



GAIL FARBER, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

February 9, 2009

IN REPLY PLEASE
REFER TO FILE: **SM-1**

Mr. Jim Bell, Director of Public Works
City of Rancho Palos Verdes
30940 Hawthorne Boulevard
Rancho Palos Verdes, CA 90275

Attention Mr. Rick James

Dear Mr. Bell:

**CONSOLIDATED SEWER MAINTENANCE DISTRICT
CONDITION ASSESSMENT PROGRAM REPORT
PROJECT Y0TV0506F**

This letter is to inform you that as part of the Sewer Condition Assessment Program, the County of Los Angeles Department of Public Works Consolidated Sewer Maintenance District has completed the closed-circuit television (CCTV) inspection of 76,591 feet or approximately 10.5 percent of the City of Rancho Palos Verdes' sewer system.

The enclosed report outlines the structural and maintenance ratings of your system based on the Pipeline Assessment and Certification Program's rating methodology. Included in the report are the following:

- Condition Assessment Report
- Project Overview Map (Enclosure 1)
- Quick Maintenance Rating Report Priority List and Quick Maintenance Rating Map (Enclosure 2)
- Quick Structural Rating Report Priority List and Quick Structural Rating Map (Enclosure 3)
- Infrastructure Inspection Reports for Grades 4 and 5 (Enclosure 4)
- CCTV Sewer Inspection Project Schedule (Enclosure 5)

Mr. Jim Bell
February 9, 2009
Page 2

The Condition Assessment Report will provide details regarding the maintenance and structural condition of your City's sewer mainlines. This information can be included in your agency's Sewer System Management Plan as a reference in Chapter 8.0, System Evaluation and Capacity Assurance Plan. The segments with critical maintenance issues have been cleaned and, in some instances, have been incorporated into our routine cleaning schedule for continued monitoring. In addition, the segments with severe structural defects have either been repaired or will be scheduled for repair as part of the ongoing Accumulative Capital Outlay Project.

If you have any questions regarding this Report or the Condition Assessment Program, please contact Mr. Robert Swartz at (626) 300-3367, Monday through Friday, 8 a.m. to 4 p.m., or at rswartz@dpw.lacounty.gov.

Very truly yours,

GAIL FARBER
Director of Public Works



MANUEL DEL REAL
Assistant Deputy Director
Sewer Maintenance Division

PK:kk
1627

Enc.

**CONDITION ASSESSMENT REPORT
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
CONSOLIDATED SEWER MAINTENANCE DISTRICT**

PROJECT NAME: Y0TV0506F	PROJECT MGR: Fernando Villaluna
PROJECT DATE: 06/27/06 – 08/04/06	CONTACT NO: (626) 300-3380
SUP. DISTRICT(s): 4	MAP PAGE(S): 1544, 1545, 1598, & 1599
Report By: Phyo Kyaw	Report Date: 01/22/09

INTRODUCTION

As part of the Sewer Condition Assessment Program, the County of Los Angeles Department of Public Works Consolidated Sewer Maintenance District has completed the closed-circuit television (CCTV) inspection of 76,591 feet or approximately 10.5 percent of the City of Rancho Palos Verdes' sewer system.

The Sewer Condition Assessment Program utilizes the Pipeline Assessment and Certification Program (PACP) Quick Rating methodology to rank the maintenance and structural ratings of your system based on industry standards.

PROJECT AREA AND DESCRIPTION

Project Y0TV0506F included sewer lines located in Unincorporated County of Los Angeles area and the Cities of Agoura Hills, Calabasas, Hidden Hills, Malibu, Rancho Palos Verdes, and Westlake Village. Enclosed for your reference is an overview map of the project area within your City (Enclosure 1).

DEFECT GRADE DESCRIPTION

The Quick Rating indicates the number of occurrences for the highest severity grade for each pipe segment for either maintenance or structural defects. A grade of 1 indicates that a pipe segment is in excellent condition with minor defects, while a grade of 5 indicates that a pipe segment requires immediate attention. A detailed breakdown of the five possible defect grades is as follows:

Grade	Description	Estimate time to Failure
1:	EXCELLENT: Minor Defects.	Unlikely in the foreseeable future
2:	GOOD: Defects that have not begun to deteriorate.	20 years or more
3:	FAIR: Moderate defects that will continue to deteriorate.	10 to 20 years
4:	POOR: Severe defects that will become grade 5 defects within the foreseeable future.	5 to 10 years
5:	IMMEDIATE ATTENTION: Defects requiring immediate attention.	Has failed or will likely fail within the next 5 years

MAINTENANCE REPORT

Our inspection revealed that approximately 79.1 percent of the system televised was free of blockages or restrictions that would impede sewer flows. However, the remaining 20.9 percent of the inspected pipe segments within the City of Rancho Palos Verdes had a PACP maintenance grade of 4 or 5 as indicated in the Quick Maintenance Rating Table shown below. These segments have been incorporated into our routine cleaning schedule with corrective action taken as noted on the Quick Maintenance Rating Report Priority List (Enclosure 2). Also included is a color-coded map showing the quick maintenance rating for each pipe segment.

QUICK MAINTENANCE RATING TABLE

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Excellent	3,922	5.1	23
2: Good	46,753	61.1	235
3: Fair	9,898	12.9	51
4: Poor	15,497	20.2	76
5: Immediate Attention	521	0.7	3
TOTAL	76,591	100.0	388

STRUCTURAL REPORT

Our inspection revealed that approximately 88.8 percent of the inspected pipe segments within the City of Rancho Palos Verdes were free of severe structural defects. However, the remaining 11.2 percent of the inspected pipe segments had a PACP structural grade of 4 or 5 as indicated in the Quick Structural Rating Table shown below. These segments have been placed on a priority list based on the severity and the need for action. For Items 1 through 42 in the Quick Structural Rating Report Priority List (Enclosure 3) which require a corrective action, the proposed corrective method will be scheduled in the next 24 months as part of the ongoing Accumulative Capital Outlay Project. A color-coded map showing the Quick Structural Rating for each pipe segment is located in Enclosure 3. Copies of the actual inspection reports for these 42 segments are included in Enclosure 4.

QUICK STRUCTURAL RATING TABLE

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Excellent	40,577	53.0	212
2: Good	6,308	8.2	30
3: Fair	21,148	27.6	104
4: Poor	4,974	6.5	24
5: Immediate Attention	3,584	4.7	18
TOTAL	76,591	100.0	388

FUTURE PROJECTS

The Sewer Condition Assessment Program will be performing future CCTV inspections of the remaining sewer lines within the City of Rancho Palos Verdes. For your reference, the CCTV Sewer Inspection project schedule for the City of Rancho Palos Verdes is listed in Enclosure 5.

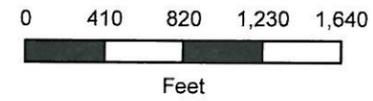
ENCLOSURE 1:

Project Overview Map

PROJECT OVERVIEW MAP

**CCTV PROJECT
Y0TV0506F**

Supervisorial District 3 & 4
City of Agoura Hills, Calabasas,
Hidden Hills, Malibu, Rancho Palos
Verdes, Westlake Village &
County Unincorporated



Legend

SMD Sanitary Sewers

- Other
- 4
- 8
- 10
- 12
- 15
- 18

SMD Manholes

- Other

MH Type

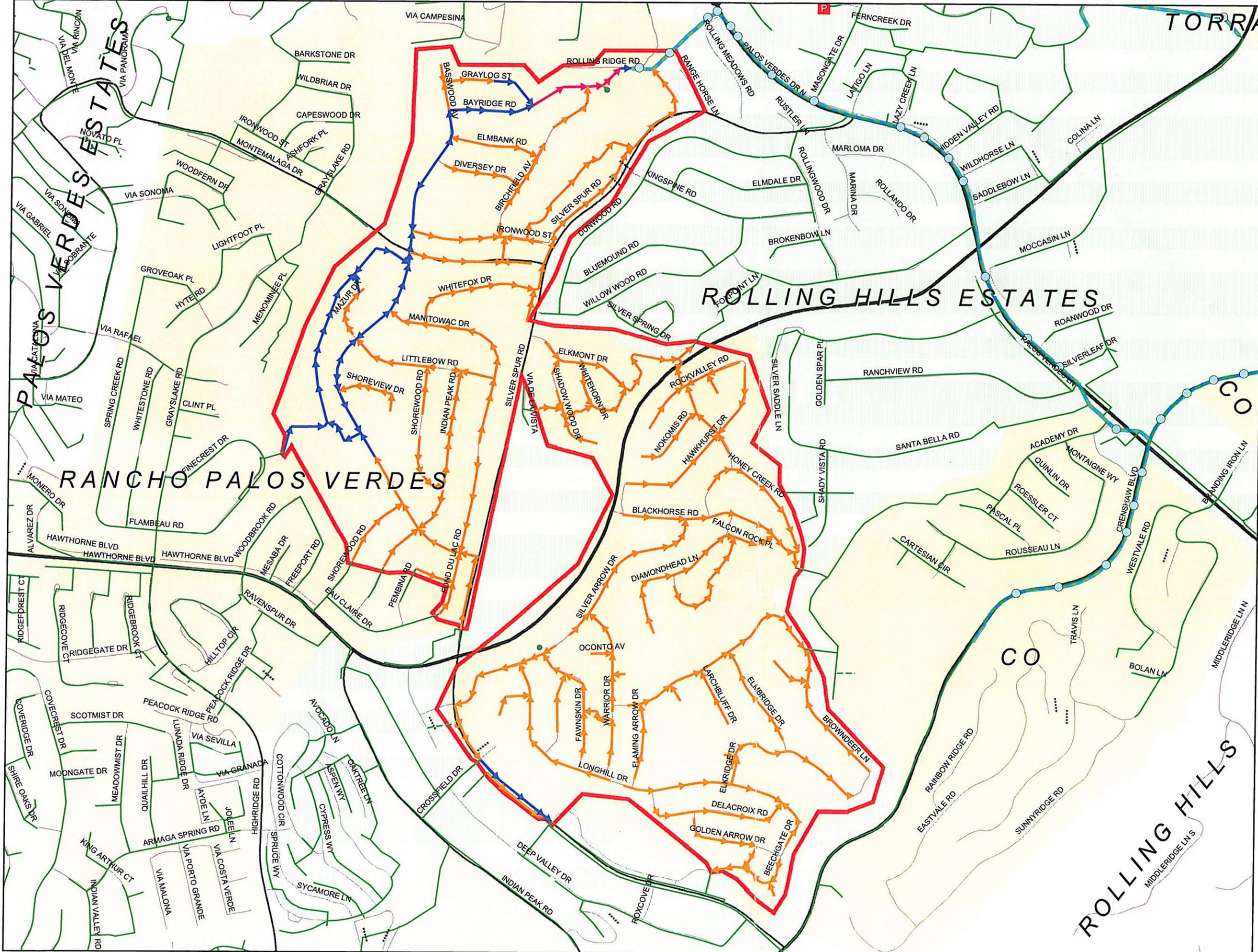
- Standard
- Siphon
- Trap
- Shallow
- Drop
- SMD Pump Satations
- SMD Treatment Plants

Maintained by Others:

- Trunk Sewerlines
- Non SMD Sanitary Sewers
- Trunk Mh
- Non SMD Maintained MH
- SMD Operations Maps
- Y0TV0506F

This map is intended only for internal operations of the Los Angeles County Sewer Maintenance Districts. Los Angeles County expressly disclaims any liability for any inaccuracies which may be present in this map. Data contained in this map is produced in whole or part from the Thomas Bros. Maps® digital database. This map is copyrighted, and reproduced with permission granted, by Thomas Bros. Maps®. All rights reserved.

SEPTEMBER 2008
Y0TV0506F_Overview.mxd



ENCLOSURE 2:

- Quick Maintenance Rating Report
Priority List
- Quick Maintenance Rating Map

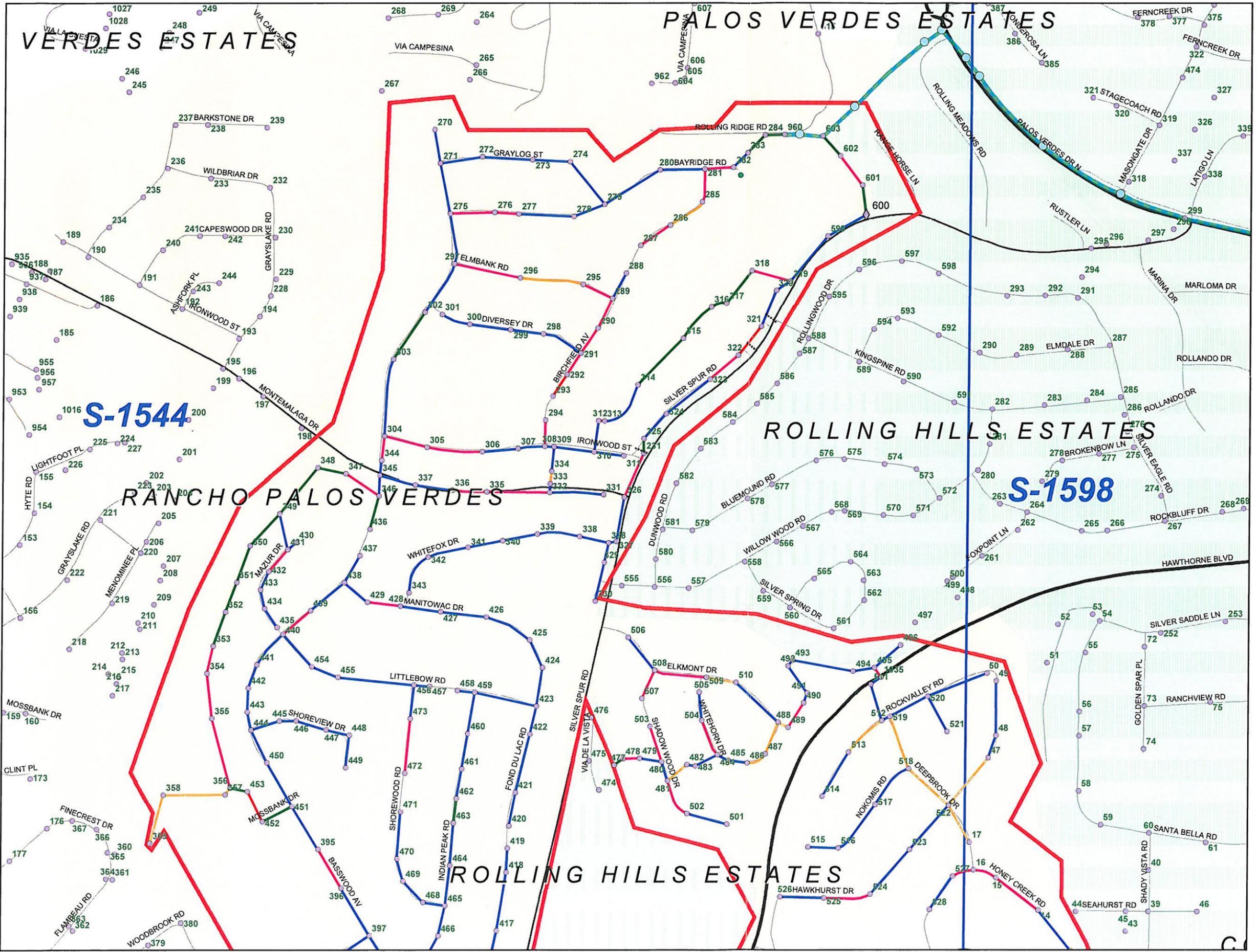
ENCLOSURE 2
 QUICK MAINTENANCE RATING REPORT PRIORITY LIST
 CITY OF RANCHO PALOS VERDES (Y0TV0506F)
 as of 08/04/06

Item No.	QMR	Start MH	End MH	Street	Observation	Corrective Action Taken
1	5243	1544-0292	1544-0293	BIRCHFIELD AV	Roots	Rodder (Completed 9/18/08)
2	5141	1544-0321	1544-0322	SILVER SPUR RD	Roots	Rodder (Completed 3/4/08); Hydro (Completed 1/15/09)
3	5100	1544-0453	1544-0452	EASEMENT by MOSSBANK and BASSWOOD	Rocks	Hydrojet (Completed 10/28/08)
4	4G21	1544-0335	1544-0332	MONTEMALAGA DR	Roots; Grease	Hydrojet (Completed 9/18/08)
5	4C22	1544-0291	1544-0290	BIRCHFIELD AV	Roots	Hydrojet (Completed 9/18/08)
6	4725	1544-0292	1544-0291	BIRCHFIELD AV	Roots	Rodder (Completed 9/18/08)
7	4422	1544-0393	1544-0394	SHOREWOOD RD	Roots	Hydrojet (Completed 9/18/08)
8	4421	1544-0287	1544-0286	BIRCHFIELD AV	Roots	Hydrojet (Completed 9/18/08)
9	4331	1545-0943	1545-0944	WARRIOR DR	Roots	Hydrojet (Completed 9/18/08)
10	4322	1544-0326	1544-0231	SILVER SPUR RD	Roots	Hydrojet (Completed 9/18/08)
11	4321	1544-0276	1544-0277	BAYRIDGE RD	Roots	Rodder (Completed 9/18/08)
12	4321	1544-0295	1544-0289	ELMBANK RD	Roots	Hydrojet (Completed 1/13/09)
13	4321	1544-0396	1544-0395	BASSWOOD AV	Camera underwater	Hydrojet (Completed 9/18/08)
14	4321	1544-0344	1544-0304	BASSWOOD AV	Roots	Rodder (Completed 9/18/08)
15	4232	1544-0539	1544-0538	SILVER ARROW DR	Roots	Hydrojet (Completed 9/18/08)
16	4231	1544-0472	1544-0473	SHOREWOOD RD	Roots	Hydrojet (Completed 9/18/08)
17	4231	1544-0275	1544-0276	BAYRIDGE RD	Roots	Hydrojet (Completed 1/13/09)
18	4231	1544-0601	1544-0602	EASEMENT by SILVER SPUR and RANGE HORSE	Roots	Hydrojet (Completed 10/28/08)
19	4231	1544-0285	1544-0281	BIRCHFIELD AV	Roots	Hydrojet (Completed 9/18/08)
20	4222	1545-0940	1545-0941	WARRIOR DR	Roots	Rodder (Completed 9/18/08)
21	4221	1599-0031	1599-0024	ELKRIDGE DR	Roots; Hole at trough of End MH	Hydrojet (Completed 1/21/09); CSMD will repair MH base.
22	4221	1544-0336	1544-0335	MONTEMALAGA DR	Roots	Hydrojet (Completed 9/18/08)
23	4221	1544-0281	1544-0282	BAYRIDGE RD	Camera underwater	Hydrojet (Completed 9/18/08)
24	4221	1544-0440	1544-0439	BASSWOOD AV	Roots; Hole at trough of End MH	Hydrojet (Completed 1/13/09); CSMD will repair MH base.
25	4136	1544-1035	1544-0495	HAWTHORNE BV	Roots	Hydrojet (Completed 1/13/09)
26	4132	1598-0031	1598-0032	EASEMENT by FALCON ROCK PL	Roots	Hydrojet (Completed 10/28/08)
27	4132	1598-0036	1598-0010	BLACKHORSE RD	Roots	Hydrojet (Completed 9/18/08)
28	4132	1599-0047	1599-0048	BEECHGATE DR	Roots	Hydrojet (Completed 10/28/08)
29	4132	1545-0939	1545-0940	WARRIOR DR	Roots	Hydrojet (Completed 1/13/09)

Item No.	QMR	Start MH	End MH	Street	Observation	Corrective Action Taken
30	4132	1544-0538	1544-0537	SILVER ARROW DR	Roots	Hydrojet (Completed 9/18/08)
31	4132	1544-0305	1544-0306	IRONWOOD ST	Roots	Rodder (Completed 9/18/08)
32	4131	1545-0544	1545-0543	SILVERARROW DR	Roots	Hydrojet (Completed 1/13/09)
33	4131	1545-0551	1545-0597	LONGHILL DR	Roots	Hydrojet (Completed 1/13/09)
34	4131	1545-0929	1545-0936	BROWNDEER LN	Roots	Rodder (Completed 9/18/08)
35	4131	1544-0507	1544-0508	SHADOW WOOD DR	Roots; High water mark	Hydrojet (Completed 1/14/09)
36	4131	1544-0503	1544-0480	SHADOW WOOD DR	Debris; Roots	Rodder (Completed 9/18/08); Hydrojet (Completed 9/18/08)
37	4131	1544-0354	1544-0353	EASEMENT by BASSWOOD and SHOREVIEW	Debris; Camera underwater	Hydrojet (Completed 1/13/09)
38	4131	1544-0290	1544-0289	BIRCHFIELD AV	Roots	Hydrojet (Completed 9/18/08)
39	412B	1545-0598	1545-0545	SILVERARROW DR	Roots	Hydrojet (Completed 1/21/09)
40	4125	1544-0525	1544-0524	HAWKHURST DR	Deposits	Hydrojet (Completed 9/18/08)
41	4122	1544-0431	1544-0432	MAZUR DR	Roots	Hydrojet (Completed 9/18/08)
42	4122	1544-0296	1544-0297	ELMBANK RD	Roots	Hydrojet (Completed 10/28/08)
43	4121	1599-0051	1599-0160	BEECHGATE DR	Roots	Hydrojet (Completed 10/28/08)
44	4121	1599-0003	1599-0002	ELMBRIDGE DR	Roots	Hydrojet (Completed 1/21/09)
45	4121	1545-0949	1545-0950	HALESCORNER RD	Deposits; Roots	Hydrojet (Completed 10/28/08)
46	4121	1545-0536	1545-0535	SILVER SPUR RD	Roots	Hydrojet (Completed 1/14/09)
47	4121	1545-0537	1545-0536	SILVER SPUR RD	Roots	Hydrojet (Completed 1/14/09)
48	4121	1545-0419	1545-0958	FAWNSKIN DR	Roots	Hydrojet (Completed 1/21/09)
49	4121	1544-0479	1544-0478	SHADOW WOOD DR	Pipe alignment change	No action needed.
50	4121	1544-0392	1544-0393	SHOREWOOD RD	Roots	Hydrojet (Completed 1/15/09)
51	4121	1544-0429	1544-0428	MANITOWAC DR	Roots	Hydrojet (Completed 1/15/09)
52	4121	1544-0294	1544-0308	BIRCHFIELD AV	Roots	Hydrojet (Completed 1/16/09)
53	4121	1544-0305	1544-0304	IRONWOOD ST	Roots	Rodder (Completed 9/18/08)
54	411B	1544-0347	1544-0346	BASSWOOD AV	Roots	Rodder (Completed 1/16/09)
55	411A	1544-0322	1544-0323	SILVER SPUR RD	Roots	Rodder (Completed 1/16/09)
56	4100	1544-0354	1544-0355	EASEMENT by BASSWOOD and SHOREVIEW	Debris; MH full of water	Hydrojet (Completed 1/16/09); Clean MH 1544-0355 (Completed 1/16/09)
57	4100	1544-0356	1544-0355	EASEMENT by BASSWOOD and SHOREVIEW	Camera underwater	Hydrojet (Completed 10/28/08)
58	4100	1544-0312	1544-0313	EASEMENT by SILVER SPUR and IRONWOOD	Roots	Rodder (Completed 9/18/08)
59	4100	1599-0041	1599-0040	BEECHGATE DR	Roots	Hydrojet (Completed 10/28/08)

The following line segments received a Quick Maintenance Rating of above 4000 due to the observation of Root Ball or Deposit inside the lateral connection. CSMD does not maintain lateral lines: it is the responsibility of the parcel owner to maintain their respective lateral lines to facilitate the flow of wastewater from their property to the mainline. Therefore, these lines were not included on the Priority List above identified with maintenance deficiencies in need of immediate attention by CSMD.

