

1902 - Serving Our Community for over 120 Years - 2023
WEST BAY SANITARY DISTRICT
AGENDA OF BUSINESS
REGULAR MEETING OF THE DISTRICT BOARD
WEDNESDAY, JUNE 28, 2023 AT 7:00 P.M.
RONALD W. SHEPHERD ADMINISTRATION BUILDING,
500 LAUREL STREET, MENLO PARK, CALIFORNIA 94025

Board Members

Fran Dehn, President
David Walker, Secretary
Roy Thiele-Sardiña, Treasurer
Edward P. Moritz, Member
George Otte, Member

General Manager

Sergio Ramirez

District General Counsel

Anthony Condotti, Esq.

AGENDA OF BUSINESS

To participate by telephone or Zoom meeting, public comments can be made by joining Zoom meeting at:

<https://us06web.zoom.us/j/85839118310?pwd=WEw5TkJlcEVUbm5HVmZpeVRsUkNBUT09>

Meeting ID: 858 3911 8310 Passcode: 245615

NOTE: The Board may take action on any agenda item unless specifically designated a “discussion” item or a “report.”

1. Call to Order and Roll Call

2. Communications from the Public

3. Consent Calendar

Matters listed under this item are considered routine and will be enacted by one motion. The motion, seconds, and vote are applicable to any included resolutions and recorded accordingly. There will be no separate discussion of these items unless specifically requested by a member of the Board.

- A. Approval of Minutes for Regular Meeting June 14, 2023 Pg. 3A-1
- B. Consider Resolution Accepting Deed of Easement Pursuant to Class 3 Sewer Permit No. 1613 for the Construction of Wastewater Facilities for 305 Cervantes Road, Portola Valley, California Pg. 3B-1
- C. Consider Accepting Sewer Facilities Constructed Pursuant to Class 3 Sewer Permit No. 1613 for the Construction of Wastewater Facilities for 305 Cervantes Rd, Portola Valley, California Pg. 3C-1
- D. Consider Authorizing the General Manager to Issue Class 3 Sewer Permit No. 1628 for the Construction of Wastewater Facilities for 460 Cervantes Road, Portola Valley, California Pg. 3D-1

4. General Manager's Report Pg. 4-1

5. Presentation, Discussion, and Direction on the New District Website Pg. 5-1

6. Consider Authorizing the General Manager to Enter Into an Agreement Approved as to Form by General Counsel with Central Square for the Online Permitting System Pg. 6-1
7. Presentation and Discussion by San Mateo LAFCo Executive Director on the Solid Waste Divestiture Process Pg. 7-1
8. Presentation and Discussion on Flow Equalization and Resource Recovery Facility Levee Improvement Project Pg. 8-1
9. Consider Authorizing the General Manager to Enter Into an Agreement for On-Call Environmental Compliance Support with Kaz & Associates, LLC for the Flow Equalization and Resource Recovery Facility Levee Improvement Project Pg. 9-1
10. Consider Accepting Work by Precision Engineering for the North Bay Road and Ringwood Avenue Sewer Project; and Authorizing the General Manager to Execute the Balancing Change Order and File the Notice of Completion Pg. 10-1
11. Consider Resolution to Adopt the New West Bay Sanitary District Logo to Include Insignia to Reclaimed Water and Authorize the General Manager to Convert to the New Logo Pg. 11-1
12. Consider Adopting Regulation Amending Various Provisions of the General Code of Regulations Pg. 12-1
13. Consider Adopting Regulation Amending the General Code of Regulations to adopt updated Standard Specifications (Section 400) Pg. 13-1
14. Consider Adopting Resolution Approving Master Fee Schedule (2023) Pg. 14-1
15. Discussion and Direction on the West Bay and Sharon Heights Recycled Water Facility Pg. 15-1
16. Discussion and Direction on Bayfront Recycled Water Project and Status Update Pg. 16-1
17. Report and Discussion on South Bayside Waste Management Authority (SBWMA) Pg.17-1
18. Report and Discussion on Silicon Valley Clean Water (SVCW) Plant Pg. 18-1
19. Closed Session
 - A. PUBLIC EMPLOYEE PERFORMANCE EVALUATION/CONF. WITH LABOR NEGOTIATORS
Agency designated representatives: Board President/General Counsel
Unrepresented employee: General Manager
20. Comments or Reports from Members of the District Board and Consider Items to be Placed on Future Agenda
21. Adjournment

The West Bay Sanitary District does not discriminate against persons with disabilities. Upon request, the agenda and agenda packet can be provided in a format to accommodate special needs. If you require a copy of the agenda or related materials in an alternative format to accommodate a disability, or if you wish to attend this public meeting and will require special assistance or other special equipment, please call the District at (650) 321-0384 at least five days in advance and we will make every reasonable attempt to provide such an accommodation.



1902 - Serving Our Community for over 115 Years - 2023

**WEST BAY SANITARY DISTRICT
MINUTES OF THE REGULAR MEETING OF THE DISTRICT BOARD
WEDNESDAY, JUNE 14, 2023 AT 7:00 P.M.**

1. Call to Order

President Dehn called the meeting to order at 7:00 PM

Roll Call

BOARD MEMBERS PRESENT: President Dehn, Secretary Walker, Treasurer Thiele-Sardiña

BOARD MEMBERS ABSENT: Director Moritz, Director Otte

STAFF MEMBERS PRESENT: Ramirez, Fisher, Heydari and Condotti by Zoom
Others Present:

2. Communications from the Public: None.

3. Consent Calendar

CONSIDERATION OF ITEM(S) REMOVED FROM THE CONSENT CALENDAR

Discussion/Comments: None.

- A. Approval of Minutes for Regular Meeting May 24, 2023
- B. Approval of the Financial Activity Report Authorizing Payment of Certain Bills and Salaries and Consideration of Other Financial Matters thru May 31, 2023
- C. WBSD Operations and Maintenance Report – May 2023
- D. Town of Los Altos Hills Operations and Maintenance Report for Work Performed by WBSD – May 2023
- E. Town of Woodside Operations and Maintenance Report for Work Performed by WBSD – May 2023
- F. Bank of the West Monthly Investment Portfolio Statements
- G. Consideration Authorizing the General Manager to Issue the Class 3 Permit 1629 for 4-Inch Sewer Main Replacement at 141 Durazno Way, Portola Valley, CA

Motion to Approve by: Walker 2nd by: Thiele-Sardiña Vote: AYE: 3 NAY: 0 Abstain: 0

4. General Manager's Report

Discussion/Comments: General Manager Ramirez reported LAFCo will report on the potential solid waste divestiture at the June 28th Board meeting. He also reported the Woodside Recycled Water Facility Study will be presented to the Board in the next two months. He continued to report the new website developer will report the progress on the new District website at the June 28th Board meeting. In addition, he informed the Board regarding work on a 4-inch main replacement at 141 Durazno Way, Menlo Park. The next regular Board meetings will be held on June 28th and July 13th, while the July 26th meeting may be cancelled. The complete General Manager's written report is in the June 14th, 2023, agenda packet.

5. Silicon Valley Clean Water Additional Contributions FY 2022-23 and FY 2023-24

Motion to Approve by: Thiele-Sardiña 2nd by: Walker Vote: AYE: 3 NAY: 0 Abstain: 0

Discussion/Comments: Matt Anderson of SVCW reported on the need for additional contributions for the fiscal years 2022-23 and 2023-24 in order to meet a 5-year debt service projection.

6. Consider Approving Resolution Adopting FY 2023-24 Budget

Motion to Approve by: Thiele-Sardiña 2nd by: Walker Vote: AYE: 3 NAY: 0 Abstain: 0

Discussion/Comments: General Manager Ramirez and Finance Manager Fisher reported on highlights and changed to the FY2023/24 budget since the May 3rd Budget Workshop. After some discussion the Board approved the FY2023/24 budget.

7. Consider Adopting Resolution Establishing Rates of Pay and Related Compensation Provisions

Motion to Approve by: Walker 2ⁿ by: Thiele-Sardiña Vote: AYE: 3 NAY: 0 Abstain: 0

Discussion/Comments: General Manager Ramirez reported the rates of pay will increase by 4% per the negotiated MOU. The increases are to take place effective July 1st.

8. Approve Amendment No.10 to the Maintenance Services Agreement Between West Bay Sanitary District and the Town of Woodside for Sanitary Sewer Maintenance Services

Motion to Approve by: Walker 2nd by: Thiele-Sardiña Vote: AYE: 3 NAY: 0 Abstain: 0

Discussion/Comments: General Manager Ramirez reported the agreement includes a 4% COLA increase and includes additional FOG inspections to be performed by Staff.

9. Report and Discussion on Sharon Heights Recycled Water Plant

Discussion/Comments: General Manager Ramirez reported 5.1MG of reclaimed water were treated in May. In addition, it was reported General Counsel Condotti updated the amendment to the Long Term Agreement per the Board's direction. He reported that if an agreement between the District and SHGCC cannot be made, the Avy Altschul Pump Station project will need to be halted.

10. Discussion and Direction on Bayfront Recycled Water Project and Status Update

Discussion/Comments: General Manager Ramirez reported the kick-off meeting for the recycled water project was held on May 31st. He also reported that SCWA habitat monitoring continues until Aug. 24th. The Board requested a revised schedule for the Levee Project and how delays will impact the habitat restrictions.

11. Report & Discussion on South Bayside Waste Management Authority (SBWMA)

Discussion/Comments: President Dehn reported that Director Otte will give an update on the SBWMA retreat at the Board meeting.

12. Report, Discussion & Direction on Silicon Valley Clean Water (SVCW) and Discussion on SVCW CIP Program and Financing

Discussion/Comments: None.

13. Comments or Reports from Members of the District Board and Consider Items to be Placed on Future Agenda

Discussion/Comments: None.

14. Adjournment Time: The meeting was adjourned at 8:44 PM

Secretary

THIS PAGE LEFT INTENTIONALLY BLANK



WEST BAY SANITARY DISTRICT AGENDA ITEM 3B

To: *Board of Directors*

From: *Fariborz Heydari, P.E. Project Manager*

Subject: *Consider Resolution Accepting Deed of Easement Pursuant to Class 3 Sewer Permit No. 1613 for the Construction of Wastewater Facilities for 305 Cervantes Road, Portola Valley, California*

Background

The District requires an easement to maintain the flow from the Grinder system that serves 305 Cervantes Road. The easement includes ingress and egress to the location of the Grinder system and is conforming to District specifications.

Recommendation

The Project Manager recommends that the Board adopt the attached Resolution accepting the Deed of Easement.

Attachments: Resolution ____ (2023), Grant Deed of Easement

RESOLUTION NO. _____ (2023)

IN THE DISTRICT BOARD OF THE WEST BAY SANITARY DISTRICT

COUNTY OF SAN MATEO, STATE OF CALIFORNIA

BE IT RESOLVED that the President and Secretary of the West Bay Sanitary District be and are hereby authorized to accept the attached Grant Deed of Easement by and between the following parties:

Steven Kull and Nancy Lindborg, husband and wife as community property with right of survivorship

BE IT FURTHER RESOLVED that the General Manager is hereby directed to place the same on record.

Passed and adopted by the District Board of the West Bay Sanitary District at a regular meeting thereof held on the 28th day of June, 2023, by the following vote:

Ayes:

Noes:

Abstain:

Absent:

President of the District Board of the West
Bay Sanitary District of San Mateo County,
State of California

Attest:

Secretary of the District Board of the
West Bay Sanitary District of San Mateo
County, State of California

RECORDING REQUESTED BY:
WEST BAY SANITARY DISTRICT

WHEN RECORDED MAIL TO:
WEST BAY SANITARY DISTRICT
500 LAUREL STREET
MENLO PARK, CA 94025

Title Order No. N/A
Escrow No. N/A
Parcel No.

GRANT DEED OF EASEMENT

THE UNDERSIGNED GRANTOR(S) DECLARE(S):

DOCUMENTARY TRANSFER TAX is \$0 CITY TAX is \$0 DEED TO PUBLIC AGENCY
computed on the full value of the property conveyed, or
computed on full value less value of liens or encumbrances remaining at the time of sale,
☒ this is a conveyance of an easement and the consideration and value is less than \$100, R & T 11911 & R&T 11922.
Unincorporated area of San Mateo County City/Town of _____

FOR NO CONSIDERATION, receipt of which is hereby acknowledged, I (we)

Steven Kull and Nancy Lindborg, husband and wife as community property with right of survivorship

Hereby GRANT(S) to:

West Bay Sanitary District, a Public Agency organized and existing under the laws of the State of California,

A perpetual easement to construct, install, maintain, use, repair, remove, replace any and all pipeline, fittings, and related facilities necessary for the operation of a wastewater conveyance system in the area described as follows over the following described real property in the Town of Portola Valley, County of San Mateo, State of California; more particularly described in Exhibit "A" and "B", attached hereto, and by this reference incorporated herein.

West Bay Sanitary District, its employees and agents shall have the right to enter upon the herein described real property at any and all times with such tools and equipment as may be necessary or convenient for the exercise of the rights herein granted to West Bay Sanitary District.

No building or structure of any kind shall be constructed upon the herein described easement, and should a building or structure be erected in violation of this provision, West Bay and its successors and assigns may still exercise all rights herein granted and shall have the right to remove, or cause grantor to remove, at Grantors expense, any building or structure that may be erected upon or over the said parcel of real property. West Bay Sanitary District shall not be held liable in any manner whatsoever for any damages thereby incurred, nor shall West Bay have any obligation to replace any structure that may be removed from said property.

This grant of easement shall be binding upon and shall inure to the benefit of the respective administrators, executors, personal representatives, successors and assigns of the parties hereto.

LEGAL DESCRIPTION ATTACHED HERETO AS EXHIBITS "A" AND "B" MADE A PART HEREOF

Also Known As: **305 CERVANTES ROAD, PORTOLA VALLEY, CA**

Assessor's Parcel Number: **077-221-020**

Executed on March 10, 2023 at Portola Valley, CA
Steven Gordon Kull Jim Kull
Printed Name Signature
(City and State)

Executed on March 10, 2023 at Portola Valley, CA
Nancy Elizabeth Lindborg Nancy Elizabeth Lindborg
Printed Name Signature(s)
(City and State)

(ATTACH NOTARY CERTIFICATE)

CALIFORNIA ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

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.

State of California }

County of San Mateo }

On 03/10/2023 before me, Jaz'min Daniels, Notary Public,
(insert name and title of the officer)

personally appeared Steven Gordon Hull,
who proved to me on 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.



J. Daniels
Notary Public Signature

(Seal)

OPTIONAL INFORMATION

DOCUMENT

(name or type of document)

(number of pages)

(document date)

SIGNER CAPACITY

(capacity claimed by the signer)

NOTICE
THE NOTARY PUBLIC DOES NOT
CERTIFY THE AUTHORIZED
CAPACITY OF THE SIGNER

CALIFORNIA ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

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.

State of California }

County of San Mateo }

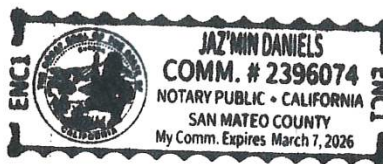
On 03/10/2023 before me, Jazmin Daniels, Notary Public
(insert name and title of the officer)

personally appeared Nancy Elizabeth Lindborg,
who proved to me on 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.

J. Daniels
Notary Public Signature



(Seal)

OPTIONAL INFORMATION

DOCUMENT

(name or type of document)

(number of pages)

(document date)

SIGNER CAPACITY

(capacity claimed by the signer)

NOTICE
THE NOTARY PUBLIC DOES NOT
CERTIFY THE AUTHORIZED
CAPACITY OF THE SIGNER



County of San Mateo TRANSFER TAX AFFIDAVIT

DTT AFFIDAVIT

Per San Mateo County Ordinance Code 2.93.050

NOTICE: Any material misrepresentation of fact in this affidavit is a misdemeanor under section 2.93.120 of the San Mateo County real property tax code. Any person who makes such a representation is subject to prosecution for such offense.

The Assessor-Clerk-Recorder reserves the right to report potentially fraudulent recordings to the District Attorney's Real Estate Fraud Unit.

This form must accompany any document that requires a Documentary Transfer Tax declaration, including but not limited to: Agreement for Sale; Assignment of Lease; Deed in Lieu of Foreclosure; Easement; Grant Deed; Land Contract; Lease; Memorandum of Lease;

1. LOCATION OF PROPERTY: Assessor's Parcel Number: 077 - 221 - 020 City: Town of Portola Valley
Street Address: 305 Cervantes Road, Portola Valley, CA 94028 Document To Be Recorded: EASEMENT

2. IS THIS A FORECLOSURE OR TRUSTEE SALE? ☐ Yes ☒ No (If yes, complete this section.)

a. Is the transferee the Beneficiary or Mortgagee? ☐ Yes ☐ No

b. Please provide. Name of Trustee: _____

Date of original Deed of Trust: _____

3. IS THIS A LEASE? ☐ Yes ☒ No (If yes or no, complete this section.)

a. Is remaining term of lease, including renewal options, greater than 35 years? ☐ Yes ☒ No

b. If NO, submit a copy of the lease, or summary, or terms.

c. If YES, enter the value of the lease interest on line 9a. (For tax calculations.)

4. IS THIS A GIFT IN WHOLE OR IN PART? ☐ Yes ☒ No (If yes, give a complete explanation.)

Name of the Donor: _____

Name of the Donee: _____

Please be aware that certain gifts in excess of \$13,000 per calendar year may trigger a Federal Gift Tax. In such cases, the Transferor/Donor may be required to fill out a Form 709 (Federal Gift Tax Return) with the Internal Revenue Service. Please also be aware that the information stated on this document may be given to and used by governmental agencies, including the Internal Revenue Service.

I, as the Transferor/Donor declare under penalty of perjury that I have read the above paragraph and acknowledge that a Federal Gift Tax may be triggered.



Signature of Donor:
SIGNATURE ON REVERSE STILL REQUIRED.

Print Donor Name:

()

Donor Phone:

5. ARE YOU ADDING OR REMOVING A CO-OWNER FOR REFINANCING PURPOSES? ☐ Yes ☒ No Initial here: _____

If yes, initial to the right to indicate your agreement with the statement below and sign on reverse. ►

The proportional ownership interest will revert back to its original holding within one (1) month from the date of recording; otherwise I will pay the applicable transfer tax.

Continued on Reverse

THIS DOCUMENT IS NOT SUBJECT TO PUBLIC INSPECTION.

Page 1 of 2

TRANSFER TAX AFFIDAVIT, pg. 2

6. ARE YOU MOVING TITLE INTO OR OUT OF A TRUST? ☐ Yes ☒ No / ☐ Into ☐ Out of / ☐ Revocable ☐ Irrevocable

a. Name of Trust: _____ b. Date of Trust: _____

c. Name of Trustor(s): _____

d. Name(s) of Currently Active Trustee(s): _____

e. If this transaction changes who is on title or the proportional interest of how title is held, further explanation is required and may require additional time to review.

Attach additional page(s) if necessary.

7. DO YOU CONTEND THAT NO TRANSFER TAX IS DUE FOR A REASON NOT EXPLAINED IN #1-6? ☒ Yes ☐ No
(If yes, give a complete explanation.)

a. The nature of the transaction is: DEED OF EASEMENT

b. The reason (exemption) you claim no tax is due: DEED TO PUBLIC ENTITY

8. IS THIS A TRANSFER BETWEEN LEGAL ENTITIES? ☐ Yes ☒ No

IF YES, TRANSFERS INVOLVING LEGAL ENTITIES MUST PROVIDE, PREFERABLY ONE (1) WEEK IN ADVANCE, APPLICABLE DOCUMENTATION. SOME EXAMPLES ARE LISTED BELOW. THIS TYPE OF TRANSACTION WILL REQUIRE 1-3 BUSINESS DAYS TO REVIEW.

Entity ownership documentation is required if you are a:

☒ **Corporation**—A copy of the Articles of Incorporation amendments and any other documents showing the shares issued and share ownership; or

☒ **LLC**—A copy of the Operating Agreement, amendments, and any other documentation showing the partners and ownership percentage; or

☒ **Partnership**—A copy of the Partner Agreement, amendments and any other documents showing the partners and ownership percentage.

For all legal entities, provide the names of individuals and specific percentages held by each individual prior to and following the transfer.

9. **TAXABLE TRANSACTIONS:** Complete the following and calculate the tax below. Tax is calculated as \$0.55 per \$500 of line 9D.
Example, \$100,000 value/\$500 increments = 200. 200 increments x \$0.55 = \$110 in tax due. You may also use \$1.10

A) Consideration paid or value. \$ _____

B) ☐ Full cash value. ☐ Less liens.

C) If less liens, loan amount assumed. \$ _____

D) Total consideration or value less liens. (Line A minus line C.) \$ _____

E) Tax due. \$ N/A

I DECLARE OR AFFIRM UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT.

Are you the ☐ Transferee, ☐ Transferor, ☐ Both, or ☐ Representative with full knowledge of foregoing. Signature still required.

Signature of Transferee: _____

Print Name: _____

Address of Transferee: _____

Phone Number of Transferee: ()

Signature of Transferor: Steven Kull

Print Name: Steven Kull

Address of Transferor: 305 Cuvaritas Road

Phone Number of Transferor: 650 850-4277

Place of Execution: (City, County, State where executed.) Portola Valley CA 94028

Date of Execution: March 10, 2023

LEGAL DESCRIPTION

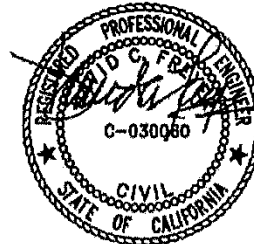
INGRESS/EGRESS AND MAINTENANCE EASEMENT TO THE WEST BAY SANITARY DISTRICT LANDS OF KULL AND LINDBORG/305 CERVANTES ROAD TOWN OF PORTOLA VALLEY, CALIFORNIA

Property situated in the Town of Portola Valley, County of San Mateo, State of California, being a portion of that parcel described in that certain Grant Deed recorded on February 26, 2021 as Instrument No. 2021-033100 of Official Records, in the Office of the Recorder of the County of San Mateo, State of California, as said parcel is shown on that certain map entitled "TRACT NO. 758 - ARROWHEAD MEADOWS UNIT NO. 1, SAN MATEO COUNTY, CALIFORNIA" recorded on December 13, 1958 in Book 58 of Maps at Pages 21 through 23, inclusive, in the Office of the Recorder of said County and being more particularly described as follows:

BEGINNING at the northerly-most corner of said Lot 1 in Block 1; thence, proceeding clockwise South 29°03'16" East, 80.36 feet to the **TRUE POINT OF BEGINNING** of easement, thence clockwise the following courses and distances:

South 29°03'16" East, 11.14 feet; thence,
South 41°45'04" West, 4.84 feet; thence,
Along a tangent curve to the left with a radius of 20', length of 24.37', through a central angle of 69°48'13"; thence,
South 40°52'59" West, 63.88 feet; thence,
North 87°33'59" West, 12.76 feet; thence,
North 17°08'20" West, 27.68 feet; thence,
North 88°31'46" West, 131.17 feet; thence,
Along the southerly line of Cervantes Road along a curve to the right with a radial bearing of North 53°44'38" West, with a radius of 470 feet, length of 12.29 feet, through a central angle of 1°29'53"; thence,
South 88°31'46" East, 130.46 feet; thence,
North 42°45'43" East, 76.53' feet to the **TRUE POINT OF BEGINNING**.

Containing 3,984 square feet more or less.



March 7, 2023

EXHIBIT A

FREYER & LAURETA, INC.

Page 1 of 2

LEGEND

- PROPOSED EASEMENT
- EXISTING PROPERTY LINE
- EXISTING ADJACENT PROPERTY LINE

320 CERVANTES RD.
APN: 077-321-030

CERVANTES ROAD

POINT OF
BEGINNING

S29°03'16"E
80.36'

TRUE POINT OF
BEGINNING

S29°03'16"E
11.14'
S41°45'04"W
4.84'

L=12.29'
D=1°29'53"
R=470'

N42°45'43"E
76.53'

S88°31'46"E
130.46'

N53°44'38"W (RAD)

N88°31'46"W
131.17'

N17°08'20"W
27.68'

N87°33'59"W
12.76'

L=24.37'
D=69°48'13"
R=20'

S40°52'59"W
63.88'

295 CERVANTES RD.
APN: 077-221-030

APN: 077-221-020
305 CERVANTES ROAD
LANDS OF KULL AND LINDBORG

311 CERVANTES RD.
APN: 077-221-010



SCALE
1" = 60'

March 7, 2023

EXHIBIT B

FREYER & LAURETA, INC.

CIVIL ENGINEERS • SURVEYORS • CONSTRUCTION MANAGERS

PLAT TO ACCOMPANY LEGAL DESCRIPTION
INGRESS/EGRESS AND MAINTENANCE EASEMENT
TO THE WEST BAY SANITARY DISTRICT
LANDS OF KULL AND LINDBORG, 305 CERVANTES ROAD
PORTOLA VALLEY, CA

THIS PAGE LEFT INTENTIONALLY BLANK



WEST BAY SANITARY DISTRICT AGENDA ITEM 3C

To: *Board of Directors*

From: *Fariborz Heydari, P.E. Project Manager*

Subject: **Consider Accepting Sewer Facilities Constructed Pursuant to Class 3 Sewer Permit No. 1613 for the Construction of Wastewater Facilities for 305 Cervantes Rd, Portola Valley, California**

Background

This permit request was for the construction of a grinder pump system and force main extension to connect to the existing force main to serve 305 Cervantes Rd, Portola Valley.

Analysis

The Board issued this permit at the Regular Meeting of December 8, 2021.

The work has been completed and has been inspected, tested, and approved by staff as being in conformance with District standards. The property owner has submitted a one-year guarantee for the work in the form of a maintenance bond.

Recommendation

The Project Manager recommends that the Board accepts these facilities and directs the General Manager to approve the Class 3 Permit No. 1613.

Attachments: Class 3 Permit No. 1613
Exhibit A: Site map

WEST BAY SANITARY DISTRICT

500 Laurel Street
Menlo Park, California 94025
(650) 321-0384

Permit Number
1613

Type _____

APPLICATION FOR CLASS 3 SEWER PERMIT

To the WEST BAY SANITARY DISTRICT:

The undersigned, being the ☐ Owner ☒ Owner's Agent of the property located at

305 Cervantes Road, Portola Valley, CA 94028

does hereby request permission to construct sanitary sewers and related facilities to serve a

☒ Residential ☐ Non-residential Development at said location.

ENGINEER'S

Rich Laureta, Freyer, Laureta
Name

150 Executive Park Blvd, SE CA 94134
Address
Ste 4200

CONTRACTOR'S

TBD
Name

Address

OWNER'S

Steven Kent
Name

305 Cervantes Road
Address

[Signature]
Applicant's Signature

Rich Laureta, Agent
Signed by - Please Print Name

150 Executive Park Blvd, Suite 4200
Address

Receipt of \$ 2585 Application Fee is hereby acknowledged

Date

Receipt of \$ 2,000 ☒ Cash Deposit or ☐ Performance Bond

Comments _____

Approved by the District Board on 12/8/21

Application approved and permit issued:

WEST BAY SANITARY DISTRICT

Sergio Ramirez, District Manager

Date

12/8/2021

By

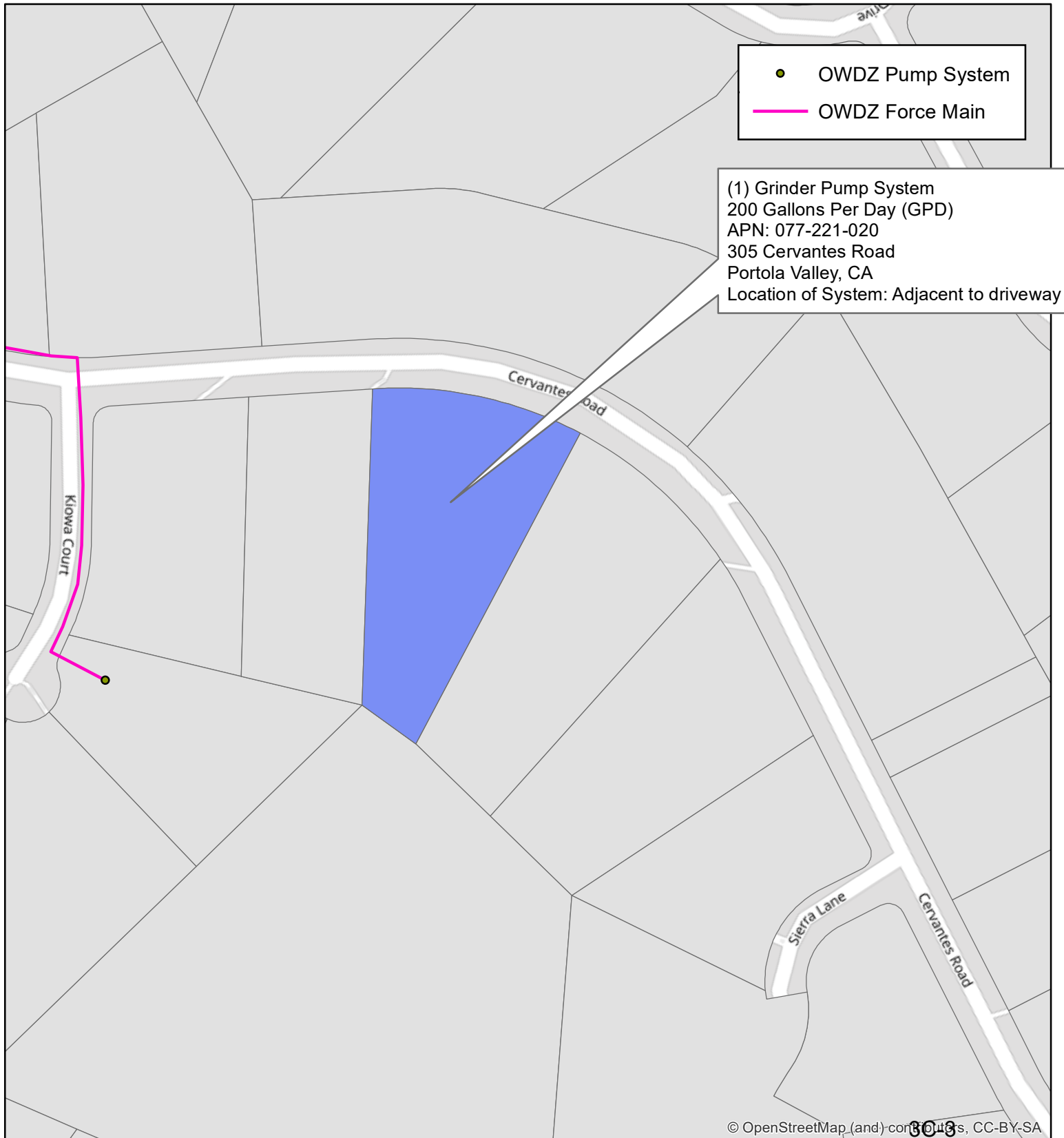
[Signature]

Final Acceptance by the District Board on _____

3C-2



WEST BAY SANITARY DISTRICT
EXHIBIT "A"
SITE LOCATION
305 CERVANTES RD
PORTOLA VALLEY, CA
GRINDER SYSTEM



THIS PAGE LEFT INTENTIONALLY BLANK



WEST BAY SANITARY DISTRICT AGENDA ITEM 3D

To: *Board of Directors*

From: *Fariborz Heydari, P.E. Project Manager*

Subject: *Consider Authorizing the General Manager to Issue Class 3 Sewer Permit No. 1628 for the Construction of Wastewater Facilities for 460 Cervantes Road, Portola Valley, California*

Background

This permit request is for the replacement of an old Grinder Pump System and Control Panel that will connect to a WBSD force main (FM) located on Cervantes Road.

Analysis

The plans, profiles, and engineering calculations for the proposed facilities have been reviewed by staff and corrections have been made to conform to District requirements. Owner has paid all associated fees.

Recommendation

The Project Manager recommends that the Board direct the District Manager to authorize the District Manager to issue Class 3 Sewer Permit No. 1628.

Attachment: Class 3 Permit No. 1628
Site Map

WEST BAY SANITARY DISTRICT

500 Laurel Street
Menlo Park, California 94025
(650) 321-0384

Permit Number
1628

Type _____

APPLICATION FOR CLASS 3 SEWER PERMIT

To the WEST BAY SANITARY DISTRICT:

The undersigned, being the ☒ Owner ☐ Owner's Agent of the property located at

460 CERVANTES RD. PONTOLEA VALLEY

does hereby request permission to construct sanitary sewers and related facilities to serve a

☒ Residential ☐ Non-residential Development at said location.

ENGINEER'S

Name _____

Address _____

CONTRACTOR'S

Name _____

Address _____

OWNER'S

JOSH ALVARO

Name

460 CERVANTES RD

Address

[Signature]

Applicant's Signature

JOSH ALVARO

Signed by — Please Print Name

Address _____

Receipt of \$ 585 Application Fee is hereby acknowledged

7. NOE 3/23/23

Date

Receipt of \$ 3,000 ☒ Cash Deposit or ☐ Performance Bond

Comments GRINDER Pump

Approved by the District Board on _____

Application approved and permit issued:

WEST BAY SANITARY DISTRICT

Sergio Ramirez, District Manager

Date _____

By _____

Final Acceptance by the District Board on _____

(SEE PERMIT CONDITIONS ON REVERSE)

CLASS 3 SEWER PERMIT

Permission is hereby granted to the applicant to construct sanitary sewers and related facilities ("the work") to serve the property described upon the following conditions:

1. **Compliance with District Regulations.** There shall be full compliance with all pertinent provisions of the District's Code of General Regulations.

2. **Performance of the Work.** The work shall be constructed:

- (a) In accordance with the District's "Standard Specifications for Sanitary Sewer Construction —Part D"; and
- (b) In substantial accordance with the drawings on file in the District Office and approved by the District Board; and
- (c) Under the inspection of and to the approval of the District. In this regard, the District shall not control or direct the actual work of construction, but shall be the sole judge as to whether the work is completed and has met all requirements including requirements of quantity and quality of materials and equipment.

3. **Protection of the Work.** Until the work has been finally completed, it and all its component parts, materials, and equipment shall be cared for and protected by the Owner/Owner's Agent and the District shall have no responsibility whatsoever for such care and protection. Final acceptance shall not be deemed to have occurred until there has been formal action of the District Board accepting the work.

4. **One-Year Guaranty of the Work.** The Owner/Owner's Agent shall guarantee the work against leaks, breaks, and other unsatisfactory conditions due to defective materials, equipment, or workmanship for a period of one (1) year from the date of final acceptance. Upon discovery of any such unsatisfactory conditions, except in the event of an emergency requiring immediate action, the District shall give you prompt written notice thereof to the Owner/Owner's Agent requiring that repairs or replacements be promptly made to the work. Should the Owner/Owner's Agent fail to undertake the necessary repairs or replacements within five (5) days after written notice has been given or shall fail to promptly complete such repairs or replacements, or in the event of an emergency when the District shall be excused from giving prior written notice, the District may make such repairs and replacements and charge Owner/Owner's Agent for the cost thereof.

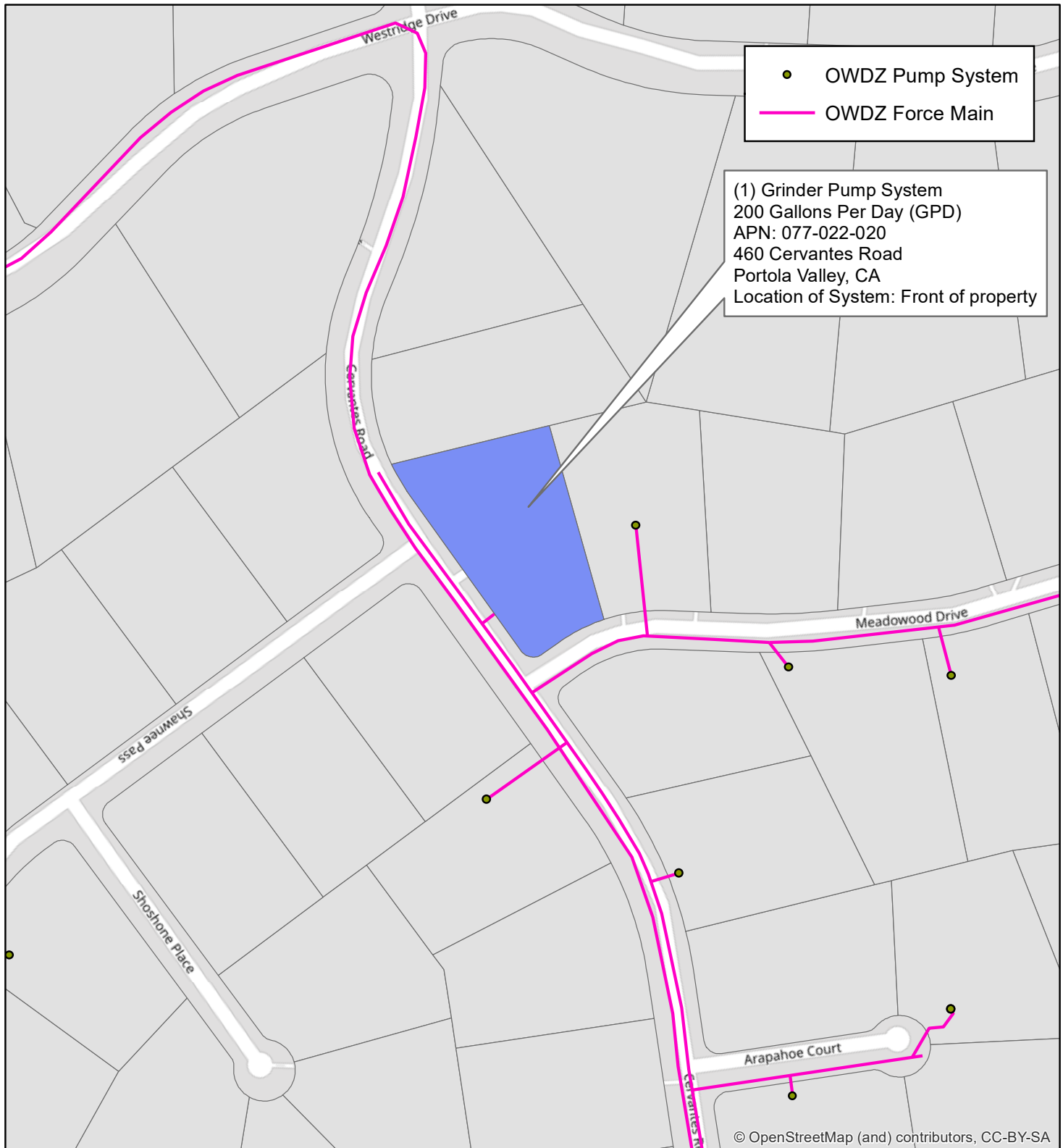
The Owner/Owner's Agent shall defend and hold the District harmless from any and all claims, actions, causes of action, liability, damages, costs, expenses, attorney's fees or the like arising out of any occurrence resulting from an unsatisfactory condition of the work or from any repair or replacement thereof.

5. **Cash Deposit or Performance Bond.** The Owner/Owner's Agent shall furnish the District with a cash deposit or a corporate surety bond securing faithful performance of the one-year guaranty referred to in Condition No. 4 above, including the obligation to defend and hold the District harmless. The amount of the cash deposit or corporate surety bond shall be equal to fifty percent (50%) of the District's estimated cost of the work. Cash deposits shall not accrue interest for the benefit of the Owner/Owner's Agent. Corporate surety bonds shall be written by a company or companies and in a form acceptable to the District.

6. **Payment of District's Cost and Expenses.** The Owner/Owner's Agent shall reimburse the District for all of its costs and expenses in excess of the Permit application fee in connection with examination of plans and specifications, inspection of construction, testing of facilities, and the like. The amount of such costs and expenses shall be determined by the District.



WEST BAY SANITARY DISTRICT
EXHIBIT "B"
SITE LOCATION
460 CERVANTES RD
PORTOLA VALLEY, CA
GRINDER SYSTEM





WEST BAY SANITARY DISTRICT AGENDA ITEM 4

To: *Board of Directors*

From: *Sergio Ramirez, General Manager*

Subject: *General Manager's Report*

1) Administrative:

- a. Staff presented the FY2023/24 the final budget to the Board on June 14, 2023.
- b. Staff is working with SBWMA to give District Staff training on recycling practices and SB1383 compliance.

2) Finance:

- a. The annual Flow Equalization Facility (FEF) payment from Silicon Valley Clean Water is expected to increase by 4.2% per the April to April Consumer Price Index and the FEF agreement. Staff invoiced SVCW in June.

3) CIP Projects:

a. Construction Capital Improvement Program (CIP):

- i. The High Frequency Point Repair Project was awarded to Casey Construction. Construction is expected to begin in late June. The first section will be replaced in the San Mateo County area ahead of their paving project.
- ii. A preconstruction meeting for the Bayfront Park Sewer Improvements Project was held with Ranger Pipelines Inc. Coordination with Silicon Valley Clean Water will be required at the Menlo Park Pump Station.

b. Levee Improvement Project:

- i. Staff are working on a Storm Water Pollution Prevention Plan for the necessary grading work.
- ii. Levee preconstruction monitoring will continue through August.
- iii. Final design changes will be presented to the Board at the June 28th Board meeting. Some of the changes will reduce costs and to make for a better project. The project will bid schedule is as follows:
 - a) Advertise: Wednesday 6/28
 - b) Pre-Bid: Tuesday 7/11
 - c) Bid Opening: Tuesday 7/25

4) Information Technology (IT):

- a. Staff is working with Streamline on the new website. The new website will include updated photos. A website update presentation is scheduled for the June 28 Board meeting.

- 5) **Operations and Maintenance:**
 - a. **Collection System:**
 - i. The Superintendent and Assistant Superintendent attended a Commercial Truck Electric Vehicle (EV) expo in Fresno, California to note options as we move to an EV fleet.
 - b. **Pump Facilities:**
 - i. The Pump Station telemetry project will begin in July of this year.
 - c. **Training:**
 - i. Maintenance Staff will receive training on the new 2100 Vactor Combo Unit at the end of June.
- 6) **Water Quality:**
 - a. **Sharon Heights Golf and Country Club (SHGCC):**
 - i. Casey Construction was awarded the Avy Altschul Pump Station project.
 - ii. Staff and SHGCC continue to work on the Solar Project.
 - b. **Bayfront Recycled Water Facility (BRWF):**
 - i. Project Management and Design has begun and should take approximately six months to be at the 30% design stage. The Recycled Water Committee met with the Project Management team and will help select the Design Build Team who will construct the facility.
 - c. **Woodside Recycled Water Facility (BRWF):**
 - i. The Woodside Recycled Water Facility feasibility will conclude soon. The study identifies a .17MGD, a .445MGD plant, as well as receiving reclaimed water from Silicon Valley Clean Water.
- 7) **Fleet and Facilities:**
 - a. **Vehicle Maintenance:**
 - i. One of two Ford EV F-150 Lightnings should be in by late June.
- 8) **Personnel:**
 - i. Recruitment for a Maintenance Worker will begin in July.
- 9) **Upcoming Events:**
 - a. **Next Regular Board Meetings:** Wednesdays, June 28th and July 12th.
- 10) **Misc. Items:**
 - a. **West Bay:** The District has experienced two sanitary sewer spills. Both were due to pipeline structural defects.
 - b. **Town of Los Altos Hills:** The Town has repaired eight High Frequency pipeline segments which will help reduce maintenance efforts on those pipelines at the Town.
 - c. **Town of Woodside:** The Town's maintenance services contract will increase by 4% per the bargaining unit MOU.



WEST BAY SANITARY DISTRICT AGENDA ITEM 5

To: *Board of Directors*

From: *Sergio Ramirez, General Manager*

Subject: *Presentation, Discussion and Direction on New District Website*

Staff from Streamline Web will give a presentation and update on the development of the new District website. The Board will be asked to provide direction.

THIS PAGE LEFT INTENTIONALLY BLANK



WEST BAY SANITARY DISTRICT AGENDA ITEM 6

To: *Board of Directors*

From: *Sergio Ramirez, General Manager*

Subject: *Consider Authorizing the General Manager to Enter Into an Agreement Approved as to Form by General Counsel with Central Square for the Online Permitting System*

Background

The Board of Directors gave direction to staff to move its software platforms to the cloud whenever feasible. To this end, Staff began to research different online permitting platforms to help streamline the permitting process. The District uses Lucy as its asset management software. Lucy is a product of Central Square.

During the Regular Board Meeting of June 14, 2023 the Board approved the Fiscal Year 2023/34 budget which included allocations for several online software as a service (SaaS) products.

After careful consideration and evaluation, staff determined that Central Square's Community Development: TraKit system could serve the needs of the District most effectively. The system was also reviewed by the Finance Manager.

Analysis

Central Square's Community Development: TraKit system is an advanced SaaS cloud-based system. The TraKit system will be incorporated as part of the new Streamline website. The TraKit system is a customer friendly product with true online permitting processing features. This process allows control and visibility through the life cycle of the permit. From the application process through issuance, inspections, and closure of the permit. The system will lessen the need for paper and allow for better accounting of permits and receipts. Credit card fees will be borne by the customer, if they choose to pay via credit card.

Some of the features include:

- Individual Parcel Information
- Permit Application
- Plan Submittals
- Payment Processing
- Plan Reviews
- Geographical Information System (GIS) Integration
- Contractor License Verification
- Inspection Scheduling
- Automatic Notifications throughout Permit Process

Fiscal Impact

Fiscal Impact to the FY2023/24 budget will be \$100,715.00. This includes the Software as a Service price of \$16,500.00 for the first year and one-time implementation of \$84,215.00 (\$168,430.00 minus an \$84,215.00 discount or 50% off of the implementation cost.). Annual subscription cost of \$16,500.00 will continue thereafter.

Recommendation

The General Manager recommends the District Board of Directors authorize the General Manager to enter into an agreement approved as to form by General Counsel with Central Square for the online permitting system.

Attachments: 1) Central Square Quote
2) Central Square Community Development: TraKit System Features

Quote #: Q-134235**Primary Quoted Solution:** Community Dev**Quote expires on:** June 30, 2023**Quote prepared for:**

Aurora Ledesma

West Bay Sanitary District

500 Laurel Street

Menlo Park, CA 94025

650 321-0384

Thank you for your interest in CentralSquare. CentralSquare provides software that powers over 8,000 communities. More about our products can be found at www.centralsquare.com.

WHAT SOFTWARE IS INCLUDED?

	PRODUCT NAME	QUANTITY	UNIT PRICE	TOTAL
1.	Bluebeam Server API for TRAKiT Annual Access Fee	1	2,100.00	2,100.00
2.	Community Development: Advanced Annual Subscription Fee SaaS	5	2,000.00	10,000.00
3.	eTRAKiT Credit Card API Annual Access Fee	1	900.00	900.00
4.	TRAKiT CSLB Integration Annual Access Fee	1	3,500.00	3,500.00
			Software Total	16,500.00 USD

WHAT SERVICES ARE INCLUDED?

	DESCRIPTION	TOTAL
1.	Community Development: Advanced SaaS Subscription Cloud Setup Fee	10,000.00
2.	Public Administration Consulting Services - Fixed Fee	66,105.00
3.	Public Administration Data Conversion Services - Fixed Fee	12,870.00
4.	Public Administration Development Services - As Incurred	17,640.00
5.	Public Administration GIS Services - Fixed Fee	15,600.00
6.	Public Administration Project Management Services - Fixed Fee	21,840.00
7.	Public Administration Technical Services - Fixed Fee	8,970.00
8.	Public Administration Training Services - Fixed Fee	15,405.00
Services Subtotal		168,430.00 USD
Discount		- 84,215.00 USD

Services Total	84,215.00 USD
-----------------------	---------------

QUOTE SUMMARY

Software Subtotal	16,500.00 USD
--------------------------	---------------

Services Subtotal	168,430.00 USD
--------------------------	----------------

Quote Subtotal	184,930.00 USD
-----------------------	----------------

Discount	- 84,215.00 USD
-----------------	-----------------

Quote Total	100,715.00 USD
--------------------	-----------------------

WHAT ARE THE RECURRING FEES?

TYPE	AMOUNT
FIRST YEAR MAINTENANCE TOTAL	0.00
FIRST YEAR SUBSCRIPTION TOTAL	16,500.00

The amount totals for Maintenance and/or Subscription on this quote include only the first year of software use and maintenance. Renewal invoices will include this total plus any applicable uplift amount as outlined in the relevant purchase agreement.

This Quote is not intended to constitute a binding agreement. The terms herein shall only be effective once incorporated into a definitive written agreement with CentralSquare Technologies (including its subsidiaries) containing other customary commercial terms and signed by authorized representatives of both parties.

BILLING INFORMATION

Fees will be payable within 30 days of invoicing.

Please note that the Unit Price shown above has been rounded to the nearest two decimal places for display purposes only. The actual price may include as many as five decimal places. For example, an actual price of \$21.37656 will be shown as a Unit Price of \$21.38. The Total for this quote has been calculated using the actual prices for the product and/or service, rather than the Unit Price displayed above.

Prices shown do not include any taxes that may apply. Any such taxes are the responsibility of Customer. This is not an invoice.

For customers based in the United States or Canada, any applicable taxes will be determined based on the laws and regulations of the taxing authority(ies) governing the "Ship To" location provided by Customer on the Quote Form.

PURCHASE ORDER INFORMATION

Is a Purchase Order (PO) required for the purchase or payment of the products on this Quote Form? (Customer to complete)

Yes [☐] No [☐]

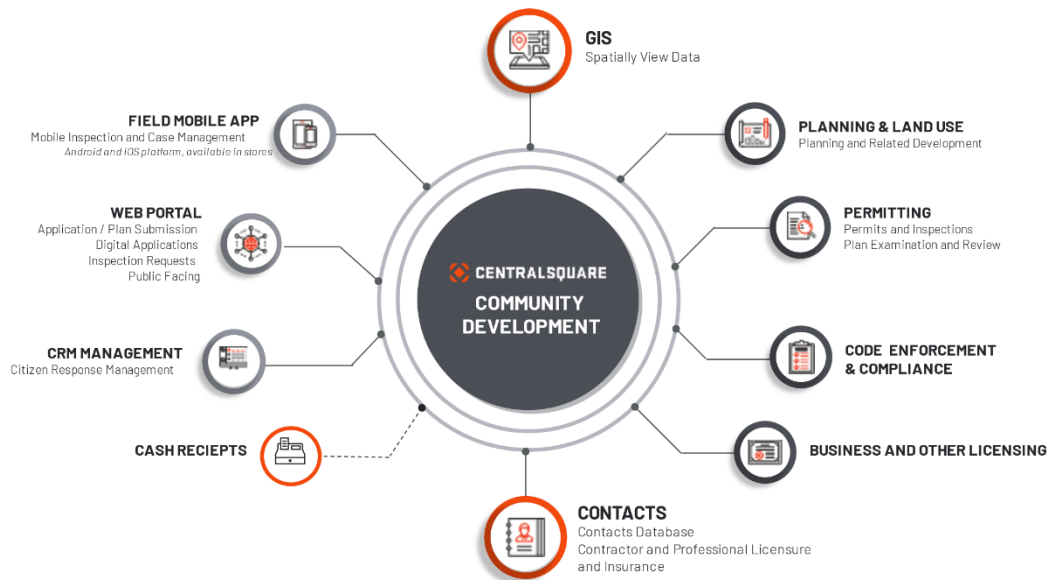
Customer's purchase order terms will be governed by the parties' existing mutually executed agreement, or in the absence of such, are void and will have no legal effect.

PO Number: _____

Initials: _____



Features



THIS PAGE LEFT INTENTIONALLY BLANK



WEST BAY SANITARY DISTRICT AGENDA ITEM 8

To: *Board of Directors*

From: *Sergio Ramirez, General Manager*

Subject: *Presentation and Discussion on Flow Equalization and
Resource Recovery Facility Levee Improvement Project*

Richard Laureta, P.E. with Freyer & Laureta will give a presentation on the Flow Equalization and Resource Recovery Facility Levee Improvement Project.

THIS PAGE LEFT INTENTIONALLY BLANK



WEST BAY SANITARY DISTRICT AGENDA ITEM 7

To: *Board of Directors*

From: *Sergio Ramirez, General Manager*

Subject: *Presentation and Discussion by San Mateo County LAFCo
Executive Director on the Solid Waste Divestiture Process*

Rob Bartoli, Executive Director of San Mateo County LAFCo will give a presentation on the Solid Waste Divestiture Process.

THIS PAGE LEFT INTENTIONALLY BLANK



WEST BAY SANITARY DISTRICT AGENDA ITEM 9

To: *Board of Directors*

From: *Fariborz Heydari, P.E. Project Manager*

Subject: *Consider Authorizing the General Manager to Enter Into an Agreement for On-Call Environmental Compliance Support with Kaz & Associates, LLC for the Flow Equalization and Resource Recovery Facility Levee Improvement Project*

Background

The levee improvement project is within the jurisdiction of several agencies that are mandated to protect wildlife habitat and water quality. The resource agencies include the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries), and San Francisco Bay Conservation and Development Commission (BCDC).

In addition to the permits obtained from the above resource agencies, a Storm Water Pollution Prevention Plan (SWPPP) for projects grading over one acre is required and must be submitted to the RWQCB for approval. The purpose of the SWPPP is to provide actions and direction to minimize impacts of runoff related to the construction activities consistent with standard construction practices and in accordance with the California State National Pollutant Discharge Elimination System (NPDES) General Permit Order No. 2009-0009-DWQ.

Kaz & Associates, LLC has prepared a proposal that includes SWPPP Compliance Services to provide Annual Comprehensive/Full Qualified SWPPP Developer (QSD) and Qualified SWPPP Practitioner (QSP) Services for the FERRF Levee Improvements construction project.

This proposal summarizes the understanding of the project and presents proposed scope of work, budget, and assumptions for supporting implementation of a SWPPP and all required QSD/P monitoring services for anticipated schedule of mid-August 2023 through February 2025. A portion of these fees will be reimbursed from the grant received from the National Fish and Wildlife Foundation (NFWF).

Analysis

Below is a summary of permit status:

- RWQCB Permit is obtained with project conditions.
- BCDC Permit is obtained with project conditions.
- USACE Permit is obtained with project conditions.
- Stand Lands approved the levee project.

The following services include the following tasks, with added descriptions in the attached proposal.

Task	General Description
SWPPP Services	<ul style="list-style-type: none">• SWPPP/Notice of Intent (NOI) Development• SWPPP Amendments• QSP Inspection/Monitoring and Reporting• Annual Report(s)• Notice of Termination• Consultation

Fiscal Impact

The District applied for a loan from the State Water Resources Control Board (SWRCB) State Revolving Fund (SRF) to design and construct the Levee as well as the Recycled Water facility. The SWRCB awarded the project \$66.6 million including \$14.7 million in State grants. The SRF will fund the recycled water facility and a portion of the levee.

The District's FY2023/24 Construction in Progress - Levee Improvement Project budget is \$7 million. The proposed fee for the above listed tasks is \$50,100 of which a portion will be reimbursed by the NFWF grant obtained by the District.

Recommendation

The Project Manager recommends the District Board of Directors authorize the General Manager to enter into an agreement with Kaz & Associates, LLC, for SWPPP Compliance Construction Support Services for the FERRF Levee Improvement Project.



June 14, 2023

Fariborz Heydari, P.E.

Project Manager

West Bay Sanitary District

RE: SWPPP Compliance Services for the West Bay Sanitary District Flow Equalization and Resource Recovery Facility Levee Improvements Project in the City of Menlo Park, CA –
Risk Level 1 Comprehensive/Full QSD-P Services

Dear Mr. Heydari, P.E.,

Kaz & Associates Environmental Services (K&AES) is pleased to submit the following SWPPP consultant proposal for compliance with the State Construction General Permit (Order #2009- 0009-DWQ) and to provide Annual Comprehensive/Full QSD-P Services for the Flow Equalization and Resource Recovery Facility Levee Improvements construction project.

NOTE: State Water Board has approved a new Construction General Permit, (2022 CGP) which will take effective on September 1, 2023. All existing projects will be grandfathered into the new permit through September 2025. Changes to scope of work and costs associated with the new adoption of the 2022 CGP will require a Change Order request if project permit is not in place prior to September 2023.

The proposed SWPPP consultant budget has been organized as follows for your review and evaluation:

- Scope of Work
- Cost Estimate
- Period of Service

SCOPE OF WORK

The proposed storm water pollution prevention services will support the planned construction work related to the Flow Equalization and Resource Recovery Facility Levee Improvements construction

project in Menlo Park, San Mateo County, CA. Site activities will be conducted per the project specifications and environmental permit conditions. Per request, Kaz & Associates proposes this budget for storm water services support in the implementation of a Storm Water Pollution Prevention Plan (SWPPP) and all required QSD/P monitoring services for the anticipated schedule of mid-August 2024 through February 2025 (~18-monts). The purpose of the SWPPP is to provide actions and direction to minimize impacts of runoff related to the construction activities consistent with standard construction practices and in accordance with the California State NPDES General Permit Order No. 2009-0009-DWQ. Preliminary risk determination indicates the project as Risk Level 1 project.

The Contract scope of work is comprised of the following tasks:

Task	Description
1	SWPPP/Notice of Intent (NOI) Development
2	SWPPP Amendments
3	QSP Inspections/Monitoring and Reporting
4	Annual Report(s)
5	Notice of Termination
6	Consultation

The tasks outlined above are described in detail in the Scope of Work provided as Attachment A.

COST ESTIMATE

The cost estimate for the above-described scope will be billed according to the rates listed in the table below:

<u>Item</u>	<u>Quantity</u>	<u>Rate</u>	<u>Price</u>
SWPPP/NOI Development	1	\$3,000.00	\$3,000.00
SWPPP Amendment	2	\$1,000.00	\$2,000.00
QSP Inspections & Monitoring*	110	\$350.00	\$38,500.00
Annual Compliance Certification Report	2	\$1,250.00	\$2,500.00
Notice of Termination (NOT)	1	\$500.00	\$500.00
Consultation**	24	\$150.00	\$3,600.00
Estimated Total for Services Based on Approximate Project Schedule. <u>Any Unused Services Will Not Be Billed.</u>			\$50,100.00[^]

^ The new General Permit will be active as of September 2023. The above budget is based on the existing permit requirements. The new CGP budget will be used as necessary to revise the project's SWPPP, NOI and Permit resubmittal if the project remains active by September 2025. Future change orders will be submitted as necessary to the project team for approval.

**QSP Inspection and Monitoring budget is an allotment estimate of 70 inspections based off the CGP requirements for the following:*

- Weekly site inspections year round
- Rain Event Inspections (Prior to, During, and Post Storm)
- Quarterly Storm Water Inspections
- See scope of work for specifics for inspection and monitoring by Kaz staff

The below table gives an estimate of inspection frequencies per month throughout the year during construction, based on the previous two years of rainfall, with unused inspections rolling over:

Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug
4	4	5	8	8	8	8	8	5	4	4	4
Total Estimated Number of Inspections = 70-75 per year = Total budgeted for project is 110 inspections (18 months of construction). <u>All unused services will not be billed.</u>											

***Consultation budgeted allotment are for additional compliance related services that are outlined in the **scope of work section**.*

For the purposes of the proposal, the cost estimate reflects an assumed level of professional services and is based on the following assumptions with regards to the project:

Field Visits

- Potential site visit for preliminary assessment of current construction conditions;
- Site visit for kick-off meeting and SWPPP training of staff;
- Qualified Storm Water Practitioner (QSP) site visits; weekly inspections, required rain event inspections (pre, during, post storm) and quarterly NSW inspections.

Other Assumptions

- Installation of BMPs to be completed by others;
- Site staff to ensure corrective actions are scheduled and implemented (QSP to sign off);
- Site specific environmental permit conditions are in place and available for review

PERIOD OF SERVICE

The proposal outlines estimated costs based on a 18-month construction schedule for consultant services at the Flow Equalization and Resource Recovery Facility Levee Improvements construction project. The anticipated project start date for construction is August 15, 2023.

K&AES appreciates the opportunity to provide the consulting proposal for the Flow Equalization and Resource Recovery Facility Levee Improvements Project. Please contact me at 707-816-2748 should you have any questions regarding this proposal.

Sincerely,

Sean Kazemi

Principal

Kaz & Associates, LLC

s.kazemi@kazandassoc.com

ATTACHMENT A
CONSULTANT SCOPE OF WORK

Flow Equalization and Resource Recovery Facility Levee Improvements Project
Menlo Park, CA

The scope of work is comprised of those activities required to review the project's Notice of Intent (NOI) and the site-specific Storm Water Pollution Prevention Plan (SWPPP) in compliance with the Construction General Permit (CGP). K&AES will provide project QSD/P oversight that meet CGP requirements by conducting periodic site inspections related to SWPPP implementation and management during each phase of construction. Specific activities include preliminary communication with the client's project manager/construction staff to develop a thorough understanding of the job phases, conduct QSP site inspections to monitor BMP implementation and outline actions needed to ensure compliance during construction activities. Other services include, future SWPPP Amendments, completion of the required yearly Annual Report(s), stormwater sampling, training of designated site staff, and other consultation services.

The Contract scope of work is comprised of the following tasks:

Task	Description
1	SWPPP/Notice of Intent (NOI) Development
2	SWPPP Amendments
3	QSP Inspections/Monitoring and Reporting
4	Annual Report(s)
5	Notice of Termination
6	Consultation

The task(s) are further described in detail on the following pages:

Task 1 – SWPPP/Notice of Intent (NOI) Development

Gathering of all necessary information will be required in order to ensure proper SWPPP and NOI development. The following information will be needed in order to develop a site specific SWPPP plan:

1. Name, Address, and Contact Info for the Property Owner or Entity
 - a. Owners designated Legally Responsible Person (LRP)
 - b. SMARTs database account linking for K&AES staff to upload project documents

2. West Bay Sanitary District' Construction Staff Contact Info (Name, Title, Phone and Email) for Project Manager, Superintendent, and any other Staff to be Trained by QSP
3. Copy of the Geotechnical Report
4. Copy of the Environmental Impact Report or any applicable site-Specific Environmental Permits (i.e. 401 Water Quality Certification, Army Corps, 404, Fish & Wildlife Streambed Alteration 1600, etc.)
5. Site Map in **AutoCAD** format showing all project layout, grading, drainage, and utilities
6. Engineers Post Construction Storm Water Management or Control Plan that meet local C.3 requirements – required for NOI upload
7. Total project Area Acreage and total area to be disturbed
8. Summary of construction activities to take place with logistic or phasing plan (if available)
9. Anticipated Construction Schedule (Start and End Dates)

If feasible or necessary, a site walk will be conducted to verify the area of the project with the potential to impact storm water including soil management areas, grading areas, equipment lay-down areas and other areas to be included in the Area of Disturbance.

West Bay Sanitary District will receive two (2) copies of the report as well as an electronic copy of the SWPPP and all appendices within two-three (2-3) weeks of obtaining all necessary documentation/information. **Any additional SWPPP binders that are requested will incur an additional cost of \$100.00 per binder.**

K&AES will ensure dedicated professional resources are assigned to complete the scope of work including a Qualified SWPPP Developer (QSD) and Qualified SWPPP Practitioner (QSP). Routine communication will occur between West Bay Sanitary District 's project team members and will be ongoing for the duration of the project. Specific activities will include periodic review of the project status relative to the project goals including inspection results/action items, quality of deliverables, project budget and schedule.

Task 2 – SWPPP Amendment

The CGP requires that the project's SWPPP is a living document, and the plan will be updated as construction progress and site conditions change. SWPPP Amendments will be created and signed by the QSD for significant changes at the site, prior to each rainy season, and or if compliance issues require

an Amendment to be created.

Task 3 – QSP Inspections/Monitoring, Reporting and Training

Periodic construction site inspection visits will be conducted subsequent to the initiation of this consultant agreement in order to provide the required certified QSP oversight for construction activities and BMP implementation. Specific site inspection activities include the assessment of site activities/conditions, inspection of BMPs, monitoring of any ongoing corrective actions (if identified from previous inspections) and direct communication with the construction staff responsible for on-site SWPPP implementation and management. An inspection report will be submitted to the construction manager via electronic mail within 24-48-hours of a site visit, unless significant issues are observed that need immediate corrective action.

Based on the project's Risk Level, QSP oversight inspections will be performed every other week for the duration of construction. It is anticipated that the first site inspection visit will be conducted during the summer of 2023 with subsequent site inspections conducted regularly until project completion. In addition, designated on-site staff will be trained appropriately by the QSP in order to conduct daily and routine site inspections required by the CGP.

The cost associated with QSP site inspections includes the following:

- Travel time to and from K&AES main office
- Report Write up and Submittal
- One hour (1) of on-site field inspection time
 - If a site inspection requires additional field time beyond one (1) hour, the additional hours will be billed at the consultation rate

Task 4 – Annual Report(s)

As required by the CGP, all dischargers must prepare and electronically submit an annual report no later than September 1st of each year, using the Storm water Multi-Application Reporting and Tracking System (SMARTS). Filing of the project's yearly Annual Report will be completed on behalf of the owner and submitted for approval prior to LRP certification. Annual Reports are required for projects that are enrolled for three (3) continuous months of permit coverage. The CGP outlines the construction year as July 1st of the previous year to June 30th of the current year. Annual Reports are required to be submitted to the State Water Board's SMARTS database by September 1st of the current year to avoid

noncompliance violations and potential fines.

The Annual Report must include a summary and evaluation of all sampling and analysis results, original laboratory reports, chain of custody forms, a summary of all corrective actions taken during the compliance year, and identification of any compliance activities or corrective actions that were not implemented.

Task 5 – Notice of Termination (NOT)

The Notice of Termination (NOT) will be submitted upon completion of all site construction activities and once the project meets the applicable NOT conditions (stabilized site with operational Post Construction BMP). The filing of the NOT will be completed within 90 days of when construction is complete or ownership has been transferred. Prior to the submittal of the NOT, a final inspection must be conducted to photo-document completed conditions and post construction BMP implementation. The final Annual Report must be submitted and certified prior to the NOT upload and certification. Upon Regional Board acceptance, the project's NOI and open permit will be closed and a NOT approval letter issued.

Task 6 – Consultation

Consultation services are for work done that falls outside the scope of this contract. Examples of such work are:

- SMARTS system administration services;
- Additional field inspections and sampling services (field hours or at request of project staff);
- Change of Information (COI) submittals;
- Meetings with State, Local Agencies and/or Owner to assist your site manager in storm water compliance issues;
- Training on-site staff and;
- Other services that may require site visits or consultation

AUTHORIZATION FORM

**STORM WATER POLLUTION PREVENTION PROGRAM
FLOW EQUALIZATION AND RESOURCE RECOVERY FACILITY LEVEE IMPROVEMENTS PROJECT**

I authorize Kaz & Associates, LLC to proceed with the listed Storm Water Services to ensure compliance through the duration of construction.

Authorized Signature

Date

Printed Name

Title

PO # _____

<u>Item</u>	<u>Quantity</u>	<u>Rate</u>	<u>Price</u>
SWPPP/NOI Development	1	\$3,000.00	\$3,000.00
SWPPP Amendment	2	\$1,000.00	\$2,000.00
QSP Inspections & Monitoring*	110	\$350.00	\$38,500.00
Annual Compliance Certification Report	2	\$1,250.00	\$2,500.00
Notice of Termination (NOT)	1	\$500.00	\$500.00
Consultation**	24	\$150.00	\$3,600.00
Estimated Total for Services Based on Approximate Project Schedule. <u>Any Unused Services Will Not Be Billed.</u>			\$50,100.00[^]

[^] The new General Permit will be active as of September 2023. The above budget is based on the existing permit requirements. The new CGP budget will be used as necessary to revise the project's SWPPP, NOI and Permit resubmittal if the project remains active by September 2025. Future change orders will be submitted as necessary to the project team for approval.

*QSP Inspection and Monitoring budget is an allotment estimate of 70 inspections based off the CGP requirements

for the following:

- Weekly site inspections year round
- Rain Event Inspections (Prior to, During, and Post Storm)
- Quarterly Storm Water Inspections
- See scope of work for specifics for inspection and monitoring by Kaz staff

The below table gives an estimate of inspection frequencies per month throughout the year during construction, based on the previous two years of rainfall, with unused inspections rolling over:

Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug
4	4	5	8	8	8	8	8	5	4	4	4
Total Estimated Number of Inspections = 70-75 per year = Total budgeted for project is 110 inspections (18 months of construction). All unused services will not be billed.											

****Consultation budgeted allotment are for additional compliance related services that are outlined in the *scope of work* section.**

PAYMENT TERMS: K&AES does not allow retainer on payments for services provided. Payments reflected above are due and payable as provided in the Authorization Agreement. If terms are not provided therein, then sums shall be due and payable in full within 30 days after date of invoice. A finance charge will be imposed upon any sums 30 days or more past due at a periodic rate of 1% per month (Annual rate of 12%). This rate will be calculated upon past due balance at the end of each billing period. Any payments received during each billing period shall be applied to the oldest outstanding amounts due. If payment of past due sums is turned over for collection agency or attorney, sums due and payable shall include recovery of reasonable attorney's fees and costs incurred, regardless of whether enforcement proceedings are filed. Proposed service costs are good for 90 days, unless agreed upon in writing between the client and K&AES management team.

INURANCE TERMS: K&AES insurance limits must be accepted as is to avoid additional premium costs associated with an increase in insurance requirements. K&AES' insurance policies include General Liability, Professional Liability, Pollution Liability Package that each contain their own \$4 million General Aggregate and \$2 million per Each Occurrence; \$1 million for Commercial Auto; and Workers Compensation coverage per State Statutes. If additional insurance coverage is required for this project, the cost of additional coverage will be the responsibility of the client and not K&AES.

Disclaimer For CGP Order No. 2009-0009-DWQ:

Unless otherwise noted, referenced standards and specifications for BMPs included in the Storm Water Pollution Prevent Plan (SWPPP) will follow recommendations of the Construction General Permit, Order No. 2009-0009-DWQ and the California Stormwater Quality Association (CASQA) BMP Manual Guidelines. If, in the unlikely event, the BMP details are not sufficient, or pose a threat to water quality, public health or property, or safety concerns are perceived to exist by using the recommended BMPs, please contact Kaz & Associates, LLC for clarification or changes. If contracted to conduct site inspections, Kaz & Associates, LLC staff are trained to assess the site

conditions, recommend corrective actions, and ensure that the implemented BMPs and or corrective actions are installed correctly and are effective.

This SWPPP plan will be prepared in accordance with the Clean Water Act and RWQCB General Construction Permit, Order No. 2009-0009-DWQ to comply with environmental regulations during the project construction. The decisions on how to operate the construction site, including but not limited to the SWPPP implementation and installation of BMPs, as recommended, rest solely with the project Owner and the General Contractor and/or Sub-contractors, not with Kaz & Associates, LLC. Therefore, Kaz & Associates, LLC is not liable for the operational decisions of the Owner and/or General Contractor to follow the recommendations as outlined in the SWPPP or in any site inspection recommendations performed by Kaz & Associates, LLC staff. It is the Owner and/or General Contractor responsibility to ensure the site maintains compliance at all times during construction.

Kaz & Associates, LLC staff are contracted to assess the active, inactive, completed and stabilized areas to ensure that the implemented practices will be effective in minimizing potential pollutant discharges during construction. Kaz & Associates, LLC can ensure compliance only when the Owner and/or the Contractor implement all recommendations and corrective actions in a timely manner and effectively. Situations may arise, that even with appropriate erosion and sediment control measures implemented throughout the site failures may occur.

The Owner and or owner's Contractor agrees to hold Kaz & Associates, LLC harmless for any potential violations the Owner/Contractor may receive for operational violations from regulatory agencies, including but not limited to, such as city governments, the State, or EPA.

Kaz & Associates, LLC will answer questions on how the SWPPP was prepared, inspections were conducted, corrective actions were recommended/implemented and defend all recommendations made with any regulated authority that may request it. By accepting the proposal, the Owner and their contractor(s) accept this disclaimer and its conditions.

***Disclaimer will be applicable to new Permit Order once in effect**

**AGREEMENT FOR PROFESSIONAL
SERVICES BETWEEN WEST BAY
SANITARY DISTRICT AND KAZ &
ASSOCIATES, LLC**

THIS AGREEMENT, hereinafter referred to as “Agreement”, made and effective on this 28th day of June, 2023, by and between West Bay Sanitary District, hereinafter referred to as “District”, and Kaz & Associates, LLC, hereinafter referred to as “Consultant.” (District and Consultant are referred to individually as a “Party” and collectively, as the “Parties”).

WITNESSETH:

WHEREAS, the District desires to procure certain professional services as more particularly described in “WEST BAY SANITARY DISTRICT FLOW EQUALIZATION AND RESOURCE RECOVERY FACILITY (FERRF) LEVEE IMPROVEMENTS PROJECT SCOPE FOR STORM WATER POLLUTION PREVENTION PLAN (SWPPP) COMPLIANCE SERVICES KAZ & ASSOCIATES, LLC” (“Scope of Work”) attached hereto as Exhibit “A” and incorporated herein by reference (hereinafter referred to as “Proposal”); and

WHEREAS, Consultant has available, and offers to provide, personnel and facilities necessary to accomplish the work contemplated in the Proposal as may be requested by the District;

NOW, THEREFORE, the District and Consultant agree as follows:

I. DESCRIPTION OF PROJECT

Consultant will provide environmental services for SWPPP Compliance for the West Bay Sanitary District FERRF Levee Improvements Project in the City of Menlo Park, San Mateo County.

II. SCOPE OF SERVICES

Consultant agrees to perform those services described in the **Scope of Work**, attached hereto as **Exhibit A**. In the event of any conflict between the Scope of Work and this Agreement, the terms and conditions of this Agreement shall prevail.

Consultant shall not undertake any work beyond the scope of services as set forth in Exhibit A. No changes in the scope of services shall be made without the District's prior written approval.

II. TIME FOR COMPLETION

The term of this Agreement shall commence on the effective date of this Agreement and terminate on either February 28, 2025 or the timely completion of the Scope of Work described in the Proposal, whichever is later.

Consultant shall begin work as specified in a written authorization (e.g. Notice to Proceed) to perform services. The written authorization to perform work shall not be issued until after this Agreement has been approved and authorized by the District.

