CITY OF PASADENA WATER & POWER DEPARTMENT

POLLUTION PREVENTION PRACTICES FOR

UTILITY VAULTS AND UNDERGROUND STRUCTURES

IN COMPLIANCE WITH
NPDES GENERAL PERMIT NO. CAG 990002
WATER QUALITY ORDER NO. 2006-0008-DWQ

NOVEMBER 29, 2006

PASADENA WATER & POWER
POLLUTION PREVENTION PRACTICES
UTILITY VAULTS

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Section 1
GENERAL INFORMATION

1.1 Overview

Pasadena Water & Power (PWP) must dewater its subsurface vaults and underground structures to protect equipment and for safety reasons prior to performing repair, maintenance, and/or installation of equipment. The water is either manually pumped from the vaults or automatically discharged where the vault is equipped with an automatic sump pump.

The State of California Water Resources Control Board (SWRCB), as the regulatory agency responsible for the protection of water quality under the Federal Clean Water Act of 1972, has authority over the discharge of pollutants to surface waters. The Clean Water Act requires the issuance of a Permit for the legal discharge of pollutants to surface waters of the United States.

General Permit No. CAG990002 (the General Permit) regulates discharges from utility vaults. To obtain coverage under this General Permit, a Notice of Intent (NOI), a project map(s), a Pollution Prevention Plan (PLAN), and the first annual fee must be submitted to the State Water Resources Control Board (SWRCB). The General Permit also requires a Monitoring and Reporting Program (MRP), which is described in a separate document. (PWP MRP Plan, 2006)

This PLAN explains the procedures and precautions that PWP will follow protect the quality of the receiving surface waters.

1.2 Purpose

The PLAN covers short-term intermittent discharges from utility vaults to surface waters by PWP. The purpose of the procedures in the PLAN is to comply with the General Permit. The PLAN is organized into four sections:

- Section 1 describes the types of discharges from utility vaults operated by PWP.
- Section 2 lists contact information for those responsible for adhering to the PLAN.
- Section 3 describes how each element required by the General Permit (see Section 2.3) is met by PWP.
- Section 4 provides a conceptual description (offered in more detail in Appendix A) of what procedures PWP will follow.
- Section 5 stipulates individual responsibilities for those people who are accountable for enacting the PLAN.

1.3 Types of Discharges

PWP discharges covered by this PLAN all originate as water trapped in underground utility vaults. Maintenance staff needs to remove this water to work safely.

These discharges can be broken into two distinct types defined by whether a sump pump is installed to automatically dewater the vault or a pump is brought to a vault that does not have a sump pump to manually dewater the vault.

1.3.1 Description of Vaults

PWP vaults may contain electrical cables, switches, transformers, and a variety of other waterproof equipment. Water that accumulates in most such structures will remain there until a worker must enter. The amount of discharge is dependent on the size of the structure (they vary from 100 to 2000 cubic feet) and the depth of the water in the structure.

At least 50 out of a total of 5263 vaults have automatic sump pumps that actuate when the amount of accumulated water exceeds a preset level. The water is then automatically discharged from the structure. Sump pumps are generally installed in areas with high water tables (e.g. the residential neighborhoods southwest of the 210 freeway). The remaining vaults must be dewatered manually.

1.3.2 Types of Discharges

The General Permit states that the PLAN shall include Provisions for Scheduled Discharges, Unscheduled Discharges, Reservoir Discharges (if any), and Emergency Operation Discharges. PWP does not have Scheduled or Reservoir Discharges, so provisions for Unscheduled and Emergency Discharges are explained below.

1.3.2.1 Unscheduled Discharges

All discharges from PWP vaults are unscheduled. Some discharges occur from automatic sump pumps, and some discharges occur via manual dewatering using portable pumps because a repair or maintenance crew that arrives at a vault without an automatic sump pump discovers standing water inside the structure that covers the equipment. The crew manually dewaters the vault to complete their work. Other discharges occur routinely after heavy rains. PWP maintains a list of 122 vaults that are known to accumulate water after a storm and require manual pumping. A crew visits and dewaters each of these vaults after a significant rain event.

1.3.2.2 Scheduled Discharges

N/A

1.3.2.3 Reservoir Discharges

N/A

1.3.2.4 Emergency Discharges

Emergency discharges are capable of control by the same procedures described under 1.2 and 1.3 of this document.

In emergency situations where service affecting outages requires immediate attention due to human health and safety concerns (e.g. loss of power to a hospital), field personnel have the authority to take whatever action is necessary, including discharge of unscreened water. If practical, a sample of the discharged water should be taken and retained for screening. If the sample fails screening, or it is not possible to take a sample, a telephone report must be provided to the Los Angeles Regional Water Quality Control Board (LA RWQCB) at the earliest possible opportunity not to exceed 24 hours of any unscreened emergency discharge. A written report (Appendix B) detailing the nature, estimated quantity, and circumstances of the emergency discharge shall be faxed to the LA RWQCB following the verbal report, within five days of the emergency discharge, as required by 40 CFR § 122.41(l)(6).

Section 2
POLLUTION PREVENTION PLAN CONTACT INFORMATION

Plan Retained at Address:	311 Mountain View St.
	Pasadena CA 91103
Fax Number:	(626) 744-6700
Mailing Address:	Attn: George Wilson
	1055 E. Colorado Boulevard; Suite 350
	Pasadena CA 91106
24-Hour Emergencies:	Dispatch Center—(626) 744-4673
Primary Contact Name:	John Rowbotham
Primary Contact Phone:	(626) 744-4467
Alternate Contact Name:	Gurcharan Bawa
Alternate Contact Phone:	(626) 744-6562

Section 3
GENERAL PERMIT REQUIREMENTS

Section 3 of the PLAN is organized around the requirements, as described in Section VII.C.3 (Best Management Practices and Pollution Prevention Plan [PLAN]) of the General Permit. Section VII.C.3 of the General Permit is divided into subsections (a) through (f). Subsection (a) defines the term "PPP;" subsection (b) discusses the lack of standard industry-wide PPPs. The remaining subsections contain minimum specifications that must be met in order for a utility to obtain coverage under the General Permit. Correspondence between these subsections and this document is identified in Table 3.1.

Table 3.1 Satisfaction of General Permit Specifications by this PLAN

General Permit Subsection (from Section VII.C.3)	Requirement	PLAN Section(s)
(c)	Response to receiving water exceedence	3.3 and 5.2.5
(d)	Notification of RWQCB	2 and 5.2.5
(e)(i)	Provisions for different types of discharges	1.3.2
(e)(ii)	Pollution Prevention Team	5
(e)(iii)(a)	Drainage map	3.1.1
(e)(iii)(b)	Inventory of exposed materials	3.1.2
(e)(iii)(c)	List of spills and leaks	3.1.3
(e)(iii)(d)	Risk identification and summary of potential pollutant sources	3.1.4
(e)(iv)(a)	Good housekeeping	3.2.1, 5.2.2 and 5.2.6
(e)(iv)(b)	Preventative maintenance	3.2.2
(e)(iv)(c)	Spill prevention and response procedures	3.2.3 and 5.2.6
(e)(iv)(d)	Inspections	3.2.4, 5.2.3 and 5.2.7
(e)(iv)(e)	Employee training	3.2.5 and 5.2.3
(e)(iv)(f)	Record keeping and internal reporting procedures	3.2.6, 5.2.5 and 5.2.7
(e)(iv)(g)	Sediment and erosion control	3.2.7
(e)(iv)(h)	Management of runoff	3.2.8
(e)(v)	Comprehensive site compliance evaluation	3.3, 5.2.3, 5.2.5 and 5.2.7

3.1 Potential Pollutant Sources

3.1.1 Drainage Map

See Figure 3.1.

3.1.2 Inventory of Exposed Materials

N/A

Handling of toxic materials does not occur inside PWP vaults.

3.1.3 Spills and Leaks

N/A

Hundreds of PWP vaults are distributed across a broad metropolitan area. It would be impossible to compile a list of spills and leaks that have occurred in the City of Pasadena over the past three years.

