

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

GAIL FARBER, Director

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

January 5, 2012

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

> IN REPLY PLEASE REFER TO FILE: SM-1

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

Attention Ms. Carla Morreale

Dear Mr. Holland:

CONSOLIDATED SEWER MAINTENANCE DISTRICT CONDITION ASSESSMENT PROGRAM REPORT PROJECT NO. Y0TV0809C

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 inspection of 31,410 feet or 4.3 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 (PACP Version 6.0.1) 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)
- High Water Levels List and 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)

Mr. Ray Holland January 5, 2012 Page 2

The Condition Assessment Report will provide you with 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, where appropriate, 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, Sewer Maintenance Division, at (626) 300-3367, Monday through Friday, 8 a.m. to 4 p.m., or rswartz@dpw.lacounty.gov.

Very truly yours,

GAIL FARBER Director of Public Works

KEITH E. LEHTO Assistant Deputy Director Sewer Maintenance Division

KE:gy H:\SMHOME\GYoung\Memos.Letters\2315.docx Enc.

bc: KL, RS, FV, File (Project No. Y0TV0809C), SPINDLE

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

PROJECT NAME:	Y0TV0809C	PROJECT MGR:	Kari Eskridge
PROJECT DATE:	08/10/2009	CONTACT NO:	(626) 300-3390
SUP. DISTRICT(s):	4	MAP PAGE(S):	1544
Report By:	Eric Liu	Report Date:	11/09/2011

INTRODUCTION

As part of the Sewer Condition Assessment Program, the County of Los Angeles Department of Public Works Consolidated Sewer Maintenance District (District) has completed the closed-circuit television (CCTV) inspection of 31,410 feet or 4.3 percent of the City of Rancho Palos Verdes' (City) sewer system.

The Sewer Condition Assessment Program utilizes the Pipeline Assessment and Certification Program (PACP Version 6.0.1) Quick Rating methodology to rank the structural and maintenance condition of your system based on industry standards.

PROJECT AREA AND DESCRIPTION

Project No. Y0TV0809C included sewer lines located in the unincorporated County of Los Angeles area and in the Cities of Glendora, Palos Verdes Estates, Rancho Palos Verdes, and San Dimas. 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 has deficiencies with the most significant defect grades. A detailed breakdown of the five possible defect grades is as follows:

Grade	Defect Grade Description
1:	MINOR
2:	MINOR TO MODERATE
3:	MODERATE
4:	SIGNIFICANT
5:	MOST SIGNIFICANT

MAINTENANCE REPORT

Our inspection revealed that approximately 92.4 percent of the system televised was free of blockages or restrictions that would impede sewer flows. However, the remaining 7.6 percent of the inspected pipe segments within the City had a PACP maintenance grade of 3, 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).

In addition, a color-coded map showing the quick maintenance rating for each pipe segment is provided in Enclosure 2.

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Minor	162	0.5	1
2: Minor to Moderate	27,710	88.2	142
3: Moderate	1,147	3.7	3
4: Significant	1,977	6.3	10
5: Most Significant	414	1.3	2
TOTAL	31,410	100.0	158

QUICK MAINTENANCE RATING TABLE

Lateral Notices

Also included on the Quick Maintenance Rating Report Priority List are deficiencies discovered inside lateral connections to the mainline. The District does not maintain lateral lines. It is the responsibility of the property owner to maintain their respective lateral lines to facilitate the flow of wastewater from their property to the mainline. A letter will be sent to the property owner notifying them of the maintenance issues discovered in their lateral. A sample lateral notice letter is provided in Enclosure 2 for your reference.

High Water Levels

Our inspection revealed that approximately 98.7 percent of the system televised has adequate capacity. However, the remaining 1.3 percent of the inspected segments included deficiencies associated with high water levels. Capacity of the sewer pipe can be determined by analyzing several PACP codes, including Water Level, Water Mark, and miscellaneous remarks, which have indicated camera underwater or sags in the line. A sewer pipe can be considered at capacity when 50 percent of the diameter of sewer pipe is full of water. However, there are particular conditions in which the water level or water mark has reached 50 percent or greater due to heavy flows in adjoining pipes, a temporary stoppage due to debris in the sewer lines, or a sag in the line.

