

**CORONAVIRUS ADVISORY
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CITY COUNCIL

Vincent Salimi, Mayor
Devin Murphy, Mayor Pro Tem
Anthony Tave, Council Member
Maureen Toms, Council Member
Norma Martínez-Rubin, Council Member

**PINOLE CITY COUNCIL
MEETING AGENDA**

**TUESDAY
September 20, 2022
6:00 P.M**

Please note: HYBRID MEETING FORMAT

**Attend in Person: PINOLE CITY COUNCIL CHAMBERS - 2131 PEAR STREET
OR**

Attend VIA ZOOM TELECONFERENCE – Details provided below

Please note: Updated COVID-19 safety protocols will be posted outside the City Council Chambers. Please review this information before entering the Council Chambers.

How to Submit Public Comments:

In Person: Attend meeting at the Pinole City Council Chambers, fill out a yellow public comment card and submit it to the City Clerk.

Via Zoom:

Members of the public may submit a live remote public comment via Zoom video conferencing. Download the Zoom mobile app from the Apple Appstore or Google Play. If you are using a desktop computer, you can test your connection to Zoom by clicking [here](#). Zoom also allows you to join the meeting by phone.

From a PC, Mac, iPad, iPhone or Android:

<https://us02web.zoom.us/j/89335000272>

Webinar ID: 893 3500 0272

By phone: +1 (669) 900-6833 or +1 (253) 215-8782 or +1 (346) 248-7799

- Speakers will be asked to provide their name and city of residence, although providing this is not required for participation.
- Each speaker will be afforded up to 3 minutes to speak (subject to modification by the Mayor)
- Speakers will be muted until their opportunity to provide public comment.

When the Mayor opens the comment period for the item you wish to speak on, please use the “raise hand” feature (or press *9 if connecting via telephone) which will alert staff that you have a comment to provide and press *6 to unmute. **To comment with your video enabled, please let the City Clerk know you would like to turn your camera on once you are called to speak.**

Written Comments: All comments received **before 3:00 pm the day of the meeting** will be posted on the City's website on the agenda page ([Agenda Page Link](#)) and provided to the City Council prior to the meeting. **Written comments will not be read aloud during the meeting.** Email comments to comment@ci.pinole.ca.us Please indicate which item on the agenda you are commenting on in the subject line of your email.

Please note: Updated COVID-19 safety protocols will be posted outside the City Council Chambers. Please review this information before entering the Council Chambers.

OTHER WAYS TO WATCH THE MEETING

LIVE ON CHANNEL 26. They are retelecast the following Thursday at 6:00 p.m. The Community TV Channel 26 schedule is published on the city's website at www.ci.pinole.ca.us.

VIDEO-STREAMED LIVE ON THE CITY'S WEBSITE, www.ci.pinole.ca.us. and remain archived on the site for five (5) years.

If none of these options are available to you, or you need assistance with public comment, please contact the City Clerk, Heather Bell at (510) 724-8928 or hbell@ci.pinole.ca.us .

Americans With Disabilities Act: In compliance with the Americans With Disabilities Act of 1990, if you need special assistance to participate in a City Meeting or you need a copy of the agenda, or the agenda packet in an appropriate alternative format, please contact the City Clerk's Office at (510) 724-8928. Notification at least 48 hours prior to the meeting or time when services are needed will assist the City staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting or service.

Note: Staff reports are available for inspection on the City Website at www.ci.pinole.ca.us. You may also contact the City Clerk via e-mail at hbell@ci.pinole.ca.us .

Ralph M. Brown Act. Gov. Code § 54950. *In enacting this chapter, the Legislature finds and declares that the public commissions, boards and councils and the other public agencies in this State exist to aid in the conduct of the people's business. It is the intent of the law that their actions be taken openly and that their deliberations be conducted openly. The people of this State do not yield their sovereignty to the agencies, which serve them. The people, in delegating authority, do not give their public servants the right to decide what is good for the people to know and what is not good for them to know. The people insist on remaining informed so that they may retain control over the instruments they have created.*

1. CALL TO ORDER & PLEDGE OF ALLEGIANCE IN HONOR OF THE US MILITARY TROOPS

2. LAND ACKNOWLEDGMENT

Before we begin, we would like to acknowledge the Ohlone people, who are the traditional custodians of this land. We pay our respects to the Ohlone elders, past, present, and future, who call this place, Ohlone Land, the land that Pinole sits upon, their home. We are proud to continue their tradition of coming together and growing as a community. We thank the Ohlone community for their stewardship and support, and we look forward to strengthening our ties as we continue our relationship of mutual respect and understanding.

3. ROLL CALL, CITY CLERK'S REPORT & STATEMENT OF CONFLICT

An official who has a conflict must, prior to consideration of the decision: (1) publicly identify in detail the financial interest that causes the conflict; (2) recuse himself /herself from discussing and voting on the matter; and (3) leave the room until after the decision has been made, Cal. Gov't Code § 87105.

4. CONVENE TO A CLOSED SESSION

Citizens may address the Council regarding a Closed Session item prior to the Council adjourning into the Closed Session, by first providing a speaker card to the City Clerk.

None

5. RECONVENE IN OPEN SESSION TO ANNOUNCE RESULTS OF CLOSED SESSION

6. CITIZENS TO BE HEARD (Public Comments)

*Citizens may speak under any item not listed on the Agenda. The time limit is 3 minutes and is subject to modification by the Mayor. Individuals may not share or offer time to another speaker. Pursuant to provisions of the Brown Act, no action may be taken on a matter unless it is listed on the agenda, or unless certain emergency or special circumstances exist. The City Council may direct staff to investigate and/or schedule certain matters for consideration at a future Council meeting. **PLEASE SEE THE COVERSHEET OF THE AGENDA FOR INSTRUCTIONS ON HOW TO SUBMIT PUBLIC COMMENTS***

7. REPORTS & COMMUNICATIONS

A. Mayor Report

1. Announcements

B. Mayoral & Council Appointments

C. City Council Committee Reports & Communications

D. Council Requests for Future Agenda Items

E. City Manager Report / Department Staff

F. City Attorney Report

8. RECOGNITIONS / PRESENTATIONS / COMMUNITY ANNOUNCEMENTS

A. **Proclamations**

1. Recognizing National Hearing Service Dog Month

2. In Support of Ukraine

B. Presentations

None

9. CONSENT CALENDAR

All matters under the Consent Calendar are considered to be routine or noncontroversial. These items will be enacted by one motion and without discussion. If, however, any interested party or Council member(s) wishes to comment on an item, they may do so before action is taken on the Consent Calendar. Following comments, if a Council member wishes to discuss an item, it will be removed from the Consent Calendar and taken up in order after adoption of the Consent Calendar.

- A. Approve the Regular Meeting Minutes of September 6, 2022
- B. Receive the September 3, 2022 – September 16, 2022 List of Warrants in the Amount of \$742,545.67 and the September 16, 2022 Payroll in the Amount of \$548,449.29
- C. Receive The Fiscal Year (FY) 2021/22 Fourth Quarter Financial Report **[Action: Receive Report & Adopt Resolution per Staff Recommendation (Guillory)]**
- D. Receive The Quarterly Investment Report For The Fourth Quarter (Ending June 30, 2022) **[Action: Receive Report & Adopt Resolution per Staff Recommendation (Guillory)]**
- E. Receive the Quarterly Report on Implementation of the Greenhouse Gas Inventory and Climate Action and Adaptation Plan For Fiscal Year (FY) 2021-22 Fourth Quarter **[Action: Receive Report (Whalen)]**
- F. Fiscal Year (FY) 2021/22 Fourth Quarter Report on Implementation of Capital Improvement Plan (CIP) Projects **[Action: Receive Report (Kaur)]**
- G. Receive the Quarterly Report on Implementation of the Strategic Plan For Fiscal Year (FY) 2021-22 Fourth Quarter **[Action: Receive Report (Murray)]**
- H. Amendment Memorandum of Understanding (MOU) With the City of Hercules For the San Pablo Avenue Bridge Replacement Project **[Action: Adopt Resolution per Staff Recommendation (Mishra)]**
- I. Approve a First Amendment to Disposition and Development Agreement Between the City of Pinole and GRP Shores, LLC Pinole Shores II and Approve A Reciprocal Easement Agreement With the Pinole Shores Owner's Association **[Action: Adopt Resolution per Staff Recommendation (Downs/Mishra)]**
- J. Approve an Amendment to the On-Call Contract With Metropolitan Planning Group (M-Group) and Issuing an Amendment to Task Order Four For Environmental Services For the Pinole Shores II Project (830-848 San Pablo Ave) **[Action: Adopt Resolution & Appropriate Funds per Staff Recommendation (Hanham)]**
- K. Adoption Of Sanitary Sewer Master Plan 2022 Project **[Action: Adopt Resolution per Staff Recommendation (Mishra)]**

10. PUBLIC HEARINGS

*Citizens wishing to speak regarding a Public Hearing item should fill out a speaker card prior to the completion of the presentation, by first providing a speaker card to the City Clerk. **An official who engaged in an ex parte communication that is the subject of a Public Hearing must disclose the communication on the record prior to the start of the Public Hearing.***

None

11. OLD BUSINESS

None

12. NEW BUSINESS

- A. Overview of City-Wide Project Labor Agreements [Action: Discuss and Provide Direction (Mishra)]
- B. Hate Crime Update [Action: Receive Report (Gang)]

13. CITIZENS TO BE HEARD (Continued from Item 6) (Public Comments)

Open only to members of the public who did not speak under the first Citizens to Be Heard, Agenda Item 6

Citizens may speak under any item not listed on the Agenda. *The time limit is 3 minutes for City Council items and is subject to modification by the Mayor. Individuals may not share or offer time to another speaker. Pursuant to provisions of the Brown Act, no action may be taken on a matter unless it is listed on the agenda, or unless certain emergency or special circumstances exist. The City Council may direct staff to investigate and/or schedule certain matters for consideration at a future meeting.*

14. ADJOURNMENT to the Regular City Council Meeting of October 4, 2022 in Remembrance of Amber Swartz.

I hereby certify under the laws of the State of California that the foregoing Agenda was posted on the bulletin board at the main entrance of Pinole City Hall, 2131 Pear Street Pinole, CA, on the City's website, not less than 72 hours prior to the meeting date set forth on this agenda.

POSTED: September 16, 2022 at 4:00 P.M.

Heather Bell, CMC
City Clerk

**CITY COUNCIL MEETING
MINUTES
September 6, 2022**

1. CALL TO ORDER & PLEDGE OF ALLEGIANCE IN HONOR OF THE US MILITARY TROOPS

The City Council Meeting was held in a hybrid format (in-person and via Zoom videoconference and broadcast) from the Pinole Council Chambers, 2131 Pear Street, Pinole, California. Mayor Salimi called the Regular Meeting of the City Council to order at 6:03 p.m. and led the Pledge of Allegiance.

2. LAND ACKNOWLEDGEMENT

Before we begin, we would like to acknowledge the Ohlone people, who are the traditional custodians of this land. We pay our respects to the Ohlone elders, past, present and future, who call this place, Ohlone Land, the land that Pinole sits upon, their home. We are proud to continue their tradition of coming together and growing as a community. We thank the Ohlone community for their stewardship and support, and we look forward to strengthening our ties as we continue our relationship of mutual respect and understanding.

3. ROLL CALL, CITY CLERK'S REPORT & STATEMENT OF CONFLICT

An official who has a conflict must, prior to consideration of the decision; (1) publicly identify in detail the financial interest that causes the conflict; (2) recuse himself/herself from discussing and voting on the matter; and (3) leave the room until after the decision has been made, Cal. Gov. Code § 87105.

A. COUNCILMEMBERS PRESENT

Vincent Salimi, Mayor
Devin Murphy, Mayor Pro Tem
Norma Martinez-Rubin, Council Member
Anthony Tave, Council Member
Maureen Toms, Council Member

B. STAFF PRESENT

Andrew Murray, City Manager
Heather Bell, City Clerk
Eric Casher, City Attorney
Jeremy Rogers, Community Services Director
Roxane Stone, Deputy City Clerk

City Clerk Heather Bell announced the agenda had been posted and distributed on Friday, September 1, 2022 at 2:00 p.m. with all legally required written notices. One written comment had been received after 3:00 p.m. to be distributed and posted on the City website.

Following an inquiry, the Council reported there were no conflicts with any items on the agenda.

Mayor Salimi reported that agenda Items 4 and 5 would be taken out of order and considered prior to the end of the meeting. At this time the City Council moved forward with Item 8B.

8. RECOGNITIONS / PRESENTATIONS / COMMUNITY ANNOUNCEMENTS

B. Presentations / Recognitions

1. Pinole Young Actors Presentation

Patty Clark, one of the Founders of Pinole Community Players, explained that Pinole Community Players had been founded in 1986 through the Pinole Community Theater located at 601 Tennent Avenue. She introduced the Pinole Young Actors program developed by David Clark in 1968 as a four-week summer drama session. The program had been expanded to provide drama throughout the school year with two, twelve-week sessions meeting in the fall and spring each year. All students performed in a selected musical at the end of each session for family and friends. Thousands of children aged 6 through 14, and some older than 14 had moved into the Teen Drama Program until age 25. This program met five weeks each summer to rehearse and perform a full-length musical.

Ms. Clark reported that the students would perform Shrek the Musical this weekend. Programs provided educational and performance opportunities for the students from Pinole and the surrounding communities. The many opportunities the programs offered to allow the students to perform their work in front of an audience were highlighted.

Ms. Clark introduced this year's participants with a performance of Under the Sea from the Little Mermaid.

The City Council expressed its appreciation to the Clarks for their accomplishments over the years, recognized the programs' legacy for Pinole and congratulated the students on their performance.

Ms. Clark emphasized the program was her passion and she was pleased the City Council appreciated the children's performance. She also appreciated the support from the City Council and commented on her goal to also provide a program at Pinole High School.

PUBLIC COMMENTS OPENED

Deputy City Clerk Roxane Stone reported there were no public comments.

PUBLIC COMMENTS CLOSED

Mayor Salimi declared a recess at 6:17 p.m. The City Council meeting reconvened at 6:29 p.m. with all Councilmembers present.

2. Pinole Car Show Presentation

Bob Kopp, Pinole, thanked all of the sponsors for the success of the Pinole Car Show and reported that some of the proceeds would be used for the 2023 Car Show. He encouraged residents to thank each of the business sponsors for their donations to the event.

Debbie Long, a member of the Car Show Committee, identified each individual business that had sponsored the Car Show in 2022.

Mr. Kopp also thanked the City Council and the City of Pinole for including funds for the Car Show in the City's budget, and thanked the Police, Fire and Public Works Departments for all their assistance during the event, which brought the community together benefitting all businesses in the downtown. He described the timeline for the event each year, thanked the Car Show Committee for their countless hours in preparing for the event and highlighted his responsibilities, with all decisions made by the Car Show team via a vote of its members. At this time, he presented a plaque to the Chief of Police and reported that plaques would also be presented at a later date to the wives and widows of two Pinole Police Department Posse Crew Members who had passed away; Nick Norton and Bill Jurney, who had also been members of the Car Show Committee.

Mr. Kopp also expressed his appreciation to Frank S. for the ability to use the shopping center during the Car Show which allowed the event to be a success. He further commented on his involvement in various community events over the years and identified those volunteers who had provided ongoing assistance including former City Council members Pete Murray, Debbie Long and Roy Swearingen. The Car Show has been in operation for the past 25 years and had previously been hosted by the Northern California Cruisers, an organized car show operator that had later turned the event over to him the past three years. He reported that in 2022 there were 261 cars and thousands of participants.

At this time, Mr. Kopp presented checks to various community organizations from the proceeds from the Car Show.

Elizabeth (____), Meals on Wheels, explained that meals were prepared on Tuesdays and Thursdays. She highlighted the programs for residents over 60 years of age and advised that more information was available by calling 925-937-8311. She accepted a check for Meals on Wheels in the amount of \$2,000 from Mr. Kopp and the Car Show Committee and explained that the funds would be used for existing services.

Sakara Sampson, Vice President, Pinole-Hercules Little League, described the League's mission to teach young citizens virtue and character building through baseball and stated more information was available at pinoleherculesll.org. Fall registration was currently at 120 children and donations would go a long way. She introduced one of the parent volunteers who detailed the partnership between the Pinole Car Show and Pinole-Hercules Little League and the work of Mr. Jurney and his family who also worked with the League.

Jeremy Rogers, introduced himself as the new Pinole Community Services Director, and expressed his appreciation to Mr. Kopp for his volunteer work.

Mr. Kopp also reported the Car Show Committee had provided checks to the Pinole Senior Center and Pinole TV for needed equipment. A check would be presented to the Pinole Swim Team off-line. The next Car Show had been scheduled for June 25, 2023. He again thanked his team for all of their hard work. Volunteers present in the audience introduced themselves to the City Council and included (Rob Sexton, Wes Troth, Jim Travers, Marguerite Mattingly, Tom Mattingly), Debbie Long and Pete Murray.

The City Council thanked Mr. Kopp and the Car Show Committee for their support for local community programs and organizations. The City Council also thanked the City Manager and City staff for the funds allocated in the budget each year for the Car Show.

Mr. Kopp added that the Car Show Committee had also paid to have the home of a veteran painted.

A volunteer accepted the plaque on behalf of Bill Journey's widow who thanked the Car Show Committee and the City Council for the recognition.

The City Council moved onto Item 8A at this time.

A. Proclamations

1. National Health Services Week

The City Council read into the record a proclamation recognizing National Health Services Week.

PUBLIC COMMENTS OPENED

Deputy City Clerk Roxane Stone reported there were no public comments.

PUBLIC COMMENTS CLOSED

The City Council recognized the need to increase access to health care with local health centers helping to fill the gaps from larger health care centers to provide services to community members.

2. Blood Cancer Awareness Month

The City Council read into the record a proclamation recognizing Blood Cancer Awareness Month.

PUBLIC COMMENTS OPENED

Deputy City Clerk Roxane Stone reported there were no public comments.

PUBLIC COMMENTS CLOSED

Deputy City Clerk Stone reported in recognition of Blood Cancer Awareness Month, the City of Pinole would host a Community and Staff Blood Drive in partnership with the American Red Cross on September 7, 2022 from 9:00 a.m. to 3:00 p.m. at the Pinole Youth Center, 635 Tennent Avenue, with registration information available at redcrossblood.org and by entering code *pcyc*.

The City Council thanked the City Clerk for spearheading the effort.

City Clerk Bell clarified the blood drive had been a collaborative effort this year. She thanked the staff from the Human Resources and Recreation Departments for helping to facilitate the logistics and for working with the American Red Cross.

6. CITIZENS TO BE HEARD (Public Comments)

Citizens may speak under any item not listed on the Agenda. The time limit is 3 minutes and is subject to modification by the Mayor. Individuals may not share or offer time to another speaker. Pursuant to provisions of the Brown Act, no action may be taken on a matter unless it is listed on the agenda, or unless certain emergency or special circumstances exist.

The City Council may direct staff to investigate and/or schedule certain matters for consideration at a future Council meeting.

Sheldon Coad, Pinole, thanked Council member Toms for her monthly newsletter which he found to be helpful as a public service. He otherwise reported that he had been trying for months to have the City clean trash from a City park on Sarah Drive and asked whether it was City policy to allow trash to accumulate in and around City parks. He emphasized the number of attempts to get the trash cleaned up either by phone or via email with no response from various City Departments. He expressed a willingness to work with whomever would clean-up the trash and commented on his attempts to clean up some trash while walking in the park, although he noted the amount of trash involved was more than he could handle.

Mayor Salimi advised that trash accumulation in City parks was not the policy of the City.

City Manager Andrew Murray expressed the willingness to address the concerns with the speaker. He was uncertain of the specific situation but reported that illegal dumping was addressed on a complaint basis. As to park maintenance, a presentation would be made to the City Council at a future meeting tentatively scheduled for October 18, 2022. He suggested waiting for that presentation to learn the schedule and activities related to park maintenance.

Rafael Menis, Pinole, reported on the current COVID-19 case rate in the City of Pinole, which was lower than it had been in the month of August but still high with Pinole having the sixth highest rate in Contra Costa County. He encouraged continued precautions. He also reported Coastal Clean-Up Day had been scheduled for Saturday, September 17, 2022 and he encouraged everyone to take part. He otherwise asked who would have been the best staff person for Mr. Coad to contact to receive the best response.

City Manager Murray advised that the most appropriate department to contact was the Public Works Department. There was information on the Department website or residents may email him or any other City Department who should forward inquiries to the right City Department.

Jeff Rubin, Pinole, President Pinole Historical Society, announced the Pinole Historical Society would be having its first program in nearly three years in their new home on Friday, September 9, 2022, from 6:30 to 8:00 p.m. at Pinole Sportsman Club, 201 Pinon Avenue. Cal State University Professor John Robinson would make a presentation on the short-lived history of Bay Area shoreline artwork made out of driftwood and other objects. He also announced the Pinole History Museum would hold a fundraiser on Saturday, September 24, 2022 at Valley Bible Church in the City of Hercules when a number of prizes would be available along with community support from a number of community organizations. Information was available at pinolehistorymuseum.org and everyone was encouraged to attend.

In response to the Mayor's understanding the City had purchased tickets for the fundraiser in the past, City Manager Murray explained if the City Council wanted to purchase tickets for the current event the City Council would have to approve an appropriation for that purpose with City staff to view it as a donation to a non-profit organization, which could be considered as a future agenda item request. The City did not have a standard policy for donations to non-profits, and while it could be considered there was no consistent historical practice for such donations.

7. REPORTS & COMMUNICATIONS

A. Mayor Report

1. Announcements

Mayor Salimi reiterated that in recognition of Blood Cancer Awareness Month the City of Pinole would host a Community and Staff Blood Drive in partnership with the American Red Cross on September 7 from 9:00 a.m. to 3:00 p.m. at the Pinole Youth Center. He reported the City would receive representatives from the French government on Thursday, September 8, 2022 to discuss economic development. He also announced the passing former Mayor Debbie Long's brother, James Autrey, and asked for a Moment of Silence.

Debbie Long, Pinole, thanked the City for the acknowledgement of her brother's passing and for sending flowers. She reported her oldest brother had died of multiple myeloma, was a good man with a family and had been a cherished husband, father, son and brother, which was his legacy. She also reported on the recent passing of Bobby Alvarado, Executive Officer of the Northern California Carpenters Regional Council, a big part of the community and another great man and gentleman in every way.

The City Council held a *Moment of Silence for Messieurs Autrey and Alvarado*.

B. Mayoral & Council Appointments: None

C. City Council Committee Reports & Communications

Council member Martinez-Rubin reported she had attended a West Contra Costa Transportation Advisory Committee (WCCTAC) meeting and briefed the Council on the discussions. She also reported that a Special Meeting of the WestCAT Board had been scheduled for September 14, 2022.

Council member Tave reported the next meeting of RecycleMore would be September 8, 2022. He encouraged everyone to participate in the Household Hazardous Waste and Mattress Collection event scheduled for Saturday, September 24, 2022 in the City of Richmond.

Mayor Pro Tem Murphy reported he had filled in for the Mayor at the August West County Mayors' Association meeting with a discussion focused on school safety and data. A future presentation would be provided to the City Council from the West Contra Costa Unified School District (WCCUSD) on the same data. He also reported he had been invited to attend the White House Climate Emergency and Energy Security Summit hosted by the U.S. Department of Energy in Washington, D.C., and briefed the Council on the attendees and topics of discussion; he had participated in a webinar hosted by People for the American Way Foundation and Public Citizen, two non-profit organizations helping cities to adopt resolutions to support core democracy and free and fair elections; the Contra Costa County Clerk's Office had joined a coalition of County Clerks with a focus on fighting against election misinformation; and the State of California had extended an invitation to a statewide planning session for the California Master Plan on Aging scheduled for September 20, 2022 in the City of Sacramento, which would include stakeholders having conversations around aging, disability and equity and with a virtual option to be available through caforall.org.

Mayor Pro Tem Murphy reiterated that Coastal Clean-Up Day had been scheduled for September 17, 2022 and the Marin Clean Energy (MCE) Technical Committee would meet on September 16, 2022.

Council member Toms reported she had attended a recent meeting of the WestCAT Board. All rides in the WestCAT system would be free during the month of October and all BART rides would be half off during the month of September with the use of the Clipper Card. Also, the Bay Area Rapid Transit System (BART) would celebrate its 50TH birthday at the Lake Merritt Station on Saturday, September 17, 2022. She would also meet with those individuals working with the East Bay communities to mitigate fire issues within the region on Friday, September 9, 2022. Additionally, the Pinole Police Department community was involved in the Torch Run, a fundraiser for Special Olympics and Bike the Bridges, another fundraiser to start and end in the City of Benicia on October 1, 2022. Donations were welcome.

D. Council Requests for Future Agenda Items

Mayor Pro Tem Murphy requested a future agenda item for the Capital Improvement Plan (CIP) to return to the City Council with the intention of discussing a rubric or index of priorities.

City Manager Murray advised that staff had provided a quarterly status report on the CIP. The next report was scheduled for the September 20, 2022 City Council meeting as a Consent Calendar item, which could be pulled for discussion. While he did not recall a prior discussion for a rubric or index to prioritize CIP projects, the CIP included a narrative of how staff identified projects to recommend in the CIP and identified funding and how to make priorities. There was no qualitative methodology for scoring the projects, which was a different discussion and new agenda item, and staff could return with a more qualitative methodology for prioritizing CIP projects.

Mayor Pro Tem Murphy recalled the City Council had discussed a methodology and would like that to be part of the discussion, and City Manager Murray noted that would not be part of the quarterly status report on the CIP to be presented on September 20, 2022.

City Manager Murray reiterated that staff would provide a quarterly report on CIP projects, another agenda item could then be discussed about a methodology to prioritize CIP projects, and he envisioned staff would discuss the methodology currently being used. The City Council could then provide direction on how a more quantitative methodology for prioritizing CIP projects could be developed. He suggested the first City Council meeting scheduled for the month of November could include that discussion.

Mayor Pro Tem Murphy reiterated his request for a future agenda item to bring back the CIP both as a discussion and action item on the creation of an index or rubric that would better formalize the selection process for CIP projects. Consensus given.

Mayor Pro Tem Murphy requested a future agenda item for a local democracy resolution and explained how that resolution could be crafted.

Council member Martinez-Rubin wanted the resolution to also blend in some aspect of how candidates were attempting to promote fair campaign practices in order to promote and sustain democracy.

Mayor Pro Tem Murphy suggested the City Clerk create a resolution. He had provided the City Clerk with templates and modifications to the resolution could be included in the discussion.

City Clerk Bell clarified the intent was that the item return as a consent item.

City Manager Murray clarified the request was for a resolution in a model similar and in-line with those seen before and Council member Martinez-Rubin's recommendation could be considered as part of that item when discussed by the City Council. Consensus given.

Council member Toms requested a future agenda item to invite the Insurance Commissioner to provide a presentation to the City Council. Consensus given.

Council member Toms requested a future agenda item to bring back the Historic Overlay, although Mayor Salimi clarified that he and Council member Tave would have a conflict of interest on that topic and would not be able to participate in the discussion.

City Attorney Eric Casher reported an update to the design guidelines and an ordinance for the historic downtown area would be presented to the City Council at its October 18, 2022 meeting.

E. City Manager Report / Department Staff

City Manager Murray reported the City had opened the Senior Center as a Cooling Center during September 5 and 6; reiterated that Coastal Clean-Up Day had been scheduled for September 17 and National Night Out had been scheduled for October 4, 2022 at Fernandez Park with a Halloween theme. He also reported there would be a Special City Council Workshop on September 13, 2022 with a focus on the draft contract for fire services with the Contra Costa County Fire Protection District (Con Fire), and he briefed the Council on a number of tentative agenda items to be included on the September 20, 2022 City Council meeting agenda. Another Special City Council meeting had been scheduled for September 27, 2022 to further discuss the draft fire services contract with Con Fire.

F. City Attorney Report: None

PUBLIC COMMENTS OPENED

Rafael Menis, Pinole, referred to the suggestion for the timing of a discussion about fair campaign practices which was a voluntary commitment and one he had personally adopted. He hoped his fellow candidates would also adopt that commitment and that a discussion would be held as early as possible to ensure no misunderstanding with fair political campaign practices.

PUBLIC COMMENTS CLOSED

9. CONSENT CALENDAR

All matters under the Consent Calendar are considered to be routine and noncontroversial. These items will be enacted by one motion and without discussion. If, however, any interested party or Council member(s) wishes to comment on an item, they may do so before action is taken on the Consent Calendar. Following comments, if a Council member wishes to discuss an item, it will be removed from the Consent Calendar and taken up in order after adoption of the Consent Calendar.

- A. Approve the Regular Meeting Minutes of August 2, 2022.
- B. Receive the July 30, 2022 – September 2, 2022 List of Warrants in the Amount of \$1,767,833.73, the August 5, 2022 Payroll in the Amount of \$522,608.27, the August 19, 2022 Payroll in the Amount of \$527,112.01, and the September 2, 2022 Payroll in the Amount of \$532,034.86
- C. Resolution Continuing Authorized Remote Teleconference Meetings Pursuant to AB 361 [**Action: Adopt Resolution per Staff Recommendation (Casher)**]
- D. Resolution Authorizing the City Manager to Execute Second Amendment to Agreement with Client First Technology Consulting to Provide Support Services During the Upgrade and Migration of the Permit Tracking and Online Application System and Appropriating Funding [**Action: Adopt Resolution per Staff Recommendation (Whalen)**]

PUBLIC COMMENTS OPENED

Deputy City Clerk Roxane Stone reported there were no public comments.

PUBLIC COMMENTS CLOSED

ACTION: Motion by Council member Toms/Mayor Pro Tem Murphy to approve Consent Calendar Items 9A through 9D, as shown.

Vote:	Passed	5-0
	Ayes:	Salimi, Murphy, Martinez-Rubin, Tave, Toms
	Noes:	None
	Abstain:	None
	Absent:	None

10. PUBLIC HEARINGS: None

Citizens wishing to speak regarding a Public Hearing item should fill out a speaker card prior to the completion of the presentation, by first providing a speaker card to the City Clerk. An official who engaged in an ex parte communication that is the subject of a Public Hearing must disclose the communication on the record prior to the start of the Public Hearing.

11. OLD BUSINESS: None

12. NEW BUSINESS: None

4. CONVENE TO A CLOSED SESSION

Citizens may address the Council regarding a Closed Session item prior to the Council adjourning into the Closed Session, by first providing a speaker card to the City Clerk.

- A. PUBLIC EMPLOYEE PERFORMANCE EVALUATION
Pursuant to Gov. Code § 54957
Title: City Manager

PUBLIC COMMENTS OPENED

Cordell Hindler, Richmond, suggested the City Manager had done a fantastic job, provided Council direction and had a lot of potential. He urged the City Council to consider his hard work during the Closed Session.

PUBLIC COMMENTS CLOSED

The City Council convened to Closed Session at 8:12 p.m.

5. RECONVENE IN OPEN SESSION TO ANNOUNCE RESULTS OF CLOSED SESSION

At 8:45 p.m., Mayor Salimi reconvened the meeting into open session and announced there was no reportable action from the Closed Session.

13. CITIZENS TO BE HEARD (Continued from Item 6) (Public Comments)

Only open to members of the public who did not speak under the first Citizens to be Heard, Agenda Item 6.

Citizens may speak under any item not listed on the Agenda. *The time limit is 3 minutes and is subject to modification by the Mayor. Individuals may not share or offer time to another speaker. Pursuant to provisions of the Brown Act, no action may be taken on a matter unless it is listed on the agenda, or unless certain emergency or special circumstances exist. The City Council may direct staff to investigate and/or schedule certain matters for consideration at a future Council meeting.*

Cordell Hindler, Richmond, referenced the August 2 City Council meeting which had been scheduled the same night as National Night Out. He asked in the future that the City Council be more considerate in scheduling a meeting on the same night as that event. He also commented that when the City Council discussed the budget it would be important that a consultant be present to provide guidance on diversity, equity and inclusion. He hoped the \$80,000 the City Council had earmarked for economic development would be used for that purpose. On another matter, he expressed disappointment that a discussion with Con Fire at a prior City Council meeting had taken up the majority of the meeting at that time, which in his opinion set a bad example. He hoped the City Council would consider more timely discussions.

Mr. Hindler further referenced the Special Meeting and discussion of the EDS, and stated he was not confident the City would be able to successfully attract potential new businesses to Pinole given the high number of vacant properties and the speed of traffic along Tennent Avenue.

In response to the Mayor, City Manager Murray reported that different communities celebrated National Night Out on different dates. Due to the pandemic, the City of Pinole decided to celebrate National Night Out on the first Tuesday of October. National Night Out in Pinole had not been celebrated on August 2, as referenced by the speaker and would be celebrated on October 4, as earlier reported. No City Council meeting had been scheduled for that date to allow City Council members to participate.

14. ADJOURNMENT to the Special City Council Meeting of September 13, 2022 in Remembrance of Amber Swartz, Bobby Alvarado and James Awtrey.

At 8:50 p.m., Mayor Salimi adjourned the meeting to the Special City Council Meeting of September 13, 2022 in Remembrance of Amber Swartz, Bobby Alvarado and James Autrey.

Submitted by:

Heather Bell, CMC
City Clerk

Approved by City Council:



City of Pinole, CA

9B WARRANT LISTING

By Vendor Name

Payment Dates 9/3/2022 - 9/16/2022

Payable Number	Payment Number	Payment Date	Account Number	Description (Payable)	Amount
Vendor: 1433 - ABIGAIL LLERENAS					
09062022	99976	09/16/2022	998-20030	REISSUE STALE DATED CHECKS	178.49
Vendor 1433 - ABIGAIL LLERENAS Total:					178.49
Vendor: ALH01 - ALHAMBRA & SIERRA SPRINGS					
19593757 090122	99977	09/16/2022	100-222-42201	WATER FOR PD	288.15
Vendor ALH01 - ALHAMBRA & SIERRA SPRINGS Total:					288.15
Vendor: 2005 - ANIMAL DAMAGE MANAGEMENT, INC					
5738C	99929	09/09/2022	100-343-42108	PEST CONTROL SERVICES FERNANDEZ AND PVR PARKS	250.00
Vendor 2005 - ANIMAL DAMAGE MANAGEMENT, INC Total:					250.00
Vendor: ARA01 - ARAMARK UNIFORM SERVICES					
AUGUST 2022	99930	09/09/2022	100-231-44410	LAUNDRY SERVICE WPCP, PSC AND FIRE	132.45
AUGUST 2022	99930	09/09/2022	100-231-44410	LAUNDRY SERVICE WPCP, PSC AND FIRE	132.45
AUGUST 2022	99930	09/09/2022	209-552-43804	LAUNDRY SERVICE WPCP, PSC AND FIRE	321.37
AUGUST 2022	99930	09/09/2022	209-552-43804	LAUNDRY SERVICE WPCP, PSC AND FIRE	336.89
AUGUST 2022	99930	09/09/2022	500-641-44410	LAUNDRY SERVICE WPCP, PSC AND FIRE	319.63
AUGUST 2022	99930	09/09/2022	500-641-44410	LAUNDRY SERVICE WPCP, PSC AND FIRE	321.46
AUGUST 2022	99930	09/09/2022	500-641-44410	LAUNDRY SERVICE WPCP, PSC AND FIRE	343.16
AUGUST 2022	99930	09/09/2022	500-641-44410	LAUNDRY SERVICE WPCP, PSC AND FIRE	321.46
Vendor ARA01 - ARAMARK UNIFORM SERVICES Total:					2,228.87
Vendor: ASB02 - ASBURY ENVIRONMENTAL SVCS					
I500-00855176	99978	09/16/2022	500-641-42107	USED OIL SERVICE WPCP	95.00
Vendor ASB02 - ASBURY ENVIRONMENTAL SVCS Total:					95.00
Vendor: BAY34 - BAY AREA NEWS GROUP- EAST BAY					
0001350208	99979	09/16/2022	212-461-42514	LEGAL ADS	262.80
0001350208	99979	09/16/2022	325-342-47205	LEGAL ADS	422.10
Vendor BAY34 - BAY AREA NEWS GROUP- EAST BAY Total:					684.90
Vendor: BLU03 - BLUE LAGOON POOL SERVICE					
16191	99980	09/16/2022	209-557-42108	POOL SERVICE SWIM CENTER	1,485.00
Vendor BLU03 - BLUE LAGOON POOL SERVICE Total:					1,485.00
Vendor: PER03 - CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTM					
100000016918794	99981	09/16/2022	100-117-41004	ANNUAL UNFUNDED ACCRUED LIABILITY SEPT. 2022	122,253.58
100000016918803	99981	09/16/2022	100-117-41004	ANNUAL UNFUNDED ACCRUED LIABILITY SEPT. 2022	146,841.25
100000016918815	99981	09/16/2022	100-117-41004	ANNUAL UNFUNDED ACCRUED LIABILITY SEPT. 2022	137.08
100000016918822	99981	09/16/2022	100-117-41004	ANNUAL UNFUNDED ACCRUED LIABILITY SEPT. 2022	859.08
100000016918831	99981	09/16/2022	100-117-41004	ANNUAL UNFUNDED ACCRUED LIABILITY SEPT. 2022	486.25
Vendor PER03 - CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTM Total:					270,577.24
Vendor: CCP03 - CCP INDUSTRIES					
IN03095446	99931	09/09/2022	500-641-44410	GLOVES SAFETY EQUIP WPCP	555.39

WARRANT LISTING

Payment Dates: 9/3/2022 - 9/16/2022

Payable Number	Payment Number	Payment Date	Account Number	Description (Payable)	Amount
IN03097534	99982	09/16/2022	500-641-44410	FACE MASKS WPCP	84.94
				Vendor CCP03 - CCP INDUSTRIES Total:	640.33
Vendor: CHR01 - CHRIST THE LORD EPISCOPAL CHURCH					
100499	99932	09/09/2022	100-343-42513	REPAIRS AND MAINTENANCE PARKING LOT USAGE	300.00
				Vendor CHR01 - CHRIST THE LORD EPISCOPAL CHURCH Total:	300.00
Vendor: CIT08 - CITY MECHANICAL, INC					
85498	99933	09/09/2022	100-343-42108	HVAC MAINTENANCE CH	967.69
85499	99933	09/09/2022	209-554-42108	HVAC MAINTENANCE YC	1,041.24
85555	99983	09/16/2022	209-558-42108	HVAC SERVICE CALL MEMORIAL HALL	1,411.98
85563	99983	09/16/2022	100-343-42108	HVAC SERVICE CALL CH	307.39
				Vendor CIT08 - CITY MECHANICAL, INC Total:	3,728.30
Vendor: 2425 - CLEARSTREAM ENVIRONMENTAL, INC					
11218	99984	09/16/2022	500-641-44306	FEEDWELL NEOPRENE WPCP	1,176.77
				Vendor 2425 - CLEARSTREAM ENVIRONMENTAL, INC Total:	1,176.77
Vendor: COM20 - COMCAST					
0050875-08142022	99934	09/09/2022	100-117-43105	CABLE CH	29.86
				Vendor COM20 - COMCAST Total:	29.86
Vendor: CON56 - CONCENTRA MEDICAL CENTERS					
76414991	99935	09/09/2022	100-116-42101	DOT TEST PW	85.00
				Vendor CON56 - CONCENTRA MEDICAL CENTERS Total:	85.00
Vendor: CON93 - CONCORD UNIFORMS LLC					
19822	99985	09/16/2022	100-222-44410	UNIFORM SUPPLIES PD	435.22
				Vendor CON93 - CONCORD UNIFORMS LLC Total:	435.22
Vendor: CON38 - CONTRA COSTA COUNTY					
9971620	99936	09/09/2022	212-462-42514	MAPPING SERVICES FEES	150.00
				Vendor CON38 - CONTRA COSTA COUNTY Total:	150.00
Vendor: 1310 - CONTRA COSTA TRANSPORTATION AUTHORITY					
2022-00000014	99986	09/16/2022	200-341-42514	MEMBER CONTRIBUTION FY2021-21 CMA	2,064.00
				Vendor 1310 - CONTRA COSTA TRANSPORTATION AUTHORITY Total:	2,064.00
Vendor: 1639 - COOKING ROUND THE WORLD					
1067	99987	09/16/2022	209-555-43801	INSTRUCTOR OF HARRY POTTER COOKING PYC	1,347.50
1148	99987	09/16/2022	209-555-43801	INSTRUCTORS FOR STAR WARS COOKING PYC	945.00
				Vendor 1639 - COOKING ROUND THE WORLD Total:	2,292.50
Vendor: 1445 - CORTEZ TIRES AND AUTO REPAIR					
22037	99988	09/16/2022	100-221-42107	OIL CHANGE PATROL CAR PD	210.00
				Vendor 1445 - CORTEZ TIRES AND AUTO REPAIR Total:	210.00
Vendor: CPS01 - CPS- HR CONSULTING					
0007233	99937	09/09/2022	100-111-42101	JOB ANALYSIS AND EXAM	9,600.00
				Vendor CPS01 - CPS- HR CONSULTING Total:	9,600.00
Vendor: 2220 - CRESCO EQUIPMENT RENTALS					
5540972-0007	99989	09/16/2022	100-343-42511	INSULATED BUCKET TRUCK CY	4,387.00
				Vendor 2220 - CRESCO EQUIPMENT RENTALS Total:	4,387.00
Vendor: 2424 - CROCKETT AWARD & TROPHY SERVICES					
149555	99938	09/09/2022	100-111-42201	NAME PLATES FOR COUNCIL CHAMBERS	84.95
149555	99938	09/09/2022	100-112-42201	NAME PLATES FOR COUNCIL CHAMBERS	34.00
149555	99938	09/09/2022	212-461-42201	NAME PLATES FOR COUNCIL CHAMBERS	68.00
149555	99938	09/09/2022	212-462-42201	NAME PLATES FOR COUNCIL CHAMBERS	17.00
				Vendor 2424 - CROCKETT AWARD & TROPHY SERVICES Total:	203.95

WARRANT LISTING

Payment Dates: 9/3/2022 - 9/16/2022

Payable Number	Payment Number	Payment Date	Account Number	Description (Payable)	Amount
Vendor: DAR06 - DARRAH TRUCKING & EXCAVATING INC					
08292022	99939	09/09/2022	100-231-42512	REMOVAL OF TREES ON TOWS COURT FIRE	9,600.00
6430	99990	09/16/2022	100-231-42512	TREES ON JORDAN, BRAZIL, WRIGHT AND VICTOR AVE	9,600.00
Vendor DAR06 - DARRAH TRUCKING & EXCAVATING INC Total:					19,200.00
Vendor: DEP01 - DEPARTMENT OF JUSTICE/ACCOUNTING OFFICE					
595610	99940	09/09/2022	100-221-42101	FINGER PRINT BACK GROUND	262.00
595610	99940	09/09/2022	100-221-42110	FINGER PRINT BACK GROUND	81.00
595610	99940	09/09/2022	100-231-42110	FINGER PRINT BACK GROUND	32.00
Vendor DEP01 - DEPARTMENT OF JUSTICE/ACCOUNTING OFFICE Total:					375.00
Vendor: 2152 - DEROTIC EMERGENCY EQUIPMENT					
NO-2399	99991	09/16/2022	100-231-42107	REFLECTIVE LETTERINGS FIRE	2,958.90
Vendor 2152 - DEROTIC EMERGENCY EQUIPMENT Total:					2,958.90
Vendor: 1443 - DIESEL DIRECT WEST, INC.					
84709175	99941	09/09/2022	100-10601	GASOLINE UNL FIRE	1,247.46
84715513	99941	09/09/2022	100-10602	ULSD CLEAR FIRE	533.67
84719243	99992	09/16/2022	100-10601	GASOLINE UNL CY	1,766.34
84723375	99992	09/16/2022	100-10601	GASOLINE UNL CY	1,492.39
Vendor 1443 - DIESEL DIRECT WEST, INC. Total:					5,039.86
Vendor: DOL01 - DOLAN'S LUMBER					
AUGUST 2022	99942	09/09/2022	500-641-42108	CITYWIDE SUPPLIES	133.19
AUGUST 2022	99942	09/09/2022	500-641-42108	CITYWIDE SUPPLIES	141.09
AUGUST 2022	99942	09/09/2022	500-641-42108	CITYWIDE SUPPLIES	195.31
AUGUST 2022	99942	09/09/2022	500-641-42108	CITYWIDE SUPPLIES	-35.12
AUGUST 2022	99942	09/09/2022	500-641-42108	CITYWIDE SUPPLIES	743.00
Vendor DOL01 - DOLAN'S LUMBER Total:					1,177.47
Vendor: EBM01 - EBMUD					
231771-08292022	99993	09/16/2022	100-343-43102	2691 APPALOOSA TRAIL-IRRIGATION USE ONLY	230.92
231772-08292022	99993	09/16/2022	100-343-43102	2785 SIMAS AVE--IRRIGATION USE ONLY	228.40
231774-08312022	99993	09/16/2022	100-343-43102	3001 Simas Ave--Irrigation Use Only	151.71
231775-08312022	99993	09/16/2022	100-343-43102	3061 Simas Ave--Irrigation Use Only	151.71
464589-08252022	99993	09/16/2022	100-345-43102	659 Tennent Ave--Parks & Gardens--Blackies Storage	60.05
464595-08292022	99993	09/16/2022	209-554-43102	635 Tennent Ave--Pinole Youth Center/CTV	40.13
464595-08292022	99993	09/16/2022	505-119-43102	635 Tennent Ave--Pinole Youth Center/CTV	40.12
464596-08292022	99993	09/16/2022	100-345-43102	2310 Park St--Fernandez Park Baseball Field	8,434.33
465183-08292022	99993	09/16/2022	201-343-43102	2361 San Pablo Ave--Old Bank Building	67.27
465190-08252022	99993	09/16/2022	201-343-43102	813 Fernandez Ave--Irrigation Use Only	60.05
465395-08292022	99993	09/16/2022	100-345-43102	1095 Nob Hill Ave--Parks & Gardens--Meadow Park	674.00
465422-08252022	99993	09/16/2022	500-641-43102	80 TENNENT AVE--WASTE WATER TREATMENT PLANT	1,121.69
465553-08252022	99993	09/16/2022	100-343-43102	2301 1/2 San Pablo Ave--Irrigation Use Only	90.71
465569-08252022	99993	09/16/2022	209-558-43102	601 Tennent Ave--Memorial Hall	103.92
465922-08252022	99993	09/16/2022	100-343-43102	636 Tennent Ave--Irrigation Use Only	60.05
465923-08292022	99993	09/16/2022	100-231 43102	880 Tennent Ave--Public Safety Facility/Building	609.39

WARRANT LISTING

Payment Dates: 9/3/2022 - 9/16/2022

Payable Number	Payment Number	Payment Date	Account Number	Description (Payable)	Amount
465924-08292022	99993	09/16/2022	100-222-43102	880 Tennent Ave--Public Safety Facility/Building	1,177.86
465924-08292022	99993	09/16/2022	100-223-43102	880 Tennent Ave--Public Safety Facility/Building	261.75
465924-08292022	99993	09/16/2022	100-231-43102	880 Tennent Ave--Public Safety Facility/Building	1,177.86
466363-08262022	99993	09/16/2022	100-345-43102	1818 Canyon Dr--Irrigation Use Only	1,130.27
466529-08252022	99993	09/16/2022	100-345-43102	656 Pinole Shores Dr--Irrigation Use Only	90.71
466531-08252022	99993	09/16/2022	100-343-43102	800 PINOLE SHORES DR-IRRIGATION USE ONLY	228.70
466532-08252022	99993	09/16/2022	100-343-43102	901 Pinole Shores Dr--Irrigation Use Only	151.88
466535-08252022	99993	09/16/2022	100-343-43102	1001 Pinole Shores Dr--Irrigation Use Only	151.88
466536-08292022	99993	09/16/2022	100-343-43102	2401 Del Monte Way--Irrigation Use Only	60.16
466640-08252022	99993	09/16/2022	100-343-43102	726 San Pablo Ave--Irrigation Use Only	90.71
466641-08252022	99993	09/16/2022	100-343-43102	880 San Pablo Ave--Irrigation Use Only	566.36
466642-08262022	99993	09/16/2022	100-343-43102	1400 San Pablo Ave--Irrigation Use Only	90.71
466643-08252022	99993	09/16/2022	100-343-43102	2000 San Pablo Ave--Irrigation Use Only	90.71
513648-08252022	99993	09/16/2022	100-343-43102	2161 Plum St--Parking Lot Irrigation	90.71
524589-08292022	99993	09/16/2022	100-345-43102	592 Marlesta Rd--Irrigation Use Only	1,271.25
526819-08222022	99993	09/16/2022	100-345-43102	2501 Pfeiffer Way--Irrigation Use Only	166.72
529821-08292022	99993	09/16/2022	209-552-43102	2500 Charles St--Senior Center	966.57
529852-08252022	99993	09/16/2022	209-552-43102	2500 Charles St--Senior Center	1,861.03
532000-08292022	99993	09/16/2022	201-343-43102	2361 San Pablo Ave--Offices--Old Bank Building	618.21
532187-08252022	99993	09/16/2022	100-343-43102	2601 Charles St--Irrigation Use Only	60.05
539199-09022022	99993	09/16/2022	500-642-43102	05005 HYDRAND PERMIT-CONSTRUCTION	800.08
540499-08252022	99993	09/16/2022	100-343-43102	1230 Pinole Valley Rd--Irrigation Use Only	60.05
540787-08252022	99993	09/16/2022	201-343-43102	2361 San Pablo Ave--Irrigation Use Only	60.05
541397-08262022	99993	09/16/2022	100-343-43102	1601 Marlesta Rd--Irrigation Use Only	60.16
544461-08292022	99993	09/16/2022	100-110-43102	2131 Pear St--Offices--City Hall	2.95
544461-08292022	99993	09/16/2022	100-111-43102	2131 Pear St--Offices--City Hall	7.10
544461-08292022	99993	09/16/2022	100-112-43102	2131 Pear St--Offices--City Hall	6.50
544461-08292022	99993	09/16/2022	100-115-43102	2131 Pear St--Offices--City Hall	19.28
544461-08292022	99993	09/16/2022	100-116-43102	2131 Pear St--Offices--City Hall	6.50
544461-08292022	99993	09/16/2022	100-117-43102	2131 Pear St--Offices--City Hall	52.03
544461-08292022	99993	09/16/2022	100-343-43102	2131 Pear St--Offices--City Hall	92.71
544461-08292022	99993	09/16/2022	200-342-43102	2131 Pear St--Offices--City Hall	16.56
544461-08292022	99993	09/16/2022	212-461-43102	2131 Pear St--Offices--City Hall	6.27
544461-08292022	99993	09/16/2022	212-462-43102	2131 Pear St--Offices--City Hall	16.67
544461-08292022	99993	09/16/2022	285-464-43102	2131 Pear St--Offices--City Hall	4.97
544461-08292022	99993	09/16/2022	505-119-43102	2131 Pear St--Offices--City Hall	4.97
545474-08292022	99993	09/16/2022	100-110-43102	2131 Pear St--Offices--City Hall	7.60
545474-08292022	99993	09/16/2022	100-111-43102	2131 Pear St--Offices--City Hall	18.28
545474-08292022	99993	09/16/2022	100-112-43102	2131 Pear St--Offices--City Hall	16.76
545474-08292022	99993	09/16/2022	100-115-43102	2131 Pear St--Offices--City Hall	49.67
545474-08292022	99993	09/16/2022	100-116-43102	2131 Pear St--Offices--City Hall	16.76

WARRANT LISTING

Payment Dates: 9/3/2022 - 9/16/2022

Payable Number	Payment Number	Payment Date	Account Number	Description (Payable)	Amount
545474-08292022	99993	09/16/2022	100-117-43102	2131 Pear St--Offices--City Hall	134.07
545474-08292022	99993	09/16/2022	100-343-43102	2131 Pear St--Offices--City Hall	238.88
545474-08292022	99993	09/16/2022	200-342-43102	2131 Pear St--Offices--City Hall	42.66
545474-08292022	99993	09/16/2022	212-461-43102	2131 Pear St--Offices--City Hall	16.15
545474-08292022	99993	09/16/2022	212-462-43102	2131 Pear St--Offices--City Hall	42.96
545474-08292022	99993	09/16/2022	285-464-43102	2131 Pear St--Offices--City Hall	12.80
545474-08292022	99993	09/16/2022	505-119-43102	2131 Pear St--Offices--City Hall	12.80
554167-08292022	99993	09/16/2022	100-345-43102	1600 Primrose Lane--Irrigation Use Only	808.98
554625-08292022	99993	09/16/2022	209-558-43102	601 Tennent Ave--Memorial Hall	311.75
565167-08292022	99993	09/16/2022	201-343-43102	2100 San Pablo Ave--Offices--Faria House	322.51
565168-08252022	99993	09/16/2022	201-343-43102	2100 San Pablo Ave--Irrigation Use Only	60.05
565169-08292022	99993	09/16/2022	201-343-43102	2100 San Pablo Ave--Offices--Faria House	109.32
570108-08262022	99993	09/16/2022	310-347-43102	1303 Pinole Valley Rd--Irrigation Use Only	926.35
571919-08252022	99993	09/16/2022	100-343-43102	2329 Orleans Dr--Irrigation Use Only	121.05
Vendor EBM01 - EBMUD Total:					26,914.80
Vendor: ECO05 - ECOLAB					
6271270857	99997	09/16/2022	209-552-43804	SERVICE AND SOLUTIONS PSC	1,208.69
Vendor ECO05 - ECOLAB Total:					1,208.69
Vendor: 2380 - ELIZABETH A. LYNN					
AUGUST 2022	99943	09/09/2022	209-552-43802	EXERCISE AIKIDO PSC	35.70
Vendor 2380 - ELIZABETH A. LYNN Total:					35.70
Vendor: 1612 - FIRST VANGUARD RENTALS & SALES					
1-505722	99998	09/16/2022	200-342-44306	RED CURB PAINT CY	755.45
Vendor 1612 - FIRST VANGUARD RENTALS & SALES Total:					755.45
Vendor: GRA13 - GRAFIX SHOPPE					
146600	99999	09/16/2022	100-221-42107	REFLECTIVE LETTERING FOR CARS PD	220.15
Vendor GRA13 - GRAFIX SHOPPE Total:					220.15
Vendor: KEN14 - GREG KENNEDY RN					
109	99944	09/09/2022	100-231-42101	EMS CQI DUTIES JULY 2022 FIRE	2,000.00
Vendor KEN14 - GREG KENNEDY RN Total:					2,000.00
Vendor: HAR01 - HARRINGTON INDUSTRIAL PLASTIC, LLC					
006N3614	100000	09/16/2022	500-641-44306	SEALKITS SPLIT RING SUPPLIES WPCP	178.09
Vendor HAR01 - HARRINGTON INDUSTRIAL PLASTIC, LLC Total:					178.09
Vendor: DEL32 - HECTOR DE LA ROSA					
09062022	100001	09/16/2022	998-20030	RE-ISSUE STALE DATED CHECK 28298	6.32
Vendor DEL32 - HECTOR DE LA ROSA Total:					6.32
Vendor: 1161 - HINDERLITER, DE LLAMAS & ASSOCIATES					
SIN020950	100002	09/16/2022	100-115-42101	AUDIT SERVICES SLAES TAX FINANCE	1,602.09
SIN021165	100002	09/16/2022	105-115-42101	TRANSACTION TAX JULY - SEPT. 2022	150.00
SIN021165	100002	09/16/2022	106-115-42101	TRANSACTION TAX JULY - SEPT. 2022	150.00
Vendor 1161 - HINDERLITER, DE LLAMAS & ASSOCIATES Total:					1,902.09
Vendor: HOM01 - HOME DEPOT CREDIT SERVICE					
AUGUST 2022	100003	09/16/2022	100-222-44306	CITYWIDE SUPPLIES	18.16
AUGUST 2022	100003	09/16/2022	100-222-44306	CITYWIDE SUPPLIES	28.22
AUGUST 2022	100003	09/16/2022	100-343-44306	CITYWIDE SUPPLIES	23.21

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Payment Dates: 9/3/2022 - 9/16/2022

Payable Number	Payment Number	Payment Date	Account Number	Description (Payable)	Amount
AUGUST 2022	100003	09/16/2022	100-343-44306	CITYWIDE SUPPLIES	31.67
AUGUST 2022	100003	09/16/2022	100-343-44306	CITYWIDE SUPPLIES	282.96
AUGUST 2022	100003	09/16/2022	100-343-44306	CITYWIDE SUPPLIES	211.75
AUGUST 2022	100003	09/16/2022	100-343-44306	CITYWIDE SUPPLIES	150.72
AUGUST 2022	100003	09/16/2022	100-343-44306	CITYWIDE SUPPLIES	115.41
AUGUST 2022	100003	09/16/2022	100-343-44306	CITYWIDE SUPPLIES	97.23
AUGUST 2022	100003	09/16/2022	100-343-44306	CITYWIDE SUPPLIES	42.25
AUGUST 2022	100003	09/16/2022	100-343-44306	CITYWIDE SUPPLIES	73.24
AUGUST 2022	100003	09/16/2022	100-343-44306	CITYWIDE SUPPLIES	77.26
AUGUST 2022	100003	09/16/2022	100-343-44306	CITYWIDE SUPPLIES	87.35
AUGUST 2022	100003	09/16/2022	100-343-44306	CITYWIDE SUPPLIES	87.27
AUGUST 2022	100003	09/16/2022	100-343-44306	CITYWIDE SUPPLIES	9.23
AUGUST 2022	100003	09/16/2022	100-345-44306	CITYWIDE SUPPLIES	565.41
AUGUST 2022	100003	09/16/2022	100-345-44306	CITYWIDE SUPPLIES	72.25
AUGUST 2022	100003	09/16/2022	100-345-44306	CITYWIDE SUPPLIES	54.83
AUGUST 2022	100003	09/16/2022	100-345-44306	CITYWIDE SUPPLIES	43.97
AUGUST 2022	100003	09/16/2022	100-345-44306	CITYWIDE SUPPLIES	24.35
AUGUST 2022	100003	09/16/2022	100-345-44306	CITYWIDE SUPPLIES	40.63
AUGUST 2022	100003	09/16/2022	100-345-44306	CITYWIDE SUPPLIES	280.36
AUGUST 2022	100003	09/16/2022	200-342-44306	CITYWIDE SUPPLIES	51.25
AUGUST 2022	100003	09/16/2022	209-552-44306	CITYWIDE SUPPLIES	55.65
AUGUST 2022	100003	09/16/2022	209-554-44306	CITYWIDE SUPPLIES	98.13
AUGUST 2022	100003	09/16/2022	500-641-42108	CITYWIDE SUPPLIES	1,462.26
AUGUST 2022	100003	09/16/2022	500-641-44306	CITYWIDE SUPPLIES	486.00
AUGUST 2022	100003	09/16/2022	500-641-44306	CITYWIDE SUPPLIES	270.43
AUGUST 2022	100003	09/16/2022	500-641-44306	CITYWIDE SUPPLIES	275.51
AUGUST 2022	100003	09/16/2022	500-642-44306	CITYWIDE SUPPLIES	73.41
Vendor HOM01 - HOME DEPOT CREDIT SERVICE Total:					5,190.37
Vendor: IED02 - IEDA, INC.					
23865	100004	09/16/2022	100-116-42101	LABOR CONSULTING FEES SEPT. 2022	2,436.39
Vendor IED02 - IEDA, INC. Total:					2,436.39
Vendor: CUL03 - ISING'S CULLIGAN-LIVERMORE					
379X07954006	99945	09/09/2022	500-641-44305	LAB SUPPLIES WPCP	747.10
Vendor CUL03 - ISING'S CULLIGAN-LIVERMORE Total:					747.10
Vendor: MOO14 - ISSAC MOORE					
AUGUST 2022	99946	09/09/2022	209-552-43802	EXERCISE CLASSES PSC	405.00
Vendor MOO14 - ISSAC MOORE Total:					405.00
Vendor: 1285 - JACKSON LEWIS P.C.					
8079525	99947	09/09/2022	100-116-42102	EMPLOYMENT RISK MANAGEMENT ERA	224.00
Vendor 1285 - JACKSON LEWIS P.C. Total:					224.00
Vendor: COR15 - JACQUELINE L CORL-SEIDEL					
AUGUST 2022	99948	09/09/2022	209-552-43802	BALANCE AND YOGA CLASSES PSC	317.80
Vendor COR15 - JACQUELINE L CORL-SEIDEL Total:					317.80
Vendor: 1611 - JANICE M. BYER					
AUGUST 2022	99949	09/09/2022	209-552-43802	EXERCISE CLASSES PSC	810.00
Vendor 1611 - JANICE M. BYER Total:					810.00
Vendor: 1415 - JASON DEAN					
09072022	100005	09/16/2022	100-221-42302	HOTEL AND MEALS	56.75
09072022	100005	09/16/2022	100-221-42303	HOTEL AND MEALS	207.00
Vendor 1415 - JASON DEAN Total:					263.75
Vendor: 2364 - JEFFREY TEEL					
09122022	100006	09/16/2022	100-221-42302	MILEAGE REIMB FOR POLICE ACADEMY	421.20
Vendor 2364 - JEFFREY TEEL Total:					421.20

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Payment Dates: 9/3/2022 - 9/16/2022

Payable Number	Payment Number	Payment Date	Account Number	Description (Payable)	Amount
Vendor: 1630 - JOHN AND CLAIRE INVESTIGATIONS					
1366	100007	09/16/2022	100-223-42514	DISPATCHER BACKGROUND SERVICES	1,991.60
1368	100007	09/16/2022	100-221-42101	POLICE OFFICER BACKGROUND	2,020.85
Vendor 1630 - JOHN AND CLAIRE INVESTIGATIONS Total:					4,012.45
Vendor: 1641 - JOSUE ARDON					
08252022	99950	09/09/2022	100-222-42201	NNO DEPOSIT PD	375.00
Vendor 1641 - JOSUE ARDON Total:					375.00
Vendor: KEL09 - KELLER CANYON LANDFILL					
4212-000031399	99951	09/09/2022	500-641-44302	SLUDGE REMOVAL WPCP	5,695.02
Vendor KEL09 - KELLER CANYON LANDFILL Total:					5,695.02
Vendor: 1424 - KRISTINA SANTOYO					
06292022	100008	09/16/2022	209-551-42515	PETTY CASH REIMBURSEMENT PSC	19.72
06292022	100008	09/16/2022	209-552-43804	PETTY CASH REIMBURSEMENT PSC	2.86
06292022	100008	09/16/2022	209-552-43809	PETTY CASH REIMBURSEMENT PSC	85.00
06292022	100008	09/16/2022	209-552-43809	PETTY CASH REIMBURSEMENT PSC	100.00
06292022	100008	09/16/2022	209-552-43809	PETTY CASH REIMBURSEMENT PSC	110.00
Vendor 1424 - KRISTINA SANTOYO Total:					317.58
Vendor: LAR04 - LARRY WALKER ASSOCIATES					
00243.11-16	99952	09/09/2022	500-641-42101	ONGOING NPDES PERMIT ASSISTANCE WPCP	951.50
Vendor LAR04 - LARRY WALKER ASSOCIATES Total:					951.50
Vendor: 2253 - LOOKOUT HEALTH CORP					
1535	99953	09/09/2022	217-117-42101	COVID TESTING FIRST RESPONDERS	22,380.00
Vendor 2253 - LOOKOUT HEALTH CORP Total:					22,380.00
Vendor: 1566 - MANAGEMENT PARTNERS, INC.					
INV10862	99954	09/09/2022	106-231-42101	EMERGENCY OPERATIONS PLAN UPDATE	3,300.00
Vendor 1566 - MANAGEMENT PARTNERS, INC. Total:					3,300.00
Vendor: ROB21 - MARY ROBERTS					
SEPTEMBER 2022	99955	09/09/2022	100-117-41101	2022 RETIREE MEDICARE REIMBURSEMENT SEPT. 2022	170.10
Vendor ROB21 - MARY ROBERTS Total:					170.10
Vendor: MEY01 - MEYERS NAVE, A PROFESSIONAL CORPORATION					
195661	99956	09/09/2022	100-20011	CITY ATTORNEY SERVICES	14,424.58
195663	99956	09/09/2022	100-20011	CITY COUNCIL MEETINGS	3,796.00
195664	99956	09/09/2022	100-20011	PUBLIC RECORDS ACT REQUESTS	330.00
195665	99956	09/09/2022	100-20011	PINOLE SQUARE SHOPPING CENTER	195.00
195666	99956	09/09/2022	100-20011	PINOLE SHORES II CR	2,059.50
195667	99956	09/09/2022	100-20011	CHARTER CITY MEASURE	3,936.00
195668	99956	09/09/2022	100-20011	COVID 19	423.00
195670	99956	09/09/2022	100-20011	1500 FITZGERALD CR	1,487.50
195671	99956	09/09/2022	100-20011	GENERAL SERVICES FINANCE	780.00
195672	99956	09/09/2022	100-20011	GENERAL SERVICES PW	3,101.00
195673	99956	09/09/2022	100-20011	CLAIM AGAINST PG&E FOR DELAYS TO PROJECT	13,824.00
195674	99956	09/09/2022	100-20011	MVP CONSTRUCTION LLC DISPUTE	3,111.00
195675	99956	09/09/2022	100-20011	GENERAL SERVICES CITY ATTORNEY	13,266.00
195677	99956	09/09/2022	100-20011	GENERAL SERVICES POLICE	432.00

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Payment Dates: 9/3/2022 - 9/16/2022

Payable Number	Payment Number	Payment Date	Account Number	Description (Payable)	Amount
195678	99956	09/09/2022	100-20011	GENERAL SERVICES LABOR AND EMPLOYMENT	2,502.00
195679	99956	09/09/2022	100-20011	GENERAL SERVICES CODE ENFORCEMENT	976.00
195680	99956	09/09/2022	100-20011	GENERAL SERVICES COMMUNITY DEVELOPMENT	3,088.00
195681	99956	09/09/2022	100-20011	GENERAL SERVICES FIRE	116.00
195682	99956	09/09/2022	100-20011	GENERAL SERVICES RECREATIONAL	426.00
195683	99956	09/09/2022	100-20011	HOUSING SUCCESSOR RDA AFFORDABLE	787.50
195684	99956	09/09/2022	100-20011	SUCCESSOR AGENCY RDA SURPLUS	4,090.00
Vendor MEY01 - MEYERS NAVE, A PROFESSIONAL CORPORATION Total:					73,151.08
Vendor: 1139 - MICHAEL BAKER INTERNATIONAL, INC.					
1155199	99958	09/09/2022	212-461-42101	PROFESSIONAL SERVICES JULY 2022	29,054.93
Vendor 1139 - MICHAEL BAKER INTERNATIONAL, INC. Total:					29,054.93
Vendor: 2426 - NEW FRONTIER TENNIS					
SUMMER 2022	100009	09/16/2022	209-555-43801	INSTRUCTOR FOR JR TENNIS CAMP PYC	2,380.00
Vendor 2426 - NEW FRONTIER TENNIS Total:					2,380.00
Vendor: 2422 - NORCAL SCAFFOLDING, INC.					
14463	99959	09/09/2022	500-641-42108	DIGESTER PROJECT WPCP	3,830.00
Vendor 2422 - NORCAL SCAFFOLDING, INC. Total:					3,830.00
Vendor: O'R01 - O'REILLY AUTOMOTIVE, INC					
AUGUST 2022	99960	09/09/2022	100-231-44306	CITYWIDE PURCHASES	71.01
AUGUST 2022	99960	09/09/2022	100-343-44306	CITYWIDE PURCHASES	35.08
AUGUST 2022	99960	09/09/2022	100-343-44306	CITYWIDE PURCHASES	48.27
AUGUST 2022	99960	09/09/2022	100-343-44306	CITYWIDE PURCHASES	171.96
AUGUST 2022	99960	09/09/2022	100-345-44306	CITYWIDE PURCHASES	8.76
AUGUST 2022	99960	09/09/2022	100-345-44306	CITYWIDE PURCHASES	46.25
AUGUST 2022	99960	09/09/2022	207-344-44306	CITYWIDE PURCHASES	39.49
Vendor O'R01 - O'REILLY AUTOMOTIVE, INC Total:					420.82
Vendor: CBA00 - PACIFIC CREDIT SERVICES					
862800000116	100010	09/16/2022	100-000-31510	COLLECTION FEES BL	55.37
Vendor CBA00 - PACIFIC CREDIT SERVICES Total:					55.37
Vendor: PAC41 - PACIFIC ECORISK					
18432	99961	09/09/2022	500-641-44305	NPDES ACUTE WET TESTING WPCP	1,046.00
Vendor PAC41 - PACIFIC ECORISK Total:					1,046.00
Vendor: PAC55 - PACIFIC SITE MANAGEMENT					
61974	100011	09/16/2022	100-222-42108	MONTHLY LANDSCAPE SERVICES	125.93
61974	100011	09/16/2022	100-231-42108	MONTHLY LANDSCAPE SERVICES	337.43
61974	100011	09/16/2022	100-343-42108	MONTHLY LANDSCAPE SERVICES	180.02
61974	100011	09/16/2022	100-345-42108	MONTHLY LANDSCAPE SERVICES	5,787.95
61974	100011	09/16/2022	200-342-42108	MONTHLY LANDSCAPE SERVICES	335.81
61974	100011	09/16/2022	201-343-42108	MONTHLY LANDSCAPE SERVICES	548.93
61974	100011	09/16/2022	209-552-42108	MONTHLY LANDSCAPE SERVICES	204.23
61974	100011	09/16/2022	209-553-42108	MONTHLY LANDSCAPE SERVICES	212.31
61974	100011	09/16/2022	209-557-42108	MONTHLY LANDSCAPE SERVICES	212.31

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Payment Dates: 9/3/2022 - 9/16/2022

Payable Number	Payment Number	Payment Date	Account Number	Description (Payable)	Amount
61974	100011	09/16/2022	310-347-42108	MONTHLY LANDSCAPE SERVICES	62.16
61974	100011	09/16/2022	310-348-42108	MONTHLY LANDSCAPE SERVICES	65.37
Vendor PAC55 - PACIFIC SITE MANAGEMENT Total:					8,072.45
Vendor: PGE01 - PG&E					
0887-09012022	100012	09/16/2022	200-342-43103	PINON AVE & SAN PABLO AVE TRAFFIC SIGNAL	76.28
1093-08312022	100012	09/16/2022	500-642-43103	W END/HAZEL AVE SEWAGE PLANT	654.93
2182-09012022	100012	09/16/2022	200-342-43103	OAKRIDGE/SAN PABLO AVE TRAFFIC SIGNAL	68.75
2222-08252022	100012	09/16/2022	100-345-43103	STREET AND HIGHWAY LIGHTING	997.26
2222-08252022	100012	09/16/2022	200-342-43103	STREET AND HIGHWAY LIGHTING	0.20
2222-08252022	100012	09/16/2022	310-347-43103	STREET AND HIGHWAY LIGHTING	5,653.61
2222-08252022	100012	09/16/2022	310-348-43103	STREET AND HIGHWAY LIGHTING	8,076.58
3834-09072022	100012	09/16/2022	100-231-43103	3790 PINOLE VALLEY RD FIRESTATION	24.82
4256-08302022	100012	09/16/2022	500-641-43103	11 TENNANT AVE	72,640.10
4430-08292022	99962	09/09/2022	100-345-43103	S/O MARLESTA 1ST POLE-SPRINKLER CONTROLLER	11.46
5274-09072022	100012	09/16/2022	201-343-43103	2361 SAN PABLO AVE OLD BANK BUILDING	27.74
6521-08302022	100012	09/16/2022	200-342-43103	IFO 971 SAN PABLO AVE-TRAFFIC SIGNAL CONTROL	103.29
6897-08302022	100012	09/16/2022	200-342-43103	PINOLE VALLEY RD & ESTATES AVE-TRAFFIC LIGHT CTRL	70.92
7547-08302022	100012	09/16/2022	100-222-43103	880 Tennent Ave-Public Safety Facility	4,457.18
7547-08302022	100012	09/16/2022	100-223-43103	880 Tennent Ave-Public Safety Facility	891.44
7547-08302022	100012	09/16/2022	100-231-43103	880 Tennent Ave-Public Safety Facility	3,565.75
8511-08252022	99962	09/09/2022	100-345-43103	W/S PINOLE SHORES DR-SPRINKLER CONTROLLER	12.07
9929-08252022	99962	09/09/2022	201-343-43103	790 PINOLE SHORES DR-NEW METAL BUILDING	75.77
9961-08302022	100012	09/16/2022	209-552-43103	2500 CHARLES ST-SENIOR CENTER	4,764.52
Vendor PGE01 - PG&E Total:					102,172.67
Vendor: JAR01 - PINOLE GOODYEAR					
INV062789	100013	09/16/2022	100-231-42107	OIL CHANGE FILTER REPLACED FIRE	198.61
Vendor JAR01 - PINOLE GOODYEAR Total:					198.61
Vendor: PIN16 - PINOLE SEALS SWIM CLUB					
08292022	100014	09/16/2022	209-557-42101	2022 SWIM SEASON EXPENSE REIMBURSEMENT	19,177.05
Vendor PIN16 - PINOLE SEALS SWIM CLUB Total:					19,177.05
Vendor: 2388 - PRESTIGE PRINTING AND GRAPHICS					
79155	99963	09/09/2022	100-110-42514	MARTINEZ-RUBIN BUSINESS CARDS	135.73
79333	100015	09/16/2022	100-231-42201	STEVE DORSEY AND GREG SEKERA BUSINESS CARDS FIRE	102.00
Vendor 2388 - PRESTIGE PRINTING AND GRAPHICS Total:					237.73
Vendor: PRI18 - PRIORITY 1 PUBLIC SAFETY EQUIPMENT					
8908	100016	09/16/2022	100-221-42107	REPLACE POLICE DECAL ON 804	100.00
Vendor PRI18 - PRIORITY 1 PUBLIC SAFETY EQUIPMENT Total:					100.00

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Payment Dates: 9/3/2022 - 9/16/2022

Payable Number	Payment Number	Payment Date	Account Number	Description (Payable)	Amount
Vendor: ISH01 - ROBERT ISHIDA					
09012022	99964	09/09/2022	998-20030	REISSUE STALE DATED CHECKS 27673 2777 27720 24770	340.18
Vendor ISH01 - ROBERT ISHIDA Total:					340.18
Vendor: SWE00 - ROY SWEARINGEN					
08312022	99965	09/09/2022	100-110-42514	OFFICE SUPPLIES	178.26
Vendor SWE00 - ROY SWEARINGEN Total:					178.26
Vendor: ROS08 - RSG, INC.					
I009055	99966	09/09/2022	285-464-42101	COMPLIANCE MONITORING YEAR 5	250.00
Vendor ROS08 - RSG, INC. Total:					250.00
Vendor: J&O01 - RUBBER DUST INC.					
151854	100017	09/16/2022	500-642-42107	AC SYSTEM CY	169.09
Vendor J&O01 - RUBBER DUST INC. Total:					169.09
Vendor: 1714 - SHERRI D. LEWIS					
PC02PINOLE-FY2022/23	100018	09/16/2022	212-461-42514	PLANNIN COMMISSION MINUTES 083122	300.00
Vendor 1714 - SHERRI D. LEWIS Total:					300.00
Vendor: 1413 - SHIELDS, HARPER & CO.					
3274324	100019	09/16/2022	100-343-44306	MAG CARD OPW FUEL MANAGEMENT SYSTEM CY	454.67
Vendor 1413 - SHIELDS, HARPER & CO. Total:					454.67
Vendor: SOM03 - SOME MORE SOUND, LLC					
SO-000048	99967	09/09/2022	505-119-47101	PCTV ELECTRONIC EQUIPMENT	733.48
SO-000048	99967	09/09/2022	505-119-47101	PCTV ELECTRONIC EQUIPMENT	458.50
Vendor SOM03 - SOME MORE SOUND, LLC Total:					1,191.98
Vendor: STE20 - STERICYCLE, INC.					
3006145164	100020	09/16/2022	100-222-42101	MEDICAL WASTE COLLECTION PD	60.45
Vendor STE20 - STERICYCLE, INC. Total:					60.45
Vendor: LEW08 - THE LEW EDWARDS GROUP					
001	99968	09/09/2022	100-111-42101	PROFESSIONAL SERVICES APRIL 2022	4,800.00
003	99968	09/09/2022	100-111-42101	PROFESSIONAL SERVICES JUNE 2022	15,396.57
004	99968	09/09/2022	100-111-42101	PROFESSIONAL SERVICES JULY 2022	3,000.00
Vendor LEW08 - THE LEW EDWARDS GROUP Total:					23,196.57
Vendor: 2351 - THE NATELSON DALE GROUP, INC.					
03763	99969	09/09/2022	100-111-42101	ECONOMIC STRATEGIC PLAN COMMUNITY WORKSHOP	3,000.00
03764	99969	09/09/2022	100-461-42101	FISCAL IMPACT ANALYSIS 1500 FITZGERALD	2,125.00
Vendor 2351 - THE NATELSON DALE GROUP, INC. Total:					5,125.00
Vendor: 2365 - TRIPEPI, SMITH AND ASSOCIATES, INC.					
8625	100021	09/16/2022	100-231-42101	SPECIAL SERVICES FIRE STATION 74	3,313.75
Vendor 2365 - TRIPEPI, SMITH AND ASSOCIATES, INC. Total:					3,313.75
Vendor: UNI38 - UNIVAR USA INC					
50508870	99970	09/09/2022	500-641-44303	SOD BISULFITE WPCP	7,813.44
50512573	99970	09/09/2022	500-641-44303	SOD HYPO LIQUICHLOR WPCP	7,442.30
Vendor UNI38 - UNIVAR USA INC Total:					15,255.74
Vendor: UNI07 - UNIVERSAL BUILDING SVCS.					
4275	99971	09/09/2022	100-231-42108	JANITORIAL SUPPLIES FIRE DPT	219.54
4275-1	100022	09/16/2022	100-231-42108	JANITORIAL SUPPLIES FIRE	146.24
4521	100022	09/16/2022	100-231-42108	JANITORIAL SUPPLIES FIRE	177.43
4616	100022	09/16/2022	100-343-42108	JANITORIAL SUPPLIES CY	291.02

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Payment Dates: 9/3/2022 - 9/16/2022

Payable Number	Payment Number	Payment Date	Account Number	Description (Payable)	Amount
505733	100022	09/16/2022	100-343-42108	JANITORIAL SERVICES AUGUST 2022 CH	1,234.00
505734	100022	09/16/2022	100-222-42108	JANITORIAL SERVICES AUGUST 2022 PD	2,523.00
505735	100022	09/16/2022	209-557-42108	JANITORIAL SERVICES AUGUST 2022 SWIM CENTER	1,333.00
505736	100022	09/16/2022	100-231-42108	JANITORIAL SERVICE AUGUST 2022 FIRE	157.00
505737	100022	09/16/2022	500-641-42108	JANITORIAL SERVICE AUGUST 2022 WPCP	508.00
Vendor UNI07 - UNIVERSAL BUILDING SVCS. Total:					6,589.23
Vendor: USB06 - US BANK					
481027944	100023	09/16/2022	525-118-42107	COPIER CITYWIDE LEASES	2,501.86
AUGUST 2022	99972	09/09/2022	100-20018	CITYWIDE CREDIT CARDS	30,229.87
Vendor USB06 - US BANK Total:					32,731.73
Vendor: LUK00 - VIVIENNE F. KEARSLEY-LUKE					
AUGUST 2022	99973	09/09/2022	209-552-43802	GENTLE YOGA CLASSES PSC	158.90
Vendor LUK00 - VIVIENNE F. KEARSLEY-LUKE Total:					158.90
Vendor: VWR01 - VWR INTERNATIONAL, LLC.					
8810466702	99974	09/09/2022	500-641-44305	CHEMICAL SUPPLIES WPCP	184.39
8810475590	99974	09/09/2022	500-641-44305	CHEMICAL SUPPLIES WPCP	314.42
8810565795	100024	09/16/2022	500-641-44305	FILTERS WPCP	348.45
Vendor VWR01 - VWR INTERNATIONAL, LLC. Total:					847.26
Vendor: 1520 - WEX BANK					
83527343	100025	09/16/2022	100-221-44301	FUEL PURCHASES PD	90.01
Vendor 1520 - WEX BANK Total:					90.01
Vendor: 2139 - Z.C. FOR HAIR					
INV0006051	99975	09/09/2022	100-111-42514	SMALL BUSINESS ASSISTANCE RELIEF PROGRAM	1,315.78
Vendor 2139 - Z.C. FOR HAIR Total:					1,315.78
Grand Total:					742,545.67

Report Summary

Fund Summary

Fund	Payment Amount
100 - General Fund	508,034.93
105 - Measure S -2006	150.00
106 - MEASURE S-2014	3,450.00
200 - Gas Tax Fund	3,585.17
201 - Restricted Real Estate Maintenance Fund	1,949.90
207 - NPDES Storm Water Fund	39.49
209 - Recreation Fund	41,863.25
212 - Building & Planning	29,934.78
217 - American Rescue Plan Act Fund	22,380.00
285 - Housing Land Held for Resale	267.77
310 - Lighting & Landscape Districts	14,784.07
325 - City Street Improvements	422.10
500 - Sewer Enterprise Fund	111,407.49
505 - Cable Access TV	1,249.87
525 - Information Systems	2,501.86
998 - Payroll Clearing	524.99
Grand Total:	742,545.67

Account Summary

Account Number	Account Name	Payment Amount
100-000-31510	Other Tax/Business License	55.37
100-10601	Gas Tanks/Corp Yard	4,506.19
100-10602	Gas Tanks/Fire Station	533.67
100-110-42514	Admin Exp/Special Depart	313.99
100-110-43102	Utilities/Water	10.55
100-111-42101	Prof Svcs/Professional Ser...	35,796.57
100-111-42201	Office Expense	84.95
100-111-42514	Admin Exp/Special Depart	1,315.78
100-111-43102	Utilities/Water	25.38
100-112-42201	Office Expense	34.00
100-112-43102	Utilities/Water	23.26
100-115-42101	Prof Svcs/Professional Ser...	1,602.09
100-115-43102	Utilities/Water	68.95
100-116-42101	Prof Svcs/Professional Ser...	2,521.39
100-116-42102	Prof Svcs/Attorney Servic...	224.00
100-116-43102	Utilities/Water	23.26
100-117-41004	Emp Benefits/PERS Retir...	270,577.24
100-117-41101	Retiree Benefits/Medical...	170.10
100-117-43102	Utilities/Water	186.10
100-117-43105	Utilities/Cable	29.86
100-20011	Accounts Payable/Miscell...	73,151.08
100-20018	Accounts Payable/CalCard	30,229.87
100-221-42101	Prof Svcs/Professional Ser...	2,282.85
100-221-42107	Prof Svcs/Equipment Mai...	530.15
100-221-42110	Prof Svcs/Fingerprinting	81.00
100-221-42302	Travel & Training/Mileage...	477.95
100-221-42303	Travel & Training/Meal Al...	207.00
100-221-44301	Other Materials Supp/Fuel	90.01
100-222-42101	Prof Svcs/Professional Ser...	60.45
100-222-42108	Prof Svcs/Building-Structu...	2,648.93
100-222-42201	Office Expense	663.15
100-222-43102	Utilities/Water	1,177.86
100-222-43103	Utilities/Electricity & Pow...	4,457.18
100-222-44306	Other Materials Supp/Ma...	46.38
100-222-44410	Safety Clothing	435.22
100-223-42514	Admin Exp/Special Depart	1,991.60
100-223-43102	Utilities/Water	261.75

Account Summary

Account Number	Account Name	Payment Amount
100-223-43103	Utilities/Electricity & Pow...	891.44
100-231-42101	Prof Svcs/Professional Ser...	5,313.75
100-231-42107	Prof Svcs/Equipment Mai...	3,157.51
100-231-42108	Prof Svcs/Building-Structu...	1,037.64
100-231-42110	Prof Svcs/Fingerprinting	32.00
100-231-42201	Office Expense	102.00
100-231-42512	Admin Exp/Abatement	19,200.00
100-231-43102	Utilities/Water	1,787.25
100-231-43103	Utilities/Electricity & Pow...	3,590.57
100-231-44306	Other Materials Supp/Ma...	71.01
100-231-44410	Safety Clothing	264.90
100-343-42108	Prof Svcs/Building-Structu...	3,230.12
100-343-42511	Admin Exp/Equipment Re...	4,387.00
100-343-42513	Admin Exp/Rent	300.00
100-343-43102	Utilities/Water	3,068.22
100-343-44306	Other Materials Supp/Ma...	1,999.53
100-345-42108	Prof Svcs/Building-Structu...	5,787.95
100-345-43102	Utilities/Water	12,636.31
100-345-43103	Utilities/Electricity & Pow...	1,020.79
100-345-44306	Other Materials Supp/Ma...	1,136.81
100-461-42101	Prof Svcs/Professional Ser...	2,125.00
105-115-42101	Prof Svcs/Professional Ser...	150.00
106-115-42101	Prof Svcs/Professional Ser...	150.00
106-231-42101	Prof Svcs/Professional Ser...	3,300.00
200-341-42514	Admin Exp/Special Depart	2,064.00
200-342-42108	Prof Svcs/Building-Structu...	335.81
200-342-43102	Utilities/Water	59.22
200-342-43103	Utilities/Electricity & Pow...	319.44
200-342-44306	Other Materials Supp/Ma...	806.70
201-343-42108	Prof Svcs/Building-Structu...	548.93
201-343-43102	Utilities/Water	1,297.46
201-343-43103	Utilities/Electricity & Pow...	103.51
207-344-44306	Other Materials Supp/Ma...	39.49
209-551-42515	Admin Exp/Special Events	19.72
209-552-42108	Prof Svcs/Building-Structu...	204.23
209-552-43102	Utilities/Water	2,827.60
209-552-43103	Utilities/Electricity & Pow...	4,764.52
209-552-43802	Program Cost/Class Fees	1,727.40
209-552-43804	Program Cost/Food Progr...	1,869.81
209-552-43809	Program Cost/Newsletter	295.00
209-552-44306	Other Materials Supp/Ma...	55.65
209-553-42108	Prof Svcs/Building-Structu...	212.31
209-554-42108	Prof Svcs/Building-Structu...	1,041.24
209-554-43102	Utilities/Water	40.13
209-554-44306	Other Materials Supp/Ma...	98.13
209-555-43801	Program Cost/Youth Camp	4,672.50
209-557-42101	Prof Svcs/Professional Ser...	19,177.05
209-557-42108	Prof Svcs/Building-Structu...	3,030.31
209-558-42108	Prof Svcs/Building-Structu...	1,411.98
209-558-43102	Utilities/Water	415.67
212-461-42101	Prof Svcs/Professional Ser...	29,054.93
212-461-42201	Office Expense	68.00
212-461-42514	Admin Exp/Special Depart	562.80
212-461-43102	Utilities/Water	22.42
212-462-42201	Office Expense	17.00
212-462-42514	Admin Exp/Special Depart	150.00
212-462-43102	Utilities/Water	59.63
217-117-42101	Prof Svcs/Professional Ser...	22,380.00

Account Summary

Account Number	Account Name	Payment Amount
285-464-42101	Prof Svcs/Professional Ser...	250.00
285-464-43102	Utilities/Water	17.77
310-347-42108	Prof Svcs/Building-Structu...	62.16
310-347-43102	Utilities/Water	926.35
310-347-43103	Utilities/Electricity & Pow...	5,653.61
310-348-42108	Prof Svcs/Building-Structu...	65.37
310-348-43103	Utilities/Electricity & Pow...	8,076.58
325-342-47205	Improvements/Streets	422.10
500-641-42101	Prof Svcs/Professional Ser...	951.50
500-641-42107	Prof Svcs/Equipment Mai...	95.00
500-641-42108	Prof Svcs/Building-Structu...	6,977.73
500-641-43102	Utilities/Water	1,121.69
500-641-43103	Utilities/Electricity & Pow...	72,640.10
500-641-44302	Other Materials Supp/Slu...	5,695.02
500-641-44303	Other Materials Supp/Ch...	15,255.74
500-641-44305	Other Materials Supp/Lab...	2,640.36
500-641-44306	Other Materials Supp/Ma...	2,386.80
500-641-44410	Safety Clothing	1,946.04
500-642-42107	Prof Svcs/Equipment Mai...	169.09
500-642-43102	Utilities/Water	800.08
500-642-43103	Utilities/Electricity & Pow...	654.93
500-642-44306	Other Materials Supp/Ma...	73.41
505-119-43102	Utilities/Water	57.89
505-119-47101	FF&E/Equipment	1,191.98
525-118-42107	Prof Svcs/Equipment Mai...	2,501.86
998-20030	Wages Payable	524.99
Grand Total:		742,545.67

Project Account Summary

Project Account Key	Payment Amount
None	720,165.67
21711742101ER2101	22,380.00
Grand Total:	742,545.67

APPROVED BY:

DATE: 9/15/2022



CITY COUNCIL REPORT

9C

DATE: SEPTEMBER 20, 2022

TO: MAYOR AND COUNCIL MEMBERS

FROM: MARKISHA GUILLORY, FINANCE DIRECTOR

**SUBJECT: RECEIVE THE FISCAL YEAR (FY) 2021/22 FOURTH QUARTER
FINANCIAL REPORT**

RECOMMENDATION

Staff recommends that the City Council receive the Fiscal Year (FY) 2021/22 Fourth Quarter Financial Report (unaudited) and adopt a resolution approving year-end budget adjustments.

BACKGROUND

The quarterly financial report is intended to provide the City Council, City staff and management, and the community a general update on the financial activities and condition of the City.

The City operates on an annual budget cycle. Through the budget, the City Council approves revenue estimates and authorizes City staff to expend the City's limited financial resources. As one of the many activities that the City undertakes to help ensure its financial soundness, staff provides quarterly financial reports on the City's budget condition.

The Fourth Quarter Financial Report covers financial activity through the fourth quarter of the FY 2021/22, ending June 30, 2022. It provides preliminary year-end results since the annual audit has not been completed. Further adjustments may be necessary as a result of the City's year-end audit process.

REVIEW & ANALYSIS

General Fund Analysis

The FY 2021/22 revised budget is a status quo budget, meaning that while it includes several economic adjustments, it does not include any fundamental changes to programs or service levels. The City remains in a stable financial position and is able to fund its operating and capital expenditures through annual, recurring funding sources. The budget does include the use of unassigned fund balance (residual, unrestricted funds) primarily for several one-time, Council-directed initiatives, which is an acceptable use of unrestricted funds. Additionally, the City maintains a separate

General Reserve Fund, which is required by the City's Cash Reserve Policy to maintain a reserve balance equal to 50% of total on-going General Fund expenditures. The balance currently has a balance of \$8.2 million and complies with the Policy.

At its meeting on June 29, 2021, the City Council adopted the FY 2021/22 budget, which included the use of a portion of the General Fund's substantial unassigned fund balance to fund several new critical positions as well as several Council-directed initiatives. The FY 2021/22 revised budget includes the use of General Fund (including Measure S 2006 and 2014) unassigned fund balance for a net deficit of about \$6.7 million.

The City is projecting to end FY 2021/22 with a net deficit of \$2.0 million, with total revenues projected at \$22.9 million and expenditures at \$24.9 million. This includes a proposed revenue adjustment of \$208,050 to increase the transfer from the Section 115 Trust for pension costs. Also included is a proposed adjustment of \$233,229 to transfer funds to the Information Technology Fund and the Cable Access TV Fund to clear negative fund balances. The table below summarizes the General Fund budget and actuals through the fourth quarter.

General Fund (including Measure S 2006 and 2014)	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Proposed Adjustments	FY 2021/22 Amended Budget	Projected Year-End
Revenues	\$ 21,627,288	\$ 22,442,475	\$ 22,859,047	102%	\$ 208,050	\$ 22,650,525	\$ 22,859,047
Expenditures	26,202,382	29,110,896	24,627,590	85%	233,229	29,344,125	24,860,819
Net surplus/deficit	(4,575,094)	(6,668,421)	\$ (1,768,542)		\$ (25,179)	\$ (6,693,600)	(2,001,771)
Beginning Fund Balance	12,803,691	12,803,691					12,803,691
Ending Fund Balance	\$ 8,228,597	\$ 6,135,270					\$ 10,801,920

General Fund Revenue (including Measure S 2006 and 2014)

The City Council authorized revenues in the amount of \$21,627,288 in the original FY 2021/22 General Fund budget, including Measure S 2006 and 2014. During the mid-year budget process, the budget was increased to \$22,442,475. General Fund actual revenues through the fourth quarter of FY 2021/22 totaled \$22,859,047, which is 102% of the revised budget. Below is a table showing the original budget, revised budget, year-end actual amounts, and percentage of budget received for General Fund revenues by category.

Category	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Proposed Adjustments	FY 2021/22 Amended Budget	Projected Year-End
Property Taxes	\$ 4,230,122	\$ 4,230,122	\$ 4,307,208	102%		\$ 4,230,122	\$ 4,307,208
Sales and Use Taxes	4,224,661	4,483,848	4,612,708	103%		4,483,848	4,612,708
Sales and Use Taxes - Measure S 2006	2,142,000	2,420,000	2,501,974	103%		2,420,000	2,501,974
Sales and Use Taxes - Measure S 2014	2,142,000	2,420,000	2,498,944	103%		2,420,000	2,498,944
Utility Users Tax	1,915,000	1,915,000	2,063,773	108%		1,915,000	2,063,773
Franchise Taxes	779,000	779,000	788,146	101%		779,000	788,146
Other Taxes: TOT	418,000	418,000	487,687	117%		418,000	487,687
Other Taxes: Business License	382,000	382,000	441,779	116%		382,000	441,779
Intergovernmental Taxes	2,082,883	2,082,883	2,108,808	101%		2,082,883	2,108,808
Public Safety Charges	1,339,796	1,339,796	1,477,492	110%		1,339,796	1,477,492
Total Other Revenue	1,118,140	1,118,140	508,792	46%		1,118,140	508,792
Revenue Total:	20,773,602	21,588,789	21,797,311	101%		21,588,789	21,797,311
Transfer In from Section 115 Trust	853,686	853,686	1,061,736	124%	208,050	1,061,736	1,061,736
Revenue/Sources Total:	\$ 21,627,288	\$ 22,442,475	\$ 22,859,047	102%	208,050	22,650,525	\$ 22,859,047

Sales Tax

Sales tax is the City's largest general revenue stream. For FY 2021/22, sales tax, including Measure S funds, was originally budgeted at \$8,508,861, then increased to \$9,323,848 during the mid-year budget process. The increase was to align the budget with updated projections provided by HdL, the City's sales tax consultant. Despite the ongoing economic impacts of COVID-19, sales tax receipts continued trending higher than initially projected when the original budget was developed. Increases in gas prices drove up revenue from fuel and service stations. Casual dining rebounded as consumers dined out more frequently. Online shopping continued its upward trend causing the County pool allocations to grow 23%. For the two Measure Ss, local restaurants and fuel stations were the largest growth contributors. For FY 2021/22, total sales tax receipts totaled \$9,613,626, 102% of the revised budget.

Property Tax

Property tax is the City's second largest revenue stream. It is received in three installments in December (55%), April (40%), and June of each year (5%). The budgeted revenue for FY 2021/22 was \$4,230,122, of which the City collected 102%. Property tax revenue includes the basic 1% property tax of \$3,072,882 and the Redevelopment Property Tax Trust Fund (RPTTF) of \$1,157,240. This is revenue that has resulted from the dissolution of the former Pinole Redevelopment Agency and represents the shift from the Agency receiving tax increment revenue to the various taxing entities receiving the tax revenue. The RPTTF revenue will convert to "normal" property tax revenue when all of the former Agency's outstanding debt is paid off and the Successor Agency is formally dissolved. Dissolution is currently expected to occur sometime after the final debt service payment in FY 2023/24.

All Other General Fund Revenue

Utility Users' Tax (UUT) is levied on telecommunication, electricity, gas, and mobile telephones. For FY 2021/22, revenues were \$2,063,773, 102% of the revised budget.

Franchise Tax is levied on gas, electricity, cable, and refuse. For FY 2021/22, revenues were \$788,146, 101% of the revised budget.

Transient Occupancy Tax (TOT), also known as the "hotel tax," is levied on persons staying 30 days or less in a motel or lodging facility within City limits. For FY 2021/22, revenues were 487,687, 117% of the revised budget.

Business License Tax is assessed on all businesses doing business within City limits. For FY 2021/22, revenues were \$441,779, 116% of the revised budget. Of the total receipts, approximately \$397,601 (90%) was collected for business license renewals and \$44,178 (10%) for new business licenses.

Intergovernmental Taxes is comprised of the Motor Vehicle License Fee (VLF), which is the City's share of motor vehicle license fees levied, collected, and apportioned by

the State. This category also includes the Homeowners Property Tax Relief, which is a reimbursement from the State to offset loss of property tax for the state-imposed homeowner exemption. For FY 2021/22, revenues were \$2,108,808, 101% of the revised budget. The majority was VLF revenue in the amount of \$2,079,739.

Public safety charges are received for dispatch services provided to the cities of Hercules and San Pablo under an Intergovernmental Service Sharing agreement. For FY 2021/22, revenues were \$1,477,492, 110% of the revised budget.

Other revenues include permits, fees, fines and forfeitures, rental income, proceeds from the sale of property, investment income, and grants. All revenues in this category totaled \$508,792, 46% of the revised budget. Actual revenues were below the budget because the budget included \$601,000 for proceeds from the sale of several properties which did not materialize.

The transfer in comes from the Section 115 Trust to offset the increase in pension costs in the General Funds. The FY 2021/22 budget included a transfer to the General Fund in the amount of \$853,686 but did not include transfers to the Measure S funds. Staff recommends an adjustment to increase the transfer to \$1,061,736 to be distributed to the General Fund and the Measure S funds.

General Fund Expenditures (including Measure S 2006 and 2014)

The City Council authorized expenditures in the amount of \$26,202,382 in the original FY 2021/22 General Fund budget. The revised budget was increased to \$29,110,896. General Fund actual expenditures through the fourth quarter of FY 2021/22 totaled \$24,627,590, 85% of the revised budget.

Below is a table showing the original budget, revised budget, year-end actual amounts, and percentage of budget used for General Fund expenditures by category.

Category	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Proposed Adjustments	FY 2021/22 Amended Budget	Projected Year-End
Salaries & Wages	\$ 10,600,127	\$ 10,553,426	\$ 10,550,396	100%		\$10,553,426	\$10,553,426
Benefits	6,822,073	6,822,073	6,030,160	88%		6,822,073	\$ 6,030,160
Professional/Admin Services	4,298,811	4,621,687	3,889,526	84%		4,621,687	\$ 3,889,526
Other Operating	286,311	286,311	304,499	106%		286,311	\$ 304,499
Materials and Supplies	184,200	188,700	261,319	138%		188,700	\$ 261,319
Interdepartmental Charges	(851,041)	(845,041)	(839,337)	99%		(845,041)	\$ (839,337)
Asset/Capital Outlay	2,867,339	3,639,781	697,457	19%		3,639,781	\$ 697,457
Debt Service	576,107	576,107	608,736	106%		576,107	\$ 608,736
Other Financing Uses/Transfers	1,418,455	3,267,852	3,124,833	96%	233,229	3,501,081	\$ 3,355,033
Expenditure Total:	\$ 26,202,382	\$ 29,110,896	\$ 24,627,589	85%	\$ 233,229	\$29,344,125	\$24,860,819

Actuals in most of the expenditure categories were at or below 100%. Actuals with significant variances from budgeted amounts are explained below.

- Benefits were only at 85% of the revised budget mostly due to vacancy savings.

- Professional services were only at 84% of the revised budget mostly due to lower-than-expected operational expenditures in the areas of general professional services, travel & training, and administrative expenses.
- Asset Capital/Outlay was far below the revised budget at 19% mostly due to capital improvements that were not completed in FY 2021/22 but deferred to FY 2022/23.
- Other Operating Expenses were 106% of the revised budget primarily due to water and electricity utility costs exceeding budget.
- Materials and Supplies were 138% of the revised budget primarily due to maintenance supplies and safety clothing exceeding budget.
- Debt Service expenditures were 106% of the revised budget due to interest.

In addition to the summary of expenditures by category, a summary of expenditures by department is provided below.

Department	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Proposed Adjustments	FY 2021/22 Amended Budget	Projected Year-End
City Council	\$ 182,509	\$ 182,509	\$ 214,449	118%		\$ 182,509	\$ 214,449
City Manager	562,708	681,538	527,117	77%		681,538	527,117
City Clerk	450,393	450,393	327,468	73%		450,393	327,468
City Treasurer	8,693	8,693	8,375	96%		8,693	8,375
City Attorney	310,200	310,200	406,476	131%		310,200	406,476
Finance Department	559,791	571,746	560,926	98%		571,746	560,277
Human Resources	493,626	523,446	377,408	72%		523,446	377,408
Non-Departmental	3,391,649	5,241,046	5,039,694	96%	233,229	5,474,275	5,273,573
Information Technology	102,600	102,600	-	0%		102,600	-
Police Department	9,760,354	9,897,426	9,837,833	99%		9,897,426	9,837,833
Fire Department	5,052,242	5,092,242	4,923,333	97%		5,092,242	4,923,333
Public Works	4,446,758	5,096,423	1,818,137	36%		5,096,423	1,818,137
Community Development	389,885	403,885	263,181	65%		403,885	263,181
Community Services	490,975	498,182	272,629	55%		498,182	272,629
Sewer	-	50,568	50,563	100%		50,568	50,563
Expenditure Total:	\$ 26,202,382	\$ 29,110,896	\$ 24,627,589	85%	\$ 233,229	\$ 29,344,125	\$24,860,819

Most departmental spending was at or below 100% for the year. Those that exceeded the revised budget are detailed below.

- City Council department expenditures were at 118% of the revised budget mostly due to administrative expenses for broadcasting services.
- City Attorney department expenditures were at 131% of the revised budget for legal services provided.

Overall, we received about \$417,000 more General Fund revenue than we budgeted; we had about \$1.1 million of savings due to lower-than-budgeted expenditures that were not carried forward; and therefore, we have an ending fund balance of about \$10.8 million, \$8.3 million once carry forwards to FY 2022/23 are accounted for.

Other Funds Analysis

The following analysis provides detailed explanations of the financial activity for select non-general funds. Attachment A includes detailed financial information for all funds.

Special Revenue Funds**Gas Tax Fund (Fund 200)**

The Gas Tax Fund accounts for revenue from State excise taxes on gasoline and diesel fuel sales (referred to as the Highway Users Tax Account (HUTA)) as well as revenue from the Road Repair and Accountability Act of 2017 (SB1) (referred to as the Road Maintenance and Rehabilitation Account (RMRA)). Gas Tax Fund resources are restricted for use in the construction and maintenance of public streets. These funds support both annual operating and capital projects. For FY 2021/22, revenues were \$862,752, 94% of the revised budget. Expenditures were \$489,964, 46% of the revised budget. Expenditures were lower than budget due to the timing of capital projects, which typically span several fiscal years. The unspent funds were carried over to the FY 2022/23 budget.

Gas Tax Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Projected Year-End
Revenues	\$ 919,303	\$ 919,303	\$ 862,752	94%	862,752
Expenditures	1,074,728	1,074,728	489,964	46%	489,964
Net surplus/deficit	(155,425)	(155,425)	\$ 372,787		372,788
Beginning Fund Balance	356,517	356,517			356,517
Ending Fund Balance	\$ 201,092	\$ 201,092			\$ 729,305

Public Safety Augmentation Fund (Fund 203)

The Public Safety Augmentation Fund (PSAF) accounts for monies allocated by the County Auditor-Controller under Proposition 172 from the statewide 0.5% sales tax based on a share of statewide taxable sales. These funds are used exclusively for public safety personnel costs. For FY 2021/22, revenues were \$260,870, 151% of the revised budget. Expenditures were \$154,595, 76% of the revised budget.

Public Safety Augmentation Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Projected Year-End
Revenues	\$ 172,766	\$ 172,766	\$ 260,870	151%	260,870
Expenditures	204,574	204,574	154,595	76%	154,595
Net surplus/deficit	(31,808)	(31,808)	\$ 106,275		106,275
Beginning Fund Balance	410,914	410,914			410,914
Ending Fund Balance	\$ 379,106	\$ 379,106			\$ 517,189

Supplemental Law Enforcement Services Fund (206)

The Supplemental Law Enforcement Services Fund (SLESF) accounts for funds received from the County under AB 3229, which enacted the Citizens Option for Public Safety (COPS) Program, through which the City receives \$100,000 annually. In addition to the \$100,000 annual payment, the City receives a Growth Allocation

payment. The funds are used to partially offset officer personnel costs. For FY 2021/22, revenues were \$156,813, 99% of the revised budget. Expenditures were \$113,750, 109% of the revised budget.

Supplemental Law Enforcement Services Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Projected Year-End
Revenues	\$ 158,327	\$ 158,327	\$ 156,813	99%	156,813
Expenditures	104,188	104,188	113,750	109%	113,750
Net surplus/deficit	54,139	54,139	\$ 43,063		43,063
Beginning Fund Balance	328,953	328,953			328,953
Ending Fund Balance	\$ 383,092	\$ 383,092			\$ 372,016

NPDES Storm Water Fund (Fund 207)

The NPDES Storm Water Fund accounts for assessments collected by the County via property tax bills and provided to the City for stormwater programs pursuant to the National Pollutant Discharge Elimination System (NPDES) regulations, a federally mandated program. Assessments are levied at \$35 per Equivalent Runoff Unit (ERU). For FY 2021/22, revenues were \$256,292, 79% of the revised budget. Expenditures were \$297,082, 71% of the revised budget.

NPDES Storm Water Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Projected Year-End
Revenues	\$ 324,128	\$ 324,128	\$ 256,292	79%	256,292
Expenditures	420,685	420,685	297,082	71%	297,082
Net surplus/deficit	(96,557)	(96,557)	\$ (40,790)		(40,790)
Beginning Fund Balance	1,853	1,853			1,853
Ending Fund Balance	\$ (94,704)	\$ (94,704)			\$ (38,937)

Recreation Department Fund (Fund 209)

The Recreation Department Fund accounts for funds received from fees for participation in recreational programs. The recreation programs of the Community Services Department have been and continue to be significantly impacted by the pandemic. These programs have operated on a limited basis to comply with health and safety guidelines. For FY 2021/22, revenues, including program revenues and transfers in, were \$1,333,340, 96% of the revised budget. Expenditures were \$1,362,502, 96% of the revised budget. The Recreation Department Fund received transfers in from the General Fund and Measure S 106 Fund totaling \$948,943, which were used to support operations and to clear the negative fund balance.

Recreation Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Projected Year-End
Revenues					
Program Revenue	\$ 519,922	\$ 295,265	\$ 384,397	130%	\$ 384,397
Transfers In	673,331	1,091,962	948,943	87%	948,943
Total Revenues	1,193,253	1,387,227	1,333,340	96%	1,333,340
Expenditures	1,542,048	1,416,400	1,362,502	96%	1,362,502
Net surplus/deficit	(348,795)	(29,173)	\$ (29,162)		(29,162)
Beginning Fund Balance	29,162	29,162			29,162
Ending Fund Balance	\$ (319,634)	\$ (12)			\$ -

Building & Planning Fund (Fund 212)

The Building & Planning Fund accounts for funds received from fees and permits for building and planning services. Fees are collected to recover the cost primarily related to inspections and plan checks performed. For FY 2021/22, revenues were \$1,392,001, 67% of the revised budget. Revenues were far below budget mostly due to review fee revenue which came in at 43% of its budget. Also, the SB2 Grant was budgeted in the amount of \$205,000 but was not received. Expenditures were \$1,782,568, 68% of the revised budget.

Building and Planning Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Projected Year-End
Revenues	\$ 1,605,700	\$ 1,605,700	\$ 910,950	57%	\$ 910,950
Transfers In	-	481,051	481,051	100%	481,051
Total Revenues	\$ 1,605,700	\$ 2,086,751	\$ 1,392,001	67%	1,392,001
Expenditures	1,727,753	2,614,632	1,782,568	68%	1,782,568
Net surplus/deficit	(122,053)	(527,881)	\$ (390,567)		(390,567)
Beginning Fund Balance	(134,313)	(134,313)			(134,313)
Ending Fund Balance	\$ (256,366)	\$ (662,194)			\$ (524,880)

Refuse Management Fund (Fund 213)

The Refuse Management Fund accounts for resources received from the City's franchise waste hauler, Republic Services, from a monthly fee imposed under AB 939 on all residential customers in Pinole. These revenues are restricted to programs and activities that promote recycling of solid waste and source reduction. For FY 2021/22, revenues were \$65,058, 98% of the revised budget. Expenditures were \$106,591, 76% of the revised budget.

Refuse Management Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Projected Year-End
Revenues	\$ 66,060	\$ 66,060	\$ 65,058	98%	65,058
Expenditures	140,858	140,858	106,591	76%	106,591
Net surplus/deficit	(74,798)	(74,798)	\$ (41,533)		(41,533)
Beginning Fund Balance	192,376	192,376			192,376
Ending Fund Balance	\$ 117,578	\$ 117,578			\$ 150,843

Solid Waste Fund (Fund 214)

The Solid Waste Fund accounts for funds received from Republic Services from a monthly fee it assesses on customer rates for solid waste services. These funds are set aside for future solid waste capital projects and for a rate stabilization fund. For FY 2021/22, revenues were \$394,103, 107% of the revised budget. Expenditures were \$194,241, 26% of the revised budget. The fund received the State of California SB 1383 grant during the fiscal year. Therefore, staff recommends a \$28,327 revenue budget adjustment and a \$3,000 expenditure adjustment to account for the grant.

Solid Waste Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Proposed Adjustments	FY 2021/22 Amended Budget	Projected Year-End
Revenues	\$ 368,000	\$ 368,000	\$ 394,103	107%	28,327	396,327	394,103
Expenditures	761,445	761,445	194,241	26%	3,000	764,445	194,241
Net surplus/deficit	(393,445)	(393,445)	\$ 199,862		25,327	(368,118)	199,862
Beginning Fund Balance	1,863,362	1,863,362					1,863,362
Ending Fund Balance	\$ 1,469,917	\$ 1,469,917					\$ 2,063,224

Rate Stabilization Fund (Fund 216)

The Rate Stabilization Fund was created to account for the excess revenues from the solid waste post collection contract with Republic Services. Twenty-five percent (25%) of the surplus funds, generated from prior years' rate increases, are set aside to offset year-over-year rate fluctuations; thereby, leveling the annual rates paid by consumers. Per Resolution 2013-91, the City was required to establish a rate stabilization fund, separate from the Solid Waste Fund (214), for the excess revenues collected. For FY 2021/22, revenues were \$15,283 and there were not any expenditures.

Rate Stabilization Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Projected Year-End
Revenues	\$ -	\$ -	\$ 15,283	0%	15,283
Expenditures	-	-	-	0%	-
Net surplus/deficit	-	-	\$ 15,283		15,283
Beginning Fund Balance	184,676	184,676			184,676
Ending Fund Balance	\$ 184,676	\$ 184,676			\$ 199,959

Measure J Fund (Fund 215)

The Measure J Fund accounts for special sales tax revenues collected by the Contra Costa Transportation Authority (CCTA) and reapportioned to the cities for local street projects. The City must submit a checklist each year to confirm compliance with a Growth Management Program in order to receive these funds. Estimates of annual funding are provided by the CCTA, and jurisdiction allocations are based on a formula that considers both population and road mileage. For FY 2021/22, revenues were \$446,991, 95% of the revised budget. Expenditures were \$178,725, 19% of the revised budget. Actual expenditures were significantly lower than budgeted due to the timing of capital projects; the unspent funds were carried over to the FY 2022/23 budget.

Measure J Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Projected Year-End
Revenues	\$ 398,147	\$ 472,095	\$ 446,991	95%	446,991
Expenditures	937,189	937,189	178,725	19%	178,725
Net surplus/deficit	(539,042)	(465,094)	\$ 268,266		268,266
Beginning Fund Balance	2,057,182	2,057,182			2,057,182
Ending Fund Balance	\$ 1,518,140	\$ 1,592,088			\$ 2,325,448

American Rescue Plan Act Fund (Fund 217)

The American Rescue Plan Act Fund accounts for the \$4.6 million allocated to the City from the federal government from the American Rescue Plan Act (ARPA) of 2021. The received its first installment of \$2,302,505. The City Council approved an appropriation of \$300,000 to provide direct financial assistance to small businesses and \$100,000 to support the community gift card program. Other expenditures included mandatory weekly COVID-19 testing for public safety staff.

American Rescue Plan Act Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Projected Year-End
Revenues	\$ -	\$ 2,302,505	\$ 2,302,505	100%	2,302,505
Expenditures	-	-	530,606		530,606
Net surplus/deficit	-	2,302,505	\$ 1,771,899		1,771,899
Beginning Fund Balance	-	-			-
Ending Fund Balance	\$ -	\$ 2,302,505			\$ 1,771,899

Growth Impact Fund (276)

The Growth Impact Fund accounts for development fees collected to mitigate the impact of new development. Specifically, it provides for the expansion, design, construction, or upgrade to facilities, roadways, and equipment. The City collects impact fees for police, fire protection, municipal, community, wastewater, roadways, and drainage. For FY 2021/22, revenue far exceeded budget due to the collection of \$2.2 million in impact fees for a multi-unit development. The fund is not projected to have any expenditures in this fiscal year as the Hazel Street gap closure project will be carried forward to the FY 2022/23 budget.

Growth Impact Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Projected Year-End
Revenues	\$ 229,834	\$ 229,834	\$ 2,441,826	1062%	2,441,826
Expenditures	258,000	243,070	-	0%	-
Net surplus/deficit	(28,166)	(13,236)	\$ 2,441,826		2,441,826
Beginning Fund Balance	141,492	141,492			141,492
Ending Fund Balance	\$ 113,326	\$ 128,256			\$ 2,583,318

Housing Assets for Resale Fund (285)

The Housing Assets for Resale Fund accounts for activities associated with administering housing programs of the former Pinole Redevelopment Agency, use of

Housing Set Aside funds, and the provision of affordable housing within the community. For FY 2021/22, revenues were \$1,680,236, 97% of the revised budget, mainly from loan repayments. Expenditures were \$97,581, 43% of the revised budget.

Housing Assets for Resale Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Projected Year-End
Revenues	\$ 1,733,692	\$ 1,733,692	\$ 1,680,236	97%	1,680,236
Expenditures	228,798	228,798	97,581	43%	97,581
Net surplus/deficit	1,504,894	1,504,894	\$ 1,582,655		1,582,655
Beginning Fund Balance	7,835,513	7,835,513			7,835,513
Ending Fund Balance	\$ 9,340,407	\$ 9,340,407			\$ 9,418,168

Lighting and Landscape District Fund (Fund 310)

The Lighting and Landscape District Fund accounts for assessments to property owners to maintain median lighting and landscaping within the Pinole Valley Road North and South areas. Revenue is received in December, April, and June with property tax payments. For FY 2021/22, revenues were \$49,768, 80% of the revised budget. Expenditures were \$42,611, 69% of the revised budget.

Landscape and Lighting District Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Projected Year-End
Revenues	\$ 62,268	\$ 62,268	\$ 49,768	80%	49,768
Expenditures	62,125	62,125	42,611	69%	42,611
Net surplus/deficit	143	143	\$ 7,157		7,157
Beginning Fund Balance	35,953	35,953			35,953
Ending Fund Balance	\$ 36,096	\$ 36,096			\$ 43,110

Capital Project Funds

City Street Improvement (Fund 325)

The City Street Improvements Fund accounts for an annual \$250,000 transfer from Measure S 2014 for street improvement projects. Additionally, it accounts for various federal, state, and other grants. For FY 2021/22, revenues were \$875,127, 162% of the revised budget. Grant reimbursements came in higher than projected. Expenditures were \$569,001, 37% of the revised budget.

City Street Improvement Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Projected Year-End
Revenues	\$ 250,000	\$ 539,594	\$ 875,127	162%	875,127
Expenditures	1,281,102	1,528,102	569,001	37%	569,001
Net surplus/deficit	(1,031,102)	(988,508)	\$ 306,126		306,126
Beginning Fund Balance	1,246,864	1,246,864			1,246,864
Ending Fund Balance	\$ 215,762	\$ 258,356			\$ 1,552,990

Arterial Streets Rehabilitation (Fund 377)

The Arterial Streets Rehabilitation Fund accounts for an annual \$250,000 transfer from Measure S 2014 for street rehabilitation projects. For FY 2021/22, expenditures, were \$1,029,962, 126% of the revised budget. The overage was mostly due to higher-than-projected expenditures for street improvements.

Arterial Streets Rehabilitation Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Projected Year-End
Revenues	\$ 250,000	\$ 250,000	\$ 250,000	100%	250,000
Expenditures	819,689	819,689	1,029,962	126%	1,029,962
Net surplus/deficit	(569,689)	(569,689)	\$ (779,962)		(779,962)
Beginning Fund Balance	788,574	788,574			788,574
Ending Fund Balance	\$ 218,885	\$ 218,885			\$ 8,612

Enterprise FundsSewer Enterprise Fund (Fund 500)

The Sewer Enterprise Fund accounts for fees charged to residents and businesses for sewer utilities. Fees are used to operate the Pinole-Hercules Wastewater Treatment Plant, which serves the Pinole and Hercules areas. Revenues are received with the property tax payments in December, April, and June. For FY 2021/22, revenues were \$7,662,916, 97% of the revised budget. Expenditures were \$6,005,788, 65% of the revised budget. Expenditures were lower than budget due to the timing of capital projects, which typically span several fiscal years. The unspent funds were carried over to the FY 2022/23 budget.

Sewer Enterprise Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Projected Year-End
Revenues	\$ 7,897,500	\$ 7,897,500	\$ 7,662,916	97%	7,662,916
Expenditures	9,126,579	9,196,579	6,005,788	65%	6,005,788
Net surplus/deficit	(1,229,079)	(1,299,079)	\$ 1,657,128		1,657,128
Beginning Fund Balance	21,399,210	21,399,210			21,399,210
Ending Fund Balance	\$ 20,170,131	\$ 20,100,131			\$ 23,056,338

Cable Access TV Fund (Fund 505)

The Cable Access TV Fund accounts for revenue received from cable franchise fees, video production and broadcast charges, and Public, Educational, and Governmental (PEG) access fees. PEG access fees are designated for equipment purchases. Transfers from the General Fund also help support the operating costs. For FY 2021/22, revenues were \$403,016, 75% of the revised budget. Expenditures were \$436,944, 77% of the revised budget. Staff recommends a \$37,060 revenue adjustment increasing the transfer from the General Fund to clear the negative fund balance.

Cable Access TV Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Proposed Adjustments	FY 2021/22 Amended Budget	Projected Year-End
Revenues	\$ 374,928	\$ 374,928	\$ 242,892	65%		\$ 374,928	\$ 242,892
Transfers In	160,124	160,124	160,124	100%	37,060	197,184	197,184
Total Revenue	\$ 535,052	\$ 535,052	\$ 403,016	75%	37,060	572,112	440,076
Expenditures	570,765	570,765	436,944	77%		570,765	436,944
Net surplus/deficit	(35,713)	(35,713)	\$ (33,928)			\$ 1,347	\$ 3,132
Beginning Fund Balance	(3,132)	(3,132)					(3,132)
Ending Fund Balance	\$ (38,845)	\$ (38,845)					\$ 0

Information Systems Fund (Fund 525)

The Information Systems Fund is an internal service fund used to account for activities that provide technology goods or services to other City funds and departments on a cost-reimbursement basis. For FY 2021/22, revenues and expenditures were both \$729,127, 54% of the revised budget. Expenditures were far below the budget mostly due to a large technology project that was anticipated to be completed in FY 2021/22 budget was carried forward to FY 2022/23.

The fund has a negative fund balance that goes back several fiscal years. Staff recommends an adjustment to transfer \$196,169 from the General Fund to clear the negative fund balance.

Information Technology Fund	FY 2021/22 Original Budget	FY 2021/22 Revised Budget	FY 2021/22 YTD Actuals	% of Revised Budget	Proposed Adjustments	FY 2021/22 Amended Budget	Projected Year-End
Transfer In	\$ -	\$ -	\$ -	0%	\$ (196,169)	\$ (196,169)	\$ 196,169
Expenditures	1,011,526	1,338,354	729,127	54%	-	1,338,354	729,127
Indirect Cost Allocations	(1,011,526)	(1,338,354)	(729,127)	54%	-	(1,338,354)	(729,127)
Net surplus/deficit	-	-	-			\$ (196,169)	196,169
Beginning Fund Balance	(196,169)	(196,169)					(196,169)
Ending Fund Balance	\$ (196,169)	\$ (196,169)					\$ -

The FY 2021/22 budget and actual revenue, expenditures, and ending fund balance for each City fund is listed in Attachment A.

Next Steps

Following City Council approval of the budget adjustments, staff will amend the budget and close the accounting books for FY 2021/22. The year-end financial audit is scheduled to begin in late September and will conclude in December. Finally, the year-end financial statements, or the Annual Comprehensive Financial Report (ACFR), will be issued by December 31, 2022.

FISCAL IMPACT

In this FY 2021/22 Fourth Quarter Financial Report, staff recommends the following year-end budget adjustments, summarized below, and detailed in Attachment A.

- General Fund expenditure budget increase totaling \$223,229;
- General Fund revenue increase totaling \$208,050;

- Solid Waste Fund revenue budget increase totaling \$28,327;
- Solid Waste Fund expenditure budget increase totaling \$3,000;
- Information Technology Fund revenue budget increase totaling \$196,169; and
- Cable TV Access Fund revenue budget increase totaling \$37,060.

ATTACHMENTS

- A – Resolution approving FY 2021/22 year-end budget adjustments
- B – FY 2021/22 Fourth Quarter Financial Report Summary by Funds

RESOLUTION NO. 2022-XX**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PINOLE, COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, AMENDING THE FISCAL YEAR 2021/22 OPERATING AND CAPITAL BUDGET TO INCORPORATE ADDITIONAL APPROPRIATIONS**

WHEREAS, the City Council did adopt the Fiscal Year (FY) 2021/22 Budget for City Operations by Resolution number 2021-51 on June 29, 2021; and

WHEREAS, the City Manager has presented proposed recommendations for modification of the adopted budget and programs of service for the City of Pinole Operations for FY 2021/22 at the regular City Council Meeting held on September 20, 2022; and

WHEREAS, the City Council has considered these recommended changes, as to the matter of the City budget; and

WHEREAS, the City Council has solicited public input on the proposed modifications to the FY 2021/22 Operations and Capital Budget; and

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Pinole as follows:

Modifications to the budget, including any requisite use of appropriate Fund Balance, for the City of Pinole for Fiscal Year 2021/22 commencing July 1, 2021 and ending June 30, 2022 are hereby approved and adopted as follows:

1. FY 2021/22 Expenditure Budget Adjustments

General Fund (100):	\$233,229
Solid Waste (214):	\$3,000
2. FY 2021/22 Revenue Budget Adjustments

General Fund (100):	\$208,050
Solid Waste Fund (214):	\$28,327
Cable TV Access Fund (505):	\$37,060
Information Technology Fund (525):	\$196,169

PASSED AND ADOPTED this 20th day of September 2022, by the following vote:

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

I hereby certify that the foregoing resolution was introduced, passed and adopted on this **20th** day of **September, 2022**.

Heather Bell, CMC
City Clerk



City of Pinole, CA

For FY2021/22 Period Ending: 6/30/22

	Original Budget	Revised Budget	Proposed Adjustments	Amended Budget	YTD Actual	Encumbrances	Total	Variance Favorable (Unfavorable)	Percent Used	Projected Year-End	Notes
General Fund (including Measure S 2006 and 2014)											
Revenue											
311- Property Taxes	4,230,122	4,230,122		4,230,122	4,307,208		4,307,208	77,086	102%	4,307,208	
312- Sales and Use Taxes	4,224,661	4,483,848		4,483,848	4,612,708		4,612,708	128,860	103%	4,612,708	
312- Sales and Use Taxes-Meas S 2006	2,142,000	2,420,000		2,420,000	2,501,974		2,501,974	81,974	103%	2,501,974	
312- Sales and Use Taxes-Meas S 2014	2,142,000	2,420,000		2,420,000	2,498,944		2,498,944	78,944	103%	2,498,944	
313- Utility Users Tax	1,915,000	1,915,000		1,915,000	2,063,773		2,063,773	148,773	108%	2,063,773	
314- Franchise Taxes	779,000	779,000		779,000	788,146		788,146	9,146	101%	788,146	
315- Other Taxes	800,000	800,000		800,000	929,466		929,466	129,466	116%	929,466	
Other Tax/Transient Occupancy Tax	418,000	418,000		418,000	487,687		487,687	69,687	117%	487,687	
Other Tax/Business License	382,000	382,000		382,000	441,779		441,779	59,779	116%	441,779	
321- Intergovernmental Taxes	2,082,883	2,082,883		2,082,883	2,108,808		2,108,808	25,925	101%	2,108,808	
323- State Grants	40,000	40,000		40,000	13,847		13,847	(26,153)	35%	13,847	
324- Other Grants	47,026	47,026		47,026	46,937		46,937	(89)	100%	46,937	
332- Permits	68,700	68,700		68,700	120,780		120,780	52,080	176%	120,780	
341- Review Fees	28,000	28,000		28,000	42,210		42,210	14,210	151%	42,210	
342- Other Fees	40,694	40,694		40,694	23,880		23,880	(16,814)	59%	23,880	
343- Abatement Fees	7,000	7,000		7,000	5,127		5,127	(1,873)	73%	5,127	
351- Fines and Forfeiture	22,050	22,050		22,050	10,411		10,411	(11,639)	47%	10,411	
361- Public Safety Charges	1,339,796	1,339,796		1,339,796	1,477,492		1,477,492	137,696	110%	1,477,492	
370- Interest and Investment Income	150,000	150,000		150,000	(134,495)		(134,495)	(284,495)	-90%	(134,495)	
381- Rental Income	89,896	89,896		89,896	87,966		87,966	(1,930)	98%	87,966	
383- Reimbursements	18,674	18,674		18,674	16,341		16,341	(2,333)	88%	16,341	
384- Other Revenue	5,100	5,100		5,100	35,606		35,606	30,506	698%	35,606	
392- Proceeds from Sale of Property	601,000	601,000		601,000	240,182		240,182	(360,819)	40%	240,182	
Revenue Total:	20,773,602	21,588,789	-	21,588,789	21,797,309	-	21,797,309	208,520	101%	21,797,309	
399- Penison Trust 115 Transfer	853,686	853,686	208,050	1,061,736	1,061,736		1,061,736	-	100%	1,061,736	
Sources Total:	21,627,288	22,442,475	208,050	22,650,525	22,859,045	-	22,859,045	208,520	101%	22,859,045	
Fund: 100- General Fund											
Expenditures											
Division: 110- City Council Total:	176,609	176,609		176,609	214,449		214,449	(37,840)	121%	214,449	
Division: 111- City Manager Total:	562,708	681,538		681,538	527,117		527,117	154,421	77%	527,117	
Division: 112- City Clerk Total:	450,393	450,393		450,393	327,468		327,468	122,925	73%	327,468	
Division: 113- City Treasurer Total:	8,693	8,693		8,693	8,375		8,375	318	96%	8,375	
Division: 114- City Attorney Total:	310,200	310,200		310,200	406,476		406,476	(96,276)	131%	406,476	
City Attorney Services	564,000	564,000		564,000	833,500		833,500	(269,500)	148%	833,500	
City Attorney Incirect Cost Allocations	(253,800)	(253,800)		(253,800)	(427,024)		(427,024)	173,224	168%	(427,024)	
Division: 115- Finance Department Total:	554,891	566,846		566,846	560,277		560,277	6,569	99%	560,277	
Division: 116- Human Resources Total:	493,626	523,446		523,446	377,408		377,408	146,038	72%	377,408	
Division: 117- General Government Total:	1,397,087	1,397,087		1,397,087	1,306,126		1,306,126	90,961	93%	1,306,126	
Total Administrative:	3,954,207	4,114,812	-	4,114,812	3,727,696	-	3,727,696	387,116	91%	3,727,696	
Division: 221- Police Operations Total:	4,260,699	4,366,771		4,366,771	4,426,829	57,081	4,483,910	(117,139)	103%	4,426,829	
Division: 222- Police Support Services Total:	1,272,092	1,272,092		1,272,092	1,116,766		1,116,766	155,326	88%	1,116,766	
Division: 223- Dispatch WBCC Total:	2,077,088	2,077,088		2,077,088	2,214,946		2,214,946	(137,859)	107%	2,214,946	
Division: 231- Fire Total:	3,925,759	3,965,759		3,965,759	3,814,877		3,814,877	150,881	96%	3,814,877	
Total Public Safety:	11,535,638	11,681,710	-	11,681,710	11,573,419	57,081	11,630,500	51,209	100%	11,573,419	
Division: 341- Administration/Engineering Total:	726,407	758,686		758,686	219,407	285	219,692	538,994	29%	219,407	
Division: 342- Road Maintenance Total:	225,284	225,284		225,284	62,776		62,776	162,508	28%	62,776	
Division: 343- Facility Maintenance Total:	693,759	693,759		693,759	547,395		547,395	146,364	79%	547,395	
Division: 345- Park Maintenance Total:	482,887	482,887		482,887	275,084		275,084	207,803	57%	275,084	
Public Works Total:	2,128,337	2,160,616	-	2,160,616	1,104,662	285	1,104,947	1,055,669	51%	1,104,662	
Division: 461- Planning Total:	167,938	167,938		167,938	64,712		64,712	103,226	39%	64,712	
Division: 465- Code Enforcement Total:	201,947	215,947		215,947	198,324		198,324	17,622	92%	198,324	
Division: 466- Economic Development Total:	-	-		-	145		145	(145)	#DIV/0!	145	
Community Development Total:	369,885	383,885	-	383,885	263,181		263,181	120,704	69%	263,181	
Division: 551- Recreation Administration Total:	427,025	427,025		427,025	253,414		253,414	173,611	59%	253,414	
Community Services Total:	427,025	427,025	-	427,025	253,414	-	253,414	173,611	59%	253,414	
Debt Service:	576,107	576,107		576,107	608,736		608,736	(32,629)	106%	608,736	
Operating Transfer Out:	702,955	2,552,352	233,229	2,785,580	2,431,931		2,431,931	353,649	87%	2,665,160	[1]
Expenditure Total:	19,694,153	21,896,506	233,229	22,129,735	19,963,039	57,366	20,020,405	(2,109,330)	90%	20,196,267	
Fund: 105 - Measure S -2006											
Expenditures											
Division: 115- Finance Department Total:	2,450	2,450		2,450	475		475	1,975	19%	475	
Division: 221- Police Operations Total:	1,514,158	1,545,158		1,545,158	1,588,933		1,588,933	(43,775)	103%	1,588,933	
Division: 222- Police Support Services Total:	330,510	330,510		330,510	330,507		330,507	3	100%	330,507	
Division: 231- Fire Total:	681,234	681,234		681,234	682,546		682,546	(1,312)	100%	682,546	
Expenditures Total:	2,528,352	2,559,352	-	2,559,352	2,602,460	-	2,602,460	(43,108)	102%	2,602,460	

NOTES:

[1] Increase for transfer to the Information Technology Fund (\$196,169) and the Cable TV Access Fund (\$33,928) to clear negative fund balances.

**Fund: 106 - Measure S-2014****Expenditures**

	Original Budget	Revised Budget	Proposed Adjustments	Amended Budget	YTD Actual	Encumbrances	Total	Variance Favorable (Unfavorable)	Percent Used	Projected Year-End	Notes
Division: 110- City Council Total:	5,900	5,900		5,900	-		-	5,900	0%	-	
Division: 115- Finance Department Total:	2,450	2,450		2,450	175		175	2,275	7%	175	
Division: 118- Information Systems Total:	102,600	102,600		102,600	-		-	102,600	0%	-	
Total Administrative:	110,950	110,950	-	110,950	175	-	175	110,775	0%	175	
Division: 221- Police Operations Total:	110,000	110,000		110,000	59,161	-	59,161	50,839	54%	59,161	
Division: 222- Police Support Services Total:	195,807	195,807		195,807	100,690	-	100,690	95,117	51%	100,690	
Division: 231- Fire Total:	445,249	445,249		445,249	425,909		425,909	19,340	96%	425,909	
Total Public Safety:	751,056	751,056	-	751,056	585,760	-	585,760	165,296	78%	585,760	
Division: 341- Admin/Engineering Total:	215,458	215,458		215,458	70,077	6,000	76,077	139,381	35%	70,077	
Division: 342- Road Maintenance Total:	499,008	761,577		761,577	153,392		153,392	608,185	20%	153,392	
Division: 343- Facility Maintenance Total:	965,853	1,240,171		1,240,171	352,421	358,629	711,049	529,122	57%	352,421	
Division: 344- NPDES Storm Drain Total:	347,860	362,790		362,790	28,290	-	28,290	334,500	8%	28,290	
Division: 345- Park Maintenance Total:	290,242	355,811		355,811	109,297	-	109,297	246,514	31%	109,297	
Public Works Total:	2,318,421	2,935,807	-	2,935,807	713,476	364,629	1,078,105	1,857,702	37%	713,476	
Division: 461- Planning Total:	20,000	20,000		20,000	-		-	20,000	0%	-	
Community Development Total:	20,000	20,000	-	20,000	-	-	-	20,000	0%	-	
Division: 552- Senior Center Total:	51,000	58,207		58,207	19,150		19,150	39,057	33%	19,150	
Division: 553- Tiny Tots Total:	2,950	2,950		2,950	-		-	2,950	0%	-	
Division: 554- Youth Center Total:	10,000	10,000		10,000	65		65	9,935	1%	65	
Community Services Total:	63,950	71,157	-	71,157	19,215	-	19,215	51,942	27%	19,215	
Sewer Collections Total:	-	50,568		50,568	50,563		50,563	5	100%	50,563	
Sub-Total:	3,264,377	3,939,538	-	3,939,538	1,369,189	364,629	1,733,818	2,205,720	44%	1,369,189	
Operating Transfer Out:	715,500	715,500		715,500	692,901		692,901	22,599	97%	692,901	
Expenditure Total:	3,979,877	4,655,038	-	4,655,038	2,062,091	364,629	2,426,719	2,228,319	52%	2,062,091	
General Fund and Measure S Expenditure Total:	26,202,382	29,110,896	233,229	29,344,125	24,627,590	421,995	25,049,584	4,294,540	85%	24,860,818	
General Fund and Measure S Net Results:	(4,575,095)	(6,668,421)	(25,179)	(6,693,600)	(1,768,545)	(421,995)	(2,190,539)	(4,503,061)	33%	(2,001,773)	
Fund Balance July 1, 2021	12,803,691	12,803,691		12,803,691	12,803,691					12,803,691	
Estimated Fund Balance June 30, 2022	8,228,596	6,135,270		6,110,091	11,035,146					10,801,918	

Fund: 150 - General Reserve

370- Interest and Investment Income	-	-		-	(249,883)		(249,883)	(249,883)	0%	(249,883)	
Revenue Total:	-	-	-	-	(249,883)	-	(249,883)	(249,883)	0%	(249,883)	
399- Transfer In Total:	-	949,715		949,715	949,715		949,715	-	0%	949,715	
General Reserve Net Results:	-	949,715	-	949,715	699,832		699,832	(249,883)	74%	699,832	
Fund Balance July 1, 2021	7,492,770	7,492,770		7,492,770	7,492,770					7,492,770	
Estimated Fund Balance June 30, 2022	7,492,770	8,442,485		8,442,485	8,192,602					8,192,602	

Fund: 160 - Equipment Reserve

392- Sale of Property	-	-		-	17,000		17,000	17,000	0	17,000	
Revenue Total:	-	-	-	-	17,000	-	17,000	17,000	0%	17,000	
399- Transfers In Total:	85,000	85,000		85,000	85,000		85,000	-	100%	85,000	
Sources Total:	85,000	85,000	-	85,000	102,000	-	102,000	17,000	120%	102,000	
Expenditures											
Division: 342- Road Maintenance Total:	194,000	194,000		194,000	104,242	39,434	143,676	50,324	74%	104,242	
Division: 345- Park Maintenance Total:	80,000	80,000		80,000	-		-	80,000	0%	-	
Division: 461- Planning Total:	5,000	5,000		5,000	-		-	5,000	0%	-	
Expenditures Total:	279,000	279,000	-	279,000	104,242	39,434	143,676	135,324	51%	104,242	
Equipment Reserve Net Results:	(194,000)	(194,000)		(194,000)	(2,242)	(39,434)	(41,676)	152,324	21%	(2,242)	
Fund Balance July 1, 2021	243,408	243,408		243,408	243,408					243,408	
Estimated Fund Balance June 30, 2022	49,408	49,408		49,408	241,166					241,166	



	Original Budget	Revised Budget	Proposed Adjustments	Amended Budget	YTD Actual	Encumbrances	Total	Variance Favorable (Unfavorable)	Percent Used	Projected Year-End	Notes
Fund: 200 - Gas Tax Fund											
321- Intergovernmental Taxes	906,667	906,667		906,667	850,633		850,633	(56,034)	94%	850,633	
370- Interest and Investment Income	5,000	5,000		5,000	(5,931)		(5,931)	(10,931)	-119%	(5,931)	
383- Reimbursements	7,636	7,636		7,636	18,050		18,050	10,414	236%	18,050	
Revenue Total:	919,303	919,303	-	919,303	862,752	-	862,752	56,551	94%	862,752	
Expenditures											
Division: 342- Road Maintenance Total:	1,074,728	1,074,728		1,074,728	489,964		489,964	584,764	46%	489,964	
Expenditures Total:	1,074,728	1,074,728	-	1,074,728	489,964	-	489,964	584,764	46%	489,964	
Gas Tax Fund Net Results:	(155,425)	(155,425)		(155,425)	372,787	-	372,787	528,212	-240%	372,787	
Fund Balance July 1, 2021	356,517	356,517		356,517	356,517					356,517	
Estimated Fund Balance June 30, 2022	201,092	201,092		201,092	729,304					729,304	
Fund: 201 - Restricted Real Estate Maintenance Fund											
342- Other Fees	3,175	3,175		3,175	475		475	(2,700)	15%	475	
381- Rental Income	36,816	36,816		36,816	-		-	(36,816)	0%	-	
384- Other Revenue	-	-		-	2,700		2,700	2,700	0%	2,700	
Revenue Total:	39,991	39,991	-	39,991	3,175	-	3,175	36,816	8%	3,175	
Expenditures											
Division: 343- Facility Maintenance Total:	26,000	26,000		26,000	19,478		19,478	6,522	75%	19,478	
Expenditures Total:	26,000	26,000	-	26,000	19,478	-	19,478	6,522	75%	19,478	
Restricted Real Estate Maint Fund Net Results:	13,991	13,991		13,991	(16,303)		(16,303)	(30,294)	-117%	(16,303)	
Fund Balance July 1, 2021	181,183	181,183		181,183	181,183					181,183	
Estimated Fund Balance June 30, 2022	195,175	195,175		195,175	164,881					164,881	
Fund: 203 - Public Safety Augmentation Fund											
321- Intergovernmental Taxes	170,266	170,266		170,266	265,501		265,501	95,235	156%	265,501	
370- Interest and Investment Income	2,500	2,500		2,500	(4,630)		(4,630)	(7,130)	-185%	(4,630)	
Revenue Total:	172,766	172,766	-	172,766	260,870	-	260,870	88,104	151%	260,870	
Expenditures											
Division: 221- Police Operations Total:	204,574	204,574		204,574	154,595		154,595	49,979	76%	154,595	
Expenditures Total:	204,574	204,574	-	204,574	154,595	-	154,595	49,979	76%	154,595	
Public Safety Augmentation Fund Net Results:	(31,808)	(31,808)		(31,808)	106,275		106,275	138,083	-334%	106,275	
Fund Balance July 1, 2021	410,914	410,914		410,914	410,914					410,914	
Estimated Fund Balance June 30, 2022	379,106	379,106		379,106	517,190					517,190	
Fund: 205 - Traffic Safety Fund											
351- Fines and Forfeitures	45,000	45,000		45,000	28,821		28,821	(16,179)	64%	28,821	
370- Interest and Investment Income	1,500	1,500		1,500	(2,754)		(2,754)	(4,254)	-184%	(2,754)	
Revenue Total:	46,500	46,500	-	46,500	26,067	-	26,067	(20,433)	56%	26,067	
Expenditures											
Division: 227- Police Grants Total:	20,261	20,261		20,261	9,219		9,219	11,042	46%	9,219	
Expenditures Total:	20,261	20,261	-	20,261	9,219	-	9,219	11,042	46%	9,219	
Traffic Safety Fund Net Results:	26,239	26,239		26,239	16,848		16,848	(9,391)	64%	16,848	
Fund Balance July 1, 2021	234,979	234,979		234,979	234,979					234,979	
Estimated Fund Balance June 30, 2022	261,218	261,218		261,218	251,826					251,826	
Fund: 206 - Supplemental Law Enforcement Svc Fund											
323- State Grants	156,727	156,727		156,727	161,285		161,285	4,558	103%	161,285	
370- Interest and Investment Income	1,600	1,600		1,600	(4,472)		(4,472)	(6,072)	-280%	(4,472)	
Revenue Total:	158,327	158,327	-	158,327	156,813	-	156,813	(1,514)	99%	156,813	
Expenditures											
Division: 227- Police Grants Total:	104,188	104,188		104,188	113,750		113,750	(9,562)	109%	113,750	
Expenditures Total:	104,188	104,188	-	104,188	113,750	-	113,750	(9,562)	109%	113,750	
Sup Law Enforce Svc Fund Net Results:	54,139	54,139		54,139	43,063		43,063	(11,076)	80%	43,063	
Fund Balance July 1, 2021	328,953	328,953		328,953	328,953					328,953	
Estimated Fund Balance June 30, 2022	383,092	383,092		383,092	372,015					372,015	



	Original Budget	Revised Budget	Proposed Adjustments	Amended Budget	YTD Actual	Encumbrances	Total	Variance Favorable (Unfavorable)	Percent Used	Projected Year-End	Notes
Fund: 207 - NPDES Storm Water Fund											
321- Intergovernmental Taxes	323,978	323,978		323,978	255,408		255,408	(68,570)	79%	255,408	
370- Interest and Investment Income	150	150		150	884		884	734	589%	884	
Revenue Total:	324,128	324,128	-	324,128	256,292	-	256,292	(67,836)	79%	256,292	
Expenditures											
Division: 342- Road Maintenance Total:	28,874	28,874		28,874	10,000		10,000	18,874	35%	10,000	
Division: 344- NPDES Storm Drain Total:	391,811	408,811		408,811	287,082		287,082	121,729	70%	287,082	
Expenditures Total:	420,685	437,685	-	437,685	297,082	-	297,082	140,603	68%	297,082	
NPDES Storm Water Fund Net Results:	(96,557)	(113,557)		(113,557)	(40,791)		(40,791)	72,766	36%	(40,791)	
Fund Balance July 1, 2021	1,853	1,853		1,853	1,853					1,853	
Estimated Fund Balance June 30, 2022	(94,704)	(111,704)		(111,704)	(38,938)					(38,938)	
Fund: 209 - Recreation Fund											
Division: 551- Recreation Administration	17,550	17,000		17,000	48,737		48,737	31,737	287%	48,737	
Division: 552- Senior Center	224,220	85,377		85,377	103,253		103,253	17,876	121%	103,253	
Division: 553- Tiny Tots	140,125	105,737		105,737	119,051		119,051	13,314	113%	119,051	
Division: 554- Youth Center	34,340	5,000		5,000	2,451		2,451	(2,549)	49%	2,451	
Division: 555- Day Camp	20,790	4,000		4,000	11,887		11,887	7,887	297%	11,887	
Division: 557- Swim Center	74,953	70,207		70,207	95,420		95,420	25,213	136%	95,420	
Division: 558- Memorial Hall	7,594	7,594		7,594	3,308		3,308	(4,285)	44%	3,308	
Division: 559- Tennis	350	350		350	289		289	(61)	83%	289	
Revenue Total:	519,922	295,265	-	295,265	384,397	-	384,397	89,132	130%	384,397	
Operating Transfers in:	673,331	1,091,962		1,091,962	948,943		948,943	(143,019)	87%	948,943	
Sources Total	1,193,253	1,387,227	-	1,387,227	1,333,340	-	1,333,340	(53,887)	96%	1,333,340	
Expenditures											
Division: 117- General Government Total:	-	-		-	7,549		7,549	(7,549)	0%	7,549	
Division: 551- Recreation Administration Total:	534,654	551,653		551,653	532,364		532,364	19,289	97%	532,364	
Division: 552- Senior Center Total:	448,819	375,390		375,390	399,234		399,234	(23,844)	106%	399,234	
Division: 553- Tiny Tots Total:	149,744	148,518		148,518	141,020		141,020	7,498	95%	141,020	
Division: 554- Youth Center Total:	216,749	173,296		173,296	111,786		111,786	61,511	65%	111,786	
Division: 555- Day Camp Total:	64,315	31,350		31,350	23,180		23,180	8,170	74%	23,180	
Division: 557- Swim Center Total:	111,167	119,673		119,673	137,822		137,822	(18,149)	115%	137,822	
Division: 558- Memorial Hall Total:	10,900	10,600		10,600	5,162		5,162	5,438	49%	5,162	
Division: 559- Tennis Total:	5,700	5,920		5,920	4,385		4,385	1,535	74%	4,385	
Expenditures Total:	1,542,048	1,416,400	-	1,416,400	1,362,502	-	1,362,502	53,898	96%	1,362,502	
Recreation Fund Net Results:	(348,795)	(29,173)		(29,173)	(29,162)		(29,162)	11	100%	(29,162)	
Fund Balance July 1, 2021	29,162	29,162		29,162	29,162					29,162	
Estimated Fund Balance June 30, 2022	(319,634)	(12)		(12)	(0)					(0)	
Fund: 212 - Building & Planning											
323- State Grants	205,000	205,000		205,000	-		-	(205,000)	0%	-	
332- Permits	487,000	487,000		487,000	480,430		480,430	(6,570)	99%	480,430	
341- Review Fees	850,000	850,000		850,000	361,433		361,433	(488,567)	43%	361,433	
342- Other Fees	50,700	50,700		50,700	65,442		65,442	14,742	129%	65,442	
344- Impact Fees	-	-		-	572		572	572	0%	572	
370- Interest and Investment Income	7,000	7,000		7,000	3,072		3,072	(3,928)	44%	3,072	
384- Other Revenue	6,000	6,000		6,000	-		-	(6,000)	0%	-	
Revenue Total:	1,605,700	1,605,700	-	1,605,700	910,950	-	910,950	(694,750)	57%	910,950	
Operating Transfers In:	-	481,051		481,051	481,051		481,051	0	0%	481,051	
Sources Total	1,605,700	2,086,751		2,086,751	1,392,001	-	1,392,001	(694,750)	67%	1,392,001	
Expenditures											
Division: 461- Planning Total:	838,219	1,254,269		1,254,269	749,792		749,792	504,477	60%	749,792	
Division: 462- Building Inspection Total:	889,535	1,360,363		1,360,363	1,032,776		1,032,776	327,587	76%	1,032,776	
Expenditures Total:	1,727,753	2,614,632	-	2,614,632	1,782,568	-	1,782,568	832,064	68%	1,782,568	
Building & Planning Net Results:	(122,053)	(527,881)		(527,881)	(390,567)		(390,567)	137,314	74%	(390,567)	
Fund Balance July 1, 2021	(134,313)	(134,313)		(134,313)	(134,313)					(134,313)	
Estimated Fund Balance June 30, 2022	(256,366)	(662,194)		(662,194)	(524,880)					(524,880)	



	Original Budget	Revised Budget	Proposed Adjustments	Amended Budget	YTD Actual	Encumbrances	Total	Variance Favorable (Unfavorable)	Percent Used	Projected Year-End	Notes
Fund: 213 - Refuse Management Fund											
323- State Grants	60,060	60,060		60,060	66,826		66,826	6,766	111%	66,826	
370- Interest and Investment Income	6,000	6,000		6,000	(1,768)		(1,768)	(7,768)	-29%	(1,768)	
Revenue Total:	66,060	66,060	-	66,060	65,058	-	65,058	(1,002)	98%	65,058	
Expenditures											
Division: 346- Waste Reduction Total:	140,858	140,858		140,858	106,591		106,591	34,267	76%	106,591	
Expenditures Total:	140,858	140,858	-	140,858	106,591	-	106,591	34,267	76%	106,591	
Refuse Management Fund Net Results:	(74,798)	(74,798)		(74,798)	(41,533)		(41,533)	33,265	56%	(41,533)	
Fund Balance July 1, 2021	192,376	192,376		192,376	192,376					192,376	
Estimated Fund Balance June 30, 2022	117,578	117,578		117,578	150,843					150,843	
Fund: 214 - Solid Waste Fund											
323- State Grants	-	-	28,327	28,327	28,327		28,327	-	100%	28,327	[2]
370- Interest and Investment Income	8,000	8,000		8,000	(20,738)		(20,738)	(28,738)	-259%	(20,738)	[3]
383- Reimbursements	360,000	360,000		360,000	386,514		386,514	26,514	107%	386,514	
Revenue Total:	368,000	368,000	28,327	396,327	394,103	-	394,103	(2,224)	99%	394,103	
Expenditures											
Division: 342- Road Maintenance Total:	336,445	336,445	3,000	339,445	194,241	88,413	282,654	56,791	83%	194,241	
Division: 345- Park Maintenance Total:	425,000	425,000		425,000	-		-	425,000	0%	-	
Expenditures Total:	761,445	761,445	3,000	764,445	194,241	88,413	282,654	481,791	37%	194,241	
Solid Waste Fund Net Results:	(393,445)	(393,445)		(393,445)	199,862	(88,413)	111,449	479,567	-28%	199,862	
Fund Balance July 1, 2021	1,863,362	1,863,362		1,863,362	1,863,362					1,863,362	
Estimated Fund Balance June 30, 2022	1,469,917	1,469,917		1,469,917	2,063,224					2,063,224	
Fund: 215 - Measure C and J Fund											
324- Other Grants	390,147	475,247		475,247	470,247		470,247	(5,000)	99%	470,247	
370- Interest and Investment Income	8,000	(3,152)		(3,152)	(23,256)		(23,256)	(20,104)	738%	(23,256)	
Revenue Total:	398,147	472,095	-	472,095	446,991	-	446,991	(25,104)	95%	446,991	
Expenditures											
Division: 117- General Government Total:	48,930	48,930		48,930	49,664		49,664	(734)	102%	49,664	
Division: 341- Administration/Engineering Total:	120,487	120,487		120,487	118,988		118,988	1,499	99%	118,988	
Division: 342- Road Maintenance Total:	765,772	765,772		765,772	10,073		10,073	755,699	1%	10,073	
Division: 343- Facility Maintenance Total:	2,000	2,000		2,000	-		-	2,000	0%	-	
Expenditures Total:	937,189	937,189	-	937,189	178,725	-	178,725	758,464	19%	178,725	
Measure C and J Fund Net Results:	(539,042)	(465,094)	-	(465,094)	268,266		268,266	733,360	-58%	268,266	
Fund Balance July 1, 2021	2,057,182	2,057,182		2,057,182	2,057,182					2,057,182	
Estimated Fund Balance June 30, 2022	1,518,140	1,592,088		1,592,088	2,325,449					2,325,449	
Fund: 216 - Rate Stabilization Fund											
370- Interest and Investment Income	-	-		-	(2,216)		(2,216)	(2,216)	0%	(2,216)	
383- Reimbursements	-	-		-	17,499		17,499	17,499	0%	17,499	
Revenue Total:	-	-	-	-	15,283	-	15,283	15,283	0%	15,283	
Expenditures Total:	-	-	-	-	-	-	-	-	0%	-	
Rate Stabilization Fund Net Results:	-	-	-	-	15,283		15,283	15,283	0%	15,283	
Fund Balance July 1, 2021	184,676	184,676		184,676	184,676					184,676	
Estimated Fund Balance June 30, 2022	184,676	184,676		184,676	199,959					199,959	
Fund: 217 - American Rescue Plan Act Fund											
322- Federal Grants	-	2,302,505		2,302,505	2,302,505		2,302,505	-	100%	2,302,505	
Revenue Total:	-	2,302,505	-	2,302,505	2,302,505	-	2,302,505	-	100%	2,302,505	
Expenditures											
Division: 117- General Government Total:	-	-		-	530,606		530,606	(530,606)	0%	530,606	
Expenditures Total:	-	-	-	-	530,606	-	530,606	(530,606)	0%	530,606	
American Rescue Plan Act Fund Net Results:	-	2,302,505		2,302,505	1,771,899		1,771,899	(530,606)	77%	1,771,899	
Fund Balance July 1, 2021	-	-		-	-					-	
Estimated Fund Balance June 30, 2022	-	2,302,505		2,302,505	1,771,899					1,771,899	

NOTES:

[2] Increase to account for State of California SB 1383 Grant.

[3] Increase for State of California SB 1383 Grant expenditures.



	Original Budget	Revised Budget	Proposed Adjustments	Amended Budget	YTD Actual	Encumbrances	Total	Variance Favorable (Unfavorable)	Percent Used	Projected Year-End	Notes
Fund: 225 - Asset Seizure-Adjudicated Fund											
370- Interest and Investment Income	-	-		-	(766)		(766)	(766)	0%	(766)	
Revenue Total:	-	-	-	-	(766)	-	(766)	(766)	0%	(766)	
Expenditures											
Division: 221- Police Operations Total:	86,562	86,562		86,562	29,000		29,000	57,562	34%	29,000	
Expenditures Total:	86,562	86,562	-	86,562	29,000	-	29,000	57,562	34%	29,000	
Asset Seizure-Adjudicated Fund Net Results:	(86,562)	(86,562)		(86,562)	(29,766)		(29,766)	56,796	0%	(29,766)	
Fund Balance July 1, 2021	87,341	87,341		87,341	87,341					87,341	
Estimated Fund Balance June 30, 2022	779	779		779	57,576					57,576	
Fund: 226 - CASp Certification and Training Fund											
342- Other Fees	-	-		-	8,172		8,172	8,172	0%	8,172	
Revenue Total:	-	-	-	-	8,172	-	8,172	8,172	0%	8,172	
Expenditures Total:	-	-		-	-		-	-	0%	-	
CASp Certification and Training Fund Net Results:	-	-		-	8,172		8,172	8,172	0%	8,172	
Fund Balance July 1, 2021	27,417	27,417		27,417	27,417					27,417	
Estimated Fund Balance June 30, 2022	27,417	27,417		27,417	35,590					35,590	
Fund: 275 - Parkland Dedication Fund											
344- Impact Fees	-	-		-	-		-	-	#DIV/0!	-	
370- Interest and Investment Income	-	-		-	(8,595)		(8,595)	(8,595)	#DIV/0!	(8,595)	
Revenue Total:	-	-	-	-	(8,595)	-	(8,595)	(8,595)	#DIV/0!	(8,595)	
Expenditures Total:	-	-		-	-		-	-	0%	-	
Parkland Dedication Fund Net Results:	-	-		-	(8,595)		(8,595)	(8,595)	0%	(8,595)	
Fund Balance July 1, 2021	104,448	104,448		104,448	104,448					104,448	
Estimated Fund Balance June 30, 2022	104,448	104,448		104,448	95,854					95,854	
Fund: 276 - Growth Impact Fund											
344- Impact Fees	229,834	229,834		229,834	2,452,573		2,452,573	2,222,739	1067%	2,452,573	
370- Interest and Investment Income	-	-		-	(10,748)		(10,748)	(10,748)	0%	(10,748)	
Revenue Total:	229,834	229,834	-	229,834	2,441,826	-	2,441,826	2,211,992	1062%	2,441,826	
Expenditures											
Division: 344- NPDES Storm Drain Total:	258,000	243,070		243,070	-		-	243,070	0%	-	
Expenditures Total:	258,000	243,070	-	243,070	-	-	-	243,070	0%	-	
Growth Impact Fund Net Results:	(28,166)	(13,236)		(13,236)	2,441,826		2,441,826	2,455,062	-18448%	2,441,826	
Fund Balance July 1, 2021	141,492	141,492		141,492	141,492					141,492	
Estimated Fund Balance June 30, 2022	113,326	128,256		128,256	2,583,317					2,583,317	
Fund: 285 - Housing Land Held for Resale											
370- Interest and Investment Income	50,000	50,000		50,000	(44,948)		(44,948)	(94,948)	-90%	(44,948)	
384- Other Revenue	-	-		-	41,492		41,492	41,492	0%	41,492	
393- Loan/Bond Proceeds	1,683,692	1,683,692		1,683,692	1,683,692		1,683,692	-	100%	1,683,692	
Revenue Total:	1,733,692	1,733,692	-	1,733,692	1,680,236	-	1,680,236	(53,456)	97%	1,680,236	
Expenditures											
Division: 461- Planning Total:	77,738	77,738		77,738	47,382		47,382	30,356	61%	47,382	
Division: 464- Housing Administration Total:	151,060	151,060		151,060	50,199		50,199	100,861	33%	50,199	
Expenditures Total:	228,798	228,798	-	228,798	97,581	-	97,581	131,217	43%	97,581	
Housing Land Held for Resale Net Results:	1,504,894	1,504,894		1,504,894	1,582,655		1,582,655	77,761	105%	1,582,655	
Fund Balance July 1, 2021	7,835,513	7,835,513		7,835,513	7,835,513					7,835,513	
Estimated Fund Balance June 30, 2022	9,340,407	9,340,407		9,340,407	9,418,168					9,418,168	
Fund: 310 - Lighting & Landscape Districts											
321- Intergovernmental Taxes	54,768	54,768		54,768	49,768		49,768	(5,000)	91%	49,768	
383- Reimbursements	7,500	7,500		7,500	-		-	(7,500)	0%	-	
Revenue Total:	62,268	62,268	-	62,268	49,768	-	49,768	(12,500)	80%	49,768	
Expenditures											
Division: 347- Landscape & Lighting PVR North Total	32,315	32,315		32,315	22,221		22,221	10,094	69%	22,221	
Division: 348- Landscape & Lighting PVR South Total	29,810	29,810		29,810	20,389		20,389	9,421	68%	20,389	
Expenditures Total:	62,125	62,125	-	62,125	42,611	-	42,611	19,514	69%	42,611	
Lighting & Landscape Districts Net Results:	143	143		143	7,157		7,157	7,014	5009%	7,157	
Fund Balance July 1, 2021	35,953	35,953		35,953	35,953					35,953	
Estimated Fund Balance June 30, 2022	36,095	36,095		36,095	43,110					43,110	



	Original Budget	Revised Budget	Proposed Adjustments	Amended Budget	YTD Actual	Encumbrances	Total	Variance Favorable (Unfavorable)	Percent Used	Projected Year-End	Notes
Fund: 317 - Pinole Valley Caretaker Fund											
381- Rental Income	15,000	15,000		15,000	-		-	(15,000)	0%	-	
Revenue Total:	15,000	15,000	-	15,000	-	-	-	(15,000)	0%	-	
Expenditures											
Division: 345- Park Maintenance Total:	14,755	14,755		14,755	1,833		1,833	12,922	12%	1,833	
Expenditures Total:	14,755	14,755	-	14,755	1,833	-	1,833	12,922	12%	1,833	
Pinole Valley Caretaker Fund Net Results:	245	245		245	(1,833)		(1,833)	(2,078)	-748%	(1,833)	
Fund Balance July 1, 2021	(327)	(327)		(327)	(327)					(327)	
Estimated Fund Balance June 30, 2022	(82)	(82)		(82)	(2,159)					(2,159)	
Fund: 324 - Public Facilities Fund											
Expenditures											
Division: 343- Facility Maintenance Total:	60,000	60,000		60,000	-		-	60,000	0%	-	
Division: 345- Park Maintenance Total:	10,000	10,000		10,000	-		-	10,000	0%	-	
Expenditures Total:	70,000	70,000	-	70,000	-	-	-	70,000	0%	-	
Public Facilities Fund Net Results:	(70,000)	(70,000)		(70,000)	-		-	70,000	0%	-	
Fund Balance July 1, 2021	541,649	541,649		541,649	541,649					541,649	
Estimated Fund Balance June 30, 2022	471,649	471,649		471,649	541,649					541,649	
Fund: 325 - City Street Improvements											
322- Federal Grants	-	156,960		156,960	336,189		336,189	179,229	214%	336,189	
323- State Grants	-	1,451		1,451	20,292		20,292	18,841	1398%	20,292	
324- Other Grants	-	131,183		131,183	268,486		268,486	137,303	205%	268,486	
351- Fines and Forfeiture	-	-		-	160		160	160	0%	160	
Revenue Total:	-	289,594	-	289,594	625,127	-	625,127	335,533	216%	625,127	
Operating transfers in Total:	250,000	250,000		250,000	250,000		250,000	-	100%	250,000	
Sources Total:	250,000	539,594	-	539,594	875,127		875,127	335,533	162%	875,127	
Expenditures											
Division: 342- Road Maintenance Total:	1,281,102	1,528,102		1,528,102	569,001	360,538	929,540	598,562	61%	569,001	
Expenditures Total:	1,281,102	1,528,102	-	1,528,102	569,001	360,538	929,540	598,562	61%	569,001	
City Street Improvements Net Results:	(1,031,102)	(988,508)	-	(988,508)	306,126	(360,538)	(54,412)	934,096	6%	306,126	
Fund Balance July 1, 2021	1,246,864	1,246,864		1,246,864	1,246,864					1,246,864	
Estimated Fund Balance June 30, 2022	215,762	258,356		258,356	1,552,990					1,552,990	
Fund: 327 - Park Grants (Measure WW)											
370- Interest and Investment Income	-	-		-	(284)		(284)	(284)	0%	(284)	
Revenue Total:	-	-	-	-	(284)	-	(284)	(284)	0%	(284)	
Expenditures											
Division: 345- Park Maintenance Total:	189,758	189,758		189,758	-		-	189,758	0%	-	
Expenditures Total:	189,758	189,758	-	189,758	-	-	-	189,758	0%	-	
Park Grants (Measure WW) Net Results:	(189,758)	(189,758)		(189,758)	(284)		(284)	189,474	0%	(284)	
Fund Balance July 1, 2021	25,521	25,521		25,521	25,521					25,521	
Estimated Fund Balance June 30, 2022	(164,237)	(164,237)		(164,237)	25,237					25,237	
Fund: 377 - Arterial Streets Rehabilitation Fund											
Operating transfers in Total:	250,000	250,000		250,000	250,000		250,000	-	100%	250,000	
Sources Total:	250,000	250,000	-	250,000	250,000	-	250,000	-	100%	250,000	
Expenditures											
Division: 342- Road Maintenance Total:	819,689	819,689		819,689	1,029,962	37,210	1,067,172	(247,483)	130%	1,029,962	
Expenditures Total:	819,689	819,689	-	819,689	1,029,962	37,210	1,067,172	(247,483)	130%	1,029,962	
Arterial Streets Rehabilitation Fund Net Results:	(569,689)	(569,689)	-	(569,689)	(779,962)	(37,210)	(817,172)	(247,483)	143%	(779,962)	
Fund Balance July 1, 2021	788,574	788,574		788,574	788,574					788,574	
Estimated Fund Balance June 30, 2022	218,885	218,885		218,885	8,612					8,612	



	Original Budget	Revised Budget	Proposed Adjustments	Amended Budget	YTD Actual	Encumbrances	Total	Variance Favorable (Unfavorable)	Percent Used	Projected Year-End	Notes
Fund: 500 - Sewer Enterprise Fund											
363- Sewer Enterprise Charges	7,797,500	7,797,500		7,797,500	7,789,007		7,789,007	(8,493)	100%	7,789,007	
370- Interest and Investment Income	100,000	100,000		100,000	(196,765)		(196,765)	(296,765)	-197%	(196,765)	
383- Reimbursements	-	-		-	3,046		3,046	3,046	0%	3,046	
384- Other Revenue	-	-		-	366		366	366	0%	366	
392- Proceeds from Sale of Property	-	-		-	67,262		67,262	67,262	0%	67,262	
Revenue Total:	7,897,500	7,897,500	-	7,897,500	7,662,916	-	7,662,916	(234,584)	97%	7,662,916	
Expenditures											
Division: 117- General Government Total:	-	-		-	12,191		12,191	(12,191)	0%	12,191	
Division: 641- Sewer Treatment Plant/Shared Total:	5,323,223	5,323,223		5,323,223	4,111,829		4,111,829	1,211,394	77%	4,111,829	
Division: 642- Sewer Collections Total:	2,193,850	2,263,850		2,263,850	1,285,049		1,285,049	978,801	57%	1,285,049	
Division: 644- WPCP Equipment/Debt Service Total:	1,609,506	1,609,506		1,609,506	596,719		596,719	1,012,787	37%	596,719	
Expenditures Total:	9,126,579	9,196,579	-	9,196,579	6,005,788	-	6,005,788	3,190,791	65%	6,005,788	
Sewer Enterprise Fund Net Results:	(1,229,079)	(1,299,079)	-	(1,299,079)	1,657,128		1,657,128	2,956,207	-128%	1,657,128	
Fund Balance July 1, 2021	21,399,210	21,399,210		21,399,210	21,399,210					21,399,210	
Estimated Fund Balance June 30, 2022	20,170,132	20,100,132		20,100,132	23,056,339					23,056,339	
Fund: 503 - Plant Expansion Fund											
370- Interest and Investment Income	-	-		-	6		6	6	0%	6	
383- Reimbursements	-	-		-	2,492		2,492	2,492	0%	2,492	
Revenue Total:	-	-	-	-	2,498	-	2,498	2,498	0%	2,498	
Expenditures											
Division: 643- Sewer Projects/Shared Total:	-	-		-	658,310		658,310	(658,310)	0%	658,310	
Expenditures Total:	-	-	-	-	658,310	-	658,310	(658,310)	0%	658,310	
Plant Expansion Fund Net Results:	-	-	-	-	(655,812)		(655,812)	(655,812)	0%	(655,812)	
Fund Balance July 1, 2021	2,365,557	2,365,557		2,365,557	2,365,557					2,365,557	
Estimated Fund Balance June 30, 2022	2,365,557	2,365,557		2,365,557	1,709,745					1,709,745	
Fund: 505 - Cable Access TV											
314- Franchise Taxes	52,972	52,972		52,972	21,934		21,934	(31,038)	41%	21,934	
365- Cable TV Charges	316,956	316,956		316,956	219,661		219,661	(97,295)	69%	219,661	
370- Interest and Investment Income	-	-		-	1,297		1,297	1,297	0%	1,297	
384- Other Revenue	5,000	5,000		5,000	-		-	(5,000)	0%	-	
Revenue Total:	374,928	374,928	-	374,928	242,892	-	242,892	(132,036)	65%	242,892	
Operating transfers in Total:	160,124	160,124	37,060	197,184	160,124		160,124	(37,060)	81%	197,184	[4]
Sources Total	535,052	535,052		572,112	403,016	-	403,016	(169,096)	70%	440,076	
Expenditures											
Division: 119- Cable Access TV Total:	375,701	375,701		375,701	304,561	18,976	323,536	52,164	86%	304,561	
Division: 120- Cable Access-Community Services Tot	4,571	4,571		4,571	-		-	4,571	0%	-	
Division: 121- Cable Access-Contract Services Total:	190,494	190,494		190,494	132,383		132,383	58,111	69%	132,383	
Expenditures Total:	570,765	570,765	-	570,765	436,944	18,976	455,920	114,846	80%	436,944	
Cable Access TV Net Results:	(35,713)	(35,713)		1,347	(33,928)	(18,976)	(52,904)	(54,251)	-3928%	3,132	
Fund Balance July 1, 2021	(3,132)	(3,132)		(3,132)	(3,132)					(3,132)	
Estimated Fund Balance June 30, 2022	(38,845)	(38,845)		(1,785)	(37,060)					0	
Fund: 525 - Information Systems											
399- Operating Transfers In	-	-	196,169	196,169	-		-	(196,169)	0%	196,169	[5]
Sources Total:	-	-	196,169	196,169	-	-	-	(196,169)	0%	196,169	
Expenditures											
Division: 118- Information Systems Total:	1,011,526	1,338,354		1,338,354	729,127	7,805	736,932	601,422	55%	729,127	
Expenditures Total:	1,011,526	1,338,354	-	1,338,354	729,127	7,805	736,932	(601,422)	55%	729,127	
Indirect cost allocations Total:	(1,011,526)	(1,338,354)		(1,338,354)	(729,127)		(729,127)	609,227	54%	(729,127)	
Information Systems Net Results:	0	0	196,169	196,169	(0)	7,805	7,805	413,058	4%	196,169	
Fund Balance July 1, 2021	(196,169)	(196,169)		(196,169)	(196,169)					(196,169)	
Estimated Fund Balance June 30, 2022	(196,169)	(196,169)		0	(196,169)					(0)	

NOTES:

[4] Increase for transfer from the General Fund to clear negative fund balance.

[5] Increase for transfer from the General Fund to clear negative fund balance.



City of Pinole, CA

For FY2021/22 Period Ending: 6/30/22

	Original Budget	Revised Budget	Proposed Adjustments	Amended Budget	YTD Actual	Encumbrances	Total	Variance Favorable (Unfavorable)	Percent Used	Projected Year-End	Notes
Fund: 700 - Pension Fund											
370- Interest and Investment Income	-	-		-	(2,248,500)		(2,248,500)	(2,248,500)	0%	(2,248,500)	
Revenue Total:	-	-	-	-	(2,248,500)	-	(2,248,500)	(2,248,500)	0%	(2,248,500)	
Expenditures											
Division: 117- General Government Total:	-	-		-	87,037		87,037	(87,037)	0%	87,037	
Transfers Out Total:	-	-		-	1,061,736		1,061,736	(1,061,736)	0%	1,061,736	
Expenditures Total:	-	-	-	-	1,148,773		1,148,773	1,148,773	0%	1,148,773	
Pension Fund Net Results:	-	-		-	(3,397,273)		(3,397,273)	(3,397,273)	0%	(3,397,273)	
Fund Balance July 1, 2021	19,442,495	19,442,495		19,442,495	19,442,495					19,442,495	
Estimated Fund Balance June 30, 2022	19,442,495	19,442,495		19,442,495	16,045,222					16,045,222	
Fund: 750 - Recognized Obligation Retirement Fund											
311- Property Taxes	250,000	250,000		250,000	219,147		219,147	(30,853)	88%	219,147	
Revenue Total:	250,000	250,000	-	250,000	219,147	-	219,147	(30,853)	88%	219,147	
Expenditures											
Division: 463- Successor Agency to RDA Total:	194,899	194,899		194,899	261,330		261,330	(66,431)	134%	261,330	
Expenditures Total:	194,899	194,899	-	194,899	261,330		261,330	66,431	134%	261,330	
Recognized Obligation Retirement Fund Net Results:	55,101	55,101		55,101	(42,183)		(42,183)	35,578	-77%	(42,183)	



CITY COUNCIL REPORT

9D

DATE: SEPTEMBER 20, 2022

TO: MAYOR AND COUNCIL MEMBERS

**FROM: MARKISHA GUILLORY, FINANCE DIRECTOR
ROY SWEARINGEN, CITY TREASURER**

**SUBJECT: RECEIVE THE QUARTERLY INVESTMENT REPORT FOR THE FOURTH
QUARTER (ENDING JUNE 30, 2022)**

RECOMMENDATION

Staff recommends that the City Council receive the Quarterly Investment Report for the fourth quarter (ending June 30, 2022).

BACKGROUND

The City of Pinole Investment Policy requires that a Quarterly Investment Report be submitted to the City Council. The City's investments, as shown in the attached Investment Report for the quarter ending June 30, 2022, conform to the City's Investment Policy as well as all applicable State and federal requirements, including California Government Code Section 53646.

The funds that the City invests, and which are reported in the Quarterly Investment Report, are comprised of cash and investment balances that are held across all City funds. The cash and investment balances across all City funds are "pooled" for investment purposes, with the exception of the assets of the General Reserve, which is discussed further below. Cash is invested in accordance with the City's Investment Policy. Interest earnings on investments are allocated to the various funds based on the cash and investments balances of those funds.

The City also maintains a Section 115 Trust that was established for the purpose of setting aside resources to offset anticipated significant increases in future City pension costs. The cash and investments in the trust are designated as restricted fund balance in the City's General Fund. These funds are invested according to the policy objectives and guidelines of the City's Pension Investment Policy.

REVIEW AND ANALYSIS

Investment Policy

All investments held at June 30, 2022 conform to the City's Investment Policy and all applicable State and federal requirements. The City's investment objectives, in order of

priority, are safety, which is investing in the highest quality securities; liquidity, which is the ability to convert the investment to cash as necessary to meet cash flow requirements; and yield, which is earning a higher return.

Investment Strategy

The City utilizes a passive investment management approach by buying and holding securities until maturity. Earnings on investments held until maturity typically fluctuate with market conditions and are considered “unrealized” prior to maturity. The City expects to yield a gain on all investments at maturity. A “laddered maturity” investment strategy is applied to the long-term portion of the City’s investment portfolio. A laddered portfolio is structured with securities that have different maturity dates. As securities are called or mature, proceeds are reinvested in a new security with another long term at the end of the ladder. Laddering helps to minimize interest-rate risk, increase liquidity, and diversify credit risk.

Staff continues to monitor rates of return on City funds invested and make investments to best achieve the objectives laid out in the Investment Policy.

Fourth Quarter Investment Summary

As of June 30, 2022, total cash and investments increased by \$6,725,489 from the previous quarter, from \$53,484,727 to \$60,210,216. Typically, the City experiences swings in cash inflow and outflow due to the seasonality of large receipts, such as property taxes, and large disbursements, like debt service that is paid semiannually. The City will have sufficient cash flow to meet the next six months of estimated expenditures.

Investment Instruments

The Finance Director, in consultation with the City Treasurer, selects the instruments in which to invest the City’s funds, in order to best meet the objectives laid out in the City’s Investment Policy. The balances held in different investment instruments at June 30, 2022 are noted in Attachment A. The bulk of the City’s investment funds are invested in the State of California’s Local Agency Investment Fund (LAIF), because of the safety and liquidity of that investment.

Funds in the City’s General Reserve are maintained in an account that is separate from the rest of the pooled funds. This enables the Finance Director to implement a directed investment plan for the General Reserve funds. The City’s practice has been to invest these funds in instruments with longer duration, thereby yielding greater investment earnings.

Investment Yield and Duration

The aggregate yield of the City’s investment portfolio for the quarter ended June 30, 2022 is summarized in Attachment A. The total investment portfolio yielded 1.302% for the fourth quarter (April through June 2022), up from the 0.24% yielded in the previous quarter (January through March 2022).

For the fourth quarter, LAIF earned an average annual yield of 0.861%, up from an average yield of 0.365% for the third quarter. LAIF yields gradually decreased between June 2019 and November 2021 and are lower than long-term investment yields in most cases. However, LAIF has shown a gradual increase in yield since December 2021.

The General Reserve, which holds the longer-term investments, earned an average yield of 1.473%, up from the 1.332% average yield in the third quarter. No new investment instruments were purchased during the fourth quarter. Additionally, there were no maturities.

Section 115 Trust

The Section 115 Trust is comprised of a diversified portfolio of investments consistent with the Trust's objectives and liquidity requirements. The funds are invested on behalf of the City by Public Agency Retirement Services (PARS). The portfolio summary for the quarter ending June 30, 2022 is included in Attachment B to this report.

FISCAL IMPACT

There is no fiscal impact as a result of receiving the Quarterly Investment Report.

ATTACHMENTS

A- Investment Report - Quarter Ending June 30, 2022

B- Section 115 Trust Investment Report – Quarter Ending June 30, 2022

**CITY OF PINOLE
INVESTMENT REPORT JUNE 2022
PORTFOLIO SUMMARY**

Investments	Par Value	Market Value	Book Value	% of Portfolio	Days to Maturity	Yield	Weighted Average Maturity
Investment Pool - LAIF	35,024,205	34,573,283	34,573,283	59.63%	1	0.861	1
Investment Pool - CalTrust	3,250,212	3,250,212	3,250,212	5.61%	1	2.410	0
Money Market Savings	11,973,449	11,973,449	11,973,449	20.65%	1	0.025	0
Mutual Funds	2,656,229	2,656,229	2,656,229	4.58%	1	1.485	0
Certificates of Deposit	3,470,000	3,374,469	3,374,469	5.82%	514	1.557	2
Medium-Term Corporate Notes	1,750,000	1,687,595	1,687,595	2.91%	889	2.120	14
Federal Agency Securities	500,000	466,210	466,210	0.80%	1,076	0.730	9
Subtotal Investments	\$ 58,624,094	\$ 57,981,446	57,981,446	100.00%	414	1.302	4

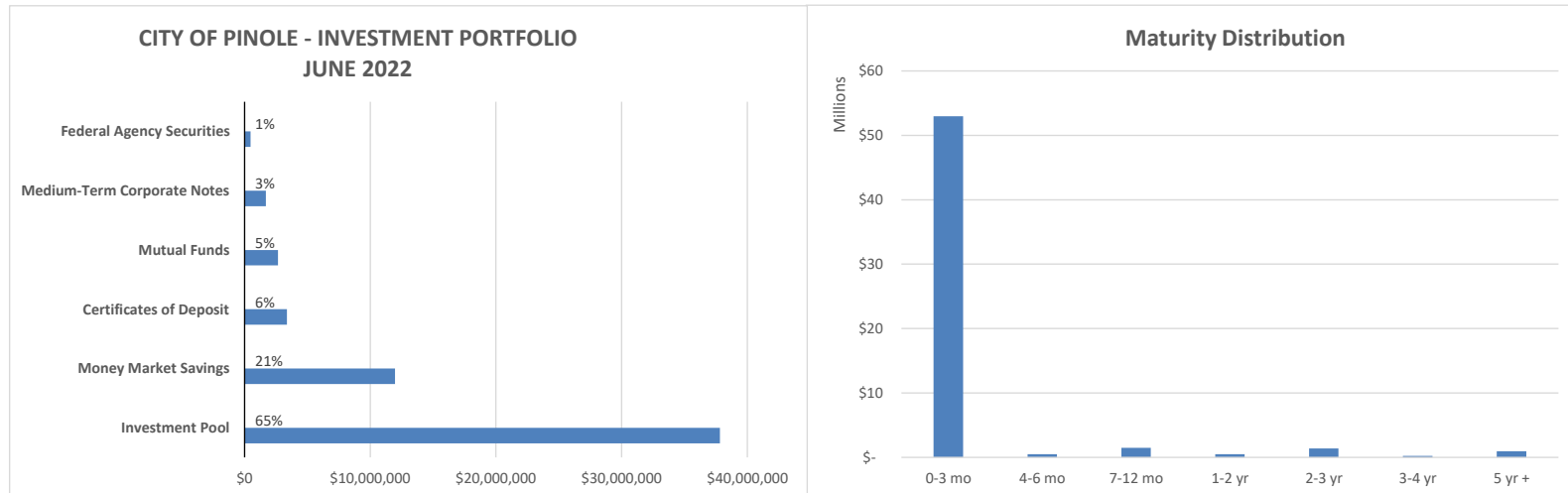
Average Years: 1.1

Cash				
Mechanics Bank - Vendor Checking *	1,127,866	1,127,866	1,127,866	1
Bank of the West - Payroll Checking *	577,323	577,323	577,323	1
Bank of the West - Checking (Credit Card Clearing) *	523,581	523,581	523,581	1
Subtotal Cash	2,228,769	2,228,769	2,228,769	1

Total Cash and Investments \$ 60,852,864 \$ 60,210,216 \$ 60,210,216

*Not included in yield calculations

The above investments are consistent with the City's Investment Policy and allowable under current legislation of the State of California. Investments were selected using safety, liquidity and yield as the criteria. The source of the market values for the investments are provided by US Bank in accordance with the California Government Code requirement. The City has sufficient cash flow to cover anticipated expenditures through the next six months.



Return to Agenda

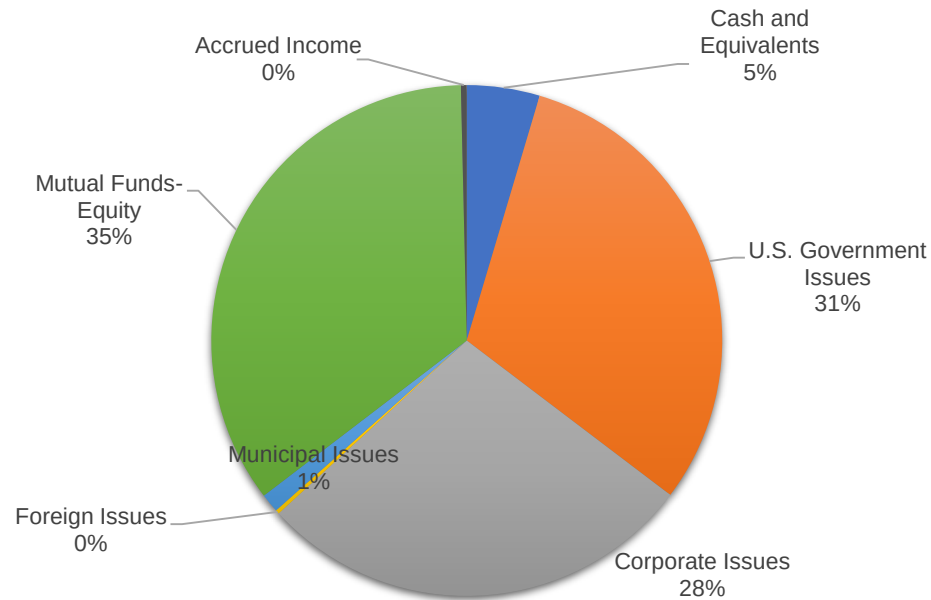
CITY OF PINOLE INVESTMENT REPORT JUNE 2022 PORTFOLIO DETAILS

Type / Account Number	CUSIP	Issuer	Investment Description	Manager	GL Acct #	Par Value	Market Value	Book Value	Rate	Yield	Days to Maturity	S&P Rating	Maturity Date	Weighted Average Maturity
Investment Pool														
		Local Agency Investment Fund (LAIF)	Pooled Treasury - State of California	LAIF	999-10201	35,024,205	34,573,283	34,573,283	0.861	0.861	1	N/A		1
		CalTrust - Short Term Fund (City)	Pooled Treasury - Joint Power Financing Authority	CalTrust	999-10202	24,368	24,368	24,368	2.000	2.000	1	N/A		0
		CalTrust - Medium Term Fund (City)	Pooled Treasury - Joint Power Financing Authority	CalTrust	999-10203	3,225,843	3,225,843	3,225,843	2.820	2.820	1	N/A		0
			Subtotal and Average			38,274,417	37,823,495	37,823,495	1.894	1.894	1			0
Money Market Savings														
		Mechanics Bank	Money Market Savings (City)	City	999-10102	11,865,672	11,865,672	11,865,672	0.040	0.040	1	N/A		0
		Bank of the West	Money Market Savings - Police Evidence Trust	City	999-10104	107,777	107,777	107,777	0.010	0.010	1	N/A		0
			Subtotal and Average			11,973,449	11,973,449	11,973,449	0.025	0.025	1			0
Mutual Funds														
19-516680		U.S. Bank	Accrued Income - City Reserve	US Bank	150-10110	17,744	17,744	17,744	1.980	1.980	1	N/A		0
19-516680	31846V203	1st American Government Obligation Fund	Mutual Fund Shares - Class "D" - City Reserve	US Bank	150-10110	2,638,485	2,638,485	2,638,485	0.990	0.990	1	N/A		0
			Subtotal and Average			2,656,229	2,656,229	2,656,229	1.485	1.485	1			0
Certificates of Deposit														
19-516680	02007GLR2	Ally Bank	Certificates of Deposit - City Reserves	US Bank	150-10110	247,000	246,995	246,995	1.800	1.800	74	N/A	9/12/2022	0
19-516680	064520BG3	Bank of Princeton	Certificates of Deposit - City Reserves	US Bank	150-10110	250,000	232,935	232,935	0.500	0.540	914	N/A	12/30/2024	4
19-516680	05580ATL8	Bmw Bank North America	Certificates of Deposit - City Reserves	US Bank	150-10110	247,000	246,723	246,723	1.800	1.800	166	N/A	12/13/2022	1
19-516680	38149MAY9	Goldman Sachs BK USA New York	Certificates of Deposit - City Reserves	US Bank	150-10110	246,000	245,665	245,665	2.600	2.600	340	N/A	6/5/2023	1
19-516680	58404DFE6	Medallion Bk Salt Lake City	Certificates of Deposit - City Reserves	US Bank	150-10110	249,000	248,945	248,945	1.700	1.700	81	N/A	9/19/2022	0
19-516680	59013KCZ7	Merrick Bank	Certificates of Deposit - City Reserves	US Bank	150-10110	249,000	244,961	244,961	1.650	1.680	456	N/A	9/29/2023	2
19-516680	61690UGW4	Morgan Stanley Bank Na	Certificates of Deposit - City Reserves	US Bank	150-10110	246,000	245,656	245,656	2.600	2.600	341	N/A	6/6/2023	1
19-516680	61760AF46	Morgan Stanley Private Bk Natlassn	Certificates of Deposit - City Reserves	US Bank	150-10110	246,000	245,656	245,656	2.600	2.600	341	N/A	6/6/2023	1
19-516680	70212VAB4	Partners Bk helena Ark	Certificates of Deposit - City Reserves	US Bank	150-10110	247,000	227,302	227,302	0.600	0.650	1,096	N/A	6/30/2025	4
19-516680	84223QAN7	Southern Bankcorp Bank	Certificates of Deposit - City Reserves	US Bank	150-10110	250,000	234,218	234,218	0.500	0.530	848	N/A	10/25/2024	3
19-516680	856283N51	State Bk Indiana Chicago Ill	Certificates of Deposit - City Reserves	US Bank	150-10110	250,000	230,943	230,943	1.000	1.080	1,092	N/A	6/26/2025	4
19-516680	85916VDN2	Sterling Bank of Poplar Bluff	Certificates of Deposit - City Reserves	US Bank	150-10110	247,000	243,139	243,139	1.650	1.680	445	N/A	9/18/2023	2
19-516680	87164WC71	Synchrony Bank	Certificates of Deposit - City Reserves	US Bank	150-10110	249,000	234,638	234,638	0.650	0.690	823	N/A	9/30/2024	3
19-516680	949495AF2	Wells Fargo Bank Natl Bk West	Certificates of Deposit - City Reserves	US Bank	150-10110	247,000	246,694	246,694	1.850	1.850	183	N/A	12/30/2022	1
			Subtotal and Average			3,470,000	3,374,469	3,374,469	1.536	1.557	514			2
Medium-Term Corporate Notes														
19-516679	037833DN7	Apple Inc.	2.05% Corporate MTN 9/11/26 - City Reserves	US Bank	150-10110	1,000,000	941,510	941,510	2.050	2.180	1,534	AA+	9/11/2026	25
19-516680	478160BT0	Johnson Johnson	2.05% Corporate MTN 3/1/23 - City Reserves	US Bank	150-10110	750,000	746,085	746,085	2.050	2.060	244	AAA	3/1/2023	3
			Subtotal and Average			1,750,000	1,687,595	1,687,595	2.050	2.120	889			14
Federal Agency Securities														
19-516680	3133ELH80	Federal Farm Credit Bks	.680% Agency Bond 6/10/25	US Bank	150-10110	500,000	466,210	466,210	0.680	0.730	1,076	AA+	6/10/2025	9
			Subtotal and Average			500,000	466,210	466,210	0.680	0.730	1,076			9
Investment Portfolio Total and Average						\$ 58,624,094	\$ 57,981,446	\$ 57,981,446	1.278	1.302	414			4

Average Years :	1.1
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CITY OF PINOLE
INVESTMENT REPORT JUNE 2022
SECTION 115 TRUST PORTFOLIO SUMMARY

Investments	Market Value	Book Value	% of Market	Yield
Cash and Equivalents	764,807	764,807	4.47%	1.260
U.S. Government Issues	5,096,451	5,459,319	29.79%	3.120
Corporate Issues	4,617,801	5,186,629	26.99%	3.780
Foreign Issues	41,724	49,500	0.24%	5.280
Municipal Issues	198,236	206,037	1.16%	4.470
Mutual Funds-Equity	5,809,818	5,865,380	33.96%	1.450
Mutual Funds-Fixed Income	517,217	516,704	3.02%	1.800
Total Assets	17,046,054	18,048,376	99.64%	2.630
Accrued Income	60,883	60,883	0.36%	
Grand Total	\$ 17,106,937	\$ 18,109,259	100%	





CITY COUNCIL REPORT

9E

DATE: SEPTEMBER 20, 2022

TO: MAYOR AND COUNCIL MEMBERS

FROM: LILLY WHALEN, COMMUNITY DEVELOPMENT DIRECTOR

SUBJECT: RECEIVE THE QUARTERLY REPORT ON IMPLEMENTATION OF THE GREENHOUSE GAS INVENTORY AND CLIMATE ACTION AND ADAPTATION PLAN FOR FISCAL YEAR (FY) 2021-22 FOURTH QUARTER

RECOMMENDATION

Staff recommends that the City Council receive this quarterly report on implementation of the greenhouse gas (GHG) inventory and Climate Action and Adaptation Plan (CAAP).

BACKGROUND

On October 19, 2021, the City Council adopted Resolution No. 2021-93, which declared a climate emergency, directed staff to complete a greenhouse gas (GHG) emissions inventory, and directed staff to prepare a Climate Action Plan (CAP) that includes GHG emission reduction goals that align with the State's GHG emission reduction goals of SB 32 and Executive Order B-55-18. The City Council budgeted \$160,000 for these efforts. The City Council also directed staff to present quarterly updates on the City's progress on the GHG emissions inventory and CAP. Staff last provided a quarterly update on May 3, 2022 that addressed staff and consultant activities for the third quarter of fiscal year (FY) 2021/22 (January - March 2022).

DISCUSSION AND ANALYSIS

This is the third quarterly report on the City's progress on the GHG emissions inventory and CAAP development from April-June 2022. During this period the GHG inventory was completed. The GHG inventory will inform all future steps of climate action, including target setting, strategy development, and ongoing monitoring and evaluation. Additionally, contract negotiations occurred and a contract to develop the CAAP was executed. The following is a summary of staff and consultant activities for the third quarter of FY 2021/22 (April-June 2022):

APRIL 2022 ACTIVITIES

- In April the community GHG emissions inventory, municipal GHG inventory and GHG emissions forecasts and provisional target report were completed by the CSG/Rincon Team, wrapping up the GHG inventory task item (total amount of contract: \$32,027).
- In April Staff negotiated CAAP development project details with Rincon and prepared a City Council staff report for contract approval.

MAY 2022 ACTIVITIES

- On May 3, 2022 the City Council approved contracting with Rincon and CSG Consultants for the development of the Climate Action and Adaptation Plan (total contract amount: \$184,808).
- Additionally, the Council authorized a partnership with Strategic Energy Innovations Inc., to participate in the Climate Corps program and receive a Sustainability Fellow for 10 months to support the CAAP development (\$48,500).

JUNE 2022 ACTIVITIES

- During the month of June City staff and Rincon Inc. negotiated contracting details.
- On June 27, 2022 the contract with Rincon for development of the CAAP was executed.

FISCAL IMPACT

There is no fiscal impact related to receiving this report.

ATTACHMENTS

None



CITY COUNCIL REPORT

9F

DATE: SEPTEMBER 20, 2022

TO: MAYOR AND COUNCIL MEMBERS

FROM: MISHA KAUR, CAPITAL IMPROVEMENT AND ENVIRONMENTAL PROGRAM MANAGER

SUBJECT: FISCAL YEAR (FY) 2021/22 FOURTH QUARTER REPORT ON IMPLEMENTATION OF CAPITAL IMPROVEMENT PLAN (CIP) PROJECTS

RECOMMENDATION

Staff recommends that the City Council receive the Fiscal Year (FY) 2021/22 Fourth Quarter Report on implementation of Capital Improvement Plan (CIP) projects.

BACKGROUND

The CIP is a multi-year plan/forecast of the City's capital improvement projects. The first year of the CIP is the proposed capital project plan and capital budget for that fiscal year.

The City creates an updated CIP each year based on the condition of the City's current capital assets, the desire for new capital assets, and available funding. Projects in the CIP address the City's major types of capital assets: facilities, parks, sanitary sewer collection and treatment infrastructure, stormwater infrastructure, and roads. The City owns considerable capital assets in other classes as well, including streetlights, traffic control devices, sidewalks, street trees, trash capture devices, waste bins and enclosures, traffic/wayfinding signage, benches, bike racks, monument signs, fleet, and fiber optic conduit. The condition of current assets and the need for new capital assets is usually determined through the creation of a master plan for each major type of asset. Below is a list of the current status of master planning for each major type of asset:

Asset	Master planning	Status
Facilities	Collection of facility condition information and input into Beehive Asset Management Software	Execution
Parks	Park Master Plan	Execution
Sanitary Sewer	Sanitary Sewer Collection Master Plan	Execution
	Sanitary Sewer Management Plan	Complete
Stormwater	Storm Drain Master Plan	Programmed for FY 2022/23
Roads	Local Road Safety Plan	Execution
	Active Transportation Plan	Initiation

	StreetSaver – Pavement Management	Execution
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CIP projects usually have five major phases of their lifecycle, described in Attachment A.

The Administration and Engineering Division in the Public Works Department is responsible for identifying and completing City capital projects.

REVIEW & ANALYSIS

The City's adopted CIP (Attachment B) contains construction projects and master planning projects. The master plans included in the CIP will aid the City in identifying and prioritizing construction projects and will identify funding opportunities for future projects.

Attachment C provides the status of each project programmed for FY 2021/22 in the CIP as of the end of the fourth quarter of FY 2021/22.

Fourth Quarter CIP Highlights

- San Pablo Avenue Rehabilitation project (RO1801):
This project was completed on June 1, 2022 and a Notice of Completion was filed with the County Clerk's office. The project involved installation of curb ramps, a pedestrian island median, a wood wall for erosion control, pavement stripes and markings, and asphalt pavement grinding and overlay on a 0.5-mile section of San Pablo Ave. between the western city limit to Pinole Shores Drive.
- San Pablo Ave Bridge over BNSF Railroad (RO1710):
A webinar was hosted by the project team to provide an update to the Hercules By the Bay Homeowners Association and address questions and concerns. Staff also collaborated with Hercules staff to draft a Memorandum of Understanding between the cities of Pinole and Hercules for project development and construction coordination.
- Safety Improvements at Appian Way & Marlesta Rd. (RO1714):
This project will install a traffic signal, traffic signage including advanced warning sign on the south end of Appian Way, pavement striping and markings, high visibility crosswalks at the Appian Way and Marlesta Rd. intersection.

This project is partially grant funded. Environmental documents, utility coordination, plans, specifications, and estimate (PS&E), along with other documents as required by Caltrans Division of Local Assistance were submitted to Caltrans in order to receive an authorization to proceed. Staff also sent notices by mail to residents near the project area. An authorization to proceed was issued by Caltrans on May 9, 2022.

- Park Master Plan (PA1704)

Public Works staff in collaboration with Community Services staff developed the scope of work for the Park Master Plan. The Request for Proposal for this project was released to select a consultant to prepare the Park Master Plan.

- Sanitary Sewer Management Plan (SSMP)
An SSMP was adopted by City Council on June 7, 2022. The SSMP outlines the activities that the City will take to effectively manage its wastewater.
- Electric Vehicle Charging Stations (FA2002)
Project plans were finalized for the installation of a Level II charging station in the Public Safety Building parking lot.

FISCAL IMPACT

Projects have budgeted sources of funds which have been previously approved by City Council. There is no fiscal impact associated with this status update and deferring master plans to future fiscal years.

ATTACHMENT(S)

- A. CIP Project Lifecycle
- B. Adopted Capital Improvement Plan for FY 2021/22 through FY 2025/26
- C. Project Status Summary

ATTACHMENT A

CIP PROJECT LIFECYCLE

1. **Initiation**: Projects in the CIP are selected and prioritized based on specific criteria such as consistency with master plans and policies, regulatory requirements, health and safety impacts, and community benefits. The funding is identified for projects and a capital budget is presented to Council for consideration. Once the CIP is adopted by City Council, staff is responsible for project implementation. The initiation phase involves determining whether the project will be managed by City staff or a consultant, assigning the project to a manager, and assembling the project team.
2. **Planning**: The assigned project manager develops the scope, preliminary schedule, and funding requirements, and identifies stakeholders.

Construction projects can be completed through several delivery methods, including design-build and design-bid-build. In design-build, the same firm/team of firms is selected to design and build the project, whereas in design-bid-build one firm designs the project, then the construction is bid, and a construction firm builds the project. Depending on the delivery method, a construction project can involve several steps which may include design, bid, award, construction, and closeout.

For non-construction projects such as master planning, staff defines the initial project by identifying major goals and objectives.

Throughout the project lifecycle, coordination and engagement with various stakeholders is necessary. Stakeholders can include the community, business owners, utilities, funding partners, and other interested and affected parties.

3. **Execution**: For construction projects, the project plans and specifications, and preliminary costs estimates, are prepared. Typically, there are three levels of design review which allow opportunity for coordination and input with stakeholders, utilities, funding partners, and regulatory agencies. The design review usually occurs at 35, 65, and 90 percent of design completion. As the design progresses through each level, the cost estimate becomes more precise. The completed design is reviewed and approved by the City Engineer.

For a design-bid-build project, the final approved design goes out to bid. The project cost estimate and source of project funding govern which procurement policies and procedures will apply. The City's procurement policy establishes the standards for purchase of goods, services, and supplies. Projects involving federal or State grant funds typically involve stricter and more formalized procedures. In addition, high value public works projects must adhere to processes established in the California Public Contract Code. A contract is awarded to the most qualified and responsible vendor.

ATTACHMENT A

After a contract is awarded and executed with the appropriate insurance and bonds, project construction can begin. The project size and complexity dictate the length of the construction phase.

For master plans, stakeholders are engaged, and links are identified among other infrastructure plans, the General Plan, and other applicable City plans. Next, solutions including conceptual alternatives are developed. Viable solutions are evaluated to ensure they meet the goals and needs of the project. The master plan is a final document which contains a recommended program and/or capital project list.

4. **Monitoring**: Throughout the project lifecycle, staff oversees and monitors the project. Construction projects involve construction management, contract compliance, and project management services, which include technical and administrative tasks. Staff is also responsible for grant administration for projects that are funded by grants.
5. **Closure**: Once construction projects are complete, the as-built drawings are filed for future reference. Closeout activities involve completing project related paperwork including filing the notice of completion with the Contra Costa County Recorder's office. For master plans, the final plan is presented to City Council.

CITY OF PINOLE

CAPITAL IMPROVEMENT PLAN

FY 2021/22 - 2025/26

ATTACHMENT B



AMENDED
JUNE 29, 2021



CAPITAL IMPROVEMENT PLAN

FY 2021/22 - 2025/26

CITY COUNCIL

Norma Martinez-Rubin, Mayor

Vincent Salimi, Mayor Pro Tem

Anthony L. Tave, Councilmember

Devin Murphy, Councilmember

Maureen Toms, Councilmember

CITY MANAGER

Andrew Murray

DEVELOPMENT SERVICES DIRECTOR

Tamara Miller



CAPITAL IMPROVEMENT PLAN: FY 2021/22 THROUGH FY 2025/26
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Introduction

The Capital Improvement Plan (CIP) is a multi-year planning tool used to identify and implement the City's capital needs over the upcoming five-year period. The CIP aligns the needs with appropriate funding, scheduling, and implementation. This document is a working blueprint for building and sustaining publicly funded physical infrastructure. Capital improvements refer to physical assets and include the design, purchase, construction, maintenance, or improvement of public resources (i.e. parks public infrastructure, equipment, public spaces). These improvements influence Pinole's built and natural environment and help guide the trajectory of future growth or change.

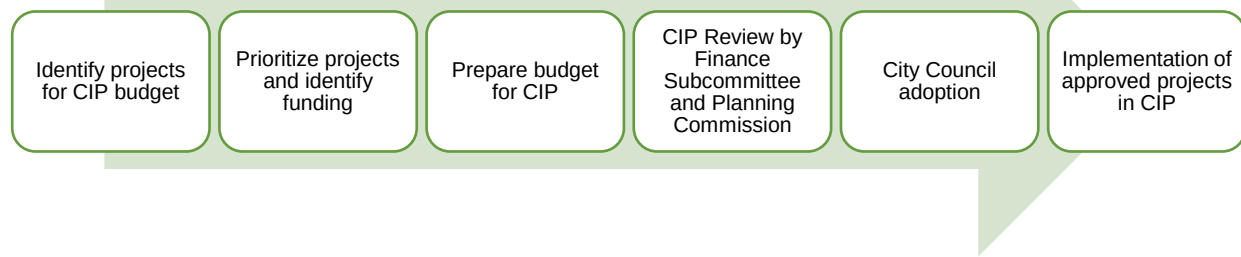
The projects in the CIP fall into the following broad categories: facility maintenance, parks, sewer collection and treatment, stormwater, streets and roads. These projects are developed in collaboration with department heads, and division managers under the direction of the City Manager to ensure all department needs are represented.

The CIP is reviewed and updated annually for capital projects and programs that support City goals and objectives including priorities identified in the 2020-2025 Strategic Plan of developing a disciplined approach to funding infrastructure maintenance and improvements. The City seeks to enhance its focus on the state of the infrastructure throughout the community by first inventorying all the assets, assessing their contributions to a safe and vibrant Pinole, assessing their current conditions, and creating a disciplined investment approach resulting in a strong and purpose driven Capital Investment Plan. This work effort has already commenced with the development of a Sanitary Sewer Collection System Master Plan which includes an asset inventory of the collection system, capacity analysis, and condition analysis. In FY 2021-22 we will follow with the development of various plans including a Park Master Plan, Local Road Safety Plan, Active Transportation Plan, Storm Drain Master Plan, Recycled Waster Master Plan, and Muncipal Broadband Master Plan.

The preparation and adoption of the CIP is an important part of Pinole's financial planning and budgeting process. Proposed projects are reviewed by the Planning Commission for consistency with the General Plan. The Finance Subcommittee also reviews and analyzes all aspects of the CIP and makes recommendations. Project priority and selection is based on specific criteria, such as:

- Consistency with community plans and policies;
- Regulatory compliance;
- Public and political support;
- Sustainability;
- Cost savings or revenue generation;
- Project demand, determined by inventory of existing land, equipment, and facility conditions;
- Economic, environmental, aesthetic or social impacts; and
- Public health, safety or other legal concerns.

The process for developing the CIP involves the following steps:



Next Steps in City Capital Planning

The City will complete condition assessment of all the City's capital assets and identify the funding levels required to maintain these assets. The City will continue to integrate capital planning information into the Long-Term Financial Plan, so City decision makers are aware of the City's capital needs when they consider allocation of the City's limited financial resources and consider possibly pursuing additional sources of City revenue.

Project Funding

A variety of funding sources support projects listed in the CIP. The first year's program in the CIP is adopted by the City Council as the Capital Budget, as a counterpart to the annual Operating Budget. The fiscal resources are appropriated only in the first year, the subsequent four years of the CIP are important for long term planning and subject to further review and modification.

The CIP is funded primarily with funds restricted for specific purposes. The next page describes various funding sources and their restrictions. Some projects are entirely or partially funded by grants and reimbursements from state and federal government and other agencies.

Funding Sources

Fund #	Fund Name (restriction)	Description
100	General Fund (unrestricted)	The General Fund is the main operating fund for the City. It accounts for sources and uses of resources that (primarily) are discretionary to the City Council in the provision of activities, programs and services deemed necessary and desirable by the community.
106	Measure S 2014 (unrestricted)	Accounts for 2014 voter-approved half-cent Local Use Tax which levies 0.5% each on all merchandise. Although these are unrestricted General Fund revenues, the 2014 Use Taxes have been allocated by the City Council to fund Infrastructure Projects as their highest funding priority.
200	Gas Tax - RMRA (roads and right-of-way)	Accounts for the Highway Users Tax (HUTA) State imposed excise taxes on gasoline and diesel fuel sales within the City limits. Gas Tax funds are restricted for use in the construction, improvement and maintenance of public streets. The taxes are allocated to Pinole through the Road Maintenance and Rehabilitation Account (RMRA) established by the Road Repair and Accountability Act of 2017.
214	Solid Waste	Accounts for special revenue received from Republic Services from a surcharge assessed on customer rates for solid waste services. These funds are set aside for future solid waste capital and for a rate stabilization fund.
215	Measure J (roads only)	Accounts for special sales tax revenues collected by Contra Costa Transportation Authority (CCTA) and reapportioned to cities for local street projects. This fund also accounts for return to source funds and grant funds.
PGE	Rule 20A (undergrounding projects)	Through Rule 20A, the California Public Utilities Commission requires Pacific Gas and Electric (PG&E) to set aside funds annually to finance the undergrounding of overhead electrical facilities located on public streets within the City of Pinole.
276	Growth Impact Fees (nexus identified needs)	Accounts for development fees collected to mitigate the impact of new development. Provides funds for nexus identified needs only.
325	City Street Improvements (roads only)	Accounts for funds set aside by the City of Pinole to fund street improvement projects. The Measure S 2014 funding plan allocates \$250k annually to this fund.
327	Park Grants (parks only)	Accounts for grants and reimbursements from the state and federal government and other agencies related to parks.
377	Arterial Street Rehabilitation (roads only)	Accounts for funds set aside by the City of Pinole to fund arterial street rehabilitation projects. The Measure S 2014 funding plan allocates \$250k annually to this fund.
500	Sewer Enterprise (sewer only)	Accounts for fees charged to residents and businesses for sewer utilities. Fees are used to operate the Pinole-Hercules Water Pollution Control Plant which services the Pinole and Hercules areas.