Consultant acknowledges that it is necessary for Consultant to complete its work on or before the completion date of February 28, 2025 in order to allow the District to achieve its objectives for entering into this Agreement. The Parties therefore agree that time is of the essence in the performance of this Agreement.

III. COMPENSATION

For actual services performed by Consultant, the District agrees to pay, and Consultant agrees to accept, compensation in an amount not to exceed the total amount described in the Proposal as full compensation for all personnel, materials, supplies, and equipment used by Consultant in the scope of services to be provided. Any change requiring compensation in excess of the sum of \$50,100.00 as specified in the Proposal, shall only be allowed if approved in advance in writing by the District's authorized representative. Consultant shall invoice the District detailing the time and materials for services provided under this Agreement in accordance with the Proposal.

Consultant shall submit invoices for services completed each month. The District shall pay such invoices within forty-five (45) days after their receipt.

IV. RESPONSIBILITY OF CONSULTANT

Consultant agrees that in undertaking the duties to be performed hereunder, it shall act as an independent consultant for and on behalf of the District. The District shall not direct the work and means for accomplishment of the services and work to be performed hereunder. The District, however, retains the right to require that all work performed by Consultant or under Consultant's direction, shall be rendered in accordance with the generally accepted practices, and to the standards of, Consultant's profession. Consultant represents and warrants that Consultant: (i) is fully experienced and properly qualified to perform the work and services provided for herein, (ii) has the financial capability required for the performance of the work and services, and (iii) is properly equipped and organized to perform the work and services in a competent, timely, and proper manner, in accordance with the requirements of this Agreement.

If, in performing the work, it is necessary to conduct field operations, security and safety of the job site will be the Consultant's responsibility excluding, the security and safety of any facility of District within the job site which is not under the Consultant's control.

V. INDEMNIFICATION

Consultant agrees, to the fullest extent permitted by law, to indemnify, defend, and hold harmless the District, its directors, officers, employees, and agents (collectively, "Indemnitees") from and against any and all liability, claim, action, loss, injury, damage, judgment, or expense, including attorneys' fees and costs ("Losses") caused by or resulting from the negligence, recklessness, or willful misconduct of Consultant, Consultant's officers, employees, agents, or subcontractors in any way related to this Agreement. Consultant's duty to indemnify and hold harmless Indemnitees shall not apply to the extent such Losses are caused by the sole or active negligence or willful misconduct of Indemnitees, as determined by an adjudicatory body or court of competent jurisdiction. The obligation to defend shall arise regardless of any claim or assertion that Indemnitees caused or contributed to the Losses.

In the event this Agreement involves the performance of design professional services by Consultant, Consultant's officers, employees, agents, or subcontractors, Consultant's costs to defend Indemnitees shall not exceed the Consultant's proportionate percentage of fault per Civil Code §2782.8. This section shall survive the termination or expiration of this Agreement.

VI. INSURANCE

Prior to the beginning and throughout the duration of the Agreement, as may be extended by written amendment, Consultant will maintain and comply with the insurance requirements below with insurers licensed to do business in the State of California and with a Best's rating of no less than A:VII. Consultant will insure the District against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the services hereunder. The insurance coverages required shall not in any way limit the liability of the Consultant.

Certificate Requirements:

The District will be issued a Certificate of Insurance (a Memorandum of Understanding will not be accepted) with the following minimum requirements:

- Certificate(s) will show current policy number(s) and effective dates,
- Coverage and policy limits will meet or exceed the requirements below,
- The Certificate Holder will be West Bay Sanitary District, 500 Laurel Street, Menlo Park, CA 94025,
- Certificate will be signed by an authorized representative,
- An endorsement, if required below, will be provided to show the District, its directors, officers, , and employees as additional insureds, and
- Coverages must be maintained during the term of the Agreement with the District, unless a longer duration is required.

Required Coverage:

A. Commercial General Liability (CGL) insurance, including products and completed operations, property damage, bodily injury, personal and advertising injury with limits of not less than \$1,000,000 each occurrence and \$2,000,000 aggregate.

B. Automobile Liability insurance of \$1,000,000 per accident covering automobile bodily injury and property damage, including all owned (if any), hired and non-owned autos. If Consultant acquires any owned vehicles, Consultant shall provide insurance as above.

C. Worker's Compensation insurance and Occupational Disease insurance, with statutory limits as required by law, and Employer's Liability insurance, of \$1,000,000 per accident for bodily injury or disease covering all workplaces involved in this Agreement. Consultant shall provide an endorsement with a **waiver of subrogation** in the District's favor for all services performed by Consultant and its employees relating to payment of any loss, including attorney's fees.

D. The Commercial General Liability and Automobile Liability Insurance policies shall be endorsed to name the District, its directors, officers, employees, and agents as additional insureds with respect to liability arising out of services or operations performed by or on behalf of Consultant including materials, parts, or equipment furnished in connection with such services or operations. Consultant's insurance coverage is primary insurance and any insurance maintained by the District shall not contribute with it.

E. Errors and Omissions: Consultant shall also provide Professional Liability Insurance appropriate to Consultant's profession with limits of liability in amounts not less than \$1,000,000 per occurrence or claim and \$2,000,000 aggregate. Consultant shall maintain, and provide evidence of coverage for at least five (5) years after the date of completion of the services under this Agreement. If coverage is canceled or non-renewed and not replaced with another claims-made policy form with a retroactive date prior to the Agreement effective date or start of work date, Consultant must purchase "extended reporting" coverage for a minimum of five (5) years after completion of services under this Agreement.

F. Consultant shall require and verify that all of Consultant's subcontractors maintain insurance meeting all of the requirements stated herein, and Consultant shall ensure that the District, its directors, officers, employees, and agents are additional insureds on the CGL and Automobile liability insurance policies required from subcontractors.

G. Consultant shall provide the District with Certificates of Insurance and endorsements, on forms acceptable to District, or other evidence of insurance acceptable to District, prior to commencement of any services under this Agreement. Each insurance policy required above shall provide that there will be no cancellation of coverage by the carrier without prior written notice to District.

H. If Consultant maintains broader insurance coverage and/or higher limits than the minimums shown above, the District requires and shall be entitled to the broader insurance coverage and/or higher limits maintained by Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the District.

I. Any excess/liability policies must provide similar coverage as the primary CGL policy with no new exclusions - Excess liability insurance must follow form the terms, conditions, definitions, and exclusions of the underlying CGL insurance. The excess/umbrella policy must also be written on a primary and noncontributory basis for an additional insured, and that it will apply before any other insurance that is available to such additional insured which covers that person or organization as a named insured, and we will not share with that other insurance.

J. The Excess policy must provide that the aggregate limits if applicable shall apply in the same manner as the aggregate limits shown in the Schedule of the Underlying Insurance.

VII. TERMINATION

The District may terminate this Agreement for its convenience with written notice of not less than 10 calendar days prior to an effective termination date. The District or Consultant may terminate the Agreement for material breach of Agreement by providing written notice to the other party not less than 15 calendar days prior to an effective termination date.

Upon notice of termination, the Consultant will immediately take action not to incur any additional obligations, costs or expenses, except as may be reasonably necessary to terminate its activities. The District's only obligation to the Consultant will be just and equitable payment for materials and/or services authorized by, and received to the satisfaction of, the District up to and including the effective date of termination, less any amounts withheld. All finished or unfinished work, materials, supplies, goods, or documents procured or produced under the Agreement will become property of the District upon the termination date. In the event of Consultant's failure to perform, District reserves the right to obtain services elsewhere, and the defaulting Consultant will be liable for the difference between the prices set forth in the terminated Agreement and the actual cost to the District. After the effective date of termination, Consultant will have no further claims against the District under the Agreement including, but not limited to, claims for anticipated profit related to unperformed services. Termination of the Agreement pursuant to this paragraph may not relieve the Consultant of any liability to District for damages sustained by the District because of any breach of the Agreement by Consultant, and District may withhold any payments to Consultant for the purpose of set-off until such time as the exact amount of damages due District from Consultant is determined.

The rights and remedies provided in this section will not be exclusive and are in addition to any other rights and remedies provided by law or under the contract.

VIII. SUBCONTRACTS

Except as provided in the Proposal, and otherwise with prior written approval of the District, Consultant shall not enter into any subcontract with any other party for purposes of providing any work or services covered by this Agreement. If at any time, the District determines any subcontractor is incompetent or unqualified, Consultant will be notified and will be expected to immediately cancel the subcontract. Consultant shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Consultant shall ensure that the District, its directors, officers, and employees are additional insureds on insurance required from subcontractors.

IX. OTHER TERMS

1. Compliance with Laws. All activities of Consultant, its employees, subcontractors and/or agents will be carried out in compliance with all applicable federal, state and local laws and regulations.
2. Conflicts of Interest. Consultant owes District a duty of undivided loyalty in performing the work and services under this Agreement. Consultant on behalf of itself, its employees, agents, representatives, and subcontractors, covenants that it presently has no direct or indirect interest, financial or otherwise, and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Agreement. Consultant acknowledges that it is aware of and agrees to comply with the provisions of the Political Reform Act, Section 1090 of the Government Code. Consultant will immediately advise District if Consultant learns of a conflicting financial interest of Consultant's during the term of this Agreement. Consultant owes District a duty of undivided loyalty in performing the work and services under this Agreement.
3. Property of District. The work, or any portion, of Consultant in performing this Agreement shall become the property of the District. The Consultant shall be permitted to retain copies or such work for information and reference in connection with the District's use. All materials and work product, whether finished or unfinished, shall be delivered to the District upon completion of contract services or termination of this Agreement for any reason. Consultant agrees that all copyrights which arise from creation of project-related documents and materials pursuant to this Agreement shall be vested in the District, and Consultant waives and relinquishes all claims to copyright or other intellectual property rights in favor of the District. Any work product related to this Agreement shall be confidential, not to be used by the Consultant on other projects or disclosed to any third party, except by agreement in writing by the District.
4. Consultant's Records. Consultant shall maintain accurate accounting records and other written documentation pertaining to the costs incurred for this project for examination and audit by the District, local, state, or federal government, as applicable. Such records and documentation shall be kept available at Consultant's office during the period of this Agreement, and after the term of this Agreement for a period of five years from

the date of the final District payment for Consultant's services. If Consultant engages a subcontractor to perform work related to this Agreement with a cost of \$10,000 or more over a 12-month period, such subcontract shall contain these same requirements. This provision shall survive the termination of this Agreement.

5. California Public Records Act. District is a public agency subject to the disclosure requirements of the California Public Records Act ("CPRA"). If Consultant's proprietary information is contained in documents or information submitted to District, and Consultant claims that such information falls within one or more CPRA exemptions, Consultant must clearly mark such information "Confidential and Proprietary," and identify the specific lines containing the information. In the event of a request for such information, District will make best efforts to provide notice to Consultant prior to such disclosure. If Consultant contends that any documents are exempt from the CPRA and wishes to prevent disclosure, it is required to obtain a protective order, injunctive relief or other appropriate remedy from a court of law in San Mateo County before the District is required to respond to the CPRA request. If Consultant fails to obtain such remedy within the time the District is required to respond to the CPRA request, District may disclose the requested information without any liability to Consultant. Consultant further agrees that it shall defend, indemnify and hold District harmless against any claim, action or litigation (including but not limited to all judgments, costs, and attorney's fees) that may result from denial by District of a CPRA request for information arising from any representation, or any action (or inaction), by the Consultant.
6. Independent Contractor. In the performance of this Agreement, it is expressly understood that Consultant, including each of Consultant's employees, agents, subcontractors or others under Consultant's supervision or control, is an independent contractor solely responsible for its own acts and omissions, and shall not be considered an employee of the District for any purpose. Consultant agrees to comply with AB5, codified at Labor Code section 2750.3, and shall indemnify, defend and hold harmless the District, its officials, officers, employees, and agents against any claim or liability, including attorneys' fees and costs, arising in any manner related to this Agreement that an employee, agent or others under Consultant's supervision or control was misclassified.
7. Consultant Not an Agent. Except as the District may specify in writing, Consultant shall have no authority, express or implied, to act on behalf of District in any capacity whatsoever as an agent. Consultant shall have no authority, express or implied, pursuant to this Agreement to bind the District to any obligation whatsoever.
8. Consultant Services Only. Consultant is employed to render professional services only and any payments made to Consultant are compensation solely for such professional services.
9. Subcontractors. Consultant shall obtain prior approval of the District prior to subcontracting of any work pursuant to this Agreement. If at any time, the District

determines any subcontractor is incompetent or unqualified, Consultant will be notified and will be expected to immediately cancel the subcontract. Consultant shall require and verify that all subcontractors maintain insurance meeting all of the requirements stated herein, including naming the District, its directors, officers, employees, and agents as additional insureds. Any modification to the insurance requirements for subcontractors must be agreed to by the District in writing.

10. Prevailing Wage. To the extent that the work or services to be performed under this Agreement may be considered a “public work” pursuant and subject to Labor Code section 1720 *et seq.*, Consultant (and any sub consultant performing the work or services) shall conform to any and all prevailing wage requirements applicable to such work/and or services under this Agreement. Consultant (and any sub consultant) shall adhere to the prevailing wage determinations made by the Director of Industrial Relations (DIR) pursuant to California Labor Code Part 7, Chapter 1, Article 2, applicable to the work, if any. All workers employed in the execution of a public works contract (as such term is defined California Labor Code section 1720 *et seq.* and section 1782(d)(1)) must be paid not less than the specified prevailing wage rates for the type of work performed. Reference: California Labor Code sections 1720, 1774 and 1782.

Consultant agrees to be bound by the prevailing wage requirements to the extent applicable to the scope of work and services under this Agreement, including, but not limited to, the following:

- a. If a worker is paid less than the applicable prevailing wage rate owed for a calendar day (or any portion thereof), Consultant shall pay the worker the difference between the prevailing wage rate and the amount actually paid for each calendar day (or portion thereof) for which the worker(s) was paid less than the prevailing wage rate, as specified in Labor Code section 1775;
- b. Consultant shall maintain and make available payroll and worker records in accordance with Labor Code sections 1776 and 1812;
- c. If Consultant employs (and/or is legally required to employ) apprentices in performing the work and/or services under this Agreement, Consultant shall ensure compliance with Labor Code section 1777.5;
- d. Consultant is aware of the limitations imposed on overtime work by Labor Code sections 1810 *et seq.* and shall be responsible for any penalties levied in accordance with Labor Code section 1813 for failing to pay required overtime wages;
- e. Consultant shall post a copy of the applicable wage rates at each jobsite at a location readily available to its workers.

Any failure of Consultant and/or its sub consultant to comply with the above requirements relating to a public work project shall constitute a breach of this

Agreement that excuses the District's performance of this Agreement at the District's sole and absolute option, and shall be at the sole risk of Consultant. Consultant on behalf of itself, any sub consultant, agree to indemnify, defend and hold harmless the District and its directors, officers, and employees from and against any and all claims, liabilities, losses, costs, expenses, attorney's fees, damages, expenses, fines, financial consequences, interest, and penalties, of any kind or nature, arising from or relating to any failure (or alleged failure) of the Consultant and any sub consultant to pay prevailing wages or to otherwise comply with the requirements of prevailing wage law relating to a public work.

11. Registration with DIR. Consultant acknowledges that it and/ any sub consultant shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, unless currently registered with the DIR and qualified to perform public work pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)]. A bid shall not be accepted nor any contract or subcontract entered into without proof of the Consultant or sub consultant's current registration to perform public work. Labor Code section 1771.1(b).
12. Dispute Resolution. The Parties agree to attempt in good faith to resolve through negotiation any dispute, claim or controversy arising out of or relating to this Agreement. Either party may initiate negotiations by providing written notice in letter form to the other party, setting forth the subject of the dispute and the relief requested. Promptly upon such notification, the Parties shall meet at a mutually agreeable time and place in order to exchange relevant information and perspective, and to attempt to resolve the dispute. In the event that no resolution is achieved, and if, but only if, the parties mutually agree, then prior to pursuing formal legal action, the parties shall make a good faith effort to resolve the dispute by non-binding mediation or negotiations between representatives with decision-making power, who, to the extent possible, shall not have had substantive involvement in the matters of the dispute. To the extent that the dispute involves or relates to a public works project, the Parties agree to attempt to resolve the dispute by complying with the claims process as set forth in Public Contract Code section 9204(e). Parties also reserve the right to exercise any and all other remedies available.
13. Force Majeure. Neither party hereto shall be considered in default in the performance of its obligation hereunder to the extent that the performance of any such obligation, except the payment of money, is prevented or delayed by an act of God, natural disaster, pandemic, acts of terrorism, war, or other peril, existing or future, which is beyond the reasonable control of the affected party and without the negligence of the respective Parties. . Each party hereto shall give notice promptly to the other of the nature and extent of any Force Majeure claimed to delay, hinder or prevent performance of the services under this Agreement. In the event either party is prevented or delayed in the performance of its respective obligation by reason of such Force Majeure, the only remedy is that there may be an equitable adjustment of the schedule based on the District's sole discretion.

14. Intellectual Property and Indemnity. Consultant represents to District that, to the best of Consultant's knowledge, any Intellectual Property (including but not limited to: patent, patent application, trade secret, copyright and any applications or right to apply for registration, computer software programs or applications, tangible or intangible proprietary information, or any other intellectual property right) in connection with any services and/or products related to this Agreement does not violate or infringe upon any Intellectual Property rights of any other person or entity.

To the fullest extent permitted by law, Consultant agrees to indemnify, defend, and hold harmless District, its directors, officers, employees, and agents, from any and all claims, demands, actions, liabilities, damages, or expenses (including reasonable attorneys' fees and costs) arising out of a claim of infringement, actual or alleged, direct or contributory, of any Intellectual Property rights in any way related to Consultant's performance under this Agreement or to the District's authorized intended or actual use of Consultant's product or service under this Agreement. This provision shall survive termination or expiration of this Agreement.

If any product or service becomes, or in the Consultant's opinion is likely to become, the subject of a claim of infringement, the Consultant shall, at its sole expense: (i) provide the District the right to continue using the product or service; or (ii) replace or modify the product or service so that it becomes non-infringing; or (iii) if none of the foregoing alternatives are possible even after Consultant's commercially reasonable efforts, in addition to other available legal remedies, District will have the right to return the product or service and receive a full or partial refund of an amount equal to the value of the returned product or service, less the unpaid portion of the purchase price and any other amounts, which may be due to the Consultant. District shall have the right to retrieve its data and proprietary information at no charge prior to any return of the product or termination of service.

15. Assignment. This Agreement may not be assigned by either the District or Consultant without the prior written consent of the other.
16. Benefit. Except as herein provided, this Agreement shall inure to the benefit of the assigns, heirs, and successors of the Parties to this Agreement.
17. Attorneys' Fees. If any action at law or in equity is brought to enforce or interpret the provisions of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees in addition to any other relief. The laws of the State of California, with jurisdiction in the San Mateo County Superior Court, shall govern all matters relating to the validity, interpretation, and effect of this Agreement and any authorized or alleged changes, the performance of any of its terms, as well as the rights and obligations of Consultant and the District.
18. Complete Agreement. This Agreement, along with any attachments, is the full and complete integration of the parties' agreement with respect to the matters addressed

herein, and that this Agreement supersedes any previous written or oral agreements between the parties with respect to the matters addressed herein.

19. Amendments. This Agreement may not be amended in any respect except by way of a written instrument which expressly references and identifies this particular Agreement, which expressly states that its purpose is to amend this particular Agreement, and which is duly executed by the District and Consultant. Consultant acknowledges that no such amendment shall be effective until approved and authorized by the District's authorized representative.
20. Severability. The unenforceability, invalidity or illegality of any provision(s) of this Agreement shall not render the other provisions unenforceable, invalid or illegal.
21. Waiver. Waiver by any party of any portion of this Agreement shall not constitute a waiver of the same or any other portion hereof.
22. Governing Law. This Agreement shall be governed by and interpreted in accordance with California law.
23. Contract Interpretation. Each party acknowledges that it has reviewed this Agreement and that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement.
24. Notices. If either party shall desire or is required to give notice to the other such notice shall be given in writing, via email and concurrently delivered by overnight Federal Express [or priority U.S. Mail], addressed to recipient as follows:

To District:

West Bay Sanitary District
Sergio Ramirez
500 Laurel Street
Menlo Park, Ca 94025
sramirez@westbaysanitary.org
(650) 321-0384

To CONSULTANT:

Kaz & Associates, LLC
Sean Kazemi
4271 Park Road
Benicia, CA 94510
s.kazemi@kazandassoc.com
(707) 747-1126

Changes to the above information shall be given to the other party in writing ten (10) business days before the change is effective.

25. Counterparts. This Agreement may be executed in counterparts, and when each party has signed and delivered at least one such counterpart, each one shall be deemed an original and, when taken together with other signed counterparts, shall constitute one Agreement, which shall be binding on and effective regarding all parties. A scanned, electronic, facsimile, or other copy of a party's signature shall have the same force and effect as an original signature.

26. ACKNOWLEDGMENT

By their signatures below, the Parties acknowledge that they have each read and understand the terms of this Agreement, and are authorized to execute this Agreement to legally obligate their respective representatives, agents, successors and assigns to comply with the provisions of this Agreement.

WEST BAY SANITARY DISTRICT

KAZ & ASSOCIATES, LLC

By: _____
Sergio Ramirez, General Manager

By: _____
Sean Kazemi, Principal

Date: _____

Date: _____

APPROVED AS TO FORM

Date: _____
Anthony Condotti, General Counsel

EXHIBIT

“A”

SCOPE

OF

WORK



WEST BAY SANITARY DISTRICT AGENDA ITEM 10

To: *Board of Directors*

From: *Fariborz Heydari, P.E. Project Manager*

Subject: *Consider Accepting Work by Precision Engineering for the North Bay Road and Ringwood Avenue Sewer Project; and Authorizing the General Manager to Execute the Balancing Change Order and File the Notice of Completion*

Background

On December 9, 2020, the District Board awarded the North Bay Road and Ringwood Avenue Sewer Project to the low bidder, Precision Engineering of San Francisco, CA for the amount of \$4,269,120.84 and apportioned an additional \$640,368.13 or approximately 10% to be used for additional work and approximately 5% for Construction Support Services. At the September 14th, 2023, Regular Board Meeting the District Board approved Change Order No. 1 for unexpected additional work in the Albervi Easement, East Palo Alto (\$197,707.00), and additional unexpected work for replacement of sewer mains Ravenswood Avenue and Laurel Avenue and construction of recycled water main in Ravenswood Avenue, Menlo Park (\$536,000.00) for a total amount of \$733,707.00. The total allocated for construction with the 15% additional work contingency was \$4,909,488.97.

Analysis

The project involved the replacement and rehabilitation of approximately 11,110 feet District sewer mains ranging from 6 to 24-inch in diameter.

Sewer mains were replaced using a combination open trench, pipe-bursting, and cured-in-place lining (CIPP) method.

Fiscal Impact

The Capital Assets Fund for Fiscal Year 2020-2021 allocated a total project amount of \$5,850,000.00. The Capital Assets Fund for Fiscal Year 2022-2023 has an approved budgeted line item for the Pipeline Replacement and Rehabilitation Construction in the amount of \$3,950,000.00. The contractor was awarded the contract in an amount of \$4,269,120.84 in 2020 of which an apportionment of an additional \$640,368.13 for contingency (10% for additional work and 5% for construction support services) was granted resulting in a total project amount of \$4,909,488.97 over a three year period.

The construction bid (\$4,269,120.84) with CCO No. 1 (\$733,707.00) was \$5,002,827.84. Actual construction work amounted to \$5,294,968.01 as described in the attached Balancing Change Order No. 2 Total allocated for construction was \$4,909,488.97. Therefore, the project was completed over budget by approximately \$385,479.04 for the construction portion of the project. Approximately \$32,020.00 was allocated for construction support services. Construction support services (geotechnical and outside inspection services) are estimated to be the same as was allocated.

Therefore, the project was over budget by approximately \$292,140.17 which paid for unexpected replacement and rehabilitation of additional main lines on Sonoma Ave, Chester Street, and additional spot repairs as provided in the balancing change order No. 2.

Recommendation

The Project Manager requests that the District Board 1) accept the work by Precision Engineering, Inc.; 2) authorize the General Manager to sign the Balancing Change Order; and 3) File the Notice of Completion for the North Bay Road and Ringwood Avenue Sewer Project.

Attachments: Balancing Change Order No. 2
 Notice of Completion
 Project Map

WEST BAY SANITARY DISTRICT
500 Laurel Street, Menlo Park, CA 94025

CHANGE ORDER

CO NO. 2

(Balancing Change Order)

Project: Capital Improvement Project North Bay Road Ringwood Avenue Project –
Replacement and Construction of Sanitary Sewer Mains

Location: Menlo Park, Atherton, San Mateo County, CA

Project No. 1761.5

Job No.: 1761.5

Contractor: Precision Engineering, Inc

Sheet 1 of 1

The following changes are hereby made to the Contract Documents:

1. Balancing Change Order (as noted on attached)

Justification:

1. Actual installed quantities in the field.

CHANGE TO CONTRACT PRICE:

Original Contract Price: \$4,269,120.84

Current Contract Price, as adjusted by previous Change Orders: \$5,002,827.84

The Contract Price due to this Change Order will be increased by: \$292,140.17

New Contract Price due to this Change Order will be: \$5,294,968.01

CHANGE TO CONTRACT TIME:

The Contract Time will be increased by 0 calendar days.

APPROVALS REQUIRED:

To be effective, this order must be approved by the Owner if it changes the scope or objective of the project, or as may otherwise be required under the terms of the Contract.

RECOMMENDED AND
APPROVED BY

Projects Manager

Date

ACCEPTED BY

Contractor

Date

AUTHORIZED BY

General Manager

Date

WEST BAY SANITARY DISTRICT									
PROJECT : NORTH BAY ROAD AND RINGWOOD DRIVE									
Contractor: Precision Engineering							Date: June 23, 2023		
Address: 1939 Newcomb Avenue							Period Ending Feb-23		
San Francisco, CA 94124							Balancing Change Order		
							District Project #: 1761.5		
ITEM NO.	DESCRIPTION	UNIT	UNIT PRICE	FINAL QUANTITY	QUANTITY CONTRACT	ADJUST QUANTITY	FINAL COST	COST CONTRACT	ADJUST COST CONTRACT
4	Utility Crossing	EA	1.00	69.00	118	(49.00)	69	118	(49.00)
5	Pavement Restoration - Menlo Park ROW	SF	7.00	11,012.00	10023	989.00	77084	70161	6,923.00
6	Paving Restoration San Mateo County ROW	SF	7.00	26,247.00	35282	(9,035.00)	183729	246974	(63,245.00)
7	Pavement Restoration - Atherton ROW	SF	7.00	3,100.00	342	2,758.00	21700	2394	19,306.00
9	Slurry Seal	SF	0.62	2,807.00	74432	(71,625.00)	1740.34	46147.84	(44,407.50)
10	Concrete Replacement	SF	3.00	642.00	1097	(455.00)	1926	3291	(1,365.00)
12	Remove Existing Manhole	EA	1,500.00	5.00	4	1.00	7500	6000	1,500.00
13	Reconnect Sewer Laterals	EA	75.00	118.00	222	(104.00)	8850	16650	(7,800.00)
14	Replace Existing 6" VCP with min 6" I.D. HDPE by Pipe Bursting	LF	140.00	803.00	659	144.00	112420	92260	20,160.00
15	Replace Existing 6" VCP with min 8" I.D. HDPE by Pipe Bursting	LF	160.00	2,264.80	4050	(1,785.20)	362368	648000	(285,632.00)
16	Replace Existing 10" VCP with min 12" I.D. HDPE by Pipe Bursting	LF	185.00	938.00	937	1.00	173530	173345	185.00
17	Replace Existing 6" VCP with 8" I.D. HDPE by Open Trench in Easements (w/root protection)	LF	210.00	0.00	651	(651.00)	0	136710	(136,710.00)
18	Replace Existing 6" VCP with 8" PVC C900 by Open Trench in Easements (w/root protection)	LF	210.00	55.00	142	(87.00)	11550	29820	(18,270.00)
19	Replace Existing 6" VCP with 8" PVC C900 by Open Trench (w/root protection)	LF	235.00	445.00	457	(12.00)	104575	107395	(2,820.00)
20	Replace Existing 10" VCP with 12" PVC C900 by Open Trench (w/root Protection)	LF	235.00	2,856.00	2693	163.00	671160	632855	38,305.00
21	Replace Existing 12" VCP with 12" PVC C900 by Open Trench (w/root Protection)	LF	260.00	19.00	162	(143.00)	4940	42120	(37,180.00)
22	Install New 6" I.D. HDPE by Open Trench Method	LF	185.00	10.00	64	(54.00)	1850	11840	(9,990.00)
23	Install New 8" I.D. HDPE by Open Trench Method	LF	210.00	175.00	479	(304.00)	36750	100590	(63,840.00)
24	Install New 6" PVC C900 by Open Trench (w/root protection)	LF	185.00	0.00	10	(10.00)	0	1850	(1,850.00)
25	Install New 8" PVC C900 by Open Trench (w/root protection)	LF	210.00	388.00	136	252.00	81480	28560	52,920.00
26	Install New 10" PVC C900 by Open Trench (w/root protection)	LF	235.00	0.00	245	(245.00)	0	57575	(57,575.00)
27	Install New 12" PVC C900 by Open Trench (w/root protection)	LF	260.00	0.00	9	(9.00)	0	2340	(2,340.00)
31	Potholing Utilities	EA	1,500.00	58.00	50	8.00	87000	75000	12,000.00
33	New Concrete Manhole (<3' Pipe Cover)	EA	3,500.00	4.00	7	(3.00)	14000	24500	(10,500.00)
36	New Concrete Manhole (<8')	EA	5,000.00	15.00	20	(5.00)	75000	100000	(25,000.00)
38	Replace Manhole (<8')	EA	5,000.00	22.00	23	(1.00)	110000	115000	(5,000.00)
39	Replace Manhole (>8')	EA	5,000.00	8.00	9	(1.00)	40000	45000	(5,000.00)
40	Rehabilitate Manhole (>8')	EA	3,000.00	0.00	3	(3.00)	0	9000	(9,000.00)
Alternate									
5	Pavement Restoration - Menlo Park ROW	SF	30.00	8.00	4	4.00	240	120	120.00
6	Pavement Restoration - San Mateo County ROW	SF	10.00	4,976.00	2488	2,488.00	49760	24880	24,880.00
9	Slurry Seal	SF	2.00	0.00	2200	(2,200.00)	0	4400	(4,400.00)
41	Install New 8" PVC (Recycled Water)	LF	200.00	2,797.00	2793	4.00	559400	558600	800.00
Sonoma Ave & Chester St (work area swap)							365,965.00		
Ravenswood Extra							60,196.00		
Force Account Summary							480,853.67		
Original Bib plus Add Alternate							5,002,827.84		
Balancing Change Order (Change Order No.2)							292,140.17		
Total Contract Amount							5,294,968.01		

EXEMPT FROM RECORDING FEES

Recorded at Request of
and Return to:

West Bay Sanitary District
500 Laurel Street
Menlo Park, CA 94025

NOTICE OF COMPLETION

Notice is hereby given that West Bay Sanitary District (a Government Agency) whose address is 500 Laurel Street, Menlo Park, California 94025, caused the North Bay Road and Ringwood Avenue Project Replacement and Construction of Sanitary Sewer Mains within San Mateo County, California; that the contract for doing said work was made with Precision Engineering, Inc. as contractor and entered into on December 18, 2020; that the work on said contract was actually completed on February 24, 2023; that the owner of said "North Bay Road and Ringwood Avenue Project Replacement and Construction of Sanitary Sewer Mians" is the West Bay Sanitary District.

WEST BAY SANITARY DISTRICT

Sergio Ramirez

STATE OF CALIFORNIA
COUNTY OF SAN MATEO

Sergio Ramirez being duly sworn says he is the General Manager of West Bay Sanitary District, the owner of the above referred improvements; that he has read the same, and knows the content thereof, and that the facts stated therein are true.

Sergio Ramirez

STATE OF CALIFORNIA)
) ss.
COUNTY OF SAN MATEO)

On _____ before me,
(Date)

_____,
Name and Title of Officer (e.g., Jane Doe, Notary Public)
personally appeared **Sergio Ramirez** who proved to me
on the basis of satisfactory evidence to be the person
whose name is subscribed to the within instrument
and acknowledged to me that he executed the same
in his authorized capacity, and that by his signature
on the instrument the person, or the entity upon behalf
of which the person 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.

Place Notary Seal Above

Signature of Notary Public

THIS PAGE LEFT INTENTIONALLY BLANK



WEST BAY SANITARY DISTRICT AGENDA ITEM 11

To: *Board of Directors*

From: *Sergio Ramirez, General Manager*

Subject: *Consider Resolution to Adopt the New West Bay Sanitary District Logo to Include Insignia to Reclaimed Water and Authorize the General Manager to Convert to the New Logo*

Background

In 2009 the Communications Committee worked on an update to the District's website. Part of the update included establishing a District's logo. The logo included green text and a white water drop with a blue border.

In 2019 the District began to operate its first reclaimed water facility at the Sharon Heights Golf and Country Club with the capacity to produce five hundred thousand gallons per day of reclaimed water. The reclaimed water facility has delivered over fifty-four million gallons of reclaimed water per year for the last two calendar years.

In 2022 the City of Menlo Park delegated authority to the District to become the reclaimed water purveyor in the City's water service area.

The District is currently engaged in designing a second reclaimed water facility at the retired treatment plant in the Bayfront area. The new facility will be capable of producing six to eight hundred thousand gallons per day of reclaimed water.

Analysis

Considering the District's efforts in reclaimed water, it is appropriate to include reclaimed water insignia as part of its existing logo. The following are two images demonstrating the existing logo and the new reclaimed water logo:



The logo will be incorporated over time as vehicles are replaced, apparel is due for replacement, the new website is implemented, digital letterhead is applied, policies are updated, and other District materials are replaced.

Fiscal Impact

The fiscal impact to the District will be de minimis as the transition to the new logo will be implemented over time.

Recommendation

The General Manager recommends the District Board Adopt the New West Bay Sanitary District Logo to include insignia to reclaimed water and Authorize the General Manager to convert to the new logo.

RESOLUTION NO. ____ (2023)

RESOLUTION ADOPTING THE NEW WEST BAY SANITARY DISTRICT LOGO TO INCLUDE INSIGNIA TO RECLAIMED WATER AND AUTHORIZE THE GENERAL MANAGER TO CONVERT TO THE NEW LOGO OVER TIME ON BEHALF OF THE DISTRICT

WHEREAS, the West Bay Sanitary District Board has revised its Logo ("Logo") to include insignia to reclaimed water as part of its existing Logo;

WHEREAS, the new West Bay Sanitary District Logo will include three purple recycling arrows associated with reclaimed water as part of its Logo; and

WHEREAS, the General Manager has been authorized to convert to the new Logo over time to District property, apparel, website, letterhead, policies, and other District materials using the revised Logo;

NOW, THEREFORE, the District Board of the West Bay Sanitary District, County of San Mateo, State of California, does hereby RESOLVE as follows:

Section 1. Public interest and convenience require the West Bay Sanitary District to better represent the District's current reclaimed water efforts in the community.

Section 2. The West Bay Sanitary District hereby authorizes the General Manager to convert to the new reclaimed water Logo.

PASSED AND ADOPTED by the District Board of the West Bay Sanitary District at a regular meeting thereof held on 28th day of June 2023, by the following votes:

Ayes:

Noes:

Absent:

Abstain:

President of the District Board of the
West Bay Sanitary District of San
Mateo County, State of California

Attest:

Secretary of the District Board of the
West Bay Sanitary District of San Mateo
County, State of California

WEST BAY SANITARY DISTRICT





**WEST BAY SANITARY DISTRICT
AGENDA ITEM 12**

To: *Board of Directors*

From: *Sergio Ramirez, General Manager*

Subject: *Consider Adopting Regulation Amending Various Provisions of the General Code of Regulations*

Background:

The District's Code of General Regulations requires amending from time to time as the Uniform Plumbing Code is updated and or new best practices are adopted by the industry.

Approval of a General Regulation amending the Code of General Regulations Article VI, Section 6 and Section 7 to the West Bay Sanitary District Code of General Regulations is required. The amendment will better serve the public and to continue to protect its infrastructure.

Analysis:

Significant changes to the General Code of Regulations are as follows:

Section 6, 13 Interference with District Easements.

(E) Zone of Influence – The Zone of influence cast by any development shall not infringe on the District's ability to access, replace, or repair facilities located within easements.

(F) Prescriptive Easements – The prohibitions in this Section 603(13) shall apply to all easements of record as well as easements of any kind that the District has acquired by operation of law including, but not limited to, prescriptive easements, implied easements, equitable easements, easements by implied dedication or easements by necessity.

Section 7, 704 Types of Sewer Connection, Disconnection, Construction Permits, and Encroachments.

There shall be six (6) classes of sewer connection permits; class one (1) residential, class two (2) non-residential, class three (3) public sewer mains, pump stations and other, class four (4) sewer disconnection, class five (5) STEP and Grinder Systems, class six (6) encroachments.

The two new classes of permits are the class 5 and class 6. Class 5 sewer permits are required for the construction of wastewater facilities including STEP or Pressure Grinder Systems. Class 6 permits are required for trenchless utility contractors including directional drilling, jack and bore, or other contractors performing work on other utilities, within the District boundaries, such as, water, PG&E, AT&T, Comcast, and other communication providers. The permit will allow contractors access to the public sewer mains for CCTV inspection before and after trenchless work so that the public sewer is not damaged during the trenchless construction of other utilities.

Fiscal Impact:

None.

Recommendation:

The General Manager recommends the District Board adopt the amended District Code of General Regulations.

Attachments:

- 1) Code of General Regulations Amendment Redline Draft
- 2) Code of General Regulations Amendment Clean Draft

REGULATION NO. _____

A REGULATION AMENDING GENERAL REGULATION NO. 58
“A GENERAL REGULATION ADOPTING CODE OF GENERAL REGULATIONS”

BE IT ORDAINED AND ENACTED BY THE District Board of West Bay Sanitary District that General Regulation No. 58, “A General Regulation Adopting Code of General regulations,” passed and approved on November 22, 1982, as heretofore amended, is hereby further amended as follows:

Section 1.

All references to “District Manager” are hereby amended to “General Manager.”

Section 2.

All references to “South Bayside System Authority” are hereby amended to “Silicon Valley Clean Water.”

Section 3.

Article I – General Provisions – is hereby amended at Section 101 to read as follows:

SECTION 101. Mailing Address and Offices of the District.

The mailing address and offices of the West Bay Sanitary District is as follows:

West Bay Sanitary District
500 Laurel Street
Menlo Park, CA 94025
(650) 321-0384

info@westbaysanitary.org

Section 4.

Article II – Meetings of the District Board – is hereby amended at Section 209 to read as follows:

SECTION 209. Board Members Compensation.

Effective ~~February 9~~January 9, 20230, members of the District Board shall be compensated in the amount of \$~~265~~0.00 per day for each day's attendance at meetings of the District Board, attendance at California Association of Sanitation Agencies conferences and for each day's service rendered as a Member of the District Board by request of the District Board. Compensation shall not exceed a total of \$1,560.00 (six days service) in any calendar month.

Compensation to Board Member attending conferences of the California Association of Sanitation Agencies shall be limited to two day's compensation regardless of the number of days attended.

Section 5.

Article IV – Specifications Controlling Manner of Construction and Clearing Services is hereby amended at Subsections (06) and (20) of Section 401 – Building Sewers and Connections and at Sections 402-404 and 406 to read as follows:

(06) Cleanout Assembly.

The cleanout assembly, consisting of a “Y” and branch fittings, shall be made of ~~cast iron or clay~~ of the same size as the building sewer it serves. The ~~cast iron~~ riser shall connect the “Y” and branch fittings up to the cleanout box. The top of the riser shall be fitted with a ~~brass or plastic screw type~~ cleanout cap and shall meet current Standard Specifications and Details.-

(20) Alternative Sewer Lateral Materials

The District will accept the following methods for replacing or rehabilitating side sewers:

1, Preferred Replacement

The West Bay Sanitary District will provide cleaning service to laterals replaced with the following materials:

- | | | |
|----|-----------------|---|
| a) | Less than 36” - | Ductile Iron Pipe Class 50 or 51
PVC C900 Class 200 |
| b) | 36” or deeper - | PVC C900 Class 150 or 200
Vitrified Clay
Ductile Iron Pipe Class 50 or 51 |

2. ~~Non-Preferred~~Acceptable Rehabilitation of Existing Side Sewer

The West Bay Sanitary District will accept, but NOT provide cleaning service to laterals rehabilitated with the following materials. Property Owners are specifically notified that the following methods are not as effective nor as long lived as the preferred methods.

a) Cured-in-place materials (requires Pre and Post CCTV post construction CCTV of the service lateral and Post construction CCTV inspection of the main connection.)inspection of the main connection by the District).

b) HDPE SDR 17 installed by pipe bursting

If the ~~Non-Preferred~~Acceptable Rehabilitation method is chosen by the property owner(s), the owner(s) must sign the District's permit addendum which clearly states that although the District will allow the use of the pipe bursting and cured in place replacement methods, ~~THEY ARE NOT RECOMMENDED~~ and that: 1) the side sewer will not receive cleaning service from the District, and 2) that this information will be disclosed by the property owner(s) should the property be transferred. This permit addendum shall be recorded at the County by the District prior to acceptance of the lateral.

If the existing side sewer is less than 36”, pipe-bursting will not be allowed. the preferred method of installation must be applied.

SECTION 402. Examination of Plans

The ~~District Manager~~General Manager or his representative shall examine the plans submitted ~~for all under a~~ Class ~~3 and 5~~ sewer permits to verify that they are in accordance with good engineering practices and in compliance with the standard specifications and policies of the District. Plans which have been so examined and approved will be submitted to the District Board for approval, alteration, or rejection.

SECTION 403. Inspection of Construction

After approval of the plans by the District ~~Board~~, actual construction may be started and all work shall be performed under the inspection of, and in accordance with the standard specifications of the District.

All work shall be inspected by the District when construction is completed but before use is made of the facilities constructed. Inspection shall be made at such other times as the ~~District Manager~~General Manager may require.

The applicant shall give 24 hours advance notice to the ~~District Manager~~General Manager that construction performed under a Class 1 or a Class 2 sewer permit is ready for inspection.

The applicant shall give 48 hours advance notice with respect to such construction performed under a Class ~~3, and 5 or 6~~ sewer permit.

SECTION 404. Dedication of Sewers - Easements

The District encourages the placement of main sewers in the public right-of-way. When no viable alternative exists the ~~District Manager~~General Manager may authorize the placement of main sewers in Public Utility Easements or in dedicated easements. No sewer shall become a public sewer unless it is dedicated to public use and is accepted by the District on such terms as the District may require. As a condition of accepting a sewer as a public sewer, the applicant shall provide such original grant deeds of easement to the District, together with rights of ingress and egress, as maybe necessary for the District to enter upon the property for the purposes of operating and maintaining the public sewers. No such easement shall be less than fifteen (15) feet in width, and will include vehicular access.-

Easements shall be recorded in the Official Records of the County of San Mateo as an encumbrance on the property.

Owners of property over which easements have been granted shall be responsible to maintain them in accordance with the requirements of Section 603 (13) of Article VI of this code.

SECTION 406. Backflow Prevention Devices.

Property owners shall install a backflow prevention device on any side sewer for gravity sewer laterals connecting houses having a finished floor elevation less than 12" above the top elevation of the nearest upstream structure (manhole). The device shall be located on the side sewer between the Building and the Conforming Property Line Cleanout Assembly and shall be installed in conformance with the current Universal Plumbing Code. The property owner shall be solely responsible for all costs of installation and maintenance of such devices and shall meet current Standard Specifications and Details.

Section 6. Article VI – Use of Public Sewers – is hereby amended at Subsection (06) of Section 602 and Subsections (01) and (13) of Section 603 to read as follows:

(06) Kitchen BMP Requirements.

All FSEs shall implement kitchen Best Management Practices (BMP)s-in accordance with requirements and guidelines established by the National Restaurant Association (<https://conserve.restaurant.org/Downloads/PDFs/FOG/FOG-ToolkitFinal3.aspx>) and ~~District Manager~~General Manager-.

(01) General Prohibitions.

No person shall, and it shall be unlawful to, discharge wastes [including, but not limited to those specified in Subparagraphs L and M below](#), into the wastewater facilities which cause, threaten to cause, or are capable of causing, either alone or by interaction with other substances;

- (A) A fire or explosion;
- (B) Obstruction of flow, or injury to, the wastewater facilities, or any portion thereof;
- (C) Danger to life or safety of persons;
- (D) Conditions inhibiting or preventing the effective maintenance or operation of the wastewater facility;
- (E) Strong or offensive odors, air pollution, or any noxious, toxic, or malodorous gas-or substance, or gas-producing substances;
- (F) Interference with the wastewater treatment process, or overloading of the wastewater facilities, or excessive collection or treatment costs, or use of capacity in the wastewater facilities to which the person is not entitled;
- (G) Interference with any wastewater reclamation process, which does or may operate in conjunction with the wastewater facilities, or overloading, or a breakdown of such reclamation process, or excessive reclamation costs, or any product of the treatment process which renders such reclamation process impracticable or not feasible under normal operating conditions;
- (H) A detrimental environmental impact, or a nuisance wherever located, or a condition unacceptable to any public agency having regulatory jurisdiction over operation of the wastewater facilities;
- (I) Discoloration, or any other adverse condition in the quality of the effluent from the wastewater facilities such that receiving water quality requirements established by any statute, rule, regulation, ordinance, or permit condition cannot be met by the District or the Authority;
- (J) Conditions at or near the wastewater facilities, or any portion thereof, which cause, or may cause, the District or Authority to be in violation of the requirements of law.
- (K) Pollutants introduced into the wastewater facilities which pass through or interfere with the operation or performance of the wastewater facilities. [Added by General Regulation No. 59.]
- [\(L\) All rags and wipes \(including flushable and non-flushable wipes\). Single Use Wipes or Hygiene products \(for example: cleaning wipes and rags, paper towels, napkins, or other non-toilet paper products.\)](#)
- [\(M\) Hygiene productsHazardous Waste.](#)

(13) Interference with District Easements.

(A) Except as provided in Subsection (E) below, it is unlawful for any person to obstruct, encroach upon or otherwise interfere with District easements or to permit or allow such obstructions, encroachments or interferences.

(B) Without in any way limiting the breadth of the general prohibition contained in Subsection (A) above, the following conditions are expressly prohibited.

- (1) Construction, installation or maintenance of any permanent or temporary structure which is on, in or over any easement and which cannot be readily and easily removed at any time the District requires access to or use of an easement. In this regard, the term "structure" includes buildings, fences, gates, decks, roof overhangs, decorative rocks and boulders, and the like.
- (2) Planting, growing or maintaining trees, shrubs or other forms of plant life which restrict access to an easement or which interfere with the use or operation of wastewater facilities located in the easement. Included within this prohibition are: trees and shrubs located on the surface of an easement which inhibits

access by District personnel, vehicles and equipment; overhanging vegetation located outside the easement which likewise restricts access; and plants of kind which produce roots that are likely to invade wastewater facilities.

(3) The deposit of any debris, garbage, trash or other solid waste on or in an easement.

(4) The abandonment of any items of property, including vehicles, within an easement.

(C) The foregoing prohibitions do not preclude the owner of the real property which is the subject of the District's easement from making uses of the easement so long as such uses are not inconsistent with District's rights.

(D) Any condition which constitutes an obstruction of, encroachment upon or interferences with a District easement shall promptly be removed by the property owner or any other responsible person upon District's demand to do so, provided, however, that in the event of an emergency, District shall be entitled, without prior demand, to remove any obstruction, encroachment or interference by such means as District determines are reasonably necessary, even if such removal will result in damage to or loss of property by the property owner or other responsible person who caused or allowed the condition to occur. In the event a condition is not removed by responsible persons after District's reasonable demand, or without demand in the case of an emergency, District shall be entitled to recover from any responsible persons all costs and expenses incurred by it to remove the condition. The remedies provided to District by this Subsection are in addition to, and cumulative with, any other remedies available to District pursuant to this Code or otherwise as provided by law.

(E) Zone of Influence – The Zone of influence cast by any development shall not infringe on the District's ability to access, replace, or repair facilities located within easements Jason / Building Dept.

(F) Prescriptive Easements – The prohibitions in this Section 603(13) shall apply to all easements of record as well as easements of any kind that the District has acquired by operation of law including, but not limited to, prescriptive easements, implied easements, equitable easements, easements by implied dedication or easements by necessity. Tony C. language

(G) In the event of any substantial hardship, or for other good cause, any affected person may seek relief from the provisions of this Subsection (13) by requesting a variance pursuant to Section 1100 of Article XI of this Code.[Amended by General Regulation No. 82]

Section 7.

Article VII – Permits – is hereby amended at Sections 704 and 705 to read as follows:

SECTION 704. Types of Sewer Connection, Disconnection, ~~and~~ Construction Permits, and Encroachments.

There shall be ~~two~~ six (652) classes of sewer ~~connection permits; one (1) class of sewer disconnection permit and one (1) class of construction permit~~ class one (1) residential, class two (2) non-residential, class three (3) public sewer mains, pump stations and other, class four (4) sewer disconnection, class five (5) STEP and Grinder Systems, class six (6) encroachments as follows:

(01) Residential.

Class 1 sewer permits are required for the following types of residential connections:

Permit type 1A for single-family residences;

Permit type 1B for multiple-unit residences;

Permit type 1C for rooming houses or boarding houses;

Permit type 1D for miscellaneous residential;

Permit type 1E for residential Non-Preferred Method of lateral replacement –
cured in place pipe; ~~for residential STEP or Pressure Grinder Systems;~~

~~Permit type 1F for residential Non-Preferred Method of lateral replacement – pipe burst.~~

(02) Non-Residential.

Class 2 sewer permits are required for the following types of non-residential connections:

Permit type 2A for commercial establishments;

Permit type 2B for industrial establishments;

Permit type 2C for institutional establishments;

Permit type 2D for miscellaneous non-residential;

~~Permit type 2E for non-residential STEP or Pressure Grinder Systems;~~

Permit type 2E for non-residential Non-Preferred Method of lateral replacement – cured in place pipe.

Permit type 2F for non-residential Non-Preferred Method of lateral replacement – pipe burst.

~~(03) — Sewer Mains, Pumping Station, Other.~~

~~Class 3 sewer permits are required for construction of sewer mains, pumping stations and other wastewater facilities including STEP or Pressure Grinder Systems.~~

~~Subsequent to the District Board's acceptance of a sewer system constructed pursuant to a Class 3 permit, but prior to connection of and discharge into the District's wastewater facilities, a Class 1 or Class 2 permit, as applicable, must be obtained by the applicant.~~

Class 3 – Public Sewer Mains, Pumping Station, Other.

Class 3 sewer permits are required for construction of public sewer mains, pressure sewer mains, pumping stations.

Subsequent to the District Board's acceptance of a sewer system constructed pursuant to a Class 3 permit, but prior to connection of and discharge into the District's wastewater facilities, a Class 1 or Class 2 permit, as applicable, must be obtained by the applicant.

Permit type 3A for construction of new gravity public sewer mains.

Permit type 3B for installation of pressure sewer main extension connecting into the back end of an existing pressure sewer main – connection to be done by contractor.

Permit type 3C for installation of pressurized sewer main branch extension connection to be done by District. with district staff tie in.

(034) Class 4 – Sewer Disconnection.

Class 4 permits are required to disconnect from the District's sewer system.

Permit type 4A for Permanent Disconnection;

Permit type 4B for Temporary Disconnection.

(054) Class 5 –STEP and Grinder Systems.

Class 5 sewer permits are required for the construction of wastewater facilities including STEP or Pressure Grinder Systems.

Permit type 5A for installation of STEP or Pressure Grinder Systems

Permit type 5B for non-residential installation of STEP, Pressure Grinder Systems, or pumping stations

Permit type 5C for replacement or upgrade of a pressure sewer lateral from a STEP or Grinder System

(06) Class 6 –Encroachments (Public Sewer Main and Facilities Access):

Class 6 permits are required for trenchless utility contractors including directional drilling, jack and bore, or other contractors performing work on other utilities, within the District boundaries, such as, water, PG&E, AT&T, Comcast, and other communication providers.

Permit type 6A for public sewer main and facilities access in order to CCTV inspect before and after drilling or boring trenchless construction.

(0755) All Permits - Expiration.

All sewer connection and disconnection permits shall expire twelve (12) months from the date of issuance unless such permit is extended by the ~~District Manager~~General Manager.

(0866) All Permits – Refund of Fees.

No refund of permit fees shall be made for expired permits

SECTION 705. Information Required by Type of Sewer Permit.

(01) Class 1.

The following information is required of all applicants for Class 1 Sewer Permits:

(A) Legal description including street address, lot number, block number, name of subdivision, assessor's parcel number and the parcel volume and page number according to the parcel map.

(B) Type or work to be done including the kind of building to be connected, whether it is a new connection, repair or other, the building permit number and the District's connection record number.

(C) The owner's name, address, email, and telephone number.

(D) The contractor's name, address, email, and telephone number.

(E) Any additional information which the ~~District Manager~~General Manager may require due to the nature of the project.

(F) The signature of the applicant including the applicant's address and telephone number. _____ un

(02) Class 2.

The following information shall be required for application for Class 2 Sewer Permit:

(A) Applicant's business name.

(B) Address of premises discharging wastewater, including the assessor's parcel number.

(C) The standard industrial classification of applicant's business and the number of the classification.

- (D) The applicant's name, mailing address, [email](#), and telephone number.
- (E) The engineer/contractor's name, address, [email](#), and telephone number.
- (F) The volume of wastewater proposed to be discharged.
- (G) Any additional information which the ~~District Manager~~[General Manager](#) may require due to the nature of the project, including a wastewater discharge report or permit.
- (H) The signature of the applicant and the date

(H) The signature of the applicant and the date.

(03) Class 3.

The following information shall be required of all applicants for a Class 3 Sewer Permit:

- (A) The name of the owner or owner's agent making application.
- (B) The location of the project.
- (C) The ~~name, mailing address, email, and telephone number~~ [name and address](#) of the engineer.
- (D) The ~~name, mailing address, email, and telephone number~~ [name and address](#) of the owner.
- (E) The ~~name, mailing address, email, and telephone number~~ [name and address](#) of the contractor.
- (F) Maps, plans, profiles and other information as required by the General Manager. These maps, plans, profiles, etc. shall show the location and boundary lines of the property to be ~~sewered~~[serviced](#) and of each tract, lot, or parcel therein, together with existing and proposed streets, roads, highways, easements, and rights-of-way within and immediately contiguous with said property, and shall show the proposed connections with the District's sewer or other proposed facilities and existing ground surface elevations together with such changes as may result from subsequent grading, filling, road construction and the like.
- (G) A [Notice of Exemption](#), Negative Declaration or final Environmental Impact Report, whichever is applicable, as determined by the lead agency for the project pursuant to the California Environmental Quality Act, as amended.
- (H) The signature and address of the applicant.

(04) Class 5. STEP and Grinder Systems

The following information shall be required of all applicants for a Class 5 Sewer Permit:

- (A) The name of the owner or owner 's agent making application.
- (B) The location of the project.
- (C) The ~~name, mailing address, email, and telephone number~~ [name and address](#) of the engineer.
- (D) The ~~name, mailing address, email, and telephone number~~ [name and address](#) of the owner.
- (E) The ~~name, mailing address, email, and telephone number~~ [name and address](#) of the contractor.
- (F) Maps, plans, profiles and other information as required by the General Manager. These maps, plans, profiles, etc. shall show the location and boundary lines of the property to be ~~sewered~~[serviced](#) and of each tract, lot, or parcel therein, together with existing and proposed streets, roads, highways, easements, and rights-of-way within and immediately contiguous with said property, and shall show the proposed connections with the District's sewer or other proposed facilities and existing ground surface elevations together with such changes as may result from subsequent grading, filling, road construction and the like.

(G) A Notice of Exemption, Negative Declaration or final Environmental Impact Report, whichever is applicable, as determined by the lead agency for the project pursuant to the California Environmental Quality Act, as amended.

(H) The signature and address of the applicant.

(I) Zero discharge is allowed until final approval of permit by Board.

(05) Class 6 – Encroachments (Public Sewer Main and Facilities Access).-Need language:

The following information shall be required of all applicants for a Class 6 Encroachment Permit:

(A) The name of the owner or owner 's agent making application.

(B) The location of the project.

(C) The name, mailing address, email, and telephone number of the engineer.

(D) The name, mailing address, email, and telephone number of the owner.

(E) The name, mailing address, email, and telephone number of the contractor.

(F) Maps, plans, profiles and other information as required by the General Manager. These maps, plans, profiles, etc. shall show the location of the proposed encroachment, together with existing and proposed streets, roads, highways, easements, and rights-of-way within and immediately contiguous with said encroachment, and shall show the proposed encroachment and proximity/relation to the District's sewer or other facilities and existing ground surface elevations together with such changes as may result from the proposed encroachment.

(G) A Notice of Exemption, Negative Declaration or final Environmental Impact Report, whichever is applicable, as determined by the lead agency for the project pursuant to the California Environmental Quality Act, as amended.

(H) The signature and address of the applicant.

~~(03) Class 53.~~

~~The following information shall be required of all applicants for a Class 3 5 Sewer Permit:~~

~~(A) The name of the owner or owner's agent making application.~~

~~(B) The location of the project.~~

~~(C) The name and address of the engineer.~~

~~(D) The name and address of the owner.~~

~~(E) The name and address of the contractor.~~

~~(F) Maps, plans, profiles and other information as required by the District ManagerGeneral Manager. These maps, plans, profiles, etc. shall show the location and boundary lines of the property to be seweredserved and of each tract, lot, or parcel therein, together with existing and proposed streets, roads, highways, easements, and rights-of-way within and immediately contiguous with said property, and shall show the proposed connections with the District's sewer or other proposed facilities and existing ground surface elevations together with such changes as may result from subsequent grading, filling, road construction and the like.~~

- ~~(G) A Negative Declaration or final Environmental Impact Report, whichever is applicable, as determined by the lead agency for the project pursuant to the California Environmental Quality Act, as amended.~~
- ~~(H) The signature and address of the applicant.~~

Section 8.

Article IX – Fees Rates and Charges – is hereby amended at Section 902 to read as follows:

SECTION 902. Permit and Inspection Fees.

(01) Class 1,2, 3, [4,5](#) and [6](#) Permits.

- (A) Class 1 Sewer Permits for service to residential structures;
- (B) Class 2 Sewer Permit for service to non-residential structures;
- (C) Class 3 Sewer Permit for construction of sewer mains, pumping stations and other wastewater facilities. The inspection fee for a Class 3 sewer permit shall be paid as covered under subsection (03) Excess Expenses, below;
- (D) Class 4A Sewer Disconnection Permit for Permanent Disconnection; and
- [\(E\) Class 4B Sewer Disconnection Permit for Temporary Disconnection.](#)
- [\(F\) Class 5 STEP and Grinder Systems](#)
- [\(G\) Class 6 Encroachments \(Public Sewer and Facilities Access\)](#)

(02) Non-Routine Wastewater Discharge Permits.

Fees, in amounts established by the Board of Directors, shall be imposed upon and collected from applicants and customers of the wastewater facilities to defray the costs of processing and issuing the following Non-Routine Wastewater Discharge Permits or performing the following services:

- (A) Mandatory wastewater discharge permit.
- (B) Determination and approval of metered waste water volumes, and metered volume permit.
- (C) Determination and approval of use of estimated wastewater volume, and estimated volume permit.
- (D) Private wastewater disposal permit.
- (E) Review of proposals for protection against accidental discharges.
- (F) Discharge report review. [Amended by General Regulation No. 78.] Service or work which is expressly or impliedly required to be performed by the District pursuant to the provisions of this Code, the payment for which is not otherwise provided for herein, shall be paid in advance of the performance of such services or work in an amount equal to the estimated cost to the District thereof. Upon performance of such services or work, and upon the calculation of the actual costs thereof, sums deposited in excess of such actual costs shall be refunded or additional charges equal to the amount by which the actual cost exceeds the estimated cost shall be paid.

The foregoing fees and charges shall be paid at the time the application for the work to which they pertain is made or requested or upon receipt of billing for excess expenses. No application shall be processed, nor work performed, without said fees or charges having first been paid.

These fees and charges shall be in addition to fees, charges, or expenses payable pursuant to other provisions of this Code.

(03) Excess Expenses.

In addition to the permit fees, the applicant shall pay to the District all costs and expenses in excess of said fees which have been borne by the District to examine application or plans and inspect construction, and to test, sample and/or monitor wastewater discharge, said costs to be determined by the District.

In accordance with the California Environmental Quality Act ("CEQA") Public Resources Code Sec. 2100 et seq., and the regulations promulgated pursuant to CEQA, the District Board finds that this Regulation establishes fees for the purpose of meeting operating expense of the District. [Amended by General Regulation No. 78.]

Section 9.

Article X – Enforcement is hereby amended at Subsection (a) of Section 1006 to read as follows:

(a) Violations of Ordinances, Rules or Regulations.

Any person who willfully or negligently discharges pollutants, except in compliance with wastewater discharge requirements, or who willfully or negligently violates any Administrative Order, prohibition, wastewater discharge requirement, effluent standard, water quality related effluent standard, Federal standard of performance, pretreatment or toxicity standard or requirement, or who fails to comply with the conditions of their permit, compliance schedule or any standard, condition or requirement set forth in any District ordinance, rule or regulation, or who tampers with any sewer facility so as to render such facility out of compliance with any District-approved plans, specifications or permit conditions, shall be punished by a fine ~~_of not more than_~~ of not more than at a minimum one thousand dollars (\$1,000) for each day such violation occurs, or by imprisonment in the county jail for not more than thirty (30) days, or both.

Section 10.

This General Regulation amending the Code of General Regulations shall be in full force and effect from and after its passage, approval, and publication as provided by law.

Passed and adopted by the Board of the West Bay Sanitary District at a regular meeting thereof held on the 28th day of June, 2023, by the following vote:

Ayes:

Noes:

Abstain:

Absent:

Fran Dehn, President

Attest:

David Walker, Secretary

WEST BAY SANITARY DISTRICT



CODE OF GENERAL REGULATIONS OF THE WEST BAY SANITARY DISTRICT

Revised: July 1, 2023

Table of Contents

ARTICLE I	1
GENERAL PROVISIONS	1
SECTION 100. Purpose.	1
SECTION 101. Mailing Address and Offices of the District.	1
SECTION 102. Superseding Previous Regulations,	1
SECTION 103. Distribution of Revenue.	1
(01) The General Fund	1
(02) The Capital Assets Fund	1
(03) The Debt Service Fund	2
(04) The Clean Water Grant Fund	2
SECTION 104. Recording of Fees and Charges.	2
SECTION 105. Definitions.	2
ARTICLE II	9
MEETINGS OF THE DISTRICT BOARD	9
SECTION 200. Public Meetings.	9
SECTION 201. Regular Meetings.	9
SECTION 202. Special Meetings.	9
SECTION 203. Public Hearings.	9
SECTION 204. Quorum.	9
SECTION 205. Minutes of Meetings.	9
SECTION 206. Contracts.	9
SECTION 207. Amendments to the Code of General Regulations.	10
SECTION 208. Orders Not Establishing Amendments to the Code of General Regulations (Resolutions).	10
SECTION 209. Board Members Compensation.	10

ARTICLE III	11
COLLECTION, REMOVAL AND DISPOSAL OF SOLID WASTE	11
SECTION 300. District Solid Waste Collection, Removal and Disposal System.	11
SECTION 301. Establishment of Rates	11
SECTION 302. Unlawful Acts.	11
SECTION 303. Mandatory Organic Waste Disposal Reduction.	11
ARTICLE IV	12
SPECIFICATIONS CONTROLLING MANNER OF CONSTRUCTION AND CLEARING SERVICES	12
SECTION 400. Standard Specifications.	12
SECTION 401. Building Sewers and Connections.	12
(01) Sewer Permit Required.	12
(02) Costs and Expenses of Installation.	12
(03) Separate Building Sewer Required.	12
(04) Cleanout Required.	12
(05) Cleanout Boxes.	13
(06) Cleanout Assembly.	13
(07) Side Sewer Ownership.	13
(08) Side Sewer Clearing	13
(09) Refusal of Clearing Services	13
(10) Side Sewer Clearing Request Notification	14
(11) Side Sewer Clearing Request Notification Data Analysis	14
(12) Side Sewer Damage Responsibility	14
(13) Side Sewer Overflow Responsibility	14
(14) Old Building Sewers.	14
(15) Residential Sewers.	14
(16) Elevation; Change of Direction.	14
(17) Artificial Lift.	15
(18) Excavation.	15
(19) Control Manholes.	15
(20) Alternative Sewer Lateral Materials	15
SECTION 402. Examination of Plans	16
SECTION 403. Inspection of Construction	16
SECTION 404. Dedication of Sewers - Easements	16
SECTION 405. Disconnection of Sewers	16
(01) Permanent Disconnection.	16

(02) Temporary Disconnection.	17
SECTION 406. Backflow Prevention Devices.	17
ARTICLE V	18
ANNEXATION OF TERRITORY	18
SECTION 500. Application for Annexation of Territory.	18
SECTION 501. Conditions and Payment of Fees.	18
ARTICLE VI	19
USE OF PUBLIC SEWERS	19
SECTION 600. Use of Public Sewers Required.	19
(01) Toilet Facilities and Connections required.	19
(02) Private Disposal Unlawful, with Exceptions.	19
SECTION 601. Private Wastewater Disposal.	19
(01) Sewers not Available.	19
(02) Permit Required.	19
(03) Compliance with Regulations.	19
(04) Discharge to Natural Outlet.	19
(05) Unlawful to Discharge to Public Sewer.	19
(06) Owner to Operate and Maintain.	20
SECTION 602. Grease, Oil, and Sand Interceptors.	20
(01) Applicability.	20
(02) Definitions.	20
(03) Prohibitions and Limitations	20
(04) Grease Control Device Requirements.	21
(05) Maintenance Requirements.	21
(06) Kitchen BMP Requirements.	22
(07) Recordkeeping Requirements.	22
(08) Inspection and Sampling Conditions.	22
(09) Variance.	22
(10) Charges and Fees.	23
(11) Falsifying Information or Tampering with Process.	23
(12) Enforcement.	23
SECTION 603. Prohibitions.	23
(01) General Prohibitions.	23
(02) Storm Drainage and Ground Water.	24
(03) Unpolluted Water.	24
(04) Garbage Grinders.	24
(05) Direct Discharge.	24
(06) Holding Tank Waste.	25

(07) Radioactive Wastes.	25
(08) Wastewater Strength.	25
(09) Additional Limitations.	26
(10) Specific Customer Limitations.	26
(11) Protection from Damage.	26
(12) Discharge to Natural Outlet.	26
(13) Interference with District Easements.	27
ARTICLE VII	28
PERMITS	28
SECTION 700. Permits Required.	28
SECTION 701. Pre-existing Discharges.	28
SECTION 702. Requirements Applicable to all Permits.	28
SECTION 703. Other Conditions and Requirements of Permits.	29
SECTION 704. Types of Sewer Connection, Disconnection, Construction Permits, and Encroachments.	29
(01) Residential.	29
(02) Non-Residential.	30
(03) Class 3 – Public Sewer Mains, Pumping Station, Other.	30
(04) Class 4 – Sewer Disconnection.	30
(05) Class 5 –STEP and Grinder Systems.	30
(06) Class 6 –Encroachments (Public Sewer Main and Facilities Access)	31
(07) All Permits - Expiration.	31
(08) All Permits – Refund of Fees.	31
SECTION 705. Information Required by Type of Sewer Permit.	32
(01) Class 1.	32
(02) Class 2.	32
(03) Class 3.	32
(04) Class 5. STEP and Grinder Systems	33
SECTION 706. Wastewater Discharge Report.	34
SECTION 707. Wastewater Discharge Permits.	34
(01) Mandatory Wastewater Discharge Permit.	34
(02) Non-Routine Wastewater Discharge Permit.	35
(03) Permit conditions.	35
(04) Duration of Wastewater Discharge Permit.	36
(05) Modification, Amendment or Other Change.	36
(06) Non-assignability of Wastewater Discharge Permit.	36
(07) Monitoring Facilities.	36
(08) Inspection and Sampling.	37
(09) Pretreatment.	37
(10) Protection Against Accidental Discharges.	38

(11) Public Information.	38
(12) Special Agreements.	38
(13) Notice to Affected Public Agencies.	38
SECTION 708. Private Wastewater System Permit.	39
SECTION 709. Extension of Sewer Permit.	39
SECTION 710. Payment of Permit Fees.	39
ARTICLE VIII	40
WASTEWATER VOLUME DETERMINATION	40
SECTION 800. General.	40
SECTION 801. Exceptions - Metering.	40
SECTION 802. Exceptions - Estimated Volume.	40
SECTION 803. Exceptions - Permit Required.	40
ARTICLE IX	42
FEES, RATES, AND CHARGES	42
SECTION 900. Sewer Service Charge.	42
(01) Purpose of Sewer Service Charge.	42
(02) Basis of Charge.	42
(03) Residential Customers Sewer Service Charge.	42
(04) Non-Residential Customer Sewer Service Charge.	43
(05) Non-Residential - Added Provisions.	43
(06) Adjustments and Reimbursements.	44
(07) Vacancy.	44
(08) Effective Date of Charges.	44
(09) Person Responsible.	45
(10) Collection of Sewer Service Charges on Tax Roll.	45
(11) Omission From Collection on Tax Roll - Direct Billing.	46
SECTION 901. Sewer Connection Charges.	46
(01) Purpose of Sewer Connection Charge.	46
(02) Basis of Charge.	46
(03) Charges by Type of Connection.	47
(04) Persons Responsible.	48
(05) Increased Use of Sewers.	48
(06) Repurchase of Capacity.	49
(07) Administration of Connection Charges.	49
SECTION 902. Permit and Inspection Fees.	49

(01) Class 1,2, 3, 4, 5 and 6 Permits.	49
(02) Non-Routine Wastewater Discharge Permits.	49
(03) Excess Expenses.	50
SECTION 903. Sewer Relocation Charge.	50
(01) Imposition of Charge.	50
(02) Effect of General Benefit.	51
(03) Parcels Subject to Relocation Charge.	51
(04) Determination of Net Cost.	51
(05) Computation of Relocation Charge Payable by Each Premise.	51
(06) Adoption of Resolution.	51
(07) Use of Relocation Charge Revenue.	52
SECTION 904. Annexation Fees.	52
(01) State of California Fees.	52
(02) Additional Fees.	52
SECTION 905. Solid Waste Collection and Disposal Charge.	52
SECTION 906. Environmental Impact Report and Negative Declaration -Preparation of Review Fee.	52
ARTICLE X	54
ENFORCEMENT	54
SECTION 1000. Violation, Notification of Violation, Unauthorized Discharges	54
(a) Violators Subject to Enforcement Provisions	54
(b) Powers and Authority of Inspectors.	54
(c) Notification of Unauthorized Discharge.	54
(d) Notices to Employees Regarding Unauthorized Discharges.	54
(e) Notice of Violation.	55
(f) Extension of Time to Comply.	55
SECTION 1001. Administrative Order.	55
SECTION 1002. Appeals From Notice Of Violation Or Administrative Order	55
SECTION 1003. Civil Penalties.	56
SECTION 1004. Administrative Penalties.	56
(a) Violators Subject To Administrative Penalties.	56
(b) Issuance of Administrative Complaint.	56
(c) Notice of Violation.	56
(d) Hearing.	56
(e) Determination of Penalty; Schedule of Penalties.	57
(f) The County of San Mateo, the District's Designee for Edible Food Recovery	57
SECTION 1005. Collection of Fines and Penalties.	57
(a) Remedies Cumulative.	57

(b) Placed on Tax Bill.	57
(c) Lien.	57
(d) Petition to Court.	58
SECTION 1006. Criminal Penalties.	58
(a) Violations of Ordinances, Rules or Regulations.	58
(b) False Statements.	58
(c) Authority to Request Enforcement.	58
SECTION 1007. Termination of Service.	58
SECTION 1008. Revocation of Permit.	59
SECTION 1009. Public Nuisance.	60
SECTION 1010. Correction of Violations.	60
SECTION 1011. Injunction.	60
SECTION 1012. District Abatement and Enforcement Expenses, Losses or Damages.	60
SECTION 1013. Hearing.	62
SECTION 1014. Remedies Cumulative.	62
ARTICLE XI	63
VARIANCES AND APPEALS	63
SECTION 1100. Variances.	63
SECTION 1101. Appeals.	63
ARTICLE XII	64
VALIDITY	64
SECTION 1200. Severability.	64
SECTION 1201. Declaration.	64
ARTICLE XIII	65
CODE OF GENERAL REGULATIONS IN FORCE	65
SECTION 1300. Full Force and Effect.	65
SECTION 1301. Passed and Adopted.	65

ARTICLE I

GENERAL PROVISIONS

SECTION 100. Purpose.

The purpose of this Code of General Regulations hereinafter referred to as the "Code" is to establish standards and conditions, and to provide for fees, relating to the use of sanitary wastewater facilities of the West Bay Sanitary District, San Mateo County, California. It is further the purpose of this Code to establish uniform requirements for discharges into the wastewater collection and treatment system used jointly with other public entities. It is further the purpose of this Code to enable the District to comply with and meet applicable laws, regulations, standards and conditions established by Federal and State agencies, or by agencies thereof in implementation of such laws. The District Board of the West Bay Sanitary District hereby finds and declares that the health, safety and welfare of the people of the West Bay Sanitary District require the enactment of the provisions of this Code of General Regulations.

SECTION 101. Mailing Address and Offices of the District.

The mailing address and offices of the West Bay Sanitary District is as follows:

West Bay Sanitary District
500 Laurel Street
Menlo Park, CA 94025
(650) 321-0384
info@westbaysanitary.org

SECTION 102. Superseding Previous Regulations,

This Code shall supersede all previous regulations and policies of the District governing items covered in this Code.