Item No.	QMR	Start MH	End MH	Street	Observation	Corrective Action Taken
1	4231	1598-0016	1598-0015	HONEY CREEK RD	Roots in lateral	Laterals are homeowner's responsibility
2	4231	1545-0596	1545-0597	SUNNY POINT PL	Roots in lateral	Laterals are homeowner's responsibility
3	4231	1544-0489	1544-0490	EASEMENT by ELKMONT and WHITEHORN	Roots in lateral	Laterals are homeowner's responsibility
4	4231	1544-0504	1544-0484	WHITE HORN DR	Roots in lateral	Laterals are homeowner's responsibility
5	4221	1545-0938	1599-0002	BROWNDEER LN	Roots in lateral	Laterals are homeowner's responsibility
6	4221	1598-0015	1598-0014	HONEY CREEK RD	Roots in lateral	Laterals are homeowner's responsibility
7	4221	1544-0319	1544-0318	EASTMENT by KINGSPINE and SILVERSPUR	Roots in lateral	Laterals are homeowner's responsibility
8	4135	1545-0844	1545-0951	FAWNSKIN DR	Roots in lateral	Laterals are homeowner's responsibility
9	4132	1545-0549	1545-0551	LONGHILL DR	Roots in lateral	Laterals are homeowner's responsibility
10	4131	1545-0958	1545-0880	FAWNSKIN DR	Roots in lateral	Laterals are homeowner's responsibility
11	4131	1544-0527	1598-0016	HONEY CREEK RD	Roots in lateral	Laterals are homeowner's responsibility
12	412A	1599-0039	1599-0036	LONGHILL DR	Roots in lateral	Laterals are homeowner's responsibility
13	4122	1545-0880	1545-0844	FAWNSKIN DR	Roots in lateral	Laterals are homeowner's responsibility
14	4121	1599-0002	1599-0001	BROWNDEER LN	Roots in lateral	Laterals are homeowner's responsibility
15	4121	1599-0011	1599-0010	BROWNDEER LN	Roots in lateral	Laterals are homeowner's responsibility
16	4121	1599-0014	1599-0011	BROWNDEER LN	Roots in lateral	Laterals are homeowner's responsibility
17	4121	1544-0544	1544-0545	DIAMOND HEAD LN	Roots in lateral	Laterals are homeowner's responsibility
18	4121	1544-0553	1544-0552	SILVERMOON LN	Roots in lateral	Laterals are homeowner's responsibility
19	4121	1544-0508	1544-0509	ELKMONT DR	Roots in lateral	Laterals are homeowner's responsibility
20	4121	1544-0502	1544-0481	SHADOW WOOD DR	Roots in lateral	Laterals are homeowner's responsibility



ENCLOSURE 2
CCTV PROJECT
YOTV0506F

Supervisorial District 4
 RANCHO PALOS VERDES

QUICK
MAINTENANCE
RATING
(QMR)



- Legend** Feet
- SMD Sanitary Sewers**
- QMR**
- 1: EXCELLENT
 - 2: GOOD
 - 3: FAIR
 - 4: POOR
 - 5: IMMEDIATE ATTENTION

- SMD Manholes**
- Other
- MH Type**
- Standard
 - Siphon
 - Trap
 - Shallow
 - Drop
 - SMD Pump Stations
 - SMD Treatment Plants

- Maintained by Others:**
- Trunk Sewerlines
 - Non SMD Sanitary Sewers
 - Trunk Mh
 - Non SMD Maintained MH
 - SMD Operations Maps
 - CCTV Project Area

This map is intended only for internal operations of the Los Angeles County Sewer Maintenance Districts. Los Angeles County expressly disclaims any liability for any inaccuracies which may be present in this map. Data contained in this map is produced in whole or part from the Thomas Bros. Maps® digital database. This map is copyrighted, and reproduced with permission granted, by Thomas Bros. Maps®. All rights reserved.

SEPTEMBER 2008

ENCLOSURE 2
CCTV PROJECT
YOTV0506F

Supervisorial District 4
 RANCHO PALOS VERDES

QUICK
MAINTENANCE
RATING
(QMR)



0 270 540 810 1,080



Legend Feet

SMD Sanitary Sewers

- QMR**
- 1: EXCELLENT (Green line)
 - 2: GOOD (Blue line)
 - 3: FAIR (Orange line)
 - 4: POOR (Pink line)
 - 5: IMMEDIATE ATTENTION (Red line)

SMD Manholes

- Other (Circle with dot)
- Standard (Purple circle)
- Siphon (Circle with cross)
- Trap (Diamond)
- Shallow (Square)
- Drop (Triangle)
- SMD Pump Stations (Red 'P' in square)
- SMD Treatment Plants (WTP in square)

Maintained by Others:

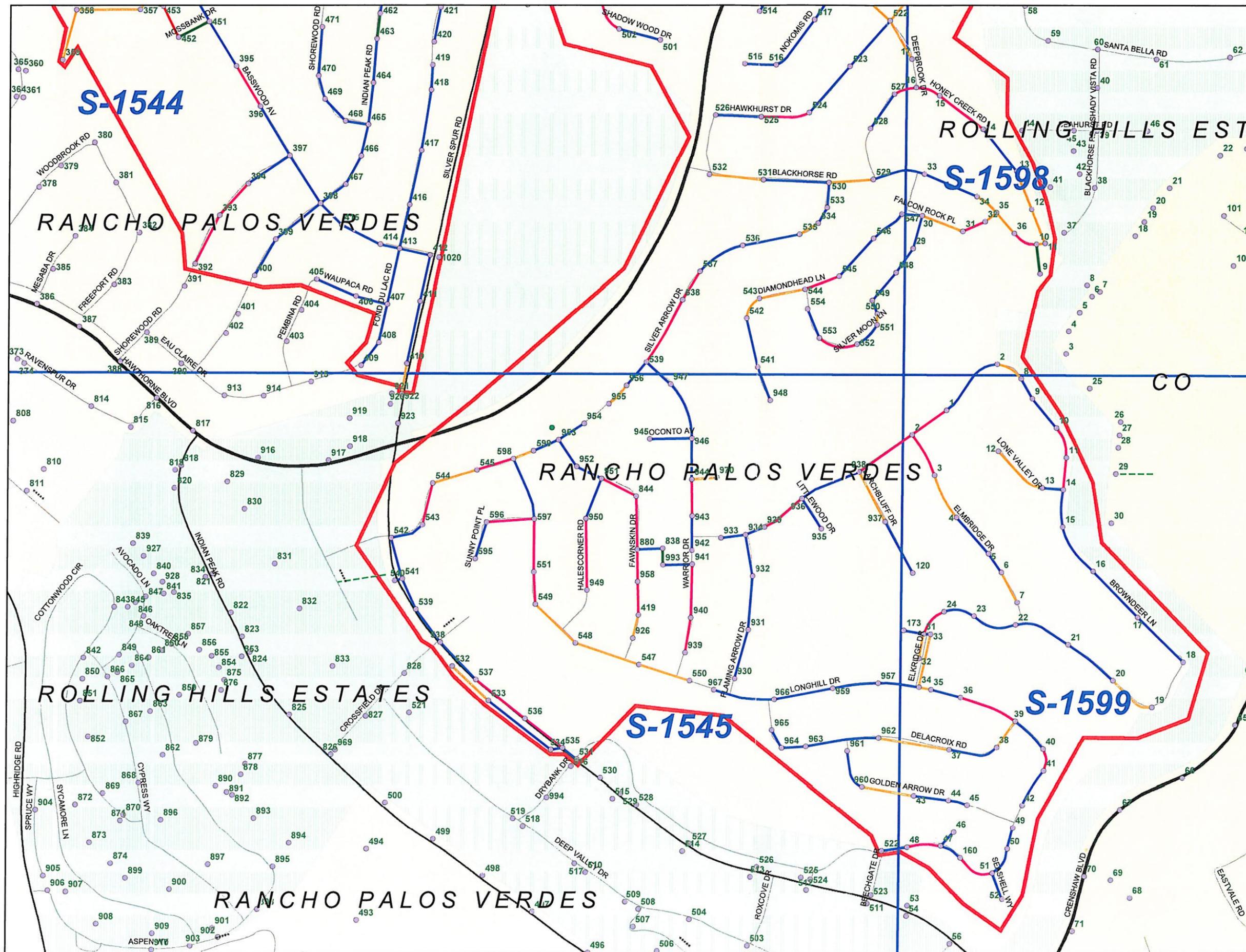
- Trunk Sewerlines (Thick blue line)
- Non SMD Sanitary Sewers (Dashed green line)
- Trunk Mh (Blue circle)
- Non SMD Maintained MH (Green circle)

- SMD Operations Maps (Blue outline)
- CCTV Project Area (Red outline)

This map is intended only for internal operations of the Los Angeles County Sewer Maintenance Districts. Los Angeles County expressly disclaims any liability for any inaccuracies which may be present in this map. Data contained in this map is produced in whole or part from the Thomas Bros. Maps® digital database. This map is copyrighted, and reproduced with permission granted, by Thomas Bros. Maps®. All rights reserved.

SEPTEMBER 2008

0506F_11x17_QMR_RPV_2.mdx





GAIL FARBER, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

February 9, 2009

IN REPLY PLEASE
REFER TO FILE: **SM-1**

Mr. Jim Bell, Director of Public Works
City of Rancho Palos Verdes
30940 Hawthorne Boulevard
Rancho Palos Verdes, CA 90275

Attention Mr. Rick James

Dear Mr. Bell:

**CONSOLIDATED SEWER MAINTENANCE DISTRICT
CONDITION ASSESSMENT PROGRAM REPORT
PROJECT Y0TV0506F**

This letter is to inform you that as part of the Sewer Condition Assessment Program, the County of Los Angeles Department of Public Works Consolidated Sewer Maintenance District has completed the closed-circuit television (CCTV) inspection of 76,591 feet or approximately 10.5 percent of the City of Rancho Palos Verdes' sewer system.

The enclosed report outlines the structural and maintenance ratings of your system based on the Pipeline Assessment and Certification Program's rating methodology. Included in the report are the following:

- Condition Assessment Report
- Project Overview Map (Enclosure 1)
- Quick Maintenance Rating Report Priority List and Quick Maintenance Rating Map (Enclosure 2)
- Quick Structural Rating Report Priority List and Quick Structural Rating Map (Enclosure 3)
- Infrastructure Inspection Reports for Grades 4 and 5 (Enclosure 4)
- CCTV Sewer Inspection Project Schedule (Enclosure 5)

Mr. Jim Bell
February 9, 2009
Page 2

The Condition Assessment Report will provide details regarding the maintenance and structural condition of your City's sewer mainlines. This information can be included in your agency's Sewer System Management Plan as a reference in Chapter 8.0, System Evaluation and Capacity Assurance Plan. The segments with critical maintenance issues have been cleaned and, in some instances, have been incorporated into our routine cleaning schedule for continued monitoring. In addition, the segments with severe structural defects have either been repaired or will be scheduled for repair as part of the ongoing Accumulative Capital Outlay Project.

If you have any questions regarding this Report or the Condition Assessment Program, please contact Mr. Robert Swartz at (626) 300-3367, Monday through Friday, 8 a.m. to 4 p.m., or at rswartz@dpw.lacounty.gov.

Very truly yours,

GAIL FARBER
Director of Public Works



MANUEL DEL REAL
Assistant Deputy Director
Sewer Maintenance Division

PK:kk
1627

Enc.

**CONDITION ASSESSMENT REPORT
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
CONSOLIDATED SEWER MAINTENANCE DISTRICT**

PROJECT NAME: Y0TV0506F	PROJECT MGR: Fernando Villaluna
PROJECT DATE: 06/27/06 – 08/04/06	CONTACT NO: (626) 300-3380
SUP. DISTRICT(s): 4	MAP PAGE(S): 1544, 1545, 1598, & 1599
Report By: Phyo Kyaw	Report Date: 01/22/09

INTRODUCTION

As part of the Sewer Condition Assessment Program, the County of Los Angeles Department of Public Works Consolidated Sewer Maintenance District has completed the closed-circuit television (CCTV) inspection of 76,591 feet or approximately 10.5 percent of the City of Rancho Palos Verdes' sewer system.

The Sewer Condition Assessment Program utilizes the Pipeline Assessment and Certification Program (PACP) Quick Rating methodology to rank the maintenance and structural ratings of your system based on industry standards.

PROJECT AREA AND DESCRIPTION

Project Y0TV0506F included sewer lines located in Unincorporated County of Los Angeles area and the Cities of Agoura Hills, Calabasas, Hidden Hills, Malibu, Rancho Palos Verdes, and Westlake Village. Enclosed for your reference is an overview map of the project area within your City (Enclosure 1).

DEFECT GRADE DESCRIPTION

The Quick Rating indicates the number of occurrences for the highest severity grade for each pipe segment for either maintenance or structural defects. A grade of 1 indicates that a pipe segment is in excellent condition with minor defects, while a grade of 5 indicates that a pipe segment requires immediate attention. A detailed breakdown of the five possible defect grades is as follows:

Grade	Description	Estimate time to Failure
1:	EXCELLENT: Minor Defects.	Unlikely in the foreseeable future
2:	GOOD: Defects that have not begun to deteriorate.	20 years or more
3:	FAIR: Moderate defects that will continue to deteriorate.	10 to 20 years
4:	POOR: Severe defects that will become grade 5 defects within the foreseeable future.	5 to 10 years
5:	IMMEDIATE ATTENTION: Defects requiring immediate attention.	Has failed or will likely fail within the next 5 years

MAINTENANCE REPORT

Our inspection revealed that approximately 79.1 percent of the system televised was free of blockages or restrictions that would impede sewer flows. However, the remaining 20.9 percent of the inspected pipe segments within the City of Rancho Palos Verdes had a PACP maintenance grade of 4 or 5 as indicated in the Quick Maintenance Rating Table shown below. These segments have been incorporated into our routine cleaning schedule with corrective action taken as noted on the Quick Maintenance Rating Report Priority List (Enclosure 2). Also included is a color-coded map showing the quick maintenance rating for each pipe segment.

QUICK MAINTENANCE RATING TABLE

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Excellent	3,922	5.1	23
2: Good	46,753	61.1	235
3: Fair	9,898	12.9	51
4: Poor	15,497	20.2	76
5: Immediate Attention	521	0.7	3
TOTAL	76,591	100.0	388

STRUCTURAL REPORT

Our inspection revealed that approximately 88.8 percent of the inspected pipe segments within the City of Rancho Palos Verdes were free of severe structural defects. However, the remaining 11.2 percent of the inspected pipe segments had a PACP structural grade of 4 or 5 as indicated in the Quick Structural Rating Table shown below. These segments have been placed on a priority list based on the severity and the need for action. For Items 1 through 42 in the Quick Structural Rating Report Priority List (Enclosure 3) which require a corrective action, the proposed corrective method will be scheduled in the next 24 months as part of the ongoing Accumulative Capital Outlay Project. A color-coded map showing the Quick Structural Rating for each pipe segment is located in Enclosure 3. Copies of the actual inspection reports for these 42 segments are included in Enclosure 4.

QUICK STRUCTURAL RATING TABLE

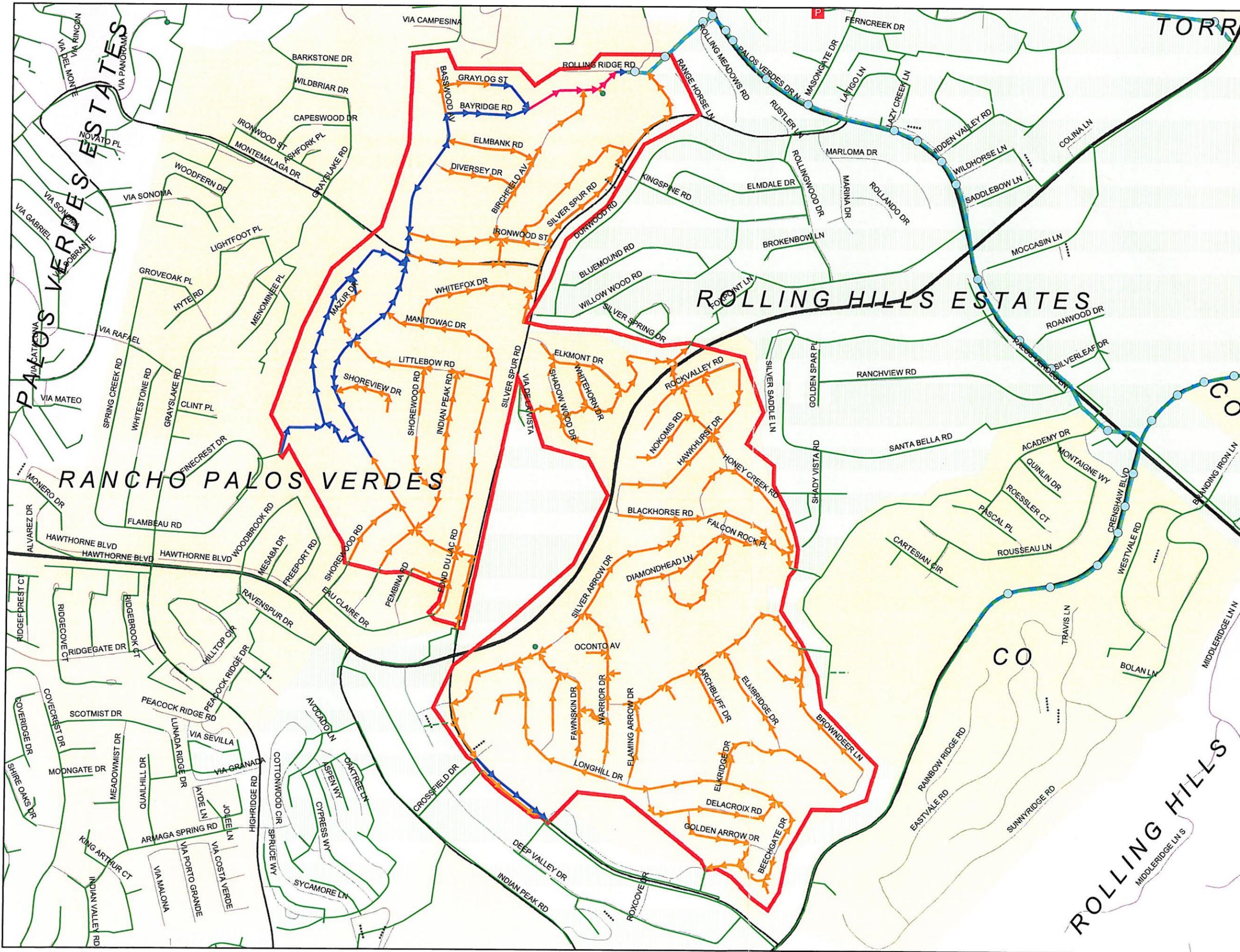
DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Excellent	40,577	53.0	212
2: Good	6,308	8.2	30
3: Fair	21,148	27.6	104
4: Poor	4,974	6.5	24
5: Immediate Attention	3,584	4.7	18
TOTAL	76,591	100.0	388

FUTURE PROJECTS

The Sewer Condition Assessment Program will be performing future CCTV inspections of the remaining sewer lines within the City of Rancho Palos Verdes. For your reference, the CCTV Sewer Inspection project schedule for the City of Rancho Palos Verdes is listed in Enclosure 5.

ENCLOSURE 1:

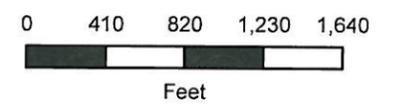
Project Overview Map



PROJECT OVERVIEW MAP

**CCTV PROJECT
YOTV0506F**

Supervisorial District 3 & 4
City of Agoura Hills, Calabasas,
Hidden Hills, Malibu, Rancho Palos
Verdes, Westlake Village &
County Unincorporated



Legend

SMD Sanitary Sewers

- Other
- 4
- 8
- 10
- 12
- 15
- 18

SMD Manholes

- Other

MH Type

- Standard
- Siphon
- Trap
- Shallow
- Drop

- SMD Pump Satations
- SMD Treatment Plants

Maintained by Others:

- Trunk Sewerlines
- Non SMD Sanitary Sewers
- Trunk Mh
- Non SMD Maintained MH
- SMD Operations Maps
- YOTV0506F

This map is intended only for internal operations of the Los Angeles County Sewer Maintenance Districts. Los Angeles County expressly disclaims any liability for any inaccuracies which may be present in this map. Data contained in this map is produced in whole or part from the Thomas Bros. Maps® digital database. This map is copyrighted, and reproduced with permission granted, by Thomas Bros. Maps®. All rights reserved.