Grants

Certain projects are eligible to receive grant funds from state, federal, or other agencies. Road projects listed in the CIP receive grant funding from a variety of sources such as:

- California Department of Transportation (Caltrans)
 - Highway Bridge Program (HBP) – funds to improve bridge structural safety.
 - Project: RO1710
 - Highway Safety Improvement Program (HSIP) – funds projects that significantly reduce fatalities and injuries on all public roads.
 - Project: RO2104
- West Contra Costa Transportation Advisory Committee (WCCTAC)
 - Subregional Transportation Mitigation Program (STMP) – funds projects that provide congestion relief and mitigate traffic impacts on regional routes through capacity improvements on those routes, improved transit services for subregional and regional travel, and improved facilities that allow West County residents to more efficiently access regional routes and transit service.
 - Projects: RO2105, RO1902, and RO1710
- Metropolitan Transportation Commission (MTC)
 - One Bay Area Grant 2 (OBAG2) – policy framework for MTC’s distribution of federal State Transportation Program and Congestion Mitigation and Air Quality Improvement Program funds. The OBAG2 program provides funding for local street and road maintenance, streetscape enhancements, bicycle and pedestrian improvements, Safe Route to School projects, Priority Conservation Areas, and Transportation planning.
 - Projects: RO1801, and RO1714
 - Transportation Development Act (TDA) Article 3 – funds construction and/or engineering of bicycle or pedestrian capital or quick build projects, maintenance of Class I or Class IV separated bikeways, bicycle and/or pedestrian safety education projects, development of a comprehensive bicycle or pedestrian facilities plans, and restriping Class II bicycle lanes and buffered bicycle lanes.
 - Project: RO1714

The receipt of certain grants and reimbursements typically follow the award of contracts; therefore, other City funding is programmed for front-end financing of the total estimated project costs.

Overview of Recommended Capital Budget

The FY 2021/22 – 2024/25 CIP contains 39 projects which includes 16 new projects. The CIP also contains information for 25 unfunded and unprogrammed projects. A funded project is one that has identified specific funding, including on-going existing resources to fully implement the project. A partially funded project has funding to accomplish various phases of the project but lacks sufficient funding to complete the project. An unfunded project is one that has been identified in the CIP as a need but no funding secured to implement the project. Should funding become available through grant or other sources, the unfunded list can be reviewed to determine if it is suitable to seek such funding.

CIP projects fall into the following categories: Facilities, Parks, Sanitary Sewer, Stormwater, and Roads. The nomenclature for the project number is derived as follows:

Project numbers begin with the abbreviation of the project category, followed by the year the project was first programmed, and then a unique sequence number. For example, FA2001 refers to a facilities project which was first programmed in 2020 with a unique sequence number of 01. Unfunded projects begin with UF and are followed by a unique sequence number.

Category	Abbreviation
Facilities	FA
Parks	PA
Sewer	SS
Stormwater	SW
Roads	RO
Unfunded	UF

In FY2021/22, there are 31 projects programmed for funding, including 13 new projects. Below is a summary of the various funding sources based on project category.

FY 2021/22		PROJECT CATEGORIES					FY 2021/22 TOTALS BY FUND
Funding Sources	Fund	Facilities FA	Parks PA	Sanitary Sewer SS	Storm-water SW	Roads RO	
General Fund	100	\$200,000		\$200,000		\$245,000	\$645,000
Measure S 2014	106	\$904,207	\$160,242		\$302,000	\$176,300	\$1,542,749
Gas Tax	200					\$509,445	\$509,445
Solid Waste	214		\$425,000				\$425,000
Measure J	215					\$706,000	\$706,000
PG&E – Rule 20A						\$511,532	\$511,532
Growth Impact Fees	276				\$78,860	\$200,000	\$278,860
City Street Improvements	325					\$969,185	\$969,185
Park Grants	327		\$189,758				\$189,758
Arterial Street Rehabilitation	377					\$819,689	\$819,689
Sewer Enterprise	500			\$801,257		\$28,398	\$829,655
FY 2021/22 TOTALS BY PROJECT CATEGORY		\$1,104,207	\$775,000	\$1,001,257	\$380,860	\$4,165,549	\$7,426,873



CITY OF PINOLE
FY2021-22 THROUGH 2025-26
FIVE-YEAR CAPITAL IMPROVEMENT PLAN

SOURCES BY FUND	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	5-Year Total
100 - General Fund	\$ 645,000	\$ -	\$ -	\$ -	\$ -	\$ 645,000
106 - Measure S 2014	\$ 1,563,609	\$ 997,406	\$ -	\$ -	\$ -	\$ 2,561,015
200 - Gas Tax	\$ 509,445	\$ -	\$ -	\$ -	\$ -	\$ 509,445
214 - Solid Waste	\$ 425,000	\$ -	\$ -	\$ -	\$ -	\$ 425,000
215 - Measure J	\$ 706,000	\$ -	\$ -	\$ -	\$ -	\$ 706,000
PGE - Rule 20A	\$ 511,532	\$ -	\$ -	\$ -	\$ -	\$ 511,532
276 - Growth Impact Fees	\$ 258,000	\$ 200,000	\$ -	\$ -	\$ -	\$ 458,000
325 - City Street Improvements	\$ 969,185	\$ 261,586	\$ 1,139,618	\$ 560,000	\$ 890,000	\$ 3,820,390
327 - Park Grants	\$ 189,758	\$ -	\$ -	\$ -	\$ -	\$ 189,758
377 - Arterial Streets Rehabilitation	\$ 819,689	\$ 550,000	\$ -	\$ -	\$ -	\$ 1,369,689
500 - Sewer Enterprise Fund	\$ 829,655	\$ 90,597	\$ 1,200,000	\$ -	\$ -	\$ 2,120,252
Sources Total	\$ 7,426,873	\$ 2,099,589	\$ 2,339,618	\$ 560,000	\$ 890,000	\$ 13,316,080
Unfunded Total			\$ 2,096,240			\$ 2,096,240
Total Sources Required	\$ 7,426,873	\$ 2,099,589	\$ 4,435,858	\$ 560,000	\$ 890,000	\$ 15,412,320

FACILITIES									
PRJ #	USES BY PROJECT	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Account #	FY 2021-22 Funds	Funding Source
FA2101	Emergency Power for Critical Facilities	\$200,000					100-343-47201	\$200,000	General Fund
FA2102	Municipal Broadband Master Plan	\$60,000					106-118-47201	\$60,000	Measure S 2014
FA2001	Post Office Maintenance	\$80,000					106-343-47201	\$80,000	Measure S 2014
FA2002	Electric Vehicle Charging Stations	\$20,000					106-343-47201	\$20,000	Measure S 2014
FA1901	Senior Center Auxiliary Parking Lot formerly known as Fowler House lot reuse	\$182,207	\$432,406				106-343-47201	\$182,207	Measure S 2014
FA1902	Energy Upgrades	\$220,000					106-343-47201	\$220,000	Measure S 2014
FA1702	Citywide Roof repairs and replacement	\$272,000	\$140,000				106-343-47201	\$272,000	Measure S 2014
FA1703	Paint City Hall	\$70,000					106-343-47201	\$70,000	Measure S 2014
PARKS									
PRJ #	USES BY PROJECT	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Account #	FY 2021-22 Funds	Funding Source
PA2101	Installation of high capacity trash bins	\$425,000					214-345-47203	\$425,000	Solid Waste Fund
PA2001	Bocce Ball Court	\$250,000					106-343-47201	\$60,242	Measure S 2014
							327-345-47203	\$189,758	Park Grants
PA1901	Pinole Valley Park Soccer Field Rehabilitation		\$200,000				106-345-47203	\$0	Measure S 2014
PA1704	Park Master Plan	\$100,000					106-345-47203	\$100,000	Measure S 2014
SANITARY SEWER									
PRJ #	USES BY PROJECT	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Account #	FY 2021-22 Funds	Funding Source
SS2101	Secondary Clarifier - Center Column Rehabilitation	\$350,000					500-641-47201	\$350,000	Sewer Enterprise
SS2102	Air Release Valve Replacements	\$50,000					500-641-47201	\$50,000	Sewer Enterprise
SS2103	Recycled Water Master Plan	\$200,000					100-341-42101	\$200,000	General Fund
SS2001	Sanitary Sewer Collection System Master Plan	\$301,257					500-642-47201	\$301,257	Sewer Enterprise
SS2002	Water Pollution Control Plant Lab Remodel	\$100,000					500-642-47201	\$100,000	Sewer Enterprise
SS1702	Sewer Pump Station Rehabilitation			\$1,200,000			500-641-47201	\$0	Sewer Enterprise
STORMWATER									
PRJ #	USES BY PROJECT	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Account #	FY 2020-21 Funds	Funding Source
SW2001	Roble Road Drainage Improvements		\$200,000				276-344-47206	\$0	Growth Impact Fees
SW2002	Adobe Road Repair and Drainage Improvements		\$150,000				106-344-47206	\$0	Measure S 2014
SW1901	Hazel Street Gap Closure (Sunnyview)	\$380,860					106-344-47206	\$322,860	Measure S 2014
							276-344-47206	\$58,000	Growth Impact Fees
SW1703	Storm Drainage Master Plan		\$75,000				106-344-42101	\$0	Measure S 2014
ROADS									
PRJ #	USES BY PROJECT	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Account #	FY 2021-22 Funds	Funding Source
RO2501	Residential Slurry Seal					\$890,000	325-342-47205	\$0	City Street Improvements
RO2401	Cape Seal				\$560,000		325-342-47205	\$0	City Street Improvements
RO2301	Residential Slurry Seal			\$890,000			325-342-47205	\$0	City Street Improvements
RO2101	Arterial Rehabilitation	\$42,205	\$550,000				377-342-47205	\$42,205	Arterial Rehabilitation
RO2102	Tennent Ave. Rehabilitation	\$409,480	\$257,918				500-641-47201	\$28,398	Sewer Enterprise
							200-342-47205	\$381,082	Gas Tax - RMRA
RO2103	Pedestrian Bridge Repair	\$55,700					106-344-47206	\$55,700	Measure S 2014
RO2104	Local Road Safety Plan	\$33,447					325-342-47205	\$33,447	Caltrans - HSIP
RO2105	Appian Way Complete Streets Project	\$100,000					325-342-47205	\$100,000	WCCTAC - STMP Fees
RO2106	Active Transportation Plan	\$75,000					100-341-47205	\$75,000	General Fund
RO2107	Brandt St. Improvements	\$170,000					100-342-47205	\$170,000	General Fund
RO1902	Pedestrian Improvements at Tennent Ave. near R X R	\$43,380		\$661,250			325-342-47205	\$43,380	WCCTAC - STMP Fees
RO1801	San Pablo Ave. Rehabilitation	\$1,363,484					377-342-47205	\$777,484	Arterial Rehabilitation
							215-342-47205	\$586,000	MTC/(OBAG 2)
RO1802	Hazel Street Gap Closure (Sunnyview)	\$200,000					276-344-47205	\$150,000	Developer
							276-344-47205	\$50,000	Growth Impact Fees
RO1708	Pinole Valley Road Improvements	\$100,000					200-342-47205	\$100,000	Gas Tax - RMRA
RO1709	Pinole Valley Road Underground District	\$539,895					200-342-47205	\$28,363	Gas Tax - RMRA
							Rule20A	\$511,532	Rule 20A Credits
RO1710	San Pablo Ave. Bridge over BNSF Railroad**	\$630,735	\$94,265	\$1,684,608			325-342-47205	\$75,000	WCCTAC - STMP Fees
							325-342-47205	-\$35,853	City Street Improvements
							325-342-47205	\$591,588	Caltrans - HBP
							325-342-47205	\$32,223	City Street Improvements
RO1714	Safety Improvements at Appian Way & Marlesta Rd. formerly known as HAWK at Appian Way and Marlesta	\$402,223					215-342-47205	\$120,000	MTC/OBAG2
							325-342-47205	\$129,400	MTC/TDA Article 3
							106-344-47206	\$120,600	Measure S 2014
	Uses by Project Total	\$7,426,873	\$2,099,589	\$4,435,858	\$560,000	\$890,000			

LEGEND:

- Items highlighted in blue are unfunded projects.
- Items highlighted in orange indicate a project or project funding is carried over from prior fiscal year.
- Items highlighted in purple are new projects, or new funding allocations in FY 2021-22.
- Project numbers: **FA** = Facilities; **PA** = Parks; **SS** = Sanitary Sewer; **SW** = Storm Water; **RO** = Roads.

**Caltrans funded total project cost is \$38 million and extends beyond the proposed Plan years.

FACILITIES

FA2101 - Emergency Power for Critical Facilities

Initial Project Start: July 1, 2022
 Initial Project Completion: June 30, 2023
 Revised Project Start:
 Revised Project Completion:
 Project Origin: Council Request
 Multi-year Project: No



Description: During severe natural hazard events, it is highly likely that utility power will not be available for an extended period of time. Critical facilities will need reliable sources of sustained electrical power to continue operations. This project will: 1) identify critical facilities in need of back-up power in coordination with an Emergency Operations Plan (EOP) , 2) assess power loads in each critical facility that requires back-up power, 3) determine the costs and technology options including solar battery storage, and 4) make any additional recommendations to Council before advancing to construction.

Supplemental Information: The Public Safety Building, Fire Station 74, and the Water Pollution Control Plant have stand by generators.

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Planning	100		\$ 200,000				
	Subtotal		\$ 200,000				
	Total Cost Estimate: \$ 200,000						

FACILITIES

FA2102 - Municipal Broadband Master Plan

Initial Project Start: July 1, 2023
Initial Project Completion: June 30, 2024
Revised Project Start:
Revised Project Completion:
Project Origin: Council Request
Multi-year Project: No



Description: Development of a Broadband Master Plan will provide an inventory of current and future needs of Pinole and develop a blueprint for Pinole to ensure the availability of affordable, reliable high-speed internet access. The Master Plan will incorporate strategies to manage the public right-of-way and assets therein, identify networks to deliver government services, find opportunities for public works projects to incorporate cost-effective installation of telecommunications infrastructure, find partnership opportunities with local and regional utilities for joint trench and cost sharing opportunities, identify strategies to facilitate competition and encourage universal access and address digital divide, and establish incremental plans for growth and evolution of telecommunications services in Pinole.

Supplemental Information:

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Planning	106		\$ 60,000				
	Subtotal		\$ 60,000				
	Total Cost Estimate:		\$ 60,000				

FACILITIES

FA2001 - Post Office Maintenance

Initial Project Start:	July 1, 2020
Initial Project Completion:	June 30, 2021
Revised Project Start:	
Revised Project Completion:	June 30, 2022
Project Origin:	Lease Agreement
Multi-year Project:	No



Description: The City of Pinole owns certain property located at 2101 Pear Street (APN: 401-163-003) and since 1960, the United States Post Office (USPO) has leased 2101 Pear Street from the City serving as a Post Office. On September 2, 2014, City Council adopted Resolution 2014-51 to execute a five year lease agreement (with Two 5-Year Options) with the USPO for the use of 2101 Pear Street. Under the terms and conditions of the lease, the City is responsible for maintaining the existing facility, including the heating and air conditioning system, electrical systems, light fixtures, and landscaping. The terms of the lease also stipulate that the City must paint all and exterior previously painted no later than six (6) months following the start of the lease, or at least once every five (5) years during the continuance of the lease unless required more often because of damage from casualties. This project involves satisfying the painting clause in the lease agreement.

Supplemental Information: The current lease period is from 09/01/2020 - 08/31/2025.

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Construction	106		\$ 80,000				
	Subtotal		\$ 80,000				
	Total Cost Estimate: \$ 80,000						

FACILITIES

FA2002 - Electric Vehicle Charging Stations

Initial Project Start:	July 1, 2020
Initial Project Completion:	June 30, 2021
Revised Project Start:	
Revised Project Completion:	June 30, 2022
Project Origin:	Council Request
Multi-year Project:	No



Description: Installation of electric vehicle (EV) charging stations at City facilities to support increased adoption and use of zero emission vehicles. An assessment of City facilities coupled with grant funding opportunities dictate the most suitable locations for installation of charging stations. In October 2020, the City reserved a charging rebate with Marin Clean Energy (MCE) for the installation of charging infrastructure and project technical assistance. The technical assistance provided by MCE covers: a site assessment which includes a review of ADA and options for charging station placement, a load study to understand the proposed site's electrical capacity, and an EV charger planning report. City staff worked with the technical assistance provider to select a publicly accessible site where installation of charging infrastructure was feasible. A load study was conducted at the public parking lot serving the Public Safety Building located at 880 Tennent Ave. The results of the load study indicated that the site could support charging infrastructure. This project will install charging infrastructure at the Public Safety Building. City staff will release a Request for Proposals to select a qualified vendor to supply and install charging station infrastructure in the City of Pinole.

Supplemental Information: City staff continue to assess other public locations throughout Pinole for opportunities to incorporate EV charging infrastructure.

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Construction	106		\$ 20,000				
	Subtotal		\$ 20,000				
	Total Cost Estimate: \$ 20,000						

FACILITIES

FA1901 - Senior Center Auxiliary Parking Lot

Initial Project Start:	July 1, 2020
Initial Project Completion:	June 30, 2021
Revised Project Start:	
Revised Project Completion:	June 30, 2023
Project Origin:	Fowler Lot Re-Use Committee
Multi-year Project:	Yes



Description: On April 16, 1990 City Council adopted Resolution 2380 authorizing the purchase of 2548 Charles Street. At the time of purchase, City Council determined that construction of a Senior Center was necessary, and that this property was needed to provide sufficient parking for the Center. The parcel is surrounded by municipal parking lots which serve the Senior Center and Old Town Pinole. On February 2, 2021 City Council adopted Resolution 2021-07 and awarded a contract to a consultant for the preliminary engineering and design for the parking lot. The parking lot will be designed to be a multi-benefit project that includes pavement structural section, striping, lighting, bicycle parking, electric vehicle charging stations, stormwater capture and retention, and drought tolerant landscaping. The final design will offer the maximum number of parking spaces while allowing access for both vehicles and pedestrians and include aesthetic design components.

Supplemental Information: The Fowler House tenants remained in the property till 2010 and many discussions took place to determine the best use of the property. It was determined that the house had asbestos and lead paint. On July 17, 2018, City Council adopted Resolution 2018-67 to create the Fowler Lot Re-use Committee to evaluate the reuse and redevelopment of the property. The Committee evaluated uses for the lot and determined the best use of the property is a parking lot. On October 16, 2018, the City Council adopted Resolution No. 2018-93 to approve a contract with a construction company to abate and demolish the Fowler house. The property demolition was completed on March 11, 2019. On July 21, 2020, City Council adopted Resolution 2020-68 to accept the final recommendation of the Committee.

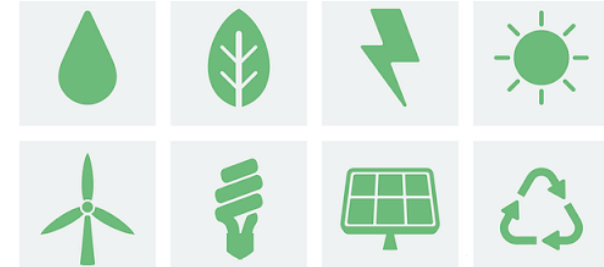
Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Design	106	\$ 9,448	\$ 182,207				
Construction	106			\$ 432,406			
	Subtotal	\$ 9,448	\$ 182,207	\$ 432,406			
	Total Cost Estimate: \$624,061						

FACILITIES

FA1902 - Energy Upgrades

Initial Project Start: July 1, 2020
Initial Project Completion: June 30, 2021
Revised Project Start:
Revised Project Completion: June 30, 2022
Project Origin: End of life cycle
Multi-year Project: No



Description: The heating, ventilation, and cooling (HVAC) systems at City Hall and Senior Center have reached the end of their useful life and need to be replaced. A portion of the roof at the Senior Center will also need to be replaced.

Supplemental Information: In October 2020, City staff began working with Marin Clean Energy's (MCE's) Energy Efficiency program to explore opportunities for energy conservation and generation at City owned facilities by replacing the HVAC systems and upgrading streetlights. It was determined that the MCE program could not incentivize HVAC replacement project or the upgrade of the streetlights. This project was formerly known as FA1706 and FA1801.

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Construction	106		\$ 220,000				
	Subtotal		\$ 220,000				
	Total Cost Estimate: \$ 220,000						

FACILITIES

FA1702 - Citywide Roof repairs and replacement

Initial Project Start: July 1, 2020
Initial Project Completion: June 30, 2022
Revised Project Start:
Revised Project Completion: June 30, 2023
Project Origin: End of life cycle
Multi-year Project: Yes



Description: In 2015, comprehensive visual roof inspections were completed by a contractor on various City owned facilities. The purpose of the inspection was to identify the extent, if any, of moisture intrusion into the existing roof assemblies, document observed roof system deficiencies, determine the overall condition of the existing roof systems and to estimate the service life of the in-place roof assemblies. The roof inspection identified several roofs which need to be repaired or replaced. The roofs at City hall and the Public Safety building need to be replaced.

Supplemental Information:

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Construction	106		\$ 272,000	\$ 140,000			
	Subtotal		\$ 272,000	\$ 140,000			
	Total Cost Estimate: \$412,000						

FACILITIES

FA1703 - Paint City Hall

Initial Project Start: July 1, 2021
Initial Project Completion: June 30, 2022
Revised Project Start:
Revised Project Completion:
Project Origin: End of life cycle
Multi-year Project: No



Description: The interior and exterior surfaces of City Hall require repainting as the paint system has reached the end of its useful life. Exterior painting is necessary to maintain external protection from the environment. Fading, chipping paint, along with water and mildew damage necessitates the painting project.

Supplemental Information:**Budget:**

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Construction	106		\$ 70,000				
	Subtotal		\$ 70,000				
	Total Cost Estimate: \$ 70,000						

PARKS

PA2101 - Installation of high capacity trash bins

Initial Project Start: July 1, 2021
Initial Project Completion: June 30, 2022
Revised Project Start:
Revised Project Completion:
Project Origin: Beautification Ad Hoc Committee
Multi-year Project: No



Description: Installation of high capacity, solar powered compacting trash bins at City parks.

Supplemental Information: In 2019, the City Council established a Beautification Ad Hoc Committee to analyze options for, and to make recommendations to the Council regarding clean-up and beautification projects in Pinole. Among other projects, the Committee recommended the installation of high capacity, solar powered compacting trash bins at City parks.

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Construction	214		\$ 425,000				
	Subtotal		\$ 425,000				
	Total Cost Estimate: \$ 425,000						

PARKS

PA2001 - Bocce Ball Court

Initial Project Start:	July 1, 2021
Initial Project Completion:	June 30, 2022
Revised Project Start:	
Revised Project Completion:	
Project Origin:	Council Request
Multi-year Project:	No



Description: Installation of a Bocce Ball court to provide recreational opportunities to the Pinole community. City staff has identified a list of potential sites for the court. The City intends to utilize the State of California Department of Parks and Recreation Per Capita Grant Program funds for this project.

Supplemental Information: There has been interest by the community and Council to provide the opportunity to play Bocce Ball year around. In 2004, the Pinole Rotary Club identified the construction of bocce ball courts in Pinole as its Centennial Project. At the time, several sites were considered and Fernandez Park was identified as a possible location. The current location of the horseshoe pits, adjacent to the public patio, was deemed the best option, and a schematic design was prepared. In 2009, the Community Services Commission recommended various park and recreational facility projects including bocce ball courts to be funded by East Bay Regional Park District Measure WW funds. On July 9, 2009, the City Council approved a list of projects for Measure WW funding which included bocce ball court installation. However, the available grant funding exceeded the cost estimate of the recommended projects. In 2020, the Fowler Lot Re-Use Committee evaluated possible uses for 2548 Charles Ave. and deemed the installation of a bocce ball at the site as an attractive recreational opportunity but concluded that it would come with increased parking demand in an area that is already affected by limited parking. The Committee encouraged staff to seek other suitable locations for a bocce ball court.

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Construction	327		\$ 189,758				
	106		\$ 60,242				
	Subtotal		\$ 250,000				
	Total Cost Estimate: \$ 250,000						

PARKS

PA1901 - Pinole Valley Park Soccer Field Rehabilitation

Initial Project Start:	July 1, 2020
Initial Project Completion:	June 30, 2021
Revised Project Start:	July 1, 2022
Revised Project Completion:	June 30, 2023
Project Origin:	Council Request
Multi-year Project:	No



Description: There are two soccer fields at Pinole Valley Park which are utilized on an annual basis, the Wright Avenue Soccer Field at the southerly end, and Savage Avenue Soccer Field at the northern end. Both fields are heavily used by soccer leagues and the general public. The Savage Avenue Soccer Field requires substantial rehabilitation which includes: upgrading the irrigation system and ongoing turf maintenance. Turf maintenance includes mowing, fertilizing, aeration, overseeding, and topdressing.

Supplemental Information: This project has been delayed pending the development of a Park Master Plan (CIP Project# PA1704).

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Construction	106			\$ 200,000			
	Subtotal			\$ 200,000			
	Total Cost Estimate: \$ 200,000						

PARKS

PA1704 - Park Master Plan

Initial Project Start:	July 1, 2020
Initial Project Completion:	June 30, 2021
Revised Project Start:	July 1, 2022
Revised Project Completion:	June 30, 2023
Project Origin:	Staff Recommendation
Multi-year Project:	No



Description: Preparation of a park master plan will aid the City in developing a strategic approach to park maintenance and operation. The master plan will allow the City to quantify and qualify the existing park system, identify deficiencies, and develop a financial analysis of the cost to maintain and operate park assets.

Supplemental Information: This project was added to the CIP in 2017 as an unfunded project; Council approved funding in 2020.

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Planning	106		\$ 100,000				
	Subtotal		\$ 100,000				
	Total Cost Estimate: \$ 100,000						

SANITARY SEWER

SS2101 - Secondary Clarifier—Center Column Rehabilitation

Initial Project Start: July 1, 2021
Initial Project Completion: June 30, 2022
Revised Project Start:
Revised Project Completion:
Project Origin: End of life cycle
Multi-year Project: No



Description: The Secondary Clarifier #5 has reached the end of its useful life. The project will involve removal and replacement of catwalk, drive mechanism, center column, and rake arm.

Supplemental Information: The City of Hercules will be reimburse the Sewer Enterprise fund for 50% of the total project cost.

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Construction	500		\$ 350,000				
	Subtotal		\$ 350,000				
	Total Cost Estimate: \$ 350,000						

SANITARY SEWER

SS2102 - Air Release Valve Replacement

Initial Project Start: July 1, 2021
Initial Project Completion: June 30, 2022
Revised Project Start:
Revised Project Completion:
Project Origin: Staff Recommendation
Multi-year Project: No



Description: There are four air relief valves at various locations on the WPCP Effluent Pipeline between the WPCP and the Rodeo treated water discharge point. This project includes removal and replacement of the pipe saddle, short pipe section, isolation valve, and air relief valve.

Supplemental Information: The four locations are: 1) across from the WPCP at 11 Tennent Ave., near the entrance of the SF Bay Trail, 2) On the SF Bay Trail near the corner of Santa Fe and Railroad Ave., 3) At the intersection of Mariposa St. and Railroad Ave. (Rodeo), 4) Outside the gate of Rodeo Sanitary District at 800 San Pablo Ave. (Rodeo). The City of Hercules will be reimburse the Sewer Enterprise fund for 50% of the total project cost.

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Construction	500		\$ 50,000				
	Subtotal		\$ 50,000				
	Total Cost Estimate: \$ 50,000						

SANITARY SEWER

SS2103 - Recycled Water Master Plan

Initial Project Start: July 1, 2022
Initial Project Completion: June 30, 2023
Revised Project Start:
Revised Project Completion:
Project Origin: Council Request
Multi-year Project: No



Description: Development of a Recycled Water Master Plan will allow the City to plan and phase the construction of future recycled water distribution system infrastructure. The Master Plan will identify potential recycled water customers, evaluate the quantity, quality, and recycled water distribution system options to address the needs of potential users in surrounding areas, seek opportunities to phase the construction of a recycled water delivery system, and develop planning-level cost options for the phased system.

Supplemental Information: Recycled water delays or eliminates the need to construct more potable water facilities, sustains the economy with increased water supply reliability, protects the environment, safeguards investments in parks and landscaping with drought proof or drought resistant water supply, and contributes to a green and healthy environment. In 2019, East Bay Municipal Utility District (EBMUD) prepared an Updated Recycled Water Plan which considered the potential for potable reuse in EBMUD's water service area. The development of a new recycled water supply for the Phillips 66 refinery in Rodeo using effluent from the Pinole-Hercules and Rodeo wastewater treatment plants was among the recommended non-potable reuse projects. This project is estimated to deliver up to 3.67 MGD of recycled water to the refinery for use in their boilers and cooling towers. The combined final disinfected effluent from both plants would be pumped at the Rodeo Pump Station to the refinery for treatment a new advanced recycled water treatment plan. This project was recommended by EBMUD because it would deliver a large amount of water to a single customer, with comparatively few pipelines required due to the short distance between the sources of wastewater and the Phillips 66 Refinery

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Planning	100		\$ 200,000				
	Subtotal		\$ 200,000				
	Total Cost Estimate: \$ 200,000						

SANITARY SEWER

SS2001 - Sanitary Sewer Collection System Master Plan

Initial Project Start: July 1, 2020
Initial Project Completion: June 30, 2021
Revised Project Start:
Revised Project Completion: June 30, 2022
Project Origin: Staff Recommendation
Multi-year Project: Yes

PREPARED FOR
 CITY OF PINOLE
 Sanitary Sewer Master Plan Update
 (Collection System)



Description: In September 2020, the City Council awarded a contract to Carollo Engineers, Inc. to develop a Sanitary Sewer Collection System Master Plan (Plan). The Plan will provide a condition assessment of the sewer collection assets to inform capital planning and effectively serve the wastewater needs of residents and businesses. This plan will also provide a capacity analysis to identify pipes that need to be upsized.

Supplemental Information: Master planning is critical to identify when and where infrastructure upgrades or improvements will be needed to accommodate growth.

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Planning	500	\$ 147,743	\$ 301,257				
	Subtotal	\$ 147,743	\$ 301,257				
	Total Cost Estimate: \$ 449,000						

SANITARY SEWER

SS2002 Water Pollution Control Plant Lab Remodel

Initial Project Start:	July 1, 2020
Initial Project Completion:	June 30, 2021
Revised Project Start:	July 1, 2021
Revised Project Completion:	June 30, 2022
Project Origin:	Regulatory Requirement
Multi-year Project:	No



Description: The California Environmental Laboratory Accreditation Program (ELAP) is responsible for accrediting environmental testing labs including the Pinole - Hercules WPCP. The 2019 ELAP inspection results indicated the lab apparatus, countertops, and the fume hood are past their useful life and recommended replacement.

Supplemental Information: The City of Hercules will be reimburse the Sewer Enterprise fund for 50% of the total project cost.

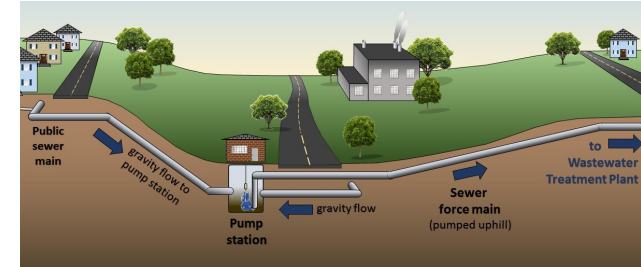
Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Construction	500		\$ 100,000				
	Subtotal		\$ 100,000				
	Total Cost Estimate: \$ 100,000						

SANITARY SEWER

SS1702 - Sewer Pump Station Rehabilitation

Initial Project Start:	October 1, 2020
Initial Project Completion:	August 31, 2022
Revised Project Start:	July 1, 2023
Revised Project Completion:	June 30, 2024
Project Origin:	End of lifecycle
Multi-year Project:	No



Description: The City owns and operates two lift stations to convey flow from low lying areas to high elevations where the flow continues by gravity to the wastewater treatment plant. Both pump stations have reached the end of their useful life and need to be rehabilitated.

Supplemental Information: The two pump stations are located on San Pablo Ave. and Hazel St

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Design	500				\$ 22,500		
Engineering	500				\$ 150,000		
Construction	500				\$ 884,000		
Contingency	500				\$ 143,500		
	Subtotal				\$ 1,200,000		
	Total Cost Estimate: \$1,200,000						

STORMWATER

SW2001 - Roble Road Storm Drainage Improvements

Initial Project Start: July 1, 2020
Initial Project Completion: June 30, 2021
Revised Project Start: July 1, 2022
Revised Project Completion: June 30, 2023
Project Origin: Staff Recommendation
Multi-year Project: No



Description: The existing system appears to have capacity issues at Roble Ave. and Encina Ave. that warrant review and upgrade. This project will assess the collection system for capacity and hydraulic profile and upgrade the system as necessary.

Supplemental Information:

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Engineering	276			\$ 20,000			
Construction	276			\$ 160,000			
Contingency	276			\$ 20,000			
	Subtotal			\$ 200,000			
	Total Cost Estimate: \$ 200,000						

STORMWATER

SW2002 - Adobe Road Storm Drainage Improvements

Initial Project Start: July 1, 2020
Initial Project Completion: June 30, 2021
Revised Project Start: July 1, 2022
Revised Project Completion: June 30, 2023
Project Origin: Staff Recommendation
Multi-year Project: No



Description: Adobe Road experienced a failure due to drainage impacts. Installation of a culvert will be required to control the drainage in the area. The area will then be regraded and the road surface will be restored. This road serves only as a service access route.

Supplemental Information:

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Engineering	106			\$ 15,000			
Construction	106			\$ 120,000			
Contingency	106			\$ 15,000			
	Subtotal			\$ 150,000			
	Total Cost Estimate: \$ 150,000						

STORMWATER

SW1901 - Hazel Street Storm Drain Improvements

Initial Project Start: July 1, 2020
Initial Project Completion: June 30, 2021
Revised Project Start:
Revised Project Completion: June 30, 2022
Project Origin: Development Driven
Multi-year Project: Yes



Description: The existing stormwater collection is an open trench system and needs to be converted to an underground conveyance system to facilitate construction of a through road. This project will include connecting the existing storm drain network within Hazel Street between 1087 Hazel St (eastern limits) and 1081 Hazel St. (western limits). In January 2020, the City contacted with Schaff and Wheeler to prepare the preliminary design which includes plan and profile of the pipe and technical specifications.

Supplemental Information: This conversion also aids in compliance with the MSP4 by reducing the potential of contaminants including litter from entering the stormwater system.

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Design	106	\$ 19,120	\$ 20,860				
Construction	106		\$ 302,000				
	276		\$ 8,000				
Contingency	276		\$ 50,000				
	Subtotal	\$ 19,120	\$ 380,860				
	Total Cost Estimate: \$ 399,980						

STORMWATER

SW1703 - Storm Drainage Master Plan

Initial Project Start: July 1, 2020
Initial Project Completion: June 30, 2023
Revised Project Start: July 1, 2022
Revised Project Completion:
Project Origin: Staff Recommendation
Multi-year Project: No



Description: Preparation of a storm drain master plan will provide an analysis of the existing collection system. The plan will identify system deficiencies related to capacity, functionality, and permit compliance. The plan can serve to guide future budget allocations for improvements to the system.

Supplemental Information:

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Planning	106			\$ 75,000			
	Subtotal			\$ 75,000			
	Total Cost Estimate: \$ 75,000						

ROADS

PAVEMENT MAINTENANCE AND REHABILITATION PROGRAM

Street Network: The City of Pinole is responsible for the repair and maintenance of approximately 52.22 centerline miles of city streets, divided into approximately 351 pavement management sections. The City’s street network replacement value is estimated at \$131.4 million.

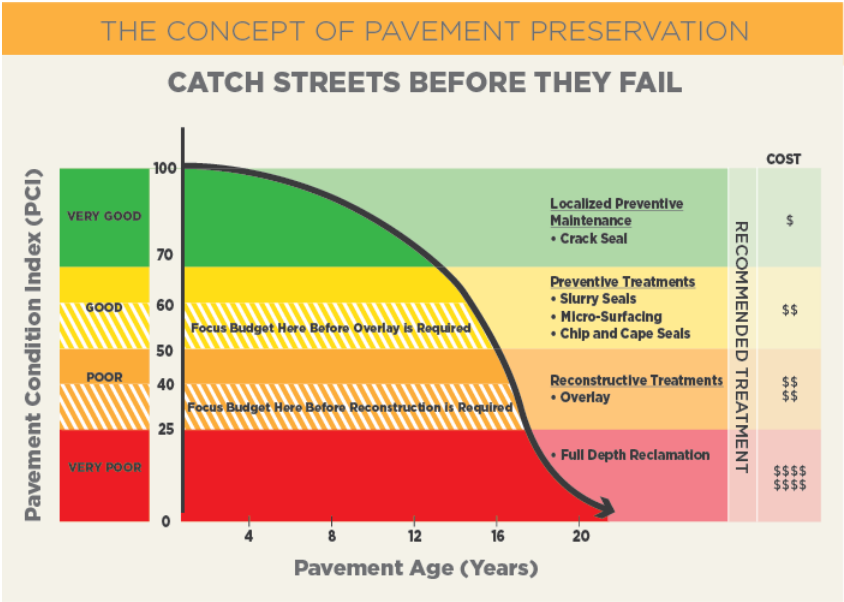
Organize & Analyze: The Pavement Management and Rehabilitation Program is a set of tools and policies designed to manage the maintenance and rehabilitation activities of the street network. The goal of the Program is to maintain the city’s pavement network in the best condition possible given the available funding. The City participates in the Metropolitan Transportation Commission (MTC) Pavement Technical Assistance Program (P-TAP) which provides grant funding to utilize a computerized Pavement Management Program called StreetSaver® to strategize the most cost effective method to extend pavement life and provides funding for a consultant to prepare a P-TAP Budget Options Report. StreetSaver® allows the City to:

- Inventory the street pavement
- Record pavement inspection data, maintenance, and rehabilitation activities
- Assess pavement conditions
- Prioritize street maintenance
- Estimate costs of treatments and rehabilitation
- Forecast budget needs
- View the impacts of funding on City-wide pavement conditions over time

Functional Class	Total	Centerline	Lane miles
Arterial	25	7.26	24.97
Collector	23	7.30	18.75
Residential/Local	303	37.66	75.32
Total	351	52.22	119.04

The most recent P-TAP report was completed by a consultant (Quality Engineering Solutions, Inc.) in March 2019. To prepare the Budget Options Report, the consultant’s team visited Pinole to visually assess the conditions of the pavement sections and assigned an index score. The data collected in the field was imported into the StreetSaver® database which generates a scoring of the condition of each segment. This score is known as the Pavement Condition Index (PCI) and based on a scale of 0 to 100 (poor to excellent condition), depending on the severity of pavement distress.

Strategy: The City uses a “Fix-it-First” approach of performing preventative maintenance has been proven to extend the life of the pavement effectively and is less costly than reconstruction. The City’s pavement management program relies on gas tax revenue and \$500k of annual funding from Measure S 2014 to maintain the road network. To learn more pavement preservation and upcoming projects, visit www.ci.pinoles.ca.us/pavement



ROADS

RO2501 - Residential Slurry Seal

Initial Project Start: July 1, 2025
Initial Project Completion: June 30, 2026
Revised Project Start:
Revised Project Completion:
Project Origin: Pavement Management Program
Multi-year Project: No



Description: Based on the most current P-TAP report various segments will be recommended for slurry seal treatment. A slurry seal functions as a topcoat to existing asphalt pavement to preserve and protect the pavement. It is best suited for pavements with mild to moderate damage, such as narrow cracks, but not for severe damage such as potholes.

Supplemental Information:**Budget:**

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Engineering	325						\$ 10,000
Construction	325						\$ 800,000
Contingency	325						\$ 80,000
	Subtotal						\$ 890,000
Total Cost Estimate: \$ 890,000							

ROADS

RO2401 - Cape Seal

Initial Project Start: July 1, 2024
Initial Project Completion: June 30, 2025
Revised Project Start:
Revised Project Completion:
Project Origin: Pavement Management Program
Multi-year Project: No



Description: Based on the most current P-TAP report, various pavement segments will benefit from a cape seal. A cape seal is applied when a slurry seal or micro-surfacing will not adequately address the pavement deterioration. Cape seals are a multi-layered treatment pavement preservation treatment which can extend the life of a pavement by 6-8 years.

Supplemental Information:**Budget:**

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Engineering	325					\$ 10,000	
Construction	325					\$ 500,000	
Contingency	325					\$ 50,000	
	Subtotal					\$ 560,000	
Total Cost Estimate: \$ 560,000							

ROADS

RO2301 - Residential Slurry Seal

Initial Project Start: July 1, 2023
Initial Project Completion: June 30, 2024
Revised Project Start:
Revised Project Completion:
Project Origin: Pavement Management Program
Multi-year Project: No



Description: Based on the most current P-TAP report various segments will be recommended for slurry seal treatment. A slurry seal functions as a topcoat to existing asphalt pavement to preserve and protect the pavement. It is best suited for pavements with mild to moderate damage, such as narrow cracks, but not for severe damage such as potholes.

Supplemental Information:**Budget:**

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Engineering	325				\$ 10,000		
Construction	325				\$ 800,000		
Contingency	325				\$ 80,000		
	Subtotal				\$ 890,000		
	Total Cost Estimate: \$ 890,000						

ROADS

RO2101 - Arterial Rehabilitation

Initial Project Start: July 1, 2020
Initial Project Completion: June 30, 2023
Revised Project Start:
Revised Project Completion:
Project Origin: Pavement Management Program
Multi-year Project: Yes



Description: Based on the 2019 P-TAP report, various segments were recommended for treatment by StreetSaver®. The recommendations will be further validated through a comparative pavement analysis to explore additional treatment options which are not discussed in the P-TAP report. This will allow the City to optimize the available funding. In February 2021, the City selected a consultant to complete the preliminary engineering for this project.

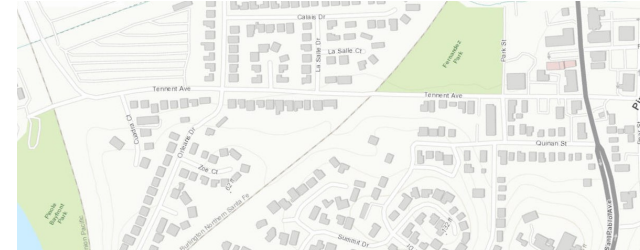
Supplemental Information:**Budget:**

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Engineering	377	\$ 16,275	\$ 42,205				
Construction	377			\$ 500,000			
Contingency	377			\$ 50,000			
	Subtotal	\$ 16,275	\$ 42,205	\$ 550,000			
	Total Cost Estimate: \$ 608,480						

ROADS

RO2102 - Tennent Ave. Rehabilitation

Initial Project Start: July 1, 2020
Initial Project Completion: June 30, 2022
Revised Project Start:
Revised Project Completion:
Project Origin: Pavement Management Program
Multi-year Project: Yes



Description: The construction impacts from the WPCP upgrade project resulted in pavement deterioration. This project will rehabilitate Tennent Ave. from San Pablo Ave. to WPCP. In February 2021, the City selected a consultant to complete the preliminary engineering for this project.

Supplemental Information: In preparation of this project, the City retained a consultant to perform internal CCTV on this section of roadway. The inspection was completed in early 2021. Coordinating collection system improvements with street resurfacing projects ensures that sewer improvements are made prior to the resurfacing so that manholes and valve covers may be properly realigned, and repairs and replacements are made in a cost-effective manner. This also avoids cutting and patching recently paved streets. The City of Hercules will reimburse \$86,430 for this project.

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Engineering	325	\$ 12,986					
	500	\$ 12,421	\$ 12,398				
Construction	200		\$ 381,082				
	500			\$ 74,597			
	325			\$ 167,321			
Contingency	500		\$ 16,000	\$ 16,000			
	Subtotal	\$ 25,407	\$ 409,480	\$ 257,918			
	Total Cost Estimate: \$ 692,805						

ROADS

RO2103 - Pedestrian Bridge Repair

Initial Project Start: July 1, 2020
Initial Project Completion: June 30, 2022
Revised Project Start:
Revised Project Completion:
Project Origin: Staff Recommendation
Multi-year Project: Yes



Description: This project will complete preventative maintenance and repairs recommended in the Pedestrian Bridge Inspection Reports prepared by a consultant.

Supplemental Information: On July 27, 2020, the City released a Request for Proposals to solicit the assistance of an engineering consulting firm to provide safety inspection services and repair/rehabilitation recommendations on the City's seven pedestrian bridges. On October 26, 2020 a consultant was awarded a contract to conduct field inspections, structural and civil engineering analysis and evaluation, develop conceptual repair details and strategies, perform cost estimation, and value engineering. The seven bridges are: Pinole Valley Park Bridge, Amber Swartz Park Bridge, Pinole Valley Shopping Center Bridge, Prune Street Bridge, Wastewater Treatment Plan Bridge, Bay Trail Bridge, and Senior Center Bridge.

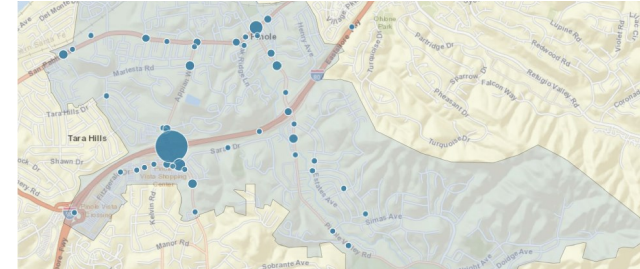
Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Inspection	106	\$ 44,300					
Maintenance	106		\$ 55,700				
	Subtotal	\$ 44,300	\$ 55,700				
	Total Cost Estimate: \$ 100,000						

ROADS

RO2104 - Local Road Safety Plan

Initial Project Start: July 1, 2020
Initial Project Completion: June 30, 2022
Revised Project Start:
Revised Project Completion:
Project Origin: Staff Recommendation
Multi-year Project: Yes



Description: Development of a Local Road Safety Plan (LRSP) which will include an existing conditions assessment, development of traffic measures in areas of engineering, education, encouragement, enforcement, emerging technologies along with associated evaluation. The LRSP will include a prioritized list of roadway infrastructure improvements.

Supplemental Information: In July 2020, staff submitted a grant application to Caltrans for funding to develop and implement an LRSP for the City of Pinole. LRSP's allow local governments to identify, analyze, and prioritize roadway safety improvements on roads within their jurisdiction. In the future, an LRSP or its equivalent, will be required for agencies to apply for federal Highway Safety Improvement Plan funds. In October 2020, the City was selected for funding and implementation of an LRSP. In December 2020, the City released a Request for Proposals to seek professional services from licensed engineering firms to develop a LRSP. A contract was awarded to a consultant in April 2021.

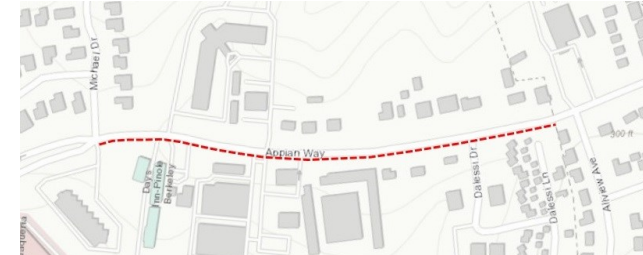
Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Planning	325	\$ 6,215	\$ 33,447				
	Subtotal	\$ 6,215	\$ 33,447				
	Total Cost Estimate: \$ 39,663						

ROADS

RO2105 - Appian Way Complete Streets Project

Initial Project Start:	July 1, 2021
Initial Project Completion:	June 30, 2022
Revised Project Start:	
Revised Project Completion:	
Project Origin:	Staff Recommendation
Multi-year Project:	No



Description: Completion of preliminary engineering and design to provide continuous sidewalks and bike lanes along Appian Way beginning from unincorporated El Sobrante to about 1500 lineal feet north of the City limit within Pinole. The City will seek 2019 STMP funds from West Contra Costa Transportation Advisory Committee (WCCTAC) to develop the preliminary design for this project.

Supplemental Information: This project will connect with the Contra Costa County's project to provide continuous sidewalks and bike lanes along Appian Way from San Pablo Dam Rd. in unincorporated El Sobrante. This project will involve coordination with Contra Costa County. The construction phase of this project is unfunded and appears in the Unfunded and Unprogrammed list.

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Engineering	325		\$ 100,000				
	Subtotal		\$ 100,000				
	Total Cost Estimate: \$ 100,000						

ROADS

RO2106 - Active Transportation Plan

Initial Project Start: July 1, 2021
Initial Project Completion: June 30, 2022
Revised Project Start:
Revised Project Completion:
Project Origin: TAPS
Multi-year Project: No



Description: Development of an Active Transportation Plan will act as a guide for active mobility within and around Pinole. The Plan will identify an integrated network of walkways and bikeways that connect Pinole neighborhoods and communities to employment, education, commercial, recreational, and tourist destinations. The plan will prioritize a set of connected projects, that when fully implemented, will increase active transportation opportunities and make it safe and more convenient for people to walk, bike, and use non-auto forms of travel.

Supplemental Information:**Budget:**

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Planning	100		\$ 75,000				
	Subtotal		\$ 75,000				
	Total Cost Estimate: \$ 75,000						

ROADS

RO2107 - Brandt St. Improvements

Initial Project Start: July 1, 2021
Initial Project Completion: June 30, 2023
Revised Project Start:
Revised Project Completion:
Project Origin: Council Request
Multi-year Project: No



Description: Provide improvements on Brandt St. including application of pavement treatments based on type and severity of distresses on existing pavement.

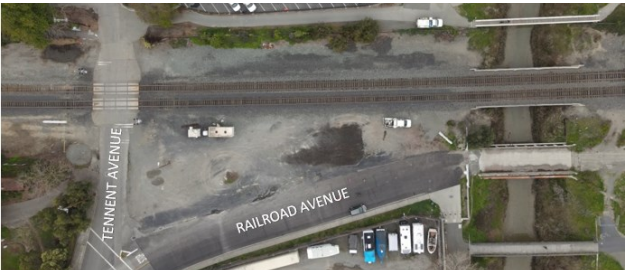
Supplemental Information:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Engineering	100		\$ 50,000				
Construction	100		\$ 120,000				
	Subtotal		\$ 170,000				
	Total Cost Estimate: \$170,000						

ROADS

RO1902 - Pedestrian Improvements at Tennent Ave. near RxR

Initial Project Start: July 1, 2020
 Initial Project Completion: June 30, 2021
 Revised Project Start:
 Revised Project Completion: June 30, 2024
 Project Origin: Staff Recommendation
 Multi-year Project: Yes



Description: In 2018, the East Bay Regional Park District completed a trail link to connect Pinole Shores Regional Shoreline to Bayfront Park trail. There remains one very small gap on Tennent Ave. from Bayfront Park to Railroad Ave. Improvements to Tennent Ave. at the Railroad Crossing will facilitate safe movement of bicycles and pedestrians. Since project inception, the scope of work has evolved to include improvements that would maximize parking on Railroad Avenue for park users. In February 2021, the City selected a consultant to complete the preliminary engineering for this project.

Supplemental Information: WCCTAC held its STMP Call for Projects in 2018 which committed \$100k in funding for preliminary engineering from the 2006 STMP program for this project. This project is eligible to respond to future STMP Call for Projects to compete for funding to advance the project through construction.

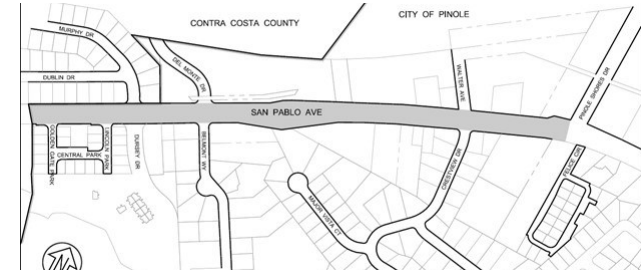
Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Design	325	\$ 11,920	\$ 43,380				
Construction	325				\$ 44,700		
	UF				\$ 530,300		
Contingency	UF				\$ 86,250		
	Subtotal	\$ 11,920	\$ 43,380		\$ 661,250		
	Total Cost Estimate: \$716,550						

ROADS

RO1801 - San Pablo Avenue Rehabilitation

Initial Project Start: July 1, 2020
Initial Project Completion: June 30, 2022
Revised Project Start:
Revised Project Completion:
Project Origin: Pavement Management Program
Multi-year Project: Yes



Description: San Pablo Ave. is an arterial street that carries the major portion of trips entering and leaving the urban area and majority of through movements desiring to bypass the central City. To maintain the PCI of San Pablo Ave., the section from the westerly city limits to Pinole Shores Drive will need rehabilitation to reset the deterioration process and extend pavement life. In February 2021, the City selected a consultant to complete the preliminary engineering for this project.

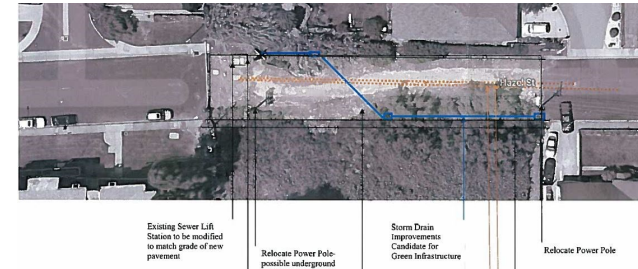
Supplemental Information:**Budget:**

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Design	377	\$ 37,970	\$ 34,911				
Construction	OBAG2		\$ 586,000				
	377		\$ 637,547				
Contingency	377		\$ 105,026				
	Subtotal	\$ 37,970	\$ 1,363,484				
	Total Cost Estimate: \$1,401,454						

ROADS

RO1802 - Hazel Street Gap Closure (Sunnyview)

Initial Project Start: July 1, 2021
Initial Project Completion: June 30, 2022
Revised Project Start:
Revised Project Completion:
Project Origin: Development Driven
Multi-year Project: No



Description: A developer has proposed to develop on a vacant lot identified as APN 402-013-060 at the end of Hazel Street. The project proposes the subdivision of the lot into four new parcels and development of single family residences on each new parcel, and execution of a development agreement to make public improvements, including the extension of Hazel Street for roadway connection to Sunnyview Drive - West end of Hazel St.

Supplemental Information:**Budget:**

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Construction	276		\$ 50,000				
	Developer		\$ 150,000				
	Subtotal	\$ -	\$ 200,000				
	Total Cost Estimate: \$ 200,000						

ROADS

RO1708 - Pinole Valley Road Improvements

Initial Project Start: July 1, 2020
Initial Project Completion: June 30, 2021
Revised Project Start: June 1, 2021
Revised Project Completion: June 30, 2022
Project Origin: Council Request
Multi-year Project: No



Description: As part of the high school construction project WCCUSD provided road improvements along the school frontage. Improvements to Pinole Valley Road - from Shea Dr. to Helena Ct. will extend the useful life of the pavement. The existing pavement score is high in this area, so a slurry seal may be the recommended treatment.

Supplemental Information:**Budget:**

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Engineering	200		\$ 5,000				
Construction	200		\$ 87,000				
Contingency	200		\$ 8,000				
	Subtotal		\$ 100,000				
	Total Cost Estimate: \$ 100,000						

ROADS

RO1709 - Pinole Valley Road Underground District

Initial Project Start: July 1, 2017
Initial Project Completion: June 30, 2021
Revised Project Start:
Revised Project Completion: June 30, 2022
Project Origin: Council Request
Multi-year Project: Yes



Description: The underground district will allow the City of Pinole to use Rule 20A credits, funds paid by PG&E to the PUC, to underground overhead utility lines. As part of the underground project, the City will need to add a streetlight that must be funded outside the Rule20A program. Project RO1708 will follow this project.

Supplemental Information:**Budget:**

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Construction	PGE	\$ 2,046,126	\$ 511,532				
	200		\$ 28,363				
	215	\$ 315,552					
	Subtotal	\$ 2,361,678	\$ 539,895				
	Total Cost Estimate: \$2,901,573						

ROADS

RO1710 - San Pablo Avenue Bridge over BNSF Railroad

Initial Project Start: July 1, 2017
Initial Project Completion: Beyond 5 year term
Revised Project Start:
Revised Project Completion: June 30, 2022
Project Origin: End of life cycle
Multi-year Project: Yes



Description: The San Pablo Avenue bridge over the Burlington Northern Santa Fe Railroad is an integral part of the area's transportation network. The age and condition assessment of the bridge supports replacement. The City was approved for initial funding from the Caltrans Highway Bridge Program (HBP). In February 2020, the City awarded a contract to a consultant for preliminary engineering (PE) to advance the project. The PE will be completed in two phases due to funding limitations. Completion of preliminary design is necessary to develop a final cost estimate for the project. Unfunded portions of this project appear in the Unfunded and Unprogrammed project list as Project UF027.

Supplemental Information: The total budget identified to complete the PE exceeds the amount of funding Caltrans committed to the project of the State's share in the current HBP.

Budget:

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25 & FY2025-26	Beyond Proposed
PM	STMP	\$ 205,265	\$ 75,000	\$ 50,000	\$ 13,208		
Planning & Design	325	\$ 168,480	\$ (35,853)				
	STMP				\$ 191,710		
	HBP	\$ 154,720	\$ 591,588	\$ 44,265			
	UF				\$ 1,479,690		
Construction	STMP						\$ 1,078,025
	UF						\$34,102,975
	Subtotal	\$ 528,465	\$ 630,735	\$ 94,265	\$ 1,684,608		\$35,181,000
	Total Cost Estimate: \$38,119,073						

ROADS

RO1714 - Safety Improvements at Appian Way and Marlesta Rd. formerly known as HAWK at Appian Way and Marlesta Rd.

Initial Project Start: July 1, 2024
Initial Project Completion: June 30, 2025
Revised Project Start: July 1, 2020
Revised Project Completion: June 30, 2022
Project Origin: TAPS
Multi-year Project: Yes



Description: The key elements affecting the safety of pedestrians and cyclists at the Appian Way and Marlesta Way intersection is speed and reduced visibility of approaching traffic due to the topography of the project area. Safety improvements are required to improve crossing conditions for pedestrians and bicyclists. In February 2021, the City selected a Consultant to complete the preliminary engineering for this project.

Supplemental Information:**Budget:**

	Fund	Prior Funding	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Design	325	\$ 2,114	\$ 32,223				
Construction	OBAG2		\$ 120,000				
	TDA		\$ 129,400				
	106		\$ 83,600				
Contingency	106		\$ 37,000				
	Subtotal	\$ 2,114	\$ 402,223				
	Total Cost Estimate: \$ 404,337						

**FIVE-YEAR CAPITAL IMPROVEMENT PLAN: FY 2021-22 THROUGH FY 2025-26
UNFUNDED AND UNPROGRAMMED PROJECTS**

#	Unfunded/Unprogrammed Projects
UF001	Railroad Avenue Bridge Removal and Replacement
UF002	Electric Vehicle Charging Stations in City lots
UF003	Parking lot resurfacing
UF004	LLAD Landscape Restoration and Improvement
UF005	Dog Park Restroom Replacement
UF006	Dog Park resurfacing and fencing improvements
UF007	Eucalyptus Grove Restoration
UF008	Fernandez Park Baseball grandstand improvement
UF009	Repave Trails
UF010	ADA Ramps
UF011	Appian Complete Streets
UF012	Bridge Maintenance
UF013	Installation of High intensity Activated crossWALK (HAWK)
UF014	Pavement Maintenance
UF015	I-80/Pinole Valley Rd. Interchange Improvements
UF016	Shale Hill Retaining wall and sidewalk gap
UF017	Sidewalks gaps
UF018	Signal System Upgrades
UF019	San Pablo Sewer Lift Station Upgrade
UF020	Sewer Collection Systemwide Rehabilitation
UF021	Tree Master Plan
UF022	San Pablo Avenue Bridge over BNSF Railroad
UF023	Installation of Solar at City Facilities
UF024	All weather access roads
UF025	San Pablo Avenue Bridge over BNSF Railroad

UF001 - Railroad Avenue Bridge Removal and Replacement

Project Information

The Contra Costa County Flood Control and Water Conservation District has advised removal of the Railroad Avenue Bridge. The bridge is a flood barrier. The first step is to determine if the City of Pinole is the responsible agency for this project.

Origin: Staff Recommendation

Budget Unit: Roads/Sanitary Sewer/Stormwater

Cost Estimate:

Potential Funding Sources:

UF002 - Electric Vehicle Charging Stations in City lots

Project Information

The City desires to promote and encourage the use of electric vehicles. With increased adoption of alternative fuel vehicles, the need for charging infrastructure is growing. The City wishes to install charging stations in city owned parking lots. The first step is to complete a load study at City owned parking lots to determine the electrical capacity at each site. There may be significant electrical upgrades necessary to install charging stations. Electrical capacity and siting determine ultimately determine the cost of each project. There are incentives available for the charging equipment.

Origin: Council Request

Budget Unit: Facilities

Cost Estimate:

Potential Funding Sources: Bay Area Air Quality Management District, West Contra Costa Transportation Authority, Marin Clean Energy

UF003 - Parking lot resurfacing

Project Information

This project is to maintain and enhance existing City owned parking facilities and infrastructure, to increase parking supply, and to support ongoing multi-modal and streetscape improvements. Improvements include saw cutting and demolition, pavement removal, earthwork, pavement installation, curb and gutter, striping, and signage.

Origin: Staff Recommendation

Budget Unit: Facilities

Cost Estimate:

Potential Funding Sources: Economic stimulus funding

UF004 - LLAD Landscape Restoration and Improvement

Project Information

The Pinole Valley Road Landscape and Lighting Assessment District was formed in 2008. The City installed various improvements on Pinole Valley Road between Henry Avenue and Ramona Street. The district provides maintenance to traffic signals, streetlights, median landscaping, irrigation for landscaping, electricity to traffic signals and streetlights, and graffiti removal. This project will maintain and restore turf, shrubs, plants and trees within the District.

Origin: LLAD Report

Budget Unit: LLAD

Cost Estimate:

Potential Funding Sources: Fund 345 & 348

UF005 - Dog Park Restroom Replacement

Project Information

The existing restroom located at the Dog Park is beyond its useful life and requires replacement.

Origin: Staff Recommendation

Budget Unit: Parks

Cost Estimate:

Potential Funding Sources: -

UF006 - Dog Park resurfacing and fencing improvements

Project Information

Resurfacing and fencing improvements

Origin: Staff Recommendation

Budget Unit: Parks

Cost Estimate:

Potential Funding Sources:

UF007 - Eucalyptus Grove Restoration

Project Information

The open space located between the Old Town area between John St. and Pinole Valley Road is forested with Eucalyptus trees. In 2014, a Safety Inspection was conducted by a consultant. A total of 8 trees were recommended for removal, and root crown excavation was recommended for 3 trees. 2 trees were determined to be hollow and recommended for further investigation to evaluate the level of internal decay. In 2018, the City hired a company to remove 20 Eucalyptus trees in the area. There are still many trees left and many of the prior trees were felled with the trunks remaining on site. This project will remove the remaining trees, both standing and, on the ground, and regreen this area with native trees.

Origin: Council Request

Budget Unit: Parks

Cost Estimate:

Potential Funding Sources:

UF008 - Fernandez Park Baseball grandstand improvement

Project Information

The current grandstand is aging and requires increased maintenance to maintain its serviceability.

Origin: Staff Recommendation

Budget Unit: Parks

Cost Estimate:

Potential Funding Sources:

UF009 - Repave Trails

Project Information

The City's goal is to develop safe, connected, and comfortable bicycle and pedestrian facilities for people of all ages and abilities. Repaving trails will enhance trail access from the City's roadway network to encourage alternative modes of transportation.

Origin: Staff Recommendation

Budget Unit: Parks

Cost Estimate:

Potential Funding Sources:

UF010 - ADA Ramps

Project Information

This project involves removing barriers to accessibility for persons using wheelchairs or other personal assistance devices and improving pedestrian accessibility and safety by reconstructing or upgrading curb ramps at various locations throughout the City.

Origin: Staff Recommendation

Budget Unit: Roads

Cost Estimate:

Potential Funding Sources:

UF011 - Appian Complete Streets

Project Information

This project will provide continuous side-walks and bike lanes along Appian Way from San Pablo Dam Rd. in unincorporated El Sobrante to about 1500 lineal feet north of the city limit within the City of Pinole. The City will seek 2019 STMP funds from West Contra Costa Transportation Authority for preliminary design.

Origin: Staff Recommendation

Budget Unit: Roads

Cost Estimate: \$970,000

Potential Funding Sources: -

UF012 - Bridge Maintenance

Project Information

Maintenance of vehicular and pedestrian bridges as identified in the Caltrans Bridge Inspection Reports and Pedestrian Bridge Inspection Reports completed by Quincy Engineering, Inc.

Origin: Staff Recommendation

Budget Unit: Roads

Cost Estimate:

Potential Funding Sources:

UF013 - Installation of High intensity Activated crossWALK (HAWK)**Project Information**

A High Intensity Activated crossWALK (HAWK) beacon is a traffic control device used to stop road traffic and facilitate pedestrians to cross more safely. HAWKS are candidate treatments for roads with three or more lanes and generally have an annual average daily traffic above 9,000. HAWKS are considered for all midblock and intersection crossings where roadway speed limits are equal or greater than 40 mph. The safety of various crossings can be improved in Pinole through the installation of a HAWK.

Origin: Staff Recommendation

Budget Unit: Roads

Cost Estimate:

Potential Funding Sources:

UF014 - Pavement Maintenance**Project Information**

The City uses a pavement management software known as StreetSaver to strategize the most cost effective method to extend the pavement life. Pavement Maintenance is necessary to maintain the City's pavement network. Deferred maintenance results in increased costs over time.

Origin: Staff Recommendation

Budget Unit: Roads

Cost Estimate: \$42,000,000

Potential Funding Sources: Fund 200 and Fund 106

UF015 - I-80/ Pinole Valley Rd. Interchange Improvements**Project Information**

This project will widen Pinole Valley Road ramp terminal intersections at I-80 to provide a dedicated right turn lane to the eastbound and westbound I-80 on ramps. This project will also provide crossing enhancements at the Pinole Valley Road and I-80 intersection.

Origin: Staff Recommendation

Budget Unit: Roads

Cost Estimate: \$10,959,000

Potential Funding Sources:

UF016 - Shale Hill Retaining wall and sidewalk gap**Project Information**

Shale Hill is located on San Pablo Ave. near Oak Ridge Road. The cut slope above the pavement is comprised of shale which is loose and sloughs onto the road. There is no sidewalk in this area because the toe of the embankment is uncontrolled and there is inadequate space to accommodate a sidewalk. Staff has not been successful in securing grant funds for this project.

Origin: Staff Recommendation

Budget Unit: Roads

Cost Estimate:

Potential Funding Sources:

UF017 - Sidewalk gaps

Project Information

This project will address sidewalk gaps by installing public sidewalks where sidewalks are missing on one or both sides of the street. This work will be coordinated with other construction projects. Sidewalk gaps often exist in places with site constraints (i.e. right of way, grade/slopes, or utility conflicts) or are adjacent to properties that have been required to provide sidewalks in the past due to land uses or ownerships. Locations for repair will be selected based on site conditions, pedestrian safety, and adjacent property attributes.

Origin: Staff Recommendation

Budget Unit: Roads

Cost Estimate:

Potential Funding Sources:

UF018 - Signal System Upgrades

Project Information

This project will upgrade various aspects of the City's traffic signal system including: traffic signal controller equipment, vehicle detection, traffic signal arms and heads, battery backup systems, and communications systems to reduce congestion and improve safety for the Pinole community.

Origin: Staff Recommendation

Budget Unit: Roads

Cost Estimate:

Potential Funding Sources:

UF019 - San Pablo Sewer Lift Station Upgrade

Project Information

This project involves upgrading the structural and electrical needs of the San Pablo Ave. lift station to address the safety and operational deficiencies.

Origin: Sanitary Sewer Master Plan

Budget Unit: Sewer

Cost Estimate:

Potential Funding Sources:

UF020 - Sewer Collection Systemwide Rehabilitation

Project Information

In 2020, the City contracted with a consultant to prepare a sanitary sewer collection system master plan. The Master Plan will provide condition assessment of sewer collection assets that will inform capital planning.

Origin: Sanitary Sewer Master Plan

Budget Unit: Sewer

Cost Estimate:

Potential Funding Sources:

UF021 - Tree Master Plan

Project Information

In 2019, the City Council established a Beautification Ad Hoc Committee to analyze options for, and to make recommendations to Council regarding clean-up and beautification projects in Pinole. Among other projects, the Committee recommended the development of a Tree Master Plan to inventory the existing trees, and to develop a plan for managing the tree inventory, including finding tree planting opportunities.

Origin: Beautification AdHoc Committee

Budget Unit:

Cost Estimate: \$375,000

Potential Funding Sources: Cal Fire Urban and Community Forestry Grant Program

UF022 - San Pablo Avenue Bridge over BNSF Railroad

Project Information

This project will replace the existing thirteen span reinforced concrete span structure over the Burlington Northern Santa Fe Railroad adjacent to San Pablo Avenue at the easterly limits of the City. On 02/18/20, Council awarded a contract to a Consultant to begin the preliminary engineering (PE) for this project (CIP Project RO1710). The PE will be completed in two phases due to funding limitations. The first phase was necessary to develop a final cost estimate to facilitate pursuing additional funding required to complete all phases including construction.

Origin: End of life cycle

Budget Unit: Roads

Cost Estimate: \$35,582,665

Potential Funding Sources: Fund 213, Fund 214, and Economic Stimulus funds.

UF023 - Installation of Solar at City Facilities

Project Information

This project involves procurement and installation of solar panels at City owned facilities to offset the City's electricity consumption and reduce the greenhouse gas impacts.

Origin: Council Request

Budget Unit: Facilities

Cost Estimate:

Potential Funding Sources:

UF024 - All access weather roads

Project Information

The General Plan, Chapter 8 discusses improvement of open space management to reduce wildfire risks. There is a desire to have improved, all-weather access roads through open space to improve access to and from Hercules and El Sobrante to shorten response times and improve mutual aid.

Origin: General Plan

Budget Unit: Roads

Cost Estimate:

Potential Funding Sources:

UF025 - Faria House Renovations

Project Information

The City has discussed the use and economic viability of the Faria House. Significant renovations are required to utilize the property for any purpose. In 2019, the City awarded a contract to a consultant to prepare design and specifications. The scope of work includes development of drawings and schematics of interior improvements, specifications for bidding, an evaluation of the structural engineering for the installation of an elevator for ADA access, and mechanical, electrical, plumbing design as part of the schematics. The consultant will provide the City with improvement costs.

Origin: Council Request

Budget Unit: Facilities/Economic Development

Cost Estimate:

Potential Funding Sources:

CITY OF PINOLE CAPITAL IMPROVEMENT PLAN

STATUS OF SCHEDULED PROJECTS FOR FY 2021/22 THRU JUNE 30, 2022

[illegible]



CITY COUNCIL REPORT

9G

DATE **SEPTEMBER 20, 2022**

TO: **MAYOR AND COUNCIL MEMBERS**

FROM: **ANDREW MURRAY, CITY MANAGER**

**SUBJECT: RECEIVE THE QUARTERLY REPORT ON IMPLEMENTATION OF THE
STRATEGIC PLAN FOR FISCAL YEAR (FY) 2021-22 FOURTH
QUARTER**

RECOMMENDATION

City staff recommends that the City Council receive the quarterly report on implementation of the Strategic Plan.

BACKGROUND

In February 2020, the City Council adopted the City of Pinole Strategic Plan 2020 – 2025. The Strategic Plan identified four goals for the City (safe and resilient, financially stable, vibrant and beautiful, and high performance) and 22 individual strategies (special projects) to complete over a five-year timeframe.

In August 2020, the City created the Strategic Plan Implementation Action Plan (IAP), which identified the timeframe on which each Strategic Plan strategy would be implemented. The City Council revisited the IAP in January 2021 and approved an updated version, which specified completion dates for each of the strategies (attached). During the January 2021 discussion of the IAP, staff recommended a quarterly report on the status of the implementation of the Strategic Plan strategies, akin to the quarterly reports that staff provides to the Council on the City budget and City investments. Council agreed to this recommendation.

REVIEW & ANALYSIS

Below find a table listing the four goals and 22 strategies contained within the Strategic Plan, along with the start and completion dates for each agreed upon in the January 2021 IAP. Each strategy has been coded with a green, yellow, or red dot to indicate whether the City is on track to achieve the beginning and completion dates specified in the January 2021 IAP. Green indicates that the City is on track to achieve the beginning and completion dates; yellow indicates that the City is on track to achieve either the beginning or completion date; and red indicates that the City is not on track to achieve either the beginning or completion date. Note that “Year 1” is FY 2020-21. The City has completed eight of the strategies and is currently on track to achieve the beginning and completion dates of many of the remaining strategies.

Goal and Strategy	Year to Begin Strategy (January 2021 IAP)	Year to Complete Strategy (January 2021 IAP)	FY 2021-22 First Quarter Status	Notes on Status
Goal 1: Safe and Resilient Pinole				
Strategy 1. Conduct a citywide asset condition assessment.	Year 1	Year 5		The City is in the midst of multiple asset condition assessments and master plans. At the end of Year 5, the City will have current assessments for all major capital assets.
Strategy 2. Update the emergency preparedness and response plan (including results of the facilities and equipment assessment).	Year 1	Year 1		Staff presented a draft updated Emergency Operations Plan (EOP) to the City Council on August 2, 2022. Staff expects to present a final updated EOP incorporating City Council's feedback and other changes for Council adoption in FY 2022-23 Q2.
Strategy 3. Explore restoring the community emergency response team (CERT) program and conducting annual tabletop exercises and community drills.	Year 3	Year 3		Staff expects to initiate and complete this effort on schedule.
Strategy 4. Review, prioritize, and implement as appropriate the 2019 fire service study recommendations.	Year 1	Year 2	 Complete	City staff presented its assessment of the fire study and its recommendations regarding next steps to bolster fire service in April 2021. City Council approved staff's recommendations, which staff is now implementing.
Goal 2: Financially Stable Pinole				
Strategy 1. Develop a long-term financial plan (LTFP) and use it to guide budget and financial decisions (including policies regarding reserves and management of liabilities).	Year 1	Year 1	 Complete	The City adopted a LTFP in June 2021. The City adopted a second LTFP, for the following fiscal year, in June 2022.

Goal and Strategy	Year to Begin Strategy (January 2021 IAP)	Year to Complete Strategy (January 2021 IAP)	FY 2021-22 First Quarter Status	Notes on Status
Strategy 2. Conduct a comprehensive fee study to ensure cost recovery of current and potential service fees. (Evaluate implementing an online payment platform.)	Year 1	Year 2	 Complete	Staff presented a proposed updated Master Fee Schedule, based on a comprehensive fee study and cost allocation plan, to Council in June 2022, which Council approved. Staff will complete a fee study and recommend updates if appropriate to development impact fees in FY 2022-23. City staff has implemented options for online payments for certain services.
Strategy 3. Establish a program to evaluate grant opportunities and capacity.	Year 2	Year 2		City staff expects complete this project in FY 2022-23.
Strategy 4. Explore an array of revenue generation opportunities to recover costs.	Year 2	Year 3	 Complete	Staff has supported the City Council in exploring various revenue generation opportunities, most significantly when the City Council considered placing an increased real property transfer tax (RPTT) measure on the November 2022 ballot. Staff will continue to identify and assess opportunities.
Strategy 5. Develop a disciplined approach to funding infrastructure maintenance and improvements.	Year 1	Year 5		This is an ongoing effort in which staff is currently engaged, and which involves the asset condition assessments, master plans, and annual capital planning process.
Goal 3: Vibrant and Beautiful Pinole				
Strategy 1. Update the General Plan and Three Corridors Specific Plan.	Year 1	Year 4		Updates to the Housing and Health & Safety Elements in addition to a new Environmental Justice Element are underway, and on target for adoption by May 2023. In Q2 of FY 2022-

Goal and Strategy	Year to Begin Strategy (January 2021 IAP)	Year to Complete Strategy (January 2021 IAP)	FY 2021-22 First Quarter Status	Notes on Status
				23, staff will consider the need to update the General Plan and Three Corridors Specific Plan Environmental Impact Report so that high-density residential projects could utilize the EIR for project-specific environmental clearances, which would encourage streamlining the rehabilitation and re-use of undeveloped or under-developed properties. In Q3 of FY 2022-23 staff will begin to objectify subjective standards, which will provide additional certainty to developers and may involve updates to the Three Corridors Specific Plan.
Strategy 2. Develop/create a comprehensive strategy to encourage streamlining the rehabilitation and re-use of undeveloped or under-developed properties.	Year 4	Year 4		Staff expects to initiate and complete this effort on schedule.

Goal and Strategy	Year to Begin Strategy (January 2021 IAP)	Year to Complete Strategy (January 2021 IAP)	FY 2021-22 First Quarter Status	Notes on Status
Strategy 3. Partner with regional for- and non-profit housing organizations to provide an array of housing options consistent with community income levels.	Year 1	Year 1	 Complete	The City has partnered with nonprofit housing organizations to explore and develop affordable housing projects, particularly the Satellite Affordable Housing Associates (SAHA) project at 811 San Pablo Avenue. Staff also processed an application for a 179-unit, 100% affordable senior housing project at 600 Roble Avenue called Vista Woods. Although this is an ongoing effort, it was scheduled as a one-year project in the IAP, and is therefore marked as complete.
Strategy 4. Develop a comprehensive economic development strategy that includes a focus on downtown redevelopment to activate the core of the community as a destination for the region (including gateway and wayfinding signage as well as branding).	Year 1	Year 2		Staff and the City's consultant presented a draft Economic Development Strategy to the City Council in August 2022. Staff expects to present a final Economic Development Strategy incorporating City Council's feedback for Council adoption in FY 2022-23 Q2.
Strategy 5. Partner regionally to improve and enhance transportation circulation, including public transit, cars, bikes, and pedestrians.	Year 2	Year 4		The City is engaged in several collaborations with other jurisdictions and agencies to enhance transportation. The City Council appropriated funding to create an Active Transportation Plan; the City received funding to collaborate with the County on an Appian Way complete streets project; and the City is requesting that new development projects have facilities to promote transit.

Goal and Strategy	Year to Begin Strategy (January 2021 IAP)	Year to Complete Strategy (January 2021 IAP)	FY 2021-22 First Quarter Status	Notes on Status
Strategy 6. Conduct a review and update of the City's code enforcement and property maintenance programs with a focus on increased beautification efforts and investment in community amenities, business districts, and nuisance abatement.	Year 1	Year 1		This is an ongoing effort. City staff is continually updating code enforcement policies and procedures. Investment in community amenities is a responsibility of the capital improvement plan and the potential creation of business districts will be addressed in the forthcoming Economic Development Strategy.
Goal 4. High Performance Pinole				
Strategy 1. Develop an employee attraction, retention, and development plan. a. Analyze the City's classification and compensation system and update as needed.	Year 1	Year 2	 Complete	Staff completed an employee attraction, retention, and development plan ("Talent Management Plan") in June 2022. City staff continuously updates the classification system and seeks Council approval of appropriate compensation changes.
Strategy 2. Conduct a citywide organization review to optimize efficiencies.	Year 1	Year 1	 Complete	The City completed a citywide organizational review (assessment) in March 2021.
Strategy 3. Review citywide implementation of best practices and improve processes.	Year 2	Year 5		This is an ongoing effort in which staff is currently engaged. City staff have made many process improvements since the adoption of the Strategic Plan.
Strategy 4. Develop a strategic communication plan (i.e., public information officer, messaging, marketing, technical implementation).	Year 1	Year 2		The City engaged a consultant in August 2021 to create a communication and engagement plan. City staff expects that the consultant will present a draft Communication and Engagement Plan to the City Council in October 2022.

Goal and Strategy	Year to Begin Strategy (January 2021 IAP)	Year to Complete Strategy (January 2021 IAP)	FY 2021-22 First Quarter Status	Notes on Status
Strategy 5. Develop a public engagement plan. a. Develop policies and practices that provide a framework for diverse community members to connect, interact, and proactively participate. b. Explore opportunities for meaningful youth participation in city and community life. c. Develop a robust volunteer and internship program.	Year 1	Year 2		The City engaged a consultant in August 2021 to create a communication and engagement plan. City staff expects that the consultant will present a draft Communication and Engagement Plan to the City Council in October 2022.
Strategy 6. Develop a comprehensive information technology Strategic Plan.	Year 1	Year 1	 Complete	City staff has created a comprehensive IT Plan.
Strategy 7. Develop an interagency legislative advocacy program.	Year 2	Year 2		City staff expects complete this project in FY 2022-23.

FISCAL IMPACT

There is no fiscal impact related to receiving this report.

ATTACHMENTS

A - Implementation Action Plan, January 2021



CITY COUNCIL REPORT

9H

DATE: SEPTEMBER 20, 2022

TO: MAYOR AND COUNCIL MEMBERS

FROM: SANJAY MISHRA, PUBLIC WORKS DIRECTOR

SUBJECT: MEMORANDUM OF UNDERSTANDING (MOU) WITH THE CITY OF HERCULES FOR THE SAN PABLO AVENUE BRIDGE REPLACEMENT PROJECT

RECOMMENDATION

Staff recommends that the City Council adopt a resolution approving the Memorandum of Understanding (MOU) with the City of Hercules for the San Pablo Avenue Bridge Replacement Project.

BACKGROUND

San Pablo Avenue is a four-lane regional arterial throughout Contra Costa County that connects the City of Pinole (the “City”) with the City of San Pablo to the south and City of Hercules to the north. The San Pablo Avenue bridge crosses over the Burlington Northern Santa Fe (BNSF) railroad track approximately 900 feet northeast of the intersection of San Pablo Avenue and Pinole Valley Road. The bridge is a 425-foot-long and 13-span reinforced concrete, parabolic slab structure that serves as the area’s direct route, other than the freeway, between the cities of Pinole and Hercules.

Built in 1938, the bridge no longer meets American Association of State Highway and Transportation Officials (AASHTO) lane width and/or shoulder width standards for current and projected future average daily traffic (ADT). Bicycle and pedestrian access are not available on the existing bridge; however, bicyclists and pedestrians utilize the bridge to cross the railroad track since no other method for crossing the BNSF railroad track is available in the vicinity of San Pablo Avenue. In addition, the existing bridge does not meet current horizontal or vertical railroad setback requirements. The age and condition assessment of the existing bridge support replacement.

In early 2012, the City’s staff completed a grant application to seek Measure J Transportation for Livable Cities funds from the Contra Costa Transportation Authority (CCTA) for construction of a new pedestrian/bicycle bridge crossing over the Burlington

Northern Santa Fe right-of-way at San Pablo Avenue. The goal of the project was to provide safe pedestrian/bicycle access over the railroad. The City was notified that a grant in the amount of \$47,000 was approved for design.

Shortly after, a State inspection revealed that the San Pablo Avenue bridge must be rehabilitated and was eligible for funding through the Highway Bridge Program (HBP). City staff worked with CCTA and received approval to reprogram grant funds and use them for pedestrian/bicycle improvements on the San Pablo Avenue bridge.

The replacement of the San Pablo Avenue bridge over BNSF Railroad is an approved project in the current adopted Capital Improvement Plan (CIP Project # RO1710, the "Project"). The purpose of the Project is to provide a safe, modern bridge and roadway that enhances and supports multi-modal transportation.

In September 2015, the City submitted an HBP application and Project Study Report (PSR) to Caltrans for the Project. The City was approved for initial funding from the Federal Highway Administration (FHWA's) Highway Bridge Program (HBP) to complete preliminary engineering (PE) in December 2015. The HBP provides federal aid to local agencies to replace and rehabilitate structurally deficient locally owned public highway bridges or complete preventative maintenance on bridges that are not deficient.

The PE phase is defined as all project initiation and development activities undertaken through the completion of the plans, specifications, and estimates (PS&E). It includes preliminary right-of-way engineering and investigations necessary to complete environmental documents.

The Project will rely on federal funding through the HBP, therefore, environmental documentation pursuant to the National Environmental Policy Act (NEPA) is required. FHWA works with the California Department of Transportation (Caltrans) to implement NEPA on federal-aid projects on the state highway system and local streets and roads. Caltrans is the lead agency under NEPA. Environmental documentation under the California Environmental Quality Act (CEQA) is also required for the project. The City is the lead agency under CEQA.

The primary steps to complete the Project are the following: 1) completion of project studies and environmental documents (CEQA & NEPA); 2) development and completion of final PS&E; 3) acquisition of right-of-way; 4) acquisition of all regulatory agency permits; and 5) advertise, award, and administer the construction project.

Due to the limited initial funding allocation from the HBP, the PE will be completed in two phases. It was necessary to begin the preliminary design and environmental process to develop a final cost estimate and to pursue funding opportunities to support additional PE and all other phases of the Project. On February 18, 2020, the Pinole City Council adopted Resolution 2020-07 to authorize the City Manager to negotiate and execute an agreement with Quincy Engineering, Inc. for preliminary engineering services to advance the Project.

In the first phase of PE, Quincy Engineering, Inc. is tasked with initiating preliminary design and the environmental process through the preparation of alternatives analysis and bridge type selection, preliminary coordination with BNSF railroad, preparation of a project report, preliminary utility coordination, and environmental technical studies to support completion of CEQA and NEPA documents.

The second phase of PE will involve final utility coordination, final coordination with BNSF railroad, completion of final PS&E, and acquisition of regulatory permits.

After completion of both phases of PE and right-of-way acquisition, the Project will be advertised for construction. It is anticipated that the Project award and construction will occur between Spring 2024 – Spring 2026 (contingent upon funding from HBP).

REVIEW & ANALYSIS

Several alignment and bridge type alternatives were investigated, and two alternatives were selected for further study based on minimizing project constraints including right-of-way needs, traffic impacts during construction, utility impacts, and construction duration.

Out of the two alternatives presented to the Council in March 2022, Alternative 1 was chosen to move forward for further design development.

Project Outreach

This Project was introduced to the West Contra Costa Transportation Advisory Committee (WCCTAC) in September 2020, and later presented to both the City Councils of Pinole and Hercules. The presentations covered the purpose and need of the Project, an introduction to the project development process, an overview of project considerations and challenges, and HBP funding constraints.

City staff routinely coordinates with the City of Hercules staff to share Project information. In February 2021, City staff attended a meeting hosted by a Hercules homeowner's

association (Hercules by the Bay) to discuss the Project and address community questions and concerns. The City project team provided further details and presented the chosen alternative to the Hercules homeowner's association (Hercules by the Bay) again on June 30, 2022 and answered questions.

The Project will be mutually beneficial to Pinole and Hercules. While the City is the sponsor of the Project and is responsible for securing funding for all phases of the Project, it is anticipated that certain approvals and actions will be required by the City of Hercules. Approvals will be required for contractors to perform site investigation, project development, and construction activities for the Project within the jurisdictional boundaries of Hercules.

Per City Council of Pinole's direction, a MOU was drafted and presented to the City Council of Hercules outlining the two parties' responsibilities for carrying out the project. The City Council of Hercules approved the MOU at a regularly scheduled meeting on August 9, 2022 with 4 -1 vote.

FISCAL IMPACT

There are no direct fiscal impacts associated with signing a MOU with City of Hercules as recommended in this staff report.

In September 2015, the City submitted an HBP application and Project Study Report (PSR) to Caltrans for the Project. The PSR identified a total budget of \$16,766,800 for the Project of which \$893,000 was for PE, \$100,000 for right-of-way, and the remainder \$15,773,800 for construction. The HBP contributes 88.53% of the bridge replacement cost and the remaining 11.47% is the local share.

Based on the project costs identified in the PSR, in December 2015, Caltrans programmed the Project in the HBP funding plan and committed to providing \$790,573 (88.53% of \$893k) for the PE phase. The City also secured \$1,600,000 for local share from West Contra Costa Transportation Advisory Committee for all phases of the Project. In addition, the City secured \$387,000 from the Contra Costa Transportation Authority for the design, right-of-way, and environmental clearance for the Project. That is sufficient funding for the local share of the PE phase.

The planning level construction cost estimate for chosen bridge alternative is \$29.1 million.

Significant funding gap exists for completion of the second phase of PE, right-of-way, and construction. The City will continue to seek additional local share funds for the construction phase. The HBP allows local agencies to request additional grant allocation when bid proposals come in higher than initially budgeted for construction. Completion of preliminary design is necessary to develop a final cost estimate and facilitate the City in pursuing funding to support all phases of the Project.

ATTACHMENT(S)

- A. Memorandum of Understanding
- B. Resolution approving MOU

**MEMORANDUM OF UNDERSTANDING FOR THE SAN PABLO AVENUE BRIDGE
PROJECT**

THIS AGREEMENT is made and entered into this ____ day of _____, 2022, by and between the City of Pinole, hereinafter called "PINOLE", and the City of Hercules, hereinafter called "HERCULES" (individually referred to as "Party" or collectively as "Parties").

RECITALS:

WHEREAS, PINOLE and HERCULES recognize the need for the replacement of the San Pablo Avenue Bridge, located in PINOLE, adjacent to the border of PINOLE and HERCULES, with a project to effectuate such replacement hereinafter referred to as "the Project;" and

WHEREAS, two bridge design alternatives have been considered, and the design alternative that maintains the existing alignment of the bridge and constructs a temporary bridge for detour traffic during construction is the preferred alternative; and

WHEREAS, HERCULES supports the preferred alternative; and

WHEREAS, the southern approach roadway and the bridge structure is located in PINOLE, and the northern approach roadway is located in HERCULES; and

WHEREAS, the Project will be mutually beneficial to PINOLE and HERCULES; and,

WHEREAS, PINOLE is the sponsor of the Project and is responsible for securing funding for all phases of the Project; and

WHEREAS, it is anticipated that certain approvals and actions will be required by HERCULES to facilitate the Project, including but not limited to an encroachment permit to construct the northern bridge approach, utility relocation, and the temporary bridge that lies within HERCULES.

NOW, THEREFORE, it is mutually agreed as follows:

1. The Project shall be performed and administered by PINOLE under a single construction contract, and HERCULES shall not make direct financial contributions to fund any phase of the Project.
2. Upon completion of the Project, PINOLE will continue to maintain the bridge structure and roadway that lie within the boundaries of PINOLE.
3. HERCULES agrees to issue PINOLE and its contractors the necessary approvals to perform site investigation, project development, and construction activities for the Project within the jurisdictional boundaries of HERCULES as requested by PINOLE and in a reasonable amount of time.

4. Temporary construction easements for the temporary detour during construction of the new bridge are anticipated. The R/W acquisition process will follow the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) as required with oversight from Caltrans and the Federal Highway Administration (FHWA). The Uniform Act ensures that owners of real property to be acquired for Federal and federally-assisted projects are treated fairly and consistently and encourages and expedites acquisition by agreements with such owners.
5. The Project shall comply with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) which includes identifying environmental impacts and associated mitigation measure as appropriate. PINOLE will serve as the Project Lead Agency with HERCULES serving as a responsible agency for the CEQA process while Caltrans has been assigned NEPA authority by the Federal Highway Administration (FHWA).
6. PINOLE agrees to indemnify, save, hold harmless, and at HERCULES request, defend HERCULES, its officers, agents and employees from any and all costs and expenses, damages, liabilities, claims, and losses occurring or resulting to any person, firm or corporation who may be injured or damaged by the performance, or failure to perform, of PINOLE, its officers, agents and employees, under this Agreement; provided that nothing herein shall constitute a waiver by PINOLE of governmental immunity available under or pursuant to Government Code Section 810 et seq. This section shall survive expiration or termination of this agreement.
7. Neither Party shall assign, transfer or sub-contract this Agreement nor any of its respective rights or duties hereunder without the written consent of the other Party.
8. This Agreement shall become effective upon execution by the Parties hereto and shall remain in effect until such time as construction of the Project has been completed and accepted by all Parties hereto and any associated claims have been settled or otherwise fully and finally resolved.
9. The provisions of this Agreement are severable. The invalidity or unenforceability of any one provision in this Agreement shall not affect the other provisions.
10. Each Party acknowledges that it has read and fully understands the content of this Agreement. This Agreement represents the entire and integrated Agreement between the Parties with respect to the subject matter hereof and supersedes all prior negotiations, representations, or agreements, either written or oral. This Agreement may

be modified only by written instrument executed by duly authorized representatives of both PINOLE and HERCULES.

IN WITNESS WHEREOF, the parties have executed this Agreement, effective as of the date first set forth above.

CITY OF PINOLE

CITY OF HERCULES

By: _____
[NAME]
[TITLE]

By: _____
[NAME]
[TITLE]

APPROVED AS TO FORM
CITY OF PINOLE
LEGAL COUNSEL

APPROVED AS TO FORM
CITY OF HERCULES
LEGAL COUNSEL

By: _____
[NAME]
[TITLE]

By: _____
[NAME]
[TITLE]

DATE: _____

DATE: _____

REVIEWED AND RECOMMENDED
FOR APPROVAL

REVIEWED AND RECOMMENDED
FOR APPROVAL

By: _____
Sanjay Mishra, Director
Pinole Department of Public Works

By: _____
Mike Roberts, Director
Hercules Department of Public Works

ATTACHMENT B

RESOLUTION NO. 2022-____

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PINOLE, COUNTY OF
CONTRA COSTA, STATE OF CALIFORNIA,
APPROVING A MEMORANDUM OF UNDERSTANDING (MOU) WITH THE CITY OF
HERCULES FOR THE SAN PABLO AVENUE BRIDGE REPLACEMENT PROJECT**

WHEREAS, the San Pablo Avenue Bridge is located in the City of Pinole just west of the City of Hercules city limits; and

WHEREAS, the 80 year old San Pablo Avenue Bridge needs replacement as it does not meet current structural design standards and lacks pedestrian and bicycle facilities; and

WHEREAS, the City of Pinole is working on a Capital Improvement Project to replace the bridge which is partially funded by Highway Bridge Program and other local funds (the "Project"); and

WHEREAS, to construct the Project work will need to be completed within the City of Hercules city limits and impact residential properties; and

WHEREAS, it is recommended the cities of Hercules and Pinole enter into an MOU that specifies respective roles and responsibilities to ensure the Project can proceed forward successfully while meeting both cities' needs and expectations; and

WHEREAS, the MOU includes support for the preferred alternative, which will construct the replacement bridge along the current alignment, resulting in less impact to the adjacent properties.

NOW THEREFORE, BE IT RESOLVED that the Pinole City Council does hereby approves the Memorandum of Understanding (MOU) with the City of Hercules for the San Pablo Avenue Bridge Replacement Project.

BE IT FURTHER RESOLVED that the City Council authorizes the City Manager or his designee to make minor modifications to the MOU as required.

PASSED AND ADOPTED at a regular meeting of the Pinole City Council held on the 20th day of September 2022 by the following vote:

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

Pinole City Council
Resolution No. 2022-____
Page ____

I hereby certify that the foregoing resolution was introduced, passed, and adopted on the 20th day of September 2022.

Heather Bell, CMD
City Clerk



CITY COUNCIL REPORT

91

DATE: SEPTEMBER 20, 2022

TO: MAYOR AND COUNCILMEMBERS

**FROM: STEPHANIE DOWNS, ASSISTANT CITY ATTORNEY
SANJAY MISHRA, DIRECTOR OF PUBLIC WORKS**

**SUBJECT: APPROVE A FIRST AMENDMENT TO DISPOSITION AND
DEVELOPMENT AGREEMENT BETWEEN THE CITY OF PINOLE
AND GRP SHORES, LLC PINOLE SHORES 2 AND APPROVE A
RECIPROCAL EASEMENT AGREEMENT WITH THE PINOLE
SHORES OWNER'S ASSOCIATION**

RECOMMENDATION

It is recommended that the City Council adopt resolution approving a First Amendment to Disposition and Development Agreement between the City of Pinole and GRP Shores, LLC for property located at 850 San Pablo Avenue known as Pinole Shores 2 (the "Property"), to extend the Due Diligence date through April 30, 2023 and approving a Reciprocal Easement Agreement with Pinole Shore's Association.

BACKGROUND

The City is the owner of certain properties located at 830-850 San Pablo Avenue in the City of Pinole, County Assessor's Parcel Numbers 402-230-015, 402-230-016, 402-230-017, 402-230-018, 402-230-020 and 402-230-022 (the "Property") known as Pinole Shores 2. On May 9, 2022 the City and GRP Shores, LLC ("Developer") executed a Disposition and Development Agreement for the Property.

In order to sell the property, a reciprocal easement agreement ("REA") is necessary to provide (i) an easement from San Pablo Avenue to the Property for the City and its successors and (ii) an easement for the Association through the Property from the Association's property for the Association to perform its required storm drain maintenance.

The City has negotiated the REA with Pinole Shores Owner's Association, which includes getting a final appraisal ("Appraisal") in order to determine the purchase value of the REA. The City and the Developer won't be able to close on the Property until the City and the Association receive the Appraisal.

In addition, it is taking the City longer than it anticipated to complete the CEQA requirements for the project to be constructed on the Property, and to review the Developer's application for the Project.

REVIEW AND ANALYSIS

The City and the Developer to extend the Due Diligence Contingency Period under the DDA through April 30, 2023 to provide time for the City to finalize the California Environmental Quality Act requirements, to provide time for the planning department to complete its review of the entitlements and to provide time for the appraiser to provide the final Appraisal in order to determine the final cost of the purchase of the Property. There is still the opportunity to extend the Due Diligence Contingency Period two times for a period of thirty days each in the event that all of the information is not yet available by April 30, 2023.

By approving the REA now, the City will be able to close on the easement as soon as it reaches an agreement on the final value of the easements, as set forth in the REA.

Staff recommends that City Council approve the First Amendment to Disposition and Development Agreement for the development of the Property and the Reciprocal Easement with the Association for access through the adjacent property.

FISCAL IMPACT

The First Amendment does not modify the fiscal impact. The Property is a former Redevelopment Property and upon sale of the Property the proceeds will be transferred to the appropriate taxing entities. As a taxing entity, the City will receive approximately \$553,500 in proceeds from the sale of the Property, plus 100% reimbursement of the funds that will need to be paid for the cost of the easement.

In addition, once the Property is transferred, the City will begin to receive property taxes and the Project, once completed, will provide an increase in property taxes, as well as employment opportunities for local residents.

ATTACHMENTS

- A Resolution
- B First Amendment to Disposition and Development Agreement

ATTACHMENT A

RESOLUTION NO 2022-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PINOLE APPROVING A FIRST AMENDMENT TO DISPOSITION AND DEVELOPMENT AGREEMENT BETWEEN THE CITY OF PINOLE AND GRP SHORES, LLC FOR THE SALE AND PURCHASE OF THE PINOLE SHORES 2 PROPERTY AND APPROVING A RECIPROCAL EASEMENT AGREEMENT WITH THE PINOLE SHORES OWNER'S ASSOCIATION

WHEREAS, the City of Pinole (the "City") is the owner of certain properties located at 830-850 San Pablo Avenue in the City of Pinole, California, County Assessor's Parcel Numbers 402-230-015, 402-230-016, 402-230-017, 402-230-018, 402-230-020 and 402-230-022 (the "Property"); and

WHEREAS, on May 9, 2022 the City and GRP Shores, LLC (the "Developer") entered a Disposition and Development Agreement (the "DDA") that sets forth the terms and conditions under which the City will convey the Property to the Developer; and

WHEREAS, the City of Pinole has negotiated a reciprocal easement agreement (the "REA"), substantially in the form on file with the City Clerk, with the adjacent landowner Pinole Shores Owner's Association (the "Association"), in order (i) to ensure continued legal access through the Association property to the Property for the City and for all future owners of the Property, and (ii) to ensure access through the Property for the Association and its agents, employees, and contractors in order for the Association to have access to the storm water facility located on the Property; and

WHEREAS, pursuant to the REA, the City and the Association have hired an appraiser to determine the purchase value of the REA (the "Appraisal"); and

WHEREAS, due to delays beyond Developer's control in obtaining the Appraisal and due to the fact that the timeframe for the completion and approval of California Environmental Quality Act is longer than the City had previously estimated, the Developer and the City desire to extend the Due Diligence Contingency Period, as defined and set forth in the DDA; and

WHEREAS, the parties mutually desire to amend the DDA to extend the Due Diligence Contingency Period through April 30, 2023; and

WHEREAS, the City desires to approve the REA, substantially in the form on file with the City Clerk; and

WHEREAS, the disposition and development of the Property pursuant to the DDA and the REA will be of benefit to the community by providing jobs and providing property taxes to the City.

ATTACHMENT A

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Pinole hereby:

Section 1. Declares the above recitals are true and correct and incorporated by this reference.

Section 2: Approves the First Amendment to Disposition and Development Agreement between the City of Pinole and GRP Shores, LLC, to extend the Due Diligence date to April 30, 2023, substantially in the form on file with the City Clerk.

Section 3. Authorizes the City Manager, or his designee, to execute the First Amendment to Disposition and Development Agreement and to take all actions and execute all documents necessary to carry out the intent of this Resolution.

Section 4. Approves the Reciprocal Easement Agreement with Pinole Shores Owner's Association, substantially in the form on file with the City Clerk, and authorizes the City Manager, or his designee, to Execute the Reciprocal Easement Agreement with such changes as may be approved by the City Attorney.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Pinole held on the 20th day of September 2022 by the following vote:

AYES:	COUNCILMEMBERS:
NOES:	COUNCILMEMBERS:
ABSENT:	COUNCILMEMBERS:
ABSTAIN:	COUNCILMEMBERS:

I hereby certify that the foregoing resolution was introduced, passed, and adopted on this 20th day of September, 2022.

Heather Bell, CMC
City Clerk

**FIRST AMENDMENT TO DISPOSITION AND DEVELOPMENT
AGREEMENT BY AND AMONG GRP SHORES, LLC AND THE CITY
OF PINOLE, CALIFORNIA**

THIS FIRST AMENDMENT TO DESIGN AND DEVELOPMENT AGREEMENT (this “**Amendment**”), dated as of September __, 2022, amending that certain Design and Development Agreement dated May 9, 2022 (“**DDA**”), is entered into by and between the City of Pinole, a California municipal corporation (the “**City**”) and GRP Shores, LLC, a California limited liability company (the “**Developer**”). The City and the Developer are each referred to herein as a “**Party**” and collectively referred to as the “**Parties**.”

WHEREAS, the City is the owner of certain properties located at 830-850 San Pablo Avenue in the City of Pinole, California, County Assessor’s Parcel Numbers 402-230-015, 402-230-016, 402-230-017, 402-230-018, 402-230-020-8 and 402-230-022 (the “**Property**”), as more particularly described in the DDA; and

WHEREAS, on May 9, 2022, the Parties executed the DDA for the purchase and sale of the Property subject to certain terms and conditions as set forth therein; and

WHEREAS, due to delays beyond Developer's control in obtaining the Third Appraisal and finalizing the REA and because the timeframe for the completion and approval of CEQA is longer than the Parties had previously estimated, Developer has requested an extension of the Due Diligence Contingency Period; and

WHEREAS, the Parties mutually desire to extend the Due Diligence Contingency Period to allow the City to satisfy the CEQA requirements and other conditions to closing in the DDA through April 30, 2023; and

WHEREAS, unless specifically stated otherwise, all defined terms in this Amendment shall have the same definition as provided in the DDA.

NOW THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows.

1. Due Diligence Contingency Period

The Parties hereby agree that Section 3.3.2 of the DDA shall be superseded and replaced in its entirety with the following new Section 3.3.2:

3.3.2. Due Diligence Contingency Period. Developer will have until April 30, 2023 (the “Due Diligence Contingency Period”) to complete physical inspections of the Property and due diligence related to the purchase of the Property. Developer may extend the above Due Diligence Contingency Period by thirty (30) days upon written notice to City not less than two (2) days prior to the end of the Due Diligence Contingency Period and deposit of the additional funds required for extension, as set forth in Section 3.2.3. Notwithstanding the foregoing, Developer may only extend the above Due Diligence Contingency Period two (2)

times. City shall provide to Developer copies of all reasonably available and known documents relating to the ownership and operation of the Property, including but not limited to agreements, plans, permits and reports (environmental, structural, mechanical, engineering and land surveys) that City has in its possession not later than five (5) days following the Effective Date. All physical inspections must be coordinated with City's representative. Developer hereby agrees to indemnify and hold City harmless for any damage to the Property caused (but not merely revealed) by Developer's inspections.

2. Effect

Except as otherwise expressly set forth in this Amendment, all other terms and conditions of the DDA remain unchanged and in full force and effect. In the event there is a conflict between the terms and provisions of this Amendment and the DDA as originally executed, the terms and provisions of this Amendment shall control.

3. General Provisions.

This Amendment may be executed in separate counterparts, which together shall be fully effective as an original and together constitute one and the same instrument. Facsimile signatures appearing hereon shall be deemed originals. This Amendment shall be binding upon and inure to the benefit of the Parties and their respective successors and assigns.

IN WITNESS WHEREOF, the Parties have executed this Amendment as of the date first written above.

CITY

City of Pinole

DEVELOPER

GRP Shores, LLC

a California limited liability company

By: _____
Andrew Murray
City Manager

By: _____
Hector R. Vinas, Manager

ATTEST:

By: _____
Heather Iopu, CMC
City Clerk

APPROVED AS TO FORM:

By: _____
Eric S. Casher
City Attorney

5187917.2

RECORDED AT THE REQUEST OF
AND WHEN RECORDED RETURN TO:

City of Pinole
2131 Pear St.
Pinole, CA 94564

EXEMPT FROM RECORDING FEES PER
GOVERNMENT CODE §§6103, 27383

(Space Above for Recorder's Use Only)

A portion of the following APNs: 402-230-020-8, 402-390-021-2

RECIPROCAL EASEMENT AGREEMENT

This Reciprocal Easement Agreement (this “**Agreement**”) is entered into as of September____, 2022, by and between Pinole Shores Owner’s Association, Inc., a California nonprofit mutual benefit corporation (the “**Association**”) and the City of Pinole, a California municipal corporation (the “**City**”). The Association and the City are each referred to herein as a “**Party**” and, collectively referred to herein as the “**Parties.**”

RECITALS

- A. The Association controls certain real property in the City of Pinole, County of Contra Costa, State of California, located within County Assessor’s Parcel Numbers 402-390-021-2, as more particularly described on **Exhibit A** attached hereto and made a part hereof (the “**Association Property**”).
- B. The City currently owns certain real property located in the City of Pinole, County of Contra Costa, State of California, known as County Assessor’s Parcel Numbers 402-230-020-8, as more particularly described on **Exhibit B** attached hereto and made a part hereof (the “**City Property**”).
- C. The City Property and the Association Property are referred to herein collectively as the “**Property.**”
- D. The City and the Association desire to enter into this Agreement in order to ensure continued legal access through the Association Property to the City Property for the City and for all future owners of the City Property, and their agents, employees, tenants, contractors, guests, and invitees, and to ensure access through the City Property for the Association and its agents, employees, and contractors in order for the Association to have access to the stormwater facility (“**Stormwater Facility**”) in order for the Association to meet its obligations under that certain Stormwater Management Facility Operations and Maintenance Agreement recorded as Document number 2008-195586-00 in the official records of the County of Contra Costa (the “**Stormwater Agreement**”).

- E. The Association has agreed to grant a non-exclusive easement for access over the Association Property for access to and from the City Property and for utilities for uses upon the City Property (the “**City Access and Utility Easement**”), as more particularly described on **Exhibit C-1** and **Exhibit D-1** and depicted on **Exhibit C-2** and **Exhibit D-2** (together, the “**City Access and Utility Easement Area**”), attached hereto and made a part hereof. The City Access and Utility Easement will be provided as more particularly set forth in Section 1 below, subject to the terms and conditions of this Agreement.

- F. The City has agreed to grant a non-exclusive easement for access to stormwater facilities located on the City Property (the “**Association Easement**”), as more particularly described on **Exhibit C-1** and depicted on **Exhibit C-2** (the “**Association Easement Area**”), attached hereto and made a part hereof. The Association Easement will be provided as more particularly set forth in Section 2 below, subject to the terms and conditions of this Agreement.

- G. On March 8, 2021, the City received an appraisal from Denton Valuation, which valued the portion of the City Access and Utility Easement depicted on Exhibit C-2 at One Hundred and Twenty-Five Thousand Dollars (\$125,000), and valued the Association Easement at Twenty-Five Thousand Dollars (\$25,000). Based on that appraisal and discussions with Denton Valuation, the City Access and Utility Easement depicted on Exhibit D-2 has been valued at Fifty Thousand Seven Hundred Forty-Two Dollars (\$50,742), for a total valuation of One Hundred Seventy Five Thousand Seven Hundred Forty-Two Dollars (\$175,742), and a net valuation of the City Access and Utility Easement over the Association Easement in the amount of One Hundred Fifty Thousand Seven Hundred Forty-Two Dollars (\$150,742) (the “**City Appraisal**”).

- H. On November 22, 2021, the Association received an appraisal from Smith & Associates, which valued the City Access and Utility Easement at Three Hundred and Nine Thousand Dollars (\$309,000), and valued the Association Easement at Sixteen Thousand Dollars (\$16,000), for a net valuation of the City Access and Utility Easement over the Association Easement in the amount of Two Hundred Ninety-Three Thousand Dollars (\$293,000) (the “**Association Appraisal**”).

NOW, THEREFORE, incorporating and in consideration of the above Recitals, and for the Purchase Price (as determined below) paid by the City and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the City and the Association hereby agree as follows:

1. **Grant of City Easement.** The Association, for itself, its successors and assigns, hereby grants to the City and to and for the benefit of each successive owner of the City Property, and their agents, employees, tenants, contractors, guests, and invitees (a) a non-exclusive easement over, across and through the City Access and Utility Easement Area for vehicle and pedestrian driveway (but not parking) access to and from public roads, drive isles, roadway, and sidewalks as is reasonably necessary for the City and it’s agents, employees, tenants, contractors, guests, and

invitees for access and exit to and from the City Property, it being the intention that such easement extends to, and provides access to and from San Pablo Avenue, and (b) a non-exclusive easement over, across, through and beneath the City Access and Utility Easement Area for the installation, maintenance, repair and replacement of pipes, lines, conduit and other facilities for the provision of utilities to the City Property as is reasonably necessary for the uses from time to time upon the City Property it being the intention that such easement extends to, and provides access to and from the public utilities under, over and above San Pablo. The City acknowledges and agrees that with respect to that part of the City Access and Utility Easement Area more particularly described on Exhibit D-1 and depicted on Exhibit D-2, vehicle access shall be limited to vehicles under 8,000 pounds gross vehicle weight.

2. **Grant of Association Easement.** The City, for itself, its successors and assigns, hereby grants to the Association and to and for the benefit of each successive owner of the Association Property and their agents, employees, and contractors, a non-exclusive easement over, across and through the Association Easement Area for vehicle and pedestrian access (but not parking) as is reasonably necessary for the Association and its agents, employees, and contractors to access the Stormwater Facility in order to conduct maintenance required under the Stormwater Agreement.

3. **Determination of Purchase Price.** The Purchase Price shall be the fair market value of the City Access and Utility Easement less the fair market value of the Association Easement ("**Net Value**"), as determined by the following procedure: Smith & Associates shall provide to Denton & Associates a list of three (3) proposed appraisers to also determine the Net Value, each of which shall be a MAI appraiser (or equivalent) with at least ten (10) years continuous experience appraising commercial land, from which list Denton & Associates shall select the third appraiser ("**Third Appraiser**"). The Third Appraiser shall not be provided with a copy of or otherwise informed of the results **or methodology** of the City Appraisal or the Association Appraisal without the prior written approval of the City and the Association. The Third Appraiser shall prepare an appraisal report that sets forth its determination of the fair market value of the City Access and Utility Easement and of the Association Easement, and net valuation of the City Access and Utility Easement over the Association Easement (the "**Third Appraisal**"), and provide copies of the Third Appraisal to the Parties. The Purchase Price shall be the average of the two of the three appraisals – as among the City Appraisal, the Association Appraisal, and the Third Appraisal – closest in net valuation to one another. The City shall pay the full cost for the Third Appraiser to prepare the Third Appraisal. The City shall pay the Association the full amount of the Purchase Price within thirty (30) days of determination of the Purchase Price.

4. **Acknowledgment of Existing Easement.** The Parties acknowledge that the City Access and Utility Easement Area and the Association Easement Area are located within a portion of that certain East Bay Municipal Utility District's (EBMUD) public utility easement (PUE) as shown on that certain map entitled Subdivision 8758, filed on December 17, 2007, in Book 506 of Maps, at Pages 13 through 19 (506 M 13), Official Records of Contra Costa County. The Parties covenant and agree that their respective use, maintenance, repair and replacement of the Association Easement Area and the City Access and Utility Easement Area will not unlawfully interfere with the EBMUD's full enjoyment of the PUE.

5. **Repair, Replacement and Maintenance of the Easements.** City and the Association shall have the following maintenance, repair, and replacement obligations; provided that as long as the City owns the City Property, the City shall have no maintenance or repair obligations (nor cost reimbursement obligations as set forth below):

A. City shall at all times be responsible for the following with respect to the Association Easement Area located upon the City Property: (i) keeping the Association Easement Area as improved from time to time, in good working order and repair and performing all maintenance, repair, and replacement of all of any roadway eventually constructed thereon (collectively, “**Maintenance Work**”), (ii) not unreasonably impeding access to or from, nor unreasonably obstructing or impacting, any of the Association Easement Area and (iii) not intruding into or modifying the Association Easement Area such that access by the Association as contemplated hereby is unreasonably and materially impacted. It is specifically acknowledged and agreed that the City Property has not yet been improved and the City is not under any obligation to improve or maintain the City Property in any particular manner until the City Property has been improved.

B. The Association shall at all times be responsible for the following with respect to the City Access and Utility Easement Area located upon the Association Property: (i) keeping the City Access and Utility Easement Area, in good working order and repair and performing all Maintenance Work of all of the roadway located thereon, (ii) not unreasonably impeding access to or from, nor unreasonably obstructing or impacting, any of the City Access and Utility Easement Area and (iii) not intruding into or modifying the City Access and Utility Easement Area such that access by the City as contemplated hereby is unreasonably and materially impacted.

C. Maintenance Work as to the Association Easement Area and the City Access and Utility Easement Area shall include, but is not limited to:

- (a) Periodic slurry sealing and restriping;
- (b) Placing, keeping in repair and replacing any necessary and appropriate directional signs, marker lines, bollards and bumpers;
- (c) Installing, operating, keeping in repair and replacing, where necessary, such artificial lighting facilities as shall be reasonably required and as are required by applicable law or governmental authority;
- (d) Maintaining the landscaping and sprinkler systems installed in or serving the Easement areas; and
- (e) Providing any other items of repair, replacement or maintenance that may be needed from time to time to properly maintain the Easement areas.

D. Each Party shall provide to the other Party not less than thirty (30) days’ advance written notice of any contemplated work hereunder (except in the case of an emergency, in which case as much advance written notice as is reasonable under the circumstances shall be given), together with a copy of any applicable plans, specifications and work orders. If the Party to whom

such notice was provided does not object in writing to such work within twenty (20) days from the date of such notice, the Party providing the notice may proceed with such work and shall be entitled to reimbursement for a portion of such work as set forth Section 5.F, below. If the Party to whom such notice was provided timely objects to such work, the Party providing such notice may proceed with such work, however, the right to reimbursement as set forth Section 5.F, below shall be subject to binding arbitration as set forth in Section 11 below with the arbitrator deciding upon the necessity for such work, the reasonableness of the cost therefore, and the amount of reimbursement therefore. The Party undertaking the work shall obtain all permits necessary for the work and shall coordinate its proposed work with the other Party, so as to reasonably minimize the disruption to the business operations of the other Party without being required to incur overtime expenses to work during non-business hours and in no event shall either Party undertake work that shall prevent access to and from the other Party's Property.

E. Should either Party fail to perform Maintenance Work as and when reasonably necessary, as set forth above, and fails to cure the same within thirty (30) days after written notice ("**Cure Notice**") from the other Party specifying the nature of such failure where such failure could reasonably be cured within said thirty (30) day period, or fails to commence such cure within said thirty (30) day period and thereafter continuously, with due diligence, prosecutes such cure to completion where such failure could not reasonably be cured within said thirty (30) day period, then, subject to the following sentence, the non performing Party shall be in breach of this Agreement and without waiving any other rights and remedies, the Party providing such notice may perform or cause to be performed such Maintenance Work and immediately recover from the non performing Party all costs and expenses in performing such work, subject to Section 5.F. below together with an administration fee of five percent (5%) of the cost of such work, and interest thereon at the maximum legal rate. If the Party to whom such Cure Notice was provided contests that it failed to perform required Maintenance Work and objects to such Cure Notice in writing within five (5) days from the date of such Cure Notice, the Party providing such Cure Notice may proceed with such work, however, the right to reimbursement as set forth above shall be subject to binding arbitration as set forth in Section 11 below with the arbitrator deciding upon the necessity for such work, the reasonableness of the cost therefore, and the amount of reimbursement therefore.

F. Subject to reimbursement, as set forth below, City shall be responsible for all costs of the Maintenance Work performed on the Association Easement Area and the Association shall be responsible for all costs of the Maintenance Work performed on the City Access and Utility Easement Area. Subject to Sections 5.D and 5.E, above, City shall be responsible for eighty percent (80%) of the reasonable out of pocket third-party cost of the Maintenance Work during construction of a development on the City Property, and seventy-five percent (75%) of the reasonable out of pocket third-party Maintenance Work performed on that part of the City Access and Utility Easement Area more particularly described on Exhibit C-1 and depicted on Exhibit C-2, and fifty percent (50%) of the reasonable out of pocket third-party Maintenance Work performed on that part of the City Access and Utility Easement Area more particularly described on Exhibit D-1 and depicted on Exhibit D-2 (which shares are based on the approximate relative use of the City Easement by the City) with respect to the City Access and Utility Easement Area, in all cases within 30-days of presentation of invoices (not to be more frequently than monthly) itemizing the subject costs in reasonable detail. The Association shall be responsible for ten percent (10%) (which share is based on the approximate relative use by the Association of the Association Easement) of the

reasonable out of pocket third-party cost of the Maintenance Work as to the Association Easement Area, in all cases within 30-days of presentation of invoices (not to be more frequently than monthly) itemizing the subject costs in reasonable detail. In the event that the Association or the City performs Maintenance Work in the Association Easement Area or the City Access and Utility Easement Area, respectively, in accordance with Section 5.E above, then within 30-days of presentation of invoices (not to be more frequently than monthly) itemizing the subject costs in reasonable detail the City shall reimburse the Association for eighty percent (80%), seventy-five percent (75%), or fifty percent (50%), as applicable, and/or the Association shall reimburse the City for twenty percent (20%), twenty-five percent (25%) or fifty percent (50%), as applicable, of the reasonable out of pocket third party cost, plus the five percent (5%) administration fee.

G. The City Access and Utility Easement includes the right of the City and its successors and assigns to enter at all times upon the City Access and Utility Easement Area, and Association Property as reasonably necessary, to install, inspect, maintain, repair, remove, and replace utility facilities as desired by City and its successors and assigns for the uses conducted upon the City Property from time to time (it being acknowledged that the City Property is planned for development and City and its successors may use the City Property for any use allowed by law from time to time and nothing in this Agreement shall limit such use nor the easements granted hereunder relating to such uses). In performing such work City shall use reasonable efforts to limit the disruption to the business operations on the Association Property without being required to incur overtime expenses to work during non-business hours. Upon completing such work, City shall restore, at its sole cost and expense, the surface area of the Association Property to as close to its condition prior to the commencement of such work as is reasonable under the circumstances.

H. All work referred to in this Agreement shall be performed in accordance with all applicable building codes and other state, federal, city or quasi-governmental laws, codes, ordinances and regulations.

6. **Covenant Against Liens.** In performing or causing to be performed any work in, on or about the Property pursuant to Section 5 above, each Party shall keep the Property free from any liens or encumbrances arising out of the work performed, materials furnished or obligations incurred by or on behalf of that Party, and shall protect, defend, indemnify and hold harmless the other Party from and against any claims, liabilities, judgments or costs (including, without limitation, reasonable attorneys' fees and costs) arising out of the same or in connection therewith.

7. **Easements Running with Land.** This Agreement and the rights, duties and obligations of the Parties hereto shall be construed as covenants running with the land pursuant to California Civil Code Section 1468, and shall be binding upon, benefit and burden the Parties, their successors, and the current and successive fee owners of the land.

8. **Negligence and Willful Misconduct.** Subject to Section 9.1, below, if there is any damage to any portion of the City Access and Utility Easement Area or Association Easement Area ("Easement Areas") caused (a) by the negligence or willful misconduct of City, Association or their respective successors, assigns, employees, contractors, agents, tenants, licensees or invitees, or (b) from any use of the Easements, by any Party hereto which is not within the scope of the respective Easement, then such Party, its successors and assigns shall be liable to the other Party, its successors

and assigns for the reasonable and actual out of pocket third-party costs and expenses incurred by such other Party(s), their successors and assigns to repair such damage to the Easement Area(s) so damaged, to substantially the same condition of the Easement Area(s) immediately prior to such damage.

9. **Insurance; Indemnification.**

- 9.1 **Insurance.** Association and City (each, an “**Insuring Owner**”) shall maintain or cause to be maintained in full force and effect commercial general liability insurance covering claims of bodily injury, personal injury and property damage (including loss of use thereof) arising out of the entry upon any portion of the respective Property owned by the Insuring Owner, with a combined single limit of liability of at least Two Million Dollars (\$2,000,000.00) for bodily injury, personal injury and property damage. The non-insuring Owners shall each be named as “additional insured’s” under the others policy with respect to the Easement Areas. The Insuring Owner hereby releases and waives for itself and each person claiming by, through or under it, the non-insuring Owners and their agents, employees, tenants, contractors, guests, and invitees in connection with the terms provided for herein from any liability for any loss or damage to all property of said non-insuring Owner, which loss or damage is of the type covered by the insurance required to be maintained under this Section 9.1, to the extent such loss or damage is actually covered by such insurance maintained by the Insuring Owner (or would have been covered if the Insuring Owner had carried the insurance required to be maintained under this Section 9.1). Each Party shall cause each insurance policy required to be obtained by it, hereunder, to provide that the insurer waives all right of recovery by way of subrogation against the other Party and its agents, employees, tenants, contractors, guests, and invitees in connection with any injury or damage covered by such policy. The insurance required hereunder shall be written on an occurrence basis and procured from companies rated by Best’s Rating Guide not less than A/X and which are authorized to do business in the State of California. The Insuring Owner shall produce or furnish to the non-insuring Owner, upon request, a certificate of insurance evidencing that the insurance required to be carried under this Section 9.1 is in full force and effect. No policy of insurance shall be allowed to expire without at least thirty (30) days prior written notice by the insurer to each insured and to each additional insured.
- 9.2 **Indemnification.** Subject to Section 9.1, above, each Party hereto (each an “**Indemnitor**”) agrees to and shall indemnify, defend (with counsel reasonably satisfactory to the other Party) and hold harmless said other Party (each an “**Indemnatee**”) from and against any and all “**Claims**”, as that term is defined below, which such Indemnatee may suffer arising out of, relating to or in any way connected with the Indemnitor’s negligence, willful act or omission, or breach of this Agreement, relating to the Easements granted pursuant to this Agreement, excepting therefrom Claims resulting from the negligence, willful act or omission, or breach of this Agreement of such Indemnatee. For purposes of this Agreement, the term “**Claims**” shall mean any and all actions, suits, causes of actions, and/or claims for

bodily injury and/or property damage, costs and expenses, including, without limitation, reasonable attorney's fees and costs.

10. **Remedies.** Each provision of this Agreement shall be enforceable by each Party by a proceeding for a prohibitive or mandatory injunction or by an action to recover damages. If proceedings are instituted in connection with the rights of enforcement and remedies provided in this Agreement, the prevailing Party shall be entitled to recover its reasonable costs and expenses in connection therewith including, without limitation, reasonable attorneys' fees. Failure to enforce any provision of this Agreement shall not operate as a waiver of any such provision, the right to enforce such provision thereafter, or of any other provision of this Agreement. It is expressly agreed that no breach of this Agreement shall entitle any Party to cancel, rescind, or otherwise terminate this Agreement, and such limitations shall not affect in any manner any of the rights or remedies which the Parties may have by reason of any breach of this Agreement. Except as otherwise provided herein, the rights and remedies of the Parties shall be cumulative; provided, however, that neither Party shall have a right to recover consequential or punitive damages.

11. **Arbitration.**

A. Any dispute relating to the interpretation or enforcement of this Agreement shall be by binding arbitration with Judicial Arbitration and Mediation Services, Inc., Walnut Creek Office (or any successor organization) (herein referred to as "**JAMS**") with a request for the appointment of one impartial arbitrator from JAMS, who shall be a retired judge of Contra Costa county and who shall be selected as follows. The arbitrator shall be selected by JAMS from a panel of five arbitrators, two of which may be objected to by each Party, in which event such objected to arbitrators shall not act as the arbitrator hereunder. Any arbitrator not objected to by either Party may serve as the arbitrator hereunder. Notwithstanding the foregoing, the Parties may mutually agree upon a single arbitrator. The arbitration hearing is to be held at the JAMS offices in Walnut Creek, California. The proceeding shall be conducted in accordance with the then prevailing rules for commercial arbitration as promulgated by JAMS. Each Party to the arbitration shall pay its pro rata share of the fees and expenses of the arbitrator appointed by JAMS, plus its pro rata share of all other expenses of the proceeding (other than the fees and disbursements of attorneys or witnesses for each Party). All such fees and costs together with attorneys' fees and costs, including expert witness costs of the Parties and attorneys' fees and costs incurred in enforcing any judgment, may be awarded to the prevailing or most prevailing Party at the discretion of the arbitrator. The provisions of Sections 1282.6, 1283, and 1283.05 of the California Code of Civil Procedure apply to the arbitration. A demand for arbitration shall be made, if at all, prior to the date when institution of legal or equitable proceedings based on such claim would be barred by the applicable statute of limitations or such earlier date as set forth in this Agreement. The award shall be in writing and shall indicate factual findings and the reasons on which the decision is based. The arbitrator shall not have any power to alter, amend, modify or change any of the terms of this Agreement nor to grant any remedy which is either prohibited by the terms of this Agreement, or not available in a court of law. The arbitrator shall have the power to grant legal and equitable remedies but shall not have the power to award any consequential, special, or punitive damages. The arbitrator shall not have the power to commit errors of law or legal reasoning; the Parties agree that the power of the court to vacate an award or correct an award shall include powers necessary to correct an error of law or legal reasoning. If a Party does not comply with the award of the arbitrator, then the other Parties

may seek (and the non-complying Party hereby consents to) the order of a court of competent jurisdiction, which shall enter judgment on the award of the proceeding and all resulting enforcement expenses (including the reasonable attorneys' fees and costs of enforcing the award). The arbitrator shall issue a final decision within thirty (30) days of the conclusion of testimony unless otherwise agreed to by the Parties.

B. In the event that JAMS does not exist at the time of such controversy the arbitration shall be conducted by the American Arbitration Association ("AAA") with the hearing to be held in Walnut Creek, California. If the AAA is utilized, the arbitration shall be held in accordance with the Commercial Arbitration Rules of the American Arbitration Association but otherwise pursuant to the provisions above.

12. **Severability.** If any clause, sentence, or other portion of the terms, conditions, covenants, and restrictions of this Agreement become illegal, null, or void for any reason, or be held by any court of competent jurisdiction to be so, the remaining portions will remain in full force and effect.

13. **Governing Law.** This Agreement shall be subject to and construed in accordance with the laws of the State of California.

14. **Effect of Provisions of Agreement; Successors and Assigns.** Each provision of this Agreement, and agreement, promise, covenant and undertaking to comply with each provision of this Agreement: (i) shall be deemed incorporated in each deed or other instrument by which any right, title or interest in any portion of the Property is granted, devised or conveyed, whether or not set forth or referred to in such deed or other instrument; and (ii) shall be deemed a covenant running with the land to, with and for the benefit of each Party having an interest in the Property; and also an equitable servitude, running, in each case, as a burden with and upon the title to each and every portion of the Property. This Agreement shall be binding upon and shall inure to the benefit of the heirs, executors, administrators, successors and assigns of each of the undersigned. A person or entity shall be bound by this Agreement only during the period such person or entity is the fee or leasehold owner of any property which is subject to this Agreement, except as to obligations, liabilities and responsibilities that accrue during said period. Although persons or entities may be released under this Section, the covenants and restrictions in this Agreement shall continue to be benefits to and servitudes upon said Property running with the land.

15. **Captions.** The captions heading the various sections of this Agreement are for the convenience and identification only and shall not be deemed to limit or define contents of the respective sections.

16. **Entire Agreement; Amendment or Revocation.** This Agreement constitutes the entire agreement between the Parties with respect to the subject matter contained herein, and Exhibits A, B, C-1, C-2, D-1 and D-2 attached hereto are by this reference incorporated in this Agreement. Any prior agreements or understandings between the Parties concerning the easements established herein are superseded and replaced by this Agreement and are hereby rendered null and void. This Agreement may be amended or revoked only upon unanimous written approval in recordable form of all owners of the Property or any portion thereof. Any other attempt to do so shall be void and have no effect.

17. **Certificate.** Each Party will, fifteen (15) days following receipt of written notice from the other Party, provide such written confirmation as is reasonably requested by the requesting Party as to the status of this Agreement, including any defaults under or sums claimed due and owing under this Agreement. Failure of a Party to timely provide such reasonably requested information shall be deemed an admission that this Agreement is in full force and effect and that there are no defaults by the requesting Party thereunder.

18. **Mortgage/Subordination.** This Agreement and the easements and obligations established hereby with respect to each Party and the Property shall be superior and senior to any lien placed upon said Property, including the lien of any mortgage or deed of trust. Notwithstanding the foregoing, no violation of the provisions contained herein shall defeat or render invalid the lien of any mortgage or deed of trust made in good faith and for value; provided, however, that any buyer, mortgagee or beneficiary under a deed of trust that acquires title to the Property or any portion thereof by foreclosure, trustee's sale, deed in lieu of foreclosure, or otherwise shall take title subject to this Agreement. Each Party shall obtain from any current lender who has a mortgage recorded against its Property a subordination agreement subordinating such mortgage to this Agreement so that this Agreement is not impacted by the foreclosure of any such mortgage.

19. **Counterparts.** This Agreement may be executed in any number of counterparts all of which together shall constitute one and the same instrument.

20. **Joint and Several.** If any Party or subsequent owner of all or any portion of the Property is comprised of more than one person or entity, then the obligations of such Party under this Agreement shall be joint and several.

21. **Attorney's Fees.** In the event that any Party commences any action or proceeding against the other in order to enforce the provisions hereof or in order to obtain damages for the alleged breach of any of the provisions hereof, the prevailing Party as determined therein shall be entitled to recover, in addition to any amounts or relief otherwise awarded, all reasonable costs incurred in connection therewith, including reasonable attorney's fees.

22. **Notices.** All notices to be given under this Agreement shall be in writing and sent by either: (i) mail, return receipt requested, in which case notice shall be deemed delivered three (3) business days after deposit, postage prepaid in the United States Mail, (ii) a reputable overnight courier, in which case notice shall be deemed delivered one (1) business day after deposit with that courier, or (iii) e-mail if a copy of the notice is also sent by United States Certified Mail or reputable overnight courier, in which case notice shall be deemed delivered on transmittal by e-mail , as follows:

City of Pinole
2131 Pear St.
Pinole, California 94564
Attention: City Manager

Pinole Shores Owners Association

c/o Kocal Properties

Attention: Richard DiNottia

Any Party may, at any time by giving five (5) days' prior written notice to the other Parties, designate any other address in substitution of the foregoing address to which such notice will be given.

[Signatures on Following Page]

IN WITNESS WHEREOF, the City and Association have executed this Agreement as of the date first written above.

**THE CITY OF PINOLE,
a California municipal corporation**

By: _____
Andrew Murray
City Manager

ATTEST:

City Clerk

APPROVED AS TO FORM

Eric S. Casher
City Attorney

**PINOLE SHORES OWNERS ASSOCIATION,
a California nonprofit mutual benefit corporation**

By: _____
Name:
Title:

(Additional Signature Next Page)

ACKNOWLEDGED AND APPROVED

EBMUD acknowledges its receipt of the Agreement and affirms that it has no objection to the easements granted therein.

EAST BAY MUNICIPAL UTILITY DISTRICT (EBMUD),

a public corporation organized and existing under the laws of the State of California

By: _____

Name:

Title:

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

ACKNOWLEDGMENT

STATE OF CALIFORNIA)
)
COUNTY OF CONTRA COSTA)

On _____ before me, _____, Notary Public, personally appeared, _____, who proved to me the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under penalty of perjury under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature_____

EXHIBIT A
Legal Description of the Association Property

EXHIBIT B
Legal Description of the City Property

EXHIBIT C-1

**Legal Description of City Access and Utility Easement
And Association Easement**

EXHIBIT C-2

**Depiction of City Access and Utility Easement Area
And Association Easement Area**

EXHIBIT D-1

Legal Description of additional City Access and Utility Easement Area

EXHIBIT D-2

Depiction of additional City Access and Utility Easement Area

3881669.13522842.5



CITY COUNCIL REPORT

9J

DATE: SEPTEMBER 20, 2022

TO: MAYOR AND COUNCIL MEMBERS

FROM: DAVID HANHAM, PLANNING MANAGER

SUBJECT: APPROVE AN AMENDMENT TO THE ON-CALL CONTRACT WITH METROPOLITAN PLANNING GROUP (M-GROUP) AND ISSUING AN AMENDMENT TO TASK ORDER FOUR FOR ENVIRONMENTAL SERVICES FOR THE PINOLE SHORES II PROJECT (830-848 SAN PABLO AVE)

RECOMMENDATION

It is recommended that the City Council:

1. Adopt a resolution approving an amendment to the On-Call contract with M-Group and issue an amended Task Order 4 for environmental services in an amount not to exceed an additional \$73,856 for the preparation of the environmental document for the Pinole Shores II project on a cost-recovery basis; and
2. Appropriate funds for this purpose to account 212-461-42101.

BACKGROUND

On November 13, 2018, the City Council approved Resolution No. 2018-101 approving on-call contract services for several consulting firms including M-Group for a period of four (4) years ending November 13, 2022, with the understanding that any contract amendments in excess of \$45,000 be presented to the City Council for approval.

On July 20, 2021, the City Council approved Resolution No. 2021-60 approving the amendment of the contract in the amount of \$125,000 for the environmental clearance services for four multi-family residential projects at 2801 Pinole Valley Road, 600 Roble Avenue, 2151 Appian Way and 1500 Fitzgerald Drive. M-Group has completed environmental review documentation for three of the four environmental clearances and is currently completing the fourth (1500 Fitzgerald Drive). The cost of these reviews is fully borne by the applicant/developer through a cost-recovery agreement between the applicant/developer and the City, in addition to 15% of the contract cost for administration of the contract.

On January 3, 2022, an application was filed for Comprehensive Design Review for the construction of two industrial buildings totaling approximately 118,312 square feet at 830-848 San Pablo Avenue (a.k.a., the "Pinole Shores II" project).

On June 7, 2022, the City Council approved Resolution No. 2022-42 approving the amendment of the Task Order 4 contract in the amount of \$32,370 for the preparation of the environmental documentation for the Pinole Shores II project and bringing the total compensation for environmental clearance services under Task Order 4 from \$125,000 to \$157,370.

REVIEW & ANALYSIS

The scope of work for the Pinole Shores II project underlying the original budget amount of \$32,370 assumed the applicant would be providing all required Technical Studies. Since that time, the applicant has elected for M-Group to subcontract the preparation of required Technical Studies, including Cultural Resources, Air Quality, Greenhouse Gases and Health Risk Assessment, Noise and Vibration, Biological Resources and Transportation Consulting Services (collectively the “Technical Studies”). The addition of the subcontracted Technical Studies increased the budget by \$73,856 and the revised budget is now \$106,226, inclusive of a 10% contingency and optional transportation operations analysis. An additional amendment in the amount of \$73,856, for a total project environmental documentation cost of \$106,226 is required to initiate the work.

FISCAL IMPACT

The Pinole Shores II project environmental document has been scoped for an additional \$73,856. Therefore, the total cost of M-Group’s environmental clearance services under Task Order 4 would increase from \$157,370 to \$231,226. The cost of these reviews is fully borne by the individual applicant/developer through a cost-recovery agreement between the applicant/developer for the specific project and the City. The City also requires the applicant to submit a fee in the amount of 15% of the contract cost, to provide contract administration support. Therefore, there will be no direct negative impact to the Planning and Building fund.

ATTACHMENTS

- A. Resolution
- B. M-Group Contract Amendment Task Order

RESOLUTION NO. 2022-XX

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PINOLE,
COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA,
APPROVING AN AMENDMENT TO THE ON CALL CONTRACT WITH
METROPOLITAN PLANNING GROUP (M-GROUP) AMENDING TASK ORDER 4 FOR
ENVIRONMENTAL SERVICES IN AN AMOUNT NOT TO EXCEED TO \$231,226**

WHEREAS, the City of Pinole has utilized M-Group for many years for current and long-range planning, environmental services; and

WHEREAS, on November 13, 2018, the City Council approved several on-call contracts which included M-Group for a period of four years, ending November 13, 2022, with the understanding that any contract amendments more than \$45,000 be presented to the City Council for approval; and

WHEREAS, on July 20, 2021, the City Council approved amendment of the contract in the amount of \$125,000 for Task Order 4: the environmental clearance documentation for four multi-family residential projects (at 2801 Pinole Valley Road, 600 Roble Avenue, 2151 Appian Way and 1500 Fitzgerald Drive), three of which have been completed with one remaining in the entitlement stage; and

WHEREAS, the Pinole Shores II project, located at 830-848 San Pablo Avenue, proposes the construction of two industrial buildings totaling approximately 118,312 square feet and requires Comprehensive Design Review; and

WHEREAS, the preparation of the environmental documentation for the Pinole Shores II project is estimated to cost \$106,226; and

WHEREAS, M-Group can prepare all of the necessary environmental documentation in an expeditious manner; and

WHEREAS, the cost of these reviews is fully borne by the applicant/developer through a cost-recovery agreement between the applicant/developer and the City.

NOW THEREFORE BE IT RESOLVED that the City Council of the City of Pinole does hereby take the following actions:

1. Authorize the City Manager to execute an amendment to the On-Call contract with M-Group amending Task Order 4 to include environmental services for the preparation and completion of environmental documentation for the Pinole Shores II project in an additional amount of \$73,856, for a total project amount not to exceed \$106,226 and for a total contract cost of \$231,226 for environmental clearance services.
2. Appropriate funds for this purpose to account 212-461-42101.

Pinole City Council
Resolution No. 2022-____
Page 2

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Pinole held on the 20th day of September 2022, by the following vote:

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

I hereby certify that the foregoing resolution was regularly introduced, passed, and adopted on the 20th day of September 2022.

Heather Bell, CMC
City Clerk

ATTACHMENT B

AMENDMENT NO.6 TO THE CONSULTING SERVICES AGREEMENT BETWEEN THE CITY OF PINOLE AND METROPOLITAN PLANNING GROUP (M-GROUP)

The Amendment No. 6 (the “Sixth Amendment”) to the Consulting Services Agreement dated November 18, 2020 (the “Agreement”), between the City of Pinole, a general law city and municipal corporation, (“City”) and M-Group (“Consultant”) (together sometimes referred to as “Parties”) is approved as of the date executed below.

Effect of Amendment. The terms and conditions of this Amendment are intended by the Parties to modify the Agreement, as previously amended from time to time. To the extent there is any inconsistency between the terms of this Amendment and the terms of the Agreement, as previously amended, the terms of this Fourth Amendment shall control.

Amendment No. 5. of the Agreement is hereby superseded in its entirety by this Amendment No. 6.

Exhibit A and B of the Agreement are amended to include the following:

Task Order: Environmental Services for 830-848 San Pablo Avenue (Pinole Shores II) for the Fiscal Year 2021-2022 for an amount not to exceed \$73,856.00.00.

To provide the services listed in Attachment A to this Fifth Amendment, and incorporated herein, in an amount not to exceed Seventy Three Thousand and Eight-hundred and Fifty Six Dollars (\$73,856.00).

With the exception of the foregoing, all other terms and conditions in the Agreement, as previously amended, remain in force and effect.

Signatures on Following Page

ATTACHMENT B

The Parties have executed this Amendment to the Agreement as of the date signed by the City.

City of Pinole

Contractor

Andrew Murray, City Manager

Dated: _____

Dated: _____

Attest:

Heather Bell, City Clerk

Approved as to Form:

Eric S. Casher, City Attorney



CITY COUNCIL REPORT

9K

DATE: **SEPTEMBER 20, 2022**

TO: **MAYOR AND COUNCIL MEMBERS**

FROM: **SANJAY MISHRA, PUBLIC WORKS DIRECTOR**

SUBJECT: **ADOPTION OF SANITARY SEWER MASTER PLAN 2022**

RECOMMENDATION

City staff recommends that the Council adopt a resolution approving the Sanitary Sewer Master Plan 2022.

BACKGROUND

The City owns and operates approximately 50 miles of sewer pipelines and 2 sewage lift stations. This system collects and conveys wastewater generated at residential, commercial, and industrial buildings to the City's wastewater treatment plant.

The wastewater collection system must be sized and have sufficient capacity for wastewater flows from both existing and planned development, as well as the ability to accommodate increased flows that occur during the wet season. Adequate operation and maintenance must be performed on the system to protect public health, safety, and the environment. Lack of or deferred maintenance can result in cumulative effects including but not limited to blockages and sanitary sewer overflows.

To achieve the goals above and effectively manage the wastewater collection system, the City relies upon its Sanitary Sewer Master Plan (SSMP), which was developed in 2008. If warranted, the SSMP should be updated to reflect new information, new operating procedures, and to evaluate the existing system for its structural integrity and determine where capacity deficiencies may exist.

The City's wastewater collection system is aging with some segments over 50 years old. Several studies and our historic records show that our collection system experiences high levels of inflow (when stormwater enters the sewer system through rain leaders or drains illegally connected to the sewer system) and infiltration (when groundwater seeps into sewer pipes through cracks or deteriorated manholes) (I/I). In response, the Regional Water Quality Control Board has included in our current operating permit a condition that the City inspect the condition of all pipes with an in-pipe camera by March 31, 2023 (the City is in the process of inspecting all pipes and

is on track to complete this task on time). As prior studies have shown, it is expected that the additional inspections will show a broad reaching need to repair or replace many miles of pipe.

REVIEW AND ANALYSIS

Master planning for the sewer collection system is vital for us to be responsive to development, especially the increases in density the State is pushing in response to the housing crisis. Further and of great importance to Pinole, the master planning process will aid in prioritizing capital improvements. This is extremely important when trying to address systemic I/I.

The current SSMP was developed over 14 years ago. This proposed SSMP 2022 will help the City address capacity deficiencies and proactively schedule and prioritize replacement/rehabilitation for segments to reduce inflow and infiltration.

The Council approved to issue a Request for Proposals for the Master Plan on May 19, 2020, which was posted to www.publicpurchase.com, an electronic bidding platform. We received one proposal. The proposal was deemed complete. The proposal was submitted by Carollo Engineers. City council approved the contract award on September 1, 2020, to Carollo engineers to complete the Sanitary Sewer Master Plan 2022 for a not to exceed amount of \$449,000.

The updated Sanitary Sewer Master Plan 2022 includes:

1. Realistic growth projections for use in collection system capacity evaluations.
2. Identifies and quantifies I/I, provides best approach to mitigate system inefficiencies.
3. Provides collection system hydraulic models.
4. Identifies capital improvements to provide for system expansion while optimizing the life of existing collection system assets.
5. Balancing capital improvements and maintenance programs to maximize taxpayer investment and provide the level of service that ratepayers expect.

Consistency with Strategic Plan

The Council has already declared its support of the efforts of this master planning process through the adoption of the City of Pinole Strategic Plan. This planning effort supports the following components of the Strategic Plan:

Goal 1 Safe and Resilient Pinole

Strategy 1 Conduct citywide asset condition assessment

Goal 2 Financially Stable Pinole

Strategy 5 Develop a disciplined approach to funding infrastructure maintenance and improvements

Goal 3 Vibrant and Beautiful Pinole

Strategy 2 Develop/create a comprehensive strategy to encourage streamlining the rehabilitation and reuse of undeveloped or under-developed properties

FISCAL IMPACT

There is no direct fiscal impact for adopting the proposed Sanitary Sewer Master Plan 2022. The Council had previously approved a not to exceed amount of \$449,0000 to complete this task. We are within the above approved budget amount and are not seeking any additional funds.

ATTACHMENTS

A: Resolution

B: Sanitary Sewer Master Plan 2022

ATTACHMENT A

RESOLUTION NO. 2022-____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PINOLE, COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, ADOPTING THE SANITARY SEWER MASTER PLAN (SSMP) 2022

WHEREAS, the State Water Resources Control Board requires local agencies that own and operate sewer collection to prepare a Sanitary Sewer Master Plan (SSMP); and

WHEREAS, the State Water Resources Control Board requires that, a SSMP must be adopted by the local agency's governing board; and

WHEREAS, the City of Pinole has an existing SSMP which was adopted by the City Council on May 19, 2008; and

WHEREAS, the State Water Resources Control Board requires local agencies to review and update their SSMP as warranted to reflect changes in operation of the collection system; and

WHEREAS, City staff has revised the City's SSMP which documents the current state of the City's sanitary sewer infrastructure, projects future needs based on a realistic growth, recommends capital projects and operational improvements.

NOW THEREFORE, BE IT RESOLVED that the Pinole City Council does hereby adopt the City's SSMP 2022.

BE IT FURTHER RESOLVED that the City Council authorizes the Public Works Director / City Engineer to make minor modifications to the SSMP as requested by the State Water Resources Control Board.

PASSED AND ADOPTED at a regular meeting of the Pinole City Council held on the 20th day of September 2022 by the following vote:

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

I hereby certify that the foregoing resolution was introduced, passed, and adopted on the 20th day of September 2022.

Heather Bell, CMD
City Clerk



SANITARY SEWER MASTER PLAN UPDATE



FINAL | September 2022



City of Pinole

SANITARY SEWER MASTER PLAN UPDATE

FINAL | September 2022

Digitally signed by Timothy J. Loper
Contact Info: Carollo Engineers, Inc.
Date: 2022.09.16 09:14:07-07'00'



Digitally signed by Ryan F. Orgill
Contact Info: Carollo Engineers, Inc.
Date: 2022.09.16 09:35:07-07'00'



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Abbreviations

°F	degrees Fahrenheit
AACE	Association for the Advancement of Cost Engineering
AAF	average annual flow
ADU	accessory dwelling unit
ADWF	average dry weather flow
BWF	base wastewater flow
Carollo	Carollo Engineers
CCTV	closed-circuit television
CIMIS	California Irrigation Management Information System
CIP	capital improvement plan
City	City of Pinole
d/D ratio	depth of flow, d, to pipe diameter, D, ratio
DOF	Department of Finance
DU	dwelling unit
DWF	dry weather flow
ENR CCI	Engineering News Record Construction Cost Index
EPA	Environmental Protection Agency
ETo	evapotranspiration
fps	feet per second
General Plan	General Plan Update
GIS	geographic information system
gpd	gallons per day
gpd/ac	gallons per day per acre
gpd/ADU	gallons per day per accessory dwelling unit
gpd/DU	gallons per day per dwelling unit
gpd/idm	gallons per day per inch of diameter per mile
gpm	gallons per minute
GWI	groundwater infiltration
HGL	hydraulic grade line
I-80	Interstate 80
I/I	infiltration and inflow
IDM	inch of diameter per mile
Master Plan	Sanitary Sewer Master Plan Update
MF	multi-family
mgd	million gallons per day
NOAA	National Oceanic and Atmospheric Administration

NPDES	National Pollutant Discharge Elimination System
PWWF	peak wet weather flow
RDII	rainfall-derived inflow/infiltration
ROW	right of way
SF	single family
SSO	sanitary sewer overflow
SWMM	storm water management model
V&A	V&A Consulting Engineers, Inc.
WaPUG	wastewater planning users group
WCW	West County Wastewater
WPCP	water pollution control plant
WWF	wet weather flow

Chapter 1

INTRODUCTION

This Chapter presents a brief summary of the City of Pinole's (City's) need for the Sanitary Sewer Master Plan Update (Master Plan), the objectives of the Master Plan, and a description and organization of the seven chapters that cover the wastewater collection system.

1.1 Background

The City is located in the San Francisco Bay Area, along the San Pablo Bay in Western Contra Costa County, California. The City is located near the beginning of State Route 4, which begins just north of the City (Figure 1.1). The City limits comprise approximately 5.5 square miles, and consists of varied topography ranging from steep terrain to ocean basin.

The City, which was incorporated in 1903, provides sewer and storm drainage service to its customers. The City provides sewer service to most of its the residential, commercial, and industrial customers. West County Wastewater (WCW) provides sewer service to a small portion of the City.

1.2 Wastewater Collection System Overview

The City provides wastewater services to approximately 19,000 residents, industrial and commercial users. The wastewater collection system includes approximately 50 miles of active gravity sewer lines, ranging from 6 to 30 inches in diameter, two lift stations, and associated force mains. Wastewater generated in the sewer service area is conveyed to the Pinole-Hercules Water Pollution Control Plant (WPCP). WPCP provides wastewater treatment to the cities of Pinole and Hercules. The WPCP is owned and operated by the City.

1.3 Study Purpose, Scope, and Authorization

The purpose of this Master Plan is to gain an understanding of the system's performance and to provide a planning document for the City's wastewater collection system. Overall, the Master Plan will assist the City in their approach to optimize their collection system operations, maximize the use of existing pipelines, and focus spending in key areas in need of improvement.

Carollo Engineers (Carollo) was contracted to prepare the Master Plan. The Master Plan scope of services include the following main tasks:

- Task 1 – Project Management and Quality Control.
- Task 2 – Data Collection and Review.
- Task 3 – Existing and Future Wastewater Flow Analysis.
- Task 4 – Hydraulic Analysis.
- Task 5 – Pipeline Risk Assessment.
- Task 6 – Prepare Capital Improvement Program.
- Task 7 – Sanitary Sewer System Master Plan Report.

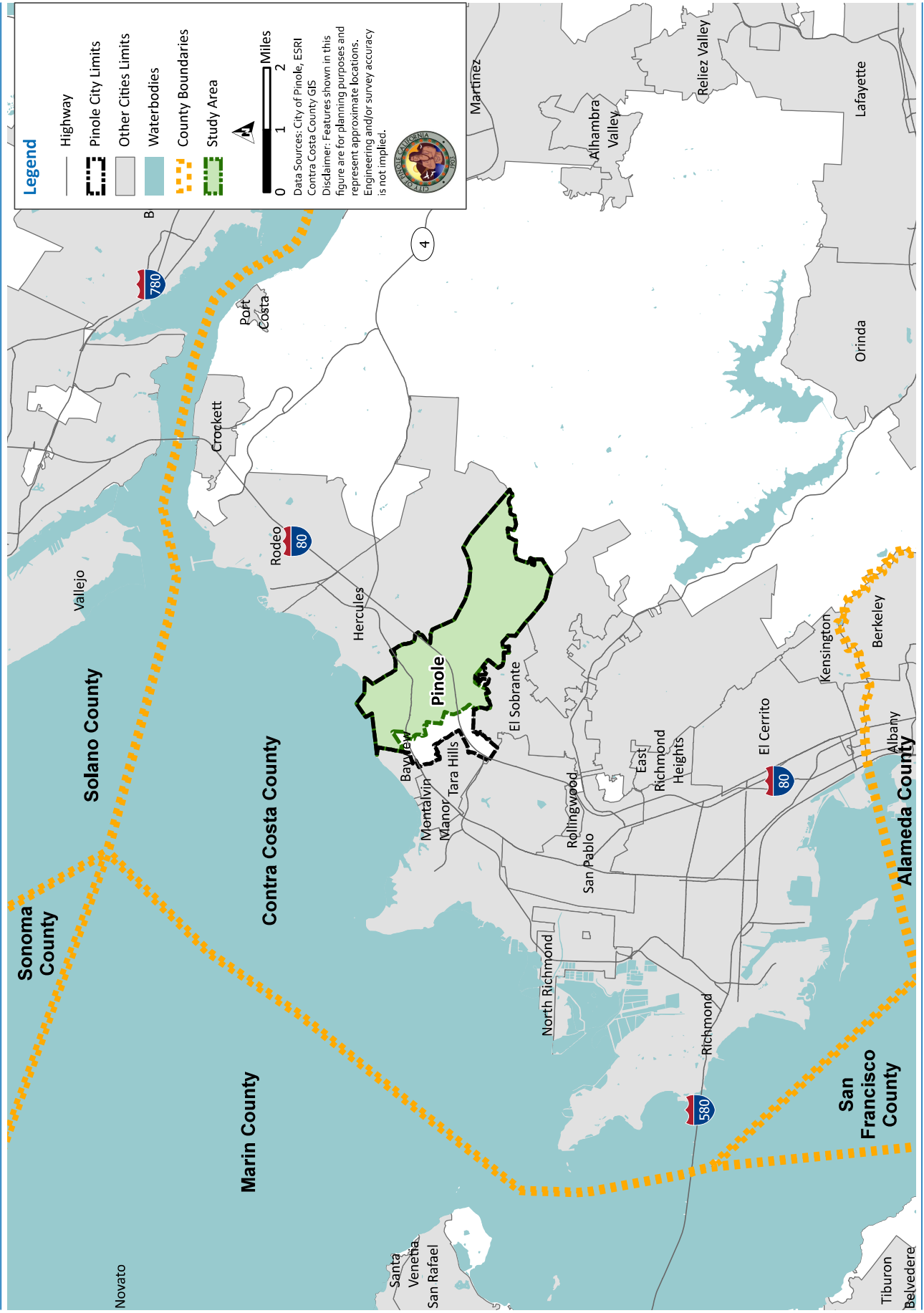


Figure 1.1 Regional Location Map

1.4 Report Organization

The Master Plan report contains seven chapters, followed by appendices that provide supporting documentation for the information presented in the report. The chapters are briefly described below:

- **Chapter 1 - Introduction.** This chapter presents the project background, goals, and organization of this Master Plan.
- **Chapter 2 - Land Use and Population.** This chapter presents a description of the study area, defines the planning horizon for this study, and summarizes the zoning classifications and future development of the study area.
- **Chapter 3 - Planning and Evaluation Criteria.** This chapter presents the planning criteria and methodologies for the analysis used to evaluate the City's existing sanitary sewer collection system and associated facilities, which are utilized to identify existing system deficiencies and to size future improvements.
- **Chapter 4 - Wastewater Flows.** This chapter summarizes the existing and projected wastewater flows for the City's collection system.
- **Chapter 5 - Sanitary Sewer Collection System Facilities and Hydraulic Model.** This chapter describes the development and calibration of the City's collection system hydraulic model. A description of the City's wastewater collection system, the existing hydraulic model, and an outline of the steps used to update the model are provided. A detailed summary of the hydraulic model calibration steps, standards, and results for both dry weather flow (DWF) and wet weather flow (WWF) conditions is also provided.
- **Chapter 6 - Capacity Evaluation and Proposed Improvements.** This chapter discusses the hydraulic evaluation of the wastewater collection system and the proposed projects that correct capacity deficiencies and serve future users.
- **Chapter 7 - Capital Improvement Plan.** This chapter presents the CIP, a summary of the capital costs, and a basic assessment of the possible financial impacts of the proposed CIP.

1.5 Acknowledgements

We would like to thank the following City staff for their assistance and oversight of this project:

- Sanjay Mishra; Public Works Director/City Engineer.
- Misha Kaur; Capital Improvement and Environmental Program Manager.
- Tamara Miller; former Development Services Director/City Engineer.

The following Carollo staff members were principally involved in this project:

- Tim Loper, P.E.; Project Manager.
- Ryan Orgill, P.E.; Project Engineer.
- Danielle Orgill, P.E.; Hydraulic Modeling Lead.
- Kyle Pierce; Staff Engineer.
- Joaquin Ramirez, P.E.; Quality Management.
- Kevin Christensen; GIS/Graphics.
- Sabrina Bruce; Document Processing.

Chapter 2

STUDY AREA

This chapter outlines the planning area for the wastewater collection system, defines land use classifications and describes the planned development within the City's service area. A summary of historical population trends and population projections are also presented in this chapter.

2.1 Study Area

The study area generally consists of the City limits, however a small portion of the City is served by WCW and is excluded from the study area for the purposes of this Master Plan. Figure 2.1 shows the study area.

2.2 Planning Horizon

This Master Plan is intended to serve as a guiding document for the planning and implementation of system improvements to accommodate future growth through build out of the City's General Plan Update (General Plan).

2.3 Climate and Topography

Table 2.1 summarizes the study area's climate. As shown, the City's climate is characterized by long, warm, arid summers and short, cold, wet winters. January is the wettest month with an average 4.76-inches of precipitation and July is the driest month with an average of 0.04-inches of precipitation. The average annual precipitation is approximately 23.14-inches, with approximately 90-percent of the average annual precipitation occurring between November and April. The City's elevation ranges from sea level in the northern portion of the City to approximately 780-feet above sea level in the south eastern portion of the City. Figure 2.2 shows a map of the study area topography.

Table 2.1 Study Area Climate

Month	Average Temperature ⁽¹⁾ (degrees Fahrenheit [°F])		Monthly Average ETo ⁽²⁾	Average Total Precipitation ⁽¹⁾
	Minimum	Maximum	(inches)	(inches)
January	42.6	57.5	1.66	4.76
February	45.4	61.5	2.06	3.83
March	46.8	63.8	3.17	3.31
April	48.8	66.5	4.31	1.67
May	51.7	69.0	4.82	0.53
June	54.4	71.1	5.48	0.21
July	55.3	70.4	5.25	0.04
August	56.1	71	4.38	0.07
September	56.3	74.1	4.06	0.21

Month	Average Temperature ⁽¹⁾ (degrees Fahrenheit [°F])		Monthly Average ETo ⁽²⁾	Average Total Precipitation ⁽¹⁾
	Minimum	Maximum	(inches)	(inches)
October	53.3	72.2	3.34	1.27
November	48.0	64.6	1.89	2.89
December	43.3	58.1	1.49	4.36
Average or Total	50.2	66.6	41.91	23.14

Notes:

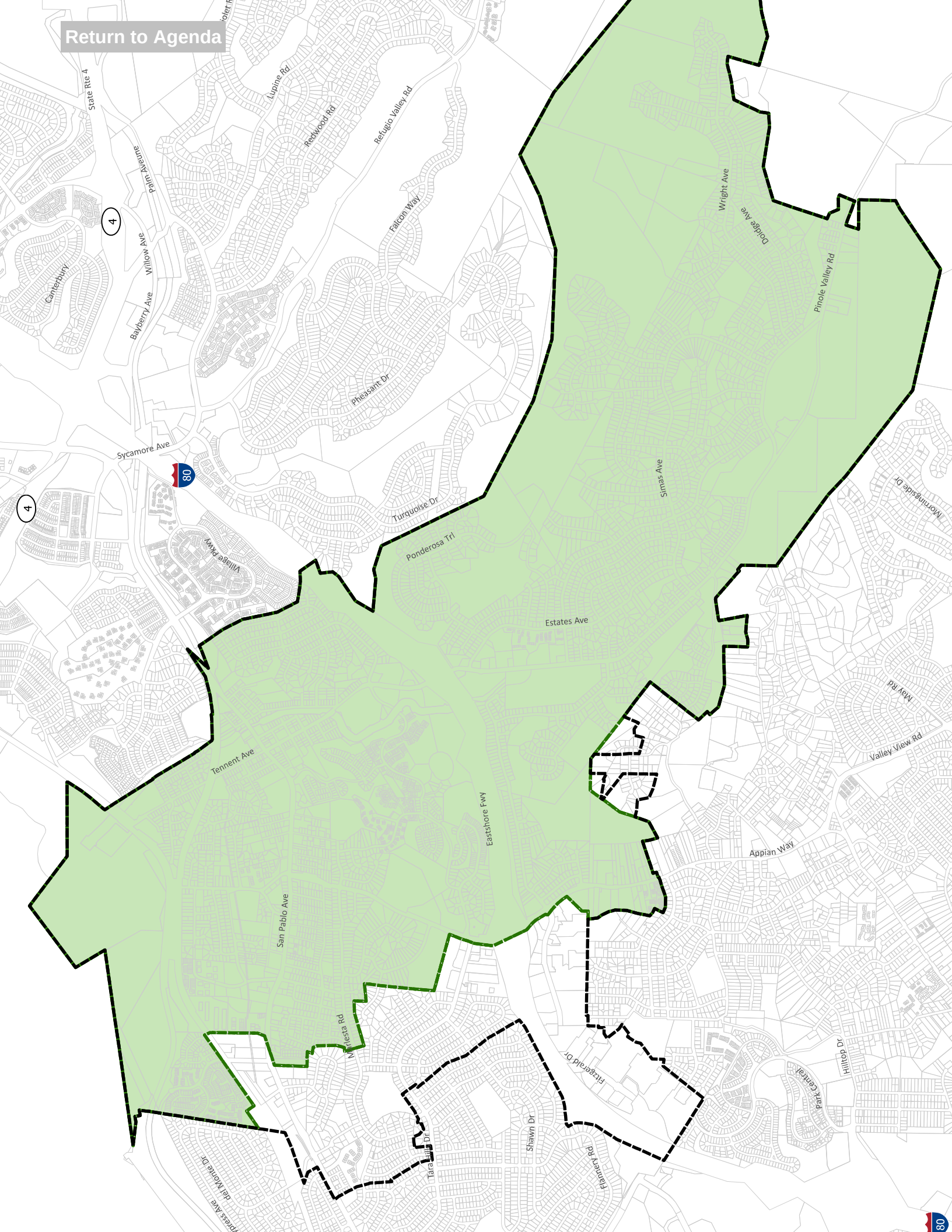
- (1) Source: Western Regional Climate Center Richmond, California (047414). Represents monthly average from December 1950 to June 2016.
- (2) Source: California Irrigation Management Information System (CIMIS) Station 213 El Cerrito. Represents monthly average evapotranspiration (ETo) from September 2013 to April 2021.

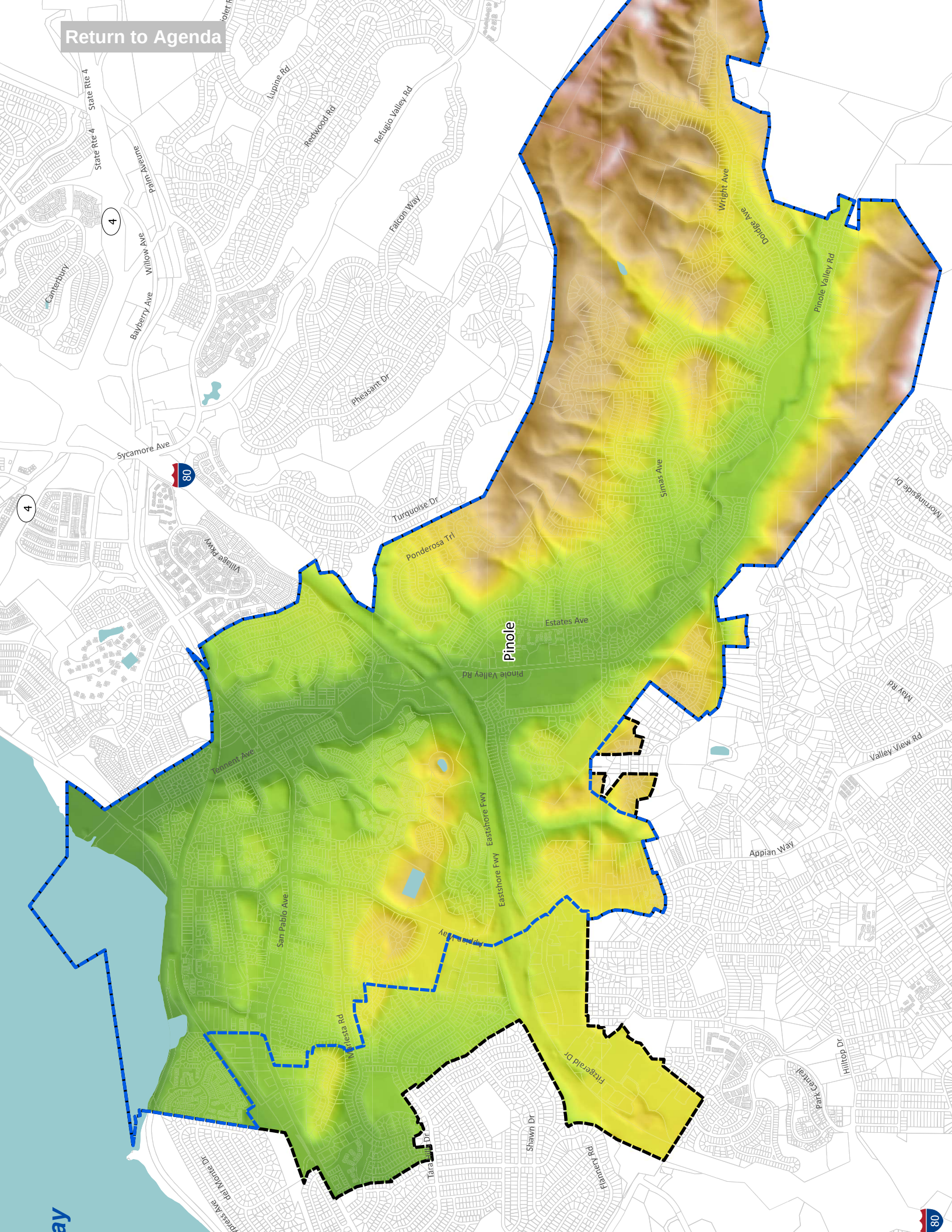
2.4 Land Use

Land use information is an integral component in determining the wastewater generation within a given service area. The type of land use in an area will affect the volume and character of the wastewater generation. Adequately estimating wastewater flow from various land use types is important in sizing and maintaining effective system facilities.

An important tool for determining land use projections is the City's General Plan, which was updated in November 2010. The land use assumptions provided in the General Plan were used for the purpose of this Master Plan. The Master Plan identifies three general land use categories, residential, commercial and public and other uses. These categories are split down even further into specific land use categories:

- Residential:
 - Low Density Residential.
 - Suburban Residential.
 - Medium Density Residential.
 - High Density Residential.
- Commercial:
 - Regional Commercial.
- Public and Other Uses:
 - Mixed Use Sub-Area.
 - Old Town Service Area.
 - Service Sub-Area:
 - San Pablo Avenue.
 - Pinole Valley Road.
 - Appian Way.
 - Rural.
 - Open Space.
 - Parks and Recreation.
 - Public/ Quasi-Public/ Institutional.
 - San Pablo Bay Conservation Area.
 - Transportation.





The City currently has limited open space/land available for future development. However, there is the potential for redevelopment/densification in certain areas of the City. The City's General Plan identifies three primary areas of growth:

- San Pablo Avenue Corridor.
- Appian Way Corridor.
- Pinole Valley Road Corridor.

Figure 2.2 shows the existing land use within the City limits, based on the 2010 General Plan. Table 2.2 provides a summary, by land use, of the amount of developed and developable land within the City limits.

Table 2.2 General Plan Land Use

Land Use Designation	Acres
Residential	
Low Density Residential	48.7
Residential Sub-Area	24.8
Suburban Residential	1,097.0
Medium Density Residential	97.4
High Density Residential	19.3
Residential Subtotal	1,287
Commercial	
Regional Commercial	67.8
Commercial Subtotal	67.8
Public and Other Uses	
Mixed Use Sub-Area	183.5
Old Town Sub-Area	31.9
Service Sub-Area	40.2
Open Space	392.8
Parks and recreation	295.7
Rural	409.6
Public/Quasi-Public/Institutional	101.4
San Pablo Bay Conservation Area	232.0
Transportation	545.0
Public and Other Uses Subtotal	2,232
Total	3,587

Notes:

(1) Source: City of Pinole General Plan (2010).

As shown in Table 2.2, out of the total 3,587 acres within the City limits. There are approximately 83 acres (2 percent) of developable land within the City limits. Of the 83 developable acres, 59.6 acres (72 percent) are classified as residential, 5.2 acres (6 percent) are classified as mixed-use, and the remaining 18.3 acres (22 percent) are classified as service sub-area, which is broken down into three primary categories: San Pablo Avenue, Appian Way and Pinole Valley

Road. The service sub-area is part of the Three Corridors Specific Plan Area Land Uses that includes three land use types: Mixed-Use, Old Town, and Service Sub-Area.

2.4.1 Planned Developments

The City provided Carollo with a list of planned developments which includes a variety of mixed-use and service sub-area land use types. These developments are assumed to be fully developed by the buildout planning horizon. The number of units and area of each planned development is summarized in Table 2.3, while the location of each development is shown on Figure 2.3. The planned developments are expected to result in roughly 395 new residential units and approximately 1.7 acres of commercial development.

Table 2.3 Planned Developments

Development Name	Existing Land Use	Study Area	Residential Units ⁽²⁾	Residential (ac)	Commercial (ac)
811 San Pablo Avenue	Mixed-Use Sub Area	San Pablo Avenue Corridor	33	0.61	
Vista Woods Apartments 1230 San Pablo Avenue	Mixed-Use Sub Area	San Pablo Avenue Corridor	179	2.02	
The BCRE Project 2801 Pinole Valley Road	Service Sub Area	Pinole Valley Road Corridor	29	1.74	1.74
Appian Way 2151 Appian Way	Service Sub Area	Appian Way Corridor	154	3.38	
Total	-	-	395	7.75	1.74

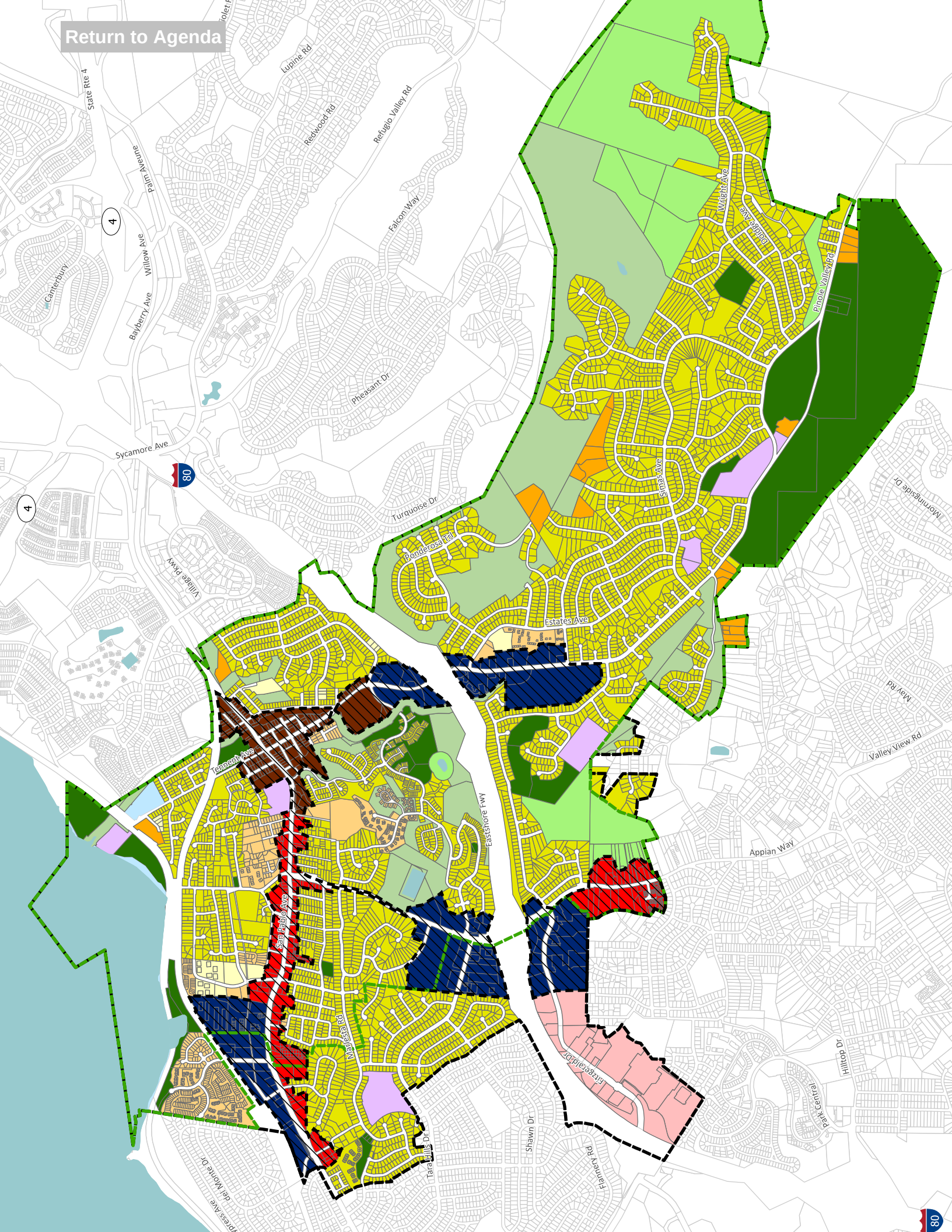
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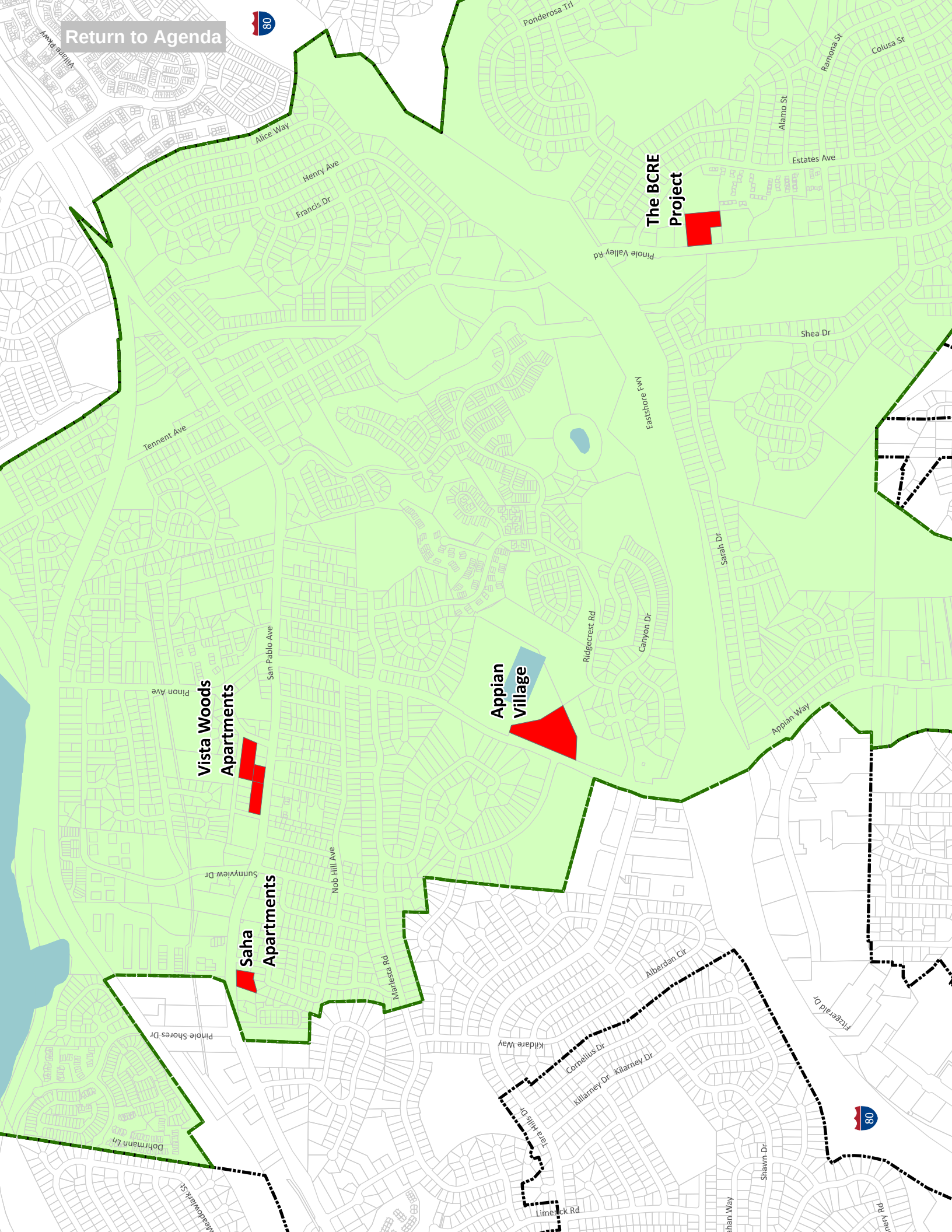
(1) Source: City of Pinole.

(2) All residential units are multifamily.

2.4.2 Additional Infill and Redevelopment

The City currently has little open space/land available for future development. However, there is the potential for redevelopment/densification in certain areas of the City. Figure 2.4 shows the areas that are vacant/underdeveloped.





2.4.3 Accessory Dwelling Units

Accessory dwelling units (ADUs) are also expected to contribute wastewater flows in the future. The City provided Carollo with the historic number of ADU applications received from 2018-2021. For the years 2022-2030, a 10-percent increase was assumed. The ADU projection summary is shown in Table 2.4. Development of ADUs beyond 2030 is not included in this Master Plan. It is recommended that the City continue to monitor the number of applications and actual development of ADUs to better estimate the number of future ADUs.

Table 2.4 ADU Projection Summary

Year	ADU's/year ⁽¹⁾
2018	3
2019	4
2020	7
2021	12
2022	13
2023	14
2024	15
2025	17
2026	19
2027	21
2028	23
2029	25
Total	201

Notes:

(1) Number of ADU's for 2018-2021 based on number of applications received. Assumed 10 percent increase in ADU applications for 2022 through 2030.

2.5 Population

This section summarizes historical population trends, existing, and projected population.

2.5.1 Historical and Existing Population

Historical population estimates from the California State Department of Finance (DOF) from years 2001 through 2020 are presented in Table 2.5. As of 2020, the total existing population within the City's boundaries was estimated at 19,505 people. This includes the area that is serviced by WCW. The average growth rate, over the past 20 years is approximately 0.12 percent.

Table 2.5 Historic and Existing Population

Year	Population	Population Connected to Sewer	Net Increase	Growth from Previous Year
2001	19,194	17,300	155	0.81 percent
2002	19,140	17,246	-54	-0.28 percent
2003	19,099	17,205	-41	-0.21 percent
2004	19,044	17,150	-55	-0.29 percent

Year	Population	Population Connected to Sewer	Net Increase	Growth from Previous Year
2005	18,837	16,943	-207	-1.10 percent
2006	18,460	16,566	-377	-2.04 percent
2007	18,291	16,397	-169	-0.92 percent
2008	18,304	16,410	13	0.07 percent
2009	18,335	16,441	31	0.17 percent
2010	18,390	16,496	55	0.30 percent
2011	18,533	16,639	143	0.77 percent
2012	18,693	16,799	160	0.86 percent
2013	18,972	17,078	279	1.47 percent
2014	19,117	17,223	145	0.76 percent
2015	19,271	17,377	154	0.80 percent
2016	19,430	17,536	159	0.82 percent
2017	19,498	17,604	68	0.35 percent
2018	19,546	17,652	48	0.25 percent
2019	19,563	17,669	17	0.09 percent
2020	19,505	17,611	-58	-0.30 percent
20 Year Average Growth				0.12 percent

Notes:

(1) Source: California DOF.

2.5.2 Projected Population

The projected population growth is summarized in Table 2.6 and shown in Figure 2.5. As shown in Table 2.6, the City is projected to experience a growth rate in population of about 10-percent by 2030, according to the City's General Plan.

Table 2.6 Projected Population Growth

	City Wide Population	Net Increase	Sewer Service Area Population	Net Increase
2020 ⁽¹⁾	19,505	-	17,611	-
2025 ⁽²⁾	21,200	8 percent	18,652	6 percent
2030 ⁽²⁾	21,800	10 percent	19,252	3 percent

Notes:

(2) Source: California DOF.

(3) Source: General Plan 2010.

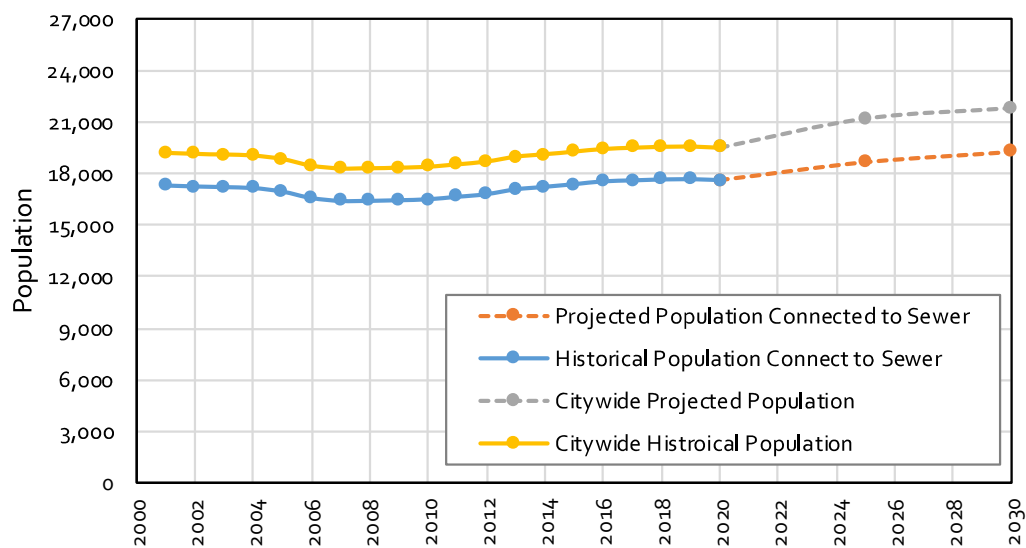


Figure 2.5 Historic and Projected Population for Sewer Service Area

Chapter 3

PLANNING AND EVALUATION CRITERIA

This chapter presents the planning criteria and methodologies for the analysis used to evaluate the City's existing sanitary sewer collection system which are utilized to identify existing system deficiencies, and to size future improvements. The planning criteria address the collection system capacity, acceptable gravity sewer pipe slopes, maximum allowable depth of flow, design velocities, and changes in pipe size.

3.1 Gravity Sewer Criteria

Gravity sewer pipe capacities are dependent on many factors, such as pipe roughness, the chosen maximum allowable depth of flow, pipeline velocity, and slope. The following sections describe the factors that account for the determination of existing and future pipeline capacities in the City's collection system.

3.1.1 Manning's Coefficient (n)

The Manning's coefficient "n" is a friction coefficient that represents resistance to flow, and varies with respect to pipe material and condition, smoothness of joints, root intrusion, and other factors. For sewer pipes, the Manning's coefficient typically ranges between 0.011 and 0.017, with 0.013 being a representative value used for system planning purposes. Due to unknown conditions of existing pipelines, a conservative Manning's "n" factor of 0.013 was initially used for the evaluation of all existing collection system pipelines. Pipe roughness values were adjusted during calibration. The evaluation of all proposed pipelines used a Manning's "n" factor of 0.013.

3.1.2 Peak Flow Depth Criteria

The primary criterion used to identify pipeline capacity deficiencies or to size new sewer improvements is the peak flow depth criteria, which is represented by the d/D ratio (depth of flow, d, to pipe diameter, D, ratio). For example, a minimum d/D of 0.5 means that the maximum allowable flow depth is 50-percent. Based on Carollo's experience, City staff input, and industry standards, the criteria listed in Table 3.1 were used to evaluate existing and proposed sewers.

Table 3.1 Maximum Flow Depth Criteria

Pipe Type	Pipe Diameter (inches)	Maximum Flow Depth Criteria
Existing Sewers	All Pipes	Minimum 3-feet freeboard
New Sewers (Future/Proposed)	Smaller than 15-inch	d/D = 0.50
New Sewers (Future/Proposed)	15-inch and Larger	d/D = 0.75

Maximum flow depth criteria for existing and new sanitary sewers are established based on a number of factors, including the acceptable risk tolerance of the utility, local standards and codes, and other factors.

Using a conservative (low) flow depth criteria when evaluating existing sewers may lead to unnecessary replacement of existing pipelines. Conversely, lenient flow depth criteria could increase the risk of sanitary sewer overflows (SSOs). Ultimately, the maximum allowable flow depth criteria should be established to be as cost-effective as possible while at the same time reducing the risk of SSOs to the greatest extent possible. For the City, existing pipelines where the maximum hydraulic grade line (HGL) reached within 3-ft of the manhole rim. The maximum allowable flow depth for new sewers varies depending on the pipe diameter (0.5 for pipes smaller than 15-inches and 0.75 for pipes 15-inches and larger).

System bottlenecks raise the hydraulic grade line of upstream sewers, leading to backwater conditions. The greater the capacity deficiency, the higher water levels will surcharge upstream of the bottleneck pipeline (or pipelines). The hydraulic model is used to determine “backwater” pipelines in order to specify which specific pipelines are the actual root causes of the capacity deficiency. Capital projects are proposed to provide greater flow capacity for the deficient sewers, which eliminates the backwater conditions that cause surcharging.

3.1.3 Design Velocities and Minimum Slope

To minimize the settlement of sewage solids, it is industry standard to specify a minimum velocity of 2-feet per second (fps). At this velocity, the sewer flow will provide self-cleaning of the pipe. Table 3.2 lists the recommended minimum slopes for new pipes to maintain a minimum velocity of 2-fps.

Table 3.2 Minimum Slope for New Pipes

Pipe Diameter (inches)	Maximum d/D Ratio ⁽¹⁾	Recommended Minimum Slope ⁽²⁾ (feet/feet)
8	0.50	0.0034
10	0.50	0.0025
12	0.50	0.0020
15	0.75	0.0012
18	0.75	0.0009
21	0.75	0.0008
24	0.75	0.0006
30	0.75	0.0005
36	0.75	0.0004
42	0.75	0.0003

Notes:

(1) Based on criteria outlined in Table 3.1.

(2) Recommended minimum slope to provide a minimum velocity of 2 fps (based on maximum allowable flow depth).

3.1.4 Changes in Pipe Size

When a smaller sewer joins a large one, the invert of the larger sewer should be lowered sufficiently to maintain the same energy gradient. An approximate method for securing these results is to place the 80 percent depth point of both sewers at the same elevation. For planning purposes and designing new pipes, sewer crowns for new/proposed pipelines are typically matched at the manholes.

3.2 Pump Stations and Force Mains

Industry standard practice is to require that sewage pump stations have sufficient capacity to pump peak flows with the largest pump out of service (firm capacity). Force main piping should be sized to provide a minimum velocity between 3-fps and 8-fps. For the determination of headloss, the Hazen-Williams equation is used with a C-factor of 120, which is typical for sewer system master planning purposes.

3.3 Peak Wet Weather Flow Design Storm

Design storms are rainfall events used to analyze the performance of a collection system under extreme wet weather events. The City's design storm was applied to the collection system hydraulic model to determine peak wet weather flows (PWWFs). The first step in the development of the design storm is to define its recurrence interval and rainfall duration. The recurrence interval is based on the probability that a given rainfall event will occur or be exceeded in any given year. For example, a "100-year storm" means there is a 1 in 100 chance that a storm as large as or larger than this event will occur at a specific location in any year.

The design storm for the City of Hercules was based on the Central Contra Costa Sanitary District Master Plan Update (Carollo, 2017). Because both the City of Hercules and Pinole discharge to the WPCP, the design storm used for the City of Hercules was used to be consistent. The design storm used was a 10-year, 24-hour storm event with a total of 24-hour rainfall volume of 3.52-inches. A 10-year, 24-hour design storm is commonly used in California to determine PWWF in collection systems. The distribution of rainfall for the 10-year, 24-hour event was based on the 12/30-31, 2005 historical event and has a peak hourly rainfall intensity of 0.54 inches per hour. The design storm is shown in Figure 3.1

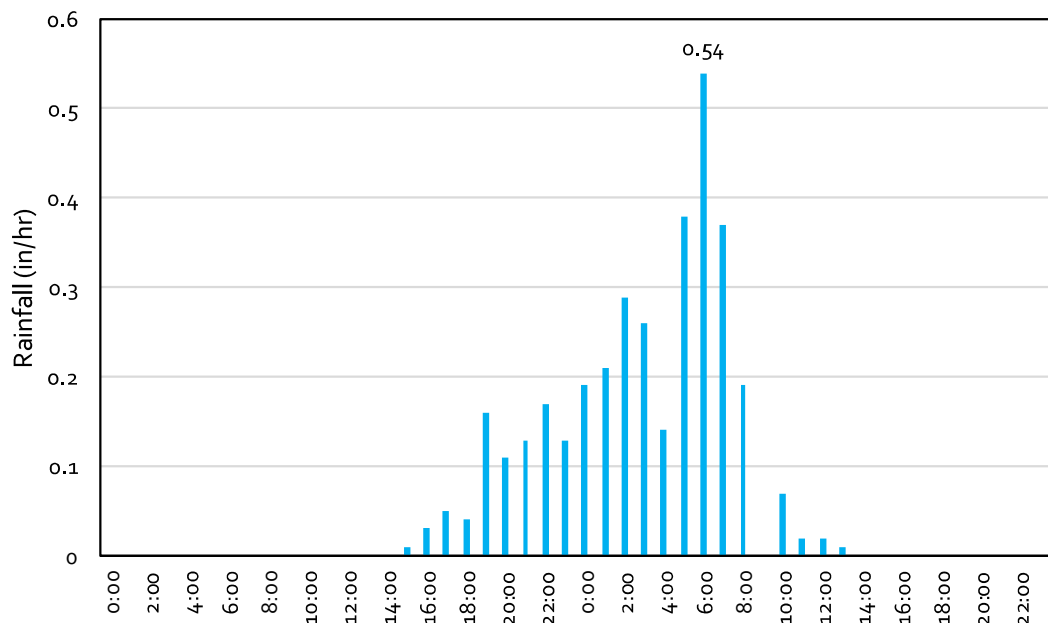


Figure 3.1 10-Year, 24-Hour Design Storm

Chapter 4

WASTEWATER FLOWS

This chapter summarizes the City's historic and projected wastewater flows. Included is a discussion on various flow components present in wastewater and a summary of the flow monitoring data that was used as part of the Master Plan.

4.1 Wastewater Flow Components

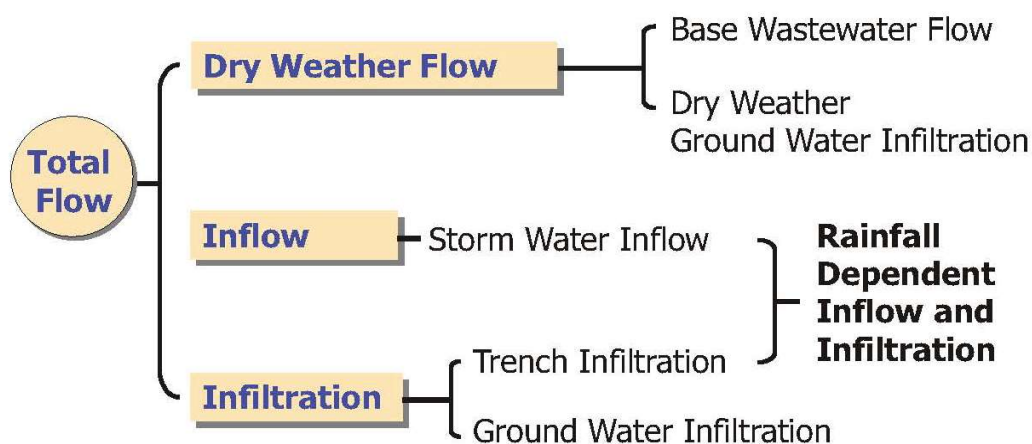
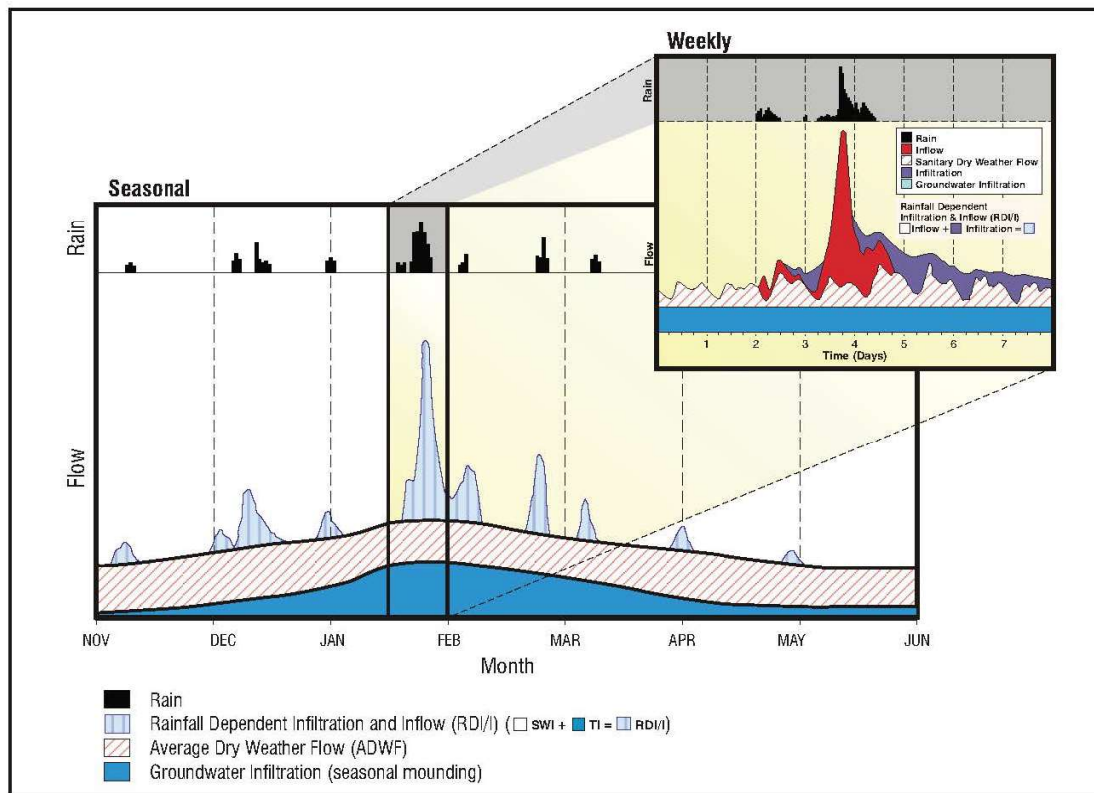
This section describes the terminology used for the hydraulic analysis of the wastewater collection system. Wastewater flows vary according to season and generally consist of DWF and WWF. DWF and WWF both include base wastewater flow (BWF), which is the day-to-day diurnal flow generated by the customers within the City-connected to the sewer system.

Figure 4.1 illustrates the various flow components of wastewater in general, which are described in detail below:

- **BWF.** The BWF is the flow generated by the City's customers independent of wet weather influences. BWF is estimated by measuring flows during dry weather conditions. The flow has a diurnal pattern that varies depending on the type of use. Commercial and industrial patterns, though they vary depending on the type of use, typically have consistently higher flows during business hours and lower flows at night. Furthermore, the diurnal flow pattern experienced during a weekend may vary from the diurnal flow experienced during a weekday.
- **Average Annual Flow (AAF).** The AAF is the average flow that occurs on a daily basis throughout the year, including both periods of dry and wet weather conditions.
- **Average Dry Weather Flow (ADWF).** The ADWF is the average flow that occurs on a daily basis during the dry weather season. The ADWF includes the BWF generated by the City's residential, commercial, and industrial users, plus the dry weather groundwater infiltration (GWI) component.
- **GWI.** GWI is the result of extraneous water entering the sewer system through defects in pipes and manholes. GWI is related to the condition of the sewer pipes, manholes, and groundwater levels. GWI may occur throughout the year, although rates are typically higher in the late winter and early spring. Dry weather GWI (or base infiltration) cannot easily be separated from BWF by flow measurement techniques. Therefore, dry weather GWI is typically grouped with BWF.
- **Rainfall-Derived Inflow/Infiltration (RDII).** Wet weather infiltration and inflow (I/I) causes flows in the collection system to increase. Infiltration is defined as storm water flows that enter the sewer system by percolating through the soil and then through defects in pipelines, manholes, and joints. Examples of infiltration entry points are cracks in pipelines, misaligned joints, and root penetration. Inflow is defined as storm water that enters the sewer system via storm drain cross connections, leaky manhole covers, or cleanouts. Examples of inflow entry points are roof drain and downspout connections, leaky manhole covers, and illegal storm drain connections. Some of the

most common sources of I/I are shown on Figure 4.2. The adverse effects of I/I entering the sewer system is that it increases both the peak flow as well as the total volume, as illustrated on Figure 4.3.

- **PWWF.** PWWF is the highest observed flow that occurs following a design storm event and is typically used for designing sewers, lift stations, and some unit processes in a treatment plant. Therefore, the PWWF and the “Design Flow” are synonymous and will be used interchangeably throughout this report.



Note: This figure is not based on flow data specific to the City or this Master Plan

Figure 4.1 Typical Wastewater Flow Components

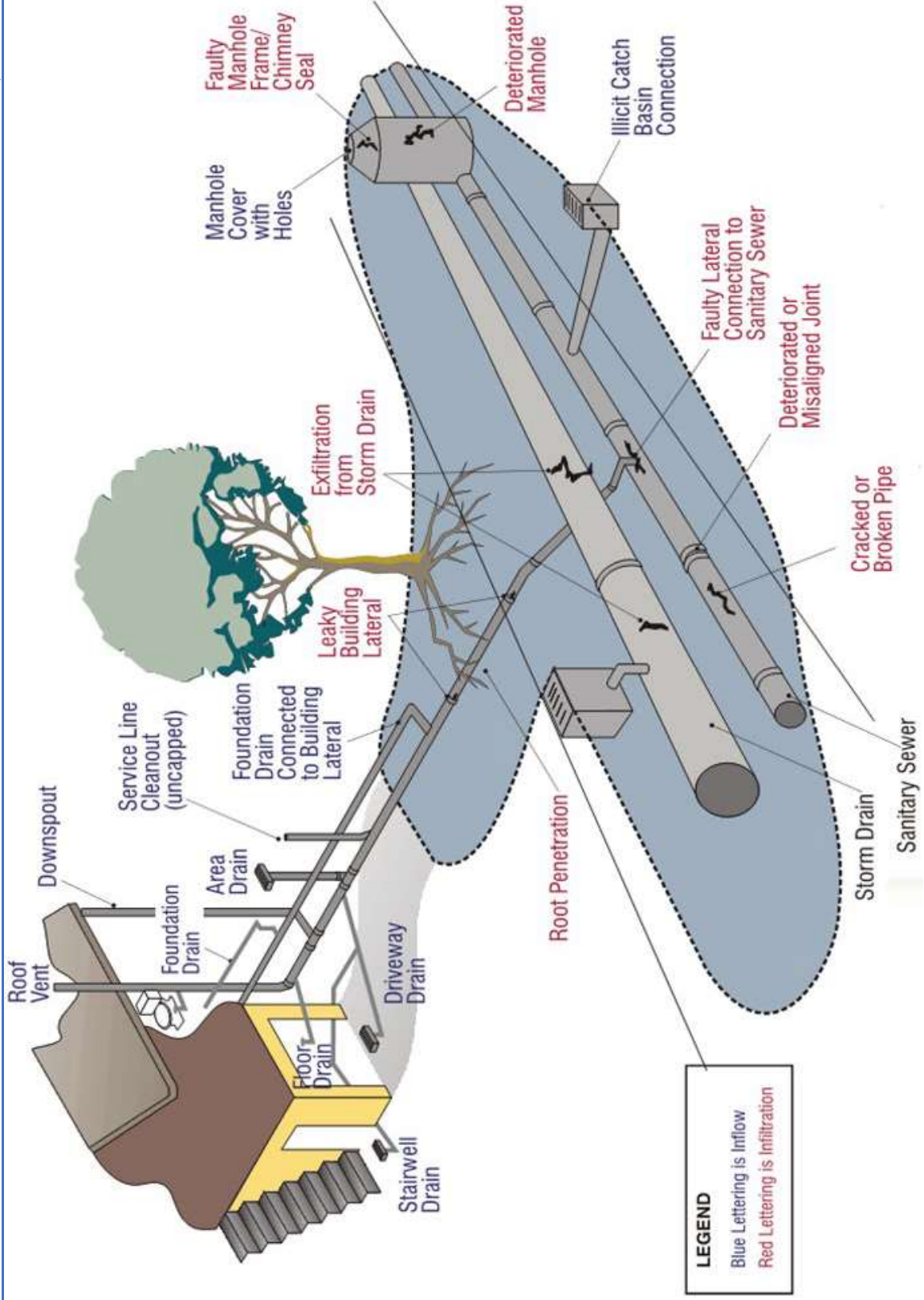


Figure 4.2 Typical Sources of Infiltration and Inflow

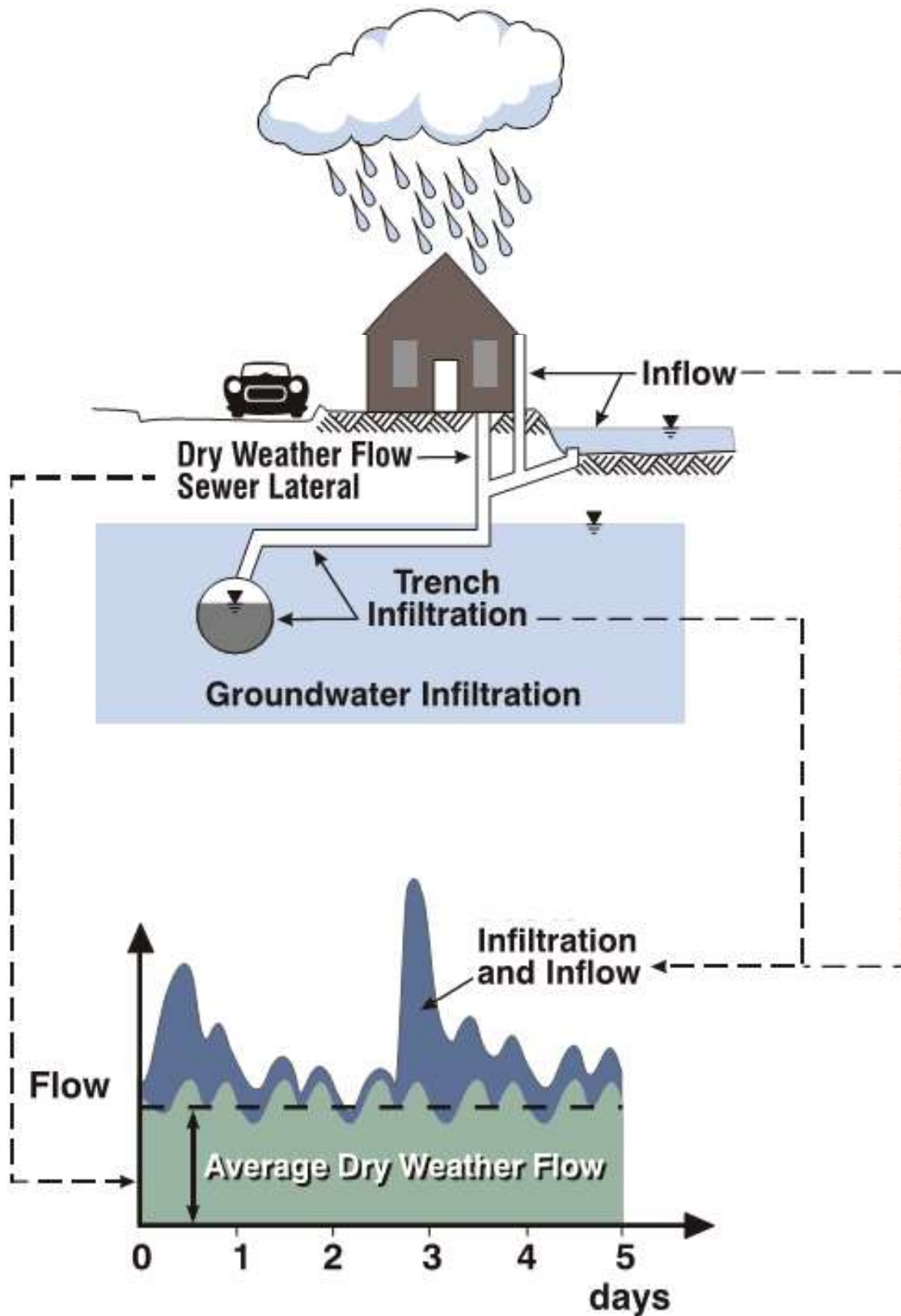


Figure 4.3 Typical Effects of Infiltration and Inflow

4.2 Temporary Flow Monitoring Program

V&A Consulting Engineers, Inc. (V&A) conducted a temporary flow monitoring program between 1/20/2014 and 3/30/2014. Flow monitoring was performed in three phases:

- **Phase 1:** 1/20/2014 through 2/16/2014.
- **Phase 2:** 2/24/2014 through 3/5/2014.
- **Phase 3:** 3/24/2014 through 3/30/2014.

The initial Phase 1 broke the collection system into 16 larger basins generally north of Interstate 80 (I-80), to establish base wastewater flow and identify basins with high rates of I/I. Following the first rain event in Phase 1, some meters were removed and relocated to break up the basins with higher I/I. Phase 3 served to further break down the Phase 2 basins with the highest I/I. Overall, a total of 34 sites were monitored during one or more phases.