SECTION 103. Distribution of Revenue.

All fees and charges payable under the provisions of this Code shall be paid to the West Bay Sanitary District, County of San Mateo, State of California, and any revenue derived pursuant to this Code shall be allocated as follows:

(01) The General Fund

The General Fund shall be credited with all revenue derived from sewer service charges, sewer permit and inspection fees, franchises, interest, and other miscellaneous revenue. Sewer user charge revenues designated for the replacement of District facilities shall be subsequently transferred and credited to the District's Capital Assets Fund.

(02) The Capital Assets Fund

The Capital Assets Fund shall be credited with sewer user charge revenues designated for replacement of District facilities and all revenue derived from connection fees and annexation fees assessed new applicants for wastewater service. A separate account shall be maintained within the Capital Assets Fund for that portion of connection fee revenue assessed for future Authority expansion costs and expansion costs paid to the Authority.

(03) The Debt Service Fund

The Debt Service Fund shall be credited with all revenues derived from the property tax roll or otherwise as payment of bonded indebtedness.

(04) The Clean Water Grant Fund

The Clean Water Grant Fund shall be credited with all revenues derived from Clean Water Grants from the Federal and State governments.

The District Board may transfer monies from any fund to any other fund in accordance with the provisions of law.

Revenues derived under the provisions of this Code shall be used for the acquisition, construction, reconstruction, maintenance and operation of sanitary or wastewater facilities, to repay principal and interest on bonds issued for the construction or reconstruction of such sanitary or wastewater facilities, to repay Federal or State loans or advances made to the District for construction or reconstruction of wastewater facilities, or any other lawful purpose the District Board deems necessary in order to conduct the business of the District. [Amended by General Regulation No. 66].

SECTION 104. Recording of Fees and Charges.

The General Manager shall keep a permanent and accurate account of all fees and charges received under this Code, give the names and addresses of the persons on whose account the fees and charges were paid, the date and amount thereof, and the purpose for which the charges were paid.

SECTION 105. Definitions.

Words, phrases, or terms not specifically defined herein, and having a technical or specialized meaning shall be defined as set forth in the latest addition of "Standard Methods for the Examination of Water and Wastewater", published by the American Public Health Association, The American Water Works Association, and the Water Pollution Control Federation.

Reference to waste constituents and characteristics shall have a meaning ascribed thereto in the aforesaid "Standard Methods for the Examination of Water and Wastewater", and measurements thereof shall be set forth in said publication, or established by Federal or State regulatory agencies.

Unless the context specifically indicates otherwise, the meanings of terms used in this Code are applicable for this Code only and do not necessarily correspond to definitions that may be used by City or County zoning, planning or assessment designation.

Unless the context specifically indicates otherwise, the meaning of terms used in this Code shall be as follows:

(01) Authority.

Silicon Valley Clean Water. The joint powers authority in which the District is a constituent member along with the Cities of Belmont, San Carlos and Redwood City, pursuant to a joint powers agreement signed in November, 1975.

(02) Beneficial Uses.

Uses of the waters of the District or State which may, or do require protection against quality degradation thereof, including, but not necessarily limited to, waters used for domestic, municipal, agricultural, industrial, power generation, recreation, aesthetic enjoyment, or navigation purposes, or for the preservation and enhancement of fish,

wildlife or other aquatic resources or reserves, and such other uses, both tangible or intangible, as are or may be specified by federal or state law as beneficial uses. [Added by General Regulation No. 59.]

(03) BOD (Biochemical Oxygen Demand).

The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in 5 days at 20 degrees Centigrade expressed in parts per million by weight.

(04) Building Sewer.

That portion of any sewer beginning at the plumbing or drainage outlet of any building or industrial facility and running to the property line cleanout. If no conforming property line cleanout is installed, the building sewer designation applies to the entire sewer from the foundation to the main sewer connection.

(05) Charge.

A rental or any other assessment established pursuant to this Code for services and facilities furnished by the District to any premises in connection with the operation of the wastewater facilities.

(06) Code.

The Code of General Regulations of the District, with such amendments as may be adopted from time to time.

(07) COD (Chemical Oxygen Demand).

The measure of chemically decomposable material in domestic or industrial wastewater as represented by the oxygen utilized as determined by the appropriate procedure described in "Standard Methods".

(08) Compatible Pollutant.

Biochemical oxygen demand, suspended solids, pH and fecal coliform bacteria, additional pollutants identified in the District's National Pollutant Discharge Elimination System (NPDES) permit, and such other pollutants as may be designated by the General Manager upon a finding by him that such pollutants are substantially treated and removed by the wastewater facilities.

(09) Commercial.

Any premises used for commercial or business purposes and discharging a quality and/or quantity of wastewater essentially similar to that of a residential customer.

(10) Contamination.

An impairment of the quality of the waters of the District or State by waste to a degree which creates a hazard to the public health. Contamination shall include any equivalent effect resulting from the disposal of wastewater whether or not waters of the District or State are affected thereby.

(11) Customer.

Owner or owners of any real property for which the District is providing sewer service. Any person who discharges, causes or permits the discharge of wastewater into the wastewater facilities.

(12) Customer Classification.

A classification of customers based upon Classifications set forth in the Standard Industrial Classification (SIC) Manual, 1972 edition, prepared and published by the Executive Office of Management and Budget of the United States.

- (13) District.
The West Bay Sanitary District, located in the County of San Mateo, State of California.
- (14) General Manager.
The General Manager of the West Bay Sanitary District or authorized deputy, agent or representative.
- (15) Emergency.
A condition which creates imminent danger to the public health, safety or welfare.
- (16) Governmental or Public Premises.
Any premises owned, controlled or used by: (1) the United States Government or any department or agency thereof, (2) the State of California or any department or agency thereof, (3) any city, county, town, city and county, or any of their departments or agencies, (4) any school district and (5) any other governmental or public entity.
- (17) Holding Tank Waste.
Any waste from wastewater or waste disposal holding tanks such as are associated with vessels, chemical toilets, campers, trailers, septic tanks, and vacuum pump tank trucks.
- (18) Incompatible Pollutant.
Any pollutant which is not a compatible pollutant.
- (19) Industrial.
Any premises used for manufacturing, processing or other industrial purpose which discharges waste, sanitary waste and wastewater by reason of the manufacturing, processing or other industrial purpose involved, or discharges chemicals or putrescent materials.
- (20) Industrial Wastes.
The liquid wastes from industrial processes and distinct from sanitary or domestic wastewater.
- (21) Institutional.
Any premises used for schools, churches, hospitals, convalescent homes, or other types of premises used to provide health, welfare, educational and similar services.
- (22) Interference.
An inhibition or disruption of the wastewater facilities, their treatment processes or operations, or their sludge processes, use or disposal which causes or significantly contributes to either a violation of the Authority's NPDES permit or to the prevention of sewage sludge use or disposal by the Authority in accordance with applicable state and federal statutory provisions and regulations or permits issued thereunder. [Added by General Regulation No. 59]
- (23) Lateral Sewer.
Shall mean the portion of sewer lying within a public street, public utilities easement or District easement connecting a conforming property line cleanout to a main sewer.

- (24) Main Sewer.
Shall mean a public sewer, maintained by a public agency and designed to accommodate more than one lateral or side sewer.
- (25) Major Contributing Industry.
Any wastewater contributor identified in the Standard Industrial Classification (SIC) Manual, prepared and published by the Executive Office of Management and Budget of the United States, classified within divisions A, B, C, D, E, and I therein, the wastewater of which has any one or more of the following characteristics: (1) a discharge flow of 50,000 gallons or more per average work day (if seasonal, the average shall be based upon the seasonal discharge) ; (2) a flow or pollutant loading greater than five percent of the design capacity of the wastewater facilities; (3) toxic pollutants in amounts defined in standards issued pursuant to Section 307 (a) of the Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500; 33 U.S.C., Section 1151, et seq.); or (4) a significant impact (determined by the Manager), either individually or in combination with other contributing industries, upon the wastewater facilities, or upon the quality of effluent from the wastewater facilities.
- (26) Mass Emission Rate.
The weight of material discharged to the wastewater facilities during a specified time interval. Unless otherwise specified, the mass emission rate shall mean pounds per day of a particular waste constituent or combination of constituents.
- (27) Multiple-Family Dwelling.
Any premises designed, improved or used as a residence for two or more families living independently of each other in two or more structurally joined dwelling units with separate entrances; this term shall include condominiums, apartment houses, triplexes, quadraplexes, and duplexes, but it shall not include hotels, motels, rooming houses, or boarding houses, dormitories, or similar structures.
- (28) Natural Outlet.
Any outlet into a watercourse, pond, ditch, lake or other body of surface or ground water.
- (29) Non-Residential Customer.
Any commercial, industrial, institutional, governmental, or miscellaneous customer not classified as a residential customer.
- (30) Parcel.
A parcel of real property as described in the records of the San Mateo County Assessor by an assessor's parcel number. It includes both improved and unimproved real property.
- (31) Pass Through.
The discharge of pollutants through the wastewater facilities into navigable waters in quantities or concentrations which cause or significantly contribute to violation of the Authority's NPDES permit. [Added by General Regulation No. 59.]
- (32) Person.
Any individual, property owner, firm, company, partnership, association, private corporation, public corporation, or governmental entity, authority, or agency, and the officers, agents or employees of such organizations.
- (33) pH.
A measure of acidity or alkalinity.

- (34) Pollution.
An alteration of the quality of the waters of the District or State by waste to a degree which unreasonably affects such waters for any beneficial use or affects facilities serving such beneficial use. The term pollution may also include contamination.
- (35) Premises.
A parcel of land, or portion thereof, including any improvements thereon, which is directly or indirectly connected to the wastewater facilities for purposes of receiving, using, and paying or service, or other purposes relating to the wastewater facilities, by an individual customer. Each dwelling unit of a duplex, apartment, or any other multi-family residence shall be deemed a separate premise. Subject to the provisions of this subsection, the Manager shall determine what constitutes a premise.
- (36) Properly Shredded Garbage.
The wastes from the preparation, cooking, and dispensing of food that have been shredded to such degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than ½ inch in any dimension.
- (37) Public Sewer.
A sewer for the benefit of customers within the District which is controlled by the District.
- (38) Reclaimed Water.
Water which, as a result of treatment of waste, is suitable for direct beneficial use, or a restricted beneficial use, which would not otherwise occur but for such treatment.
- (39) Requirement of Law or Other Requirements of Law.
A pertinent provision of the Federal Water Pollution Control Act as amended by the Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500, 33 U.S.C., Section 1151 et seq.), or of any statute, ordinance, code, rule, regulation, order, directive, or of the District's or Authority's National Pollutant Discharge Elimination System (NPDES) permit, or of any amendments thereto, or other Federal, State, Regional or Local law.
- (40) Residential Customer.
Any single or multiple family dwelling customer, including premises defined as condominiums, apartment houses, duplexes, motels, rooming houses, or boarding houses, dormitories, or similar structures.
- (41) Sanitary Sewer.
A pipe or conduit which carries wastewater and to which storm, surface, and ground waters are not intentionally admitted.
- (42) Shall.
The word "shall" is mandatory; "may" is permissive.
- (43) Side Sewer.
Shall mean the sewer line beginning at the foundation wall of any building and terminating at the main sewer and includes the building sewer and lateral sewer together.

(44) Single-Family Dwelling or “Residential Unit”.

Premises designed, improved or used as a residence for one family only and for no other purpose.

Notwithstanding the foregoing, the following kinds of residential dwelling units shall be deemed to be a part of, and not in addition to, a single-family dwelling for all purposes of this Code, including provisions having to do with the calculation and payment of connection fees and sewer service charges:

1. Any structure located within the City of Menlo Park, which meets the requirements set forth in Ordinance No. 688 of the City of Menlo Park adopted on May 10, 1983 by the Menlo Park City Council.
2. Any structure located within the Town of Woodside which meets the requirements set forth in Ordinance No. 1984-321 of the Town of Woodside adopted on December 12, 1984 by the Woodside Town Council.
3. Any structure in the District located within the unincorporated areas of San Mateo County which meets the requirements set forth in Ordinance No. 2876 of the County of San Mateo, which Ordinance was adopted by the San Mateo County Board of Supervisors and became effective February 23, 1984.
4. Any structure located within the Town of Atherton which meets the requirements set forth in Ordinance No. 402 of the Town of Atherton adopted on March 21, 1984 by the Atherton Town Council.
5. Any structure located within the Town of Portola Valley which meets the requirements set forth in Ordinance No. 1991 – 263 of the Town of Portola Valley adopted on July 10, 1991 by the Portola Valley Town Council.
6. Any structure located within the City of Redwood City which meets the requirements set forth in Ordinance No. 1130.226 of the City of Redwood City adopted on July 27, 1983 by the Redwood City Council.
7. Any structure located in the District, but not within a Town or City referred to above, which meets the following requirements:
 - (a) The Town or City has not adopted an “ordinance governing second units” as such ordinances are referred to in California Government Code section 65852.2(b) and
 - (b) The structure meets all the requirements of Government Code section 65852.2(b). [Added by General Regulation No. 69.]

Silicon Valley Clean Water (SVCW)). See “Authority”.

Storm Sewer or Storm Drain.

A sewer which carries storm and surface waters and drainage, but excludes wastewater and polluted industrial wastes.

(45) Suspended Solids (SS).

The total non-filterable residue as defined in “Standard Methods for Chemical Analysis of Water and Wastewater.”

(46) Type of Use.

The purpose of the premises, such as, commercial, industrial, institutional, single-family dwelling, multiple-family dwelling, and miscellaneous use.

- (47) Unpolluted Water.
Water to which no constituent has been added, either intentionally or accidentally, which would render such water unacceptable to the District or Authority for disposal to storm or natural drainages, or directly to surface waters.
- (48) Waste.
Wastewater and any and all waste substances, whether liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing or processing operation of whatever nature, including such waste placed within containers of whatever nature prior to, and for purposes of, disposal.
- (49) Wastewater. Waste and water.
Whether treated or untreated, discharged into, or permitted to enter into the wastewater facilities. Wastewater shall mean a combination of the water-carried wastes from residences, business buildings, institutions, and industrial establishments, together with such ground, surface, and storm waters as may be present.
- (50) Wastewater Constituents and Characteristics.
- (51) The individual chemical, physical, bacteriological and radiological parameters, including volume and flow rate and such other parameters that serve to define, classify or measure the contents, quality, quantity, or strength of wastewater.
- (52) Wastewater Facilities.
All facilities for collecting, pumping, treating, and disposing of wastewater.
- (53) Water Pollution Control Plant.
Any arrangement of devices and structures used for treating wastewater; a wastewater treatment plant.
- (54) Waters of the District or State.
Any water, whether surface, underground, and whether saline or non-saline, within the boundaries of the District, or within the boundaries of the District and flowing into, touching, or otherwise combined with later outside the limits of the District but within the boundaries of the State. [Added by General Regulation No. 59.]

ARTICLE II

MEETINGS OF THE DISTRICT BOARD

SECTION 200. Public Meetings.

All meetings of the District Board shall be open to the public except for closed sessions called pursuant to the Ralph M. Brown Act (California Government Code 5495.0 et.seq.).

SECTION 201. Regular Meetings.

The regular meetings of the District Board shall be held on the second and fourth Wednesday of each month at 7:00 p.m. at the District Administration Office, unless the regular meeting day is a District holiday, in which case the meeting shall be held at a time and date to be determined by the District Board and noticed in accordance with these regulations and statute. *Notwithstanding the foregoing, closed sessions may be commenced prior to the regularly scheduled start time, with notice of the start time specified on the agenda.*

The District Board may cancel a regular meeting at any time. [Amended by General Regulation No. 2016-01]

SECTION 202. Special Meetings.

The District Board may schedule a special meeting at any time it deems necessary.

SECTION 203. Public Hearings.

The District Board may schedule a public hearing on any subject pertinent to business of the West Bay Sanitary District at any time it deems necessary. Public hearings shall be held in conjunction with regular or special meetings of the District Board.

SECTION 204. Quorum.

Three (3) members of the District Board shall constitute a quorum.

SECTION 205. Minutes of Meetings.

Minutes shall be taken of all public meetings of the District Board and Public Hearings. The minutes shall be approved by the District Board and, upon approval, shall be signed by the Secretary of the District. All minutes of public meetings of the District Board shall be retained at the Administration Office and shall be available for reading by the public, upon request.

SECTION 206. Contracts.

All contracts, deeds, warrants, releases, receipts, and documents shall be signed in the name of the District by its President, and countersigned by its Secretary, except that the Board may, by resolution, authorize the General Manager or other District employees specified by the Board to sign releases, receipts, and similar documents in the name of the District.

SECTION 207. Amendments to the Code of General Regulations.

Amendments to this Code shall be entered in the minutes of the District Board and shall be published once in a newspaper published in the District and posted in three (3) public places within the District for a period of one week. An Amendment to this Code takes effect upon expiration of the week of publication and posting.

SECTION 208. Orders Not Establishing Amendments to the Code of General Regulations (Resolutions).

Orders of the District Board not establishing Amendments to the Code shall be known as "Resolutions" and shall be entered in the minutes and shall take effect upon adoption. They need not be published or posted.

SECTION 209. Board Members Compensation.

Effective February 9, 2023, members of the District Board shall be compensated in the amount of \$260.00 per day for each day's attendance at meetings of the District Board, attendance at California Association of Sanitation Agencies conferences and for each day's service rendered as a Member of the District Board by request of the District Board. Compensation shall not exceed a total of \$1,560.00 (six days service) in any calendar month.

Compensation to Board Member attending conferences of the California Association of Sanitation Agencies shall be limited to two day's compensation regardless of the number of days attended.

ARTICLE III

COLLECTION, REMOVAL AND DISPOSAL OF SOLID WASTE

SECTION 300. District Solid Waste Collection, Removal and Disposal System.

By resolution duly adopted, the District Board may approve franchise agreements with private garbage companies or make such other provisions as it deems appropriate for the collection, removal and disposal of solid waste, garbage, trash and rubbish from the District. All residents and property owners of the District are required to use the District's solid waste collection, removal and disposal system.

SECTION 301. Establishment of Rates

By resolution duly adopted, the District Board may establish rates to be paid by residents and property owners or make such other provisions as it deems appropriate for the collection, removal and disposal of solid waste.

SECTION 302. Unlawful Acts.

It shall be unlawful for any person to place, deposit, or permit to be deposited in an unsanitary manner upon public or private property within the District, or in any area under the jurisdiction of the District, any human or animal excrement, garbage, or other objectionable waste.

SECTION 303. Mandatory Organic Waste Disposal Reduction.

The District's Mandatory Organic Waste Disposal Reduction Ordinance, as set forth in Appendix "A" is hereby adopted as part of Article III of the Code of General Regulations and incorporated by reference into this Section 303 and made a part hereof.

ARTICLE IV

SPECIFICATIONS CONTROLLING MANNER OF CONSTRUCTION AND CLEARING SERVICES

SECTION 400. Standard Specifications.

"Standard Specifications for Sanitary Sewer Construction - 1979", Part D - Technical Specifications, revised March, 1980, promulgated by the District, as they may be hereafter amended from time to time, are hereby adopted as the standard specifications of the District governing the manner of construction, repair, maintenance and operation of all sanitary wastewater facilities within the District. These standard specifications are incorporated herein by reference. Copies of the standard specifications shall be available for examination in the District's Administration Office at all times.

SECTION 401. Building Sewers and Connections.

(01) Sewer Permit Required.

No unauthorized person shall uncover, make any connections with or openings into, use, alter or disturb any public sewer or appurtenance thereof without first obtaining a written sewer permit from the General Manager.

(02) Costs and Expenses of Installation.

All costs and expenses incident to the installation and connection of the building sewer shall be borne by the owner. The owner shall indemnify the District from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.

(03) Separate Building Sewer Required.

A separate and independent building sewer shall be provided for every building; except:

- (A) Where one building stands at the rear of another on an interior lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, court, yard, or driveway, the building sewer from the front building may be extended to the rear building and the whole considered as one building sewer.
- (B) Where it is determined by the General Manager that it is necessary to do so in order to properly service a particular building, more than one building sewer may be required.
- (C) Where there is a second auxiliary residential structure or living unit located on the same parcel, under the same ownership, as a primary residence, the General Manager may determine that the primary building sewer may be extended to serve the second structure or living unit. [Added By General Regulation No. 68.]

(04) Cleanout Required.

Every building sewer shall have an approved cleanout located within 5 feet of the property line of the premises served by such building sewer. The cleanout shall be equipped with a cleanout box which shall be accessible for maintenance purposes and plainly visible to the eye. Unless otherwise approved by the General Manager, the cleanout shall be located within the property to be served.

(05) Cleanout Boxes.

Concrete sidewalks shall have an appropriately sized cleanout box made of concrete fitted with a loose cover. The concrete cover shall have two holes in the top for removal. Cleanout boxes installed in alleys, streets, or driveways shall be of cast iron. The cast iron cleanout box cover shall be installed with two brass screws. Cleanout boxes installed in unpaved surfaces shall be of concrete or of equal quality as approved by the General Manager.

(06) Cleanout Assembly.

The cleanout assembly, consisting of a "Y" and branch fittings, shall be made of the same size as the building sewer it serves. The riser shall connect the "Y" and branch fittings up to the cleanout box. The top of the riser shall be fitted with a cleanout cap and shall meet current Standard Specifications and Details.

(07) Side Sewer Ownership.

All side sewers, from the connection at the District Public Sewer to the property served, are the property of, solely owned by, and the sole responsibility of, the Property Owner. [Gen Reg. 111]

(08) Side Sewer Clearing

Notwithstanding subsection (07), the District may provide side sewer clearance, between the public sewer and the property line cleanout of properties which have a Conforming Property Line Cleanout Assembly and provided further that the side sewer and property line cleanout conform to the requirements of this Code of General Regulations. Notwithstanding the provision of these clearing services, the District will have no responsibility for costs incurred by a property owner that privately contracts for sewer clearing services. [Gen. Reg. 111]

(09) Refusal of Clearing Services

Side sewer clearing services offered pursuant to subsection (08) may be refused for any reason including, but not limited to, the following:

(A) If the General Manager or a designee determines that the provision of clearing services could damage private or public property, including property of the District. In such circumstances, the District may determine, in its sole discretion, that clearing services shall not be provided until such time as the side sewer has been inspected, tested and approved for such service. Any costs incurred by a property owner in the inspection, testing or repair of side sewer shall be the sole responsibility of the property owner and shall be conducted in accordance with this Code of General Regulations.

(B) If the General Manager or a designee determines, in its sole discretion, that the condition of a side sewer, or discharges to the lateral sewer in violation of this Code of General Regulations are resulting in excessive requirements for clearing. In such circumstances, the General Manager may employ one or more of the following options:

- I. Deny the request for clearing services;
- II. Charge for clearing services;
- III. Require the inspection, testing and repair or replacement of the side sewer. Such inspection, testing, repair, or replacement shall be at the sole cost and expense of the property owner. [Gen. Reg. 111]

(10) Side Sewer Clearing Request Notification

All requests for clearing service provided pursuant to this article are the sole responsibility of the property owner. All requests for clearing services must be made by telephone to the District Office. The District shall not be responsible for failure to respond to a Request for Service that is made in any other form, i.e. Facsimile or any other form of Electronic Transmission. [Gen. Reg. 111]

(11) Side Sewer Clearing Request Notification Data Analysis

The District may, at its sole option, record and analyze requests for clearing service. Analysis and projection of Clearing Service Data shall not constitute an agreement to provide future clearing service by the District. [Gen. Reg. 111]

(12) Side Sewer Damage Responsibility

The District shall not be responsible for any damage caused by a blocked or damaged side sewer unless such blockage or damage is caused by the activities or facilities of the District. All other damage caused by a blocked or damaged side sewer, whether caused by the property owner, another entity, or another person shall not be the responsibility of the District, including but not limited to, root intrusion, construction activities, damage due to earthquakes or other "Acts of God". In such circumstances, any costs of construction or repair, permits, encroachment fees or any other fees required by any other entity empowered with oversight of such matters, and any damages of whatever nature caused by the blockage or failure of the side sewer, shall be the exclusive responsibility of the property owner. [Gen. Reg. 111]

(13) Side Sewer Overflow Responsibility

Overflows into or onto private property, in part or in whole resulting from faulty construction, maintenance or repair of a private sewer in accordance with the Uniform Plumbing Code and this Code of General Regulations, including, but not limited to, failure to adequately provide for clearing of the private sewer line, failure to ensure adequate capping of cleanouts or other appurtenances of the private sewer line, or any other condition for which care, diligence and maintenance is under the control of the property owner, shall be the sole responsibility of the property owner. [Gen. Reg. 111]

(14) Old Building Sewers.

Old building sewers may be used in connection with new building sewers only when they are found on examination and test by the General Manager to meet all requirements of this Article.

(15) Residential Sewers.

The lateral sewer for residential property shall be of PVC C900, or approved equal; for non-residential property, the lateral sewer shall be PVC C900 or approved equal. Pipe specifications shall be in conformance with the technical specifications of the Standard Specifications approved by the District Board. Any variations from the conditions must be approved by the General Manager.

(16) Elevation; Change of Direction.

Whenever possible the building sewer shall be brought to the building at an elevation below the basement floor. Changes in direction require a cleanout or properly curved pipe and fittings as approved by the General Manager.

(17) Artificial Lift.

In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary wastewater carried by such drain shall be lifted by approved artificial means and discharged to the building sewer. Responsibility for construction, operation, and maintenance of wastewater facilities serving private property shall be the sole obligation of the property owner. The District shall attempt to clear only that portion of the building sewer which is within the public right-of-way in accordance with this Article. [Gen. Reg. 111]

(18) Excavation.

All excavations for building sewer installation shall be adequately guarded with barriers and lights so as to protect the public from hazard. Streets, sidewalks, parkways and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the District and to any governmental agency having jurisdiction thereof.

(19) Control Manholes.

When required by the General Manager, the owner of any property served by a building sewer carrying non-residential wastes shall install a suitable control manhole in the building sewer to facilitate observation, sampling and measurement of the wastes. Such manhole, when required, shall be constructed in accordance with plans approved by the General Manager. The manhole shall be installed by and at the owner's expense, and shall be maintained by the owner, at the owner's sole cost and expense, so as to be safe and accessible at all times. [Gen. Reg. 111]

(20) Alternative Sewer Lateral Materials

The District will accept the following methods for replacing or rehabilitating side sewers:

1, Preferred Replacement

The West Bay Sanitary District will provide cleaning service to laterals replaced with the following materials:

- | | | |
|----|-----------------|---|
| a) | Less than 36" - | Ductile Iron Pipe Class 50 or 51
PVC C900 Class 200 |
| b) | 36" or deeper - | PVC C900 Class 150 or 200
Vitrified Clay
Ductile Iron Pipe Class 50 or 51 |

2. Non-Preferred Rehabilitation of Existing Side Sewer

The West Bay Sanitary District will accept, but NOT provide cleaning service to laterals rehabilitated with the following materials. Property Owners are specifically notified that the following methods are not as effective nor as long lived as the preferred methods.

- | | |
|----|--|
| a) | Cured-in-place materials (requires Pre and Post CCTV of the service lateral and Post construction CCTV inspection of the main connection.) |
| b) | HDPE SDR 17 installed by pipe bursting |

If the Non-Preferred Rehabilitation method is chosen by the property owner(s), the owner(s) must sign the District's permit addendum which clearly states that although the District will allow the use of the pipe bursting and cured in place replacement methods, ARE NOT RECOMMENDED and that: 1) the side sewer will not receive cleaning service from the District, and 2) that this information will be disclosed by the property owner(s) should the property be transferred. This permit addendum shall be recorded at the County by the District prior to acceptance of the lateral.

If the existing side sewer is less than 36", pipe-bursting will not be allowed.

SECTION 402. Examination of Plans

The General Manager or his representative shall examine the plans submitted for all Class sewer permits to verify that they are in accordance with good engineering practices and in compliance with the standard specifications and policies of the District. Plans which have been so examined and approved will be submitted to the District Board for approval, alteration, or rejection.

SECTION 403. Inspection of Construction

After approval of the plans by the District, actual construction may be started and all work shall be performed under the inspection of, and in accordance with the standard specifications of the District.

All work shall be inspected by the District when construction is completed but before use is made of the facilities constructed. Inspection shall be made at such other times as the General Manager may require.

The applicant shall give 24-hour advance notice to the General Manager that construction performed under a Class 1 or a Class 2 sewer permit is ready for inspection.

The applicant shall give 48-hour advance notice with respect to such construction performed under a Class 3, 5 or 6 sewer permit.

SECTION 404. Dedication of Sewers - Easements

The District encourages the placement of main sewers in the public right-of-way. When no viable alternative exists the General Manager may authorize the placement of main sewers in Public Utility Easements or in dedicated easements. No sewer shall become a public sewer unless it is dedicated to public use and is accepted by the District on such terms as the District may require. As a condition of accepting a sewer as a public sewer, the applicant shall provide such original grant deeds of easement to the District, together with rights of ingress and egress, as maybe necessary for the District to enter upon the property for the purposes of operating and maintaining the public sewers. No such easement shall be less than fifteen (15) feet in width, and will include vehicular access.

Easements shall be recorded in the Official Records of the County of San Mateo as an encumbrance on the property.

Owners of property over which easements have been granted shall be responsible to maintain them in accordance with the requirements of Section 603 (13) of Article VI of this code.

SECTION 405. Disconnection of Sewers

(01) Permanent Disconnection.

When sanitary sewer service has been discontinued, permanent disconnection of properties from the District's facilities shall be accomplished by the actual disconnection of the existing lateral at its point of connection to the District's main sewer. The method of disconnection is by saw cutting the lateral at the main sewer and plugging the remaining stub(s) with a calder type coupling (or equal) and a clay disc ("biscuit") or other material or method approved by the General Manager. The owner of the property to be disconnected shall obtain a Class Four (4) Sewer Permit from the District and all other necessary permits for the abandonment in the street and/or public right-of-way, and shall restore the site to its original condition to the satisfaction of the District and/or other public agency with appropriate jurisdiction.

(02) Temporary Disconnection.

When sanitary sewer service has been discontinued, temporary disconnection of properties from the District's facilities shall be accomplished by the capping of the existing lateral at the rear of the cleanout or within five feet of the property line closest to the public right-of-way if no Conforming Property Line Cleanout exists.

Prior to reuse, the property owner is required to install a Conforming Property Line Cleanout Assembly in accordance with this Code of General Regulations.

Failure to obtain, and comply with, a Class Four (4) Disconnection Permit shall result in discontinued Clearing Service from the Conforming Property Line Cleanout to the Main Line Sewer until the property owner has obtained a Class One (1) Sewer Permit and the sewer lateral has been tested, inspected and found to be acceptable for reuse. The property owner shall be solely responsible for all costs of repair and/or construction of the Conforming Property Line Cleanout Assembly. [Gen. Reg. 111]

SECTION 406. Backflow Prevention Devices.

Property owners shall install a backflow prevention device on any side sewer for gravity sewer laterals connecting houses having a finished floor elevation less than 12" above the top elevation of the nearest upstream structure (manhole). The device shall be located on the side sewer between the Building and the Conforming Property Line Cleanout Assembly and shall be installed in conformance with the current Universal Plumbing Code. The property owner shall be solely responsible for all costs of installation and maintenance of such devices and shall meet current Standard Specifications and Details.

ARTICLE V

ANNEXATION OF TERRITORY

SECTION 500. Application for Annexation of Territory.

The District Board shall consider an application for annexation of territory after the following conditions have been met:

- (01) The applicant has complied with all conditions of annexation imposed by the San Mateo County Local Agency Formation Commission (LAFCO).
- (02) The San Mateo County Local Agency Formation Commission has approved the territory for annexation by resolution; and
- (03) The applicant has complied with all conditions of annexation imposed by the District and any other public agency having jurisdiction over such matters.

SECTION 501. Conditions and Payment of Fees.

No territory shall be annexed to the District until the applicant has complied with all terms and conditions of annexation imposed by the District and the applicant has paid to the District the State Board of Equalization Filing Fee.

ARTICLE VI

USE OF PUBLIC SEWERS

SECTION 600. Use of Public Sewers Required.

(01) Toilet Facilities and Connections required.

The owner of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purpose, situated within the District and abutting on any street, alley or right-of-way in which there is now located or may in the future be located a public sewer of the District, is hereby required at his expense to install suitable toilet facilities therein, and to connect such facilities directly with the proper public sewer in accordance with the provisions of this Code, within ninety (90) days after date of official notice to do so, provided that said public sewer is within one hundred (100) feet of the property line.

(02) Private Disposal Unlawful, with Exceptions.

Except as hereinafter provided, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool, or other facility intended or used for the private disposal of wastewater.

SECTION 601. Private Wastewater Disposal.

(01) Sewers not Available.

Where a public sanitary sewer is not available under the provisions of Section 600 (01), the building sewer shall be connected to a private wastewater disposal system complying with the provisions of this Article.

(02) Permit Required.

Before commencement of construction of a private wastewater disposal system, the owner shall first obtain a written permit signed by the General Manager.

(03) Compliance with Regulations.

The type, capacities, location, layout, operation and maintenance of a private wastewater disposal system shall comply with all applicable regulations promulgated by any government agency having jurisdiction with respect to the discharge of wastewater into a private wastewater disposal system.

(04) Discharge to Natural Outlet.

No septic tank, cesspool or other private wastewater treatment or disposal system shall be permitted to discharge effluent to any natural outlet unless applicant has complied with all applicable regulations promulgated by and obtained approval from any government agency having jurisdiction with respect to the discharge of such effluent.

(05) Unlawful to Discharge to Public Sewer.

No septic tank, cesspool or other private wastewater treatment or disposal system shall be permitted to discharge effluent to any public sewer, unless otherwise authorized by a permit issued pursuant to Article VII of this Code.

(06) Owner to Operate and Maintain.

The owner shall operate and maintain the private wastewater disposal facilities in a sanitary manner at all times, at no expense to the District.

SECTION 602. Grease, Oil, and Sand Interceptors.

(01) Applicability.

This Section 602 shall apply to discharges of wastewater containing fats, oils and grease conveyed to the wastewater facilities from any commercial or institutional food service establishment.

(02) Definitions.

(A) Fats, Oils and Grease (FOG).

Any substance such as a vegetable or animal product that is used in, or is a byproduct of, the cooking or food preparation process, and that becomes or may become viscous, or solidifies or may solidify, with a change in temperature or other conditions.

(B) Food Service Establishment (FSE).

A non-residential wastewater discharger that engages in activities of preparing, serving, or otherwise making available food for consumption by the public or on the premises.

(C) Grease Control Device.

Any grease control device, grease trap or other mechanism, device or process which attaches to, or is applied to, wastewater plumbing fixtures and lines, the purpose of which is to trap, collect or treat FOG prior to it being discharged into the wastewater facilities.

(D) Remodel or Remodeling.

Any physical and/or operational change to an FSE that involves any one or a combination of the following: (i) under-slab plumbing in the food processing area; (ii) a 30% or greater increase in the net public seating area; (iii) a 30% or greater increase in the size of the kitchen area; (iv) any change in the size or type of food preparation equipment; and (v) any remodel, addition, alteration or repair valued greater than \$50,000.

(E) Sanitary Sewer Overflow (SSO).

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

(03) Prohibitions and Limitations

(A) Discharge of FOG or any food waste containing FOG into drains directly leading to the wastewater system is prohibited, except in accordance with this Section 602 and applicable building codes and regulations.

(B) Discharge of the following to or through any grease control device is prohibited: (i) wastewater from dishwashers; (ii) wastewater with temperatures in excess of 150 degrees F; and (iii) wastes from toilets, urinals, wash basins, and other fixtures containing fecal materials.

(C) Installation of food grinders in the FSE plumbing system is prohibited. FSEs shall remove or render permanently inoperative all existing food grinders within 180 day of the adoption of this ordinance.

(D) Diluting a discharge to achieve compliance with this Section 602 is prohibited.

(E) Introduction of any additives into the plumbing system of an FSE or grease control device for the purpose of emulsifying or chemically treating FOG for grease remediation or as a supplement to device maintenance is prohibited. Biological treatment of grease control devices may be allowed upon approval of the General Manager or designee.

(04) Grease Control Device Requirements.

(A) All FSEs shall, at the time of construction, remodel, and/or change in operation, install, operate, maintain and service a grease control device. The grease control device shall be installed at a location where it shall be at all times easily accessible for inspection, cleaning, and removal of accumulated grease.

(B) Any FSE required to provide a grease control device shall install, operate, and maintain a District approved type and adequately sized grease control device necessary to maintain compliance with the objectives of this Section 602.

(C) Grease control device design, construction, sizing, and installation shall be subject to prior written approval of the District and shall conform to the most current edition of the California Plumbing Code.

(D) Any existing FSE which has caused or contributed to a grease-related blockage in the wastewater facilities, has one or more sewer laterals connected to pipelines on the District's list of sewer lines that have experienced grease related blockages or sanitary sewer overflows, and/or has contributed significant FOG to the wastewater facilities, shall be deemed to have reasonable potential to adversely impact the wastewater facilities and shall be required to install a grease control device within 180 days following the issuance of written notification from the General Manager.

(05) Maintenance Requirements.

(A) Grease control devices shall be fully pumped out and cleaned once every 3 months or when the combined FOG and solids accumulation in the grease control device equals 25% of the design hydraulic depth of the grease control device, whichever occurs first. FSEs shall comply with any District directive to increase the frequency of grease control device servicing if the frequency of servicing is not adequate to ensure this requirement. If the grease control device at any time contains FOG and solids accumulation exceeding this maximum, the FSE shall be required to have the grease control device pumped and cleaned as soon as possible, but in no case more than 48 hours following issuance of an order to clean by the General Manager, unless otherwise specified.

(B) Wastewater, accumulated FOG, floating materials, sludge/solids, and other materials removed from the grease control devices shall be transported by a licensed waste hauler to an approved recycling or disposal site in accordance with all applicable federal, state, and/or local laws. FSEs shall obtain and maintain a copy of the waste hauler's documentation, which shall include: (i) name of hauling company; (ii) name and signature of the operator performing the pump out; (iii) documentation of a full pump out indicating the total volume of water and FOG removed in gallons; (iv) documentation of the level by percentage of the combined FOG and solids accumulation in the control device; (v) documentation regarding whether repairs to the grease control device are required; and (vi) identification of the facility where the waste hauler has transported the waste.

(06) Kitchen BMP Requirements.

All FSEs shall implement kitchen Best Management Practices (BMP) in accordance with requirements and guidelines established by the National Restaurant Association (<https://conserve.restaurant.org/Downloads/PDFs/FOG/FOG-ToolkitFinal3.aspx>) and General Manager

(07) Recordkeeping Requirements.

All FSEs shall be required to maintain on the FSE premises copies of the following records for no less than 3 years: (i) grease control device cleaning and maintenance activities; (ii) kitchen best management practices implemented; (iii) solids accumulation in the grease control device; (iv) waste hauling documentation; (v) sampling data; and (vi) spills and/or cleaning of the wastewater facilities.

(08) Inspection and Sampling Conditions.

All FSEs shall allow the General Manager access to the FSE premises during normal business hours to inspect the FSE's grease control device, sample wastewater discharges and review records kept in accordance with this Section 602. Failure by the FSE to comply with the requirements of this Section 602 constitutes a violation of this Code and shall be cause for the District to initiate all necessary actions and/or exercise any available legal remedies to remediate such violation.

(09) Variance.

(A) In accordance with the District's Grease Control Device Variance Guidelines, any FSE may submit in writing to the General Manager a request for a variance from the grease control device requirement upon a showing that the installation of a grease control device is not feasible in an existing structure or the FSE's FOG discharge is negligible and has had an insignificant impact on the wastewater facilities.

(B) Where the installation of a grease control device in an existing structure is not feasible, an FSE may be granted a variance upon the payment of an annual grease disposal mitigation fee to cover the District's costs of increased maintenance of the wastewater facilities resulting from the FSE's inability to adequately remove FOG from its wastewater discharge.

(10) Charges and Fees.

The District shall adopt charges and fees by resolution for reimbursement of costs incurred by the District and to ensure consistent compliance with this Section 602. In addition, any cost, expense, liability, fine, penalty or other payment made or incurred by the District to clear or repair any wastewater facility, or to contain, clean, report or otherwise remediate the FSE from violation of this Code shall constitute a debt to the District, due and payable upon demand and collectable in any manner provided by law.

(11) Falsifying Information or Tampering with Process.

It shall be unlawful to make any false statement or record or other document that is required by this Section 602 or otherwise required by the General Manager, and to tamper with or knowingly render inoperable any grease control device required under this Section 602.

(12) Enforcement.

Failure to comply with the provisions of this Section 602 may result in one or more of the following enforcement actions in addition to any other remedy or provision of law, including but not limited to, those provided in Article X of this Code: (i) a notice of violation may be issued with a compliance schedule for correction; (ii) a noncompliance fee may be charged, which fee may be increased each time an FSE is issued a notice of violation; (iii) the General Manager may direct a contractor to pump and clean an FSE's grease control device; (iv) service to the FSE may be suspended or terminated; (v) the FSE may be issued an administrative citation; (vi) a misdemeanor complaint against the FSE may be filed; and/or (vii) FSE noncompliance may be enjoined as a public nuisance through a civil action brought by District or the San Mateo District County Attorney against the FSE.

SECTION 603. Prohibitions.

(01) General Prohibitions.

No person shall, and it shall be unlawful to, discharge wastes including, but not limited to those specified in Subparagraphs L and M below, not the wastewater facilities which cause, threaten to cause, or are capable of causing, either alone or by interaction with other substances;

(A) A fire or explosion;

(B) Obstruction of flow, or injury to, the wastewater facilities, or any portion thereof;

(C) Danger to life or safety of persons;

(D) Conditions inhibiting or preventing the effective maintenance or operation of the wastewater facility;

(E) Strong or offensive odors, air pollution, or any noxious, toxic, or malodorous gas-or substance, or gas-producing substances;

(F) Interference with the wastewater treatment process, or overloading of the wastewater facilities, or excessive collection or treatment costs, or use of capacity in the wastewater facilities to which the person is not entitled;

(G) Interference with any wastewater reclamation process, which does or may operate in conjunction with the wastewater facilities, or overloading, or a breakdown of such reclamation process, or excessive reclamation

costs, or any product of the treatment process which renders such reclamation process impracticable or not feasible under normal operating conditions;

(H) A detrimental environmental impact, or a nuisance wherever located, or a condition unacceptable to any public agency having regulatory jurisdiction over operation of the wastewater facilities;

(I) Discoloration, or any other adverse condition in the quality of the effluent from the wastewater facilities such that receiving water quality requirements established by any statute, rule, regulation, ordinance, or permit condition cannot be met by the District or the Authority;

(J) Conditions at or near the wastewater facilities, or any portion thereof, which cause, or may cause, the District or Authority to be in violation of the requirements of law.

(K) Pollutants introduced into the wastewater facilities which pass through or interfere with the operation or performance of the wastewater facilities. [Added by General Regulation No. 59.]

(L) Single Use Wipes or Hygiene products (for example: cleaning wipes and rags, paper towels, napkins, or other non-toilet paper products.)

(M) Hazardous Waste.

(02) Storm Drainage and Ground Water.

No person shall, and it shall be unlawful to, discharge, cause to be discharged, or permit to be discharged, any storm water, ground water, rainwater, street drainage, subsurface drainage, swimming pool drainage, or yard drainage, either directly or indirectly into the wastewater facilities, unless a permit therefor is issued by the General Manager. The General Manager may issue such permit only upon a finding by him that no reasonable alternative method of disposal of such water is available.

(03) Unpolluted Water.

No person shall, and it shall be unlawful to, discharge, cause to be discharged, or permit to be discharged any unpolluted water, including, but not limited to, cooling water, process water, or blow-down water from cooling towers or evaporative coolers, either directly or indirectly into the wastewater facilities, unless a permit therefor is issued by the General Manager.

(04) Garbage Grinders.

No person shall, and it shall be unlawful to, discharge, caused to be discharged, or permit to be discharged waste from garbage grinders into the wastewater facilities, provided, however, that:

(A) Wastes generated in preparation of food normally consumed on the premises may be so discharged; or

(B) Such discharge is made pursuant to a permit issued by the General Manager.

Garbage grinders from which wastes are permitted under either subparagraph (A) or subparagraph (B) above, shall be of such design and capacity to shred wastes used therein such that all waste particles shall be carried freely under normal flow conditions into and through the wastewater facilities.

(05) Direct Discharge.

No person shall, and it shall be unlawful to, discharge, cause to be discharged, or permit to be discharged any wastes or wastewater, or any object, material, or other substance directly into a manhole or other opening into the wastewater facilities other than wastes or wastewater through an approved building sewer; provided, however, that wastes or wastewater may be discharged into the wastewater facilities by means other than through an approved building sewer pursuant to a permit therefor issued by the General Manager.

(06) Holding Tank Waste.

No person shall, and it shall be unlawful to, discharge, cause to be discharged, or permit to be discharged any holding tank waste into the wastewater facilities; provided, however, that:

(A) Such discharges may be made into facilities designed to receive such wastes and approved by the General Manager; or

(B) Such discharge may be made pursuant to a permit issued therefor by the General Manager. Unless otherwise provided by the General Manager, a separate permit shall be required for each separate holding tank waste discharge.

(07) Radioactive Wastes.

No person shall, and it shall be unlawful to, discharge, cause to be discharged, or permit to be discharged, any radioactive wastes into the wastewater facilities, provided, however, that;

(A) Persons authorized to use radioactive materials by the State Department of Health or other governmental agency empowered to regulate the use of radioactive materials may discharge, cause to be discharged, or permit to be discharged such wastes provided that such wastes are discharged in strict conformance with current California radiation control regulations (California Administrative Code, Title XVII, Ch. 5, Sub. Ch. 4, Group 3, Art. 5), and federal regulations and recommendations for safe disposal of such wastes; and

(B) The person so acting does so in compliance with all applicable rules and regulations of all other regulatory agencies.

(08) Wastewater Strength.

Except as noted below under Article VI, Section 603 (10), no person shall, and it shall be unlawful to, discharge, cause to be discharged, or permit to be discharged any wastewater containing any of the following constituents in excess of the maximum allowable amounts respectively hereinafter established therefor:

-
- (a) 0.27 mg/l arsenic;
 - (b) 0.13 mg/l cadmium;
 - (c) 2.3 mg/l copper;
 - (d) 0.06 mg/l cyanide;
 - (e) 1.2 mg/l lead;
 - (f) 0.00097 mg/l mercury;
 - (g) 0.17 mg/l nickel;
 - (h) 0.44 mg/l silver;
 - (i) 3.3 mg/l total chromium;
 - (j) 6.5 mg/l zinc;
 - (k) 0.098 mg/l selenium;
 - (l) 0.07 mg/l methylene chloride;
 - (m) 0.03 mg/l chloroform;
 - (n) 0.03 mg/l tetrachloroethene (perchloroethylene);
 - (o) 0.002 mg/l benzene;
 - (p) 0.001 mg/l carbon tetrachloride;
 - (q) 2,000 mg/l cBOD;
 - (r) 3,600 mg/l TDS
 - (s) 1,800 mg/l Electrical Conductivity

(09) Additional Limitations.

No person shall, and it shall be unlawful to, discharge, cause to be discharged, or permit to be discharged any wastewater:

- (A) The temperature of which is higher than 150 degrees Fahrenheit (65 degrees Celsius);
- (B) Containing more than 300 mg/l of oil or grease of animal or vegetable origin;
- (C) Containing more than 100 mg/l of oil or grease of mineral or petroleum origin;
- (D) Having a pH lower than 6.0 or having a corrosive property capable of causing damage or hazard to structures or equipment of the wastewater facilities, or any portion thereof;
- (I) Containing any sand, grit, straw, metal, glass, rags, feathers, paper, tar, plastic, wood, leaves, garden clippings, manure, dead animals, offal, or any other solid or viscous substance capable of causing obstruction to the flow in the wastewater facilities, or which in any way interferes with the proper operation of the wastewater facilities;
- (J) Containing a toxic or poisonous substance not otherwise specifically prohibited in this Code in sufficient quantities to constitute a hazard to humans or animals, or to create a hazard in the wastewater facilities, or to injure or interfere with the operation thereof;
- (K) Containing suspended solids, not otherwise specifically prohibited under the provisions of this Code the characteristics or quantity of which require unusual attention, treatment, or expense in handling or treating such material in the wastewater facilities, or any portion thereof;
- (L) Any waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit;
- (M) Any trucked or hauled wastes except at points designated by the Authority or District.

(10) Specific Customer Limitations.

Notwithstanding the limitations upon the characteristics or quantity of wastewater discharged, caused to be discharged, or permitted to be discharged into the wastewater facilities pursuant to this Article, the General Manager may, in connection with the issuance of permits pursuant to the provisions of Article VII, establish additional or different specific limitations on wastewater strength upon a finding by the General Manager that:

- (A) The limitations set forth in this Article may not be sufficient to protect the operation of the wastewater facilities, or any portion thereof, or the waste or wastewater proposed to be discharged otherwise constitutes a hazard to, or an unreasonable burden upon, such operation, or otherwise causes or significantly contributes to violation of the Authority's National Pollutant Discharge Elimination System (NPDES) permit; or
- (B) The limitations set forth in this Article may be unreasonably restrictive when applied to a specific industry; and imposing a less stringent limitation will not cause or contribute to violation of any state or federal requirement of law; or
- (C) Specific standards have been established by the state or federal government for a specific category of industrial customer which would supersede the limitations set forth in this Article with respect to such category. [Amended by General Regulation No.59.]

(11) Protection from Damage.

No unauthorized person shall break, damage, destroy, uncover, deface or tamper with any structure, appurtenance, or equipment which is a part of the District's wastewater facilities.

(12) Discharge to Natural Outlet.

It shall be unlawful to discharge to any natural outlet within the District, or in any area under the jurisdiction of the District, any wastewater, industrial wastes, or other polluted waters, except where suitable treatment has been provided in accordance with provisions of this Code.

(13) Interference with District Easements.

(A) Except as provided in Subsection (E) below, it is unlawful for any person to obstruct, encroach upon or otherwise interfere with District easements or to permit or allow such obstructions, encroachments or interferences.

(B) Without in any way limiting the breadth of the general prohibition contained in Subsection (A) above, the following conditions are expressly prohibited.

(1) Construction, installation or maintenance of any permanent or temporary structure which is on, in or over any easement and which cannot be readily and easily removed at any time the District requires access to or use of an easement. In this regard, the term "structure" includes buildings, fences, gates, decks, roof overhangs, decorative rocks and boulders, and the like.

(2) Planting, growing or maintaining trees, shrubs or other forms of plant life which restrict access to an easement or which interfere with the use or operation of wastewater facilities located in the easement. Included within this prohibition are: trees and shrubs located on the surface of an easement which inhibits access by District personnel, vehicles and equipment; overhanging vegetation located outside the easement which likewise restricts access; and plants of kind which produce roots that are likely to invade wastewater facilities.

(3) The deposit of any debris, garbage, trash or other solid waste on or in an easement.

(4) The abandonment of any items of property, including vehicles, within an easement.

(C) The foregoing prohibitions do not preclude the owner of the real property which is the subject of the District's easement from making uses of the easement so long as such uses are not inconsistent with District's rights.

(D) Any condition which constitutes an obstruction of, encroachment upon or interferences with a District easement shall promptly be removed by the property owner or any other responsible person upon District's demand to do so, provided, however, that in the event of an emergency, District shall be entitled, without prior demand, to remove any obstruction, encroachment or interference by such means as District determines are reasonably necessary, even if such removal will result in damage to or loss of property by the property owner or other responsible person who caused or allowed the condition to occur. In the event a condition is not removed by responsible persons after District's reasonable demand, or without demand in the case of an emergency, District shall be entitled to recover from any responsible persons all costs and expenses incurred by it to remove the condition. The remedies provided to District by this Subsection are in addition to, and cumulative with, any other remedies available to District pursuant to this Code or otherwise as provided by law.

(E) Zone of Influence – The Zone of influence cast by any development shall not infringe on the District's ability to access, replace, or repair facilities located within easements

(F) Prescriptive Easements – The prohibitions in this Section 603(13) shall apply to all easements of record as well as easements of any kind that the District has acquired by operation of law including, but not limited to, prescriptive easements, implied easements, equitable easements, easements by implied dedication or easements by necessity.

(G) In the event of any substantial hardship, or for other good cause, any affected person may seek relief from the provisions of this Subsection (13) by requesting a variance pursuant to Section 1100 of Article XI of this Code. [Amended by General Regulation No. 82]

ARTICLE VII

PERMITS

SECTION 700. Permits Required.

No person shall do any of the following acts without first obtaining a written permit from the General Manager:

- (01) Construct or use any private wastewater disposal system;
- (02) Uncover, make any connection with or opening into, use, alter or disturb any public sewer or appurtenance thereof;
- (03) Reestablish use of any private wastewater disposal system where such use has been discontinued;
- (04) Reestablish service to any premises served by the public sewers, where use of the public sewers has been discontinued;
- (05) Increase the volume of discharge of wastewater from any premises into the public sewers or into a private wastewater disposal system beyond the volume authorized for such premises under any previously issued permit;
- (06) Change the nature of the discharge of wastewater from any premises into the public sewers or into a private wastewater disposal system beyond the nature of the discharge authorized for such premises under any previously issued permit.
- (07) Discharge, cause to be discharged or permit to be discharged any wastewater containing in excess of 0.02 mg/l total identifiable chlorinated hydrocarbons.
- (08) Discharge, cause to be discharged or permit to be discharged any wastewater containing in excess of 1.0 mg/l phenolic compounds.
- (09) Discharge, cause to be discharged or permit to be discharged any wastewater containing in excess of 20.0 mg/l fluoride compounds.

SECTION 701. Pre-existing Discharges.

For the purposes of Sections 700 (05) and 700 (06) above, premises which have been legally connected to the public sewers prior to July 1, 1974 shall be deemed to have been authorized the volume and nature or discharge which existed for the calendar year 1974 or the quantity and quality of discharge for which a connection fee has been paid, whichever is greater.

SECTION 702. Requirements Applicable to all Permits.

No permit shall be issued until all of the following requirements, to the extent applicable, have been satisfied:

- (01) It has been determined by the General Manager that:
 - (A) The real property to be served is located within the District;
 - (B) The proposed project is not prohibited or precluded by this Code or by the regulations of any other government agency having jurisdiction over wastewater disposal within the District;
 - (C) There is sufficient capacity within the District's wastewater facilities to accommodate the proposed project and, if required by the District, the applicant has received a written recommendation for wastewater discharge entitlement for a specified volume in gallons per day, average daily flow, from the local planning jurisdiction in which the project is located;

- (D) No extension of the District's collection facilities is required to serve the proposed project or the applicant has satisfied all requirements of the District for extending the collection facilities to the vicinity of the project site; and
 - (E) Any easements necessary for the District to operate and maintain public facilities installed in private property have been granted and accepted by the District.
- (02) The applicant has submitted a properly completed application on a form supplied by the District which shall set forth the following:
- (A) The name and address of the applicant;
 - (B) The location and description of the discharge proposed to be permitted;
 - (C) A detailed description of any work to be performed, and materials and equipment to be used in carrying out the provisions of such permit; and
 - (D) Such other information deemed necessary by the General Manager to determine the effect upon the wastewater facilities of the proposed discharge or activities related thereto, or otherwise reasonably necessary to enable the General Manager to carry out the provisions of this Code, or any other requirements of law.
- (03) The applicant has paid all fees and charges imposed by the District to process and consider the application.

SECTION 703. Other Conditions and Requirements of Permits.

Where the interest of the District would be served, the District Board may, at its discretion:

- (01) Impose additional requirements upon an applicant which must be satisfied before the permit will be issued;
- (02) Authorize issuance of the permit subject to satisfaction of conditions subsequent; failure to satisfy such conditions is grounds for the District Board to revoke the permit and discontinue any use authorized by the permit;
- (03) Waive compliance by the applicant with requirements or conditions previously imposed.

SECTION 704. Types of Sewer Connection, Disconnection, Construction Permits, and Encroachments.

There shall be six (6) classes of sewer permits; class one (1) residential, class two (2) non-residential, class three (3) public sewer mains, pump stations and other, class four (4) sewer disconnection, class five (5) STEP and Grinder Systems, class six (6) encroachments as follows:

(01) Residential.

Class 1 sewer permits are required for the following types of residential connections:

Permit type 1A for single-family residences;

Permit type 1B for multiple-unit residences;

Permit type 1C for rooming houses or boarding houses;

Permit type 1D for miscellaneous residential;

Permit type 1E for residential Non-Preferred Method of lateral replacement – cured in place pipe.

Permit type 1F for residential Non-Preferred Method of lateral replacement – pipe burst.

(02) Non-Residential.

Class 2 sewer permits are required for the following types of non-residential connections:

Permit type 2A for commercial establishments;

Permit type 2B for industrial establishments;

Permit type 2C for institutional establishments;

Permit type 2D for miscellaneous non-residential;

Permit type 2E for non-residential Non-Preferred Method of lateral replacement – cured in place pipe.

Permit type 2F for non- residential Non-Preferred Method of lateral replacement – pipe burst.

(03) Class 3 – Public Sewer Mains, Pumping Station, Other.

Class 3 sewer permits are required for construction of public sewer mains, pressure sewer mains, pumping stations.

Subsequent to the District Board's acceptance of a sewer system constructed pursuant to a Class 3 permit, but prior to connection of and discharge into the District's wastewater facilities, a Class 1 or Class 2 permit must be obtained by the applicant.

Permit type 3A for construction of new gravity public sewer mains.

Permit type 3B for installation of pressure sewer main extension connecting into the back end of an existing pressure sewer main connection to be done by contractor.

Permit type 3C for installation of pressurized sewer main branch extension connection to be done by District. .

(04) Class 4 – Sewer Disconnection.

Class 4 permits are required to disconnect from the District's sewer system.

Permit type 4A for Permanent Disconnection;

Permit type 4B for Temporary Disconnection.

(05) Class 5 –STEP and Grinder Systems.

Class 5 sewer permits are required for the construction of wastewater facilities including STEP or Pressure Grinder Systems.

Permit type 5A for installation of STEP or Pressure Grinder Systems

Permit type 5B for non-residential installation of STEP, Pressure Grinder Systems, or pumping stations

Permit type 5C for replacement or upgrade of a pressure sewer lateral from a STEP or Grinder System

(06) Class 6 –Encroachments (Public Sewer Main and Facilities Access)

Class 6 permits are required for trenchless utility contractors including directional drilling, jack and bore, or other contractors performing work on other utilities, within the District boundaries, such as, water, PG&E, AT&T, Comcast, and other communication providers.

Permit type 6A for public sewer main and facilities access in order to CCTV inspect before and after drilling or boring trenchless construction.

(07) All Permits - Expiration.

All sewer connection and disconnection permits shall expire twelve (12) months from the date of issuance unless such permit is extended by the General Manager.

(08) All Permits – Refund of Fees.

No refund of permit fees shall be made for expired permits

SECTION 705. Information Required by Type of Sewer Permit.

(01) Class 1.

The following information is required of all applicants for Class 1 Sewer Permits:

- (A) Legal description including street address, lot number, block number, name of subdivision, assessor's parcel number and the parcel volume and page number according to the parcel map.
- (B) Type or work to be done including the kind of building to be connected, whether it is a new connection, repair or other, the building permit number and the District's connection record number.
- (C) The owner's name, address, email, and telephone number.
- (D) The contractor's name, address, email, and telephone number.
- (E) Any additional information which the General Manager may require due to the nature of the project.
- (F) The signature of the applicant including the applicant's address and telephone number. un

(02) Class 2.

The following information shall be required for application for Class 2 Sewer Permit:

- (A) Applicant's business name.
- (B) Address of premises discharging wastewater, including the assessor's parcel number.
- (C) The standard industrial classification of applicant's business and the number of the classification.
- (D) The applicant's name, mailing address, email, and telephone number.
- (E) The engineer/contractor's name, address, email, and telephone number.
- (F) The volume of wastewater proposed to be discharged.
- (G) Any additional information which the General Manager may require due to the nature of the project, including a wastewater discharge report or permit.
- (H) The signature of the applicant and the date

(03) Class 3.

The following information shall be required of all applicants for a Class 3 Sewer Permit:

- (A) The name of the owner or owner's agent making application.
- (B) The location of the project.
- (C) The name, mailing address, email, and telephone number of the engineer.
- (D) The name, mailing address, email, and telephone number of the owner.
- (E) The name, mailing address, email, and telephone number of the contractor.
- (F) Maps, plans, profiles and other information as required by the General Manager. These maps, plans, profiles, etc. shall show the location and boundary lines of the property to be serviced and of each tract, lot, or parcel therein, together with existing and proposed streets, roads, highways, easements, and rights-of-way

within and immediately contiguous with said property, and shall show the proposed connections with the District's sewer or other proposed facilities and existing ground surface elevations together with such changes as may result from subsequent grading, filling, road construction and the like.

(G) A Notice of Exemption, Negative Declaration, or final Environmental Impact Report, whichever is applicable, as determined by the lead agency for the project pursuant to the California Environmental Quality Act, as amended.

(H) The signature and address of the applicant.

(04) Class 5. STEP and Grinder Systems

The following information shall be required of all applicants for a Class 5 Sewer Permit:

(A) The name of the owner or owner 's agent making application.

(B) The location of the project.

(C) The name, mailing address, email, and telephone number of the engineer.

(D) The name, mailing address, email, and telephone number of the owner.

(E) The name, mailing address, email, and telephone number of the contractor.

(F) Maps, plans, profiles and other information as required by the General Manager. These maps, plans, profiles, etc. shall show the location and boundary lines of the property to be serviced and of each tract, lot, or parcel therein, together with existing and proposed streets, roads, highways, easements, and rights-of-way within and immediately contiguous with said property, and shall show the proposed connections with the District's sewer or other proposed facilities and existing ground surface elevations together with such changes as may result from subsequent grading, filling, road construction and the like.

(G) A Notice of Exemption, Negative Declaration or final Environmental Impact Report, whichever is applicable, as determined by the lead agency for the project pursuant to the California Environmental Quality Act, as amended.

(H) The signature and address of the applicant.

(I) Zero discharge is allowed until final approval of permit by Board.

(05) Class 6 – Encroachments (Public Sewer Main and Facilities Access):

The following information shall be required of all applicants for a Class 6 Encroachment Permit:

(A) The name of the owner or owner 's agent making application.

(B) The location of the project.

(C) The name, mailing address, email, and telephone number of the engineer.

(D) The name, mailing address, email, and telephone number of the owner.

(E) The name, mailing address, email, and telephone number of the contractor.

(F) Maps, plans, profiles and other information as required by the General Manager. These maps, plans, profiles, etc. shall show the location of the proposed encroachment, together with existing and proposed streets, roads, highways, easements, and rights-of-way within and immediately contiguous with said encroachment, and shall show the proposed encroachment and proximity/relation to the District's sewer or other facilities and existing ground surface elevations together with such changes as may result from the proposed encroachment.

(G) A Notice of Exemption, Negative Declaration or final Environmental Impact Report, whichever is applicable, as determined by the lead agency for the project pursuant to the California Environmental Quality Act, as amended.

(H) The signature and address of the applicant.

SECTION 706. Wastewater Discharge Report.

Upon a determination that such information is necessary or appropriate to carry out the provisions of this Code, the General Manager may require that any person discharging, causing to be discharged, permitting to be discharged, or proposing to discharge wastewater into the wastewater facilities shall file a periodic discharge report, the cost of which shall be borne by such person. Such report may include, but shall not necessarily be limited to:

- (01) A description of the activities, facilities, and plant processes conducted on the premises, including, but not limited to, all materials fabricated or processed and the type of materials which are or could be discharged into the wastewater facilities;
- (02) The type and quantity of each product produced, fabricated or manufactured on the premises;
- (03) Site plans, floor plans, mechanical and plumbing plans in detail necessary or appropriate to show and to describe all sewers and appurtenances by size, location and elevation.
- (04) The number and classifications for work categories of employees, and the hours of work or operation on the premises;
- (05) Wastewater constituents and characteristics the presence and amount of which shall be determined by a laboratory competent to test and describe such constituents and characteristics, as approved by the General Manager;
- (06) Average volumes and 30-minute peak flow rate of fresh water, non-wastewater, and wastewater proposed to be discharged, including daily, monthly, and seasonal variations, if any;
- (07) Time and duration of the proposed wastewater discharge;
- (08) Such other information deemed necessary by the General Manager to determine the effect upon the wastewater facilities of the proposed discharge, or to determine the necessity for, or type of pretreatment, or permit conditions, or other measures necessary or appropriate to enable the General Manager to carry out the provisions of this Code or any other requirements of law. The General Manager may also require that such reports include the chemical constituents and quantity of liquid, gaseous, or solid materials stored on the premises relating to such discharge, even though such materials are not normally discharged into, or become a part of the wastewater, in the wastewater facilities. Such reports shall be in addition to self-monitoring reports, information furnished in connection with wastewater discharge permits, or other permits authorized under this Code. Reports authorized and required under this Section shall be filed with the General Manager periodically and/or at such other times as the General Manager may reasonably require.

SECTION 707. Wastewater Discharge Permits.

(01) Mandatory Wastewater Discharge Permit.

No major contributing industry or other customer discharging, or proposing to discharge wastewater having characteristics or quantities equivalent to that of a major contributing industry, shall, and it shall be unlawful for any such industry or customer to connect to, or discharge into, the wastewater facilities without first obtaining a Wastewater Discharge Permit therefor.

(02) Non-Routine Wastewater Discharge Permit.

A Wastewater Discharge Permit may be required for any customer who:

- (A) Requests that charges and fees established pursuant to this Code be based upon an estimated volume of wastewater discharged, or to be discharged, into the wastewater system.
- (B) Establishes to the satisfaction of the General Manager that wastewater proposed to be discharged from such customer's premises into the wastewater system has, or will have, wastewater strength characteristics less than normal range for the customer classification to which such customers assigned, by reason of pretreatment, process changes, or other reasons related to such wastewater characteristics.
- (C) Discharges, or proposes to discharge, unpolluted water into the public wastewater system.
- (D) Operates or proposes to operate, a garbage grinder on the premises which discharges to the public wastewater system.
- (E) Maintains, or proposes to maintain, a holding tank for wastewater which discharges into the public wastewater system.
- (F) Discharges, or proposes to discharge, any wastewater containing in excess of 0.02 mg/l of total identifiable chlorinated hydrocarbons into the public system.
- (G) Discharges, or proposes to discharge, any wastewater containing in excess of 1.0 mg/l phenolic compounds into the public wastewater system.
- (H) Discharges, or proposes to discharge, any wastewater containing in excess of 20.0 mg/l fluoride compounds.
- (I) Maintains and operates, or proposes to maintain and operate, a flow meter which measures either the volume of wastewater discharged into the public wastewater system or the volume of unpolluted water discharged into the storm drain or to groundwater drainage or to other diversion not discharged to the public wastewater system.
- (J) Discharges, or proposes to discharge, wastewater into the wastewater facilities by means other than through an approved building sewer.
- (K) Maintains and operates, or proposes to maintain and operate, a private wastewater disposal system.
- (L) Occupies or owns a parcel at which the business or activity on the premises would create a hazard to public health or the public wastewater system should an accidental discharge occur.

(03) Permit conditions.

Wastewater Discharge Permits authorized under this Article shall be subject to all provisions and requirements of this Code, and to all other requirements of law. Permits authorized under this Article may include any or all of the following limitations, requirements, and conditions:

- (A) The unit charge or schedule of charges and fees for the service and use of the wastewater facilities to be paid by the permittee, and the terms and conditions of such payment;
- (B) The allowable average and maximum wastewater constituents and characteristics thereof permitted to be discharged into the wastewater facilities;
- (C) Limitations upon time and rate of wastewater discharge, or requirements for flow regulations and equalizations thereof;
- (D) Requirements for the installation of inspection, sampling, or testing facilities;
- (E) Pretreatment requirements;
- (F) Specifications for monitoring programs which may include, but shall not necessarily be limited to, sampling locations, frequency and method of sampling, number, types and standards per test, and reporting schedule;
- (G) Requirements for submitting chemical, engineering or other kinds of technical reports or wastewater discharge reports;

- (H) Requirements for maintaining plant records related to the wastewater discharge, as specified by the General Manager, and provisions for access by the General Manager thereto;
- (I) The mean and maximum mass emission rates, or other appropriate limits, when incompatible pollutants are proposed to be discharged into, or are present in, the customer's wastewater discharge; and
- (J) Such other conditions, requirements, or provisions deemed appropriate by the General Manager to insure compliance with the provisions of this Code or other requirements of law.

(04) Duration of Wastewater Discharge Permit.

A Wastewater Discharge Permit authorized under this Article shall be effective for the period described therein, but in no event, longer than five (5) years.

Upon expiration of the term specified in any Wastewater Discharge Permit, or any term during which the permit was renewed automatically, the permit shall be deemed renewed automatically for an additional one-year period, which shall commence upon the day following the last day of the expired term; provided, however, that in the event the General Manager gives written notice to the permittee of the termination or expiration of such permit not less than thirty (30) days prior to the expiration of the initial term thereof, or prior to the expiration of any successive one-year term thereof, then a new permit shall be required subject to the provisions of this Code.

(05) Modification, Amendment or Other Change.

(A) Every permit shall be subject to modification, amendment, or other change by the General Manager during the term thereof, as determined necessary by the General Manager in order to obtain compliance by the customer with the requirements of this Code or other requirements of law.

(B) Except in an emergency, if the General Manager determines that non-compliance with the requirements of the Code or other requirements of law has created a risk to the public health, safety or welfare, the General Manager shall give written notice to a permittee of any proposed modification, changes or amendments to the customer's permit not less than thirty (30) days prior to the effective date of such change, modification, or amendment. The General Manager may specify a time schedule for compliance with any new conditions, provisions, or requirements established by modification, change, or other amendments to the permit. The notice shall state the time, date and place a hearing shall be held by the District Board upon the question of the proposed modifications, changes or amendments and time schedule for compliance, which date shall not be not less than ten (10) days after giving such notice.

(C) If the General Manager determines that non-compliance with the requirements of the Code or other requirements of law has created a condition which constitutes an emergency, the permit is subject to modification, amendment, or other change by the General Manager without prior written notice.

(06) Non-assignability of Wastewater Discharge Permit.

Wastewater Discharge Permits shall be personal to each permittee, and shall relate only to the use or operation described therein. No person shall, and it shall be unlawful to, assign, reassign, transfer, sell, lease, sublet, or otherwise transfer a Wastewater Discharge Permit, or any interest therein, to another person or to use, cause to be used, or permit to be used, such permit in connection with different premises, or a different operation than that specified in such permit, or with a new, expanded, or modified operation.

(07) Monitoring Facilities.

The General Manager may require a customer to construct, operate, and maintain, at the customer's own expense, monitoring, sampling, or metering facilities or other equipment to allow inspection, sampling, and flow measurement of the customer's building sewer, or internal drainage systems, or waste or wastewater discharges. Such monitoring, sampling, or metering facilities or equipment shall be located on the customer's

premises; provided, however, that the General Manager may allow such equipment or facility to be constructed upon public property adjacent to the customer's premises upon a determination by the General Manager that location of such equipment or facilities upon the customer's premises would be impracticable or cause unnecessary or undue hardship. In the event that the General Manager makes the foregoing determination, and the public property upon which such facilities or equipment are proposed to be constructed or installed is outside the District, the customer shall obtain permission for such installation or construction, and for the maintenance and operation of such facilities or equipment, from the government agency having jurisdiction over such public property. Monitoring, sampling, or metering facilities or equipment to be provided, installed, maintained and operated pursuant to the provisions of this Section shall be so situated and constructed and installed as to permit safe and immediate access thereto by the General Manager; provided, however, that the General Manager may, at the option of the customer, secure such equipment or facilities with a lock furnished by the General Manager, at the expense of the customer. The customer shall provide sufficient space, as determined by the General Manager, at or near such equipment or facilities so as to allow ready and accurate monitoring, sampling, and composition of samples for analysis. Such equipment and facilities, and the sampling and measuring equipment to be maintained and operated in connection there-with, shall be so maintained and operated at all times in a safe and proper condition, by and at the expense of the customer.

Monitoring, sampling or metering equipment or facilities to be furnished pursuant to the provisions of this Section shall be provided in accordance with all reasonable requirements of the General Manager and all applicable construction standards and specifications of the District, or the government jurisdiction wherein such equipment or facilities are located. Installation and construction of such facilities or equipment shall be completed within ninety (90) days following written notification requiring such installation or construction from the General Manager provided, however, that the General Manager may, at his discretion, extend the time of performance of such installation or construction.

(08) Inspection and Sampling.

The General Manager is hereby authorized to inspect the premises of any customer at all reasonable times to ascertain whether the provisions of this Code or the provisions of any permit issued pursuant to this Code are being complied with. Owners or occupants of premises where wastewater is created, held or discharged shall allow the General Manager ready access at all such reasonable times to all parts of the premises for the purposes of inspection, sampling, monitoring, or performing any or all of the duties reasonably necessary or appropriate in carrying out or enforcing the provisions of this Code or any permit issued pursuant to this Code. The General Manager shall further have the right to install and use on the customer's premises such devices as are reasonably necessary or appropriate to conduct sampling, metering, or monitoring operations or other of the aforesaid duties. In the event a customer has established security measures requiring identification and clearance prior to entry onto such customer's premises, the customer shall furnish and provide such identification or clearance to the General Manager so as to permit ready access by the General Manager to the premises for the purposes described in this Section.

(09) Pretreatment.

Pretreatment of wastes or wastewater shall be furnished by every customer on the customer's premises when such waste or wastewater, prior to pretreatment, does not comply with the minimum acceptable requirements and criteria for discharge into the wastewater facilities as set forth in Article VI, Section 603 of this Code. Such pretreatment facilities shall be provided and maintained at the customer's expense, and shall be of sufficient design and capacity to pretreat waste or wastewater discharged from the premises into the wastewater facilities to a level meeting such minimum requirements, and such other requirements established by the General Manager and reasonably necessary or appropriate for the wastewater facilities to treat adequately such waste or wastewater under normal operating and treatment conditions.

(10) Protection Against Accidental Discharges.