ENCLOSURE 2:

- Quick Maintenance Rating Report
Priority List
- Quick Maintenance Rating Map

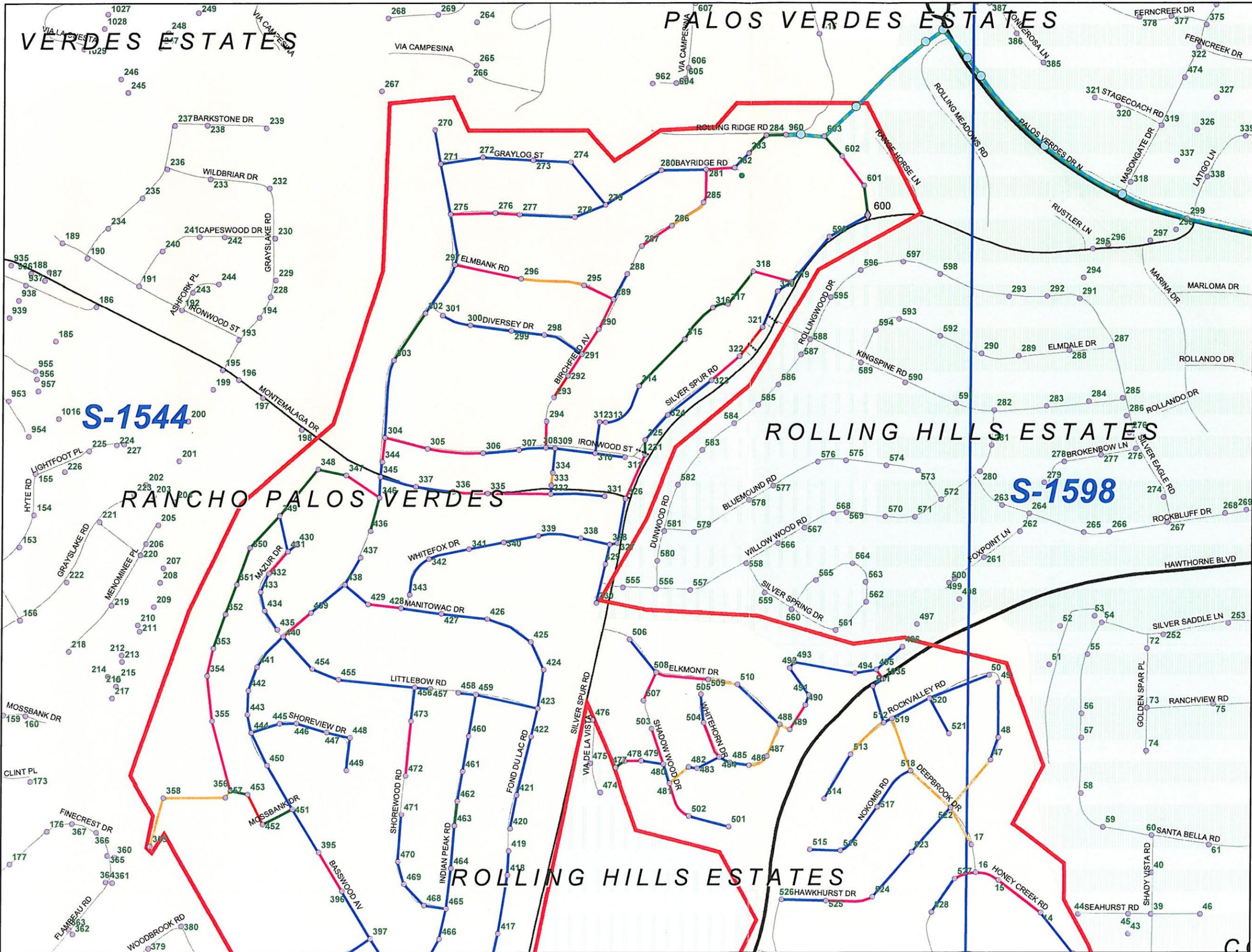
ENCLOSURE 2
 QUICK MAINTENANCE RATING REPORT PRIORITY LIST
 CITY OF RANCHO PALOS VERDES (Y0TV0506F)
 as of 08/04/06

Item No.	QMR	Start MH	End MH	Street	Observation	Corrective Action Taken
1	5243	1544-0292	1544-0293	BIRCHFIELD AV	Roots	Rodder (Completed 9/18/08)
2	5141	1544-0321	1544-0322	SILVER SPUR RD	Roots	Rodder (Completed 3/4/08); Hydro (Completed 1/15/09)
3	5100	1544-0453	1544-0452	EASEMENT by MOSSBANK and BASSWOOD	Rocks	Hydrojet (Completed 10/28/08)
4	4G21	1544-0335	1544-0332	MONTEMALAGA DR	Roots; Grease	Hydrojet (Completed 9/18/08)
5	4C22	1544-0291	1544-0290	BIRCHFIELD AV	Roots	Hydrojet (Completed 9/18/08)
6	4725	1544-0292	1544-0291	BIRCHFIELD AV	Roots	Rodder (Completed 9/18/08)
7	4422	1544-0393	1544-0394	SHOREWOOD RD	Roots	Hydrojet (Completed 9/18/08)
8	4421	1544-0287	1544-0286	BIRCHFIELD AV	Roots	Hydrojet (Completed 9/18/08)
9	4331	1545-0943	1545-0944	WARRIOR DR	Roots	Hydrojet (Completed 9/18/08)
10	4322	1544-0326	1544-0231	SILVER SPUR RD	Roots	Hydrojet (Completed 9/18/08)
11	4321	1544-0276	1544-0277	BAYRIDGE RD	Roots	Rodder (Completed 9/18/08)
12	4321	1544-0295	1544-0289	ELMBANK RD	Roots	Hydrojet (Completed 1/13/09)
13	4321	1544-0396	1544-0395	BASSWOOD AV	Camera underwater	Hydrojet (Completed 9/18/08)
14	4321	1544-0344	1544-0304	BASSWOOD AV	Roots	Rodder (Completed 9/18/08)
15	4232	1544-0539	1544-0538	SILVER ARROW DR	Roots	Hydrojet (Completed 9/18/08)
16	4231	1544-0472	1544-0473	SHOREWOOD RD	Roots	Hydrojet (Completed 9/18/08)
17	4231	1544-0275	1544-0276	BAYRIDGE RD	Roots	Hydrojet (Completed 1/13/09)
18	4231	1544-0601	1544-0602	EASEMENT by SILVER SPUR and RANGE HORSE	Roots	Hydrojet (Completed 10/28/08)
19	4231	1544-0285	1544-0281	BIRCHFIELD AV	Roots	Hydrojet (Completed 9/18/08)
20	4222	1545-0940	1545-0941	WARRIOR DR	Roots	Rodder (Completed 9/18/08)
21	4221	1599-0031	1599-0024	ELKRIDGE DR	Roots; Hole at trough of End MH	Hydrojet (Completed 1/21/09); CSMD will repair MH base.
22	4221	1544-0336	1544-0335	MONTEMALAGA DR	Roots	Hydrojet (Completed 9/18/08)
23	4221	1544-0281	1544-0282	BAYRIDGE RD	Camera underwater	Hydrojet (Completed 9/18/08)
24	4221	1544-0440	1544-0439	BASSWOOD AV	Roots; Hole at trough of End MH	Hydrojet (Completed 1/13/09); CSMD will repair MH base.
25	4136	1544-1035	1544-0495	HAWTHORNE BV	Roots	Hydrojet (Completed 1/13/09)
26	4132	1598-0031	1598-0032	EASEMENT by FALCON ROCK PL	Roots	Hydrojet (Completed 10/28/08)
27	4132	1598-0036	1598-0010	BLACKHORSE RD	Roots	Hydrojet (Completed 9/18/08)
28	4132	1599-0047	1599-0048	BEECHGATE DR	Roots	Hydrojet (Completed 10/28/08)
29	4132	1545-0939	1545-0940	WARRIOR DR	Roots	Hydrojet (Completed 1/13/09)

Item No.	QMR	Start MH	End MH	Street	Observation	Corrective Action Taken
30	4132	1544-0538	1544-0537	SILVER ARROW DR	Roots	Hydrojet (Completed 9/18/08)
31	4132	1544-0305	1544-0306	IRONWOOD ST	Roots	Rodder (Completed 9/18/08)
32	4131	1545-0544	1545-0543	SILVERARROW DR	Roots	Hydrojet (Completed 1/13/09)
33	4131	1545-0551	1545-0597	LONGHILL DR	Roots	Hydrojet (Completed 1/13/09)
34	4131	1545-0929	1545-0936	BROWNDER LN	Roots	Rodder (Completed 9/18/08)
35	4131	1544-0507	1544-0508	SHADOW WOOD DR	Roots; High water mark	Hydrojet (Completed 1/14/09)
36	4131	1544-0503	1544-0480	SHADOW WOOD DR	Debris; Roots	Rodder (Completed 9/18/08); Hydrojet (Completed 9/18/08)
37	4131	1544-0354	1544-0353	EASEMENT by BASSWOOD and SHOREVIEW	Debris; Camera underwater	Hydrojet (Completed 1/13/09)
38	4131	1544-0290	1544-0289	BIRCHFIELD AV	Roots	Hydrojet (Completed 9/18/08)
39	412B	1545-0598	1545-0545	SILVERARROW DR	Roots	Hydrojet (Completed 1/21/09)
40	4125	1544-0525	1544-0524	HAWKHURST DR	Deposits	Hydrojet (Completed 9/18/08)
41	4122	1544-0431	1544-0432	MAZUR DR	Roots	Hydrojet (Completed 9/18/08)
42	4122	1544-0296	1544-0297	ELMBANK RD	Roots	Hydrojet (Completed 10/28/08)
43	4121	1599-0051	1599-0160	BEECHGATE DR	Roots	Hydrojet (Completed 10/28/08)
44	4121	1599-0003	1599-0002	ELMBRIDGE DR	Roots	Hydrojet (Completed 1/21/09)
45	4121	1545-0949	1545-0950	HALESCORNER RD	Deposits; Roots	Hydrojet (Completed 10/28/08)
46	4121	1545-0536	1545-0535	SILVER SPUR RD	Roots	Hydrojet (Completed 1/14/09)
47	4121	1545-0537	1545-0536	SILVER SPUR RD	Roots	Hydrojet (Completed 1/14/09)
48	4121	1545-0419	1545-0958	FAWNSKIN DR	Roots	Hydrojet (Completed 1/21/09)
49	4121	1544-0479	1544-0478	SHADOW WOOD DR	Pipe alignment change	No action needed.
50	4121	1544-0392	1544-0393	SHOREWOOD RD	Roots	Hydrojet (Completed 1/15/09)
51	4121	1544-0429	1544-0428	MANITOWAC DR	Roots	Hydrojet (Completed 1/15/09)
52	4121	1544-0294	1544-0308	BIRCHFIELD AV	Roots	Hydrojet (Completed 1/16/09)
53	4121	1544-0305	1544-0304	IRONWOOD ST	Roots	Hydrojet (Completed 1/16/09)
54	411B	1544-0347	1544-0346	BASSWOOD AV	Roots	Rodder (Completed 9/18/08)
55	411A	1544-0322	1544-0323	SILVER SPUR RD	Roots	Rodder (Completed 1/16/09)
56	4100	1544-0354	1544-0355	EASEMENT by BASSWOOD and SHOREVIEW	Debris; MH full of water	Hydrojet (Completed 1/16/09); Clean MH 1544-0355 (Completed 1/16/09)
57	4100	1544-0356	1544-0355	EASEMENT by BASSWOOD and SHOREVIEW	Camera underwater	Hydrojet (Completed 10/28/08)
58	4100	1544-0312	1544-0313	EASEMENT by SILVER SPUR and IRONWOOD	Roots	Rodder (Completed 9/18/08)
59	4100	1599-0041	1599-0040	BEECHGATE DR	Roots	Hydrojet (Completed 10/28/08)

The following line segments received a Quick Maintenance Rating of above 4000 due to the observation of Root Ball or Deposit inside the lateral connection. CSMD does not maintain lateral lines: it is the responsibility of the parcel owner to maintain their respective lateral lines to facilitate the flow of wastewater from their property to the mainline. Therefore, these lines were not included on the Priority List above identified with maintenance deficiencies in need of immediate attention by CSMD.

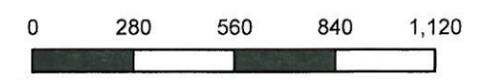
Item No.	QMR	Start MH	End MH	Street	Observation	Corrective Action Taken
1	4231	1598-0016	1598-0015	HONEY CREEK RD	Roots in lateral	Laterals are homeowner's responsibility
2	4231	1545-0596	1545-0597	SUNNY POINT PL	Roots in lateral	Laterals are homeowner's responsibility
3	4231	1544-0489	1544-0490	EASEMENT by ELKMONT and WHITEHORN	Roots in lateral	Laterals are homeowner's responsibility
4	4231	1544-0504	1544-0484	WHITE HORN DR	Roots in lateral	Laterals are homeowner's responsibility
5	4221	1545-0938	1599-0002	BROWNDDEER LN	Roots in lateral	Laterals are homeowner's responsibility
6	4221	1598-0015	1598-0014	HONEY CREEK RD	Roots in lateral	Laterals are homeowner's responsibility
7	4221	1544-0319	1544-0318	EASTMENT by KINGSPINE and SILVERSPUR	Roots in lateral	Laterals are homeowner's responsibility
8	4135	1545-0844	1545-0951	FAWNSKIN DR	Roots in lateral	Laterals are homeowner's responsibility
9	4132	1545-0549	1545-0551	LONGHILL DR	Roots in lateral	Laterals are homeowner's responsibility
10	4131	1545-0958	1545-0880	FAWNSKIN DR	Roots in lateral	Laterals are homeowner's responsibility
11	4131	1544-0527	1598-0016	HONEY CREEK RD	Roots in lateral	Laterals are homeowner's responsibility
12	412A	1599-0039	1599-0036	LONGHILL DR	Roots in lateral	Laterals are homeowner's responsibility
13	4122	1545-0880	1545-0844	FAWNSKIN DR	Roots in lateral	Laterals are homeowner's responsibility
14	4121	1599-0002	1599-0001	BROWNDDEER LN	Roots in lateral	Laterals are homeowner's responsibility
15	4121	1599-0011	1599-0010	BROWNDDEER LN	Roots in lateral	Laterals are homeowner's responsibility
16	4121	1599-0014	1599-0011	BROWNDDEER LN	Roots in lateral	Laterals are homeowner's responsibility
17	4121	1544-0544	1544-0545	DIAMOND HEAD LN	Roots in lateral	Laterals are homeowner's responsibility
18	4121	1544-0553	1544-0552	SILVERMOON LN	Roots in lateral	Laterals are homeowner's responsibility
19	4121	1544-0508	1544-0509	ELKMONT DR	Roots in lateral	Laterals are homeowner's responsibility
20	4121	1544-0502	1544-0481	SHADOW WOOD DR	Roots in lateral	Laterals are homeowner's responsibility



ENCLOSURE 2 CCTV PROJECT YOTV0506F

Supervisory District 4
RANCHO PALOS VERDES

QUICK MAINTENANCE RATING (QMR)



- Legend** Feet
- SMD Sanitary Sewers**
- QMR**
- 1: EXCELLENT
 - 2: GOOD
 - 3: FAIR
 - 4: POOR
 - 5: IMMEDIATE ATTENTION

- SMD Manholes**
- Other
- MH Type**
- Standard
 - Siphon
 - Trap
 - Shallow
 - Drop
 - SMD Pump Stations
 - SMD Treatment Plants

- Maintained by Others:**
- Trunk Sewerlines
 - - - Non SMD Sanitary Sewers
 - Trunk Mh
 - Non SMD Maintained MH
 - SMD Operations Maps
 - CCTV Project Area

This map is intended only for internal operations of the Los Angeles County Sewer Maintenance Districts. Los Angeles County expressly disclaims any liability for any inaccuracies which may be present in this map. Data contained in this map is produced in whole or part from the Thomas Bros. Maps® digital database. This map is copyrighted, and reproduced with permission granted, by Thomas Bros. Maps®. All rights reserved.

ENCLOSURE 2

CCTV PROJECT YOTV0506F

Supervisorial District 4
RANCHO PALOS VERDES

QUICK MAINTENANCE RATING (QMR)



0 270 540 810 1,080



Legend

- SMD Sanitary Sewers**
- QMR**
- 1: EXCELLENT
 - 2: GOOD
 - 3: FAIR
 - 4: POOR
 - 5: IMMEDIATE ATTENTION

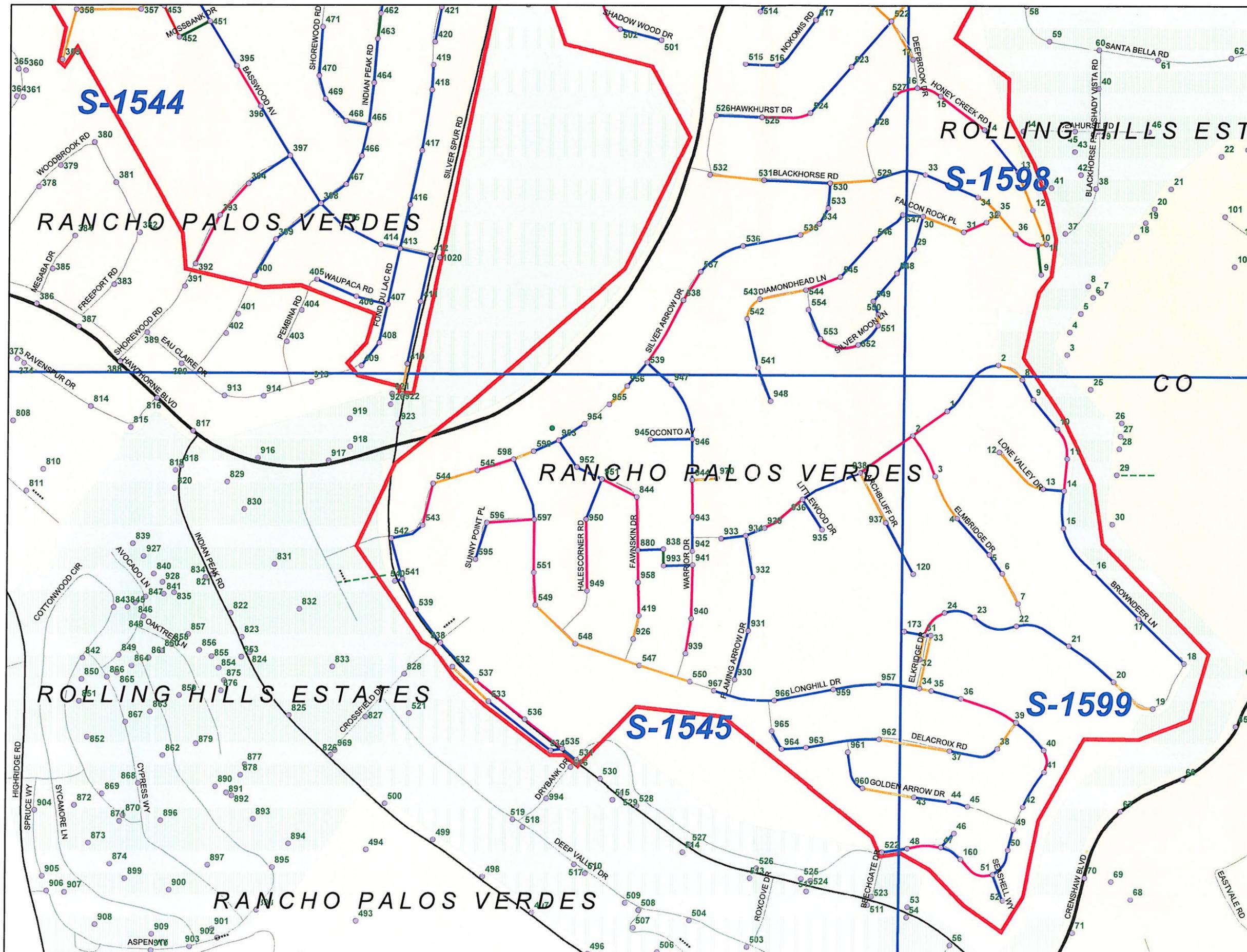
- SMD Manholes**
- Other
 - Standard
 - Siphon
 - Trap
 - Shallow
 - Drop
 - SMD Pump Stations
 - SMD Treatment Plants

- Maintained by Others:**
- Trunk Sewerlines
 - Non SMD Sanitary Sewers
 - Trunk Mh
 - Non SMD Maintained MH
 - SMD Operations Maps
 - CCTV Project Area

This map is intended only for internal operations of the Los Angeles County Sewer Maintenance Districts. Los Angeles County expressly disclaims any liability for any inaccuracies which may be present in this map. Data contained in this map is produced in whole or part from the Thomas Bros. Maps® digital database. This map is copyrighted, and reproduced with permission granted, by Thomas Bros. Maps®. All rights reserved.