3.1.4 Risk Identification

The water in electrical vaults includes storm runoff, irrigation runoff, and/or groundwater seepage that enters the vaults through electrical conduits, poor joint seals, a damaged lid, and holes in the ceiling, floors, and walls. Water may contain trace amounts of oil, grease, fertilizer, groundwater contaminants, organic matter, and other natural and artificial pollutants. In new vaults, the concrete has a pH of 12-13, which alkalizes water that comes into contact with it. Some vaults contain oil-filled equipment, such as transformers and switches. Where oil-impregnated paper is used for insulating the cable, it is wrapped in a plastic sheath at the splice, but this sheath may unravel over time and cause the oil to leak into the vault.

Other pollutants occasionally encountered that affect the quality of water removed from wet structures include silt, materials illegally dumped by the public, and pollutants contained in surface runoff.

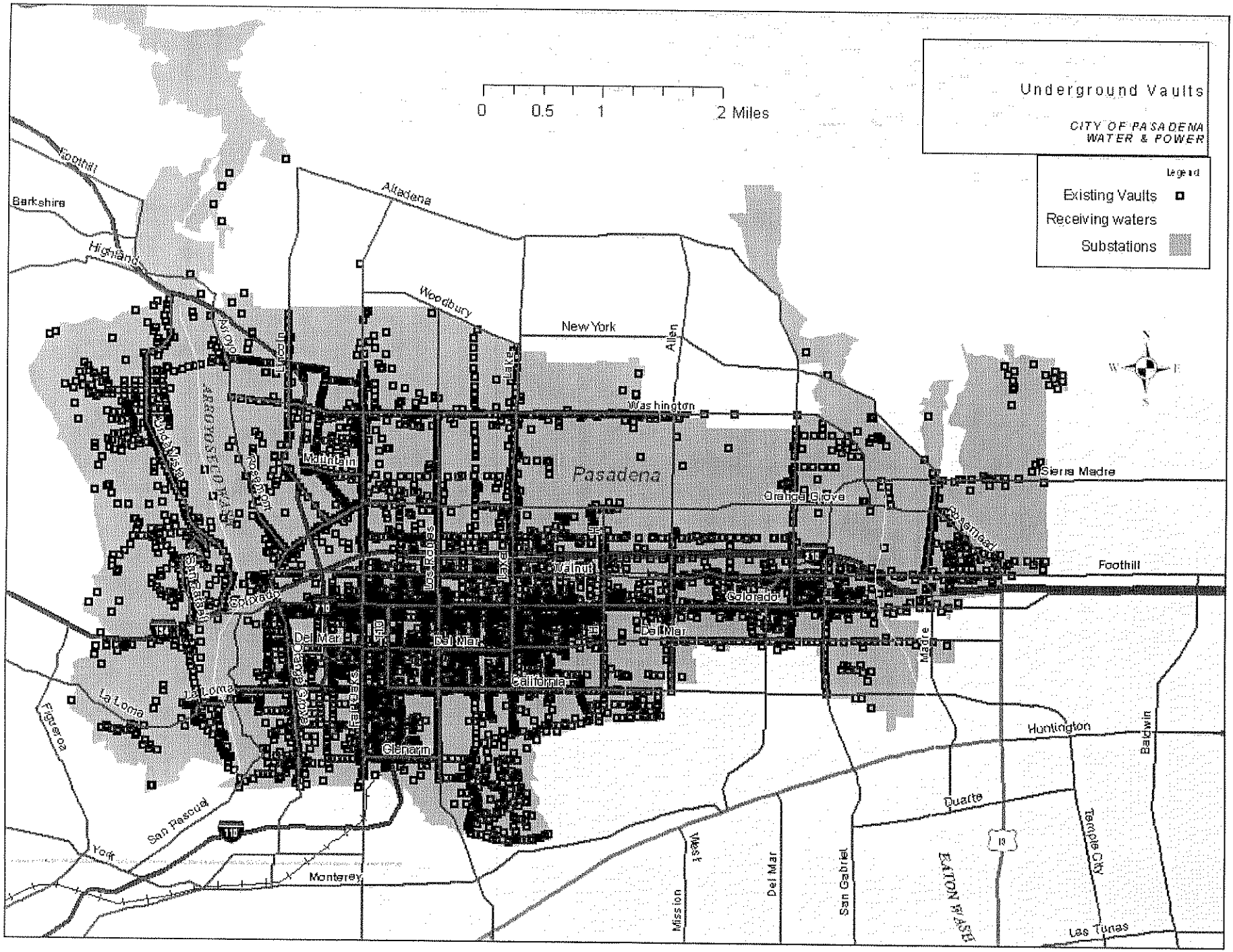


Figure 3-1: Map of PWP Utility Vaults

3.2 Measures and Controls

PPPs are designed to prevent or control the discharge of pollutants. They may include a schedule of activities, prohibition of practices, maintenance procedures, or other management practices. Standard industry-wide PPPs have not been developed for utility vaults. The following PPPs were determined to be appropriate for PWP and will be implemented to prevent the introduction of contaminants to water inside PWP utility vaults. Good housekeeping, spill prevention and response procedures, and inspections will be implemented before January 1, 2007. Preventative engineering measures will be implemented for vaults designed as part of projects that are initiated in 2007 or later.

3.2.1 Good Housekeeping

3.2.1.1 Existing Vaults

- Debris and other sources of pollution will be kept away from the top of the vault.
- Vault lids will be sealed and tightened upon leaving the vault.
- Crews will look for obvious sources of pollution—such as an oil patch or oily water flowing toward the vault from a nearby home, business, or parked car—that could cause polluted stormwater or irrigation runoff to enter the vault. If a crew member observes a likely source of pollution, he will report it to his supervisor so that corrective actions can be applied by Public Works or another appropriate stormwater management agency.

3.2.1.2 Future Vaults

Specifications for design and installation of new vaults will consider engineering controls to minimize ingress of stormwater and groundwater. Such controls may include:

- Waterproofing external concrete surfaces,
- Sealing around the openings where conduits enter the vaults,
- Improving lid sealing, and
- Setting the lid of the vault above grade where possible.

3.2.2 Preventative Maintenance

N/A

PWP vaults are simple underground structures, containing no complex mechanical devices. The concept of preventative maintenance does not apply.

3.2.3 Spill Prevention and Response Procedures

Vaults will be kept clean of oil, grease, solvents, and any other source of pollution. Oil leakages will be repaired; oil spills and seepages will be cleaned. For a severe situation, such as a large spill or equipment fire, a contractor will be called to perform a steam cleaning. After steam cleaning, the water left in the vault will be pumped and disposed of at a licensed facility.

3.2.4 Inspections

Each time a vault is dewatered, the field crew will inspect it for signs of pollution prior to dewatering. The inspection involves both sensory evaluation and testing using pH strips. Inspection procedures, an inspection log sheet, and appropriate actions to take in response to the inspection are contained in Appendix A.

Dry weather inventory and inspection of discharge points is not applicable to PWP utility vaults. Vaults provide a storage volume; thus pollutant concentrations in discharges are unlikely to be determined by antecedent weather conditions. Therefore, dry weather inspections would offer no additional information that is relevant to discharge characterization.

3.2.5 Employee Training

Field crews will be given instructions in spill prevention and response procedures, good housekeeping activities, and inspection protocol. All current employees will receive these instructions before January 1, 2007. New employees will receive training during their orientation period.

3.2.6 Record Keeping and Internal Reporting Procedures

Records are to be written and retained by the Power Distribution Supervisor, Underground Power, as described in Section 5. Written documents associated with vault dewatering include:

- Field logs, to be completed by field crew each time there is a controlled discharge (Appendix A);
- Emergency discharge report forms, to be completed by field crew whenever water must be discharged without prior inspection (Appendix B);
- Case study, to be written by the Environmental Manager within six months of gaining coverage under the General Permit (Section 4.3 of the MRP Plan);
- Report about Comprehensive Site Compliance Evaluation, to be written by the Environmental Manager after the case study has been completed (Section 3.3);
- Annual monitoring report, to be written by the Environmental Manager and submitted to the RWQCB by March 20th, beginning in 2008 (Section 4.3 of the MRP Plan).