Every customer shall provide protective measures against accidental or unauthorized discharges for prohibited wastes, wastewater constituents or characteristics, or volumes into the wastewater facilities as set forth in Article VI, Section 603 of this Code, or as may be otherwise set forth in any permit issued pursuant to this Code. Such measures shall consist of operational or other procedures and/or facilities as determined reasonably necessary or appropriate by the General Manager. All costs of such measures shall be borne by the customer.

The General Manager may specify standard procedures and/or facilities for each classification of customer, and, to the extent so specified, he is hereby authorized and directed to require the institution and use of such procedures, and the installation and construction of such facilities for each such classification. Alternatively, the General Manager may require any customer to propose such procedures and/or facilities, which proposals shall be submitted to the General Manager for review, with such supporting plans, specifications, data, explanations, or other matters as may reasonably be required by the General Manager in order to ascertain the effectiveness of the procedures and/or facilities proposed. The General Manager may require such revisions, amendments, modifications, or other changes to such proposals, or approve, or reject the same, as the General Manager deems reasonably necessary or appropriate in order that such proposals ensure protection against accidental or unauthorized discharge.

(11) Public Information.

All information and data furnished by, or regarding the operations of, a customer obtained from reports, questionnaires, permit applications, permits, monitoring programs, inspections, or from other sources provided or required under the provisions of this code shall be available to the public or other government agencies without restriction unless the customer requests in writing that such information be maintained confidential, and establishes to the satisfaction of the General Manager that the disclosure of the information to other persons would result in unfair competitive disadvantage to the customer; provided, however, that in no event shall wastewater constituents, characteristics, or volumes be deemed confidential information.

Notwithstanding the foregoing, information approved by the General Manager as confidential shall be available for use by the District, the Authority, the State, the Federal government, or any agency of said entities, in connection with enforcement proceedings, or any judicial proceedings to which the customer is a party. Subject to the foregoing, information accepted by the General Manager as confidential shall not be transmitted to any government agency, or to the general public by the General Manager until and unless prior written notification is given to the customer.

(12) Special Agreements.

The provisions of this Code shall not be deemed a limitation upon the District or Authority to enter into agreements, and to recover costs relating thereto, with any customer relating to treatment, pretreatment, or other matters in furtherance of the provisions of this Code and the purposes thereof, and not inconsistent therewith, when unique, unusual, or extraordinary circumstances require such special agreements; provided, however, that no such agreement shall authorize an extension of the final dates for compliance with required federal standards or waive such standards. [Amended by General Regulation No. 59]

(13) Notice to Affected Public Agencies.

No Wastewater Discharge Permit shall be issued, nor shall it become effective, until affected public agencies shall have been given an opportunity to review and comment upon the proposed permit in the manner set forth in this Subsection.

(A) An "affected public agency" within the meaning of this subsection (13) is the County of San Mateo and/or a City or Town having territory located in the District if the wastewater to be discharged under the proposed permit will be discharged in or conveyed through the territorial boundaries of the County, City or Town.

(B) Not less than ten (10) days prior to the date the Wastewater Discharge Permit is proposed to be issued and become effective, the General Manager shall give written notice thereof to any affected public agencies who have informed the District they desire to receive such notices. As a minimum, the written notice shall identify the applicant, the address of the applicant and the site of the proposed discharge, the nature of the uses to be made on the site, the wastewater constituents proposed to be discharged, and the conditions which the District intends to attach to the proposed permit.

(C) Any affected public agency may comment upon the proposed permit and may request changes to the conditions or that the permit not be issued. If the Manager agrees with the requests, the changed conditions shall be included in the permit or the permit shall not be issued, as the case may be. If the Manager does not concur with the request, the affected public agency or agencies may appeal the Manager's decision in accordance with the procedures set forth in Article HI, Section 1101. The permit shall not be issued, nor shall it become effective, until the appeal process has been concluded. [Amended by General Regulation No. 73]

SECTION 708. Private Wastewater System Permit.

A permit for a private wastewater system shall become effective upon signing by the General Manager. The permit shall provide the General Manager with the authority to inspect the work at any stage of construction and before any underground portions are covered.

SECTION 709. Extension of Sewer Permit.

The District Board may extend a sewer permit beyond its expiration date upon such terms as the District Board deems just and reasonable, and upon a showing of good cause for such extension by the applicant. The showing shall include proof that the applicant has exercised due diligence in pursuing the construction project.

SECTION 710. Payment of Permit Fees.

Permits authorized pursuant to the provisions of this Article shall be subject to reasonable terms and conditions determined necessary or appropriate by the General Manager in order to carry out the provisions of, and insure compliance with, this Code, or other requirements of law. No permit shall be issued until all applicable fees and charges, including inspection fees, and, if applicable, connection charges, established pursuant to this Code have first been paid (See Master Fee Schedule).

ARTICLE VIII

WASTEWATER VOLUME DETERMINATION

SECTION 800. General.

For the purposes of this Code unless otherwise provided pursuant to the conditions of this Article, wastewater volumes shall be determined upon the basis of volumes of fresh water, including all sources of non-wastewater, used by, or furnished to, a customer.

SECTION 801. Exceptions - Metering.

Upon application of a customer, and upon a finding by the General Manager that a significant portion of fresh water or non- wastewater, received by the customer from any meter source does not flow into the wastewater facilities because of the principal activity of the customer, or other significant diversion of water use, or by reason of removal of wastewater by other means, the General Manager may authorize determination of the volume of wastewater discharge to be made by an appropriate metering device. Upon such determination by the General Manager, a metering device, of a type approved by the General Manager, and at a location approved by the General Manager, shall be installed at the customer's expense. Such metering device shall measure either the amount of wastewater discharged into the wastewater facilities, or the amount of fresh water or non-wastewater diverted from the wastewater facility. Upon installation, such meters shall be maintained and tested periodically for accuracy in accordance with requirements established by the General Manager, all of which maintenance and testing shall be at the expense of the customer.

SECTION 802. Exceptions - Estimated Volume.

In lieu of use of a metering device as specified in the previous section, and upon a determination by the General Manager that it would be unnecessary or impractical to install, maintain, or operate such metering device, wastewater volume discharged by a customer into the wastewater facilities may be based upon an estimate thereof determined by the General Manager. The determination of such estimated wastewater volume shall be based upon such factors as the number of fixtures through which wastewater flows into the sewerage facilities from the customer's premises, seating capacity of buildings or improvements upon the premises, the population equivalent associated with the premises, annual production of goods and services related to the premises, or other factors reasonably relating to water use, wastewater volume calculations and/or diversions of wastewater flow from wastewater facilities.

SECTION 803. Exceptions - Permit Required.

Permission for calculation or wastewater volumes to be determined in accordance with the provisions of the previous Sections (801 and (802) shall only be granted by a permit issued by the General Manager or as a provision of such other permit as may be required or provided under this Code. In the event such permission is granted pursuant to a separate permit, applications therefor shall be in writing in such form as the General Manager shall require, and shall set forth the following:

- (A) The name and address of the applicant;
- (B) The location, or other description of the premises served by the wastewater facilities and for which such calculation is proposed to be made;
- (C) Reasons supporting use of a metering device or calculation or estimated volumes, as appropriate; and

(D) Such data, statistics, or other information deemed necessary or appropriate by the General Manager to enable him to make the findings or determination specified in the two previous Sections (801) and (802), as appropriate.

ARTICLE IX

FEES, RATES, AND CHARGES

SECTION 900. Sewer Service Charge.

(01) Purpose of Sewer Service Charge.

The purpose of the sewer service charge is to raise revenue for the costs of maintenance, operation, construction, and reconstruction of the District's wastewater facilities used for the collection, conveyance, treatment, and disposal of wastewater, including the District's share of the cost of construction, operation, and maintenance of the Silicon Valley Clean Water wastewater facilities, and for other expenditures deemed necessary by the District Board in order to conduct the business of the District, except to the extent prohibited by Sections 5471 and 6520.5 of the Health and Safety Code of the State of California.

(02) Basis of Charge.

The basis of the sewer service charge is the establishment of a flat rate for the residential customers and a unit cost per hundred cubic feet for non-residential customers, computed to reflect costs of collection, treatment and disposal of sewage. In no event shall any customer be charged less than the residential customer flat rate charge.

(03) Residential Customers Sewer Service Charge.

(A) Residential Customers Rate.

The flat rate sewer service charge for fiscal year July 1, 2022 through June 30, 2023 for residential customers shall be One Thousand Two Hundred Eighty dollars and no cents (\$1,280.00) per Single Family Residence.

The flat rate sewer service charge for fiscal year July 1, 2023 through June 30, 2024 for residential customers shall be One Thousand Three Hundred Six dollars and no cents (\$1,306.00) per Single Family Residence.

(B) Septic Tank Effluent Pumping System and Grinder Pump System (STEP/Grinder System) Residential Customers Rate included in the On-Site Wastewater Disposal Zone (OWDZ).

The sewer service charge for residential customers served by a STEP/Grinder System for fiscal year July 1, 2022 through June 30, 2023 shall be Two Thousand Fifty Dollars and no cents (\$2,050.00) per Single Family Residence.

The sewer service charge for residential customers served by a STEP/Grinder System for fiscal year July 1, 2023 through June 30, 2024 shall be Two Thousand Two Hundred Twenty-Six Dollars and no cents (\$2,226.00) per Single Family Residence.

(04) Non-Residential Customer Sewer Service Charge.

(A) The rates for customers in the non-residential category for fiscal year July 1, 2022 through June 30, 2023 shall be computed on the basis of:

(1) A flow rate charge of \$7.61 per hundred cubic feet of metered water consumption in accordance with the formula set forth for non-residential customers, **PROVIDED** that District may make adjustments where it appears to District that water consumption is not a reasonably accurate measure of wastewater discharge.

(2) A biochemical oxygen demand rate of \$1.34 per pound per hundred cubic feet of water consumption; and,

(3) A suspended solids loading rate of \$1.53 per pound per hundred cubic feet of water consumption.

(B) The rates for customers in the non-residential category for fiscal year July 1, 2023 through June 30, 2024 shall be computed on the basis of:

(1) A flow rate charge of \$7.76 per hundred cubic feet of metered water consumption in accordance with the formula set forth for non-residential customers, **PROVIDED** that District may make adjustments where it appears to District that water consumption is not a reasonably accurate measure of wastewater discharge.

(2) A biochemical oxygen demand rate of \$1.37 per pound per hundred cubic feet of water consumption; and,

(3) A suspended solids loading rate of \$1.56 per pound per hundred cubic feet of water consumption.

(C) STEP/Grinder System Non-Residential Customer Rate (Non-Residential Customers included in the On-Site Wastewater Disposal Zone – OWDZ).

The sewer service charge for non-residential customers served by a Septic Tank Effluent Pumping System or Grinder Pump System for fiscal year July 1, 2022 through June 30, 2023 shall be Two Thousand Fifty Dollars and no cents (\$2,050.00) for each 200 gallons per day, average annual daily flow rate, discharged to the District's sewer system.

The sewer service charge for non-residential customers served by a Septic Tank Effluent Pumping System or Grinder Pump System for fiscal year July 1, 2023 through June 30, 2024 shall be Two Thousand Two Hundred Twenty-Six Dollars and no cents (\$2,226.00) for each 200 gallons per day, average annual daily flow rate, discharged to the District's sewer system.

(D) In accordance with the California Environmental Quality Act ("CEQA") Public Resources Code Sec. 2100 et seq., and the regulations promulgated pursuant to CEQA, the District Board finds that this Regulation establishes rates and/or charges for the purpose of meeting operating expenses of the District, meeting financial reserves needs and requirements of the District, and obtaining funds for capital projects which are necessary to maintain services within existing sewer service areas in the District

(05) Non-Residential - Added Provisions.

The following are additional provisions applicable to the computation of the sewer service charge for non-residential customers:

(A) In no event shall the non-residential sewer service charge be less than the flat rate sewer service charge for residential customers.

(B) The period used in determining the total of metered water consumption shall be the preceding calendar year or such other period as, in the opinion of the General Manager, is representative of water consumption.

(C) Upon application from customers maintaining extensive irrigated landscaping or where it can be conclusively established that the metered water consumption is not a valid measure of the quantity of wastewater discharged, the quantity to be used in determining the yearly rate shall be determined by the General Manager.

(D) The District or the customer may require the installation of District-approved recording and sampling devices or sewage meters on the premises for use by the District at the customer's expense. Such devices or meters shall be available for inspection at any reasonable time. Recording devices shall be capable of recording instantaneous and accumulated flows, and sampling devices shall be automatic and capable of 24-hour storage and maintenance of temperature between 30 degrees and 40 degrees Fahrenheit and have a five-gallon capacity as approved by the General Manager. The customer shall be responsible for the maintenance, repair and replacement of all sampling or recording devices and equipment.

(06) Adjustments and Reimbursements.

It is the intent of the District Board, to establish different sewer service charges for different categories of customers, that reflect the proportional cost of the sewer service attributable to the premises or parcel, based upon the type of use of the premises or parcel. If, in respect to any customer the District Board should find that the charge is inequitable or unfair because of unusual circumstances, it may establish a special service charge for such customer, differing from those otherwise established, which will bear a closer relationship to the proportional cost of sewer service. Such special charge may be established by resolution or agreement but may be revoked at any time by the District Board whenever it finds that continuation thereof would be inequitable or unfair under the circumstances then prevailing.

Requests for a different basis of charges shall be applied for, in writing, and shall state with particularity the unusual circumstances which the applicant believes justifies a different basis of charges for the premises in question. The application shall be submitted to the General Manager and shall be considered and a determination made thereon by the District Board and shall be effective as of the date of such application and continuing during the period of such special circumstances.

When a refund becomes due and owing by virtue of action of the District Board or by virtue of any error made in ascertaining the charge applicable to any customer, the General Manager is authorized to pay such monies from the specific fund established for the deposit of sewer service charges.

(07) Vacancy.

No credit, adjustment or refund shall be made to any customer because the premises or any part thereof are vacant, unless said premises are disconnected from the sewer system.

(08) Effective Date of Charges.

(A) Charges and rates established by this Section and subsequent amendments, as required, shall be effective upon the date specified by the District Board and shall apply to all premises then connected or then discharging directly or indirectly any wastewater and/or industrial waste into said system.

(B) Notwithstanding the foregoing provisions of this Section or other provisions of this Code, no service charge shall be due or paid for building or dwelling which is newly constructed until such building or dwelling is connected to the sewer system.

(09) Person Responsible.

The owner of any premises is and shall be responsible for payment of any and all sewer service charges applicable to said premises. It shall be and is hereby made the duty of each such owner to ascertain from the General Manager the amount and due date of any such charge applicable to said premises and to pay such charge when due and payable. It also shall be and is hereby made the duty of all owners of all premises to inform the General Manager immediately of all circumstances, and of any change or changes in any circumstances, which will in any way affect the applicability of any charge to said premises or the amount of any such charge.

(10) Collection of Sewer Service Charges on Tax Roll.

(A) Pursuant to the provisions of Division 5, Part 3, Chapter 6, Article 4, of the Health and Safety Code of the State of California, subject to the provisions of this Section, the District hereby elects, as the procedure for the collection of sewer service and use charges prescribed or imposed by the provisions of this Section, to have all such sewer service charges for each fiscal year collected on the tax roll of the County of San Mateo in the same manner, by the same persons and at the same time as property taxes, assessments and other charges collected thereon.

(B) The General Manager shall prepare and file with the District Secretary on or before the 15th day of July of each year written report containing a description of each and every parcel of real property receiving sewer service and facilities and subject to the sewer service charge established by this Section and the amount of the service charges for each parcel for the then current fiscal year, computed in conformity with the charges prescribed by the provisions of this Section. The parcels of real property included in said report may be described by reference to maps prepared in accordance with Section 327 of the Revenue and Taxation Code of the State of California and on file in the office of the County Assessor of San Mateo County, California, or by reference to plats or maps on file in the office of the District.

(C) The District Secretary shall cause notice of the filing of said report and of a time and place of hearing thereon to be published prior to the date set for hearing in a newspaper of general circulation published within the District. The publication of said notice shall be once a week for two successive weeks. Publications shall be made with at least five days intervening between the respective publication dates not counting such publication dates. A minimum of two public notices shall be published in a newspaper circulated more often than once a week. In newspapers that circulate once a week, the public notice shall be published in each circulation for two successive weeks. The period of notice commences upon the first day of publication and terminates at the end of the 14th day, including therein the first day.

(D) At the time stated in the above-mentioned notice, the District Board shall hear and consider all objections or protests, if any, to said report referred to in said notice and may continue the hearing from time to time. If the District Board finds that protest is made by owners of a majority of separate parcels of property described in the report, then the report shall not be adopted, and the charges shall be collected separately from the tax roll and shall not constitute a lien against any parcel or parcels of land.

(E) Upon the conclusion of the hearing, the District Board may adopt, revise, change, reduce or modify any charge or overrule any or all objections, excepting objections from a majority as described above in sub-section (10) (D), and shall make its determination upon each charge as described in said report, which determination shall be final.

(F) On or before the 31st day of August of each year following such final determination, the District Secretary shall file with the Controller of the County of San Mateo a copy of said report with a statement endorsed thereon over his signature that the report has been finally adopted by the District Board in order that the Controller of the County of San Mateo shall be able to enter the amounts of the charges against the respective lots or parcels of land as they appear on the current assessment roll and in order that such charges may be collected on the tax roll in accordance with the provisions of Sections 5473.5 through 5473.11 of the Health and Safety Code of the State of California. [Amended by General Regulation No. 75.]

(G) Except as provided in Section 5473.8 of the Health and Safety Code of the State of California, the amount of the charges shall constitute a lien against the lot or parcel of land against which the charge has been imposed as of the date prescribed by law as the lien date for property taxes.

(11) Omission From Collection on Tax Roll - Direct Billing.

If the full amount of sewer service charges for premises connected to or discharging wastewater into the District sewer system are, for any reason, not collected in accordance with the provisions of sub-section (10) above, the sewer service charges, or the portion thereof not appearing on the tax rolls, for such premises shall be collected by direct billing of the property owner.

(A) Billing. The General Manager shall ascertain the amount of each sewer service charge applicable to such premises and shall mail to the owner and/or owner and lessee thereof, within Sixty (60) days from and after the date any sewer service charges become due and payable, a bill for the sewer service charges which are then due and payable. Such bill shall be mailed to the person or persons listed as the owners on the last equalized assessment roll of the County of San Mateo at the address shown on such assessment roll, or to the successor in interest and/or to the lessee of such owner, if the name and address of such successor in interest or lessee is known to the General Manager. Each bill so mailed shall contain a statement that a delinquency in payment for sixty (60) days shall constitute a lien against the lot or parcel against which the charge is imposed and that when recorded it shall have the force, effect and priority of a judgement lien three (3) years unless sooner released or otherwise discharged. Failure of the General Manager to mail any such bill or failure of any owner to receive any such bill, shall not excuse the owner of any premises from the obligation of paying any sewer service charge for any premises owned by him.

(B) Due Date of Sewer Service Charges. All sewer service charges shall be due and payable on November 1st of each year. At the customer's option, sewer service charges may be paid in two equal installments with the first installment being due and payable on November 1st and the second installment being due and payable on February 1st of the following year so that both payments are made within the same fiscal year.

(C) Delinquency Date of Sewer Service Charges. Each sewer service charge shall be delinquent if not paid on or before the tenth (10th) day of the month following the date upon which such sewer service charge became due and payable.

(D) Where Payable. Sewer service charges collected by direct billing shall be payable at the administrative offices of the District, or as noted on the billing.

(E) Penalties for Non-Payment of Sewer Service Charges-Lien. Whenever a delinquency shall occur for non-payment of sewer service charges, a penalty of ten (10) percent shall attach to such charges, and for each month that such charges remain delinquent a further penalty of one and one-half percent (1-1/2 percent of said basic charge shall be added. [Amended by General Regulation No.74.]

SECTION 901. Sewer Connection Charges.

(01) Purpose of Sewer Connection Charge.

The purpose of the sewer connection charge is to equalize the cost of acquisition, construction, and installation of the District's facilities by the District so that each resident or property owner pays his/her proportionate share of such costs.

(02) Basis of Charge.

No connection shall be made to any public sewer, or to any sewer flowing into a public sewer within the District, until there shall be paid to the District a sewer connection charge, such charge to be in addition to charges for permits, inspections or the requirements of any other rule or regulation of the District. The connection charge shall be paid at the time the application for a Class 1 or Class 2 sewer permit is filed.

The estimate of the average volume of wastewater discharge in gallons per day for any proposed use shall be made by the General Manager. Any applicant for connection dissatisfied with the average daily volume estimated by the General Manager may appeal such determination to the District Board, who shall conduct a hearing thereon and establish connection charge to be paid by the applicant.

(03) Charges by Type of Connection.

The connection fees shown below shall be assessed each new applicant for wastewater service. In the event that a parcel will have combined residential and non-residential uses, the residential connection fee shall be applied to each living unit and the non-residential connection fee shall be applied to the non-residential uses. In no event shall a connection fee be less than the residential connection fee. A separate meter serving the non-residential premises shall be required for annual user charge assessments.

Connection Fee Dollars	District
Residential Unit (includes 30 gpd lateral I/I) Minimum per EDU 200 Gallons Per Day (GPD)	\$8,608.00
Supplementary Connection Fee (a) (equivalent to 30 gpd lateral I/I)	\$1,291.20
Non-Residential Use (b) Equal or Less than 300 mg/l Biological Oxygen Demand (BOD) or Suspended Solids (SS) *per supplementary connection (a)	\$43.04/gpd +\$1,291.20*
Greater than 300 mg/l BOD or SS *per supplementary connection (a)	\$36.28/gpd + \$6.76/gpd x strength ratio (c) + \$1,291.20*

- (a) * The connection fee for a supplementary connection(s) to the same building shall be \$1,291.20 per connection. [Amended by General Regulation No.2022-02]
- (b) Non-Residential Use connection fees are calculated using average daily flow in gpd. Minimum Non-Residential Use is based on 300 gpd of average daily flow. In no event shall the Non-Residential Use connection fee be less than the Residential connection fee of \$8,608.00.
Example: A Non-Residential Use connection with 300 gpd of average daily flow and 300 mg/l of BOD or SS would pay the following:

$$\$43.04/\text{gpd} \times 300 \text{ gpd} = \$12,912.00$$
- (c) The strength ratio component for Non-Residential Use with BOD and/or SS concentrations greater than 300 mg/l, is calculated by the ratio of the highest of the BOD or SS concentrations to 300 mg/l.
Example: A Non-Residential Use connection with 300 gpd of average daily flow and 400 mg/l of BOD and 350 mg/l of SS would pay the following:

$$\$36.28/\text{gpd} \times 300 \text{ gpd} + (\$6.76/\text{gpd} \times 300 \text{ gpd} \times (400 \text{ mg/l} \div 300 \text{ mg/l})) = \$13,588.00$$

Connection fees will be adjusted annually, July 1 of each year, by the Annual Percentage Change of the Engineering News Record Construction Cost Index for San Francisco. The Annual Percentage Change

shall be calculated as: the December Value for the current fiscal year, minus the December Value for the prior fiscal year, and the result of which shall be divided by the December Value for the prior fiscal year.

Accessory Dwelling Unit

Pursuant to Section 65852.2 of the California Government Code the District will charge an Accessory Dwelling Unit Connection Fee based on the number of plumbing fixture units (FU). District establishes 20 FU's per EDU (equivalent dwelling unit) as the basis for charging accessory dwellings for an existing customer. The connection fee would be \$430.40 multiplied times the number of fixture units in the accessory dwelling unit to charge a connection for the accessory dwelling unit.

Formula Assumptions:

#1 - District Connection Fee charge per EDU = \$8,608.00, the charge per fixture unit would be \$430.40 per FU (\$8,608.00 divided by 20 FU).

#2 - \$430.40 per FU per FU (\$8,608.00 divided by 20 FU).

Example: An accessory dwelling for an existing customer with 15 fixture units would be charged a connection fee of \$6,456.00 (15 x \$430.40).

(04) Persons Responsible.

The owner of any premises is and shall be responsible for payment of all connection charges applicable to said premises. It shall be and is hereby made the duty of each property owner to ascertain from the General Manager the amount and due date of any connection charge applicable to said property and to pay said charge when due and payable. Each property owner shall be responsible to inform the General Manager, in a reasonable amount of time of any change or changes in any circumstances which will in any way affect applicability, or amount of any such charge.

(05) Increased Use of Sewers.

(A) In the event increased use is or will be made of the sewer, and the actual, calculated, or estimated volume of wastewater discharge exceeds or will exceed the volume of wastewater discharge the premises are entitled to discharge, an additional sewer connection charge shall be paid. The additional sewer connection charge shall be calculated by subtracting the wastewater discharge entitlement assigned to the parcel from the actual, calculated or estimated volume of wastewater discharge, measured in gallons per day, average daily flow and multiplying the remainder by the non-residential connection charge rate. The wastewater discharge entitlement is determined by the base year wastewater discharge, which is the average daily discharge from the property in 1974 OR the wastewater discharge for which a connection charge has been paid, whichever is higher. The maximum allowable volume of wastewater discharge shall be increased through payment of additional sewer connection charges.

(B) In those instances where an increased use has been made without written notice by the customer to the District, the additional connection charge shall be computed at the rate in effect under this Code on the date the additional charge is levied. The General Manager shall ascertain the amount of each additional connection charge applicable to each premise in the District and shall mail to the property owner of each applicable premise a statement for the additional connection charge which is due and payable. Such statement shall be mailed to the person or persons listed as the property owner on the last equalized assessment roll of the County of San Mateo at the address shown on such assessment roll, or to the successor in interest of such owner, if the name and address of such successor in interest is known to the General Manager. Each bill so mailed shall contain a statement that a delinquency in payment for Sixty (60) days shall constitute a lien against the lot or parcel against which the charge is imposed and that when recorded it shall have the force, effect and priority of a judgment lien for three (3) years unless sooner released or otherwise discharged. Failure of the General Manager to mail said statement, or failure of any

property owner to receive said statement, shall not excuse the obligation of paying said additional connection charge. [Amended by General Regulation No. 75.]

(C) In the event a customer has previously notified the District in writing of an increased use, the additional connection charge shall be computed at the rate in effect on the date such written notice was received by the District. The General Manager shall ascertain the amount of the additional connection charge applicable to the premises and shall mail to the property owner of the premises a statement for the additional connection charge which is due and payable. Such statement shall be mailed to the person or persons listed as the property owner on the last equalized assessment roll of the County of San Mateo at the address shown on such assessment roll, or to the successor in interest of such owner, if the name and address of such successor in interest is known to the General Manager. Failure of the General Manager to mail said statement, or failure of any property owner to receive said statement, shall not excuse the obligation of paying said additional connection charge.

(D) Penalties for Non-Payment of Additional Connection Charges. Whenever a delinquency shall occur for non-payment of additional connection charges, a penalty of ten (10) percent shall attach to such charges, and for each month that such charges remain delinquent a further penalty of one and one-half percent (1-1/2 percent) of said basic charge shall be added. [Amended by General Regulation No. 75.]

(E) Where payable. Additional connection charges collected by direct billing shall be payable at the administrative offices of the District, or as noted on the billing. [Amended by General Regulation No. 75.]

(06) Repurchase of Capacity.

(A) In the event the property owner notifies the General Manager within 2 years of payment of a sewer connection charge for a use proposed to be made that it appears either that such use will not be made or will create less volume of wastewater discharge than anticipated, the General Manager may re-compute the sewer connection charge and refund to the payer ninety percent (90%) of the difference between the sewer connection charge paid and the recomputed charge. [Amended by General Regulation No. 66.]

(07) Administration of Connection Charges.

(A) The sewer connection charge rate may be revised only by an amendment to this Code approved by a two-thirds vote of the members of the District Board.

(B) The amount of connection charges for all classifications of connections shall be reviewed at least once each fiscal year. [Amended by General Regulation No. 66.]

SECTION 902. Permit and Inspection Fees.

(01) Class 1,2, 3, 4, 5 and 6 Permits.

- (A) Class 1 Sewer Permits for service to residential structures;
- (B) Class 2 Sewer Permit for service to non-residential structures;
- (C) Class 3 Sewer Permit for construction of sewer mains, pumping stations and other wastewater facilities. The inspection fee for a Class 3 sewer permit shall be paid as covered under subsection (03) Excess Expenses, below;
- (D) Class 4A Sewer Disconnection Permit for Permanent Disconnection; and
- (E) Class 4B Sewer Disconnection Permit for Temporary Disconnection.
- (F) Class 5 STEP and Grinder Systems
- (G) Class 6 Encroachments (Public Sewer and Facilities Access)

(02) Non-Routine Wastewater Discharge Permits.

Fees, in amounts established by the Board of Directors, shall be imposed upon and collected from applicants and customers of the wastewater facilities to defray the costs of processing and issuing the following Non-Routine Wastewater Discharge Permits or performing the following services:

- (A) Mandatory wastewater discharge permit.
- (B) Determination and approval of metered wastewater volumes, and metered volume permit.
- (C) Determination and approval of use of estimated wastewater volume, and estimated volume permit.
- (D) Private wastewater disposal permit.
- (E) Review of proposals for protection against accidental discharges.
- (F) Discharge report review. [Amended by General Regulation No. 78.] Service or work which is expressly or impliedly required to be performed by the District pursuant to the provisions of this Code, the payment for which is not otherwise provided for herein, shall be paid in advance of the performance of such services or work in an amount equal to the estimated cost to the District thereof. Upon performance of such services or work, and upon the calculation of the actual costs thereof, sums deposited in excess of such actual costs shall be refunded or additional charges equal to the amount by which the actual cost exceeds the estimated cost shall be paid.

The foregoing fees and charges shall be paid at the time the application for the work to which they pertain is made or requested or upon receipt of billing for excess expenses. No application shall be processed, nor work performed, without said fees or charges having first been paid. These fees and charges shall be in addition to fees, charges, or expenses payable pursuant to other provisions of this Code.

(03) Excess Expenses.

In addition to the permit fees, the applicant shall pay to the District all costs and expenses in excess of said fees which have been borne by the District to examine application or plans and inspect construction, and to test, sample and/or monitor wastewater discharge, said costs to be determined by the District.

In accordance with the California Environmental Quality Act ("CEQA") Public Resources Code Sec. 2100 et seq., and the regulations promulgated pursuant to CEQA, the District Board finds that this Regulation establishes fees for the purpose of meeting operating expense of the District. [Amended by General Regulation No. 78.]

SECTION 903. Sewer Relocation Charge.

(01) Imposition of Charge.

A sewer relocation charge shall be imposed by the District whenever all of the following conditions are found by the District Board to exist:

- (A) A governmental entity proposes to undertake a work of public improvement that will necessitate relocation, modification, or reconstruction of existing District wastewater facilities;
- (B) Except for the work of improvement, the wastewater facilities would not have required relocation, modification, or reconstruction at that time;
- (C) The District will be required to pay to the governmental entity all or some part of the relocation, modification or reconstruction costs, or the District will be required to perform the relocation, modification or reconstruction of its facilities without reimbursement for all or some portion of the attendant costs; and

(D) The work of improvement is primarily for the benefit of some of the premises within the District's boundaries, and not primarily for the general benefit of all premises within the District.

(02) Effect of General Benefit.

If the Board makes all of the findings required by above Sub-section, it shall further determine to what extent, if any, there is some benefit to the District generally by reason of the relocation, modification, or reconstruction. To the extent the District Board determines that there is some general benefit to the District, that pro-rata share of the net cost, as defined in sub-section (04) below, shall be borne by the District from its general funds. In making the determination required by this Section, the Board shall consider all relevant factors including increased life of the wastewater facilities and benefits to wastewater facilities outside of the improvement project boundaries.

(03) Parcels Subject to Relocation Charge.

The relocation charge, other than that allocated to the District generally, shall be levied against all parcels within the boundaries of the improvement project which are either connected to or able to connect to the District's wastewater facilities. Determination of whether a parcel is able to connect to the District's waste water facilities is governed by Article VI of this Code. Those parcels which are unable to connect are exempt from the relocation charge. If the governmental entity which has undertaken the improvement project has not established boundaries for the project, the District Board shall set the boundaries based upon a determination of which premises are benefited by the improvement project.

(04) Determination of Net Cost.

The total amount to be allocated among the benefited premises as a relocation charge shall be the net cost to be borne by the District for all necessary expenses, after credit for any reimbursements to the District from sources other than the imposition of the relocation charge, and after credit for any grant funding to be received by the District. Necessary expenses include, without limitation: labor, material and equipment costs; fees for engineering, architectural, legal or other professional services; interest charges; bond or insurance premiums; and the like.

(05) Computation of Relocation Charge Payable by Each Premise.

The amount of the relocation charge to be imposed against each parcel shall be computed according to the following formula:

$$RC = \frac{PSC}{TSC} \times NDC$$

Where 'RC' is the relocation charge to be imposed against each premises; 'PSC' is the annual sewer service charge imposed by this Code and then in effect for the premises; 'TSC' is the total of all annual sewer service charges imposed on all benefited premises within the boundaries of the improvement project; and 'NDC' is the net District cost after taking into account any reduction by reason of the effect of a general benefit, pursuant to sub-section (02) above. In the event any premises are not presently subject to a sewer service charge, then in performing the computation, 'PSC' shall be the minimum annual sewer service charge rate, and 'TSC' shall be determined as if an annual minimum sewer service charge rate was in effect for the premises.

(06) Adoption of Resolution.

The imposition of a relocation charge pursuant to this Section shall be established by a Resolution of the District Board and approved by a two-thirds vote of its members. The Resolution shall set forth the following:

- (A) A schedule of the relocation charges to be imposed.
- (B) The description of all premises subject to the charge by Assessor's Parcel Number.
- (C) The provisions for payment and collection of the charge.
- (D) The time and place at which the District Board will hold a public hearing at which persons may appear and voice any and all objections they may have to the imposition of the charge.

(07) Use of Relocation Charge Revenue.

Except as prohibited by Section 5471 and 6520.5 of the Health and Safety Code of the State of California, revenues derived from the imposition of the relocation charge may be used for any lawful purpose as determined by the District Board.

SECTION 904. Annexation Fees.

(01) State of California Fees.

All properties annexed to the District shall submit an annexation fee as established by resolution, plus any fees payable to the State of California for filing and processing fees, the amount of which is determined by the San Mateo County Local Agency Formation Commission (LAFCo) in accordance with applicable statutes of the State Board of Equalization. All applications shall submit, at the time of application, an application fee in an amount established by resolution of the Board, in addition to any other fees, charged by LAFCo or any other regulatory agency, that are required as a condition of proceeding.

(02) Additional Fees.

In addition to the State of California fees, new properties shall be required to pay all costs of collection facilities on the property, connection to the District's collection system, and any over-sizing of the District's collection system which may be required to convey the sewer discharge through the District's collection system to the Authority. [Amended by General Regulation No. 66.]

SECTION 905. Solid Waste Collection and Disposal Charge.

The charges for solid waste collection and disposal shall be established and revised from time to time, by resolutions duly adopted and approved by the District Board in accordance with Article III of this Code.

SECTION 906. Environmental Impact Report and Negative Declaration -Preparation of Review Fee.

A charge shall be imposed upon and collected from applicants to defray costs for the preparation or review by the District of any environmental documents including an Environmental Impact Statement (EIS), an Environmental Impact Report (EIR), a Negative Declaration, or other similar statement, report or study for any projects (as defined in the California Environmental Quality Act) undertaken by any person other than the District, according to the following methods:

(01) If the preparation or review is made by District staff, the charge shall be the actual salary of District employees for the time necessary for the preparation or review, times 1.75.

(02) If the preparation or review is made by District consultants engaged by the District, the charge shall be the actual cost billed to the District by the consultants.

(03) Any other expenses incurred by the District for such preparation or review shall also be reimbursed by the applicant to the District.

ARTICLE X

ENFORCEMENT

SECTION 1000. Violation, Notification of Violation, Unauthorized Discharges

(a) Violators Subject to Enforcement Provisions

Any person who violates any ordinance, rule or regulation of the District, or who alters or tampers with sewer facilities so as to render the operation thereof inconsistent with the approved plans, specifications or conditions for such facilities, shall be subject to the enforcement provisions of this ordinance. Each day that a violation of an ordinance, rule, regulation or condition that deviates from such approved plans, specifications or condition continues shall constitute a separate and additional violation.

(b) Powers and Authority of Inspectors.

The General Manager and other duly authorized employees of the District bearing proper credentials and identification shall be permitted to enter upon all properties for the purpose of inspection, observation, measurement, sampling, and testing, in accordance with the provisions of this Code. The General Manager and other duly authorized employees are further empowered to ascertain the nature of such premises, the type of activities carried on therein, the number and type of plumbing fixtures situated therein, and any other facts and information reasonably necessary to carry out the provisions of this Code.

(c) Notification of Unauthorized Discharge.

Every customer shall notify the General Manager immediately upon discharging wastes or wastewater in violation of the provisions of this Code, or any permit issued pursuant to this Code. A customer, who discharges, causes to be discharged, or permits to be discharged such wastes or wastewater shall, within five (5) days of the occurrence thereof, submit a written report to the General Manager describing the cause or causes of such unauthorized discharge, and measures taken, or proposed to be taken, to prevent future similar occurrences. Such report shall not relieve any customer of liability for any expense, loss, or damage suffered or incurred by the District or the Authority directly or indirectly, by reason of such unauthorized discharge. Such report shall not relieve or absolve any person from civil liabilities, or imposition of civil or criminal penalties in any manner whatsoever.

(d) Notices to Employees Regarding Unauthorized Discharges.

Every non-domestic customer, every customer issued a mandatory wastewater discharge permit and every customer issued an optional wastewater discharge permit shall prominently post a notice on the customer's premises advising of the requirement to notify the General Manager of any unauthorized discharge, including the telephone number of the General Manager to be called in the event of such discharge. The General Manager may require any customer to inform and advise the customer's officers, agents, and employees of the provisions of this Code, or the provisions of any permit issued

pursuant to this Code, or of other requirements of law, or of any other information which may be of assistance in ensuring compliance with said Code, permit, or other requirements of law.

(e) Notice of Violation.

Whenever it is found that any person has violated, is violating, or is threatening to violate any District ordinance, rule or regulation, or any prohibition, limitation or requirement contained therein or in any sewer permit issued pursuant thereto, the District may serve upon such person a Notice of Violation stating the nature of the violation and providing a reasonable time, not to exceed thirty (30) days, for its satisfactory correction and the submission of an explanation of the circumstances giving rise to such violation. The Notice of Violation may set forth a compliance schedule with specific actions the user shall take in order to prevent or correct the violation. In addition, the Notice of Violation may require inspections or sampling and may impose other requirements deemed necessary. The Notice of Violation may also contain a statement that additional enforcement action may be pursued if corrective actions are not accomplished as scheduled.

(f) Extension of Time to Comply.

If the Manager receives a request from any person required to comply with a Notice of Violation, the Manager may grant an extension for any period of time to correct or remedy the violation if the Manager determines that such an extension of time will not create or perpetuate imminent danger to the public health and safety. The Manager shall have the authority to place reasonable conditions on such an extension.

SECTION 1001. Administrative Order.

In lieu of issuing a Notice of Violation under Section 1000, above, or, if a person does not take appropriate corrective action in response to a Notice of Violation issued under Section 1000, the Manager may issue an Administrative Order requiring immediate compliance with the terms of the District ordinance, rule, regulation, or permit or setting forth a compliance schedule with specific actions the user shall take in order to prevent or correct the violation. In addition, the Administrative Order may require inspections or sampling and may impose other requirements deemed necessary by the Manager. Prior to issuing such an Administrative Order, the Manager may, but shall not be required to, issue an order to show cause. Said order to show cause shall present the user with the facts demonstrating non-compliance and shall ask that the user show cause why the District should not institute formal enforcement action or discontinue sewer service.

SECTION 1002. Appeals From Notice Of Violation Or Administrative Order

Any person affected by a Notice of Violation or Administrative Order issued pursuant to Section 1000 or Section 1001 may file a written request for reconsideration or appeal the same pursuant to Section 1101.

SECTION 1003. Civil Penalties.

Any person who discharges pollutants, except in compliance with waste discharge requirements, or who violates any Administrative Order, prohibition, waste discharge requirement, effluent standard, water quality related effluent standard, federal standard or performance, pretreatment or toxicity standard or requirement, or who refuses to comply with the requirements adopted to control the discharge of pollutants, or who fails to comply with the conditions of their permit, or who alters a sewer system so as to render it out of compliance with plans and specifications approved by the District, or who fails to comply with any condition or requirement set forth in any District ordinance, rule or regulation, shall be subject to a civil penalty not to exceed one thousand dollars (\$1,000) for each such discharge, violation, refusal or failure to comply occurs. The District may utilize any mechanism authorized by law to impose, assess and recover any such civil penalty, including but not limited to petitioning the Superior Court to impose, assess and recover such civil penalty.

SECTION 1004. Administrative Penalties.

(a) Violators Subject To Administrative Penalties.

A person who violates any District ordinance, rule, regulation or permit, or who tampers with or alters any sewer facility constructed pursuant to a District-issued permit so as to render it out of compliance with plans and specification approved by or conditions imposed by the District shall be subject to an administrative penalty pursuant to this Section, in addition to any other remedy authorized by this Code or otherwise by law.

(b) Issuance of Administrative Complaint.

Prior to imposing such administrative penalties, the District shall issue an administrative complaint to the person the District alleges has violated a District ordinance, rule, regulation or permit, or who has tampered with or altered any sewer facility as set forth in subsection (a), above. The administrative complaint shall be served by personal delivery or certified mail, and shall inform the person served that a hearing shall be conducted within forty-five (45) days after the person has been served.

(c) Notice of Violation.

Where the alleged violation does not create an immediate danger to health or safety, the District shall, prior to imposing administrative penalties, first issue a Notice of Violation that gives the person responsible for a continuing violation a reasonable period of time to correct or remedy the violation.

(d) Hearing.

The hearing shall be before a hearing officer designated by the Board of Directors. The person who has been issued an administrative complaint may waive the right to a hearing, in which case the District shall not conduct a hearing. A person dissatisfied with the decision of the hearing office may appeal to the Board of Directors pursuant to Section 1101.

(e) Determination of Penalty; Schedule of Penalties.

If after the hearing, or appeal, if any, it is found that the person has violated a District ordinance, rule, regulation or permit, or has tampered with or altered any sewer facility as set forth in subsection (a), above, the hearing officer or Board of Directors may assess an administrative penalty against that person. In determining the amount of the administrative penalty, the hearing officer or Board of Directors shall take into consideration all relevant circumstances, including but not limited to the extent of the harm caused by the violation, the economic benefit derived through any noncompliance, the nature and persistence of the violation, the length of time over which the violation occurs and corrective action, if any attempted or taken by the discharger. Penalties imposed pursuant to this section shall not exceed the limits set forth in subdivision (d) (1) of Cal. Gov't Code, section 54740.5.

(f) The County of San Mateo, the District's Designee for Edible Food Recovery

The County of San Mateo, the District's Designee for Edible Food Recovery, is hereby authorized to and may enforce the Edible Food Recovery provisions in the District's Mandatory Organic Waste Disposal Reduction Ordinance as adopted by reference in Article III, Section 303, upon entry into a Memorandum of Understanding with the County of San Mateo. The County's enforcement authority includes, without limitation, the authority to inspect, investigate, hold hearings, issue citations and/or assess administrative fines on behalf of the District as its Designee for Edible Food Recovery.

SECTION 1005. Collection of Fines and Penalties.

(a) Remedies Cumulative.

Remedies for collecting and enforcing fines and penalties for violation of any ordinance set out in this Article are cumulative and any and all may be used alternatively, and none of the remedies are exclusive.

(b) Placed on Tax Bill.

Fines and penalties imposed pursuant to this Article may be added to and become part of the charges fixed by the District for services furnished to the property where the violation occurred if the property is owned, controlled, or in the possession of the same person who owned, controlled, or was in possession of it during the time the violation occurred. Fines and penalties may be collected in the same manner, by the same person, and at the same time together with the fees and charges levied by the District.

(c) Lien.

Fines and penalties added to a service charge are a lien on the subject property.

(d) Petition to Court.

Fines and penalties may be collected by an action in any court of competent jurisdiction against a person or persons who owned the property where the violation occurred, in addition to any other means of collection authorized by law.

SECTION 1006. Criminal Penalties.

(a) Violations of Ordinances, Rules or Regulations.

Any person who willfully or negligently discharges pollutants, except in compliance with wastewater discharge requirements, or who willfully or negligently violates any Administrative Order, prohibition, wastewater discharge requirement, effluent standard, water quality related effluent standard, Federal standard of performance, pretreatment or toxicity standard or requirement, or who fails to comply with the conditions of their permit, compliance schedule or any standard, condition or requirement set forth in any District ordinance, rule or regulation, or who tampers with any sewer facility so as to render such facility out of compliance with any District-approved plans, specifications or permit conditions, shall be punished by a fine of not more than one thousand dollars (\$1,000) for each day such violation occurs, or by imprisonment in the county jail for not more than thirty (30) days, or both.

(b) False Statements.

Any person who knowingly makes any false statement, representation, record, report, plan or other document filed with a Regional Water Quality Control Board or the State Water Resources Control Board, or who falsifies, tampers with or knowingly renders inaccurate any monitoring device or method required by the laws of the State of California shall be punished by a fine of not more than ten thousand dollars (\$10,000), or by imprisonment for not more than six (6) months, or both.

(c) Authority to Request Enforcement.

If the District believes a criminal offense has been committed hereunder, it may refer the matter to the District Attorney for prosecution. Nothing in this Code of Regulations shall limit the District's authority to request enforcement of Section 6523 of the California Health and Safety Code, which provides that a violation of a regulation of the District is a misdemeanor punishable by imprisonment in the County jail not to exceed thirty (30) days or by a fine not to exceed one thousand dollars (1,000) or by both.

SECTION 1007. Termination of Service.

In order to effect its powers and subject to the provisions of this Section, the District may terminate sanitary wastewater service to any premises from which wastes or wastewater have been discharged, are being discharged, or are threatened to be discharged in violation of any provision of this Code, or of any permit issued pursuant to this Code, or because of delinquency of any charge or fee assessed by the District, or of any other requirement of law.

Prior to termination of service, the District Board shall notify, in writing, the owner and tenant, if any, of such property that service is intended to be terminated, which notice shall state the date of proposed

termination of service, the reason(s) therefor, and the date, time and place a hearing shall be held by the District Board upon the question of the termination. Such notice shall be mailed to the owner at the address shown on the records of the assessor of the County of San Mateo or as known to the clerk, and a copy shall be delivered to the tenant or posted conspicuously on the property. Such hearing shall not be held less than 10 days subsequent to the giving of notice as herein described.

Any owner, the customer, the tenant, the alleged violator, the General Manager and any other person as the District Board may deem appropriate shall be heard at the hearing on the question of termination of service. The District Board shall determine such order as it deems appropriate under the circumstances and in furtherance of the purposes and intent of this Code.

Notwithstanding the foregoing, any unauthorized connection with or opening into the public sanitary wastewater system or appurtenance thereof may be abated by the General Manager without notice if, in the judgment of the General Manager, such unauthorized connection or opening poses an imminent threat of damage to the District's wastewater facilities or of injury to the public health, safety and welfare.

Notwithstanding the foregoing, any unauthorized connection with or opening into the public sanitary wastewater system or appurtenance thereof may be abated by the General Manager without notice if, in the judgment of the General Manager, such unauthorized connection or opening poses an imminent threat of damage to the District's wastewater facilities or of injury to the public health, safety and welfare.

In the event disconnection from the wastewater facilities would create a public hazard or nuisance, the General Manager or his representative may enter upon the premises for the purpose of doing such things as may be reasonably necessary to alleviate or remove such hazard or menace. The owner of such premises shall have a duty to reimburse the District for all expenses incurred by the District in disconnecting any such premises, or in doing other things authorized by this Section; and no reconnection shall be made until all such charges are paid

SECTION 1008. Revocation of Permit.

Subject to the procedure set forth in Section 1013, below, the District Board may revoke any permit issued pursuant to the provisions of this Code upon a determination by the District Board that:

The permittee has failed to report factually the wastewater constituents, characteristics, or volume of the permitted wastewater discharge;

The permittee has failed to report significant or substantial changes in the operations conducted upon the premises to which the permit pertains, or significant or substantial changes in wastewater constituents, characteristics, or volumes pertaining to said premises; or

The permittee has refused, or failed to permit, reasonable access to the premises to which the permit pertains; or

The permittee has violated, caused to be violated, or allowed to be violated, any term, condition, or provision of the permit.

SECTION 1009. Public Nuisance.

Any discharge or threatened discharge, or any condition which is in any manner in violation of the provisions of this Code, or of any permit issued pursuant to this Code or any order or directive of the General Manager authorized by this Code, shall be, and the same is hereby declared to be, unlawful and a public nuisance. Any person creating a public nuisance is guilty of a misdemeanor. In the event of a public nuisance, the Board may direct the District's counsel to commence an action for appropriate legal and/or equitable relief in the Superior Court, or may refer the matter to the District Attorney for prosecution. In such event and as a condition of reconnection or as a condition of continued sewer service, there shall be paid to the District, by the person in violation, a sum of money equal to reasonable attorney's fees, costs of suit and all other expenses reasonably occasioned to the District as a result of said violation. "All other expenses" mentioned above, shall include, but not be limited to, a return to the District of a reasonable charge for the payment of the time expended by District employees as a result of the violation.

SECTION 1010. Correction of Violations.

In order to enforce the provisions of any District ordinance, the District may correct any violation thereof. The cost of such correction (including, but not limited to, any fines or other costs imposed on the District by any Federal or State agency or court) shall be payable by the person violating the ordinance or by the owner or tenant of the property upon which the violation occurred. Such cost may be added to any sewer service charge payable in connection with the property. The District shall have such remedies for the collection of such costs as it has for the collection of sewer service charges, in addition to any other remedies provided for herein or by law.

SECTION 1011. Injunction.

Whenever a discharge of wastewater is in violation of the provisions of any District ordinance or otherwise causes or threatens to cause a condition of contamination, pollution, or nuisance, or in the case of non-discharge violations or other such non-compliance with a permit, compliance schedule or any standard, condition or requirement set forth in any District ordinance, rule or regulation, or in any case of tampering with any sewer facility so as to render such facility out of compliance with any District-approved plans, specifications or permit conditions, the District may petition the Superior Court for the issuance of a restraining order or a preliminary or permanent injunction, or any or all of these, as may be deemed appropriate by the General Manager.

SECTION 1012. District Abatement and Enforcement Expenses, Losses or Damages.

- (a) Any person violating any of the provisions of the ordinances, rules or regulations of the District, or any permit imposed pursuant thereto shall become liable to the District for each, every, any and all expenses, losses or damages occasioned by the District by reason of such violation. For the purposes of this provision, "expenses, losses or damages" shall include, but not be limited to, reasonable attorney's fees incurred by the District for negotiations, consultations, litigation or otherwise, and shall include

reimbursement to the District for the costs to it of the hours expended by the employees of the District by reason of such violation and all other costs and expenses so occasioned.

(b) The cost of abating a public nuisance and/or enforcing the Code shall be imposed as a special assessment and lien on the subject property or as a personal obligation of the owner of the subject property and/or the person responsible for creating, causing, committing, or maintaining the public nuisance or violating the Code. If there is more than one responsible party, each responsible party shall be jointly and severally liable for the costs. Costs incurred by the District are recoverable even if a public nuisance or Code is corrected by the property owner or other responsible party.

(c) A schedule of District abatement and enforcement expenses, losses, and damages shall be established by the Board of Directors.

(d) To collect abatement and enforcement costs under these procedures, the District shall invoice the noticed party for the costs incurred by the District, except that an invoice is not necessary for administrative citations and other fixed penalties where notice of the penalty and an opportunity for appeal of the underlying violation has been provided. The invoice shall notify the noticed party of the following:

(i) A description of the abatement or enforcement action taken by the District, (where applicable) a description of the property subject to the abatement or enforcement, and the total amount of the costs incurred by the District.

(ii) That, should the noticed party fail to pay the invoiced costs within thirty (30) days from the date of service of the invoice, the invoiced costs may be collected in any or all of the following ways: by a collection agency as a personal obligation, through judicial action initiated by the District's attorneys, or as a special assessment and lien attached to the subject property.

(iii) That the noticed party has a right to administrative review of the accounting of the costs incurred by the District by filing a written request for such review with the General Manager within fifteen (15) days of the date of the invoice, and that a failure to request administrative review will be deemed a waiver of a right to review of the amount of the costs.

(iv) That before a special assessment is placed on the subject property, the costs will be confirmed by the Board of Directors and a notice will be issued at least fifteen (15) days before the Board of Directors meeting.

(v) That the invoice may be recorded as a Notice of Costs or Penalties in the San Mateo County Recorder's Office.

(e) A noticed party shall have the right to administrative review of the accounting of the costs incurred by the District by filing a written request to the District for such review within fifteen (15) days of the date of the invoice. A failure to timely request administrative review will be deemed a waiver of a right to review of the amount of the costs.

(f) If a request for administrative review is timely filed, a copy of the invoice and request for administrative review shall be delivered to the General Manager or his/her designee, which may include the appointment of a hearing officer, who shall set a date and time to review the accounting report and invoice with the requesting party. The administrative review shall be an informal proceeding where the enforcement department and requesting party may present any evidence they deem pertinent to the amount of the costs. The scope of review shall be limited to the amount of the costs unless there has been no opportunity for a hearing on the underlying violation.

(g) The General Manager may affirm or reduce the costs if the General Manager determines that they are not supported by the evidence or upon a showing that the costs were unnecessary or unreasonable. The General Manager will not pass upon the validity of the underlying enforcement action or the amount of any penalties unless there has been no opportunity for a hearing of the underlying action. The General Manager's decision shall be memorialized in writing. The General Manager may approve a payment plan for the costs.

- (h) The requesting party shall have thirty (30) days from the date of the General Manager's decision to pay the costs, unless a payment plan is approved, in which case the costs shall be paid in accordance with the payment plan.
- (i) There is no right to administrative review if the costs have already been approved by a court of competent jurisdiction. There is no right to administrative review to confirm costs under this section if they have been previously upheld in an abatement or other administrative hearing.

SECTION 1013. Hearing.

Prior to seeking a civil penalty under Section 1003, terminating service under Section 1007, revoking a permit under Section 1008, correcting a violation under Section 1010, seeking a temporary restraining order or injunction under Section 1011, taking action to abate a nuisance under section 1009 or referring a violation for criminal prosecution under Sections 1006 or 1009, the Board shall conduct a hearing to consider the proposed action. The person or persons affected by the proposed action shall be given at least ten (10) days' notice of the hearing and shall be given the opportunity to present evidence and testimony relating to the matter. Such affected person or persons shall be notified of the decision made by the Board and such decision shall be final. Notwithstanding the foregoing, unless otherwise required by law, neither a hearing nor prior notice to affected persons shall be required in cases in which immediate action must be taken in order to prevent injury to persons or serious damage to property as a result of a violation hereunder. In the event the District seeks to impose an administrative penalty under Section 1004, the notice and hearing provisions specified therein shall apply.

SECTION 1014. Remedies Cumulative.

The enforcement procedures set forth herein are in addition to and not in limitation of the enforcement procedures otherwise provided for by law. The District may utilize any available local, State or Federal enforcement procedures in addition to or in lieu of the procedures provided for hereunder."

ARTICLE XI

VARIANCES AND APPEALS

SECTION 1100. Variances.

Notwithstanding any other provision of this Code, the District Board may grant a variance from the terms, conditions, or charges as set forth herein where special circumstances make it reasonable to do so.

SECTION 1101. Appeals.

(01) Any customer, permittee, applicant, or other person aggrieved by any decision, action, finding, determination, order, or directive of the General Manager, made or authorized pursuant to the provisions of this Code, or any permit issued pursuant to this Code or interpreting or implementing same, may file a written request with the General Manager for reconsideration thereof within ten (10) days of such decision, action, finding, determination, or order, setting forth in detail the facts supporting such customer's or person's request for reconsideration. The General Manager shall render a formal decision within ten (10) days of the receipt of such request or reconsideration.

(02) Any customer, permittee, applicant, or other person aggrieved by the final determination of the General Manager may appeal such determination to the District Board within ten (10) days of notification by the General Manager of his final determination. Written notification of such appeal shall be filed with the Secretary of the District within ten (10) days after notification of the final determination of the General Manager, and shall set forth in detail the facts and reasons supporting the appeal. Hearing on the appeal shall be heard by the District Board within thirty (30) days from the date of filing the Notice of Appeal. The appellant, the General Manager, and such other persons as the District Board may deem appropriate, shall be heard at the hearing on such appeal. Upon conclusion of the hearing, the District Board may affirm, reverse or modify the final determination of the General Manager as the District Board deems just and equitable, and in furtherance of the provisions, purposes and intent of this Code. The District Board's determination on the appeal shall be final.

ARTICLE XII

VALIDITY

SECTION 1200. Severability.

If any section, subsection, sentence, clause or phrase of this Code is for any reason held to be invalid, unconstitutional or unenforceable, such holding shall not affect the validity of the remaining portions of this Code. To this end, the provisions of this Code are severable.

SECTION 1201. Declaration.

The District Board hereby declares that it would have based the provisions of this Code, and each section, subsection, sentence, clause and phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid, unconstitutional or unenforceable.

ARTICLE XIII

CODE OF GENERAL REGULATIONS IN FORCE

SECTION 1300. Full Force and Effect.

This Code of General Regulations shall be in full force and effect from and after its passage, approval and publication as provided by law.

SECTION 1301. Passed and Adopted.

Passed and adopted by this District Board of the West Bay Sanitary District, County of San Mateo, State of California, on the 22nd day of November, 1982, by the following vote:

Ayes: Boyce, Halbo, Inglis

Nayes: None

Absent: Wear

Abstain: None

John Inglis, Jr.
President of the District
Board of the West Bay
Sanitary District, County of
San Mateo, State of
California

Attest:

Finn T. Halbo
Secretary of the District Board
of the West Bay Sanitary District
County of San Mateo, State of
California

THIS PAGE LEFT INTENTIONALLY BLANK



WEST BAY SANITARY DISTRICT AGENDA ITEM 13

To: *Board of Directors*

From: *Sergio Ramirez, General Manager*

Subject: *Consider Adopting Regulation Amending the General Code of Regulations to adopt updated Standard Specifications (Section 400)*

Background

Section 400 of the District's General Code of Regulations reads:

"Standard Specifications for Sanitary Sewer Construction - 1979", Part D - Technical Specifications, revised March, 1980 and further revised June 2015, promulgated by the District, as they may be hereafter amended from time to time, are hereby adopted as the standard specifications of the District governing the manner of construction, repair, maintenance and operation of all sanitary wastewater facilities within the District. These standard specifications are incorporated herein by reference. Copies of the standard specifications shall be available for examination in the District's Administration Office at all times.

Analysis

The purpose of the Standard Specifications is to provide direction in the application of improvements which are to be dedicated to the public and accepted by the District for maintenance and operation. The Standard Specifications must change as industry standards, procedures, and materials are updated and amended. The proposed changes updates the Standard Specification with current Uniform Plumbing Code requirements and best practices.

Fiscal Impact

None

Recommendation

The General Manager recommends the Board adopt a regulation amending the General Code of Regulations to adopt updated Standard Specifications (Section 400) and, by motion, approve the proposed ordinance.

WEST BAY SANITARY DISTRICT

GENERAL REGULATION NO. _____

**A GENERAL REGULATION AMENDING GENERAL REGULATION NO. 58
"A GENERAL REGULATION ADOPTING CODE OF GENERAL REGULATIONS"**

BE IT ORDAINED AND ENACTED BY THE District Board of West Bay Sanitary District that General Regulation No. 58, "A General Regulation Adopting Code of General Regulations," passed and approved on November 27, 1982, as heretofore amended, is hereby further amended as follows:

Article IV, Section 400 ~~is are~~ hereby amended in ~~its their~~ entirety to read as follows:

"Standard Specifications for Sanitary Sewer Construction - 1979", Part D - Technical Specifications, revised March, 1980 and further revised June 2015, promulgated by the District, as they may be ~~hereafter~~ amended from time to time by separate resolution of the District Board, are hereby adopted as the standard specifications of the District governing the manner of construction, repair, maintenance and operation of all sanitary wastewater facilities within the District. These standard specifications are incorporated herein by reference. Copies of the standard specifications shall be available for examination in the District's Administration Office at all times.

Passed and approved by the District Board of the West Bay Sanitary District on June 28, 2023 by the following vote:

Ayes:

Noes:

Abstain:

Absent:

President of the District Board of the West Bay
Sanitary District, County of San Mateo, State of
California

Attest:

Secretary of the District Board of the
West Bay Sanitary District, County of
San Mateo, State of California

WEST BAY ~~logo~~
SANITARY DISTRICT
~~SAN MATEO COUNTY, CALIFORNIA~~



STANDARD SPECIFICATIONS
FOR
DESIGN AND CONSTRUCTION OF
SANITARY SEWER COLLECTION AND
CONVEYANCE FACILITIES

~~May 2015~~ ~~June 28~~ ~~March 30, 2023~~ ~~June 24, 2015~~

West Bay Sanitary District
500 Laurel Street
Menlo Park, CA 94025
(650) 321-0384
www.westbaysanitary.org

Formatted: Centered

Formatted: Centered

Delete WEST BAY
SANITARY DISTRICT
SAN MATEO COUNTY, CALIFORNIA

STANDARD SPECIFICATIONS
FOR
DESIGN AND CONSTRUCTION OF
SANITARY SEWER COLLECTION AND
CONVEYANCE FACILITIES

~~May 2015~~ June 24, 2015

West Bay Sanitary District
500 Laurel Street
Menlo Park, CA 94025
(650~~415~~) 321-0384

PART A

GENERAL INFORMATION

SECTION A1 - INTRODUCTION AND SCOPE

SECTION A2 - DEFINITIONS

SECTION A1 - INTRODUCTION AND SCOPE

A1.01 INTRODUCTION

These Standard Specifications shall govern the design and installation of sanitary sewage collection and conveyance facilities under the jurisdiction of the West Bay Sanitary District. Reference is made hereby to the ordinances, rules and regulations of the District regarding sewage collection which shall be considered a part of these specifications as set forth in full, specifically Code of General Regulations Article IV.

The District's Standard Specifications have been prepared to aid all persons engaged in the design or construction of sewerage facilities for the District. These specifications are periodically updated to reflect changes in the technology affecting the District's sewerage facilities. Copies of changes will be distributed to interested parties upon receipt of request to the District office.

The information contained herein is not intended to be used as a contract document either for contracts between the District and a contractor or for contracts between a subdivider or private person and a contractor. Separate contract documents must be prepared for each project, with each such contract containing a "Special Provisions" section applicable to that particular project. In such contracts, construction details included herein may be included by reference.

The District Standard Specifications are divided into four parts, each of which is briefly described below:

1. Part A - General Information

Part A includes a general description of the intent and purpose of the District's Standard Specifications, a brief description of the District's Master Sewerage Plan, and definitions of terms used herein.

2. Part B - Design Standards

Part B describes standards to be used in the design of all sewerage facilities for the District.

3. Part C - Construction Standards

Part C, written in the form of typical specifications, covers the District's construction standards. These standards must be followed in any work constructed for the District's acceptance, and may be included by reference in construction contracts.

4. Part D - Standard Drawings

Part D consists of standard drawings and details which must be followed where applicable, in any work done for the District's acceptance.

A1.02 DISTRICT BOUNDARY

The boundary of the West Bay Sanitary District is available at the District Office. All sanitary sewers constructed within that boundary come under the jurisdiction of the District and must comply with the standards set forth herein.

A1.03 MASTER SEWERAGE PLAN

In July 2011, the District Board of the West Bay Sanitary District officially adopted a report entitled "[Wastewater](#) Collection System Master Plan" to serve as a guide for future construction of sewerage system facilities. [The Master Plan was revised in 2013.](#)

Formatted: Not Highlight

That report identifies existing wastewater collection capacity and structural deficiencies and provides a staged capital improvements program to correct the existing deficiencies and to insure adequate capacity over the next [120](#) years to buildout of the service area. Copies of the report are on file in the District Office and it is suggested that any person who proposes to construct sewers within the District consult the report prior to design or layout.

PART B

DESIGN STANDARDS

SECTION B1 - GENERAL REQUIREMENTS

SECTION B2 - GRAVITY SEWERS, FORCE MAINS, STEP,
AND GRIDER SYSTEMS

which in the opinion of the Engineer do not conform to the drawings and specifications or are otherwise unsatisfactory.

12. "Directed", "designated", "permitted", "required", "accepted", and words of like import, wherever and in whatever manner used, with or without reference to the Engineer, means as directed, designated, permitted, required, and accepted by the Engineer.
13. DISTRICT shall mean the West Bay Sanitary District.
14. DISTRICT ENGINEER as used in these specifications shall be taken to designate the party or parties authorized or employed by the District to observe completed work, and to observe their general compliance with plans, specifications, design and planning concept.
15. ~~DISTRICT~~ GENERAL MANAGER shall mean the person appointed by the Board to administer and enforce the rules and regulations of the District.
16. DWELLING shall mean any house, duplex, apartment, commercial establishment, or any other building to be connected to a public or main sewer.
17. GARBAGE shall mean solid wastes from the preparation, cooking, and dispensing of food and from the handling, storage, and sale of produce.
18. INSTALL, wherever and in whatever manner used, shall mean the installation complete in place of an item of equipment.
19. LATERAL SEWER shall mean the portion of a side sewer lying within a public street/easement connecting a building sewer to the main sewer.
20. MAIN SEWER shall mean a public sewer designed to accommodate more than one lateral sewer.
21. MASCULINE gender words include the feminine.
22. MAY, wherever and in whatever manner used, is permissive.
23. MULTIPLE DWELLING shall mean a building containing two or more units for rental, lease, or similar legal instrument, for residential occupancy purposes, including, but not limited to the following: Hotels, Motels, Auto Courts, Trailer Courts, Mobil Home Parks, Apartment Houses, Duplexes, Rooming Houses, Boarding Houses, and Dormitories.

Commented [FH1]: General

24. ORDINANCE shall mean the latest version of the West Bay Sanitary District's Code of General Regulations.
25. OUTSIDE SEWER shall mean a sanitary sewer beyond the limits of the District not subject to the control or jurisdiction of the District.
26. PERMIT shall mean any written authorization required pursuant to this or any regulation of the District for the installation of any sewerage works.
27. PERSON shall mean any human being, individual, firm, company, partnership, association and private or public and municipal corporation, the United States of America, the State of California, Districts, and all political subdivisions, governmental agencies and mandataries thereof.
21. PROVIDE, wherever and in whatever manner used, shall be understood to mean provide complete in place, that is, furnish and install.
22. PRIVATE SEWER shall mean that portion of a sewer serving an independent sewage disposal system not connected with a public sewer and which accommodates one or more buildings or industries.
23. PUBLIC NUISANCE shall mean continued habitation of any building or continued operation of any industrial facility in violation of the provisions the District's Ordinances, Rules or Regulations.
24. PUBLIC SEWER shall mean a sewer lying within a street or easement, and which is controlled by or under the jurisdiction of the District.
25. SANITARY SEWER shall mean a sewer which carries sewage and to which storm, surface, and ground waters are not intentionally admitted.
26. SEWAGE shall mean a combination of water-carried wastes from residences, business buildings, institutions, and industrial establishments.
27. SEWAGE TREATMENT PLANT shall mean any arrangement of devices and structures used for treating sewage.
28. SEWAGE WORKS shall mean all facilities owned or controlled by the District for collecting, pumping, treating, and disposing of sewage (Excepting private sewers).
29. SEWER shall mean a pipe or conduit for carrying sewage.
30. SHOWN, "indicated", "detailed", and words of like import, wherever and in

whatever manner used, with or without reference to the drawings, means shown, indicated or detailed on the drawings.

31. SHALL or "will", whenever used to stipulate anything, means shall or will be done or be performed.
32. SIDE SEWER shall mean the sewer line connecting any dwelling to a public sewer beginning at the foundation wall of any building and terminating at the main sewer and includes the building sewer and lateral sewer together.
33. SINGLE FAMILY DWELLING is defined to mean and refer to the place of residence, detached or attached unit, ~~—~~that can be legally owned by the occupant or occupants, including, but not limited to, condominiums, townhouses, houses or similar design.
34. SINGULAR words include the plural.
35. STANDARD SPECIFICATIONS shall mean a set of documents containing design and construction standards for all sewerage works within the District (i.e., this set of documents).
36. STATE STANDARD SPECIFICATIONS shall mean the Standard Specifications of the State of California, Business and Transportation Agency, Department of Transportation Standard Specifications, latest edition.
37. STORM SEWER OR STORM DRAIN shall mean a sewer which carries storm and surface ground waters and drainage, but excludes sewage and polluted industrial wastes.
38. STREET shall mean any public highway, road, street, avenue, alley, way, public place, public easement, or right of way.
39. SUBMITTED, wherever and in whatever manner used, means submitted to the Engineer for his acceptance.
40. SUFFICIENT, "necessary", "proper", "acceptable", "satisfactory", "desirable", and works of like import, wherever and in whatever manner used, with or without reference to the Engineer, means sufficient, necessary, proper, acceptable, satisfactory and desirable in the judgement of the Engineer.
41. USER shall mean any owner, possessor, tenant, occupier, inhabitant, holder or person owning or occupying premises which are connected

directly or indirectly with the sewage works of the District.

- 42. WASTEWATER FACILITIES shall mean any part of the sewage collection system of the District.
- 43. WORK means and includes anything and everything to be done for the execution, completion and fulfillment of the contract to the satisfaction of the District.
- 44. WORKING DAY is any day except Saturdays, Sundays, or legal holidays, on which the normal working forces of the Contractor may proceed with regular work on the controlling operation or operations on the accepted work schedule for at least six hours toward completion of the contract, unless work is suspended for causes beyond the Contractor's control.

END PART A

SECTION B1 - GENERAL REQUIREMENTS

B1.01 SCOPE

This section covers the general design requirements and design criteria applicable to the sewerage system as a whole.

B1.02 DESIGN CALCULATIONS

Design calculations submitted for District review shall be in a neat, acceptable form, and shall indicate the date, signature of the supervising engineer, and ~~his~~ their State of California Engineering Registration Number and expiration date.

1. When Required

Design calculations along with maps and supporting data will be required for all subdivisions, industrial or commercial developments or when in the judgment of the District such information is necessary.

2. Sewers and Pipelines

Design calculations for sewers and pipelines shall be presented in tabular form and shall include the following information for each section of sewer: terminal manhole designation, ground elevations at the terminal manholes, incremental and cumulative tributary areas, incremental and cumulative tributary populations, incremental average and maximum domestic sewage flow, incremental infiltration allowance, cumulative design flow, invert elevations for terminal manholes, length of sewer run, and sewer size, slope, capacity, and velocity.

3. Pump Stations

Design calculations for pump stations shall include the following information: pad elevation at pump station surface, invert elevation of wet well, invert elevation of incoming and outgoing piping, headloss calculations, anticipated incoming flow calculations, pump run time calculations, wet well storage calculations, peak flows, system curve/pump curve overlay, and velocity through force main.

B1.03 UNIT DESIGN FACTORS

1. Population Densities

Population densities for determining ultimate tributary population shall be as indicated in the District's "Master Plan" of July 2011, updated in 2013, or the latest revision on file at the District's Office or applicable City or County General Plan. Indicated densities shall be modified where conditions are known to be different. In the case of such modification, the applicant shall submit substantiating data.

2. Sewage Flow

- a. Per Capita Domestic Sewage Flow. The average dry weather per capita domestic flow shall be 85-80 gallons per day.
- b. Domestic Flow The average dry weather flow per single family dwelling and/or equivalent shall be 200 gallons per day.
- c. Ratio of Peak to Average Flow. The ratio of peak to average dry weather sewage flow is a function of the tributary population, and the tabulated values below shall be used.

<u>TRIBUTARY POPULATION</u>	<u>RATIO OF PEAK TO AVERAGE SEWAGE FLOW</u>
1,000 and less	5.0
2,000	4.4
3,000	4.0
4,000	3.7
5,000	3.5
10,000	3.2
20,000	2.8
50,000	2.4

Formatted: Not Highlight

- d. Infiltration. The infiltration allowance for areas to be served shall be 600 gallons per acre per day or 500 gallons per inch diameter per mile per day whichever is larger.
- e. Inflow Sources. No inflow sources which include rainwater, stormwater, groundwater, street drainage, subsurface drainage, roof drainage, yard drainage, and water from yard fountains, ponds, lawn sprays or swimming pools or any other uncontaminated water shall

Formatted: Not Highlight

be discharged into the public sewer.

- f. Commercial: Average dry weather flow rate of 90 gallons per day per 1,000 square feet or 2,500 gallons per acre per day.
- g. Office: Average dry weather flow rate of 300 square foot per employee and 15 gallons per day per employee or 2,000 gallons per day per acre.
- h. Restaurant: Average dry weather flow rate of 1 gallon per day per square foot.
- i. Industrial: Average dry weather flow rate of 3,000 gallons per acre per day.
- j. A minimum peak design value of 10,000 gallons/day per acre shall apply in all cases.

SECTION B2 - GRAVITY SEWERS, FORCEMAINS AND PRESSURE SYSTEMS

B2.01 SCOPE

This section covers basic design criteria and standards relating to gravity sewers, forcemains, and pressure systems.

B2.02 GRAVITY SEWERS

Design calculations for sewers and pipelines shall be presented in tabular form and shall include the following information for each section of sewer: terminal manhole designation, ground elevations at the terminal manholes, incremental and cumulative tributary areas, incremental and cumulative tributary population, incremental average and maximum domestic sewage flow, incremental infiltration allowance, cumulative design flow, invert elevations of terminal manholes, length of sewer run, and sewer size, slope, capacity, and velocity.

Gravity sewers shall be designed for obtaining reareation velocities and to prevent sulfide buildup by maintaining a self oxidizing condition. No surcharging of gravity sewers shall be allowed. Inverted siphons shall be avoided if at all possible. Design criteria for inverted siphons shall be established by the engineer on an individual basis only.