SEPTEMBER 2008

0506F_11x17_QMR_RPV_2.mdx



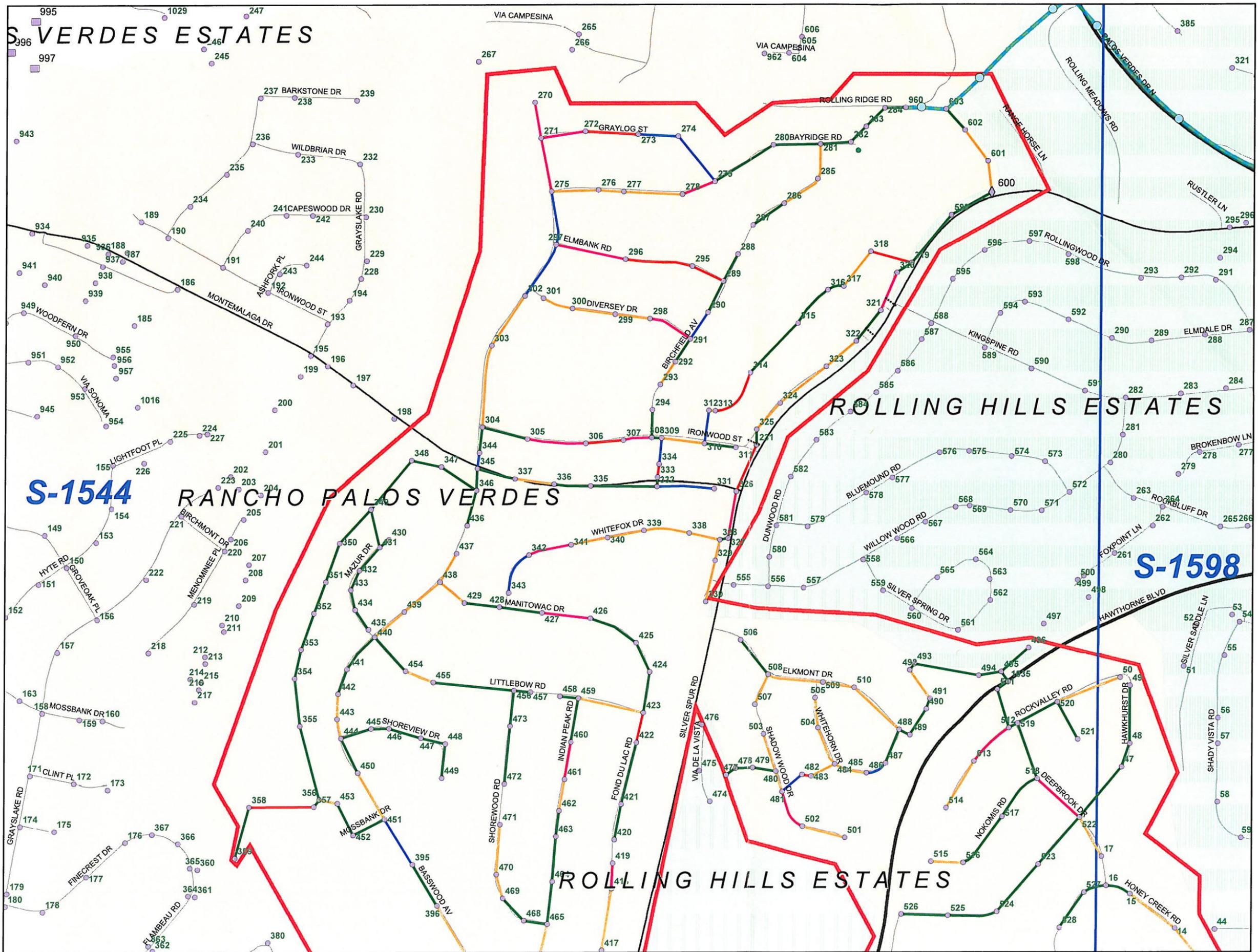
ENCLOSURE 3:

- Quick Structural Rating Report
Priority List
- Quick Structural Rating Map

ENCLOSURE 3
 QUICK STRUCTURAL RATING REPORT PRIORITY LIST
 CITY OF RANCHO PALOS VERDES (Y0TV0506F)
 as of 08/04/06

Item No.	QSR	Start MH	End MH	Street	Observation: Location	Proposed Corrective Method	Length of Repair (FT)
1	5145	1544-0333	1544-0334	EASEMENT between IRONWOOD and MONTEMALAGA	Multiple fractures; Cracks	Emergency Repair (Point Repair): completed October 2006	Completed
2	5143	1544-0313	1544-0314	EASEMENT by IRONWOOD and SILVERSPUR	Hole and collapse: 67'	Lining: MH to MH	276
3	5141	1544-0482	1544-0483	SHADOW WOOD DR	Broken and collapse: 17'	Emergency Repair (Point Repair and Lining): completed December 2006	Completed
4	513C	1544-0318	1544-0319	EASEMENT by KINGSPINE and SILVERSPUR	Hole: 105'; Fractures: 157'	Lining: MH to MH	229
5	5137	1544-0295	1544-0289	ELMBANK RD	Broken and hole: 100'; Cracks	Lining: MH to MH	164
6	5137	1544-0272	1544-0273	GRAYLOG ST	Broken: 98.5'	Structural integrity in tact. No action needed.	-
7	5134	1544-0295	1544-0296	ELMBANK RD	Broken: 17'	Structural integrity in tact. No action needed.	-
8	5131	1545-0950	1545-0951	HALESCORNER RD	Hole: Start MH	CSMD will repair MH base.	-
9	5131	1545-0599	1545-0598	SILVERARROW DR	Hole: End MH	CSMD will repair MH base.	-
10	5131	1545-0926	1545-0419	FAWNSKIN DR	Broken: 115'	Structural integrity in tact. No action needed.	-
11	5131	1544-0422	1544-0423	FOND DU LAC RD	Hole: End MH	CSMD will repair MH base.	-
12	5131	1544-0306	1544-0307	IRONWOOD ST	Hole: End MH	CSMD will repair MH base.	-
13	5131	1544-0326	1544-0231	SILVER SPUR RD	Hole: End MH	CSMD will repair MH base.	-
14	5123	1545-0938	1599-0002	BROWNDER LN	Hole: End MH	CSMD will repair MH base.	-
15	5112	1545-0939	1545-0940	WARRIOR DR	Hole: End MH	CSMD will repair MH base.	-
16	5100	1545-0547	1545-0550	LONGHILL DR	Hole: Start MH	CSMD will repair MH base.	-
17	5100	1544-0531	1544-0530	BLACKHORSE RD	Hole: End MH	CSMD will repair MH base.	-
18	5100	1544-0368	1544-0357	EASEMENT by MOSSBANK and BASSWOOD	Broken: 276'	Emergency Repair (Point Repair): completed January 2007	Completed
19	4439	1544-0296	1544-0297	ELMBANK RD	Fractures: 286'	Lining: MH to MH	346
20	4332	1544-0321	1544-0320	SILVER SPUR RD	Fracture: 53'	Structural integrity in tact. No action needed.	-
21	4331	1544-0426	1544-0427	MANITOWAC DR	Broken: 178'	Lining: MH to MH	329
22	4324	1544-0271	1544-0272	GRAYLOG ST	Fracture and cracks	Structural integrity in tact. No action needed.	-
23	4313	1544-0419	1544-0418	FOND DU LAC RD	Fracture: 161'	Structural integrity in tact. No action needed.	-
24	423A	1545-0544	1545-0543	SILVERARROW DR	Fracture	Lining: MH to MH	236
25	4231	1544-0342	1544-0341	WHITEFOX DR	Broken: 215'	Lining: MH to MH	305
26	4231	1544-0327	1544-0326	SILVER SPUR RD	Fracture: 10'; Multiple cracks	Lining: MH to MH	255
27	4200	1544-0522	1544-0518	DEEPBROOK DR	Fracture: 212'; Deposits	Lining: MH to MH	300
28	4200	1544-0278	1544-0279	BAYRIDGE RD	Fractures: 41'	Lining: MH to MH	150
29	4137	1544-0275	1544-0271	BASSWOOD AV	Small fracture	Structural integrity in tact. No action needed.	-

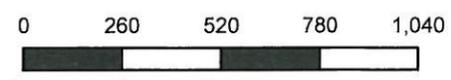
Item No.	QSR	Start MH	End MH	Street	Observation: Location	Proposed Corrective Method	Length of Repair (FT)
30	4135	1544-0502	1544-0481	SHADOW WOOD DR	Fractures: 232', 153'	Lining: MH to MH	250
31	4134	1544-0305	1544-0306	IRONWOOD ST	Fractures and cracks	Structural integrity in tact. No action needed.	-
32	4133	1545-0543	1545-0542	SILVERARROW DR	Fracture and cracks	Structural integrity in tact. No action needed.	-
33	4133	1544-0298	1544-0291	DIVERSEY DR	Fractures and cracks	Structural integrity in tact. No action needed.	-
34	4133	1544-0270	1544-0271	BASSWOOD AV	Fracture and cracks	Structural integrity in tact. No action needed.	-
35	4131	1545-0941	1545-0993	EASEMENT by WARRIOR and BROWNDEER	Fracture	Lining: MH to MH	143
36	4131	1544-0461	1544-0460	INDIAN PEAK RD	Multiple fractures; Roots	Lining: MH to MH	290
37	4122	1544-0307	1544-0308	IRONWOOD ST	Fracture: 123'	Structural integrity in tact. No action needed.	-
38	4113	1544-0408	1544-0407	FOND DU LAC RD	Fracture	Structural integrity in tact. No action needed.	-
39	4100	1544-0541	1544-0542	DIAMOND HEAD LN	Hole: End MH	CSMD will repair MH base.	-
40	4100	1544-0551	1544-0550	EASEMENT by SILVERMOON	Fracture	Structural integrity in tact. No action needed.	-
41	4100	1544-0513	1544-0512	ROCKVALLEY RD	Fracture: 267'	Structural integrity in tact. No action needed.	-
42	4100	1599-0048	1545-0522	BEECHGATE DR	Fracture: 146'	Structural integrity in tact. No action needed.	-



ENCLOSURE 3 CCTV PROJECT Y0TV0506F

Supervisorial District 4
RANCHO PALOS VERDES

QUICK STRUCTURAL RATING (QSR)



- Legend** Feet
- SMD Sanitary Sewers**
- QSR
- 1: EXCELLENT
 - 2: GOOD
 - 3: FAIR
 - 4: POOR
 - 5: IMMEDIATE ATTENTION

- SMD Manholes**
- Other
- MH Type**
- Standard
 - Siphon
 - Trap
 - Shallow
 - Drop
 - SMD Pump Stations
 - SMD Treatment Plants

- Maintained by Others:**
- Trunk Sewerlines
 - Non SMD Sanitary Sewers
 - Trunk Mh
 - Non SMD Maintained MH
 - SMD Operations Maps
 - CCTV Project Area

This map is intended only for internal operations of the Los Angeles County Sewer Maintenance Districts. Los Angeles County expressly disclaims any liability for any inaccuracies which may be present in this map. Data contained in this map is produced in whole or part from the Thomas Bros. Maps® digital database. This map is copyrighted, and reproduced with permission granted, by Thomas Bros. Maps®. All rights reserved.

ENCLOSURE 3

CCTV PROJECT YOTV0506F

Supervisorial District 4
RANCHO PALOS VERDES

QUICK STRUCTURAL RATING (QSR)



0 270 540 810 1,080



Legend Feet

SMD Sanitary Sewers

QSR

- 1: EXCELLENT
- 2: GOOD
- 3: FAIR
- 4: POOR
- 5: IMMEDIATE ATTENTION

SMD Manholes

- Other
- Standard
- Siphon
- Trap
- Shallow
- Drop
- SMD Pump Stations
- SMD Treatment Plants

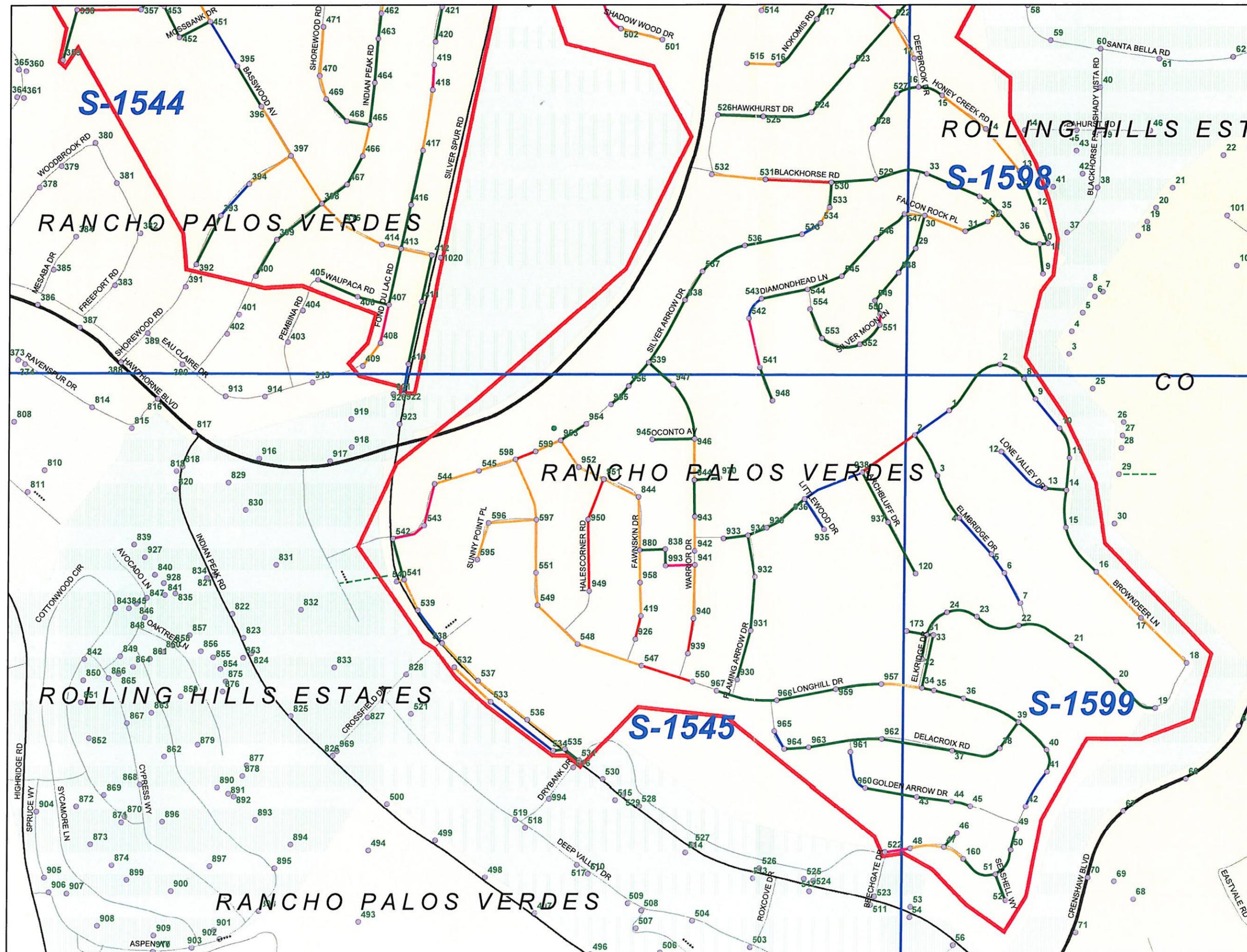
Maintained by Others:

- Trunk Sewerlines
- Non SMD Sanitary Sewers
- Trunk Mh
- Non SMD Maintained MH
- SMD Operations Maps
- CCTV Project Area

This map is intended only for internal operations of the Los Angeles County Sewer Maintenance Districts. Los Angeles County expressly disclaims any liability for any inaccuracies which may be present in this map. Data contained in this map is produced in whole or part from the Thomas Bros. Maps® digital database. This map is copyrighted, and reproduced with permission granted, by Thomas Bros. Maps®. All rights reserved.

SEPTEMBER 2008

0506F_11x17_QSR_RPV_2.mdx



ENCLOSURE 4:

Infrastructure Inspection Reports
for Grades 4 and 5



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060726	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 352	PSR: 77091
Total Pipe Length: 48.1	Survey Customer: LACDPW	System Owner: ZLAS	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: 0	Flow Control: N Not Controlled	Start MH: 1544-0333
City: ZLAS	Year Renewed:	End MH: 1544-0334
Location Code: D Easement/Right of Way	Tape/Media #: 035	Total length surveyed: 48.1 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 46 ID#77091
Drain. Area: 1544	Lining:
	Category:

Comment:
 Location details: OFF MONTEMALAGA DR

1:125	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:39		
	2.64	Water Level, 5 % of cross sectional area	00:00:58		
	2.64	Water Mark, 5 % of cross sectional area	00:00:59		
	3.81	Roots Fine Joint, from 07 to 08 o'clock, within 8 inch: YES	00:01:07	1481a	
	6.84 S1	Roots Fine Joint, from 04 to 08 o'clock, within 8 inch: YES, start	00:01:22	1482a	
	11.15	Crack Circumferential, from 10 to 04 o'clock, within 8 inch: YES	00:01:46	1483a	
	11.15	Crack Longitudinal, at 12 o'clock, within 8 inch: YES	00:01:49	1484a	
	17.21	Fracture Multiple, from 12 to 12 o'clock, within 8 inch: YES	00:02:40	1485a	
	21.02	Fracture Multiple, from 02 to 10 o'clock, within 8 inch: YES	00:03:20	1486a	
	25.52	Crack Multiple, from 12 to 09 o'clock, within 8 inch: YES	00:03:53		
	27.77	Fracture Multiple, from 04 to 10 o'clock, within 8 inch: YES	00:04:12	1488a	
	31.68	Crack Multiple, from 12 to 09 o'clock, within 8 inch: YES	00:04:36		
	38.33	Crack Longitudinal, at 11 o'clock, within 8 inch: YES	00:04:59		
	40.67	Fracture Multiple, from 02 to 11 o'clock, within 8 inch: YES	00:05:31	1491a	
	42.73	Roots Medium Joint, from 09 to 02 o'clock, 10 %, within 8 inch: YES	00:06:43		
	42.73	Fracture Multiple, from 07 to 04 o'clock, within 8 inch: YES	00:06:46		
	42.73	Collapse Pipe Sewer, 15 %	00:06:48	1494a	
	48.10	General Observation, Remark: End Segment	00:07:30		
	48.10 F1	Roots Fine Joint, from 04 to 08 o'clock, within 8 inch: YES, end	00:07:38		
	48.10	General Observation, Remark: pipe material found VCP	00:07:39		
	48.10	Manhole	00:07:52		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3814, Fax: (562) 495-1528

Inspection report

Date: 20060711	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D.Beck	section number: 612	PSR: 77182
Total Pipe Length: 275.9	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: N No Pre-Cleaning	Map Grid #: 1544

Street: 0	Flow Control: N Not Controlled	Start MH: 1544-0313
City: RPV	Year Renewed:	End MH: 1544-0314
Location Code: D Easement/Right of Way	Tape/Media #: 002	Total length surveyed: 275.9 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 272
Drain. Area: 1544	Lining:
	Category:

Comment:
 Location details:

1:675	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:21		
	10.17	Tap Factory Made Active, at 10 o'clock, 4", within 8 inch: NO	00:01:07		
	22.88	S1 Roots Fine Joint, from 07 to 05 o'clock, within 8 inch: YES, start	00:01:41	133a	
	64.23	Fracture Circumferential, from 04 to 06 o'clock, within 8 inch: YES	00:03:03	134a	
	66.58	Fracture Multiple, from 12 to 12 o'clock, within 8 inch: YES	00:03:31	135ai	
	67.75	Hole Soil Visible, from 10 to 02 o'clock, within 8 inch: YES	00:03:49	136a, b	
	90.44	Repair Patch, at 12 o'clock, within 8 inch: YES	00:05:30	137ai, b	
	144.99	Alignment Left, 15 °	00:08:08		
	202.48	F1 Roots Fine Joint, from 07 to 04 o'clock, within 8 inch: YES, end	00:10:09		
	209.52	Crack Circumferential, from 09 to 12 o'clock, within 8 inch: YES	00:10:28	140a	
	218.61	Fracture Multiple, from 05 to 07 o'clock, within 8 inch: YES	00:10:53	141ai	
	242.86	Fracture Multiple, from 05 to 07 o'clock, within 8 inch: YES	00:11:52	142a	
	242.86	Crack Circumferential, from 08 to 03 o'clock, within 8 inch: YES	00:11:58	143a	
	259.87	Crack Multiple, from 04 to 09 o'clock, within 8 inch: YES	00:12:40	144a	
	263.29	Crack Multiple, from 09 to 03 o'clock, within 8 inch: YES	00:12:56	145a	
	275.90	Manhole	00:14:07		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



Inspection report

Date: 20060706	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 305	PSR: 77026
Total Pipe Length: 17.01	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: SHADOW WOOD DR	Flow Control: N Not Controlled	Start MH: 1544-0482
City: RPV	Year Renewed:	End MH: 1544-0483
Location Code: D Easement/Right of Way	Tape/Media #: 010	Total length surveyed: 17.01 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 47
Drain. Area: 1544	Lining:
	Category:

Comment: Broken pipe
 Location details: Whitehorn Dr

1:50	position	observation	MPEG	photo	grade
	0.00	Manhole	00:01:33		
	0.00	General Observation, Remark: Start Segment	00:01:37		
	2.93	Water Level, 5 % of cross sectional area	00:02:11		
	2.93	Water Mark, 20 % of cross sectional area	00:02:12		
	2.93	Crack Multiple, from 07 to 05 o'clock, within 8 inch: YES, Remark: roots	00:02:16		
	2.93 S1	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES, start	00:02:23		
	4.50	Fracture Multiple, from 07 to 10 o'clock, within 8 inch: YES	00:03:06	370a, b	
	13.30	Crack Multiple, from 08 to 04 o'clock, within 8 inch: YES	00:03:55		
	16.72 F1	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES, end			
	17.01	Broken Void Visible, from 07 to 05 o'clock, within 8 inch: YES	00:04:22	372a, b	
	17.01	Survey Abandoned, Remark: Pipe broken camera blocked	00:06:07	373a	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060611	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D.Beck	section number: 617	PSR: 77187
Total Pipe Length: 161.12	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: 0	Flow Control: N Not Controlled	Start MH: 1544-0318
City: RPV	Year Renewed:	End MH: 1544-0319
Location Code: D Easement/Right of Way	Tape/Media #: 001	Total length surveyed: 161.12 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 217
Drain. Area: 1544	Lining:
	Category:

Comment:
 Location details:

1:400	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:24		
	8.51	Crack Circumferential, from 10 to 03 o'clock, within 8 inch: YES	00:00:45	92a	
	15.25	Crack Circumferential, from 08 to 02 o'clock, within 8 inch: YES	00:01:04	93a	
	28.74	Crack Circumferential, from 01 to 03 o'clock, within 8 inch: YES	00:01:35	94a	
	31.97	Crack Circumferential, from 10 to 12 o'clock, within 8 inch: YES	00:01:46		
	39.60	Crack Circumferential, from 10 to 02 o'clock, within 8 inch: YES	00:04:38	96a	
	43.02	Crack Multiple, from 09 to 02 o'clock, within 8 inch: YES	00:04:57	97a	
	45.85	Crack Circumferential, from 11 to 01 o'clock, within 8 inch: YES	00:05:13		
	49.67	Crack Circumferential, from 10 to 04 o'clock, within 8 inch: YES	00:05:34	99a	
	53.19	Crack Circumferential, from 06 to 08 o'clock, within 8 inch: YES	00:05:47	100a	
	59.83	Crack Circumferential, from 09 to 03 o'clock, within 8 inch: YES	00:06:04	101a	
	63.06	Crack Circumferential, from 11 to 01 o'clock, within 8 inch: YES	00:06:15		
	69.81	Crack Multiple, from 09 to 12 o'clock, within 8 inch: YES	00:06:29	103a	
	73.33 S1	Crack Multiple, from 12 to 12 o'clock, within 8 inch: YES, start	00:06:39	104a	
	105.79	Hole Soil Visible, at 12 o'clock, within 8 inch: YES	00:08:02	105a, b	
	161.12 F1	Crack Multiple, from 12 to 12 o'clock, within 8 inch: YES, end	00:11:29		
	161.12	Survey Abandoned, Remark: debries	00:11:39		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060628	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	Section number: 380	PSR: 77157
Total Pipe Length: 218.17	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: ELMBANK RD	Flow Control: N Not Controlled	Start MH: 1544-0295
City: RPV	Year Renewed:	End MH: 1544-0289
Location Code: C Light Highway	Tape/Media #: 003	Total length surveyed: 218.17 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 168 ID#77157
Drain. Area: 1544	Lining:
	Category:

Comment: **BROKEN PIPE 3-9 @ 102'**
 Location details: **BIRCHFIELD AVE**

1:550	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:41		
	0.00	Water Level, 5 % of cross sectional area	00:00:51		
	0.00	Water Mark, 20 % of cross sectional area	00:00:53		
	16.47	Roots Fine Joint, from 10 to 02 o'clock, within 8 inch: YES	00:01:36		
	26.55	Crack Circumferential, from 03 to 04 o'clock, within 8 inch: YES	00:02:27		
	34.23	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:02:53		
	37.73	Roots Ball Joint, at 06 o'clock, 20 %, within 8 inch: YES	00:03:09	212a	
	43.31	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:03:47		
	44.31	Roots Ball Joint, from 07 to 08 o'clock, 10, within 8 inch: YES	00:04:04	214a	
	54.29	Roots Ball Joint, from 05 to 07 o'clock, 10 %, within 8 inch: YES	00:04:38		
	60.78	Roots Fine Joint, from 07 to 04 o'clock, within 8 inch: YES	00:05:09		
	66.47 S1	Crack Multiple, from 01 to 08 o'clock, within 8 inch: YES, start	00:06:03	217a	
	97.81 F1	Crack Multiple, from 01 to 08 o'clock, within 8 inch: YES, end	00:07:19		
	102.60	Broken, from 03 to 09 o'clock, within 8 inch: YES	00:07:54	219a, b	S 5
	107.69	Crack Circumferential, from 05 to 01 o'clock, within 8 inch: YES	00:09:07		
	114.27	Crack Circumferential, from 01 to 04 o'clock, within 8 inch: YES	00:09:27		
	165.37	Crack Longitudinal, at 05 o'clock, within 8 inch: YES	00:11:40		
	166.47	Crack Multiple, from 05 to 08 o'clock, within 8 inch: YES	00:11:51		
	218.17	General Observation, Remark: End of Segment	00:13:39		
	218.17	General Observation, Remark: Materials found- VCP	00:13:40		
	218.17	Manhole	00:13:53		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5100	0000	5	0	5	5	0	5



Inspection report

Date: 20060627	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 416	PSR: 77250
Total Pipe Length: 332.05	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: GRAYLOG ST	Flow Control: N Not Controlled	Start MH: 1544-0272
City: RPV	Year Renewed:	End MH: 1544-0273
Location Code: C Light Highway	Tape/Media #: 001	Total length surveyed: 332.05 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 272 ID#77250
Drain. Area: 1544	Lining:
	Category:

Comment: **cracks ,roots**
 Location details: **BASSWOOD AVE**

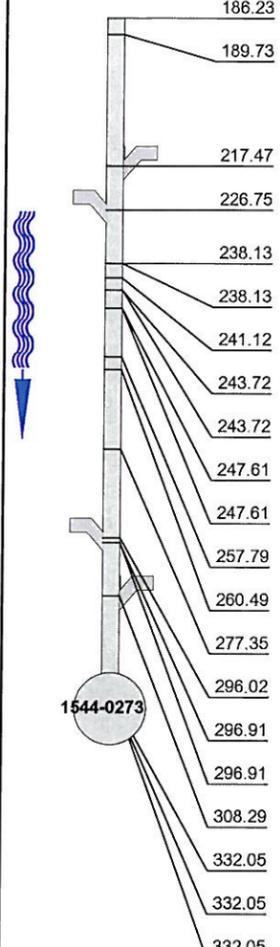
1:465	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:49		
	3.99	Water Level, 5 % of cross sectional area	00:01:13		
	3.99	Water Mark, 10 % of cross sectional area	00:01:14		
	16.37	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES, Remark: ROOTS	00:02:00	99a	
	17.07	Roots Tap Joint, at 02 o'clock, 3 %, within 8 inch: YES	00:03:02	100a	
	18.86	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:03:27		
	32.94	Crack Circumferential, from 12 to 05 o'clock, within 8 inch: YES	00:04:12		
	35.83	Crack Multiple, from 05 to 07 o'clock, within 8 inch: YES	00:04:26	103a	
	39.72	Crack Multiple, from 07 to 10 o'clock, within 8 inch: YES	00:04:45		
	41.82	Crack Longitudinal, at 05 o'clock, within 8 inch: YES	00:04:55		
	46.61	Crack Circumferential, from 06 to 09 o'clock, within 8 inch: YES	00:05:12		
	46.61	Roots Fine Joint, from 12 to 02 o'clock, within 8 inch: YES	00:05:16		
	66.27	Crack Longitudinal, at 08 o'clock, within 8 inch: YES	00:06:13		
	74.35	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:06:37		
	75.35	Crack Longitudinal, at 09 o'clock, within 8 inch: YES	00:06:50		
	96.81	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:07:38		
	98.51	Hole Soil Visible, at 10 o'clock, within 8 inch: YES	00:08:14	112a	
	98.51	Fracture Circumferential, from 08 to 10 o'clock, within 8 inch: YES	00:08:42		
	124.55	Crack Circumferential, from 09 to 10 o'clock, within 8 inch: YES	00:09:38		
	135.73	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:10:08		
	136.93	Crack Multiple, from 05 to 07 o'clock, within 8 inch: YES	00:10:27		
	147.61	Crack Circumferential, from 09 to 10 o'clock, within 8 inch: YES	00:11:02		
	158.39	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:11:44		
	166.17	Crack Multiple, from 12 to 05 o'clock, within 8 inch: YES	00:12:14	119a	
	186.23	Roots Fine Joint, from 01 to 03 o'clock, within 8 inch: YES	00:13:06		



Inspection report

Date: 20060627	P.O.# Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 416	PSR: 77250
Total Pipe Length: 332.05	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

1:465	position	observation	MPEG	photo	grade
	186.23	Roots Fine Joint, from 01 to 03 o'clock, within 8 inch: YES	00:13:06		
	189.73	Crack Multiple, from 11 to 04 o'clock, within 8 inch: YES	00:13:23		
	217.47	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:14:25		
	226.75	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:15:01		
	238.13	Crack Circumferential, from 10 to 01 o'clock, within 8 inch: YES	00:15:44		
	238.13	Roots Fine Joint, from 03 to 08 o'clock, within 8 inch: YES	00:15:48		
	241.12	Roots Fine Joint, from 09 to 03 o'clock, within 8 inch: YES	00:16:23		
	243.72	Roots Fine Joint, from 09 to 03 o'clock, within 8 inch: YES	00:16:48		
	243.72	Crack Circumferential, from 08 to 11 o'clock, within 8 inch: YES	00:16:52		
	247.61	Roots Fine Joint, from 12 to 01 o'clock, within 8 inch: YES	00:17:12		
	247.61	Crack Circumferential, from 09 to 10 o'clock, within 8 inch: YES	00:17:14		
	257.79	Roots Fine Joint, from 09 to 04 o'clock, within 8 inch: YES	00:17:40		
	260.49	Crack Multiple, from 08 to 12 o'clock, within 8 inch: YES	00:17:49		
	277.35	Roots Fine Joint, from 12 to 03 o'clock, within 8 inch: YES	00:18:27		
	296.02	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:19:10		
	296.91	Crack Multiple, from 08 to 02 o'clock, within 8 inch: YES	00:19:27		
	296.91	Roots Fine Joint, at 03 o'clock, within 8 inch: YES	00:19:34		
	308.29	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES, Remark: ROOTS	00:20:03	137a	
	332.05	General Observation, Remark: End of Segment	00:21:23		
	332.05	General Observation, Remark: Materials found- VCP	00:21:26		
	332.05	Manhole	00:21:39		



QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060628	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 437	PSR: 77163
Total Pipe Length:	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: ELMBANK RD	Flow Control: N Not Controlled	Start MH: 1544-0295	
City: RPV	Year Renewed:	End MH: 1544-0296	
Location Code: C Light Highway	Tape/Media #: 002	Total length surveyed: 204.2 ft	

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 319 ID#77163
Drain. Area: 1544	Lining:
	Category:

Comment:
 Location details:

1:500	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:47		
	0.00	Reversal Inspection	00:00:59		
	0.00	Water Level, 5 % of cross sectional area	00:01:22		
	0.00	Water Mark, 10 % of cross sectional area	00:01:23		
	9.38	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:01:51		
	17.37	Broken Soil Visible, from 06 to 08 o'clock, within 8 inch: YES	00:02:46	6a, b	
	17.37	Crack Multiple, from 02 to 09 o'clock, within 8 inch: YES	00:03:24	7a	
	36.73	Crack Multiple, from 02 to 09 o'clock, within 8 inch: YES	00:04:23		
	41.42	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:04:42		
	70.96	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:05:53		
	74.95	Crack Multiple, from 03 to 08 o'clock, within 8 inch: YES	00:06:24		
	98.11	Crack Multiple, from 03 to 09 o'clock, within 8 inch: YES	00:07:32		
	104.59	Roots Fine Joint, from 03 to 04 o'clock, within 8 inch: YES	00:07:58		
	126.35	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:08:42		
	135.73	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:09:08		
	143.22	Crack Circumferential, from 07 to 12 o'clock, within 8 inch: YES	00:09:32		
	185.04	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:10:51		
	201.90	Roots Fine Joint, from 03 to 07 o'clock, within 8 inch: YES	00:11:30		
	204.20	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:11:43		
	204.20	General Observation, Remark: End of Reversal Set up	00:11:54	20a	
	204.20	General Observation, Remark: Materials found- VCP	00:12:00		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

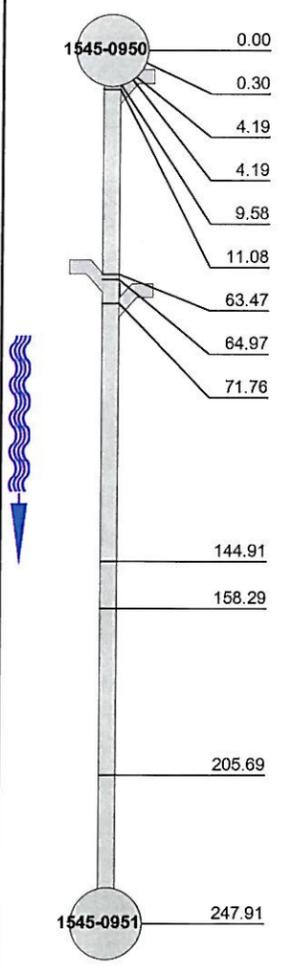
Date: 20060718	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 161	PSR: 75520
Total Pipe Length: 247.91	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1545

Street: HALESCORNER RD	Flow Control: N Not Controlled	Start MH: 1545-0950
City: RPV	Year Renewed:	End MH: 1545-0951
Location Code: C Light Highway	Tape/Media #: 034	Total length surveyed: 247.91 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 228
Drain. Area: 1545	Lining:
	Category:

Comment: **Cracks and Roots**
 Location details: **Fawnskin**

1:625	position	observation	MPEG	photo	grade
	0.00	Manhole, Remark: Start of Segment	00:00:57		
	0.30	Hole Void Visible, from 05 to 07 o'clock, within 8 inch: NO, Remark: cement gone	00:01:36	1249a	
	4.19	Water Level, 5 % of cross sectional area	00:02:01		
	4.19	Water Mark, 20 % of cross sectional area	00:02:05		
	9.58	Crack Multiple, from 04 to 08 o'clock, within 8 inch: YES	00:02:40		
	11.08	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:02:57		
	63.47	Roots Fine Joint, from 04 to 05 o'clock, within 8 inch: YES	00:04:32		
	64.97	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:04:43		
	71.76	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:05:06		
	144.91	Roots Fine Joint, from 03 to 05 o'clock, within 8 inch: YES	00:07:10		
	158.29	Crack Spiral, from 09 to 12 o'clock, within 8 inch: YES	00:07:58	1258a	
	205.69	Crack Spiral, from 09 to 11 o'clock, within 8 inch: YES	00:09:27		
	247.91	Manhole, Remark: End of Segment Material found-VCP	00:11:22		





Inspection report

Date: 20060718	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 172	PSR: 75752
Total Pipe Length: 129.84	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1545

Street: SILVERARROW DR	Flow Control: N Not Controlled	Start MH: 1545-0599
City: RPV	Year Renewed	End MH: 1545-0598
Location Code: C Light Highway	Tape/Media #: 038	Total length surveyed: 129.84 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 110
Drain. Area: 1545	Lining:
	Category:

Comment: Cracks
 Location details: Longhill

1:325	position	observation	MPEG	photo	grade
	0.00	Manhole, Remark: Start of Segment	00:00:52		
	1.80	Water Level, 10 % of cross sectional area	00:01:13		
	1.80	Water Mark, 25 % of cross sectional area	00:01:14		
	4.29	Roots Fine Joint, from 07 to 10 o'clock, within 8 inch: YES	00:01:28		
	5.59	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES, Remark: Roots	00:01:50		
	5.59	Roots Fine Lateral, from 07 to 10 o'clock, within 8 inch: YES	00:01:56		
	8.68	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES, Remark: Roots	00:02:08		
	8.68	Roots Medium Lateral, from 08 to 04 o'clock, 30 %, within 8 inch: YES	00:02:34		
	55.59	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:03:51		
	70.56	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:04:29		
	116.17	Crack Multiple, from 11 to 05 o'clock, within 8 inch: YES	00:06:16		
	117.47	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:06:42		
	127.25	Hole Void Visible, from 03 to 05 o'clock, within 8 inch: YES, Remark: cement gone in manhole	00:07:20	1496a	
	129.84	Manhole, Remark: End of Segment Material found-VCP	00:08:15		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060717	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 196	PSR: 76015
Total Pipe Length: 124.75	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1545

Street: FAWNSKIN DR	Flow Control: N Not Controlled	Start MH: 1545-0926
City: RPV	Year Renewed	End MH: 1545-0419
Location Code: C Light Highway	Tape/Media #: 032	Total length surveyed: 124.75 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 121
Drain. Area: 1545	Lining:
	Category:

Comment: Cracks and Roots
 Location details: Longhill

1:325	position	observation	MPEG	photo	grade
	0.00	Manhole, Remark: Start of Segment	00:00:51		
	5.89	Water Level, 1 % of cross sectional area	00:01:14		
	5.89	Water Mark, 15 % of cross sectional area	00:01:18		
	7.09	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES, Remark: Roots	00:01:32		
	7.09	Roots Medium Lateral, from 06 to 11 o'clock, 35, within 8 inch: YES	00:01:37		
	21.06	Roots Tap Joint, from 08 to 04 o'clock, 35 %, within 8 inch: YES	00:02:07	1090a	
	30.54	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:02:37		
	49.20	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:03:12		
	51.30 S1	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES, start	00:03:22		
	74.75 F1	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES, end	00:04:00		
	89.62	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES, Remark: Roots	00:04:26		
	89.62	Roots Medium Lateral, from 01 to 05 o'clock, 5 %, within 8 inch: YES	00:04:33		
	108.29	Crack Multiple, from 11 to 03 o'clock, within 8 inch: YES	00:05:08	1097a	
	109.78	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES, Remark: Roots	00:05:21		
	109.78	Roots Fine Lateral, from 06 to 09 o'clock, within 8 inch: YES	00:05:25		
	115.27	Broken Soil Visible, from 04 to 07 o'clock, within 8 inch: YES	00:05:50	1100a	
	124.75	Manhole, Remark: End of Segment Material found-VCP	00:06:52		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060630	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 338	PSR: 77076
Total Pipe Length: 147.31	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: FOND DU LAC RD	Flow Control:	Start MH: 1544-0422
City: RPV	Year Renewed:	End MH: 1544-0423
Location Code: C Light Highway	Tape/Media #: 006	Total length surveyed: 147.31 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 156 ID#77076
Drain. Area: 1544	Lining:
	Category:

Comment:
 Location details:

1:375	position	observation	MPEG	photo	grade
	1544-0422 0.00	Manhole	00:00:48		
	2.30	Water Level, 3 % of cross sectional area	00:01:10		
	2.30	Water Mark, 10 % of cross sectional area	00:01:10		
	16.87	Crack Multiple, from 09 to 04 o'clock, within 8 inch: YES	00:01:44	729a	
	16.87	Roots Fine Joint, from 08 to 09 o'clock, within 8 inch: YES	00:01:47		
	31.54	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:02:29		
	98.31	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:04:34		
	144.22	Hole Soil Visible, from 04 to 05 o'clock, within 8 inch: YES	00:06:16	733a, b	
	147.31	General Observation, Remark: End of Segment	00:07:10		
	1544-0423 147.31	General Observation, Remark: Materials found- VCP	00:07:12		
	147.31	Manhole	00:07:31		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060629	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 396	PSR: 77174
Total Pipe Length: 226.85	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: IRONWOOD ST	Flow Control: N Not Controlled	Start MH: 1544-0306
City: RPV	Year Renewed:	End MH: 1544-0307
Location Code: C Light Highway	Tape/Media #: 004	Total length surveyed: 226.85 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 179 ID#77174
Drain. Area: 1544	Lining:
	Category:

Comment: **NONE**
 Location details: **BIRCHFIELD AVE**

1:575	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:37		
	0.20	Water Level, 3 % of cross sectional area	00:00:55		
	0.20	Water Mark, 15 % of cross sectional area	00:00:55		
	19.96	Tap Factory Made Capped, at 10 o'clock, 6", within 8 inch: YES	00:01:36		
	22.56	Tap Factory Made Capped, at 02 o'clock, 6", within 8 inch: YES	00:01:53		
	58.68	Tap Factory Made Capped, at 10 o'clock, 6", within 8 inch: YES	00:03:06		
	87.63	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:04:11		
	91.62	Crack Multiple, from 02 to 10 o'clock, within 8 inch: YES	00:04:31	451a	
	153.80	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:06:33		
	187.63	Tap Break-In Active, at 10 o'clock, 6", within 8 inch: NO	00:07:42		
	194.52	Crack Circumferential, from 10 to 02 o'clock, within 8 inch: YES	00:08:06		
	216.17	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:08:52		
	220.17	Crack Circumferential, from 06 to 10 o'clock, within 8 inch: YES	00:09:08		
	224.16	Hole Soil Visible, from 04 to 08 o'clock, within 8 inch: YES	00:10:14	457a	
	226.85	General Observation, Remark: End of Segment	00:10:28		
	226.85	General Observation, Remark: Materials found- VCP	00:10:29		
	226.85	Manhole	00:10:42		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20061011	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D.Beck	section number: 620	PSR: 77212
Total Pipe Length: 255.27	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: N No Pre-Cleaning	Map Grid #: 1544

Street: SILVER SPUR RD	Flow Control: N Not Controlled	Start MH: 1544-0326
City: RPV	Year Renewed:	End MH: 1544-0231
Location Code: B Main Highway - Suburban/Rural	Tape/Media #: 004	Total length surveyed: 255.27 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 260
Drain. Area: 1544	Lining:
	Category:

Comment:
 Location details:

1:625	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:25		
	42.43	Crack Multiple, from 12 to 04 o'clock, within 8 inch: YES	00:02:07	333a	
	93.17 S1	Roots Fine Joint, from 07 to 05 o'clock, within 8 inch: YES, start	00:03:26	334ai	
	214.31 F1	Roots Fine Joint, from 07 to 05 o'clock, within 8 inch: YES, end	00:06:13		
	214.31	Roots Ball Joint, from 07 to 02 o'clock, 45 %, within 8 inch: YES	00:06:16	336ai	
	221.45 S2	Roots Fine Joint, from 07 to 05 o'clock, within 8 inch: YES, start	00:06:38	337a	
	252.64 F2	Roots Fine Joint, from 07 to 05 o'clock, within 8 inch: YES, end	00:07:30		
	253.22	Hole Void Visible, from 05 to 07 o'clock, within 8 inch: YES	00:07:46	339a, b	
	255.27	Manhole	00:08:31		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



Inspection report

Date: 20060719	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 421	PSR: 84695
Total Pipe Length: 339.23	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1545

Street: BROWND EER LN	Flow Control: N Not Controlled	Start MH: 1545-0938
City: RPV	Year Renewed:	End MH: 1599-0002
Location Code: C Light Highway	Tape/Media #: 038	Total length surveyed: 339.23 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 53
Drain. Area: 1599	Lining:
	Category:

Comment: **Cracks and Roots**
 Location details: **Larchbluff**

1:744	position	observation	MPEG	photo	grade
	0.00	Manhole, Remark: Start of Segment	00:01:03		
	3.18	Water Level, 5 % of cross sectional area	00:01:34		
	3.19	Water Mark, 20 % of cross sectional area	00:01:35		
	6.39	Roots Fine Joint, from 11 to 02 o'clock, within 8 inch: YES	00:02:04		
	11.38	Roots Fine Joint, from 02 to 04 o'clock, within 8 inch: YES	00:02:20		
	21.16	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES, start	00:02:40		
	33.03	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES, Remark: Roots	00:03:14		
	33.03	Roots Ball Lateral, from 12 to 12 o'clock, 98 %, within 8 inch: YES	00:03:20		
	39.32	Crack Spiral, from 09 to 01 o'clock, within 8 inch: YES	00:04:12	1561a	
	44.11	Crack Longitudinal, at 09 o'clock, within 8 inch: YES	00:04:41	1562a	
	59.18	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES, end	00:05:17		
	63.67	Crack Spiral, from 11 to 03 o'clock, within 8 inch: NO	00:05:36	1564a	
	73.65	Roots Fine Joint, from 02 to 05 o'clock, within 8 inch: YES	00:06:26		
	90.62	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES, Remark: Roots	00:06:55	1566a	
	90.62	Roots Fine Lateral, at 02 o'clock, within 8 inch: YES	00:07:20		
	116.77	Roots Fine Joint, at 04 o'clock, within 8 inch: YES	00:08:15		
	143.42	Tap Factory Made Capped, at 10 o'clock, 6", within 8 inch: YES	00:08:58		
	168.57	Tap Break-In Active, at 10 o'clock, 4", within 8 inch: YES, Remark: Roots	00:09:51		
	168.57	Roots Fine Connection, from 02 to 04 o'clock, within 8 inch: YES	00:09:57		
	169.77	Roots Fine Joint, from 11 to 03 o'clock, within 8 inch: YES	00:10:13		
	194.42	Roots Fine Joint, from 09 to 03 o'clock, within 8 inch: YES	00:10:45		
	251.50	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES, Remark: Roots	00:11:52		
	251.50	Roots Ball Lateral, from 11 to 07 o'clock, 75 %, within 8 inch: YES	00:11:57		
	287.53	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES, start	00:12:49		
	297.61	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES, end	00:13:10		