3.2.7 Sediment and Erosion Control

N/A

PWP vaults are enclosed, underground structures. They do not experience erosion or generate sediment.

3.2.8 Management of Runoff

N/A

PWP vaults are enclosed, underground structures. They do not generate runoff.

3.3 Comprehensive Site Compliance Evaluation

Site compliance evaluations are covered under three types of activities:

a. Vault condition rating and corrective actions performed pursuant to General Order Number 165, Public Utilities Commission of the State of California Inspection Cycles for Electric Distribution Facilities.

b. Inspections of manually dewatered vaults, for the potential for pollutants to enter the receiving waters, performed prior to each discharge.

c. Annual monitoring and testing of automatically dewatered vaults, as described in the MRP Plan.

The General Permit states:

> Based on the results of the evaluation, the Discharger shall revise, as appropriate, the description of potential pollutant sources . . . within two weeks of such evaluation and shall provide timely implementation of any changes to the PLAN.

Accordingly, if site compliance evaluations expose pollutant sources not already listed in the PLAN, the Environmental Manager will modify the PLAN consequent to such discovery, and inspection practices will be likewise updated.

After the first cycle of annual monitoring has been completed, the Environmental Manager will write a report summarizing the scope of compliance evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations related to the implementation of the PLAN, and any modifications made to the PLAN. The report will also identify any incidents of noncompliance OR certify that PWP is in compliance with the PLAN and the General Permit (Order 2006-0008-DWQ).

Section 4
PROCEDURES

The previous section of this document identified the ways in which each requirement of the General Permit is met by this PLAN. This section summarizes those aspects of the PLAN that affect those individuals who are physically involved with dewatering PWP vaults.

4.1 Applicability of the PLAN

The PLAN only applies to water discharged to storm drainage systems, surface water, and/or land.

The PLAN is to be used for short-term intermittent discharge of water from vaults. The PLAN also addresses the control of pollutants discharged from automatically pumped sumps in vaults.

The PLAN does not apply to discharges from:

- Automobile washing.
- Equipment cleaning.
- Groundwater cleanup activities.
- Discharge into a sanitary sewer drainage system.
- Building or property cleaning.
- New construction activities on sites larger than 1 acre.
- Facilities with existing NPDES permits.

4.2 Pollution Prevention in Manually Dewatered Vaults

4.2.1 Screening Prior to Water Removal

Screening procedures summarized here are detailed in Appendix A. PWP uses two methods of screening: human sensory evaluation and pH strips (or equivalent device).

Section II.E (Notification Requirements, Discharge to a Municipal Separate Storm Sewer System) of SWRCB Order No. 2006-0008-DWQ specifies a 24-hour reporting requirement for discharge of 50,000 gallons or more to a municipal separate storm sewer system. Because all of PWP's vaults are less than 50,000 gallons in volume, this requirement is not applicable.

4.2.2 Water Fails Screening

Water fails screening if pH is outside the acceptable range (6.5 to 8.5) or oil sheen, suspended sediment, discoloration, or odor is observed. Water that fails the screening will not be discharged to the storm sewer system. Field crews will call their immediate supervisor, and he will arrange for Public Works or a PWP contractor to pump out the water and dispose of it at a permitted facility.

4.3 Pollution Prevention Procedures in Automatically Dewatered Vaults

These procedures apply to any structure with an automatic sump pump that discharges water to the surface; except for the listed exclusions (refer to Section 3.1 for exclusions). Locations that discharge to sanitary or industrial sewer systems are exempt from the permit requirements.

A representative sample of automatically controlled vault discharges will be included in the MRP Plan devised for PWP. These sampling results will be used as a screening tool to determine the range of concentrations of contaminants, if any, being discharged by these automatic sump pumps. If this sampling shows pollutants are in exceedance of receiving water limitations in an automatically pumped vault, the pump in this vault and all similar vaults will be disabled until the source of the pollutants is remedied. Until automatic pumping is restored, the vaults will be manually dewatered, as described in Appendix A.

Section 5
POLLUTION PREVENTION TEAM

5.1 Team Members

- General Manager *(Phyllis Currie)* (626) 744-4425
- Director, Power Delivery Engineering/ Construction Management *(Joe Awad)* (626) 744-4157
- Director, Power Delivery Services *(George Wilson)* (626) 744-4481
- Power Distribution Supervisor, Underground Power (*John Rowbotham*) (626) 744-4467
- Environmental Manager *(Gurcharan Bawa)* (626) 744-6562
- Power Delivery Crew Supervisors
- Power Delivery Crew Members

5.2 Member Responsibilities

5.2.1 General Manager

- Submit letter to the RWQCB authorizing both the Director of Power Delivery Services and the Environmental Manager as representatives, authorized to certify reports and documents required by the General Permit.
- In the event of a reorganization that results in responsibility for operation of the vaults being assigned to an employee holding a job title other than Director of Power Delivery Services or responsibility for environmental matters being assigned to an employee holding a job title other than Environmental Manager, the General Manager shall submit a new letter authorizing employees with the updated job titles as representatives.

5.2.2 Director, Power Delivery Engineering/Construction Management

- Read and be familiar with the contents of the General Permit, this PLAN, and the MRP Plan for Statewide General NPDES Permit for Utility Vaults.
- Encourage incorporation of engineering controls to minimize ingress of stormwater and groundwater to new vaults, as described in Section 2.5.1.2.

5.2.3 Director, Power Delivery Services

- Read and be familiar with the contents of the General Permit, this PLAN, and the MRP Plan for Statewide General NPDES Permit for Utility Vaults.
- Maintain a list of contractors approved to handle disposal of contaminated water.
- Ensure that vaults selected for the MRP are outfitted with float switches that allow accumulation of sufficient water to collect a sample from (see Section 3.1 of the MRP).
- Oversee employee training pertaining to the PLAN.
- Schedule PWP staff or contract with an environmental firm to perform sampling as described in the MRP Plan. Individuals who perform sampling must possess a Water Sampling Certificate issued by an ELAP-accredited lab.
- If a crew supervisor reports an emergency discharge that either was not screened or failed screening, call the LA RWQCB to report this within 24 hours of the incident. Complete and fax a written report (Appendix B) within five days.
- If pollutants in exceedance of water quality standards are detected in an automatically pumped vault, ensure that this vault and all similar vaults have their pumps disabled and are manually dewatered until the cause of the pollution can be discovered and eliminated to the extent practicable.

5.2.4 Power Distribution Supervisor, Underground Power

- Read and be familiar with the contents of the General Permit, this PLAN, and the MRP Plan.
- Maintain a hardcopy of the General Permit, this PLAN, the MRP Plan, all monitoring information, and any reports required by the permit at 311 Mountain View St.
- Submit updates of the Pollution Prevention Team membership or responsibilities to the RWQCB within 30 days of making any change.

5.2.5 Environmental Manager

- Read and be familiar with the contents of the General Permit, this PLAN, and the MRP Plan.
- Provide notice to the public of permit application materials (NOI, PLAN, and associated maps) for a minimum of 30 days, by posting a link to electronic copies of these documents on PWP's website. This notice must be performed after application materials have been submitted to the RWQCB and before the end of 2006.
- If there is an exceedence of water quality standards, submit a revised PLAN, which demonstrates to the satisfaction of the RWQCB that implementation of the

revised PLAN will reduce the chances of any future exceedances of the water quality standard.

