

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PG&E EQUIPMENT YARD (Continued)**

**S103880675**

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 06S1E32M10  
Oversite Agency: SCVWD  
Date Listed: 1993-05-26 00:00:00  
Closed Date: 2001-01-23 00:00:00

**SWEEPS UST:**

Status: Not reported  
Comp Number: 404880  
Number: Not reported  
Board Of Equalization: Not reported  
Ref Date: Not reported  
Act Date: Not reported  
Created Date: Not reported  
Tank Status: Not reported  
Owner Tank Id: Not reported  
Swrcb Tank Id: 43-060-404880-000001  
Actv Date: Not reported  
Capacity: 1000  
Tank Use: OIL  
Stg: WASTE  
Content: Not reported  
Number Of Tanks: 1

**DC439**  
**ENE**  
**1/4-1/2**  
**0.451 mi.**  
**2380 ft.**

**PG & E EQUIPMENT YARD**  
**1201 15TH**  
**SAN JOSE, CA**  
**Site 2 of 4 in cluster DC**

**HIST CORTESE** **S102435166**  
**N/A**

**Relative:**  
**Higher**

**CORTESE:**  
Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-0995

**Actual:**  
**66 ft.**

**DC440**  
**ENE**  
**1/4-1/2**  
**0.455 mi.**  
**2400 ft.**

**INDUSTRIAL TOOL & SUPPLY**  
**1177 15TH**  
**SAN JOSE, CA 95115**  
**Site 3 of 4 in cluster DC**

**HIST CORTESE** **S103474118**  
**N/A**

**Relative:**  
**Higher**

**CORTESE:**  
Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-0720

**Actual:**  
**67 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DC441**     **INDUSTRIAL TOOL & SUPPLY CO.**  
**ENE**        **1177 N 15TH ST**  
**1/4-1/2**     **SAN JOSE, CA 95115**  
**0.455 mi.**  
**2400 ft.**     **Site 4 of 4 in cluster DC**

**HAZNET**    **S103880672**  
**LUST**        **N/A**  
**HIST LUST**

**Relative:**  
**Higher**

HAZNET:  
Gepaid:            CAL000304687  
Contact:           DANIEL SCHAPER  
Telephone:        4084370337  
Facility Addr2:   Not reported  
Mailing Name:     Not reported  
Mailing Address:  1177 N 15TH ST  
Mailing City,St,Zip: SAN JOSE, CA 951121422  
Gen County:        Santa Clara  
TSD EPA ID:        CAD009452657  
TSD County:        San Mateo  
Waste Category:   Unspecified oil-containing waste  
Disposal Method:  H141  
Tons:                0.45  
Facility County:   Santa Clara

**Actual:**  
**67 ft.**

Gepaid:            CAL000304687  
Contact:           DANIEL SCHAPER  
Telephone:        4084370337  
Facility Addr2:   Not reported  
Mailing Name:     Not reported  
Mailing Address:  1177 N 15TH ST  
Mailing City,St,Zip: SAN JOSE, CA 951121422  
Gen County:        Santa Clara  
TSD EPA ID:        CAD059494310  
TSD County:        Santa Clara  
Waste Category:   Unspecified oil-containing waste  
Disposal Method:  H141  
Tons:                0.22  
Facility County:   Santa Clara

Gepaid:            CAL000304687  
Contact:           DANIEL SCHAPER  
Telephone:        4084370337  
Facility Addr2:   Not reported  
Mailing Name:     Not reported  
Mailing Address:  1177 N 15TH ST  
Mailing City,St,Zip: SAN JOSE, CA 951121422  
Gen County:        Santa Clara  
TSD EPA ID:        CAD059494310  
TSD County:        Santa Clara  
Waste Category:   Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)  
Disposal Method:  H141  
Tons:                0.45  
Facility County:   Santa Clara

Gepaid:            CAL000304687  
Contact:           DANIEL SCHAPER  
Telephone:        4084370337  
Facility Addr2:   Not reported  
Mailing Name:     Not reported  
Mailing Address:  1177 N 15TH ST  
Mailing City,St,Zip: SAN JOSE, CA 951121422

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**INDUSTRIAL TOOL & SUPPLY CO. (Continued)**

**S103880672**

Gen County: Santa Clara  
TSD EPA ID: CAD009452657  
TSD County: San Mateo  
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)  
Disposal Method: H141  
Tons: 0.22  
Facility County: Santa Clara

[Click this hyperlink](#) while viewing on your computer to access  
-1 additional CA\_HAZNET: record(s) in the EDR Site Report.

**LUST:**

Region: STATE  
Global Id: T0608500747  
Latitude: 37.365756  
Longitude: -121.892064  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 1995-04-03 00:00:00  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: Not reported  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: Not reported  
File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

**LUST REG 2:**

Region: 2  
Facility Id: Not reported  
Facility Status: Case Closed  
Case Number: 06S1E32M03f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: 7/18/1989  
Pollution Characterization Began: 2/5/1990  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: 12/11/1992

**LUST SANTA CLARA:**

Region: SANTA CLARA  
SCVWD ID: 06S1E32M03f  
Closed Date: 4/3/1995

**HIST LUST SANTA CLARA:**

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 06S1E32M03

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**INDUSTRIAL TOOL & SUPPLY CO. (Continued)**

**S103880672**

Oversite Agency: SCVWD  
Date Listed: 1990-01-01 00:00:00  
Closed Date: 1995-04-03 00:00:00

**442**  
**ENE**  
**1/4-1/2**  
**0.470 mi.**  
**2484 ft.**

**GIACOMMAZZI TRUST PROPERTY**  
**645 HORNING ST**  
**SAN JOSE, CA 95112**

**LUST**  
**HIST LUST**  
**HIST CORTESE**

**S103473036**  
**N/A**

**Relative:**  
**Higher**

**LUST:**

**Actual:**  
**69 ft.**

Region: STATE  
Global Id: T0608502076  
Latitude: 37.361766  
Longitude: -121.892132  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 2002-11-15 00:00:00  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: Not reported  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: Not reported  
File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Diesel  
Site History: Not reported

**LUST REG 2:**

Region: 2  
Facility Id: Not reported  
Facility Status: Case Closed  
Case Number: 06S1E32N05f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: 3/6/1992  
Pollution Characterization Began: 3/6/1992  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

**LUST SANTA CLARA:**

Region: SANTA CLARA  
SCVWD ID: 06S1E32N05f  
Closed Date: 11/15/2002

**HIST LUST SANTA CLARA:**

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 06S1E32N05  
Oversite Agency: SCVWD  
Date Listed: 1995-03-03 00:00:00

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**GIACOMMAZZI TRUST PROPERTY (Continued)**

**S103473036**

Closed Date: 2002-11-15 00:00:00

**CORTESE:**

Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-2261

**443**  
**ENE**  
**1/4-1/2**  
**0.476 mi.**  
**2514 ft.**

**ULTRAMAR (BEACON ST. #605)**  
**1200 OLD OAKLAND RD**  
**SAN JOSE, CA 95112**

**LUST** **S102439548**  
**HIST LUST** **N/A**  
**HIST CORTESE**

**Relative:**  
**Higher**

**LUST:**

Region: STATE  
Global Id: T0608501700  
Latitude: 37.367104  
Longitude: -121.891053  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 1998-01-15 00:00:00  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: Not reported  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: Not reported  
File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

**Actual:**  
**68 ft.**

**LUST REG 2:**

Region: 2  
Facility Id: Not reported  
Facility Status: Case Closed  
Case Number: 06S1E32M11f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: 11/29/1993  
Pollution Characterization Began: 11/29/1993  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: 11/29/1993

**LUST SANTA CLARA:**

Region: SANTA CLARA  
SCVWD ID: 06S1E32M11f  
Closed Date: 1/15/1998

**HIST LUST SANTA CLARA:**

Region: SANTA CLARA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ULTRAMAR (BEACON ST. #605) (Continued)**

**S102439548**

Region Code: 2  
SCVWD ID: 06S1E32M11  
Oversite Agency: SCVWD  
Date Listed: 1994-02-04 00:00:00  
Closed Date: 1998-01-15 00:00:00

**CORTESE:**

Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-1770

**DD444**  
**WNW**  
**1/4-1/2**  
**0.478 mi.**  
**2526 ft.**

**UNOCAL**  
**2101 1ST**  
**SAN JOSE, CA 95131**  
**Site 1 of 5 in cluster DD**

**HIST CORTESE** **S104396973**  
**N/A**

**Relative:**  
**Lower**

**CORTESE:**  
Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-1545

**Actual:**  
**43 ft.**

**DD445**  
**WNW**  
**1/4-1/2**  
**0.478 mi.**  
**2526 ft.**

**UNOCAL #5628**  
**2101 N 1ST ST**  
**SAN JOSE, CA 95131**  
**Site 2 of 5 in cluster DD**

**LUST** **S103880784**  
**HIST LUST** **N/A**

**Relative:**  
**Lower**

**LUST REG 2:**  
Region: 2  
Facility Id: Not reported  
Facility Status: Case Closed  
Case Number: 06S1W36A02f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Wokplan Submitted: Not reported  
Preliminary Site Assessment Began: 4/4/1990  
Pollution Characterization Began: 7/1/1991  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

**Actual:**  
**43 ft.**

**HIST LUST SANTA CLARA:**

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 06S1W36A02  
Oversite Agency: SCVWD  
Date Listed: 1990-05-30 00:00:00  
Closed Date: 2003-11-07 00:00:00



Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**INDEPENDENT FOOD SERVICE INC. (Continued)**

**S109285898**

Longitude: -121.891498  
 Case Type: LUST Cleanup Site  
 Status: Completed - Case Closed  
 Status Date: 2008-03-24 00:00:00  
 Lead Agency: SANTA CLARA COUNTY LOP  
 Case Worker: Not reported  
 Local Agency: SANTA CLARA COUNTY LOP  
 RB Case Number: Not reported  
 LOC Case Number: 07S1E05D06f  
 File Location: Stored electronically as an E-file  
 Potential Media Affect: Other Groundwater (uses other than drinking water)  
 Potential Contaminants of Concern: Gasoline  
 Site History: Not reported

**DE449 INDEPENDENT FOOD SERVICE**  
**ESE 808 10TH**  
**1/4-1/2 SAN JOSE, CA 95112**  
**0.479 mi.**  
**2527 ft. Site 3 of 3 in cluster DE**

**HIST CORTESE S101304167**  
**N/A**

**Relative:** CORTESE:  
**Higher** Region: CORTESE  
 Facility County Code: 43  
**Actual:** Reg By: LTNKA  
**69 ft.** Reg Id: 43-0717

**DD450 AVIS RENT A CAR SERVICE C**  
**WNW 2103 1ST**  
**1/4-1/2 SAN JOSE, CA 95131**  
**0.481 mi.**  
**2538 ft. Site 4 of 5 in cluster DD**

**HIST CORTESE S103472964**  
**N/A**

**Relative:** CORTESE:  
**Lower** Region: CORTESE  
 Facility County Code: 43  
**Actual:** Reg By: LTNKA  
**43 ft.** Reg Id: 43-0135

**DD451 LOWELL HONDA**  
**WNW 2103 N FIRST ST**  
**1/4-1/2 SAN JOSE, CA 95131**  
**0.481 mi.**  
**2538 ft. Site 5 of 5 in cluster DD**

**RCRA-SQG 1000204990**  
**LUST CAD981641806**  
**HIST UST**  
**HIST LUST**

**Relative:** RCRA-SQG:  
**Lower** Date form received by agency: 02/27/1987  
 Facility name: LOWELL HONDA  
 Facility address: 2103 N FIRST ST  
 SAN JOSE, CA 95131  
 EPA ID: CAD981641806  
 Mailing address: N FIRST ST  
 SAN JOSE, CA 95131  
 Contact: ENVIRONMENTAL MANAGER  
 Contact address: 2103 N FIRST ST  
 SAN JOSE, CA 95131

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LOWELL HONDA (Continued)**

**1000204990**

Contact country: US  
Contact telephone: (408) 436-1492  
Contact email: Not reported  
EPA Region: 09  
Classification: Small Small Quantity Generator  
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

**Owner/Operator Summary:**

Owner/operator name: CERRITOS MANAGEMENT  
Owner/operator address: NOT REQUIRED  
NOT REQUIRED, ME 99999  
Owner/operator country: Not reported  
Owner/operator telephone: (415) 555-1212  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED  
Owner/operator address: NOT REQUIRED  
NOT REQUIRED, ME 99999  
Owner/operator country: Not reported  
Owner/operator telephone: (415) 555-1212  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

**Handler Activities Summary:**

U.S. importer of hazardous waste: Unknown  
Mixed waste (haz. and radioactive): Unknown  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: Unknown  
Furnace exemption: Unknown  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No  
Off-site waste receiver: Commercial status unknown

Violation Status: No violations found

**LUST:**

Region: STATE  
Global Id: T0608500202  
Latitude: 37.375271  
Longitude: -121.919073

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LOWELL HONDA (Continued)**

**1000204990**

Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 1990-07-19 00:00:00  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: Not reported  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: Not reported  
File Location: Stored electronically as an E-file  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating  
Site History: Not reported

**LUST REG 2:**

Region: 2  
Facility Id: Not reported  
Facility Status: Case Closed  
Case Number: 06S1W36B02f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assesment Wokplan Submitted: Not reported  
Preliminary Site Assesment Began: 6/28/1989  
Pollution Characterization Began: Not reported  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

**LUST SANTA CLARA:**

Region: SANTA CLARA  
SCVWD ID: 06S1W36B02f  
Closed Date: 7/19/1990

**HIST UST:**

Region: STATE  
Facility ID: 00000009513  
Facility Type: Other  
Other Type: AUTO DEALER  
Total Tanks: 0001  
Contact Name: ALAN SOBERS  
Telephone: 4082871492  
Owner Name: LOWELL HONDA-GMC  
Owner Address: 2103 NORTH FIRST ST.  
Owner City,St,Zip: SAN JOSE, CA 95131

Tank Num: 001  
Container Num: 1  
Year Installed: Not reported  
Tank Capacity: 00000500  
Tank Used for: WASTE  
Type of Fuel: WASTE OIL  
Tank Construction: Not reported  
Leak Detection: Visual

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LOWELL HONDA (Continued)**

**1000204990**

HIST LUST SANTA CLARA:

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 06S1W36B02  
Oversite Agency: SCVWD  
Date Listed: 1989-01-01 00:00:00  
Closed Date: 1990-07-19 00:00:00

**DF452**  
**North**  
**1/4-1/2**  
**0.482 mi.**  
**2547 ft.**

**PRECISION ROOFING**  
**510 E BROKAW RD**  
**SAN JOSE, CA 95112**  
**Site 1 of 5 in cluster DF**

**LUST** **S101309141**  
**HIST LUST** **N/A**  
**HIST CORTESE**

**Relative:**  
**Lower**

LUST:

Region: STATE  
Global Id: T0608501067  
Latitude: 37.379074  
Longitude: -121.909278  
Case Type: LUST Cleanup Site  
Status: Open - Site Assessment  
Status Date: 1991-08-01 00:00:00  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: Not reported  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: 11-084  
LOC Case Number: 06S1E30M04f  
File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

**Actual:**  
**46 ft.**

LUST REG 2:

Region: 2  
Facility Id: Not reported  
Facility Status: Pollution Characterization  
Case Number: 06S1E30M04f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: 4/1/1988  
Pollution Characterization Began: 8/1/1991  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:

Region: SANTA CLARA  
SCVWD ID: 06S1E30M04f  
Closed Date: Not reported

HIST LUST SANTA CLARA:

Region: SANTA CLARA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PRECISION ROOFING (Continued)**

**S101309141**

Region Code: 2  
SCVWD ID: 06S1E30M04  
Oversite Agency: SCCDEH  
Date Listed: 1987-01-01 00:00:00  
Closed Date: Not reported

**CORTESE:**

Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-1075

453  
ENE  
1/4-1/2  
0.484 mi.  
2557 ft.

**SAN CARLOS SHEET METAL**  
**1181 OLD OAKLAND RD**  
**SAN JOSE, CA 95112**

**LUST**  
**HIST LUST**  
**HIST CORTESE**

**S100235242**  
**N/A**

**Relative:**  
**Higher**

**LUST:**

Region: STATE  
Global Id: T0608501160  
Latitude: 37.366418  
Longitude: -121.891148  
Case Type: LUST Cleanup Site  
Status: Open - Site Assessment  
Status Date: 1997-11-22 00:00:00  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: Not reported  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: 14-333  
LOC Case Number: 06S1E32M02f  
File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Diesel  
Site History: Not reported

**Actual:**  
**68 ft.**

**LUST REG 2:**

Region: 2  
Facility Id: Not reported  
Facility Status: Pollution Characterization  
Case Number: 06S1E32M02f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: 7/19/1985  
Pollution Characterization Began: 11/22/1997  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

**LUST SANTA CLARA:**

Region: SANTA CLARA  
SCVWD ID: 06S1E32M02f

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SAN CARLOS SHEET METAL (Continued)**

**S100235242**

Closed Date: Not reported

**HIST LUST SANTA CLARA:**

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 06S1E32M02  
Oversite Agency: SCCDEH  
Date Listed: 1989-02-16 00:00:00  
Closed Date: Not reported

**CORTESE:**

Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-1170

**454  
NE  
1/4-1/2  
0.487 mi.  
2570 ft.**

**VANDERSON CONSTRUCTION  
1345 VANDER WY  
SAN JOSE, CA 95112**

**HAZNET 1000188490  
LUST N/A  
HIST LUST  
SWEEPS UST  
HIST CORTESE**

**Relative:  
Higher**

**HAZNET:**

Gepaid: CAL000148237  
Contact: GREAN TEAM OF SAN JOSE  
Telephone: 4082838500  
Facility Addr2: Not reported  
Mailing Name: Not reported  
Mailing Address: 1333 OAKLAND RD  
Mailing City,St,Zip: SAN JOSE, CA 951122809  
Gen County: Santa Clara  
TSD EPA ID: CAD059494310  
TSD County: Santa Clara  
Waste Category: Other inorganic solid waste  
Disposal Method: Disposal, Other  
Tons: .0200  
Facility County: Santa Clara

**Actual:  
63 ft.**

Gepaid: CAC002554796  
Contact: BARBARA LAUBACH/MARK  
Telephone: 4082683221  
Facility Addr2: Not reported  
Mailing Name: Not reported  
Mailing Address: 954 HAMPSWOOD WAY  
Mailing City,St,Zip: SAN JOSE, CA 951120000  
Gen County: Santa Clara  
TSD EPA ID: Not reported  
TSD County: Los Angeles  
Waste Category: Off-specification, aged, or surplus organics  
Disposal Method: Recycler  
Tons: 0.22  
Facility County: Not reported

Gepaid: CAC002554796  
Contact: BARBARA LAUBACH/MARK  
Telephone: 4082683221  
Facility Addr2: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VANDERSON CONSTRUCTION (Continued)**

**1000188490**

Mailing Name: Not reported  
Mailing Address: 954 HAMPSWOOD WAY  
Mailing City,St,Zip: SAN JOSE, CA 951120000  
Gen County: Santa Clara  
TSD EPA ID: Not reported  
TSD County: Los Angeles  
Waste Category: Unspecified organic liquid mixture  
Disposal Method: Recycler  
Tons: 1.12  
Facility County: Not reported

Gepaid: CAC002554796  
Contact: BARBARA LAUBACH/MARK  
Telephone: 4082683221  
Facility Addr2: Not reported  
Mailing Name: Not reported  
Mailing Address: 954 HAMPSWOOD WAY  
Mailing City,St,Zip: SAN JOSE, CA 951120000  
Gen County: Santa Clara  
TSD EPA ID: Not reported  
TSD County: San Bernardino  
Waste Category: Waste oil and mixed oil  
Disposal Method: Transfer Station  
Tons: 1.59  
Facility County: Not reported

Gepaid: CAC002554796  
Contact: BARBARA LAUBACH/MARK  
Telephone: 4082683221  
Facility Addr2: Not reported  
Mailing Name: Not reported  
Mailing Address: 954 HAMPSWOOD WAY  
Mailing City,St,Zip: SAN JOSE, CA 951120000  
Gen County: Santa Clara  
TSD EPA ID: Not reported  
TSD County: San Bernardino  
Waste Category: Off-specification, aged, or surplus organics  
Disposal Method: Transfer Station  
Tons: 1.36  
Facility County: Not reported

[Click this hyperlink](#) while viewing on your computer to access  
1 additional CA\_HAZNET: record(s) in the EDR Site Report.

**LUST:**

Region: STATE  
Global Id: T0608501556  
Latitude: 37.370055  
Longitude: -121.894184  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 1992-03-30 00:00:00  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: Not reported  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VANDERSON CONSTRUCTION (Continued)**

**1000188490**

File Location: Stored electronically as an E-file  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

**LUST REG 2:**

Region: 2  
Facility Id: Not reported  
Facility Status: Case Closed  
Case Number: 06S1E31H04f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: 2/26/1991  
Pollution Characterization Began: 2/26/1991  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

**LUST SANTA CLARA:**

Region: SANTA CLARA  
SCVWD ID: 06S1E31H04f  
Closed Date: 3/30/1992

**HIST LUST SANTA CLARA:**

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 06S1E31H04  
Oversite Agency: SCVWD  
Date Listed: 1991-05-29 00:00:00  
Closed Date: 1992-03-30 00:00:00

**SWEEPS UST:**

Status: Not reported  
Comp Number: 400939  
Number: Not reported  
Board Of Equalization: Not reported  
Ref Date: Not reported  
Act Date: Not reported  
Created Date: Not reported  
Tank Status: Not reported  
Owner Tank Id: Not reported  
Swrcb Tank Id: 43-060-400939-000001  
Actv Date: Not reported  
Capacity: 10000  
Tank Use: M.V. FUEL  
Stg: PRODUCT  
Content: DIESEL  
Number Of Tanks: 4  
  
Status: Not reported  
Comp Number: 400939

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VANDERSON CONSTRUCTION (Continued)**

**1000188490**

Number: Not reported  
Board Of Equalization: Not reported  
Ref Date: Not reported  
Act Date: Not reported  
Created Date: Not reported  
Tank Status: Not reported  
Owner Tank Id: Not reported  
Swrcb Tank Id: 43-060-400939-000002  
Actv Date: Not reported  
Capacity: 5000  
Tank Use: M.V. FUEL  
Stg: PRODUCT  
Content: REG UNLEADED  
Number Of Tanks: Not reported

Status: Not reported  
Comp Number: 400939  
Number: Not reported  
Board Of Equalization: Not reported  
Ref Date: Not reported  
Act Date: Not reported  
Created Date: Not reported  
Tank Status: Not reported  
Owner Tank Id: Not reported  
Swrcb Tank Id: 43-060-400939-000003  
Actv Date: Not reported  
Capacity: 6000  
Tank Use: M.V. FUEL  
Stg: PRODUCT  
Content: REG UNLEADED  
Number Of Tanks: Not reported

Status: Not reported  
Comp Number: 400939  
Number: Not reported  
Board Of Equalization: Not reported  
Ref Date: Not reported  
Act Date: Not reported  
Created Date: Not reported  
Tank Status: Not reported  
Owner Tank Id: Not reported  
Swrcb Tank Id: 43-060-400939-000004  
Actv Date: Not reported  
Capacity: 4000  
Tank Use: M.V. FUEL  
Stg: PRODUCT  
Content: DIESEL  
Number Of Tanks: Not reported

**CORTESE:**

Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-1599

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DG455**    **ORCHARD ELEMENTARY SCHOOL**  
**NE**        **711 E GISH RD**  
**1/4-1/2**    **SAN JOSE, CA 95112**  
**0.487 mi.**  
**2573 ft.**    **Site 1 of 2 in cluster DG**

**LUST**    **S102434717**  
**HIST LUST**    **N/A**  
**NPDES**  
**HIST CORTESE**

**Relative:**  
**Higher**

LUST:

Region: STATE  
Global Id: T0608500999  
Latitude: 37.37121  
Longitude: -121.893972  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 1993-12-23 00:00:00  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: Not reported  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: Not reported  
File Location: Stored electronically as an E-file  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

**Actual:**  
**62 ft.**

LUST REG 2:

Region: 2  
Facility Id: Not reported  
Facility Status: Case Closed  
Case Number: 06S1E31A04f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: 10/24/1991  
Pollution Characterization Began: Not reported  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:

Region: SANTA CLARA  
SCVWD ID: 06S1E31A04f  
Closed Date: 12/23/1993

HIST LUST SANTA CLARA:

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 06S1E31A04  
Oversite Agency: SCVWD  
Date Listed: 1989-01-01 00:00:00  
Closed Date: 1993-12-23 00:00:00

NPDES:

Npdes Number: Not reported  
Facility Status: Terminated

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ORCHARD ELEMENTARY SCHOOL (Continued)**

**S102434717**

Agency Id: 348936  
Region: 2  
Regulatory Measure Id: 314231  
Order No: 99-08DWQ  
Regulatory Measure Type: Storm water construction  
Place Id: 642682  
WDID: 2 43C344284  
Program Type: CONSTW  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: 11/1/2006 3:07:27 PM  
Expiration Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: 12/23/2008  
Discharge Name: Challenger School  
Discharge Address: Not reported  
Discharge City: Not reported  
Discharge State: Not reported  
Discharge Zip: Not reported

CORTESE:  
Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-1002

**DF456** **PHOTOTRON CORPORATION**  
**North** **524 E BROWKAW RD**  
**1/4-1/2** **SAN JOSE, CA 95112**  
**0.490 mi.**  
**2586 ft.** **Site 2 of 5 in cluster DF**

**RCRA-SQG** **1000418032**  
**FINDS** **CAD077168094**  
**LUST**  
**SAN JOSE HAZMAT**  
**HIST UST**  
**HIST LUST**  
**HIST CORTESE**

**Relative:**  
**Lower**

**Actual:**  
**46 ft.**

RCRA-SQG:  
Date form received by agency: 09/01/1996  
Facility name: PHOTOTRON CORPORATION  
Facility address: 524 E BROWKAW RD  
SAN JOSE, CA 95112  
EPA ID: CAD077168094  
Mailing address: 524 E BROKAW RD  
SAN JOSE, CA 95112  
Contact: Not reported  
Contact address: Not reported  
Contact country: Not reported  
Contact telephone: Not reported  
Contact email: Not reported  
EPA Region: 09  
Classification: Small Small Quantity Generator  
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:  
Owner/operator name: NOT REQUIRED  
Owner/operator address: NOT REQUIRED

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PHOTOTRON CORPORATION (Continued)**

**1000418032**

NOT REQUIRED, ME 99999  
Owner/operator country: Not reported  
Owner/operator telephone: (415) 555-1212  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported  
  
Owner/operator name: MR & MRS THOMAS CUNNINGHAM  
Owner/operator address: NOT REQUIRED  
NOT REQUIRED, ME 99999  
Owner/operator country: Not reported  
Owner/operator telephone: (415) 555-1212  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: Unknown  
Mixed waste (haz. and radioactive): Unknown  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: Unknown  
Furnace exemption: Unknown  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No  
Off-site waste receiver: Commercial status unknown

Historical Generators:

Date form received by agency: 03/12/1981  
Facility name: PHOTOTRON CORPORATION  
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002658856

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PHOTOTRON CORPORATION (Continued)**

**1000418032**

LUST:

Region: STATE  
Global Id: T0608501055  
Latitude: 37.379276  
Longitude: -121.90903  
Case Type: LUST Cleanup Site  
Status: Open - Site Assessment  
Status Date: 1990-03-08 00:00:00  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: Not reported  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: 12-044  
LOC Case Number: 06S1E30M03f  
File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

LUST REG 2:

Region: 2  
Facility Id: Not reported  
Facility Status: Pollution Characterization  
Case Number: 06S1E30M03f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: 12/15/1987  
Pollution Characterization Began: 3/8/1990  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:

Region: SANTA CLARA  
SCVWD ID: 06S1E30M03f  
Closed Date: Not reported

SAN JOSE HAZMAT:

Region: SAN JOSE  
File Num: 400044  
Class: Auto Body and Paint

HIST UST:

Region: STATE  
Facility ID: 00000047617  
Facility Type: Other  
Other Type: PHOTOFINISHING  
Total Tanks: 0001  
Contact Name: ROBERT OLMES  
Telephone: 4082860600  
Owner Name: PHOTOTRON CORPORATION  
Owner Address: 412 W. HOSPITALITY LANE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PHOTOTRON CORPORATION (Continued)**

**1000418032**

Owner City,St,Zip: SAN BERNARDINO, CA 92408

Tank Num: 001  
Container Num: 1  
Year Installed: Not reported  
Tank Capacity: 00000550  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Tank Construction: Not reported  
Leak Detection: Visual, Stock Inventor

**HIST LUST SANTA CLARA:**

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 06S1E30M03  
Oversite Agency: SCCDEH  
Date Listed: 1981-01-01 00:00:00  
Closed Date: Not reported

**CORTESE:**

Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-1061

**457**  
**SSW**  
**1/4-1/2**  
**0.493 mi.**  
**2603 ft.**

**SANTA CLARA COUNTY JAIL**  
**180 WEST HEDDING STREET**  
**SAN JOSE, CA 95110**

**RESPONSE** **S105628347**  
**ENVIROSTOR** **N/A**  
**HIST Cal-Sites**

**Relative:**  
**Higher**

**Actual:**  
**67 ft.**

**RESPONSE:**  
Facility ID: 43920002  
Site Type: State Response  
Site Type Detail: State Response or NPL  
Acres: 3.4  
National Priorities List: NO  
Cleanup Oversight Agencies: SMBRP  
Lead Agency: SMBRP  
Lead Agency Description: DTSC - Site Mitigation And Brownfield Reuse Program  
Project Manager: KATHARINE HILF  
Supervisor: Karen Toth  
Division Branch: Berkeley  
Site Code: Not reported  
Assembly: 23  
Senate: 13  
Special Program Status: Not reported  
Status: Certified  
Status Date: 1983-09-01 00:00:00  
Restricted Use: NO  
Funding: Responsible Party  
Latitude: 37.3536070082502  
Longitude: -121.905203000154  
Alias Name: 230-37-034  
Alias Type: APN  
Alias Name: 230-37-041  
Alias Type: APN

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SANTA CLARA COUNTY JAIL (Continued)**

**S105628347**

Alias Name: 110033609922  
Alias Type: EPA (FRS #)  
Alias Name: 43920002  
Alias Type: Envirostor ID Number  
Alias Name: SANTA CLARA GENERAL SERVICES  
Alias Type: Alternate Name

APN: 230-37-034, 230-37-041  
APN Description: Not reported  
APN Description: Not reported

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Certification  
Completed Date: 1983-09-01 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Discovery  
Completed Date: 2002-01-02 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Completion Report  
Completed Date: 1983-09-01 00:00:00

Confirmed: NONE SPECIFIED  
Confirmed Description: Not reported  
Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Media Affected: 30018  
Media Affected Desc: Not reported

Management:

Management Required: NONE SPECIFIED  
Management Required Desc: Not reported  
Potential: CSS  
Potential Description: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported  
PastUse: PRISON

ENVIROSTOR:

Site Type: State Response  
Site Type Detailed: State Response or NPL  
Acres: 3.4  
NPL: NO  
Regulatory Agencies: SMBRP  
Lead Agency: SMBRP  
Program Manager: KATHARINE HILF  
Supervisor: Karen Toth  
Division Branch: Berkeley

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SANTA CLARA COUNTY JAIL (Continued)**

**S105628347**

Facility ID: 43920002  
Site Code: Not reported  
Assembly: 23  
Senate: 13  
Special Program: Not reported  
Status: Certified  
Status Date: 1983-09-01 00:00:00  
Restricted Use: NO  
Funding: Responsible Party  
Latitude: 37.3536070082502  
Longitude: -121.905203000154  
Alias Name: 230-37-034  
Alias Type: APN  
Alias Name: 230-37-041  
Alias Type: APN  
Alias Name: 110033609922  
Alias Type: EPA (FRS #)  
Alias Name: 43920002  
Alias Type: Envirostor ID Number  
Alias Name: SANTA CLARA GENERAL SERVICES  
Alias Type: Alternate Name

APN: 230-37-034, 230-37-041  
APN Description: Not reported  
APN Description: Not reported

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Certification  
Completed Date: 1983-09-01 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Discovery  
Completed Date: 2002-01-02 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Completion Report  
Completed Date: 1983-09-01 00:00:00

Confirmed: NONE SPECIFIED  
Confirmed Description: Not reported  
Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Media Affected: 30018  
Media Affected Desc: Not reported

Management:

Management Required: NONE SPECIFIED  
Management Required Desc: Not reported  
Potential: CSS  
Potential Description: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SANTA CLARA COUNTY JAIL (Continued)**

**S105628347**

Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported  
PastUse: PRISON

**HISTORICAL CAL-SITES:**

Facility ID: 43920002  
Region: 2  
Region Name: BERKELEY  
Branch: NC  
Branch Name: NORTH COAST  
File Name: Not reported  
State Senate District: 09011983  
Status: CERT - CERTIFIED AS HAVING BEEN REMEDIED SATISFACTORILY UNDER DTSC  
OVERSIGHT  
Status Name: CERTIFIED  
Lead Agency: DTSC  
Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL  
Facility Type: RP  
Type Name: RESPONSIBLE PARTY  
NPL: Not Listed  
SIC Code: 92  
SIC Name: JUSTICE, PUBLIC ORDER & SAFETY  
Access: Controlled  
Cortese: Not reported  
Hazardous Ranking Score: Not reported  
Date Site Hazard Ranked: Not reported  
Groundwater Contamination: Unknown  
Staff Member Responsible for Site: KHILF  
Supervisor Responsible for Site: Not reported  
Region Water Control Board: SF  
Region Water Control Board Name: SAN FRANCISCO BAY  
Lat/Long Direction: Not reported  
Lat/Long (dms): 0 0 0 / 0 0 0  
Lat/long Method: Not reported  
Lat/Long Description: Not reported  
State Assembly District Code: 23  
State Senate District Code: 13  
Facility ID: 43920002  
Activity: RA  
Activity Name: REMOVAL ACTION  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 09011983  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: CERT  
Definition of Status: CERTIFIED  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SANTA CLARA COUNTY JAIL (Continued)**

**S105628347**

Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 43920002  
Activity: CERT  
Activity Name: CERTIFICATION  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 09011983  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: CERT  
Definition of Status: CERTIFIED  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Alternate Address: 180 WEST HEDDING STREET  
Alternate City,St,Zip: SAN JOSE, CA 95110  
Alternate Address: 1555 BERGER DRIVE - BUILDING 3  
Alternate City,St,Zip: SAN JOSE, CA 95112  
Background Info: In 1983 the Santa Clara County Jail had three transformers (located on the roof, in the basement and near a prisoner holding area) that leaked small quantities ("a teaspoonful to less than a coffee cupful") of polychlorinated biphenyl (PCB) contaminated oil. The contamination of the three spots ranged from 12 micrograms per sample to 6,600 micrograms per sample before cleanup.  
Comments Date: 09011983  
Comments: CERT and RA - A cleanup level of 100 micrograms per square foot  
Comments Date: 09011983  
Comments: was chosen for the wipe tests. After cleanup, the areas tested  
Comments Date: 09011983  
Comments: were between non-detect and 25 micrograms per square foot. The  
Comments Date: 09011983  
Comments: cleanup was completed by September 1, 1983 and was certified.  
ID Name: Not reported  
ID Value: Not reported  
Alternate Name: SANTA CLARA COUNTY JAILSANTA CLARA GENERAL SERVICES  
Special Programs Code: Not reported  
Special Programs Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DH458**      **SAN JOSE CITY POLICE GARAGE**  
**South**      **825 N SAN PEDRO ST**  
**1/4-1/2**      **SAN JOSE, CA 95127**  
**0.494 mi.**  
**2608 ft.**      **Site 1 of 2 in cluster DH**

**LUST**      **U001602484**  
**HIST UST**      **N/A**  
**HIST LUST**  
**EMI**

**Relative:**  
**Higher**

LUST:

**Actual:**  
**68 ft.**

Region: STATE  
Global Id: T0608501184  
Latitude: 37.350318  
Longitude: -121.903936  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 2002-01-07 00:00:00  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: Not reported  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: Not reported  
File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

LUST REG 2:

Region: 2  
Facility Id: Not reported  
Facility Status: Case Closed  
Case Number: 07S1E06L01f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: 12/14/1984  
Pollution Characterization Began: 2/18/1986  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: 9/1/1989  
Date Post Remedial Action Monitoring Began: 4/30/1996

LUST SANTA CLARA:

Region: SANTA CLARA  
SCVWD ID: 07S1E06L01f  
Closed Date: 1/7/2002

HIST UST:

Region: STATE  
Facility ID: 00000068700  
Facility Type: Other  
Other Type: MUNICIPAL POLICE GAR  
Total Tanks: 0006  
Contact Name: FRED WRIGHT  
Telephone: 4082775522  
Owner Name: CITY OF SAN JOSE  
Owner Address: 801 NORTH FIRST STREET  
Owner City,St,Zip: SAN JOSE, CA 95110

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SAN JOSE CITY POLICE GARAGE (Continued)**

**U001602484**

Tank Num: 001  
Container Num: 281  
Year Installed: Not reported  
Tank Capacity: 00010000  
Tank Used for: WASTE  
Type of Fuel: 1  
Tank Construction: Unkown inches  
Leak Detection: Groundwater Monitoring Well

Tank Num: 002  
Container Num: 282  
Year Installed: Not reported  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Tank Construction: Not reported  
Leak Detection: Groundwater Monitoring Well

Tank Num: 003  
Container Num: 283  
Year Installed: Not reported  
Tank Capacity: 00010000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Tank Construction: Not reported  
Leak Detection: Groundwater Monitoring Well

Tank Num: 004  
Container Num: 284  
Year Installed: Not reported  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Tank Construction: Not reported  
Leak Detection: Groundwater Monitoring Well

Tank Num: 005  
Container Num: 285  
Year Installed: Not reported  
Tank Capacity: 00010000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Tank Construction: Not reported  
Leak Detection: Groundwater Monitoring Well

Tank Num: 006  
Container Num: 286  
Year Installed: Not reported  
Tank Capacity: 00000500  
Tank Used for: WASTE  
Type of Fuel: WASTE OIL  
Tank Construction: Not reported  
Leak Detection: Groundwater Monitoring Well

**HIST LUST SANTA CLARA:**

Region: SANTA CLARA  
Region Code: 2

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SAN JOSE CITY POLICE GARAGE (Continued)**

**U001602484**

SCVWD ID: 07S1E06L01  
 Oversight Agency: SCVWD  
 Date Listed: 1985-01-01 00:00:00  
 Closed Date: 2002-01-07 00:00:00

**EMI:**

Year: 1990  
 County Code: 43  
 Air Basin: SF  
 Facility ID: 4748  
 Air District Name: BA  
 SIC Code: 9111  
 Air District Name: BAY AREA AQMD  
 Community Health Air Pollution Info System: Not reported  
 Consolidated Emission Reporting Rule: Not reported  
 Total Organic Hydrocarbon Gases Tons/Yr: 1  
 Reactive Organic Gases Tons/Yr: 1  
 Carbon Monoxide Emissions Tons/Yr: 0  
 NOX - Oxides of Nitrogen Tons/Yr: 0  
 SOX - Oxides of Sulphur Tons/Yr: 0  
 Particulate Matter Tons/Yr: 0  
 Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

**DH459**  
**South**  
**1/4-1/2**  
**0.494 mi.**  
**2608 ft.**

**SAN JOSE POLICE GARAGE**  
**825 SAN PEDRO**  
**SAN JOSE, CA 95112**  
**Site 2 of 2 in cluster DH**

**HIST CORTESE** **S101304053**  
**N/A**

**Relative:**  
**Higher**

**CORTESE:**  
 Region: CORTESE  
 Facility County Code: 43  
 Reg By: LTNKA  
 Reg Id: 43-1197

**Actual:**  
**68 ft.**

**460**  
**WNW**  
**1/4-1/2**  
**0.495 mi.**  
**2613 ft.**

**BAYSHORE PLAZA**  
**2107 N FIRST ST**  
**SAN JOSE, CA 95131**

**LUST** **S105512859**  
**HIST LUST** **N/A**

**Relative:**  
**Lower**

**LUST:**  
 Region: STATE  
 Global Id: T0608550106  
 Latitude: 37.374225  
 Longitude: -121.920505  
 Case Type: LUST Cleanup Site  
 Status: Completed - Case Closed  
 Status Date: 2000-11-08 00:00:00  
 Lead Agency: SANTA CLARA COUNTY LOP  
 Case Worker: Not reported  
 Local Agency: SANTA CLARA COUNTY LOP  
 RB Case Number: Not reported  
 LOC Case Number: Not reported  
 File Location: Stored electronically as an E-file  
 Potential Media Affect: Other Groundwater (uses other than drinking water)

**Actual:**  
**43 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BAYSHORE PLAZA (Continued)**

**S105512859**

Potential Contaminants of Concern: Gasoline  
Site History: Not reported

LUST REG 2:

Region: 2  
Facility Id: Not reported  
Facility Status: Case Closed  
Case Number: 06S1W26A03f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: 9/18/2000  
Pollution Characterization Began: Not reported  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:

Region: SANTA CLARA  
SCVWD ID: 06S1W26A03f  
Closed Date: 11/8/2000

HIST LUST SANTA CLARA:

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 06S1W26A03  
Oversite Agency: SCVWD  
Date Listed: 2000-11-08 00:00:00  
Closed Date: 2000-11-08 00:00:00

DG461  
NE  
1/4-1/2  
0.495 mi.  
2616 ft.

**BERGER DR VACANT LOT  
UNKNOWN BERGER DR / GISH  
SAN JOSE, CA 95112**  
**Site 2 of 2 in cluster DG**

**HIST CORTESE S103723213  
N/A**

**Relative:  
Higher**

CORTESE:  
Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-2208

**Actual:  
63 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

462  
ENE  
1/4-1/2  
0.499 mi.  
2634 ft.

**GOLDENSTATE CAR WASH**  
**955 OLD OAKLAND RD**  
**SAN JOSE, CA 95112**

**LUST** S104162839  
**HIST LUST** N/A  
**HIST CORTESE**

**Relative:**  
**Higher**

LUST REG 2:  
Region: 2  
Facility Id: Not reported  
Facility Status: Pollution Characterization  
Case Number: 06S1E32N04f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assesment Wokplan Submitted: Not reported  
Preliminary Site Assesment Began: 12/2/1993  
Pollution Characterization Began: 11/22/1994  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

**Actual:**  
**73 ft.**

LUST SANTA CLARA:  
Region: SANTA CLARA  
SCVWD ID: 06S1E32N04f  
Closed Date: Not reported

HIST LUST SANTA CLARA:  
Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 06S1E32N04  
Oversite Agency: SCCDEH  
Date Listed: 1994-08-12 00:00:00  
Closed Date: Not reported

CORTESE:  
Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-1838

DF463  
North  
1/4-1/2  
0.499 mi.  
2634 ft.

**FMC CORPORATION**  
**495 EAST BROKAW RD**  
**SAN JOSE, CA 95112**  
**Site 3 of 5 in cluster DF**

**HAZNET** S104573959  
**ENVIROSTOR** N/A

**Relative:**  
**Lower**

HAZNET:  
Gepaid: CAD085302958  
Contact: FMC CORP  
Telephone: 3128616000  
Facility Addr2: Not reported  
Mailing Name: Not reported  
Mailing Address: PO BOX 58123  
Mailing City,St,Zip: SANTA CLARA, CA 950528123  
Gen County: Santa Clara  
TSD EPA ID: CAD050806850

**Actual:**  
**46 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FMC CORPORATION (Continued)**

**S104573959**

TSD County: Los Angeles  
Waste Category: Aqueous solution with less than 10% total organic residues  
Disposal Method: Not reported  
Tons: 3.6600  
Facility County: Santa Clara

Gepaid: CAD085302958  
Contact: FMC CORP  
Telephone: 3128616000  
Facility Addr2: Not reported  
Mailing Name: Not reported  
Mailing Address: PO BOX 58123  
Mailing City,St,Zip: SANTA CLARA, CA 950528123  
Gen County: Santa Clara  
TSD EPA ID: CAD050806850  
TSD County: Los Angeles  
Waste Category: Aqueous solution with less than 10% total organic residues  
Disposal Method: Treatment, Tank  
Tons: 3.6600  
Facility County: Santa Clara

Gepaid: CAD085302958  
Contact: Z M ZAHIRALESLAMZADEH/PROJ MGR  
Telephone: 4082893141  
Facility Addr2: Not reported  
Mailing Name: C/O UNITED DEFENSE  
Mailing Address: PO BOX 58123  
Mailing City,St,Zip: SANTA CLARA, CA 950528123  
Gen County: Santa Clara  
TSD EPA ID: CAD059494310  
TSD County: Santa Clara  
Waste Category: Organic liquids (nonsolvents) with halogens  
Disposal Method: Disposal, Other  
Tons: 0.89  
Facility County: Santa Clara

Gepaid: CAD085302958  
Contact: FMC CORP  
Telephone: 3128616000  
Facility Addr2: Not reported  
Mailing Name: Not reported  
Mailing Address: PO BOX 58123  
Mailing City,St,Zip: SANTA CLARA, CA 950528123  
Gen County: Santa Clara  
TSD EPA ID: CAD059494310  
TSD County: Santa Clara  
Waste Category: Organic liquids (nonsolvents) with halogens  
Disposal Method: Not reported  
Tons: 1.0425  
Facility County: Santa Clara

Gepaid: CAD085302958  
Contact: FMC CORP  
Telephone: 3128616000  
Facility Addr2: Not reported  
Mailing Name: Not reported  
Mailing Address: PO BOX 58123

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FMC CORPORATION (Continued)**

**S104573959**

Mailing City,St,Zip: SANTA CLARA, CA 950528123  
Gen County: Santa Clara  
TSD EPA ID: CAD059494310  
TSD County: Santa Clara  
Waste Category: Organic liquids (nonsolvents) with halogens  
Disposal Method: Disposal, Other  
Tons: 2.798  
Facility County: Santa Clara

[Click this hyperlink](#) while viewing on your computer to access 10 additional CA\_HAZNET: record(s) in the EDR Site Report.

**ENVIROSTOR:**

Site Type: Military Evaluation  
Site Type Detailed: FUDS  
Acres: Not reported  
NPL: NO  
Regulatory Agencies: SMBRP  
Lead Agency: NONE SPECIFIED  
Program Manager: Not reported  
Supervisor: Donn Diebert  
Division Branch: Sacramento  
Facility ID: 80000713  
Site Code: Not reported  
Assembly: 22  
Senate: 13  
Special Program: Not reported  
Status: Inactive - Needs Evaluation  
Status Date: 2005-07-01 00:00:00  
Restricted Use: NO  
Funding: DERA  
Latitude: 37.3508333333333  
Longitude: -121.9172222222222  
Alias Name: 80000713  
Alias Type: Envirostor ID Number  
Alias Name: CA99799F727800  
Alias Type: Federal Facility ID  
Alias Name: J09CA1123  
Alias Type: INPR  
Alias Name: 201685  
Alias Type: Envirostor ID Number  
  
APN: NONE SPECIFIED  
APN Description: Not reported

**Completed Info:**

Completed Area Name: Not reported  
Completed Sub Area Name: Not reported  
Completed Document Type: Not reported  
Completed Date: Not reported  
  
Confirmed: NONE SPECIFIED  
Confirmed Description: Not reported  
Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**FMC CORPORATION (Continued)**

**S104573959**

Media Affected: NONE SPECIFIED  
 Media Affected Desc: Not reported

**Management:**

Management Required: NONE SPECIFIED  
 Management Required Desc: Not reported  
 Potential: NONE SPECIFIED  
 Potential Description: Not reported  
 Schedule Area Name: Not reported  
 Schedule Sub Area Name: Not reported  
 Schedule Document Type: Not reported  
 Schedule Due Date: Not reported  
 Schedule Revised Date: Not reported  
 PastUse: NONE SPECIFIED

**DF464**  
**North**  
**1/4-1/2**  
**0.499 mi.**  
**2635 ft.**

**SCR-495 EAST BROKAW ASSOC**  
**495 BROKAW**  
**SAN JOSE, CA 95112**  
**Site 4 of 5 in cluster DF**

**HIST CORTESE** **S105026246**  
**N/A**

**Relative:**  
**Lower**

**CORTESE:**  
 Region: CORTESE  
 Facility County Code: 43  
 Reg By: WBC&D  
 Reg Id: 2 438324N01

**Actual:**  
**46 ft.**

**DF465**  
**North**  
**1/4-1/2**  
**0.499 mi.**  
**2635 ft.**

**495 E. BROKAW ROAD**  
**495 EAST BROKAW**  
**SAN JOSE, CA**  
**Site 5 of 5 in cluster DF**

**SLIC** **S106235196**  
**N/A**

**Relative:**  
**Lower**

**SLIC:**  
 Region: STATE  
**Facility Status: Open - Remediation**  
 Status Date: 2002-07-01 00:00:00  
 Global Id: SL20202821  
 Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)  
 Lead Agency Case Number: Not reported  
 Latitude: 37.379411  
 Longitude: -121.91002  
 Case Type: Cleanup Program Site  
 Case Worker: Not reported  
 Local Agency: Not reported  
 RB Case Number: 43S0262  
 File Location: Regional Board  
 Potential Media Affected: Not reported  
 Potential Contaminants of Concern: Trichloroethylene (TCE), Vinyl chloride  
 General Comments: The Site was agricultural land before 1960. An aluminum extrusion plant operated at the Site from 1960 to 1966, under several owners. FMC used the Site from 1966 through 1988 to manufacture commercial logging equipment and military ordnance. FMC purchased the Site in 1983, then sold the Site in 1987. The Site is currently owned by 495 East Brokaw Road, LLC, and leased by various tenants. FMC began environmental investigations at the Site in 1986 and identified high boilingpoint hydrocarbons and volatile organic compounds (VOCs) in

**Actual:**  
**46 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

495 E. BROKAW ROAD (Continued)

S106235196

the Site soil and groundwater. Approximately 1,200 cubic yards of impacted soils were excavated from specific sumps and pits at the Site in 1987 and 1988. In 1988, FMC conducted further investigations of soil and groundwater that confirmed that VOC impacts were still present in shallow soil and groundwater. FMC reported these results to the State of California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) in the Comprehensive Site Assessment Report - Soil and Ground-Water Conditions, FMC Corporation, 495 East Brokaw Road, San Jose, California in 1989 (EMCON, 1989). In February 1990, the RWQCB adopted Order No. 90-032, Site Cleanup Requirements for: FMC Corporation Ground Systems Division and 495 East Brokaw Associates for the Property Located at: 495 East Brokaw Road, San Jose, Santa Clara County (RWQCB, 1990) requiring completion of Site characterization. In response, FMC submitted an Additional Soil and Ground-Water Investigation Report, FMC Corporation, 495 East Brokaw Road, San Jose, California in April 1991 (EMCON, 1991a), and an Addendum to Additional Soil and Ground-Water Investigation Report, FMC Corporation, 495 East Brokaw Road, San Jose, California in June 1991 (EMCON, 1991b). Quarterly groundwater monitoring was conducted and reports were submitted in accordance with Order No. 90-032. Order No. 90-032 was amended by Order No. 92-053, Amending SCO 90-032, Site Cleanup Requirements for: FMC Corporation-Ground Systems Division and 495 East Brokaw Associates, 495 East Brokaw Road, San Jose, Santa Clara County (RWQCB, 1992). Order No. 00-092, Final Site Cleanup Requirements and Recession of Orders Nos. 90-032 and 92-053 for: FMC Corporation and 495 East Brokaw Road, LLC for the property located at 495 East Brokaw Road, San Jose, Santa Clara County (RWQCB, 2000) was adopted on August 16, 2000 and rescinded Orders No. 90-032 and 92-053. Site groundwater monitoring is now occurring in accordance with the revised Self-Monitoring Program (SMP) for the Site dated January 18, 2002 (RWQCB, 2002). The primary VOCs detected in shallow zone groundwater at the Site are trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride. The presence of cis-1,2- 1-3 DCE and vinyl chloride are attributable to reductive dehalogenation of TCE. The two areas primarily impacted at the Site are the northeast corner and the east side of the building in the vicinity of the storm sewer. The nature and extent of impacts are well defined and limited. Historical data indicate that VOC migration in groundwater is minimal. The A-level aquifer beneath the Site has not been impacted with VOCs. A pilot test was performed in 1999 to evaluate the effectiveness of Hydrogen Release Compound (HRC) to stimulate anaerobic biodegradation of VOCs in Site soil and groundwater. The Pilot Study Results Report and Full-Scale Implementation Workplan for In-Situ Bioremediation Using HRC Injection (Workplan) (HSI GeoTrans, 2000) presented the successful results of the pilot study and a work plan for full-scale implementation. As part of the pilot study four pilot wells were installed. Full-scale implementation of enhanced bioremediation began in May 2000. A total of 103 HRC points were drilled at the northeast corner of the property (and along the northern boundary) and approximately 13,300 pounds of HRC were injected into the subsurface during May 2000. Ninety additional injection points were dri

SLIC:

Region: 2  
Facility ID: SL20202821  
Facility Status: Remedial action (cleanup) Underway

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**495 E. BROKAW ROAD (Continued)**

**S106235196**

Date Closed: Not reported  
Local Case #: Not reported  
How Discovered: DVA  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Confirmed: Not reported  
Date Prelim Site Assmnt Workplan Submitted: Not reported  
Date Preliminary Site Assessment Began: Not reported  
Date Pollution Characterization Began: Not reported  
Date Remediation Plan Submitted: Not reported  
Date Remedial Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

466  
SE  
1/2-1  
0.611 mi.  
3228 ft.

**CONTINENTAL CAN CO USA PLT 12  
357 EAST TAYLOR STREET  
SAN JOSE, CA 95112**

Relative:  
Higher

Actual:  
68 ft.

**CERCLIS 1000412905  
RCRA-SQG CAT000624643  
FINDS  
HAZNET  
LUST  
CORRACTS  
SAN JOSE HAZMAT  
HIST UST  
HIST LUST  
ENVIROSTOR  
HIST CORTESE**

CERCLIS:

Site ID: 0900355  
Federal Facility: Not a Federal Facility  
NPL Status: Not on the NPL  
Non NPL Status: Deferred to RCRA

CERCLIS Site Contact Name(s):

Contact Name: Not reported  
Contact Tel: Not reported  
Contact Title: 92711

Contact Name: Not reported  
Contact Tel: Not reported  
Contact Title: 92700

Contact Name: Not reported  
Contact Tel: Not reported  
Contact Title: 13002

Contact Name: Not reported  
Contact Tel: Not reported  
Contact Title: 92700

Site Description: 6/00: Changed to Deferred to RCRA - Deferral in schedule

CERCLIS Assessment History:

Action: DISCOVERY  
Date Started: Not reported  
Date Completed: 1/1/1991 0:00:00  
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT  
Date Started: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONTINENTAL CAN CO USA PLT 12 (Continued)**

**1000412905**

Date Completed: 8/9/1991 0:00:00  
Priority Level: Deferred to RCRA (Subtitle C)

**RCRA-SQG:**

Date form received by agency: 11/29/1995  
Facility name: CONTINENTAL CAN CORP  
Facility address: 357 E TAYLOR ST  
SAN JOSE, CA 95112  
EPA ID: CAT000624643  
Contact: FRANKLIN KESSLER  
Contact address: 927 CLINT MOORE RD  
BOCA RATON, FL 33487  
Contact country: US  
Contact telephone: (407) 997-8400  
Contact email: Not reported  
EPA Region: 09  
Land type: Private  
Classification: Small Small Quantity Generator  
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

**Owner/Operator Summary:**

Owner/operator name: CONTINENTAL CAN CO USA PLANT #12  
Owner/operator address: PO BOX 1210  
CITY NOT REPORTED, CA 99999  
Owner/operator country: Not reported  
Owner/operator telephone: (408) 280-2852  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Owner/operator name: CP ASSOC LLC  
Owner/operator address: OPC 401 E TAYLOR ST STE 9  
SAN JOSE, CA 95112  
Owner/operator country: Not reported  
Owner/operator telephone: (408) 297-0500  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

**Handler Activities Summary:**

U.S. importer of hazardous waste: Unknown  
Mixed waste (haz. and radioactive): Unknown  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: Unknown  
Furnace exemption: Unknown  
Used oil fuel burner: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONTINENTAL CAN CO USA PLT 12 (Continued)**

**1000412905**

Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No  
Off-site waste receiver: Commercial status unknown

Historical Generators:

Date form received by agency: 08/19/1993  
Facility name: CONTINENTAL CAN CORP  
Classification: Not a generator, verified

Corrective Action Summary:

Event date: 07/31/1991  
Event: CA029WQ

Event date: 07/31/1991  
Event: CA Prioritization, Facility or area was assigned a medium corrective action priority.

Event date: 07/31/1991  
Event: CA074ME

Event date: 07/31/1991  
Event: CA049PA

Facility Has Received Notices of Violations:

Regulation violated: Not reported  
Area of violation: TSD - General  
Date violation determined: 03/25/1987  
Date achieved compliance: 01/30/1989  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 07/02/1987  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 07/29/1992  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 07/14/1992  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONTINENTAL CAN CO USA PLT 12 (Continued)**

**1000412905**

Evaluation date: 01/30/1989  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 01/05/1988  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 03/25/1987  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General  
Date achieved compliance: 01/30/1989  
Evaluation lead agency: State

**FINDS:**

Registry ID: 110013847249

**Environmental Interest/Information System**

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

**HAZNET:**

Gepaid: CAC002612109  
Contact: LUIS CHAVEZ  
Telephone: 4087921546  
Facility Addr2: Not reported  
Mailing Name: Not reported  
Mailing Address: 357 E TAYLOR ST  
Mailing City,St,Zip: SAN JOSE, CA 951123105  
Gen County: Santa Clara  
TSD EPA ID: CAD009452657  
TSD County: San Mateo  
Waste Category: Other organic solids  
Disposal Method: H141  
Tons: 0.1  
Facility County: Santa Clara

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONTINENTAL CAN CO USA PLT 12 (Continued)**

**1000412905**

Gepaid: CAC002612109  
Contact: LUIS CHAVEZ  
Telephone: 4087921546  
Facility Addr2: Not reported  
Mailing Name: Not reported  
Mailing Address: 357 E TAYLOR ST  
Mailing City,St,Zip: SAN JOSE, CA 951123105  
Gen County: Santa Clara  
TSD EPA ID: CAD980887418  
TSD County: Alameda  
Waste Category: Other organic solids  
Disposal Method: H141  
Tons: 0.22  
Facility County: Santa Clara

Gepaid: CAC002612109  
Contact: LUIS CHAVEZ  
Telephone: 4087921546  
Facility Addr2: Not reported  
Mailing Name: Not reported  
Mailing Address: 357 E TAYLOR ST  
Mailing City,St,Zip: SAN JOSE, CA 951123105  
Gen County: Santa Clara  
TSD EPA ID: CAD009452657  
TSD County: San Mateo  
Waste Category: Unspecified oil-containing waste  
Disposal Method: H141  
Tons: 0.33  
Facility County: Santa Clara

**LUST REG 2:**

Region: 2  
Facility Id: Not reported  
Facility Status: Pollution Characterization  
Case Number: 07S1E05E02f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assesment Wokplan Submitted: Not reported  
Preliminary Site Assesment Began: 11/6/1986  
Pollution Characterization Began: 9/25/1990  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

**LUST SANTA CLARA:**

Region: SANTA CLARA  
SCVWD ID: 07S1E05E02f  
Closed Date: Not reported

**CORRACTS:**

EPA ID: CAT000624643

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONTINENTAL CAN CO USA PLT 12 (Continued)**

**1000412905**

EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 07/31/1991  
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority  
NAICS Code(s): Not reported  
Original schedule date: Not reported  
Schedule end date: Not reported

**SAN JOSE HAZMAT:**

Region: SAN JOSE  
File Num: 406597  
Class: Misc. Complex firms and labs

**HIST UST:**

Region: STATE  
Facility ID: 00000021759  
Facility Type: Other  
Other Type: CAN MANUFACTURE  
Total Tanks: 0004  
Contact Name: M.A. OSTROFSKY (PLT. MGR)  
Telephone: 4082802800  
Owner Name: CONTINENTAL CAN COMPANY  
Owner Address: 357 EAST TAYLOR STREET  
Owner City,St,Zip: SAN JOSE, CA 95112

Tank Num: 001  
Container Num: 300  
Year Installed: Not reported  
Tank Capacity: 00001000  
Tank Used for: PRODUCT  
Type of Fuel: REGULAR  
Tank Construction: Not reported  
Leak Detection: Stock Inventor

Tank Num: 002  
Container Num: 200  
Year Installed: 1953  
Tank Capacity: 00004000  
Tank Used for: PRODUCT  
Type of Fuel: Not reported  
Tank Construction: Not reported  
Leak Detection: Stock Inventor

Tank Num: 003  
Container Num: 400  
Year Installed: Not reported  
Tank Capacity: 00000100  
Tank Used for: PRODUCT  
Type of Fuel: REGULAR  
Tank Construction: Not reported  
Leak Detection: Stock Inventor

Tank Num: 004  
Container Num: 100  
Year Installed: 1953

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONTINENTAL CAN CO USA PLT 12 (Continued)**

**1000412905**

Tank Capacity: 00007000  
Tank Used for: PRODUCT  
Type of Fuel: Not reported  
Tank Construction: Not reported  
Leak Detection: Stock Inventor

**HIST LUST SANTA CLARA:**

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 07S1E05E02  
Oversite Agency: SCCDEH  
Date Listed: 1992-10-15 00:00:00  
Closed Date: Not reported

**ENVIROSTOR:**

Site Type: Corrective Action  
Site Type Detailed: Corrective Action  
Acres: 0  
NPL: NO  
Regulatory Agencies: NONE SPECIFIED  
Lead Agency: NONE SPECIFIED  
Program Manager: Not reported  
Supervisor: Mark Piros  
Division Branch: Berkeley  
Facility ID: 80001805  
Site Code: Not reported  
Assembly: 23  
Senate: 23  
Special Program: Not reported  
Status: Inactive - Needs Evaluation  
Status Date: 2009-06-22 00:00:00  
Restricted Use: NO  
Funding: Not reported  
Latitude: 37.352534  
Longitude: -121.893003  
Alias Name: CAT000624643  
Alias Type: EPA Identification Number  
Alias Name: 80001805  
Alias Type: Envirostor ID Number

APN: NONE SPECIFIED  
APN Description: Not reported

**Completed Info:**

Completed Area Name: Not reported  
Completed Sub Area Name: Not reported  
Completed Document Type: Not reported  
Completed Date: Not reported

Confirmed: NONE SPECIFIED  
Confirmed Description: Not reported  
Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Media Affected: NONE SPECIFIED  
Media Affected Desc: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CONTINENTAL CAN CO USA PLT 12 (Continued)**

**1000412905**

Management:

Management Required: NONE SPECIFIED  
Management Required Desc: Not reported  
Potential: NONE SPECIFIED  
Potential Description: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported  
PastUse: NONE SPECIFIED

CORTESE:

Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-0410

467  
SSE  
1/2-1  
0.684 mi.  
3610 ft.

**SAN JOSE DEPARTMENT OF PUBLIC WORKS  
650 NORTH 6TH STREET  
SAN JOSE, CA 95112**

**ENVIROSTOR S101482405  
N/A**

Relative:  
Higher

ENVIROSTOR:

Actual:  
67 ft.

Site Type: Evaluation  
Site Type Detailed: Evaluation  
Acres: 0.5  
NPL: NO  
Regulatory Agencies: SANTA CLARA VALLEY WATER DISTRICT  
Lead Agency: SANTA CLARA VALLEY WATER DISTRICT  
Program Manager: KATHARINE HILF  
Supervisor: Karen Toth  
Division Branch: Berkeley  
Facility ID: 43760002  
Site Code: Not reported  
Assembly: 23  
Senate: 13  
Special Program: \* Site Char & Assess Grant (CERCLA 104)  
Status: Refer: Other Agency  
Status Date: 2002-01-02 00:00:00  
Restricted Use: NO  
Funding: Not reported  
Latitude: 37.3508339689803  
Longitude: -121.894676216152  
Alias Name: 43760002  
Alias Type: Envirostor ID Number  
Alias Name: 249-39-011  
Alias Type: APN  
Alias Name: CAD980498901  
Alias Type: EPA Identification Number  
  
APN: 249-39-011  
APN Description: Not reported

Completed Info:

Completed Area Name: PROJECT WIDE

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SAN JOSE DEPARTMENT OF PUBLIC WORKS (Continued)**

**S101482405**

Completed Sub Area Name: Not reported  
 Completed Document Type: \* Discovery  
 Completed Date: 1983-10-12 00:00:00

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Site Screening  
 Completed Date: 2002-01-02 00:00:00

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Site Screening  
 Completed Date: 1987-04-22 00:00:00

Confirmed: NONE SPECIFIED  
 Confirmed Description: Not reported  
 Future Area Name: Not reported  
 Future Sub Area Name: Not reported  
 Future Document Type: Not reported  
 Future Due Date: Not reported  
 Media Affected: 30024, 30025, 3002502  
 Media Affected Desc: Not reported  
 Media Affected Desc: Not reported  
 Media Affected Desc: Not reported

Management:  
 Management Required: NONE SPECIFIED  
 Management Required Desc: Not reported  
 Potential: SOIL  
 Potential Description: Not reported  
 Schedule Area Name: Not reported  
 Schedule Sub Area Name: Not reported  
 Schedule Document Type: Not reported  
 Schedule Due Date: Not reported  
 Schedule Revised Date: Not reported  
 PastUse: VEHICLE MAINTENANCE

**DI468**  
**East**  
**1/2-1**  
**0.899 mi.**  
**4747 ft.**

**SOLVENT SERVICES**  
**1021 BERRYESSA ROAD**  
**SAN JOSE, CA**  
**Site 1 of 2 in cluster DI**

**CA BOND EXP. PLAN** **S100833419**  
**SLIC** **N/A**  
**EMI**  
**ENVIROSTOR**

**Relative:**  
**Higher**

CA BOND EXP. PLAN:  
 Responsible Party: NPL SITE CLEANUP WORKPLAN  
 Project Revenue Source Company: Not reported  
 Project Revenue Source Addr: Not reported  
 Project Revenue Source City,St,Zip: Not reported  
 Project Revenue Source Desc:

**Actual:**  
**79 ft.**

DHS will be issuing a RAO or entering into an enforceable agreement with the RPs. DHS has budgeted \$50,000 for oversight/monitoring of cleanup activities. DHS will recover 100 percent of its direct costs plus staff costs and overhead related to the project. The RPs will pay all costs associated with remedial investigations and cleanup activities.

Site Description: A solvent recycler has operated at this site since about 1972. Extensive contamination of soil, shallow ground water and potential deep aquifer contamination exist due to releases of spend solvents and other chemicals. This site was formerly known as Berryessa Road, San Jose.

Hazardous Waste Desc: Volatile organic compounds are the primary contaminants of concern. A

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SOLVENT SERVICES (Continued)**

**S100833419**

Threat To Public Health & Env: "petroleum channel" has been discovered on one corner of the property where offsite contamination has been discovered.  
Ground water contamination and its potential effect on drinking water supplies is the primary threat to public health. Approximately 22 wells are registered with Santa Clara Valley Water District within a one-half mile radius of the site. Three domestic wells are perforated in zones likely to be affected by onsite contamination. However, that aquifer has recently been demonstrated to be uncontaminated.

Site Activity Status: Remedial investigations and interim measures have been occurring at the site since 1983. The RP has prepared a "screening" FS and implemented a steam injection/vapor extraction pilot study for soil heavily contaminated with solvents. Low temperature thermal stripping pilot test apparatus and a ground water treatment system using air stripping, carbon filtration and biotreatment are being constructed. The plume of ground water contamination has been essentially contained and the extent of soil contamination delineated. After evaluation of pilot tests, a FS will be prepared and a RAP developed and implemented.

SLIC:

Region: STATE  
**Facility Status:** **Open - Remediation**  
Status Date: 1985-01-01 00:00:00  
Global Id: SL721181220  
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)  
Lead Agency Case Number: Not reported  
Latitude: 37.3655015503024  
Longitude: -121.884319782257  
Case Type: Cleanup Program Site  
Case Worker: Not reported  
Local Agency: Not reported  
RB Case Number: 43S0118  
File Location: Regional Board  
Potential Media Affected: Other Groundwater (uses other than drinking water), Soil  
Potential Contaminants of Concern: Other Chlorinated Hydrocarbons, Other Solvent or Non-Petroleum Hydrocarbon, Acetone, \*\* CHLOROMETHANE, \*\* CIS-1,2-DICHLOROETHYLENE, Dioxin / Furans, Trichloroethylene (TCE), Vinyl chloride, Xylene  
General Comments: Clean Harbors currently owns and operates the waste-chemical storage, treatment, and recycling facility at the Site. The facility has been in operation since 1975 under several different owners including Solvent Services Company (now dissolved) and Safety-Kleen Corporation (currently in bankruptcy). Clean Harbors purchased the Site in 2002.  
Plume/Contaminant Description: Extremely high concentrations of VOCs (1,500,000 ppm) and 23,000 ppb of 1,4-dioxane in the groundwater,  
Soil Description: Extremely high concentrations of VOCs and 1,4-dioxane in the soil underneath the facility. The extent of soil and groundwater pollution has been fully defined. Cleanup actions taken at the Site include 1) removal of all underground storage tanks and associated soil, 2) operation of a steam injection and vapor extraction system, and 3) operation of a groundwater extraction system using wells and trenches.

SLIC:

Region: 2  
Facility ID: 43s0118  
Facility Status: Remedial action (cleanup) Underway  
Date Closed: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SOLVENT SERVICES (Continued)**

**S100833419**

Local Case #: Not reported  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Confirmed: Not reported  
Date Prelim Site Assmnt Workplan Submitted: Not reported  
Date Preliminary Site Assessment Began: Not reported  
Date Pollution Characterization Began: Not reported  
Date Remediation Plan Submitted: Not reported  
Date Remedial Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

**EMI:**

Year: 1987  
County Code: 43  
Air Basin: SF  
Facility ID: 2074  
Air District Name: BA  
SIC Code: 7399  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 7  
Reactive Organic Gases Tons/Yr: 7  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 1990  
County Code: 43  
Air Basin: SF  
Facility ID: 2074  
Air District Name: BA  
SIC Code: 7389  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 8  
Reactive Organic Gases Tons/Yr: 8  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 1995  
County Code: 43  
Air Basin: SF  
Facility ID: 2074  
Air District Name: BA  
SIC Code: 7389  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 5

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SOLVENT SERVICES (Continued)**

**S100833419**

Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers & Smlr Tons/Yr:	1
Year:	1996
County Code:	43
Air Basin:	SF
Facility ID:	2074
Air District Name:	BA
SIC Code:	7389
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	5
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers & Smlr Tons/Yr:	1
Year:	1997
County Code:	43
Air Basin:	SF
Facility ID:	2074
Air District Name:	BA
SIC Code:	7389
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers & Smlr Tons/Yr:	0
Year:	1998
County Code:	43
Air Basin:	SF
Facility ID:	11925
Air District Name:	BA
SIC Code:	7389
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers & Smlr Tons/Yr:	0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SOLVENT SERVICES (Continued)**

**S100833419**

Year: 1999  
County Code: 43  
Air Basin: SF  
Facility ID: 11925  
Air District Name: BA  
SIC Code: 7399  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 2000  
County Code: 43  
Air Basin: SF  
Facility ID: 11925  
Air District Name: BA  
SIC Code: 7399  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 2001  
County Code: 43  
Air Basin: SF  
Facility ID: 11925  
Air District Name: BA  
SIC Code: 7389  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 2002  
County Code: 43  
Air Basin: SF  
Facility ID: 14638  
Air District Name: BA  
SIC Code: 8748

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SOLVENT SERVICES (Continued)**

**S100833419**

Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 2003  
County Code: 43  
Air Basin: SF  
Facility ID: 14638  
Air District Name: BA  
SIC Code: 8748  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 2004  
County Code: 43  
Air Basin: SF  
Facility ID: 14638  
Air District Name: BA  
SIC Code: 8748  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.476  
Reactive Organic Gases Tons/Yr: 0.401191  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0.112  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0.109036

Year: 2005  
County Code: 43  
Air Basin: SF  
Facility ID: 14638  
Air District Name: BA  
SIC Code: 8748  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: .341  
Reactive Organic Gases Tons/Yr: .2850358  
Carbon Monoxide Emissions Tons/Yr: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SOLVENT SERVICES (Continued)**

**S100833419**

NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: .067  
Part. Matter 10 Micrometers & Smlr Tons/Yr: .063644

Year: 2006  
County Code: 43  
Air Basin: SF  
Facility ID: 14638  
Air District Name: BA  
SIC Code: 8748  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: .32  
Reactive Organic Gases Tons/Yr: .2672446  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: .121  
Part. Matter 10 Micrometers & Smlr Tons/Yr: .116348

Year: 2007  
County Code: 43  
Air Basin: SF  
Facility ID: 14638  
Air District Name: BA  
SIC Code: 8748  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 2.065  
Reactive Organic Gases Tons/Yr: 1.7466488  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: .148  
Part. Matter 10 Micrometers & Smlr Tons/Yr: .140648

Year: 2007  
County Code: 40  
Air Basin: SCC  
Facility ID: 2074  
Air District Name: SLO  
SIC Code: 3441  
Air District Name: SAN LUIS OBISPO COUNTY APCD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: .3545  
Reactive Organic Gases Tons/Yr: .343156  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

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**SOLVENT SERVICES (Continued)**

**S100833419**

ENVIROSTOR:

Site Type: Evaluation  
Site Type Detailed: Evaluation  
Acres: 3.3  
NPL: NO  
Regulatory Agencies: HWMP, RWQCB 2 - San Francisco Bay  
Lead Agency: RWQCB 2 - San Francisco Bay  
Program Manager: CLAUDE JEMISON  
Supervisor: Karen Toth  
Division Branch: Berkeley  
Facility ID: 43290007  
Site Code: Not reported  
Assembly: 24  
Senate: 10  
Special Program: Not reported  
Status: Refer: RWQCB  
Status Date: 1991-08-09 00:00:00  
Restricted Use: NO  
Funding: Responsible Party  
Latitude: 37.3650925798301  
Longitude: -121.884616033365  
Alias Name: 241-06-019  
Alias Type: APN  
Alias Name: 110000484743  
Alias Type: EPA (FRS #)  
Alias Name: LAIDLAW ENVIRONMENTAL SERVICES  
Alias Type: Alternate Name  
Alias Name: 43290007  
Alias Type: Envirostor ID Number  
Alias Name: CAD059494310  
Alias Type: EPA Identification Number  
Alias Name: CLEAN HARBORS SAN JOSE LLC  
Alias Type: Alternate Name

APN: 241-06-019  
APN Description: Not reported

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Screening  
Completed Date: 2002-01-18 00:00:00

Confirmed: 30541,30028,30032,30192,30195,30246,30386  
Confirmed Description: Tetrahydrofuran  
Confirmed Description: Vinyl chloride  
Confirmed Description: Acetone  
Confirmed Description: 1,1-Dichloroethane  
Confirmed Description: 1,2-Dichloroethylene (cis)  
Confirmed Description: 1,4-Dioxane  
Confirmed Description: Methyl ethyl ketone (2-Butanone)  
Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Media Affected: 10009, 10097, 30028, 30032, 30192, 30195, 30246, 30386, 30541  
Media Affected Desc: Not reported

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**SOLVENT SERVICES (Continued)**

**S100833419**

Media Affected Desc: Not reported  
Media Affected Desc: Not reported

Management:

Management Required: NONE SPECIFIED  
Management Required Desc: Not reported  
Potential: OTH  
Potential Description: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported  
PastUse: HAZARDOUS WASTE HAULER

**DI469** **CLEAN HARBORS SAN JOSE LLC**  
**East** **1021 BERRYESSA ROAD**  
**1/2-1** **SAN JOSE, CA 95133**  
**0.899 mi.**  
**4747 ft.** **Site 2 of 2 in cluster DI**  
**Relative:**  
**Higher**  
**Actual:**  
**79 ft.**

**FINDS** **1000430269**  
**RCRA-LQG** **CAD059494310**  
**RCRA-TSDF**  
**CORRACTS**  
**CERC-NFRAP**  
**SAN JOSE HAZMAT**  
**ROD**  
**HIST UST**  
**US ENG CONTROLS**  
**US INST CONTROL**  
**ENVIROSTOR**  
**MANIFEST**  
**MANIFEST**

FINDS:

Registry ID: 110000484743

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and its Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

PCS (Permit Compliance System) is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

**RCRA-LQG:**

Date form received by agency: 02/24/2006  
Facility name: CLEAN HARBORS SAN JOSE LLC  
Facility address: 1021 BERRYESSA ROAD  
SAN JOSE, CA 95133  
EPA ID: CAD059494310  
Mailing address: 1040 COMMERCIAL STREET  
SUITE 109  
SAN JOSE, CA 95112  
Contact: CHARLES RAQUET  
Contact address: Not reported  
Not reported  
Contact country: Not reported  
Contact telephone: (408) 451-5000  
Contact email: RAQUETC@CKEANHARBORS.COM  
EPA Region: 09  
Land type: Private  
Classification: TSDF  
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste  
TSD commencement date: Not reported  
Classification: Large Quantity Generator  
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name: CLEAN HARBORS SAN JOSE LLC  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: US  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 09/07/2002  
Owner/Op end date: Not reported

Owner/operator name: CLEAN HARBORS SAN JOSE LLC  
Owner/operator address: 1021 BERYESSA ROAD  
SAN JOSE, CA 95133  
Owner/operator country: US  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 09/07/2002  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: Yes  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No  
Off-site waste receiver: Commercial status unknown

Universal Waste Summary:

Waste type: Batteries  
Accumulated waste on-site: Yes  
Generated waste on-site: No

Waste type: Lamps

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Accumulated waste on-site: Yes  
Generated waste on-site: No

Waste type: Pesticides  
Accumulated waste on-site: No  
Generated waste on-site: No

Waste type: Thermostats  
Accumulated waste on-site: Yes  
Generated waste on-site: No

Historical Generators:

Date form received by agency: 03/30/2004  
Facility name: CLEAN HARBORS SAN JOSE LLC  
Classification: Large Quantity Generator

Date form received by agency: 12/09/2002  
Facility name: CLEAN HARBORS SAN JOSE LLC  
Classification: Large Quantity Generator

Date form received by agency: 02/28/2002  
Facility name: CLEAN HARBORS SAN JOSE LLC  
Site name: SAFETY-KLEEN (SAN JOSE) INC  
Classification: Large Quantity Generator

Date form received by agency: 10/12/2000  
Facility name: CLEAN HARBORS SAN JOSE LLC  
Site name: SAFETY-KLEEN (SAN JOSE), INC.  
Classification: Large Quantity Generator

Date form received by agency: 01/05/2000  
Facility name: CLEAN HARBORS SAN JOSE LLC  
Site name: SAFETY KLEEN SAN JOSE INC  
Classification: Not a generator, verified

Date form received by agency: 06/06/1999  
Facility name: CLEAN HARBORS SAN JOSE LLC  
Site name: LAIDLAW ENVIRONMENTAL SERV. (SAN JOSE)  
Classification: Large Quantity Generator

Date form received by agency: 07/01/1997  
Facility name: CLEAN HARBORS SAN JOSE LLC  
Site name: SAFETY KLEEN SAN JOSE INC  
Classification: Not a generator, verified

Date form received by agency: 09/01/1996  
Facility name: CLEAN HARBORS SAN JOSE LLC  
Site name: SAFETY KLEEN SAN JOSE INC  
Classification: Large Quantity Generator

Date form received by agency: 02/29/1996  
Facility name: CLEAN HARBORS SAN JOSE LLC  
Site name: SOLVENT SERVICE CO INC  
Classification: Large Quantity Generator

Date form received by agency: 03/30/1994  
Facility name: CLEAN HARBORS SAN JOSE LLC

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

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Site name: TRS - SAN JOSE; SOLVENT SERVICE CO., INC  
Classification: Large Quantity Generator

Date form received by agency: 03/31/1992  
Facility name: CLEAN HARBORS SAN JOSE LLC  
Site name: SOLVENT SERVICE CO., INC.  
Classification: Large Quantity Generator

Date form received by agency: 05/11/1990  
Facility name: CLEAN HARBORS SAN JOSE LLC  
Site name: SOLVENT SERVICE INC  
Classification: Large Quantity Generator

Hazardous Waste Summary:

Waste code: D001  
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002  
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003  
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D004  
Waste name: ARSENIC

Waste code: D005  
Waste name: BARIUM

Waste code: D006  
Waste name: CADMIUM

Waste code: D007  
Waste name: CHROMIUM

Waste code: D008  
Waste name: LEAD

Waste code: D009  
Waste name: MERCURY

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code:	D010
Waste name:	SELENIUM
Waste code:	D011
Waste name:	SILVER
Waste code:	D012
Waste name:	ENDRIN
Waste code:	D013
Waste name:	LINDANE
Waste code:	D014
Waste name:	METHOXYCHLOR
Waste code:	D015
Waste name:	TOXAPHENE
Waste code:	D016
Waste name:	2,4-D
Waste code:	D018
Waste name:	BENZENE
Waste code:	D019
Waste name:	CARBON TETRACHLORIDE
Waste code:	D020
Waste name:	CHLORDANE
Waste code:	D021
Waste name:	CHLOROBENZENE
Waste code:	D022
Waste name:	CHLOROFORM
Waste code:	D023
Waste name:	O-CRESOL
Waste code:	D024
Waste name:	M-CRESOL
Waste code:	D025
Waste name:	P-CRESOL
Waste code:	D026
Waste name:	CRESOL
Waste code:	D027
Waste name:	1,4-DICHLOROBENZENE
Waste code:	D028
Waste name:	1,2-DICHLOROETHANE
Waste code:	D029
Waste name:	1,1-DICHLOROETHYLENE

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

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Waste code:	D030
Waste name:	2,4-DINITROTOLUENE
Waste code:	D031
Waste name:	HEPTACHLOR (AND ITS EPOXIDE).
Waste code:	D032
Waste name:	HEXACHLOROBENZENE
Waste code:	D033
Waste name:	HEXACHLOROBUTADIENE
Waste code:	D034
Waste name:	HEXACHLOROETHANE
Waste code:	D035
Waste name:	METHYL ETHYL KETONE
Waste code:	D036
Waste name:	NITROBENZENE
Waste code:	D037
Waste name:	PENTRACHLOROPHENOL
Waste code:	D038
Waste name:	PYRIDINE
Waste code:	D039
Waste name:	TETRACHLOROETHYLENE
Waste code:	D040
Waste name:	TRICHLOROETHYLENE
Waste code:	D041
Waste name:	2,4,5-TRICHLOROPHENOL
Waste code:	D042
Waste name:	2,4,6-TRICHLOROPHENOL
Waste code:	D043
Waste name:	VINYL CHLORIDE
Waste code:	F001
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

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1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code:  
Waste name:

F003  
THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code:  
Waste name:

F004  
THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code:  
Waste name:

F005  
THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code:  
Waste name:

F006  
WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Waste code:  
Waste name:

F007  
SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS

Waste code:  
Waste name:

F008  
PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Waste code:  
Waste name:

F009  
SPENT STRIPPING AND CLEANING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Waste code:  
Waste name:

F010  
QUENCHING BATH RESIDUES FROM OIL BATHS FROM METAL HEAT TREATING

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Waste code: F011  
Waste name: SPENT CYANIDE SOLUTIONS FROM SALT BATH POT CLEANING FROM METAL HEAT TREATING OPERATIONS.

Waste code: F012  
Waste name: QUENCHING WASTE WATER TREATMENT SLUDGES FROM METAL HEAT TREATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Waste code: F019  
Waste name: WASTEWATER TREATMENT SLUDGES FROM THE CHEMICAL CONVERSION COATING OF ALUMINUM EXCEPT FROM ZIRCONIUM PHOSPHATING IN ALUMINUM CAN WASHING WHEN SUCH PHOSPHATING IS AN EXCLUSIVE CONVERSION COATING PROCESS.

Waste code: F024  
Waste name: PROCESS WASTES, INCLUDING BUT NOT LIMITED TO, DISTILLATION RESIDUES, HEAVY ENDS, TARS, AND REACTOR CLEAN-OUT WASTES, FROM THE PRODUCTION OF CERTAIN CHLORINATED ALIPHATIC HYDROCARBONS BY FREE RADICAL CATALYZED PROCESSES. THESE CHLORINATED ALIPHATIC HYDROCARBONS ARE THOSE HAVING CARBON CHAIN LENGTHS RANGING FROM ONE TO AND INCLUDING FIVE, WITH VARYING AMOUNTS AND POSITIONS OF CHLORINE SUBSTITUTION. (THIS LISTING DOES NOT INCLUDE WASTEWATERS, WASTEWATER TREATMENT SLUDGES, SPENT CATALYSTS, AND WASTES LISTED IN SECTION 261.31 OR SECTION 261.32).

Waste code: F027  
Waste name: DISCARDED UNUSED FORMULATIONS CONTAINING TRI-, TETRA-, OR PENTACHLOROPHENOL OR DISCARDED UNUSED FORMULATIONS CONTAINING COMPOUNDS DERIVED FROM THESE CHLOROPHENOLS. (THIS LISTING DOES NOT INCLUDE FORMULATIONS CONTAINING HEXACHLOROPHENE SYNTHESIZED FROM PREPURIFIED 2,4,5-TRICHLOROPHENOL AS THE SOLE COMPONENT).

Waste code: F032  
Waste name: WASTEWATERS, PROCESS RESIDUALS, PRESERVATIVE DRIPPAGE, AND SPENT FORMULATIONS FROM WOOD PRESERVING PROCESSES GENERATED AT PLANTS THAT CURRENTLY USE OR HAVE PREVIOUSLY USED CHLOROPHENOLIC FORMULATIONS (EXCEPT POTENTIALLY CROSS-CONTAMINATED WASTES THAT HAVE HAD THE F032 WASTE CODE DELETED IN ACCORDANCE WITH SECTION 261.35 OF THIS CHAPTER AND WHERE THE GENERATOR DOES NOT RESUME OR INITIATE USE OF CHLOROPHENOLIC FORMULATIONS). THIS LISTING DOES NOT INCLUDE K001 BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATER FROM WOOD PRESERVING PROCESSES THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL. (NOTE: THE LISTING OF WASTEWATERS THAT HAVE NOT COME INTO CONTACT WITH PROCESS CONTAMINANTS IS STAYED ADMINISTRATIVELY. THE LISTING FOR PLANTS THAT HAVE PREVIOUSLY USED CHLOROPHENOLIC FORMULATIONS IS ADMINISTRATIVELY STAYED WHENEVER THESE WASTES ARE COVERED BY THE F034 OR F035 LISTINGS. THESE STAYS WILL REMAIN IN EFFECT UNTIL FURTHER ADMINISTRATIVE ACTION IS TAKEN.)

Waste code: F034  
Waste name: WASTEWATERS, PROCESS RESIDUALS, PRESERVATIVE DRIPPAGE, AND SPENT FORMULATIONS FROM WOOD PRESERVING PROCESS GENERATED AT PLANTS THAT USE CREOSOTE FORMULATIONS. THIS LISTING DOES NOT INCLUDE K001 BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATER FROM WOOD PRESERVING PROCESSES THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL. (NOTE: THE LISTING OF WASTEWATERS THAT HAVE NOT COME INTO CONTACT WITH PROCESS CONTAMINANTS IS STAYED ADMINISTRATIVELY. THE STAY WILL REMAIN IN

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

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EFFECT UNTIL FURTHER ADMINISTRATIVE ACTION IS TAKEN.)

Waste code: F035  
Waste name: WASTEWATERS, PROCESS RESIDUALS, PRESERVATIVE DRIPPAGE, AND SPENT FORMULATIONS FROM WOOD PRESERVING PROCESS GENERATED AT PLANTS THAT USE INORGANIC PRESERVATIVES CONTAINING ARSENIC OR CHROMIUM. THIS LISTING DOES NOT INCLUDE K001 BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATER FROM WOOD PRESERVING PROCESSES THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL (NOTE: THE LISTING OF WASTEWATERS THAT HAVE NOT COME INTO CONTACT WITH PROCESS CONTAMINANTS IS STAYED ADMINISTRATIVELY. THE STAY WILL REMAIN IN EFFECT UNTIL FURTHER ADMINISTRATIVE ACTION IS TAKEN.).

Waste code: F037  
Waste name: PETROLEUM REFINERY PRIMARY OIL/WATER/SOLIDS SEPARATION SLUDGE-ANY SLUDGE GENERATED FROM THE GRAVITATIONAL SEPARATION OF OIL/WATER/SOLIDS DURING THE STORAGE OR TREATMENT OF PROCESS WASTEWATERS AND OILY COOLING WASTEWATERS FROM PETROLEUM REFINERIES. SUCH SLUDGES INCLUDE, BUT ARE NOT LIMITED TO, THOSE GENERATED IN: OIL/WATER/SOLIDS SEPARATORS; TANKS AND IMPOUNDMENTS; DITCHES AND OTHER CONVEYANCES; SUMPS; AND STORMWATER UNITS RECEIVING DRY WEATHER FLOW. SLUDGE GENERATED IN STORMWATER UNITS THAT DO NOT RECEIVE DRY WEATHER FLOW, SLUDGES GENERATED FROM NON-CONTACT ONCE-THROUGH COOLING WATERS SEGREGATED FOR TREATMENT FROM OTHER PROCESS OR OILY COOLING WATERS, SLUDGES GENERATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS AS DEFINED IN SECTION 261.31(B)(2) (INCLUDING SLUDGES GENERATED IN ONE OR MORE ADDITIONAL UNITS AFTER WASTEWATERS HAVE BEEN TREATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS) AND K051 WASTES ARE NOT INCLUDED IN THIS LISTING.

Waste code: F038  
Waste name: PETROLEUM REFINERY SECONDARY (EMULSIFIED) OIL/WATER/SOLIDS SEPARATION SLUDGE-ANY SLUDGE AND/OR FLOAT GENERATED FROM THE PHYSICAL AND/OR CHEMICAL SEPARATION OF OIL/WATER/SOLIDS IN PROCESS WASTEWATERS AND OILY COOLING WASTEWATERS FROM PETROLEUM REFINERIES. SUCH WASTES INCLUDE, BUT ARE NOT LIMITED TO, ALL SLUDGES AND FLOATS GENERATED IN: INDUCED AIR FLOTATION (IAF) UNITS, TANKS AND IMPOUNDMENTS, AND ALL SLUDGES GENERATED IN DAF UNITS. SLUDGES GENERATED IN STORMWATER UNITS THAT DO NOT RECEIVE DRY WEATHER FLOW, SLUDGES GENERATED FROM NON-CONTACT ONCE-THROUGH COOLING WATERS SEGREGATED FOR TREATMENT FROM OTHER PROCESS OR OILY COOLING WATERS, SLUDGES AND FLOATS GENERATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS AS DEFINED IN SECTION 261.31(B)(2) (INCLUDING SLUDGES AND FLOATS GENERATED IN ONE OR MORE ADDITIONAL UNITS AFTER WASTEWATERS HAVE BEEN TREATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS) AND F037, K048, AND K051 WASTES ARE NOT INCLUDED IN THIS LISTING.

Waste code: F039  
Waste name: LEACHATE (LIQUIDS THAT HAVE PERCOLATED THROUGH LAND DISPOSED WASTES) RESULTING FROM THE DISPOSAL OF MORE THAN ONE RESTRICTED WASTE CLASSIFIED AS HAZARDOUS UNDER SUBPART D OF THIS PART. (LEACHATE RESULTING FROM THE DISPOSAL OF ONE OR MORE OF THE FOLLOWING EPA HAZARDOUS WASTES AND NO OTHER HAZARDOUS WASTES RETAINS ITS EPA HAZARDOUS WASTES NUMBER(S): F020, F021, F022, F026, F027, AND/OR F028).

Waste code: K002

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste name:	WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF CHROME YELLOW AND ORANGE PIGMENTS.
Waste code:	K003
Waste name:	WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF MOLYBDATE ORANGE PIGMENTS
Waste code:	K004
Waste name:	WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF ZINC YELLOW PIGMENTS
Waste code:	K005
Waste name:	WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF CHROME GREEN PIGMENTS
Waste code:	K006
Waste name:	WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF CHROME OXIDE GREEN PIGMENTS (ANHYDROUS AND HYDRATED).
Waste code:	K007
Waste name:	WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF IRON BLUE PIGMENTS
Waste code:	K008
Waste name:	OVEN RESIDUE FROM THE PRODUCTION OF CHROME OXIDE GREEN PIGMENTS
Waste code:	K009
Waste name:	DISTILLATION BOTTOMS FROM THE PRODUCTION OF ACETALDEHYDE FROM ETHYLENE
Waste code:	K010
Waste name:	DISTILLATION SIDE CUTS FROM THE PRODUCTION OF ACETAIDEHYDE FROM ETHYLENE
Waste code:	K011
Waste name:	BOTTOM STREAM FROM THE WASTEWATER STRIPPER IN THE PRODUCTION OF ACRYLONITRILE
Waste code:	K013
Waste name:	BOTTOM STREAM FROM THE ACETONITRILE COLUMN IN THE PRODUCTION OF ACRYLONITRILE
Waste code:	K014
Waste name:	BOTTOMS FROM THE ACETONITRILE PURIFICATION COLUMN IN THE PRODUCTION OF ACRYLONITRILE
Waste code:	K015
Waste name:	STILL BOTTOMS FROM THE DISTILLATION OF BENZYL CHLORIDE
Waste code:	K016
Waste name:	HEAVY ENDS OR DISTILLATION RESIDUES FROM THE PRODUCTION OF CARBON TETRACHLORIDE
Waste code:	K017
Waste name:	HEAVY ENDS (STILL BOTTOMS) FROM THE PURIFICATION COLUMN IN THE PRODUCTION OF EPICHLOROHYDRIN.
Waste code:	K018
Waste name:	HEAVY ENDS FROM THE FRACTIONATION COLUMN IN ETHYL CHLORIDE PRODUCTION

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code:	K019
Waste name:	HEAVY ENDS FROM THE DISTILLATION OF ETHYLENE DICHLORIDE IN ETHYLENE DICHLORIDE PRODUCTION.
Waste code:	K020
Waste name:	HEAVY ENDS FROM THE DISTILLATION OF VINYL CHLORIDE IN VINYL CHLORIDE MONOMER PRODUCTION.
Waste code:	K021
Waste name:	AQUEOUS SPENT ANTIMONY CATALYST WASTE FROM FLUOROMETHANES PRODUCTION
Waste code:	K022
Waste name:	DISTILLATION BOTTOM TARS FROM THE PRODUCTION OF PHENOL/ACETONE FROM CUMENE
Waste code:	K023
Waste name:	DISTILLATION LIGHT ENDS FROM THE PRODUCTION OF PHTHALIC ANHYDRIDE FROM NAPHTHALENE
Waste code:	K024
Waste name:	DISTILLATION BOTTOMS FROM THE PRODUCTION OF PHTHALIC ANHYDRIDE FROM NAPHTHALENE
Waste code:	K025
Waste name:	DISTILLATION BOTTOMS FROM THE PRODUCTION OF NITROBENZENE BY THE NITRATION OF BENZENE
Waste code:	K026
Waste name:	STRIPPING STILL TAILS FROM THE PRODUCTION OF METHY ETHYL PYRIDINES
Waste code:	K027
Waste name:	CENTRIFUGE AND DISTILLATION RESIDUES FROM TOLUENE DIISOCYANATE PRODUCTION
Waste code:	K028
Waste name:	SPENT CATALYST FROM THE HYDROCHLORINATOR REACTOR IN THE PRODUCTION OF 1,1,1-TRICHLOROETHANE.
Waste code:	K029
Waste name:	WASTE FROM THE PRODUCT STEAM STRIPPER IN THE PRODUCTION OF 1,1,1-TRICHLOROETHANE
Waste code:	K030
Waste name:	COLUMN BOTTOMS OR HEAVY ENDS FROM THE COMBINED PRODUCTION OF TRICHLOROETHYLENE AND PERCHLOROETHYLENE.
Waste code:	K031
Waste name:	BY-PRODUCT SALTS GENERATED IN THE PRODUCTION OF MSMA AND CACODYLIC ACID
Waste code:	K032
Waste name:	WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF CHLORDANE
Waste code:	K033
Waste name:	WASTEWATER AND SCRUB WATER FROM THE CHLORINATION OF CYCLOPENTADIENE IN THE PRODUCTION OF CHLORDANE.