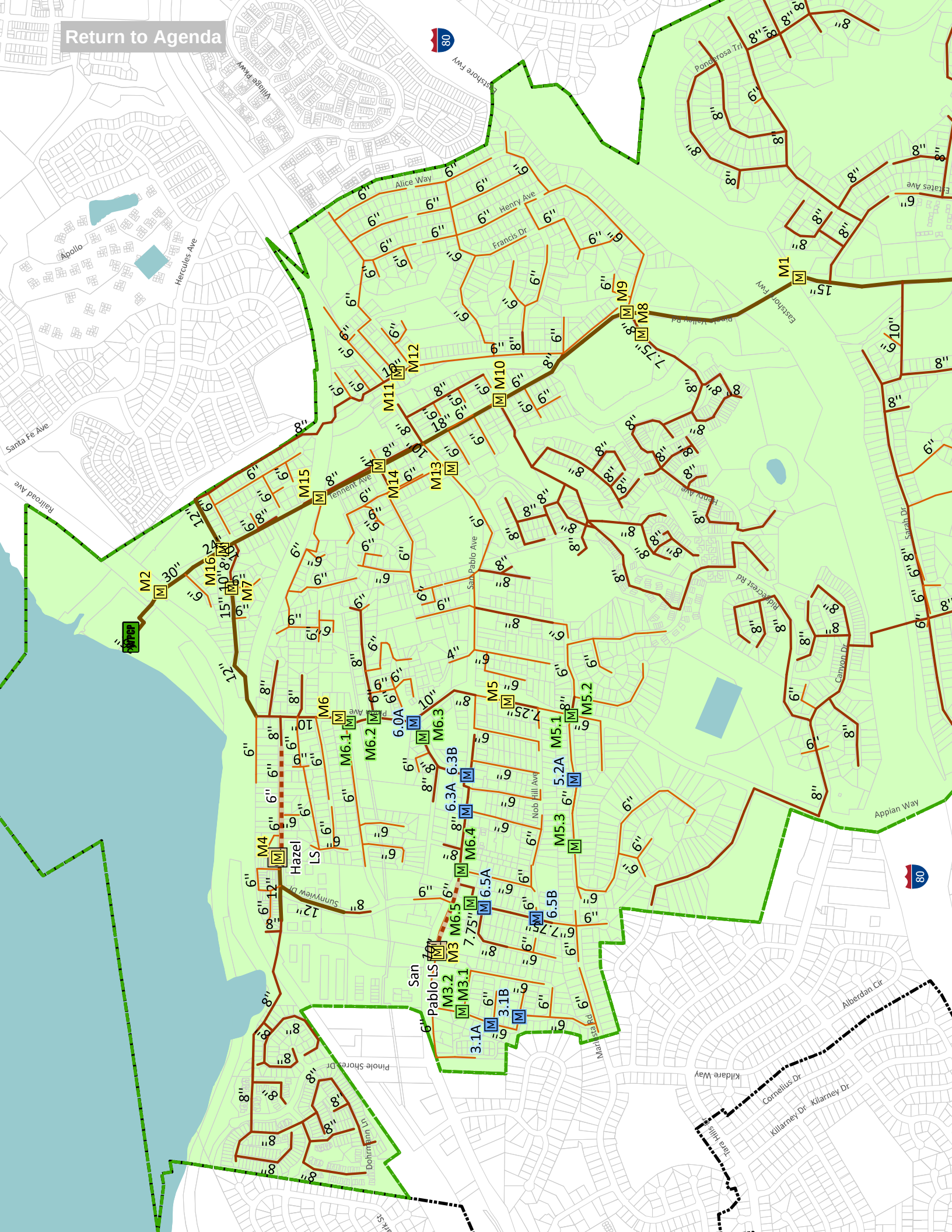
The temporary flow monitoring program helped develop design flow criteria and correlate actual collection system flows to the hydraulic model predicted flows. Flow monitoring data was used to calibrate the collection system hydraulic model for dry weather and wet weather flow and to help to identify areas of the system with the highest rates of I/I. The City defined an “Area of Interest” north of I-80 as the goal of the 2014 flow monitoring program.

4.2.1 Flow Monitoring Sites and Tributary Areas

Open-channel flowmeters were installed at 32 gravity sites and volumetric meters sensors were installed at the two lift stations, throughout all three phases. Table 4.1 lists the flow monitoring locations and the sewer diameters where the meters were installed. The 34 flow monitoring locations, as well as the tributary area to each site, are shown on Figure 4.4. Figure 4.5 provides a schematic illustration of the flow monitoring locations for each phase.

eM3	LS Logger	n/a	Sunnyview Drive)	n/a	n/a	n/a
eM3.1	Return to Agenda		830 Meadows Avenue	n/a	✓	✓
eM3.1A	gravity	6	Intersection of Meadow Avenue and Betty Avenue	n/a	n/a	✓
eM3.1B	gravity	6	Intersection of Meadow Avenue and Nob Hill Avenue	n/a	n/a	✓
eM3.2	gravity	6	830 Meadows Avenue	n/a	✓	n/a
eM4	LS Logger	n/a	Hazel Lift Station (In easement at west end of Hazel Street)	✓	n/a	n/a
eM5	gravity	7.25	Appian Way south of San Pablo Avenue	✓	n/a	n/a
eM5.1	gravity	8	Intersection of Appian Way and Marlesta Road	n/a	✓	n/a
eM5.2	gravity	8	Intersection of Appian Way and Marlesta Road	n/a	✓	✓
eM5.2A	gravity	6	1367 Marlesta Road	n/a	n/a	✓
eM5.3	gravity	6	1171 Marlesta Road	n/a	✓	✓
eM6	gravity	10	Pinon Avenue north of Bay View Farm Road	✓	n/a	✓
eM6.0A	gravity	10	Intersection of Roble Avenue and Pinon Avenue	n/a	n/a	✓
eM6.1	gravity	6	Just west of the intersection of Bay View Farm Road and Pinon Avenue	n/a	✓	n/a
eM6.2	gravity	8	Intersection of Pinon Avenue and Primrose Lane	n/a	✓	n/a
eM6.3	gravity	8	Roble Avenue west of Pinon Avenue	n/a	✓	✓
eM6.3A	gravity	6	Intersection of San Pablo Avenue and 5th Avenue	n/a	n/a	✓
eM6.3B	gravity	8	Intersection of San Pablo Avenue and Roble Avenue	n/a	n/a	✓
eM6.4	gravity	8	Intersection of San Pablo Avenue and Rogers Way	n/a	✓	n/a
eM6.5	gravity	8	747 Sunnyview Drive	n/a	✓	✓
eM6.5A	gravity	7.75	Intersection of Sunnyview Drive and Patrick Drive	n/a	n/a	✓
eM6.5B	gravity	7.75	Intersection of Sunnyview Drive and Nob Hill Avenue	n/a	n/a	✓
eM7	gravity	15	Intersection of Orleans Drive and Zoe Court	✓	n/a	n/a
eM8	gravity	7.75	Henry Avenue west of Pinole Valley Road	✓	n/a	n/a
eM9	gravity	6	Intersection of Henry Avenue and Pinole Valley Road	✓	n/a	n/a
eM10	gravity	8	Intersection of Tennent Avenue and Prune Street	✓	n/a	n/a
eM11	gravity	10	Intersection of Pinole Valley Road and Rafaela Street	✓	n/a	n/a
eM12	gravity	8	Intersection of Pinole Valley Road and Rafaela Street	✓	n/a	n/a
eM13	gravity	6	San Pablo Avenue just west of Quinan Street	✓	n/a	n/a
eM14	gravity	8	Intersection of Tennent Avenue and Park Street	✓	n/a	n/a
eM15	gravity	6	Tennent Avenue south of the train tracks west of Fernandez Park	✓	n/a	n/a
eM16	gravity	11.5	Tennent Avenue north of Orleans Drive	✓	n/a	n/a

:
 n/a means it is not active during this phase of the flow monitoring period.
 Internal measured diameter.



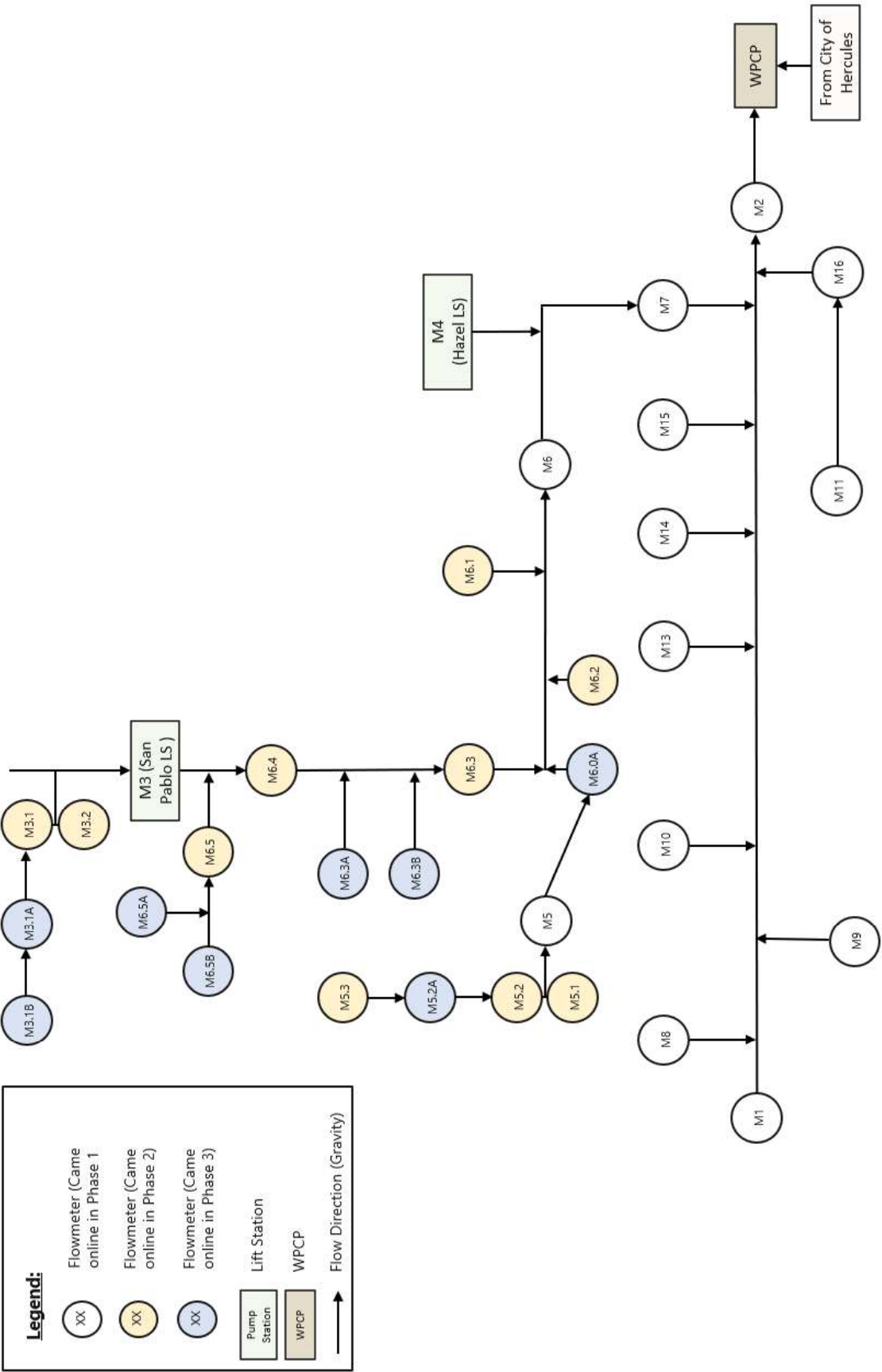


Figure 4.5 Flow Monitoring Schematic

4.2.2 Flowmeter Installation and Flow Calculation

V&A installed a combination of Isco 2150 flowmeters and Hatch Flo-Dar flowmeters for temporary monitoring within the collection system. Isco 2150 meters use submerged sensors with a pressure transducer to collect depth readings and an ultrasonic Doppler sensor to determine the average fluid velocity. The ultrasonic sensor emits high-frequency sound waves, which are reflected by air bubbles and suspended particles in the flow. The sensor receives the reflected signal and determines the Doppler frequency shift, which indicates the estimated average flow velocity. The sensor is typically mounted at a manhole inlet to take advantage of smoother upstream flow conditions. The sensor may be offset to one side to lessen the chances of fouling and sedimentation where these problems are expected to occur. Manual level and velocity measurements were taken during the installation of the flowmeters and again when they were removed and compared to simultaneous level and velocity readings from the flowmeters to ensure proper calibration and accuracy. The pipeline diameter was also verified in order to accurately calculate the flow cross-section. The continuous depth and velocity readings were recorded by the flowmeters on 5-minute intervals. The flow at each meter was calculated at 5-minute intervals based on the continuity equation:

$$Q = V \times A$$

where,

Q = Pipeline flow rate, cfs

V = Average velocity, ft/s

A = Cross sectional flow area, ft²

Finally, the 5-minute flow, velocity, and level data were aggregated into 15-minute increments.

4.2.3 Rain Gauges

V&A collected data from four rain gauges near the City. Rainfall data was collected in 15-minute intervals throughout the flow monitoring period.

4.3 Flow Monitoring Program Results

This section summarizes the results of the flow monitoring program, including dry weather flow, rainfall data, and wet weather flow results. Appendix A includes additional data summaries and other information associated with the temporary flow monitoring program. Results for meter site M7 is presented throughout this chapter as an example.

4.3.1 Dry Weather Flow Data

During the flow monitoring period, flow, depth, and velocity data were collected at each meter at 15-minute intervals. Carollo aggregated the 15-minute data to hourly data for use in the hydraulic model. Characteristic dry weather 24-hour diurnal flow patterns for each site were developed based on the hourly data. This hourly flow data was then used to calibrate the hydraulic model for the observed dry weather flows during the flow monitoring period. For this flow monitoring program, V&A developed two ADWF curves for each site location (weekday and weekend). Hourly patterns were separated this way to better understand how the dry weather flows vary day to day as flows often differ on weekday evenings compared to weekend. V&A used the data from days least affected by rainfall to estimate the weekday and weekend ADWF.

Figure 4.6 illustrates a typical variation of weekday and weekend flows in the City's wastewater collection system, which is based on the data collected from flowmeter site M7. Similar graphics

associated with the remaining sites are included in Appendix A. Table 4.2 summarizes the dry weather flows at each meter. As shown on Figure 4.6, flow patterns differ according to the day of the week. Dry weather flow for weekdays experienced an earlier and shorter morning peak and a later evening peak. By contrast, the weekend pattern shows a later and prolonged morning peak, which levels off until the late evening.

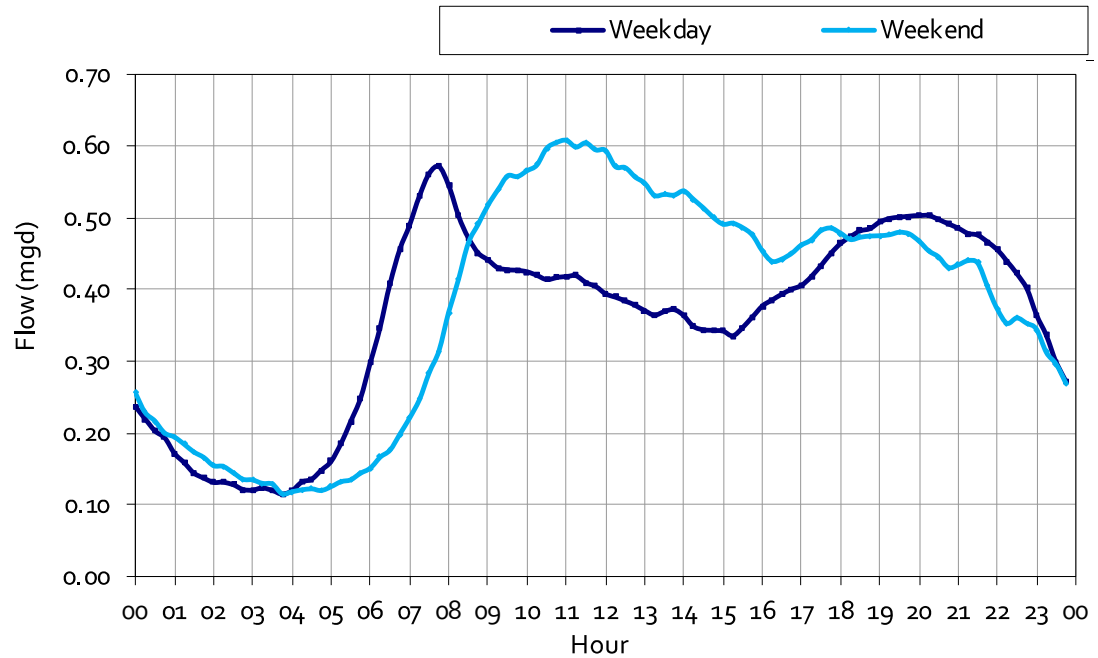


Figure 4.6 Typical Dry Weather Flow Variation (Site M7)

Table 4.2 Dry Weather Flow Summary

Site	ADWF (mgd)		
	Weekday	Weekend	Overall
Phase 1			
Site M1	0.459	0.497	0.47
Site M2	1.11	1.105	1.109
Site M3	0.067	0.068	0.067
Site M4	0.126	0.136	0.129
Site M5	0.019	0.02	0.019
Site M6	0.172	0.189	0.177
Site M7	0.358	0.378	0.364
Site M8	0.007	0.006	0.007
Site M9	0.004	0.005	0.004
Site M10	0.083	0.09	0.085
Site M11	0.018	0.016	0.017
Site M12	0.003	0.003	0.003
Site M13	0.055	0.058	0.056

Site	ADWF (mgd)		
	Weekday	Weekend	Overall
Site M14	0.041	0.044	0.042
Site M15	0.015	0.016	0.015
Site M16	0.083	0.091	0.085
Phase 2			
Site M3.1	0.035	0.025	0.032
Site M3.2	0.011	0.011	0.011
Site M5.1	0.022	0.026	0.023
Site M5.2	0.011	0.013	0.013
Site M5.3	0.022	0.023	0.022
Site M6.1	0.01	0.014	0.011
Site M6.2	0.015	0.018	0.016
Site M6.3	0.171	0.14	0.162
Site M6.4	0.076	0.103	0.084
Site M6.5	0.008	0.011	0.009
Phase 3			
Site M3.1A	0.009	0.01	0.009
Site M3.1B	0.006	0.006	0.006
Site M5.2A	0.009	0.01	0.009
Site M6.0A	0.056	0.061	0.057
Site M6.3A	0.005	0.005	0.005
Site M6.3B	0.003	0.004	0.003
Site M6.5A	0.003	0.003	0.003
Site M6.5B	0.003	0.004	0.003

Notes:

- (1) Source: City of Pinole Sanitary Sewer Flow Monitoring and I/I Study, V&A Consulting Engineers, Inc. (2015).
 (2) Overall DWF = $((5 \times \text{Weekday}) + (2 \times \text{Weekend})) / 7$.

In addition, V&A provided estimates for the average weekday and weekend levels and velocities at each site, which are used for dry weather calibration.

4.3.2 Rainfall Data

The rainfall data collected by V&A was used to correlate the I/I response observed in the collection system to specific storm recurrence intervals. At least one major rainfall event was captured during each Phase of the flow monitoring program. The rain gauges recorded a total of 6.48 and 11.28-inches of rain during the entire flow program depending on location. The February 2-10, 2014 rainfall event was the most significant event captured and elicited the greatest I/I response throughout the collection system. The rain gauges recorded between 3.00 and 5.47-inches of rain during the February 2-10, 2014 storm event. Table 4.3 summarizes the rainfall amount for each rain gauge for the major storm events for each phase, along with the total rainfall captured during the flow monitoring program.

Table 4.3 Rain Gauge Data

Storm Event	North	East	South	West
February 2 – 10, 2014 (Phase 1)	3.75	5.47	4.76	3.00
February 26 – March 6, 2014 (Phase 2)	2.34	2.48	2.55	1.28
March 26 – April 1, 2014 (Phase 3)	2.45	3.17	3.09	2.46
Season Total (inches)	8.69	11.28	10.55	6.84
February 2/10/2014 Event Classification(2)	< 1 year	4 year, 24 hour	1+ year, 24 hour	< 1 year

Notes:

(1) Source: V&A 2014 Sewer Flow Monitoring and Inflow/Infiltration Study.

(2) Storm event classifications only provide for February 2-10, 2014 event because this was the largest event.

It is important to classify the size of any major storm events captured during the flow monitoring period. National Oceanic and Atmospheric Administration (NOAA) Atlas 14 provides precipitation frequency estimates for the United States based on historical rainfall data and serves as the industry standard for determining total rainfall depth at specified frequencies and durations. The Atlas provides precipitation frequency estimates for 5-minutes through 60-days durations at average recurrence intervals of 1-year through 1,000-year.

The largest storm event classifications for the February 2-10, 2014 storm event is listed in Table 4.4 for each rain gauge site. As shown, the February 2-10, 2014 was classified as a 4-year, 24-hour storm event at the East rain gauge. This storm event was classified as approximately 1-year or less storm event at the other rain gauge sites.

4.3.3 Wet Weather Flow Data

The flow monitoring data was also evaluated to determine how the collection system responds to wet weather events. As mentioned above, the flow monitoring program captured three rainfall events, and all were used for the I/I analysis and model calibration.

Figure 4.7 shows an example of the wet weather response at flowmeter M7 during the February 2-10, 2014 storm event. Additional wet weather monitoring results for all meters can be found in Appendix A. The dashed line is the calculated ADWF (baseline flow) while the black line is the measured flow from the flow monitoring period (real-time flow). The difference between the real-time flow and the baseline flow is essentially I/I. As shown on Figure 4.7 and Appendix A, significant amounts of I/I do enter portions of the collection system during wet weather events. The following section summarizes the results from V&A's Inflow/Infiltration Analysis as part of the Temporary Flow Monitoring Program.

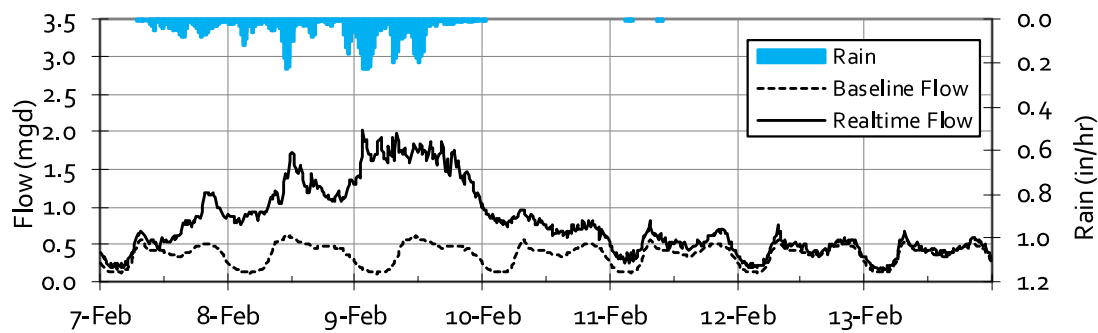


Figure 4.7 Example Wet Weather Flow Response (Site M7)

4.3.4 Inflow and Infiltration Analysis

This section summarizes the findings from V&A's I/I analysis, provided in Appendix A, which was completed for the flowmeters installed as part of the temporary flow monitoring program.

- Site M1 was not included in the analysis because it was used to measure the flow coming into the area of interest.
- Site M2 was not included in the analysis because it was not isolated as a basin because it would have required subtracting flow from 11 other upstream metering sites. This is an issue because when subtracting flows, the inherent error is increased on an additive basis.
- Site M12 was not included because in the analysis because the meter failed after prolonged surcharging during the first storm event.

4.3.4.1 Inflow

As discussed earlier in this chapter, inflow is storm water discharged into the sewer system through direct connections. The corresponding flow rates from these direct connections are closely related to the intensity of the storm. Inflow causes peak flow problems that often dictate downstream pipeline and pump station capacity.

Table 4.4 summarizes the peak measured I/I flows and inflow analysis results. Peak I/I rates for Phase 1 sites were measured for the February 2 – 10, 2014 storm event, Phase 2 sites were measured for the February 26 – March 6, 2014 storm event, and Phase 3 sites were measured for the March 26 – April 1, 2014 storm event. The highest weighted, normalized peak I/I rates are an indicator of high inflow upstream from the flow monitoring basin. Below Summarizes the findings of the inflow analysis:

- In Phase 1, Basins M3, M9 had the highest inflow rankings, respectively. The response for Basin M9 was real and considerable, but the magnitude may not be correct due to metering conditions.
- In Phase 2, Basins M5.2, M3.1, M6.5 had the highest inflow rankings, respectively.
- In Phase 3, Basins M5.2, M6.3A, M3.1 had the highest inflow rankings, respectively.

4.3.4.2 Combined I/I

The combined I/I analysis considers the total volume of I/I over the duration of a storm event. Table 4.5 summarizes the combined I/I results for Phase 1 of the flow monitoring period. Mater basins M11, M16, M15, M5, and M3 had the highest weighted, combined I/I rates, an indicator of high total I/I upstream from the flow monitoring basin.

Table 4.5 Combined I/I Analysis Summary

Basin	ADWF	Total I/I (gallons)	Total I/I per idm	R-Value (per acre)	Total I/I per ADWF	Combined I/I Ranking
Basin M3	0.067	670,000	109,000	19.0 percent	3.07	5
Basin M4	0.129	355,000	8,000	6.9 percent	0.85	11
Basin M5	0.019	570,000	17,000	9.1 percent	9.17	4
Basin M6	0.090	560,000	27,000	4.9 percent	1.90	9
Basin M7	0.058	200,000	5,000	5.5 percent	1.05	10
Basin M8	0.007	1,000	0	0.0 percent	0.05	13
Basin M9	0.004	76,000	5,000	3.1 percent	5.27	7
Basin M10	0.085	291,000	8,000	5.3 percent	1.05	12
Basin M11	0.017	594,000	17,000	12.9 percent	10.51	1
Basin M13	0.056	214,000	21,000	14.2 percent	1.18	8
Basin M14	0.042	412,000	20,000	12.6 percent	3.02	6
Basin M15	0.015	205,000	17,000	14.5 percent	4.17	3
Basin M16	0.086	858,000	55,000	80.9 percent	3.08	2

Notes:

- (1) Source: V&A 2014 Sewer Flow Monitoring and Inflow/Infiltration Study (Appendix A).
- (2) Ranking of 1 represents most inflow after normalization.

4.4 Design Flows

This section summarizes the historic flows measured at the Hercules-Pinole WPCP and presents the calculation of the design flows used to model the existing and future sewer collection system.

4.4.1 Historical Wastewater Flows

In addition to the flow monitoring program, this project reviewed historical influent flow data at the Hercules-Pinole WPCP from 2013 to 2017 (Data from 2018 to present was not evaluated due to inaccurate flow data) to help establish wastewater flow criteria. Historical flow data is for the City only, it excludes the City of Hercules flow. The City's existing ADWF is 1.10, which was measured in the 2014 flow monitoring program.

Flow data from January 2013 through December 2017 are summarized in Table 4.6. The total annual rainfall was included with the table to help show the trends in the AAF. As expected, the non-drought years generally indicate a higher AAF than in the drought years, which was likely due to water conservation efforts and decreased volumes of I/I entering the collection system. The max day peaking factors for drought years (2013 and 2015) are 1.34 and 2.45 respectively.

The max day peaking factor for non-drought years (2014,2016,2017) are significantly higher and range from 4.02 to 5.66.

Table 4.6 Historical Wastewater Flows

Year	Total Annual Rainfall ⁽³⁾ (inches)	Average Annual Flow (mgd)	ADWF ⁽²⁾⁽³⁾ (mgd)	Max Day Flow ⁽³⁾ (mgd)	Max Day: ADWF ⁽³⁾ Peaking Factor
2013	4.0	1.29	1.28	1.72	1.34
2014	16.3	1.34	1.19	5.16	4.34
2015	8.0	1.14	1.10	2.69	2.45
2016	16.4	1.31	1.12	4.49	4.02
2017	20.0	1.60	1.17	6.64	5.66

Notes:

(1) Source: City WPCP Influent flow data.

(2) ADWF is defined as the weighted average flow during the months of June through August.

(3) Total Annual Rainfall Data is from CIMIS Station 170 for Concord, California.

(4) The ADWF and max day flows are from the City only, not the entire WPCP flows which include Hercules flow.

4.4.2 Wastewater Flow Projections

In order to develop wastewater flow projections and allocate future flows to the collection system, relationships between land use and wastewater generation were developed. These relationships, called wastewater flow factors are established based on the average wastewater flow generated (based on flow data collected from the temporary flow monitoring program, discussed in Section 4.3) for each existing land use type. These wastewater flow factors were then compared to the existing population and residential dwelling units to develop a wastewater flow per capita and dwelling unit.

4.4.3 Wastewater Flow Factors

Wastewater flow factors provide a means to estimate flow per acre for each land use category. Wastewater unit flow factors, expressed in gpd/ac, are applied to land use acreage for calculating average day flow generated from a particular land use type. A wastewater flow factor was developed for each of the City's existing land use classifications, based on water billing data and data collected during the 2014 temporary flow monitoring program.

The wastewater flow factors were developed using the following procedure:

1. Water billing data was joined to the parcels and aggregated by billing category (single family [SF] residential, multi-family [MF] residential, government, and non-residential). Winter (January-February) water billing data is usually more representative of average wastewater flows, because less water is typically used for irrigation during winter (wet) months. Water billing data associated with fire hydrants or irrigation were excluded.
2. Each parcel within the Study Area was designated as developed or vacant. The acreage for the developed parcels were added up by land use type and associated water billing category. Open space land use types are assumed to generate negligible wastewater flows and were excluded from this analysis.
3. A return to sewer ratio (the amount of potable water that is returned to the sewer) was applied to each water billing category.

The final wastewater flow factors observed in this Master Plan are summarized in Table 4.7. The wastewater flow factors presented in Table 4.7 represent all customers connected to the City's sewer broken down by billing category.

Table 4.7 Wastewater Flow Factors

Land Use	Area (acres)	Wastewater Flow Factor (gpd/ac)
SF Residential	1,267	770
MF Residential	21	2,890
Government	257	100
Non-Residential	141	1,360

Based on DOF data, there were 17,611 people living within the study area in 2020. Based on the wastewater flow factors presented in Table 4.7, this yields an approximate rate of 58 gpd/person. Based on DOF data, there is 2.81 people/dwelling units (DU). For this Master Plan, SF homes are assumed to have an average of 3 people/DU and MF homes and ADU's are assumed to have an average of 2 people/DU. This yields an approximate rate of 177 gallons per day per dwelling unit (gpd/DU) for SF and 118 gpd/DU for MF residential types. The final flow factors used to estimate the future wastewater flows are presented in Table 4.8. The future flows for residential areas are based on the flow per dwelling unit, whereas the future flows for commercial (non-residential) and government are based on the flow factors listed in Table 4.7, rounded up to the nearest 10 gpd/acre.

Table 4.8 Future Wastewater Unit Flow Rates

Land Use	Units	Factor
SF Residential ⁽¹⁾	gpd/DU	177
MF Residential ⁽²⁾	gpd/DU	118
Government	gpd/ac	100
Non-Residential	gpd/ac	1,360

Notes:

(1) Assumed 3 people per DU at approximately 58 gpd/person.

(2) Assumed 2 people per DU at approximately 58 gpd/person.

Future ADU's are assumed to be built on existing SF residential lots, however, wastewater flows generated from ADU's are estimated based on the MF wastewater flow factor (118 gallons per day per accessory dwelling unit [gpd/ADU]) which assumes two people per ADU.

4.4.4 Wastewater Flow Projections

Developing an accurate estimate of the future quantity of wastewater generated in the collection system is an important step in maintaining and sizing sewer system facilities, for both existing conditions and future developments.

4.4.4.1 Average Dry Weather Flow

The calibrated ADWF based on the flow monitoring data was not changed for existing parcels currently connected to the City's wastewater collection system. In general, the following assumptions were used for determining the future ADWF for buildout:

- The number of planned residential (SF and MF) units were provided by the City. The unit flow per dwelling unit presented in Table 4.9 were applied to each planned development based on the number of SF and/or MF units proposed.
- Projected wastewater flows for planned commercial developments were based on the acres associated with the planned development and the wastewater flow factors (gpd/acre) presented in Table 4.8.
- The future wastewater flows for the planned developments, vacant infill, and densification were allocated in the model as point loads based on the location of the planned development/parcels, the location of existing sewers, and the topography of the area.
- Projected wastewater flows for ADU's were based on a MF residential unit flow rate of 118 gpd/ADU. Because it is impossible to know where the ADUs will be constructed, the total projected flows for ADUs were evenly distributed throughout the model among the existing SF residential parcels.

Table 4.9 summarizes the existing and projected ADWF for the study area, based on the methodology and assumptions stated above. As shown, the City's wastewater flow is expected to increase by 25.2 percent at buildout (from 1.1 mgd to 1.47 mgd).

Table 4.9 Projected ADWF Summary

Flow Component	Wastewater Flow (mgd)
Existing	1.10
Future	
Planned Developments	0.05
Vacant	0.05
Underdeveloped	0.08
Densification	0.20
ADU's	0.02
Total at Buildout	1.47

4.4.4.2 Peak Wet Weather Flow

The PWWF is the highest observed hourly flow that occurs following the design storm event (discussed in Chapter 3). Wet weather I/I, which occurs during and after rainfall events, increases flows in the collection system. The City's collection system was evaluated based on its capacity to convey the PWWF.

The existing PWWF was derived based on the hydraulic modeling results. This was accomplished by applying the 10-year, 24-hour design storm to the hydraulic model, which was calibrated to both dry weather and wet weather conditions. The 10-year, 24-hour design storm volume is approximately 3.52 inches, although may vary slightly depending on the specific location within the study area.

Similar to the existing PWWF, the future (buildout) PWWF was derived by applying a 10-year, 24-hour design storm to the hydraulic model under future conditions. A peak I/I rate of 500 gpd/ac was assumed for future developments and vacant infill. Redevelopment areas and ADU's are not expected to contribute to future I/I.

Table 4.10 presents a summary of the existing and buildout ADWF and PWWFs as well as the PWWF peaking factors. The PWWFs presented in Table 4.10 assume there are no capacity constraints in the collection system. This is essentially the PWWF after the recommended improvements are constructed. Without the recommended improvements, the PWWF at the outfall would be less (due to backwater and SSO's). As shown in Table 4.10, the existing PWWF to ADWF peaking factor decreases from 13.83 to 10.70 for buildout.

Table 4.10 Projected Wastewater Flow Summary

Year	Projected Wastewater Flow (mgd) ⁽¹⁾		
	ADWF ⁽²⁾	PWWF ⁽³⁾	PWWF to ADWF Peaking Factor
Existing	1.10	15.21	13.83
Buildout	1.47	15.73	10.70

Notes:

- (1) Does not include flows from the City of Hercules.
- (2) Model simulated, system-wide peak hourly flow for entire study area.
- (3) Modeled average dry weather loads. ADWF loads were adjusted during calibration to closely match all flow meter locations. The resulting final modeled ADWF is slightly higher than the calculated and measured ADWF from the flow monitoring program.

Chapter 5

WASTEWATER COLLECTION SYSTEM FACILITIES AND HYDRAULIC MODEL

This chapter describes the construction and calibration of the City's sewer collection system hydraulic model. It provides a description of the hydraulic model development process, including a summary of the modeling software selection, a description of the modeled collection system, the hydraulic model elements, the model creation process, and the model calibration process.

5.1 Collection System Facilities

The City's collection system consists of gravity sewers, pump stations, and associated force mains that collect and convey wastewater to the Pinole-Hercules WPCP, which is located on Tennent Avenue, south of the San Pablo Bay and north of Highway 80. The City's wastewater collection system consists of approximately 50 miles of gravity sewers, over 1,300 manholes, two pump stations, and approximately 807 linear feet of force mains according to the City's AutoCAD files. Pinole-Hercules WPCP provides wastewater treatment to the Cities of Pinole and Hercules. The WPCP is owned and operated by the City. Figure 5.1 presents the City's existing collection system.

5.1.1 Gravity Collection System

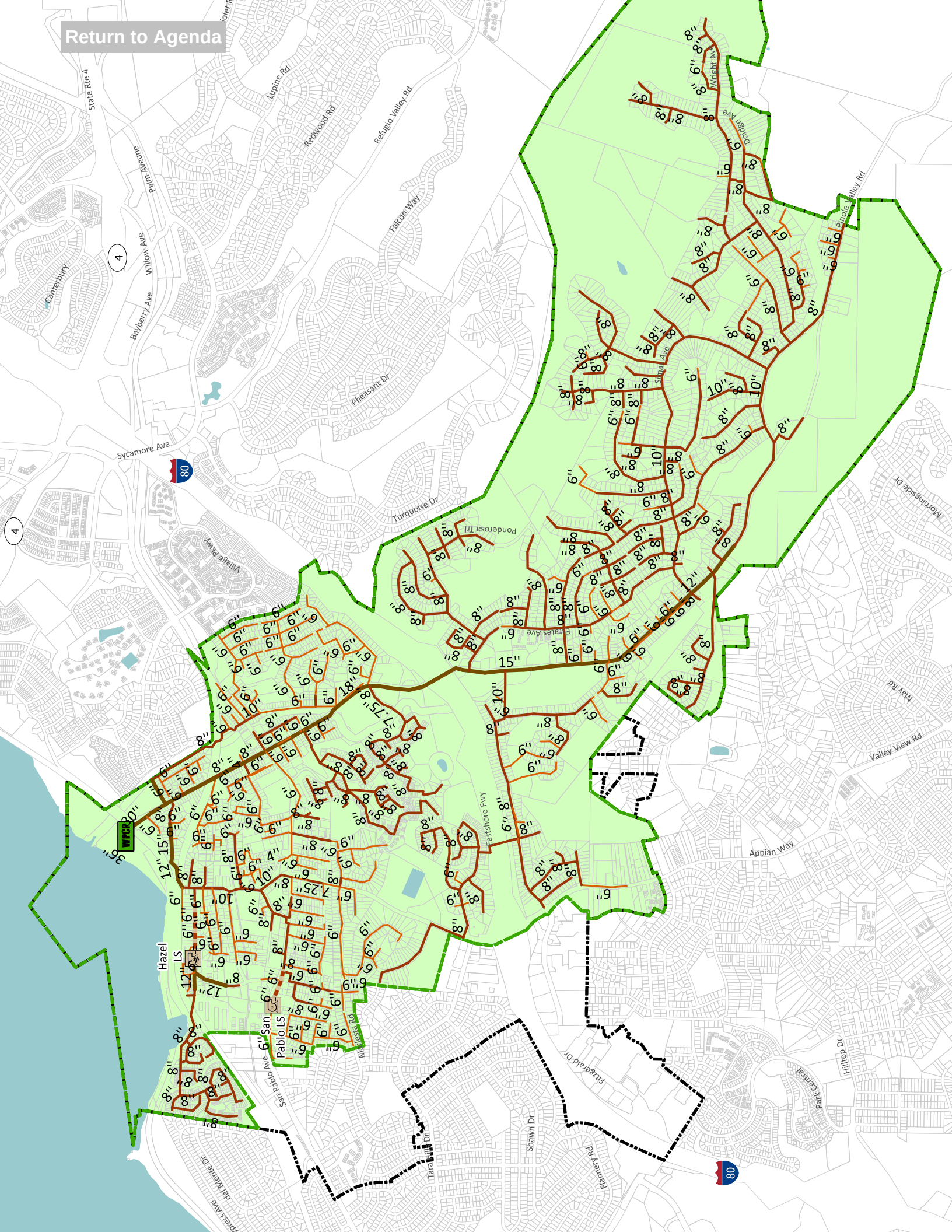
The City's gravity collection system is comprised of roughly 50 miles of gravity pipe up to 36 inches in diameter and over 1,300 manholes. Table 5.1 presents a summary of the existing gravity sewers, by diameter. As shown in Table 5.1, roughly 89 percent of the system is 8-inches in diameter and smaller, with the majority of the system (roughly 54 percent) being 8-inches in diameter.

Table 5.1 Collection System Gravity Pipeline Diameter Summary

Pipe Diameter (inches)	Length ⁽¹⁾ (miles)	Percent of System (by Length)
4	0.1	0.2
6	17.1	34.6
8	26.7	54.0
10	2.6	5.3
12	0.9	1.9
15	1.0	2.0
18	0.8	1.6
24	0.0	<0.1 percent
30	0.2	0.5
36	<0.01	<0.1 percent
Total	49.4	--

Notes:

(1) Includes all gravity pipes in the City's Model database within the study area.



5.1.2 Pump Stations and Force Mains

The City operates and maintains two wastewater pump stations throughout the City. Figure 5.2 shows the locations of each pump station and the area that it serves. A brief summary of each pump station is presented below:

- **San Pablo:** The San Pablo pump station is located on San Pablo Avenue east of Meadow Avenue and west of Sunnyview Drive. The pump station consists of a 6-foot diameter, 14-feet deep wet well with two 300 gallons per minute (gpm) submersible pumps. The San Pablo Pump Station conveys raw wastewater east via a 6-inch diameter force main approximately 625 feet until it discharges into the 8-inch gravity main on San Pablo Avenue west of Rodgers Way.
- **Hazel:** The Hazel pump station is located between Hazel Street and Sunnyview Drive. The pump station consists of a 8-feet by 4-feet cubical wet well that is 11-feet with two 405 gpm submersible pumps. The Hazel pump station conveys raw wastewater via a 6-inch diameter force main approximately 940 feet until it discharges into a 8-inch diameter sewer main downstream between Alfred Drive and Pinon Avenue.

5.2 Hydraulic Model Development

A sewer collection system model is a simplified representation of the real sewer system. Sewer system models can assess the conveyance capacity for a collection system and can also be used to perform “what if” scenarios to assess the impacts of future developments and land use changes. The City’s collection system hydraulic model was constructed using a multi-step process utilizing data from various sources. This section summarizes the hydraulic model development process, including a summary of the modeling software selection, a description of the modeled collection system, the hydraulic elements, and the model calibration process.

5.2.1 Hydraulic Modeling Software

There are several software applications for network analysis with a variety of capabilities and features. The selection of a particular model is generally dependent upon user preference, the requirements of the particular collection system, and the cost associated with the software.

InfoSWMM®, developed by Innovyze (formerly MWH Soft), was selected as the software platform for the development of the City’s hydraulic model. The hydraulic modeling engine for InfoSWMM® uses the Environmental Protection Agency’s (EPA’s) Storm Water Management Model (SWMM), which is widely used throughout the world for planning, analysis, and design related to stormwater runoff, combined sewers, sanitary sewers, and other drainage systems. InfoSWMM® routes flows through the model using the Dynamic Wave method, which solves the complete Saint Venant one dimensional equations of fluid flow.

InfoSWMM® consists of multiple components that work together to bring a graphical approach to the analysis and design of wastewater and stormwater collection systems. The program includes seamless integration with geographic information system (GIS) data.

5.2.2 Elements of the Hydraulic Model

The following provides an overview of the elements of the City's hydraulic wastewater collection system model and the required input parameters associated with each:

- **Junctions:** Sewer manholes, cleanouts, as well as other locations where pipe sizes change or where pipelines intersect are represented by junctions in the hydraulic model. Required inputs for junctions include rim elevation, invert elevation, and surcharge depth (used to represent pressurized systems). Junctions are also used to represent locations where flows are split or diverted between two or more downstream links.
- **Pipes:** Gravity sewers and force mains are represented as pipes in the hydraulic model. Input parameters for pipes include length, friction factor (e.g., Manning's n for gravity mains, Hazen Williams C for force mains), invert elevations, diameter, and whether or not the pipe is a force main.
- **Storage Nodes:** For sewer system modeling, storage nodes typically are used to represent lift station wet wells (although other storage basins would be modeled as storage nodes). Input parameters for storage nodes include bottom elevation, maximum depth, and cross sectional area.
- **Pumps:** Pumps are included in the hydraulic model as links. Input parameters for pumps include pump curves and operational controls.
- **Outfalls:** Outfalls represent areas where flow leaves the system. For sewer system modeling, an outfall typically represents the connection to the influent pump station or the headworks at a wastewater treatment plant. Required input parameters include ground elevation, outfall type (freefall, fixed head, etc.).
- **Inflows:** The following are the two types of wastewater flow sources that can be applied at individual model junctions (and storage nodes):
 - **External.** External inflows can represent any number of sources entering the collection system, such as metered flow data or groundwater infiltration. External inflows are applied to a specific model junction by applying a baseline flow value and a pattern that varies the flow by hour, day, or month of the year. This option was used to simulate future inflow/infiltration.
 - **Dry Weather.** Dry weather inflows simulate base sanitary wastewater flows and represent the average flow. The dry weather flows can be multiplied by up to four patterns that vary the flow by month, day, hour, and day of the week (e.g., weekday or weekend). The dry weather diurnal patterns are adjusted during the dry weather calibration process.

5.2.3 Hydraulic Model Construction

The City's hydraulic model combines information on physical and operational characteristics of the wastewater collection system and performs calculations to solve a series of mathematical equations to simulate flows in pipelines.

The model construction process consisted of six steps, as described below:

- **Step 1:** The City's drawings and GIS shapefiles for the sewer collection system were obtained.

- **Step 2:** The GIS data was reviewed and formatted to allow easy import into the InfoSWMM® modeling platform. The City's collection system alignment and manhole placement were imported into the modeling software.
- **Step 3:** A majority of the physical and operational data for the City's wastewater collection facilities was not available from the City's original base GIS data. Data, such as pipeline inverts, wet well dimensions, pump stations, and other special features, were input manually into the model based on additional sources. In addition, discrepancies with pipeline alignment and junction placement were reviewed and manually input or modified based on City records, field reconnaissance, and engineering judgment.
- **Step 4:** Once all the relevant data was input into the hydraulic model, the model was reviewed to verify that the model data was input correctly and that the flow direction and size of the modeled pipelines were logical. Additionally, the modeled lift stations were also checked to verify that they operated correctly.
- **Step 5:** Dry weather wastewater flows were then allocated to the appropriate model junctions. These flows were scaled, as necessary, to match the DWFs recorded during the flow monitoring period.
- **Step 6:** The hydraulic model contains certain run parameters that need to be set by the user at the beginning of the project. These include run dates, time steps, reporting parameters, output units, and flow routing method. Once the run parameters were established, the model was debugged to ensure that it ran without errors or warnings.

5.2.4 Wastewater Load Allocation

Determining the quantity of base wastewater flows generated by a municipality and how they are distributed throughout the collection system is a critical component of the hydraulic modeling process.

Various techniques can be used to assign wastewater flows to individual model junctions, depending on the type of data that is available. Adequate estimates of the volume of wastewater are important in maintaining and sizing sewer system facilities, both for present and future conditions. Baseline wastewater loads were allocated (assigned to specific nodes) in the hydraulic model based on water billing data provided by the City, as well as the flow data from the 2014 temporary flow monitoring program. The following steps outline the wastewater load allocation process:

- **Step 1:** Each parcel within the City's service area was assigned a modeled manhole ID. The water billing data provided by the City was joined to the associated parcel in GIS.
- **Step 2:** Each parcel within the City's sewer service area was then assigned a modeled manhole ID. At the end each parcel has a water consumption amount, land use type, area in acres, and a model junction assigned to it.
- **Step 3:** The water consumption was added for each model manhole ID and allocated in the model.
- **Step 4:** Once the existing wastewater flows were allocated into the model, they were adjusted as needed during model calibration to closely match the dry weather flows recorded during the flow monitoring program.

5.3 Hydraulic Model Calibration

Hydraulic model calibration is a crucial component of the hydraulic modeling effort. Calibrating the model to match data collected during the flow monitoring program ensures the most accurate results possible. The calibration process consists of calibrating to both dry and wet weather conditions. This section summarizes the overall methodology employed to calibrate the City's wastewater collection system hydraulic model and the calibration results, including a detailed description of each of the major components of the model calibration process.

For this project, both dry and wet weather flow monitoring were conducted during three phases along a 2 month period starting in January 2014 and ending in March 2014. DWF calibration ensures an accurate depiction of base wastewater flow generated within the study area. The WWF calibration consists of calibrating the hydraulic model to a specific storm event or events to accurately simulate the peak and volume of I/I into the sewer system. The amount of I/I is essentially the difference between the WWF and DWF components.

5.3.1 Calibration Standards

The hydraulic model was calibrated in accordance with international modeling standards. The Wastewater Planning Users Group (WaPUG), a section of the Chartered Institution of Water and Environmental Management, has established generally agreed upon principles for model verification. The dry weather and wet weather calibration focused on meeting the recommendations on model verification contained in the "Code of Practice for the Hydraulic Modeling of Sewer Systems," published by the WaPUG (WaPUG 2002), as summarized below:

- **Dry Weather Calibration Standards:** Dry weather calibration should be carried out for two dry weather days and the modeled flows and depths should be compared to the field measured flows and depths. Both the modeled and field measured flow hydrographs should closely follow each other in both shape and magnitude. In addition to the shape, the flow hydrographs should also meet the following criteria as a general guide:
 - The timing of flow peaks and troughs should be within 1 hour.
 - The peak flow rate should be within the range of ± 10 percent.
 - The volume of flow (or the average rate of flow) should be within the range of ± 10 percent. If applicable, care should be taken to exclude periods of missing or inaccurate data.
- **Wet Weather Calibration Standards:** The model simulated flows should be compared to the field measured flows. The flow hydrographs for both events should closely follow each other in both shape and magnitude, until the flow has substantially returned to DWF rates. In addition to the shape, the flow hydrographs should also meet the following criteria as a general guide:
 - The timing of the peaks and troughs should be similar with regard to the duration of the events.
 - The peak flow rates at significant peaks should be in the range of +25 percent to -15 percent and should be generally similar throughout.
 - The volume of flow (or the average flow rate) should be within the range of +20 percent to -10 percent.

5.3.2 Dry Weather Flow Calibration

The DWF calibration process consists of several elements, as outlined below:

- **Divide the system into areas tributary to each flowmeter.** The first step in the calibration process was to divide the City into flowmeter tributary areas, one for each flow monitoring site. A map showing the locations of each flow monitoring site and their associated tributary area are provided in Chapter 4 along with a schematic of the flowmeters.
- **Define flow volumes within each area.** The next step was to define the flow volumes within each area, which was accomplished in the flow allocation step (described in Section 5.2.3).
- **Create diurnal patterns to match the temporal distribution of flow.** A diurnal curve is a pattern of hourly multipliers that are applied to the base flow to simulate the variation in flow that occurs throughout the day. Two diurnal curves were developed for each flow monitoring tributary area, one representing weekday flow and one representing weekend flow. The diurnal patterns were initially developed based on the flow monitoring data and adjusted as part of the calibration process until the model simulated flows matched the field measured flows as closely as possible. Figure 5.2 shows the calibrated weekday and weekend diurnal pattern for the area tributary to Site M5. Additional diurnal patterns were developed for all flowmeter tributaries. These diurnal patterns are found on the DWF calibration sheets that are included in Appendix B.

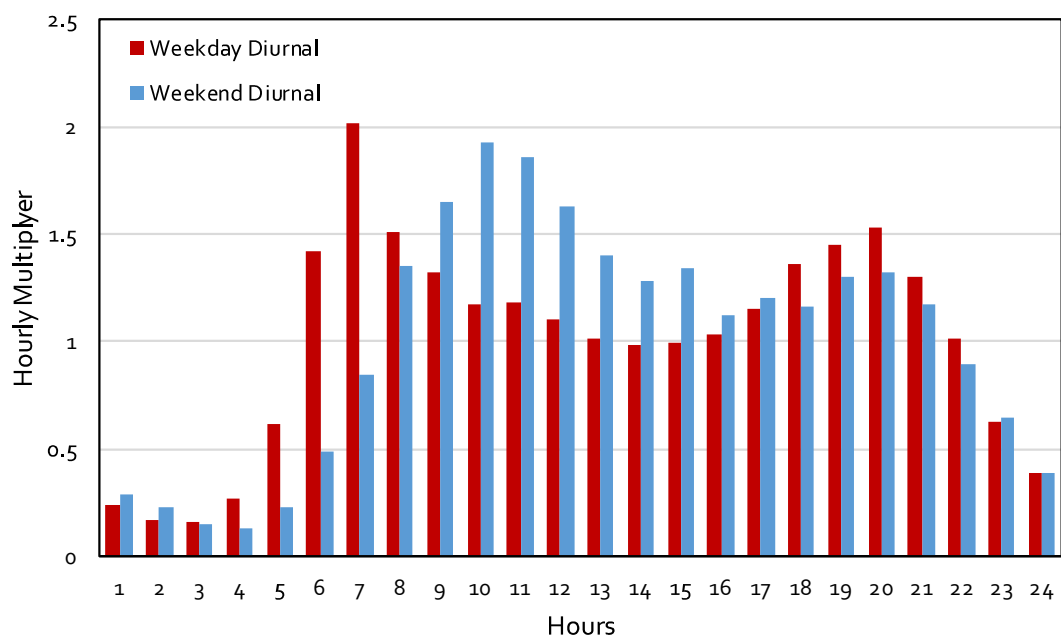


Figure 5.2 Example Weekday and Weekend ADWF Diurnal Patterns (Site M5)

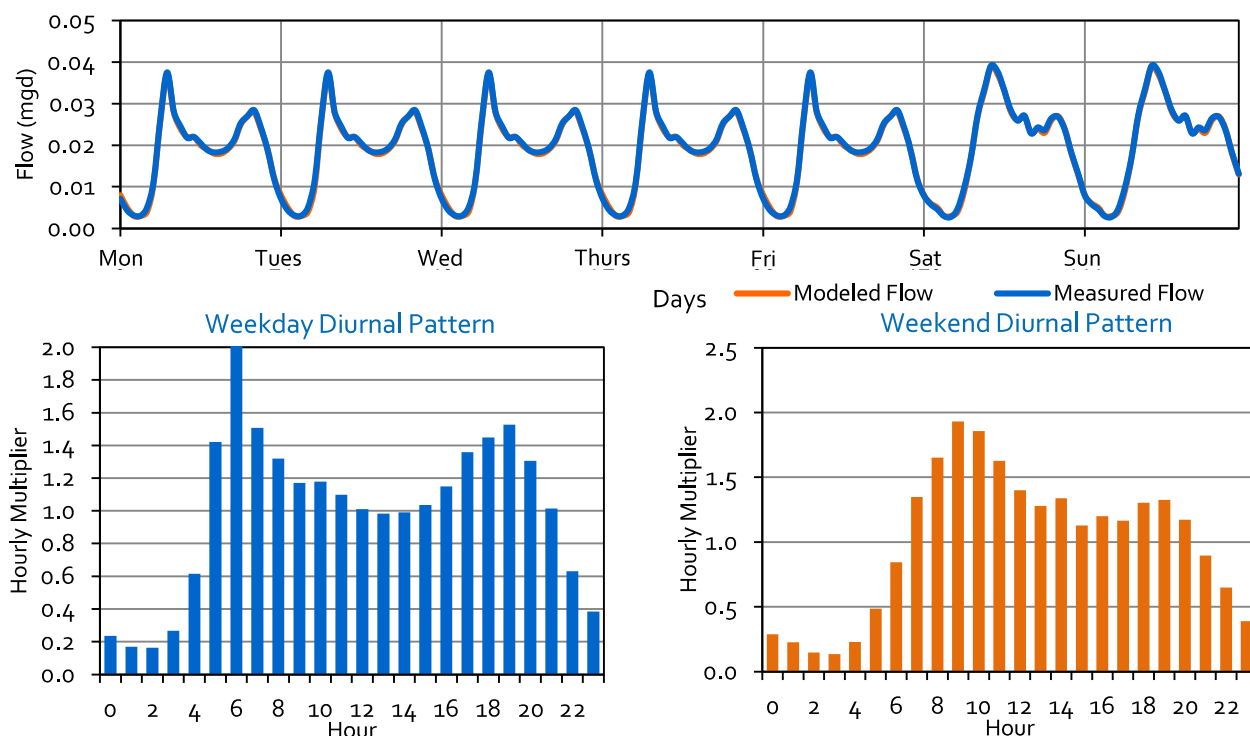
- **Adjust model variables to match field measured velocity and flow depths.** Once the model simulated flows acceptably matched the field measured flows, the model simulated velocity and flow depth were compared to the field measured velocity and

flow depth. Adjustments were made to various model parameters until the modeled and measured velocity and depth closely matched one another. The primary varied parameters for this process are pipeline roughness (Manning's n) and sediment buildup in the pipe, although other parameters can also be adjusted as calibration results are generated.

- Manning's roughness coefficients, or n values, have industry accepted ranges based on a number of variables. Roughness coefficients increase over time depending on the construction methods, installation quality, system maintenance, and other environmental factors. There can be certain factors within the City's collection system that can result in roughness coefficients that differ from the typical range. For example, pipeline bellies, joint misalignment, cracks, and debris (e.g., root intrusion, etc.) lead to increased turbulence in a pipe, as well as the apparent Manning's n factor.
- If the model is unable to reasonably match the field measured flow depth and velocity without leaving the acceptable range of Manning's roughness coefficients, further investigation is conducted to help determine the cause of the discrepancy. Some issues that could cause such a discrepancy can include errors in the slope or diameter of a pipeline, downstream blockages, pipeline sags, and, in some cases, influences from downstream pump station operations.

Figure 5.3 is an example DWF calibration sheet for flowmeter Site M5. Calibration sheets provide plots and tables that compare model results and the field measured flow, velocity, and level for during the calibration period. Appendix B contains detailed DWF calibrations sheets for all meter locations. As shown in Appendix B, all of the model simulated average flows for weekday and weekend DWF were all within 10 percent.

Overall, the hydraulic model met the established dry weather calibration standards. Some areas require further investigation. Overall, the model accurately simulates DWF, and the sites that did not had little impact on the model's overall accuracy. For these reasons the model is considered calibrated for DWF conditions.



Model Calibration Summary

Day	Measured Data ⁽¹⁾		Modeled Data		Percent Error ⁽³⁾	
	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (%)	Peak Flow (%)
Mon.	0.02	0.04	0.02	0.04	-1%	-1%
Tues.	0.02	0.04	0.02	0.04	-1%	-1%
Wed.	0.02	0.04	0.02	0.04	-1%	-1%
Thur.	0.02	0.04	0.02	0.04	-1%	-1%
Fri.	0.02	0.04	0.02	0.04	-1%	-1%
Sat.	0.02	0.04	0.02	0.04	-1%	0%
Sun.	0.02	0.04	0.02	0.04	-1%	0%
Summary						
Weekday	0.019	--	0.018	--	-1%	--
Weekend	0.020	--	0.020	--	-1%	--
ADWF ⁽⁴⁾	0.019	--	0.019	--	-1%	--

Notes:

- Source: V&A Temporary Flow Monitoring Program
- Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
- Percent Error = (Modeled - Measured) / Measured x 100
- ADWF = (5xWeekday Average + 2xWeekend Average)/7

Figure 5.3 Example DWF Calibration Sheet (Site M5)

5.3.3 Wet Weather Flow Calibration

The wet weather calibration enables the hydraulic model to accurately simulate I/I entering the collection system during a large storm event. As outlined below, the WWF calibration process consists of several elements:

- Identify calibration rainfall events.** For this project, the WWF calibration process consists of running model simulations of a historic rainfall event. The goal of any WWF calibration is to capture and characterize a system's response to a significant rainfall event, preferably during wet antecedent moisture conditions. During the temporary flow monitoring program, one major storm event was captured on March 21-22, 2018. This storm event was used for wet weather calibration.
- Define RDII tributary areas.** For the WWF calibration, RDII flows are superimposed on top of the DWF. The model calculates RDII by assigning "RDII Inflows" to each node in the model. RDII inflows consist of both a unit hydrograph and the total area that is tributary to the model node. The RDII tributary areas were calculated in GIS using the loading polygons. The tributary area provides a means to transform hourly rainfall depth from the rainfall hyetographs into a rainfall volume. The rainfall volume is transformed into actual RDII flows using the unit hydrograph, as described in the next step.
- Create I/I parameter database and modify to match field measured flows.** The main step in the WWF calibration process involved creating a custom unit hydrograph for the study area using the "RTK Method," which is widely used in collection system master planning. Using the RTK Method, the RDII unit hydrograph is the summation of three separate triangular hydrographs (short term, medium term, and long term), which are each defined by three parameters: R, T, and K. R represents the fraction of rainfall over the sewer basin that enters the collection system; T represents the time to peak of the of the hydrograph; and K represents the ratio of time to recession to the time to peak. Therefore, there are a total of nine separate variables associated with a unit hydrograph. Figure 5.4 shows the shape of an example unit hydrograph.

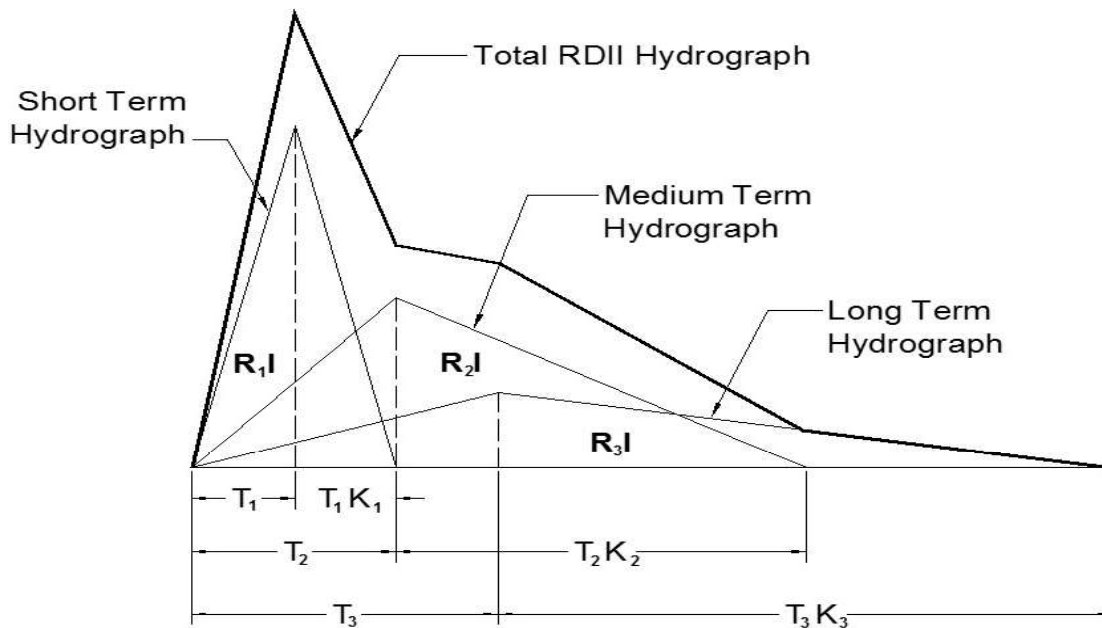


Figure 5.4 Example RDII Unit Hydrograph

The hydrograph utilizes the R-values (percent of rainfall that enters the collection system) calculated for each basin to simulate I/I. The nine variables in each unit hydrograph were initially set based on engineering judgment and then adjusted until the model simulated flows (both peak flows and average flows) matched closely with the field measured flows.

As with the dry weather calibration, the wet weather calibration process compared the measured flow data with the model output. Comparisons were made for average and peak flows as well as the temporal distribution of flow until flows returned to their baseline levels.

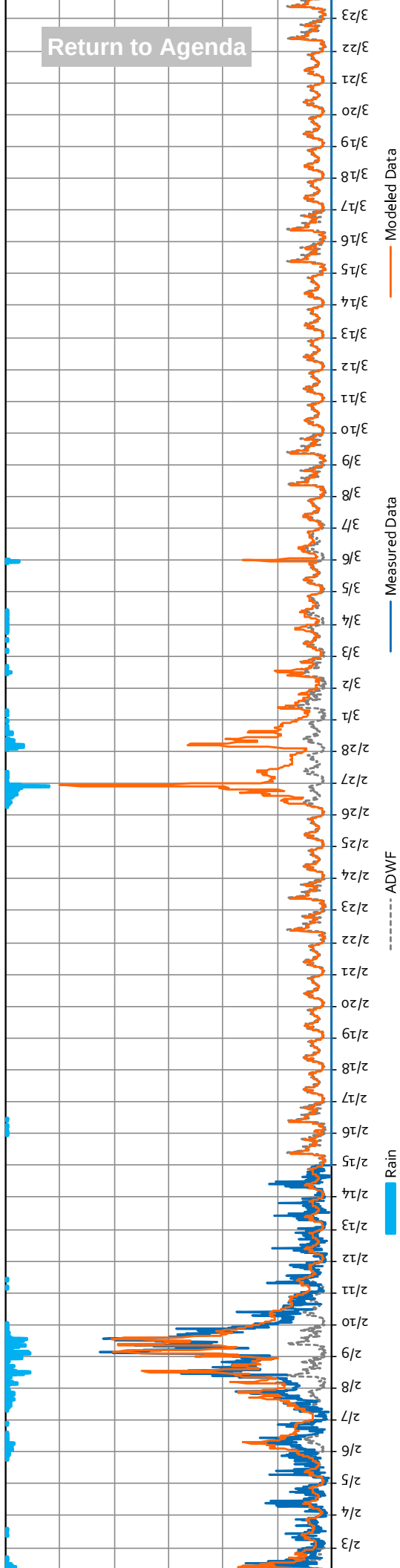
Figure 5.5 is an example WWF calibration sheet for flowmeter site M15. The WWF calibration sheets show figures comparing the measured data and model results for flow, velocity, and level in response to rainfall. The WWF calibrations sheets for all sites are provided in Appendix C. There is good correlation between the model-simulated flows and the flows that were measured at each meter location. Overall, the model accurately simulated the effects of wet weather events, and was considered calibrated and ready to use for capacity analysis purposes.

5.3.4 Collection System Hydraulic Model Calibration Summary

In summary, the calibration results indicate the model predicts conditions similar to those observed in the field. Within a few isolated areas of the model, there are some very minor discrepancies, but the overall collection system is very well represented in the model.

Based on the results presented in this chapter, it can be concluded that the model is calibrated to DWF and WWF conditions. The model provides an accurate representation of the City's wastewater collection system to a level suitable for this Master Plan and for the City's future hydraulic modeling needs.

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Chapter 6

CAPACITY EVALUATION AND PROPOSED IMPROVEMENTS

This chapter discusses the hydraulic evaluation of the sewer collection system and the proposed projects that correct capacity deficiencies and serve future users.

6.1 Capacity Evaluation

Following the dry and wet weather flow calibration, which is summarized in detail in Chapter 5, a capacity analysis of the existing and future collection system was performed. The capacity analysis entailed identifying areas in the sewer system where flow restrictions occur or where pipe capacity is insufficient to convey PWWFs. Sewers that lack sufficient capacity to convey PWWFs create bottlenecks in the collection system that can potentially cause SSOs. The sewer system was evaluated based on planning criteria presented in Chapter 3.

This section discusses the locations of current and projected hydraulic deficiencies resulting from flows exceeding the maximum allowable flow depth criteria.

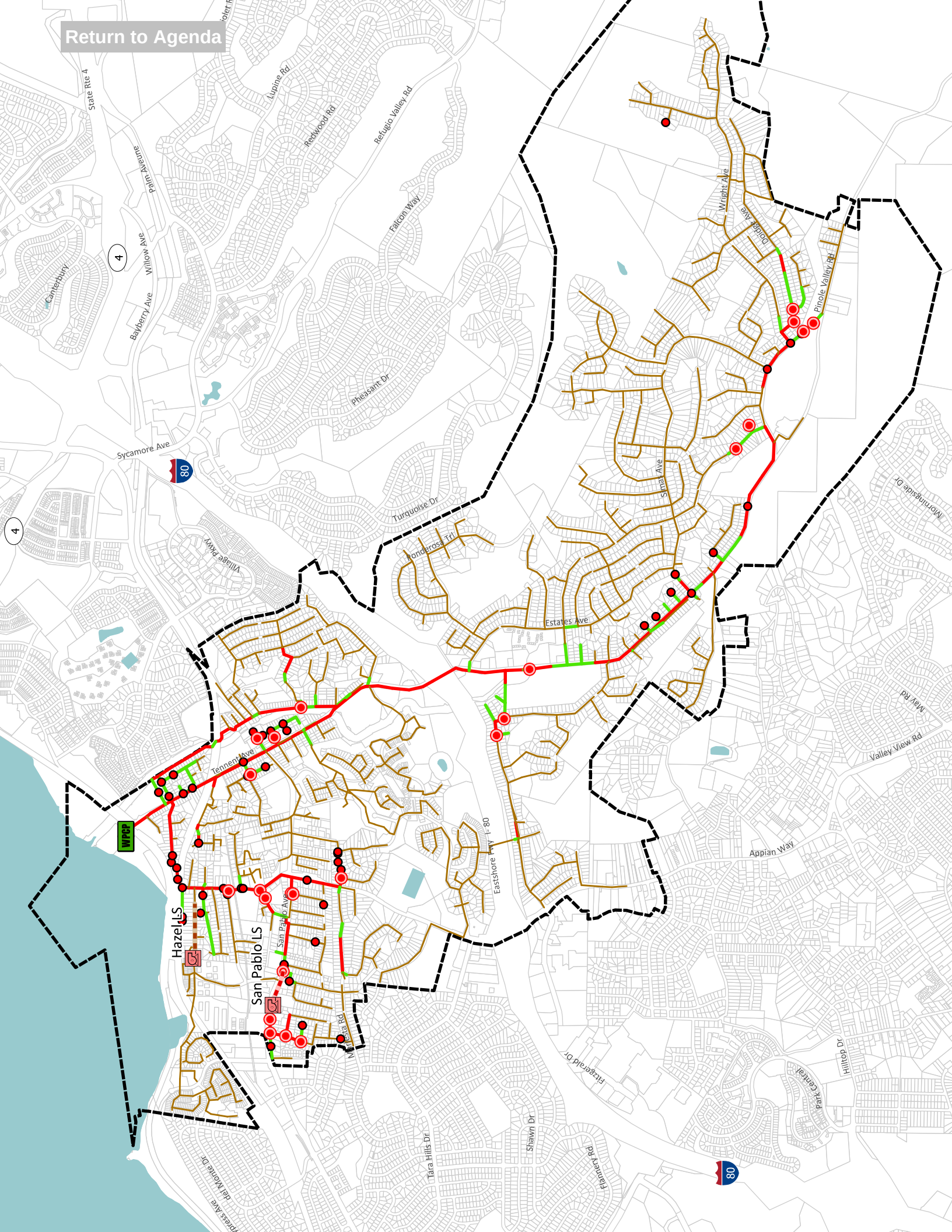
6.1.1 Existing System

For the existing sewer collection system, the PWWF was routed through the hydraulic model. Pipelines where the maximum HGL reached within 3-feet of the upstream manhole rim, were identified. The existing deficiencies are shown on Figure 6.1. There were some areas that exhibited backwater conditions at PWWF. These are indicated in green on Figure 6.1. Replacing a capacity limited (bottleneck) sewer will allow for higher peak flows to be carried to downstream sewers. In some cases, this increase in peak flow overwhelms the downstream sewers, which creates additional deficiencies. The two lift stations that did not have the firm capacity to convey PWWF. These are indicated in orange on Figure 6.1.

Following the completion of the existing system analysis, improvement projects were identified in order to mitigate existing pipeline capacity deficiencies. The recommended improvement projects are discussed in greater detail in Section 6.2. In accordance with the established planning criteria, new sewer pipelines were sized such that the maximum flow d/D did not exceed the values summarized in Chapter 3.

6.1.2 Future System

The analysis of the future (buildout) system was performed in a manner similar to the existing system analysis. The purpose of the future system evaluation is to verify that the existing system improvements were appropriately sized to convey future peak flows, and to identify the locations of sewers that are adequately sized to convey existing peak flows, but cannot convey future peak flows. The buildout planning period includes the complete buildout of the study area, including full capacity of all planned developments. There were no new deficiencies identified based on the future system evaluation.



6.2 Collection System Improvements

Based on the hydraulic analysis the significant contribution of I/I in the City's collection system has created multiple capacity deficiencies. The improvements to mitigate the capacity deficiencies are all listed in the following sections of this report, however mitigating the deficiencies through pipeline upgrades in the planning horizon of this report are not financially feasible for the City at this time. A programmatic approach to address I/I as well as pipeline condition, while still addressing some of the most pressing capacity constraints is included in this Master Plan in the near term.

6.2.1 Programmatic Recommendations

In addition to developing capacity improvements to mitigate existing and anticipated future deficiencies, the following projects are also recommended:

- **RR-2 (Pipe Rehabilitation and Replacement Program):** This is an annual program to rehabilitate or replace aging pipes or pipes with poor condition. The results of the City's closed-circuit television (CCTV) inspection program should be used to identify the pipes most in need of rehabilitation and replacement. Additionally, a long-term risk assessment should be completed to identify long term rehabilitation and replacement projects and funding needs. It is also recommended that gravity pipes less than 8 inches in diameter be replaced with 8-inch pipe. The length/total cost recommended in the CIP is an estimate. Once the City completes the CCTV inspection and has a better idea of the condition of the collection system, the length/total cost should be adjusted as needed.
- **RR-3 (Inflow Identification Program):** The 2014 flow monitoring program revealed several subbasins within the collection system that exhibited higher rates of inflow. This project includes smoke testing and/or nighttime CCTV and/or field reconnaissance to identify potential sources of inflow. The City should take action if illicit connections to the sewer are found. Figure 6.3 shows the basins that should be targeted first for inflow identification.
- **O-1 (Sewer Master Plan Update):** It is recommended that the City updates their Master Plan every 5 years to re-evaluate the wastewater collection system.
- **O-2 (Flow Monitoring Program):** It is recommended that the City conduct a flow monitoring program every 5 years to aid with the Master Plan (O-1). It is assumed that each program will consist of 15 flow meters for a 1-month period. Flow monitoring should be timed to capture at least one major storm event, preferably following wet ground conditions.

6.2.2 Capacity Improvements

Figure 6.3 illustrates the proposed sewer improvements required to correct existing deficiencies and to serve future users. When an increase to capacity is required, existing sewers can be upgraded or a parallel or relief sewer can be constructed. For the purposes of this study, unless otherwise stated, it was assumed that capacity deficient sewers would be upgraded to a larger diameter. The upgraded pipeline generally followed the same alignment as the existing pipeline.

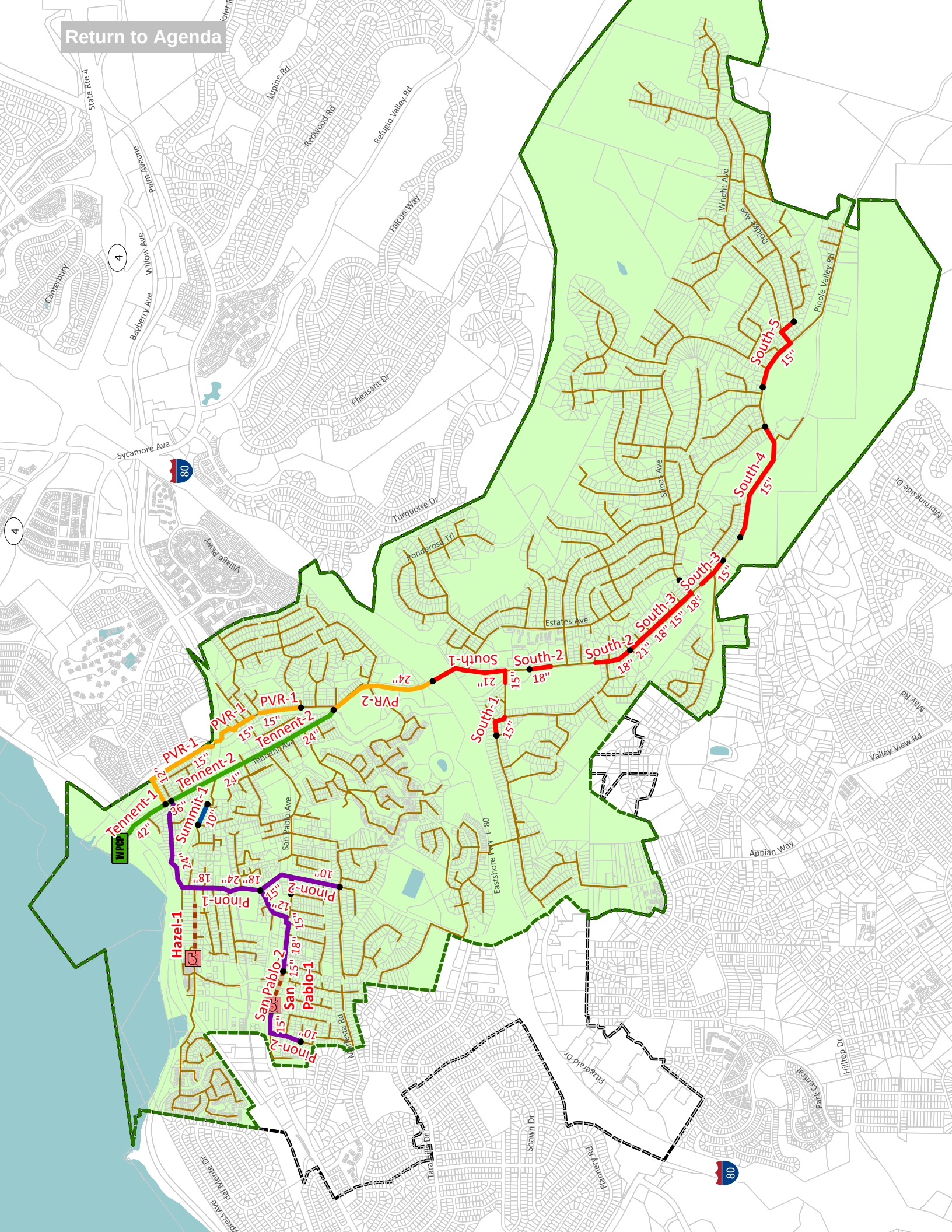
The proposed existing improvements are sized for buildout conditions. As the City continues to grow, it is recommended that the proposed pipeline diameters be constructed so that the facilities have sufficient capacity for buildout conditions. The proposed pipe diameter represents the ultimate diameter for anticipated buildout conditions.

6.2.3 Existing versus Future Improvements

An existing deficiency is one where the existing facility's capacity is insufficient to meet the planning criteria (e.g., pipeline upgrades required to prevent severe surcharging during the design wet weather event) for existing users. If a project was proposed to exclusively correct an existing deficiency, then existing users would be assigned 100 percent of the project's benefit, and therefore, 100 percent of the costs, however this Master Plan did not identify any projects needed to serve exclusively future growth.

Other recommended improvements could serve future users. In these cases, an existing sewer or pump station may have sufficient capacity to convey current PWWFs, but as growth continues and more users are added to the system, the increased flow results in capacity deficiencies. These projects are classified as future improvements. Future users would be assigned 100 percent of the future project's benefit and 100 percent of the costs.

In some cases, a project is needed to correct an existing capacity deficiency, but is sized to accommodate additional flows from future development. In these cases, the hydraulic modeling results were used to determine the cost breakdown between existing and future users based on the ratio of existing and build out average dry weather flows. More information on the breakdown in cost split between existing and future users and whether a proposed improvement is intended to correct an existing deficiency, to serve a future user, or both, is provided in Chapter 7.



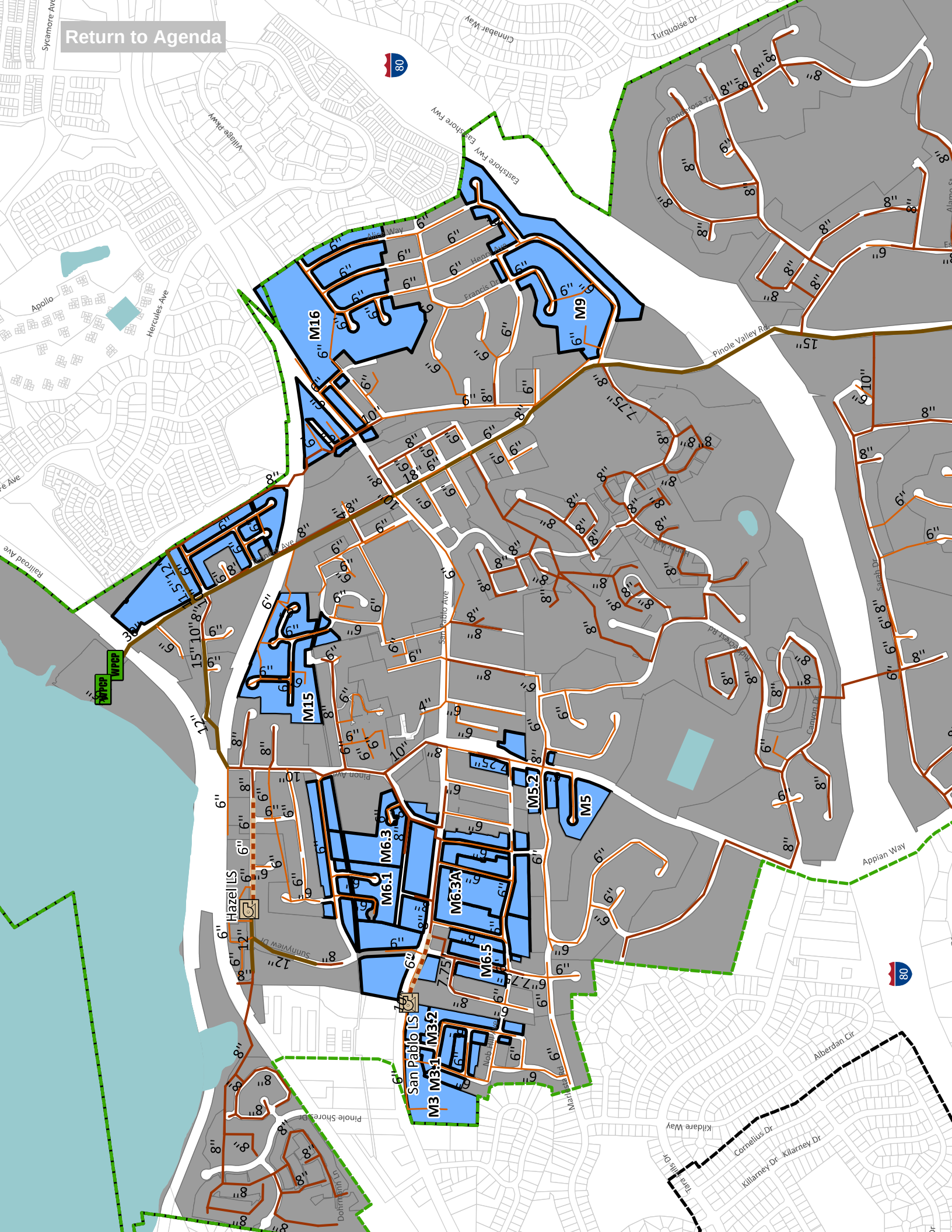
6.2.4 Capacity Improvements

Following the completion of the existing and future system analysis, improvement projects were identified to mitigate pipeline capacity deficiencies while maintaining the maximum flow depth criteria outlined in Chapter 3. The proposed improvements to address existing and future deficiencies are shown on Figure 6.2 and are summarized below.

- **Pinon-1:** This project includes the replacement of approximately 1,050 feet of 8-inch diameter pipeline along San Pablo Avenue, approximately 740 feet of 8-inch diameter pipeline along Roble Avenue, approximately 1,500 feet of 8-inch to 10-inch diameter pipeline along Pinon Avenue, approximately 520 feet of 12-inch diameter pipeline between Pinon Avenue and Orleans Avenue and approximately 1,160 feet of 8-inch to 15-inch diameter pipeline along Orleans Avenue. The surcharging of the gravity sewer cause SSO's under PWWF conditions. To mitigate SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with pipelines ranging in size from 12-inch to 24-inch diameter pipeline.
- **Pinon-2:** This project includes the replacement of approximately 820 feet of 6-inch to 10-inch diameter pipeline along San Pablo Avenue, approximately 680 feet of 8-inch to 10-inch diameter pipeline along Pinon Avenue, approximately 890 feet of 6-inch to 8-inch diameter pipeline along Appian Way, approximately 290 feet of 6-inch diameter pipeline along Meadow Avenue, and approximately 290 feet of 6-inch diameter pipeline between Meadow Avenue and San Pablo Avenue. The surcharging of the gravity sewer cause SSO's under PWWF conditions. To mitigate SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with pipelines ranging in size from 10-inch to 15-inch diameter pipeline.
- **Tennent-1:** This project includes the replacement of approximately 130 feet of 24-inch diameter pipeline, 1,250 feet of 30-inch diameter pipeline, and approximately 10 feet of 36-inch diameter pipeline along Tennent Avenue and inside of the WPCP. The surcharging of the gravity sewer cause SSO's upstream under PWWF conditions. To mitigate the risk of SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with pipelines ranging in size from 36-inch to 42-inch diameter pipeline.
- **Tennent-2:** This project includes the replacement of approximately 3,360 feet of 18-inch diameter pipeline along Tennent Avenue. The surcharging of the gravity sewer cause SSO's under PWWF conditions. To mitigate the risk of SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with pipelines ranging in size from 24-inch to 36-inch diameter pipeline.
- **PVR-1:** This project includes the replacement of approximately 1,130 feet of 6-inch to 10-inch diameter pipeline along Pinole Valley Road, approximately 1,830 feet of 8-inch diameter pipeline along Pinole Valley Creek, and approximately 530 feet of 12-inch diameter pipeline along Orleans Drive. The surcharging of the gravity sewer cause SSO's under PWWF conditions. To mitigate SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with 15-inch diameter pipeline.
- **PVR-2:** This project includes the replacement of approximately 1,030 feet of 15-inch diameter pipeline and approximately 970 feet of 18-inch diameter pipeline along Pinole Valley Road. The surcharging of the gravity sewer cause SSO's under PWWF conditions. To mitigate SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with 24-inch diameter pipeline.

- **South-1:** This project includes the replacement of approximately 1,400 feet of 15-inch diameter pipeline along Pinole Valley Road, approximately 250 feet of 8-inch diameter pipeline along Sarah Drive, approximately 210 feet of 8-inch diameter pipeline along Shea Drive, and approximately 220 feet of 10-inch diameter pipeline between Shea Drive and Pinole Valley Road. The surcharging of the gravity sewer cause SSO's under PWWF conditions. To mitigate SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with pipelines ranging in size from 15-inch to 21-inch diameter pipeline. This project should be re-evaluated once the 2021 flow monitoring program has confirmed the flows in the pipes.
- **South-2:** This project includes the replacement of approximately 1,090 feet of 15-inch diameter pipeline along Pinole Valley Road. The flow levels of the gravity sewer cause upstream manholes to surcharge within 3 feet of the manhole rim under PWWF conditions. To mitigate the risk of SSO occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with pipelines ranging in size from 18-inch to 21-inch diameter pipeline. This project should be re-evaluated once the 2021 flow monitoring program has confirmed the flows in the pipes.
- **South-3:** This project includes the replacement of approximately 320 feet of 8-inch diameter pipeline along Simas Avenue and approximately 1,820 feet of 12-inch to 15-inch diameter pipeline along Pinole Valley Road. The flow levels of the gravity sewer cause upstream manholes to surcharge within 3 feet of the manhole rim under PWWF conditions. To mitigate the risk of SSO occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with pipelines ranging in size from 15-inch to 21-inch diameter pipeline. This project should be re-evaluated once the 2021 flow monitoring program has confirmed the flows in the pipes.
- **South-4:** This project includes the replacement of approximately 2,500 feet of 10-inch to 12-inch diameter pipeline along Pinole Valley Road. The surcharging of the gravity sewer cause SSO's under PWWF conditions. To mitigate SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with 15-inch diameter pipeline. This project should be re-evaluated once the 2021 flow monitoring program has confirmed the flows in the pipes.
- **South-5:** This project includes the replacement of approximately 980 feet of 8-inch to 10-inch diameter pipeline along Pinole Valley Road, approximately 290 feet of 8-inch diameter pipeline along Doidge Avenue and approximately 260 feet of 8-inch pipeline along Wright Avenue. The surcharging of the gravity sewer cause SSO's under PWWF conditions. To mitigate SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with pipelines ranging in size from 10-inch to 15-inch diameter pipeline. This project should be re-evaluated once the 2021 flow monitoring program has confirmed the flows in the pipes.
- **Summit-1:** This project includes the replacement of approximately 410 feet of 6-inch diameter pipeline along Summit Drive. The flow levels of the gravity sewer cause upstream manholes to surcharge within 3 feet of the manhole rim under PWWF conditions. To mitigate the risk of SSO occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with 10-inch diameter pipeline.

- **Hazel-1:** This project includes the replacement of the existing lift station. The existing influent flow exceeds the existing firm pumping capacity under PWWF conditions. To mitigate the risk of a SSO occurring during PWWF conditions, it is recommended that the new lift station have a firm pumping capacity of 0.831 mgd.
- **San Pablo-1:** This project includes the replacement of the existing lift station. The existing influent flow exceeds the existing firm pumping capacity under PWWF conditions. To mitigate the risk of a SSO occurring during PWWF conditions, it is recommended that the new lift station have a firm pumping capacity of 1.38 mgd.
- **San Pablo-2:** The purpose of this project is to mitigate the high velocity (> 8 fps) that the existing forcemain experiences following San Pablo Lift Station under future conditions. It is recommended that an 8-inch diameter forcemain be constructed to replace the existing 6-inch diameter forcemain.



Chapter 7

CAPITAL IMPROVEMENT PROGRAM

This chapter presents the City's wastewater collection system CIP and a summary of the capital costs. This chapter is organized to assist the City in making financial decisions. The CIP is based on the evaluation of the City's wastewater collection system, as described in Chapter 6.

7.1 Capital Improvement Project Costs

The capacity upgrades and other system capital improvements set the foundation of the City's wastewater collection system CIP. The cost estimates presented in this study are opinions developed from bid tabulations, cost curves, information obtained from previous studies, and Carollo's experience on other projects. The costs are based on an Engineering News Record Construction Cost Index (ENR CCI) of 14,452 (San Francisco, October 2021).

7.2 Cost Estimating Accuracy

The cost estimates presented in the CIPs have been prepared for general master planning purposes and for guidance in project evaluation and implementation. Final costs of a project will depend on actual labor and material costs, competitive market conditions, final project scope, implementation schedule, and other variable factors such as preliminary alignment generation, investigation of alternative routings, and detailed utility and topography surveys.

The Association for the Advancement of Cost Engineering (AACE) defines an Order of Magnitude Estimate, deemed appropriate for master plan studies as an approximate estimate made without detailed engineering data. It is normally expected that an estimate of this type would be accurate within plus 50 percent to minus 30 percent. The following sections present the assumptions used in developing order of magnitude cost estimates for recommended facilities.

7.3 Construction Unit Costs

The construction costs are representative of wastewater collection system facilities under normal construction conditions and schedules. Costs have been estimated for public works construction.

7.3.1 Gravity Sewer Replacement (Open Cut) Unit Costs

Sewer pipeline improvements range in size from 8 inches to 42 inches in diameter in this study. Unit costs for the construction of pipelines and appurtenances (e.g., manholes) are shown in Table 7.1. The construction cost estimates are based upon these unit costs. The gravity pipeline unit costs are based on an open cut construction method and assume "typical" field conditions with construction in stable soil at a depth ranging between 10 feet to 15 feet. The unit costs were developed based on Carollo's cost database and experience on other projects.

Table 7.1 Gravity Pipeline Unit Costs

Pipe Size (inches)	Replacement Unit Construction Cost ⁽¹⁾ (\$/linear foot)
8	\$220
10	\$275
12	\$320
15	\$405
18	\$480
21	\$535
24	\$620
27	\$710
30	\$810
33	\$870
36	\$930
42	\$1,045

Notes:

(1) ENR CCI (SF) for October 2021 is 14,452.

7.3.2 Lift Station Unit Costs

Costs associated with the lift station capacity improvements and forcemain, as well as other miscellaneous projects, were compiled based on Carollo's cost database and past experience on similar projects, and are shown in Table 7.2.

Table 7.2 Forcemain Unit Costs

Pipe Size (inches)	Replacement Unit Construction Cost ⁽¹⁾ (\$/linear foot)
6	\$185
8	\$185
12	\$205

Notes:

(1) ENR CCI (SF) for October 2021 is 14,452.

7.4 Project Costs and Contingency

Project cost estimates are calculated based on elements, such as the project location, size, length, and other factors. Allowances for project contingencies consistent with an "Order of Magnitude" estimate are also included in the project costs prepared as part of this study, as outlined in this section.

7.4.1 Baseline Construction Costs

Baseline Construction Cost is the total estimated construction cost, in dollars, of the proposed improvements for pipelines. Baseline Construction Costs were calculated by multiplying the estimated length by the unit construction cost listed in Table 7.1.

7.4.2 Estimated Construction Cost

Contingency costs must be reviewed on a case-by-case basis because they will vary considerably with each project. Consequently, it is appropriate to allow for uncertainties associated with the preliminary layout of a project. Factors such as unexpected construction conditions, the need for unforeseen mechanical items, and variations in final quantities are a few of the items that can

increase project costs for which it is wise to make allowances in preliminary estimates. To assist the City in making financial decisions for these future construction projects, contingency costs will be added to the planning budget as percentages of the baseline construction cost.

Since knowledge about site-specific conditions of each proposed project is limited at the master planning stage, a 30 percent contingency was applied to the Baseline Construction Cost to account for unforeseen events and unknown conditions.

7.4.3 Capital Improvement Cost

Other project construction contingency costs include costs associated with construction management, bid climate, environmental and legal costs, and engineering services. Construction management services covers items such as materials testing, and inspection during construction. Bid climate contingency covers any major fluctuations in the availability and cost of construction materials. Environmental and legal costs cover items such as legal fees, environmental compliance requirements, financing expenses, administrative costs, and interest during construction. Finally, there are engineering services costs associated with new facilities include preliminary investigation and reports, Right of Way (ROW) acquisition, foundation explorations, preparation of drawings and specifications during construction, surveying and staking, sampling of testing material, and start-up services.

The cost of these items can vary, but for the purpose of this study, it is assumed that the other project contingency costs will equal approximately 27.5 percent of the Estimated Construction Cost. Additionally, a bid market contingency of 15 percent is also applied to the estimated construction cost to account for the rapidly changing bid climate.

As shown in the following sample calculation of the Capital Improvement Cost, the total cost of all project construction contingencies (construction, construction management, bid climate, environmental and legal and engineering services) is approximately 185 percent of the Baseline Construction Cost. Note that contingencies were not applied to land acquisition costs.

Calculation of the 185 percent is the overall mark-up on the Baseline Construction Cost to arrive at the Capital Improvement Cost. It is not an additional contingency.

Example:

Baseline Construction Cost	\$1,000,000
<u>Contingency (30 percent)</u>	<u>\$300,000</u>
Estimated Construction Cost	\$1,300,000
Construction Management (10 percent)	\$130,000
Bid Climate Contingency (15 percent)	\$195,000
Environmental and Legal Costs (7.5 percent)	\$97,500
<u>Engineering Services (10 percent)</u>	<u>\$130,000</u>
Capital Improvement Cost	\$1,852,500

7.5 Capital Improvement Program Implementation

As discussed in Chapter 6, the capital projects identified will allow the City to provide reliable service to its customers through buildout. The improvement projects were prioritized based on the following factors:

- Reducing the risk of SSOs in the collection system under PWWF conditions.
- The type and extent of the deficiency.

Based on these factors, each project was assigned an implementation year. The capital improvements were grouped into one of the following phases:

- **Near Term Phase 1 (5 to 7 years):** This phase includes projects that are targeted as the highest priority improvements.
- **Near Term Phase 2 (8 to 12 years):** This phase includes projects that are targeted as high priority improvements that may be mitigated or monitored for several years prior to being implemented.
- **Long Term (13 to 20 years):** This phase generally includes medium priority improvements or projects that eliminate SSO's.

Critical projects were phased in the earlier phases (years) of the 20-year CIP. Less critical projects were phased into later phases of the 20-year CIP.

A summary of the capital projects is presented in Table 7.2. This table identifies the projects, provides a brief description of each project, identifies facility sizes (e.g., pipe diameter and length), and provides capital improvement costs. The columns used in Table 7.2 refer to the following:

- **Project Number:** Assigned project number. This is an alphanumeric number that starts with a project name that corresponds to the associated trunk and continues with a number.
- **Description:** Provides a brief description of the project.
- **Existing Size/Type:** This is the size of the existing pipeline/facility.
- **Proposed Size/Type:** This is the size of the proposed improvement.
- **Proposed Amount:** Estimated length of the proposed improvement (in feet). It should be noted that the length estimates do not account for re-routing the alignments to avoid unknown conditions.
- **CIP Cost Estimate:** This is the total estimated capital cost.
- **Existing and Future User Cost Breakdown:** This shows the cost allocation between existing and future users.
- **CIP Phasing:** This is an estimated improvement project start year.

The projects listed in Table 7.3 are broken down by capacity-related improvements and other projects. Capacity-related improvements were recommended based on the capacity deficiencies described in Chapter 6. Other projects include an annual rehabilitation and replacement program, Master Plan updates (as needed), flow monitoring program (every 5 years), and an inflow identification program. Detailed capital improvement sheets for each project are included in Appendix D.

Project phasing shown in Table 7.3 represents the implementation schedule for the proposed improvements, although funding availability may limit the City's ability to implement the proposed projects according to this schedule.

A summary of the capital projects is presented in Table 7.3. This table identifies the projects, provides a brief description of each project, identifies facility sizes (e.g., pipe diameter and length), and provides capital improvement costs.

Table 7.3 Capital Improvement Program Summary

City of Pinole Sewer Master Plan Update WASTEWATER COLLECTION SYSTEM CAPITAL IMPROVEMENT PLAN SUMMARY										
Project Number	Project Description	Existing/Future Deficiency	Deficiency Severity	Existing Size/Type	Proposed Size/Type	Proposed Amount	CIP Cost Estimate ⁽¹⁾⁽²⁾ (\$)	Existing User Cost (\$)	Future User Cost (\$)	
Capacity Related Improvements										
Gravity Mains										
Pinon-1	Gravity Main along Pinon Ave, Orleans Ave, Roble Ave, and San Pablo Ave	Existing	Flooding	Diameter (in)	Diameter (in)	Length (ft)	\$ 32,050,000	\$ 30,864,000	\$ 1,186,000	
				8-15	12-24	4,970	\$ 26,556,000	\$ 25,504,000	\$ 1,052,000	
Pinon-2	Gravity Main along San Pablo Ave, Pinon Ave, Appian Way, and Meadow Ave	Existing	Flooding	6-10	10-15	2,970	\$ 4,482,000	\$ 4,339,000	\$ 143,000	
Tennent-1	Gravity Main along Tennent Ave and at the WWTP	Existing	Flooding	24-36	36-42	3,390	\$ 1,866,000	\$ 1,858,000	\$ 8,000	
Tennent-2	Gravity Main along Tennent Ave	Existing	Flooding	18	24-36	3,360	\$ 2,664,000	\$ 2,582,000	\$ 82,000	
PVR-1	Gravity Main along Pinole Valley Road, Orleans Drive, and Pinole Creek	Existing	Flooding	6-12	12-15	4,020	\$ 3,018,000	\$ 2,990,000	\$ 28,000	
PVR-2	Gravity Main along Pinole Valley Road	Existing	Flooding	15-18	24	2,000	\$ 2,298,000	\$ 2,122,000	\$ 176,000	
South-1	Sarah Drive, Shea Drive, and between Shea Drive and Pinole Valley Road	Existing	Flooding	8-15	15-24	2,080	\$ 1,975,000	\$ 1,836,000	\$ 139,000	
South-2	Gravity Main along Pinole Valley Road	Existing	Within 3-feet of manhole rim	15	18-21	1,090	\$ 971,000	\$ 949,000	\$ 22,000	
South-3	Gravity Main along Pinole Valley Road and Sintas Avenue	Existing	Within 3-feet of manhole rim	8-15	15-21	2,140	\$ 1,807,000	\$ 1,766,000	\$ 41,000	
South-4	Gravity Main along Pinole Valley Road	Existing	Within 3-feet of manhole rim	10-12	15	2,500	\$ 1,877,000	\$ 1,835,000	\$ 42,000	
South-5	Gravity Main along Pinole Valley Road, Dodge Avenue and Wright Avenue	Existing	Flooding	8-10	10-15	1,530	\$ 1,149,000	\$ 1,128,000	\$ 21,000	
Summit-1	Gravity Main along Summit Drive	Existing	Within 3-feet of manhole rim	6	10	410	\$ 210,000	\$ 204,000	\$ 6,000	
Lift Stations				Capacity (mgd)			\$ 5,232,000	\$ 5,108,000	\$ 124,000	
Hazel-1	Hazel Lift Station Replacement	Existing	Exceeds firm Capacity	0.432	0.831	N/A	\$ 2,153,000	\$ 2,144,000	\$ 9,000	
San Pablo-1	San Pablo Lift Station Replacement	Existing	Exceeds firm Capacity	0.5832	1.38	N/A	\$ 3,079,000	\$ 2,964,000	\$ 115,000	
Force Mains				Diameter (in)	Diameter (in)	Length (ft)	\$ 362,000	\$ 352,000	\$ 10,000	
San Pablo-2	San Pablo Lift Station Force Main Rehabilitation and Replacement Projects	Existing	Exceeds maximum	6	8	1,530	\$ 262,000	\$ 252,000	\$ 10,000	
Gravity Mains							\$ 29,000,000	\$ 29,000,000	\$ -	
				Diameter (in)	Diameter (in)	Length (ft)	\$ 29,000,000	\$ 29,000,000	\$ -	
RR-2	Pipe Rehabilitation and Replacement Program	--	--	Varies	Varies	Varies	\$ 19,000,000	\$ 19,000,000	\$ -	
RR-3	Inflow Identification on Program	--	--	--	--	--	\$ 10,000,000	\$ 10,000,000	\$ -	
Other Projects							\$ 600,000	\$ -	\$ 600,000	
O-1	Sewer Master Plan Update	--	--	--	--	--	\$ 600,000	\$ -	\$ 600,000	
O-2	Flow Monitoring Program	--	--	--	--	--	\$ -	\$ -	\$ -	
CIP Total Annual Cost							\$ 61,650,000	\$ 59,864,000	\$ 1,786,000	
							N/A	N/A	N/A	

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 14,452 (SF).
- (2) Estimated Construction Cost includes a 30% contingency of the baseline construction cost.
- (3) Total project costs include a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

7.6 Existing Versus Future User Cost Share

A summary of the share of the costs for existing and future users for the proposed capacity-related improvement projects by phase is summarized in Table 7.4. As shown in Table 7.3, the existing user's share of the costs is approximately 96 percent (\$30.9 million), and the future user's share of the costs is approximately 4 percent (or \$1.2 million) of the proposed improvements. It is anticipated that existing user costs will be paid through existing user fees, while future user costs will be paid through connection fees. The future users cost share is small compared to the existing users share. This is because all of the capacity related improvements are triggered under existing PWWF conditions. If a project was proposed to exclusively correct an existing deficiency, then existing users would be assigned 100 percent of the project's benefit, and therefore, 100 percent of the costs

Table 7.4 CIP Estimate by Reimbursement Category

Reimbursement Category	CIP Cost Estimate (\$, Millions) ⁽¹⁾
Existing Users	\$59.7
Future Users	\$1.8
Total	\$61.7

Notes:

(1) CIP costs based on assumptions outlined in this Chapter and Table 7.2.

7.7 CIP Summary

A summary of the CIP costs is provided in Table 7.5 and shown graphically on Figure 7.1. As listed in Table 7.5, the total recommended improvements is estimated to be \$61.7 million. Near Term Phase 1 (–5 – 7 Years) projects account for approximately 23 percent (\$14.35.0 million), Near Term Phase 2 (–8 – 12 Years) projects accounts for approximately 40 percent (\$25.36million), and Long-Term (13 – 20 Years) projects account for approximately 37 percent (\$23.44 million). The other recommended projects (RR-1 through RR-3 and O-1) is estimated to be \$0.6 million.

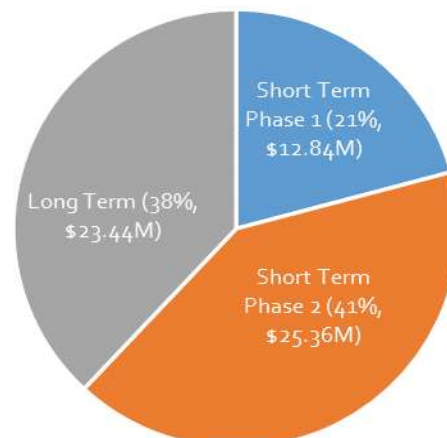


Figure 7.1 CIP by Phase

Table 7.5 CIP Cost Estimate Summary

Improvement Type	CIP Cost Estimate by Phase (\$, Millions) ⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾			Total (\$, Millions)
	Near Term Phase 1	Near Term Phase 2	Long Term	
	(–5 to 7 Years)	–8 – 12 Years)	(–13 to 20 Years)	
Capacity-Related Improvements	\$6.35	\$17.71	-	\$32.1
R&R Projects	\$6.5	\$7.5	\$15.0	\$29.0
Other Projects	-	\$0.2	\$0.5	\$0.6
Total	\$12.85	\$25.34	\$23.44	\$61.7

Notes:

(1) ENR CCI (SF) for October 2021 is 14,452.

(2) Estimated Construction Cost includes a 30 percent contingency of the Baseline Construction Cost.

(3) Total project costs include a 15 percent for bid climate, 10 percent for engineering, 10 percent for construction management, and 7.5 percent for environmental and legal costs. Total Mark-Up is 185 percent of the Baseline Construction Costs.

Appendix A

SEWER INFLOW MONITORING AND INFLOW/INFILTRATION STUDY

CITY OF PINOLE

SEWER FLOW MONITORING & INFLOW/INFILTRATION STUDY



Prepared for: **City of Pinole**
2131 Pear Street
Pinole, CA 94564

Date: August 2015

Prepared by:



V&A Project No. 13-0276

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APPENDICES

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ABBREVIATIONS, ACRONYMS, UNITS OF MEASURE, AND TERMS AND DEFINITIONS USED IN THIS REPORT

Table i. Abbreviations

Abbreviation	Term
ADWF	average dry weather flow
C. of	City of...
CO	carbon monoxide
COOP	Cooperative Observer Program
d/D	depth/diameter ratio
gpd	gallons per day
FM	flow monitor
GW	groundwater infiltration
H ₂ S	hydrogen sulfide
IDM	inch diameter-miles
I/I	inflow and infiltration
LEL	lower explosive limit
LS	lift station
mgd	million gallons per day
NOAA	National Oceanic and Atmospheric Administration
NWS	National Weather Service
OSHA	U.S. Department of Labor, Occupational Safety and Health Administration
PPE	personal protective equipment
Q	flow rate
RDI	rainfall-dependent infiltration
QA/QC	quality assurance/quality control
RRI	rainfall-responsive infiltration
RG	rain gauge
SSO	sanitary sewer overflow
WEF	Water Environment Federation
WRCC	Western Regional Climate Center

Table ii. Terms and Definitions

Term	Definition
Average dry weather flow (ADWF)	Average flow rate or pattern from days without noticeable inflow or infiltration response. ADWF usage patterns for weekdays and weekends differ and must be computed separately. ADWF can be expressed as a numeric average or as a curve showing the variation in flow over a day. ADWF includes the influence of normal groundwater infiltration (not related to a rain event).
Basin	Sanitary sewer collection system upstream of a given location (often a flow meter), including all pipelines, inlets, and appurtenances. Also refers to the ground surface area near and enclosed by pipelines. A basin may refer to the entire collection system upstream from a flow meter or exclude separately monitored basins upstream.
Depth/diameter (d/D) ratio	Depth of water in a pipe as a fraction of the pipe's diameter. A measure of fullness of the pipe used in capacity analysis.
Infiltration and inflow	Infiltration and inflow (I/I) rates are calculated by subtracting the ADWF flow curve from the instantaneous flow measurements taken during and after a storm event. Flow in excess of the baseline consists of inflow, rainfall-responsive infiltration, and rainfall-dependent infiltration. Total I/I is the total sum in gallons of additional flow attributable to a storm event.
Infiltration, groundwater	Groundwater infiltration (GWI) is groundwater that enters the collection system through pipe defects. GWI depends on the depth of the groundwater table above the pipelines as well as the percentage of the system that is submerged. The variation of groundwater levels and subsequent groundwater infiltration rates is seasonal by nature. On a day-to-day basis, groundwater infiltration rates are relatively steady and will not fluctuate greatly.
Infiltration, rainfall-dependent	Rainfall-dependent infiltration (RDI) is similar to groundwater infiltration but occurs as a result of storm water. The storm water percolates into the soil, submerges more of the pipe system, and enters through pipe defects. RDI is the slowest component of storm-related infiltration and inflow, beginning gradually and often lasting 24 hours or longer. The response time depends on the soil permeability and saturation levels.
Infiltration, rainfall-responsive	Rainfall-responsive infiltration (RRI) is storm water that enters the collection system through pipe defects, but normally in sewers constructed close to the ground surface such as private laterals. RRI is independent of the groundwater table and reaches defective sewers by way of the pipe trench in which the sewer is constructed; particularly if the pipe is placed in impermeable soil and bedded and backfilled with a granular material. In this case, the pipe trench serves as a conduit similar to a French drain, conveying storm drainage to defective joints and other openings in the system.
Inflow	Inflow is defined as water discharged into the sewer system, including private sewer laterals, from direct connections such as downspouts, yard and area drains, holes in manhole covers, cross-connections from storm drains, or catch basins. Inflow creates a peak flow problem in the sewer system and often dictates the required capacity of downstream pipes and transport facilities to carry these peak instantaneous flows. Overflows are often attributable to high inflow rates.
Normalization	To run an "apples-to-apples" comparison amongst different basins, calculated metrics must be normalized . Individual basins will have different runoff areas, pipe lengths and sanitary flows. There are three common methods of normalization. Depending on the information available, one or all methods can be applied to a given project:

Term	Definition
	• <u>Pipe Length</u>: The metric is divided by the length of pipe in the upstream basin expressed in units of inch-diameter-mile (IDM). • <u>Basin Area</u>: The metric is divided by the estimated drainage area of the basin in acres. • <u>ADWF</u>: The metric is divided by the average dry weather sanitary flow (ADWF).
Normalization, inflow	The peak I/I flow rate is used to quantify inflow. Although the instantaneous flow monitoring data will typically show an inflow peak, the inflow response is measured from the I/I flow rate (in excess of baseline flow). This removes the effect of sanitary flow variations and measures only the I/I response: • <u>Pipe Length</u>: The peak I/I flow rate is divided by the length of pipe (IDM) in the upstream basin. The result is expressed in gallons per day (gpd) per IDM (gpd/IDM). • <u>Basin Area</u>: The peak I/I flow rate is divided by the geographic area of the upstream basin. The result is expressed in gpd per acre. • <u>ADWF</u>: The peak I/I flow rate is divided by the average dry weather flow (ADWF). This is a ratio and is expressed without units.
Normalization, GWI	The estimated GWI rates are compared to acceptable GWI rates, as defined by the Water Environment Federation, and are used to identify basins with high GWI: • <u>Pipe Length</u>: The GWI flow rate is divided by the length of pipe (IDM) in the upstream basin. The result is expressed in gallons per day (gpd) per IDM (gpd/IDM). • <u>Basin Area</u>: The GWI flow rate is divided by the geographic area of the upstream basin. The result is expressed in gpd per acre. • <u>ADWF</u>: The GWI flow rate is divided by the average dry weather flow (ADWF). This is a ratio and is expressed without units.
Normalization, RDI	The estimated RDI rates at a period 24 hours or more after the conclusion of a storm event are used to identify basins with high RDI: • <u>Pipe Length</u>: The RDI flow rate is divided by the length of pipe (IDM) in the upstream basin. The result is expressed in gallons per day (gpd) per IDM (gpd/IDM). • <u>Basin Area</u>: The RDI flow rate is divided by the geographic area of the upstream basin. The result is expressed in gpd per acre. • <u>ADWF</u>: The RDI flow rate is divided by the average dry weather flow (ADWF). This is a ratio and is expressed without units.
Normalization, total I/I	The estimated totalized I/I in gallons attributable to a particular storm event is used to identify basins with high total I/I. Because this is a totalized value rather than a rate and can be attributable solely to an individual storm event, the volume of the storm event is also taken into consideration. This allows for a comparison not only between basins but also between storm events: • <u>Pipe Length</u>: Total gallons of I/I is divided by the length of pipe (IDM) in the upstream basin and the rainfall total (inches) of the storm event. The result is expressed in gallons per IDM per inch-rain.

Term	Definition
	• Basin Area (R-Value): Total gallons of I/I is divided by total gallons of rainfall water that fell within the acreage of the basin area. This is a ratio and is expressed as a percentage. R-Value is described as “the percentage of rainfall that enters the collection system.” Systems with R-Values less than 5%¹ are often considered to be performing well. • ADWF: Total gallons of I/I is divided by the ADWF and the rainfall total of the storm event. The result is expressed in million gallons per MGD of ADWF per inch of rain.
Peaking factor	Ratio of peak measured flow to average dry weather flow. This ratio expresses the degree of fluctuation in flow rate over the monitoring period and is used in capacity analysis.
Surcharge	When the flow level is higher than the crown of the pipe, then the pipeline is said to be in a surcharged condition. The pipeline is surcharged when the d/D ratio is greater than 1.0.
Weekend/weekday ratio	The ratio of weekend ADWFs to weekday ADWFs. In residential areas, this ratio is typically slightly higher than 1.0. In business districts, depending on the type of service, this ratio can be significantly less than 1.0.

¹ Keefe, P.N. “Test Basins for I/I Reduction and SSO Elimination.” 1998 WEF Wet Weather Specialty Conference, Cleveland.

ES EXECUTIVE SUMMARY

Scope and Purpose

V&A Consulting Engineers, Inc. (V&A) has completed sanitary sewer flow monitoring with inflow and infiltration (I/I) analysis within the City of Pinole (City). Flow monitoring was performed over a period of approximately 3.5 months from December 13, 2013 to April 1, 2014 at 16 open-channel flow monitoring sites. The purpose of this study was to identify smaller basins within Area Five and Area Six having the highest rates of I/I.

To the extent possible given the time constraints of a single wet weather season and the unpredictable nature regarding the duration and intensity of storm events, V&A attempted to analyze early season rain events, make a decision on areas with high I/I, and then relocate flow meters within the same wet weather season. Relocations between rainfall events intended to further narrow the search for areas of high I/I with an ultimate goal of identifying possible CIP projects in support of the City's budgeted pipe lining and replacement program.

During the course of Phase 1 of this study, V&A installed 14 flow meters and 2 volumetric meters focused within Area Five and Area Six, dividing these areas into 16 sub-basins. For Phase 2, V&A removed ten Phase 1 meters and redistributed them amongst Basins 3, 5 and 6. A final rain event allowed for a third phase of this study, in which V&A removed seven Phase 1 and 2 meters and reinstalled them within sub-basins 3.1, 5.2, 6.3 and 6.5.

The contents of this deliverable summarize the results of the three aforementioned flow monitoring and I/I phases of this study. Additionally, V&A was asked to analyze and comment on the following items, which are included in this report as additional Appendices:

- **Flow Split between M6.0A and M6:** As a part of Phase 3, the City asked that the flow split between Sites M6.0A and M6.3 be monitored and analyzed during average dry weather and peak wet weather flow conditions.
- **Allocation of Inflow within the Perimeter of the Treatment Plant:** Rain that falls within the perimeter of the treatment plant flows directly into the treatment facility as waste; henceforth, there is an associated cost of treatment. The City asked V&A to determine the volume of inflow that falls within the footprint of the treatment facility.
- **Treatment Plant Influent Meter:** The City has two methods available to measure incoming flows from the City of Pinole. The City requested that V&A analyze the accuracy and determine which method is preferred for flow data reliability. This analysis was important for purposes of billing between the Cities of Pinole and Hercules. V&A dedicated a flow meter to measure the flow into the treatment plant for comparison to the City meter; the results are presented within this deliverable as a Technical Memorandum.

Disclaimer

The following flow monitoring, capacity and I/I results and analyses do not replace a full dynamic hydraulic model. A dynamic model developed by a master planning engineering firm would determine capacity on a node-to-node basis and would be based on pipe slopes of the individual pipe segments within the local collection system. The following data and the interpretation of these data should be used at the discretion of the City Engineer.

Flow Monitoring and Capacity Results

Table ES-1 summarizes the peak recorded flows, levels, d/D ratios, and peaking factors per site during the flow monitoring period. Sites that surcharged and sites with peaking factors greater than 10.0 have been shaded in **RED**. Capacity analysis data is presented on a site-by-site basis and represents the hydraulic conditions only at the point site locations. Hydraulic conditions in other areas of the collection system will differ.

Table ES-1. Capacity Analysis Summary

Monitoring Site	ADWF (mgd)	Peak Measured Flow (mgd)	Peaking Factor	Diameter (Inches)	Peak Level (Inches)	d/D Ratio	Surcharge Level (feet)
<i>Phase 1</i>							
Site M1	0.71	3.50	4.9	15	8.5	0.57	-
Site M2	1.11	7.20	6.5	30	45.5	1.52	1.3
Site M3	0.07	0.71	10.7	n/a	n/a	n/a	-
Site M4	0.13	0.47	3.7	n/a	n/a	n/a	-
Site M5	0.02	0.65	33.9	7.25	10.7	1.53	0.3
Site M6	0.18	1.10	6.2	10	82.3	8.23	6.0
Site M7	0.36	2.02	5.6	15	11.8	0.78	-
Site M8	0.007	0.03	5.0	7.75	1.3	0.17	-
Site M9	0.004	0.30	67.5	6	2.7	0.45	-
Site M10	0.09	0.41	4.8	8	11.4	1.43	0.3
Site M11	0.02	0.53	30.6	10	51.6	5.16	3.5
Site M12 ²	0.003	n/a	n/a	8	51.6	6.45	3.6
Site M13	0.06	0.21	3.8	6	1.7	0.28	-
Site M14	0.04	0.32	7.7	8	9.3	1.16	0.1
Site M15	0.02	0.21	14.1	6	2.6	0.44	-
Site M16	0.09	0.62	7.2	11.5	37.2	3.23	2.1

² Site M12 failed during Storm Event 1; the manhole was surcharged for an extended time period, flooding the flow logging computer. Enough data was recovered to establish an average dry weather flow but not enough for a proper capacity and I/I analysis. This site and other sites that comprise the 'Old Henry Road' basin are the subject of a future project.

Monitoring Site	ADWF (mgd)	Peak Measured Flow (mgd)	Peaking Factor	Diameter (Inches)	Peak Level (Inches)	d/D Ratio	Surcharge Level (feet)
<u>Phase 2</u>							
Site M3.1	0.03	0.58	18.3	6	3.3	0.41	-
Site M3.2	0.01	0.08	7.3	6	3.2	0.40	-
Site M5.1	0.02	0.15	6.5	8	7.6	0.95	-
Site M5.2	0.01	0.31	27.6	8	6.1	0.77	-
Site M5.3	0.02	0.10	4.5	6	2.1	0.35	-
Site M6.1	0.01	0.12	10.4	6	7.2	1.20	0.1
Site M6.2	0.02	0.04	2.3	8	1.9	0.23	-
Site M6.3	0.16	0.72	4.4	8	5.1	0.64	-
Site M6.4	0.08	0.51	6.1	8	6.2	0.78	-
Site M6.5	0.01	0.12	13.5	8	3.0	0.37	-
<u>Phase 3</u>							
Site M3.1A	0.009	0.15	15.4	6	5.9	0.98	-
Site M3.1B	0.006	0.10	16.7	6	2.0	0.34	-
Site M5.2A	0.009	0.11	12.0	6	3.2	0.53	-
Site M6.0A	0.057	1.09	19.0	10	7.2	0.72	-
Site M6.3A	0.005	0.30	61.5	6	3.2	0.53	-
Site M6.3B	0.004	0.06	16.1	8	1.3	0.16	-
Site M6.5A	0.003	0.03	11.1	7.75	1.3	0.17	-
Site M6.5B	0.003	0.04	11.8	7.75	1.1	0.14	-

The following capacity analysis results are noted:

- Peaking Factor:** Several sites had peaking factors greater than 10. Larger peaking factors are expected given that the study analyzes basins previously identified as having high I/I rates.
- d/D Ratio:** Nine of the flow monitoring sites (Sites M2, M5, M6, M10, M11, M12, M14, M16 and M6.1) reached surcharge conditions.
- Sanitary Sewer Overflow Potential:** Given the level of surcharging seen during Storm Event 1, the manholes at Site 6, Site 11/12 and Site 16 have the potential for a sanitary sewer overflow (SSO) during a larger rainfall event. Site 6 has historical precedence for SSO discharging during large rainfall events.

Inflow and Infiltration Analysis Results

Preface

Per discussions with the City, V&A prioritized I/I evaluations on the comparative analysis of the Peak I/I rate, traditionally associated with inflow. Inflow sources transport rain water *directly* into the sewer system; the corresponding inflow rates are tied closely to the intensity of the storm. This component of RDI/I often causes a peak flow problem in the sewer system and often dictates the required capacity of downstream pipes and transport facilities to carry these peak instantaneous flows. Figure ES-1 illustrates the I/I response curve for Basin 3 during Phase 1 as it related to peak I/I rate.

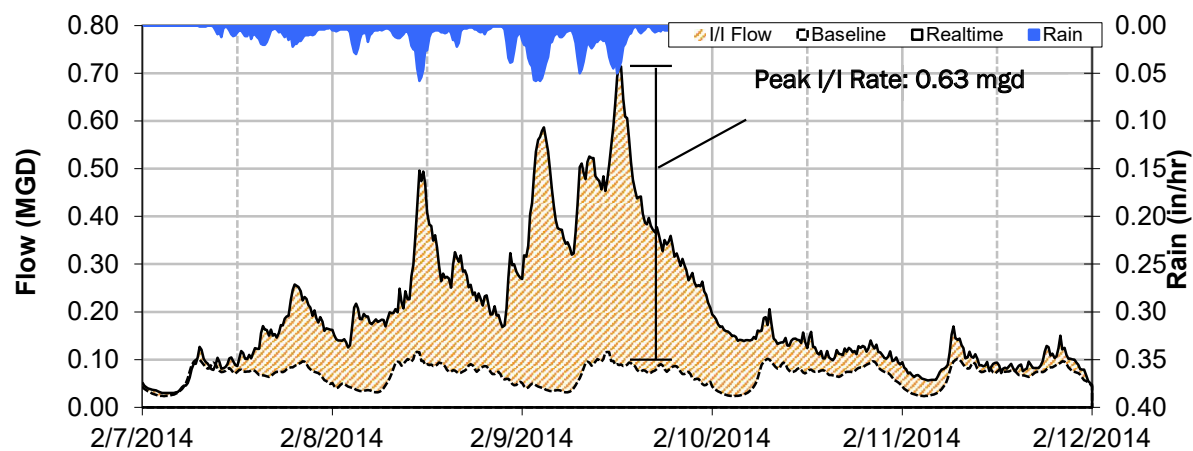


Figure ES-1. I/I Isolation Curve, Basin 3 (Inflow Measurement)

V&A analyzed the I/I isolation curves for all sites and all phases of this study to try to determine the areas of the City collection system that had the highest peak I/I rates.

Phase 1 (Large Basin) Results

The results of the Phase 1 flow monitoring and I/I analyses for the larger basins are shown as follows:

- **Basin 3:** The City cited historical data and field observations regarding known I/I issues within Basin 3.
- **Basin 5:** V&A recommended investigating Basin 5 due to the high peak I/I ratios and high combined I/I totals.
- **Basin 6:** There is a known capacity issue one manhole upstream from the Basin 6 monitoring location.
- **Basin 8:** This is a newer area of the City and this area had minimal I/I contribution.
- **Basin 9:** The flow meter was not in an ideal location for monitoring. The consensus was that the response for Basin 9 was real and considerable but the magnitude may not be correct due to metering conditions.

- **Basin 11:** This location had significant peak I/I rates and combined I/I totals.
- **Basin 12:** The metering manhole for this basin surcharged with evidence that the surcharge was close to an SSO.
- **Basins 15/16:** Both basins were noted for generally high I/I rates and total I/I contribution.
- **Old Henry Road:** The City cited the age of the sewer system along Old Henry Road and noted this correlation to the high I/I rates within Basins 9, 11 and 12.

Final group conclusions were as follows:

- Focus additional phases of monitoring within Basins 3, 5 and 6.
 - The focus of the study moving forward would be to spend the remainder of the 2014 wet weather season identifying smaller high I/I mini-basins within this region for possible future CIP work.
 - Identifying areas of I/I reduction may help to solve two problems within the City: (1) severe flows observed in Basin 3 (San Pablo Pump Station), and (2) capacity issues observed at the manhole at the intersection of Pinon Avenue and Bay View Farm Road.
- Make note of the 'Old Henry Road' Basins as a future candidate for a focused flow monitoring and I/I study.

Figure ES-2 illustrates the Phase 1 inflow rankings for the larger basins.

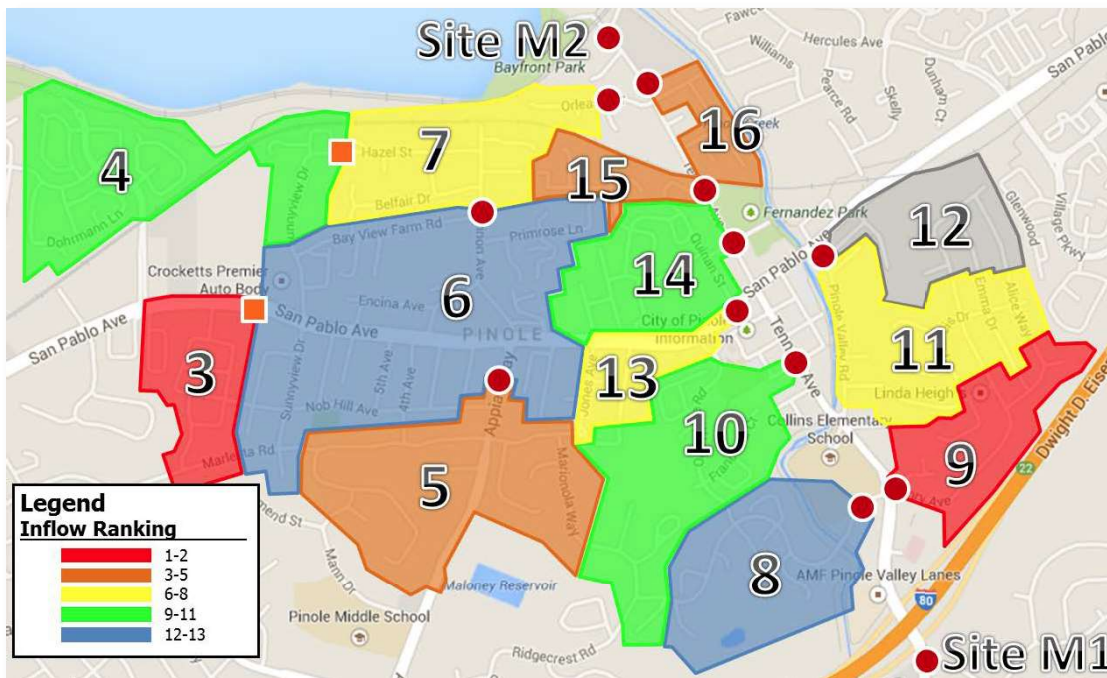


Figure ES-2. Phase 1 Inflow Temperature Map

Phases 2 and 3 Focused Sub-Basin Results

Additional phases of flow monitoring and I/I analysis were focused within Basins 3, 5 and 6. Through focused flow monitoring on a very small basis, V&A was able to find 'hot-spot' locations within Basins 3, 5 and 6 that were contributing a significant percentage of the peak. Figure ES-3 illustrates the hot-spot areas within Basins 3, 5 and 6.

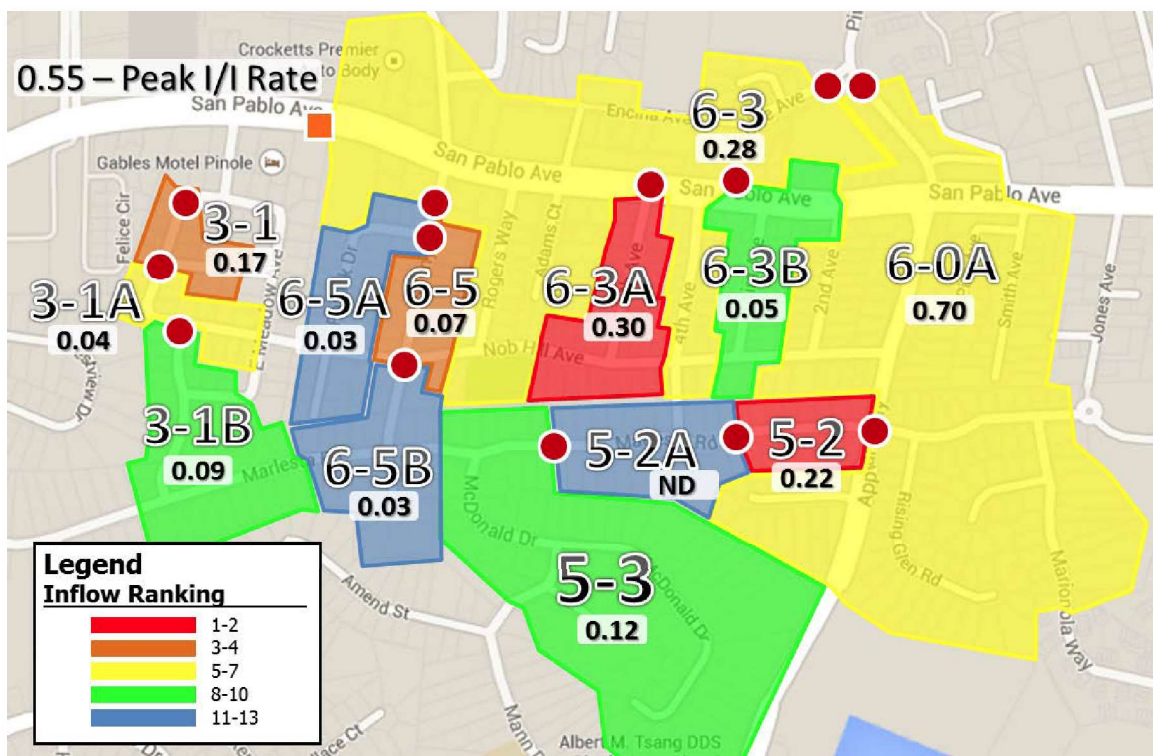


Figure ES-3. Phase 3 Inflow Analysis Temperature Map

Recommendations

V&A advises that future I/I reduction plans consider the following recommendations:

1. Potential CIP Projects for I/I Mitigation and Reduction

- a. The City should conduct I/I mitigation and reduction measures in the following mini-basins:
 - i. Basin 3-1
 - ii. Basin 3-1A
 - iii. Basin 5-2
 - iv. Basin 6-3A
 - v. Basin 6-5
- b. For I/I reduction, V&A recommends rehabilitation of the sewer mains, laterals and side sewers.
 - i. The most comprehensive study on the percent of I/I reduction has been conducted by King County, *Initial Infiltration and Inflow Reduction Project Alternatives Analysis Report*. This study confirmed the popular theory that over 50% of infiltration and inflow enters from private lateral connections. The report also makes the following recommendations for I/I mitigation:
 - (a) CCTV work is best performed during a rainfall event after groundwater levels have begun to rise, allowing visual confirmation of specific I/I entry points, including determining the source of potential lateral I/I source. A generally consistent deficiency was observed with regards to the joint conditions in the laterals and side sewers.
 - (b) Rehabilitation of sewer mains, manholes, laterals and side sewers results in approximately 80% reduction of I/I.

2. Future I/I Identification – Continued Sub-Basin Flow Monitoring and I/I Analysis: V&A recommends that the City continue to locate and mitigate potential sources of I/I. Already identified as known contributing sub-basins with high volumes of I/I are Basins 9, 11, 12, 14 and 15. It is possible that a study similar to this study may identify CIP projects that can significantly reduce the overall I/I within the City collection system.

3. Other I/I Investigation Methods: Other potential I/I investigation methods include the following:

- a. Smoke testing
- b. Night-time reconnaissance work to (1) investigate and determine direct point sources of inflow, and (2) determine the areas and pipe reaches responsible for high levels of infiltration contribution.

4. I/I Reduction Cost Effectiveness Analysis: The City should conduct a study to determine which is more cost-effective: (1) locating the sources of inflow/infiltration and systematically rehabilitating or replacing the faulty pipelines; or (2) continued treatment of the additional rainfall dependent I/I flow.

1.0 INTRODUCTION

1.1 Scope and Purpose

V&A Consulting Engineers, Inc. (V&A) was retained by the City of Pinole (City) to conduct sanitary sewer flow monitoring and inflow/infiltration (I/I) analysis within the City of Pinole (City). Flow monitoring occurred over a 3.5-month period from December 13, 2013 to April 1, 2014. Two basins within the collection system (Area Five “The Meadows” and Area Six “Old Town”) had already been identified by the City as having high rates of RDI/I. The purpose of this study was to identify smaller basins within Area Five and Area Six having the highest rates of I/I.

To the extent possible given the time constraints of a single wet weather season and the unpredictable nature regarding the duration and intensity of storm events, V&A would attempt to relocate flow meters within the wet weather season. Relocations between rainfall events could further narrow the search for areas of high I/I with an ultimate goal of identifying possible CIP projects in support of the City’s budgeted pipe lining and replacement program. The outline of the strategies for the I/I investigation is shown as follows:

- **Phase 1 – Initial Sub-Basins:** V&A installed 14 flow meters and 2 volumetric meters focused within Area Five and Area Six, dividing these areas into 16 sub-basins.
 - **Mid-Project, Post-Rainfall I/I Analysis:** After the first usable rainfall event, V&A analyzed the flow data for relative I/I contribution and comparison amongst the sub-basins.
 - **Quick Decisions:** V&A conveyed the I/I results to the City, making recommendations for targeted investigation of the highest ranking I/I sub-basins.
 - **Maneuverable Metering:** V&A removed the meters from the sub-basins with lower RDI/I rates and relocated them into the sub-basins with the higher RDI/I rates, dividing the original sub-basins into mini-basins.
- **Phase 2 – Focused Sub-Basins:** The same process from Phase 1 was repeated for Phase 2, focusing the search within the sub-basins with the greatest I/I contribution.
- **Phase 3 – Focused Mini-Basins:** The rain events of the 2013/2014 season were sufficient to conduct a third phase of flow monitoring and I/I analysis.

Additionally, V&A was asked to analyze and comment on the following items:

- **Flow Split between M6.0A and M6:** As a part of Phase 3, the City asked that the flow split between Sites M6.0A and M6.3 be monitored and analyzed during average dry weather and peak wet weather flow conditions.

- **Allocation of Inflow within the Perimeter of the Treatment Plant:** Rain that falls within the perimeter of the treatment plant flows directly into the treatment facility as waste; henceforth, there is an associated cost of treatment. The City asked V&A to determine the volume of inflow that falls within the footprint of the treatment facility.
- **Treatment Plant Influent Meter:** The City has two methods available to measure incoming flows from the City of Pinole. The City requested that V&A analyze the accuracy and determine which method is preferred for flow data reliability. This analysis was important for purposes of billing between the Cities of Pinole and Hercules. V&A dedicated a flow meter to measuring the flow into the treatment plant for comparison to the City meter; the results are presented within this deliverable as a Technical Memorandum.

These additional analyses are included in this report as *Appendix A, Appendix B and Appendix C.*

1.2 Flow Monitoring Sites

Flow monitoring sites are the locations where the flow monitors were placed. Flow monitoring site data may include the flows of one or many drainage basins. Capacity and flow rate information is presented on a site-by-site basis. The flow monitoring sites for the three phases are listed in Table 1-1, Table 1-2 and Table 1-3 and illustrated in Figure 1-1, Figure 1-2 and Figure 1-3. Detailed descriptions of the individual flow monitoring sites are included in *Appendix A.*

Table 1-1. Phase 1 Flow Monitoring Sites

Monitoring Site	Pipe Size (Inches)	Location
Site M1	15	Pinole Valley Rd., just south of Highway 80
Site M2	30	Tennant Ave., just outside WWTP
Site M3	n/a	San Pablo Ave., west of Sunnyview Dr.
Site M4	n/a	In easement at west end of Hazel St.
Site M5	7.25	Appian Way, south of San Pablo Ave.
Site M6	10	Pinon Ave., north of Bay View Farm Rd.
Site M7	15	Intersection of Orleans Dr. and Zoe Ct.
Site M8	7.75	Henry Ave., west of Pinole Valley Rd.
Site M9	6	Intersection of Henry Ave. and Pinole Valley Rd.
Site M10	8	Intersection of Tennant Ave. and Prune St.
Site M11	10	Intersection of Pinole Valley Rd. and Rafaela St.
Site M12	8	Intersection of Pinole Valley Rd. and Rafaela St.
Site M13	6	San Pablo Ave. just west of Quinan St.
Site M14	8	Intersection of Tennant Ave. and Park St.
Site M15	6	Tennant Ave., south of train tracks, west of Fernandez Park
Site M16	11.5	Tennant Ave. north of Orleans Dr.

Table 1-2. Phase 2 Flow Monitoring Sites

Monitoring Site	Pipe Size (inches)	Location
Site M2	30	Tennant Ave., just outside WWTP
Site M3	n/a	San Pablo Ave., west of Sunnyview Dr.
Site M4	n/a	In easement at west end of Hazel St.
Site M6	10	Pinon Ave., north of Bay View Farm Rd.
Site M7	15	Intersection of Orleans Dr. and Zoe Ct.
Site M3.1	6	830 Meadows Ave.
Site M3.2	6	830 Meadows Ave.
Site M5.1	8	Intersection of Appian Way and Marlesta Rd.
Site M5.2	8	Intersection of Appian Way and Marlesta Rd.
Site M5.3	6	1171 Marlesta Rd.
Site M6.1	6	Just west of intersection of Bay View Farm Rd. and Pinon Ave.
Site M6.2	8	Intersection of Pinon Ave. and Primrose Ln.
Site M6.3	8	Roble Ave., west of Pinon Ave.
Site M6.4	8	Intersection of San Pablo Ave. and Rogers Way
Site M6.5	8	747 Sunnyview Dr.

Table 1-3. Phase 3 Flow Monitoring Sites

Monitoring Site	Pipe Size (inches)	Location
Site M2	30	Tennant Ave., just outside WWTP
Site M3	n/a	San Pablo Ave., west of Sunnyview Dr.
Site M4	n/a	In easement at west end of Hazel St.
Site M6	10	Pinon Ave., north of Bay View Farm Rd.
Site M3.1	6	830 Meadows Ave.
Site M5.2	8	Intersection of Appian Way and Marlesta Rd.
Site M5.3	6	1171 Marlesta Rd.
Site M6.3	8	Roble Ave., west of Pinon Ave.
Site M6.5	8	747 Sunnyview Dr.
Site M3.1A	6	Intersection of Meadow Ave. and Betty Ave.
Site M3.1B	6	Intersection of Meadow Ave. and Nob Hill Ave.
Site M5.2A	6	1367 Marlesta Rd.
Site M6.0A	10	Intersection of Roble Ave. and Pinon Ave.
Site M6.3A	6	Intersection of San Pablo Ave. and 5 th Ave.
Site M6.3B	8	Intersection of San Pablo Ave. and Roble Ave.
Site M6.5A	7.75	Intersection of Sunnyview Dr. and Patrick Dr.
Site M6.5B	7.75	Intersection of Sunnyview Dr. and Nob Hill Ave.



Figure 1-1. Phase 1 Flow Monitoring Site Map



Figure 1-2. Phase 2 Flow Monitoring Site Map

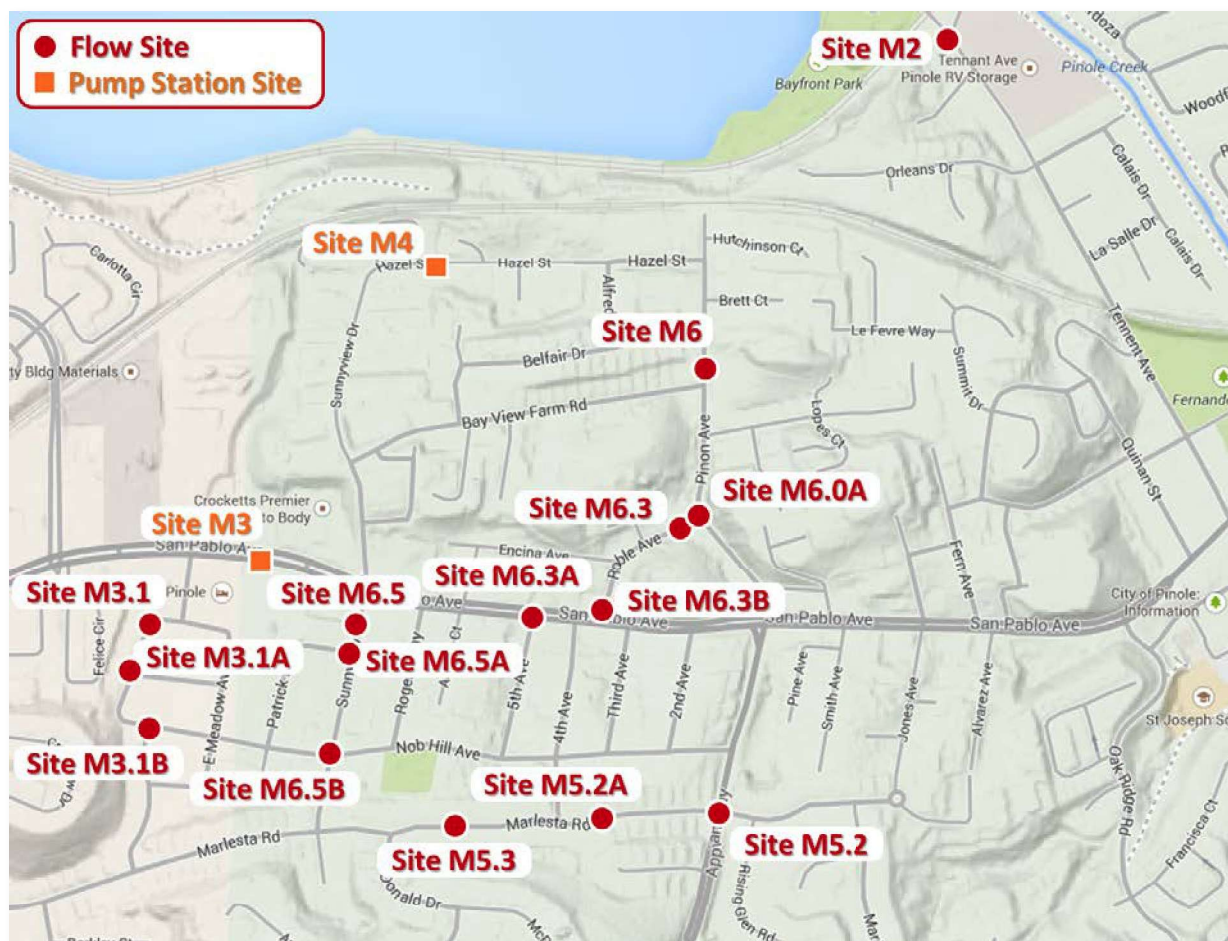


Figure 1-3. Phase 3 Flow Monitoring Site Map

1.3 Flow Monitoring Basins

Flow monitoring basins are localized areas of a sanitary sewer collection system upstream of a given location (often a flow meter), including all pipelines, inlets, and appurtenances. The basin refers to the ground surface area near and enclosed by the pipelines. A basin may refer to the entire collection system upstream from a flow meter or may exclude separately monitored basins upstream.

To isolate a flow monitoring basin, an addition or subtraction of flows may be required³. Site M1 was not used as a basin because it served to measure the flow coming into the area of interest. Site M2 was not isolated as a basin because it would have required subtracting the flow from 11 other sites.

I/I analysis in this report will be conducted on a basin-by-basin basis. Table 1-4 lists the basins and sub-basins that were isolated⁴ and utilized for I/I analysis and Figure 1-4, Figure 1-5 and Figure 1-6 illustrate the basins utilized for I/I analysis.

Table 1-4. List of Flow Monitoring Basins

Sub-Basin	Area (acres)	Pipe Length (IDM)	Basin Flow Calculation
<u>Phase 1</u>			
Basin M3	40	5.09	$Q_{M3}(\text{Basin}) = Q_{M3}(\text{Site})$
Basin M4	58	12.91	$Q_{M4}(\text{Basin}) = Q_{M4}(\text{Site})$
Basin M5	71	10.32	$Q_{M5}(\text{Basin}) = Q_{M5}(\text{Site})$
Basin M6	130	13.01	$Q_{M6}(\text{Basin}) = Q_{M6}(\text{Site}) - Q_{M5}(\text{Site}) - Q_{M3}(\text{Site})$
Basin M7	41	11.88	$Q_{M7}(\text{Basin}) = Q_{M7}(\text{Site}) - Q_{M6}(\text{Site}) - Q_{M4}(\text{Site})$
Basin M8	53	6.35	$Q_{M8}(\text{Basin}) = Q_{M8}(\text{Site})$
Basin M9	28	4.99	$Q_{M9}(\text{Basin}) = Q_{M9}(\text{Site})$
Basin M10	62	11.87	$Q_{M10}(\text{Basin}) = Q_{M10}(\text{Site})$
Basin M11	52	10.48	$Q_{M11}(\text{Basin}) = Q_{M11}(\text{Site})$
Basin M12	31	4.47	$Q_{M12}(\text{Basin}) = Q_{M12}(\text{Site})$
Basin M13	17	3.20	$Q_{M13}(\text{Basin}) = Q_{M13}(\text{Site})$
Basin M14	37	6.33	$Q_{M14}(\text{Basin}) = Q_{M14}(\text{Site})$
Basin M15	16	3.65	$Q_{M15}(\text{Basin}) = Q_{M15}(\text{Site})$
Basin M16	12	4.78	$Q_{M16}(\text{Basin}) = Q_{M16}(\text{Site})$

³ There is error inherent in flow monitoring. Adding and subtracting flows increases error on an additive basis. For example, if Site A has error $\pm 10\%$ and Site B has error $\pm 10\%$, then the resulting flow when subtracting Site A from Site B would be $\pm 20\%$.

⁴ There may be locations with cross-connections between trunk sewers or overflow bypass sewers to help equalize basins and prevent sanitary sewer overflows during peak rain events. However, unless the inter-basin connections are plugged, the behavior of flows may not be known with certainty. The basin isolation equations shown are per the best of V&A's knowledge.

Sub-Basin	Area (acres)	Pipe Length (IDM)	Basin Flow Calculation
<u>Phase 2</u>			
Basin M3.1	16	2.07	$Q_{M3.1}(\text{Basin}) = Q_{M3.1}(\text{Site})$
Basin M3.2	6	1.14	$Q_{M3.2}(\text{Basin}) = Q_{M3.2}(\text{Site})$
Basin M5.1	23	3.34	$Q_{M5.1}(\text{Basin}) = Q_{M5.1}(\text{Site}) - Q_{M5.3}(\text{Site})$
Basin M5.2	9	1.34	$Q_{M5.2}(\text{Basin}) = Q_{M5.2}(\text{Site})$
Basin M5.3	29	3.25	$Q_{M5.3}(\text{Basin}) = Q_{M5.3}(\text{Site})$
Basin M6.1	13	2.41	$Q_{M6.1}(\text{Basin}) = Q_{M6.1}(\text{Site})$
Basin M6.2	13	3.32	$Q_{M6.2}(\text{Basin}) = Q_{M6.2}(\text{Site})$
Basin M6.3	40	2.69	$Q_{M6.3}(\text{Basin}) = Q_{M6.3}(\text{Site}) - Q_{M6.4}(\text{Site})$
Basin M6.4	13	1.07	$Q_{M6.4}(\text{Basin}) = Q_{M6.4}(\text{Site}) - Q_{M6.5}(\text{Site})$
Basin M6.5	17	3.50	$Q_{M6.5}(\text{Basin}) = Q_{M6.5}(\text{Site})$
<u>Phase 3</u>			
Basin M3.1	3.1	0.69	$Q_{M3.1}(\text{Basin}) = Q_{M3.1}(\text{Site}) - Q_{M3.1A}(\text{Site})$
Basin M3.1A	2.4	0.67	$Q_{M3.1A}(\text{Basin}) = Q_{M3.1A}(\text{Site}) - Q_{M3.1B}(\text{Site})$
Basin M3.1B	10.1	1.83	$Q_{M3.1B}(\text{Basin}) = Q_{M3.1B}(\text{Site})$
Basin M5.2	3.6	0.75	$Q_{M5.2}(\text{Basin}) = Q_{M5.2}(\text{Site}) - Q_{M5.2A}(\text{Site})$
Basin M5.2A	5.6	0.69	$Q_{M5.2A}(\text{Basin}) = Q_{M5.2A}(\text{Site}) - Q_{M5.3}(\text{Site})$
Basin M5.3	28.9	3.42	$Q_{M5.3}(\text{Basin}) = Q_{M5.3}(\text{Site})$
Basin M6.0A	55.1	10.14	$Q_{M6.0A}(\text{Basin}) = Q_{M6.0A}(\text{Site}) - Q_{M5.2}(\text{Site})$
Basin M6.3	36.4	5.38	$Q_{M6.3}(\text{Basin}) = Q_{M6.3}(\text{Site}) - Q_{M6.3A}(\text{Site}) - Q_{M6.3B}(\text{Site})$
Basin M6.3A	7.6	0.97	$Q_{M6.3A}(\text{Basin}) = Q_{M6.3A}(\text{Site})$
Basin M6.3B	5.9	1.39	$Q_{M6.3B}(\text{Basin}) = Q_{M6.3B}(\text{Site})$
Basin M6.5	3.4	0.85	$Q_{M6.5}(\text{Basin}) = Q_{M6.5}(\text{Site}) - Q_{M6.5A}(\text{Site}) - Q_{M6.5B}(\text{Site})$
Basin M6.5A	6.4	1.36	$Q_{M6.5A}(\text{Basin}) = Q_{M6.5A}(\text{Site})$
Basin M6.5B	7.3	1.32	$Q_{M6.5B}(\text{Basin}) = Q_{M6.5B}(\text{Site})$

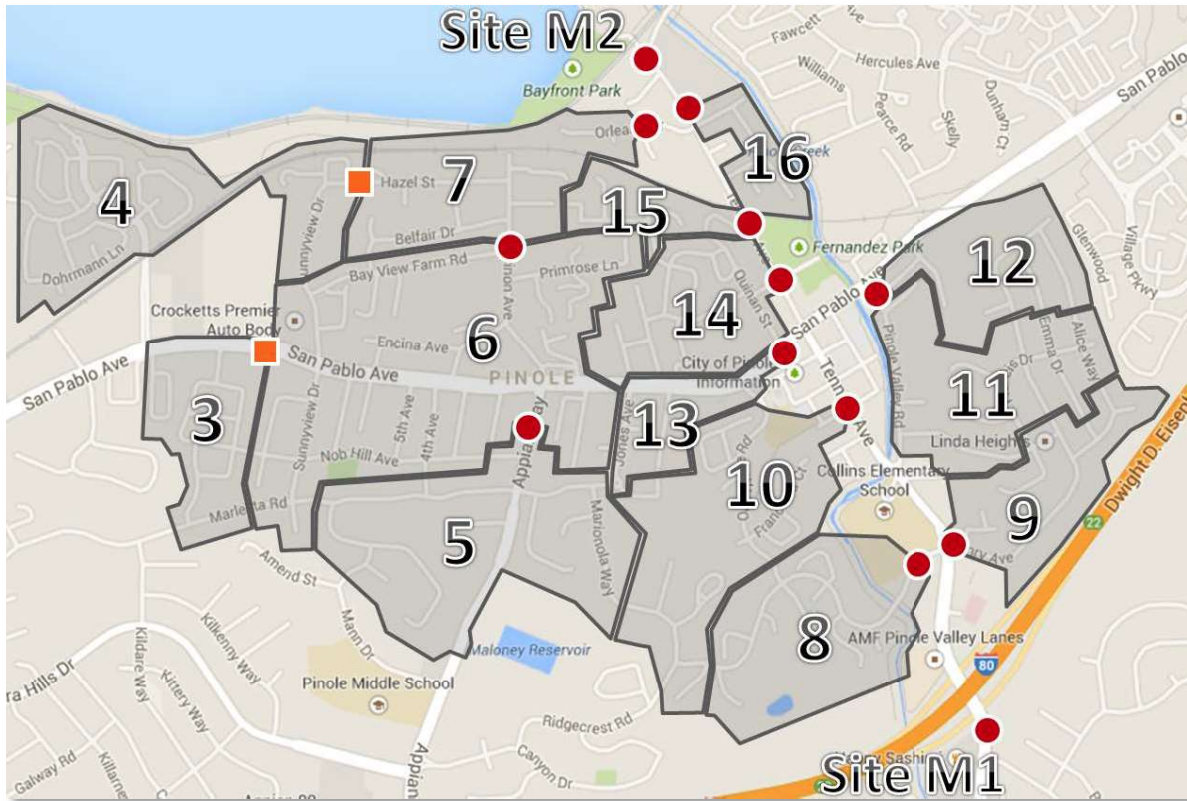


Figure 1-4. Phase 1 Flow Monitoring Basins Map

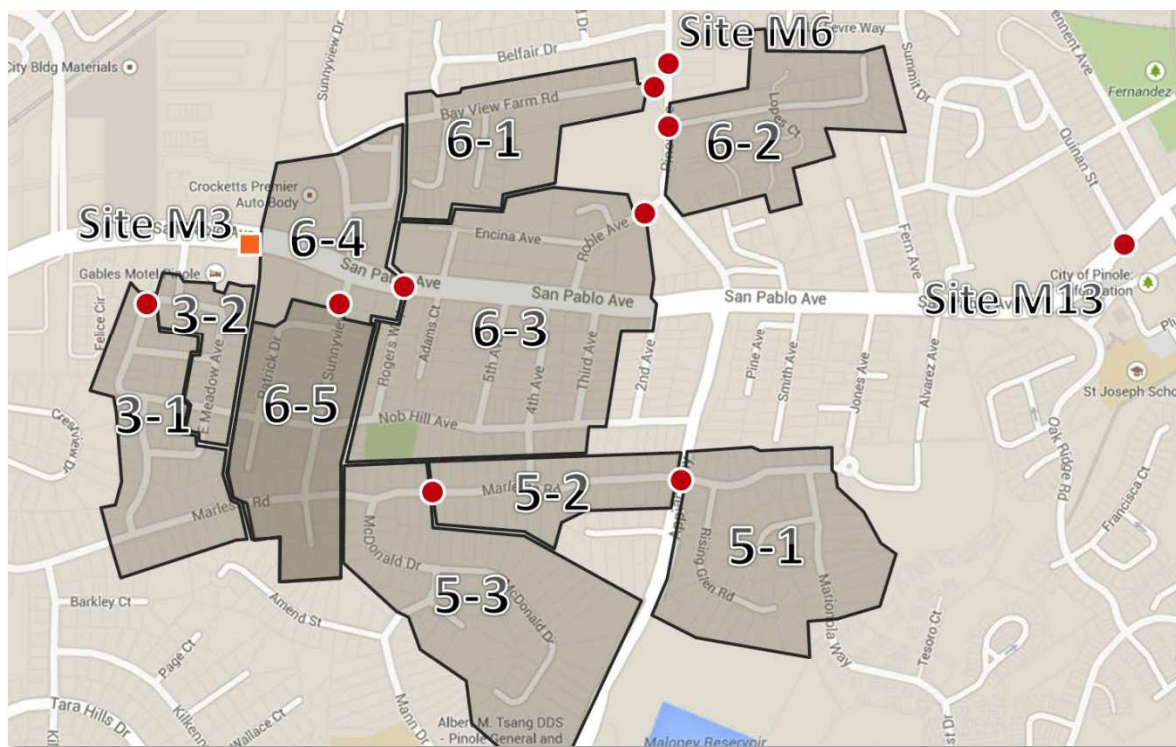


Figure 1-5. Phase 2 Flow Monitoring Basins Map

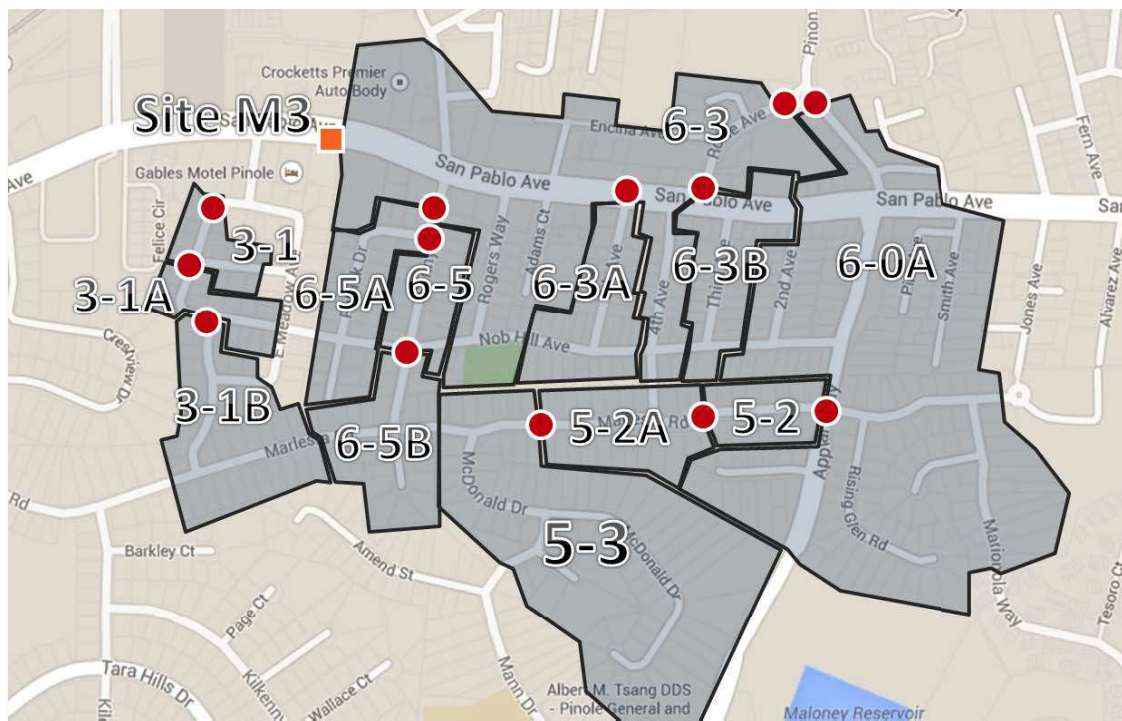


Figure 1-6. Phase 3 Flow Monitoring Basins Map

2.0 METHODS AND PROCEDURES

2.1 Confined Space Entry

A confined space entry (Photo 2-1) is defined as any space large enough and so configured that a person can bodily enter and perform assigned work, has limited or restricted means for entry or exit, and is not designed for continuous employee occupancy. In general, the atmosphere must be constantly monitored for sufficient levels of oxygen (19.5% to 23.5%), and the absence of hydrogen sulfide (H_2S) gas, carbon monoxide (CO) gas, and lower explosive limit (LEL) levels. A typical confined space entry crew has members with U.S. Department of Labor, Occupational Safety & Health Administration-defined (OSHA-defined) responsibilities of "entrant," "attendant," and "supervisor." The entrant is the individual performing the work. He or she is equipped with the appropriate level of personal protective equipment (PPE) needed to perform the job safely, including a personal four-gas monitor (Photo 2-2). If it is not possible to maintain line-of-sight with the entrant, then more entrants are required until line-of-sight can be maintained. The attendant is responsible for maintaining contact with the entrants to monitor the atmosphere using another four-gas monitor and maintaining records of all entrants. The supervisor is responsible for developing the safe work plan prior to entering.



Photo 2-1. Confined Space Entry



Photo 2-2. Typical Personal Four-Gas Monitor

2.2 Flow Meter Installation

A combination of Isco 2150 area-velocity meters and Hach Flo-Dar meters were installed by V&A in the sewer lines in Table 1-1, Table 1-2 and Table 1-3. Continuous depth and velocity readings were recorded by the flow meters on 5-minute intervals.

Isco 2150 meters use submerged sensors with a pressure transducer to collect depth readings and an ultrasonic Doppler sensor to determine the average fluid velocity. The ultrasonic sensor emits high-frequency sound waves, which are reflected by air bubbles and suspended particles in the flow. The sensor receives the reflected signal and determines the Doppler frequency shift, which indicates the estimated average flow velocity. The sensor is typically mounted at a manhole inlet to take advantage of smoother upstream flow conditions. Figure 2-1 shows a typical installation for a flow meter with a submerged sensor.

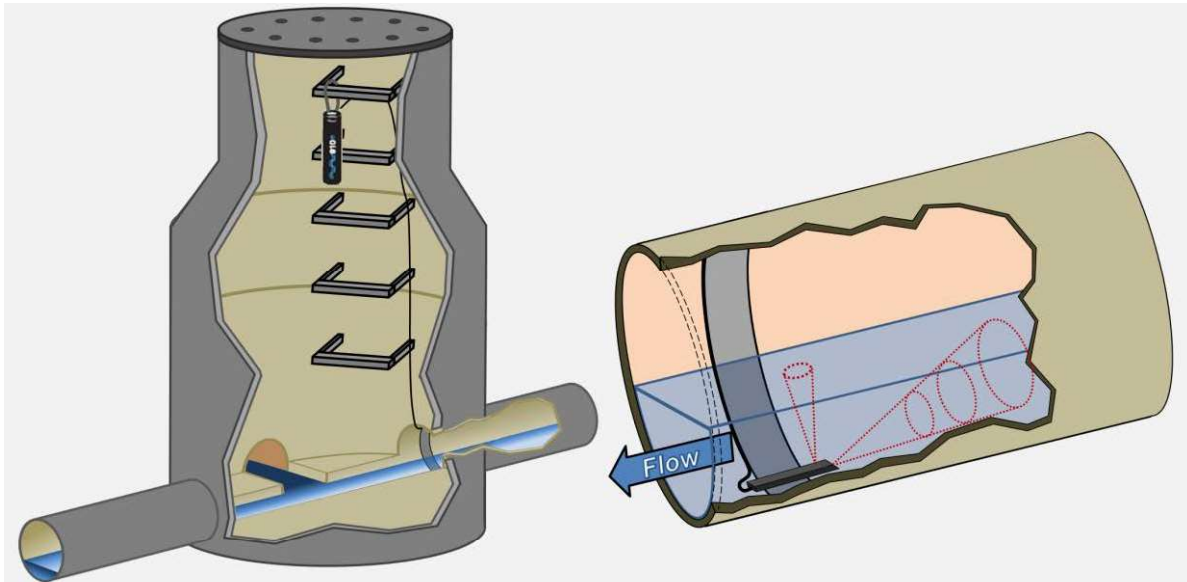


Figure 2-1. Typical Installation for Flow Meter with Submerged Sensor

The pipe diameter was verified in order to accurately calculate the flow cross-section. In-situ manual (hand) level and velocity measurements were taken and compared to simultaneous level and velocity readings from the flow meters to ensure proper calibration and accuracy. This determination of the level offset is required because of variations in individual flow meters, position of the sensor upon installation, thickness of the mounting band and other factors.

During the in-situ calibrations, the technician/engineer reports the actual depth of the flow to the invert of the pipe (d_A) while the flow meter reports the depth of water to the sensor (d_s). The difference between these is the offset. These sets of measurements are taken at least three times during installation and removal of the flow meters and during mid-project calibrations. The various sets of measurements are used to track the data quality. During site visits, observations of sediment

are noted. If sediment is present, several depth of sediment readings (S) are taken and the type of sediment encountered (sandy, rocky, pebbly) is noted.

Most area-velocity meters employ a forward-looking ultrasonic Doppler sensor that does not record velocity if covered by sediment. To mitigate this, the sensor may be offset to a position where sediment is less likely to affect the sensor. It is important to take multiple sediment readings in multiple locations; sediment tends to settle in waves, which affects the accuracy of the sediment measurement if not accounted for.

Figure 2-2 illustrates a sensor offset for sediment, and the level measurements recorded during an in situ calibration. Figure 2-3 illustrates sediment wave pattern settlement commonly observed in sewer lines.

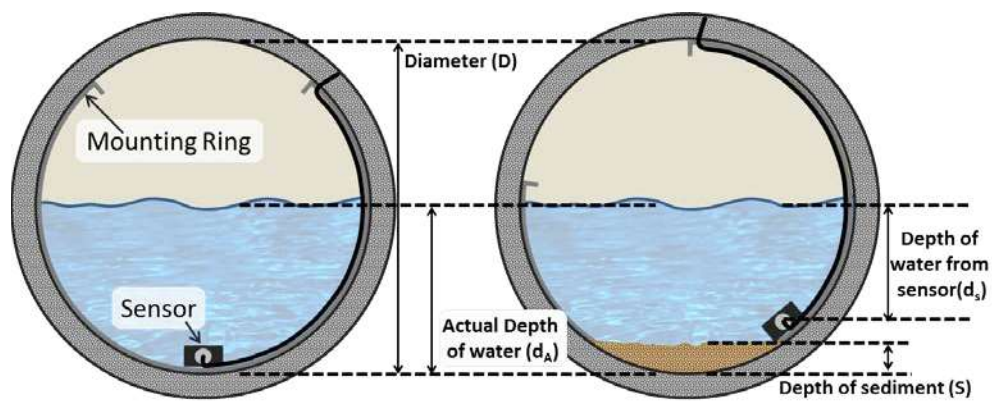


Figure 2-2. Sensor Offset due to Sediment

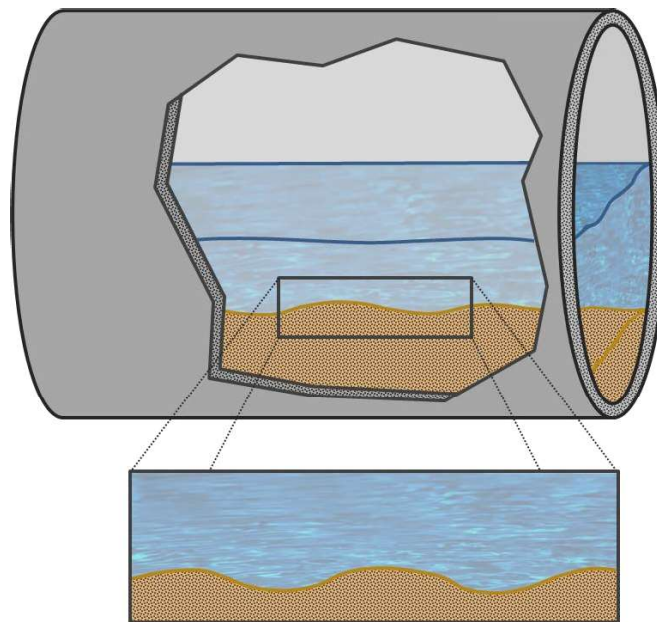


Figure 2-3. The Settling of Sediment in Pipelines

A Flo-Dar flow meter is a non-contact flow meter that uses radar to measure velocity and a down-looking ultrasonic sensor to measure depth. Figure 2-4 illustrates a typical Flo-Dar installation.



Figure 2-4. Typical Flo-Dar Flow Meter Installation

2.3 Flow Calculation

Data retrieved from each flow meter was placed into a spreadsheet program for analysis. Data analysis includes data comparison to field calibration measurements, as well as necessary geometric adjustments as required for sediment (sediment reduces the pipe's wetted cross-sectional area available to carry flow). Area-velocity flow metering uses the continuity equation,

$$Q = v \cdot A = v \cdot (A_T - A_S)$$

where Q : volume flow rate

v : average velocity as determined by the ultrasonic sensor

A : cross-sectional area available to carry flow

A_T : total cross-sectional area with both wastewater and sediment

A_S : cross-sectional area of sediment.

For circular pipe,

$$A_T = \left[\frac{D^2}{4} \cos^{-1} \left(1 - \frac{2d_w}{D} \right) \right] - \left[\left(\frac{D}{2} - d_w \right) \left(\frac{D}{2} \right) \sin \left(\cos^{-1} \left(1 - \frac{2d_w}{D} \right) \right) \right]$$

$$A_S = \left[\frac{D^2}{4} \cos^{-1} \left(1 - \frac{2d_s}{D} \right) \right] - \left[\left(\frac{D}{2} - d_s \right) \left(\frac{D}{2} \right) \sin \left(\cos^{-1} \left(1 - \frac{2d_s}{D} \right) \right) \right]$$

where d_w : distance between wastewater surface level and pipe invert

d_s : depth of sediment

D : pipe diameter

2.4 Average Dry Weather Flow Determination

Weekday and weekend flow patterns differ and must be separated when determining average dry weather flows. Days least affected by rainfall were used to estimate weekend and weekday average flows. The overall average dry weather flow (ADWF) was calculated per the following equation:

$$ADWF = \left(ADWF_{Mon-Fri} \times \frac{5}{7} \right) + \left(ADWF_{Sat-Sun} \times \frac{2}{7} \right)$$

Figure 2-5 illustrates the varying flow patterns within a typical dry week.

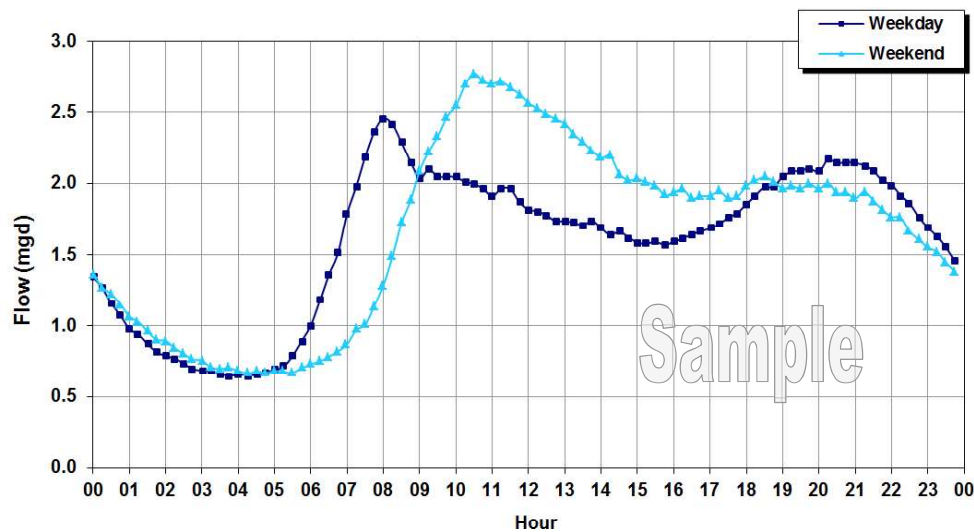


Figure 2-5. Sample ADWF Diurnal Flow Patterns

2.5 Pipeline Capacity Analysis Methods

Peak measured flows and peak flow depths are important factors to consider when evaluating the capacity of the collection system. The peak flows and flow levels reported are from the peak measurements taken across the entirety of the flow monitoring period and may or may not correspond to a simultaneous event for all sites.

The following capacity analysis terms are defined as follows:

- Peaking Factor:** Peaking factor is defined as the peak measured flow divided by the ADWF. A peaking factor threshold value of 3.0 is commonly used for sanitary sewer design of new pipe; however, it is noted that this value is variable and subject to attenuation and the size of the upstream collector area. The City should follow its own standards and criteria when examining peaking factors.
- d/D Ratio:** The d/D ratio is the peak measured depth of flow (d) divided by the pipe diameter (D). Standards for d/D ratio vary agency to agency, but typically range between $d/D \leq 0.5$ and $d/D \leq 0.75$. The d/D ratio for each site was computed based on the maximum depth of flow for the flow monitoring study.

2.6 Inflow/Infiltration Analysis Methods

Inflow and infiltration (I/I) consists of stormwater and groundwater that enter the sewer system through pipe defects and improper storm drainage connections and is defined as follows.

2.6.1 Definition and Typical Sources

- **Inflow:** Storm water inflow is defined as water discharged into the sewer system, including private sewer laterals, from direct connections such as downspouts, yard and area drains, holes in manhole covers, cross-connections with storm drains, or catch basins.
- **Infiltration:** Infiltration is defined as water entering the sanitary sewer system through defects in pipes, pipe joints, and manhole walls, which may include cracks, offset joints, root intrusion points, and broken pipes.

Figure 2-6 illustrates the possible sources and components of I/I.

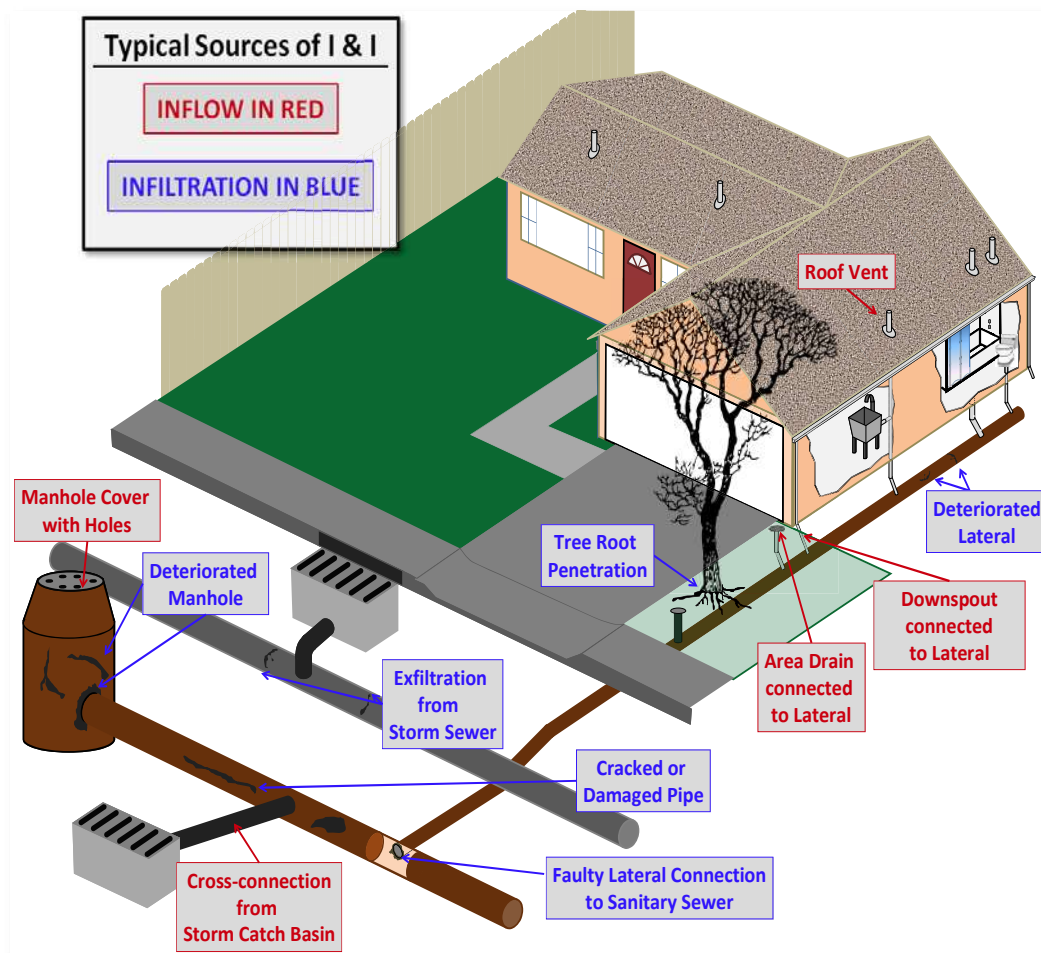


Figure 2-6. Typical Sources of Infiltration and Inflow

2.6.2 Infiltration Components

Infiltration can be further subdivided into the following components:

- **Rainfall-Dependent Infiltration:** This component occurs as a result of storm water and enters the sewer system through pipe defects, as with GWI. The storm water first percolates directly into the soil and then migrates to an infiltration point. Typically, the time of concentration for rainfall-dependent infiltration (RDI) may be 24 hours or longer, but this depends on the soil permeability and saturation levels.
- **Groundwater Infiltration:** Groundwater infiltration (GWI) depends on the depth of the groundwater table above the pipelines as well as the percentage of the system submerged. The variation of groundwater levels and subsequent GWI rates are seasonal by nature. On a day-to-day basis, GWI rates are relatively steady and will not fluctuate greatly.
- **Rainfall-Responsive Infiltration** is storm water that enters the collection system indirectly through pipe defects, but normally in sewers constructed close to the ground surface such as private laterals. Rainfall-responsive infiltration (RRI) is independent of the groundwater table and reaches defective sewers via the pipe trench in which the sewer is constructed, particularly if the pipe is placed in impermeable soil and bedded and backfilled with a granular material. In this case, the pipe trench serves as a conduit similar to a French drain, conveying storm drainage to defective joints and other openings in the system. This type of infiltration can have a quick response and graphically can look very similar to inflow.

2.6.3 Impact and Cost of Source Detection and Removal

- **Inflow:**
 - **Impact:** This component of I/I creates a peak flow problem in the sewer system and may dictate the required capacity of downstream pipes and transport facilities to carry these peak instantaneous flows. Because the response and magnitude of inflow is tied closely to the intensity of the storm event, short-term peak flows may result in surcharging and overflows within a collection system. Severe inflow can result in sewage dilution, which may upset the biological process (secondary treatment) at the treatment facility.
 - **Cost of Source Identification and Removal:** Inflow locations are usually less difficult to find and less expensive to correct than infiltration sources. These sources include direct and indirect cross-connections with storm drainage systems, roof downspouts, and various types of surface drains. Generally, the costs to identify and remove sources of inflow are low compared to potential benefits to public health and safety or the costs of building new facilities to convey and treat the resulting peak flows.
- **Infiltration:**
 - **Impact:** Infiltration typically creates long-term annual volumetric problems. The major impact is the cost of pumping and treating the additional volume of water, and of paying for treatment (for municipalities that are billed strictly on flow volume).
 - **Cost of Source Detection and Removal:** Infiltration sources are usually harder to find and more expensive to correct than inflow sources. Infiltration sources include defects in deteriorated sewer pipes or manholes that may be widespread throughout a sanitary sewer system.

2.6.4 Graphical Identification of Inflow and Infiltration

Inflow is usually recognized graphically by large-magnitude, short-duration spikes immediately following a rain event. Infiltration is often recognized graphically by a gradual increase in flow after a wet-weather event. The increased flow typically sustains for a period after rainfall has stopped and then gradually drops off as soils become less saturated and as groundwater levels recede to normal levels. Real-time flows were plotted against average dry weather flow (ADWF) to analyze the I/I response to rainfall events. Figure 2-7 illustrates a sample of how this analysis is conducted and some of the measurements that are used to distinguish I/I. Similar graphs were generated for the individual flow monitoring sites and can be found in *Appendix A*.

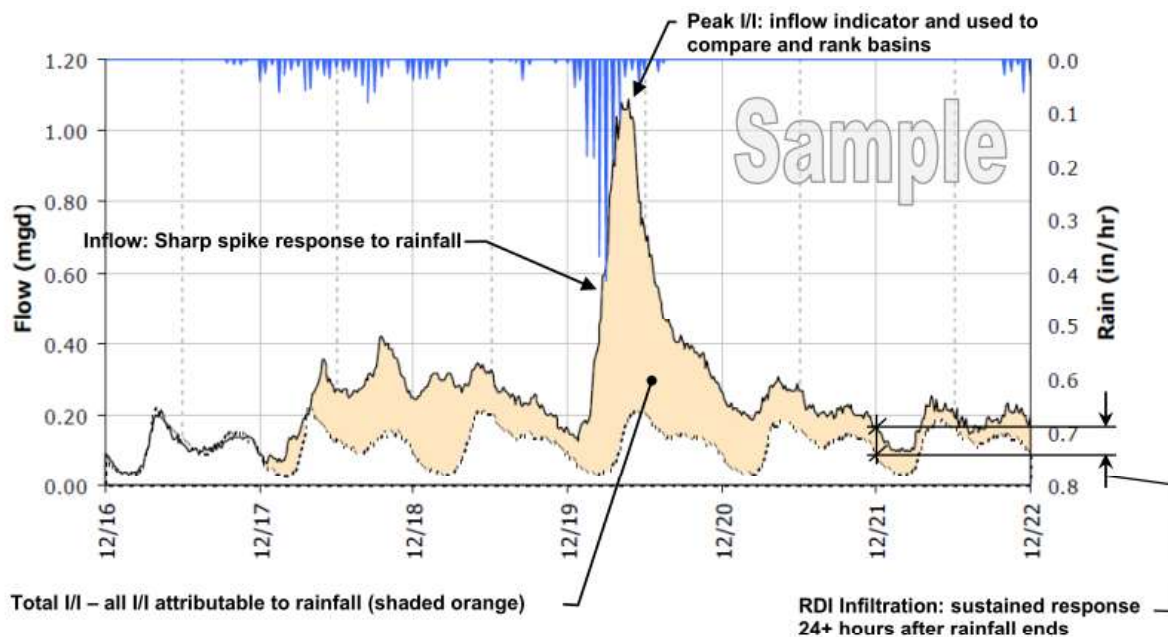


Figure 2-7. Sample Infiltration and Inflow Isolation Graph

2.6.5 Analysis Methods

After differentiating I/I flows from ADWF flows, various calculations can be made to determine which I/I component (inflow or infiltration) is more prevalent at a particular site and to compare the relative magnitudes of the I/I components between drainage basins and between storm events. Inflow or infiltration components are typically normalized in up to three ways:

- **per-IDM:** Inflow or infiltration rates are divided by length of pipe within the drainage basin, expressed in units of inch-diameter-mile (IDM) (miles of pipeline multiplied by the diameter of the pipeline in inches). Final units are gallons per day (gpd) per IDM.
- **per-ACRE:** Inflow or infiltration rates are divided by the acreage of the drainage basin. Final units are gallons per day (gpd) per ACRE.
- **per-ADWF:** Inflow or infiltration rates are divided by the ADWF that was measured and established within the drainage basin. This is a ratio. The number is unitless, but can be thought of in the same light as a Peaking Factor.

The infiltration and inflow indicators were normalized by all three methods for this report per the following weighting system:

I/I Analysis Method	Weight
per-IDM	50%
per-ACRE	20%
per-ADWF	30%

The per-IDM method was given the highest weight because capital improvement projects concerning rehabilitation or replacement of sanitary sewer pipelines are most commonly bid based on the length of pipe. Note: inflow is subject to the effects of attenuation, explained in the following section.

2.7 Flow Attenuation

Flow attenuation in a sewer collection system is the natural process of the reduction of the peak flow rate through redistribution of the same volume of flow over a longer period of time. This occurs as a result of friction (resistance), internal storage and diffusion along the sewer pipes. Fluids are constantly working towards equilibrium. For example, a volume of fluid poured into a static vessel with no outside turbulence will eventually stabilize to a static state, with a smooth fluid surface without peaks and valleys. Attenuation within a sanitary sewer collection system is based upon this concept. A flow profile with a strong peak will tend to stabilize towards equilibrium, as shown in Figure 2-8.

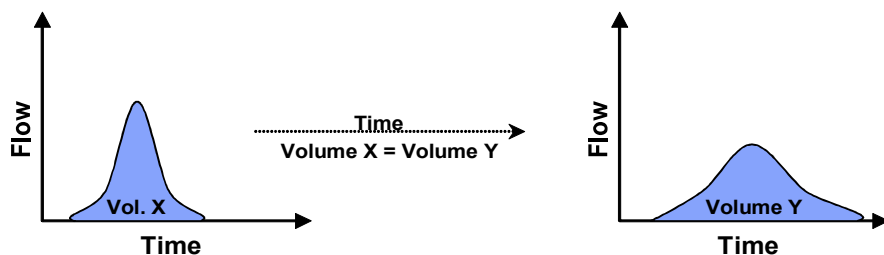


Figure 2-8. Attenuation Illustration

Within a sanitary sewer collection system, each individual basin will have a specific flow profile. As the flows from the basins combine within the trunk sewer lines, the peaks from each basin will (a) not necessarily coincide at the same time, and (b) due to the length and time of travel through the trunk sewers, peak flows will attenuate prior to reaching the treatment facility. The sum of the peak flows of the individual basins within a collection system will usually be greater than the peak flows observed at the treatment facility.

3.0 RAINFALL RESULTS

3.1 Rainfall Data

There were sufficient rainfall events over the flow monitoring period that could be used to conduct multiple sets of infiltration and inflow analysis, allowing for relocation of flow meters and isolation of multiple drainage basins. V&A utilized rain data publically available through the National Weather Service (NWS) Cooperative Observer Program (COOP). While V&A performed QA/QC analysis to ensure, to the extent possible, the quality of the rainfall data, it is noted that V&A had no direct control over those gauges.

Table 3-1 shows the precipitation for the notable rainfall events measured from the four rain gauges. Figure 3-1 illustrates the rain events over the monitoring period (average of all rain gauges shown). Figure 3-2 shows the rainfall accumulation during the monitoring period, as well as the historical average rainfall⁵ in Pinole at the approximate study centroid during this project duration.

The cumulative precipitation at the four rain gauges ranged from 52% to 85% of the historical precipitation for the time period shown.

Table 3-1. Rainfall Events Summary

Rainfall	RG North (Inches)	RG East (Inches)	RG South (Inches)	RG West (Inches)
Event 1: February 2, 2014 – February 10, 2014	3.75	5.47	4.76	3.00
Event 2: February 26, 2014 – March 6, 2014	2.34	2.48	2.55	1.28
Event 3: March 26, 2014 – April 1, 2014	2.45	3.17	3.09	2.46
<i>Total over Monitoring Period:</i>	8.69	11.28	10.55	6.84

⁵ Historical data taken from the WRCC (Station 45378 in Martinez, CA and Station 47414 in Richmond, CA): <http://www.wrcc.dri.edu/summary/climsmnca.html>

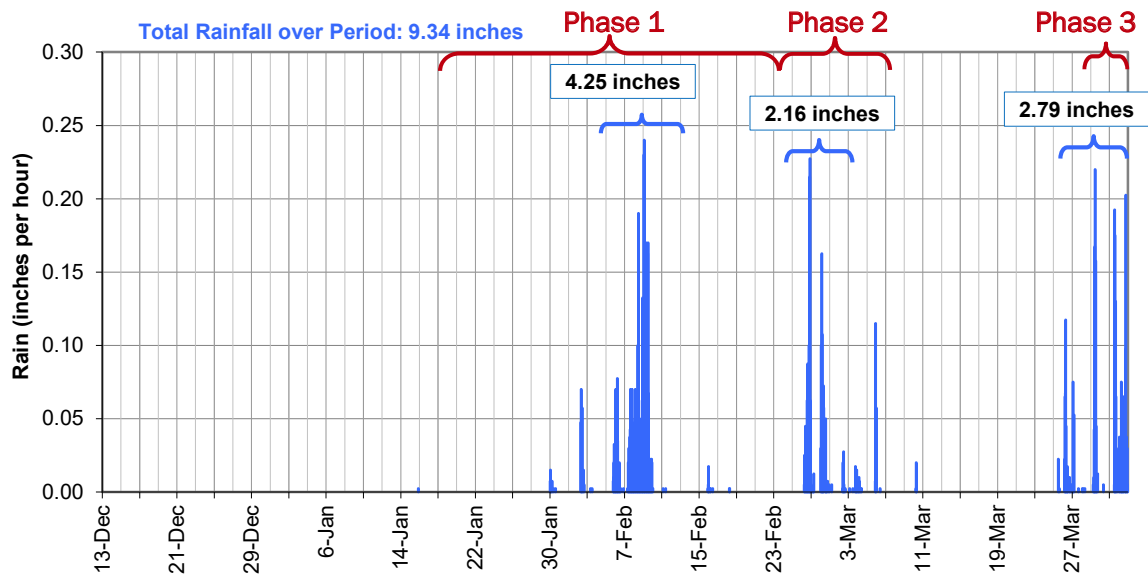


Figure 3-1. Rainfall Distribution over Flow Monitoring Period (Avg. of Four Rain Gauges)

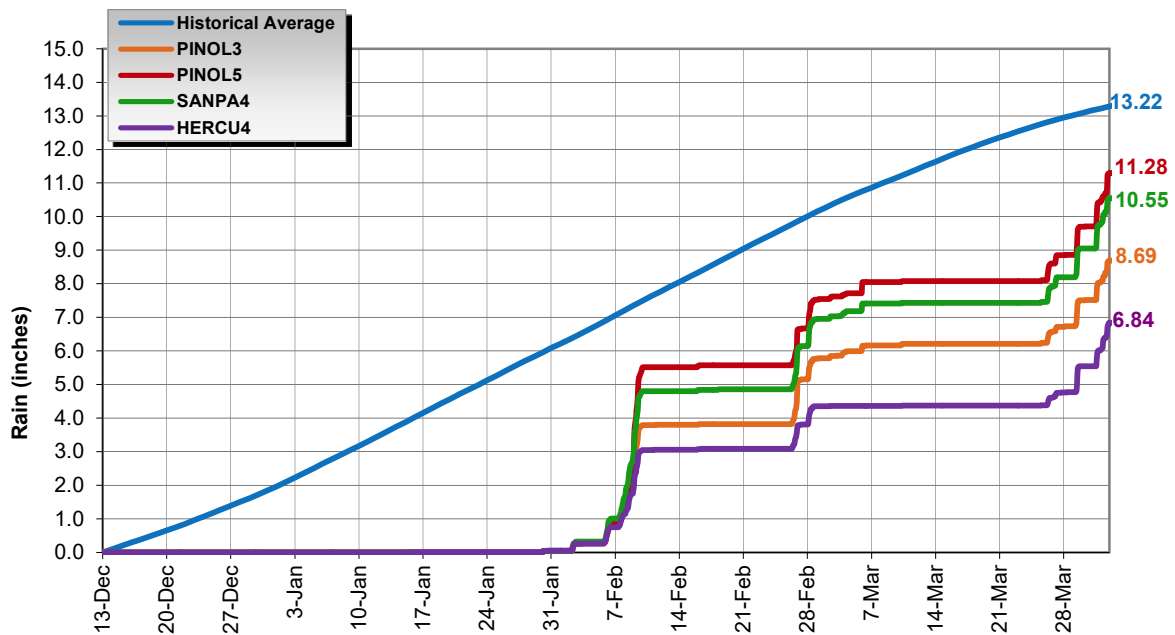


Figure 3-2. Rainfall Accumulation Plot

3.2 Regional Rainfall Event Classification

It is important to classify the relative size of a major storm event that occurs over the course of a flow-monitoring period⁶. Rainfall events are classified by intensity and duration. Based on historical data, frequency contour maps for storm events of given intensity and duration have been developed by the National Oceanic and Atmospheric Administration (NOAA) for Northern California (Figure 3-3).

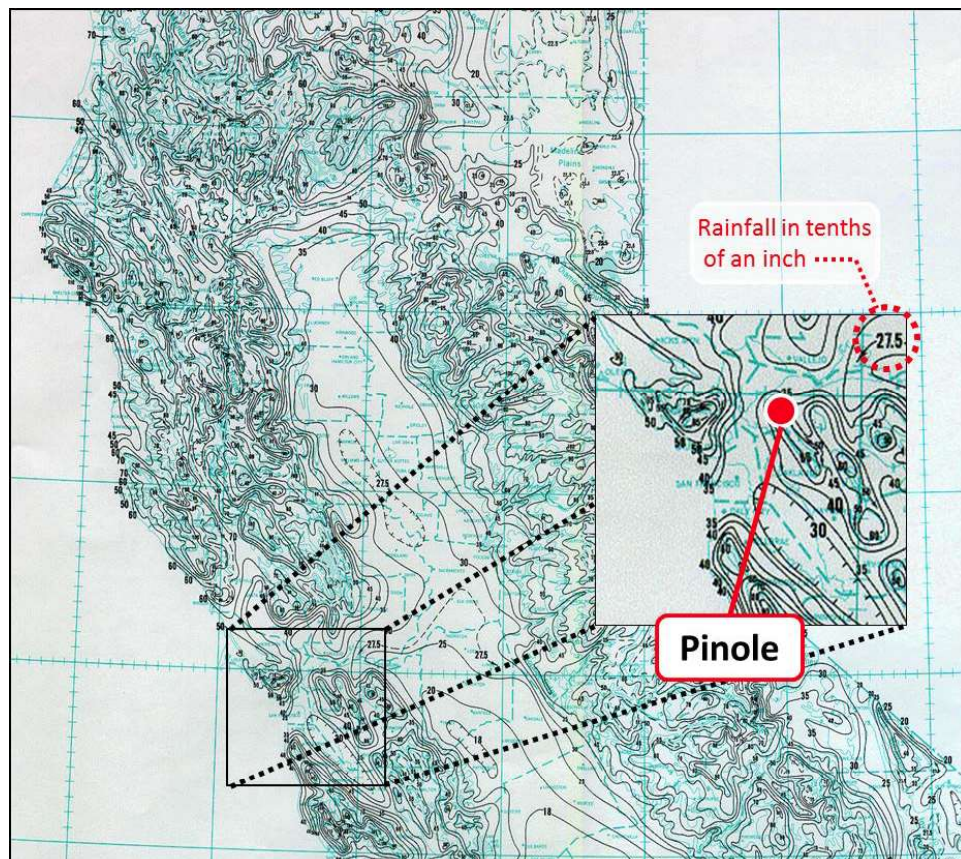


Figure 3-3. NOAA Northern California Rainfall Frequency Map, Isopleths of 10-year 24-hour precipitation in inches

For example, the NOAA *Rainfall Frequency Atlas*⁷ classifies a 10-year, 24-hour storm event at the PINOL5 rain gauge location as 3.75 inches. This means that in any given year, at this specific location, there is a 10% chance that 3.75 inches of rain will fall in any 24-hour period.

From the NOAA frequency maps, for a specific latitude and longitude, the rainfall densities for period durations ranging from 1 hour to 24 hours are known for rain events ranging from 1-year to 100-year intensities. These were plotted to develop a rain event frequency map specific to each rainfall monitoring site. Superimposing the peak-measured densities for the rainfall events on the rain event

⁶ Sanitary sewers are often designed to withstand I/I contribution to sanitary flows for specific-sized “design” storm events.

⁷ NOAA Western U.S. Precipitation Frequency Maps Atlas 14, 1973: <http://www.wrcc.dri.edu/pcpnfreq.html>

frequency plot determines the classification of the rainfall event. Figure 3-4 depicts the classification curves for the rainfall events for the SANPA4 rain gauge. Table 3-2 lists the intensity of the various storm events for each rain gauge.

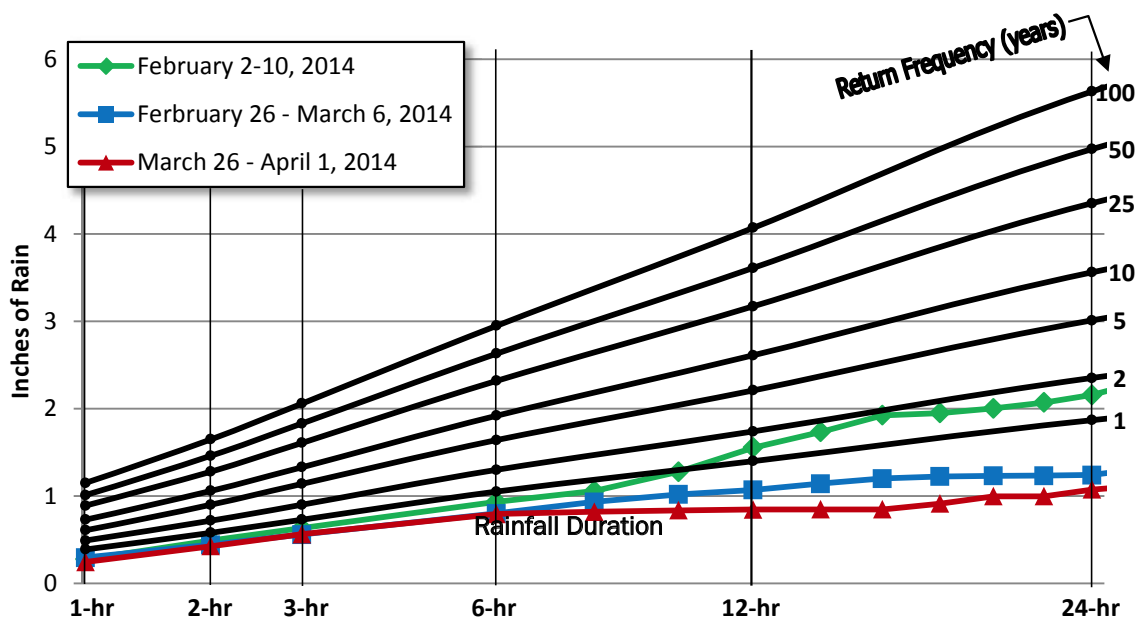


Figure 3-4. Storm Event Classification at SANPA4

Table 3-2. Rainfall Frequency Return Summary

Rainfall Event	PINOL3 (in)	PINOL5 (in)	SANPA4 (in)	HERCU4 (in)
Event 1: February 2 – February 10, 2014	< 1 year	4 year, 24 hour	1+ year, 24 hour	< 1 year
Event 2: February 26 – March 6, 2014	< 1 year	< 1 year	< 1 year	< 1 year
Event 3: March 26 – April 1, 2014	< 1 year	< 1 year	< 1 year	< 1 year

3.3 Rainfall Summary

- Though the total rainfall for the entirety of the 2013/2014 rainfall season was generally low, Storm Event 1 provided sufficient rainfall to conduct a solid I/I analysis of the flow monitoring data gathered for Phase 1.
- Event 1 was classified as greater than a 1-year, 24-hour event for some rain gauges in the region. Event 1 also increased the soil saturation levels so that future rainfall events (Events 2 and 3) were effective for I/I analysis of the flow monitoring data collected for Phase 2 and Phase 3.

4.0 FLOW MONITORING RESULTS

4.1 Average Dry Weather Flows

ADWF flows were established during dry days within the flow monitoring period when RDI had the least impact on the flow rates. Table 4-1 summarizes the ADWF flow data measured during this study. Figure 4-1, Figure 4-2 and Figure 4-3 show flow schematic diagrams of the ADWF and flow levels for the flow monitoring sites, all phases.

Table 4-1. Average Dry Weather Flow Summary

Monitoring Site	Weekday ADWF (mgd)	Weekend ADWF (mgd)	Overall ADWF (mgd)
<i>Phase 1</i>			
Site M1	0.70	0.76	0.71
Site M2	1.11	1.10	1.11
Site M3	0.07	0.07	0.07
Site M4	0.13	0.14	0.13
Site M5	0.02	0.02	0.02
Site M6	0.17	0.19	0.18
Site M7	0.36	0.38	0.36
Site M8	0.007	0.006	0.007
Site M9	0.004	0.005	0.004
Site M10	0.08	0.09	0.09
Site M11	0.02	0.02	0.02
Site M12	0.003	0.003	0.003
Site M13	0.06	0.06	0.06
Site M14	0.04	0.04	0.04
Site M15	0.01	0.02	0.02
Site M16	0.08	0.09	0.09
<i>Phase 2</i>			
Site M3.1	0.035	0.025	0.032
Site M3.2	0.011	0.011	0.011
Site M5.1	0.022	0.026	0.023
Site M5.2	0.011	0.013	0.011
Site M5.3	0.022	0.023	0.022
Site M6.1	0.010	0.014	0.011

Monitoring Site	Weekday ADWF (mgd)	Weekend ADWF (mgd)	Overall ADWF (mgd)
Site M6.2	0.015	0.018	0.016
Site M6.3	0.171	0.140	0.163
Site M6.4	0.076	0.103	0.084
Site M6.5	0.008	0.011	0.009
<i>Phase 3</i>			
Site M3.1A	0.009	0.010	0.009
Site M3.1B	0.006	0.006	0.006
Site M5.2A	0.009	0.010	0.009
Site M6.0A	0.056	0.061	0.057
Site M6.3A	0.005	0.005	0.005
Site M6.3B	0.003	0.004	0.004
Site M6.5A	0.003	0.003	0.003
Site M6.5B	0.003	0.004	0.003

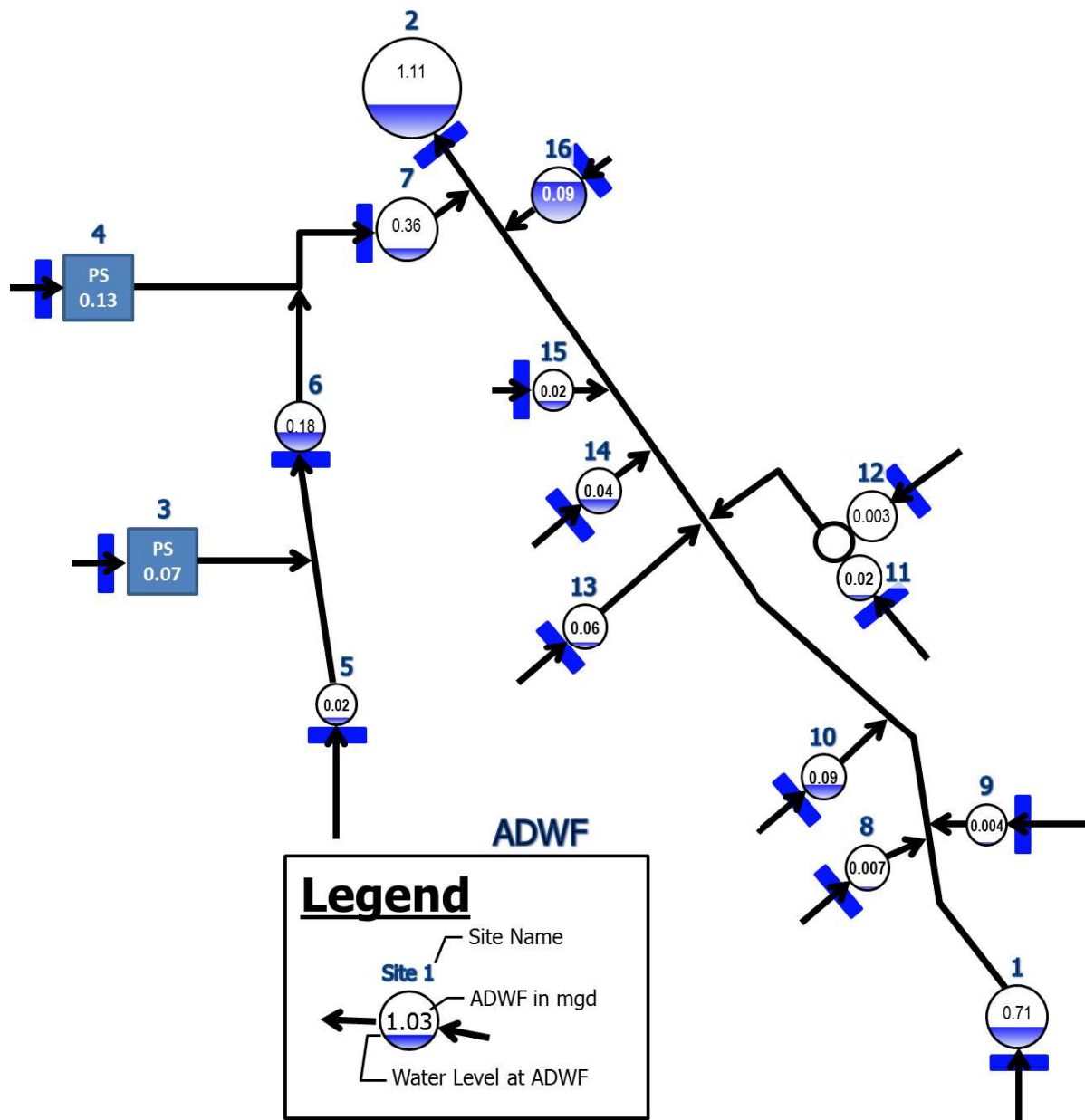


Figure 4-1. Average Dry Weather Flow Schematic (Phase 1)

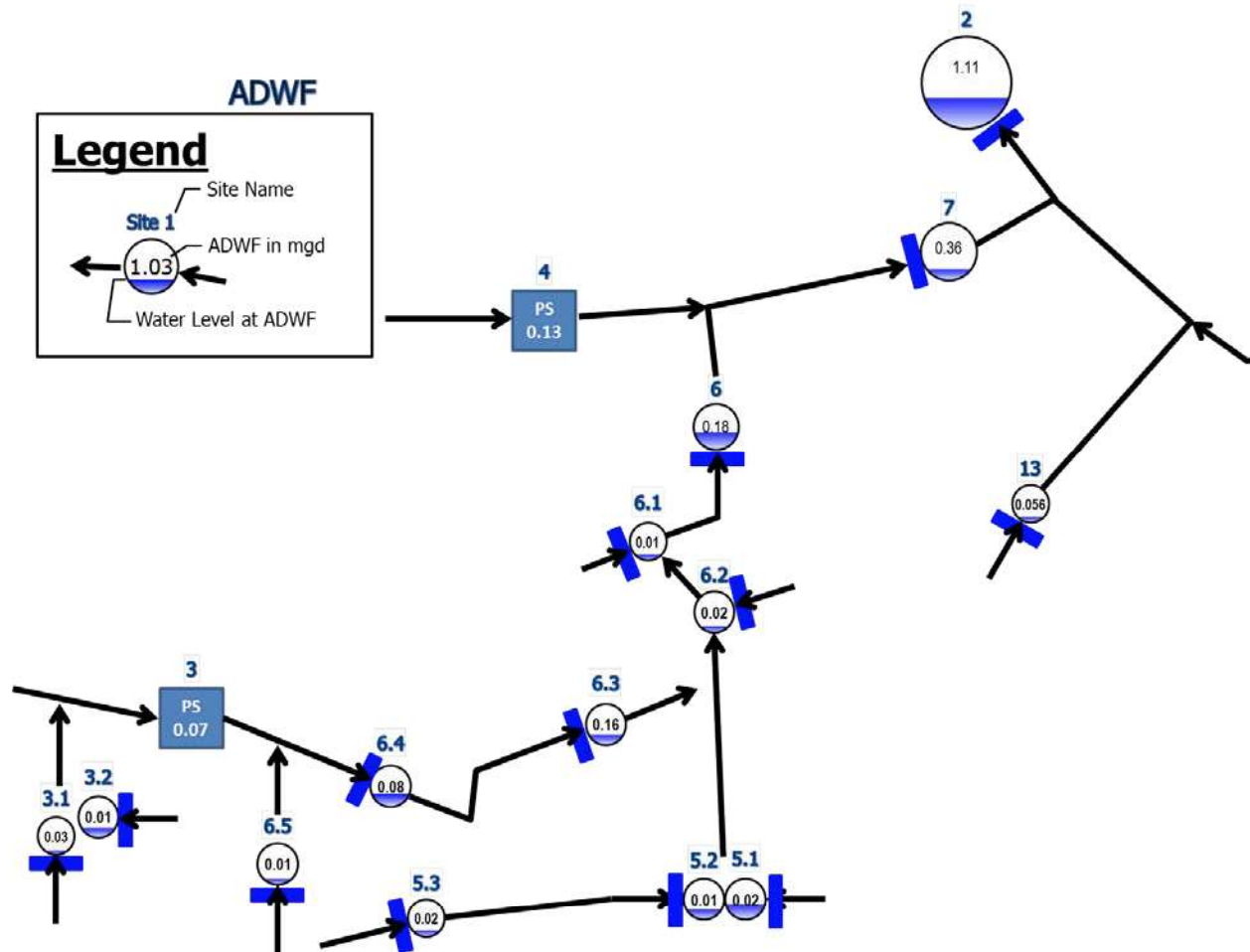


Figure 4-2. Average Dry Weather Flow Schematic (Phase 2)

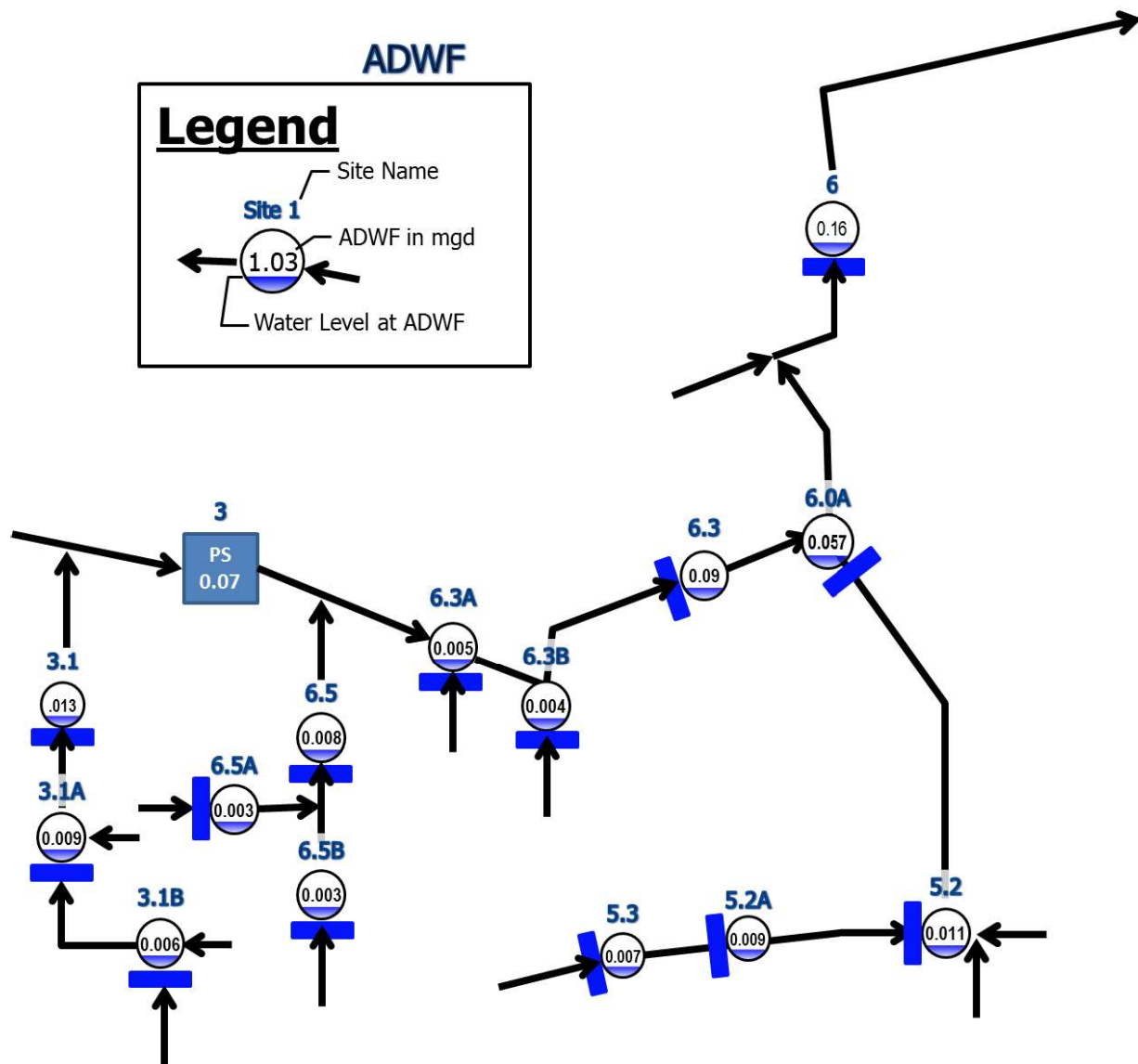


Figure 4-3. Average Dry Weather Flow Schematic (Phase 3)

4.2 Peak Measured Flows and Pipeline Capacity Analysis

Capacity analysis data is presented on a site-by-site basis and represents the hydraulic conditions only at the point site locations. Hydraulic conditions in other areas of the collection system will differ. Due to the relocation of flow meters and different flow data capture periods, the peak flows and peak levels should not necessarily be directly compared to each other. The period of meter installation are coded per the following scheme:

Scheme	Install Period
A	1/17/2014 – 2/25/2014
B	1/17/2014 – 3/28/2014
C	1/17/2014 – 4/1/2014
D	2/25/2014 – 3/28/2014
E	2/25/2014 – 4/1/2014
F	3/28/2014 – 4/1/2014

Table 4-2 summarizes the peak recorded flows, levels, d/D ratios, and peaking factors per site during the flow monitoring period. Sites that surcharged and sites with peaking factors greater than 10.0 have been shaded in **RED**. Figure 4-4, Figure 4-5 and Figure 4-6 show bar graphs of the capacity results for all phases. Figure 4-7, Figure 4-8 and Figure 4-9 show schematic diagrams of the peak measured flows with peak flow levels for all phases of the flow monitoring.