Therefore, additional review of all pipe segments with such high water level concerns was conducted to determine capacity issues, if any. All sewer pipes where Water Level, Water Mark, and miscellaneous remarks of camera underwater or sags in the line are at or above 50 percent capacity, have been outlined and analyzed on the High Water Level table in Enclosure 2. The nature of these high water level conditions is also summarized on this table.

A map showing the sewer lines with high water levels is provided in Enclosure 2.

Infiltration

Our inspection revealed that infiltration was not detected in any pipe segment in your City's system.

STRUCTURAL REPORT

Our inspection revealed that approximately 84 percent of the inspected pipe segments within the City were free of severe structural defects. However, the remaining 16 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 24 in the Quick Structural Rating Report Priority List (Enclosure 3), which require corrective action, the proposed repair or replacement will be scheduled in the next 24 months as part of our 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 report for these 24 segments are included in Enclosure 4.

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Minor	20,489	65.2	105
2: Minor to Moderate	3,406	10.9	18
3: Moderate	2,494	7.9	11
4: Significant	3,803	12.1	18
5: Most Significant	1,218	3.9	6
TOTAL	31,410	100.0	158

QUICK STRUCTURAL RATING TABLE

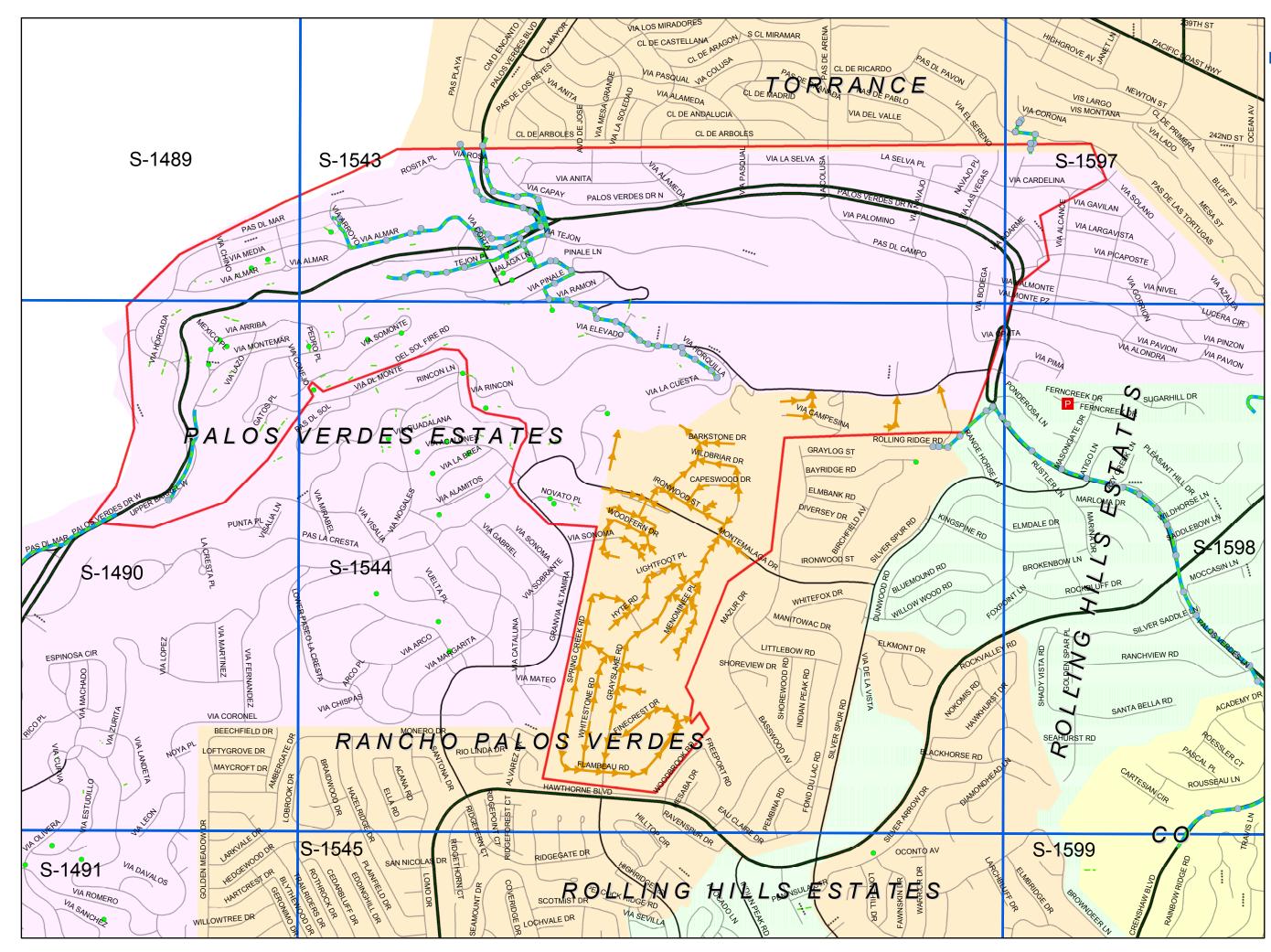
FUTURE PROJECTS

The Sewer Condition Assessment Program will be performing future CCTV inspection of the remaining sewer lines within the City according to the following schedule:

FISCAL YEAR	PROJECT NAME	LENGTH (FT)	PERCENTAGE OF SYSTEM	STATUS
2005-2006	Y0TV0506F	76,591	10.4	COMPLETED
2006-2007	Y0TV0607D	126,170	17.2	COMPLETED
2008-2009	Y0TV0809C	31,410	4.3	COMPLETED
2009-2010	Y0TV0910A	266,462	36.3	REPORT PENDING
2011-2012	Y0TV1112D	233,988	31.8	
TOTAL		734,621	100.0	

ENCLOSURE 1:

Project Overview Map



OVERVIEW MAP RANCHO PALOS VERDES

CCTV PROJECT YOTV0809C

Cities of Glendora, San Dimas, Palos Verdes Estates, Rancho Palos Verdes & County Unincorporated



0	575	1,150	1,725	2,300
		Feet		

Legend SMD Sanitary Sewers

SMD Manholes

Other

Manhole Type

- Standard
- ▲ DROP
- Shallow
- 🔷 Trap
- Siphon
- P SMD Pump Stations
- WTP SMD Treatment Plants

Maintained by Others:

- Trunk Sewerlines
- – Non SMD Sanitary Sewers
- 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 Angles 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.