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code:	K034
Waste name:	FILTER SOLIDS FROM THE FILTRATION OF HEXACHLOROCYCLOPENTADIENE IN THE PRODUCTION OF CHLORDANE.
Waste code:	K035
Waste name:	WASTEWATER TREATMENT SLUDGES GENERATED IN THE PRODUCTION OF CREOSOTE
Waste code:	K036
Waste name:	STILL BOTTOMS FROM TOLUENE RECLAMATION DISTILLATION IN THE PRODUCTION OF DISULFOTON
Waste code:	K037
Waste name:	WASTEWATER TREATMENT SLUDGES FROM THE PRODUCTION OF DISULFOTON
Waste code:	K038
Waste name:	WASTEWATER FROM THE WASHING AND STRIPPING OF PHORATE PRODUCTION
Waste code:	K039
Waste name:	FILTER CAKE FROM THE FILTRATION OF DIETHYLPHOSPHORODITHIOIC ACID IN THE PRODUCTION OF PHORATE.
Waste code:	K040
Waste name:	WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF PHORATE
Waste code:	K041
Waste name:	WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF TOXAPHENE
Waste code:	K042
Waste name:	HEAVY ENDS OR DISTILLATION RESIDUES FROM THE DISTILLATION OF TETRACHLOROBENZENE IN THE PRODUCTION OF 2,4,5-T.
Waste code:	K043
Waste name:	2,6-DICHLOROPHENOL WASTE FROM THE PRODUCTION OF 2,4-D
Waste code:	K044
Waste name:	WASTEWATER TREATMENT SLUDGES FROM THE MANUFACTURING AND PROCESSING OF EXPLOSIVES
Waste code:	K045
Waste name:	SPENT CARBON FROM THE TREATMENT OF WASTEWATER CONTAINING EXPLOSIVES
Waste code:	K046
Waste name:	WASTEWATER TREATMENT SLUDGES FROM THE MANUFACTURING, FORMULATION AND LOADING OF LEAD-BASED INITIATING COMPOUNDS.
Waste code:	K047
Waste name:	PINK/RED WATER FROM TNT OPERATIONS
Waste code:	K048
Waste name:	DISSOLVED AIR FLOTATION (DAF) FLOAT FROM THE PETROLEUM REFINING INDUSTRY
Waste code:	K049
Waste name:	SLOP OIL EMULSION SOLIDS FROM THE PETROLEUM REFINING INDUSTRY
Waste code:	K050
Waste name:	HEAT EXCHANGER BUNDLE CLEANING SLUDGE FROM THE PETROLEUM REFINING

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**1000430269**

INDUSTRY

Waste code: K051  
Waste name: API SEPARATOR SLUDGE FROM THE PETROLEUM REFINING INDUSTRY

Waste code: K052  
Waste name: TANK BOTTOMS (LEADED) FROM THE PETROLEUM REFINING INDUSTRY

Waste code: K060  
Waste name: AMMONIA STILL LIME SLUDGE FROM COKING OPERATIONS

Waste code: K061  
Waste name: EMISSION CONTROL DUST/SLUDGE FROM THE PRIMARY PRODUCTION OF STEEL IN ELECTRIC FURNACES.

Waste code: K062  
Waste name: SPENT PICKLE LIQUOR GENERATED BY STEEL FINISHING OPERATIONS OF FACILITIES WITHIN THE IRON AND STEEL INDUSTRY (SIC CODES 331 AND 332).

Waste code: K071  
Waste name: BRINE PURIFICATION MUDS FROM THE MERCURY CELL PROCESS IN CHLORINE PRODUCTION, WHERE SEPARATELY PREPURIFIED BRINE IS NOT USED.

Waste code: K073  
Waste name: CHLORINATED HYDROCARBON WASTE FROM THE PURIFICATION STEP OF THE DIAPHRAGM CELL PROCESS USING GRAPHITE ANODES IN CHLORINE PRODUCTION.

Waste code: K083  
Waste name: DISTILLATION BOTTOMS FROM ANILINE PRODUCTION

Waste code: K084  
Waste name: WASTEWATER TREATMENT SLUDGES GENERATED DURING THE PRODUCTION OF VETERINARY PHARMACEUTICALS FROM ARSENIC OR ORGANO-ARSENIC COMPOUNDS.

Waste code: K085  
Waste name: DISTILLATION OR FRACTIONATION COLUMN BOTTOMS FROM THE PRODUCTION OF CHLOROBENZENES

Waste code: K086  
Waste name: SOLVENT WASHES AND SLUDGES, CAUSTIC WASHES AND SLUDGES, OR WATER WASHES AND SLUDGES FROM CLEANING TUBS AND EQUIPMENT USED IN THE FORMULATION OF INK FROM PIGMENTS, DRIERS, SOAPS, AND STABILIZERS CONTAINING CHROMIUM AND LEAD.

Waste code: K087  
Waste name: DECANTER TANK TAR SLUDGE FROM COKING OPERATIONS

Waste code: K093  
Waste name: DISTILLATION LIGHT ENDS FROM THE PRODUCTION OF PHTHALIC ANHYDRIDE FROM ORTHO-XYLENE

Waste code: K094  
Waste name: DISTILLATION BOTTOMS FROM THE PRODUCTION OF PHTHALIC ANHYDRIDE FROM ORTHO-XYLENE

Waste code: K095  
Waste name: DISTILLATION BOTTOMS FROM THE PRODUCTION OF 1,1,1-TRICHLOROETHANE

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Waste code:	K096
Waste name:	HEAVY ENDS FROM THE HEAVY ENDS COLUMN FROM THE PRODUCTION OF 1,1,1-TRICHLOROETHANE.
Waste code:	K097
Waste name:	VACUUM STRIPPER DISCHARGE FROM THE CHLORDANE CHLORINATOR IN THE PRODUCTION OF CHLORDANE.
Waste code:	K098
Waste name:	UNTREATED PROCESS WASTEWATER FROM THE PRODUCTION OF TOXAPHENE
Waste code:	K099
Waste name:	UNTREATED WASTEWATER FROM THE PRODUCTION OF 2,4-D
Waste code:	K100
Waste name:	WASTE LEACHING SOLUTION FROM ACID LEACHING OF EMISSION CONTROL DUST/SLUDGE FROM SECONDARY LEAD SMELTING.
Waste code:	K101
Waste name:	DISTILLATION TAR RESIDUES FROM THE DISTILLATION OF ANILINE-BASED COMPOUNDS IN THE PRODUCTION OF VETERINARY PHARMACEUTICALS FROM ARSENIC OR ORGANO-ARSENIC COMPOUNDS.
Waste code:	K102
Waste name:	RESIDUE FROM THE USE OF ACTIVATED CARBON FOR DECOLORIZATION IN THE PRODUCTION OF VETERINARY PHARMACEUTICALS FROM ARSENIC OR ORGANO-ARSENIC COMPOUNDS.
Waste code:	K103
Waste name:	PROCESS RESIDUES FROM ANILINE EXTRACTION FROM THE PRODUCTION OF ANILINE
Waste code:	K104
Waste name:	COMBINED WASTEWATER STREAMS GENERATED FROM NITROBENZENE/ANILINE PRODUCTION
Waste code:	K105
Waste name:	SEPARATED AQUEOUS STREAM FROM THE REACTOR PRODUCT WASHING STEP IN THE PRODUCTION OF CHLOROBENZENES.
Waste code:	K106
Waste name:	WASTEWATER TREATMENT SLUDGE FROM THE MERCURY CELL PROCESS IN CHLORINE PRODUCTION
Waste code:	K111
Waste name:	PRODUCT WASHWATERS FROM THE PRODUCTION OF DINITROTOLUENE VIA NITRATION OF TOLUENE
Waste code:	K112
Waste name:	REACTION BY-PRODUCT WATER FROM THE DRYING COLUMN IN THE PRODUCTION OF TOLUENEDIAMINE VIA HYDROGENATION OF DINITROTOLUENE.
Waste code:	K113
Waste name:	CONDENSED LIQUID LIGHT ENDS FROM THE PURIFICATION OF TOLUENEDIAMINE IN THE PRODUCTION OF TOLUENEDIAMINE VIA HYDROGENATION OF DINITROTOLUENE.
Waste code:	K114

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Waste name: VICINALS FROM THE PURIFICATION OF TOLUENEDIAMINE IN THE PRODUCTION OF TOLUENEDIAMINE VIA HYDROGENATION OF DINITROTOLUENE.

Waste code: K115  
Waste name: HEAVY ENDS FROM THE PURIFICATION OF TOLUENEDIAMINE IN THE PRODUCTION OF TOLUENEDIAMINE VIA HYDROGENATION OF DINITROTOLUENE.

Waste code: K116  
Waste name: ORGANIC CONDENSATE FROM THE SOLVENT RECOVERY COLUMN IN THE PRODUCTION OF TOLUENE DIISOCYANATE VIA PHOSGENATION OF TOLUENEDIAMINE.

Waste code: K117  
Waste name: WASTEWATER FROM THE REACTOR VENT GAS SCRUBBER IN THE PRODUCTION OF ETHYLENE DIBROMIDE VIA BROMINATION OF ETHENE.

Waste code: K118  
Waste name: SPENT ADSORBENT SOLIDS FROM PURIFICATION OF ETHYLENE DIBROMIDE IN THE PRODUCTION OF ETHYLENE DIBROMIDE VIA BROMINATION OF ETHENE.

Waste code: K123  
Waste name: PROCESS WASTEWATER (INCLUDING SUPERNATES, FILTRATES, AND WASHWATERS) FROM THE PRODUCTION OF ETHYLENEBISDITHIOCARBAMIC ACID AND ITS SALT.

Waste code: K124  
Waste name: REACTOR VENT SCRUBBER WATER FROM THE PRODUCTION OF ETHYLENEBISDITHIOCARBAMIC ACID AND ITS SALTS.

Waste code: K125  
Waste name: FILTRATION, EVAPORATION, AND CENTRIFUGATION SOLIDS FROM THE PRODUCTION OF ETHYLENEBISDITHIOCARBAMIC ACID AND ITS SALTS.

Waste code: K126  
Waste name: BAGHOUSE DUST AND FLOOR SWEEPINGS IN MILLING AND PACKAGING OPERATIONS FROM THE PRODUCTION OR FORMULATION OF ETHYLENEBISDITHIOCARBAMIC ACID AND ITS SALTS.

Waste code: K131  
Waste name: WASTEWATER FROM THE REACTOR AND SPENT SULFURIC ACID FROM THE ACID DRYER FROM THE PRODUCTION OF METHYL BROMIDE.

Waste code: K132  
Waste name: SPENT ABSORBENT AND WASTEWATER SEPARATOR SOLIDS FROM THE PRODUCTION OF METHYL BROMIDE.

Waste code: K136  
Waste name: STILL BOTTOMS FROM THE PURIFICATION OF ETHYLENE DIBROMIDE IN THE PRODUCTION OF ETHYLENE DIBROMIDE VIA BROMINATION OF ETHENE.

Waste code: K161  
Waste name: PURIFICATION SOLIDS (INCLUDING FILTRATION, EVAPORATION, AND CENTRIFUGATION SOLIDS), BAG HOUSE DUST A

Waste code: K169  
Waste name: Crude oil storage tank sediment from petroleum refining operations.

Waste code: K170  
Waste name: Clarified slurry oil storage tank sediment and/or in-line

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filter/separation solids from petroleum refining operations.

Waste code:	K171
Waste name:	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (excludes inert support media)
Waste code:	K172
Waste name:	Spent hydro refining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (excludes inert support media).
Waste code:	P001
Waste name:	2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%
Waste code:	P002
Waste name:	ACETAMIDE, N-(AMINOTHIOXOMETHYL)-
Waste code:	P003
Waste name:	ACROLEIN
Waste code:	P004
Waste name:	ALDRIN
Waste code:	P005
Waste name:	ALLYL ALCOHOL
Waste code:	U131
Waste name:	ETHANE, HEXACHLORO-
Waste code:	U132
Waste name:	HEXACHLOROPHENE
Waste code:	U133
Waste name:	HYDRAZINE (R,T)
Waste code:	U134
Waste name:	HYDROFLUORIC ACID (C,T)
Waste code:	U135
Waste name:	HYDROGEN SULFIDE
Waste code:	U136
Waste name:	ARSINIC ACID, DIMETHYL-
Waste code:	U137
Waste name:	INDENO[1,2,3-CD]PYRENE
Waste code:	U138
Waste name:	METHANE, IODO-
Waste code:	U140
Waste name:	ISOBUTYL ALCOHOL (I,T)
Waste code:	U141
Waste name:	1,3-BENZODIOXOLE, 5-(1-PROPENYL)-

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Waste code:	U142
Waste name:	KEPONE
Waste code:	U143
Waste name:	2-BUTENOIC ACID, 2-METHYL-, 7-[[[2,3-DIHYDROXY-2-(1-METHOXYETHYL)-3-METHYL-1-OXOBUTOXY]METHYL]-2,3,5,7A-TETRAHYDRO-1H-PYRROLIZIN-1-YL ESTER, [1S-[1ALPHA(Z),7(2S*,3R*),7AALPHA]]-
Waste code:	U144
Waste name:	ACETIC ACID, LEAD(2+) SALT
Waste code:	U145
Waste name:	LEAD PHOSPHATE
Waste code:	U146
Waste name:	LEAD, BIS(ACETATO-O)TETRAHYDROXYTRI-
Waste code:	U147
Waste name:	2,5-FURANDIONE
Waste code:	U148
Waste name:	MALEIC HYDRAZIDE
Waste code:	U149
Waste name:	MALONONITRILE
Waste code:	U150
Waste name:	MELPHALAN
Waste code:	U151
Waste name:	MERCURY
Waste code:	U152
Waste name:	METHACRYLONITRILE (I, T)
Waste code:	U153
Waste name:	METHANETHIOL (I, T)
Waste code:	U154
Waste name:	METHANOL (I)
Waste code:	U155
Waste name:	1,2-ETHANEDIAMINE, N,N-DIMETHYL-N'-2-PYRIDINYL-N'-(2-THIENYLMETHYL)-
Waste code:	U156
Waste name:	CARBOCHLORIDIC ACID, METHYL ESTER (I,T)
Waste code:	U157
Waste name:	BENZ[J]ACEANTHRYLENE, 1,2-DIHYDRO-3-METHYL-
Waste code:	U158
Waste name:	BENZENAMINE, 4,4'-METHYLENEBIS[2-CHLORO-
Waste code:	U159
Waste name:	2-BUTANONE (I,T)

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Waste code:	U160
Waste name:	2-BUTANONE, PEROXIDE (R,T)
Waste code:	U161
Waste name:	METHYL ISOBUTYL KETONE (I)
Waste code:	U162
Waste name:	METHYL METHACRYLATE (I,T)
Waste code:	U163
Waste name:	GUANIDINE, N-METHYL-N'-NITRO-N-NITROSO-
Waste code:	U164
Waste name:	METHYLTHIOURACIL
Waste code:	U165
Waste name:	NAPHTHALENE
Waste code:	U166
Waste name:	1,4-NAPHTHALENEDIONE
Waste code:	U167
Waste name:	1-NAPHTHALENAMINE
Waste code:	U168
Waste name:	2-NAPHTHALENAMINE
Waste code:	U169
Waste name:	BENZENE, NITRO-
Waste code:	U170
Waste name:	P-NITROPHENOL
Waste code:	U171
Waste name:	2-NITROPROPANE (I,T)
Waste code:	U172
Waste name:	1-BUTANAMINE, N-BUTYL-N-NITROSO-
Waste code:	U173
Waste name:	ETHANOL, 2,2'-(NITROSOIMINO)BIS-
Waste code:	U174
Waste name:	ETHANAMINE, N-ETHYL-N-NITROSO-
Waste code:	U176
Waste name:	N-NITROSO-N-ETHYLUREA
Waste code:	U177
Waste name:	N-NITROSO-N-METHYLUREA
Waste code:	U178
Waste name:	CARBAMIC ACID, METHYLNITROSO-, ETHYL ESTER
Waste code:	U179
Waste name:	N-NITROSOPIPERIDINE

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Waste code:	U180
Waste name:	N-NITROSOPYRROLIDINE
Waste code:	U181
Waste name:	BENZENAMINE, 2-METHYL-5-NITRO-
Waste code:	U182
Waste name:	PARALDEHYDE
Waste code:	U183
Waste name:	BENZENE, PENTACHLORO-
Waste code:	U184
Waste name:	ETHANE, PENTACHLORO-
Waste code:	U185
Waste name:	BENZENE, PENTACHLORONITRO-
Waste code:	U186
Waste name:	1-METHYLBUTADIENE (I)
Waste code:	U187
Waste name:	ACETAMIDE, N-(4-ETHOXYPHENYL)-
Waste code:	U188
Waste name:	PHENOL
Waste code:	U189
Waste name:	PHOSPHORUS SULFIDE (R)
Waste code:	U190
Waste name:	1,3-ISOBENZOFURANDIONE
Waste code:	U191
Waste name:	2-PICOLINE
Waste code:	U192
Waste name:	BENZAMIDE, 3,5-DICHLORO-N-(1,1-DIMETHYL-2-PROPYNYL)-
Waste code:	U193
Waste name:	1,2-OXATHIOLANE, 2,2-DIOXIDE
Waste code:	U194
Waste name:	1-PROPANAMINE (I,T)
Waste code:	U196
Waste name:	PYRIDINE
Waste code:	U197
Waste name:	P-BENZOQUINONE
Waste code:	U200
Waste name:	RESERPINE
Waste code:	U201
Waste name:	1,3-BENZENEDIOL

Map ID  
Direction  
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MAP FINDINGS

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code:	U202
Waste name:	1,2-BENZISOTHIAZOL-3(2H)-ONE, 1,1-DIOXIDE, & SALTS
Waste code:	U203
Waste name:	1,3-BENZODIOXOLE, 5-(2-PROPENYL)-
Waste code:	U204
Waste name:	SELENIOUS ACID
Waste code:	U206
Waste name:	GLUCOPYRANOSE, 2-DEOXY-2-(3-METHYL-3-NITROSOUREIDO)-, D-
Waste code:	U207
Waste name:	BENZENE, 1,2,4,5-TETRACHLORO-
Waste code:	U208
Waste name:	ETHANE, 1,1,1,2-TETRACHLORO-
Waste code:	U209
Waste name:	ETHANE, 1,1,2,2-TETRACHLORO-
Waste code:	U210
Waste name:	ETHENE, TETRACHLORO-
Waste code:	U211
Waste name:	CARBON TETRACHLORIDE
Waste code:	U213
Waste name:	FURAN, TETRAHYDRO-(I)
Waste code:	U214
Waste name:	ACETIC ACID, THALLIUM(1+) SALT
Waste code:	U215
Waste name:	CARBONIC ACID, DITHALLIUM(1+) SALT
Waste code:	U216
Waste name:	THALLIUM(I) CHLORIDE
Waste code:	U217
Waste name:	NITRIC ACID, THALLIUM(1+) SALT
Waste code:	U218
Waste name:	ETHANETHIOAMIDE
Waste code:	U219
Waste name:	THIOUREA
Waste code:	U220
Waste name:	BENZENE, METHYL-
Waste code:	U221
Waste name:	BENZENEDIAMINE, AR-METHYL-
Waste code:	U222
Waste name:	BENZENAMINE, 2-METHYL-, HYDROCHLORIDE

Map ID  
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MAP FINDINGS

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code:	U223
Waste name:	BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)
Waste code:	U225
Waste name:	BROMOFORM
Waste code:	U226
Waste name:	ETHANE, 1,1,1-TRICHLORO-
Waste code:	U227
Waste name:	ETHANE, 1,1,2-TRICHLORO-
Waste code:	U228
Waste name:	ETHENE, TRICHLORO-
Waste code:	U234
Waste name:	BENZENE, 1,3,5-TRINITRO-
Waste code:	U235
Waste name:	1-PROPANOL, 2,3-DIBROMO-, PHOSPHATE (3:1)
Waste code:	U236
Waste name:	2,7-NAPHTHALENEDISULFONIC ACID, 3,3'-[(3,3'-DIMETHYL[1,1'-BIPHENYL]-4,4'-DIYL)BIS(AZO)BIS[5-AMINO-4-HYDROXY]-, TETRASODIUM SALT
Waste code:	U237
Waste name:	2,4-(1H,3H)-PYRIMIDINEDIONE, 5-[BIS(2-CHLOROETHYL)AMINO]-
Waste code:	U238
Waste name:	CARBAMIC ACID, ETHYL ESTER
Waste code:	U239
Waste name:	BENZENE, DIMETHYL- (I,T)
Waste code:	U240
Waste name:	ACETIC ACID, (2,4-DICHLOROPHENOXY)-, SALTS & ESTERS
Waste code:	U243
Waste name:	HEXACHLOROPROPENE
Waste code:	U244
Waste name:	THIOPEROXYDICARBONIC DIAMIDE [(H2N)C(S)]2S2, TETRAMETHYL-
Waste code:	U246
Waste name:	CYANOGEN BROMIDE (CN)BR
Waste code:	U247
Waste name:	BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLIDENE)BIS[4- METHOXY-
Waste code:	U248
Waste name:	2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYL-BUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS OF 0.3% OR LESS
Waste code:	U249
Waste name:	ZINC PHOSPHIDE ZN3P2, WHEN PRESENT AT CONCENTRATIONS OF 10% OR LESS

Map ID  
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MAP FINDINGS

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code:	U271
Waste name:	BENOMYL (OR) CARBAMIC ACID, [1-[(BUTYLAMINO)CARBONYL]-1H-BENZIMIDAZOL-2-YL]-, METHYL ESTER
Waste code:	U279
Waste name:	CARBARYL (OR) 1-NAPHTHALENOL, METHYLCARBAMATE
Waste code:	U328
Waste name:	BENZENAMINE, 2-METHYL-
Waste code:	U353
Waste name:	BENZENAMINE, 4-METHYL-
Waste code:	U359
Waste name:	ETHANOL, 2-ETHOXY-
Waste code:	U372
Waste name:	CARBAMIC ACID, 1H-BENZIMIDAZOL-2-YL, METHYL ESTER (OR) CARBENDAZIM
Waste code:	U389
Waste name:	CARBAMOTHIOIC ACID, BIS(1-METHYLETHYL)-, S-(2,3,3-TRICHLORO-2-PROPENYL) ESTER (OR) TRIALLATE
Waste code:	U404
Waste name:	ETHANAMINE, N,N-DIETHYL- (OR) TRIETHYLAMINE
Waste code:	P006
Waste name:	ALUMINUM PHOSPHIDE (R,T)
Waste code:	P007
Waste name:	5-(AMINOMETHYL)-3-ISOXAZOLOL
Waste code:	P008
Waste name:	4-AMINOPYRIDINE
Waste code:	P010
Waste name:	ARSENIC ACID H3ASO4
Waste code:	P011
Waste name:	ARSENIC OXIDE AS2O3
Waste code:	P012
Waste name:	ARSENIC OXIDE AS2O3
Waste code:	P013
Waste name:	BARIUM CYANIDE
Waste code:	P014
Waste name:	BENZENETHIOL
Waste code:	P015
Waste name:	BERYLLIUM
Waste code:	P016
Waste name:	DICHLOROMETHYL ETHER
Waste code:	P017

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste name:	BROMOACETONE
Waste code:	P018
Waste name:	BRUCINE
Waste code:	P020
Waste name:	DINOSEB
Waste code:	P021
Waste name:	CALCIUM CYANIDE
Waste code:	P022
Waste name:	CARBON DISULFIDE
Waste code:	P023
Waste name:	ACETALDEHYDE, CHLORO-
Waste code:	P024
Waste name:	BENZENAMINE, 4-CHLORO-
Waste code:	P026
Waste name:	1-(O-CHLOROPHENYL)THIOUREA
Waste code:	P027
Waste name:	3-CHLOROPROPIONITRILE
Waste code:	P028
Waste name:	BENZENE, (CHLOROMETHYL)-
Waste code:	P029
Waste name:	COPPER CYANIDE
Waste code:	P030
Waste name:	CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED
Waste code:	P031
Waste name:	CYANOGEN
Waste code:	P033
Waste name:	CYANOGEN CHLORIDE
Waste code:	P034
Waste name:	2-CYCLOHEXYL-4,6-DINITROPHENOL
Waste code:	P036
Waste name:	ARSONOUS DICHLORIDE, PHENYL-
Waste code:	P037
Waste name:	DIELDRIN
Waste code:	P038
Waste name:	ARSINE, DIETHYL-
Waste code:	P039
Waste name:	DISULFOTON
Waste code:	P040

Map ID  
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MAP FINDINGS

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Database(s)

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste name:	O,O-DIETHY: O-PYRAZINYL PHOSPHOROTHIOATE
Waste code:	P041
Waste name:	DIETHYL-P-NITROPHENYL PHOSPHATE
Waste code:	P042
Waste name:	1,2-BENZENEDIOL, 4-[1-HYDROXY-2-(METHYLAMINO)ETHYL]-, (R)-
Waste code:	P043
Waste name:	DIISOPROPYTFLUOROPHOSPHATE (DFP)
Waste code:	P044
Waste name:	DIMETHOATE
Waste code:	P045
Waste name:	2-BUTANONE, 3,3-DIMETHYL-1-(METHYLTHIO)-, O-[METHYLAMINO)CARBONYL] OXIME
Waste code:	P046
Waste name:	BENZENEETHANAMINE, ALPHA,ALPHA-DIMETHYL-
Waste code:	P047
Waste name:	4,6-DINITRO-O-CRESOL, & SALTS
Waste code:	P048
Waste name:	2,4-DINITROPHENOL
Waste code:	P049
Waste name:	DITHIOBIURET
Waste code:	P050
Waste name:	ENDOSULFAN
Waste code:	P051
Waste name:	2,7:3,6-DIMETHANONAPHTH [2,3-B]OXIRENE, 3,4,5,6,9,9-HEXACHLORO-1A,2,2A,3,6,6A,7,7A-OCTAHYDRO-, (1AALPHA,2BETA,2ABETA,3ALPHA,6ALPHA,6ABETA,7BETA, 7AALPHA)-, & METABOLITES
Waste code:	P054
Waste name:	AZIRIDINE
Waste code:	P056
Waste name:	FLUORINE
Waste code:	P057
Waste name:	ACETAMIDE, 2-FLUORO-
Waste code:	P058
Waste name:	ACETIC ACID, FLUORO-, SODIUM SALT
Waste code:	P059
Waste name:	HEPTACHLOR
Waste code:	P060
Waste name:	1,4,5,8-DIMETHANONAPHTHALENE, 1,2,3,4,10,10-HEXACHLORO-1,4,4A,5,8,8A-HEXAHYDRO-,

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

(1ALPHA,4ALPHA,4ABETA,5BETA,8BETA,8ABETA)-

Waste code:	P062
Waste name:	HEXAETHYL TETRAPHOSPHATE
Waste code:	P063
Waste name:	HYDROCYANIC ACID
Waste code:	P064
Waste name:	METHANE, ISOCYANATO-
Waste code:	P066
Waste name:	ETHANIMIDOTHIOIC ACID, N-[[[(METHYLAMINO)CARBONYL]OXY]-, METHYL ESTER
Waste code:	P067
Waste name:	AZIRIDINE, 2-METHYL-
Waste code:	P068
Waste name:	HYDRAZINE, METHYL-
Waste code:	P069
Waste name:	2-METHYLLACTONITRILE
Waste code:	P070
Waste name:	ALDICARB
Waste code:	P071
Waste name:	METHYL PARATHION
Waste code:	P072
Waste name:	ALPHA-NAPHTHYLTHIOUREA
Waste code:	P073
Waste name:	NICKEL CARBONYL
Waste code:	P074
Waste name:	NICKEL CYANIDE
Waste code:	P075
Waste name:	NICOTINE, & SALTS
Waste code:	P076
Waste name:	NITRIC OXIDE
Waste code:	P077
Waste name:	BENZENAMINE, 4-NITRO-
Waste code:	P078
Waste name:	NITROGEN DIOXIDE
Waste code:	P082
Waste name:	METHANAMINE, N-METHYL-N-NITROSO-
Waste code:	P084
Waste name:	N-NITROSOMETHYLVINYLAMINE
Waste code:	P085

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste name:	DIPHOSPHORAMIDE, OCTAMETHYL-
Waste code:	P087
Waste name:	OSMIUM OXIDE OSO4, (T-4)-
Waste code:	P088
Waste name:	ENDOTHALL
Waste code:	P089
Waste name:	PARATHION
Waste code:	P092
Waste name:	MERCURY, (ACETATO-O)PHENYL-
Waste code:	P093
Waste name:	PHENYLTHIOUREA
Waste code:	P094
Waste name:	PHORATE
Waste code:	P095
Waste name:	CARBONIC DICHLORIDE
Waste code:	P096
Waste name:	HYDROGEN PHOSPHIDE
Waste code:	P097
Waste name:	FAMPHUR
Waste code:	P098
Waste name:	POTASSIUM CYANIDE
Waste code:	P099
Waste name:	ARGENTATE(1-), BIS(CYANO-C)-, POTASSIUM
Waste code:	P101
Waste name:	ETHYL CYANIDE
Waste code:	P102
Waste name:	PROPARGYL ALCOHOL
Waste code:	P103
Waste name:	SELENOUREA
Waste code:	P104
Waste name:	SILVER CYANIDE
Waste code:	P105
Waste name:	SODIUM AZIDE
Waste code:	P106
Waste name:	SODIUM CYANIDE
Waste code:	P108
Waste name:	STRYCHNIDIN-10-ONE, & SALTS
Waste code:	P109

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste name:	TETRAETHYLDITHIOPYROPHOSPHATE
Waste code:	P110
Waste name:	PLUMBANE, TETRAETHYL-
Waste code:	P111
Waste name:	DIPHOSPHORIC ACID, TETRAETHYL ESTER
Waste code:	P112
Waste name:	METHANE, TETRANITRO- (R)
Waste code:	P113
Waste name:	THALLIC OXIDE
Waste code:	P114
Waste name:	SELENIOS ACID, DITHALLIUM(1+) SALT
Waste code:	P115
Waste name:	SULFURIC ACID, DITHALLIUM(1+) SALT
Waste code:	P116
Waste name:	HYDRAZINECARBOTHIOAMIDE
Waste code:	P118
Waste name:	METHANETHIOL, TRICHLORO-
Waste code:	P119
Waste name:	AMMONIUM VANADATE
Waste code:	P120
Waste name:	VANADIUM OXIDE V2O5
Waste code:	P121
Waste name:	ZINC CYANIDE
Waste code:	P122
Waste name:	ZINC PHOSPHIDE ZN3P2, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 10% (R,T)
Waste code:	P123
Waste name:	TOXAPHENE
Waste code:	U001
Waste name:	ACETALDEHYDE (I)
Waste code:	U002
Waste name:	ACETONE (I)
Waste code:	U003
Waste name:	ACETONITRILE (I,T)
Waste code:	U004
Waste name:	ACETOPHENONE
Waste code:	U005
Waste name:	ACETAMIDE, N-9H-FLUOREN-2-YL-

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code:	U006
Waste name:	ACETYL CHLORIDE (C,R,T)
Waste code:	U007
Waste name:	ACRYLAMIDE
Waste code:	U008
Waste name:	ACRYLIC ACID (I)
Waste code:	U009
Waste name:	ACRYLONITRILE
Waste code:	U010
Waste name:	AZIRINO[2',3':3,4]PYRROLO[1,2-A]INDOLE-4,7-DIONE, 6-AMINO-8-[[[(AMINOCARBONYL)OXY]METHYL]- 1,1A,2,8,8A,8B-HEXAHYDRO-8A-METHOXY-5-METHYL-, [1AS-(1AALPHA, 8BETA,8AALPHA,8BALPHA)]-
Waste code:	U011
Waste name:	AMITROLE
Waste code:	U012
Waste name:	ANILINE (I,T)
Waste code:	U014
Waste name:	AURAMINE
Waste code:	U015
Waste name:	AZASERINE
Waste code:	U016
Waste name:	BENZ[C]ACRIDINE
Waste code:	U017
Waste name:	BENZAL CHLORIDE
Waste code:	U018
Waste name:	BENZ[A]ANTHRACENE
Waste code:	U019
Waste name:	BENZENE (I,T)
Waste code:	U020
Waste name:	BENZENESULFONIC ACID CHLORIDE (C,R)
Waste code:	U021
Waste name:	BENZIDINE
Waste code:	U022
Waste name:	BENZO[A]PYRENE
Waste code:	U023
Waste name:	BENZENE, (TRICHLOROMETHYL)-
Waste code:	U024
Waste name:	DICHLOROMETHOXY ETHANE

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MAP FINDINGS

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code:	U025
Waste name:	DICHLOROETHYL ETHER
Waste code:	U026
Waste name:	CHLORNAPHAZIN
Waste code:	U027
Waste name:	DICHLOROISOPROPYL ETHER
Waste code:	U028
Waste name:	1,2-BENZENEDICARBOXYLIC ACID, BIS(2-ETHYLHEXYL) ESTER
Waste code:	U029
Waste name:	METHANE, BROMO-
Waste code:	U030
Waste name:	BENZENE, 1-BROMO-4-PHENOXY-
Waste code:	U031
Waste name:	1-BUTANOL (I)
Waste code:	U032
Waste name:	CALCIUM CHROMATE
Waste code:	U034
Waste name:	ACETALDEHYDE, TRICHLORO-
Waste code:	U035
Waste name:	BENZENEBUTANOIC ACID, 4-[BIS(2-CHLOROETHYL)AMINO]-
Waste code:	U036
Waste name:	CHLORDANE, ALPHA & GAMMA ISOMERS
Waste code:	U037
Waste name:	BENZENE, CHLORO-
Waste code:	U038
Waste name:	BENZENEACETIC ACID, 4-CHLORO-ALPHA-(4-CHLOROPHENYL)-ALPHA-HYDROXY-, ETHYL ESTER
Waste code:	U039
Waste name:	P-CHLORO-M-CRESOL
Waste code:	U041
Waste name:	EPOCHLOROHYDRIN
Waste code:	U042
Waste name:	2-CHLOROETHYL VINYL ETHER
Waste code:	U043
Waste name:	ETHENE, CHLORO-
Waste code:	U044
Waste name:	CHLOROFORM
Waste code:	U045
Waste name:	METHANE, CHLORO- (I, T)

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MAP FINDINGS

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code:	U046
Waste name:	CHLOROMETHYL METHYL ETHER
Waste code:	U047
Waste name:	BETA-CHLORONAPHTHALENE
Waste code:	U048
Waste name:	O-CHLOROPHENOL
Waste code:	U049
Waste name:	BENZENAMINE, 4-CHLORO-2-METHYL-, HYDROCHLORIDE
Waste code:	U050
Waste name:	CHRYSENE
Waste code:	U051
Waste name:	CREOSOTE
Waste code:	U052
Waste name:	CRESOL (CRESYLIC ACID)
Waste code:	U053
Waste name:	2-BUTENAL
Waste code:	U055
Waste name:	BENZENE, (1-METHYLETHYL)- (I)
Waste code:	U056
Waste name:	BENZENE, HEXAHYDRO- (I)
Waste code:	U057
Waste name:	CYCLOHEXANONE (I)
Waste code:	U058
Waste name:	CYCLOPHOSPHAMIDE
Waste code:	U059
Waste name:	DAUNOMYCIN
Waste code:	U060
Waste name:	BENZENE, 1,1'-(2,2-DICHLOROETHYLIDENE)BIS[4-CHLORO-
Waste code:	U061
Waste name:	BENZENE, 1,1'-(2,2,2-TRICHLOROETHYLIDENE)BIS[4-CHLORO-
Waste code:	U062
Waste name:	CARBAMOTHIOIC ACID, BIS(1-METHYLETHYL)-, S-(2,3-DICHLORO-2-PROPENYL) ESTER
Waste code:	U063
Waste name:	DIBENZ[A,H]ANTHRACENE
Waste code:	U064
Waste name:	BENZO[RST]PENTAPHENE
Waste code:	U066
Waste name:	1,2-DIBROMO-3-CHLOROPROPANE

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code:	U067
Waste name:	ETHANE, 1,2-DIBROMO-
Waste code:	U068
Waste name:	METHANE, DIBROMO-
Waste code:	U069
Waste name:	1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER
Waste code:	U070
Waste name:	BENZENE, 1,2-DICHLORO-
Waste code:	U071
Waste name:	BENZENE, 1,3-DICHLORO-
Waste code:	U072
Waste name:	BENZENE, 1,4-DICHLORO-
Waste code:	U073
Waste name:	[1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DICHLORO-
Waste code:	U074
Waste name:	2-BUTENE, 1,4-DICHLORO- (I,T)
Waste code:	U075
Waste name:	DICHLORODIFLUOROMETHANE
Waste code:	U076
Waste name:	ETHANE, 1,1-DICHLORO-
Waste code:	U077
Waste name:	ETHANE, 1,2-DICHLORO-
Waste code:	U078
Waste name:	1,1-DICHLOROETHYLENE
Waste code:	U079
Waste name:	1,2-DICHLOROETHYLENE
Waste code:	U080
Waste name:	METHANE, DICHLORO-
Waste code:	U081
Waste name:	2,4-DICHLOROPHENOL
Waste code:	U082
Waste name:	2,6-DICHLOROPHENOL
Waste code:	U083
Waste name:	PROPANE, 1,2-DICHLORO-
Waste code:	U084
Waste name:	1,3-DICHLOROPROPENE
Waste code:	U085
Waste name:	2,2'-BIOXIRANE

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code:	U086
Waste name:	N,N'-DIETHYLHYDRAZINE
Waste code:	U087
Waste name:	O,O-DIETHYL S-METHYL DITHIOPHOSPHATE
Waste code:	U088
Waste name:	1,2-BENZENEDICARBOXYLIC ACID, DIETHYL ESTER
Waste code:	U089
Waste name:	DIETHYLSTILBESTEROL
Waste code:	U090
Waste name:	1,3-BENZODIOXOLE, 5-PROPYL-
Waste code:	U091
Waste name:	[1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DIMETHOXY-
Waste code:	U092
Waste name:	DIMETHYLAMINE (I)
Waste code:	U093
Waste name:	BENZENAMINE, N,N-DIMETHYL-4-(PHENYLAZO)-
Waste code:	U094
Waste name:	BENZ[A]ANTHRACENE, 7,12-DIMETHYL-
Waste code:	U095
Waste name:	[1,1'-BIPHENYL]-4,4'-DIAMINE, 3,3'-DIMETHYL-
Waste code:	U097
Waste name:	CARBAMIC CHLORIDE, DIMETHYL-
Waste code:	U098
Waste name:	1,1-DIMETHYLHYDRAZINE
Waste code:	U099
Waste name:	1,2-DIMETHYLHYDRAZINE
Waste code:	U101
Waste name:	2,4-DIMETHYLPHENOL
Waste code:	U102
Waste name:	1,2-BENZENEDICARBOXYLIC ACID, DIMETHYL ESTER
Waste code:	U103
Waste name:	DIMETHYL SULFATE
Waste code:	U105
Waste name:	BENZENE, 1-METHYL-2,4-DINITRO-
Waste code:	U106
Waste name:	BENZENE, 2-METHYL-1,3-DINITRO-
Waste code:	U107
Waste name:	1,2-BENZENEDICARBOXYLIC ACID, DIOCTYL ESTER

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code:	U108
Waste name:	1,4-DIETHYLENEOXIDE
Waste code:	U109
Waste name:	1,2-DIPHENYLHYDRAZINE
Waste code:	U110
Waste name:	DIPROPYLAMINE (I)
Waste code:	U111
Waste name:	DI-N-PROPYLNITROSAMINE
Waste code:	U112
Waste name:	ACETIC ACID ETHYL ESTER (I)
Waste code:	U113
Waste name:	ETHYL ACRYLATE (I)
Waste code:	U114
Waste name:	CARBAMODITHIOIC ACID, 1,2-ETHANEDIYLBIS-, SALTS & ESTERS
Waste code:	U115
Waste name:	ETHYLENE OXIDE (I,T)
Waste code:	U116
Waste name:	ETHYLENETHIOUREA
Waste code:	U117
Waste name:	ETHANE, 1,1'-OXYBIS-(I)
Waste code:	U118
Waste name:	ETHYL METHACRYLATE
Waste code:	U119
Waste name:	ETHYL METHANESULFONATE
Waste code:	U120
Waste name:	FLUORANTHENE
Waste code:	U121
Waste name:	METHANE, TRICHLOROFLUORO-
Waste code:	U122
Waste name:	FORMALDEHYDE
Waste code:	U123
Waste name:	FORMIC ACID (C,T)
Waste code:	U124
Waste name:	FURAN (I)
Waste code:	U125
Waste name:	2-FURANCARBOXALDEHYDE (I)
Waste code:	U126
Waste name:	GLYCIDYLALDEHYDE

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code: U127  
Waste name: BENZENE, HEXACHLORO-

Waste code: U128  
Waste name: 1,3-BUTADIENE, 1,1,2,3,4,4-HEXACHLORO-

Waste code: U129  
Waste name: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-,  
(1ALPHA,2ALPHA,3BETA,4ALPHA,5ALPHA,6BETA)-

Waste code: U130  
Waste name: 1,3-CYCLOPENTADIENE, 1,2,3,4,5-HEXACHLORO-

Biennial Reports:

Last Biennial Reporting Year: 2007

Annual Waste Handled:

Waste code: D001  
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Amount (Lbs): 51629063.1

Waste code: D002  
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Amount (Lbs): 43130007.7

Waste code: D003  
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Amount (Lbs): 2482069.5

Waste code: D004  
Waste name: ARSENIC  
Amount (Lbs): 58041401.7

Waste code: D005  
Waste name: BARIUM  
Amount (Lbs): 58246865.5

Waste code: D006  
Waste name: CADMIUM  
Amount (Lbs): 57891448.9

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code:	D007
Waste name:	CHROMIUM
Amount (Lbs):	58558853.8
Waste code:	D008
Waste name:	LEAD
Amount (Lbs):	58537870.6
Waste code:	D009
Waste name:	MERCURY
Amount (Lbs):	54895630.8
Waste code:	D010
Waste name:	SELENIUM
Amount (Lbs):	56764429.5
Waste code:	D011
Waste name:	SILVER
Amount (Lbs):	57992332.6
Waste code:	D013
Waste name:	LINDANE
Amount (Lbs):	16666.1
Waste code:	D014
Waste name:	METHOXYCHLOR
Amount (Lbs):	40780170.4
Waste code:	D016
Waste name:	2,4-D
Amount (Lbs):	40780170.4
Waste code:	D018
Waste name:	BENZENE
Amount (Lbs):	48899946
Waste code:	D019
Waste name:	CARBON TETRACHLORIDE
Amount (Lbs):	43732296.1
Waste code:	D020
Waste name:	CHLORDANE
Amount (Lbs):	9593.7
Waste code:	D021
Waste name:	CHLOROBENZENE
Amount (Lbs):	43647723.8
Waste code:	D022
Waste name:	CHLOROFORM
Amount (Lbs):	51950216.7
Waste code:	D023
Waste name:	O-CRESOL
Amount (Lbs):	41805972.2
Waste code:	D024

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**CLEAN HARBORS SAN JOSE LLC (Continued)**

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Waste name:	M-CRESOL
Amount (Lbs):	41833605.2
Waste code:	D025
Waste name:	P-CRESOL
Amount (Lbs):	41759805.9
Waste code:	D026
Waste name:	CRESOL
Amount (Lbs):	41822809.1
Waste code:	D027
Waste name:	1,4-DICHLOROBENZENE
Amount (Lbs):	41829229.8
Waste code:	D028
Waste name:	1,2-DICHLOROETHANE
Amount (Lbs):	41792035.8
Waste code:	D029
Waste name:	1,1-DICHLOROETHYLENE
Amount (Lbs):	43615606
Waste code:	D030
Waste name:	2,4-DINITROTOLUENE
Amount (Lbs):	41699063.7
Waste code:	D032
Waste name:	HEXACHLOROBENZENE
Amount (Lbs):	41699063.7
Waste code:	D033
Waste name:	HEXACHLOROBUTADIENE
Amount (Lbs):	41699063.7
Waste code:	D034
Waste name:	HEXACHLOROETHANE
Amount (Lbs):	43551317.6
Waste code:	D035
Waste name:	METHYL ETHYL KETONE
Amount (Lbs):	51411482.7
Waste code:	D036
Waste name:	NITROBENZENE
Amount (Lbs):	41795138.3
Waste code:	D038
Waste name:	PYRIDINE
Amount (Lbs):	48383905.4
Waste code:	D039
Waste name:	TETRACHLOROETHYLENE
Amount (Lbs):	41893088.8
Waste code:	D040
Waste name:	TRICHLOROETHYLENE

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Amount (Lbs): 44610333.6

Waste code: D041  
Waste name: 2,4,5-TRICHLOROPHENOL  
Amount (Lbs): 40903915.5

Waste code: D043  
Waste name: VINYL CHLORIDE  
Amount (Lbs): 41824094.2

Waste code: F001  
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.  
Amount (Lbs): 50333604.4

Waste code: F002  
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.  
Amount (Lbs): 52917972.6

Waste code: F003  
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.  
Amount (Lbs): 53285970.6

Waste code: F004  
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.  
Amount (Lbs): 44782145.6

Waste code: F005  
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL

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KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Amount (Lbs): 51935976

Waste code: F006  
Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Amount (Lbs): 48333169.3

Waste code: F007  
Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS  
Amount (Lbs): 100252.7

Waste code: F008  
Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Amount (Lbs): 239916.6

Waste code: F009  
Waste name: SPENT STRIPPING AND CLEANING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Amount (Lbs): 79378.5

Waste code: F024  
Waste name: PROCESS WASTES, INCLUDING BUT NOT LIMITED TO, DISTILLATION RESIDUES, HEAVY ENDS, TARS, AND REACTOR CLEAN-OUT WASTES, FROM THE PRODUCTION OF CERTAIN CHLORINATED ALIPHATIC HYDROCARBONS BY FREE RADICAL CATALYZED PROCESSES. THESE CHLORINATED ALIPHATIC HYDROCARBONS ARE THOSE HAVING CARBON CHAIN LENGTHS RANGING FROM ONE TO AND INCLUDING FIVE, WITH VARYING AMOUNTS AND POSITIONS OF CHLORINE SUBSTITUTION. (THIS LISTING DOES NOT INCLUDE WASTEWATERS, WASTEWATER TREATMENT SLUDGES, SPENT CATALYSTS, AND WASTES LISTED IN SECTION 261.31 OR SECTION 261.32).

Amount (Lbs): 30466331.3

Waste code: F032  
Waste name: WASTEWATERS, PROCESS RESIDUALS, PRESERVATIVE DRIPPAGE, AND SPENT FORMULATIONS FROM WOOD PRESERVING PROCESSES GENERATED AT PLANTS THAT CURRENTLY USE OR HAVE PREVIOUSLY USED CHLOROPHENOLIC FORMULATIONS (EXCEPT POTENTIALLY CROSS-CONTAMINATED WASTES THAT HAVE HAD THE F032 WASTE CODE DELETED IN ACCORDANCE WITH SECTION 261.35 OF THIS CHAPTER AND WHERE THE GENERATOR DOES NOT RESUME OR INITIATE USE OF CHLOROPHENOLIC FORMULATIONS). THIS LISTING DOES NOT INCLUDE K001 BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATER FROM WOOD PRESERVING PROCESSES THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL. (NOTE: THE LISTING OF WASTEWATERS THAT HAVE NOT COME INTO CONTACT WITH PROCESS CONTAMINANTS IS STAYED ADMINISTRATIVELY. THE LISTING FOR PLANTS THAT HAVE PREVIOUSLY USED CHLOROPHENOLIC FORMULATIONS IS ADMINISTRATIVELY STAYED WHENEVER THESE WASTES ARE COVERED BY THE F034

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OR F035 LISTINGS. THESE STAYS WILL REMAIN IN EFFECT UNTIL FURTHER ADMINISTRATIVE ACTION IS TAKEN.)

Amount (Lbs): 23960944

Waste code: F034  
Waste name: WASTEWATERS, PROCESS RESIDUALS, PRESERVATIVE DRIPPAGE, AND SPENT FORMULATIONS FROM WOOD PRESERVING PROCESS GENERATED AT PLANTS THAT USE CREOSOTE FORMULATIONS. THIS LISTING DOES NOT INCLUDE K001 BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATER FROM WOOD PRESERVING PROCESSES THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL. (NOTE: THE LISTING OF WASTEWATERS THAT HAVE NOT COME INTO CONTACT WITH PROCESS CONTAMINANTS IS STAYED ADMINISTRATIVELY. THE STAY WILL REMAIN IN EFFECT UNTIL FURTHER ADMINISTRATIVE ACTION IS TAKEN.)

Amount (Lbs): 40948859.4

Waste code: F035  
Waste name: WASTEWATERS, PROCESS RESIDUALS, PRESERVATIVE DRIPPAGE, AND SPENT FORMULATIONS FROM WOOD PRESERVING PROCESS GENERATED AT PLANTS THAT USE INORGANIC PRESERVATIVES CONTAINING ARSENIC OR CHROMIUM. THIS LISTING DOES NOT INCLUDE K001 BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATER FROM WOOD PRESERVING PROCESSES THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL (NOTE: THE LISTING OF WASTEWATERS THAT HAVE NOT COME INTO CONTACT WITH PROCESS CONTAMINANTS IS STAYED ADMINISTRATIVELY. THE STAY WILL REMAIN IN EFFECT UNTIL FURTHER ADMINISTRATIVE ACTION IS TAKEN.).

Amount (Lbs): 41007266.1

Waste code: F037  
Waste name: PETROLEUM REFINERY PRIMARY OIL/WATER/SOLIDS SEPARATION SLUDGE-ANY SLUDGE GENERATED FROM THE GRAVITATIONAL SEPARATION OF OIL/WATER/SOLIDS DURING THE STORAGE OR TREATMENT OF PROCESS WASTEWATERS AND OILY COOLING WASTEWATERS FROM PETROLEUM REFINERIES. SUCH SLUDGES INCLUDE, BUT ARE NOT LIMITED TO, THOSE GENERATED IN: OIL/WATER/SOLIDS SEPARATORS; TANKS AND IMPOUNDMENTS; DITCHES AND OTHER CONVEYANCES; SUMPS; AND STORMWATER UNITS RECEIVING DRY WEATHER FLOW. SLUDGE GENERATED IN STORMWATER UNITS THAT DO NOT RECEIVE DRY WEATHER FLOW, SLUDGES GENERATED FROM NON-CONTACT ONCE-THROUGH COOLING WATERS SEGREGATED FOR TREATMENT FROM OTHER PROCESS OR OILY COOLING WATERS, SLUDGES GENERATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS AS DEFINED IN SECTION 261.31(B)(2) (INCLUDING SLUDGES GENERATED IN ONE OR MORE ADDITIONAL UNITS AFTER WASTEWATERS HAVE BEEN TREATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS) AND K051 WASTES ARE NOT INCLUDED IN THIS LISTING.

Amount (Lbs): 35800281.5

Waste code: F038  
Waste name: PETROLEUM REFINERY SECONDARY (EMULSIFIED) OIL/WATER/SOLIDS SEPARATION SLUDGE-ANY SLUDGE AND/OR FLOAT GENERATED FROM THE PHYSICAL AND/OR CHEMICAL SEPARATION OF OIL/WATER/SOLIDS IN PROCESS WASTEWATERS AND OILY COOLING WASTEWATERS FROM PETROLEUM REFINERIES. SUCH WASTES INCLUDE, BUT ARE NOT LIMITED TO, ALL SLUDGES AND FLOATS GENERATED IN: INDUCED AIR FLOTATION (IAF) UNITS, TANKS AND IMPOUNDMENTS, AND ALL SLUDGES GENERATED IN DAF UNITS. SLUDGES GENERATED IN STORMWATER UNITS THAT DO NOT RECEIVE DRY WEATHER FLOW, SLUDGES GENERATED FROM NON-CONTACT ONCE-THROUGH COOLING WATERS SEGREGATED FOR TREATMENT FROM OTHER PROCESS OR OILY COOLING WATERS, SLUDGES AND FLOATS GENERATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS AS DEFINED IN SECTION

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261.31(B)(2) (INCLUDING SLUDGES AND FLOATS GENERATED IN ONE OR MORE ADDITIONAL UNITS AFTER WASTEWATERS HAVE BEEN TREATED IN AGGRESSIVE BIOLOGICAL TREATMENT UNITS) AND F037, K048, AND K051 WASTES ARE NOT INCLUDED IN THIS LISTING.

Amount (Lbs): 30466331.3

Waste code: F039  
Waste name: LEACHATE (LIQUIDS THAT HAVE PERCOLATED THROUGH LAND DISPOSED WASTES) RESULTING FROM THE DISPOSAL OF MORE THAN ONE RESTRICTED WASTE CLASSIFIED AS HAZARDOUS UNDER SUBPART D OF THIS PART. (LEACHATE RESULTING FROM THE DISPOSAL OF ONE OR MORE OF THE FOLLOWING EPA HAZARDOUS WASTES AND NO OTHER HAZARDOUS WASTES RETAINS ITS EPA HAZARDOUS WASTES NUMBER(S): F020, F021, F022, F026, F027, AND/OR F028).

Amount (Lbs): 36693660.8

Waste code: K048  
Waste name: DISSOLVED AIR FLOTATION (DAF) FLOAT FROM THE PETROLEUM REFINING INDUSTRY

Amount (Lbs): 30466331.3

Waste code: K049  
Waste name: SLOP OIL EMULSION SOLIDS FROM THE PETROLEUM REFINING INDUSTRY

Amount (Lbs): 30466331.3

Waste code: K050  
Waste name: HEAT EXCHANGER BUNDLE CLEANING SLUDGE FROM THE PETROLEUM REFINING INDUSTRY

Amount (Lbs): 34172789

Waste code: K051  
Waste name: API SEPARATOR SLUDGE FROM THE PETROLEUM REFINING INDUSTRY

Amount (Lbs): 33080010.5

Waste code: K052  
Waste name: TANK BOTTOMS (LEADED) FROM THE PETROLEUM REFINING INDUSTRY

Amount (Lbs): 32318585.3

Waste code: K086  
Waste name: SOLVENT WASHES AND SLUDGES, CAUSTIC WASHES AND SLUDGES, OR WATER WASHES AND SLUDGES FROM CLEANING TUBS AND EQUIPMENT USED IN THE FORMULATION OF INK FROM PIGMENTS, DRIERS, SOAPS, AND STABILIZERS CONTAINING CHROMIUM AND LEAD.

Amount (Lbs): 30466331.3

Waste code: K087  
Waste name: DECANter TANK TAR SLUDGE FROM COKING OPERATIONS

Amount (Lbs): 30466331.3

Waste code: K169  
Waste name: Crude oil storage tank sediment from petroleum refining operations.

Amount (Lbs): 58377.4

Waste code: K171  
Waste name: Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (excludes inert support media)

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Amount (Lbs):	1856899
Waste code:	K172
Waste name:	Spent hydro refining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (excludes inert support media).
Amount (Lbs):	1852254
Waste code:	P001
Waste name:	2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%
Amount (Lbs):	3430393.7
Waste code:	P005
Waste name:	ALLYL ALCOHOL
Amount (Lbs):	60.8
Waste code:	P010
Waste name:	ARSENIC ACID H3ASO4
Amount (Lbs):	2661893.5
Waste code:	P011
Waste name:	ARSENIC OXIDE AS2O3
Amount (Lbs):	60742.2
Waste code:	P012
Waste name:	ARSENIC OXIDE AS2O3
Amount (Lbs):	3772826.9
Waste code:	P014
Waste name:	BENZENETHIOL
Amount (Lbs):	4337.2
Waste code:	P018
Waste name:	BRUCINE
Amount (Lbs):	60742.2
Waste code:	P022
Waste name:	CARBON DISULFIDE
Amount (Lbs):	64910.2
Waste code:	P023
Waste name:	ACETALDEHYDE, CHLORO-
Amount (Lbs):	8082.4
Waste code:	P026
Waste name:	1-(O-CHLOROPHENYL)THIOUREA
Amount (Lbs):	3650
Waste code:	P029
Waste name:	COPPER CYANIDE
Amount (Lbs):	1214
Waste code:	P030
Waste name:	CYANIDES (SOLUBLE CYANIDE SALTS), NOT OTHERWISE SPECIFIED
Amount (Lbs):	4099.5

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Waste code:	P041
Waste name:	DIETHYL-P-NITROPHENYL PHOSPHATE
Amount (Lbs):	60742.2
Waste code:	P042
Waste name:	1,2-BENZENEDIOL, 4-[1-HYDROXY-2-(METHYLAMINO)ETHYL]-, (R)-
Amount (Lbs):	5251105.9
Waste code:	P044
Waste name:	DIMETHOATE
Amount (Lbs):	2661893.5
Waste code:	P046
Waste name:	BENZEETHANAMINE, ALPHA,ALPHA-DIMETHYL-
Amount (Lbs):	16666.1
Waste code:	P048
Waste name:	2,4-DINITROPHENOL
Amount (Lbs):	10431.6
Waste code:	P075
Waste name:	NICOTINE, & SALTS
Amount (Lbs):	42163529.7
Waste code:	P077
Waste name:	BENZENAMINE, 4-NITRO-
Amount (Lbs):	60742.2
Waste code:	P081
Waste name:	NITROGLYCERINE (R)
Amount (Lbs):	3446456.9
Waste code:	P087
Waste name:	OSMIUM OXIDE OSO4, (T-4)-
Amount (Lbs):	8650967.3
Waste code:	P095
Waste name:	CARBONIC DICHLORIDE
Amount (Lbs):	78.8
Waste code:	P098
Waste name:	POTASSIUM CYANIDE
Amount (Lbs):	6777.6
Waste code:	P102
Waste name:	PROPARGYL ALCOHOL
Amount (Lbs):	2553.7
Waste code:	P105
Waste name:	SODIUM AZIDE
Amount (Lbs):	63768.2
Waste code:	P106
Waste name:	SODIUM CYANIDE
Amount (Lbs):	3066.6
Waste code:	P108

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste name:	STRYCHNIDIN-10-ONE, & SALTS
Amount (Lbs):	9371.7
Waste code:	P112
Waste name:	METHANE, TETRANITRO- (R)
Amount (Lbs):	2057.6
Waste code:	P188
Waste name:	BENZOIC ACID, 2-HYDROXY-, COMPD. WITH (3AS-CIS)-1,2,3,3A,8,8A-HEXAHYDRO-1,3A,8-TRIMETHYLPYRROLO[2,3-
Amount (Lbs):	603
Waste code:	U001
Waste name:	ACETALDEHYDE (I)
Amount (Lbs):	32834827.9
Waste code:	U002
Waste name:	ACETONE (I)
Amount (Lbs):	41764497.2
Waste code:	U003
Waste name:	ACETONITRILE (I,T)
Amount (Lbs):	43625562.1
Waste code:	U004
Waste name:	ACETOPHENONE
Amount (Lbs):	41727747.5
Waste code:	U006
Waste name:	ACETYL CHLORIDE (C,R,T)
Amount (Lbs):	40780481.3
Waste code:	U007
Waste name:	ACRYLAMIDE
Amount (Lbs):	45228047.4
Waste code:	U008
Waste name:	ACRYLIC ACID (I)
Amount (Lbs):	15060127
Waste code:	U009
Waste name:	ACRYLONITRILE
Amount (Lbs):	15019424.2
Waste code:	U010
Waste name:	AZIRINO[2',3':3,4]PYRROLO[1,2-A]INDOLE-4,7-DIONE, 6-AMINO-8-[[AMINOCARBONYLOXY]METHYL]- 1,1A,2,8,8A,8B-HEXAHYDRO-8A-METHOXY-5-METHYL-, [1AS-(1AALPHA, 8BETA,8AALPHA,8BALPHA)]-
Amount (Lbs):	44331096.5
Waste code:	U011
Waste name:	AMITROLE
Amount (Lbs):	60742.2
Waste code:	U012
Waste name:	ANILINE (I,T)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Amount (Lbs):	18577283.7
Waste code:	U014
Waste name:	AURAMINE
Amount (Lbs):	9359.7
Waste code:	U015
Waste name:	AZASERINE
Amount (Lbs):	40840912.6
Waste code:	U019
Waste name:	BENZENE (I,T)
Amount (Lbs):	41727747.5
Waste code:	U021
Waste name:	BENZIDINE
Amount (Lbs):	13509.7
Waste code:	U022
Waste name:	BENZO[A]PYRENE
Amount (Lbs):	3650
Waste code:	U026
Waste name:	CHLORNAPHAZIN
Amount (Lbs):	16666.1
Waste code:	U031
Waste name:	1-BUTANOL (I)
Amount (Lbs):	41763352
Waste code:	U034
Waste name:	ACETALDEHYDE, TRICHLORO-
Amount (Lbs):	16666.1
Waste code:	U035
Waste name:	BENZENEBUTANOIC ACID, 4-[BIS(2-CHLOROETHYL)AMINO]-
Amount (Lbs):	19325765.6
Waste code:	U037
Waste name:	BENZENE, CHLORO-
Amount (Lbs):	41699063.7
Waste code:	U038
Waste name:	BENZENEACETIC ACID, 4-CHLORO-ALPHA-(4-CHLOROPHENYL)-ALPHA-HYDROXY-, ETHYL ESTER
Amount (Lbs):	60742.2
Waste code:	U041
Waste name:	EPICHLOROHYDRIN
Amount (Lbs):	89426
Waste code:	U044
Waste name:	CHLOROFORM
Amount (Lbs):	45206262.7
Waste code:	U046
Waste name:	CHLOROMETHYL METHYL ETHER

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Amount (Lbs):	13221537.8
Waste code:	U051
Waste name:	CREOSOTE
Amount (Lbs):	30207411.7
Waste code:	U052
Waste name:	CRESOL (CRESYLIC ACID)
Amount (Lbs):	60742.2
Waste code:	U055
Waste name:	BENZENE, (1-METHYLETHYL)- (I)
Amount (Lbs):	35471734.2
Waste code:	U056
Waste name:	BENZENE, HEXAHYDRO- (I)
Amount (Lbs):	41699063.7
Waste code:	U057
Waste name:	CYCLOHEXANONE (I)
Amount (Lbs):	41699063.7
Waste code:	U058
Waste name:	CYCLOPHOSPHAMIDE
Amount (Lbs):	19326418.6
Waste code:	U059
Waste name:	DAUNOMYCIN
Amount (Lbs):	19326618.6
Waste code:	U060
Waste name:	BENZENE, 1,1'-(2,2-DICHLOROETHYLIDENE)BIS[4-CHLORO-
Amount (Lbs):	13219496.2
Waste code:	U066
Waste name:	1,2-DIBROMO-3-CHLOROPROPANE
Amount (Lbs):	60742.2
Waste code:	U067
Waste name:	ETHANE, 1,2-DIBROMO-
Amount (Lbs):	6055.8
Waste code:	U069
Waste name:	1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER
Amount (Lbs):	40790478.5
Waste code:	U070
Waste name:	BENZENE, 1,2-DICHLORO-
Amount (Lbs):	41759805.9
Waste code:	U072
Waste name:	BENZENE, 1,4-DICHLORO-
Amount (Lbs):	13280238.4
Waste code:	U075
Waste name:	DICHLORODIFLUOROMETHANE
Amount (Lbs):	105210.1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code:	U077
Waste name:	ETHANE, 1,2-DICHLORO-
Amount (Lbs):	40780170.4
Waste code:	U080
Waste name:	METHANE, DICHLORO-
Amount (Lbs):	41823822.1
Waste code:	U089
Waste name:	DIETHYLSTILBESTEROL
Amount (Lbs):	32816161.6
Waste code:	U093
Waste name:	BENZENAMINE, N,N-DIMETHYL-4-(PHENYLAZO)-
Amount (Lbs):	13223146.2
Waste code:	U098
Waste name:	1,1-DIMETHYLHYDRAZINE
Amount (Lbs):	12
Waste code:	U103
Waste name:	DIMETHYL SULFATE
Amount (Lbs):	15844306
Waste code:	U105
Waste name:	BENZENE, 1-METHYL-2,4-DINITRO-
Amount (Lbs):	40780170.4
Waste code:	U106
Waste name:	BENZENE, 2-METHYL-1,3-DINITRO-
Amount (Lbs):	40780170.4
Waste code:	U108
Waste name:	1,4-DIETHYLENEOXIDE
Amount (Lbs):	41727747.5
Waste code:	U110
Waste name:	DIPROPYLAMINE (I)
Amount (Lbs):	35471734.2
Waste code:	U112
Waste name:	ACETIC ACID ETHYL ESTER (I)
Amount (Lbs):	41823822.1
Waste code:	U113
Waste name:	ETHYL ACRYLATE (I)
Amount (Lbs):	28683.8
Waste code:	U115
Waste name:	ETHYLENE OXIDE (I,T)
Amount (Lbs):	16666.1
Waste code:	U117
Waste name:	ETHANE, 1,1'-OXYBIS-(I)
Amount (Lbs):	30269818.8
Waste code:	U118

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste name:	ETHYL METHACRYLATE
Amount (Lbs):	28683.8
Waste code:	U121
Waste name:	METHANE, TRICHLOROFLUORO-
Amount (Lbs):	36369100
Waste code:	U122
Waste name:	FORMALDEHYDE
Amount (Lbs):	43615879.9
Waste code:	U123
Waste name:	FORMIC ACID (C,T)
Amount (Lbs):	40853434.4
Waste code:	U125
Waste name:	2-FURANCARBOXALDEHYDE (I)
Amount (Lbs):	13219496.2
Waste code:	U129
Waste name:	CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA,2ALPHA,3BETA,4ALPHA,5ALPHA,6BETA)-
Amount (Lbs):	20475.8
Waste code:	U132
Waste name:	HEXACHLOROPHENE
Amount (Lbs):	17269.1
Waste code:	U133
Waste name:	HYDRAZINE (R,T)
Amount (Lbs):	36473909.1
Waste code:	U134
Waste name:	HYDROFLUORIC ACID (C,T)
Amount (Lbs):	36496304.9
Waste code:	U136
Waste name:	ARSINIC ACID, DIMETHYL-
Amount (Lbs):	60742.2
Waste code:	U138
Waste name:	METHANE, IODO-
Amount (Lbs):	91577.3
Waste code:	U140
Waste name:	ISOBUTYL ALCOHOL (I,T)
Amount (Lbs):	41699063.7
Waste code:	U144
Waste name:	ACETIC ACID, LEAD(2+) SALT
Amount (Lbs):	38997178.7
Waste code:	U147
Waste name:	2,5-FURANDIONE
Amount (Lbs):	6424.5
Waste code:	U148

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste name:	MALEIC HYDRAZIDE
Amount (Lbs):	60742.2
Waste code:	U150
Waste name:	MELPHALAN
Amount (Lbs):	3513541.6
Waste code:	U151
Waste name:	MERCURY
Amount (Lbs):	19521.1
Waste code:	U152
Waste name:	METHACRYLONITRILE (I, T)
Amount (Lbs):	50.8
Waste code:	U154
Waste name:	METHANOL (I)
Amount (Lbs):	48108377.6
Waste code:	U157
Waste name:	BENZ[J]ACEANTHRYLENE, 1,2-DIHYDRO-3-METHYL-
Amount (Lbs):	13009.7
Waste code:	U158
Waste name:	BENZENAMINE, 4,4'-METHYLENEBIS[2-CHLORO-
Amount (Lbs):	36
Waste code:	U159
Waste name:	2-BUTANONE (I,T)
Amount (Lbs):	47345253.9
Waste code:	U160
Waste name:	2-BUTANONE, PEROXIDE (R,T)
Amount (Lbs):	719.6
Waste code:	U161
Waste name:	METHYL ISOBUTYL KETONE (I)
Amount (Lbs):	41699063.7
Waste code:	U162
Waste name:	METHYL METHACRYLATE (I,T)
Amount (Lbs):	32799495.5
Waste code:	U165
Waste name:	NAPHTHALENE
Amount (Lbs):	40808119.3
Waste code:	U169
Waste name:	BENZENE, NITRO-
Amount (Lbs):	13316070.8
Waste code:	U170
Waste name:	P-NITROPHENOL
Amount (Lbs):	60742.2
Waste code:	U171
Waste name:	2-NITROPROPANE (I,T)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Amount (Lbs):	35471734.2
Waste code:	U176
Waste name:	N-NITROSO-N-ETHYLUREA
Amount (Lbs):	60742.2
Waste code:	U182
Waste name:	PARALDEHYDE
Amount (Lbs):	16666.1
Waste code:	U187
Waste name:	ACETAMIDE, N-(4-ETHOXYPHENYL)-
Amount (Lbs):	26025.8
Waste code:	U188
Waste name:	PHENOL
Amount (Lbs):	50607877.5
Waste code:	U189
Waste name:	PHOSPHORUS SULFIDE (R)
Amount (Lbs):	12754
Waste code:	U190
Waste name:	1,3-ISOBENZOFURANDIONE
Amount (Lbs):	9359.7
Waste code:	U192
Waste name:	BENZAMIDE, 3,5-DICHLORO-N-(1,1-DIMETHYL-2-PROPYNYL)-
Amount (Lbs):	9359.7
Waste code:	U196
Waste name:	PYRIDINE
Amount (Lbs):	41504160.3
Waste code:	U200
Waste name:	RESERPINE
Amount (Lbs):	77408.3
Waste code:	U201
Waste name:	1,3-BENZENEDIOL
Amount (Lbs):	13230725.9
Waste code:	U202
Waste name:	1,2-BENZISOTHAZOL-3(2H)-ONE, 1,1-DIOXIDE, & SALTS
Amount (Lbs):	785166.3
Waste code:	U204
Waste name:	SELENIOS ACID
Amount (Lbs):	10228.2
Waste code:	U205
Waste name:	SELENIUM SULFIDE
Amount (Lbs):	603
Waste code:	U206
Waste name:	GLUCOPYRANOSE, 2-DEOXY-2-(3-METHYL-3-NITROSOUREIDO)-, D-
Amount (Lbs):	2750822.3

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code:	U209
Waste name:	ETHANE, 1,1,2,2-TETRACHLORO-
Amount (Lbs):	41699063.7
Waste code:	U210
Waste name:	ETHENE, TETRACHLORO-
Amount (Lbs):	41715729.8
Waste code:	U211
Waste name:	CARBON TETRACHLORIDE
Amount (Lbs):	41759805.9
Waste code:	U213
Waste name:	FURAN, TETRAHYDRO-(I)
Amount (Lbs):	41763079.9
Waste code:	U216
Waste name:	THALLIUM(I) CHLORIDE
Amount (Lbs):	6133.5
Waste code:	U219
Waste name:	THIOUREA
Amount (Lbs):	102435.7
Waste code:	U220
Waste name:	BENZENE, METHYL-
Amount (Lbs):	48007420.4
Waste code:	U221
Waste name:	BENZENEDIAMINE, AR-METHYL-
Amount (Lbs):	37804898.3
Waste code:	U223
Waste name:	BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)
Amount (Lbs):	36439241.2
Waste code:	U226
Waste name:	ETHANE, 1,1,1-TRICHLORO-
Amount (Lbs):	41128516.1
Waste code:	U227
Waste name:	ETHANE, 1,1,2-TRICHLORO-
Amount (Lbs):	41500886.2
Waste code:	U228
Waste name:	ETHENE, TRICHLORO-
Amount (Lbs):	41759805.9
Waste code:	U236
Waste name:	2,7-NAPHTHALENEDISULFONIC ACID, 3,3'-[(3,3'- DIMETHYL[1,1'-BIPHENYL]-4,4'-DIYL)BIS(AZO)BIS[5-AMINO-4-HYDROXY]-, TETRASODIUM SALT
Amount (Lbs):	106092.1
Waste code:	U237
Waste name:	2,4-(1H,3H)-PYRIMIDINEDIONE, 5-[BIS(2-CHLOROETHYL)AMINO]-
Amount (Lbs):	2750322.3

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste code: U238  
Waste name: CARBAMIC ACID, ETHYL ESTER  
Amount (Lbs): 73751.9

Waste code: U239  
Waste name: BENZENE, DIMETHYL- (I,T)  
Amount (Lbs): 46201227.1

Waste code: U246  
Waste name: CYANOGEN BROMIDE (CN)BR  
Amount (Lbs): 75392.6

Waste code: U248  
Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYL-BUTYL)-, & SALTS,  
WHEN PRESENT AT CONCENTRATIONS OF 0.3% OR LESS  
Amount (Lbs): 26025.8

Waste code: U279  
Waste name: CARBARYL (OR) 1-NAPHTHALENOL, METHYLCARBAMATE  
Amount (Lbs): 177

Waste code: U328  
Waste name: BENZENAMINE, 2-METHYL-  
Amount (Lbs): 40780170.4

Waste code: U353  
Waste name: BENZENAMINE, 4-METHYL-  
Amount (Lbs): 40780170.4

Waste code: U404  
Waste name: ETHANAMINE, N,N-DIETHYL- (OR) TRIETHYLAMINE  
Amount (Lbs): 36473723.6

**Corrective Action Summary:**

Event date: 07/01/1984  
Event: CA074ME

Event date: 07/01/1984  
Event: CA049PA

Event date: 07/01/1984  
Event: CA Prioritization, Facility or area was assigned a medium corrective action priority.

Event date: 08/01/1985  
Event: CA049SI

Event date: 07/01/1986  
Event: Stabilization Measures Implemented, Primary measure is source removal and/or treatment (e.g., soil or waste excavation, in-situ soil treatment, off-site treatment).

Event date: 07/01/1986  
Event: Stabilization Measures Implemented, Groundwater extraction and treatment (e.g., to achieve groundwater containment, to achieve MCL).

Map ID  
Direction  
Distance  
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MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Event date:	04/19/1989
Event:	RFI Imposition
Event date:	04/19/1989
Event:	CMS Imposition
Event date:	04/20/1989
Event:	CMS Workplan Approved
Event date:	04/20/1989
Event:	RFI Workplan Approved
Event date:	05/01/1989
Event:	RFA Completed, Assessment was an RFA.
Event date:	05/01/1989
Event:	RFA Completed, Assessment was an RFA.
Event date:	11/15/1989
Event:	CA036WQ
Event date:	12/31/1989
Event:	Stabilization Construction Completed
Event date:	08/15/1990
Event:	CMI Workplan Approved
Event date:	08/15/1990
Event:	CMS Approved
Event date:	08/15/1990
Event:	RFI Approved
Event date:	08/15/1990
Event:	Date For Remedy Selection (CM Imposed)
Event date:	08/15/1990
Event:	Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.
Event date:	11/30/1990
Event:	Certification Of Remedy Completion Or Construction Completion
Event date:	04/20/1991
Event:	CA Prioritization, Facility or area was assigned a medium corrective action priority.
Event date:	04/01/1992
Event:	Current Human Exposures under Control, Yes, Current Human Exposures

Map ID  
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MAP FINDINGS

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Database(s)

EDR ID Number  
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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 08/08/1994  
Event: CA Prioritization, Facility or area was assigned a high corrective action priority.

Event date: 08/08/1994  
Event: Stabilization Measures Evaluation, This facility is not amenable to stabilization activity at the present time for reasons other than 1- it appears to be technically infeasible or inappropriate (NF) or 2- there is a lack of technical information (IN). Reasons for this conclusion may be the status of closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other administrative considerations.

Event date: 09/22/1997  
Event: CA210WB

Event date: 12/28/2000  
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 12/28/2000  
Event: Igration of Contaminated Groundwater under Control, More information is needed to make a determination.

Event date: 09/16/2004  
Event: Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

Facility Has Received Notices of Violations:

Regulation violated: Not reported  
Area of violation: TSD - General Facility Standards  
Date violation determined: 06/29/2005  
Date achieved compliance: Not reported  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 06/29/2005  
Enf. disposition status: Not reported

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MAP FINDINGS

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Database(s)

EDR ID Number  
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**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD - General Facility Standards  
Date violation determined: 06/16/2004  
Date achieved compliance: Not reported  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 06/27/2005  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD - General Facility Standards  
Date violation determined: 06/19/2003  
Date achieved compliance: 08/25/2005  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 06/03/2004  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD - Manifest/Records/Reporting  
Date violation determined: 06/19/2003  
Date achieved compliance: 08/25/2005  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 06/03/2004  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD - Container Use and Management  
Date violation determined: 06/18/2001  
Date achieved compliance: 06/18/2002  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 02/01/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD - Manifest/Records/Reporting  
Date violation determined: 06/18/2001  
Date achieved compliance: 06/18/2002  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 02/01/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD - General  
Date violation determined: 06/18/2001  
Date achieved compliance: 06/18/2002  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 02/01/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD - Tank System Standards  
Date violation determined: 06/18/2001  
Date achieved compliance: 06/18/2002  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 06/18/2001  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD - Tank System Standards  
Date violation determined: 06/18/2001  
Date achieved compliance: 06/18/2002  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 02/01/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Transporters - General  
Date violation determined: 06/18/2001  
Date achieved compliance: 06/18/2002  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 02/01/2002  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Records/Reporting  
Date violation determined: 04/24/2000  
Date achieved compliance: 01/21/2001  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 11/30/2000  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD - Container Use and Management  
Date violation determined: 04/24/2000  
Date achieved compliance: 01/12/2001  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 11/30/2000  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: LDR - General  
Date violation determined: 04/24/2000  
Date achieved compliance: 01/12/2001  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 04/24/2003  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD - Manifest/Records/Reporting  
Date violation determined: 04/24/2000  
Date achieved compliance: 01/12/2001  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 11/30/2000  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD - General Facility Standards  
Date violation determined: 04/24/2000  
Date achieved compliance: 11/30/2000  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: Not reported  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: Not reported  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD - Container Use and Management  
Date violation determined: 04/24/2000  
Date achieved compliance: 01/12/2001  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 04/24/2003  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: Generators - Records/Reporting  
Date violation determined: 04/24/2000  
Date achieved compliance: 11/30/2000  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: Not reported  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: Not reported  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD - General Facility Standards  
Date violation determined: 04/24/2000  
Date achieved compliance: 01/21/2001  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 11/30/2000  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD - Manifest/Records/Reporting  
Date violation determined: 04/24/2000  
Date achieved compliance: 01/12/2001  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 04/24/2003  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD - General  
Date violation determined: 04/24/2000  
Date achieved compliance: 01/21/2001  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 11/30/2000  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: LDR - General  
Date violation determined: 04/24/2000  
Date achieved compliance: 01/12/2001  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 11/30/2000  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Regulation violated: Not reported  
Area of violation: TSD - Tank System Standards  
Date violation determined: 04/24/2000  
Date achieved compliance: 01/12/2001  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 11/30/2000  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: Not reported  
Area of violation: TSD - Tank System Standards  
Date violation determined: 04/24/2000  
Date achieved compliance: 01/12/2001  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: 04/24/2003  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60  
Area of violation: Generators - General  
Date violation determined: 11/18/1992  
Date achieved compliance: 11/18/1992  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: Not reported  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: Not reported  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.170-177.I  
Area of violation: TSD - General  
Date violation determined: 11/18/1992  
Date achieved compliance: 11/18/1992  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: Not reported  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: Not reported  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.50-56.D

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Area of violation: TSD - General  
Date violation determined: 07/21/1992  
Date achieved compliance: 09/17/1992  
Violation lead agency: State  
Enforcement action: REFERRAL TO ATTORNEY GENERAL  
Enforcement action date: 06/13/1994  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.50-56.D  
Area of violation: TSD - General  
Date violation determined: 07/21/1992  
Date achieved compliance: 09/17/1992  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 07/30/1992  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.10-18.B  
Area of violation: TSD - General  
Date violation determined: 07/21/1992  
Date achieved compliance: 01/20/1993  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 07/30/1992  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.190-201.J  
Area of violation: TSD - General  
Date violation determined: 07/21/1992  
Date achieved compliance: 09/17/1992  
Violation lead agency: State  
Enforcement action: REFERRAL TO ATTORNEY GENERAL  
Enforcement action date: 06/13/1994  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.190-201.J  
Area of violation: TSD - General

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Date violation determined: 07/21/1992  
Date achieved compliance: 09/17/1992  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 07/30/1992  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.190-201.J  
Area of violation: TSD - General  
Date violation determined: 07/21/1992  
Date achieved compliance: 09/17/1992  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 01/03/1995  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: 700000  
Paid penalty amount: 0

Regulation violated: FR - 264.50-56.D  
Area of violation: TSD - General  
Date violation determined: 07/21/1992  
Date achieved compliance: 09/17/1992  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 01/03/1995  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: 700000  
Paid penalty amount: 0

Regulation violated: FR - 264.10-18.B  
Area of violation: TSD - General  
Date violation determined: 07/21/1992  
Date achieved compliance: 01/20/1993  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 01/03/1995  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: 700000  
Paid penalty amount: 0

Regulation violated: FR - 264.10-18.B  
Area of violation: TSD - General  
Date violation determined: 07/21/1992

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Date achieved compliance: 01/20/1993  
Violation lead agency: State  
Enforcement action: REFERRAL TO ATTORNEY GENERAL  
Enforcement action date: 06/13/1994  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 270  
Area of violation: TSD - General  
Date violation determined: 07/31/1991  
Date achieved compliance: 11/18/1992  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 01/03/1995  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: 700000  
Paid penalty amount: 0

Regulation violated: FR - 270  
Area of violation: TSD - General  
Date violation determined: 07/31/1991  
Date achieved compliance: 11/18/1992  
Violation lead agency: State  
Enforcement action: REFERRAL TO ATTORNEY GENERAL  
Enforcement action date: 06/13/1994  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 270  
Area of violation: TSD - General  
Date violation determined: 07/31/1991  
Date achieved compliance: 11/18/1992  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 08/15/1991  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.170-177.I  
Area of violation: TSD - General  
Date violation determined: 07/31/1991  
Date achieved compliance: 11/18/1992

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

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Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 01/03/1995  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: 700000  
Paid penalty amount: 0

Regulation violated: FR - 264.170-177.I  
Area of violation: TSD - General  
Date violation determined: 07/31/1991  
Date achieved compliance: 11/18/1992  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 08/15/1991  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.170-177.I  
Area of violation: TSD - General  
Date violation determined: 07/31/1991  
Date achieved compliance: 11/18/1992  
Violation lead agency: State  
Enforcement action: REFERRAL TO ATTORNEY GENERAL  
Enforcement action date: 06/13/1994  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.10-18.B  
Area of violation: TSD - General  
Date violation determined: 07/02/1991  
Date achieved compliance: 01/17/1995  
Violation lead agency: State  
Enforcement action: REFERRAL TO ATTORNEY GENERAL  
Enforcement action date: 06/13/1994  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.10-18.B  
Area of violation: TSD - General  
Date violation determined: 07/02/1991  
Date achieved compliance: 01/17/1995  
Violation lead agency: State

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 01/03/1995  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: 700000  
Paid penalty amount: 0

Regulation violated: FR - 270  
Area of violation: TSD - General  
Date violation determined: 09/25/1990  
Date achieved compliance: 01/11/1991  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 10/31/1990  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.50-56.D  
Area of violation: TSD - General  
Date violation determined: 11/11/1989  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 12/19/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.190-201.J  
Area of violation: TSD - General  
Date violation determined: 11/11/1989  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 12/19/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60  
Area of violation: Generators - General  
Date violation determined: 12/29/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: REFERRAL TO ATTORNEY GENERAL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Enforcement action date: 04/12/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 130000  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 262.20-23.B  
Area of violation: Generators - General  
Date violation determined: 12/29/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 12/27/1988  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 262.20-23.B  
Area of violation: Generators - General  
Date violation determined: 12/29/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: REFERRAL TO ATTORNEY GENERAL  
Enforcement action date: 04/12/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 130000  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60  
Area of violation: Generators - General  
Date violation determined: 12/29/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 12/27/1988  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60  
Area of violation: Generators - General  
Date violation determined: 12/29/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY  
Enforcement action date: 12/31/1990

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 262.20-23.B  
Area of violation: Generators - General  
Date violation determined: 12/29/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY  
Enforcement action date: 12/31/1990  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.50-56.D  
Area of violation: TSD - General  
Date violation determined: 12/27/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY  
Enforcement action date: 12/31/1990  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.50-56.D  
Area of violation: TSD - General  
Date violation determined: 12/27/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: REFERRAL TO ATTORNEY GENERAL  
Enforcement action date: 04/12/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 130000  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.170-177.I  
Area of violation: TSD - General  
Date violation determined: 12/27/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY  
Enforcement action date: 12/31/1990  
Enf. disposition status: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.170-177.I  
Area of violation: TSD - General  
Date violation determined: 12/27/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 12/27/1988  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.10-18.B  
Area of violation: TSD - General  
Date violation determined: 12/27/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: REFERRAL TO ATTORNEY GENERAL  
Enforcement action date: 04/12/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 130000  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.10-18.B  
Area of violation: TSD - General  
Date violation determined: 12/27/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 12/27/1988  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.50-56.D  
Area of violation: TSD - General  
Date violation determined: 12/27/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 12/27/1988  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.190-201.J  
Area of violation: TSD - General  
Date violation determined: 12/27/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY  
Enforcement action date: 12/31/1990  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.190-201.J  
Area of violation: TSD - General  
Date violation determined: 12/27/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: REFERRAL TO ATTORNEY GENERAL  
Enforcement action date: 04/12/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 130000  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.190-201.J  
Area of violation: TSD - General  
Date violation determined: 12/27/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 12/27/1988  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 270  
Area of violation: TSD - General  
Date violation determined: 12/27/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY  
Enforcement action date: 12/31/1990  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 270  
Area of violation: TSD - General  
Date violation determined: 12/27/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 12/27/1988  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 270  
Area of violation: TSD - General  
Date violation determined: 12/27/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: REFERRAL TO ATTORNEY GENERAL  
Enforcement action date: 04/12/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 130000  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.10-18.B  
Area of violation: TSD - General  
Date violation determined: 12/27/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY  
Enforcement action date: 12/31/1990  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.170-177.I  
Area of violation: TSD - General  
Date violation determined: 12/27/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: REFERRAL TO ATTORNEY GENERAL  
Enforcement action date: 04/12/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 130000

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 270  
Area of violation: TSD - General  
Date violation determined: 06/24/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY  
Enforcement action date: 12/31/1990  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 270  
Area of violation: TSD - General  
Date violation determined: 06/24/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: REFERRAL TO ATTORNEY GENERAL  
Enforcement action date: 04/12/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 130000  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.110-120.G  
Area of violation: TSD - Closure/Post-Closure  
Date violation determined: 06/24/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY  
Enforcement action date: 12/31/1990  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 270  
Area of violation: TSD - General  
Date violation determined: 06/24/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 12/27/1988  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Paid penalty amount: Not reported

Regulation violated: FR - 264.70-77.E  
Area of violation: TSD - General  
Date violation determined: 06/24/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: REFERRAL TO ATTORNEY GENERAL  
Enforcement action date: 04/12/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 130000  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.70-77.E  
Area of violation: TSD - General  
Date violation determined: 06/24/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 12/27/1988  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.70-77.E  
Area of violation: TSD - General  
Date violation determined: 06/24/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY  
Enforcement action date: 12/31/1990  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.110-120.G  
Area of violation: TSD - Closure/Post-Closure  
Date violation determined: 06/24/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: REFERRAL TO ATTORNEY GENERAL  
Enforcement action date: 04/12/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 130000  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Regulation violated: FR - 264.110-120.G  
Area of violation: TSD - Closure/Post-Closure  
Date violation determined: 06/24/1988  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 12/27/1988  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 268.7  
Area of violation: LDR - General  
Date violation determined: 10/21/1987  
Date achieved compliance: 01/19/1988  
Violation lead agency: EPA  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 12/18/1987  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 268 ALL  
Area of violation: LDR - General  
Date violation determined: 10/21/1987  
Date achieved compliance: 01/19/1988  
Violation lead agency: EPA  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 12/18/1987  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 270  
Area of violation: TSD - General  
Date violation determined: 10/21/1987  
Date achieved compliance: 01/19/1988  
Violation lead agency: EPA  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 12/18/1987  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 270

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Area of violation: TSD - General  
Date violation determined: 12/10/1986  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 05/11/1987  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.110-120.G  
Area of violation: TSD - Closure/Post-Closure  
Date violation determined: 12/10/1986  
Date achieved compliance: 01/28/1991  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 05/11/1987  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Evaluation Action Summary:  
Evaluation date: 06/04/2008  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 08/13/2007  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 06/28/2007  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 07/26/2006  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 07/25/2005  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Evaluation date: 06/29/2005  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General Facility Standards  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 06/16/2004  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General Facility Standards  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 06/27/2003  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 06/19/2003  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General Facility Standards  
Date achieved compliance: 08/25/2005  
Evaluation lead agency: State

Evaluation date: 06/19/2003  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - Manifest/Records/Reporting  
Date achieved compliance: 08/25/2005  
Evaluation lead agency: State

Evaluation date: 03/25/2002  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 06/18/2001  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: TSD - Tank System Standards  
Date achieved compliance: 06/18/2002  
Evaluation lead agency: State

Evaluation date: 06/18/2001  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: TSD - Container Use and Management  
Date achieved compliance: 06/18/2002  
Evaluation lead agency: State

Evaluation date: 06/18/2001  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: TSD - Manifest/Records/Reporting  
Date achieved compliance: 06/18/2002  
Evaluation lead agency: State

Evaluation date: 06/18/2001  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Transporters - General

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Date achieved compliance: 06/18/2002  
Evaluation lead agency: State

Evaluation date: 06/18/2001  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: TSD - General  
Date achieved compliance: 06/18/2002  
Evaluation lead agency: State

Evaluation date: 04/27/2000  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: EPA-Initiated Oversight/Observation/Training Actions

Evaluation date: 04/24/2000  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: TSD - Tank System Standards  
Date achieved compliance: 01/12/2001  
Evaluation lead agency: State

Evaluation date: 04/24/2000  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: TSD - Manifest/Records/Reporting  
Date achieved compliance: 01/12/2001  
Evaluation lead agency: State

Evaluation date: 04/24/2000  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: TSD - Container Use and Management  
Date achieved compliance: 01/12/2001  
Evaluation lead agency: State

Evaluation date: 04/24/2000  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: TSD - General Facility Standards  
Date achieved compliance: 01/21/2001  
Evaluation lead agency: State

Evaluation date: 04/24/2000  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: TSD - General Facility Standards  
Date achieved compliance: 11/30/2000  
Evaluation lead agency: State

Evaluation date: 04/24/2000  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: LDR - General  
Date achieved compliance: 01/12/2001  
Evaluation lead agency: State

Evaluation date: 04/24/2000  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Generators - Records/Reporting  
Date achieved compliance: 01/21/2001  
Evaluation lead agency: State

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Evaluation date: 04/24/2000  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: TSD - General  
Date achieved compliance: 01/21/2001  
Evaluation lead agency: State

Evaluation date: 04/24/2000  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Generators - Records/Reporting  
Date achieved compliance: 11/30/2000  
Evaluation lead agency: State

Evaluation date: 06/30/1999  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 08/12/1998  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: EPA

Evaluation date: 03/27/1998  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 06/02/1997  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: EPA

Evaluation date: 10/10/1996  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: EPA

Evaluation date: 07/20/1995  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 12/21/1993  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 11/17/1992  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Date achieved compliance: 11/18/1992  
Evaluation lead agency: State

Evaluation date: 11/17/1992  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - General  
Date achieved compliance: 11/18/1992  
Evaluation lead agency: State

Evaluation date: 11/03/1992  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 06/09/1992  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General  
Date achieved compliance: 01/20/1993  
Evaluation lead agency: State

Evaluation date: 06/09/1992  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General  
Date achieved compliance: 09/17/1992  
Evaluation lead agency: State

Evaluation date: 04/15/1992  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 11/20/1991  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 07/02/1991  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General  
Date achieved compliance: 11/18/1992  
Evaluation lead agency: State

Evaluation date: 07/02/1991  
Evaluation: FOCUSED COMPLIANCE INSPECTION  
Area of violation: TSD - General  
Date achieved compliance: 01/17/1995  
Evaluation lead agency: State

Evaluation date: 09/25/1990  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General  
Date achieved compliance: 01/11/1991  
Evaluation lead agency: State

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Evaluation date: 09/17/1990  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 03/21/1990  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 03/13/1990  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 09/28/1989  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General  
Date achieved compliance: 01/28/1991  
Evaluation lead agency: State

Evaluation date: 06/07/1989  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 06/24/1988  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - General  
Date achieved compliance: 01/28/1991  
Evaluation lead agency: State

Evaluation date: 06/24/1988  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - Closure/Post-Closure  
Date achieved compliance: 01/28/1991  
Evaluation lead agency: State

Evaluation date: 06/24/1988  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General  
Date achieved compliance: 01/28/1991  
Evaluation lead agency: State

Evaluation date: 06/02/1988  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 03/07/1988  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 10/21/1987  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: LDR - General  
Date achieved compliance: 01/19/1988  
Evaluation lead agency: EPA

Evaluation date: 10/21/1987  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General  
Date achieved compliance: 01/19/1988  
Evaluation lead agency: EPA

Evaluation date: 12/10/1986  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - Closure/Post-Closure  
Date achieved compliance: 01/28/1991  
Evaluation lead agency: State

Evaluation date: 12/10/1986  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General  
Date achieved compliance: 01/28/1991  
Evaluation lead agency: State

**CORRACTS:**

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 04/01/1992  
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 04/19/1989  
Action: CA250 - CMS Imposition  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 04/19/1989  
Action: CA100 - RFI Imposition  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 04/20/1989  
Action: CA150 - RFI Workplan Approved  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal

Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 04/20/1989  
Action: CA300 - CMS Workplan Approved  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal

Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 04/20/1991  
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal

Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 05/01/1989  
Action: CA050RF - RFA Completed, Assessment was an RFA  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal

Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 07/01/1984  
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal

Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Area Name: ENTIRE FACILITY  
Actual Date: 07/01/1986  
Action: CA600SR - Stabilization Measures Implemented, Primary measure is source removal and/or treatment  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 07/01/1986  
Action: CA600GW - Stabilization Measures Implemented, Groundwater extraction and treatment  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 08/08/1994  
Action: CA225NR - Stabilization Measures Evaluation, This facility is, not amenable to stabilization activity at the, present time for reasons other than (1) it appears to be technically, infeasible or inappropriate (NF) or (2) there is a lack of technical, information (IN). Reasons for this conclusion may be the status of, closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other, administrative considerations  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 08/08/1994  
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 08/15/1990  
Action: CA500 - CMI Workplan Approved  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 08/15/1990  
Action: CA400 - Date For Remedy Selection (CM Imposed)  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 08/15/1990  
Action: CA200 - RFI Approved  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 08/15/1990  
Action: CA350 - CMS Approved  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 08/15/1990  
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes,  
Migration of Contaminated Groundwater Under Control has been verified  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 09/16/2004  
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes,  
Migration of Contaminated Groundwater Under Control has been verified  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 09/22/1997  
Action: CA210 - CA Responsibility Referred To A Non-RCRA Federal Authority

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 11/30/1990  
Action: CA550 - Certification Of Remedy Completion Or Construction Completion  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 12/28/2000  
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 12/28/2000  
Action: CA750IN - Migration of Contaminated Groundwater under Control, More information is needed to make a determination  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD059494310  
EPA Region: 9  
Area Name: ENTIRE FACILITY  
Actual Date: 12/31/1989  
Action: CA650 - Stabilization Construction Completed  
NAICS Code(s): 562211  
Hazardous Waste Treatment and Disposal  
Original schedule date: Not reported  
Schedule end date: Not reported

CERC-NFRAP:  
Site ID: 0901471  
Federal Facility: Not a Federal Facility  
NPL Status: Removed from Proposed NPL  
Non NPL Status: NFRAP

CERCLIS-NFRAP Site Contact Name(s):  
Contact Title: Not reported  
Contact Name: Carl Brickner

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Contact Tel: (415) 972-3814

Contact Title: Not reported  
Contact Name: Brunilda Davila  
Contact Tel: (415) 972-3162

Contact Title: Not reported  
Contact Name: Jeff Inglis  
Contact Tel: (415) 972-3095

Contact Title: Not reported  
Contact Name: Karen Jurist  
Contact Tel: (415) 972-3219

Contact Title: Not reported  
Contact Name: Matt Mitguard  
Contact Tel: (415) 972-3096

CERCLIS-NFRAP Site Alias Name(s):

Alias Name: BERRYESSA RD, SAN JOSE  
Alias Address: Not reported  
CA

Alias Name: SSI  
Alias Address: Not reported  
CA

Alias Name: SOLVENT SERVICE, INC.  
Alias Address: 1021 BERRYESSA RD  
SAN JOSE, CA 95133

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY  
Date Started: Not reported  
Date Completed: 07/01/1984  
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT  
Date Started: Not reported  
Date Completed: 07/01/1984  
Priority Level: Low priority for further assessment

Action: HRS PACKAGE  
Date Started: Not reported  
Date Completed: 08/01/1985  
Priority Level: Not reported

Action: SITE INSPECTION  
Date Started: Not reported  
Date Completed: 08/01/1985  
Priority Level: Higher priority for further assessment

Action: PROPOSAL TO NPL  
Date Started: Not reported  
Date Completed: 06/24/1988  
Priority Level: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Action:	STATE ORDER
Date Started:	Not reported
Date Completed:	04/19/1989
Priority Level:	Not reported
Action:	REMOVAL ASSESSMENT
Date Started:	08/03/1989
Date Completed:	08/03/1989
Priority Level:	Not reported
Action:	STATE SUPPORT AGENCY COOP AGREEMENT
Date Started:	09/15/1989
Date Completed:	Not reported
Priority Level:	Not reported
Action:	CF
Date Started:	Not reported
Date Completed:	06/20/1990
Priority Level:	Not reported
Action:	REMOVAL ASSESSMENT
Date Started:	08/14/1990
Date Completed:	08/14/1990
Priority Level:	Not reported
Action:	STATE ORDER
Date Started:	Not reported
Date Completed:	08/15/1990
Priority Level:	Not reported
Action:	REMOVED FROM THE PROPOSED NPL
Date Started:	Not reported
Date Completed:	08/30/1990
Priority Level:	Not reported
Action:	RECORD OF DECISION
Date Started:	Not reported
Date Completed:	09/27/1990
Priority Level:	Final Remedy Selected at Site
Action:	PRP RI/FS
Date Started:	04/20/1989
Date Completed:	09/27/1990
Priority Level:	Not reported
Action:	ADMINISTRATIVE RECORDS
Date Started:	10/22/1990
Date Completed:	Not reported
Priority Level:	Admin Record Compiled for a Remedial Event
Action:	ADMIN ORDER ON CONSENT
Date Started:	Not reported
Date Completed:	09/28/1992
Priority Level:	Not reported
Action:	PREPARATION OF COST DOCM PKGE
Date Started:	03/01/1995

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Date Completed: 06/29/1995  
Priority Level: Not reported

Action: DL  
Date Started: Not reported  
Date Completed: 09/28/1995  
Priority Level: Not reported

Action: ARCHIVE SITE  
Date Started: Not reported  
Date Completed: 06/12/2003  
Priority Level: Not reported

Action: PRP RD  
Date Started: Not reported  
Date Completed: Not reported  
Priority Level: Not reported

Action: GE  
Date Started: Not reported  
Date Completed: Not reported  
Priority Level: Not reported

Action: PREPARATION OF COST DOCM PKGE  
Date Started: Not reported  
Date Completed: Not reported  
Priority Level: Not reported

**SAN JOSE HAZMAT:**

Region: SAN JOSE  
File Num: 402285  
Class: Chemical Warehouse

**ROD:**

Full-text of USEPA Record of Decision(s) is available from EDR.