1. Minimum Size Main Sewer

The minimum diameter for main sewers shall be 8-inches. The use of 6-inch pipe may only be allowed for the following conditions, and if approved in writing and in advance by the General Manager:

- a. Little or no possibility of future extension.
- b. Maximum tributary population of 25.
- c. Minimum slope of 1 percent on dead-end runs less than 200 feet in length.

2. Gravity Sanitary Sewer Lateral Connections

The minimum diameter for gravity sewer laterals shall be 4-inches. For gravity sewer laterals serving commercial or industrial buildings, or multiple family living units having more than three units, the minimum diameter shall be 6-inches.

The General Manager may grant a variance for commercial or industrial buildings, with only restroom facilities, to allow the use of a 4-inch side sewer. Such use must be guaranteed for future use of the facilities and no additional change will be allowed.

3. Minimum Slopes

The minimum slope of gravity sewer laterals shall be 2 percent for 4-inch sewers and 1 percent for 6-inch sewers. The minimum slope for main sewers shall be that required to obtain a velocity of 2 feet per second when the sewer is flowing full or one-half full. For the purpose of computing velocity, the Manning's coefficient of roughness "n" shall be 0.015 for sewers 8-inches in diameter and smaller, and 0.013 for sewers larger than 8-inches in diameter.

4. Steep Slopes

Special design features may be required for main sewers installed on steep slopes. Depending upon conditions of the specific installation, such items as underdrains, check dams, special anchorage, or special pipe material may be required. Based upon data supplied, the General Manager will assess each case and recommend certain special requirements.

5. Minimum Depth

The minimum depth of cover for any public sewer shall be 3 feet. If it is impossible to obtain the specified minimum depth, the sewer shall be either PVC-C900 -DR 18 or ductile iron pipe for the entire length from manhole to manhole.

For gravity sewer laterals, minimum depths of cover shall be 3 feet, from property line to connection to sewer main. Where the minimum depths of cover ~~is-are~~ impossible to obtain, the use of GREEN PVC-C900 DR 18, or polyethylene encased ductile iron pipe will be required.

The use of public or gravity sewer laterals with less than 2 feet of cover will require advance, special approval from the General Manager. Concrete Caps will not be permitted except where specifically approved by the General Manager.

6. Manholes

Manholes shall be provided at every line or grade change and at every

point where the sewer changes size or material. In addition, manholes shall be provided at maximum intervals of 300 feet on sewers 21-inches in diameter and smaller, and 400 feet on sewers larger than 21-inches in diameter.

7. Flushing Inlets, ~~or~~ Rod Holes, Riser Clean Out

Flushing inlets, ~~or~~ Rod Holes, or Riser Clean Out will not be allowed.

8. Types of Pipe Permitted

Complete specifications for all approved pipe materials are given in Article C5.02. Limitations on the use of specific pipe materials are listed below.

a. Gravity Sewers. Corrugated Mmetal, ABS, high density polyethylene pipe and Rreinforced Cconcrete pipes will not be permitted except where specifically approved by the General Manager., and aAsbestos Ceement pipes areis not permitted. High Density Polyethylene pipe for sewer laterals will not be serviced by District personnel. Plastic pipe with slopes greater than 10 percent will not be permitted except where specifically approved in advance by the General Manager.

b. Force Mains. In general, any pressure pipe material listed in Article C5.02 may be used. Asbestos cement pressure mains are not permitted.

The General Manager is the sole judge as to what types of pipe may or may not be used for each specific project.

9. Cleanouts

Each side sewer shall have a cleanout installed, at the property line, as shown on District Standard Drawing No. 7. The cleanout shall be the same size as the lateral. Each side sewer shall have a cleanout installed at the property line as per the requirements of the District's Code of General Regulations.

10. Backwater ~~Check~~-Valve / Backflow Prevention Device

Gravity sewer laterals connecting houses having a finished floor elevation less ~~than~~ 12" above the top elevation of the nearest upstream structure (manhole) shall have a backwater ~~check~~-valve as required by the Uniform Plumbing Code. When conditions exist where the sewage cannot overflow

on the area surrounding such installation without damage to property, a Backwater ~~Check Valve and Shutoff System~~ shall be installed. The Backwater Valve shall be installed upstream of the property line cleanout, as shown on District Standard Drawing No. 13

11. Sampling Manhole

When required by the ~~District~~**General Manager**, any property served by a building sewer carrying non-residential wastes shall install a suitable control manhole in the building sewer in place of a cleanout as shown on District Standard Drawing No. 14.

Commented [FH1]: General

12. Trace Wire

All new gravity sewer laterals and public main sewers shall have coated #8 gauge copper wire for tracing purposes placed over the pipe.

~~13.~~ Root Control

~~All pipe joints shall be wrapped with an approved root control fabric, such as Biobarrier root control system or equal, to prevent future root intrusion into the new sewer. Root Control shall be placed over all joints, including laterals.~~

134. Lateral Abandonment

Formatted: Highlight

Laterals to be abandoned shall be disconnected at the main sewer connection as shown on District Standard Drawing No. ~~2425~~. Laterals to be re-used shall be disconnected at the property line. ~~The District shall approve a~~All lateral abandonments must be pre-approved by the District.

B2.03 FORCEMAINS

1. Forcemains shall be designed using a Hazen and Williams coefficient for roughness "C" of 100 for non-plastic pipe, and 130 for plastic pipe.

2. Minimum Size Forcemain

The minimum diameter forcemain shall be 3-inches for septic tank effluent pumping (STEP) systems, 2-inch for grinder pump systems, and 4-inches for raw wastewater pump stations. Forcemains shall be sized for a

maximum fluid velocity of 8 feet per second and of a pressure not to exceed half the pressure rating of the pipe, unless approved by the General Manager.

3. Slope and Termination

Forcemains shall have a uniform slope preventing high spots forming possible air pocket traps. Where high spots cannot be prevented, suitable air- and/or vacuum release valve shall be installed at the high points. Each forcemain shall terminate in a vented transition structure designed to provide hydraulic characteristics compatible with the pump performance curve.

4. Maximum Size Forcemain

Forcemains shall be sized to carry grit and settleable solids expected in sewage tributary to the pump station. Minimum velocities of 2 feet per second should be maintained. Long forcemains and transition structures shall be designed resistant to corrosion resulting from sulfide generation.

5. Thrust Blocks

Concrete thrust blocks must be provided at all bends of the forcemain with angles 11 degrees or more. Thrust block must be sized based on soil conditions and maximum force exerted.

B2.04 PRESSURE SYSTEMS

1. SEPTIC TANK EFFLUENT PUMPING (STEP) SYSTEM (within On-Site Wastewater Disposal Zone)

a. Size of Septic Tank

1. Residential

2,500 gallons as shown on Standard Detail [No. 18](#).

2. Commercial

Sewage flow up to 1,500 gallons per day: Daily Flow x 1.5

Sewage flow over 1,500 gallons per day: Daily Flow x 0.75 + 1,125

Reserve Capacity add: 500 gallons

b. Design

Formatted: Not Highlight

1. Septic tanks shall have two compartments, as shown on Standard Detail No. 18.

2. Septic tanks shall conform to the standards outlined by the San Mateo County Environmental Health Department, specifically in the manual for Septic Tank Practice, dated , and available at of the San Mateo County Environmental Health Services, as well as any other- or applicable jurisdictional requirements. U.S. Department of Health, Education and Welfare.

Formatted: Not Highlight

3. Septic tanks shall be of reinforced concrete material unless otherwise approved by the General Manager.

4. Septic tanks shall be structurally designed to withstand all anticipated earth, vehicle, or other loads. Complete plans and design calculations for the tanks shall be submitted to the District for pre-approval.

Septic tanks shall be designed for the following minimum loading condition: Lateral Loads - -45 PCF (EFP).

5. Cleanout Stations shall be installed along the small diameter forcemain as shown on District Standard Drawing No. 11. The location of the cleanout station shall be submitted to the District for pre-approval.

6. The lateral discharge line shall be 1-1/4" HDPE pipe from the STEP system pumps to the small diameter forcemain.

7. For each STEP system, a Lateral Check Valve Station shall be installed along the lateral discharge line as shown on District Standard Drawing No. 12. The location of the Lateral eCheck vValve sStation shall be submitted to the District for pre-approval.

8. A Control/Telemetry unit with electrical bypass shall be installed at the STEP system as shown on District Standard Drawing No. 17. The location of the Control/Telemetry unit shall be submitted to the District, and the Town of Portola Valley, and appropriate County jurisdiction for pre-approval. A dedicated phone line shall be supplied by the property owner for the telemetry system.

9. A Hose Bib shall be installed near the STEP system as shown on District Standard Drawing No. 15. The location of the Hhose bBib shall be submitted to the District for pre-approval.

10. Design plans and specifications shall direct the contractor to provide one spare pump to the District prior to the District's final approval of the system.
11. In the event that an on-site ejector pump is required to convey wastewater from a residential unit to the STEP system, the on-site ejector pump shall be sized to discharge at a rate no more than the STEP system discharge rate, ~~unless approved by the District.~~

c. Location

1. The septic tank shall be located so as to provide vehicle access for maintenance unless otherwise approved by the General Manager. The District shall pre-approve the location.
2. The septic tank shall be installed outside of traffic areas, including but not limited to below a driveway or parking area.
3. A fifteen (15) foot recorded ingress/egress and maintenance easement must be dedicated to the District to gain for access and maintenance of the septic tank pump.

Formatted: Underline

Formatted: Underline

2. GRINDER PUMP SYSTEM (Residential Only, in On-Site Wastewater Disposal Zone)

a. Minimum Size of Basin

1. Single Family Residential (simplex) 150 Gallons

Basin size must be submitted to the District for approval.

b. Design

1. Grinder pump system shall be a complete unit, including grinder pump, check valve, tank basin, electrical quick disconnect (NEMA 4X), pump removal system, shut-off valve, anti-siphon valve, internal wiring and controls. Grinder pump shall be as manufactured by Environmental One (e-one).
2. Concrete anchor shall be poured-in-place.
3. The pump shall be an integral, vertical rotor, motor driven, solids handling pump of the progressing cavity type with mechanical seal.
4. The pump shall be capable of delivering 15 gpm against a rated total dynamic head of 0 feet and 9 gpm against a rated total dynamic head of 138 feet. The pump must also be capable of operating at negative total dynamic head without overloading the motor. Under no conditions shall in-line piping or valving be allowed to create a false apparent head.
5. The grinder shall be placed immediately below the pumping

elements and shall be direct-driven by a single, one-piece stainless steel motor shaft. The grinder impeller assembly shall be securely fastened to the pump motor shaft.

6. ~~A~~ Cleanout Stations shall be installed along the small diameter forcemain as shown on District Standard Drawing No. 11. The location of the cleanout station shall be submitted to the District for pre-approval.
7. The lateral discharge line shall be 1-¼" from the grinder pump(s) to the small diameter forcemain.
8. For each Grinder pump ~~system~~system, a Lateral Check Valve Station shall be installed along the lateral discharge line as shown on District Standard Drawing No. 12. The location of the lateral check valve station shall be submitted to the District for pre-approval.
9. A Control~~Telemetry~~ unit shall be installed for the grinder pump(s) as shown on District Standard Drawing No. 17. The location of the Control~~Telemetry~~ unit shall be submitted to the District and the Town of Portola Valley for pre-approval. ~~A dedicated phone line shall be supplied by the property owner for the telemetry system.~~
10. A Hose Bib shall be installed near the grinder pump(s) as shown on District Standard Drawing No. 15. The location of the ~~H~~hose ~~b~~Bib shall be submitted to the District for pre-approval.
11. Design plans and specifications shall direct the contractor to provide one spare pump to the District prior to the District's final approval of the system.
12. In the event that an on-site ejector pump is required to convey wastewater from a residential unit to the grinder pump, the on-site ejector pump shall be sized to discharge at a rate no more than the grinder pump discharge rate, ~~unless approved by the District.~~

c. Location

1. The grinder pump system shall be located so as to provide vehicle access for maintenance unless otherwise approved by the General Manager. The District shall pre-approve the location.
2. The tank shall be installed outside of traffic-vehicular access areas, including but not limited to below a driveway or parking area.

Formatted: Underline

Formatted: Underline

Formatted: Underline

- |
3. A ~~fifteen~~ (150) foot recorded permanent easement must be dedicated to the District to gain access and maintain the pump(s).

END PART B

SECTION C1 - SPECIAL CONDITIONS AND CONSTRUCTION REQUIREMENTS

C1.01 ARRANGEMENT OF SPECIFICATIONS

The Construction Standards are arranged in sections covering various phases of the work as follow:

<u>SECTION NUMBER</u>	<u>TITLE</u>
C1	Special Conditions and Construction Requirements
C2	Earthwork
C3	Concrete Work
C4	Metal Work
C5	Pipelines and Sewers
C6	Painting
C7	Resurfacing
C8	Sewer Line Cleaning
C9	Smoke Testing
C10	Sewer Flow Control
C11	Television Inspection
C12	Pressure Systems
C13	Grease Interceptors

C1.02 STANDARD SPECIFICATIONS

Whenever Standard Specifications, codes, or regulations are referred to, they shall be the latest edition of those specifications, codes, or regulations, and they shall be considered to be a part of these standard insofar as they apply. Such documents from the following sources may be referred to herein:

- American Assoc. of State Highway and Transportation Officials (AASHTO)
- American Concrete Institute (ACI)
- American Gas Association (AGA)
- American Institute of Electrical Engineers (AIEE)
- American Institute of Steel Construction (AISC)
- American National Standards Institute, Inc. (ANSI)
- American Public Works Association (APWA)
- American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)
- American Society for Testing and Materials (ASTM)
- American Welding Society (AWS)
- American Water Works Association (AWWA)
- State of California, Department of Transportation (CalTrans)
- State of California, Division of Occupational Safety and Health (CAL OSHA)
Construction Safety Orders

- Federal Environmental Protection Agency (EPA)
- Federal Specifications (Fed. Spec.)
- National Electrical Manufacturers' Association (NEMA)
- National Lumber Manufacturers' Association (NLMA)
- Uniform Building Code (UBC)

C1.03 EXISTING UTILITIES

The Contractor shall maintain all water or sewer lines, lighting, power or telephone conduits, structures, house connection lines, datacom, gas, and other surface or subsurface of any nature that may be affected by the work. Should it be necessary in the performance of the work to disconnect or reroute any underground utility, or should any such utility be damaged during construction, all expenses of whatever nature arising from such disconnection, rerouting, damage or replacement shall be borne by the Contractor.

The District reserves the right, if requested by the utility owner, to permit the utility owner to move or maintain any such conflicting utility at the Contractor's expense.

The right is reserved by the State, the County, the applicable City or the District, and by owners of public utilities, to enter upon any street or road right-of-way, or easement for the purpose of maintaining their property and for making necessary repairs or changes caused by the work.

C1.04 DUST CONTROL

The contractor shall provide rReasonable means ~~shall be provided~~ to prevent a nuisance occurring due to dust from areas under construction. Such means shall include watering and sweeping, and in cases of extreme nuisance, light oiling of the affected surface.

C1.05 ENCROACHMENT PERMITS

Before any construction commences, the Contractor shall obtain any Encroachment Permit from the jurisdiction in which the work is located. All work done in City, Town, and County streets shall be subject to the requirements of the City, Town and/or County as included in the Encroachment Permit. Other jurisdictional agencies requiring encroachment permits are Caltrans and San Francisco Water. The Contractor shall provide a copy of any encroachment permit upon request by the District.

C1.06 WORK WITHIN RAILROAD AND HIGHWAY RIGHT-OF-WAYS

Construction within the Railroad and State Highway right-of-ways shall be subject to utility Encroachment Permits provided by the Railroad Company, Joint Powers, or CalTrans. Contractor is solely responsible for obtaining any necessary Encroachment Permits for the work.

C1.07 WORK IN EASEMENTS

Before construction commences on an easement, the District must have in its possession a fully signed copy of the Deed of Easement to the District. Should an area greater than that included in the easement be required for construction purposes, the Contractor shall negotiate for use of the additional area from the property owners. Fences, structures, and landscaping, which are removed and damaged by the Contractor, shall be restored as nearly as possible to their original condition at the Contractor's sole expenses. Contractor to provide video of each site prior to start construction. Any damage caused by the Contractor's operations shall be the Contractor's sole responsibility.

Formatted: Font: 12 pt

The Contractor shall obtain a signed release from the affected property owner(s) after the work is completed. Contractor shall provide a copy of the signed release to the District upon request by the District.

C1.08 OPERATION OF EXISTING FACILITIES

Existing sewerage facilities shall be maintained in service at all times during and after construction. The Contractor shall devise acceptable methods for maintaining continuity of service equal to that which existed prior to construction. If bypassing is required, the Contractor shall demonstrate bypassing operations to the District for approval prior to start of excavation.

Existing sewer manholes to be abandoned shall be broken up at the bottom and filled with structural backfill, the top three feet shall be removed, cone section crushed, and their frames and covers shall be salvaged by the Contractor. These District owned frames and covers shall be delivered by the Contractor to a location within the District designated by the District ManagerGeneral Manager.

Formatted: Not Highlight

The Contractor shall notify the District in writing at least seven days in advance before of connecting a new sewer line ~~is to be connected~~ to an existing sewer.

To prevent dirt, rocks, and other debris from entering the sewerage system, the Contractor shall install and maintain an acceptable grit interceptor in a manhole designated by the District ManagerGeneral Manager.

C1.09 SAFETY AND HEALTH PROVISIONS

The Contractor shall conform to all applicable occupational safety and health standards, rules, regulations and orders established by Federal and State Agencies, including but not limited to those related to pandemics, as necessary, at its sole cost and expense.

All working areas utilized by the Contractor to perform work during the hours of darkness, shall be lighted to conform to the minimum illumination intensities established by California Division of Occupational Safety and Health Construction Safety Orders (CAL OSHA).

All lighting fixtures shall be mounted and directed in a manner precluding glare to approaching traffic.

Specific attention is directed also to OSHA safety rules, regulations and precautions to be taken by the Contractor before entering sanitary sewer manholes, and other sanitation structures with respect to physical and chemical hazards which may be present.

C1.10 HAZARDOUS MATERIALS

If the Contractor encounters material on the site, which it reasonably believes may contain asbestos, Polychlorinated Biphenyl (PCB) or other suspected hazardous materials, the Contractor shall immediately (i) secure or otherwise isolate such condition, (ii) stop work in the affected area, —and (iii) notify the District ManagerGeneral Manager within 24 hours of Contractor's knowledge of the presence of the hazardous materials. The Contractor shall proceed with analysis, removal, and disposal of the hazardous material only upon approval by the General Manager and only according to applicable federal and state guidelines.

C1.11 CONTRACTOR'S SUBMITTAL

Shop drawings or information regarding materials and equipment shall be submitted to the District in five copies. The District, after taking appropriate action, will return two marked copies to the Contractor.

C1.12 TRAFFIC CONTROL

The Contractor shall furnish Traffic Control Plans for all phases of work for the project site, as required by the governing jurisdiction of the right of way in which the work is planned, in conformance with Caltrans Standards. **No construction site work shall commence prior to the jurisdictional agencies' approval of the Traffic Control Plans and installation of required signs.**

No material or equipment shall be stored where it will interfere with the safe

passage of public traffic. At the end of each day's work and at all other times when construction operations are suspended for any reason, Contractor shall remove all equipment and other obstructions from that portion of the roadway open for use by public traffic.

SECTION C2 - EARTHWORK

C2.01 SCOPE

Earthwork includes all plant, labor, equipment, appliances, and materials as required or necessary to excavate, trench, fill, backfill, and grade for the construction of structures, sewers, and graded areas.

C2.02 GENERAL REQUIREMENTS

1. Control of Water

The Contractor shall furnish, install, and operate all necessary machinery, appliances, and equipment to keep excavations reasonably free from water during construction and ~~he-it~~ shall properly dispose of the water so as not to cause injury to public or private property, or to cause a nuisance or a menace to the public. ~~He-Contractor~~ shall at all times have on hand sufficient pumping equipment and machinery in good working condition for all ordinary pumping and emergencies and shall have available at all times competent mechanics for the operation of all pumping equipment.

The control of ground water shall be such that softening of the bottom of the excavation, or the formation of "quick" conditions or "boils" shall be prevented. Dewatering systems shall be designed to operate so as to prevent the removal of the natural soils.

During excavation, installation of sewers, placing of trench backfill, and the placing and setting of concrete, the excavation shall be kept reasonably free of water. When specified, the static water level shall be drawn down below the bottom of the excavation so as to maintain the undisturbed state of the natural soil and to allow the placement of backfill to the required density. The dewatering system shall be installed and operated so that the ground water level outside the excavation is not reduced to the extent that would damage or endanger adjacent structures or property.

The release of ground water to its static level shall be performed in such a manner as to maintain the undisturbed state of the natural foundation soil, prevent disturbances of compacted backfill, and prevent floatation or movement of structures and sewers.

If area is potentially contaminated or known to be contaminated, the Contractor shall notify the Regional Water Quality Control Board (RWQCB) prior to discharge of groundwater. Contractor shall adhere to the requirements of the RWQCB, including but not limited to-and obtaining a

[ground water discharge permit from the West Bay Sanitary District and its regional plant.](#)

2. Excavated Material

Arrangements for proper disposing of excess excavated material unsuitable for backfill shall be made by the Contractor at his own expense. Excavated material suitable for backfill shall be stored temporarily in such a manner as will facilitate work under the contract.

Except as indicated elsewhere in these specifications, excess materials from trench and structure excavation shall become the property of the Contractor and shall be properly disposed of and at an offsite location. The Contractor is responsible for obtaining all necessary easements, rights, and permits pertaining to such proper disposal. The Contractor shall furnish a copy of all such easements, rights, and permits to the District prior to disposal of excavated materials. All expenses involved with offsite disposal shall be borne by the Contractor.

3. Shoring, Sheet piling and Bracing

Where sheet piling, shoring, sheeting, bracing, or other supports are necessary, they shall be furnished, placed, maintained and removed by the Contractor. At all times during the work, the contractor shall strictly observe the rules of the California Department of Industrial Relations, Division of Industrial Accidents sec 6705, with respect to excavation and construction ~~shall be strictly observed~~. Sheet piling and other supports shall be withdrawn in such a manner as to prevent subsequent settlement of the pipe, or additional backfill on sewer lines which might cause overloading.

Pursuant to State law, including but not limited to Labor Code Section 6705 and Public Contract Code Section 7104, all open excavations ~~greater of than~~ five feet or more shall be constructed with bracing, shoring, or other equipment method designed for the protection of life and limb, including but not limited to submitting to District a detailed plan showing the design of such bracing, shoring, sloping, or other provisions to protect workers from the hazard of caving ground during trench excavation. No excavation shall be started until such plan has been approved by the District. The contractor must at all times comply with the requirements of the construction safety orders of the Division of Industrial Safety.

The minimum required protection will be that described in the Construction Safety Orders of the Division of Industrial Safety. It shall be the contractor's responsibility to provide the additional strength required to support the sides

of the excavation against loads that may exceed those employed to derive the criteria set forth in the Industrial Safety Orders. The contractor shall be solely responsible for any and all liabilities which may arise from ~~his~~-its failure to provide adequate shoring, bracing or sheeting as necessary to support the excavation under any and all of the conditions of loading which may exist or which may arise during construction.

In addition, the Contractor shall obtain, pay for, and comply with all provisions of the permit required by Section 6500 of the California Occupational Safety and Health Act.

The design, planning, installation, and removal of all shoring, sheeting, and bracing shall be by a registered engineer and accomplished in such a manner as to maintain the undisturbed state of the soil adjacent to the trench and below the excavation bottom.

4. Removal of Obstructions

The Contractor shall remove, or cause to be removed, all trees, including stumps, fences, and all structures where the proper construction and completion of the work require their removal. The Contractor shall also remove all rock, stones, debris, and obstructions or whatsoever kind or character, whether natural or artificial, encountered in the construction of the work.

Material that is removed as hereinabove specified, and is not to be incorporated in the improvement being constructed, shall be disposed of according to applicable laws by the Contractor at ~~his~~-its sole expense.

C2.03 CLEARING AND GRUBBING

1. Clearing shall consist of the satisfactory removal and disposal of vegetation designated for removal, including brush and rubbish occurring within the area to be cleared. Grubbing shall consist of the removal and disposal of matted roots from the designated clearing and grubbing areas. Clearing shall be limited to only the construction area and in no case shall it extend onto adjacent private property.
2. Unless otherwise shown or required, existing trees shall be preserved and protected. Limbs on trees which are to remain shall be trimmed by the Contractor in a professional manner if they interfere with construction to the satisfaction of the District and all local jurisdictions. ~~and City or Town.~~
3. Roots, brush, grass and other vegetation in areas to be cleared shall be

removed completely and disposed of properly and offsite by the Contractor.

4. The materials, together with organic items, masonry, concrete or metallic debris, in the clearing and grubbing areas shall be excavated and removed to a depth of not less than 12 inches below the original surface level of the ground.
5. Depressions made by grubbing shall be filled with approved material and compacted in accordance with Section C2.04.3 to make the surface conform with the original adjacent surface of the ground, or with the rough finish surface as shown on the drawings.
6. Brush, rotten wood, and other refuse from the clearing and grubbing operations shall be completely removed and disposed of by the Contractor unless the property owner requests in writing that the material to remain.
7. Permission to dispose of cleared and grubbed material on the property of others shall be in writing, and a copy of this permission shall be filed with the District General Manager.
8. Damages caused by the execution of this work shall be paid for by the Contractor.

C2.04 SITE GRADING

1. General Excavation

- a. General excavation shall be performed in the areas shown on the Drawings to bring surface levels to the elevations indicated. Excavation shall include the removal of earth, loose rock, boulders, and other items or materials encountered in the work.
- b. Common excavation shall include silt, clay, sand, gravel, topsoil, hard and compact materials such as hardpan, cemented gravel, shale, soft or disintegrated rock and boulders or detached pieces of solid rock or masonry less than 1/2 cubic yard in volume that can be removed by hand, power shovels, draglines and other excavating equipment and without continuous and systematic blasting or without the use of pneumatic tools for successful removal.
- c. Excavated material suitable for fill or backfill shall be stockpiled as needed on the site in an area designated by the District ManagerGeneral Manager. Stockpiles shall be graded to shed water. Excess excavation not required shall be removed from the

site and properly disposed of by the Contractor.

- d. Material found unsuitable for use as fill or backfill shall be removed from the site and properly disposed of by the Contractor at Contractor's sole expense.

2. Filling

- a. Fill required to bring low areas to grade shall be clean, non-expansive, selected material with a plasticity index (PI) less than 10 and maximum dimension of 6 inches. Fill shall be obtained from excavations on site, or from off-site borrow sources if the amount of suitable material from on-site excavation is insufficient. No rocks larger than 4 inches in maximum dimension shall be placed in the upper two feet of fill.
- b. Subgrades on which fill material is to be placed shall be scarified to a depth of not less than 4 inches by plowing or discing. A layer of suitable fill material, approximately 3 inches in depth, shall be spread over the scarified surface and compacted as specified herein.
- c. Dumping, spreading and compacting of fill material shall be carried out in sequence as closely as possible. Unless otherwise specified, fill material shall be spread and compacted in uniform layers not exceeding 8 inches in depth (loose measure) until the total thickness of fill, as shown on the Drawings, is completed.
- d. When the quantity of material required for filling is not available within the limits of the job site, the Contractor shall provide sufficient material to construct the fills to the lines, elevations and cross-sections as shown on the Drawings from offsite borrow areas. If required, borrow areas shall be provided by the Contractor and at his its sole expense. Borrow material shall meet the requirements and conditions of the fill in which it is to be deposited. Borrow areas selected by the Contractor and the materials contained there shall be approved by the District ManagerGeneral Manager—prior to the placing of any such materials excavated from the borrow pit in fill or backfill.
- e. Procedures and requirements specified here for other excavation are also applicable to excavation from borrow areas.

- f. The Contractor shall notify the ~~District Manager~~ General Manager at least 10 days in advance of the opening of any borrow pit to permit any necessary elevations or measurements to be taken or any desired material tests to be made.
- g. Aggregate Base where indicated on the Drawings shall conform to section 26, Aggregate Bases, of the State Standard Specifications for Class 2 Aggregate Base as to materials and workmanship.

3. Compaction

- a. Compaction of each fill layer shall be performed with equipment and methods approved by the ~~District~~ General Manager. Equipment shall be operated in one direction along the full length of each layer until the area has been thoroughly and uniformly compacted to the specified density. Fill areas shall be crowned and sloped to drainage ditches as shown on the Drawings, or as required to prevent ponding of surface water.
- b. In places inaccessible to rolling equipment, the required compaction may be obtained with mechanical tamps, single-shoe vibrators, or other approved equipment.
- c. Fills failing to meet the requirements for density, shall be further processed by mixing, rolling or other approved methods.
- d. Fill shall be compacted to 90 percent relative density per ASTM D 1557 test method.

4. Soil Testing

- a. A soil testing laboratory will be employed by the Contractor at ~~his~~ its ~~sole~~ expense to determine sieve analysis and Proctor curves necessary to make field density tests for all work pertaining to the general construction.
- b. Compaction density will be based on the percent of standard Proctor ASTM ~~D~~1557 for each of the materials and for the particular application as specified above.
- c. Method of determining the density in place of compacted soil will be in accordance with ASTM D2167.

- d. Density test will be run for each 1 foot of compacted fill unless otherwise required by the ~~District Manager~~General Manager and/or the jurisdictional agency.
- e. It will be the Contractor's responsibility to keep the fill material near the optimum moisture content so as to obtain proper compaction and to notify the Engineer in sufficient time to observe the necessary field density tests. It will be the responsibility of the ~~District Manager~~General Manager to determine the number and location of these tests.
- f. Proctor tests will be obtained at each new source of backfill material or when the characteristics of the material change sufficiently, in the opinion of the ~~District~~General Manager, to require further tests.
- g. A copy of all test results shall be provided to the District upon ~~the completion of the test~~each test's completion.

C2.05 EXCAVATION BACKFILL AND COMPACTION FOR STRUCTURES

1. Excavation

The site shall be cleared of all natural obstructions, pavement, utilities, and other items which will interfere with construction. Unless otherwise specified, any method of excavation may be employed which, in the opinion of the Contractor, is considered best.

Ground shall not be dug by machinery nearer than 3 inches from any finished subgrade without the express approval of the ~~District~~General Manager. The last 3 inches shall be removed without disturbing the subgrade. Should the excavation be carried below the required lines and grades because of the Contractor's operations, the Contractor at ~~his~~its own expense shall refill such excavated space to the proper elevation in accordance with the procedure specified for backfill, or if under footings, the space shall be filled with concrete as directed by the ~~District~~General Manager.

Bearing surfaces under footings and foundations shall be level, except as otherwise shown on the Drawings. Interfering boulders in bearing surfaces shall be removed and replaced with concrete, at least equal in strength to the soil bearing value of the surrounding or overlying soil, or interfering portions jack hammered out, as directed by the ~~District~~General Manager.

Should bearing surfaces under footings, foundations or slabs appear

inadequate at the design elevations for the loads indicated on the Drawings. ~~The~~ Contractor shall immediately notify the ~~District~~ General Manager. The Contractor shall then proceed in accordance with the ~~District~~ General Manager's direction.

Materials unsuitable for structure foundations encountered at the established elevation of the bottom of footings or the bottoms of floors of structures shall be removed to the depth required by the ~~District~~ General Manager. The volume resulting from the removal of such unsuitable materials shall be backfilled with material approved by the ~~District~~ General Manager and compacted to 95 percent of maximum density, as determined by ASTM D1557. ~~The m~~Method of determining the density in-place of compacted soil shall be in accordance with ASTM D2167.

Where, in the opinion of the District Manager, the undisturbed condition of the natural soil is not adequate to support the structure, the ~~District~~ General Manager shall direct the Contractor to over excavate to adequate supporting soil and refill the over excavated space as directed by the ~~District~~ General Manager. The quantity and placement of such material shall be as ordered by the ~~District~~ General Manager.

Excavation shall extend a sufficient distance from walls and footings to allow for placing and removal of forms, installation of services, and for inspection, except where concrete is authorized to be deposited directly against excavated surfaces or against existing concrete surfaces.

2. Backfill and Compaction

After completion of foundation footings and walls, and of other construction below the elevation of the final grade, all forms shall be removed and the excavation shall be cleaned of all debris. Substructure surfaces shall be waterproofed if required and as specified. Sheet piling shall not be removed until backfilling operations are completed.

The Contractor shall keep all excavations free of water at ~~his-its~~ own expense. Contractor ~~shall~~ provide all dams, flumes, channels, sumps, or other works necessary to keep the excavation entirely clear of water, and shall provide and operate pumps and other suitable equipment of adequate capacity for dewatering the excavations. Contractor shall avoid producing mud in the excavated bottom by ~~his-its~~ operations, and, if necessary or so ordered, shall place crushed rock at ~~his-its~~ own expense to maintain a firm dry excavated bottom and base.

Backfill shall be composed of clean natural material or imported material

acceptable to the ~~District-General~~ Manager. Backfill shall be placed in layers not exceeding 8 inches in loose depth and compacted by tamping or rolling. Jetting is not permitted.

The finished subgrade shall be brought to the elevations indicated on the Drawings and sloped to drain water away from the structure walls. Backfill shall be brought up to required elevations for any areas where settlement occurs. Density tests will be run for each 6 inches of compacted fill.

Backfill shall be placed against foundations and concrete walls only after approval of the ~~District Manager-General Manager~~ has been obtained. Backfill shall be placed and compacted so as to minimize settlement and avoid any damage to concrete walls, to waterproofing, and other work in place.

No backfill shall be placed against structure walls until test specimens indicate that the concrete has developed the required compressive strength. Backfill material shall be placed in such a manner that unbalanced loading will be prevented except in the case of retaining walls.

During backfilling, the Contractor shall take adequate precautions to prevent damage to or misalignment of work already in place, as a result of ~~his-its~~ methods of work, or the operation of ~~his-its~~ equipment, and shall pay the cost of rectifying any damage or misalignment thus caused. The District shall not be responsible for such operations or costs.

Compacted backfill shall not be placed when, in the judgement of the ~~District-General~~ Manager, the weather or the condition of the fill preclude obtaining the degree of compaction specified.

Regardless of the method of compaction, the final density shall be as shown in the District's Standard Detail No. 8 with a maximum density at optimum moisture as determined by AASHTO T180 or by California Test 216.

C2.06 EXCAVATION AND BACKFILL FOR SEWER LINES

1. Trench Excavation

Unless otherwise indicated on the plans or in the special conditions, excavation for sewer lines shall be by open cut. Trenching machines may be used except where their use will result in damage to existing facilities. For sewers to be constructed in filled areas, the entire area fill shall be placed and compacted to at least five feet above the proposed sewer invert

before the sewer trench is excavated.

Trenches shall be excavated at least 4 inches below the barrel of the pipe and the bottom refilled with select, virgin, imported material of the type specified under Article C2.06 2a - Bedding Material or as shown in the District's Standard Detail No. 8.

The maximum allowable width of trench measured at the top of the pipe shall be the outside diameter of the pipe, exclusive of bells and collar, plus 24 inches, and such maximum width shall be inclusive of all trench timbers.

A minimum of 6 inches shall be maintained between pipe and trench wall. Whenever the maximum allowable trench width is exceeded for any reason, the Contractor shall embed or cradle the pipe in a manner satisfactory to the District General Manager.

Excavations shall be supported as set forth in the rules, orders and regulations of the California Department of Industrial Relations, Division of Industrial Accidents. Sheet piling and other timbers shall be withdrawn so as to prevent subsequent settlement of the pipe, or additional backfill that might overload the pipe. No sheeting will be withdrawn from below the top of the pipe after completion of backfill to that level.

Where water is encountered in pipe trenches, the Contractor shall furnish^{1.5} install and operate such pumps or other devices that may be necessary for removing the water during the construction of the pipelines. Trenches shall be kept free from water while the pipe or other structures are installed, while concrete is setting and until backfill has progressed to a sufficient height to anchor the work against possible flotation or leakage. Water shall be disposed of in such a manner as not to cause injury to public or private property, or be a menace to the public health.

Whenever the bottom of the trench is rocky, soft, yielding, or in the opinion of the ~~District Manager~~ General Manager otherwise unsuitable as a foundation for pipe, the unsuitable material shall be removed to a depth such that when replaced with crushed rock it will provide a stable and satisfactory foundation. Special compaction of the imported material may be required.

Trenching adjacent to, or near, structures shall be made using construction methods that will not result in damage to the structure. Excess excavated material not required for backfilling shall be properly disposed of by the Contractor.

2. Trench Backfill

- a. Bedding Material. After the pipe has been properly laid and inspected, select, virgin, backfill material shall be placed under and around the pipe to a depth of 12 inches above the top of the pipe and shall be thoroughly consolidated to a final density of at least 90 percent of maximum density as determined by AASHTO T180 or by California Test 216. Consolidation shall be obtained by mechanical means. The select material shall be free from organic matter, and of such size and gradation that the desired compaction can be readily attained. The size of gradation shall fall within the following limits.

Bedding Material: Granular Bedding Requirements (ASTM D448 Size #67 and California Test 202).

<u>SIEVE SIZE</u>	<u>PERCENTAGE PASSING SIEVE</u>
1 inch	100
3/4"	90-100
3/8"	20-55
No. 4	0-10
No. 8	0-5

- b. Subsequent Backfill. Above the level of bedding material, the trench shall be filled with structural backfill as designated by Standard Detail No. 8. Backfill shall be placed in layers not exceeding 8 inches in loose depth and compacted by mechanical means to a density of not less than 95 percent maximum density at optimum moisture as determined by California Test 216 or 231 (Nuclear Gauge). In trenches where the structural backfill is deeper than 3.0 feet, the upper 3.0 feet of the structural backfill should be compacted to 95% relative compaction. Lower portions of the backfill material shall be compacted to a minimum of 90% relative compaction.

The size of gradation shall fall within the following limits:

Structural Backfill: Structural backfill requirements (CalTrans California Test 202) Minimum Sand Equivalent 20:

<u>SIEVE SIZE</u>	<u>PERCENTAGE PASSING SIEVE</u>
1-1/2"	100
3/4"	80-100
#4	30-60
#30	5-35

The finishing of the roadway (aggregate base and asphalt concrete) shall match the existing finishing and be constructed to the requirements of San Mateo County, Caltrans, ~~the Town or the City~~ the applicable town or city jurisdiction, whichever requirements apply.

Contractor shall provide a gradation analysis from the source or from a soil engineering firm to ascertain that the material used for bedding or structural backfill is in compliance with the District's Specifications.

C2.07 SITE DRAINAGE

The Contractor shall control the grading in the vicinity of any structure or trench such that the surface of the ground will be properly sloped to prevent water from running into the excavated areas. Excavation shall be formed in such a manner that the area of the site and the area immediately surrounding the site for a distance of 25 feet, including slopes and ditches, will continually and effectively drain away from the excavated areas.

Pumps and discharge lines of sufficient capacity to prevent the accumulation of groundwater and rain-water in the excavation shall be at the site and in proper operating condition at all times.

Except as authorized by the ~~District Manager~~ General Manager in writing, the excavation shall be continuously maintained dry until the progress of construction of the structure to be built in the excavation is above grade and the backfill is complete.

The Contractor's method for removal of water from foundation excavations shall be subject to the approval of the ~~District~~ General Manager.

Water discharged from the excavation shall be disposed of in a manner to protect the work and adjacent property from damage. Except when authorized by the ~~District~~ General Manager, no water shall be drained into work already built or under construction.

The Contractor shall be responsible for and shall repair at ~~his~~ its sole expense any damage to the foundations, structures, or any other part of the work caused by floods, water, or failure of any part of the diversion or protective work.

C2.08 CLEAN UP

The Contractor shall not allow the site of the work to become littered with trash and waste material but shall maintain the site in its normal neat and orderly condition throughout the construction period. On or before the completion of the work, the Contractor shall carefully clean out all pits, drain lines and drains, chambers or conduits and shall tear down and remove all temporary structures built by ~~him~~ Contractor and shall remove rubbish of all kinds from any of the grounds which ~~he~~ it has occupied and leave them in first-class condition.

After completing all work, the Contractor shall leave the site in a neat and clean condition, doing such grading as is required to restore the site to its original shape and configuration. Any existing features, improvements, structures, and other facilities damaged or affected by the work shall be replaced, repaired, or restored to their original condition or better.

C2.09 ARCHAEOLOGICAL MATERIALS

If archaeological materials are uncovered during earthwork or trenching, stop work within 100 feet of archaeological materials until a professional archaeologist certified by the Society of California Archaeology or the Society of Professional Archaeology has evaluated the significance of the find. Depending on significance of find, archaeologist may suggest mitigation measures.

In the event that archaeological remains are uncovered by work of ~~this-the~~ project and examination of remains delays Work, Contractor shall be entitled to an extension of contract ~~duration-time~~ equal to the number of days Contractor is delayed. Contractor shall not be entitled to an increase in contract sum. No compensation or additional time will be allowed for delays caused by examination of archaeological remains.

C2.10 DISCOVERY OF PROTECTED ANIMAL AND PLANT LIFE

If protected animal or plant life is discovered during earthwork or trenching, ~~the Contractor work~~ shall ~~be stopped~~ all work within 100 feet of the protected animal or plant life and immediately notify the District. The District will notify the effective agency and evaluate the significance of the find. Depending on significance of find, the District may suggest mitigation measures.

In the event that a discovery is uncovered by work of this project and examination of the discovery delays Work, Contractor shall be entitled to an extension of contract ~~duration-time~~ equal to the number of days Contractor is delayed. Contractor shall not be entitled to an increase in contract sum. No compensation or additional time will be allowed for delays caused by examination

of discovery of protected animal or plant life.

C2.11 STORM WATER POLLUTION PREVENTION PROGRAM

The Contractor shall confirm whether the project is subject to a local ordinance to control the discharge of pollutants into storm sewers ~~The City of Menlo Park adopted an ordinance to control the discharge of pollutants into storm sewers for to protect~~ing the water quality pursuant to the Clean Water Act. In order to implement the Federal Regulatory requirements, the Contractor and ~~his~~any subcontractors shall undertake all practicable measures specified herein to reduce pollutants.

The following are recommended construction materials handling and disposal practices for construction sites and a list of recyclers and disposal services to guide contractors/subcontractors in safe and non-polluting methods of disposal. ~~The City of Menlo Park~~The local jurisdiction will enforce any of the provisions of this Section. The violation of any provisions of this Section or failure to comply with any of the mandatory requirements of this Section ~~shall~~may constitute a misdemeanor to be charged and prosecuted ~~pursuant to local code as provided by City code.~~

A. ROADWORK AND PAVING: Road construction often involves extensive earth work and grading, which loosens soils and creates opportunities for erosion and deposition of sediments in storm drains and creeks. Road paving, surfacing and pavement removal happen right in the street where there are numerous opportunities for storm drain pollution by asphalt sawcut slurry or excavated material. Efforts should be made to store and dispose of materials properly and to guard against pollution of storm drains and creeks.

1. Check all equipment for leaks and repair leaking equipment promptly.
2. Perform major maintenance, repairs and washing of equipment away from storm drains and creeks.
3. When refueling or vehicle/equipment maintenance must be done on site, designate a completely contained area away from storm drains and creeks.
4. Recycle used oil to lubricate (clean equipment and/or parts).
5. Cover and seal catch basins and manholes when applying seal coats, slurry seal, and fog seal.
6. Never wash excess material from exposed aggregate concrete or similar treatments into a street or storm drain. Collect, recycle or dispose to dirt area.
7. Cover stockpiles and other construction materials with plastic tarps. Protect from rainfall to prevent run-off with temporary roofs or plastic sheets and berms.
8. Catch drips from paver with drip pans or absorbent material. Place under

machine when not in use.

9. Clean all Spills and leaks using “dry methods” and dig up and remove contaminated soil.
 10. Avoid creating excess dust when breaking asphalt or concrete. After breaking up of pavement, be sure to remove all chunks and pieces from the site.
 11. Protect nearby storm drain inlets during sawcutting. Shovel or vacuum sawcut slurry deposits and remove from the site. Never hose down streets to cleanup tracked dirt. Use dry sweep methods.
- B. HEAVY EQUIPMENT OPERATION: Poorly maintained vehicles and heavy equipment leaking fuel, oil, anti-freeze or other fluids on the construction site are common sources of storm drain pollution. Prevent spills and leaks by isolating equipment from fun-off channels and by watching for leaks and other maintenance problems. Remove such equipment from the site as soon as possible.
1. Maintain all vehicles and heavy equipment. Inspect frequently for and repair leaks.
 2. Perform major maintenance, repair jobs and vehicle **eg** equipment washing off site.
 3. If you must drain and replace motor oil, radiator coolant or other fluids on site, use drip pans or drop cloths to catch drips and spills. Collect all fluids, store in separate containers and recycle whenever possible or dispose of fluids as hazardous waste.
 4. Recycle used vehicle batteries.
 5. Never hose down “dirty” pavement or impermeable surfaces where fluids have spilled. Use dry clean-up methods whenever possible.
 6. Sweep up spilled dry materials immediately. Never attempt to wash them away with water **r** or bury them.
 7. Report significant spills to the appropriate spill response agencies immediately.

SECTION C3 - CONCRETE WORK

C3.01 SCOPE

Concrete work includes the construction of all manholes, footings, slabs, walls, supports, and other concrete items, complete with steel reinforcement. Concrete work shall include all material, labor, and other items necessary to construct concrete structures and appurtenances, specified and/or required to make the work complete and operable.

C3.02 MATERIALS

1. Cement

Portland cement concrete shall be Class ~~4~~A conforming to State Standard Specifications section 90, Portland Cement Concrete. Cement shall conform to Caltrans Standard Specification Section 90-1.01. Only one brand of cement shall be used for exposed architectural concrete throughout one structure or composite element. Insofar as possible, all cement used in the work shall be taken from stock bins at the place of manufacture.

Cement brought to the site of the work shall at all times be suitably stored and protected from exposure to the atmosphere. In the event the cement shows signs of deterioration, [in District's sole discretion](#), it shall be removed from the work unless additional tests show that it conforms to the requirements stated above.

2. Aggregate

Fine and coarse aggregate for concrete shall conform to ASTM C33 or to CalTrans Standard Specifications Section 90-2.02 "Aggregates" with the appropriate Test Methods designated therein. In reinforced concrete maximum size of aggregate shall be 1-1/2 inches except in slabs and walls 8 inches or less where 3/4 inch maximum aggregate shall be used.

3. Water

Water shall be any potable water, clean and free from injurious amounts of oil, acid, alkali, and organic materials.

4. Reinforcing Steel

Reinforcing steel shall consist of deformed bars and wire reinforcement.

Steel shall conform to ASTM A615 Grade 60 and State Standard Specification Section 52, Reinforcement. Deformation shall conform to ASTM A615. Wire reinforcement shall conform to ASTM A185, with mesh and wire sizes as specified.

5. Waterstops

Waterstops embedded in the concrete shall be 6 inch polyvinyl chloride. A sample shall be submitted to the General Manager for review. Waterstops shall be installed in as long lengths as possible. Joining splices and corners shall be heat fused in accordance with manufacturer's recommendations.

Formatted: Highlight

6. Joint Filler

Preformed joint fillers shall conform to ASTM D1751.

7. Joint Sealant

- a. General. For below ground installation or in areas not subject to architectural consideration, joint sealers shall be of the mastic type. For above ground installations or where architectural appearance is important, joint sealers shall be of the rubber sealant type.
- b. Underground Sealant. For sealing non-moving underground joints, construction joints and grooves in slabs, the sealant shall be "Permapol RC-550 Sealant" as manufactured by Products Research and Chemical Corporation, Gloucester City, New Jersey, and distributed by Sherwin Williams Company, Emeryville, California, or equal. The product is a two-component, nonsag, elastomeric epoxy sealant. Color shall be black. Application shall be as recommended by the manufacturer.
- c. Aboveground Sealant. For sealing exterior joints subject to structural movement, and for weathertight joints between various materials the sealant shall be "PRC Rubber Caulk 7000 Sealant" as manufactured by Products Research and Chemical Corporation, Gloucester City, New Jersey and distributed by Sherwin Williams Company, Emeryville, California, or equal. The product is a one-part low-modulus, polysulfide elastomer. Color shall match material being applied to. Application shall be as recommended by the manufacturer.

8. Forms

Form materials shall conform to State Standard Specification Section 51-1.05, Forms.

C3.03 CONCRETE

1. Quality

Concrete shall be composed of cement, natural or crushed aggregate, and water proportioned and mixed as hereinafter specified. Pozzolan and water reducing air entraining agent shall be used when specified by the ~~District~~ General Manager. All work shall be accomplished in compliance with A.C.I. Standards. The exact proportions of cement and aggregate shall be such as to produce a workable, strong, dense, impermeable concrete having approximate consistency and strength:

- a. Consistency. The quantity of water required for the proper consistency of the concrete shall be determined by the slump test, in accordance with ASTM C143. Slump allowances shall be as follows:

Vertical wall sections, columns: maximum slump, 4 inches plus or minus 1 inch tolerance.

Floor slabs, beams, and footings: maximum slump, 3 inches plus or minus 1/2 inch tolerance.

- b. Strength. Compressive strength shall be determined at the end of 28 days on standard 6 X 12 inch test cylinders in accordance with ASTM C39. The minimum compressive strength shall be 4,000 pounds per square inch.

- c. Tests. Tests will be required by the District of the materials and of the resulting concrete at such intervals as deemed necessary by the District. Concrete testing shall be done at the Contractor's sole expense ~~in the case where the a property owner is constructing the work is being constructed by a property owner~~ for the District. The slump tests and 3 day, 7 day, and 28 day test results shall be given to the District to ensure compliance to the Specifications. The concrete mix shall be changed whenever, in the opinion of the District such change is necessary or desirable to secure the required workability, density, impermeability, and strength.

2. Batching

Concrete batching equipment shall be provided to determine and to control accurately the relative amounts of cement, water, sand, and each individual size of coarse aggregate entering into the concrete. Sand, cement, and coarse aggregate shall be measured by direct weighing.

Water shall be determined by direct weighing or by volumetric measurement. Equipment and its operation shall be subject at all times to the [review and](#) approval of the District.

3. Mixing

When authorized by the District, concrete may be mixed in a batch mixer of approved type which will insure a uniform distribution of the materials throughout the mass, so that the mixture is uniform in color and homogeneous. The mixer shall be equipped with a suitable charging hopper, a water storage and water measuring device controlled from a case which can be kept locked and so constructed that the water can be discharged only while the mixer is being charged. The entire contents of the mixing drum shall be discharged before recharging. The mixer shall be cleaned at frequent intervals while in use. The volume of mixed material per batch shall not exceed the rated capacity of the mixer.

4. Transit Mixed Concrete

Transit mixed concrete shall be used, provided that all of the above requirements as to batching, mixing, and placing are complied with, and provided further that the concrete shall be placed within 2 hours after water is first added to the batch. Transit mixed concrete shall comply with all provisions of ASTM C94.

5. Construction

Reinforcement: Reinforcing shall be placed in accordance with State Standard Specification Section 55.

Concrete: Concrete shall be constructed in accordance with the applicable portions of the following State Standard Specification Sections:

Placing:	51-1.09, 51-1.11,	Placing Concrete Construction Methods
Joints:	51-1.12, 51-1.13,	Expansion and Fixed Joints and Bearings Bonding

Finishing:	51-1.18A,	Ordinary Surface Finish
Curing:	90-7.03,	Curing Structures (method subject to approval by Engineer)

A minimum 24-hour cure period is required for manhole foundations/bases prior to installation of barrel and cone sections.

6. Sampling and Testing

- a. Sampling and testing of concrete materials shall be in accordance with ASTM Designations. Test samples shall be supplied by the Contractor at his-its sole expense. Tests will be made by an independent testing laboratory at the District's expense. The source from which concrete aggregates are to be obtained shall be selected by the Contractor well in advance of the time when they will be required in the work, and suitable samples, as they are to be used in the concrete, shall be furnished in advance of the time when the placing of the concrete is expected to begin.
- b. The Contractor shall provide a slump cone and perform slump tests in accordance with ASTM C143, "Test for slump of Portland Cement Concrete." A slump test shall be performed before the placement of each of the first two truck loads of ready-mix concrete at the beginning of a continuous pour. The slump test shall be conducted in the presence of the District. If the slump is greater than 4 inches, the concrete will be rejected. After the consistency of the mix is approved, additional slump testing will be necessary only when required by the District.
- c. If an entrainment is used, the Contractor shall provide an acceptable method for testing it. The Contractor may use any method approved by ASTM. The recommended methods are the pressure method ASTM C231 and the Chace air meter method. The method used by the Contractor shall be approved by the District prior to any concrete placement. The concrete shall be tested for air content before the placement of each of the first two truck loads of ready-mix concrete at the beginning of a continuous pour and at the time when strength test cylinders are prepared.
- d. For compressive strength test purposes, the Contractor shall provide one set of three cylinders taken from each day's pour or more frequently as required by the District. Test samples shall be supplied

by the Contractor at ~~his~~-its expense and tests will be made by an independent testing laboratory at the District's expense. Test specimens shall be molded, laboratory-cured, and tested in accordance with State Standard Specification Section 90-9, Compressive Strength. Concrete represented by test specimens will be accepted or rejected as specified therein.

C3.04 MORTAR AND NON-SHRINK GROUT

Mortar and non-shrink grout shall be mixed in a suitable mixer in a watertight mixing box. The material must be thoroughly mixed dry until the mass assumes a uniform color and then sufficient water added to bring the mixture to a workable consistency. No mortar or grout which has begun to set shall be used, and no retempering thereof will be permitted.

- (a) Mortar shall have an ultimate strength at least equal to that required for Type A-I Mortar, ASTM C 270. Mortar shall be freshly prepared and uniformly mixed in a ratio by volume as follows:

1 Part Portland Cement, 1/4 Part Hydrated Lime or Lime Putty, 2-3/4 to 3-3/4 Parts Mortar Sand, Sufficient water for a workable mix. Portland Cement shall be added and such water shall not contain an amount of impurities that will cause a change in the setting time of Portland Cement of more than 25 percent nor a reduction in the compressive strength of mortar at 14 days of more than 5 percent when compared to the results obtained with distilled water nor cause discoloration of the concrete or produce etching of the surface.

Sand shall be clean, well graded, and free from loam, vegetative matter, or deleterious matter of any kind and shall comply with the requirements of ASTM C 144, except not less than 3% shall pass a 100 sieve.

Hydrated Lime for Masonry Purposes shall meet the requirements of ASTM Designation C 207, Type S and shall not contain air-entrainment additives.

Mortar materials shall be stored off the ground, under cover in a dry place.

- (b) Grout shall be as specified in ASTM C1107 with 28 day compressive strength of 3,000 PSI, and the proportions per cubic yard shall be as follows:

Portland Cement	7 Sacs
Aggregate	50% Sand
	50% Pea Gravel

Mixing Water

6" Slump Maximum

Pea-gravel shall be uniformly graded with not more than 5% passing a No. 8 sieve and all passing 3/8" sieve.

C3.05 PRECAST CONCRETE MANHOLES

Manholes shall be of precast concrete and shall conform to the details shown on District Standard Drawing Nos. 3 and 4. Materials shall conform to ASTM C478, and CalTrans Standard Specifications Section 90-2 "Materials".

Precast concrete base shall not be allowed unless approved [in advance](#) by the General Manager in writing.

Pipe stubs for lateral sewers shall be built into the structures as required; the outer ends shall be sealed securely by a cap or stopper of the same material as the branch. In laying pipe up to the structures, the pipe shall not project beyond the inside of the wall of the structure and in no case shall the socket of a vitrified clay pipe be built into the wall of a structure.

Joints for precast manhole pipe sections shall be sealed by using "Ram-Nek" and Rub-r-Nek, preformed materials manufactured by K.T. Snyder Co., Houston, Texas, following the company's recommendations and Federal Specification SS-S-00210 (GSA-FSS).

Where the vertical distance from the pipe invert to finished grade is less than 3 feet, the manhole shall be constructed from reinforced concrete in a manner acceptable to the [District General](#) Manager.

C3.06 SPECIAL CONCRETE STRUCTURES

1. Forms

Forms for concrete construction shall be of wood or steel. For surfaces not exposed to view, such as backfilled walls, the forms may be metal or smooth boards free from large or loose knots. For other surfaces, the forms shall be waterproof plywood, tongue and groove sheeting, or metal. All forms shall be true, rigid, tight, thoroughly braced, and sufficiently strong to carry all loads.

Bolts, rods, or single wires shall preferably be used for internal ties and if used shall be so arranged that when the forms are removed no metal shall be within 1 inch of any surface. Twisted wire ties will not be permitted in the

forms for any wall later to be subject to water pressure. The Contractor shall take due precautions to prevent future leakage or seepage along ties in all walls which will be subject to water pressure. Ties used in all such walls shall be cut back into the face of the wall at least 1 inch and the resulting holes pointed up with 1:1-½ mortar, cement to sand by volume. Forms shall comply with all provisions of the State Standard Specifications Section 51-1.05.

2. Placing Reinforcing Steel

Reinforcing steel, before being positioned, shall be cleaned thoroughly of mill and rust scale or other coatings that will destroy or reduce the bond. Reinforcement appreciably reduced in section shall be rejected. Where there is delay in depositing concrete, reinforcement shall be inspected and, when necessary, cleaned. All bars shall be bent cold, shall be positioned accurately, and secured against displacement by using annealed iron wire or suitable clips.

3. Inserts

Where pipes, castings, or conduits are to pass through concrete walls, the Contractor shall place such pipes or castings in the forms being poured in the concrete, or in special cases, with the express consent and approval of the District Manager, shall build approved boxes in the forms to make cored openings for subsequent insertion of such pipes, castings, or conduits. To withstand water pressures and to insure watertightness around openings so formed, the boxes or cores shall be provided with continuous keyways with waterstops all around, and they shall have a slight flare to facilitate grouting and the escape of entrained air during grouting.

Additional reinforcement shall be provided around such openings, if large, to meet the approval of the ~~Distric~~^{General} Manager. The pipes, castings, or conduits, as specified shall be grouted in place by pouring in non-shrink grout under a head of at least 4 inches. The non-shrink grout shall be poured and rammed or joggled into place to completely fill the space between the pipes, castings, or conduits, and the sides of the openings, so as to obtain the same watertightness as the wall itself. The grouting materials so placed shall be surfaced when the forms are removed to give a uniform appearance to the wall if such wall will be exposed to view.

The Contractor shall accurately set and hold in exact position the forms until the concrete is poured, and set all thimbles, special castings, or other metal parts that are to be embedded in the concrete. ~~He-It~~ shall furnish and accurately set all inserts and anchors or other bolts necessary for the

attaching of piping, valves and equipment.

4. Depositing Concrete

Concrete shall not be placed until the forms and reinforcements have been approved by the ~~District Manager~~General Manager.

5. Curing

Unformed concrete surfaces shall be covered with wet burlap mats as soon as the concrete has set sufficiently and shall thereafter be kept wet under burlap until backfilled or for 14 days after the concrete is placed. Formed surfaces, both interior and exterior, shall be similarly water-cured under burlap mats or by water sprays beginning as soon as the forms are stripped. At the option of the Contractor, concrete surfaces may be cured by the curing-compound method as defined below. Where wooden forms are used, they shall be wetted immediately after concreting and shall be kept moist until removed, or may be treated with an approved form sealer before pouring.

Concrete curing compounds, if their use is permitted by the ~~District Manager~~General Manager, shall be of a nature and composition not deleterious to concrete, and thinned to a working consistency, either with a volatile solvent or by emulsification with water. The curing compound shall be of a standard and uniform quality ready for use as shipped by the manufacturer. At the time of use, the curing compound shall be in a thoroughly stirred condition. Curing compound shall not be diluted by the addition of solvent or thinners or be altered in any manner without the specific approval of and in a manner prescribed by the manufacturer.

The curing compound shall, when tested in accordance with ASTM C156, be effective in limiting the water loss in the concrete test specimens to 3-½ percent when applied at the coverage rate recommended by the manufacturer. Any compound proposed by the Contractor shall be tested by a recognized testing laboratory at the Contractor's expense, and 3 certified copies of the test report shall be furnished to the ~~District Manager~~General Manager.

Curing compound shall form a continuous, unbroken membrane which will adhere to moist concrete and which will not peel from the surface or show signs of such deterioration within 30 days after application under actual weather and working conditions.

The compound shall be sufficiently transparent and free from color so that

there will be no permanent change in the color of the concrete. The compound shall contain however, a temporary hue of sufficient color to make the membrane clearly visible for a period of at least 4 hours after application.

6. Protection and Repair of Concrete Construction

All surfaces shall be protected against injury. During the first 72 hours after placing the concrete, wheeling, working, or walking on the concrete shall not be permitted. All slabs subject to wear shall be covered with a layer of sand or other suitable material as soon as the concrete has set. "Sisalcraft" paper or other similar tough waterproof paper may also be used, provided all joints between adjacent strips of paper are carefully sealed. This does not alter the requirements for proper curing as specified in Article C3.06.5, above.

No concrete shall be placed during rain period. All concrete placed within the preceding 12 hours of a rainstorm shall be protected with waterproof canvas or other suitable coverings.

All concrete construction shall be protected from excessive loadings. Installation of mechanical and electrical equipment shall be accomplished by employing shores, bearing places, frames, cranes, and temporary beams.

Immediately after the removal of forms, all concrete shall be inspected, and all poor joints, rough sections, or rock pockets containing loose materials shall be repaired by cutting back to solid concrete and making an opening of such size and shape as will form a 1 inch key for cement mortar fill. All form tie holes and small imperfections shall be kept wet for 2 hours and then coated with neat cement paste. The fill for small imperfections and form ties shall consist of cement mortar composed of 1 part cement well mixed with 1 1/2 parts of fine aggregate by volume and just enough water so that the mortar will stick together on being molded into a ball by slight pressure of the hands. This mortar shall be thoroughly compacted into place. Where the area and volume of defective concrete is large, it shall be repaired by reforming the surface and filling the opening with concrete. For such major repairs, the filling shall be reinforced and doweled securely to old concrete and shall be neatly finished to match the surface, color, and texture of the adjacent concrete. All patches shall be kept damp for 7 days.

Where the work requires concrete of existing structures to be removed, the existing concrete and steel shall be cut accurately to the lines required under the supervision of the District General Manager. The cutting shall be

accomplished in a manner that preserves, free from cracks or other injuries, those parts of the existing structure that are to remain. Where the cut surface is to be left exposed, it shall be cleaned, sprayed with water, faced with 1:1-½ mortar, and finished to match adjacent surfaces.

7. Finish or Formed Surfaces

All finished or formed surfaces shall conform accurately to the shape, alignment, grades, and sections required [by the Drawings](#). The finished surface shall be free from fins, bulges, ridges, offsets, honeycombing, or roughness of any kind, and shall present a finished, smooth continuous hard surface. All sharp angles shall be rounded or beveled, where required.

Any formed surface to be painted shall be free of any material that will be detrimental to the paint.

SECTION C5 - PIPELINES AND SEWERS

C5.01 SCOPE

Pipelines and Sewers include the furnishing, installing, and testing of pipe, pipe supports, anchors, thrust blocks, fittings, valves, specials, and all necessary appurtenances to make the work complete and operable.

The Contractor's attention is directed to Article C 1.09 Safety and Health Provisions, of these Specifications with respect to CAL OSHA rules and regulations to follow before entering manholes.

C5.02 MATERIALS

1. Scope

All pipe materials that may be used are covered under this section. The inclusion of all acceptable material does not infer that any of the materials listed below may be used on any project for any set of conditions. Refer to Article B2.02 of these District Standard Specifications for limitations on the use of various types of pipe materials. ~~High Density Polyethylene pipe for sewer laterals will not be serviced by District personnel. —Whenever possible,~~

~~lateral sewers shall be of the same material as the main sewer to which they are connected.~~—The following limitations are offered as guidelines to the Contractor for gravity sewer lines.

- (a) Unless otherwise indicated, extra strength vitrified clay or PVC ~~C900~~ DR ~~1825~~ may be used for main lines.
- (b) Where plans designate a specific type of pipe, no other type may be used.
- (c) At other locations, any acceptable pipe material may be used, in accordance with the indicated strength, bedding, and trench width requirements and subject to the specifications in this Division, the ~~s~~Standard ~~d~~Details and ~~g~~General ~~r~~Regulations.
- (d) No change in pipe materials may be made between manholes or on service laterals and service extensions, except between classes of the same pipe.

2. Vitrified Clay Pipe and Fittings

Vitrified clay pipe and fittings shall be extra strength, unglazed, conforming to ASTM C700, and shall be furnished with bell and spigot ends or plain

Formatted: Highlight

ends.

Pipe joints shall be of a mechanical flexible compression type. Joints for bell and spigot pipe shall be made of plasticized polyvinyl chloride compound, bonded to the pipe, molded and cured to uniform harness so as to form a tight coupling when assembled. Joints for bell and spigot pipe shall be Wedge Lock and Speed Seal Mainline conforming to all provisions of current revision of ASTM C425. Joints for plain end pipe shall be rubber couplings secured with stainless steel bands. Joints for plain end pipe shall be Band Seal as manufactured by Mission Clay, Caulder Couplings Products Company or equal.

The connection of gravity sewer laterals to the public sewer shall be by means of a tee or a wye branch fitting. Connection to existing gravity mains may be permitted by means of a Taptite connection or equal. No breaking or rough cutting of the pipe shall be permitted when making service connections.

3. Plastic Pipe

Plastic pipe, fittings and joint materials for gravity sewer mains herein consist of Poly-Vinyl Chloride, hereinafter referred to as PVC only. Polyethylene pipe, hereinafter referred to as PE, is not a standard District approved material for gravity sewer mains. PE shall only be used for small diameter STEP and Grinder Pump force mains. All materials incidental to plastic pipe installations such as gaskets, joint lubricants, cement, etc., shall be supplied by the pipe manufacturer. All plastic pipe required in odd lengths shall be cut using a proper cutting tool and guide that insures true line cut on planes perpendicular to the pipe axis. No bevel cuts for pipeline alignments will be permitted.

All bedding material around plastic pipe shall be placed in two stages as follows; first, from the bedding material foundation to the top of pipe, second, from the top of pipe to a point at least twelve (12) inches over the top of the pipe. Each stage shall be compacted by hand or mechanical tamping to a minimum of ninety (90) percent. No jetting of bedding materials will be permitted.

The inside diameter of an installed section of plastic pipe shall not be allowed to deflect more than five (5%) percent. The pipe deflection shall be checked by means of the deflection gauge in the presence of the ~~District Manager~~ General Manager after the placement of all trench backfills, aggregate subbase (if specified) but prior to installation of aggregate base and/or asphalt concrete.

The pipe deflection gauge shall be fabricated to permit passage through installed sections of pipelines within the specified tolerances for plastic pipe applicable and the maximum deflection set forth herein. Any section or sections of plastic pipe that does not permit deflection gauge passage will not be accepted and said section or sections shall be repaired or replaced and rechecked as directed by the [District General](#) Manager.

PVC Pipe

All PVC pipe and fittings shall, at a minimum, conform to the requirements of ASTM Designation D 1784, cell class 12454-B as they apply to material compound. The pipe and fittings shall meet AWWA C900 for pipe size 12 inches and smaller, and AWWA [C9005](#) for pipes larger than 12 inches. Unless otherwise indicated or required, the pipe shall DR [1825](#). Sewer Pipe using an Elastomeric Gasket Joint in a bell and spigot assembly system shall meet the requirements of ASTM Designation F477. No solvent cement joints will be permitted.

Formatted: Highlight

All PVC pipe entering or leaving a concrete structure shall have a rubber sealing gasket, as supplied by the pipe manufacturer, firmly seated perpendicular to the pipe axis, around the pipe exterior and cast into the structure base or near the structure wall center as a water stop. Said water stop may also consist of a manhole coupling with rubber sealing rings cast into structure base.

PVC pipe joining may occur at any convenient distance beyond and/or between structures.

PVC pipes shall be white in color, ~~and have no markings indicating the pipe as a water pipe.~~ Metallic marking tape labeled "sanitary sewer" shall be placed [123](#)" above the top of pipe [for open trench or connected directly to the pipe for trenchless construction.](#)

Polyethylene Pipe

Polyethylene pipe is not a standard District approved material for gravity sewer mains. Polyethylene pipe will only be considered for gravity sewer mains in special conditions where no other pipe materials can be installed. This condition shall be presented to the District and use of material can only be approved [in advance](#) by the [General District](#) Manager.

STEP and grinder pump system forcemains shall be SDR 11 high density polyethylene pipe with polyethylene fittings. The pipe material shall comply

with all requirements for Type III, Class C. Category 5, Grade P 34 according to ASTM D1248, and have a PPI recommended designation of PE 3408.

Polyethylene pipe shall have a green stripe, or no stripe, ~~and should have no markings indicating the pipe as water pipe.~~ Metallic marking tape labeled "sanitary sewer" shall be placed 123" above the top of pipe or connected directly to the pipe for trenchless construction.

4. Cast Iron and Ductile Iron Pipe

Grey cast iron pipe shall be Class 150 centrifugally cast, cement lined, and shall comply with ANSI A 21.6 (AWWA C106) for pipe cast in metal molds or ANSI A21.8 (AWWA C108) for pipe cast in sand-lined molds.

Ductile iron pipe shall comply with ANSI A21.51 (AWWA C151).

Cast and ductile iron pipe joints shall comply with the following requirements for the types specified:

<u>Type of Joint</u>	<u>Specifications</u>
Rubber Gasket Push-on Joint	ANSI A21.11 (AWWA C111)
Mechanical Joint	ANSI A21.11 (AWWA C111)
Flanged Joint	ANSI B16.1, B16.2, and A21.10 (AWWA C110)

Flanged Joint (Threaded Flanges) ANSI B1.1

Flange gaskets shall be 1/16 inch for pipe 10 inches and less and 1/8 inch for larger pipe. Flange assembly bolts shall be standard square headed machine bolts with heavy, hot pressed hexagon nuts. Threads shall conform to ANSI B1.1 coarse thread series, Class 2 fit. Bolt length shall be such that after joints are made up, the bolts shall protrude through the nut, but no more than 1/2 inch. Bolts and nuts for use in submerged services shall be of 316 stainless steel.

Flexible couplings shall be Smith-Blair flexible steel coupling series 411 or Dresser style 38 with the stop removed on middle ring. Exposed metal surfaces shall receive a protective coating as specified in Section C6 - Painting.

All rubber gasket, push-on, mechanical and flanged joint fittings for cast iron or ductile iron pipe shall be manufactured in accordance with ANSI A21.10 (AWWA C110).

Unless otherwise specified, the internal surfaces of cast iron and ductile iron pipe and fittings shall be lined with a uniform thickness of cement mortar then sealed with a bituminous coating in accordance with ANSI A21.4 (AWWA C104). The outside surfaces of cast iron and ductile iron pipe and fittings for general use shall be coated with a bituminous coating 1 mil (0.025mm) thick in accordance with ANSI A21.6 or ANSI A21.51.

The manufacturer shall furnish a certified statement that the pipe has been manufactured and tested in accordance with these specifications.

Loose polyethylene encasement for the protection of cast iron and ductile iron pipe shall be furnished and installed in accordance with the requirements of ANSI A21.5 (AWWA C105).

5. Conductor Pipe

Pipe used as a conductor under a highway, railroad, or other location, shall be welded steel pipe. Welded steel pipe shall be manufactured of a steel meeting ASTM A245, commercial grade. All joints shall be butt welded. Welded steel conductor pipe shall have a minimum wall thickness of 1/4 inch for sizes up to and including 26-inch in diameter, and 5/16-inch for sized 27-inch to 36-inch in diameter.

6. Manholes

Manholes shall be constructed of precast reinforced concrete pipe sections as specified in Article C3.05 of these specifications.

7. Backwater Check Valves

The contractor shall provide information about the type of backwater check valve and shutoff system intended for use. Detail drawings should conform to the most recent edition of the Uniform Plumbing Code.

C5.03 INSTALLATION

1. Pipe Laying

Pipe laying shall include the installation and jointing of the pipe. Pipe shall be laid with uniform bearing under the full length of the pipe. In general,

pipe laying shall proceed upgrade with the spigot ends of the bell and spigot pipe pointing in the direction of flow. Each piece shall be laid true to line and grade and in such manner as to form a close concentric joint with the adjoining pipe and to prevent sudden offsets in the flow line. As the work progresses, the interior of the sewer shall be cleared of all dirt and debris. Where cleaning after laying is difficult because of small pipe size, a suitable swab or squeegee shall be kept in the pipe and pulled forward past each joint immediately after jointing has been completed. Pipe shall not be laid when the condition of the trench or the weather is unsuitable. At times when work is not in progress, open ends of pipe and fittings shall be closed.

2. Pipe Jointing

- (1) For rubber gasket joints, the gasket and bell shall be thoroughly cleaned before inserting the gasket into the bell. After the gasket is positioned, a thin film of approved lubricant shall be applied to the exposed surface of the rubber gasket. After wiping the spigot clean, it shall be shoved home into the bell. If pipe is field cut, the spigot end shall be tapered with a file to about 1/8-inch back at an angle of 30 degrees with the centerline of the pipe.
- (2) Flexible Couplings shall be Smith-Blair Type 411, 431, 433, or equal. Buried couplings shall be extra heavy, with 316 stainless steel bolts and nuts, and shall be painted with two coats of bitumastic paint after installation.
- (3) Screwed Joint Material shall be best quality red lead for steel pipe or litharge and glycerin for stainless steel and chlorine piping.
- (4) Flanges, Gaskets, and Bolts - Flanges shall conform to dimensions and drilling of ASA B16.1, Class 125. Flange gaskets shall be ring type, Johns-Manville Style 60S or Cranite. Thickness shall be 1/16-inch for pipe 18-inches and smaller, and 1/8-inch for larger pipe. Flange assembly bolts shall be standard hexagon head machine bolts with heavy hot pressed, hexagon nuts, conforming to ASTM A387 Grade B. Bolt length shall be such that after the joints are made up, the bolts shall protrude through the nut, but not more than 1/2-inch.
- (5) Transition joints between different pipe materials shall be "Ceramicweld", "Calder", "Band-Seal", or other equal flexible coupling.