Table 4-2. Capacity Analysis Summary

Monitoring Site	Install Period Scheme	ADWF (mgd)	Peak Measured Flow (mgd)	Peaking Factor	Diameter (inches)	Peak Level (Inches)	d/D Ratio	Surcharge Level (feet)
<i>Phase 1</i>								
Site M1	A	0.71	3.50	4.9	15	8.5	0.57	-
Site M2	C	1.11	7.20	6.5	30	45.5	1.52	1.3
Site M3	C	0.07	0.71	10.7	n/a	n/a	n/a	-
Site M4	C	0.13	0.47	3.7	n/a	n/a	n/a	-
Site M5	A	0.02	0.65	33.9	7.25	10.7	1.53	0.3
Site M6	C	0.18	1.10	6.2	10	82.3	8.23	6.0
Site M7	B	0.36	2.02	5.6	15	11.8	0.78	-
Site M8	A	0.007	0.03	5.0	7.75	1.3	0.17	-
Site M9	A	0.004	0.30	67.5	6	2.7	0.45	-
Site M10	A	0.09	0.41	4.8	8	11.4	1.43	0.3
Site M11	A	0.02	0.53	30.6	10	51.6	5.16	3.5
Site M12 ⁸	A	0.003	n/a	n/a	8	51.6	6.45	3.6

⁸ Site M12 failed during Storm Event 1; the manhole was surcharged for an extended time period, flooding the flow logging computer. Enough data was recovered to establish an average dry weather flow but not enough for a proper capacity and I/I analysis. This site and other sites that comprise the 'Old Henry Road' basin are the subject of a future project.

Monitoring Site	Install Period Scheme	ADWF (mgd)	Peak Measured Flow (mgd)	Peaking Factor	Diameter (Inches)	Peak Level (Inches)	d/D Ratio	Surcharge Level (feet)
Site M13	B	0.06	0.21	3.8	6	1.7	0.28	-
Site M14	A	0.04	0.32	7.7	8	9.3	1.16	0.1
Site M15	A	0.02	0.21	14.1	6	2.6	0.44	-
Site M16	A	0.09	0.62	7.2	11.5	37.2	3.23	2.1
<i>Phase 2</i>								
Site M3.1	E	0.03	0.58	18.3	6	3.3	0.41	-
Site M3.2	D	0.01	0.08	7.3	6	3.2	0.40	-
Site M5.1	D	0.02	0.15	6.5	8	7.6	0.95	-
Site M5.2	E	0.01	0.31	27.6	8	6.1	0.77	-
Site M5.3	E	0.02	0.10	4.5	6	2.1	0.35	-
Site M6.1	D	0.01	0.12	10.4	6	7.2	1.20	0.1
Site M6.2	D	0.02	0.04	2.3	8	1.9	0.23	-
Site M6.3	E	0.16	0.72	4.4	8	5.1	0.64	-
Site M6.4	D	0.08	0.51	6.1	8	6.2	0.78	-
Site M6.5	E	0.01	0.12	13.5	8	3.0	0.37	-
<i>Phase 3</i>								
Site M3.1A	F	0.009	0.15	15.4	6	5.9	0.98	-
Site M3.1B	F	0.006	0.10	16.7	6	2.0	0.34	-
Site M5.2A	F	0.009	0.11	12.0	6	3.2	0.53	-
Site M6.0A	F	0.057	1.09	19.0	10	7.2	0.72	-
Site M6.3A	F	0.005	0.30	61.5	6	3.2	0.53	-
Site M6.3B	F	0.004	0.06	16.1	8	1.3	0.16	-
Site M6.5A	F	0.003	0.03	11.1	7.75	1.3	0.17	-
Site M6.5B	F	0.003	0.04	11.8	7.75	1.1	0.14	-

The following capacity analysis results are noted:

- Peaking Factor:** Several sites had peaking factors greater than 10. Larger peaking factors are expected given that the study analyzes basins previously identified as having I/I rates.
- d/D Ratio:** Nine of the flow monitoring sites (Sites M2, M5, M6, M10, M11, M12, M14, M16 and M6.1) reached surcharge conditions.
- Sanitary Sewer Overflow Potential:** Given the level of surcharging seen during Storm Event 1, the manholes at Site 6, Site 11/12 and Site 16 have the potential for a sanitary sewer overflow (SSO) during a larger rainfall event. Site 6 has historical precedence for SSO discharging during large rainfall events.
- These capacity results do not replace a full hydraulic model which would determine capacity on a node-to-node basis and would be based on pipe slopes of the individual pipe segments within the local collection system.

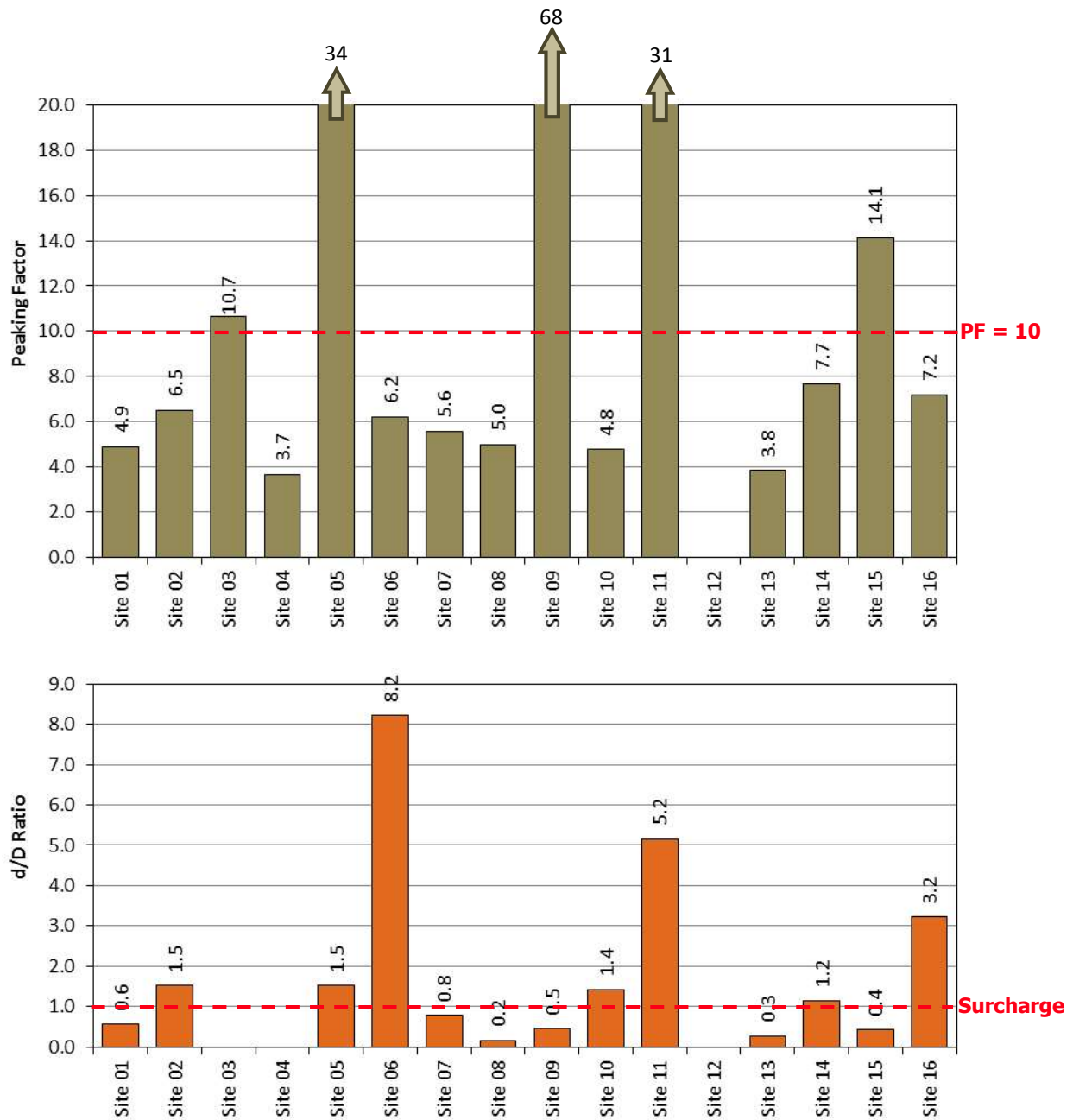


Figure 4-4. Phase 1 Capacity Summary: Peaking Factors and d/D Ratios

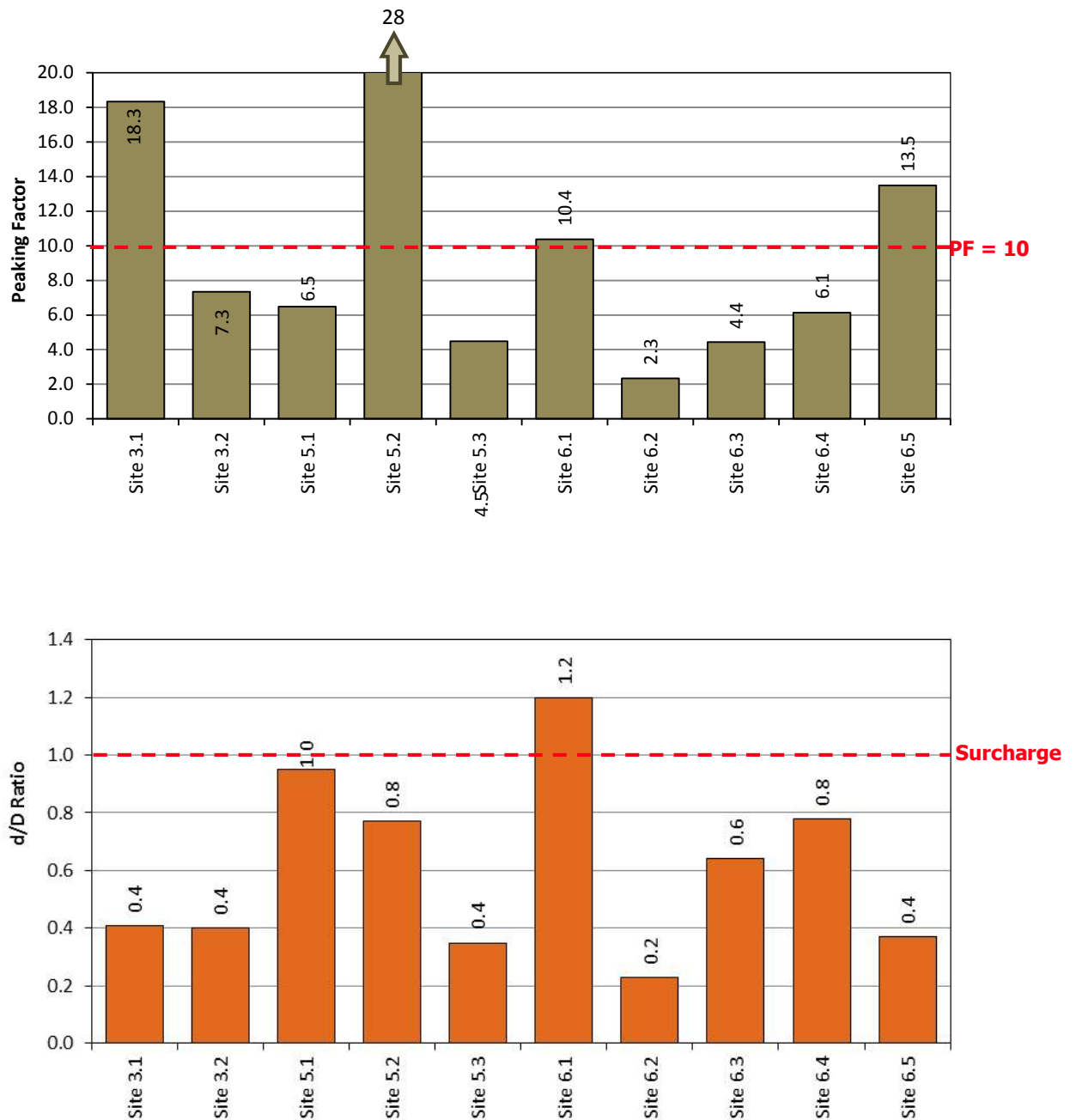


Figure 4-5. Phase 2 Capacity Summary: Peaking Factors and d/D Ratios

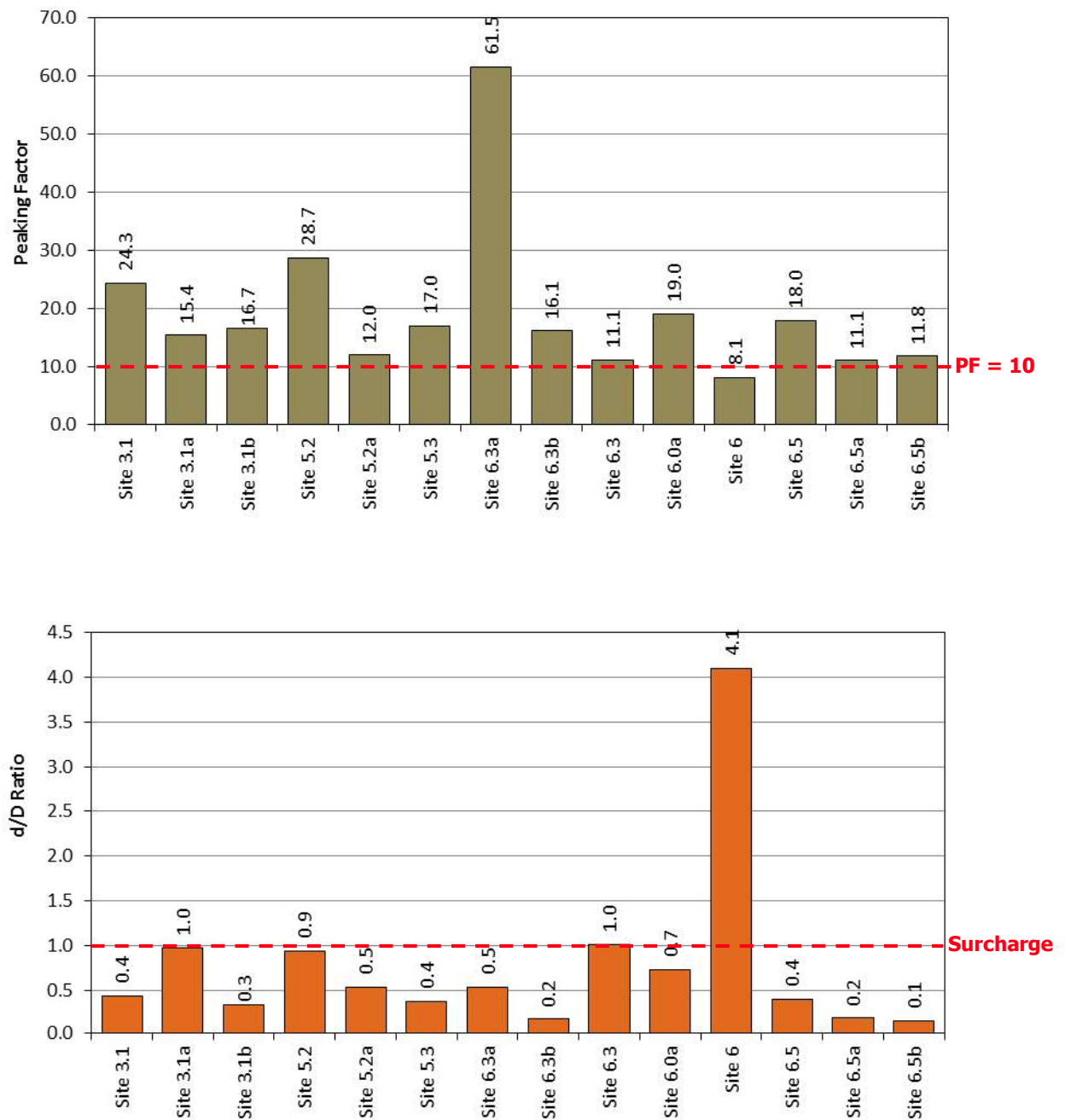


Figure 4-6. Phase 3 Capacity Summary: Peaking Factors and d/D Ratios

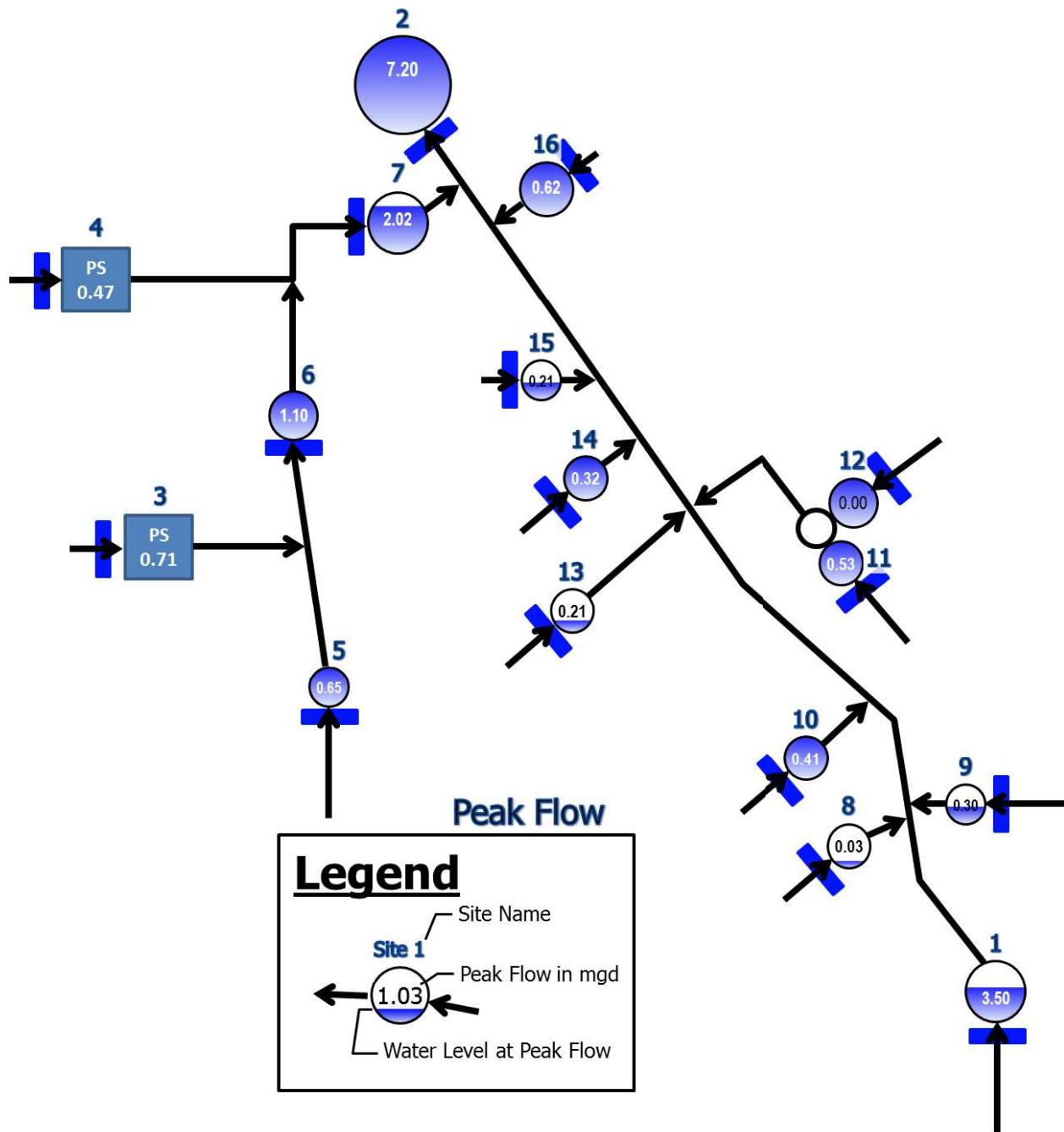


Figure 4-7. Peak Measured Flow Schematic (Phase 1)



Figure 4-8. Peak Measured Flow Schematic (Phase 2)

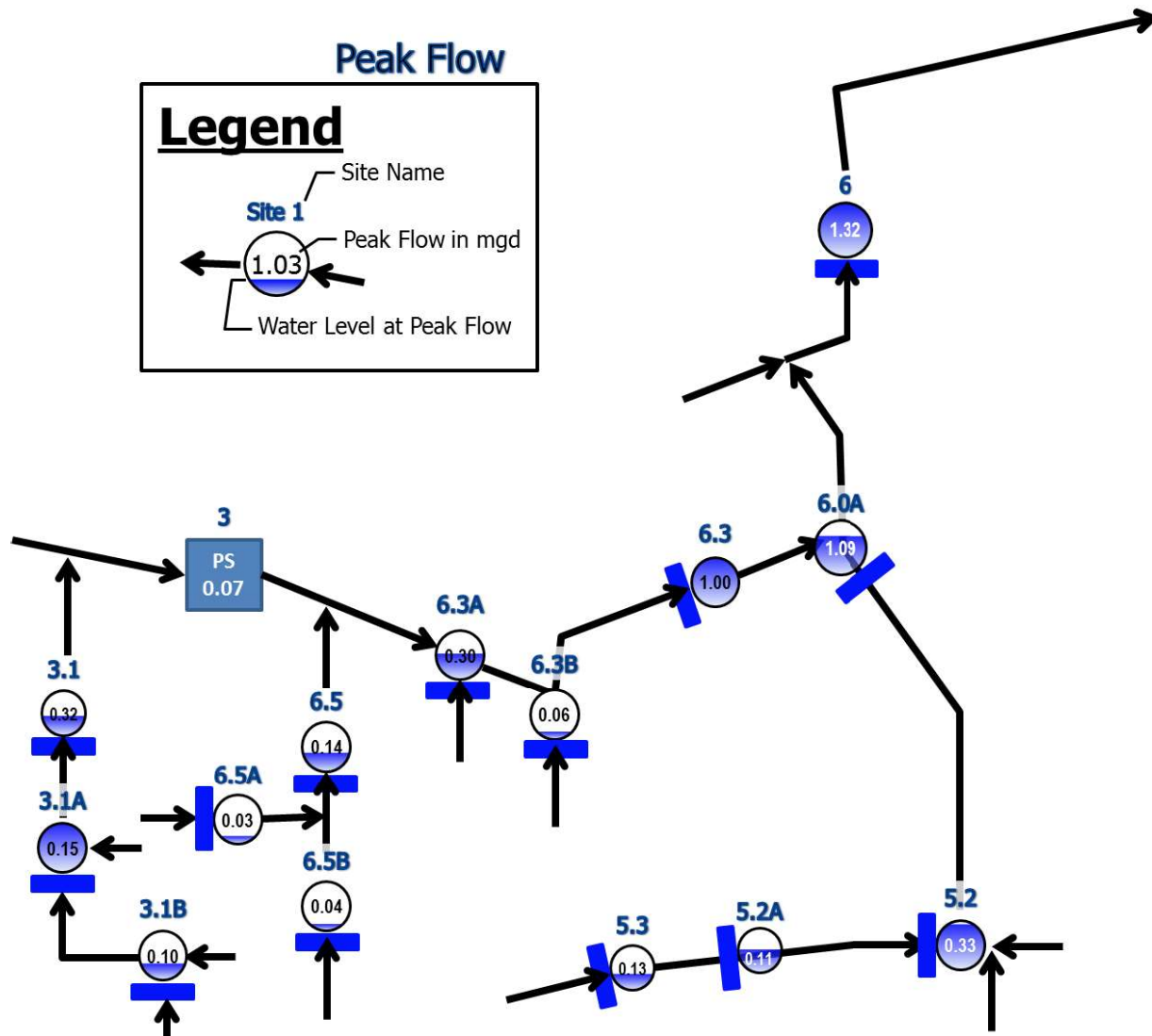


Figure 4-9. Peak Measured Flow Schematic (Phase 3)

5.0 PHASE 1 I/I RESULTS

5.1 Preface

The original 16 flow monitoring basins were illustrated in Figure 1-4. The following items are noted regarding the early-season analysis:

- Results are presented on a basin-by-basin basis (not a site-by-site basis).
- Results are for the original 15 basins only (Basin 12 excluded).
- Results presented to the City during the early-season were considered preliminary and based upon the information known at the time of presentation.
- Results presented in the following pages of analyses have been updated from the initial presentation to reflect final data and results; values may be different from the initial presentation; however, the conclusions and recommendations are the same.

5.2 Inflow Analysis

Inflow sources transport rain water *directly* into the sewer system; the corresponding inflow rates are tied closely to the intensity of the storm. This component of RDI/I often causes a peak flow problem in the sewer system and often dictates the required capacity of downstream pipes and transport facilities to carry these peak instantaneous flows.

Figure 5-1 illustrates the I/I response curve for Basin 3 and Storm Event 1 as it relates to peak I/I rate.

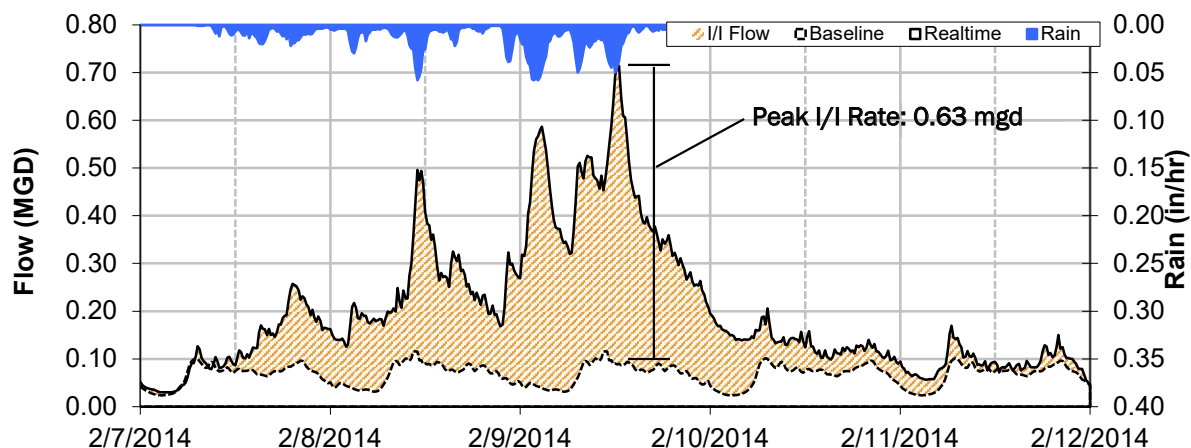


Figure 5-1. I/I Isolation Curve, Basin 3 (Inflow Measurement)

Table 5-1 summarizes the peak measured I/I flows and inflow analysis results for the Phase 1 basins for Storm Event 1 (refer to the *Methods* section for more information on inflow analysis methods). The peak I/I rate was normalized by three different methods: length of pipe (IDM), basin area (acres) and sewerage contribution (ADWF). Basins that ranked in the top 5 have been color coded red. Figure 5-2 illustrates a temperature map summary of the inflow analysis results per basin.

Table 5-1. Inflow Analysis Summary, Large Basins

Basin	ADWF (mgd)	Peak I/I Rate (mgd)	Peak I/I per IDM (gpd/IDM)	Peak I/I per ACRE (gpd/AC)	Peak I/I per ADWF Ratio	Inflow Ranking
Basin 3	0.067	0.63	123,000	15,700	9.34	1
Basin 4	0.129	0.28	22,000	4,800	2.16	11
Basin 5	0.019	0.64	62,000	9,000	33.50	4
Basin 6	0.090	0.14	11,000	1,100	1.57	13
Basin 7	0.058	0.66	56,000	16,100	11.34	6
Basin 8	0.007	0.02	3,000	400	3.06	12
Basin 9	0.004	0.30	60,000	10,700	67.75	2
Basin 10	0.085	0.26	22,000	4,200	3.05	10
Basin 11	0.017	0.51	49,000	9,800	29.38	7
Basin 13	0.056	0.16	50,000	9,400	2.86	8
Basin 14	0.042	0.30	47,000	8,100	7.17	9
Basin 15	0.015	0.21	58,000	13,100	13.91	5
Basin 16	0.086	0.58	121,000	48,300	6.78	3

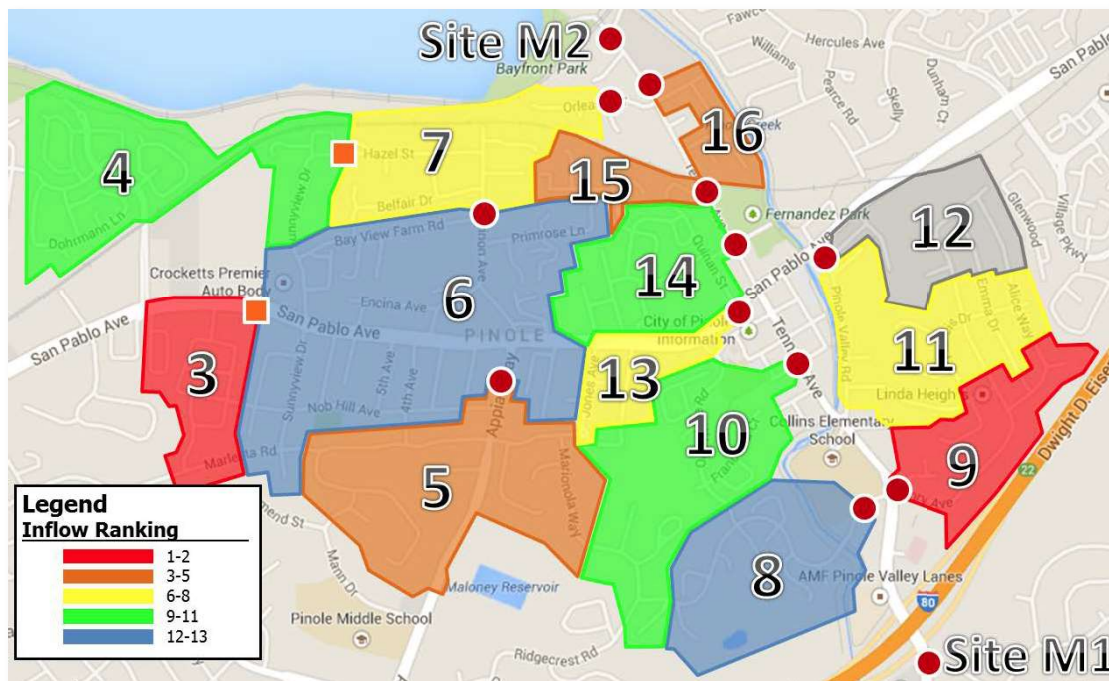


Figure 5-2. Phase 1 Inflow Temperature Map

5.3 Combined I/I Analysis

Combined I/I analysis considers the totalized volume (in gallons) of both inflow and rainfall-dependent infiltration over the course of a storm event. For example, the total volume of infiltration and inflow into Basin 3 for the February 7 - 12, 2014 storm event calculated out to 670,000 gallons (hatched area below in Figure 5-3).

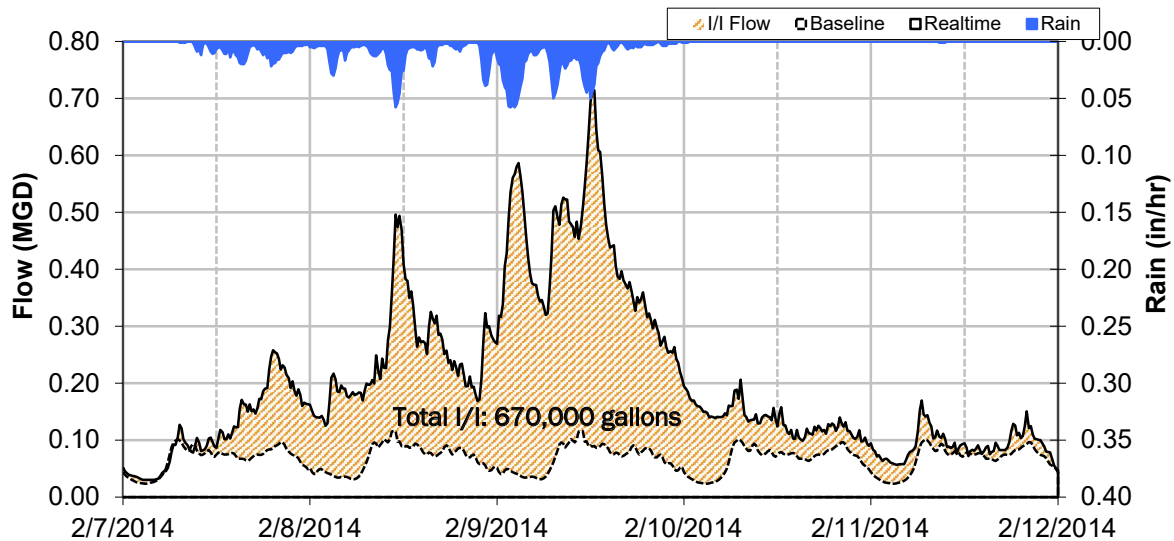


Figure 5-3. I/I Isolation Curve, Basin 3 (Combined I/I Measurement)

Table 5-2 summarizes the combined I/I analysis results for the large basins. Figure 5-4 illustrates a temperature map of the basin rankings for combined I/I.

Table 5-2. Combined I/I Analysis Summary, Large Basins

Basin	ADWF (mgd)	Total I/I (gallons)	Total I/I per IDM	R-Value (per Acre)	Total I/I per ADWF	Combined I/I Ranking
Basin 3	0.067	670,000	109,000	19.0%	3.07	5
Basin 4	0.129	355,000	8,000	6.9%	0.85	11
Basin 5	0.019	570,000	17,000	9.1%	9.17	4
Basin 6	0.090	560,000	27,000	4.9%	1.90	9
Basin 7	0.058	200,000	5,000	5.5%	1.05	10
Basin 8	0.007	1,000	0	0.0%	0.05	13
Basin 9	0.004	76,000	5,000	3.1%	5.27	7
Basin 10	0.085	291,000	8,000	5.3%	1.05	12
Basin 11	0.017	594,000	17,000	12.9%	10.51	1
Basin 13	0.056	214,000	21,000	14.2%	1.18	8
Basin 14	0.042	412,000	20,000	12.6%	3.02	6
Basin 15	0.015	205,000	17,000	14.5%	4.17	3
Basin 16	0.086	858,000	55,000	80.9%	3.08	2

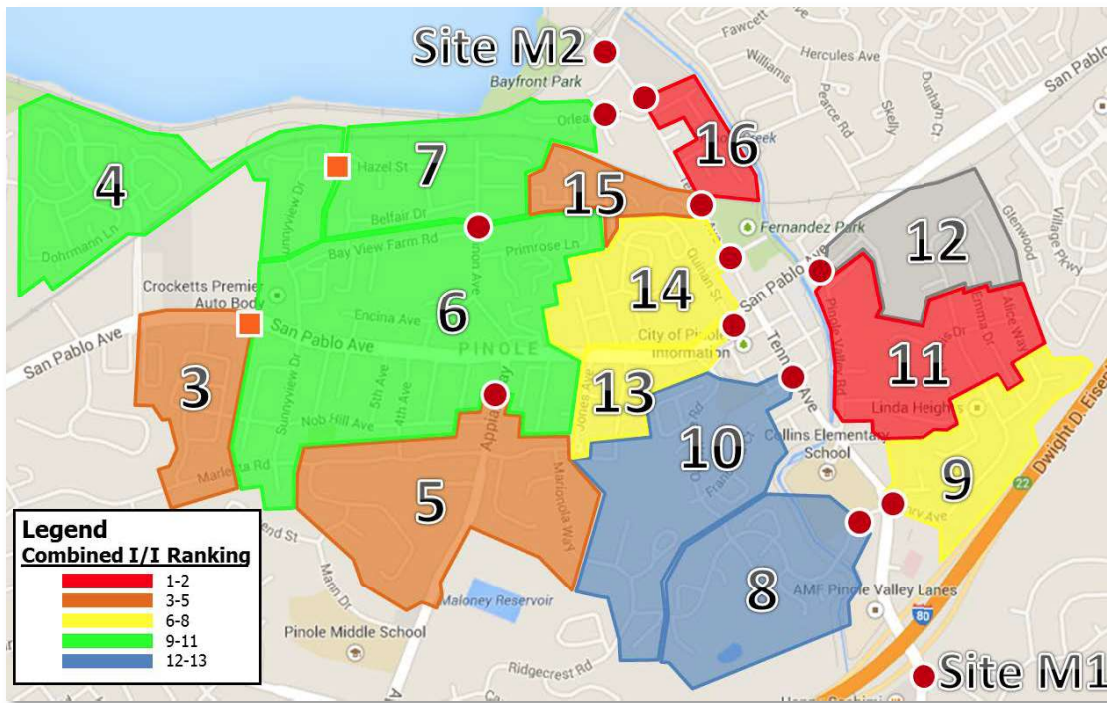


Figure 5-4. Phase 1 Combined I/I Temperature Map

5.4 Phase 1 Summary

On February 20, 2014, V&A met with the City to discuss the Phase 1 findings. At the time of the discussion, peak I/I to ADWF ratios and total combined I/I contribution were main topics of discussion, presented in the format of I/I response curves per each monitoring site (similar to Figure 5-1). The following bullet items highlight important topics of discussion between V&A and the City:

- **Basin 3:** The City cited historical data and field observations regarding known I/I issues within Basin 3.
- **Basin 5:** V&A recommended investigating Basin 5 due to the high peak I/I ratios and high combined I/I totals.
- **Basin 6:** There is a known capacity issue one manhole upstream from the Basin 6 monitoring location.
- **Basin 8:** This is a newer area of the City and this area had minimal I/I contribution.
- **Basin 9:** The flow meter was not in an ideal location for monitoring. The consensus was that the response for Basin 9 was real and considerable but the magnitude may not be correct due to metering conditions.
- **Basin 11:** This location had significant peak I/I rates and combined I/I totals.

- **Basin 12:** The metering manhole for this basin surcharged with evidence that the surcharge was close to an SSO.
- **Basins 15/16:** Both basins were noted for generally high I/I rates and total I/I contribution.
- **Old Henry Road:** The City cited the age of the sewer system along Old Henry Road and noted this correlation to the high I/I rates within Basins 9, 11 and 12.

5.4.1 Conclusions

Final group conclusions were as follows:

- Focus the Phase 2 monitoring within Basins 3, 5 and 6.
 - The focus of the study moving forward would be to spend the remainder of the 2014 wet weather season identifying smaller high I/I mini-basins within this region for possible future CIP work.
 - Identifying areas of I/I reduction may help to solve two problems within the City: (1) severe flows observed in Basin 3 (San Pablo Pump Station), and (2) capacity issues observed at the manhole at the intersection of Pinon Avenue and Bay View Farm Road.
- Make note of the 'Old Henry Road' Basins as future candidates for a focused flow monitoring and I/I study.

5.4.2 Actions

Future actions for Phase 2 included the following:

- Remove ten flow meters from the following sites: M1, M5, M8 – M16.
- Utilize the ten available flow meters to further analyze and gather data on the high I/I basins as follows:
 - Basin 3: Sub-divide into two basins (3.1 and 3.2) and perform Phase 2 flow monitoring.
 - Basin 5: Sub-divide into three basins (5.1, 5.2 and 5.3) and perform Phase 2 flow monitoring.
 - Basin 6: Sub-divide into five basins (6.1, 6.2, 6.3, 6.4 and 6.5) and perform Phase 2 flow monitoring.

6.0 PHASE 2 I/I RESULTS

6.1 Preface

The Phase 2 flow monitoring occurred from February 26, 2014 through March 6, 2014. The ten flow monitoring sub-basins designated for the Phase 2 analysis are illustrated in Figure 1-5. The following items are noted regarding the early-season analysis:

- Results are presented on a basin-by-basin basis (not a site-by-site basis).
- Results are for the ten Phase 2 basins only.
- Results presented to the City during Phase 2 were considered preliminary and based upon the information known at the time of presentation.
- Results presented in the following pages of analyses have been updated from initial presentation to reflect final data and results. The values presented in this report will differ from the initial presentation; however, the conclusions and recommendations are the same.

6.2 I/I Summary of Results

V&A performed flow monitoring and I/I analysis similar to Phase 1. Figure 6-1 shows the I/I response curve for Basin 3.1.

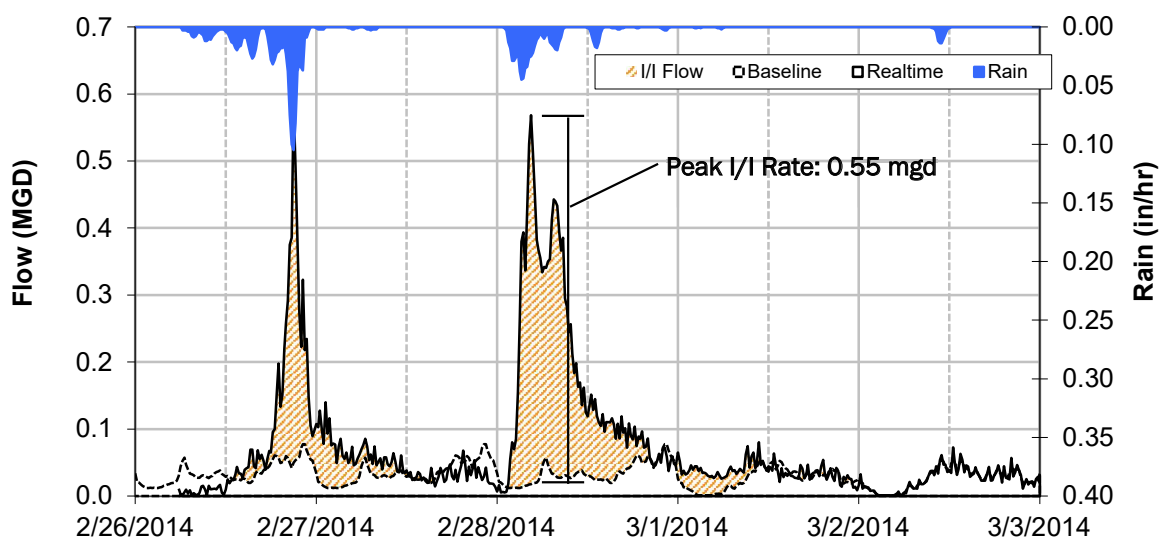


Figure 6-1. Peak I/I Rate, Basin 3.1 (Event 2)

Table 6-1 summarizes the peak measured I/I flows and inflow analysis results for the Phase 2 basins for Storm Event 2. Basins that ranked in the top 5 have been color coded red. Figure 6-2 illustrates a temperature map summary of the inflow analysis results per basin.

Table 6-1. Phase 2 Inflow Analysis Summary

Basin	ADWF (mgd)	Peak I/I Rate (mgd)	Peak I/I per IDM (gpd/IDM)	Peak I/I per ACRE (gpd/AC)	Peak I/I per ADWF Ratio	Inflow Ranking
Basin 3.1	0.032	0.55	265,700	34,400	17.3	2
Basin 3.2	0.011	0.06	52,600	10,000	5.7	5
Basin 5.1	0.023	0.12	35,900	5,200	5.2	6
Basin 5.2	0.011	0.23	171,600	25,600	20.9	1
Basin 5.3	0.022	0.08	24,600	2,800	3.6	8
Basin 6.1	0.011	0.10	41,500	7,700	8.9	4
Basin 6.2	0.016	0.03	9,000	2,300	1.9	9
Basin 6.3	0.079	0.04	14,900	1,000	0.5	10
Basin 6.4	0.008	0.03	28,000	2,300	3.7	7
Basin 6.5	0.009	0.11	31,400	6,500	12.6	3

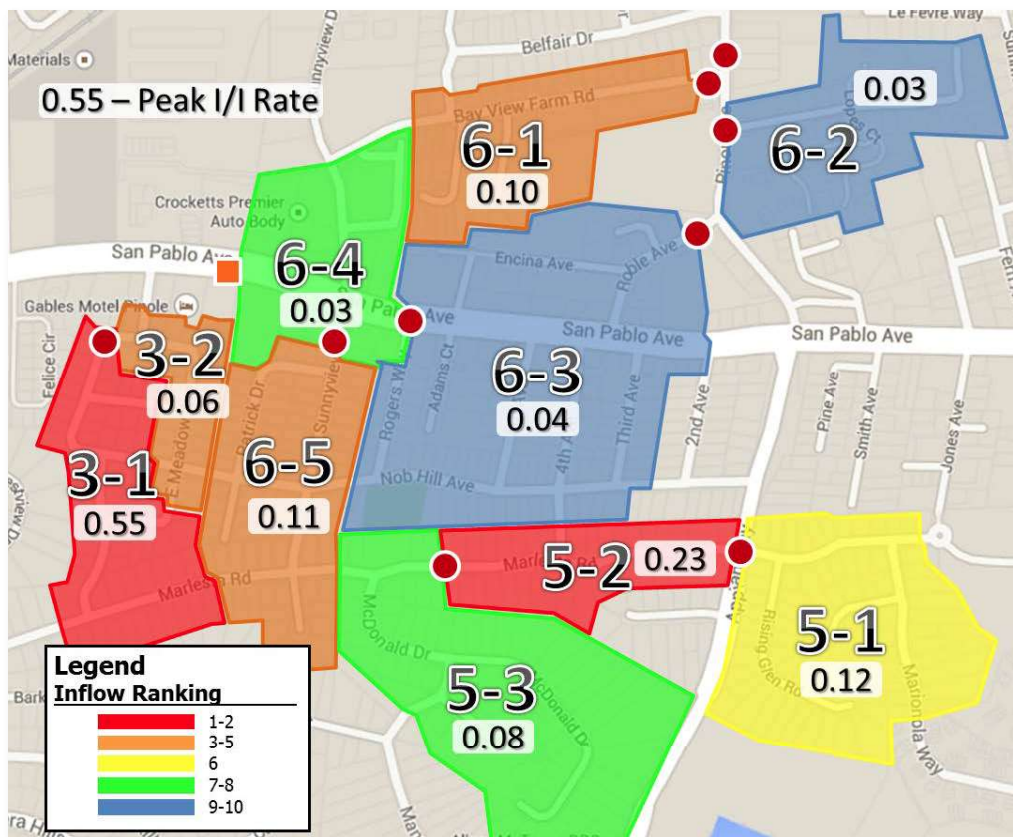


Figure 6-2. Phase 2 Inflow Analysis Temperature Map

6.3 Phase 2 Summary

On March 18, 2014, V&A met with the City to discuss the Phase 2 findings. At the time of the discussion, the measured peak I/I rates were the main topics of discussion, presented in the format of I/I response curves per each monitoring site. The following bullet items highlight important topics of discussion between V&A and the City:

- **Basin 3.1/Basin 3.2:** Basin 3.1 had significantly more peak I/I than Basin 3.2. Basin 3.1 had 0.55 mgd of peak I/I flow occurring within only approximately 2,700 lineal feet of pipe.
 - Rehabilitating the 2,700 lineal feet of pipe is a realistic CIP project that can have significant impact at the treatment plant. For Storm Event 2, at the treatment plant, there was approximately 2.47 mgd of peak I/I. Though not a perfect comparison due to attenuation and holding times within the collection system, 0.55 mgd peak inflow from Basin 3.1 is approximately 22% of the 2.47 mgd peak inflow measured from the City of Pinole for Storm Event 2.
- **Basin 5.2 and Basin 6.5** also had high peak I/I rates.
- The City was interested in obtaining the percentage volume of flow contribution at the intersection of Roble Avenue and Appian Way where two main sewers combine.
- **Basin 6.3:** The City was interested in directly monitoring flows in the numbered streets if possible (2nd Avenue to 5th Avenue).

6.3.1 Recommendations

Final group recommendations were as follows:

- Focus the Phase 3 monitoring within Basins 3.1, 5.2 and 6.5 for focused I/I analysis.
- Monitor the Roble/Appian junction and capture the sewerage basins for Third Avenue and 5th Avenue.

6.3.2 Actions

- Remove seven flow meters from the following sites: M3.2, M5.1, M6.1, M6.2, M6.4, M7 and M13.
- Utilize the seven available flow meters plus one extra meter to further analyze and gather data on the high I/I basins as follows:
 - **Basin 3.1:** Sub-divide into three basins (3.1, 3.1A, 3.1B) for Phase 3 flow monitoring.
 - **Basin 5.2:** Sub-divide into three basins (5.2, 5.2A and 5.3) for Phase 3 flow monitoring.
 - **Basin 6.3:** Sub-divide into three basins (6.3, 6.3A and 6.3B) for Phase 3 flow monitoring.
 - **Basin 6.5:** Sub-divide into three basins (6.5, 6.5A and 6.5B) for Phase 3 flow monitoring.

7.0 PHASE 3 I/I RESULTS

7.1 Preface

The 13 flow monitoring sub-basins designated after the Phase 2 analysis are illustrated in Figure 1-6. The following items are noted regarding the early-season analysis:

- Results are presented on a basin-by-basin basis (not a site-by-site basis).
- Results are for the 13 Phase 3 basins only.
- Results presented to the City during Phase 3 were considered preliminary and based upon the information known at the time of presentation.
- Results presented in the following pages of analyses have been updated from the initial presentation to reflect final data and results. The results may differ from the initial presentation; however, the conclusions and recommendations are the same.

7.2 I/I Summary of Results

V&A performed flow monitoring and I/I analysis similar to Phase 1 and Phase 2. Figure 7-1 shows the I/I response curve for Basin 3.1A

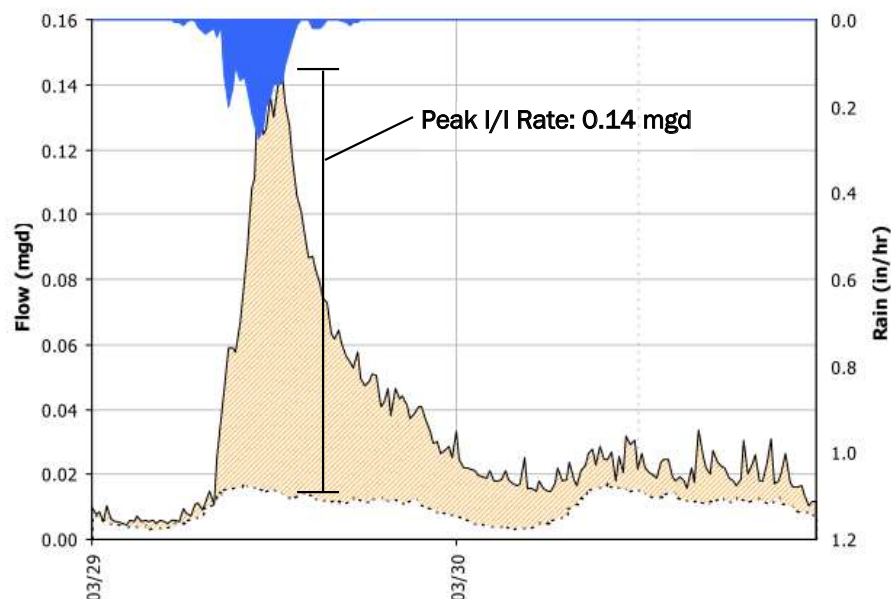


Figure 7-1. Peak I/I Rate, Basin 3.1A (Event 3)

Table 7-1 summarizes the peak measured I/I flows and inflow analysis results for the Phase 3 basins for Storm Event 3. Basins that ranked in the top 5 have been color coded red. Figure 7-2 illustrates a temperature map summary of the inflow analysis results per basin.

Table 7-1. Phase 3 Inflow Analysis Summary

Basin	ADWF (mgd)	Peak I/I Rate (mgd)	Peak I/I per IDM (gpd/IDM)	Peak I/I per ACRE (gpd/AC)	Peak I/I per ADWF Ratio	Inflow Ranking
Basin M3.1	0.0036	0.168	243,600	54,200	46.6	3
Basin M3.1A	0.0038	0.044	66,000	18,400	11.7	7
Basin M3.1B	0.0057	0.087	47,700	8,600	15.2	8
Basin M5.2	0.0025	0.220	292,700	61,000	89.3	1
Basin M5.2A	0.0016	0.000	0	0	0	13
Basin M5.3	0.0074	0.115	33,500	4,000	15.6	10
Basin M6.0A	0.0459	0.703	69,300	12,700	15.3	6
Basin M6.3	0.0146	0.283	52,500	7,800	19.4	5
Basin M6.3A	0.0049	0.295	304,100	38,800	60.0	2
Basin M6.3B	0.0036	0.052	37,600	8,800	14.5	9
Basin M6.5	0.0016	0.068	80,600	20,100	41.8	4
Basin M6.5A	0.0029	0.028	20,400	4,300	9.4	12
Basin M6.5B	0.0033	0.034	25,800	4,700	10.4	11

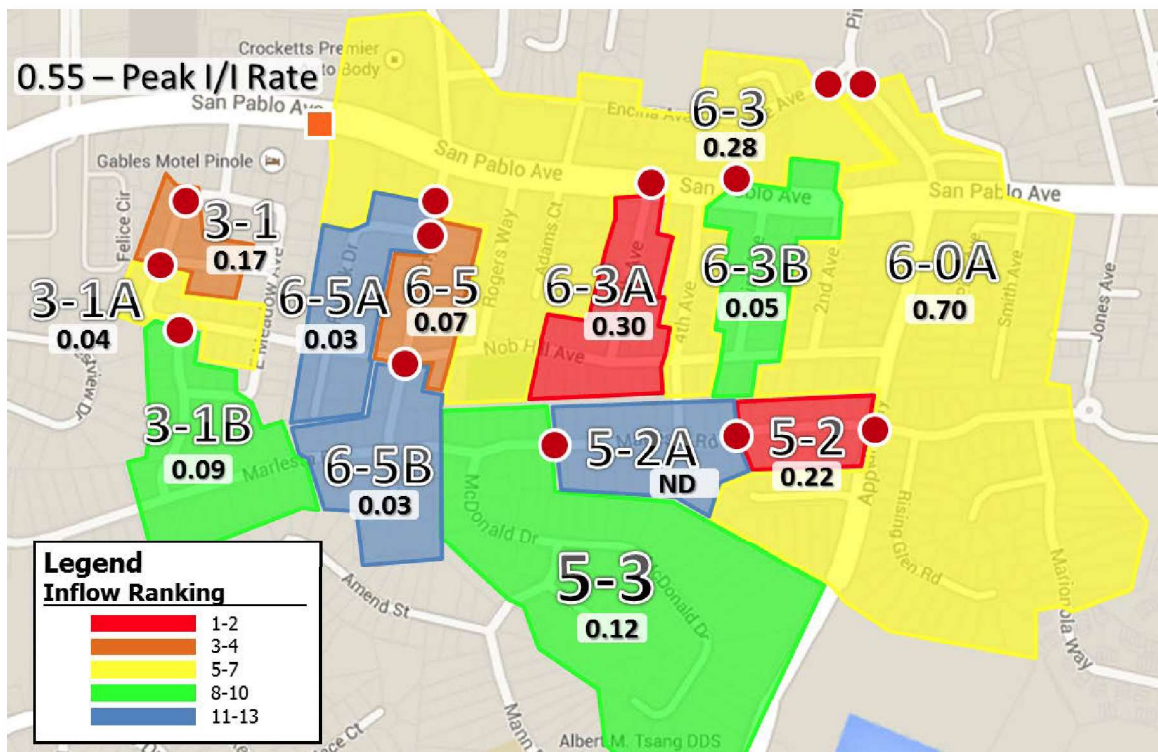


Figure 7-2. Phase 3 Inflow Analysis Temperature Map

7.3 Phase 3 Summary

On April 15, 2014, V&A met with the City to discuss the Phase 3 findings. The following bullet items highlight important topics of discussion between V&A and the City:

- **Basin 3.1:** Basin 3.1 had previously been broken into three parts in order to refine the potential location for the high rates of inflow.
 - The high rates of inflow were once more confirmed in Basin 3.1. Basin 3.1 had the highest rate of inflow amongst the three Basin 3.1 meters (3.1, 3.1A and 3.1B)
- **Basin 5.2:** Previously, Basin 5.2 had very high rates of inflow for a relatively small service area. This basin was divided approximately in half to further refine the problem area.
 - Of the two sub-basins (5.2 and 5.2A), Basin 5.2 had the vast majority of I/I.
- **Basin 6.5:** During Phase 2, Basin 6.5 was one of the two highest ranked basins. This was divided into three sub-basins (6.5, 6.5A and 6.5B).
 - Basin 6.5 had the highest rate of inflow
- **Basin 6.3A:** The rate of inflow observed in Basin 6.3A was higher than expected.

8.0 RECOMMENDATIONS

V&A advises that future I/I reduction plans consider the following recommendations:

1. Potential CIP Projects for I/I Mitigation and Reduction

- a. The City should conduct I/I mitigation and reduction measures in the following mini-basins:
 - i. Basin 3-1
 - ii. Basin 3-1A
 - iii. Basin 5-2
 - iv. Basin 6-3A
 - v. Basin 6-5
- b. For I/I reduction, V&A recommends rehabilitation of the sewer mains, laterals and side sewers.
 - i. The most comprehensive study on the percent of I/I reduction has been conducted by King County, *Initial Infiltration and Inflow Reduction Project Alternatives Analysis Report*. This study confirmed the popular theory that over 50% of infiltration and inflow enters from private lateral connections. The report also makes the following recommendations for I/I mitigation:
 - (a) CCTV work is best performed during a rainfall event after groundwater levels have begun to rise, allowing visual confirmation of specific I/I entry points, including determining the source of potential lateral I/I source. A generally consistent deficiency was observed with regards to the joint conditions in the laterals and side sewers.
 - (b) Rehabilitation of sewer mains, manholes, laterals and side sewers results in approximately 80% reduction of I/I.

2. Future I/I Identification – Continued Sub-Basin Flow Monitoring and I/I Analysis: V&A recommends that the City continue to locate and mitigate potential sources of I/I. Already identified as known contributing sub-basins with high volumes of I/I are Basins 9, 11, 12, 14 and 15. It is possible that a study similar to this study may identify CIP projects that can significantly reduce the overall I/I within the City collection system.

3. Other I/I Investigation Methods: Potential other I/I investigation methods include the following:

- a. Smoke testing
- b. Night-time reconnaissance work to (1) investigate and determine direct point sources of inflow, and (2) determine the areas and pipe reaches responsible for high levels of infiltration contribution.

4. I/I Reduction Cost Effectiveness Analysis: The City should conduct a study to determine which is more cost-effective: (1) locating the sources of inflow/infiltration and systematically rehabilitating or replacing the faulty pipelines; or (2) continued treatment of the additional rainfall dependent I/I flow.

APPENDIX A. ADDITIONAL ANALYSIS

REQUEST: FLOW SPLIT BETWEEN M6.0A AND M6.3



A.1 Flow Split between M6.0A and M6

As a part of Phase 3, the City asked that the flow split between Sites M6.0A and M6.3 be monitored. Site M6.0A monitored a 10-inch line running southwest along Pinon Ave that gathers flow from Basin 5 (Phase 1) as well as the area near the intersection of Appian Way and San Pablo Ave. Site M6.3 monitors an 8-inch line that gathers flow from Basin 3, Basin 6.5, Basin 6.4 and Basin 6.3. The flows from these two sites eventually travel through Site M6.

The average and peak flow splits for the two sites are illustrated in Figure A-1 and Figure A-2.

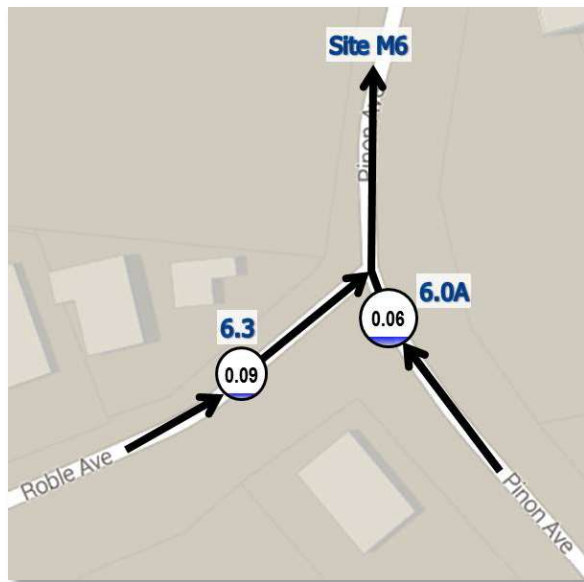


Figure A-1. ADWF Split for Site M6.3 and M6.0A

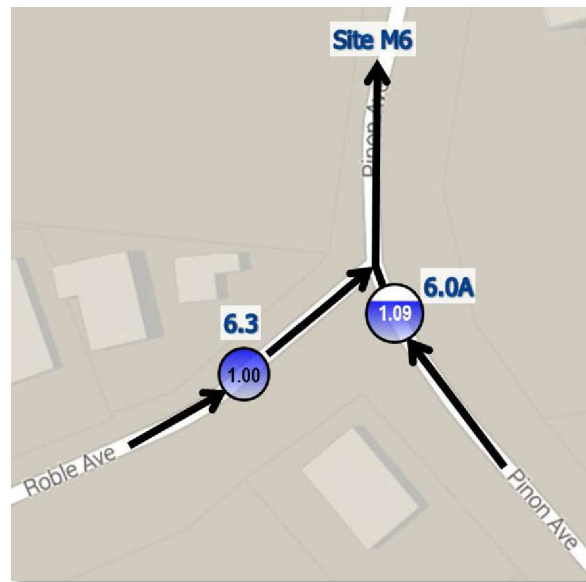


Figure A-2. Peak Flow Split for Site M6.3 and M6.0A

The split in flows between the two lines was approximately 40% for Site M6.0A and 60% for Site M6.3 for Average Dry Weather Flow.

The split in flows between the two lines was approximately 52% for Site M6.0A and 48% for Site M6.3 for Peak Flow during Storm Event 3.

APPENDIX B. ADDITIONAL ANALYSIS

REQUEST: TREATMENT PLANT INFLOW CONTRIBUTION



B.1 Treatment Plant Inflow Contribution

The City of Pinole shares ownership of the Wastewater Treatment Plant with the City of Hercules. One aspect that is currently not addressed between the cities is the cost of treating the rainfall that falls on the footprint of the treatment plant itself.

The footprint of the treatment plant (Figure B-3) is approximately 228,300 ft² (5.28 acres). This equates to 142,300 gallons per inch of rain that falls. The City of Pinole averages approximately 20.25 inches of rain per year. With the drainage on the treatment plant property, the majority of this rainfall would flow into the treatment process. In total, this results in approximately 2,880,000 gallons of rainfall that is treated by the treatment facility each year.



Figure B-3. Footprint of City of Pinole Wastewater Treatment Plant

APPENDIX C. ADDITIONAL ANALYSIS REQUEST: COMPARISON OF SANITARY SEWER FLOWS FROM CITY OF PINOLE, CITY OF HERCULES, AND THE PINOLE/ HERCULES WASTEWATER TREATMENT PLANT

This request was processed and submitted as a separate Technical Memorandum, but included within Appendix C as follows.

TECHNICAL MEMORANDUM

COMPARISON OF SANITARY SEWER FLOWS FROM CITY OF PINOLE, CITY OF HERCULES, AND THE PINOLE/HERCULES WASTEWATER TREATMENT PLANT

Prepared for: Dean Allison, P.E., City of Pinole

Prepared by: Kevin Krajewski, P.E., V&A Consulting Engineers

Reviewed by: Oliver Pohl, P.E., V&A Consulting Engineers
Glenn Willson, P.E., V&A Consulting Engineers



Date: February 23, 2015

V&A Project No.: 13-0276

1.0 INTRODUCTION

The Pinole/Hercules Wastewater Treatment Plant treats sanitary sewage flow from both the City of Pinole and the City of Hercules. Presently, the Hercules flows are measured directly through a Parshall flume located at the treatment plant. Pinole flows are measured using two methods:

- **Method 1:** Indirect measurement by subtracting the Hercules flows from the totalized treatment plant effluent flows, monitored at an effluent weir structure. This method has traditionally been the primary method for determining flows from the City of Pinole.
- **Method 2:** Direct measurement using a Hach FloDar flow meter located on the 30-inch line on Tennant Avenue as it enters into the treatment facility. This 30-inch line captures the entirety of the sanitary sewer waste from the City of Pinole collection system.

V&A Consulting Engineers (V&A) was retained by the City of Pinole (City) to compare both methods of flow calculation to temporary flow monitoring conducted on the 30-inch line on Tennent Avenue, just east of the railroad tracks, approximately 240 feet upstream from the City Influent Meter. The 30-inch line captures the entirety of the sanitary sewer waste from the City of Pinole collection system.

Flows from the Influent, Hercules and Effluent meters were provided by the City. V&A was provided two different types of data sets from the influent (FloDar) meter:

- **Data Set 1:** The City provided 15-minute interval data for the Influent flow meter from November 1 through December 10, 2014.
- **Data Set 2:** V&A accessed the flow meter directly and was able to retrieve five days of 1-minute interval data from January 18 to 23, 2015.

These data sets were analyzed separately and for different purposes that will be outlined later in this report.

V&A was initially retained by the City to perform sanitary sewer flow monitoring during the 2013/2014 wet weather season as part of the City's efforts to reduce inflow and infiltration (I/I) within the City collection system. Through the 2014 summer months, V&A maintained the flow meter that was already installed on Tennent Avenue. This work was performed under the same contract as the 2013/2014 Flow Monitoring and I/I Analysis work.

Figure 1-1 illustrates a map of the treatment plant and the Pinole and Hercules trunk sewer lines.



Figure 1-1. Map of Pinole/Hercules Treatment Plant, Contributing Flows

2.0 METHOD 1 ANALYSIS (EFFLUENT LESS HERCULES)

2.1 Review of Validity of City Data for Analysis

The City provided 15-minute interval data for the Hercules Parshall flume and for the treatment plant effluent from June 14, 2014 to September 25, 2014. V&A performed a cursory QA/QC on the data provided. The data from June 14 through July 20, 2014 appeared to have been reported correctly and is considered as valid data sets for comparison. From July 21, 2014 forward, there were only a few valid data points for each data set per day, resulting in several “flat-lines” or repeated values in the data sets, illustrated in Figure 2-1.

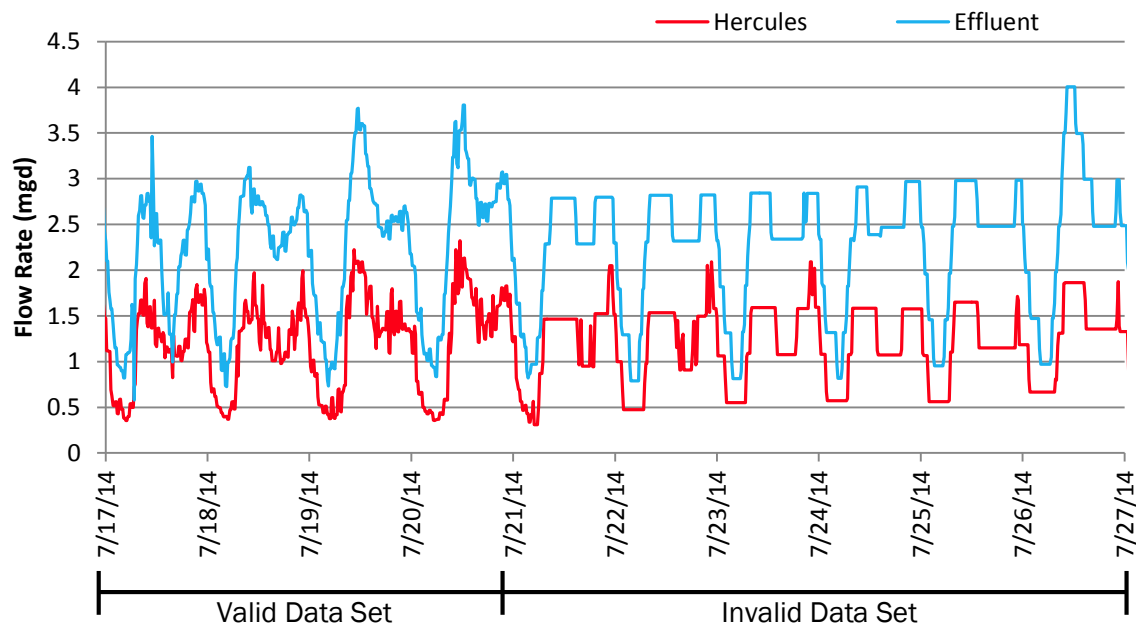


Figure 2-1. Hercules and Effluent Flow Data, 7/17/2014 – 7/27/2014

For Method 1 Flows, the data from July 21 forward was not considered valid for comparison for the purposes of this study.

2.2 Micro Analysis

V&A first looked at the data at the 15-minute data interval level. Though the City does not report totalized flows at this interval level; however, analyzing the data on a micro level may lend confidence or provide valuable information as to the operational viability of the metering methods currently in use. Figure 2-2 shows a graph of the flow monitoring data sets evaluated for this study. The purple line labeled “Pinole+Hercules” is simply a sum of the directly monitored values for Pinole and Hercules and is intended to be shown as a direct comparison to the Effluent data.

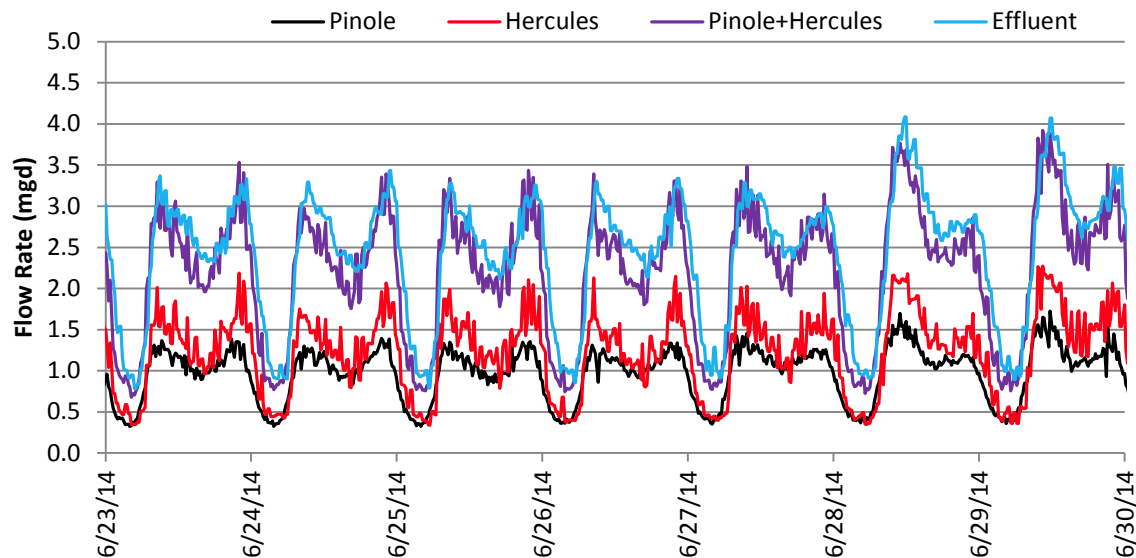


Figure 2-2. Hercules and Effluent Flow Data, 6/23/2014 – 6/30/2014

It is noted that the Effluent flows undergo some degree of attenuation; there is detention time in between the influent and effluent stages of the treatment process. The following items are noted: analysis:

- The Effluent flow data and the sum of the directly monitored data sets (“Pinole + Hercules”) match each other well in terms of magnitude and range.
- When operating correctly, the diurnal curves and trends of the flow data from the Hercules Parshall flume and the Effluent Weir appear to provide solid and repeatable data.

2.3 Macro Analysis

Flow data was analyzed on a day-by-day basis to determine the estimated difference in the calculated flow for Pinole (present method – Effluent less Hercules) versus the measured flows per the V&A flow monitoring conducted on the 30-inch trunk sewer on Tennent Avenue. Table 2-1 shows the daily flow comparison of the daily calculated flows versus the measured City flows.

Table 2-1. Comparison of Average Daily Flow Rates (Method 1)

Date	Effluent (mgd)	Hercules (mgd)	Method 1 Pinole Flows (Effl – Herc) (mgd)	Pinole Measured (mgd)	% Difference
6/18/2014	2.32	1.17	1.15	0.97	19%
6/19/2014	2.34	1.18	1.16	0.97	19%
6/20/2014	2.39	1.18	1.21	0.98	22%
6/21/2014	2.49	1.30	1.19	0.99	20%
6/22/2014	2.50	1.34	1.16	1.01	14%
6/23/2014	2.37	1.21	1.16	0.96	20%
6/24/2014	2.36	1.19	1.18	0.94	25%
6/25/2014	2.32	1.20	1.12	0.94	19%
6/26/2014	2.33	1.15	1.19	0.94	26%
6/27/2014	2.40	1.20	1.21	1.00	21%
6/28/2014	2.51	1.26	1.25	1.01	24%
6/29/2014	2.59	1.34	1.25	1.02	22%
6/30/2014	2.42	1.21	1.21	0.97	24%
7/1/2014	2.32	1.15	1.17	0.95	23%
7/2/2014	2.30	1.15	1.15	0.97	19%
7/3/2014	2.28	1.16	1.12	0.96	17%
7/4/2014	2.37	1.23	1.15	0.97	18%
7/5/2014	2.32	1.20	1.12	0.99	12%
7/6/2014	2.40	1.26	1.14	1.04	10%
7/7/2014	2.29	1.18	1.11	1.03	8%
7/8/2014	2.27	1.15	1.12	1.02	9%
7/9/2014	2.28	1.18	1.10	1.00	10%
7/10/2014	2.20	1.15	1.05	0.98	7%
7/11/2014	2.24	1.12	1.12	1.00	13%
7/12/2014	2.39	1.27	1.12	1.02	9%
7/13/2014	2.44	1.29	1.15	1.05	10%
7/14/2014	2.33	1.21	1.12	1.03	8%
7/15/2014	2.35	1.18	1.17	0.99	18%
7/16/2014	2.41	1.18	1.22	1.01	21%
7/17/2014	2.02	1.15	0.87	0.98	-11%
7/18/2014	2.22	1.13	1.09	1.00	9%
7/19/2014	2.31	1.24	1.07	1.00	7%
7/20/2014	2.37	1.26	1.11	1.04	7%
Average:	2.35	1.20	1.14	0.99	15.2%

Note: V&A has no knowledge of the accuracy of the flow data from Hercules and the plant. It is also noted that the industry standard for open-channel flow monitoring is expected to have an accuracy of approximately $\pm 5\%$.

Method 1 Flow Measurement Summary

Using the Method 1 determination of the City of Pinole flows, the flows for Pinole are over-reported by approximately 15.2%.

3.0 METHOD 2, DATA SET 1

3.1 Review of Validity of City Data for Analysis

Similar to the data sets provided for the Hercules and Effluent flows of the previous section, the data set had many repeated values and flat-lines, illustrated in Figure 3-1.

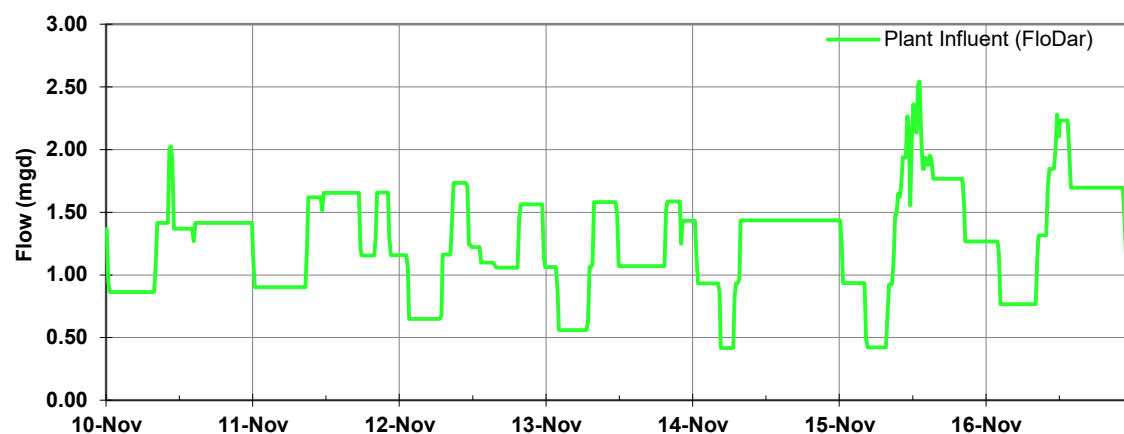


Figure 3-1. Pinole Influent Data, 11/10/2014 – 11/17/2014

Given that the repeated values occurred with all data sets, and occurred for the same date/time stamps for concurrent data sets of different meters, it is believed the repeated values are not an indication of meter failure, but an indication of data storage error within the City SCADA system.

For the purposes of the Method 2, Data Set 1 analysis, V&A assumed that non-repeated data points were valid at the time of the date/time stamp, but that repeated values were not valid data points. Figure 3-2 illustrates an example of valid data points for analysis and direct comparison to the V&A temporary flow meter.

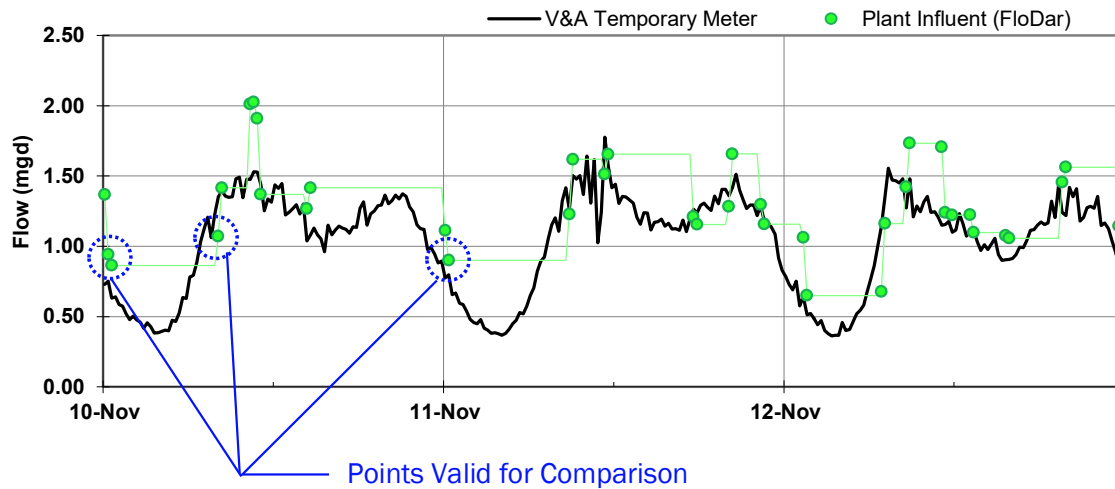


Figure 3-2. Pinole Influent Data, 11/10/2014 – 11/13/2014, Example of Valid Points

3.2 Method 2, Data Set 1 Analysis

From Data Set 1 (November 1 through December 10, 2014), there were 316 valid data points from the plant influent meter that could be directly compared to the V&A temporary flow meter. Figure 3-3 shows a scatter plot comparison of the Influent Meter to the V&A Meter.

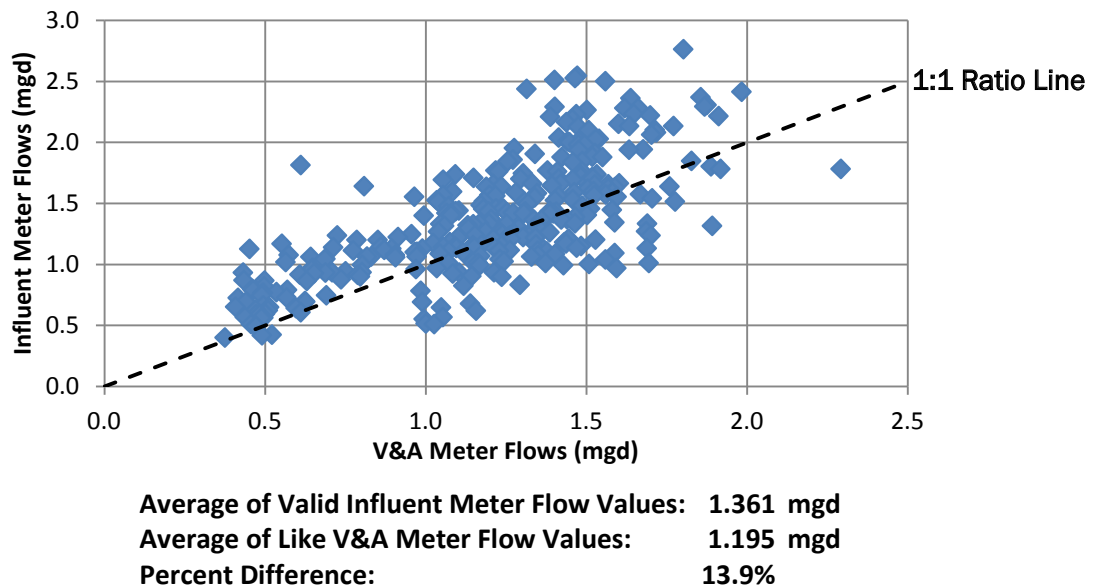


Figure 3-3. Pinole Influent Data Comparison of All Valid Points

Method 2 Flow Measurement Summary (Data Set 1)

Using the Method 2 determination of the City of Pinole flows, the flows for Pinole are over-reported by approximately 13.9%.

4.0 METHOD 2, DATA SET 2

Data Set 2 was 1-minute interval data accessed directly from the flow meter and thus did not have the “repeated-value” issue noted in previous sections. This data set was utilized to better analyze the sensor measurements of the FloDar flow meter and perhaps lend information to understand why the values in Data Set 1 were over-reported.

4.1 Method 2, Data Set 2 Analysis

Figure 4-1 illustrates hydrographs of the 1-minute level, velocity and flow data measured by the FloDar meter from January 18 through 23, 2015.

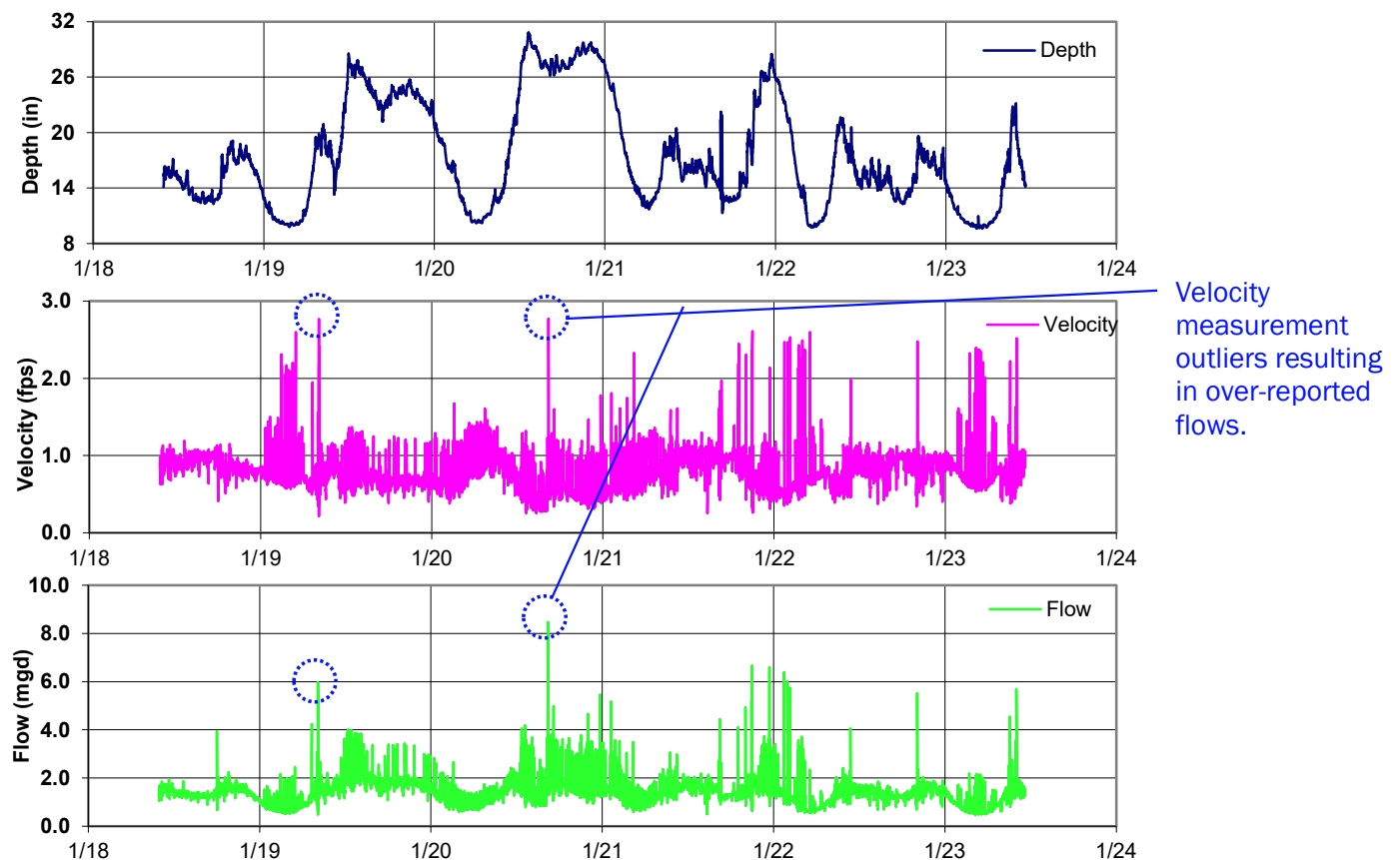


Figure 4-1. Pinole Influent Level, Velocity and Flow Data

Velocity Outliers

There are several velocity point outliers that, based on the hydraulic conditions at the treatment plant, are known to be incorrect and over-reported. This is not an uncommon occurrence with flow monitoring equipment. The FloDar meter measures surface velocity of the flow stream; excessive floating debris or bubbles or foam on the flow surface could cause this issue.

For this data set, V&A went through the exercise of correcting the velocity values to determine the overall effect of these outliers on the flow data. Figure 4-2 illustrates the corrected velocity measurements.

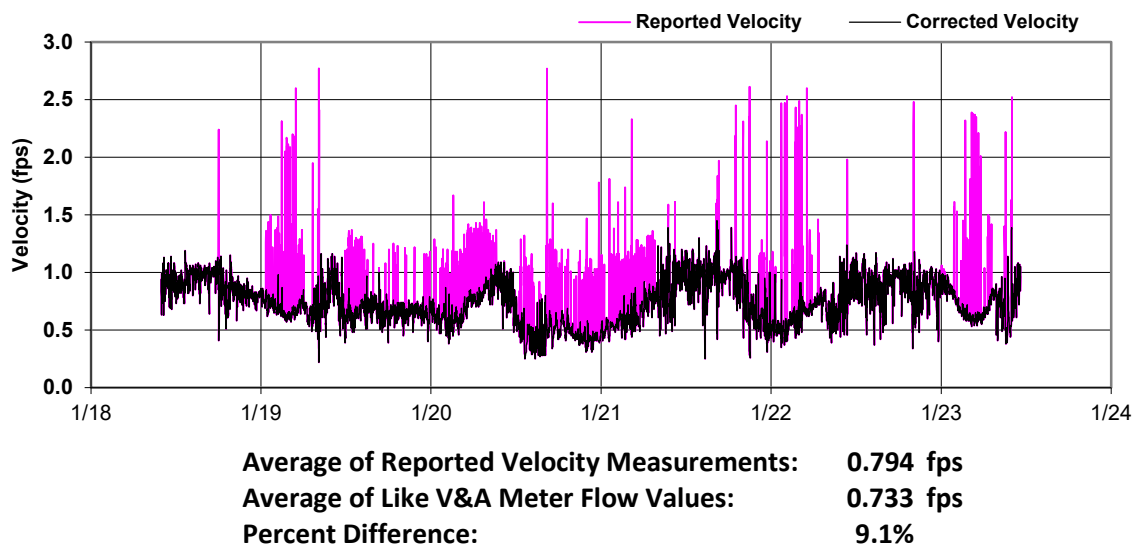


Figure 4-2. Pinole Influent Velocity Measurements, Reported and Corrected

Flow Calculation and Sediment

The flow calculation programmed into the FloDar meter did not consider the volume of sediment within the pipe channel. The cross-sectional area filled with sediment is not available for conveyance of waste stream flow. It is known that this particular trunk sewer has a sediment issue. Assuming no sediment would result in the over-reporting of flow values.

The exact level of sediment at the Influent Meter location was not known. The sediment at the V&A Meter approximately 240 feet upstream from the Influent Meter manhole measured approximately 2 inches. For Data Set 2, assuming 2 inches of sediment in the pipe channel would result in a 5.7% reduction of flow.

Data Set 2 Analysis Summary

If the velocity outliers were corrected and 2 inches of sediment was accounted for in the pipeline, the overall impact on the flows reported by the FloDar would be approximately 14.8%. This number corresponds well with the percentage difference in flows analyzed in Data Set 1 (13.9%).

5.0 DISCUSSION

The following discussion items are presented for review by the City:

- **Primary Devices vs. Flow Meters:** Primary devices, flumes and weirs, traditionally have been a popular and reliable method to measure flows in permanent installations. The main limitations of these methods is that there are constraints on where such devices can be installed and once installed, moving them to a different location is difficult. Primary devices are less reliant on technology because one of the parameters used to calculate flow is removed from the equation as a variable.
- **Method 1 (Effluent less Hercules):** Using the Method 1 determination of the City of Pinole flows, the flows for Pinole are over-reported by approximately 15.2%.
 - The flow monitoring methods used presently to determine the Hercules flows and the Effluent flows appear to be repeatable.
- **Method 2 (Influent meter direct measurement):** The influent meter was over-reporting flows by approximately 13.9% per comparison of valid data points within Data Set 1 and the V&A temporary meter.
 - Detailed analysis of the 1-minute level and velocity data reported from the FloDar meter indicates that there are likely two causes for this over-reporting:
 - **Cause #1:** There are velocity outliers reported by the FloDar that cause the velocity to be over-reported. For the five days of data analyzed, these outliers caused the flows to be over-reported by 9.1%.
 - **Cause #2:** There are known sediment issues in the pipeline where the influent meter is located. The FloDar meter was not programmed to account for sediment when calculating flow. The exact level of sediment in that manhole was not known at the time of this report. If one assumes 2 inches of sediment as measured 240 feet upstream from the influent meter, then the net effect of accounting for the sediment would be a reduction of flow of approximately 5.7% (Data Set 2).
- **Preferred Method:** Given the known sediment issues at the influent meter location, and also given the repeatability and sustainability of the Primary Device used at the Effluent Meter location, Method 1 would be considered the preferred method for determining the City of Pinole flows generated from the collection system on a mass flow basis.
 - Note: Instantaneous flows from the City of Pinole cannot be determined due to attenuation and hold times through the treatment process.

APPENDIX D. FLOW MONITORING SITES DATA, GRAPHS, INFORMATION: PHASE 1



City of Pinole

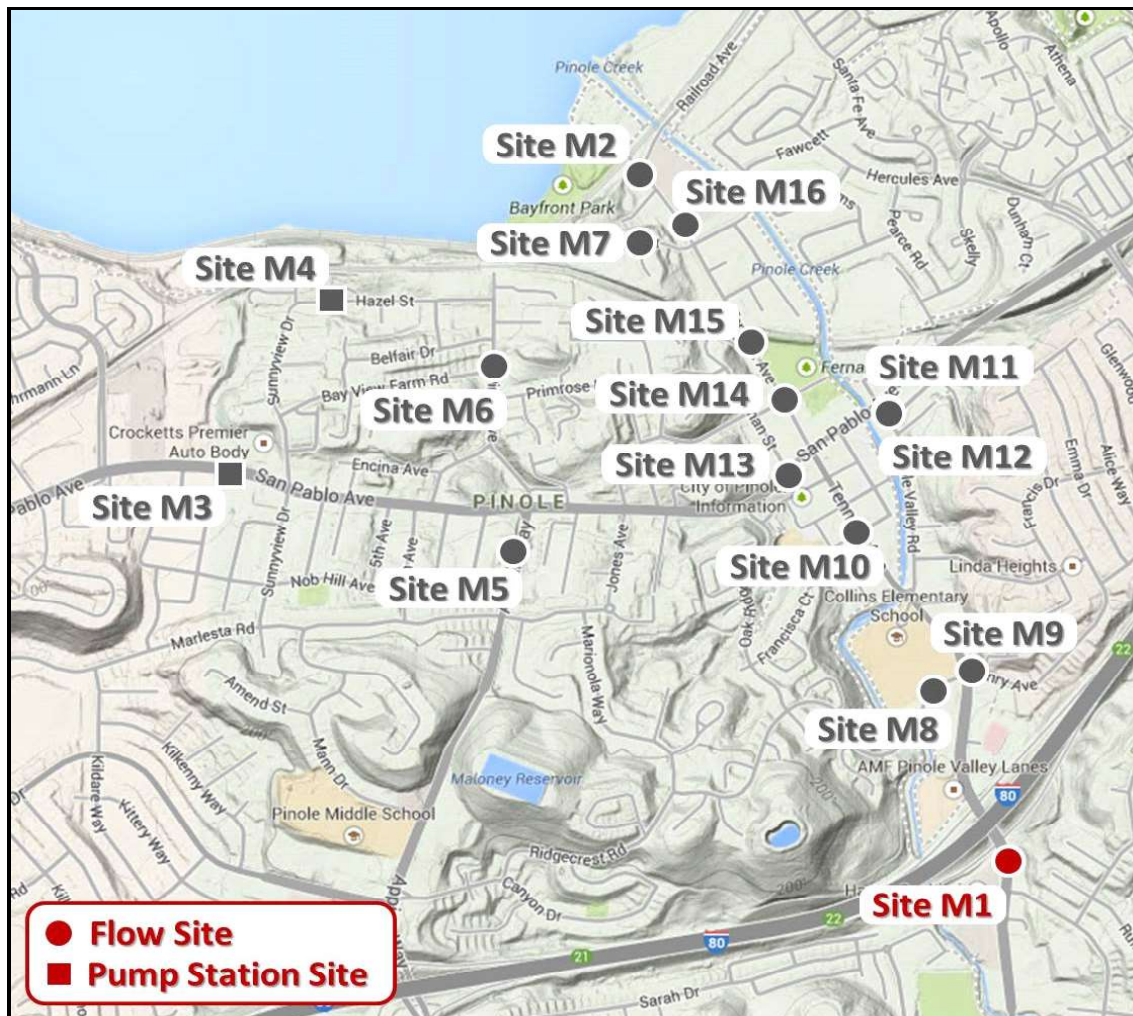
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M1

Location: Pinole Valley Rd., just south of Highway 80

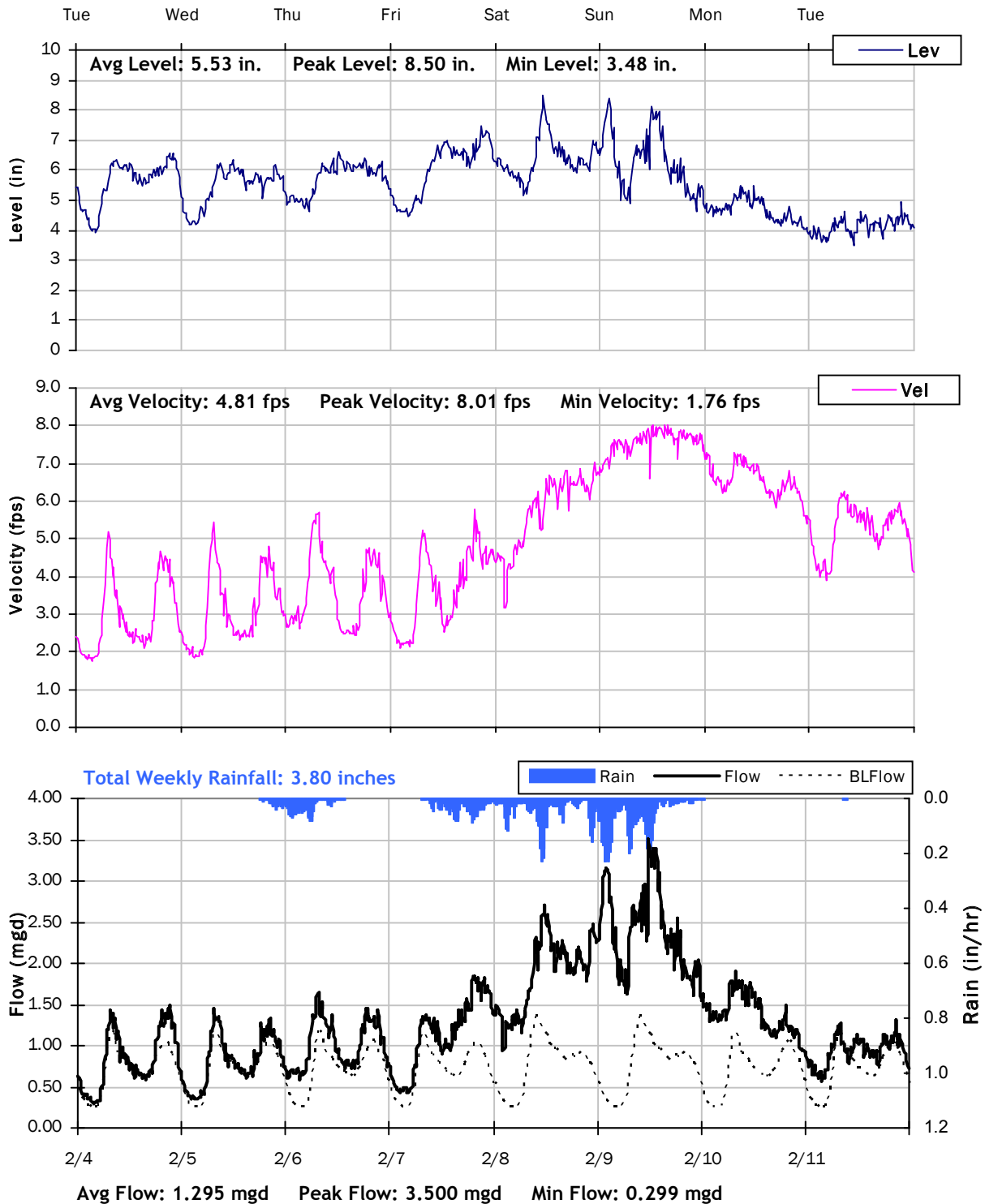
Data Summary Report



Vicinity Map: Site M1

SITE M1

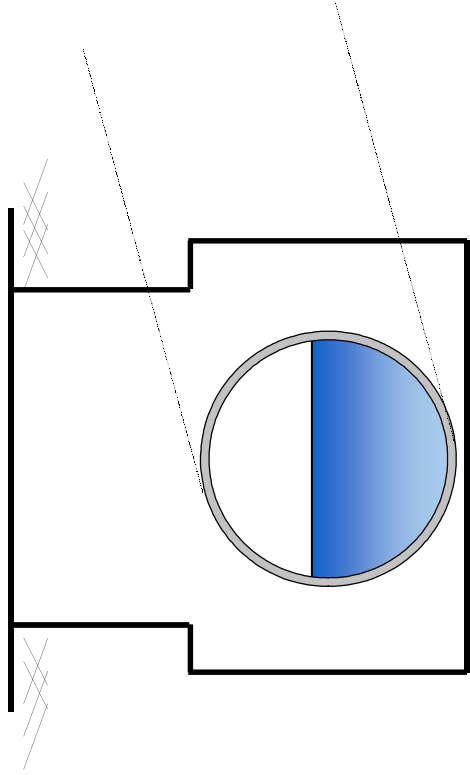
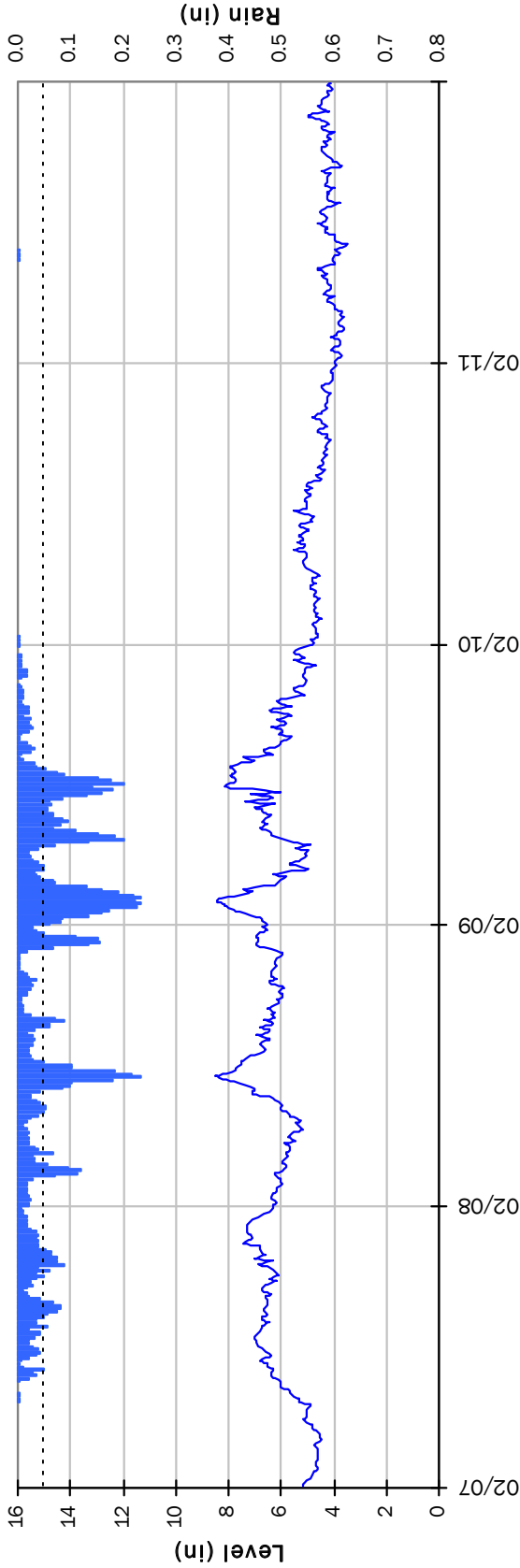
Weekly Level, Velocity and Flow Hydrographs



SITE M1

Site Capacity and Surge Summary

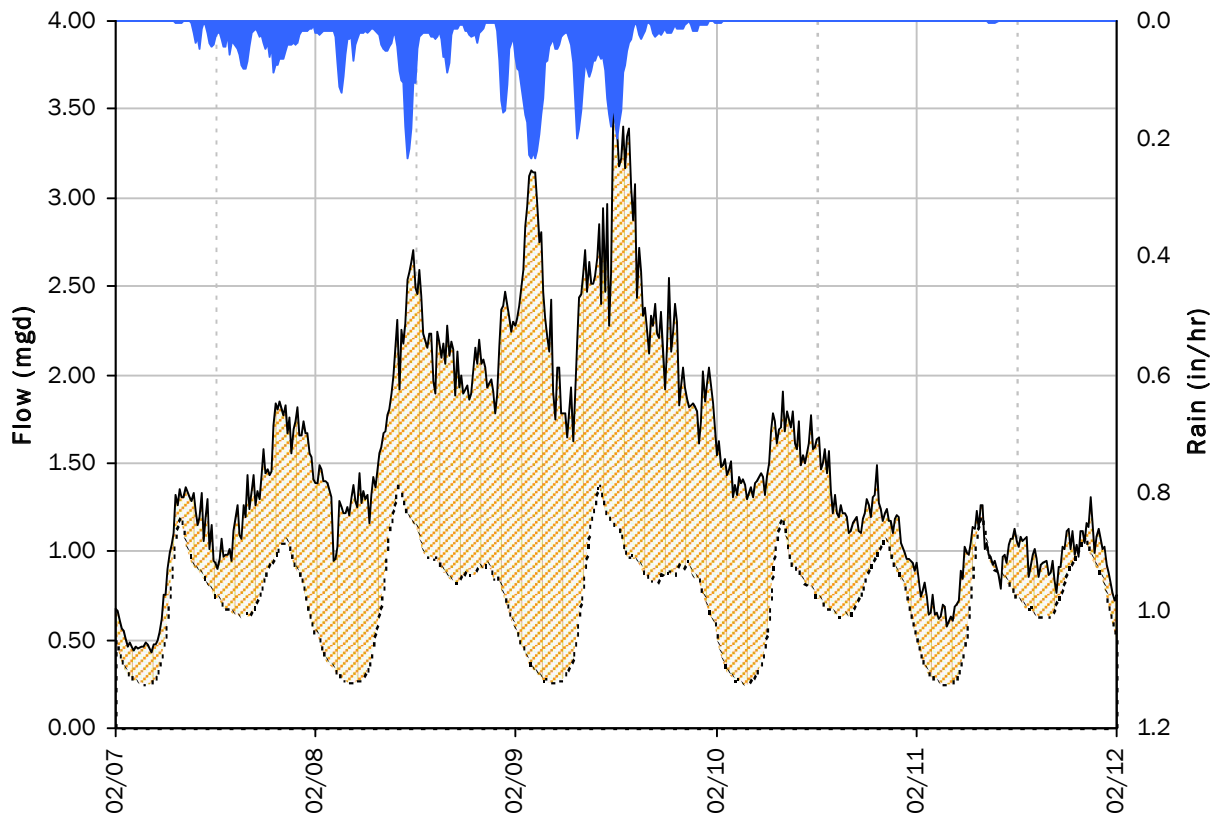
Realtime Flow Levels with Rainfall Data over Monitoring Period





SITE M1

I/I Summary: Event 1

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 1 Detail Graph**Storm Event I/I Analysis (Rain = 3.25 inches)**Capacity

Peak Flow: 3.50 mgd

PF: 4.90

Peak Level: 8.50 in

d/D Ratio: 0.57

Inflow / Infiltration

Peak I/I Rate: 2.83 mgd

Total I/I: 4,093,000 gallons

City of Pinole

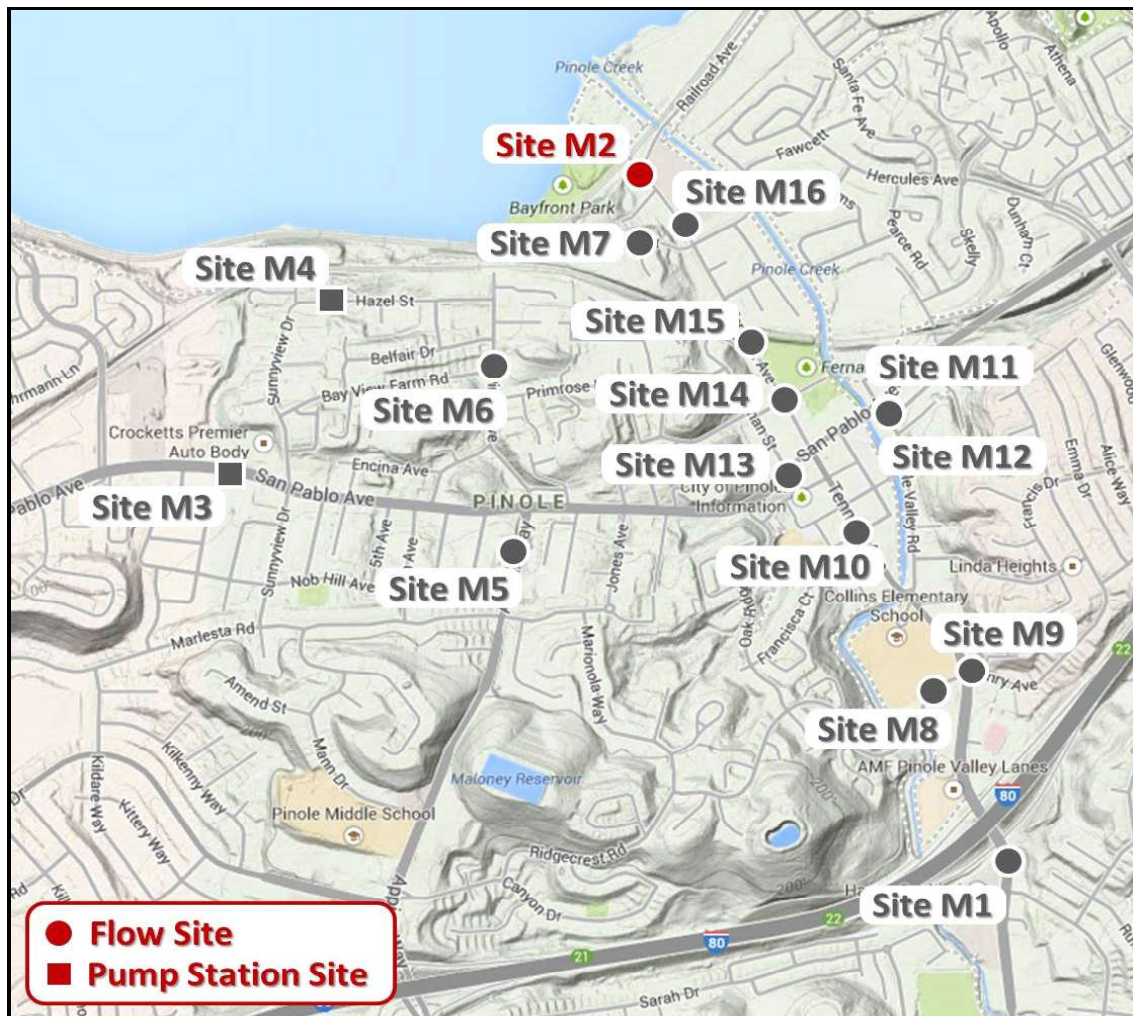
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M2

Location: Tennant Ave., just outside WWTP

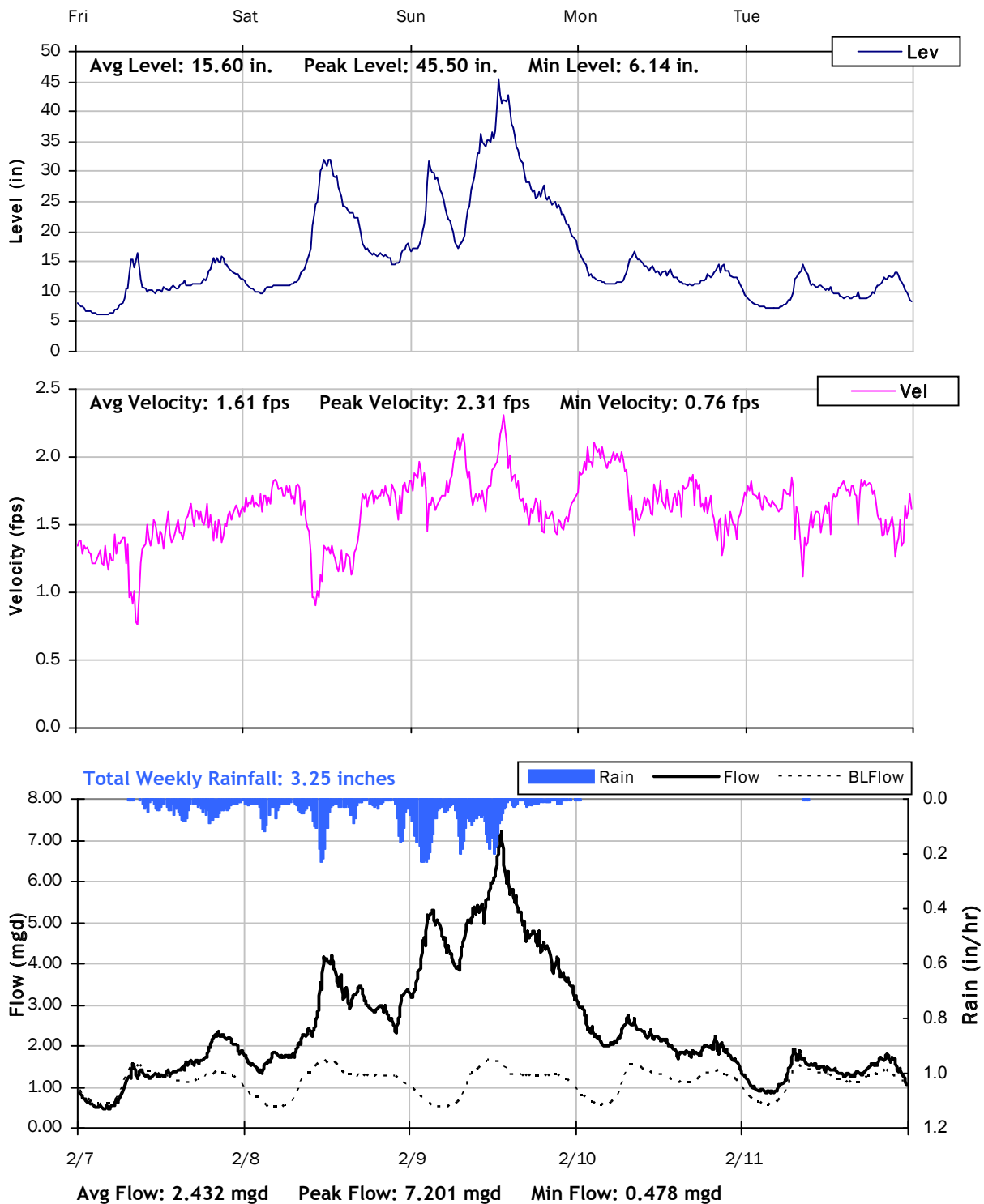
Data Summary Report



Vicinity Map: Site M2

SITE M2

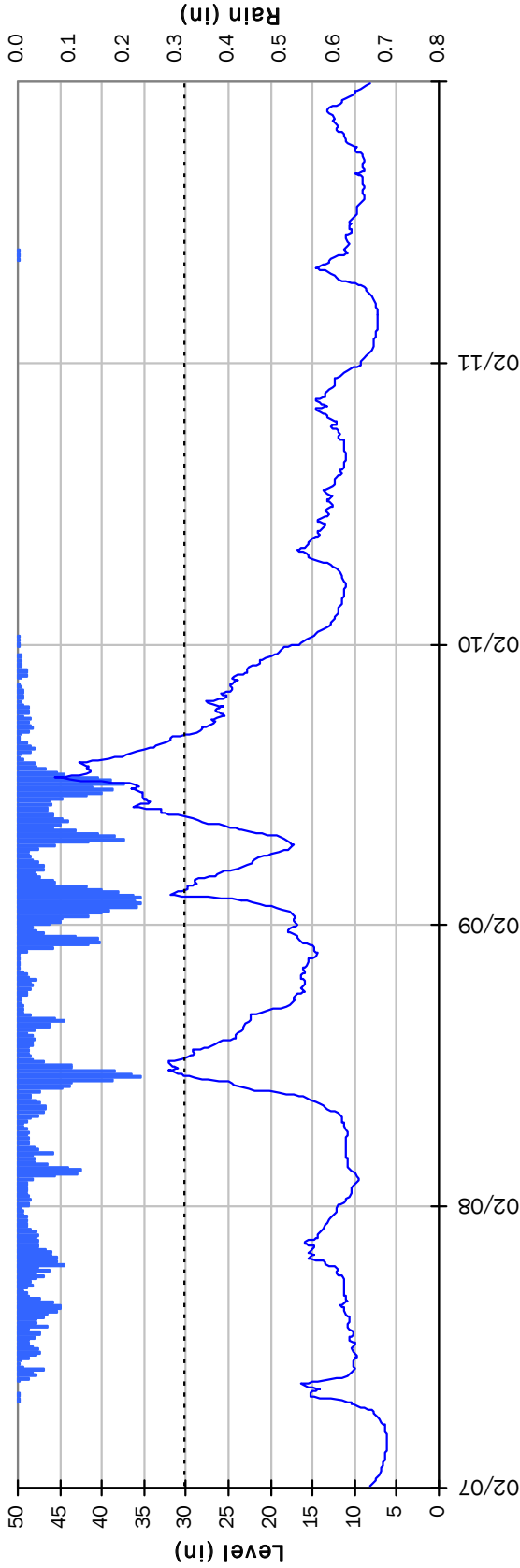
Weekly Level, Velocity and Flow Hydrographs



SITE M2

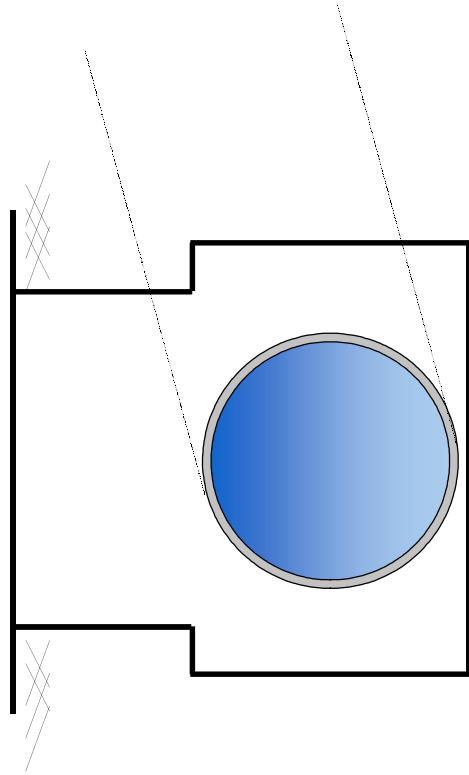
Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



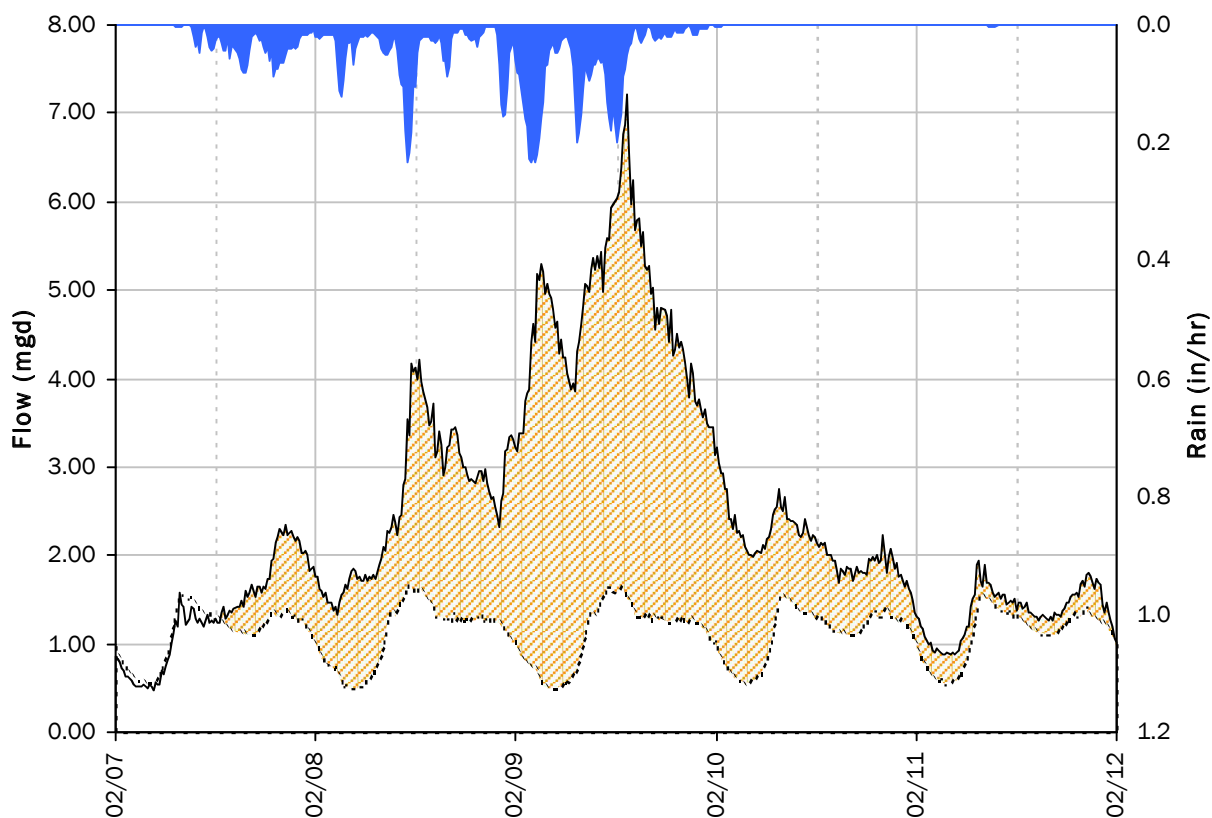
Pipe Diameter: 30 inches
Peak Measured Level: 45.5 inches
Peak d/D Ratio: 1.52

Surcharged 15.5 inches over crown



SITE M2

I/I Summary: Event 1

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 1 Detail GraphStorm Event I/I Analysis (Rain = 3.25 inches)Capacity

Peak Flow: 7.20 mgd

PF: 6.50

Peak Level: 45.50 in

d/D Ratio: 1.52

Inflow / Infiltration

Peak I/I Rate: 5.70 mgd

Total I/I: 6,623,000 gallons

City of Pinole

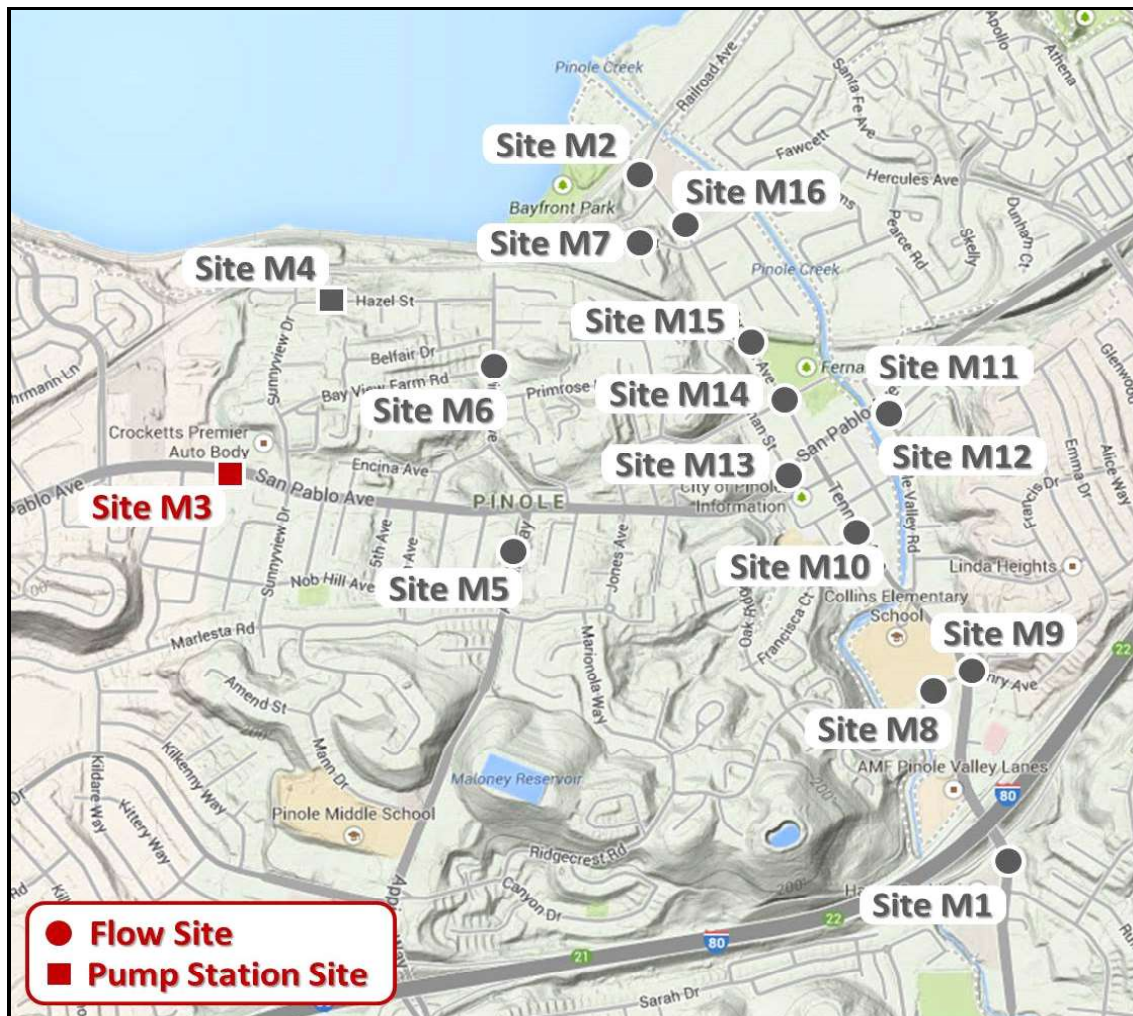
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M3

Location: San Pablo Ave., west of Sunnyview Dr.

Data Summary Report

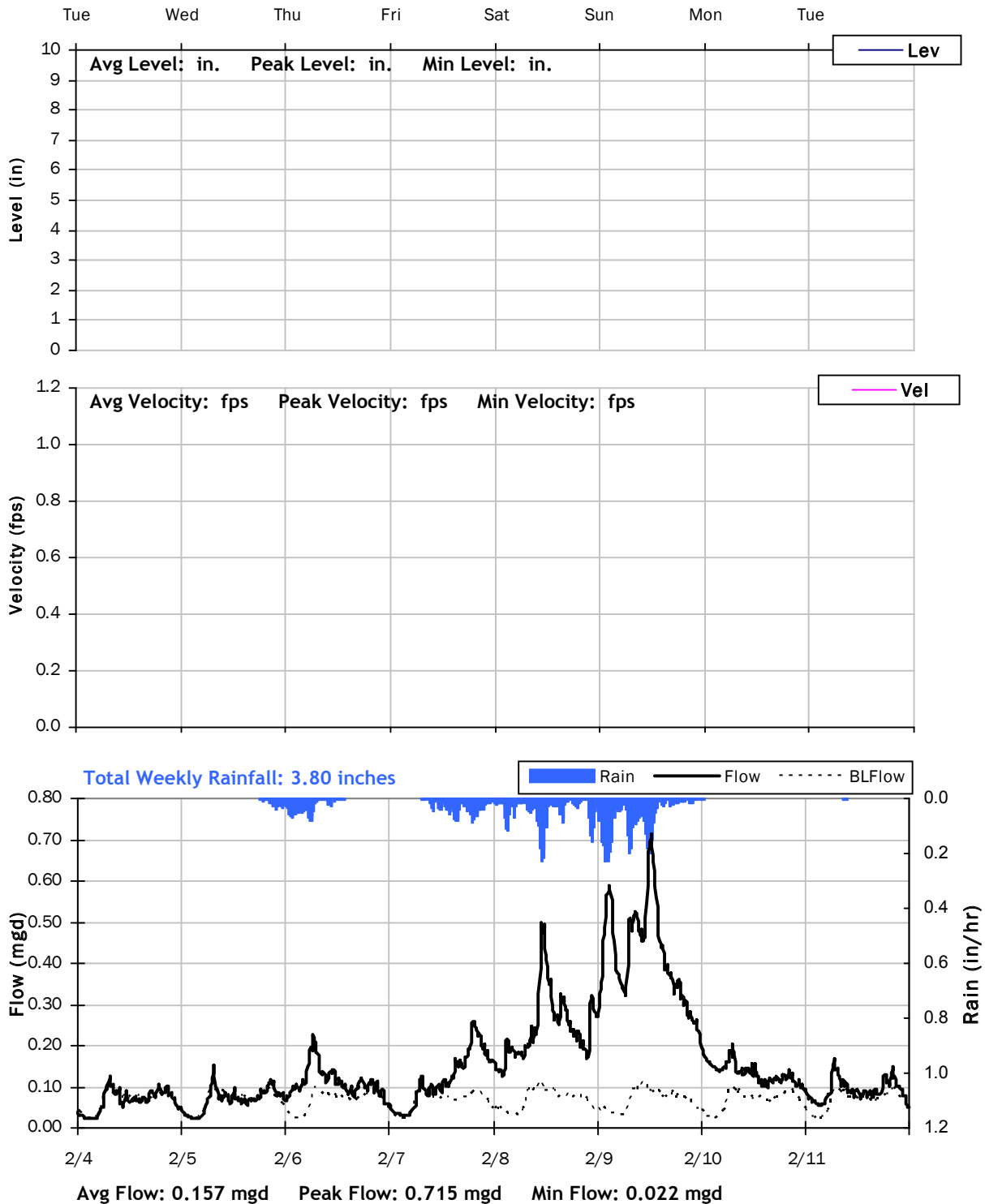


Vicinity Map: Site M3



SITE M3

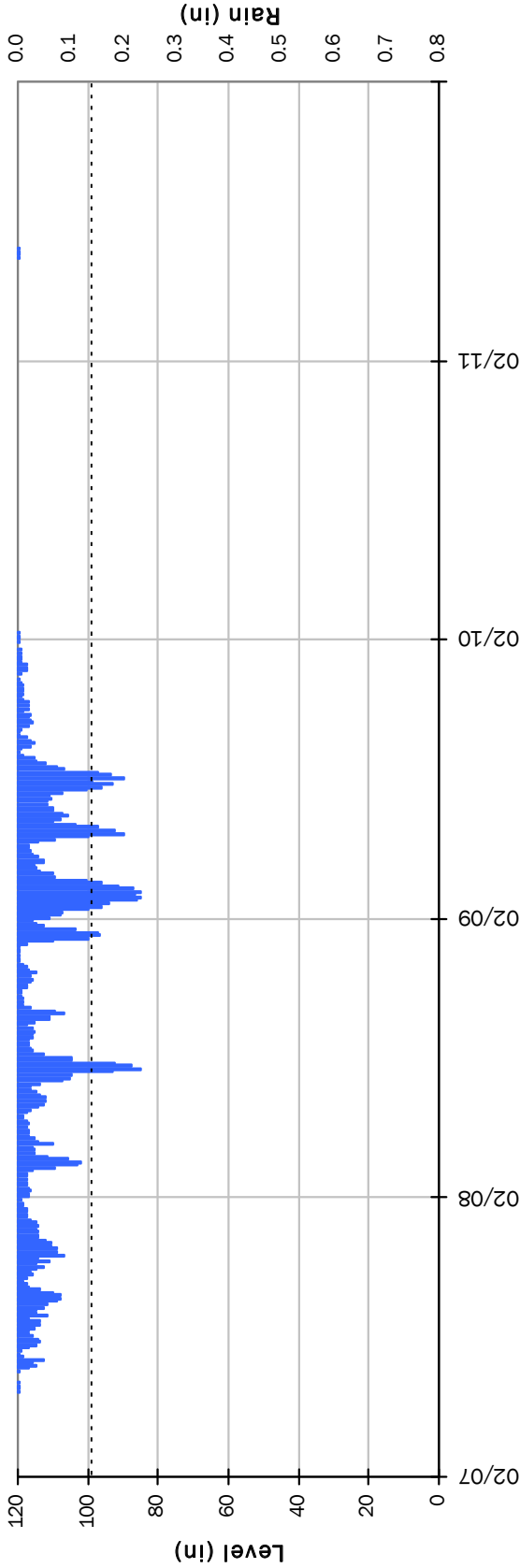
Weekly Level, Velocity and Flow Hydrographs



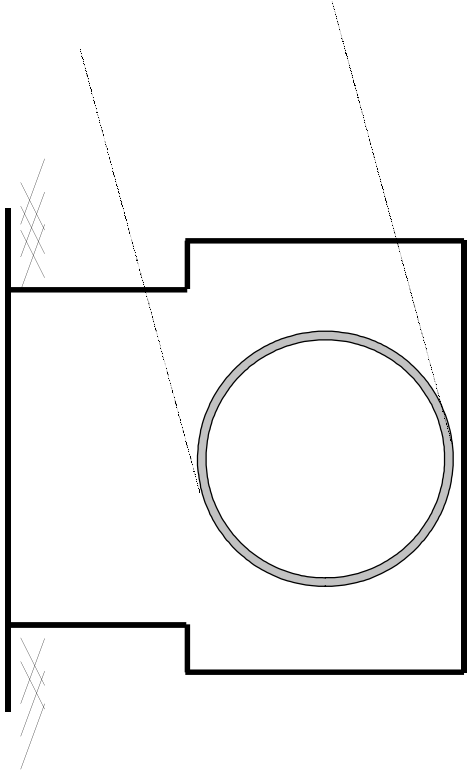
SITE M3

Site Capacity and Surchage Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



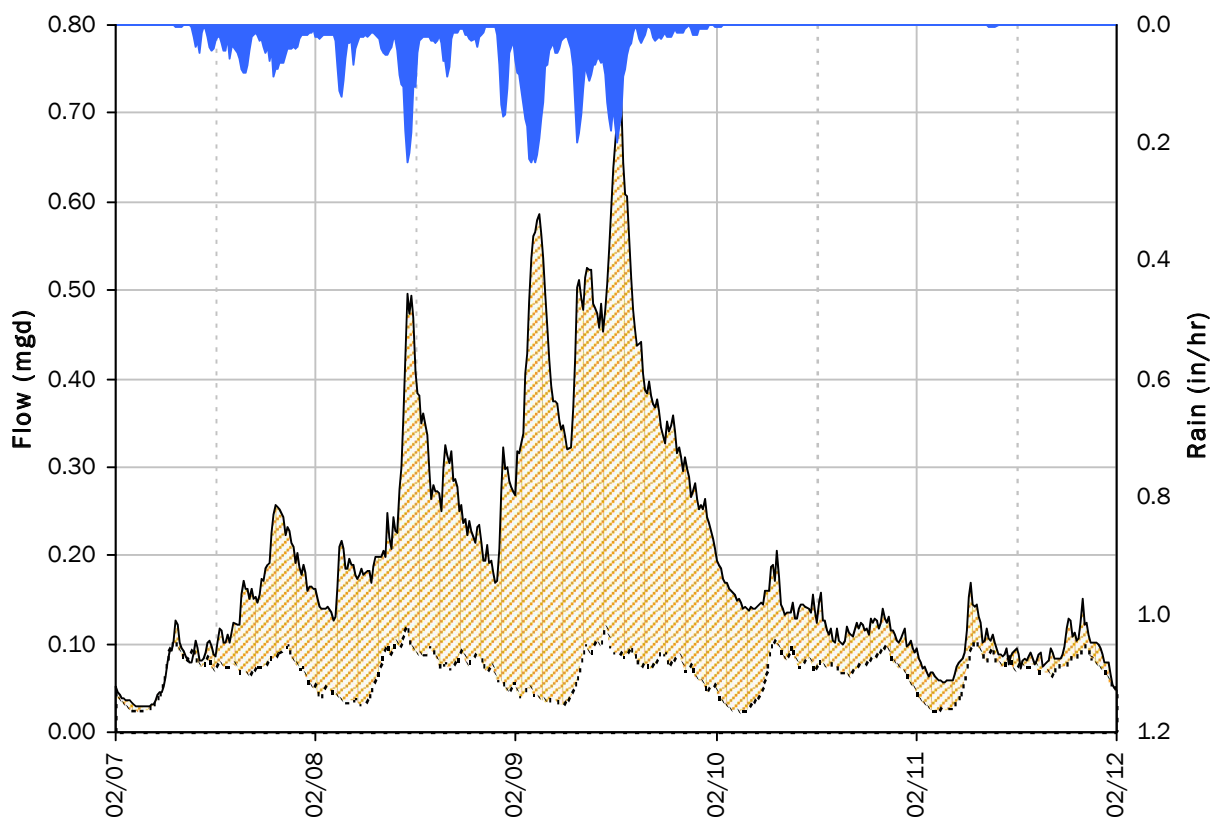
Pipe Diameter: 99 inches
Peak Measured Level: inches
Peak d/D Ratio:





SITE M3

I/I Summary: Event 1

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 1 Detail Graph**Storm Event I/I Analysis (Rain = 3.25 inches)**Capacity

Peak Flow: 0.71 mgd

PF: 10.66

Peak Level: in

d/D Ratio:

Inflow / Infiltration

Peak I/I Rate: 0.63 mgd

Total I/I: 670,000 gallons

City of Pinole

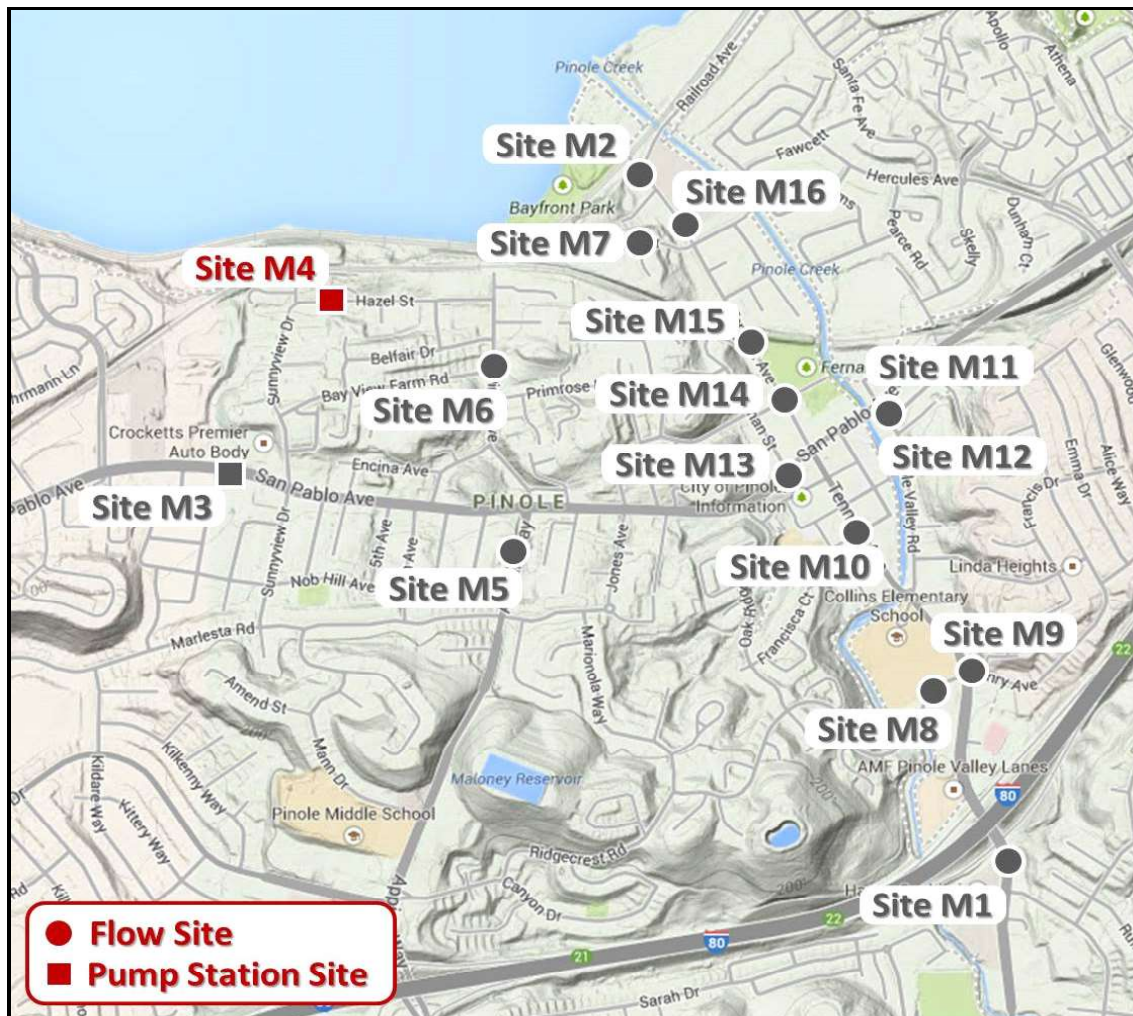
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M4

Location: In easement at west end of Hazel St.

Data Summary Report

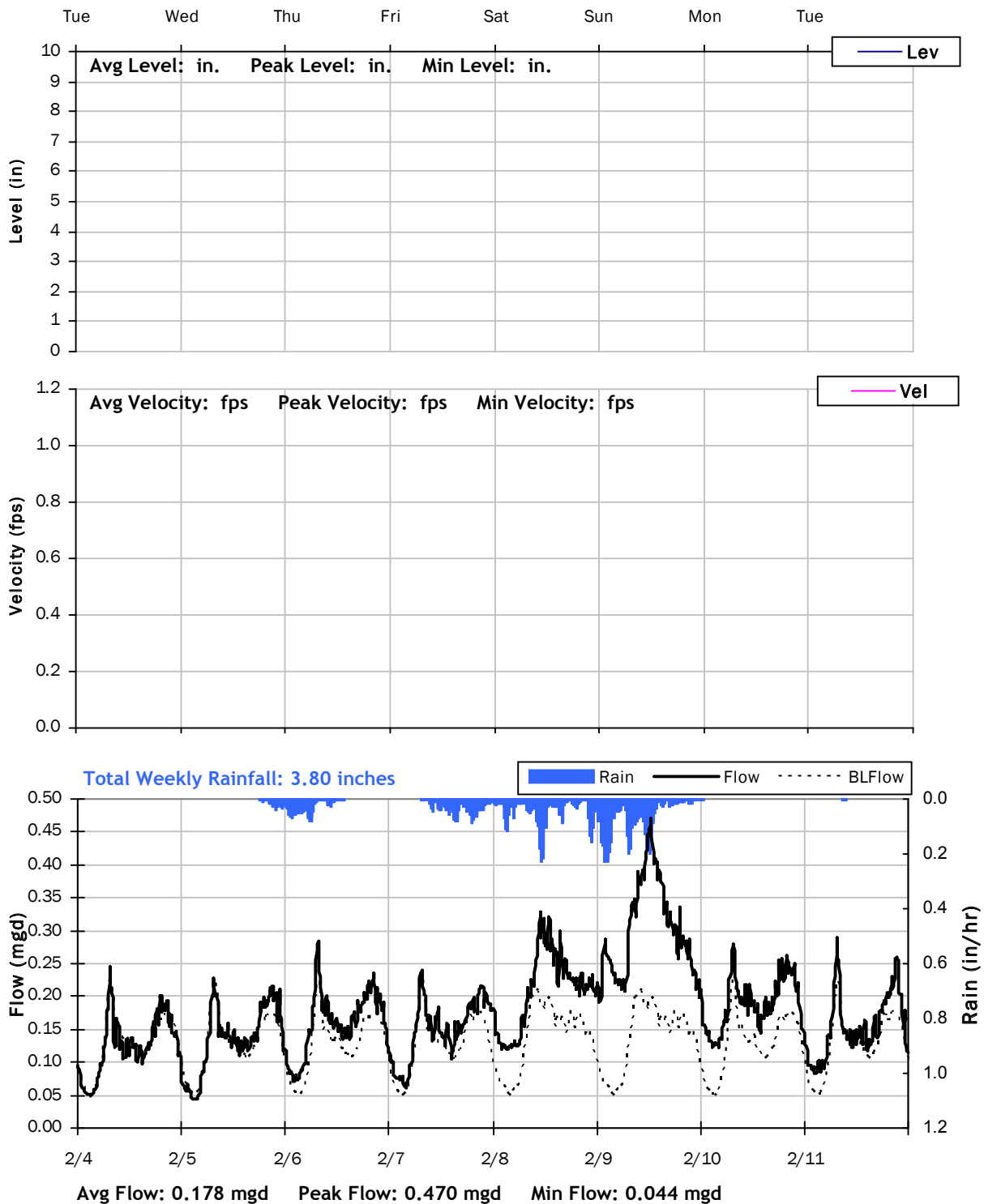


Vicinity Map: Site M4



SITE M4

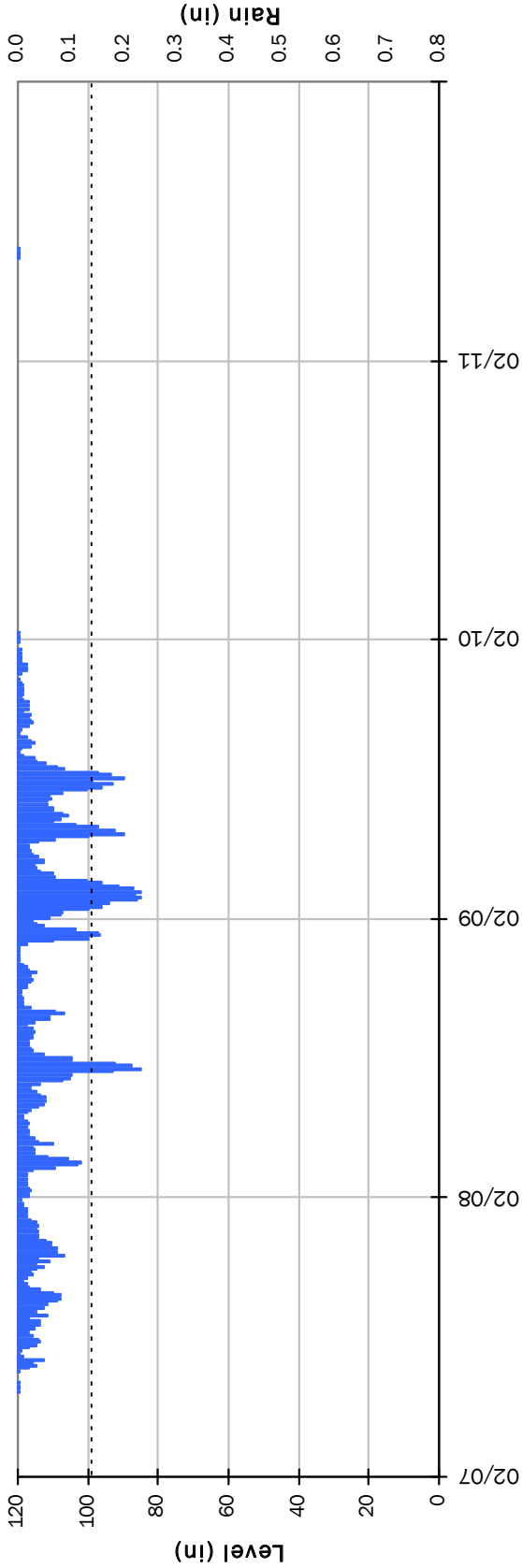
Weekly Level, Velocity and Flow Hydrographs



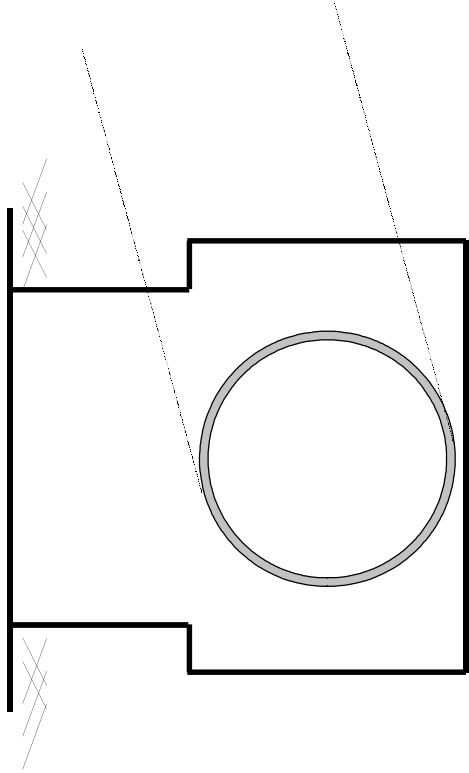
SITE M4

Site Capacity and Surchage Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



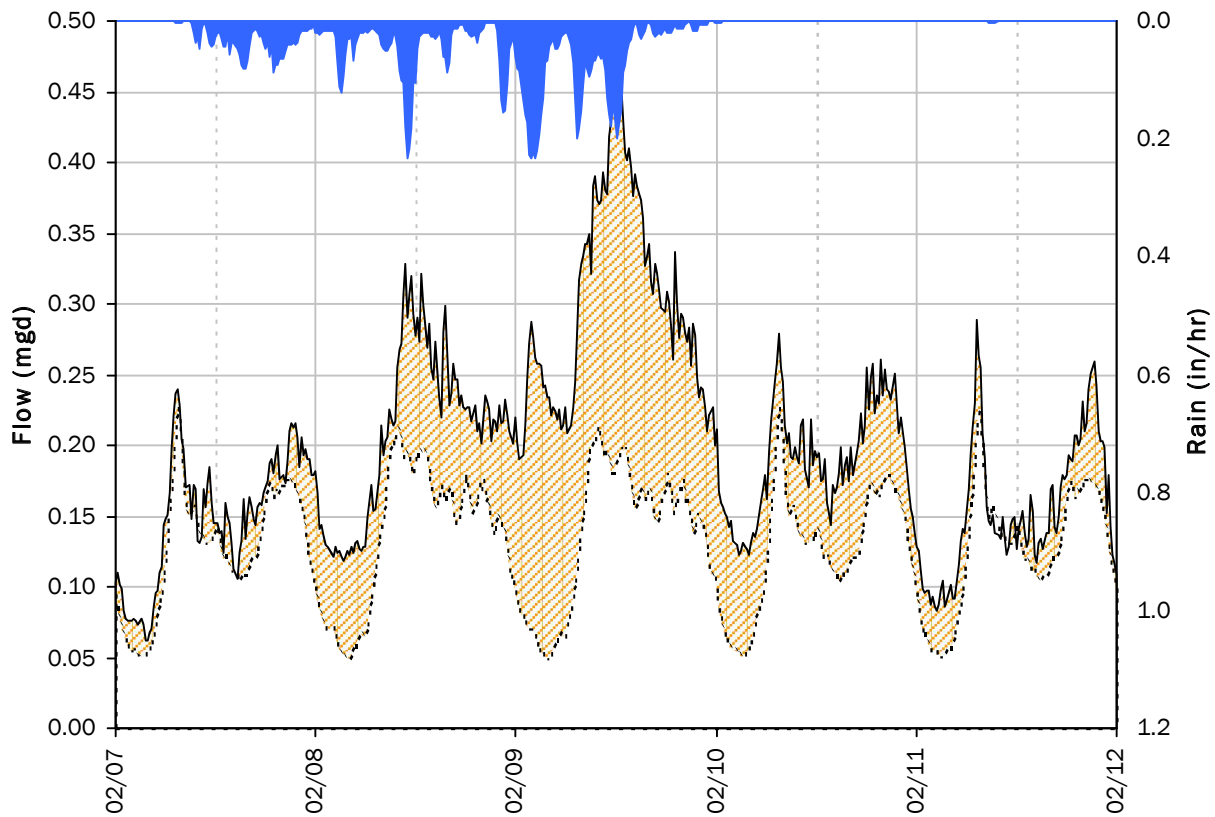
Pipe Diameter: 99 inches
Peak Measured Level: inches
Peak d/D Ratio:





SITE M4

I/I Summary: Event 1

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 1 Detail Graph**Storm Event I/I Analysis (Rain = 3.25 inches)**Capacity

Peak Flow: 0.47 mgd

PF: 3.66

Peak Level: in

d/D Ratio:

Inflow / Infiltration

Peak I/I Rate: 0.28 mgd

Total I/I: 355,000 gallons

City of Pinole

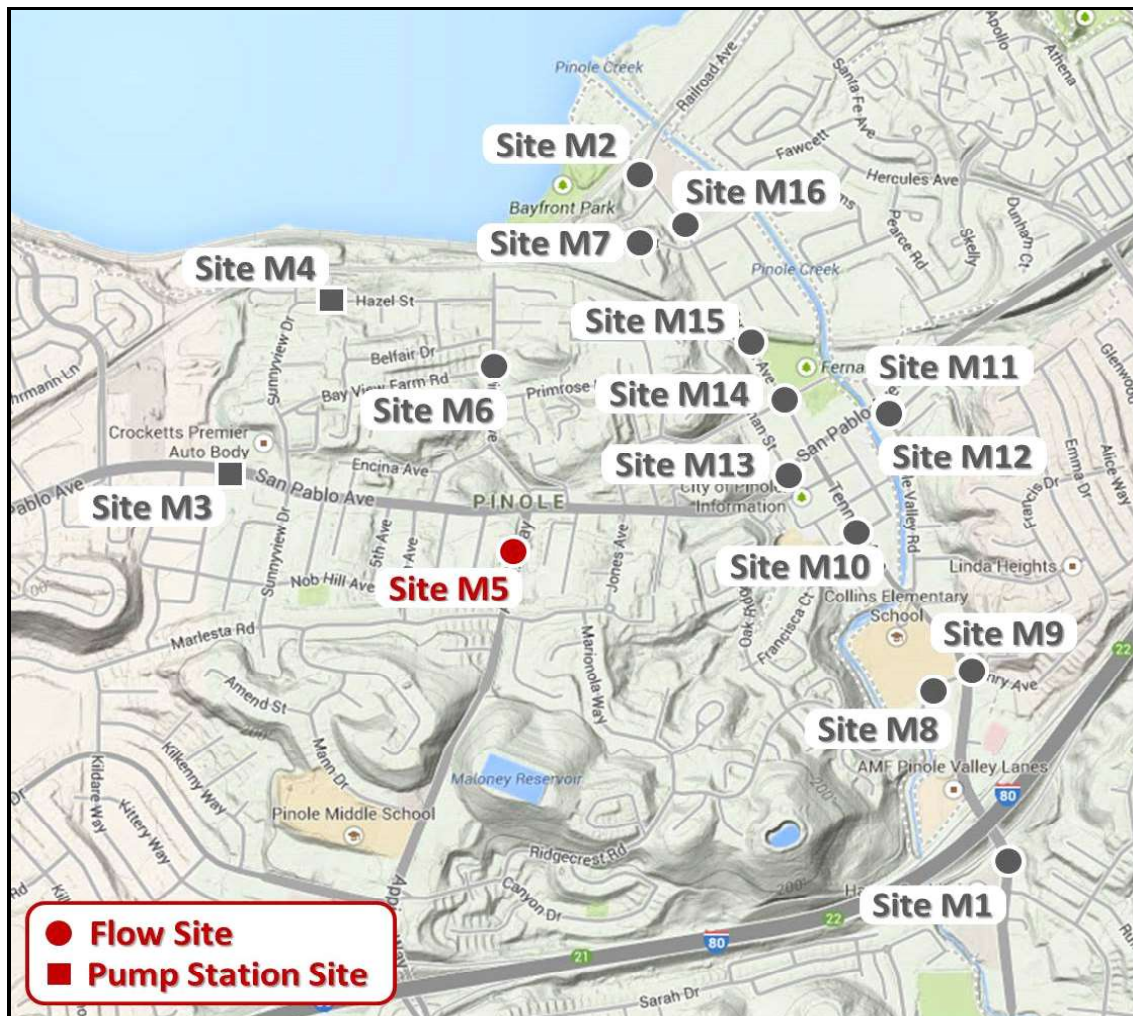
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M5

Location: Appian Way, south of San Pablo Ave.

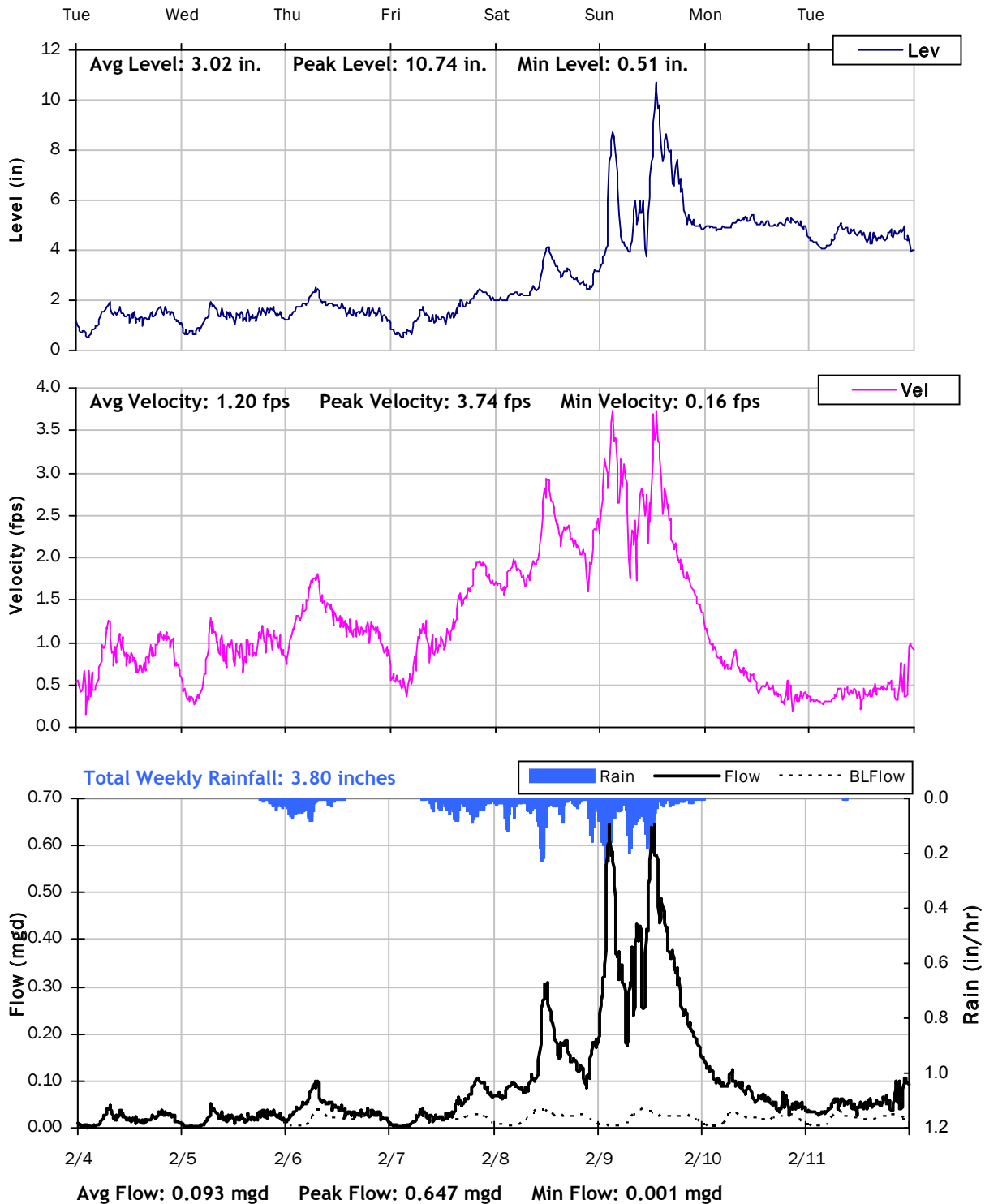
Data Summary Report



Vicinity Map: Site M5

SITE M5

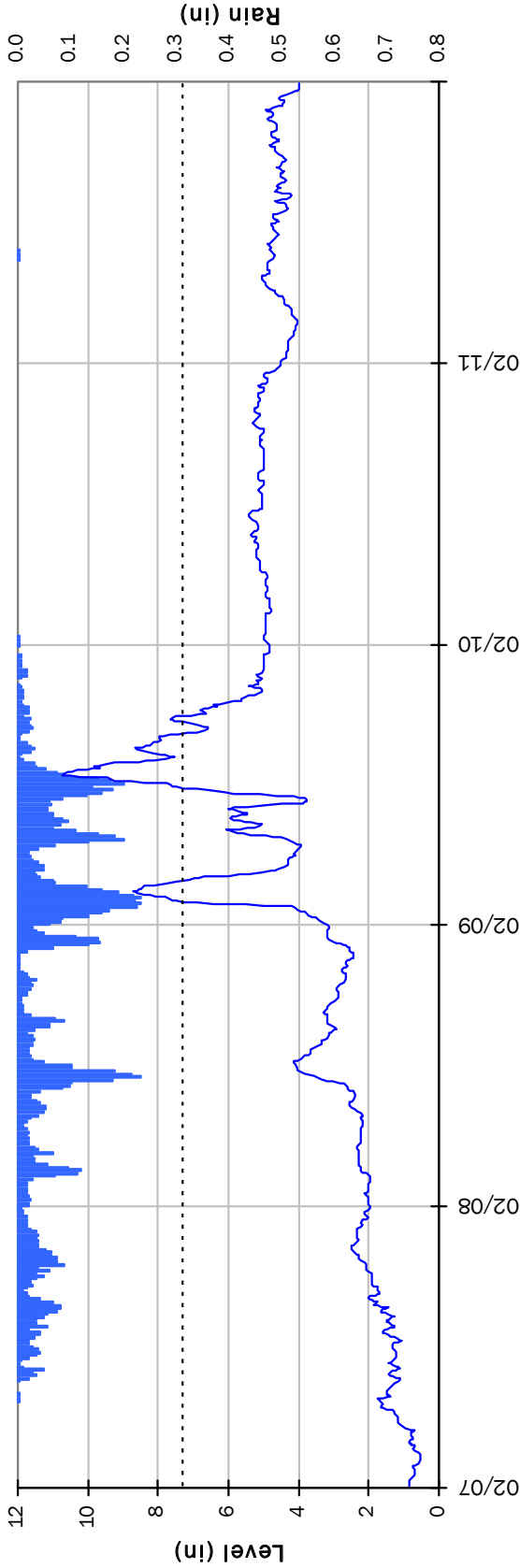
Weekly Level, Velocity and Flow Hydrographs



SITE M5

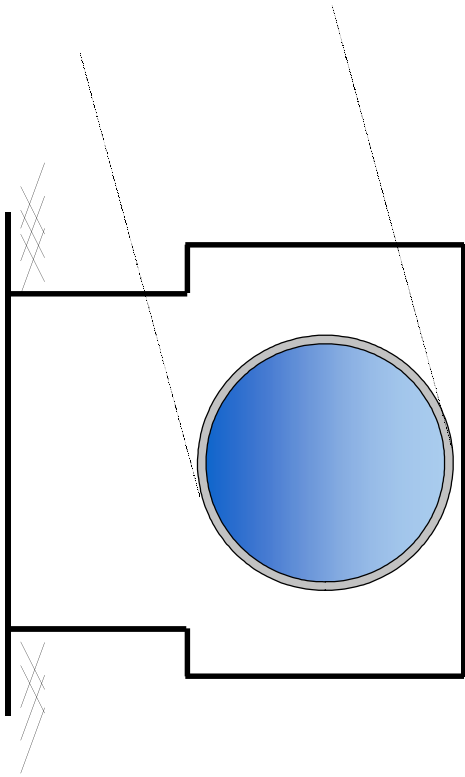
Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



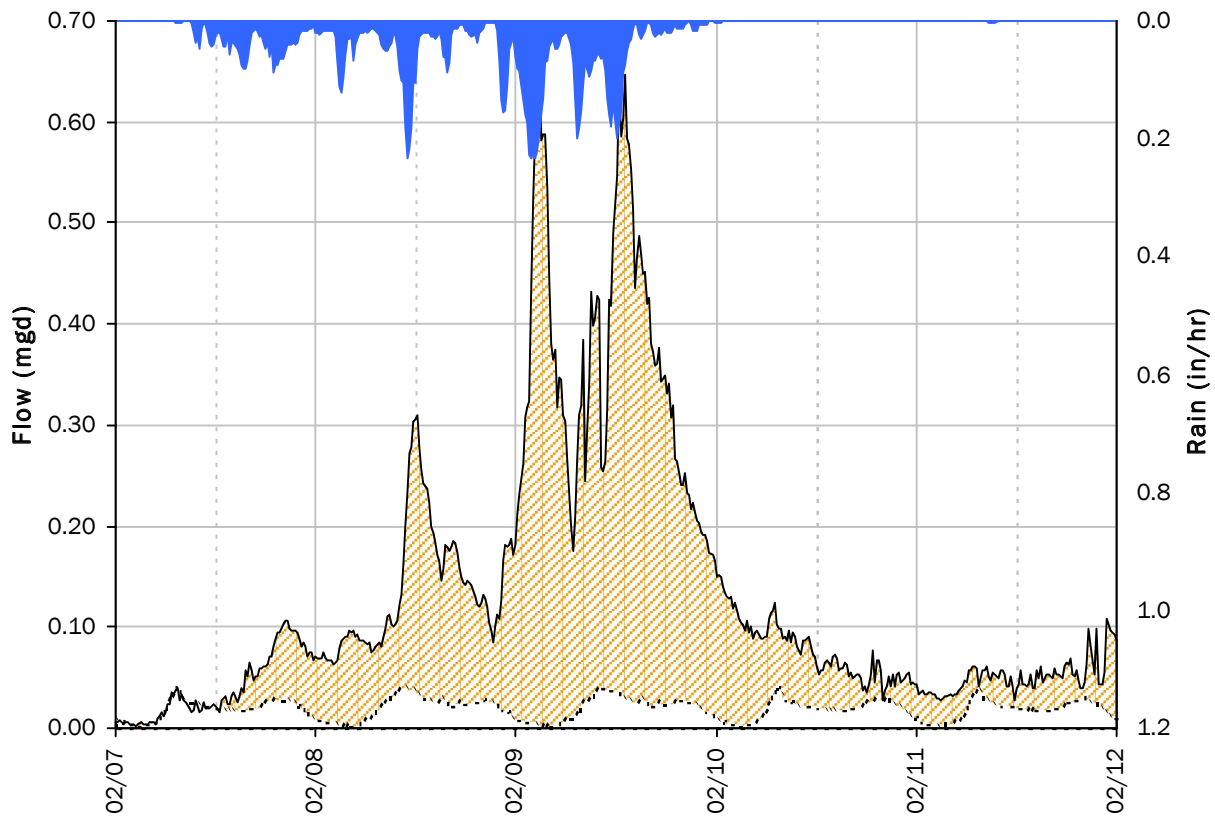
Pipe Diameter: 7.25 inches
Peak Measured Level: 10.7 inches
Peak d/D Ratio: 1.48

Surcharged 3.5 inches over crown



SITE M5

I/I Summary: Event 1

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 1 Detail GraphStorm Event I/I Analysis (Rain = 3.25 inches)Capacity

Peak Flow: 0.65 mgd

PF: 33.85

Peak Level: 10.74 in

d/D Ratio: 1.48

Inflow / Infiltration

Peak I/I Rate: 0.64 mgd

Total I/I: 570,000 gallons

City of Pinole

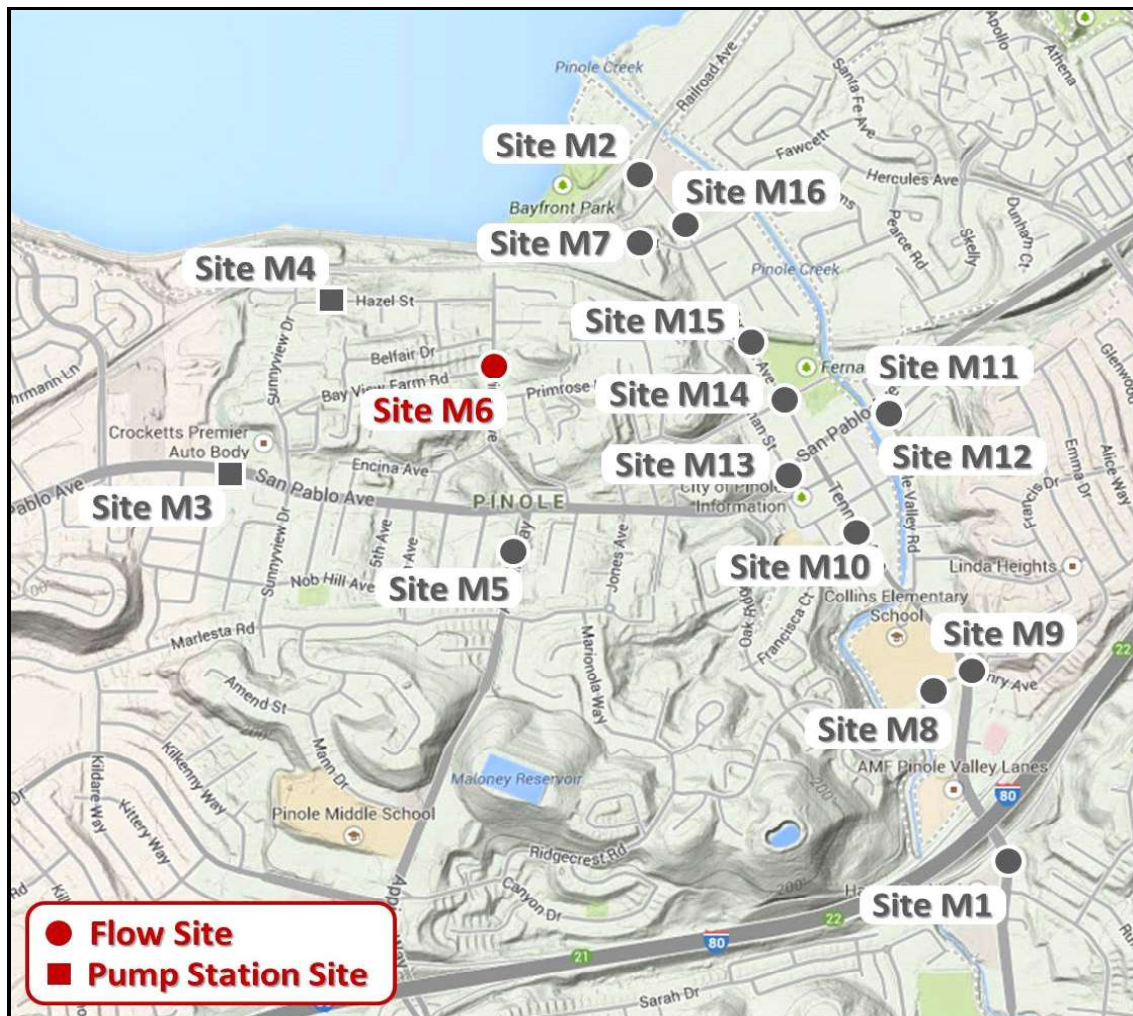
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M6

Location: Pinon Ave., north of Bay View Farm Rd.

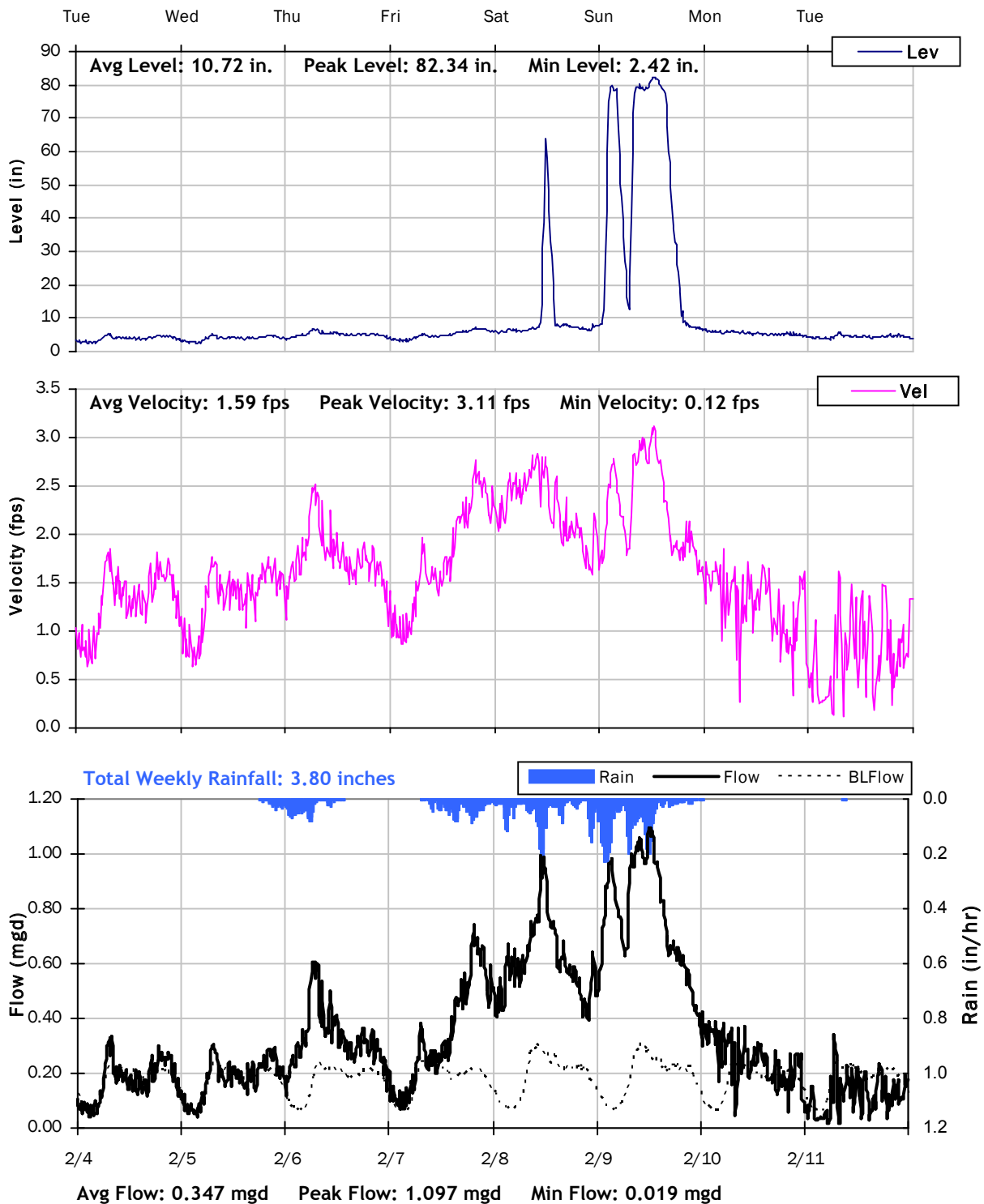
Data Summary Report



Vicinity Map: Site M6

SITE M6

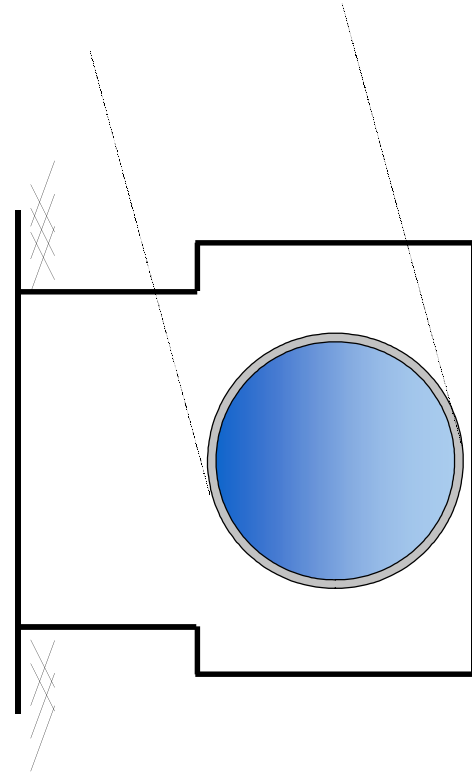
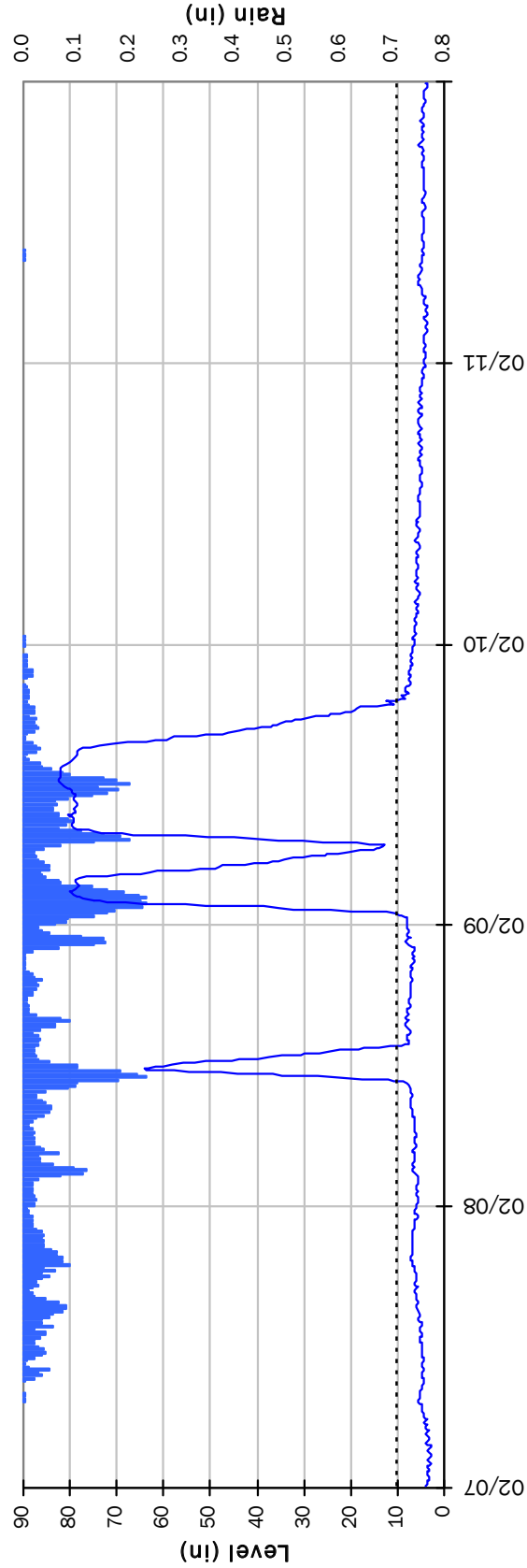
Weekly Level, Velocity and Flow Hydrographs



SITE M6

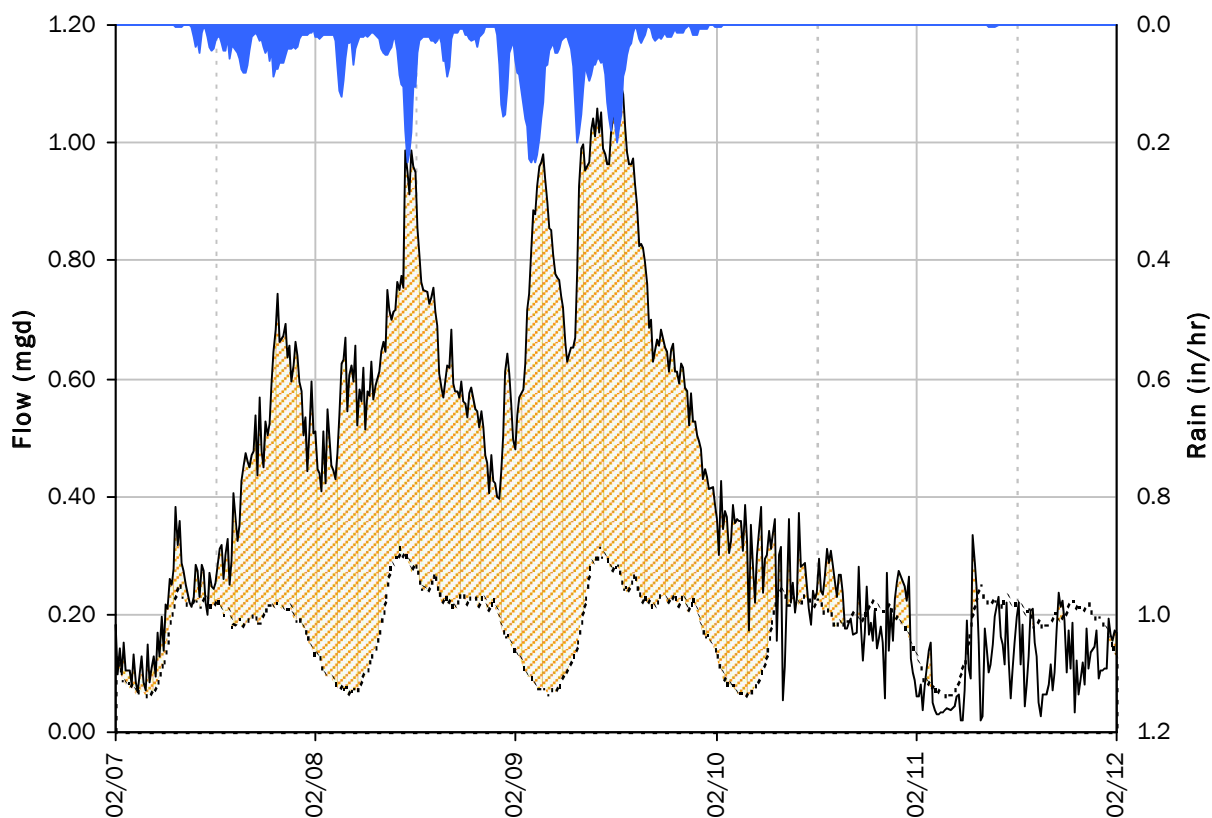
Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



SITE M6

I/I Summary: Event 1

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 1 Detail Graph**Storm Event I/I Analysis (Rain = 3.25 inches)**Capacity

Peak Flow: 1.10 mgd

PF: 6.21

Peak Level: 82.34 in

d/D Ratio: 8.23

Inflow / Infiltration

Peak I/I Rate: 0.91 mgd

Total I/I: 1,202,000 gallons

City of Pinole

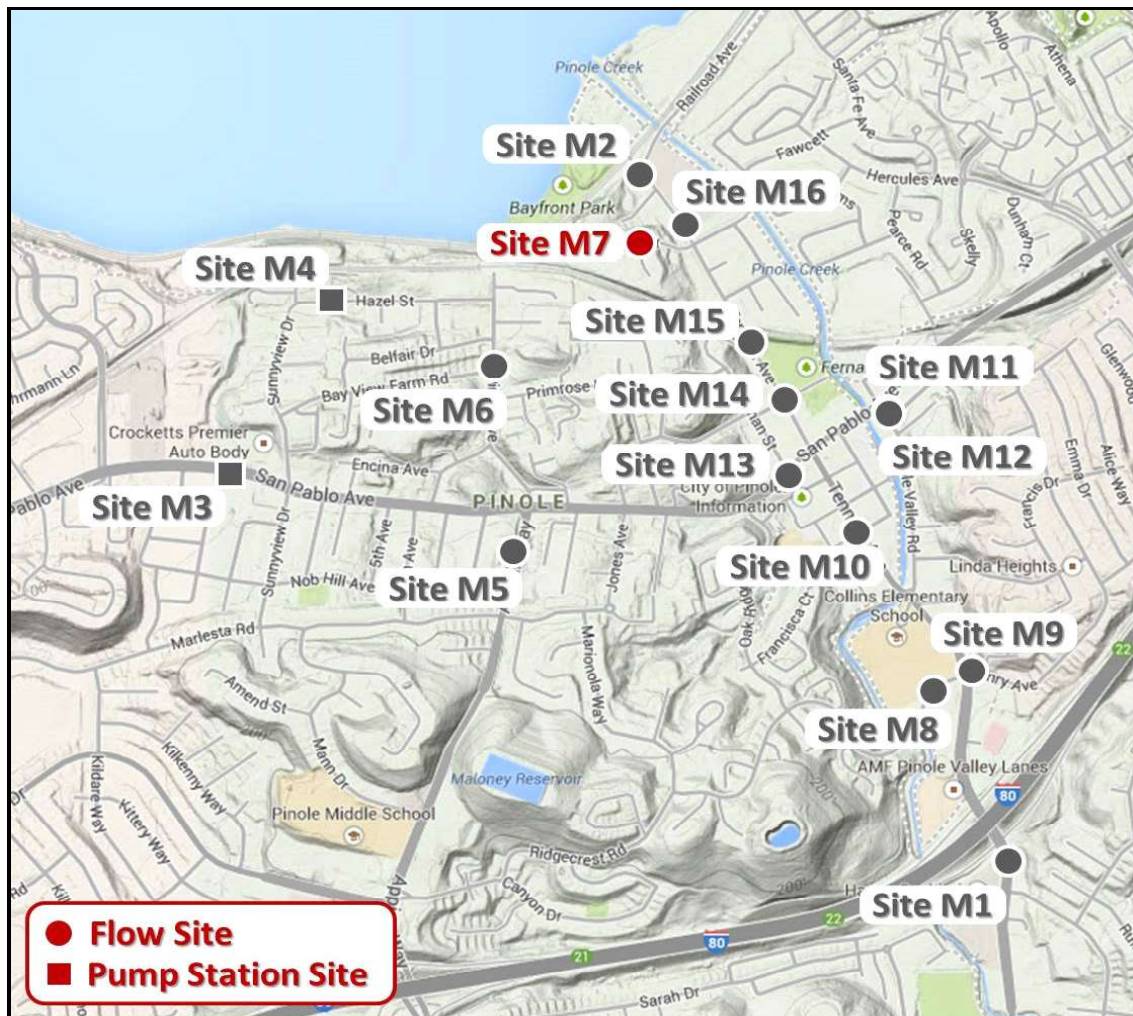
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M7

Location: Intersection of Orleans Dr. and Zoe Ct.

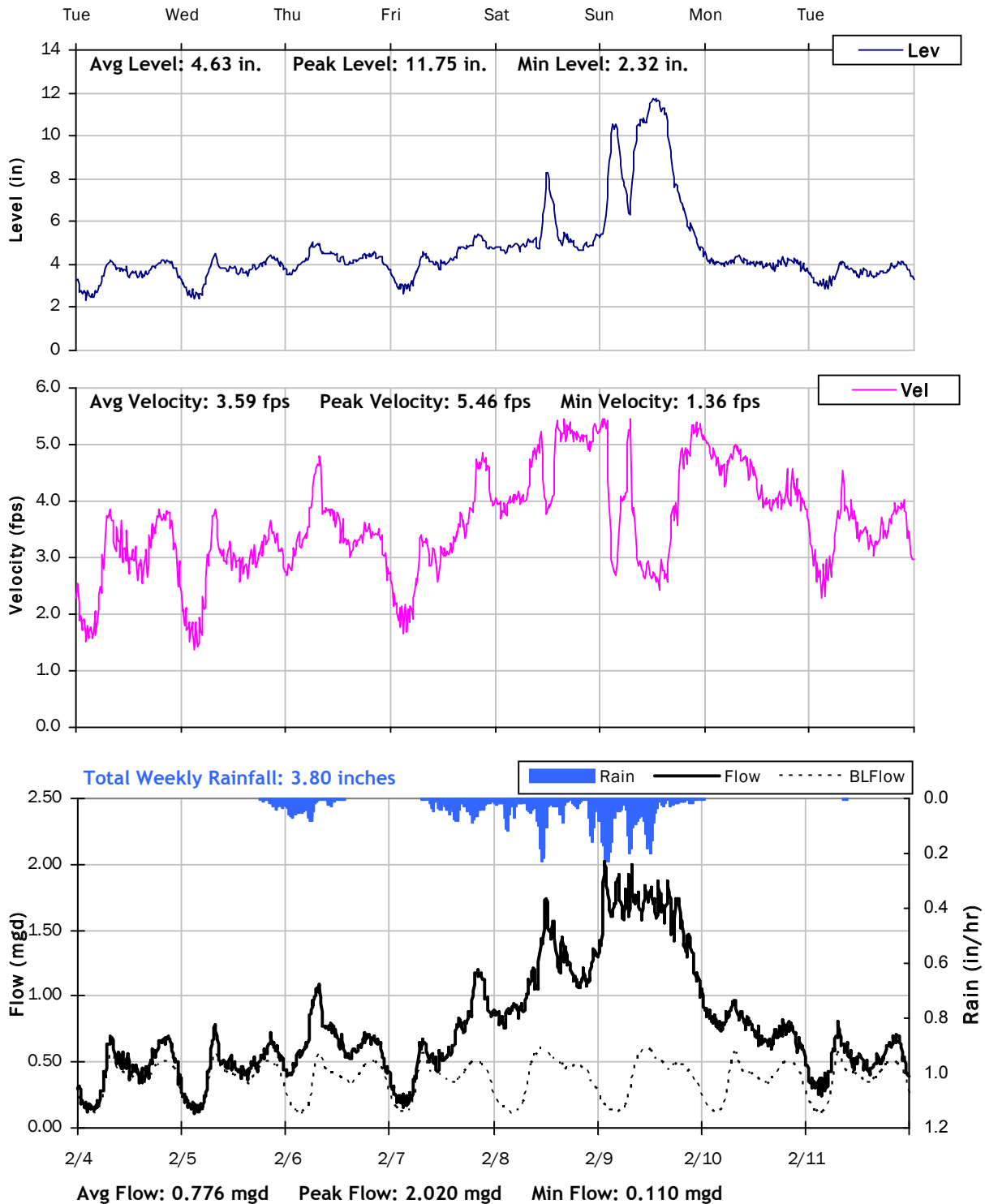
Data Summary Report



Vicinity Map: Site M7

SITE M7

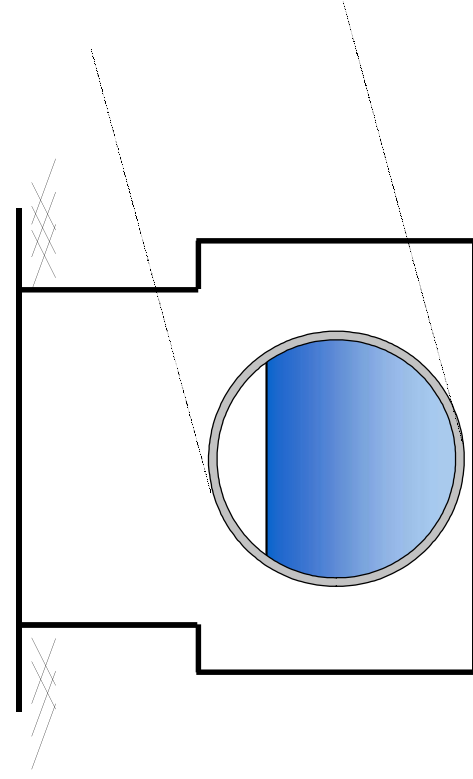
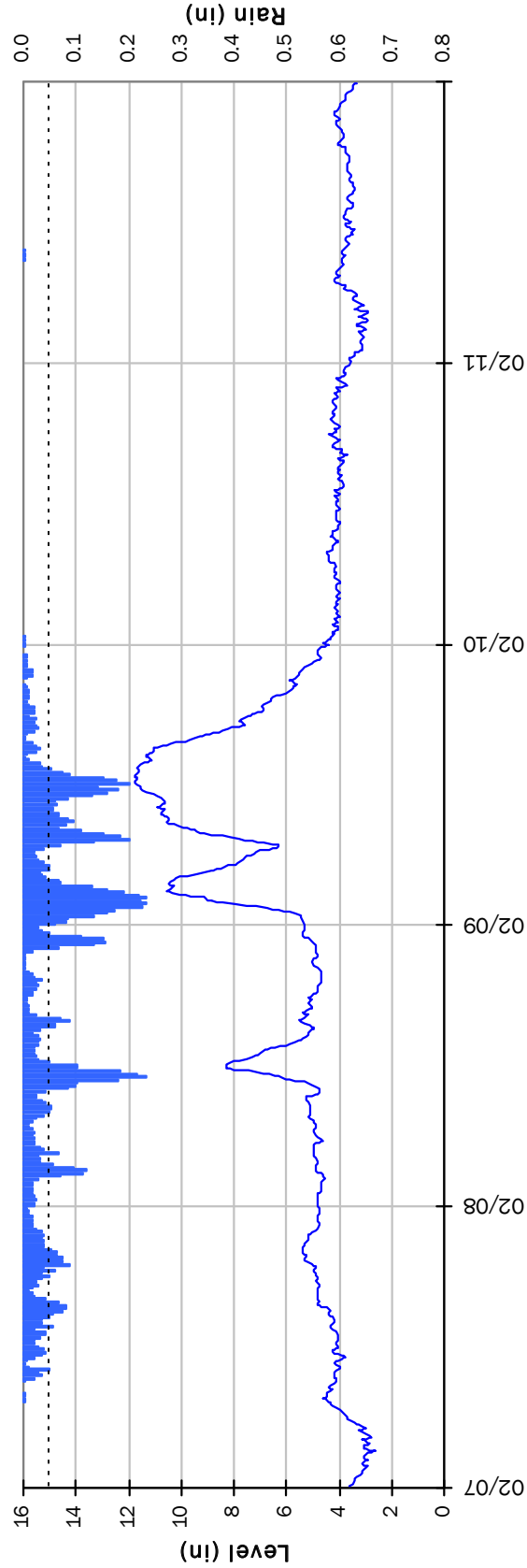
Weekly Level, Velocity and Flow Hydrographs



SITE M7

Site Capacity and Surge Summary

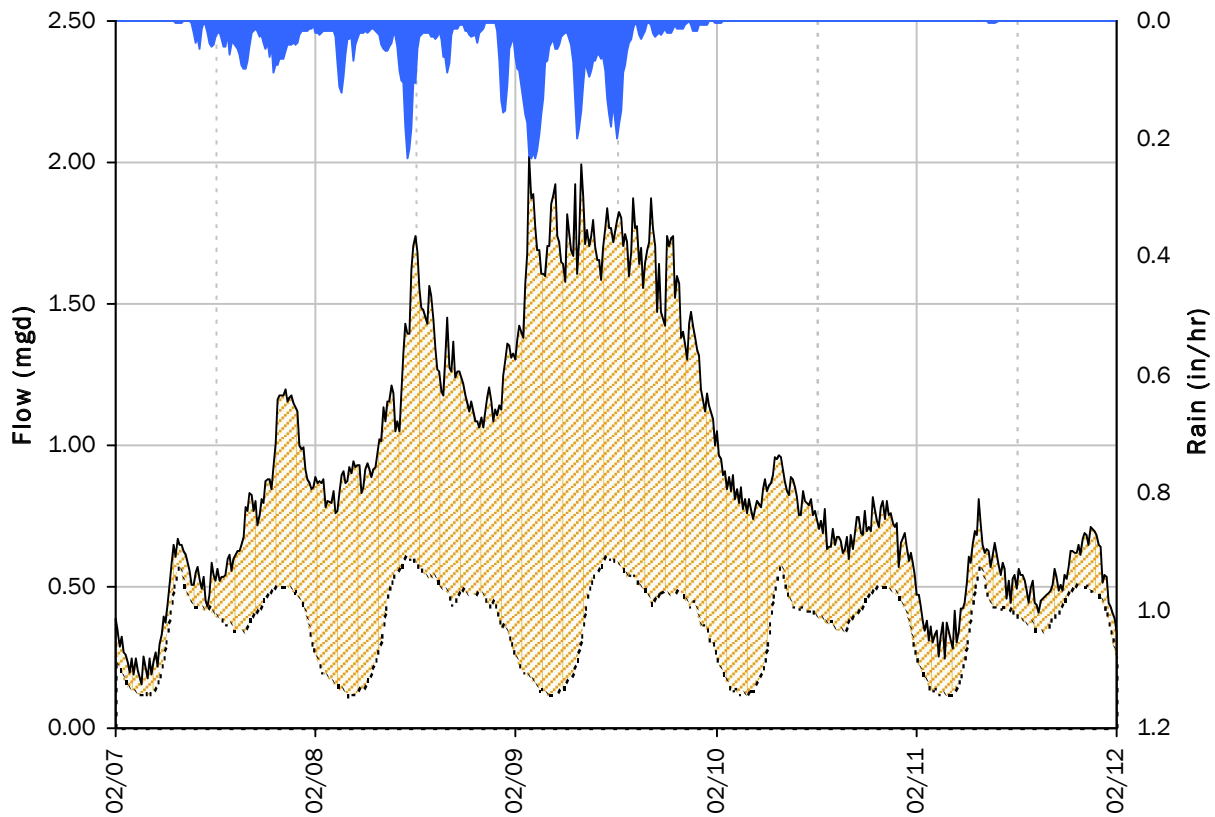
Realtime Flow Levels with Rainfall Data over Monitoring Period



Pipe Diameter: 15 inches
Peak Measured Level: 11.8 inches
Peak d/D Ratio: 0.78

SITE M7

I/I Summary: Event 1

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 1 Detail Graph**Storm Event I/I Analysis (Rain = 3.25 inches)**Capacity

Peak Flow: 2.02 mgd

PF: 5.56

Peak Level: 11.75 in

d/D Ratio: 0.78

Inflow / Infiltration

Peak I/I Rate: 1.85 mgd

Total I/I: 2,841,000 gallons

City of Pinole

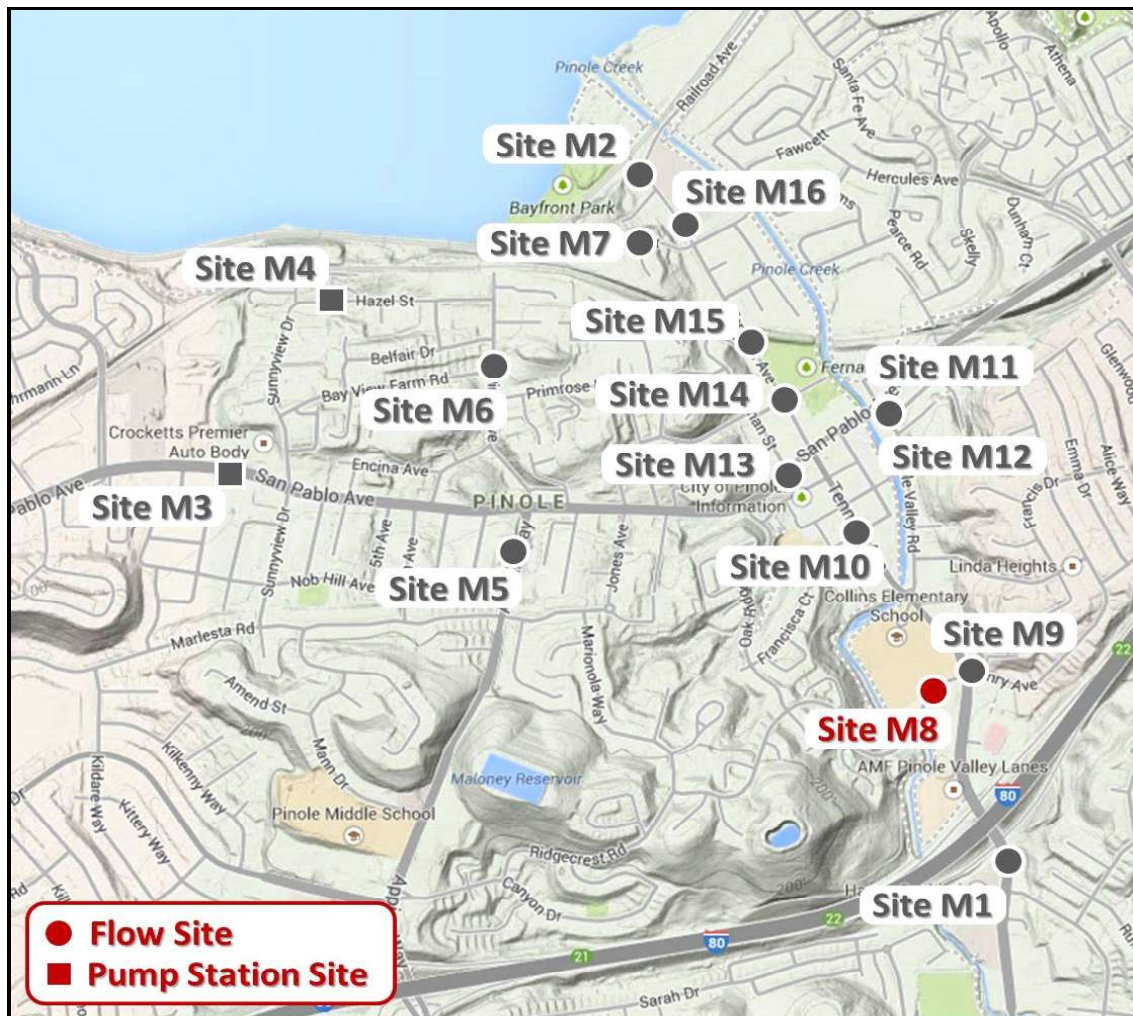
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M8

Location: Henry Ave., west of Pinole Valley Rd.