- Revise PLAN following discovery of unforeseen pollutant sources during site compliance evaluations, or in response to requests from RWQCB.
- Write, and retain for three years, a report about Comprehensive Site Compliance Evaluation, as described in Section 3.3. This report is a one-time requirement, to be written after the Case Study (see Section 2.1 of the MRP Plan) is completed. Sign the report with the certification required by 40 CFR §122.22(d). (This certification can be found in Attachment D to the General Permit, Section V.B.5.) Furnish this report upon the request of the RWQCB, SWRCB, or USEPA.
- Write a case study and an annual sampling report, as described in Section 4.3 of the MRP Plan. Submit the report for the preceding calendar year to the RWQCB by March 20th. Sign the report with the certification required by 40 CFR §122.22(d).

5.2.6 Power Delivery Crew Supervisors

- Read and be familiar with the contents of this PLAN.
- Ensure that crew members follow Good Housekeeping procedures for existing vaults, as described in Section 2.5.1.1.
- Follow Spill Prevention and Response guidelines, as described in Section 2.5.3.
- When water fails pollution inspection, assist crew and implement the procedure established by PWP to dispose of the water at a permitted facility.
- Report emergency discharges—including whether a sample of the discharge was taken, and if so, whether it passed screening—to the Director of Power Delivery Services.

5.2.7 Power Delivery Crew Members

- Perform pollution inspections of manually dewatered vaults, prior to each discharge. Exceptions are made when there is an imminent threat to human life or serious property damage. Crew members are authorized to make this judgment call and take whatever action is necessary to relieve the immediate threat.
- If an emergency discharge is made, collect a sample of the discharge, if possible, and perform water quality screening on it.

Appendix A
MANUALLY-DEWATERED VAULT INSPECTION PROCEDURE

The following describes the inspection procedure for manually dewatered vaults. See Figure A-1 for a summary of this process.

Waste Water Test Kit

The following items are contained in the Wastewater Test Kit:

- pH test strips,
- laminated color chart for pH test strips,
- weights (e.g. large washers),
- plastic box for kit contents, and
- a roll of synthetic thread.

Test Kit Use

Use the Wastewater Test Kit to test the water found in vaults, manholes, and other underground structures before pumping the water from the structure.

The following steps outline the water test procedure (Figure A-1).

Step 1

Test and ventilate the manhole per PWP procedure for confined spaces. Follow confined space permit requirements.

Step 2

Enter the following in the inspection log (page A-6)

- Date of the inspection.
- Time of the inspection.
- Manhole number or location address.
- Name of individual performing inspection.

Step 3

Conduct a sensory survey of the water in the vault to determine the presence of any obvious signs of contamination. Visual signs of contamination include a sheen on the water surface, murkiness/cloudiness, and presence of debris. Olfactory signs of contamination include petroleum or sewage odors.

If there are obvious signs of contamination, then:

- Circle *Yes* in the test log next to the signs you observed. (page A-6)
- Contact your supervisor.
- Do NOT pump the vault.

If there is no visible evidence of contamination, then:

- Circle *No* next to each option in the test log.
- Proceed with the pH test.

Step 4

Remove one test strip, a weight, and the spool of thread from the test kit container.

Step 5

Run thread through the weight and the hole in the test strip. Secure.

Step 6

Cut the thread to an appropriate length to allow the test strip to reach the bottom of the manhole.

Step 7

Put on gloves or have a rag/paper towel available for holding the strip. Avoid touching the test strip after it has been in the water.

Step 8

Lower the test strip into the manhole water.

NOTE: In deeper water, stratification may occur. Lower the test strip well into the water to ensure that the strip is exposed to the entire volume of water.

Step 9

Remove the test strip from the manhole and shake it to remove excess water. Avoid touching the test strip to your bare skin.

Step 10

Examine the test strip for visible evidence of contamination, such as mud, oil, or sludge.

If there is visible evidence of contamination, then:

- Circle the type of residue you observed. If you circle *Other*, include a one-word description. (page A-6)
- Contact your supervisor.
- Do NOT pump the vault.

If there is no visible evidence of contamination, then:

- Circle *None* on the test log.
- Proceed with the test.

Step 11

Compare the pH strip to the color chart provided in the Water Test Kit. Write the pH number in the blank at the bottom of the test log. If the strip indicates that pH is greater than 8.5 or less than 6.5, then:

- Contact your supervisor.
- Do NOT pump the vault.

If the strip indicates that the pH is at least 6.5 but no more than 8.5, then:

- Proceed with pumping the vault.

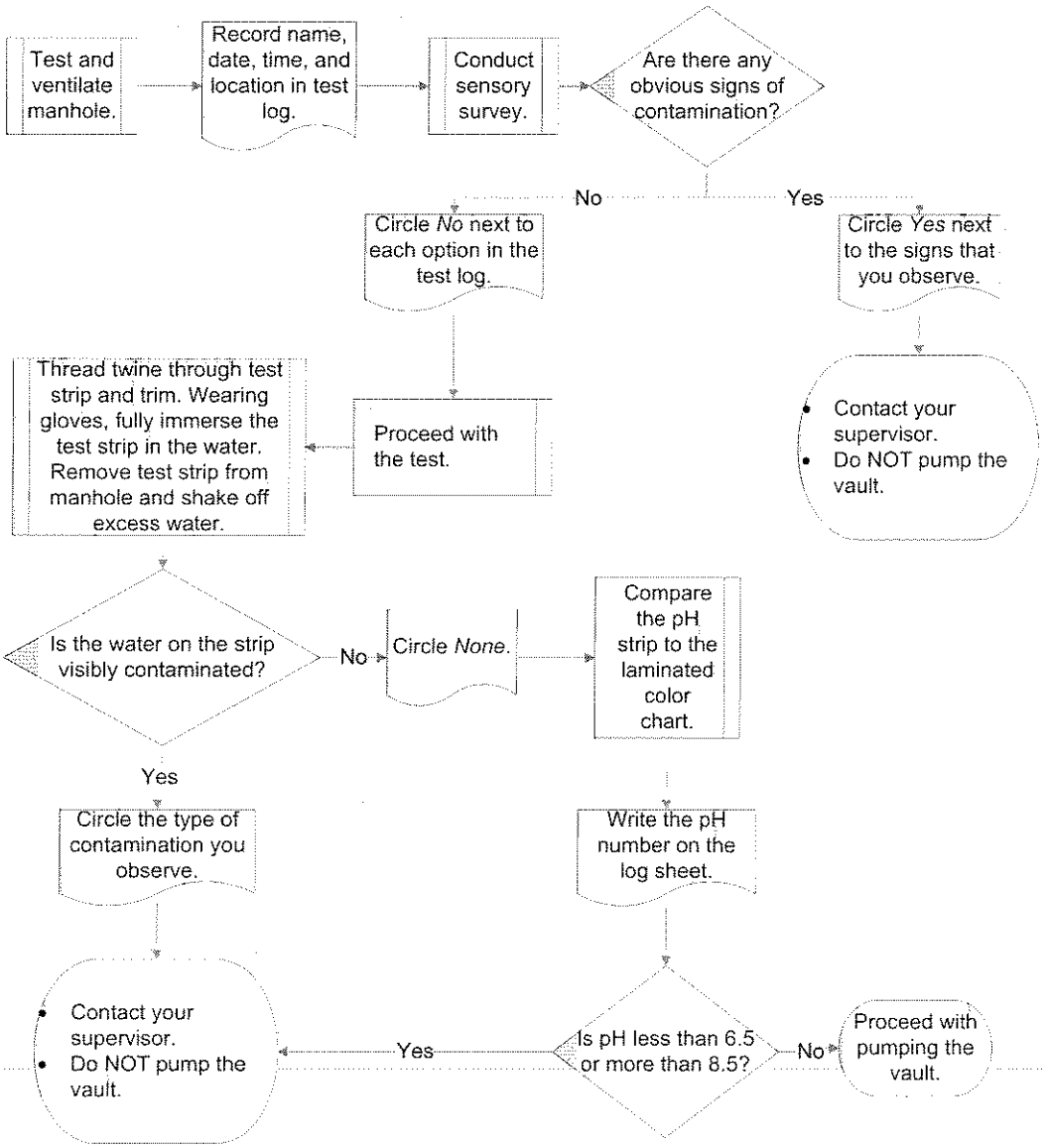


Figure A-1: Flowchart of Pollution Testing Procedure

Contaminated Water

Introduction

All contaminated water must be disposed of according to federal, state, and local environmental regulations. In some cases, a report must be filed with the regulatory agencies. Failure to do so may result in substantial fines and/or penalties.