3. Construction

Pipe shall be inspected for cracked, broken, or defective pieces before laying. Pipe shall be carefully lowered into the trench to prevent damage. All dirt or other foreign matter shall be removed from inside pipe before lowering into the trench. The Contractor ~~will be~~ required to replace all damaged pipe.

All pipe shall be carefully placed and supported at the proper lines and grades and, where possible, shall be sloped to permit complete drainage. Piping runs shown on the Drawings shall be followed as closely as possible, except for minor adjustments to avoid architectural and structural features. If minor relocations are required, they shall be approved by the Engineer.

Pipe, fittings and appurtenances shall be installed in accordance with the manufacturer's written instructions and in accordance with AWWA C-600. The allowable angle of deflection at any joint shall not exceed the amount recommended by the pipe manufacturer for the particular pipe size used. The pipe shall be protected to prevent entrance of foreign material during laying operations. When laying is not in progress, open pipe ends shall be protected with a watertight plug or other approved means to exclude water or foreign material.

Excavation, bedding, and backfilling shall conform to these specifications.

C5.04 CONNECTIONS TO EXISTING MANHOLES

Pipe connections to existing manholes shall be made in such a manner that the finished work shall conform as nearly as practicable to the applicable requirements specified for new manholes, including all necessary concrete work, cutting, and shaping.

Where holes are to be broken in existing manhole barrels, the work shall be carefully done. After insertion the annular space shall be tightly packed with a "dry" cement mortar. Surfaces to be in contact with the mortar shall be thoroughly moistened and then scrubbed with Portland cement paste. The inside of the manhole barrel shall be neatly finished. The manhole bottom shall be rechannelized as necessary to provide smooth transitions with good hydraulic properties.

Any line to be connected to an existing manhole shall, unless otherwise shown, be installed by forming a new channel with the top invert of the new installed pipe to the same elevation as the top invert of the existing main sewer.

C5.05 CONNECTIONS TO EXISTING PIPES

The approximate locations of existing sewers are shown at the points where the new sewers are to be connected in the Drawings. It is the responsibility of the Contractor to determine the exact location and depth of existing sewers prior to ~~the~~ laying ~~of~~ any sewer pipe. Prior to construction of any portion of a side sewer, the Contractor shall also determine the elevation of the plumbing outlet of the structure to be connected and to confirm that the required grade can be maintained between the outlet and the main sewer.

Fittings or adapters required to connect new pipe to existing pipe shall be provided by the Contractor. Detail drawings of such fittings or adapters and the method of connection shall be submitted to the ~~District Manager~~ General Manager for pre-approval.

C5.06 REPAIR OF PIPELINES

Repair of breaks in pipe lines shall be made by making clean cuts on either side of the breaks, inserting new straight sections of pipe with plain ends in line, and connecting the ends with flexible couplings similar and equal to the couplings manufactured by Calder. Clamp screws shall be retightened after a lapse of at least five minutes. Maximum trench width limitations at top of pipe must be observed during repairs as well as original construction.

C5.07 GRAVITY SEWER LATERAL CONNECTIONS TO MAIN SEWERS

1. Concurrent Construction

Where gravity sewer laterals are constructed concurrently with main sewers, connections shall be made with regularly manufactured wye or tee branches. The ends of the side sewer shall be securely stopped with plugs or caps which can easily be removed without damage to the pipe end. The ends of the side sewers shall be marked with a 2 x 4 redwood stake extending from the sewer invert to finished grade. In the case of new subdivision work, curbs shall be imprinted with an "s" directly over the sewer laterals.

2. Gravity Sewer Lateral Connection to Existing Main Sewer

Lateral connections to existing main sewers shall be made at wye or tee branches. No breaking or rough cutting of the pipe shall be permitted when making service connections. Where, in the opinion of the ~~District Manager~~ General Manager, it is impractical to connect to an existing wye or tee branch, the connection shall be made by the use of special fittings as

described below.

- i. Cut out a section of the main sewer and install a plain-end wye branch using banded rubber seal sleeves with stainless steel bands. This method shall be used whenever the side sewer is the same size as the main sewer.
- ii. Core a neat trim opening in the upper portion of the main sewer and install a special drilled fitting (i.e., tap-tight) to complete the side sewer connection.

C5.08 BORING AND JACKING

1. General

The work contemplated under this heading consists of installing sewer pipe, in a conductor pipe, under a paved roadway, street or railroad to a true line and grade, by means of jacking operations. The equipment and method of operation shall be approved by the ~~District Manager~~ General Manager before proceeding with the work. Approval of the proposed method by the ~~District Manager~~ General Manager will not relieve the Contractor of the responsibility for making a satisfactory installation meeting the criteria set forth herein. Only workmen experienced in the jacking of conductor pipes shall be used in performing the work. Sewer pipe shall be installed in the conductor pipe in the manner shown on the plans.

The Contractor shall obtain all encroachment permits or other types of permits required by the Owner or the authority having jurisdiction over the proposed work area.

2. Bores

Where a conductor or sewer pipe is installed in a bored hole, the hole shall be bored by use of a machine which will cut a true circular bore to the required line and grade. Bored tunnels shall be no more than one inch larger than the outside limits of the conductor pipe to be placed therein. If so required bracing and shoring shall be provided to adequately protect the workmen and the roadway or railroad. The conductor pipe shall be placed closely behind and in conjunction with the boring operation.

3. Placing Sewer Pipe in Conductor

Sewer pipe shall be strapped to two nylon skids with steel straps. The nylon skids shall be near the center of each pipe section and shall be large

enough to prevent any part of the joint from bearing on the conductor. Skids may have to be adjusted in height to hold the pipe on correct line and grade. In lieu of nylon skids, Contractor may use conductor pipe spacers as herein specified.

After installation of the sewer pipe, clean, dry sand shall then be blown into the conductor pipe on both sides to the full depth of the conductor pipe. Casing seals, shall be provided at each end of conductor pipe to contain the sand. Casing seals shall be Plico Type 660 or P.S.I. Model W, or equal.

4. Jacking Heads

Whenever the nature of the soil indicates, in the opinion of the Engineer, the likelihood of ground loss during the driving of the conduit, the use of a steel jacking head will be required. The jacking head shall be fitted to the leading section of the conduit in such a manner that it extends around the outer surface of the upper two-thirds of the circumference of the conduit and projects at least 18 inches beyond the driving end at the top of the conduit, but does not protrude over 1/2 inch outside of the outer conduit surface. This head shall be securely anchored to prevent any wobble or alignment variation during the jacking operation. Excavation shall be carried out entirely within the jacking head and no excavation in advance thereof will be permitted. Every effort shall be made to avoid any loss of ground outside the perimeter of the jacking head.

5. Backpacking Voids

In general, excavated material shall be removed from the conduit as jacking progresses and no accumulation of excavated material within the conduit will be permitted. Should appreciable loss of ground occur, the voids shall be backpacked promptly to the extent practicable with soil cement consisting of a slightly moistened mixture of one part cement to five parts of granular material. When material selected from the spoil is not suitable for this purpose, the Contractor shall import suitable material at his sole expense. The soil cement shall be thoroughly mixed and rammed into place as soon after the loss of ground as possible.

After jacking is completed, the Contractor shall drill holes in the conduit at the locations of ground loss and elsewhere where voids behind the conduit are suspected. If such holes disclose void spaces existing, the Contractor shall force grout into such voids to refusal at pressure as directed by the District General Manager, but not to exceed 50 pounds per square inch. ~~He~~ It shall then repair the drilled holes, including any plastic lining. Grout shall

be a lean mixture of sand and cement. Backpacking of the one inch annular space in the case of bores will not be required, unless specifically called for on the ~~P~~plans.

6. Tolerances

Extreme care shall be exercised by the Contractor to maintain line and grade during jacking operations, and the Contractor may be required to modify the manner in which ~~he-it is~~ conducting ~~his~~its jacking operation to correct any deviation which deemed necessary by the ~~District-General~~ Manager.

Maximum deviation from stated line and grade of conductor pipe shall be such that line and grade of the sanitary sewer pipe can be adjusted a sufficient amount within the conductor pipe to achieve the line and grade shown on the plans to within 0.25 feet per 100 feet, unless otherwise directed by the ~~District-General~~ Manager.

7. Conductor Pipe Spacers

Insulating casing spacers, where used, will be installed at not over 10 foot spacing, prior to inserting pipe in the casing. Spacers will be similar and equal to "Plico" Type 512M or P.S.I. Model A12 with insulating skid, 12" bolted spacer with 6 skids. Segment with 4 skids will be placed on the bottom, with skids sized to give equal bearing pressure on the casing without deformation of the pipe.

C5.09 CONCRETE THRUST BLOCKS

Concrete thrust blocks shall be provided on all force main bends having a deflection angle of 11 degrees or more. Thrust blocks shall have a sufficient bearing area to withstand the maximum force to be exerted.

The use of other means of anchoring piping against thrust may be permitted; however, the proposed method shall be submitted to the District for ~~pre~~-approval. Calculations and drawings on the approved anchoring method shall be submitted to the District ~~in advance of work being performed~~.

C5.10 ACCEPTANCE TESTS

All gravity sewers shall be tested for both obstructions and leakage; all gravity sewer laterals shall be tested for leakage; all force mains shall be tested for leakage. The ~~District-Manager-General Manager~~ reserves the right to require

additional testing, if deemed necessary. The Contractor shall provide all labor, tools, equipment, and utilities necessary to make the tests, to perform any work incidental thereto, and to dispose of all waste.

1. Obstructions

After backfilling and compacting, but before paving, Contractor shall test all main sewers ~~shall be tested~~ for obstructions either by rodding or by the sewer ball method. Means shall be provided for intercepting all grit, rocks, and other flushed debris to keep debris from entering the existing sewerage system.

2. Leakage

The testing program ~~of testing~~ shall fit ~~the~~ conditions ~~as~~ mutually determined by the ~~District Manager~~ General Manager and the Contractor. The Contractor shall, at ~~his~~ its own expense, correct any excess leakage resulting from or caused by this test. Where the actual leakage exceeds the allowable, the Contractor shall determine the cause and remedy ~~it~~ before the District will accept a test ~~is accepted~~. If the leakage is less than the allowable and leaks are observed, such leaks shall be repaired at the District ~~General~~ Manager's direction.

- a. Gravity Main Sewers. After main sewers have been inspected and cleared of obstructions and following backfill, but prior to repaving, ~~they~~ Contractor shall ~~be~~ tested for leakage. Each section of sewer shall be tested between successive manholes by closing the lower end of the sewer to be tested and the inlet sewer of the upper manhole with stoppers. At the Contractor's option either the hydrostatic or air test may be used.

Hydrostatic Test for Gravity Sewer Main- Fill the pipe and manhole with water to a point four feet below the ground surface of the upper manhole, but in no case less than four feet above the pipe invert. If ground water is present, the water surface in the upper manhole shall be at least four feet above the level of the ground water. The line shall be filled at least one hour prior to testing and shall be tested at least 2 hours by maintaining the head specified above with measured additions of water. The sum of these additions of water in the two-hour period shall be the leakage amount for the test period.

The maximum allowable head of water above any portion of sewer being tested shall be 15 feet. Where the difference in elevation between successive manholes exceeds 15 feet a test tee shall be

installed between manholes, and testing shall be carried on between the tee and the manhole.

The allowable leakage shall not exceed 0.1 gallons per minute per inch diameter, per 1000 feet of main line sewer being tested.

Air Test for Gravity Sewer Main - Air test shall be applied to each length between adjacent manholes, and the procedure shall be as follows:

Pressurize the test section to 3.5 p.s.i. and hold above 3.0 p.s.i. for not less than 5 minutes. Add air if necessary to keep the pressure above 3.0 p.s.i. At the end of this 5 minute saturation period, note the pressure (must be 3.0 p.s.i. min.) and begin the timed period. If the pressure drops 0.5 p.s.i. in less than the time given in the following table the section of pipe has not passed the test.

<u>SIZE</u>	<u>MINIMUM TIME IN SECONDS</u>
4"	125
6"	185
8"	245
10"	310
12"	370
15"	460
18"	555

<u>SIZE</u>	<u>TIME IN MINUTES</u>
21"	10
24"	12
27"	14
30"	16
36"	18
42"	20
48"	23
54"	26

If the time for the pressure to drop 0.5 p.s.i. is 125% or less of the time indicated, the line shall immediately be repressurized to 3.0 p.s.i.g. and the test repeated. If, during the 5 minute saturation period, the pressure drops less than 0.5 p.s.i. after the initial pressurization and air is not added, the section undergoing the test shall have passed.

If the test did not pass, the leak shall be found and repaired to the satisfaction of the ~~District~~ General Manager, and the section shall be retested.

When the prevailing ground water is above the line being tested, air pressure shall be increased 0.43 p.s.i. for each foot the water table is above the invert of the line.

The pressure gauge used shall be supplied by the contractor, shall have minimum divisions of 0.10 p.s.i., and shall have an accuracy of 0.04 p.s.i. Accuracy and calibration of the gauge shall be certified by a reliable testing firm at six (6) month intervals or when requested by the District Manager.

- b. Manhole Testing - After completion of manhole construction, Contractor shall test all manholes ~~shall be tested~~ for leakage. The Contractor shall furnish all labor, tools, and equipment necessary to make the tests and to perform any work incidental thereto. ~~He-It~~ shall, at ~~his-its~~ own expense, correct any excess leakage and repair any damage to the pipe and its appurtenances or to any structures resulting from or caused by these tests. Each manhole shall be tested by Vacuum Test or by Hydrostatic Test.

Vacuum Test - Testing shall be performed in accordance with ASTM C1244-93, "Standard Test Method for Concrete Sewer Manholes by Negative Air Pressure (Vacuum) Test."

The vacuum test shall be performed prior to backfilling around the manhole.

Preparation of the manhole prior to testing shall include plugging all lift holes and temporarily plugging all pipes entering and existing the manhole, taking care to securely brace the pipes and plugs to prevent them from being drawn into the manhole.

The test head shall be placed at the inside top of the cone section and the seal inflated in accordance with the manufacturer's recommendation.

A vacuum of 10 inches of mercury shall be drawn and the vacuum pump shut off. With the valve closed, the time shall be measured for the vacuum to drop to 9 inches. The manhole shall pass if the time is greater than 60 seconds for a 48" diameter manhole, 75

seconds for 60" diameter, and 90 seconds for 72" diameter.

If the manhole fails the initial test, necessary repairs shall be made with a non-shrink grout while the vacuum is still being drawn. Retesting shall proceed until a satisfactory test is obtained.

Hydrostatic Test - Each manhole shall be tested by inserting inflatable plugs in all sewer inlets and outlets of the manhole, and filling the manholes with water to a point six inches below the base of the manhole frame.

The manhole shall be filled at least one hour in advance of the official test period to allow time for absorption. The loss of water may be determined by measuring additions of water required to maintain the specified water level, but the level shall not be allowed to fall more than 25% of the manhole depth.

The allowable leakage shall be determined by the following formula:

$$Em = .0002 \times L \times \text{square root } H$$

where Em = amount of allowable leakage in gallons per minute.

L = depth of manhole from top to bottom. (feet)

H = head of water in feet, as measured from the sewer line invert or from prevailing ground water against outside of manhole barrel. The lesser height governs.

Where the actual leakage in a manhole exceeds the allowable, the Contractor shall discover the cause, remedy it, and retest the manhole before the manhole is accepted. If the leakage is less than allowable and leaks are observed, such leaks shall be repaired.

As an alternative to the above procedure, the Contractor may fill the manhole with water prior to backfill and repair all visible leaks provided there is no ground water above base. Any visible leaks into or out of a manhole shall be repaired. Alternative methods of manhole testing will be considered by the District General Manager.

Where media other than water is used for testing, the allowable leakage shall be as mutually agreed to by the District Manager

General Manager and Contractor.

- c. Gravity Sewer Laterals. Gravity sewer laterals shall be tested before backfilling. The side sewer shall be plugged at its ends and filled with water through the cleanouts. The water level in the cleanouts shall be maintained throughout the test period as high as possible. One hour after filling the pipe with water, the entire line shall be visually examined for leakage. All leaks shall be repaired in an acceptable manner. The trench shall not be backfilled until the complete inspection has been made. Following approval by the District General Manager, the plugs shall be removed, the water disposed of, and the connection at the main sewer completed.
- d. Force Mains. Force mains shall be tested for leakage in conformance with applicable portions of Section 13, American Water Works Association C600, for test pressure of 150 percent of the specified working pressure for the pipe.

The test shall last at least one hour at the required pressure measured at the test pump. The allowable leakage shall be computed by the following formula:

$$L = \frac{ND(P)^{\frac{1}{2}}}{1850}$$

where

- L = allowable leakage, gallons per hour
N = number of joints in test section
D = nominal pipe diameter, inches
P = average test pressure, pounds per square inch.

C5.11 Inspections

- (1) General Requirements: All materials, equipment, installation, and workmanship, if so required by the District, shall be tested and inspected to prove compliance with the contract requirements. For the purpose of this requirement "equipment" shall mean any mechanical, electrical, or instrumentation devices and other items with one or more moving parts.

No tests specified herein shall be applied until the item to be tested has been inspected and approval given for the application of such test.

Tests and inspections shall include:

- a. The delivery acceptance test and inspections.
- b. The installed tests and inspections of items.

Tests and inspections, unless otherwise specified or accepted, shall be in accordance with the recognized standards of the industry.

The form of evidence of satisfactory fulfillment of delivery acceptance test and of installed test and inspection requirements shall be, at the discretion of the District, either by tests and inspections carried out in his presence or by certificates or reports of tests and inspections carried out by approved persons or organizations. The Contractor shall provide and use forms which include all test information and are acceptable in content to the District.

- (2) Delivery Inspection: The delivery inspection shall be at the Contractor's expense for any materials or equipment specified herein and shall include the following:
 - a. Inspections of items during the process of manufacture and/or on completion of manufacture, comprising material tests, hydraulic pressure tests, electric tests, performance and operating tests and inspections in accordance with the relevant standards of the industry and more particularly as detailed in individual clauses of these Specifications to satisfy the District that the items tested and inspected comply with the requirements of this contract.
 - b. Inspection of all items delivered at the site in order that the District may be satisfied that such items are of the specified quality and workmanship and are in good order and condition at the time of delivery.
- (3) Television Inspections: The District may require the use of television inspection to inspect laterals and main sewers for review and before acceptance. Copies of the tapes of such television inspection shall be submitted to the District. The District will not deem a project complete until the line is deemed acceptable by visual observation.

SECTION C6 - PAINTING

C6.01 SCOPE

Painting shall include the furnishing of all plant labor, equipment, appliances and material, and the performing of all operation in connection with the preparation of surfaces, application of all paint or other materials, and the manufacture of paints, paint materials, and miscellaneous materials incidental thereto. Surface to be painted shall receive the treatment and the number of coats prescribed in the Painting Schedule.

C6.02 STANDARD PRODUCTS

All materials, supplies, and articles furnished shall, whenever practicable, be the standard product of a recognized, reputable manufacturer. The standard products of manufacturers other than those specified will be acceptable when it is proved to the satisfaction of the District that all paint materials comply fully with the specification.

Precautions concerning the handling and the application of paint shall be shown on the label of paint and solvent containers in accordance with the Construction Safety Orders and General Industry Safety Orders of the State of California.

C6.03 CLEANING AND PREPARATION OF SURFACES

Surfaces to be painted shall be clean before applying paint or surface treatments. Oil, grease, dirt, rust, loose millscale, old weathered paint, and other foreign substances shall be removed. The removal of oil and grease shall, in general, be accomplished by blast cleaning. Minor amounts of grease and oil contaminants will be tolerated on the surface prior to blast cleaning, provided that abrasive is not reclaimed and reused.

Clean cloths and clean fluids shall be used in solvent cleaning to avoid leaving a thin film of greasy residue. Cleaning and painting shall be so programmed that dust or spray from the cleaning process will not fall on wet, newly painted surfaces. Hardware and similar accessories shall be removed or suitably masked during preparation and painting operations, or shall otherwise be satisfactorily protected.

In all cases, the recommendations of the paint manufacturer shall be rigidly followed.

C6.04 PAINT APPLICATION

1. Workmanship

In general all painting shall be done as specified herein and as set forth in CalTrans Standard Specifications Section 59 "Painting" applicable provisions.

All work shall be done in a workmanlike manner so that the finished surfaces will be free from runs, drops, ridges, waves, laps, and unnecessary brush marks. All coats shall be applied in such manner as to produce an even film of uniform thickness completely coating all corners and crevices. All painting shall be done by thoroughly experienced workman. Care shall be exercised during spraying to hold the nozzle sufficiently close to the surface being painted to avoid excessive evaporation of the volatile constituents and loss of materials into the air, or the bridging over of crevices and corners.

Spray equipment shall be equipped with mechanical agitators, pressure gauges, and pressure regulators. Nozzles shall be of proper size. Floors, roofs, and other adjacent areas and installations shall be satisfactorily protected by drop cloths or other precautionary measures. All overspray shall be removed by approved method or the affected surface repainted.

2. Atmospheric Conditions

Except as specified or required for certain water-thinned paints, paints shall be applied only to surfaces that are thoroughly dry and only under such combination of humidity and temperature of the atmosphere and surfaces to be painted as will cause evaporation rather than condensation. In no case shall any paint be applied during rainy, misty weather, or to surfaces upon which there is frost or moisture condensation without suitable protection. Where painting is permitted during damp weather, or when the temperature is at or below 50 degrees Fahrenheit, the surface shall be heated to prevent moisture condensation thereon. Bare metal surfaces, except those that may be warped by heat, may be dehydrated by flame-heating devices, immediately prior to paint application. While any painting is being done, the temperature of the surfaces to be painted and of atmosphere in contact therewith, shall be maintained at or above 50 degrees Fahrenheit, except where paints are being used which dry solely by evaporation, in which case temperature of the air and surface may be 35 degrees Fahrenheit. All paint when applied shall be approximately the same temperature as that of the surface on which it is applied.

3. Protection of Painted Surfaces

Where protection is provided for paint surfaces, such protection shall be

preserved in place until the paint film has properly dried, and the removal of the protection is approved. Items, which have been painted, shall not be handled, worked on, or otherwise disturbed until the paint coat is completely dry and hard. After delivery at the site, all shop-coated metalwork shall be repainted or retouched from time to time with specified paint whenever, in the opinion of the ~~General District~~General Manager, it becomes necessary to maintain the integrity of the film.

4. Method of Paint Application

The specified primer or first coat of paint shall be applied by brush to ferrous surfaces which have not been blast cleaned, except as hereinafter specified. All subsequent coats for all ferrous surfaces may be brushed or sprayed. All coats for miscellaneous ferrous metal surfaces may be either brush or spray applied.

5. Coverage and Film Thickness

The actual surface area covered per gallon of paint for metal surfaces shall not exceed those listed in the following table. The first coat on metal surfaces refers to the first full paint coat and not to conditioning or other pretreatment applications. Bituminous type coating shall be applied to the thickness and in accordance with instructions contained herein. Specified coverage rates do not include spraying and other losses of material resulting from the conditions under which coating is applied.

On atmosphere exposed steel and other metal surfaces:

1st coat	500 sq ft/gal
2nd coat	500 sq ft/gal
3rd coat	550 sq ft/gal
4th coat (where required)	550 sq ft/gal

In no case shall the average total thickness (dry) of the completed protective coating system on exposed metal surfaces be less than 1.25 mils per coat as determined by G. E. film thickness gauge. The minimum thickness at any point shall not deviate more than 25 percent from the required average.

6. Continuity

In testing for continuity about welds, projections, such as bolts and nuts, and crevices, the General Manager shall determine the minimum conductivity for smooth areas of like coating where the dry mil thickness has

been found adequate. This conductivity shall then be taken as the minimum required for these rough, irregular areas. All pin holes and holidays shall be repainted to the required coat coverage. All ferrous metal surfaces shall meet minimum continuity requirements.

C6.05 PAINT MATERIALS

Specifications of primers, washcoats, and paints are as follows:

1. Paints for Metal

IDENTIFICATION NUMBER

PAINT SPECIFICATION

P1	CALTRANS STD. SPECS. SEC. 91-2.07; Pretreatment, Vinyl Wash Primer (State Specification 8010-31A-27) For application prior to painting clean aluminum, galvanized surfaces, or blast-cleaned steel.
P2	CALTRANS STD. SPECS. SEC. 91-2.10; Vinyl Primer, Red Iron Oxide Type (State Specification 8010-31A-23) For use on metal surfaces treated with Vinyl Wash Primer, P1, above.
P3	CALTRANS STD. SPECS. SEC. 91-2.22; White Tintable Vinyl Finish Coat (State Specification 3010-31A-35) For use on metal surfaces, treated with Vinyl Wash Primer, P1, above; primarily for spray application.
P4	CALTRANS STD. SPECS. SEC. 91-2.08; Aluminum Paint, Finish Coat (State Specification 8010-31A-45) For use as a finish coat on steel, above and below water.

2. Paints for Wood

P5	CALTRANS STD. SPECS. SEC. 91-3.01; Wood Primer, Latex-Base (Federal Specification TT-P-001984, Latest Revision) For use on unpainted wood.
----	---

- P6 CALTRANS STD. SPECS. SEC. 91-3.02; Paint, Latex-Base for Exterior Wood, White and Tints (Federal Specification TT-P-96D)
For wood subject to outside exposures, previously treated with wood primer, P5, above.

3. Miscellaneous Paints

- P7 SHERWIN-WILLIAMS CO., CLEVELAND, OHIO; Coal Tar Epoxy C-200; or RUST-OLEUM CORP., VERNAN HILLS, ILLINOIS; Coating No. 9578 Coal Tar Epoxy; or equal.
Two-coat application on iron and steel exposed underground and/or to moisture or sewage.
- P8 CALTRANS STD. SPECS. SEC. 91-4.05; Paint, Acrylic Emulsion Exterior White and Light and Medium Tints (Federal Specification TT-P-19)
For use on exterior masonry.
- P9 CALTRANS STD. SPECS. SEC. 91-4.09; Enamel, Gloss, Industrial (Federal Specification TT-E-489, Class A, Air Drying)
For use where high gloss enamel is desired, for exterior and interior primed wood and metal surfaces.

All materials shall be specifically manufactured for use on projects of this type, and shall be used on surfaces intended by the manufacturer. All materials shall be delivered in original containers, with seals unbroken.

Colors for the various surfaces to be painted shall be as required by the District. Use of different colors for the various structures or for surfaces of a single structure may be directed by the District.

C6.06 PAINTING SCHEDULE

In general, the following items shall be painted: exposed iron and steel surfaces in underground pipelines; iron and steel surfaces in above ground pipelines; exterior woodwork; all visible surfaces of equipment, bolts, nuts, hangers, clamps and similar metal devices; and all galvanized surfaces, except gratings and floor plates.

Notes:

1. For exposed iron and steel surfaces in underground pipe installation prime coat may be brush applied in shop. Touch up prime coat as required in field. Prime shall be allowed at least 72 hours drying time in good weather before recoating. All coats may be brush or spray applied. Allow at least 2 days for drying between coats.
2. For iron and steel surfaces in above ground pipe installation the surface shall be blast cleaned. Apply paint with brush or spray. Mil thickness for first two coats, 1.2 mils per coat and 1.0 mil per coat for last two coats. Second and third coats to be tinted.
3. For exterior woodwork, apply paint with brush or spray.
4. For iron and steel exposed to moisture or sewage apply coal tar epoxy a minimum of two brush coats to give a minimum of 25 mils total film thickness. Brush each coat perpendicular to strokes of preceding coat. Drying time between coats shall be as recommended by the manufacturer.

C6.07 TESTING

Testing will be conducted in accordance with the latest test methods of American Society of Testing Materials and of the Federal Test Method Standard No. 141, as applicable.

SECTION C7 - RESURFACING

C7.01 SCOPE

Resurfacing includes the furnishing and installation of all materials, equipment, and labor necessary for the replacement and restoration of all streets, roads, highways, sidewalks, curbs, gutters, driveways, and similar surfaces.

C7.02 GENERAL

Any concrete or bituminous paved surface which is broken, removed, or damaged by the Contractor's operations shall be restored by Contractor to at least ~~to~~ the condition existing prior to beginning work. Notwithstanding the provisions of this section, all work will be subject to the requirements of the entity having jurisdiction over the affected area. The Contractors shall familiarize themselves with the requirements of said entity and shall comply in all respects with these requirements. Wherever there is a conflict between the requirements of the entity having jurisdiction and the requirements of this Section, the more restrictive of the two shall be the requirement with which the Contractor shall comply.

All trenches shall be saw cut prior to excavation. All breaks shall be saw cut prior to patching.

C7.03 MATERIALS

1. Concrete

Concrete shall be as hereinbefore specified in Section C3.

2. Aggregate Base Course

Aggregate base course shall conform to the requirements of CalTrans Standard Specifications, Section 26 and shall be Class 2, 1-½ inch maximum size.

3. Prime Coat

Prime coat shall conform to the requirements of CalTrans Specifications, Section 39. Liquid asphalt grade for prime coat shall be Grade MC-70.

4. Asphalt Concrete Surfacing

Asphalt concrete surface shall conform to the requirements of CalTrans Specifications, Section 39, and shall be Type B, 1/2 inch maximum size.

Paving asphalt shall conform to the provisions in Section 92 and shall be of the penetration range specified the entity having jurisdiction. Viscosity grade shall be AR 4000.

C7.04 PREPARATION OF SUBGRADE

After backfill has been properly placed in the trench and other affected areas, in accordance with the provisions herein, the surface shall be rolled or tamped until the subbase is firm and unyielding. Mud or other soft or spongy material shall be removed and the space filled with gravel and rolled or tamped in layers not exceeding 4 inches in thickness. The edges of all existing surfaces shall be saw cut and square prior to placement of the base course and final surface.

C7.05 BASE COURSE

In the absence of any requirements to the contrary by an agency having jurisdiction over the pavement replacement, the base course shall consist of a lean concrete base. Lean concrete base shall conform to the provisions of Section 90 of CalTrans Standard Specifications except that the cement content shall be not less than 2 1/2 and not more than 3 1/2 sacks per cubic yard.

Concrete base shall be placed to a depth of 6 inches (minimum) and shall extend six inches (minimum) outside of the trench line.

Aggregate base may be used for a base course at the following locations:

1. When the trench is entirely within the shoulder, gutter, or sidewalk on a public street.
2. When the trench is located in a paved area which is not a public street. Aggregate base course shall be placed to a compacted thickness equal to that which existed prior to construction or to a minimum compacted depth of 6 inches. Spreading and compacting shall be in accordance with the applicable portions of CalTrans Standard Specification, Section 26.

C7.06 CONCRETE SURFACES

Reconstruction of concrete curbs, gutters, driveways, and sidewalks shall be of the same kind of material and in not less than the same dimensions as the overall work. In the case of concrete slabs, the minimum thickness shall be 4 inches. Repairs shall be made by removing and replacing the entire portions between joints or scores and not merely by refinishing the damaged part. All work shall match the appearance of the existing improvements as nearly as practicable.

C7.07 ASPHALTIC SURFACES

After the base course has been compacted, plant-mix surfacing shall be applied to a minimum depth of 2 inches, but in no case less than the thickness of the existing pavement. Before placing the plant-mix surfacing, a prime coat of asphaltic emulsion shall be applied over the area to be resurfaced. Proportioning, mixing, spreading, and compaction of asphalt concrete shall conform to applicable portions of CalTrans Standard Specification, Section 39, except that a self-propelled mechanical spreading and finishing machine need not be used. The finished work shall be to the satisfaction of the entity having jurisdiction.

The Contractor shall submit samples of the asphalt and the aggregate for use in the design of the mix. Thickness shall be as indicated, but in no case less than that removed.

The subgrade shall be smooth graded to an even elevation using finish elevations. Any soft or spongy material encountered shall be removed and replaced with approved gravel. The Contractor shall provide adequate drainage at all times to prevent water from standing on the subgrade.

The prime coat shall be applied only when the base course is dry or contains moisture not in excess of that which will permit uniform distribution and the desired penetration. It shall not be applied unless the air temperature is 60 degrees F and rising and shall be applied at the rate of 0.25 gallons per square yard.

No mixture shall be mixed or spread when the air temperature is at or below 50 degrees F, nor when the base or binder is wet, nor when other conditions are obviously unsuitable.

No vehicular traffic of any kind shall be permitted on the finished surface until the bituminous material has cured sufficiently not to be unduly distorted.

Any foreign material that may have accumulated on the surface shall be removed before the surfaces are rolled.

C7.08 SURFACE TREATMENTS

If special surface treatments such as seal coat, armor coats, or fog seal are required by the jurisdictional authority, they shall be done to the requirements of the authority.

C7.09 RESTORATION OF SURFACE MARKERS

Traffic markers or other surface markings painted on the roadway surface which

have been damaged or destroyed by Contractor or any of its subcontractors shall be replaced by Contractor in strict accordance with the requirements of the jurisdictional authority.

C7.10 REPLACEMENT OF TRAFFIC LOOPS

Traffic Loops that are damaged by construction shall be replaced as possible upon damage. The Contractor shall notify the District, the Police Department, and the Fire Department after damage occurs. The Contractor shall replace the damaged loops in strict accordance with the requirements of jurisdictional authority.

SECTION C8 - SEWER LINE CLEANING

C8.01 SCOPE

The Contractor should understand the purpose and scope of any sewer line cleaning specified in relation to the degree of cleaning and inspection required. The Contractor's attention is directed to the Safety and Health Provisions with respect to CAL OSHA rules and regulations to follow before entering manholes.

Below are Examples of cleaning purposes and associated cleaning requirements included in the CAL OSHA Safety and Health Provisions that Contractor must follow.

1. **Removal of Blockages:** This is usually emergency cleaning. The requirement is to remove or relieve a particular blockage and prevent sewage back-up, overflow, and property damage.
2. **Routine Maintenance:** This often involves moderate root removal or the removal of light to heavy debris preventing adequate flow. The intent is to prevent blockages and restore the sewer to near-full capacity and self-scouring velocity. Cleaning requirements are not usually stringent if the purpose appears to have been achieved.
3. **Cleaning Prior to TV Inspection:** Cleaning in preparation for TV inspection must be performed. Pipe walls must be clean enough for the camera to discern structural defects, misalignment and points of infiltration. Small amounts of debris left on the sewer invert, such as sand, stone or sewage solids, may not interfere with effective inspection.
4. **Cleaning in Preparation for Sewer Pipe Joint Sealing or Pipe Lining:** Cleaning must be much more thorough than for sewer maintenance. All sand, rocks, gravel, grease, mud, sludge and other debris must be removed from the sewer invert to permit operation of a sealing packer. Roots usually enter the top portion of the pipe and should be removed to the extent necessary to effectively seal the joints.

It is usually desirable to perform the cleaning immediately prior to joint sealing or pipe lining operations to preclude the buildup of materials from infiltration and inflow sources and the shoaling of wastewater debris.

C8.02 MATERIALS TO BE REMOVED

The bulk of sewer cleaning is involved with the removal of sludge, mud, sand, gravel, rocks, bricks, grease, and roots from pipes, manholes, and wet well. Other material may be found in combined sewers.

Removal of bricks, pieces of tile and clean sand or soil indicates structural problems such as broken or collapsed pipe (see Cleaning Precautions, of these specifications)

C8.03 SEWER CLEANING PROCEDURES

Sewers are generally cleaned downstream starting at the upstream manhole section of the area to be cleaned. Selection of equipment and methods often depends on the conditions at the time the work commences. The equipment should be capable of removing dirt, grease, rocks, sand, and other materials and obstructions from the sewer lines and manholes. If cleaning of an entire section cannot be successfully performed from one manhole, Contractor must set up the equipment ~~may be set up~~ on the other manhole and cleaning again attempted. If, again, successful cleaning cannot be performed or the equipment fails to traverse the entire manhole section, it may be assumed that a major blockage exists and the cleaning effort should be terminated. The Contractor should make note of the indicated location (footage) of the blockage in anticipation of excavation which may be required. The Contractor should make note of the sewage flow and determine if the blockage is causing a sewage back-up which requires near-term or emergency action by the District. The Contractor should immediately report the need for appropriate action to the District.

C8.04 PIPE DAMAGE PREVENTING CLEANING OPERATIONS

The Contractor should recognize that there are some conditions such as broken pipe and major blockages that prevent cleaning from being accomplished or where damage would result if cleaning were attempted or continued. Should such conditions be encountered, the Contractor should not be required to clean those specific manhole sections. The Contractor will be knowledgeable of and alert for any conditions which warrant termination of cleaning activities.

Example: The removal of large quantities of fresh soil with a jet cleaner may indicate broken or collapsed pipe.

Example: The removal of bricks from a brick sewer with a bucket machine may indicate more harm is being done than good.

C8.05 DEBRIS REMOVAL

Sludge, dirt, sand, rocks, grease, and other solid or semisolid material resulting from the cleaning operation shall be removed at the downstream manhole of the section being cleaned. Contractor shall not ~~Ppassing~~ material from manhole section to manhole section, which could cause line stoppages, accumulations of sand in wet wells, or damage pumping equipment, ~~shall not be done~~.

C8.06 CLEANING TASKS

The Primary tasks performed in sewer cleaning are:

1. Dislodge materials.
2. Transport materials to a point of access.
3. Remove materials from the sewer system.
4. Transport materials to a disposal site.

Most cleaning techniques require access for men and equipment at the downstream manhole where materials are to be removed. Some cleaning techniques require equipment access to both ends of a manhole section.

C8.07 CLEANING METHODS

The Contractor should be experienced with the methods and techniques generally used with each type of sewer cleaning equipment.

1. Rodding Machine

Rotating-rod sewer cleaning equipment is practical and useful for returning clogged sewers to service. The rods are generally 3/8- to 1/2-inch in diameter and may be sectional or continuous. Rods are made of high-strength, oil-tempered spring steel.

A sewer rodding machine can push the rod through a sewer for a distance as great as 800 feet. It can also be used in curved sections.

The rodding machine should be set up in close proximity to the downstream manhole and positioned so that the flexible rod guide (containing the rotating rod) makes a gentle curve from the machine to the entrance of the sewer pipe at the bottom of the manhole. The rod is usually pushed upstream so that the flow will help bring the debris back toward the machine.

The rod can be fitted with a variety of tools. To open a line that is completely plugged, the operator can place a small spear or a corkscrew device on the end of the rod. The rodding machine will push and rotate the rod into the blockage to make an opening large enough to permit wastewater to start flowing.

The operator can then replace the corkscrew with an auger. Augers are spiral-shaped cutting devices with diameters smaller than that of the pipe to be cleaned. The rodding machine rotates the rod and the auger, forcing the auger upstream into the sewer to grab as much of the clogging material as it can, and then retrieves the rod, pulling the debris back downstream.

The operator should set the footage meter on the machine to zero before pushing the rod up the sewer. This zero setting indicates how far the cleaning tool is into the line.

The operator can move the rod forward without rotating it, but it should be rotated in larger pipes or if debris is encountered to prevent buckling the rod. If the line is fairly clean, the rotating rod can be moved quickly and easily. When cleaning becomes difficult, increasing hydraulic system pressure and the sound and speed of the machine alert the operator. Cleaning can continue if the hydraulic pressure is within limits, but the forward speed should be reduced and the rod rotation speed maintained. The machine must have a pressure (or mechanical) overload device to prevent the rod from being twisted off if the tools should stop rotating in the sewer.

If the rod and the cutter appear to be making no forward progress and high hydraulic system pressure is indicated, the cutter probably has encountered a heavy mass of roots or other obstruction. The operator should reverse the rotation, retrieve the rod and cutter, clean the cutter of entangling roots, and then run the rod and cutter back to again attack the obstruction.

The rod can be pulled back without rotating, but in general it should not be. Spring-blade cutters can be attached at the upstream manhole and pulled back with the cutter rotating at maximum speed.

Many cleaning tools can be used by rodding machines. Among them are:

- Root saws.
- Expandable cutters with two or three knife blades that can adjust to the diameter of the sewer being cleaned.
- Sand cups are rubber discs designed to permit passage of a portion of the wastewater flow through holes in the disc, thereby creating jets which flush the debris toward the downstream manhole.

2. Bucket Machine

Bucket machines are strong, powerful pieces of equipment. They can open

heavily blocked sewers clogged with large masses of roots, sand, or clay. When a crew completes its cleaning using this type of machine, the sewer should be in good flowing condition, unless it contains broken pipe.

The crew must first thread the cable through the length of sewer to be cleaned. One method is to float or flush a light rope through the pipe, assuming that the flow is sufficient and there are no blockages or root curtains. A more positive method is to pull the cable through using a rodding machine or jet cleaner.

A bucket machine setup consists of two powered winches, each equipped with sufficient steel cable to reach between two manholes, generally not over 750 feet. The cleaning crew will center the machines over the two manholes.

A specially designed bucket serves as the connecting link between the two cables permitting the machines to pull the bucket in either direction. The bucket is designed so that one end opens and closes. One of the machines pulls the bucket into the sewer with the bucket end open. When the bucket is full, the other machine pulls it back. When the bucket is pulled back, the "clam shell" end automatically closes.

Most models can draw the bucket completely out of the manhole and, by use of a swinging boom or chute, discharge the debris into a dump truck.

After the operators have removed the bulk of the debris from the sewer line, they can replace the bucket with a "porcupine". This is a cleaning tool with stiff wire cables protruding outward. By drawing it back and forth in the sewer, the operator can remove roots and grease deposits. For a final, wiped-clean finish, the operator can replace the porcupine with a rubber "squeegee"/⁴⁴³³swab".

3. High-Velocity Jet Machine

High-velocity jet sewer cleaning using water pressure can produce excellent results. Under favorable conditions, jet cleaning has demonstrated the ability to clean a line faster and with greater efficiency than any of the other methods.

There are many advantages. Operation is at street level without requiring the crew to enter the manhole. Little time is required for setup. An operator can quickly and thoroughly clean a small-diameter sewer 500 feet long.

Although the method uses water at high pressure, tests have shown that

the water jets do not harm pipe joints. A jet cleaner can clean curved lines where buckets and rotary cutters would harm the pipe.

The nozzle provides the cleaning action. The nozzle has a backward spray that propels the hose up the sewer to be cleaned. When the operator retrieves the hose, the water jets scour the sewer and move the debris to the downstream manhole. Refer to Section C8.05 Debris Removal for additional requirements.

4. Hydraulically Propelled Equipment

(a) Cleaning Ball:

Over the years, the use of a rubberized ball to clean flowing sewers has proved its effectiveness. An experienced operator will hold back the ball to permit wastewater to pass around its lower perimeter, thus flushing the debris ahead to the downstream manhole.

To use sewer balls, a crew should be equipped with:

- At least 600 feet of 0.5-inch synthetic-fiber rope mounted on a winch. For balls over 15 inches in diameter, steel cable is preferred.
- A swivel and clevis that serves to attach the rope or cable to the ball.
- 400 feet of fire hose and a gate valve fitted with connections to attach to a hydrant.
- A downhole roller having a free-running wheel to be fitted into the upstream manhole for the rope or cable.
- Rubber buckets, appropriate shovels, boots, and safety harnesses for use when crew members enter the manhole.

The downhole roller is placed in the upstream manhole and set firmly in place. The wheel should be above and opposite the outgoing sewer opening which serves as the entry point for the ball. This wheel location permits the cleaning crew to insert the ball into the downstream pipe.

An elbow trap is placed in the outgoing pipe of the downstream manhole to confine debris flushed out by the ball and permit passage of wastewater downstream. The rope or cable is passed under the

roller and secured to the ball. The ball is then inserted into the outgoing pipe. Finally, hydrant water, via air gap, is introduced at an upstream manhole to raise the level in the upstream manhole to a depth of approximately 3 feet.

A few tugs on the rope, permitting some water to escape around the perimeter of the ball, will start the ball moving. Most of the water will escape around the lower surface of the ball since the ball's buoyancy will hold it against the top of the pipe. The static head will then force the ball to move downstream. The operator must keep the rope or cable tight to prevent it from overriding the ball if the ball is not inflated to a snug fit.

The ribbed ball flutters, rather than spins, in the pipe. It will develop about 6 inches of turbulent water on the downstream side, and this water will lift the debris and flush it toward the downstream manhole, where it can be shoveled out or removed by debris removal equipment. If the ball stops moving, it is pulled back, increasing the flow around the ball, which levels the debris and allows the ball to proceed.

In general, the ball is inflated with enough air to make it fit snugly in the pipe, although some conditions can require the ball to be underinflated. The operators must learn through experience how much inflation is required.

The cross-sectional area of a cleaning ball increases with the square of its diameter. Thus, a 30-inch ball has four times the area of a 15-inch ball. With the same head of water behind it, the 30-inch ball will have four times the propulsive force of a 15-inch ball and nine times the force of a 10-inch ball. Large cleaning balls are hard to control and difficult to handle and may require winch truck with cable.

(b) Hinged-Disc Cleaner (Scooter):

The hinged-disc cleaner operates in a manner similar to that of the ball. The device is inserted into the outgoing sewer line. Flow is reduced and the resulting head causes the machine to roll down the pipe until debris is encountered. The scooter will then stop, causing the water to rise upstream. A cable attached to the device is then pulled back, causing the upper half of the disc to rotate backward and release the accumulated head. The velocity of the released water is generally several times the normal velocity of the sewage and washes the debris downstream, where it is removed at the next manhole.

When heavy debris is encountered, the device is pulled back, causing the flushing action, and then released. This operation results in a completely clean pipe.

The hydraulic force available increases with the square of the pipe diameter, while the amount of debris increases in proportion to the diameter. As a consequence, the scooter's ability and efficiency increase in larger pipe, but a large amount of water is required.

C8.08 CLEANING EQUIPMENT

There are five types of cleaning equipment:

- a. Rodding machines
- b. Bucket machines
- c. High-velocity jet machines
- d. Hydraulically propelled equipment
- e. Debris removal equipment (including combination machines)

Cleaning equipment is available with characteristics ranging from light to heavy duty. Each type of equipment can utilize special attachments, tools, and methods to expand its capabilities. Cleaning equipment will be evaluated here with emphasis on its primary application.

The Contractor should be concerned with the type of equipment used most notably in areas where the Contractor's equipment is likely to cause pipe damaged, flooding of private property, etc. In hills, only the bucket machine can be used for sewer cleaning unless authorized by the [General](#) Manager.

The applications, advantages and limitations of each type of sewer cleaning equipment are summarized on the following pages.

1. Rodding Machines

Materials removed:

Most effective for dislodging roots and relieving blockages.

Applicable for dislodging and transporting sludge, mud, and grease

using appropriate accessory tools and adequate flushing water.

Pipe size range:

Generally 6-inch to 18-inch pipes due to the limited pulling power and the tendency of the rod to bend in larger pipes.

Technique advantages:

Access to the downstream manhole only is required.

Can be used at the upstream manhole under surcharge conditions.

Threading the sewer line is not necessary; often used for threading sewer lines for other cleaning or inspection equipment.

Fast response to emergency stoppages.

Technique limitations:

Generally ineffective for cleaning heavy solids.

A large quantity of water is required for "brush and flush" cleaning.

Does not provide for removal of materials from the manhole.

Rod and/or tool can be broken off in the sewer line.
Operation is moderately hazardous.

2. Bucket Machines

Materials removed:

Most effective for dislodging, transporting and removing heavy solids such as gravel, rocks, bricks, and roots.

Applicable for dislodging and transporting mud, sand, and grease.

Pipe size range:

Generally 18-inch to 36-inch pipes make the best use of the available power although 8-inch to 15-inch pipes can be cleaned.

Technique advantages:

Provides the "iron and power" for removal of large amounts of heavy solids and roots.

Effective in large-diameter pipe.

Various buckets, scrapers, brushes, and squeegees are available.

Can remove materials from the manhole.

Technique limitations:

Access to both manholes is required.

Threading the sewer line is necessary.

Time consumed is longer than for other methods for light cleaning.

Uses heavy tools and has the power to damage the pipe.

Curved pipe, structurally damaged pipe, off-set joints, and intruding service connections can preclude the use of bucket machine tools.

Bucket machines are hazardous to transport, set up and operate.

3. High Velocity Jet Machines (capabilities depend on size of machine)

Materials removed:

Most effective for cleaning pipes of light solids such as sludge, mud, sand, and gravel.

Applicable for dislodging and transporting rocks and grease.

Capable of cutting root growth by using special tools in pipes. Some larger tools are available.

Effective for cleaning manholes using a scouring gun.

Pipe size range:

Most effective in 6-inch to 24-inch pipes. The effectiveness in larger pipes is reduced, especially on grease.

Materials can be cleaned from the invert of larger pipes by using a weighted nozzle.

Technique advantages:

Access to the downstream manhole only is required.

Threading the sewer line is not necessary; often used for threading sewer lines for other cleaning or inspection equipment.

Setup is fast.

Fast method for light cleaning and removal of blockages.

Operation is comparatively easy.

Effective for final cleaning prior to rehabilitation work.

Low pipe damage potential except in badly deteriorated pipe.

Few operator safety hazards are involved.

Jet cleaning provides ventilation when the upstream manhole cover is removed.

Technique limitations:

Water must be available reasonably near the work site.

Least effective on large and heavy materials such as roots, rocks, bricks.

Can cause cavitation of backfill outside broken pipe.

4. Hydraulically Propelled Equipment (cleaning ball, hinged-disc cleaner)

Materials removed:

Most effective for cleaning pipes of light solids such as sludge, mud, and sand.

Fair applicability for dislodging and transporting gravel, rocks, and grease.

Pipe size range:

Generally 8-inch to 36-inch pipes.

Best in intermediate sizes, with extreme caution required in large pipes (see Cleaning Precautions, Section 8.09 of these Specifications).

Technique advantages:

Crew access only to upstream and downstream manholes.

Minimum equipment requirements.

Operation is easy.

Few safety hazards are involved, except manhole entry.

Technique limitations:

A large quantity of water is required at or upstream of the site.

Basement flooding is a real possibility; may be used only where head in sewer will not exceed basement drain elevations.

Not applicable for removal of blockages. ~~sewer must be flowing.~~

Does not provide for removal of materials from the manhole.

Caution is required when using hydraulically propelled devices in large pipes due to the large propulsive force and the possibility of getting the equipment stuck in the sewer line with dig-up becoming the only solution.

5. Debris Removal Equipment (including combination machines)

Vacuum machines are primarily used for removal of materials from manholes when other cleaning equipment is used to dislodge and transport the materials to the access point. Some vacuum machines can remove heavy materials such as bricks. Most machines can separate solid materials from cleaning water and transport the debris to a dump site.

Note: A vacuum machine in combination with a jet machine is called a "combination machine."

Trash pumps are frequently used to remove sludge, mud, sand, and gravel from manholes.

Trailers (sometimes containing pumps, tanks and settling baffles) are frequently used to separate solid materials from cleaning water and to transport the debris to a dump site.

C8.09 CLEANING PRECAUTIONS

The Contractor should be aware of several precautions to ~~be taken~~ during cleaning operations.

Eroded, corroded, or otherwise structurally deteriorated pipe may collapse during cleaning operations. Visible inspection must be used to ascertain the advisability of cleaning. Sometimes a television inspection must be made prior to cleaning in such situations. Contractor must exercise due caution.

Clean soil and pieces of broken tile observed in a manhole trough are strong indications of broken, crushed, or collapsed pipe in the upstream section. Contractor must exercise due caution.

Full gage cleaning tools are subject to getting "hung up" on off-set joints, intruding service connections, root masses, and other obstructions. A tag cable and winch should be used when practical to retrieve cleaning tools and devices.

Pipe damage is possible any time powerful cleaning equipment is used. Cleaning equipment and tools should be matched to both the job and pipe conditions to avoid pipe damage.

When bucket machines are used, downhole cable rollers should always be employed. Properly installed, the lower "V" of the roller should be just below the top of the sewer pipe so the cable does not rub or catch on the entrance to the pipe. The roller must be high enough to permit free passage of the bucket into and out of the sewer pipe.

When hydraulically propelled cleaning tools (which depend on water pressure to provide their cleaning force) or any equipment which retards the flow in the sewer is used, a real possibility of a sewage back-up resulting in flooding and property damage exists. When a hydraulically propelled cleaning tool stops moving downstream for any reason (e.g., stopped by a roller in a downstream manhole), a sewage back-up starts to take place, especially if water is being added from an upstream hydrant. The Contractor should be on the lookout for such a situation.

C8.10 DISPOSAL OF MATERIALS

Solids or semisolids resulting from the cleaning operations shall be removed from the site and disposed of at a site designated by the District. All materials shall be

removed from the site at the end of each workday. The Contractor may be allowed to accumulate debris at the work site beyond the stated time in enclosed containers and as approved in advance by the District.

C8.11 ROOT REMOVAL

Contractor shall remove ~~R~~oots ~~shall be removed~~ in ~~the~~ designated sections where root intrusion is a problem. Special attention shall be used during the cleaning operations to assure almost complete removal of roots from the joints prior to joint sealing. Roots which could prevent the seating of the packer or could prevent the proper application of chemical sealants must be removed. Procedures may include the use of mechanical equipment such as rodding machines, bucket machines and winches using root cutters, root saws, porcupines, and jet machines equipped with hydraulically driven cutters.

C8.12 CHEMICAL ROOT TREATMENT

To aid in the control of roots, Contractor may treat manhole sections that have root intrusion ~~may be treated~~ with an Environmental Protection Agency (EPA) registered herbicide. The application of the herbicide to the roots shall be done in accordance with the manufacturer's recommendations and in such a manner to preclude damage to surrounding vegetation. Damaged vegetation shall be replaced by the Contractor at no additional cost to the District. Safety precautions as recommended by the manufacturer shall be adhered to concerning handling and application of the herbicide.

C8.13 CHEMICAL ROOT TREATMENT METHODS

With the following application methods, roots absorb the killing agent and inhibitor. Soil in the sewer joints absorbs the inhibitor allowing it to be effective for as much as three years in open joints.

The preferred method of treating roots with a foam fumigant is as follows: The foam generator is set up at the downstream manhole. The fumigant hose is pulled through the sewer to the upstream manhole. The foam generator is then started and run until foam shows at the upstream manhole. The hose is then retrieved at a rate given on a chart provided by the equipment supplier. Foaming is terminated when foam appears at the downstream manhole. No plugs need to be used as the sewage will flow under the foam and does not rapidly wash it away. The foam tends to cling to the upper portion of the sewer giving the roots time to absorb the fumigant.

C8.14 FINAL ACCEPTANCE

Acceptance criteria for sewer line cleaning shall be as specified in the contract.

The General Manager shall be satisfied that the degree of cleaning is adequate for the purpose and intent of the contract. District A acceptance of sewer cleaning shall be made upon the successful completion of the television inspection if specified in the contract. If TV inspection shows the cleaning to be unsatisfactory, the Contractor shall reclean and reinspect the sewer line until the cleaning is shown to be satisfactory. If internal sealing is to follow the television inspection, particular attention should be given to the adequacy of the cleaning to insure that proper seating of the sealing packer can be achieved.

C8.15 VARIABLES WHICH AFFECT THE DIFFICULTY OF SEWER CLEANING

The Contractor should be familiar with the many variables which may have impact on ~~his~~its performance, production and cost on any particular sewer cleaning job. Some variables apply to each manhole section to be cleaned.

1. Locating, exposing, removing manhole covers.
2. Access to manholes, terrain, traffic control requirements.
3. Condition of the manholes -- steps, cleanliness, structure.
4. Depth of the sewer -- difficulty of entry and debris removal.
5. Size of the pipe.
6. Depth and velocity of sewage flow.
7. Structural integrity of the pipe.
8. Off-set joints, intruding service connections, curved pipe.
9. Availability of hydrant water at or upstream of the site.
10. Depth of deposition in the pipe.
11. Type of solid materials to be removed, arranged in order of increasing difficulty -- sludge, mud, sand, gravel, rocks, grease, bricks and roots. Roots are difficult to remove completely and may be a significant factor.
12. Degree of cleanliness required -- see Intent, Article C8.01 of these specifications.
13. Productivity differences in cleaning successive vs. random manhole sections.

14. Requirements for transportation and disposal of solid materials and distance to the disposal site.

SECTION C9 - SMOKE TESTING

C9.01 EQUIPMENT

The Contractor shall provide a portable blower designed and built specifically for the use of smoke testing. The blower shall be self-contained ~~and powered by a minimum three (3) horsepower (HP) gasoline engine~~ and be capable of producing a minimum of 1800 cubic feet of air per minute. In addition to the blower, the Contractor shall provide all other equipment and tools and incidentals required to perform smoke testing as required by these specifications.

~~Attention by t~~The Contractor's s attention is directed to the Safety and Health Provisions with respect to CAL OSHA rules and regulations to follow before entering manholes.

C9.02 SMOKE PRODUCT

The smoke product ~~shall~~ produce a chemical reaction generating white to gray smoke, leaving no residue, and shall be non-toxic and non-explosive. Each product shall be capable of producing 100,000 cubic feet of smoke within five (5) minutes.

Manufacturer's literature on the smoke product to be used in this project shall be provided by the Contractor for review by the General —Manager prior to commencement of any work.

C9.03 PERSONNEL

The Contractor's employees performing ~~the~~ smoke testing under the provisions of these specifications shall be properly trained in the use of the equipment and procedures. As a minimum, they shall have at least five (5) days of previous testing experience. The five (5) days of experience shall have been acquired within a maximum of six (6) months prior to the date of award of this contract, unless specifically waived by the District. A list of employees to be used shall be provided to the District upon request.

C9.04 PROCEDURE

Upon award of the Agreement by the District and PRIOR TO COMMENCING ANY WORK, the Contractor shall provide a complete WorkORK SscheduleCHEDULE to the General Manager for review and approval. The Work Schedule shall be typed and shall indicate the planned progress for the proposed work.

The Work Schedule shall indicate the following:

- a. Street Name (In easements - the names of the abutting streets).
- b. Street Limits (Cross streets or property addresses).
- c. Upstream and Downstream Manhole Numbers (from District Maps).
- d. Date of Testing.
- e. Starting Time.
- f. Ending Time.

The Contractor shall not commence testing before 8 a.m. and shall terminate testing no later than 4 p.m. each day. If the Contractor wishes to test before 8 a.m. in commercial areas of the District, such testing shall be shown on the submitted WORK SCHEDULE and is subject to the approval of the General Manager. Smoke testing shall not be performed on weekends or on holidays without the prior approval of the General Manager.

Once the WORK SCHEDULE is approved by the General Manager, the Contractor shall not make any revisions or modifications to it without the WRITTEN APPROVAL of the General Manager.

The Contractor shall not perform smoke testing on days that, in the opinion of the General Manager, will hinder the results of the test.

C9.05 NOTIFICATION AND PUBLIC INFORMATION

1. The Contractor shall notify all providers of emergency services the day before any area to be smoke tested by phone ~~daily of the area to be tested the next day of work~~. Notification shall be 24 hours in advance of the testing.

Providers of emergency services shall include the police, fire and medevac agencies ~~which serve the area being smoke tested~~.

It shall be the Contractor's responsibility to keep adequate records of all notifications to emergency services and to produce them upon request by the District. Failure to comply with this requirement may be cause for the District to suspend the Contractor's operations until compliance is achieved.

2. The Contractor shall notify, by hand delivery of a notification letter to each address, all RESIDENCES AND BUSINESSES in the area to be tested, 48 hours in advance of the testing.
3. The Contractor shall require all personnel to demonstrate good judgement in performing the testing. The Contractor shall take appropriate action to insure that his-its employees are polite to the public in all aspects of the work and that immediate assistance is provided to property owners if needed.

C9.06 RECORDS

1. The Contractor shall prepare a ~~bound~~ report of the smoke testing. The report shall contain a ~~typed~~ log that clearly identifies each sewer main tested. For each sewer main tested, the log shall identify each point of smoke exfiltration from:
 - a. Roof gutters
 - b. Sewer cleanouts
 - c. Leakage in house laterals
 - d. Patio or area drains
 - e. Storm drain cross connections
 - f. Any other source not stated above.
2. The points of exfiltration, as identified above, shall be referenced to permanent landmarks and/or house or lot numbers. A photograph of all leaks, using a digital camera or approved equal, shall be included in the ~~bound~~ report. All photographs shall be clearly cross referenced to the typed log indicating the location of the leak. The Contractor shall provide the District with ~~the~~ photos at the end of the project in jpeg format electronically on a disk or flash drive.

All smoke testing information shall be accurately and neatly recorded on field worksheets and on 200 scale maps (1 in. = 200 ft.) or other maps of suitable scale as provided by the District. The form of the field worksheet shall be approved by the General Manager prior to the commencement of work by the Contractor.

All items described above shall be placed in ~~thea-bound~~ report. ~~ATwo-(2)~~ Complete copies of the report shall be submitted to the General Manager, or their designee for review. Upon receiving the General Manager's review comments, the Contractor shall edit or revise the report as necessary and resubmit ~~two copies~~ to the General Manager or their designee.

C9.07 SAFETY

The Contractor and ~~his-its~~ personnel, including but not limited to any subcontractor hired by Contractor for the project, shall be aware of and shall follow all Federal, State and Local safety laws and regulations in the performance of their work. Specific attention is directed to Article C1.09 Safety and Health Provisions of these specifications.

Prior to placing any smoke product into a manhole, the Contractor shall first evacuate the system with a blower.

The area of work shall at all times be protected by means of an adequate number of cones, barricades, flags or whatever means is necessary to properly and safely protect both vehicular and pedestrian traffic.

Any condition deemed to be an unsafe condition shall be immediately corrected by the Contractor. The failure of the General Manager or its representatives to bring a potentially dangerous situation to the Contractor's attention shall not relieve the Contractor from his-its responsibility for providing a safe work area.

SECTION C10 - SEWER FLOW CONTROL

C10.01 INTENT

Most cleaning, inspection, joint testing, joint sealing, sewer lining and excavation operations require minimal, or at least acceptable, depth of flow in order to be performed effectively. The Contractor should be aware that excessive depth of flow will inhibit and may even prevent some cleaning, inspection and rehabilitation procedures. The Contractor shall know and comply with the provisions, requirements, specifications and responsibilities for sewer flow control (if any) that are necessary. Specific aAttention by the Contractor is directed to the Safety and Health Provisions with respect to CAL OSHA rules and regulations to follow before entering manholes.

C10.02 DEPTH OF FLOW

For effective television inspection, joint testing and/or sealing operations, the depth of flow at the upstream manhole of the manhole section being worked shall be within the recommended limits given below:

Recommended Maximum Depth of Flow for Television Inspection:

6" - 10" Pipe	<u>20%</u> of pipe diameter
12" - 24" Pipe	25% of pipe diameter
27" & up Pipe	30% of pipe diameter

Recommended Maximum Depth of Flow for Joint Testing/Sealing:

6" - 12" Pipe	<u>25%</u> of pipe diameter
15" - 24" Pipe	30% of pipe diameter
7" & up Pipe	35% of pipe diameter

When depth of flow is greater than recommended for television inspection, joint testing and/or sealing, the flow may be reduced by operation of pump stations, plugging, or by pumping and bypassing of the flow.

C10.03 PLUGGING

A sewer line plug may be installed upstream of the section being worked. The plug should be designed to permit a portion of the sewage to be released. After the work has been completed, sewage flow shall be restored to normal.

Sewer plugs are always installed in the upstream (incoming) pipe of a manhole. It is desirable that the plug be equipped with an ~~air hose~~ [air hose](#) to permit deflation from above ground. A strong rope or cable shall be attached to enable the plug to be quickly pulled out of the manhole. Care must be taken to prevent a plug from being pushed into the outgoing pipe when the backed-up sewage is released.

C10.04 PUMPING AND BYPASSING

When pumping and bypassing is required, pumps, conduits, and other equipment are needed to bypass the flow of sewage around the manhole section in which work is to be performed. The bypass system shall have sufficient capacity to handle the existing flow plus additional flow that may occur. Contractor shall demonstrate bypassing operations to the District prior to any excavation. Excavation cannot begin until bypassing operations have been approved by the District.

C10.05 FLOW CONTROL PRECAUTIONS

When the flow in a sewer line is reduced, plugged, or bypassed, precautions must be taken to insure that the operations do not cause overflows, flooding or damage to public or private property. The Contractor shall closely monitor sewer surcharging upstream of the manhole section being worked and be alert for situations such as residential overflows and flooding that would be likely to occur, particularly where there are steep sewers serving houses with basements having floor drains or toilet facilities.

SECTION C11 - TELEVISION INSPECTION

C11.01 GENERAL

1. Contractor shall provide the District's with copies of all CCTV operators' NASSCO certifications. All operators shall be certified.
2. The video recordings shall be in color electronic data format, and shall give clear video/pictures of conditions of pipelines requiring cleaning and any other structural problems. ~~VHS and DVD recordings are not allowed.~~
3. All data and video recording will become the sole property of the District without restrictions of future use, duplication, modification, and dissemination. The Contractor shall have no vested rights to the completed work.
4. The project data furnished by the District to the Contractor for this work shall remain the property of the District and shall be returned on termination of the contract. The Contractor may not distribute, sell or otherwise use data without the written permission of the District.
5. The Contractor shall have the ability to communicate with its crew at all times (i.e. cellular phone, radio, etc.) to ensure that adequate communication exists between members of the crew.
6. If the Contractor encounters a condition where public safety is threatened (such as, but not limited to, a pipe hole, pipe collapse, stoppage, blockage and/or eminent sewer spill), Contractor shall immediately notify the District's representative ~~shall be notified immediately~~. Furthermore, the Contractor shall provide a visual record of the section of line containing the condition within 8 hours to District.
7. If the CCTV camera becomes lodged inside the sewer and cannot be retrieved, the Contractor shall inform the District immediately. It is the Contractor's responsibility to remove the camera and ensure that the sewer is not damaged and SSOs do not occur.

Formatted: Underline

Formatted: Underline

C11.02 EQUIPMENT AND TV PICTURE QUALITY

1. The Contractor's CCTV equipment shall include video cameras, a video monitor cable, power sources, and all other equipment necessary to perform the needed CCTV inspections.
2. The cameras shall meet Cal-OSHA requirements for operating in the sanitary sewer environment.
3. The cameras shall have Pan-and-Tilt capabilities, and shall have a minimum of 360 x 270 degree rotation and illumination sensitivity shall be three lux or less and provide a minimum of 460 lines of resolution. The focal distance shall be adjustable through a range from 25 mm (1 inch) to infinity.
4. The television shall be operative in 100 percent humidity conditions.
5. During CCTV inspection, lighting intensity shall be adjusted to minimize glare.

The camera must have its own light source suitable to provide a clear, in-focus picture of the entire periphery of the pipeline for all conditions encountered.

6. All camera systems shall be able to navigate around minor objects, roots, and debris. The system used to move the camera through the pipe shall not obstruct the camera's view or interfere with proper documentation of the sewer conditions.
7. Manual winches, power winches, TV cable powered rewind or other devices that do not obstruct the camera view or interfere with proper documentation of the sewer conditions shall be used to move the camera through the line.
8. The camera cable shall be retracted to remove slack and to ensure an accurate footage reading.
9. The distance shall be measured between the exit of the start manhole and the entrance of the finish manhole for a true measurement of the length of the pipe segment, as required by PACP. Distance shall be recorded in standard units and the video display readout shall display units to one-tenth of a foot.
10. The cable footage-counter shall be accurate to plus or minus 2 feet per 1,000 feet. The Contractor shall calibrate ~~their~~its measuring device monthly with a known distance prior to starting the inspection and recording process.
11. The camera lens shall be kept clear of condensation and debris during the CCTV inspection.
12. A Nationally Recognized Testing Laboratory must approve all electrical equipment, including CCTV cameras, for use in a Hazardous location and wet environments. This equipment must be approved for use in Class I, Division I, Group 0 Hazardous Locations as defined by the National Fire Protection Association (NFPA) Code 820-1999.
13. Contractor shall have replacement equipment available within twenty-four (24) hours in the event of equipment breakdown.
14. To insure peak picture quality throughout all conditions encountered during the survey, a variable intensity control of the camera lights and remote control adjustments for focus shall be located at the monitoring station. Focal distance shall be adjustable. Continuously displayed on the monitors as part of the video presentation shall be the date of the survey, number designation of the manhole section being surveyed, and a continuous forward read-out of the camera distance from the manhole of reference.

C11.03 VIDEO LABELING REQUIREMENTS

- A. The naming of the video file shall be automatic, consisting of the "FROM MANHOLE" ID, "TO MANHOLE" ID, and the eight-digit inspection date, as shown in the following example, or as specified by the District:

B10106_B10105_20100721
(FromMH_ ToMH_ YYYYMMDD)

- B. Each pipe segment (manhole to manhole) shall be identified with an initial text screen and completed in accordance with PACP's CCTV inspection form header format, as follows:

<u>Line</u>	<u>Number & Description</u>
Line 1:	Surveyed By
Line 2:	Street
Line 3:	Location Code*
Line 4:	Weather*
Line 5:	Direction of Survey (upstream/downstream)
Line 6:	Use of sewer*
Line 7:	Pipe Material
Line 8:	Pipe Diameter/Height
Line 9:	Pipe Length (on plans)
Line 10:	Start Manhole Number
Line 11:	End Manhole Number
Line 12:	Pipe ID (PSR or MMS #)
Line 13:	Inspection Time/Date

Line items noted with an asterisk (*) are optional depending on the line capacity of the text overlay equipment.

- C. This data must completely match the data entered in the database header information.
- D. During the CCTV inspection, the video shall show the following text at all times:

<u>Line Number</u>	<u>Description</u>
Line 1:	District
Line 2:	Street/ Start Manhole No. / Direction of Inspection/ End Manhole No.
Line 3:	Pipe Material / Pipe Size
Line 4:	Inspection Time/Date/Running Total

C11.04 CONDUCTING THE VIDEO INSPECTION

1. Video inspection and reporting shall be submitted in a NASSCO-compatible format and transferrable to the District's current Asset Management Software.
2. The recorded files shall have a minimum resolution of 352 by 240 pixels and an interlaced frame rate of a minimum of 24 frames per second.
3. The initial text screen shall appear no more than 15 seconds at the beginning

of the video footage, and shall appear before the 360 degree pan of the starting manhole.

4. The camera shall be moved through the line at a uniform rate stopping when necessary to ensure proper documentation of the sewer's condition but in no case shall the television camera be pulled at a speed greater than thirty feet per minute (30 fpm).
5. The Contractor shall make a continuous color recording of each complete pipe inspection. The recording shall also be used as a permanent record of defects. Unless directed otherwise by the District, the recording shall be in an electronic file format, be MPEG-4.
6. Separate video and data files shall be created for each sewer line segment. In case of reverse setup, such inspection shall be stored in a separate video and data files.
7. The video recording shall include on-screen observation text and narrative for every observation recorded, in addition to the general descriptive text above.
8. If an undocumented manhole is discovered during the inspection, then a separate inspection shall be started for the additional pipe segment.
9. The Contractor shall pause the digital recording at any time there is a delay in the inspection and restart the digital video recording in the same digital file. The pause shall in no way affect, freeze, or interrupt the reply of the video and shall not close the video file during the inspection.
10. During the CCTV inspection, the camera shall stop at all lateral connections, defects, and significant observations to ensure a clear and focused view of the pipe condition and shall rotate the camera head at the defect to allow for adequate evaluation at a later time. The camera shall be panned to look up all laterals.
11. All defects and significant observations shall include a text overlay and audio narrative of the recorded observation.
12. If the television camera will not pass through the entire section, the Contractor shall re-set his-its equipment in a manner so that the inspection can be performed from the opposite maintenance hole. If the camera continues to fail to pass through the entire section, the Contractor shall notify the District as soon as practicable.
13. A full 360-degree pan of all manholes starting from street level and proceeding to the bottom of manhole is required. This video footage shall occur at the beginning of each pipe segment survey inspection. In instances when the manhole is the terminating manhole, then the pan shall occur at the end of the pipe segment survey inspection.
14. Video footage shall be taken centered on the pipe with the water level running horizontally. The camera shall run along the invert of the pipe and not at its side, unless it is passing a point obstacle. If extended driving on the side of the pipe is required, then either the pipe needs a more thorough cleaning or an observation should be noted from the PACP codes describing the nature

of the obstacle.

C11.05 PHOTO OBSERVATIONS

- A. Digital photographs in JPEG format shall be made of all recorded defect observations. These photographs will be computer generated with the use of the inspection reporting system software.
- B. All pictures shall be recorded as a JPEG image at a minimum resolution of 640 X 480 pixels.
- C. At a minimum, all photographs shall be named consisting of the following descriptions: "FROM MANHOLE STATION NUMBER", "TO MANHOLE STATION NUMBER", eight-digit inspection date, and the defect 'station' location along the pipe. It is in the Contractor's discretion as to additional data information that may be needed in the naming of the files to make each file unique within the file naming constraints of their inspection software.

B10106_B1010_20100721_125_A.jpg
FromMHStation_ToMHStation_YYYYMMDD_Defect
Position_UniqueData)

- D. A minimum of TWO photographs of each defect shall be taken, one with a perspective view and one with a close-up view.
- E. ONE photograph is required for each lateral connection looking directly at the connection and each manhole observation from the bottom of the manhole looking up. At minimum, each lateral must be verified to be in service or not, and each "live" lateral must be identified with an address.

C11.06 SPECIAL CONDITIONS

- 1. Maximum depth of flow for CCTV inspections shall be 25 percent of the pipe diameter. If the depth of flow is greater, then flow control measures must be used as described in Section C10. At the contractor's option and approval from the District, the CCTV inspection may be performed during the low flow periods between the hours of 10:00 p.m. to 6:00 a.m. The Contractor shall pay special attention to all local jurisdiction rules and regulations, especially regarding activities during off-peak hours.
- 2. If the Contractor encounters a surcharging manhole (whereas the flow at the manhole is at least 50 percent of the sewer pipe diameter), then the Contractor shall immediately notify the District's representative.