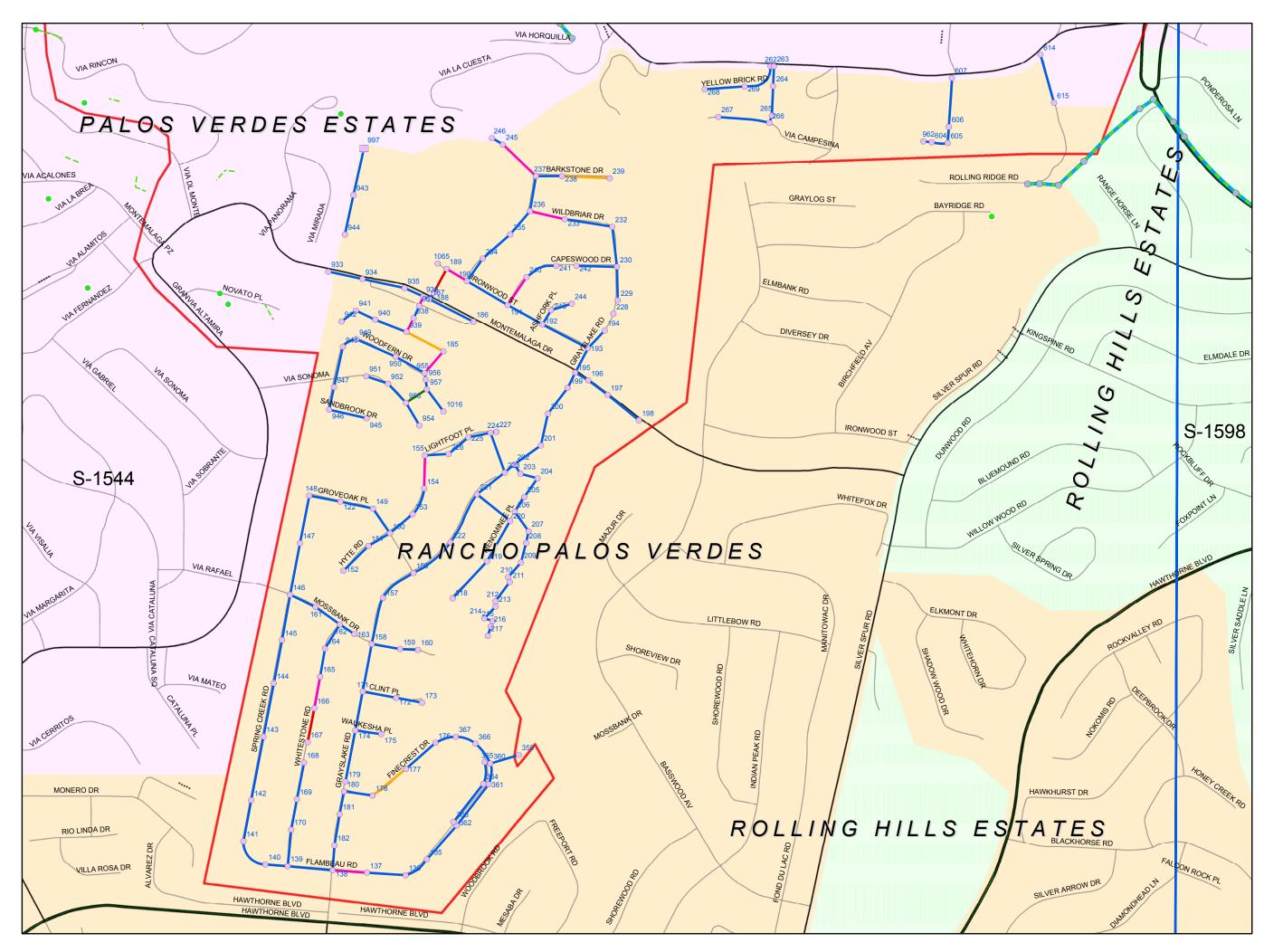
AUGUST 2011

ENCLOSURE 2:

- Quick Maintenance Rating Report Priority List
- Quick Maintenance Rating Map
- High Water Levels
- High Water Levels Map
- Sample Lateral Notice Letter

ENCLOSURE 2 QUICK MAINTENANCE RATING REPORT PRIORITY LIST CITY OF RANCHO PALOS VERDES (Y0TV0809C) as of 08/10/2009

ITEM NO.	QMR	MMS	START MH	END MH	STREET	OBSERVATION	CORRECTIVE ACTION TAKEN (COMPLETED DATE)
1	5122	77257	1544-0167	1544-0166	WHITESTONE RD	Roots; lateral roots	Letter will be sent to home owner; hydro (09/24/10)
2	5121	77278	1544-0188	1544-0189	Easement between IRONWOOD & BARKSTONE	Roots	Hydro (09/23/10)
3	4C21	77219	1544-0237	1544-0245	Easement North of BARKSTONE	High flow; alignment down	Hydro (10/26/11)
4	4221	77214	1544-0233	1544-0236	WILDBRIAR DR	Roots; lateral roots	Letter will be sent to home owner; hydro (09/23/10)