**HIST UST:**

Region: STATE  
Facility ID: 00000022083  
Facility Type: Other  
Other Type: T.S.D.F.  
Total Tanks: 0003  
Contact Name: E.A. MAIONCHI  
Telephone: 4082866446  
Owner Name: SOLVENT SERVICE  
Owner Address: 1021 BERRYESSA ROAD  
Owner City,St,Zip: SAN JOSE, CA 95133

Tank Num: 001  
Container Num: 1  
Year Installed: 1983  
Tank Capacity: 00006000  
Tank Used for: WASTE  
Type of Fuel: Not reported  
Tank Construction: 1/4" unknown  
Leak Detection: Groundwater Monitoring Well

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Tank Num: 002  
Container Num: 2  
Year Installed: 1983  
Tank Capacity: 00006000  
Tank Used for: WASTE  
Type of Fuel: Not reported  
Tank Construction: 1/4" unknown  
Leak Detection: Groundwater Monitoring Well

Tank Num: 003  
Container Num: 3  
Year Installed: 1983  
Tank Capacity: 00006000  
Tank Used for: WASTE  
Type of Fuel: Not reported  
Tank Construction: 1/4" inches  
Leak Detection: Groundwater Monitoring Well

**US ENG CONTROLS:**

EPA ID: CAD059494310  
Site ID: 0901471  
Name: SOLVENT SERVICE, INC.  
Address: 1021 BERRYESSA RD  
SAN JOSE, CA 95133

EPA Region: 09  
County: SANTA CLARA  
Event Code: Not reported  
Actual Date: Not reported

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 9/27/1990  
Planned Complet. date: 9/30/1990  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Air Stripping

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 9/27/1990  
Planned Complet. date: 9/30/1990  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Bioremediation Treatment, (N.O.S.)

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 9/27/1990  
Planned Complet. date: 9/30/1990  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Flocculation

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 9/27/1990  
Planned Complet. date: 9/30/1990

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Liquid Phase Carbon Adsorption

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 9/27/1990  
Planned Complet. date: 9/30/1990  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Monitoring

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 9/27/1990  
Planned Complet. date: 9/30/1990  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Operations & Maintenance (O&M)

**US INST CONTROL:**

EPA ID: CAD059494310  
Site ID: 0901471  
Name: SOLVENT SERVICE, INC.  
Action Name: RECORD OF DECISION  
Address: 1021 BERRYESSA RD  
SAN JOSE, CA 95133  
EPA Region: 09  
County: SANTA CLARA  
Event Code: Not reported  
Inst. Control: Institutional Controls, (N.O.S.)  
Actual Date: Not reported  
Comple. Date: 9/27/1990  
Operable Unit: 01  
Contaminated Media : Groundwater

**ENVIROSTOR:**

Site Type: Corrective Action  
Site Type Detailed: Corrective Action  
Acres: 0  
NPL: NO  
Regulatory Agencies: RWQCB  
Lead Agency: WQC  
Program Manager: Not reported  
Supervisor: \* Unknown  
Division Branch: Berkeley  
Facility ID: 80001434  
Site Code: 200197  
Assembly: 24  
Senate: 10  
Special Program: Not reported  
Status: Refer: RWQCB  
Status Date: 2008-01-01 00:00:00  
Restricted Use: NO  
Funding: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Latitude: 37.36409  
Longitude: -121.88558  
Alias Name: 43290007  
Alias Type: Envirostor ID Number  
Alias Name: Solvent Services San Jose  
Alias Type: Alternate Name  
Alias Name: Safety Kleen San Jose  
Alias Type: Alternate Name  
Alias Name: SOLVENT SERVICES INC.  
Alias Type: Alternate Name  
Alias Name: 80001434  
Alias Type: Envirostor ID Number  
Alias Name: 200197  
Alias Type: Project Code (Site Code)  
Alias Name: CAD059494310  
Alias Type: EPA Identification Number

APN: NONE SPECIFIED  
APN Description: Not reported

Completed Info:  
Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* State Analogous  
Completed Date: 1990-08-15 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* State Analogous  
Completed Date: 1989-04-19 00:00:00

Confirmed: NONE SPECIFIED  
Confirmed Description: Not reported  
Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Media Affected: NONE SPECIFIED  
Media Affected Desc: Not reported

Management:  
Management Required: NONE SPECIFIED  
Management Required Desc: Not reported  
Potential: NONE SPECIFIED  
Potential Description: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported  
PastUse: NONE SPECIFIED

NY MANIFEST:  
EPA ID: CAD059494310  
Country: USA  
Mailing Name: LAIDLAW ENV SVCS (SAFETY KLEEN)  
Mailing Contact: S VEDANTHAM  
Mailing Address: 1021 BERRYESSA RD

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Mailing Address 2: Not reported  
Mailing City: SAN JOSE  
Mailing State: CA  
Mailing Zip: 95133  
Mailing Zip4: 1004  
Mailing Country: USA  
Mailing Phone: 408-451-5000

Document ID: NYB1570824  
Manifest Status: Not reported  
Trans1 State ID: NYD982792814  
Trans2 State ID: Not reported  
Generator Ship Date: 10/29/1998  
Trans1 Recv Date: 10/29/1998  
Trans2 Recv Date: Not reported  
TSD Site Recv Date: 11/09/1998  
Part A Recv Date: Not reported  
Part B Recv Date: Not reported  
Generator EPA ID: CAD059494310  
Trans1 EPA ID: NYD000632372  
Trans2 EPA ID: Not reported  
TSD ID: 71071NNY  
Waste Code: D001 - NON-LISTED IGNITABLE WASTES  
Quantity: 00050  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DM - Metal drums, barrels  
Handling Method: B Incineration, heat recovery, burning.  
Specific Gravity: 01.00  
Waste Code: D001 - NON-LISTED IGNITABLE WASTES  
Quantity: 00010  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DF - Fiberboard or plastic drums (glass)  
Handling Method: B Incineration, heat recovery, burning.  
Specific Gravity: 01.00  
Waste Code: D001 - NON-LISTED IGNITABLE WASTES  
Quantity: 00050  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DM - Metal drums, barrels  
Handling Method: B Incineration, heat recovery, burning.  
Specific Gravity: 01.00  
Waste Code: D001 - NON-LISTED IGNITABLE WASTES  
Quantity: 00010  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DM - Metal drums, barrels  
Handling Method: B Incineration, heat recovery, burning.  
Specific Gravity: 01.00  
Year: 98  
Manifest Tracking Num: Not reported  
Import Ind: Not reported  
Export Ind: Not reported  
Discr Quantity Ind: Not reported  
Discr Type Ind: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Discr Residue Ind: Not reported  
Discr Partial Reject Ind: Not reported  
Discr Full Reject Ind: Not reported  
Manifest Ref Num: Not reported  
Alt Fac RCRA Id: Not reported  
Alt Fac Sign Date: Not reported  
Mgmt Method Type Code: Not reported

Document ID: NYB1570833  
Manifest Status: Not reported  
Trans1 State ID: SCD987574647  
Trans2 State ID: Not reported  
Generator Ship Date: 10/29/1998  
Trans1 Recv Date: 10/29/1998  
Trans2 Recv Date: Not reported  
TSD Site Recv Date: 11/09/1998  
Part A Recv Date: Not reported  
Part B Recv Date: Not reported  
Generator EPA ID: CAD059494310  
Trans1 EPA ID: NYD000632372  
Trans2 EPA ID: Not reported  
TSD ID: 71071NNY  
Waste Code: D001 - NON-LISTED IGNITABLE WASTES  
Quantity: 00005  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DF - Fiberboard or plastic drums (glass)  
Handling Method: B Incineration, heat recovery, burning.  
Specific Gravity: 01.00  
Waste Code: D001 - NON-LISTED IGNITABLE WASTES  
Quantity: 00005  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DF - Fiberboard or plastic drums (glass)  
Handling Method: B Incineration, heat recovery, burning.  
Specific Gravity: 01.00  
Waste Code: D001 - NON-LISTED IGNITABLE WASTES  
Quantity: 00020  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DM - Metal drums, barrels  
Handling Method: T Chemical, physical, or biological treatment.  
Specific Gravity: 01.00  
Year: 98  
Manifest Tracking Num: Not reported  
Import Ind: Not reported  
Export Ind: Not reported  
Discr Quantity Ind: Not reported  
Discr Type Ind: Not reported  
Discr Residue Ind: Not reported  
Discr Partial Reject Ind: Not reported  
Discr Full Reject Ind: Not reported  
Manifest Ref Num: Not reported  
Alt Fac RCRA Id: Not reported  
Alt Fac Sign Date: Not reported  
Mgmt Method Type Code: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Document ID: NYB8462925  
Manifest Status: Not reported  
Trans1 State ID: NYD982792814  
Trans2 State ID: Not reported  
Generator Ship Date: 04/23/1998  
Trans1 Recv Date: 04/23/1998  
Trans2 Recv Date: Not reported  
TSD Site Recv Date: 05/06/1998  
Part A Recv Date: Not reported  
Part B Recv Date: Not reported  
Generator EPA ID: CAD059494310  
Trans1 EPA ID: NYD000632372  
Trans2 EPA ID: Not reported  
TSD ID: 71071NNY  
Waste Code: D001 - NON-LISTED IGNITABLE WASTES  
Quantity: 00003  
Units: P - Pounds  
Number of Containers: 001  
Container Type: CF - Fiber or plastic boxes, cartons  
Handling Method: T Chemical, physical, or biological treatment.  
Specific Gravity: 01.00  
Year: 98  
Manifest Tracking Num: Not reported  
Import Ind: Not reported  
Export Ind: Not reported  
Discr Quantity Ind: Not reported  
Discr Type Ind: Not reported  
Discr Residue Ind: Not reported  
Discr Partial Reject Ind: Not reported  
Discr Full Reject Ind: Not reported  
Manifest Ref Num: Not reported  
Alt Fac RCRA Id: Not reported  
Alt Fac Sign Date: Not reported  
Mgmt Method Type Code: Not reported

Document ID: NYG1564677  
Manifest Status: Not reported  
Trans1 State ID: NYD982792814  
Trans2 State ID: Not reported  
Generator Ship Date: 03/22/2002  
Trans1 Recv Date: 03/22/2002  
Trans2 Recv Date: Not reported  
TSD Site Recv Date: 04/01/2002  
Part A Recv Date: Not reported  
Part B Recv Date: Not reported  
Generator EPA ID: CAD059494310  
Trans1 EPA ID: NYD000632372  
Trans2 EPA ID: Not reported  
TSD ID: AB62851NY  
Waste Code: D001 - NON-LISTED IGNITABLE WASTES  
Quantity: 00100  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DM - Metal drums, barrels  
Handling Method: B Incineration, heat recovery, burning.  
Specific Gravity: 01.00

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Year: 02  
Manifest Tracking Num: Not reported  
Import Ind: Not reported  
Export Ind: Not reported  
Discr Quantity Ind: Not reported  
Discr Type Ind: Not reported  
Discr Residue Ind: Not reported  
Discr Partial Reject Ind: Not reported  
Discr Full Reject Ind: Not reported  
Manifest Ref Num: Not reported  
Alt Fac RCRA Id: Not reported  
Alt Fac Sign Date: Not reported  
Mgmt Method Type Code: Not reported

Document ID: NYB5862411  
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC  
Trans1 State ID: 11341PNY  
Trans2 State ID: Not reported  
Generator Ship Date: 940323  
Trans1 Recv Date: 940323  
Trans2 Recv Date: Not reported  
TSD Site Recv Date: 940404  
Part A Recv Date: Not reported  
Part B Recv Date: 940418  
Generator EPA ID: CAD059494310  
Trans1 EPA ID: NYD980769947  
Trans2 EPA ID: Not reported  
TSDf ID: NYD000632372  
Waste Code: D001 - NON-LISTED IGNITABLE WASTES  
Quantity: 00188  
Units: P - Pounds  
Number of Containers: 002  
Container Type: DM - Metal drums, barrels  
Handling Method: T Chemical, physical, or biological treatment.  
Specific Gravity: 100  
Year: 94  
Manifest Tracking Num: Not reported  
Import Ind: Not reported  
Export Ind: Not reported  
Discr Quantity Ind: Not reported  
Discr Type Ind: Not reported  
Discr Residue Ind: Not reported  
Discr Partial Reject Ind: Not reported  
Discr Full Reject Ind: Not reported  
Manifest Ref Num: Not reported  
Alt Fac RCRA Id: Not reported  
Alt Fac Sign Date: Not reported  
Mgmt Method Type Code: Not reported

Document ID: NYB8463699  
Manifest Status: Completed after the designated time period for a TSDf to get a copy to the DEC  
Trans1 State ID: 11340PNY  
Trans2 State ID: Not reported  
Generator Ship Date: 970303  
Trans1 Recv Date: 970303

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Trans2 Recv Date: Not reported  
TSD Site Recv Date: 970321  
Part A Recv Date: Not reported  
Part B Recv Date: 970402  
Generator EPA ID: CAD059494310  
Trans1 EPA ID: NYD980769947  
Trans2 EPA ID: Not reported  
TSD ID: NYD000632372  
Waste Code: D002 - NON-LISTED CORROSIVE WASTES  
Quantity: 00155  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DF - Fiberboard or plastic drums (glass)  
Handling Method: R Material recovery of more than 75 percent of the total material.  
Specific Gravity: 100  
Waste Code: Not reported  
Quantity: 00478  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DM - Metal drums, barrels  
Handling Method: R Material recovery of more than 75 percent of the total material.  
Specific Gravity: 100  
Year: 97  
Manifest Tracking Num: Not reported  
Import Ind: Not reported  
Export Ind: Not reported  
Discr Quantity Ind: Not reported  
Discr Type Ind: Not reported  
Discr Residue Ind: Not reported  
Discr Partial Reject Ind: Not reported  
Discr Full Reject Ind: Not reported  
Manifest Ref Num: Not reported  
Alt Fac RCRA Id: Not reported  
Alt Fac Sign Date: Not reported  
Mgmt Method Type Code: Not reported

Document ID: NYA4067234  
Manifest Status: Completed copy  
Trans1 State ID: 706346  
Trans2 State ID: Not reported  
Generator Ship Date: 870113  
Trans1 Recv Date: 870113  
Trans2 Recv Date: 870115  
TSD Site Recv Date: 870128  
Part A Recv Date: 870204  
Part B Recv Date: 870204  
Generator EPA ID: CAD059494310  
Trans1 EPA ID: NYD980769947  
Trans2 EPA ID: Not reported  
TSD ID: NYD000632372  
Waste Code: D002 - NON-LISTED CORROSIVE WASTES  
Quantity: 00005  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DM - Metal drums, barrels  
Handling Method: T Chemical, physical, or biological treatment.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Specific Gravity:	100
Waste Code:	Not reported
Quantity:	00010
Units:	P - Pounds
Number of Containers:	002
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Waste Code:	Not reported
Quantity:	00006
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Waste Code:	Not reported
Quantity:	00002
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Waste Code:	Not reported
Quantity:	00005
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Waste Code:	D002 - NON-LISTED CORROSIVE WASTES
Quantity:	00002
Units:	P - Pounds
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	T Chemical, physical, or biological treatment.
Specific Gravity:	100
Year:	87
Manifest Tracking Num:	Not reported
Import Ind:	Not reported
Export Ind:	Not reported
Discr Quantity Ind:	Not reported
Discr Type Ind:	Not reported
Discr Residue Ind:	Not reported
Discr Partial Reject Ind:	Not reported
Discr Full Reject Ind:	Not reported
Manifest Ref Num:	Not reported
Alt Fac RCRA Id:	Not reported
Alt Fac Sign Date:	Not reported
Mgmt Method Type Code:	Not reported
Document ID:	NYA4067234
Manifest Status:	Completed copy
Trans1 State ID:	706346
Trans2 State ID:	Not reported
Generator Ship Date:	870113
Trans1 Recv Date:	870113

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Trans2 Recv Date: 870115  
TSD Site Recv Date: 870128  
Part A Recv Date: 870204  
Part B Recv Date: 870204  
Generator EPA ID: CAD059494310  
Trans1 EPA ID: NYD980769947  
Trans2 EPA ID: Not reported  
TSD ID: NYD000632372  
Waste Code: D001 - NON-LISTED IGNITABLE WASTES  
Quantity: 00010  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DM - Metal drums, barrels  
Handling Method: T Chemical, physical, or biological treatment.  
Specific Gravity: 100  
Waste Code: Not reported  
Quantity: 00002  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DM - Metal drums, barrels  
Handling Method: T Chemical, physical, or biological treatment.  
Specific Gravity: 100  
Waste Code: Not reported  
Quantity: 00002  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DM - Metal drums, barrels  
Handling Method: T Chemical, physical, or biological treatment.  
Specific Gravity: 100  
Waste Code: Not reported  
Quantity: 00005  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DM - Metal drums, barrels  
Handling Method: T Chemical, physical, or biological treatment.  
Specific Gravity: 100  
Waste Code: Not reported  
Quantity: 00002  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DM - Metal drums, barrels  
Handling Method: T Chemical, physical, or biological treatment.  
Specific Gravity: 100  
Waste Code: D001 - NON-LISTED IGNITABLE WASTES  
Quantity: 00010  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DM - Metal drums, barrels  
Handling Method: T Chemical, physical, or biological treatment.  
Specific Gravity: 100  
Year: 87  
Manifest Tracking Num: Not reported  
Import Ind: Not reported  
Export Ind: Not reported  
Discr Quantity Ind: Not reported  
Discr Type Ind: Not reported  
Discr Residue Ind: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Discr Partial Reject Ind: Not reported  
Discr Full Reject Ind: Not reported  
Manifest Ref Num: Not reported  
Alt Fac RCRA Id: Not reported  
Alt Fac Sign Date: Not reported  
Mgmt Method Type Code: Not reported

Document ID: NYA4067234  
Manifest Status: Completed copy  
Trans1 State ID: 706346  
Trans2 State ID: Not reported  
Generator Ship Date: 870113  
Trans1 Recv Date: 870113  
Trans2 Recv Date: 870115  
TSD Site Recv Date: 870128  
Part A Recv Date: 870204  
Part B Recv Date: 870204  
Generator EPA ID: CAD059494310  
Trans1 EPA ID: NYD980769947  
Trans2 EPA ID: Not reported  
TSDF ID: NYD000632372  
Waste Code: D001 - NON-LISTED IGNITABLE WASTES  
Quantity: 00002  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DM - Metal drums, barrels  
Handling Method: T Chemical, physical, or biological treatment.  
Specific Gravity: 100  
Waste Code: Not reported  
Quantity: 00002  
Units: P - Pounds  
Number of Containers: 001  
Container Type: DM - Metal drums, barrels  
Handling Method: T Chemical, physical, or biological treatment.  
Specific Gravity: 100  
Year: 87  
Manifest Tracking Num: Not reported  
Import Ind: Not reported  
Export Ind: Not reported  
Discr Quantity Ind: Not reported  
Discr Type Ind: Not reported  
Discr Residue Ind: Not reported  
Discr Partial Reject Ind: Not reported  
Discr Full Reject Ind: Not reported  
Manifest Ref Num: Not reported  
Alt Fac RCRA Id: Not reported  
Alt Fac Sign Date: Not reported  
Mgmt Method Type Code: Not reported

**WI MANIFEST:**

Year: 04  
EPA ID: CAD059494310  
FID: 0  
ACT Code: 201  
ACT Status: A  
ACT Code 1: 201

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

ACT Name: HW Generator - Large  
Contact First Name: Not reported  
Contact Last Name: Not reported  
Contact Title: Not reported  
Contact Address: Not reported  
Contact State: Not reported  
Contact City: Not reported  
Contact Zip: Not reported  
Contact Telephone: Not reported  
Contact Extention: Not reported  
Contact Email Address: Not reported  
WI MANIFEST SHIP: -  
Manifest DOC ID: 002324756FLE  
Copy Type: TSDCOPY  
Gen EPA ID: CAD059494310  
Gen Date: 11/25/2008  
TSD Date: 01/15/2009  
TSD EPA ID: WIR000000356  
GEN Copy Revd Date: Not reported  
TSG Copy Revd Date: 3/11/2009  
Manifest DOC ID: 002324756FLE  
Waste Page No: 1  
Waste Line No: 1  
Waste Code: D009  
Waste Amount: 240  
Unit of Measure: P  
Waste LBS: 240

WI MANIFEST TRANS: -  
Mifest DOC ID: Not reported  
TRAN EPA ID: Not reported  
TRAN ORDER NO: Not reported  
TRAN Date: Not reported

Manifest DOC ID: Not reported  
Waste Page No: Not reported  
Waste Line No: Not reported  
Waste Code: Not reported  
Waste Amount: Not reported  
Unit of Measure: Not reported  
Waste LBS: Not reported

Year: 05  
EPA ID: CAD059494310  
FID: 0  
ACT Code: 201  
ACT Status: A  
ACT Code 1: 201  
ACT Name: HW Generator - Large  
Contact First Name: Not reported  
Contact Last Name: Not reported  
Contact Title: Not reported  
Contact Address: Not reported  
Contact State: Not reported  
Contact City: Not reported  
Contact Zip: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Contact Telephone: 0  
Contact Extention: Not reported  
Contact Email Address: Not reported  
WI MANIFEST SHIP: -  
Manifest DOC ID: 002324756FLE  
Copy Type: TSDCOPY  
Gen EPA ID: CAD059494310  
Gen Date: 11/25/2008  
TSD Date: 01/15/2009  
TSD EPA ID: WIR000000356  
GEN Copy Revd Date: Not reported  
TSG Copy Revd Date: 3/11/2009  
Manifest DOC ID: 002324756FLE  
Waste Page No: 1  
Waste Line No: 1  
Waste Code: D009  
Waste Amount: 240  
Unit of Measure: P  
Waste LBS: 240

WI MANIFEST TRANS: -  
Mifest DOC ID: Not reported  
TRAN EPA ID: Not reported  
TRAN ORDER NO: Not reported  
TRAN Date: Not reported

Manifest DOC ID: Not reported  
Waste Page No: Not reported  
Waste Line No: Not reported  
Waste Code: Not reported  
Waste Amount: Not reported  
Unit of Measure: Not reported  
Waste LBS: Not reported

Year: 06  
EPA ID: CAD059494310  
FID: 0  
ACT Code: 201  
ACT Status: A  
ACT Code 1: 201  
ACT Name: HW Generator - Large  
Contact First Name: Not reported  
Contact Last Name: Not reported  
Contact Title: Not reported  
Contact Address: Not reported  
Contact State: Not reported  
Contact City: Not reported  
Contact Zip: Not reported  
Contact Telephone: Not reported  
Contact Extention: Not reported  
Contact Email Address: Not reported  
WI MANIFEST SHIP: -  
Manifest DOC ID: 002324756FLE  
Copy Type: TSDCOPY  
Gen EPA ID: CAD059494310  
Gen Date: 11/25/2008

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

TSD Date: 01/15/2009  
TSD EPA ID: WIR000000356  
GEN Copy Revd Date: Not reported  
TSG Copy Revd Date: 3/11/2009  
Manifest DOC ID: 002324756FLE  
Waste Page No: 1  
Waste Line No: 1  
Waste Code: D009  
Waste Amount: 240  
Unit of Measure: P  
Waste LBS: 240

WI MANIFEST TRANS: -

Mifest DOC ID: Not reported  
TRAN EPA ID: Not reported  
TRAN ORDER NO: Not reported  
TRAN Date: Not reported

Manifest DOC ID: Not reported  
Waste Page No: Not reported  
Waste Line No: Not reported  
Waste Code: Not reported  
Waste Amount: Not reported  
Unit of Measure: Not reported  
Waste LBS: Not reported

Year: 07  
EPA ID: CAD059494310  
FID: 0  
ACT Code: 201  
ACT Status: A  
ACT Code 1: 201  
ACT Name: HW Generator - Large  
Contact First Name: Not reported  
Contact Last Name: Not reported  
Contact Title: Not reported  
Contact Address: Not reported  
Contact State: Not reported  
Contact City: Not reported  
Contact Zip: 0  
Contact Telephone: 0  
Contact Extention: Not reported  
Contact Email Address: Not reported

WI MANIFEST SHIP: -

Manifest DOC ID: 002324756FLE  
Copy Type: TSDCOPY  
Gen EPA ID: CAD059494310  
Gen Date: 11/25/2008  
TSD Date: 01/15/2009  
TSD EPA ID: WIR000000356  
GEN Copy Revd Date: Not reported  
TSG Copy Revd Date: 3/11/2009  
Manifest DOC ID: 002324756FLE  
Waste Page No: 1  
Waste Line No: 1  
Waste Code: D009

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

Waste Amount: 240  
Unit of Measure: P  
Waste LBS: 240

WI MANIFEST TRANS: -  
Mifest DOC ID: Not reported  
TRAN EPA ID: Not reported  
TRAN ORDER NO: Not reported  
TRAN Date: Not reported

Manifest DOC ID: Not reported  
Waste Page No: Not reported  
Waste Line No: Not reported  
Waste Code: Not reported  
Waste Amount: Not reported  
Unit of Measure: Not reported  
Waste LBS: Not reported

Year: 08  
EPA ID: CAD059494310  
FID: Not reported  
ACT Code: 201  
ACT Status: A  
ACT Code 1: 201  
ACT Name: HW Generator - Large  
Contact First Name: Not reported  
Contact Last Name: Not reported  
Contact Title: Not reported  
Contact Address: Not reported  
Contact State: Not reported  
Contact City: Not reported  
Contact Zip: Not reported  
Contact Telephone: Not reported  
Contact Extention: Not reported  
Contact Email Address: Not reported

WI MANIFEST SHIP: -  
Manifest DOC ID: 002324756FLE  
Copy Type: TSDCOPY  
Gen EPA ID: CAD059494310  
Gen Date: 11/25/2008  
TSD Date: 01/15/2009  
TSD EPA ID: WIR000000356  
GEN Copy Revd Date: Not reported  
TSG Copy Revd Date: 3/11/2009  
Manifest DOC ID: 002324756FLE  
Waste Page No: 1  
Waste Line No: 1  
Waste Code: D009  
Waste Amount: 240  
Unit of Measure: P  
Waste LBS: 240

WI MANIFEST TRANS: -  
Mifest DOC ID: Not reported  
TRAN EPA ID: Not reported  
TRAN ORDER NO: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CLEAN HARBORS SAN JOSE LLC (Continued)**

**1000430269**

TRAN Date: Not reported  
Manifest DOC ID: Not reported  
Waste Page No: Not reported  
Waste Line No: Not reported  
Waste Code: Not reported  
Waste Amount: Not reported  
Unit of Measure: Not reported  
Waste LBS: Not reported

**470  
NE  
1/2-1  
0.960 mi.  
5071 ft.**

**BROKAW ROAD SITE  
1040, 1060, / 1080 EAST BROKAW ROAD  
SAN JOSE, CA 95131**

**VCP S108054485  
ENVIROSTOR N/A**

**Relative:  
Higher**

VCP:

**Actual:  
58 ft.**

Facility ID: 60000336  
Site Type: Voluntary Cleanup  
Site Type Detail: Voluntary Cleanup  
Acres: 12  
National Priorities List: NO  
Cleanup Oversight Agencies: SMBRP  
Lead Agency: SMBRP  
Lead Agency Description: DTSC - Site Mitigation And Brownfield Reuse Program  
Project Manager: XAVIER BRYANT  
Supervisor: Mark Piros  
Division Branch: Berkeley  
Site Code: 201663  
Assembly: 22  
Senate: 10  
Special Programs Code: Voluntary Cleanup Program  
Status: Active  
Status Date: 2006-06-01 00:00:00  
Restricted Use: NO  
Funding: Responsible Party  
Lat/Long: 37.3817019308285 / -121.89677470158  
Alias Name: 110033619305  
Alias Type: EPA (FRS #)  
Alias Name: 201663  
Alias Type: Project Code (Site Code)  
Alias Name: Markovits and Fox 2  
Alias Type: Alternate Name  
Alias Name: 237-03-069  
Alias Type: APN  
Alias Name: 60000336  
Alias Type: Envirostor ID Number  
Alias Name: Markovits and Fox Brokaw Road Site  
Alias Type: Alternate Name  
Alias Name: 237-03-061  
Alias Type: APN  
APN: 237-03-061, 237-03-069  
APN Description: Not reported  
APN Description: Not reported

Completed Info:

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BROKAW ROAD SITE (Continued)**

**S108054485**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Design/Implementation Workplan  
Completed Date: 2009-07-23 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Public Notice  
Completed Date: 2009-07-21 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Voluntary Cleanup Agreement  
Completed Date: 2007-03-15 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Notice of Exemption  
Completed Date: 2008-04-24 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Workplan  
Completed Date: 2008-04-24 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Newsletter  
Completed Date: 2007-04-12 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 2008-03-13 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Investigation Report  
Completed Date: 2008-02-01 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fieldwork  
Completed Date: 2008-05-06 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Investigation Report  
Completed Date: 2008-02-01 00:00:00

Confirmed: 30018,30001,30008,30013  
Confirmed Description: Polychlorinated biphenyls (PCBs)  
Confirmed Description: Arsenic  
Confirmed Description: DDT  
Confirmed Description: Lead  
Future Area Name: PROJECT WIDE  
Future Sub Area Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BROKAW ROAD SITE (Continued)**

**S108054485**

Future Document Type: Remedial Action Completion Report  
Future Due Date: 2010  
Future Area Name: PROJECT WIDE  
Future Sub Area Name: Not reported  
Future Document Type: Operations and Maintenance Plan  
Future Due Date: 2010  
Future Area Name: PROJECT WIDE  
Future Sub Area Name: Not reported  
Future Document Type: Land Use Restriction  
Future Due Date: 2011  
Future Area Name: PROJECT WIDE  
Future Sub Area Name: Not reported  
Future Document Type: Certification  
Future Due Date: 2010  
Media Affected: 30001, 30008, 30013, 30018  
Media Affected Desc: Not reported  
Media Affected Desc: Not reported  
Media Affected Desc: Not reported  
Media Affected Desc: Not reported

Management:

Management Required: NONE SPECIFIED  
Management Required Desc: Not reported  
Potential: SOIL  
Potential Description: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported  
PastUse: AGRICULTURAL - ORCHARD, RECYCLING - SCRAP METAL

ENVIROSTOR:

Site Type: Voluntary Cleanup  
Site Type Detailed: Voluntary Cleanup  
Acres: 12  
NPL: NO  
Regulatory Agencies: SMBRP  
Lead Agency: SMBRP  
Program Manager: XAVIER BRYANT  
Supervisor: Mark Piros  
Division Branch: Berkeley  
Facility ID: 60000336  
Site Code: 201663  
Assembly: 22  
Senate: 10  
Special Program: Voluntary Cleanup Program  
Status: Active  
Status Date: 2006-06-01 00:00:00  
Restricted Use: NO  
Funding: Responsible Party  
Latitude: 37.3817019308285  
Longitude: -121.89677470158  
Alias Name: 110033619305  
Alias Type: EPA (FRS #)  
Alias Name: 201663  
Alias Type: Project Code (Site Code)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BROKAW ROAD SITE (Continued)**

**S108054485**

Alias Name: Markovits and Fox 2  
Alias Type: Alternate Name  
Alias Name: 237-03-069  
Alias Type: APN  
Alias Name: 60000336  
Alias Type: Envirostor ID Number  
Alias Name: Markovits and Fox Brokaw Road Site  
Alias Type: Alternate Name  
Alias Name: 237-03-061  
Alias Type: APN

APN: 237-03-061, 237-03-069  
APN Description: Not reported  
APN Description: Not reported

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Design/Implementation Workplan  
Completed Date: 2009-07-23 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Public Notice  
Completed Date: 2009-07-21 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Voluntary Cleanup Agreement  
Completed Date: 2007-03-15 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Notice of Exemption  
Completed Date: 2008-04-24 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Workplan  
Completed Date: 2008-04-24 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Newsletter  
Completed Date: 2007-04-12 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 2008-03-13 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Investigation Report  
Completed Date: 2008-02-01 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BROKAW ROAD SITE (Continued)**

**S108054485**

Completed Document Type: Fieldwork  
Completed Date: 2008-05-06 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Investigation Report  
Completed Date: 2008-02-01 00:00:00

Confirmed: 30018,30001,30008,30013  
Confirmed Description: Polychlorinated biphenyls (PCBs)  
Confirmed Description: Arsenic  
Confirmed Description: DDT  
Confirmed Description: Lead  
Future Area Name: PROJECT WIDE  
Future Sub Area Name: Not reported  
Future Document Type: Remedial Action Completion Report  
Future Due Date: 2010  
Future Area Name: PROJECT WIDE  
Future Sub Area Name: Not reported  
Future Document Type: Operations and Maintenance Plan  
Future Due Date: 2010  
Future Area Name: PROJECT WIDE  
Future Sub Area Name: Not reported  
Future Document Type: Land Use Restriction  
Future Due Date: 2011  
Future Area Name: PROJECT WIDE  
Future Sub Area Name: Not reported  
Future Document Type: Certification  
Future Due Date: 2010  
Media Affected: 30001, 30008, 30013, 30018  
Media Affected Desc: Not reported  
Media Affected Desc: Not reported  
Media Affected Desc: Not reported  
Media Affected Desc: Not reported

Management:  
Management Required: NONE SPECIFIED  
Management Required Desc: Not reported  
Potential: SOIL  
Potential Description: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported  
PastUse: AGRICULTURAL - ORCHARD, RECYCLING - SCRAP METAL

471  
NE  
1/2-1  
0.978 mi.  
5164 ft.

**1633 OLD OAKLAND ROAD SITE**  
**1633 OAKLAND RD**  
**SAN JOSE, CA 95131**

VCP S106568341  
ENVIROSTOR N/A

**Relative:**  
**Higher**

VCP:  
Facility ID: 43990007  
Site Type: Voluntary Cleanup  
Site Type Detail: Voluntary Cleanup  
Acres: 18

**Actual:**  
**60 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**1633 OLD OAKLAND ROAD SITE (Continued)**

**S106568341**

National Priorities List: NO  
Cleanup Oversight Agencies: SMBRP, RWQCB 2 - San Francisco Bay, CITY OF SAN JOSE, SANTA CLARA VALLEY WATER DISTRICT  
Lead Agency: SMBRP  
Lead Agency Description: DTSC - Site Mitigation And Brownfield Reuse Program  
Project Manager: XAVIER BRYANT  
Supervisor: Mark Piros  
Division Branch: Berkeley  
Site Code: 201371  
Assembly: 22  
Senate: 10  
Special Programs Code: Voluntary Cleanup Program  
Status: Active  
Status Date: 2001-07-13 00:00:00  
Restricted Use: NO  
Funding: Responsible Party  
Lat/Long: 37.3797750879855 / -121.897071974372  
Alias Name: 110033621089  
Alias Type: EPA (FRS #)  
Alias Name: 201371  
Alias Type: Project Code (Site Code)  
Alias Name: 43990007  
Alias Type: Envirostor ID Number  
Alias Name: OLD OAKLAND ROAD SITE  
Alias Type: Alternate Name  
Alias Name: MARKOVITS & FOX, INC.  
Alias Type: Alternate Name  
Alias Name: MARKOVITZ & FOX, INC.  
Alias Type: Alternate Name  
Alias Name: M/F Metals  
Alias Type: Alternate Name  
Alias Name: 237-03-070  
Alias Type: APN

APN: 237-03-070  
APN Description: Not reported

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fieldwork  
Completed Date: 2006-09-07 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fieldwork  
Completed Date: 2006-11-17 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Monitoring Report  
Completed Date: 2009-08-12 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Voluntary Cleanup Agreement  
Completed Date: 2001-07-13 00:00:00

Completed Area Name: PROJECT WIDE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**1633 OLD OAKLAND ROAD SITE (Continued)**

**S106568341**

Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 2004-11-02 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Notice of Exemption  
Completed Date: 2007-10-23 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Amendment - Order/Agreement  
Completed Date: 2007-12-13 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Workplan  
Completed Date: 2004-11-02 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Design  
Completed Date: 2005-04-29 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Health & Safety Plan  
Completed Date: 2004-07-15 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Completion Report  
Completed Date: 2007-06-13 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 2006-05-02 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 2006-10-05 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 2004-08-20 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Public Notice  
Completed Date: 2005-11-21 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Public Notice

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**1633 OLD OAKLAND ROAD SITE (Continued)**

**S106568341**

Completed Date: 2004-08-25 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Community Profile  
Completed Date: 2002-02-28 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Investigation Report  
Completed Date: 2001-09-13 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 2007-06-21 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Design  
Completed Date: 2006-09-18 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Workplan  
Completed Date: 2007-10-23 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Technical Workplan  
Completed Date: 2007-10-23 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Monitoring Report  
Completed Date: 2007-09-14 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 2007-10-23 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 2008-02-19 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fieldwork  
Completed Date: 2008-05-23 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Other Report  
Completed Date: 2008-12-12 00:00:00

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**1633 OLD OAKLAND ROAD SITE (Continued)**

**S106568341**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Completion Report  
Completed Date: 2008-11-20 00:00:00

Confirmed: 30001,30008,30013,30018,30024,30025,30028  
Confirmed Description: Arsenic  
Confirmed Description: DDT  
Confirmed Description: Lead  
Confirmed Description: Polychlorinated biphenyls (PCBs)  
Confirmed Description: TPH-diesel  
Confirmed Description: TPH-gas  
Confirmed Description: Vinyl chloride

Future Area Name: PROJECT WIDE  
Future Sub Area Name: Not reported  
Future Document Type: Removal Action Completion Report  
Future Due Date: 2009  
Future Area Name: PROJECT WIDE  
Future Sub Area Name: Not reported  
Future Document Type: Certification  
Future Due Date: 2009

Media Affected: 30001, 30008, 30013, 30018, 30024, 30025, 30028  
Media Affected Desc: Not reported  
Media Affected Desc: Not reported

**Management:**

Management Required: NONE SPECIFIED  
Management Required Desc: Not reported  
Potential: OTH, SOIL  
Potential Description: Not reported  
Potential Description: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported  
PastUse: BATTERY STORAGE, INCINERATOR - OTHER, LANDFILL - CONSTRUCTION, MACHINE SHOP, METAL RECLAMATION, OIL/WATER SEPARATORS, RECYCLING - OTHER, RECYCLING - SCRAP METAL, VEHICLE MAINTENANCE

**ENVIROSTOR:**

Site Type: Voluntary Cleanup  
Site Type Detailed: Voluntary Cleanup  
Acres: 18  
NPL: NO  
Regulatory Agencies: SMBRP, RWQCB 2 - San Francisco Bay, CITY OF SAN JOSE, SANTA CLARA VALLEY WATER DISTRICT  
Lead Agency: SMBRP  
Program Manager: XAVIER BRYANT  
Supervisor: Mark Piros  
Division Branch: Berkeley  
Facility ID: 43990007  
Site Code: 201371

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**1633 OLD OAKLAND ROAD SITE (Continued)**

**S106568341**

Assembly: 22  
Senate: 10  
Special Program: Voluntary Cleanup Program  
Status: Active  
Status Date: 2001-07-13 00:00:00  
Restricted Use: NO  
Funding: Responsible Party  
Latitude: 37.3797750879855  
Longitude: -121.897071974372  
Alias Name: 110033621089  
Alias Type: EPA (FRS #)  
Alias Name: 201371  
Alias Type: Project Code (Site Code)  
Alias Name: 43990007  
Alias Type: Envirostor ID Number  
Alias Name: OLD OAKLAND ROAD SITE  
Alias Type: Alternate Name  
Alias Name: MARKOVITS & FOX, INC.  
Alias Type: Alternate Name  
Alias Name: MARKOVITZ & FOX, INC.  
Alias Type: Alternate Name  
Alias Name: M/F Metals  
Alias Type: Alternate Name  
Alias Name: 237-03-070  
Alias Type: APN

APN: 237-03-070  
APN Description: Not reported

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fieldwork  
Completed Date: 2006-09-07 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fieldwork  
Completed Date: 2006-11-17 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Monitoring Report  
Completed Date: 2009-08-12 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Voluntary Cleanup Agreement  
Completed Date: 2001-07-13 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 2004-11-02 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Notice of Exemption

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**1633 OLD OAKLAND ROAD SITE (Continued)**

**S106568341**

Completed Date: 2007-10-23 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Amendment - Order/Agreement  
Completed Date: 2007-12-13 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Workplan  
Completed Date: 2004-11-02 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Design  
Completed Date: 2005-04-29 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Health & Safety Plan  
Completed Date: 2004-07-15 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Completion Report  
Completed Date: 2007-06-13 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 2006-05-02 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 2006-10-05 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 2004-08-20 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Public Notice  
Completed Date: 2005-11-21 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Public Notice  
Completed Date: 2004-08-25 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Community Profile  
Completed Date: 2002-02-28 00:00:00

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**1633 OLD OAKLAND ROAD SITE (Continued)**

**S106568341**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Investigation Report  
Completed Date: 2001-09-13 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 2007-06-21 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Design  
Completed Date: 2006-09-18 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Workplan  
Completed Date: 2007-10-23 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Technical Workplan  
Completed Date: 2007-10-23 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Monitoring Report  
Completed Date: 2007-09-14 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 2007-10-23 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 2008-02-19 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fieldwork  
Completed Date: 2008-05-23 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Other Report  
Completed Date: 2008-12-12 00:00:00

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Removal Action Completion Report  
Completed Date: 2008-11-20 00:00:00

Confirmed: 30001,30008,30013,30018,30024,30025,30028  
Confirmed Description: Arsenic

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**1633 OLD OAKLAND ROAD SITE (Continued)**

**S106568341**

Confirmed Description: DDT  
Confirmed Description: Lead  
Confirmed Description: Polychlorinated biphenyls (PCBs)  
Confirmed Description: TPH-diesel  
Confirmed Description: TPH-gas  
Confirmed Description: Vinyl chloride  
Future Area Name: PROJECT WIDE  
Future Sub Area Name: Not reported  
Future Document Type: Removal Action Completion Report  
Future Due Date: 2009  
Future Area Name: PROJECT WIDE  
Future Sub Area Name: Not reported  
Future Document Type: Certification  
Future Due Date: 2009  
Media Affected: 30001, 30008, 30013, 30018, 30024, 30025, 30028  
Media Affected Desc: Not reported  
Media Affected Desc: Not reported

Management:

Management Required: NONE SPECIFIED  
Management Required Desc: Not reported  
Potential: OTH, SOIL  
Potential Description: Not reported  
Potential Description: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported  
PastUse: BATTERY STORAGE, INCINERATOR - OTHER, LANDFILL - CONSTRUCTION, MACHINE SHOP, METAL RECLAMATION, OIL/WATER SEPARATORS, RECYCLING - OTHER, RECYCLING - SCRAP METAL, VEHICLE MAINTENANCE

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICO	1010314144	CALIFORNIA WATER SERVICE CO CH STA	E 3RD ST AT SW CORNER OF E 1ST	95112	RCRA-SQG, HAZNET
COUNTY	S109466237	PG&E TRIMBLE SUBSTATION	0 N 1ST ST SUITE SUB	95110	SAN JOSE HAZMAT
COUNTY	S109466233	PG&E NORTECH SUBSTATION	0 N 1ST ST SUITE SUB	95110	SAN JOSE HAZMAT
COUNTY	S109821622	LAMPSON TRACTOR & EQUIP CO	1233 N 5TH ST	95112	SAN JOSE HAZMAT
COUNTY	S106916641	Z CAR GARAGE	140 ARCHER ST SUITE A	95112	SAN JOSE HAZMAT
COUNTY	S109035071	CORTEC PRECISION SHEETMETA	3565 CHARTER PARK DR SUITE 3	95112	SAN JOSE HAZMAT
COUNTY	S109821628	UPS SUPPLY CHAIN SOLUTIONS	1030 COMMERCIAL ST	95112	SAN JOSE HAZMAT
COUNTY	S108419337	MUFFLERS EXPRESS	903 COMMERCIAL ST SUITE B	95112	SAN JOSE HAZMAT
COUNTY	S108419307	CALIFORNIA CABINET BUILDER	1020 COMMERCIAL ST SUITE 105	95112	SAN JOSE HAZMAT
COUNTY	S106916656	TRAN TOUCH UP	915 COMMERCIAL ST SUITE 4	95112	SAN JOSE HAZMAT
COUNTY	S108419263	CIRCUIT NINTY NINE INC	2520 ZANKER RD SUITE B	95112	SAN JOSE HAZMAT
SAN JOSE	1010313863	SANTA CLARA CNTY HWY 280 RESURFACI	RTE 280 PM 2.2 TO 5.1	95110	RCRA-SQG
SAN JOSE	S109285944	ANCEWICZ PROPERTY	1098 S. 5TH ST.	95112	LUST
SAN JOSE	S106932750	T & H AUTO REPAIR	1684 S 7TH ST A/B	95112	SWEEPS UST
SAN JOSE	S107737073	PROPOSED COMMUNICATION HILL K-8 SC	HIGHWAY 87	95112	SCH, ENVIROSTOR
SAN JOSE	S106931689	S J CONCRETE PIPE CO	1420 N BAYSHORE HWY 1		SWEEPS UST
SAN JOSE	S103982023	PITNEY BOWES	C/O BURNHAM 1030 COMMERCIAL ST	95112	HAZNET, WIP
SAN JOSE	S109277152	HYUNDAI PROPERTY	NW CORNER N 1ST STREET / MONTA		SLIC
SAN JOSE	S106923279	BEST OVERNIGHT EXPRESS	300 E GISH RD A	95112	SWEEPS UST
SAN JOSE	S109821497	MARSHLAND SOLID WASTE FACILITY	NW HWY 237 / GOLD STREET ALVIS		SWF/LF
SAN JOSE	S105512891	P&G INVESTMENT COMPANY	1775 MONTEREY BLDG. #64 HWY	95112	LUST, HIST LUST
SAN JOSE	1003878439	STAUFFER CHEM CO RAISCH QUARRY	S OF 1ST ST	95112	CERC-NFRAP
SAN JOSE	S106924778	COCA COLA BOTTLING COMPANY	1555 OLD BAYSHORE HWY 4	95112	SWEEPS UST
SAN JOSE	S106931943	SCAFFOLD WORKS INC, THE	1697 ROGERS AVE 1	95112	SWEEPS UST
SAN JOSE	S106927460	I T CORP	1680 ROGERS AVE 1	95112	SWEEPS UST
SAN JOSE	S106922992	AUTOMATIC MERCHANDISING	1698 ROGERS AVE A	95112	SWEEPS UST
SAN JOSE	S105026285	SAN ANTONIO PLAZA	SAN FERNANDO 84TH ST	95112	HIST CORTESE
SAN JOSE	S109285935	CALIFORNIA CAR WASH	2345 7TH ST.	95112	LUST
SAN JOSE	S109285909	AQUA BLU POOLS	535 7TH ST.	95112	LUST
SAN JOSE	S106931824	SAN JOSE PLATING	1501 TERMINAL AVE A	95112	SWEEPS UST
SAN JOSE	S106934378	WESTERN EXTERMINATOR	1611 TERMINAL AVE 1	95112	SWEEPS UST
SAN JOSE	S106922549	ALL BRAND FORKLIFT REPAIR	1481 TERMINAL AVE 1	95112	SWEEPS UST
SAN JOSE	S106162858	KLEEN QUIPMENT	1441 A TERMINAL AVE	95112	SLIC
SAN JOSE	S105026298	CAL DOT	UNKNOWN HWY 101 / 10TH ST	95112	HIST CORTESE
SUNNYVALE	U001594927	THE JOHN LINCOLN CO.	172 COMMERCIAL ST	95112	LUST, UST, HIST UST, HIST LUST
SUNNYVALE	S102441003	W.L. HICKEY SONS INC.	190 COMMERCIAL ST	95112	LUST, HIST LUST

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

#### NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 06/29/2009	Source: EPA
Date Data Arrived at EDR: 07/31/2009	Telephone: N/A
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 10/14/2009
Number of Days to Update: 52	Next Scheduled EDR Contact: 01/25/2010
	Data Release Frequency: Quarterly

#### NPL Site Boundaries

##### Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

#### Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 06/29/2009	Source: EPA
Date Data Arrived at EDR: 07/31/2009	Telephone: N/A
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 10/14/2009
Number of Days to Update: 52	Next Scheduled EDR Contact: 01/25/2010
	Data Release Frequency: Quarterly

#### NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/17/2009
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal Delisted NPL site list***

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 06/29/2009	Source: EPA
Date Data Arrived at EDR: 07/31/2009	Telephone: N/A
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 10/14/2009
Number of Days to Update: 52	Next Scheduled EDR Contact: 01/25/2010
	Data Release Frequency: Quarterly

## ***Federal CERCLIS list***

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 06/30/2009	Source: EPA
Date Data Arrived at EDR: 08/11/2009	Telephone: 703-412-9810
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 09/30/2009
Number of Days to Update: 41	Next Scheduled EDR Contact: 01/11/2010
	Data Release Frequency: Quarterly

## ***Federal CERCLIS NFRAP site List***

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 06/23/2009	Source: EPA
Date Data Arrived at EDR: 09/02/2009	Telephone: 703-412-9810
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 09/09/2009
Number of Days to Update: 19	Next Scheduled EDR Contact: 12/14/2009
	Data Release Frequency: Quarterly

## ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/30/2009	Source: EPA
Date Data Arrived at EDR: 07/01/2009	Telephone: 800-424-9346
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 08/31/2009
Number of Days to Update: 82	Next Scheduled EDR Contact: 11/30/2009
	Data Release Frequency: Quarterly

## ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Transporters, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/12/2008  
Date Data Arrived at EDR: 11/18/2008  
Date Made Active in Reports: 03/16/2009  
Number of Days to Update: 118

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 10/07/2009  
Next Scheduled EDR Contact: 01/18/2010  
Data Release Frequency: Quarterly

## ***Federal RCRA generators list***

### **RCRA-LQG: RCRA - Large Quantity Generators**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 11/12/2008  
Date Data Arrived at EDR: 11/18/2008  
Date Made Active in Reports: 03/16/2009  
Number of Days to Update: 118

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 10/07/2009  
Next Scheduled EDR Contact: 01/18/2010  
Data Release Frequency: Quarterly

### **RCRA-SQG: RCRA - Small Quantity Generators**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 11/12/2008  
Date Data Arrived at EDR: 11/18/2008  
Date Made Active in Reports: 03/16/2009  
Number of Days to Update: 118

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 10/07/2009  
Next Scheduled EDR Contact: 01/18/2010  
Data Release Frequency: Quarterly

### **RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 11/12/2008  
Date Data Arrived at EDR: 11/18/2008  
Date Made Active in Reports: 03/16/2009  
Number of Days to Update: 118

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 10/07/2009  
Next Scheduled EDR Contact: 01/18/2010  
Data Release Frequency: Varies

## ***Federal institutional controls / engineering controls registries***

### **US ENG CONTROLS: Engineering Controls Sites List**

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/31/2009  
Date Data Arrived at EDR: 04/22/2009  
Date Made Active in Reports: 05/05/2009  
Number of Days to Update: 13

Source: Environmental Protection Agency  
Telephone: 703-603-0695  
Last EDR Contact: 09/18/2009  
Next Scheduled EDR Contact: 12/28/2009  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/31/2009  
Date Data Arrived at EDR: 04/22/2009  
Date Made Active in Reports: 05/05/2009  
Number of Days to Update: 13

Source: Environmental Protection Agency  
Telephone: 703-603-0695  
Last EDR Contact: 09/18/2009  
Next Scheduled EDR Contact: 12/28/2009  
Data Release Frequency: Varies

## ***Federal ERNS list***

### ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 05/15/2009  
Date Data Arrived at EDR: 07/21/2009  
Date Made Active in Reports: 09/21/2009  
Number of Days to Update: 62

Source: National Response Center, United States Coast Guard  
Telephone: 202-267-2180  
Last EDR Contact: 10/06/2009  
Next Scheduled EDR Contact: 01/18/2010  
Data Release Frequency: Annually

## ***State- and tribal - equivalent NPL***

### RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 08/27/2009  
Date Data Arrived at EDR: 08/27/2009  
Date Made Active in Reports: 09/18/2009  
Number of Days to Update: 22

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 08/27/2009  
Next Scheduled EDR Contact: 11/23/2009  
Data Release Frequency: Quarterly

## ***State- and tribal - equivalent CERCLIS***

### ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 08/27/2009  
Date Data Arrived at EDR: 08/27/2009  
Date Made Active in Reports: 09/18/2009  
Number of Days to Update: 22

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 08/27/2009  
Next Scheduled EDR Contact: 11/23/2009  
Data Release Frequency: Quarterly

## ***State and tribal landfill and/or solid waste disposal site lists***

### SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/02/2009  
Date Data Arrived at EDR: 09/04/2009  
Date Made Active in Reports: 09/18/2009  
Number of Days to Update: 14

Source: Integrated Waste Management Board  
Telephone: 916-341-6320  
Last EDR Contact: 09/04/2009  
Next Scheduled EDR Contact: 12/07/2009  
Data Release Frequency: Quarterly

## **State and tribal leaking storage tank lists**

### LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001  
Date Data Arrived at EDR: 02/28/2001  
Date Made Active in Reports: 03/29/2001  
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)  
Telephone: 707-570-3769  
Last EDR Contact: 08/17/2009  
Next Scheduled EDR Contact: 11/16/2009  
Data Release Frequency: No Update Planned

### LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005  
Date Data Arrived at EDR: 02/15/2005  
Date Made Active in Reports: 03/28/2005  
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)  
Telephone: 909-782-4496  
Last EDR Contact: 10/16/2009  
Next Scheduled EDR Contact: 02/01/2010  
Data Release Frequency: Varies

### LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004  
Date Data Arrived at EDR: 02/26/2004  
Date Made Active in Reports: 03/24/2004  
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)  
Telephone: 760-776-8943  
Last EDR Contact: 08/17/2009  
Next Scheduled EDR Contact: 11/16/2009  
Data Release Frequency: No Update Planned

### LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008  
Date Data Arrived at EDR: 07/22/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-464-4834  
Last EDR Contact: 10/05/2009  
Next Scheduled EDR Contact: 01/18/2010  
Data Release Frequency: Quarterly

### LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6710  
Last EDR Contact: 09/14/2009  
Next Scheduled EDR Contact: 12/21/2009  
Data Release Frequency: No Update Planned

### LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/30/2004  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-622-2433  
Last EDR Contact: 09/23/2009  
Next Scheduled EDR Contact: 01/04/2010  
Data Release Frequency: Quarterly

## LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 09/05/2009  
Date Data Arrived at EDR: 09/28/2009  
Date Made Active in Reports: 10/13/2009  
Number of Days to Update: 15

Source: State Water Resources Control Board  
Telephone: see region list  
Last EDR Contact: 09/28/2009  
Next Scheduled EDR Contact: 01/04/2010  
Data Release Frequency: Quarterly

## LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001  
Date Data Arrived at EDR: 04/23/2001  
Date Made Active in Reports: 05/21/2001  
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-637-5595  
Last EDR Contact: 09/28/2009  
Next Scheduled EDR Contact: 01/11/2010  
Data Release Frequency: No Update Planned

## LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003  
Date Data Arrived at EDR: 05/19/2003  
Date Made Active in Reports: 06/02/2003  
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-542-4786  
Last EDR Contact: 10/16/2009  
Next Scheduled EDR Contact: 02/01/2010  
Data Release Frequency: No Update Planned

## LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003  
Date Data Arrived at EDR: 09/10/2003  
Date Made Active in Reports: 10/07/2003  
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)  
Telephone: 530-542-5572  
Last EDR Contact: 08/31/2009  
Next Scheduled EDR Contact: 11/30/2009  
Data Release Frequency: No Update Planned

## LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005  
Date Data Arrived at EDR: 06/07/2005  
Date Made Active in Reports: 06/29/2005  
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)  
Telephone: 760-241-7365  
Last EDR Contact: 09/18/2009  
Next Scheduled EDR Contact: 12/28/2009  
Data Release Frequency: No Update Planned

## SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/05/2009  
Date Data Arrived at EDR: 09/28/2009  
Date Made Active in Reports: 10/13/2009  
Number of Days to Update: 15

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 09/28/2009  
Next Scheduled EDR Contact: 01/04/2010  
Data Release Frequency: Varies

## SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003  
Date Data Arrived at EDR: 04/07/2003  
Date Made Active in Reports: 04/25/2003  
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)  
Telephone: 707-576-2220  
Last EDR Contact: 08/17/2009  
Next Scheduled EDR Contact: 11/16/2008  
Data Release Frequency: No Update Planned

## SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-286-0457  
Last EDR Contact: 09/23/2009  
Next Scheduled EDR Contact: 01/04/2010  
Data Release Frequency: Quarterly

## SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006  
Date Data Arrived at EDR: 05/18/2006  
Date Made Active in Reports: 06/15/2006  
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-549-3147  
Last EDR Contact: 10/16/2009  
Next Scheduled EDR Contact: 02/01/2010  
Data Release Frequency: Semi-Annually

## SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004  
Date Data Arrived at EDR: 11/18/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6600  
Last EDR Contact: 10/05/2009  
Next Scheduled EDR Contact: 01/18/2010  
Data Release Frequency: Varies

## SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005  
Date Data Arrived at EDR: 04/05/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-464-3291  
Last EDR Contact: 09/18/2009  
Next Scheduled EDR Contact: 12/28/2009  
Data Release Frequency: Semi-Annually

## SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/24/2005  
Date Data Arrived at EDR: 05/25/2005  
Date Made Active in Reports: 06/16/2005  
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch  
Telephone: 619-241-6583  
Last EDR Contact: 09/18/2009  
Next Scheduled EDR Contact: 12/28/2009  
Data Release Frequency: Semi-Annually

## SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region  
Telephone: 530-542-5574  
Last EDR Contact: 08/31/2009  
Next Scheduled EDR Contact: 11/30/2009  
Data Release Frequency: No Update Planned

## SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004  
Date Data Arrived at EDR: 11/29/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region  
Telephone: 760-346-7491  
Last EDR Contact: 08/17/2009  
Next Scheduled EDR Contact: 11/16/2009  
Data Release Frequency: No Update Planned

## SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008  
Date Data Arrived at EDR: 04/03/2008  
Date Made Active in Reports: 04/14/2008  
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)  
Telephone: 951-782-3298  
Last EDR Contact: 09/18/2009  
Next Scheduled EDR Contact: 12/28/2009  
Data Release Frequency: Semi-Annually

## SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007  
Date Data Arrived at EDR: 09/11/2007  
Date Made Active in Reports: 09/28/2007  
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-467-2980  
Last EDR Contact: 08/26/2009  
Next Scheduled EDR Contact: 11/23/2009  
Data Release Frequency: Annually

## INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/24/2009  
Date Data Arrived at EDR: 03/03/2009  
Date Made Active in Reports: 05/05/2009  
Number of Days to Update: 63

Source: EPA Region 4  
Telephone: 404-562-8677  
Last EDR Contact: 08/17/2009  
Next Scheduled EDR Contact: 11/16/2009  
Data Release Frequency: Semi-Annually

## INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 06/08/2009  
Date Data Arrived at EDR: 06/09/2009  
Date Made Active in Reports: 09/21/2009  
Number of Days to Update: 104

Source: Environmental Protection Agency  
Telephone: 415-972-3372  
Last EDR Contact: 08/17/2009  
Next Scheduled EDR Contact: 11/16/2009  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 08/20/2009	Source: EPA Region 10
Date Data Arrived at EDR: 08/21/2009	Telephone: 206-553-2857
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 08/17/2009
Number of Days to Update: 31	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land  
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/19/2009	Source: EPA Region 1
Date Data Arrived at EDR: 02/19/2009	Telephone: 617-918-1313
Date Made Active in Reports: 03/16/2009	Last EDR Contact: 08/17/2009
Number of Days to Update: 25	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 08/24/2009	Source: EPA Region 6
Date Data Arrived at EDR: 08/26/2009	Telephone: 214-665-6597
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 08/17/2009
Number of Days to Update: 26	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/24/2009	Source: EPA Region 7
Date Data Arrived at EDR: 05/20/2009	Telephone: 913-551-7003
Date Made Active in Reports: 06/17/2009	Last EDR Contact: 08/21/2009
Number of Days to Update: 28	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 06/01/2009	Source: EPA Region 8
Date Data Arrived at EDR: 06/03/2009	Telephone: 303-312-6271
Date Made Active in Reports: 06/17/2009	Last EDR Contact: 08/17/2009
Number of Days to Update: 14	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Quarterly

## **State and tribal registered storage tank lists**

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 07/07/2009	Source: SWRCB
Date Data Arrived at EDR: 07/09/2009	Telephone: 916-480-1028
Date Made Active in Reports: 07/24/2009	Last EDR Contact: 09/28/2009
Number of Days to Update: 15	Next Scheduled EDR Contact: 01/04/2010
	Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities  
Registered Aboveground Storage Tanks.

Date of Government Version: 08/01/2009	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/10/2009	Telephone: 916-341-5712
Date Made Active in Reports: 10/01/2009	Last EDR Contact: 10/09/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/25/2010
	Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 08/20/2009	Source: EPA Region 10
Date Data Arrived at EDR: 08/21/2009	Telephone: 206-553-2857
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 08/17/2009
Number of Days to Update: 31	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Quarterly

### INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 09/08/2008	Source: EPA Region 5
Date Data Arrived at EDR: 09/19/2008	Telephone: 312-886-6136
Date Made Active in Reports: 10/16/2008	Last EDR Contact: 08/17/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Varies

### INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/24/2009	Source: EPA Region 4
Date Data Arrived at EDR: 03/03/2009	Telephone: 404-562-9424
Date Made Active in Reports: 05/05/2009	Last EDR Contact: 08/17/2009
Number of Days to Update: 63	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Semi-Annually

### INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/19/2009	Source: EPA, Region 1
Date Data Arrived at EDR: 02/19/2009	Telephone: 617-918-1313
Date Made Active in Reports: 03/16/2009	Last EDR Contact: 08/17/2009
Number of Days to Update: 25	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Varies

### INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 08/24/2009	Source: EPA Region 6
Date Data Arrived at EDR: 08/26/2009	Telephone: 214-665-7591
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 08/17/2009
Number of Days to Update: 26	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Semi-Annually

### INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/01/2008	Source: EPA Region 7
Date Data Arrived at EDR: 12/30/2008	Telephone: 913-551-7003
Date Made Active in Reports: 03/16/2009	Last EDR Contact: 08/21/2009
Number of Days to Update: 76	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 06/01/2009	Source: EPA Region 8
Date Data Arrived at EDR: 06/03/2009	Telephone: 303-312-6137
Date Made Active in Reports: 06/17/2009	Last EDR Contact: 08/17/2009
Number of Days to Update: 14	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Quarterly

## INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 06/04/2009	Source: EPA Region 9
Date Data Arrived at EDR: 06/04/2009	Telephone: 415-972-3368
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 08/17/2009
Number of Days to Update: 109	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Quarterly

### ***State and tribal voluntary cleanup sites***

#### INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

#### INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 04/02/2008	Source: EPA, Region 1
Date Data Arrived at EDR: 04/22/2008	Telephone: 617-918-1102
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 10/05/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 01/18/2010
	Data Release Frequency: Varies

#### VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 08/27/2009	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/27/2009	Telephone: 916-323-3400
Date Made Active in Reports: 09/18/2009	Last EDR Contact: 08/27/2009
Number of Days to Update: 22	Next Scheduled EDR Contact: 11/23/2009
	Data Release Frequency: Quarterly

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Local Brownfield lists***

US BROWNFIELDS: A Listing of Brownfields Sites

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 10/01/2008	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/14/2008	Telephone: 202-566-2777
Date Made Active in Reports: 12/23/2008	Last EDR Contact: 09/11/2009
Number of Days to Update: 39	Next Scheduled EDR Contact: 01/11/2010
	Data Release Frequency: Semi-Annually

## **Local Lists of Landfill / Solid Waste Disposal Sites**

### ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009	Source: EPA, Region 9
Date Data Arrived at EDR: 05/07/2009	Telephone: 415-972-3336
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 09/23/2009
Number of Days to Update: 137	Next Scheduled EDR Contact: 12/21/2009
	Data Release Frequency: Varies

### WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000	Source: State Water Resources Control Board
Date Data Arrived at EDR: 04/10/2000	Telephone: 916-227-4448
Date Made Active in Reports: 05/10/2000	Last EDR Contact: 08/31/2009
Number of Days to Update: 30	Next Scheduled EDR Contact: 11/30/2009
	Data Release Frequency: Quarterly

### SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 09/25/2009	Source: Department of Conservation
Date Data Arrived at EDR: 09/28/2009	Telephone: 916-323-3836
Date Made Active in Reports: 10/13/2009	Last EDR Contact: 09/28/2009
Number of Days to Update: 15	Next Scheduled EDR Contact: 01/04/2010
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**HAULERS: Registered Waste Tire Haulers Listing**  
A listing of registered waste tire haulers.

Date of Government Version: 10/05/2009  
Date Data Arrived at EDR: 10/05/2009  
Date Made Active in Reports: 10/13/2009  
Number of Days to Update: 8

Source: Integrated Waste Management Board  
Telephone: 916-341-6422  
Last EDR Contact: 09/23/2009  
Next Scheduled EDR Contact: 12/07/2009  
Data Release Frequency: Varies

**INDIAN ODI: Report on the Status of Open Dumps on Indian Lands**  
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998  
Date Data Arrived at EDR: 12/03/2007  
Date Made Active in Reports: 01/24/2008  
Number of Days to Update: 52

Source: Environmental Protection Agency  
Telephone: 703-308-8245  
Last EDR Contact: 08/26/2009  
Next Scheduled EDR Contact: 11/23/2009  
Data Release Frequency: Varies

## **Local Lists of Hazardous waste / Contaminated Sites**

**US CDL: Clandestine Drug Labs**

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/01/2009  
Date Data Arrived at EDR: 06/22/2009  
Date Made Active in Reports: 09/21/2009  
Number of Days to Update: 91

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 03/26/2009  
Next Scheduled EDR Contact: 06/22/2009  
Data Release Frequency: Quarterly

**HIST CAL-SITES: Calsites Database**

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005  
Date Data Arrived at EDR: 08/03/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 21

Source: Department of Toxic Substance Control  
Telephone: 916-323-3400  
Last EDR Contact: 02/23/2009  
Next Scheduled EDR Contact: 05/25/2009  
Data Release Frequency: No Update Planned

**SCH: School Property Evaluation Program**

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 08/27/2009  
Date Data Arrived at EDR: 08/27/2009  
Date Made Active in Reports: 09/18/2009  
Number of Days to Update: 22

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 08/27/2009  
Next Scheduled EDR Contact: 11/23/2009  
Data Release Frequency: Quarterly

**TOXIC PITS: Toxic Pits Cleanup Act Sites**

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/1995  
Date Data Arrived at EDR: 08/30/1995  
Date Made Active in Reports: 09/26/1995  
Number of Days to Update: 27

Source: State Water Resources Control Board  
Telephone: 916-227-4364  
Last EDR Contact: 01/26/2009  
Next Scheduled EDR Contact: 04/27/2009  
Data Release Frequency: No Update Planned

## CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2009  
Date Data Arrived at EDR: 07/23/2009  
Date Made Active in Reports: 08/03/2009  
Number of Days to Update: 11

Source: Department of Toxic Substances Control  
Telephone: 916-255-6504  
Last EDR Contact: 10/05/2009  
Next Scheduled EDR Contact: 01/18/2010  
Data Release Frequency: Varies

## US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007  
Date Data Arrived at EDR: 11/19/2008  
Date Made Active in Reports: 03/30/2009  
Number of Days to Update: 131

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 03/23/2009  
Next Scheduled EDR Contact: 06/22/2009  
Data Release Frequency: No Update Planned

## **Local Lists of Registered Storage Tanks**

### CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994  
Date Data Arrived at EDR: 09/05/1995  
Date Made Active in Reports: 09/29/1995  
Number of Days to Update: 24

Source: California Environmental Protection Agency  
Telephone: 916-341-5851  
Last EDR Contact: 12/28/1998  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009  
Date Data Arrived at EDR: 09/23/2009  
Date Made Active in Reports: 10/01/2009  
Number of Days to Update: 8

Source: Department of Public Health  
Telephone: 707-463-4466  
Last EDR Contact: 09/23/2009  
Next Scheduled EDR Contact: 12/21/2009  
Data Release Frequency: Varies

### HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990  
Date Data Arrived at EDR: 01/25/1991  
Date Made Active in Reports: 02/12/1991  
Number of Days to Update: 18

Source: State Water Resources Control Board  
Telephone: 916-341-5851  
Last EDR Contact: 07/26/2001  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/07/2005	Telephone: N/A
Date Made Active in Reports: 08/11/2005	Last EDR Contact: 06/03/2005
Number of Days to Update: 35	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## Local Land Records

### LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 08/18/2009	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/21/2009	Telephone: 202-564-6023
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 08/17/2009
Number of Days to Update: 31	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Varies

### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005	Source: Department of the Navy
Date Data Arrived at EDR: 12/11/2006	Telephone: 843-820-7326
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 09/08/2009
Number of Days to Update: 31	Next Scheduled EDR Contact: 12/07/2009
	Data Release Frequency: Varies

### LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 08/13/2009	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/14/2009	Telephone: 916-323-3400
Date Made Active in Reports: 08/20/2009	Last EDR Contact: 10/19/2009
Number of Days to Update: 6	Next Scheduled EDR Contact: 02/01/2010
	Data Release Frequency: Varies

### DEED: Deed Restriction Listing

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 09/21/2009	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 09/22/2009	Telephone: 916-323-3400
Date Made Active in Reports: 10/13/2009	Last EDR Contact: 12/30/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 12/28/2009
	Data Release Frequency: Semi-Annually

## **Records of Emergency Release Reports**

### HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 07/16/2009	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 07/16/2009	Telephone: 202-366-4555
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 10/05/2009
Number of Days to Update: 67	Next Scheduled EDR Contact: 01/11/2010
	Data Release Frequency: Annually

### CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2007	Source: Office of Emergency Services
Date Data Arrived at EDR: 05/09/2008	Telephone: 916-845-8400
Date Made Active in Reports: 06/20/2008	Last EDR Contact: 08/18/2009
Number of Days to Update: 42	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Varies

### LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 09/05/2009	Source: State Water Quality Control Board
Date Data Arrived at EDR: 09/28/2009	Telephone: 866-480-1028
Date Made Active in Reports: 10/13/2009	Last EDR Contact: 09/28/2009
Number of Days to Update: 15	Next Scheduled EDR Contact: 01/04/2010
	Data Release Frequency: Quarterly

### MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 09/05/2009	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/28/2009	Telephone: 866-480-1028
Date Made Active in Reports: 10/13/2009	Last EDR Contact: 09/28/2009
Number of Days to Update: 15	Next Scheduled EDR Contact: 01/04/2010
	Data Release Frequency: Quarterly

## **Other Ascertainable Records**

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## RCRA-NonGen: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 11/12/2008	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/18/2008	Telephone: (415) 495-8895
Date Made Active in Reports: 03/16/2009	Last EDR Contact: 10/07/2009
Number of Days to Update: 118	Next Scheduled EDR Contact: 01/18/2010
	Data Release Frequency: Varies

## DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 05/14/2008	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 05/28/2008	Telephone: 202-366-4595
Date Made Active in Reports: 08/08/2008	Last EDR Contact: 08/27/2009
Number of Days to Update: 72	Next Scheduled EDR Contact: 11/23/2009
	Data Release Frequency: Varies

## DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 703-692-8801
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 05/08/2009
Number of Days to Update: 62	Next Scheduled EDR Contact: 08/03/2009
	Data Release Frequency: Semi-Annually

## FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2007	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 09/05/2008	Telephone: 202-528-4285
Date Made Active in Reports: 09/23/2008	Last EDR Contact: 09/30/2009
Number of Days to Update: 18	Next Scheduled EDR Contact: 12/28/2009
	Data Release Frequency: Varies

## CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 04/24/2009	Source: Department of Justice, Consent Decree Library
Date Data Arrived at EDR: 05/19/2009	Telephone: Varies
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 10/06/2009
Number of Days to Update: 125	Next Scheduled EDR Contact: 01/18/2010
	Data Release Frequency: Varies

## ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/23/2009	Source: EPA
Date Data Arrived at EDR: 04/28/2009	Telephone: 703-416-0223
Date Made Active in Reports: 05/19/2009	Last EDR Contact: 09/22/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 12/28/2009
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 01/05/2009	Source: Department of Energy
Date Data Arrived at EDR: 05/07/2009	Telephone: 505-845-0011
Date Made Active in Reports: 05/08/2009	Last EDR Contact: 09/14/2009
Number of Days to Update: 1	Next Scheduled EDR Contact: 12/14/2009
	Data Release Frequency: Varies

## MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/28/2009	Source: Department of Labor, Mine Safety and Health Administration
Date Data Arrived at EDR: 06/23/2009	Telephone: 303-231-5959
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 09/18/2009
Number of Days to Update: 90	Next Scheduled EDR Contact: 12/21/2009
	Data Release Frequency: Semi-Annually

## TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2007	Source: EPA
Date Data Arrived at EDR: 04/09/2009	Telephone: 202-566-0250
Date Made Active in Reports: 06/17/2009	Last EDR Contact: 09/14/2009
Number of Days to Update: 69	Next Scheduled EDR Contact: 12/14/2009
	Data Release Frequency: Annually

## TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002	Source: EPA
Date Data Arrived at EDR: 04/14/2006	Telephone: 202-260-5521
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 10/07/2009
Number of Days to Update: 46	Next Scheduled EDR Contact: 01/11/2010
	Data Release Frequency: Every 4 Years

## FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 09/10/2009
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/14/2009
	Data Release Frequency: Quarterly

## FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 09/10/2009
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/14/2009
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

## HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

## SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2007	Source: EPA
Date Data Arrived at EDR: 05/19/2009	Telephone: 202-564-4203
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 09/29/2009
Number of Days to Update: 125	Next Scheduled EDR Contact: 01/11/2010
	Data Release Frequency: Annually

## ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 03/20/2009	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/20/2009	Telephone: 202-564-5088
Date Made Active in Reports: 05/05/2009	Last EDR Contact: 09/28/2009
Number of Days to Update: 46	Next Scheduled EDR Contact: 01/11/2010
	Data Release Frequency: Quarterly

## PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 05/27/2009	Source: EPA
Date Data Arrived at EDR: 08/05/2009	Telephone: 202-566-0500
Date Made Active in Reports: 09/29/2009	Last EDR Contact: 10/21/2009
Number of Days to Update: 55	Next Scheduled EDR Contact: 02/01/2010
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/06/2009	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 07/13/2009	Telephone: 301-415-7169
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 09/21/2009
Number of Days to Update: 70	Next Scheduled EDR Contact: 12/28/2009
	Data Release Frequency: Quarterly

## RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/28/2009	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/28/2009	Telephone: 202-343-9775
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 10/16/2009
Number of Days to Update: 55	Next Scheduled EDR Contact: 01/25/2010
	Data Release Frequency: Quarterly

## FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/23/2009	Source: EPA
Date Data Arrived at EDR: 07/28/2009	Telephone: (415) 947-8000
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 09/18/2009
Number of Days to Update: 55	Next Scheduled EDR Contact: 12/28/2009
	Data Release Frequency: Quarterly

## RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

## BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2007	Source: EPA/NTIS
Date Data Arrived at EDR: 02/19/2009	Telephone: 800-424-9346
Date Made Active in Reports: 05/22/2009	Last EDR Contact: 09/09/2009
Number of Days to Update: 92	Next Scheduled EDR Contact: 12/07/2009
	Data Release Frequency: Biennially

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989  
Date Data Arrived at EDR: 07/27/1994  
Date Made Active in Reports: 08/02/1994  
Number of Days to Update: 6

Source: Department of Health Services  
Telephone: 916-255-2118  
Last EDR Contact: 05/31/1994  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/31/2009  
Date Data Arrived at EDR: 09/04/2009  
Date Made Active in Reports: 09/18/2009  
Number of Days to Update: 14

Source: State Water Resources Control Board  
Telephone: 916-445-9379  
Last EDR Contact: 09/04/2009  
Next Scheduled EDR Contact: 12/07/2009  
Data Release Frequency: Quarterly

## CA WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007  
Date Data Arrived at EDR: 06/20/2007  
Date Made Active in Reports: 06/29/2007  
Number of Days to Update: 9

Source: State Water Resources Control Board  
Telephone: 916-341-5227  
Last EDR Contact: 06/15/2009  
Next Scheduled EDR Contact: 09/14/2009  
Data Release Frequency: Quarterly

## CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

Date of Government Version: 10/06/2009  
Date Data Arrived at EDR: 10/07/2009  
Date Made Active in Reports: 10/13/2009  
Number of Days to Update: 6

Source: CAL EPA/Office of Emergency Information  
Telephone: 916-323-3400  
Last EDR Contact: 10/07/2009  
Next Scheduled EDR Contact: 01/18/2010  
Data Release Frequency: Quarterly

## HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES].

Date of Government Version: 04/01/2001  
Date Data Arrived at EDR: 01/22/2009  
Date Made Active in Reports: 04/08/2009  
Number of Days to Update: 76

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 01/22/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## NOTIFY 65: Proposition 65 Records

Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/1993  
Date Data Arrived at EDR: 11/01/1993  
Date Made Active in Reports: 11/19/1993  
Number of Days to Update: 18

Source: State Water Resources Control Board  
Telephone: 916-445-3846  
Last EDR Contact: 09/28/2009  
Next Scheduled EDR Contact: 01/11/2010  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 09/22/2009  
Date Data Arrived at EDR: 09/23/2009  
Date Made Active in Reports: 10/13/2009  
Number of Days to Update: 20

Source: Department of Toxic Substance Control  
Telephone: 916-327-4498  
Last EDR Contact: 09/18/2009  
Next Scheduled EDR Contact: 12/28/2009  
Data Release Frequency: Annually

## WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009  
Date Data Arrived at EDR: 07/21/2009  
Date Made Active in Reports: 08/03/2009  
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board  
Telephone: 213-576-6726  
Last EDR Contact: 10/15/2009  
Next Scheduled EDR Contact: 01/18/2010  
Data Release Frequency: Varies

## HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2007  
Date Data Arrived at EDR: 02/17/2009  
Date Made Active in Reports: 04/08/2009  
Number of Days to Update: 50

Source: California Environmental Protection Agency  
Telephone: 916-255-1136  
Last EDR Contact: 10/21/2009  
Next Scheduled EDR Contact: 02/01/2010  
Data Release Frequency: Annually

## EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2007  
Date Data Arrived at EDR: 07/14/2009  
Date Made Active in Reports: 07/23/2009  
Number of Days to Update: 9

Source: California Air Resources Board  
Telephone: 916-322-2990  
Last EDR Contact: 10/08/2009  
Next Scheduled EDR Contact: 01/11/2010  
Data Release Frequency: Varies

## INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 12/08/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 34

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 05/08/2009  
Next Scheduled EDR Contact: 08/03/2009  
Data Release Frequency: Semi-Annually

## SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 06/29/2009  
Date Data Arrived at EDR: 06/29/2009  
Date Made Active in Reports: 09/21/2009  
Number of Days to Update: 84

Source: Environmental Protection Agency  
Telephone: 615-532-8599  
Last EDR Contact: 09/08/2009  
Next Scheduled EDR Contact: 11/09/2009  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 05/08/2009
Number of Days to Update: 339	Next Scheduled EDR Contact: 08/03/2009
	Data Release Frequency: N/A

## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 01/01/2008	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/18/2009	Telephone: 202-566-0517
Date Made Active in Reports: 05/29/2009	Last EDR Contact: 08/21/2009
Number of Days to Update: 100	Next Scheduled EDR Contact: 11/16/2009
	Data Release Frequency: Varies

## EDR PROPRIETARY RECORDS

### *EDR Proprietary Records*

#### Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

#### EDR Historical Auto Stations: EDR Proprietary Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

#### EDR Historical Cleaners: EDR Proprietary Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## COUNTY RECORDS

### ALAMEDA COUNTY:

#### Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 07/20/2009  
Date Data Arrived at EDR: 07/20/2009  
Date Made Active in Reports: 08/03/2009  
Number of Days to Update: 14

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 10/05/2009  
Next Scheduled EDR Contact: 01/18/2010  
Data Release Frequency: Semi-Annually

#### Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/20/2009  
Date Data Arrived at EDR: 07/20/2009  
Date Made Active in Reports: 07/31/2009  
Number of Days to Update: 11

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 10/05/2009  
Next Scheduled EDR Contact: 01/18/2010  
Data Release Frequency: Semi-Annually

### CONTRA COSTA COUNTY:

#### Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 09/01/2009  
Date Data Arrived at EDR: 09/02/2009  
Date Made Active in Reports: 09/18/2009  
Number of Days to Update: 16

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 08/26/2009  
Next Scheduled EDR Contact: 11/23/2009  
Data Release Frequency: Semi-Annually

### FRESNO COUNTY:

#### CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/21/2009  
Date Data Arrived at EDR: 07/23/2009  
Date Made Active in Reports: 08/03/2009  
Number of Days to Update: 11

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 10/16/2009  
Next Scheduled EDR Contact: 02/01/2010  
Data Release Frequency: Semi-Annually

### KERN COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 09/18/2009  
Date Data Arrived at EDR: 09/18/2009  
Date Made Active in Reports: 10/01/2009  
Number of Days to Update: 13

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 09/18/2009  
Next Scheduled EDR Contact: 11/30/2009  
Data Release Frequency: Quarterly

## LOS ANGELES COUNTY:

### San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/1998  
Date Data Arrived at EDR: 07/07/1999  
Date Made Active in Reports: N/A  
Number of Days to Update: 0

Source: EPA Region 9  
Telephone: 415-972-3178  
Last EDR Contact: 09/28/2009  
Next Scheduled EDR Contact: 01/11/2010  
Data Release Frequency: No Update Planned

### HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 05/28/2009  
Date Data Arrived at EDR: 08/13/2009  
Date Made Active in Reports: 08/20/2009  
Number of Days to Update: 7

Source: Department of Public Works  
Telephone: 626-458-3517  
Last EDR Contact: 10/19/2009  
Next Scheduled EDR Contact: 02/01/2010  
Data Release Frequency: Semi-Annually

### List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 08/10/2009  
Date Data Arrived at EDR: 08/17/2009  
Date Made Active in Reports: 08/20/2009  
Number of Days to Update: 3

Source: La County Department of Public Works  
Telephone: 818-458-5185  
Last EDR Contact: 08/10/2009  
Next Scheduled EDR Contact: 11/09/2009  
Data Release Frequency: Varies

### City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009  
Date Data Arrived at EDR: 03/10/2009  
Date Made Active in Reports: 04/08/2009  
Number of Days to Update: 29

Source: Engineering & Construction Division  
Telephone: 213-473-7869  
Last EDR Contact: 09/08/2009  
Next Scheduled EDR Contact: 12/07/2009  
Data Release Frequency: Varies

### Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 02/11/2009  
Date Data Arrived at EDR: 04/23/2009  
Date Made Active in Reports: 05/11/2009  
Number of Days to Update: 18

Source: Community Health Services  
Telephone: 323-890-7806  
Last EDR Contact: 08/10/2009  
Next Scheduled EDR Contact: 11/09/2009  
Data Release Frequency: Annually

### City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/10/2009  
Date Data Arrived at EDR: 08/17/2009  
Date Made Active in Reports: 08/27/2009  
Number of Days to Update: 10

Source: City of El Segundo Fire Department  
Telephone: 310-524-2236  
Last EDR Contact: 08/10/2009  
Next Scheduled EDR Contact: 11/09/2009  
Data Release Frequency: Semi-Annually

## City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003  
Date Data Arrived at EDR: 10/23/2003  
Date Made Active in Reports: 11/26/2003  
Number of Days to Update: 34

Source: City of Long Beach Fire Department  
Telephone: 562-570-2563  
Last EDR Contact: 08/17/2009  
Next Scheduled EDR Contact: 11/16/2009  
Data Release Frequency: Annually

## City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/12/2009  
Date Data Arrived at EDR: 08/31/2009  
Date Made Active in Reports: 09/04/2009  
Number of Days to Update: 4

Source: City of Torrance Fire Department  
Telephone: 310-618-2973  
Last EDR Contact: 10/19/2009  
Next Scheduled EDR Contact: 02/01/2010  
Data Release Frequency: Semi-Annually

## MARIN COUNTY:

### Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 08/04/2009  
Date Data Arrived at EDR: 08/18/2009  
Date Made Active in Reports: 08/27/2009  
Number of Days to Update: 9

Source: Public Works Department Waste Management  
Telephone: 415-499-6647  
Last EDR Contact: 10/13/2009  
Next Scheduled EDR Contact: 01/25/2010  
Data Release Frequency: Semi-Annually

## NAPA COUNTY:

### Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 07/09/2008  
Date Data Arrived at EDR: 07/09/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 22

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 09/14/2009  
Next Scheduled EDR Contact: 12/21/2009  
Data Release Frequency: Semi-Annually

### Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008  
Date Data Arrived at EDR: 01/16/2008  
Date Made Active in Reports: 02/08/2008  
Number of Days to Update: 23

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 09/14/2009  
Next Scheduled EDR Contact: 12/21/2009  
Data Release Frequency: Annually

## ORANGE COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 07/01/2009  
Date Data Arrived at EDR: 08/31/2009  
Date Made Active in Reports: 09/18/2009  
Number of Days to Update: 18

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 08/28/2009  
Next Scheduled EDR Contact: 11/30/2009  
Data Release Frequency: Annually

## List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 08/13/2009  
Date Data Arrived at EDR: 09/04/2009  
Date Made Active in Reports: 09/18/2009  
Number of Days to Update: 14

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 08/31/2009  
Next Scheduled EDR Contact: 11/30/2009  
Data Release Frequency: Quarterly

## List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 08/05/2009  
Date Data Arrived at EDR: 08/31/2009  
Date Made Active in Reports: 09/04/2009  
Number of Days to Update: 4

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: 11/30/2009  
Data Release Frequency: Quarterly

## PLACER COUNTY:

### Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 07/15/2009  
Date Data Arrived at EDR: 07/16/2009  
Date Made Active in Reports: 07/23/2009  
Number of Days to Update: 7

Source: Placer County Health and Human Services  
Telephone: 530-889-7312  
Last EDR Contact: 06/28/2009  
Next Scheduled EDR Contact: 09/28/2009  
Data Release Frequency: Semi-Annually

## RIVERSIDE COUNTY:

### Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 08/24/2009  
Date Data Arrived at EDR: 08/26/2009  
Date Made Active in Reports: 09/18/2009  
Number of Days to Update: 23

Source: Department of Public Health  
Telephone: 951-358-5055  
Last EDR Contact: 09/28/2009  
Next Scheduled EDR Contact: 01/11/2010  
Data Release Frequency: Quarterly

### Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 08/24/2009  
Date Data Arrived at EDR: 08/26/2009  
Date Made Active in Reports: 09/16/2009  
Number of Days to Update: 21

Source: Health Services Agency  
Telephone: 951-358-5055  
Last EDR Contact: 09/28/2009  
Next Scheduled EDR Contact: 01/11/2010  
Data Release Frequency: Quarterly

## SACRAMENTO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 06/04/2009  
Date Data Arrived at EDR: 07/28/2009  
Date Made Active in Reports: 08/03/2009  
Number of Days to Update: 6

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 10/16/2009  
Next Scheduled EDR Contact: 01/25/2010  
Data Release Frequency: Quarterly

## Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 06/04/2009  
Date Data Arrived at EDR: 07/28/2009  
Date Made Active in Reports: 08/03/2009  
Number of Days to Update: 6

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 10/16/2009  
Next Scheduled EDR Contact: 01/25/2010  
Data Release Frequency: Quarterly

## SAN BERNARDINO COUNTY:

### Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 09/18/2009  
Date Data Arrived at EDR: 09/21/2009  
Date Made Active in Reports: 10/13/2009  
Number of Days to Update: 22

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 08/31/2009  
Next Scheduled EDR Contact: 11/30/2009  
Data Release Frequency: Quarterly

## SAN DIEGO COUNTY:

### Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 07/16/2008  
Date Data Arrived at EDR: 10/29/2008  
Date Made Active in Reports: 11/26/2008  
Number of Days to Update: 28

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268  
Last EDR Contact: 09/24/2009  
Next Scheduled EDR Contact: 12/28/2009  
Data Release Frequency: Quarterly

### Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 11/01/2008  
Date Data Arrived at EDR: 12/23/2008  
Date Made Active in Reports: 01/27/2009  
Number of Days to Update: 35

Source: Department of Health Services  
Telephone: 619-338-2209  
Last EDR Contact: 08/17/2009  
Next Scheduled EDR Contact: 11/16/2009  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 08/18/2009	Source: San Diego County Department of Environmental Health
Date Data Arrived at EDR: 09/22/2009	Telephone: 619-338-2371
Date Made Active in Reports: 10/13/2009	Last EDR Contact: 09/22/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 12/28/2009
	Data Release Frequency: Varies

## SAN FRANCISCO COUNTY:

### Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008	Source: Department Of Public Health San Francisco County
Date Data Arrived at EDR: 09/19/2008	Telephone: 415-252-3920
Date Made Active in Reports: 09/29/2008	Last EDR Contact: 08/31/2009
Number of Days to Update: 10	Next Scheduled EDR Contact: 11/30/2009
	Data Release Frequency: Quarterly

### Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008	Source: Department of Public Health
Date Data Arrived at EDR: 09/19/2008	Telephone: 415-252-3920
Date Made Active in Reports: 10/01/2008	Last EDR Contact: 09/14/2009
Number of Days to Update: 12	Next Scheduled EDR Contact: 11/30/2009
	Data Release Frequency: Quarterly

## SAN JOAQUIN COUNTY:

### San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 08/21/2009	Source: Environmental Health Department
Date Data Arrived at EDR: 08/21/2009	Telephone: N/A
Date Made Active in Reports: 08/27/2009	Last EDR Contact: 09/28/2009
Number of Days to Update: 6	Next Scheduled EDR Contact: 01/11/2010
	Data Release Frequency: Semi-Annually

## SAN MATEO COUNTY:

### Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 07/27/2009	Source: San Mateo County Environmental Health Services Division
Date Data Arrived at EDR: 07/28/2009	Telephone: 650-363-1921
Date Made Active in Reports: 08/03/2009	Last EDR Contact: 09/23/2009
Number of Days to Update: 6	Next Scheduled EDR Contact: 01/04/2010
	Data Release Frequency: Annually

### Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 04/07/2009	Source: San Mateo County Environmental Health Services Division
Date Data Arrived at EDR: 04/07/2009	Telephone: 650-363-1921
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 09/23/2009
Number of Days to Update: 34	Next Scheduled EDR Contact: 01/04/2010
	Data Release Frequency: Semi-Annually

## SANTA CLARA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005  
Date Data Arrived at EDR: 03/30/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 22

Source: Santa Clara Valley Water District  
Telephone: 408-265-2600  
Last EDR Contact: 03/23/2009  
Next Scheduled EDR Contact: 06/22/2009  
Data Release Frequency: No Update Planned

## LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 05/29/2009  
Date Data Arrived at EDR: 06/01/2009  
Date Made Active in Reports: 06/15/2009  
Number of Days to Update: 14

Source: Department of Environmental Health  
Telephone: 408-918-3417  
Last EDR Contact: 09/23/2009  
Next Scheduled EDR Contact: 12/21/2009  
Data Release Frequency: Varies

## Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 08/31/2009  
Date Data Arrived at EDR: 08/31/2009  
Date Made Active in Reports: 09/18/2009  
Number of Days to Update: 18

Source: City of San Jose Fire Department  
Telephone: 408-277-4659  
Last EDR Contact: 08/31/2009  
Next Scheduled EDR Contact: 11/30/2009  
Data Release Frequency: Annually

## SOLANO COUNTY:

### Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 09/21/2009  
Date Data Arrived at EDR: 09/25/2009  
Date Made Active in Reports: 10/13/2009  
Number of Days to Update: 18

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 09/14/2009  
Next Scheduled EDR Contact: 12/21/2009  
Data Release Frequency: Quarterly

### Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 07/01/2009  
Date Data Arrived at EDR: 07/10/2009  
Date Made Active in Reports: 07/24/2009  
Number of Days to Update: 14

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 09/14/2009  
Next Scheduled EDR Contact: 12/21/2009  
Data Release Frequency: Quarterly

## SONOMA COUNTY:

### Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 10/05/2009  
Date Data Arrived at EDR: 10/06/2009  
Date Made Active in Reports: 10/13/2009  
Number of Days to Update: 7

Source: Department of Health Services  
Telephone: 707-565-6565  
Last EDR Contact: 10/05/2009  
Next Scheduled EDR Contact: 01/18/2010  
Data Release Frequency: Quarterly

## SUTTER COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 04/01/2009  
Date Data Arrived at EDR: 04/02/2009  
Date Made Active in Reports: 04/09/2009  
Number of Days to Update: 7

Source: Sutter County Department of Agriculture  
Telephone: 530-822-7500  
Last EDR Contact: 09/18/2009  
Next Scheduled EDR Contact: 12/28/2009  
Data Release Frequency: Semi-Annually

## VENTURA COUNTY:

### Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 08/28/2009  
Date Data Arrived at EDR: 09/08/2009  
Date Made Active in Reports: 09/18/2009  
Number of Days to Update: 10

Source: Ventura County Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 09/04/2009  
Next Scheduled EDR Contact: 12/07/2009  
Data Release Frequency: Quarterly

### Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 08/01/2009  
Date Data Arrived at EDR: 10/05/2009  
Date Made Active in Reports: 10/13/2009  
Number of Days to Update: 8

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 09/28/2009  
Next Scheduled EDR Contact: 11/30/2009  
Data Release Frequency: Annually

### Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008  
Date Data Arrived at EDR: 06/24/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 37

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 09/04/2009  
Next Scheduled EDR Contact: 12/07/2009  
Data Release Frequency: Quarterly

### Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 06/26/2009  
Date Data Arrived at EDR: 07/09/2009  
Date Made Active in Reports: 07/24/2009  
Number of Days to Update: 15

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 09/28/2009  
Next Scheduled EDR Contact: 01/04/2010  
Data Release Frequency: Quarterly

## YOLO COUNTY:

### Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 07/22/2009  
Date Data Arrived at EDR: 09/04/2009  
Date Made Active in Reports: 09/16/2009  
Number of Days to Update: 12

Source: Yolo County Department of Health  
Telephone: 530-666-8646  
Last EDR Contact: 10/13/2009  
Next Scheduled EDR Contact: 01/11/2010  
Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

### CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2007	Source: Department of Environmental Protection
Date Data Arrived at EDR: 08/26/2009	Telephone: 860-424-3375
Date Made Active in Reports: 09/11/2009	Last EDR Contact: 09/09/2009
Number of Days to Update: 16	Next Scheduled EDR Contact: 12/07/2009
	Data Release Frequency: Annually

### NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2008	Source: Department of Environmental Protection
Date Data Arrived at EDR: 05/05/2009	Telephone: N/A
Date Made Active in Reports: 05/22/2009	Last EDR Contact: 10/20/2009
Number of Days to Update: 17	Next Scheduled EDR Contact: 02/01/2010
	Data Release Frequency: Annually

### NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 07/28/2009	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 08/27/2009	Telephone: 518-402-8651
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 08/27/2009
Number of Days to Update: 25	Next Scheduled EDR Contact: 11/23/2009
	Data Release Frequency: Annually

### PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2007	Source: Department of Environmental Protection
Date Data Arrived at EDR: 09/11/2008	Telephone: N/A
Date Made Active in Reports: 10/02/2008	Last EDR Contact: 09/08/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 12/07/2009
	Data Release Frequency: Annually

### RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 06/01/2009	Source: Department of Environmental Management
Date Data Arrived at EDR: 06/12/2009	Telephone: 401-222-2797
Date Made Active in Reports: 06/29/2009	Last EDR Contact: 09/14/2009
Number of Days to Update: 17	Next Scheduled EDR Contact: 12/14/2009
	Data Release Frequency: Annually

### WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2008	Source: Department of Natural Resources
Date Data Arrived at EDR: 07/17/2009	Telephone: N/A
Date Made Active in Reports: 08/10/2009	Last EDR Contact: 09/24/2009
Number of Days to Update: 24	Next Scheduled EDR Contact: 01/04/2010
	Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**Oil/Gas Pipelines:** This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

### Electric Power Transmission Line Data

Source: PennWell Corporation

Telephone: (800) 823-6277

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

### Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

### Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## STREET AND ADDRESS INFORMATION

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## GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

SAN JOSE SEWER REPLACEMENT  
4TH ST BTW COMMERCIAL AND HWY 101  
SAN JOSE, CA 95112

### TARGET PROPERTY COORDINATES

Latitude (North): 37.36510 - 37° 21' 54.4"  
Longitude (West): 121.9086 - 121° 54' 31.0"  
Universal Tranverse Mercator: Zone 10  
UTM X (Meters): 596646.1  
UTM Y (Meters): 4135730.0  
Elevation: 54 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map: 37121-C8 SAN JOSE WEST, CA  
Most Recent Revision: 1980  
  
North Map: 37121-D8 MILPITAS, CA  
Most Recent Revision: 1980

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

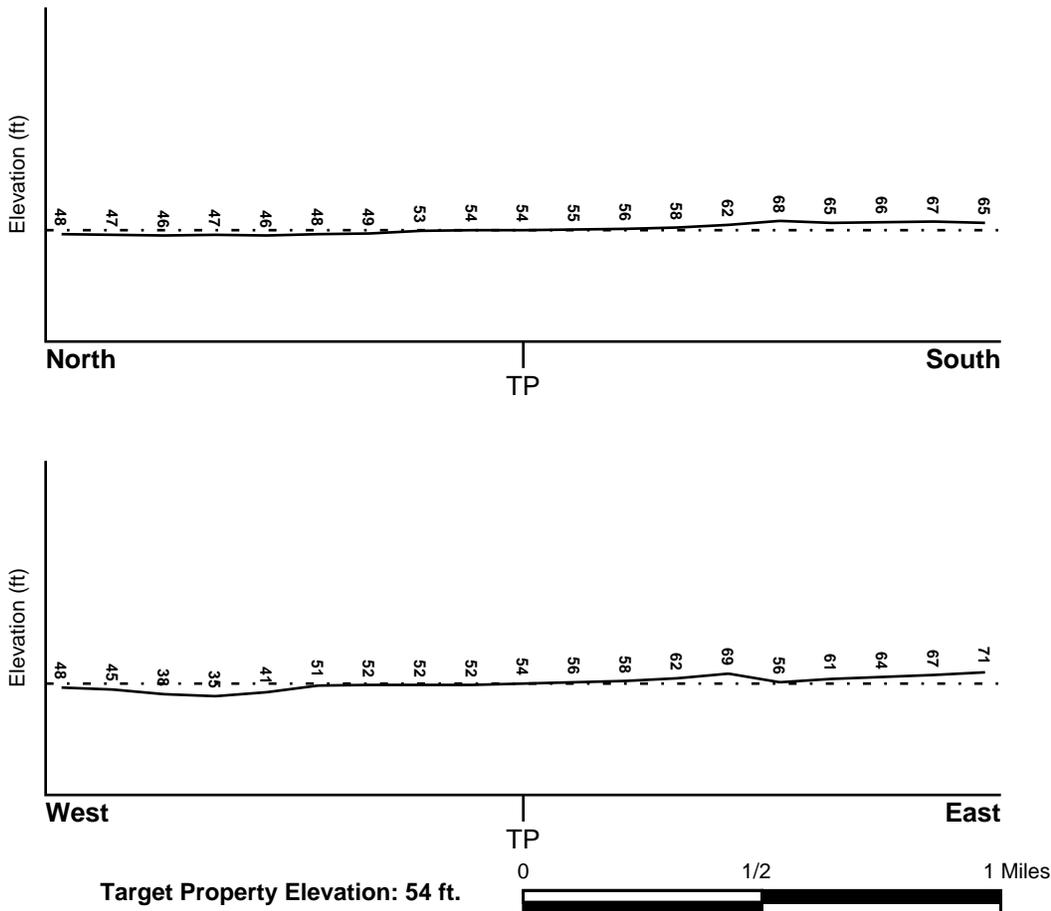
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WNW

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## **FEMA FLOOD ZONE**

<u>Target Property County</u>	<u>FEMA Flood Electronic Data</u>
SANTA CLARA, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 0603490019E

Additional Panels in search area:

- 0603490013E
- 0603490014E
- 0603370070F
- 0603370235E
- 0603490018D

## **NATIONAL WETLAND INVENTORY**

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
SAN JOSE WEST	YES - refer to the Overview Map and Detail Map

## HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### ***Site-Specific Hydrogeological Data\*:***

Search Radius:	1.25 miles
Location Relative to TP:	1/2 - 1 Mile SE
Site Name:	MODERN MACHINE CO
Site EPA ID Number:	CAD982400467
Groundwater Flow Direction:	North-Northeast
Measured Depth to Water:	16 feet to 17 feet.
Hydraulic Connection:	The site is located in the pressure (confined) zone, although interconnection between the upper and lower aquifers has been demonstrated within a one mile radius of the site.
Sole Source Aquifer:	No information about a sole source aquifer is available
Data Quality:	Information based on site-specific subsurface investigations is documented in the CERCLIS investigation report(s)

## **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

\* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

## GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

### ROCK STRATIGRAPHIC UNIT

Era: Cenozoic  
System: Quaternary  
Series: Quaternary  
Code: Q (*decoded above as Era, System & Series*)

### GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

## DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: BOTELLA

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 0.60 Min: 0.20	Max: 7.30 Min: 5.60
2	9 inches	41 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 0.60 Min: 0.20	Max: 7.80 Min: 5.60
3	41 inches	76 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 0.60 Min: 0.20	Max: 7.80 Min: 5.60

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: No Other Soil Types

Surficial Soil Types: No Other Soil Types

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: No Other Soil Types

### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

### WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A2	USGS3224026	1/4 - 1/2 Mile East
A3	USGS3224027	1/4 - 1/2 Mile East

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

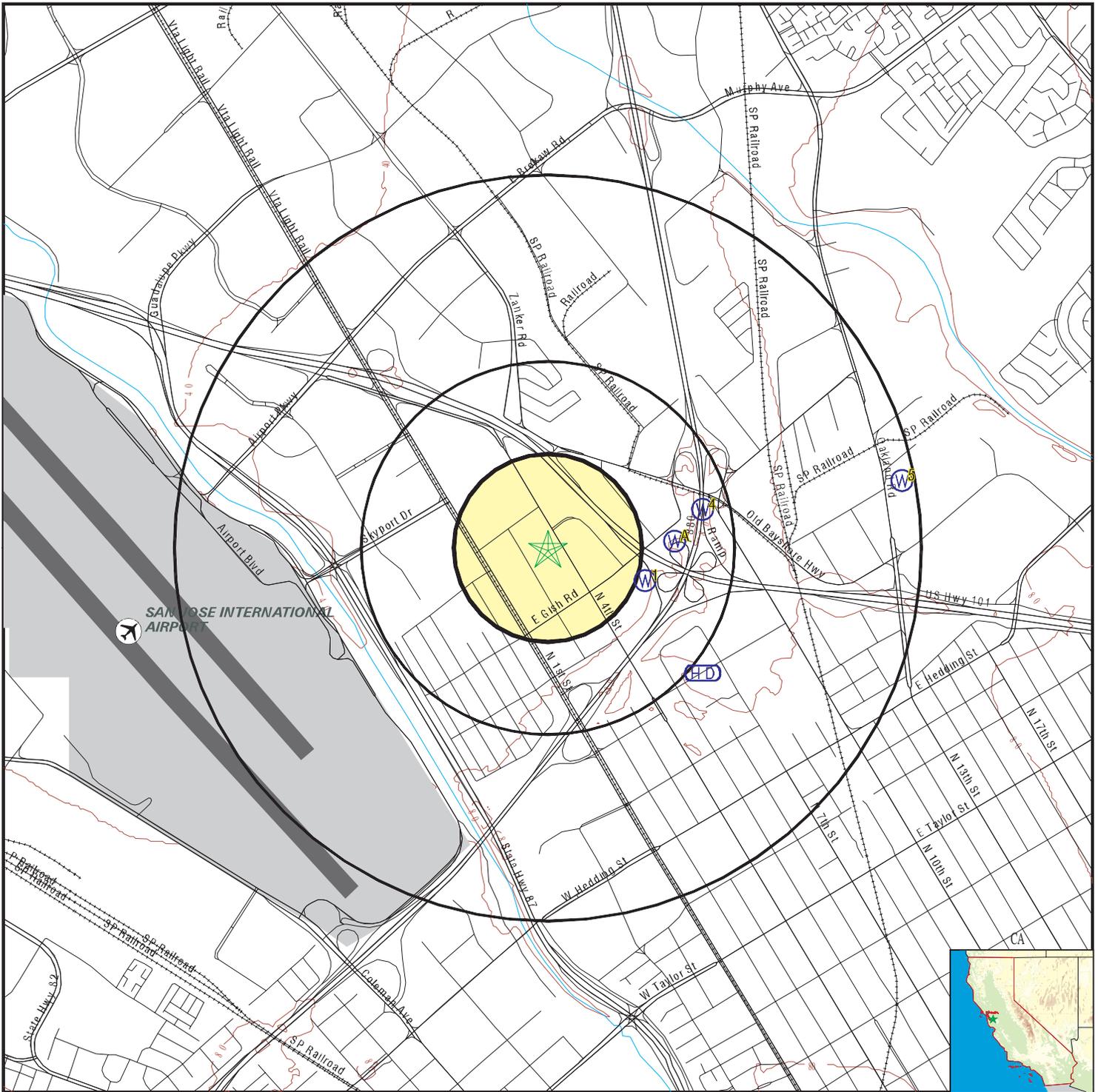
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	6834	1/4 - 1/2 Mile ESE
4	6833	1/4 - 1/2 Mile ENE
5	6835	1/2 - 1 Mile East

# PHYSICAL SETTING SOURCE MAP - 2619575.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: San Jose Sewer Replacement  
 ADDRESS: 4th St btw Commercial and Hwy 101  
 San Jose CA 95112  
 LAT/LONG: 37.3651 / 121.9086

CLIENT: AMEC/Geomatrix  
 CONTACT: Donald Daniels  
 INQUIRY #: 2619575.2s  
 DATE: October 21, 2009 3:55 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

<b>1</b>		
<b>ESE</b>	<b>CA WELLS</b>	<b>6834</b>
<b>1/4 - 1/2 Mile</b>		
<b>Higher</b>		

**Water System Information:**

Prime Station Code: 06S/01E-31K02 M	User ID: HEN	
FRDS Number: 4310011052	County: Santa Clara	
District Number: 05	Station Type: WELL/AMBNT/MUN/INTAKE	
Water Type: Well/Groundwater	Well Status: Inactive Untreated	
Source Lat/Long: 372150.0 1215410.0	Precision: 1,000 Feet (10 Seconds)	
Source Name: GISH WELL 01 - INACTIVE		
System Number: 4310011		
System Name: San Jose Water Company		
Organization That Operates System:		
1221 S. Bascom Avenue		
San Jose, CA 95128		
Pop Served: 944000	Connections: 206890	
Area Served: SAN JOSE VICINITY		
Sample Collected: 04/08/2009	Findings: 3.3 MG/L	
Chemical: NITRATE (AS NO3)		
Sample Collected: 12/09/2008	Findings: 1.8 PCI/L	
Chemical: GROSS ALPHA COUNTING ERROR		
Sample Collected: 12/09/2008	Findings: 3 PCI/L	
Chemical: GROSS ALPHA MDA95		
Sample Collected: 12/09/2008	Findings: .57 PCI/L	
Chemical: RADIUM 228 MDA95		
Sample Collected: 12/09/2008	Findings: .37 PCI/L	
Chemical: RADIUM 228 COUNTING ERROR		
Sample Collected: 10/28/2008	Findings: 110 UG/L	
Chemical: MANGANESE		
Sample Collected: 10/28/2008	Findings: 260 UG/L	
Chemical: IRON		
Sample Collected: 09/22/2008	Findings: .43 PCI/L	
Chemical: RADIUM 228 COUNTING ERROR		
Sample Collected: 09/22/2008	Findings: 2 PCI/L	
Chemical: GROSS ALPHA MDA95		
Sample Collected: 09/22/2008	Findings: .55 PCI/L	
Chemical: RADIUM 228 MDA95		
Sample Collected: 09/22/2008	Findings: 1.9 PCI/L	
Chemical: GROSS ALPHA COUNTING ERROR		
Sample Collected: 07/08/2008	Findings: 22.7 UG/L	
Chemical: MANGANESE		
Sample Collected: 06/25/2008	Findings: .362 PCI/L	
Chemical: RADIUM 228 COUNTING ERROR		
Sample Collected: 03/13/2008	Findings: 557 US	
Chemical: SPECIFIC CONDUCTANCE		
Sample Collected: 03/13/2008	Findings: 7.9	
Chemical: PH, LABORATORY		
Sample Collected: 03/13/2008	Findings: 159 MG/L	
Chemical: ALKALINITY (TOTAL) AS CaCO3		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/13/2008	Findings:	190 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/13/2008	Findings:	200 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	03/13/2008	Findings:	50 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/13/2008	Findings:	19 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/13/2008	Findings:	39 MG/L
Chemical:	SODIUM		
Sample Collected:	03/13/2008	Findings:	1.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/13/2008	Findings:	28 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/13/2008	Findings:	.15 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/13/2008	Findings:	160 UG/L
Chemical:	BARIUM		
Sample Collected:	03/13/2008	Findings:	57 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/13/2008	Findings:	1.7 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/13/2008	Findings:	.4 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	03/13/2008	Findings:	356 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/13/2008	Findings:	.4
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03/13/2008	Findings:	3.7 MG/L
Chemical:	NITRATE (AS NO <sub>3</sub> )		
Sample Collected:	03/13/2008	Findings:	3900 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/13/2008	Findings:	.9 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	03/13/2008	Findings:	12
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	03/13/2008	Findings:	830 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03/13/2008	Findings:	3 PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	03/13/2008	Findings:	1 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	09/18/2007	Findings:	.74 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	09/18/2007	Findings:	1 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	09/18/2007	Findings:	.4 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	12/15/2005	Findings:	2.845 MG/L
Chemical:	NITRATE (AS NO <sub>3</sub> )		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/15/2005	Findings:	.78 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	04/20/2004	Findings:	316 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	04/20/2004	Findings:	3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/20/2004	Findings:	6 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	04/20/2004	Findings:	.59 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	04/20/2004	Findings:	18 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	04/20/2004	Findings:	1 UNITS
Chemical:	COLOR		
Sample Collected:	04/20/2004	Findings:	545 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04/20/2004	Findings:	7.84
Chemical:	PH, LABORATORY		
Sample Collected:	04/20/2004	Findings:	200 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	04/20/2004	Findings:	242 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	04/20/2004	Findings:	1.1 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	04/20/2004	Findings:	202 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	04/20/2004	Findings:	51 MG/L
Chemical:	CALCIUM		
Sample Collected:	04/20/2004	Findings:	17 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	04/20/2004	Findings:	40 MG/L
Chemical:	SODIUM		
Sample Collected:	04/20/2004	Findings:	40
Chemical:	SODIUM ABSORPTION RATIO		
Sample Collected:	04/20/2004	Findings:	1.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	04/20/2004	Findings:	24 MG/L
Chemical:	CHLORIDE		
Sample Collected:	04/20/2004	Findings:	150 UG/L
Chemical:	BARIUM		
Sample Collected:	04/20/2004	Findings:	28 UG/L
Chemical:	MANGANESE		

**A2  
East  
1/4 - 1/2 Mile  
Higher**

**FED USGS USGS3224026**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency cd:	USGS	Site no:	372155121540602
Site name:	006S001E31K002M		
Latitude:	372154.96	EDR Site id:	USGS3224026
Longitude:	1215406.24	Dec lat:	37.36520738
Dec lon:	-121.90280054	Coor meth:	G
Coor accr:	5	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	085
Country:	US	Land net:	Not Reported
Location map:	SAN JOSE WEST	Map scale:	24000
Altitude:	40		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	2.5		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Not Reported		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19990623	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	660	Hole depth:	667
Source of depth data:	other reported		
Project number:	470655400		
Real time data flag:	Not Reported		
Daily flow data end date:	Not Reported	Daily flow data begin date:	Not Reported
Peak flow data begin date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data count:	Not Reported	Peak flow data end date:	Not Reported
Water quality data end date:	Not Reported	Water quality data begin date:	Not Reported
Ground water data begin date:	Not Reported	Water quality data count:	Not Reported
Ground water data count:	Not Reported	Ground water data end date:	Not Reported

Ground-water levels, Number of Measurements: 0

**A3  
East  
1/4 - 1/2 Mile  
Higher**

**FED USGS      USGS3224027**

Agency cd:	USGS	Site no:	372156121540401
Site name:	006S001E31K001M		
Latitude:	372156.1	EDR Site id:	USGS3224027
Longitude:	1215403.54	Dec lat:	37.36552404
Dec lon:	-121.90205052	Coor meth:	G
Coor accr:	5	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	085
Country:	US	Land net:	Not Reported
Location map:	SAN JOSE WEST	Map scale:	24000
Altitude:	40		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	2.5		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	Not Reported		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19990623	Mean greenwich time offset:	PST

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	752	Hole depth:	752
Source of depth data:	other reported		
Project number:	470655400		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

**4**  
**ENE**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS    6833**

**Water System Information:**

Prime Station Code:	06S/01E-31K01 M	User ID:	HEN
FRDS Number:	4310011053	County:	Santa Clara
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Untreated
Source Lat/Long:	372200.0 1215400.0	Precision:	Undefined
Source Name:	GISH WELL 02		
System Number:	4310011		
System Name:	San Jose Water Company		
Organization That Operates System:	1221 S. Bascom Avenue San Jose, CA 95128		
Pop Served:	944000	Connections:	206890
Area Served:	SAN JOSE VICINITY		
Sample Collected:	02/25/2009	Findings:	34 UG/L
Chemical:	MANGANESE		
Sample Collected:	02/25/2009	Findings:	630 UG/L
Chemical:	IRON		
Sample Collected:	12/09/2008	Findings:	3.7 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	12/09/2008	Findings:	2 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/09/2008	Findings:	.33 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	12/09/2008	Findings:	2 PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	12/09/2008	Findings:	.41 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	10/28/2008	Findings:	310 UG/L
Chemical:	IRON		
Sample Collected:	10/28/2008	Findings:	29 UG/L
Chemical:	MANGANESE		
Sample Collected:	09/22/2008	Findings:	1.6 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09/22/2008	Findings:	.39 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	09/22/2008	Findings:	.45 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	09/22/2008	Findings:	3 PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	07/08/2008	Findings:	25.5 UG/L
Chemical:	MANGANESE		
Sample Collected:	04/29/2008	Findings:	.5 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	03/13/2008	Findings:	5 UNITS
Chemical:	COLOR		
Sample Collected:	03/13/2008	Findings:	2 TON
Chemical:	ODOR THRESHOLD @ 60 C		
Sample Collected:	03/13/2008	Findings:	507 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/13/2008	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	03/13/2008	Findings:	141 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	03/13/2008	Findings:	170 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/13/2008	Findings:	190 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	03/13/2008	Findings:	48 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/13/2008	Findings:	18 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03/13/2008	Findings:	41 MG/L
Chemical:	SODIUM		
Sample Collected:	03/13/2008	Findings:	1.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03/13/2008	Findings:	22 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/13/2008	Findings:	.13 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03/13/2008	Findings:	150 UG/L
Chemical:	BARIUM		
Sample Collected:	03/13/2008	Findings:	400 UG/L
Chemical:	IRON		
Sample Collected:	03/13/2008	Findings:	53 UG/L
Chemical:	MANGANESE		
Sample Collected:	03/13/2008	Findings:	1.8 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	03/13/2008	Findings:	.34 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	03/13/2008	Findings:	320 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03/13/2008	Findings:	.6
Chemical:	LANGELIER INDEX @ 60 C		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	03/13/2008	Findings:	2200 UG/L
Chemical:	CARBON DIOXIDE		
Sample Collected:	03/13/2008	Findings:	2.6 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	03/13/2008	Findings:	12
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	03/13/2008	Findings:	3 PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	03/13/2008	Findings:	1 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	09/18/2007	Findings:	.65 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	09/18/2007	Findings:	1 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	09/18/2007	Findings:	.32 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	12/15/2005	Findings:	2.746 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/07/2004	Findings:	7.76
Chemical:	PH, LABORATORY		
Sample Collected:	12/07/2004	Findings:	198 MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	12/07/2004	Findings:	196.439 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/07/2004	Findings:	1.56 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/07/2004	Findings:	170 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	12/07/2004	Findings:	45.6 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/07/2004	Findings:	14.22 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/07/2004	Findings:	43.167 MG/L
Chemical:	SODIUM		
Sample Collected:	12/07/2004	Findings:	4.682
Chemical:	SODIUM ABSORPTION RATIO		
Sample Collected:	12/07/2004	Findings:	1.07 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12/07/2004	Findings:	18.9 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/07/2004	Findings:	159.983 UG/L
Chemical:	BARIUM		
Sample Collected:	12/07/2004	Findings:	24.939 UG/L
Chemical:	MANGANESE		
Sample Collected:	12/07/2004	Findings:	6.865 UG/L
Chemical:	VANADIUM		
Sample Collected:	12/07/2004	Findings:	272 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/07/2004	Findings:	3.298 MG/L
Chemical:	NITRATE (AS NO3)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	12/07/2004	Findings:	.3 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	12/07/2004	Findings:	906.018 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	12/07/2004	Findings:	3.258 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	12/07/2004	Findings:	4 UNITS
Chemical:	COLOR		
Sample Collected:	12/07/2004	Findings:	519 US
Chemical:	SPECIFIC CONDUCTANCE		

**5  
East  
1/2 - 1 Mile  
Higher**

**CA WELLS 6835**

**Water System Information:**

Prime Station Code:	06S/01E-32E04 M	User ID:	HEN
FRDS Number:	4300820001	County:	Santa Clara
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	372204.0 1215325.0	Precision:	100 Feet (one Second)
Source Name:	WELL 01		
System Number:	4300820		
System Name:	Trailer Tel RV Park		
Organization That Operates System:	1212 Oakland Road San Jose, CA 95112		
Pop Served:	250	Connections:	170
Area Served:	Not Reported		
Sample Collected:	05/05/2082	Findings:	1340 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05/05/2082	Findings:	432 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	05/05/2082	Findings:	677 MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	05/05/2082	Findings:	135 MG/L
Chemical:	CALCIUM		
Sample Collected:	05/05/2082	Findings:	83 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	05/05/2082	Findings:	62 MG/L
Chemical:	SODIUM		
Sample Collected:	05/05/2082	Findings:	84 MG/L
Chemical:	CHLORIDE		
Sample Collected:	05/05/2082	Findings:	.05 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	05/05/2082	Findings:	931 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	05/05/2082	Findings:	8.1
Chemical:	PH, LABORATORY		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CA Radon

### Radon Test Results

Zip	Total Sites	> 4 Pci/L	Pct. > 4 Pci/L
95112	9	0	0.00

Federal EPA Radon Zone for SANTA CLARA County: 2

- Note: Zone 1 indoor average level > 4 pCi/L.
- : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
- : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 95112

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-1.100 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

## HYDROLOGIC INFORMATION

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

#### California Drinking Water Quality Database

Source: Department of Health Services

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

## OTHER STATE DATABASE INFORMATION

#### California Oil and Gas Well Locations

Source: Department of Conservation

Telephone: 916-323-1779

Oil and Gas well locations in the state.

### RADON

#### State Database: CA Radon

Source: Department of Health Services

Telephone: 916-324-2208

Radon Database for California

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### OTHER

Airport Landing Facilities: Private and public use landing facilities  
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater  
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

### STREET AND ADDRESS INFORMATION

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# Construction Impact Mitigation Plan

## Preliminary Draft

### 60-Inch Brick Interceptor Phase VIA Project for the City of San Jose

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#### CITY OF SAN JOSE

Project Manager

Andrew Romer, PE

#### AECOM TEAM

Project Staff

Barbara Bartholomae

Project No. 60183928/06000

February 2013

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60-Inch Brick Interceptor Phase VIA Project  
February 22, 2013**

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## **A. EXECUTIVE OVERVIEW**

The City of San Jose retained AECOM to design the 60-Inch Brick Interceptor Phase VIA Project and prepare the Construction Impact Mitigation Plan (CIMP) for the project. The CIMP is an evolving, dynamic document that will guide the project team in solving construction impacts to the adjacent community as they arise.

Potential impacts arising from construction activities are discussed in Section C of this report and mitigation measures addressing those specific impacts are described in Section D.

The project proposes to redirect flow from the existing 60-inch brick sanitary sewer, which extends along North 5th Street and continues north within dedicated easements, terminating at the existing Structure E, located just north of U.S. Highway 101 at Zanker Road and Old Bayshore Freeway. The project will intercept and divert existing flows from the 4,500-foot long, 60-inch sewer line to a new reinforced concrete pipe (RCP) interceptor sewer. The proposed RCP line will be installed within the existing right-of-way of Commercial Street, North 4th Street and finally under U.S. Highway 101 to connect the existing Structure E. Project features include:

- 450± linear feet of 84" RCP interceptor sewer under U.S. Highway 101(US-101) from Structure E (located just north of US 101 at Zanker Road and Old Bayshore Highway) to North 4th Street;
- 4200± linear feet of 84" RCP interceptor sewer in North 4th Street from US 101± to Commercial Street (replacing existing 48- and 54-inch RCP sewers);
- 400± LF of 72" RCP interceptor sewer in Commercial Street from North 4th to North 5th Streets (replacing an existing 8" sewer line);
- Four diversion structures; and
- Three sections of local sewer (10", 12", and 12" - 15" VCP).

By upsizing the existing sewer lines in Commercial and North 4th Streets, the system will be able to convey substantially more flow with fewer pipelines, and reduce operation and maintenance requirements.

Most of the sewer interceptor installation will be installed using open trench construction. The portion under US-101 will be installed by trenchless methods. Vehicular traffic and property access present the greatest challenges because this is a heavily urbanized area with surrounding land uses that include commercial, industrial, office, and residential uses. Project construction will temporarily affect right-of-way access within Zanker Road, North 4th Street, Commercial Street and North 5th Street. Traffic will need to be rerouted, lanes reduced and there may be some short-term road closures or intersection closures. On street parking will be eliminated where needed for safety.

The pipeline construction zone will include the west side of North 4th Street. Most of the adjacent properties either have two driveways or one driveway and available access from either a side street, Kerley Street, or an alley. For the two driveway properties, the Contractor can stage

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construction to have one of the driveways available for access to the property. For properties with available alternative access points, the Contractor will close the driveway adjacent to construction and the property user will have to use the alternate access route during construction. It is anticipated that up to 60 linear feet of the pipeline can be constructed per day. As such, the construction work zone will move and access to impacted sites will open as others close.

Eleven properties exist along the project alignment that only have one driveway and no other available access point. The Contractor will work with the property owners to find workable solutions.

Construction activities will generally occur between the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday for any on-site or off-site work within 500 feet of any residential unit. No work shall be conducted outside the designated hours without advance notice to the adjacent community and approval of Department of Public Works. Construction noise would be temporary and would only occur during the daytime.

Project construction is anticipated to begin in mid 2013 and last up to 24 months. Mobilization of equipment, site clearing, and preparation will take approximately two months and will overlap with pipeline and junction structure installation (22 months). Pipeline installation will take approximately 16 months, while junction structures will take approximately two months to construct. The tunneling portion of the project duration is anticipated to be four months, and site restoration is anticipated to last one month.

**Project Team and Contact Information**

The project team includes representatives from City of San Jose Departments of Public Works.

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San Jose, CA 95112  
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- At the intersection of Old Bayshore Highway and North Fourth Street;
- At the proposed 30” sewer relocation at Old Bayshore Highway and Zanker Road; and
- At Zanker Road on the north side of US-101 to allow the following sewer connection points to be shifted in Structure E: reroute the existing Large interceptor to the connection point of the existing 60” brick sewer and reroute the existing 60” brick sewer to connect to the existing 66” stub-out at the eastern portion of the structure.

Approximately 120’ upstream of each existing sewer will be demolished, replaced in kind with PVC lined RCP, and a new connection made with Structure E.

The new 72” sewer will be constructed between the new junction structures located at North 5th/Commercial and North 4th/Commercial and will replace the existing 8” sewer within this corridor. Approximately 1,400 linear feet of a proposed 8-inch collector sewer will be required to convey flow from existing lateral and service connections. Approximately 100-feet of the existing 60” sewer pipeline upstream of the new junction structure at 4<sup>th</sup> and Commercial will also be replaced with an 84-inch RCP sewer from the junction structure to existing Structure F, located at North 4<sup>th</sup> Street and Burton.

The project also includes a new local sewer collector system that is designed to pick up existing sewer laterals or side street sewers which were originally connected with the existing 43-inch sewer line. It is to pick up the sewer laterals or side street sewer flow, and to tie in with the new 84-inch sewer downstream, to reduce the number of connections with the new 84-inch sewer.

Along North 4th Street, there are three sections of local sewer. These are described below, from upstream section to downstream section:

1. Between Station 46+42, near North 4th Street and Commercial Street, and Station 42+50, approximately 380-feet of 10-inch VCP sewer, with 2 manholes. Two sewer laterals will be connected with this section;
2. Between Rosemary Street and East Gish Road, about 740-feet of 12-inch VCP sewer, with 4 manholes. A total of three sewer laterals or side street sewers will be connected with this section; and
3. From East Gish Road to downstream MH#2 near Station 4+50, a 12-inch and 15-inch VCP sewer will be combined. The total length of the combined sewer will be approximately 2,490-feet, and includes 10 manholes. A total of 10 sewer laterals or side street sewer lines will be connected with this section.

Other elements of work include demolishing and removing an existing concrete structure located upstream of Structure E (Old Structure E); constructing and repaving the affected portions of North 4th and Commercial streets and portions of the existing sidewalk where needed.

## **b. Project Background**

The City of San Jose owns and operates approximately 2,200 miles of sanitary sewer lines ranging in size from 6 to 90 inches in diameter within City limits. The City is in the process of implementing improvements to the sanitary system to meet future system demands, and to remedy existing and future capacity and operational deficiencies based on a recent series of condition assessments and the October 2004 Sanitary Sewer Master Plan Capacity Assessment.

The improvements identified for the Phase VI interceptor system consist of replacing approximately 4,500 linear feet of an existing 60-inch-diameter brick interceptor sewer with a new interceptor sewer between Structure G located at North 4th Street and Commercial Street and Structure E located at Zanker Road north of Old Bayshore highway.

The major existing elements of the system examined within this Phase VI project consist of three major pipelines:

- East Interceptor (60-inch brick) – The circular 60-inch, unreinforced, 8-inch-thick brick east interceptor was built in 1898 through rural lots along the future projection of North 5th Street. It is apparently located within a 20-foot-wide easement through private property along a majority of its alignment. Prior condition assessments indicated that the sewer requires substantial repair. This pipeline is proposed to be taken out of service after the new interceptor is constructed.
- Large Interceptor – This 84- and 90-inch reinforced concrete pipe (RCP) interceptor was constructed in 1969 along North Fourth Street, and was relined in 2004 to approximately 78- and 82-inch internal diameter within the Phase VI project limits. It currently conveys the majority of the flow within the project limits and will be difficult to take offline for inspection and maintenance.
- The West Interceptor – This 48- and 54-inch RCP interceptor was constructed in 1959 within North Fourth Street, and relined in 1988 to 40- and 42-inch internal diameters within the Phase VI project limits. Due to its size and elevation, it currently conveys the least amount of flow within the project area.

The recommendations of the Phase VI San Jose Brick Sewer Replacement Alternatives Analysis and confirmed by City management, was to replace the existing West Interceptor with an 84” RCP sewer within the West Interceptor alignment.

The project also includes sanitary laterals that convey flow into the three main interceptors. For the East Interceptor, the largest lateral connection is the 30-inch “Berryessa” sewer, which ties in at a manhole about 160-feet upstream of Structure E. Other lateral connections throughout this alignment range in size from 2- to 12-inches. For the West Interceptor, the largest lateral connection is a 15-inch lateral sewer connecting at the intersection of East Gish Road. Other lateral connections range in size from 6- to 12-inches. Due to its location in North 4th Street, the interceptor crosses many existing utilities, including storm drain lines and laterals, electrical, gas, water, and telecommunications. Some of these may need to be relocated to avoid the proposed sewer.

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There are four concrete junction structures located in the project limits which hydraulically connect the three interceptors described above.

- Structure G is located at the intersection of Commercial Street and North 5th Street, connecting the east 60-inch brick interceptor along North 5th Street and the 72-inch RCP sewer along Commercial Street. The east 60-inch brick sewer exits the north side of Structure G approximately 1.5 feet higher than the 72-inch RCP sewer, which exits from the west side of the structure.
- Structure H is located at the intersection of Burton Street and North 4th Street, connecting flow from the 60-inch RCP sewer along North 4th Street and the West 48-inch RCP interceptor along North 4th Street. The 60-inch RCP sewer exiting at Structure H enters Structure F on the south side of the structure.
- Structure F is located at the intersection of Commercial Street and North 4th Street connecting the 72-inch RCP sewer in Commercial Street and the 60-inch RCP from Structure H downstream within North 4th Street. A large 84-inch interceptor exits the structure and flows north under North 4th Street.
- Structure E is located at the intersection of Old Bayshore Highway and Zanker Road. The East, Large, and West interceptors all tie into Structure E at the downstream point of their reach. There is also an existing 60-inch stub out located at the same elevation as the East and Large interceptors on the east side of the Structure.

**c. Construction Stages**

Major stages (or phases) of project construction are as follows (see 60 Inch Brick Interceptor Phase VIA Project - Demolition and Bypass Schematic Plans included in Attachment A):

<b>Construction Sequence</b>	<b>Description of Work</b>
Phase 1	Connect (E) 60-Inch Brick Sewer to Structure E
Phase 2	Connect (E) 90-Inch RCP Sewer to Structure E
Phase 3	Construct (N) 84-Inch and Structures within North 4th Street
Phase 4	Reconstruct (E) 66-, 78-, and 42-Inch Storm Sewers and (N) 60-Inch RCP Sanitary Sewer Siphon
Phase 5	Construct (N) 72-Inch RCP Sanitary Sewer and Structure within 5th St.

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## **C. CONSTRUCTION IMPACTS**

### **a. Construction Methods**

The project will install approximately 4,141 linear feet of 84-inch RCP, 287.5 linear feet of 72-inch RCP, 382 linear feet of 12-inch VCP, and 120 linear feet of 8-inch SS using open cut installation methods; and 436 linear feet of 84-inch RCP using trenchless construction as it crosses US-101. Some existing utilities will be temporarily or permanently relocated, and the construction methods described below for the main sewer will be utilized for those relocations. Construction within the I-880 corridor will be the same as described below, except for reduced overhead space directly under the bridge over Fourth Street.

Open cut construction installations will involve: (1) saw-cutting, clearing and removal of pavement, (2) Installation of shoring and excavation of the trench and removal of the existing RCP pipe, (3) delivery of pipe segments and bedding material, (4) placement of the pipe segments along the trench, (5) installing the bedding and pipe in the trench, (6) backfilling the trench and removal of shoring, (7) temporary paving, (8) inspection and testing, and (9) cleanup and restoration of the corridor. The area to be trenched, as well as adjacent work areas, will be cleared of vegetation and rocks, as needed, and graded. Asphaltic concrete and vegetation removed will be removed from the site. Final paving and grading will restore the original grade and drainage patterns to the extent feasible. This procedure is similar for the construction of the junction structures.

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At the I-880 crossing, the pipeline will be buried with approximately of 9 feet of cover. The pipe will also be encased in concrete.

Trenchless construction is proposed for the U.S. 101 crossing, consisting of a 436-foot-long tunnel that will cross from North 4th Street and Old Bayshore Highway to Zanker Road. The tunnel will have a finished inside diameter of 84 inches with cover from the top of pipe excavation to ground surface ranging from about 10- to 17-feet. It is anticipated that tunneling will be accomplished using an Earth Pressure Balance (EPB) Machine Jacked Casing Pipe (Two-Pass) procedure. The EPB Machine will excavate the soil and initially jack a 3/4-inch steel casing pipe with a diameter ranging from 108- to 120-inches (the 84-inch RCP will be about 100-inches in diameter). Overcut of the soil on the order of 1 inch is grouted. Next, the proposed interceptor carrier pipe (approximate 8-inch thickness) is set to grade within the steel casing using blocks and bracing. The annulus between the two pipes is backfilled with grout.

Ground improvement, through use of a spile canopy, will be required due to the critical nature of the crossing and low cover above the tunnel. A spile canopy will consist of drilled spiles in a semi-circular arch on one-foot centers around the top half of the proposed pipe. The spiles may be drilled from the shaft across the extent of the proposed trenchless alignment using a horizontal augerbore or a laser-guided auger (such as the Verneer AXS system). Each spile consists of a 6-inch steel pipe centered in the hole backfilled with grout. The spiles should be positioned approximately 1-foot from the outside diameter of the proposed pipe excavation with spacing between each spile of about one-foot. The number and/or spacing of the spiles may vary depending on the ultimate outside diameter of the proposed excavation.

The following is an analysis of the potential impacts of the construction activities on residents and businesses within a five hundred (500) foot radius of the project. In addition to any specific mitigation measures required by this document, the Contractor will be responsible for restoring existing public improvements to their original condition.

**b. Physical Impacts**

Physical impacts from construction include impacts to parking, vehicular traffic, pedestrian traffic, bicycle traffic, public transit, and existing street improvements and landscaping. Each of these items in this section (see Attachment B for project location / 500-foot radius map with property owner list).

**1. Parking**

On-street parking is located intermittently on both sides of the street along North 4th Street between Commercial Street and Structure E. Any on street parking on the west side of North 4th Street will likely be limited during some portion of the project construction.

**2. Vehicular Traffic**

The primary roadways in the project area are Commercial Street, North Fourth Street, Interstate 880, and U.S. Highway 101. Secondary roadways include Rosemary Street,

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Gish Road, Koll Circle, Archer Street, and North Fifth Street. Project construction will temporarily affect right-of-way access within Commercial Street and North Fourth Street, north and south of I-880. Traffic will need to be rerouted and there will be short-term road closures. It is likely that a portion of North Fourth Street will be closed, with one lane open to allow traffic access. Access to the southbound U.S. 101 on-ramp from northbound North 4th Street and the U.S. 101 southbound off-ramps to Zanker Road would be limited during construction hours. Access to the southbound U.S. 101 on-ramp from Old Bayshore Highway should not be limited during construction hours. However, for safety reasons, traffic to southbound North 4th Street would be blocked at that location during tunnel construction. The tunneling portion of the project is anticipated to last four months, and site restoration is anticipated to last one month.

During pipeline removal and construction, it is likely that a portion of Commercial Street and North 4th Street will be closed, with one lane open for traffic. Construction of both junction structures within the intersections of North 5th Street and Commercial Street, and North 4th Street and Commercial Street would require shutdown of traffic through these intersections for approximately two months. Construction at the northern end of the alignment, in the vicinity of Structure E, would affect both northbound and southbound traffic along Zanker Road, as well as eastbound and westbound traffic along Old Bayshore Highway. The overall pipeline installation will take approximately 16 months. Tunneling under U.S. 101 is anticipated to last approximately four months. Construction of the proposed junction structures will take approximately two months to complete, and site restoration is anticipated to last one month.

### **3. Pedestrian Traffic**

Pedestrian traffic will not be affected during for most of the project. However, during Phase 3D, pedestrian traffic will need to be detoured to the northern sidewalk between Archer Street and Old Bayshore Highway.

### **4. Bicycle Traffic**

There are bike lanes on both sides of Commercial Street in the project area. Sidewalks are located on the north side of Commercial Street, and along the east and west sides of North Fourth Street. Southbound bicycle traffic will be affected.

### **5. Public Transit**

There are no bus routes operating on the project alignment. The nearest public is the light rail located on North First Street, to the west of the project area. Express bus routes 121 and 122 run on U.S. Highway 101, adjacent to the project area. Route 121 provides commuter service from Lockheed/Moffett Park in Sunnyvale to the Gilroy Transit Center via the Morgan Hill Caltrain Station, and Route 122 provides commuter service from Lockheed/Moffett Park in Sunnyvale to the Santa Teresa light rail station in South San Jose. Therefore, project construction will not affect public transit.

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**6. Existing Street Improvements and Landscaping**

The project proposes to preserve all the trees within the project limits in accordance with the City's tree protection ordinance. This includes all trees located along North Fourth Street, Commercial Street, and adjacent to the project alignment. The Contractor will be required to replace all surface features in kind that are affected by construction activities.

**c. Impacted Community**

**Adjacent Businesses:** The following is a list of businesses and residents located adjacent to the project site. See Appendix C for detailed location maps. The entries shown in bold text represent those properties that will have the heaviest impact to their driveways. Pipeline construction in front of their properties will require alternate access points.

<b>Owner</b>	<b>Contact</b>	<b>Address</b>	<b>East or West Side of Street</b>	<b>Currently Occupied By</b>
1780 Old Bayshore Hwy LLC	408-202-6693	1780 Old Bayshore Hwy	East	Zen Space Solutions
<b>George M &amp; Alyce Y Imamura</b>		<b>1107 N 4th St.</b>	<b>West</b>	<b>Residential</b>
<b>Clinton Butsuda</b>		<b>1117 N 4th St.</b>	<b>West</b>	<b>Residential</b>
<b>Clinton Butsuda</b>		<b>1125 N 4th St.</b>	<b>West</b>	<b>Residential</b>
<b>Lucy &amp; Miguel Corona</b>		<b>1135 N 4th St.</b>	<b>West</b>	<b>Residential</b>
<b>Grace Groesser</b>		<b>1147 N 4th St.</b>	<b>West</b>	<b>Residential</b>
<b>Darrell J Dukes / Deborah D Moore</b>	<b>408-279-2600</b>	<b>1156 N 4th St.</b>	<b>East</b>	<b>Neighborhood Housing Services - NeighborWorks Home Ownership Center</b>
Bankers Trust Co Calif NA/Cushman & Wakefield	408-298-5766	1160 N 4th St.	East	O'Reilly Auto Parts
Bankers Trust Co Calif NA/Cushman & Wakefield		1164 N 4th St.	East	Parking Lot for O'Reilly Auto Parks
Babbitt Bearing Co Inc		1170 N 5th St.	East	Vacant Lot
<b>Barbara M Vandeweghe</b>	<b>1 - 408-292-1400 2 - 408-275-9718 3 - 408-792-3830 4 - 408-298-1133 5 - 408-885-9134</b>	<b>1181 N 4th St. 1-Ste. 30 2 - 1181 N 4th St., #50 3-1171 N 4th St., #B 4 - 1151 N 4th St. 5 - 1161 N 4th St.</b>	<b>West</b>	<b>Civic Center <u>Business Park</u>: 1-On Demand Circuits Services 2- ASF 3 - Senju Comtek Corp., Valley Heating, Cooling and Electrical 4 - San Jose Police Officers Association Inc. 5 - A &amp; J Precision Sheetmetal, Inc.</b>

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<b>Owner</b>	<b>Contact</b>	<b>Address</b>	<b>East or West Side of Street</b>	<b>Currently Occupied By</b>
San & Michael Ong		1186 N 4th St.	East	1 - SWIFT 2 - Engineering Technology, Inc. (1190 N 4th)
Cornerstone Evangelical Baptist	408-392-0752	1275 N 4th St.	West	Golden Heritage Senior Living (can access from E. Rosemary Street)
Bay Area Lodging LLC/Anish Khimani	408-437-9100	1280 N 4th St.	East	Days Inn Airport
Eugene H & Shirley Smith		1302 N 4th St.	West	Commercial bldg
Milpitas Vistas LLC		1305 N 4th St.	West	Vacant Lot
Viscovich 4th St Part	408-487-9191	1330 N 4th St.	East	Nor-Cal Specialties, Inc.
Panion Group LLC	408-467-1789	1350-1368 N 4th St.	East	Holiday Inn Express Hotel & Suites San Jose - International Airport
Milpitas Vistas LLC	408-453-5340 408-392-2468	1355 N 4th St.	West	Clarion Hotel (can access from E. Rosemary St.) Island Grill
Hector L & Norma A Cervantes	1 - 408-392-9276 2 - 408-453-0188 3 - 408-436-7850	1376 N 4th St.	East	1 - Primerica (#204) 2 - Applied Remediation Co. (#203) 3 - La Oferta
Nguyen Tho Van & Vicky Trang	408-441-9986	1394 N 4th St.	East	Bayshore Automotive
Ruben & Gladys Cervantes	408-437-1107	1415 N 4th St.	West	Karlitas Taco Place (access also from Gish)
Ho Fred F Sung/Wendy W Chun	1 - 408-740-5775 2 - 408-453-8181	1 - 1420 N 4th St. 2 - 1444 N 4th St	East	1 - Espanas Collison Repair 2 - Seases Auto Service & Repair
CCM Development LLC	408-453-7771	1440 N 4th St.	East	Cooks NAPA Auto Parts
North 4th Street LLC	1 - 408-453-1750 2 - 408-453-5555 3- 408-982-5550	1441 N 4th St.	West	1- 4th Street Bowl Coffee Shop 2- 4th Street Bowl 3- Off the Sheet Pro Shop (access from Kerley)
Warehouseman & Helpers Local		1452 N 4th St.	East	
City of San Jose Financing Authority		1460 N 4th St.	East	Under construction
PNCMAC 2001-C1-147th N 4th St	408-452-0200	1471 N 4th St.	West	Radisson Hotel San Jose Airport

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<b>Owner</b>	<b>Contact</b>	<b>Address</b>	<b>East or West Side of Street</b>	<b>Currently Occupied By</b>
Ramiro & Bertha M Fernandez/Jose L & Bertha Fernandez	Ryan Hoffman (for lease) -408-453-7490 1 - 408-458-7525 2 - 408-380-4298	148 Archer St.	West (N. 4th)	1- Happy Vans 2 - Finishline Auto
Paul A & Janice L Heymann	408-453-1054	1488 N 4th St.	East	DeLuxe Dye Works Rug Cleaning
Washington Green LLC		1500 N 4th St.	East	C&O
Kunde 2006 Trust	408-263-7300	1505 N 4th St.	West	Diamond Mitsubishi Fuso
Lawrence & Ruby Fong	1- 408-441-4680 2- 408-573-7226 3- 408-437-1318	1518 N 4th St. (Bldg. address 1520)	East	Retail: 1-Penguin Fireplace; 2- Golden Harvest Catering, Inc.; 3 -Sushi Coast
Dollinger 4th St Assocs/David Dollinger	1 - 408-434-0400 2 - 408-727-4471	1560 N 4th St.	East	<u>1 -Koll Circle Business Park</u> 2 - Print Vision 3 - No Quan Restaurant
Leland A Jr & Elaine M Mlejnek	408-453-6237	234 East Gish Rd, Ste. 110.	West	Score of Silicon Valley
John Vossoughi & Helene L/ Michele Keon & Vossoughi	408-437-7510	1585 N 4th St.	West	Fourth Street Industrial Park -Re Mobilizers
Daniel J & Michel S Orlando	408-453-7490	1600 N 4th St.	East	Commercial Building
17 Pasteur Investors LLC	408-441-0806	1610 N 4th St.	East	Easy Park and Fly
Gbr San Jose LLC/National Realty & Development	408-451-9320	1695 N 4th St.	West	Hertz Equipment Rental
Essex Waterford	408-437-1900	1700 N 1St. St.	West	Waterford Place Apartment Homes (1drwy N 4th, 1 dwy N 1st)
Carl A & Sharon L Liljenstolpe	408-441-8175	1707 N 4th St.	West	The Practice Place
Archer 4th St LLC/Allison L Dozier	408-453-5510	1740 N 4th St.	East	Coast Counties Peterbilt Truck & Equipment Co.
Archer 4th St LLC/Allison L Dozier	408-441-1740	1785 N. 4th St.	East	Park & Jet Airport Parking
Bankers Trust Co Calif NA/Cushman & Wakefield	408-291-0490	1101 N 5th St.	West	RSG
<b>Tom T. Cao</b>	<b>408-294-2001</b>	<b>1102 N 5th St.</b>	<b>East</b>	<b>T&amp;H Body Shop</b>
Deerfield Properties	408-297-2555	1097 N 5th St.	West	Coast Engraving (address for 1095 N 5th)
Jagdish Patel/Michael K Hanover	1 - 408-980-9895 2 - 408-520-7915	1099 N 5th St.	West	1 - P H Machining Inc. 2 - Treehouse Collective

**Bold Text = Property Access Impacted**

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Properties located on the east side of North 4th Street will have the least impact to their driveways, as there will be a northbound lane open most of the time. The only time that these driveways are expected to be closed will be during restriping of the street. Other impacts will occur during times when the traffic on 4<sup>th</sup> Street is congested and access to the driveway will be delayed. Access from southbound traffic will also be delayed during the times when the left turns from 4<sup>th</sup> Street are prohibited and detour to the northbound lane is necessary.

Access will be impacted to properties located along the west side of North 4th Street. Properties with more than one driveway from North 4<sup>th</sup> Street can be staged so that right turns into one of the driveways is possible at most times. Other properties with only one access from North 4th Street have alternate access from Kerley Street, North 1st Street, an alley or adjacent side street. These properties are identified in the table above. There are a few properties with one driveway as its sole access point. These properties will need alternate access, as well as alternative parking areas for their employees, occupants, and visitors and are discussed below (also shown in Figures 1, 2 and 3). A survey is being made of all property owners or occupants in these areas to determine which option they would prefer to have for access during construction. The contractor will be directed to contact the property owners and occupants in order to provide advice on the schedule and length of time that construction will occur in front of each driveway or access point.

The following businesses have only one driveway to access their site and will require special arrangements to be made during construction:

**Civic Center Business Park:**

The Civic Center Business Park is located from 1151 to 1181 North 4th Street, south of I-880 and north of Commercial Street. Their one access to the site is from the driveway located on the west side of along North 4th Street. Construction of the 84-Inch RCP Interceptor will occur on the west side of the roadway and local traffic will be reconfigured with one lane located on the east side of the road.

**Accessibility:** Impact anticipated.

**Deliveries:** Impacted during working hours.

**Noise:** Movement of construction vehicles, equipment, and pavement restoration activities will generate some noise during regular construction hours.

**Vibration:** Construction activities such as truck traffic and compaction could generate vibrations in the buildings closer to North 4th Street (1181 and 1151), but not in the rear buildings (1161 and 1171).

**Neighborhood Housing Services - NeighborWorks Home Ownership Center**

The Neighborhood Housing Services, NeighborWorks Home Ownership Center is located on the southeast corner of North 4th and Commercial Streets at 1156 North 4th Street. The only point of access is one driveway connecting to North 4th Street. Phase 4

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will construct a junction structure in the intersection of North 4th Street and Commercial Street and will require traffic to be shutdown through this intersection for approximately two months. The intersection will also be closed for the construction along Commercial Street during Phase 5. These construction zones will close off access to the driveway at 1156 North 4th Street.

**Accessibility:** Impact anticipated to employees, patrons both working and parking.

**Deliveries:** No impact is anticipated.

**Noise:** Movement of construction vehicles, equipment, and pavement restoration activities will generate some noise during regular construction hours.

**Vibration:** Construction activities such as truck traffic and compaction could generate vibrations.

### **Private Residences**

Private residences located on the west side of North 4th Street, north and south of Commercial Street with the street addresses of 1107, 1117, 1125, 1135, and 1147 North 4th Street. These properties will be impacted during business hours by construction. One driveway serves 1147 and 1135 North 4th Street. One driveway also serves 1125 and 1117 North 4th Street. The residence at 1107 is served by its own driveway. Each driveway is the sole point of access for these homes. Phase 4 will construct the junction structure in the intersection of North 4th Street and Commercial Street and will require traffic to be shutdown through this intersection for approximately two months. The intersection will also be closed for the construction along Commercial Street during Phase 5. These construction zones will close off access to these residential driveways.

**Accessibility:** May impact residents (depends on working hours)

**Deliveries:** No impact is anticipated.

**Noise:** Movement of construction vehicles, equipment, and pavement restoration activities will generate some noise during regular construction hours.

**Vibration:** Construction activities such as truck traffic and compaction could generate vibrations.

### **T & H Body Shop**

T & H Body Shop is located on the northeast corner of North 5th Street and Commercial Street, at 1102 North 5th Street. Parking for the business is directly in front of the building along North 5th Street. This is also the only point of access for employees and customers into the building. Construction of the junction structure within the intersection of North 5th Street and Commercial Street will shut traffic down through the intersection. The pipeline alignment in the one block segment along Commercial Street will also require closing that segment of the street during Phase 5.

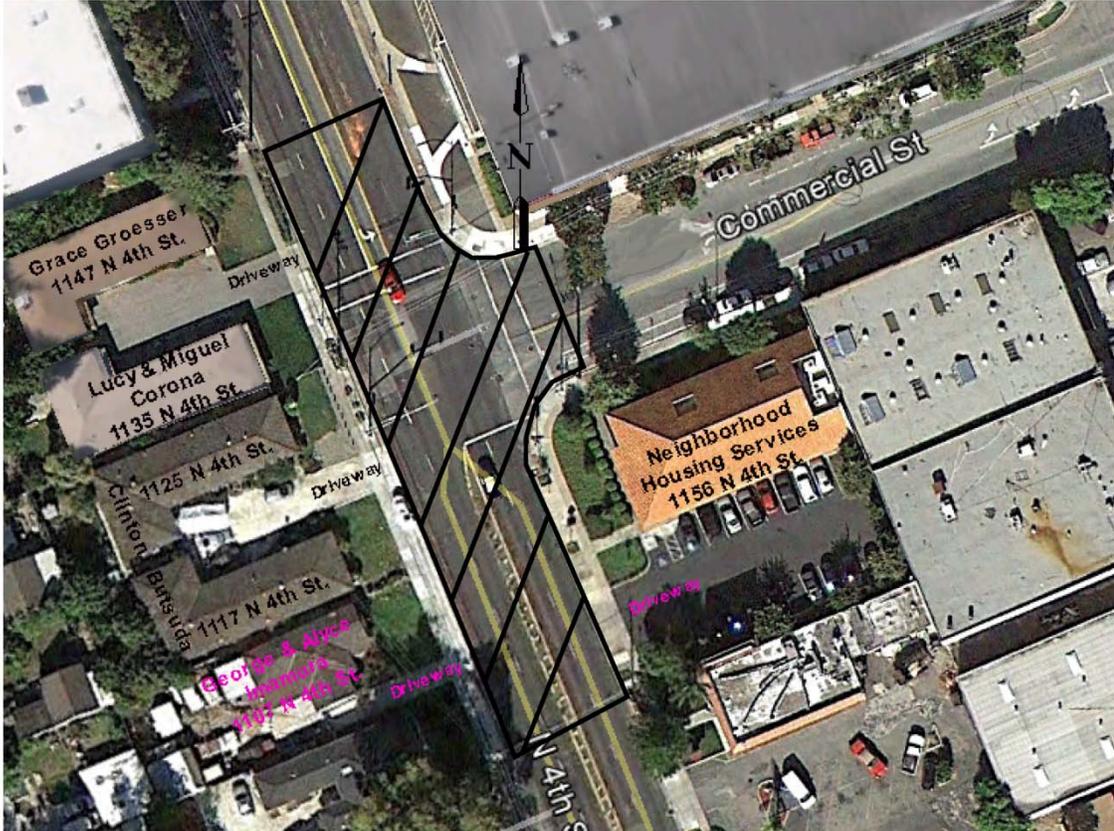
**Figure 1**



**CIVIC CENTER BUSINESS PARK  
Pipeline Construction Access Impacts  
During Phase 3H**

 = CONSTRUCTION AREA

Figure 2



**BUSINESS & RESIDENCE IMPACTS**  
**Junction Structure Construction at**  
**4th & Commercial Streets**  
**During Phase 4**

 = CONSTRUCTION AREA

**Figure 3**



**T & H Body Shop  
Pipeline & Junction Structure  
Construction at 5th & Commercial  
Streets During Phase 5**



**Phase 5 Work Zone**

 = CONSTRUCTION AREA

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- Accessibility:** Will impact employee and customer access
- Deliveries:** Will impact deliveries made during business hours.
- Noise:** Movement of construction vehicles, equipment, and pavement restoration activities will generate some noise during regular construction hours.
- Vibration:** Construction activities such as truck traffic and compaction could generate vibrations, not likely to affect business.

Occupants of the properties adjacent to the project area will generally experience increased traffic from hauling trucks, movement of heavy construction equipment, and reduced number of traffic lanes during construction hours.

#### **d. Environmental Impacts**

The Director of Planning, Building & Code Enforcement finds mitigation measures included in the project will reduce potentially significant effects to a less than significant level. Based on the initial study, the Director of Planning, Building and Code Enforcement has concluded that the project will not have a significant effect on the environment. The initial study identified a few potentially significant effects on the environment for which the project plans and specifications include provisions for the Contractor to adopt procedures that will mitigate the effects to a less than significant level. The Initial Study Report (PP10-160), prepared by Department of Planning, Building and Code Enforcement, is available online at: <http://www.sanjoseca.gov/planning/eir/MND.asp>.

The identified impacts include, but are not limited to, the following:

##### **1. Air Quality**

Although the project will not result in long term air quality impacts, construction generated dust, if uncontrolled, could result in a significant air quality impact. Provisions have been included in the Contract Specifications for the Contractor to implement feasible dust control measures that can reduce construction impacts to a level that is less than significant.

##### **2. Biological Resources**

Biotic Study was prepared by H. T. Harvey and Associates (June 2010) that evaluated potential biological impacts and identified mitigation measures to avoid impacts on biological resources. The report indicates that the project site is located in a heavily urbanized area of San Jose. A tree survey was also completed in June 2010 that noted that a variety of street trees and shrubs border the west side of North Fourth Street, and both sides of Commercial Street. Common street trees on the site included London planetree, tree of heaven, white alder, and chitalpa. The largest and most mature trees are located on the west side of North Fourth Street, between the I-880 underpass and Commercial Street. These include mature white alders growing approximately 30 to 50

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feet tall with a 25 to 32 inch DBH, and mature olive trees growing to heights of approximately 15 to 20 feet. There is one ordinance-size tree adjacent to the project alignment: a native coast redwood measured approximately 72 inches in circumference (23 inches in diameter), located near the southwest corner of North Fourth Street and Commercial Street.

The London plane trees, alders, eucalyptus, and other trees along the project alignment provide potential nesting habitat for several regionally abundant raptor species including red-tailed hawks, Cooper's hawks, and red-shouldered hawks. While unlikely, the mature trees on-site may be utilized by nesting and/or foraging raptors if prey species are abundant in the area or by other migratory birds.

### **3. Cultural Resources**

The project site is located within a moderately archaeologically sensitive area, and has a potential for containing prehistoric archaeological resources due to the proximity to the Guadalupe River and Coyote Creek. However, the NAHC record search was negative for Native American resources within or adjacent to the project area and the proposed construction is not anticipated to affect buried cultural resources.

### **4. Geology and Soils**

A Phase I Environmental Assessment report was prepared by AMEC Geomatrix, Inc. in January of 2010 that identified that the project alignment is generally flat and the potential for erosion and siltation occurring during construction would be low. The project is not expected to be exposed to slope instability, erosion, or landslide-related hazards, due to the flat topography of the project site. The project will not result in any long term geologic or soil impacts.

### **5. Greenhouse Gas Emissions**

The project has minimal new net energy and water needs. Although the project will incrementally temporarily increase greenhouse gas emissions from construction equipment operations, truck trips, and asphalt paving during the short term construction period, once construction is complete, the project would not contribute to global climate change or emit greenhouse gas emissions.

### **6. Hazards and Hazardous Materials**

An inspection of the project alignment area was performed on November 23, 2009 by *AMEC Geomatrix, Inc.* The reconnaissance focused on the storage or dumping of hazardous materials or waste on the project area or hazardous use, storage, or spillage at facilities within and adjacent to the project area including evidence of underground storage tanks and noted the following hazards:

**Groundwater.** While the project does not propose any sensitive land uses, the proposed sewer line would not be impacted by the potential presence of hazardous materials in the

soil or the groundwater along the proposed alignment. However, excavation of the project alignment could result in exposure of construction workers and other potential receptors to soil and/or groundwater contamination, increased handling/disposal costs, and possible treatment or disposal of groundwater associated with dewatering activities, in the event these hazardous materials are encountered.

**Agricultural Use Impacts.** Excavation along the project alignment could result in exposure of construction workers to soils contamination with residual pesticides and/or herbicides from historical agricultural practices.

**Aerially Deposited Lead.** The project area is adjacent to two major highways, Interstate 880 and Highway 101 and it is possible that shallow soils in the vicinity of these highways may contain elevated levels of aerially-deposited lead. Excavation of the project alignment could result in exposure of construction workers to soils and groundwater contamination with lead.

## **7. Hydrology and Water Quality**

Construction activities could affect the water quality of storm water surface runoff. Removal of the existing interceptor and installation of the new interceptor will result in a disturbance to the underlying soils, thereby increasing the potential for sedimentation and erosion. When disturbance of underlying soils occurs, the surface runoff that flows across the site may contain sediments that are ultimately discharged into the storm drainage system. Standard best management practices are incorporated into the project to prevent erosion and storm water runoff during construction activities.

## **8. Land Use**

The project will not create a new type of land use, or result in any long term land use impacts. The proposed road alignment will be restored to its current condition following installation of the proposed 84-inch sewer line.

## **9. Mineral Resources**

The project area does not contain any mineral deposits of significance and will not impact the availability of any known resource.

## **10. Noise**

Project construction is anticipated to begin in mid 2013 and last up to 24 months. Noise levels at sensitive receivers adjacent to the project alignment would increase during the construction period and will be temporary and only occur during the daytime.

Construction noise would primarily consist of the operation of vehicles and equipment during pavement removal, excavation, pipeline installation, backfill operations, and the repaving of the portion of the street disturbed by the project. Noise impacts from project construction activities are a function of the level of noise generated by individual pieces

of construction equipment, the amount of equipment operating at any given time, the distance and sensitivities of nearby land uses, the presence of noise barriers or other structures that provide acoustical shielding, and the timing and duration of the noise-generating activities. Where noise from construction activities exceeds 60 dBA Leq and exceeds the ambient noise environment by at least five dBA Leq at noise-sensitive residential uses in the project vicinity for a period of more than one construction season, the impact would be considered significant. Hourly average noise levels generated by public works-type projects typically range from 79 to 88 dBA Leq measured at a distance of 50 feet from the center of a busy construction site. During construction activities, maximum instantaneous noise levels would vary depending on the specific pieces of equipment operating on site. The typical range of maximum instantaneous noise levels would be 75 to 82 dBA Lmax at a distance of 50 feet

Project construction activities anticipated along North Fifth Street and North Fourth Street, Commercial Street, and Zanker Road would be relatively short in duration, and the overall construction activities would occur for less than a year in duration; therefore, the project construction noise would be considered a less than significant impact.

#### **11. Population and Housing**

The project does not propose any housing development and would not induce population, job growth, or displace either housing or persons. It is designed to serve projected growth and provide capacity for peak wet weather flows in the City's sanitary sewer system. The project will not indirectly induce population growth beyond what is anticipated in the City's General Plan.

#### **12. Public Services**

The project is the replacement/installation of sanitary sewer pipelines and will not result in the need for additional public services.

#### **13. Recreation**

The project will be constructed in an urban developed area and will not impact or create the need for any additional recreational resources.

#### **14. Transportation**

See Physical Impact, Vehicular Traffic section for temporary traffic impacts. No long term traffic impact is anticipated.

#### **15. Utilities and Service Systems**

The project will not require the construction of new facilities for wastewater treatment, storm drainage, water, or waste disposal because the subject site is located within the City of San Jose Urban Service Area where such facilities exist, and the capacity exists to serve the project.

## **16. Mandatory Findings of Significance**

The project consists of public improvements to the sanitary sewer system and when completed, will increase the efficiency of the major interceptors without significantly impacting the environment. Although, the project could have significant effect on the environment, it will not, because of the measures included in the project plans and specifications.

## **D. MITIGATION MEASURES**

Following are proposed measures to be undertaken to mitigate each of the impacts identified in Section C above. In addition to specific mitigation measures identified by this document, the Contractor will be responsible for restoring existing public amenities to their condition in place prior to construction. Implementation of many of the proposed measures will require the cooperation of regulatory authorities, and various agencies. The Contractor will use all reasonable efforts to implement such measures.

### **a. Physical Impacts**

#### **1. Parking**

This project will not impact any parking in the nearby office buildings and residential areas. Most of these office buildings have adequate parking spaces inside the property limits and rarely any vehicles are parked along the street. During construction, the Contractor is likely to restrict on-street vehicle parking for safety reasons. Parking restriction signs (tow away signs) are put at least 24-hours in advance.

#### **2. Vehicular Traffic**

The first sequences of work likely will occur at Structure E on the corner of Old Bayshore Highway and Zanker Road. During this work, there are some traffic movements that may need to be prohibited. The left turn from eastbound Old Bayshore Highway to northbound Zanker Road may be blocked by excavations or construction equipment. A detour for this movement can be made via local streets from the north, dependent on the complexity required.

Once the work around Structure E is completed, two excavations for the jacking and receiving pits for the 84-inch tunnel crossing under U.S. 101 will occur. The pits will remain in place for a several weeks due to the length pipeline and the number of 6-inch canopy pipes to be installed above the pipe casing. To mitigate impacts, striping will be modified and traffic detoured around the area. The two northbound lanes will need to be combined into one lane that abuts the raised pork-chop island. The southbound turn from Old Bayshore Highway will need to be reduced into one lane also. This reconfiguration of striping will mean that there will be only one lane of traffic on 4<sup>th</sup> Street for each direction of traffic adjacent to the boring pit.

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North 4th Street is currently configured for five lanes: two lanes in each direction, and a two-way turn lane in the middle of the road. The middle lane converts to a designated left-turn lane at intersections. To mitigate traffic impacts, the street will be restriped to two lanes between Old Bayshore Highway and Archer Street. These two temporary lanes will be laid out along the east side of the street. At Archer Street, the pipeline swings closer to the centerline of the street up to Gish Road. Only one northbound lane can be provided along the east side of the road in this area. Southbound traffic will be detoured to North 1<sup>st</sup> Street between Archer and Rosemary Streets. Alternate advisory detour routes can be posted along North 1<sup>st</sup> Street between Old Bayshore Highway and Barton Avenue. This alternate route would direct motorists to avoid traveling through the work zone.

Between Gish Road and Commercial Street, the pipeline alignment switches back to the west side of the road and local traffic will be reconfigured into the one-lane-each-way pattern that was applied north of Archer Street.

The alignment in the one block segment along Commercial Street will require the street to be closed in this segment. Since the existing street network is in a grid pattern, detours can easily be provided along parallel streets to route traffic through the area.

Mitigation for traffic impacts at intersections along the pipeline route will be as follows:

- Archer Street. Eastbound Archer will be detoured to East Gish Road along Kerley Drive. Turns into westbound Archer will be detoured via East Gish Road or Old Bayshore Highway.
- Koll Circle. The left-turn lane into Koll Circle will be eliminated and an alternate access point can be provided via East Gish Road.
- Gish Road. The construction of a large structure underneath the existing 60-inch storm drain will require most intersection turn movements to be prohibited. Eastbound East Gish Road traffic will be detoured via Archer Street and traffic into westbound East Gish Road will be detoured via Archer or Rosemary Streets.
- Rosemary Street. This intersection also requires a large structure to be installed under a 78-inch storm drain pipe. Eastbound Rosemary Street road traffic will be detoured to East Gish Road via Kerley Drive and turning movements into westbound Rosemary Street will be detoured via East Gish Road or Burton Avenue.

North 4th Street traffic can be detoured to North 1<sup>st</sup> Street via Rosemary or Burton and westbound Commercial Street traffic can be detoured via southbound North 5<sup>th</sup> Street to other streets in the local network.

### **3. Pedestrians**

Pedestrians will generally not be affected by the project and should locations become unavailable for pedestrian use, it can easily be detoured to the other side of the street.

#### **4. Bicycle Traffic**

The Contractor will be required to install bicycle detour signs wherever bicycle traffic will be detoured or directed to share the road with vehicular traffic. Construction zone speed limits of 25 mph will be posted in places where the lanes are to be shared by both bicycle and vehicular traffic. Bicycle detours are not anticipated to last throughout the entire duration of the project. All signs will additionally include the name of the project, duration and contact person telephone number.

#### **5. Public Transit**

Since there will be no public transit impacts, no mitigation is required.

#### **6. Street and Landscape**

No impact to street and landscape is anticipated. Contractor will be required to replace any damages incurred during construction in kind.

### **b. Impacted Community**

#### **Adjacent Businesses and Residents**

With an estimated maximum of 60 lineal feet of pipeline construction being completed per day, the Contractor will reduce impacts to businesses by staging construction to allow one driveway to remain open on properties that have two driveways. Properties that have one driveway adjacent to the work zone, but other available routes to their site (via a back or side street or alley) will be required to use the alternative route. For those properties that only have one driveway and no alternate access route, the contractor will work with the property owner to provide a means for them to access their site.

In addition, A community meeting will be set up by Public Works Department Staff with representatives from all adjacent businesses to introduce the project prior to award and before the start of construction. During the meeting, Staff will describe the project, approximate duration, and possible impacts from temporary lane closures, heavy equipment movements through the local streets, working hours, and all special measures to be adopted by the Contractor to mitigate and minimize impacts.

During construction, the Contractor will notify businesses and residences, a minimum of three times of construction operations. The first notice will be given to all businesses and residents within the project area fourteen calendar days prior to the start of construction. The second notice of construction will be given to businesses and residences seven calendar days prior to any construction operation to be performed in close proximity to said businesses and residences. The third notice will be given to businesses and residences 48 hours prior to any construction operation performed in close proximity to said businesses and residences. All three notices will be in writing. Notices will include a toll free number to use to contact the Contractor's representative 24-hours per day for problems or emergencies encountered. Notices will also include a City of San Jose contact person and

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phone number. All notices will be reviewed by DPW staff prior to sending out for distribution. If construction operations are delayed for any reason beyond the duration stipulated in the original notices, the Contractor will re-issue written notices explaining the delay and indicating the revised schedule.

**c. Environmental Impacts**

**1. Air Quality**

The Contractor will implement effective dust control measures to prevent dust and other airborne matter from leaving the site. The following construction practices will be implemented during all phases of construction. With the inclusion of these mitigation measures, the short-term air quality impacts associated with construction will be reduced to less-than-significant levels:

- All exposed surfaces (e.g. parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material offsite shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Pave, apply water at least three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.

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- Apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

## **2. Biological Resources**

Nesting Birds. Nesting Birds Impacts will be mitigated by the following measures:

- **Pre-construction/Pre-disturbance Surveys.** If construction is to occur during the breeding season (February 1 through August 31), pre-construction surveys shall be conducted by a qualified ornithologist no more than 7 days prior to the initiation of construction in any given area. Pre-construction surveys will identify active nests of species protected by the MBTA and State Code.
- **Avoid the Nesting Season.** If possible, potential nesting substrates (e.g., bushes, trees, grass, buildings, burrows) to be removed by the project should be removed between September 1 and January 31, to avoid the nesting season.
- **Buffer Zones.** If an active nest is found and is greater than half completed, a qualified ornithologist, in consultation with the CDFG, will determine the extent of a construction-free buffer zone to be established around the nest, until nesting is complete. Typical buffer widths are 250 feet for a nesting raptor and 100 feet for other species. The establishment of construction-free buffer zones will ensure that no active nests of species protected by the MBTA and California Fish and Game Code will be disturbed by construction.

## **3. Cultural Resources**

Although no impacts to cultural resources are anticipated, the following standard measures will be implemented should a cultural resource be discovered during construction:

- Work within 50 feet of the find shall be stopped to allow adequate time for evaluation and mitigation by a qualified professional archaeologist. The material shall be evaluated and if significant, a mitigation program including collection and analysis of the materials at a recognized storage facility shall be developed and implemented under the direction of the City's Director of Planning.
- As required by County ordinance, this project has incorporated the following guidelines. Pursuant to Section 7050.5 of the Health and Safety Code, and Section 5097.94 of the Public Resources Code of the State of California, in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native

**Construction Impact Mitigation Plan  
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- American Heritage Commission who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the landowner shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.
- A final report shall be submitted to the City's Director of Planning containing a description of the mitigation programs and its results including a description of the monitoring and testing program, a list of the resources found, a summary of the resources analysis methodology and conclusions, and a description of the disposition/curation of the resources. The report shall verify completion of the mitigation program to the satisfaction of the City's Director of Planning.

**4. Geology and Soils**

No mitigation required.

**5. Greenhouse Gas Emissions**

No mitigation required.

**6. Hazards and Hazardous Materials**

**Soil or groundwater contamination.** The project will include the following mitigation measures upon completion of final design and prior to the start of construction to reduce the risks of potential soil or groundwater contamination or residual pesticides and/or herbicide contamination at the site to future construction workers to a less than significant level:

- Prior to project development, a soil and groundwater investigation shall be completed to determine if residual contaminants of concern (COCs: petroleum hydrocarbons, volatile organic compounds, metals, or agricultural chemicals) are present in the proposed excavated soil. The analytical results will be compared against applicable environmental screening levels for construction workers and hazardous waste criteria. Based on these results, the investigation will provide recommendations regarding soil handling procedures and disposal of affected soils in the project area including the potential reuse of affected soil during project development. Impacted soil deemed for removal shall be disposed of at a licensed facility. If contaminants are present in the soil and/or groundwater, the extent of the impact shall be evaluated to determine if the appropriate regulatory agency (i.e. Regional Water Quality Control Board or Department of Toxic Substances Control) should be contacted and regulatory oversight sought.
- A site management plan shall be developed to establish management practices for construction worker safety while handling contaminated soil, groundwater, or other materials if encountered during excavation and construction activities.

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- A hazardous materials licensed contractor shall conduct construction earthwork activities with properly trained employees in areas where contaminated soil or ground water are present. Employees conducting earthwork activities at the site must complete a 40-hour training course, including respirator and personal protective equipment training. Each contractor working at the site shall prepare a health and safety plan (HSP) that addresses the safety and health hazards of each phase of site operations that includes the requirements and procedures for employee protection.

**Aerially Deposited Lead.** Mitigation for the potential presence and exposure of construction workers to aerially deposited lead from the adjacent two major highways (I-880 and Highway 101) will be reduced to a less than significant level by:

- Prior to project development, a soil investigation shall be completed to determine whether ADL has affected soils that will be excavated as part of the proposed project. The investigation for ADL shall be performed in accordance with the Caltrans' *Lead Testing Guidance Procedure* (dated March 16, 2001). The analytical results will be compared against applicable environmental screening levels for construction workers and hazardous waste criteria. Based on analytical results, the investigation will provide recommendations regarding soil handling procedures, management and disposal of affected soils in the project area including the reuse potential of ADL-affected soil during project development. The provisions of a variance granted to Caltrans by the California Department of Toxic Substances Control (DTSC) on September 22, 2000 (or any subsequent variance in effect when the project is constructed) regarding aerially-deposited lead shall be followed, and will reduce this impact to a less than significant level.

## **7. Hydrology and Water Quality**

No mitigation required.

## **8. Land Use and Planning**

No mitigation required.

## **9. Mineral Resources**

No mitigation required.

## **10. Noise**

The Contractor will implement the following standard noise control measures to limit construction noise impacts to nearby properties:

- Construction will be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday for any on-site or off-site work within 500 feet of any residential unit. Construction outside of these hours may be approved through a development permit based on a site-specific construction noise mitigation plan and a finding by the

**Construction Impact Mitigation Plan  
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- Director of Planning, Building, and Code Enforcement that the construction noise mitigation plan is adequate to prevent noise disturbance of affected residential uses.
- Use the best available noise control techniques (including mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds) for all equipment and trucks to minimize construction noise impacts.
  - Locate stationary noise generating equipment as far from sensitive receptors. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) will be used as necessary to comply with daytime noise limits. Any enclosure openings or venting will face away from sensitive receptors.
  - Locate material stockpiles as well as maintenance/equipment staging and parking areas a minimum of 200 feet from noise sensitive receptors, such as residential uses.
  - Designate a project liaison that will be responsible for responding to noise complaints during the construction phase. The name and phone number of the liaison will be conspicuously posted at construction areas and on all advanced notifications. This person will take steps to resolve complaints, including periodic noise monitoring, if necessary. Results of noise monitoring will be presented at regular project meetings with the project contractor, and the liaison will coordinate with the contractor to modify any construction activities that generated excessive noise levels to the extent feasible.
  - Require a reporting program that documents complaints received, actions taken to resolve problems, and effectiveness of these actions.

**11. Population and Housing**

No mitigation required.

**12. Public Services**

No mitigation required.

**13. Recreation**

No mitigation required.

**14. Transportation/Traffic**

See Physical Impact, Vehicular Traffic section for temporary traffic impact mitigation. No long term traffic impact is anticipated.

**15. Utilities and Service Systems**

No mitigation required.

## **E. OTHER IMPACTS & SIGNAGE**

### **Businesses**

City staff will coordinate the various construction activities with all project stakeholders listed in this CIMP.

Each business will receive an updated construction schedule throughout the project cycle and frequent contacts between stakeholders and appropriate City Staff will ensure that the project addresses stakeholder's needs and issues.

## **F. COMMUNICATIONS PLAN**

### **Business Survey**

A business survey will be sent to study area businesses to obtain a better understanding of their needs and concerns with respect to access issues.

### **Community Meetings**

A community meeting with the adjacent businesses and residences will be scheduled prior to construction. During the meeting, DPW Staff will present the project, the approximate duration and possible impacts. Follow up meetings will be scheduled as the project progresses. These meetings will update the project status and solicit feedback from the community.

### **Monitoring of Mitigation Plan**

The project team will evaluate the implementation of the CIMP on a regular basis and revise as required.

### **24-Hour Response**

The Contractor will be required to maintain a toll free 24-hour contact telephone number for the adjacent businesses and residences. A live person will be available to answer any questions or address the any problems that may arise during construction immediately.

## **G. REFERENCES**

1. Proposed Construction Traffic Control Plan, 60-inch Brick Interceptor Replacement Phase VIA Project (February 21, 2013), prepared by AECOM.
2. Draft Mitigated Negative Declaration Plan PP10-160 (May 13, 2011) - prepared by the City of San Jose Planning, Building and Code Enforcement Department.
3. Initial Study, Sewer Interceptor Phase VIA Project, File No. PP10-160 (May 2011), prepared by the City of San Jose Planning, Building and Code Enforcement Department.