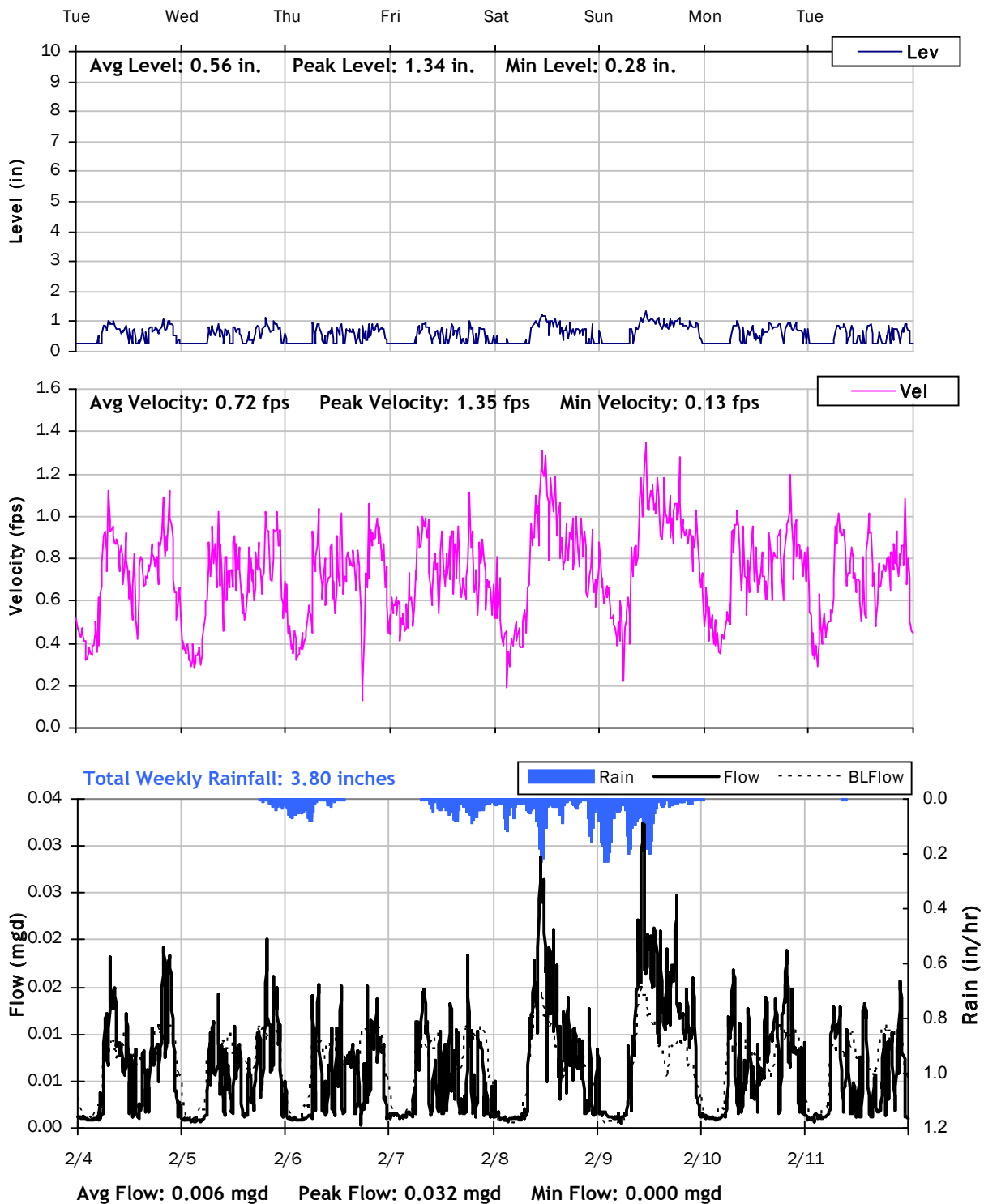
Data Summary Report



Vicinity Map: Site M8

SITE M8

Weekly Level, Velocity and Flow Hydrographs

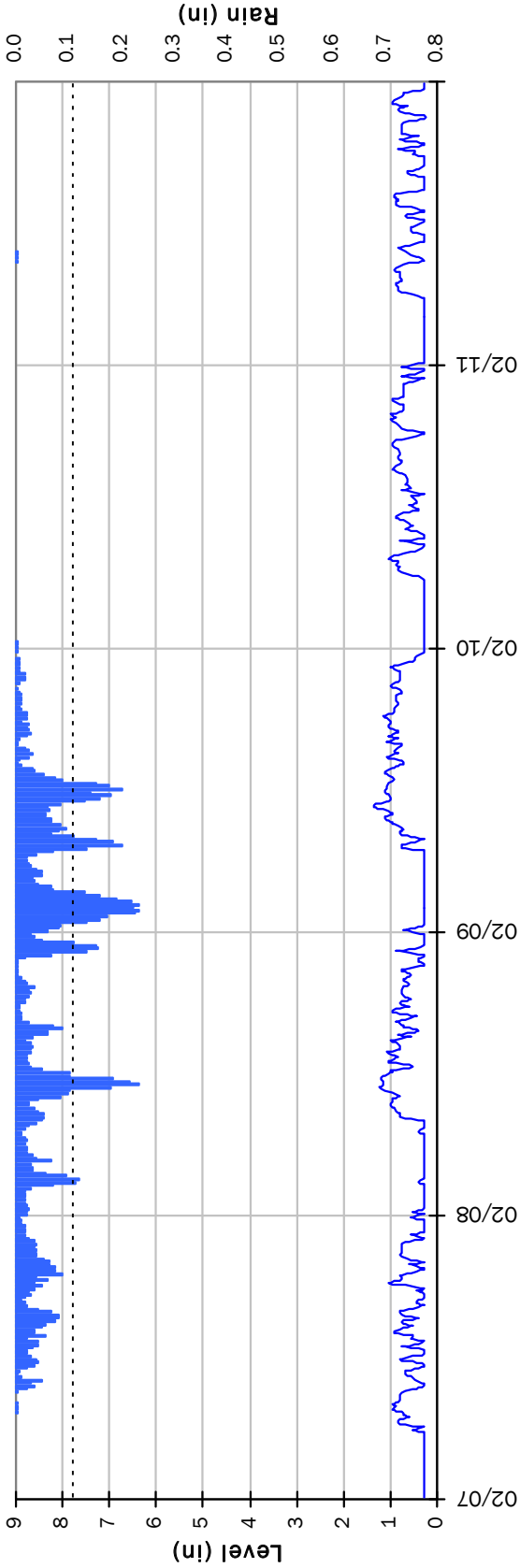




SITE M8

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



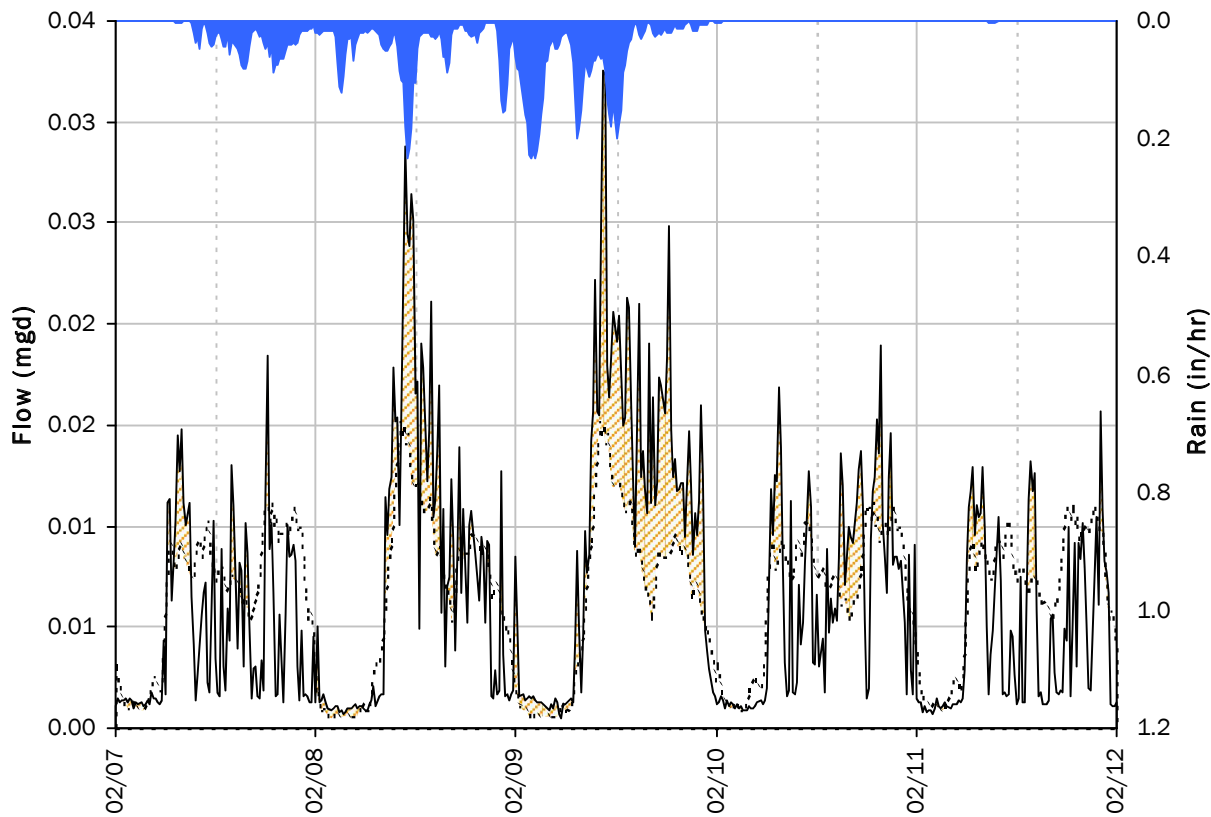
	Pipe Diameter:	7.75	inches
	Peak Measured Level:	1.34	inches
	Peak d/D Ratio:	0.17	



SITE M8
I/I Summary: Event 1

Baseline and Realtime Flows with Rainfall Data over Monitoring Period

Event 1 Detail Graph



Storm Event I/I Analysis (Rain = 3.25 inches)

Capacity

Peak Flow: 0.03 mgd

PF: 4.98

Peak Level: 1.34 in

d/D Ratio: 0.17

Inflow / Infiltration

Peak I/I Rate: 0.02 mgd

Total I/I: 1,000 gallons

City of Pinole

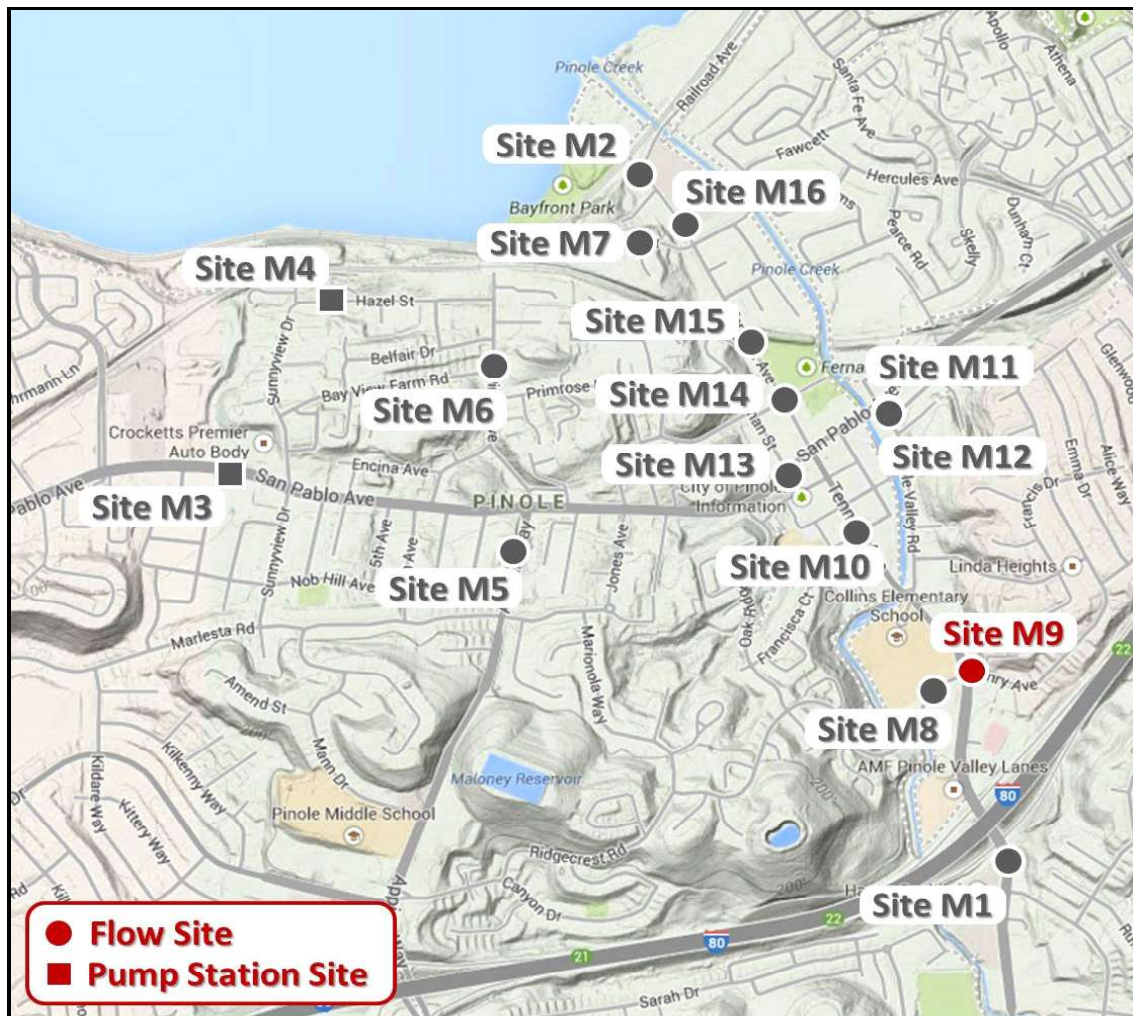
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M9

Location: Intersection of Henry Ave. and Pinole Valley Rd.

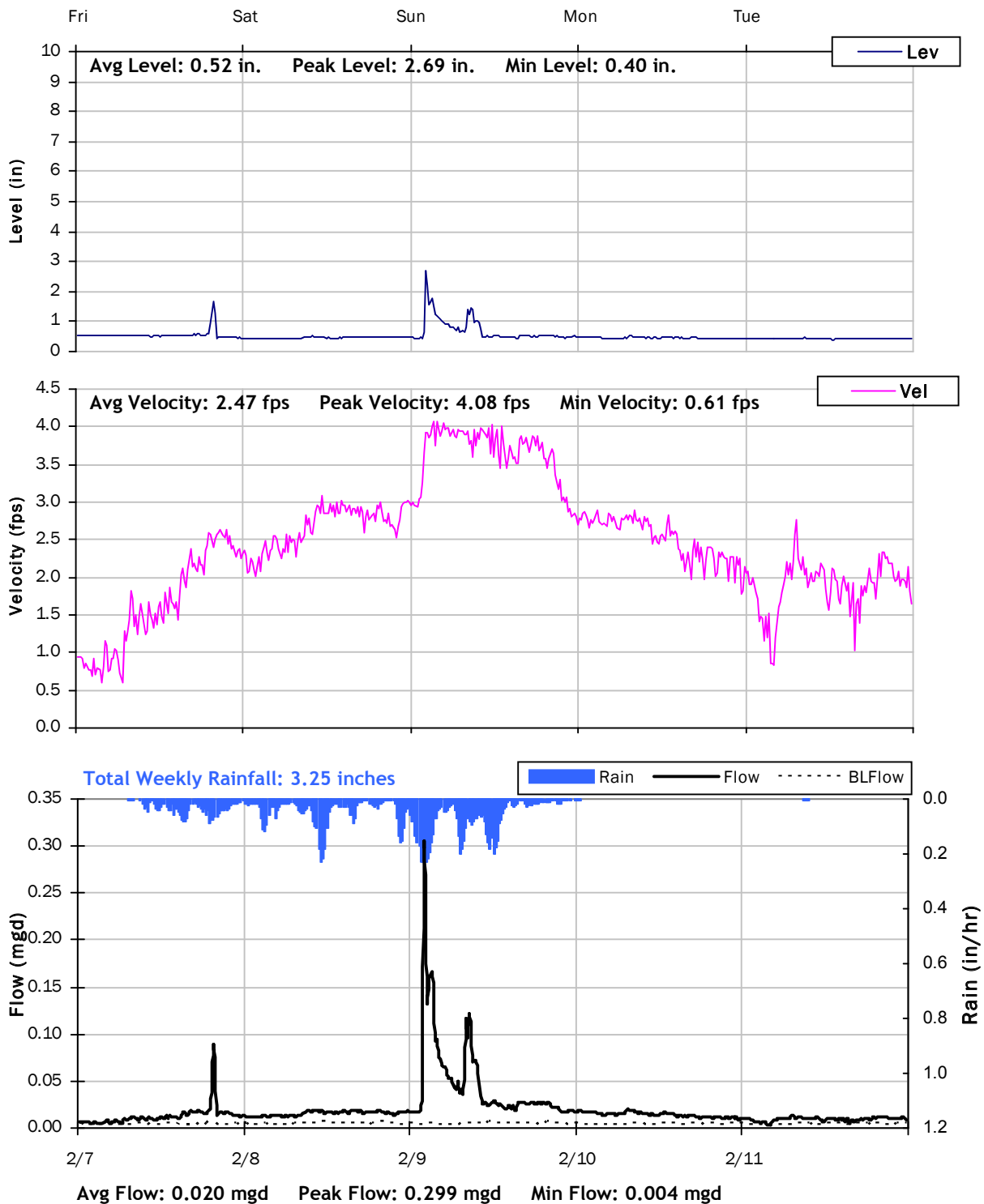
Data Summary Report



Vicinity Map: Site M9

SITE M9

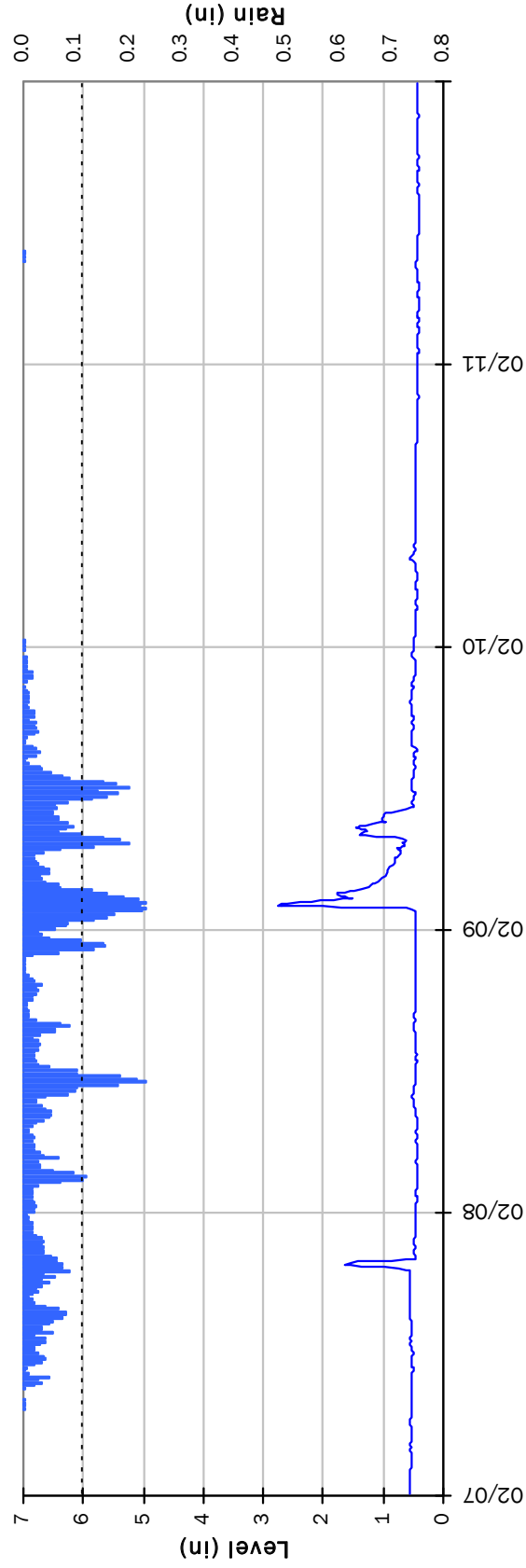
Weekly Level, Velocity and Flow Hydrographs



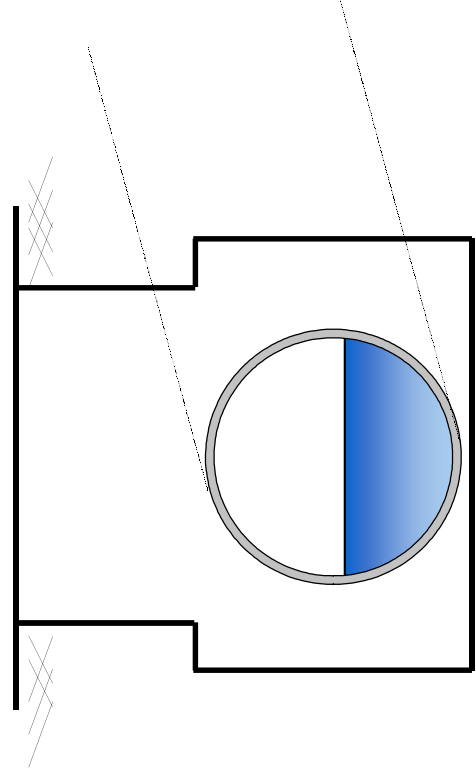
SITE M9

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period

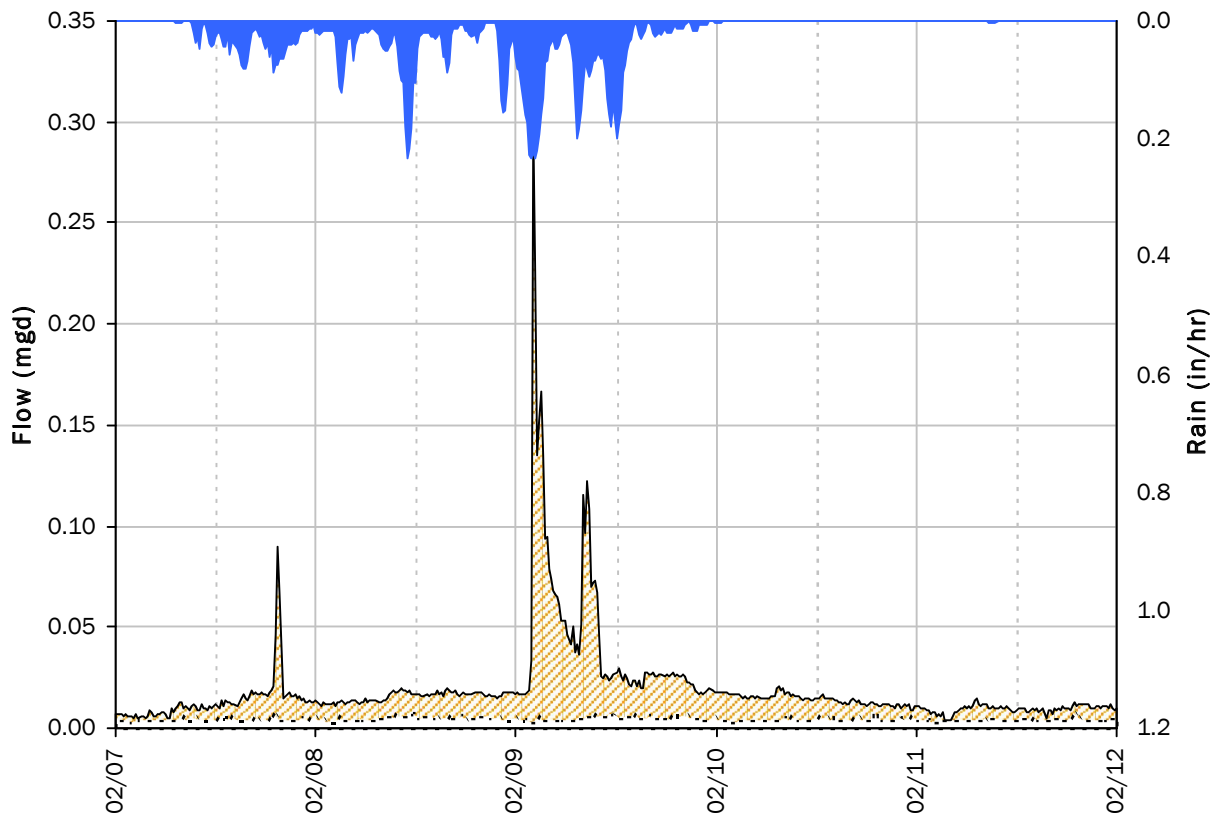


Pipe Diameter: 6 inches
Peak Measured Level: 2.69 inches
Peak d/D Ratio: 0.45



SITE M9

I/I Summary: Event 1

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 1 Detail GraphStorm Event I/I Analysis (Rain = 3.25 inches)Capacity

Peak Flow: 0.30 mgd

PF: 67.45

Peak Level: 2.69 in

d/D Ratio: 0.45

Inflow / Infiltration

Peak I/I Rate: 0.30 mgd

Total I/I: 76,000 gallons

City of Pinole

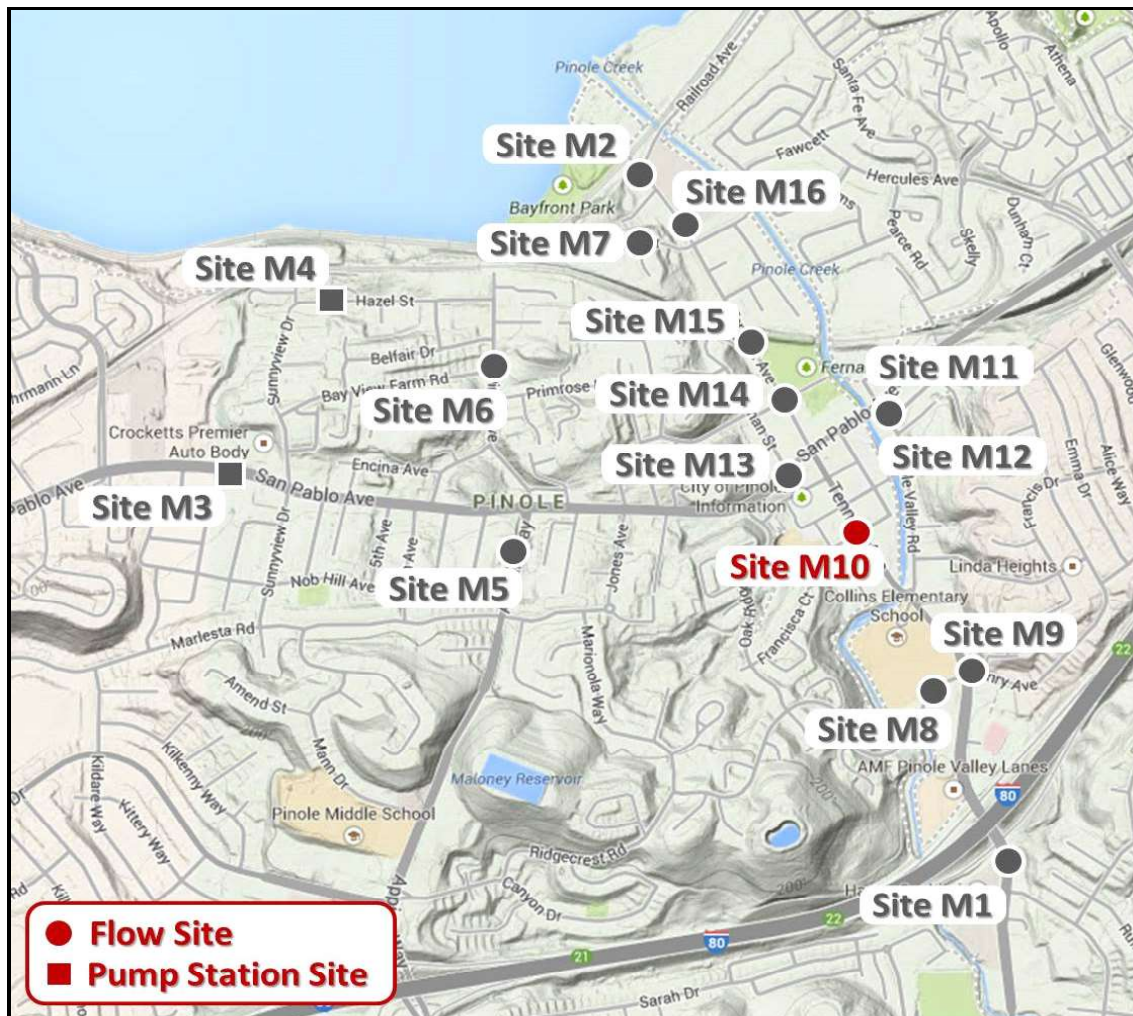
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M10

Location: Intersection of Tennant Ave. and Prune St.

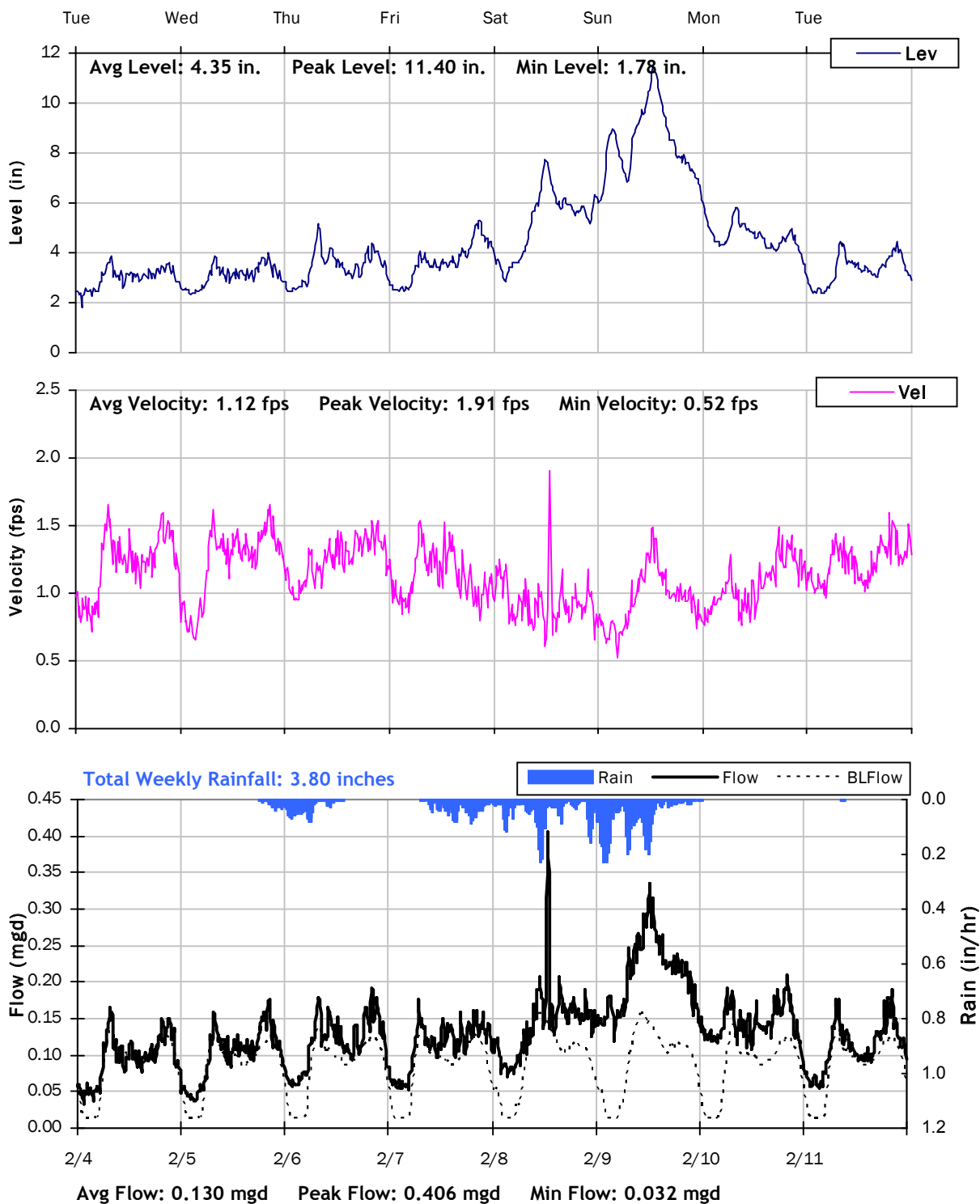
Data Summary Report



Vicinity Map: Site M10

SITE M10

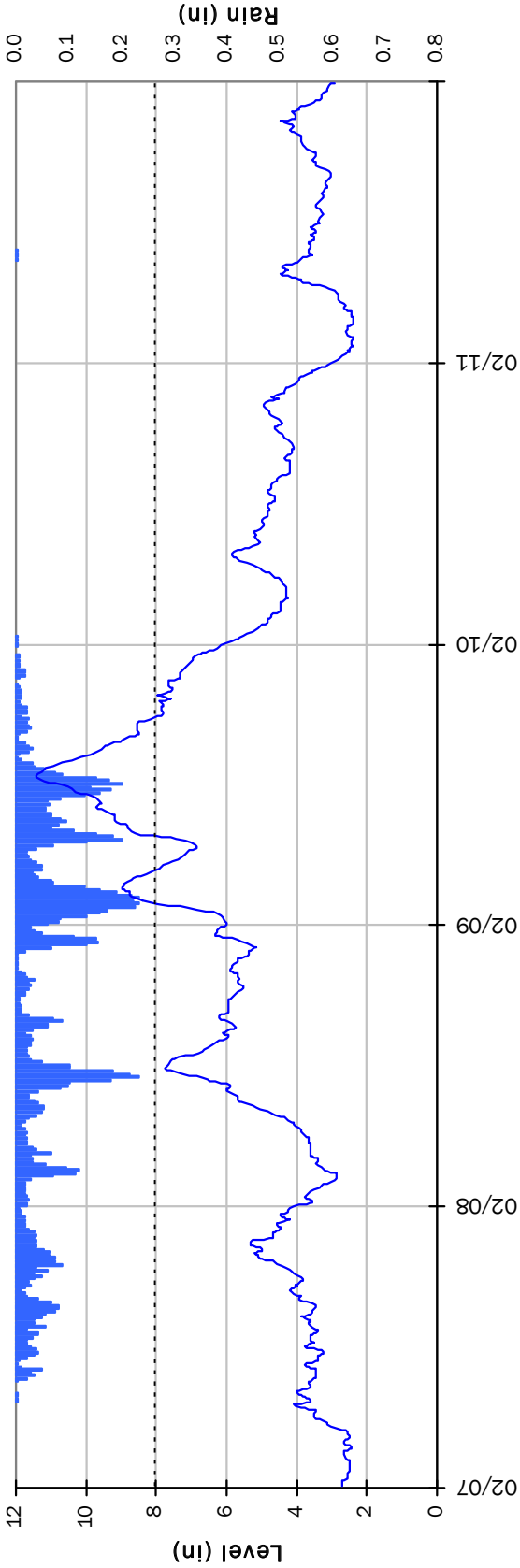
Weekly Level, Velocity and Flow Hydrographs





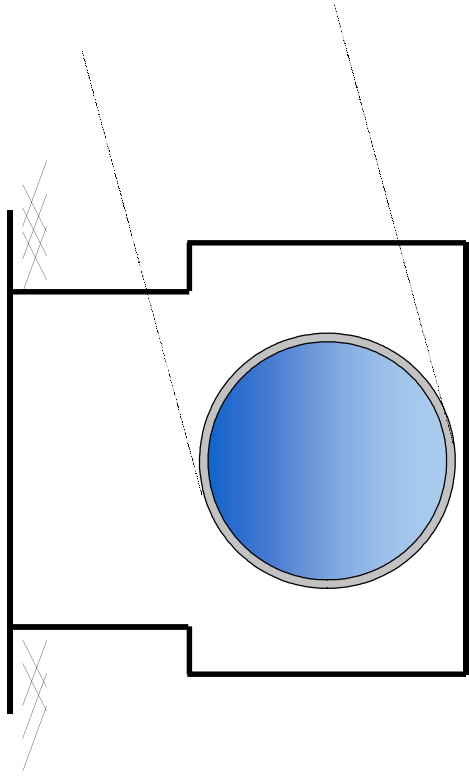
SITE M10
Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



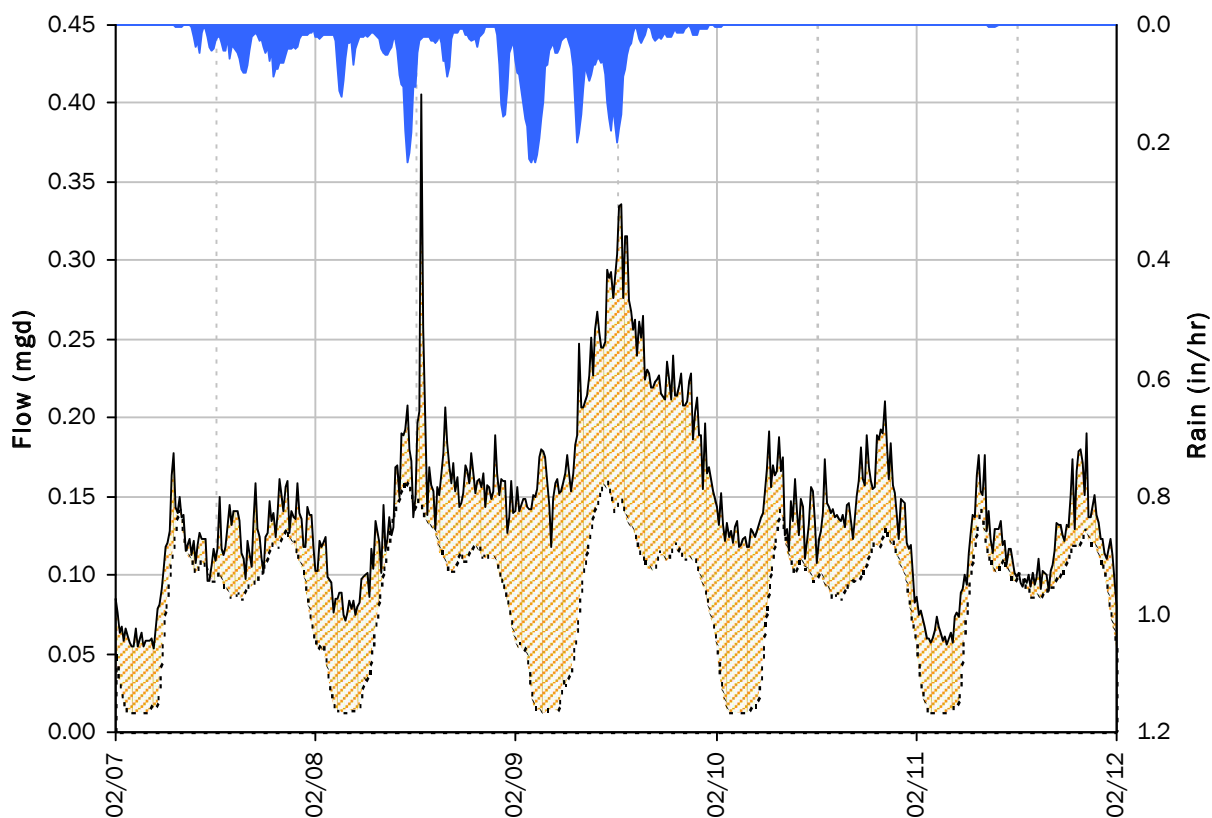
Pipe Diameter: 8 inches
Peak Measured Level: 11.4 inches
Peak d/D Ratio: 1.43

Surcharged 3.4 inches over crown



SITE M10

I/I Summary: Event 1

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 1 Detail GraphStorm Event I/I Analysis (Rain = 3.25 inches)Capacity

Peak Flow: 0.41 mgd

PF: 4.76

Peak Level: 11.40 in

d/D Ratio: 1.43

Inflow / Infiltration

Peak I/I Rate: 0.26 mgd

Total I/I: 291,000 gallons

City of Pinole

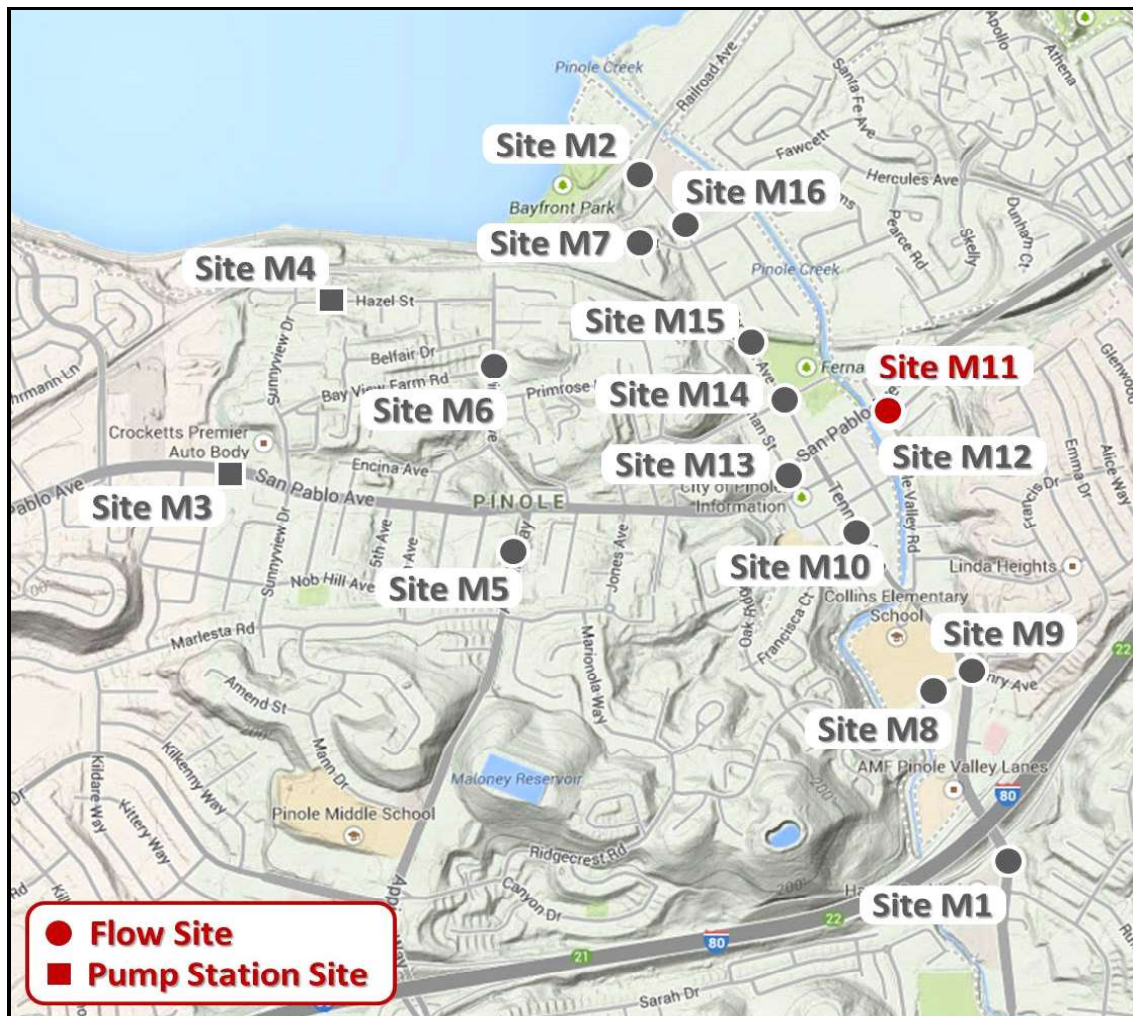
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M11

Location: Intersection of Pinole Valley Rd. and Rafaela St.

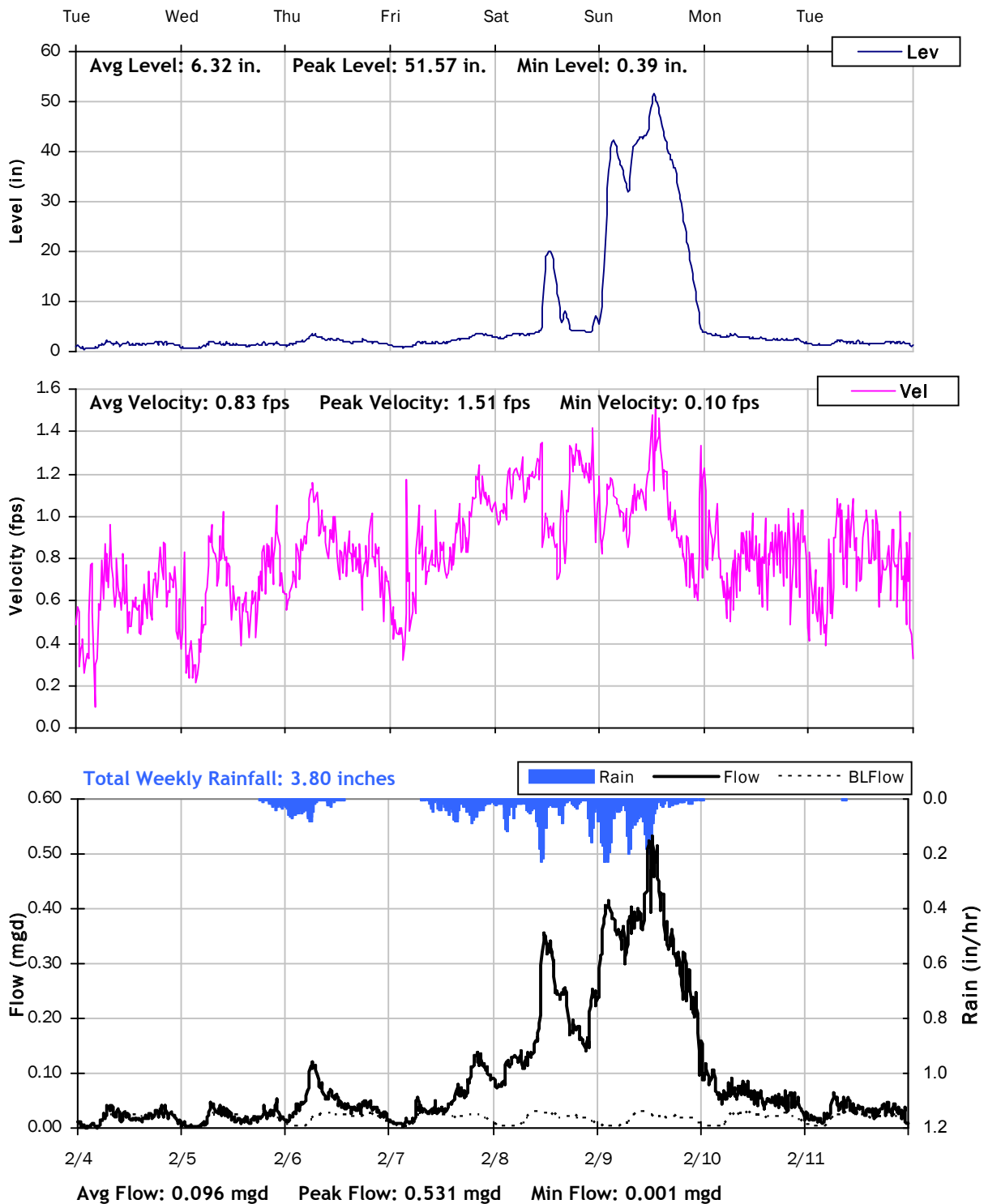
Data Summary Report



Vicinity Map: Site M11

SITE M11

Weekly Level, Velocity and Flow Hydrographs

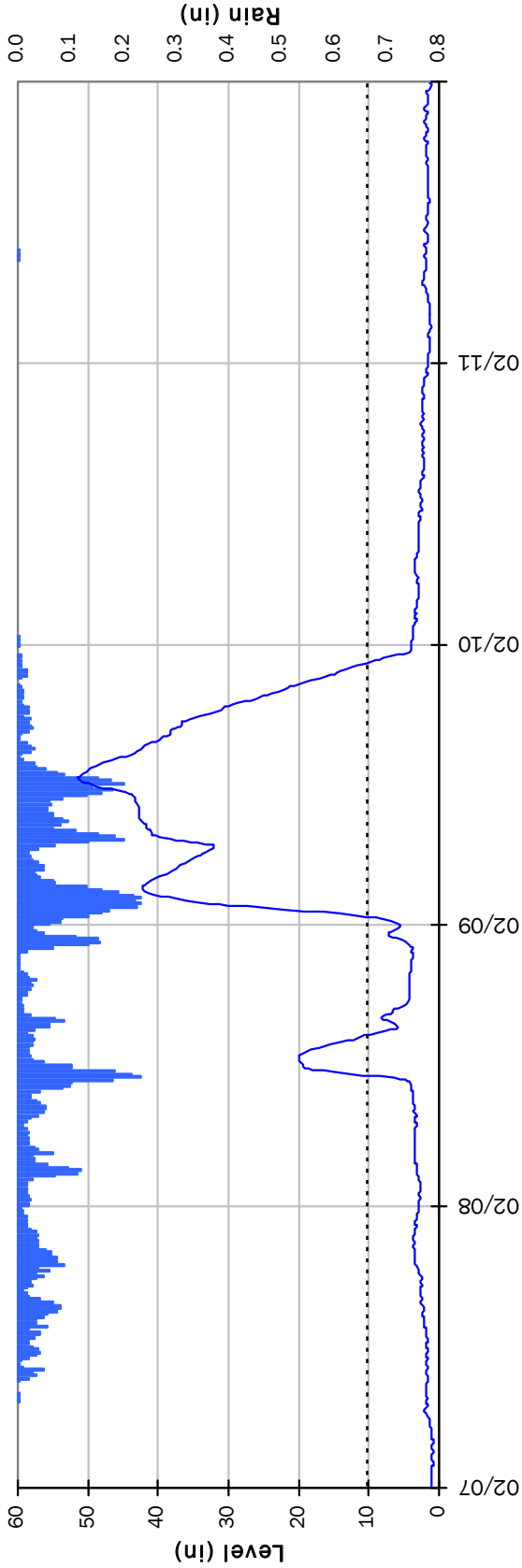




SITE M11

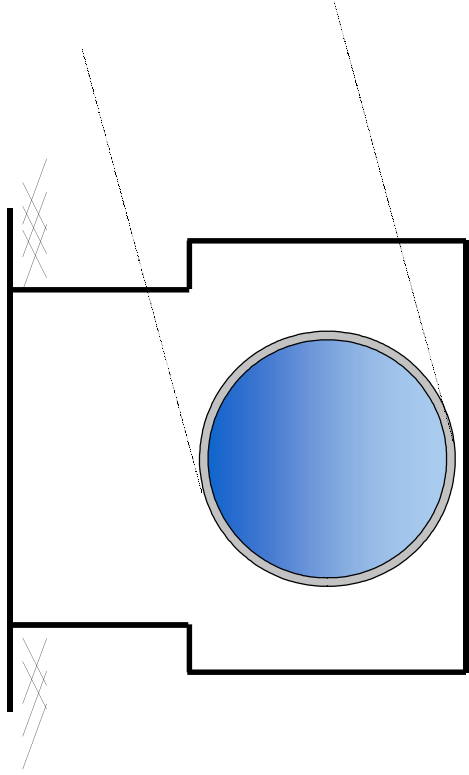
Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



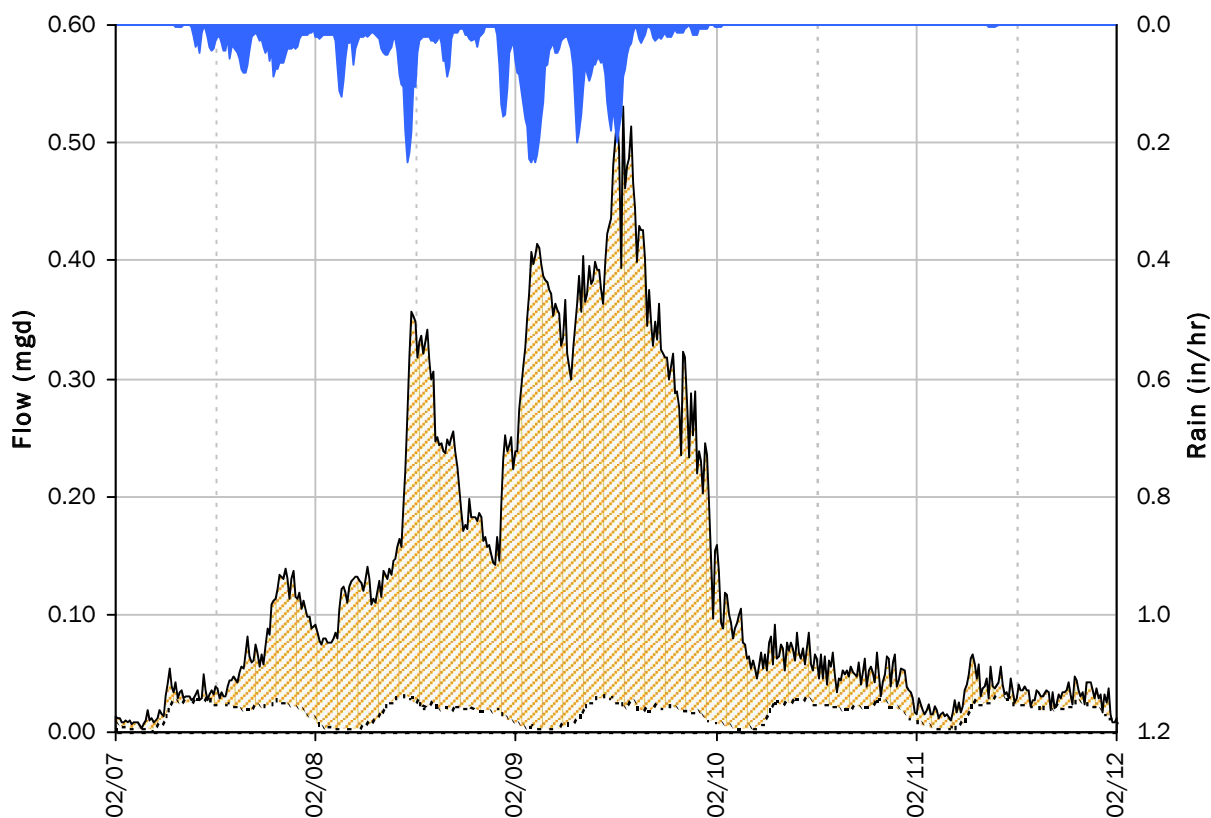
Pipe Diameter: 10 inches
Peak Measured Level: 51.6 inches
Peak d/D Ratio: 5.16

Surcharged 41.6 inches over crown



SITE M11

I/I Summary: Event 1

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 1 Detail Graph**Storm Event I/I Analysis (Rain = 3.25 inches)**Capacity

Peak Flow: 0.53 mgd

PF: 30.59

Peak Level: 51.57 in

d/D Ratio: 5.16

Inflow / Infiltration

Peak I/I Rate: 0.51 mgd

Total I/I: 594,000 gallons

City of Pinole

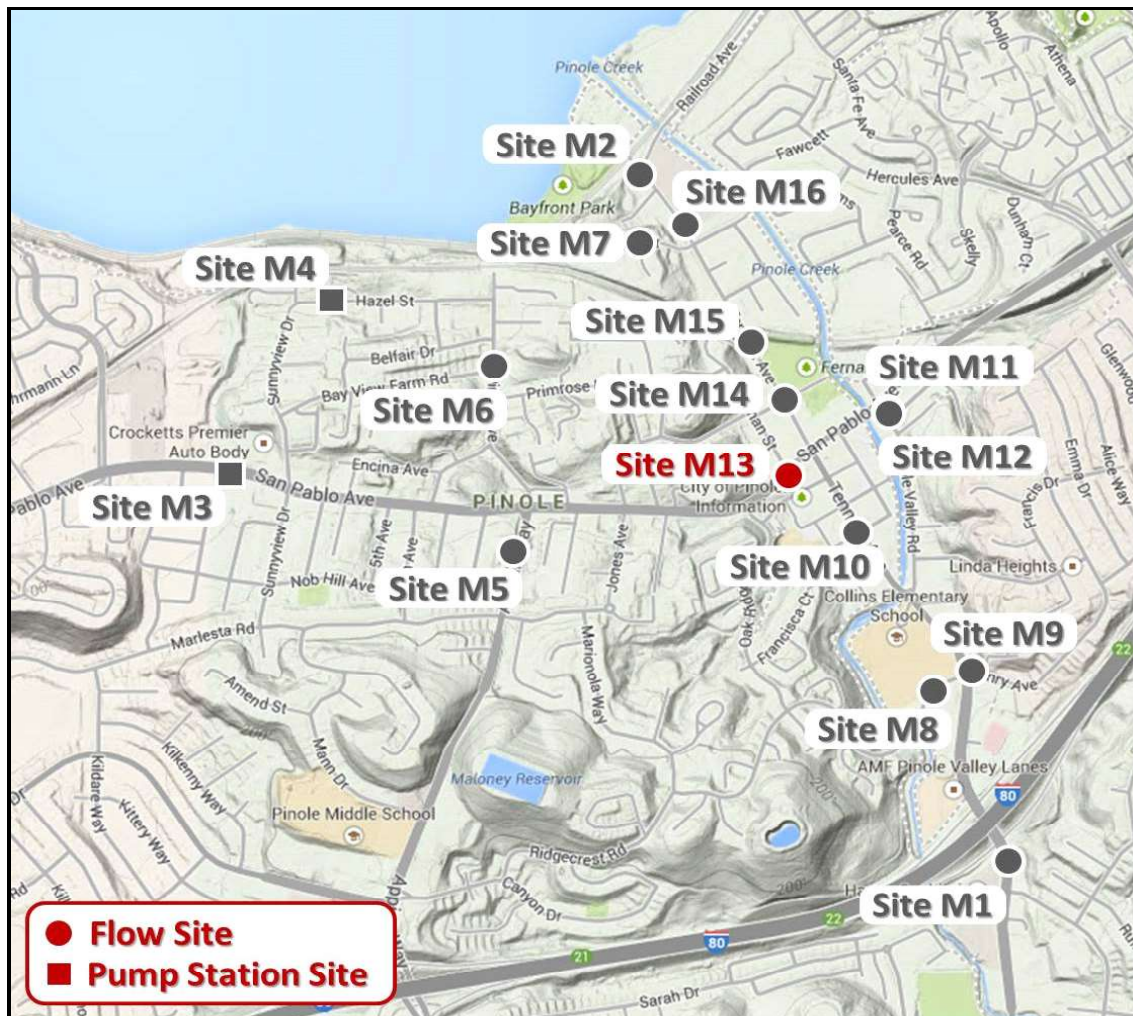
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M13

Location: San Pablo Ave. just west of Quinan St.

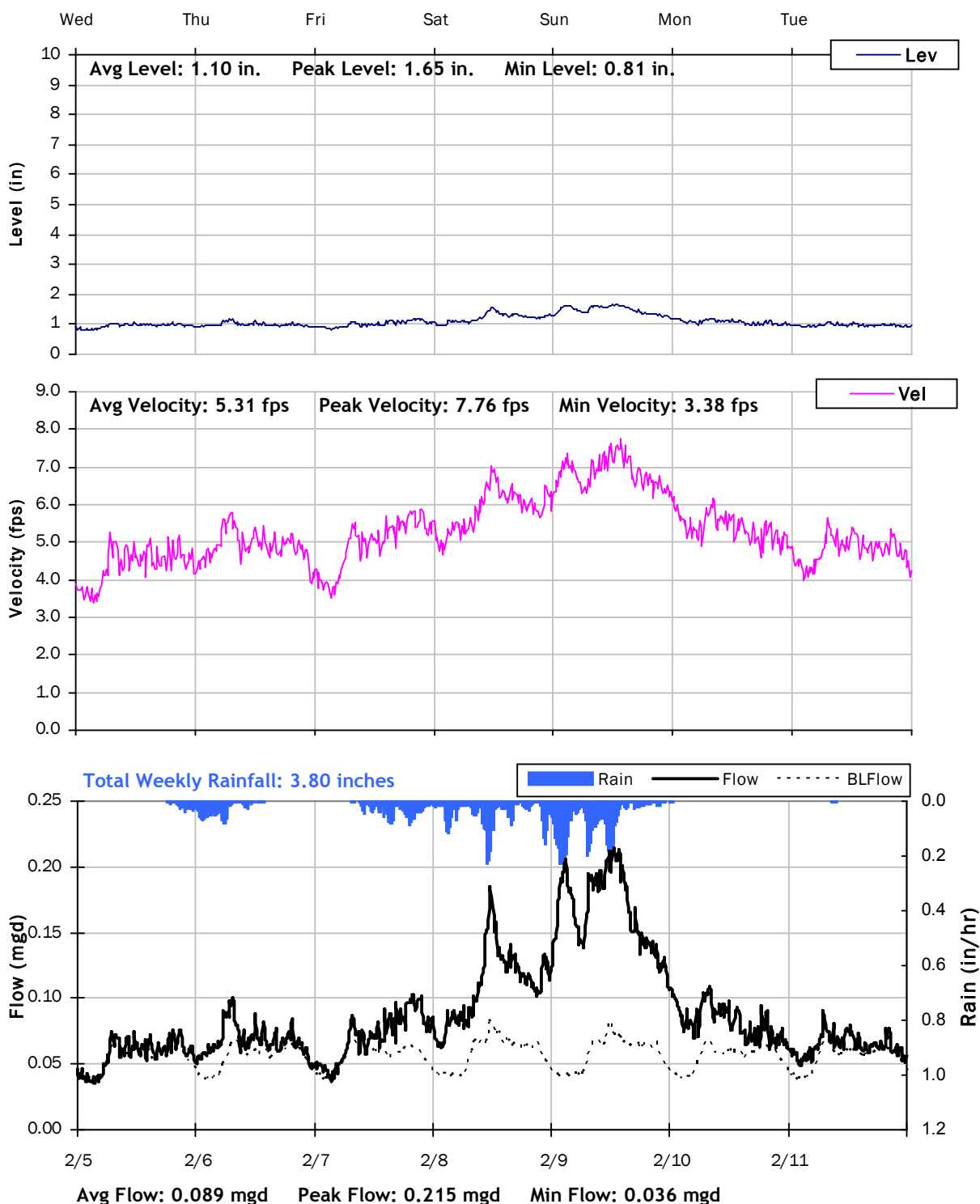
Data Summary Report



Vicinity Map: Site M13

SITE M13

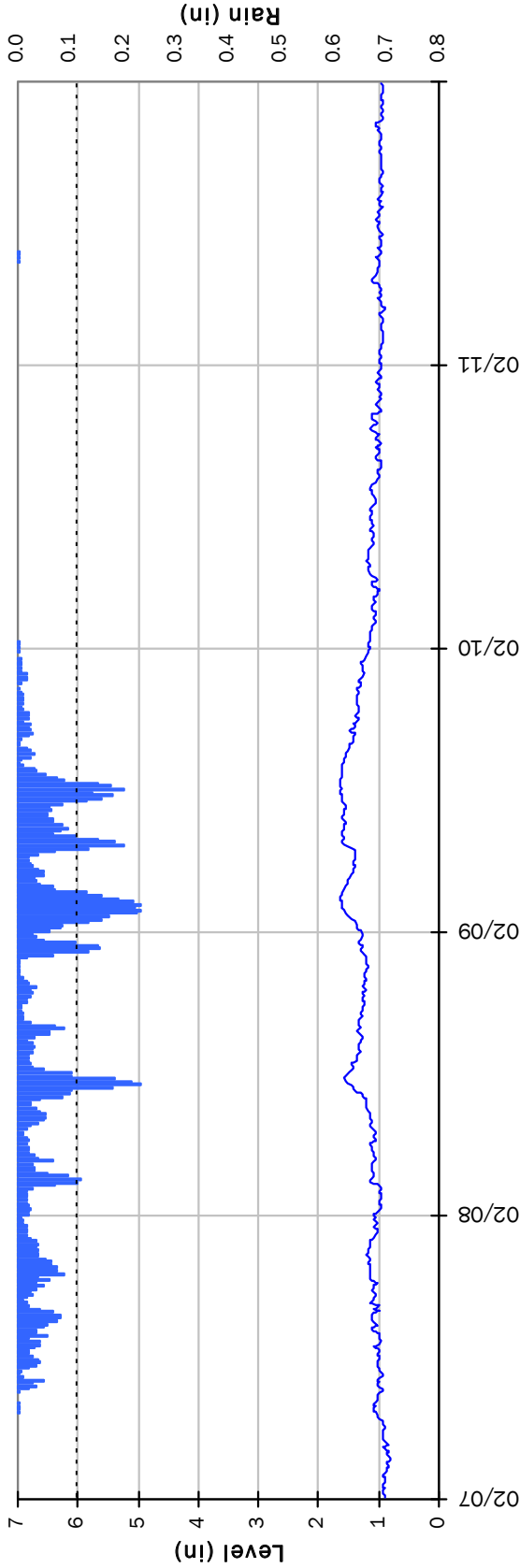
Weekly Level, Velocity and Flow Hydrographs



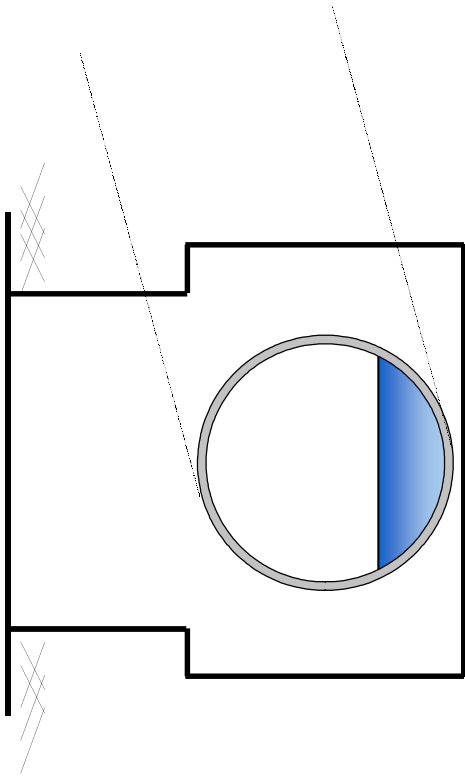
SITE M13

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



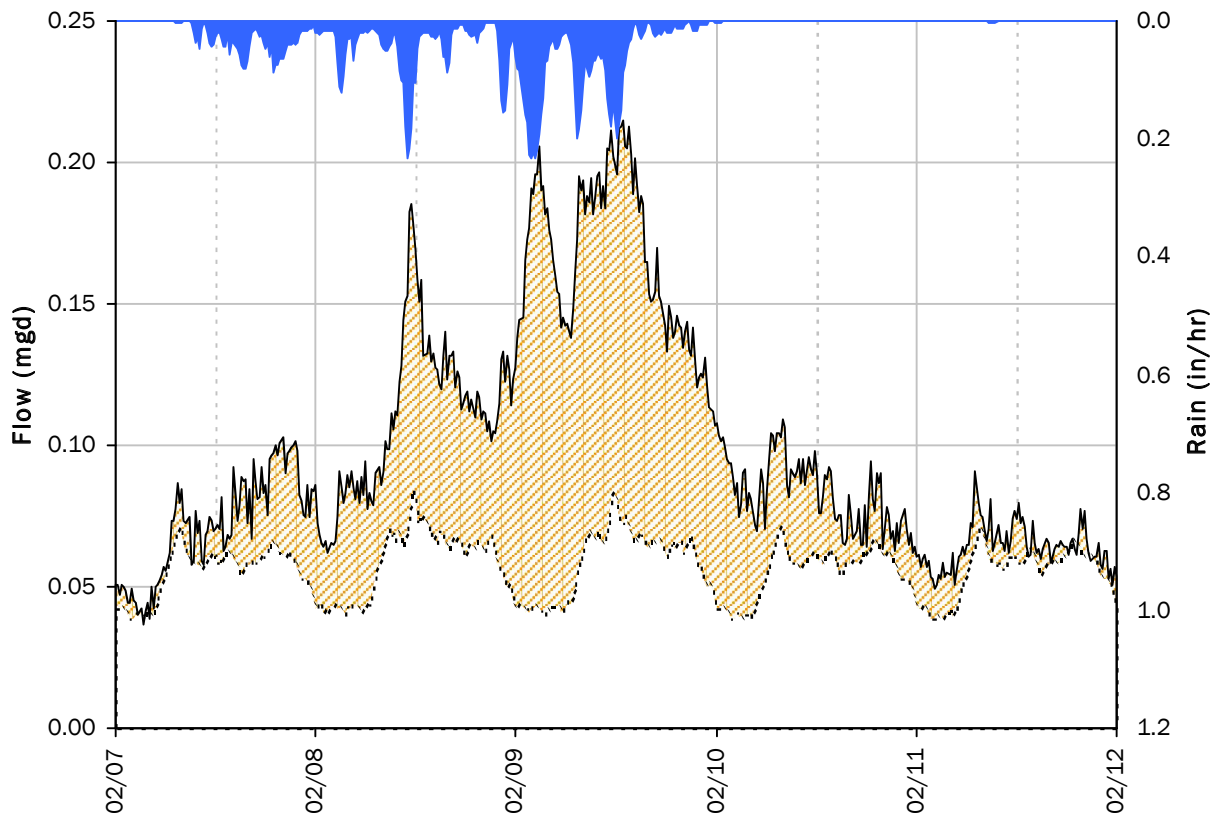
Pipe Diameter: 6 inches
Peak Measured Level: 1.65 inches
Peak d/D Ratio: 0.28





SITE M13

I/I Summary: Event 1

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 1 Detail Graph**Storm Event I/I Analysis (Rain = 3.25 inches)**Capacity

Peak Flow: 0.21 mgd

PF: 3.84

Peak Level: 1.65 in

d/D Ratio: 0.28

Inflow / Infiltration

Peak I/I Rate: 0.16 mgd

Total I/I: 214,000 gallons

City of Pinole

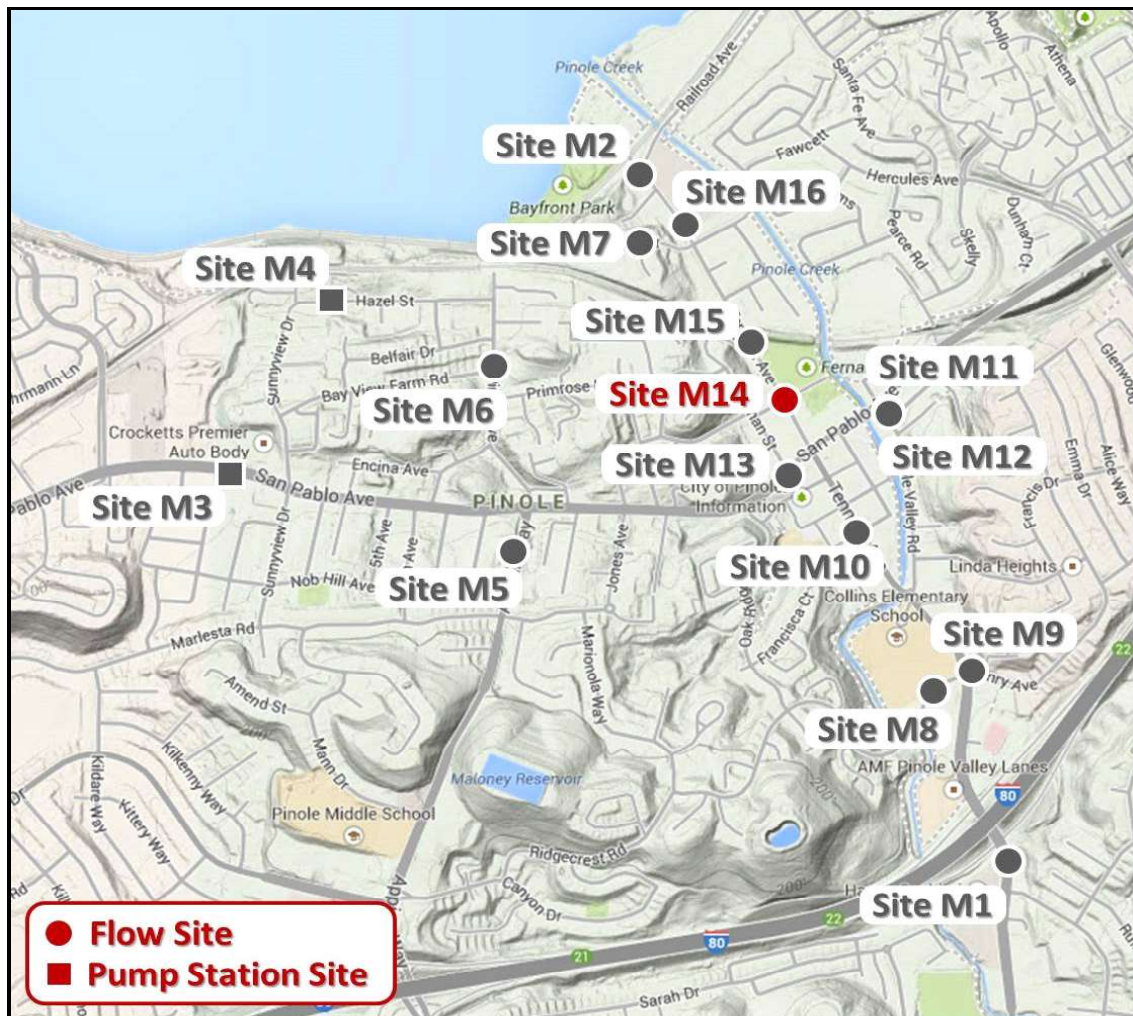
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M14

Location: Intersection of Tennant Ave. and Park St.

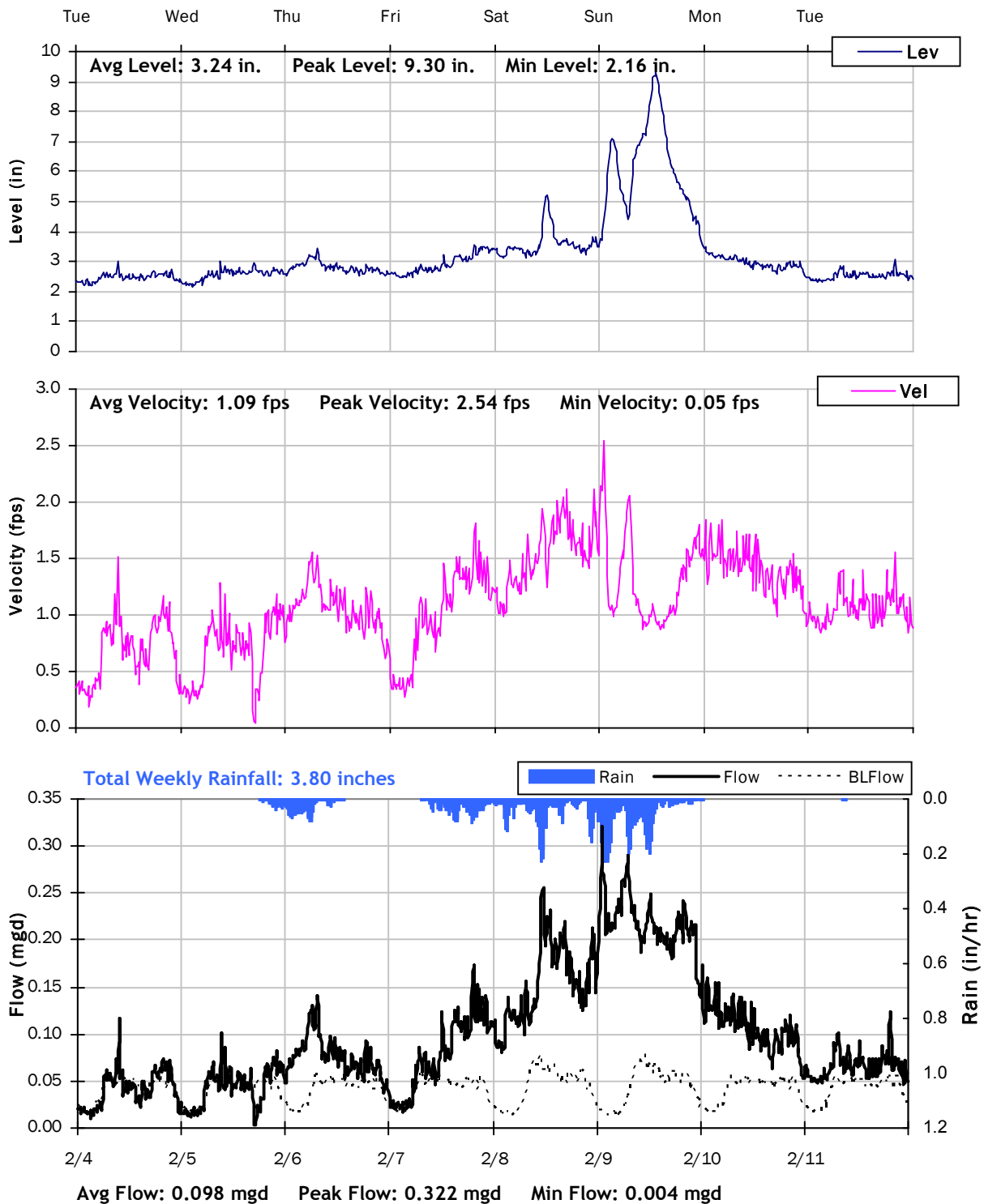
Data Summary Report



Vicinity Map: Site M14

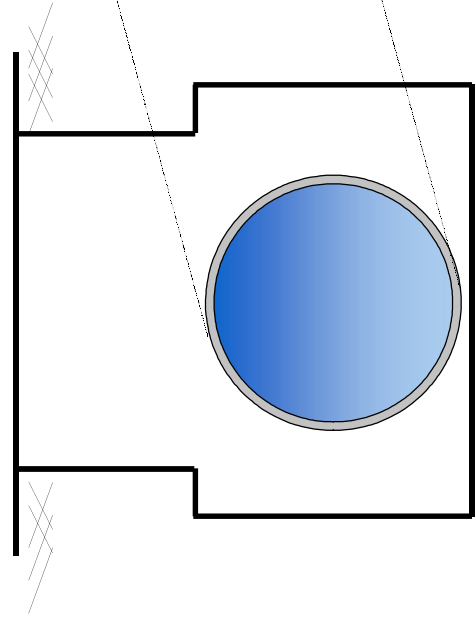
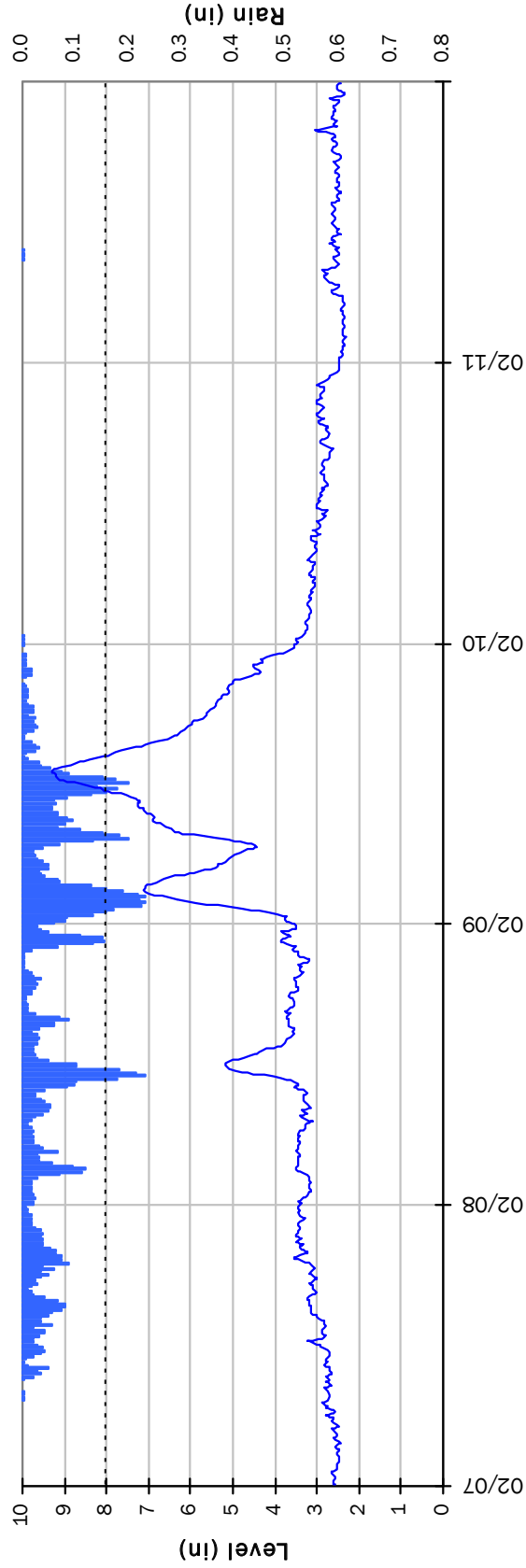
SITE M14

Weekly Level, Velocity and Flow Hydrographs



SITE M14 Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



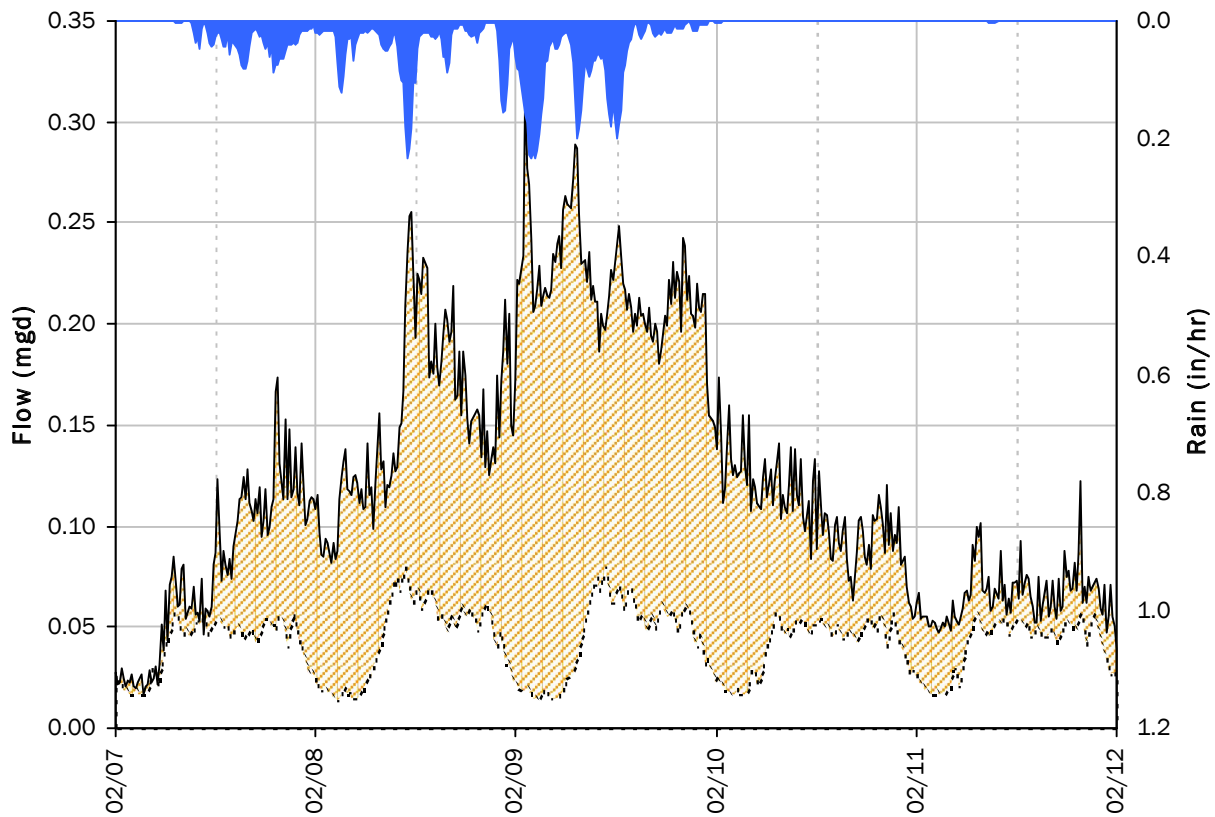
Pipe Diameter: 8 inches
Peak Measured Level: 9.3 inches
Peak d/D Ratio: 1.16

Surcharged 1.3 inches over crown



SITE M14

I/I Summary: Event 1

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 1 Detail Graph**Storm Event I/I Analysis (Rain = 3.25 inches)**Capacity**Peak Flow:** 0.32 mgd**PF:** 7.68**Peak Level:** 9.30 in**d/D Ratio:** 1.16Inflow / Infiltration**Peak I/I Rate:** 0.30 mgd**Total I/I:** 412,000 gallons

City of Pinole

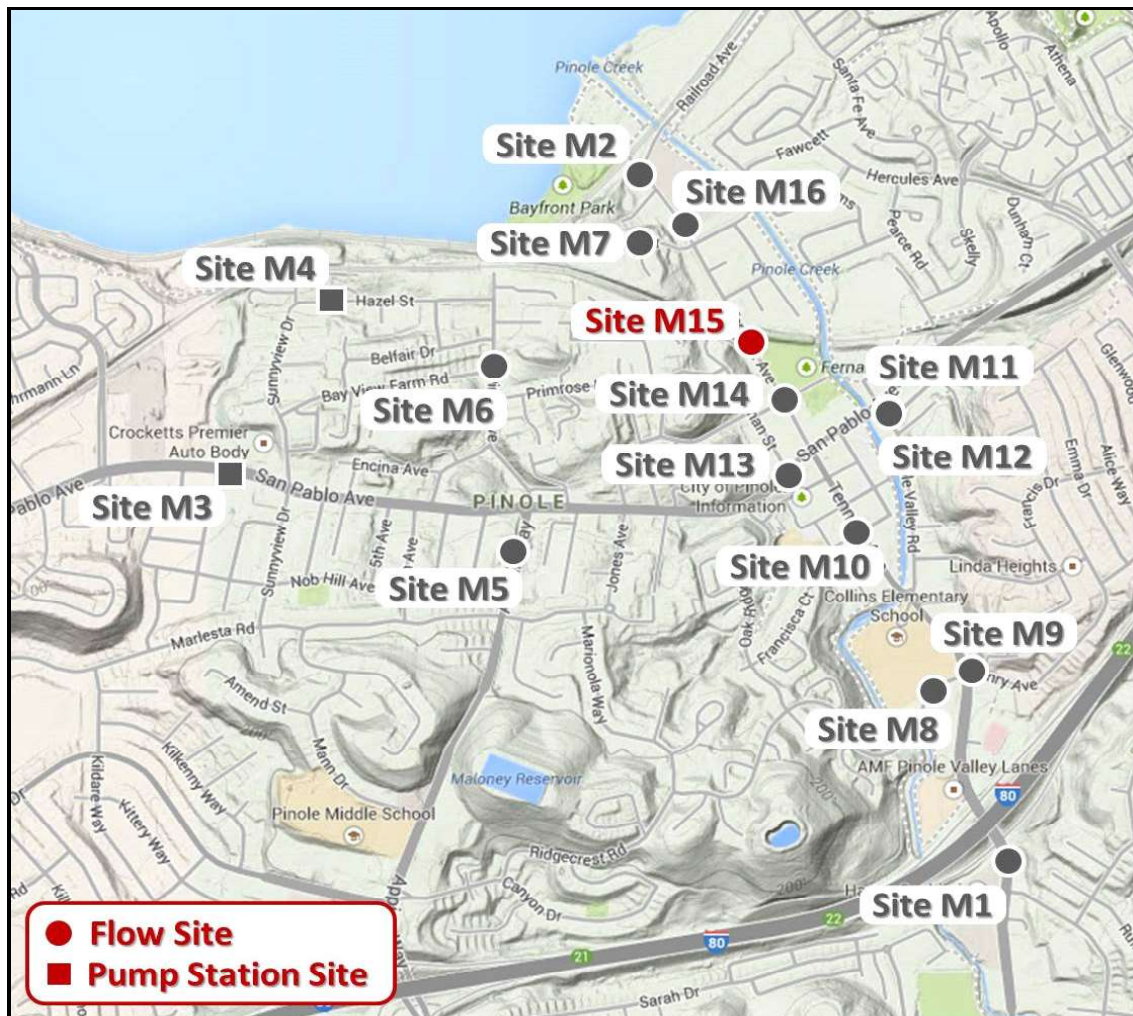
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M15

Location: Tennant Ave., south of train tracks, west of Fernandez Park

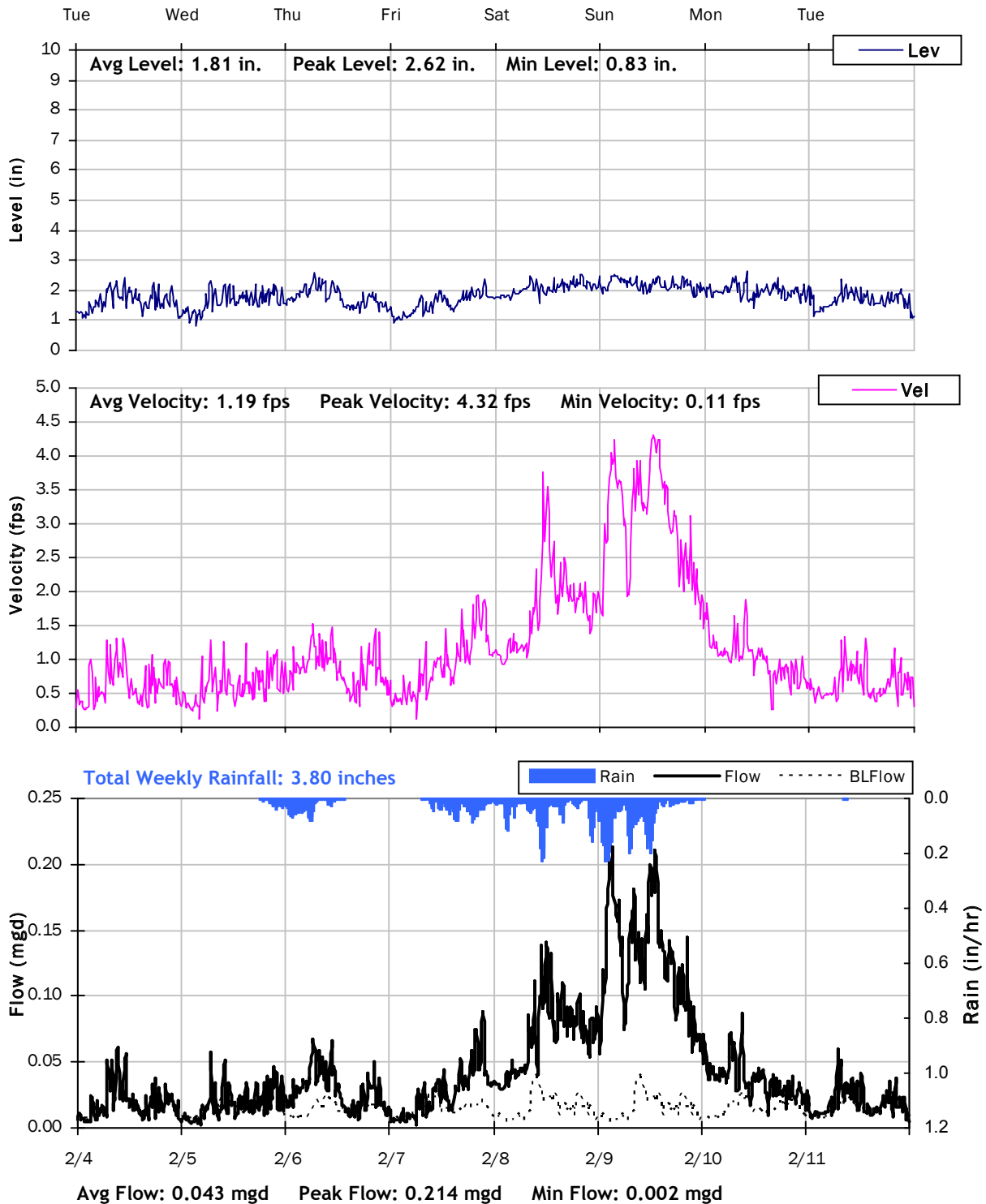
Data Summary Report



Vicinity Map: Site M15

SITE M15

Weekly Level, Velocity and Flow Hydrographs

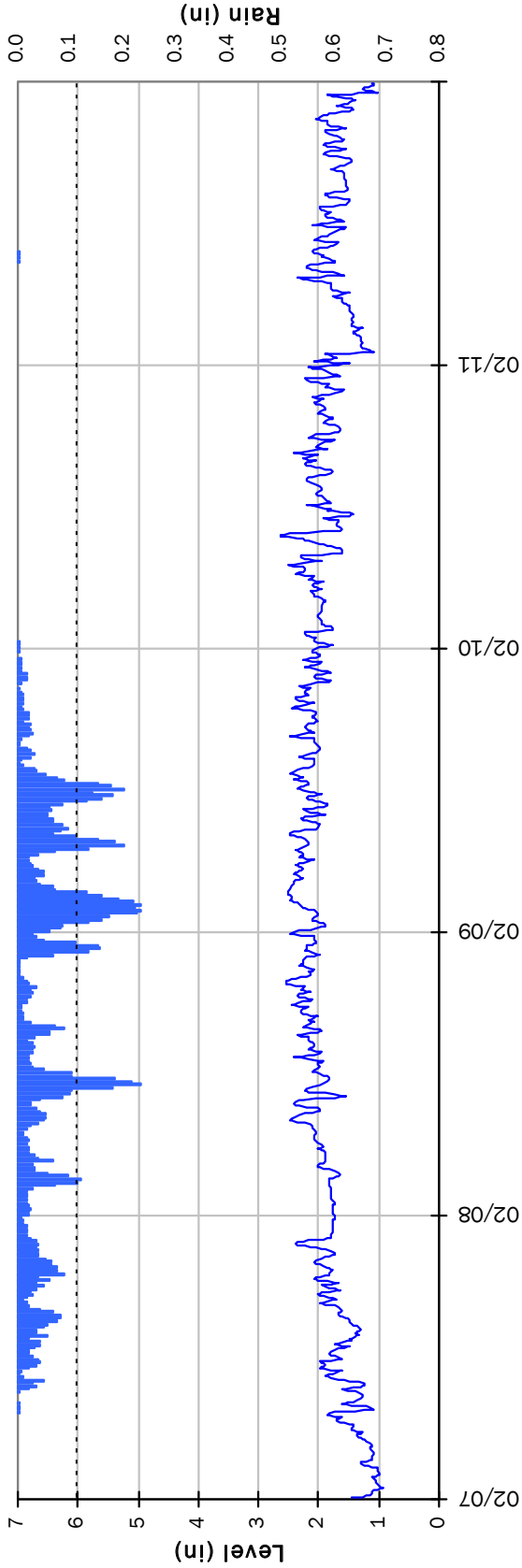




SITE M15

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



	Pipe Diameter:	6	inches
	Peak Measured Level:	2.62	inches
	Peak d/D Ratio:	0.44	

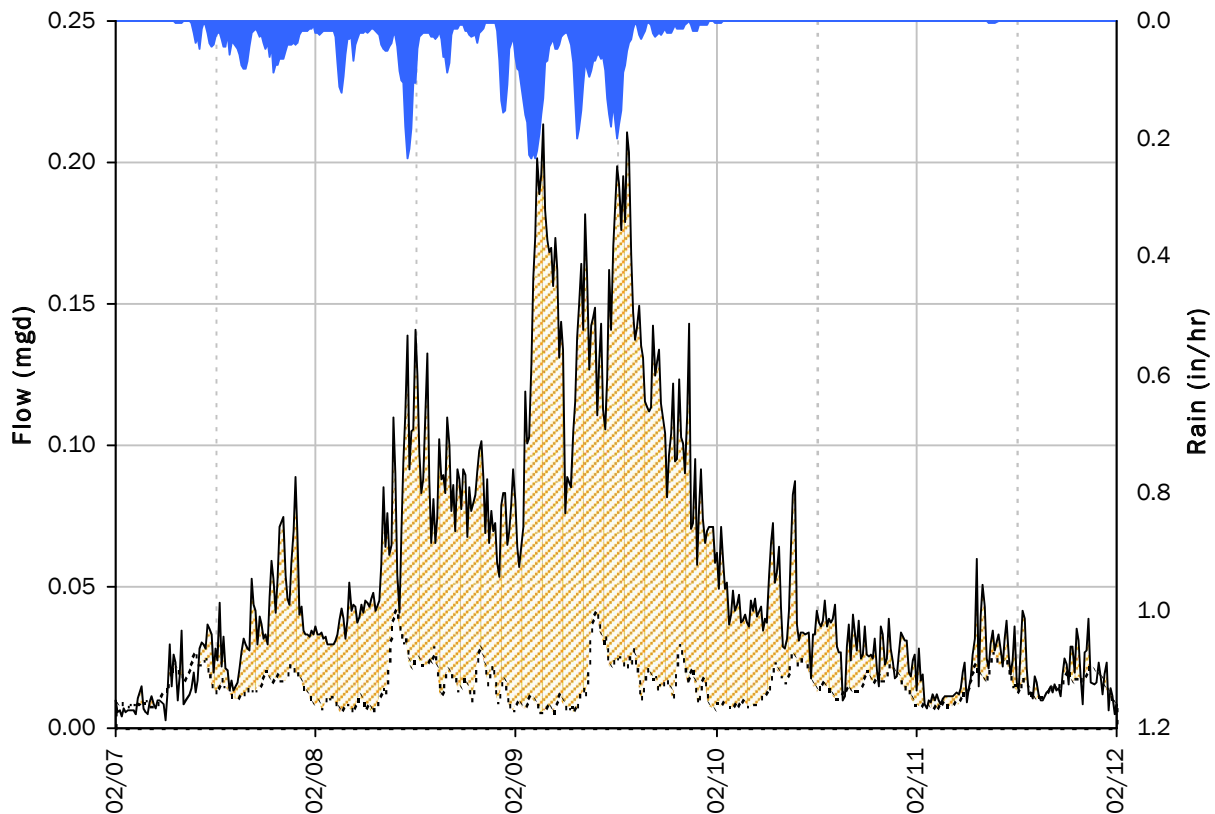


SITE M15

I/I Summary: Event 1

Baseline and Realtime Flows with Rainfall Data over Monitoring Period

Event 1 Detail Graph



Storm Event I/I Analysis (Rain = 3.25 inches)

Capacity

Peak Flow: 0.21 mgd

PF: 14.14

Peak Level: 2.62 in

d/D Ratio: 0.44

Inflow / Infiltration

Peak I/I Rate: 0.21 mgd

Total I/I: 205,000 gallons

City of Pinole

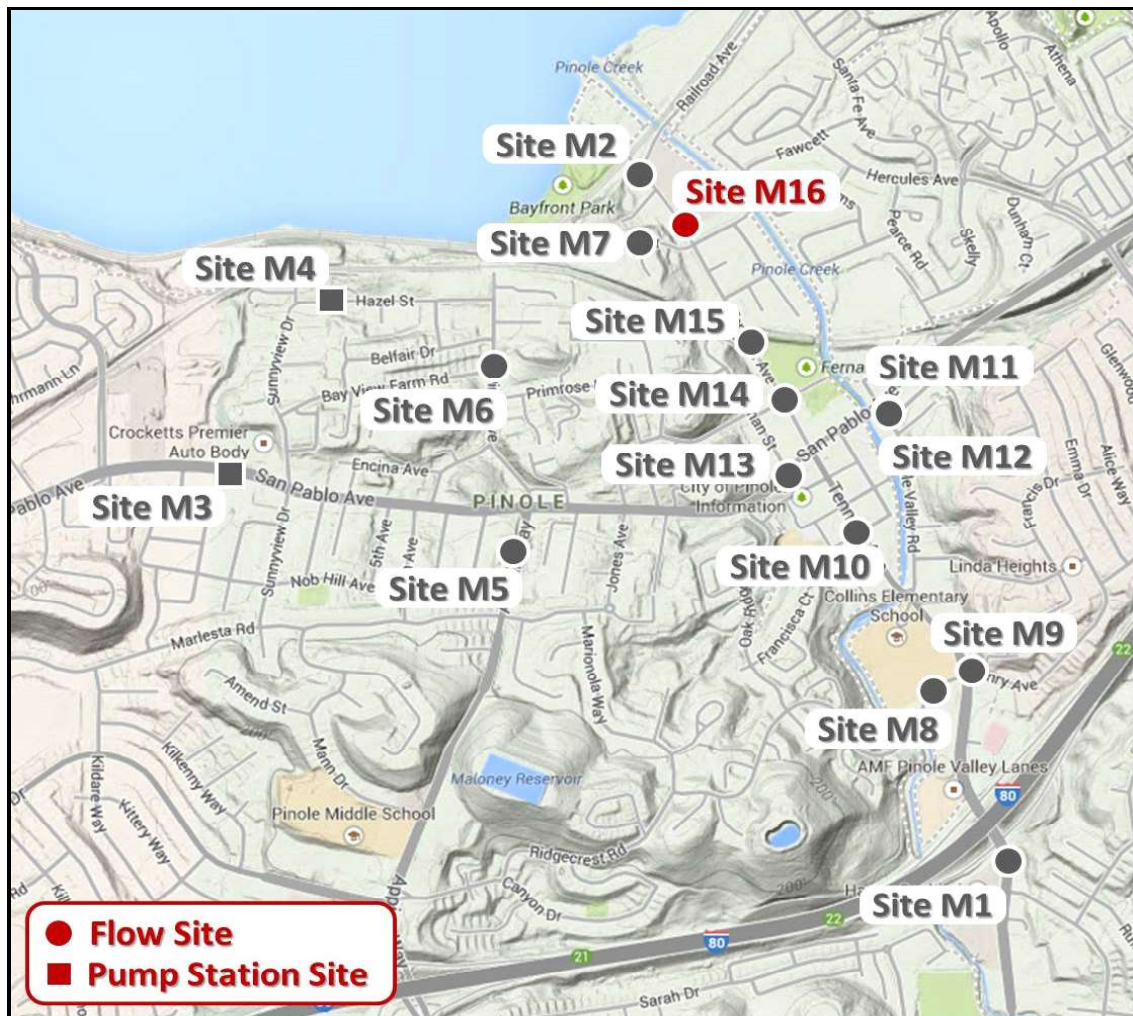
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M16

Location: Tennant Ave. north of Orleans Dr.

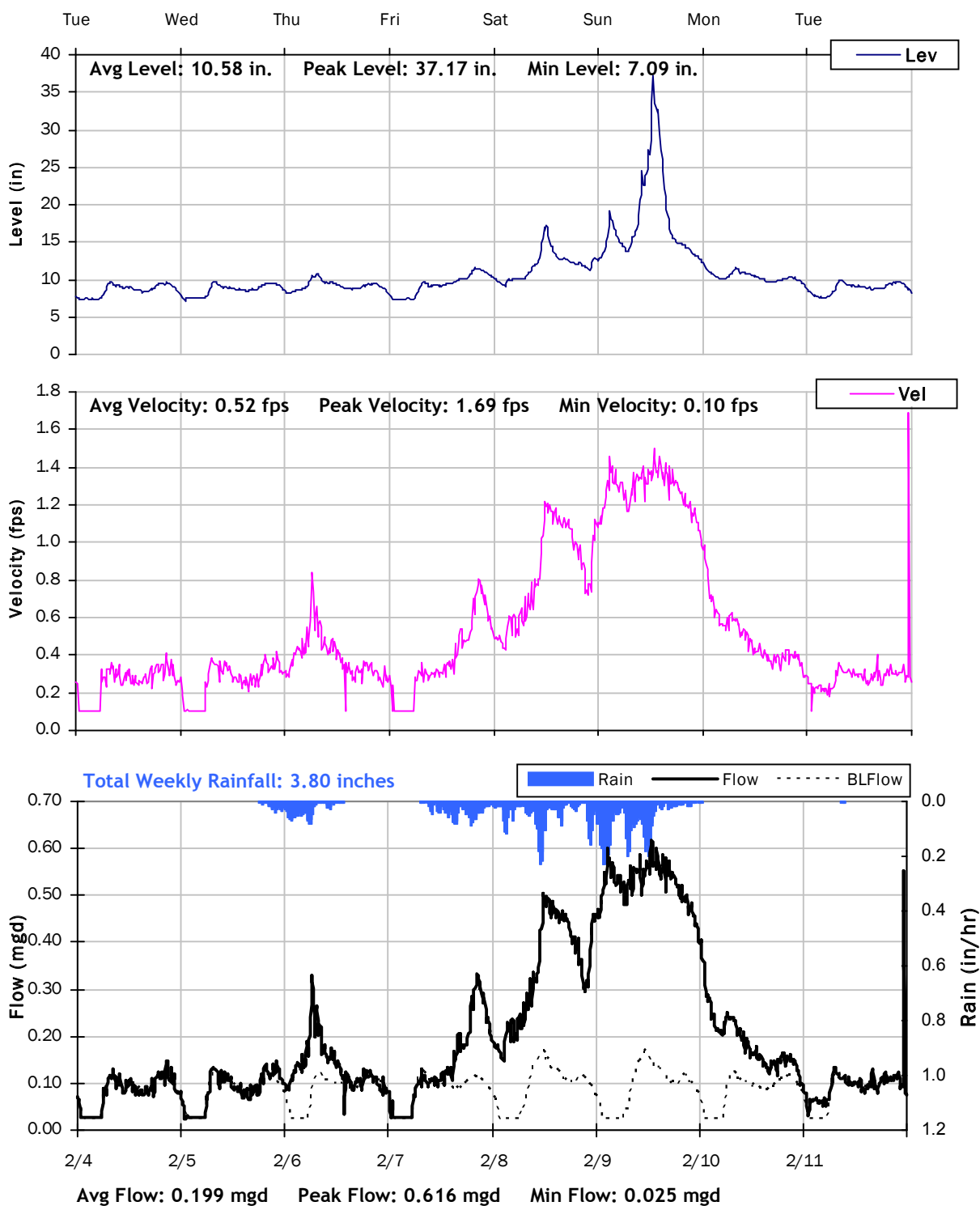
Data Summary Report



Vicinity Map: Site M16

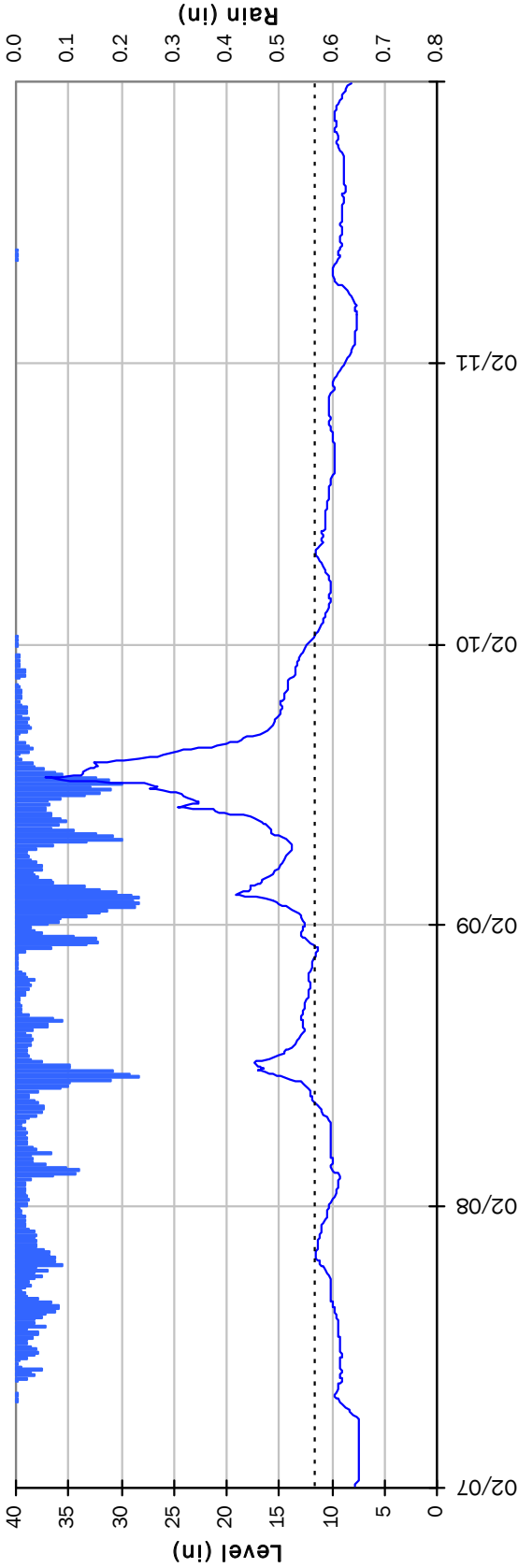
SITE M16

Weekly Level, Velocity and Flow Hydrographs



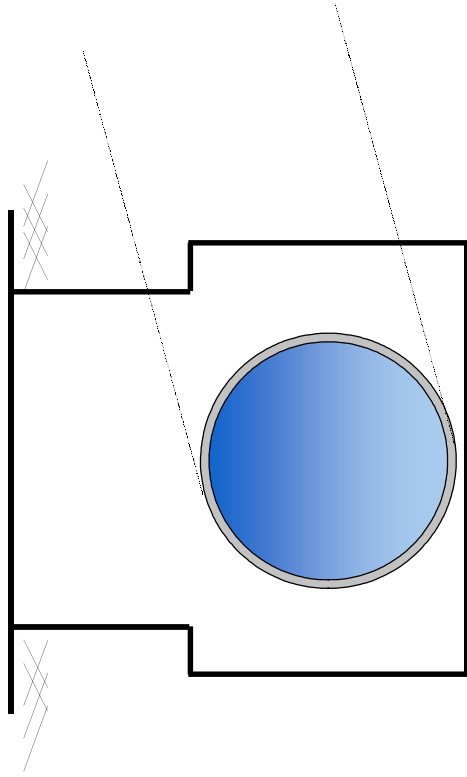
SITE M16 Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



Pipe Diameter: 11.5 inches
Peak Measured Level: 37.2 inches
Peak d/D Ratio: 3.23

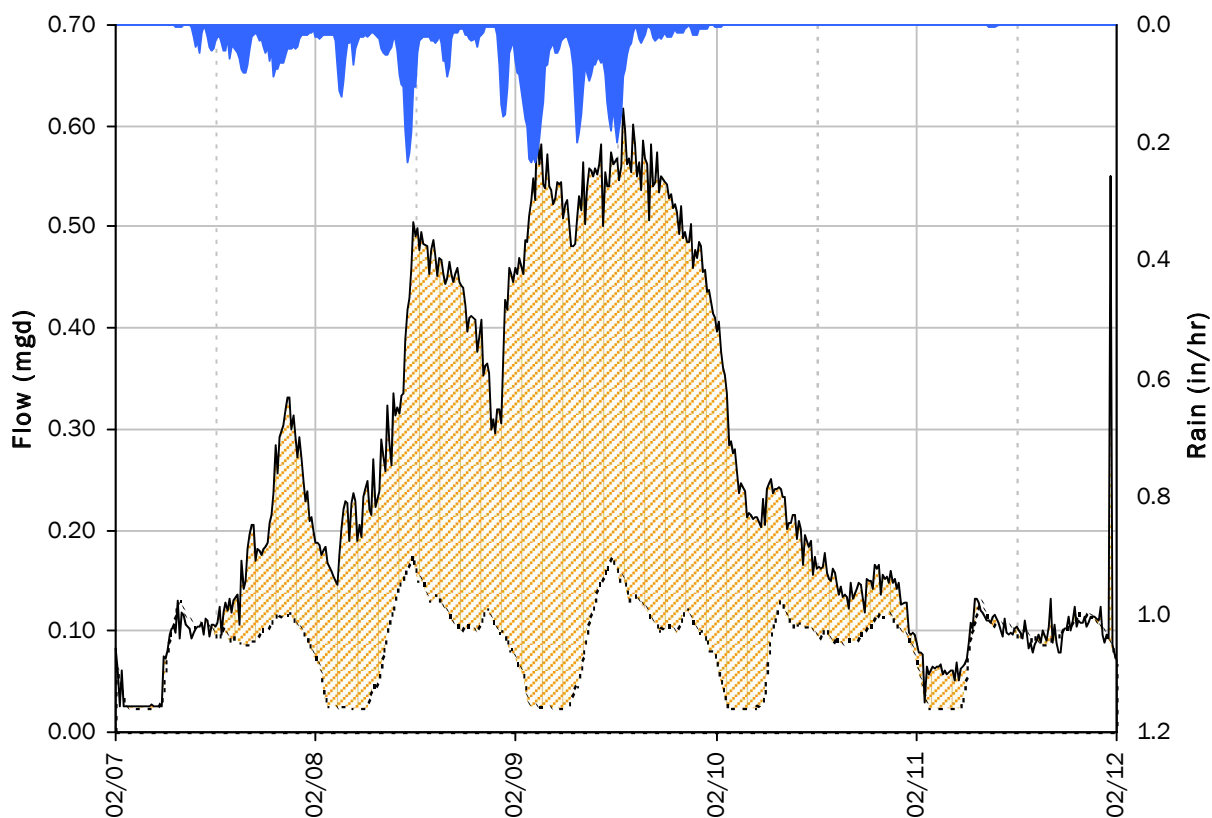
Surcharged 25.7 inches over crown





SITE M16

I/I Summary: Event 1

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 1 Detail GraphStorm Event I/I Analysis (Rain = 3.25 inches)Capacity

Peak Flow: 0.62 mgd

PF: 7.20

Peak Level: 37.17 in

d/D Ratio: 3.23

Inflow / Infiltration

Peak I/I Rate: 0.58 mgd

Total I/I: 858,000 gallons

APPENDIX E. FLOW MONITORING SITES DATA, GRAPHS, INFORMATION: PHASE 2



City of Pinole

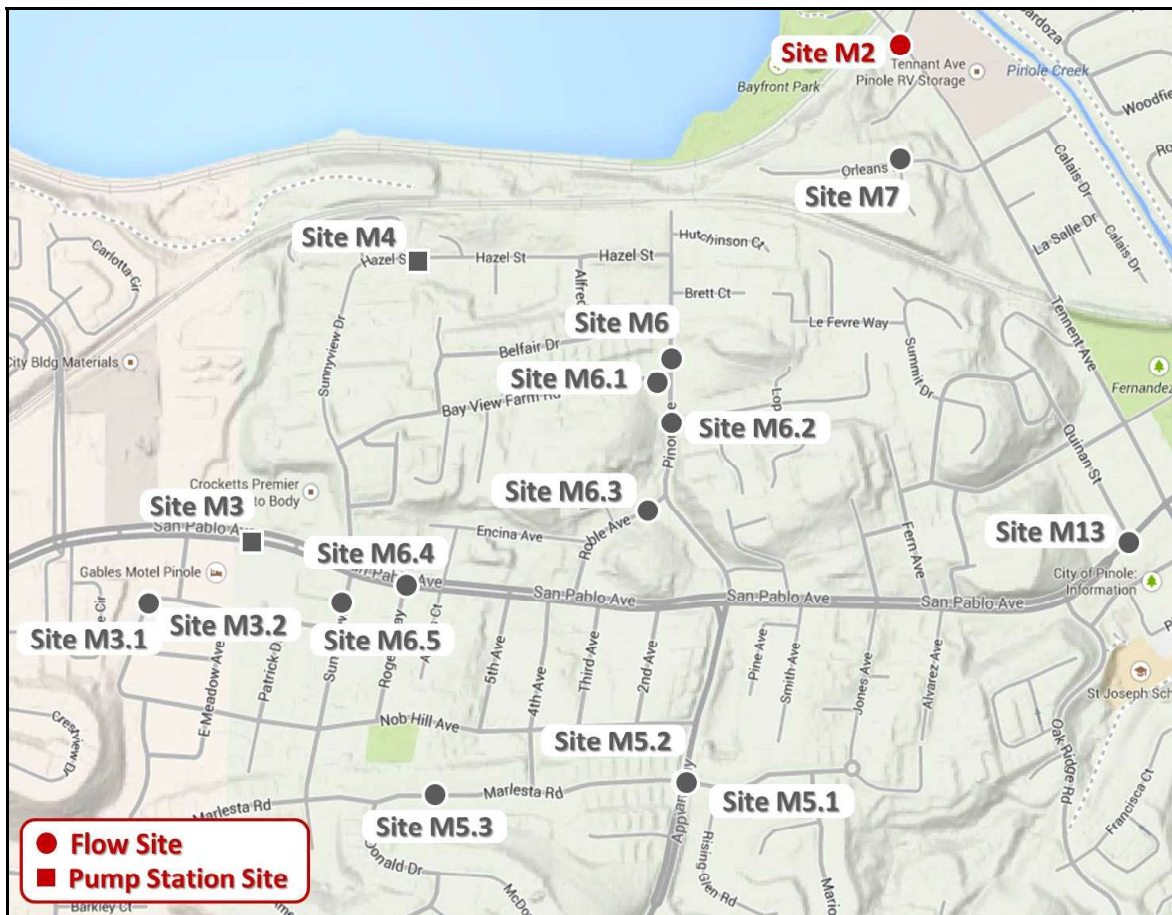
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M2

Location: Tennant Ave., just outside WWTP

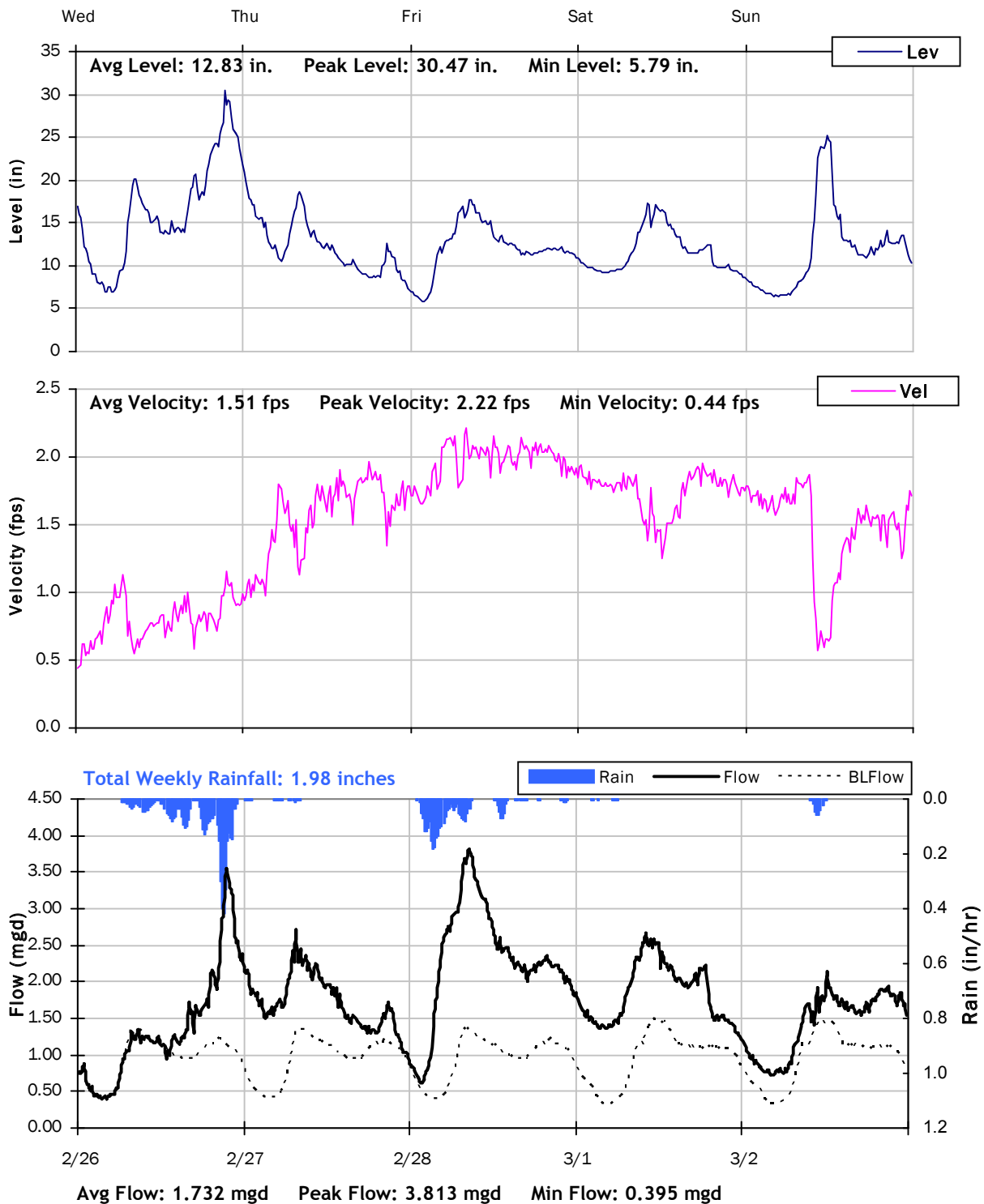
Data Summary Report



Vicinity Map: Site M2

SITE M2

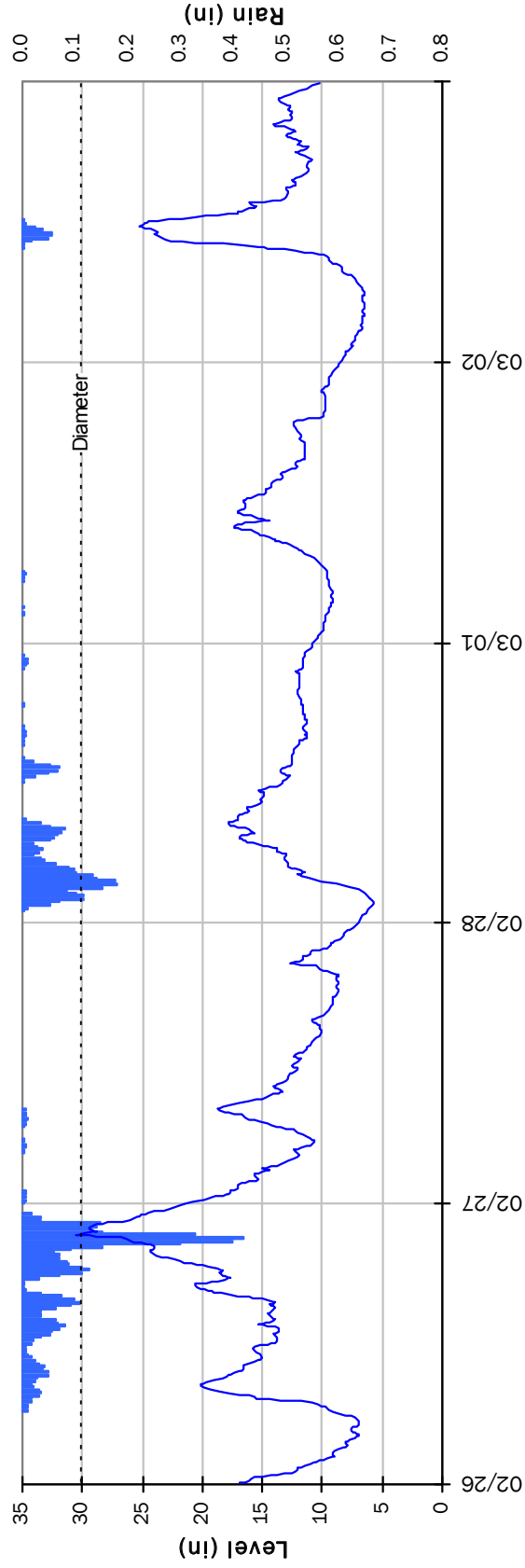
Weekly Level, Velocity and Flow Hydrographs



SITE M2

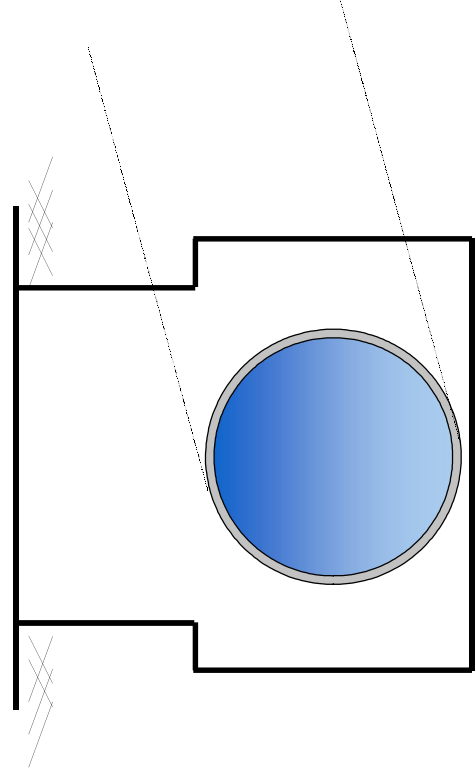
Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



Pipe Diameter: 30 inches
Peak Measured Level: 30.5 inches
Peak d/D Ratio: 1.02

Surcharged 0.5 inches over crown



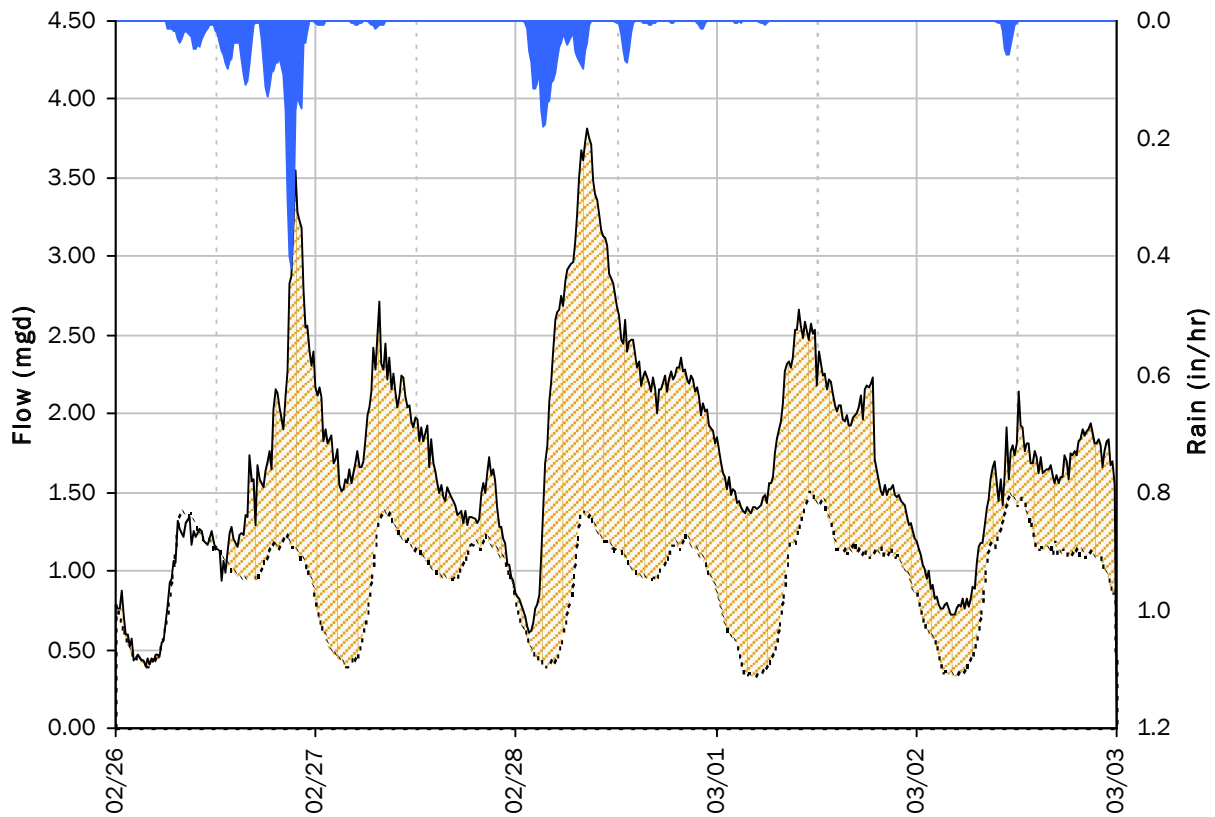


SITE M2

I/I Summary: Event 2

Baseline and Realtime Flows with Rainfall Data over Monitoring Period

Event 2 Detail Graph



Storm Event I/I Analysis (Rain = 1.98 inches)

Capacity

Peak Flow: 3.81 mgd

PF: 4.02

Peak Level: 30.47 in

d/D Ratio: 1.02

Inflow / Infiltration

Peak I/I Rate: 2.47 mgd

Total I/I: 3,432,000 gallons

City of Pinole

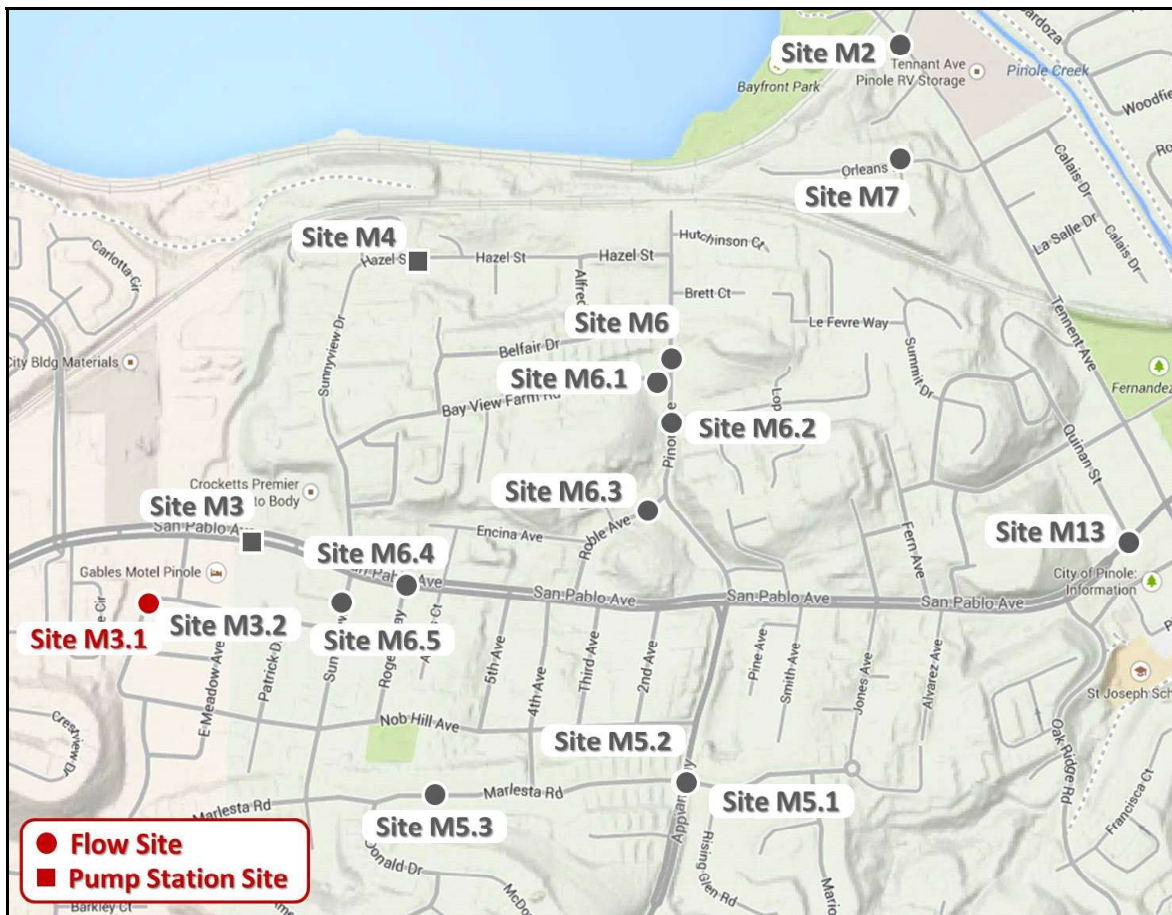
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M3.1

Location: 830 Meadows Ave.

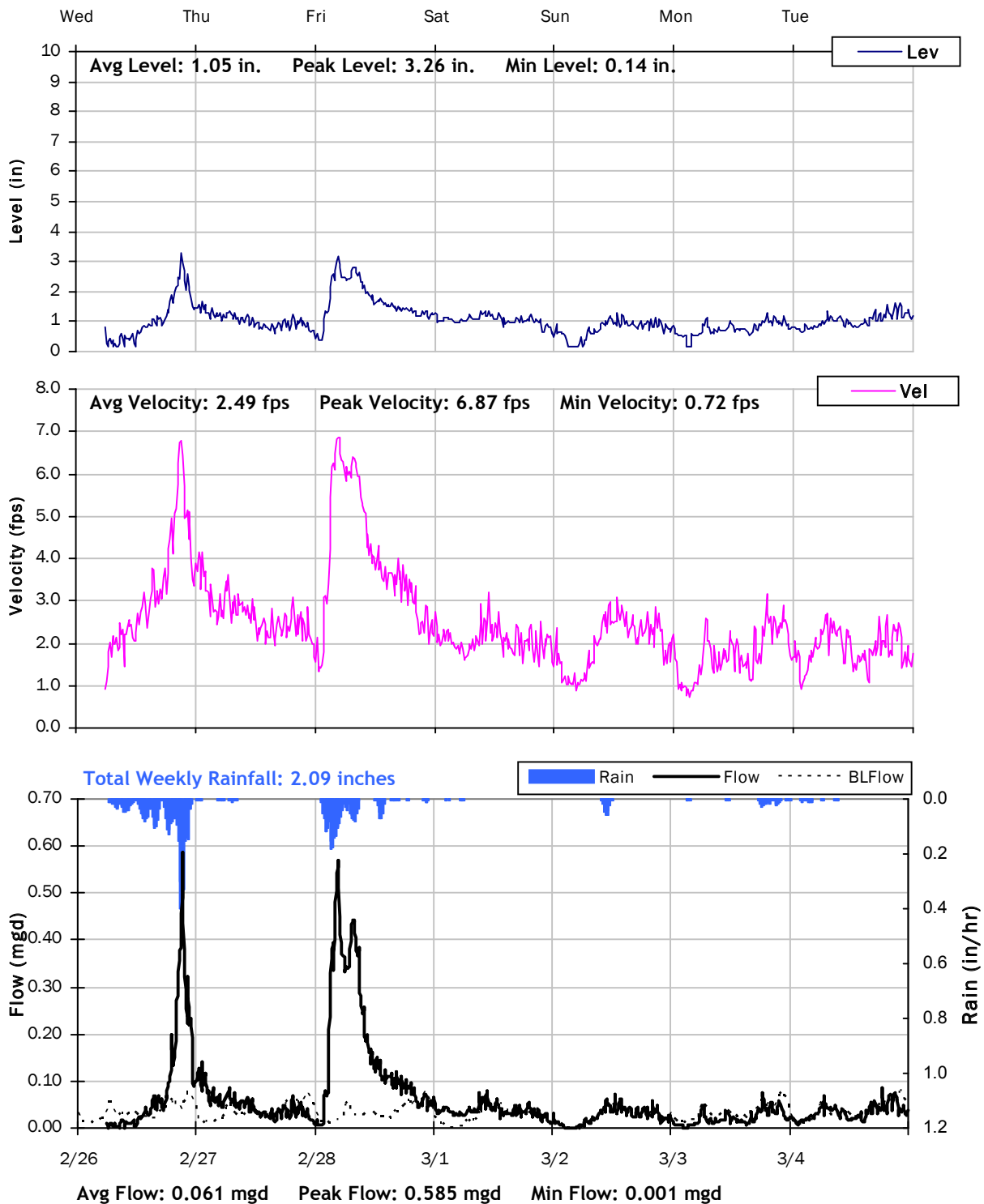
Data Summary Report



Vicinity Map: Site M3.1

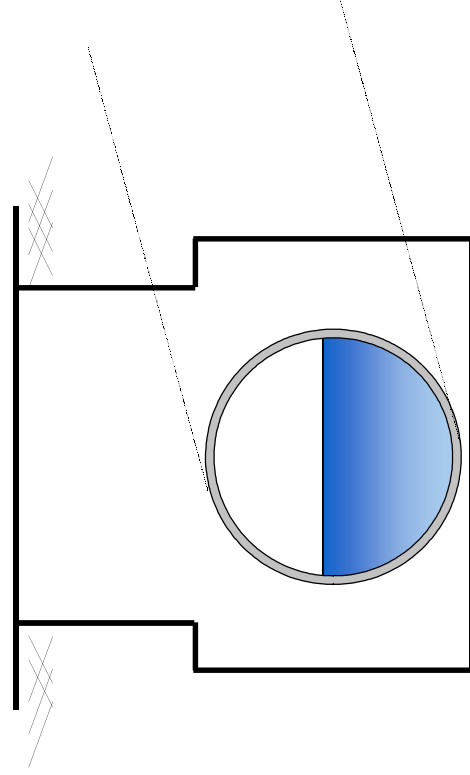
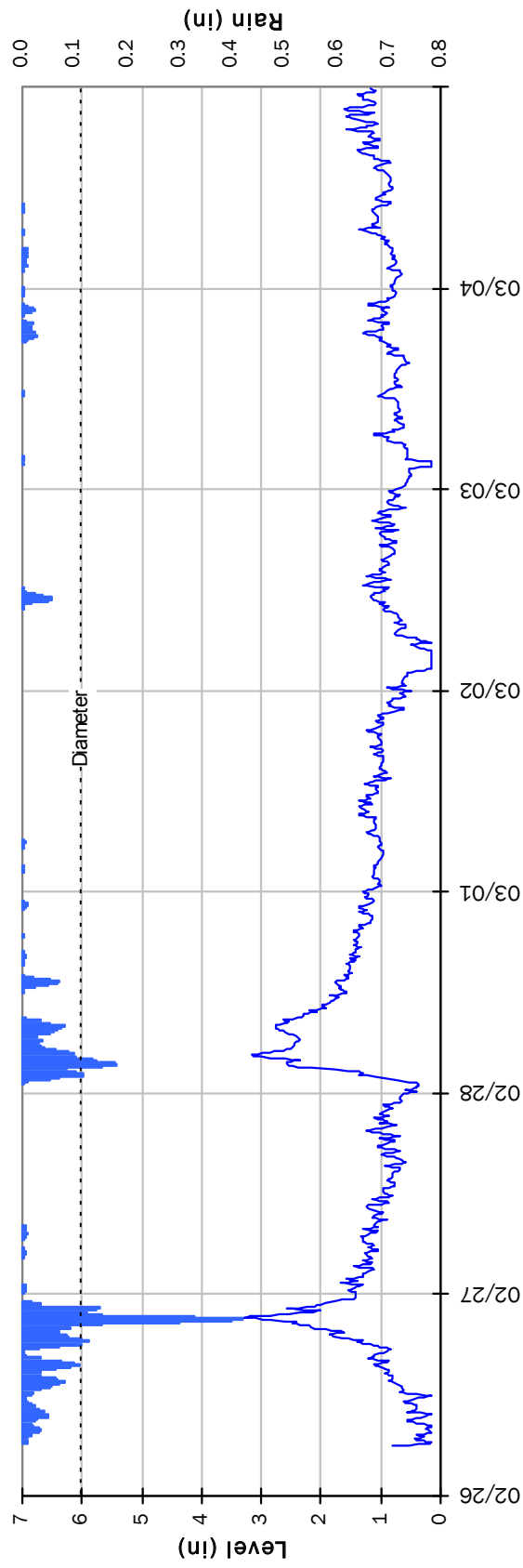
SITE M3.1

Weekly Level, Velocity and Flow Hydrographs



SITE M3.1 Site Capacity and Surge Summary

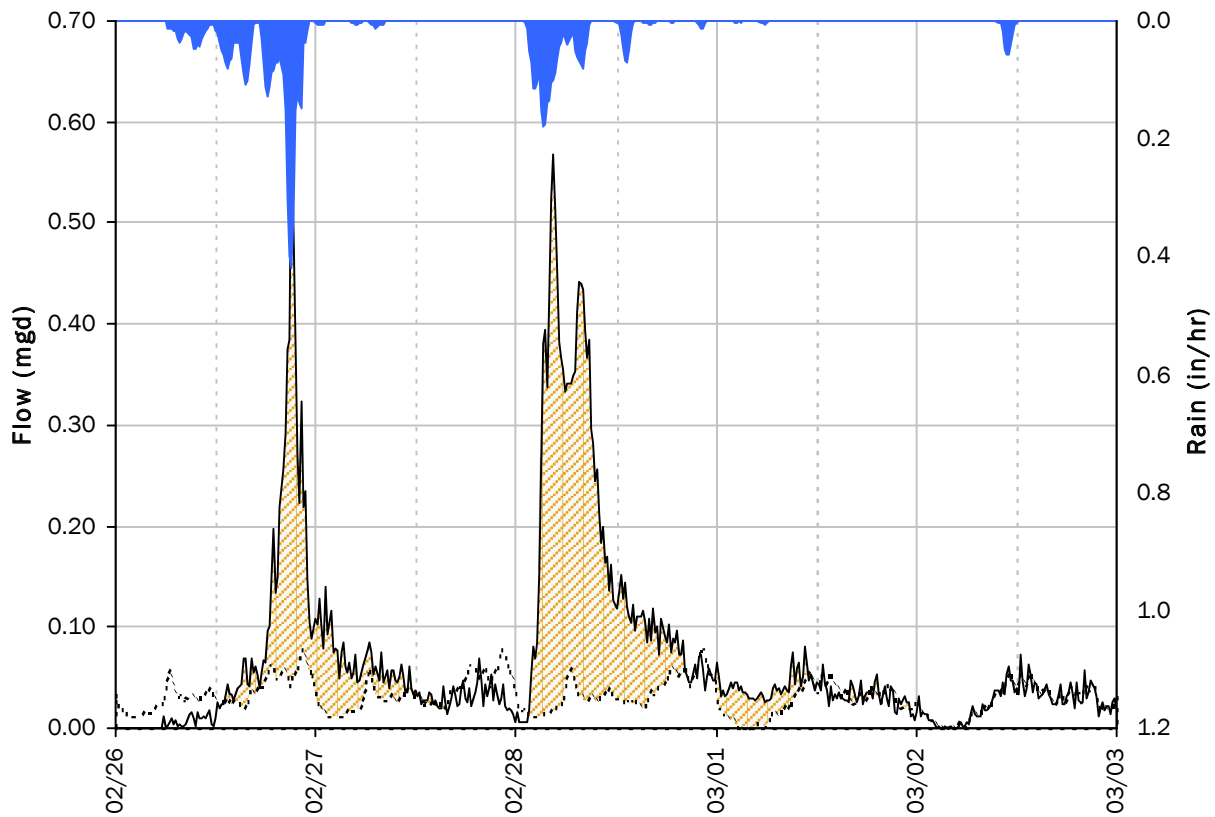
Realtime Flow Levels with Rainfall Data over Monitoring Period



Pipe Diameter: 6 inches
Peak Measured Level: 3.26 inches
Peak d/D Ratio: 0.54

SITE M3.1

I/I Summary: Event 2

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 2 Detail Graph**Storm Event I/I Analysis (Rain = 1.98 inches)**Capacity

Peak Flow: 0.58 mgd

PF: 18.34

Peak Level: 3.26 in

d/D Ratio: 0.54

Inflow / Infiltration

Peak I/I Rate: 0.55 mgd

Total I/I: 213,000 gallons

City of Pinole

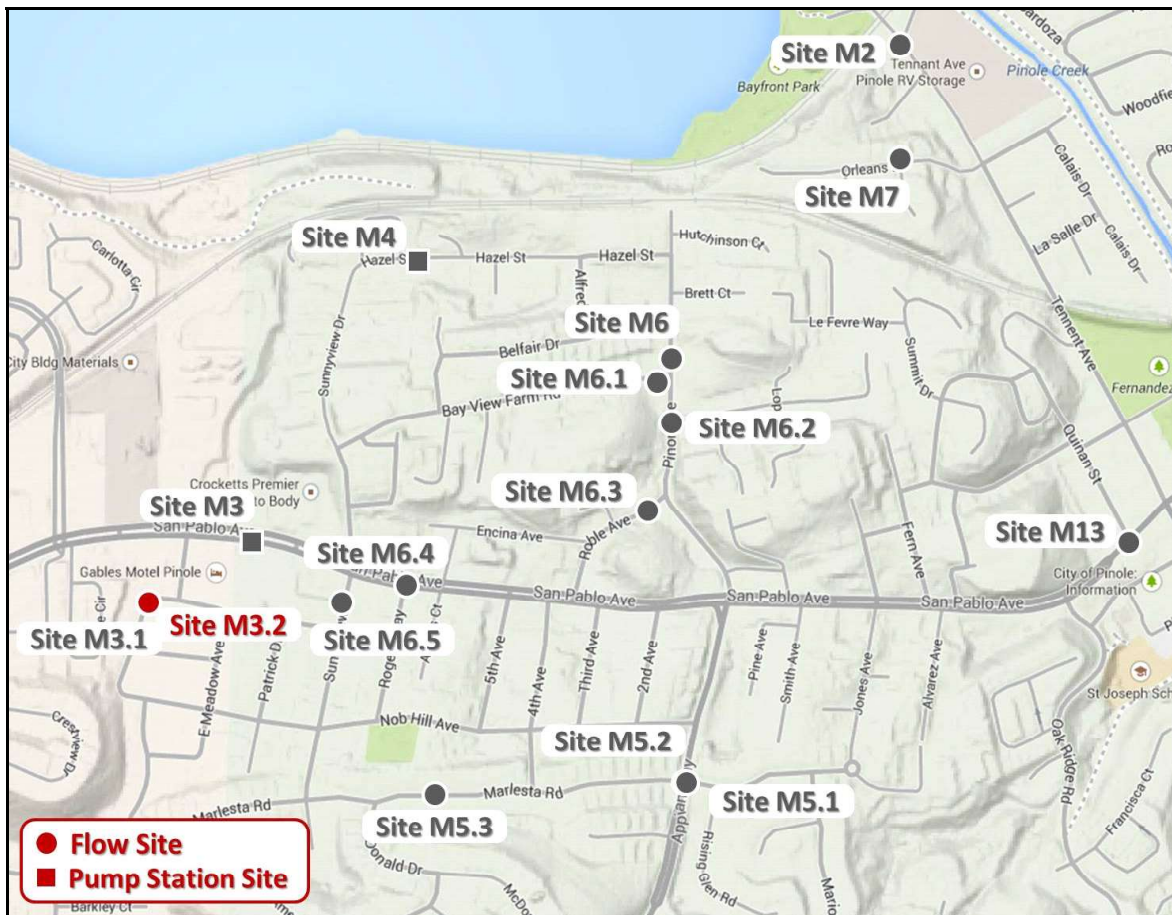
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M3.2

Location: 830 Meadows Ave.

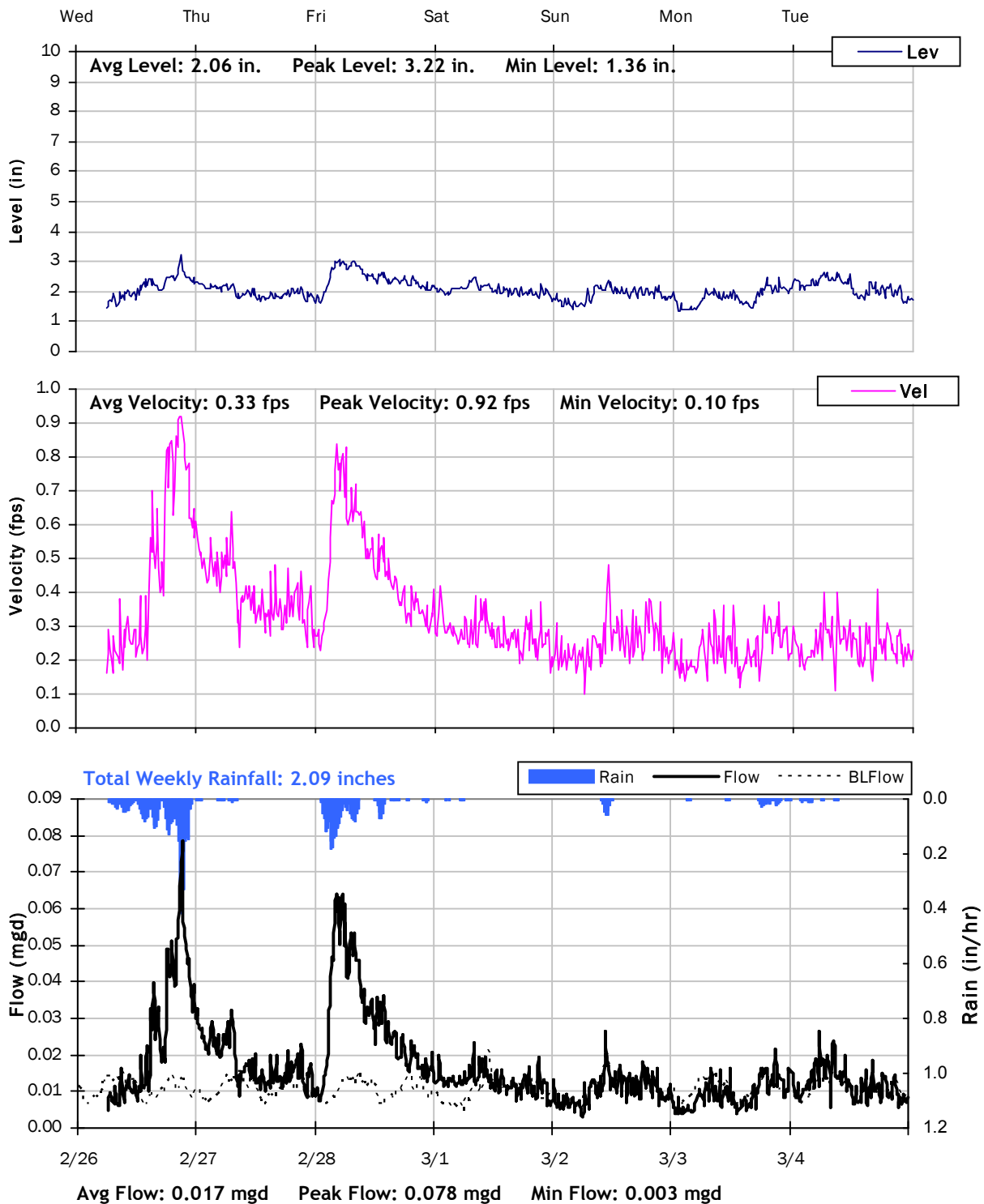
Data Summary Report



Vicinity Map: Site M3.2

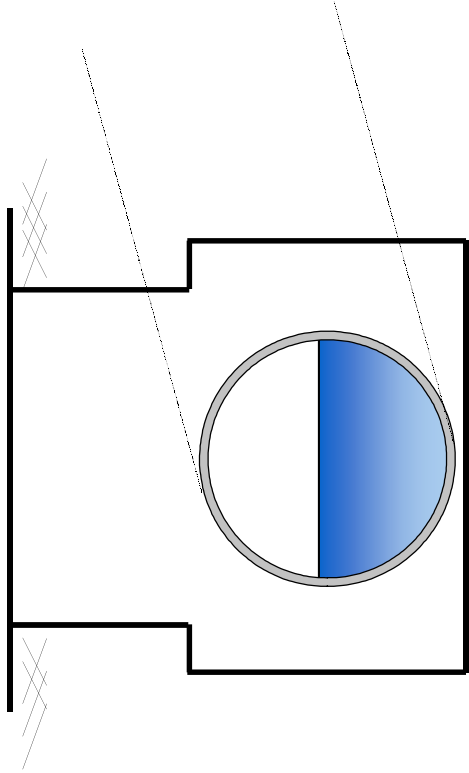
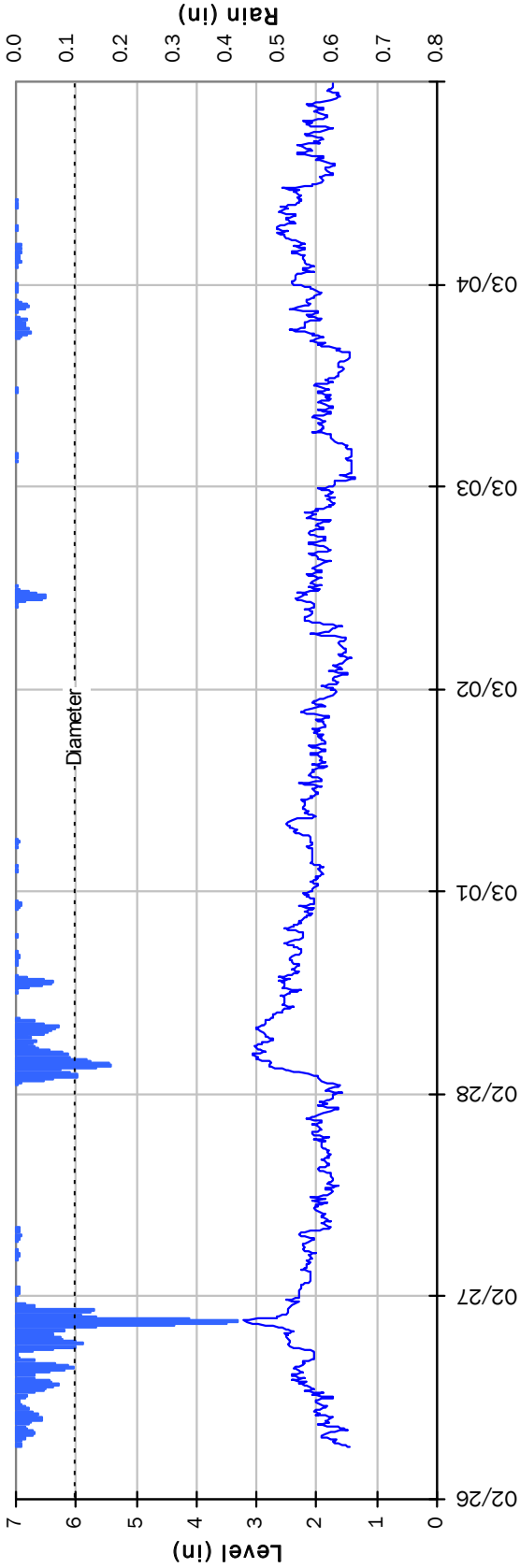
SITE M3.2

Weekly Level, Velocity and Flow Hydrographs



SITE M3.2 Site Capacity and Surge Summary

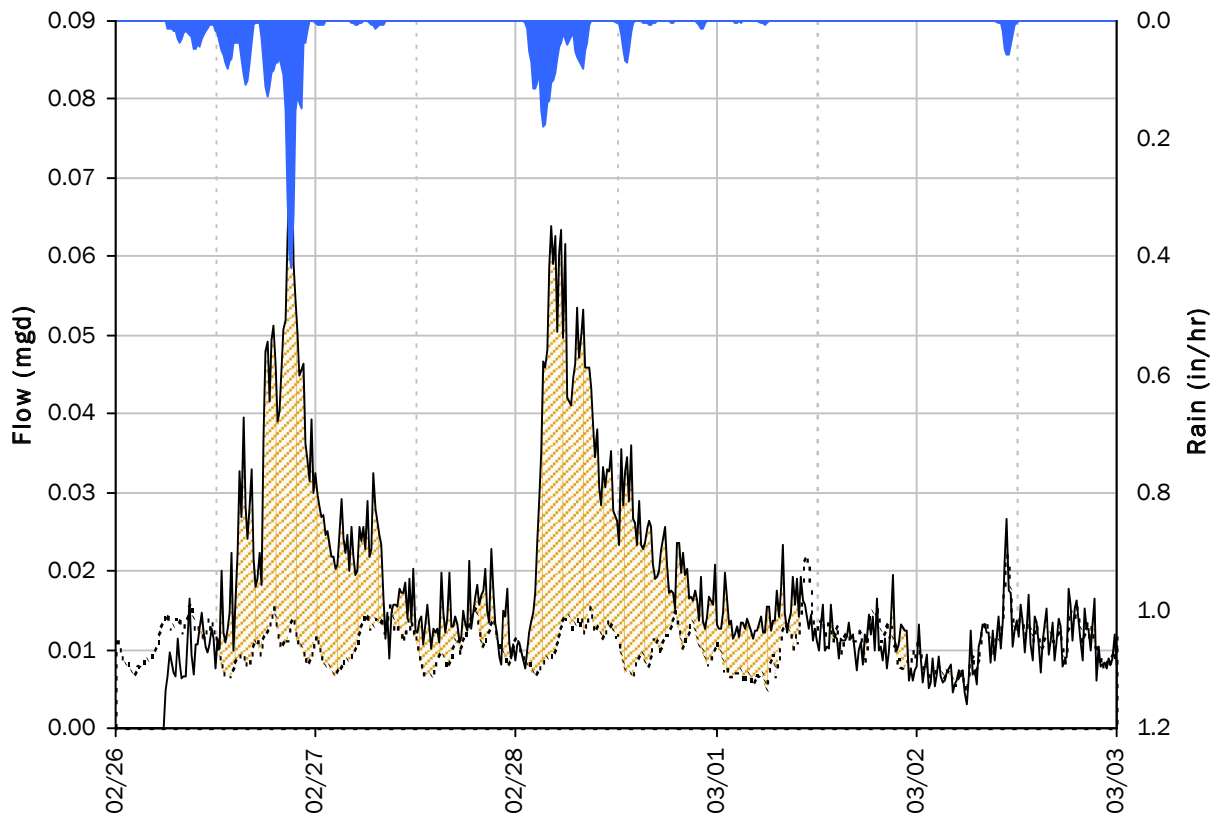
Realtime Flow Levels with Rainfall Data over Monitoring Period



Pipe Diameter: 6 inches
Peak Measured Level: 3.22 inches
Peak d/D Ratio: 0.54

SITE M3.2

I/I Summary: Event 2

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 2 Detail Graph**Storm Event I/I Analysis (Rain = 1.98 inches)**Capacity

Peak Flow: 0.08 mgd

PF: 7.34

Peak Level: 3.22 in

d/D Ratio: 0.54

Inflow / Infiltration

Peak I/I Rate: 0.06 mgd

Total I/I: 41,000 gallons

City of Pinole

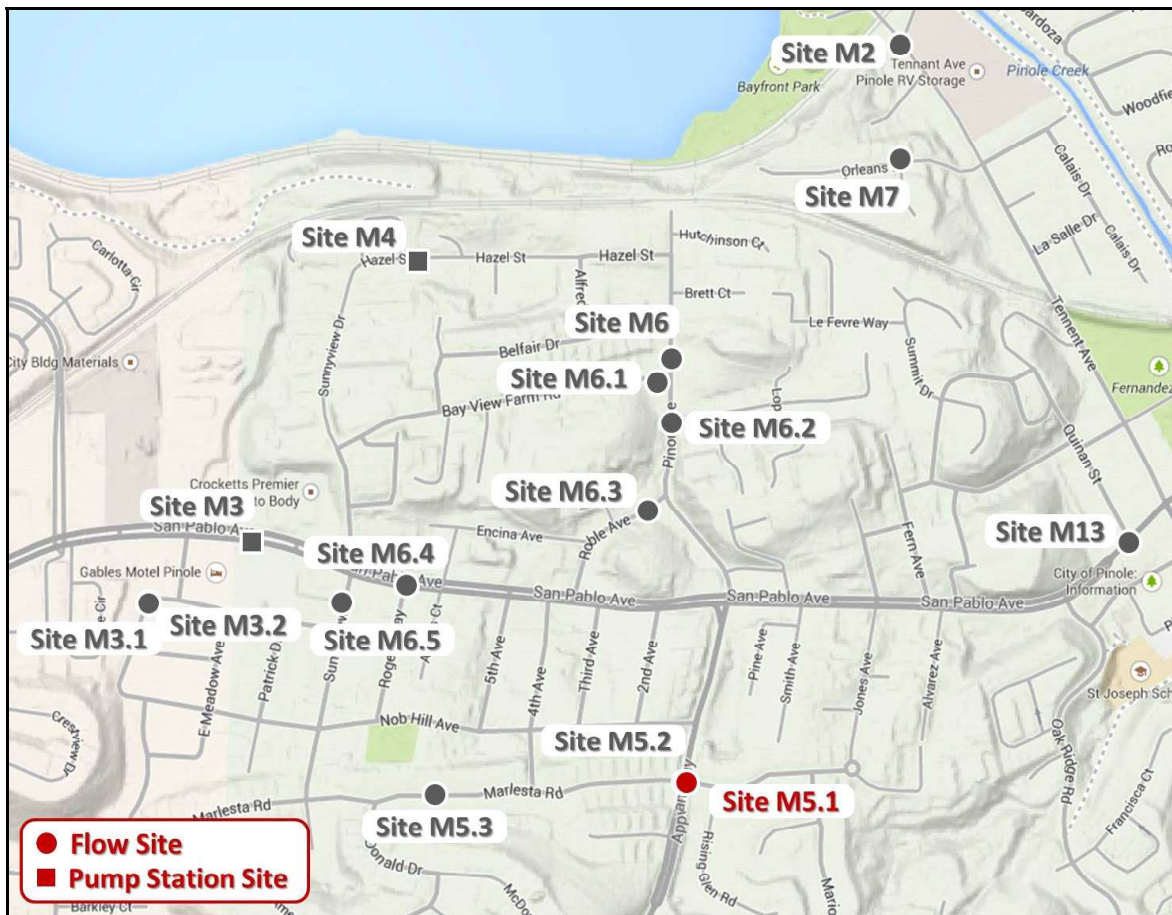
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M5.1

Location: Intersection of Appian Way and Marlesta Rd.

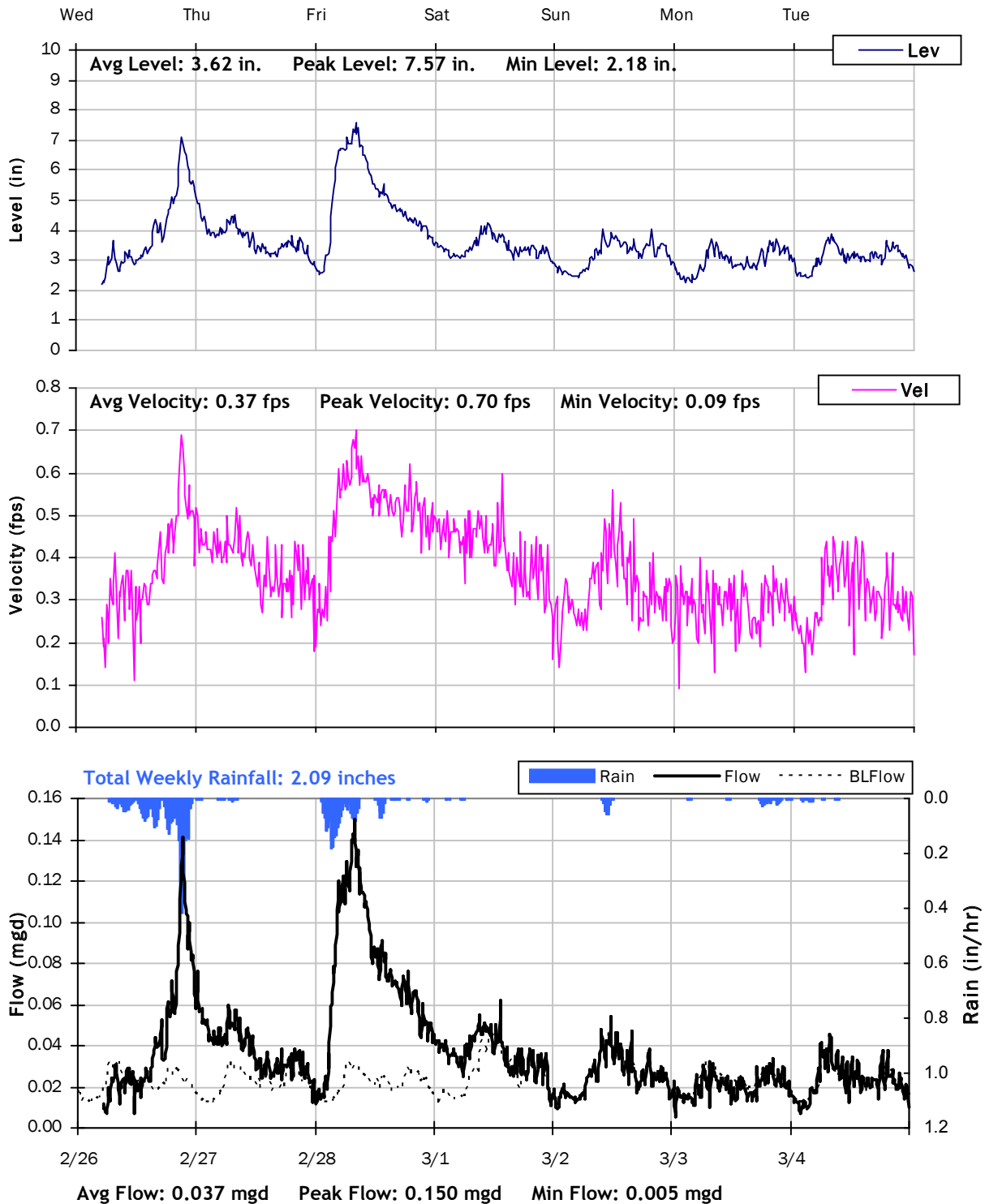
Data Summary Report



Vicinity Map: Site M5.1

SITE M5.1

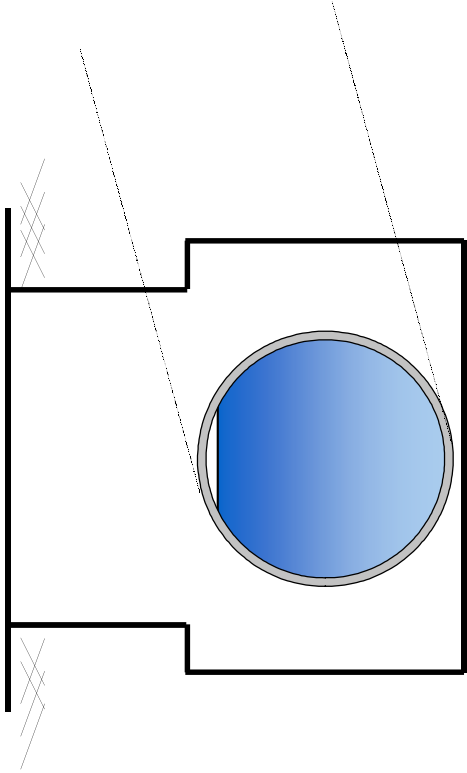
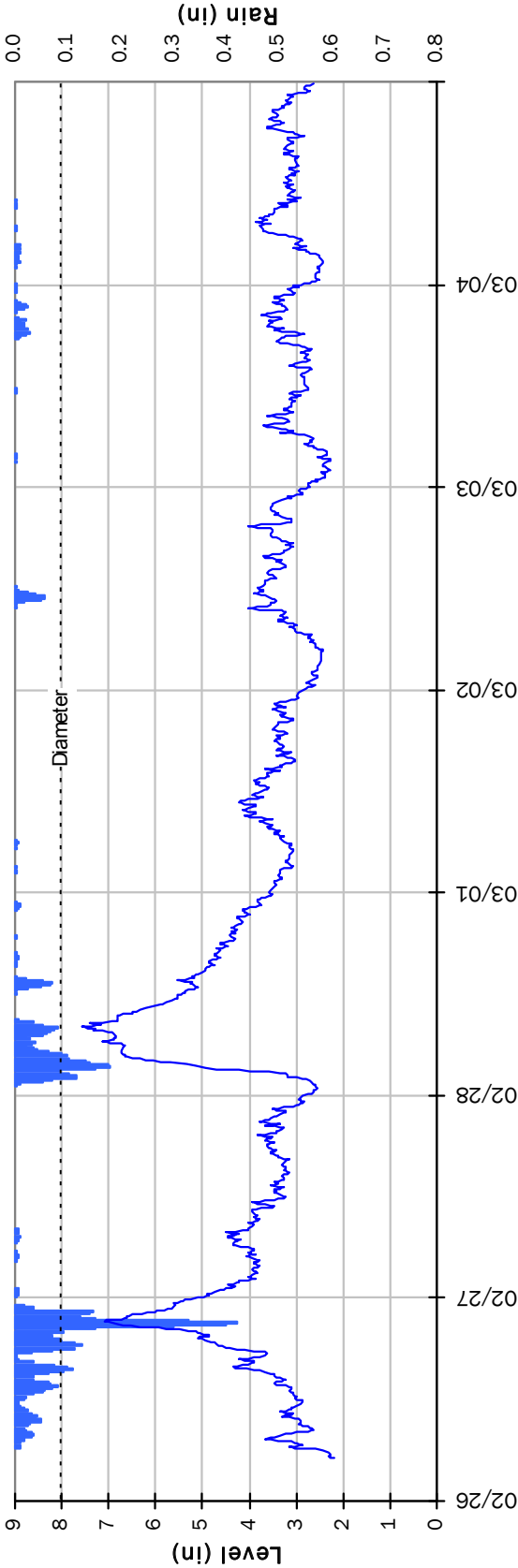
Weekly Level, Velocity and Flow Hydrographs



SITE M5.1

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period

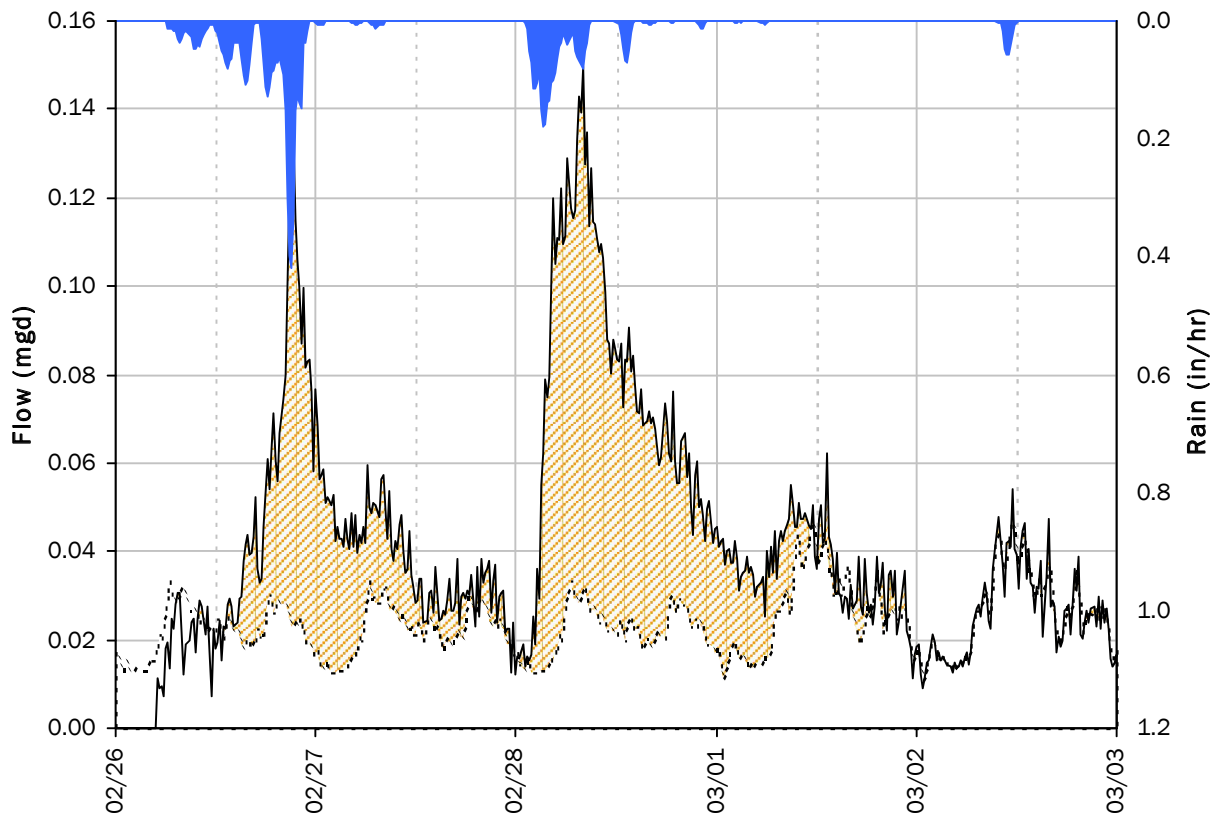


Pipe Diameter: 8 inches
Peak Measured Level: 7.57 inches
Peak d/D Ratio: 0.95



SITE M5.1

I/I Summary: Event 2

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 2 Detail Graph**Storm Event I/I Analysis (Rain = 1.98 inches)**Capacity

Peak Flow: 0.15 mgd

PF: 6.49

Peak Level: 7.57 in

d/D Ratio: 0.95

Inflow / Infiltration

Peak I/I Rate: 0.12 mgd

Total I/I: 98,000 gallons

City of Pinole

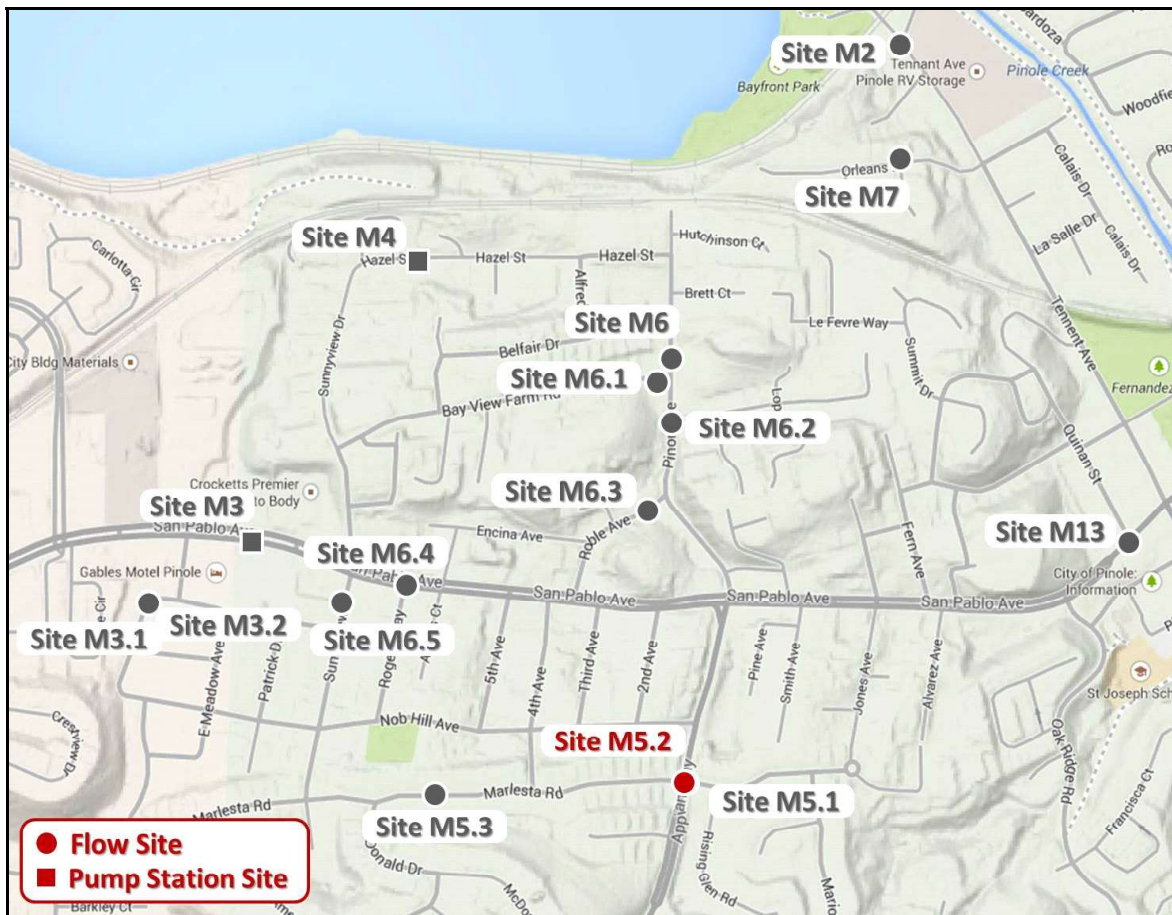
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M5.2

Location: Intersection of Appian Way and Marlesta Rd.

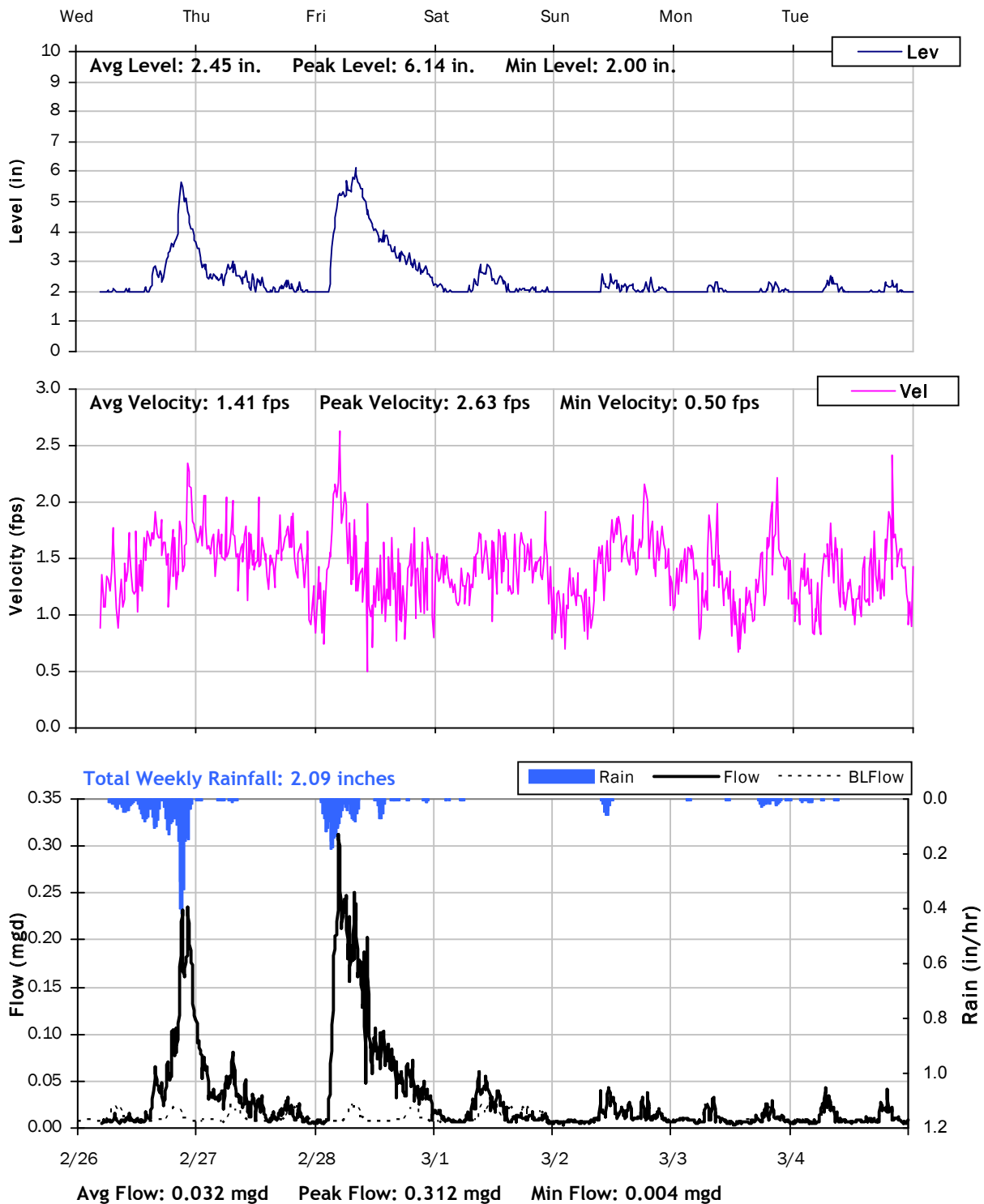
Data Summary Report



Vicinity Map: Site M5.2

SITE M5.2

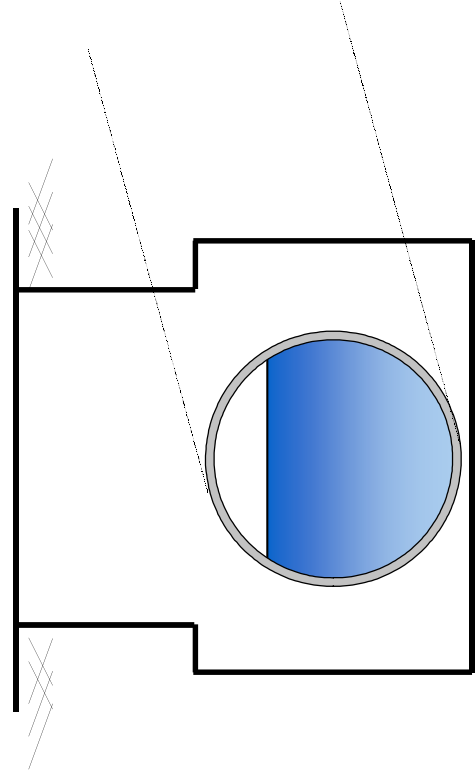
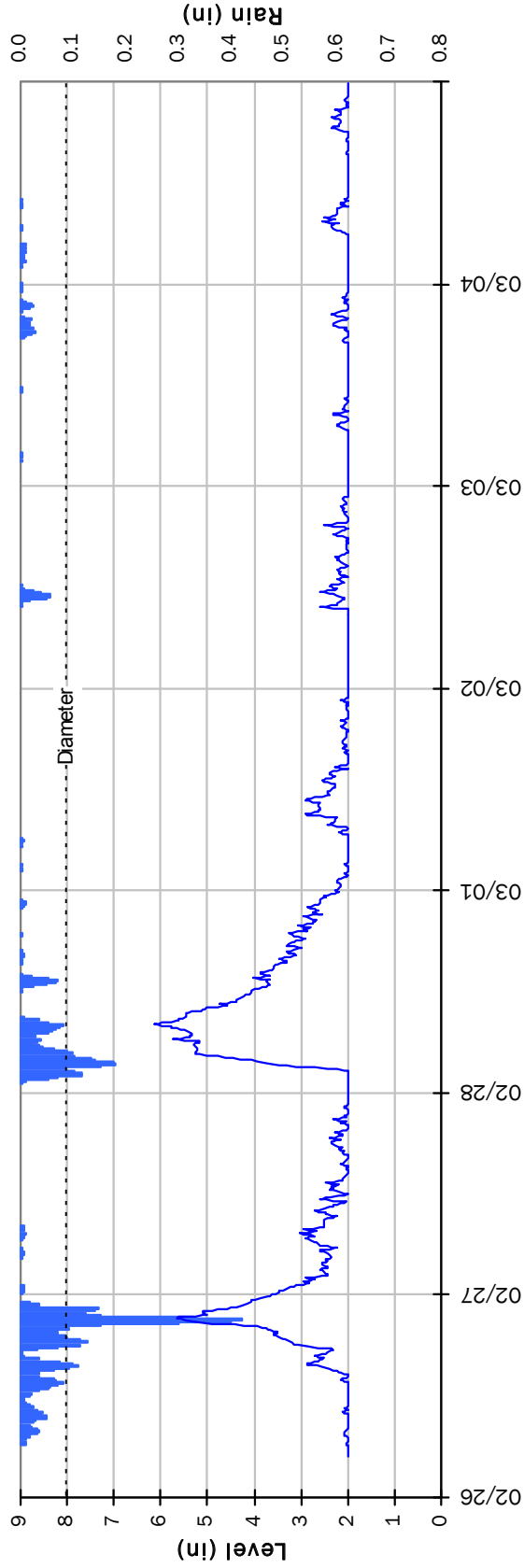
Weekly Level, Velocity and Flow Hydrographs





SITE M5.2
Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



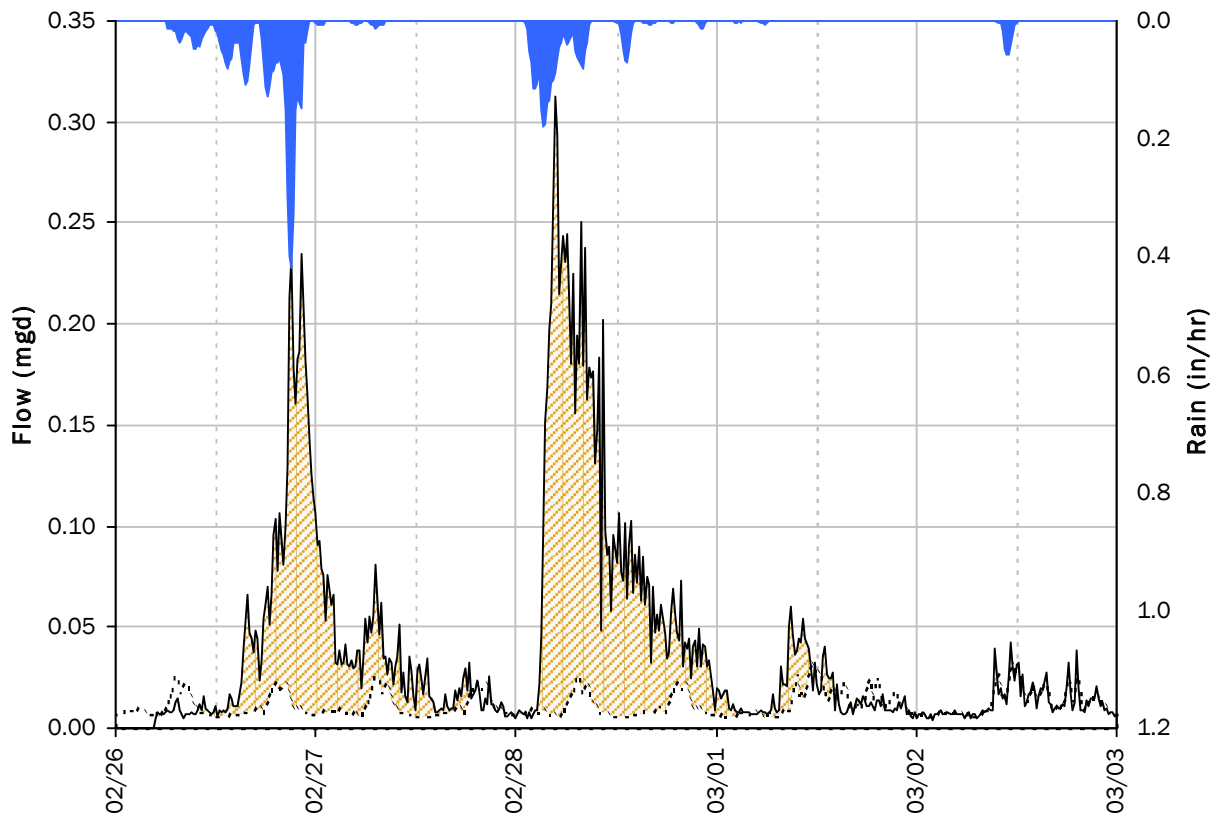


SITE M5.2

I/I Summary: Event 2

Baseline and Realtime Flows with Rainfall Data over Monitoring Period

Event 2 Detail Graph



Storm Event I/I Analysis (Rain = 1.98 inches)

Capacity

Peak Flow: 0.31 mgd

PF: 27.55

Peak Level: 6.14 in

d/D Ratio: 0.77

Inflow / Infiltration

Peak I/I Rate: 0.31 mgd

Total I/I: 142,000 gallons

City of Pinole

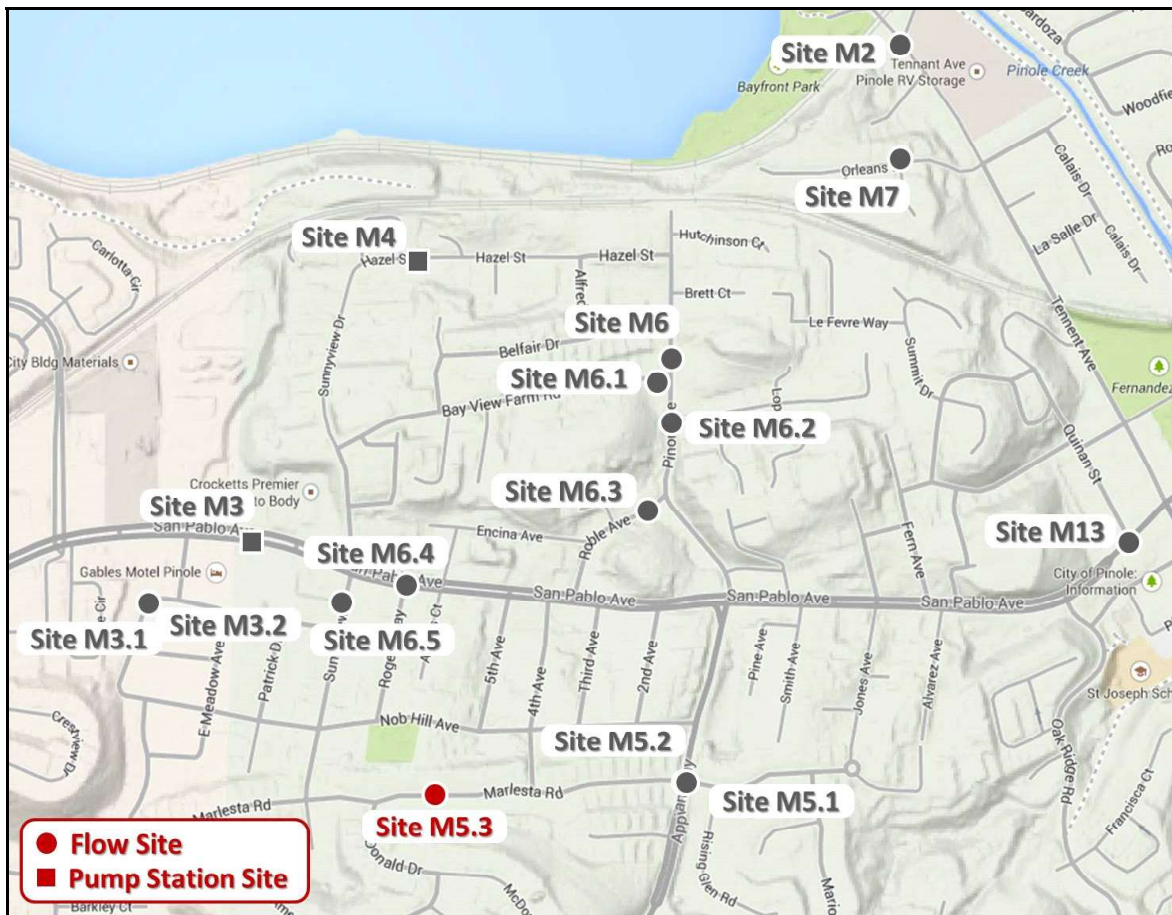
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M5.3

Location: 1171 Marlesta Rd.

Data Summary Report

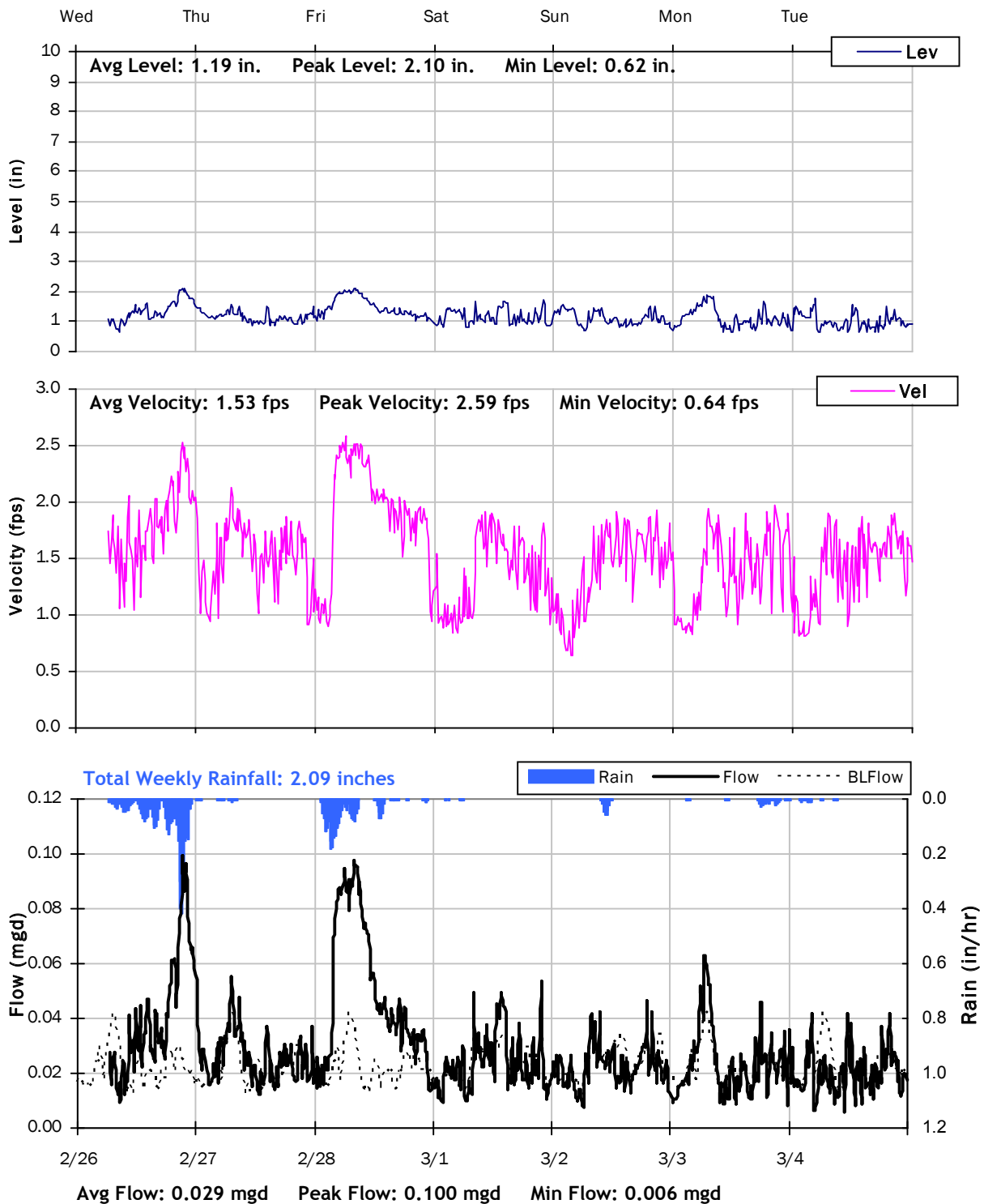


Vicinity Map: Site M5.3



SITE M5.3

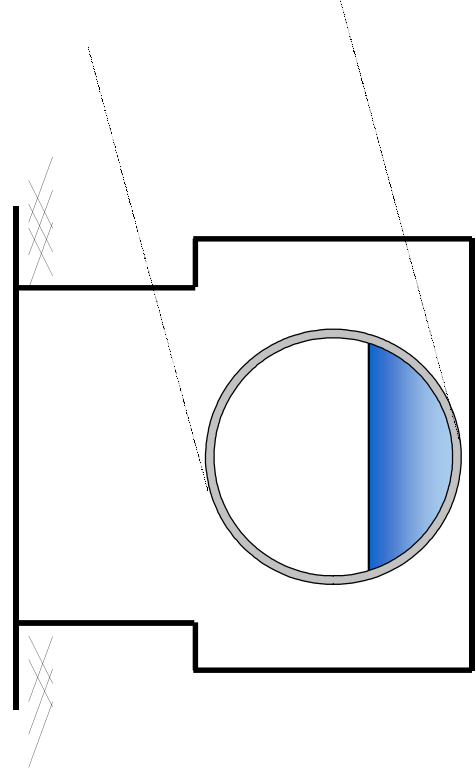
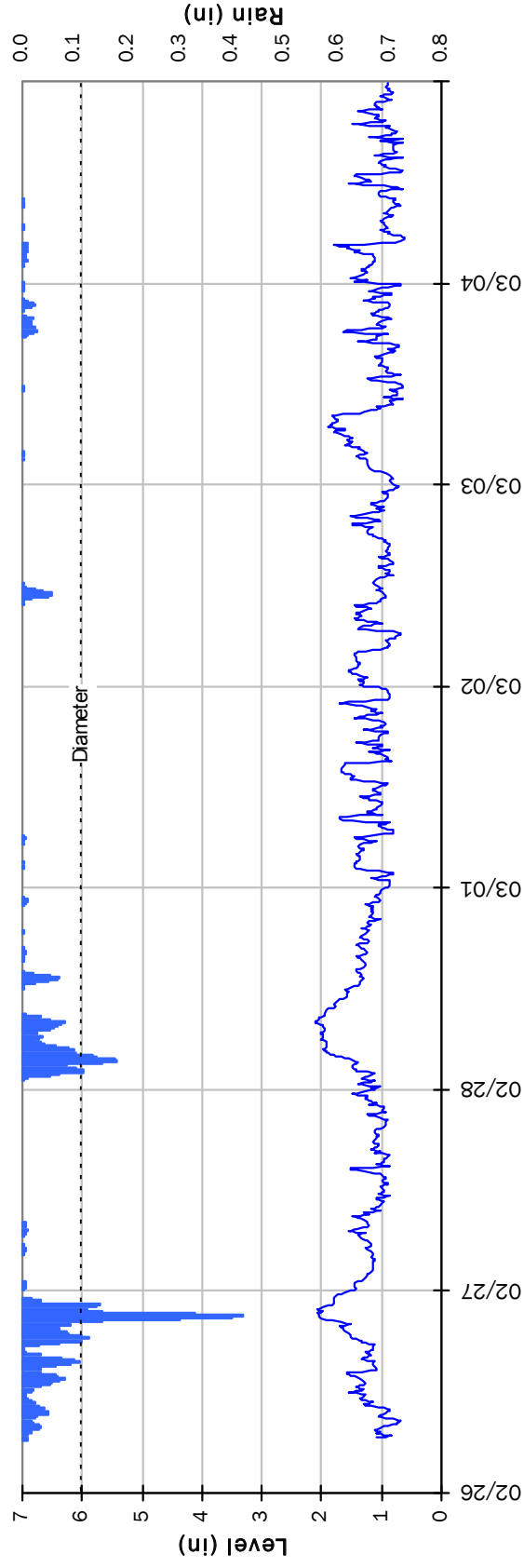
Weekly Level, Velocity and Flow Hydrographs



SITE M5.3

Site Capacity and Surge Summary

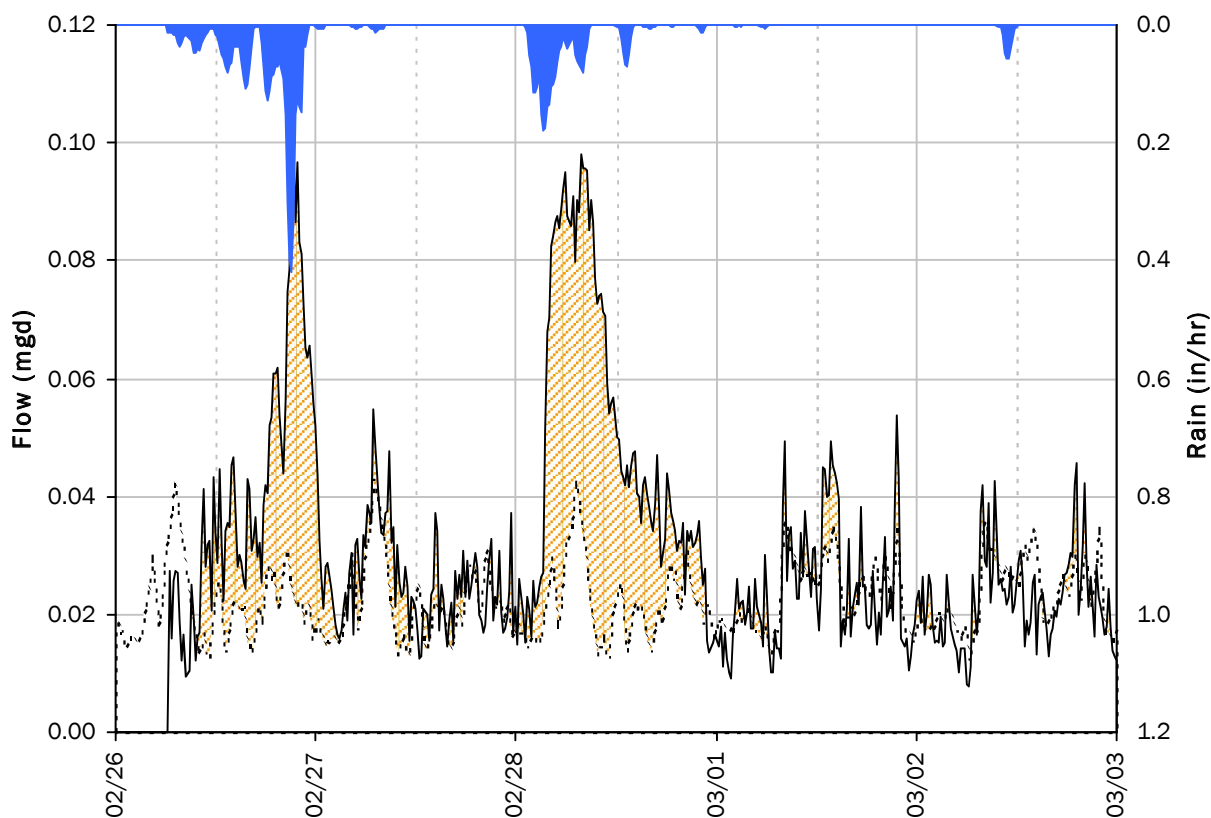
Realtime Flow Levels with Rainfall Data over Monitoring Period





SITE M5.3

I/I Summary: Event 2

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 2 Detail Graph**Storm Event I/I Analysis (Rain = 1.98 inches)**Capacity

Peak Flow: 0.10 mgd

PF: 4.49

Peak Level: 2.10 in

d/D Ratio: 0.35

Inflow / Infiltration

Peak I/I Rate: 0.08 mgd

Total I/I: 47,000 gallons

City of Pinole

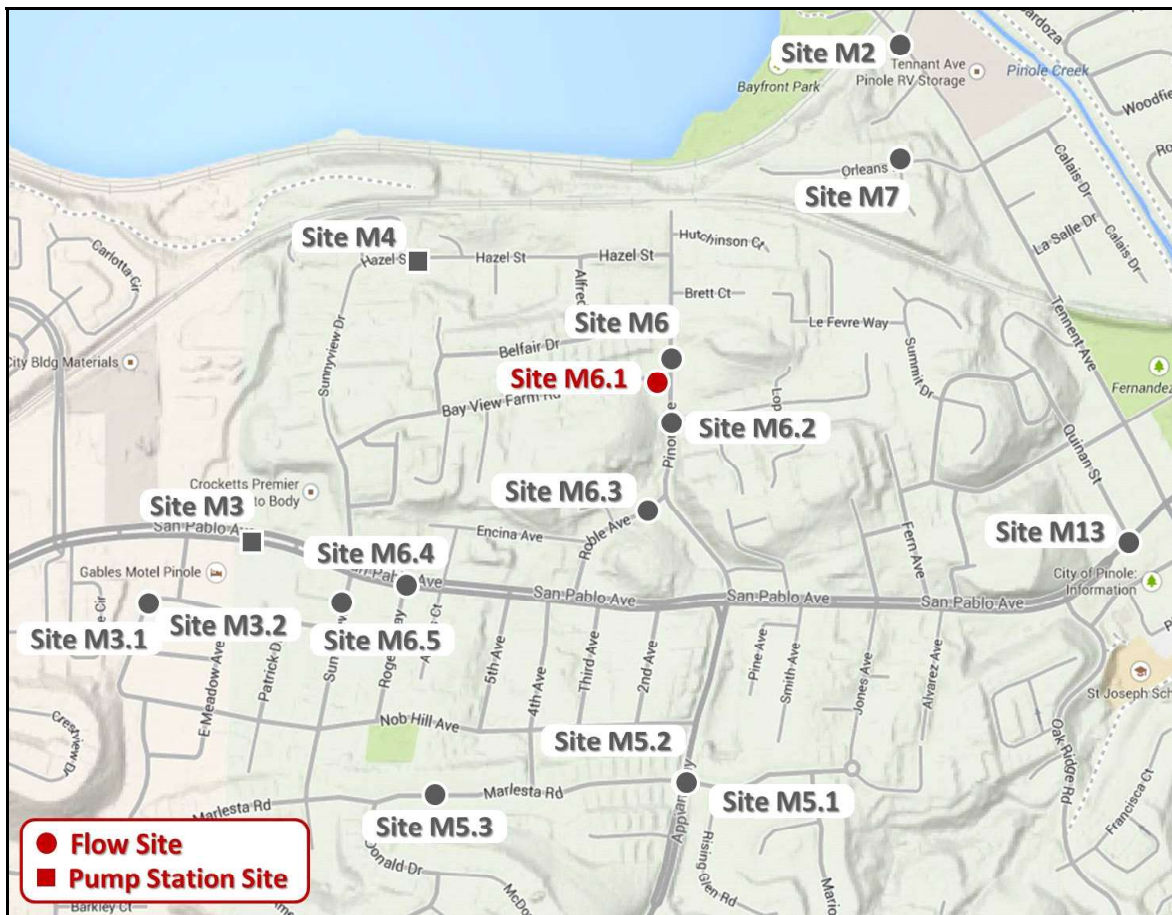
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M6.1

Location: Just west of intersection of Bay View Farm Rd. and Pinon Ave.