5	4131	77283	1544-0240	1544-0191	CAPESWOOD DR	Roots	Hydro (09/23/10)
6	4121	77256	1544-0166	1544-0165	WHITESTONE RD	Roots	Hydro (09/24/10)
7	4121	77356	1544-0154	1544-0155	HYTE RD	Roots	Hydro (09/24/10)
8	4121	76506	1544-0937	1544-0936	MONTEMALAGA DR	Roots	Hydro (09/23/10)
9	4121	76508	1544-0939	1544-0938	Easement South of MONTEMALAGA	Roots	Hydro (09/23/10)
10	4121	77274	1544-0955	1544-0185	Easement North of WOODFERN	Roots	Hydro (09/24/10)
11	4121	77336	1544-0138	1544-0137	FLAMBEAU DR	Roots; lateral roots	Letter will be sent to home owner; hydro (09/24/10)
12	4121	77279	1544-0189	1544-0190	IRONWOOD ST	Roots	Hydro (09/23/10)
13	3221	77273	1544-0185	1544-0939	Easement South of MONTEMALAGA	Roots	Hydro (09/24/10)
14	3121	77220	1544-0239	1544-0238	BARKSTONE DR	Roots; lateral roots	Letter will be sent to home owner; hydro (09/24/10)
15	3121	77267	1544-0177	1544-0178	FINECREST DR	Lateral roots	Letter will be sent to homeowner.