C11.07 TYPES OF PIPE (Abbreviations)

Acrylonitrile-butadiene-styrene (ABS)
Asbestos-Cement (AC)
Brick Pipe (BP)
Cast Iron Pipe (CIP)
Concrete Pipe (CP)
Corrugated Metal Pipe (CMP)
Cured in Place Pipe (CIPP)
High Density Polyethylene (HDPE)
Polyethylene (PE)
Polyvinyl Chloride (PVC)
Reinforced Concrete (RC)
Reinforced Plastic Mortar (RPM)
Steel Pipe (SP)
Vitrified Clay Pipe (VCP)

C11.08 TYPES OF SEWER PIPE JOINTS

Asphaltic/Bituminous
Cement Mortar
Compression Gasket (e.g. O-ring, molded elastomeric seal)
Solvent Weld (e.g. ABS & PVC pipe)
Thermal Weld (e.g. Polyethylene pipe)

C11.09 TYPES OF SERVICE CONNECTIONS

Intruding Service Connection--is a building sewer pipe inserted into the street sewer (often through a hole broken through the side of the street sewer) which intrudes into the sewer

Saddle Tap--is a device used for a cut-in connection.

Tee--manufactured pipe fitting, enters pipe at 90° angle.

Wye--manufactured pipe fitting, enters pipe at less than 90° angle.

C11.10 TYPE OF DEBRIS (in order of increasing difficulty of removal)

Sludge--organic materials
Silt--light soil
Mud--clay soil
Sand--sand, soil and grit

Gravel--smaller than 0.5 inch
Rocks--larger than 0.5 inch
Bricks
Grease
Roots
Root Curtains--growth fills most of area above water level
Root Blockages--growth fills the pipe and causes a stoppage
Foreign Objects

C11.11 VARIABLES WHICH AFFECT THE DIFFICULTY OF TV INSPECTION

The Contractor shall be familiar with the many variables that may have impact on ~~his~~-its performance. Some variables applying to each manhole section to be inspected are as follows:

1. Locating, exposing, removing manhole covers.
2. Access to manholes, terrain, traffic control requirements.
3. Condition of the manholes, steps, cleanliness, structure
4. Depth of the sewer, difficulty and safety of entry.
5. Depth and velocity of sewage flow.
6. Availability of water for threading the sewer line.
7. Plugging requirements--ability to plug, necessity to bypass.
8. Presence of explosive gas or combustible liquid.
9. Off-set joints, intruding joint materials, intruding service connections, curved pipe, crushed pipe and other obstructions which could prevent the passage of the camera.
10. Cleanliness of the pipe and the presence of root curtains or grease, which could foul the camera lens.
11. Size of the pipe, 6 and 8-inch pipe is tight and may involve equipment clearance problems; 10 to 21-inch pipe is best for inspection; 24 to 36-inch pipe may require special illumination and skids.

12. Production is sensitive to the number of setups required; ~~it~~ it is possible to televise 1000 feet in one direction from a single location when inspecting successive manhole sections. Random inspection of single manhole sections is more time-consuming.
13. Requirements for documentation by means of monitor photographs and ~~videotape~~ recording.
14. Weather conditions--rain affects the production rate.

C11.12 SPECIAL CONDITIONS

- A. Maximum depth of flow for CCTV inspections shall be 25 percent of the pipe diameter. If the depth of flow is greater, then flow control measures must be used as described in Section C10. At the contractor's option and approval from the District, the CCTV inspection may be performed during the low flow periods between the hours of 10:00 p.m. to 6:00 a.m. The Contractor shall pay special attention to all local jurisdiction rules and regulations, especially regarding activities during off-peak hours.

- B. If the Contractor encounters a surcharging manhole (whereas the flow at the manhole is at least 50 percent of the sewer pipe diameter), then the Contractor shall immediately notify the District's representative.

~~B. cc. Contractor shall immediately notify the District's representative, if the Contractor encounters a District flow monitoring device, then the Contractor shall immediately notify the District's representative.~~

Formatted: Font: (Default) Times New Roman, 10 pt

Formatted: Normal, Left, No bullets or numbering

Formatted: Font: Bold

Formatted: Normal, Left, Indent: Left: 0.75", No bullets or numbering

Formatted: Font: (Default) Times New Roman, 10 pt

SECTION C12 – PRESSURE SYSTEMS

C12.01 SCOPE

Pressure systems include all labor, equipment and materials as required or necessary to excavate, trench, install and backfill for the construction of tank, pumps, forcemains, laterals, valves, and electrical conduit, control panel, ~~telemetry~~, wiring and all related work.

C12.02 GENERAL

- A. Septic Tank Effluent Pumping (STEP) system includes a septic tank and a pump tank fitted with ~~manhole~~-risers, covers, and poured in place concrete slabs as shown on the District Standard Detail ~~18.6~~.
- B. Grinder Pump system includes a semi-positive displacement type grinder pump mounted in a self-contained basin with covers and poured in place concrete anchors as shown on the District Standard Detail ~~20.6~~.

C12.03 STEP SYSTEM (On-Site Wastewater Disposal Zone only)

A. SEPTIC TANK

1. Size and design of the tank shall be as specified in Section B2.04 and Section C12 herein of these standard specifications.
2. Material for Construction
 - a) Walls, bottom and top of reinforced-concrete tanks shall be designed across the shortest dimension using one-way slab analysis. Stresses in each face of monolithically-constructed tanks may be determined by analyzing the tank cross-section as a continuous fixed frame.
 - b) Subgrade shall be prepared per manufacturer recommendations.
 - c) Reinforcing steel shall be ASTM A-615 Grade 60, $f_y=60,000$ psi. Details and placement shall be in accordance with ACI 315 and ACI 318.
 - d) Concrete shall be ready mix with cement conforming to ASTM C150, Type II. There shall be a cement content of not less than six (6) sacks per cubic yard, with 3/4-inch maximum aggregate size, and concrete shall achieve a minimum compressive strength of 3,000

psi, in 28 days.

- e) Tank shall be protected by applying a waterproof coating, Thoroseal or equal, on both inside and outside surfaces, in compliance with Council of American Building Officials (CABO), report #NRB-168; 6181.
- f) Tank shall be manufactured and furnished with access openings of the size and configuration shown on the drawings. Access covers shall have watertight seals.
- g) Outlet Risers shall be a minimum 18-inches high, maximum 36-inches high, and shall adhere to District Standard Detail 18, ~~have a minimum nominal diameter of 26 inches~~, and shall be factory-equipped with the following:
 - i. One 1-inch or 1¼ inch diameter (IPS) neoprene grommet for the pump discharge installed no less than eight inches from the top of the risers.
 - ii. A PVC splice box, with ~~bolted-threaded~~ access cap, bonded to the riser.
 - iii. Four (4) UL listed electrical cord grips, installed in the riser to provide access to the splice box.
- h) A lid shall be furnished with each riser. It shall be latching and shall be constructed of fiberglass with an aggregate finish. Riser and lid shall be visible and accessible at all times, ~~located below the manhole cover~~.

3. Construction

- a) Riser installation - Each riser shall be bonded to the top of the concrete tank with a two-part epoxy available from Orenco Systems, Inc. ~~—~~The epoxy shall be applied in accordance with the manufacturer's recommendations. A generous bead of epoxy shall be laid completely around the bottom of the riser prior to mounting the riser on the top of the tank. After the riser is in place, a generous fillet of sealant shall be run completely around the inside base. Four hours curing time shall be allowed the epoxy before backfill is placed over the tanks. Care shall be exercised during the curing period to avoid dislodging the riser or disrupting the watertight seal between the riser and tank.

~~b) Before backfilling, all exterior concrete joints shall be coated with a paste of powdered bentonite clay and water. To insure water tightness, backfill around the tank shall be granular bentonite clay backfill.~~

4. Testing

- a) In order to demonstrate water tightness, tanks shall be tested twice prior to acceptance. Each tank shall be tested at the factory, prior to shipping, by filling to the soffit and letting stand. After 24 hours, the tank shall be refilled to the soffit and the exfiltration rate shall be determined by measuring the water loss during the next two hours. The two-hour loss shall not exceed six gallons. After installation is completed, each tank shall be filled with water to the top of the riser and retested in the manner previously described.

B. EFFLUENT PUMP FOR SINGLE-FAMILY DWELLINGS

1. Material

- a) Per West Bay Sanitary District Standard Detail 21.
- b) Spare pump shall be provided to the District prior to final approval.

2. Installation

- a) Pumping system shall be installed in accordance with the manufacturer's recommendations and the standard plans.

C12.04 GRINDER PUMP SYSTEM (Single Family, On-Site Wastewater Disposal Zone only)

A. BASIN TANK

1. Size and design of the tank shall be as specified in Section B2.04 and Section C12 herein of these standard specifications.
2. Material for Construction
 - a) The tank shall be molded of fiberglass reinforced polyester resin or high density polyethylene of a grade selected for environmental stress cracking resistance and shall be with one inlet grommet to accept a pipe.

- b) Corrugated sections are to be made of a double wall construction with the internal wall being generally smooth to promote scouring.
- c) Corrugations of outside wall are to be of a minimum amplitude of 1 ½ inches to provide necessary transverse stiffness.
- d) Any incidental sections of a single wall construction are to be a minimum .250 inch thick.
- e) All seams that created during tank construction are to be thermally welded and factory tested for leak tightness.
- f) Tank wall and bottom must withstand the pressure exerted by saturated soil loading at maximum burial depth. All components must function normally when exposed to maximum external soil and hydrostatic pressure.
- g) The access_way shall be an integral extension of the wet well assembly and include a lockable cover assembly providing low profile mounting and watertight capability. —The access_way shall include a single NEMA 4X electrical quick disconnect for all power and control functions. —The access_way shall include a vent to prevent sewage gases from accumulating in the tank.
- h) The tank and access_way shall have all necessary penetrations molded in and factory sealed. —All penetrations shall be watertight. No field penetrations shall be acceptable.
- i) All discharge piping shall be constructed of 304 series stainless steel and terminate outside of the access_way bulkhead with a stainless steel, 1 ¼ inch female NPT fitting. The discharge piping shall include a stainless steel ball valve rated for 200 psi. —A factory installed, gravity-operated, flapper-type check valve shall be built into the stainless steel discharge piping.

3. Construction

- a) Tank Installation – Excavate to a depth that the removable cover extends above the finished grade line, the grade should slope away from the unit. The diameter of the excavation must be large enough to allow for a concrete anchor. The unit shall be placed on a 6-inch deep bed of ¾ inch crushed rock, clean rounded aggregate. —The aggregate shall be no larger than ¾ inch in diameter and no less

~~than 1/8 inch in diameter.~~ The tank shall be filled with water to the bottom of the inlet while the concrete anchor is poured. No concrete shall be poured above the inlet.

- b) The system shall be connected as per the manufacturers recommendations and the Districts Standard Detail 19.-

4. Testing

- a) To demonstrate water tightness, tanks shall be tested twice prior to acceptance. Each tank shall be tested at the factory, prior to shipping. After 24 hours, the tank shall be refilled and the exfiltration rate shall be determined by measuring the water loss during the next two hours. The two-hour loss shall not exceed one gallon. After installation is completed, each tank shall be filled with water and retested in the manner previously described.

B. SEMI-POSITIVE DISPLACEMENT PUMP

1. Material

- a) Pumping system shall be capable of delivering 15 gallons per minute (gpm) against a rated total dynamic head (TDH) of 0 feet and 9 gpm against a rated TDH of 138-feet.
 - i. The pump shall be a designed, integral, vertical rotor, motor driven, solids handling pump of the progressive cavity type with mechanical seal. The rotor shall be hardened stainless steel. The material for the stator shall have physical properties that include high tear and abrasion resistance, grease resistance, water and detergent resistance, temperature stability, good aging properties, and outstanding wear resistance.
 - ii. The grinder shall be placed below the pumping elements and shall be direct driven by a single, one -piece stainless steel motor shaft. The grinder will be the rotating type with stationary hardened chrome steel shedding ring in alignment with the driven impeller assembly. The driven impeller assembly shall carry two hardened type 400 series stainless steel cutter bars.
 - iii. The motor shall be a 1 HP, 1725 RPM, 240V 60 Hz, single phase, capacity start, ball bearing, squirrel cage induction

type with a low starting current not to exceed 30 amperes and high starting torque of 8.4 foot pounds.

- iv. Spare pump shall be provided to the District prior to final approval.

2. Installation

- a) Pumping system shall be installed in accordance with the manufacturer's recommendations and the standard plans.

C12.05 PRESSURE SYSTEM FORCEMAIN

A. Materials

- 1. STEP and grinder pump system forcemains shall be SDR 11 high density polyethylene pipe with polyethylene fittings. ~~—~~The pipe material shall comply with all requirements for Type III, Class C. Category 5, Grade P 34 according to ASTM D1248, and have a PPI recommended designation of PE 3408.
- 2. Tracing wire shall be coated #8 solid copper wire.

B. Construction

- 1. Forcemain installation shall be performed in conformance with these Standard Specifications.

C. Testing

- 1. Forcemain shall be tested ~~at~~ above operating pressure for one hour.

C12.06 VALVES

A. Materials

- 1. Ball valves shall be polyethylene ball valves rated for 150 psi.
- 2. Check valves shall be of ~~PVC material, stainless steel.~~
- 3. Valve box shall be Christy reinforced concrete utility boxes with Christy reinforced concrete lids, or equal.

B. Installation

All valves and valve boxes shall be installed in accordance with the manufacturer's recommendations and the plans. All concrete boxes in paved areas shall be traffic type.

C12.07 ELECTRICAL

A. Materials

~~Telemetry~~/Control panel and alarms shall be installed in accordance with the manufacturer's recommendations. All elements of the installation shall conform to applicable state and local codes and regulations.

~~Telemetry~~/Control panels shall have the following features:

1. Exposed metal parts shall be treated for corrosion resistance.
2. Automatic/manual-audio-alarm reset.
3. NEMA 4X-rated, fiberglass enclosure with hinged cover.
4. Alarm circuit shall be wired separately from the pump, so that if the internal overload switch is tripped, the alarm will still function.
5. Double insulated, motor rated, single or double pole, single throw isolation switch.
6. Current Limiting Circuit Breaker: 20 amps, OFF/ON switch, DIN rail mounting (Single Pole/115V - Double Pole/2420 V) with thermal magnetic tripping characteristics.

~~7. Electrical bypass shall be provided within the control panel.~~

~~8. Dedicated telephone line for Telemetry, supplied by the property owner.~~

B. Installation

The pump control panel shall be mounted on a pressure treated post near the septic tank or grinder pump. The District'sA 24-hour emergency telephone number shall be posted in the same location.

Formatted: Indent: Left: 0", First line: 0"

C12.08 EXISTING FACILITIES TO BE ABANDONED

After all the new installations are completed, tested, ~~and functioning, and~~
~~accepted by the District Board,~~ the existing septic tank, laterals and related
~~items shall be emptied and filled with structural backfill material or native~~
~~excavated material. Ends of all pipes shall be plugged with cement~~
~~concrete.~~ Contractor shall aAbandonment of existing septic tank shall be
in accordance with the Authority having jurisdiction.

PART D

STANDARD DRAWINGS

Manhole Frame and Cover	1
Screw Bolt Down Type Manhole Frame and Cover	2
Manhole for 21" Diameter and Smaller Pipe	3
Manhole for 24" Diameter and Larger Pipe	4
Standard Inside Drop Manholes (4", 6" and 8" Diameter Pipes only)	5
Sanitary Sewer Lateral Connections	6
Service Lateral Cleanout	7
Excavation, Backfill and Surface Restoration	8
Drop Manhole Detail for Connection of Existing Sewer to New Manhole	9
Air Release Assembly for STEP Main	10
Cleanout 2" – 3" Forcemain (STEP and Grinder Pump Systems)	11
1-1/4" Lateral Check Valve Station	12
Backwater Valve Requirements Root Control System	13
Sampling Manhole	14
Typical STEP/Grinder Pump System	15
Forcemain Service Connection	16
Control Telemetry Panel _for STEP/Grinder Systems	17
Single Family Septic Tank Effluent Pumping (STEP) System	18
Single Family Grinder Pump Installation Detail	19
Single Family Grinder Pump Information Detail	20
Pump Detail – STEP System	21
Sanitary Sewer Water Main Crossings	22
Sanitary Sewer Lateral Utility Crossings (Excluding Water)	23
Sanitary Sewer Lateral Disconnections	24
Repair Coupling for 15" Diameter and Larger Pipe	25
Grease Interceptor	26
Concrete Platform	27

TABLE OF CONTENTS

DETAIL 1	MANHOLE FRAME AND COVER
DETAIL 2	SCREW DOWN TYPE MANHOLE FRAME AND COVER
DETAIL 3	MANHOLE FOR 21" DIAMETER AND SMALLER PIPE
DETAIL 4	MANHOLE FOR 24" DIAMETER AND LARGER PIPE
DETAIL 5	STANDARD INSIDE DROP MANHOLES (4",6" AND 8" DIAMETER PIPES ONLY)
DETAIL 6	SANITARY SEWER LATERAL CONNECTIONS
DETAIL 7	SERVICE LATERAL CLEANOUT
DETAIL 8	EXCAVATION, BACKFILL AND SURFACE RESTORATION
DETAIL 9	DROP MANHOLE DETAIL FOR CONNECTION OF EXISTING SEWER TO NEW MANHOLE
DETAIL 10	AIR RELEASE ASSEMBLY FOR STEP MAIN
DETAIL 11	CLEANOUT 2-3 INCHES FORCEMAIN
DETAIL 12	1.25" LATERAL CHECK VALVE STATION
DETAIL 13	BACKWATER VALVE REQUIREMENTS
DETAIL 14	SAMPLING MANHOLE
DETAIL 15	TYPICAL STEP OR GRINDER PUMP SYSTEM
DETAIL 16	FORCEMAIN SERVICE CONNECTION
DETAIL 17	CONTROL PANEL- STEP / GRINDER SYSTEMS
DETAIL 18	SINGLE FAMILY SEPTIC TANK EFFLUENT PUMPING (STEP) SYSTEM
DETAIL 19	SINGLE FAMILY GRINDER PUMP INSTALLATION DETAIL
DETAIL 20	SINGLE FAMILY GRINDER PUMP INFORMATION DETAIL
DETAIL 21	PUMP DETAIL-SINGLE FAMILY SEPTIC TANK EFFLUENT PUMP (STEP) SYSTEM
DETAIL 22	SANITARY SEWER WATER MAIN CROSSINGS
DETAIL 23	SANITARY SEWER LATERAL UTILITY CROSSINGS (EXCLUDING WATER)
DETAIL 24	SANITARY SEWER LATERAL DISCONNECTIONS
DETAIL 25	REPAIR COUPLING FOR 15" DIAMETER AND LARGER PIPES
DETAIL 26	GREASE INTERCEPTOR
DETAIL 27	CONCRETE PLATFORM - NON PAVED AREAS

REMOVE BIO-BARRIER

WEST BAY
SANITARY DISTRICT

TABLE OF CONTENTS

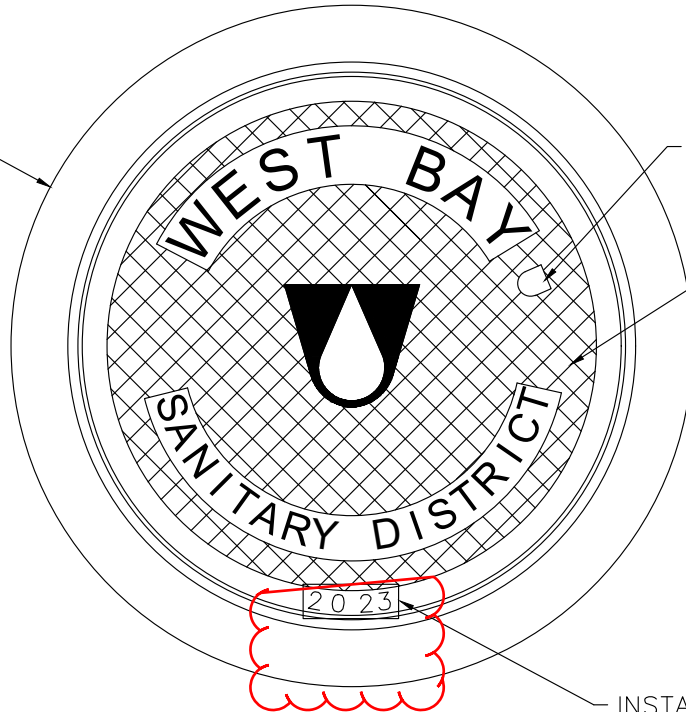
APPROVED BY:

/S/ - SERGIO RAMIREZ
GENERAL MANAGER

03-30-23
DATE:

TC

D&L FOUNDRY
STD. A-1024
MANHOLE RING
AND COVER OR
APPROVED EQUAL.

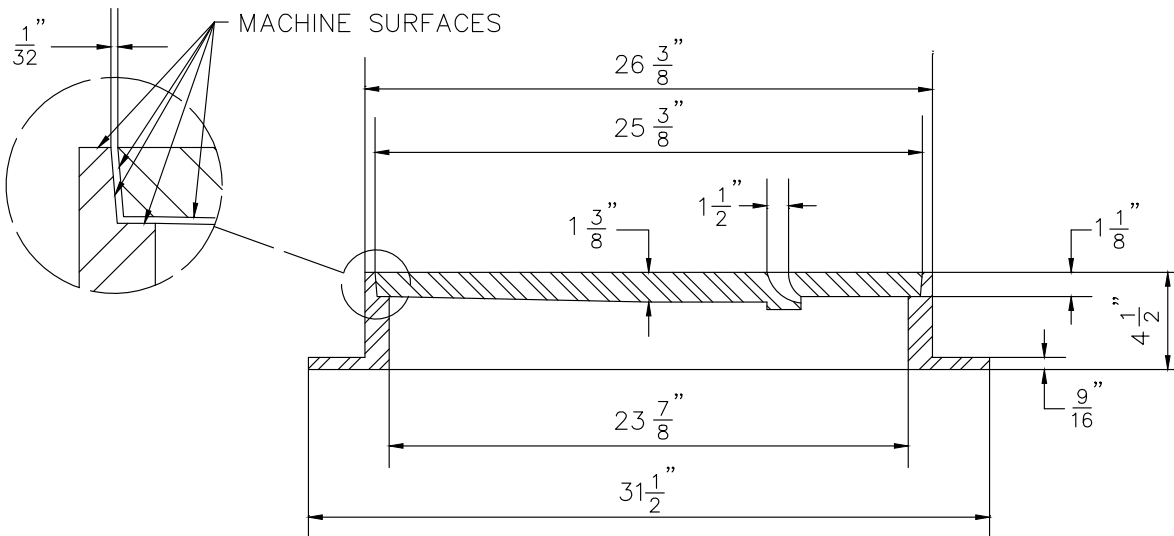


ONE MAN BLIND
PICK HOLE

SKID RESISTANT
DIAMOND TREAD
PATTERN

INSTALL CURRENT YEAR

DATE



NOTES:

- 1) CAST IRON FOR FRAME AND COVER SHALL BE CLASS 30 MINIMUM PER ASTM A-48.
- 2) COVERS SHALL BE H-20, FULL VEHICULAR TRAFFIC LOADING, RATED AND SHALL NOT EXCEED 145 POUNDS IN WEIGHT.
- 3) THE FRAME AND COVER SHALL BE PAINTED OR DIPPED IN ASPHALT PRIOR TO LEAVING FOUNDRY.

SECTION

WEST BAY
SANITARY DISTRICT

MANHOLE FRAME AND COVER

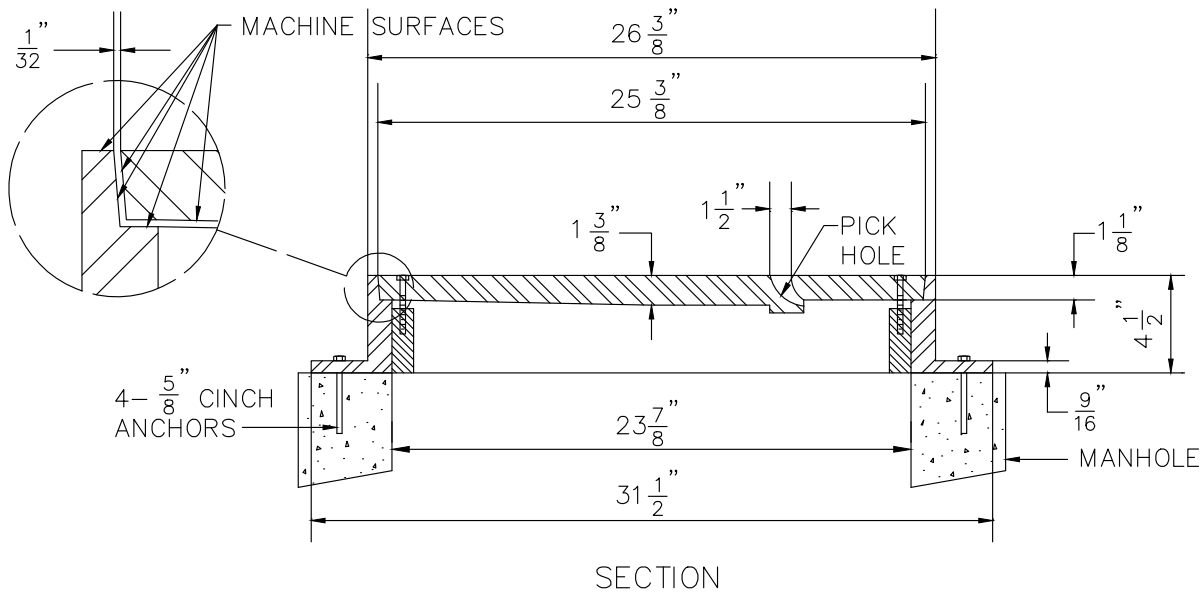
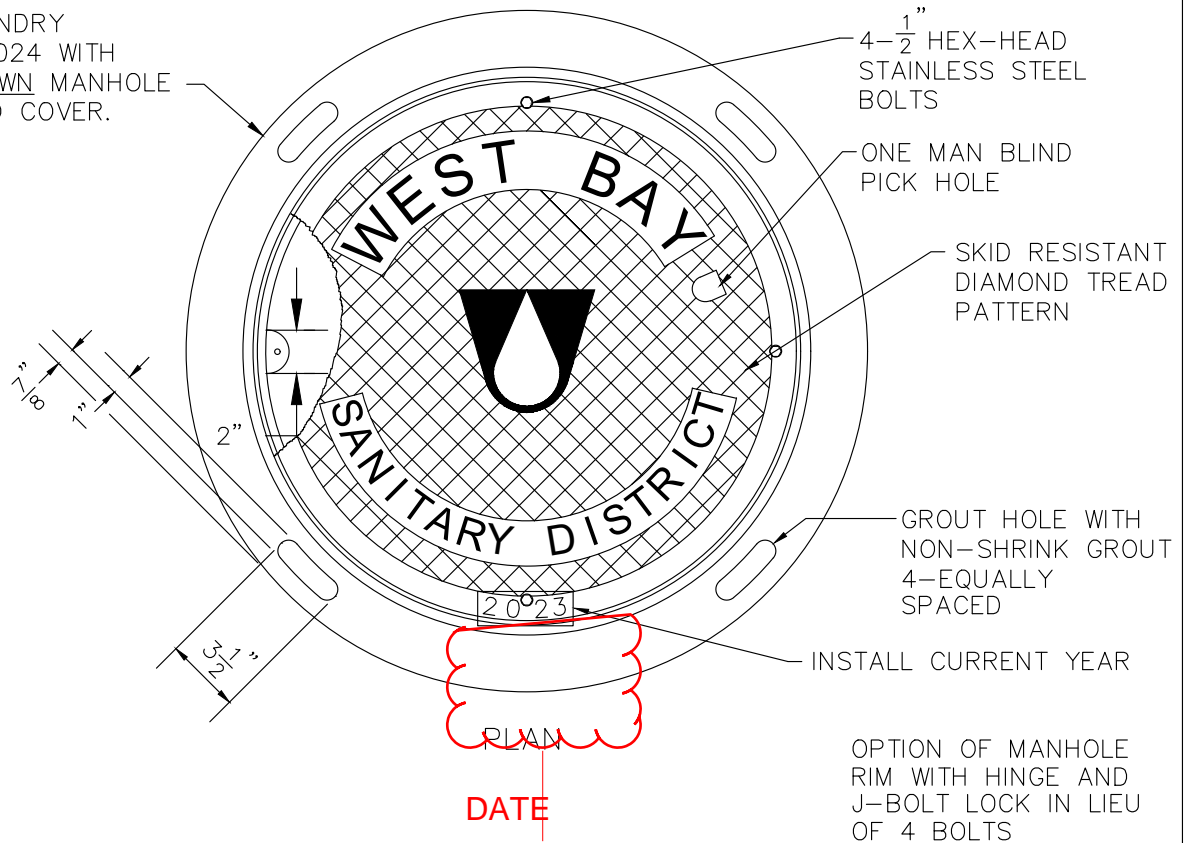
APPROVED BY:

/S/ - SERGIO RAMIREZ
GENERAL MANAGER

03-30-23
DATE:

1

D&L FOUNDRY
STD A-1024 WITH
BOLT-DOWN MANHOLE
RING AND COVER.



NOTES:

1) ALL MATERIAL SHALL CONFORM TO ASTM SPECIFICATION A-159-70T-G3000.

2) COVERS SHALL BE H-20, FULL VEHICULAR TRAFFIC LOADING, RATED AND SHALL NOT EXCEED 145 POUNDS IN WEIGHT.

WEST BAY
SANITARY DISTRICT

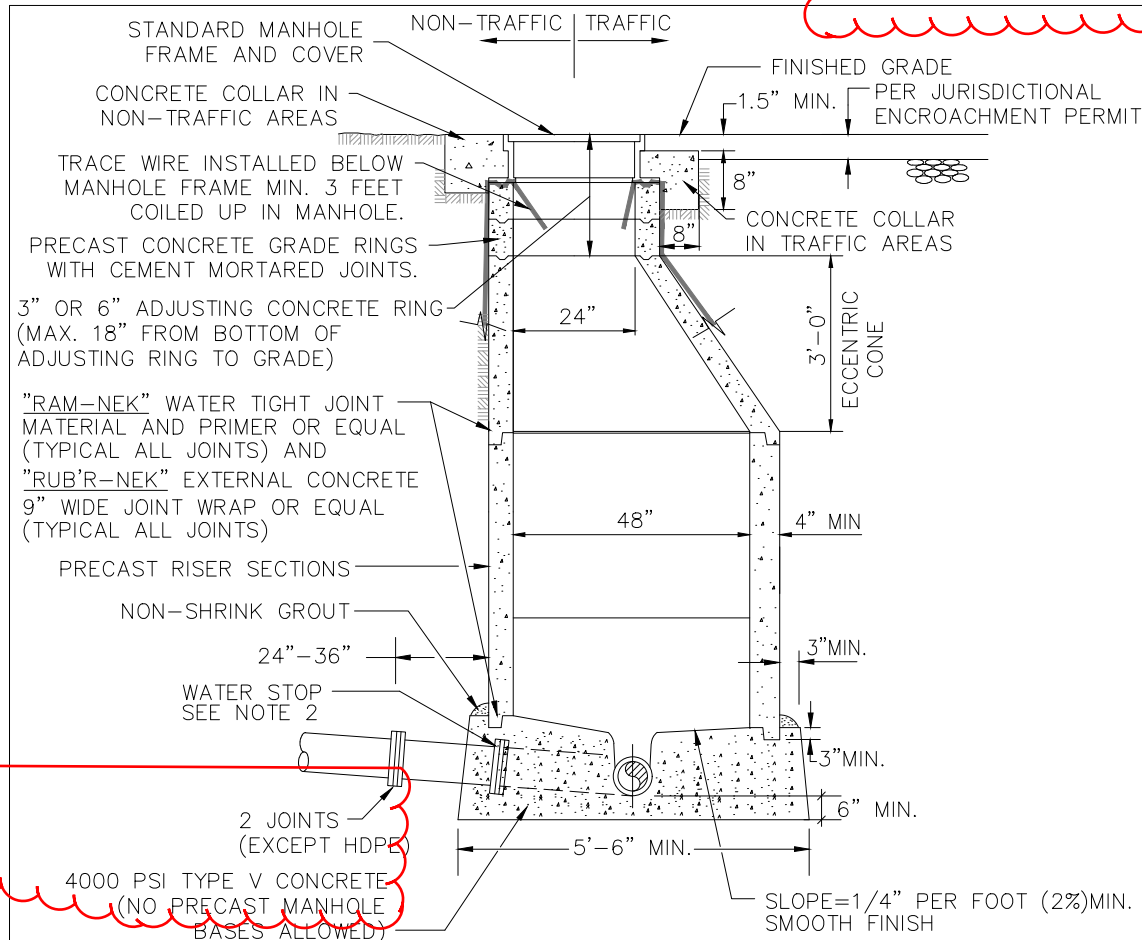
SCREW DOWN TYPE
MANHOLE FRAME AND COVER

APPROVED BY:

/S/ - SERGIO RAMIREZ
GENERAL MANAGER

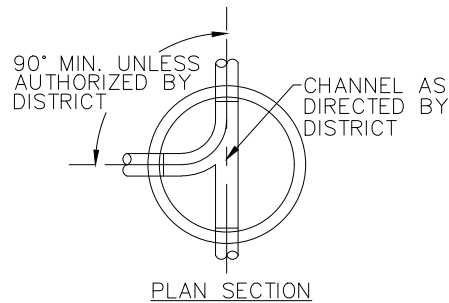
03-30-23
DATE:

2



NOTES:

- 1) MANHOLE BASES SHALL BE PLACED ON IMPORTED BEDDING MATERIAL COMPACTED TO 95% RELATIVE COMPACTION.
- 2) AN APPROVED WATER STOP SHALL BE INSTALLED ON ALL FLEXIBLE PIPE ENTERING OR LEAVING A MANHOLE, AND CENTERED UNDER MANHOLE WALL.
- 3) INSTALL "RAM-NEK" WATER TIGHT JOINT MATERIAL OR EQUAL BETWEEN EACH JOINT OF CONE AND BARREL SECTIONS TO MAKE A FLEXIBLE WATERTIGHT JOINT. AFTER JOINT IS MADE, TRIM JOINT SMOOTH ON INSIDE OF MANHOLE.
- 4) STEPS IN MANHOLES ARE NOT ALLOWED.
- 5) TRACE WIRE SHALL BE SOLID AND COATED 8 GAUGE COPPER WIRE PLACED BELOW FRAME WITH 3 FEET COILED UP IN MANHOLE.
- 6) MANHOLES SHALL BE VACUUM TESTED.
- 7) ECCENTRIC CONE SHALL BE POSITIONED IN SUCH A MANNER OVER CENTER OF PIPE FOR INSTALLATION OF FLOW METER SENSOR BRACKET.
- 8) CONCRETE PLATFORMS MAY BE REQUIRED ON A CASE BY CASE BASIS.



WEST BAY
SANITARY DISTRICT

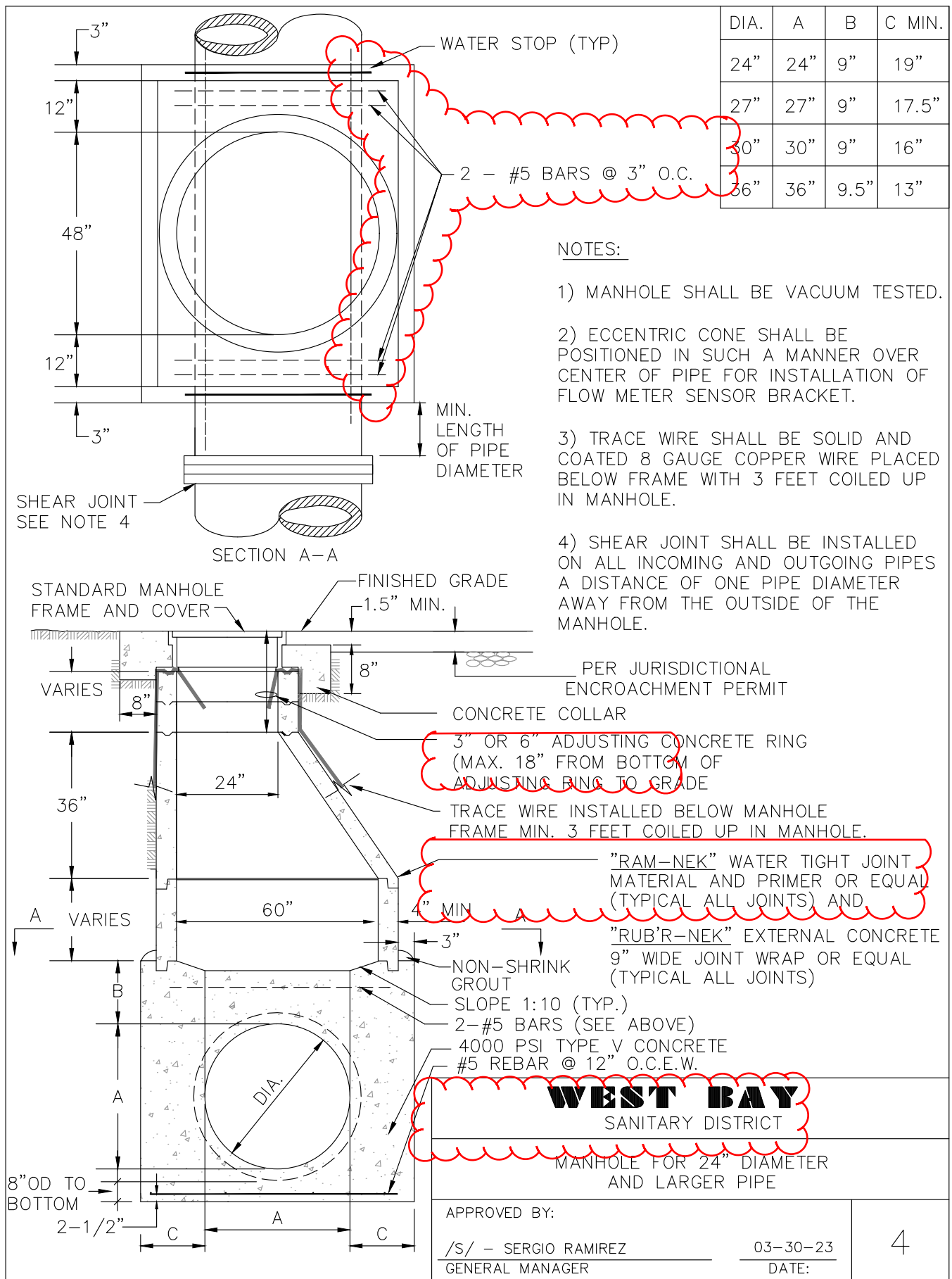
MANHOLE FOR 21" DIAMETER
AND SMALLER PIPE

APPROVED BY:

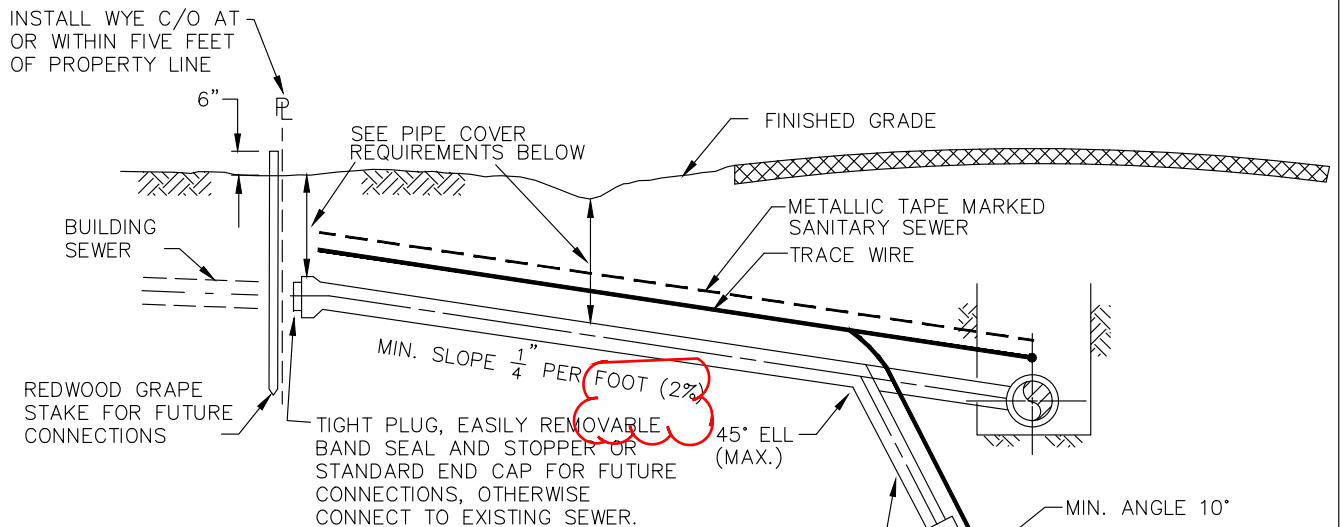
/S/ - SERGIO RAMIREZ
GENERAL MANAGER

03-30-23
DATE:

3







NOTES:

1. FOR SEWER DEPTHS FROM MINIMUM COVER TO 5 FEET, USE STANDARD WYE CONNECTION. FOR DEPTHS BELOW 5 FEET, USE STANDARD TEE CONNECTION WITH SLOPING RISER AS SHOWN. TAP-TITE CONNECTIONS MAY BE USED WHERE APPLICABLE.

2. WHEN SEWER IS AT MINIMUM DEPTH, HOLD SERVICE LINE TO MINIMUM SLOPE AND LESSEN COVER AT PROPERTY LINE, OTHERWISE 3 FEET OF COVER TO OFFICIAL GRADE IS REQUIRED AT PROPERTY LINE.

3. THE LOCATION OF ALL SEWER LATERALS SHALL BE MARKED WITH A LETTER "S" ON TOP OF CURB OR BACK OF WALK.

4. ALL SERVICE TEES OR WYES SHALL BE MANUFACTURER'S STANDARD FITTINGS. CONNECTION CLOSURE SHALL BE BY STANDARD BAND SEAL COUPLINGS WITH 316 STAINLESS STEEL SHEAR RING ON SERVICE ADDITIONS. NO PIPE BREAKING AND CONCRETE PATCHING WILL BE PERMITTED, ONLY NEATLY SNAPPED OR SAWCUT LENGTHS WILL BE ALLOWED.

5. 8 GAUGE COPPER WIRE OR COATED COPPER WIRE FOR TRACING PURPOSES SHALL BE PLACED ON ALL NEW LATERALS AND REPLACEMENT LATERALS WHEN EXCAVATION IS FROM MAIN LINE TO THE PROPERTY LINE CLEANOUT. WIRE TO BE BROUGHT TO RISER WITH TWO FEET COILED INSIDE BOX.

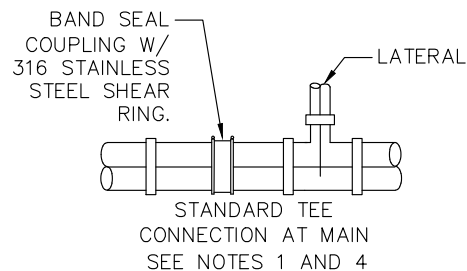
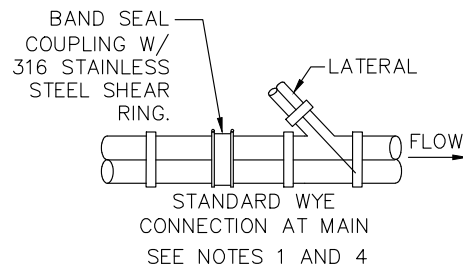
6. TAP-TITE AND TEE CONNECTIONS ARE NOT ALLOWED IN TERMINATING SEWER MAINS (MOST UPSTREAM LINE).

7. CONTRACTOR SHALL INSTALL BEDDING AND BACKFILL MATERIAL AS SHOWN ON WEST BAY SANITARY DISTRICT DETAIL NO. 8.

8. PIPE MATERIAL FOR LATERALS SHALL BE DIP CLASS 50 OR 51, OR PVC C900 DR18.

RISER TO REST AGAINST UNDISTURBED SOIL. WHERE TRENCH IS TOO WIDE, PVC C-900 DR 18 PIPE SHALL BE USED AND SHALL BE INSTALLED VERTICALLY IN CONCRETE CRADLE.

DEEP SEWER – GREATER THAN 10'



REMOVE BIO-BARRIER

WEST BAY SANITARY DISTRICT

SANITARY SEWER LATERAL CONNECTIONS

APPROVED BY:

/S/ – SERGIO RAMIREZ

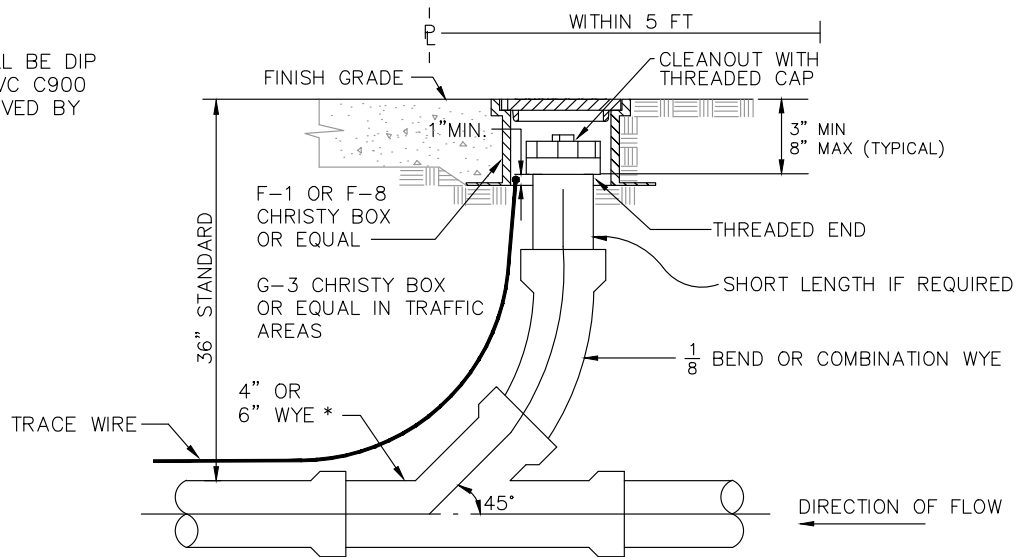
GENERAL MANAGER

03-30-23

DATE:

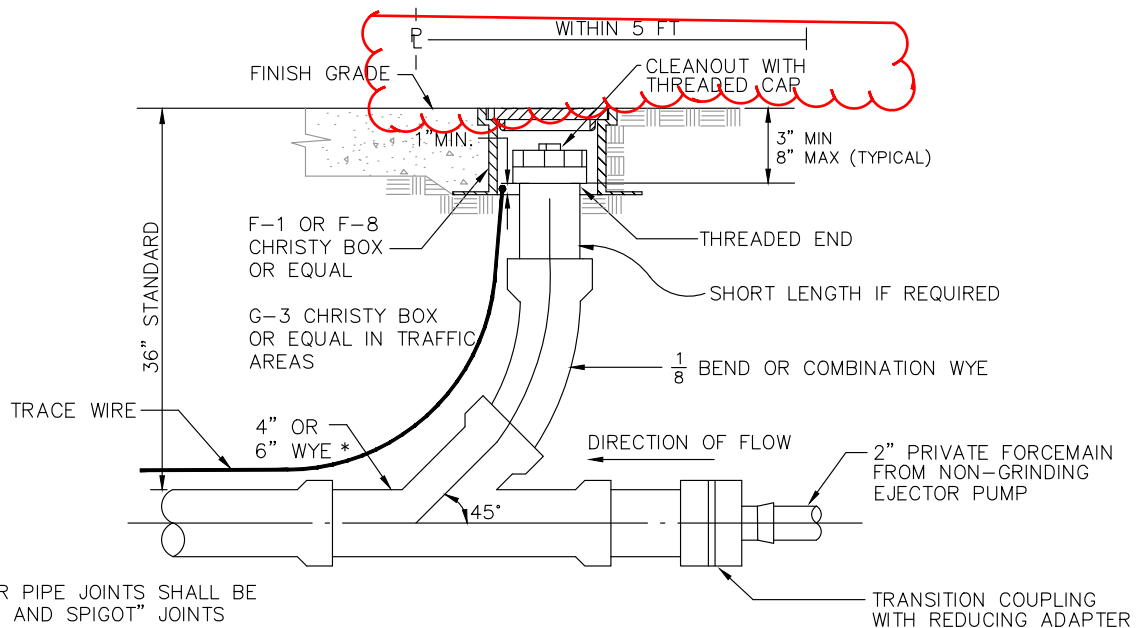
6

PIPE MATERIAL SHALL BE DIP
CLASS 50 OR 51, PVC C900
DR18, OR AS APPROVED BY
DISTRICT MANAGER.



NOTE: SEWER PIPE JOINTS SHALL BE
"BELL AND SPIGOT" JOINTS

VERTICAL RISER/GRAVITY SEWER



NOTE: SEWER PIPE JOINTS SHALL BE
"BELL AND SPIGOT" JOINTS

VERTICAL RISER/PRIVATE FORCEMAIN TO GRAVITY SEWER

NOTES:

- 1) THE CLEAN OUT ASSEMBLY SHALL BE THE SAME SIZE AS THE LATERAL SEWER IT SERVICES.
- 2) COVERS SHALL BE C.I. FOR STREETS, ALLEYS OR DRIVES, OTHERWISE FIBRELYTE OR CONCRETE FOR NON-TRAFFIC USE.
- 3) #8 GAUGE SOLID AND COATED COPPER WIRE FOR TRACING PURPOSES SHALL BE PLACED ON ALL NEW LATERALS AND REPLACEMENT LATERALS WHEN EXCAVATION IS FROM MAIN LINE TO THE PROPERTY LINE CLEANOUT. WIRE TO BE BROUGHT TO RISER WITH TWO FEET COILED INSIDE BOX.
- 4) ALL CLEAN OUT BOX LIDS SHALL BE MARKED WITH A LETTER "S" OR THE WORD "SEWER".
- 5) WYE SHALL BE INSTALLED AT OR WITHIN 5 FEET OF PROPERTY LINE.

6) CONTRACTOR SHALL INSTALL BEDDING AND BACKFILL MATERIAL AS SHOWN ON WEST BAY SANITARY DISTRICT DETAIL NO. 8.

7) CLEANOUT BOX SHALL BE VISIBLE AND ACCESSIBLE AT ALL TIMES.

WEST BAY
SANITARY DISTRICT

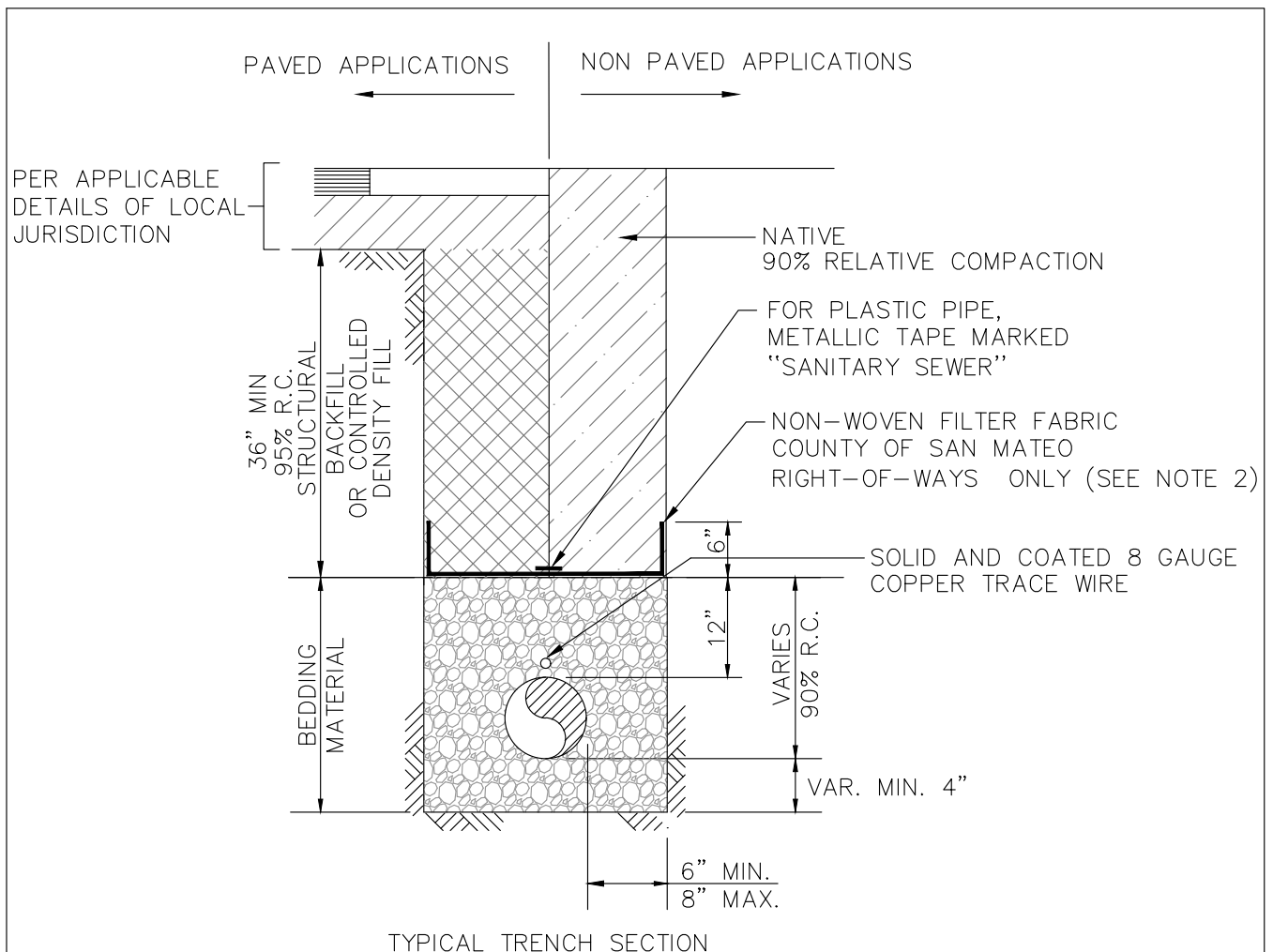
SERVICE LATERAL CLEANOUT

APPROVED BY:

/S/ - SERGIO RAMIREZ
GENERAL MANAGER

03-30-23
DATE:

7



TYPICAL TRENCH SECTION

BEDDING MATERIAL

ANGULAR BEDDING MATERIAL REQUIREMENTS
CLASS 1 (3/4" CRUSHED DRAIN ROCK)

PERCENT PASSING

SIEVE SIZES	PERCENTAGE PASSING
1"	100
3/4"	90-100
3/8"	20-55
#4	0-10
#8	0-5

STRUCTURAL BACKFILL

STRUCTURAL BACKFILL REQUIREMENTS
CLASS 2 AGGREGATE BASE

PERCENT PASSING

SIEVE SIZES	PERCENTAGE PASSING
1-1/2"	100
3/4"	80-100
#4	30-60
#30	5-35
#200	0-12

NOTES:

- 1) STRUCTURE BACKFILL AND BEDDING SHALL ALL BE VIRGIN MATERIALS.
- 2) IN COUNTY OF SAN MATEO RIGHT-OF-WAYS ONLY, NON-WOVEN FILTER FABRIC SHALL BE PLACED AS SHOWN PRIOR TO BACKFILLING ABOVE PIPE ZONE. FILTER FABRIC SHALL BE LAPPED 6" LONGITUDINALLY.

WEST BAY
SANITARY DISTRICT

EXCAVATION, BACKFILL AND
SURFACE RESTORATION

APPROVED BY:

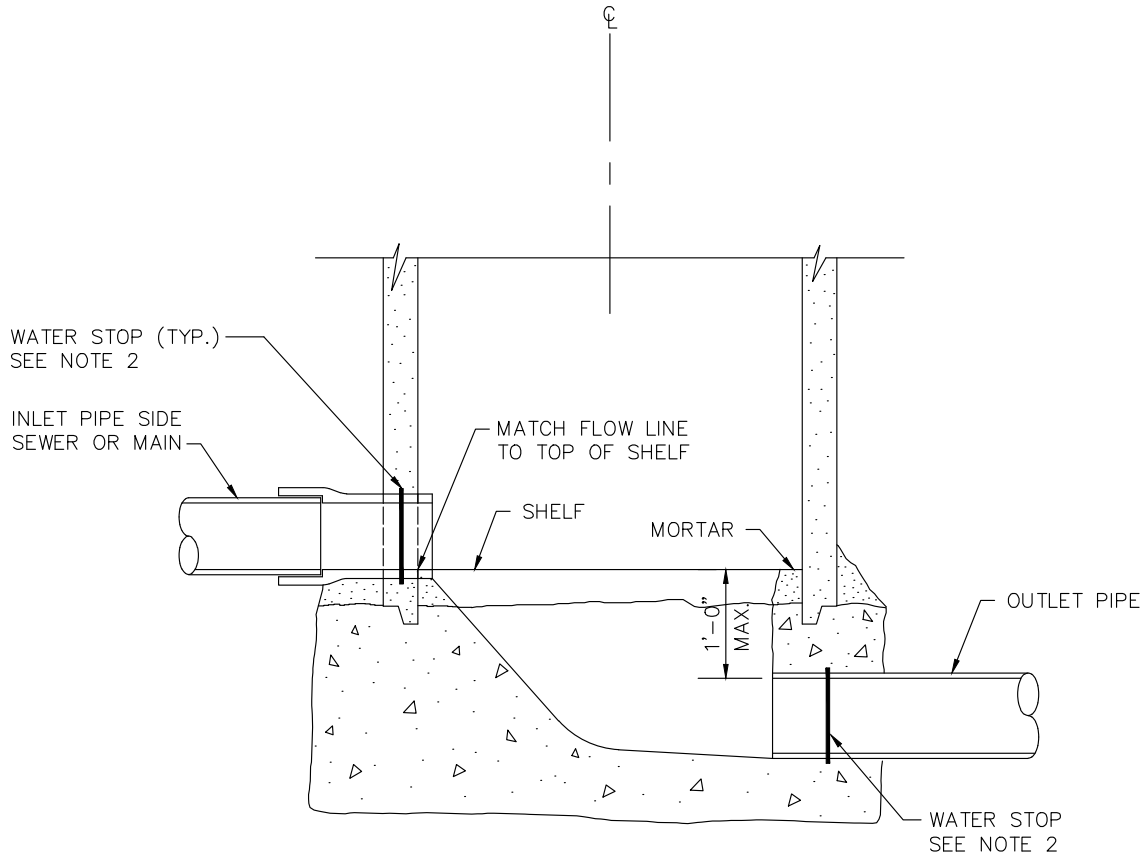
/S/ - SERGIO RAMIREZ

GENERAL MANAGER

03-30-23

DATE:

8



ELEVATION

NOTES:

- 1) SEE STANDARD MANHOLE DETAIL FOR MANHOLE CONSTRUCTION AND DIMENSIONS.
- 2) AN APPROVED WATER STOP SHALL BE INSTALLED ON ALL FLEXIBLE PIPE ENTERING OR EXITING MANHOLE.

WEST BAY SANITARY DISTRICT

DROP MANHOLE DETAIL FOR CONNECTION OF EXISTING SEWER TO NEW MANHOLE

APPROVED BY:

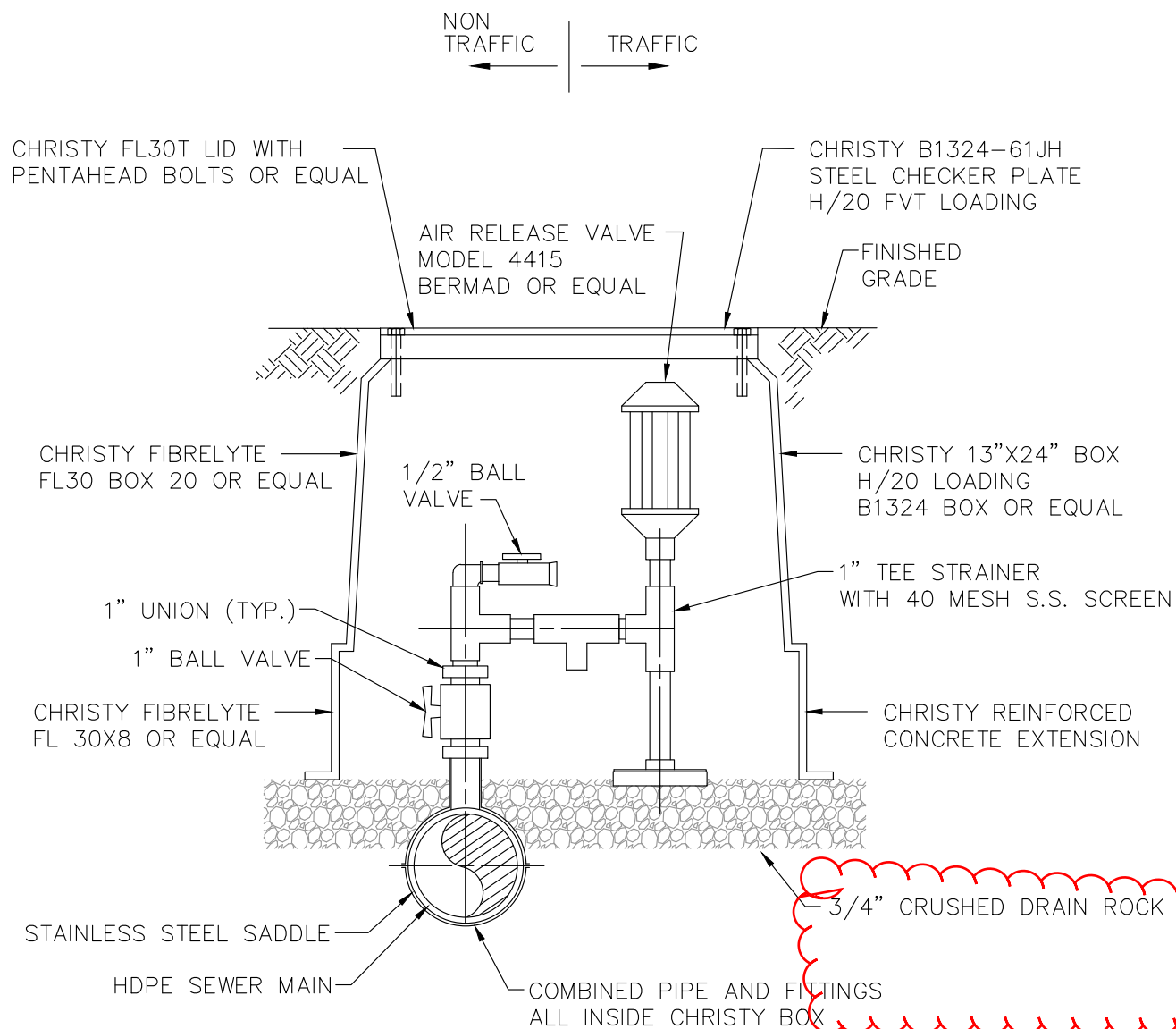
/S/ - SERGIO RAMIREZ

GENERAL MANAGER

03-30-23

DATE:

9



NOTE:

- 1) AIR RELEASE ASSEMBLY PIPE AND FITTINGS TO BE PVC.
- 2) THE CONTRACTOR MUST OBTAIN A CLASS 3 PERMIT FROM THE DISTRICT PRIOR TO INSTALLATION.

WEST BAY
SANITARY DISTRICT

AIR RELEASE ASSEMBLY
FOR S.T.E.P. MAIN

APPROVED BY:

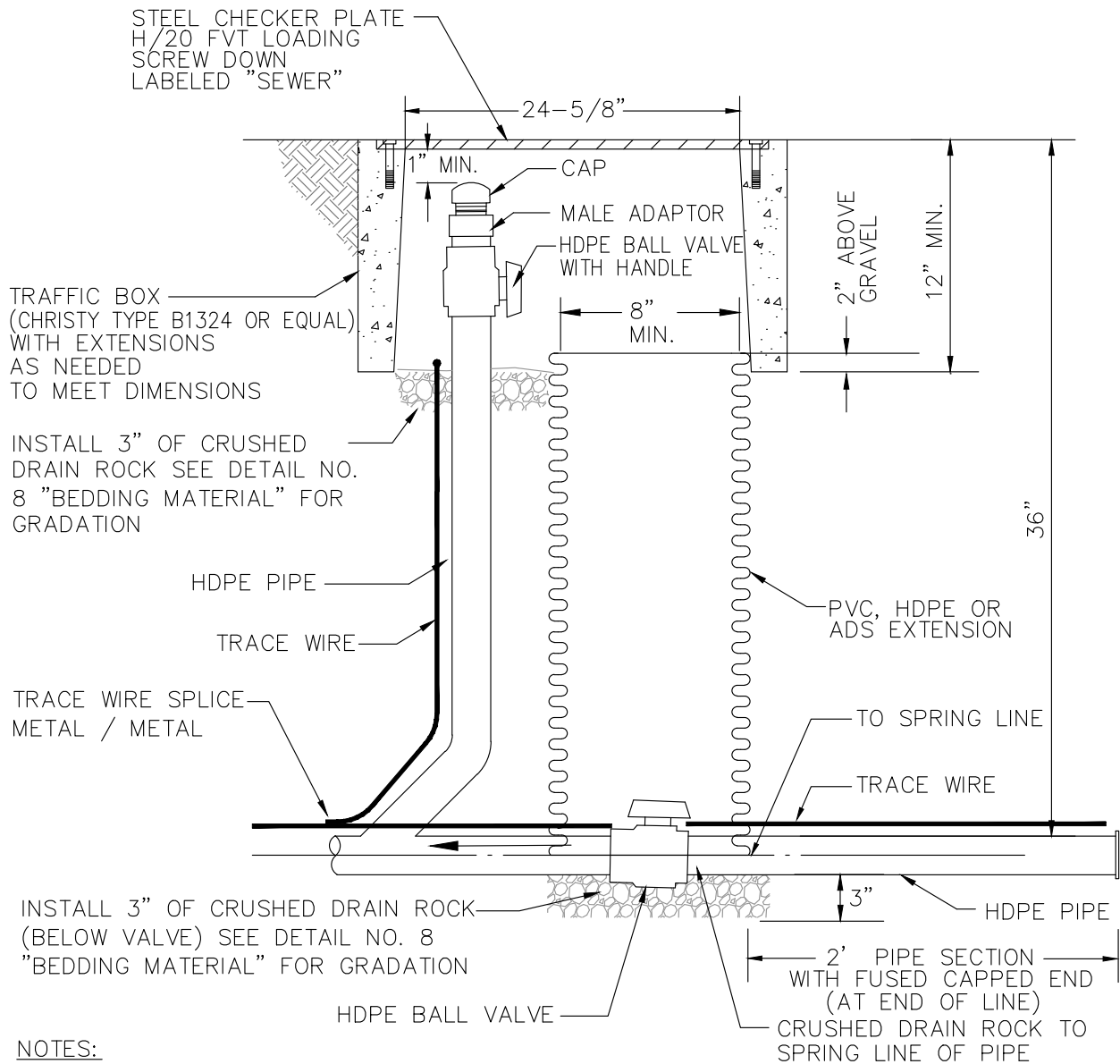
/S/ - SERGIO RAMIREZ

GENERAL MANAGER

03-30-23

DATE:

10



NOTES:

1. CONTRACTOR SHALL SUPPLY DISTRICT WITH 4'-5' VALVE ACTUATOR HANDLE TO TURN VALVE.
2. ALL HDPE JOINTS SHALL BE FUSED.
3. TRACE WIRE SHALL BE CONTINUOUS 8 GAUGE SOLID AND COATED COPPER WITH 2 FEET COILED IN BOX.
4. RISER SHALL BE SAME SIZE AS FORCEMAIN.

WEST BAY
SANITARY DISTRICT

CLEANOUT STATION 2"-3" FORCEMAIN
(STEP AND GRINDER PUMP SYSTEMS)

APPROVED BY:

/S/ - SERGIO RAMIREZ

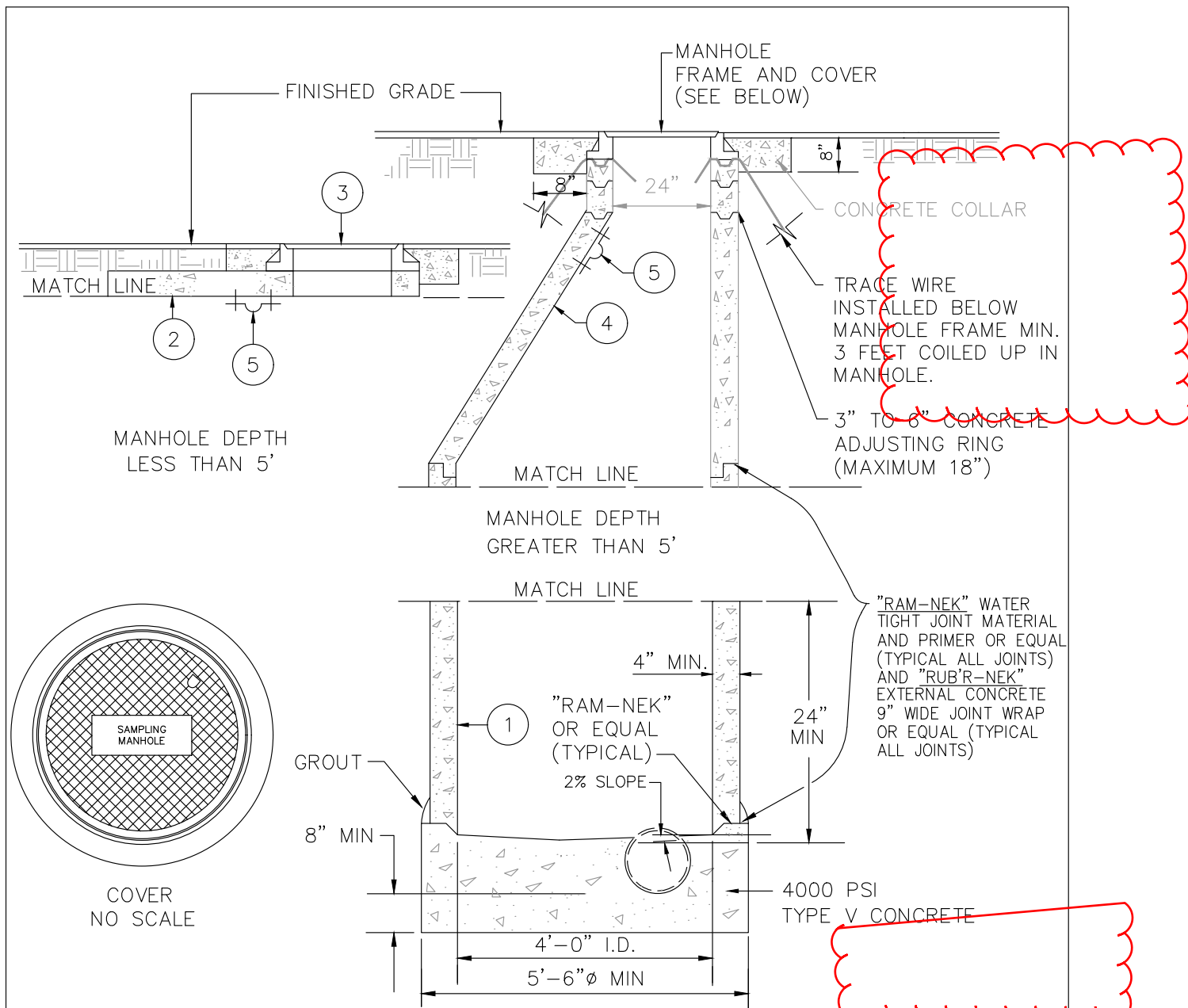
GENERAL MANAGER

03-30-23

DATE:

11

SANITARY SEWER BACKWATER VALVE REQUIRED	
<p>12"</p> <p>UPSTREAM MANHOLE</p> <p>SANITARY SEWER MAIN</p> <p>DOWNSTREAM MANHOLE</p>	<p>12" ABOVE THE UPSTREAM MANHOLE RIM ELEVATION</p> <p>FINISHED FLOOR ELEVATION</p> <p>BASEMENT WITH PLUMBING FIXTURES - ELEVATION</p>
BASEMENT LOWER THAN UPSTREAM MANHOLE	
<p>FINISHED FLOOR</p> <p>BASEMENT</p> <p>BACKWATER VALVE OWNED AND SERVICED BY PROPERTY OWNER</p> <p>LATERAL & PROPERTY LINE CLEAN OUT (SEE DETAIL No. 6 & 7)</p>	<p>12" ABOVE THE UPSTREAM MANHOLE RIM ELEVATION</p> <p>FINISHED FLOOR ELEVATION</p> <p>BASEMENT WITH PLUMBING FIXTURES - ELEVATION</p>
FINISH FLOOR LOWER THAN UPSTREAM MANHOLE	
<p>FINISHED FLOOR</p> <p>BASEMENT</p> <p>BACKWATER VALVE OWNED AND SERVICED BY PROPERTY OWNER</p> <p>LATERAL & PROPERTY LINE CLEAN OUT (SEE DETAIL No. 6 & 7)</p>	<p>12" ABOVE THE UPSTREAM MANHOLE RIM ELEVATION</p> <p>FINISHED FLOOR ELEVATION</p>
<p>NOTES</p> <p>1. ALL PLUMBING SHALL CONFORM TO UNIFORM PLUMBING CODE, LATEST EDITION.</p> <p>2. BACKWATER VALVES SHALL BE INSTALL FOR ANY GRAVITY LATERAL THAT IS LESS THAN 12" ABOVE THE THE TOP OF THE NEAREST UPSTREAM STRUCTURE (MANHOLE).</p>	
WEST BAY SANITARY DISTRICT	
BACKWATER VALVE REQUIREMENTS	
<p>APPROVED BY:</p> <p>/s/ - SERGIO RAMIREZ</p> <p>GENERAL MANAGER</p>	<p>03-30-23</p> <p>DATE:</p>
<p style="font-size: 24px; font-weight: bold;">13</p>	



NOTE:

- 1) STANDARD 48" DIAMETER PRECAST MANHOLE SECTION WITHOUT STEPS. HEIGHT AS REQUIRED. SECTIONS SHALL CONFORM TO ASTM C 478
- 2) PRECAST MANHOLE CAP DESIGNED FOR H-20 FVT LOADING.
- 3) D&L FOUNDRY STD. A-1024 MANHOLE RING AND COVER OR APPROVED EQUAL WITHIN 5' OF PROPERTY LINE.
- 4) ECCENTRIC CONE SECTION. MANHOLE OPENING TO BE PLACED OVER CHANNEL
- 5) WROUGHT STEEL STRAP WITH 3/8" CINCH ANCHORS-GRINNELL FIG. 262 FOR 2" PIPE

- 1) FLEXIBLE PIPE ONLY – AN APPROVED WATER STOP SHALL BE INSTALLED ON ALL FLEXIBLE PIPE ENTERING OR EXITING SAMPLING MANHOLE.
- 2) ECCENTRIC CONE SHALL BE POSITIONED IN SUCH A MANNER OVER CENTER OF PIPE FOR INSTALLATION OF FLOW METER SENSOR BRACKET.