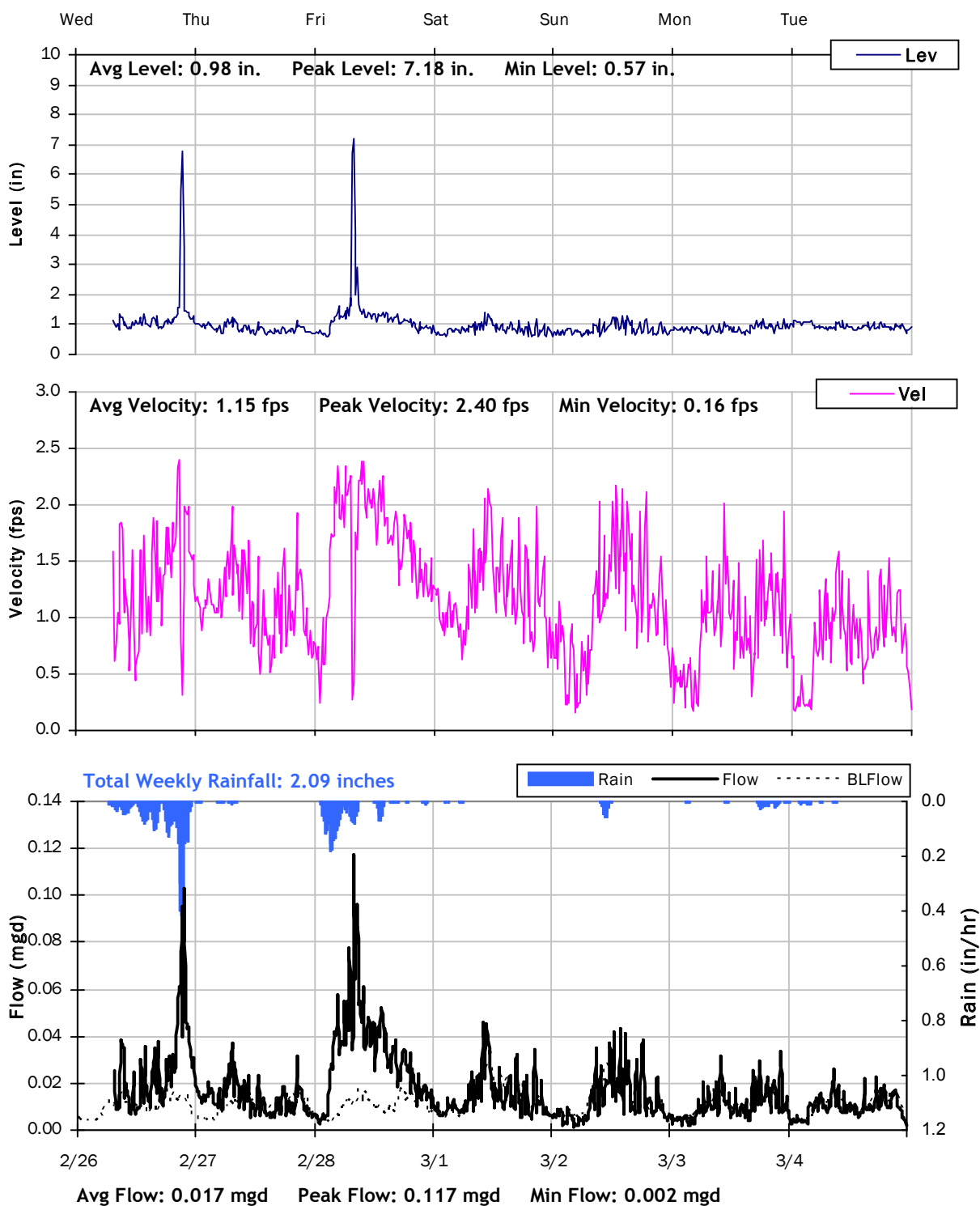
Data Summary Report



Vicinity Map: Site M6.1

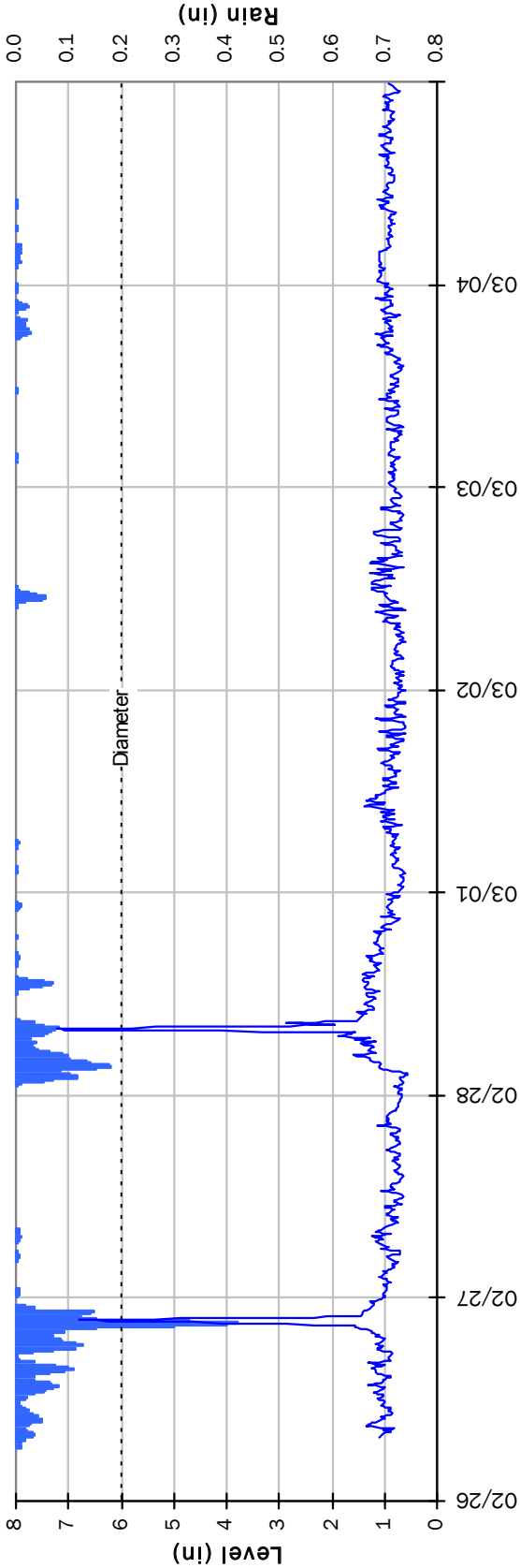
SITE M6.1

Weekly Level, Velocity and Flow Hydrographs



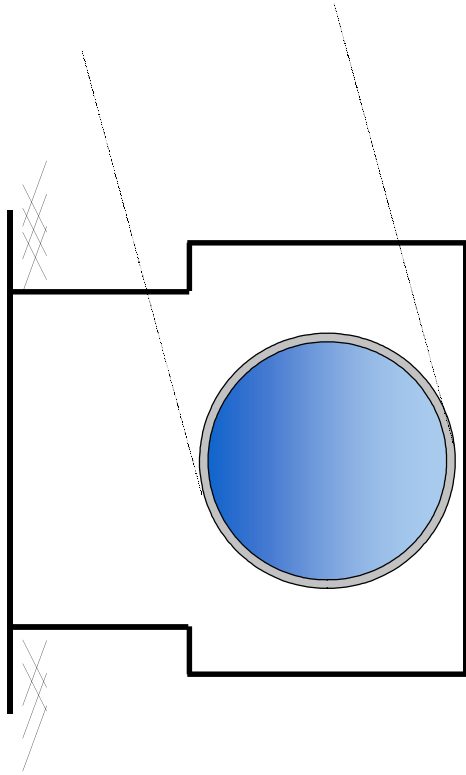
SITE M6.1 Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



Pipe Diameter: 6 inches
Peak Measured Level: 7.18 inches
Peak d/D Ratio: 1.20

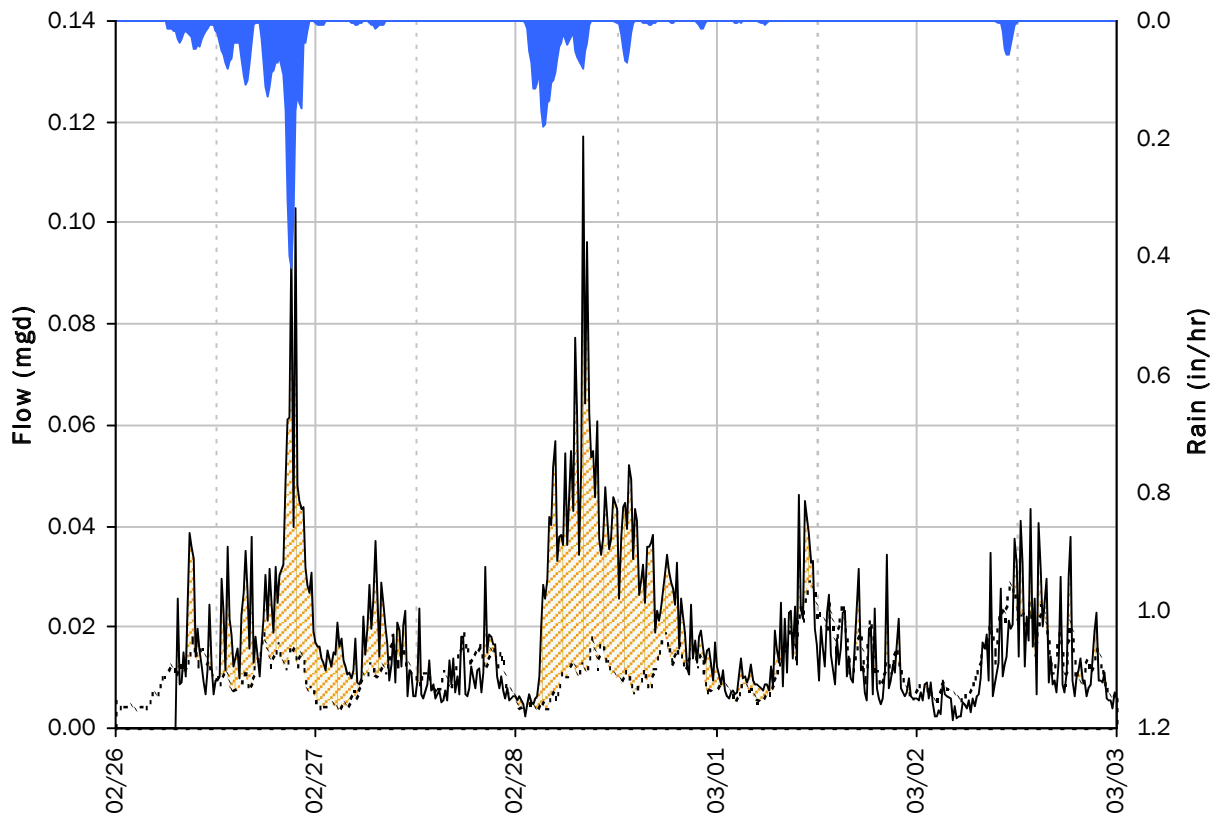
Surcharged 1.2 inches over crown





SITE M6.1

I/I Summary: Event 2

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 2 Detail Graph**Storm Event I/I Analysis (Rain = 1.98 inches)**Capacity

Peak Flow: 0.12 mgd

PF: 10.37

Peak Level: 7.18 in

d/D Ratio: 1.20

Inflow / Infiltration

Peak I/I Rate: 0.10 mgd

Total I/I: 35,000 gallons

City of Pinole

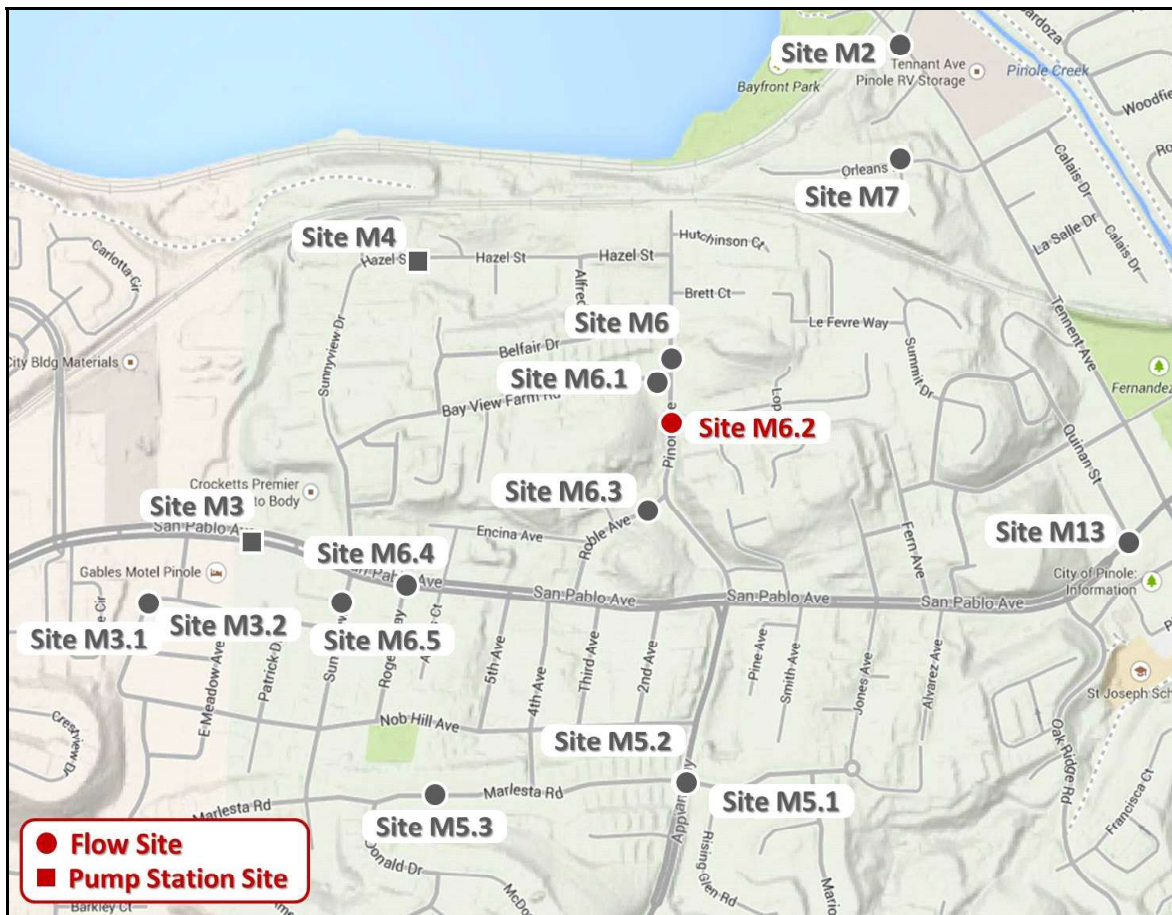
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M6.2

Location: Intersection of Pinon Ave. and Primrose Ln.

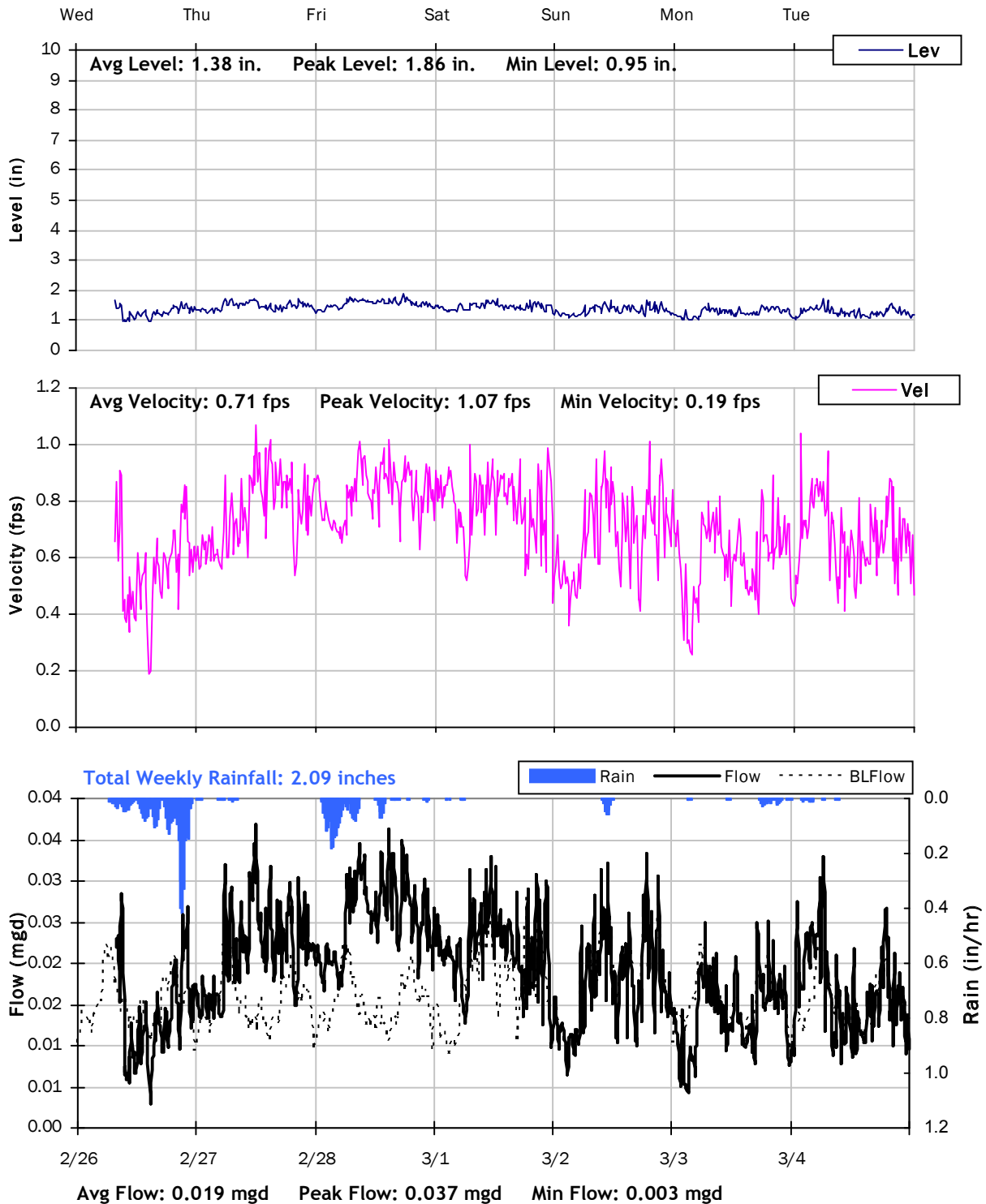
Data Summary Report



Vicinity Map: Site M6.2

SITE M6.2

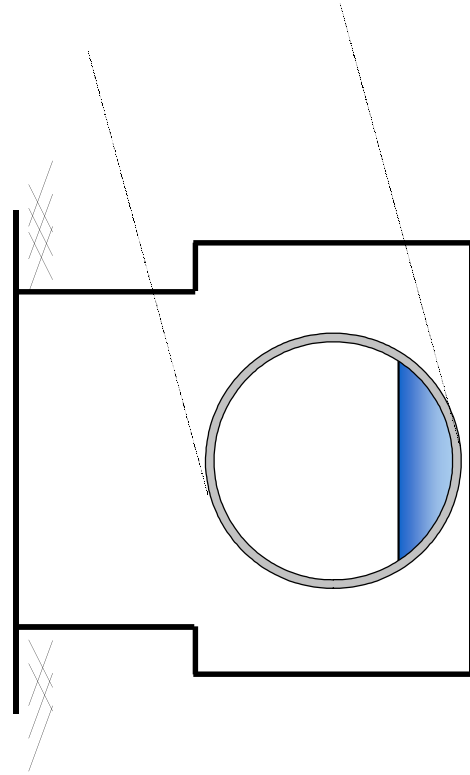
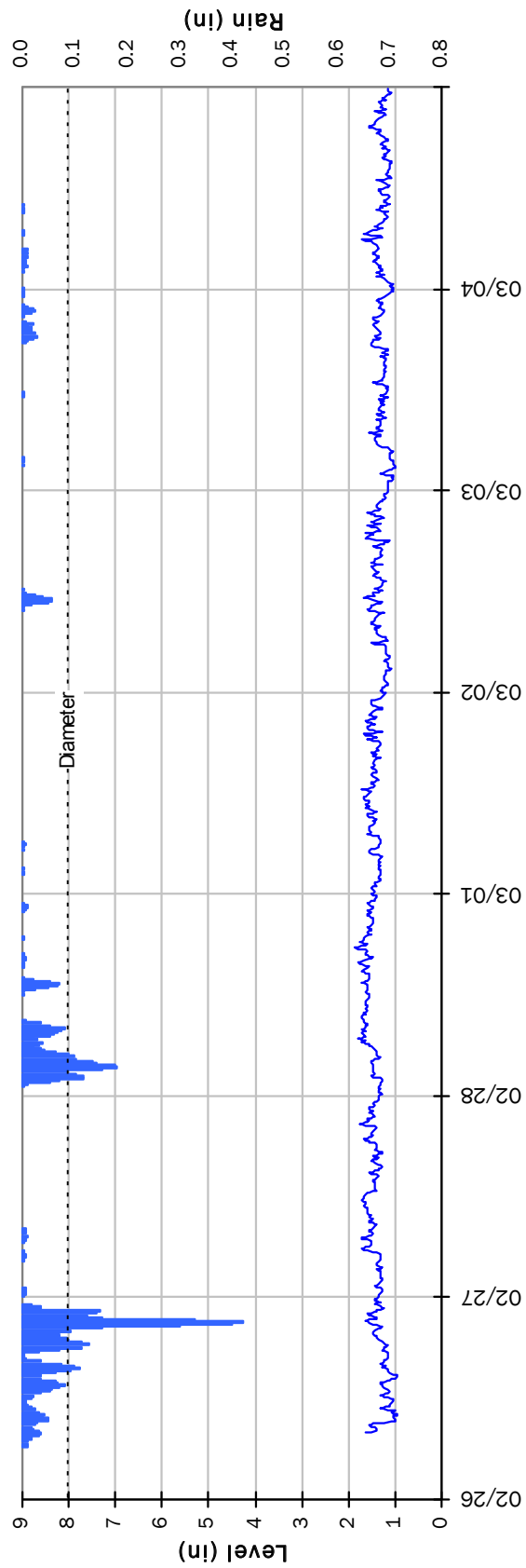
Weekly Level, Velocity and Flow Hydrographs



SITE M6.2

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



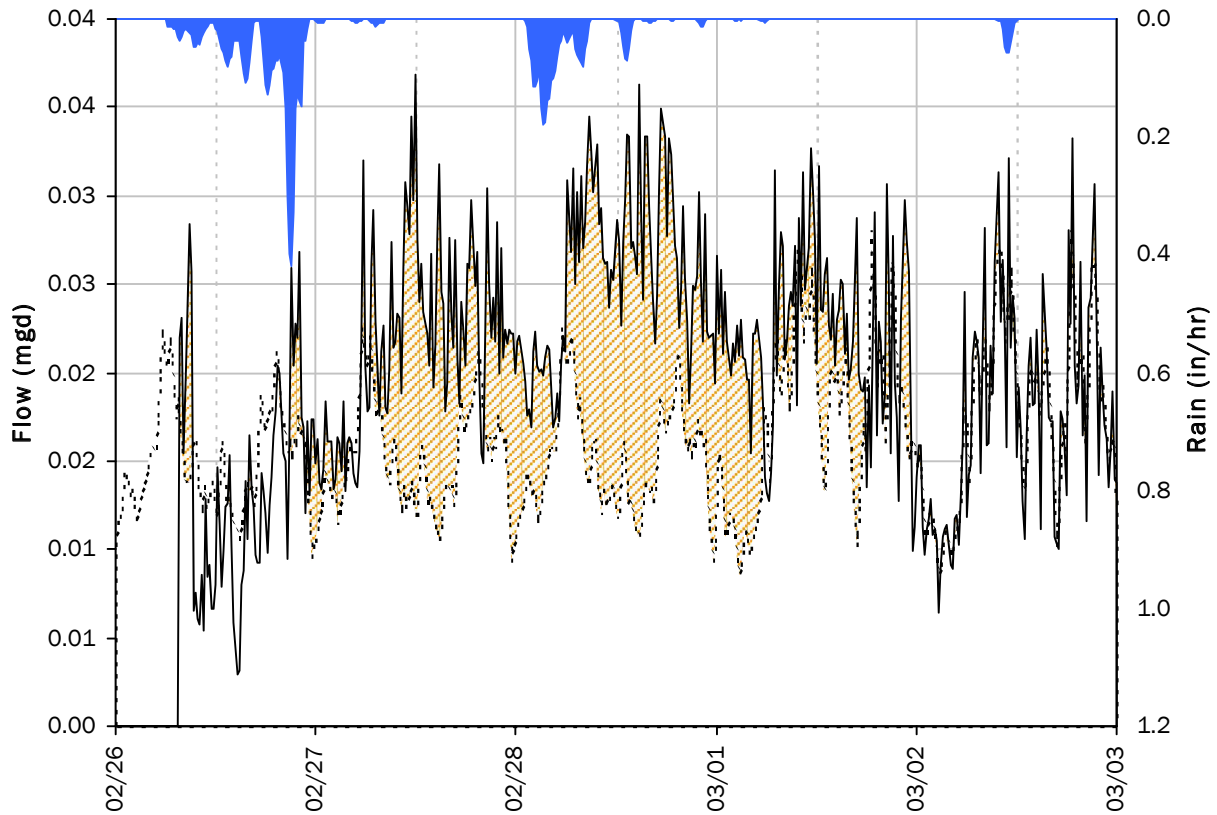


SITE M6.2

I/I Summary: Event 2

Baseline and Realtime Flows with Rainfall Data over Monitoring Period

Event 2 Detail Graph



Storm Event I/I Analysis (Rain = 1.98 inches)

Capacity

Peak Flow: 0.04 mgd

PF: 2.34

Peak Level: 1.86 in

d/D Ratio: 0.23

Inflow / Infiltration

Peak I/I Rate: 0.03 mgd

Total I/I: 21,000 gallons

City of Pinole

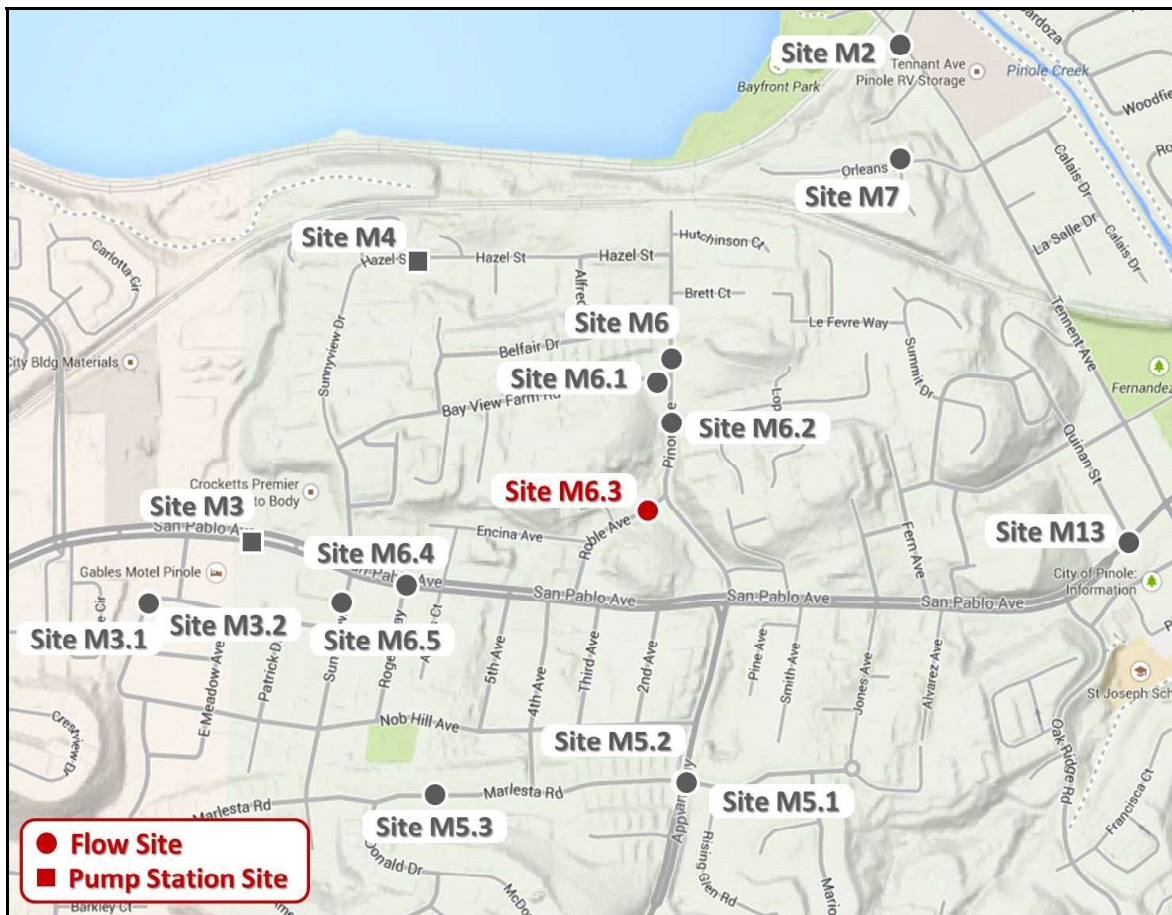
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M6.3

Location: Roble Ave., west of Pinon Ave.

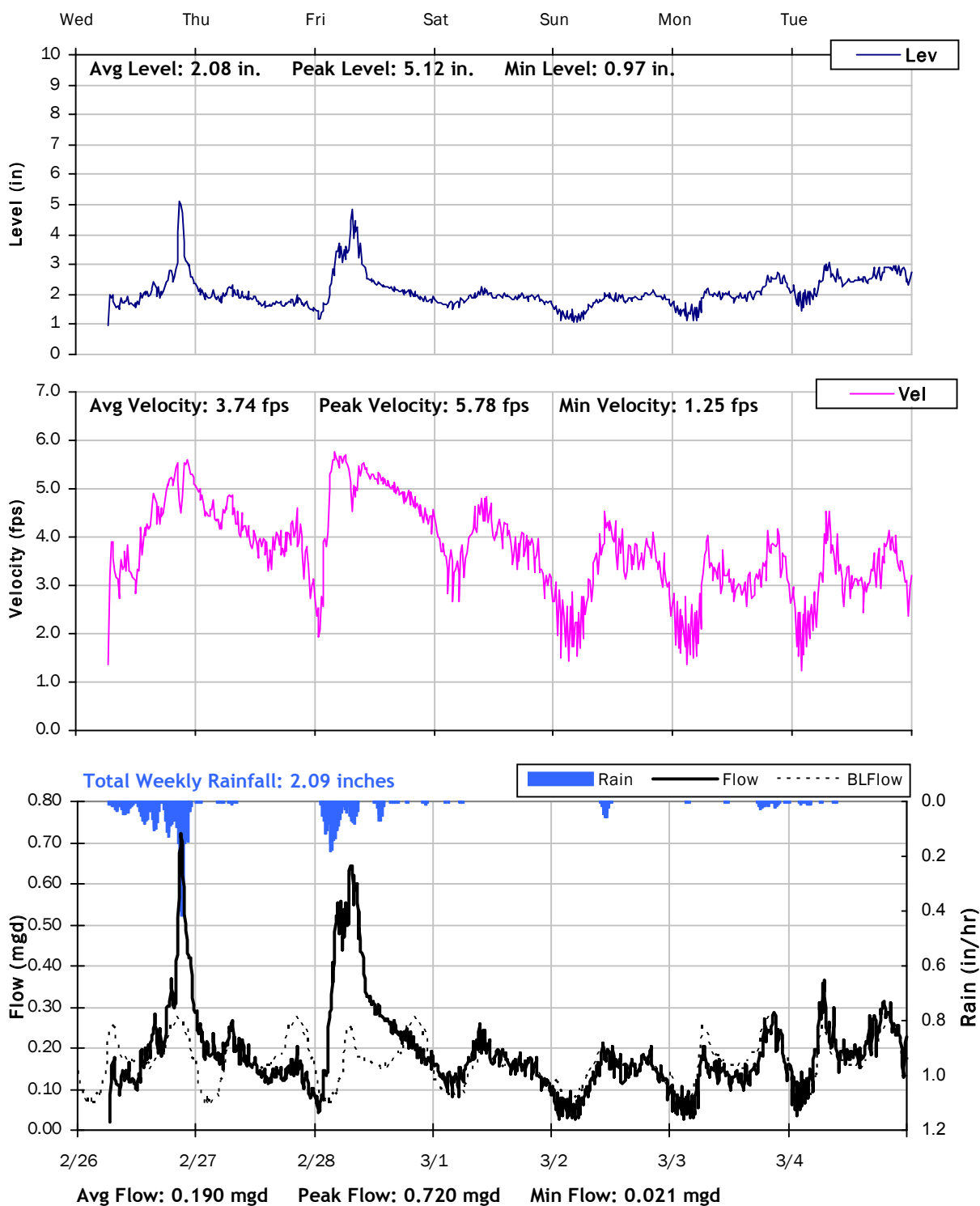
Data Summary Report



Vicinity Map: Site M6.3

SITE M6.3

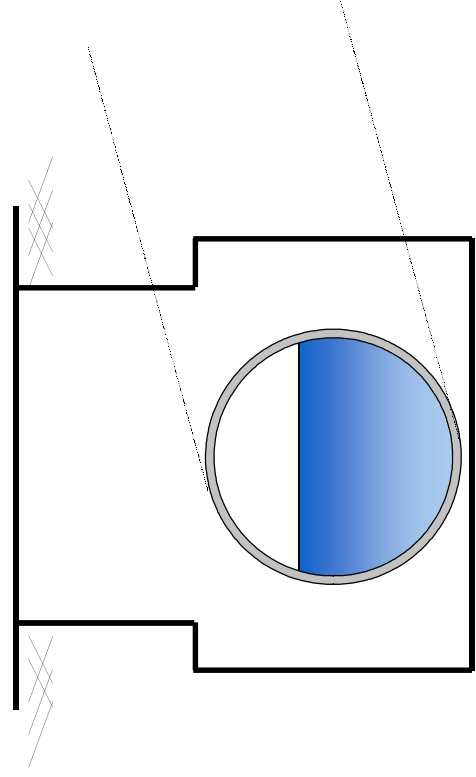
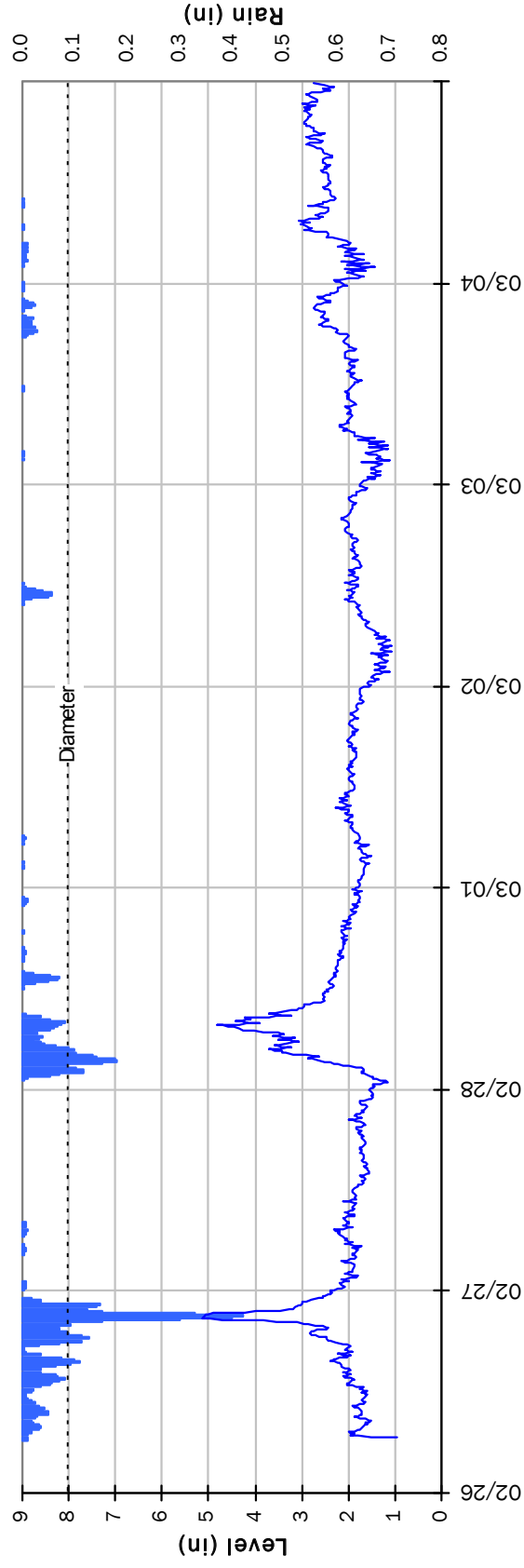
Weekly Level, Velocity and Flow Hydrographs





SITE M6.3 Site Capacity and Surge Summary

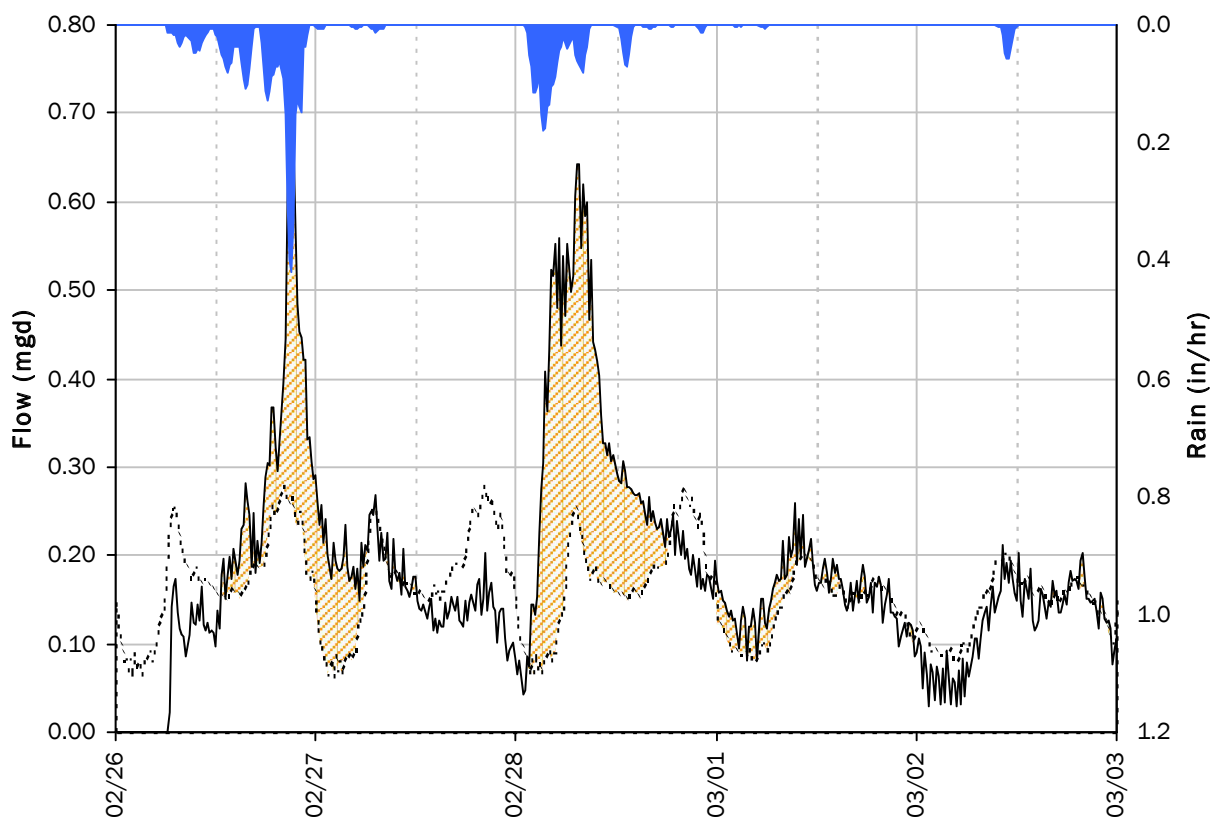
Realtime Flow Levels with Rainfall Data over Monitoring Period



Pipe Diameter: 8 inches
Peak Measured Level: 5.12 inches
Peak d/D Ratio: 0.64

SITE M6.3

I/I Summary: Event 2

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 2 Detail Graph**Storm Event I/I Analysis (Rain = 1.98 inches)**Capacity

Peak Flow: 0.72 mgd

PF: 4.43

Peak Level: 5.12 in

d/D Ratio: 0.64

Inflow / Infiltration

Peak I/I Rate: 0.46 mgd

Total I/I: 198,000 gallons

City of Pinole

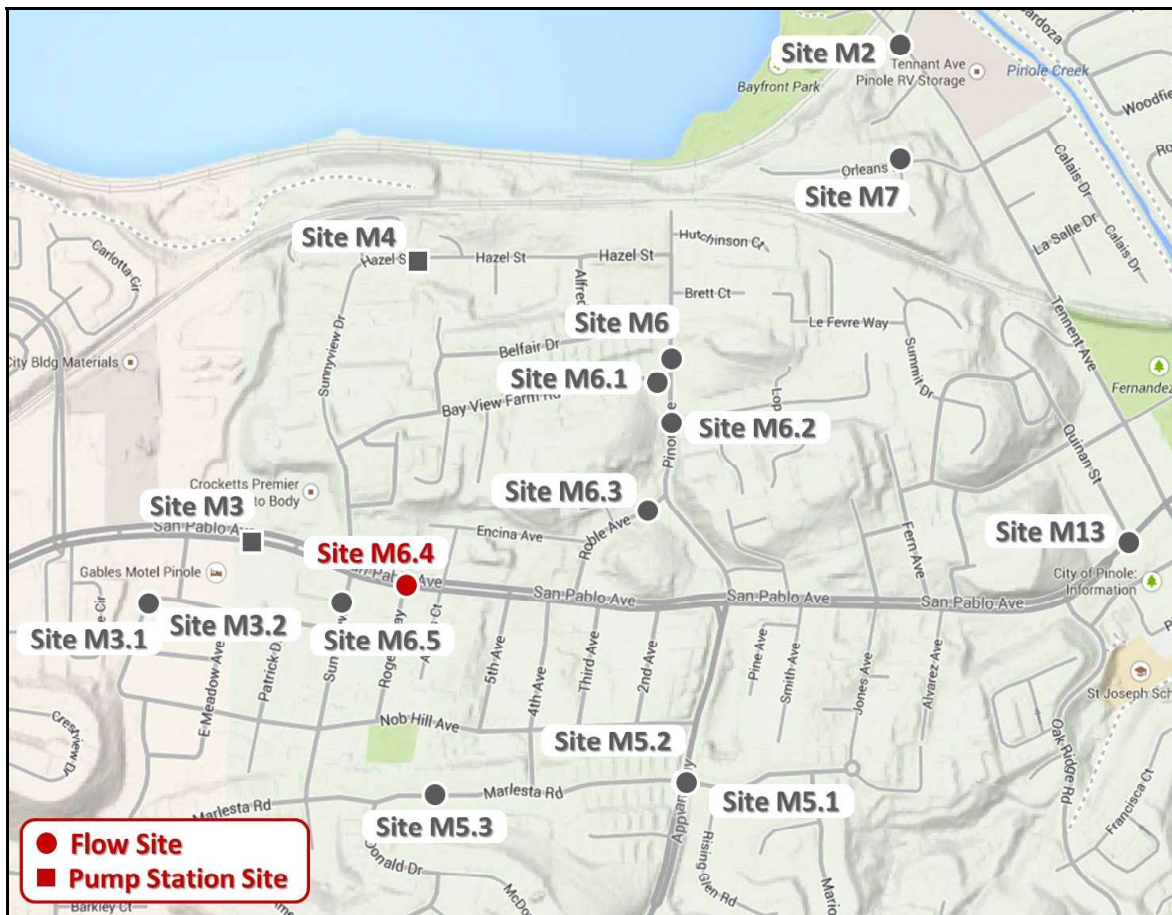
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M6.4

Location: Intersection of San Pablo Ave. and Rogers Way

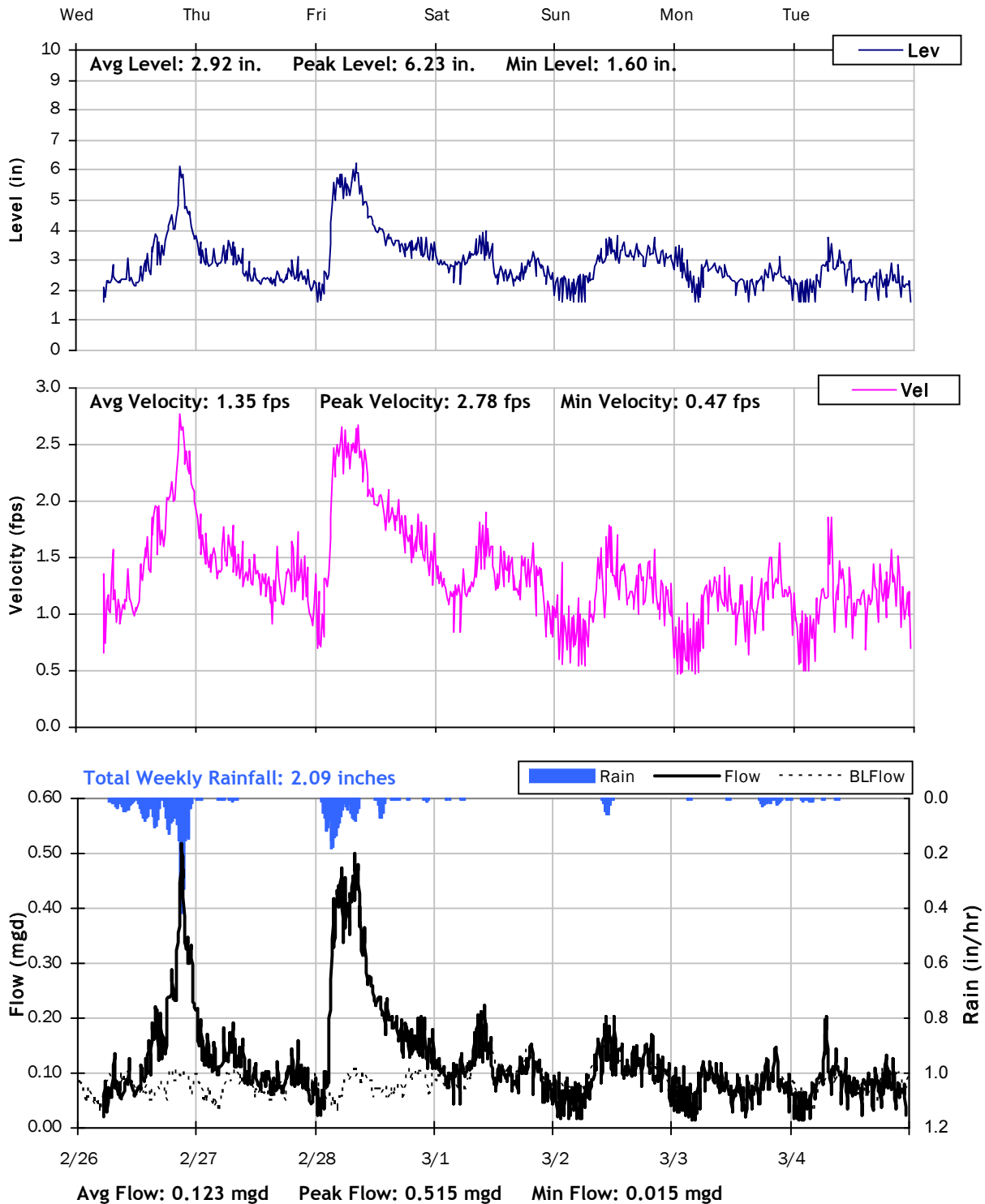
Data Summary Report



Vicinity Map: Site M6.4

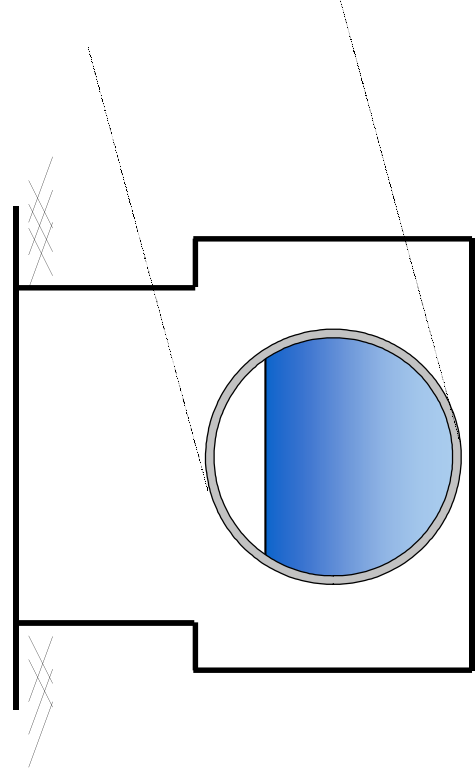
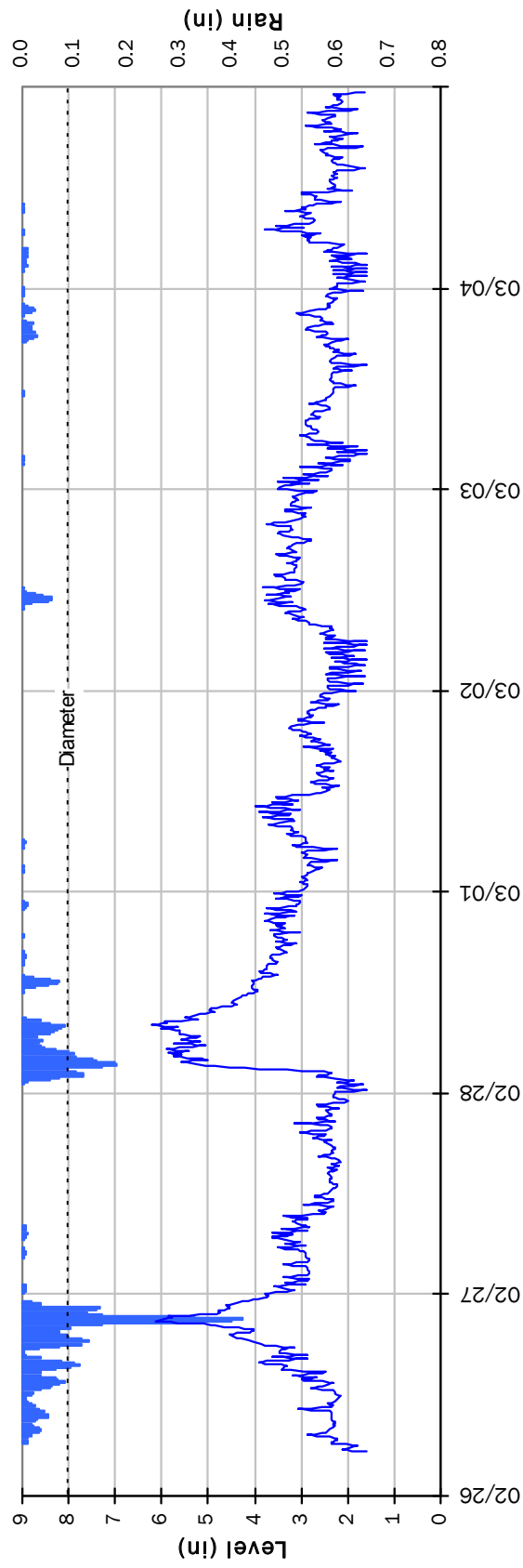
SITE M6.4

Weekly Level, Velocity and Flow Hydrographs



SITE M6.4 Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



Pipe Diameter: 8 inches
Peak Measured Level: 6.23 inches
Peak d/D Ratio: 0.78

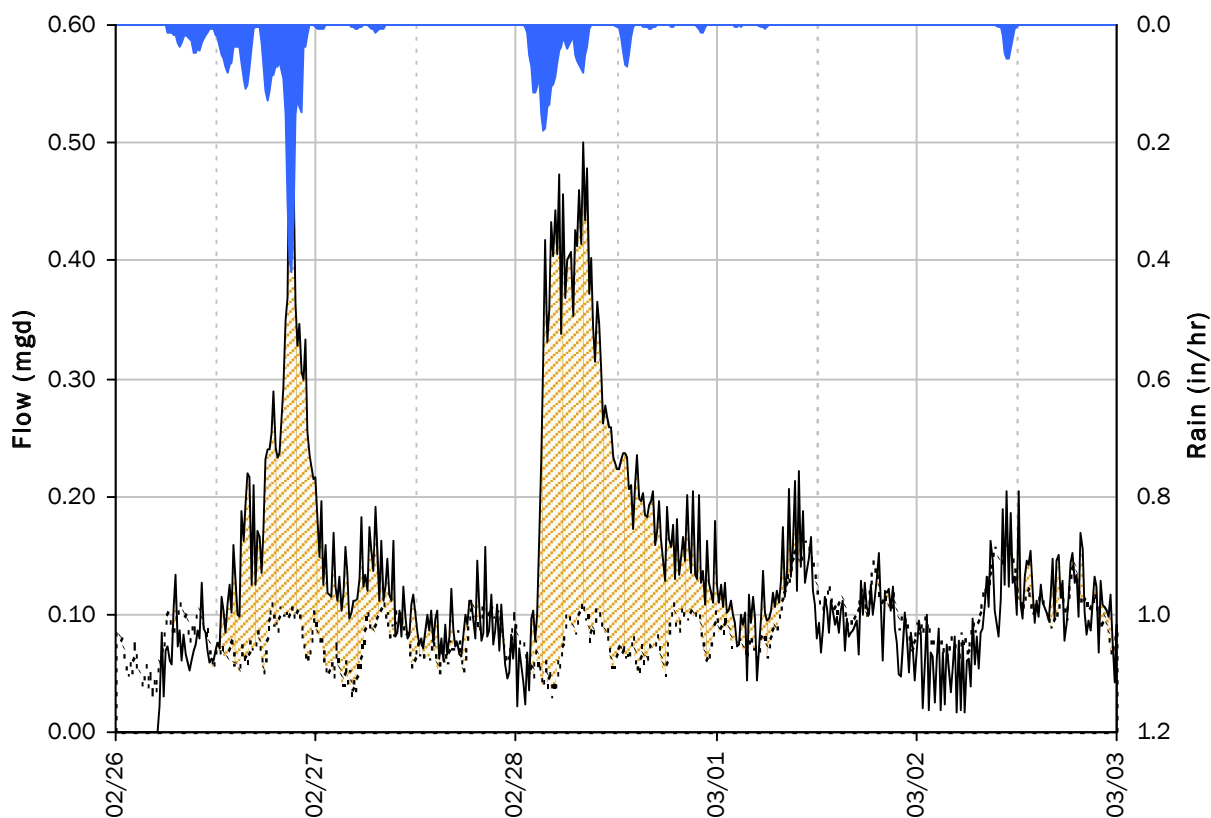


SITE M6.4

I/I Summary: Event 2

Baseline and Realtime Flows with Rainfall Data over Monitoring Period

Event 2 Detail Graph



Storm Event I/I Analysis (Rain = 1.98 inches)

Capacity

Peak Flow: 0.51 mgd

PF: 6.14

Peak Level: 6.23 in

d/D Ratio: 0.78

Inflow / Infiltration

Peak I/I Rate: 0.42 mgd

Total I/I: 267,000 gallons

City of Pinole

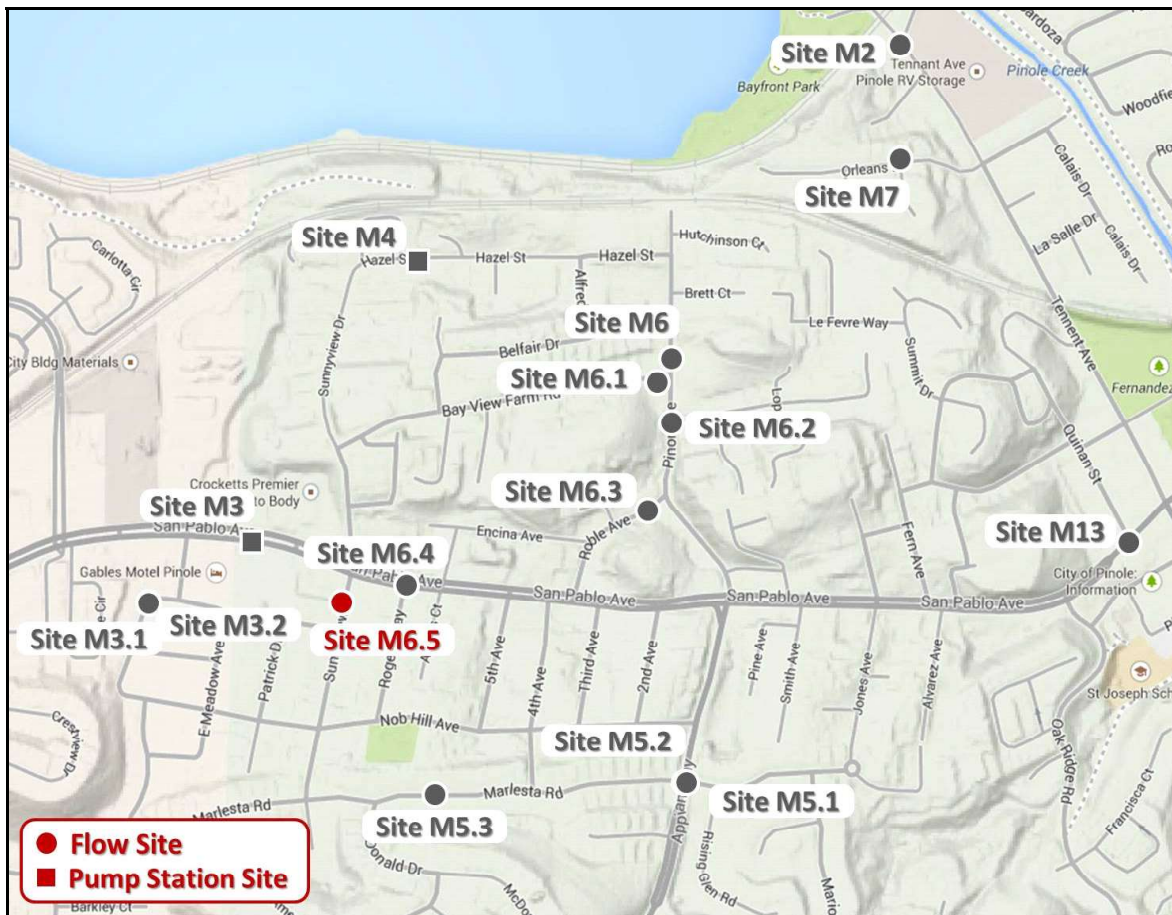
Sanitary Sewer Flow Monitoring

Temporary Monitoring: February 2014

Monitoring Site: Site M6.5

Location: 747 Sunnyview Dr.

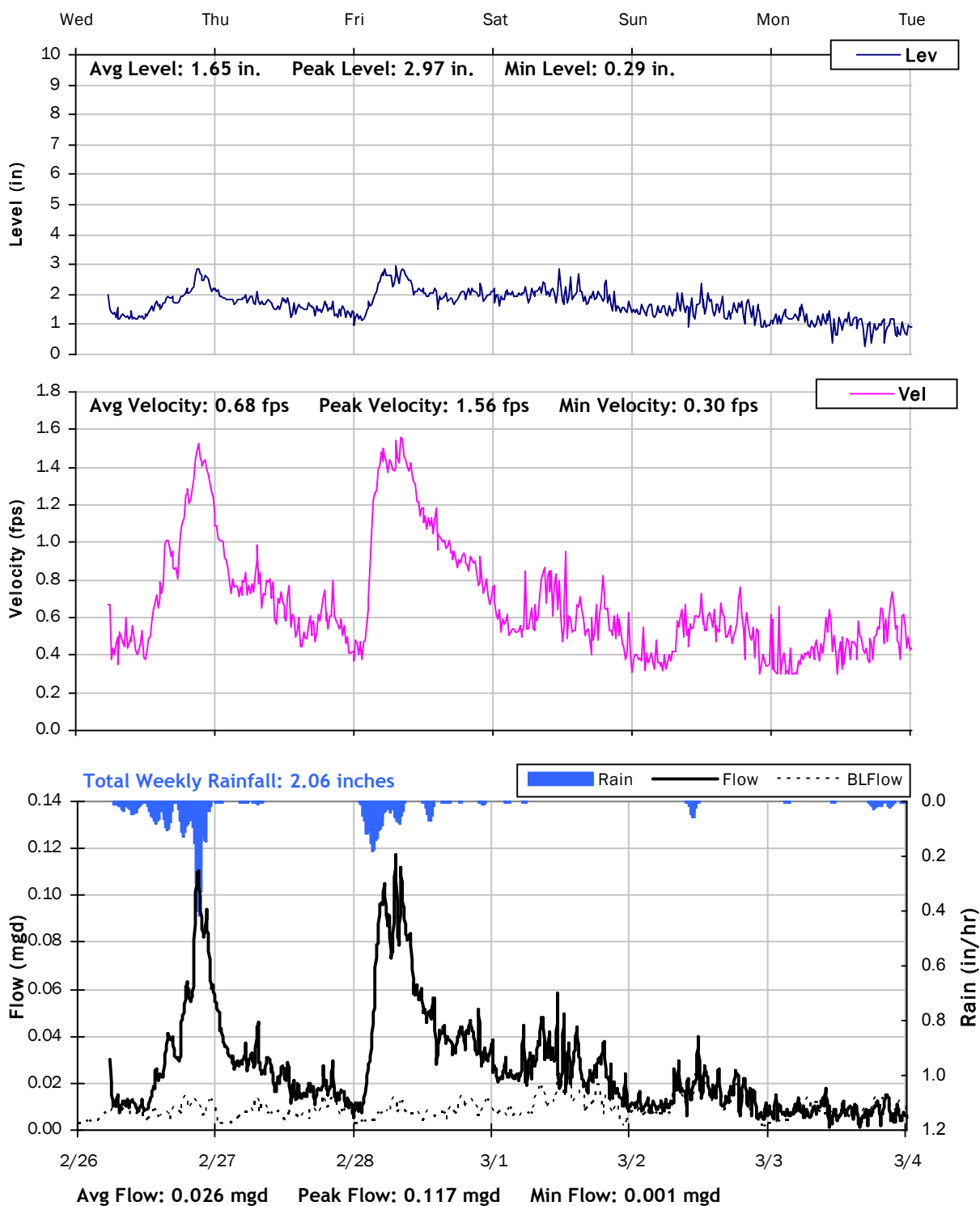
Data Summary Report



Vicinity Map: Site M6.5

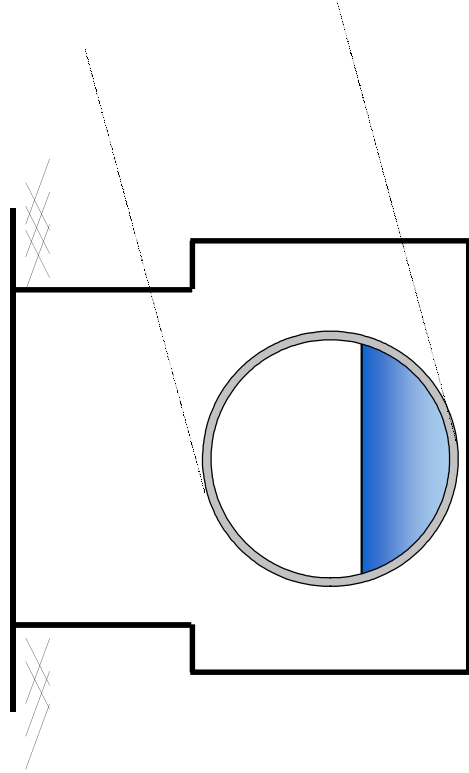
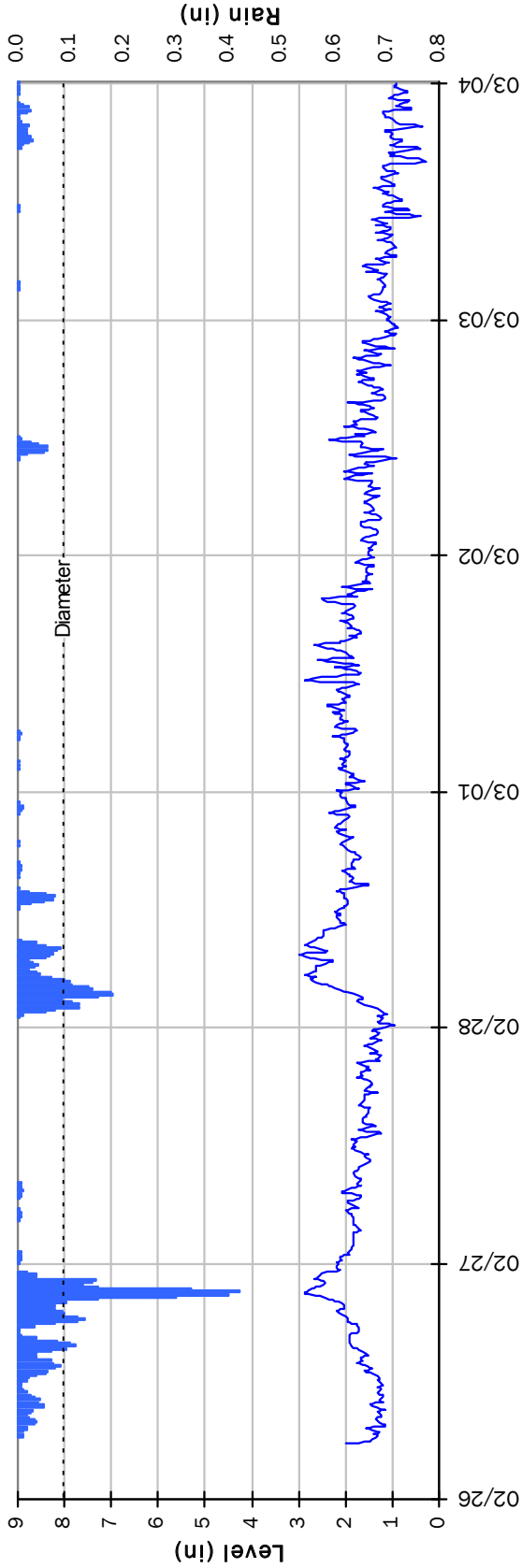
SITE M6.5

Weekly Level, Velocity and Flow Hydrographs



SITE M6.5 Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period

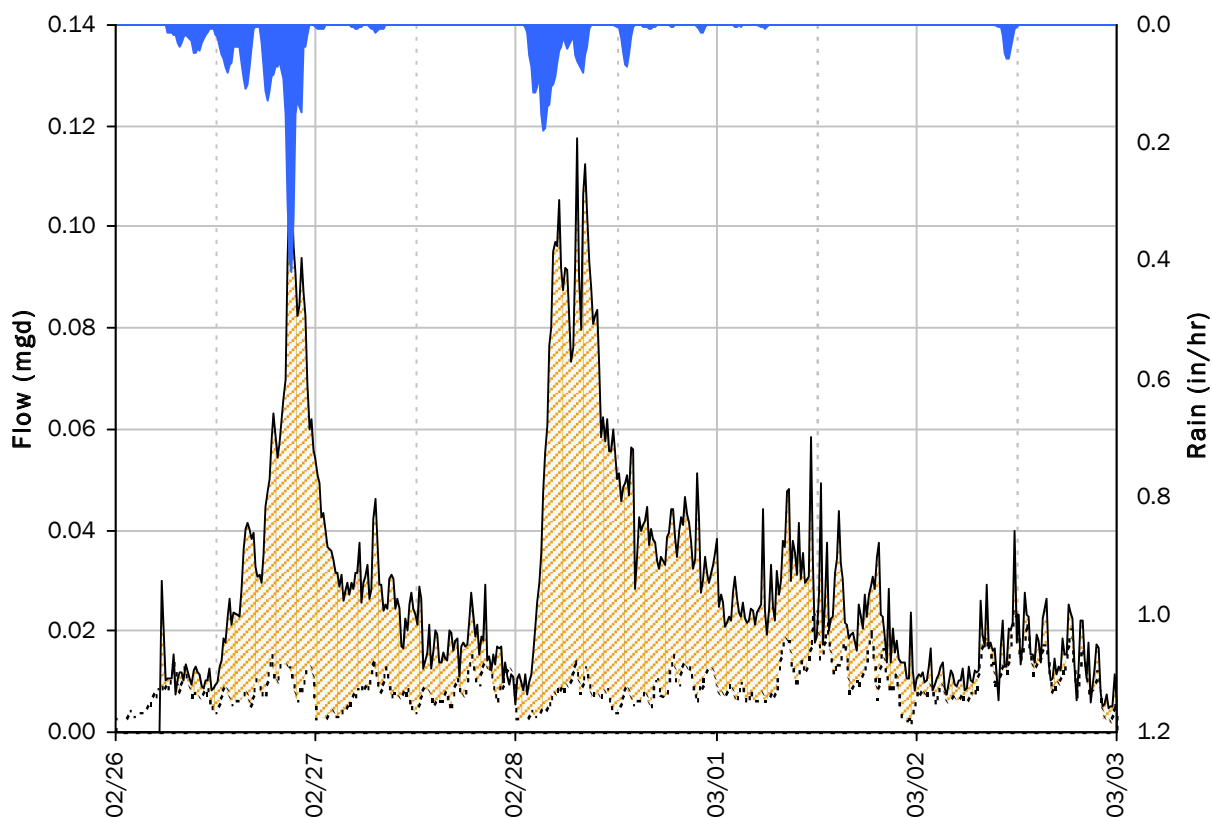


Pipe Diameter: 8 inches
Peak Measured Level: 2.97 inches
Peak d/D Ratio: 0.37



SITE M6.5

I/I Summary: Event 2

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 2 Detail Graph**Storm Event I/I Analysis (Rain = 1.98 inches)**Capacity

Peak Flow: 0.12 mgd

PF: 13.49

Peak Level: 2.97 in

d/D Ratio: 0.37

Inflow / Infiltration

Peak I/I Rate: 0.11 mgd

Total I/I: 96,000 gallons

APPENDIX F. FLOW MONITORING SITES DATA, GRAPHS, INFORMATION: PHASE 3



City of Pinole

Sanitary Sewer Flow Monitoring

Temporary Monitoring: March 2014

Monitoring Site: Site M6

Location: Pinon Ave., north of Bay View Farm Rd.

Data Summary Report

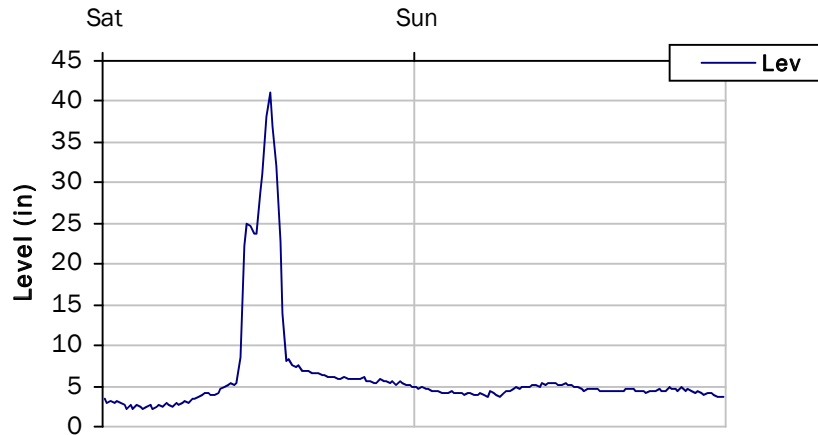


Vicinity Map: Site M6

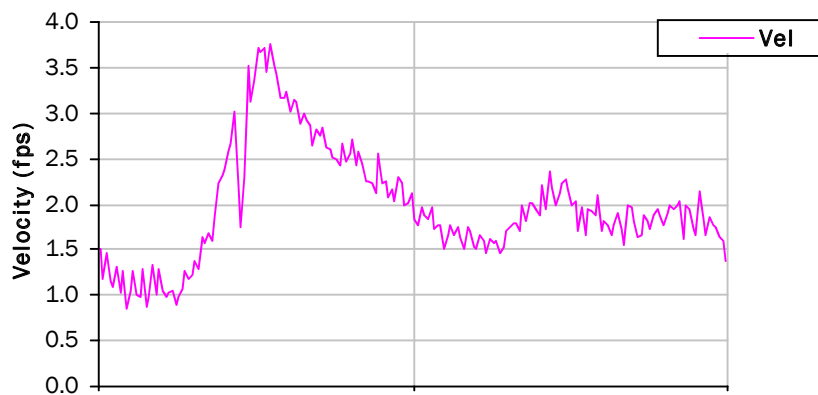
SITE M6

Weekly Level, Velocity and Flow Hydrographs

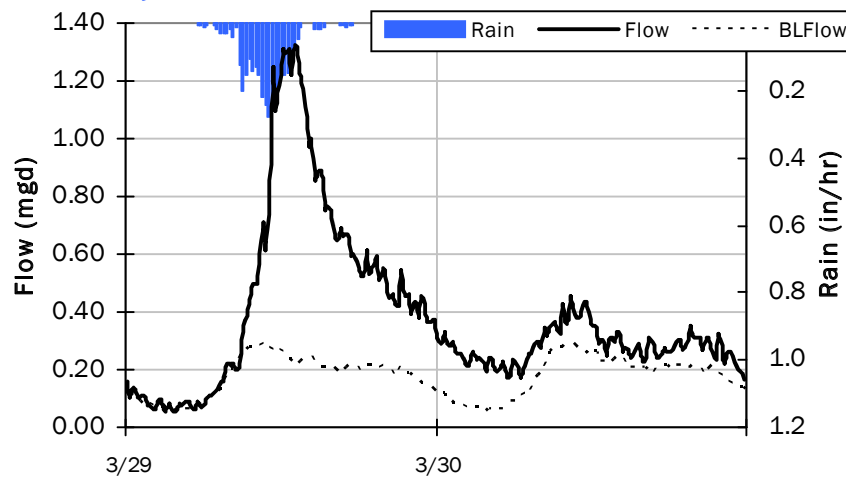
Avg Level: 6.18 in. Peak Level: 41.01 in. Min Level: 2.12 in.



Avg Velocity: 1.98 fps Peak Velocity: 3.76 fps Min Velocity: 0.86 fps



Total Weekly Rainfall: 0.85 inches

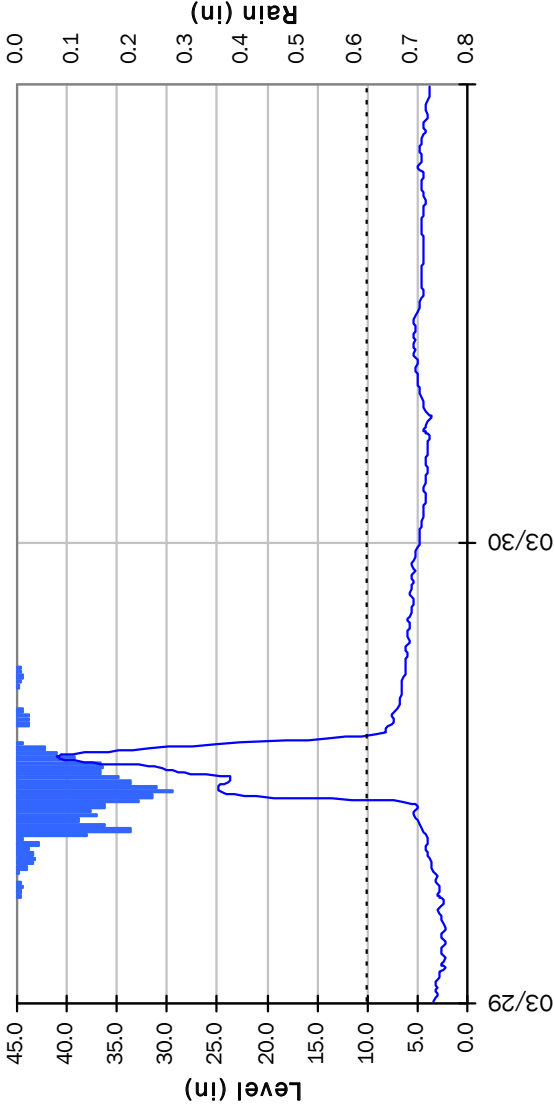


Avg Flow: 0.380 mgd Peak Flow: 1.324 mgd Min Flow: 0.053 mgd

SITE M6

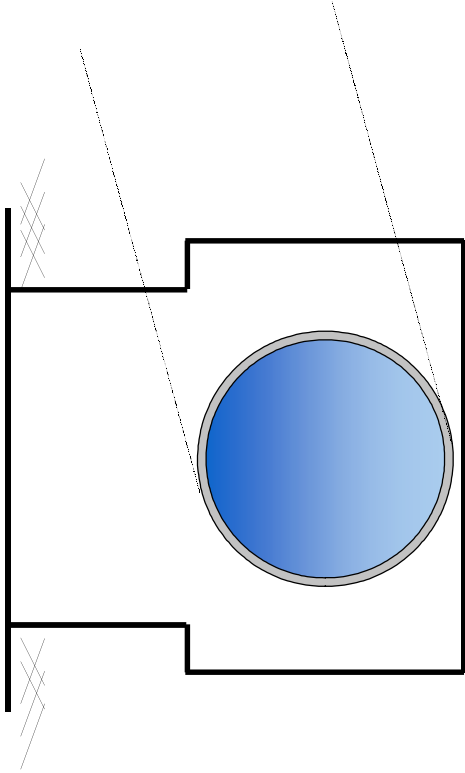
Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



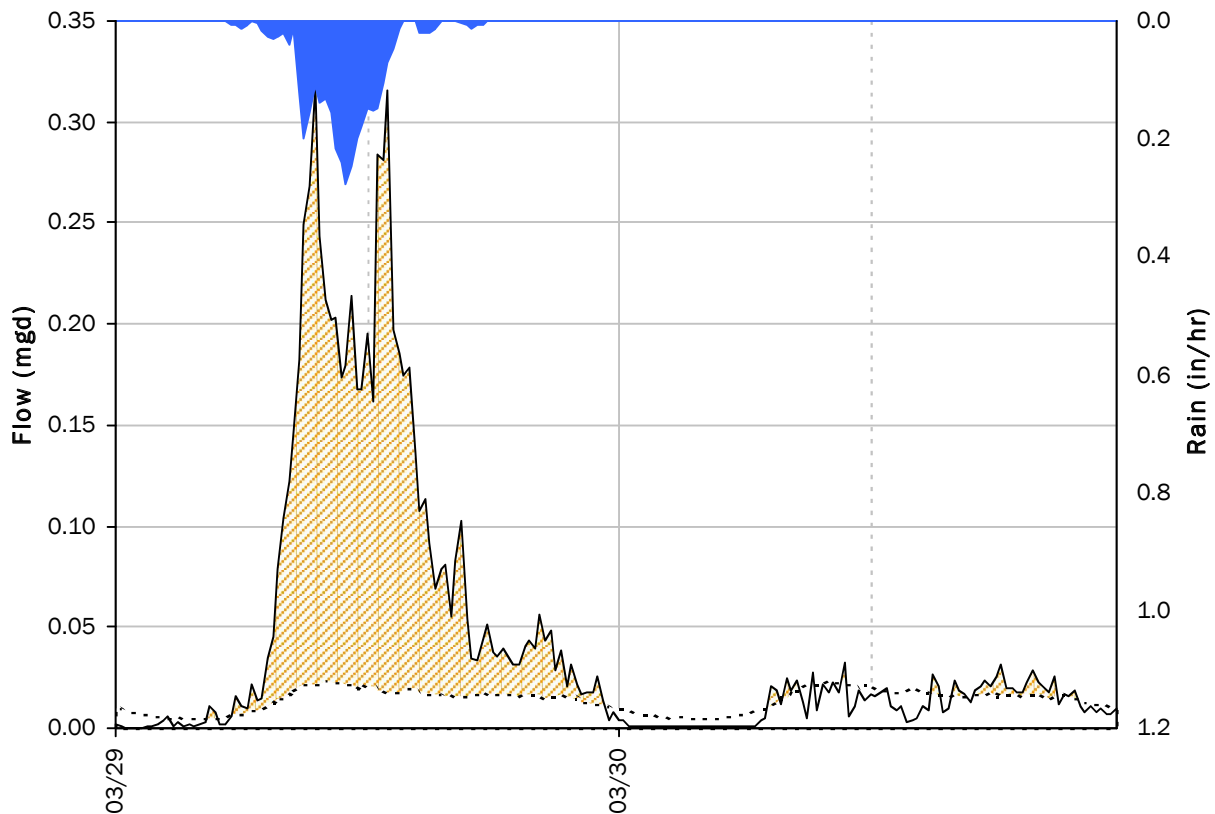
Pipe Diameter: 10 inches
Peak Measured Level: 41.0 inches
Peak d/D Ratio: 4.10

Surcharged 31.0 inches over crown



SITE 3.1

I/I Summary: Event 3

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 3 Detail Graph**Storm Event I/I Analysis (Rain = 0.85 inches)**Capacity

Peak Flow: 0.32 mgd

PF: 24.33

Peak Level: 2.61 in

d/D Ratio: 0.44

Inflow / Infiltration

Peak I/I Rate: 0.30 mgd

Total I/I: 60,000 gallons

City of Pinole

Sanitary Sewer Flow Monitoring

Temporary Monitoring: March 2014

Monitoring Site: Site M3.1

Location: 830 Meadows Ave.

Data Summary Report

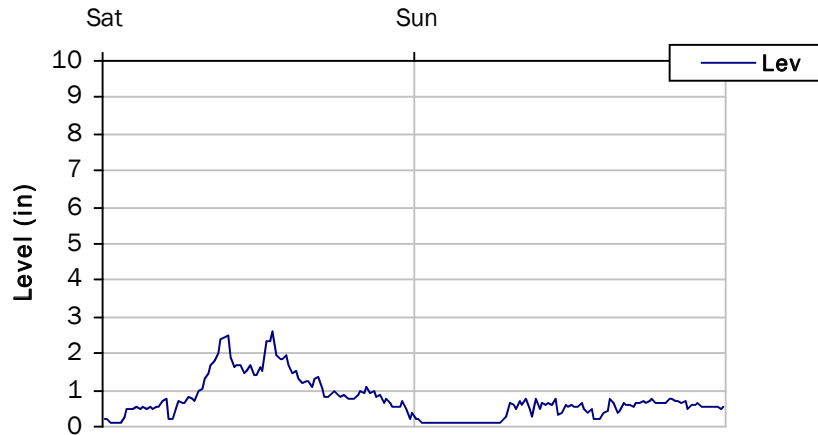


Vicinity Map: Site M3.1

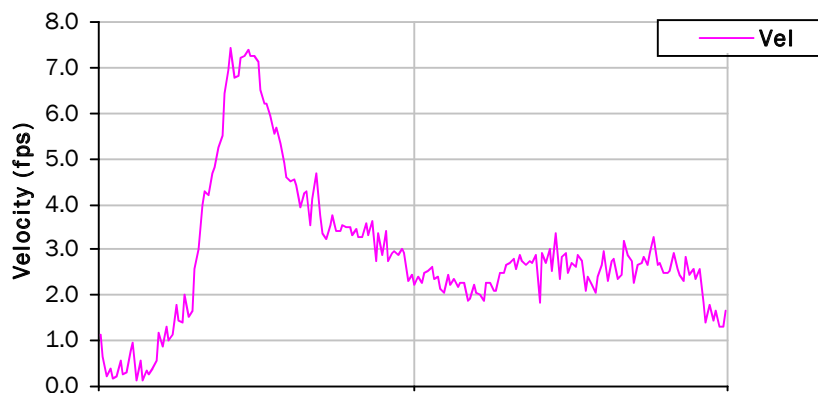
SITE M3.1

Weekly Level, Velocity and Flow Hydrographs

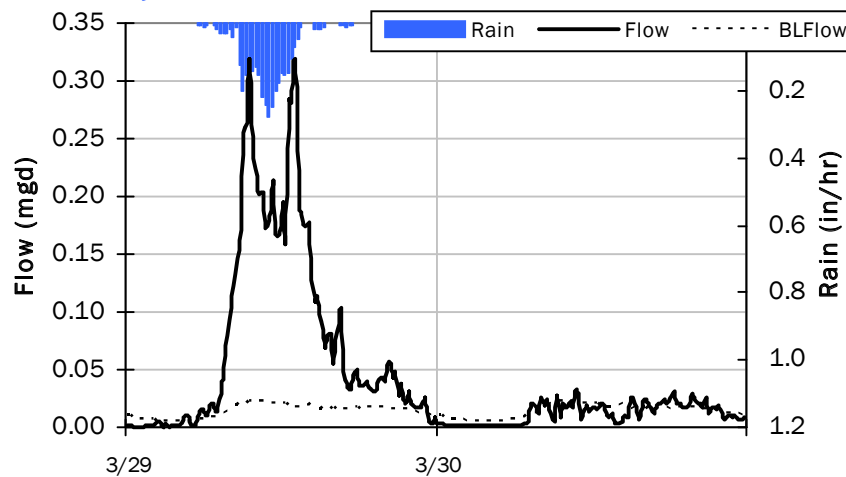
Avg Level: 0.74 in. Peak Level: 2.61 in. Min Level: 0.11 in.



Avg Velocity: 2.90 fps Peak Velocity: 7.44 fps Min Velocity: 0.13 fps



Total Weekly Rainfall: 0.85 inches

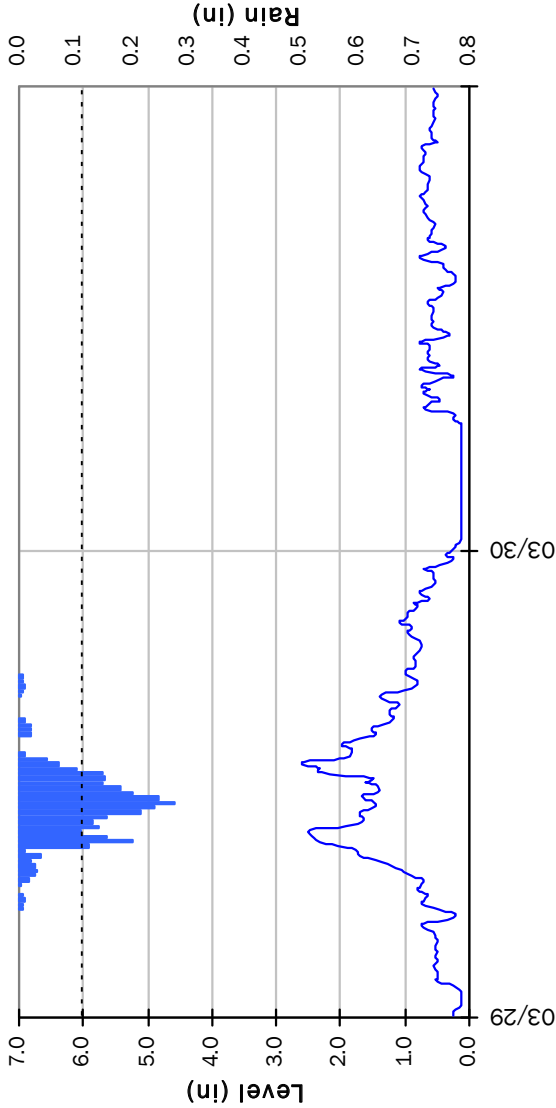


Avg Flow: 0.044 mgd Peak Flow: 0.319 mgd Min Flow: 0.000 mgd

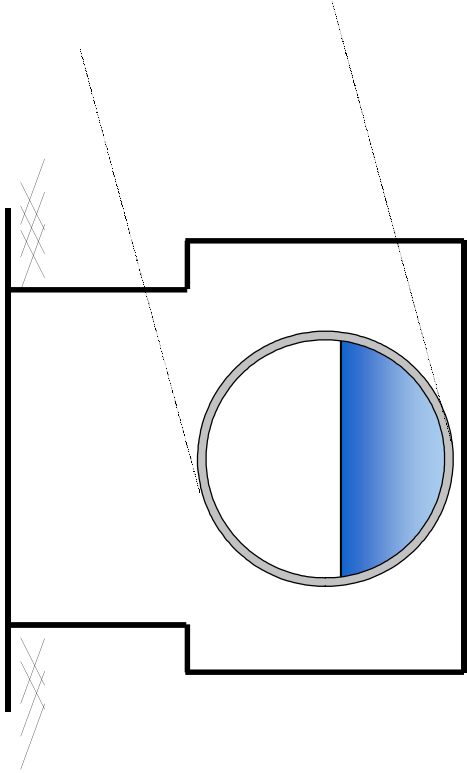
SITE M3.1

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period

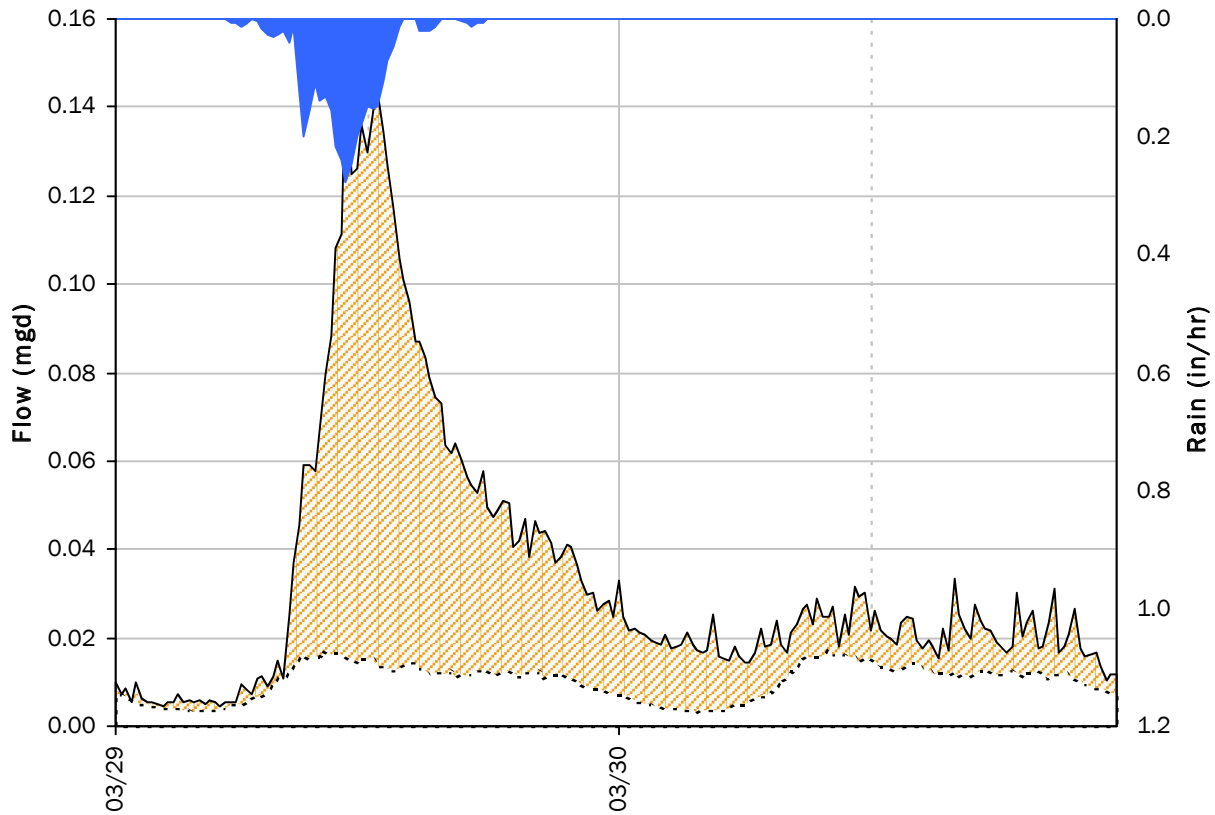


Pipe Diameter: 6 inches
Peak Measured Level: 2.61 inches
Peak d/D Ratio: 0.44



SITE 3.1A

I/I Summary: Event 3

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 3 Detail GraphStorm Event I/I Analysis (Rain = 0.85 inches)Capacity

Peak Flow: 0.15 mgd

PF: 15.37

Peak Level: 5.85 in

d/D Ratio: 0.98

Inflow / Infiltration

Peak I/I Rate: 0.13 mgd

Total I/I: 48,000 gallons

City of Pinole

Sanitary Sewer Flow Monitoring

Temporary Monitoring: March 2014

Monitoring Site: Site M5.2

Location: Intersection of Appian Way and Marlesta Rd.

Data Summary Report

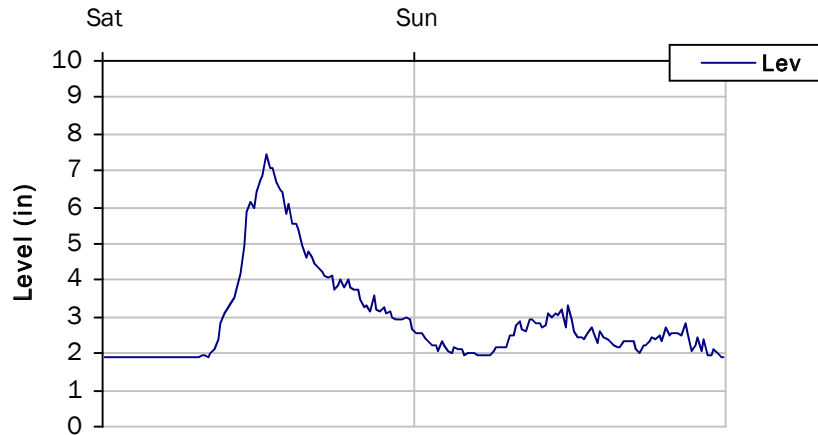


Vicinity Map: Site M5.2

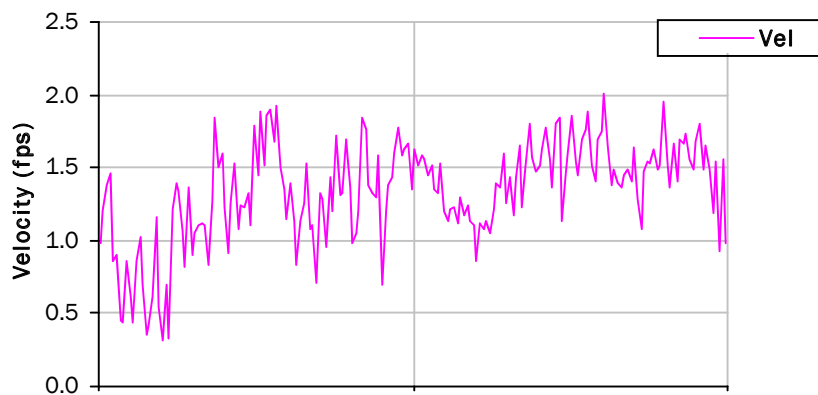
SITE M5.2

Weekly Level, Velocity and Flow Hydrographs

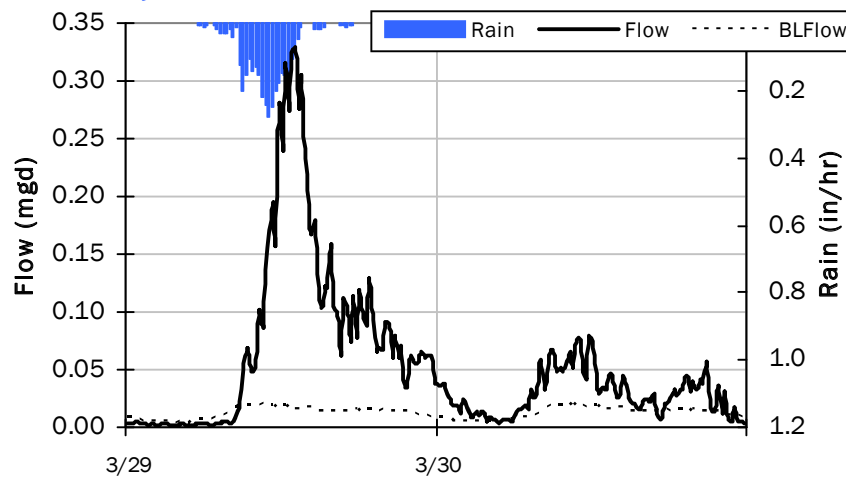
Avg Level: 2.94 in. Peak Level: 7.47 in. Min Level: 1.90 in.



Avg Velocity: 1.33 fps Peak Velocity: 2.01 fps Min Velocity: 0.32 fps



Total Weekly Rainfall: 0.85 inches

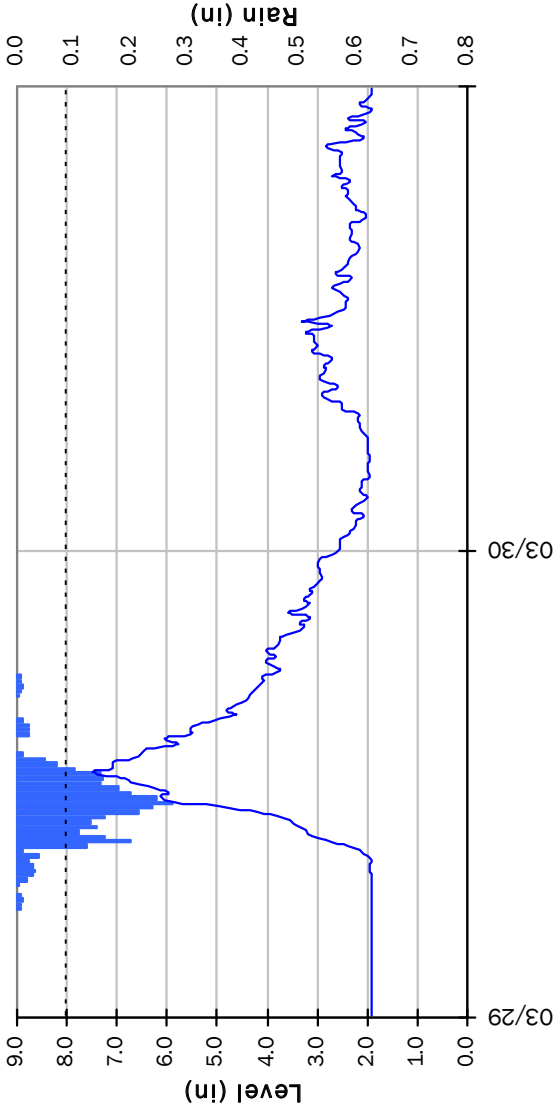


Avg Flow: 0.054 mgd Peak Flow: 0.329 mgd Min Flow: 0.001 mgd

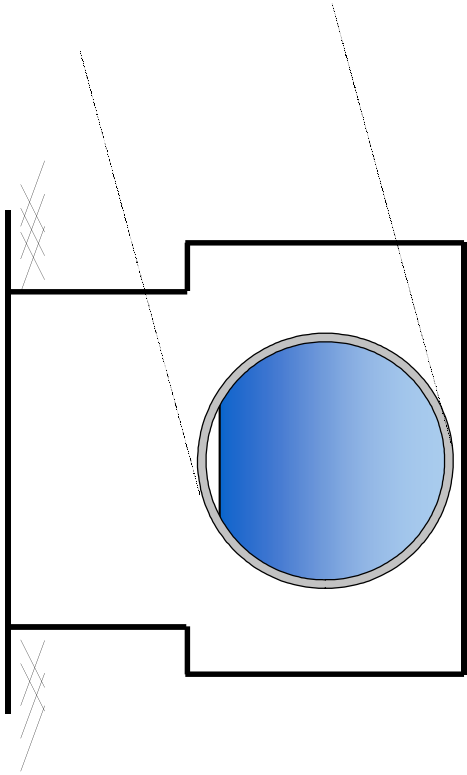
SITE M5.2

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



Pipe Diameter: 8 inches
Peak Measured Level: 7.47 inches
Peak d/D Ratio: 0.93



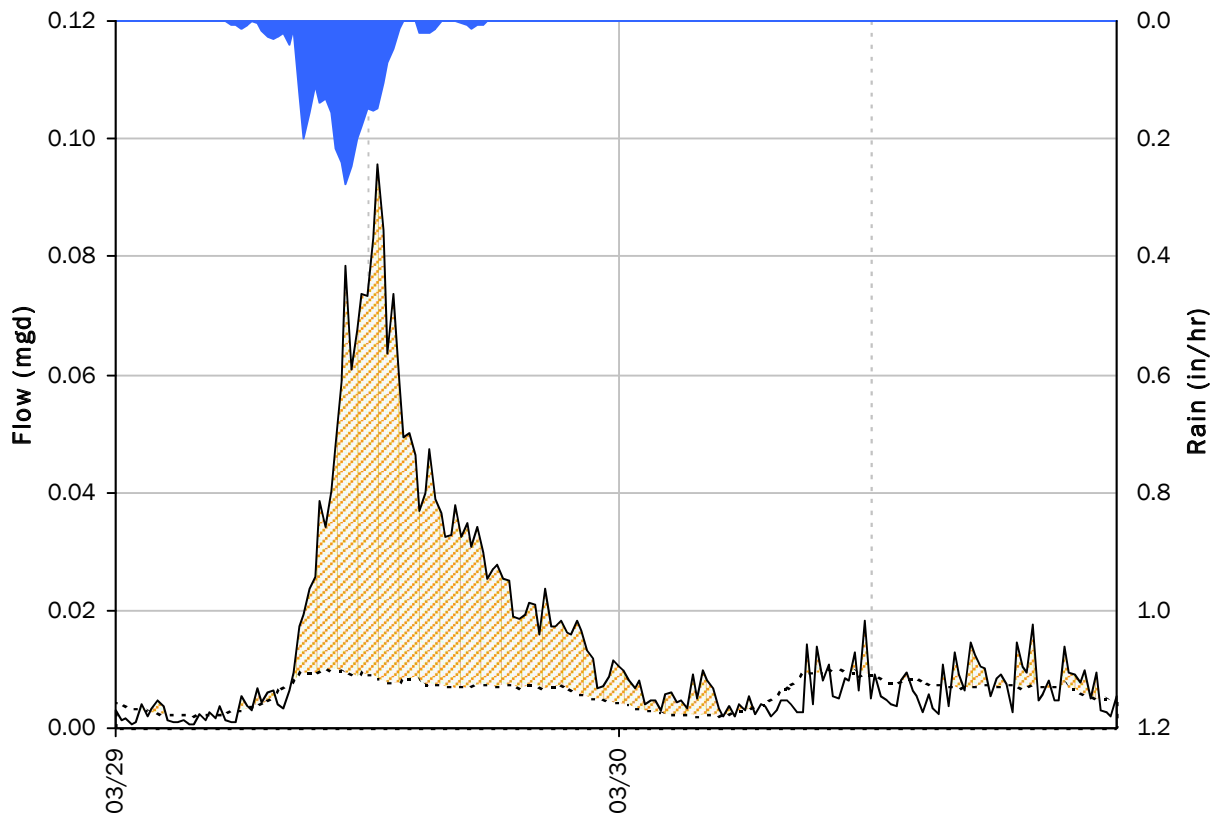


SITE 3.1B

I/I Summary: Event 3

Baseline and Realtime Flows with Rainfall Data over Monitoring Period

Event 3 Detail Graph



Storm Event I/I Analysis (Rain = 0.85 inches)

Capacity

Peak Flow: 0.10 mgd

PF: 16.66

Peak Level: 2.03 in

d/D Ratio: 0.34

Inflow / Infiltration

Peak I/I Rate: 0.09 mgd

Total I/I: 18,000 gallons

City of Pinole

Sanitary Sewer Flow Monitoring

Temporary Monitoring: March 2014

Monitoring Site: Site M5.3

Location: 1171 Marlesta Rd.

Data Summary Report

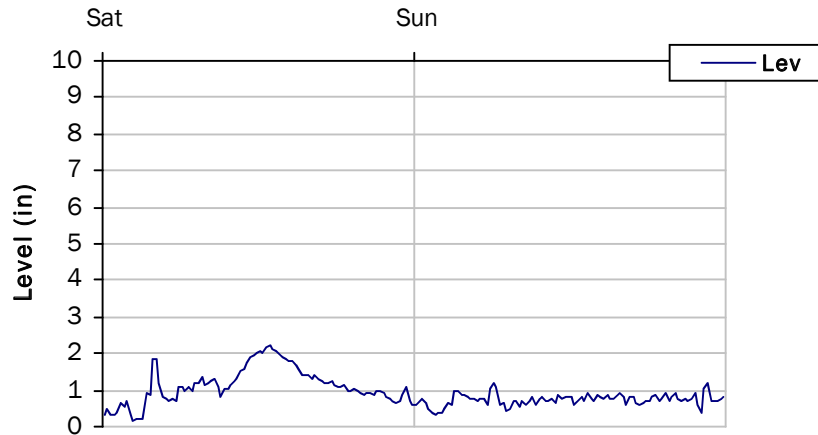


Vicinity Map: Site M5.3

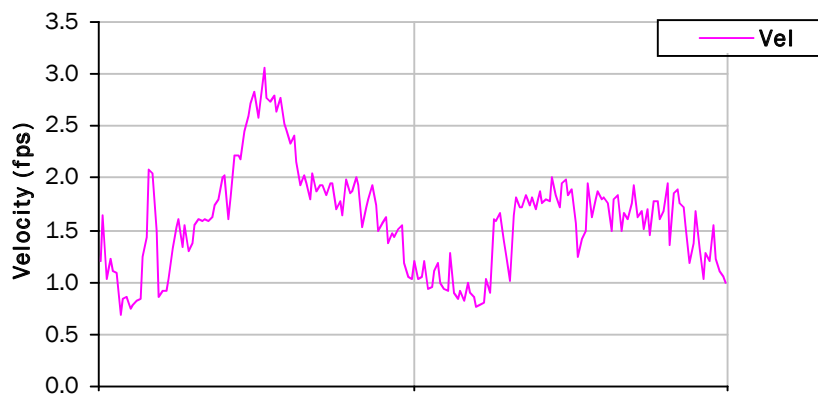
SITE M5.3

Weekly Level, Velocity and Flow Hydrographs

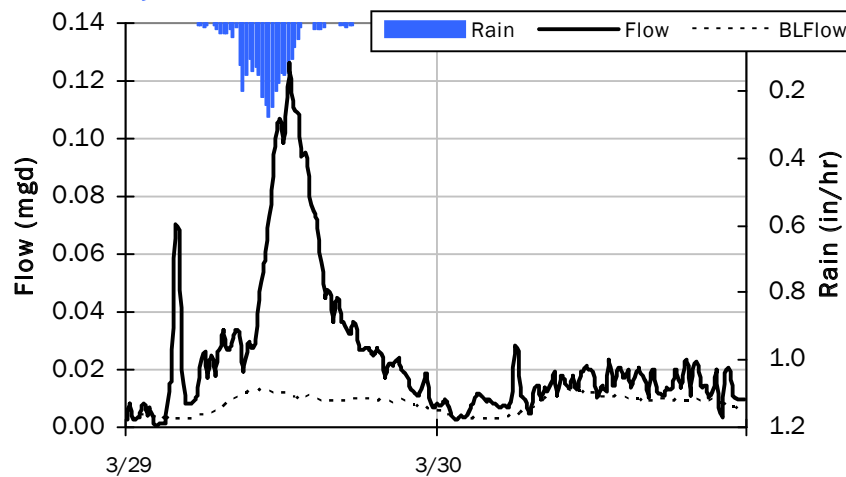
Avg Level: 0.93 in. Peak Level: 2.21 in. Min Level: 0.18 in.



Avg Velocity: 1.60 fps Peak Velocity: 3.06 fps Min Velocity: 0.69 fps



Total Weekly Rainfall: 0.85 inches

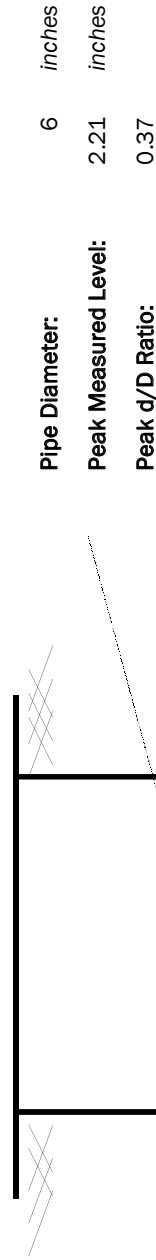
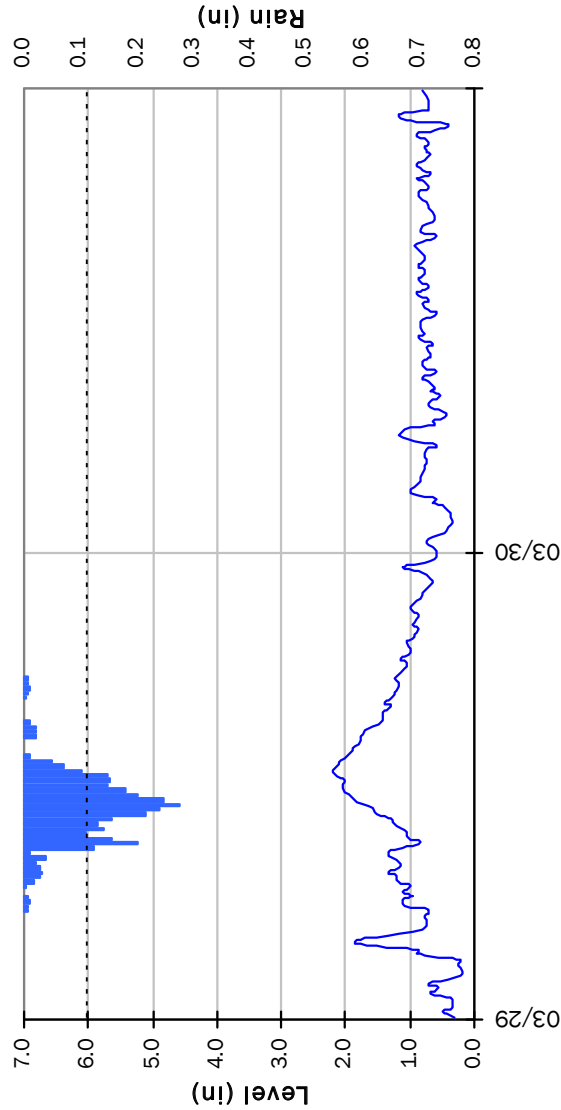


Avg Flow: 0.024 mgd Peak Flow: 0.125 mgd Min Flow: 0.001 mgd

SITE M5.3

Site Capacity and Surge Summary

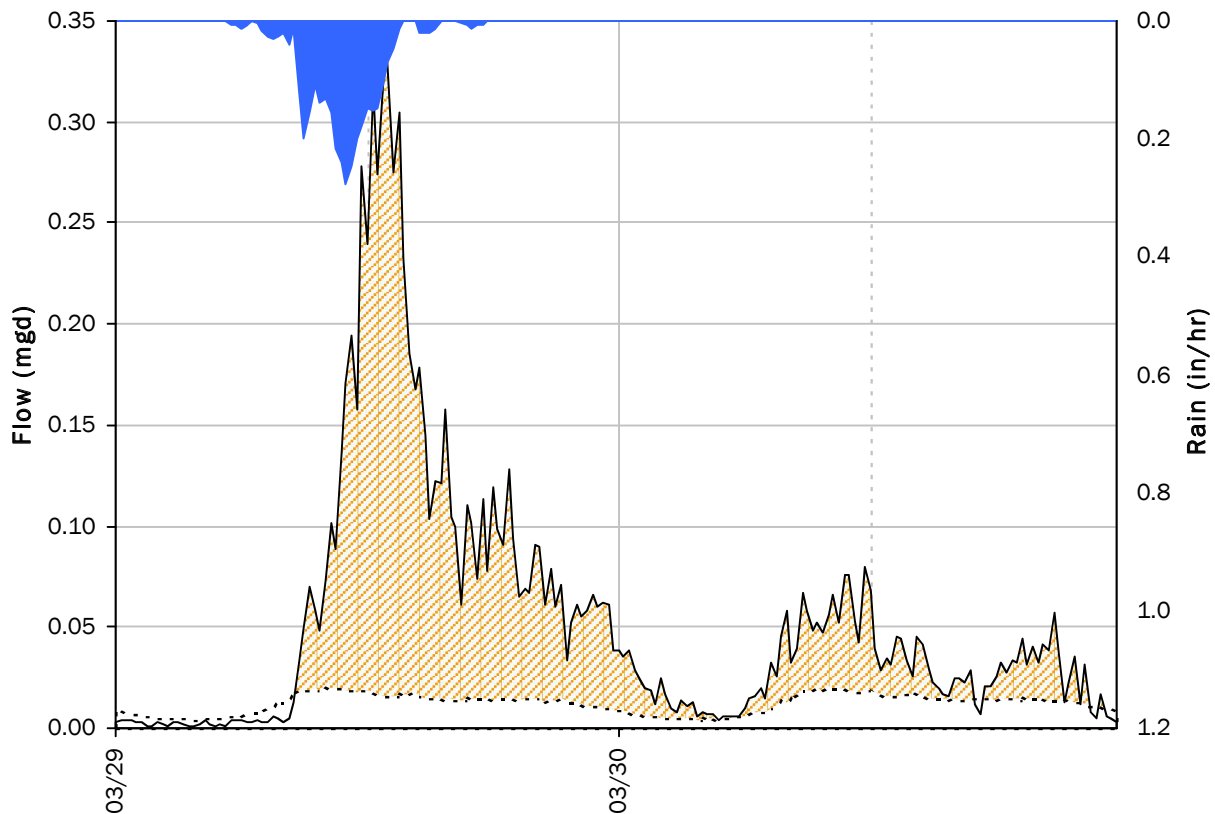
Realtime Flow Levels with Rainfall Data over Monitoring Period





SITE 5.2

I/I Summary: Event 3

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 3 Detail Graph**Storm Event I/I Analysis (Rain = 0.85 inches)**Capacity

Peak Flow: 0.33 mgd

PF: 28.70

Peak Level: 7.47 in

d/D Ratio: 0.93

Inflow / Infiltration

Peak I/I Rate: 0.31 mgd

Total I/I: 83,000 gallons

City of Pinole

Sanitary Sewer Flow Monitoring

Temporary Monitoring: March 2014

Monitoring Site: Site M6.3

Location: Roble Ave., west of Pinon Ave.

Data Summary Report

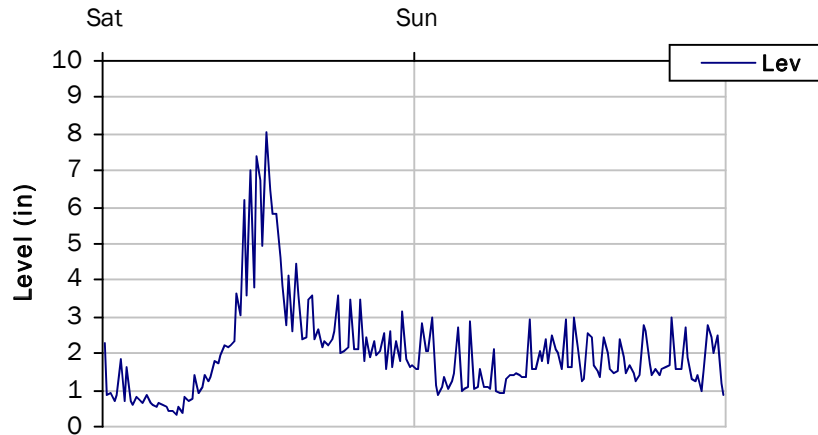


Vicinity Map: Site M6.3

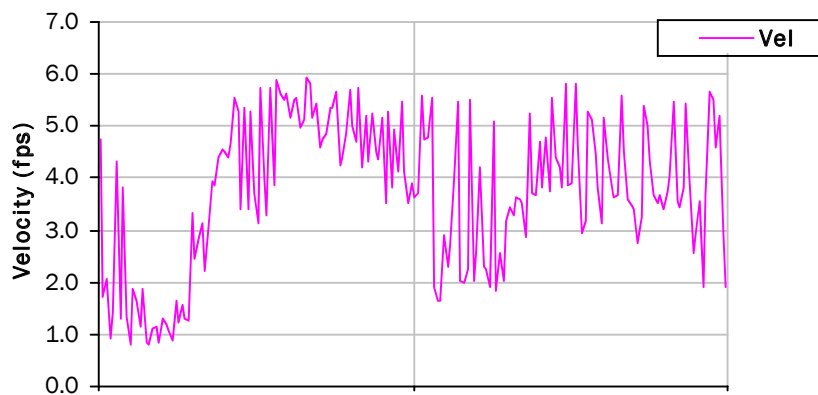
SITE M6.3

Weekly Level, Velocity and Flow Hydrographs

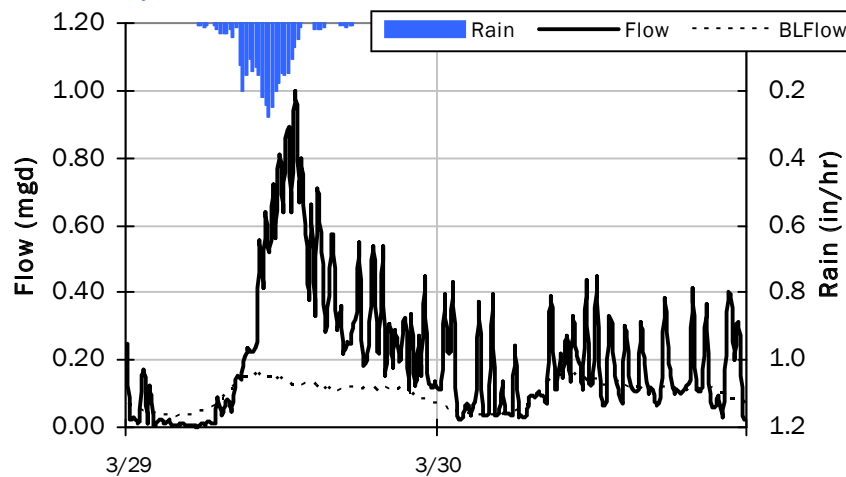
Avg Level: 2.03 in. Peak Level: 8.07 in. Min Level: 0.32 in.



Avg Velocity: 3.76 fps Peak Velocity: 5.91 fps Min Velocity: 0.80 fps



Total Weekly Rainfall: 0.85 inches

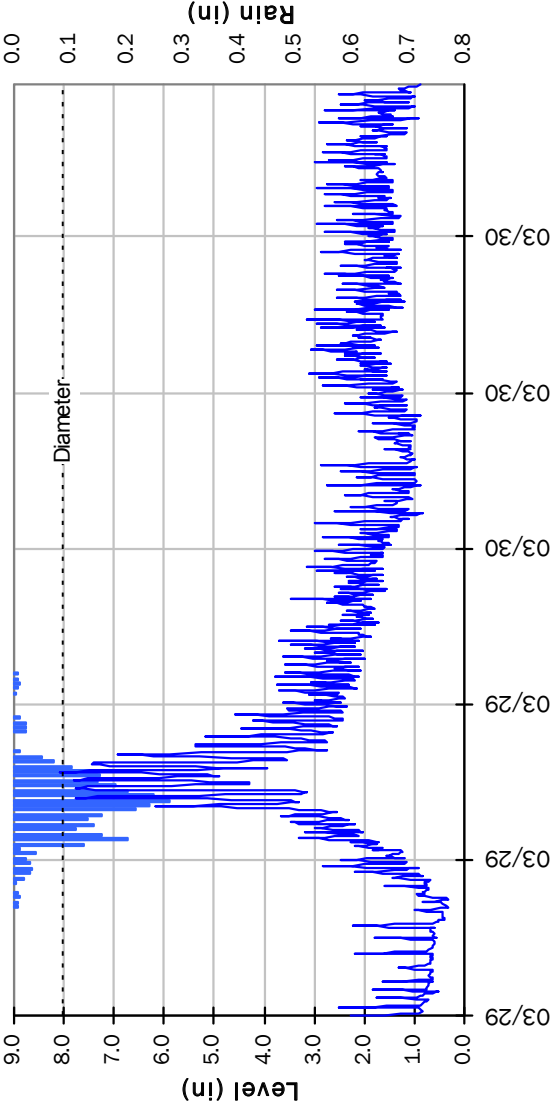


Avg Flow: 0.212 mgd Peak Flow: 1.002 mgd Min Flow: 0.003 mgd

SITE M6.3

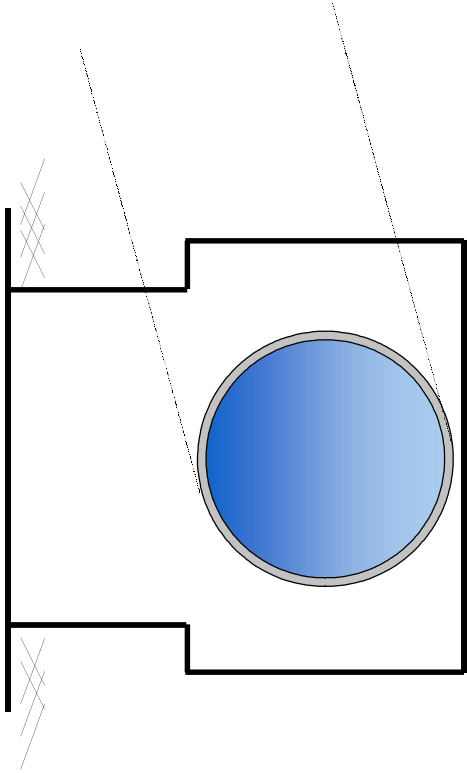
Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



Pipe Diameter: 8 inches
Peak Measured Level: 8.07 inches
Peak d/D Ratio: 1.01

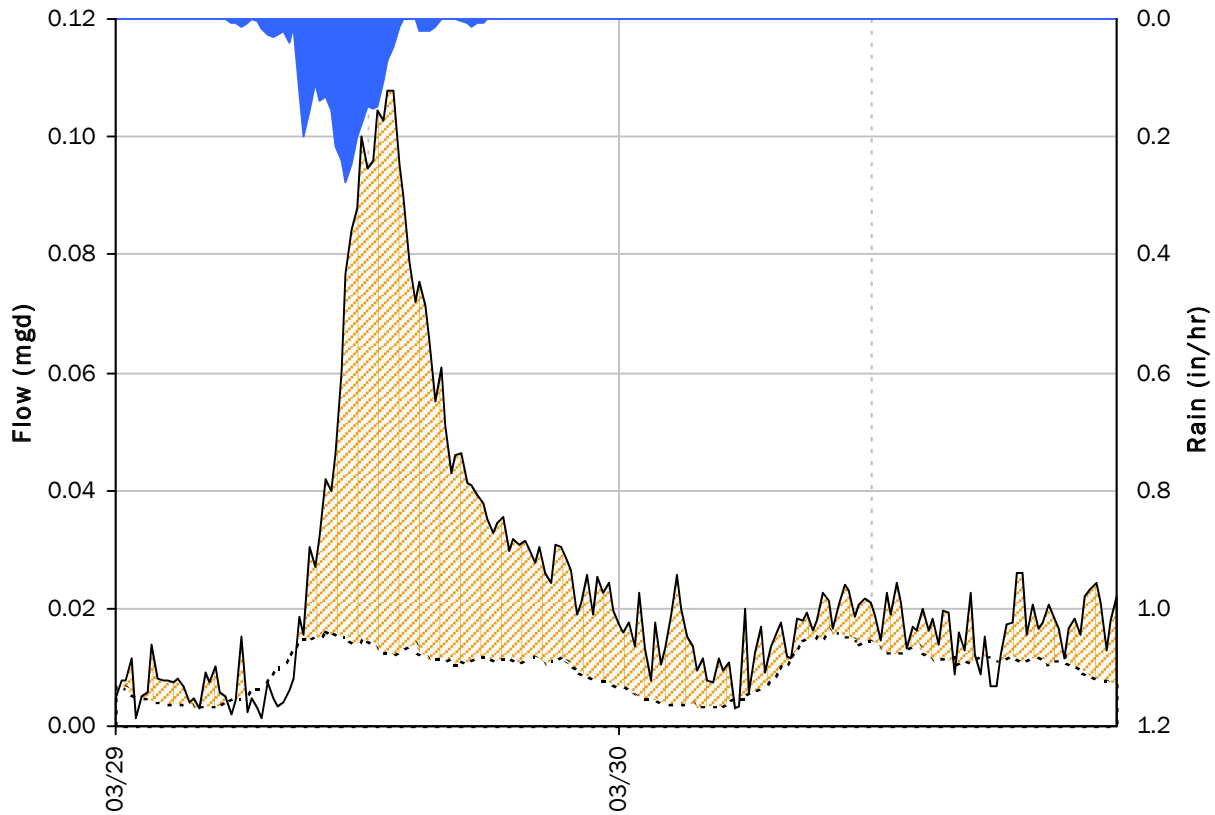
Surcharged 0.1 inches over crown





SITE 5.2A

I/I Summary: Event 3

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 3 Detail Graph**Storm Event I/I Analysis (Rain = 0.85 inches)**Capacity

Peak Flow: 0.11 mgd

PF: 11.99

Peak Level: 3.20 in

d/D Ratio: 0.53

Inflow / Infiltration

Peak I/I Rate: 0.10 mgd

Total I/I: 30,000 gallons

City of Pinole

Sanitary Sewer Flow Monitoring

Temporary Monitoring: March 2014

Monitoring Site: Site M6.5

Location: 747 Sunnyview Dr.

Data Summary Report

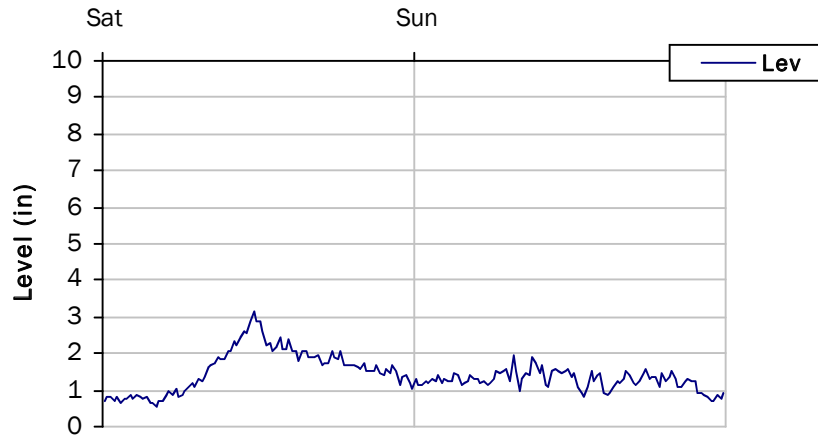


Vicinity Map: Site M6.5

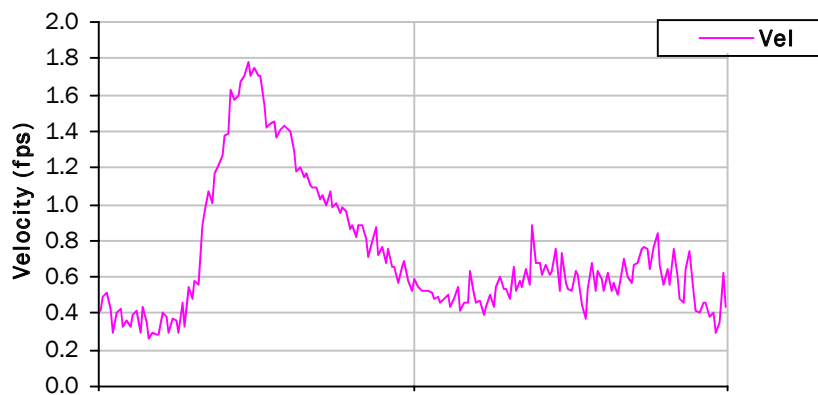
SITE M6.5

Weekly Level, Velocity and Flow Hydrographs

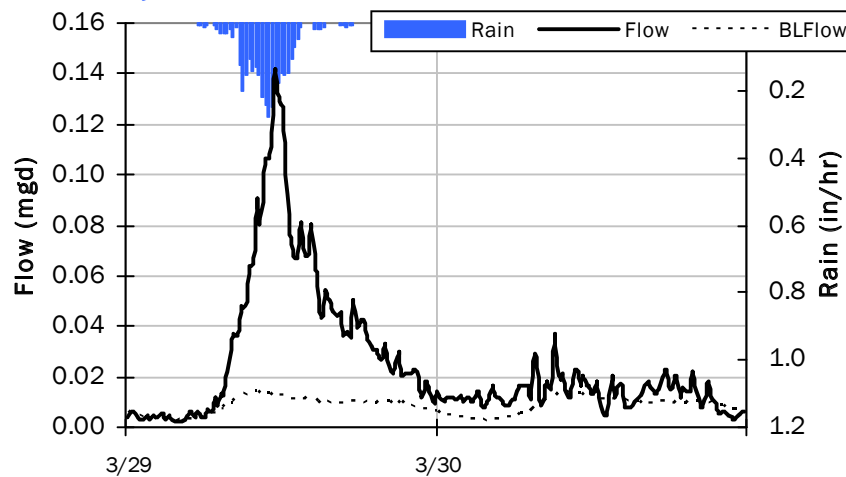
Avg Level: 1.42 in. Peak Level: 3.15 in. Min Level: 0.54 in.



Avg Velocity: 0.72 fps Peak Velocity: 1.78 fps Min Velocity: 0.26 fps



Total Weekly Rainfall: 0.85 inches

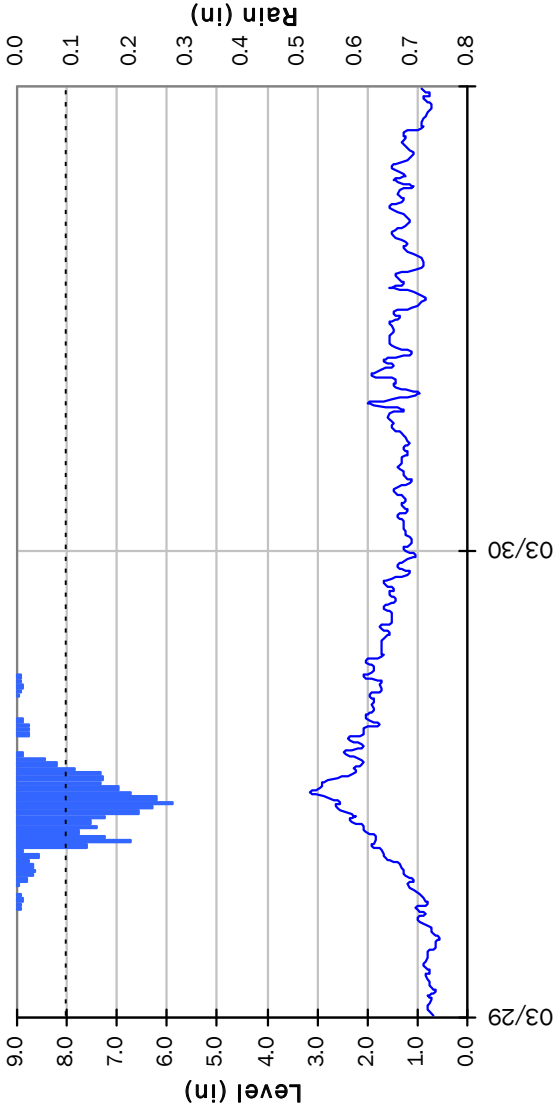


Avg Flow: 0.025 mgd Peak Flow: 0.141 mgd Min Flow: 0.002 mgd

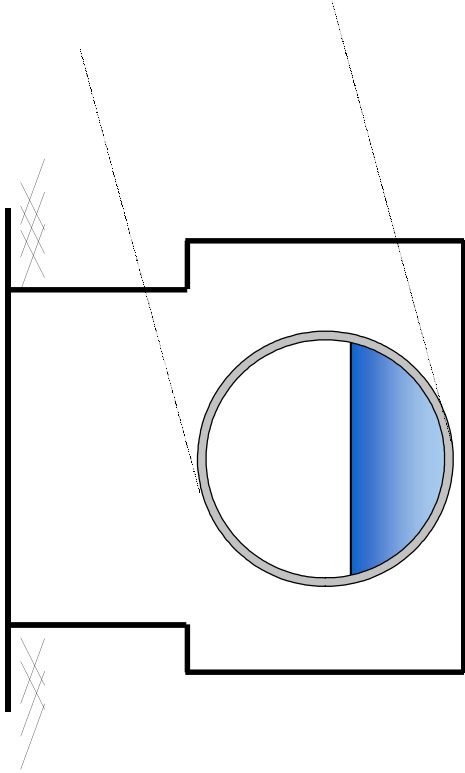
SITE M6.5

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



Pipe Diameter: 8 inches
Peak Measured Level: 3.15 inches
Peak d/D Ratio: 0.39



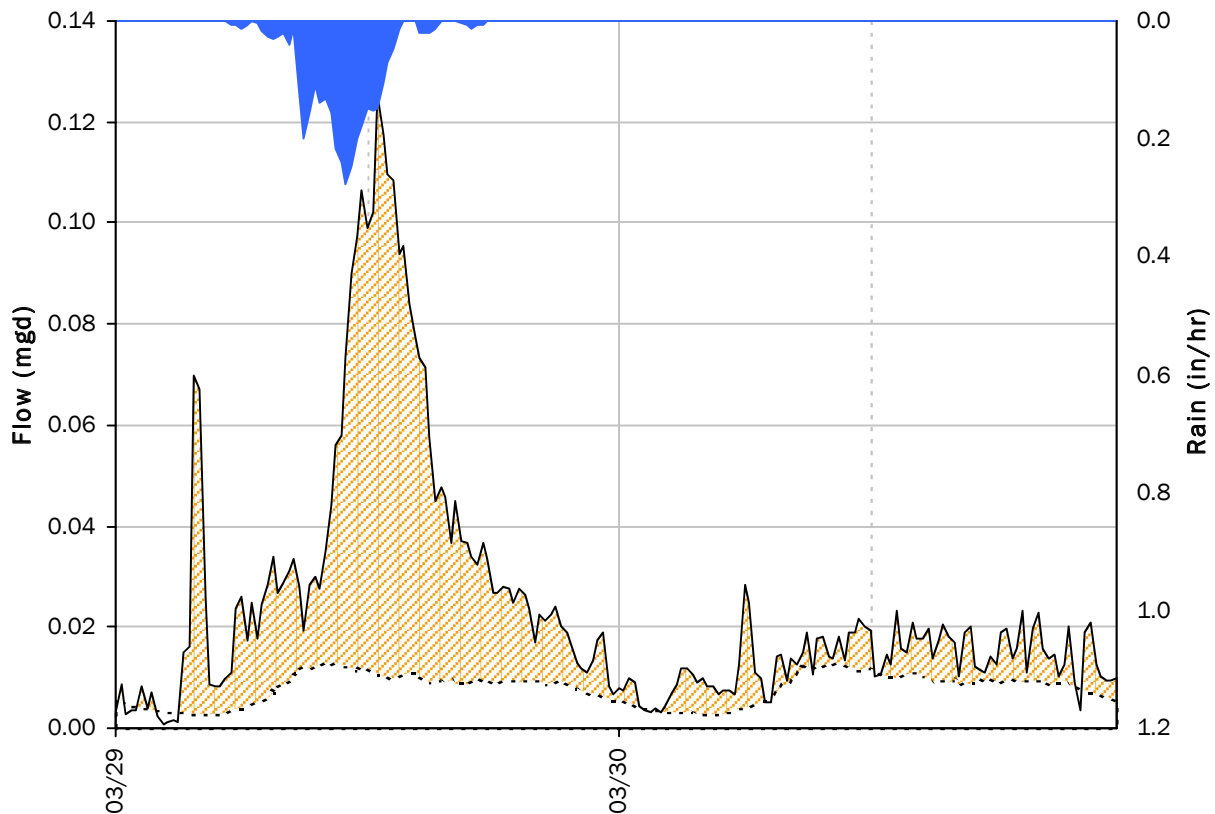


SITE 5.3

I/I Summary: Event 3

Baseline and Realtime Flows with Rainfall Data over Monitoring Period

Event 3 Detail Graph



Storm Event I/I Analysis (Rain = 0.85 inches)

Capacity

Peak Flow: 0.13 mgd

PF: 17.01

Peak Level: 2.21 in

d/D Ratio: 0.37

Inflow / Infiltration

Peak I/I Rate: 0.11 mgd

Total I/I: 33,000 gallons

City of Pinole

Sanitary Sewer Flow Monitoring

Temporary Monitoring: March 2014

Monitoring Site: Site M3.1A

Location: Intersection of Meadow Ave. and Betty Ave.

Data Summary Report

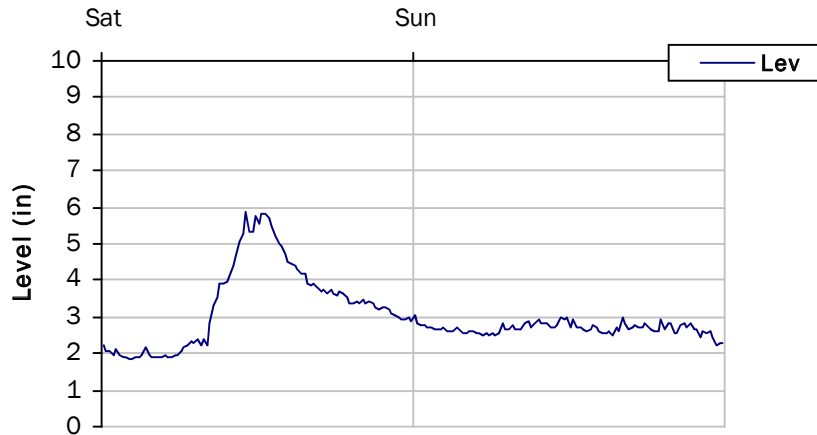


Vicinity Map: Site M3.1A

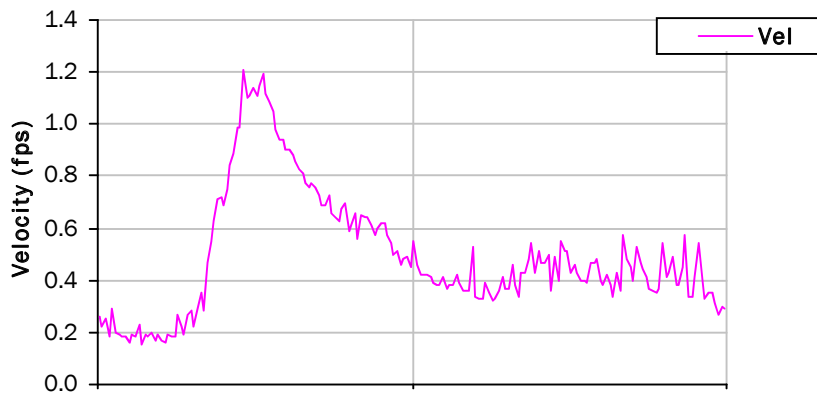
SITE M3.1A

Weekly Level, Velocity and Flow Hydrographs

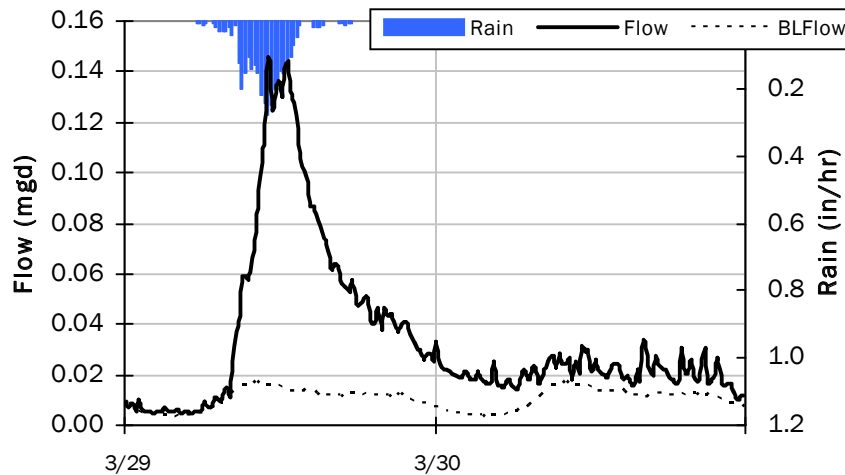
Avg Level: 3.02 in. Peak Level: 5.85 in. Min Level: 1.85 in.



Avg Velocity: 0.49 fps Peak Velocity: 1.21 fps Min Velocity: 0.15 fps



Total Weekly Rainfall: 0.85 inches

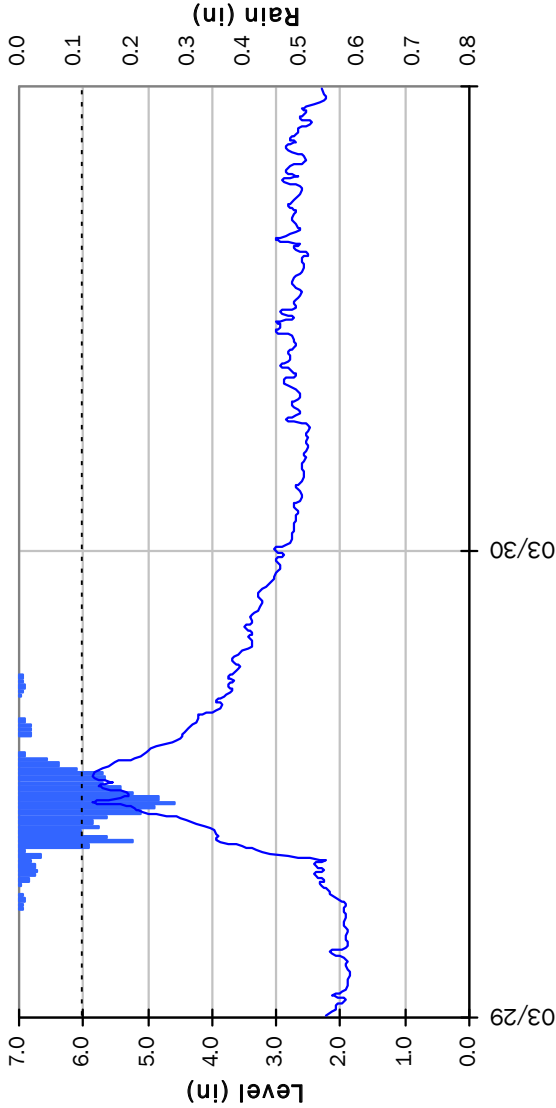


Avg Flow: 0.034 mgd Peak Flow: 0.146 mgd Min Flow: 0.005 mgd

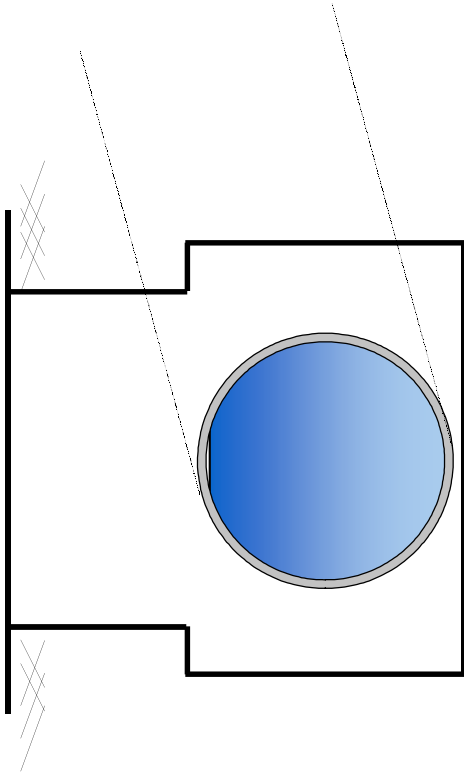
SITE M3.1A

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



Pipe Diameter: 6 inches
Peak Measured Level: 5.85 inches
Peak d/D Ratio: 0.98



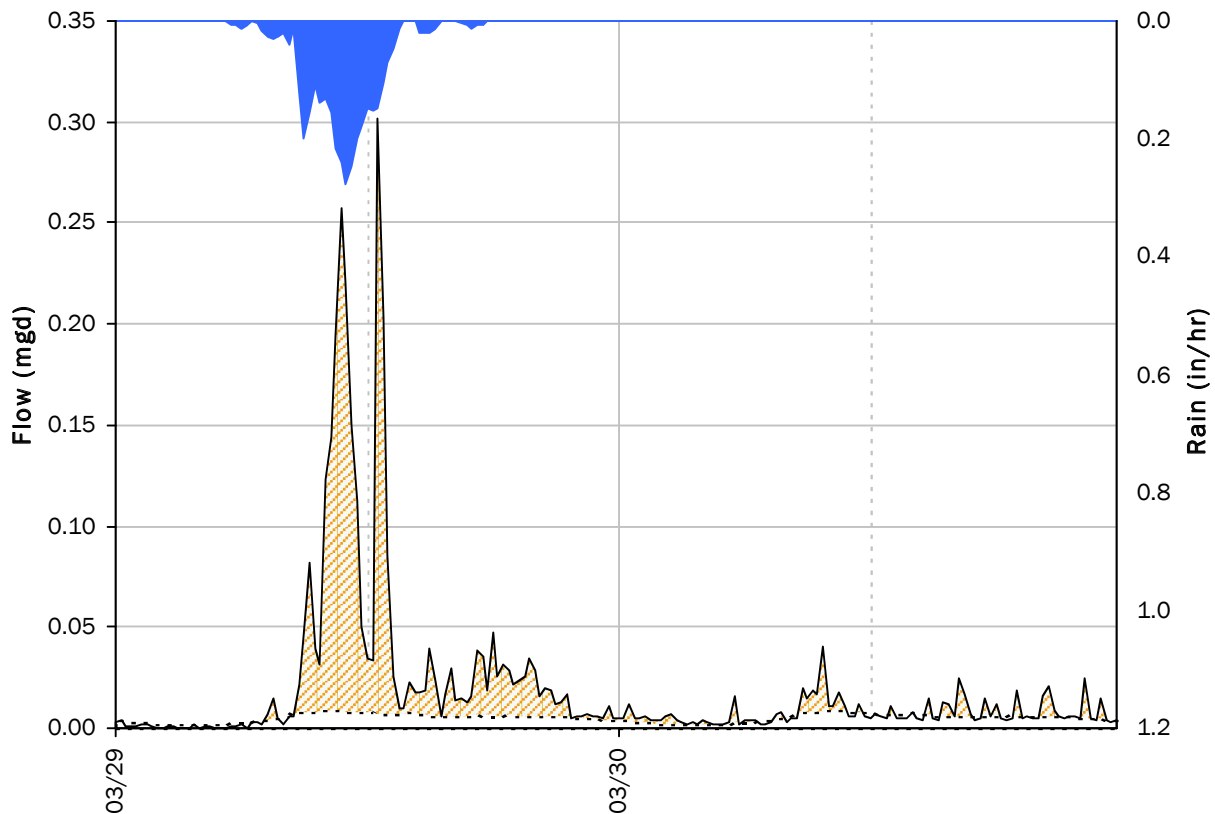


SITE 6.3A

I/I Summary: Event 3

Baseline and Realtime Flows with Rainfall Data over Monitoring Period

Event 3 Detail Graph



Storm Event I/I Analysis (Rain = 0.85 inches)

Capacity

Peak Flow: 0.30 mgd

PF: 61.48

Peak Level: 3.15 in

d/D Ratio: 0.53

Inflow / Infiltration

Peak I/I Rate: 0.30 mgd

Total I/I: 29,000 gallons

City of Pinole

Sanitary Sewer Flow Monitoring

Temporary Monitoring: March 2014

Monitoring Site: Site M3.1B

Location: Intersection of Meadow Ave. and Nob Hill Ave.

Data Summary Report

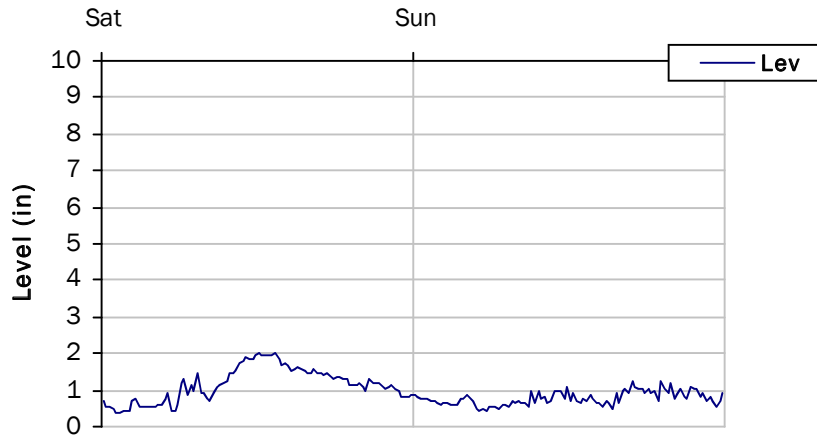


Vicinity Map: Site M3.1B

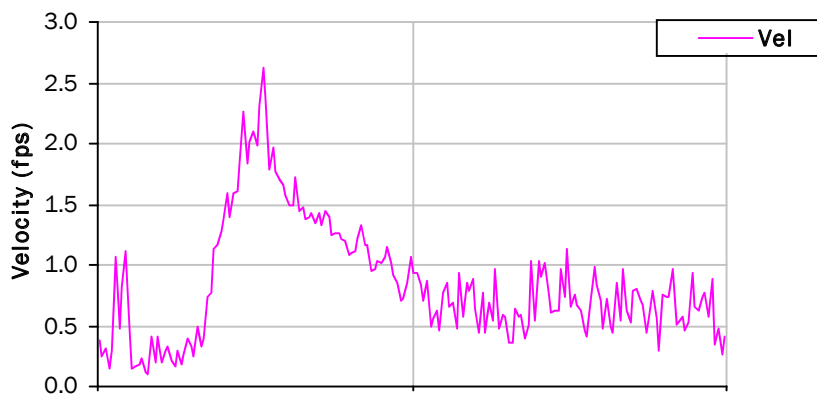
SITE M3.1B

Weekly Level, Velocity and Flow Hydrographs

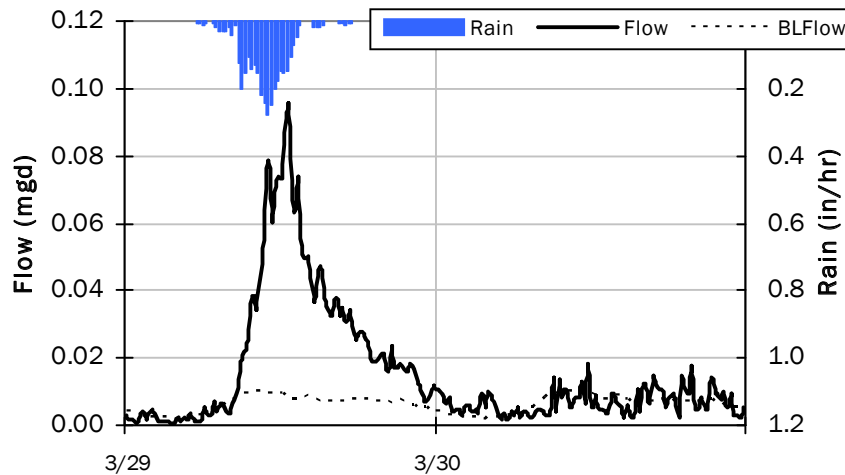
Avg Level: 0.97 in. Peak Level: 2.03 in. Min Level: 0.37 in.



Avg Velocity: 0.85 fps Peak Velocity: 2.62 fps Min Velocity: 0.10 fps



Total Weekly Rainfall: 0.85 inches

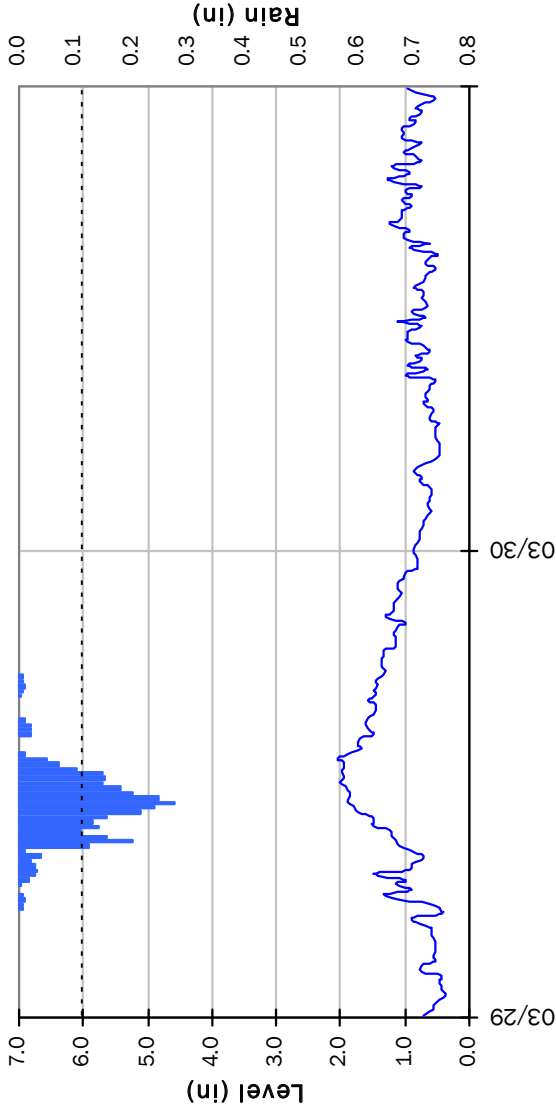


Avg Flow: 0.015 mgd Peak Flow: 0.095 mgd Min Flow: 0.001 mgd

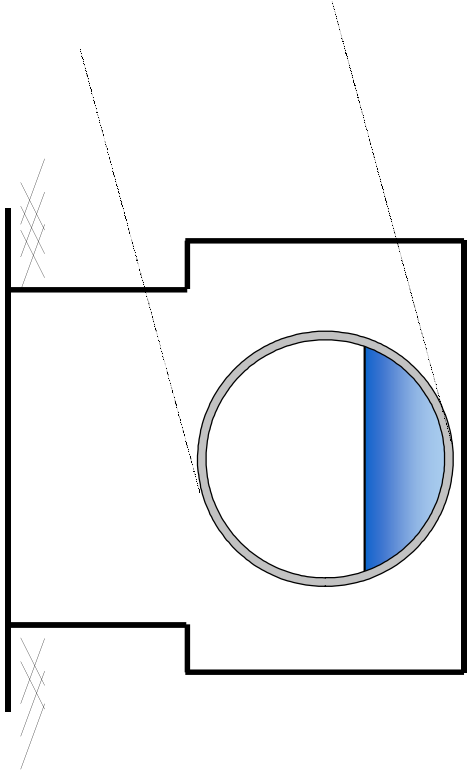
SITE M3.1B

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



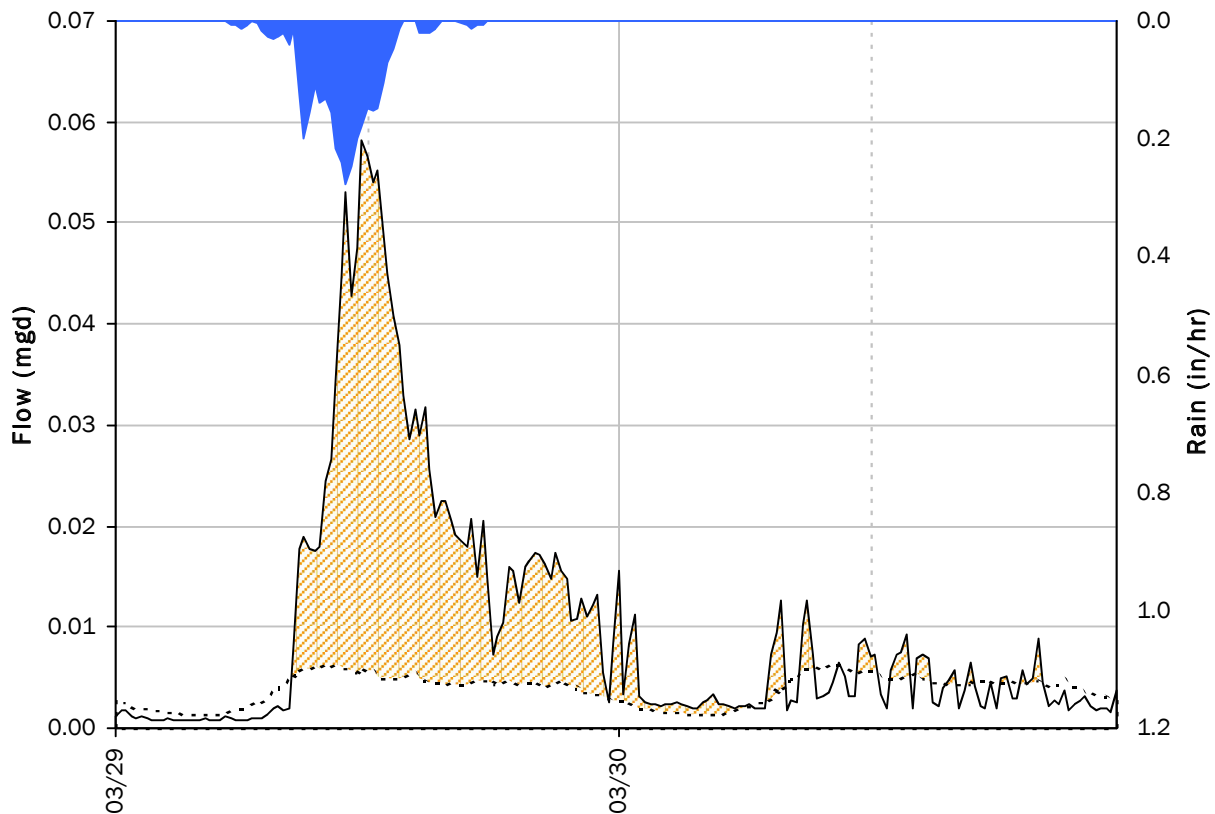
Pipe Diameter: 6 inches
Peak Measured Level: 2.03 inches
Peak d/D Ratio: 0.34





SITE 6.3B

I/I Summary: Event 3

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 3 Detail Graph**Storm Event I/I Analysis (Rain = 0.85 inches)**Capacity

Peak Flow: 0.06 mgd

PF: 16.12

Peak Level: 1.26 in

d/D Ratio: 0.16

Inflow / Infiltration

Peak I/I Rate: 0.05 mgd

Total I/I: 12,000 gallons

City of Pinole

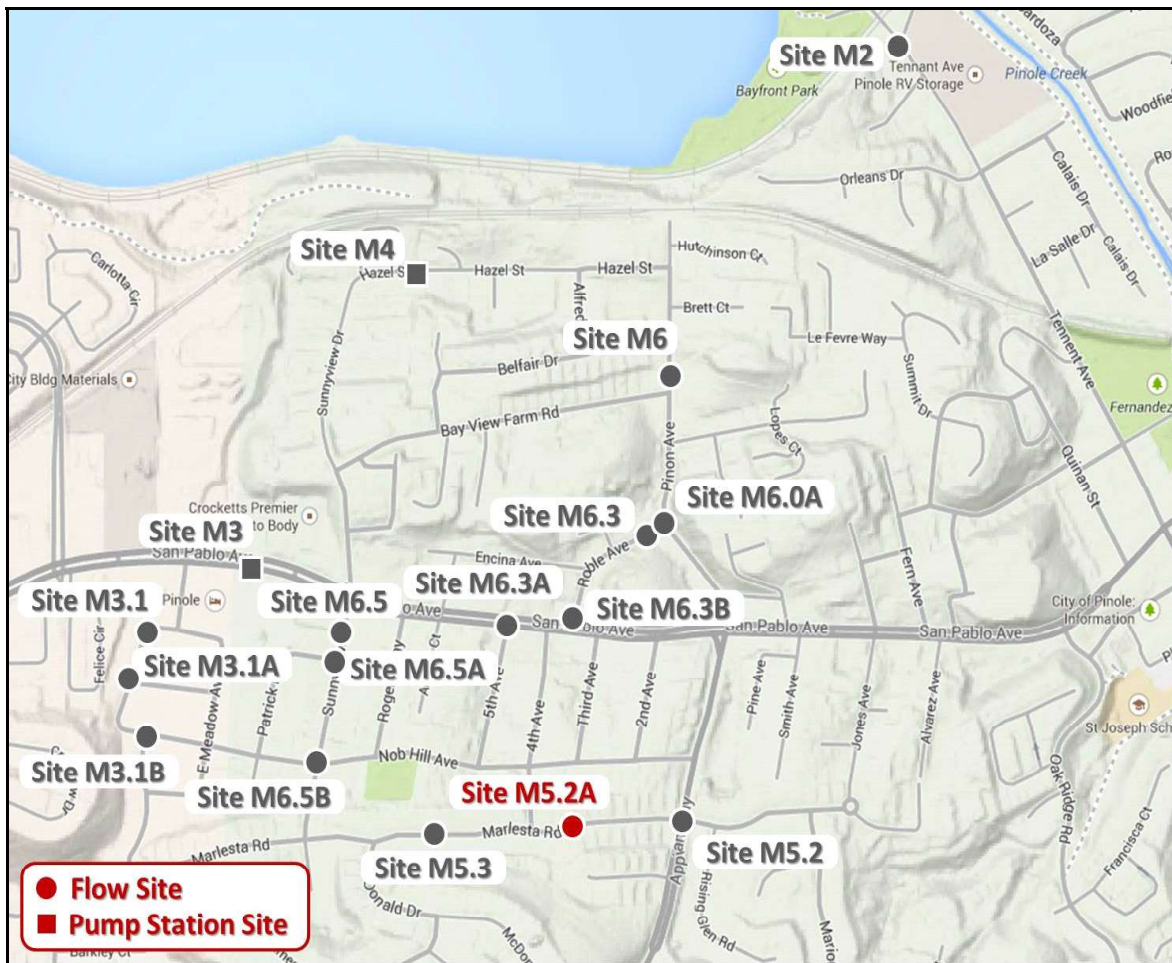
Sanitary Sewer Flow Monitoring

Temporary Monitoring: March 2014

Monitoring Site: Site M5.2A

Location: 1367 Marlesta Rd.

Data Summary Report

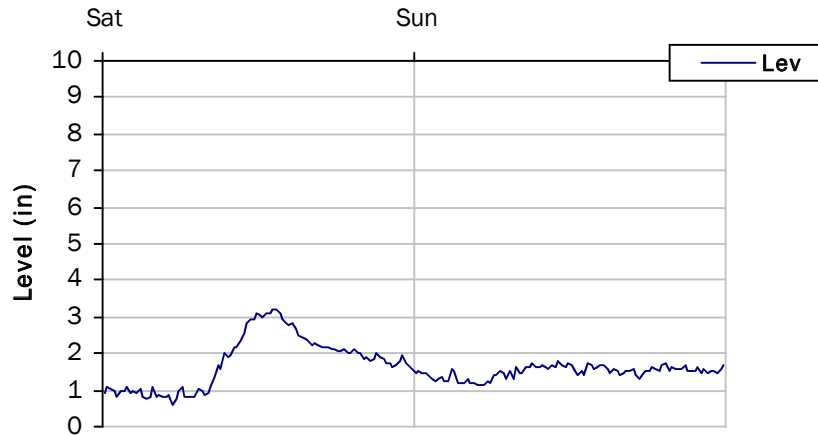


Vicinity Map: Site M5.2A

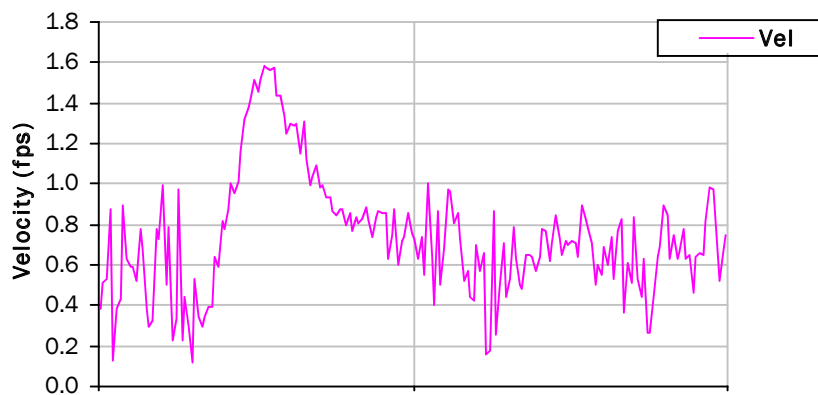
SITE M5.2A

Weekly Level, Velocity and Flow Hydrographs

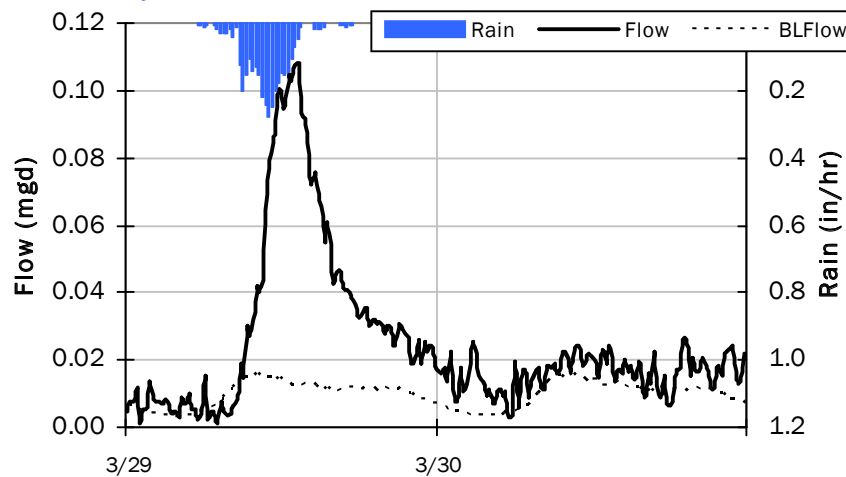
Avg Level: 1.64 in. Peak Level: 3.20 in. Min Level: 0.60 in.



Avg Velocity: 0.74 fps Peak Velocity: 1.58 fps Min Velocity: 0.12 fps



Total Weekly Rainfall: 0.85 inches

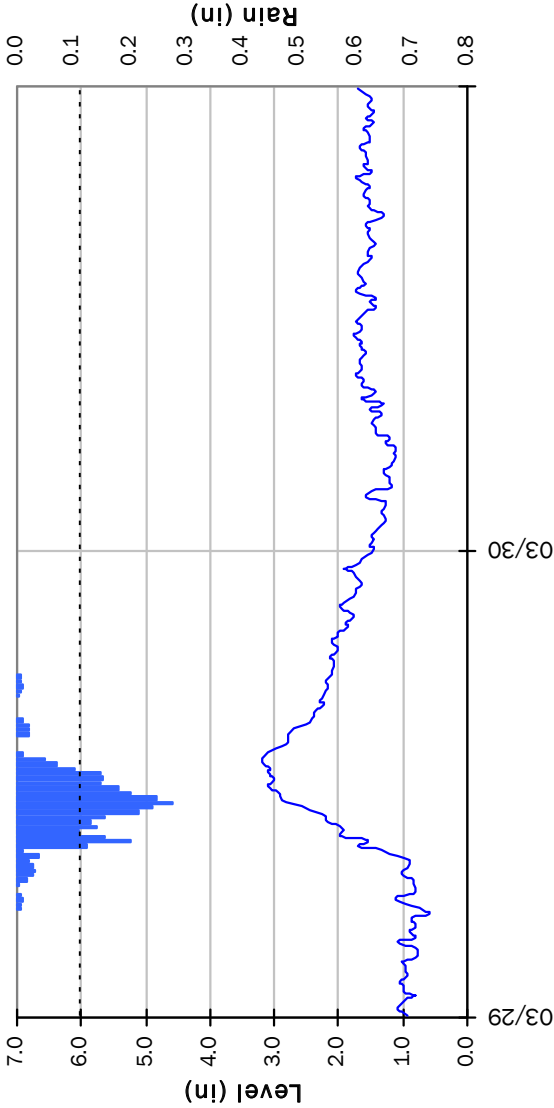


Avg Flow: 0.025 mgd Peak Flow: 0.108 mgd Min Flow: 0.001 mgd

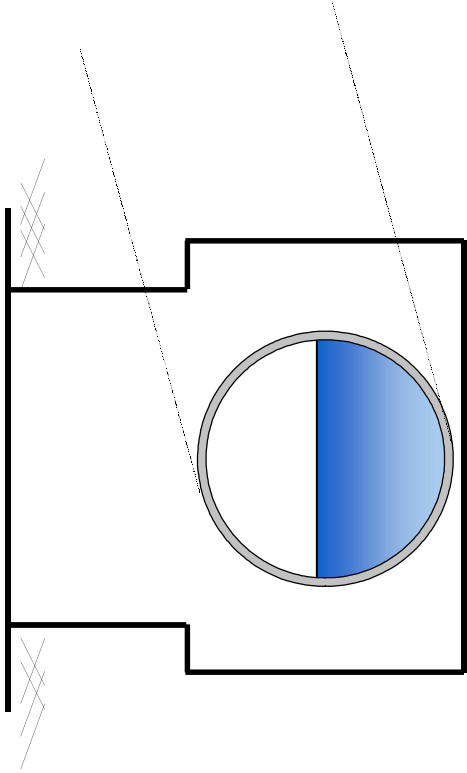
SITE M5.2A

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



Pipe Diameter: 6 inches
Peak Measured Level: 3.2 inches
Peak d/D Ratio: 0.53



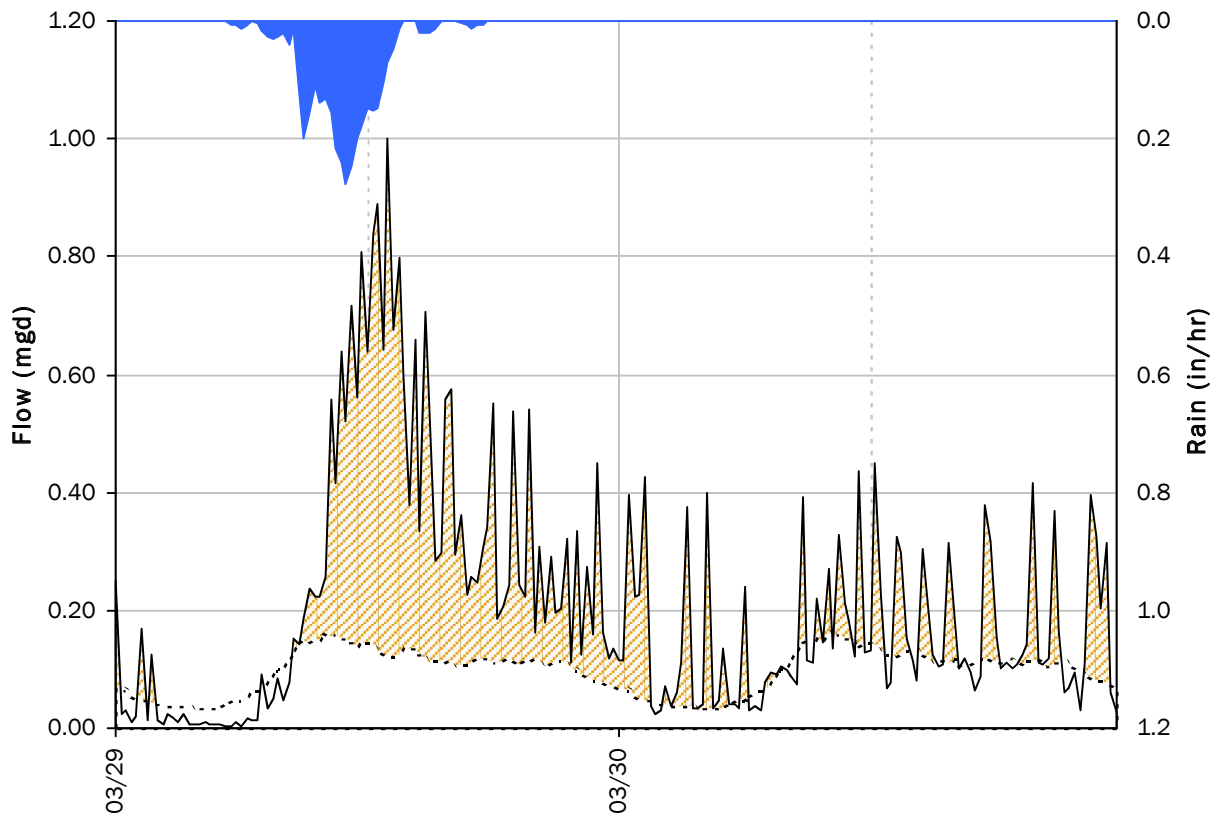


SITE 6.3

I/I Summary: Event 3

Baseline and Realtime Flows with Rainfall Data over Monitoring Period

Event 3 Detail Graph



Storm Event I/I Analysis (Rain = 0.85 inches)

Capacity

Peak Flow: 1.00 mgd

PF: 11.12

Peak Level: 8.07 in

d/D Ratio: 1.01

Inflow / Infiltration

Peak I/I Rate: 0.88 mgd

Total I/I: 230,000 gallons

City of Pinole

Sanitary Sewer Flow Monitoring

Temporary Monitoring: March 2014

Monitoring Site: Site M6.0A

Location: Intersection of Roble Ave. and Pinon Ave.

Data Summary Report

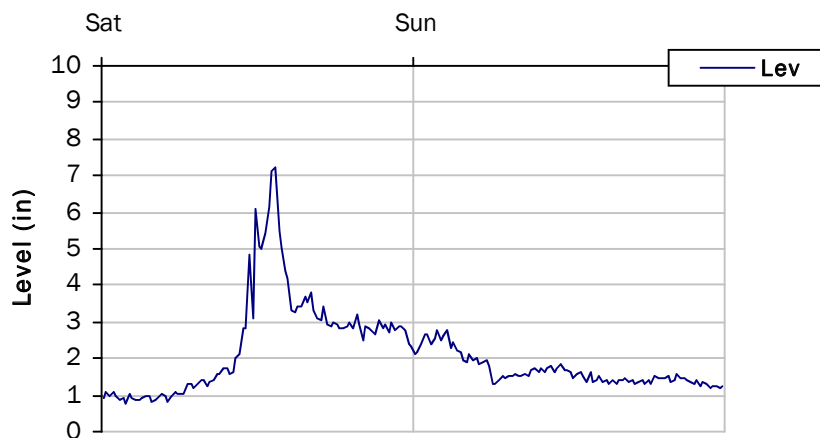


Vicinity Map: Site M6.0A

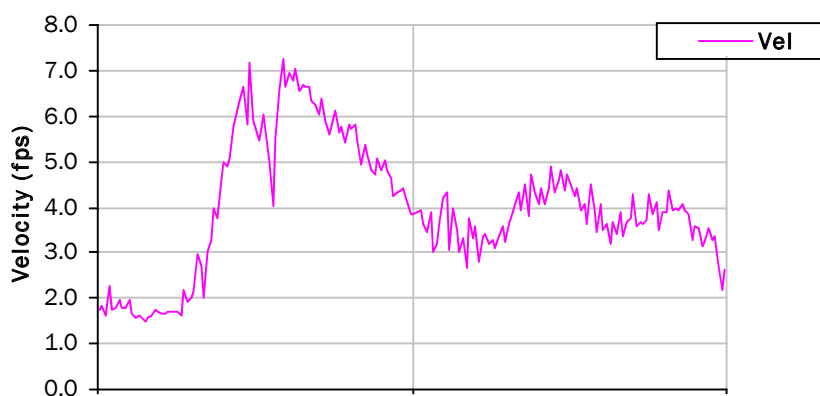
SITE M6.0A

Weekly Level, Velocity and Flow Hydrographs

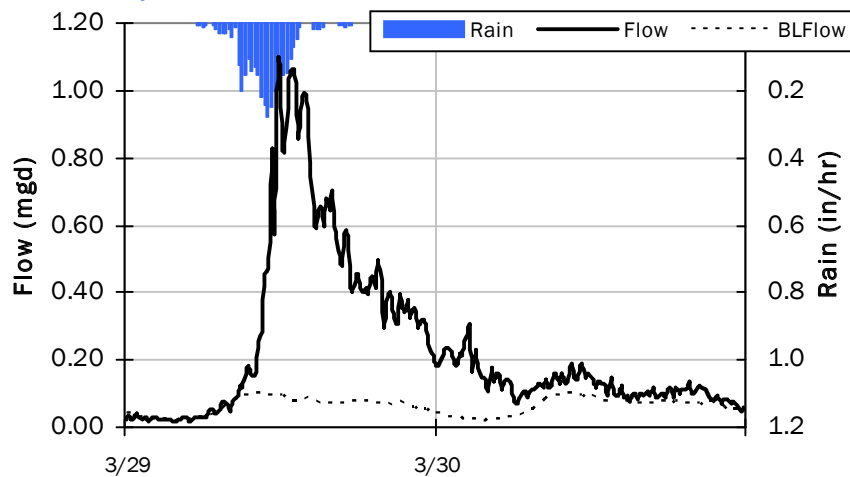
Avg Level: 2.08 in. Peak Level: 7.24 in. Min Level: 0.77 in.



Avg Velocity: 3.99 fps Peak Velocity: 7.27 fps Min Velocity: 1.50 fps



Total Weekly Rainfall: 0.85 inches



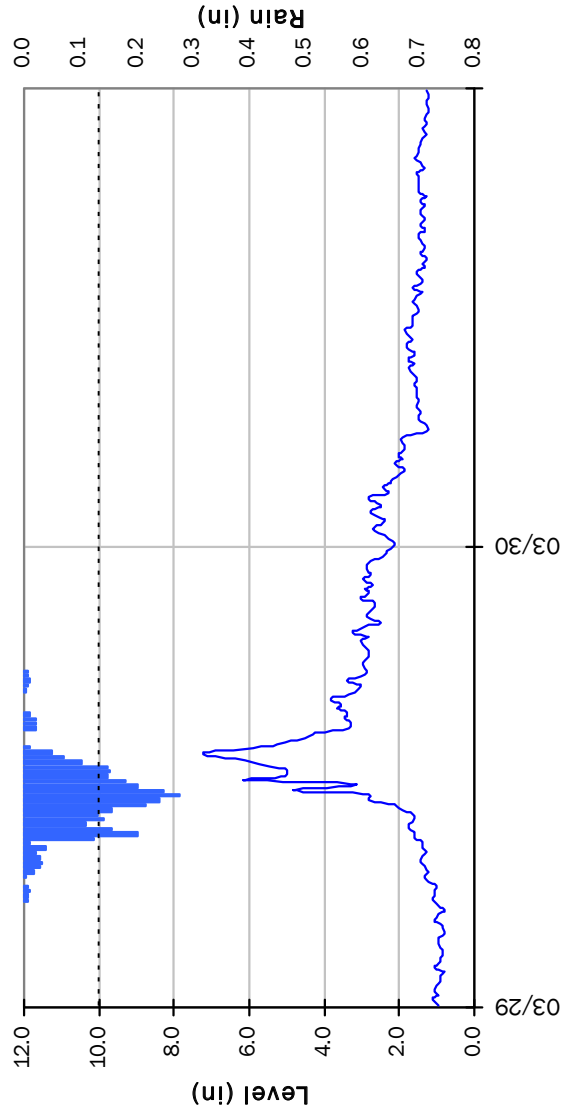
Avg Flow: 0.231 mgd Peak Flow: 1.091 mgd Min Flow: 0.019 mgd



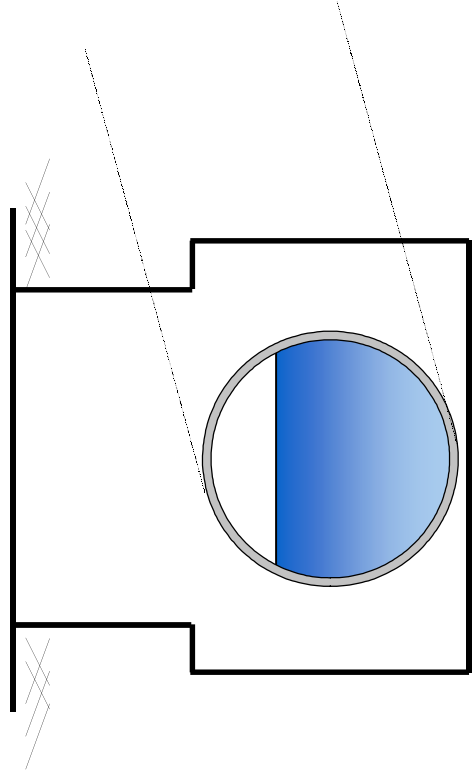
SITE M6.0A

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



Pipe Diameter:	10	inches
Peak Measured Level:	7.24	inches
Peak d/D Ratio:	0.72	



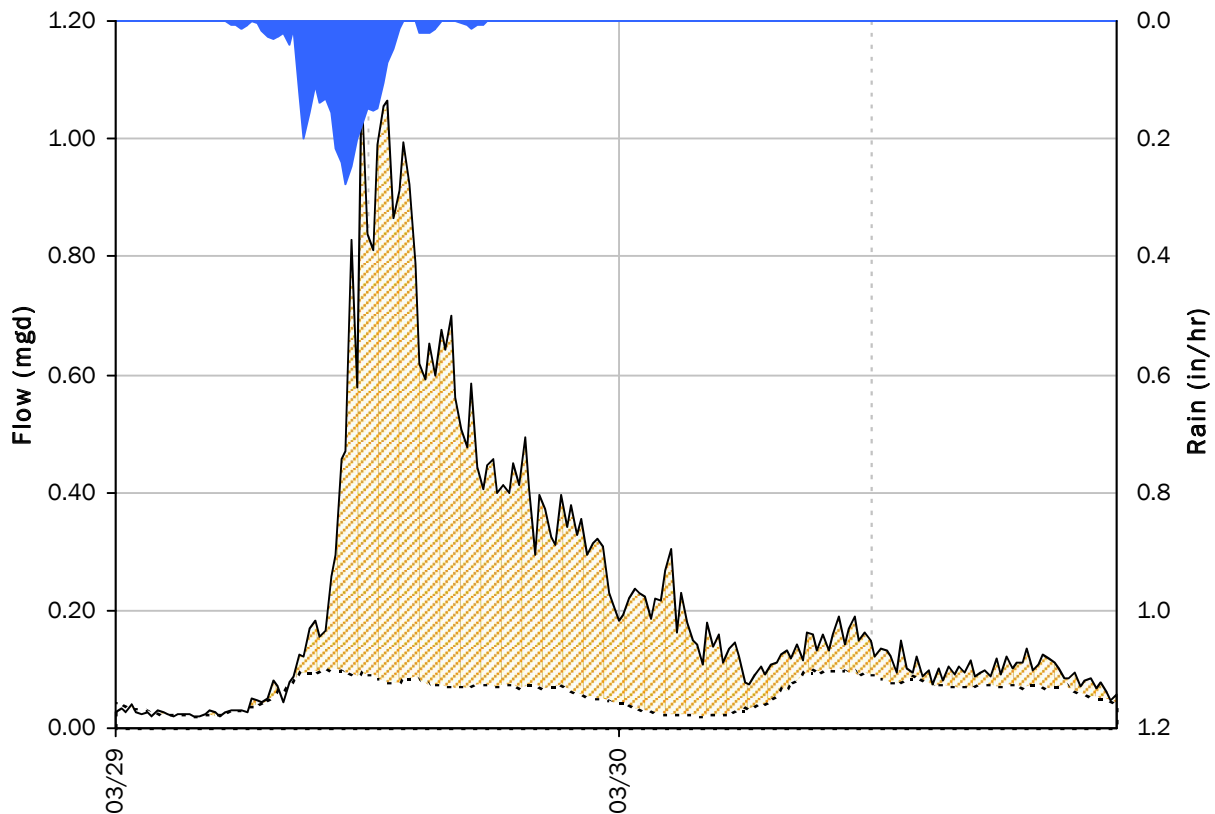


SITE 6.0A

I/I Summary: Event 3

Baseline and Realtime Flows with Rainfall Data over Monitoring Period

Event 3 Detail Graph



Storm Event I/I Analysis (Rain = 0.85 inches)

Capacity

Peak Flow: 1.09 mgd

PF: 19.03

Peak Level: 7.24 in

d/D Ratio: 0.72

Inflow / Infiltration

Peak I/I Rate: 1.00 mgd

Total I/I: 339,000 gallons

City of Pinole

Sanitary Sewer Flow Monitoring

Temporary Monitoring: March 2014

Monitoring Site: Site M6.3A

Location: Intersection of San Pablo Ave. and 5th Ave.

Data Summary Report

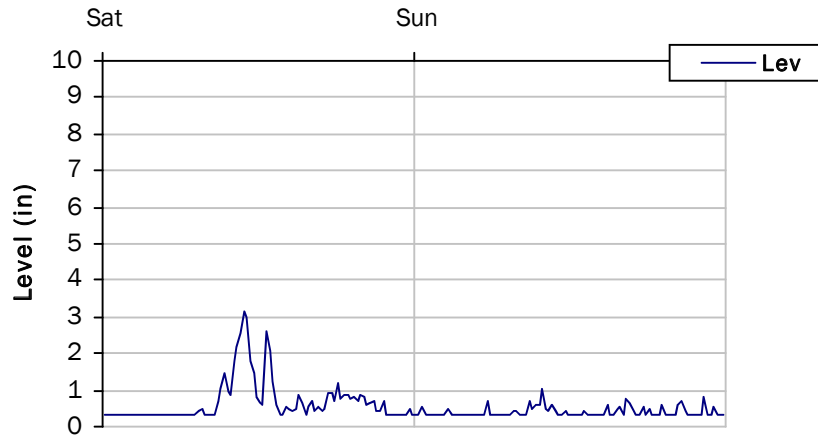


Vicinity Map: Site M6.3A

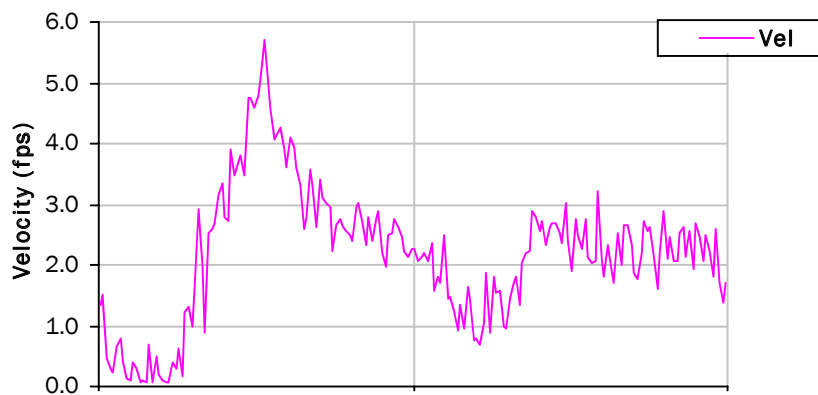
SITE M6.3A

Weekly Level, Velocity and Flow Hydrographs

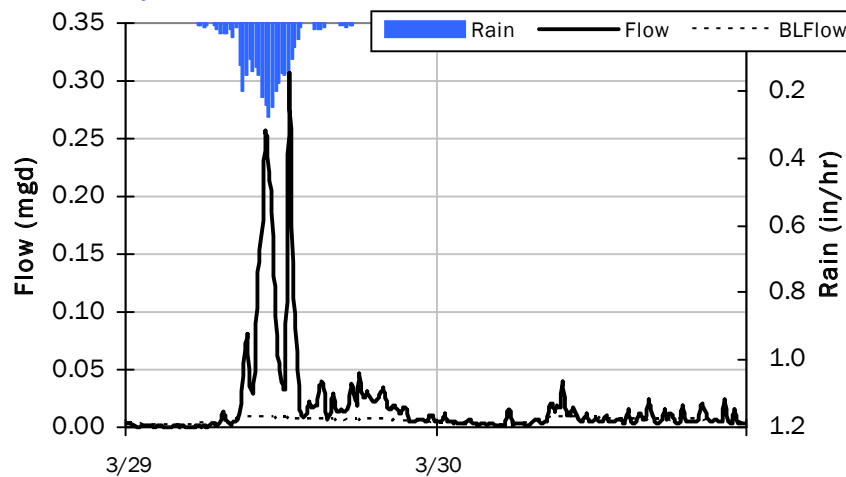
Avg Level: 0.53 in. Peak Level: 3.15 in. Min Level: 0.30 in.



Avg Velocity: 2.19 fps Peak Velocity: 5.70 fps Min Velocity: 0.07 fps



Total Weekly Rainfall: 0.85 inches

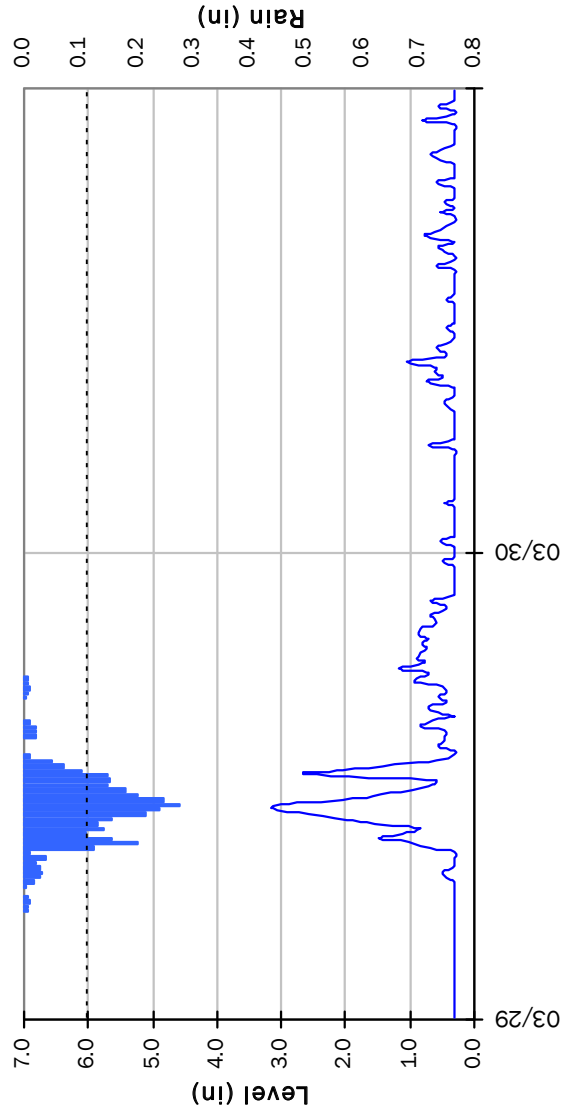


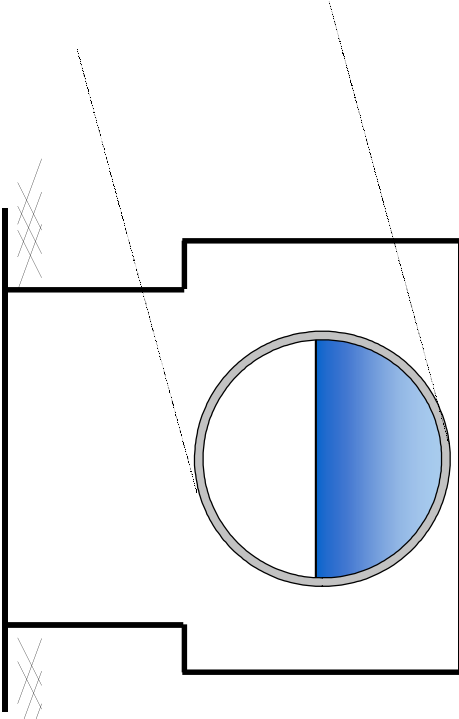
Avg Flow: 0.020 mgd Peak Flow: 0.302 mgd Min Flow: 0.000 mgd

SITE M6.3A

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period

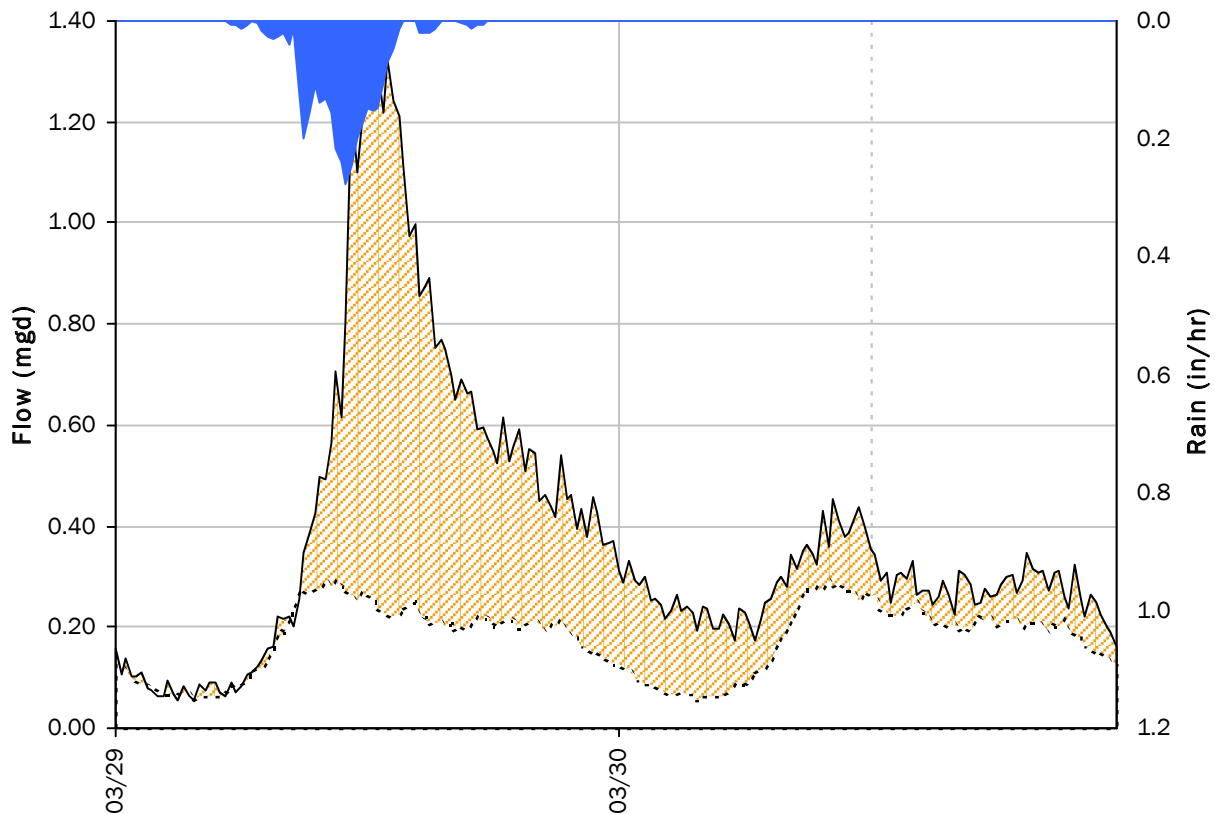


	Pipe Diameter:	6	inches
	Peak Measured Level:	3.15	inches
	Peak d/D Ratio:	0.53	



SITE 6

I/I Summary: Event 3

Baseline and Realtime Flows with Rainfall Data over Monitoring PeriodEvent 3 Detail Graph**Storm Event I/I Analysis (Rain = 0.85 inches)**Capacity

Peak Flow: 1.32 mgd

PF: 8.09

Peak Level: 41.01 in

d/D Ratio: 4.10

Inflow / Infiltration

Peak I/I Rate: 1.10 mgd

Total I/I: 408,000 gallons

City of Pinole

Sanitary Sewer Flow Monitoring

Temporary Monitoring: March 2014

Monitoring Site: Site M6.3B

Location: Intersection of San Pablo Ave. and Roble Ave.

Data Summary Report

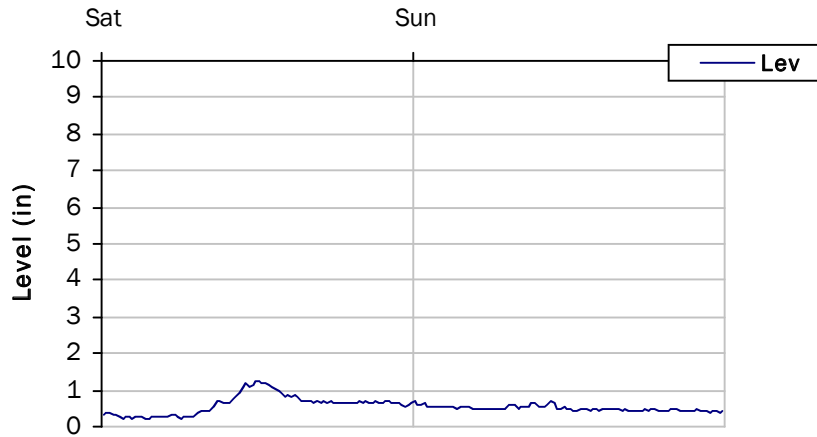


Vicinity Map: Site M6.3B

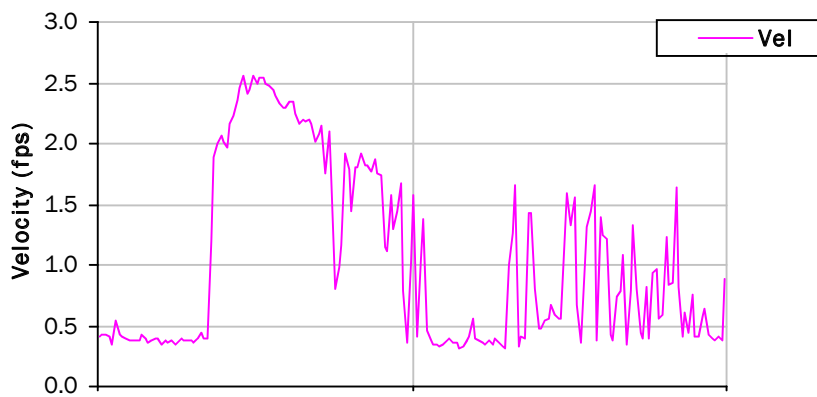
SITE M6.3B

Weekly Level, Velocity and Flow Hydrographs

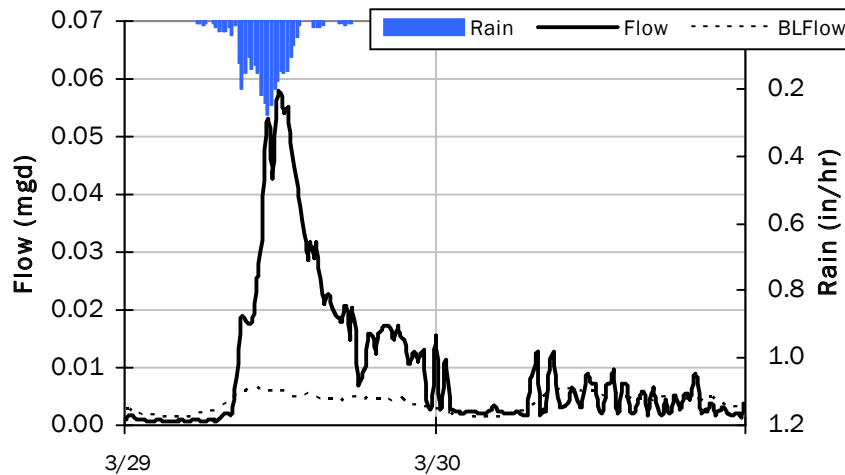
Avg Level: 0.56 in. Peak Level: 1.26 in. Min Level: 0.23 in.



Avg Velocity: 1.04 fps Peak Velocity: 2.56 fps Min Velocity: 0.31 fps



Total Weekly Rainfall: 0.85 inches

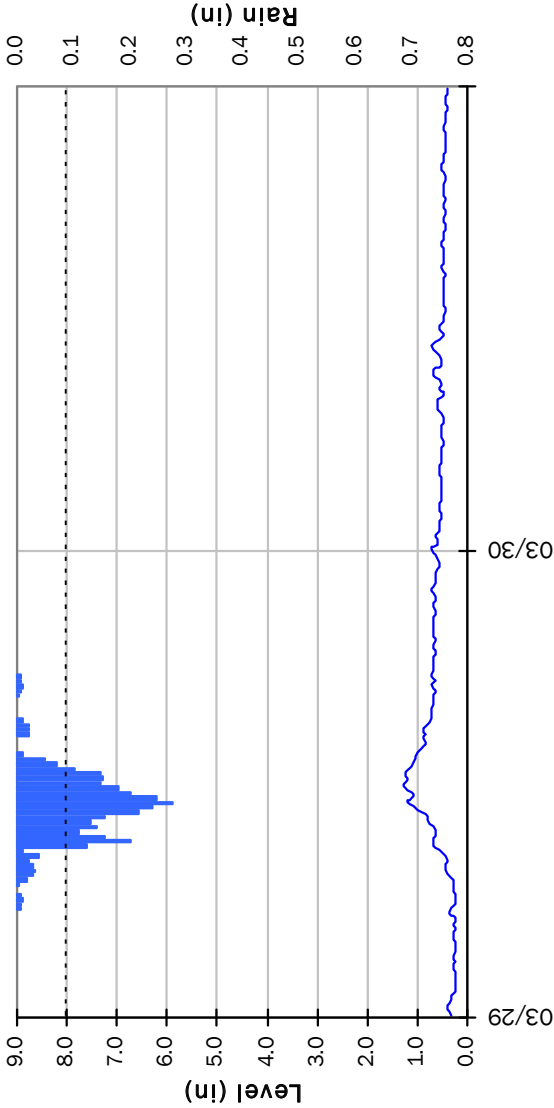


Avg Flow: 0.010 mgd Peak Flow: 0.058 mgd Min Flow: 0.001 mgd

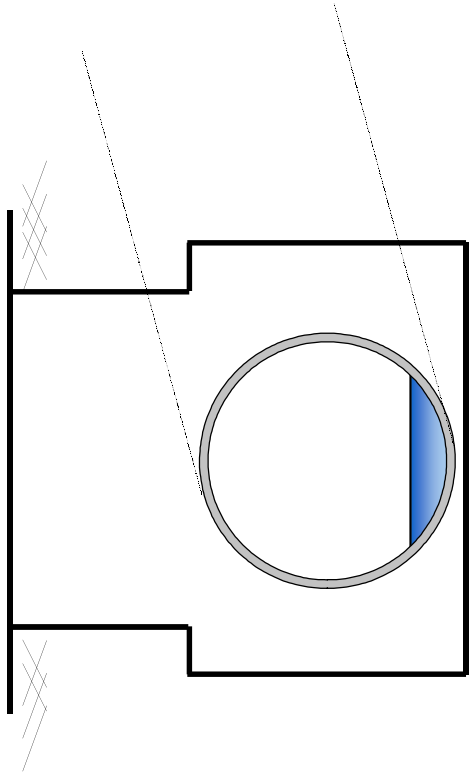
SITE M6.3B

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



Pipe Diameter: 8 inches
Peak Measured Level: 1.26 inches
Peak d/D Ratio: 0.16



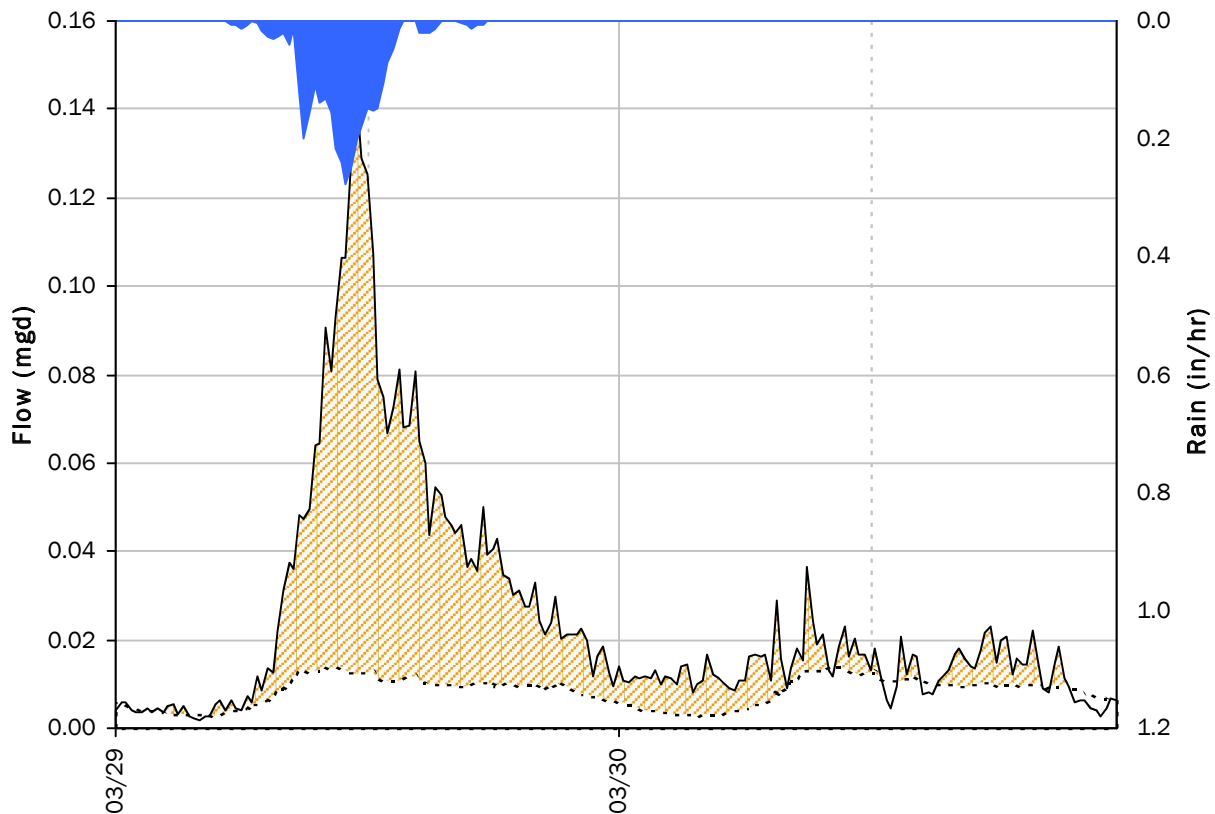


SITE 6.5

I/I Summary: Event 3

Baseline and Realtime Flows with Rainfall Data over Monitoring Period

Event 3 Detail Graph



Storm Event I/I Analysis (Rain = 0.85 inches)

Capacity

Peak Flow: 0.14 mgd

PF: 18.00

Peak Level: 3.15 in

d/D Ratio: 0.39

Inflow / Infiltration

Peak I/I Rate: 0.13 mgd

Total I/I: 33,000 gallons

City of Pinole

Sanitary Sewer Flow Monitoring

Temporary Monitoring: March 2014

Monitoring Site: Site M6.5A

Location: Intersection of Sunnyview Dr. and Patrick Dr.

Data Summary Report

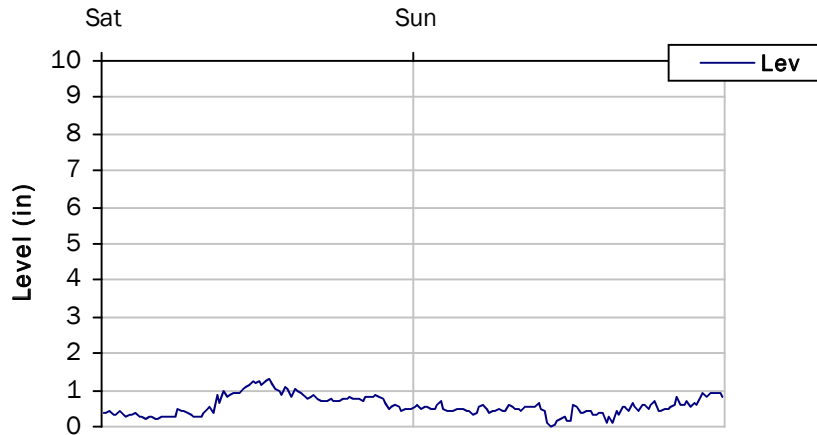


Vicinity Map: Site M6.5A

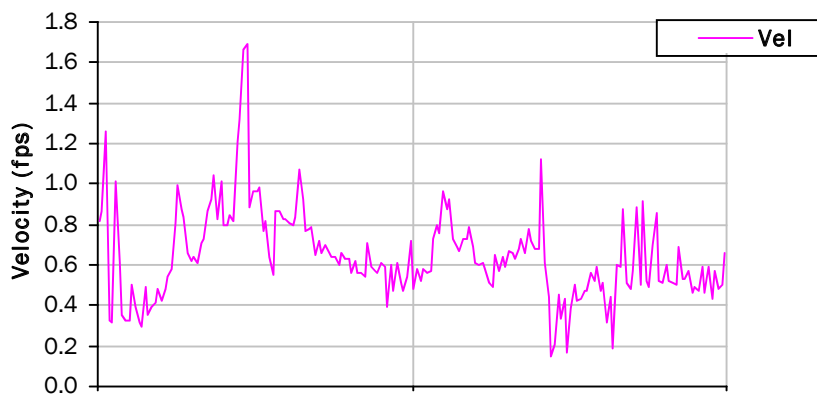
SITE M6.5A

Weekly Level, Velocity and Flow Hydrographs

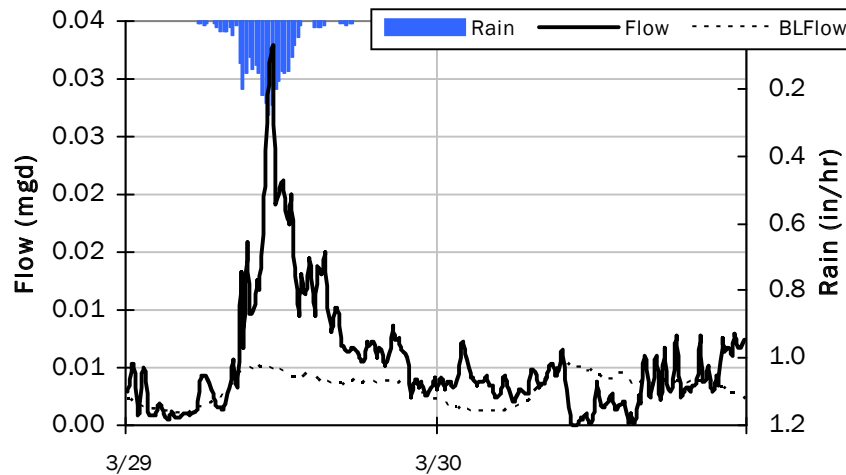
Avg Level: 0.58 in. Peak Level: 1.32 in. Min Level: 0.01 in.