Contact PWP Environmental Manager for further details on the disposal of contaminated water.

See Table A-1 for roles and responsibilities upon discovery of contaminated water.

Disposal Contractors

All vendors/contractors used for transport, storage, and/or disposal of contaminated water must be:

- Permitted by federal and state environmental regulatory agencies.
- Operating under a current contract or general agreement.

Uniform Hazardous Waste Manifest

All water classified as hazardous that is being transported from a PWP vault to a vendor recycling or disposal facility must be accompanied by a Uniform Hazardous Waste Manifest. (Figure A-2)

Record Keeping

Environmental regulations require that copies of all shipping documents and manifests be retained by the generator.

Send a copy of all manifests and shipping documents to the Power Distribution Supervisor, Underground Power.

Table A-1
Response to Discovery of Contaminated Water During Manual Dewatering

Stage	Who	What
1	**Employee who discovers contamination**	Contacts his supervisor. Does **not** pump the contaminated water.
2	**Employee's Supervisor**	Contacts Power Distribution Supervisor, if needed: ■ For disposal instructions. ■ For a list of approved vendors. ■ Provides technical guidance on disposal requirements.
3	**Power Distribution Supervisor**	Provides a list of approved vendors. Contacts appropriate regulatory agencies, if necessary. Maintains a copy of all disposal records in a permanent file. Reports incident to Environmental Manager.
4	**Environmental Manager**	Determines if contamination is a one-time occurrence or a chronic problem. If it is a chronic problem, finds the source of the problem. If necessary, revises the PLAN to incorporate source control PPPs or other procedures to reduce the likelihood of crews encountering contaminated water in the future.

Vault #	

Pollution Inspection Log Sheet

Name:	
Date of Test:	
Time of Test:	

Sensory Observations (circle Yes or No for each row):

Sheen on water surface/oily swirls:	**Yes**	**No**
Cloudy or murky:	**Yes**	**No**
Presence of debris (trash):	**Yes**	**No**
Petroleum (gas) odor:	**Yes**	**No**
Sewage or rotten odor:	**Yes**	**No**

Test Strip:

Residue covering strip (circle one)

Mud

Oil

Sludge

Other _____

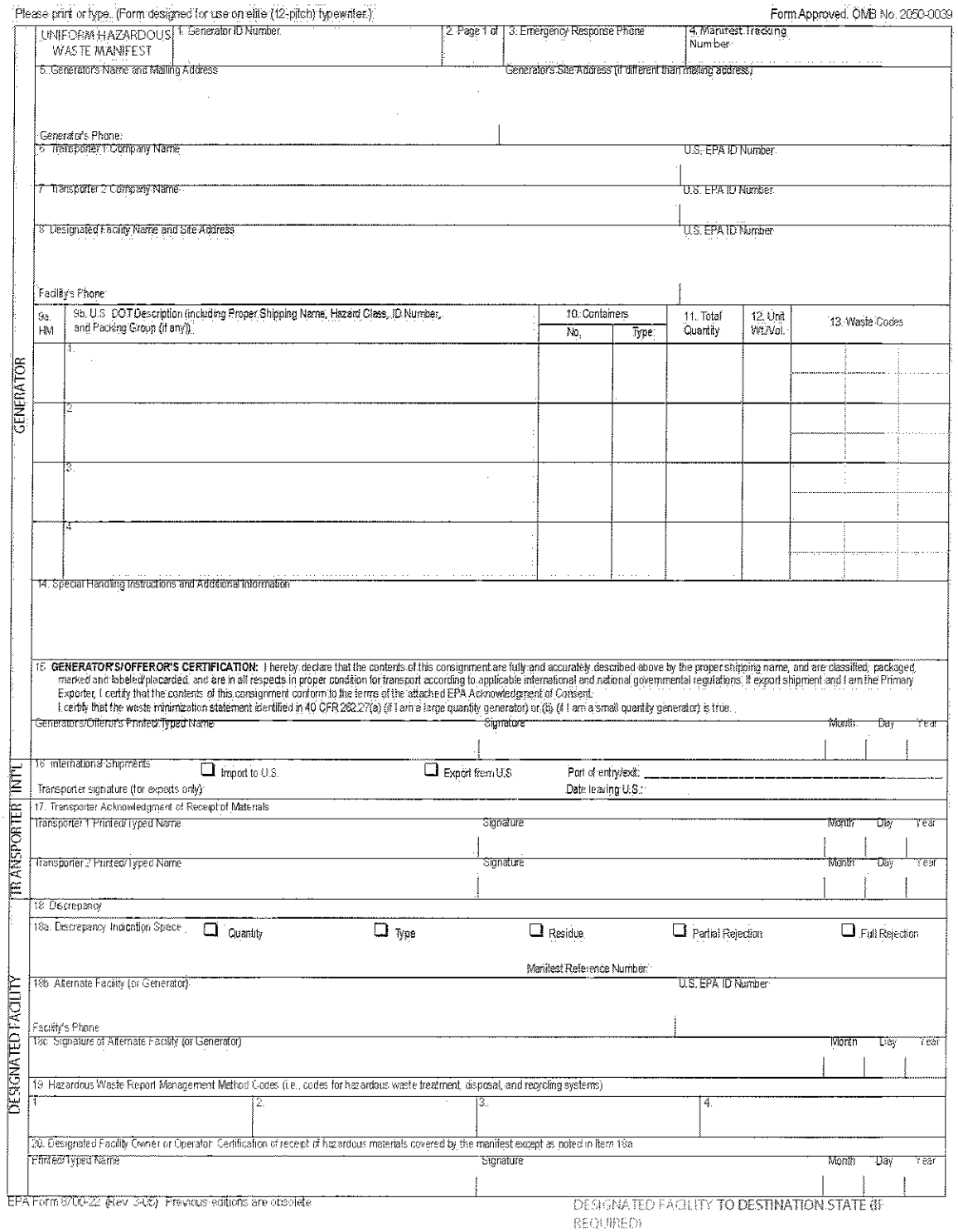
None

pH (write in the number) _____

Comments: _____

_____

_____



Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number | 2. Page 1 of | 3. Emergency Response Phone | 4. Manifest Tracking Number

GENERATOR

5. Generator's Name and Mailing Address | Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name | U.S. EPA ID Number

7. Transporter 2 Company Name | U.S. EPA ID Number

8. Designated Facility Name and Site Address | U.S. EPA ID Number

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1.					
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

TRANSPORTER INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) | U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1. | 2. | 3. | 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name | Signature | Month | Day | Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Figure A-2: Sample Uniform Hazardous Waste Manifest

Appendix B
EMERGENCY DISCHARGE REPORT FORM

VAULT NUMBER: _____

STREET LOCATION: _____

INITIAL BELOW

YEAR	MONTH	DAY	TIME
	/	/	

Reason for emergency discharge:

Appearance of discharge (e.g. murky, iridescent sheen, etc.):

Approximate volume of discharge:

Steps taken or planned to reduce, eliminate, or prevent reoccurrence of the noncompliance:

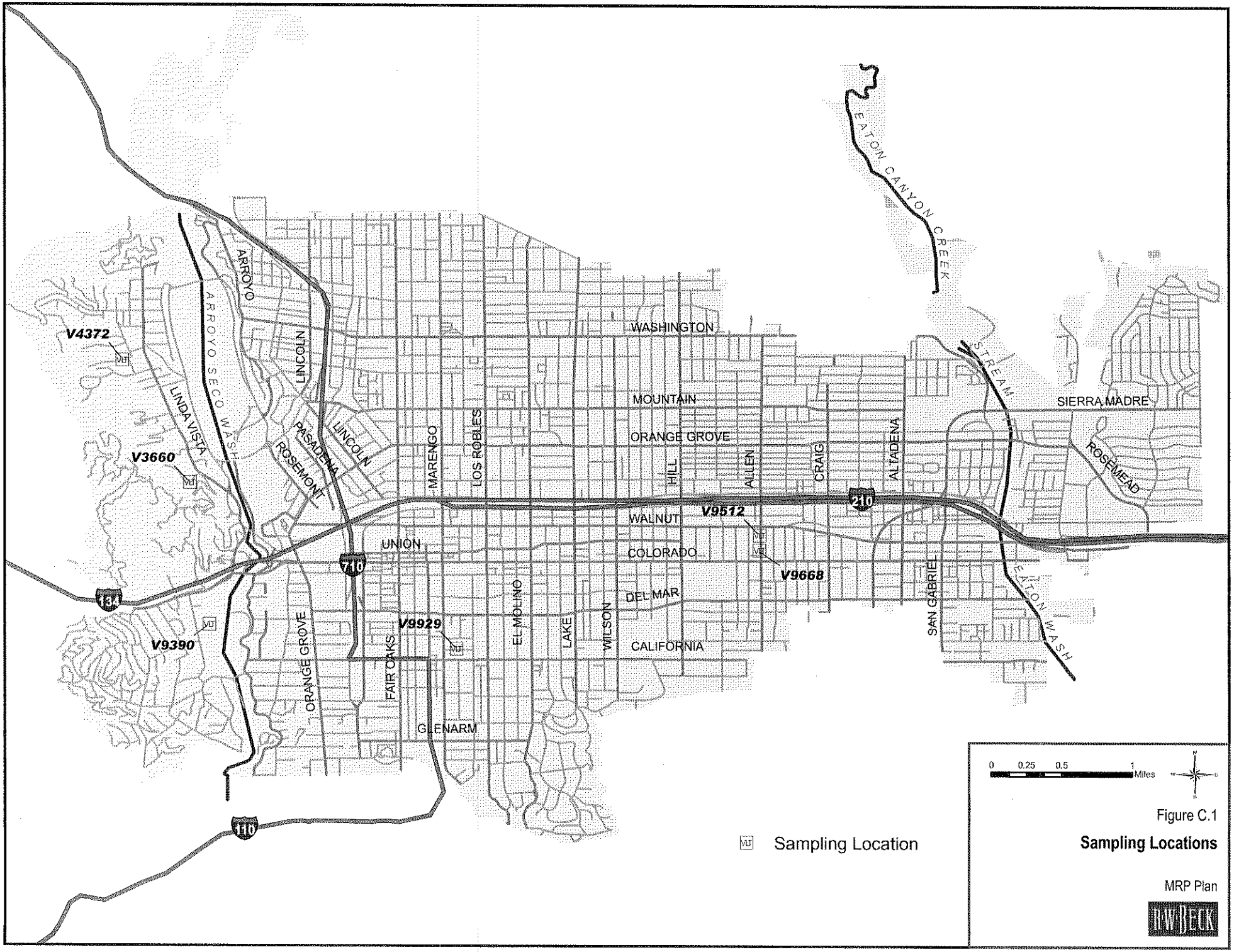
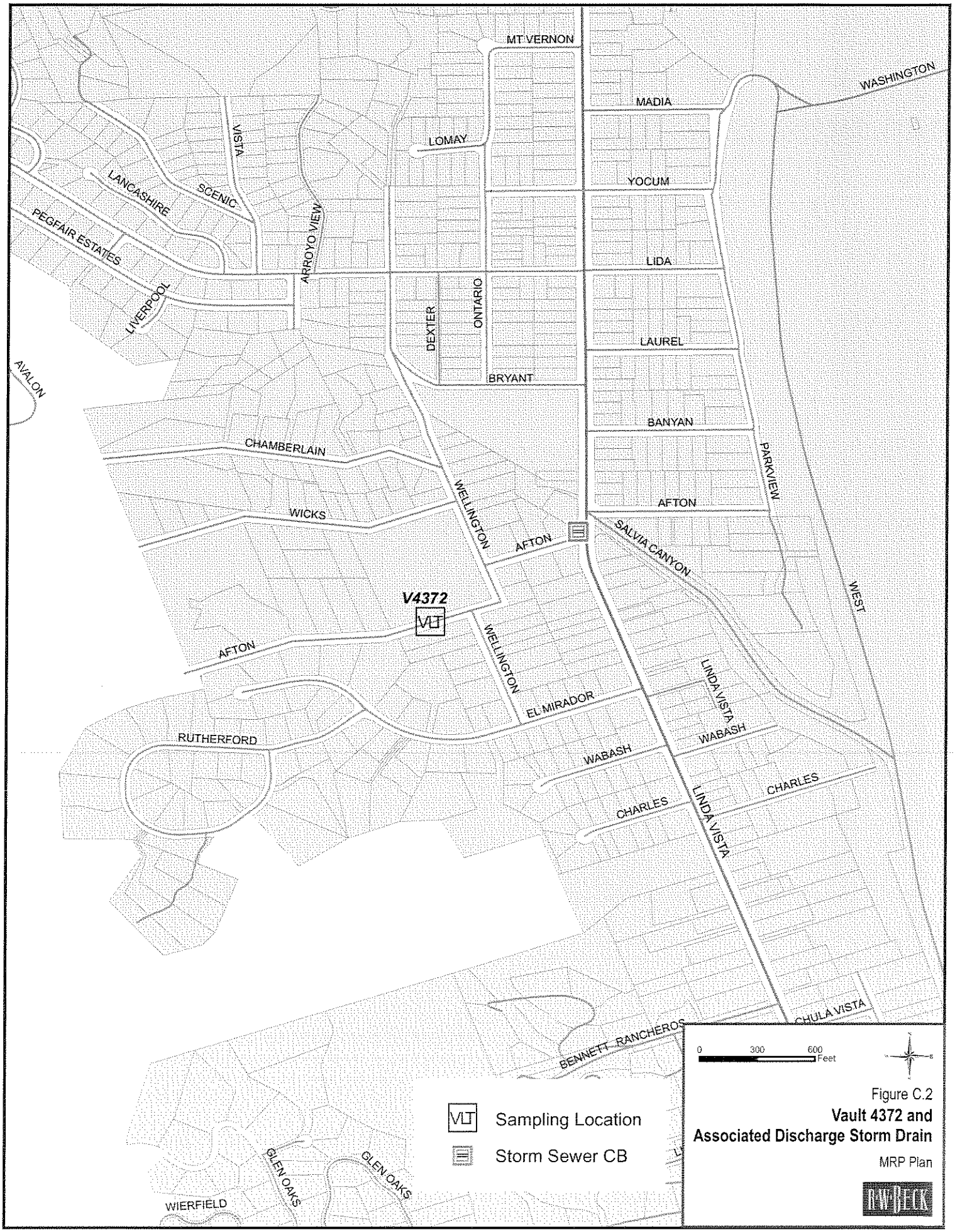


Figure C.1

Sampling Locations

MRP Plan

LWA BECK


MT VERNON
WASHINGTON
MADIA
LOMAY
YOCUM
VISTA
LANCASHIRE
SCENIC
PEGFAIR ESTATES
ARROYO VIEW
LIDA
LIVERPOOL
DEXTER
ONTARIO
LAUREL
AVALON
BRYANT
BANYAN
CHAMBERLAIN
PARKVIEW
WELLINGTON
AFTON
WICKS
SALVIA CANYON
V4372
VLT
WEST
AFTON
WELLINGTON
LINDA VISTA
EL MIRADOR
WABASH
RUTHERFORD
WABASH
CHARLES
CHARLES
LINDA VISTA
CHULA VISTA
BENNETT RANCHEROS
GLEN OAKS
GLEN OAKS
WIERFIELD
VLT Sampling Location
Storm Sewer CB
0
300
600
Feet
N
Figure C.2
Vault 4372 and
Associated Discharge Storm Drain
MRP Plan
RMW/ECK