ENCLOSURE 2 CCTV PROJECT YOTV0809C

RANCHO PALOS VERDES

QUICK MAINTENANCE RATING (QMR)





0	270	540	810	1,080			
Feet							

Legend

SMD Sanitary Sewers QMR DEFECT GRADES

- I: MINOR
- 2: MINOR TO MODERATE
- 3: MODERATE
- 4: SIGNIFICANT
- 5: MOST SIGNIFICANT

SMD Manholes

Other

Manhole Type

- Standard
- ▲ DROP
- Shallow
- 🔷 Trap
- Siphon
- P SMD Pump Stations
- WTP SMD Treatment Plants

Maintained by Others:

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

CCTV PROJECT AREA

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OCTOBER 2011

ENCLOSURE 2 HIGH WATER LEVELS CITY OF RANCHO PALOS VERDES (Y0TV0809C)

as of 08/10/09

Item No.	QMR	START MH	END MH	STREET	OBSERVATION		SAG (ft)
1	4C21	1544-0237	1544-0245	Easement North of BARKSTONE	High water level (Due to alignment)	(30%-80%): Hydro (10/26/11)	
2	2200	1544-0266	1544-0265	Easement South of VIA CAMPESINA	High water level (Due to debris & roots)	(30%-80%): Hydro (10/26/11)	



ENCLOSURE 2 CCTV PROJECT Y0TV0809C

RANCHO PALOS VERDES

HIGH WATER LEVELS





0	125	250	375	500
		Feet		

Legend

High Water Levels

SMD Manholes

Other

Manhole Type

- Standard
- ▲ DROP
- Shallow
- 🔷 Trap
- Siphon
- MH: High Water Levels
- P SMD Pump Stations
- WTP SMD Treatment Plants

Maintained by Others:

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

CCTV PROJECT AREA

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SEPTEMBER 2011



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

IN REPLY PLEASE REFER TO FILE: SM-1

May 26, 2011

Dear:

SEWER LATERAL ROOT INTRUSION

As the agency responsible for the maintenance of the sanitary sewer system in your area, the County of Los Angeles Consolidated Sewer claim nance District (District) is providing you with this letter informing you that the sewer claterer serving the property located at XXXX, requires maintenance and is inviolation circounty Code 20.24.080 Maintenance of Sewer Laterals, which states:

"All house laterals, industrial connection seriers, septic tank outlet connections to STEP system, and appurtenances were a existing as of January 23, 1953, or thereafter constructed, shall be maintained by the owner of the property served in a safe and sanitary condition, an efficiency of safeguards which are required by this Division 2 for the operation force shall be maintained in good working order."

Using closed-circuit television (OCTV) camera technology, the District recently televised the sanitary sewer manline and accovered the presence of roots in your sewer lateral connection. The intrusion of the roots from your lateral may block the flow of sewage in the mainline sewer causing a sanitary sewer overflow upstream of your property.

Since the CCTV inspection, the sewer mainline has been cleaned and blockages from root growth have been removed; however, the root blockage in your sewer lateral is still present. As the property owner, you are responsible for the entire length of the sewer lateral, which includes the portion that extends beyond the property line into the public right of way. We request that you contact a qualified plumbing contractor to service

GAIL FARBER, Director

May 26, 2011 Page 2

your sewer lateral within 90 days to remove roots and any other obstructions that may cause a sewage backup.

Prior to your plumbing contractor servicing your lateral, please notify the District's sewer maintenance yard in your area at XXXX to arrange for authorization to access the downstream manhole.

During your lateral service, your plumbing contractor must protect the District's sewer mainlines from dislodged roots and other debris by utilizing catcher baskets at the manhole downstream from your lateral connection.

After your lateral has been serviced, please notify the District office, XXXX, Sewer Maintenance Division, at XXXX.

For your reference, we have enclosed photos of your late al connection showing the presence of the root blockage. Also enclosed are some literature on ways of minimizing sewer overflows and damage to your home.

Thank you for helping the Department a Public Works keep the public's sewers clean and in good working order.