Avg Velocity: 0.64 fps Peak Velocity: 1.69 fps Min Velocity: 0.15 fps



Total Weekly Rainfall: 0.85 inches

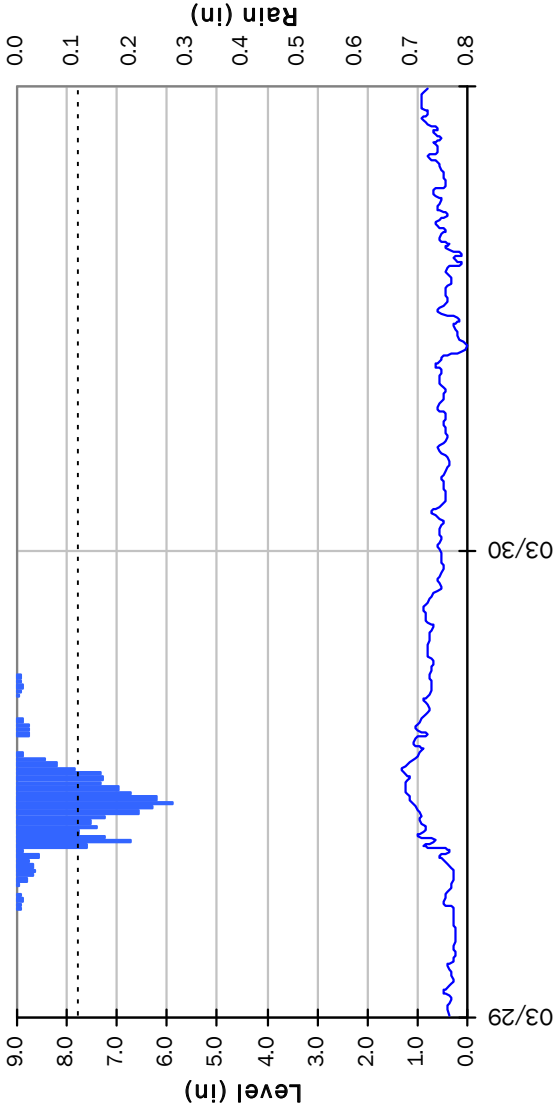


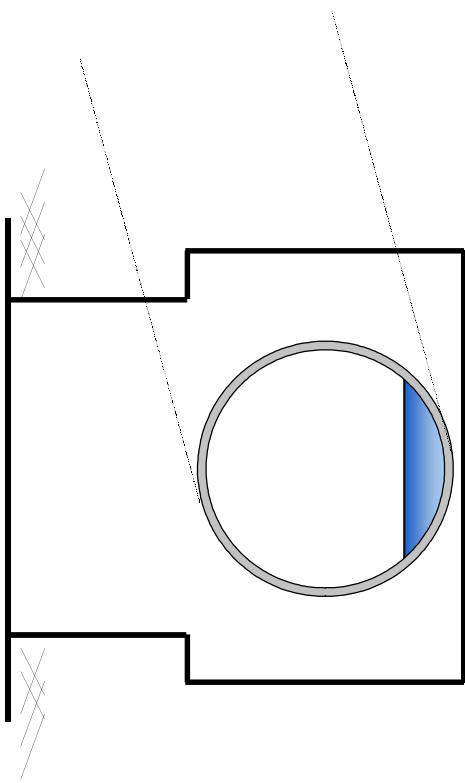
Avg Flow: 0.006 mgd Peak Flow: 0.033 mgd Min Flow: 0.000 mgd

SITE M6.5A

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



	Pipe Diameter:	7.75	inches
	Peak Measured Level:	1.32	inches
	Peak d/D Ratio:	0.17	

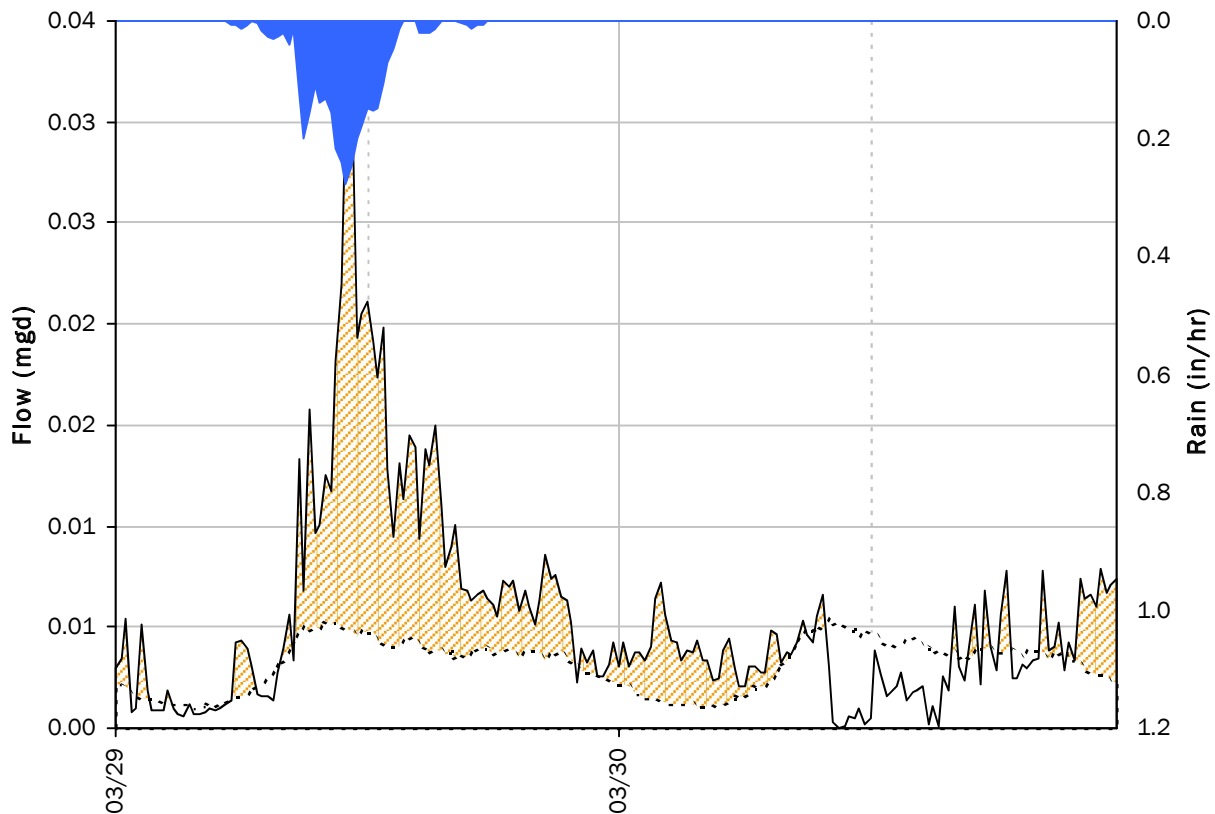


SITE 6.5A

I/I Summary: Event 3

Baseline and Realtime Flows with Rainfall Data over Monitoring Period

Event 3 Detail Graph



Storm Event I/I Analysis (Rain = 0.85 inches)

Capacity

Peak Flow: 0.03 mgd

PF: 11.06

Peak Level: 1.32 in

d/D Ratio: 0.17

Inflow / Infiltration

Peak I/I Rate: 0.03 mgd

Total I/I: 5,000 gallons

City of Pinole

Sanitary Sewer Flow Monitoring

Temporary Monitoring: March 2014

Monitoring Site: Site M6.5B

Location: Intersection of Sunnyview Dr. and Nob Hill Ave.

Data Summary Report

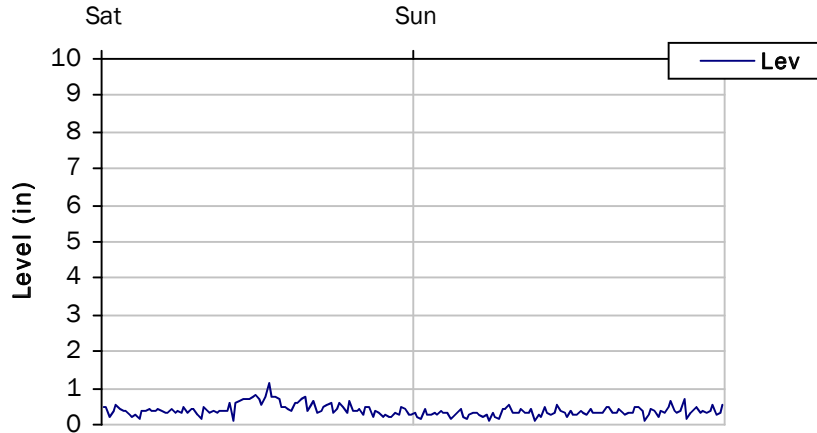


Vicinity Map: Site M6.5B

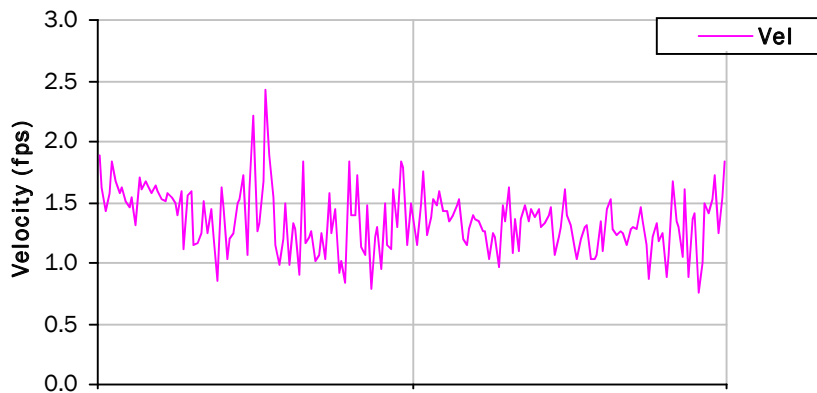
SITE M6.5B

Weekly Level, Velocity and Flow Hydrographs

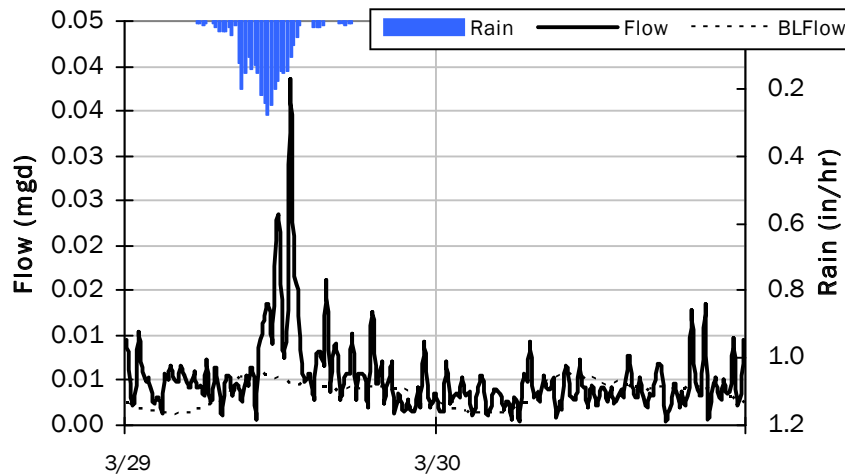
Avg Level: 0.39 in. Peak Level: 1.12 in. Min Level: 0.10 in.



Avg Velocity: 1.36 fps Peak Velocity: 2.42 fps Min Velocity: 0.76 fps



Total Weekly Rainfall: 0.85 inches

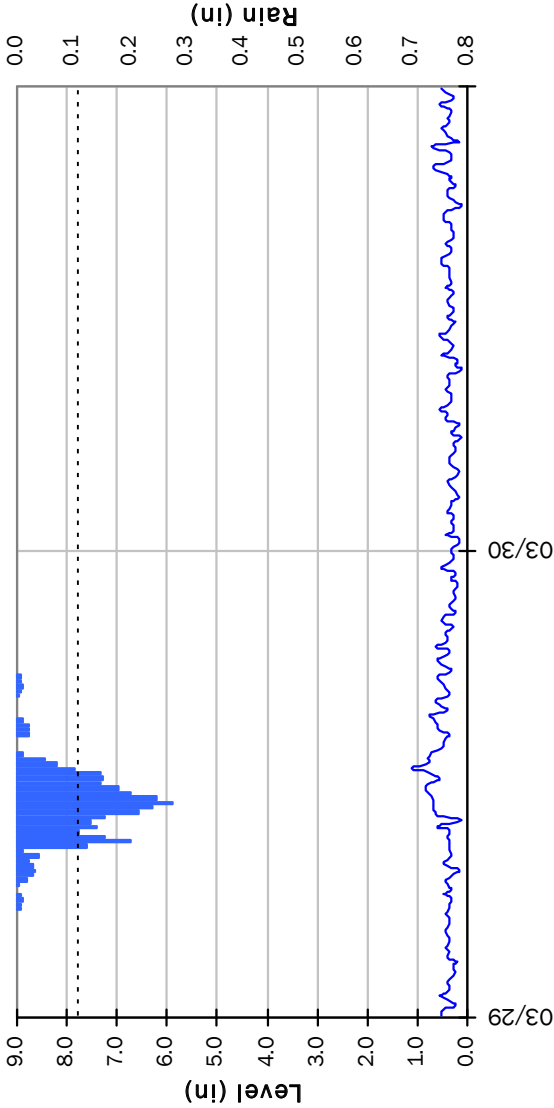


Avg Flow: 0.005 mgd Peak Flow: 0.039 mgd Min Flow: 0.001 mgd

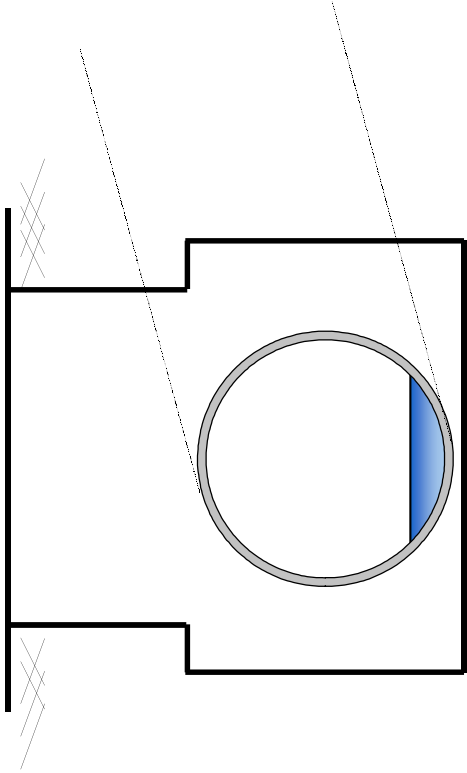
SITE M6.5B

Site Capacity and Surge Summary

Realtime Flow Levels with Rainfall Data over Monitoring Period



Pipe Diameter: 7.75 inches
Peak Measured Level: 1.12 inches
Peak d/D Ratio: 0.14



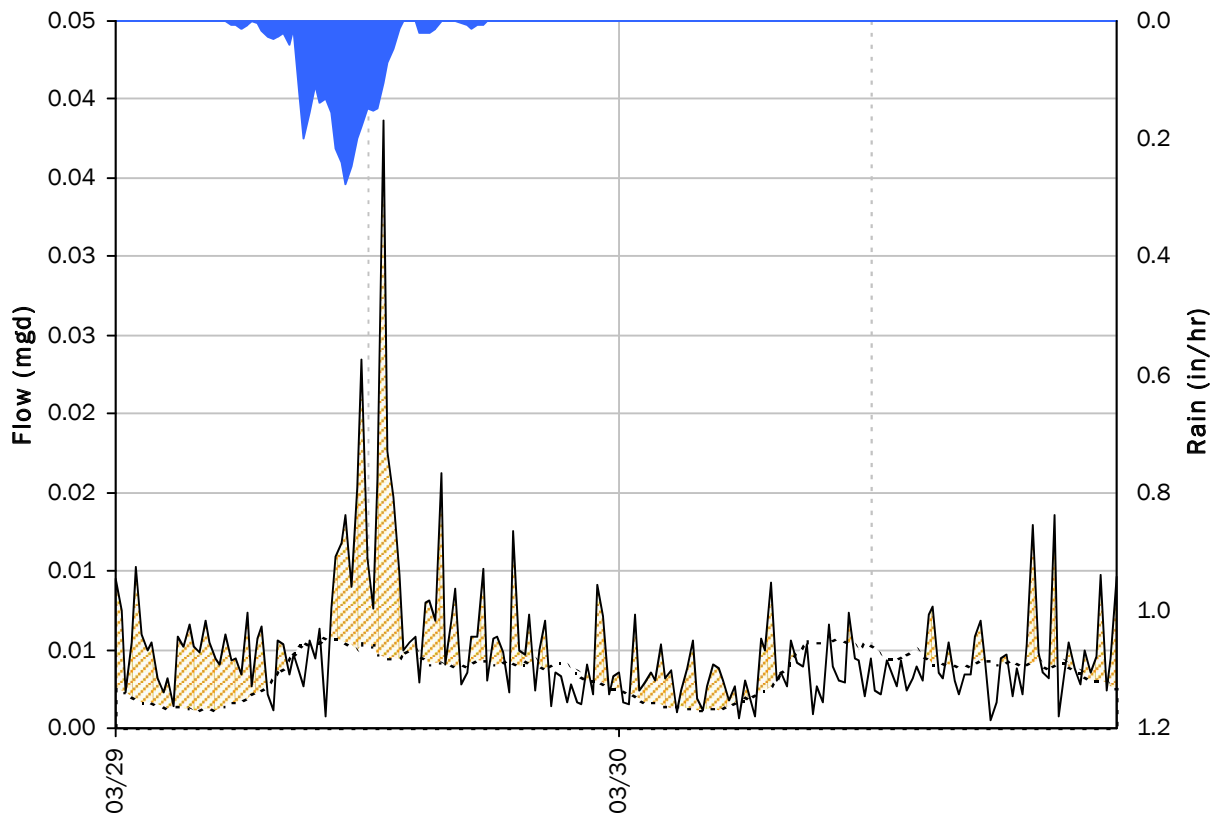


SITE 6.5B

I/I Summary: Event 3

Baseline and Realtime Flows with Rainfall Data over Monitoring Period

Event 3 Detail Graph



Storm Event I/I Analysis (Rain = 0.85 inches)

Capacity

Peak Flow: 0.04 mgd

PF: 11.78

Peak Level: 1.12 in

d/D Ratio: 0.14

Inflow / Infiltration

Peak I/I Rate: 0.03 mgd

Total I/I: 3,000 gallons

Appendix B

DRY WEATHER FLOW CALIBRATION SHEETS



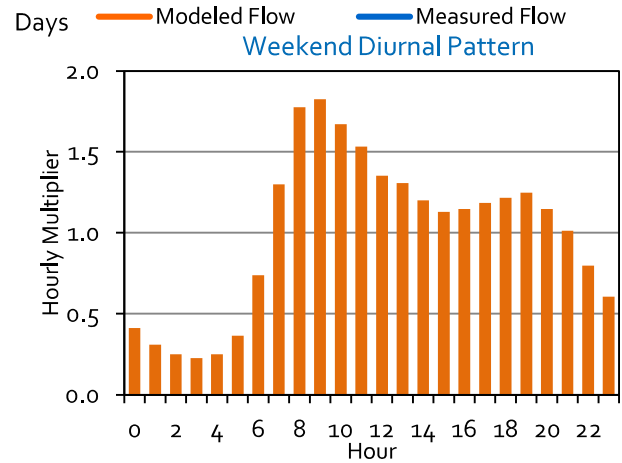
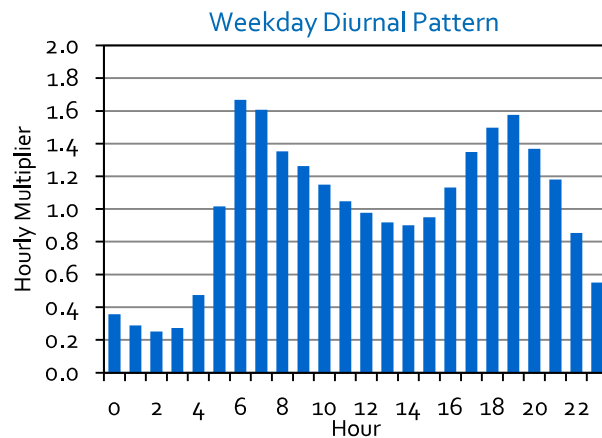
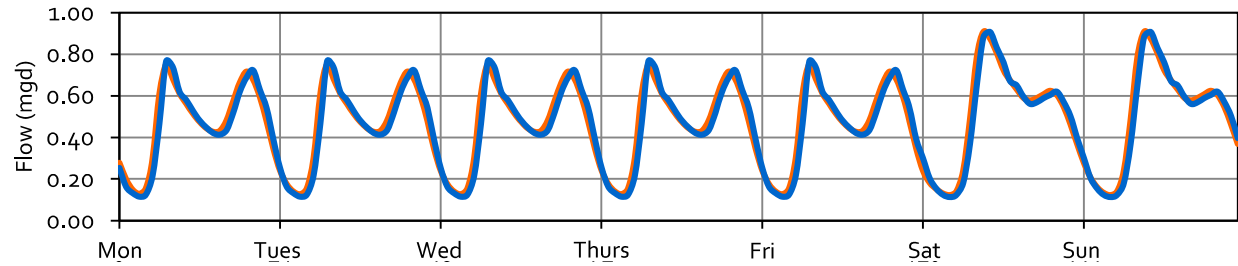
Flow Monitoring Site M₁, Dry Weather Flow Calibration

Location: Pinole valley Road just south of Highway 80

Measured Pipeline Diameter: 15"

Model Manhole ID: MH_1277

Model Pipe ID: P_691



Model Calibration Summary

Day	Measured Data ⁽¹⁾		Modeled Data		Percent Error ⁽³⁾	
	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (%)	Peak Flow (%)
Mon.	0.46	0.77	0.47	0.75	2%	-2%
Tues.	0.46	0.77	0.47	0.75	2%	-2%
Wed.	0.46	0.77	0.47	0.75	2%	-2%
Thur.	0.46	0.77	0.47	0.75	2%	-2%
Fri.	0.46	0.77	0.47	0.75	2%	-2%
Sat.	0.50	0.91	0.50	0.91	1%	0%
Sun.	0.50	0.91	0.51	0.91	2%	0%
Summary						
Weekday	0.459	--	0.467	--	2%	--
Weekend	0.497	--	0.505	--	2%	--
ADWF ⁽⁴⁾	0.470	--	0.478	--	2%	--

Notes:

- Source: V&A Temporary Flow Monitoring Program
- Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
- Percent Error = (Modeled - Measured) / Measured x 100
- ADWF = (5xWeekday Average + 2xWeekend Average)/7



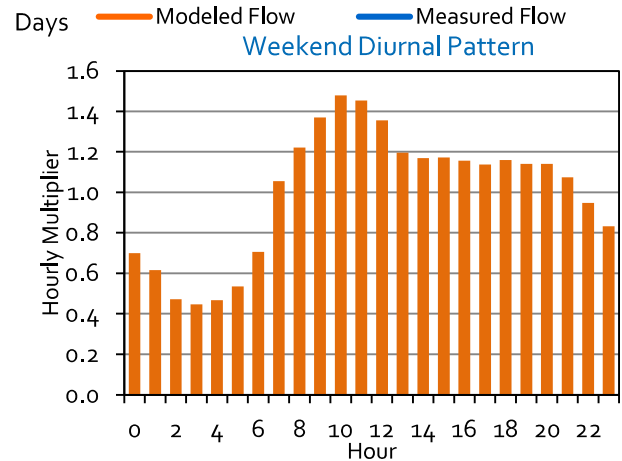
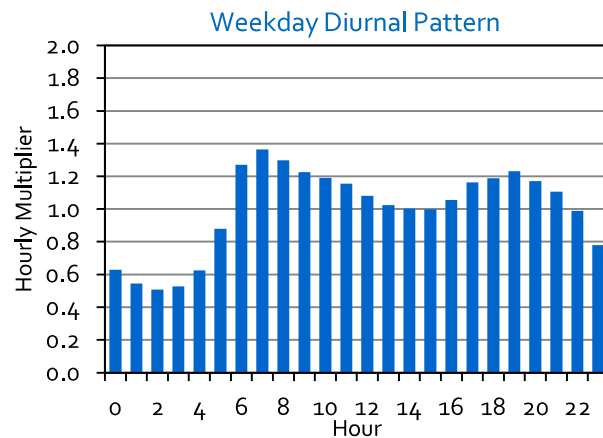
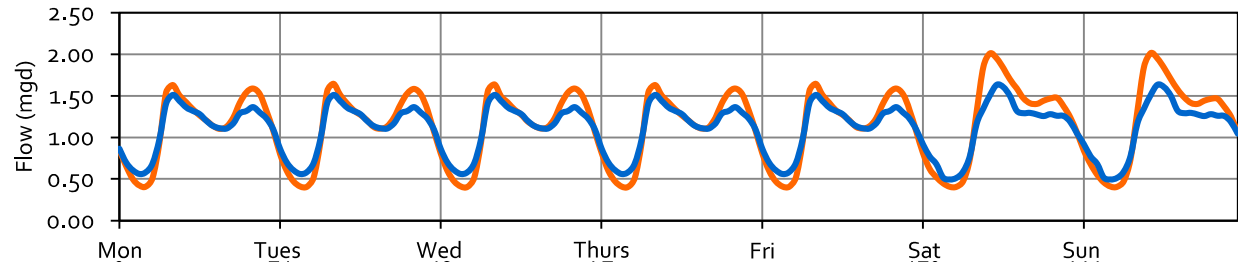
Flow Monitoring Site M2, Dry Weather Flow Calibration

Location: Tennent Avenue just outside WPCP

Measured Pipeline Diameter: 30"

Model Manhole ID: MH_1106

Model Pipe ID: P_868



Model Calibration Summary

Day	Measured Data ⁽¹⁾		Modeled Data		Percent Error ⁽³⁾	
	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (%)	Peak Flow (%)
Mon.	1.11	1.51	1.13	1.65	2%	9%
Tues.	1.11	1.51	1.13	1.65	2%	9%
Wed.	1.11	1.51	1.13	1.65	2%	9%
Thur.	1.11	1.51	1.13	1.65	2%	9%
Fri.	1.11	1.51	1.13	1.65	2%	9%
Sat.	1.10	1.63	1.21	2.01	10%	23%
Sun.	1.10	1.63	1.21	2.02	10%	23%
Summary						
Weekday	1.110	--	1.132	--	2%	--
Weekend	1.105	--	1.212	--	10%	--
ADWF ⁽⁴⁾	1.108	--	1.155	--	4%	--

Notes:

- Source: V&A Temporary Flow Monitoring Program
- Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
- Percent Error = (Modeled - Measured) / Measured x 100
- ADWF = (5xWeekday Average + 2xWeekend Average)/7



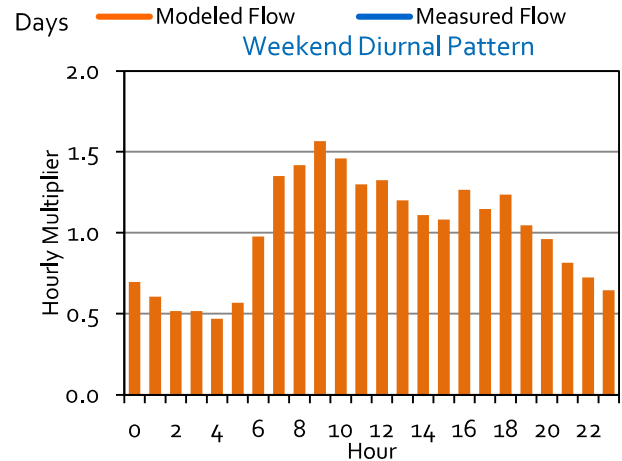
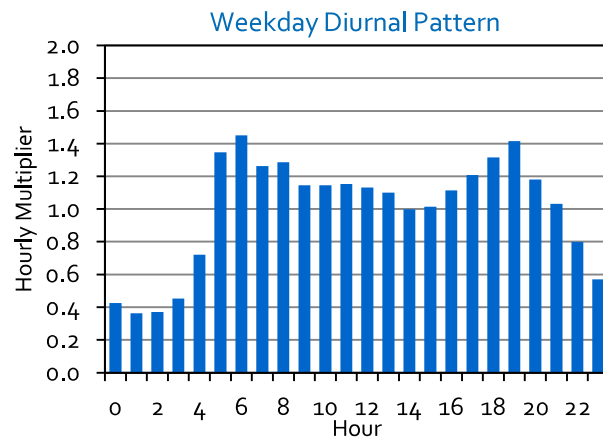
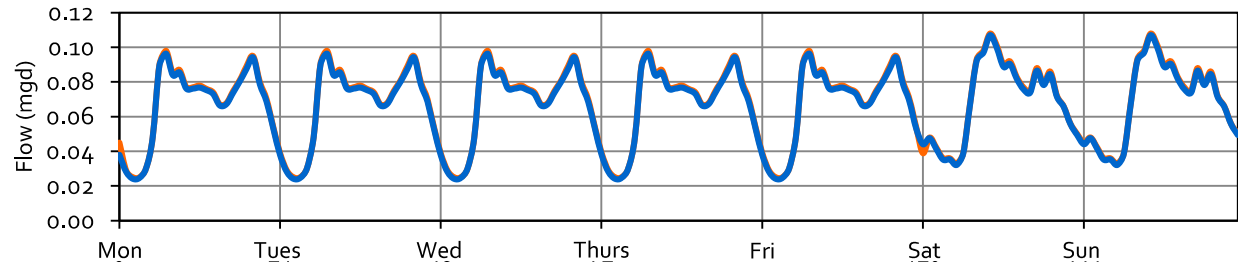
Flow Monitoring Site M3, Dry Weather Flow Calibration

Location: San Pablo Lift Station (San Pablo Avenue west of Sunnyview Drive)

Measured Pipeline Diameter: N/A"

Model Manhole ID: SAN_PABLO

Model Pipe ID: San_Pablo



Model Calibration Summary

Day	Measured Data ⁽¹⁾		Modeled Data		Percent Error ⁽³⁾	
	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (%)	Peak Flow (%)
Mon.	0.07	0.10	0.07	0.10	1%	2%
Tues.	0.07	0.10	0.07	0.10	1%	2%
Wed.	0.07	0.10	0.07	0.10	1%	2%
Thur.	0.07	0.10	0.07	0.10	1%	2%
Fri.	0.07	0.10	0.07	0.10	1%	2%
Sat.	0.07	0.11	0.07	0.11	1%	1%
Sun.	0.07	0.11	0.07	0.11	1%	1%
Summary						
Weekday	0.067	--	0.067	--	1%	--
Weekend	0.068	--	0.069	--	1%	--
ADWF ⁽⁴⁾	0.067	--	0.068	--	1%	--

Notes:

- Source: V&A Temporary Flow Monitoring Program
- Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
- Percent Error = (Modeled - Measured) / Measured x 100
- ADWF = (5xWeekday Average + 2xWeekend Average)/7



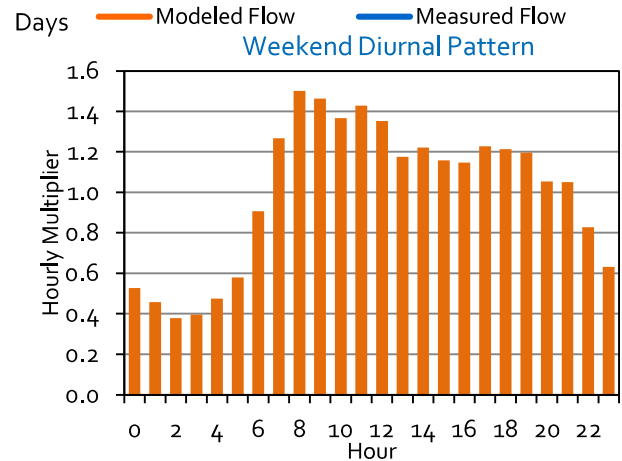
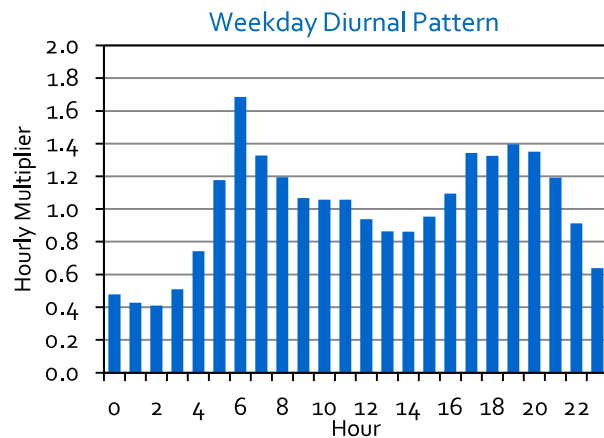
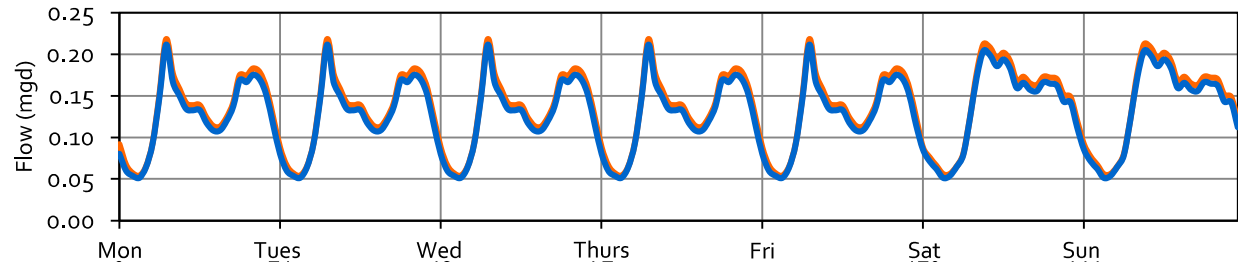
Flow Monitoring Site M₄, Dry Weather Flow Calibration

Location: Hazel Lift Station (In easement at west end of Hazel Street)

Measured Pipeline Diameter: N/A"

Model Manhole ID: MH_1175

Model Pipe ID: P_428



Model Calibration Summary

Day	Measured Data ⁽¹⁾		Modeled Data		Percent Error ⁽³⁾	
	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (%)	Peak Flow (%)
Mon.	0.13	0.21	0.13	0.22	5%	3%
Tues.	0.13	0.21	0.13	0.22	5%	3%
Wed.	0.13	0.21	0.13	0.22	5%	3%
Thur.	0.13	0.21	0.13	0.22	5%	3%
Fri.	0.13	0.21	0.13	0.22	5%	3%
Sat.	0.14	0.20	0.14	0.21	4%	4%
Sun.	0.14	0.20	0.14	0.21	4%	4%
Summary						
Weekday	0.126	--	0.131	--	5%	--
Weekend	0.136	--	0.142	--	4%	--
ADWF ⁽⁴⁾	0.129	--	0.134	--	5%	--

Notes:

- Source: V&A Temporary Flow Monitoring Program
- Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
- Percent Error = (Modeled - Measured) / Measured x 100
- ADWF = (5xWeekday Average + 2xWeekend Average)/7



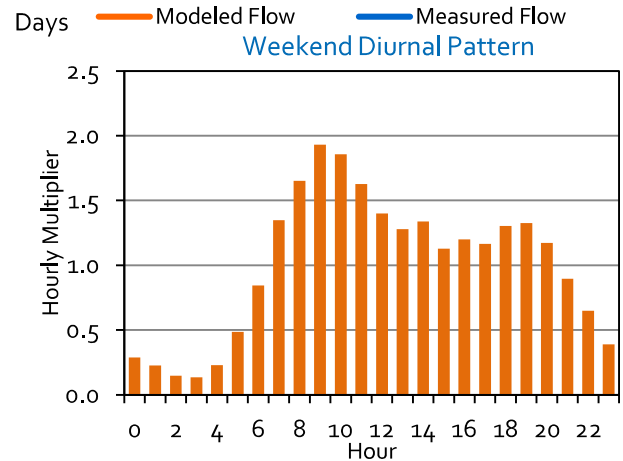
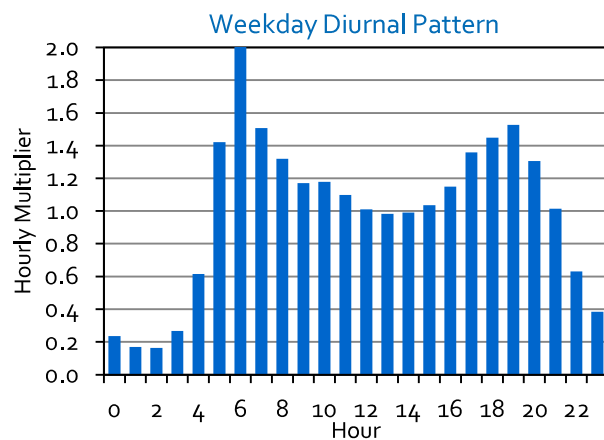
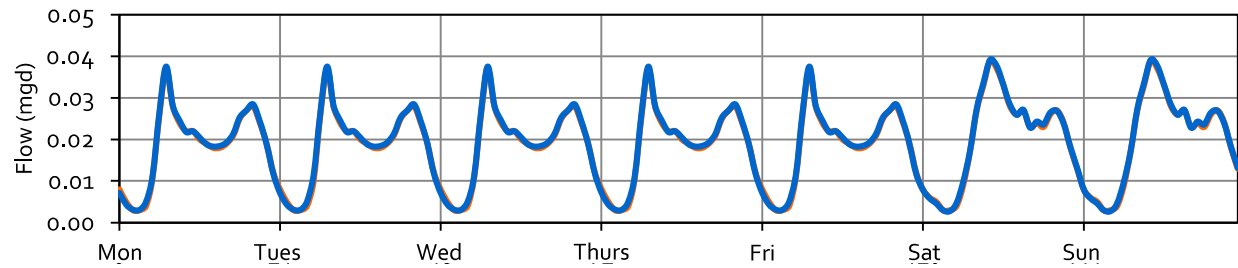
Flow Monitoring Site M5, Dry Weather Flow Calibration

Location: Appian Way south of San Pablo Avenue

Measured Pipeline Diameter: 7.25"

Model Manhole ID: MH_497

Model Pipe ID: P_101



Model Calibration Summary

Day	Measured Data ⁽¹⁾		Modeled Data		Percent Error ⁽³⁾	
	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (%)	Peak Flow (%)
Mon.	0.02	0.04	0.02	0.04	-1%	-1%
Tues.	0.02	0.04	0.02	0.04	-1%	-1%
Wed.	0.02	0.04	0.02	0.04	-1%	-1%
Thur.	0.02	0.04	0.02	0.04	-1%	-1%
Fri.	0.02	0.04	0.02	0.04	-1%	-1%
Sat.	0.02	0.04	0.02	0.04	-1%	0%
Sun.	0.02	0.04	0.02	0.04	-1%	0%
Summary						
Weekday	0.019	--	0.018	--	-1%	--
Weekend	0.020	--	0.020	--	-1%	--
ADWF ⁽⁴⁾	0.019	--	0.019	--	-1%	--

Notes:

- Source: V&A Temporary Flow Monitoring Program
- Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
- Percent Error = (Modeled - Measured) / Measured x 100
- ADWF = (5xWeekday Average + 2xWeekend Average)/7



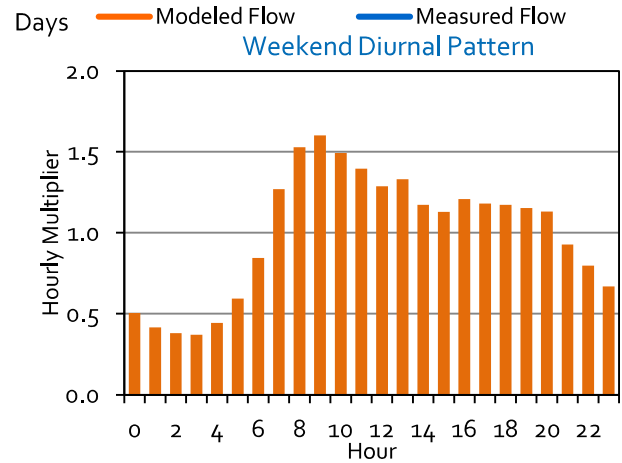
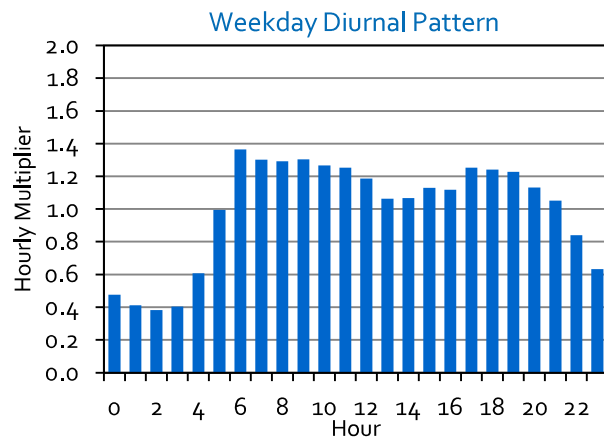
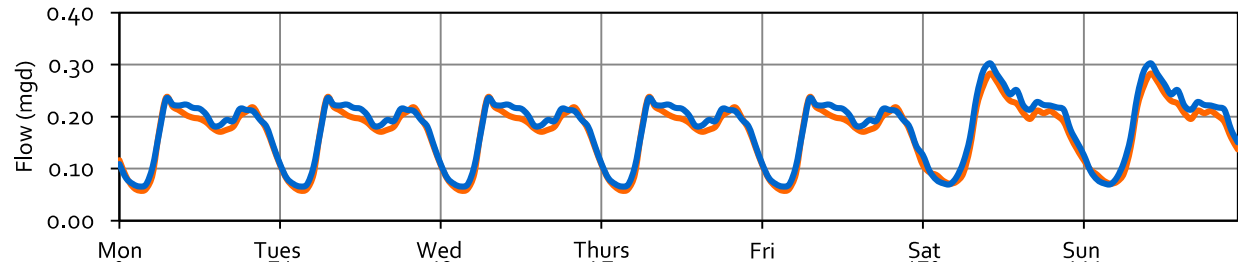
Flow Monitoring Site M6, Dry Weather Flow Calibration

Location: Pinon Avenue north of Bay View Farm Road

Measured Pipeline Diameter: 10"

Model Manhole ID: MH_1143

Model Pipe ID: P_755



Model Calibration Summary

Day	Measured Data ⁽¹⁾		Modeled Data		Percent Error ⁽³⁾	
	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (%)	Peak Flow (%)
Mon.	0.17	0.23	0.16	0.24	-4%	1%
Tues.	0.17	0.23	0.16	0.24	-4%	1%
Wed.	0.17	0.23	0.16	0.24	-4%	1%
Thur.	0.17	0.23	0.16	0.24	-4%	1%
Fri.	0.17	0.23	0.16	0.24	-4%	1%
Sat.	0.19	0.30	0.17	0.28	-7%	-6%
Sun.	0.19	0.30	0.18	0.28	-7%	-6%
Summary						
Weekday	0.172	--	0.164	--	-4%	--
Weekend	0.189	--	0.175	--	-7%	--
ADWF ⁽⁴⁾	0.177	--	0.167	--	-5%	--

Notes:

- Source: V&A Temporary Flow Monitoring Program
- Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
- Percent Error = (Modeled - Measured) / Measured x 100
- ADWF = (5xWeekday Average + 2xWeekend Average)/7



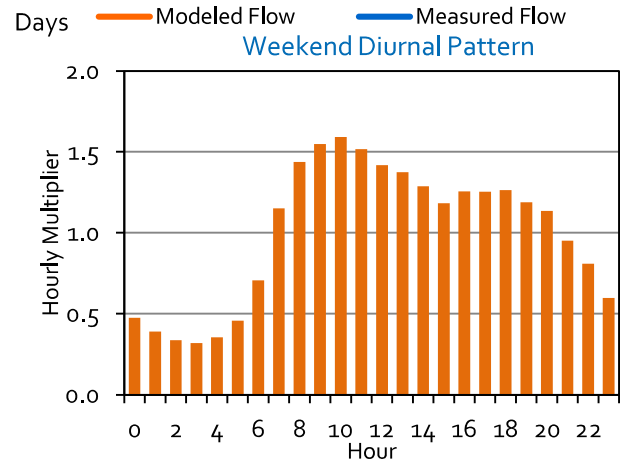
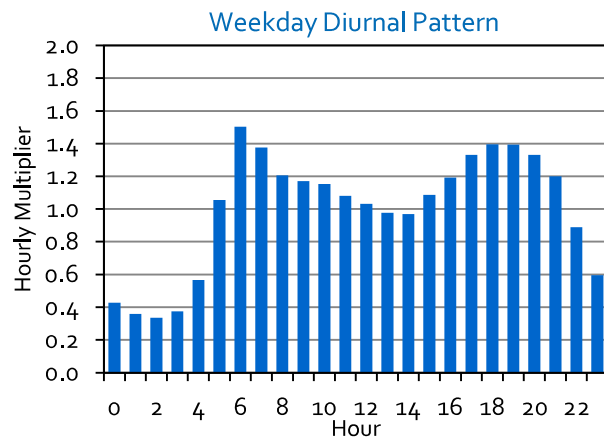
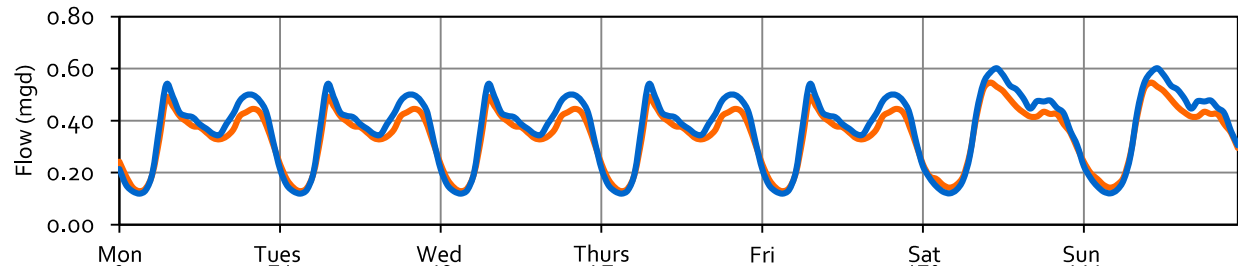
Flow Monitoring Site M7, Dry Weather Flow Calibration

Location: Intersection of Orleans Drive and Zoe Court

Measured Pipeline Diameter: 15"

Model Manhole ID: MH_1093

Model Pipe ID: P_212



Model Calibration Summary

Day	Measured Data ⁽¹⁾		Modeled Data		Percent Error ⁽³⁾	
	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (%)	Peak Flow (%)
Mon.	0.36	0.54	0.33	0.49	-7%	-10%
Tues.	0.36	0.54	0.33	0.49	-7%	-10%
Wed.	0.36	0.54	0.33	0.49	-7%	-10%
Thur.	0.36	0.54	0.33	0.49	-7%	-10%
Fri.	0.36	0.54	0.33	0.49	-7%	-10%
Sat.	0.38	0.60	0.36	0.55	-6%	-9%
Sun.	0.38	0.60	0.36	0.55	-5%	-9%
Summary						
Weekday	0.358	--	0.333	--	-7%	--
Weekend	0.378	--	0.357	--	-6%	--
ADWF ⁽⁴⁾	0.364	--	0.340	--	-6%	--

Notes:

- Source: V&A Temporary Flow Monitoring Program
- Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
- Percent Error = (Modeled - Measured) / Measured x 100
- ADWF = (5xWeekday Average + 2xWeekend Average)/7



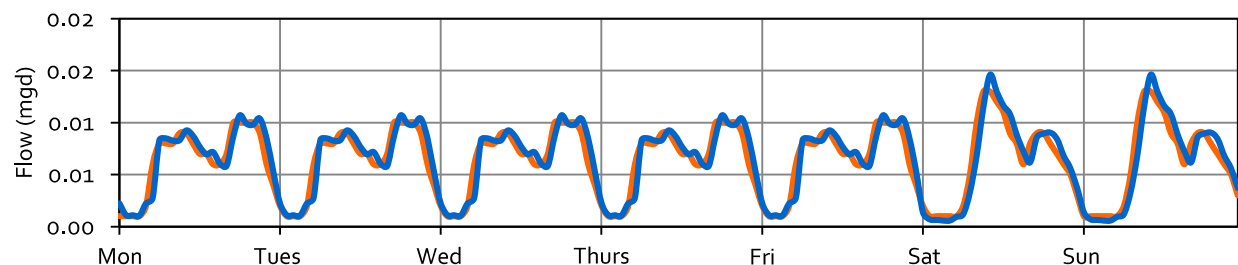
Flow Monitoring Site M8, Dry Weather Flow Calibration

Location: Henry Avenue west of Pinole Valley Road

Measured Pipeline Diameter: 7.75"

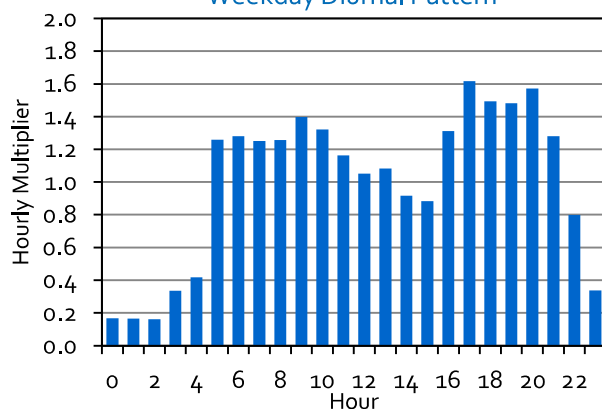
Model Manhole ID: MH_230

Model Pipe ID: P_922

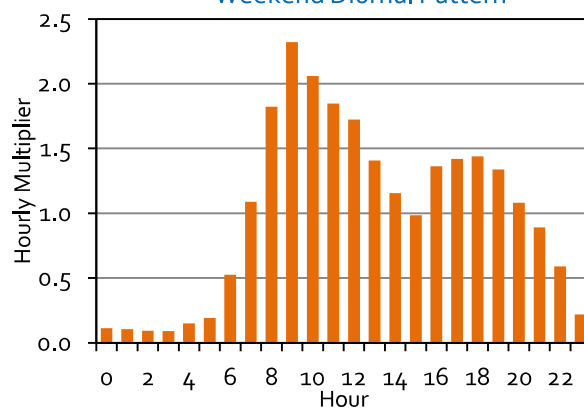


Days — Modeled Flow — Measured Flow

Weekday Diurnal Pattern



Weekend Diurnal Pattern



Model Calibration Summary

Day	Measured Data ⁽¹⁾		Modeled Data		Percent Error ⁽³⁾	
	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (%)	Peak Flow (%)
Mon.	0.01	0.01	0.01	0.01	-3%	-7%
Tues.	0.01	0.01	0.01	0.01	-3%	-7%
Wed.	0.01	0.01	0.01	0.01	-3%	-7%
Thur.	0.01	0.01	0.01	0.01	-3%	-7%
Fri.	0.01	0.01	0.01	0.01	-2%	-7%
Sat.	0.01	0.01	0.01	0.01	0%	-11%
Sun.	0.01	0.01	0.01	0.01	-1%	-11%
Summary						
Weekday	0.007	--	0.006	--	-3%	--
Weekend	0.006	--	0.006	--	0%	--
ADWF ⁽⁴⁾	0.007	--	0.006	--	-2%	--

Notes:

- Source: V&A Temporary Flow Monitoring Program
- Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
- Percent Error = (Modeled - Measured) / Measured x 100
- ADWF = (5xWeekday Average + 2xWeekend Average)/7



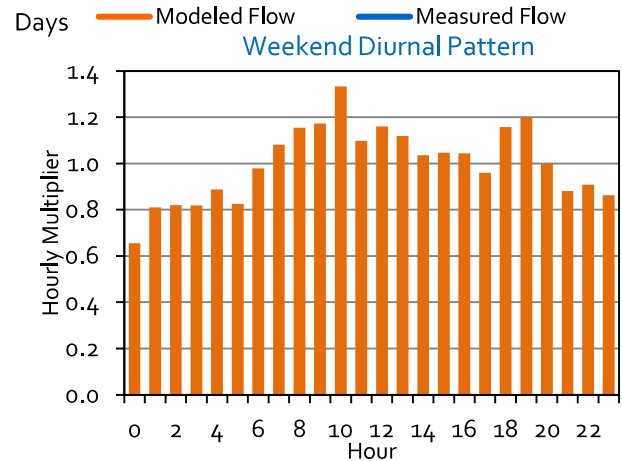
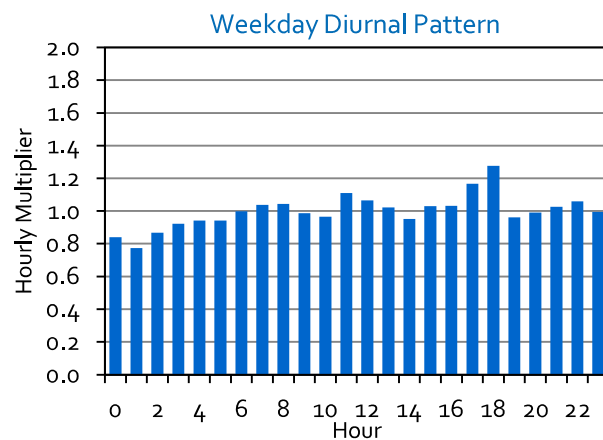
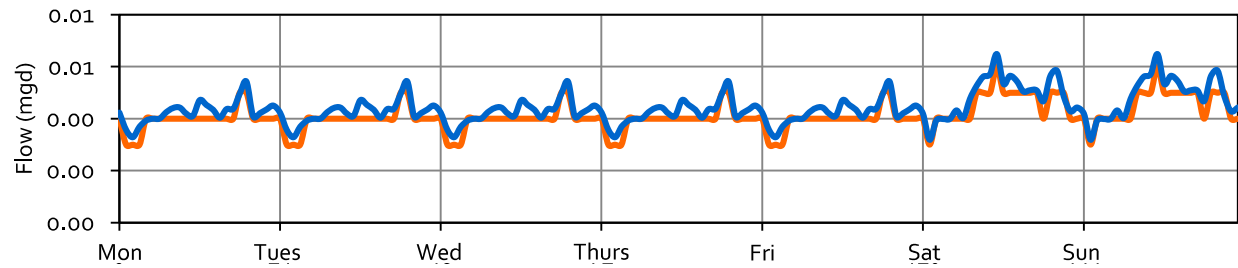
Flow Monitoring Site M9, Dry Weather Flow Calibration

Location: Intersection of Henry Avenue and Pinole Valley Road

Measured Pipeline Diameter: 6"

Model Manhole ID: MH_234

Model Pipe ID: P_278



Model Calibration Summary

Day	Measured Data ⁽¹⁾		Modeled Data		Percent Error ⁽³⁾	
	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (%)	Peak Flow (%)
Mon.	0.00	0.01	0.00	0.01	-7%	-8%
Tues.	0.00	0.01	0.00	0.01	-7%	-8%
Wed.	0.00	0.01	0.00	0.01	-7%	-8%
Thur.	0.00	0.01	0.00	0.01	-7%	-8%
Fri.	0.00	0.01	0.00	0.01	-7%	-8%
Sat.	0.00	0.01	0.00	0.01	-7%	-8%
Sun.	0.00	0.01	0.00	0.01	-7%	-8%
Summary						
Weekday	0.004	--	0.004	--	-7%	--
Weekend	0.005	--	0.005	--	-7%	--
ADWF ⁽⁴⁾	0.004	--	0.004	--	-7%	--

Notes:

- Source: V&A Temporary Flow Monitoring Program
- Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
- Percent Error = (Modeled - Measured) / Measured x 100
- ADWF = (5xWeekday Average + 2xWeekend Average)/7



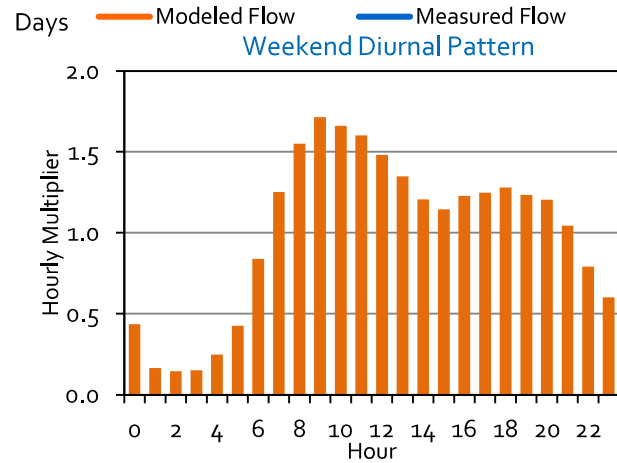
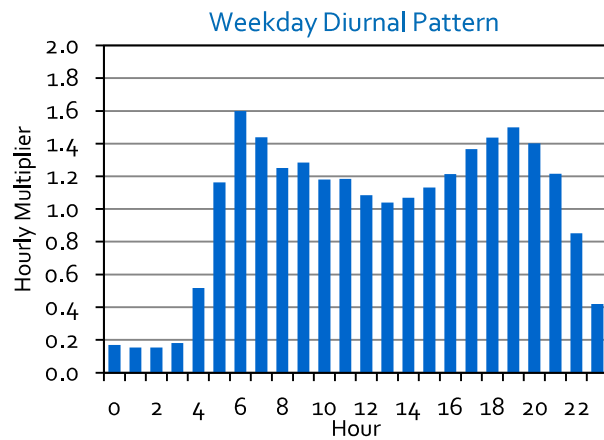
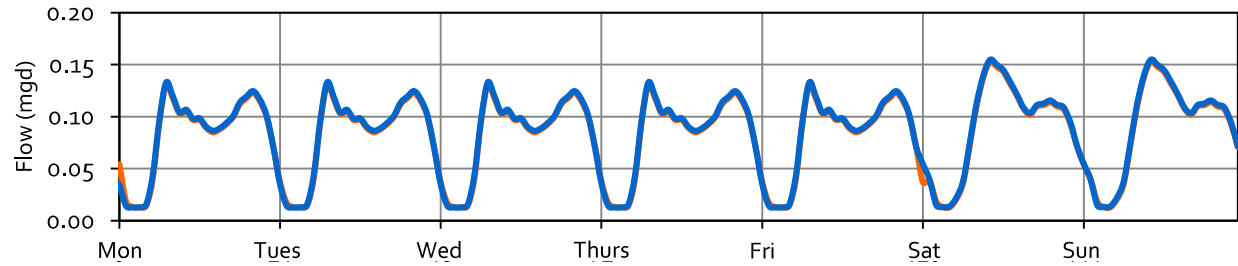
Flow Monitoring Site M10, Dry Weather Flow Calibration

Location: Intersection of Tennent Avenue and Prune Street

Measured Pipeline Diameter: 8"

Model Manhole ID: MH_143

Model Pipe ID: P_355



Model Calibration Summary

Day	Measured Data ⁽¹⁾		Modeled Data		Percent Error ⁽³⁾	
	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (%)	Peak Flow (%)
Mon.	0.08	0.13	0.08	0.13	-1%	-1%
Tues.	0.08	0.13	0.08	0.13	-1%	-1%
Wed.	0.08	0.13	0.08	0.13	-1%	-1%
Thur.	0.08	0.13	0.08	0.13	-1%	-1%
Fri.	0.08	0.13	0.08	0.13	-1%	-1%
Sat.	0.09	0.15	0.09	0.15	-2%	-1%
Sun.	0.09	0.15	0.09	0.15	-1%	-1%
Summary						
Weekday	0.083	--	0.082	--	-1%	--
Weekend	0.090	--	0.089	--	-2%	--
ADWF ⁽⁴⁾	0.085	--	0.084	--	-1%	--

Notes:

- Source: V&A Temporary Flow Monitoring Program
- Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
- Percent Error = (Modeled - Measured) / Measured x 100
- ADWF = (5xWeekday Average + 2xWeekend Average)/7



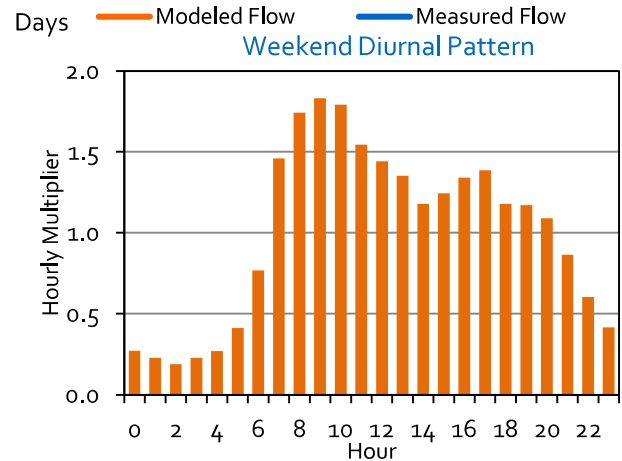
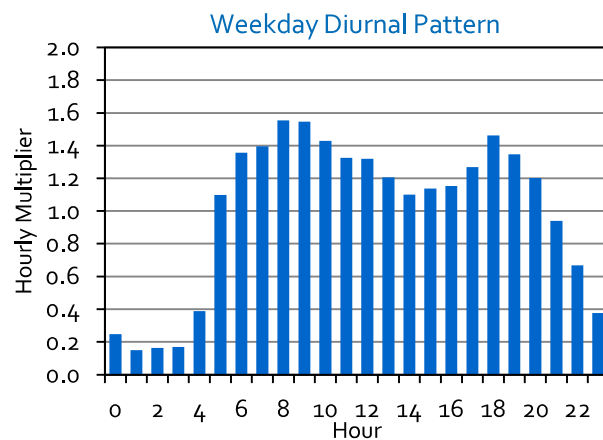
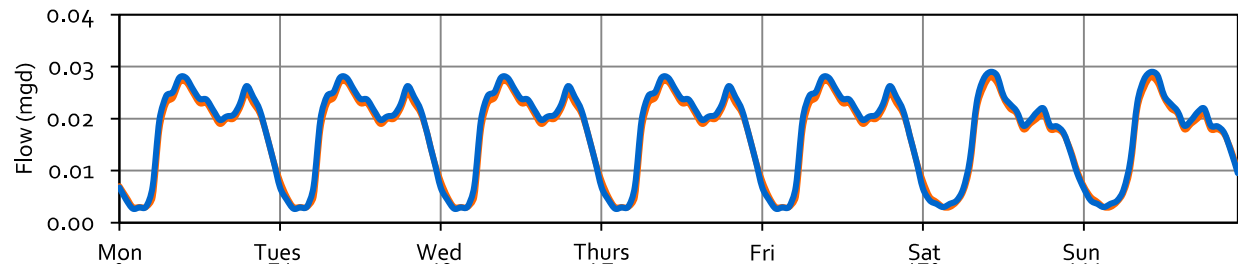
Flow Monitoring Site M11, Dry Weather Flow Calibration

Location: Intersection of Pinole Valley Road and Rafaela Street

Measured Pipeline Diameter: 10"

Model Manhole ID: MH_1220

Model Pipe ID: P_233



Model Calibration Summary

Day	Measured Data ⁽¹⁾		Modeled Data		Percent Error ⁽³⁾	
	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (%)	Peak Flow (%)
Mon.	0.02	0.03	0.02	0.03	-3%	-3%
Tues.	0.02	0.03	0.02	0.03	-3%	-3%
Wed.	0.02	0.03	0.02	0.03	-3%	-3%
Thur.	0.02	0.03	0.02	0.03	-3%	-3%
Fri.	0.02	0.03	0.02	0.03	-3%	-3%
Sat.	0.02	0.03	0.02	0.03	-3%	-3%
Sun.	0.02	0.03	0.02	0.03	-3%	-3%
Summary						
Weekday	0.018	--	0.017	--	-3%	--
Weekend	0.016	--	0.015	--	-3%	--
ADWF ⁽⁴⁾	0.017	--	0.017	--	-3%	--

Notes:

- Source: V&A Temporary Flow Monitoring Program
- Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
- Percent Error = (Modeled - Measured) / Measured x 100
- ADWF = (5xWeekday Average + 2xWeekend Average)/7



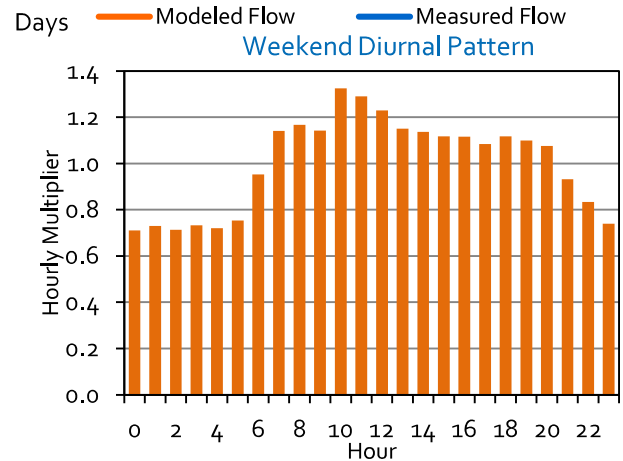
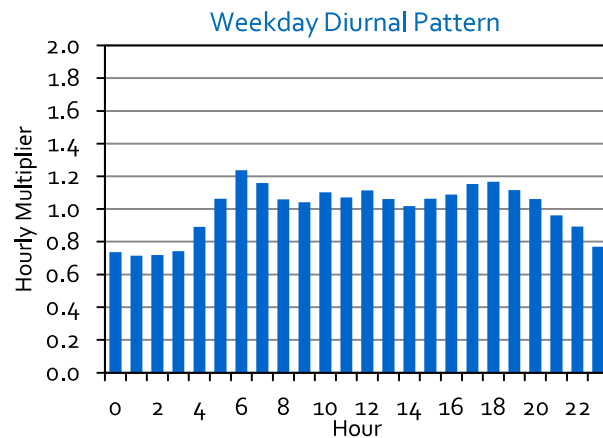
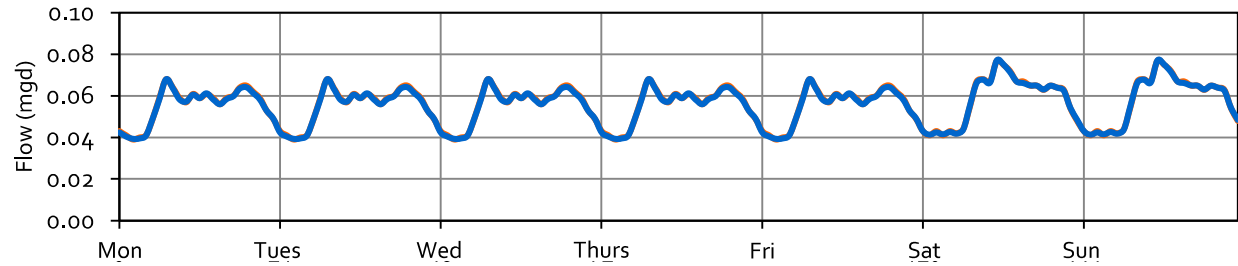
Flow Monitoring Site M13, Dry Weather Flow Calibration

Location: San Pablo Avenue just west of Quinan Street

Measured Pipeline Diameter: 6"

Model Manhole ID: MH_1369

Model Pipe ID: P_351



Model Calibration Summary

Day	Measured Data ⁽¹⁾		Modeled Data		Percent Error ⁽³⁾	
	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (%)	Peak Flow (%)
Mon.	0.06	0.07	0.06	0.07	0%	0%
Tues.	0.06	0.07	0.06	0.07	0%	0%
Wed.	0.06	0.07	0.06	0.07	0%	0%
Thur.	0.06	0.07	0.06	0.07	0%	0%
Fri.	0.06	0.07	0.06	0.07	0%	0%
Sat.	0.06	0.08	0.06	0.08	0%	0%
Sun.	0.06	0.08	0.06	0.08	0%	0%
Summary						
Weekday	0.055	--	0.055	--	0%	--
Weekend	0.058	--	0.058	--	0%	--
ADWF ⁽⁴⁾	0.056	--	0.056	--	0%	--

Notes:

- Source: V&A Temporary Flow Monitoring Program
- Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
- Percent Error = (Modeled - Measured) / Measured x 100
- ADWF = (5xWeekday Average + 2xWeekend Average)/7



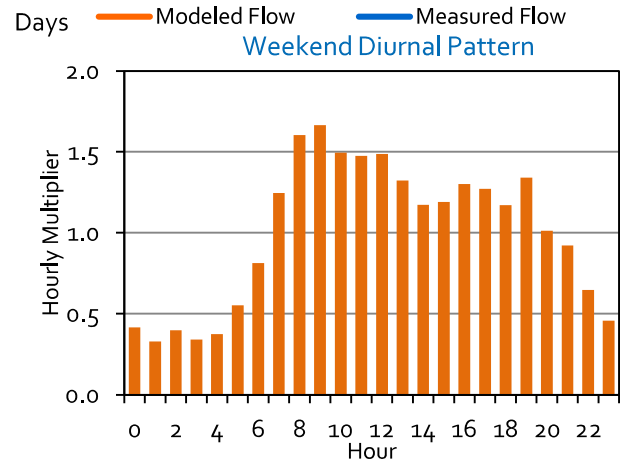
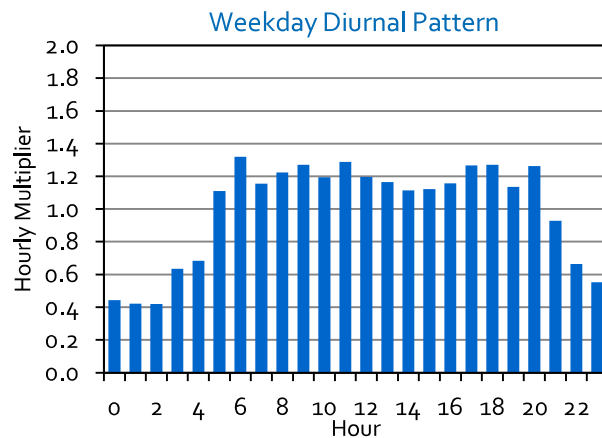
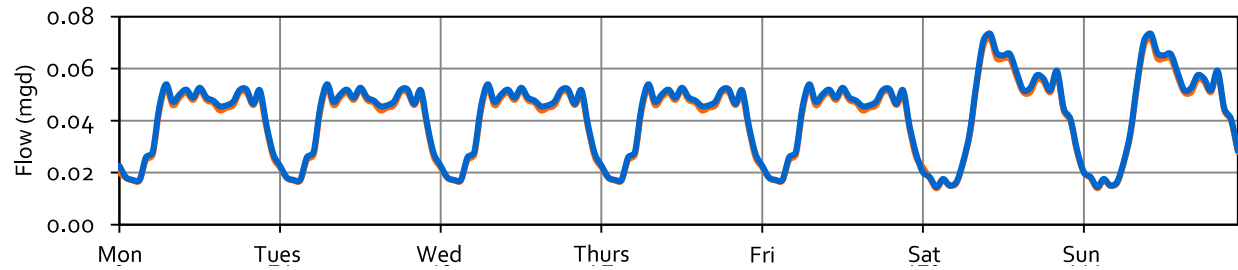
Flow Monitoring Site M14, Dry Weather Flow Calibration

Location: Intersection of Tennent Avenue and Park Street

Measured Pipeline Diameter: 8"

Model Manhole ID: MH_1010

Model Pipe ID: P_998



Model Calibration Summary

Day	Measured Data ⁽¹⁾		Modeled Data		Percent Error ⁽³⁾	
	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (%)	Peak Flow (%)
Mon.	0.04	0.05	0.04	0.05	-2%	-2%
Tues.	0.04	0.05	0.04	0.05	-2%	-2%
Wed.	0.04	0.05	0.04	0.05	-2%	-2%
Thur.	0.04	0.05	0.04	0.05	-2%	-2%
Fri.	0.04	0.05	0.04	0.05	-2%	-2%
Sat.	0.04	0.07	0.04	0.07	-2%	-2%
Sun.	0.04	0.07	0.04	0.07	-2%	-2%
Summary						
Weekday	0.041	--	0.040	--	-2%	--
Weekend	0.044	--	0.043	--	-2%	--
ADWF ⁽⁴⁾	0.042	--	0.041	--	-2%	--

Notes:

- Source: V&A Temporary Flow Monitoring Program
- Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
- Percent Error = (Modeled - Measured) / Measured x 100
- ADWF = (5xWeekday Average + 2xWeekend Average)/7



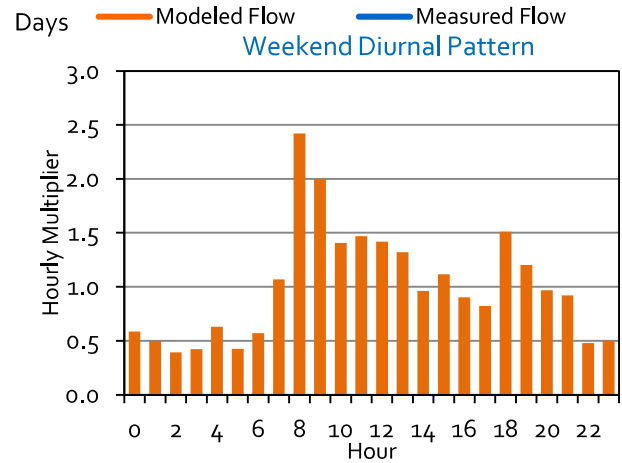
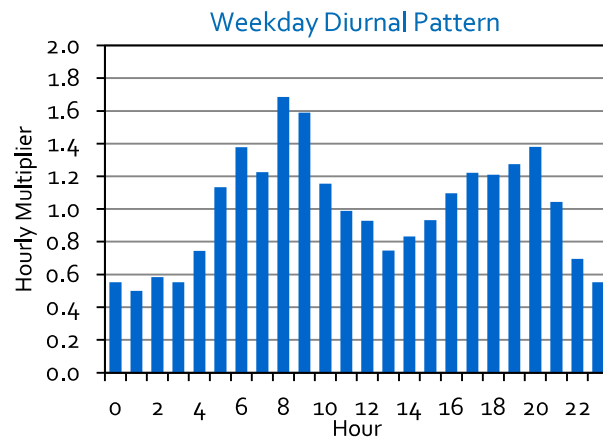
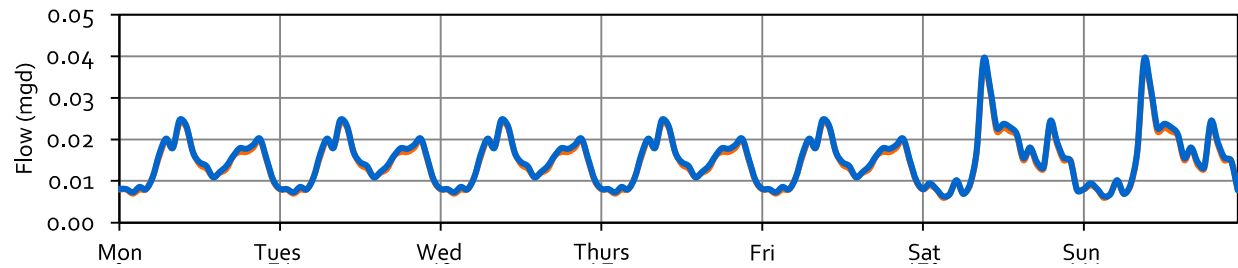
Flow Monitoring Site M15, Dry Weather Flow Calibration

Location: Tennent Avenue south of the train tracks west of Fernandez Park

Measured Pipeline Diameter: 6"

Model Manhole ID: MH_1012

Model Pipe ID: P_885



Model Calibration Summary

Day	Measured Data ⁽¹⁾		Modeled Data		Percent Error ⁽³⁾	
	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (%)	Peak Flow (%)
Mon.	0.01	0.02	0.01	0.02	-2%	-3%
Tues.	0.01	0.02	0.01	0.02	-2%	-3%
Wed.	0.01	0.02	0.01	0.02	-2%	-3%
Thur.	0.01	0.02	0.01	0.02	-2%	-3%
Fri.	0.01	0.02	0.01	0.02	-2%	-3%
Sat.	0.02	0.04	0.02	0.04	-2%	-3%
Sun.	0.02	0.04	0.02	0.04	-2%	-3%
Summary						
Weekday	0.015	--	0.014	--	-2%	--
Weekend	0.016	--	0.016	--	-2%	--
ADWF ⁽⁴⁾	0.015	--	0.015	--	-2%	--

Notes:

- Source: V&A Temporary Flow Monitoring Program
- Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
- Percent Error = (Modeled - Measured) / Measured x 100
- ADWF = (5xWeekday Average + 2xWeekend Average)/7



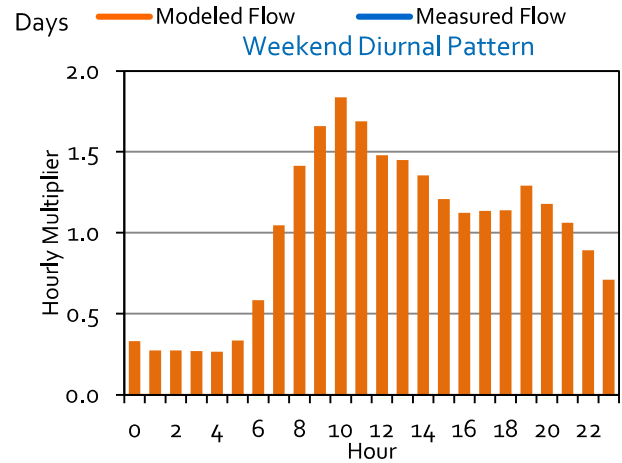
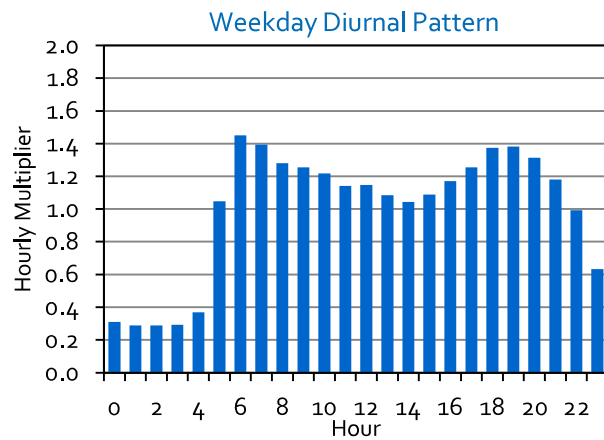
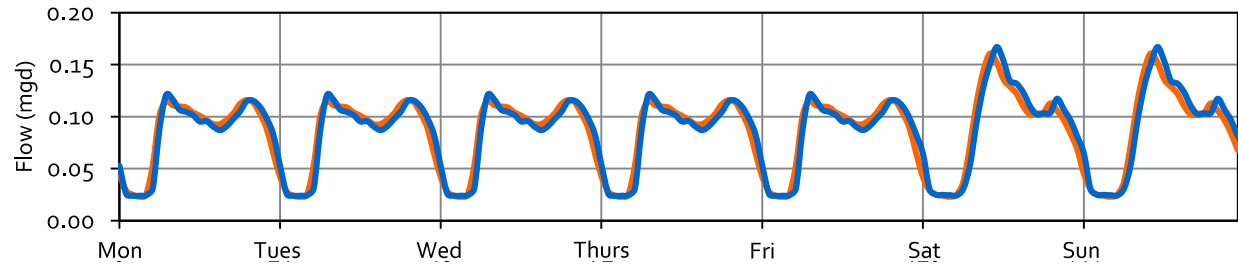
Flow Monitoring Site M16, Dry Weather Flow Calibration

Location: Tennent Avenue north of Orleans Drive

Measured Pipeline Diameter: 11.5"

Model Manhole ID: MH_1107

Model Pipe ID: P_986



Model Calibration Summary

Day	Measured Data ⁽¹⁾		Modeled Data		Percent Error ⁽³⁾	
	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (mgd)	Peak Flow ⁽²⁾ (mgd)	Avg. Flow (%)	Peak Flow (%)
Mon.	0.08	0.12	0.08	0.12	1%	-4%
Tues.	0.08	0.12	0.08	0.12	1%	-4%
Wed.	0.08	0.12	0.08	0.12	1%	-4%
Thur.	0.08	0.12	0.08	0.12	1%	-4%
Fri.	0.08	0.12	0.08	0.12	1%	-4%
Sat.	0.09	0.17	0.09	0.16	-3%	-4%
Sun.	0.09	0.17	0.09	0.16	-3%	-4%
Summary						
Weekday	0.083	--	0.085	--	1%	--
Weekend	0.091	--	0.089	--	-3%	--
ADWF ⁽⁴⁾	0.086	--	0.086	--	0%	--

Notes:

- Source: V&A Temporary Flow Monitoring Program
- Peak flow is the hourly average hourly peak flow, which was derived based on the 15-minute flow data from V&A.
- Percent Error = (Modeled - Measured) / Measured x 100
- ADWF = (5xWeekday Average + 2xWeekend Average)/7

Appendix C

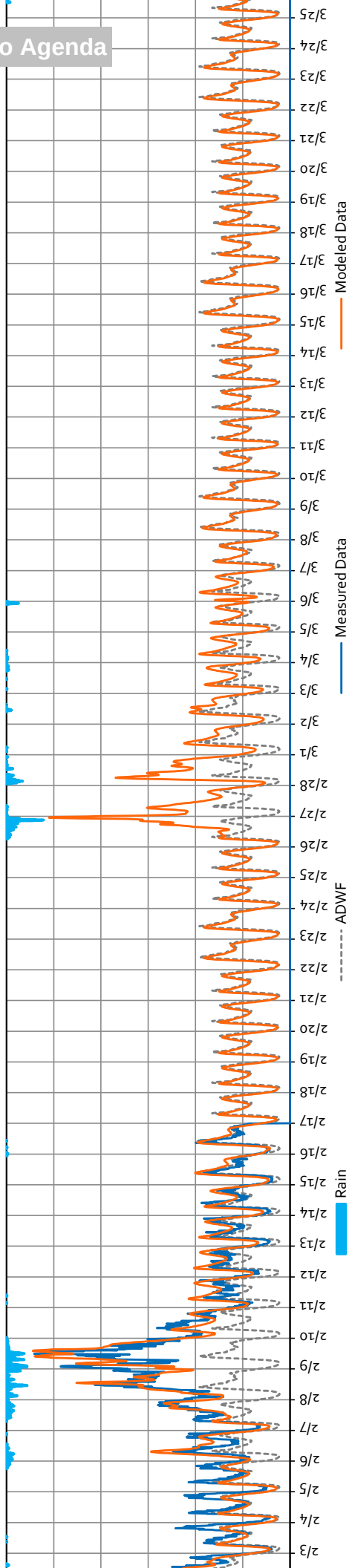
WET WEATHER FLOW CALIBRATION SHEETS

valley Road just south of Highway 80

the Diameter:15"

_691

[Return to Agenda](#)

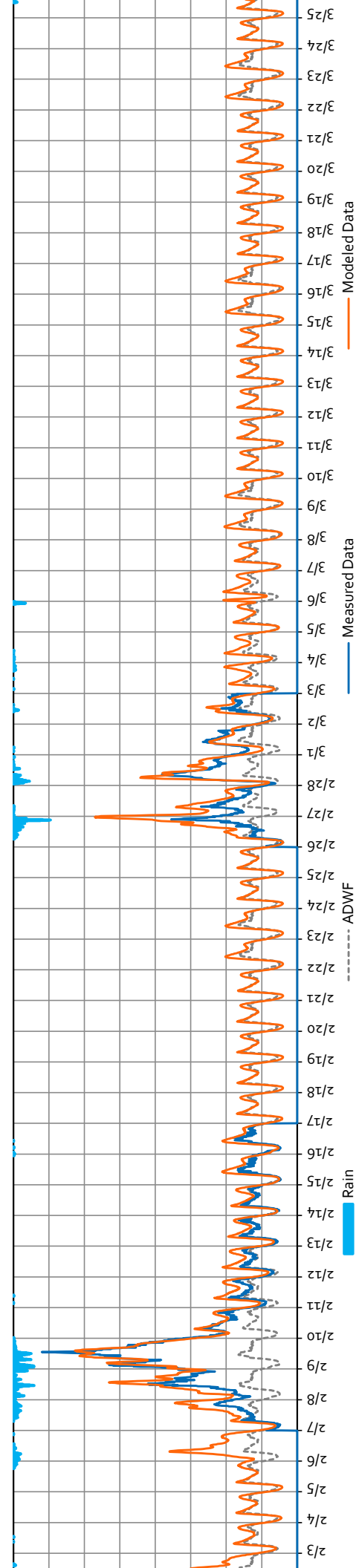


Calibration

Ant Avenue just outside WPCP

the Diameter:30"

_868

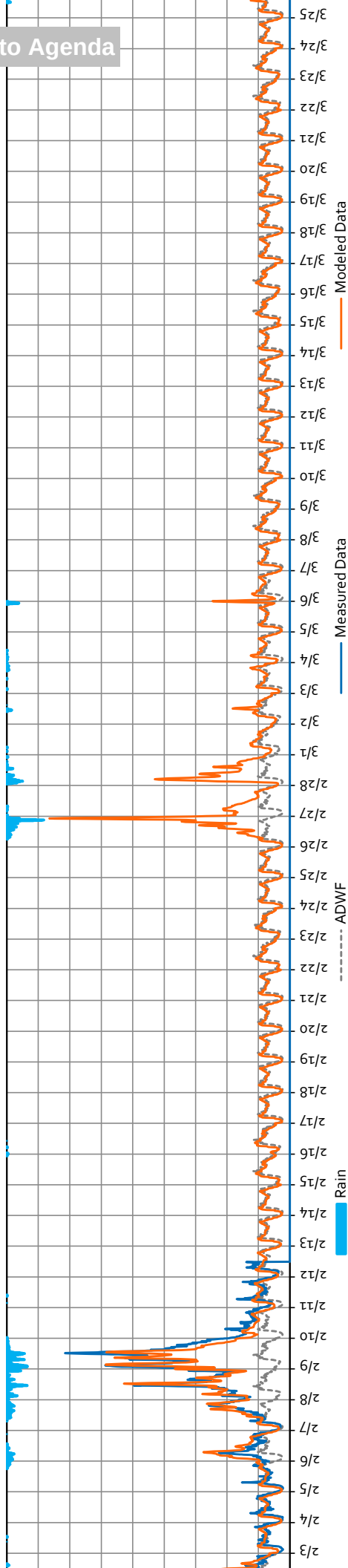


blo Lift Station (San Pablo Avenue west of Sunnyview Drive)

ne Diameter: N/A

AN_PABLO

[Return to Agenda](#)

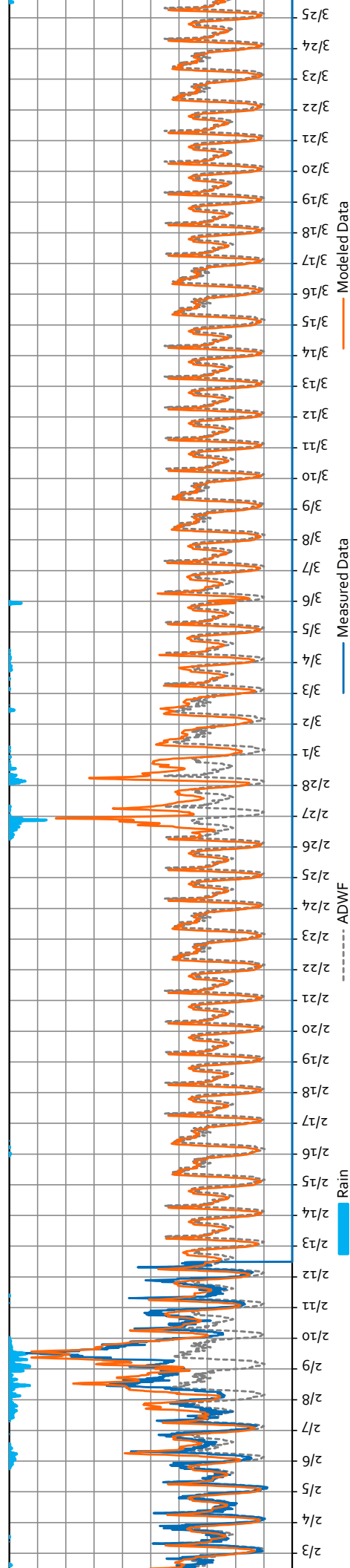


Calibration

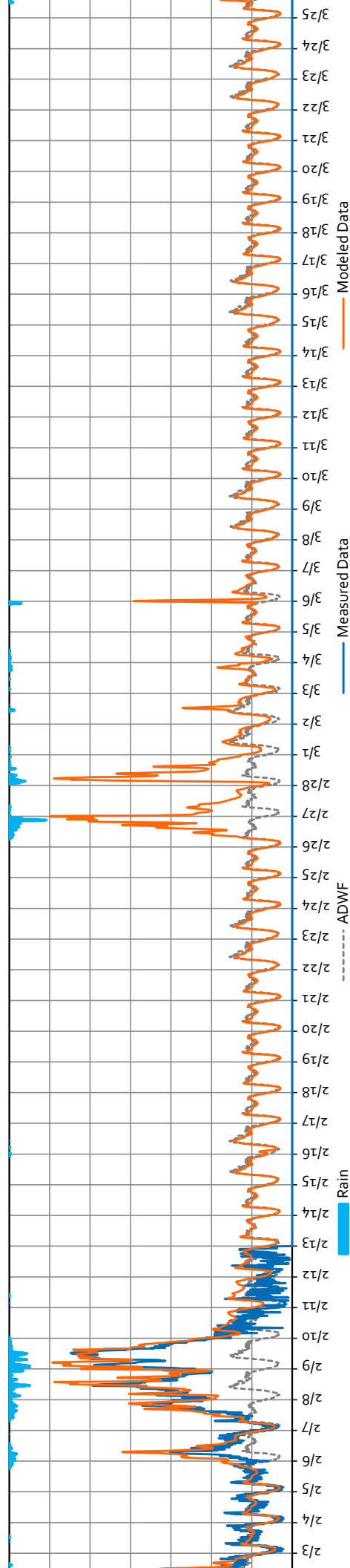
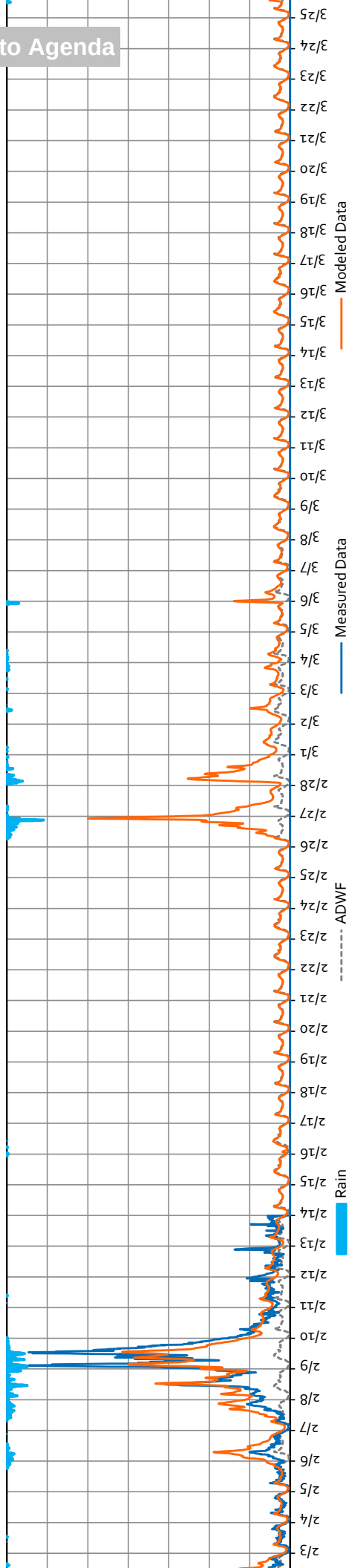
Lift Station (In easement at west end of Hazel Street)

ne Diameter: N/A

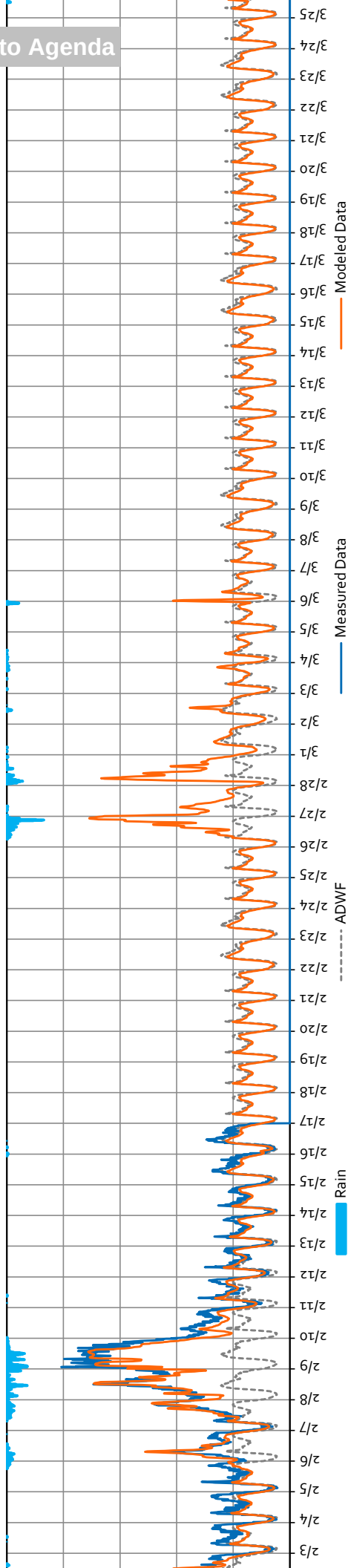
IH_1175



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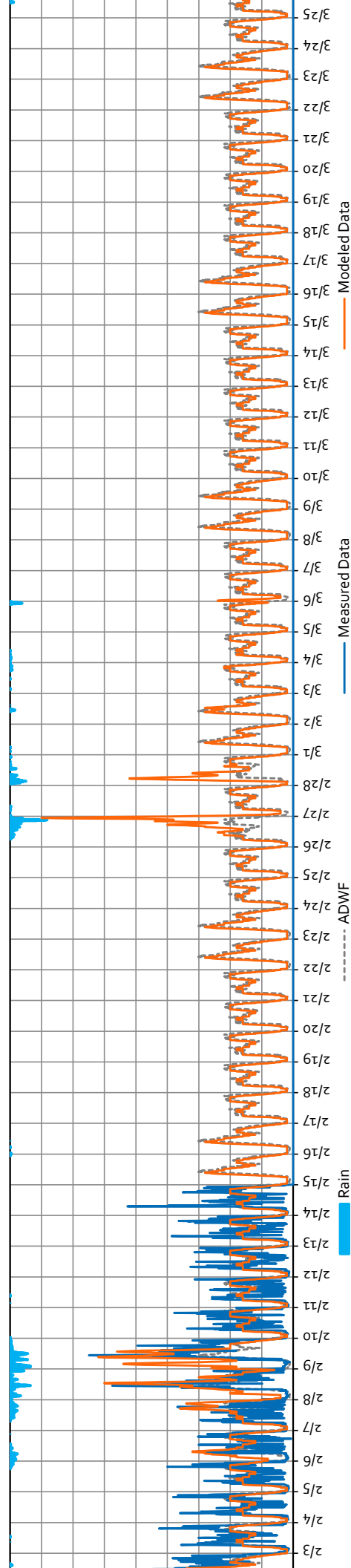
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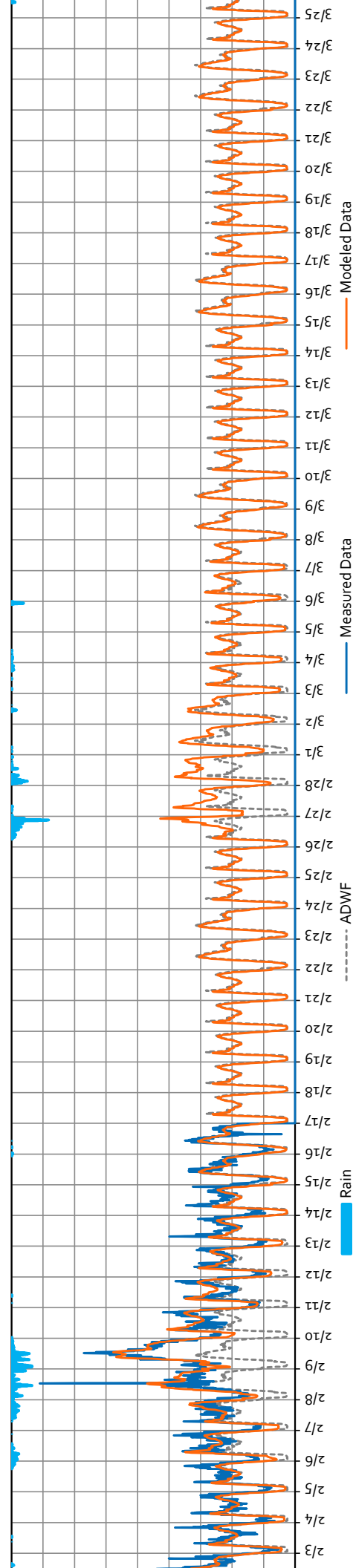
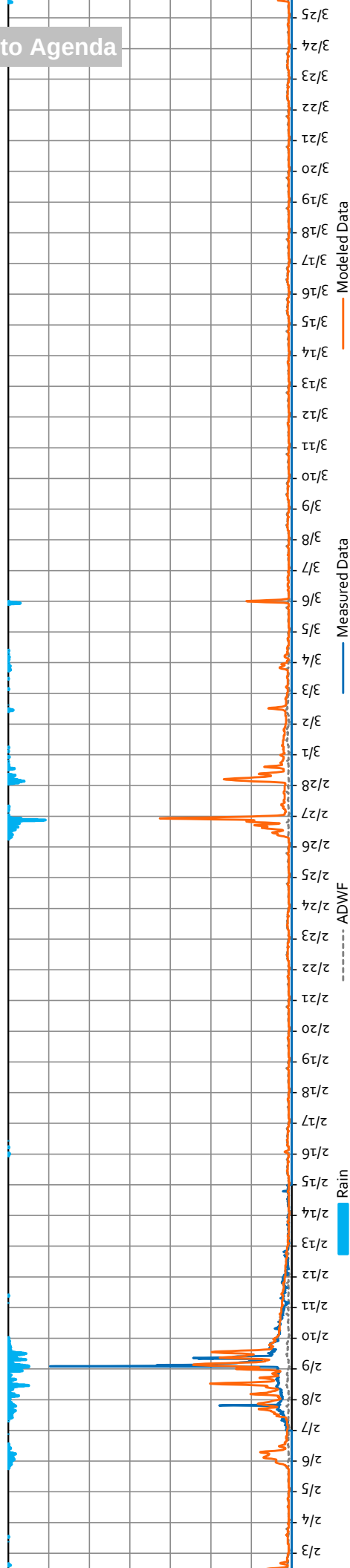
Calibration

Avenue west of Pinole Valley Road

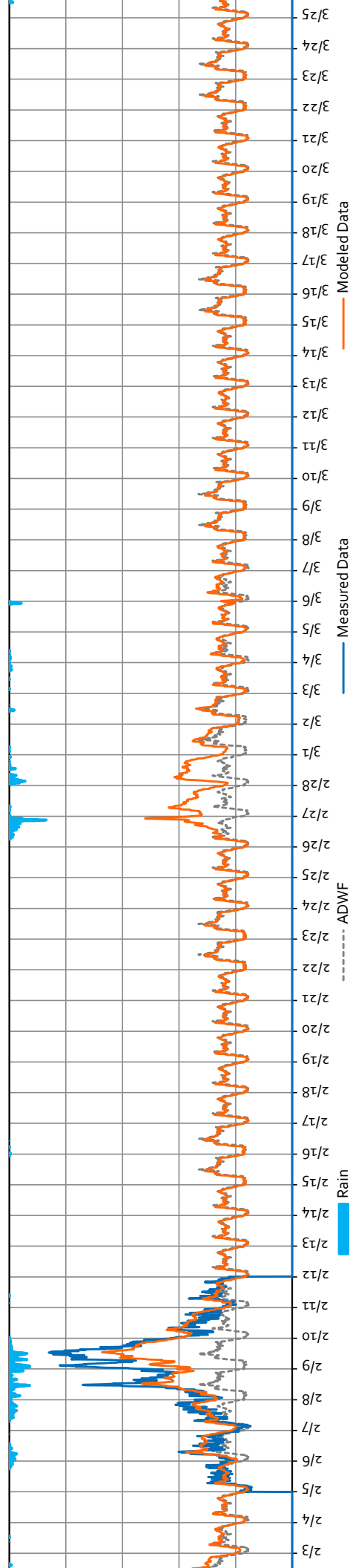
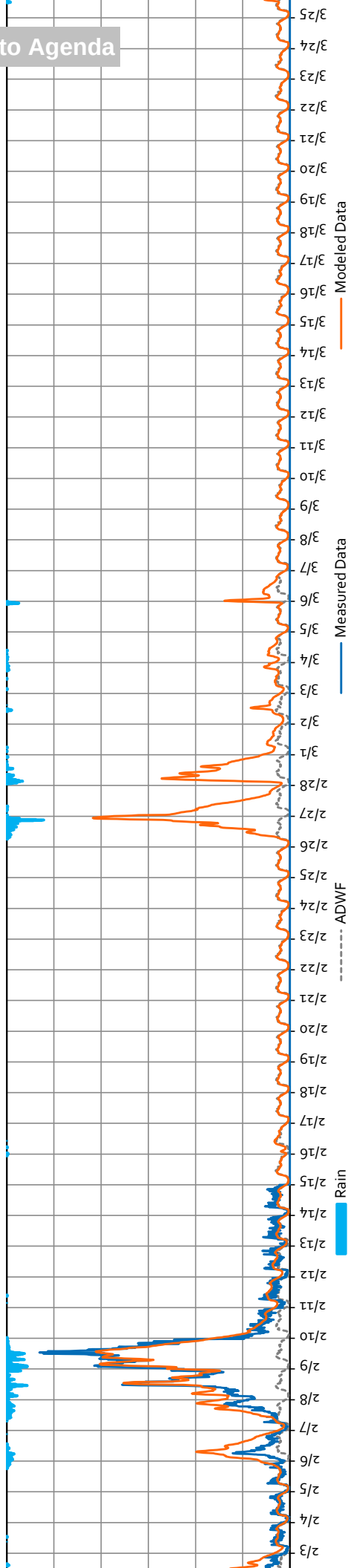
ne Diameter: 7.75



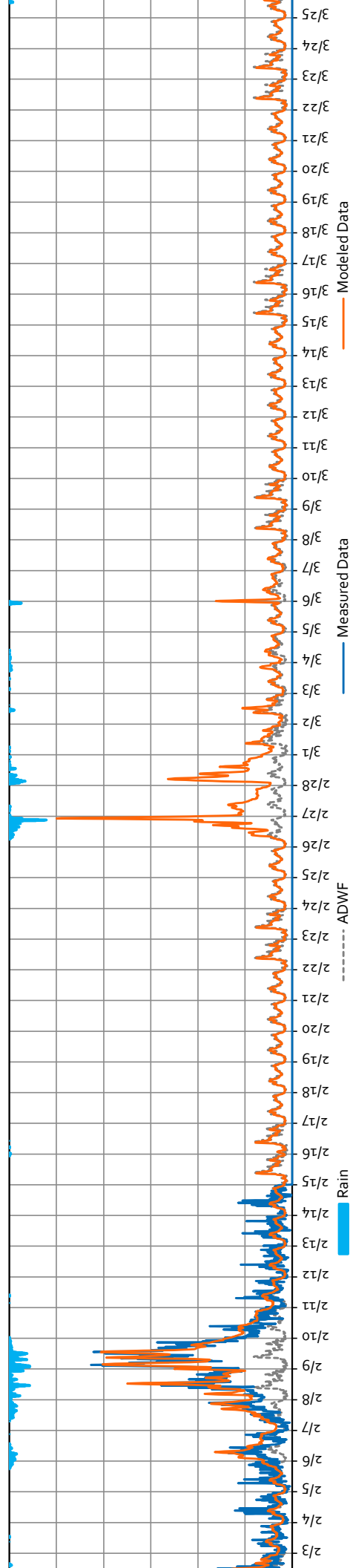
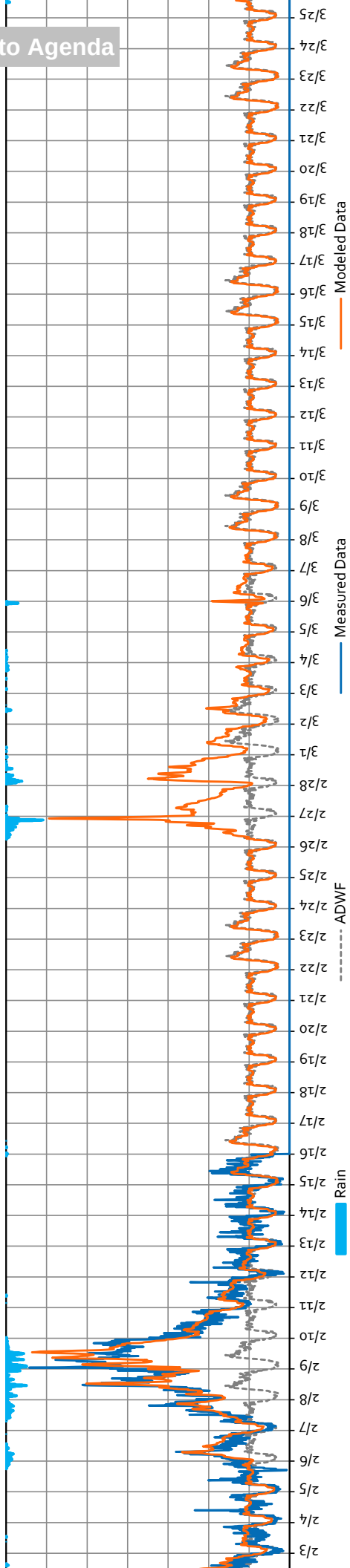
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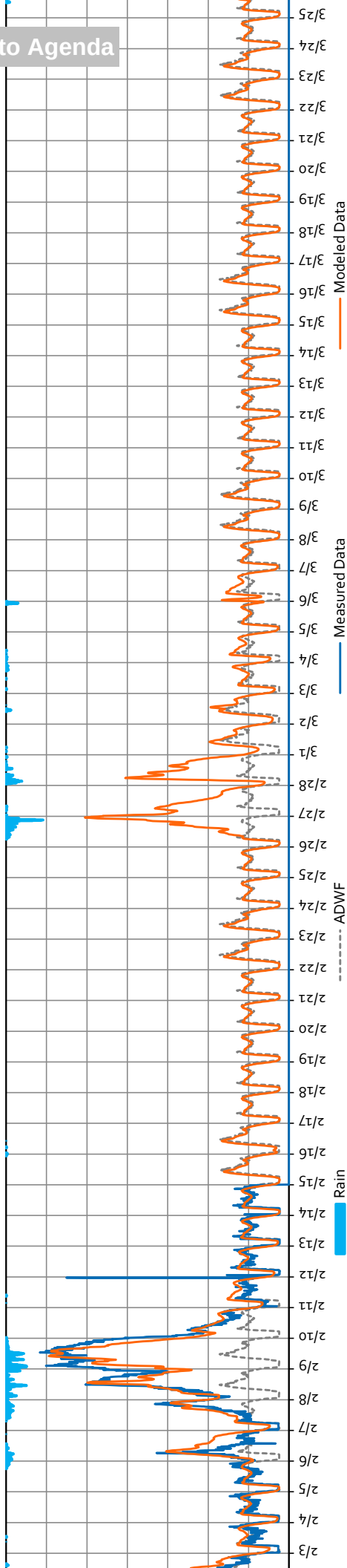
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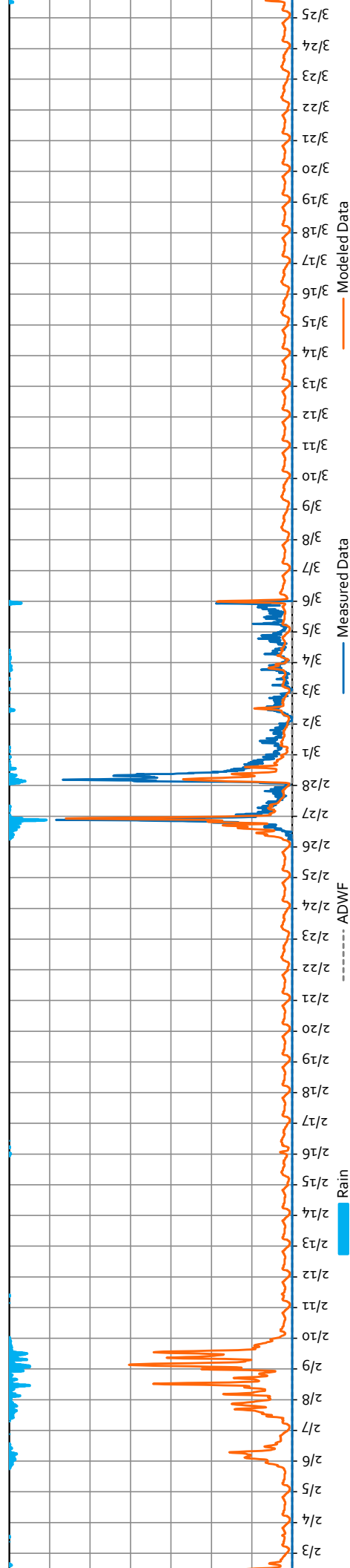
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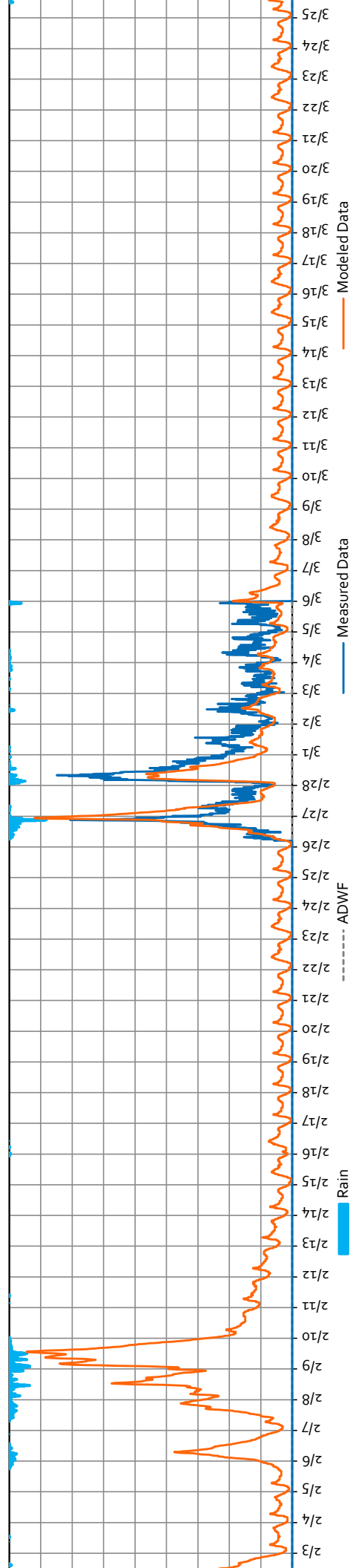
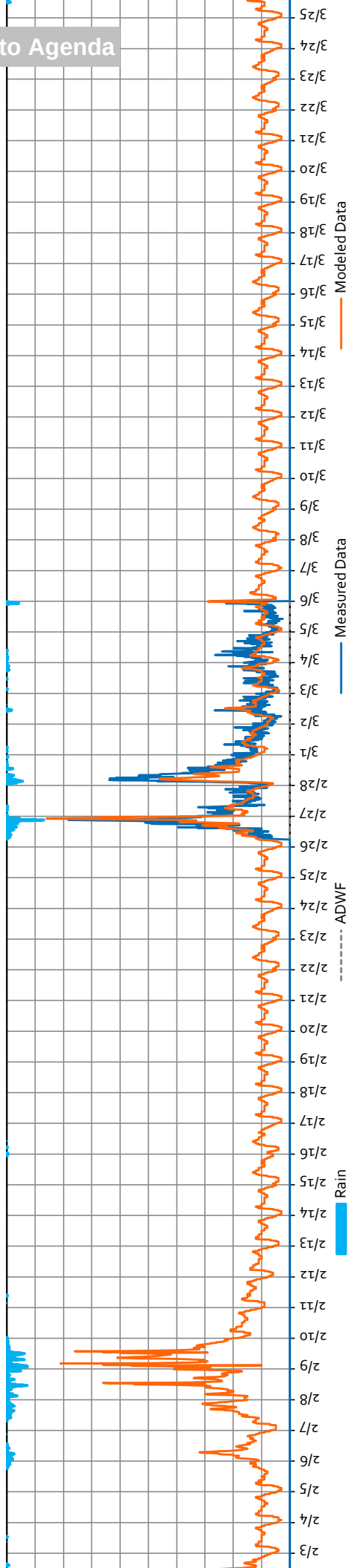
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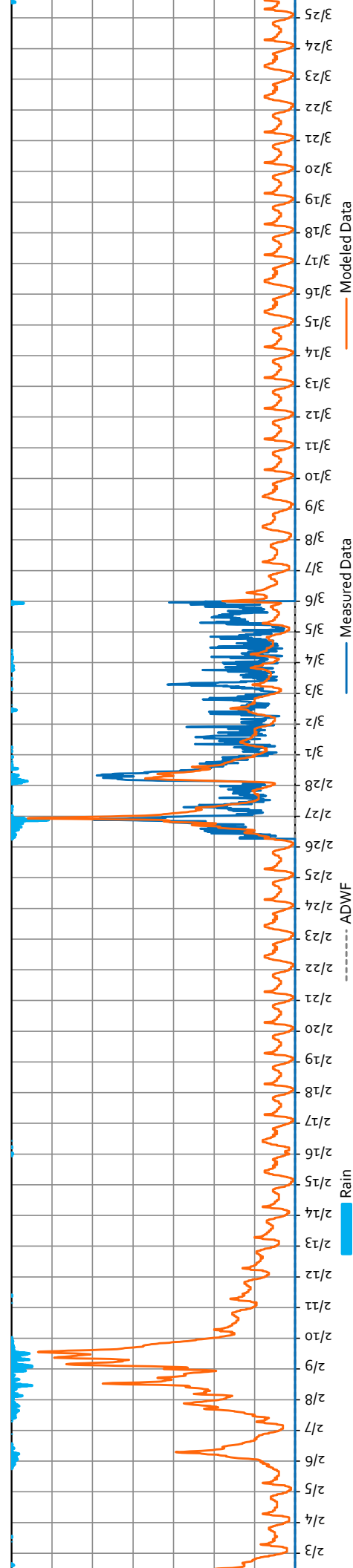
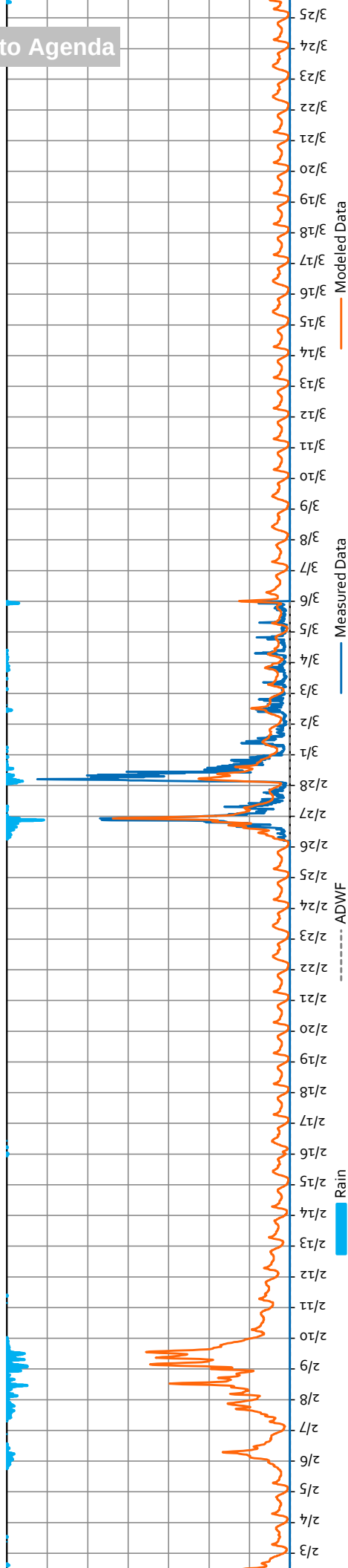
er Calibration



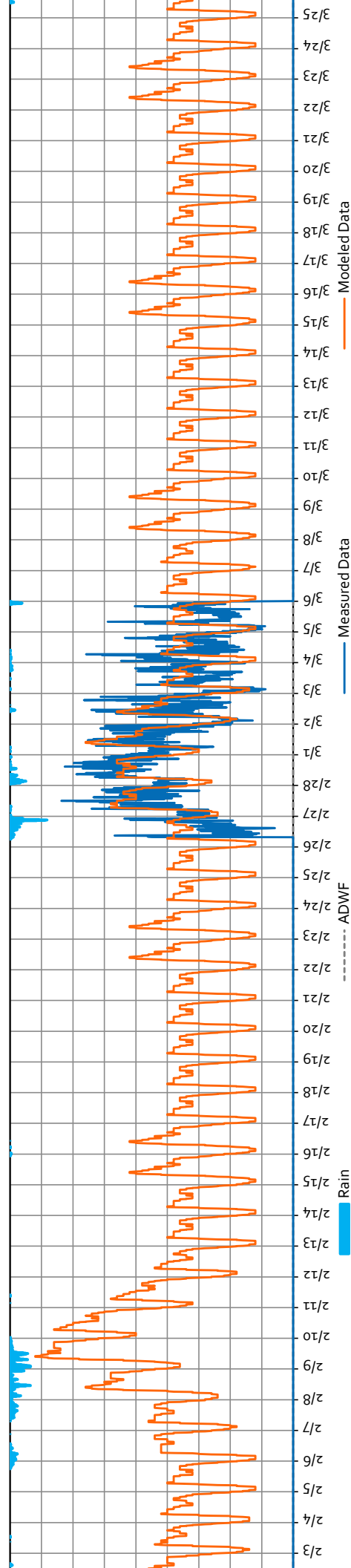
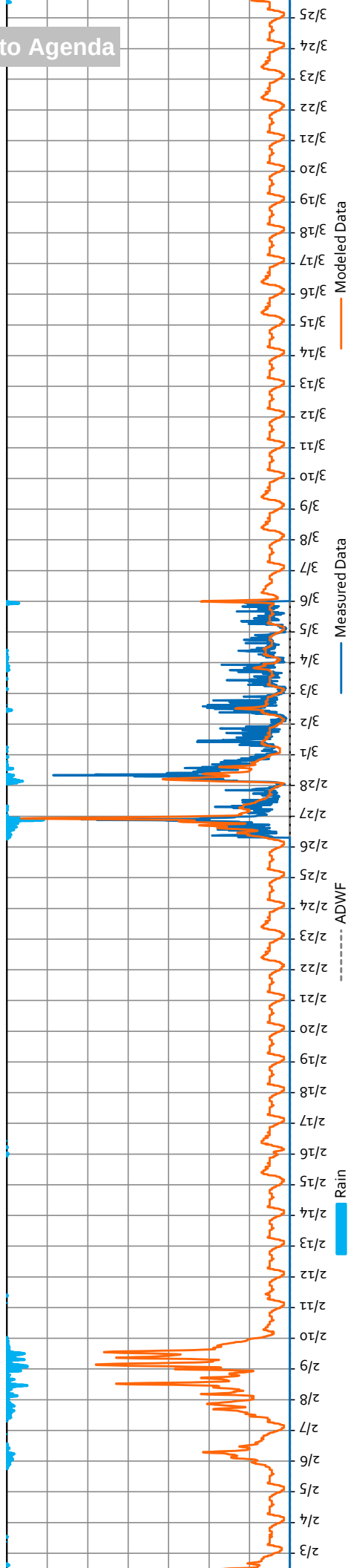
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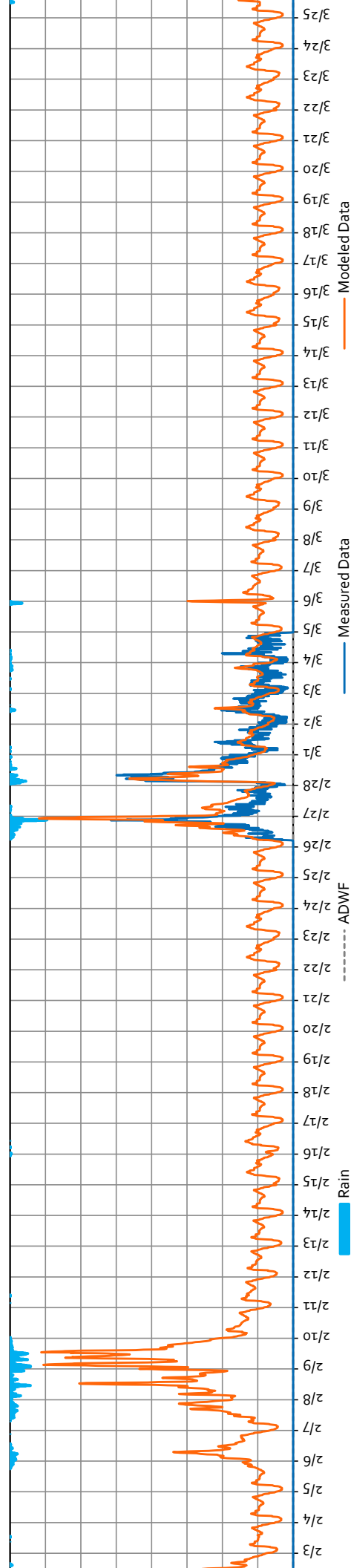
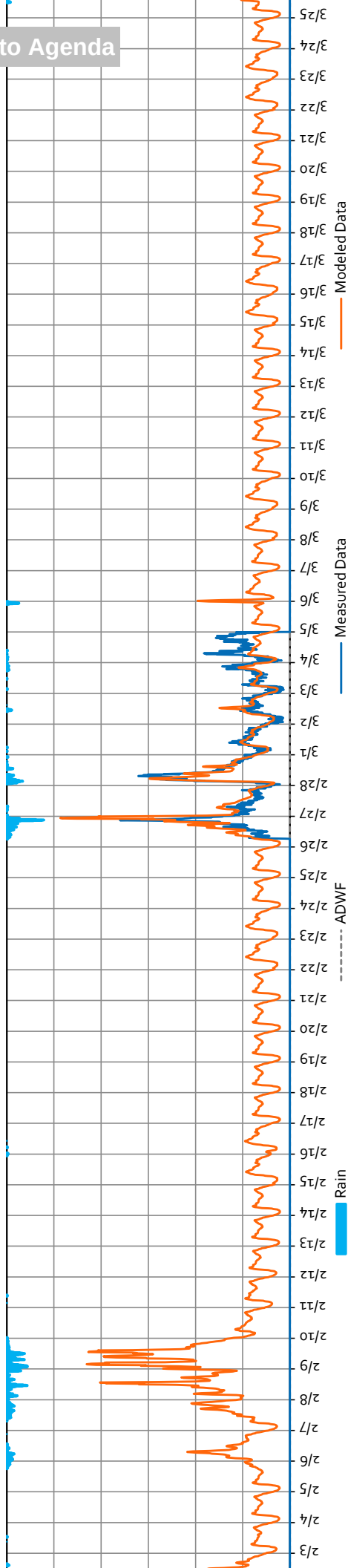
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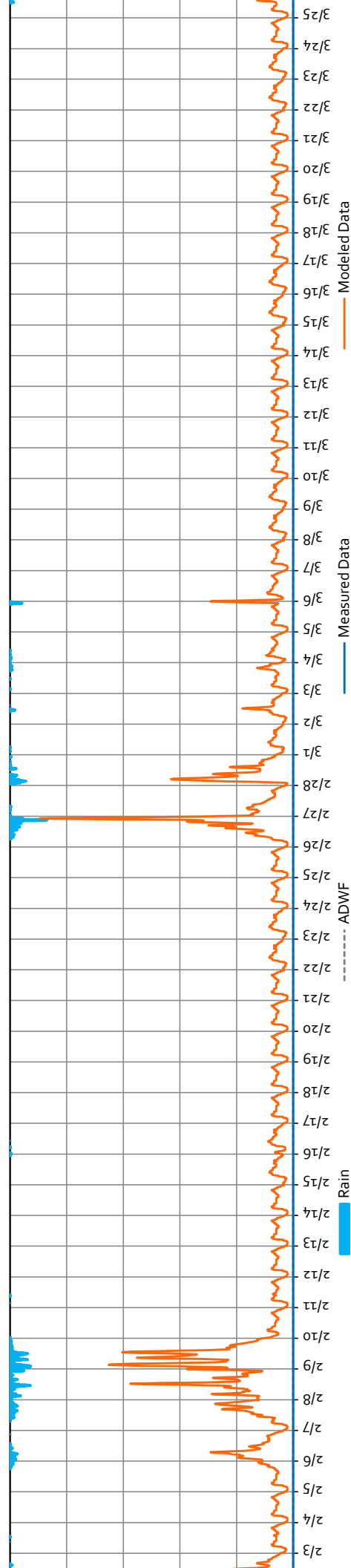
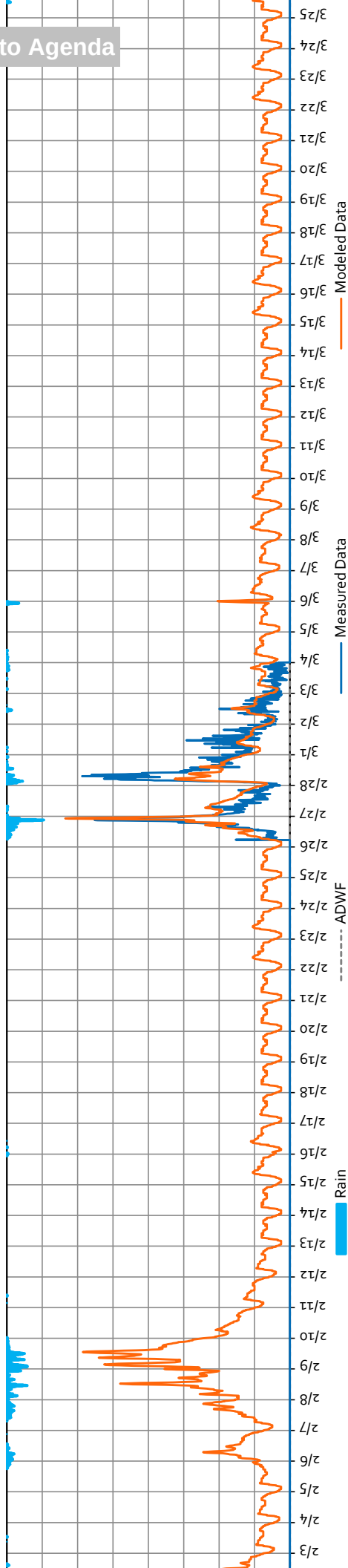
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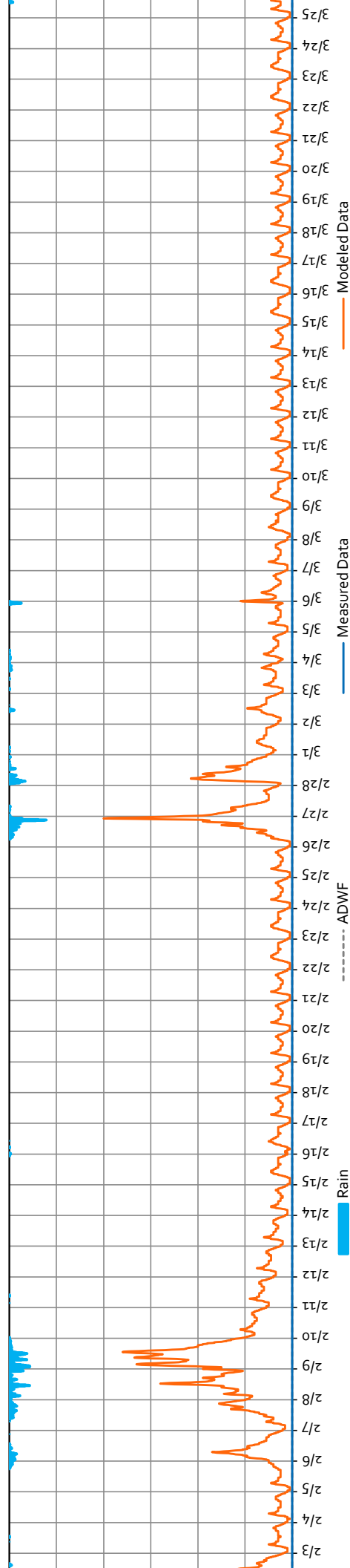
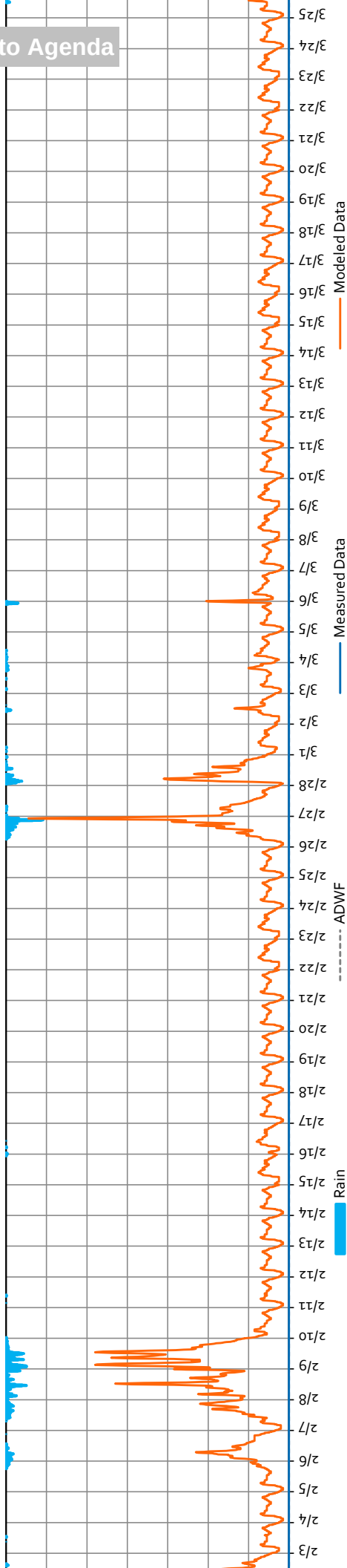
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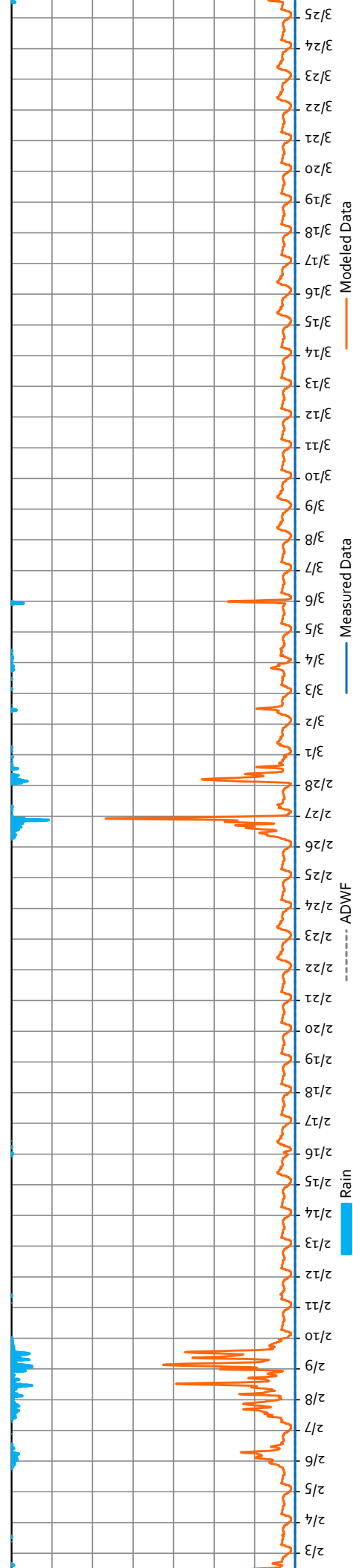
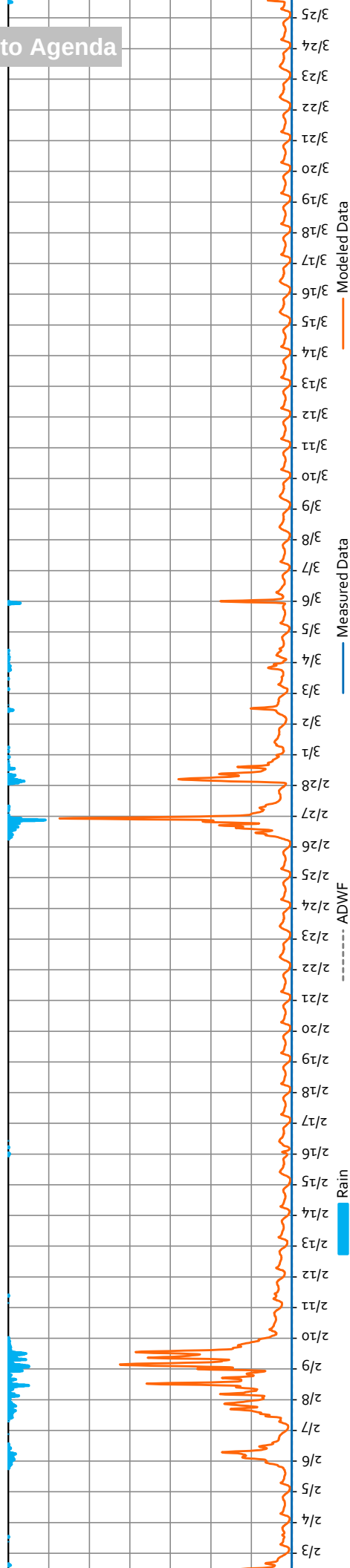
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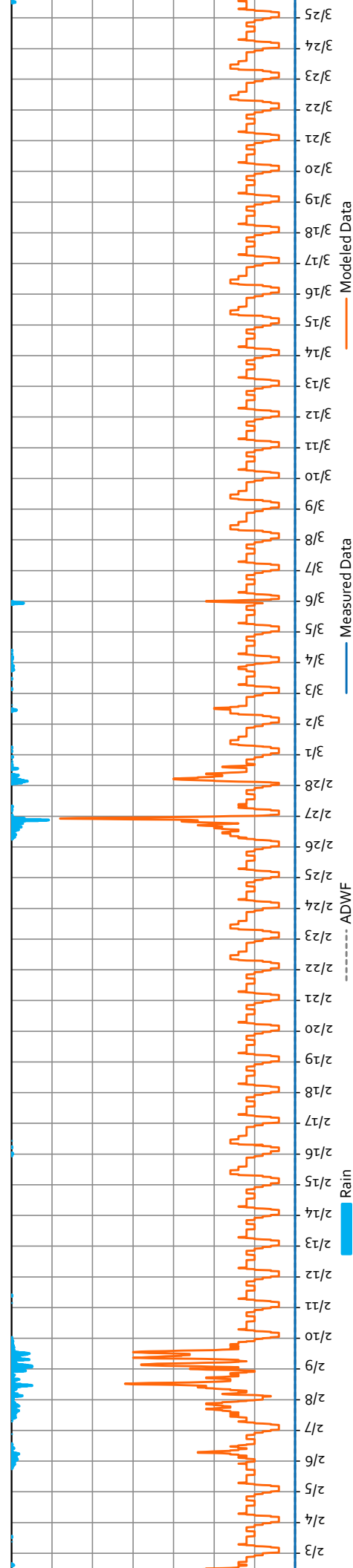
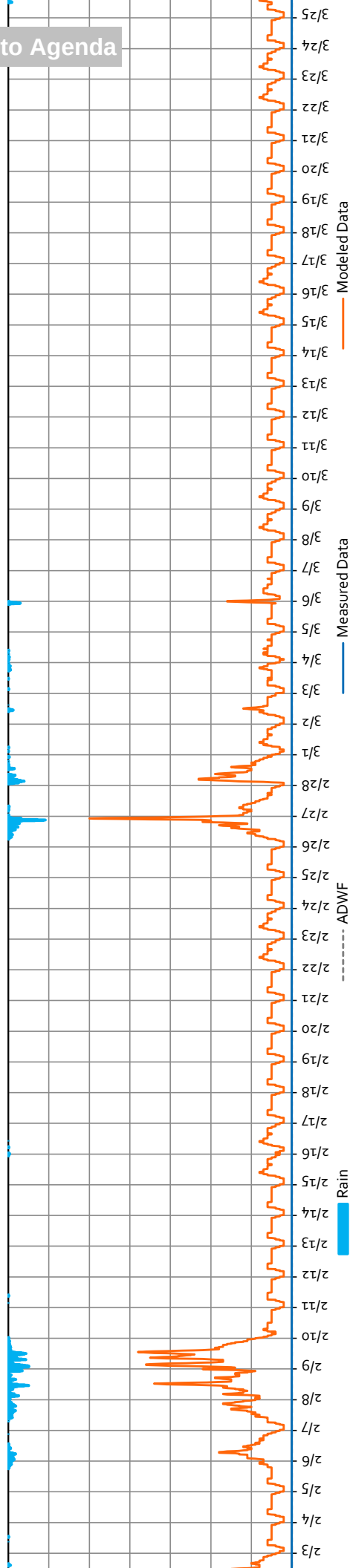
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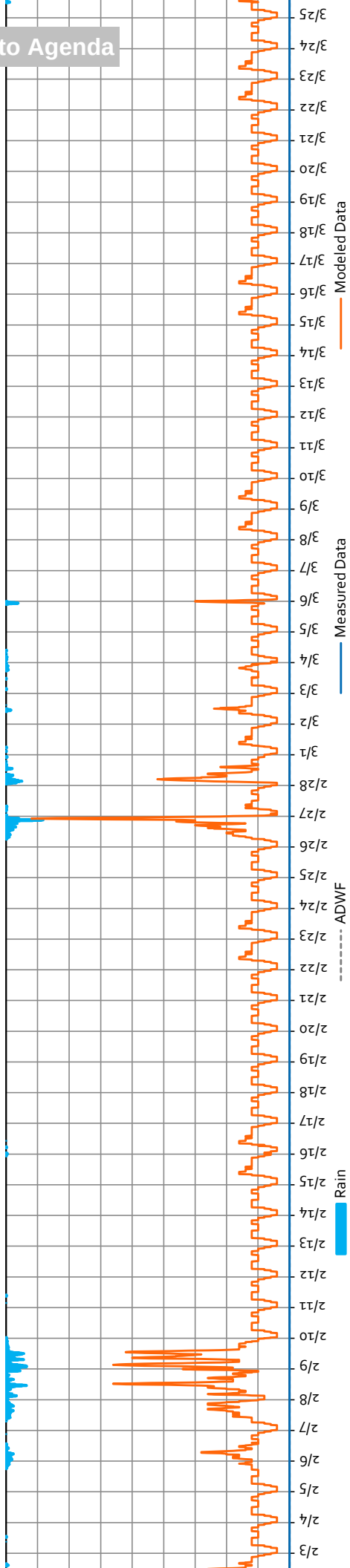
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Appendix D

CIP DETAIL SHEETS

Project Number:	Pinon-1
Project Name:	Gravity Main along Pinon Ave, Orleans Ave, Roble Ave, and San Pablo Ave
System Type:	Wastewater Collection System

Project Description:

This project includes the replacement of approximately 1,050 feet of 8-inch diameter pipeline along San Pablo Avenue, approximately 740 feet of 8-inch diameter pipeline along Roble Avenue, approximately 1,500 feet of 8-inch to 10-inch diameter pipeline along Pinon Avenue, approximately 520 feet of 12-inch diameter pipeline between Pinon Avenue and Orleans Avenue and approximately 1,160 feet of 8-inch to 15-inch diameter pipeline along Orleans Avenue. The surcharging of the gravity sewer cause SSO's under PWWF conditions. To mitigate SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with pipelines ranging in size from 12-inch to

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ⁽¹⁾ (\$/ft)	Baseline Construction Cost (\$)	Estimated Construction Cost ⁽²⁾ (\$)	Capital Improvement Cost ⁽³⁾ (\$)	Project Schedule
Gravity Main	8-15	12-24	Replace	4,970	#N/A	\$ 2,419,000	\$ 3,145,000	\$ 4,482,000	2022

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 14,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

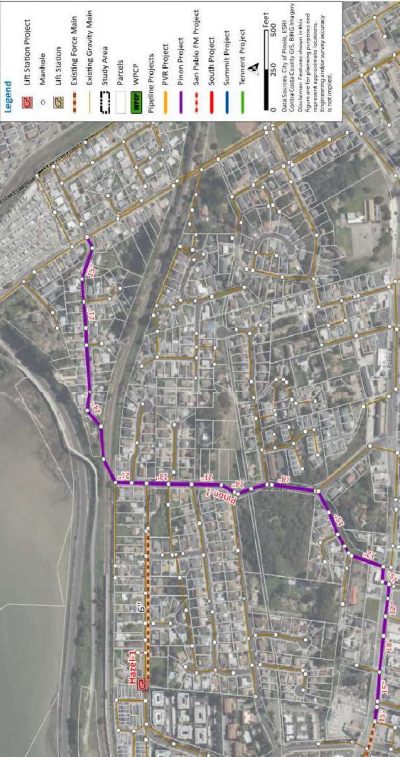
Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	97%	\$ 4,339,000
Future Users	3%	\$ 143,000
Total	100%	\$ 4,482,000

Notes on Cost Estimation:

This project is an existing improvement. A cost percentage has been assigned to future users as a combination of existing and future users contribute to the deficiency.

Project Detail:



Project Number: Pinon-2
Project Name: Gravity Main along San Pablo Ave, Pinon Ave, Appian Way, and Meadow Ave
System Type: Wastewater Collection System

Project Description:

This project includes the replacement of approximately 820 feet of 6-inch to 10-inch diameter pipeline along San Pablo Avenue, approximately 680 feet of 8-inch to 10-inch diameter pipeline along Pinon Avenue, approximately 890 feet of 6-inch to 8-inch diameter pipeline along Appian Way, approximately 290 feet of 6-inch diameter pipeline along Meadow Avenue, and approximately 290 feet of 6-inch diameter pipeline between Meadow Avenue and San Pablo Avenue. The surcharging of the gravity sewer cause SSO's under PWWF conditions. To mitigate SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with pipelines ranging in size

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ⁽¹⁾ (\$/ft)	Baseline Construction Cost (\$)	Estimated Construction Cost ⁽²⁾ (\$)	Capital Improvement Cost ⁽³⁾ (\$)	Project Schedule
Gravity Main	6-10	10-15	Replace	2,970	#N/A	\$ 1,007,000	\$ 1,310,000	\$ 1,866,000	2023

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 14,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

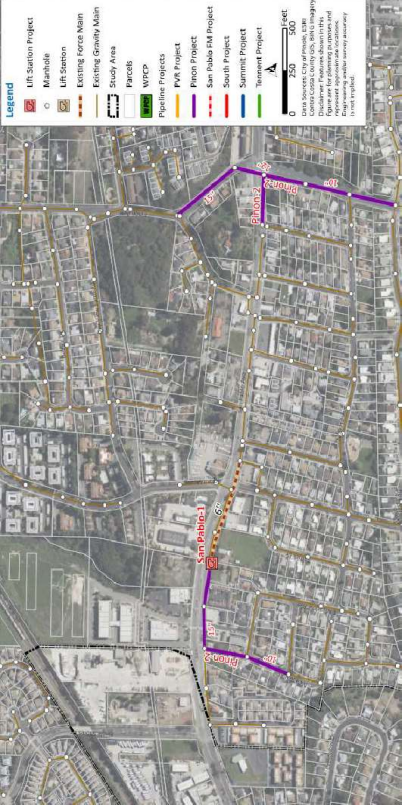
Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	100%	\$ 1,858,000
Future Users	0%	\$ 8,000
Total	100%	\$ 1,866,000

Notes on Cost Estimation:

This project is an existing improvement. A cost percentage has been assigned to future users as a combination of existing and future users contribute to the deficiency.

Project Detail:



Project Number: Tennent-1
Project Name: Gravity Main along Tennent Ave and at the WWTP
System Type: Wastewater Collection System

Project Description:

This project includes the replacement of approximately 130 feet of 24-inch diameter pipeline, 1,250 feet of 30-inch diameter pipeline, and approximately 10 feet of 36-inch diameter pipeline along Tennent Avenue and inside of the WPCP. The surcharging of the gravity sewer cause SSO's upstream under PWWF conditions. To mitigate the risk of SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with pipelines ranging in size from 36-inch to 42-inch diameter pipeline.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ⁽¹⁾ (\$/ft)	Baseline Construction Cost (\$)	Estimated Construction Cost ⁽²⁾ (\$)	Capital Improvement Cost ⁽³⁾ (\$)	Project Schedule
Gravity Main	24-36	36-42	Replace	1,390	#N/A	\$ 1,438,000	\$ 1,870,000	\$ 2,664,000	2027-2031

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 14,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	97%	\$ 2,582,000
Future Users	3%	\$ 82,000
Total	100%	\$ 2,664,000

Notes on Cost Estimation:

This project is an existing improvement. A cost percentage has been assigned to future users as a combination of existing and future users contribute to the deficiency.

Project Detail:



Project Number: Tennent-2
Project Name: Gravity Main along Tennent Ave
System Type: Wastewater Collection System

Project Description:

This project includes the replacement of approximately 3,360 feet of 18-inch diameter pipeline along Tennent Avenue. The surcharging of the gravity sewer cause SSO's under PWWF conditions. To mitigate the risk of SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with pipelines ranging in size from 24-inch to 36-inch diameter pipeline.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ⁽¹⁾ (\$/ft)	Baseline Construction Cost (\$)	Estimated Construction Cost ⁽²⁾ (\$)	Capital Improvement Cost ⁽³⁾ (\$)	Project Schedule
Gravity Main	18	24-36	Replace	3,360	#N/A	\$ 2,288,000	\$ 2,975,000	\$ 4,239,000	2027-2031

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 14,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

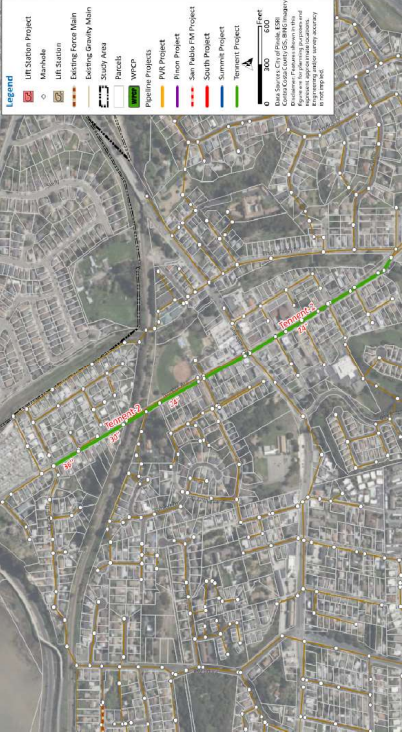
Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	92%	\$ 3,895,000
Future Users	8%	\$ 344,000
Total	100%	\$ 4,239,000

Notes on Cost Estimation:

This project is an existing improvement. A cost percentage has been assigned to future users as a combination of existing and future users contribute to the deficiency.

Project Detail:



Project Number:	PVR-2
Project Name:	Gravity Main along Pinole Valley Road
System Type:	Wastewater Collection System

Project Description:

This project includes the replacement of approximately 1,030 feet of 15-inch diameter pipeline and approximately 970 feet of 18-inch diameter pipeline along Pinole Valley Road. The surcharging of the gravity sewer cause SSO's under PWWF conditions. To mitigate SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with 24-inch diameter pipeline.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ⁽¹⁾ (\$/ft)	Baseline Construction Cost (\$)	Estimated Construction Cost ⁽²⁾ (\$)	Capital Improvement Cost ⁽³⁾ (\$)	Project Schedule
Gravity Main	15-18	24	Replace	2,000	#N/A	\$ 1,240,000	\$ 1,612,000	\$ 2,298,000	2027-2031

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 144,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	92%	\$ 2,122,000
Future Users	8%	\$ 176,000
Total	100%	\$ 2,298,000

Notes on Cost Estimation:

This project is an existing improvement. A cost percentage has been assigned to future users as a combination of existing and future users contribute to the deficiency.



Project Detail:



Project Number:	South-1
Project Name:	Gravity Main along Pinole Valley Road, Sarah Drive, Shea Drive, and between Shea Drive
System Type:	Wastewater Collection System

Project Description:

This project includes the replacement of approximately 1,400 feet of 15-inch diameter pipeline along Pinole Valley Road, approximately 250 feet of 8-inch diameter pipeline along Sarah Drive, approximately 210 feet of 8-inch diameter pipeline along Shea Drive, and approximately 220 feet of 10-inch diameter pipeline between Shea Drive and Pinole Valley Road. The surcharging of the gravity sewer cause SSO's under PWWF conditions. To mitigate SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with pipelines ranging in size from 15-inch to 21-inch diameter pipeline. This project should be re-evaluated once the 2021 flow monitoring program

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ⁽¹⁾ (\$/ft)	Baseline Construction Cost (\$)	Estimated Construction Cost ⁽²⁾ (\$)	Capital Improvement Cost ⁽³⁾ (\$)	Project Schedule
Gravity Main	8-15	15-24	Replace	2,080	#N/A	\$ 1,066,000	\$ 1,386,000	\$ 1,975,000	2032-2041

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 14,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

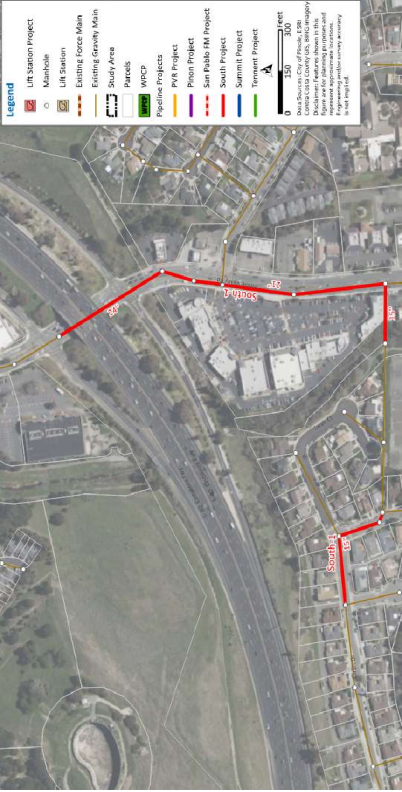
Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	93%	\$ 1,836,000
Future Users	7%	\$ 139,000
Total	100%	\$ 1,975,000

Notes on Cost Estimation:

This project is an existing improvement. A cost percentage has been assigned to future users as a combination of existing and future users contribute to the deficiency.

Project Detail:



Project Number:	South-2
Project Name:	Gravity Main along Pinole Valley Road
System Type:	Wastewater Collection System

Project Description:

This project includes the replacement of approximately 1,090 feet of 15-inch diameter pipeline along Pinole Valley Road. The flow levels of the gravity sewer cause upstream manholes to surcharge within 3 feet of the manhole rim under PWWF conditions. To mitigate the risk of SSO occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with pipelines ranging in size from 18-inch to 21-inch diameter pipeline. This project should be re-evaluated once the 2021 flow monitoring program has confirmed the flows in the pipes.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ⁽¹⁾ (\$/ft)	Baseline Construction Cost	Estimated Construction Cost ⁽²⁾	Capital Improvement Cost ⁽³⁾	Project Schedule
						(\$)	(\$)	(\$)	
Gravity Main	15	18-21	Replace	1,090	#N/A	\$ 524,000	\$ 682,000	\$ 971,000	2032-2041

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 144,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	98%	\$ 949,000
Future Users	2%	\$ 22,000
Total	100%	\$ 971,000

Notes on Cost Estimation:

This project is an existing improvement. A cost percentage has been assigned to future users as a combination of existing and future users contribute to the deficiency.



Project Number: South-3
Project Name: Gravity Main along Pinole Valley Road and Simas Avenue
System Type: Wastewater Collection System

Project Description:

This project includes the replacement of approximately 320 feet of 8-inch diameter pipeline along Simas Avenue and approximately 1,820 feet of 12-inch to 15-inch diameter pipeline along Pinole Valley Road. The flow levels of the gravity sewer cause upstream manholes to surcharge within 3 feet of the manhole rim under PWWF conditions. To mitigate the risk of SSO occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with pipelines ranging in size from 15-inch to 21-inch diameter pipeline. This project should be re-evaluated once the 2021 flow monitoring program has confirmed the flows in the pipes.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ⁽¹⁾ (\$/ft)	Baseline Construction Cost (\$)	Estimated Construction Cost ⁽²⁾ (\$)	Capital Improvement Cost ⁽³⁾ (\$)	Project Schedule
Gravity Main	8-15	15-21	Replace	2,140	#N/A	\$ 975,000	\$ 1,268,000	\$ 1,807,000	2032-2041

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 14,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	98%	\$ 1,766,000
Future Users	2%	\$ 41,000
Total	100%	\$ 1,807,000

Notes on Cost Estimation:

This project is an existing improvement. A cost percentage has been assigned to future users as a combination of existing and future users contribute to the deficiency.

Project Detail:



Project Number: South-4
Project Name: Gravity Main along Pinole Valley Road
System Type: Wastewater Collection System

Project Description:

This project includes the replacement of approximately 2,500 feet of 10-inch to 12-inch diameter pipeline along Pinole Valley Road. The surcharging of the gravity sewer cause SSO's under PWWF conditions. To mitigate SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with 15-inch diameter pipeline. This project should be re-evaluated once the 2021 flow monitoring program has confirmed the flows in the pipes

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ⁽¹⁾ (\$/ft)	Baseline Construction Cost (\$)	Estimated Construction Cost ⁽²⁾ (\$)	Capital Improvement Cost ⁽³⁾ (\$)	Project Schedule
Gravity Main	10-12	15	Replace	2,500	#N/A	\$ 1,013,000	\$ 1,317,000	\$ 1,877,000	2032-2041

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 144,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	98%	\$ 1,835,000
Future Users	2%	\$ 42,000
Total	100%	\$ 1,877,000

Notes on Cost Estimation:

This project is an existing improvement. A cost percentage has been assigned to future users as a combination of existing and future users contribute to the deficiency.



Project Number: South-5
Project Name: Gravity Main along Pinole Valley Road, Doidge Avenue and Wright Avenue
System Type: Wastewater Collection System

Project Description:

This project includes the replacement of approximately 980 feet of 8-inch to 10-inch diameter pipeline along Pinole Valley Road, approximately 290 feet of 8-inch diameter pipeline along Doidge Avenue and approximately 260 feet of 8-inch pipeline along Wright Avenue. The surcharging of the gravity sewer cause SSO's under PWWF conditions. To mitigate SSO's occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with pipelines ranging in size from 10-inch to 15-inch diameter pipeline. This project should be re-evaluated once the 2021 flow monitoring program has confirmed the flows in the pipes.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ⁽¹⁾ (\$/ft)	Baseline Construction Cost (\$)	Estimated Construction Cost ⁽²⁾ (\$)	Capital Improvement Cost ⁽³⁾ (\$)	Project Schedule
Gravity Main	8-10	10-15	Replace	1,530	#N/A	\$ 620,000	\$ 806,000	\$ 1,149,000	2032-2041

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 14,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	98%	\$ 1,128,000
Future Users	2%	\$ 21,000
Total	100%	\$ 1,149,000

Notes on Cost Estimation:

This project is an existing improvement. A cost percentage has been assigned to future users as a combination of existing and future users contribute to the deficiency.



Project Detail:



Project Number: Summit-1
Project Name: Gravity Main along Summit Drive
System Type: Wastewater Collection System

Project Description:

This project includes the replacement of approximately 410 feet of 6-inch diameter pipeline along Summit Drive. The flow levels of the gravity sewer cause upstream manholes to surcharge within 3 feet of the manhole rim under PWWF conditions. To mitigate the risk of SSO occurring during PWWF conditions, it is recommended that the existing pipeline be replaced with 10-inch diameter pipeline.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ⁽¹⁾ (\$/ft)	Baseline Construction Cost (\$)	Estimated Construction Cost ⁽²⁾ (\$)	Capital Improvement Cost ⁽³⁾ (\$)	Project Schedule
Gravity Main	6	10	Replace	410	#N/A	\$ 113,000	\$ 147,000	\$ 210,000	2032-2041

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 14,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	97%	\$ 204,000
Future Users	3%	\$ 6,000
Total	100%	\$ 210,000

Notes on Cost Estimation:

This project is an existing improvement. A cost percentage has been assigned to future users as a combination of existing and future users contribute to the deficiency.

Project Detail:



Project Number: Hazel-1
Project Name: Hazel Lift Station Replacement
System Type: Wastewater Collection System

Project Description:

This project includes the replacement of the existing lift station. The existing influent flow exceeds the existing firm pumping capacity under PWWF conditions. To mitigate the risk of a SSO occurring during PWWF conditions, it is recommended that the new lift station have a firm pumping capacity of 0.831 mgd.

Project Details:

Project Element	Existing Firm Capacity (mgd)	Proposed Firm Capacity (mgd)	Replace/ New	No. of Pumps (Units)	Unit Cost (\$)	Baseline Construction Cost ⁽¹⁾ (\$)	Estimated Construction Cost ⁽²⁾ (\$)	Capital Improvement Cost ⁽³⁾ (\$)	Project Schedule
Lift Station	0.43	0.831	Replace	2	--	\$ 1,162,000	\$ 1,511,000	\$ 2,153,000	2027

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 14,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	100%	\$ 2,144,000
Future Users	0%	\$ 9,000
Total	100%	\$ 2,153,000

Notes on Cost Estimation:

As an existing deficiency, current users are assigned 100-percent of the project's cost. Costs based on lift station cost curve.



Project Detail:



Project Number: San Pablo-1
Project Name: San Pablo Lift Station Replacement
System Type: Wastewater Collection System

Project Description:

This project includes the replacement of the existing lift station. The existing influent flow exceeds the existing firm pumping capacity under PWWF conditions. To mitigate the risk of a SSO occurring during PWWF conditions, it is recommended that the new lift station have a firm pumping capacity of 1.38 mgd.

Project Details:

Project Element	Existing Firm Capacity (mgd)	Proposed Firm Capacity (mgd)	Replace/ New	No. of Pumps (Units)	Unit Cost (\$)	Baseline Construction Cost ⁽¹⁾ (\$)	Estimated Construction Cost ⁽²⁾ (\$)	Capital Improvement Cost ⁽³⁾ (\$)	Project Schedule
Lift Station	0.58	1.38	Replace	2	--	\$ 1,662,000	\$ 2,161,000	\$ 3,079,000	2027

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 14,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	96%	\$ 2,964,000
Future Users	4%	\$ 115,000
Total	100%	\$ 3,079,000

Notes on Cost Estimation:

As an existing deficiency, current users are assigned 100-percent of the project's cost. Costs based on lift station cost curve.

Project Detail:



Project Number: San Pablo-2
Project Name: San Pablo Lift Station Forcemain Replacement
System Type: Wastewater Collection System

Project Description:

The purpose of this project is to mitigate the high velocity (> 8 fps) that the existing forcemain experiences following San Pablo Lift Station under future conditions. It is recommended that an 8-inch diameter forcemain be constructed to replace the existing 6-inch diameter forcemain.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ⁽¹⁾ (\$/ft)	Baseline Construction Cost (\$)	Estimated Construction Cost ⁽²⁾ (\$)	Capital Improvement Cost ⁽³⁾ (\$)	Project Schedule
Force Main	6	8	Replace	640	#N/A	\$ 141,000	\$ 184,000	\$ 262,000	2027

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 14,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	96%	\$ 252,000
Future Users	4%	\$ 10,000
Total	100%	\$ 262,000

Notes on Cost Estimation:

This project is an existing improvement. A cost percentage has been assigned to future users as a combination of existing and future users contribute to the deficiency.



Project Number: RR-2
Project Name: Pipe Rehabilitation and Replacement Program
System Type: Wastewater Collection System

Project Description:

This is an annual program to rehabilitate or replace aging pipes or pipes with poor condition. The results of the City's CCTV inspection program should be used to identify the pipes most in need of rehabilitation and replacement. Additionally, a long term risk assessment should be completed to identify long term rehabilitation and replacement projects and funding needs. It is also recommended that gravity pipes less than 8 inches in diameter be replaced with 8-inch pipe. The length/total cost recommended in the CIP is an estimate. Once the City completes the CCTV inspection and have a better idea of the condition of the

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Annual Length (ft/yr)	Unit Cost ⁽¹⁾ (\$/ft)	Baseline Construction Cost ⁽²⁾ (\$)	Estimated Construction Cost ⁽²⁾ (\$)	Capital Improvement Cost ⁽³⁾ (\$)	Project Schedule
Gravity Main	Varies	Varies	R&R	Varies	Varies	\$ 540,000	\$ 702,000	\$ 1,000,000	2023
Gravity Main	Varies	Varies	R&R	Varies	Varies	\$ 540,000	\$ 702,000	\$ 1,000,000	2024
Gravity Main	Varies	Varies	R&R	Varies	Varies	\$ 540,000	\$ 702,000	\$ 1,000,000	2025
Gravity Main	Varies	Varies	R&R	Varies	Varies	\$ 540,000	\$ 702,000	\$ 1,000,000	2026
Gravity Main	Varies	Varies	R&R	Varies	Varies	\$ 540,000	\$ 702,000	\$ 1,000,000	2027
Gravity Main	Varies	Varies	R&R	Varies	Varies	\$ 540,000	\$ 702,000	\$ 1,000,000	2028
Gravity Main	Varies	Varies	R&R	Varies	Varies	\$ 540,000	\$ 702,000	\$ 1,000,000	2029
Gravity Main	Varies	Varies	R&R	Varies	Varies	\$ 540,000	\$ 702,000	\$ 1,000,000	2030
Gravity Main	Varies	Varies	R&R	Varies	Varies	\$ 540,000	\$ 702,000	\$ 1,000,000	2031
Gravity Main	Varies	Varies	R&R	Varies	Varies	\$ 5,400,000	\$ 7,020,000	\$ 10,000,000	2032-2041

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 14,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	100%	\$ 19,000,000
Future Users	0%	\$ -
Total	100%	\$ 19,000,000

Notes on Cost Estimation:

As an R&R project, current users are assigned 100-percent of the project's cost.



Project Number: RR-3
 Project Name: Inflow Identification Program
 System Type: Wastewater Collection System

Project Description:

The 2014 flow monitoring program revealed several subbasins within the collection system that exhibited higher rates of inflow. This project includes smoke testing and/or nighttime CCTV and/or field reconnaissance to identify potential sources of inflow.

Project Details:

Project Element	Existing Diameter	Proposed Diameter	Replace/ New	Length (ft)	Annual Cost (\$/yr)	Capital Improvement Cost ⁽³⁾	Project Schedule
I/I Reduction Projects	4-12	8-12	R&R	Varies	\$ 500,000	\$ 500,000	2022
I/I Reduction Projects	4-12	> 6	R&R	Varies	\$ 500,000	\$ 500,000	2023
I/I Reduction Projects	4-12	> 6	R&R	Varies	\$ 500,000	\$ 500,000	2024
I/I Reduction Projects	4-12	> 6	R&R	Varies	\$ 500,000	\$ 500,000	2025
I/I Reduction Projects	4-12	> 6	R&R	Varies	\$ 500,000	\$ 500,000	2026
I/I Reduction Projects	4-12	> 6	R&R	Varies	\$ 500,000	\$ 500,000	2027
I/I Reduction Projects	4-12	> 6	R&R	Varies	\$ 500,000	\$ 500,000	2028
I/I Reduction Projects	4-12	> 6	R&R	Varies	\$ 500,000	\$ 500,000	2029
I/I Reduction Projects	4-12	> 6	R&R	Varies	\$ 500,000	\$ 500,000	2030
I/I Reduction Projects	4-12	> 6	R&R	Varies	\$ 500,000	\$ 500,000	2031
I/I Reduction Projects	4-12	> 6	R&R	Varies	\$ 500,000	\$ 5,000,000	2032-2041

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 14,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	100%	\$ 10,000,000
Future Users	0%	\$ -
Total	100%	\$ 10,000,000

Notes on Cost Estimation:

As an existing R&R project, current users are assigned 100-percent of the project's cost. This CIP line item was developed so the City can budget for R&R Projects that could come from the I/I Reduction Program's inspection phases.



Project Number: O-1
Project Name: Sewer Master Plan Update
System Type: Wastewater Collection System

Project Description:

It is recommended that the City updates their Sewer Master Plan Update every 5 years to re-evaluate the wastewater collection system.

Project Details:

Project Element	Existing Diameter (in)	Proposed Diameter (in)	Replace/ New	Length (ft)	Unit Cost ⁽¹⁾ (\$/ft)	Baseline Construction Cost (\$)	Estimated Construction Cost ⁽²⁾ (\$)	Capital Improvement Cost ⁽³⁾ (\$)	Project Schedule
Sewer Master Plan Update	--	--	--	--	--	--	--	\$ 150,000	2027
Sewer Master Plan Update	--	--	--	--	--	--	--	\$ 150,000	2032-2041
Sewer Master Plan Update	--	--	--	--	--	--	--	\$ 150,000	2032-2041
Sewer Master Plan Update	--	--	--	--	--	--	--	\$ 150,000	2032-2041

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 14,452.
- (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
- (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	0%	\$ -
Future Users	100%	\$ 600,000
Total	100%	\$ 600,000



Notes on Cost Estimation:

As a Sewer Master Plan Update, current users are assigned 100-percent of the project's cost.

Project Number: O-2
Project Name: Flow Monitoring Program
System Type: Wastewater Collection System

Project Description:

It is recommended that the City conduct a flow monitoring program every 5 years to aid with the Sewer Master Plan Updates (O-1). It is assumed that each program will consist of 15 flow meters for a 1-month period. Flow monitoring should be timed to capture at least one major storm event, preferably following wet ground conditions.

Project Details:

Project Element	Existing Diameter (in)	Duration (weeks)	Replace/ New	No.	Unit Cost ⁽¹⁾ (\$/meter-week)	Baseline Construction Cost (\$)	Estimated Construction Cost ⁽²⁾ (\$)	Capital Improvement Cost ⁽³⁾ (\$)	Project Schedule
Flow Monitoring Program	--	4 weeks	--	15	--	--	--	--	2027
Flow Monitoring Program	--	4 weeks	--	15	--	--	--	--	2028
Flow Monitoring Program	--	4 weeks	--	15	--	--	--	--	2032-2041
Flow Monitoring Program	--	4 weeks	--	15	--	--	--	--	2029-2040

Notes:

- (1) ENR 20 City Average Construction Cost Index for October 2021 is 14,452.
 (2) Estimated Construction Cost include a 30% contingency of the baseline construction cost.
 (3) Total project costs includes a 15% for bid climate, 10% for engineering, 10% for construction management, and 7.5% for environmental and legal costs.

Project Cost Allocation:

Reimbursement Category	Percent	Cost (\$)
Existing Users	0%	\$ -
Future Users	100%	\$ -
Total	100%	\$ -



Notes on Cost Estimation:

As an existing inspection program, current users are assigned 100-percent of the program's cost.



CITY COUNCIL REPORT

12A

DATE: SEPTEMBER 20, 2022

TO: MAYOR AND COUNCIL MEMBERS

FROM: SANJAY MISHRA, PUBLIC WORKS DIRECTOR

SUBJECT: OVERVIEW OF CITY-WIDE PROJECT LABOR AGREEMENTS

RECOMMENDATION

Staff recommends that the City Council receive information on project labor agreements (PLA) and provide direction, if any, on next steps.

BACKGROUND

The City Council requested that City staff provide information on PLAs.

A PLA is defined as a pre-hire collective bargaining agreement between a construction project sponsor/owner and one or more labor organizations that establishes terms and conditions of employment for a specific construction project or projects. PLAs are also sometimes referred to as Community Workforce Agreements. PLA's typically address challenges commonly associated with complex construction projects, such as avoiding labor disruptions, while providing specific benefits by setting participation goals for local businesses.

PLAs are described in Title 29, Section 158(f) of the United States Code. Public Contract Code 2500(a) enables cities to utilize PLAs.

PLAs must have specific taxpayer protection provisions, including the following:

1. The agreement prohibits discrimination based on race, national origin, religion, sex, sexual orientation, political affiliation, or membership in a labor organization in hiring and dispatching workers for the project.
2. The agreement permits all qualified contractors and subcontractors to bid for and be awarded work on the project without regard to whether they are otherwise parties to collective bargaining agreements.
3. The agreement contains an agreed-upon protocol concerning drug testing for workers who will be employed on the project.
4. The agreement contains guarantees against work stoppages, strikes, lockouts, and similar disruptions of the project.

5. The agreement provides that a neutral arbitrator shall resolve disputes arising from the agreement.

REVIEW & ANALYSIS

The City of Pinole has entered PLAs on individual City construction projects in the past. For example, the City entered into a PLA when it performed the Water Pollution Control Plant Upgrade (See Attachment A).

Several agencies, including the County and cities such as Hayward, Martinez, Sacramento, San Francisco, San Jose, and Watsonville have utilized PLAs on individual projects. As a result of their successful experience with PLAs, they have adopted policies that require that they use PLAs on public construction projects that meet certain criteria and have established overarching PLAs with the relevant labor organizations in their jurisdictions. The overarching PLA establishes terms and conditions on projects within the city that meet specific pre-agreed upon requirements and thresholds

PLAs usually address wage irregularities and ensures a minimum level of local business participation in the public contracts. Local business participation requirements help local construction labors, trucking, suppliers etc. PLAs seems to benefit local economy, promotes local hires and offers project stability related to labor disputes. A criticism of PLAs is that they increase the cost of construction by requiring payment of union wages to non-union workers. All public contract projects are required to pay prevailing wages (per the public contract code) and comparable to the union wages.

Most of the PLA agreements reviewed by staff had similar language but differed on the project thresholds, local hiring goals, and inclusion of a disadvantaged resident program.

- **Project Thresholds**

The application of the policy in several of the PLAs reviewed was determined by a construction project's minimum bid amount (the "Threshold"). For example, after forming an Ad Hoc Committee and discussing the item with key staff members, the City of Martinez adopted a policy with a threshold of \$500,000. The City of Watsonville has determined its threshold to be on all competitively bid public works construction projects with a projected construction cost of \$600,000. The City of Hayward's Community Workforce Agreement covers all construction projects with a minimum cost of \$1,000,000.

- **Local Hiring Goals**

Several cities found that the construction jobs that are created by City-funded projects can be used to facilitate their local hire goals (i.e., hiring from a socio-economic group, within a certain geographic boundary, certain income boundary etc.). The City of

Watsonville determined that project labor agreements have proven to be a valuable vehicle for accomplishing their local hire goals, and their City-Wide PLA policy was written to include any local hire ordinance adopted by the City of Watsonville. The City-Wide PLA agreement entered into by the City of Hayward included a goal that Hayward residents perform a minimum of thirty (30%) of the hours worked on a craft-by-craft basis.

- Inclusion of a Disadvantaged Resident Program

The City of Hayward's City-Wide PLA recognized a desire to facilitate the entry of veterans who are interested in careers in the building and construction industry and agreed to utilize the services of the Center for Military Recruitment, Assessment and Veteran's Employment Center and the "Helmets to Hardhats" program to serve as a resource for employment opportunities and training to the extent permitted by law. The City of Watsonville's PLA also requires the use of the "Helmets to Hardhats" program to assist returning veterans in obtaining employment and training opportunities on public works construction projects.

Cities often take the following steps to determine what an overarching PLA should contain:

1. formation of ad-hoc council subcommittee to study the item in further detail;
2. presentations and study sessions to the City Council;
3. meetings between senior staff members of the city and local union groups where specific terms were negotiated; and
4. preparation of a draft PLA for the Council to consider at a publicly held City Council meeting.

City staff is seeking Council direction on whether to take next steps on the issue of PLAs.

FISCAL IMPACT

There is no fiscal impact in receiving and accepting this report. This is for information and discussion by Council for direction to staff.

ATTACHMENT(S)

- A. Executed PLA for Water Pollution Control Plant Upgrade
- B. Filling the Good Jobs Gap: Fresno's Opportunity for a Citywide Project Labor Agreement, Community and Labor Center at UC Merced, January 2021
- C. Hayward Community Workforce Agreement
- D. Martinez Project Labor Agreement
- E. Sacramento Project Labor Agreement

DOCUMENT 006230

PROJECT LABOR AGREEMENT

PROJECT LABOR AGREEMENT
FOR THE
PINOLE-HERCULES WASTEWATER TREATMENT PLANT
UPGRADE PROJECT

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RECITALS

WHEREAS, the Pinole-Hercules Wastewater Treatment Plant is an estimated \$48 million public works project that will replace the existing Pinole-Hercules Water Pollution Control Plant (WCPC) with a state-of-the-art wastewater treatment facility; and

WHEREAS, the successful completion of the Pinole-Hercules Wastewater Treatment Plant is of the utmost importance to the general public in the Cities of Pinole and Hercules because the project is needed to provide additional wastewater treatment capacity in order to accommodate the cities' growth and in order to bring treatment operations into compliance with standards set forth by the State Water Resources Control Board; and

WHEREAS, the proposed Pinole-Hercules Wastewater Treatment Plant will provide the region with a modern facility that will be able to process twice as much wastewater as the current plant and do so in a more environmentally sound manner; and

WHEREAS, the Pinole-Hercules Wastewater Treatment Plant will replace the current facility and bring the plant's operations into compliance with the Regional Water Quality Control Board's permit requirement and other applicable state and federal regulations; and

WHEREAS, construction of the plant is expected to begin in January 2016 and take approximately 30 months to complete; and

WHEREAS, the timely and successful completion of the Pinole-Hercules Wastewater Treatment Plant is necessary in order to avoid potential fines by the State Water Resources Control Board if the Project is not completed by September 30, 2017 when the current operating permit expires; and

WHEREAS, the new Pinole-Hercules Wastewater Treatment Plant will be located on the same site as the existing treatment facility, which will continue operations during the project; and

WHEREAS, City workers will continue to be responsible for treatment operations, including, but not limited to routine maintenance and repairs, which will not be covered by the Project Labor Agreement; and

WHEREAS, performing construction in an operational plant presents logistical challenges for the City employees, Unions and Contractors; and

WHEREAS, the parties agree that one of the primary purposes of this agreement is to avoid the tensions that may arise on the Project because Union and nonunion workers may be required to work side by side on the Project, thereby leading to labor disputes that could delay completion of the Project; and

WHEREAS, any work disruptions on this Project could pose significant risk to public health and safety and potentially expose the City to fines; and

WHEREAS, workers of various skills will be required in the performance of the construction work, including those to be represented by the Unions signatory to this Agreement and employed by contractors and subcontractors who are signatory to this Agreement; and

WHEREAS, it is recognized that on a Project of this magnitude with multiple contractors and bargaining units on the job site at the same time over an extended period of time, the potential for work disruption is substantial without an overriding commitment to maintain continuity of work; and

WHEREAS, the interests of the general public, the City, the Unions and the Contractor would be best served if the construction work proceeds in an orderly manner without disruption because of strikes, sympathy strikes, work stoppages, picketing, lockouts, slowdowns or other interferences with work; and

WHEREAS, the Contractors and the Unions desire to mutually establish and stabilize wages, hours and working conditions for the workers employed on the Project by the Contractors and that a satisfactory, continuous and harmonious relationship will exist among the parties to this Agreement; and

WHEREAS, this Agreement is not intended to replace, interfere with, abrogate, diminish or modify existing local or national collective bargaining agreements in effect during the duration of the Project, insofar as a legally binding agreement exists between the Contractor/Employer(s) and the affected Union(s), except to the extent that the provisions of this Agreement are inconsistent with said collective bargaining agreements, in which event, the provisions of this Agreement shall prevail; and

WHEREAS, contracts for the Project will be awarded in accordance with the applicable provisions of local, state and federal laws, including State Public Contract Code and Davis-Bacon and State Prevailing Wage Requirements, state and federal regulations, as well as the terms of the financing agreement with the State Water Board's Clean Water State Revolving Fund; and

WHEREAS, the City has the absolute right to select the lowest responsive and responsible bidder for the award of construction contracts on the Project; and

WHEREAS, the City places high priority upon the development of comprehensive programs for the recruitment, training and employment of local area residents, and recognizes the potential of local apprenticeship programs to provide meaningful and sustainable careers in the building and construction industry; and

WHEREAS, the parties signatory to this Agreement pledge their full good faith and trust to work towards mutually satisfactory completion of the Project;

NOW, THEREFORE, IT IS AGREED BETWEEN AND AMONG THE PARTIES HERETO, AS FOLLOWS:

ARTICLE 1 PURPOSE

The purpose of this Agreement is to promote the timely, safe and economical upgrade of the Pinole-Hercules Wastewater Treatment Plant and to provide for the peaceful settlement of labor disputes and grievances without the work disruptions set forth in Article 6, thereby promoting the public interest in assuring the completion of the Project. The City of Pinole ("City") and the Contra Costa Building & Construction Trades Council ("Council") may mutually agree in writing to add additional components to the Project's Scope of Work to be covered under this PLA.

ARTICLE 2 INITIAL PROVISION

This Project Labor Agreement is entered into this ____ day of _____, 2015 by and between the City, together with contractors and subcontractors of all tiers, who shall become signatory to this Agreement by signing the "Agreement To Be Bound" (Addendum A) (all of whom are referred to herein as "Contractors "), and the Council and its affiliated local Unions that have executed this Agreement (all of whom are referred to collectively as "Unions").

ARTICLE 3 DEFINITIONS

- 3.1 "Agreement" means this Project Labor Agreement.
- 3.2 "City" means the City of Pinole and its public employees, including managerial personnel.
- 3.3 "Construction Contract(s)" or "Contract(s)" means any contract awarded by the City for Project work, and all subcontracts thereunder.

- 3.4 “Contractor(s)” means any individual, firm, partnership or corporation, or combination thereof, including joint ventures, that is an independent business enterprise, including the Prime Contractor, General Contractor, and Construction Manager or equivalent, and their successors and assigns, that enters into a Contract with the City for the construction of any part of the Project under contract terms and conditions approved by the City, and any of its contractors or subcontractors of any tier.
- 3.5 “Council” means the Contra Costa County Building & Construction Trades Council, AFL-CIO.
- 3.6 “Effective Date” means the date that this Agreement is approved and executed by the City Council of Pinole and the Contra Costa County Building & Construction Trades Council.
- 3.7 “Helmets to Hardhats” means a national program that connects National Guard, Reserve and transitioning active-duty military members with career training and employment opportunities within the construction industry. The program is administered by a non-profit Section 501(c)(3) joint labor-management committee established under Section 302(c)(9) of the Labor Management Relations Act.
- 3.8 “Local Area” means the Cities of Pinole and Hercules, West Contra Costa County, and Contra Costa County.
- 3.9 “Master Agreement” or “Schedule A” or “Master Labor Agreement” means the Master Collective Bargaining Agreement of each craft Union signatory to this Agreement. The agreements are listed in Addendum B and posted online at www.ci.pinole.ca.us/publicworks/treat_plant.html.

- 3.10 “Project” means all construction under a specific contract to upgrade the Pinole-Hercules Wastewater Treatment Plant. The elements of the Project, which may be amended at any time and at the sole discretion of the City, are listed in Addendum C. The City and the Council may mutually agree in writing to add additional components to the Project’s Scope of Work to be covered under this PLA.
- 3.11 “Project Manager” means the person or business entity under direct contract with the City of Pinole to support the management and administration of the Project.
- 3.12 “Project Work” means all work that is part of the Project within the craft jurisdiction of the Unions signatory to this Agreement, except as otherwise provided in Articles 4.5 and 4.6.
- 3.13 “Union(s)” means the Contra Costa Building & Construction Trades Council, AFL-CIO (“the Council”) and its affiliated local Unions signatory to this Agreement, acting on their own behalf and on behalf of their respective affiliates and member organizations, who have through their authorized officers executed this Agreement.

ARTICLE 4 SCOPE OF AGREEMENT

- 4.1 Parties: The Agreement shall apply and is limited to the City and all Contractors performing or subcontracting work under Construction Contract(s) on the Project (including subcontractors of any tier), the Council and its affiliated local Unions signatory to this Agreement, acting in their own behalf and on behalf of their respective affiliates and member organizations (“Signatory Unions”).

- 4.2 Applicability: The Agreement shall govern construction of the Pinole-Hercules Wastewater Treatment Plant, located at 11 Tennent Avenue, Pinole, CA 94564. For the purposes of this Agreement, the Project shall be considered completed as provided by Article 20, or otherwise provided by applicable law.
- 4.3 The City of Pinole reserves the right, in its sole discretion, to terminate, delay, suspend, modify, augment and/or expand any and all portions of the Project at any time, including, but not limited to: value engineering, re-packaging, and/or re-bidding any Project Work or otherwise combining, modifying, consolidating, or canceling contracts identified as part of the Project work. However, all such work shall continue to be covered under this Agreement. Further, the City of Pinole may require or prohibit some or all work on certain days or during certain hours of the day and/or require such other operational or schedule changes that it may deem necessary.
- 4.4 There shall be no limitation or restriction upon the City's choice of materials, equipment, machinery, package units, factory pre-cast, prefabricated, or preassembled materials, tools or other labor-savings devices except as set forth in Article 4.5(b). Unions agree to use or install the aforementioned items.
- 4.5 Project Work: As defined in Article 3.12 and except as otherwise provided in this article or in Article 4.6, this Agreement covers without limitation, all on-site site preparation, surveying, construction, alteration, demolition, installation, improvement, painting or repair of buildings, structures and other works, and related activities for the Project, that is within the craft jurisdiction of one of the Unions, including, without limitation to the following examples: geotechnical and exploratory drilling, temporary HVAC, landscaping and temporary fencing, pipelines (including those in linear corridors built to serve the project), installation

of pumps, pump stations, and modular furniture. On-site work includes work done for the Project in temporary yards or areas adjacent to the Project, and at any on-site or off-site batch plant constructed solely to supply materials to the Project. This scope of work includes all soils and materials testing and inspection where such testing and inspection is a classification in which a prevailing wage determination has been published.

- (a) This Agreement shall apply to any start-up, calibration, commissioning, performance testing, field revisions, and repairs covered by warranty to systems and/or subsystems related to the Contractor's work under a Construction Contract for this Project unless such work is performed by City employees.
- (b) This Agreement covers all on-site fabrication work over which the City, Contractor(s) or subcontractor(s) possess the right of control (including work done for the Project in any temporary yard or area established for the Project). Additionally, this Agreement covers any off-site work, including fabrication necessary for the Project defined herein, that is covered by a current Schedule A Agreement or local addenda to a National Agreement of the applicable Union(s) that is in effect as of the execution date of this Agreement.
- (c) Construction trucking work, such as the delivery of ready-mix, asphalt, aggregate, sand or other fill material which are incorporated into the construction process shall be covered by this Agreement. The off-hauling of debris and excess fill, material and/or mud, shall be covered by the Agreement to the extent provided by applicable prevailing wage determinations of the California Department of Industrial Relations or by Labor Code Section 1720.3.

- (d) Work covered by this Agreement within the following craft jurisdictions shall be performed under the terms of their National Agreements as follows: the NTL Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, and the National Agreement of Elevator Constructors, and any instrument calibration work and loop checking shall be performed under the terms of the UA/IBEW Joint National Agreement for Instrument and Control Technicians, with the exception that Articles 6, 13, and 14 of this Agreement shall apply to such work.

4.6 Exclusions

- (a) This Agreement shall not cover the furnishing of supplies, equipment or materials that are stockpiled for later use.
- (b) This Agreement is not intended to, and shall not affect or govern the award of public works contracts by the City which are not included in the Project, including, but not limited to, other scheduled capital improvement projects, regular repairs and maintenance.
- (c) The City shall not be required to comply with this Agreement for any work performed with its own employees, including but not limited to all work necessary for wastewater treatment operations of the Pinole-Hercules Wastewater Treatment Plant;
- (d) This Agreement shall not apply to a Contractor's non-construction craft supervisors, or technical employees, including but not limited to executives, managerial employees, engineering employees and supervisors above the level of General Foreman, staff engineers or other

professional engineers, administrative, management, office and clerical employees.

- (e) Work not referenced in Addendum C that is undertaken by state, county, city or other governmental bodies, or their employees or their contractors, or by public or private utilities or their contractors, shall not be covered by this Agreement.
- (f) This Agreement shall not apply to off-site maintenance of leased equipment and on-site supervision of such work.
- (g) This Agreement shall not apply to any work that would void the warranty of equipment, machinery, or package units. For any work performed pursuant to this provision, the Contractor shall provide copies of the manufacturer's written warranty requirements to the Union and the City's Project Manager prior to the commencement of work by the manufacturer or vendor. In the absence of a written manufacturer's warranty, the Contractor responsible for performing the work will assign the work to the appropriate craft prior to the commencement of work.

4.7 Award of Contracts: It is understood and agreed that the City has the absolute right to select any qualified bidder for the award of contracts under this Agreement. The City in awarding Contracts, has the absolute right to award a Contract to any Contractor notwithstanding the existence or nonexistence of any agreement between such Contractor and any Union party, provided only that such contractor is willing, ready and able to execute and comply with this Agreement. It is further agreed that this Agreement shall be included in all invitations to bid or solicitations for proposals from contractors or subcontractors for work on the Project that are issued on and after the effective date of this

Agreement. Copies of all invitations to bid shall be provided at the time of issuance to the Council.

ARTICLE 5 EFFECT OF AGREEMENT

- 5.1 By executing the Agreement, the Unions and the City agree to be bound by each and all of the provisions of the Agreement.
- 5.2 By accepting the award of work under a Construction Contract for the Project, whether as contractor or subcontractor, the Contractor agrees to be bound by each and every provision of the Agreement and agrees that it will evidence its acceptance prior to the commencement of work by executing the Agreement To Be Bound in the form attached hereto as Addendum A.
- 5.3 At the time that any Contractor enters into a subcontract with any subcontractor providing for the performance of work under a Construction Contract, the Contractor shall provide a copy of this Agreement to said subcontractor and shall require the subcontractor as a precondition of accepting an award of a construction subcontract to agree in writing, by executing the Agreement To Be Bound (Addendum A), to be bound by each and every provision of this Agreement prior to the commencement of work. The obligations of a contractor may not be evaded by subcontracting.
- 5.4 This Agreement shall only be binding on the parties signatory to this Agreement or to an Agreement To Be Bound, as well as to their successors and assigns, and shall not apply to the parents, affiliates, subsidiaries, or other ventures of any such party. Each Contractor shall alone be liable and responsible for its own individual acts and conduct and for any breach or alleged breach of this

Agreement. Any dispute between the Union(s) and the Contractor(s) respecting compliance with the terms of the Agreement, shall not affect the rights, liabilities, obligations and duties between the signatory Union(s) and other Contractor(s) party to this Agreement.

5.5 It is mutually agreed by the parties that any liability by a signatory Union to this Agreement shall be several and not joint. Any alleged breach of this Agreement by a signatory Union shall not affect the rights, liabilities, obligations and duties between the signatory Contractor(s) and the other Union(s) party to this Agreement.

5.6 The provisions of this Agreement, including Schedules As, which are the local Master Agreements of the Signatory Unions having jurisdiction over the work on the Project, shall apply to the work covered by this Agreement, notwithstanding the provisions of any other local, area and/or national agreements which may conflict with or differ from the terms of this Agreement. Where a subject covered by the provisions of this Agreement is also covered by a Schedule A, the provisions of this Agreement shall prevail. Where a subject is covered by the provisions of a Schedule A and is not covered by this Agreement, the provisions of the Schedule A shall prevail.

5.7 This Agreement is subject to the terms and conditions of the financing agreement between the City of Pinole and the State Water Board's Clean Water State Revolving Fund.

ARTICLE 6

WORK STOPPAGES, STRIKES, SYMPATHY STRIKES AND LOCKOUTS

6.1 The Unions, City and Contractors agree that for the duration of the Project:

- (a) There shall be no strikes, sympathy strikes, work stoppages, picketing, handbilling or otherwise advising the public that a labor dispute exists, or slowdowns of any kind, for any reason, by the Unions or employees employed on the Project, at the job site of the Project or at any other facility of the City or Contractors because of a dispute on the Project. Nor shall the Unions or any employees employed on the Project participate in any strikes, sympathy strikes, work stoppages, picketing, hand billing, slowdowns, or otherwise advising the public that a labor dispute exists at the jobsite of the Project because of a dispute between Unions and Contractor on any other project. Withholding employees, but not picketing, for failure of a Contractor(s) to tender trust fund contributions as required in accordance with Article 11 and/or for failure to meet its weekly payroll is not a violation of this Article; however, the Union shall give the affected Contractor, Project Manager and the City written notice no less than five (5) working days prior to the withholding of employees. Should a Contractor performing work on this Project be delinquent in the payment of Trust Fund contributions required under this Agreement with respect to employees represented by the Union, the Union may request that the General Contractor issue joint checks payable to the Contractor and the appropriate employee benefit Trust Fund(s) until such delinquencies are satisfied. Any Trust Fund claiming that a Contractor is delinquent in its fringe benefit contributions to the funds will provide written notice of the alleged delinquency to the affected Contractor, with copies to the General Contractor, Project Manager, and City. The notice will indicate the amount of delinquency asserted and the period that the delinquency covers. It is agreed, however, with respect to contractors delinquent in trust or benefit

contribution payments, that nothing in this Agreement shall affect normal contract remedies available under the local collective bargaining agreements and or Trust Agreements. Nothing stated in this Agreement shall prevent Unions from participating in the actions mentioned in this section on jobsites other than the Project jobsite because of disputes between the Unions and Contractors on projects other than this Project.

- (b) There shall be no lockout of any kind of any employee employed on the Project by a Contactor covered by the Agreement.
- (c) If a Master Agreement expires during the term of this Agreement, it is specifically agreed that there shall be no strike, sympathy strike, work stoppage, picketing, hand billing or otherwise advising the public that a labor dispute exists, or a slowdown of any kind. The wages, benefits, and terms of employment established and set under the initial Master Agreement shall continue in full force until the completion of the Project.
- (d) Notification: If the City, Project Manager or Contractor contends that any Union has violated this Article, it shall notify by phone, email, and overnight mail the Senior Executive of the Council and the Senior Executive of the Union, setting forth the facts alleged to violate the Article, prior to instituting the expedited arbitration procedure set forth below. The Senior Executive of the Council will immediately use his/her best efforts to cause the cessation of any violation of this Article. The leadership of the Union will direct the membership to cease any violation of this Article. A Union complying with this obligation shall not be liable for unauthorized acts of employees it represents.

- 6.2 Expedited Arbitration: Any party to this Agreement shall institute the following procedure, prior to initiating any other action at law or equity, when a breach of this Article is alleged to have occurred:
- (a) A party invoking this procedure shall notify Robert Hirsch, as the permanent arbitrator, or, Barry Winograd, as the alternate under this procedure. In the event that the permanent arbitrator is unavailable at any time, the alternate will be contacted. If neither is available, then a selection shall be made from the list of arbitrators in Article 14.2. Notice to the arbitrator shall be by the most expeditious means available, with notices by phone, email, and overnight mail to the party alleged to be in violation and to the Council and involved local Union if a Union is alleged to be in violation.
 - (b) Upon receipt of said notice, the City will contact the designated arbitrator named above or his alternate who will attempt to convene a hearing within twenty-four (24) hours if it is contended that the violation still exists.
 - (c) The arbitrator shall notify the parties by phone, email, and overnight mail of the place and time for the hearing. Said hearing shall be completed in one session, which, with appropriate recesses at the arbitrator's discretion, shall not exceed twenty-four (24) hours unless otherwise agreed upon by all parties. A failure of any party to attend said hearings shall not delay the hearing of evidence or the issuance of any award by the arbitrator.
 - (d) The sole issue at the hearing shall be whether or not a violation of Article 6 of the Agreement has occurred. The arbitrator shall have no authority to consider any matter of justification, explanation or mitigation of such violation or to award damages, which issue is reserved for court

proceedings, if any. The award shall be issued in writing within three (3) hours after the close of the hearing, and may be issued without a written opinion. If any party desires a written opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with or enforcement of the award. The arbitrator may order cessation of the violation of this Article and other appropriate relief and such award shall be served on all parties by hand or registered mail upon issuance. Should a party found in violation of this Article fail to comply with an Arbitrator's award to cease the violation, the party in violation shall pay to the affected party as liquidated damages the sum of ten thousand dollars (\$10,000.00) per shift for which it failed to comply, or portion thereof, until such violation is ceased. The Arbitrator shall retain jurisdiction to resolve any disputes regarding the liquidated damages claimed under this section.

- (e) Such award may be enforced by any Court of competent jurisdiction upon the filing of this Agreement and all other relevant documents referred to above in the following manner. Written notice of the filing of such enforcement proceedings shall be given to the other party. In the proceeding to obtain a temporary order enforcing the arbitrator's award as issued under Section 6.2(d) of this Article, all parties waive the right to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a hearing for a final order or enforcement. The Court's order or orders enforcing the arbitrator's award shall be served on all parties by hand or delivered by certified mail.

- (f) Any rights created by statute or law governing arbitration proceedings inconsistent with the above procedure, or which interfere with compliance, are waived by the parties.
- (g) The fees and expenses of the arbitrator shall be divided equally between the party instituting the arbitration proceedings provided in this Article and the party alleged to be in breach of its obligation under this Article.
- (h) Should either the permanent or the alternate arbitrator listed above no longer work as a labor arbitrator, the City and the Council shall mutually agree to a replacement.

ARTICLE 7 PRE-CONSTRUCTION CONFERENCE

- 7.1 All efforts will be made to hold pre-construction conferences in sufficient time to ensure all parties the ability to properly raise and resolve any issues that may arise out of such conferences.
- 7.2 The Project Manager shall convene and conduct a pre-job conference with representatives of all involved Contractors, and the Unions. The Contractors shall be prepared to announce craft assignments and to discuss in detail the scope of work and other issues as set forth below, at a location and time mutually agreeable to the Council at least 21 days prior to:
 - (a) The commencement of any Project Work, and
 - (b) The commencement of Project Work on each subsequently awarded construction contract or phase.

- 7.3 Pre-job conferences shall be attended by a representative from each of the participating Contractors and Unions and the Project Manager. The Council and City may, at their discretion, attend any and all pre-construction conferences.
- 7.4 Pre-Job Conference: The pre-job conference shall consist of:
- (a) A listing of each Contractor's scope of work;
 - (b) The proposed craft assignments;
 - (c) The estimated number of craft workers required to perform the work;
 - (d) Transportation arrangements; and
 - (e) The estimated start and completion dates of the work.
- 7.5 Waiver: Any jurisdictional dispute relating to the assignment of work shall be waived if not made within five (5) business days of the pre-job conference or from when the Union becomes aware or should have become aware of the assignment. All Project Work shall proceed without delay as assigned at the pre-job conference notwithstanding any pending disputes about the assignment of any portion of that work.
- 7.6 Progress meetings: In order to ensure the terms of the PLA are being fulfilled and all concerns to the City, Unions, Contractors are addressed, the Project Manager, General Contractor and Senior Executive of the Council or designated representatives thereof shall meet on a periodic basis during the term of the construction. As needed, subcontractors may be required to attend progress meetings.

ARTICLE 8 NON-DISCRIMINATION

- 8.1 The Contractor and Unions agree to comply with all anti-discrimination provisions of federal, state and local law, to protect employees and applicants for employment, on the Project.

ARTICLE 9 UNION SECURITY

- 9.1 The Contractor recognizes the Union(s) as the sole bargaining representative of all craft employees working within the scope of this Agreement.
- 9.2 All construction persons who are employed by the Contractor(s) shall, as a condition of employment, on or before the eighth (8th) day of consecutive or cumulative employment on the Project, be responsible for the payment of the applicable dues and/or fees uniformly required by the applicable Local union. Individuals are required to pay applicable dues and/or fees only during the term of their work on the Project. Upon paying the applicable dues and/or fees, workers shall enjoy full access to Union hiring halls for as long as such dues and/or fees are paid. Nothing in this Agreement shall prevent non-union employees from joining the local Union.
- 9.3 Authorized representatives of the Unions shall have access to the Projects whenever work covered by this Agreement is being, has been, or will be performed on the Project.

ARTICLE 10 REFERRAL

- 10.1 Contractor/Employers performing construction work on the Project described in the Agreement shall, in filling craft job requirements, utilize and be bound by the registration facilities and referral systems established or authorized by the Unions signatory hereto. The Contractors shall have the right to reject any person referred by the Union(s). This right will be exercised in accordance with the procedures and timelines established by the applicable Master Agreement.
- 10.2 The Contractor(s) shall have the unqualified right to select and hire directly all supervisors above General Foreman it considers necessary and desirable, without such persons being referred by the Union(s). Further, it is understood that all signatory Unions shall permit foremen to be called by name at hiring halls.
- 10.3 In the event that referral facilities maintained by the Union(s) are unable to fill the requisition of a Contractor for employees within a forty-eight (48) hour period (Saturdays, Sundays and Holidays excluded) after such requisition is made by the Contractor (s), the Contractor (s) shall be free to obtain workers from any source. A Contractor who hires any worker to perform Project Work pursuant to this Section shall immediately provide the appropriate Union with the name and address of such employee(s) and shall immediately refer such employee(s) to the appropriate Union to satisfy the requirements of Article 9 of this Agreement.
- 10.4 Local Hire: It is in the interest of the parties to this Agreement to facilitate employment of Local Area residents and to use Local Area resources in construction of the Project. The objective of the parties is that at least twenty-five percent (25%) of the total work hours for the Project shall be performed by Local Area residents and that a minimum of twenty-five percent (25%) of all new hires

will be from the Local Area. The Unions will exert their utmost efforts to recruit and refer sufficient numbers of skilled craft persons from the Local Area who possess the requisite skills and qualifications to fulfill the needs of the Contractor(s) and the requirements of this Article 10.4. To the fullest extent allowed by law and the Unions' lawful hiring hall provisions, residents of the Local Area, including journeymen and apprentices, shall be referred for Project work covered by this Agreement in the following order: 1) Residents of the cities of Pinole and Hercules; 2) Residents of West Contra Costa County; and 3) Residents of Contra Costa County.

- 10.5 Monitoring: Contractors and Unions. Unions will work with the City of Pinole's Project Manager when recruiting, referring and selecting employees to perform Project work under this Agreement. The Contractor will forward to the Union and the City a copy of all construction personnel requests made, specifying the personnel requested. Contractors shall utilize the "name-call", "re-hire", "transfer" and or "sponsorship" options, where available under a craft's Master Agreement and the Union hiring hall rules to maximize the participation of Local Area Residents on the Project.
- 10.6 The Unions and Contractors shall maintain an updated list containing the craft classification of any worker hired for the Project along with that worker's city and zip code. For the purposes of establishing residency, Post Office boxes will not be accepted.

ARTICLE 11 WAGES AND BENEFITS

- 11.1 For all Project Work, all Contractors agree to pay contributions to the established vacation, pension and other form of deferred compensation plan, apprenticeship,

worker protection and assistance, and health benefit funds established by the applicable Master Agreement for each hour worked on the Project in the amounts designated in the Master Agreements of the appropriate Signatory Unions.

11.2 By signing this Agreement, Contractors adopt and agree to be bound by the written terms of the legally established Trust Agreements, as described in Article 11.1, only for Project Work performed during the Project. The Trust Agreements, which may from time to time be amended, specify the manner in which payments are to be paid into, and benefits paid out of, such Trust Funds. The Contractors authorize the parties to such local trust agreements to appoint trustees and successor trustees to administer the trust funds and hereby ratify and accept the trustees so appointed as if made by the Contractor(s). The Contractors agree to execute a separate Subscription Agreement(s) for Trust Funds applicable solely to Project Work performed during the Project, when such Trust Fund(s) require(s) such document(s).

11.3 Wages, Hours, Terms and Conditions of Employment: The wages, hours and other terms and conditions of employment on the Project shall be governed by the Master Agreement of the respective crafts, to the extent such Master Agreement is not inconsistent with this Agreement. Where a subject covered by the provisions of this Agreement is also covered by a Schedule A, the provisions of this Agreement shall prevail. Where a subject is covered by the provisions of a Schedule A and is not covered by this Agreement, the provisions of the Schedule A shall prevail.

ARTICLE 12 COMPLIANCE

- 12.1 It shall be the responsibility of the Contractors and Unions to investigate and monitor compliance with the provisions of the Agreement contained in Article 11. Nothing in this agreement shall be construed to interfere with or supersede the usual and customary legal remedies available to the Unions and/or employee benefit Trust Funds to collect delinquent Trust Fund contributions from Contractors on the Project.

ARTICLE 13 GRIEVANCE ARBITRATION PROCEDURE

- 13.1 Project Labor Disputes: All project labor disputes involving the application or interpretation of the Master Agreement to which a signatory Contractor and a signatory Union are parties shall be resolved pursuant to the resolution procedures of that Master Agreement. All disputes relating to the interpretation or application of this Agreement shall be subject to resolution by the Grievance arbitration procedures set forth herein.
- 13.2 No grievance shall be recognized unless the grieving party (Local Union on its own behalf, or on behalf of an employee whom it represents, the City, or a Contractor) provides notice in writing to the party with whom it has a dispute within five (5) business days after becoming aware of the dispute but in no event more than thirty (30) business days after it reasonably should have become aware of the event giving rise to the dispute. Time limits may be extended by mutual written agreement of the parties.

Step 1: Within five (5) business days after the receipt of the written notice of the grievance, the Business Representative of the involved Local Union

or District Council, or his/her designee, or the representative of the employee, and the representative of the involved Contractor shall confer and attempt to resolve the grievance.

Step 2: In the event that the representatives are unable to resolve the dispute within the five (5) business days of the Step 1 meeting, within five (5) business days thereafter, the alleged grievance may be referred in writing by either involved party to the Business Manager(s) of the affected Union(s) involved and the Manager of Labor Relations of the Contractor or the Manager's designated representative, for discussion and resolution. Regardless of which party has initiated the grievance proceeding, prior to a Step 2 meeting, the Union(s) shall notify its International Union representative(s), which shall advise both parties if it intends on participating in a Step 2 meeting. The Project Manager and the City shall have the right to participate in any efforts to resolve the dispute at Step 2.

Step 3: If the grievance is not settled in Step 2, within five (5) business days of the Step 2 meeting, either party may request the dispute be submitted to arbitration or the time may be extended by mutual consent of both parties. Within five (5) business days after referral of a dispute to Step 3, the representatives shall choose a mutually agreed upon arbitrator for final and binding arbitration. The parties agree that if the permanent arbitrator or his alternate is not available, an arbitrator shall be selected by the alternate striking method from the list of three (3) below. The order of striking names from the list of arbitrators shall be determined by a coin toss, the winner of which shall decide whether they wish to strike first or second.

1. William Riker
2. David Weinberg
3. Katherine Thomson

The decision of the Arbitrator shall be final and binding on all parties. The Arbitrator shall have no authority to change, amend, add to or detract from any of the provisions of the Agreement. The expense of the Arbitrator shall be borne equally by both parties. The Arbitrator shall arrange for a hearing on the earliest available date from the date of his/her selection. A decision shall be given to the parties within five (5) calendar days after completion of the hearing unless such time is extended by mutual agreement. A written opinion may be requested by a party from the presiding arbitrator.

The time limits specified in any step of the Grievance Procedure set forth in Section 12.2 may be extended by mutual agreement of the parties. However, failure to process a grievance within the time limits provided above, without an agreed upon extension of time, shall be deemed a waiver of such grievance without prejudice, or without precedent to the processing of and/or resolution of like or similar grievances or disputes.

In order to encourage the resolution of disputes and grievances at Steps 1 and 2 of this Grievance Procedure, the parties agree that such settlements shall not be precedent setting.

- 13.3 Should any of the arbitrators listed in this Article no longer work as a labor arbitrator, the City and the Council shall mutually agree to a replacement.

ARTICLE 14

WORK ASSIGNMENTS AND JURISDICTIONAL DISPUTES

- 14.1 The assignment of Project Work will be solely the responsibility of the Contractor performing the work involved; and such work assignments will be in accordance with the Plan for the Settlement of the Jurisdictional Disputes in the Construction Industry (the "Plan") or any successor Plan.

- 14.2 All jurisdictional disputes on this Project between or among the building and construction trades Unions and the Contractors party to this Agreement shall be settled and adjusted according to the present Plan established by the Building and Construction Trades Department or any other plan or method of procedure that may be adopted in the future by the Building and Construction Trades Department. Decisions rendered shall be final, binding and conclusive on the Contractor and Union parties to this Agreement.
- 14.3 If a dispute arising under this Article involves the Northern California Carpenters Regional Council or any of its subordinate bodies, an Arbitrator shall be chosen by the procedures specified in Article V, Section 5 of the Plan from a list composed of John Kagel, Thomas Angelo, Robert Hirsch, and Thomas Pagan, and the Arbitrator's hearing on the dispute shall be held at the offices of the California State Building and Construction Trades Council in Sacramento, California, within 14 days of the selection of the Arbitrator . All other procedures shall be as specified in the Plan.
- 14.4 All jurisdictional disputes shall be resolved without the occurrence of any strike, work stoppage, or slow-down of any nature, and the Contractor's assignment shall be adhered to until the dispute is resolved. Individual employees violating this section shall be subject to immediate discharge. Each Contractor will conduct a pre-job conference with the Council prior to commencing work. The Project Manager and City will be advised in advance of all such conferences and may participate if they wish. Pre-job conferences for different Contractors may be held together.