## **Attachment A**

### **60 Inch Brick Interceptor Phase VIA Project - Demolition and Bypass Schematic Plans**

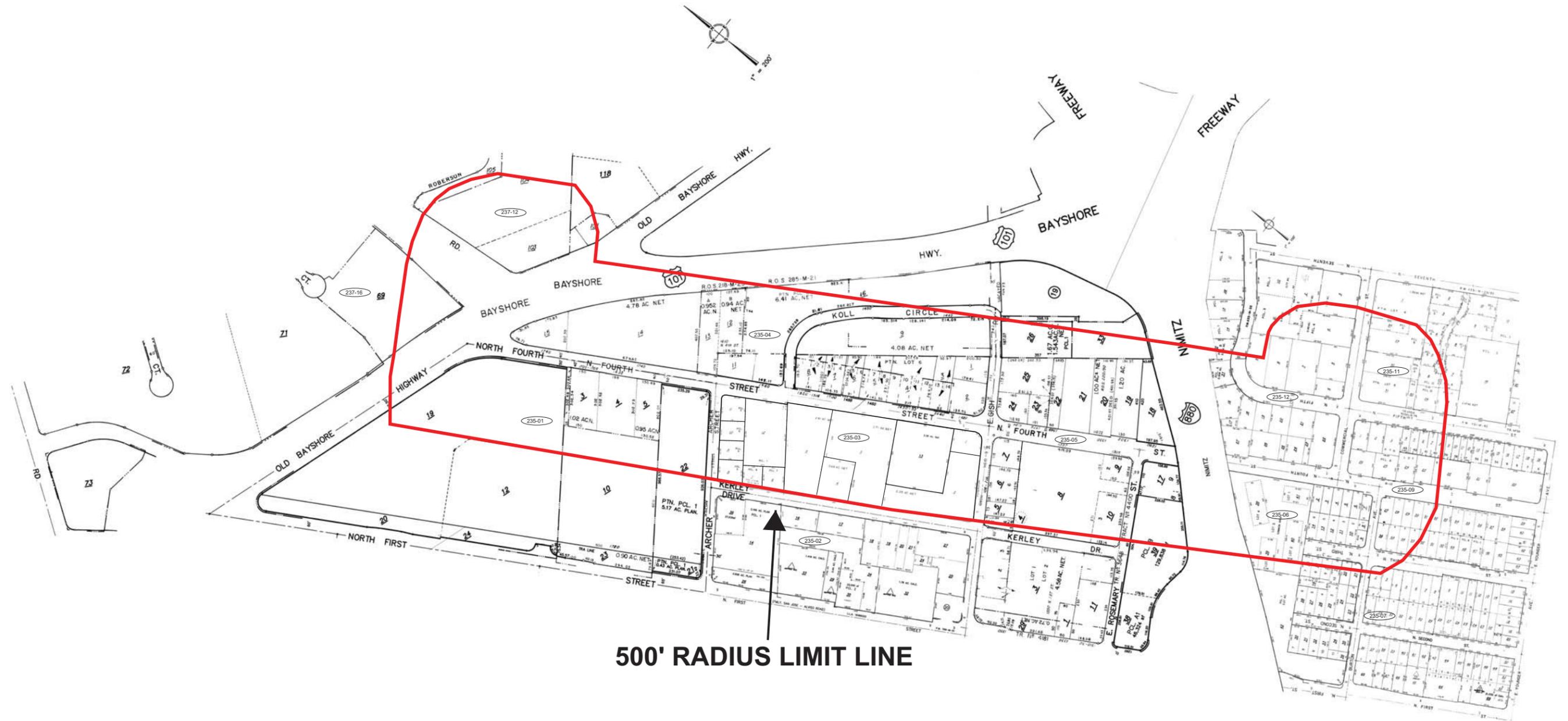
**Information Not Provided**

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**Attachment B**

**Location Map / 500-Foot Radius Map  
with Property Owner List**

**CITY OF SAN JOSE / 60-INCH BRICK INTERCEPTOR PHASE VIA PROJECT  
CONSTRUCTION IMPACT MITIGATION PLAN  
500-FOOT RADIUS MAP**



**500' RADIUS LIMIT LINE**

**City of San Jose**  
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**Construction Impact Mitigation Plan**  
**APN/Property Owner 500-Foot Radius List**

<b>Assessor Parcel No.</b>	<b>Owner</b>	<b>Street Address</b>	<b>City</b>	<b>State</b>	<b>Zip Code</b>
235-01-002	CALIFORNIA WATER SERVICE CO	LAND ONLY	San Jose	CA	95112
235-01-003	CARL A (TE) & SHARON L (TE) LILJENSTOLPE	1705 N 4TH ST	San Jose	CA	95112-4515
235-01-004	GBR SAN JOSE LLC/NATIONAL REALTY & DEVELOPMENT	1695 N 4TH ST	San Jose	CA	95112-4513
235-01-005	CALIFORNIA WATER SERVICE CO	LAND ONLY	San Jose	CA	95112
235-01-010	CALIFORNIA WATER SERVICE CO	1720 N 1ST ST	San Jose	CA	95112-4508
235-01-012	RNM FIRST STREET CENTER	1730 N 1ST ST	San Jose	CA	95112-4508
235-01-022	ESSEX WATERFORD	1700 N 1ST ST	San Jose	CA	95112-4548
235-01-019	NSHE CA MEYERS LLC	1750 N 1ST ST	San Jose	CA	95112
235-03-001	RUBEN & GLADYS CERVANTES	1415 N 4TH ST	San Jose	CA	95112-4716
235-03-002	CHANG INCOME PROPERTY PARTNERSHIP	111 E GISH RD	San Jose	CA	95112-4702
235-03-003	PNCMAC 2001-C1-147TH N 4TH ST	1471 N 4TH ST	San Jose	CA	95112-4716
235-03-004	ATRIUM GARDEN LLC	1536 KERLEY DR	San Jose	CA	95112-4815
235-03-005	KUNDE 2006 TRUST	1505 N 4TH ST	San Jose	CA	95112-4607
235-03-006	BRUCE & JEAN C SWITZER	1580 KERLEY DR	San Jose	CA	95112-4815
235-03-007	FRANK J SR (TE) & MARY T (TE) TAVOLACCI	1590 KERLEY DR	San Jose	CA	95112-4815
235-03-008	JAMES D & KARRIE MACHADO/BITMANSOUR RAMSIN (TE)	1604 KERLEY DR	San Jose	CA	95112-4815
235-03-009	130 ARCHER LLC	130 ARCHER ST	San Jose	CA	95112-4504
235-03-010	RAMIRO & BERTHA M FERNANDEZ/JOSE L & BERTHA FERNANDEZ	140 ARCHER ST	San Jose	CA	95112-4504
235-03-011	RAMIRO & BERTHA M FERNANDEZ/JOSE L & BERTHA FERNANDEZ	148 ARCHER ST	San Jose	CA	95112-4504
235-03-012	VOSSOUGH I JOHN (TE) & HELENE L/MICHELE KEON & VOSSOUGH I	1585 N 4TH ST	San Jose	CA	95112-4605
235-03-013	NORTH 4TH STREET LLC	1441 N 4TH ST	San Jose	CA	95112-4716
235-04-001	SUNG W & CHI M SHIN	191 E GISH RD	San Jose	CA	95112-4704
235-04-002	HO FRED F SUNG (TE)/WENDY W CHUN (TE)	1420 N 4TH ST A	San Jose	CA	95112-4715
235-04-003	CCM DEVELOPMENT LLC	1440 N 4TH ST	San Jose	CA	95112-4715
235-04-004	WAREHOUSEMAN & HEL PERS LOCALD	1452 N 4TH ST	San Jose	CA	95112-4717
235-04-005	CITY OF SAN JOSE FINANCING AUTHORITY	1460 N 4TH ST	San Jose	CA	95112-4725
235-04-006	PAUL A (TE) & JANICE L HEYMANN/PAUL A HEYMANN	1488 N 4TH ST	San Jose	CA	95112-4715
235-04-007	WASHINGTON GREEN LLC	1500 N 4TH ST	San Jose	CA	95112-4606
235-04-008	LAWRENCE (TE) & RUBY (TE) FONG	1516 N 4TH ST	San Jose	CA	95112-4606
235-04-009	DOLLINGER 4TH ST ASSOCS/DAVID DOLLINGER	1560 N 4TH St	San Jose	CA	95112-4615
235-04-011	DANIEL J (TE) & MICHEL S (TE) ORLANDO	1600 N 4TH ST	San Jose	CA	95112-4613
235-04-012	17 PASTEUR INVESTORS LLC	1610 N 4TH ST	San Jose	CA	95112-4613
235-04-013	17 PASTEUR INVESTORS LLC	1610 N 4TH ST	San Jose	CA	95112-4613

**City of San Jose**  
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**APN/Property Owner 500-Foot Radius List**

<b>Assessor Parcel No.</b>	<b>Owner</b>	<b>Street Address</b>	<b>City</b>	<b>State</b>	<b>Zip Code</b>
235-04-014	ARCHER 4TH ST LLC/ALLISON L DOZIER	1740 N 4TH ST	San Jose	CA	95112-4514
235-04-015	ARCHER 4TH ST LLC/ALLISON L DOZIER	N 4TH ST	San Jose	CA	95112
235-04-016	DOLLINGER 4TH ST ASSOCS/DAVID DOLLINGER	1410 KOLL CIR	San Jose	CA	95112-4601
235-05-004	MILPITAS VISTAS LLC	90 E GISH RD	San Jose	CA	95112-4806
235-05-005	MILPITAS VISTAS LLC	90 E GISH RD	San Jose	CA	95112-4806
235-05-006	MILPITAS VISTAS LLC	106 E GISH RD	San Jose	CA	95112-4701
235-05-007	MILPITAS VISTAS LLC	E GISH RD,	San Jose	CA	95112
235-05-008	MILPITAS VISTAS LLC	1355 N 4TH ST	San Jose	CA	95112-4714
235-05-009	MILPITAS VISTAS LLC	1305 N 4TH ST	San Jose	CA	95112
235-05-010	CHAN ANITA/HOM MAI SUI	KERLEY DR	San Jose	CA	95112
235-05-017	CORNERSTONE EVANGELICAL BAPTIST	1275 N 4TH ST	San Jose	CA	95112-4705
235-05-018	BAY AREA LODGING LLC/ANISH KHIMANI	1280 N 4TH ST	San Jose	CA	95112-4711
235-05-019	EUGENE H (TE) & SHIRLEY (TE) SMITH	1302 N 4TH ST	San Jose	CA	95112-4713
235-05-020	VISCOVICH 4TH ST PART	1330 N 4TH ST	San Jose	CA	95112-4713
235-05-021	PANION GROUP LLC	1350 N 4TH ST	San Jose	CA	95112-4713
235-05-022	PANION GROUP LLC	1368 N 4TH ST	San Jose	CA	95112
235-05-023	HECTOR L & NORMA A (TE) CERVANTES	1376 N 4TH ST	San Jose	CA	95112-4721
235-05-024	NGUYEN THO VAN & VICKY TRANG	1394 N 4TH ST	San Jose	CA	95112-4722
235-05-025	NBO LLC	186 E GISH RD	San Jose	CA	95112-4703
235-05-026	EASTFIELD MING QUONG INC	232 E GISH RD	San Jose	CA	95112-4706
235-05-033	SCP MANTECA LLC	234 E GISH RD	San Jose	CA	95112-4724
235-05-039	1ST & ROSEMARY FAM HOUSING/ROEM DVLPMPT CORP JONATHAN	60 E ROSEMARY ST	San Jose	CA	95112
235-06-002	GRACE GROESSER (TE)	1147 N 4TH ST	San Jose	CA	95112-4945
235-06-003	LUCY M & MIGUEL A CORONA	1135 N 4TH ST	San Jose	CA	95112-4945
235-06-004	CLINTON BUTSUDA (TE)	1125 N 4TH ST	San Jose	CA	95112-4945
235-06-005	CLINTON BUTSUDA (TE)	1117 N 4TH ST	San Jose	CA	95112-4945
235-06-006	GEORGE M & ALYCE Y IMAMURA	1107 N 4TH ST	San Jose	CA	95112-4945
235-06-007	BLANCA A RAMIREZ (TE)	1103 N 4TH ST	San Jose	CA	95112-4945
235-06-008	PATRICIA S SMITH (TE)	115 BURTON AVE	San Jose	CA	95112-4906
235-06-009	BARBARA A HONDA (TE)	1134 N 3RD ST	San Jose	CA	95112-4958
235-06-010	RICARDO M REYNOSO	1136 N 3RD ST	San Jose	CA	95112-4958
235-06-011	EDITH C HASHIMOTO (TE)	1140 N 3RD ST	San Jose	CA	95112-4958
235-06-012	SAMUEL T (TE) & JUNE (TE) ONO	1142 N 3RD ST	San Jose	CA	95112-4958

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235-06-013	DELORME/LENNARD LOUIS J STOVALL	1144 N 3RD ST	San Jose	CA	95112-4958
235-06-014	JOHN J SEISLOVE (TE)	1148 N 3RD ST	San Jose	CA	95112-4958
235-06-015	MICHAEL J & MARIANN SOLARI	1141 N 3RD ST	San Jose	CA	95112-4957
235-06-016	EARL/OWENS MARGARET J THAXTON	1137 N 3RD ST B	San Jose	CA	95112-4980
235-06-017	EARL/OWENS MARGARET J THAXTON	1137 N 3RD ST 1	San Jose	CA	95112-4979
235-06-018	GEORGE & LYNNE S YAMAICHI	1135 N 3RD ST	San Jose	CA	95112-4957
235-06-019	LOUISE M WIGHTMAN (TE)	1131 N 3RD ST	San Jose	CA	95112-4957
235-06-020	DOLORES WRIGHT	1127 N 3RD ST	San Jose	CA	95112-4957
235-06-021	JOHN C GEORGE	95 BURTON AVE	San Jose	CA	95112-4904
235-06-022	TEMKIN DOUGLAS TRUST	55 BURTON AVE	San Jose	CA	95112-4904
235-06-024	K STUART & ANN NAKASHIMA	1126 N 2ND ST	San Jose	CA	95112-4955
235-06-025	NADEAU FESTA 2011 TRUST	1130 N 2ND ST	San Jose	CA	95112-4955
235-06-038	BRIGHTSTAR INVESTMENT GRP LLC	1181 N 4TH ST 50	San Jose	CA	95112-4962
235-06-039	THOMAS III (TE) & ANN (TE) ATKINSON	1171 N 4TH ST STE	San Jose	CA	95112-4968
235-06-040	AMRIK S (TE) & JAGTAR K (TE) ATWAL	1161 N 4TH ST	San Jose	CA	95112-4945
235-06-041	SAN JOSE POLICE OFFICER S ASSOCIATION INC	1151 N 4TH ST	San Jose	CA	95112-4945
235-06-042	ROMAN CATHOLIC BISHOP SAN JOSE	1150 N 1ST ST	San Jose	CA	95112-4965
235-07-002	EDWARD & KATHLEEN CEFALU	98 BURTON AVE	San Jose	CA	95112-4903
235-07-003	MARIE D MOORE (TE)	1121 N 3RD ST	San Jose	CA	95112-4956
235-09-001	JAGDISH PATEL/MICHAEL K HANOVER	1099 N 5TH ST	San Jose	CA	95112-4414
235-09-002	DEERFIELD PROPERTIES	1095 N 5TH ST	San Jose	CA	95112-4414
235-09-003	LELAND A JR (TE) & ELAINE M (TE) MLEJNEK	1091 N 5TH ST	San Jose	CA	95112-4414
235-09-004	NORTH 5TH BUSINESS LLC	1089 N 5TH ST	San Jose	CA	95112-4435
235-09-005	NORTH 5TH BUSINESS LLC	1085 N 5TH ST	San Jose	CA	95112-4436
235-09-006	NORTH 5TH BUSINESS LLC	1081 N 5TH ST	San Jose	CA	95112-4445
235-09-007	NORTH 5TH BUSINESS LLC	1077 N 5TH ST	San Jose	CA	95112-4448
235-09-008	ALLEN & LILLIAN WONG	1073 N 5TH ST	San Jose	CA	95112-4444
235-09-022	GARY B (TE) & MARY J DRIEDGER/ATLANTIS REAL ESTATE INC	1058 N 4TH ST,	San Jose	CA	95112-4920
235-09-023	WONG KELLY KWOK & AARON KWOK-O/AARON KWOK-ON WONG	1060 N 4TH ST	San Jose	CA	95112-4941
235-09-024	REW MMW INVS LLC	1070 N 4TH ST	San Jose	CA	95112-4941
235-09-025	GONG HOY YUM (TE) & PING (TE)	1144 N 4TH ST	San Jose	CA	95112-4944
235-09-026	DARRELL J DUKES TRUST/DEBORAH D MOORE TRUST	1156 N 4TH ST	San Jose	CA	95112-4900
235-09-027	KOREAN AMERICAN COMMUN SERVS INC	136 BURTON AVE	San Jose	CA	95112-4973

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235-09-028	DINH LINH THUY & VAN THUY	1093 N 4TH ST	San Jose	CA	95112-4942
235-09-029	JONATHAN & CORRINE GONZALEZ	1085 N 4TH ST	San Jose	CA	95112-4942
235-09-030	LORRAINE VIGIL (TE)	1079 N 4TH ST	San Jose	CA	95112-4942
235-09-031	KENNETH R MAGGI (TE)	1071 N 4TH ST	San Jose	CA	95112-4942
235-09-032	MARKET VERENA M/MARKET STEVE W	1055 N 4TH ST	San Jose	CA	95112-4942
235-09-051	CRAIG SOLIS	1104 N 3RD ST	San Jose	CA	95112-4937
235-09-052	MARK A FERRIERA/DEBORAH FERREIRA	1112 N 3RD ST	San Jose	CA	95112-4937
235-09-053	TOMIKO TANASE (TE)	1116 N 3RD ST	San Jose	CA	95112-4937
235-09-054	JOHN G KARRIS	1120 N 3RD ST	San Jose	CA	95112-4937
235-09-055	JOHN T (TE) & MARIA L (TE) CROPPER	1126 N 3RD ST	San Jose	CA	95112-4937
235-09-056	EUDORO G MENDOZA/MARTHA E MAL DEMENDOZA	1128 N 3RD ST	San Jose	CA	95112-4937
235-11-001	SWOOB ENTS LLC	1095 N 7TH ST	San Jose	CA	95112-4434
235-11-004	NORTHWEST LANDSCAPE MAINT CO	271 KINNEY DR	San Jose	CA	95112-4433
235-11-005	MMM INVESTMENTS UNLIMITED	259 KINNEY DR	San Jose	CA	95112-4433
235-11-006	ABEL (TE) & DIANA C (TE) MANRIQUEZ	245 KINNEY DR	San Jose	CA	95112-4433
235-11-007	KATHLEEN M BACIOCCO (TE)/JOHN J OTOOLE (TE)	254 KINNEY DR	San Jose	CA	95112-4433
235-11-028	SIGI J VALENCIA	1052 N 5TH ST	San Jose	CA	95112-4413
235-11-029	ERIC N (TE) & MAUREEN C (TE) REEVES	1060 N 5TH ST	San Jose	CA	95112-4413
235-11-030	ATSUKO T NELSON (TE)	N 5TH ST	San Jose	CA	95112
235-11-031	ATSUKO T NELSON (TE)	206 COMMERCIAL ST	San Jose	CA	95112-4401
235-11-032	GERALD A (TE) & ANN C (TE) THOMAS	232 COMMERCIAL ST	San Jose	CA	95112-4401
235-11-033	BARRY L (TE) & MARY E (TE) COHEN/ MICHAEL GREY	250 COMMERCIAL ST	San Jose	CA	95112-4401
235-11-034	SAN JOSE URBAN MINISTRY/INNVISION THE WAY HOME	260 COMMERCIAL ST	San Jose	CA	95112-4401
235-12-002	SAMI B SALAH (TE) & JANET H (T/E) SALAH 2004 FAMILY TRUST	1125 N 7TH ST	San Jose	CA	95112-4428
235-12-003	INN VISION THE WAY HOME	297 COMMERCIAL ST	San Jose	CA	95112-4402
235-12-004	LEN CAR INVESTMENTS	255 COMMERCIAL ST	San Jose	CA	95112-4402
235-12-005	JOSE A SR & MAGDALENA CASTILLO	233 COMMERCIAL ST	San Jose	CA	95112-4402
235-12-006	TOM T CAO LIVING TRUST	1102 N 5TH ST	San Jose	CA	95112
235-12-007	T C & KATHRYN YUEN	1150 N 5TH ST	San Jose	CA	95112-4415
235-12-008	BABBITT BEARING CO INC	1170 N 5TH ST	San Jose	CA	95112-4415
235-12-009	BABBITT BEARING CO INC	1180 N 5TH ST	San Jose	CA	95112
235-12-010	LEN CAR INVESTMENTS	1236 N 5TH ST	San Jose	CA	95112-4417
235-12-016	MARK D ALLEN (TE)	1191 N 5TH ST	San Jose	CA	95112-4416

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**APN/Property Owner 500-Foot Radius List**

<b>Assessor Parcel No.</b>	<b>Owner</b>	<b>Street Address</b>	<b>City</b>	<b>State</b>	<b>Zip Code</b>
235-12-017	SAN & MICHAEL ONG	1190 N 4TH ST	San Jose	CA	95112-4946
235-12-018	BARBARA M VANDEWEGHE	1181 N 5TH ST	San Jose	CA	95112-4416
235-12-019	THE THO NGUYEN & NANCY Y HO	1165 N 5TH ST	San Jose	CA	95112-4416
235-12-020	BANKERS TRUST CO CALIF NA (TE)/CUSHMAN & WAKEFIELD	N 5TH ST	San Jose	CA	95112
235-12-021	BANKERS TRUST CO CALIF NA (TE)/CUSHMAN & WAKEFIELD	1101 N 5TH ST	San Jose	CA	95112-4416
235-12-022	BANKERS TRUST CO CALIF NA (TE)/CUSHMAN & WAKEFIELD	1160 N 4TH ST	San Jose	CA	95112-4946
235-12-023	BANKERS TRUST CO CALIF NA (TE)/CUSHMAN & WAKEFIELD	LAND ONLY	San Jose	CA	95112
235-12-024	BANKERS TRUST CO CALIF NA (TE)/CUSHMAN & WAKEFIELD	1164 N 4TH ST	San Jose	CA	95112
235-12-025	BANKERS TRUST CO CALIF NA (TE)/CUSHMAN & WAKEFIELD	LAND ONLY	San Jose	CA	95112
235-12-026	BANKERS TRUST CO CALIF NA (TE)/CUSHMAN & WAKEFIELD	1170 N 4TH ST	San Jose	CA	95112
235-12-027	SAN & MICHAEL ONG	1186 N 4TH ST	San Jose	CA	95112-4946
235-12-031	GERALDINE HARRIS (TE)/DONALD BEUKERS (TE)	1195 N 5TH ST	San Jose	CA	95112-4416
235-12-032	KONG YIN YIU	1199 N 5TH ST	San Jose	CA	95112-4416
237-12-101	MOHAWK PACKING CO	1736 OLD BAYSHORE HWY	San Jose	CA	95112
237-12-102	BOBBY R & MICHAEL SUTTON	1764 OLD BAYSHORE HWY	San Jose	CA	95112
237-12-103	1780 OLD BAYSHORE HWY LLC	ZANKER RD	San Jose	CA	95131
237-12-104	REYNOLDS CIRCLE LLC	499 REYNOLDS CIR CL	San Jose	CA	95112-1122
237-12-105	ROBERSON REMUDA LLC/GRIMES MARILYN LEE G	402 ROBERSON LN	San Jose	CA	95112-1125
237-12-118	MOHAWK LAND & CATTLE CO INC/JOHN V WILLOUGHBY	1720 OLD BAYSHORE HWY	San Jose	CA	95112-4306
237-16-069	1810 OLD OAKLAND LLC	1610 CRANE CT	San Jose	CA	95112-4201

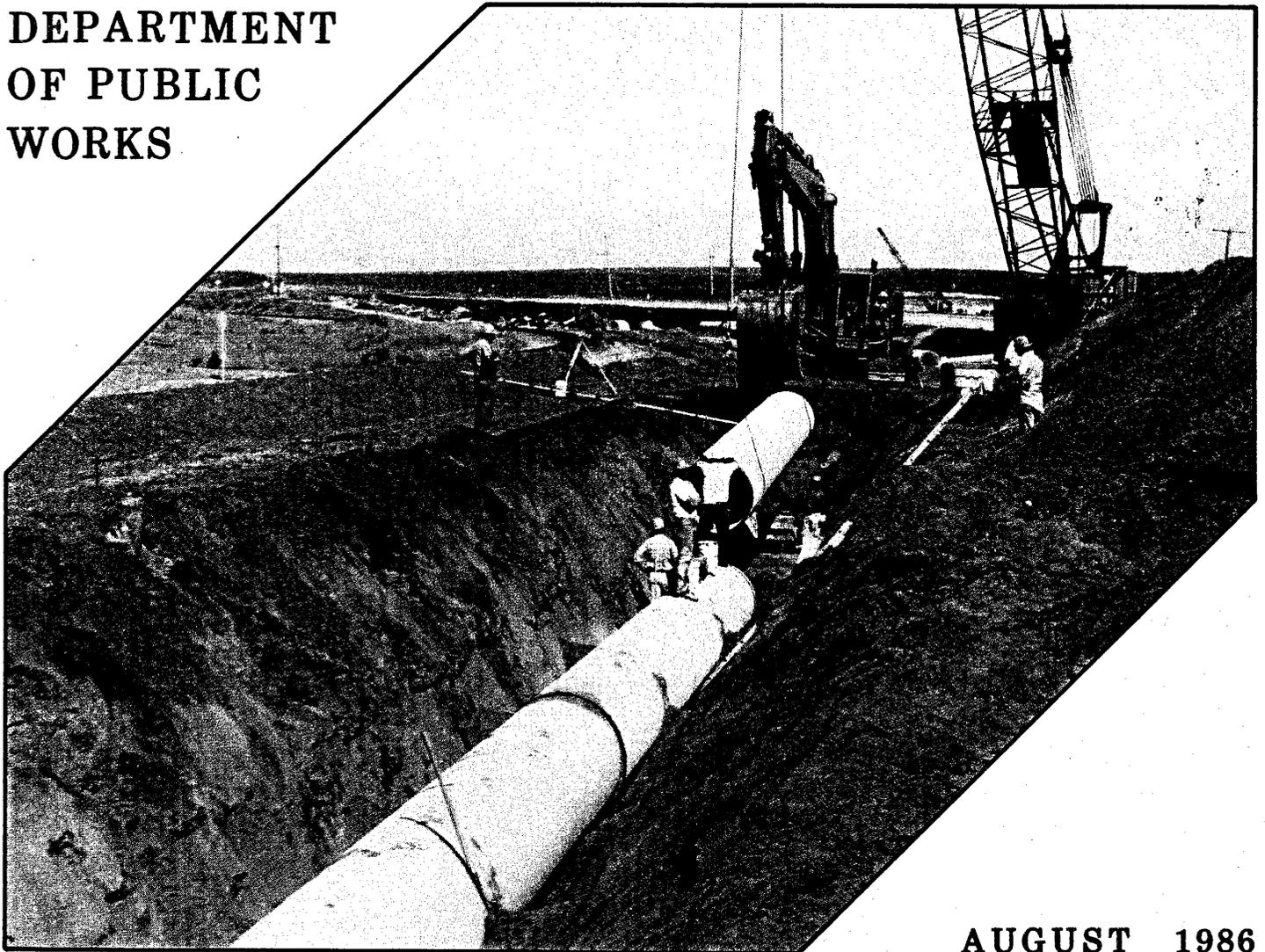
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~~OSAKA~~  
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# PRELIMINARY DESIGN REPORT for a FOURTH MAJOR INTERCEPTOR

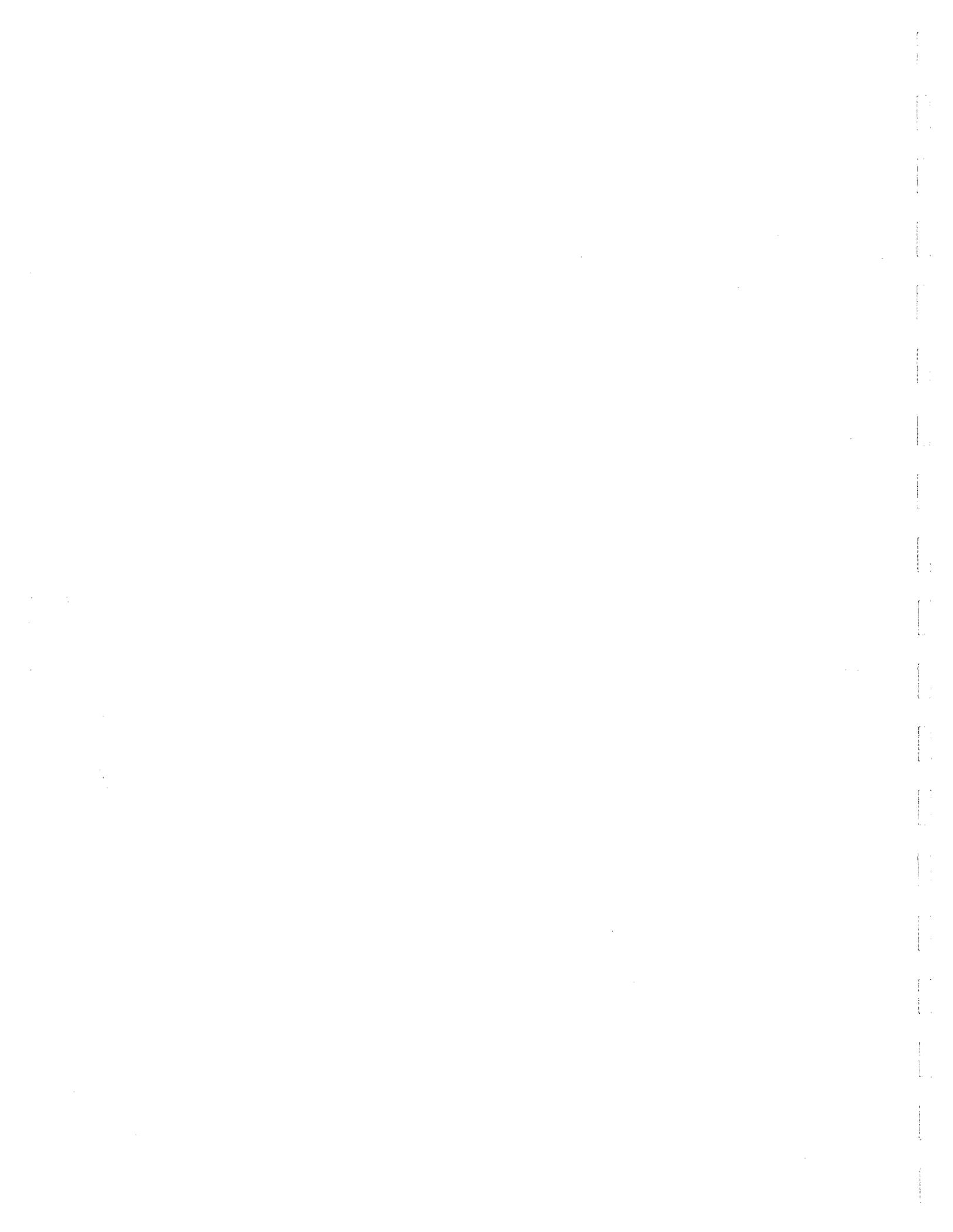
## CITY of SAN JOSE

DEPARTMENT  
OF PUBLIC  
WORKS



AUGUST 1986

JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC. 



August 22, 1986

City Council  
City of San Jose  
801 North First Street  
San Jose, CA 95110

**Council Members:**

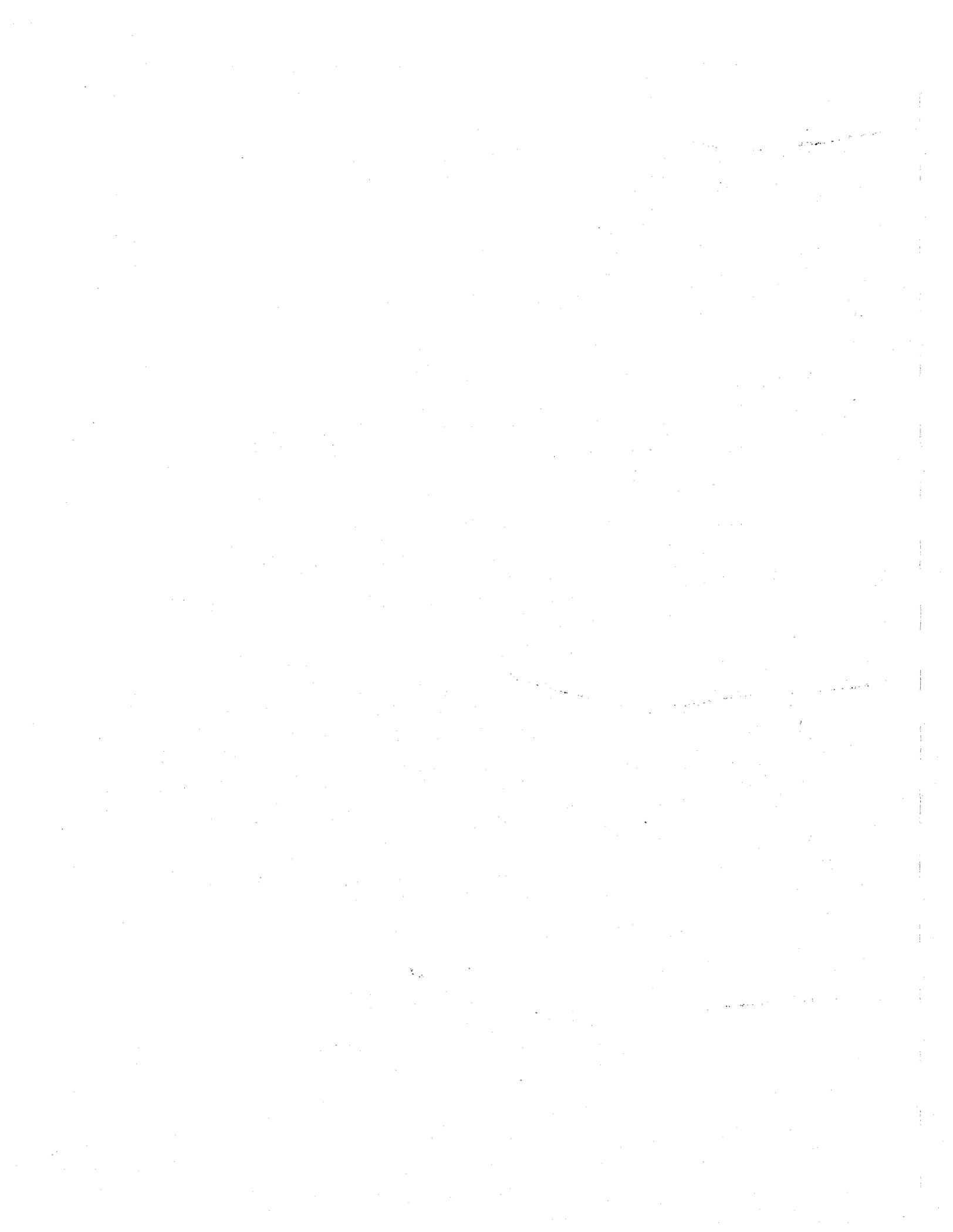
In accordance with our agreement dated February 11, 1985, we are pleased to submit this final report of the Preliminary Design of a Fourth Major Interceptor. The objectives of this study have been to determine the capacity of the existing interceptor system and to identify necessary improvements to accommodate the City's ultimate projected wastewater flow.

This Preliminary Design Report is presented in three volumes. Volume I consists of the text, appendices and technical memoranda prepared during the study. Volume II consists of plan and profile drawings of the existing interceptors and the preliminary alignment and profile of the Apparent Best Alternative Project. Volume III consists of the report of Preliminary Geotechnical Investigation prepared by Woodward-Clyde Consultants.

The Apparent Best Alternative Project is the result of a segment-by-segment alternative analysis and consists of a combination of new interceptor construction projects and existing interceptor replacement and rehabilitation projects. The Fourth Major Interceptor, referred to herein as the New Interceptor, provides the interceptor system with the ultimate projected peak wet weather flow (PWWF) capacity. The existing interceptor replacement projects replace deteriorated sections of the existing 60-inch RCP and 60-inch brick interceptors and provide the necessary redundant capacity to accommodate individual interceptor bypass for inspection and maintenance. The interceptor rehabilitation projects are eventual projects, the timing of which cannot be determined until detailed inspections are conducted.

The total estimated construction cost for all phases of the Major Interceptor Project is approximately \$58.736 million which includes:

- Fourth Major Interceptor (New Interceptor)  
Six Phases Totalling \$20.759 Million
- Interceptor Replacement Projects (Redundancy)  
Seven Phases Totalling \$23.279 Million
- Interceptor Rehabilitation Projects  
Seven Phases Totalling \$14.698 Million



Council Members

-2-

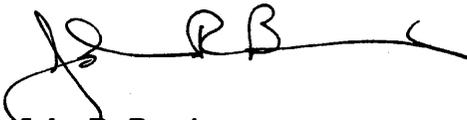
August 22, 1986

The estimated construction costs can be used as a basis for initiating the required financial planning to implement the Major Interceptor Project.

We appreciate the assistance received from Mr. Martin Gonzales, Mr. Al Oxonian, Mr. Jim Tanner, and other City staff members in the preparation of this report.

Very truly yours,

**JAMES M. MONTGOMERY,  
CONSULTING ENGINEERS, INC.**



John R. Burris  
Project Engineer



William W. Kennedy  
Project Manager

/cao



**CITY OF SAN JOSE**

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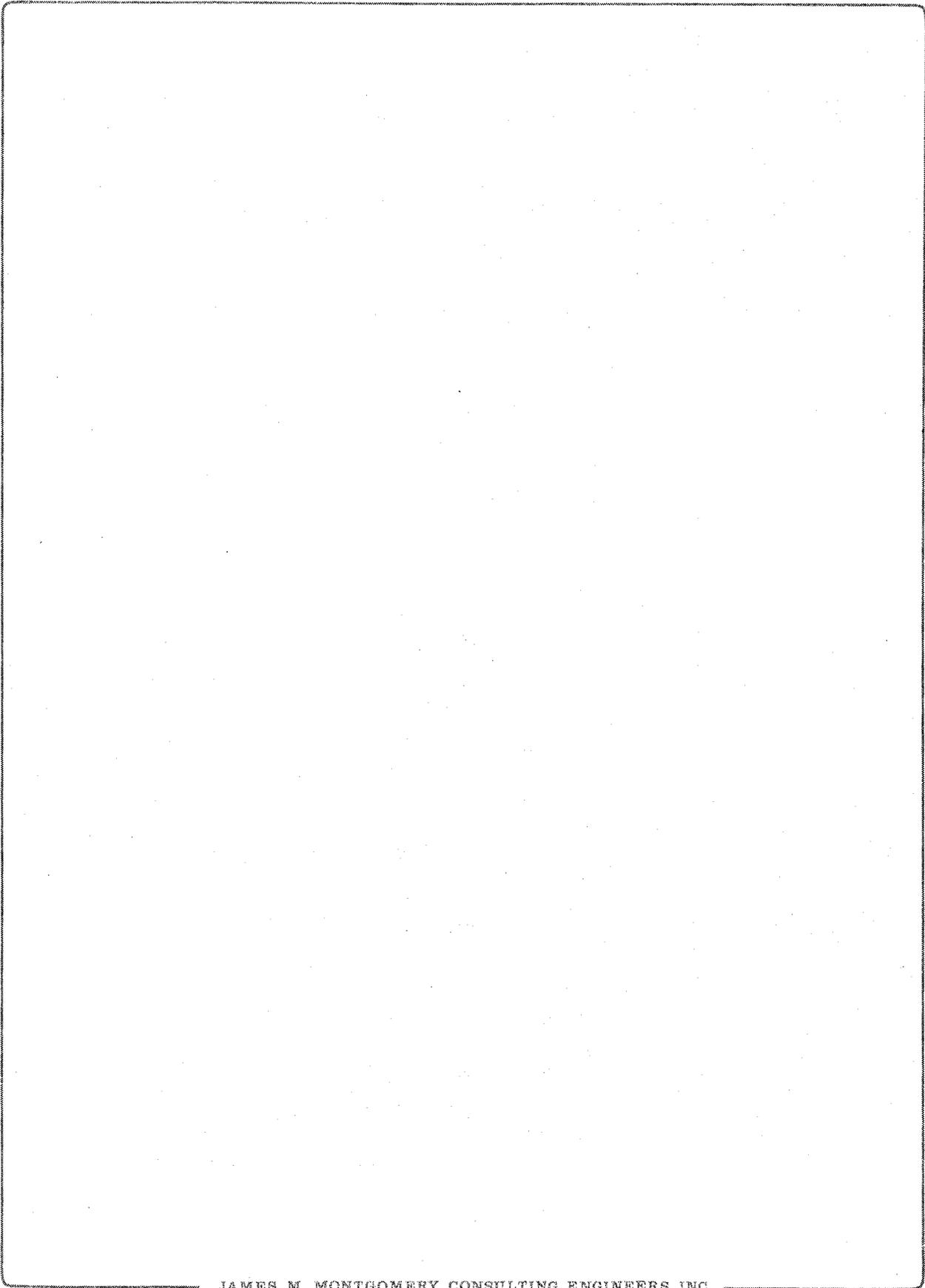
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# CHAPTER

# 1

JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC.



## **CHAPTER 1**

### **INTRODUCTION**

#### **GENERAL**

This report summarizes the results of preliminary design engineering for the City of San Jose major interceptor system. The report establishes the capacity of the three existing interceptors and presents projected ultimate peak flows and design criteria for a fourth major interceptor to handle the increased loadings. The information presented in this report is intended to serve as a guide to the orderly phased implementation of interceptor facilities to meet the ultimate needs of the City of San Jose.

#### **REPORT ORGANIZATION**

This Preliminary Design Report is presented in three volumes. Volume I consists of the text, appendices and technical memoranda prepared during the study. Chapter 1 presents general information and project background. Chapter 2 describes the existing interceptor system and presents an analysis of the existing interceptor system capacity and compares it to the ultimate projected wastewater flow to determine future demands on the system. Chapter 3 identifies and develops alternatives to meet these future demands. Chapter 4 screens and evaluates the alternatives on a reach-by-reach (or phase-by-phase) basis to arrive at the Apparent Best Alternative Project (ABAP) for each reach of the interceptor system. Also, in Chapter 4 the project is segmented into phases. Each of the phase evaluations is presented in a stand-alone "project report" including the alternative analysis, ABAP description and preliminary construction cost estimate.

## Introduction

Volume II consists of plan and profile drawings of the existing three interceptors and the preliminary alignment and profile of the proposed fourth major interceptor. The existing interceptors are profiled only where their alignment coincides with that of the proposed interceptor. In the interest of clarity, where the alignment of the proposed interceptor diverges from the existing alignments, the proposed interceptor is profiled while the existing is shown in plan view only with rim and invert elevations.

Volume III of this Preliminary Design Report consists of the Report of Geotechnical Investigation prepared by Woodward-Clyde Consultants. This soils report analyzes the soils along the route of the proposed interceptor and presents recommendations on construction techniques and special geotechnical constraints. This information will be particularly valuable during the detailed design of this project.

### BACKGROUND

On September 29, 1982 the City of San Jose authorized James M. Montgomery, Consulting Engineers, Inc. (JMM) to conduct a study of the three major interceptor sewers tributary to the San Jose/Santa Clara Water Pollution Control Plant (WPCP). Initiation of this study was in response to odor complaints pertaining to the interceptor alignment north of the Bayshore Freeway. In addition to these odor complaints, the City knew that the interceptors and cross-connection structures were undergoing corrosion. Thus, the focus of the study was to identify the causes of the odor and corrosion problems and to prepare any solutions and future work necessary to alleviate the problems. The study was limited, however, to the interceptor alignment north of the Bayshore Freeway along Zanker Road to the San Jose/Santa Clara WPCP. A description of the interceptor system originating in the downtown area of the City to the WPCP is presented in Chapter 2 of this Predesign report.

Another major concern of the City was the condition of the surcharged portion of the 84-inch RCP (reinforced concrete pipe) south of the WPCP. Because the interceptor was installed at a depth below the WPCP headworks water level, it

## Introduction

remains completely full (surcharged) for a considerable portion of its alignment. Under certain flow conditions, the pipeline can accumulate settleable material and eventually decrease flow capacity unless it can be periodically cleaned. In the unsurcharged sections, corrosion of the pipe walls is a significant concern. The 84-inch RCP cannot be taken out of service because the 60-inch RCP and Brick interceptors cannot handle the entire flow to the WPCP. The City requested that options be investigated that would enable the City staff to periodically gain access to the interceptor for inspection and cleaning, if necessary.

An important factor in the evaluation of odor/sulfide control alternatives and options to inspect the 84-inch interceptor was that the City was planning to construct a fourth interceptor along the present interceptor alignment to convey additional flow generated by projected growth in the service area to the WPCP. The City planned to initiate construction of the new pipeline by the late 1980's. In addition to providing additional capacity, construction of this new pipeline may enable the City to avoid costly rehabilitation of the existing interceptors.

The findings of A Study of Three Major Gravity Sanitary Sewer Interceptors (April, 1983) can best be categorized in terms of field investigations, evaluation of sulfide/odor control and capacity options, and recommendations. These findings are critically important to the understanding, objectives, and justification of this predesign study and are summarized in the following:

### Field Investigations

1. **Odor Monitoring.** Testing indicated that hydrogen sulfide is the principle source of odor along the interceptors except at the corner of Trimble Road and Zanker Road where a distinct and strong manure odor was detected coming from the local meat-packing company. Eighty-three percent of odor samples were determined to be above the threshold complaint level. Odors will be stronger in dry, hot weather.

## Introduction

2. **Sulfide Monitoring.** Wintertime measurement of sulfides show a range from 0 to 2.5 mg/l, with the average near 0.5 mg/l. Sulfides entering the interceptors, not production in the interceptor, account for most of the observed concentration levels. Sulfide levels will be increased during dry, hot weather and should be monitored.
3. **Structural Inspection.** The 84-inch RCP interceptor has received minor corrosion and rehabilitation is not required. The 60-inch RCP interceptor has suffered moderate to severe corrosion and rehabilitation is considered necessary. The 60-inch brick interceptor appears to have suffered moderate to severe deterioration and weakening of the mortar, but an accurate assessment of remaining service life cannot be determined unless additional field investigations are conducted.
4. **Inspection of 84-inch Surcharged Interceptor.** Inspection is not required for corrosion in the surcharged section of piping; lack of oxygen prevents formation of  $H_2SO_4$  (sulfuric acid). It is not known if settleable material has accumulated enough in the pipeline to warrant inspection. Since buildup would result in higher headlosses, field testing would determine if the interceptor is experiencing abnormal headlosses.

### Evaluation of Sulfide/Odor Control and Capacity Options

1. **Sulfide Control.** Analysis of chemical methods to control sulfide indicates that oxygen injection is the most cost effective and safe to implement. Sulfide release can be further minimized by implementing measures to reduce the high level of turbulence created where cross-ties between the interceptors and tributary flows are joined at the interceptor structures.
2. **Odor Control.** Reduction in the formation of sulfides will greatly reduce, but not eliminate odors. Control of the release of sulfides will also minimize odors. Appreciable odor reduction can be achieved by capping vent stacks located at each cross-connection structure. If odors persist,

## Introduction

after capping vent stacks, prevention of the detection of odors can be accomplished by installation of activated carbon bed scrubbers at groups of cross-connection structures.

3. **New Interceptor.** The construction of a new interceptor is warranted if one or more existing interceptors need replacement. It provides the benefits of flow diversion from 84-inch RCP to permit inspection, future capacity, and some degree of sulfide control.

### Recommendations

1. **New Interceptor.** The City should initiate design of a new interceptor starting from the vicinity of 4th Street and Empire Avenue, along Zanker Road, and terminating at the WPCP. The capacity of the interceptor should be determined on the basis of future flow projections, infiltration and inflow estimates, and flow diversion capabilities.
2. **Odor Control.** The City should cap the vent stacks on each of the interceptor structures before summer, 1983 to minimize odorous air release. To further reduce odorous air release, access hatches located on top of these structures should be modified to prevent leakage. During hot weather, an air odor study should be conducted to determine if additional measures need to be taken to mitigate odors. If this study determines additional odor treatment is required, design should be initiated by the City of carbon bed scrubbers.
3. **Pipeline Inspection.** The City should continue video and physical inspection of the 60-inch RCP and 60-inch brick interceptors. Physical inspection should be conducted to determine if corrosion has penetrated to the reinforcing steel of the 60-inch RCP, and also to measure the depth of weakened mortar in the 60-inch brick interceptor. The findings of the inspection should determine if seriously corroded pipeline segments should be rehabilitated or decommissioned.

## Introduction

4. **Construction Near 60-Inch Brick Interceptor.** The City should evaluate all proposed construction activities, particularly in the orchard area south of the WPCP, to determine if proper precautions can be taken to protect the 60-inch brick interceptor from potential damage.

### AUTHORIZATION

This Preliminary Design Report has been authorized and prepared under the terms of an agreement between the City of San Jose and James M. Montgomery, Consulting Engineers, Inc., dated February 11, 1985.

### SCOPE OF WORK

Much of the available information relative to the existing interceptor system is dated, and because of suspected settlement (and/or subsidence) and corrosion, substantial emphasis during this study was placed on describing the existing system and determining its capacity. The scope of this preliminary design study is as follows:

1. Conduct surveying and prepare plan and profile maps of existing interceptors:
  - 60-inch RCP from the San Jose/Santa Clara Water Pollution Control Plant (WPCP) to North 4th Street and East Hedding. This interceptor is herein referred to as the West Interceptor. Portions of it are constructed of brick in the northern reaches.
  - 60-inch "brick" from WPCP to North 5th Street and East Empire. Herein referred to as the East Interceptor; portions in the northern reaches are constructed of RCP.
  - 84-inch RCP from WPCP to North 7th Street and East Empire. Herein referred to as the Large Interceptor.

## Introduction

2. Conduct hydraulic analyses of existing interceptors:
  - Estimate the hydraulic capacity of each individual interceptor pipeline at various depths of flow.
  - Estimate the total hydraulic capacity of the three existing interceptors as a system with cross-ties. Also estimate capacity of the two remaining interceptors if the 60-inch Brick interceptor is not in service.
3. Develop Capacity Alternatives. Using flow projections furnished by the City, develop alternatives designed to meet future flow conditions through a combination of rehabilitation and new interceptor construction.
4. Analyze alternatives developed in Item 3 above based on monetary and non-monetary factors.
5. Segment the project into manageable phases based on the City's budget constraints.
6. Prepare the Preliminary Design Report.

### ABBREVIATIONS

ABAP	Apparent Best Alternative Project
ac	acre
ADWF	Average Dry Weather Flow
cu ft	cubic feet
d/D	ratio of flow depth to pipe diameter
ENR	Engineering News Record Construction Cost Index
ft	feet

## Introduction

fps	feet per second
gal	gallon
gpad	gallons per acre per day
gpd	gallon per day
gpm	gallons per minute
GWI	groundwater infiltration
hp	horsepower
I/I	infiltration/inflow
in	inch
JMM	James M. Montgomery, Consulting Engineers, Inc.
lb	pound
lf	linear feet
mgal	million gallons
mgd	million gallons per day
NPDES	National Pollutant Discharge Elimination System
O&M	operation and maintenance
PDWF	Peak Dry Weather Flow
PF	Peaking Factor
PVC	polyvinyl chloride
PWWF	Peak Wet Weather Flow
RCP	reinforced concrete pipe
RRI	Rainfall Responsive Infiltration
scfm	standard cubic feet per minute
sq ft	square foot
SWI	storm water inflow
TDH	total dynamic head
T-Lock	PVC liner for RCP pipe and structures
TM	Technical Memorandum
u/ac	units per acre
USGS	United States Geological Survey
VCP	vitriified clay pipe
WPCP	San Jose/Santa Clara Water Pollution Control Plant

# CHAPTER 2



## CHAPTER 2

### EXISTING INTERCEPTOR SYSTEM

#### GENERAL

The City of San Jose interceptor system consists of three major pipelines which convey wastewater from central San Jose to the Water Pollution Control Plant (WPCP):

- West Interceptor (60-inch RCP) from 4th and Hedding to the WPCP
- East Interceptor (60-inch Brick) from 5th and Empire to the WPCP
- Large Interceptor (84-inch RCP) from 7th and Empire to the WPCP

During the 1983 study of the three major interceptors, it was found that the available plans of various segments of the pipelines have widely differing datums, that detailed construction drawings for most of the 60-inch Brick pipeline were not available, and that the interceptors have suffered substantial subsidence. Since an accurate estimate of gravity pipeline capacity cannot be determined without an accurate profile of each interceptor, it was necessary to survey and map the existing interceptors so that an updated profile could be generated utilizing a common datum.

This chapter describes each of the existing interceptors and indicates the findings of the hydraulic analyses.

#### DESCRIPTION OF EXISTING INTERCEPTORS

The three existing interceptors are designated "West," "East," and "Large" for convenience in differentiating between the three. A schematic plan of the interceptor system is shown in Figure 2-1. A 1,000 scale plan of the system is

## Existing Interceptor System

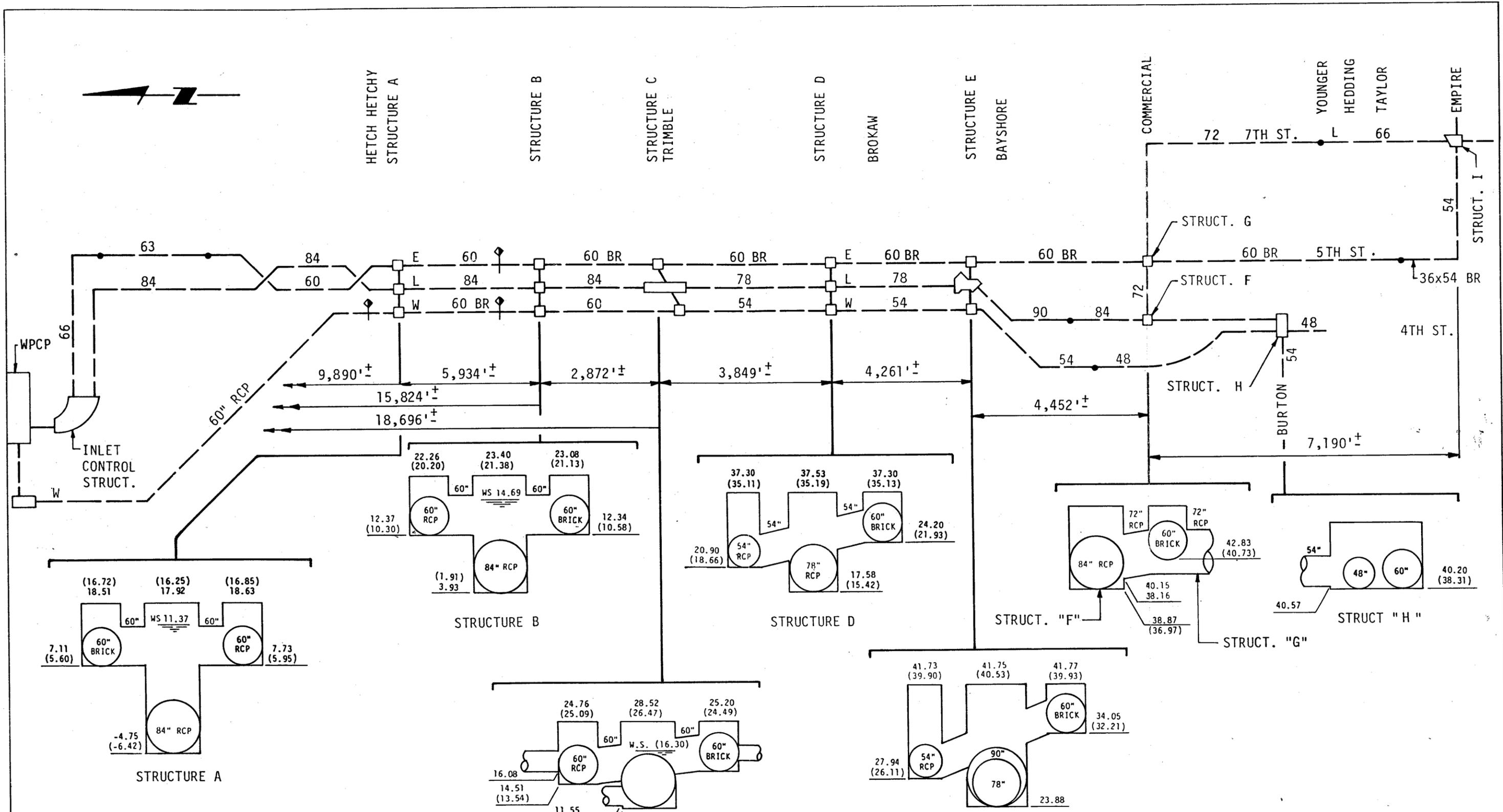
contained in Technical Memorandum (TM) No. 4A in Appendix D. The pipe sizes, in general, graduate upward as they travel downstream toward the WPCP. Also, the "Brick" sewer (as it is historically referred to) is not constructed of brick for its entire length because portions of the original brick interceptor have been replaced with RCP over the years since its construction.

### West Interceptor

The West Interceptor begins at North 4th and East Hedding Streets as a 48-inch RCP. It proceeds north on 4th Street to East Gish Road (approximately 3,698 feet) where it changes to 54-inch RCP. The 54-inch interceptor continues north on 4th Street across Highway 17 and the Bayshore Freeway, then along Zanker Road to Trimble Road (approximately 10,948 feet) where it changes to 60-inch RCP. The interceptor continues along Zanker Road approximately 8,854 feet to Structure A south of Hetch Hetchy where it changes to 60-inch Brick for a length of approximately 160 feet. From that point north to the WPCP the interceptor diverges from Zanker Road and is constructed at 60-inch RCP and T-Lock RCP for a length of approximately 6,656 feet where it changes to dual 45-inch RCP pipes to the WPCP Influent Transition Structure, approximately 2,182 feet. The overall length of the interceptor is approximately 33,000 feet.

### East Interceptor

The East Interceptor was the first of the major interceptors and was installed around the turn-of-the-century. For the purposes of this report, it begins at North 5th and Empire Streets as a 36 x 54-inch egg-shaped brick sewer. It proceeds north on North 5th Street to East Hedding Street (approximately 1,926 feet) where it becomes a 60-inch brick sewer. It then proceeds north across Highway 17 and the Bayshore Freeway and then along Zanker Road to a point south of Hetch Hetchy (approximately 20,964 feet) where the pipe material changes to 60-inch RCP. The alignment continues along Zanker Road approximately 8,564 feet to point north of Highway 237 where it changes to 63-inch RCP for a length of 2,511 feet. The interceptor again changes to 66-inch



NOT TO SCALE

**LEGEND**

W - WEST INTERCEPTOR		EXIST. STRUCTURES
E - EAST INTERCEPTOR		EXIST. INTERCEPTOR
L - LARGE INTERCEPTOR		CHANGE MATERIAL
BR - BRICK CONSTRUCTION		

NOTE: ELEVATIONS IN PARENTHESES FROM RECENT SURVEY. OTHERS FROM AS-BUILTS.

**CITY OF SAN JOSE**  
**MAJOR INTERCEPTOR SYSTEM**  
**SCHEMATIC &**  
**STRUCTURE PROFILES**  
**FIGURE 2-1**



## Existing Interceptor System

for the remainder of its length (approximately 2,976 feet). The interceptor terminates at the Inlet Control Structure and its overall length is approximately 36,941 feet.

### Large Interceptor

The Large Interceptor begins at North 7th and Empire Streets as a 66-inch RCP. It proceeds north on North 7th Street approximately 4,371 feet to East Younger Street where it changes to 72-inch RCP. It then continues north on 7th street and west on Commercial Street to 4th Street where it changes to 84-inch RCP (approximately 2,124 feet). The 84-inch RCP proceeds north on 4th Street across Highway 17 to East Gish Road (approximately 1,711 feet) where it changes to 90-inch RCP and crosses the Bayshore Freeway (approximately 2,489 feet). This reach was over-sized during its construction to avoid costly boring and jacking operations across the Bayshore Freeway for future interceptor construction. North of the Bayshore Freeway, on Zanker Road, the interceptor changes to 78-inch RCP and proceeds north on Zanker a distance of approximately 5,629 feet to Bering Drive where it again changes to 84-inch RCP. The interceptor continues north as 84-inch RCP a distance of approximately 1,303 feet to Component Drive where it changes back to 78-inch RCP for a distance of approximately 1,209 feet to Trimble Road where it again becomes 84-inch RCP. From Trimble Road north to South Plant Road and west to the Inlet Control Structure (approximately 18,722 feet) the interceptor is 84-inch RCP. The interceptor terminates at the WPCP Inlet Control Structure and its total length is approximately 37,917 feet.

### CROSS-TIE STRUCTURES

Along the alignment of the existing three interceptors, there are several cross-tie structures which are important in any analysis of the operation and hydraulics of the interceptor system. Schematic sectional views of the key structures are shown in Figure 2-1. It can be seen in these sectional views that the Large Interceptor is lower than the East and West Interceptors and the further downstream the structure, the lower the large pipe is relative to the others.

## **Existing Interceptor System**

The cross-tie structures were designed with provisions to isolate the three interceptors from each other utilizing stop-logs. However, the guides for the stop logs have corroded to the point of uselessness. The interceptors cannot, therefore, operate independently. In fact, at Structure B (north of Trimble), the 84-inch RCP must be surcharged at least 1.4 feet before the smaller pipes will receive any of the flow. At Structure A, near Agnews State Hospital and Hetch Hetchy, the necessary surcharge becomes 4.9 feet. The hydraulic analyses in this chapter considers the continued usefulness of these cross-tie structures.

### **HYDRAULIC ANALYSIS OF EXISTING INTERCEPTORS**

The first step in determining the future interceptor capacity requirements of the City of San Jose is to conduct an hydraulic analysis of the existing interceptor system. The interceptors have experienced differential settlement and subsidence during their respective life times. Thus, today's pipeline profile elevations differ significantly from the design drawings. Since accurate pipeline profile information is critical to the accuracy of the hydraulic analyses, it was decided that a new survey was necessary in order to obtain an accurate profile of each interceptor. This approach results in a consolidated, up-to-date plan of the interceptor system and provides the most accurate slope information available for hydraulic calculations.

The hydraulic analyses of the interceptors were performed by computer utilizing the Manning's equation. The three interceptors were first evaluated as isolated pipelines (no cross-ties) and secondly as a system with due consideration for what actually happens at the existing cross-ties. In addition, because the long-term life of the 60-inch Brick interceptor is suspect, the capacity of the interceptor system was also determined assuming the 60-inch Brick interceptor was decommissioned.

## Existing Interceptor System

Manning's equation is as follows:

$$Q = \frac{1.49}{n} AR^{2/3} S^{1/2}$$

where      n = Manning's Coefficient of friction  
              A = Cross-Sectional Area of Flow, sq ft  
              R = Hydraulic Radius, ft  
              S = Pipeline Slope, ft/ft  
              Q = Flow, cfs

For the purpose of the capacity discussions of this chapter, the calculations were performed utilizing a Manning's "n" of 0.015 for RCP, 0.011 for T-Lock RCP (reinforced concrete pipe lined with polyvinyl chloride), and 0.017 for brick. At the City's request, the calculations were also performed utilizing a lower Manning's "n" of 0.013 (the City's standard) for all construction materials. The results of those calculations are presented in Appendix A. A discussion of Manning's "n" values is presented in TM No. 3 in Appendix B.

### Individual Interceptor Capacities

In this analysis, the three interceptors were evaluated individually as if they were isolated pipelines. The capacities were determined at one-half full, two-thirds full, three-quarters full and full (d/D = 0.5, 0.67, 0.75, and 1.0).

The computer calculations of gravity flow capacity for the various flow depths and values of "n" are contained in Appendix A. The flow capacities presented therein are calculated based strictly on the pipe slopes determined from the updated pipe invert information.

The surcharged condition and localized subsidence were two factors that helped to produce invalid flow capacity estimates for certain pipeline segments. Localized subsidence can cause "bellying" and result in positive (upward) rather

## Existing Interceptor System

than negative (downward) sloping pipeline segments. Since the Manning's formula is based on uniform, steady gravity flow, the positive slope results in a theoretically negative capacity, or flow goes in the opposite direction. The application of a uniform, steady gravity flow formula to each pipeline segment of a surcharged section also produces meaningless capacities. However, if the hydraulic gradeline of the entire surcharged section of pipeline is used as the slope, Manning's equation will give reasonably valid capacity estimates.

For purposes of the report, the computer program was run again to calculate gravity capacity between major structures utilizing the calculated overall slope between the structures. This analysis is presented in TM No. 4 contained in Appendix C. The results of that analysis for the West, East and Large Interceptors are summarized in Tables 2-1, 2-2 and 2-3, respectively. Because of the surcharge condition imposed by the water surface at the WPCP, the tables show the West and East Interceptors surcharged to Structure A at Hetch Hetchy and the Large Interceptor surcharged to Structure C at Trimble.

### Interceptor System Capacity

Analysis of the three interceptors as a system is more complex than the individual analyses. As a result of the cross-ties and the elevation differences between the interceptors, the smaller interceptors, especially in the lower reaches, receive very little flow. To force flow into the smaller interceptors, the Large Interceptor must be surcharged. Increasing the surcharge on the Large Interceptor, in turn, changes the hydraulic gradeline of that pipe and therefore its flow capacity. Therefore, the analysis becomes a reiterative one, and assumptions must be made regarding the allowable surcharge. Based on discussions with the City engineering staff, the allowable surcharge has been established to be Structure C at Trimble Road. That is, the water level at Trimble Road matches the crown of the Large Interceptor.

The location of the upstream point of surcharge is important in the operation of pipelines connecting to the interceptors. For example, if the capacity of a

**Existing Interceptor System**

**TABLE 2-1**

**CITY OF SAN JOSE  
WEST INTERCEPTOR  
GRAVITY CAPACITY**

(@ n = 0.011 T-Lock, 0.015 RCP, 0.017 Brick)

Interceptor Reach		Capacity (mgd)			
Downstream Point	Upstream Point	d/D = 1.0	0.75	0.67	0.50
WPCP	Structure A	36.2	*	Surcharged	*
Structure A	River Oaks	20.8	19.0	16.3	10.4
River Oaks	Montague	40.6	37.0	31.8	20.3
Montague	Structure C	49.3	44.9	38.6	24.6
Structure C	Structure D	40.0	36.5	31.4	20.0
Structure D	Brokaw	47.3	43.1	37.0	23.6
Brokaw	Bering	50.0	45.6	39.2	25.0
Bering	Structure E	34.9	31.8	27.3	17.4
Structure E	Gish	46.7	42.6	36.6	23.4
Gish	Burton	48.3	44.1	37.9	24.2

**Existing Interceptor System**

**TABLE 2-2**

**CITY OF SAN JOSE  
EAST INTERCEPTOR  
GRAVITY CAPACITY**

**(@ n = 0.015 RCP, 0.017 Brick)**

<b>Interceptor Reach</b>		<b>Capacity (mgd)</b>			
<b>Downstream Point</b>	<b>Upstream Point</b>	<b>d/D = 1.0</b>	<b>0.75</b>	<b>0.67</b>	<b>0.50</b>
WPCP	Structure A	35.5	*	Surcharged	*
Structure A	Structure C	42.9	39.1	33.6	21.4
Structure C	Structure D	59.7	54.4	46.8	29.8
Structure D	Brokaw	65.2	59.4	51.1	32.6
Brokaw	Structure E	62.3	56.8	48.8	31.1
Structure E	Gish	60.3	55.0	47.3	30.1
Gish	Hedding	54.0	49.3	42.3	27.0
Hedding	Taylor	47.9	43.7	37.5	24.0
Taylor	Empire	24.4	20.5	17.0	7.6

**Existing Interceptor System**

**TABLE 2-3**

**CITY OF SAN JOSE  
LARGE INTERCEPTOR  
GRAVITY CAPACITY**

**(@ n = 0.015 RCP)**

<b>Interceptor Reach</b>		<b>Capacity (mgd)</b>			
<b>Downstream Point</b>	<b>Upstream Point</b>	<b>d/D = 1.0</b>	<b>0.75</b>	<b>0.67</b>	<b>0.50</b>
WPCP	Structure C	91.7	*	Surcharged	*
Structure C	Structure D	116.7	106.4	91.5	58.4
Structure D	Structure E	121.0	110.3	94.8	60.5
Structure E	MH 23	187.3	170.8	146.8	93.6
MH 23	Structure F	258.2	235.5	202.4	129.1
Structure F	Structure G	88.9	81.1	69.7	44.5
Structure G	MH 27	92.2	84.1	72.3	46.1
MH 27	Taylor	95.0	86.6	74.5	47.5
Taylor	Empire	64.6	58.9	50.6	32.3

## Existing Interceptor System

connecting pipeline was designed for free discharge into the interceptor, but the interceptor became full or surcharged at that point, the capacity of the connecting pipeline would be reduced significantly.

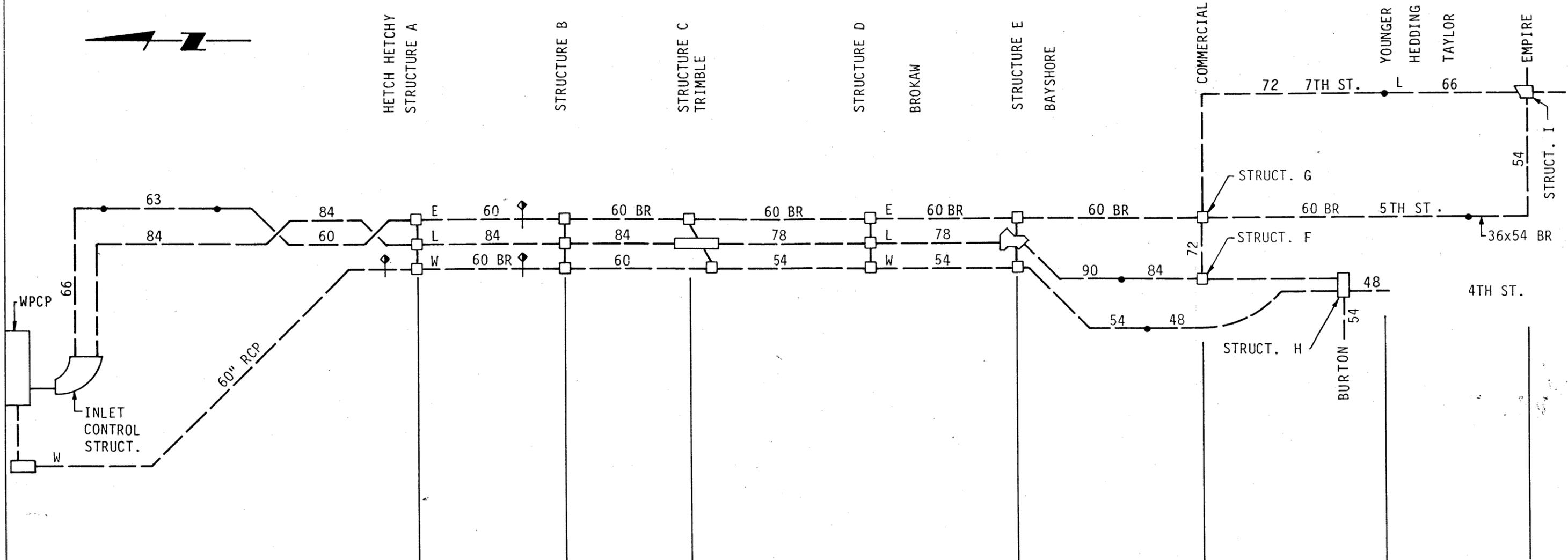
The practical system capacity is analyzed in detail in TM No. 4A contained in Appendix D. TM No. 4A determines the system capacity with due consideration for constraints such as:

1. Cross-tie structures
2. Adverse slopes
3. Practical limits of surcharge
4. Future flow conditions

The memorandum also compares the system capacity to the ultimate projected peak wet weather flow to determine what future facilities and/or improvements are necessary to provide the required capacity. Conclusions regarding future requirements are discussed in Chapter 3. Discussion in this section will be limited to the capacity of the existing system.

Early in the analysis, it became evident that the system capacity is severely limited by the existing cross-tie structures. Because of the differential elevations between the Large Interceptor and the West and East Interceptors, the smaller interceptors divert flow into the Large Interceptor and carry virtually no flow in some unsurcharged reaches. In order to provide a meaningful system capacity analysis, the cross-ties are assumed to be blocked off where it is appropriate. On the West Interceptor, the cross-ties are thus eliminated at Structure E (at Bayshore), D (north of Brokaw), and C (at Trimble). On the East Interceptor, the cross-connection at Structure D (north of Brokaw) is eliminated.

The calculated capacity is not necessarily the full capacity of the pipe; rather, it is the quantity of flow the interceptors will carry under peak flow conditions, given the surcharge limitations that must be assumed. The interceptor system capacity is summarized in Table 2-4, and shown schematically in Figure 2-2.



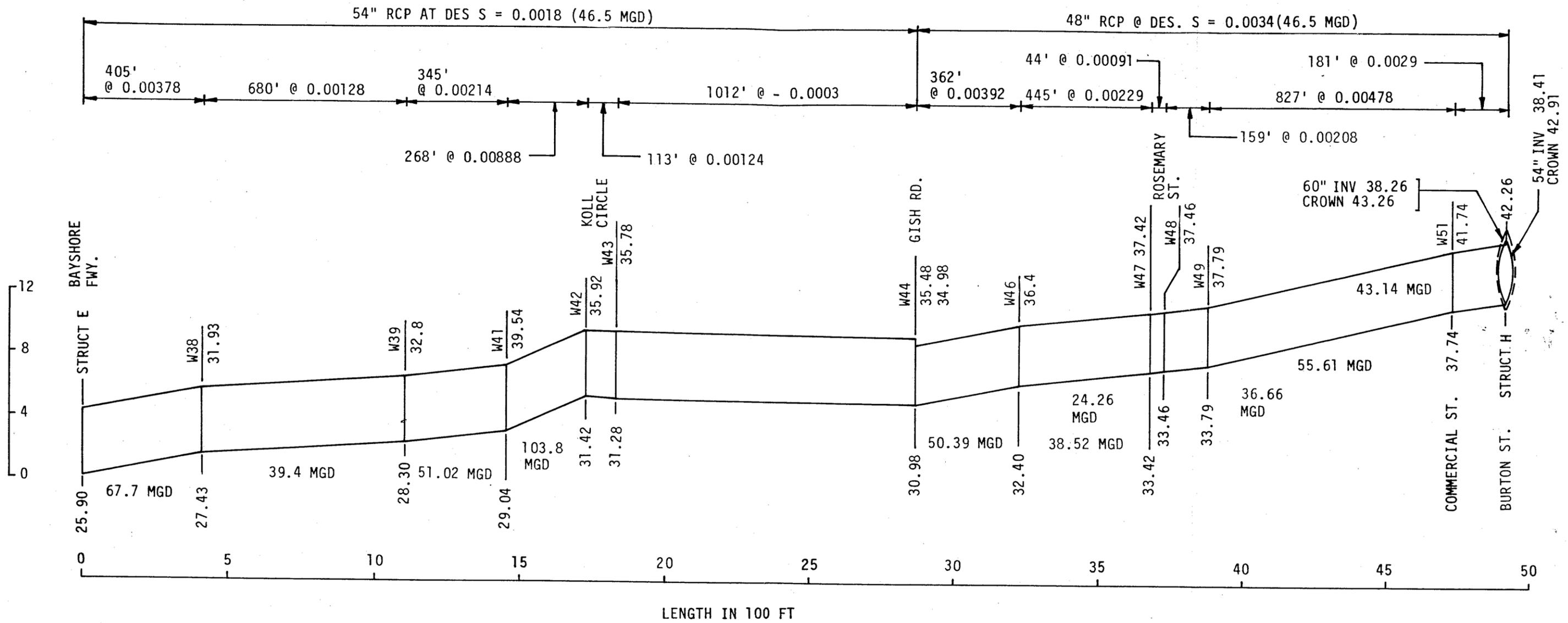
WPCP - A		A - B	B - C	C - E	E - COMMERCIAL	COMMERCIAL - YOUNGER	YOUNGER - EMPIRE
WEST	32.9 MGD	42.1 MGD	46.0 MGD	38.0 MGD	36.0 MGD	36.0 MGD	-
EAST	40.0 MGD	38.9 MGD	18.6 MGD	20.9 MGD	33.3 MGD	12.7 MGD	14.5 MGD
LARGE	84.7 MGD	84.7 MGD	84.7 MGD	113.0 MGD	175.8 MGD	92.0 MGD	60.0 MGD
TOTAL	157.6 MGD	165.7 MGD	149.3 MGD	171.9 MGD	245.1 MGD	140.7 MGD	74.5 MGD

**LEGEND**

- W - WEST INTERCEPTOR
- E - EAST INTERCEPTOR
- L - LARGE INTERCEPTOR
- BR - BRICK CONSTRUCTION
- EXIST. STRUCTURES
- EXIST. INTERCEPTOR
- CHANGE MATERIAL

**CITY OF SAN JOSE  
MAJOR INTERCEPTOR SYSTEM  
EXISTING SYSTEM  
CAPACITY  
FIGURE 2-2**





NOTE:

CAPACITIES SHOWN ARE FULL PIPE GRAVITY FLOW CAPACITY AND DIFFER FROM ACTUAL PRACTICAL CAPACITY.

**WEST INTERCEPTOR PROFILE  
BAYSHORE TO COMMERCIAL**

**FIGURE 2-3**



**Existing Interceptor System**

**TABLE 2-4**

**CITY OF SAN JOSE  
INTERCEPTOR SYSTEM CAPACITY**

(@ n = 0.011 T-Lock, 0.015 RCP, 0.017 Brick)

<b>Interceptor Reach</b>		<b>Capacity (mgd)</b>			
<b>Downstream Point</b>	<b>Upstream Point</b>	<b>West</b>	<b>East</b>	<b>Large</b>	<b>Total</b>
WPCP	Structure A	32.9	40.0	84.7	157.6
Structure A	Structure B	42.1	38.9	84.7	165.7
Structure B	Structure C	46.0	18.6	84.7	149.3
Structure C	Structure E	38.0	20.9	113.0	171.9
Structure E	Commercial	36.0	33.3	175.8	245.1
Commercial	Younger	36.0	12.7	92.0	140.7
Younger	Empire	--	14.5	60.0	74.5

## Existing Interceptor System

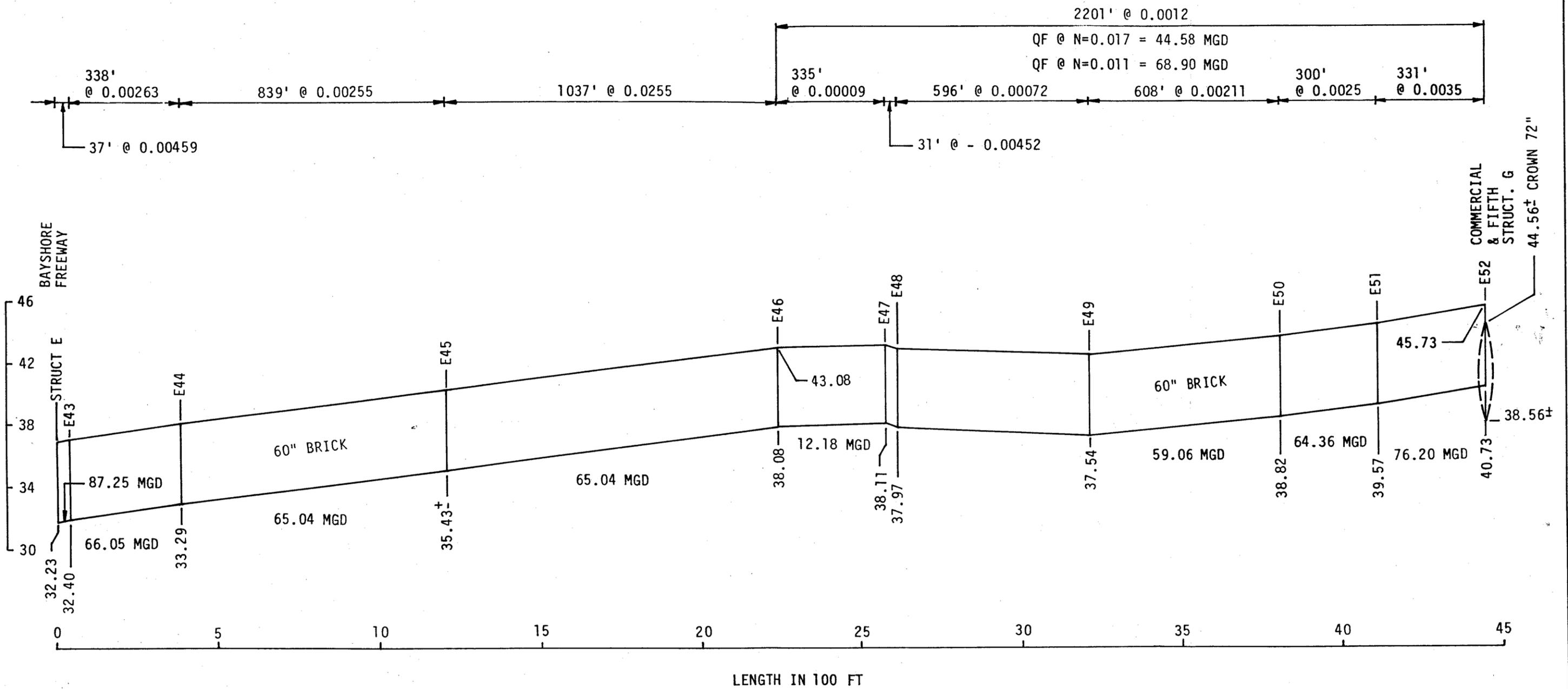
### System Limitations

One major constraint limiting interceptor system capacity is the cross-tie structures. These structures along the interceptor alignment effectively empty the two smaller interceptors into the Large Interceptor. This causes the Large Interceptor run full while the West and East Interceptors receive limited flow. Elimination of cross-ties, where appropriate, was previously discussed. The structures left intact in the previous analysis are either necessary for individual interceptor relief or their elimination makes no difference in the capacity analysis.

The three interceptors have experienced varying degrees of subsidence since their original construction. As a result, some reaches of the pipes have adverse (negative) slopes. These reaches must be surcharged, to the extent possible, to realize their maximum capacity. Between Structure E (at Bayshore) and Commercial Street, both the West and East Interceptors are severely capacity limited by sections with negative slopes. To illustrate these significant problem areas, the West and East Interceptors are profiled in Figures 2-3 and 2-4 respectively.

Referring to Figure 2-3, note that the West Interceptor has adverse slope for a length of 1,125 feet between Manholes W42 and W44. To achieve the maximum capacity in the West Interceptor between Structure E and Commercial Street, it must be surcharged to its crown at Burton Street. The maximum surcharged capacity under these conditions is 36 mgd.

The East Interceptor, shown in Figure 2-4, has adverse slope for a distance of 962 feet between Manholes E46 and E49. The limit of surcharge for this reach of interceptor is the crown of the Large Interceptor at Commercial and Fifth Streets. The Large Interceptor crosses the East Interceptor at that point. Under these surcharged conditions the capacity of the East Interceptor in the reach between Structure E and Commercial is limited to 33.3 mgd.



**NOTE:**

CAPACITIES SHOWN ARE FULL PIPE GRAVITY FLOW CAPACITY AND DIFFER FROM ACTUAL PRACTICAL CAPACITY.

**EAST INTERCEPTOR PROFILE  
BAYSHORE TO COMMERCIAL**

**FIGURE 2-4**



## Existing Interceptor System

Other limitations which must be corrected or compensated for are:

1. Gravity capacity in the West Interceptor north of Structure A (at Hetch Hetchy) is limited to 20 mgd. It must be surcharged to achieve 32.9 mgd capacity.
2. Gravity capacity in the West Interceptor between Structure E (at Bayshore) and Structure D (north of Brokaw) is limited to 28.4 mgd and must be surcharged to carry 36 mgd.
3. Much of the East Interceptor and a portion of the West Interceptor are constructed of brick which exhibits a higher friction coefficient and thereby lower flow capacity than other materials. The brick portions are also old with an unpredictable life expectancy.
4. The East Interceptor, between Empire and Younger Streets, is a 54 x 36-inch egg-shaped brick sewer. Its capacity is limited to 12.8 mgd and it cannot be surcharged. Upstream flow inputs are far in excess of this capacity and therefore must be diverted to the Large Interceptor.

### FLOW PROJECTIONS

To determine the ultimate capacity requirement in the City's interceptor system, City staff estimated growth and development within the service area from City planning documents. Contributing agencies were also contacted to provide their estimates of ultimate capacity requirements. The flow projections obtained were, for the most part, in terms of average dry weather flow (ADWF). Because interceptor design must be based on peak wet weather flow (PWWF), a peaking factor (P.F.) was applied to the various ADWF's. The P.F. utilized for the calculation of PWWF is the same one used in the City's sewer system computer model and is defined as follows:

## Existing Interceptor System

$$P.F. = 2.5 Q_A^{-0.1}$$

and

$$Q_p = P.F. \times Q_A$$

where

P.F. = Peaking factor, dimensionless

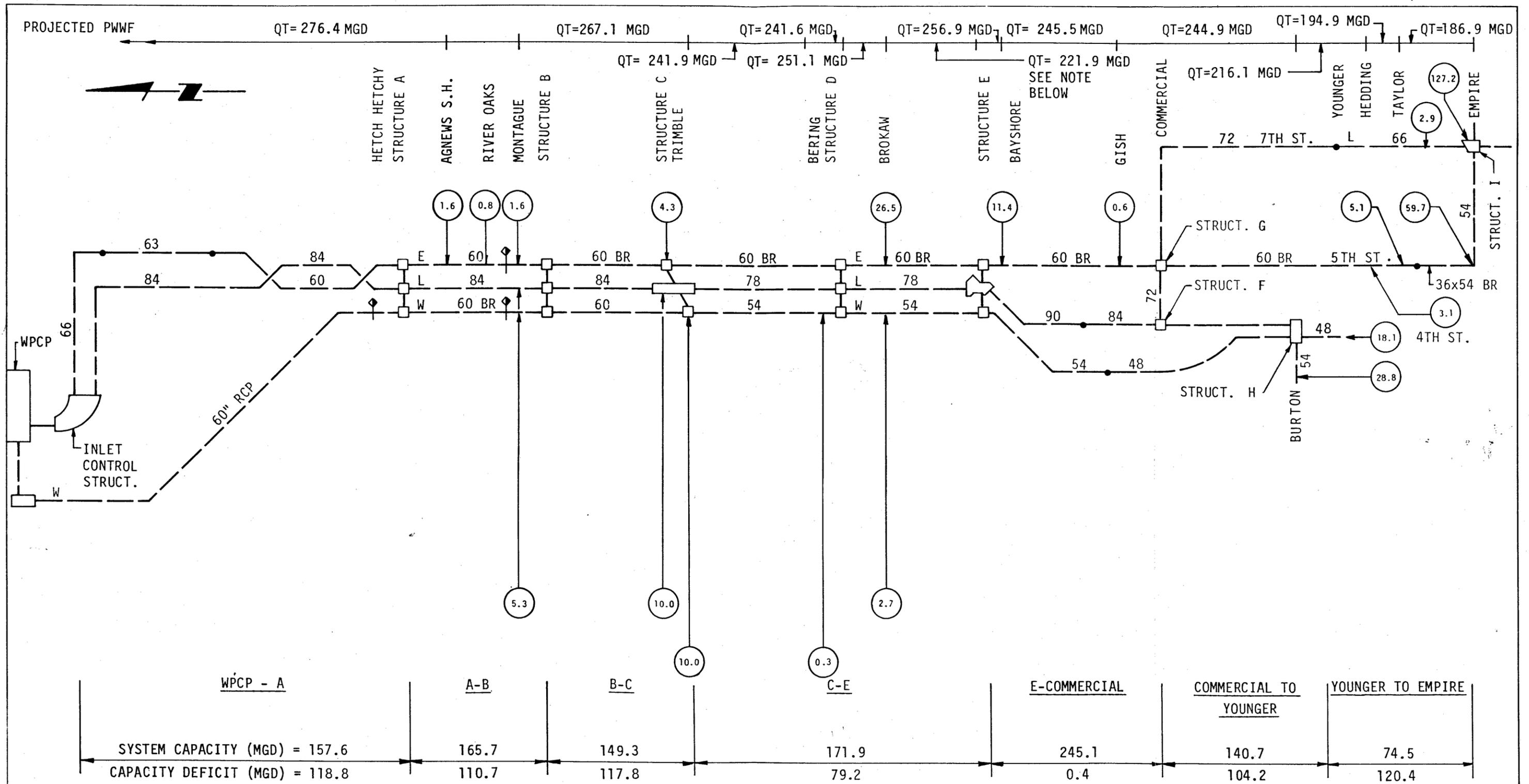
$Q_A$  = ADWF, in mgd

$Q_p$  = PWWF, in mgd

The P.F. equation assumes that as the area served increases (or as ADWF increases) the magnitude of the P.F. decreases. The P.F. is applied to the cumulative ADWF downstream of each input along the course of each interceptor. The resultant projected design PWWF's are tabulated in Table 2-5. As shown in the table, the East Interceptor has inputs totalling 71.3 mgd, the West Interceptor receives 72.6 mgd, the Large Interceptor receives 132.5 mgd and 81.5 mgd enters the WPCP in separate pipelines. Therefore the total estimated PWWF in the interceptors is 276.4 mgd and at the WPCP is 357.9 mgd (including the 81.5 mgd direct inputs to the WPCP). The flow inputs are shown schematically in Figure 2-5. While the 81.5 mgd of flow which enters the plant directly need not be considered for interceptor capacity, these inputs do affect the hydraulics of the interceptor system and must be considered. The existing WPCP capacity is 271 mgd, and flow in excess of that total will be diverted from the interceptors to a proposed future plant expansion south of the existing WPCP.

### CAPACITY DEFICIT

One of the principal objectives of this study is to identify the facilities and improvements required to meet the demands placed on the interceptor system by the projected PWWF. In this section, the existing interceptor system capacity is compared to the projected PWWF to determine the location and extent of capacity deficits in the system. With the hydraulic deficiencies identified, Chapters 3 and 4 will develop and evaluate alternatives which will alleviate the inadequacies.



NOTE: REDUCTION IN TOTAL PWWF AT STRUCTURE E DUE TO REDUCED P.F. RESULTANT FROM COMBINING ALL FLOW AT THAT POINT.

LEGEND	
W - WEST INTERCEPTOR	□ EXIST. STRUCTURES
E - EAST INTERCEPTOR	— 60 — EXIST. INTERCEPTOR
L - LARGE INTERCEPTOR	◇ CHANGE MATERIAL
BR - BRICK CONSTRUCTION	○ FLOW INPUTS (MGD)
QT - TOTAL SYSTEM PWWF	

**CITY OF SAN JOSE**  
**MAJOR INTERCEPTOR SYSTEM**  
**PROJECTED PWWF**  
**AND CAPACITY DEFICIT**  
**FIGURE 2-5**



Existing Interceptor System

TABLE 2-5  
 CITY OF SAN JOSE  
 MAJOR INTERCEPTOR SYSTEM  
 PROJECTED ULTIMATE WASTEWATER FLOWS

Flow Input Description	Cumulative		P.F.	Cumulative Q <sub>p</sub> (mgd)
	Q <sub>A</sub> (mgd)	Q <sub>A</sub> (mgd)		
<b><u>East Interceptor</u></b>				
1. E. Empire 48" from West 36" x 54" from South	16.0 18.0	34.0	1.76	59.7
2. E. Taylor 28" x 42" from East 18" & 33" from West	3.2	37.2	1.74	64.8
3. E. Hedding 21" from West	2.0 <sup>a</sup>	39.2	1.73	67.9
4. Downstream at Commercial <sup>b</sup>	33.3	33.3	c	33.3
5. E. Gish 8" from East 15" from West	0.2	33.5	2.93 <sup>d</sup>	33.9
6. Old Bayshore, 12" & 30" from East	5.4	38.9	2.11 <sup>d</sup>	45.3
7. Downstream of Bayshore <sup>e</sup>	0	0	—	0
8. Brokaw, 21" & 42" from East	13.8	13.8	1.92	26.5
9. Downstream of Structure D <sup>f</sup>		42.0	1.5	63.0
10. Trimble 24" from East <sup>g</sup>	2.4	45.2	2.29	67.3
11. North of Montague 18"	0.6	45.8	2.63 <sup>d</sup>	68.9
12. River Oaks 12" from East	0.3	46.1	2.82 <sup>d</sup>	69.7
13. South of Hetch Hetchy 2-10" from East	0.6	<u>46.7</u>	2.63 <sup>d</sup>	<u>71.3</u>
<b><u>West Interceptor</u></b>				
1. E. Hedding, 48" from West	9.0	9.0	2.01	18.1
2. Burton, 54" from West	17.0	26.0	1.80	46.9

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## Existing Interceptor System

TABLE 2-5 (Continued)

Flow Input Description	Cumulative		P.F.	Cumulative
	$Q_A$ (mgd)	$Q_A$ (mgd)		$Q_p$ (mgd)
3. Downstream of Bayshore <sup>h</sup>		47.3 <sup>i</sup>	1.52 <sup>j</sup>	71.8
4. E. Brokaw, 8" & 15" from West	1.1	48.4	2.48 <sup>d</sup>	74.5
5. Downstream of Structure D <sup>k</sup>		34.0	1.5 <sup>j</sup>	51.0
6. Bering, 8" from East & West	0.1	34.1	3.15 <sup>d</sup>	51.3
7. Trimble, 33" Santa Clara from West <sup>l</sup>	8.0	45.2	m	67.3
8. Montague, 14" FM from West	3.5	<u>48.7</u>	m	<u>72.6</u>
<b><u>Large Interceptor</u></b>				
1. E. Empire 54" from East 72" from South	78.7	78.7	1.62	127.2
2. E. Taylor 28" x 42" from East	2.0	80.7	1.61	130.1
3. Transferred from East Interceptor @ 5th & Commercial ( $Q_p = 34.6$ )	5.9	86.6	1.57	164.7
4. Downstream of Bayshore <sup>e</sup>		98.8	1.52 <sup>c</sup>	150.1
5. Structure D north of Brokaw <sup>f</sup>		85.1	1.5 <sup>j</sup>	127.6
6. Trimble 33" S.C. from West <sup>n</sup>	8.0	<u>89.1</u>	m	<u>132.5</u>
<b><u>Directly to WPCP</u></b>				<b><u>Qp</u></b>
1. Alviso FM 10"	0.6		2.63	1.6
2. S.C. FM 2 - 33" Combined as 48"				54.0
3. Lamplighter FM 24"				7.0
4. Milpitas FM, 36"				<u>18.9</u>
<b>Total</b>				<b><u>81.5</u></b>

Total in Interceptors = 276.4

Total to WPCP = 276.4 + 81.5 = 357.9

## Existing Interceptor System

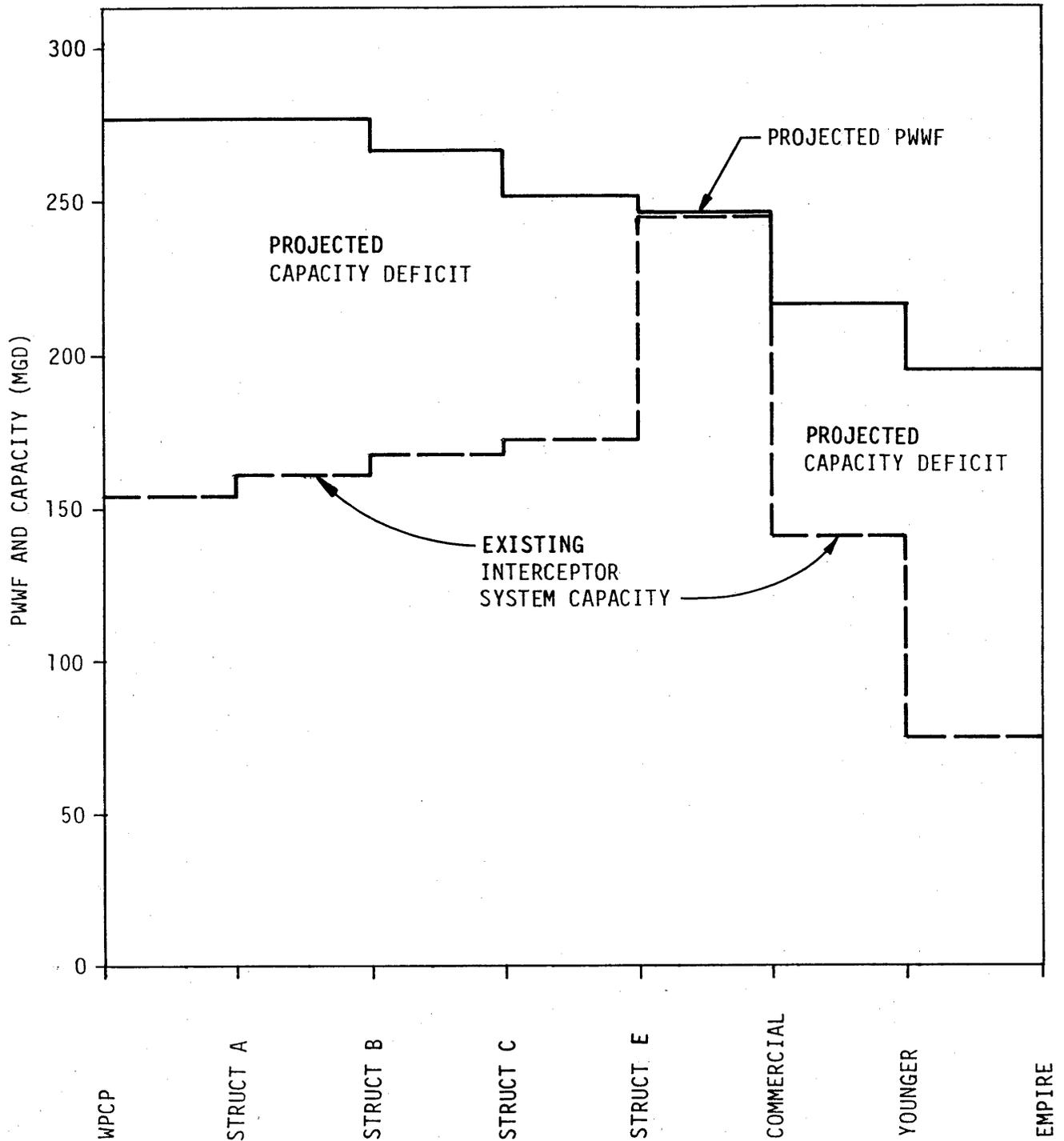
TABLE 2-5 (Continued)

### Footnotes:

- a. Estimated  $Q_a$  from  $Q_p$  given by City.
- b. At Commercial, the East Interceptor (60" Brick) crosses the Large Interceptor (72" RCP). Crown of Large is lower than East, therefore  $Q_p$  in East is controlled by water surface limitation set at crown of Large.
- c. Back-calculated; P.F. equation does not apply.
- d. P.F. applied to  $Q_a$  input only and added to  $Q_p$ .
- e. At Bayshore, Structure E, flow in East Interceptor is transferred to Large and West Interceptors.
- f. Interceptors are combined at Structure D north of Brokaw. Total  $Q_a$  is peaked and flow split is by proportional cross-section.
- g. Interceptors are combined at Structure C at Trimble. Santa Clara input is peaked individually and added to combined peak. Flow split is by cross-section.
- h. Interceptors are connected at Structure E at Bayshore. East Interceptor transfers to Large and West. Flow split is by cross-section.
- i.  $Q_a$  calculated from flow split between Large and West cross-section.
- j. P.F. derived from combined  $Q_a = Q_e + Q_w + Q_l$
- k. At Structure D north of Brokaw the interceptors are combined. Total  $Q_a$  is peaked; split by cross-section.
- l. Interceptors combined at Structure C at Trimble. Santa Clara input peaked by contract and added to combined peak; split by cross-section.
- m. P.F. does not apply.
- n. At Structure C at Trimble, interceptors are cross-connected. Inputs at C on East and West Interceptors are peaked individually and added to the combined peaked flow. Split is by cross-section.

## Existing Interceptor System

Table 2-6 compares the existing system capacity, as calculated in TM No. 4A (Appendix D), to the project PWWF as presented in the previous section. The information in Table 2-6 is displayed graphically in Figure 2-6. It can be seen that a significant capacity deficit exists over much of the length of the system. The reach between Structure E (Bayshore) and Commercial Street is nearly adequate because of the City's foresight in oversizing that section across the Bayshore Freeway. Originally, it was anticipated that the oversized Large Interceptor in that reach would provide sufficient capacity for the ultimate PWWF. However, the deficit exists because the East and West Interceptors have experienced significant subsidence and, therefore, do not perform at design capacity.



**INTERCEPTOR SYSTEM  
CAPACITY VS. FLOW**

**FIGURE 2-6**

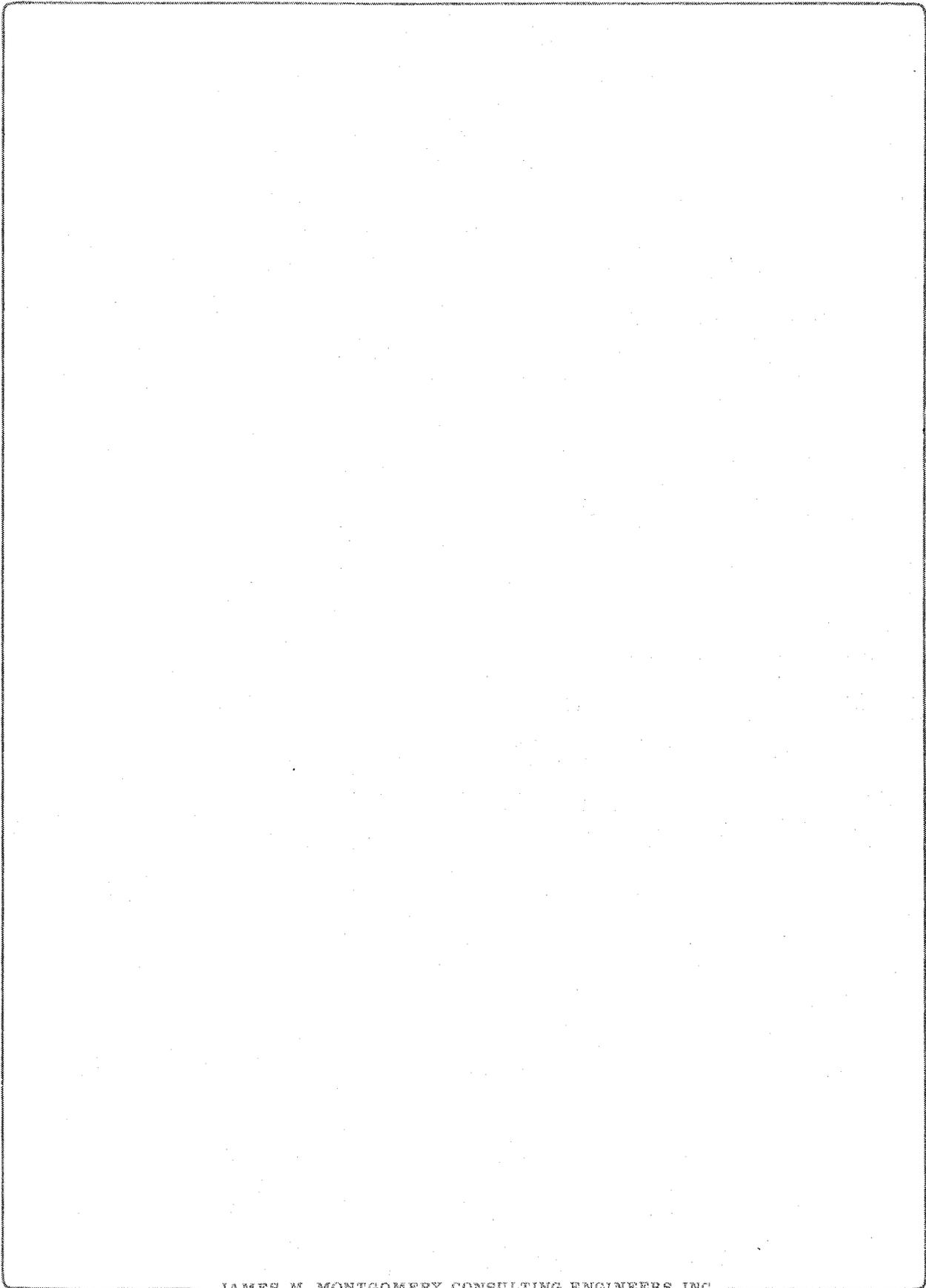


**Existing Interceptor System**

**TABLE 2-6**

**CITY OF SAN JOSE  
MAJOR INTERCEPTOR SYSTEM  
CAPACITY VS. PWWF**

<b>Interceptor Reach</b>		<b>System Capacity (mgd)</b>	<b>Projected PWWF (mgd)</b>	<b>Capacity Deficit (mgd)</b>
<b>Downstream Point</b>	<b>Upstream Point</b>			
WPCP	Structure A	157.6	276.4	118.8
Structure A	Structure B	165.7	276.4	110.7
Structure B	Structure C	149.3	267.1	117.8
Structure C	Structure E	171.9	251.1	79.2
Structure E	Commercial	245.1	245.5	0.4
Commercial	Younger	140.7	216.1	75.4
Younger	Empire	74.5	194.9	120.4



# CHAPTER

# 3

JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC.



## CHAPTER 3

### DEVELOPMENT OF INTERCEPTOR CAPACITY ALTERNATIVES

#### GENERAL

The purpose of this Preliminary Design Study is to develop the most feasible method of approach to providing the ultimate projected flow capacity. In Chapter 2, the existing interceptor system capacity was determined and compared to the ultimate peak wet weather flow (PWWF) projections to identify areas of capacity deficiency. Alternatives for correcting deficiencies are developed in this chapter. The alternatives evaluated include rehabilitation of corroded sections, replacement of certain portions, and a parallel interceptor from North 7th and Empire Streets to the Water Pollution Control Plant. A secondary objective of the project is to provide a means by which the Large Interceptor may be bypassed to facilitate inspection and maintenance.

#### DESIGN CRITERIA

In order to develop and evaluate alternatives on a common basis, design criteria were first established. The principal design criterion of consideration (in addition to projected PWWF) in the hydraulic design calculations for an interceptor sewer is the friction factor, which is dependent on the selected material of construction. The Manning's equation is utilized throughout this report for hydraulic calculations. A discussion of Manning's friction factor "n" is presented in TM No. 3 in Appendix B. Once the materials of construction are determined, a value of "n" can be estimated. Because corrosion is a major concern in the interceptor system, T-Lock RCP (reinforced concrete pipe lined with PVC) has been selected for use in the construction of all new interceptor segments except those that are permanently submerged. This material has been selected by City staff for its superior corrosion resistance and flow characteristics.

## Development of Interceptor Capacity Alternatives

The PVC liner of T-Lock RCP is much smoother than an unlined RCP pipe and therefore exhibits lower friction losses. The Manning's "n" for design of the T-Lock RCP is estimated to be 0.011 (design value for unlined RCP would be 0.015).

Another criterion which must be considered is the allowable surcharge on the interceptor system. The allowable surcharge is the maximum upstream water surface elevation which can be tolerated by connecting pipelines without significantly reducing their capacity. As stated in Chapter 2, City engineering staff has established the allowable surcharge water surface elevation under peak flow conditions to be the crown of the Large Interceptor at Structure C located at the intersection of Zanker and Trimble Roads. This maximum water surface elevation is approximately 10 feet below ground surface at that point. There are other surcharge limitations inherent with the system which must be assumed in the hydraulic analysis of the system. Those limitations are discussed in TM No. 4A.