WEST BAY
SANITARY DISTRICT

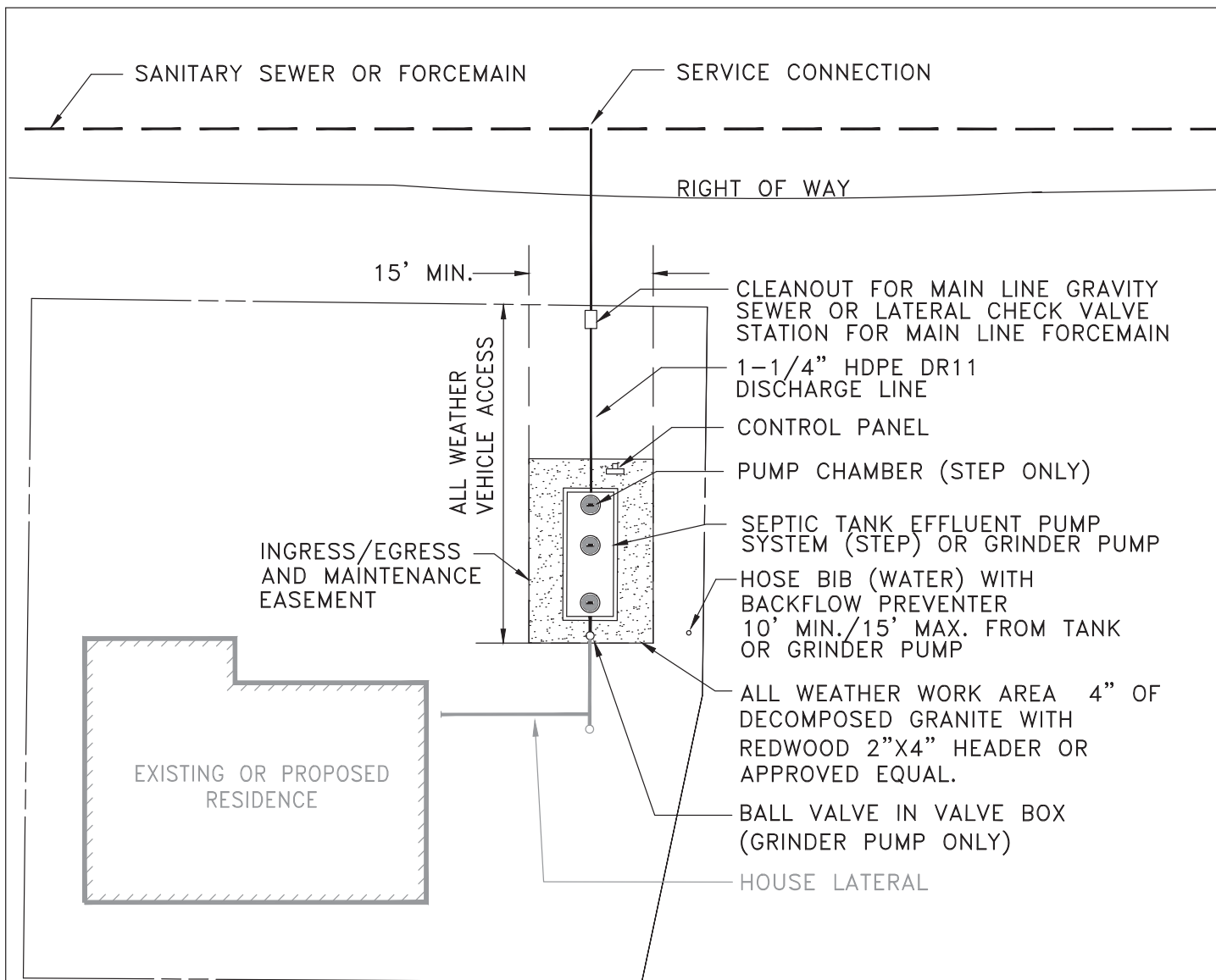
SAMPLING MANHOLE

APPROVED BY:

/S/ – SERGIO RAMIREZ
GENERAL MANAGER

03-30-23
DATE:

14



NOTES:

- 1) FOR USE IN THE ON-SITE WASTEWATER DISPOSAL ZONE (OWDZ) ONLY.
- 2) LOCATION OF ALL SANITARY FACILITIES SHALL BE SUBJECT TO DISTRICT APPROVAL.
- 3) PROVIDE VEHICLE ACCESS TO GRINDER PUMP/STEP SYSTEM.
- 4) AN EASEMENT SHALL BE GRANTED TO THE DISTRICT FOR VEHICULAR INGRESS/EGRESS AND FOR MAINTENANCE PURPOSES.
- 5) COATED #8 GAUGE WIRE FOR TRACING PURPOSES SHALL BE PLACED ON ALL NEW LATERALS/DISCHARGE LINES.
- 6) CONTRACTOR/APPLICANT SHALL ANNEX INTO THE WEST BAY SANITARY DISTRICT BOUNDARY AND ON-SITE WASTEWATER DISPOSAL ZONE, OBTAIN BOARD APPROVAL, SUBMIT PUMP INFORMATION, SUBMIT ENGINEERED DRAWINGS & MUST OBTAIN A CLASS 5 PERMIT PRIOR TO INSTALLATION.
- 7) ALL LIDS SHALL BE VISIBLE AND ACCESSIBLE

WEST BAY
SANITARY DISTRICT

TYPICAL STEP/GRINDER PUMP SYSTEM LAYOUT
ON-SITE WASTEWATER DISPOSAL ZONE (OWDZ) ONLY

APPROVED BY:

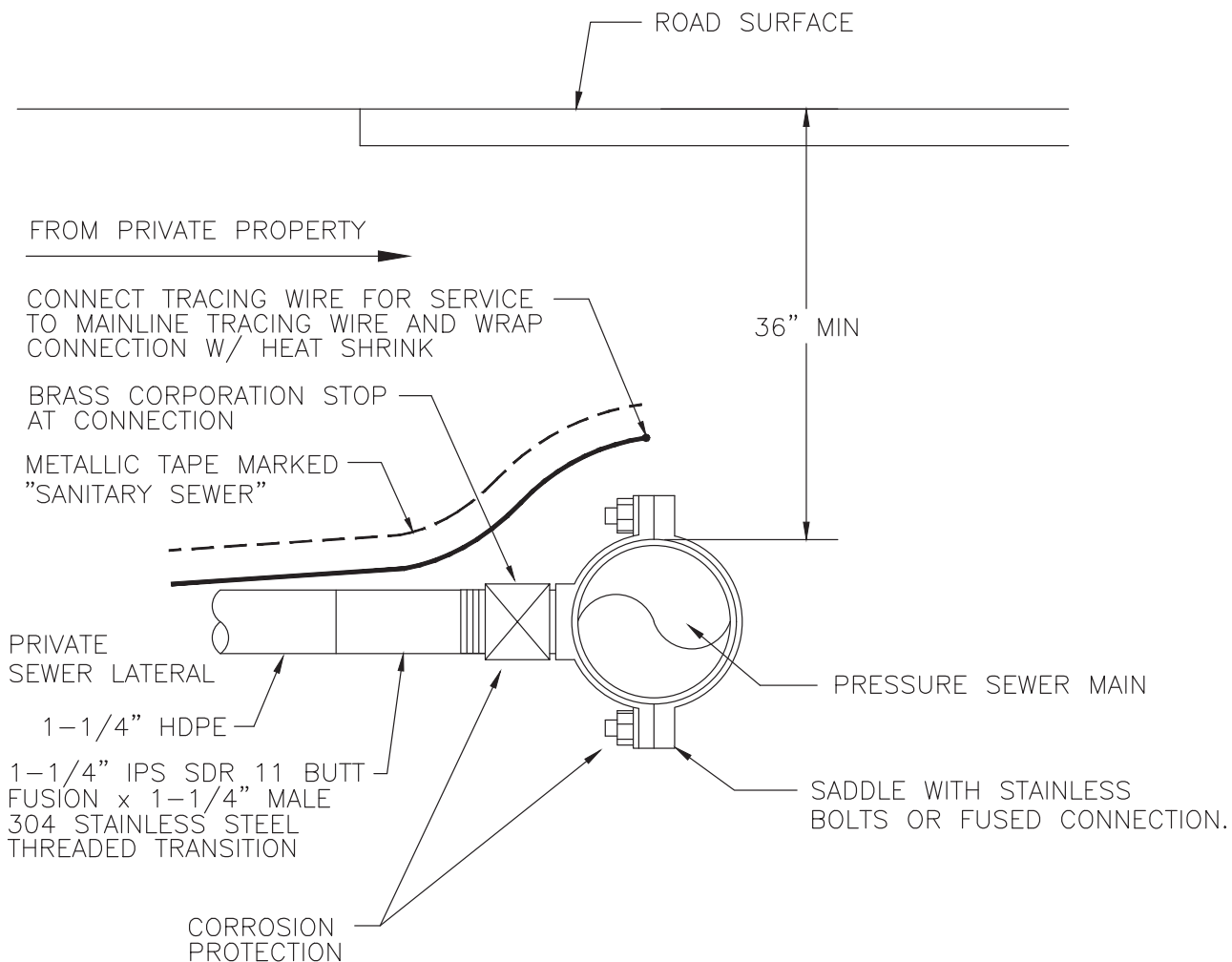
/S/ - SERGIO RAMIREZ

GENERAL MANAGER

03-30-23

DATE:

15



NOTES:

1. TRACE WIRE SHALL BE SOLID AND COATED 8 GAUGE COPPER WIRE.
2. THE CONTRACTOR SHALL EXCAVATE BY HAND EXPOSING THE EXISTING PRESSURE SEWER MAIN.
3. THE CONTRACTOR SHALL COAT CONNECTION WITH CORROSION PROTECTION.

WEST BAY
SANITARY DISTRICT

FORCEMAIN SERVICE CONNECTION

APPROVED BY:

/S/ - SERGIO RAMIREZ
GENERAL MANAGER

03-30-23
DATE:

16

CONTROL PANEL INFORMATION

FOR STEP SYSTEM:
INSTALL AN ORENCO SIMPLEX
PANEL – 115 VOLT, MODEL #
S1ROETMCTPRLSA

FOR GRINDER PUMP SYSTEM
INSTALL AN ORENCO GRINDER
PANEL – 240 VOLT, MODEL #
S2ETMCTPRLSA–Grinder

CONNECT THE CONTROL
PANEL TO THE POST
WITH UNISTRUT

CONTROL PANEL ALARMS
(LIGHTS AND BUZZER):

- HIGH WATER

FEATURES:

- HOUR METER
- CYCLE METER
- AUTO / MANUAL RUN

6"x4" PRESSURE TREATED POST

INSTALL CONDUIT SWEEPS

3000 PSI CONCRETE

1" CONDUIT
TO PUMPS

1" CONDUITS
(FOR POWER, FROM HOUSE)

6" MIN AROUND
POST

NOTES:

- 1) THE PANEL IS TO CONTROL THE PUMPS AND TO ALARM AT HIGH WATER. IF ALARM IS TRIGGERED CONTACT THE WEST BAY SANITARY DISTRICT IMMEDIATELY. (650) 321-0384
- 2) THE PROPERTY OWNER SHALL PROVIDE A DEDICATED ELECTRICAL CIRCUIT FOR THE PANEL. THE CIRCUIT'S SINGLE PURPOSE SHALL BE FOR THE PUMP CONTROL PANEL, AND PAID FOR AT THE HOMEOWNERS EXPENSE.
- 3) LOCATION SUBJECT TO DISTRICT APPROVAL.
- 4) BURIED CONDUIT SHALL BE PVC SCHEDULE 80. EXPOSED CONDUIT SHALL BE GALVANIZED STEEL OR ALUMINUM.
- 5) ALL CONDUIT BENDS OR FITTINGS SHALL HAVE A MINIMUM RADIUS OF 18". NO MORE THAN 4 SWEEPS OF ANY KIND ALLOWED PER CONDUIT RUN.

WEST BAY
SANITARY DISTRICT

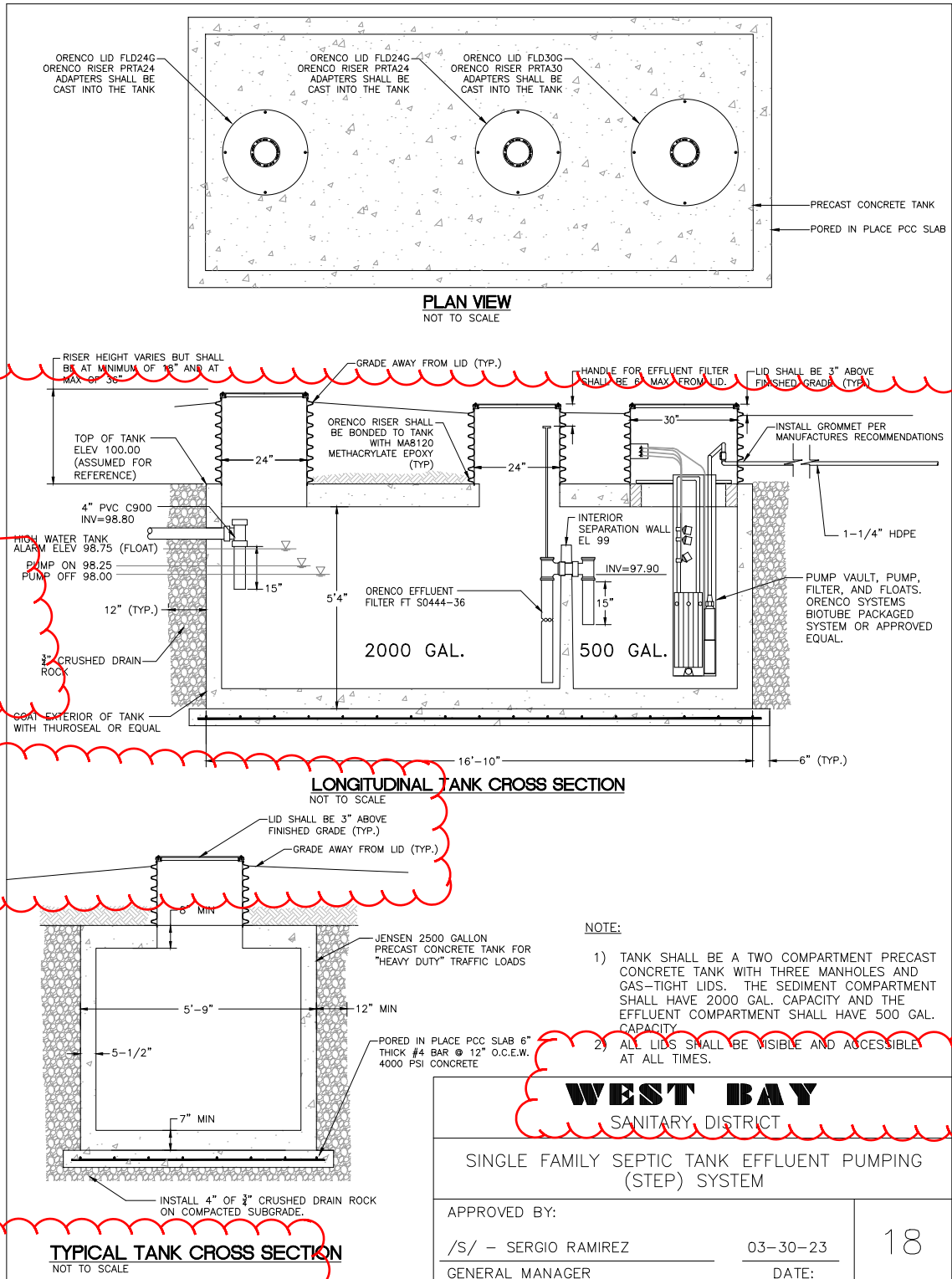
CONTROL PANEL
STEP/GRINDER SYSTEMS

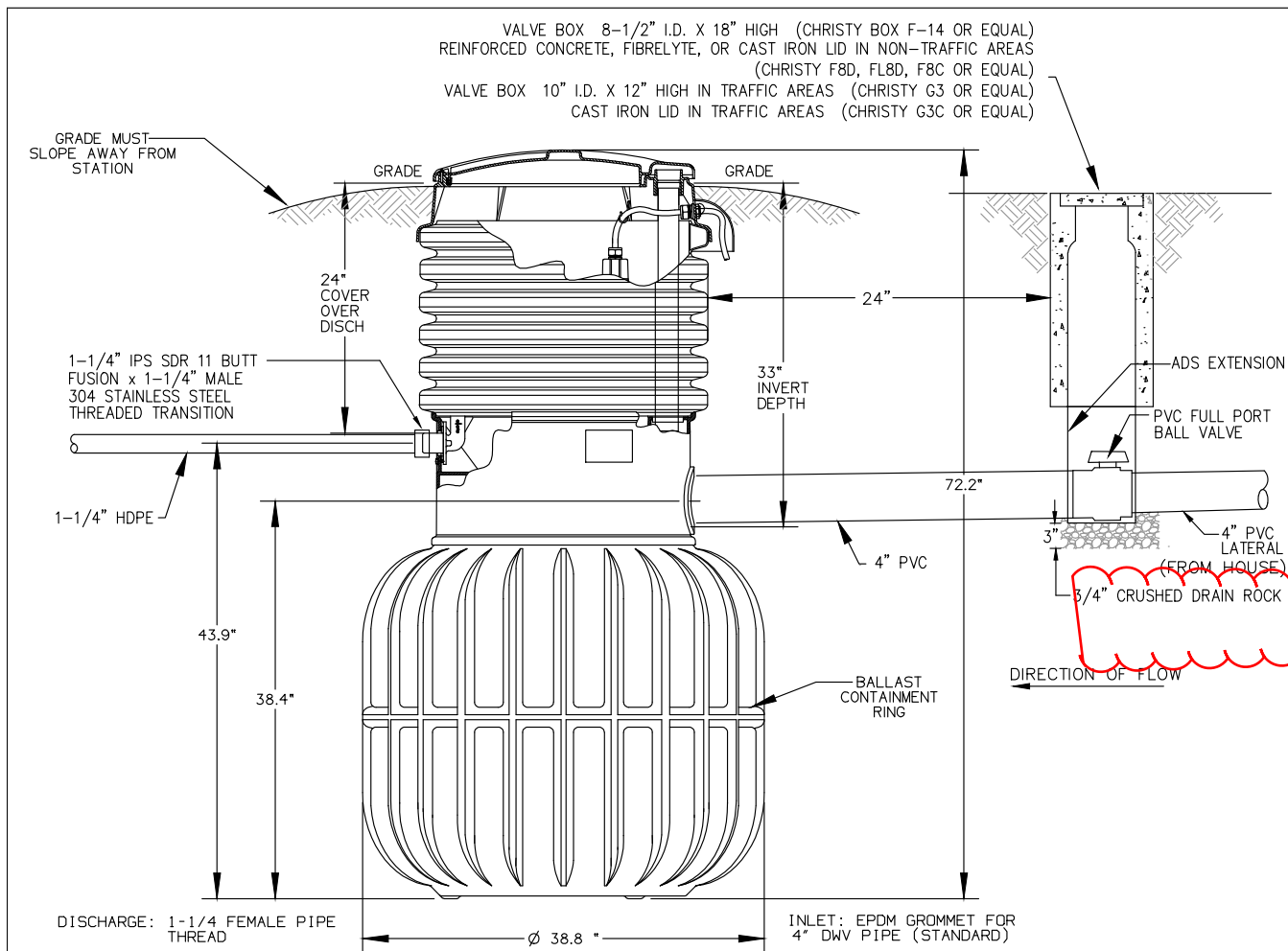
APPROVED BY:

/S/ – SERGIO RAMIREZ
GENERAL MANAGER

03-30-23
DATE:

17





NOTES:

1. PUMP SHALL BE ENVIRONMENT ONE MODEL DH151-74 WITH POURED-IN-PLACE CONCRETE ANCHOR. LOCAL REPRESENTATIVE: SHAFER INCORPORATED (209) 234-5909
2. PUMP SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
3. SEE SINGLE FAMILY GRINDER PUMP INFORMATION DETAIL FOR PUMP ANCHOR DETAIL.
4. SEE 1-1/4 INCH LATERAL CHECK VALVE STATION DETAIL FOR DISCHARGE LINE VALVE REQUIREMENTS.
5. CONTRACTOR SHALL SUPPLY DISTRICT WITH HANDLE TO TURN PVC BALL VALVE.
6. CONTROL PANEL SUPPLIED BY ORENCO (PER WEST BAY DETAIL #17).

7. IF THE HOMEOWNER HAS AN ON-SITE PUMP SYSTEM THAT PUMPS INTO THE GRINDER PUMP, THE HOMEOWNER SHALL NOTIFY THE DISTRICT WHEN APPLYING FOR PERMIT. ADDITIONAL REQUIREMENTS SPECIFIC TO THE PROJECT WILL BE APPLIED. THE PUMP SHALL NOT EXCEED CAPACITY OF THE GRINDER PUMP.

8. OWNER SHALL PROVIDE A SPARE GRINDER PUMP TO THE DISTRICT.

WEST BAY

SANITARY DISTRICT

SINGLE FAMILY
GRINDER PUMP INSTALLATION DETAIL

APPROVED BY:

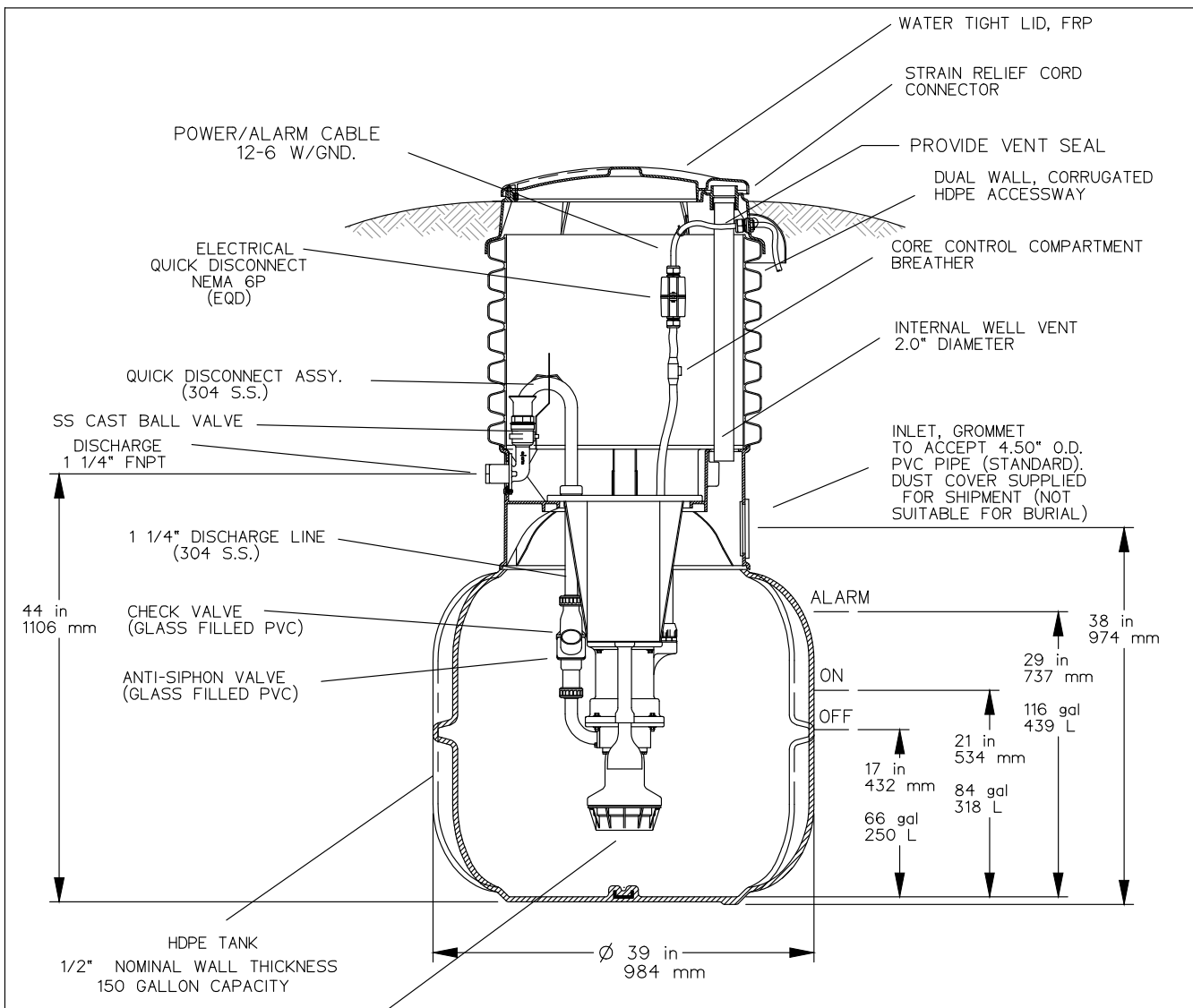
/S/ - SERGIO RAMIREZ

GENERAL MANAGER

03-30-23

DATE:

19

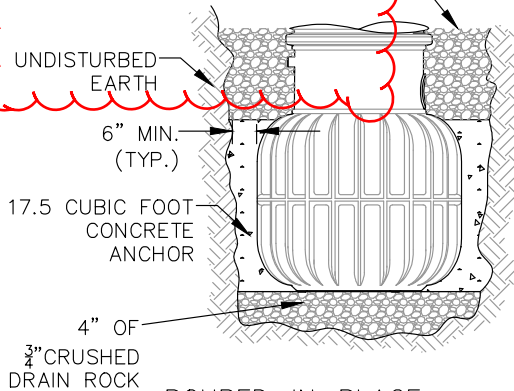


SEMI-POSITIVE DISPLACEMENT TYPE PUMP
DIRECTLY DRIVEN BY A 1 HP MOTOR
CAPABLE OF DELIVERING 9 gpm AT 138' T.D.H.

NOTE:

1. PUMP SHALL BE ENVIRONMENT ONE MODEL DH151-74 WITH POURED-IN-PLACE CONCRETE ANCHOR. (LOCAL REPRESENTATIVE: SHAPE INC. (209) 234-5909.
2. OWNER SHALL PROVIDE A SPARE PUMP TO THE DISTRICT.

FILL TO GRADE WITH CLEAN, COMPATIBLE BACKFILL OR 3/4" CRUSHED DRAIN ROCK. CLAY, SAND AND SILT ARE NOT ACCEPTABLE BACKFILL.



POURED-IN-PLACE
CONCRETE ANCHOR DETAIL

WEST BAY
SANITARY DISTRICT

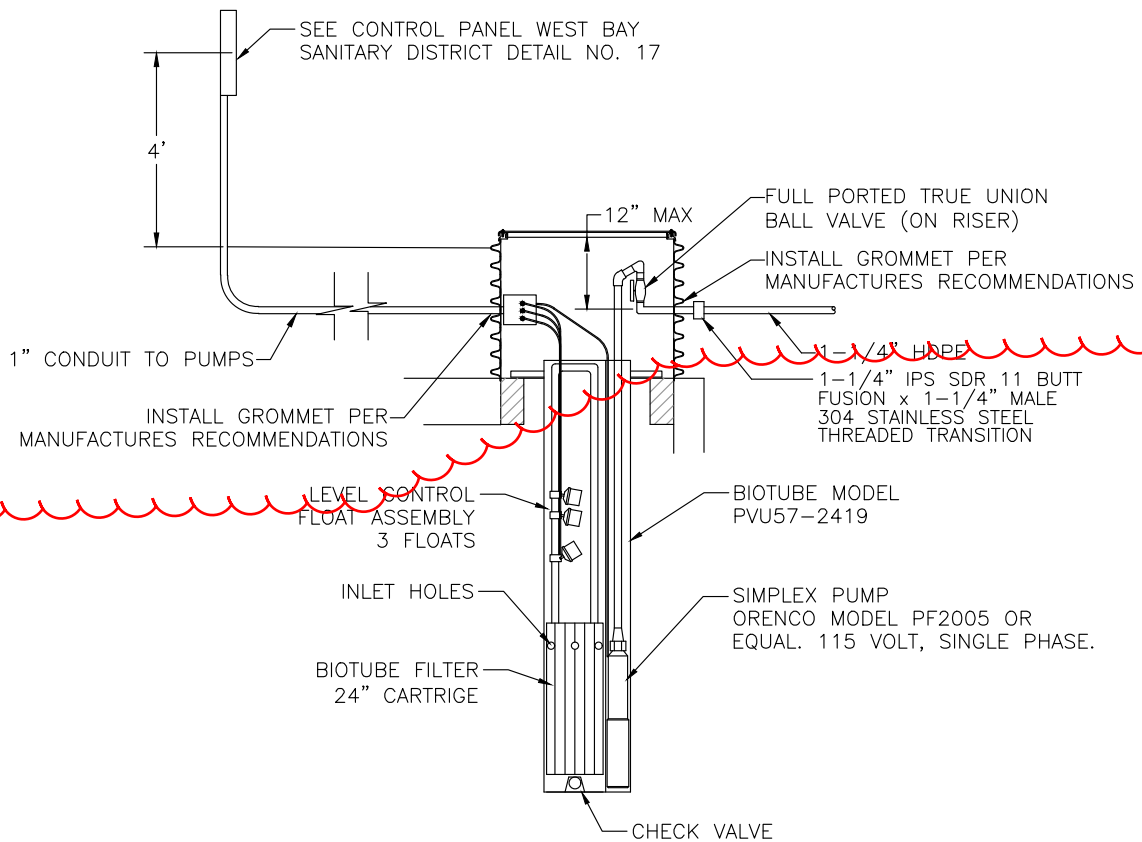
SINGLE FAMILY
GRINDER PUMP INFORMATION DETAIL

APPROVED BY:

/S/ - SERGIO RAMIREZ
GENERAL MANAGER

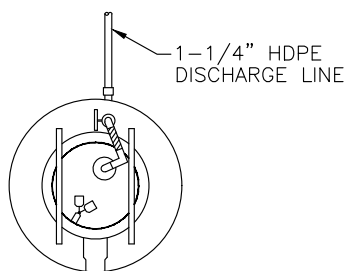
03-30-23
DATE:

20



PUMP DETAIL

NOT TO SCALE



**TOP VIEW
RISER ASSEMBLY**

NOTES:

- 1) INSTALL PUMP AND VAULT PER
MANUFACTURER'S RECOMMENDATIONS.
- 2) CORD LENGTHS TO BE DETERMINED
BY DESIGN ENGINEER OR CONTRACTOR.
- 3) SPARE PUMP TO BE PROVIDED TO
THE DISTRICT.

WEST BAY

SANITARY DISTRICT

PUMP DETAIL—SINGLE FAMILY SEPTIC TANK
EFFLUENT PUMP (STEP) SYSTEM

APPROVED BY:

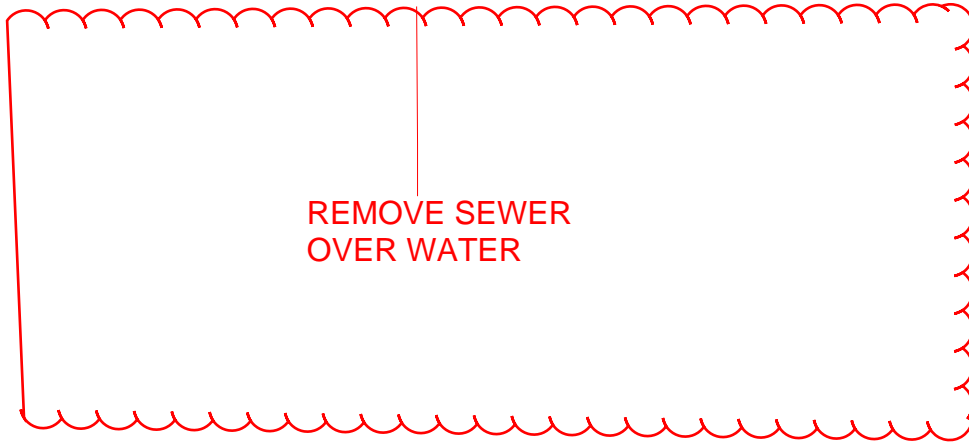
/S/ - SERGIO RAMIREZ

GENERAL MANAGER

03-30-23

DATE:

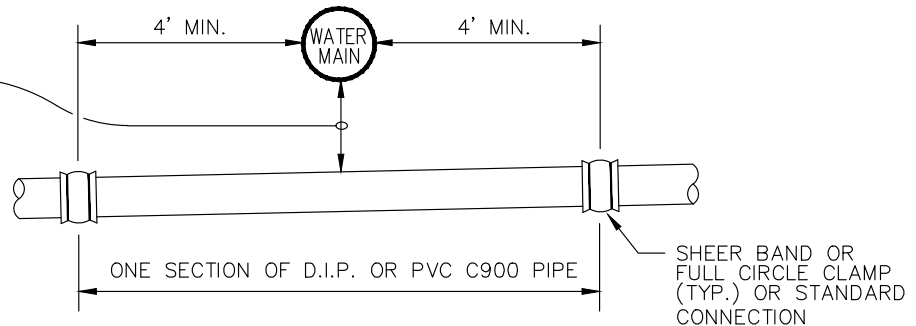
21



REMOVE SEWER
OVER WATER



REQUIRED CLEARANCE IN
12" MIN. MEASURED
FROM OUTSIDE TO PIPE
TO OUT SIDE OF PIPE.



TYPICAL CROSSING UNDER WATER MAIN

NOTES

- 1) ALL WATER CROSSINGS SHALL CONFORM TO AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS.

WEST BAY
SANITARY DISTRICT

SANITARY SEWER WATER MAIN CROSSINGS

APPROVED BY:

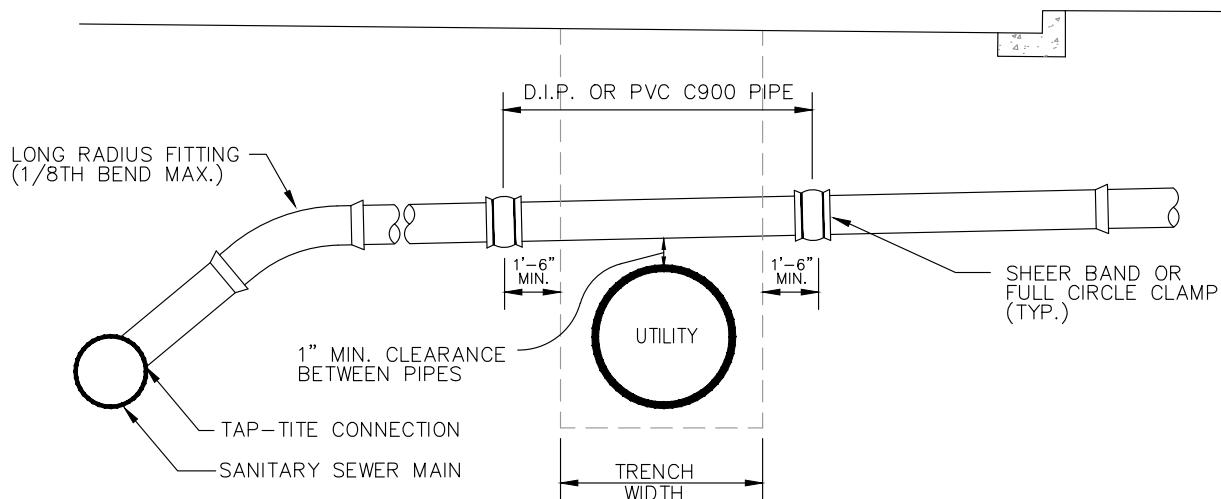
/S/ - SERGIO RAMIREZ

GENERAL MANAGER

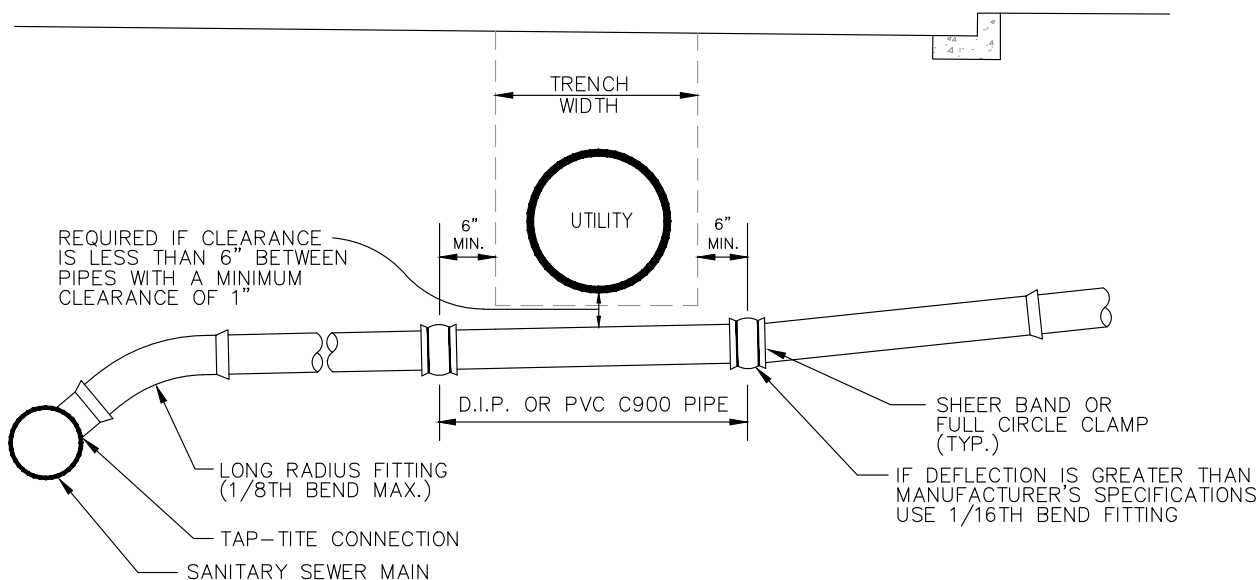
03-30-23

DATE:

22



TYPICAL LATERAL CROSSING OVER UTILITY (EXCLUDING WATER)



TYPICAL LATERAL CROSSING UNDER UTILITY (EXCLUDING WATER)

NOTE:

- 1) D.I.P. PIPE SHALL BE CLASS 50 OR 51, OR PVC PIPE SHALL BE C-900 DR 18.

WEST BAY

SANITARY DISTRICT

SANITARY SEWER LATERAL UTILITY CROSSINGS
(EXCLUDING WATER)

APPROVED BY:

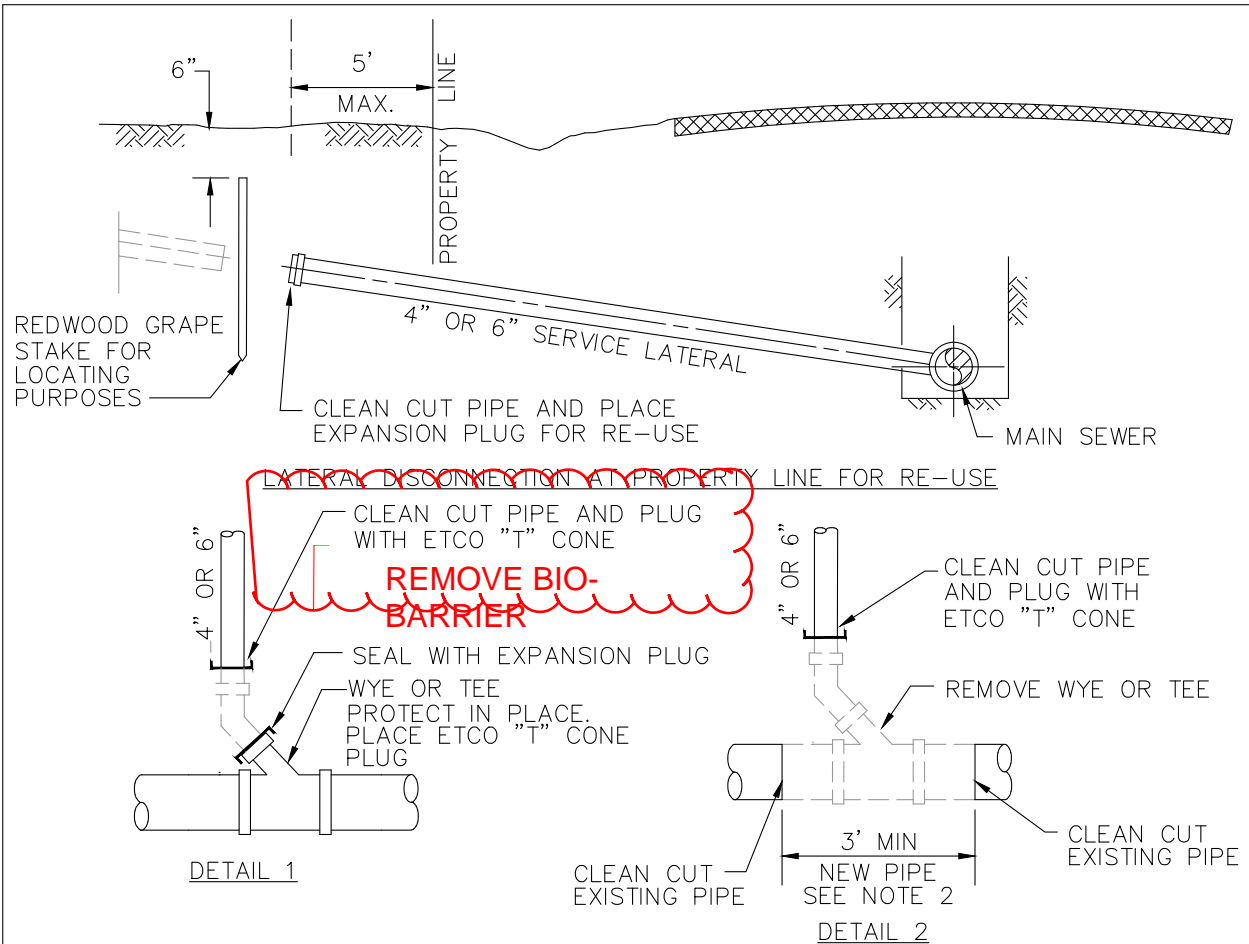
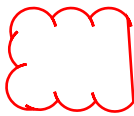
/S/ - SERGIO RAMIREZ

GENERAL MANAGER

03-30-23

DATE:

23



NOTES:

LATERAL DISCONNECTION AT MAIN SEWER (SEE NOTES 1&5)

1) THE CONTRACTOR SHALL EXCAVATE BY HAND EXPOSING THE WYE/TEE AT THE MAIN SEWER LINE FOR INSPECTION BY A WEST BAY REPRESENTATIVE. IF THE MAIN AND WYE/TEE ARE DEEMED IN GOOD CONDITION, PLUG WYE/TEE AS SHOWN IN DETAIL 1. IF THE MAIN IS IN GOOD CONDITION AND THE WYE/TEE IS IN POOR CONDITION, REMOVE TEE AND SECTION OF PIPE AS SHOWN IN DETAIL 2. IF BOTH MAIN AND WYE/TEE ARE IN POOR CONDITION, NOTIFY WBSD.

2) REPLACEMENT PIPE SHALL MATCH EXISTING SEWER MAIN PIPE. COUPLING SHALL BE SMITH-BLAIR 226 FULL CIRCLE STAINLESS STEEL CLAMP OR EQUAL FOR MAIN DIAMETER LESS THAN 15" AND ROCKWELL 228 FULL CIRCLE CLAMP OR EQUAL FOR MAIN 15" OR GREATER.

3) IF SEWER MAIN IS CONCRETE ENCASED OR CRADLED, ANY PORTION REMOVED BY CONTRACTOR SHALL BE REPLACED ENTIRELY TO THE SATISFACTION OF THE DISTRICT'S FIELD REPRESENTATIVE.

4) CONTRACTOR SHALL SUPPLY ADDRESS OF ABANDONED LATERAL AND DISTANCE AS MEASURED FROM THE DOWNSTREAM MANHOLE.

5) IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM THAT NO OTHER PROPERTIES ARE CONNECTED TO THE LATERAL PRIOR TO DISCONNECTION.

WEST BAY
SANITARY DISTRICT

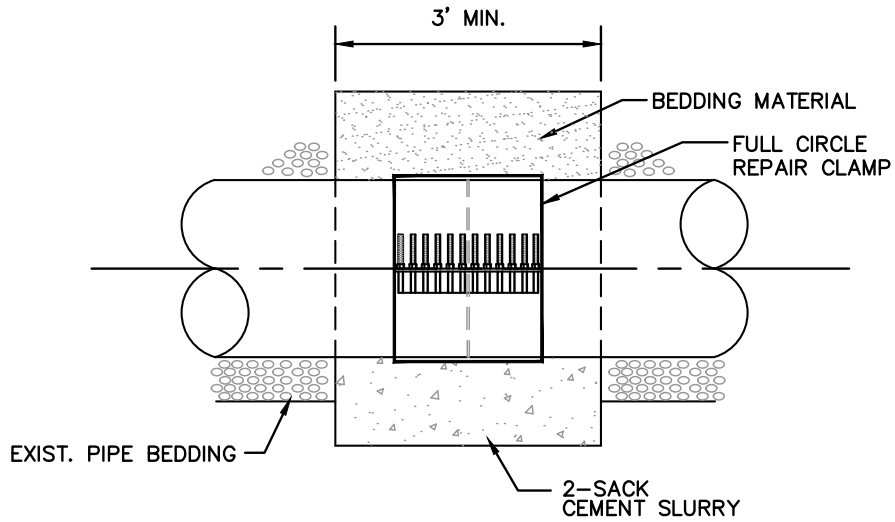
SANITARY SEWER
LATERAL DISCONNECTIONS

APPROVED BY:

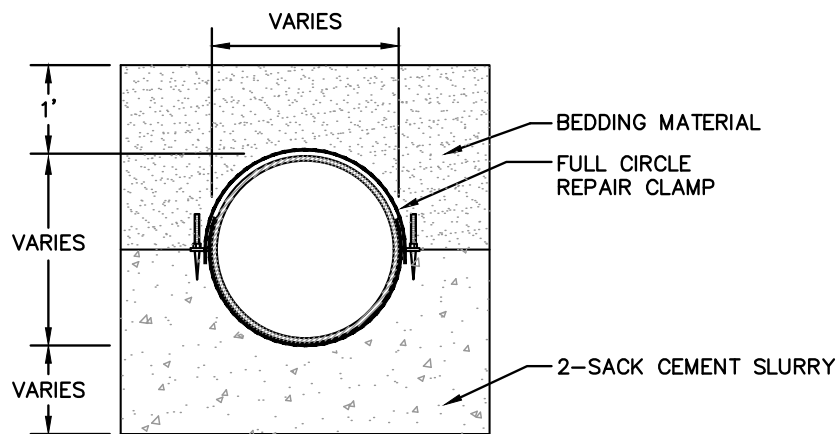
/S/ - SERGIO RAMIREZ
GENERAL MANAGER

03-30-23
DATE:

24



PLAN



NOTE:

1. REPAIR SLEEVE SHALL BE STAINLESS STEEL FULL CIRCLE ROCKWELL 228, 3 BAND, 20" WIDE CLAMP OR EQUAL.

WEST BAY
SANITARY DISTRICT

REPAIR COUPLING FOR 15" DIAMETER AND LARGER PIPE

APPROVED BY:

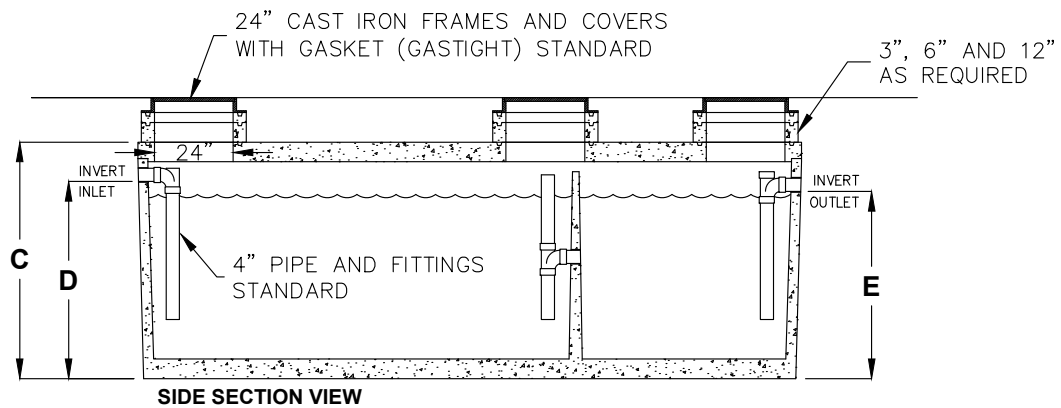
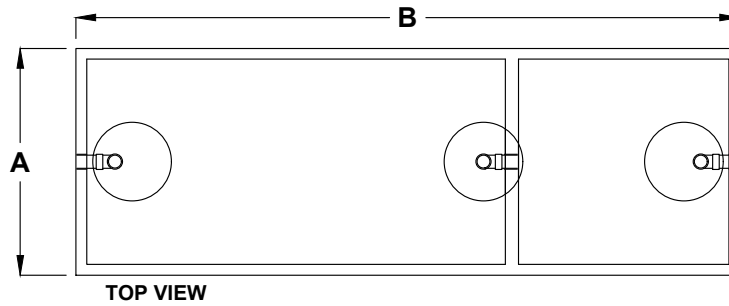
/S/ - SERGIO RAMIREZ

GENERAL MANAGER

03-30-23

DATE:

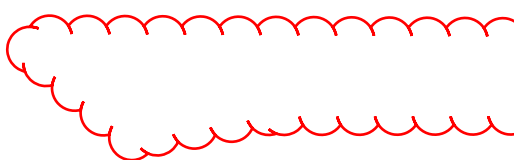
25

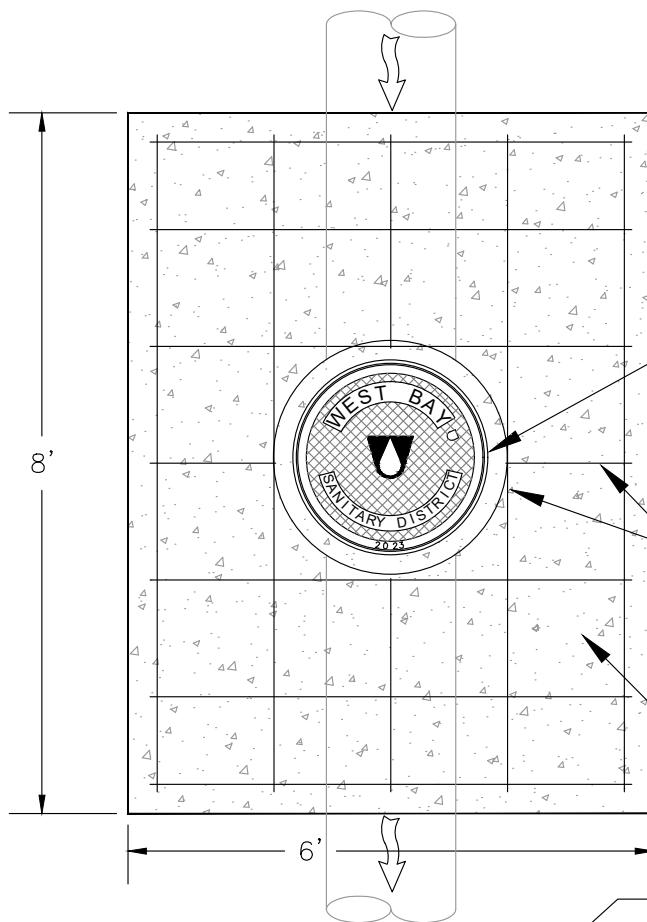


LIQUID CAPACITY (GALLONS)	DIM A	DIM B	DIM C	DIM D	DIM E
320	3'-0"	7'-0"	4'-6"	3'-7"	3'-4"
500	4'-0"	6'-0"	5'-10"	4'-10"	4'-7"
750	4'-0"	8'-1"	6'-3"	5'-0"	4'-9"
1000	5'-1"	8'-2"	6'-3"	5'-0"	4'-9"
1200	5'-9"	8'-6"	6'-6"	5'-0"	4'-9"
1500	5'-7"	10'-8"	6'-3"	5'-0"	4'-9"
2000	4'-11"	15'-11"	6'-0"	5'-0"	4'-9"
2500	5'-9"	16'-10"	6'-0"	5'-0"	4'-9"
3000	5'-9"	16'-10"	6'-9"	5'-9"	5'-6"
4000	7'-8"	16'-7"	6'-9"	5'-6"	5'-3"
5000	7'-8"	16'-7"	7'-11"	6'-9"	6'-6"

NOTES:

- 1) DESIGN LOAD: H-20 TRAFFIC WITH DRY SOIL CONDITIONS (WATER LEVEL BELOW TANK.)
- 2) BEDDING NOTE: SUITABLE SUB-BASE BEDDED WITH GRANULAR MATERIAL SHALL BE PREPARED TO HANDLE ANTICIPATED LOADS.
- 3) ALL INTERCEPTORS SHALL MEET THESE STANDARDS OR APPROVED EQUAL.

		WEST BAY SANITARY DISTRICT	
		GREASE INTERCEPTOR	
APPROVED BY:		26	
/S/ - SERGIO RAMIREZ GENERAL MANAGER		03-30-23 DATE:	



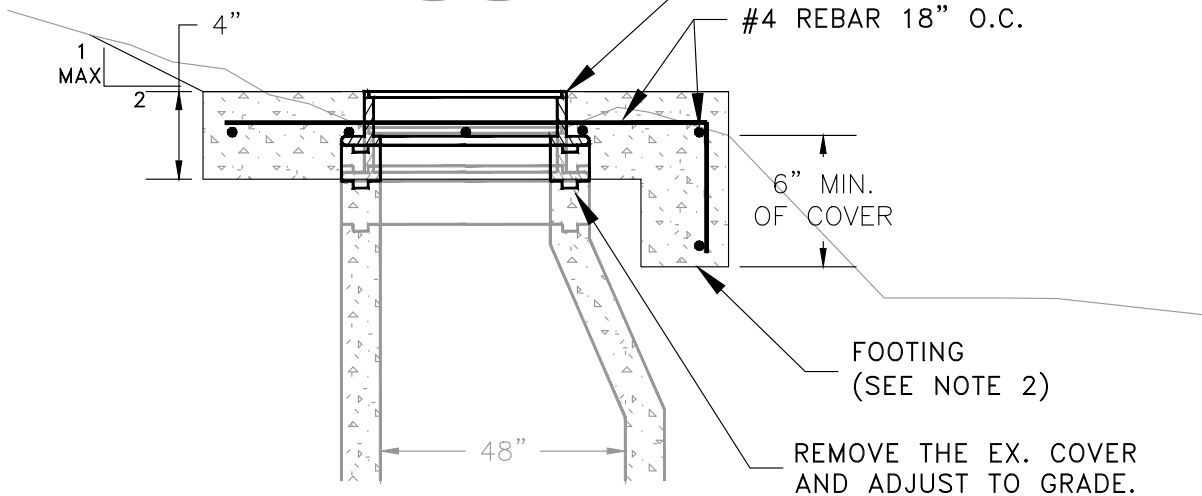
NOTE:

- 1) CONCRETE FLATWORK TO BE FIELD FIT AND APPROVED BY THE DISTRICT.
- 2) FOOTING SHALL BE PLACED ON DOWNHILL SLOPE.

NEW MANHOLE COVER

#4 REBAR 18" O.C.

NEW CAST-IN-PLACE
CONCRETE PLATFORM



WEST BAY
SANITARY DISTRICT

CONCRETE PLATFORM – NON PAVED AREAS

APPROVED BY:

/S/ – SERGIO RAMIREZ
GENERAL MANAGER

03-30-23
DATE:

27



**WEST BAY SANITARY DISTRICT
AGENDA ITEM 14**

To: *Board of Directors*

From: *Sergio Ramirez, General Manager*
Todd Reese, Office & Communication Manager

Subject: *Consider Adopting Resolution Approving Master Fee Schedule (2023)*

Background

The District Board approved an amendment to the Code of General Regulations in August of 2014, removing the Master Fee Schedule, which outlines fees, from the Code of General Regulations and allows the Board to update these fees by resolution as needed to keep pace with inflation etc. The Master Fee Schedule was subsequently updated by resolution for the various District permits in September of 2014, September 2017, and January of 2020. District Staff has worked to develop an updated schedule of District fees that would cover cost of service involved in each rate category for issuing, inspecting, reviewing and enforcing permits.

Analysis

Staff calculated District costs for service of staff time and equipment used for each category. The District combined the Class 3 permit deposit and fee into one fee. In addition a new Class 5 and Class 6 permit were added to better track the activities associated with the actual work performed. A Private Job Account deposit was added and will recover costs associated with reviewing new development and re-development coordination and plan reviews.

The proposed increases include totals for both CPI and MOU salary increases (at fully loaded rates) to cover District costs. Staff has rounded up or down minimally for convenience and more efficient accounting.

The following are the CPI and MOU increases for the last 2 years.

April CPI:	2020 1.1%,	2021 3.8%,	2022 5%	2023 4.2%
MOU:	2020 4%,	2021 4%,	2022 4%,	2023 4%

The advantage of a Master Fee Schedule is: a) fees can be updated periodically by Board resolution rather than amend the Code of Regulations; b) it serves as a convenient handout for customers seeking information on permit fees etc.

Fiscal Impact:

There will be a slight positive fiscal impact to the District, since in most cases, fees are proposed to be increased to cover District costs.

Recommendation:

The General Manager recommends that the District Board Adopt the Resolution Approving Master Fee Schedule 2023.

Attachments: Resolution ____ (2023)
Master Fee Schedule (2023)

RESOLUTION NO. _____ (2023)

IN THE DISTRICT BOARD OF THE WEST BAY SANITARY DISTRICT
COUNTY OF SAN MATEO, STATE OF CALIFORNIA

BE IT RESOLVED by the West Bay Sanitary District Master Fee Schedule, which is attached and incorporated herein as Exhibit A, is hereby adopted by the Board of Directors of the West Bay Sanitary District.

PASSED AND ADOPTED by the District Board of the West Bay Sanitary District at a regular meeting thereof held on 28th day of June, 2023, by the following votes:

Ayes:

Noes:

Absent:

Abstain:

President of the District Board of the
West Bay Sanitary District of San
Mateo County, State of California

Attest:

Secretary of the District Board of the
West Bay Sanitary District of San Mateo
County, State of California

Class 1 A - E

The permit and inspection fees for a Class 1 Sewer Permit (open-trench) for service to residential structures shall be ~~\$490.00~~ \$290.00.

Class 2 A - E

The permit and inspection fees for a Class 2 Sewer Permit (open-trench) for service to non-residential structures shall be ~~\$690.00~~ \$290.00.

Class 1F and Class 2F.

The permit and inspection fees for a Class 1F Sewer Permit (trenchless) for service to residential or non-residential structures shall be ~~\$720.00~~ \$355.00 plus San Mateo County recording fee.

Class 3.

The permit fee for a Class 3 Sewer Permit for construction of sewer mains, pumping stations and other wastewater facilities, shall be ~~\$ 2,660.00~~ 585.00. ~~The inspection fee for a Class 3 sewer permit requires a \$2,000 deposit.~~

Class 4A and 4B

The permit and inspection fees for a Class 4 Disconnect Sewer Permit for service to residential or non-residential structures shall be ~~\$220.00~~ \$170.00.

Class 5 STEP and Grinder

~~The permit and inspection fees for a Class 5 Sewer Permit for service to residential or non-residential structures shall be \$5,600.00 (mainline extension requires additional Class 3 permit).~~

Class 6 - Encroachments (Public Sewer Main and Facilities Access)

~~The permit and inspection fees for a Class 6 Sewer Permit for CCTV Sewer Mains shall be \$325.00~~ 190.40 per project.

Private Job Account: Development and Re-Development Projects

~~Developer shall submit initial deposit of \$20,000 for plan submittals and review. Developer may be required to supply additional deposit when the initial deposit falls below 25%. Once project is approved a permit will be required.~~

Additional or Re-Inspection .

~~\$1109.00~~ \$85.00 per additional inspection or re-inspection.

CCTV Review Only.

~~CCTV Inspection for Sewer Lateral \$110.00~~ \$95.00 for review of CCTV of sewer lateral.

Effective July 1, 2023

Formatted: Font: (Default) Arial, 12 pt

Formatted: Indent: Left: 0"

Formatted: Indent: Left: 0", First line: 0.5"

WBSD Master Fee Schedule – [Exhibit A](#)

Estimated & Metered Volume Permits.

~~\$200.00~~ ~~\$175.00~~ for estimation of discharge for commercial customers upon determination by the ~~General~~District Manager.

Private Wastewater Disposal Permits.

~~\$210.00~~ ~~\$185.00~~ for maintaining and operating, or proposes to maintain~~ing~~ and operat~~e~~ing, a private wastewater disposal system.

Enforcement Hearing.

~~\$1,500.00~~ ~~\$670.00~~ per public hearing.

Plan Review (~~Projects~~Construction or Water Quality~~Regulatory Compliance~~).

~~\$140.00~~ ~~\$140.00~~ per hour for review by ~~Projects & IT~~ Manager or Water Quality ~~Manager~~Regulatory Coordinator.

Charges for Staff Time.

Staff salary multiplied by 1.75%.

Charges for District Materials.

Cost of materials multiplied by 10%.

Annexation Fee*.

~~\$655.00~~ ~~\$585~~ annexation processing fee per parcel;

~~\$655.00~~ ~~\$585~~ annexation into the On-Site Wastewater Disposal Zone per parcel;

~~\$2400.00~~ ~~\$2,200~~ publication ~~fe~~edeposit per parcel (for annexation into the On-Site Wastewater Disposal Zone)

* Additional fees may be due other agencies.

Formatted: Not Highlight

Formatted: Not Highlight

Review of Proposals for Accidental Discharges & HMBP's.

~~\$455.00~~ ~~\$405.00~~ for any accidental spills or discharges that do not conform to the conditions of a facilities permit or the code must be reported immediately to the POTW and the WBSD. Hazardous Material Business Plan (HMBP): A Business Plan is required when businesses handle and/or stores a hazardous material equal to or greater than the minimum reportable quantities. These quantities are 55 gallons for liquids, 500 pounds for solids and 200 cubic feet (at standard temperature and pressure) for compressed gases. Radioactive materials and extremely hazardous substances are reportable in any amount. The District reviews these plans and inspects facilities to ensure compliance with the District's Code.

Non-Routine Discharge Permit.

~~\$515.00~~ ~~\$300.00~~ plus treatment fees based on flow and loadings plus SVCW fee of \$50.00.,

Non-routine discharges (slugs) are defined as any quantity of industrial (non-domestic) wastewater that is discharged to the sanitary sewer on less than a daily frequency, and has the potential to cause interference with or pass-through the wastewater treatment plant or collection system.

Effective [July 1, 2023](#)

WBSD Master Fee Schedule – [Exhibit A](#)

Ground Water Discharge.

~~\$ 515.00~~ ~~\$405.00~~ plus treatment fees based on current ccf rate plus SVCW fee of \$436.00 (as of 4/7/14)

Groundwater discharge is defined as the movement of water out of an area of saturated soil, to the sanitary sewer

Mandatory Wastewater Discharge Compliance Permit (& 5-year Permit Renewal).

~~\$785.00~~ ~~\$700.00~~ plus SVCW fee of \$1,112.00 (as of 4/7/14). Required for chemically treated wastewater to make acceptable for discharge into the sanitary sewer.

Self Monitoring Report (Review).

~~\$270.00~~ ~~\$175.00~~ for sampling is performed and the results of the sampling indicate a violation the user shall notify the POTW and the WBSD within 24 hours of becoming aware of the violation.

Discharge Report Review.

~~\$270.00~~ ~~\$175.00~~

Discharge report review is defined as a report prepared by industries and other facilities discharging to sanitary sewer. The facilities collect wastewater samples, conduct chemical and/or biological tests of the samples, and submit the reports for review.

Formatted: Indent: Left: 0"

Swimming Pool Discharge "Residential".

~~\$295.00~~ ~~\$35.00~~ plus treatment fees based on current ccf rate for discharge of pool in sanitary sewer.

Swimming Pool Discharge "Commercial".

~~\$295.00~~ ~~\$160.00~~ plus treatment fees based on current ccf rate for discharge of pool in sanitary sewer.

FOG Non-Compliance Inspection.

~~\$220.00~~ ~~\$175.00~~

Re-inspection fee for facilities in violation of the Districts Code of General Regulations, Sections 602 & 603

Commercial/Industrial Non-Compliance Inspection.

~~\$220.00~~ ~~\$175.00~~

Re-inspection fee for facilities in violation of the Districts Code of General Regulations, Sections 600, 601, 602, 603

Flow Meter Operations and Maintenance Fee.

\$595.00 monthly

Effective [July 1, 2023](#)

Class 1 A - E

The permit and inspection fees for a Class 1 Sewer Permit (open-trench) for service to residential structures shall be \$490.00.

Class 2 A - E

The permit and inspection fees for a Class 2 Sewer Permit (open-trench) for service to non-residential structures shall be \$690.00.

Class 1F and Class 2F

The permit and inspection fees for a Class 1F Sewer Permit (trenchless) for service to residential or non-residential structures shall be \$720.00 plus San Mateo County recording fee.

Class 3

The permit fee for a Class 3 Sewer Permit for construction of sewer mains, pumping stations and other wastewater facilities, shall be \$ 2,660.00.

Class 4A and 4B

The permit and inspection fees for a Class 4 Disconnect Sewer Permit for service to residential or non-residential structures shall be \$220.00.

Class 5 STEP and Grinder

The permit and inspection fees for a Class 5 Sewer Permit for service to residential or non-residential structures shall be \$5,600.00 (mainline extension requires additional Class 3 permit.)

Class 6 - Encroachments (Public Sewer Main and Facilities Access)

The permit and inspection fees for a Class 6 Encroachment Permit for CCTV Sewer Main inspections shall be \$325.00 per project.

Private Job Account: Development and Re-Development Projects

Developer shall submit an initial deposit of \$20,000.00 for plan submittals and review. Developer may be required to supply additional deposit when the initial deposit falls below 25%. Once the project is approved a permit will be required as described above.

Additional or Re-Inspections

\$110.00 per additional inspection or re-inspection.

CCTV Review Only

CCTV Inspection reviews for Sewer Lateral shall be \$110.00 per sewer lateral.

Estimated & Metered Volume Permits

Estimation of discharge for commercial customers shall be \$200.00 upon determination by the General Manager.

Private Wastewater Disposal Permits

\$210.00 for maintaining and operating, or proposes to maintain and operate, a private wastewater disposal system.

Enforcement Hearing.

\$1,500.00 per public hearing.

Plan Review (Projects or Water Quality)

\$140.00 per hour for review by Project Manager or Water Quality Manager.

Charges for Staff Time

Staff salary multiplied by 1.75%.

Charges for District Materials

Cost of materials multiplied by 10%.

Annexation Fee*.

\$655.00 annexation processing fee per parcel;

\$655.00 annexation into the On-Site Wastewater Disposal Zone per parcel;

\$2400.00 publication fee per parcel (for annexation into the On-Site Wastewater Disposal Zone)

* Additional fees may be due by other agencies.

Review of Proposals for Accidental Discharges & HMBP's

\$455.00 for any accidental spills or discharges that do not conform to the conditions of a facilities permit or the code must be reported immediately to the POTW and the WBSD. Hazardous Material Business Plan (HMBP): A Business Plan is required when businesses handle and/or stores a hazardous material equal to or greater than the minimum reportable quantities. These quantities are 55 gallons for liquids, 500 pounds for solids and 200 cubic feet (at standard temperature and pressure) for compressed gases. Radioactive materials and extremely hazardous substances are reportable in any amount. The District reviews these plans and inspects facilities to ensure compliance with the District's Code.

Non-Routine Discharge Permit

\$515.00 plus treatment fees based on flow and loadings plus SVCW fee of \$50.00.,

Non-routine discharges (slugs) are defined as any quantity of industrial (non-domestic) wastewater that is discharged to the sanitary sewer on less than a daily frequency, and has the potential to cause interference with or pass-through the wastewater treatment plant or collection system.

Ground Water Discharge.

\$515.00 plus treatment fees based on current ccf rate plus SVCW fee of \$436.00 (as of 4/7/14).

Groundwater discharge is defined as the movement of water out of an area of saturated soil, to the sanitary sewer.

Mandatory Wastewater Discharge Compliance Permit (& 5-year Permit Renewal)

\$785.00 plus SVCW fee of \$1,112.00 (as of 4/7/14). Required for chemically treated wastewater to make acceptable for discharge into the sanitary sewer.

Self Monitoring Report (Review)

\$270.00 for sampling is performed and the results of the sampling indicate a violation the user shall notify the POTW and the WBSD within 24 hours of becoming aware of the violation.

Discharge Report Review

\$270.00 Discharge report review is defined as a report prepared by industries and other facilities discharging to sanitary sewer. The facilities collect wastewater samples, conduct chemical and/or biological tests of the samples, and submit the reports for review.

Swimming Pool Discharge "Residential".

\$295.00 plus treatment fees based on current ccf rate for discharge of pool in sanitary sewer.

Swimming Pool Discharge "Commercial".

\$295.00 plus treatment fees based on current ccf rate for discharge of pool in sanitary sewer.

FOG Non-Compliance Inspection.

\$220.00 Re-inspection fee for facilities in violation of the Districts Code of General Regulations, Sections 602 & 603

Commercial/Industrial Non-Compliance Inspection.

\$220.00 Re-inspection fee for facilities in violation of the Districts Code of General Regulations, Sections 600, 601, 602, & 603

Flow Meter Operations and Maintenance Fee.

\$595.00 monthly.

THIS PAGE LEFT INTENTIONALLY BLANK



WEST BAY SANITARY DISTRICT AGENDA ITEM 15

To: *Board of Directors*

From: *Sergio Ramirez, General Manager*

Subject: *Discussion and Direction on the West Bay and Sharon Heights Recycled Water Facility*

A discussion will be held on the Sharon Heights Recycled Water Facility and other events related to the recycled water plant. The Board will have opportunity to provide direction to staff and legal counsel.

Recycled Water Facility Production Data:

2020	Treated	Delivered
August	8.8MG	8.2MG
September	8.2MG	5.1MG
October	7.4MG	4.5MG
November	5MG	1.4MG
December	4.7MG	.55MG
2021	Treated	Delivered
January	4.8MG	.23MG
February	4.4MG	.13MG
March	5.9MG	1.8MG
April	8.5MG	7.6MG
May	9.3.MG	8.2MG
June	9.8MG	8.7MG
July	9.5MG	9.1MG
August	9.4MG	9.0MG
September	9.1MG	6.9MG*
October	7.6MG	2.6MG**
November	5.2MG	0
December	4.7MG	0

Report to the District Board for the Regular Meeting of June 28, 2023

2022	Treated	Delivered
January	4.4MG	97,000 gallons
February	4.4MG	1.5MG
March	6.6MG	3.5MG
April	7.6MG	3.8MG
May	9.2MG	7.4MG
June	9.8MG	8.7MG
July	9.6MG	8.1MG
August	9.2MG	8.1MG
September	8.6MG	6.7MG
October	7.9MG	4.6MG
November	5.9MG	310,000 gallons
December	5.4MG	154,690 gallons

2023	Treated	Delivered
January	5MG	0 gallons
February	3.3MG	0 gallons
March	3.5MG	0 gallons
April	4.9MG	0 gallons
May	5.1MG	0 gallons

* Sharon Heights substantially tapered off their water usage for September which is the reason for the large discrepancy between treated and delivered.

** Treatment was reduced in the second half of the month. Rain in late October and an irrigation equipment malfunctions caused water delivery to decrease.

The following is a disclosure statement required for any document, written report or brochure prepared in whole or in part pursuant to the Finance Agreement with the State Water Resources Control Board for the West Bay Sanitary District Recycled Water Project - Sharon Heights: Funding for this project has been provided in full or in part through an agreement with the State Water Resources Control Board. California's Clean Water State Revolving Fund is capitalized through a variety of funding sources, including grants from the United States Environmental Protection Agency and state bond proceeds. The contents of this document do not necessarily reflect the views and policies of the foregoing, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.



WEST BAY SANITARY DISTRICT AGENDA ITEM 16

To: *Board of Directors*

From: *Sergio Ramirez, General Manager*

Subject: *Discussion and Direction on the Bayfront Recycled Water Project and Status Update*

A discussion will be held on the District's Bayfront Recycled Water Projects and other events related to the recycled water projects including financing, environmental review, design/build issues and grant applications.

The Board will have the opportunity to provide direction to staff and general counsel.

THIS PAGE LEFT INTENTIONALLY BLANK



WEST BAY SANITARY DISTRICT AGENDA ITEM 17

To: *Board of Directors*

From: *Sergio Ramirez, General Manager*

Subject: *Report and Discussion on South Bayside Waste Management Authority (SBWMA)*

The District's representative to South Bayside Waste Management Authority (SBWMA), President Fran Dehn, will report on any pertinent items regarding SBWMA business.

THIS PAGE LEFT INTENTIONALLY BLANK



WEST BAY SANITARY DISTRICT AGENDA ITEM 18

To: *Board of Directors*

From: *Sergio Ramirez, General Manager*

Subject: *Report and Discussion on Silicon Valley Clean Water (SVCW) Plant*

The District's representative to Silicon Valley Clean Water (SVCW), Commissioner George Otte, will report on pertinent items regarding SVCW Operations, CIP and Finance.

Report to the District Board for the Regular Meeting of June 28, 2023

THIS PAGE LEFT INTENTIONALLY BLANK