ARTICLE 15 APPRENTICES

- 15.1 Recognizing the need to develop adequate numbers of competent workers in the construction industry, the Contractor(s) shall employ apprentices of a California State-approved Joint Apprenticeship Training Committee (JATC) Program in the respective crafts to perform such work as is within their capabilities and which is customarily performed by the craft in which they are indentured.
- 15.2 The apprentice ratios will be in compliance with the applicable provisions of the California Labor Code, Training Standards and the Master Agreements.
- 15.3 The objective of the parties is that at least twenty-five percent (25%) of the apprentices employed on the Project will be from the Local Area. Apprentices shall be given priority in hiring in the following order: 1) Residents of the cities of Pinole and Hercules; 2) Residents of West Contra Costa County; and 3) Residents of Contra Costa County. The prioritization of apprenticeship hiring shall be consistent with the law, hiring hall procedures of the Unions, and the standards and procedures of the JATC. The Contractors shall reach this goal through utilization of the normal hiring hall procedures. The Unions are committed to working with the Contractors to achieve these goals. All Local Area apprentices referred to Contractors under this Agreement shall be enrolled in State of California approved Joint Apprentice Training Programs. The employment of apprentices shall count toward the 25% local hiring goal in Article 10.4.
- 15.4 Consistent with the Master Agreements and State law, there shall be no restriction on the utilization of apprentices in performing the work of their craft provided they are properly supervised.

**ARTICLE 16
MANAGEMENT RIGHTS**

- 16.1 The Contractor(s) shall retain full and exclusive authority for the management of their operations, including the right to direct their work force in their sole discretion. No rules, customs or practices shall be permitted or observed which limit or restrict production, or limit or restrict the working efforts of employees except that lawful manning provisions in the Master Agreement shall be recognized.

**ARTICLE 17
HELMETS TO HARDHATS**

- 17.1 The Contractors and the Unions recognize a desire to facilitate the entry into the building and construction trades of veterans who are interested in careers in the building and construction industry. The Contractor and Unions agree to utilize the services of the Center for Military Recruitment, Assessment and Veterans Employment (hereinafter "Center) and the Center's "Helmets to Hardhats" program to serve as a resource for preliminary orientation, assessment of construction aptitude, referral to apprenticeship programs or hiring halls, counseling and mentoring, support network, employment opportunities and other needs as identified by the parties.
- 17.2 The Unions and Contractors agree to coordinate with the Center to participate in an integrated database of veterans interested in working on the Project and of apprenticeship and employment opportunities for this Project. To the extent permitted by law, the Unions will give credit to such veterans for bona fide, provable past experience.

**ARTICLE 18
DRUG & ALCOHOL TESTING**

- 18.1 The use, sale, transfer, purchase and/or possession of a controlled substance, alcohol and/or firearms at any time during the work day is prohibited.
- 18.2 The Parties agree to recognize and use the Substance Abuse Prevention Policies contained in each applicable Union's Schedule A.

**ARTICLE 19
SAVINGS CLAUSE**

- 19.1 In the event any article, provision, clause, sentence or word of the Agreement is determined to be illegal or void as being in contravention of any applicable law, by a court of competent jurisdiction, the remainder of the Agreement shall remain in full force and effect. In that event, the parties shall meet and confer and exercise best efforts to reach agreement on acceptable replacement language which will meet the objections to its validity and which will be in accordance with the intent and purpose of the article, provision, clause, sentence or work in question.
- 19.2 If agreement is reached, the Parties shall substitute in place and stead of the invalidated article, provision, clause, sentence or word another article, provision, clause, sentence or word that will resolve the issues identified by the court and be in accordance with the intent and purpose of the article, provision, clause, sentence or word invalidated.
- 19.3 If the Parties are unable to reach an agreement, then the entire Agreement shall be null and void and the Council and Unions will no longer be bound by the provisions of Article 6 (Work Stoppages, Strikes, Sympathy Strikes and Lockouts).

ARTICLE 20
TERM

- 20.1 This Agreement shall become effective on the day it is executed and approved by the City Council of Pinole and by the Contra Costa County Building Construction and Trades Council and shall continue in effect until construction of the Project is complete. Construction shall be deemed complete when each item on the punch list is completed, a Notice of Completion has been prepared, the Project has been accepted by City Council resolution and the notice of completion has been filed.

CITY OF PINOLE

By _____

Date_____

**CONTRA COSTA BUILDING AND
CONSTRUCTION TRADES COUNCIL, AFL-CIO (COUNCIL)**

By _____

Date_____

SIGNATURE BLOCK FOR UNIONS

Asbestos Workers Local 16

Hod Carriers Local 166

Boilermakers Local 549

Roofers Local 81

Bricklayers Local 3

Iron Workers Local 378

Northern California Regional
Council of Carpenters for and on
Behalf of Their Affiliated Crafts

Laborers Local Union 324

Laborers Local Union 67

Sheet Metal Workers Local 104

Cement Masons Local 300

Operating Engineers Local 3

Electrical Workers Local 302

Painters District Council 16

Plasterers Local 66

Sprinkler Fitters Local 483

United Association Local 159

United Association Local 342

United Association Local 355

Teamsters Local 315

Elevator Constructors Local 8

**ADDENDUM A
PINOLE WASTE WATER TREATMENT PLANT
PROJECT LABOR AGREEMENT
AGREEMENT TO BE BOUND**

[Addressee]
[Address]
[City and State]

Re: Pinole Waste Water Treatment Plant Project Labor Agreement.

Dear Mr. /Ms. _____:

For the duration of the Project, the undersigned party confirms that it agrees to be a party to and bound by the Pinole-Hercules Wastewater Treatment Plant Project Labor Agreement as such Agreement may, from time to time, be amended by the parties or interpreted pursuant to its terms.

By executing this Agreement To Be Bound, the undersigned party subscribes to, adopts and agrees to be bound by the written terms of the legally established trust agreements specifying the detailed basis upon which contributions are to be made into, and benefits made out of, such trust funds and ratifies and accepts the trustees appointed by the parties to such trust funds. The Contractors agree to execute a separate Subscription Agreement(s) for Trust Funds when such Trust Fund(s) requires such document(s).

Such obligation to be a party to and bound by this Agreement shall extend to all work covered by the Pinole-Hercules Wastewater Treatment Plant Project Labor Agreement undertaken by the undersigned party for the duration of the Project. The undersigned party shall require all of its subcontractors, of whatever tier, to become similarly bound for all their work within the scope of this Agreement by signing an identical Agreement To Be Bound.

This letter shall constitute a subscription agreement, to the extent of the terms of the letter.

CONTRACTOR/SUBCONTRACTOR: _____

Project Contract Number: _____

California State License Number:
or Motor Carrier (CA) Permit Number _____

Name and Signature of Authorized Person: _____

(Signature)

(Print Name)

(Title)

ADDENDUM B
PINOLE WASTE WATER TREATMENT PLANT
PROJECT LABOR AGREEMENT
LIST OF MASTER AGREEMENTS

ADDENDUM C
PINOLE WASTE WATER TREATMENT PLANT

**PROJECT LABOR AGREEMENT
CONSTRUCTION PLAN**

**ADDENDUM D
PINOLE WASTE WATER TREATMENT PLANT
PROJECT LABOR AGREEMENT
SUPPLEMENTAL AGREEMENTS**

City of Pinole – Wastewater Treatment Plant Project Labor Agreement

Addendum D: Supplemental Agreement between City and Building Trades Council

This Supplemental Agreement confirms the Parties' understanding concerning the application of section 4.5(b) of the above-referenced Project Labor Agreement (PLA).

Having reviewed the current Schedule A Agreements, the Parties agree that the only Schedule A Agreements containing provisions relevant to section 4.5(b) are those of the Plumbers and Pipefitters Local Union Nos. 159 and 342 and Sheet Metal Workers' Local Union No. 104. With respect to these two Unions, the City recognizes that the provisions of their Schedule A Agreements addressing off-site fabrication shall apply to work on the Project.

Should other issues arise relevant to off-site fabrication, the parties agree to work cooperatively to assure that the Project is finished in the most timely and efficient manner possible.

Agreed and accepted this ____ day of _____ 2015

By: _____
[City]

By: _____
[BTC]

By: _____
[Local 159]

UNITED ASSOCIATION LOCAL UNION 159

Comprised of
Plumbers, Steamfitters & Refrigeration
Journeyman & Apprentices

ARAM HODESS
Business Manager

THOMAS LAWSON
President

ROBERT SEWELL
Fin. Sec. Treas.

SIDE LETTER MANUFACTURED MECHANICAL EQUIPMENT PINOLE WWTP PROJECT

United Association Locals 159 and 342, having reviewed the specifications for the Wastewater Treatment Plant, agree that all manufactured mechanical equipment (EX: boiler, compressor, pumps) to be installed on the Project is not subject to the off-site pre-fabrication provisions of their Schedule "A" Agreements.



Aram Hodess
Business Manager
Plumbers and Steamfitters Local 159

Filling the Good Jobs Gap: Fresno's Opportunity for a Citywide Project Labor Agreement

EXECUTIVE SUMMARY

A Project Labor Agreement (PLA) guaranteeing wage levels, training standards, local hires, and other working conditions for municipal public construction projects is currently under local government consideration in Fresno, California. This study finds that from January 2013 to October 2020, an estimated 1,720 construction jobs in Fresno would have been covered through such a municipal policy.

Prior University of California studies and further independent research, reviewed here, demonstrate the significant benefits of PLAs for a diverse and locally inclusive workforce, income, and career training with no significant change in construction costs. In the face of enduring poverty and a gap of mid- and high-income careers in Fresno, a municipal PLA represents an opportunity that would support new or solidify existing careers for 215 construction workers a year on average, with immediate socioeconomic benefits for their families and communities.

In just two decades, Fresno's policy transformation—from an early prohibition on PLAs, to growing PLA adoption with broad official support—offers an instructive case for cities and government bodies that have yet to adopt this foundational labor policy. To

support such policy dissemination, this study provides an analysis of the potential construction job impacts of public PLAs.

BACKGROUND

For over sixty years, PLAs have been a cornerstone of worker advocacy efforts for equitable economic development in the construction industry. A PLA is a pre-hire contract negotiated between management and one or more labor unions, which standardizes job terms for a project, including wages, benefits, and working conditions. In turn, a PLA assures a steady labor force and prohibits strikes or lockouts. PLAs may also require quotas for local hires, apprenticeships, and small business participation. In California, over one hundred cities and other public bodies have approved PLAs to date, including over a dozen blanket PLAs covering all public construction work in a jurisdiction (Coalition for Fair Employment Construction 2020).

In recent decades, non-union contractors have sought to challenge the legality of PLAs in public sector construction projects. These opponents claim that PLAs reduce economic competition and raise costs, by mandating union wages that constrain the number of

bids on a project, and ultimately placing their businesses at a disadvantage. In 1993, the Supreme Court unanimously ruled against Associated Builders and Contractors of Massachusetts/Rhode Island, deciding that the National Labor Relations Act does not prohibit public entities from entering into PLAs any more than private entities (U.S. Supreme Court 1993). Associated Builders and Contractors, the largest organization of non-union contractors, responded with a national campaign against PLAs. This led to the first state-level preemptive laws striking down local PLA mandates in Utah and Montana. Following in the footsteps of right-to-work laws across the country, preemptive bans against public PLAs are now established in 24 states (Associated Builders and Contractors 2020).

Independent academic research, however, has found a lack of empirical evidence for claims made by PLA opponents. Prior University of California research on construction bids for projects among California Community Colleges between 2007 and 2016—controlled for project size and location, as well as business cycle and season—found PLA policies did not affect the number of bids (Philips and Waitzman 2017). The study also found that the lowest bids on projects with PLA agreements were no higher in cost than those without PLA agreements, and had fewer problems and delays during construction. Similarly, an analysis of PLAs on school construction costs in Massachusetts found that higher PLA costs were attributed to factors that underlie PLAs, such as the size of the project (Belman et al. 2010).

The City of Fresno is a unique and instructive case of a transformation of PLA laws. In 2000, Fresno was one of the first jurisdictions in the nation to ban PLAs (Wang 2012). In 2012, the California legislature passed a law

preventing state funding to municipal projects in cities with bans on public PLAs. By 2014, Fresno City Council turned around to repeal its prior PLA ban (Calix 2019). Next, in June 2019, Fresno's City Council unanimously approved a PLA for the \$115 million expansion of the Fresno Airport (Watkins 2019). Soon after, in February 2020, the Board of Trustees at the Fresno area's State Center Community College District approved a PLA covering an estimated \$86.5M in construction on a new West Fresno campus, including all subcontracts of \$600,000 or above (SCCD 2020).

These breakthrough policies followed a decade in which PLAs became a standard practice on private sector utility-scale solar construction in the surrounding San Joaquin Valley (Philips 2014), and on the estimated \$12.6B first segment of California's High-Speed Rail from Fresno to Kern County (California High Speed Rail Authority 2019).

As California's fifth largest city, with an estimated population of 531,576, Fresno is characterized as both a major regional economic hub and a stronghold of inequality. According to US Census Bureau American Community Survey 2014-2018 data, Fresno's median household income (\$50,432) is far below the state average of (\$71,228), and the rate of household poverty (25.2%) was more than double the state average (11.8%) (US Census Bureau 2018).

To the extent which PLAs support higher-paying, career-track jobs, Fresno municipal public construction remains untapped potential. On January 7, 2021, the Fresno City Council showed strong interest in this potential, as it approved (by a vote of 6-1) a process to design a PLA policy proposal that would cover municipal public construction citywide.

DATA AND METHODS

This study utilizes public records from the California Department of Industrial Relations Public Works Registration Database (PWC-100) (CDIR 2020). The analysis examines all 145 qualifying construction contracts issued by the City of Fresno, and all 6 qualifying contracts from the Fresno Housing Authority, with listed construction start dates between January 1st, 2013 and October 31st, 2020.

The analysis was limited to projects that would have been affected by a hypothetical municipal Project Labor Agreement. As a result, contracts were included in this study only if they were issued by the City of Fresno or the Fresno Housing Authority, and met one or more of the following three conditions (all figures in adjusted 2020 dollars):

- i. Contracts over \$1M:** Contract amount listed at \$1,000,000 or greater.
- ii. Bond-funded contracts:** Contract amount over \$500,000, with funding from a municipal bond of at least \$1,000,000, in adjusted 2020 dollars. Bond data was obtained from the City of Fresno's most recently available Complete Bond Listing (City of Fresno 2018).
- iii. Multi-prime contracts:** Contract amount over \$500,000, on a project site with multiple contracts totaling of \$1M or greater, in adjusted 2020 dollars. This accounted for only a small number of contracts identified in the PWC-100 database.

These conditions were designed to follow the parameters of a hypothetical Project Labor Agreement for the City of Fresno and Fresno Housing Authority, with one minor exception. The \$500,000 and above condition for considering bond-funded and multi-prime contracts was not indicative of expected

Project Labor Agreement terms, but instead a means to expedite data collection and omit small projects with only minor effects on findings. This condition contributes to a more conservative job estimates, as smaller bond-funded and multi-prime projects would likely add modestly to the total job estimates.

Each contract was classified with a single North American Industry Classification Scheme (NAICS) construction sub-sector code, corresponding to the principal type of work listed on the contract (for example, "Highway, street, and bridge construction"). Where the principal type of work was difficult to specify based on listed contract data and publicly available city records, contracts were classified a general NAICS category (for example, "Heavy and civil engineering construction").

Using data from the US Economic Census, this study then estimated the annual full-time equivalent jobs provided on each project. Estimates of construction jobs on each Fresno municipal project were created based on California-specific construction sector data from the 2017 US Economic Census, the most recent year available (US Census Bureau 2020). This Census data provided specific construction sub-sector figures (arranged by NAICS codes) for construction workers on payroll each quarter, and for combined annual sales, shipments, and revenues (equivalent to a sum of construction contract amounts). Construction worker job figures are adjusted in the Census data to reflect annual full-time equivalent (annual FTE) jobs.

For each construction trade and subsector listed, this study used Economic Census data to derive a "job factor" for annual full-time equivalent construction workers per \$1,000,000 in revenues. To create this factor, the analysis divided the annual average of

Table 1. Demonstration of California construction sub-sector data and job factor

Industry sub-sector (NAICS classification)	Construction workers in California (annual FTE)	Sales, value of shipments, or revenue in California (in \$1,000s)	Job factor (workers per \$1M revenue)
Highway, street, and bridge construction	21,160	\$10,540,013	2.01
Other heavy and civil engineering construction	4,592	\$3,244,196	1.42
Water and sewer line and related construction	14,267	\$6,189,516	2.31
Electrical contractors and other wiring installation	81,629	\$23,243,498	3.51

Source: Author analysis California Department of Industrial Relations Public Works Registration Database 2013-2020

Table 2: Number of municipal construction contracts per year, by contract type

	2013	2014	2015	2016	2017	2018	2019	2020	Total
Fresno contracts ≥ \$1M	16	9	10	21	8	12	11	17	104
Bond & multi-prime Fresno contracts (\$500K - \$1M)	10	3	5	3	8	2	5	5	41
Fresno Housing Authority contracts	0	0	0	0	1	0	3	2	6
All contract types	26	12	15	24	17	14	19	24	151

Source: Author analysis California Department of Industrial Relations Public Works Registration Database 2013-2020

full-time equivalent construction workers in a specific sub-sector by its total annual revenue. Table 1 demonstrates four inputs and job factor outcomes of this approach.

Tables 2 and 3 list the number of Fresno municipal construction contracts and total contract amount (in millions of dollars) for each year, as documented by the Department of Industrial Relations PWR-100 database.

Specific estimates of jobs on qualified municipal contracts were then calculated with the following formula:

$$J = [(C / i) / 1,000,000] \times F$$

Where:

J: Estimated construction jobs on a specific City of Fresno project

Table 3: Amount of municipal construction contracts per year, by contract type (in \$ mil.)

	2013	2014	2015	2016	2017	2018	2019	2020	Total
Fresno contracts ≥ \$1M	7.2	52.3	46.3	186	180	47.7	40.1	47.1	94.8
Bond & multi-prime Fresno contracts (\$500K - \$1M)	3	6.3	2.1	3.3	2.2	5.2	1.3	4.9	3.7
Fresno Housing Authority contracts	0	0	0	0	0	8	0	14	28
All contract types	10.2	58.6	48.4	189	182	60.9	41.3	66	127

Source: Author analysis California Department of Industrial Relations Public Works Registration Database 2013-2020

Table 4. Estimated municipal construction jobs (annual FTE) by contract type and year

	2013	2014	2015	2016	2017	2018	2019	2020	Total
City of Fresno contracts ≥ \$1M	120	113	444	416	102	87	124	177	1,583
Bond & multi-prime Fresno contracts (\$500K - \$1M)	15	5	9	6	18	3	8	9	74
Fresno Housing Authority contracts	0	0	0	5	0	9	17	31	62
All contract types	135	118	454	427	119	99	150	218	1720

Source: Author analysis California Department of Industrial Relations Public Works Registration Database 2013-2020

C: Contract amount for a specific project, based on PWC-100 data

i: Inflation factor, based on annual CPI, to adjust contract amounts to 2020 dollars (US Bureau of Labor Statistics 2020)

F: Job factor (construction workers per \$1M) for the relevant sub-sector, identified from Economic Census data as described above

Specific project job estimates were then combined to create annual, total job estimate figures. Results are available by year and contract category in Table 4, rounded to the nearest integer.

In Table 5, contract amounts, and job estimates are provided by industry sub-sector, based on types from the North American Industry Classification System (NAICS).

Table 5: Contract amounts and estimated municipal construction jobs by sub-sector

	Contract Amounts, 2013-2020 Total (\$M)	Jobs, 2013- 2020 Total (annual FTE)
Water and sewer line and related structures construction	493	1161
Highway, street, and bridge construction	139.8	280
New multifamily housing construction (except for-sale builders)	50	31
Electrical contractors and other wiring installation contractors	29.1	100
Heavy and civil engineering construction	20.9	44
Nonresidential building construction	20.8	16
Other specialty trade contractors	5.6	18
Other heavy and civil engineering construction	4.3	6
Building finishing contractors	2.4	13
Other building equipment contractors	2.4	7
Power and communication line and related construction	2	5
Oil and gas pipeline and related structures construction	1.2	5
Plumbing, heating, and air-conditioning contractors	0.5	2

Source: Author analysis California Department of Industrial Relations Public Works Registration Database 2013-2020

Table 6: Estimated jobs on PLA-qualified Fresno municipal construction projects

	2013	2014	2015	2016	2017	2018	2019	2020	Total
Municipal construction jobs (annual FTE)	135	118	454	427	119	99	150	218	1,720

Source: Author analysis California Department of Industrial Relations Public Works Registration Database 2013-2020

FINDINGS

From 2013-2020, the distribution of Fresno municipal construction contracts that qualified for a potential PLA were primarily projects over \$1M in the water, sewer, and road sub-sectors. More than two-thirds of qualifying contracts were with the City of Fresno in amounts greater than \$1M (104 of 151 contracts) (see Table 2). Across the eight years studied, Fresno city contracts above

\$1M accounted for three-fourths (74.9%) of the total dollar amount of qualifying Fresno construction contracts (\$94.8M of \$126.5M) (see Table 3). More than nine in ten (91.9%) of the estimated jobs created by PLA-qualified construction contracts in Fresno were generated by City of Fresno contracts in excess of \$1M (see Table 4). As shown in Table 5, water and sewer projects made up a strong majority of Fresno municipal construction contract dollars (63.9%) and jobs (68.8%) during this period.

This analysis estimates that 1,720 annual, full-time equivalent construction jobs could have been covered by a Fresno municipal PLA from 2013-2020, as summarized in Table 6. Qualified Fresno municipal construction spending of \$126.5M, during eight years, supported an average of 215 full-time equivalent construction jobs each year. This job estimate provides the first published analysis of the specific potential job impact of a municipal PLA in Fresno, through a method that could be replicated for other cities in California and beyond.

POLICY IMPLICATIONS

The estimated 1,720 construction jobs without PLA standards represent missed opportunities for stronger wages, career training, and working conditions in one of California's lowest-income major cities. Research comparing similar union and non-union jobs has shown that union jobs in the San Joaquin Valley provide higher wages of an additional \$7,000 per worker annually, on average (Jacobs and Thomason 2018).

With this average wage increase to all construction jobs estimated in this study, a municipal PLA would have benefited Fresno with over \$1.5M per year, on average, in total increased income for construction laborers. These income benefits may in fact be greater, as an additional study found that "those workers who earn the least in non-union workplaces gain the most" from union jobs (Thomason and Bernhardt 2018).

Public-sector PLAs frequently include local hire provisions that lead to diverse local inclusion in unionized construction careers (Waheed and Herrera 2014). From these wage and inclusion benefits, University of California studies have found a single union job will "decrease by 30.6 percent the likelihood that a worker is in a family where

at least one member is enrolled in a public safety net program" (Jacobs and Thomason 2018), while providing a collective voice for workers that is often lacking otherwise (MacGillvary and Jacobs 2018).

Through support for union-affiliated training programs, PLAs prepare a skilled labor force that has lasting benefits to both public and private-sector growth. In a report on solutions for skilled construction labor shortages, the Business Roundtable Construction Cost Effectiveness Task Force concluded "(t)he union sector has always excelled in craft training through the joint labor/management apprenticeship programs... but the open shop [non-union] sector, as a whole, has not supported formal craft training to the extent necessary" (Business Roundtable 1997).

According to the available independent academic studies, PLAs deliver these benefits without increasing costs to construction projects, while reducing project delays. An independent study commissioned by a California county agency found that PLA projects had "fewer problems" during construction than non-PLA projects, and claimed the PLA "dispute resolution process was an advantage" (Kelley et al. 2013). The only existing comprehensive study of PLAs and bid effects, analyzing 88 PLA and 175 non-PLA community college projects, shows that PLAs did not increase the price or reduce the number of construction bids. In fact, PLA projects in that study received low bids that were 5% cheaper on average than their non-PLA counterparts.

For a city aiming for broad prosperity, a municipal PLA policy would offer rich opportunity. The most recent Fresno General Plan "envision[s] Fresno as a vibrant, growing city, infused with a sense of heritage and community" (City of Fresno Planning and Development 2014). This study finds that a

municipal PLA for Fresno would benefit over two hundred construction jobs per year on average, along with benefits to construction.

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About UC Merced Community and Labor Center

The UC Merced Community and Labor Center conducts research, education and policy development on issues of community, labor and employment.

**COMMUNITY WORKFORCE AGREEMENT
WITH THE CITY OF HAYWARD**

This Agreement is made and entered into this 6 day of July, 2017 ("Effective Date"), by and between the City of Hayward ("City"), together with other contractors and/or sub-contractors, who agree to, and shall become parties to this Agreement by signing the "Agreement To Be Bound" (Attachment A), and the Building and Construction Trades Council of Alameda County and its affiliated local unions.

PURPOSE

The purpose of this Agreement is to promote efficiency of construction operations performed by the City of Hayward and to provide for the peaceful settlement of labor disputes and grievances without strikes or lockouts, thereby promoting the public interest in assuring the timely and economical completion of the projects covered by this Agreement, while helping to increase training and employment opportunities for graduates of the Hayward Unified School District ("HUSD") and Hayward residents in the construction trades through local hire, apprenticeship and pre-apprentice programs.

RECITALS

WHEREAS, the successful completion of the City's construction projects, as hereinafter defined, is of the utmost importance to the City of Hayward; and

WHEREAS, the interests of the general public, the City, the Unions and Contractor(s) would be best served if the construction work proceeded in an orderly manner without disruption because of strikes, sympathy strikes, work stoppages, picketing, lockouts, slowdowns or other interferences with work; and

WHEREAS, the Contractor(s) and the Unions desire to mutually establish and stabilize wages, hours and working conditions for the workers employed on construction work performed for the City of Hayward by the Contractor(s), and further, to encourage close cooperation among the Contractor(s) and the Union(s) to the end that a satisfactory, continuous and harmonious relationship will exist among the parties to the Agreement; and

WHEREAS, the Contractor(s) and the Union(s) and the City of Hayward wish to ensure labor peace at the jobsite devoid of any disruption that could jeopardize the schedule and timeliness of the construction process, where both contractors that are signatory to collective bargaining agreements of the Union(s) are supervising employees that are members of the Union(s) and where contractors that are not signatory to collective bargaining agreements are also supervising employees; and

WHEREAS, SB 922, codified as Public Contract Code Section 2500 *et seq.*, authorizes public entities to use, enter into, or require contractors to enter into, project labor agreements for construction projects, provided the agreement includes specified taxpayer protection provisions, which requirements have been incorporated into this Agreement; and

WHEREAS, this Agreement is not intended to replace, interfere, abrogate, diminish or modify existing local or national collective bargaining agreements in effect during the duration of this Agreement, insofar as a legally binding agreement exists between the Contractor and the affected Union, except to the extent that the provisions of this Agreement are inconsistent with said bargaining agreements, in which event the provisions of this Agreement shall prevail; and

WHEREAS, contracts for construction subject to this Agreement will be awarded in accordance with the applicable provisions of the Charter of the City of Hayward, the California State Public Contract Code, the California Labor Code, and other applicable California law; and

WHEREAS, the City of Hayward has the absolute right to select the lowest responsive and responsible bidder for the award of the construction contracts; and

WHEREAS, the parties signatory to this Agreement pledge their full good faith and trust to work towards a mutually satisfactory completion of the projects covered by this Agreement.

NOW, THEREFORE, IT IS AGREED BETWEEN AND AMONG THE PARTIES HERETO AS FOLLOWS:

ARTICLE 1

DEFINITIONS

1.1 “Agreement” means this Community Workforce Agreement.

1.2 “Building Trades Council” means the Building and Construction Trades Council of Alameda County, AFL-CIO.

1.3 “City” means the City of Hayward.

1.4 “Completion” means that point at which the City accepts a project at issue by filing a Notice of Completion, or as otherwise provided by applicable state law. It is understood by the parties that portions of the Projects may be completed in phases and Completion of any such phase may occur prior to Completion of the Projects.

1.5 “Contractor(s)” means all contractors and subcontractors at all tiers, any individual, firm, partnership or corporation, or combination thereof, including joint ventures, which is an independent business enterprise and has entered into a contract with the City of Hayward or any of its contractors or subcontractors of any tier, with respect to the construction work necessary for any part of the Project,

including construction building material delivery truckers, trucking companies and trucking brokers, who agrees, under contract with the Contractor(s), or a subcontractor of the Contractor(s), to perform on the project, any part or portion of the construction work covered by this Agreement, including the operating of construction equipment, performance of labor and/or installation of materials.

1.6 “Construction Contract(s)” means all of the contract(s) for construction of any Project as that term is hereinafter defined.

1.7 “Council” means the Building and Construction Trades Council of Alameda County.

1.8 “District Graduate” is a Hayward resident who has graduated from a Hayward Unified School District school within the last four years preceding the effective date of this Agreement.

1.9 “New Apprentice” is an apprentice who has been enrolled in a State of California approved apprenticeship program that is a joint labor-management apprentice program for a maximum of two years.

1.10 “Hayward Resident” means any individual who at any time during the Projects’ construction can certify through a utility bill or other similar means acceptable to the parties that the individual resides within the boundaries of the City of Hayward.

1.11 “Master Agreement” or “Schedule A” means the Master Collective Bargaining Agreement of each craft Union signatory hereto (copies of which shall be provided by the Union to the City) and which are listed in Attachment B, and which are incorporated herein by reference.

1.12 “Project” or “Projects” for the purposes of this Agreement mean all construction Projects costing more than one million dollars (\$1,000,000) based on Engineer’s Estimate.

1.13 “Union” or “Unions” means the Building and Construction Trades Council of Alameda County and its affiliated local Unions signatory to this Agreement, acting on their own behalf and on behalf of their respective affiliates and member organizations, whose names are subscribed hereto and who have through their officers executed this Agreement.

1.14 “Project Manager” means the person or persons or business entity designated by the City to oversee all phases of design and construction on the Projects.

1.15 “Sole Operator” means a licensed contractor with no employees and exempted by the Contractor’s State License Board from the requirement to carry workers’ compensation insurance. (See: *California Business and Professions Code section 7125.*)

1.16 "Veteran" means a person who served in the active military, naval, or air service, and who was discharged or released therefrom under conditions other than dishonorable.

ARTICLE 2

SCOPE OF AGREEMENT

2.1 Parties: This Agreement shall apply and is limited to all Contractors and Subcontractors performing Construction Contracts necessary for the Projects, the City, the Building Trades Council and any labor organization signatory to this Agreement, acting on their own behalf and on behalf of their respective affiliates and member organizations, whose names are subscribed hereto and who have through their officers executed this Agreement.

2.2 Project Description: This Agreement shall govern the award of all of the Construction Contracts identified by the City as part of the Project. All Projects that are subject to this Agreement shall be identified as covered Projects in the agenda report to the City Council requesting the authorization to solicit bids. The City Council retains the right to exempt projects following meet and confer as an agendized item at the JAC between City staff and the Building Trades Council. The City has the absolute right to combine, change, consolidate, suspend or cancel Construction Contracts(s) or portions of Construction Contract(s) identified as part of the Projects. Once a Construction Contract is completed, it is no longer covered by this Agreement, except when a Contractor is directed to engage in repairs, warranty work or modifications required by its Construction Contract with the City. For the purposes of this Agreement, a Construction Contract shall be considered completed as set forth in Section 1.4 of this Agreement.

2.3 Covered Work:

2.3.1 This Agreement covers, without limitation, all construction Projects with a construction cost estimate of more than one million dollars (\$1,000,000). For these Projects, the Agreement covers all Contractor performed on-site site preparation, on-site surveying, construction, alteration, demolition, installation, improvement, painting or repair of buildings, structures and other works, and related activities for the Project that is within the craft jurisdiction of one of the Unions and which is directly part of the Project, including, without limitation to the following examples, geotechnical and exploratory drilling, temporary and permanent HVAC, landscaping and temporary fencing, pipelines (including those in linear corridors built to serve the project), pumps, pump stations, and installation of modular furniture that is covered by the State of California Prevailing Wage determinations. On-site work includes work done for the Project in temporary yards, dedicated sites, or areas adjacent to the Project, and at any on-site or off-site batch plant constructed solely to supply materials to the Project. This scope of work includes all soils and materials testing and inspection where such testing and inspection is a classification in which a prevailing wage determination has been published. This Agreement shall apply to any start-up, calibration, commissioning, performance testing, repair, and

operational revisions to systems and/or subsystems performed for the Project after completion unless it is performed by City employees.

2.3.2 The Projects include work necessary for the Projects and/or in temporary yards or areas adjacent to and/or dedicated to the Projects, and at any on-site batch plant(s) constructed solely to supply materials to the Projects. This Agreement covers all on-site fabrication work over which the City or Contractor(s) possesses the right of control (including work done for the Projects in any temporary yard or area established for the Projects). Additionally, it is agreed hereby that off-site work, including fabrication work necessary for the projects defined herein that is covered by a provision of a current Master Agreement or local addenda to a National Agreement of the applicable Union(s) that is in effect as of the Effective Date of this Agreement shall be considered covered work under this Agreement.

2.3.3 The furnishing of supplies, equipment or materials that are stockpiled for later use shall in no case be considered subcontracting. Construction trucking work, such as the delivery of ready-mix, asphalt, aggregate, sand or other fill material that are directly incorporated into the construction process, as well as the off-hauling of debris and excess fill material and/or mud, shall be covered by the terms and conditions of this Agreement, to the fullest extent provided by law and by prevailing wage determinations of the California Department of Industrial Relations. Employers, including brokers, of persons providing construction trucking work shall provide certified payroll records to the City within ten (10) calendar days of written request or as required by bid specifications.

2.3.4 The on-site installation or application of all items shall be performed by the craft having jurisdiction over such work as set forth under the provisions of this Agreement; provided, however, that the installation of specialty items which may be furnished by the Contractor shall be performed by construction persons employed under this Agreement who may be directed by other personnel in a supervisory role; further, provided, however, in limited circumstances requiring special knowledge of the particular item(s), work may be performed by construction persons of the vendor or other companies where necessary to protect a manufacturer's warranty. The issue of whether it is necessary to use construction persons of the vendor or other companies shall be subject to the grievance and arbitration clause of this Agreement. Work subject to manufacturer's warranty shall be discussed during the pre-job conference.

2.4 Exclusions: The following shall be excluded from the scope of this Agreement:

2.4.1 This Agreement is not intended to, and shall not affect or govern the award of public works contracts by the City that are outside the identified scope of work of the Projects. This Agreement is not intended to and shall not govern any construction work that is bid or performed prior to the effective date of this Agreement. This Agreement applies only to Construction Contracts that are awarded by the City, and not third party public agencies, where City funding is utilized.

2.4.2 This Agreement is not intended to, and shall not affect the current or anticipated operation, maintenance, repair, access to or use of any of the City's buildings or facilities, except in those circumstances where the Project satisfies the requirements set forth in Section 1.12.

2.4.3 This Agreement shall not apply to a Contractor or Subcontractor's executives, managerial employees, engineering employees, design employees, supervisors (except those covered by existing building and construction trades collective bargaining agreements), and office and clerical employees that are not performing construction work on the project.

2.4.4 This Agreement shall not apply to any work performed on, near or leading to the site of work covered by this Agreement that is undertaken by state, county or other governmental bodies or their contractors; or by public or private utilities or their contractors; or by the City or its contractors for work not part of the scope of the Projects. Furthermore, this Agreement shall not be construed to prohibit or restrict the City or its employees from performing work on or around the Project construction sites or from entering the sites for any purposes deemed necessary or appropriate by the City.

2.4.5 This Agreement shall not apply to the off-site maintenance of leased equipment or the on-site supervision of such work.

2.4.6 Unless otherwise decided by the City, work covered by this Agreement within the following craft jurisdictions shall be based on the terms of various National Agreements as follows: the NTL Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, and the National Agreement of Elevator Constructors, and any instrument calibration work and loop checking shall be performed under the terms of the UA/IBEW Joint National Agreement for Instrument and Control Technicians, with the exception that Articles 4, 11, 13 and 14 of this Agreement shall apply to such work.

2.5 Termination, Suspension and/or Delay of Work: It is understood and agreed that the City, at its sole option, may change, terminate, delay and/or suspend any and all portions of the covered work at any time. Furthermore, the City may prohibit some or all work on certain days or during certain hours of the day to comply with applicable codes, laws or regulations, permits or to accommodate the ongoing operations of the City's facilities and/or to mitigate the effect of the ongoing Projects' work on the businesses and residents in the neighborhood of the Project sites; and/or require such other operational or schedule changes that may be deemed necessary, in its sole judgment, to effectively maintain the primary purpose of the City's facilities and to remain a good neighbor to the residents and businesses in the area of the Projects. In order to permit the Contractors and Unions to make appropriate scheduling plans, the City will provide the affected Contractor and Union(s) with reasonable notice of any changes it requires pursuant to this section.

ARTICLE 3
EFFECT OF AGREEMENT

3.1 By executing this Agreement, the Unions, and the City, and any other signatory to this Agreement, agree to be bound by each and every provision of this Agreement.

3.2 By accepting the award of a Construction Contract for the Projects, whether as contractor or subcontractor at any tier, the Contractor/Subcontractor agrees to be bound by each and every provision of this Agreement.

3.3 This Agreement shall only be binding on the signatory parties hereto their successors and assigns and shall not apply to the parents, affiliates, subsidiaries, lenders, or other ventures of any such party unless performing work within the scope of the Project(s).

3.4 At any time that any Contractor enters into a subcontract with any subcontractor of any tier for the performance of construction or construction trucking work within the scope of this Agreement, the Contractor shall provide a copy of this Agreement, as it may from time to time be modified by the negotiating parties, to said subcontractor and shall require the subcontractor as a part of accepting an award of a construction subcontract to agree in writing to be bound by each and every provision of the Agreement prior to the commencement of work.

3.5 Each Contractor and Subcontractor shall evidence their agreement to be bound to this Agreement by executing the Agreement To Be Bound form attached hereto as Attachment A. A copy of the Agreement To Be Bound executed by a Contractor or Subcontractor shall be submitted to the Union(s) prior to both the commencement of work and the pre-job conference. If the Contractor or Subcontractor refuses to execute the Agreement To Be Bound, then such Contractor or Subcontractor shall not be awarded a Construction Contract to perform work on the Projects. A Contractor or Subcontractor who executes the Agreement To Be Bound shall then subsequently be considered a signatory party to this Agreement.

3.6 The Contractor(s) has the primary obligation for performance of all conditions of this Agreement. This obligation cannot be relieved, evaded or diminished by subcontracting. Should the Contractor(s) elect to subcontract, the Contractor(s) shall continue to have such primary obligation.

3.7 Each Contractor(s) shall give written notice to the Union(s) of any subcontract involving the performance of work covered by this Agreement within either seven (7) days of entering such subcontract or before such subcontractor(s) commences work on the Project, whichever occurs first. Such notice shall specify the name, address and the California State License Board license number of the subcontractor(s).

- 3.8 (a) With regard to any Contractor that is independently signed to any Master Agreement, this Community Workforce Agreement shall in no way supersede or prevent the enforcement of any subcontracting clause contained in such Master Agreement, except as specifically set forth in subsection (b) of this Section. Any such subcontracting clause in a Master Agreement shall remain and be fully enforceable between each craft union and its signatory employers, and no provision of this Community Workforce Agreement shall be interpreted and/or applied in any manner that would give this Community Workforce Agreement precedence over subcontracting obligations and restrictions that exist between craft unions and their respective signatory employers under a Master Agreement, except as specifically set forth in subsection (b) of this Section 3.8. To the extent that the provisions of this Agreement are inconsistent with any other provisions contained in a Master Agreement, the provisions of this Agreement shall prevail.
- (b) If a craft union (hereafter "Aggrieved Union") believes that an assignment of work on this Project has been made improperly by a contractor or subcontractor, even if that assignment was as a result of another craft union's successful enforcement of the subcontracting clause in its Master Agreement, as permitted by subsection (a) of this Section 3.8, the Aggrieved Union may submit a claim under the jurisdictional resolution process contained in Article 12 of this Community Workforce Agreement, and the decision rendered as part of that process shall be enforceable to require the contractor or subcontractor that made the work assignment to assign that work prospectively to the Aggrieved Union. An award made to a craft union under the subcontracting clause of its Master Agreement, as permitted pursuant to Section 3.8(a) of this Article, shall be valid and fully enforceable by that craft union unless it conflicts with a jurisdictional award made pursuant to this Community Workforce Agreement. If the award made under the Master Agreement conflicts with the jurisdictional award, the award of any damages under the former shall be null and void *ab initio*.
- 3.10 Each Contractor(s) shall alone be liable and responsible for its own individual acts and conduct and for any breach or alleged breach of this Agreement. Any alleged breach of this Agreement by a Contractor(s) or any dispute between the Union(s) and the Contractor(s) respecting compliance with the terms of this Agreement, shall not affect the rights, liabilities, obligations and duties between the signatory Union(s) and each other Contractor(s), party to this Agreement.
- 3.11 It is mutually agreed by the parties that any liability of a Union(s) shall be several and not joint. Any alleged breach of this Agreement by a signatory Union(s) shall not affect the rights, liabilities, obligations and duties between the Contractor(s) and the other Union(s) party to this Agreement.
- 3.12 The Unions agree that this Agreement does not have the effect of creating any joint employment status between or among the City and/or any Contractor or subcontractor.

3.13 The provisions of this Agreement, including Schedules A's, which are incorporated herein by reference and which are the local Master Agreements of the Signatory Unions having jurisdiction over the work on the Project, shall apply to the work covered by this Agreement, notwithstanding the provisions of any other local, area and/or national agreements which may conflict with or differ from the terms of this Agreement. Where a subject covered by the provisions of this Agreement is also covered by a Schedule A, the provisions of this Agreement shall prevail. Where a subject is covered by the provisions of a Schedule A and is not covered by this Agreement, the provisions of the Schedule A shall prevail.

ARTICLE 4

WORK STOPPAGES, STRIKES, SYMPATHY STRIKES AND LOCKOUTS

4.1 During the duration of the Projects, the Union(s) and its members, agents, representatives and employees shall not incite, encourage, condone or participate in any strike, walkout, slowdown, sit-down, stay-in, boycott, wobble, sympathy strike, picketing or other work stoppage or handbilling of any nature whatsoever, for any cause whatsoever (including jurisdictional disputes), and it is expressly agreed that any such action is a violation of this Agreement.

4.1.1 Withholding employees for failure of a Contractor(s) to tender trust fund contributions as required in accordance with Article 15 and/or for failure to meet its weekly payroll is not a violation of this Article 4; however, the Union(s) shall give the affected Contractor(s) and the City written notice five (5) business days prior to the withholding of employees when failure to tender trust fund contributions has occurred.

4.1.2 Expiration of Master Agreements. It is specifically agreed that there shall be no strike, sympathy strike, picketing, lockout, slowdown, withholding of work, refusal to work, walk-off, sit-down, stand-in, wobble, boycott or other work stoppage of any kind as a result of the expiration of any local, regional or other applicable labor agreement having application at the Projects and/or failure of the parties to that agreement to reach a new contract. If a Master Agreement expires before the Contractor(s) completes the performance of a construction contract and the Union(s) or Contractor(s) gives notice of demands for a new or modified Master Agreement, the Union(s) agrees that it will not strike or withhold labor from the Contractor(s) on said contract for work covered under this Agreement and the Union(s) and the Contractor(s) agree that the expired collective bargaining agreement shall continue in full force and effect for work covered under this Agreement until a new or modified Master Agreement is reached between the Union(s) and Contractor(s). If the Union(s) and Contractor(s) agree to an interim agreement that will apply until a new Master Agreement is reached, then, at the Contractor(s)' option, the Contractor(s) may work under the terms of the interim agreement until a new or modified Master Agreement is reached between the Union(s) and Contractor(s). If the new or modified Master Agreement reached between the Union(s) and Contractor(s) provides that any terms of compensation of the Master Agreement shall be retroactive, the Contractor(s) agrees to comply with any retroactive terms of the new or modified Master Agreement to its effective

date which is applicable to employees employed on a project within seven (7) days after its effective date.

4.2 In consideration of the foregoing, the Contractor(s) shall not incite, encourage or participate in any lockout or cause to be locked out any employee covered under the provisions of this Agreement. The term "lockout" does not refer to the discharge, termination or layoff of employees by the Contractor(s) for any reasons in the exercise of its rights as set forth in any provision of this Agreement, nor does "lockout" include the City's decision to terminate or suspend work on the site or any portion thereof for any reason.

4.3 Any employee or employees inciting, encouraging or participating in any strike, slowdown, picketing, sympathy strike or other activity in violation of this Agreement is subject to immediate discharge and the procedure of Article 11, if invoked.

4.4 If the City contends that any Union has violated this Article, it will notify in writing (including email) the Secretary-Treasurer/Business Manager/Senior Executive of the Council and the Senior Executive of the Union, setting forth the facts alleged to violate the Article, prior to instituting the expedited arbitration procedure set forth below. The Council will immediately use his/her best efforts to cause the cessation of any violation of this Article. The leadership of the Union will immediately inform the membership of their obligations under this Article.

4.5 Any party to this Agreement shall institute the following binding arbitration procedure prior to initiating any other action at law or equity when a breach of this Article is alleged to have occurred. In the event a party institutes this procedure, arbitration shall be mandatory.

4.5.1 The party invoking this procedure shall immediately notify Robert Hirsch who the parties agree shall be the permanent Arbitrator under this procedure. Barry Winograd shall serve as the alternate in the event that the permanent Arbitrator is unavailable at any time. If both Arbitrators are unavailable, the City will propose three (3) additional alternate Arbitrators from which the other party in the action will select from those three (3) additional alternates. Notice to the Arbitrator shall be by the most expeditious means available, with notice by facsimile, telegram, email or similar means to the party alleged to be in violation and the involved Contractor(s) and/or Union(s), the Building Trades Council and the City.

4.5.2 Upon receipt of said notice the Arbitrator named above or the alternate shall designate a place for, schedule and hold a hearing within twenty-four (24) hours.

4.5.3 The Arbitrator shall notify the parties by facsimile, telegram, email or similar means of the place and time chosen for the session. A failure of any party or parties to attend said hearing shall not delay the hearing of evidence or issuance of an award by the Arbitrator.

4.5.4 The sole issue at the hearing shall be whether or not a violation of this Article has in fact occurred, and the Arbitrator shall have no authority to consider any matter in justification,

explanation or mitigation of such violation or to award damages, which issue is reserved for court or other arbitration proceedings, if any. The Arbitrator shall determine compliance with this Article and establish the appropriate sum of damages, which shall not be less than One Thousand Dollars (\$1,000) or more than Ten Thousand Dollars (\$10,000) for each shift, for violations of this Article. The award shall be issued in writing within three (3) hours after the close of the hearing and may be issued without a written opinion. If any party desires a written opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the award. The Arbitrator shall order cessation of the violation of this Article and other appropriate relief, and such award shall be served on all parties by hand or registered mail upon issuance.

4.5.5 The award shall be final, binding and non-reviewable as to the merits. A judgment of any court of competent jurisdiction shall be entered upon the award, which may be enforced by any such court, upon the filing of this Agreement and all other relevant documents referred to hereinabove in the following manner. Facsimile, telegram or similar notice of the filing of such enforcement proceedings shall be given to the other party. In the proceeding to obtain a temporary order enforcing the Arbitrator's award as issued under Section 4.5.4, all parties waive the right to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the Arbitrator's award shall be served on all parties by hand or by delivery to their last known address or by registered mail.

4.5.6 Any rights created by statute or law governing arbitration or injunction proceedings inconsistent with the above procedure, or which interfere with compliance therewith, are hereby waived by the parties to whom they accrued.

4.5.7 The costs of the arbitration, including the fee and expenses of the Arbitrator, shall be borne equally by the parties.

4.5.8 The procedures contained in Article 4 shall be applicable only to alleged violations of this Article. Discharge or discipline of employees for violation of this Article 4 shall be subject to the grievance and arbitration procedures of Article 9.

4.6 If there is a lockout, strike, sympathy strike, stoppage, slowdown, picketing or action otherwise advising the public that a labor dispute exists or interference with the progress of the Projects, the Parties shall have the right to seek full legal redress in the courts of California, after complying with the emergency arbitration provisions of Article 4.

ARTICLE 5
PRE-JOB CONFERENCE

5.1 A mandatory pre-job conference shall be held after the award of the contract and prior to the commencement of each Construction Contract or subcontract. Such conference shall be attended by a representative each from the participating Contractor(s), including all sub-contractors under contract, and Union(s), the Project Manager or any other City representative deemed appropriate by the City. One of the conference topics shall be discussion of work covered under warranty. All efforts will be made to hold the pre-job conference in sufficient time to ensure all parties the ability to properly raise and resolve any issue that may arise out of such meeting, with a goal that such conferences will be held at least fourteen (14) calendar days before the work commences. All meetings shall be held at Hayward City Hall, 777 B Street, Hayward, California 94541, or with mutual agreement of the parties, the meeting may be held at the offices of the Building Trades Council.

ARTICLE 6
NO DISCRIMINATION

6.1 The Contractors and Unions agree not to engage in any form of discrimination on the ground or because of race, color, creed, national origin, ancestry, age, sex, sexual orientation, gender identity, disability or any other basis made illegal by law against any person, or applicant for employment on the Projects.

ARTICLE 7
UNION SECURITY

7.1 The Contractors recognize the Union(s) as the sole bargaining representative of all construction persons working within the scope of this Agreement.

7.2 All construction persons who are employed by the Contractor(s) shall, as a condition of employment, on or before the eighth (8th) day of consecutive or cumulative employment on the Projects, be responsible for the payment of the applicable monthly working dues, fees, pension-fund type benefits, and any associated fees uniformly required for union membership in the applicable local union that is signatory to this Agreement, but is not required to join union.

7.3 Authorized representatives of the Unions shall have access to the Projects whenever their respective craft work is being performed on the Project.

ARTICLE 8

REFERRAL

8.1 Contractor(s) performing construction work on the Projects described in the Agreement shall, in filling craft job requirements, utilize and be bound by the registration facilities and referral systems established or authorized by the Unions signatory hereto ("Job Referral System"). Such Job Referral System will be operated in a non-discriminatory manner and in full compliance with all federal, state, and local laws and regulations, including those which require equal employment opportunities and nondiscrimination.

8.2 The Contractor(s) shall have the right to reject any applicant referred by the Union(s), in accordance with any applicable Master Agreement.

8.3 The Contractor(s) shall have the unqualified right to select and hire directly all supervisors above general foreman it considers necessary and desirable, without such persons being referred by the Union(s).

8.4 In the event that referral facilities maintained by Union(s) are unable to fill the requisition of a Contractor(s) for employees within a forty-eight (48) hour period, weekends and holidays excluded, after such requisition is made by the Contractor(s), the Contractor(s) shall be free to obtain employees from any source ("Alternative Employees"). Upon hiring Alternative Employees, the Contractor(s) shall immediately notify the appropriate Union(s) of the name and address of the Alternative Employees hired. This provision does not affect core employees as defined below.

8.5 Unions shall exert their utmost efforts to recruit sufficient numbers of skilled craft persons, particularly those craft persons residing in Hayward, to fulfill the requirements of the Contractor(s).

8.6 A Sole Operator, as defined in this Agreement under section 1.15, self-performing work on a covered Project shall not be required to request dispatch from the union hall with jurisdiction over the Sole Operator's work. However, if the Sole Operator hires any additional employees subsequent to starting work on a covered Project, the Sole Operator will be treated as the core employee and any subsequent employee(s) will be dispatched from the hiring hall. Before hiring an employee(s) on the Project, the Sole Operator must request permission from the JAC through the Coordinator and provide evidence of compliance with CLSB and Workers Compensation requirements. For purposes of this Agreement, Trucking Sole Operators will be treated as the core employee, but must nevertheless be dispatched from the hiring hall, and will be exempt from trust fund obligations but must pay representational fees. All Sole Operators, including truckers, must sign this Agreement's Letter of Assent prior to starting work on a covered Project.

8.7 In the event that a Contractor has its own core employees, the Contractor may request by name, and the local union will honor, referral of persons who demonstrate the following qualifications:

- (1) Possess any license and/or certifications required by state or federal law for the Project work to be performed; and
- (2) Have worked a total of at least one thousand (1,000) hours in the construction craft during the prior three (3) years; and
- (3) Were on the Contractor's active payroll for at least sixty (60) days out of the one hundred and eighty (180) calendar days prior to the contract award; and
- (4) Have the ability to perform safely the basic functions of the applicable trade.

8.8 The Union will refer to such Contractor one journeyman employee from the hiring hall out-of-work list for the affected trade or craft, and will then thereafter refer one of such Contractor's "core" employees as a journeyman and shall repeat the process, one and one, until such Contractor's crew requirements are met or until such Contractor(s) has hired no more than five (5) "core" employees, whichever occurs first. Thereafter, all additional employees in the affected trade or craft shall be hired exclusively from the hiring hall out-of-work lists(s). For the duration of the Contractor's work, the ratio shall be maintained and when the Contractor's workforce is reduced, employees shall be reduced in the same ratio of core employees to hiring hall referrals as was applied in the initial hiring. Contractor(s) signatory to a Master Agreement with Union(s) signatory hereto shall be bound to use the hiring hall provisions contained in the relevant collective bargaining agreement of the affected Union(s), and nothing in the referral provisions of this Agreement shall be construed to supersede the local hiring hall provisions of the Master Agreement, as they relate to such Contractor(s). Any exceptions requested to this process must be referred to the JAC for review.

8.9 Subject to the limitations of applicable law, the parties to this Agreement support the development of increased numbers of skilled construction workers who are residents of the City of Hayward, to meet the needs of the Projects and the requirements of the industry generally. To that end, the Unions agree to encourage the referral and utilization, to the extent permitted by law and the hiring hall procedures of the Unions, of qualified Hayward Residents as journeymen and apprentices on the Projects and entrance into such apprenticeship and training programs as may be operated by the signatory Unions consistent with the applicable apprenticeship program's state-approved standards.

ARTICLE 9

GRIEVANCE PRODEDURE

9.1 All disputes involving discipline and/or discharge of employees working on the Project shall be resolved through the grievance and arbitration provision contained in the Master Agreement for the craft of the affected employee. For purposes of this Article, such grievance procedure shall be limited to disputes regarding the imposition of discipline or dismissal arising from work covered by the Agreement. Such Contractor shall not impose discipline or dismissal on its construction persons covered

by this Agreement without just cause. For purposes of this Agreement, just cause shall have the meaning set forth in the Master Agreement of the craft representing the employee(s) involved in the dispute.

ARTICLE 10

JOINT ADMINISTRATIVE COMMITTEE

10.1 The parties to this Agreement shall establish a five (5) person Joint Administrative Committee. This Committee shall be comprised of two (2) representatives selected by the City; two (2) representatives selected by the Unions; and one (1) industry representative mutually agreed to by the parties. Each representative shall designate an alternate who shall serve in his or her absence for any purpose contemplated by this Agreement. A quorum of the Joint Administrative Committee shall consist of three members, comprising at least one representative from the City and one representative from the Building Trades Council.

10.2 The Joint Administrative Committee shall meet as required, but not less than once each quarter, to review the implementation of the Agreement and the progress of the Projects. Any question by any party to the Agreement regarding the meaning, interpretation or application of the provisions of this Agreement shall be referred directly to the Joint Administrative Committee for review and recommendation. The Joint Administrative Committee will also have the responsibility of monitoring the provisions in Article 13 Local Hire and Apprentices.

10.3 If there is a request regarding exemptions per Section 2.2, the meet and confer discussion will occur between the City and Building Trades Representatives. If there is no agreement, the exemption would be presented to City Council for decision.

ARTICLE 11

GRIEVANCE ARBITRATION PROCEDURE

11.1 The parties understand and agree that in the event any dispute arises out of the meaning, interpretation or application of the provisions of this Agreement, the same shall be settled by means of the procedures set out herein. All disputes concerning the interpretation and/or application of this Agreement which do not fall within the Article 4 Work Stoppages, Strikes, Sympathy Strikes, and Lockouts procedure shall be governed by the following grievance and arbitration procedure. No grievance shall be recognized unless the grieving party provides notice in writing to the signatory party with whom it has a dispute within seven (7) calendar days after becoming aware of the dispute, but in no event more than thirty (30) business days after it reasonably should have become aware of the event giving rise to the dispute. The time limits in this Article may be extended by mutual written agreement of the parties.

11.2 Grievances shall be settled according to the following procedures:

Step 1: Within seven (7) calendar days after the receipt of the written notice of grievance, the necessary parties to the grievance, including but not limited to the Business Representative of the involved Local Union, or the City's authorized representative or his/her designee, or representative of the construction person or the involved Contractor shall confer and attempt to resolve the grievance.

Step 2: In the event that the representatives are unable to resolve the dispute within seven (7) calendar days after its referral to Step 1, either involved party may submit it within three (3) calendar days to a Grievance Committee consisting of one (1) person selected by the City and one (1) person selected by the Council, which shall meet within seven (7) calendar days after such referral (or such longer time as mutually agreed upon by all representatives of the Committee), to confer in an attempt to resolve the grievance. Regardless of which party has initiated the grievance proceeding, prior to the meeting of the Grievance Committee, the Union(s) shall notify its International Union(s) Representative(s), which shall advise both parties if it intends on participating in the meeting. The participation by the International Union(s) Representative in this Step 2 meeting shall not delay the time set herein for the meeting, unless otherwise mutually agreed by the parties. A decision of the Grievance Committee shall be final and binding. If the dispute is not resolved with such time (seven (7) calendar days after its referral or such longer time as mutually agreed upon), it may be referred within seven (7) business days by either party to Step 3.

Step 3: In the event that the representatives are unable to resolve the dispute within seven (7) calendar days after its referral to Step 3, the parties shall choose a mutually agreed-upon arbitrator for final and binding arbitration. If the parties cannot mutually agree on the selection of an arbitrator, the arbitrator shall be selected by the alternate striking method from the following list: William Riker, Barry Winograd, The Honorable Laurence Kay, Robert Hirsch and Robert Clark. The order of striking names from the list of arbitrators shall be determined by a coin toss; the winner of such toss shall decide whether to strike first or second. Such striking shall take place within three (3) calendar days. If a party does not respond within three (3) calendar days, any arbitrator from the list is acceptable.

11.3 The Arbitrator shall arrange for a hearing no later than fourteen (14) calendar days after the matter has been submitted to arbitration. A decision shall be given to the parties within five (5) calendar days after completion of the hearing, unless such time is extended by mutual agreement. A written opinion may be requested by a party from the Arbitrator.

11.4 The decision of the Arbitrator shall be binding by all parties. The Arbitrator shall not have authority to change, amend, add or detract from any of the provisions of the Agreement. The expense

of the Arbitrator shall be borne equally by both parties, with each party bearing the cost of their own legal counsel.

11.5 In order to encourage the resolution of disputes and grievances at Step 1 and 2 of the Grievance Procedure, the parties agree that such settlements shall not be precedent-setting.

11.6 The time limits specified in any step of the Grievance Procedure set forth in Section 11.2 may be extended by mutual agreement of the parties initiated by the written request of one party to the other, at the appropriate step of the Grievance Procedure. However, failure to process a grievance, or failure to respond in writing within the time limits provided above, without the request for an extension of time, shall be deemed a waiver of such grievance without prejudice, or without precedent to the processing of and/or resolution of like or similar grievances or disputes.

11.7 Where an issue is addressed in this Agreement and a Master Agreement, this Agreement shall prevail. Where an issue is addressed in a Master Agreement and not in this Agreement, the Master Agreement shall control. Grievances between a Union(s) and a Union(s)' signatory contractor involving interpretation or application of the Master Agreement shall be governed by the grievance procedures contained in the Master Agreement.

11.8 Any strike, slowdown, picketing, sympathy strike or other form of work stoppage that arises out of a dispute as to the interpretation of the Agreement shall be subject to the procedures set forth in Article 4.

11.9 Should any of the arbitrators listed in section 11.2 or above no longer work as a labor arbitrator, the City and the Council shall mutually agree to a replacement.

ARTICLE 12

JURISDICTIONAL DISPUTES

12.1 The assignment of Covered Work will be solely the responsibility of the Contractor/Employer(s) performing the work involved; and such work assignments will be in accordance with the Plan for the Settlement of Jurisdictional Disputes in the Construction Industry (the "Plan") or any successor Plan.

12.2 All jurisdictional disputes on this Project between or among the Building and Construction Trades Unions and the Contractors, parties to this Agreement, shall be settled and adjusted according to the present Plan established by the Building and Construction Trades Department, or any other plan or method of procedure that may be adopted in the future by the Building and Construction Trades Department. Decisions rendered shall be final, binding and conclusive on the Union parties to this Agreement.

12.2.1 If a dispute arising under this Article involves the Northern California Carpenters Regional Council or any of its subordinate bodies, an Arbitrator shall be chosen by the procedures specified in Article V, Section 5, of the Plan from a list composed of John Kagel, Thomas Angelo, Robert Hirsch, and Thomas Pagan, and the Arbitrator's hearing on the dispute shall be held at the offices of the California State Building and Construction Trades Council in Sacramento, California, within 14 days of the selection of the Arbitrator. All other procedures shall be as specified in the Plan.

12.3 All jurisdictional disputes shall be resolved without the occurrence of any strike, work stoppage, or slow-down of any nature, and the Contractor's assignment shall be adhered to until the dispute is resolved. Individuals violating this Section shall be subject to immediate discharge. Each Employer will conduct a pre-job conference with the Council prior to commencing work. The Project Manager and the City will be advised in advance of all such conferences. The Primary Contractor shall attend all such meetings and the City may participate if it wishes. Pre-job conferences for different Employers may be held together.

ARTICLE 13

LOCAL HIRE AND APPRENTICES

13.1 The parties agree to a goal that Hayward Residents, and especially District Graduates, will perform a minimum of thirty (30%) percent of the hours worked on a craft by craft basis on the Projects (the "Local Hire Goal"). The Contractor shall make good faith efforts to reach the Local Hire Goal through the utilization of the Union's hiring hall procedures. The Unions shall make good faith efforts in their recruiting and training of Hayward Resident workers and in their hiring hall procedures to facilitate the Local Hire Goal on the Projects. The parties shall cooperate to establish or support a pre-apprenticeship/internship program for HUSD graduates. If a Contractor fails to meet the Local Hire Goal or demonstrate a good faith effort, there will be a ten (10%) percent contract retention withheld until the Local Hire Goal is remedied. Acceptable remedies include: commitment to employ Hayward residents on non-City projects or acceptance of Hayward residents as new apprentices.

13.2 A Contractor that has employed a Hayward Resident for up to six (6) months preceding the start of the Project for a minimum of at least one hundred (100) hours per month who has the ability to perform safely the basic functions of the applicable trade may receive credit for fifty (50%) percent of those hours towards the Local Hire Goal. A contractor may also receive credit for fifty (50%) percent of the documented hours performed by Hayward Residents on non-City projects, when such hours are concurrent with the Contractor's work on the Project. The maximum total combined credit that can be applied under this section is half of the Local Hire Goal.

13.3 The Contractor is required to hire one Hayward resident as a New Apprentice for the first 1 million dollars (\$1,000,000) of construction costs with one additional apprentice for every \$5 million dollars (\$5,000,000) thereafter (capped at 2 per craft). A minimum of 50% of the applicable Apprentice hours on any project must be worked by the Hayward New Apprentice. Any modifications to these

requirements must be agreed to by the JAC. There shall be no more than two New Apprentices for each craft, and the General Contractor shall be entitled to include New Apprentices hired by their subcontractors to meet this requirement. The City will refer the names of District Graduates and/or Hayward Residents to the Union and Contractors, and the Unions agree to cooperate with the Contractor in furnishing apprentices as requested. The hiring, supervision and compensation of apprentices shall be in accordance with the Apprenticeship Programs in the Master Agreements. The Contractor may deploy the Hayward New Apprentice to work on another concurrent project in order to meet the minimum hours, and those hours will be counted towards the total hours of the craft on the City project. The failure of the City to refer names and/or the Unions to provide those apprentices upon request will relieve the Contractor of this First-Period Apprentice hiring responsibility. The Contractor shall make good faith efforts to hire Apprentices for a minimum of six (6) months or 1,000 labor hours.

13.4 The Council shall facilitate and encourage enrollment of least ten (10) Hayward residents or District Graduates into State approved Labor-Management Apprenticeship programs during each year of the agreement term and facilitate placing them on a job site.

13.5 The Contractor or Subcontractor who hires such Hayward Resident First-Period Apprentices shall be credited with two (2) work hours towards the Local Hire Goal, for each hour worked by the Hayward Resident First-Period Apprentices.

13.6 The intent of the apprentice requirement is to employ new apprentices to the fullest extent permissible by state law and the Master Agreements. The failure of the Contractor and its subcontractors to maintain qualified apprentices on the Project will be subject to Division of Apprenticeship Standards' penalties and further penalties as determined by the Joint Administrative Committee. The Contractors, Unions and the Building Trades Council shall use good faith efforts to retain apprentices employed pursuant to this Agreement and advance those apprentices to journeyman status.

13.7 It shall be the responsibility of the Contractor to report and document compliance with this Article. This shall include, but not be limited to, monthly utilization reports showing all work hours by craft, certified weekly payroll records, and any documentation showing dispatch and referral requests.

13.8 The Contractor may request a negotiated compliance plan if compliance with the requirements of this Article is unreasonable or poses difficulty due to safety. In this case the Contractor will make the request in writing for a meeting with the Joint Administrative Committee prior to the commencement of work. The Joint Administrative Committee will then review this request, and if there is consensus, will approve the negotiated compliance plan, that the Contractor will sign off on. This new document will become the new local hiring requirements that the Contractor will have to meet or risk being in non-compliance.

ARTICLE 14
MANAGEMENT RIGHTS

14.1 The Contractor shall retain full and exclusive authority for the management of its operations, including the right to direct its work force in its sole discretion, except as otherwise limited by the terms of this Agreement and/or the Master Agreements. No rules, customs or practices shall be permitted or observed which limit or restrict production, or limit or restrict the working efforts of construction persons except that the lawful manning provisions of the Master Agreements shall be recognized.

ARTICLE 15
WAGES/BENEFITS

15.1 The wages, hours and other terms and conditions of employment on the Project shall be governed by the Master Agreement of the respective crafts and shall also comply with applicable general prevailing wages, to the extent such Master Agreement is not inconsistent with this Agreement. Where a subject is covered by the Master Agreement and not covered by this Agreement, the Master Agreement will prevail. When a subject is covered by both the Master Agreement and this Agreement, to the extent there is any inconsistency, this Agreement will prevail.

15.2 All Contractor(s)/Employer(s) agree to pay contributions to the vacation, pension and other form of deferred compensation plan, apprenticeship, worker protection and assistance, and health benefit funds established by the applicable Master Agreement for each hour worked on the Project in the amounts designated in the Master Agreements of the appropriate local Unions.

15.3 By signing this Agreement, the Contractor(s)/Employer(s) adopt and agree to be bound by the written terms of the legally established Trust Agreements, as described in section 9.1, and which may from time to time be amended, specifying the detailed basis on which payments are to be made into, and benefits paid out of, such Trust Funds. The Contractors authorize the parties to such local trust agreements to appoint trustees and successor trustees to administer the trust funds and hereby ratify and accept the trustees so appointed as if made by the Contractor(s). The Contractor(s) agrees to execute a separate Subscription Agreement(s) for Trust Funds when such Trust Fund(s) requires such document(s).

15.4 If an employee is discharged or voluntarily terminates, wages due shall be paid in accordance with California State Law.

ARTICLE 16
MODIFIED MASTER AGREEMENTS

16.1 Certain Provisions Shall Not Apply. Provisions negotiated into the new or modified Master Agreements that are less favorable to the Contractor than those uniformly required of employers for construction work normally covered by those agreements or that may be construed to apply exclusively or predominately to work covered by this Agreement shall not apply to work covered by this Agreement. Any disagreement between the parties regarding the application of the provisions of any new or modified collective bargaining agreement to work covered by this Agreement shall be resolved under the dispute and grievance arbitration procedures set forth in Article 11 hereof.

ARTICLE 17

SAVINGS CLAUSE

17.1 The parties agree that in the event any article, provision, clause, sentence or word of this Agreement is determined to be illegal or void as being in contravention of any applicable law by a court of competent jurisdiction, the remainder of the Agreement shall remain in full force and effect. The parties further agree that if any article, provision, clause, sentence or word of the Agreement is determined to be illegal or void by a court of competent jurisdiction, the parties shall substitute, by mutual agreement, in its place and stead, an article, provision, clause, sentence or word which will mitigate the objections to its validity and which will be in accordance with the intent and purpose of the article, provision, clause, sentence or word in question.

17.2 The parties also agree that in the event that a decision of a court of competent jurisdiction materially alters the terms of this Agreement such that the intent of the parties is defeated, then the entire Agreement shall be null and void.

ARTICLE 18

ENTIRE AGREEMENT

18.1 This Agreement, including the attachments hereto, and the Schedule As incorporated by reference, represents the complete understanding of the parties. The provisions of this Agreement shall apply to the work covered by this Agreement. Where a subject covered by the provisions of this Agreement is also covered by a Master Agreement, the provisions of this Agreement shall prevail. Where a subject is covered by the provisions of a Master Agreement and is not covered by this Agreement, the provisions of the Master Agreement shall prevail.

18.2 The parties agree that this Agreement covers matters affecting wages, hours, and other terms and conditions of employment and that during the term of this Agreement the parties will not be required to negotiate on any further matters affecting these or any other subject not specifically set forth in this Agreement except by mutual agreement of the parties.

18.3 This Agreement may be executed in counterpart, such that original signatures may appear on separate pages and when bound together all necessary signatures shall constitute an original. Facsimile or PDF signature pages transmitted to other parties to this Agreement shall be deemed the equivalent to original signatures.

ARTICLE 19

HELMETS TO HARDHATS

19.1 The parties recognize a desire to facilitate the entry of Veterans who are interested in careers in the building and construction industry. The parties agree to utilize the services of the Center for Military Recruitment, Assessment and Veteran's Employment ("Center") and the Center's "Helmets to Hardhats" program to serve as a resource for preliminary orientation, assessment of construction aptitude, referral to apprenticeship programs or hiring halls, counseling and mentoring, support network, employment opportunities and other needs as identified by the parties.

19.2 The Union(s) and Contractor(s) agree to coordinate with the Center to participate in an integrated database of Veterans interested in working on the Projects and of apprenticeship and employment opportunities for the Projects. To the extent permitted by law, the Contractor(s) and Union(s) will give credit to such Veterans for bona fide, provable past experience.

ARTICLE 20

TERM

20.1 This Agreement shall be included as a condition of the award of the Construction Contract.

20.2 This Agreement shall continue in full force and effect for a term of three (3) years from the Effective Date and shall be applicable to all Projects until completion that are advertised for bidding during the term.

20.3 This Agreement shall continue in full force and effect until Completion of the Term. The parties may mutually agree to extend and/or amend this Agreement, and will review the Agreement at two years from date of execution for possible extension beyond the initial term. Review of the Agreement may include, but is not necessarily limited to, the following criteria: (1) the impact of the agreement on local jobs and work hours, (2) the administrative costs of implementing the Agreement, and (3) the impact on awarding contracts or subcontracts to City-based businesses as a result of the Agreement.

ARTICLE 21
COMPLIANCE

21.1 It shall be the responsibility of the Contractor(s) and Union(s) to investigate and monitor compliance with the provisions of this Agreement contained in Article 15. Nothing in this Agreement shall be construed to interfere with or supersede the usual and customary legal remedies available to the Unions and/or employee benefit Trust Funds to collect delinquent Trust Fund contributions from Contractors on the Project.

ARTICLE 22
SUBSTANCE ABUSE PREVENTION

22.1 The use, sale, transfer and/or possession of a controlled substance during the work day is prohibited. Accordingly, the parties agree to adopt the procedures and safeguards for the testing of employees for prohibited or controlled substances set forth in the Uniform Substance Abuse Prevention Policy, attached as Attachment C hereto (the "Policy"). With respect to testing procedures, the parties agree that:

(i) No person referred from a Union hiring hall or any hiring organization shall be allowed on site as an employee until such person has completed and passed any test required under the applicable Policy; and

(ii) A person who is put to work immediately after having passed the tests shall be paid starting at the time the person reported for the test; and

(iii) Where a contractor requests a person to report for purposes of a pre-hire substance abuse test, and does not intend to place the person in an active work position that day, the person shall receive four (4) hours of pay at the regular straight-time hourly rate if the test is negative.

22.2 Requirements of Substance Abuse policies currently contained within a Master Agreement shall supersede the Policy attached as Attachment C and of the General Contractor policy below.

22.3 If the Substance Abuse policy of the General Contractor meets or exceeds the requirements of the policy in Attachment C, the General Contractor may then use their policy.

City of Hayward

By 

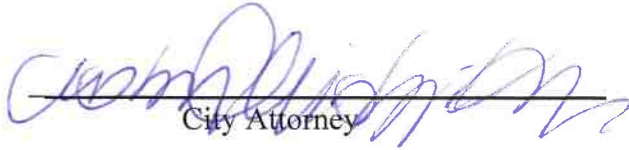
Date: _____

Alameda County Building & Construction Trades Council, AFL-CIO

By _____ Date _____

Attest: _____
City Clerk

Approved as to Form and Procedure:



City Attorney

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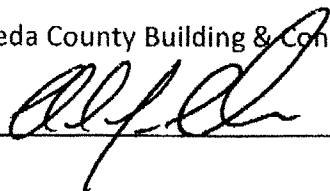
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City of Hayward

By _____ Date: _____

Alameda County Building & Construction Trades Council, AFL-CIO

By  Date 7-13-14

Asbestos Workers, Local 16

By: _____

Boilermakers, Local 549

By: _____

Carpenters, Local 2236

By: _____

Carpet & Lino Layers, Local 12

By: _____

Electrical Workers, Local 595

By: _____

Glass Workers, Local 169

By: _____

Ironworkers, Local 378

By: _____

Laborers, Local 304

By: _____

Lathers, Local 68L

By: _____

Auto & Marine Painters, Local 1176

By: _____

Bricklayers & Allied Craftsmen, Local 3

By: _____

Carpenters, Local 713

By: _____

Cement Masons, Local 300

By: _____

Elevator Constructors, Local 8

By: _____

Insulator Workers, Local 16

By: _____

Laborers, Local 67

By: _____

Laborers, Local 886

By: _____

Millwrights, Local 102

By: _____

Operating Engineers, Local 3

By: _____

Plasters, Local 66

By: _____

Sheet Metal Workers, Local 104

By: _____

Sprinkler Fitter, Local 483

By: _____

Plumbers & Steamfitters, Local 342

By: _____

U.A. Utility/Landscape, Local 355

By: _____

**No. CA Carpenters Regional Council
(Local 713, 2236, 68L, 102, 34)**

By: _____

Painters, Local 3

By: _____

Roofers, Local 81

By: _____

Sign Display, Local 510

By: _____

Pile Driver, Local 34

By: _____

Teamsters, Local #853

By: _____

**District Council #16 Painters
(Local 1176, 12, 169, 3)**

By: _____

**District Council Iron Workers of CA &
Vicinity Trades *Only Regional***

By: _____

ATTACHMENT A AGREEMENT TO BE BOUND

The undersigned, as a Contractor or Subcontractor ("Contractor") on a City Project ("Project"), for and in consideration of the award to it of a contract to perform work on said Project, and in further consideration of the mutual promises made in the Community Workforce Agreement ("Agreement"), a copy of which was received and is acknowledged, hereby:

Accepts and agrees to be bound by the terms and conditions of the Agreement, together with any and all amendments and supplements now existing or which are later made to said Agreement;

Certifies that it has no commitments or agreements which would preclude its full and complete compliance with the terms and conditions of said Agreement;

Agrees to secure from any contractor (as defined in said Agreement) which is or becomes a subcontractor (of any tier) to it, and from any successors, a duly executed Agreement to be bound in form identical to this document;

Contractor agrees that it shall be bound by all applicable trust agreements and plans for the provision of such fringe benefits as accrue to the direct benefit of the construction persons, including Health and Welfare, Pension, Training, Vacation, and/or other direct benefits provided pursuant to the appropriate craft Master Agreement and ratifies and accepts the trustees appointed by the parties to such trust funds, and agrees to execute a separate Subscription Agreement(s) for Trust Funds when such Trust Fund(s) requires such document(s).

Date: _____

Company Name _____

Name of Prime Contractor or Higher Level Subcontractor:

Name of Project: _____

Signature: _____

Print Name: _____

Title: _____

Contractor's License #: _____

Motor Carrier Permit (CA) #: _____

ATTACHMENT B

(List of Master Agreements)

ATTACHMENT C

CITY OF HAYWARD COMMUNITY WORKFORCE AGREEMENT UNIFORM SUBSTANCE ABUSE PREVENTION POLICY

This Uniform Substance Abuse Prevention Policy, hereinafter referred to as “Policy,” is adopted by the City of Hayward, the Alameda County Building and Construction Trades Council, AFL-CIO, the Unions that become signatories to the Community Workforce Agreement (collectively referred to as “Unions”) and the Contractors who agree to be bound by the City of Hayward Community Workforce Agreement (collectively the “parties”).

The parties agree and acknowledge that the United States Government may require differing testing and detection standards than those that are contained in this policy for certain projects that will be constructed under the Community Workforce Agreement (the “CWA”). To the degree that these federal policies differ in substance or procedure (including the use of random testing), the parties acknowledge that the federal policies will prevail where required by law or regulation. Violation of any federal policy will result in the same consequences as a violation of this Policy.

POLICY

The Contractors and the Unions are committed to protecting the health and safety of individual employees, their co-workers, and the public at large from the hazards caused by the misuse of drugs and alcohol on the job. The safety of the public, as well as the safety of fellow employees, dictates that employees not be permitted to perform their duties while under the influence of drugs or alcohol.

This Policy supersedes any policies negotiated for any other work outside of the Project by Contractors and the Unions that might otherwise apply. Nothing in this Policy is intended to supersede or diminish more restrictive controlled substance or alcohol regulations imposed by federal or state agencies upon specific employee groups or categories of employees who are also covered by this Policy. A summary of this Policy will be provided to all dispatched employees. The full Policy will be made available to any Union representative or to Project employees upon request.

The intention of this Policy is to comply with the City of Hayward CWA’s requirement to maintain a drug and alcohol free workplace in order to ensure safe and productive working conditions with due regard for the personal privacy interests of Project employees. It is not the intention of the parties that any Contractor intrude on off-duty activities of Project employees away from the Project site unless those activities have a job-related impact. The circumstances permitting controlled substance and alcohol testing in the Policy have been carefully defined and intentionally restricted. The Substance Abuse Prevention Coordinator will retain oversight over Policy implementation and will monitor test procedures for consistency and policy compliance.

In order to implement this Policy, the following agreements have been reached:

1. No employee may purchase, sell, transfer, furnish, possess, use or be under the influence of illegal drugs or any alcoholic beverage while working on any Project job site in connection with work performed under the CWA, or when using any Contractor vehicle.
2. The proper use of prescription drugs or over-the-counter medication as part of a medical treatment program and consistent with the terms of this Policy is not a violation of this Policy. The improper use of prescription drugs, over-the-counter medication or the use of designer synthetic drugs that alters or affects an individual's motor function or mental capacity is prohibited and is a violation of this Policy. Employees who believe or have been informed that their use of any prescription drug or over-the-counter medication may present a safety risk are to report such use to the Contractor's supervision to ensure the safety of themselves, other employees, and Contractor or Project property or vehicles.
3. Any employee, while employed on the Project, who tests positive for drug or alcohol abuse or who is convicted for selling illegal drugs off the Project will not be permitted to work on the Project and will be subject to discipline up to and including discharge, subject to the provisions of this Policy. Employees engaged in the sale, purchase or use of illegal drugs during the employee's working hours will be subject to immediate termination and removed from the Project and will not be eligible for rehire.
4. Any prospective or dispatched worker who fails the pre-employment testing required pursuant to this Policy will be denied employment and will not be eligible for referral to any Contractor on the Project until a period of not less than sixty (60) calendar days has passed and the applicant has provided a certification of rehabilitation and satisfactory participation in an approved counseling or rehabilitation program, which will be at the employee's expense.
5. Any prospective or dispatched worker/employee who refuses to submit to a properly administered drug or alcohol test will be treated as having tested positive on the test and will be subject to removal from the Project and will not be granted permission for a second drug or alcohol test for a period of ninety (90) days.

NOTICE

1. When calling the Union hiring hall for workers, the Contractor shall advise the Union dispatcher that the Contractor will require any dispatched worker to take a pre-employment drug and alcohol test, and that worker(s) will be subject to further testing in accordance with specified circumstances outlined in this Policy.
2. At the commencement of a Contract, the Contractor shall also provide notice in advance of the first dispatch request either by certified mail, by facsimile transmission or by hand delivery.
3. The Contractor shall provide written notice to each employee, attached hereto as Appendix C, of the major provisions of the drug and alcohol testing policy and its consequences.
4. A Contractor that fails to provide notice to the dispatcher shall be liable for two hours show-up pay for any dispatched worker who refuses to take a pre-employment test, and a dispatched worker's

refusal to take the test may not be used in any adverse manner against that worker, except that no dispatched worker will be hired without having taken a pre-employment drug test.

TERMS/DEFINITIONS

For purposes of this Policy, the following terms/conditions will apply:

1. Illegal drugs:

For the purpose of this Policy, the terms “illegal drugs” or “drugs” refer to those drugs listed in Appendix A, except in those circumstances where they are prescribed by a duly licensed health care provider. Appendix A lists the illegal drugs and alcohol and the threshold levels for which an employee/applicant will be tested. Threshold levels of categories of drugs and alcohol constituting positive test results will be determined using the applicable Substance Abuse and Mental Health Services Administration (“SAMHSA”) (formerly the National Institute of Drug Abuse, or “NIDA”) threshold levels, or U.S. Government thresholds where required, in effect at the time of testing. Appendix A will be updated periodically to reflect the SAMHSA or the U.S. Government threshold changes, subject to mutual agreement of the Parties.

2. Prescription Drug:

A drug or medication prescribed by a duly licensed health care provider for current use by the person possessing it that is lawfully available for retail purchase only with a prescription.

3. Reasonable Cause:

Reasonable cause to test (which test must be conducted pursuant to this Policy’s Identification and Consent Procedures outlined below) an employee for illegal drugs or alcohol will exist when specific, reliable, objective facts and circumstances are sufficient for a prudent person to believe that the employee more probably than not has used a drug or alcohol as evidenced by work performance, behavior or appearance while on the job site. These indicators will be recognized and accepted symptoms of intoxication or impairment caused by drugs or alcohol, and will be indicators not reasonably explained as resulting from causes other than the use of such controlled substances (such as, but not by way of limitation, fatigue, lack of sleep, side effects of proper use of prescription drugs, reaction to noxious fumes or smoke, etc.) If cause results from an observation, the observation must be confirmed by a second member of the Contractor’s supervision and those Contractor representatives will endeavor to consult with the Contractor’s Safety Representative or a job site management representative, one who must be trained in detection of drug use, and whose training will be documented. The specific behavioral, performance on-the-spot physical indicators of being under the influence of drugs or alcohol

on the job will be substantiated in writing by the use of an Incident Report Form (attached as Appendix E).

The following may constitute some of the reasonable cause to believe that an employee is under the influence of drugs or alcohol:

- (a) Incoherent, slurred speech;
- (b) Odor of alcohol on breath;
- (c) Staggering gait, disorientation, or loss of balance;
- (d) Red and watery eyes, if not explained by environmental causes;
- (e) Paranoid or bizarre behavior; or
- (f) Unexplained drowsiness.

4. Post-Accident Testing:

A Contractor will require that an employee who is involved in an accident in the course of job duties resulting in serious damage to property or equipment or injury to him/herself or others as defined below may be tested (which test must be conducted pursuant to this Policy's Identification and Consent Procedures outlined below) for drugs or alcohol where the Contractor Safety Representative or designee concludes that:

- (a) The accident may have resulted from human error or could have been avoided by reasonably alert action; and
- (b) The employer's representative reasonably concluded that the employee(s) to be tested caused or contributed to the following circumstances:
 - (i) An OSHA recordable injury, i.e., medical treatment case, restricted work case or lost workday case;
 - (ii) Damage to equipment, vehicles, structures, or guarding resulting in repair costs that in the judgment of the Contractor will exceed \$2,500.00;
 - (iii) Loss of material containment resulting in an environmental spill notification; or
 - (iv) Any incident resulting in job site shutdown or involving a fatality; and
- (c) A basis exists to believe that the employee was under the influence of a drug or alcohol at the time of the accident.

5. Adulterated, Substituted or Diluted Specimens:

This Substance Abuse Prevention Policy adheres to guidelines established in SAMHSA Public Document 035 dated September 28, 1998, for determining the validity of a specimen. This guideline is consistent with the Department of Transportation (DOT) regulations (49 CFR Part 40 and 382) that permit laboratories to conduct additional tests to determine the validity of a specimen.

An employee/applicant submitting a specimen for which an approved testing laboratory reports the existence of an “adulterant,” “interfering substance” and/or “masking agent” or the sample is identified as a “substituted specimen” will be deemed a violation of the PSA and Policy and will be processed as if the test result were positive. Those employees/applicants for whom the testing laboratory reports an “adulterated,” “interfering substance,” “masking agent” or “substituted” specimen will be prohibited from the Project for not less than ninety (90) calendar days and the employee/applicant shall be required to show certification of rehabilitation of satisfactory participation in a Substance Abuse Prevention Coordinator-approved rehabilitation program, not at the expense of the Contractor or Owner, as a condition of the employee’s return to work at that time.

The guideline issued in PD 035, in the SAMHSA September 28, 1998, memo uses the following reporting protocols:

- (a) Adulterated Specimen: PD 035 includes three definitions for Adulterated:
 - (i) If the nitrite concentration is equal to or greater than 500 mcg/mL.
 - (ii) If the pH is less than or equal to 3, or if it is greater than or equal to 11.
 - (iii) If a foreign substance is present, or if an endogenous substance (one that is normally found in urine) is present at a concentration greater than the normal physiological concentration.
- (b) Substituted Specimen: one that has a creatinine reading of less than or equal to 5mg/dL and a specific gravity less than or equal to 1.001 or greater than or equal to 1.020. These specimens do not exhibit the clinical signs or characteristics associated with normal urine.
- (c) Dilute Test: Protocol covering diluted specimens will follow guidelines established by SAMSHA PD 035 in its memo dated September 28, 1998. Specimens identified by the testing laboratory as dilute will require the employee/applicant to submit to an observed test. Refusal to retest or noncompliance with drug testing procedures will result in the employee/applicant being prohibited from working on the Project for ninety (90) calendar days, and the employee/applicant will be required to successfully complete a Substance Abuse Prevention Coordinator-approved rehabilitation program at his/her own expense as a condition of the employee’s return to work at that time.

A “dilute specimen” is defined as: “one that has creatinine reading less than 20 mg/dL, but greater than 5mg/dL, and a specific gravity less than 1.003 but greater than 1.001.

6. Project:

The Project is defined as any construction activity that is undertaken under the terms of the City of Hayward Community Workforce Agreement.

IDENTIFICATION AND CONSENT PROCEDURE

1. When a prospective employee or dispatched worker arrives at the job site for potential employment, he/she will be shown and sign a copy of the Pre-Employment Substance Abuse Prevention Testing Consent/Waiver Form attached as Appendix D before taking a pre-employment drug or alcohol screening test. An employee who is working on the Project and has submitted to the pre-employment drug and alcohol test and has tested negative may thereafter be required to submit to drug or alcohol testing only if the Contractor has “reasonable cause” to believe that the employee is under the influence of drugs or alcohol in violation of this Policy or in connection with an accident as set out above in this Policy. The Contractor may order urine (or in the case of alcohol, breathalyzer) testing only.

2. If a management representative (preferably not in the bargaining unit) makes observations of an employee which may constitute reasonable cause for drug or alcohol testing, the supervisor shall immediately take the following actions:
 - A. Inform the employee that he/she may have a Union Representative present, if reasonably available. The employee will be shown the Substance Abuse Prevention Testing Consent/Waiver Form attached as Appendix B.
 - B. Fill out the Incident Report Form, including a statement of the specific facts constituting reasonable cause to believe that the employee is under the influence of drugs or alcohol, and the name of the person(s) making the supporting observations.
 - C. Provide a completed copy of this Incident Report Form to the employee before he/she is required to be tested (and one copy made available to the Union Representative, if present). After being given a copy of the Incident Report Form, the employee will be allowed enough time to read the entire document, to understand the reasons for the test.
 - D. Provide the employee with an opportunity to provide an explanation of his/her condition, including providing evidence (e.g., doctor’s prescription or note, or prescription container) or existing medical treatment or reaction to a prescribed drug. If available, the Union Representative shall be present during such explanation and will be entitled to confer with the employee before the explanation is required.
 - E. If the Management representative(s), after observing the employee, and hearing any explanation, concludes that there is in fact reasonable cause to believe that the employee is under the influence of drugs or alcohol, the employee may be ordered to submit to a drug and/or alcohol test and will be asked to sign the Consent/Waiver Form attached as Appendix B.

3. Failure to follow any of these procedures will result in the elimination of the test results as if no test had been administered; the test results will be destroyed and no discipline shall be imposed against the employee. Refusal of the employee to submit to the test where these procedures have been followed

will be treated as a positive test and subject the employee to discipline including removal from the Project and discharge.

4. Unless there is reason to believe that the person being tested has previously altered a sample or unless there is agreement in writing, an individual will be allowed to provide the required specimen in the privacy of a stall or partitioned area.

5. A worker initially dispatched to a Project job site where this Policy is in effect will be required to submit to testing for illegal drugs or alcohol as defined in the Policy. The testing of such workers must be conducted in compliance with the "Drug Testing Procedures" described in this Policy, and be required of dispatched workers only on the first day of reporting to the initial job site. The urine drug and alcohol testing of these dispatched workers is the only testing allowed under this Policy, other than for "reasonable cause" or in connection with an accident as set out above in this Policy. Notwithstanding this provision, if a rehabilitation program or drug treatment program determines that periodic testing is appropriate or necessary for the employee who has tested positive under this Policy, then that employee will be subject to future urine drug testing as recommended by the rehabilitation program.

Except as set out in the Notice provision above, a worker initially dispatched to such job site who refuses to submit a urine sample for drug/alcohol testing will not be entitled to show-up pay for that day, and will be denied employment on the Project for a period of ninety (90) calendar days. If a worker who has refused a test returns to the same job site within ninety (90) calendar days, and is denied work, that worker will not be entitled to show-up pay. If a worker initially dispatched to the job site refuses to submit a urine sample or to take a breathalyzer test for drug/alcohol testing, and that worker is denied employment for ninety (90) calendar days this action will not be grievable under the CWA. If the worker tests negative for drugs and alcohol, he/she will not be drug tested again while employed by the Contractor at any job site except for reasonable cause or post-accident as described in this Policy.

6. If the Contractor has reasonable cause to believe an employee is under the influence of drugs or alcohol, or requires a post accident drug or alcohol test, as set forth in this Policy, and the employee refuses to submit to a drug test, the refusal shall be treated as a positive test result and the employee/applicant shall be subject to discipline, including removal from the Project and discharge.

7. The following rules control the pay for dispatched workers tested on the first day of their employment:

- A. A dispatched worker who is put to work immediately after having passed the test shall be paid starting at the time the worker reported for the test(s).
- B. Where a contractor requests a dispatched worker to report for purposes of a pre-hire substance abuse test, and does not intend to place the worker in an active work position

on that day, the worker shall receive four (4) hours of pay at the regular straight-time hourly rate if the test is negative.

- C. If the dispatched worker is not allowed to work until the results of the drug test are received, and the test results are positive, the dispatched worker is not entitled to any form of pay (including show-up pay).
- D. If the dispatched worker is put to work, that dispatched worker is entitled to pay and benefits under the CWA for all hours worked, regardless of the results of the drug test.
- E. Where a Contractor fails to provide notice, pursuant to this Policy, to the Union hiring hall that the job site is a drug and alcohol testing site, a dispatched worker who refuses to take the pre-employment test will be paid two hours show-up pay, except that no dispatched worker will be hired without having taken a pre-employment drug test.

DRUG TESTING PROCEDURES

1. The testing shall be done at a certified laboratory located in California. The parties retain the right to inspect the laboratory to determine conformity with the standards described in this Policy. The laboratory will only test for alcohol and the illegal drugs listed in the Definition Section of this Policy and Appendix A. All testing will be at the Contractor's expense.

Testing procedures, including controlled substance to be tested, specimen collection, chain of custody and threshold and confirmation test levels shall comport with the Mandatory Guidelines For Federal Workplace Testing Programs established by the U.S. Department of Health and Human Services, as amended and the Federal Motor Carrier Safety Act regulations, where applicable. Controlled substance tests shall be conducted only by laboratories licensed and approved by SAMHSA which comply with the American Occupational Medical Association (AOMA) ethical standards. Controlled substance tests shall be by urinalysis and shall consist of two procedures, a screen test (EMIT or equivalent) and if that is positive, a confirmation test (GC/MS). Alcohol test shall be by breathalyzer. Any test revealing a blood/alcohol level equal to or greater than 0.08 percent, or the established California State standard for non-commercial motor vehicle operations, or when operating a moving vehicle or crane any test revealing a blood/alcohol level equal to or greater than 0.04 percent, or the established California State standard for commercial motor vehicle operations, shall be positive and will be conducted under procedures consistent with California state law.

An employee/applicant presenting himself/herself at a Substance Abuse Prevention Coordinator-approved drug collection site must have a minimum of one piece of government-issued photo identification and may not leave the collection site for any reason – unless authorized by the collection agency – until he/she has fully completed all collection procedures. Failure to follow all collection procedures will result in the employee/applicant being classified as “refusing to test” and

being prohibited from working on the Project for a minimum of ninety (90) calendar days from the date of the scheduled test.

At the time the urine specimens are collected two (2) separate samples shall be placed in separate sealed containers. One (1) of the samples collected in a separate container shall be kept refrigerated at the site where the sample is given. Upon request, this second sample shall be made available to the employee for testing by a certified laboratory selected by the employee at the employee's expense.

2. The specific required procedure is as follows:
 - A. Urine will be obtained directly in a tamper-resistant urine bottle. Alternatively, the urine specimen may be collected at the employee's option in a wide-mouthed clinic specimen container that must remain in full view of the employee until transferred to, sealed and initialed, in separate tamper-resistant urine bottles.
 - B. Immediately after the specimen is collected, it will be divided into two (2) urine bottles which, in the presence of the employee, will be labeled and then initialed by the employee and witness. If the sample must be collected at a site other than the drug and/or alcohol-testing laboratory, the specimens must then be placed in a transportation container. The container shall be sealed in the employer's presence and the employee must be asked to initial or sign the container. The container will be sent to the designated testing laboratory on that day or the earliest business day by the fastest available method.
 - C. A chain of possession form must be completed by the hospital, laboratory and/or clinic personnel during the specimen collection and attached to and mailed with the specimens.
3. The initial test of all urine specimens will utilize immunoassay techniques. All specimens identified as positive in the initial screen must be confirmed utilizing gas chromatography/mass spectrometry (GC/MS) technique that identifies at least three (3) ions. In order to be considered "positive" for reporting by the laboratory to the employer, both samples must be tested separately in separate batches and must also show positive results on the GC/MS confirmatory test.
4. All positive drug, alcohol or adulterant test results must be reported to a Medical Review Officer (MRO) appointed by the designated laboratory. The MRO shall review the test results and disclosure made by the employee/dispatched worker and shall attempt to interview the employee/dispatched worker to determine if there is any physiological or medical reason why the result should not be deemed positive. If no extenuating reasons exist, the MRO shall designate the test positive. The MRO shall make good faith efforts to contact the employee/dispatched worker, but failing to make contact within two (2) working days, may deem the employee/dispatched worker's result a "lab positive." After the issuance of a "lab positive," the employee/dispatched worker will be barred

from the Project until the employee/dispatched worker makes contact with the MRO and the MRO sends the Substance Abuse Prevention Coordinator a written confirmation of the negative result.

5. If the testing procedures confirm a positive result, as described above, the employee/dispatched worker and the Substance Abuse Prevention Coordinator will be notified of the results in writing by the MRO, including the specific quantities. If requested by the employee or the Union (within the written consent of the member), the laboratory will provide copies of all laboratory reports, forensic opinions, laboratory work sheets, procedure sheets, acceptance criteria and laboratory procedures.
6. In the event of a positive drug or alcohol test, an automatic confirmation test will be performed on the original specimen by the testing laboratory at no cost to the employee. In addition, the testing laboratory shall preserve a sufficient specimen to permit an independent re-testing at the request of the employee at his/her expense. Re-tests may be conducted by the same or any other approved laboratory. The laboratory shall endeavor to notify the MRO of positive drug, alcohol or adulterant test results within five (5) working days after receipt of the specimen. The employee may request a re-test within five (5) working days from notice of a positive test result by the MRO. Costs of re-tests will be paid in advance by the requesting party.
7. The Substance Abuse Prevention Coordinator shall ensure that all specimens confirmed positive will be retained and placed in properly secured long-term frozen storage for a minimum of one (1) year, and be made available for retest as part of any administrative proceedings.
8. All information from an employee's or dispatched worker's drug and alcohol test is confidential for purposes other than determining whether this Policy has been violated. Disclosure of test results to any other person, agency, or organization is prohibited unless written authorization is obtained from the employee or dispatched worker. The results of a positive drug test shall not be released until the results are confirmed.
9. Every effort will be made to ensure that all employee substance abuse problems will be discussed in private and actions taken will not be made known to anyone other than those directly involved in taking the action, or who are required to be involved in any disciplinary procedure, and those persons will be identified in writing at the time of the procedure.

No laboratory or medical test results will appear in the employee's Personnel File. Information of this nature will be kept in a separate confidential file.

All necessary measures shall be taken to keep the fact and the results of the test confidential.

CONSEQUENCES FOR VIOLATING THE RULES AND PROVISIONS OF THIS POLICY

1. Prospective or dispatched workers: Dispatched workers who test positive to the pre-employment drug and alcohol test conducted pursuant to this Policy will be denied employment by the Contractor until the test is confirmed to the dispatched worker in writing. Dispatched workers will be informed in writing if they are rejected on the basis of a confirmed positive drug test result. A dispatched worker may utilize the CWA grievance procedure to challenge the validity of a positive test result.

2. Employees: If the initial results of a drug or alcohol test administered by the Contractor show that the employee was under the influence of drugs or alcohol while on duty, the employee will be removed from the Project until the test results have been confirmed by the procedures contained in this Policy.
 - (a) If the final test is negative, the employee will be reinstated with full back pay for lost time.

 - (b) If the initial positive test result is confirmed, the employee will be barred from the Project effective the date and time of the collection of the test specimen. The employee is subject to termination, subject to the provisions of the section below.

 - (c) Discipline imposed for a first positive test for an employee subjected to reasonable-cause testing, or subject to post-accident testing when in fact drugs or alcohol played no role in the accident, and any grievance filed in response thereto, will be held in abeyance pending voluntary participation by the employee in a Substance Abuse Prevention Coordinator-approved treatment program during an unpaid leave of absence.

 - (d) The employee may return to work if work is available after a certificate of either rehabilitation or satisfactory participation in the program. If the program determines that periodic testing is appropriate or necessary, the employee will be subject to future urine drug or alcohol testing, even on a random basis.

 - (e) If the employee successfully completes or participates in such a program or is not disciplined for substance use, possession or being under the influence of drugs or alcohol for twenty-four (24) months following the initial confirmed positive test, the discipline shall be revoked.

 - (f) A second positive test will result in the imposition of discipline, including termination and removal from the Project and the lifting of any suspension regarding discipline imposed for a first test less than twenty-four (24) months preceding the date of the second positive test.

NOTICE AND CONSENT/WAIVER FORMS

Employees must execute a written consent and waiver to submit to the drug and alcohol tests and for the testing laboratory to release the report of test results to the Contractor. The individual to be tested will sign the form attached as Appendix D at the time of submitting to a pre-employment test and the form attached as Appendix B for any subsequent test. Signing the Content/Waiver Form will not waive any individual rights available to the employee under federal or state law. The employee must also sign at the time of employment the Notice Form, attached as Appendix C, describing the employee's obligations under this Uniform Substance Abuse Prevention Policy.

SUBSTANCE ABUSE PREVENTION COORDINATOR

The City will designate a Substance Abuse Prevention Coordinator from candidates nominated by the parties to the CWA to monitor compliance with this Policy and to provide assistance to Project employees with questions concerning drugs or alcohol test procedures, availability of approved counseling or rehabilitation or any other drug or alcohol matters. All inquiries to the Coordinator will be confidential. The parties are eager to help employees with drug and alcohol problems. The Coordinator will be prepared to assist employees in discussing insurance coverage and locating available counseling, rehabilitation and community resources.

SUPERVISOR TRAINING

The Contractor shall develop and implement a program of training to assist management representatives and stewards in identifying factors which constitute reasonable cause for drug testing, as well as a detailed explanation and emphasis on the terms and conditions of the Policy.

EMPLOYEE VOLUNTARY SELF-HELP PROGRAM

An employee who engages in drug/alcohol abuse is encouraged to participate in an Employee Voluntary Self-Help Program. Employees who seek voluntary assistance for alcohol and/or substance abuse not arising out of or in connection with the occurrence of any testing incident or related disciplinary action may not be disciplined for seeking such assistance. Request by employees for such assistance shall remain confidential and shall not be revealed to other employees or management personnel without the employee's consent. Such Voluntary Self-Help Program will not be at the expense of the Contractor. An Employee Self-Help Program Counselor shall not disclose information on drug/alcohol use received from an employee for any purpose or under any circumstances, unless specifically authorized in writing by the employee.

The Contractor shall offer an employee affected by alcohol or drug dependency an unpaid medical leave of absence, for the purpose of enrolling and participating in a drug or alcohol rehabilitation program. Any employee who voluntarily submits to such Voluntary Self-Help Program may return to employment on the Project upon successful completion of such a program, or upon a certification of rehabilitation and satisfactory participation in such a program, and provide that the employee passes a drug and alcohol test upon return to the Project and agrees for a period of one (1) year thereafter, to submit to periodic drug and alcohol testing, which shall be conducted in addition to any reasonable cause or post-accident testing otherwise conducted, if considered appropriate or necessary by the rehabilitation program.

The Substance Abuse Prevention Coordinator will work with the signatory Unions to develop an "approved" list of counseling and rehabilitation programs to be used by the employees/dispatched workers who test positive for illegal drugs, alcohol, adulterants or misuse of prescription drugs. The cost of counseling and rehabilitation will not be the responsibility of the Contractor.

GRIEVANCE PROCEDURE

All disputes concerning the interpretation or application of the Policy shall be subject to the grievances procedure established by the CWA. Nothing in the grievance procedure may void this Uniform Substance Abuse Policy from continued utilization on Project work.

SAVINGS CLAUSE

The establishment or operation of this Policy shall not curtail any right of any employee found in any law, rule or regulation. Should any part of the Policy be determined contrary to law, such invalidation of that part or portion of the Policy will not invalidate the remaining portions. In the event of such determination, the parties to the CWA agree to meet promptly to commence negotiations concerning the provision affected by such decision for the purpose of achieving conformity with the requirements of the applicable law and the intent of the parties hereto.

TERM OF THE POLICY

This Policy constitutes the only agreement in effect between the parties to the CWA concerning drug abuse, prevention and drug testing. No revisions or amendments will be made to this Policy except with the written approval of the parties hereto. This Policy shall become effective for all work covered by the CWA upon the effective date of the CWA and shall remain in effect for the duration of the CWA unless terminated or amended by the mutual consent of the parties hereto.

The parties to the CWA agree to meet on an annual basis to review this Policy, to bring it into compliance with the law, if necessary, and to review other considerations which may arise during the course of the CWA. Changes in this Policy may be made only if mandated by law or agreed upon by the parties.

APPENDIX A
SUBSTANCE ABUSE PREVENTION AND DETECTION
THRESHOLD LEVELS

CONTROLLED SUBSTANCE*	SCREENING METHOD	SCREENING LEVEL**	CONFIRMATION METHOD	CONFIRMATION LEVEL
Amphetamines	EMIT	1000 ng/ml	GC/MS	500 ng/ml**
Barbiturates	EMIT	300 ng/ml	GC/MS	200 ng/ml
Benzodiazepines	EMIT	300 ng/ml	GC/MS	300 ng/ml
Cocaine	EMIT	300 ng/ml**	GC/MS	150 ng/ml**
Methadone	EMIT	300 ng/ml	GC/MS	100 ng/ml
Methaqualone	EMIT	300 ng/ml	GC/MS	300 ng/ml
Opiates	EMIT	2000 ng/ml**	GC/MS	2000 ng/ml**
PCP (Phencyclidine)	EMIT	25 ng/ml**	GC/MS	25 ng/ml**
THC (Marijuana)	EMIT	50 ng/ml**	GC/MS	15 ng/ml **
Propoxyphene	EMIT	300 ng/ml	GC/MS	100 ng/ml
Alcohol	EMIT	0.08 or 0.04% as required	GC/MS	0.08 or 0.04% as required

*All controlled substances including their metabolite components.

** SAMHSA specified threshold

*** A sample reported positive contains the indicated drug at or above the cutoff level for that drug. A negative sample either contains no drug or contains a drug below the cutoff level. Testing levels may be changed to meet revised industry standards subject to mutual agreement.

EMIT - Enzyme immunoassay

GC/MS – Gas Chromatography/Mass Spectrometry

**APPENDIX B
EMPLOYEE DRUG TEST
CONSENT/WAIVER FORM**

TO: (Name of Contractor/Employer) _____
 FOR: (Project Name) _____
 Name of Dispatched Worker/Employee: _____
 Social Security Number: _____
 Home Address: _____
 City: _____ State: _____ Zip Code: _____
 Home Telephone: _____ Other Phone Numbers: _____

Consent for Testing

I (name) _____ understand that my Employer has determined that there is probable cause to believe that I have been working at the job site under the influence of alcohol or drugs. In response to this, my Employer requires that I provide a urine (or breathalyzer) sample as is allowed under the Project drug testing policy.

These tests will be used to detect the presence of alcohol, marijuana and/or other drugs in my body. I understand that if these drugs are found to be present in my body that I will be subject to discipline including discharge from employment.

I hereby consent and agree to give specimens of my urine or to take the breathalyzer test. **My refusal to provide such a specimen or take such a test will lead to termination of my employment.**

All charges for these tests will be paid for by the Employer and not by me.

Waiver: The results of any test I am required to take may be furnished, in accordance with the terms of this policy, to the Medical Review Officer, the Substance Abuse Prevention Coordinator and my employer. The company may inform the Union that I failed the test only if a grievance is filed in my behalf.

I have read and understood and agree to the above:

Witness Signature

Employee Signature

Date

Date

APPENDIX C
UNIFORM SUBSTANCE ABUSE PREVENTION POLICY NOTICE FORM

The City of Hayward CWA Substance Abuse Prevention Policy requires that:

- Use, possession or the sale of controlled substances at the Project site is prohibited. Employees engaged in the sale, purchase or use of illegal drugs during the employee's working hours will be subject to immediate termination, removed from the Project and not be eligible for rehire.
- Conviction for selling illegal drugs, while employed on this Project, even if off the Project, will cause me to be barred from the Project and will subject me to discipline, including discharge.
- Use of prescribed or over-the-counter medication is permitted if it will not affect work performance.
- If prescribed or over-the-counter medication may cause a safety risk, I must notify my Contractor/Employer prior to using such substances on the job.
- If I refuse to submit to pre-employment screening/testing for controlled substances and alcohol as requested by the Contractor in accordance with the terms of the Policy, I will not be eligible to retake the drug test for ninety (90) calendar days. I understand that nobody will be hired on the Project without taking and passing such a test.
- The presence of an adulterant in my system at or above the defined threshold levels will make me ineligible for employment, or will result in the termination of my employment and ineligibility for reemployment, for at least ninety (90) calendar days.
- I will not be hired if I fail the test because an illegal drug or alcohol is found in my system, and I will not be eligible to be employee for ninety (90) calendar days and unless I have participated successfully in a drug or alcohol rehabilitation program.
- I may be terminated for failing a drug or alcohol test, and I will be required to complete an approved counseling or rehabilitation program and to agree to periodic testing at that program's request in order to return to work.

I sign this acknowledgement voluntarily, with full knowledge and understanding of the City of Hayward CWA Substance Abuse Prevention Program and I agree to be bound by its terms.

(Employee Name)

Print _____

Signature _____

Date _____

Contractor/Company Name

**APPENDIX D
CITY OF HAYWARD CWA
PRE-EMPLOYMENT DRUG TEST
CONSENT/WAIVER FORM**

TO: (Name of Contractor/Employer) _____
 FOR: (Project Name) _____
 Name of Dispatched Worker/Employee: _____
 Social Security Number: _____
 Home Address: _____
 City: _____ State: _____ Zip Code: _____
 Home Telephone: _____ Other Phone Numbers: _____

Consent for Testing

I (name) _____ understand that the City of Hayward Project to which I have been dispatched, or for which I am seeking employment, requires pre-employment drug and alcohol testing. The company to which I have been dispatched requires that I take and pass this test prior to commencing employment.

These tests will be used to detect the presence of alcohol, marijuana and/or other drugs in my body. I understand that if these drugs are found to be present in my body that I will be ineligible for employment on the Project and will not be able to take a new drug or alcohol test for ninety (90) days.

I hereby consent and agree to give specimens of my urine. **My refusal to provide such a specimen will prevent me from gaining employment on the Project for ninety (90) days.**

All charges for these tests will be paid for by the Employer and not by me.

Waiver: The results of any test I am required to take may be furnished, in accordance with the terms of this policy, to the Medical Review Officer, the Substance Abuse Prevention Coordinator and my employer. The company may inform the Union that I failed the test only if a grievance is filed in my behalf.

I have read and understood and agree to the above:

Witness Signature

Prospective/Dispatched Worker

Date

Date

APPENDIX E INCIDENT REPORT FORM

Employer _____
 Employee involved _____
 Date of Incident _____ Time of Incident _____
 Location of Incident _____
 Employee's Job Assignment/Position _____
 Has employee been notified of his/her right to Union Representation? _____
 Date/Time notified _____
 Employee's Initials _____
 Witness to incident _____

OBSERVATIONS:

EMPLOYEE'S EXPLANATION:

Action Recommended:

Action Taken:

Signature	Date	Signature	Date
Employee Representative		Union Representative (if present)	
Title		Title	
Date/Time Action taken: _____			

**PROJECT LABOR AGREEMENT
FOR THE CITY OF MARTINEZ**

INTRODUCTION/FINDINGS

This Project Labor Agreement is entered into this ____ day of _____, 2019, by and between the City of Martinez (hereinafter the “City”), together with contractors and subcontractors of all tiers, who shall become signatory to this Agreement by signing the **“Agreement to be Bound” (Addendum A)** (referred to collectively herein as the “Contractors/Employers”), and the Contra Costa County Building & Construction Trades Council (hereinafter the “Council”) and its affiliated local Unions that have executed this Agreement (referred to collectively herein as the “Union” or “Unions”).

The purpose of this Agreement is to promote the efficiency of construction operations for the City of Martinez through the use of skilled labor resulting in quality construction outcomes, and to provide for the peaceful settlement of labor disputes and grievances without strikes or lockouts, thereby promoting the public interest in assuring the timely and economical completion of the Project.

WHEREAS, the timely and successful completion of the Projects covered by this Agreement are of the utmost importance to meet the needs of the City and avoid increased costs resulting from delays in construction; and

WHEREAS, workers of various skills will be required in the performance of the construction work and will be represented by the Unions signatory to this Agreement and employed by contractors and subcontractors who are also signatory to this Agreement; and

WHEREAS, the use of skilled labor on construction work increases the safety of construction projects as well as the quality of completed work; and

WHEREAS, it is recognized that on Projects with multiple contractors and bargaining units on the job site at the same time over an extended period of time, the potential for work disruption may be substantial without an overriding commitment to maintain continuity of work; and

WHEREAS, the interests of the general public, the City, the Unions and the Contractors/Employers would be best served if the construction work proceeded in an orderly manner without disruption because of strikes, sympathy strikes, work stoppages, picketing, lockouts, slowdowns or other interferences with work; and

WHEREAS, the Contractors/Employers and the Unions desire to mutually establish and stabilize wages, hours and working conditions for the workers employed on the Projects covered by this Agreement to the end that a satisfactory, continuous and harmonious relationship will exist among the parties to this Agreement; and

WHEREAS, the parties agree that one of the primary purposes of this Agreement is to avoid the tensions that might arise on the Project if Union and nonunion workers of different employers were to work side by side on the Project, potentially leading to labor disputes that could delay completion of the Project; and

WHEREAS, this Agreement is not intended to replace, interfere with, abrogate, diminish or modify existing local or national collective bargaining agreements in effect during the duration of the Project, insofar as any legally binding agreement exists between the Contractors/Employers and the affected Union(s), except to the extent that the provisions of this Agreement are inconsistent with said collective bargaining agreements, in which event the provisions of this Agreement shall prevail; and

WHEREAS, the contract(s) for construction work on the Projects covered by this Agreement will be awarded in accordance with the applicable provisions of the California State Public Contract Code and all state, local and federal laws; and

WHEREAS, the City has the right to select the lowest responsive and responsible bidder for the award of Construction Contracts on the Project; and

WHEREAS, the City has determined that a project labor agreement will be beneficial to the Projects covered by this Agreement and will serve the City's interests as the proprietor of construction projects; and

WHEREAS, the City places high priority upon the development of comprehensive programs for the recruitment, training and employment of local area residents for both journey-and apprentice-level work, and military veterans, and recognizes the ability of local pre-apprenticeship and apprenticeship programs to provide meaningful and sustainable pathways to careers in the building and construction industry; and

WHEREAS, the parties to this Agreement pledge their full good faith and trust to work towards the mutually satisfactory completion of the Projects covered by this Agreement;

NOW, THEREFORE, IT IS AGREED BETWEEN AND AMONG THE PARTIES HERETO, AS FOLLOWS:

ARTICLE I **DEFINITIONS**

1.1 "Agreement" means this Project Labor Agreement.

1.2 "Agreement to be Bound" means the agreement (attached hereto and incorporated herein as Addendum A) that shall be executed by each and every Contractor(s)/Employer(s) as a condition of working on the Project.

1.3 "City" means the City of Martinez and its Mayor and City Council, officers, agents and employees, including managerial personnel.

1.4 "Completion" means that point at which there is Final Acceptance by the City of a Construction Contract and the City Council has filed a Notice of Completion.

1.5 "Construction Contract" means the public works or improvement contract(s) (including design-bid, design-build, lease-leaseback or other contracts under which construction of the Project is performed) awarded by the City that are necessary to complete a Project.

1.6 "Contractor(s)/Employer(s)" or "Contractor(s)" or "Employer(s)" means any individual, firm, partnership or corporation (including the prime contractor, general contractor, construction manager, project manager, design-build entity, lease-leaseback entity or equivalent entity), or

combination thereof, including joint ventures, and their successors and assigns, that is an independent business enterprise and enters into a contract with the City with respect to the construction of any part of the Project, under contract terms and conditions that are approved by the City and that incorporate this Agreement, and all contractors and subcontractors of any tier.

1.7 “Council” means the Contra Costa County Building & Construction Trades Council.

1.8 “Local Area” means the communities of the City of Martinez and Contra Costa County to be served by the Project.

1.9 “Master Agreement” or “Schedule A” means the Master Collective Bargaining Agreement of each craft Union signatory hereto.

1.10 “Project” means all construction projects awarded by the City that have an engineer’s estimate of or in excess of one million dollars (\$1,000,000); however, if the engineer’s estimate is under one million dollars (\$1,000,000) but over seven hundred and fifty thousand dollars (\$750,000), the City shall include language in its bid solicitation indicating that if the bid awarded for the project is over one million dollars (\$1,000,000), including any addenda or alternates, the project shall be covered by this Agreement. The City and the Council may mutually agree in writing to add additional projects or components to be covered by this Agreement. The term “Project” applies to all projects as defined in this section, whether used in the singular or plural herein.

1.11 “Project Manager” means the person(s) or business entity(ies) designated by the City to oversee all phases of construction on the Project and the implementation of this Agreement.

1.12 “Project Work” means construction performed on a Project as defined in Section 1.10, including work covered by Section 2.3 of this agreement and not excluded by Sections 2.3 or 2.4, that is within the craft jurisdiction of one or more of the Unions.

1.13 “Union” or “Unions” means the Contra Costa Building and Construction Trades Council and its affiliated Unions signatory to this Agreement, acting on their own behalf and on behalf of their respective affiliates and member organizations whose names are subscribed hereto and who have through their officers executed this Agreement.

ARTICLE II

SCOPE OF AGREEMENT

2.1 **Parties:** This Agreement shall apply and is limited to all Contractors/Employers performing Construction Contracts on the Project (including subcontractors at any tier), and their successors and assigns, the City, the Council and its affiliated Unions signatory to this Agreement.

2.2 **Applicability:** This Agreement shall govern all Construction Contracts awarded on a Project. For the purposes of this Agreement, Construction Contracts shall be considered Completed as set forth in Section 1.4, except when the City directs a Contractor to engage in repairs, warranty work, punch list work, or modifications under a Construction Contract or when a Contractor performs work under a change order for a Construction Contract.

2.3 **Covered Work:** This Agreement covers, without limitation, all on-site site preparation, surveying, construction, alteration, demolition, installation, improvement, remediation, retrofit, painting

or repair of buildings, structures and other works, and related activities for the Project that is within the craft jurisdiction of one of the Unions and that is directly or indirectly part of the Project, including, without limitation to the following examples, geotechnical and exploratory drilling, temporary HVAC, landscaping and temporary fencing, pipelines (including those in linear corridors built to serve the Project), pumps, pump stations, start-up, modular furniture installation, and final clean-up. Covered Work includes work done for the Project in temporary yards, dedicated sites, or areas adjacent to the Project, and at any on-site or off-site batch plant constructed to supply materials to the Project. Covered Work includes all soils and materials testing and inspection where such testing and inspection is a classification in which a prevailing wage determination has been published.

2.3.1 This Agreement applies to any of the following craft work: start-up, calibration, commissioning, performance testing, repair, maintenance, and operational revisions to systems and/or subsystems for the Project performed after Completion, unless performed by City employees.

2.3.2 This Agreement covers all on-site fabrication work over which the City, Contractor(s) or subcontractor(s) possess the right of control (including work done for the Project in any temporary yard or area established for the Project). This Agreement also covers any off-site work, including fabrication, that is traditionally performed by any of the Unions and is directly or indirectly part of the Project, provided such work is covered by a current Master Agreement or local addenda to a national agreement of the applicable Union(s) as of the date this agreement is effective.

2.3.3 Except for the delivery of supplies, equipment or materials that are stockpiled for later use, this Agreement covers all construction trucking work, including the hauling and delivery of ready-mix, asphalt, aggregate, sand, soil or other fill or similar material that is directly incorporated into the construction process as well as the off-hauling of soil, sand, gravel, rocks, concrete, asphalt, excavation materials, construction debris and excess fill, material and/or mud. Contractor(s)/Employer(s), including brokers, of persons providing construction trucking work shall provide certified payroll records to the City within ten (10) days of written request or as required by the bid specifications.

2.3.4 Work covered by this Agreement within the following craft jurisdictions shall be performed under the terms of their National Agreements as follows: the National Transient Lodge (NTL) Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, and the National Agreement of Elevator Constructors, and any instrument calibration work and loop checking shall be performed under the terms of the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, with the exception that Articles IV, XIII and XIV of this Agreement shall apply to such work.

2.4 Exclusions: Notwithstanding any other provision of this agreement, the following shall be excluded from Covered Work and the scope of this Agreement.

2.4.1 This Agreement shall not apply to a Contractor/Employer's non-construction craft employees, including, but not limited to, executives, managerial employees, supervisors above the level of general foreman (unless covered by a Master Agreement), administrative, office and clerical employees, engineering employees, architects, quality control/assurance personnel (unless covered by a Master Agreement), and guards.

2.4.2 This Agreement shall not apply to any non-Project work performed on, near, or leading to the Project site(s) that is undertaken by state, county, city, or other governmental bodies or

their contractors. Work performed by public or private utilities or their contractors including all electrical utility, voice-data video, and security installation work ahead of and up to the electrical service entry connection or the main point of entry into the building shall be excluded. All electrical utility, voice-data video, and security installation work performed after the electrical utility service entrance or the main point of entry shall be Covered Work. Additionally, all contracted work performed ahead of the service entrance connection and main point of entry that is inside the property line and that provides for access to a building via a conduit or series of conduits shall be Covered Work.

2.4.3 This Agreement shall not apply to off-site maintenance of leased equipment and on-site supervision of such work.

2.4.4 The City shall not be required to comply with this Agreement for any work performed with its own forces as permitted by the Public Contract Code.

~~2.4.5 This Agreement shall not apply to any maintenance work as defined by Public Contract Code section 22002(d), or any street maintenance that is routine and recurring work for the preservation and protection of streets.~~

~~2.4.6~~2.4.5 In limited circumstances involving a manufacturer's warranty or guarantee, or requiring special knowledge of a particular item, work may be performed by persons not covered by this Agreement provided that the Contractor/Employer or manufacturer responsible for such work demonstrates by an enumeration of specific tasks that the work cannot be performed by craft workers covered by this Agreement. All such work shall be identified and discussed by the Contractor/Employer or manufacturer at the Pre-Construction Conference as provided in Article V, or, if not known at the time of the Pre-Construction Conference, shall be identified and discussed with the Council and the relevant Union(s) once the work becomes known, including by holding a Pre-Construction Conference if requested by the Council.

~~2.4.7~~2.4.6 This Agreement shall not apply to work that is jointly performed with another public agency, unless the City is the lead agency, or the work is awarded by the City, or if application of this Agreement is otherwise agreed to by the Parties on a case by case basis. With respect to work jointly performed with another public agency properly excluded under this Section, the City will make a request, in writing, to the other public agency to apply this Agreement, or in the alternative, requesting that the other public agency meet with the City and the Council to discuss application of this Agreement.

~~2.4.8~~2.4.7 This Agreement shall not apply to work substantially funded by any federal, state, local or other public agency that prohibits the use of project labor agreements on projects receiving its funding, or the funding of projects on which such agreements are used. With respect to such work, the City agrees that it will make a reasonable effort to defend the application of this Agreement, including by making a written request to the funding source. However, should only a specific provision of the Agreement be prohibited by the funding source, then, upon mutual agreement of the Council, the City shall modify the requirements of this Agreement accordingly, to advance the purposes of this Agreement to the maximum extent feasible.

~~2.4.9~~2.4.8 This Agreement shall not apply to the programming, testing, and operation of computerized control systems if such work is not covered by a Master Agreement or is covered by a Master Agreement but properly excluded from Covered Work pursuant to Section 2.4.6.

2.5 Award of Contracts: It is understood and agreed that the City has the right to select any qualified bidder for the award of Construction Contracts under this Agreement. The bidder need only be willing, ready and able to execute and comply with this Agreement. It is further agreed that this Agreement shall be included in all invitations to bid or solicitations for proposals from contractors or subcontractors for work on the Project that are issued on and after the effective date of this Agreement. A copy of all invitations to bid shall be provided at time of issuance to the Council. This Agreement is not intended to, and shall not, affect or govern the award of public works contracts by the City that are not a part of a Project as defined by section 1.10.

2.6 Combining, Consolidating, or Canceling Project Work: The City has the absolute right to combine, consolidate, or cancel a Project or Project Work, however, if the City cancels a Project or Project Work and thereafter reauthorizes such work, then such work shall be performed under the terms and conditions of this Agreement.

ARTICLE III **EFFECT OF AGREEMENT**

3.1 By executing this Agreement, the Unions and the City agree to be bound by each and all of the provisions of the Agreement.

3.2 By accepting the award of work under a Construction Contract for the Project, whether as a Contractor/Employer or subcontractor thereunder, the Contractor/Employer agrees to be bound by each and every provision of the Agreement and agrees that it will evidence its acceptance prior to the commencement of work by executing the Agreement to be Bound (attached hereto and incorporated herein as Addendum A).

3.3 At the time that any Contractor/Employer enters into a subcontract with any subcontractor providing for the performance of work under a Construction Contract, the Contractor/Employer shall provide a copy of this Agreement to said subcontractor and shall require the subcontractor as a condition of accepting the award of a construction subcontract, to agree in writing by executing the Agreement to be Bound, to be bound by each and every provision of this Agreement prior to the commencement of work. The obligations of a Contractor may not be evaded by subcontracting.

3.4 This Agreement shall only be binding on the signatory parties hereto, and their successors and assigns, and shall not apply to the parents, affiliates, subsidiaries, or other ventures of any such party. Each Contractor/Employer shall alone be liable and responsible for its own individual acts and conduct and for any breach or alleged breach of this Agreement, except as otherwise provided by law or the applicable Schedule A. Any dispute between the Union(s) and the Contractor(s)/Employer(s) respecting compliance with the terms of the Agreement, shall not affect the rights, liabilities, obligations and duties between the Union(s) and other Contractor(s)/Employer(s) party to this Agreement.

3.5 It is mutually agreed by the parties that any liability by a Union signatory to this Agreement shall be several and not joint. Any alleged breach of this Agreement by a Union shall not affect the rights, liabilities, obligations and duties between the Contractor(s)/Employer(s) and the other Union(s) party to this Agreement.

3.6 The provisions of this Agreement, including the Schedule As incorporated herein by reference, shall apply to the work covered by this Agreement, notwithstanding the provisions of any

other local, area and/or national agreements which may conflict with or differ from the terms of this Agreement. To the extent a provision of this Agreement is inconsistent with a Schedule A, the provisions of this Agreement shall prevail. Where a provision of a Schedule A is not inconsistent with this Agreement, the provision of the Schedule A shall apply.

ARTICLE IV
WORK STOPPAGES, STRIKES, SYMPATHY STRIKES AND LOCKOUTS

4.1 The Unions, City, and Contractor(s)/Employer(s) covered by this Agreement agree that for the duration of the Project:

4.1.1 There shall be no strikes, sympathy strikes, work stoppages, picketing, handbilling, slowdowns, withholding of work, unlawful refusals to work, lockouts, sickouts, walk-offs, sit-downs, stand-ins, boycotts, or other work stoppages, or otherwise advising the public that a labor dispute exists, or slowdowns of any kind, for any reason, by the Unions or employees employed on the Project, at the job site of the Project or at any other City facility because of a dispute on the Project. Disputes arising between the Unions and Contractor(s)/Employer(s) on other City projects are not governed by the terms of this Agreement or this Article.

4.1.2 There shall be no lockout of any kind by a Contractor/Employer of workers employed on the Project.

4.1.3 Neither the Council nor local Unions may sanction, aid or abet, encourage or continue any work stoppage, strike, picketing or other disruptive activity prohibited by Section 4.1.1 at any Project site and shall undertake all reasonable means to prevent or to terminate any such activity. No employee shall engage in activities which violate this Article. Any employee who engages in activities that violate this Article shall be subject to disciplinary action, including discharge.

4.1.4 If a Master Agreement expires before the Contractor/Employer completes the performance of work under a Construction Contract, the Union agrees that it will not strike on work covered by this Agreement or engage in any work disruption as described in Section 4.1.1 and the Union and the Contractor/Employer agree that the expired Master Agreement shall continue in full force and effect for work covered under this Agreement until a new or modified Master Agreement is reached. If the new or modified Master Agreement provides that any terms of the Master Agreement shall be retroactive, the Contractor/ Employer agrees to comply with any retroactive terms of the new or modified Master Agreement that are applicable to employees who were employed on the Project during the interim, with retroactive payment due within seven (7) calendar days of the effective date of the new or modified Master Agreement.

4.1.5 In the case of nonpayment of wages or trust fund contributions on the Project, the Union shall give the City and the Contractor/Employer(s) three (3) business days' notice when nonpayment of trust fund contributions has occurred and two (2) business days' notice when nonpayment of wages has occurred or when paychecks being tendered to a financial institution normally recognized to honor such paychecks will not honor such paycheck as a result of insufficient funds, of the intent to withhold labor from the Contractor/Employer(s)' or their subcontractor's workforce, during which time the Contractor/Employer(s) shall have the opportunity to correct the default. In this instance, a Union's withholding of labor (but not picketing) from a Contractor/Employer who has failed to pay its fringe benefit contributions or failed to meet its weekly payroll shall not be considered a violation of this

Article.

4.1.6 If the City contends that any Union has violated this Article, it will so notify in writing (including e-mail) the Senior Executive of the Council and the Senior Executive of the Union, setting forth the facts alleged to violate the Article, prior to instituting the expedited arbitration procedure set forth below. The Council will immediately use its best efforts to cause the cessation of any violation of this Article. The leadership of the Union will immediately inform the worker(s) of their obligations under this Article. A Union complying with this obligation shall not be held responsible for the unauthorized acts of employees it represents.

4.2 Expedited Arbitration: Any party to this Agreement shall institute the following procedure, prior to initiating any other action at law or equity, when a breach of this Article is alleged to have occurred:

4.2.1 A party invoking this procedure shall notify David Weinberg, as the permanent arbitrator, or Robert Hirsch, as the alternate arbitrator, under this procedure. In the event that the permanent arbitrator is unavailable at any time, the alternate will be contacted. If neither is available, then a selection shall be made from the list of arbitrators in Section 13.4. Notice to the arbitrator shall be by the most expeditious means available, with notices by facsimile, email or telephone to the City and the party alleged to be in violation, and to the Council and involved local Union if a Union is alleged to be in violation.

4.2.2 Upon receipt of said notice, the City will contact the permanent arbitrator named above, or the alternate if the permanent arbitrator is not available, who will attempt to convene a hearing within twenty-four (24) hours if it is contended that the violation still exists.

4.2.3 The arbitrator shall notify the parties by facsimile, email or telephone of the place and time for the hearing. Said hearing shall be completed in one session, which, with appropriate recesses at the arbitrator's discretion, shall not exceed twenty-four (24) hours unless otherwise agreed upon by all parties. A failure of any party to attend said hearings shall not delay the hearing of evidence or the issuance of an award by the arbitrator.

4.2.4 The sole issue at the hearing shall be whether or not a violation of Section 4.1 of the Agreement has occurred. The arbitrator shall have no authority to consider any matter of justification, explanation or mitigation of such violation or to award damages, which issue is reserved for court proceedings, if any. The award shall be issued in writing within three (3) hours after the close of the hearing, and may be issued without a written opinion. If any party desires a written opinion, one shall be issued within fifteen (15) calendar days, but its issuance shall not delay compliance with or enforcement of the award. The arbitrator may order cessation of the violation of this Article and other appropriate relief and such award shall be served on all parties by hand or registered mail upon issuance. Should a party found in violation of this Article fail to comply with an Arbitrator's award to cease the violation, the party in violation shall pay to the affected party as liquidated damages the sum of ten thousand dollars (\$10,000.00) per shift for which it failed to comply, or portion thereof, until such violation is ceased. The Arbitrator shall retain jurisdiction to resolve any disputes regarding the liquidated damages claimed under this section.

4.2.5 Such award shall be final and binding and may be enforced by any Court of competent jurisdiction upon the filing of this Agreement and all other relevant documents referred to

above in the following manner. The party filing such enforcement proceedings shall give written notice to the other party. In the proceeding to obtain a temporary order enforcing the arbitrator's award as issued under this Article, all parties waive the right to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a proceeding for a final order or enforcement. The Court's order or orders enforcing the arbitrator's award shall be served on all parties by hand or delivered by certified mail.

4.2.6 Any rights created by statute or law governing arbitration proceedings inconsistent with the above procedure, or which interfere with compliance therewith, are waived by the parties.

4.2.7 The fees and expenses of the arbitrator shall be divided equally between the party instituting the arbitration proceedings provided in this Article and the party alleged to be in breach of its obligation under this Article.

4.2.8 Should either the permanent or the alternate arbitrator identified above no longer work as a labor arbitrator, the City and the Council shall mutually agree to a replacement.

ARTICLE V

PRE-CONSTRUCTION CONFERENCE

5.1 **Timing:** The Project Manager shall convene and conduct a pre-job conference with representatives of all involved Contractors/Employers, who shall be prepared to announce craft assignments and discuss in detail the scope of work and other issues as set forth below, and the Unions, at a location mutually agreeable to the Council, at least fourteen (14) calendar days prior to:

- (a) The commencement of any Project work, and
- (b) The commencement of Project work on each subsequently awarded Construction Contract.

5.2 The pre-construction conference shall be attended by a representative of each participating Contractor and each affected Union, and the Council and City may attend at their discretion.

5.3 The pre-construction conference shall include but not be limited to the following subjects:

- (a) A listing of each Contractor's scope of work;
- (b) The craft assignments;
- (c) The estimated number of craft workers required to perform the work;
- (d) Transportation arrangements;
- (e) The estimated start and completion dates of the work;
- (f) Discussion of pre-fabricated materials; and
- (g) Discussion of any items covered by Section 2.4.6.

5.4 **Review Meetings:** In order to ensure the terms of this Agreement are being fulfilled and all concerns pertaining to the City, the Unions and the Contractors are addressed, the Project Manager, General Contractor and Senior Executive of the Council, or designated representatives thereof shall meet on a periodic basis during any construction covered by this Agreement. The City or the Council

shall have the right to call a meeting of the appropriate parties.

ARTICLE VI
NO DISCRIMINATION

6.1 The Contractors/Employers and the Unions agree to comply with all antidiscrimination provisions of federal, state, and local law, to protect employees and applicants for employment, on the Project.

ARTICLE VII
UNION SECURITY

7.1 The Contractor/Employers recognize the Union(s) as the sole bargaining representative of all craft employees working within the scope of this Agreement.

7.2 All employees who are employed by Contractors/Employers to work on the Project will be required to become members and maintain membership in the appropriate Union on or before eight (8) days of consecutive or cumulative employment on the Project. Membership under this section shall be satisfied by the tendering of periodic dues and fees uniformly required to the extent allowed by law.

7.3 Authorized representatives of the Unions shall have access to the Project whenever work covered by this Agreement is being, has been, or will be performed on the Project.

ARTICLE VIII
REFERRAL

8.1 Contractor(s)/Employer(s) performing construction work on the Project shall, in filling craft job requirements, utilize and be bound by the registration facilities and referral systems established or authorized by the Unions signatory hereto. The Contractor(s)/Employer(s) shall have the right to reject any applicant referred by the Union(s), in accordance with the applicable Master Agreement.

8.2 Contractor(s)/Employer(s) shall have the unqualified right to select and hire directly all supervisors above the level of general foreman that it considers necessary and desirable, without such persons being referred by the Union(s), subject to Section 2.4.1.

8.3 In the event that referral facilities maintained by the Union(s) are unable to fill the requisition of a Contractor/Employer for employees within a forty-eight (48) hour period (Saturdays, Sundays and Holidays excluded) after such requisition is made by the Contractor/Employer, the Contractor/Employer shall be free to obtain the worker(s) from any source. A Contractor/Employer who hires a worker(s) to perform Covered Work on the Project pursuant to this section shall immediately provide the appropriate Union with the name and address of such employee(s) and shall immediately refer such employee(s) to the appropriate Union to satisfy the requirements of Article VII of this Agreement.

~~8.4 — Core Workers. A Contractor may request by name, and the local Union shall honor, referral of Core Workers who qualify as Local Area residents have applied to the local Union for Project Work and who demonstrate to the Union dispatcher and provide satisfactory proof that the worker meets all the following qualifications:~~

- ~~(a) Appearance on the Contractor's active payroll for at least sixty (60) of the last one hundred (100) working days prior to award of a Construction Contract;~~
- ~~(b) Possession of all licenses and certifications required by applicable state and federal law for the Project Work;~~
- ~~(c) Ability to safely perform the basic functions of the applicable trade as required by law; and~~
- ~~(d) Has worked at least one thousand (1,000) hours in the appropriate construction craft.~~

~~8.5 Prior to each Contractor performing any Project Work, such Contractor or subcontractor shall provide a list of its Core Workers to the City and the Council. Failure of such a Contractor to do so will result in that Contractor being prohibited from using any Core Workers on that Construction Contract. Upon request by any Party to this Agreement, the Contractor hiring any core workforce employee shall provide satisfactory proof (i.e., payroll records, quarterly tax records, and such other documentation) evidencing the worker's qualification as a Core Worker to the City and the Council.~~

~~8.6 Referral: The Contractor/Employer shall be allowed to employ five (5) Core Workers pursuant to the following methodology: The Union will first refer to such Contractor one of the Contractor's Core Workers and will then refer one employee from the applicable hiring hall. This alternating procedure shall repeat until such Contractor/Employer has hired five (5) Core Workers. Thereafter, all additional employees in the affected trade or craft shall be hired exclusively from the applicable hiring hall out of work list. For the duration of the Contractor's work, this ratio shall be maintained and when the Contractor's workforce is reduced, employees shall be reduced in reverse order and in the same ratio of Core Workers to hiring hall referrals as was applied in the initial hiring.~~

8.78.4 It is in the interest of the parties to this Agreement to facilitate employment of City of Martinez and Local Area residents and to use resources in the Local Area in construction of the Project. It is the objective of the parties that not less than twenty-five percent (25%) of all hours worked on the Project, including apprentice hours, be worked by residents of the Local Area. The Unions will exert their utmost efforts to recruit sufficient numbers of skilled craft persons to fulfill the requirements of the Contractor(s)/Employer(s). To the extent allowed by law, and consistent with the Unions' hiring hall provisions, and as long as they possess the requisite skills and qualifications, residents of the Local Area, including journeymen and apprentices, shall be referred for Project work covered by this Agreement.

ARTICLE IX

WAGES AND BENEFITS

9.1 The Contractors/Employers agree to pay contributions to the vacation, pension and/or other form of deferred compensation, apprenticeship, worker protection and assistance, and health benefit funds established by the applicable Master Agreement for each hour worked on the Project in the amounts designated in the Master Agreements of the applicable Unions.

9.2 By signing this Agreement, the Contractors/Employers adopt and agree to be bound by the written terms of the legally established Trust Agreements, as described in Section 9.1, which may from time to time be amended, specifying the detailed basis on which payments are to be made into, and benefits paid out of, such Trust Funds. The Contractors/Employers authorize the parties to such local

Trust Agreements to appoint trustees and successor trustees to administer the Trust Funds and hereby ratify and accept the trustees so appointed as if made by the Contractors/Employers. The Contractors/Employers agree to execute a separate Subscription Agreement(s) when such Trust Fund(s) requires such document(s).

9.3 Wages, Hours, Terms and Conditions of Employment: The wages, hours and other terms and conditions of employment on the Project shall be governed by the Master Agreement of the respective craft, to the extent such Master Agreement is not inconsistent with this Agreement. Where a subject is covered by the Master Agreement and not covered by this Agreement, the Master Agreement will prevail. When a subject is covered by both the Master Agreement and this Agreement, to the extent there is any inconsistency, this Agreement will prevail.

9.4 Holidays: Holidays shall be as set forth in the applicable Master Agreement.

ARTICLE X **APPRENTICES**

10.1 Recognizing the need to develop adequate numbers of competent workers in the construction industry, the Contractor(s)/Employer(s) shall employ apprentices from a California State-approved Joint Apprenticeship Training Program in the respective crafts to perform such work as is within their capabilities and which is customarily performed by the craft in which they are indentured.

10.2 The apprentice ratios will be in compliance with the provisions of the California Labor Code and the applicable state prevailing wage determination. \

10.3 The objective of the parties is that at least twenty-five percent (25%) of the apprentices employed on the Project will be from the Local Area. Contractor(s)/Employer(s) shall reach this goal through utilization of the normal hiring hall procedures. Unions are committed to working with the Contractors to achieve these goals. All Local Area apprentices referred to Contractors under this Agreement shall be enrolled in State of California-approved Joint Apprentice Training Programs.

10.4 Consistent with the Master Agreements, there shall be no restriction on the utilization of apprentices in performing the work of their craft provided they are properly supervised.

ARTICLE XI **HELMETS TO HARDHATS**

11.1 The Contractor(s)/Employer(s) and the Unions recognize a desire to facilitate the entry into the building and construction trades of veterans who are interested in careers in the building and construction industry. The Contractor(s)/Employer(s) and Unions agree to utilize the services of the Center for Military Recruitment, Assessment and Veterans Employment (the "Center"), and the Center's "Helmets to Hardhats" program to serve as a resource for preliminary orientation, assessment of construction aptitude, referral to apprenticeship programs or hiring halls, counseling and mentoring, support network, employment opportunities and other needs as identified by the parties.

11.2 The Unions and Contractor(s)/Employer(s) agree to coordinate with the Center to participate in an integrated database of veterans who are interested in working on the Project and of apprenticeship and employment opportunities for this Project. To the extent permitted by law, the

Unions will give credit to such veterans for bona fide, provable past experience.

ARTICLE XII **COMPLIANCE**

12.1 It shall be the responsibility of the Contractors/Employers and Unions to investigate and monitor compliance with Article IX of this Agreement. Nothing in this Agreement shall be construed to interfere with or supersede the usual and customary legal remedies available to the Unions and/or employee benefit Trust Funds to collect delinquent contributions from Contractors/Employers on the Project. The City shall monitor and enforce compliance with state prevailing wage requirements and the Contractors/Employers' compliance with this Agreement.

ARTICLE XIII **GRIEVANCE ARBITRATION PROCEDURE**

13.1 **Project Labor Disputes:** All disputes involving the application or interpretation of a Master Agreement to which a Contractor/Employer and a Union are parties shall be resolved pursuant to the resolution procedures of that Master Agreement. All disputes relating to the interpretation or application of this Agreement, other than disputes under Article IV and Article XIV, shall be subject to resolution by the grievance arbitration procedures set forth in this Article.

13.2 **Employee Discipline:** All disputes involving the discipline and/or discharge of an employee working on the Project shall be resolved through the grievance and arbitration provision contained in the Master Agreement for the craft of the affected employee. No employee working on the Project shall be disciplined or dismissed without just cause.

13.3 No grievance shall be recognized unless the grieving party (Local Union or District Council on its own behalf, or on behalf of an employee whom it represents, or a Contractor/Employer on its own behalf) provides notice in writing to the party with whom it has a dispute within five (5) business days after becoming aware of the dispute but in no event more than thirty (30) business days after it reasonably should have become aware of the event giving rise to the dispute. Time limits may be extended by mutual written agreement of the parties.

13.4 Grievances shall be settled according to the following procedures:

Step 1: Within five (5) business days after the receipt of the written notice of the grievance, the representative of the involved Union or District Council, or his/her designee, and the representative of the involved Contractor/Employer, shall confer and attempt to resolve the grievance.

Step 2: If the grievance is not resolved in Step 1, within five (5) business days of the Step 1 meeting, the grievance may be referred in writing by either party to the Business Manager(s) of the affected Union(s) and the Labor Relations Manager of the Employer(s) or the Manager's designated representative, for discussion and resolution. Regardless of which party has initiated the grievance, the Union(s) shall notify its International Union representative(s) prior to the Step 2 meeting, and the International Union representative(s) shall advise if it intends to participate. The Project Manager and the Council shall have the right to participate in any efforts to resolve the dispute at Step 2.

Step 3: If the grievance is not resolved in Step 2, either party may request the dispute be submitted to arbitration within five (5) business days of the Step 2 meeting, or the time

may be extended by mutual consent of both parties. Within five (5) business days after referral of a dispute to Step 3, the representatives shall refer the matter to the permanent arbitrator designated in Article IV, or if he is not available, the alternate arbitrator designated in Article IV, for final and binding arbitration. If the permanent arbitrator or the alternate is not available, an arbitrator shall be selected by the alternate striking method from the list of three (3) below. The order of striking names from the list of arbitrators shall be determined by a coin toss, the winner of which shall decide whether they wish to strike first or second.

1. Barry Winograd
2. Carol Vendrillo
3. Katherine Thomson

13.5 The decision of the Arbitrator shall be final and binding on all parties. The Arbitrator shall have no authority to change, amend, add to or detract from any of the provisions of the Agreement. The expense of the Arbitrator shall be borne equally by both parties. The Arbitrator shall arrange for a hearing on the earliest available date from the date of his/her selection. A decision shall be given to the parties within five (5) calendar days after completion of the hearing unless such time is extended by mutual agreement. A written opinion may be requested by a party from the presiding Arbitrator.

13.6 The time limits specified at any step of these grievance procedures may be extended by mutual agreement of the parties. However, failure to process a grievance, or failure to respond in writing within the time limits provided above, without an agreed upon extension of time, shall be deemed a waiver of such grievance without prejudice, or without precedent to the processing of and/or resolution of like or similar grievances or disputes.

13.7 In order to encourage the resolution of disputes and grievances at Steps 1 and 2, the parties agree that such settlements shall not be precedent setting.

13.8 Retention: In the event of a pending grievance regarding unpaid wages or benefits, the Council may request, that the City withhold retention payments and/or require the Contractor/Employer involved in the grievance to obtain a bond sufficient to cover the potential damages. However, the City may decline to withhold retention payments subject to the terms of the applicable Construction Contract.

13.9 Should any of the arbitrators listed in this Article or Article IV no longer work as a labor arbitrator, the City and the Council shall mutually agree to a replacement.

ARTICLE XIV

WORK ASSIGNMENTS AND JURISDICTIONAL DISPUTES

14.1 The assignment of Covered Work will be solely the responsibility of the Contractor/Employer performing the work involved; and such work assignments will be in accordance with the Plan for the Settlement of the Jurisdictional Disputes in the Construction Industry (the "Plan") or any successor Plan.

14.2 All jurisdictional disputes on this Project between or among the building and construction trades Unions and the Employers parties to this Agreement, shall be settled and adjusted according to the present Plan established by the Building and Construction Trades Department or any other plan or method of procedure that may be adopted in the future by the Building and Construction

Trades Department. Decisions rendered shall be final, binding and conclusive on the Employers and Unions parties to this Agreement.

14.3 If a dispute arising under this Article involves the Northern California Carpenters Regional Council or any of its subordinate bodies, an Arbitrator shall be chosen by the procedures specified in Article V, Section 5 of the Plan from a list composed of John Kagel, Thomas Angelo, Robert Hirsch and Thomas Pagan, and the Arbitrator's hearing on the dispute shall be held at the offices of the California State Building and Construction Trades Council in Sacramento, California within fourteen (14) calendar days of the selection of the Arbitrator. All other procedures shall be as specified in the Plan.

14.4 All jurisdictional disputes shall be resolved without the occurrence of any strike, work stoppage, or slow-down of any nature, and the Contractor/Employer's assignment shall be adhered to until the dispute is resolved. Individual employees violating this section shall be subject to immediate discharge.

14.5 Each Contractor/Employer will conduct a pre-job conference with the Council prior to commencing work. The Project Manager and the City will be advised in advance of all such conferences and may participate if they wish. Pre-job conferences for different Contractors/Employers may be held together.

ARTICLE XV **MANAGEMENT RIGHTS**

15.1 Consistent with the Schedule A agreements, the Contractor(s)/Employer(s) shall retain full and exclusive authority for the management of their operations, including the right to direct their work force in their sole discretion. No rules, customs or practices shall be permitted or observed which limit or restrict production, or limit or restrict the working efforts of employees, except that lawful manning provisions in the Master Agreement shall be recognized.

15.2 In addition to the rights of Contractors/Employers specifically enumerated in this Agreement, Contractors/Employers expressly reserve their management rights and all the rights conferred upon them by law, consistent with the Schedule A agreements, including but not limited to, the right to:

- i. Plan, direct and control operations of all work;
- ii. Hire, promote, transfer and layoff their employees, as deemed appropriate to satisfy work and/or skill requirements;
- iii. Promulgate and require all employees to observe reasonable, uniformly applicable job rules and security and safety regulations;
- iv. Discharge, suspend or discipline their employees, subject to applicable Master Agreement procedures;
- v. Utilize, in accordance with the City's approval, any work methods,

procedures or techniques;

- vi. Except as set forth Section 2.3.2, Contractors/Employers may select, purchase and use materials, equipment and systems from any source, and this Agreement does not limit or restrict the installation of equipment, machinery, package units, factory pre-cast, prefabricated or preassembled materials, tools, or other labor-saving devices;
- vii. Assign and schedule work at their discretion; and
- viii. Assign appropriately paid overtime, determine when it will be worked and the number and identity of employees who will engage in such work, subject to such provisions in the applicable Master Agreement(s) requiring such assignments be equalized or otherwise made in a nondiscriminatory manner.

ARTICLE XVI **DRUG AND ALCOHOL TESTING**

16.1 The use, sale, transfer, purchase and/or possession of a controlled substance, alcohol and/or firearms at any time during the work day is prohibited.

16.2 Drug and alcohol testing shall be conducted in accordance with the substance abuse prevention policies set forth in each applicable Schedule A.

ARTICLE XVII **SAVINGS CLAUSE**

17.1 The parties agree that in the event any article, provision, clause, sentence or word of the Agreement is determined to be illegal or void as being in contravention of any applicable law, by a court of competent jurisdiction, the remainder of the Agreement shall remain in full force and effect, and the parties shall substitute, by mutual agreement, in its place and stead, an article, provision, clause, sentence or word which will meet the objections to its validity and which will be in accordance with the intent and purpose of the article, provision, clause, sentence or word in question.

17.2 If the Parties are unable to reach an agreement on substitute language, or an agreement that substitute language is unnecessary, then the entire Agreement shall be null and void and the Council and Unions shall no longer be bound by the provisions of Article IV.

17.3 If a court of competent jurisdiction determines that all or part of the Agreement is invalid and/or enjoins the City from complying with all or part of its provisions, and as a result the either party reasonably determines that the intent of the parties has been defeated, the entire agreement shall be declared null and void.

ARTICLE XVIII **TERM**

18.1 This Agreement shall be included in the bid documents, requests for proposals, or other

equivalent Project solicitations, which shall indicate that entering into this Agreement is a condition of the award of a Construction Contract(s) for the Project.

18.2 This Agreement shall apply until the Completion of each Project in accordance with Sections 1.4 and 2.2.

18.3 This Agreement shall become effective on the day it is executed by the City Council and the Council. It shall remain in full force and effect for a period of five (5) years from the date of execution and, unless extended by the Parties, shall terminate thereafter. During the fifth year of the Agreement, and prior to the termination date, the City shall meet with the Council to discuss the potential extension of the Agreement and any necessary changes thereto.

18.4 During the fifth year of the Agreement, the City Manager shall prepare a report for the City Council's review assessing the effectiveness and efficiency of work performed under the Agreement, and assessing the effectiveness of the Agreement in accomplishing other goals contained herein.

18.5 The section headings contained in this Agreement are inserted for convenience only and shall not affect in any way the meaning or interpretation of this Agreement. All defined terms used in this Agreement shall be deemed to refer to the singular and/or plural, in each instance as the context and/or particular facts may require.

18.6 This Agreement may be executed in counterparts, such that original signatures may appear on separate pages and when bound together all necessary signatures shall constitute an original. Facsimile or emailed signature pages transmitted to other parties to this Agreement shall be deemed the equivalent of original signatures.

CITY OF MARTINEZ

By: _____

Date: _____

CONTRA COSTA COUNTY BUILDING AND
CONSTRUCTION TRADES COUNCIL

By: _____

Bill Whitney, CEO

Date: _____

[SIGNATURE BLOCKS FOR UNIONS]

Addendum A

AGREEMENT TO BE BOUND

[Date]

[Addressee]

[Address]

Re: City of Martinez Project Labor Agreement --Agreement to be Bound

Dear Mr./Ms. _____:

The undersigned confirms that it agrees to be a party to and bound by the City of Martinez Project Labor Agreement as such Agreement may, from time to time, be amended by the parties or interpreted pursuant to its terms.

By executing this Agreement to be Bound, the undersigned subscribes to, adopts and agrees to be bound by the written terms of the legally established trust agreements as set forth in Section 9.1, as they may from time to time be amended, specifying the detailed basis upon which contributions are to be made into, and benefits made out of, such trust funds, and ratifies and accepts the trustees appointed by the parties to such trust funds. The undersigned agrees to execute a separate Subscription Agreement(s) for such trust funds when such trust fund(s) require(s) such document(s).

The obligation to be a party to and bound by this Agreement shall extend solely to all work covered by the City of Martinez Project Labor Agreement undertaken by the undersigned. The undersigned shall require all of its subcontractors, of whatever tier, to become similarly bound for all their work within the scope of this Agreement by signing an identical Agreement to be Bound.

This letter shall constitute a subscription agreement, to the extent of the terms of the letter.

CONTRACTOR/SUBCONTRACTOR: _____

California Contractor State License No. or Motor Carrier (CA) Permit No.: _____

Name of Authorized Person (print): _____

Signature of Authorized Person: _____

Title of Authorized Person: _____

Telephone Number of Authorized Person: _____

Address of Authorized Person: _____

State Public Works Registration Number: _____

PROJECT LABOR AGREEMENT

for the

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

PREAMBLE

This Project Labor Agreement (“Agreement”) is entered into by and between the Sacramento City Unified School District (“District”), together with contractors and/or subcontractors, who shall become signatory to this Agreement by signing the “Agreement To Be Bound” (Attachment A), and the Sacramento-Sierra Building & Construction Trades Council (“Council”) and the local Unions that have executed this Agreement.

RECITALS

WHEREAS, the purpose of this Agreement is to promote efficiency of construction operations during the construction of the District’s projects subject to this Agreement, and to provide for the peaceful settlement of labor disputes and grievances without work disruptions or delays, thereby promoting the District’s interest and the public’s interest in assuring the timely and cost-effective completion of the District’s construction projects; and

WHEREAS, the successful and efficient completion of the District’s construction projects is of the utmost importance to the District and its educational programs and mission; and

WHEREAS, large numbers of workers of various skills will be required in the performance of the construction work, including those to be represented by the Unions affiliated with the Council; and

WHEREAS, it is recognized that District construction projects require multiple contractors and bargaining units on the job site at the same time over an extended period of time, and that the potential for work disruption is substantial in the absence of a binding commitment to maintain continuity of work; and

WHEREAS, the Employers and the Unions desire to mutually establish and stabilize wages, hours and working conditions for the workers employed on the construction projects subject to this Agreement in order to promote a satisfactory, continuous and harmonious relationship among the parties to this Agreement; and

WHEREAS, the District desires to provide construction training and employment opportunities for students of and residents within the District through local hire, apprentice and pre-apprentice programs; and

WHEREAS, the parties signatory to this Agreement pledge their full good faith and trust to work towards mutually satisfactory and successful completion of all District construction projects subject to the Agreement; and

WHEREAS, the Sacramento City Unified School District has previously adopted Resolution No. 2774 regarding the use of Project Labor Agreements on District projects.

NOW, THEREFORE, the parties, in consideration of the mutual promises and covenants herein contained, do mutually agree as follows:

ARTICLE 1

DEFINITIONS

- 1.1 “Agreement” means this Project Labor Agreement.
- 1.2 “Agreement to be Bound” means the agreement (attached hereto and incorporated herein as Attachment A) required to be executed by any Employer(s) working on the Project as a precondition to performing Covered Work on the Project.
- 1.3 “Council” means the Sacramento-Sierra Building and Construction Trades Council, which is the local jurisdictional division of the State Building and Construction Trades Council of California, with affiliated trades unions within its geographical jurisdiction of Sacramento, Yolo, Placer, El Dorado, Amador, Nevada and Sierra Counties.
- 1.4 “Completion” means the point at which there is Final Acceptance by the District of a Construction Contract. For purposes of this definition of “Completion,” “Final Acceptance” shall mean that point in time at which the District has determined upon final inspection that the work on a Construction Contract has been completed in all respects and all required contract documents, contract drawings, warranties, certificates, manuals and data have been submitted and training completed in accordance with the contract documents and the District has executed a written acceptance of the work.
- 1.5 “Construction Contract” means, except as to section 2.5 (exclusions from Covered Work) public works or improvement contracts approved by the District, including design-bid, design-build, lease-leaseback or other contracts under which construction work is performed, that are necessary to complete the Project.
- 1.6 “District” means the Sacramento Unified School District and the administrative employees under its Superintendent, including any in house Project Manager designated by the District for the Project.
- 1.7 “Contractor(s)” means any person, firm, corporation, or other entity, or any combination thereof, including joint ventures, and any of its contractors or subcontractors of any tier, or any successor or assigns of such persons or entities, that has entered into a contract with the District, or with any other person or entity contracting for work on the Project on behalf of the District (whether by design-bid, design-build, lease-leaseback or other means), with respect to the construction of any part of the Project under contract terms and conditions approved by the District.

- 1.8 “Master Agreement” means the multi-employer collective bargaining agreement of each of the Unions that covers the geographic area of the Project, copies of which shall be provided to the District upon request.
- 1.9 “Project” means any District construction project that has a total minimum value of five hundred thousand (\$500,000) or more. The District may, at its discretion, designate other projects or contracts with a total value of less than five hundred thousand (\$500,000) to be covered by this Agreement if the District believes it is in the best interest of the District to do so. Routine maintenance of District properties are not covered by the scope of this Agreement.
- 1.10 “Project Manager” means a person, including a District employee, firm or other entity designated by the District to manage, coordinate or administer the construction work on a Project subject to this Agreement.
- 1.11 “Union” or “Unions” means the Sacramento-Sierra Building and Construction Trades Council and the local Unions that are signatory to this Agreement, acting on their own behalf and on behalf of their respective affiliates and member organizations whose names are subscribed hereto and who have through their officers executed this Agreement. The Council and the local Unions are collectively referred to herein as the “Unions.”

ARTICLE 2

SCOPE OF AGREEMENT

- 2.1 Parties. This Agreement shall apply and is limited to all Contractor(s), the District and the Unions that are signatory to this Agreement.
- 2.2. Applicability. This Agreement shall govern all Construction Contracts awarded on the District Projects that are subject to this Agreement. Except for exclusions from the Covered Work described in section 2.5, for purposes of this Agreement, a Construction Contract shall be considered completed as described in Section 1.4, except when the District’s authorized representative directs a Contractor to engage in repairs, warranty work, or modifications as required under the original Construction Contract with the District.
- 2.3 Covered Work. This Agreement covers all on-site construction, alteration, painting or repair of buildings, structures and other works and related activities for the Project that is within the craft jurisdiction of one of the Unions and which is directly or indirectly part of the Project, including, without limitation, start-up and commissioning, site preparation, survey work, soil and material inspection and testing, modular furniture installation covered by an applicable Master Agreement or a prevailing wage determination, all on-site fabrication work, provided such work is within the fabrication provision of the Master or national agreement of one of the Unions, demolition of existing structures, and all construction, demolition or improvements required to be performed as a condition of approval by any public agency. On-site fabrication work includes work done for the Project in temporary

yards or areas near the Project. This Agreement also covers all off-site work, including fabrication, traditionally performed by any of the Unions that is directly or indirectly part of the Project, provided such work is covered by a provision of a local Master Agreement of the applicable Union(s). On-site construction shall also include the site of any batch plant constructed solely to supply materials to the Project. The furnishing of supplies, equipment or materials which are stockpiled for later use shall in no case be considered subcontracting, however, the delivery of ready-mix, asphalt, aggregate, sand or other fill material which are directly incorporated into the construction process, as well as the off-hauling of debris and excess fill and/or mud shall be covered by the terms and conditions of this Agreement. All of the work described in this Section is within the scope of this Agreement and is referred to hereafter as "Covered Work."

2.5 The following shall be excluded from Covered Work:

- 2.5.1 Work of non-manual employees, including, but not limited to, superintendents, supervisors above the level of general foreman (except those covered by any applicable Master Agreement), staff engineers, building inspectors, timekeepers, clerks, office workers, including messengers, guards, safety personnel, emergency medical and first aid technicians, and other professional, engineering, administrative, executive and management employees;
- 2.5.2 Equipment and machinery owned or controlled and operated by the District;
- 2.5.3 Any work performed on or near or leading to or on to the site of work covered by this Agreement and undertaken by state, county, city or other governmental bodies, or their contractor, or by public utilities or their contractors;
- 2.5.4 Off-site maintenance of leased equipment and on-site supervision of such work;
- 2.5.5 Work performed by employees of a manufacturer or vendor on the manufacturer's or vendor's equipment if necessary to satisfy the guarantee or warranty on such equipment and where performance of the work is expressly stated in the manufacturer's or vendor's written warranty or guarantee to be a condition for the warranty or guarantee for such products. For any work performed pursuant to this provision, the Contractor shall provide copies of the written warranty requirement to the District, Project Manager, the Council and the affected local Union prior to the commencement of work by the manufacturer or vendor. This exclusion does not apply to any on site construction work subcontracted by such manufacturer or vendor.
- 2.5.6 Off-site maintenance of leased equipment and on-site supervision of such work;

- 2.5.7 Laboratory or specialty testing or inspection not covered by an applicable Master Agreement;
- 2.5.8 Non-construction support services contracted by the District or any Contractor in connection with this Project;
- 2.5.9 All work by employees of the District.

ARTICLE 3

SUBCONTRACTING

- 3.1 Each Contractor agrees that it will contract for the assignment, awarding or subcontracting of Covered Work, or authorize another party to assign, award or subcontract Covered Work, only to a person, firm, corporation or other entity that, at the time the contract is executed, has become a party to this Agreement by executing Attachment A, the Agreement to be Bound.
- 3.2 Each Contractor agrees that it will contract or subcontract the performance of Covered Work only to a person, firm, corporation or other entity that is or becomes a party to this Agreement. Any Contractor performing Covered Work on the Project shall, as a condition to working on the Project, perform all work under the terms of this Agreement and the applicable Master Agreement. Before being authorized to perform any Covered Work, Contractors shall become a party to this Agreement by signing Attachment A, the Agreement to be Bound. Every Contractor shall notify the Council in writing within five (5) business days after it has contracted to assign, award, or subcontract Covered Work, or to authorize another party to assign, award or subcontract Covered Work in accordance with Section 3.1 or this Section 3.2, and shall at the same time provide to the Council a copy of the executed Agreement to be Bound. The District shall also provide copies to the Council of all executed Agreements to be Bound that it receives within fifteen (15) days of receipt.
- 3.3 Nothing in this Agreement shall in any manner whatsoever limit the rights of the District or any Contractor to subcontract Covered Work or to select its contractors or subcontractors; provided, however, that all Contractors, at all tiers, assigning, awarding, contracting or performing Covered Work, or authorizing another to assign, award, contract or perform Covered Work, shall be required to comply with the provisions of this Agreement. Each Contractor shall notify each of its contractors and subcontractors of the provisions of this Agreement and require as a condition precedent to the assigning, awarding or subcontracting of any Covered Work, or allowing any subcontracted Covered Work to be performed, that all such contractors and subcontractors at all tiers become signatory to this Agreement. Any Contractor that fails to provide the Council with the Agreement to be Bound executed by its contractor or subcontractor shall be liable for any failure of that contractor or subcontractor, or any contractor or subcontractor at a lower tier, to comply with the provisions of this Agreement, including any contributions to any trust funds that the contractor or subcontractor, or any subcontractor to that subcontractor, fails to make. Nothing in this Agreement shall be construed to

interfere with or supersede the usual and customary legal remedies available to the Unions and/or employee benefit Trust Funds to collect delinquent Trust Fund contributions from Contractors on the Project.

- 3.4 Nothing in this Agreement shall limit the District's right to combine, consolidate, or cancel contracts for Project construction, or to comply with public agency contracting laws.

ARTICLE 4

WAGES AND BENEFITS

- 4.1 All employees covered by this Agreement (including foremen and general foremen if they are covered by the Master Agreement) shall be classified and paid wages and other compensation, including but not limited to travel, subsistence, and shift premium pay, and contributions made on their behalf to multi-employer trust funds, all in accordance with the then current multi-employer Master Agreement of the applicable Union and in compliance with the applicable prevailing wage rate determination established pursuant to the California Labor Code by the Department of Industrial Relations.
- 4.2 During the period of construction on this Project, the Contractors agree to recognize and put into effect such increases in wages and recognized fringe benefits as shall be negotiated between the various Unions and the historically recognized local bargaining parties on the effective date as set forth in the applicable Master Agreement. The Unions shall notify the Contractors in writing of the specific increases in wages and recognized fringe benefits and the date on which they become effective.

ARTICLE 5

NO STRIKES - NO LOCKOUTS

- 5.1 During the term of this Agreement, there shall be no strikes, sympathy strikes, picketing, work stoppages, picket-related hand billing, slow downs, interference with the work or other disruptive activity for any reason by the Union or by any employee, and there shall be no lockout by any Contractor. Failure of any Union or employee to cross any picket line established at the Contractor's Project site is a violation of this Article.
- 5.2 The Union shall not sanction, aid or abet, encourage or continue any work stoppage, strike, picketing or other disruptive activity at the Project site and shall undertake all reasonable means to prevent or to terminate any such activity. No employee shall engage in activities which violate this Article. Any employee who participates in or encourages any activities which interfere with the normal operation of the Project shall be subject to disciplinary action, including discharge, and, if justifiably

discharged for the above reasons, shall not be eligible for rehire on the same project for a period of not less than ninety (90) days.

- 5.3 The Union(s) agrees that if any union or any other persons, whether parties to this Agreement or otherwise, engage in any picketing or work stoppages, the signatory Unions shall consider such work stoppage or picketing to be illegal and refuse to honor such picket line or work stoppage.
- 5.4 In the event of any work stoppage, strike, sympathy strike, picketing interference with the work or other disruptive activity in violation of this Article, the Contractor may suspend all or any portion of the Project work affected by such activity at the Contractor's discretion and without penalty, and the District may replace any Contractor whose employees have not reported to work with any other contractor or subcontractor in accordance with Section 3.2.
- 5.5 In addition to any other action at law or equity, any party may elect to have the matter decided by a neutral arbitrator in accordance with the following procedure when a breach of this Article is alleged, after the Union(s) or Contractor(s) has been notified of the fact.
 - 5.5.1 A party invoking this procedure shall notify Robert Hirsch, as the permanent arbitrator, or Barry Winograd, as the alternate arbitrator under this procedure. In the event that the permanent arbitrator is unavailable at any time, the alternate will be contacted. If neither is available, then the American Arbitration Association shall select an alternative arbitrator within 24 hours of notice. Notice to the Arbitrator shall be by the most expeditious means available, with notice by fax or electronic means or any other effective written means to the party alleged to be in violation and the involved International Union President and/or local Union.
 - 5.5.2 Upon receipt of said notice, the Project Manager shall contact the designated Arbitrator named above or his alternate who will attempt to convene a hearing within twenty-four (24) hours if it is contended that the violation still exists.
 - 5.5.3 The Arbitrator shall notify the parties by fax or electronic means or any other effective written means of the place and time he has chosen for this hearing. Said hearing shall be completed in one session. A failure of any party or parties to attend said hearing shall not delay the hearing of evidence or issuance of an Award by the Arbitrator.
 - 5.5.4 The sole issue at the hearing shall be whether or not a violation of this Article has in fact occurred. The Award which shall be final and binding shall be issued in writing within three (3) hours after the close of the hearing, and may be issued without an opinion. If any party desires an opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the Award. The Arbitrator may order cessation of the violation of this Article by the Union or Contractor, and such Award shall

be served on all parties by hand or registered mail upon issuance. Should a party found in violation of this Article fail to comply with an Arbitrator's award to cease the violation, the party in violation shall pay to the affected party as liquidated damages the sum of ten thousand dollars (\$10,000) for the first shift for which it failed to comply, or portion thereof, and ten thousand dollars (\$10,000) for each subsequent shift for which it failed to comply, until such violation is ceased. The Arbitrator shall retain jurisdiction to resolve any disputes regarding the liquidated damages claimed under this Section.

- 5.5.5 Such Award may be enforced by any court of competent jurisdiction upon the filing of this Agreement and all other relevant documents referred to hereinabove in the following manner. The fax or electronic notice of the filing of such enforcement proceedings shall be given to the other party. In the proceeding to obtain a temporary order enforcing the Arbitrator's Award as issued under Section 5.5.4 of this Article, all parties waive the right to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the Arbitrator's Award shall be served on all parties by hand or by delivery to their last known address or by certified mail.
- 5.5.6 Any rights created by statute or law governing arbitration proceedings inconsistent with the above procedure or which interfere with compliance therewith are hereby waived by the parties to whom they accrue.
- 5.5.7 The fees and expenses of the Arbitrator shall be borne by the party or parties found in violation, or in the event no violation is found, such fees and expenses shall be borne by the moving party.
- 5.6 The procedures contained in Section 5.5 shall be applicable to alleged violations of this Article. Disputes alleging violation of any other provision of this Agreement, including any underlying disputes alleged to be in justification, explanation or mitigation of any violation of this Article, shall be resolved under the grievance procedures of Article 9.
- 5.7 In the case of nonpayment of wages or trust fund contributions on the Project, the Union shall give the District and the Contractor(s) three (3) business days' notice when nonpayment of trust fund contributions has occurred and one (1) business day's notice when nonpayment of wages has occurred or when paychecks being tendered to a financial institution normally recognized to honor such paychecks will not honor such paycheck as a result of insufficient funds, of the intent to withhold labor from the Contractor(s) or their subcontractor's workforce, during which time the Contractor shall have the opportunity to correct the default. In this instance, a Union's withholding of labor (but not picketing) from an Contractor who has failed to pay its fringe benefit contributions or failed to meet its weekly payroll shall not be considered a violation of this Article. In the event the Union or any of its members withhold their services from such contractor or subcontractor, District shall have the right to

replace such contractor or subcontractor with any other contractor or subcontractor who executes the Agreement to be Bound.

- 5.8 It will not be a violation of this Agreement when the Contractor considers it necessary to shut down to avoid the possible loss of human life because of an emergency situation that could endanger the life and safety of an employee. In such cases, employees will be compensated only for the actual time worked. In the case of a situation described above whereby the Contractor requests employees to wait in a designated area available for work, the employees will be compensated for the waiting time.
- 5.9 If a Master Agreement expires before the Contractor completes the performance of work under the Construction Contract and the Union or Contractor gives notice of demands for a new or modified Master Agreement, the Union agrees that it will not strike on work covered under this Agreement and the Union and the Contractor agree that the expired Master Agreement shall continue in full force and effect for work covered under this Agreement until a new or modified Master Agreement is reached. If the new or modified Master Agreement provides that any terms of the Master Agreement shall be retroactive, the Contractor agrees to comply with any retroactive terms of the new or modified Master Agreement which are applicable to employees who were employed on the projects during the interim, with retroactive payment due within seven (7) days of the effective date of the modified Master Agreement subject to section 4.3.

ARTICLE 6

WORK ASSIGNMENTS AND JURISDICTIONAL DISPUTES

- 6.1 The assignment of Covered Work will be solely the responsibility of the Contractor performing the work involved; and such work assignments will be in accordance with the Plan for the Settlement of the Jurisdictional Disputes in the Construction Industry (the "Plan") or any successor Plan.
- 6.2 All jurisdictional disputes on this Project between or among the building and construction trades Unions and the Contractors parties to this Agreement, shall be settled and adjusted according to the present Plan established by the Building and Construction Trades Department or any other plan or method of procedure that may be adopted in the future by the Building and Construction Trades Department. Decisions rendered shall be final, binding and conclusive on the Contractors and Unions parties to this Agreement.
- 6.3 If a dispute arising under this Article involves the Northern California Carpenters Regional Council or any of its subordinate bodies, an Arbitrator shall be chosen by the procedures specified in Article V, Section 5, of the Plan from a list composed of John Kagel, Thomas Angelo, Robert Hirsch, and Thomas Pagan, and the Arbitrator's hearing on the dispute shall be held at the offices of the California State Building and Construction Trades Council in Sacramento, California within fourteen (14)

days of the selection of the Arbitrator. All other procedures shall be as specified in the Plan.

- 6.4 All jurisdictional disputes shall be resolved without the occurrence of any strike, work stoppage, or slow-down of any nature and the Contractor's assignment shall be adhered to until the dispute is resolved. Individual employees violating this section shall be subject to immediate discharge.

ARTICLE 7

JOINT LABOR/MANAGEMENT MEETINGS

- 7.1 Joint Labor/Management Meetings. During the period of any work performed under this Agreement, the Project Manager, or District designee, may schedule monthly Joint Labor/Management Meetings that include the Project Manager, or the District's designee, the Contractors and the Unions. The purpose of these meetings is to promote harmonious labor/management relations, ensure adequate communications and advance the proficiency and efficiency of the employees and the Contractors on the Project. These meetings may include a discussion of safety, craft resource requirements, scheduling and productivity of work performed at the Project. The Union representative shall keep minutes of any such meetings and the minutes shall be subject to approval at any subsequent meeting. Any such meetings may be in person or by conference call. It shall be mandatory for a representative of the Unions to participate in such meetings.
- 7.2 A Pre-Job Conference shall be scheduled by the District prior to the commencement of work to establish the scope of work in each Contractor's contract. When a contract has been let to a Contractor covered by this Agreement, a job conference and/or mark up meeting shall be scheduled by the District upon request of any Union, Contractor or the District.

ARTICLE 8

MANAGEMENT RIGHTS

- 8.1 The Contractor(s) retains full and exclusive authority for the management of their work forces for all work performed under this Agreement. This authority includes, but is not limited to the right to:
- A. Plan, direct and control the operation of all the work.
 - B. Decide the number and types of employees required to perform the work safely and efficiently. The lawful staffing provisions of the applicable Master Agreement shall be recognized.

- C. Hire, promote and layoff employees as deemed appropriate to meet work requirements and/or skills required.
 - D. Require all employees to observe the District and Contractor Project Rules, Security and Safety Regulations, consistent with the provisions of this Agreement. These Project Rules and Regulations shall be reviewed and mutually agreed upon at the Pre-Job meeting and supplied to all employees and/or posted on the jobsite.
 - E. Discharge, suspension or discipline will be handled under the applicable craft agreement.
 - F. Assign and schedule work at its sole discretion and determine when overtime will be worked. There shall be no refusal by a craft to perform work assigned, including overtime work. However, individual craftspeople shall not be required to work overtime unless specifically dispatched for overtime work. Any cases of a craft's refusal to work overtime shall be subject to the grievance procedure.
 - G. Utilize any work methods, procedures or techniques and select and use any type or kind of materials, apparatus or equipment regardless of source, manufacturer or designator (in accordance with Article 2).
 - H. The foregoing listing of management rights shall not be deemed to exclude other functions not specifically set forth herein. The Contractors, therefore, retain all legal rights not specifically enumerated in this Agreement.
- 8.2 All workers employed or otherwise used on a Project shall comply with the District's Drug and Alcohol-Free Workplace Policy (BP 4020) and Employee Drug Testing Policy (BP 4112.41, 4212.41, 4312.41) and applicable regulations as amended from time to time. If not otherwise specified, the drug testing protocol shall be in compliance with 49 Code of Federal Regulations (CFR) section 382.105 (Testing procedures) which incorporates 49 CFR Part 40.

ARTICLE 9

GRIEVANCE PROCEDURE

- 9.1 It is mutually agreed that any question arising out of and during the term of this Agreement involving its interpretation and application (other than matters subject to Section 5.5 and Union jurisdictional disputes subject to Article 6) shall be considered a grievance. Questions between or among parties signatory to a Master Agreement arising out of or involving the interpretation of a Master Agreement shall be resolved under the grievance procedure provided in that Master Agreement.
- 9.2 The District and other Contractors, as well as the Unions, may bring forth grievances under this Article.

- 9.3 A grievance shall be considered null and void if not brought to the attention of the Contractor(s) within five (5) working days after the incident that initiated the alleged grievance occurred or was discovered, whichever is later. The term “working days” as used in this Article shall exclude Saturdays, Sundays or holidays regardless of whether any work is actually performed on such days.
- 9.4 Grievances shall be settled according to the following procedure, except that grievances that do not involve an individual grievant shall be discussed by the District, and the Council and then, if not resolved within five (5) working days of written notice unless extended by mutual consent, commence at Step 4:

Step 1

The Steward and the grievant shall attempt to resolve the grievance with the craft supervisor within five (5) working days after the Grievance has been brought to the attention of the Contractor.

Step 2

In the event the matter remains unresolved in Step 1 above after five (5) working days, within five (5) working days thereafter, the alleged grievance may be referred in writing to the Business Manager(s) of the Union(s) affected and the site construction manager or Labor Relations representative of the Contractor(s) for discussion and resolution. A copy of the written grievance shall also be mailed, faxed or emailed to the District.

Step 3

In the event the matter remains unresolved in Step 2 above within five (5) working days, within five (5) working days thereafter, the grievance may be referred in writing to the Business Manager(s) of the affected Union(s) involved and the Manager of Labor Relations of the Contractor(s) or the Manager’s designated representative and the District for discussion and resolution.

Step 4

If the grievance is not settled in Step 3 within five (5) working days, within five (5) days thereafter, either party may request the dispute be submitted to neutral arbitration or the time may be extended by mutual consent of both parties. The request for arbitration and/or the request for an extension of time must be in writing with a copy to the District. Should the parties be unable to mutually agree on the selection of a neutral Arbitrator, selection for that given arbitration shall be made by seeking a list of seven (7) labor arbitrators with construction experience from the Federal Mediation and Conciliation Service and alternately striking names from the list of names on the list until the parties agree on an Arbitrator or until one name remains. The first party to strike a name from the list shall alternate between the party bringing forth the grievance and the party defending the grievance. District shall keep a record of the sequence and shall notify the parties to the grievance as to which party has the right to strike a name first.

- 9.5 The Arbitrator shall conduct a hearing at which the parties to the grievance shall be entitled to present testimonial and documentary evidence. Hearings will be

transcribed by a certified court reporter. The parties shall be entitled to file written briefs after the close of the hearing and receipt of the transcript.

- 9.6 Upon expiration of the time for the parties to file briefs, the Arbitrator shall issue a written decision that will be served on all parties and on the District. The Arbitrator shall have the authority to utilize any equitable or legal remedy to prevent and/or cure any breach or threatened breach of this Agreement. The Arbitrator's decision shall be final and binding as to all parties signatory to this Agreement.
- 9.7 The cost of the Arbitrator and the court reporter, and any cost to pay for facilities for the hearing, shall be borne equally by the parties to the grievance. All other costs and expenses in connection with the grievance hearing shall be borne by the party who incurs them.
- 9.8 The Arbitrator's decision shall be confined to the issue(s) posed by the grievance, and the Arbitrator shall not have the authority to modify, amend, alter, add to or subtract from any provision of this Agreement.
- 9.9 Any party to a grievance may invite the District to participate in resolution of a grievance. The District may, at its own initiative, participate in Steps 1 through 3 of the grievance procedure.
- 9.10 In determining whether the time limits of Steps 2 through 4 of the grievance procedure have been met, a written referral or request shall be considered timely if it is personally delivered, sent by overnight mail or faxed within the five (5) working day period. Any of the time periods set forth in this Article may be extended in writing by mutual consent of the parties to the grievance, and any written referral or request shall be considered timely if it is personally delivered, sent by overnight mail or faxed during the extended time period.

ARTICLE 10

UNION SECURITY

- 10.1 The Contractors recognize the Unions signatory to this Agreement as the sole bargaining representative of all craft employees performing Covered Work for the Project.
- 10.2 All employees performing Covered Work shall, as a condition of employment on or before the eighth (8th) cumulative day of employment on the Project, be responsible for the payment of the applicable periodic working dues and any associated fees uniformly required for union membership in the local Union that is a signatory to this Agreement for the duration of his or her employment on the Project. Nothing in this Agreement is intended to prevent any non-union employees from joining the local Union.
- 10.3 Authorized representatives of the Unions shall have access to the Project whenever Covered Work is or will be performed on the Project. All authorized representatives

of the Union must comply with the required uniform check-in procedure prior to visiting the work area.

- 10.4 Each Union shall have the right to designate a working journeyperson as a steward. The steward shall be a qualified employee performing the work of that craft and shall not exercise any supervisory functions. Each steward shall be concerned with the employees of the steward's Contractor and not with the employees of any other Contractor. A steward shall be allowed sufficient time to perform his duties.

ARTICLE 11

REFERRAL-LOCAL HIRE

- 11.1 Contractors performing Covered Work on the Project shall, in filling craft job vacancies, utilize and be bound by the registration facilities and referral systems established or authorized by the Unions signatory to this Agreement. Such Job Referral System shall be operated in a non-discriminatory manner and in full compliance with all federal, state, and local laws and regulations, including those which require equal employment opportunities and non-discrimination. The Contractor(s) shall have the right to reject any applicant referred by the Union(s), in accordance with the applicable Master Agreement. The Unions shall be the primary source of all craft labor employed on the Project, however, an Contractor with a core workforce may request by name, and the local Union shall honor, referral of such Contractor's regular and experienced personnel ("Core Employees") who have applied to the applicable Union to perform Covered Work on the Project. For purposes of this Agreement, a Core Employee is a person who meets all of the following:

- (1) Possesses any license required by state or federal law for the Project work to be performed;
- (2) Worked a total of at least one thousand (1,000) hours in the construction craft during the prior two (2) years;
- (3) Has been on the Contractor's active payroll for at least ninety (90) out of the one hundred and twenty (120) calendar days prior to the contract award; and
- (4) Has the ability to perform safely the basic functions of the applicable trade.

- 11.2 The Union will refer to such Contractor one journeyman employee from the hiring hall out-of-work list for the affected trade or craft, and will then refer one of the Contractor's Core Employees as a journeyman. The process will then be repeated, one for one, until such Contractor's crew requirements are met, or until such Contractor has hired eight (8) Core Employees, whichever occurs first. Thereafter, all additional employees in the affected trade or craft shall be hired exclusively from the hiring hall out-of-work list(s). For the duration of the Contractor's work on the

Project, the ratio shall be maintained. When such Contractor's workforce is reduced, employees shall be reduced in the same one for one ratio of Core Employees to hiring hall referrals as was applied in the initial hiring. Contractors that are signatory to a Master Agreement with Union(s) signatory hereto must comply with the hiring hall provisions contained in the applicable Master Agreement, and nothing in the referral provisions of this Agreement shall be construed to supersede the local hiring hall provisions of the Master Agreement(s) as they apply to such Contractors.

11.3 In the event the referral facilities maintained by the Unions do not refer the employees as requested by the Contractor within a forty-eight (48) hour period after such requisition is made by the Contractor (Saturdays, Sundays and holidays excepted), the Contractor may employ applicants from any source. Contractors shall immediately notify and provide the appropriate Union(s) with the name and address of such gate-hires, who shall be bound by the provisions of this Article.

11.4 It is in the interest of the parties to this Agreement to facilitate employment of District and Local Area residents, including parents, guardians or other care givers of students attending the District's schools, and to use resources in the Local Area in construction of a Project. The "Local Area" shall be defined as the area within the boundaries of the District, the City of Sacramento and Sacramento County. To the extent allowed by law, and consistent with the Union's hiring hall provisions, and as long as they possess the requisite skills and qualifications, residents of the Local Area shall be first referred for Project work, including journeymen and apprentices covered by this Agreement. It is the goal of the parties that not less than fifty (50) percent of all hours worked on the Project, on a craft by craft basis, be worked by residents of the Local Area (including fifty (50) percent of the total hours worked by any Core Employees). Contractors will be required to submit certified weekly payroll records to the District along with monthly workforce utilization reports documenting the Contractor's compliance with the requirements described in this Article. At a minimum, the monthly reports must include: 1) data on Local Area resident work hour utilization on the Project; and 2) documentation showing any requests made to the Union dispatchers for Local Area residents and the Union's response to the request. An annual report shall be submitted to the Board on the number of workers employed, or contracted for, within the Local Area.

ARTICLE 12

APPRENTICES

12.1 The parties recognize the need to maintain continuing support of programs designed to develop adequate numbers of competent workers in the construction industry, the Contractors will employ apprentices in the respective crafts to perform such work as is within their capabilities and which is customarily performed by the craft in which they are indentured.

- 12.2. Apprentices may comprise up to thirty (30) percent of each craft's work force at any time, unless the state approved apprenticeship standards or regulations or the applicable Master Agreement establish a lower maximum percentage.
- 12.3 The parties agree to work with the Construction Technology Academy ("Academy") as set forth in Attachment B in order to carry out the training and employment objectives of this Agreement, including providing District students with the opportunities and skills necessary to enter post-secondary study and to pursue lifelong training within the broader context of the building trades industry, and to develop and reinforce academic course standards in order to maximize career opportunities and technical competency.

ARTICLE 13

NON-DISCRIMINATION

- 13.1 The Unions and Contractors shall not discriminate against any employee or applicant for employment because of race, creed, color, sex, sexual orientation, political affiliation, national origin, age, religion, Vietnam veteran or Vietnam Era status, disability as identified in the Americans with Disabilities Act, membership in a labor organization in hiring and dispatching workers for the Project, or any other basis recognized by law. The parties to this Agreement understand and agree that nothing in this Agreement shall supersede or take precedence over any District Board of Education policy or requirement including, but not limited to, the construction contract and general conditions for the Project.
- 13.2 All qualified (as determined by the District and applicable law) contractors and subcontractors may bid and be awarded work on a Project without regard to whether they are otherwise parties to collective bargaining agreements provided they comply with the provisions of this Agreement.

ARTICLE 14

HOURS OF WORK, SHIFTS AND HOLIDAYS

- 14.1 The standard work day shall be in accordance with the applicable Master Agreements. Common start times may be established by the Contractor during the standard work day established by the applicable Master Agreements. The standard work week shall be five (5) consecutive days of work commencing on Monday. Nothing herein shall be construed as guaranteeing any employee eight (8) hours of work per day or forty (40) hours of work per week.
- 14.2 Common shifts may be established when considered necessary by the Contractor. The Contractor shall provide at least one week notice to the Council prior to any change in shift time. Any shifts established shall continue for the established work week.

- 14.3 Recognized holidays shall be in accordance with the applicable Master Agreements. Under no circumstances shall any work be performed on Labor Day except in cases of emergency involving life or property. In the event a holiday falls on Saturday, the previous day, Friday, shall be observed as such holiday. In the event a holiday falls on Sunday, the following day, Monday, shall be observed as such holiday. There shall be no paid holidays. If employees are required to work on a holiday, they shall receive the appropriate rate, but in no case shall such overtime rate be more than double the straight time rate.

ARTICLE 15

GENERAL PROVISIONS

- 15.1 If any article or provision of this Agreement shall become invalid, inoperative and/or unenforceable by operation of law or by declaration of any competent authority of the executive, legislative, judicial or administrative branches of the federal or state government, the District, the Contractors and the Council shall suspend the operation of such article or provision during the period of its invalidity, and the District and the Council shall negotiate in its place and stead an article or provision that will satisfy the objections to its validity and that, to the greatest extent possible, will be in accord with the intent and purpose of the article or provision in question. The new article or provision negotiated by the District and the Council shall be binding on all parties signatory to this Agreement.
- 15.2 If any article or provision of this Agreement shall be held invalid, inoperative or unenforceable by operation of law, or by any of the above mentioned tribunals of competent jurisdiction, the remainder of the Agreement or application of such article or provision to persons or circumstances other than to which it has been held invalid, inoperative or unenforceable shall not be affected thereby.
- 15.3 Except as enumerated in this Agreement, all other terms and conditions of employment described in the Master Agreement of the Union having traditional and customary jurisdiction over the Covered Work shall apply.
- 15.4 The provisions of this Agreement shall take precedence over conflicting provisions of any Master Agreement or any other national, area or local collective bargaining agreement, except for all work performed under the NTL Articles of Agreement, the National Stack/Chimney Agreement and the National Cooling Tower Agreement. In addition, all instrument calibration work and loop checking Covered Work shall be performed under the terms of the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, and work within the craft jurisdiction of the Elevator Constructors will be performed under the terms of the National Agreements of the International Union of Elevator Constructors. Notwithstanding the provisions of this section, Articles 5, 6 and 9 of this Agreement shall apply to all Covered Work.
- 15.4 Each person executing this Agreement represents and warrants that he or she is authorized to execute this Agreement on behalf of the party or parties indicated.

- 15.5 This Agreement may be executed in any number of counterparts, and each counterpart shall be deemed to be an original document. All executed counterparts together shall constitute one and the same document, and any signature pages may be assembled to form a single original document.
- 15.6 To the fullest extent consistent with the applicable Master Agreement and trust agreement, it is agreed that any liability under this Agreement by District, the Council, a Union, or any other Contractor shall be several and not joint. Any alleged breach of this Agreement by a party shall not affect the rights, liabilities, obligations, and duties among the other parties or between that party and any other party.

ARTICLE 16

HELMETS TO HARDHATS

- 16.1 The Contractors and Unions recognize a desire to facilitate the entry into the building and construction trades of veterans and members of the National Guard and Reserves who are interested in careers in the building and construction industry. The Contractors and Unions agree to utilize the services of the Center for Military Recruitment, Assessment and Veterans Employment (hereinafter “Center”), a joint Labor-Management Cooperation Trust Fund, established under the authority of Section 6(b) of the Labor-Management Cooperation Act of 1978, 29 U.S.C. Section 175(a), and Section 302(c)(9) of the Labor-Management Relations Act, 29 U.S.C. Section 186(c)(9), and a charitable tax exempt organization under Section 501(c)(3) of the Internal Revenue Code, and the Center’s “Helmets to Hardhats” program to serve as a resource for preliminary orientation, assessment of construction aptitude, referral to apprenticeship programs or hiring halls, counseling and mentoring, support network, employment opportunities and other needs as identified by the parties.
- 16.2 The Unions and Contractors agree to coordinate with the Center to create and maintain an integrated database of veterans and members of the National Guard and Reserves interested in working on this Project and of apprenticeship and employment opportunities for this Project. To the extent permitted by law, the Contractors and Unions will give credit to such veterans and members of the National Guard and Reserves for bona fide, provable past experience.

ARTICLE 17

DURATION OF AGREEMENT; MID-TERM ASSESSMENT

- 17.1 This Agreement shall remain in full force and effect for a period of four (4) years from the date approved by the Board of Education on November 16, 2017. Notwithstanding the term of the Agreement as set forth above, the Agreement will continue to apply until the completion of all Covered Work pursuant to Section 2.1 where the initial bid for any Construction Contract for a Project is

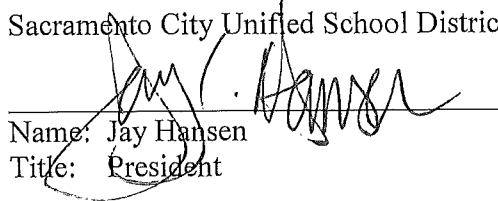
awarded or approved by the Board on or before the date the Agreement terminates.

- 17.2 At the two year mark, a mid-term assessment, including mutually agreed upon metrics, shall be reported to the Board.

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SIGNATURES

Sacramento City Unified School District


Name: Jay Hansen

Title: President

Date: December 16, 2017

Sacramento-Sierra Building and
Construction Trades Council


Name: Kevin Ferreira

Title: President

Date: 11/16/2017

UNIONS

UNIONS

Signed _____
Asbestos Workers Local #16

Signed _____
Iron Workers Local #118

Signed _____
Bricklayers Local #3

Signed
Laborers Local #185

Signed
Boilermakers Local #549

Signed
Operating Engineers Local #3

Signed _____
Cement Masons Local #400

Signed
Plasterers & Cement Masons Local #300

**Northern California Carpenters Regional Council
on behalf of itself and its affiliated Local Unions**

Signed _____
 UA of Journeymen & Apprentices of the
 Plumbing & Pipe Fitting Ind. Local #355

Signal
District Council #16 International
Union of Painters & Allied Trades

Signed _____
Plumbers & Pipefitters Local #447

Siguel
Elevator Constructors Local #8

Sigmond
Roofers Local #81

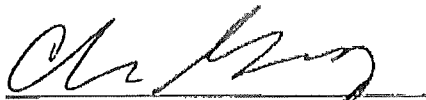
Signed
International Brotherhood of Electricians
Local #340

Sheet Metal Workers Local #104

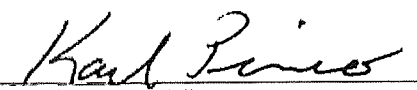
Signal
Sprinkler Fitters Local #669

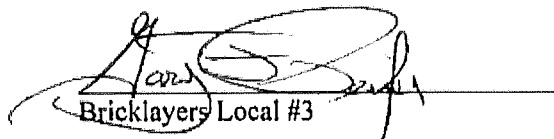
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Teamsters Local #150

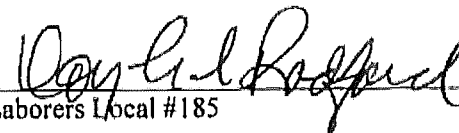
Signed
Asbestos, Lead and Mold Laborers
Local #67


Asbestos Workers Local #16

UNIONS


Iron Workers Local #118


Bricklayers Local #3


Laborers Local #185

Boilermakers Local #549

Operating Engineers Local #3

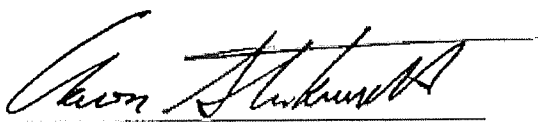
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Plasterers & Cement Masons Local #300

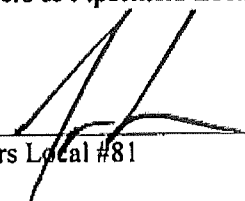
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District Council #16 International
Union of Painters & Allied Trades


Plumbers & Pipefitters Local #447

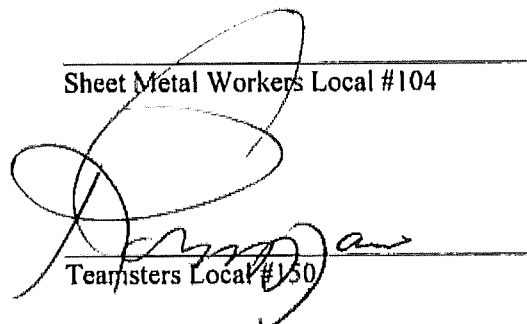
Elevator Constructors Local #8


Roofers Local #81


International Brotherhood of Electricians
Local #340

Sheet Metal Workers Local #104

Sprinkler Fitters Local #669


Teamsters Local #150

Asbestos, Lead and Mold Laborers
Local #67

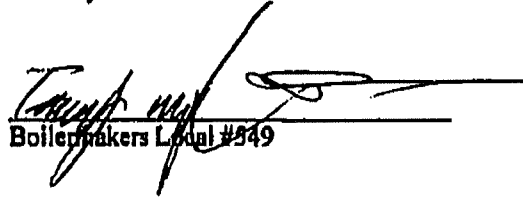
UNIONS

Asbestos Workers Local #16

Iron Workers Local #118

Bricklayers Local #3

Laborers Local #185


Boilermakers Local #549

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Cement Masons Local #400

Plasterers & Cement Masons Local #300

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Union of Painters & Allied Trades**

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Elevator Constructors Local #8

Roofers Local #81

**International Brotherhood of Electricians
Local #340**

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Teamsters Local #150

**Asbestos, Lead and Mold Laborers
Local #67**

UNIONS

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Operating Engineers Local #3

Cody J. Bit
Cement Masons Local #400

Plasterers & Cement Masons Local #300

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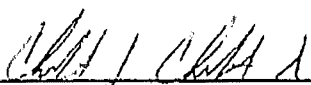
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Northern California Carpenters Regional
Council on behalf of itself and its affiliated
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Roofers Local #81

International Brotherhood of Electricians
Local #340

Sheet Metal Workers Local #104

 Brian Wynn
Sprinkler Fitters Local #669

Teamsters Local #150

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UNIONS

Asbestos Workers Local #16Iron Workers Local #118Bricklayers Local #3Laborers Local #185Boilermakers Local #549Operating Engineers Local #3Cement Masons Local #400Plasterers & Cement Masons Local #300Northern California Carpenters Regional Council
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Local #67

UNIONS

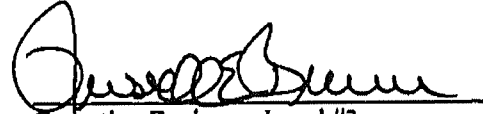
Asbestos Workers Local #16

Iron Workers Local #118

Bricklayers Local #3

Laborers Local #185

Boilermakers Local #549


Operating Engineers Local #3

Cement Masons Local #400

Plasterers & Cement Masons Local #300

Northern California Carpenters Regional Council
on behalf of itself and its affiliated Local Unions

UA of Journeymen & Apprentices of the
Plumbing & Pipe Fitting Ind. Local #355

District Council #16 International
Union of Painters & Allied Trades

Plumbers & Pipefitters Local #447

Elevator Constructors Local #8

Roofers Local #81

International Brotherhood of Electricians
Local #340

Sheet Metal Workers Local #104

Sprinkler Fitters Local #669

Teamsters Local #150

Asbestos, Lead and Mold Laborers
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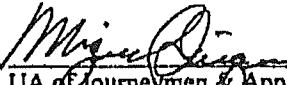
Boilermakers Local #549

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Plasterers & Cement Masons Local #300

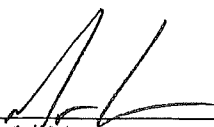
Asbestos, Lead and Mold Laborers
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Plumbers & Pipefitters Local #447

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& WATERPROOFERS

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Northern California Carpenters Regional
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Sprinkler Fitters Local #669

Teamsters Local #150

Asbestos, Lead and Mold Laborers
Local #67

ATTACHMENT A

PROJECT LABOR AGREEMENT

Project: _____
Bid Number _____

AGREEMENT TO BE BOUND

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

The undersigned hereby certifies and agrees that:

- 1.) It is a Contractor as that term is defined in Section 1.7 of the Sacramento City Unified School District Agreement (“Agreement”) because it has been, or will be, awarded a contract or subcontract to assign, award or subcontract Covered Work (as defined in Section 2.3) on the Project (as defined in Section 1.9), or to authorize another party to assign, award or subcontract Covered Work, or to perform Covered Work.
- 2.) In consideration of the award of such contract or subcontract, and in further consideration of the promises made in the Agreement and all attachments thereto (a copy of which was received and is hereby acknowledged), it accepts and agrees to be bound by the terms and conditions of the Agreement, together with any and all amendments and supplements now existing or which are later made thereto.
- 3.) If it performs Covered Work, it will be bound by the legally established trust agreements designated in local master collective bargaining agreements, and hereby authorizes the parties to such local trust agreements to appoint trustees and successor trustee to administer the trust funds, and hereby ratifies and accepts the trustees so appointed as if made by the undersigned.
- 4.) It has no commitments or agreements that would preclude its full and complete compliance with the terms and conditions of the Agreement.
- 5.) It will secure a duly executed Agreement to be Bound, in form identical to this document, from any Contractor(s) at any tier or tiers with which it contracts to assign, award, or subcontract Covered Work, or to authorize another party to assign, award or subcontract Covered Work, or to perform Covered Work, and it will provide a copy of such executed Agreement to be Bound to the Sacramento-Sierra

Building & Construction Trades Council within fifteen (15) days of such contracting or subcontracting in accordance with Section 3.2 of the Agreement.

DATED: _____ Name of Contractor _____

(Authorized Officer & Title)

(Address)

ATTACHMENT B

PROJECT LABOR AGREEMENT

Project: _____

Bid Number _____

Construction Technology Academy. The parties have agreed to work with the Construction Technology Academy ("Academy") operated at the Sacramento City Unified School District's comprehensive high schools to carry out the training and employment objectives of this Attachment B. The overall objectives are to:

- (a) offer opportunities and skills necessary to enter post-secondary study and to pursue lifelong learning within the broader context of the building trades industry and construction management industry; and
- (b) develop and reinforce academic course contents standards in order to maximize career opportunities and technical competency.

Academy Steering Committee. In order to facilitate the goals of the Academy, the District and Council agree to create a steering committee ("Committee") which will conduct meetings as determined by the District during the school year to develop the goals of the Academy; plan for the presentation and content of training lectures to facilitate employable skills in the construction trades; develop a summer schedule for training; organize and develop summer internship positions; assist in planning curriculum scope and sequencing; design co-curricular activities; identify sources for educational and financial support; and otherwise initiate steps to carry out the goals of the Academy.

The committee shall consist of eight (8) members, with three (3) of the members representing building trades JATCs, two (2) members representing the Sacramento-Sierra Building and Construction Trades Council ("Council") and three (3) members representing the District. The Academy Steering Committee, in coordination with the District's Career Services representative, shall develop and implement a plan for annual assessment of the goals and objectives of Attachment B in order to maximize the employability of the summer interns described below. A quorum for the Committee meeting shall be at least one member representing the building trades JATCs; one member representing the Council; and one member representing the District.

- (1) **Annual Training Summer Sessions.** Annual summer intern training sessions developed by the Academy Steering Committee shall be made available for qualified District students nominated by the District and accepted by the Academy Steering Committee.
 - (a) **Purpose of Summer Training Sessions.** The purpose of the summer intern training sessions is to teach the interns employable skills in the construction trades and soft job skills applicable to any job setting. The skills sets to be taught will be determined by the Academy Steering

Committee. Examples of such are work site safety, proper use of construction tools, general employability skills and drug and alcohol information. The sessions shall include classroom and job visit components.

- (b) **Number of Interns.** The goal for the summer programs for the term of the Agreement shall be a maximum of twenty (20) internships available for students nominated by the District and approved by the Academy Steering Committee. The actual number of interns shall be determined and selected by the District.
 - (c) **Number and Scope of Training Sessions.** For the first year, the number of summer training sessions shall not be less than eight (8) with each session lasting a minimum of four (4) hours. The scope of the training sessions, and the presenters, shall be developed by the Academy Steering Committee. The location of the summer training centers will be at a JATC and the JATC's will provide presenters. Attendances at the training sessions are mandatory in order to be eligible for a summer internship.
 - (d) **Cost.** The District shall incur the costs of the interns. After the first year, a report shall be submitted to the Board of the costs incurred by the District and the costs incurred as provided by the Council, through the local Unions.
- (2) **Employment of Interns.** The interns shall be paid an hourly rate as required by law, but not for periods of time attending the classroom training sessions. The training sessions shall occur over a minimum of four (4) and maximum of five (5) weeks. The number of interns each year shall be determined by the District pursuant to (1)(b) above. Due to safety, prevailing wage and state law restrictions, the interns shall not be employed directly on the public works projects that are the subject of the Project Labor Agreement and this Attachment B.
- (3) **Intern Program and Priority on California Apprenticeship Council Approved Program Apprenticeship Lists.**
 - (a) **Post-graduate Training.** The Academy Steering Committee will collaborate with post-graduate training programs, such as the Northern California Construction Training and American River College's Stripe Program, in order to assist graduates in obtaining an internship into a JATC.
 - (b) **Priority on Apprenticeship List.** The training and employment program of the interns shall be developed by the Academy Steering Committee such that graduating interns shall possess the skills, training, and educational background to help the graduate achieve priority on the lists of the building trades to the degree allowed under each JATC's application process

including those programs that allow direct entry. It is recognized that the Apprenticeship Programs operate according to existing Standards approved by the California Department of Industrial Relations, Division of Apprenticeship Standards, and the standards set forth in the collective bargaining agreements for each building trades union and that any such priority shall be in accordance with such Standards and agreements.

- (4) **District Staff Training.** The parties have also agreed that the Academy Steering Committee will explore opportunities to utilize the Academy's construction skills training program, including work site safety and proper use of construction tools, to enhance the skills of District maintenance and construction staff.
- (5) **Binding Effect.** This Attachment B shall be deemed incorporated into the Agreement as if set forth fully and at length in the Agreement and is binding in accordance with its terms. However, nothing in this Attachment B shall supersede the provisions of the Project Labor Agreement, a Master Agreement or the approved standards for any building trades' union apprenticeship program.



CITY COUNCIL REPORT

12B

DATE: SEPTEMBER 20, 2022

TO: MAYOR AND COUNCIL MEMBERS

FROM: NEIL GANG, CHIEF OF POLICE

SUBJECT: HATE CRIME UPDATE

RECOMMENDATION

City staff recommends that the City Council accept an informational report on hate crimes in Pinole.

BACKGROUND

At its meeting on February 1, 2022, the City Council requested a future Council agenda item on hate crimes in Pinole.

The State recently released the 2021 Hate Crime in California Report. It indicated that overall, hate crimes reported in California increased 32.6% from 2020 to 2021, to 1,763 bias events, and are at their highest reported level since 2001.

According to the California Department of Justice, a hate crime is a crime against a person, group, or property motivated by the victim's real or perceived protected social group (disability, gender, nationality, race or ethnicity, religion, sexual orientation, and association with a person or group with one or more of these actual or perceived characteristics). A hate incident is an action or behavior motivated by hate but which, for one or more reasons, is not a crime. Examples of hate incidents include name-calling, insults, displaying hate material on your property, posting hate material that does not result in property damage, and distributing materials with hate messages in public places.

The City of Pinole has had two reported hate incidents over the past five years. The City realizes that this might not accurately reflect the number of community members that have experienced harassment and intimidation based on their race, gender, ethnicity, or sexual orientation. The City understands that specific hate incidents can go unreported, and members of the community may have experienced acts of aggression and/or intimidation.

REVIEW & ANALYSIS

As stated by California Attorney General Rob Bonta, “Crimes motivated by hate are not just attacks on individual innocent people, they are attacks on our communities and the entire State.”

The City believes everyone has a role in stopping bias and hate and creating a safe, inclusive community. The Police Department has the specific role of preventing and responding to hate crimes, like other crimes. Other City departments, particularly the Community Services Department, can play a role in promoting inclusivity in the community.

The Police Department strives to be aware of hate and bias incidents in the community through its multiple communication and engagement activities, including the work of the Community Outreach Unit and extensive social media communication. The Police Department strongly encourages members of the community to speak out against hate and report all incidents of possible hate crimes. Regarding hate crimes and other matters, it has and continues to be the philosophy of the Police Department that “No call is too small.” The City of Pinole has a zero-tolerance policy. The City encourages anyone who may be a victim or has witnessed hate crimes to report it to their local Police Department. When a law enforcement agency publicly prioritizes combating hate crimes, it sends the message that discrimination and harassment will not be tolerated.

To address hate incidents and crimes more actively, the City began participating in the national program United Against Hate Week (UAHW). This campaign brings together municipalities, school districts, and civic organizations to establish a network of support and resources so communities can respond to and prevent hate, foster inclusion, and promote equity for all. The City will be holding its first annual “Pinole United Against Hate” event at Fernandez Park on November 19, 2022, as well as undertaking additional activities to promote UAHW.

FISCAL IMPACT

There is no fiscal impact related to accepting this informational report.

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