### IDENTIFICATION OF ALTERNATIVES

The objective of this section is to identify alternatives which will:

1. Provide the necessary ultimate interceptor capacity based on projected flows determined by the City.
2. Provide a means by which the largest capacity pipe in the system may be bypassed to facilitate inspection and maintenance during summer dry weather flow.
3. Maximize useful capacity of each existing interceptor.

Alternative interceptor alignments from North 7th and East Empire Streets to North 4th and Commercial Streets were evaluated during the course of this study. These alternatives were evaluated on the basis of constructability and

## Development of Interceptor Capacity Alternatives

cost and have no affect on capacity. Therefore, these alternatives are not discussed in this section. The evaluation is presented in TM No. 1 in Appendix E. Interceptor routing from Zanker Road into the plant site is the subject of a separate report by CH2M Hill, and is attached in Appendix G.

Because the magnitude of the capacity deficit over much of the system indicates the necessity of a parallel interceptor, construction of a parallel interceptor becomes the Base Project Alternative. Other alternatives presented herein either decrease, increase or have no affect on the required capacity of the parallel New Interceptor.

Project alternatives are listed and briefly defined in this section and more fully developed in a subsequent section. The alternatives that have been identified consist of the following:

- I Base Project Alternative: Parallel Interceptor
- II Decommission Brick Interceptor
- III Rehabilitate Brick Interceptor
- IV Modify Cross-Tie Structures
- V Abandon East Interceptor from Structure C (at Trimble) to Structure B (South of Montague)
- VI East Interceptor Commercial to Structure E (Bayshore)
  - a. Rehabilitate
  - b. Replace
- VII East Interceptor Empire to Younger
  - a. Abandon
  - b. Replace
  - c. Rehabilitate

## Development of Interceptor Capacity Alternatives

VIII Cross-Tie New and Large Interceptors at 7th and Younger

IX Interceptor Bypass

### **Alternative I: Base Project - Parallel Interceptor**

As stated previously, because of the magnitude of the capacity deficit, a parallel interceptor (referred to herein as the New Interceptor) is required over much of the length of the system from 7th and Empire Streets to the WPCP. This, then, becomes the Base Project and other alternatives may or may not affect its design.

### **Alternative II: Decommission Brick Interceptor**

This alternative involves abandoning what has historically been referred to as the "Brick Interceptor." Actually, portions of both the East and West Interceptors are constructed of brick. The brick portions of the interceptors were originally constructed near the turn-of-the-century. The condition of the brick portions is suspected to be poor and its remaining useful life is difficult to estimate. Over the years, some sections of brick interceptor have been replaced by RCP; however, these sections have also been subjected to moderate to severe sulfide corrosion.

Decommissioning of the "Brick Interceptor" will diminish the system capacity. This diminished capacity must be replaced by increased capacity in the parallel interceptor (Base Project).

### **Alternative III: Rehabilitate Brick Interceptor**

Deteriorated portions of the brick interceptor can be rehabilitated to restore its capacity and/or delay its obsolescence. Rehabilitation options include regrouting, slip-lining and a relatively new process called Insituform. Implementation of rehabilitation alternatives is primarily an economic decision.

## Development of Interceptor Capacity Alternatives

Capital cost and anticipated useful life of the rehabilitated sewer must be compared to that of a new sewer. Rehabilitation may reduce the design capacity of the parallel interceptor of the Base Project.

### **Alternative IV: Modify Cross-Tie Structures**

As discussed in Chapter 2, the existing cross-tie structures relieve the two 60-inch interceptors at the expense of the 84-inch interceptor. As a result of the cross-ties, much of the capacity available in the smaller interceptors cannot be used except during periods of high flow. Elimination of some or all of the cross-ties would effectively increase the capacity of the existing interceptor system.

### **Alternative V: Abandon East Interceptor - C to B**

The width of the public right-of-way north of Structure C (at Trimble) is limited. There is not sufficient width to accommodate a parallel pipe at this point without easement acquisition on the east side of Zanker Road. In consideration of the complexity of condemnation proceedings, abandonment of the existing East Interceptor and its replacement by a larger New Interceptor is compared to the costs of easement acquisition for the parallel interceptor.

### **Alternative VI: East Interceptor - Commercial to Structure E**

The East Interceptor between Commercial and Structure E (at Bayshore) has limited capacity because of subsidence, which has resulted in negative slope over much of the length and diminished capacity. Flow enhancement in this reach can be accomplished in two ways:

- a. Rehabilitation
- b. Replacement

## Development of Interceptor Capacity Alternatives

### **Alternative VII: East Interceptor - Empire to Younger**

The East Interceptor between Empire and Younger Streets along 5th Street consists of a 36 by 54-inch egg-shaped brick sewer which is severely capacity limited. The sub-alternatives for flow enhancement in this section consist of the following:

- a. Abandonment
- b. Replacement
- c. Rehabilitation

### **Alternative VIII: Cross-Tie New and Large Interceptors at 7th and Younger**

The Base Project, New Interceptor, is sized to relieve the overloaded Large Interceptor between Empire and Younger Streets along 7th Street. However, the capacity of the Large Interceptor increases by approximately 50 percent north of Younger. If the New and Large Interceptors are cross-tied at 7th and Younger Streets, the size of the New Interceptor may be reduced between that point and 4th and Commercial Streets.

### **Alternative IX: Interceptor Bypass**

In addition to the capacity alternatives outlined above, the City desires to provide a means by which the individual interceptors may be bypassed to facilitate inspection and maintenance. The only feasible alternative to provide this function is a parallel pipeline and diversion structures.

## **ALTERNATIVES DEVELOPMENT**

The alternatives outlined and defined in the previous section are developed in TM No. 5 (Appendix H). TM No. 5 develops the alternatives in sufficient detail to allow their screening and comparison. The alternatives, thus developed, are screened in TM No. 6 (Appendix I) on the basis of monetary cost, implementation considerations, capacity and other considerations.

# CHAPTER

# 4



## CHAPTER 4

### APPARENT BEST ALTERNATIVE PROJECT

#### GENERAL

The magnitude of the Major Interceptor Project and the City's annual capital budget limitations dictate that the overall project be constructed in phases. To fulfill this requirement, the project has been segmented into several phased projects. In TM No. 6 (Appendix I), it was concluded that the Apparent Best Alternative Project (ABAP) must be the result of an alternative analysis on a reach-by-reach basis. Therefore, the ABAP will be comprised of the best alternative from each project reach. In this chapter, alternatives are presented and evaluated for each of the reaches to yield the most cost-effective project for each reach. The description and alternative analysis for each of the projects are intended to be stand-alone project reports.

#### PROJECT OBJECTIVES

The primary objectives of the City's Major Interceptor Project are twofold:

- Provide the interceptor system hydraulic capacity for the ultimate projected Peak Wet Weather Flow (PWWF).
- Provide the means and capacity by which any of the interceptors may be taken out of service (bypassed) during the summer conditions of Peak Dry Weather Flow (PDWF).

#### Hydraulic Capacity

For satisfaction of the first objective, the total system capacity, upon completion of the Major Interceptor Project, must be greater than the projected PWWF.

## Apparent Best Alternative Project

### Bypass Provisions

The existing interceptor system has experienced moderate to severe corrosion over much of its length. It is imperative that bypass provisions be included in the project to facilitate routine inspection and maintenance of the individual interceptors. To accomplish this objective, the project must include diversion structures (to facilitate bypass) and sufficient system capacity to accommodate the PDWF with the largest capacity interceptor out of service.

### PROJECT PHASING

For convenience and clarity, the phasing of the ABAP begins at the WPCP and proceeds south, ending at the intersection of Seventh and Empire Streets. The actual implementation order is dependent on the City's capacity and maintenance priorities.

The overall system alignment is broken down into seven segments for the reach-by-reach alternative analysis in this chapter. The segmentation is based on: (1.) Length of pipeline which can be implemented in a single phase under the constraints of a phased capital budget, and (2.) Length of pipeline between major flow contributions, that is; the capacity deficit is constant over the length of the segment. The seven segments are outlined below:

- I WPCP to Lamplighter Way. This segment begins at the New WPCP Junction Structure south of the existing WPCP and proceeds north to the proposed intersection of Zanker Road and Lamplighter Way south of Highway 237.
- II Lamplighter Way to Structure A. This segment begins at Lamplighter Way, south of Highway 237, and proceeds south to Structure A near the intersection of Zanker Road and the Hetch Hetchy Aqueduct.

## Apparent Best Alternative Project

- III Structure A to Structure B. This segment begins at Structure A, near Hetch Hetchy, and proceeds south to Structure B, north at Plumeria Drive.
- IV Structure B to Structure C. This segment begins at Structure B, north of Plumeria Drive and proceeds south to Structure C, located at the intersection of Zanker and Trimble Roads.
- V Structure C to Structure E. This segment begins at Structure C, at Trimble Road, and proceeds south to Structure E, just north of the Bayshore Freeway.
- VI Structure E to Structure F. This segment begins at Structure E, at Bayshore, and proceeds south to Structure F at the intersection of Fourth and Commercial Streets.
- VII Structure F to Structure I. This segment begins at Structure F, at Fourth and Commercial Streets, and proceeds south to Structure I at the intersection of Seventh and Empire Streets.

Because of the City's budget constraints, the analysis of seven segments yields twenty project phases including: six New Interceptor project phases, seven interceptor replacement projects necessary for inspection and maintenance redundancy, and seven eventual interceptor rehabilitation projects. The project phases are numbered sequentially from the north to the south with roman numerals representing the phases of the Fourth Major Interceptor Project (New Interceptor), roman numerals with the modifier "A" representing project phases required for inspection and maintenance redundancy, and roman numerals with the modifier "B" representing eventual interceptor rehabilitation projects.

## Apparent Best Alternative Project

### ESTIMATED CONSTRUCTION COST

The estimated construction cost for the City's Major Interceptor Project is summarized in Table 4-1. The total estimated construction cost for all phases of the project is approximately \$58.736 million, which includes \$14.698 million for eventual interceptor rehabilitation costs. Implementation of the entire project will require right-of-way acquisitions totalling approximately 53,000 square feet at an estimated cost of \$848,000. The costs shown do not include an allowance for engineering, legal, administration, or contingency expenses. The allowance for these costs is usually on the order of 30 percent of construction cost (15 percent for preliminary design contingencies, and 15 percent for engineering, legal, and administration). The costs are presented in current dollars (1986) and assume an Engineering News Record Construction Cost Index (ENR-CCI) of 5100. Detailed cost estimating worksheets for all phases of the ABAP are presented in Appendix J.

### IMPLEMENTATION PRIORITIES

The magnitude of the Major Interceptor Project dictates that it be implemented in phases. The order in which the project phases will be implemented is dependent on the City's capacity and maintenance priorities. Table 4-2 assigns priorities to the project phases based on system capacity versus projected ultimate PWWF and on known maintenance priorities. New Interceptor projects are assigned priority designations 1, 2, 3, . . . , while maintenance redundancy projects are designated 1A, 2A, 3A. . . . Two of the maintenance redundancy projects, IVA and VIIA, are assigned the same priority as their corresponding New Interceptor phases. This indicates that those projects are intended to be constructed concurrently. The following paragraphs discuss the priority assignment rationale.

The top priority has been established to be the provision of inspection and maintenance capabilities for the northern submerged section of the existing Large Interceptor. The priority assignments therefore begin at the WPCP with

**Apparent Best Alternative Project**

**TABLE 4-1**

**CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
APPARENT BEST ALTERNATIVE PROJECT  
ESTIMATED CONSTRUCTION COST  
(ENR 5100)**

Project Phase <sup>a</sup>	Estimated Cost <sup>d</sup>		
	New Interceptor	East Interceptor	West Interceptor
WPCP to Lamplighter Way			
Phase I	\$ 4,339,000		
Phase IA	6,075,000	\$ 4,214,000	
Phase IB		5,900,000	\$2,822,000
			3,951,000
Lamplighter Way to Structure A			
Phase II	2,107,000		
Phase IIA	2,950,000	2,080,000	
Phase IIB		2,912,000	1,440,000
			2,016,000
Structure A to Structure B			
Phase III	4,075,000		
Phase IIIA	5,705,000		4,199,000
Phase IIIB		2,646,000	5,879,000
		3,704,000	
Structure B to Structure C			
Phase IV	1,783,000		
Phase IVA	2,497,000	1,612,000	
Phase IVB		2,757,000	1,278,000
			1,789,000
Structure C to Structure E			
Phase V	4,762,000		
Phase VA		5,300,000	
Phase VB	6,667,000	7,420,000	3,672,000
			5,141,000
Structure E to Structure F			
Phase VIA		2,996,000	
Phase VIB		4,194,000	2,052,000
			2,873,000

**Apparent Best Alternative Project**

**Table 4-1 (Continued)**

Structure F to Structure I			
Phase VII	3,693,000		
Phase VIIA	5,170,000	<del>4,028,000</del> 2,878,000	1,107,000
Phase VIIB			788,000
<b>Total Estimated Construction Cost</b>	<b>\$20,759,000</b>	<b>\$21,726,000<sup>b</sup></b>	<b>\$16,251,000<sup>c</sup></b>
Right-of-Way Acquisition	29,064,000	30,416,000	22,752,000
Phase I; 37,600 sf	602,000		
Phase III; 13,400 sf	214,000		
Phase IV; 2,000 sf	32,000		

**Footnotes for Table 4-1**

- a** Phases I, II, III...indicate New Interceptor Project; Phases IA, IIA, IIIA...indicate an interceptor replacement project necessary for inspection and maintenance redundancy; Phase IB, IIB, IIIB...indicate eventual interceptor rehabilitation projects.
- b** Total construction cost includes \$19,080,000 for East Interceptor replacement projects and \$2,646,000 for eventual East Interceptor rehabilitation projects.
- c** Total construction cost includes \$4,199,000 for West Interceptor replacement projects and \$12,052,000 for eventual West Interceptor rehabilitation projects.
- d** Eventual rehabilitation project costs are estimated conservatively. More accurate estimates can only be prepared following inspection of the interceptors.

Apparent Best Alternative Project

TABLE 4-2

CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
PROJECT PHASE PRIORITY

Segment/Phase	Capacity (mgd)	Percent of PWWF	Priority
<b><u>Segment I</u></b>			
PWWF	276.4	-	-
Existing Capacity	157.6	57.0	-
w/Phase I	273.0	98.8	1
w/Phase IA	348.4	126.0	1A
<b><u>Segment II</u></b>			
PWWF	276.4	-	-
Existing Capacity	157.6	57.0	-
w/Phase II	273.0	98.8	2
w/Phase IIA	348.4	126.0	2A
<b><u>Segment III</u></b>			
PWWF	276.4	-	-
Existing Capacity	165.7	59.9	-
w/Phase III	281.1	101.7	3
w/Phase IIIA	354.4	128.2	3A
<b><u>Segment IV</u></b>			
PWWF	267.1	-	-
Existing Capacity	149.3	55.9	-
w/Phase IV	207.2	77.6	4
w/Phase IVA	283.7	106.2	4
<b><u>Segment V</u></b>			
PWWF	251.1	-	-
Existing Capacity	171.9	68.5	-
w/Phase V	269.9	107.5	6
w/Phase VA	348.2	138.7	5A
<b><u>Segment VI</u></b>			
PWWF	245.5	-	-
Existing Capacity	245.1	99.8	-
w/Phase VA	356.4	145.4	4A

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Apparent Best Alternative Project

TABLE 4-2 (Continued)  
 CITY OF SAN JOSE  
 MAJOR INTERCEPTOR PROJECT  
 PROJECT PHASE PRIORITY

Segment/Phase	Capacity (mgd)	Percent of PWWF	Priority
<b><u>Segment VII-1</u></b>			
PWWF	244.9	-	-
Existing Capacity	140.7	57.5	-
w/Phase VII	222.7	90.9	5
w/Phase VIIA	292.0	119.2	5
<b><u>Segment VII-2</u></b>			
PWWF	194.9	-	-
Existing Capacity	74.5	38.2	-
w/Phase VII	158.9	81.5	5
w/Phase VIIA	228.8	117.4	5

## Apparent Best Alternative Project

Phase I being the Priority 1 project. The Phase I project capacity, however, cannot be utilized until the project has been completed from the WPCP to Structure C at Trimble Road. Therefore, the New Interceptor priorities proceed south from the WPCP to Structure C. Once completed to Structure C, that reach of the the system will have the capacity shown in Table 4-2 for Phase I, II, III and IV. These phases are therefore Priority 1, 2, 3 and 4 respectively. Completion of these four projects alone does not provide sufficient capacity to facilitate bypass for inspection and maintenance. Bypass capabilities in this northernmost reach requires the implementation of the Phase IA, IIA and IIIA projects (Phase IVA is to be constructed concurrently with the Phase IV, Priority 4 project). Therefore, these three projects are assigned Priority 1A, 2A, and 3A, respectively.

Following completion of the projects north of Structure C, the next highest New Interceptor priority is in Segment VII. The existing capacity in Segment VII-2 (Younger Street to Structure I) is 38 percent of the projected PWWF indicating a substantial potential capacity deficit. The Phase VII project is therefore assigned Priority 5. The Phase VIIA maintenance redundancy project is to be constructed concurrently and is therefore assigned the same priority.

The last New Interceptor project is the Phase V project which is assigned Priority 6. This project is given a lower priority than Segment VII because of the large capacity deficit in Segment VII and the capability to surcharge upstream of Segment V. This surcharge capability will provide interim increased capacity in Segment V.

The Phase VIA maintenance redundancy project replaces the brick East Interceptor between Structure E (at Bayshore) and Commercial Street. This project is assigned Priority 4A. Parts of the project are already in the planning stages, initiated in response to a property owner's desire to have the existing pipe removed from his property.

## **Apparent Best Alternative Project**

The last maintenance redundancy project is the Phase VA project which is assigned Priority 5A.

### **PHASE PROJECT REPORTS**

The remainder of this chapter consists of individual project reports which include analyses of alternatives for each segment of the interceptor system and the estimated construction cost for each phase of the project. These project reports are designed to be stand-alone project phase scoping documents.

**City of San Jose**  
**Major Interceptor Project**  
**ABAP Phase I**

**GENERAL**

Originally, the Major Interceptor Project was intended to begin at the existing Inlet Control Structure at the WPCP. However, following discussions with WPCP staff, the decision was made that the interface between the Major Interceptor Project and the WPCP would be at a New Inlet Structure south of the existing WPCP near the proposed WPCP expansion. The New Inlet Structure, a New Junction Structure, and approximately 900 feet of Plant Intertie Piping comprise a separate project which will be designed and constructed by the Department of Water Pollution Control concurrent with the Phase I Major Interceptor Project. The plant intertie project is described in a report by CH2M-HILL appended (Appendix G) to the Preliminary Design Report for the Major Interceptor Project and is shown in Volume II of the Report.

**GENERAL PROJECT DESCRIPTION**

Phase I of the Apparent Best Alternative Project begins at the proposed New Inlet Structure south of the existing WPCP and proceeds east, parallel to the south dike of the plant site, to New Diversion Structure No. 1 adjacent to Zanker Road. The alignment then proceeds south across Highway 237 to a point near the proposed intersection of Zanker Road and Lamplighter Way. The overall length of the Phase I alignment is approximately 6,105 feet.

The most critical consideration for design and construction of this project is the crossing at Highway 237. This highway crossing is complicated by a CalTrans proposal for a cloverleaf interchange at the intersection of Zanker Road and Highway 237. The fill placed for the Zanker Road overpass will impose additional load on the existing interceptors and will eventually require their relocation. The alignment of the Phase I Interceptor must avoid the area of

## Apparent Best Alternative Project

proposed fill and consider the future relocation of existing interceptors. During the design of the highway crossing, an intensive geotechnical investigation of the site will be required and should include several soils borings and well dewatering testing. The investigation is necessary to make design decisions on method of crossing, i.e., boring and jacking or tunnelling.

### PROJECT OBJECTIVES

The primary objectives of the ABAP are twofold:

- Provide the interceptor system hydraulic capacity for the ultimate projected Peak Wet Weather Flow (PWWF).
- Provide the means and capacity by which any of the interceptors may be taken out of service (bypassed) during the summer conditions of Peak Dry Weather Flow (PDWF).

### Hydraulic Capacity

The existing interceptor system capacity in the Phase I reach is 158 million gallons per day (mgd). With a projected PWWF of 276 mgd, the capacity deficit is 118 mgd.

### Bypass Provisions

The existing interceptor system has experienced moderate to severe corrosion over much of its length. The existing Large Interceptor (84-inch RCP) is completely submerged in the Phase I reach and therefore is probably not corroded. However, it has never been inspected. One of the primary objectives of the Major Interceptor Project is to provide the means by which any of the interceptors may be bypassed for inspection and maintenance. This function is imperative to ensure that the system's useful life is not shortened by corrosion.

## Apparent Best Alternative Project

Routine inspection and maintenance will be scheduled during summer dry weather flow conditions and the system should therefore have sufficient capacity to accommodate the PDWF with the largest capacity interceptor out of service. The projected PDWF in the Phase I reach is 225 mgd which is the required system capacity with one interceptor out of service.

### ALTERNATIVE ANALYSIS

The goal of the alternative analysis is to determine the most cost-effective project to satisfy the objectives for each reach of the Major Interceptor Project. The objectives for a reach may not be satisfied by a single project phase because of budget constraints. In this case, subsequent phase(s) will be necessary. The alternatives for the Phase I reach are screened for objective satisfaction in Table I-1. The table shows that Alternatives 1, 2, 3, 4, 6A and 6B are rejected as they do not satisfy the capacity objectives.

Alternatives 5 and 6 are basically the same alternative which, in addition to the New Interceptor, replace the East Interceptor (inspection of the East Interceptor has shown it to be in poor condition requiring replacement or rehabilitation in the near future). The subalternatives involve alternative materials and sizes to satisfy the capacity objectives.

It can be seen that the PWWF objective can be satisfied by either 78-inch T-Lock RCP (5A) or 90-inch RCP (5B). Alternative 6 evaluates satisfaction of the PDWF objective. The system capacity is less than PDWF for both 6A and 6B. To satisfy the PDWF objective will require 84-inch T-Lock RCP or 96-inch RCP (Alternatives 6C and 6D, respectively).

Based on the above discussion, the ABAP for the Phase I reach consists of two parallel interceptors, one of which replaces the East Interceptor. The pipe material selected for the Phase I reach is 84-inch T-Lock RCP (6C) rather than 96-inch RCP for the following reasons:

Apparent Best Alternative Project

TABLE I-1

CITY OF SAN JOSE  
 MAJOR INTERCEPTOR PROJECT  
 ABAP PHASE I ALTERNATIVE SCREENING  
 WPCP TO LAMPLIGHTER WAY

Alternative Description	Interceptor Capacity (mgd)				Remarks
	West	East	Large	New Total	
Existing System Capacity	32.9	40.0	84.7	157.6	PWWF = 276.4 PDWF = 225.0
1. System w/New Interceptor					
A. 84" T-Lock RCP	32.9	40.0	84.7	115.4	<PWWF Reject for PDWF Capacity
B. 96" RCP	32.9	40.0	84.7	120.9	>PWWF Reject for PDWF Capacity
2. Alt. 1A + Rehab. West & East Interceptor	44.5	54.5	84.7	115.4	>PWWF Reject for PDWF Capacity
Alt. 1B + Rehab. West & East Interceptor	44.5	54.5	84.7	120.9	>PWWF Reject for PDWF Capacity
3. Alt. 2 w/o New Interceptor	44.5	54.5	84.7	183.7	<PDWF Reject 1, 2, & 3
4. Same as Alt. 3, except surcharge to 1' above crown @ Trimble	46.3	56.7	89.0	192.0	<PDWF Reject
5. Same as Alt. 1 w/ New Interceptor and replace East w/same size					
A. 78" T-Lock RCP	32.9	94.7	84.7	94.7	>PWWF Reject for PDWF Capacity
B. 90" RCP	32.9	101.8	84.7	101.8	>PWWF Reject for PDWF Capacity
C. 84" T-Lock RCP	32.9	115.4	84.7	115.4	>PWWF
D. 96" RCP	32.9	120.9	84.7	120.9	>PWWF
6. Same as Alt. 5 w/o Large Interceptor					
A. 78" T-Lock RCP	32.9	94.7	84.7	212.3	<PDWF Reject
B. 90" RCP	32.9	101.8	84.7	219.4	<PDWF Reject
C. 84" T-Lock RCP	32.9	115.4	84.7	233.0	>PDWF
D. 96" RCP	32.9	120.9	84.7	238.5	>PDWF

## Apparent Best Alternative Project

1. The New Interceptor will be installed shallower than the existing Large Interceptor to reduce excavation and backfill costs.
2. The New Interceptor will not be permanently submerged, thus, will be subject to corrosion.

Because of budget constraints and City departmental division of responsibilities, the project is divided into two projects: Phase I and Phase IA. A third project for this reach, eventual rehabilitation of the West Interceptor, will be required at some point in the future. This rehabilitation project is designated Phase IB. The timing of this phase cannot be estimated until future inspections are conducted. However, this reach of the West Interceptor was recently rehabilitated and recent inspection by the City has shown it to be sound at this point in time.

### ABAP ALIGNMENT

The preliminary alignment of the Phase I and Phase IA projects is shown in Figure I-1. Phase I consists of approximately 6,105 feet of 84-inch T-Lock RCP beginning at the New Inlet Structure at the WPCP and ending near the proposed intersection of Zanker Road and Lamplighter Way. The project includes two cross-tie structures adjacent to Zanker Road near the southeast corner of the WPCP and a highway crossing at Highway 237. The crossing will be either bored and jacked or tunnelled beneath the highway. This decision will be made during the detailed design of the project. The Phase IA project involves 6,105 feet of 84-inch T-Lock RCP installed parallel to the Phase I project. This project replaces the severely corroded East Interceptor and provides the necessary redundant capacity to facilitate bypass for inspection and maintenance. A portion of this replacement project, approximately 1,500 feet, will be necessary as part of Caltrans' planned interchange construction project.

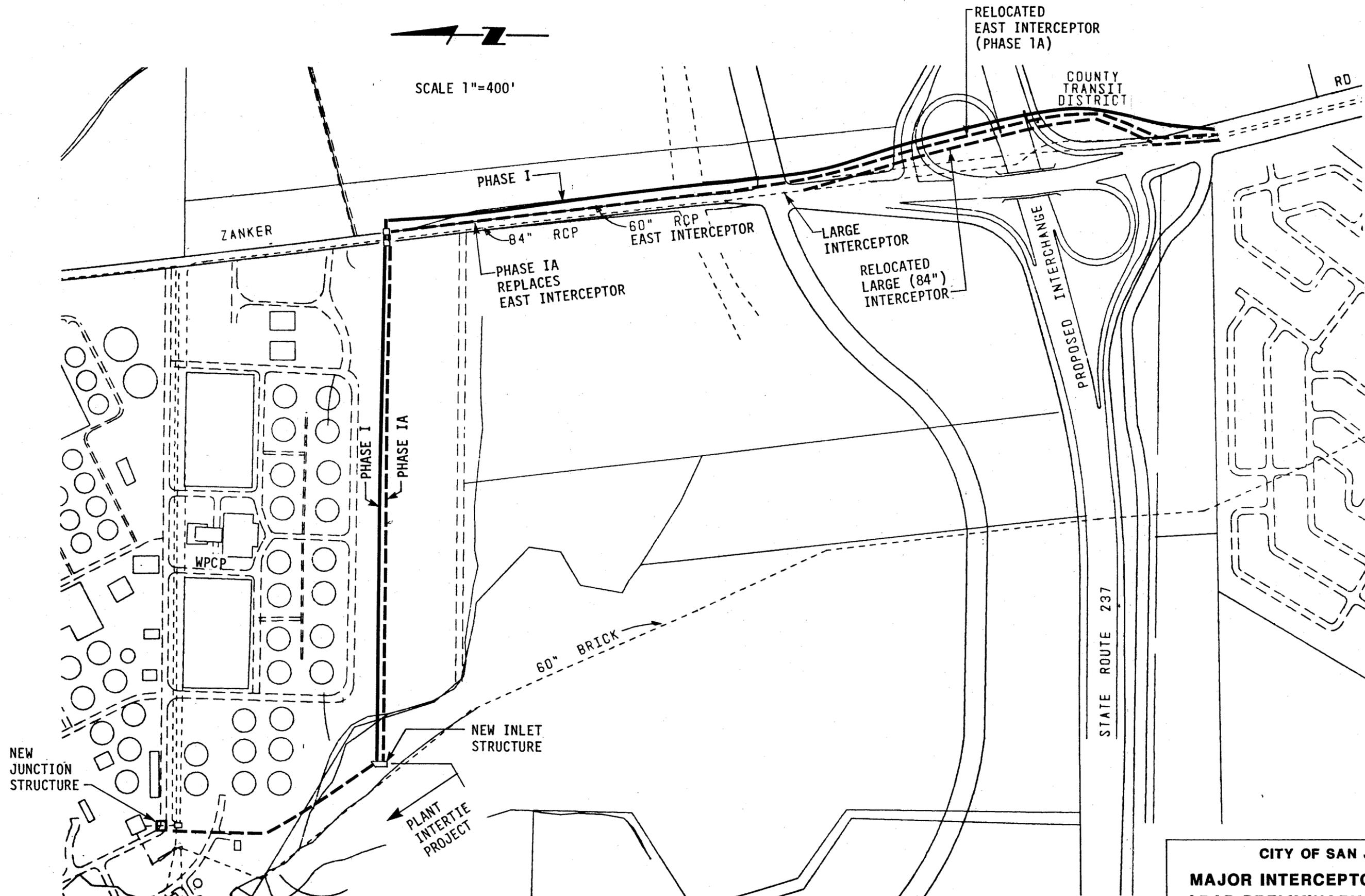
## Apparent Best Alternative Project

### ESTIMATED CONSTRUCTION COST

The estimated construction cost for the Phase I ABAP is \$4.339 million and is summarized in Table I-2. The Phase I project will also require acquisition of right-of-way across County land at the intersection of Zanker Road and Highway 237. Approximately 37,600 square feet is required at an estimated cost of \$602,000. The estimated construction cost for the Phase IA project is \$4.214 million and is summarized in Table I-3. Note that \$0.823 million of the Phase IA cost may be borne by Caltrans. This is because Caltrans' interchange construction will require the relocation of the East Interceptor. The construction cost estimate is presented in current (1986) dollars and includes no allowance for engineering, legal, administration, or contingencies. The preliminary estimate of construction cost for the Phase IB rehabilitation project for this reach is approximately \$2.822 million.



SCALE 1"=400'



COMPUTER GRAPHICS BY CITY OF SAN JOSE DEPARTMENT OF PUBLIC WORKS

CITY OF SAN JOSE  
**MAJOR INTERCEPTOR PROJECT**  
**ABAP PRELIMINARY ALIGNMENT**  
**PHASES I AND IA**

FIGURE I-1



**Apparent Best Alternative Project**

**TABLE I-2  
CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PHASE I  
WPCP TO LAMPLIGHTER WAY  
ESTIMATED CONSTRUCTION COST**

<b>Project Component</b>	<b>Quantity/Unit</b>	<b>Estimated Cost</b>
Piping (84-inch T-Lock RCP)	6,105 LF	\$ 3,250,000
Structures	1 LS	100,000
Pipe Jacking (at Highway 237)	200 LF	112,000
Manholes	3 EA	<u>15,000</u>
Subtotal		\$ 3,477,000
Mobilization	4%	<u>139,000</u>
Subtotal		\$ 3,616,000
Contractor's OH&P	20%	<u>\$ 723,000</u>
Total Construction Cost		<u><u>\$ 4,339,000</u></u>
Right-of-Way Acquisition	37,600 SF	\$ 602,000

**Apparent Best Alternative Project**

**TABLE I-3**

**CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PHASE IA  
WPCP TO LAMPLIGHTER WAY  
ESTIMATED CONSTRUCTION COST  
(REPLACES EAST INTERCEPTOR)**

<b>Project Component</b>	<b>Quantity/Unit</b>	<b>Estimated Cost</b>
Piping (84-inch T-Lock RCP)	6,105 LF	\$ 3,250,000
Pipe Jacking (at Highway 237)	200 LF	112,000
Manholes	3 EA	<u>15,000</u>
Subtotal		\$ 3,377,000
Mobilization	4%	<u>135,000</u>
Subtotal		\$ 3,512,000
Contractor's OH&P	20%	<u>702,000</u>
Total Construction Cost		<u><u>\$ 4,214,000</u></u>

**ESTIMATE OF COST TO  
BE BORNE BY CALTRANS**

Piping (60-inch RCP)	1,500 LF	\$ 570,000
Pipe Jacking (at Highway 237)	200 LF	<u>90,000</u>
Subtotal		\$ 660,000
Mobilization	4%	<u>26,000</u>
Subtotal		\$ 686,000
Contractor's OH&P	20%	<u>137,000</u>
Total Construction Cost		<u><u>\$ 823,000</u></u>

**City of San Jose**  
**Major Interceptor Project**  
**ABAP Phase II**

**GENERAL**

Phase II of the Apparent Best Alternative Project covers the second of seven interceptor segments comprising the City's Major Interceptor Project.

**GENERAL PROJECT DESCRIPTION**

Phase II of the ABAP begins south of Highway 237 near the proposed intersection of Zanker Road and Lamplighter Way. From there the project proceeds south along Zanker Road and ends at a point adjacent to existing Structure A near the Hetch Hetchy Aqueduct crossing. The overall length of the Phase II alignment is approximately 2,980 feet.

The most critical consideration for design and construction of this project is the crossing of the Hetch Hetchy Aqueduct. This crossing will involve a deep siphon and bored and jacked or tunnelled construction. An intensive focused geotechnical investigation at the site will be required during design to ensure that the aqueduct is not disturbed during construction.

**PROJECT OBJECTIVES**

The primary objectives of the Phase II project are twofold:

- Provide the interceptor system hydraulic capacity for the ultimate projected Peak Wet Weather Flow (PWWF).
- Provide the means and capacity by which any of the interceptors may be taken out of service (bypassed) during the summer conditions of Peak Dry Weather Flow (PDWF).

## Apparent Best Alternative Project

### Hydraulic Capacity

The existing interceptor system capacity in the Phase II reach is 158 million gallons per day (mgd). With a projected PWWF of 276 mgd, the capacity deficit is 118 mgd.

### Bypass Provisions

The existing interceptor system has experienced moderate to severe corrosion over much of its length. The existing Large Interceptor (84-inch RCP) is completely submerged in the Phase II reach and therefore is probably not corroded. However, it has never been inspected. One of the primary objectives of the Major Interceptor Project is to provide the means by which any of the interceptors may be bypassed for inspection and maintenance. This function is imperative to ensure that the system's useful life is not shortened by corrosion.

Routine inspection and maintenance will be scheduled during summer dry weather flow conditions and the system should therefore have sufficient capacity to accommodate the PDWF with the largest capacity interceptor out of service. The projected PDWF in the Phase II reach is 225 mgd which is the required system capacity with one interceptor out of service.

### ALTERNATIVE ANALYSIS

The goal of the alternative analysis is to determine the most cost-effective project to satisfy the objectives for each reach of the Major Interceptor Project. The objectives for a reach may not be satisfied by a single project phase because of budget constraints. In this case, subsequent phase(s) will be necessary. The alternatives for the Phase II reach are screened for objective satisfaction in Table II-1. The table shows that Alternatives 1, 2, 3, 4, 6A and 6B are rejected as they do not satisfy the capacity objectives.

Apparent Best Alternative Project

TABLE II-1

CITY OF SAN JOSE  
 MAJOR INTERCEPTOR PROJECT  
 ABAP PHASE II ALTERNATIVE SCREENING  
 LAMPLIGHTER WAY TO STRUCTURE A

Alternative Description	West	Interceptor Capacity (mgd)			Total	Remarks
		East	Large	New		
Existing System Capacity	32.9	40.0	84.7		157.6	PWWF = 276.4 PDWF = 225.0
1. System w/New Interceptor						
A. 84" T-Lock RCP	32.9	40.0	84.7	115.4	273.0	<PWWF Reject for PDWF Capacity
B. 96" RCP	32.9	40.0	84.7	120.9	278.5	>PWWF Reject for PDWF Capacity
2. Alt. 1A + Rehab. West & East Interceptor	44.5	54.5	84.7	115.4	299.1	>PWWF Reject for PDWF Capacity
Alt. 1B + Rehab. West & East Interceptor	44.5	54.5	84.7	120.9	304.6	>PWWF Reject for PDWF Capacity
3. Alt. 2 w/o New Interceptor	44.5	54.5	84.7		183.7	<PDWF Reject 1, 2, & 3
4. Same as Alt. 3, except surcharge to 1' above crown @ Trimble	46.3	56.7	89.0		192.0	<PDWF Reject
5. Same as Alt. 1 w/ New Interceptor and replace East w/same size						
A. 78" T-Lock RCP	32.9	94.7	84.7	94.7	307.0	>PWWF Reject for PDWF Capacity
B. 90" RCP	32.9	101.8	84.7	101.8	321.2	>PWWF Reject for PDWF Capacity
C. 84" T-Lock RCP	32.9	115.4	84.7	115.4	348.4	>PWWF
D. 96" RCP	32.9	120.9	84.7	120.9	359.4	>PWWF
6. Same as Alt. 5 w/o New Interceptor						
A. 78" T-Lock RCP	32.9	94.7	84.7		212.3	<PDWF Reject
B. 90" RCP	32.9	101.8	84.7		219.4	<PDWF Reject
C. 84" T-Lock RCP	32.9	115.4	84.7		233.0	>PDWF
D. 96" RCP	32.9	120.9	84.7		238.5	>PDWF

## Apparent Best Alternative Project

Alternatives 5 and 6 are basically the same alternative which, in addition to the New Interceptor, replace the East Interceptor (inspection of the East Interceptor has shown it to be in poor condition requiring replacement or rehabilitation in the near future). The subalternatives involve alternative materials and sizes to satisfy the capacity objectives.

It can be seen that the PWWF objective can be satisfied by either 78-inch T-Lock RCP (5A) or 90-inch RCP (5B). Alternative 6 evaluates satisfaction of the PDWF objective. The system capacity is less than PDWF for both 6A and 6B.

To satisfy the PDWF objective will require 84-inch T-Lock RCP or 96-inch RCP (Alternatives 6C and 6D, respectively).

Based on the above discussion, the ABAP for the Phase II reach consists of two parallel interceptors, one of which replaces the East Interceptor. The pipe material selected for the Phase II reach is 84-inch T-Lock RCP (6C) rather than 96-inch RCP for the following reasons:

1. The New Interceptor will be installed shallower than the existing Large Interceptor to reduce excavation and backfill costs.
2. The New Interceptor will not be permanently submerged, thus, will be subject to corrosion.

Because of City departmental division of responsibilities, the project is divided into two project designations: Phase II and Phase IIA. A third project for this reach, eventual rehabilitation of the West Interceptor, will be required at some point in the future. This rehabilitation project is designated Phase IIB. The timing of this phase cannot be estimated until future inspections are conducted. However, this reach of the West Interceptor was recently rehabilitated and recent inspection by the City has shown it to be sound at this point in time.

## Apparent Best Alternative Project

### ABAP ALIGNMENT

The preliminary alignment of the Phase II and Phase IIA projects is shown in Figure II-1. Phase II consists of approximately 2,980 feet of 84-inch T-Lock RCP beginning near the proposed intersection of Zanker Road and Lamplighter Way and ending at Structure A near the Hetch Hetchy Aqueduct. The project includes either bored and jacked or tunnelled crossing beneath the Hetch Hetchy Aqueduct. This decision will be made during the detailed design of the project. The Phase IIA project involves 2,980 feet of 84-inch T-Lock RCP installed parallel to the Phase II project. This project replaces the severely corroded East Interceptor and provides the necessary redundant capacity to facilitate bypass for inspection and maintenance.

### ESTIMATED CONSTRUCTION COST

The estimated construction cost for the Phase II ABAP is \$2.107 million and is summarized in Table II-2. The estimated construction cost for the Phase IIA project is \$2.080 million and is summarized in Table II-3. The construction cost estimate is presented in current (1986) dollars and includes no allowance for engineering, legal, administration, or contingencies. The preliminary estimate of construction cost for the Phase IIB rehabilitation project for this reach is approximately \$1.44 million.

Apparent Best Alternative Project

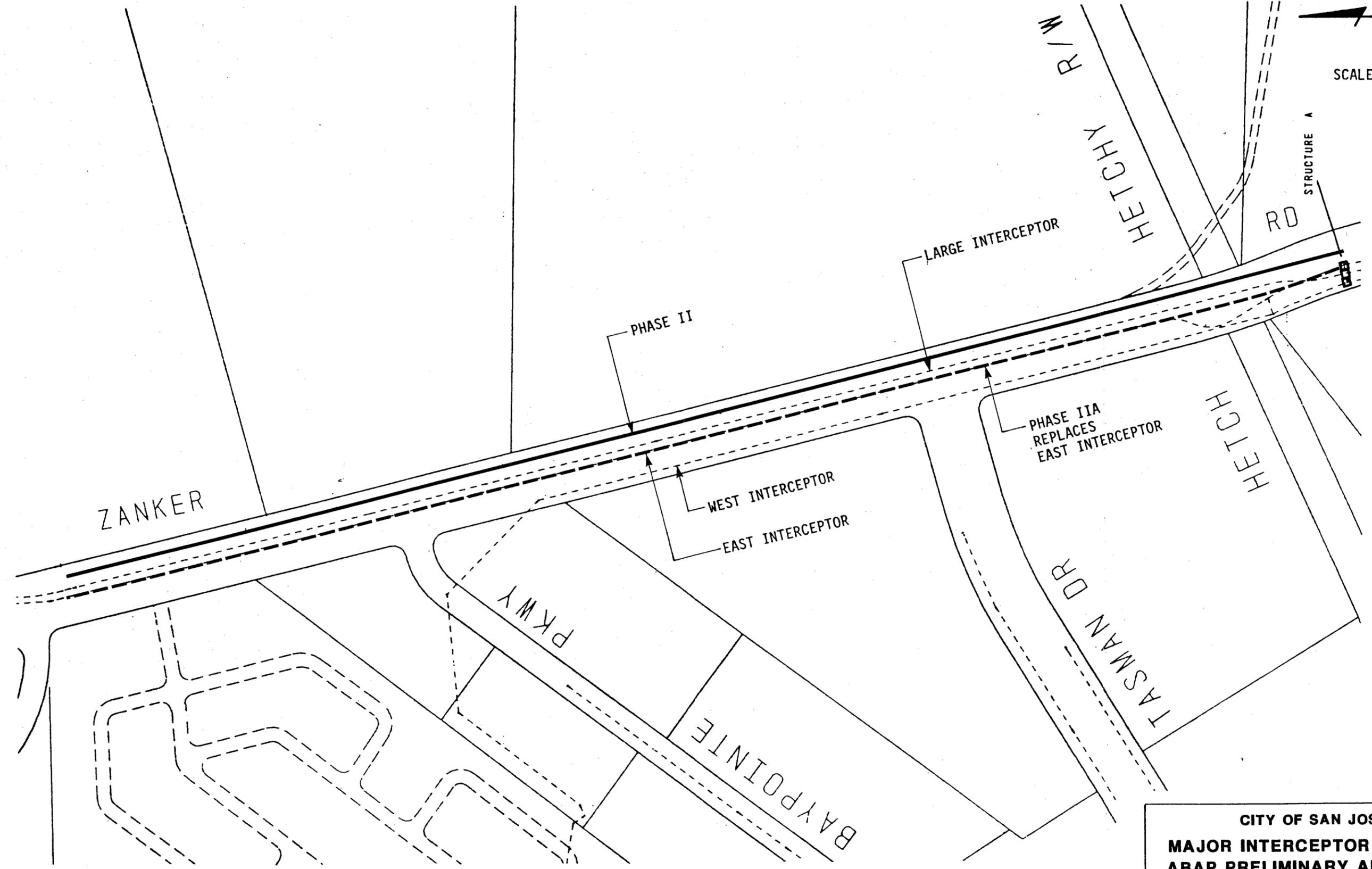
TABLE II-2

CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PHASE II  
LAMPLIGHTER WAY TO STRUCTURE A  
ESTIMATED CONSTRUCTION COST

Project Component	Quantity/Unit	Estimated Cost
Piping (84-inch T-Lock RCP)	2,980 LF	\$ 1,595,000
Pipe Jacking (at Hetch Hetchy)	100 LF	61,000
Manholes	2 EA	10,000
Interferences	1 LS	<u>22,000</u>
Subtotal		\$ 1,688,000
Mobilization	4%	<u>68,000</u>
Subtotal		\$ 1,756,000
Contractor's OH&P	20%	<u>351,000</u>
Total Construction Cost		<u><u>\$ 2,107,000</u></u>



SCALE 1"=200'



COMPUTER GRAPHICS BY CITY OF SAN JOSE DEPARTMENT OF PUBLIC WORKS

CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PRELIMINARY ALIGNMENT  
PHASES II AND IIA

FIGURE II-1



Apparent Best Alternative Project

TABLE II-3

CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PHASE IIA  
LAMPLIGHTER WAY TO STRUCTURE A  
ESTIMATED CONSTRUCTION COST  
(REPLACES EAST INTERCEPTOR)

Project Component	Quantity/Unit	Estimated Cost
Piping (84-inch T-Lock RCP)	2,980 LF	\$ 1,595,000
Pipe Jacking (at Hetch Hetchy)	100 LF	61,000
Manholes	2 EA	10,000
Subtotal		\$ 1,666,000
Mobilization	4%	67,000
Subtotal		\$ 1,733,000
Contractor's OH&P	20%	347,000
Total Construction Cost		\$ 2,080,000

**City of San Jose**  
**Major Interceptor Project**  
**ABAP Phase III**

**GENERAL**

Phase III of the Apparent Best Alternative Project covers the third of seven interceptor segments comprising the City's Major Interceptor Project.

**GENERAL PROJECT DESCRIPTION**

Phase III of the ABAP begins at Structure A near the intersection of Zanker Road and the Hetch Hetchy Aqueduct. From that point, the project proceeds along Zanker Road to Structure B approximately 5,930 feet to the south.

Critical design and construction considerations for this project are the intersection crossings at the Montague Expressway and at River Oaks. The Montague Expressway is heavily travelled and cannot withstand an interruption. River Oaks is not a major thoroughfare, however, there is a major storm drain that crosses the Phase III alignment at that point. Both of these intersections will require either bored and jacked or tunnel construction. Focused geotechnical investigations during design of the Phase III project will be important to make sound design decisions for these crossings.

**PROJECT OBJECTIVES**

The primary objectives of the Phase III project are twofold:

- Provide the interceptor system hydraulic capacity for the ultimate projected Peak Wet Weather Flow (PWWF).

## Apparent Best Alternative Project

- Provide the means and capacity by which any of the interceptors may be taken out of service (bypassed) during the summer conditions of Peak Dry Weather Flow (PDWF).

### Hydraulic Capacity

The existing interceptor system capacity in the Phase III reach is 166 million gallons per day (mgd). With a projected PWWF of 276 mgd, the capacity deficit is 110 mgd.

### Bypass Provisions

The existing interceptor system has experienced moderate to severe corrosion over much of its length, and corrosion will continue to be a potential problem within the interceptor system. One of the primary objectives of the Major Interceptor Project is to provide the means by which any of the interceptors may be bypassed for inspection and maintenance. This function is imperative to ensure that the system's useful life is not shortened by corrosion.

Routine inspection and maintenance will be scheduled during summer dry weather flow conditions and the system should therefore have sufficient capacity to accommodate the PDWF with the largest capacity interceptor out of service. The projected PDWF in the Phase III reach is 225 mgd which is the required system capacity with one interceptor out of service.

### ALTERNATIVE ANALYSIS

The goal of the alternative analysis is to determine the most cost-effective project to satisfy the objectives for each reach of the Major Interceptor Project. The objectives for a reach may not be satisfied by a single project phase because of budget constraints. In this case, subsequent phase(s) will be necessary. The alternatives for the Phase III reach are screened for objective satisfaction in Table III-1. The table shows that Alternatives 1, 2, 3, 4, 5A and 6A are rejected

**Apparent Best Alternative Project**

TABLE III-1

**CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PHASE III ALTERNATIVE SCREENING  
STRUCTURE A TO STRUCTURE B**

Alternative Description	Interceptor Capacity (mgd)			Remarks
	West	East	Total	
Existing System Capacity	42.1	38.9	165.7	PWWF = 276.4 PDWF = 225.0
1. System w/New Interceptor				
A. 84" T-Lock RCP	42.1	38.9	281.1	>PWWF Reject for PDWF Capacity
B. 96" RCP	42.1	38.9	286.6	>PWWF Reject for PDWF Capacity
2. Alt. 1A + Rehab. West & East Interceptor	57.4	53.0	310.5	>PWWF Reject for PDWF Capacity
Alt. 1B + Rehab. West & East Interceptor	57.4	53.0	316.0	>PWWF Reject for PDWF Capacity
3. Alt. 2 w/o New Interceptor	57.4	53.0	195.1	<PDWF Reject 1, 2, & 3
4. Same as Alt. 3, except surcharge to 1' above crown @ Trimble	59.7	55.1	203.8	<PDWF Reject
5. Same as Alt. 1 w/smaller New Interceptor and replace West w/same size				
A. 78" T-Lock RCP	94.7	38.9	313.0	>PWWF Reject for PDWF Capacity
B. 90" RCP	101.8	38.9	327.2	>PWWF Reject for Materials
6. Same as Alt. 5 w/o New Interceptor				
A. 78" T-Lock RCP	94.7	38.9	218.3	<PDWF Reject
B. 90" RCP	101.8	38.9	225.4	>PDWF Reject for Materials
C. 84" T-Lock RCP	115.4	38.9	239.0	>PDWF

## Apparent Best Alternative Project

as they do not satisfy the capacity objectives. Alternatives 5 and 6 are basically the same alternative which, in addition to the New Interceptor, replace the West Interceptor (this reach of the West Interceptor is constructed of brick and its continued useful life is questionable). The subalternatives involve alternative materials and sizes to satisfy the capacity objectives.

It can be seen that the PWWF objective can be satisfied by either 78-inch T-Lock RCP (5A) or 90-inch RCP (5B). Alternative 6 evaluates satisfaction of the PDWF objective. The system capacity is less than PDWF for 6A. Alternative 6B satisfies the objective with a capacity of 225.4 mgd, however, 6B is an RCP alternative. This reach will not be permanently submerged and will be subjected to a corrosive atmosphere. Therefore, Alternative 6C (84-inch T-Lock RCP) is the most desirable choice as it satisfies the capacity objectives and is protected from sulfide corrosion.

Because of budget constraints and City departmental division of responsibilities, the project is divided into two projects: Phase III and Phase IIIA. A third project for this reach, eventual rehabilitation of the East Interceptor, will be required at some point in the future. This rehabilitation project is designated Phase IIIB. The timing of this phase cannot be estimated until future inspections are conducted.

### ABAP ALIGNMENT

The preliminary alignment of the Phase III and Phase IIIA projects is shown in Figure III-1. Phase III consists of approximately 5,930 feet of 84-inch T-Lock RCP beginning at Structure A and ending at Structure B. The project involves crossing two key intersections: Montague Expressway and River Oaks. The crossings will be either bored and jacked or tunnelled at these intersections. This decision will be made during the detailed design of the project. The Phase IIIA project involves 5,930 feet of 84-inch T-Lock RCP installed parallel to the Phase III project. This project replaces the West Interceptor and provides the necessary redundant capacity to facilitate bypass for inspection and maintenance.

JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.

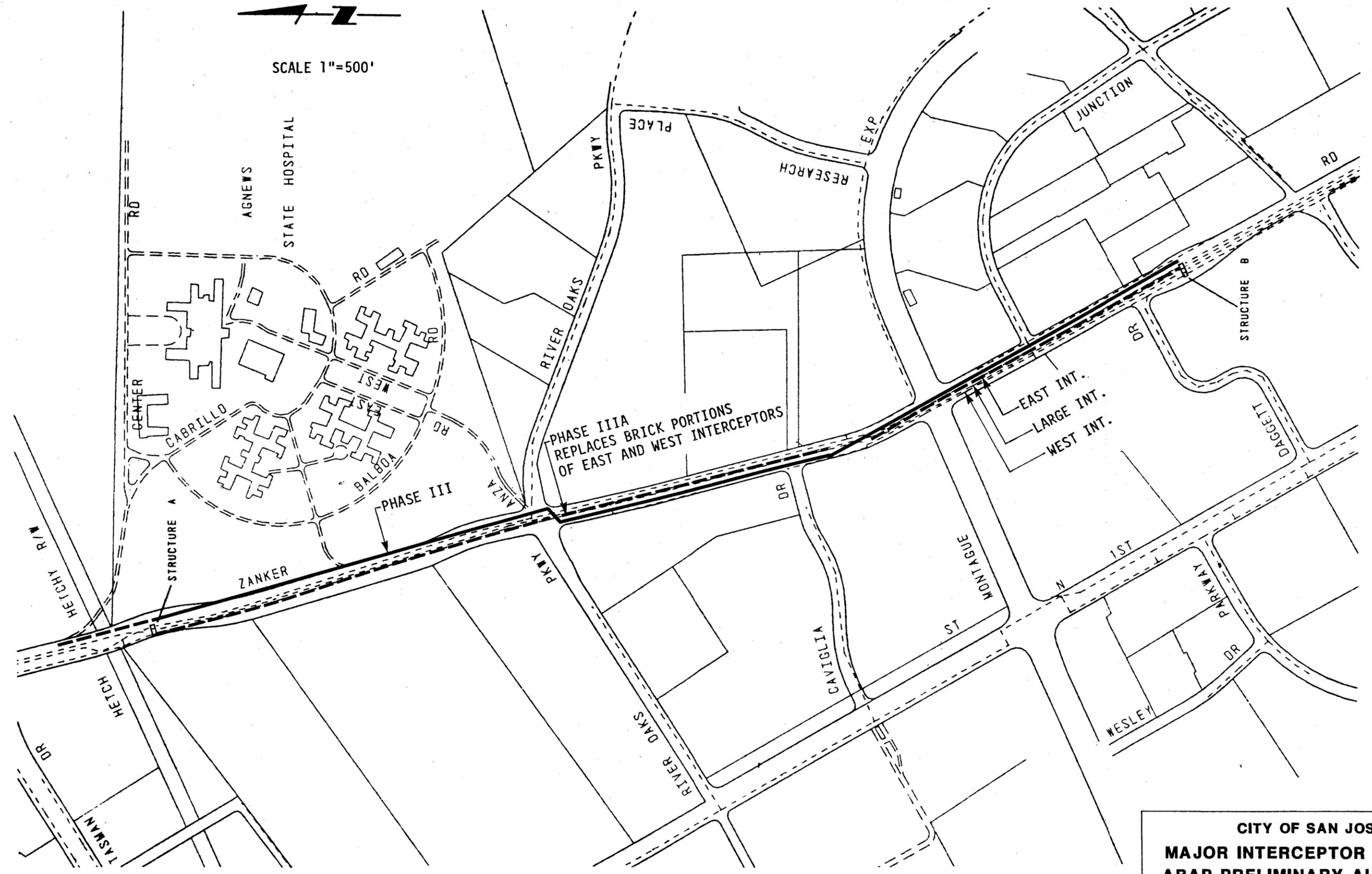
## Apparent Best Alternative Project

### ESTIMATED CONSTRUCTION COST

The estimated construction cost for the Phase III ABAP is \$4.075 million and is summarized in Table III-2. The Phase III project will also require approximately 13,400 square feet of additional right-of-way at an estimated cost of \$214,000. The estimated construction cost for the Phase IIIA project is \$4.199 million and is summarized in Table III-3. The construction cost estimate is presented in current (1986) dollars and includes no allowance for engineering, legal, administration, or contingencies. The preliminary estimate of construction cost for the Phase IIIB rehabilitation project is approximately \$2.646 million.



SCALE 1"=500'



COMPUTER GRAPHICS BY CITY OF SAN JOSE DEPARTMENT OF PUBLIC WORKS

**CITY OF SAN JOSE  
 MAJOR INTERCEPTOR PROJECT  
 ABAP PRELIMINARY ALIGNMENT  
 PHASES III AND IIIA**

FIGURE III-1



**Apparent Best Alternative Project**

**TABLE III-2  
CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PHASE III  
STRUCTURE A TO STRUCTURE B  
ESTIMATED CONSTRUCTION COST**

<b>Project Component</b>	<b>Quantity/Unit</b>	<b>Estimated Cost</b>
Piping (84-inch T-Lock RCP)	5,930 LF	\$ 3,027,000
Pipe Jacking (at River Oaks & Montague)	250 LF	148,000
Manholes	3 EA	15,000
Curb & Gutter	880 LF	11,000
Median Repair	180 LF	28,000
Interferences	1 LS	36,000
Subtotal		<u>\$ 3,265,000</u>
Mobilization	4%	131,000
Subtotal		<u>\$ 3,396,000</u>
Contractor's OH&P	20%	679,000
Total Construction Cost		<u><u>\$ 4,075,000</u></u>
Right-of-Way Acquisition	13,400 SF	\$ 214,000

**Apparent Best Alternative Project**

**TABLE III-3  
CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PHASE IIIA  
STRUCTURE A TO STRUCTURE B  
ESTIMATED CONSTRUCTION COST  
(REPLACES WEST INTERCEPTOR)**

<b>Project Component</b>	<b>Quantity/Unit</b>	<b>Estimated Cost</b>
Piping (84-inch T-Lock RCP)	5,930 LF	\$ 3,027,000
Pipe Jacking (at River Oaks & Montague)	250 LF	148,000
Manholes	3 EA	15,000
Median Repair	1,560 LF	156,000
Interferences	1 LS	18,000
Subtotal		<u>\$ 3,364,000</u>
Mobilization	4%	\$ 135,000
Subtotal		<u>\$ 3,499,000</u>
Contractor's OH&P	20%	700,000
<b>Total Construction Cost</b>		<u><u>\$ 4,199,000</u></u>

**City of San Jose**  
**Major Interceptor Project**  
**ABAP Phase IV**

**GENERAL**

Phase IV of the Apparent Best Alternative Project covers the fourth of seven interceptor segments comprising the City's Major Interceptor Project.

**GENERAL PROJECT DESCRIPTION**

Phase IV of the ABAP begins at Structure B, north of Plumeria Drive, and proceeds south along Zanker Road to Structure C, located at the intersection of Zanker Road and Trimble Road. The overall length of the Phase IV alignment is approximately 2,875 feet.

The major area of concern for this project is along Zanker Road near Trimble. The public right-of-way is relatively narrow at this point and construction and sewer easements may be required from the property owner on the east side of Zanker Road (Ferrara Meat Company).

**PROJECT OBJECTIVES**

The primary objectives of the Phase IV project are twofold:

- Provide the interceptor system hydraulic capacity for the ultimate projected Peak Wet Weather Flow (PWWF).
- Provide the means and capacity by which any of the interceptors may be taken out of service (bypassed) during the summer conditions of Peak Dry Weather Flow (PDWF).

## Apparent Best Alternative Project

### Hydraulic Capacity

The existing interceptor system capacity in the Phase IV reach is 149 million gallons per day (mgd). With a projected PWWF of 267 mgd, the capacity deficit is 118 mgd.

### Bypass Provisions

The existing interceptor system has experienced moderate to severe corrosion over much of its length, and corrosion will continue to be a potential problem within the interceptor system. One of the primary objectives of the Major Interceptor Project is to provide the means by which any of the interceptors may be bypassed for inspection and maintenance. This function is imperative to ensure that the system's useful life is not shortened by corrosion.

Routine inspection and maintenance will be scheduled during summer dry weather flow conditions and the system should therefore have sufficient capacity to accommodate the PDWF with the largest capacity interceptor out of service. The projected PDWF in the Phase IV reach is 180 mgd which is the required system capacity with one interceptor out of service.

### ALTERNATIVE ANALYSIS

The goal of the alternative analysis is to determine the most cost-effective project to satisfy the objectives for each reach of the Major Interceptor Project. The objectives for a reach may not be satisfied by a single project phase because of budget constraints. In this case, subsequent phase(s) will be necessary. The alternatives for the Phase IV reach are screened for objective satisfaction in Table IV-1. The table shows that Alternatives 1, 2, 3, and 4 are rejected as they do not satisfy the capacity objectives.

Alternatives 5 and 6 are basically the same alternative which, in addition to the New Interceptor, replace the East Interceptor (this reach of the East Interceptor

**Apparent Best Alternative Project**

TABLE IV-1

**CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PHASE IV ALTERNATIVE SCREENING  
STRUCTURE B TO STRUCTURE C**

Alternative Description	Interceptor Capacity (mgd)			Total	Remarks
	West	East	New		
Existing System Capacity	46.0	18.6	84.7	149.3	PWWF = 267.1 PDWF = 179.5
1. System w/New Interceptor					
A. 84" T-Lock RCP	46.0	18.6	84.7	115.4	<PWWF Reject for PDWF Capacity
B. 96" RCP	46.0	18.6	84.7	120.9	>PWWF Reject for PDWF Capacity
2. Alt. 1A + Rehab. West & East Interceptor	62.7	28.7	84.7	115.4	>PWWF Reject for PDWF Capacity
Alt. 1B + Rehab. West & East Interceptor	62.7	28.7	84.7	120.9	>PWWF Reject for PDWF Capacity
3. Alt. 1 w/o New Interceptor	46.0	18.6	84.7	149.3	<PDWF Reject 1 & 3
4. Alt. 2 w/o New Interceptor	62.7	28.7	84.7	176.1	<PDWF Reject 2 & 4
5. Same as Alt. 1 w/smaller New Interceptor and replace East w/same size					
A. 72" T-Lock RCP	46.0	76.5	84.7	76.5	>PWWF
B. 78" RCP	46.0	69.5	84.7	69.5	>PWWF Reject Materials
6. Same as Alt. 5 w/o Large Interceptor					
A. 72" T-Lock RCP	46.0	76.5	76.5	199.0	>PDWF
B. 78" RCP	46.0	69.5	69.5	185.0	>PDWF Reject Materials

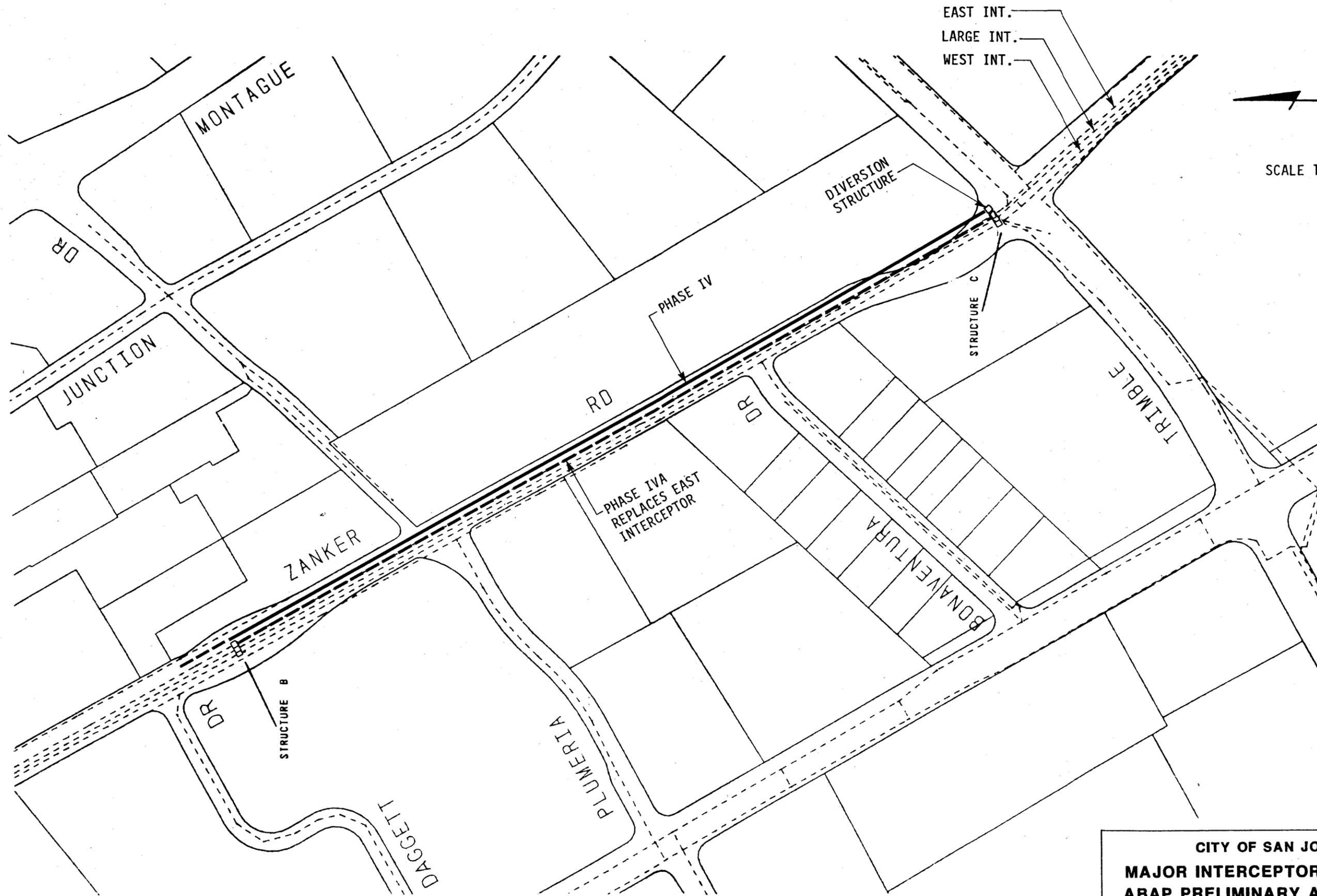
## Apparent Best Alternative Project

is constructed of brick and its continued useful life is questionable). The subalternatives involve alternative materials and sizes to satisfy the capacity objectives.

It can be seen that the PWWF objective can be satisfied by either 72-inch T-Lock RCP (5A) or 90-inch RCP (5B). Alternative 6 evaluates satisfaction of the PDWF objective. The system capacity is greater than PDWF for both 6A and 6B. However, this reach is not permanently submerged and will be subject to a corrosive atmosphere. Therefore, 5B and 6B (RCP alternatives) are rejected on the basis of materials. The Phase IV ABAP is two parallel interceptors (72-inch T-Lock RCP), one of which replaces the brick East Interceptor. Because of City departmental division of responsibilities, the project is given two designations: Phase IV and Phase IVA. However, the two projects should be constructed concurrently. A third project for this reach, eventual rehabilitation of the West Interceptor, will be required at some point in the future. This rehabilitation project is designated Phase IVB. The timing of this phase cannot be estimated until future inspections are conducted.

### ABAP ALIGNMENT

The preliminary alignment of the Phase IV and Phase IVA projects is shown in Figure IV-1. Phases IV and IVA are concurrent projects and consist of approximately 5,750 feet of 72-inch T-Lock RCP beginning at the Structure B and ending at Structure C at the intersection of Zanker Road and Trimble Road. The project includes a bypass/diversion structure adjacent to Structure C. The two projects will be constructed concurrently in a common trench because of narrow right-of-way near the Trimble Road intersection. The Phase IVA project replaces the brick East Interceptor and provides the necessary redundant capacity to facilitate bypass for inspection and maintenance.



SCALE 1"=300'

COMPUTER GRAPHICS BY CITY OF SAN JOSE DEPARTMENT OF PUBLIC WORKS

CITY OF SAN JOSE  
 MAJOR INTERCEPTOR PROJECT  
 ABAP PRELIMINARY ALIGNMENT  
 PHASES IV AND IVA  
 FIGURE IV-1



## Apparent Best Alternative Project

### ESTIMATED CONSTRUCTION COST

The combined estimated construction cost for the Phase IV and IVA ABAP is \$3.395 million and is summarized in Table IV-2. The Phase IV project will require approximately 2,000 square feet of additional right-of-way at an estimated cost of \$32,000. The construction cost estimate is presented in current (1986) dollars and includes no allowance for engineering, legal, administration, or contingencies. The preliminary estimate of construction cost for the Phase IVB rehabilitation project is approximately \$1.278 million.

**Apparent Best Alternative Project**

**TABLE IV-2**

**CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PHASE IV AND IVA  
STRUCTURE B TO STRUCTURE C  
ESTIMATED CONSTRUCTION COST  
(IVA REPLACES EAST INTERCEPTOR)**

<b>Project Component</b>	<b>Quantity/Unit</b>	<b>Estimated Cost</b>
Piping (72-inch T-Lock RCP)	5,750 LF	\$ 2,563,000
Structure	1 LS	100,000
Manholes	4 EA	20,000
Curb & Gutter	3,120 LF	<u>37,000</u>
Subtotal		\$ 2,720,000
Mobilization	4%	<u>109,000</u>
Subtotal		\$ 2,829,000
Contractor's OH&P	20%	<u>566,000</u>
Total Construction Cost <sup>a</sup>		<u><u>\$ 3,395,000</u></u>
Right-of-Way Acquisition	2,000 SF	\$ 32,000

<sup>a</sup> Total construction cost is the combined cost for both Phase IV (New Interceptor) and Phase IVA (replacement of East Interceptor).

**City of San Jose**  
**Major Interceptor Project**  
**ABAP Phase V**

**GENERAL**

Phase V of the Apparent Best Alternative Project covers the fifth of seven interceptor segments comprising the City's Major Interceptor Project.

**GENERAL PROJECT DESCRIPTION**

Phase V of the ABAP begins at Structure C, located at the intersection of Zanker Road and Trimble Road. From there the project proceeds south along Zanker Road and ends at Structure E located just north of the Bayshore Freeway on Zanker Road. The overall length of the Phase V alignment is approximately 8,160 feet.

**PROJECT OBJECTIVES**

The primary objectives of the Phase V project are twofold:

- Provide the interceptor system hydraulic capacity for the ultimate projected Peak Wet Weather Flow (PWWF).
- Provide the means and capacity by which any of the interceptors may be taken out of service (bypassed) during the summer conditions of Peak Dry Weather Flow (PDWF).

**Hydraulic Capacity**

The existing interceptor system capacity in the Phase V reach is 172 million gallons per day (mgd). With a projected PWWF of 251 mgd, the capacity deficit is 79 mgd.

## Apparent Best Alternative Project

### Bypass Provisions

The existing interceptor system has experienced moderate to severe corrosion over much of its length, and corrosion will continue to be a potential problem within the interceptor system. One of the primary objectives of the Major Interceptor Project is to provide the means by which any of the interceptors may be bypassed for inspection and maintenance. This function is imperative to ensure that the system's useful life is not shortened by corrosion.

Routine inspection and maintenance will be scheduled during summer dry weather flow conditions and the system should therefore have sufficient capacity to accommodate the PDWF with the largest capacity interceptor out of service. The projected PDWF in the Phase V reach is 196 mgd which is the required system capacity with one interceptor out of service.

### ALTERNATIVE ANALYSIS

The goal of the alternative analysis is to determine the most cost-effective project to satisfy the objectives for each reach of the Major Interceptor Project. The objectives for a reach may not be satisfied by a single project phase because of budget constraints. In this case, subsequent phase(s) will be necessary. The alternatives for the Phase V reach are screened for objective satisfaction in Table V-1.

Because corrosion is a major concern in the interceptor system, all of the alternatives utilizing RCP are rejected. Alternative 2B, New Interceptor plus rehabilitation of the West and East Interceptors, is rejected for excessive cost because replacement is less costly than rehabilitation. The resultant best alternative from this analysis is 6C, two parallel 66-inch T-Lock RCP interceptors, one of which replaces the East Interceptor.

Because of budget constraints and City departmental division of responsibilities, the project is divided into two projects Phase V and Phase VA. A third project

TABLE V-1

CITY OF SAN JOSE  
 MAJOR INTERCEPTOR PROJECT  
 ABAP PHASE V ALTERNATIVE SCREENING  
 STRUCTURE C TO STRUCTURE E

Alternative Description	Interceptor Capacity (mgd)			Remarks
	West	East	Total	
Existing System Capacity	38.0	20.9	113.0	PWWF = 251.1 PDWF = 196.0
1. System w/New Interceptor				
A. 72" T-Lock RCP	38.0	20.9	113.0	>PWWF Reject for PDWF Capacity
B. 78" RCP	38.0	20.9	112.9	>PWWF Reject for Material
2. Alt. 1A + Rehab. West & East Interceptor	51.8	32.3	113.0	>PWWF Reject for Cost
Alt. 1B + Rehab. West & East Interceptor	51.8	32.3	112.9	>PWWF Reject for Material
3. Alt. 1 w/o New Interceptor	38.0	20.9	113.0	<PDWF Reject for Capacity
4. Alt. 2 w/o New Interceptor	51.8	32.3	113.0	>PDWF Reject for Cost
5. Same as Alt. 1 w/smaller New Interceptor and replace East w/same size				
A. 60" T-Lock RCP	38.0	76.5	113.0	>PWWF Reject for PDWF Capacity
B. 66" RCP	38.0	72.3	113.0	>PWWF Reject for Material
6. Same as Alt. 5 w/o Large Interceptor				
A. 60" T-Lock RCP	38.0	76.5	191.0	<PDWF Reject for Capacity
B. 66" RCP	38.0	72.3	182.6	<PDWF Reject for Material
C. 66" T-Lock RCP	38.0	98.6	235.2	>PDWF
D. 72" RCP	38.0	91.2	220.4	>PDWF Reject for Material

## Apparent Best Alternative Project

for this reach, eventual rehabilitation of the West Interceptor, will be required at some point in the future. This rehabilitation project is designated Phase VB. The timing of this phase cannot be estimated until future inspections are conducted.

### ABAP ALIGNMENT

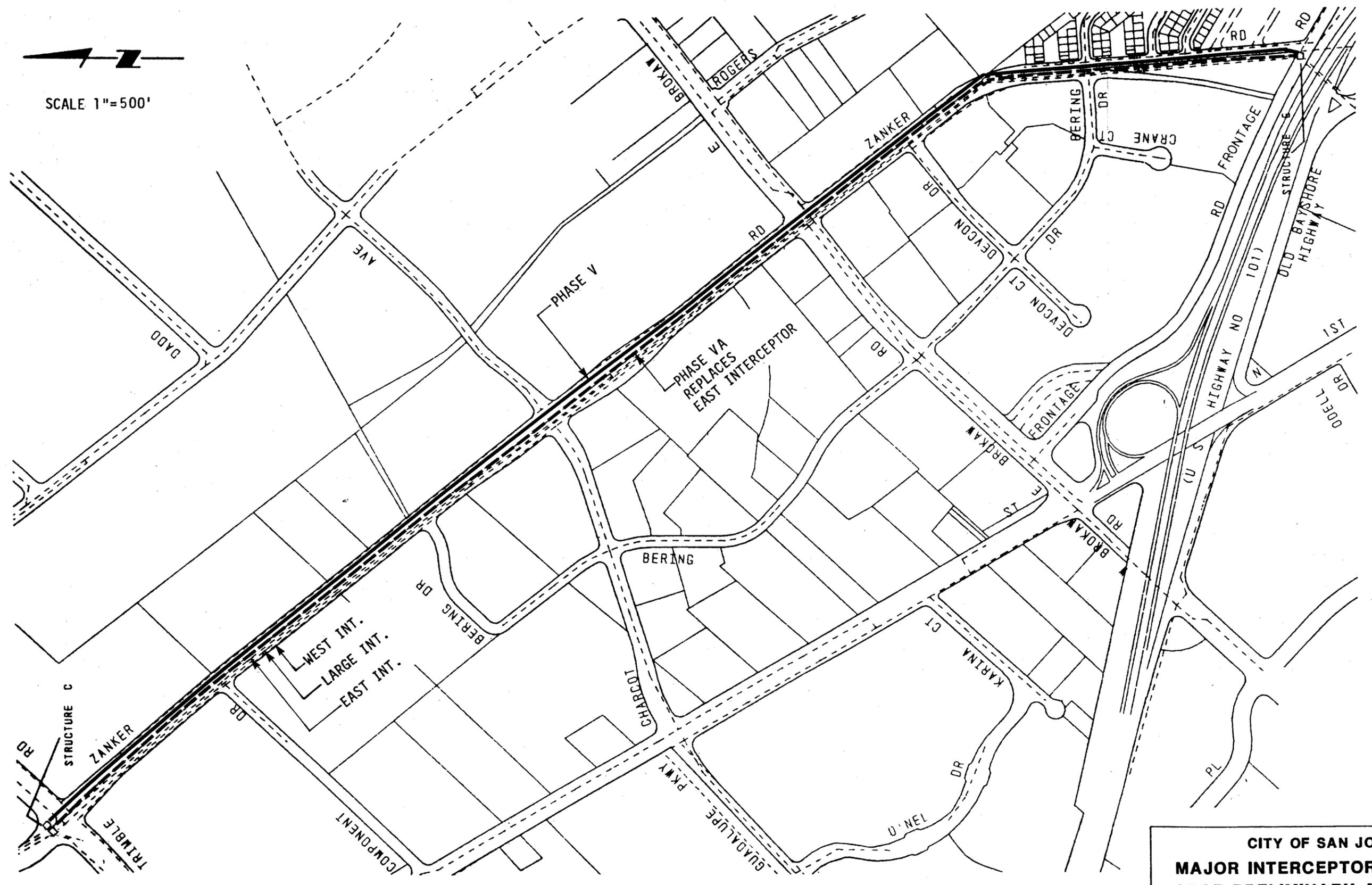
The preliminary alignment of the Phase V and Phase VA projects is shown in Figure V-1. Phase V consists of approximately 8,160 feet of 66-inch T-Lock RCP beginning at Structure C at Trimble Road and ending at Structure E north of the Bayshore Freeway. The Phase VA project involves 8,160 feet of 66-inch T-Lock RCP installed parallel to the Phase V project. This project replaces the brick East Interceptor and provides the necessary redundant capacity to facilitate bypass for inspection and maintenance.

### ESTIMATED CONSTRUCTION COST

The estimated construction cost for the Phase V ABAP is \$4.762 million and is summarized in Table V-2. The estimated construction cost for the Phase VA project is \$5.30 million and is summarized in Table V-3. The construction cost estimate is presented in current (1986) dollars and includes no allowance for engineering, legal, administration, or contingencies. The preliminary estimate of construction cost for the Phase VB rehabilitation project is approximately \$3.672 million.



SCALE 1"=500'



COMPUTER GRAPHICS BY CITY OF SAN JOSE DEPARTMENT OF PUBLIC WORKS

CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PRELIMINARY ALIGNMENT  
PHASES V AND VA  
FIGURE V-1



Apparent Best Alternative Project

TABLE V-2

CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PHASE V  
STRUCTURE C TO STRUCTURE E  
ESTIMATED CONSTRUCTION COST

Project Component	Quantity/Unit	Estimated Cost
Piping (66-inch T-Lock RCP)	8,160 LF	\$ 3,650,000
Manholes	4 EA	20,000
Curb & Gutter	1,460 LF	18,000
Interferences	1 LS	<u>127,000</u>
Subtotal		\$ 3,815,000
Mobilization	4%	<u>153,000</u>
Subtotal		\$ 3,968,000
Contractor's OH&P	20%	<u>794,000</u>
Total Construction Cost		<u><u>\$ 4,762,000</u></u>

Apparent Best Alternative Project

TABLE V-3

CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PHASE VA  
STRUCTURE C TO STRUCTURE E  
ESTIMATED CONSTRUCTION COST  
(REPLACES EAST INTERCEPTOR)

Project Component	Quantity/Unit	Estimated Cost
Piping (66-inch T-Lock RCP)	8,160 LF	3,650,00
Manholes	4 EA	20,000
Median Repair	5,160 LF	516,000
Curb & Gutter	1,300 LF	16,000
Interferences	1 LS	45,000
Subtotal		\$ 4,247,000
Mobilization	4%	170,000
Subtotal		\$ 4,417,000
Contractor's OH&P	20%	883,000
Total Construction Cost		\$ 5,300,000

**City of San Jose**  
**Major Interceptor Project**  
**ABAP Phase VI**

**GENERAL**

Phase VI of the Apparent Best Alternative Project covers the sixth of seven interceptor segments comprising the City's Major Interceptor Project.

**GENERAL PROJECT DESCRIPTION**

Phase VI of the ABAP begins at Structure E, located just north of the Bayshore Freeway. From there the project alignment proceeds south across the Bayshore, then follows Fourth Street south to the intersection of Fourth and Commercial Streets (Structure F). The total length of the alignment is approximately 4,500 feet.

The most critical consideration for design and construction of this project is the crossing at the Bayshore Freeway. This crossing will require either bored and jacked or tunnel construction. A focused geotechnical investigation will be required during design of the project to determine the best method of crossing.

**PROJECT OBJECTIVES**

The primary objectives of the Phase VI project are twofold:

- Provide the interceptor system hydraulic capacity for the ultimate projected Peak Wet Weather Flow (PWWF).
- Provide the means and capacity by which any of the interceptors may be taken out of service (bypassed) during the summer conditions of Peak Dry Weather Flow (PDWF).

## Apparent Best Alternative Project

### Hydraulic Capacity

The existing interceptor system capacity in the Phase VI reach is 245 million gallons per day (mgd). The projected PWWF is 245 mgd, and therefore, no PWWF capacity deficit exists.

### Bypass Provisions

The existing interceptor system has experienced moderate to severe corrosion over much of its length. One of the primary objectives of the Major Interceptor Project is to provide the means by which any of the interceptors may be bypassed for inspection and maintenance. This function is imperative to ensure that the system's useful life is not shortened by corrosion.

Routine inspection and maintenance will be scheduled during summer dry weather flow conditions and the system should therefore have sufficient capacity to accommodate the PDWF with the largest capacity interceptor out of service. The project PDWF in the Phase VI reach is 178 mgd which is the required system capacity with one interceptor out of service.

### ALTERNATIVE ANALYSIS

The goal of the alternative analysis is to determine the most cost-effective project to satisfy the objectives for each reach of the Major Interceptor Project. The objectives for a reach may not be satisfied by a single project phase because of budget constraints. In this case, subsequent phase(s) will be necessary. The alternatives for the Phase VI reach are screened for objective satisfaction in Table VI-1.

Because corrosion is a major factor in the system, the RCP alternatives are rejected in favor of the T-Lock RCP alternative. The Phase VI project therefore consists of a parallel 72-inch T-Lock RCP pipeline from Structure E to Structure F. The East Interceptor is abandoned in this reach for the following reasons:

TABLE VI-1  
 CITY OF SAN JOSE  
 MAJOR INTERCEPTOR PROJECT  
 PHASE VI ALTERNATIVE SCREENING  
 STRUCTURE E TO STRUCTURE F

Alternative Description	Interceptor Capacity (mgd)			Remarks
	West	East	Total	
Existing System Capacity	36.0	33.3	245.1	PWWF = 245.5 PDWF = 178.2
1. Rehab West & East	49.1	51.5	276.4	>PWWF Reject for PDWF Capacity
2. Alt. 1 w/o Large Interceptor	49.1	51.5	100.6	<PDWF Reject for Capacity
3. System w/New Interceptor Abandon East Interceptor				
A. 72" T-Lock RCP	36.0	175.8	356.4	>PWWF
B. 84" RCP	36.0	175.8	371.8	>PWWF Reject for Materials
4. Alt. 3 w/o Large Interceptor				
A. 72" T-Lock RCP	36.0	144.6	180.6	>PDWF
B. 84" RCP	36.0	160.0	196.0	>PDWF Reject for Materials

## Apparent Best Alternative Project

1. Rehabilitation is more costly than replacement.
2. The land owner on the east side of Fourth Street near the Bayshore would participate in the relocation or abandonment of the East Interceptor which bisects his property.

Because this project is an interceptor replacement project necessary for inspection and maintenance redundancy, it is designated Phase VIA. There is no Phase VI project as sufficient capacity exists to accommodate the projected PWWF. A second project for this reach, eventual rehabilitation of the West Interceptor, will be required at some point in the future. This rehabilitation project is designated Phase VIB. The timing of this phase cannot be estimated until future inspections are conducted.

### ABAP ALIGNMENT

The preliminary alignment of the Phase VIA project is shown in Figure VI-1. There is no Phase VI project. Phase VIA consists of approximately 4,500 feet of 72-inch T-Lock RCP beginning at the Structure E north of the Bayshore Freeway and ending at Structure F at the intersection of Fourth and Commercial Streets. The project involves crossing the Bayshore Freeway.

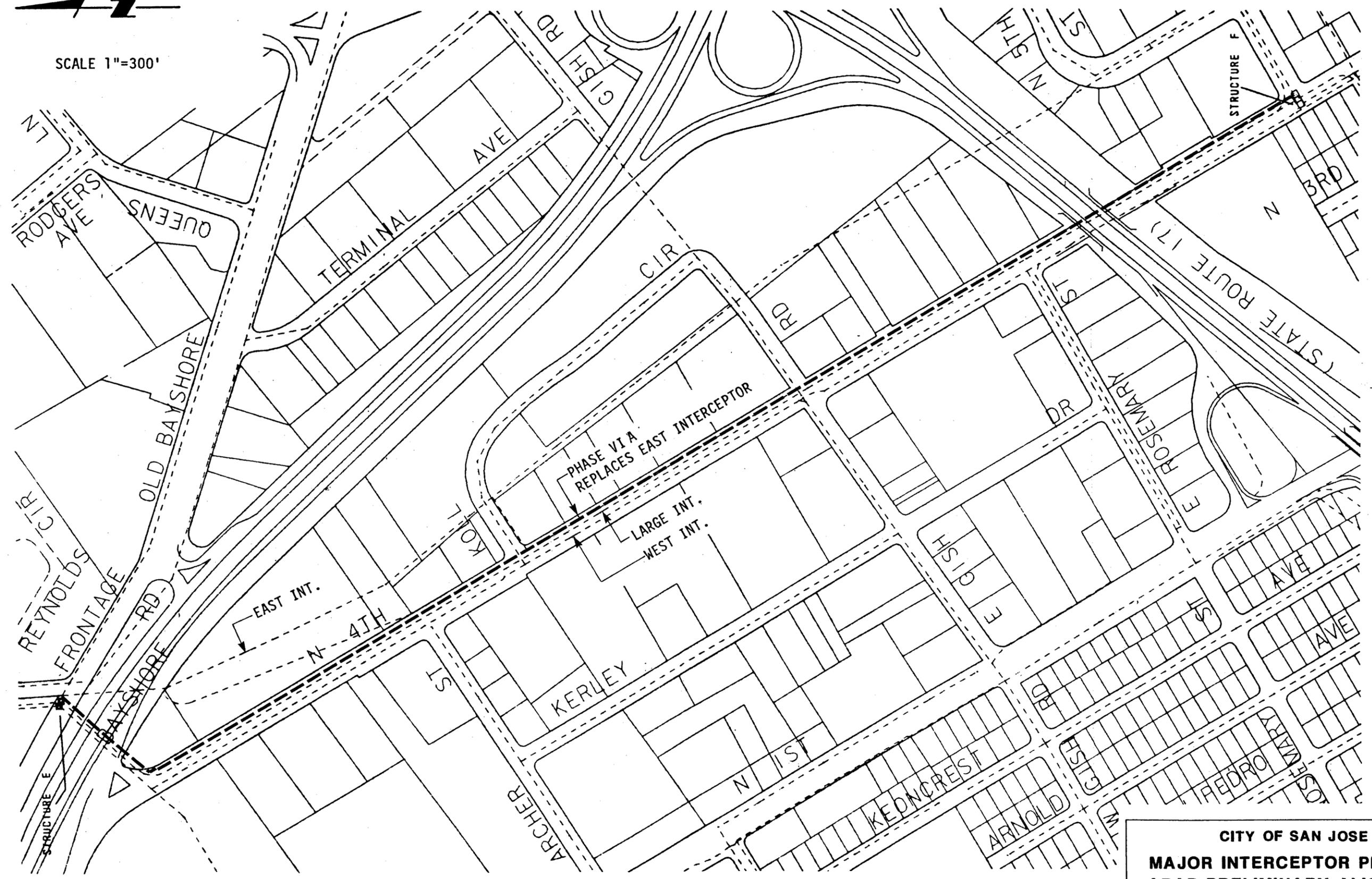
The crossing will be either bored and jacked or tunnelled beneath the highway this decision will be made during the detailed design of the project. The Phase VIA project replaces the brick East Interceptor and provides the necessary redundant capacity to facilitate bypass for inspection and maintenance.

### ESTIMATED CONSTRUCTION COST

The estimated construction cost for the Phase VIA ABAP is \$2.996 million and is summarized in Table VI-2. The construction cost estimate is presented in current (1986) dollars and includes no allowance for engineering, legal, administration, or contingencies. The preliminary estimate of construction cost for the Phase VIB rehabilitation project is approximately \$2.052 million.



SCALE 1"=300'



COMPUTER GRAPHICS BY CITY OF SAN JOSE DEPARTMENT OF PUBLIC WORKS

CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PRELIMINARY ALIGNMENT  
PHASES VIA

FIGURE VI-1



# APPENDIX

# A



**Apparent Best Alternative Project**

**TABLE VI-2  
CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PHASE VIA  
STRUCTURE E TO STRUCTURE F  
ESTIMATED CONSTRUCTION COST  
(REPLACES EAST INTERCEPTOR)**

Project Component	Quantity/Unit	Estimated Cost
Piping (72-inch T-Lock RCP)	4,500 LF	\$ 1,980,000
Structures	1 LS	30,000
Pipe Jacking (at Bayshore)	280 LF	186,000
Manholes	2 EA	10,000
Curb and Gutter	3,970 LF	48,000
Interferences	1 LS	<u>147,000</u>
Subtotal		\$ 2,401,000
Mobilization	4%	<u>96,000</u>
Subtotal		2,497,000
Contractor's OH&P	20%	<u>499,000</u>
<b>Total Construction Cost</b>		<b><u><u>\$ 2,996,000</u></u></b>

**City of San Jose**  
**Major Interceptor Project**  
**ABAP Phase VII**

**GENERAL**

Phase VII of the Apparent Best Alternative Project covers the seventh of seven interceptor segments comprising the City's Major Interceptor Project.

**GENERAL PROJECT DESCRIPTION**

Phase VII of the ABAP begins at Structure F at the intersection of Fourth and Commercial Streets. From there the project proceeds south on Fourth Street to Younger Street where it turns to the east. It proceeds east on Younger to Fifth Street where it again turns to the south and proceeds to Empire Street. At Empire it turns to the east and connects to the Large Interceptor at Structure I at the intersection of Seventh and Empire Streets. The total length of the alignment is approximately 6,440 feet.

**PROJECT OBJECTIVES**

The primary objectives of the Phase VII project are two-fold:

- Provide the interceptor system hydraulic capacity for the ultimate projected Peak Wet Weather Flow (PWWF).
- Provide the means and capacity by which any of the interceptors may be taken out of service (bypassed) during the summer conditions of Peak Dry Weather Flow (PDWF).

## Apparent Best Alternative Project

### Hydraulic Capacity

The existing interceptor system capacity in the Phase VII reach is 141 million gallons per day (mgd) in the reach north of Younger and 74 mgd in the reach between Younger and Empire. With a projected PWWF of 245 mgd and 195 mgd, respectively, the capacity deficit is 104 mgd and 121 mgd, respectively.

### Bypass Provisions

The existing interceptor system has experienced moderate to severe corrosion over much of its length. One of the primary objectives of the Major Interceptor Project is to provide means by which any of the interceptors may be bypassed for inspection and maintenance. This function is imperative to ensure that the system's useful life is not shortened by corrosion.

Routine inspection and maintenance will be scheduled during summer dry weather flow conditions and the system should therefore have sufficient capacity to accommodate the PDWF with the largest capacity interceptor out of service. The projected PDWF in the Phase VII reach is 178 mgd in the northern segment and 138 mgd in the southern segment, which represent the required system capacity with one interceptor out of service.

### ALTERNATIVE ANALYSIS

The goal of the alternative analysis is to determine the most cost-effective project to satisfy the objectives for each reach at the Major Interceptor Project. The objectives for a reach may not be satisfied by a single project phase because of budget constraints. In this case, subsequent phase(s) will be necessary. The alternatives for the Phase VII reach are screened in two segments: Commercial to Younger Streets (Table VII-1) and Younger to Empire Streets (Table VII-2).

The analyses do not consider RCP as an alternative material as corrosion is a major consideration in the Phase VII reach. The single interceptor of

**Apparent Best Alternative Project**

**TABLE VII-1  
CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PHASE VII ALTERNATIVE SCREENING  
STRUCTURE F TO YOUNGER**

Alternative Description	Interceptor Capacity (mgd)				Remarks
	West	East	Large	New Total	
<u>Commercial to Younger</u>					
Existing System Capacity	36.0	12.7	92.0	140.7	PWWF = 244.9 PDWWF = 178.0
1. System w/New Interceptor					
A. 78" T-Lock RCP	36.0	12.7	92.0	165.1	>PWWF Rejected for PDWF Capacity
B. 72" T-Lock RCP	36.0	12.7	92.0	133.3	>PWWF Rejected for PDWF Capacity
2. Alt. 1A @ 1B w/o New Interceptor	36.0	12.7	92.0	140.7	<PDWF Rejected
3. Alt. 1A + Rehab. West & East	49.1	19.6	92.0	165.1	>PWWF Rejected for PDWF Capacity
Alt. 1B + Rehab. West & East	49.1	19.6	92.0	133.3	>PWWF Rejected for PDWF Capacity
4. Alt. 3 w/o New Interceptor	49.1	19.6	92.0	160.7	<PDWF Reject
5. Same as Alt. 1 w/smaller New Interceptor and replace East w/same size					
A. 60" T-Lock RCP	36.0	82.0	92.0	82.0	>PWWF
6. Alt. 5 w/o Large Interceptor	36.0	82.0		82.0	>PDWF

TABLE VII-2  
 CITY OF SAN JOSE  
 MAJOR INTERCEPTOR PROJECT  
 ABAP PHASE VII ALTERNATIVE SCREENING  
 YOUNGER TO STRUCTURE I

Alternative Description	Interceptor Capacity (mgd)			Remarks
	West	East	Total	
<u>Younger to Empire</u>				
Existing System Capacity				PWWF = 194.9 PDWF = 137.5
1. System w/New Interceptor A. 72" T-Lock RCP	14.5	60.0	74.5	
2. Alt. 1A w/o New Interceptor	14.5	60.0	74.5	>PWWF Rejected for PDWF Capacity <PDWF Rejected
3. Alt. 1A + Rehab. East	22.4	60.0	219.6	>PWWF Rejected for PDWF Capacity <PDWF Reject
4. Alt. 3 w/o New Interceptor	22.4	60.0	82.4	
5. Same as Alt. 1 w/smaller New Interceptor and replace East w/same size A. 60" T-Lock RCP	84.4	60.0	228.8	>PWWF
6. Alt. 5 w/o New Interceptor	84.4	60.0	144.4	>PDWF

## Apparent Best Alternative Project

Alternative 1 and the rehabilitation Alternative 3 are rejected due to dissatisfaction of the PDWF capacity objective. The resultant Phase VII ABAP is two parallel 60-inch T-Lock RCP interceptors, one of which replaces the East Interceptor, from Commercial Street to Empire Street. Because of City departmental division of responsibilities the project is given two designations: Phase VII and Phase VIIA. However, because of congestion in this area, the two projects should be constructed concurrently. A third project for this reach, eventual rehabilitation of the West Interceptor, will be required at some point in the future. This rehabilitation project is designated Phase VIIB. The timing of this phase cannot be estimated until future inspections are conducted.