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060719	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 421	PSR: 84695
Total Pipe Length: 339.23	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1545

1:744	position	observation	MPEG	photo	grade
	319.07	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:13:42		
	320.07	Roots Fine Joint, from 09 to 03 o'clock, within 8 inch: YES	00:13:56		
	337.43	Hole Void Visible, from 04 to 06 o'clock, within 8 inch: NO, Remark: cement gone in manhole	00:15:09	1580a	
	339.23	Manhole, Remark: End of Segment Material found-VCP	00:15:53		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20061011	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D.Beck	section number: 574	PSR: 75510
Total Pipe Length: 172.95	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: N No Pre-Cleaning	Map Grid #: 1545

Street: WARRIOR DR	Flow Control: N Not Controlled	Start MH: 1545-0939	
City: RPV	Year Renewed:	End MH: 1545-0940	
Location Code: B Main Highway - Suburban/Rural	Tape/Media #: 004	Total length surveyed: 172.95 ft	

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 182
Drain. Area: 1545	Lining:
	Category:

Comment:
 Location details:

1:425	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:23		
	8.11	Roots Fine Joint, from 07 to 09 o'clock, within 8 inch: YES	00:00:46		
	8.11	Tap Factory Made Active, at 10 o'clock, 4", within 8 inch: NO	00:01:02		
	8.11	Crack Circumferential, from 04 to 08 o'clock, within 8 inch: YES	00:01:13	373a	
	10.36	Tap Factory Made Active, at 02 o'clock, 4", within 8 inch: NO	00:01:28	374a	
	15.06	Roots Fine Joint, from 07 to 05 o'clock, within 8 inch: YES, start	00:01:46		
	15.06	Crack Circumferential, from 12 to 04 o'clock, within 8 inch: YES	00:01:51	376a	
	49.18	Tap Factory Made Active, at 10 o'clock, 4", within 8 inch: NO	00:02:43	377a	
	50.74	Tap Factory Made Active, at 02 o'clock, 4", within 8 inch: NO	00:03:06	378a	
	117.52	F1 Roots Fine Joint, from 07 to 05 o'clock, within 8 inch: YES, end	00:04:47		
	121.62	Tap Factory Made Active, at 10 o'clock, 4", within 8 inch: NO	00:05:00		
	127.39	Tap Factory Made Active, at 02 o'clock, 4", within 8 inch: NO	00:05:23	381a	
	170.02	Hole Void Visible, from 04 to 08 o'clock, within 8 inch: YES	00:06:51	382a, b	
	172.95	Manhole	00:07:27		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



Inspection report

Date: 20060718	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 181	PSR: 75813
Total Pipe Length: 349.41	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1545

Street: LONGHILL DR	Flow Control: N Not Controlled	Start MH: 1545-0547
City: RPV	Year Renewed:	End MH: 1545-0550
Location Code: C Light Highway	Tape/Media #: 034	Total length surveyed: 349.41 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 276
Drain. Area: 1545	Lining:
	Category:

Comment: **Roots, TVed upstream**
 Location details: **Warrior**

1:875	position	observation	MPEG	photo	grade
	0.00	Manhole, Remark: Start of Segment	00:01:26		
	0.00	Hole Void Visible, from 05 to 07 o'clock, within 8 inch: YES, Remark: cement gone in manhole	00:01:48	1262a	
	5.79	Water Level, 5 % of cross sectional area	00:02:35		
	5.79	Water Mark, 20 % of cross sectional area	00:02:56		
	5.89	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:03:07		
	62.38	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES, Remark: Roots	00:05:01		
	62.38	Roots Fine Lateral, from 08 to 04 o'clock, within 8 inch: YES	00:05:29		
	82.94	Roots Fine Joint, from 03 to 09 o'clock, within 8 inch: YES	00:06:07		
	123.16	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES, Remark: Roots	00:07:22		
	123.16	Roots Medium Lateral, from 07 to 05 o'clock, 20 %, within 8 inch: YES	00:07:28		
	183.74	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES, Remark: Roots	00:09:02		
	183.74	Roots Medium Lateral, from 09 to 05 o'clock, 20 %, within 8 inch: YES	00:09:16		
	228.05	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:10:53		
	244.42	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES, Remark: Roots	00:11:22		
	244.42	Roots Fine Lateral, at 02 o'clock, within 8 inch: YES	00:11:30		
	245.32	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES, Remark: holding paper	00:12:10	1277a	
	284.64	Roots Fine Joint, at 09 o'clock, within 8 inch: YES	00:13:36		
	305.30	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES, Remark: Roots	00:14:16		
	305.30	Roots Fine Lateral, from 07 to 04 o'clock, within 8 inch: YES	00:14:20		
	329.35	Roots Fine Joint, at 09 o'clock, within 8 inch: YES	00:15:13		
	342.52	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES, Remark: Roots	00:15:37		
	342.52	Roots Fine Lateral, from 03 to 09 o'clock, within 8 inch: YES	00:15:43		
	349.41	Manhole, Remark: End of Segment Material found-VCP	00:16:36		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060714	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 252	PSR: 76964
Total Pipe Length: 3540.81	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: BLACKHORSE RD	Flow Control: N Not Controlled	Start MH: 1544-0531
City: RPV	Year Renewed:	End MH: 1544-0530
Location Code: C Light Highway	Tape/Media #: 028	Total length surveyed: 350.81 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 344
Drain. Area: 1544	Lining:
	Category:

Comment: **hole where pipe meets MH**
 Location details: **Hawthorn BI**

1:875	position	observation	MPEG	photo	grade
	0.00	Manhole, Remark: Start of Segment	00:00:51		
	1.80	Water Level, 3 % of cross sectional area	00:01:07		
	1.80	Water Mark, 15 % of cross sectional area	00:01:11		
	7.19	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:01:28		
	34.93	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:02:26		
	62.48	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:03:10		
	95.41	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:04:05		
	103.10	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES, Remark:	00:04:23		
	103.10	Roots Roots Fine Lateral, from 06 to 09 o'clock, within 8 inch: YES	00:04:32		
	139.33	Tap Break-In Active, at 02 o'clock, 6", within 8 inch: YES	00:06:03		
	160.78	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:06:56		
	188.93	Tap Factory Made Abandoned, at 02 o'clock, 6", within 8 inch: YES	00:07:58		
	221.26	Tap Break-In Active, at 02 o'clock, 6", within 8 inch: YES	00:08:55		
	226.65	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:09:17		
	269.37	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:10:33		
	287.03	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:11:22		
	344.82	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES, Remark:	00:12:48		
	348.31	Roots Hole Soil Visible, from 04 to 08 o'clock, within 8 inch: YES, Remark: at	00:13:30		
	350.81	Manhole, Remark: End of Segment Material found-VCP	00:14:49		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20061204	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS R RUIZ	section number: 603	PSR: 77116
Total Pipe Length: 0	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: 0	Flow Control: N Not Controlled	Start MH: 1544-0358
City: RPV	Year Renewed	End MH: 1544-0357
Location Code: D Easement/Right of Way	Tape/Media #: 001	Total length surveyed: 315.5 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 10/10
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 77116
Drain Area: 1544	Lining: CP Cured in Place
Category:	

Comment:
 Location details:

1:775	position	observation	MPEG	photo	grade
	1544-0358 — 0.00	Manhole	00:00:34		
	9.48	Water Level, 15 % of cross sectional area	00:01:00		
	9.48	Water Mark, 40 % of cross sectional area	00:01:01		
	276.30	Broken Void Visible, from 09 to 03 o'clock, within 8 inch: YES	00:09:03	650ai, b	
	315.50	Alignment Down, 20 °	00:12:56	651a	
	315.50	Survey Abandoned, Remark: pipe aligns down	00:13:50		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



Inspection report

Date: 20060627	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 387	PSR: 77164
Total Pipe Length: 346.02	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: ELMBANK RD	Flow Control: N Not Controlled	Start MH: 1544-0296
City: RPV	Year Renewed	End MH: 1544-0297
Location Code: C Light Highway	Tape/Media #: 001	Total length surveyed: 346.02 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 350 ID#77164
Drain. Area: 1544	Lining:
	Category:

Comment: cracks ,roots
 Location details: BASSWOOD AVE

1:434	position	observation	MPEG	photo	grade
	0.00	Manhole	00:01:53		
	0.00	Water Level, 2 % of cross sectional area	00:02:21		
	0.00	Water Mark, 5 % of cross sectional area	00:02:23		
	11.68	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:03:12		
	16.07	S1 Roots Fine Joint, from 03 to 09 o'clock, within 8 inch: YES, start	00:03:41	5a	
	32.64	Fracture Multiple, from 09 to 02 o'clock, within 8 inch: YES	00:04:51	6a	
	37.33	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:05:33		
	37.43	F1 Roots Fine Joint, from 03 to 09 o'clock, within 8 inch: YES, end	00:05:47		
	38.62	Crack Circumferential, from 08 to 10 o'clock, within 8 inch: YES	00:06:30		
	45.71	Crack Multiple, from 09 to 04 o'clock, within 8 inch: YES	00:06:58	10a	
	48.50	Crack Circumferential, from 09 to 12 o'clock, within 8 inch: YES	00:07:19		
	62.28	Crack Circumferential, from 08 to 10 o'clock, within 8 inch: YES	00:08:44		
	65.27	Crack Multiple, from 03 to 09 o'clock, within 8 inch: YES	00:09:35		
	68.66	Crack Circumferential, from 09 to 02 o'clock, within 8 inch: YES	00:09:58		
	68.66	Roots Fine Joint, from 04 to 07 o'clock, within 8 inch: YES	00:10:03		
	79.04	Roots Fine Joint, from 02 to 08 o'clock, within 8 inch: YES	00:10:38		
	80.04	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:10:51		
	84.43	Crack Circumferential, from 08 to 03 o'clock, within 8 inch: YES	00:11:14		
	99.10	Tap Factory Made Defective, at 10 o'clock, 6", within 8 inch: YES, Remark: HEAVY ROOTS	00:12:13	19a	
	99.10	Roots Ball Lateral, from 12 to 12 o'clock, 100 %, within 8 inch: YES	00:12:23	20a	
	107.39	Crack Longitudinal, at 12 o'clock, within 8 inch: YES	00:12:58		
	113.88	Crack Circumferential, from 10 to 01 o'clock, within 8 inch: YES	00:13:24		
	113.88	Roots Fine Joint, from 11 to 04 o'clock, within 8 inch: YES	00:13:25		



Inspection report

Date: 20060627	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 387	PSR: 77164
Total Pipe Length: 346.02	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

1:434	position	observation	MPEG	photo	grade
	113.88	Crack Circumferential, from 10 to 01 o'clock, within 8 inch: YES	00:13:24		
	113.88	Roots Fine Joint, from 11 to 04 o'clock, within 8 inch: YES	00:13:25		
	121.06	Crack Multiple, from 11 to 02 o'clock, within 8 inch: YES	00:14:55		
	121.06	Roots Fine Joint, from 12 to 02 o'clock, within 8 inch: YES	00:14:57		
	124.06	Roots Fine Joint, at 01 o'clock, within 8 inch: YES	00:15:20		
	140.92	Crack Circumferential, from 08 to 01 o'clock, within 8 inch: YES	00:16:03		
	145.41	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:16:21		
	157.89	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES, Remark: ROOT BALL	00:17:05	29a	
	159.29	Crack Circumferential, from 01 to 03 o'clock, within 8 inch: YES	00:17:32		
	169.47	Crack Circumferential, from 10 to 12 o'clock, within 8 inch: YES	00:18:05		
	205.79	Crack Circumferential, from 10 to 02 o'clock, within 8 inch: YES	00:19:48		
	213.88	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:20:15		
	218.97	Fracture Multiple, from 08 to 09 o'clock, within 8 inch: YES	00:20:59	34a	
	220.96	Crack Multiple, from 05 to 11 o'clock, within 8 inch: YES	00:21:20		
	223.36	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:21:37		
	227.05	Crack Multiple, from 12 to 04 o'clock, within 8 inch: YES	00:22:14		
	248.51	Crack Multiple, from 08 to 04 o'clock, within 8 inch: YES	00:23:10		
	284.24	Crack Multiple, from 04 to 07 o'clock, within 8 inch: YES	00:24:40	39a, b	
	286.34	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:25:11		
	286.83	Fracture Multiple, from 12 to 12 o'clock, within 8 inch: YES	00:25:26	41a, b	
	288.83	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:25:57		
	293.32	Crack Multiple, from 04 to 10 o'clock, within 8 inch: YES	00:26:33		
	340.23	Fracture Multiple, from 04 to 08 o'clock, within 8 inch: YES	00:28:17	44a, b	
	340.33	Fracture Spiral, from 02 to 09 o'clock, within 8 inch: YES	00:28:58	45a, b	
	346.02	General Observation, Remark: End of Segment	00:29:39		
	346.02	General Observation, Remark: Materials found- VCP	00:29:40		
	346.02	Manhole	00:29:56		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060629	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 406	PSR: 77190
Total Pipe Length: 81.34	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: SILVER SPUR RD	Flow Control: N Not Controlled	Start MH: 1544-0321
City: RPV	Year Renewed:	End MH: 1544-0320
Location Code: C Light Highway	Tape/Media #: 005	Total length surveyed: 81.34 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8	Pipe Joint length: 210 ID#77190
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe	
Drain. Area: 1544	Lining:	
	Category:	

Comment:
 Location details:

1:200	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:54		
	0.00	Water Level, 10 % of cross sectional area	00:01:17		
	0.00	Water Mark, 20 % of cross sectional area	00:01:21		
	5.89	Crack Circumferential, from 11 to 04 o'clock, within 8 inch: YES	00:01:59	584a	
	21.26	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:03:34		
	29.54	Crack Circumferential, from 12 to 04 o'clock, within 8 inch: YES	00:04:32	586a	
	45.01	Crack Multiple, from 08 to 04 o'clock, within 8 inch: YES	00:05:46		
	47.91	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:06:08		
	49.50	Crack Circumferential, from 06 to 10 o'clock, within 8 inch: YES	00:06:27		
	51.00	Crack Circumferential, from 08 to 02 o'clock, within 8 inch: YES	00:06:43		
	53.39	Fracture Multiple, from 09 to 04 o'clock, within 8 inch: YES	00:07:07	591a	
	53.39	Roots Fine Joint, from 09 to 04 o'clock, within 8 inch: YES	00:07:13		
	54.59	Fracture Multiple, from 08 to 02 o'clock, within 8 inch: YES	00:07:30		
	54.59	Roots Fine Joint, from 07 to 08 o'clock, within 8 inch: YES	00:07:35		
	57.29	Roots Fine Joint, from 08 to 09 o'clock, within 8 inch: YES	00:07:57		
	57.29	Fracture Multiple, from 08 to 11 o'clock, within 8 inch: YES	00:08:04		
	61.28	Crack Circumferential, from 08 to 03 o'clock, within 8 inch: YES	00:08:28		
	67.97 S1	Roots Fine Joint, from 04 to 05 o'clock, within 8 inch: YES, start	00:09:02		
	75.65	Crack Multiple, from 08 to 01 o'clock, within 8 inch: YES	00:09:39		
	75.95	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:09:50		
	77.15 F1	Roots Fine Joint, from 04 to 05 o'clock, within 8 inch: YES, end	00:10:02		
	81.34	General Observation, Remark: End of Segment	00:10:23		
	81.34	General Observation, Remark: Materials found- VCP	00:10:24		
	81.34	Manhole	00:10:38		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060630	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 343	PSR: 77081
Total Pipe Length: 328.55	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: MANITOWAC DR	Flow Control: N Not Controlled	Start MH: 1544-0426
City: RPV	Year Renewed:	End MH: 1544-0427
Location Code: C Light Highway	Tape/Media #: 006	Total length surveyed: 328.55 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 250 ID#77081
Drain. Area: 1544	Lining:
	Category:

Comment:
 Location details:

1:825	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:42		
	1544-0426 2.30	Water Level, 5 of cross sectional area	00:00:56		
	2.30	Water Mark, 10 % of cross sectional area	00:00:56		
	28.94	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:01:47		
	64.77	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:02:52		
	90.72	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:03:52		
	125.75	Crack Circumferential, from 07 to 04 o'clock, within 8 inch: YES	00:05:05	789a	
	129.84	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:05:25		
	155.79	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:06:21		
	176.85	Crack Circumferential, from 09 to 01 o'clock, within 8 inch: YES	00:07:10	792a	
	177.45	Fracture Multiple, from 07 to 12 o'clock, within 8 inch: YES	00:07:26	793a	
	179.55	Broken, from 06 to 08 o'clock, within 8 inch: YES	00:07:40	794a	S 4
	180.34	Fracture Multiple, from 04 to 08 o'clock, within 8 inch: YES	00:07:54	795a	
	194.92	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:08:25		
	220.86	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:09:20		
	228.65	Crack Multiple, from 07 to 04 o'clock, within 8 inch: YES	00:09:50		
	256.69	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:10:44		
	261.18	Crack Circumferential, from 01 to 04 o'clock, within 8 inch: YES	00:11:08		
	285.74	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:12:02		
	321.67	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:13:08		
	328.55	General Observation, Remark: End of Segment	00:13:33		
	1544-0427 328.55	General Observation, Remark: Materials found- VCP	00:13:35		
	328.55	Manhole	00:13:51		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
4100	0000	4	0	4	4	0	4



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3814, Fax: (562) 495-1528

Inspection report

Date: 20060627	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 414	PSR: 77248
Total Pipe Length: 216.10	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: GRAYLOG ST	Flow Control: N Not Controlled	Start MH: 1544-0271
City: RPV	Year Renewed:	End MH: 1544-0272
Location Code: C Light Highway	Tape/Media #: 001	Total length surveyed: 216.87 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 230 ID#77248
Drain. Area: 1544	Lining:
	Category:

Comment: cracks ,roots
 Location details: BASSWOOD AVE

1:496	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:53		
	0.00	Water Level, 5 % of cross sectional area	00:01:13		
	0.00	Water Mark, 10 % of cross sectional area	00:01:16		
	57.89	Fracture Multiple, from 10 to 02 o'clock, within 8 inch: YES	00:04:31	73a	
	67.17	Crack Circumferential, from 10 to 04 o'clock, within 8 inch: YES	00:05:14	74a	
	68.76	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:05:35		
	86.33	Crack Spiral, from 06 to 08 o'clock, within 8 inch: YES	00:06:25	76a	
	95.21	Crack Longitudinal, at 07 o'clock, within 8 inch: YES	00:07:17		
	96.61	Fracture Multiple, from 12 to 12 o'clock, within 8 inch: YES	00:07:46	78a, b	
	119.46	Roots Fine Joint, at 01 o'clock, within 8 inch: YES	00:09:15		
	126.15	Roots Fine Joint, at 03 o'clock, within 8 inch: YES	00:09:41		
	144.12	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:10:28		
	144.12	Roots Fine Lateral, from 12 to 12 o'clock, within 8 inch: YES	00:10:32	82a	
	155.29	Fracture Multiple, from 07 to 05 o'clock, within 8 inch: YES	00:11:13	83a	
	157.89	Crack Longitudinal, at 08 o'clock, within 8 inch: YES	00:11:34		
	165.67	Roots Fine Joint, at 02 o'clock, within 8 inch: YES	00:12:16	85a	
	181.74	Crack Circumferential, from 08 to 12 o'clock, within 8 inch: YES	00:12:57		
	181.74	Roots Fine Joint, from 08 to 10 o'clock, within 8 inch: YES	00:13:04		
	183.24	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:13:14		
	184.74	Roots Fine Joint, from 10 to 11 o'clock, within 8 inch: YES	00:14:10		
	184.74	Crack Longitudinal, at 03 o'clock, within 8 inch: YES	00:14:35		
	187.53	Roots Tap Joint, at 03 o'clock, 2, within 8 inch: YES	00:14:51	91a	
	197.81	Crack Circumferential, from 12 to 03 o'clock, within 8 inch: YES	00:15:36		



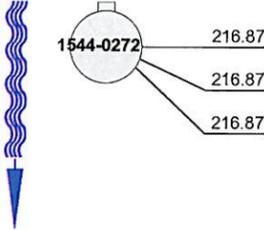
National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060627	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 414	PSR: 77248
Total Pipe Length: 216.10	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

1:496	position	observation	MPEG	photo	grade
	216.87	General Observation, Remark: End of Segment	00:16:37		
	216.87	General Observation, Remark: Materials found- VCP	00:16:38		
	216.87	Manhole	00:16:54		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0





National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060705	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 335	PSR: 77073
Total Pipe Length: 255.1	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: FOND DU LAC RD	Flow Control: N Not Controlled	Start MH: 1544-0419
City: RPV	Year Renewed:	End MH: 1544-0418
Location Code: C Light Highway	Tape/Media #: 009	Total length surveyed: 255.1 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 130 ID#77073
Drain. Area: 1544	Lining:
	Category:

Comment:
 Location details:

1:625	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:50		
	6.49	Water Level, 1 % of cross sectional area	00:02:27		
	6.49	Water Mark, 1 % of cross sectional area	00:02:28		
	9.28	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:01:35		
	11.68	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:01:53		
	40.92	Crack Circumferential, from 07 to 08 o'clock, within 8 inch: YES	00:03:40	1067a	
	45.81	Tap Break-In Active, at 02 o'clock, 6", within 8 inch: YES	00:04:11		
	64.57	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:04:51		
	110.68	Tap Factory Made Capped, at 02 o'clock, 6", within 8 inch: YES	00:06:22		
	126.65	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:06:58		
	158.19	Crack Circumferential, from 08 to 10 o'clock, within 8 inch: YES	00:08:00	1072a	
	161.08	Fracture Multiple, from 04 to 08 o'clock, within 8 inch: YES	00:08:37	1073a, b	
	172.96	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:09:31		
	191.82	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:10:15		
	195.41	Fracture Multiple, from 04 to 08 o'clock, within 8 inch: YES	00:10:34	1076a, b	
	223.26	Crack Circumferential, from 09 to 04 o'clock, within 8 inch: YES	00:11:41	1077a	
	229.75	Fracture Multiple, from 04 to 09 o'clock, within 8 inch: YES	00:12:08	1078a, b	
	241.32	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:12:50		
	255.10	General Observation, Remark: End of Segment	00:13:29		
	255.10	General Observation, Remark: Materials found- VCP	00:13:30		
	255.10	Manhole	00:13:47		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060726	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 177	PSR: 75808
Total Pipe Length: 236.33	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1545