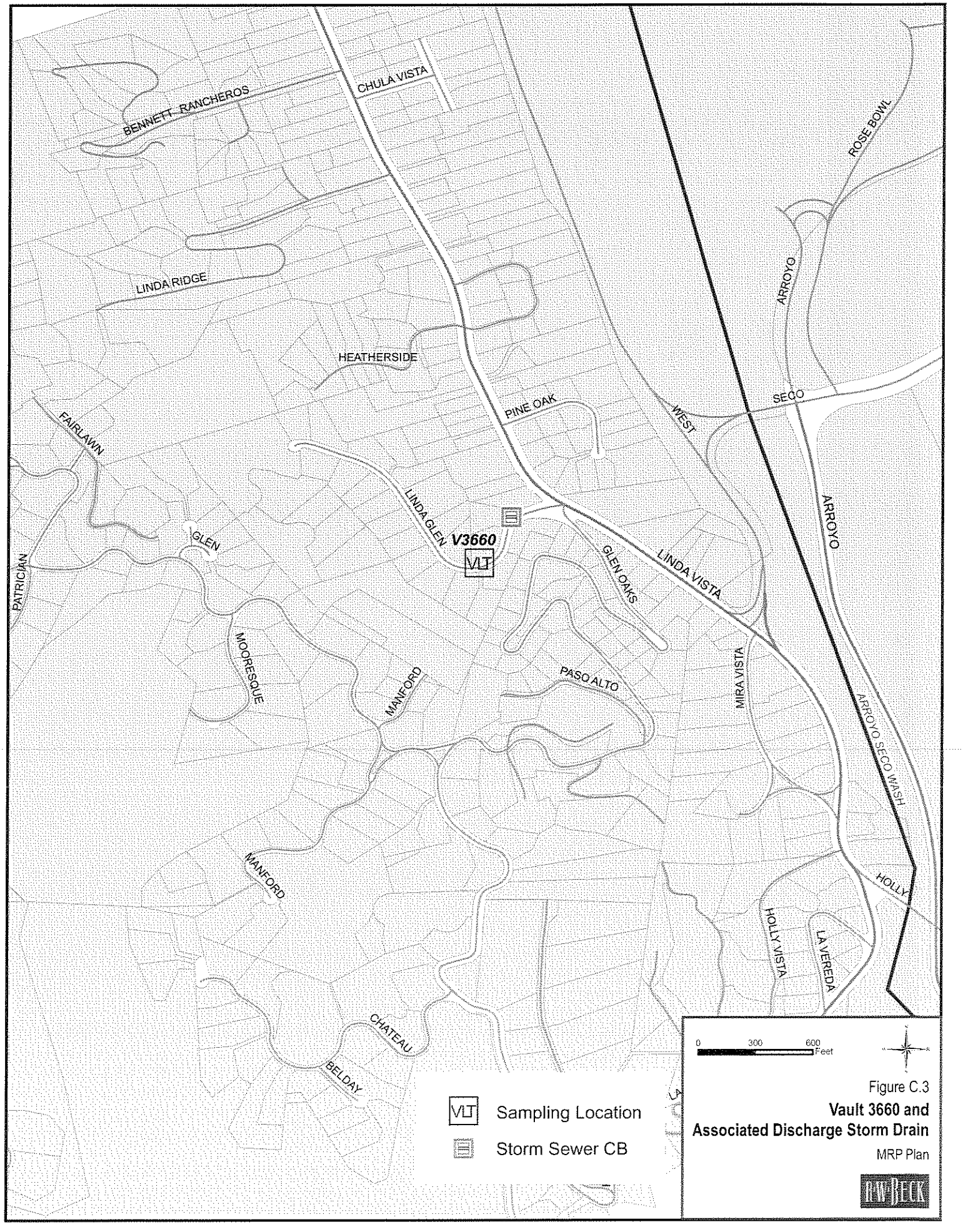


Figure C.3

Vault 3660 and Associated Discharge Storm Drain

MRP Plan

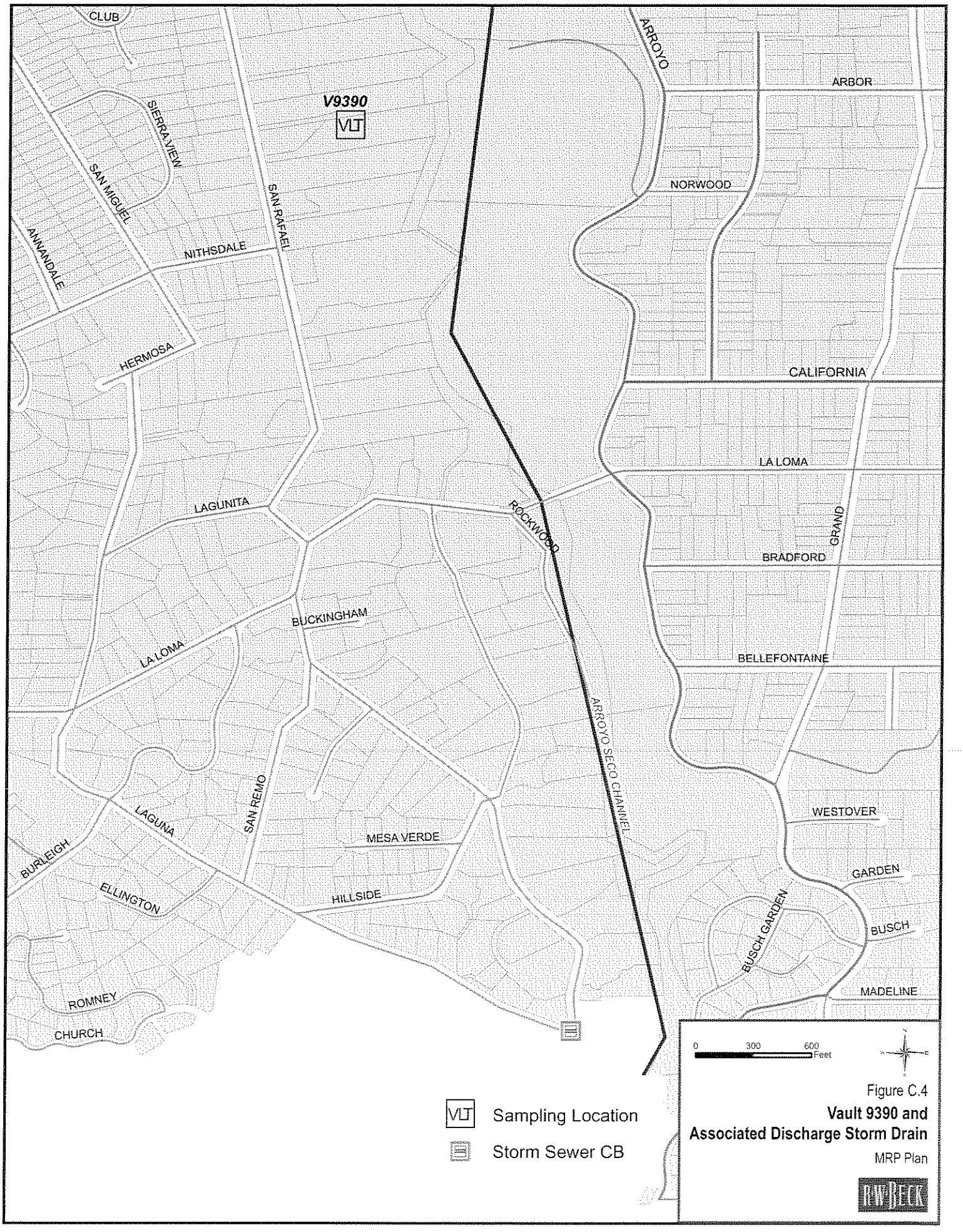


Figure C.4

Vault 9390 and Associated Discharge Storm Drain

MRP Plan