### ABAP ALIGNMENT

The preliminary alignment of the Phase VII and Phase VIIA projects is shown in Figure VII-1. Phases VII and VIIA are concurrent projects and consist of approximately 12,840 feet of 60-inch T-Lock RCP beginning at Structure F at the intersection of Fourth and Commercial Streets and ending at Structure I at the intersection of Seventh and Empire Streets. The Phase VIIA project replaces the brick East Interceptor and provides the necessary redundant capacity to facilitate bypass for inspection and maintenance.

### ESTIMATED CONSTRUCTION COST

The estimated construction cost for the Phase VII and VIIA ABAP is \$6.571 million and is summarized in Table VII-3. The construction cost estimate is presented in current (1986) dollars and includes no allowance for engineering, legal, administration, or contingencies. The preliminary estimate of construction cost for the Phase VIIB rehabilitation project is approximately \$0.788 million.



**Apparent Best Alternative Project**

**TABLE VII-3**

**CITY OF SAN JOSE  
MAJOR INTERCEPTOR PROJECT  
ABAP PHASE VII AND VIIA  
ESTIMATED CONSTRUCTION COST  
(VIIA REPLACES EAST INTERCEPTOR)**

<b>Project Component</b>	<b>Quantity/Unit</b>	<b>Estimated Cost</b>
Piping (60-inch T-Lock RCP)	12,840 LF	\$ 4,971,000
Structures	1 LS	75,000
Pipe Jacking (at Railroad)	100 LF	45,000
Manholes	6 EA	30,000
Interferences	1 LS	144,000
Subtotal		<u>\$ 5,265,000</u>
Mobilization	4%	<u>211,000</u>
Subtotal		5,476,000
Contractor's OH&P	20%	<u>1,095,000</u>
<b>Total Construction Cost<sup>a</sup></b>		<u><u>\$ 6,571,000</u></u>

<sup>a</sup> Total construction cost is the combined cost for both Phase VII (New Interceptor) and Phase VIIA (replacement of East Interceptor).



# APPENDIX

# B



A B C D E F G H I J K L M N O P Q R S T U V W X

1:11/22/85 SJH/DEIS  
 2:CITY OF SAN JOSE  
 3:PRELIMINARY DESIGN OF A FOURTH MAJOR INTERCEPTOR  
 4:MAJOR INTERCEPTOR HYDRAULIC ANALYSIS  
 5:60-INCH BRICK/60-INCH REP\*  
 6:"EAST INTERCEPTOR (PARALLEL TO 84-INCH FROM BAYSHORE TO WPCP)  
 7:  
 8:  
 9:  
 10:  
 11:  
 12:  
 13:INLET STRUCT  
 14:RCP  
 15:1  
 16:  
 17:2  
 18:  
 19:3  
 20:  
 21:4  
 22:  
 23:5  
 24:199.0 FT  
 25:6  
 26:1871.0 FT  
 27:7  
 28:1351.0 FT  
 29:8  
 30:  
 31:9  
 32:  
 33:STRUCT A  
 34:  
 35:10  
 36:  
 37:11  
 38:NEG SLOPE  
 39:12  
 40:  
 41:13  
 42:NEG SLOPE  
 43:14  
 44:208.0 FT  
 45:GRADE BREAK; BEGIN BRICK  
 46:247.0 FT  
 47:15  
 48:100.0 FT  
 49:16  
 50:31.0 FT  
 51:17  
 52:440.0 FT  
 53:18  
 54:459.0 FT  
 55:19  
 56:405.0 FT  
 57:20  
 58:169.0 FT  
 59:STRUCT B  
 60:315.0 FT  
 61:21

PIPE FLOWING FULL										PIPE FLOWING PARTIALLY FULL														
STRIKES	STRUCTURE/	PIPELINE	PIPE	REACH	DIAMETER	INVERT	LENGTH	SLOPE	MANHOLE	R (FT)	A (SQ FT)	V (FPS)	Q (MGD)	R (FT)	A (SQ FT)	V (FPS)	Q (MGD)	d/D=	ANGLE=	R (FT)	A (SQ FT)	V (FPS)	Q (MGD)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
	1	5.50	.00064	.0150	1.38	23.76	3.11	47.73	1.66	19.11	3.52	43.52	1.60	16.83	3.44	37.42	1.38	11.88	3.11	23.87				
	2	5.50	.00034	.0150	1.38	23.76	2.26	34.74	1.66	19.11	2.56	31.68	1.60	16.83	2.50	27.24	1.38	11.88	2.26	17.37				
	3	5.50	.00080	.0150	1.38	23.76	3.46	53.20	1.66	19.11	3.93	48.52	1.60	16.83	3.84	41.71	1.38	11.88	3.46	26.60				
	4	5.25	.00016	.0150	1.31	21.65	1.52	21.23	1.58	17.42	1.72	19.36	1.53	15.33	1.68	16.64	1.31	10.82	1.52	10.82				
	5	5.00	.00079	.0150	1.25	19.63	3.24	41.10	1.51	15.80	3.67	37.48	1.46	13.91	3.58	32.22	1.25	9.82	3.24	20.55				
	6	5.00	.00075	.0150	1.25	19.63	3.14	39.83	1.51	15.80	3.56	36.32	1.46	13.91	3.47	31.22	1.25	9.82	3.14	19.91				
	7	5.00	.00075	.0150	1.25	19.63	3.14	39.83	1.51	15.80	3.56	36.32	1.46	13.91	3.47	31.22	1.25	9.82	3.14	19.91				
	8	5.00	.00075	.0150	1.25	19.63	3.14	39.83	1.51	15.80	3.56	36.32	1.46	13.91	3.47	31.22	1.25	9.82	3.14	19.91				
	9	5.00	.00085	.0150	1.25	19.63	3.36	42.62	1.51	15.80	3.81	38.87	1.46	13.91	3.72	33.41	1.25	9.82	3.36	21.31				
	10	5.00	.00156	.0150	1.25	19.63	4.54	57.56	1.51	15.80	5.14	52.49	1.46	13.91	5.02	45.13	1.25	9.82	4.54	28.78				
	11	5.00	.00003	.0150	1.25	19.63	.60	7.67	1.51	15.80	.68	6.99	1.46	13.91	.67	6.01	1.25	9.82	.60	3.83				
	12	5.00	.00063	.0150	1.25	19.63	2.89	36.63	1.51	15.80	3.27	33.40	1.46	13.91	3.19	28.72	1.25	9.82	2.89	18.31				
	13	5.00	-.00422	.0150	1.25	19.63	ERROR	ERROR	1.51	15.80	ERROR	ERROR	1.46	13.91	ERROR	ERROR	1.25	9.82	ERROR	ERROR				
	14	5.00	.00182	.0150	1.25	19.63	4.90	62.21	1.51	15.80	5.56	56.72	1.46	13.91	5.43	48.77	1.25	9.82	4.90	31.10				
	15	5.00	-.00065	.0150	1.25	19.63	ERROR	ERROR	1.51	15.80	ERROR	ERROR	1.46	13.91	ERROR	ERROR	1.25	9.82	ERROR	ERROR				
	16	5.00	.00341	.0150	1.25	19.63	6.72	85.23	1.51	15.80	7.61	77.72	1.46	13.91	7.43	66.81	1.25	9.82	6.72	42.61				
	17	5.00	.00341	.0170	1.25	19.63	5.93	75.20	1.51	15.80	6.72	68.57	1.46	13.91	6.56	58.95	1.25	9.82	5.93	37.60				
	18	5.00	.00341	.0170	1.25	19.63	5.93	75.20	1.51	15.80	6.72	68.57	1.46	13.91	6.56	58.95	1.25	9.82	5.93	37.60				
	19	5.00	.00341	.0170	1.25	19.63	5.93	75.20	1.51	15.80	6.72	68.57	1.46	13.91	6.56	58.95	1.25	9.82	5.93	37.60				
	20	5.00	.00187	.0170	1.25	19.63	4.38	55.62	1.51	15.80	4.97	50.72	1.46	13.91	4.85	43.60	1.25	9.82	4.38	27.81				
	21	5.00	.00187	.0170	1.25	19.63	4.38	55.62	1.51	15.80	4.97	50.72	1.46	13.91	4.85	43.60	1.25	9.82	4.38	27.81				
	22	5.00	.00187	.0170	1.25	19.63	4.38	55.62	1.51	15.80	4.97	50.72	1.46	13.91	4.85	43.60	1.25	9.82	4.38	27.81				
	23	5.00	.00187	.0170	1.25	19.63	4.38	55.62	1.51	15.80	4.97	50.72	1.46	13.91	4.85	43.60	1.25	9.82	4.38	27.81				
	24	5.00	.00104	.0170	1.25	19.63	3.26	41.43	1.51	15.80	3.70	37.78	1.46	13.91	3.61	32.48	1.25	9.82	3.26	20.71				



1251E 50	58	5.00	38.82	300.00	.00250	.0170	1.25	19.63	5.07	64.36	1.51	15.80	5.75	58.69	1.46	13.91	5.61	50.46	1.25	9.82	5.07	32.18
1261																						
1271E 51	59	5.00	39.57	331.00	.00350	.0170	1.25	19.63	6.00	76.20	1.51	15.80	6.81	69.49	1.46	13.91	6.65	59.74	1.25	9.82	6.00	38.10
1281																						
1291E 52	60	5.00	40.75	206.00	.00170	.0170	1.25	19.63	4.18	53.06	1.51	15.80	4.74	48.38	1.46	13.91	4.63	41.59	1.25	9.82	4.18	26.53
1301																						
1311E 53	61	5.00	41.08	126.00	.00365	.0170	1.25	19.63	6.13	77.78	1.51	15.80	6.95	70.92	1.46	13.91	6.78	60.97	1.25	9.82	6.13	38.89
1321																						
1331E 54	62	5.00	41.54	303.00	.00231	.0170	1.25	19.63	4.88	61.87	1.51	15.80	5.53	56.42	1.46	13.91	5.40	48.50	1.25	9.82	4.88	30.94
1331E 55																						
1361	63	5.00	42.24	293.00	.00229	.0170	1.25	19.63	4.85	61.55	1.51	15.80	5.50	56.13	1.46	13.91	5.37	48.26	1.25	9.82	4.85	30.78
1371E 56	64	5.00	42.91	297.00	.00084	.0170	1.25	19.63	2.94	37.35	1.51	15.80	3.34	34.06	1.46	13.91	3.26	29.28	1.25	9.82	2.94	18.67
138142.0 FT																						
1391E 57	65	5.00	NA	NA																		
140155.0 FT																						
1411E 58	66	5.00	43.16	293.00	.00123	.0170	1.25	19.63	3.56	45.12	1.51	15.80	4.03	41.14	1.46	13.91	3.94	35.37	1.25	9.82	3.56	22.56
1421																						
1431E 59	67	5.00	43.52	254.00	.00209	.0170	1.25	19.63	4.63	58.80	1.51	15.80	5.25	53.62	1.46	13.91	5.13	46.10	1.25	9.82	4.63	29.40
1441																						
1451E 60	68	5.00	44.05	56.00	.00661	.0170	1.25	19.63	8.24	104.63	1.51	15.80	9.35	95.41	1.46	13.91	9.13	82.03	1.25	9.82	8.24	52.32
1461																						
1471E 61	69	5.00	44.42	306.00	.00029	.0170	1.25	19.63	1.74	22.08	1.51	15.80	1.97	20.13	1.46	13.91	1.93	17.31	1.25	9.82	1.74	11.04
1481																						
1491E 62	70	5.00	44.51	310.00	.00139	.0170	1.25	19.63	3.78	47.94	1.51	15.80	4.28	43.72	1.46	13.91	4.18	37.58	1.25	9.82	3.78	23.97
1501																						
1511E 63	71	5.00	44.94	310.00	.00229	.0170	1.25	19.63	4.85	61.60	1.51	15.80	5.50	56.18	1.46	13.91	5.37	48.29	1.25	9.82	4.85	30.80
1521																						
1531E 64	72	5.00	45.65	310.00	.00229	.0170	1.25	19.63	4.85	61.60	1.51	15.80	5.50	56.18	1.46	13.91	5.37	48.29	1.25	9.82	4.85	30.80
1541																						
1551E 65	73	5.00	46.36	306.00	.00010	.0170	1.25	19.63	1.00	12.75	1.51	15.80	1.14	11.62	1.46	13.91	1.11	9.99	1.25	9.82	1.00	6.37
1561																						
1571E 66	74	5.00	46.39	228.00	.00211	.0170	1.25	19.63	4.65	59.06	1.51	15.80	5.28	53.86	1.46	13.91	5.15	46.30	1.25	9.82	4.65	29.53
1581																						
1591E 67	75	4.50	46.87	343.00	.00146	.0170	.87	10.34	3.04	20.30	1.00	12.80	3.33	27.53	.95	11.26	3.22	23.43	.65	7.95	2.51	12.88
160136454 BRICK																						
1611E 68	76	4.50	47.37	324.00	.00231	.0170	.87	10.34	3.83	25.59	1.00	12.80	4.19	34.69	.95	11.26	4.06	29.53	.65	7.95	3.16	16.24
1631E 69	77	4.50	48.12	327.00	.00346	.0170	.87	10.34	4.68	31.26	1.00	12.80	5.12	42.38	.95	11.26	4.96	36.08	.65	7.95	3.86	19.84
164136454 BR																						
1651E 70	78	4.50	49.25	306.00	.00307	.0170	.87	10.34	4.41	29.47	1.00	12.80	4.83	39.96	.95	11.26	4.67	34.01	.65	7.95	3.64	18.70
166136454 BR																						
1671E 71	79	4.50	50.19	302.00	.00099	.0170	.87	10.34	2.51	16.76	1.00	12.80	2.75	22.72	.95	11.26	2.66	19.34	.65	7.95	2.07	10.64
168136454 BR																						
1691E 72	80	4.50	50.49	309.00	.00074	.0170	.87	10.34	2.17	14.51	1.00	12.80	2.38	19.67	.95	11.26	2.30	16.74	.65	7.95	1.79	9.21
170136454 BR																						
1711E 73	81	4.50	50.72	15.00	.01400	.0170	.87	10.34	9.42	62.92	1.00	12.80	10.32	85.30	.95	11.26	9.97	72.61	.65	7.95	7.77	39.93
172136454 BR																						
1731E 74																						
1741																						
1751																						

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36,941.00

1: A :: B :: C :: D :: E :: F :: G :: H :: I :: J :: K :: L :: M :: N :: O :: P :: Q :: R :: S :: T :: U :: V :: W ::  
 11/11/22/85 SJHVDL3  
 2: CITY OF SAN JOSE  
 3: PRELIMINARY DESIGN OF A FOURTH MAJOR INTERCEPTOR  
 4: MAJOR INTERCEPTOR HYDRAULIC ANALYSIS  
 5: 60-INCH BRICK/60-INCH RCP\*  
 6: EAST INTERCEPTOR (PARALLEL TO 84-INCH FROM BAYSHORE TO WFCP)

PIPE FLOWING PARTIALLY FULL

LINE	STRUCTURE/ PIPELINE REACH NAME	PIPE DIAMETER	INVERT FT ELEVATION	LENGTH FT	SLOPE FT/FT	R (FT)	PIPE FLOWING FULL		PIPE FLOWING PARTIALLY FULL		R (FT)	Q (FPS)	Q (MGD)	V (FPS)	V (MGD)						
							ANGLE=	d/D=	ANGLE=	d/D=											
13: INLET STRUCT																					
14: RCP		5.50	994.00	0.0064	0.130	1.38	23.76	3.59	55.07	1.66	19.11	4.07	50.22	1.60	16.83	3.97	43.17	1.38	11.88	3.59	27.54
15: E 1		5.50	1,407.00	0.0034	0.130	1.38	23.76	2.61	40.09	1.66	19.11	2.96	36.56	1.60	16.83	2.89	31.43	1.38	11.88	2.61	20.04
16: I		5.50	1,43	0.0080	0.130	1.38	23.76	4.00	61.39	1.66	19.11	4.53	55.98	1.60	16.83	4.43	48.13	1.38	11.88	4.00	30.69
17: E 2		5.50	1,89	0.0016	0.130	1.31	21.65	1.75	24.50	1.58	17.42	1.98	22.34	1.53	15.33	1.94	19.21	1.31	10.82	1.75	12.25
18: I		5.00	2,30	0.0079	0.130	1.25	19.63	3.74	47.42	1.51	15.80	4.24	43.24	1.46	13.91	4.14	37.18	1.25	9.82	3.74	23.71
19: E 3		5.00	2,80	0.0075	0.130	1.25	19.63	3.62	45.96	1.51	15.80	4.10	41.91	1.46	13.91	4.01	36.03	1.25	9.82	3.62	22.98
20: I		5.00	NA	0.0075	0.130	1.25	19.63	3.62	45.96	1.51	15.80	4.10	41.91	1.46	13.91	4.01	36.03	1.25	9.82	3.62	22.98
21: E 4		5.00	NA	0.0075	0.130	1.25	19.63	3.62	45.96	1.51	15.80	4.10	41.91	1.46	13.91	4.01	36.03	1.25	9.82	3.62	22.98
22: I		5.00	4.53	0.0085	0.130	1.25	19.63	3.88	49.18	1.51	15.80	4.39	44.85	1.46	13.91	4.29	38.55	1.25	9.82	3.88	24.59
23: E 5		5.00	5.69	0.0156	0.130	1.25	19.63	5.23	66.42	1.51	15.80	5.93	60.57	1.46	13.91	5.79	52.07	1.25	9.82	5.23	33.21
24: I		5.00	5.95	0.0003	0.130	1.25	19.63	0.70	8.85	1.51	15.80	0.79	8.07	1.46	13.91	0.77	6.94	1.25	9.82	0.70	4.42
25: E 6		5.00	5.97	0.0063	0.130	1.25	19.63	3.33	42.26	1.51	15.80	3.78	38.54	1.46	13.91	3.69	33.13	1.25	9.82	3.33	21.13
26: I		5.00	6.84	0.0422	0.130	1.25	19.63	ERROR	ERROR	1.51	15.80	ERROR	ERROR	1.46	13.91	ERROR	ERROR	1.25	9.82	ERROR	ERROR
27: E 7		5.00	6.65	0.0182	0.130	1.25	19.63	5.66	71.78	1.51	15.80	6.41	65.45	1.46	13.91	6.26	56.27	1.25	9.82	5.66	35.89
28: I		5.00	6.87	0.0065	0.130	1.25	19.63	ERROR	ERROR	1.51	15.80	ERROR	ERROR	1.46	13.91	ERROR	ERROR	1.25	9.82	ERROR	ERROR
29: E 8		5.00	5.83	0.0341	0.130	1.25	19.63	7.75	98.34	1.51	15.80	8.78	89.67	1.46	13.91	8.58	77.09	1.25	9.82	7.75	49.17
30: I		5.00	NA	0.0341	0.130	1.25	19.63	7.75	98.34	1.51	15.80	8.78	89.67	1.46	13.91	8.58	77.09	1.25	9.82	7.75	49.17
31: E 9		5.00	NA	0.0341	0.130	1.25	19.63	7.75	98.34	1.51	15.80	8.78	89.67	1.46	13.91	8.58	77.09	1.25	9.82	7.75	49.17
32: I		5.00	NA	0.0341	0.130	1.25	19.63	7.75	98.34	1.51	15.80	8.78	89.67	1.46	13.91	8.58	77.09	1.25	9.82	7.75	49.17
33: STRUCT A		5.00	6.87	0.0341	0.130	1.25	19.63	7.75	98.34	1.51	15.80	8.78	89.67	1.46	13.91	8.58	77.09	1.25	9.82	7.75	49.17
34: I		5.00	NA	0.0341	0.130	1.25	19.63	7.75	98.34	1.51	15.80	8.78	89.67	1.46	13.91	8.58	77.09	1.25	9.82	7.75	49.17
35: E 10		5.00	7.83	0.0187	0.130	1.25	19.63	5.73	72.73	1.51	15.80	6.50	66.32	1.46	13.91	6.34	57.02	1.25	9.82	5.73	36.37
36: I		5.00	NA	0.0187	0.130	1.25	19.63	5.73	72.73	1.51	15.80	6.50	66.32	1.46	13.91	6.34	57.02	1.25	9.82	5.73	36.37
37: E 11		5.00	NA	0.0187	0.130	1.25	19.63	5.73	72.73	1.51	15.80	6.50	66.32	1.46	13.91	6.34	57.02	1.25	9.82	5.73	36.37
38: INEB SLOPE		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
39: E 12		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
40: I		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
41: E 13		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
42: INEB SLOPE		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
43: E 14		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
44: 208.0 FT		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
45: GRADE BREAK; BEGIN BRICK		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
46: 247.0 FT		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
47: E 15		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
48: 100.0 FT		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
49: E 16		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
50: 31.0 FT		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
51: E 17		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
52: 40.0 FT		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
53: E 18		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
54: 459.0 FT		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
55: E 19		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
56: 405.0 FT		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
57: E 20		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
58: 169.0 FT		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
59: STRUCT B		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
60: 315.0 FT		5.00	10.58	0.0104	0.130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09

62:496.0 FT	25	5.00	11.42	.00104	.0130	1.25	19.63	4.27	54.17	1.51	15.80	4.84	49.40	1.46	13.91	4.73	42.47	1.25	9.82	4.27	27.09
63:E 22																					
64:NEG SLOPE	26	5.00	11.03	-.00082	.0130	1.25	19.63	ERROR	ERROR	1.51	15.80	ERROR	ERROR	1.46	13.91	ERROR	ERROR	1.25	9.82	ERROR	ERROR
65:E 23																					
66:	27	5.00	12.88	.00345	.0130	1.25	19.63	7.79	98.89	1.51	15.80	8.83	90.18	1.46	13.91	8.63	77.53	1.25	9.82	7.79	49.45
67:E 24																					
68:	28	5.00	13.59	.00066	.0130	1.25	19.63	3.40	43.12	1.51	15.80	3.85	39.32	1.46	13.91	3.76	33.80	1.25	9.82	3.40	21.56
69:STRUCT C																					
70:	29	5.00	14.14	.01170	.0130	1.25	19.63	14.35	182.09	1.51	15.80	16.26	166.05	1.46	13.91	15.88	142.75	1.25	9.82	14.35	91.05
71:E 25																					
72:	30	5.00	15.74	.00303	.0130	1.25	19.63	7.30	92.66	1.51	15.80	8.28	84.50	1.46	13.91	8.08	72.64	1.25	9.82	7.30	46.33
73:E 26																					
74:498.0 FT	31	5.00	NA	.00244	.0130	1.25	19.63	6.56	83.20	1.51	15.80	7.43	75.87	1.46	13.91	7.26	65.22	1.25	9.82	6.56	41.60
75:E 27																					
76:550.0 FT	32	5.00	18.30	.00244	.0130	1.25	19.63	6.56	83.20	1.51	15.80	7.43	75.87	1.46	13.91	7.26	65.22	1.25	9.82	6.56	41.60
77:E 28																					
78:	33	5.00	18.95	.00107	.0130	1.25	19.63	4.33	54.99	1.51	15.80	4.91	50.15	1.46	13.91	4.80	43.11	1.25	9.82	4.33	27.50
79:E 29																					
80:618.0 FT	34	5.00	20.95	.00176	.0130	1.25	19.63	5.56	70.57	1.51	15.80	6.30	64.35	1.46	13.91	6.15	55.32	1.25	9.82	5.56	35.28
81:E 30																					
82:520.0 FT	35	5.00	21.19	.00052	.0130	1.25	19.63	5.56	70.57	1.51	15.80	6.30	64.35	1.46	13.91	6.15	55.32	1.25	9.82	5.56	35.28
83:E 31																					
84:	36	5.00	21.93	.01480	.0130	1.25	19.63	3.02	38.32	1.51	15.80	3.42	34.95	1.46	13.91	3.34	30.04	1.25	9.82	3.02	19.16
85:E 32																					
86:	38	5.00	23.14	.00255	.0130	1.25	19.63	6.69	84.96	1.51	15.80	7.59	77.47	1.46	13.91	7.41	66.60	1.25	9.82	6.69	42.48
87:STRUCT A																					
88:	39	5.00	24.05	.00197	.0130	1.25	19.63	5.89	74.71	1.51	15.80	6.67	68.12	1.46	13.91	6.52	58.57	1.25	9.82	5.89	37.35
89:E 33																					
90:	40	5.00	25.26	.00334	.0130	1.25	19.63	7.67	97.32	1.51	15.80	8.69	88.74	1.46	13.91	8.49	76.29	1.25	9.82	7.67	48.66
91:E 34																					
92:	41	5.00	25.58	.00582	.0130	1.25	19.63	10.12	128.40	1.51	15.80	11.47	117.08	1.46	13.91	11.20	100.66	1.25	9.82	10.12	64.20
93:E 35																					
94:	42	5.00	27.25	.00423	.0130	1.25	19.63	8.62	109.45	1.51	15.80	9.78	99.81	1.46	13.91	9.55	85.80	1.25	9.82	8.62	54.73
95:E 36																					
96:	43	5.00	28.65	.00341	.0130	1.25	19.63	7.74	98.24	1.51	15.80	8.77	89.59	1.46	13.91	8.57	77.02	1.25	9.82	7.74	49.12
97:E 37																					
98:	44	5.00	30.24	.00394	.0130	1.25	19.63	8.32	105.60	1.51	15.80	9.43	96.30	1.46	13.91	9.21	82.79	1.25	9.82	8.32	52.80
99:E 38																					
100:	45	5.00	31.35	.00207	.0130	1.25	19.63	6.04	76.67	1.51	15.80	6.85	69.92	1.46	13.91	6.69	60.11	1.25	9.82	6.04	38.34
101:E 39																					
102:	46	5.00	32.33	.00183	.0130	1.25	19.63	5.68	72.04	1.51	15.80	6.43	65.70	1.46	13.91	6.28	56.48	1.25	9.82	5.68	36.02
103:E 40																					
104:	47	5.00	32.20	-.00024	.0130	1.25	19.63	ERROR	ERROR	1.51	15.80	ERROR	ERROR	1.46	13.91	ERROR	ERROR	1.25	9.82	ERROR	ERROR
105:E 41																					
106:NEG SLOPE	48	5.00	32.23	.00028	.0130	1.25	19.63	2.22	28.19	1.51	15.80	2.52	25.70	1.46	13.91	2.46	22.10	1.25	9.82	2.22	14.09
107:E 42																					
108:	49	5.00	32.40	.00459	.0130	1.25	19.63	8.99	114.10	1.51	15.80	10.19	104.05	1.46	13.91	9.95	89.45	1.25	9.82	8.99	57.05
109:STRUCT B																					
110:	50	5.00	33.29	.00263	.0130	1.25	19.63	6.81	86.38	1.51	15.80	7.71	78.77	1.46	13.91	7.53	67.71	1.25	9.82	6.81	43.19
111:E 43																					
112:	51	5.00	NA	.00255	.0130	1.25	19.63	6.70	85.06	1.51	15.80	7.60	77.56	1.46	13.91	7.42	66.68	1.25	9.82	6.70	42.53
113:E 44																					
114:839.0 FT	52	5.00	38.08	.00009	.0130	1.25	19.63	6.70	85.06	1.51	15.80	7.60	77.56	1.46	13.91	7.42	66.68	1.25	9.82	6.70	42.53
115:E 45																					
116:1037.0 FT	53	5.00	38.11	.00009	.0130	1.25	19.63	6.70	85.06	1.51	15.80	7.60	77.56	1.46	13.91	7.42	66.68	1.25	9.82	6.70	42.53
117:E 46																					
118:	54	5.00	37.97	-.00452	.0130	1.25	19.63	ERROR	ERROR	1.51	15.80	ERROR	ERROR	1.46	13.91	ERROR	ERROR	1.25	9.82	ERROR	ERROR
119:E 47																					
120:NEG SLOPE	55	5.00	37.54	-.00072	.0130	1.25	19.63	ERROR	ERROR	1.51	15.80	ERROR	ERROR	1.46	13.91	ERROR	ERROR	1.25	9.82	ERROR	ERROR
121:E 48																					
122:NEG SLOPE	56	5.00	37.54	-.00072	.0130	1.25	19.63	ERROR	ERROR	1.51	15.80	ERROR	ERROR	1.46	13.91	ERROR	ERROR	1.25	9.82	ERROR	ERROR
123:E 49																					
124:	57	5.00	NA	.00211	.0130	1.25	19.63	4.00	77.95	1.51	15.80	4.00	77.95	1.46	13.91	4.00	77.95	1.25	9.82	4.00	27.09





62:	284.00	.00581	.0170	1.25	19.63	7.73	98.12	1.51	15.80	8.76	89.47	1.46	13.91	8.56	76.92	1.25	9.82	7.73	49.06	
63:W 21	7.24																			
64:	1,357.00	-.00043	.0170	1.25	19.63	ERROR	ERROR	1.51	15.80	ERROR	ERROR	1.46	13.91	ERROR	ERROR	1.25	9.82	ERROR	ERROR	ERROR
65:GRADE BREAK																				
66:RCP	6.65																			
67:W 22	7.97																			
68:361.0 FT																				
69:W 23	NA																			
70:105.0 FT	8.31																			
71:W 24																				
72:	1,508.00	.00132	.0150	1.25	19.63	4.18	53.00	1.51	15.80	4.73	48.33	1.46	13.91	4.62	41.55	1.25	9.82	4.18	26.50	
73:STRUCT B	10.30																			
74:	1,613.00	.00082	.0150	1.25	19.63	3.29	41.73	1.51	15.80	3.73	38.06	1.46	13.91	3.64	32.72	1.25	9.82	3.29	20.87	
75:W 25	11.62																			
76:	1,296.00	.00148	.0150	1.25	19.63	4.42	56.15	1.51	15.80	5.02	51.20	1.46	13.91	4.90	44.02	1.25	9.82	4.42	28.08	
77:STRUCT C	13.54																			
78:	1,215.00	.00082	.0150	1.13	15.90	3.07	31.60	1.36	12.80	3.48	28.82	1.31	11.26	3.40	24.77	1.13	7.95	3.07	15.80	
79:W 26	14.54																			
80:	791.00	.00159	.0150	1.13	15.90	4.28	43.96	1.36	12.80	4.85	40.09	1.31	11.26	4.73	34.46	1.13	7.95	4.28	21.98	
81:W 27	15.80																			
82:	890.00	.00149	.0150	1.13	15.90	4.14	42.58	1.36	12.80	4.70	38.83	1.31	11.26	4.59	33.38	1.13	7.95	4.14	21.29	
83:W 28	17.13																			
84:	982.00	.00156	.0150	1.13	15.90	4.23	43.48	1.36	12.80	4.79	39.65	1.31	11.26	4.68	34.09	1.13	7.95	4.23	21.74	
85:STRUCT A	18.66																			
86:	656.00	.00232	.0150	1.13	15.90	5.16	53.02	1.36	12.80	5.85	48.35	1.31	11.26	5.71	41.57	1.13	7.95	5.16	26.51	
87:W 29	20.18																			
88:	664.00	.00137	.0150	1.13	15.90	3.97	40.78	1.36	12.80	4.50	37.19	1.31	11.26	4.39	31.97	1.13	7.95	3.97	20.39	
89:W 30	21.09																			
90:	40.00	.00525	.0150	1.13	15.90	7.76	79.81	1.36	12.80	8.80	72.78	1.31	11.26	8.59	62.57	1.13	7.95	7.76	39.91	
91:W 31	21.30																			
92:	598.00	.00176	.0150	1.13	15.90	4.49	46.16	1.36	12.80	5.09	42.09	1.31	11.26	4.97	36.18	1.13	7.95	4.49	23.08	
93:W 32	22.35																			
94:	68.00	.00338	.0150	1.13	15.90	6.23	64.06	1.36	12.80	7.06	58.42	1.31	11.26	6.90	50.22	1.13	7.95	6.23	32.03	
95:W 33	22.58																			
96:	524.00	.00260	.0150	1.13	15.90	5.46	56.12	1.36	12.80	6.19	51.17	1.31	11.26	6.04	43.99	1.13	7.95	5.46	28.06	
97:W 34	23.94																			
98:	390.00	.00067	.0150	1.13	15.90	2.77	28.44	1.36	12.80	3.14	25.94	1.31	11.26	3.06	22.30	1.13	7.95	2.77	14.22	
99:W 35	24.20																			
100:	159.00	.00346	.0150	1.13	15.90	6.30	64.79	1.36	12.80	7.14	59.08	1.31	11.26	6.98	50.79	1.13	7.95	6.30	32.39	
101:W 36	24.75																			
102:	297.00	.00128	.0150	1.13	15.90	3.83	39.40	1.36	12.80	4.34	35.93	1.31	11.26	4.24	30.89	1.13	7.95	3.83	19.70	
103:W 37	25.13																			
104:	851.00	.00090	.0150	1.13	15.90	3.22	33.13	1.36	12.80	3.65	30.21	1.31	11.26	3.57	25.98	1.13	7.95	3.22	16.57	
105:STRUCT B	25.90																			
106:	405.00	.00378	.0150	1.13	15.90	6.59	67.70	1.36	12.80	7.47	61.74	1.31	11.26	7.29	53.08	1.13	7.95	6.59	33.85	
107:W 38	27.43																			
108:	680.00	.00128	.0150	1.13	15.90	3.83	39.40	1.36	12.80	4.34	35.93	1.31	11.26	4.24	30.89	1.13	7.95	3.83	19.70	
109:W 39	28.30																			
110:117.0 FT	NA																			
111:W 40																				
112:228.0 FT	29.04																			
113:W 41																				
114:	345.00	.00214	.0150	1.13	15.90	4.76	51.02	1.36	12.80	5.63	46.52	1.31	11.26	5.49	39.99	1.13	7.95	4.76	25.51	
115:W 42	31.42																			
116:	268.00	.00888	.0150	1.13	15.90	10.10	103.80	1.36	12.80	11.45	94.66	1.31	11.26	11.18	81.38	1.13	7.95	10.10	51.90	
117:W 43	31.28																			
118:	113.00	-.00124	.0150	1.13	15.90	ERROR	ERROR	1.36	12.80	ERROR	ERROR	1.31	11.26	ERROR	ERROR	1.13	7.95	ERROR	ERROR	
119:W 44	30.98																			
120:80.0 FT	NA																			
121:W 45																				
122:272.0 FT	362.00	.00392	.0150	1.00	12.57	6.20	50.39	1.21	10.11	7.03	45.95	1.16	8.90	6.87	39.51	1.00	6.28	6.20	25.20	
123:W 46	32.40																			
5:	445	.00229	1.	1.	2.57	1		1.21	11			1.16	8.90							



1: A : B : C : D : E : F : G : H : I : J : K : L : M : N : O : P : Q : R : S : T : U : V : W : X : Y : Z

1: 11/22/85 SJHYDW13  
 2: CITY OF SAN JOSE  
 3: PRELIMINARY DESIGN OF A FOURTH MAJOR INTERCEPTOR  
 4: MAJOR INTERCEPTOR HYDRAULIC ANALYSIS  
 5: 51" 60-INCH BRICK/60-INCH RCP  
 6: PARALLEL TO 84-INCH FROM BAYSHORE TO WPCP  
 7: WEST INTERCEPTOR

PIPE FLOWING PARTIALLY FULL

STATION	STRUCTURE/REACH NAME	PIPE DIA (IN)	INVERT ELEV (FT)	LENGTH (FT)	SLOPE (FT/FT)	PIPE FLOWING FULL			PIPE FLOWING PARTIALLY FULL			d/D=	ANGLE=	RADIANS	DEGREES	V (FPS)	Q (MGD)	R (FT)	A (SQ FT)	V (FPS)	Q (MGD)	R (FT)	A (SQ FT)	V (FPS)	Q (MGD)		
						R (FT)	A (SQ FT)	V (FPS)	Q (MGD)	R (FT)	A (SQ FT)															V (FPS)	Q (MGD)
13+86	BRICK SCREEN INLET CHAN																										
14+RCP		6.50		131.00	.00252	.0130	1.63	33.18	7.93	170.07	1.96	26.70	8.99	155.09	1.89	23.50	8.78	133.33	1.63	16.59	7.93	85.04					
15+OVERFLOW STRUCT																											
16+RCP		5.50					1.38	23.76	5.25	80.55	1.66	19.11	5.95	73.46	1.60	16.83	5.81	63.15	1.38	11.88	5.25	40.28					
17+INFL. JUNCTION STRUCT																											
18+RCP 460'		5.50					1.38	23.76	5.25	80.55	1.66	19.11	5.95	73.46	1.60	16.83	5.81	63.15	1.38	11.88	5.25	40.28					
19+INFL. TRANSITION STRUCT			NA																								
20+2X45 RCP 1050'		3.75		1,510.00	.00138	.0130	.94	11.04	4.06	58.02	1.13	8.89	4.61	52.91	1.09	7.82	4.50	45.48	.94	5.52	4.06	29.01					
21+M 1																											
22+2X45 RCP		3.75		1,132.00	.00053	.0130	.94	11.04	2.52	35.99	1.13	8.89	2.86	32.82	1.09	7.82	2.79	28.21	.94	5.52	2.52	17.99					
23+M 2																											
24+610.0 FT		5.00			.00019	.0130	1.25	19.63	1.82	23.16	1.51	15.80	2.07	21.12	1.46	13.91	2.02	18.15	1.25	9.82	1.82	11.58					
25+M 3																											
26+1290.0 FT		5.00		2,325.00	.00019	.0130	1.25	19.63	1.82	23.16	1.51	15.80	2.07	21.12	1.46	13.91	2.02	18.15	1.25	9.82	1.82	11.58					
27+M 4																											
28+425.0 FT		5.00			.00019	.0130	1.25	19.63	1.82	23.16	1.51	15.80	2.07	21.12	1.46	13.91	2.02	18.15	1.25	9.82	1.82	11.58					
29+M 5																											
30+		5.00			.00159	.0130	1.25	19.63	5.30	67.22	1.51	15.80	6.00	61.30	1.46	13.91	5.86	52.70	1.25	9.82	5.30	33.61					
31+M 6																											
32+1069.0 FT		5.00		1,831.00	.00159	.0130	1.25	19.63	5.30	67.22	1.51	15.80	6.00	61.30	1.46	13.91	5.86	52.70	1.25	9.82	5.30	33.61					
33+M 7																											
34+762.0 FT		5.00			.00159	.0130	1.25	19.63	5.30	67.22	1.51	15.80	6.00	61.30	1.46	13.91	5.86	52.70	1.25	9.82	5.30	33.61					
35+M 8																											
36+T-LOCK		5.00	3.86	53.00	-.00604	.0130	1.25	19.63	ERROR	ERROR	1.51	15.80	ERROR	ERROR	1.46	13.91	ERROR	ERROR	1.25	9.82	ERROR	ERROR					
37+M 9																											
38+T-LOCK		5.00	3.54	263.00	.00065	.0130	1.25	19.63	3.37	42.80	1.51	15.80	3.82	39.03	1.46	13.91	3.73	33.55	1.25	9.82	3.37	21.40					
39+M 10																											
40+T-LOCK		5.00	3.71	290.00	.00062	.0130	1.25	19.63	3.30	41.94	1.51	15.80	3.75	38.24	1.46	13.91	3.66	32.88	1.25	9.82	3.30	20.97					
41+M 11																											
42+T-LOCK		5.00	3.89	340.00	.00232	.0130	1.25	19.63	6.39	81.14	1.51	15.80	7.25	73.99	1.46	13.91	7.08	63.61	1.25	9.82	6.39	40.57					
43+M 12																											
44+T-LOCK		5.00	4.68	766.00	.00027	.0130	1.25	19.63	2.20	27.87	1.51	15.80	2.49	25.42	1.46	13.91	2.43	21.85	1.25	9.82	2.20	13.94					
45+M 13																											
46+T-LOCK		5.00	4.89	788.00	.00104	.0130	1.25	19.63	4.28	54.30	1.51	15.80	4.85	49.52	1.46	13.91	4.74	42.57	1.25	9.82	4.28	27.15					
47+M 14																											
48+BRICK		5.00	5.71	160.00	-.00069	.0130	1.25	19.63	ERROR	ERROR	1.51	15.80	ERROR	ERROR	1.46	13.91	ERROR	ERROR	1.25	9.82	ERROR	ERROR					
49+STRUCT A																											
50+		5.00	5.60	156.00	-.00109	.0130	1.25	19.63	ERROR	ERROR	1.51	15.80	ERROR	ERROR	1.46	13.91	ERROR	ERROR	1.25	9.82	ERROR	ERROR					
51+M 15																											
52+		5.00	5.43	550.00	-.00011	.0130	1.25	19.63	ERROR	ERROR	1.51	15.80	ERROR	ERROR	1.46	13.91	ERROR	ERROR	1.25	9.82	ERROR	ERROR					
53+M 16																											
54+		5.00	5.37	546.00	.00057	.0130	1.25	19.63	3.16	40.11	1.51	15.80	3.56	36.56	1.46	13.91	3.50	31.44	1.25	9.82	3.16	20.05					
55+M 17																											
56+		5.00	5.68	492.00	.00051	.0130	1.25	19.63	2.99	37.94	1.51	15.80	3.39	34.60	1.46	13.91	3.31	29.75	1.25	9.82	2.99	18.97					
57+M 18																											
58+		5.00	5.93	404.00	.00057	.0130	1.25	19.63	3.16	40.16	1.51	15.80	3.59	36.62	1.46	13.91	3.50	31.49	1.25	9.82	3.16	20.08					
59+M 19																											
60+		5.00	6.16	139.00	.00110	.0130	1.25	19.63	ERROR	ERROR	1.51	15.80	ERROR	ERROR	1.46	13.91	ERROR	ERROR	1.25	9.82	ERROR	ERROR					

62:	25	5.00	7.24	284.00	.00581	.0130	1.25	19.63	10.11	128.30	1.51	15.80	11.46	117.00	1.46	13.91	11.19	100.58	1.25	9.82	10.11	64.15
63:W 21																						
64:	26	5.00	6.65	1,357.00	-.00043	.0130	1.25	19.63	ERROR	ERROR	1.51	15.80	ERROR	ERROR	1.46	13.91	ERROR	ERROR	1.25	9.82	ERROR	ERROR
65:GRADE BREAK																						
66:RCP	27	5.00	7.97	43.00	.03070	.0130	1.25	19.63	23.24	294.93	1.51	15.80	26.34	268.94	1.46	13.91	25.72	231.21	1.25	9.82	23.24	147.46
67:W 22																						
68:361.0 FT	28	5.00	NA	466.00	.00073	.0130	1.25	19.63	3.58	45.47	1.51	15.80	4.06	41.46	1.46	13.91	3.97	35.64	1.25	9.82	3.58	22.73
69:W 23	29	5.00	8.31	1,508.00	.00073	.0130	1.25	19.63	3.58	45.47	1.51	15.80	4.06	41.46	1.46	13.91	3.97	35.64	1.25	9.82	3.58	22.73
70:105.0 FT																						
71:W 24	30	5.00	10.30	1,508.00	.00132	.0130	1.25	19.63	4.82	61.15	1.51	15.80	5.46	55.76	1.46	13.91	5.33	47.94	1.25	9.82	4.82	30.57
72:																						
73:STRUCT B																						
74:	31	5.00	11.62	1,613.00	.00082	.0130	1.25	19.63	3.79	48.15	1.51	15.80	4.30	43.91	1.46	13.91	4.20	37.75	1.25	9.82	3.79	24.08
75:W 25																						
76:	32	5.00	13.54	1,296.00	.00148	.0130	1.25	19.63	5.11	64.79	1.51	15.80	5.79	59.08	1.46	13.91	5.65	50.79	1.25	9.82	5.11	32.40
77:STRUCT C																						
78:	33	4.50	14.54	1,215.00	.00082	.0130	1.13	15.90	3.55	36.46	1.36	12.80	4.02	33.25	1.31	11.26	3.93	28.58	1.13	7.95	3.55	18.23
79:W 26																						
80:	34	4.50	15.80	791.00	.00159	.0130	1.13	15.90	4.93	50.73	1.36	12.80	5.59	46.26	1.31	11.26	5.46	39.77	1.13	7.95	4.93	25.36
81:W 27																						
82:	35	4.50	17.13	890.00	.00149	.0130	1.13	15.90	4.78	49.13	1.36	12.80	5.42	44.80	1.31	11.26	5.29	38.52	1.13	7.95	4.78	24.57
83:W 28																						
84:	36	4.50	18.66	982.00	.00156	.0130	1.13	15.90	4.88	50.17	1.36	12.80	5.53	45.75	1.31	11.26	5.40	39.33	1.13	7.95	4.88	25.08
85:STRUCT A																						
86:	38	4.50	20.18	656.00	.00232	.0130	1.13	15.90	5.95	61.18	1.36	12.80	6.75	55.79	1.31	11.26	6.59	47.96	1.13	7.95	5.95	30.59
87:W 29																						
88:	39	4.50	21.09	664.00	.00137	.0130	1.13	15.90	4.58	47.05	1.36	12.80	5.19	42.91	1.31	11.26	5.07	36.89	1.13	7.95	4.58	23.53
89:W 30																						
90:	40	4.50	21.30	40.00	.00525	.0130	1.13	15.90	8.96	92.09	1.36	12.80	10.15	83.98	1.31	11.26	9.92	72.19	1.13	7.95	8.96	46.05
91:W 31																						
92:	41	4.50	22.35	598.00	.00176	.0130	1.13	15.90	5.18	53.26	1.36	12.80	5.87	48.57	1.31	11.26	5.73	41.75	1.13	7.95	5.18	26.63
93:W 32																						
94:	42	4.50	22.58	68.00	.00338	.0130	1.13	15.90	7.19	73.92	1.36	12.80	8.15	67.40	1.31	11.26	7.96	57.95	1.13	7.95	7.19	36.96
95:W 33																						
96:	43	4.50	23.94	524.00	.00260	.0130	1.13	15.90	6.30	64.75	1.36	12.80	7.14	59.05	1.31	11.26	6.97	50.76	1.13	7.95	6.30	32.38
97:W 34																						
98:	44	4.50	24.20	390.00	.00067	.0130	1.13	15.90	3.19	32.82	1.36	12.80	3.62	29.93	1.31	11.26	3.53	25.73	1.13	7.95	3.19	16.41
99:W 35																						
100:	45	4.50	24.75	159.00	.00346	.0130	1.13	15.90	7.27	74.75	1.36	12.80	8.24	68.17	1.31	11.26	8.05	58.60	1.13	7.95	7.27	37.38
101:W 36																						
102:	46	4.50	25.13	297.00	.00128	.0130	1.13	15.90	4.42	45.46	1.36	12.80	5.01	41.46	1.31	11.26	4.90	35.64	1.13	7.95	4.42	22.73
103:W 37																						
104:	47	4.50	25.90	851.00	.00090	.0130	1.13	15.90	3.72	38.23	1.36	12.80	4.22	34.86	1.31	11.26	4.12	29.97	1.13	7.95	3.72	19.12
105:STRUCT B																						
106:	48	4.50	27.43	405.00	.00378	.0130	1.13	15.90	7.60	78.12	1.36	12.80	8.61	71.24	1.31	11.26	8.41	61.24	1.13	7.95	7.60	39.06
107:W 38																						
108:	49	4.50	28.30	680.00	.00128	.0130	1.13	15.90	4.42	45.46	1.36	12.80	5.01	41.46	1.31	11.26	4.90	35.64	1.13	7.95	4.42	22.73
109:W 39																						
110:117.0 FT	50	4.50	NA	345.00	.00214	.0130	1.13	15.90	5.73	58.86	1.36	12.80	6.49	53.68	1.31	11.26	6.34	46.15	1.13	7.95	5.73	29.43
111:W 40																						
112:228.0 FT	51	4.50	29.04	268.00	.00214	.0130	1.13	15.90	5.73	58.86	1.36	12.80	6.49	53.68	1.31	11.26	6.34	46.15	1.13	7.95	5.73	29.43
113:W 41																						
114:	52	4.50	31.42	113.00	.00888	.0130	1.13	15.90	11.65	119.77	1.36	12.80	13.21	109.22	1.31	11.26	12.90	93.90	1.13	7.95	11.65	59.89
115:W 42																						
116:	53	4.50	31.28	113.00	-.00124	.0130	1.13	15.90	ERROR	ERROR	1.36	12.80	ERROR	ERROR	1.31	11.26	ERROR	ERROR	1.13	7.95	ERROR	ERROR
117:W 43																						
118:	54	4.50	30.98	1,012.00	-.00030	.0130	1.13	15.90	ERROR	ERROR	1.36	12.80	ERROR	ERROR	1.31	11.26	ERROR	ERROR	1.13	7.95	ERROR	ERROR
119:W 44																						
120:90.0 FT	55	4.00	NA	362.00	.00392	.0130	1.00	12.57	7.16	58.15	1.21	10.11	8.11	53.02	1.16	8.90	7.92	45.58	1.00	6.28	7.16	29.07
121:W 45																						
122:273.0 FT	56	4.00	32.40	362.00	.00392	.0130	1.00	12.57	7.16	58.15	1.21	10.11	8.11	53.02	1.16	8.90	7.92	45.58	1.00	6.28	7.16	29.07
123:W 46																						
124:	57	4.00		445.00	.00229	.0130	1.00	12.57	5.47	44.45	1.21	10.11	6.20	40.53	1.16	8.90	6.06	34.84	1.00	6.28	5.47	22.22











# APPENDIX

# C



# TECHNICAL MEMORANDUM NO. 3

## CITY OF SAN JOSE

**SUBJECT:** Friction Factor for Interceptors

**PROJECT:** Major Interceptor Sewer Predesign Report

**DATE:** October 4, 1985

**PREPARED BY:** V. Alvin Nembhard  
John R. Burris

File No. 1320.0040

### INTRODUCTION

In the design of sewers and hydraulics calculations, the City of San Jose has a policy of utilizing Manning's friction factor "n" = 0.013 for concrete pipe. While this value may be accurate for new, clean, uncorroded pipe, it is felt that it is not sufficiently conservative for long range planning and design of facilities with a life expectancy of 50 years. Because the existing interceptor system ranges in age from relatively new to 80 years and exhibits varying degrees of corrosion and deterioration, several sources were consulted to arrive at a Manning's "n" that could be endorsed by the City and JMM.

### VEN TE CHOW "OPEN CHANNEL HYDRAULICS"

This source offers one of the broadest tabulations of "n" values available, compiled from observations and various other sources. Tabulated below are the pertinent materials for San Jose's interceptor system:

<b>Type of Conduit</b>	<b><u>Min.</u></b>	<b><u>Normal</u></b>	<b><u>Max.</u></b>
Concrete Culvert, straight & free of debris	0.010	0.011	0.013
Concrete Culvert w/bends, connections, some debris	0.011	0.013	0.014
Concrete Sewer w/manholes, inlet etc., straight	0.013	0.015	0.017
Brickwork lined w/cement mortar	0.012	0.015	0.017
Brickwork glazed	0.011	0.013	0.015
Sanitary Sewers, slime coated w/bends & connections	0.012	0.013	0.016

For each material the minimum, normal and maximum values of "n" are shown. The normal values, according Chow, are recommended only for channels with good maintenance. For poorly maintained sewers, the values would be expected to be higher than the normal values shown.

**KING AND BRATER "HANDBOOK OF HYDRAULICS"**

The corresponding values of Manning's "n" as compiled by King and Brater are tabulated below as quoted in Metcalf and Eddy "Wastewater Engineering":

<b>Type of Conduit</b>	<b><u>Best</u></b>	<b><u>Good</u></b>	<b><u>Fair</u></b>	<b><u>Bad</u></b>
Concrete Pipe	0.012	0.013	0.015*	0.016
Brick Sewer	0.012	0.013	0.015*	0.017

\* Values commonly used in designing

**WPCF MOP NO. 9 "SEWER DESIGN AND CONSTRUCTION"**

MOP No. 9 lists ranges of values for Manning's "n" alongside ranges for Hazen-Williams "C" friction coefficient. The applicable materials and ranges are listed below:

<b>Type of Conduit</b>	<b><u>Manning "n"</u></b>	<b><u>Hazen-Williams "C"</u></b>
Concrete Pipe	0.011-0.015	100-140
Brick Sewer	0.013-0.017	--
Plastic Pipe	0.011-0.015	100-140

Plastic pipe is shown in the tabulation above to represent the range of values that could be expected with T-lock lined concrete pipe.

**INGERSOLL-RAND "CAMERON HYDRAULIC DATA"**

This reference lists friction factors only in terms of Hazen-Williams "C". Brick and plastic materials are not listed, however the range given for concrete pipe is 152-85 (high = best, smooth, well laid; low = poor or corroded). The average value given for clean, new pipe is 120, and the value commonly used for design purposes is 100.

**CONVERSION: MANNING "n" TO HAZEN-WILLIAMS "C"**

Normal design practice assumes a "C" value of 140 for new RCP and 100 for old pipe. While the Hazen-Williams formula is primarily used for design of pressure pipes flowing full, conversion of "C" to "n" and vice versa is useful as another basis of comparison. The conversion formula is as follows:

$$4.66n^2 = \frac{4.72D^{0.47}}{C^{1.85}Q^{0.15}}$$

Or

$$C = \left( \frac{4.72D^{0.47}}{4.66^2Q^{0.15}} \right)^{\frac{1}{1.85}}$$

Where = D = pipe dia. in feet  
Q = flow in cfs

Therefore:

- (a) For 84-inch diameter, assuming Q = 80 mgd, n = 0.013:

$$C = \left( \frac{4.72 \times 7^{0.47}}{(4.66)(0.013)^2(80 \times 1.547)^{0.15}} \right)^{\frac{1}{1.85}} = 122$$

- (b) For 48-inch diameter, assuming Q = 25 mgd, n = 0.013:

$$C = \left( \frac{4.72 \times 4^{0.47}}{(4.66)(0.013)^2(25 \times 1.547)^{0.15}} \right)^{\frac{1}{1.85}} = 116$$

- (c) For 84-inch diameter, assuming Q = 100 mgd, n = 0.013:

$$C = \left( \frac{4.72 \times 7^{0.47}}{(4.66)(0.013)^2(100 \times 1.547)^{0.15}} \right)^{\frac{1}{1.85}} = 120$$

(d) For 84-inch diameter, assuming  $Q = 100$  mgd,  $n = 0.015$ :

$$C = \left( \frac{4.72 \times 70.47}{(4.66)(0.015)^2(100 \times 1.547)^{0.15}} \right)^{\frac{1}{1.85}} = 103$$

The average "C" value of 120 obtained from  $n = 0.013$  is higher than normal design practice for pipes with long design life. The computation of "C" at  $n = 0.015$  yields a value of approximately 100.

### CONCLUSION

All sources consulted in the preparation of this Technical Memorandum quote similar ranges of "n" values. Chow and Metcalf & Eddy recommended design values of 0.015 for both brick and concrete pipe. Because of the age and condition of the brick sewer, it is expected that the actual "n" in that line is in the range of 0.016 - 0.017.

Based on this literature search it is concluded that the City's value of  $n = 0.013$  is too low to offer any conservatism in hydraulic analysis of the existing interceptors. The values proposed for use in the analysis are as follows:

Brick	$n = 0.016$
RCP	$n = 0.015$
RCP w/T-Lock	$n = 0.011$

TECHNICAL MEMORANDUM NO. 4

CITY OF SAN JOSE

SUBJECT: Interceptor Hydraulics  
PROJECT: Major Interceptor Sewer Predesign Report  
DATE: December 9, 1985  
PREPARED BY: John R. Burris

INTRODUCTION

The scope of work for the subject project includes the hydraulic analysis of the existing three interceptors to determine the theoretical capacity at one-half, two-thirds, three-quarters full and full. To do this, the interceptors are analyzed individually without regard for cross-ties between them. The interceptors are then considered as a system to determine how the system actually operates.

A survey of the interceptors was conducted to update the invert information and determine actual slopes for the various reaches of pipe. The updated information was then entered into a computer program utilizing the Manning equation to calculate capacity. The calculations were first done using Manning's "n" (friction factor) of  $n=0.015$  for RCP,  $0.017$  for Brick. Discussion of the "n" factors used is presented in T.M. No. 3. At the City's request, the calculations were run again using  $n=0.013$  (the City's standard design value).

INTERCEPTOR ANALYSIS

The interceptors were analyzed from Empire Street to the San Jose-Santa Clara Water Pollution Control Plant. The complete computer printouts for the capacity calculations are attached to this TM as Exhibit I. Exhibit II contains an abbreviated version of the system hydraulics which calculates capacity utilizing only key structures and lateral connections as data points. This method of computation results in a more practical approach to the capacity calculation as it eliminates the inherent negative slopes in some reaches of pipe and effectively surcharges the interceptors as necessary to compensate for the negative slopes (negative slopes yield "error" results in the printouts of Exhibit I).

With the capacity thus calculated, the ultimate projected peak wet weather flow (PWWF) was tabulated for each reach of the interceptors to determine capacity deficiencies. The cumulative PWWF contributions for each of the interceptors, as well as the system total PWWF, are plotted graphically in Figure 4-1. The ultimate system PWWF totals approximately 301 mgd.

Table 4-1 presents the projected PWWF tabulated beside the calculated interceptor capacities for each reach of pipe. The information in Table 4-1 is then plotted to readily identify the sections of the system which exhibit capacity deficiencies. Figures 4-2, 4-3, and 4-4

show flow and capacity characteristics for the East, West and 84-Inch (respectively) interceptors. Figure 4-5 displays the total system PWWF plotted together with the total system capacity. The figure indicates the following capacity deficiencies:

REACH NO.	LOCATION	DEFICIENCY	
		@ n=0.015 & 0.017	@ n=0.013
1	Empire to Taylor	98 mgd	80 mgd
2	Taylor to Hedding	52	23
3	Hedding to Burton	26	-
6	Bayshore to Bering	35	-
7	Bering to Brokaw	21	-
8	Brokaw to Trimble	76	36
9	Trimble to Montague	113	85
10	Montague to N. of Montague	116	87
11	N. of Montague to River Oaks	122	89
12	River Oaks to Hetch Hetchy	122	89
13	Hetch Hetchy to WPCP	121	94

The most obvious deficiencies pointed out by this analysis are the reaches of interceptor from Empire to Taylor (approximately 1,800 feet) and from Brokaw to the Water Pollution Control Plant (approximately 24,000 feet).

TABLE 4-1

11:12/08/85 SJCAPV58  
 CITY OF SAN JOSE  
 3) PRELIMINARY DESIGN OF A FOURTH MAJOR INTERCEPTOR  
 4) MAJOR INTERCEPTOR HYDRAULIC ANALYSIS  
 5) INTERCEPTOR SYSTEM CAPACITY VS PROJECTED PEAK FLOW

10: FROM	TO	REACH #	PEAK FLOW (MGD)			CAPACITY (MGD) # n=.015(RCP); n=17(BRICK)			CAPACITY (MGD) # n=.013					
			EAST	WEST	84-INCH	EAST	WEST	84-INCH	EAST	WEST	84-INCH			
12: EMPIRE	TAYLOR	1	59.70	.00	127.20	186.90	24.42	.00	64.58	89.00	31.93	.00	74.52	106.45
13: TAYLOR	HEDDING	2	64.80	.00	130.10	194.90	47.89	.00	95.00	142.89	62.63	.00	109.62	172.23
14: HEDDING	BURTON	3	67.90	18.10	130.10	216.10	54.02	44.30	92.20	190.52	70.64	51.12	106.38	228.14
15: BURTON	GISH	4	67.90	46.90	130.10	244.90	54.02	48.33	258.23	360.58	70.64	55.76	297.95	424.35
16: GISH	BAYSHORE	5	68.20	46.90	130.10	245.20	60.28	46.73	187.29	294.30	78.83	53.92	216.10	348.85
17: BAYSHORE	BERING	6	76.60	46.90	130.10	253.60	62.28	34.84	121.00	218.14	81.45	40.23	139.61	261.29
18: BERING	BROKAW	7	76.60	47.10	130.10	253.80	62.28	49.96	121.00	233.24	81.45	57.65	139.61	278.71
19: BROKAW	TRIMBLE	8	97.50	48.90	130.10	276.50	59.66	39.83	100.84	200.33	78.01	45.96	116.35	240.32
20: TRIMBLE	MONTAGUE	9	101.10	56.90	137.30	295.30	40.63	42.01	99.89	182.53	46.89	48.~7	115.26	210.62
21: MONTAGUE	N. OF MONTAGUE	10	101.10	60.50	137.30	298.90	40.63	42.75	99.89	183.27	46.89	49.33	115.26	211.48
22: N. OF MONTAGUE	RIVER OAKS	11	101.10	61.50	137.30	299.90	40.63	37.53	99.89	178.05	46.89	49.08	115.26	211.23
23: RIVER OAKS	HEICH HEICHY	12	101.10	61.90	137.30	300.30	40.63	37.57	99.89	178.09	46.89	49.13	115.26	211.28
24: HEICH HEICHY	WPCP	13	101.10	62.90	137.30	301.30	40.63	39.44	99.89	179.96	46.89	45.51	115.26	207.66

FIGURE 4-1

CITY OF SAN JOSE  
MAJOR INTERCEPTOR SYSTEM FLOW

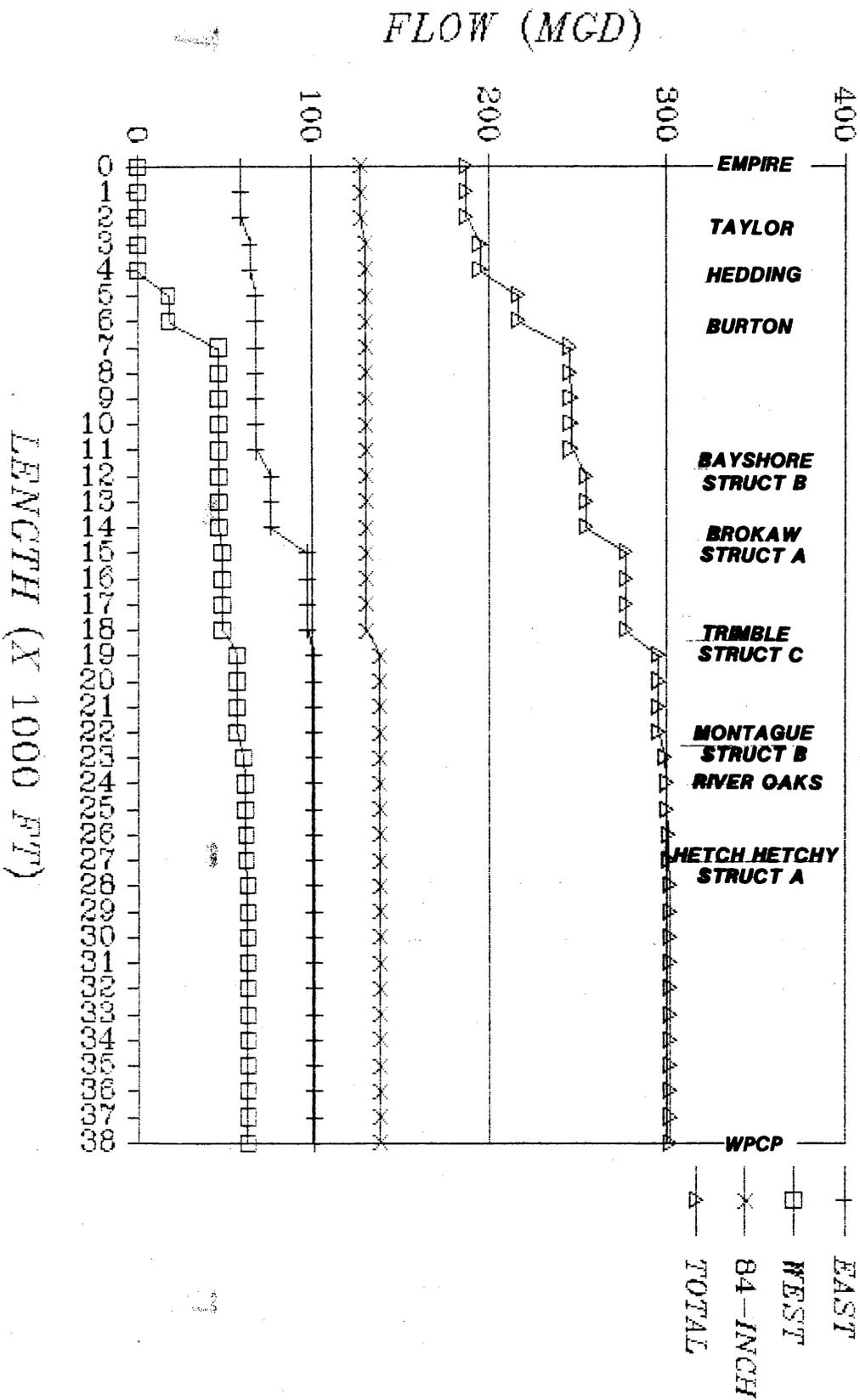


FIGURE 4-2

# CITY OF SAN JOSE EAST INTERCEPTOR CAPACITY vs FLOW

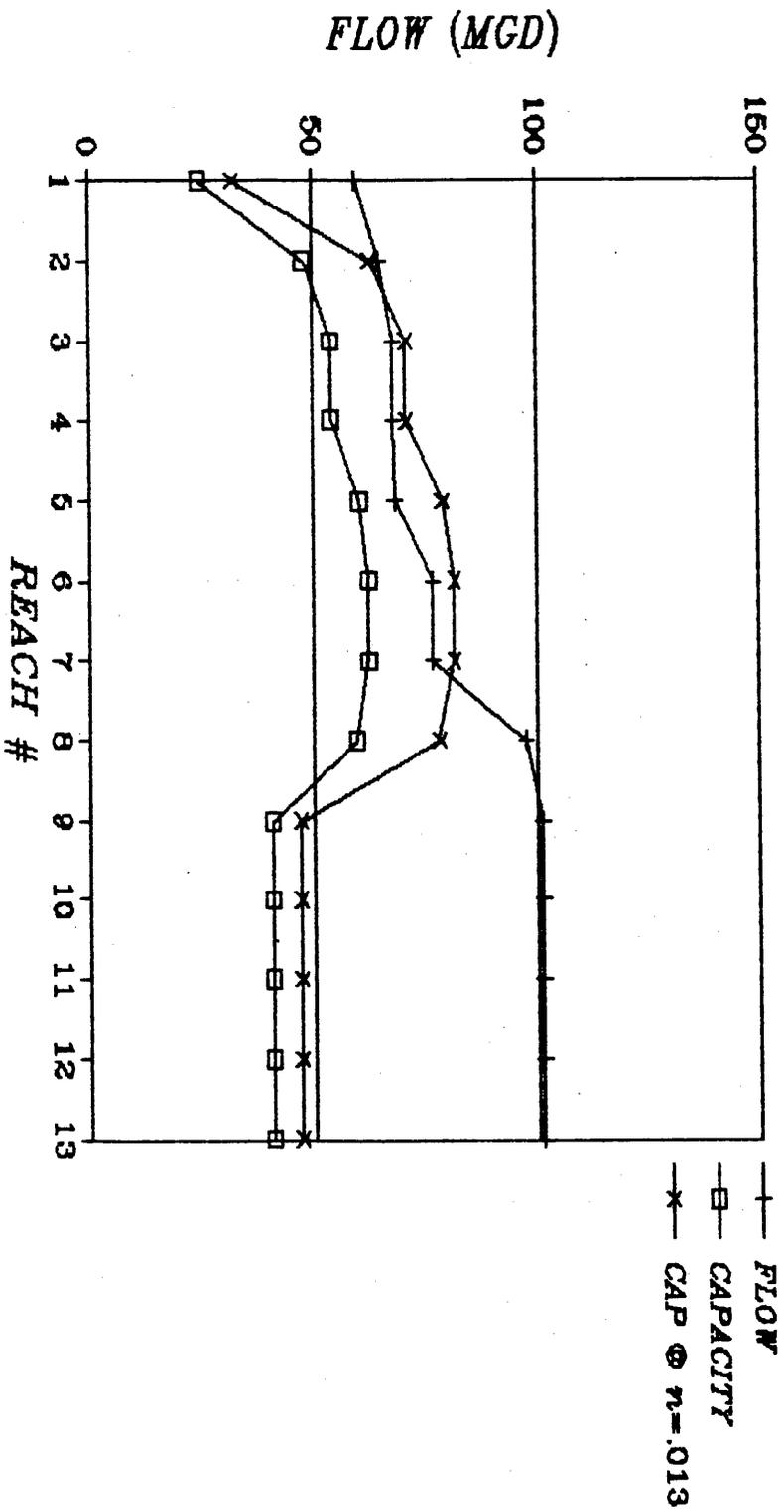


TABLE 4-1 (REVISED)

11: FROM	TO	REACH #	PEAK FLOW (MGD)			CAPACITY (MGD) @ n=.015(RCP); n=17(BRICK)			CAPACITY (MGD) @ n=.013					
			EAST	WEST	84-INCH TOTAL	EAST	WEST	84-INCH TOTAL	EAST	WEST	84-INCH TOTAL			
12:EMPIRE	TAYLOR	1	59.70	.00	127.20	186.90	24.42	.00	64.58	89.00	31.93	.00	74.52	106.45
13:TAYLOR	HEDDING	2	64.80	.00	130.10	194.90	47.89	.00	95.00	142.89	62.63	.00	109.62	172.25
14:HEDDING	BURTON	3	67.90	18.10	130.10	216.10	54.02	44.30	92.20	190.52	70.64	51.12	106.38	228.14
15:BURTON	GISH	4	67.90	46.90	130.10	244.90	54.02	48.33	258.23	360.58	70.64	55.76	297.95	424.35
16:GISH	BAYSHORE	5	68.20	46.90	130.10	245.20	60.28	46.73	187.29	294.30	78.83	53.92	216.10	348.85
17:BAYSHORE	BERING	6	76.60	46.90	130.10	253.60	62.28	34.86	121.00	218.14	81.45	40.23	139.61	261.29
18:BERING	BROKAW	7	76.60	47.10	130.10	253.80	62.28	49.96	121.00	233.24	81.45	57.65	139.61	278.71
19:BROKAW	TRIMBLE	8	97.50	48.90	130.10	276.50	59.66	40.02	116.69	216.37	78.01	46.18	134.65	258.84
20:TRIMBLE	MONTAGUE	9	101.10	56.90	137.30	295.30	42.88	49.28	91.72	183.88	49.48	56.86	105.65	211.99
21:MONTAGUE	N. OF MONTAGUE	10	101.10	60.50	137.30	298.90	42.88	49.16	91.72	183.76	49.48	56.73	105.65	211.86
22:N. OF MONTAGUE	RIVER OAKS	11	101.10	61.50	137.30	299.90	42.88	40.56	91.72	175.16	49.48	53.04	105.65	208.17
23:RIVER OAKS	HETCH HETCHY	12	101.10	61.90	137.30	300.30	42.88	20.78	91.72	155.38	49.48	27.18	105.65	182.31
24:HETCH HETCHY	WPCP	13	101.10	62.90	137.30	301.30	35.53	36.83	91.72	164.08	41.00	42.50	105.65	189.15

FIGURE 4-2 (REVISED)

CITY OF SAN JOSE  
EAST INTERCEPTOR CAPACITY vs FLOW

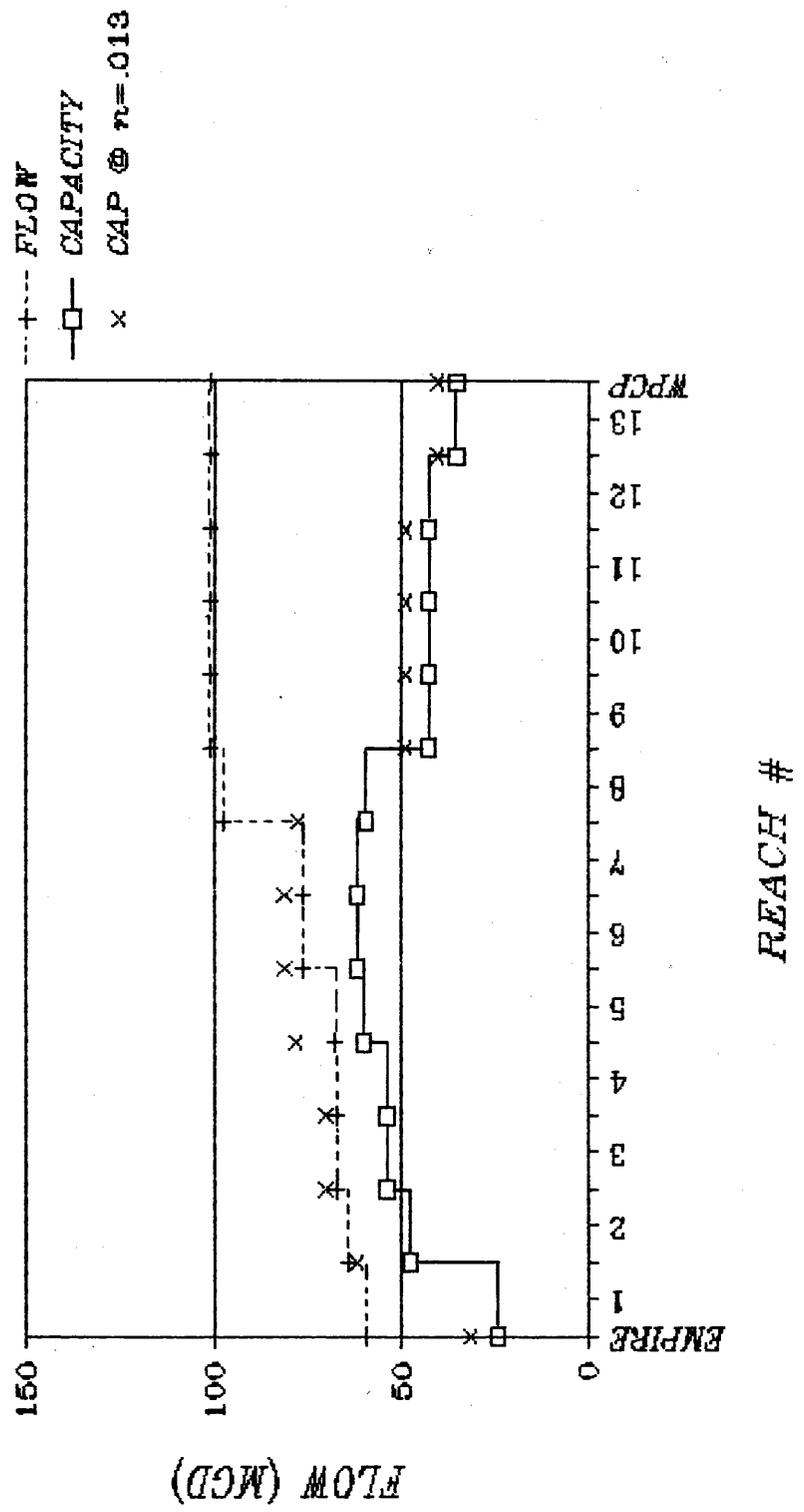


FIGURE 4-3

# CITY OF SAN JOSE

## WEST INTERCEPTOR CAPACITY vs FLOW

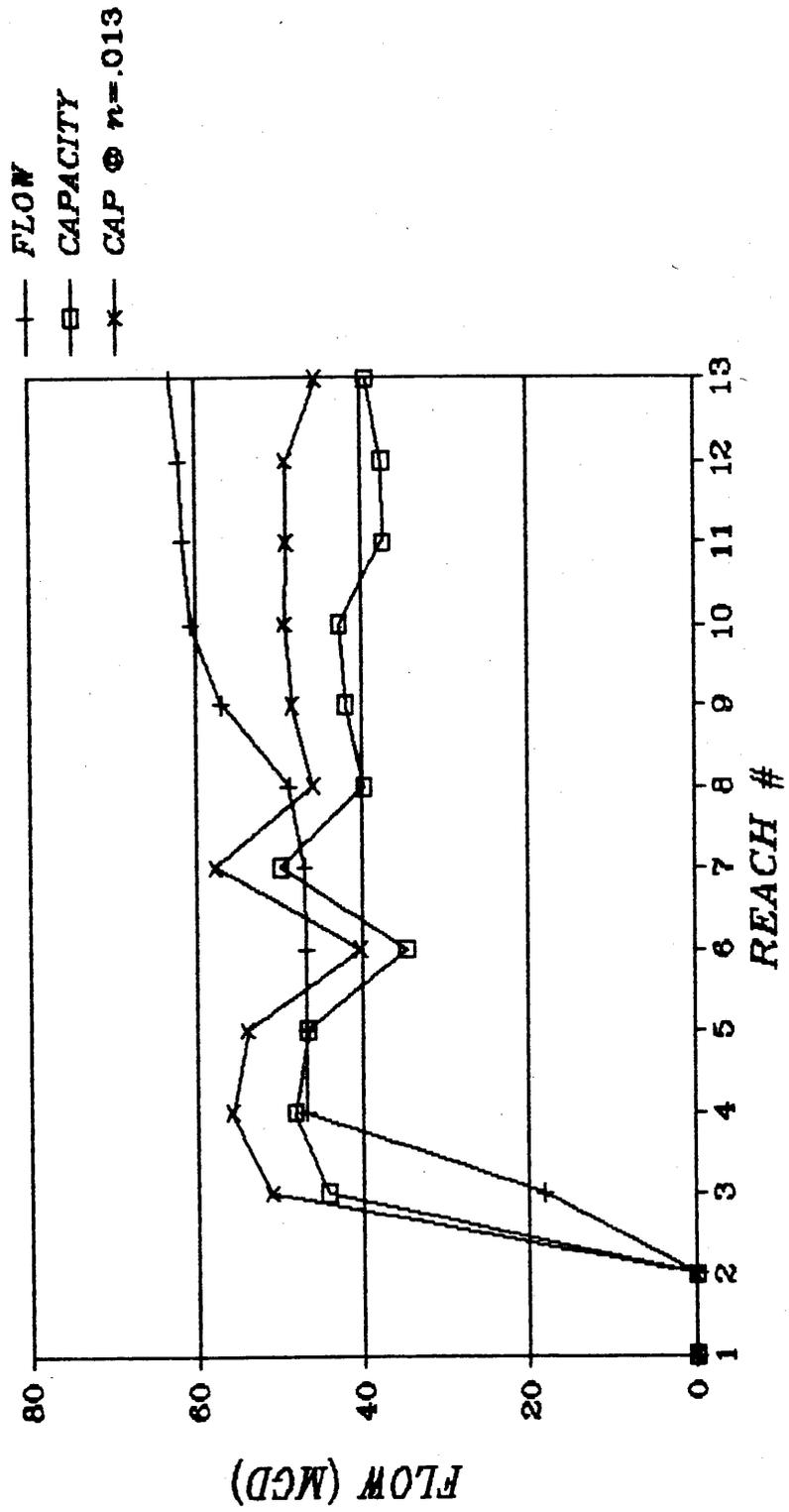


FIGURE 4-3 (REVISED)

CITY OF SAN JOSE

WEST INTERCEPTOR CAPACITY vs FLOW

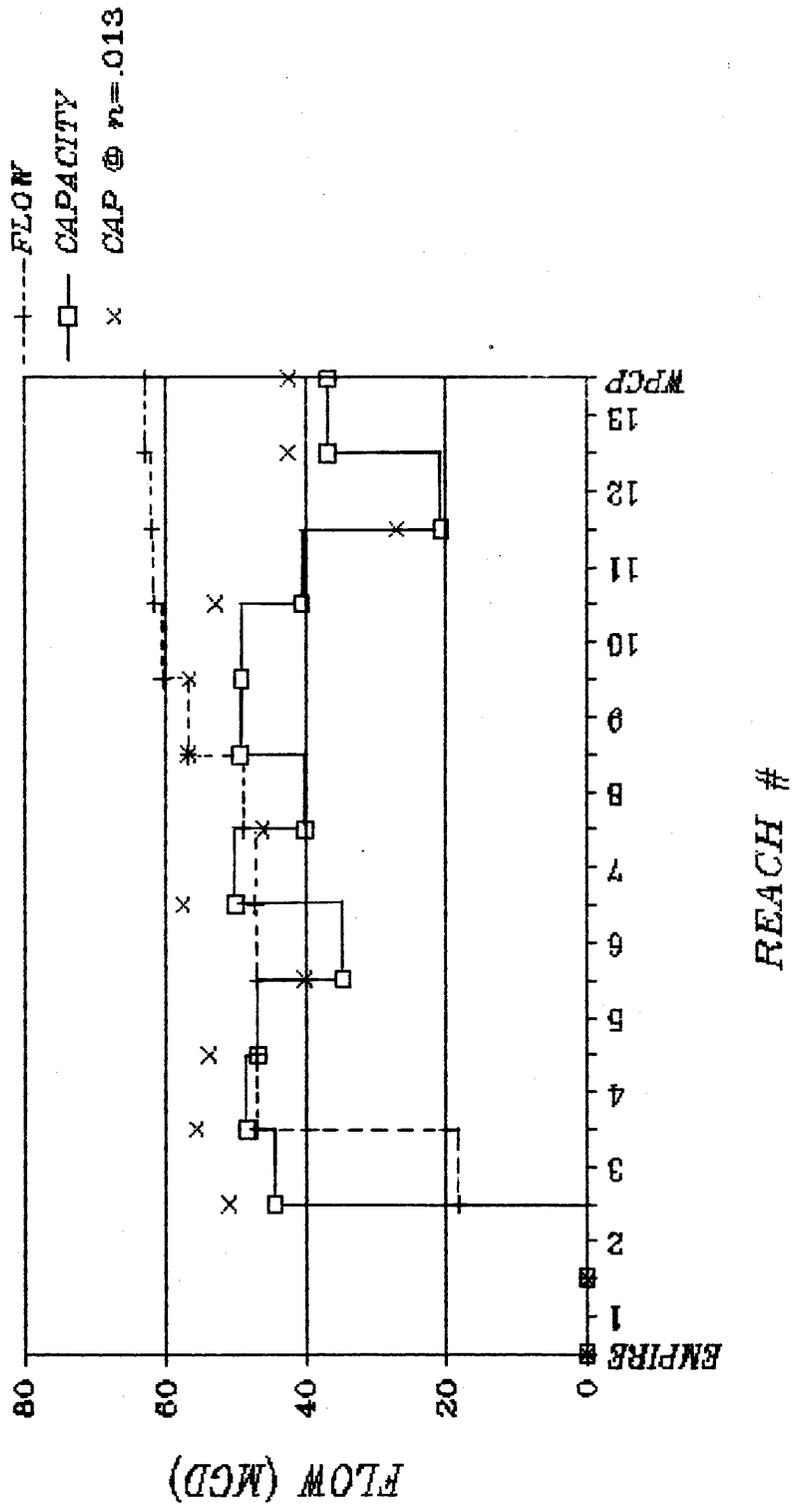


FIGURE 4-4

# CITY OF SAN JOSE

## 84-INCH INTERCEPTOR CAPACITY vs FLOW

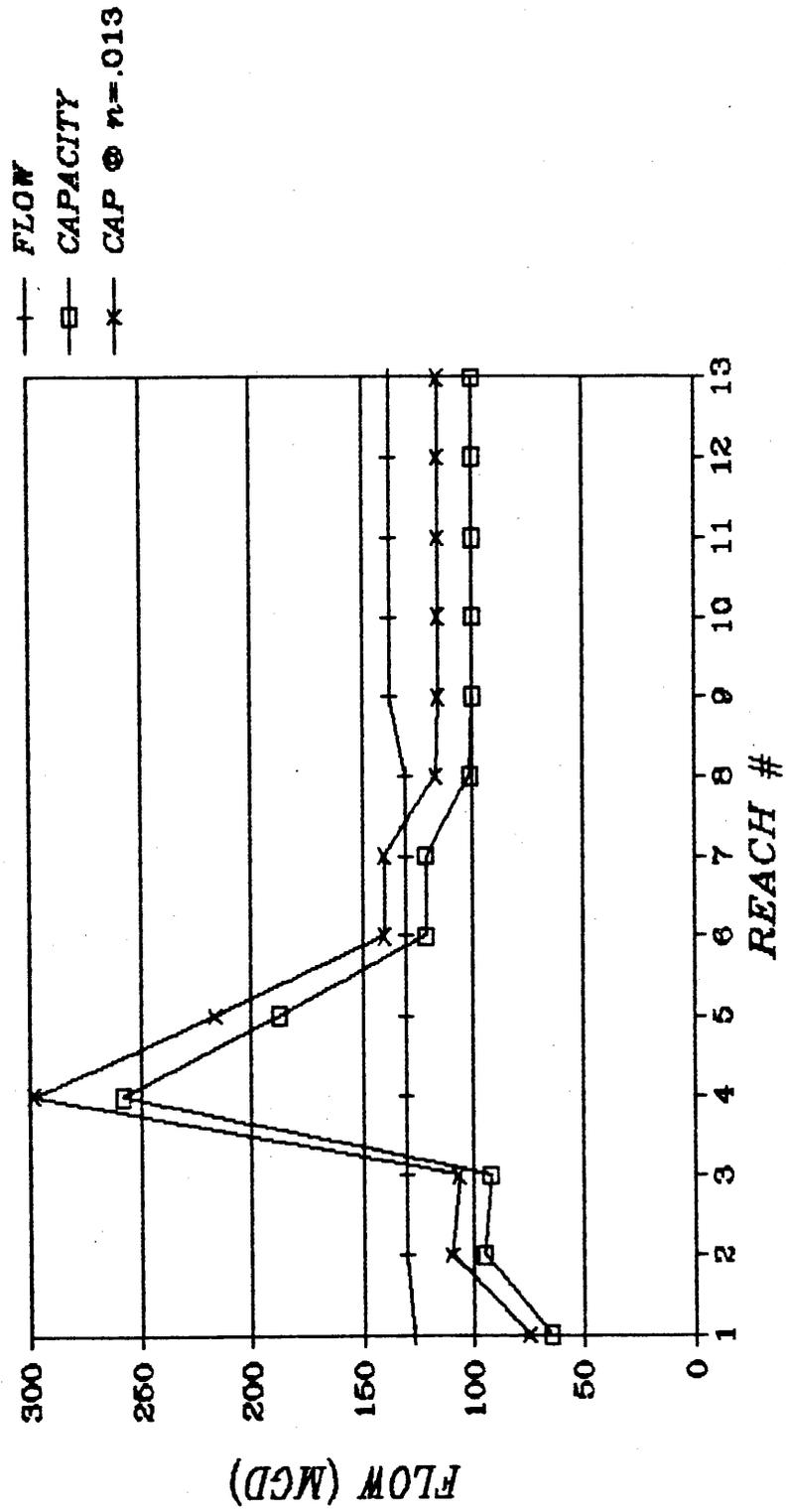


FIGURE 4-4 (REVISED)

CITY OF SAN JOSE  
84-INCH INTERCEPTOR CAPACITY vs FLOW

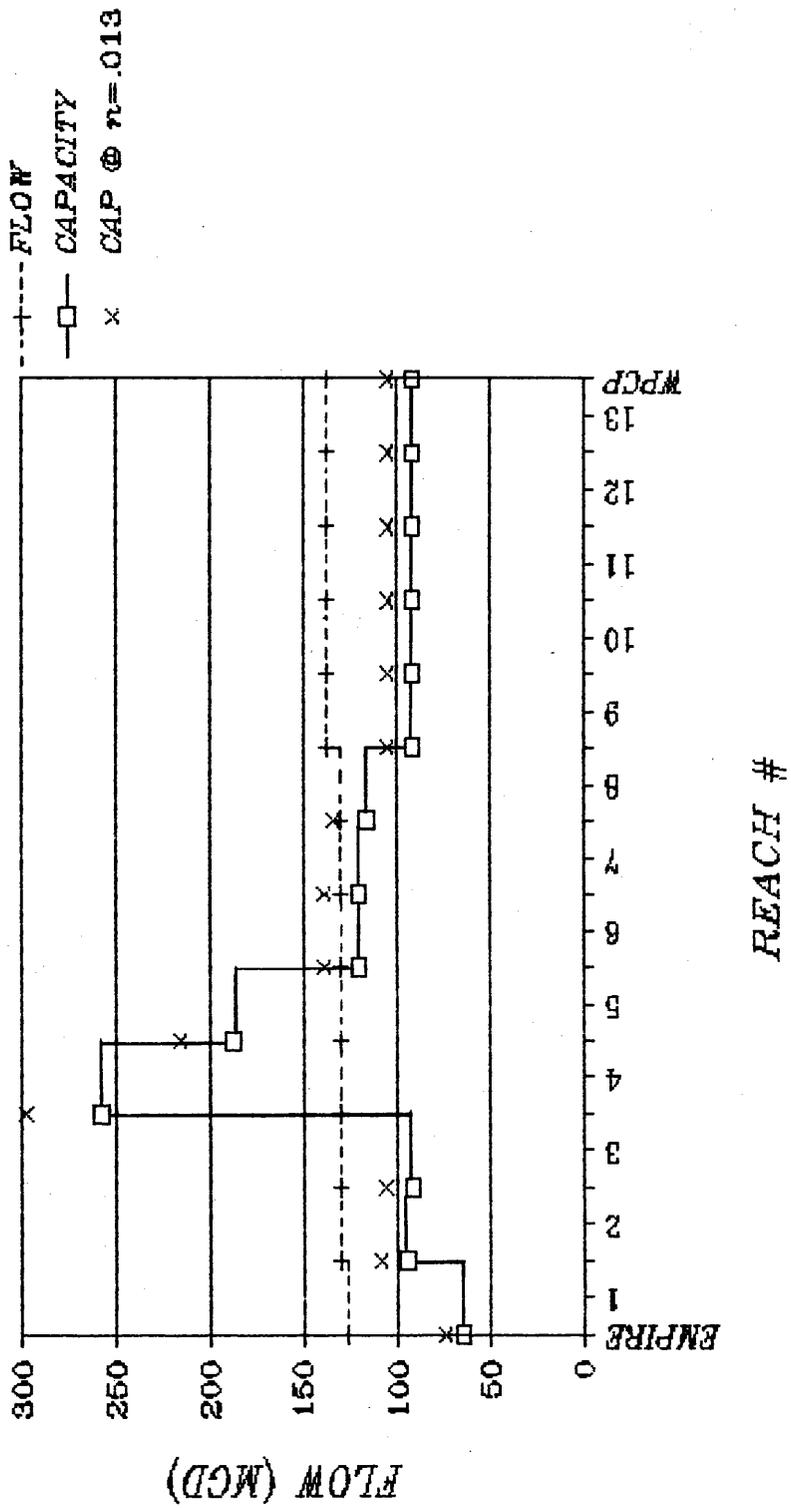


FIGURE 4-5

CITY OF SAN JOSE  
INTERCEPTOR SYSTEM CAPACITY vs FLOW

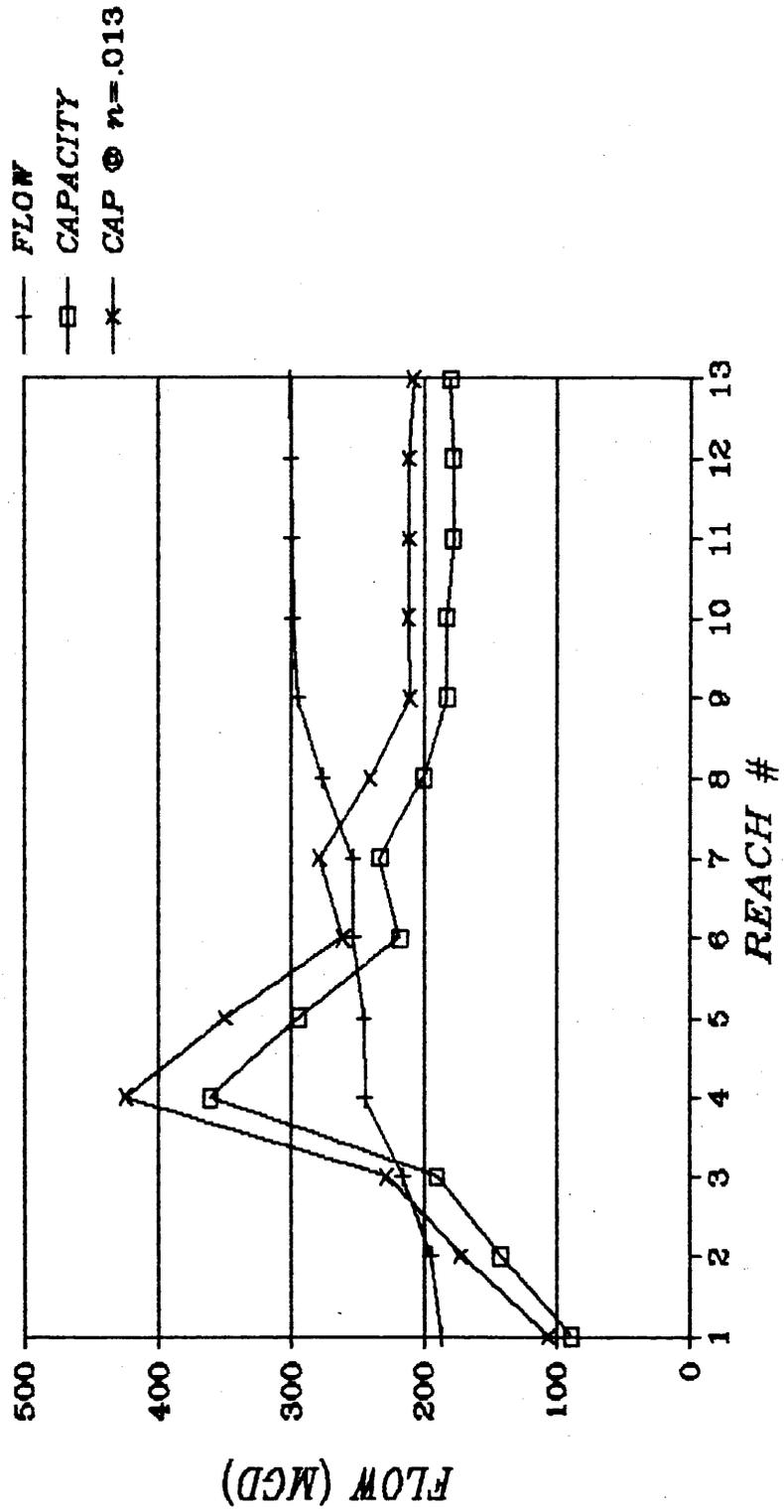
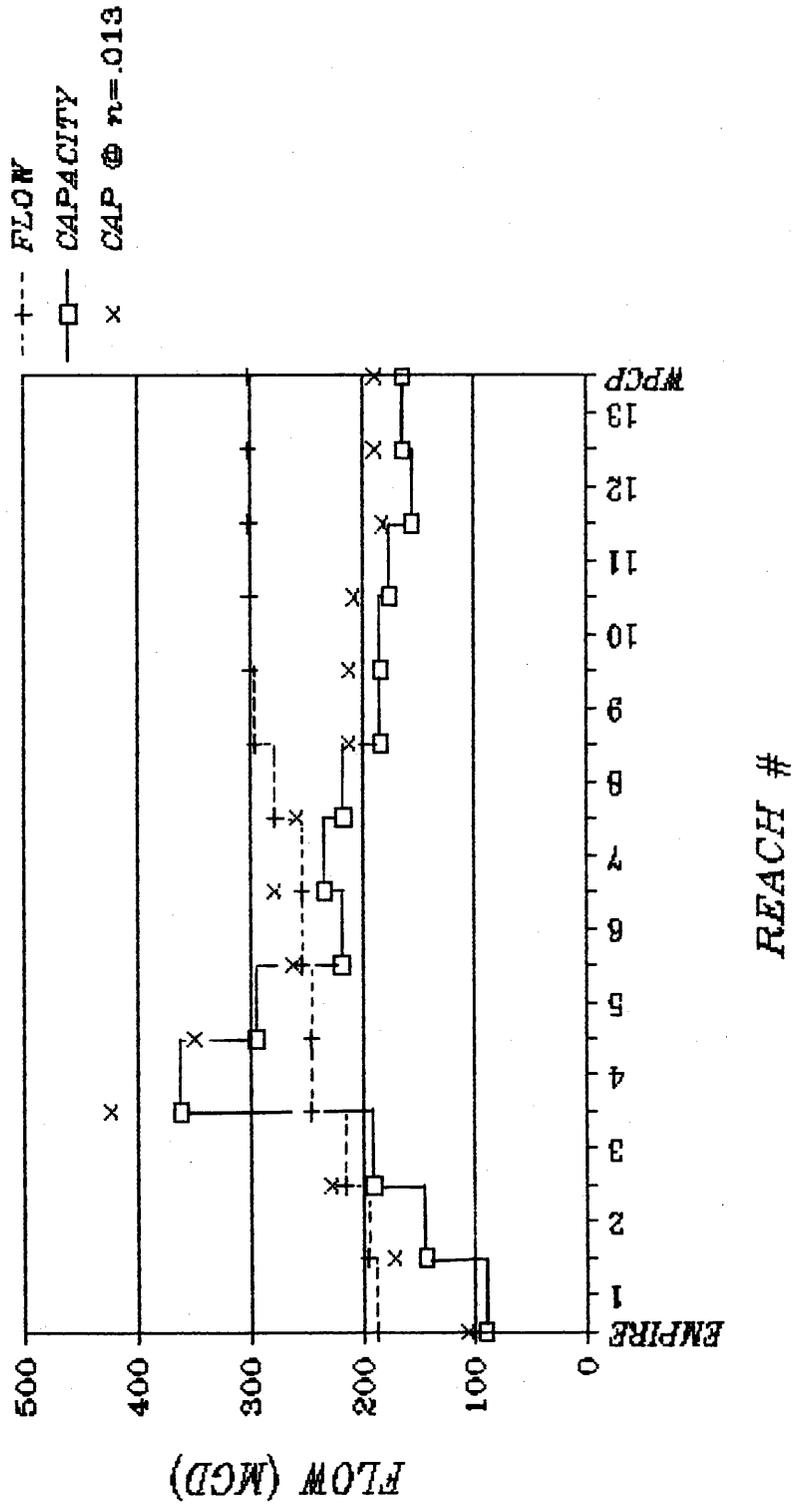