Street: SILVERARROW DR	Flow Control: N Not Controlled	Start MH: 1545-0544
City: RPV	Year Renewed:	End MH: 1545-0543
Location Code: C Light Highway	Tape/Media #: 044	Total length surveyed: 236.33 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 218
Drain. Area: 1545	Lining:
	Category:

Comment: **Cracks, Fractures and Roots**
 Location details: **Silverspur**

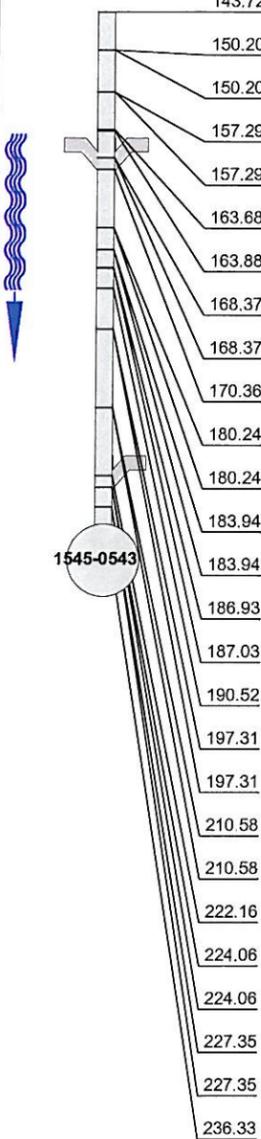
1:372	position	observation	MPEG	photo	grade
	0.00	Manhole, Remark: Start of Segment	00:00:56		
	3.99	Tap Factory Made Active, at 02 o'clock, 4", within 8 inch: YES, Remark:	00:03:50		
	3.99	Roots			
	3.99	Roots Ball Lateral, from 12 to 12 o'clock, 98 %, within 8 inch: YES	00:03:57		
	4.99	Water Level, 10 % of cross sectional area	00:01:21		
	4.99	Water Mark, 25 % of cross sectional area	00:01:22		
	6.19	Roots Fine Joint, from 01 to 02 o'clock, within 8 inch: YES	00:04:28		
	9.78	Crack Spiral, from 07 to 10 o'clock, within 8 inch: YES	00:04:51		
	15.97	Roots Fine Joint, from 10 to 12 o'clock, within 8 inch: YES	00:05:07		
	26.35	Crack Multiple, from 08 to 04 o'clock, within 8 inch: YES	00:05:59		
	37.73	Crack Longitudinal, at 05 o'clock, within 8 inch: YES	00:07:05	2445a	
	44.51	Crack Longitudinal, at 11 o'clock, within 8 inch: YES	00:07:48		
	44.61	Crack Spiral, from 02 to 04 o'clock, within 8 inch: YES	00:08:08		
	49.00	Tap Factory Made Active, at 02 o'clock, 4", within 8 inch: YES, Remark:	00:08:33		
	49.00	Roots			
	49.00	Roots Medium Lateral, from 04 to 11 o'clock, 45 %, within 8 inch: YES	00:08:39		
	69.66	Crack Multiple, from 09 to 03 o'clock, within 8 inch: YES	00:09:37	2450a	
	81.74	Crack Longitudinal, at 08 o'clock, within 8 inch: YES	00:10:16		
	86.63	Tap Factory Made Active, at 10 o'clock, 4", within 8 inch: YES	00:10:34		
	88.53	Crack Multiple, from 09 to 03 o'clock, within 8 inch: YES	00:11:00	2453a	
	96.61	Fracture Multiple, from 01 to 04 o'clock, within 8 inch: YES	00:11:37	2454a, b	
	109.48	Tap Factory Made Active, at 02 o'clock, 4", within 8 inch: YES	00:12:32		
	123.16	Roots Fine Joint, from 12 to 02 o'clock, within 8 inch: YES	00:13:05		
	131.64	Crack Spiral, from 08 to 02 o'clock, within 8 inch: YES	00:13:30		
	135.23	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:13:54		
	143.32	Roots Fine Joint, at 03 o'clock, within 8 inch: YES	00:14:19		
	143.72	Crack Longitudinal, at 04 o'clock, within 8 inch: YES	00:14:25		



Inspection report

Date: 20060726	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 177	PSR: 75808
Total Pipe Length: 236.33	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1545

1:372	position	observation	MPEG	photo	grade
	<u>143.72</u>	Crack Longitudinal, at 04 o'clock, within 8 inch: YES	00:14:25		
	<u>150.20</u>	Crack Spiral, from 08 to 02 o'clock, within 8 inch: YES, Remark: Roots	00:14:47		
	<u>150.20</u>	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:14:51		
	<u>157.29</u>	Fracture Multiple, from 07 to 11 o'clock, within 8 inch: YES, Remark: Roots	00:15:34	2463a	
	<u>157.29</u>	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:15:56		
	<u>163.68</u>	Roots Fine Joint, from 07 to 05 o'clock, within 8 inch: YES	00:16:28		
	<u>163.88</u>	Crack Longitudinal, at 05 o'clock, within 8 inch: YES	00:16:37		
	<u>168.37</u>	Tap Factory Made Active, at 10 o'clock, 4", within 8 inch: YES, Remark: Roots	00:16:56		
	<u>168.37</u>	Roots Fine Lateral, from 10 to 04 o'clock, within 8 inch: YES	00:17:02		
	<u>170.36</u>	Crack Longitudinal, at 04 o'clock, within 8 inch: YES	00:17:16	2469a	
	<u>180.24</u>	Crack Multiple, from 08 to 04 o'clock, within 8 inch: YES, Remark: Roots	00:18:05	2470a	
	<u>180.24</u>	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:18:10		
	<u>183.94</u>	Crack Spiral, from 07 to 11 o'clock, within 8 inch: YES, Remark: Roots	00:18:27	2472a	
	<u>183.94</u>	Roots Fine Joint, from 07 to 10 o'clock, within 8 inch: YES	00:18:44		
	<u>186.93</u>	Crack Multiple, from 08 to 11 o'clock, within 8 inch: YES, Remark: Roots	00:19:00	2474a	
	<u>187.03</u>	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:19:14		
	<u>190.52</u>	Crack Multiple, from 07 to 11 o'clock, within 8 inch: YES	00:19:30	2476a	
	<u>197.31</u>	Crack Multiple, from 09 to 03 o'clock, within 8 inch: YES, Remark: Roots	00:20:03	2477a	
	<u>197.31</u>	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:20:10		
	<u>210.58</u>	Crack Multiple, from 08 to 04 o'clock, within 8 inch: YES, Remark: Roots	00:20:41		
	<u>210.58</u>	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:20:46		
	<u>222.16</u>	Tap Factory Made Active, at 10 o'clock, 4", within 8 inch: YES	00:21:11		
	<u>224.06</u>	Crack Multiple, from 08 to 04 o'clock, within 8 inch: YES, Remark: Roots	00:21:25	2482a	
	<u>224.06</u>	Roots Fine Joint, from 10 to 02 o'clock, within 8 inch: YES	00:21:46		
	<u>227.35</u>	Crack Multiple, from 01 to 09 o'clock, within 8 inch: YES, Remark: Roots	00:22:24	2484a	
	<u>227.35</u>	Roots Fine Joint, from 10 to 02 o'clock, within 8 inch: YES	00:22:30		
	<u>236.33</u>	Manhole, Remark: End of Segment Material found-VCP	00:23:23		



QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060706	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 359	PSR: 77098
Total Pipe Length: 304.9	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: WHITEFOX DR	Flow Control: N Not Controlled	Start MH: 1544-0342	
City: RPV	Year Renewed:	End MH: 1544-0341	
Location Code: C Light Highway	Tape/Media #: 011	Total length surveyed: 304.9 ft	

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 200 ID#77098
Drain. Area: 1544	Lining:
	Category:

Comment:
 Location details:

1:750	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:47		
	0.00	Water Level, 2 % of cross sectional area	00:00:52		
	0.00	Water Mark, 10 % of cross sectional area	00:00:54		
	39.22	Crack Circumferential, from 08 to 10 o'clock, within 8 inch: YES	00:02:20	1181a	
	40.52	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:02:39		
	46.11	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:02:58		
	106.79	Crack Circumferential, from 08 to 11 o'clock, within 8 inch: YES	00:04:47	1184a	
	108.89	Crack Circumferential, from 12 to 12 o'clock, within 8 inch: YES	00:05:04	1185a	
	110.38	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:05:18		
	162.38	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:07:12		
	178.25	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:07:48		
	215.18 S1	Broken, from 12 to 12 o'clock, within 8 inch: YES, start	00:10:21	1190a, b	S 5
	215.48	Roots Fine Barrell, from 12 to 12 o'clock, within 8 inch: YES	00:09:25		
	219.27 F1	Broken, from 12 to 12 o'clock, within 8 inch: YES, end	00:11:12		S 5
	246.51	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:12:06		
	252.50	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:12:26		
	293.22	Crack Multiple, from 07 to 05 o'clock, within 8 inch: YES	00:13:48	1194a	
	304.90	General Observation, Remark: End of Segment	00:14:24		
	304.90	General Observation, Remark: Materials found- VCP	00:14:26		
	304.90	Manhole	00:14:39		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5200	0000	10	0	10	5	0	5



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060725	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 410	PSR: 77195
Total Pipe Length: 255.18	Survey Customer: LACDPW	System Owner: ZLAS	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: SILVER SPUR RD	Flow Control: N Not Controlled	Start MH: 1544-0327
City: ZLAS	Year Renewed:	End MH: 1544-0326
Location Code: C Light Highway	Tape/Media #: 035	Total length surveyed: 255.18 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 242 ID#77195
Drain. Area: 1544	Lining:
	Category:

Comment:
 Location details:

1:625	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:48		
	0.00	Water Level, 5 % of cross sectional area	00:00:53		
	0.00	Water Mark, 10 % of cross sectional area	00:00:55		
	8.60	Crack Longitudinal, at 03 o'clock, within 8 inch: YES	00:01:21	1424a	
	10.17	Fracture Multiple, from 07 to 02 o'clock, within 8 inch: YES	00:02:07	1425a, b	
	12.51	Fracture Multiple, from 07 to 02 o'clock, within 8 inch: YES	00:02:53	1426a	
	16.03	Crack Multiple, from 09 to 03 o'clock, within 8 inch: YES	00:03:41	1427a	
	22.19	Crack Circumferential, from 04 to 09 o'clock, within 8 inch: YES	00:04:04	1428a	
	150.27	Crack Circumferential, from 10 to 03 o'clock, within 8 inch: YES	00:08:18		
	177.55	Crack Circumferential, from 09 to 03 o'clock, within 8 inch: YES	00:09:18		
	187.42	Crack Circumferential, from 09 to 03 o'clock, within 8 inch: YES	00:09:41		
	207.86	Crack Circumferential, from 10 to 02 o'clock, within 8 inch: YES	00:10:27		
	255.18	General Observation, Remark: End Segment	00:12:06		
	255.18	General Observation, Remark: pipe material found VCP	00:12:07		
	255.18	Manhole	00:12:22		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3814, Fax: (562) 495-1528

Inspection report

Date: 20060710	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 240	PSR: 76952
Total Pipe Length: 300.01	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: DEEPBROOK DR	Flow Control: N Not Controlled	Start MH: 1544-0522
City: RPV	Year Renewed	End MH: 1544-0518
Location Code: C Light Highway	Tape/Media #: 018	Total length surveyed: 300.01 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 279
Drain. Area: 1544	Lining:
	Category:

Comment: Deposits, Fractures
 Location details: Hawkhurst

1:750	position	observation	MPEG	photo	grade
	0.00	Manhole	00:01:10		
	1.60	General Observation, Remark: Start of Segment	00:01:37		
	1.60	Water Level, 10 % of cross sectional area	00:01:42		
	1.60	Water Mark, 35 % of cross sectional area	00:01:47		
	8.38 S1	Deposits Attached Encrustation, 1 % of cross sectional area, from 08 to 04 o'clock, within 8 inch: YES, start	00:02:41		
	69.16	Tap Factory Made Active, at 10 o'clock, 4", within 8 inch: YES	00:04:45		
	122.26	Tap Factory Made Active, at 10 o'clock, 4", within 8 inch: YES	00:06:12		
	123.06 F1	Deposits Attached Encrustation, 1 % of cross sectional area, from 08 to 04 o'clock, within 8 inch: YES, end	00:06:30		
	129.84	Tap Factory Made Active, at 02 o'clock, 4", within 8 inch: YES	00:06:47		
	188.13	Tap Factory Made Active, at 10 o'clock, 4", within 8 inch: YES	00:08:17		
	192.62	Tap Factory Made Active, at 02 o'clock, 4", within 8 inch: YES	00:08:38		
	212.58 S2	Fracture Multiple, from 07 to 05 o'clock, within 8 inch: YES, start	00:09:28	308a	
	215.87 F2	Fracture Multiple, from 07 to 05 o'clock, within 8 inch: YES, end	00:10:17	309a	
	256.09	Tap Factory Made Active, at 10 o'clock, 4", within 8 inch: YES	00:11:41		
	273.96	Tap Factory Made Active, at 02 o'clock, 4", within 8 inch: YES	00:12:29		
	300.01	General Observation, Remark: End of Segment Material found-VCP	00:13:22		
	300.01	Manhole	00:13:47		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060703	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 370	PSR: 77145
Total Pipe Length: 150.1	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: BAYRIDGE RD	Flow Control: N Not Controlled	Start MH: 1544-0278
City: RPV	Year Renewed:	End MH: 1544-0279
Location Code: C Light Highway	Tape/Media #: 007	Total length surveyed: 150.1 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 10/10
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 179 ID#77145
Drain. Area: 1544	Lining:
	Category:

Comment:
 Location details:

1:375	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:50		
	0.00	Water Level, 15 % of cross sectional area	00:00:59		
	0.00	Water Mark, 20 % of cross sectional area	00:01:00		
	7.59	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:01:31		
	41.72	Fracture Multiple, from 08 to 05 o'clock, within 8 inch: YES	00:02:41	889a, b	
	44.41	Fracture Multiple, from 12 to 12 o'clock, within 8 inch: YES	00:03:16	890a, b	
	97.71	Tap Break-In Active, at 12 o'clock, 6", within 8 inch: YES	00:05:10		
	150.10	General Observation, Remark: End of Segment	00:06:40		
	150.10	General Observation, Remark: Materials found- VCP	00:06:43		
	150.10	Manhole	00:07:01		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060627	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 415	PSR: 77249
Total Pipe Length: 294.02	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: BASSWOOD AV	Flow Control: N Not Controlled	Start MH: 1544-0275
City: RPV	Year Renewed:	End MH: 1544-0271
Location Code: C Light Highway	Tape/Media #: 002	Total length surveyed: 294.02 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 253 ID#77249
Drain. Area: 1544	Lining: Category:

Comment: **cracks ,roots**
 Location details: **BAYRIDGE RD**

1:682	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:58		
	0.00	Water Level, 0 % of cross sectional area	00:01:06		
	0.00	Water Mark, 1 % of cross sectional area	00:01:09		
	5.09	Crack Circumferential, from 01 to 08 o'clock, within 8 inch: YES	00:01:54	158a	
	6.69	Crack Multiple, from 12 to 05 o'clock, within 8 inch: YES	00:02:33	159a	
	9.18	Fracture Multiple, from 02 to 11 o'clock, within 8 inch: YES	00:02:59	160a	
	10.88	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:03:20		
	31.74	Crack Multiple, from 09 to 03 o'clock, within 8 inch: YES	00:04:15		
	35.03	Crack Multiple, from 01 to 07 o'clock, within 8 inch: YES	00:04:39	163a	
	42.12	Crack Circumferential, from 09 to 01 o'clock, within 8 inch: YES	00:05:01		
	67.87	Crack Circumferential, from 08 to 11 o'clock, within 8 inch: YES	00:05:53		
	69.36	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:06:04		
	86.43	Crack Multiple, from 04 to 08 o'clock, within 8 inch: YES	00:06:49		
	90.52	Crack Multiple, from 01 to 05 o'clock, within 8 inch: YES	00:07:07		
	103.80	Roots Fine Joint, from 09 to 11 o'clock, within 8 inch: YES	00:07:55		
	119.76	Roots Fine Joint, at 08 o'clock, within 8 inch: YES	00:08:31		
	126.95	Roots Fine Joint, from 09 to 10 o'clock, within 8 inch: YES	00:08:51		
	127.95	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:09:02		
	142.32	Roots Fine Joint, from 12 to 04 o'clock, within 8 inch: YES	00:09:43		
	209.59	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:11:29		
	213.78	Crack Multiple, from 05 to 08 o'clock, within 8 inch: YES	00:11:48		
	240.63	Crack Circumferential, from 07 to 11 o'clock, within 8 inch: YES	00:12:40		
	264.88	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:13:33		
	279.25	Crack Multiple, from 08 to 03 o'clock, within 8 inch: YES	00:14:11	178a	



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3814, Fax: (562) 495-1528

Inspection report

Date: 20060627	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 415	PSR: 77249
Total Pipe Length: 294.02	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

1:682	position	observation	MPEG	photo	grade
	294.02	General Observation, Remark: End of Segment	00:14:57		
	294.02	General Observation, Remark: Materials found- VCP	00:14:58		
	294.02	Manhole	00:15:14		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060705	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 304	PSR: 77025
Total Pipe Length: 250.29	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: SHADOW WOOD DR	Flow Control: N Not Controlled	Start MH: 1544-0502
City: RPV	Year Renewed	End MH: 1544-0481
Location Code: C Light Highway	Tape/Media #: 012	Total length surveyed: 250.29 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 215
Drain. Area: 1544	Lining:
	Category:

Comment: Cracks and Roots
 Location details: Elkmont Dr

1:589	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:52		
	0.00	General Observation, Remark: Start Segment	00:00:54		
	3.13	Water Level, 5 % of cross sectional area	00:02:14		
	3.13	Water Mark, 15 % of cross sectional area	00:02:15		
	3.13	Roots Fine Joint, from 08 to 11 o'clock, within 8 inch: YES	00:02:36		
	6.94	Roots Ball Lateral, from 05 to 02 o'clock, 95 %, within 8 inch: YES	00:03:00		
	6.94	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES, Remark: roots	00:03:16		
	8.60	Crack Multiple, from 06 to 08 o'clock, within 8 inch: YES	00:03:32		
	45.07	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:04:45		
	64.43	Roots Fine Lateral, from 08 to 01 o'clock, within 8 inch: YES	00:05:27		
	64.43	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES, Remark: roots	00:05:34		
	104.22	Roots Fine Lateral, from 02 to 04 o'clock, within 8 inch: YES	00:06:43		
	104.22	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:06:44		
	138.64	Crack Multiple, from 04 to 08 o'clock, within 8 inch: YES	00:07:50		
	148.02	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:08:17		
	150.08	Crack Longitudinal, at 08 o'clock, within 8 inch: YES	00:08:38	329a	
	153.89	Crack Multiple, from 04 to 08 o'clock, within 8 inch: YES	00:09:16	330a	
	157.80	Crack Multiple, from 04 to 08 o'clock, within 8 inch: YES	00:09:41		
	171.29	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:10:18		
	214.70	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:11:52		
	220.57	Crack Multiple, from 04 to 08 o'clock, within 8 inch: YES	00:12:20		
	224.48	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:12:36		
	232.79	Fracture Multiple, from 02 to 05 o'clock, within 8 inch: YES	00:13:04	336a	
	233.96	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:13:26		



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060705	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 304	PSR: 77025
Total Pipe Length: 250.29	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

1:589	position	observation	MPEG	photo	grade		
	250.19	General Observation, Remark: End Segment	00:14:11				
	250.19	General Observation, Remark: pipe material found VCP	00:14:13				
	250.29	Manhole	00:14:37				
QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



Inspection report

Date: 20060629	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 395	PSR: 77173
Total Pipe Length: 350.11	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: IRONWOOD ST	Flow Control: N Not Controlled	Start MH: 1544-0305
City: RPV	Year Renewed:	End MH: 1544-0306
Location Code: C Light Highway	Tape/Media #: 004	Total length surveyed: 350.11 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 271 ID#77173
Drain. Area: 1544	Lining:
	Category:

Comment: **ROOTS**
 Location details: **BASSWOOD AVE**

1:558	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:49		
	6.39	Water Level, 3 % of cross sectional area	00:01:25		
	6.39	Water Mark, 15 % of cross sectional area	00:01:25		
	11.48	Roots Tap Joint, at 03 o'clock, 2 %, within 8 inch: YES	00:01:38	416a	
	16.07	Roots Tap Joint, at 03 o'clock, 2 %, within 8 inch: YES	00:01:53		
	27.35	Crack Circumferential, from 08 to 03 o'clock, within 8 inch: YES	00:02:33	418a	
	27.35	Roots Fine Joint, from 08 to 02 o'clock, within 8 inch: YES	00:02:39		
	33.23	Roots Fine Joint, from 04 to 08 o'clock, within 8 inch: YES	00:02:57		
	39.62	Roots Tap Joint, at 12 o'clock, 5 %, within 8 inch: YES	00:03:18		
	42.52	Roots Medium Joint, from 08 to 10 o'clock, 20, within 8 inch: YES	00:03:39	422a	
	46.61	Crack Circumferential, from 12 to 04 o'clock, within 8 inch: YES	00:04:00		
	48.20	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:04:14		
	48.70	Roots Medium Joint, from 03 to 10 o'clock, 35 %, within 8 inch: YES	00:04:26	425a	
	65.17	Roots Ball Joint, from 04 to 05 o'clock, 5 %, within 8 inch: YES	00:05:40		
	77.05	Tap Factory Made Capped, at 10 o'clock, 6", within 8 inch: YES	00:06:05		
	110.88	Crack Multiple, from 01 to 05 o'clock, within 8 inch: YES	00:07:02		
	112.88	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:07:18		
	113.68	Crack Circumferential, from 09 to 04 o'clock, within 8 inch: YES	00:07:32		
	126.85	Fracture Multiple, from 12 to 12 o'clock, within 8 inch: YES	00:08:05	431a	
	140.12	Crack Multiple, from 08 to 02 o'clock, within 8 inch: YES	00:08:56		
	144.02	Crack Multiple, from 02 to 07 o'clock, within 8 inch: YES	00:09:13		
	177.15	Crack Circumferential, from 02 to 05 o'clock, within 8 inch: YES	00:10:23		
	178.55	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:10:36		
	186.13	Crack Longitudinal, at 08 o'clock, within 8 inch: YES	00:10:59	436a	
	224.36	Tap Factory Made Active, at 10 o'clock, 10", within 8 inch: YES	00:12:13		