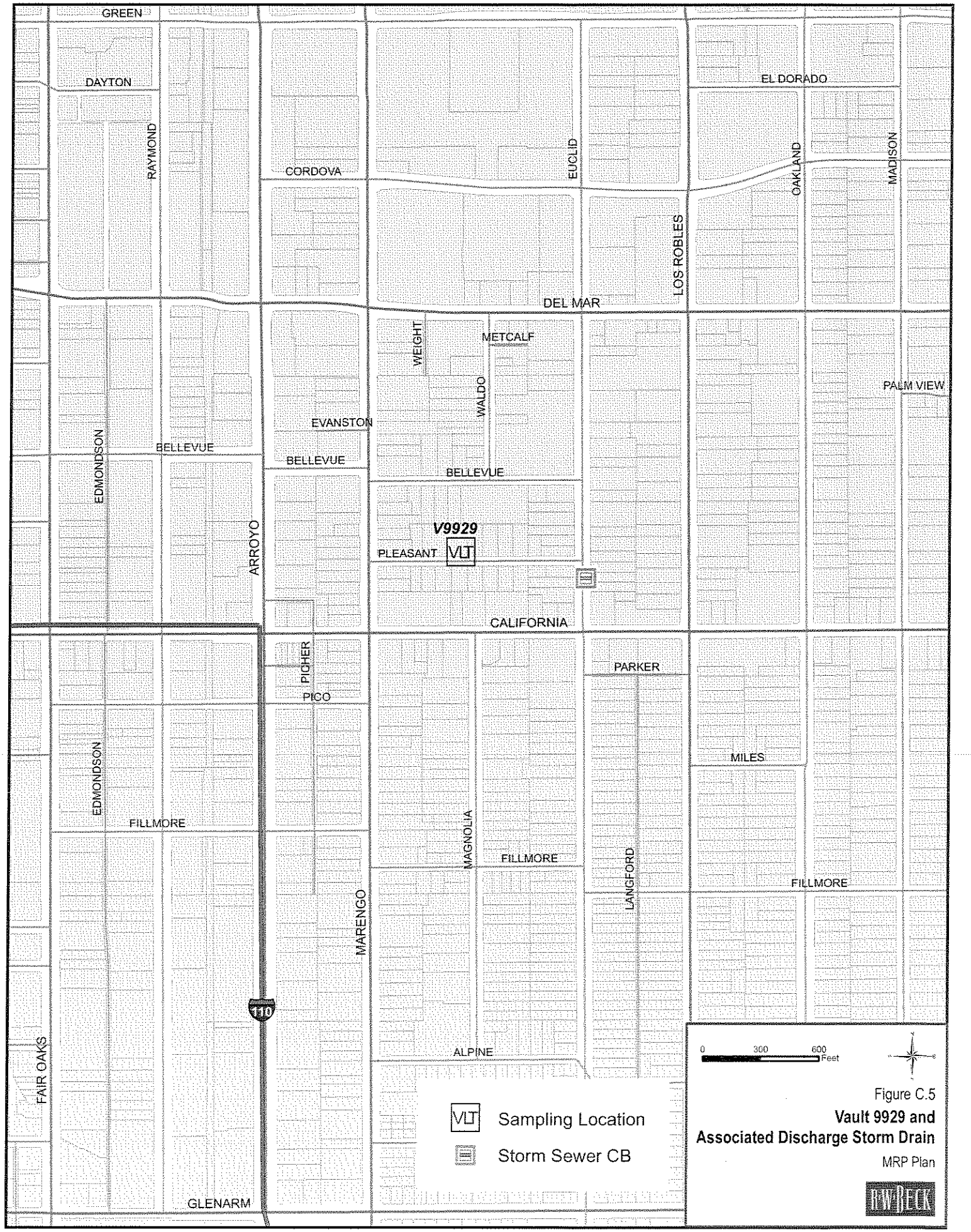


Figure C.5

Vault 9929 and Associated Discharge Storm Drain

MRP Plan

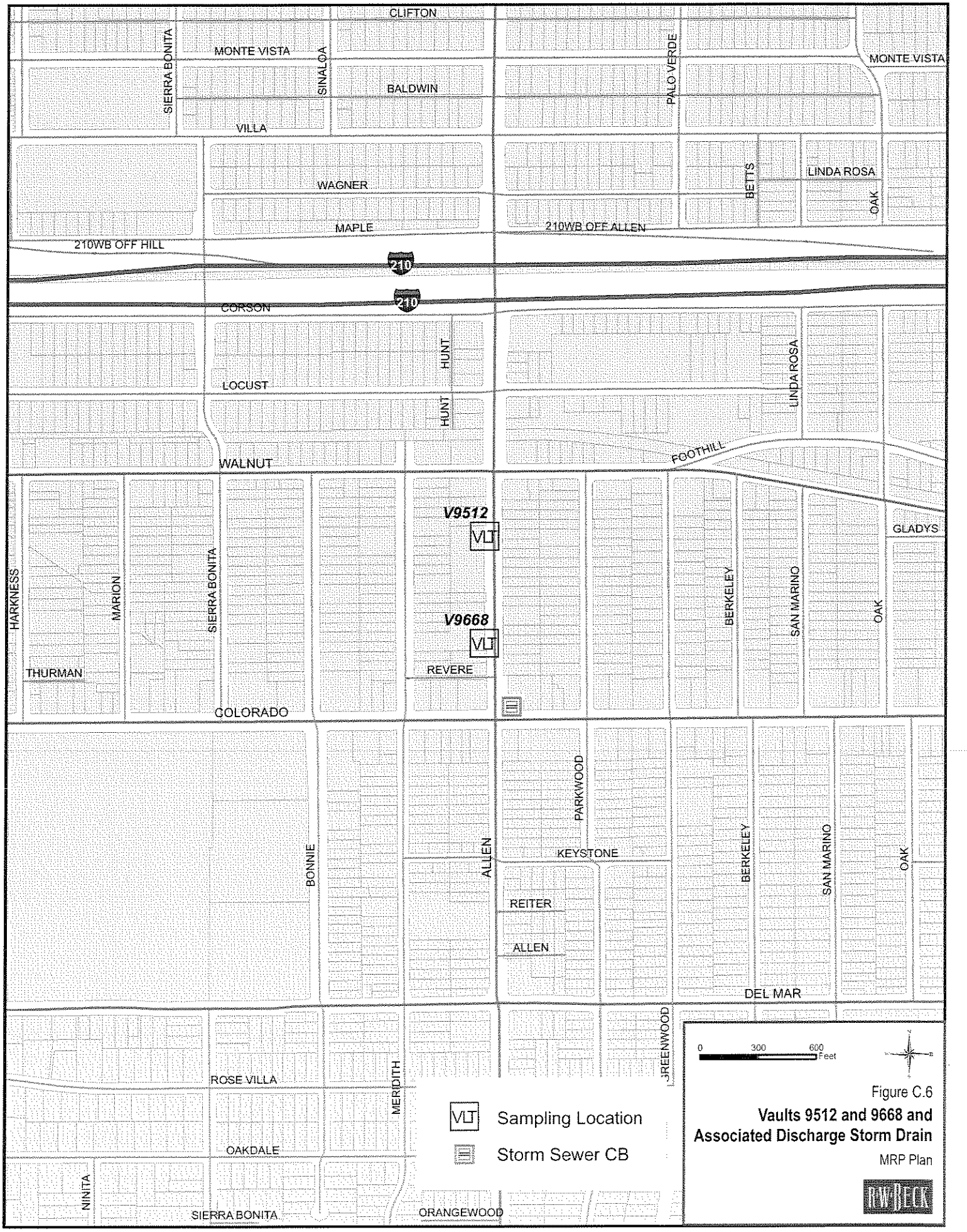


Figure C.6

Vaults 9512 and 9668 and Associated Discharge Storm Drain

MRP Plan