FIGURE 4-5 (REVISED)

# CITY OF SAN JOSE INTERCEPTOR SYSTEM CAPACITY vs FLOW



REACH #



**EXHIBIT I**













1: A :: B :: C :: D :: E :: F :: G :: H :: I :: J :: K :: L :: M :: N :: O :: P :: Q :: R :: S :: T :: U :: V :: W ::  
 1:12/05/85 SCHWENZ  
 2: CITY OF SAN JOSE  
 3: PRELIMINARY DESIGN OF A FOURTH MAJOR INTERCEPTOR  
 4: MAJOR INTERCEPTOR HYDRAULIC ANALYSIS  
 5: 60-INCH BRICK/60-INCH RCP  
 6: PARALLEL TO 84-INCH FROM BAYSHORE TO WPCP  
 7: WEST INTERCEPTOR SURCHARGED TO TRIMBLE

PIPE FLOWING FULL

8:	PIPE FLOWING FULL										PIPE FLOWING PARTIALLY FULL									
9:	STRUCTURE/	PIPELINE	PIPE	D/B=		ANGLE=		RADIANS		ANGLE=		RADIANS		ANGLE=		RADIANS				
10:	MANHOLE	REACH	DIAMETER	INVERT	LENGTH	SLOPE	MARKING	R(f(0))	A(f(0))	V(f(0))	Q(f(0))	R(f(0))	A(f(0))	V(f(0))	Q(f(0))	R(f(0))	A(f(0))			
11:	NAME	NAME	FT	FT	FT/FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT			
12:	NAME	NAME	FT ELEVATION	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT			
13:	BAR SCREEN	INLET CHAN	3.00																	
14:	RCP INV.	-2.8	1	5.00	18,443.00	.00085	.0130	1.25	19.63	3.86	48.94									
15:	STRUCT C																			
16:																				
17:	STRUCT C																			
18:																				
19:	W 26		33	4.50	1,215.00	.00082	.0130	1.13	15.90	3.55	36.46	1.36	12.80	4.02	33.25	1.31	11.26			
20:																				
21:	W 27		34	4.50	791.00	.00159	.0130	1.13	15.90	4.93	50.73	1.36	12.80	5.59	46.26	1.31	11.26			
22:																				
23:	W 28		35	4.50	890.00	.00149	.0130	1.13	15.90	4.78	49.13	1.36	12.80	5.42	44.80	1.31	11.26			
24:																				
25:	STRUCT A		36	4.50	982.00	.00156	.0130	1.13	15.90	4.88	50.17	1.36	12.80	5.53	45.75	1.31	11.26			
26:																				
27:	W 29		38	4.50	656.00	.00232	.0130	1.13	15.90	5.95	61.18	1.36	12.80	6.75	55.79	1.31	11.26			
28:																				
29:	W 30		39	4.50	664.00	.00137	.0130	1.13	15.90	4.58	47.05	1.36	12.80	5.19	42.91	1.31	11.26			
30:																				
31:	W 31		40	4.50	40.00	.00525	.0130	1.13	15.90	8.96	92.09	1.36	12.80	10.15	83.98	1.31	11.26			
32:																				
33:	W 32		41	4.50	598.00	.00176	.0130	1.13	15.90	5.18	53.26	1.36	12.80	5.87	48.57	1.31	11.26			
34:																				
35:	W 33		42	4.50	68.00	.00338	.0130	1.13	15.90	7.19	73.92	1.36	12.80	8.15	67.40	1.31	11.26			
36:																				
37:	W 34		43	4.50	524.00	.00260	.0130	1.13	15.90	6.30	64.75	1.36	12.80	7.14	59.05	1.31	11.26			
38:																				
39:	W 35		44	4.50	390.00	.00067	.0130	1.13	15.90	3.19	32.82	1.36	12.80	3.62	29.93	1.31	11.26			
40:																				
41:	W 36		45	4.50	159.00	.00346	.0130	1.13	15.90	7.27	74.75	1.36	12.80	8.24	68.17	1.31	11.26			
42:																				
43:	W 37		46	4.50	297.00	.00128	.0130	1.13	15.90	4.42	45.46	1.36	12.80	5.01	41.46	1.31	11.26			
44:																				
45:	STRUCT B		47	4.50	851.00	.00090	.0130	1.13	15.90	3.72	38.23	1.36	12.80	4.22	34.86	1.31	11.26			
46:																				
47:	W 38		48	4.50	405.00	.00378	.0130	1.13	15.90	7.40	76.12	1.36	12.80	8.61	71.24	1.31	11.26			
48:																				
49:	W 39		49	4.50	680.00	.00128	.0130	1.13	15.90	4.42	45.46	1.36	12.80	5.01	41.46	1.31	11.26			
50:																				
51:	W 40		50	4.50	345.00	.00214	.0130	1.13	15.90	5.73	58.86	1.36	12.80	6.49	53.68	1.31	11.26			
52:																				
53:	W 41		51	4.50	268.00	.00888	.0130	1.13	15.90	11.65	119.77	1.36	12.80	13.21	109.22	1.31	11.26			
54:																				
55:	W 42		52	4.50	113.00	.00124	.0130	1.13	15.90	ERROR	ERROR	1.36	12.80	ERROR	ERROR	1.31	11.26			
56:																				
57:	W 43		53	4.50	1,012.00	.00320	.0130	1.13	15.90	ERROR	ERROR	1.36	12.80	ERROR	ERROR	1.31	11.26			
58:																				
59:	W 44		54	4.50	362.00	.00392	.0130	1.00	12.57	7.16	58.15	1.21	10.11	8.11	53.02	1.16	8.90			
60:																				
61:	W 45		55	4.00	621.272.0 FT	.00392	.0130	1.00	12.57	7.16	58.15	1.21	10.11	8.11	53.02	1.16	8.90			
62:																				

GRAVITY FLOW

8:	GRAVITY FLOW										GRAVITY FLOW									
9:	STRUCTURE/	PIPELINE	PIPE	D/B=		ANGLE=		RADIANS		ANGLE=		RADIANS		ANGLE=		RADIANS				
10:	MANHOLE	REACH	DIAMETER	INVERT	LENGTH	SLOPE	MARKING	R(f(0))	A(f(0))	V(f(0))	Q(f(0))	R(f(0))	A(f(0))	V(f(0))	Q(f(0))	R(f(0))	A(f(0))			
11:	NAME	NAME	FT	FT	FT/FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT			
12:	NAME	NAME	FT ELEVATION	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT			
13:	BAR SCREEN	INLET CHAN	3.00																	
14:	RCP INV.	-2.8	1	5.00	18,443.00	.00085	.0130	1.25	19.63	3.86	48.94									
15:	STRUCT C																			
16:																				
17:	STRUCT C																			
18:																				
19:	W 26		33	4.50	1,215.00	.00082	.0130	1.13	15.90	3.55	36.46	1.36	12.80	4.02	33.25	1.31	11.26			
20:																				
21:	W 27		34	4.50	791.00	.00159	.0130	1.13	15.90	4.93	50.73	1.36	12.80	5.59	46.26	1.31	11.26			
22:																				
23:	W 28		35	4.50	890.00	.00149	.0130	1.13	15.90	4.78	49.13	1.36	12.80	5.42	44.80	1.31	11.26			
24:																				
25:	STRUCT A		36	4.50	982.00	.00156	.0130	1.13	15.90	4.88	50.17	1.36	12.80	5.53	45.75	1.31	11.26			
26:																				
27:	W 29		38	4.50	656.00	.00232	.0130	1.13	15.90	5.95	61.18	1.36	12.80	6.75	55.79	1.31	11.26			
28:																				
29:	W 30		39	4.50	664.00	.00137	.0130	1.13	15.90	4.58	47.05	1.36	12.80	5.19	42.91	1.31	11.26			
30:																				
31:	W 31		40	4.50	40.00	.00525	.0130	1.13	15.90	8.96	92.09	1.36	12.80	10.15	83.98	1.31	11.26			
32:																				
33:	W 32		41	4.50	598.00	.00176	.0130	1.13	15.90	5.18	53.26	1.36	12.80	5.87	48.57	1.31	11.26			
34:																				
35:	W 33		42	4.50	68.00	.00338	.0130	1.13	15.90	7.19	73.92	1.36	12.80	8.15	67.40	1.31	11.26			
36:																				
37:	W 34		43	4.50	524.00	.00260	.0130	1.13	15.90	6.30	64.75	1.36	12.80	7.14	59.05	1.31	11.26			
38:																				
39:	W 35		44	4.50	390.00	.00067	.0130	1.13	15.90	3.19	32.82	1.36	12.80	3.62	29.93	1.31	11.26			
40:																				
41:	W 36		45	4.5																



1: A : B : C : D : E : F : G : H : I : J : K : L : M : N : O : P : Q : R : S : T : U : V : W : X : Y : Z :  
 1:12/05/85 SJ84SUR15  
 2: CITY OF SAN JOSE  
 3: PRELIMINARY DESIGN OF A FOURTH MAJOR INTERCEPTOR  
 4: MAJOR INTERCEPTOR HYDRAULIC ANALYSIS  
 5: 78-INCH SURCHARGED TRIMBLE TO WPCP  
 6: 1.8 MANNING'S n=0.015

PIPE FLOWING PARTIALLY FULL

STATION	STRUCTURE / PIPELINE	PIPE	INVERT	LENGTH	SLOPE	R (full)	A (full)	V (full)	Q (full)	ANGLE	d/D	RADIANS	DEGREES	ANGLE	d/D	RADIANS	DEGREES
13: INLET STRUCT			4.00														
14: INV. EL. -9.57	1	7.00	18.722.00	.00078	.0150	1.75	38.48	4.02	99.89	SURCHARGED							
15: STRUCT C			18.59														
16: INV. EL. 9.3	18	6.50	3.876.00	.00078	.0150	1.63	33.18	3.82	81.97	SURCHARGED							
17: STRUCT A			21.61														

GRAVITY FLOW

STATION	STRUCTURE	PIPELINE	PIPE	INVERT	LENGTH	SLOPE	R (full)	A (full)	V (full)	Q (full)	ANGLE	d/D	RADIANS	DEGREES	ANGLE	d/D	RADIANS	DEGREES			
19: STRUCT A			15.42																		
20:																					
21: MH 17	23	6.50	1,303.00	.00148	.0150	1.63	33.18	5.27	113.02	1.96	26.70	5.97	103.07	1.89	23.50	5.83	88.60	1.63	16.59	5.27	56.51
22:																					
23: MH 18	24	6.50	804.00	.00164	.0150	1.63	33.18	5.55	118.99	1.96	26.70	6.29	108.51	1.89	23.50	6.14	93.28	1.63	16.59	5.55	59.50
24:																					
25: MH 19	25	6.50	441.00	.00193	.0150	1.63	33.18	6.01	128.93	1.96	26.70	6.81	117.57	1.89	23.50	6.65	101.07	1.63	16.59	6.01	64.47
26:																					
27: MH 20	26	6.50	865.00	.00169	.0150	1.63	33.18	5.63	126.65	1.96	26.70	6.38	110.02	1.89	23.50	6.23	94.58	1.63	16.59	5.63	60.33
28:																					
29: STRUCT B	27	6.50	852.00	.00197	.0150	1.63	33.18	6.08	130.41	1.96	26.70	6.89	118.92	1.89	23.50	6.73	102.23	1.63	16.59	6.08	65.20
30:																					
31: MH 21	28	7.50	359.00	.00217	.0150	1.88	44.18	7.02	200.49	2.26	35.54	7.96	182.83	2.18	31.29	7.77	157.17	1.88	22.09	7.02	100.25
32:																					
33: MH 22	29	7.50	1,215.00	.00167	.0150	1.88	44.18	6.16	175.81	2.26	35.54	6.98	160.32	2.18	31.29	6.82	137.83	1.88	22.09	6.16	87.91
34:																					
35: MH 23	30	7.50	1,274.00	.00203	.0150	1.88	44.18	6.79	193.93	2.26	35.54	7.70	176.85	2.18	31.29	7.52	152.04	1.88	22.09	7.70	96.97
36:																					
37: MH 24	31	7.00	773.00	.00493	.0150	1.75	38.48	10.10	251.22	2.11	30.96	11.45	229.09	2.04	27.26	11.18	196.95	1.75	19.24	10.10	125.61
38:																					
39: STRUCT C	32	7.00	938.00	.00544	.0150	1.75	38.48	10.61	263.86	2.11	30.96	12.02	240.61	2.04	27.26	11.74	206.85	1.75	19.24	10.61	131.93
40: 363.0 FT																					
41: STRUCT B	33	6.00	363.00	.00140	.0150	1.50	28.27	4.87	88.92	1.81	22.75	5.52	81.08	1.75	20.03	5.39	69.71	1.50	14.14	4.87	44.46
42: 486.0 FT																					
43: MH 25	34	6.00	686.00	.00152	.0150	1.50	28.27	5.05	92.37	1.81	22.75	5.73	84.23	1.75	20.03	5.59	72.41	1.50	14.14	5.05	46.18
44:																					
45: MH 26	35	6.00	47.00	.00149	.0150	1.50	28.27	5.01	91.55	1.81	22.75	5.68	83.48	1.75	20.03	5.55	71.77	1.50	14.14	5.01	45.78
46:																					
47: MH 27	36	6.00	1,028.00	.00151	.0150	1.50	28.27	5.04	92.12	1.81	22.75	5.71	84.00	1.75	20.03	5.58	72.21	1.50	14.14	5.04	46.06
48:																					
49: MH 28	37	5.50	759.00	.00302	.0150	1.38	23.76	6.73	103.32	1.66	19.11	7.63	94.22	1.60	16.83	7.45	81.00	1.38	11.88	7.63	51.66
50: 597.0 FT																					
51: GRADE BREAK	38	5.50	597.00	.00219	.0150	1.38	23.76	5.74	88.11	1.66	19.11	6.50	80.35	1.60	16.83	6.35	69.08	1.38	11.88	6.50	44.06
52: 296.0 FT																					
53: MH 29	39	5.50	296.00	.00547	.0150	1.38	23.76	9.06	139.16	1.66	19.11	10.27	126.90	1.60	16.83	10.03	109.09	1.38	11.88	10.27	69.58
54: 912.0 FT																					
55: STRUCT E	40	5.50	912.00	.00145	.0150	1.38	23.76	4.66	71.56	1.66	19.11	5.28	65.26	1.60	16.83	5.16	56.10	1.38	11.88	5.28	35.78
56: 903.0 FT																					
57: MH 30	41	5.50	903.00	.00127	.0150	1.38	23.76	4.37	67.13	1.66	19.11	4.96	61.21	1.60	16.83	4.84	52.62	1.38	11.88	4.96	33.56
58:																					
59: MH 31	42	5.50	462.00	.00115	.0150	1.38	23.76	4.15	63.71	1.66	19.11	4.70	58.10	1.60	16.83	4.59	49.95	1.38	11.88	4.70	31.86
60:																					
61: STRUCT J	43	5.50	442.00	.00102	.0150	1.38	23.76	3.91	60.02	1.66	19.11	4.43	54.73	1.60	16.83	4.33	47.05	1.38	11.88	4.43	30.01
62:																					
63:																					





# APPENDIX

# D



**TECHNICAL MEMORANDUM NO. 4A**

**CITY OF SAN JOSE**

**SUBJECT:** Interceptor Hydraulics

**PROJECT:** Major Interceptor Sewer Predesign Report

**DATE:** December 23, 1985

File: 1320.0040

**PREPARED BY:** John R. Burris  
V. Alvin Nembhard

**INTRODUCTION**

In Technical Memorandum No. 4, the existing interceptors were each analyzed to determine their individual gravity and surcharged flow capacities under the best of conditions, without regard for flow splitting, pipeline deficiencies, cross-connections and other hydraulic constraints which impede the realization of design capacity. This TM considers the actual physical condition and configuration of the existing interceptor system to calculate the maximum effective capacity of the system to facilitate:

1. Sizing of future interceptor facilities based on the projected ultimate peak wet weather flow (PWWF).
2. Recommendations concerning rehabilitation and/or abandonment of some existing facilities.

The reader should bear in mind that this memorandum is technical in nature and while the order of presentation may seem illogical, the material is presented in the order dictated by the order in which the calculations were done. Due to the configuration of the system, hydraulically constricted portions of the system were analysed first to determine what actions must be taken upstream and what the actual downstream flow conditions are.

The West and East Interceptors have been profiled from the Bayshore south to Commercial for the purposes of the TM to visualize the significant problem

areas along those reaches. The West and East Interceptor profiles are shown in Figure 4A-1 and 4A-2 respectively. A plan of the entire interceptor system is attached as Figure 4A-3. A schematic representation of the existing system showing structure profiles is shown in Figure 4A-4 (elevations in parentheses are from the recent survey). Please refer to these figures as necessary throughout this TM.

Gravity flow capacities for the various reaches of the existing interceptors were taken from the spreadsheet printouts of TM No. 4.

The friction factors used in the analysis of the existing and future facilities are as follows:

	<u>Manning's n</u>	<u>Hazen-William's C</u>
Brick	0.017	
RCP	0.015	105
T-Lock RCP	0.011	130
Insituform	0.011	130

The ultimate projected peak wet weather flows (PWWF) utilized in the analysis were furnished to JMM by the City. Of the total projected flow to the WPCP (382.8 mgd) 301.3 mgd is conveyed by the interceptors and 81.5 mgd arrives by force mains directly into the WPCP. It is assumed that the existing plant will treat 271 mgd (the design peak capacity) and the remainder (111.8 mgd) will be diverted from the East, Large, and New Interceptors to a proposed plant expansion for treatment.

#### **WEST INTERCEPTOR**

The West Interceptor, from Structure A north to the WPCP, has a gravity capacity of 20 mgd. This low capacity is due to the reach of pipe between manholes W5 and W2 which has minimal slope ( $S = 0.00019$ , Dia. = 60-inch). The pipeline age is 60 years, however, it was lined 21 years ago and therefore it is

assumed that it can withstand a slight surcharge. The minimum upstream gravity capacity is 32.9 mgd (Structure A to W12); it is therefore desirable to assume a surcharge sufficient to provide 32.9 mgd capacity in the reach from MH-W5 to W2. Under these conditions, the water surface (W.S.) at Structure A is 10.79 ft. (0.19 feet above the pipe crown).

The West Interceptor has experienced significant settlement between Commercial and Structure B (at Bayshore), resulting in some reaches below design capacity, some above, and some with adverse slopes. It is important that this section of the interceptors operate at or near design capacity to avoid the necessity of constructing a new sewer across the Bayshore. Flow enhancement in this section of the West Interceptor can be achieved in one of two ways:

1. Surcharge the low capacity reaches.
2. Rehabilitation of portions of the pipe.

The design capacity for the West Interceptor from Burton to Structure B is 46.5 mgd. Under the existing conditions, in order to carry the design flow, the pipe would have to be surcharged to 3.76 feet above the crown at Burton. This is obviously not desirable, as it would adversely affect the 48-inch and 54-inch connections at Burton.

The maximum capacity of the West Interceptor from Burton to Structure B is therefore limited to the flow at which the water surface is at the pipe crown at MH-W42 and does not exceed the crown at Structure N (Burton and 4th Streets) as follows:

1. W.S. at MH-W42 = 35.92
2. Maximum W.S. at Structure N = 42.26

Solution by trial yields a maximum capacity of 36 mgd in the West Interceptor between Structure N at Burton and Structure B at Bayshore. Rehabilitation of portions of the line from Structure N to Structure B (Structure N to W42 and W39 to W38; 3,823 feet) would provide a surcharged capacity of approximately 49 mgd.

From Structure B to Structure A open channel flow capacity is limited to 28.4 mgd, however, because the reach immediately upstream from Structure B has excess capacity (full capacity = 67.7 mgd), it appears that the 36 mgd can be carried by surcharging between Structures B and A.

#### **Conclusions Regarding West Interceptor**

1. Maximum Capacity is 36 mgd.
2. In order to operate at maximum capacity, cross-connections must be eliminated at Structures B (Bayshore), A (McGier Lane), and C (Trimble).
3. Because the West Interceptor capacity is limited to 36 mgd, and the projected PWWF is 245.2 mgd, the required capacity for both the East Interceptor and the Large Interceptor is a total of 209.2 mgd ( $245.2 - 36.0 = 209.2$ ), south of Bayshore.

#### **EAST INTERCEPTOR SOUTH OF BAYSHORE**

The capacity of the East Interceptor south of the Bayshore Freeway between Structure B and MH E52 (at Commercial) is severely limited by the reach of pipe between E46 and E49. This 962-foot reach of interceptor has an adverse slope and therefore no gravity flow capacity.

As noted previously, the required capacity for the East and Large Interceptors, south of the Bayshore, is 209.2 mgd. The full capacity of Large Interceptor in

this reach is 175.81 mgd. Therefore, the required capacity in the East Interceptor is 33.39 mgd ( $209.2 - 175.81 = 33.39$  mgd). To obtain this capacity, the interceptor will require surcharging. The limit of surcharge is the crown of the 72-inch cross pipe (Large Interceptor) at Structure D (5th and Commercial); that water surface elevation is 44.56. The resultant water surface slope from Commercial to Structure B is 0.00067. Given the condition of the existing pipe (Brick at  $n = 0.017$ ), the flow capacity is 33.31 mgd. This capacity is close to what is required, however, there is no factor of safety and the condition and life expectancy of this reach of pipe cannot be estimated. Rehabilitation of the interceptor from MH-E46 to E52 (2201 feet) would increase its capacity to 51.48 mgd (at  $n = 0.011$ ). Replacement of the same reach would provide a capacity of 68.90 mgd.

#### **REQUIRED CAPACITY NORTH OF BAYSHORE**

At Structure B (Bayshore) flow in the East Interceptor is transferred to the Large Interceptor via the cross connection. The flow in the East Interceptor from Structure B to Structure C at Trimble is equal to the flow inputs along that reach (20.9 mgd at Brokaw and 3.6 mgd north of C). The cross connection at Structure A, north of Brokaw, must be closed off to avoid further flow diversion.

The required capacity of the Large and New Interceptors is equal to the total PWWF less the flow carried by the East and West Interceptors. Those flows are 38 mgd and 20.9 mgd, respectively. The projected PWWF is 276.5 mgd; therefore the combined capacity of the existing Large and the New Interceptors should be 217.6 mgd ( $276.5 - 38 - 20.9 = 217.6$ ) from Structure B to C at Trimble. The capacity of the Large Interceptor from B to C is 112 mgd. Therefore, the required capacity of the new interceptor in that reach is 105.6 mgd ( $217.6 - 112 = 105.6$ ).

At Structure C (Trimble) the West Interceptor cross-connection should be blocked off to avoid diversion of its flow and to allow it to carry its capacity. The flow in the West Interceptor from Structure C north will then be 46 mgd,

which is the full capacity. There is another input (3.6 mgd) north of Structure B which should be diverted to the Large Interceptor.

Because of construction constraints, the East Interceptor cannot be isolated at Structure C. Therefore, the required capacity of the East, Large, and New Interceptors is 249.3 mgd ( $217.6 + 20.9 + 3.6 + 7.2 = 249.3$ ) from Structure C to B.

Assuming that the cross-connections at Structures B and A remain, and that the Large and New Interceptors are submerged, the total flow is shared by the three existing interceptors and the New Interceptor based on water surface elevation. The total flow from Structure B to the WPCP is 301.3 ( $46 + 249.3 + 3.6 + 2.4 = 301.3$ ; 3.6 mgd and 2.4 mgd are inputs between B and A).

#### **NEW INTERCEPTOR - BAYSHORE TO WPCP**

The size of the New Interceptor is affected by the water surface elevation in the Inlet Control Structure at the WPCP. That water surface is affected by the total flow and headloss through the 108-inch line between the Inlet Control Structure and the Bar Screens. Total flow to the plant from all sources will be 271 mgd (the existing plant capacity) the remainder of flows will be diverted from the interceptors upstream of the plant to the proposed plant expansion. Flows entering the WPCP directly at the bar screens will not be diverted, those include:

- |    |                                  |             |     |
|----|----------------------------------|-------------|-----|
| 1. | West Interceptor                 | 32.9        | mgd |
| 2. | Alviso, Santa Clara, Lamplighter | <u>62.6</u> | mgd |
|    |                                  | 95.5        | mgd |

The balance of the flow to the WPCP enters at the Inlet Control Structure and equals 175.5 mgd ( $271 - 95.5 = 175.5$ ). This flow is made up of flows from Milpitas (18.9 mgd), the East Interceptor (surcharged capacity = 40 mgd) and the flows in the Large and New Interceptors. Therefore the flow in the Large and New

Interceptors between the plant expansion diversion structure and the Inlet Control Structure is 116.6 mgd ( $175.5 - 18.9 - 40 = 116.6$ ). From Structure A to the plant expansion diversion structure the flow in the large and new interceptors is the total flow less the flows of Milpitas, Alviso, Santa Clara, Lamplighter, and the East and West Interceptors. This flow is 228.4 mgd ( $382.8 - 18.9 - 62.6 - 40 - 32.9 = 228.4$ ).

Based on CH<sub>2</sub>M-Hill's hydraulic profile, the water surface at the Bar Screen Inlet Channel is 4.87 ft. at the peak flow of 271 mgd. Assuming the Inlet Control Structure gates are fully open, the calculated water surface at the Inlet Control Structure is 5.77 ft. The water surface upstream at Structure A is 10.79 ft. and the resulting water surface slope yields a capacity of 81.4 mgd in the existing Large Interceptor. Therefore, the capacity necessary in the New Interceptor between the plant expansion diversion structure and the Inlet Control Structure is 35.2 mgd ( $116.6 - 81.4 = 35.2$ ). This quantity of flow can be carried in a 48-inch pipe, however, the City requires redundant capacity in the lower, submerged reaches of the interceptors to facilitate bypass for inspection and maintenance. Therefore, the New Interceptor should be 84-inch in this reach.

As noted previously, the flow in the Large and New Interceptors from Structure A to the plant expansion diversion structure is 228.4 mgd. The capacity in the existing Large Interceptor, based on the slope of the water surface, is 98.4 mgd. Therefore, the required capacity of the New Interceptor in this reach is 130 mgd ( $228.4 - 98.4 = 130$ ). The pipe size in this reach will be 90-inch.

Because of possible easement acquisition problems in the vicinity of Structure C, in our analysis of New Interceptor sizing, the reach from Structure C (at Trimble) to Structure A (at Hetch Hetchy) was evaluated under two sets of conditions:

1. East Interceptor abandoned between C and B due to easement acquisition problems.

2. East Interceptor remains in service; easement obtained.

The total flow to be transported from Structure C is 249.3 mgd (assuming the West Interceptor is isolated at C and is carrying 46 mgd). The existing Large Interceptor capacity in this reach is calculated to be 111.4 mgd. Therefore, if the East Interceptor is abandoned from C to B, the New Interceptor must carry 137.9 mgd. This will require the New Interceptor to be 90-inch.

If the East Interceptor is left in service, the flow split is based on the water surface elevation at Structure C (the southern limit of surcharge on the system; w.s. elevation = 16.3 = crown of the Large Interceptor). The East Interceptor has a full capacity at 33 mgd out of Structure C, however because of the water surface limitation, it will receive only 18.6 mgd. The remainder of the flow will be split proportionally (based on friction factor) between the existing Large Interceptor and the New Interceptor. Therefore the existing 84-inch interceptor will receive 103 mgd and the New Interceptor will carry 127.4 mgd. To facilitate this capacity the New Interceptor will be 84-inch.

Based on the above discussion, the difference between the two sets of conditions is the cost of a 90-inch interceptor and abandonment of the existing East Interceptor from Structure C to B versus the cost of an 84-inch interceptor and easement acquisition.

From Structure B (at Bayshore) to C (at Trimble) the existing interceptor system capacity is 171.9 mgd compared to the PWWF of 276.5 mgd. Therefore the New Interceptor between these points must be sized to handle 105 mgd. This capacity equates to a 72-inch interceptor.

#### **NEW INTERCEPTOR -SOUTH OF COMMERCIAL**

Analysis of the interceptors south of Commercial is made complex by the existing flow distribution in the system and the limited capacity of the existing East Interceptor (Brick). The East Interceptor has inputs far in excess of its capacity. Therefore, flow redistribution is necessary.

The East Interceptor is required to convey 67.9 mgd in the vicinity of 5th and Younger. The capacity between 5th and Empire and 5th and Younger is limited to 12.75 mgd north of Taylor between E65 and E66. It is assumed that this line will not be surcharged and also that rehabilitation is not a viable alternative to provide increased capacity. The East Interceptor therefore requires relief.

Inputs to the East Interceptor at 5th and Empire total 59.7 mgd. This flow could be diverted along Empire to 7th and Empire. There is an existing 54-inch RCP connection between these two points. Based on the recent survey, the slope of this line is 0.0011 with a calculated capacity of 36.5 mgd. The additional capacity required for this cross-tie would be 23.2 mgd ( $59.7 - 36.5 = 23.2$ ). This quantity of flow can be handled by a parallel 42-inch pipeline at the same slope. Alternatively, the existing 54-inch pipeline could be replaced by a new 60-inch connector pipeline. It should be noted that the existing 54-inch pipe was laid at a slope of 0.000139 which yields a design capacity of 13 mgd. It is therefore important that differential elevations between 5th and Empire and 7th and Empire be rechecked during detailed design to verify the slope, capacity, and size of the new pipe.

As a result of the diversion at 5th and Empire, the total input at 7th and Empire is 186.9 mgd ( $127.2 + 59.7 = 186.9$ ). The capacity of the existing 66-inch Large Interceptor north from 7th and Empire is 60 mgd. Therefore the required additional capacity in the New Interceptor is 126.9 mgd ( $186.9 - 60 = 126.9$ ). The existing slopes are as follows:

Empire to Taylor	0.0012 ft/ft.
Taylor to Mission	0.0014
Mission to Younger	0.0022
7th & Younger to C2	0.0017
C2 to C1	0.0011
C1 to C	0.0023

The resultant size of the New interceptor is 78-inch from 7th and Empire to Structure C at 4th and Commercial. The flow in the interceptor from 7th and Empire to 5th and Younger is 126.9 mgd. At 5th and Younger it will cross-connect with the existing Brick East Interceptor and cause a flow split based on the imposed water surface. As a result, the East Interceptor will accept 35.9 mgd. Upstream of this point on the East Interceptor inputs amount to 8.2 mgd, therefore, the total flow to be distributed is 135.1 mgd ( $126.9 + 8.2 = 135.1$ ). With 35.9 mgd forced into the East Interceptor, the remaining flow to be conveyed by the New Interceptor is 99.2 mgd ( $135.1 - 35.9 = 99.2$ ).

In the previous discussion of the West Interceptor, it was concluded that its capacity is limited to 36 mgd north of 4th and Burton. Total flow in this interceptor at 4th and Burton is 46.9 mgd, therefore there is 10.9 mgd ( $46.9 - 36 = 10.9$ ) to be carried by the existing 60-inch from 4th and Burton to the New Interceptor at C2. The required capacity of the New Interceptor between C2 and C1 at 4th and Commercial is then 110.1 mgd ( $99.2 + 10.9 = 110.1$ ). A 78-inch pipe will be sufficient for this flow.

During detailed design there are several factors which need to be given careful consideration by the City and the designer:

1. The capacity at the existing Large Interceptor north of 7th and Younger is increased from 60 to 92 mgd. If the New and Large Interceptors are joined at this point, the resulting size of the New Interceptor may be reduced between 7th and Younger and 4th and Commercial.
2. It may be necessary to adjust slopes during final design which could result in the New Interceptor being an 84-inch rather than 78-inch as sized in this preliminary design.
3. The City and the designer may wish to consider routing the New Interceptor along Empire from 7th to 5th, then along 5th to Younger,

thereby abandoning the Brick East Interceptor in the capacity limited reach between Empire and Younger.

4. If the East Interceptor is blocked off at Empire as outlined in this Technical Memorandum, it may be practical to replace it with a small local service trunk between Empire and Younger alleviating concern regarding its eventual failure or damage during construction.

**ABANDONMENT OF BRICK INTERCEPTOR**

The scope of work for this Preliminary Design Report included the determination of the interceptor system capacity assuming the Brick Interceptor is decommissioned. The East Interceptor is constructed of brick from 5th and Empire to the Montague Expressway where a cross-over occurs and the West Interceptor is known as the "Brick." The West Interceptor continues north as brick to a point approximately 160-feet north of Structure A at Hetch Hetchy where it changes to RCP. North of Hetch Hetchy, the West Interceptor diverges from Zonker Road and takes a cross-country alignment to the WPCP. This reach, while it is constructed of RCP and T-Lock RCP, has historically been termed the Brick Interceptor.

Based on the surcharge limitations and structure modifications discussed previously in this TM, following is a tabulation of the practical flow capacity limitations of the existing interceptors:

Structure A to WPCP Projected PWWF = 301.3 mgd

West ("Brick")	32.9 mgd
East	40.0
Large	81.4
Total Existing Capacity	154.3
Capacity w/o "Brick"	121.4

Structure B to Structure A Projected PWWF = 301.3 mgd

West	42.1 mgd
East ("Brick")	38.9
Large	80.0
Total Existing Capacity	161.0
Capacity w/o "Brick"	122.1

Structure C (Trimble) to Structure B Projected PWWF = 295.3 mgd

West	46.0 mgd
East ("Brick")	18.6
Large	103.0
Total Existing Capacity	167.6
Capacity w/o "Brick"	149.0

Structure B (Bayshore) to Structure C Projected PWWF = 276.5 mgd

West	38.0mgd
East ("Brick")	20.9
Large	113.0
Total Existing Capacity	171.9
Capacity w/o "Brick"	151.0

Commerical to Structure B Projected PWWF = 245.2 mgd

West	36.0 mgd
East ("Brick")	33.3
Large	175.8
Total Existing Capacity	245.1
Capacity w/o "Brick"	211.8

Younger to Commercial Projected PWWF = 216.1 mgd

West	36.0 mgd
East ("Brick")	12.7
Large	92.0
Total Existing Capacity	140.7
Capacity w/o "Brick"	128.0

Empire to Younger Projected PWWF = 194.9 mgd

East ("Brick")	14.5 mgd
Large	60.0
Total Existing Capacity	74.5
Capacity w/o "Brick"	60.0

**SUMMARY**

This Technical Memorandum has analyzed the practical hydraulics of the existing San Jose Interceptor System with due regard to its limitations and physical hydraulic constraints which prevent the system from operating at its peak theoretical capacity. In conjunction with this analysis, preliminary design of the facilities and improvements required for ultimate capacity has been completed. The following is a summary of the findings and recommendations resulting from this analysis.

**West Interceptor**

1. Gravity capacity north of Structure A at Hetch Hetchy is limited to 20 mgd. Surge is necessary to achieve 32.9 mgd capacity.
2. Capacity between Commercial and Structure B at Bayshore, as a result of significant settlement, is limited to 36 mgd (original design capacity is 46.5 mgd).

3. Gravity capacity between Structure B and Structure A is limited to 28.4 mgd and must be surcharged to carry 36 mgd.
4. Cross-connections along the West Interceptor should be eliminated at Structures B (Bayshore), A (McGier Lane), and C (Trimble).

#### **East Interceptor**

1. Capacity between Commercial and Structure B at Bayshore is severely limited and a portion must be rehabilitated (2,201 linear feet) and surcharged to achieve a capacity of 51.48 mgd.
2. Replacement at the same reach will achieve a capacity of 68.90 mgd.
3. The required capacity is 33.39 mgd.
4. The cross-connection at Structure A, north of Brokaw, should be eliminated to avoid flow diversion.

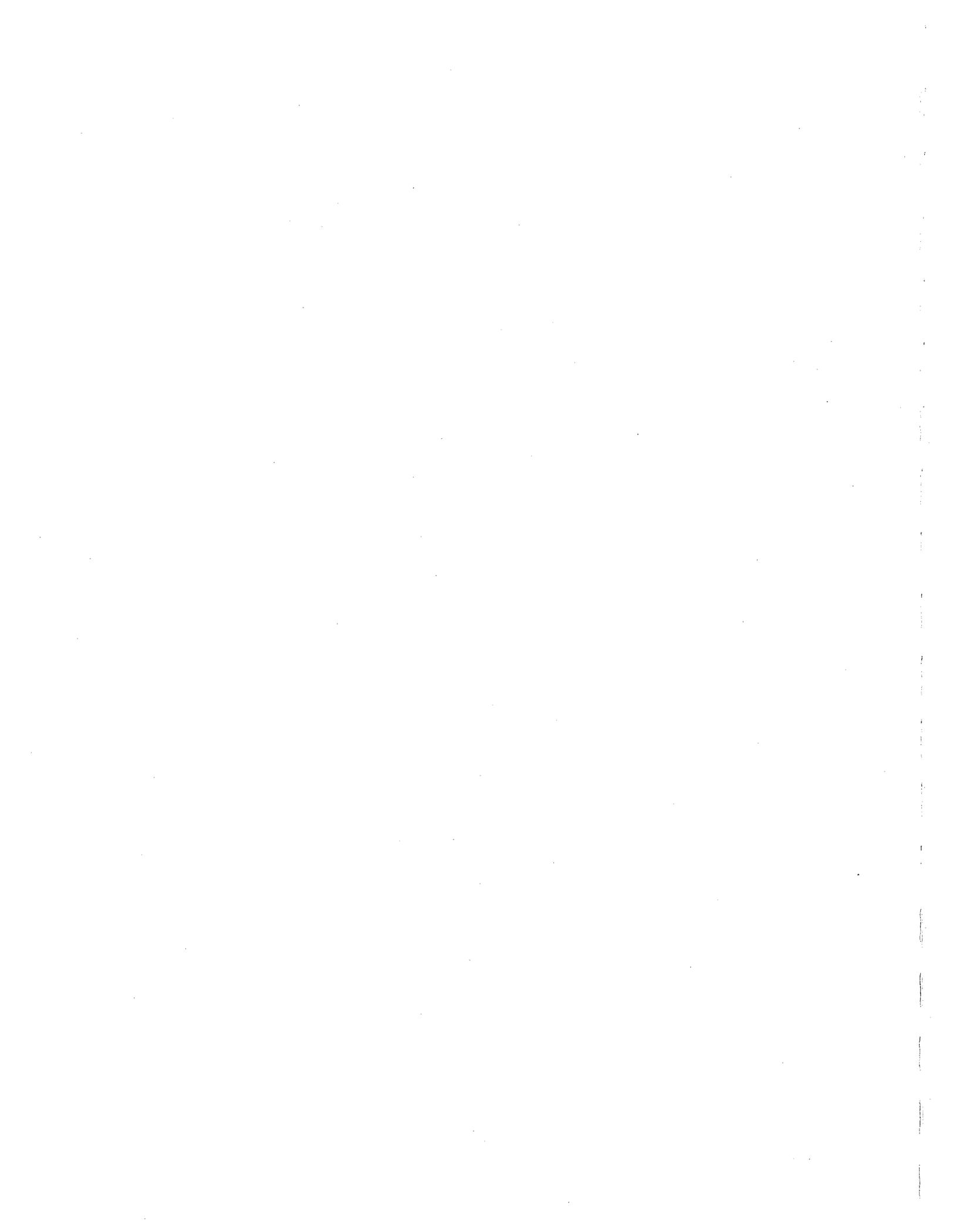
#### **New Interceptor: Bayshore to WPCP**

1. New Interceptor size is:
  - a. Plant Expansion Diversion Structure to WPCP:
    - 84-inch; 4,200 feet
  - b. Structure at Hetch Hetchy to Plant Expansion Diversion Structure:
    - 90-inch; 5,690 feet
  - c. Structure C at Trimble to Structure A at Hetch Hetchy:
    - (i) East Interceptor abandoned at C

- C to B - 90 inch; 2,888 feet
  - B to A - 84-inch; 5,939 feet
- (ii) East Interceptor remains in service:
- C to A - 84-inch; 8,827 feet
- d. Structure B at Bayshore to Structure C at Trimble:
- 72-inch; 8,141 feet

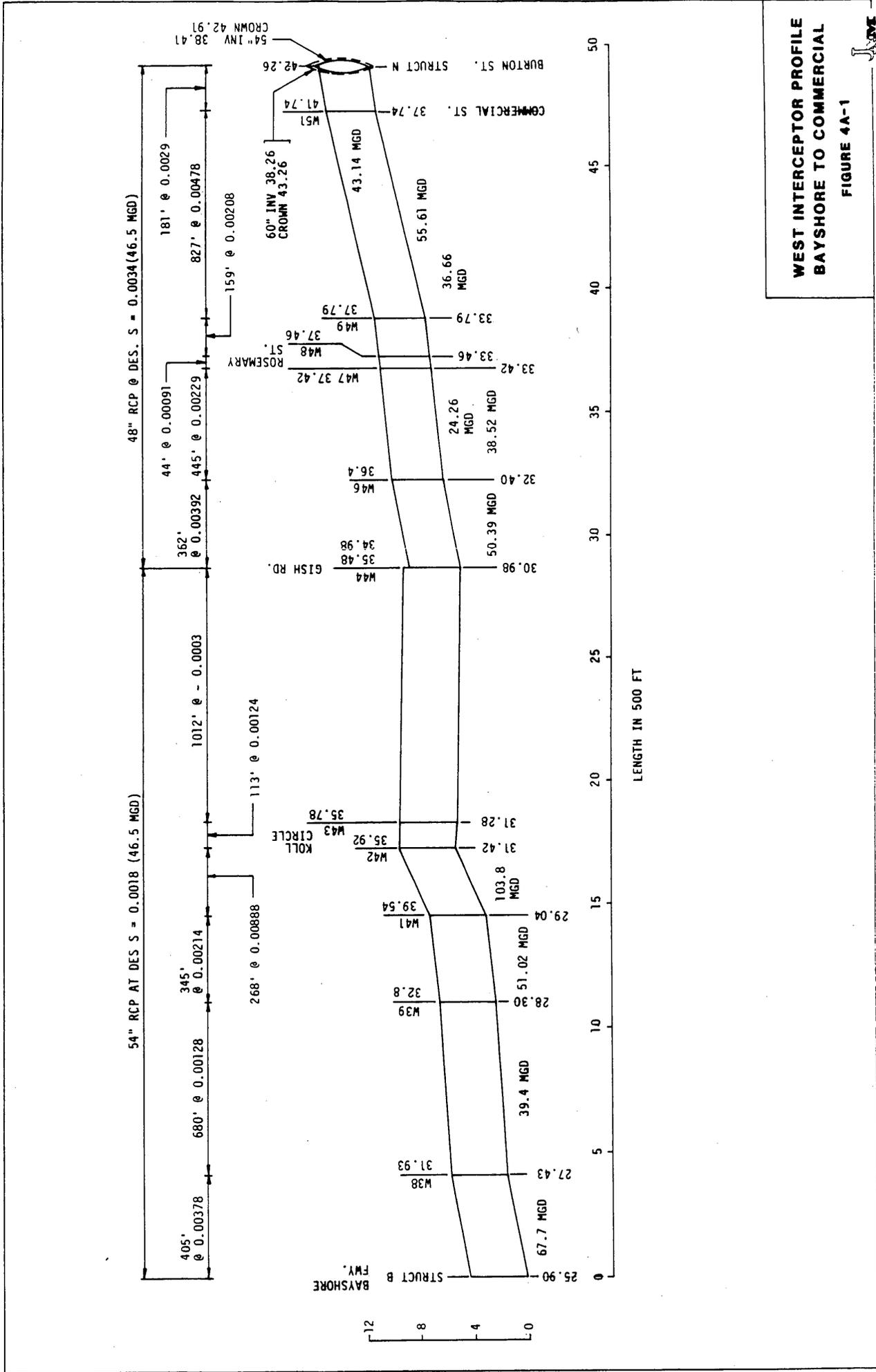
**New Interceptor: South of Bayshore**

1. 7th and Empire to 4th and Commercial:
  - 78-inch; approximately 7,190 feet
2. East Interceptor is severely capacity limited (12.75 mgd) along 5th between Empire and Younger.
3. Inputs to East Interceptor should be diverted from 5th and Empire to 7th and Empire.
4. Existing 54-inch along Empire between 5th and 7th should be paralleled with a 42-inch pipe or replaced with a 60-inch pipe to facilitate diversion; 712 feet.

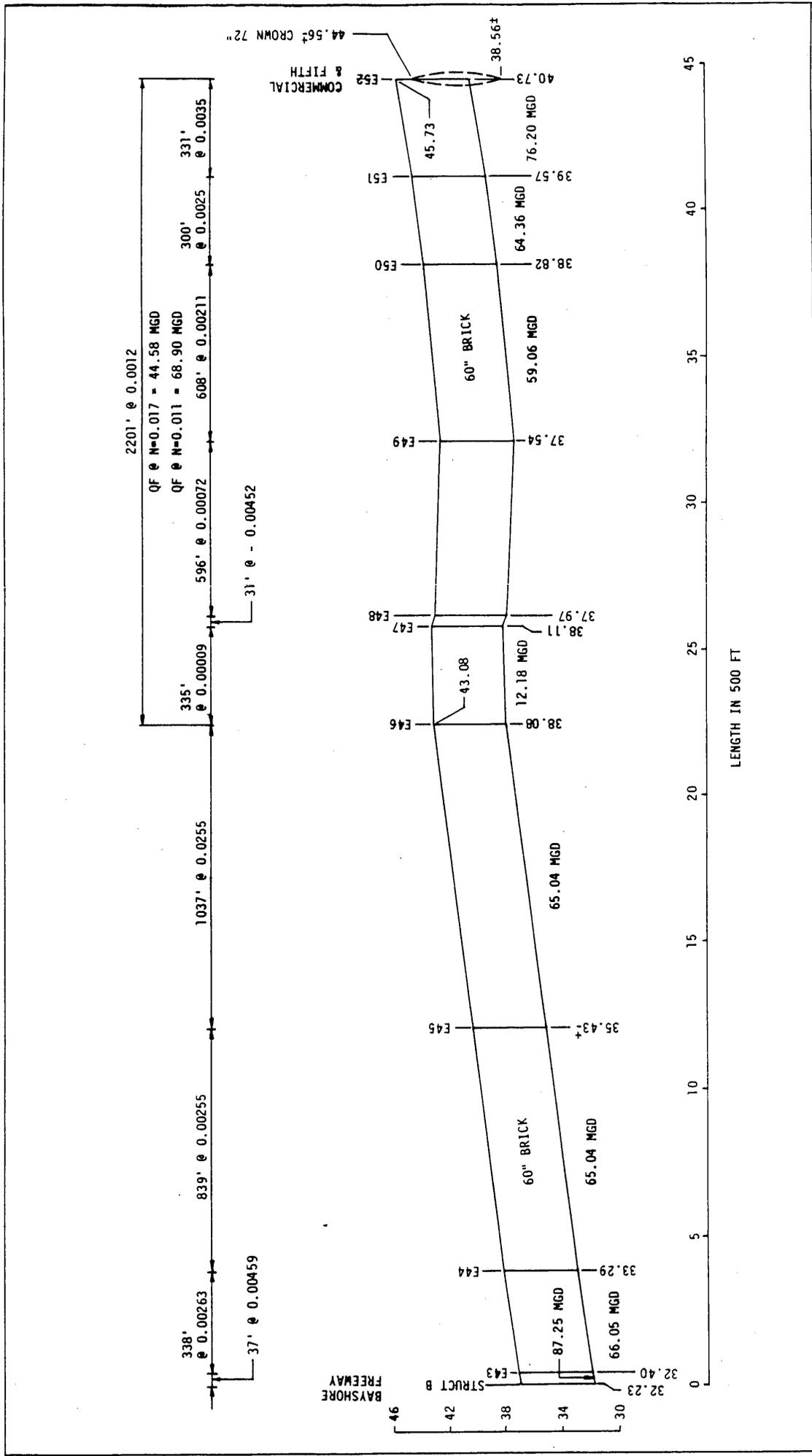


**WEST INTERCEPTOR PROFILE  
BAYSHORE TO COMMERCIAL**

**FIGURE 4A-1**

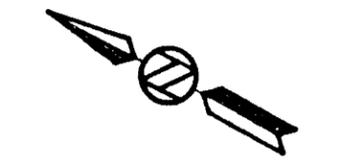
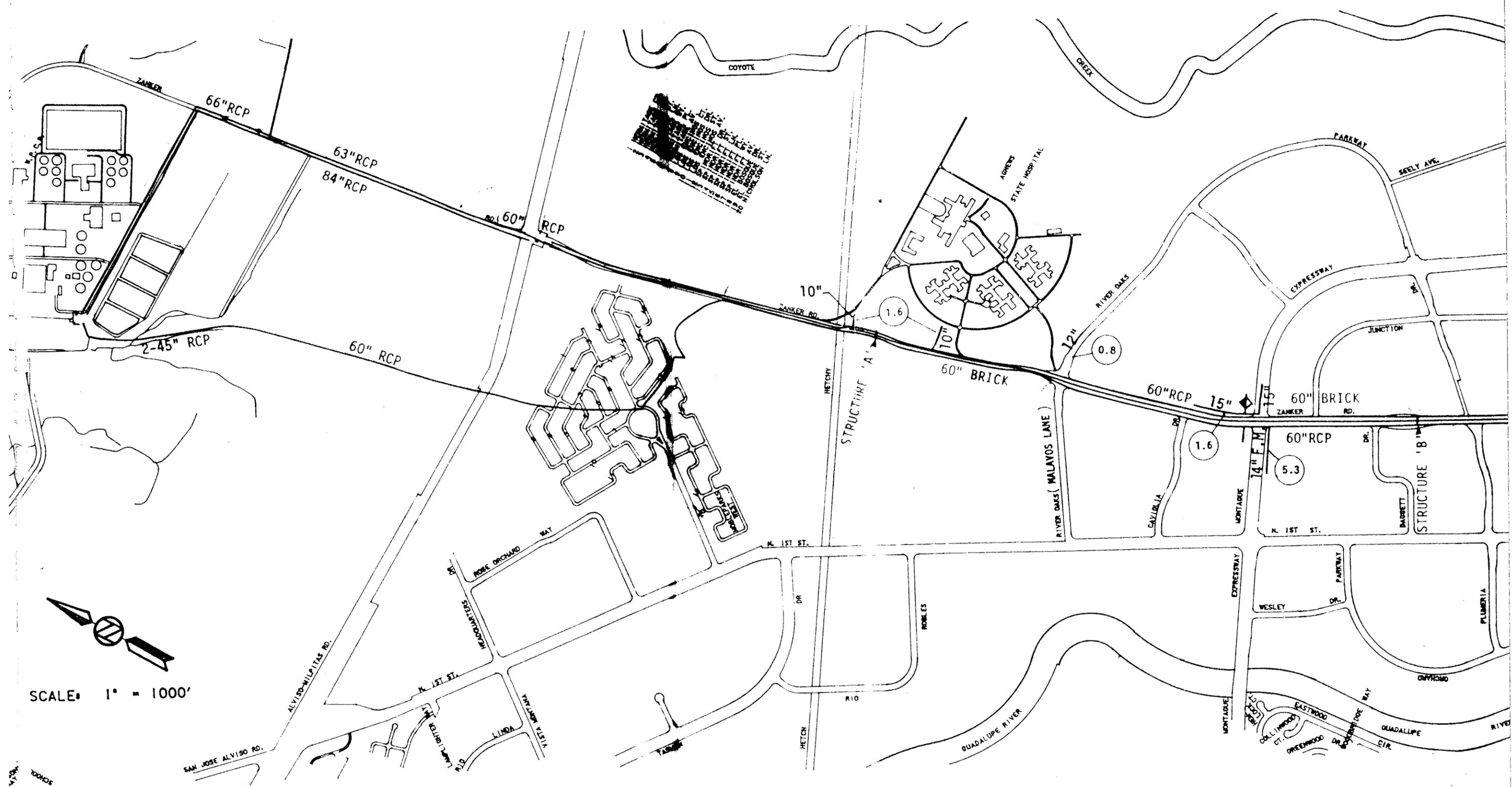






**EAST INTERCEPTOR PROFILE  
BAYSHORE TO COMMERCIAL  
FIGURE 4A-2**





SCALE: 1" = 1000'

.M. 1.6 MGD  
 AI 54.0 MGD



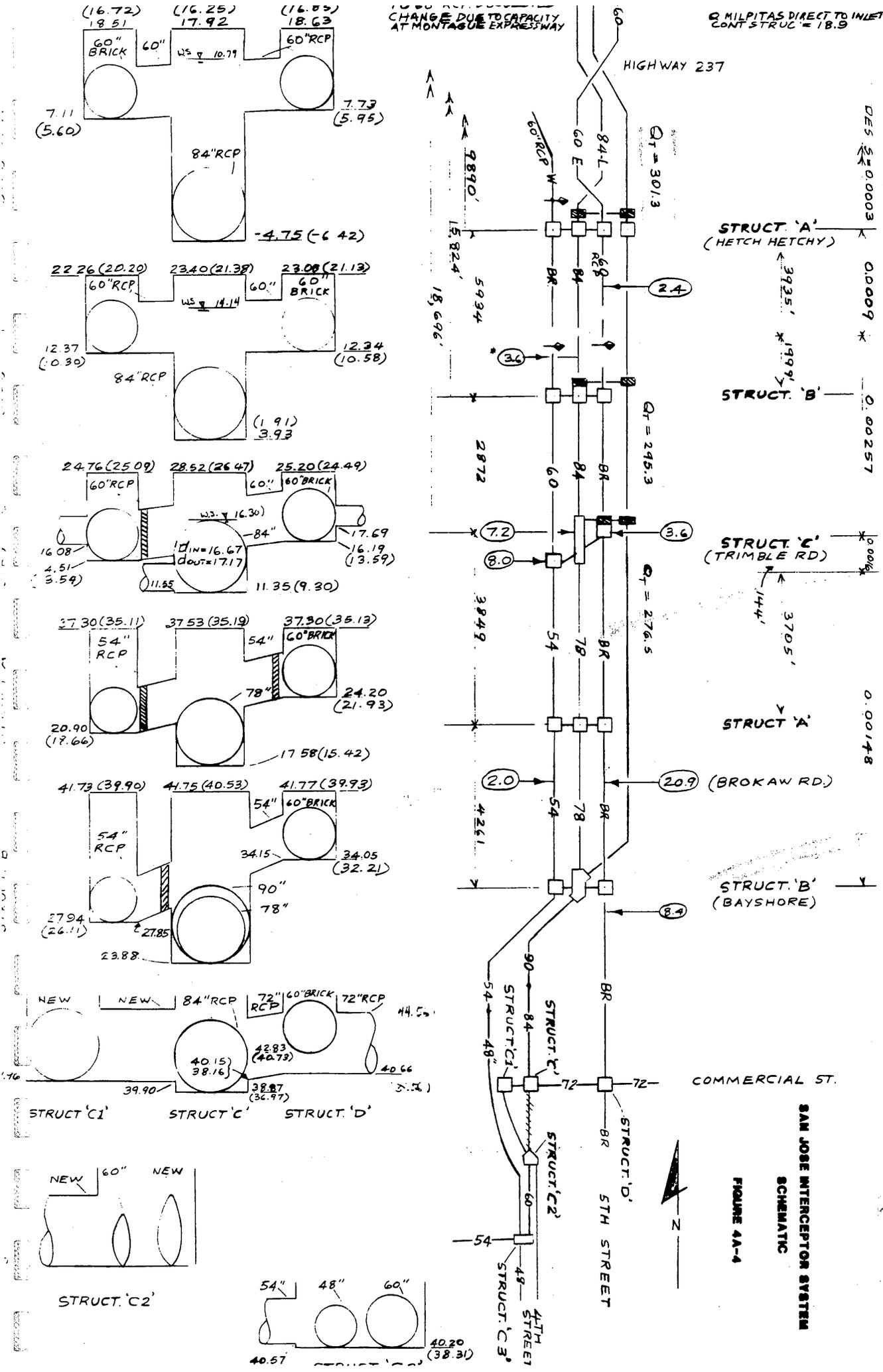


**FIGURE 4A-3**  
**CITY OF SAN JOSE**  
**PLAN OF INTERCEPTORS**

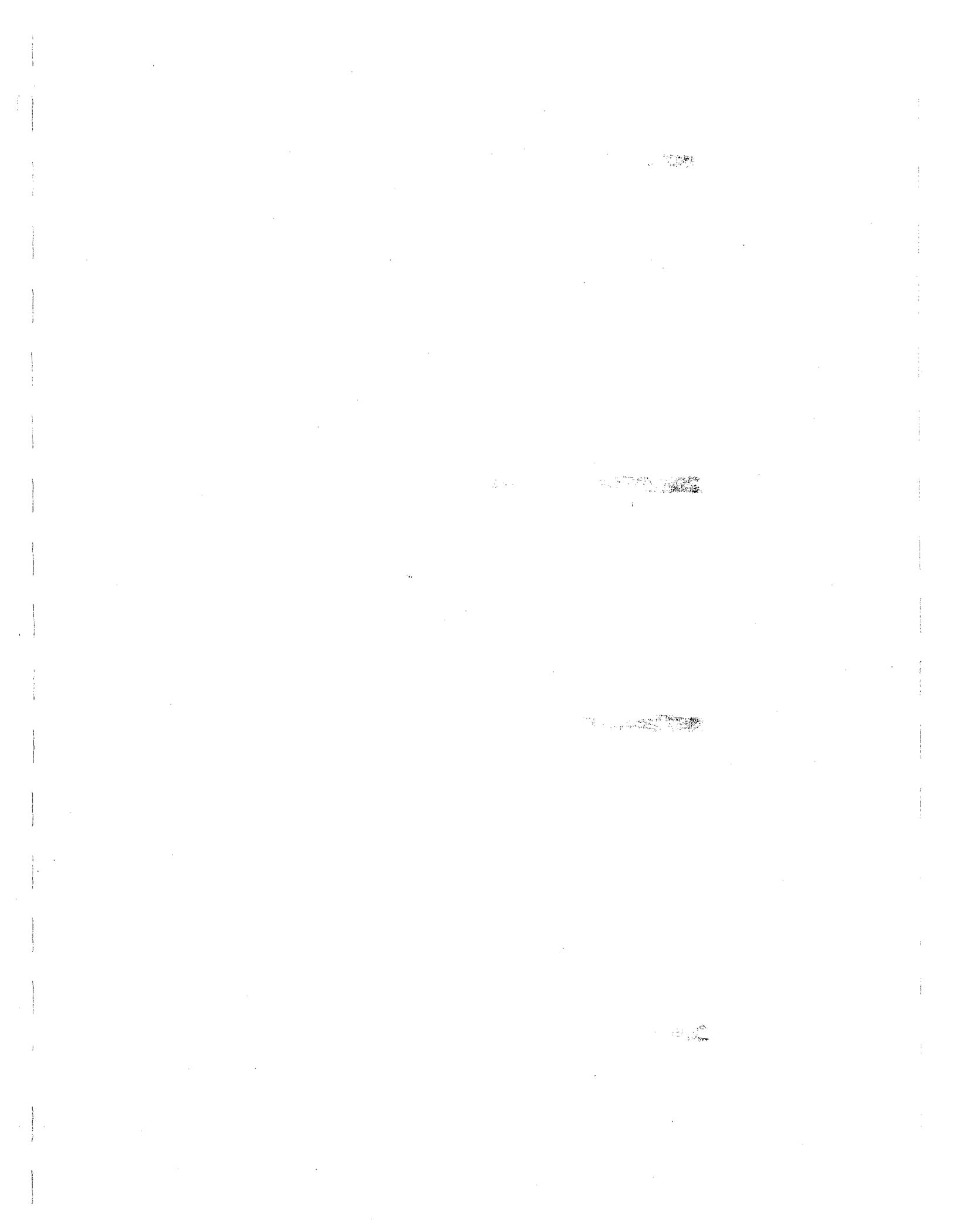


1000  
CHANGE DUE TO CAPACITY  
AT MONTAGUE EXPRESSWAY

2 MILPITAS DIRECT TO INLET  
CONT STRUC = 18.9



SAN JOSE INTERCEPTOR SYSTEM  
SCHEMATIC  
FIGURE 4A-4



# APPENDIX

# E



## **TECHNICAL MEMORANDUM NO. 1**

### **CITY OF SAN JOSE**

**SUBJECT:** Route from Seventh and Empire Streets to Bayshore Freeway

**PROJECT:** Major Interceptor Sewer Predesign Report

**DATE:** August 7, 1985

**PREPARED BY:** V. Alvin Nembhard

File No. 1320.0040

### **INTRODUCTION**

The existing 84" interceptor was laid with the obvious intent of providing future capacity between 4th and Commercial Streets and Structure "B" at Zanker Road and Bayshore Freeway. The purpose of this memorandum is to evaluate the capacity and hence need for an additional interceptor between those two points, and selection of a route from 7th and Empire Streets to 4th and Commercial.

#### **4th & COMMERCIAL TO ZANKER & BAYSHORE**

The estimated capacity of the existing 84" interceptor increases significantly from 102 mgd upstream of 4th and Commercial Streets to approximately 245 mgd downstream of that point. The only addition is the 60" from Burton which has an estimated capacity of 24 mgd. This capacity may not be achieved because the 60" is surcharged when the 72" is full. For the purpose of this discussion, however, we will assume that north of 4th and Commercial the existing interceptor has excess capacity of 119 mgd ( $245 - 102 - 24 = 119$  mgd). Therefore, pending development of flow data that indicates otherwise, it will be assumed that the new interceptor excludes the reach from 4th and Commercial to Zanker and Bayshore.

#### **7th & EMPIRE TO 4th & COMMERCIAL**

The objective therefore is to select the best route from 7th and Empire to 4th and Commercial. There are six factors that will determine the route, namely:

1. Construction difficulty and duration
2. Effect on traffic
3. Disruption of other utilities.
4. Space for future construction
5. Proximity to the right-of-way boundary
6. Cost

Four possible routes were chosen and each is discussed below. The relative costs of the alternatives are discussed in a subsequent section of this Memorandum. The alternative routes are shown on the attached figure.

### Commercial Street Option

This is the same alignment as the existing 84" interceptor. The route is along 7th Street to Commercial, then along Commercial to 4th Street. On Commercial Street the sewer has to be laid south of the centerline, mainly because the existing interceptor lies on the other side. There are construction difficulties due to the presence of two storm drains. Two alternatives are analyzed as follows:

**Alternative No. 1** The interceptor would be laid south of the 48"/78" storm drain. The implications of this alternative are as follows:

- The pipe centerline would be 12" into the gutter, i.e., the pipe would be under the sidewalk
- Right-of-way - The edge of the trench would be approximately 3'-6" from the right-of-way boundary. At 4th Street there is a building at this boundary.
- Future Construction There is no room left for construction of any future underground utility unless of small size.
- Cost - Reconstruction of 52-feet of 30" storm drain at 7th Street would be required. Also special construction techniques would be employed in the vicinity of the building.

**Alternative No. 2.** The existing 36"/42" (310' of 36"; 680' of 42") and 48"/78" (650' of 48"; 360' of 78") storm drains between 7th and 4th Streets would be removed and replaced by a 48"/84" (650' of 48"; 360' of 84"). The interceptor would be laid in the location of the 48"/78" storm drain. The implications of this alternative area as follows:

- Cost - There is the additional cost of removing two storm drains and laying one storm drain, plus reconstruction of storm drains at 7th Street.
- Traffic - Reconstruction of storm drains at 7th Street would result in major disruption of traffic.
- Duration - There is increased construction time due to construction of storm drains.
- Future Construction - This alternative leaves 17'-6" between pipe centerline and edge of right-of-way. This is adequate to lay another large pipe even though it would be under the sidewalk.

### Younger Street Option

In this option the route is along 7th Street to E. Younger, west along E. Younger to 4th Street and north along 4th Street to Commercial. The sewer would be laid

approximately 19 feet north of the centerline to clear the existing storm drain. The implications of this option are as follows:

- Traffic - Younger street appears to have only 36 feet of paved surface, hence construction could present more than normal traffic disruption; however, because of its narrow width, Younger is not a major thoroughfare.
- Cost - A siphon on the existing 60" storm drain is required at 4th and Younger Streets.

### **Hedding Street Option**

In this option, the route is along 7th Street to Hedding Street, west on Hedding to 4th Street and north on 4th Street to Commercial. The sewer would be laid 18'-6" north of the centerline on Hedding. The implications of this option are as follows:

- Reconstruct 24", 33" and 72" storm drains at 5th Street.
- Cross-connection structure with 48" sewer at 5th Street.
- Siphon sewer under 60" storm drain at 6th Street. This storm drain was constructed in 1949 and the survey datums appear to be different, hence the details are questionable.
- Re-lay 720 feet of 4" waterline on 4th Street between Hedding and Younger Streets.

### **Empire Street Option**

This route is west along Empire to 4th Street, and north along 4th to Commercial. This option differs from the others in that 7th Street is avoided entirely. The only reason this option was considered is because the details of the Central Interceptor at 7th and Empire streets appear to make it difficult to construct the connection for pipelaying on 7th Street. The implications of this option are as follows:

- 1,080 feet of 4" gas and 6" water line on Empire Street between 7th and 4th Streets would have to be relocated.
- 4,320 feet of 4" water line on 4th Street would have to be relocated.
- Reconstruction of a 33" storm drain siphon at 4th and Hedding Streets.

### **OTHER CONSIDERATIONS**

The intersection of 4th and Commercial Streets presents special construction problems regardless of whether the route is along Commercial or one of the









JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC.

COST ESTIMATE

ENR: 5000 ±

PROJECT San Jose Interceptor  
 JOB NO.: 1320.0040 CLIENT: San Jose

DATE 8/6/85  
 TYPE OF ESTIMATE: Prelim

SHEET 1 OF 5  
 EST. BY: VAN/JRB

DESCRIPTION: Commercial Street Option  
 Alternative I

REF. Interference Relocations

ITEM	QUANTITY	UNIT	M/H	MATERIAL		LABOR/EQUIPMENT		TOTAL COST	
				UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
1	1	EA							
2	52	LF				36	1872		7000
3	36	LF				36	1296		1872
4	16	LF		4516	723	3192	511	7708	1233
5	1	LS							20000
6	1	LS							30000
7	1	LS							550
8									
9									61401
10									
11									18420
12									
13									79821
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

Subtotal

+ Contingency @ 30%

Total Construction Cost

Costs for new curbs + gutter  
 and sidewalk are not  
 reflected in this estimate.

PAGE TOTAL

AC-2 (7/79)



PROJECT: San Jose Interceptor  
 JOB NO.: 1320.0040 CLIENT: San Jose

DATE: 8/6/85  
 TYPE OF ESTIMATE: Prelim

SHEET 2 OF 5  
 EST. BY: VAN/JRB

DESCRIPTION: Commercial St. Option  
 Alternative II

REF. Interference Relocations

ITEM	QUANTITY	UNIT	M/H	MATERIAL		LABOR/EQUIPMENT		TOTAL COST	
				UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
1	310	LF				3304	10242		10242
2	340	LF				3008	10227		10227
3	340	LF				3226	10968		10968
4	650	LF				3271	21392		21392
5	360	LF				4330	15588		15588
6	650	LF				4551	29582		29582
7	860	LF				21180	76248		76248
8	80	LF				4945	3756		3756
9	2	EA						5000	10000
10	15	LF				3024	454		454
11	15	LF		7528	1127	3861	579	11387	1708
12	55	LF		4516	2484	2737	1505	7253	3787
13	1	LS							6000
14	1	LS							30000
16									230354
17									
18									46071
20									276425
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
PAGE TOTAL									



JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC.

COST ESTIMATE

ENR: 5000 ±

PROJECT San Jose Interceptor  
JOB NO: 1320-0040 CLIENT: San Jose

DATE 8/6/85  
TYPE OF ESTIMATE: Prelim

SHEET 3 OF 5  
EST. BY: VAN/JRB

DESCRIPTION: Younger Street Option

REF. Interference Relocations

ITEM	QUANTITY	UNIT	M/H	MATERIAL		LABOR/EQUIPMENT		TOTAL COST	
				UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
1	1	LS							10000 -
2	90	LF			4075	3668 -			3668 -
3	45	LF			4658	2096 -			2096 -
4	45	LF		9430	4244 -	2761	1242 -	122 21	5486 -
5	1	LS							550 -
6									
7		Subtotal							21800 -
8									
9		+ Contingency @ 20%							4360 -
10									
11		Total Construction Cost							26160 -
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
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28									
29									
30									

PAGE TOTAL

AC-2 (7/79)



PROJECT San Jose Interceptor  
 JOB NO: 1320.0046 CLIENT: San Jose

DATE 8/6/85

SHEET 4 OF 5

DESCRIPTION: Hedding St. Options

TYPE OF ESTIMATE: Prelim

EST. BY: JIAN/SJC

REF. ITEM	QUANTITY	UNIT	M/H	MATERIAL		LABOR/EQUIPMENT		TOTAL COST	
				UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
1									
2	27	LF				3436	976		976
3	27	LF				1902	552		552
4	20	LF		52.62	1054	3573	715	88.41	1769
5	20	LF				4705	941		941
6	1	LS							7000
7	1	LS							16000
8	1	LS							29000
9									
10									50258
11									
12									
13	70	LF				3881	2717		2717
14	30	LF				3247	974		974
15	40	LF		94.30	3772	2663	1065	120.73	4837
16	1	LS							10000
17									
18									18528
19									
20	720	LF		475	3420	804	5789	12.79	9209
21									
22	1	LS							3500
23									
24									81495
25									
26									16299
27									
28									97794
29									
30									



JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC.

COST ESTIMATE

ENR: 5000 I

PROJECT San Jose Interceptor  
 JOB NO: 1320.0040 CLIENT: San Jose

DATE 8/6/85  
 TYPE OF ESTIMATE: Prelim

SHEET 5 OF 5  
 EST. BY: JAN/JRB

DESCRIPTION: Empire St. Optim

REF. ITEM	QUANTITY	UNIT	M/H	MATERIAL		LABOR/EQUIPMENT		TOTAL COST	
				UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
1									
2	1080	LF		475	5130	804	8683	1279	13813
3	1080	LF		544	5875	1012	10930	1556	16805
4									
5	4320	LF		475	20520	804	34733	1279	55253
6									
7	60	LF				3164	1898		1898
8	23	LF				2242	740		740
9	27	LF		5268	1422	1902	514	7170	1936
10	2	EA						2000	14000
11	18	LF				3000		3000	540
12	1	EA							3000
13									
14	1	LS							1000
15									
16									108985
17									
18									21797
19									
20									130782
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

PAGE TOTAL

AC-2 (7/79)



# APPENDIX

# F





JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC.

COST ESTIMATE

ENR: 5100

PROJECT Prelim. Design of 4th Major Interceptor DATE 1/86 SHEET 1 OF 11  
 JOB NO.: 1320-0040 CLIENT: City of San Jose TYPE OF ESTIMATE: Prelim EST. BY: J. R. Barris

ITEM	DESCRIPTION	QUANTITY	UNIT	M/H	MATERIAL		LABOR/EQUIPMENT		TOTAL COST	
					UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
1	Piping T-LOCK RCP class IV									
2	90-inch 270'									
3	84-inch									
4	78-inch									
5	72-inch									
6	60-inch									
7										
8	Rehabilitation In situ form 60"	962	LF				450			4329.00
9										
10	Modify Exist Structures									
11	Struct C Block West	1	LS							5000
12	Struct A Block East+West	1	LS							7500
13	Struct B Block West+Tie in	1	LS							1001.00
14	Struct C Tie in	1	LS							7500
15	5th + Empire Block East	1	LS							5000
16										
17	Struct #1 WPCP	1	LS							1001.00
18	Struct #2 Diversion	1	LS							1001.00
19	Struct #3 @ A	1	LS							7500.00
20	Struct #4 @ B	1	LS							7500.00
21	Struct #5 @ C	1	LS							7500.00
22	Struct #6 @ Commercial on 4th	1	LS							5000.00
23	Struct #7 @ S. of Commercial	1	LS							3500.00
24	Struct #8 @ 5th + Younger	1	LS							3000.00
25	Struct #9 @ 7th + Empire	1	LS							4000.00
26	Struct #10 @ 5th + Empire	1	LS							3000.00
27										
28	Interferences from P.5	1	LS							8118.60
29										
30										
PAGE TOTAL										20422.292

See Piping Breakdown on P. 3



JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC.

COST ESTIMATE

ENR: 5100

SHEET 2 OF 11

DATE 1/86

TYPE OF ESTIMATE: Prelim

EST. BY: J.R. Burris

PROJECT Prelim. Design of 4th Major Interceptor

JOB NO: 1320-0040 CLIENT: City of San Jose

DESCRIPTION: Base Project

REF.	ITEM	QUANTITY	UNIT	M/H	MATERIAL		LABOR/EQUIPMENT		TOTAL COST	
					UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
1	Pipe Jacking									
2	@ 237 90"	190	LF				260			47400
3	@ Hatch Hatchy 90"	110	LF				260			28600
4	@ Montague 84"	200	LF				240			48000
5	@ River Oaks 84"	30	LF				240			7200
6	@ RR on 7th 78"	100	LF				220			19500
7	Jacking Pits	10	EA				5000			5000
8	Relocate 48" @ 4th + Commercial	150	LF				400			60000
9										
10	Curb & Gutter	10600	LF				12			126720
11										
12	Manholes	25	EA				5000			125000
13										
14	Subtotal this page									514420
15										
16	Subtotal fm page 1									20422292
17										
18	Subtotal									20936712
19										
20	Mobilization @ 4%	4	%							837468
21										
22	Subtotal									21774180
23										
24	Contractors O&P @ 20%	20	%							4354836
25										
26	Total Construction Cost									26129016
27										
28	Engng Legal Admin. & Contingency	30	%							7838705
29	Easement acquisition	5000	SF						10	50000
30										
PAGE TOTAL	Total Capital Cost									34017721



JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC.

COST ESTIMATE

ENR: 5100

PROJECT Prelim. Design of 4th Major Interceptor DATE 1/86 SHEET 3 OF 11  
 JOB NO.: 1320 0040 CLIENT: City of San Jose TYPE OF ESTIMATE: Prelim EST. BY: J. R. Burris

REF. ITEM	DESCRIPTION	QUANTITY	UNIT	M/H	MATERIAL		LABOR/EQUIPMENT		TOTAL COST	
					UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
1	WPCP - Structure A (Hatch Hatchy)									
2	84" @ 15' deep	1568	LF		235		285	520		815360
3	84" @ 16'	1780	LF		235		300	535		952300
4	84" @ 19'	852	LF		235		345	580		494160
5	90" @ 19'	1660	LF		252		360	612		1015920
6	90" @ 21'	4020	LF		252		390	642		2580840
7										
8	Struct A - Struct C (Trimble)									
9	84" @ 21'	968	LF		235		350	585		566280
10	84" @ 19'	3740	LF		235		345	580		2169200
11	84" @ 17'	2480	LF		235		310	545		1351600
12	84" @ 15'	1225	LF		235		285	520		637000
13	84" @ 16'	408	LF		235		300	535		218290
14										
15	Struct C - Struct B (Bayshore)									
16	72" @ 19'	8161	LF		195		315	510		4162110
17										
18	4th Empire - 7th Empire									
19	78" @ 17'	1166	LF		215		300	515		600490
20	78" @ 15'	5472	LF		215		275	490		2681280
21										
22	7th Empire - 4th Empire									
23	60" @ 15'	712	LF		156		220	376		267712
24										
25	* Includes Material, Excavation,									
26	Imported fill, backfill, shoring,									
27	and Pavement replacement. Does									
28	not include Contractor's OHTP									
29										
30										
	PAGE TOTAL	34212	LF							18512532

Subtotal Piping



PROJECT Prelim. Design of 4th Major Interceptor DATE 1/86 SHEET 4 OF 11  
 JOB NO: 1320-0040 CLIENT: City of San Jose TYPE OF ESTIMATE: Prelim EST. BY: J. R. Burris

ITEM	DESCRIPTION	QUANTITY	UNIT	M/H	MATERIAL		LABOR/EQUIPMENT		TOTAL COST	
					UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
1	Interferences									
2	Sht 1A, B, C; Multiple Interferences	1	LS							50000
3	Sht 2; 3" Gas	1	LS							2500
4	Sht 3; 36" Gas, 3" Gas, UGT, 22" Gas	1	LS							15000
5	Sht 4; 8" UCP, UGT	1	LS							5000
6	12" water relocate	410	LF						40	18400
7	Sht 5; 2-27" SD, 2-12" W	1	LS							2500
8	Sht 6; 9" 60" SD, 12" W	1	LS							15000
9	Sht 7; Relocate 48" SA	1120	LF						200	224000
10	Sht 8; Relocate 48" SD	45	LF						200	9000
11	" 36" SD	540	LF						175	94500
12	Sht 9; 12" UCP, 3" G	1	LS							3000
13	Sht 10; Relocate 48" SD	298	SF						5	1990
14	Sht 11; Relocate 48" SD	3500	SF						5	17500
15	Multiple Inter. & Trimble	1	LS							20000
16	3-SD 12" 2	1	LS							1000
17	Sht 15; 3-12" RCP SD, 2" G, UGE	1	LS							5000
18	2-18" RCP SD	1	LS							1500
19	Sht 16; 3-12" RCP SD, 2-12" RCP SD	1	LS							5000
20	Sht 17; UGT, 42" RCP SD, 2-12" RCP SD	1	LS							20000
21	Sht 18; Multiple Inter. & Break	1	LS							75000
22	Relocate UGT 540'	1	LS							50000
23	Sht 19; Multiple Interference	1	LS							60000
24	Relocate UGT 420'	1	LS							1500
25	Sht 20; 2-10', 1-12" SD	1	LS							5000
26	Cross under Brick	1	LS							15000
27	Sht 21; Multiple Inter.	1	LS							5000
28	Sht 22; 27" RCP, 6" Water	1	LS							5000
29	Relocate 6" Water	350	CF						30	10500
30	2" G, 6" W	1	LS							2000
31	Sht 27; 2-8" W, 4" W, 10" UCP, 3-4" RCP, 3" G	1	LS							5000
PAGE TOTAL										218400



JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC.

COST ESTIMATE

ENR: 5100

PROJECT Prelim. Design of 4th Major Interceptor DATE 1/86 SHEET 5 OF 11  
JOB NO: 1320-0040 CLIENT: City of San Jose TYPE OF ESTIMATE: Prelim EST. BY: J.R. Burris

REF.	DESCRIPTION	QUANTITY	UNIT	M/H	MATERIAL		LABOR/EQUIPMENT		TOTAL COST		
					UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	
	Base Project										
	Interferences (Cont'd)										
1	Sht 30; 4"W, 24" SD, 8" SS, 12" SD, 4"G	1	LS								5000
2	Relocate 6"W	900	LF							20	18000
3	Sht 31; Relocate 6"W	840	LF							30	25200
4	10"G, 12"G, 54" SD, 28x42 Br										
5	4"G, 25W	1	LS								25000
6	Sht 32; Relocate 4"W	88	LF							20	1760
7	4"W 8" VCP	1	LS								500
8	Sht 33; Relocate 4"W	800	CF							20	16000
9	4" CP Gas, 10" VCP, 5"W	1	LS								20000
10											
11											
12	Subtotal this page										93460
13											
14	Subtotal from Previous Page										718400
15											
16	Total Interferences										811860
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											

PAGE TOTAL

AC-2 (7/79)

DATE 1/10/86

CLIENT Sanduse

JOB NO. 1320.0040

CALC. BY JFB

DESCRIPTION Summary of Depth + Size + Length

CHECKED BY

Sht. 1A	✓ 84"	5 88'	@	15'	deep
1B	✓ 84"	9 80'	@	15'	
1C	✓ 84"	8 10	@	16'	
1	✓ 84"	9 70	@	16.5'	
2	✓ 84"	8 52	@	19'	
-	✓ 90"	3 9 8	@	19'	
3	✓ 90"	12 62	@	19'	
4	✓ 90"	12 49	@	21'	
5	✓ 90"	12 45	@	21'	
6	✓ 90"	12 51	@	21'	
7	✓ 90"	2 7 5	@	21'	Structure A
	✓ 84"	9 6 8	@	21'	
8	✓ 84"	12 4 9	@	19.5'	
9	✓ 84"	12 5 5	@	18'	
10	✓ 84"	12 3 6	@	18'	
11	✓ 84"	12 20	@	17'	Structure B
	✓ 84"	10	@	17'	
12	✓ 84"	12 50	@	17.5'	
13	✓ 84"	12 2 5	@	15'	
14	✓ 84"	4 0 8	@	16'	Struct. C Trimble
	✓ 72"	8 5 6	@	16'	
15	✓ 72"	12 5 6	@	17.5'	
16	✓ 72"	12 5 5	@	18.5'	
17	✓ 72"	12 5 8	@	20'	
18	✓ 72"	12 3 2	@	19'	
19	✓ 72"	12 3 4	@	20'	
20	✓ 72"	10 7 0	@	19'	Structure B Bayshore
25	78"	3 5	@	17'	Struct C - #4
	78"	10 8	@	17'	#4 to #5
	78"	3 6 9	@	17.5'	
26	78"	6 5 4	@	17.5'	
27	78"	11 0 5	@	15'	
29	78"	7 1 5	@	14.5'	
30	78"	9 0 6	@	14.5'	
31	78"	9 0 3	@	14'	
32+33	78"	18 4 3	@	15'	7 <sup>th</sup> + Empire

DATE 1/10/86

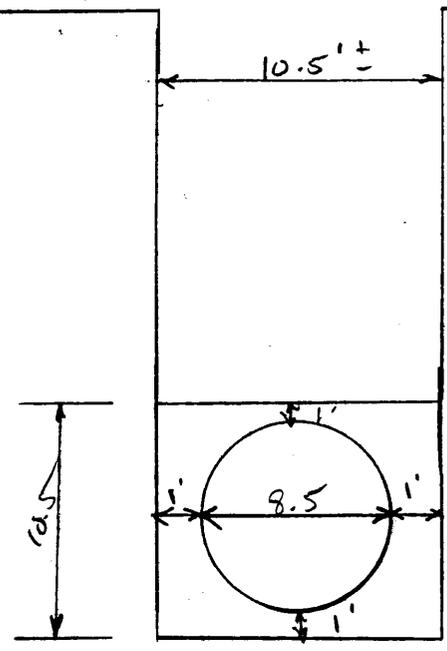
CLIENT Sen Jose

JOB NO. 1320.0040

CALC. BY JRB

DESCRIPTION Cost Estimating

CHECKED BY \_\_\_\_\_



84" Pipe  
 @ 25' Depth  
 Per LF

Exc. =  $(10.5 \times 25) \div 27 = 9.72 \text{ cy}$

Imported fill  $[(10.5 \times 10.5) - (\frac{\pi}{4}(8.5)^2)] \div 27 = 1.98 \text{ cy}$

Backfill  $[(25 - 10.5)(10.5)] \div 27 = 5.64 \text{ cy}$

Pavement Replace. 10.5 sf

Shoring  $(25 - 5) \times 2 = 40 \text{ sf}$

Disposal  $9.72 - 5.64 = 4.08 \text{ cy}$

If Paved  $9.72 - 5.64 + [(10.5 \times 2) \div 27] = 4.86 \text{ cy}$

DATE 1/10/86

CLIENT San Jose

JOB NO. 1320-0040

CALC. BY JRB

DESCRIPTION Take Off on Interceptor

CHECKED BY

84 @ 15' deep

Exc.	$(10.5 \times 15) \div 27 = 5.83$ cy	$\times \$16.00 = 93.28$	} 283.85
Imp Fill	= 1.98 cy	$\times 24.00 = 47.52$	
Backfill	$[(15-10.5)(10.5)] \div 27 = 1.75$ cy	$\times 17.00 = 29.75$	
Pavement	= 10.5 sf.	$\times 5 = 52.50$	
Shoring	$(15-5) \times 2 = 20$ sf	$\times 1 = 20.00$	
Disposal	$5.83 - 1.75 = 4.08$	$\times 10 = 40.80$	

84 @ 16'

Exc	$(10.5 \times 16) \div 27 = 6.22$ cy	$\times \$16 = 99.52$	} 298.72
Imp Fill	= 1.98 cy	$\times 24 = 47.52$	
Backfill	$[(16-10.5)(10.5)] \div 27 = 2.14$ cy	$\times 17 = 36.38$	
Paving	= 10.5 sf	$\times 5 = 52.50$	
Shoring	$(16-5) \times 2 = 22$ sf	$\times 1 = 22.00$	
Disposal	$(6.22 - 2.14) = 4.08$ cy	$\times 10 = 40.80$	

84 @ 19'

Exc	$(10.5 \times 19) \div 27 = 7.37$ cy	$\times 16 = 118.24$	} 343.3
Imp. fill	= 1.98	$\times 24 = 47.52$	
Backfill	$(19-10.5)(10.5) \div 27 = 3.31$	$\times 17 = 56.27$	
Paving	= 10.5 sf	$\times 5 = 52.50$	
Shoring	$(19-5) \times 2 = 28$ sf	$\times 1 = 28.00$	
Disposal	$7.37 - 3.31 = 4.08$ cy	$\times 10 = 40.80$	

90" @ 19

Exc	$(11 \times 19) \div 27 = 7.74$ cy	$\times 16 = 123.84$	} 357.96
Imp Fill	$[(11 \times 11) - \frac{\pi}{4} 9^2] \div 27 = 2.12$	$\times 24 = 50.88$	
Backfill	$(19-11)(11) \div 27 = 3.26$	$\times 17 = 55.42$	
Paving	= 11 sf	$\times 5 = 55.00$	
Shoring	$(19-5) \times 2 = 28$ sf	$\times 1 = 28.00$	
Disposal	$7.74 - 3.26 = 4.48$	$\times 10 = 44.80$	

DATE 1/10/86

CLIENT San Jose

JOB NO. 13220040

CALC. BY JRB

DESCRIPTION Cost Estimating

CHECKED BY \_\_\_\_\_

90" @ 21'

Exc. $(11 \times 21) \div 27$	= 8.56 cy	x 16 = 136.96	} 388.93
Imp. Fill	= 2.12 cy	x 24 = 50.88	
Backfill $(21-11)(11) \div 27$	= 4.07 cy	x 17 = 69.19	
Paving	= 11 sf	x 5 = 55.00	
Shoring $(21-5) \times 2$	= 32 sf	x 1 = 32.00	
Disposal $8.56 - 4.07$	= 4.49 cy	x 10 = 44.90	

72" @ 19'

Exc $(9.5 \times 19) \div 27$	= 6.69 cy	x 16 = 107.04	} 313.86
Imp. Fill $[(9.5 \times 9.5) - (\frac{\pi}{4} 7.5^2)] \div 27$	= 1.71 cy	x 24 = 41.04	
Backfill $(19-9.5)(9.5) \div 27$	= 3.34 cy	x 17 = 56.78	
Pavement	= 9.5 sf	x 5 = 47.50	
Shoring $(19-5) \times 2$	= 28 sf	x 1 = 28.00	
Disposal $6.69 - 3.34$	= 3.35 cy	x 10 = 33.50	

78 @ 17

Exc $(10 \times 17) \div 27$	= 6.3 cy	x 16 = 100.80	} 300.09
Imp. Fill $[(10 \times 10) - (\frac{\pi}{4} 8^2)] \div 27$	= 1.84 cy	x 24 = 44.16	
Backfill $(17-10)(10) \div 27$	= 2.59 cy	x 17 = 44.03	
Pavement	= 10 sf	x 5 = 50.00	
Shoring $(17-5) \times 2$	= 24 sf	x 1 = 24.00	
Disposal $6.3 - 2.59$	= 3.71 cy	x 10 = 37.10	

78 @ 15

Exc $(10 \times 15) \div 27$	= 5.56 cy	x 16 = 88.96	} 271.67
Imp. Fill $[(10 \times 10) - (\frac{\pi}{4} 8^2)] \div 27$	= 1.84 cy	x 24 = 44.16	
Backfill $(15-10)(10) \div 27$	= 1.85 cy	x 17 = 31.45	
Pave.	= 10 sf	x 5 = 50.00	
Shoring $(15-5) \times 2$	= 20 sf	x 1 = 20.00	
Disposal $5.56 - 1.85$	= 3.71 cy	x 10 = 37.10	

DATE 1/10/86

CLIENT San Jose

JOB NO. 13200040

CALC. BY JFB

DESCRIPTION Cost Estimating

CHECKED BY \_\_\_\_\_

102" @ 17'

EXC  $(12 \times 17) \div 27 = 7.56 \text{ CY} \times 16.00 = 120.89$

Imp Fill  $[(12 \times 12) - (\frac{\pi}{4} 10.5^2)] \div 27 = 2.13 \text{ CY} \times 24.00 = 51.03$

BF  $(17-12)(12) \div 27 = 2.22 \text{ CY} \times 17.00 = 37.78$

Pave.  $= 12 \text{ SF} \times 5 = 60.00$

Shoring  $(17-5) \times 2 = 24 \text{ SF} \times 1 = 24.00$

Disposal  $7.56 - 2.22 = 5.34 \times 10 = 53.40$

} \$ 347.10

Materials in-Place

102  $\Rightarrow \frac{102}{84} \times 176.34 = 214 + (8.5 \pi \times 1.50) = 254 \times 1.1 =$  T-Lock Class 4

90  $\Rightarrow \frac{90}{84} \times 176.34 = 189 + (7.5 \pi \times 1.5) = 224 \times 1.1 = 246.4$

DATE 1/10/86

CLIENT San Jose

JOB NO. 1320-0040

CALC. BY JRB

DESCRIPTION Alternative Cost Estimates

CHECKED BY \_\_\_\_\_

Pipe Costs materials only, delivered to site  
No Contractor's OH+P or installation  
Material: 270° T-Lock RCP Class II

Costs furnished by Ameron: Mr. Ron Gerke

102-inch	\$ 296
90-inch	252
84-inch	235
78-inch	215
72-inch	195
66-inch	175
60-inch	156
42-inch	105



PROJECT Prelim. Design of 4th Major Interceptor DATE 1/86 SHEET 1 OF 2  
 JOB NO: 1320-0040 CLIENT: City of San Jose TYPE OF ESTIMATE: Prelim EST. BY: J. R. Burris

ITEM	DESCRIPTION	QUANTITY	UNIT	M/H	MATERIAL		LABOR/EQUIPMENT		TOTAL COST		
					UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	
1	Piping Takeoff										
2	WPCP - Plant Expan. Branch										
3	84" @ 15' deep	1568	LF		235		285		520	815360	
4	84" @ 16'	1780	LF		235		300		535	952800	
5	84" @ 19'	852	LF		235		345		580	494160	
6											
7	Plant Exp. - Struct A (Hatch Nuts)										
8	102" @ 20'	1660	LF		296		385		681	1130460	
9	102" @ 22'	4020	LF		296		400		696	2797920	
10											
11	Struct A - Struct B										
12	102" @ 17'	5934	LF		296		350		646	3833364	
13											
14	Struct B - Struct C (Trinble)										
15	90" @ 19'	2827	LF		252		360		612	1766844	
16											
17	Struct C - Struct B (Bayshore)										
18	78" @ 19'	8161	LF		215		330		545	4447745	
19											
20	Struct B - Commercial										
21	42" @ 17'	4452	LF		105		180		285	1268820	
22	Bore & Jack	360	LF						450	162000	
23											
24	Commercial to Empire										
25	Same as Base	7350	LF							3549482	
26											
27											
28											
29											
30											
PAGE TOTAL											91218455

Subtotal Piping



JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC.

COST ESTIMATE

ENR: 5100

PROJECT Prelim. Design of 4th Major Interceptor DATE 1/86 SHEET 2 OF 2  
 JOB NO.: 1320-0040 CLIENT: City of San Jose TYPE OF ESTIMATE: Prelim EST. BY: J.R. Burris

DESCRIPTION:

1 Alternative II, Cont'd  
 Decommission Brick

2 Base Project Cost w/o Piping

3 Alt. II Piping

4 Deduct Rehab

5 Subtotal

6 Mobilization

7 Subtotal

8 Contractor's O&P

9 Total Construction Cost

10 Engrg, Legal, Admin & Contingency

11 Total Capital Cost

REF. ITEM	QUANTITY	UNIT	M/H	MATERIAL		LABOR/EQUIPMENT		TOTAL COST	
				UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
1									
2									2424180
3									21218455
4									(432900)
5									23209735
6									928389
7	4	%							24138124
8									4827625
9	20	%							28965749
10									8689725
11	30	%							37655474
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
PAGE TOTAL									



JAMES M. MONTGOMERY, CONSULTING ENGINEERS, INC.

COST ESTIMATE

ENR: S100

REF.	ITEM	QUANTITY	UNIT	M/H	MATERIAL		LABOR/EQUIPMENT		TOTAL COST		
					UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	
	PROJECT Prelim. Design of 4th Major Interceptor DATE 1/86 SHEET 1 OF 1										
	JOB NO: 1320-0046 CLIENT: City of San Jose TYPE OF ESTIMATE: Prelim EST. BY: J. R. Burris										
	DESCRIPTION: Alternative II Abandon East Port @ Trimble										
1	Differential Costs; Alt I as Base										
2	Struct. B - Struct C (Trimble)	2887	LF						70	202090	
3	90" vs 84" Differential Cost										
4	Incl. Dem. + Disposal Mobilization	4	%							8084	
5											
6	Subtotal									210174	
7											
8	Contractor's O+P	20	%							42035	
9											
10	Total Const. Cost Diff.									252209	
11											
12	Engng, Legal, Admin & Contingency	30	%							75663	
13											
14	Total Cap. Cost									327872	
15											
16											
17											
18	* Land Acquisition Negligible										
19	W/ this alternative										
20	∴ Deduct \$0K from Total									(50000)	
21	Cap Cost Diff										
22											
23	Differential Total									277872	
24											
25											
26											
27											
28											
29											
30											
	PAGE TOTAL										