Very truly yours,

GAIL FARBER Director of Public Works

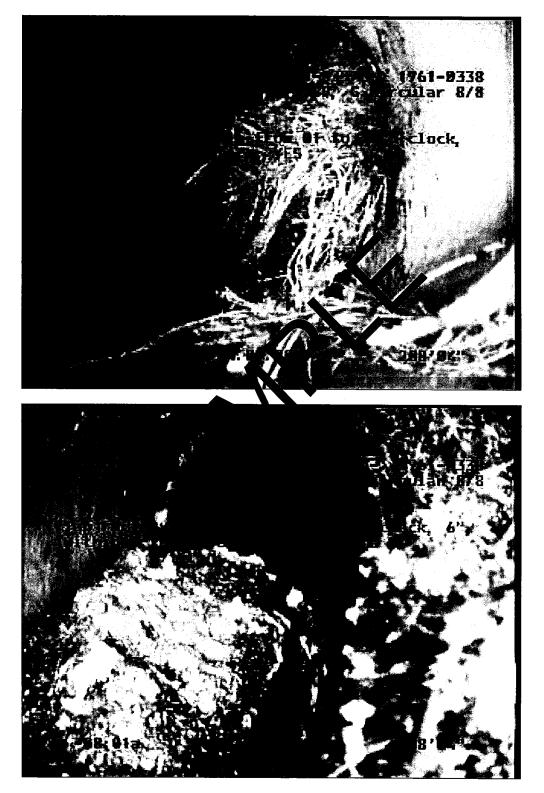
KEITH LEHTO Assistant Deputy Director Sewer Maintenance Division

EL:

Enc.

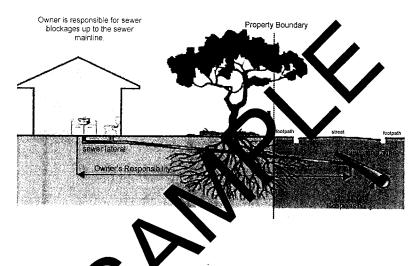
bc: KL, MM, RS, FV, RH, File (Lateral Notice), SPINDLE

XXXX Roots at Lateral Connection



Minimizing Sewer Overflows and Damage to Your Home

The sewer system within the County of Los Angeles Consolidated Sewer Maintenance District (District) is comprised of a series of underground pipes. Many are publicly owned; however, the sewer laterals are entirely owned by the private property owner they serve. The laterals extend from the building to the mainline within the street (or within an easement at the rear of your home). The laterals are typically four inches in diameter while the District's mainline is typically at least eight inches in diameter. The private property owner is responsible for the entire length of the lateral, which includes that portion that may be located within the public right of way (under the asphalt and street landscaping).



SEWER LATERALS - AREAS OF RESPONSIBILITY

Sewer backups can cruse treme dous damage to the interior of a home. In order to minimize these, the Discreptor des continual maintenance services for the public sewer mainlines.

Unfortunately, sewer laterals are often not maintained by private property owners until a disaster strikes. "Out of sight, out of mind" is a typical approach to sewer lateral maintenance and operation by many. It is our hope that we can provide you various means of addressing these issues and thus minimize your risk of an overflow entering your home.

The three methods we suggest are:

- 1. Maintain your lateral through proper cleaning, repair, and replacement
- 2. Do not place improper items into the sewer or make improper connections to the sewer
 - a. Keep rainwater out of the sewer lines as it overwhelms the capacity of the sewer lines and may cause sewer spills.
 - b. Do not pour fats, oils, and grease in your drains as these products harden and stick to the inside of the sewer pipes, which build up and may eventually cause a blockage in the sewer pipe.
- 3. Install a backflow preventer and cleanout in your sewer lateral.