Inspection report

Date: 20060629	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 395	PSR: 77173
Total Pipe Length: 350.11	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

1:558	position	observation	MPEG	photo	grade
	243.32	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:12:55		
	258.19	Crack Multiple, from 10 to 03 o'clock, within 8 inch: YES	00:13:29		
	312.58	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:15:17		
	350.11	General Observation, Remark: End of Segment	00:16:54		
	350.11	General Observation, Remark: Materials found- VCP	00:16:55		
	350.11	Manhole	00:17:10		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060726	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 176	PSR: 75807
Total Pipe Length: 164.28	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1545

Street: SILVERARROW DR	Flow Control: N Not Controlled	Start MH: 1545-0543
City: RPV	Year Renewed	End MH: 1545-0542
Location Code: C Light Highway	Tape/Media #: 044	Total length surveyed: 164.28 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 234 ID#85807
Drain Area: 1545	Lining: Category:

Comment: Cracks Fractures and Roots
 Location details: Silverspur

1:425	position	observation	MPEG	photo	grade
	0.00	Manhole, Remark: Start of Segment	00:00:55		
	4.99	Water Level, 10 % of cross sectional area	00:01:25		
	4.99	Water Mark, 25 % of cross sectional area	00:01:28		
	10.88	Roots Fine Joint, from 09 to 03 o'clock, within 8 inch: YES	00:01:56		
	15.17	Crack Spiral, from 09 to 02 o'clock, within 8 inch: YES, Remark: Roots	00:02:34	2491a	
	15.27	Roots Fine Joint, from 10 to 01 o'clock, within 8 inch: YES	00:02:45		
	18.76	Roots Fine Joint, from 10 to 12 o'clock, within 8 inch: YES	00:03:02		
	20.16	Tap Factory Made Active, at 10 o'clock, 4", within 8 inch: YES	00:03:13		
	26.45	Crack Multiple, from 08 to 04 o'clock, within 8 inch: YES	00:03:39		
	35.03	Tap Factory Made Active, at 02 o'clock, 4", within 8 inch: YES	00:04:48		
	35.53	Roots Fine Joint, from 09 to 04 o'clock, within 8 inch: YES	00:05:11		
	40.72	Fracture Multiple, from 08 to 11 o'clock, within 8 inch: YES	00:05:30	2498a	
	40.72	Crack Spiral, from 11 to 03 o'clock, within 8 inch: YES	00:05:37	2499a	
	40.72	Roots Fine Joint, from 08 to 11 o'clock, within 8 inch: YES, Remark: in crack	00:05:51		
	64.57	Roots Fine Joint, from 09 to 03 o'clock, within 8 inch: YES	00:06:49		
	76.45	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:07:33		
	77.95	Tap Factory Made Active, at 10 o'clock, 4", within 8 inch: YES	00:07:43		
	79.84	Crack Longitudinal, at 11 o'clock, within 8 inch: YES	00:08:06		
	79.84	Roots Fine Joint, from 03 to 05 o'clock, within 8 inch: YES	00:08:23		
	83.83	Roots Fine Joint, at 03 o'clock, within 8 inch: YES	00:08:48		
	103.20	Roots Fine Joint, from 11 to 02 o'clock, within 8 inch: YES	00:09:34		
	112.08	Crack Multiple, from 08 to 04 o'clock, within 8 inch: YES	00:11:24		
	147.31	Crack Multiple, from 10 to 02 o'clock, within 8 inch: YES	00:13:06		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060628	P.O. #: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 383	PSR: 77160
Total Pipe Length: 167.57	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: DIVERSEY DR	Flow Control: N Not Controlled	Start MH: 1544-0298
City: RPV	Year Renewed:	End MH: 1544-0291
Location Code: C Light Highway	Tape/Media #: 003	Total length surveyed: 167.57 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 203 ID#77160
Drain. Area: 1544	Lining:
	Category:

Comment:
 Location details: **BIRCFIELD AVE**

1:425	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:49		
	0.00	Water Level, 10 % of cross sectional area	00:01:03		
	0.00	Water Mark, 20 % of cross sectional area	00:01:05		
	6.79	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:01:34		
	14.37	Crack Multiple, from 09 to 03 o'clock, within 8 inch: YES	00:02:00	299a	
	64.97	Crack Multiple, from 08 to 05 o'clock, within 8 inch: YES	00:03:53	300a	
	71.76	Crack Multiple, from 07 to 04 o'clock, within 8 inch: YES	00:04:20	301a	
	92.12	Roots Fine Joint, from 12 to 02 o'clock, within 8 inch: YES	00:05:19		
	111.88	Roots Fine Joint, from 11 to 12 o'clock, within 8 inch: YES	00:06:12		
	119.07	Roots Fine Joint, at 11 o'clock, within 8 inch: YES	00:06:39		
	135.73	Crack Circumferential, from 09 to 04 o'clock, within 8 inch: YES	00:07:24		
	135.73	Roots Fine Joint, from 08 to 10 o'clock, within 8 inch: YES	00:07:28		
	142.32	Fracture Multiple, from 07 to 12 o'clock, within 8 inch: YES	00:07:53	307a	
	142.32	Roots Fine Joint, at 02 o'clock, within 8 inch: YES	00:08:02		
	167.57	General Observation, Remark: End of Segment	00:09:55		
	167.57	General Observation, Remark: Materials found- VCP	00:09:57		
	167.57	Manhole	00:10:13		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 446-3614, Fax: (562) 495-1528

Inspection report

Date: 20060627	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 413	PSR: 77247
Total Pipe Length: 178.55	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: BASSWOOD AV	Flow Control: N Not Controlled	Start MH: 1544-0270
City: RPV	Year Renewed:	End MH: 1544-0271
Location Code: C Light Highway	Tape/Media #: 001	Total length surveyed: 178.55 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 206 ID#77247
Drain. Area: 1544	Lining:
	Category:

Comment: **cracks**
 Location details: **GRAYLOG ST**

1:450	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:54		
	0.00	Water Level, 0 % of cross sectional area	00:01:07		
	0.00	Water Mark, 5 % of cross sectional area	00:01:09		
	5.49	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:01:44		
	7.68	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:02:01		
	13.57	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:02:44		
	15.07	Crack Multiple, from 09 to 02 o'clock, within 8 inch: YES	00:03:16		
	42.82	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:04:26		
	58.38	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:05:06		
	68.46	Fracture Multiple, from 05 to 07 o'clock, within 8 inch: YES	00:05:35	58a	
	69.36	Crack Circumferential, from 10 to 02 o'clock, within 8 inch: YES	00:05:49		
	93.12	Crack Circumferential, from 01 to 04 o'clock, within 8 inch: YES	00:06:36		
	94.31	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES, Remark: ROOTS	00:06:48	61a	
	109.48	Crack Multiple, from 04 to 09 o'clock, within 8 inch: YES	00:07:38		
	133.54	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:08:31		
	154.30	Crack Multiple, from 09 to 05 o'clock, within 8 inch: YES	00:09:24		
	165.97	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:10:04		
	165.97	Roots Tap Lateral, from 05 to 12 o'clock, 50 %, within 8 inch: YES	00:10:08	66a, b	
	178.55	General Observation, Remark: End of Segment	00:11:11		
	178.55	General Observation, Remark: Materials found- VCP	00:11:12		
	178.55	Manhole	00:11:30		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



Inspection report

Date: 20060717	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 153	PSR: 75512
Total Pipe Length: 142.82	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1545

Street: 0	Flow Control: N Not Controlled	Start MH: 1545-0941
City: RPV	Year Renewed:	End MH: 1545-0993
Location Code: D Easement/Right of Way	Tape/Media #: 032	Total length surveyed: 142.82 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 143' ID#75512
Drain. Area: 1545	Lining:
	Category:

Comment: **Fracture, roots**
 Location details: **Browndeer**

1:350	position	observation	MPEG	photo	grade
	0.00	Manhole, Remark: Start of Segment	00:00:52		
	0.00	Water Level, 5 % of cross sectional area	00:01:28		
	4.99	Water Mark, 25 % of cross sectional area	00:01:32		
	11.58	Crack Longitudinal, at 08 o'clock, within 8 inch: YES	00:02:01		
	17.96	Roots Fine Joint, at 12 o'clock, within 8 inch: YES	00:02:15		
	34.93	Crack Multiple, from 04 to 06 o'clock, within 8 inch: YES	00:02:54	1078a	
	34.93	Roots Fine Joint, at 02 o'clock, within 8 inch: YES	00:03:01		
	39.42	Tap Factory Made Active, at 12 o'clock, 6", within 8 inch: YES	00:03:17		
	41.92 S1	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES, start	00:04:05		
	53.79 F1	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES, end	00:04:35		
	133.74	Fracture Multiple, from 04 to 08 o'clock, within 8 inch: YES	00:06:35	1083a	
	142.82	Manhole, Remark: End of Segment Material found-VCP	00:07:44		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060707	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 288	PSR: 77004
Total Pipe Length: 290.43	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: INDIAN PEAK RD	Flow Control: N Not Controlled	Start MH: 1544-0461
City: RPV	Year Renewed:	End MH: 1544-0460
Location Code: C Light Highway	Tape/Media #: 015	Total length surveyed: 290.43 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 209 ID#77004
Drain. Area: 1544	Lining:
	Category:

Comment:
 Location details:

1:725	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:50		
	2.59	Water Level, 5 % of cross sectional area	00:01:11		
	2.59	Water Mark, 15 % of cross sectional area	00:01:11		
	11.78	Roots Fine Joint, from 10 to 11 o'clock, within 8 inch: YES	00:01:37	1486a	
	15.37	Roots Fine Joint, at 08 o'clock, within 8 inch: YES	00:01:58	1487a	
	17.96	Roots Fine Joint, from 03 to 09 o'clock, within 8 inch: YES	00:02:19	1488a	
	67.47	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES, Remark: ROOTS	00:03:42	1489a	
	68.46	Crack Circumferential, from 09 to 03 o'clock, within 8 inch: YES	00:04:06		
	73.55	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:04:21		
	133.74	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:06:03		
	143.22	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:06:29		
	165.97	Crack Multiple, from 03 to 09 o'clock, within 8 inch: YES	00:07:20	1494a	
	166.97	Roots Fine Barrell, from 08 to 02 o'clock, within 8 inch: YES	00:07:37	1495a	
	168.17	Fracture Multiple, from 02 to 08 o'clock, within 8 inch: YES	00:07:57	1496a, b	
	171.06	Crack Circumferential, from 09 to 12 o'clock, within 8 inch: YES	00:08:22		
	203.30	Tap Factory Made Capped, at 02 o'clock, 6", within 8 inch: YES	00:09:26		
	209.09	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:09:46		
	210.19	Crack Circumferential, from 12 to 03 o'clock, within 8 inch: YES	00:09:58		
	226.55	Roots Fine Joint, from 02 to 03 o'clock, within 8 inch: YES	00:10:32	1501a	
	271.46	Crack Circumferential, from 10 to 02 o'clock, within 8 inch: YES	00:11:56	1502a	
	274.56	Roots Fine Joint, from 05 to 10 o'clock, within 8 inch: YES	00:12:12		
	290.43	General Observation, Remark: End of Segment	00:12:47		
	290.43	General Observation, Remark: Materials found- VCP	00:12:48		
	290.43	Manhole	00:13:01		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060629	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 397	PSR: 77175
Total Pipe Length: 142.42	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: N No Pre-Cleaning	Map Grid #: 1544

Street: IRONWOOD ST	Flow Control: N Not Controlled	Start MH: 1544-0307
City: RPV	Year Renewed:	End MH: 1544-0308
Location Code: C Light Highway	Tape/Media #: 004	Total length surveyed: 142.42 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 125 ID#77175
Drain. Area: 1544	Lining:
	Category:

Comment:
 Location details: **BIRCHFIELD AVE**

1:350	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:42		
	2.00	Water Level, 5 % of cross sectional area	00:01:01		
	2.00	Water Mark, 15 % of cross sectional area	00:01:03		
	4.19	Crack Longitudinal, at 03 o'clock, within 8 inch: YES	00:01:21	464a	
	10.38	Crack Longitudinal, at 07 o'clock, within 8 inch: YES	00:01:48	465a	
	55.49	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:03:16		
	114.08	Crack Circumferential, from 06 to 12 o'clock, within 8 inch: YES	00:05:11	467a	
	118.17	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:05:31		
	122.66	Fracture Multiple, from 03 to 11 o'clock, within 8 inch: YES	00:05:52	469a	
	142.42	General Observation, Remark: End of Segment	00:07:04		
	142.42	General Observation, Remark: Materials found- VCP	00:07:05		
	142.42	Manhole	00:07:19		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



Inspection report

Date: 20060705	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Solano	section number: 322	PSR: 77060
Total Pipe Length: 194.92	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: FOND DU LAC RD	Flow Control: N Not Controlled	Start MH: 1544-0408
City: RPV	Year Renewed:	End MH: 1544-0407
Location Code: C Light Highway	Tape/Media #: 011	Total length surveyed: 194.92 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 204 ID#77060
Drain. Area: 1544	Lining:
	Category:

Comment:
 Location details:

1:500	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:41		
	0.00	Water Level, 10 % of cross sectional area	00:00:55		
	0.00	Water Mark, 10 % of cross sectional area	00:00:58		
	6.59	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:01:31		
	9.28	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:01:45		
	68.66	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:03:42		
	110.18	Crack Circumferential, from 09 to 12 o'clock, within 8 inch: YES	00:05:12	1125a	
	128.35	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:05:58		
	139.23	Crack Circumferential, from 08 to 12 o'clock, within 8 inch: YES	00:06:27		
	169.37	Crack Circumferential, from 09 to 03 o'clock, within 8 inch: YES	00:07:25	1128a	
	173.76	Fracture Multiple, from 05 to 07 o'clock, within 8 inch: YES	00:07:52	1129a, b	
	184.04	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:08:36		
	194.92	General Observation, Remark: End of Segment	00:09:05		
	194.92	General Observation, Remark: Materials found- VCP	00:09:08		
	194.92	Manhole	00:09:26		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



Inspection report

Date: 20060711	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 199	PSR: 76868
Total Pipe Length: 270.17	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: DIAMOND HEAD LN	Flow Control: N Not Controlled	Start MH: 1544-0541
City: RPV	Year Renewed:	End MH: 1544-0542
Location Code: C Light Highway	Tape/Media #: 022	Total length surveyed: 270.17 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 276
Drain. Area: 1544	Lining:
	Category:

Comment: **Pipe Clean,hole at end of pipe at MH0542**
 Location details: **Silvermoon Ln**

1:675	position	observation	MPEG	photo	grade
	0.00	Manhole	00:00:59		
	0.00	General Observation, Remark: Start of Segment	00:01:08		
	4.99	Water Level, 2 % of cross sectional area	00:01:41		
	4.99	Water Mark, 20 % of cross sectional area	00:01:44		
	36.33	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:02:49		
	49.10	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:03:22		
	98.71	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:04:48		
	118.47	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:05:29		
	158.19	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:06:36		
	180.74	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:07:21		
	223.66	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:08:25		
	246.31	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:09:21		
	267.97	Hole, from 04 to 06 o'clock, within 8 inch: NO, Remark: at manhole	00:10:26	461a	S 4
	270.17	General Observation, Remark: End of Segment Material found-VCP	00:11:10		
	270.17	Manhole	00:11:31		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
4100	0000	4	0	4	4	0	4



National Plant Services, INC.
 1461 Harbor Avenue
 Long Beach, CA 90813-2741
 Tel: (800) 445-3614, Fax: (562) 495-1528

Inspection report

Date: 20060711	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 208	PSR: 76877
Total Pipe Length: 58.09	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: 0	Flow Control: N Not Controlled	Start MH: 1544-0551
City: RPV	Year Renewed:	End MH: 1544-0550
Location Code: D Easement/Right of Way	Tape/Media #: 024	Total length surveyed: 58.09 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 57
Drain. Area: 1544	Lining:
	Category:

Comment: **Roots,Fracture**
 Location details: **Falconrock**

1:150	position	observation	MPEG	photo	grade
	0.00	Manhole	00:01:22		
	0.00	General Observation, Remark: Start of Segment	00:01:24		
	4.99	Water Level, 2 % of cross sectional area	00:03:09		
	4.99	Water Mark, 10 of cross sectional area	00:03:32		
	11.78	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:04:47		
	47.41	Tap Break-In Active, at 10 o'clock, 6", within 8 inch: YES, Remark: roots	00:06:10		
	47.41	Roots Fine Connection, from 01 to 04 o'clock, within 8 inch: YES	00:06:17		
	48.20	Fracture Multiple, from 09 to 03 o'clock, within 8 inch: YES	00:06:34	579a	
	49.20	Roots Medium Connection, from 03 to 10 o'clock, 55 %, within 8 inch: YES	00:07:06		
	49.20	Tap Break-In Abandoned, at 02 o'clock, 6", within 8 inch: YES, Remark: roots	00:08:00		
	52.30	Tap Break-In Active, at 02 o'clock, 6", within 8 inch: YES	00:07:43		
	58.09	General Observation, Remark: End of Segment Material found-VCP	00:08:32		
	58.09	Manhole	00:08:51		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



Inspection report

Date: 20060710	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 233	PSR: 76945
Total Pipe Length: 271.56	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1544

Street: ROCKVALLEY RD	Flow Control: N Not Controlled	Start MH: 1544-0513
City: RPV	Year Renewed:	End MH: 1544-0512
Location Code: C Light Highway	Tape/Media #: 016	Total length surveyed: 271.56 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 249
Drain. Area: 1544	Lining: Category:

Comment: **Fracture and Roots**
 Location details: **Deepbrook**

1:675	position	observation	MPEG	photo	grade
	0.00	Manhole	00:01:20		
	0.00	General Observation, Remark: Start of Segment	00:01:24		
	4.99	Water Level, 1 % of cross sectional area	00:01:59		
	4.99	Water Mark, 20 % of cross sectional area	00:02:04		
	43.21	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:03:22		
	50.50	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:03:42		
	113.18	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:05:39		
	115.57	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:06:03		
	161.78	Roots Fine Joint, from 08 to 02 o'clock, within 8 inch: YES	00:07:20		
	177.05	Roots Fine Joint, from 08 to 05 o'clock, within 8 inch: YES	00:08:13	209a	
	181.84	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:08:33		
	188.03	Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES	00:08:50		
	214.08	Roots Fine Joint, from 07 to 05 o'clock, within 8 inch: YES	00:09:40		
	224.56	Roots Medium Joint, from 08 to 04 o'clock, 45 %, within 8 inch: YES	00:10:14	213a	
	243.92	Tap Break-In Active, at 11 o'clock, 6", within 8 inch: YES	00:11:39		
	255.60	Tap Factory Made Active, at 02 o'clock, 6", within 8 inch: YES	00:12:31		
	267.47	Fracture Multiple, from 02 to 08 o'clock, within 8 inch: YES	00:13:22	216a	
	271.56	General Observation, Remark: End of Segment	00:14:29		
	271.56	General Observation, Remark: Material found-VCP	00:14:34		
	271.56	Manhole	00:14:58		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



Inspection report

Date: 20060727	P.O #: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS T Glock	section number: 420	PSR: 84691
Total Pipe Length: 170.56	Survey Customer: LACDPW	System Owner: RPV	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1599

Street: BEECHGATE DR	Flow Control:	Start MH: 1599-0048
City: RPV	Year Renewed:	End MH: 1545-0522
Location Code: C Light Highway	Tape/Media #: 046	Total length surveyed: 170.56 ft

Purpose: F Routine Assessment	Dia/Height: C Circular 8/8
Use: SS Sanitary	Material: VCP Vitrified Clay Pipe Pipe Joint length: 41
Drain. Area: 1599	Lining:
	Category:

Comment: **Roots,Fracture**
 Location details: **Silverspur**

1:425	position	observation	MPEG	photo	grade
	0.00	Manhole, Remark: Start of Segment	00:00:54		
	5.09	Water Level, 5 % of cross sectional area	00:01:23		
	5.09	Water Mark, 1'0 % of cross sectional area	00:01:24		
	64.67	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:03:11		
	75.35	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:03:35	2774a	
	105.89	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:04:55		
	120.86	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:05:44		
	146.01	Fracture Multiple, from 09 to 05 o'clock, within 8 inch: YES, Remark: Roots	00:06:55	2777a	
	146.01	Roots Fine Joint, from 09 to 03 o'clock, within 8 inch: YES	00:07:03		
	152.90	Roots Fine Joint, from 09 to 03 o'clock, within 8 inch: YES	00:07:22		
	159.98	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES	00:07:39		
	165.17	Tap Break-In Abandoned, at 02 o'clock, 4", within 8 inch: NO	00:08:00		
	170.56	Manhole, Remark: End of Segment Material found-VCP	00:08:54		

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0

ENCLOSURE 5:

CCTV Sewer Inspection
Project Schedule

Rancho Palos Verdes**CCTV PROJECT SCHEDULE**

FISCAL YEAR	YARD	SUP DIST	PROJECT NAME	LENGTH (FT)*
2005-2006	S	4	Y0TV0506F	76,591
2006-2007	S	4	Y0TV0607D	131,329
2008-2009	S	4	4_18	31,410
2009-2010	S	4	4_19	266,674
2011-2012	S	4	4_16	100,727
2011-2012	S	4	4_17	124,667
2012-2013	S	4	1_5	850
TOTAL (FT)				732,248
TOTAL (MILES)				139

* Approximate length as of July 2005, actual project length may vary.