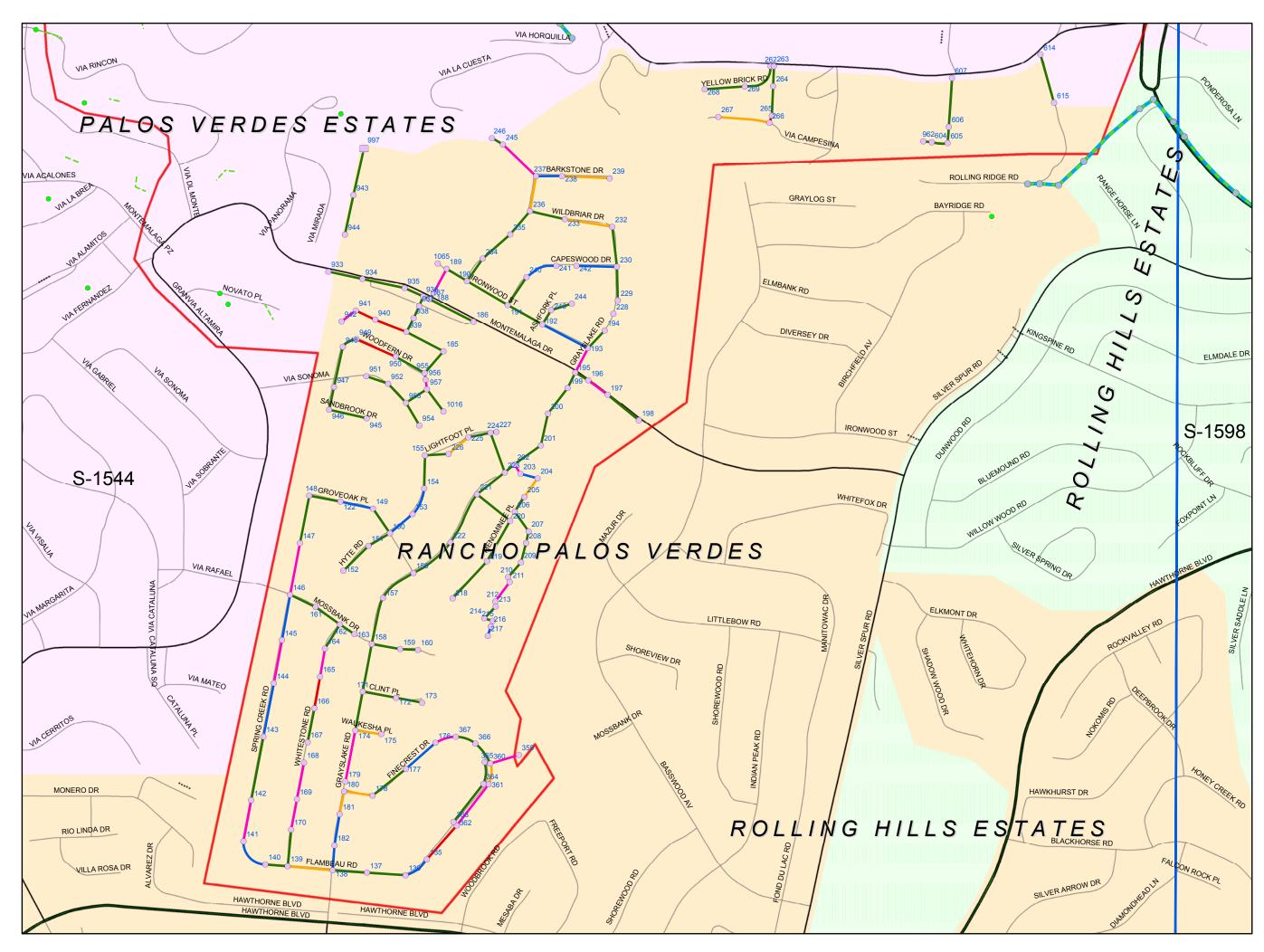
ENCLOSURE 3:

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

ENCLOSURE 3 QUICK STRUCTURAL RATING REPORT PRIORITY LIST CITY OF RANCHO PALOS VERDES (Y0TV0809C)

as of 08/10/2009

Item No.	QSR	Start MH	End MH	Street	Observation: Location	Proposed Corrective Method	Length of Repair (FT)
1	5147	1544-0265	1544-0266	Easement South of VIA	Fractures: 13', 19', 24', 29', 39', 44', 55'; hole with	Lining: MH to MH	56
				CAMPESINA	fracture: 33'		
2	5141	1544-0135	1544-0362	FLAMBEAU DR	Broken: 43'-46'	Lining: MH to MH	298
3	5141	1544-0940	1544-0939	Easement South of MONTEMALAGA	Broken: 224'; fracture: 22'	Lining: MH to MH	227
4	5141	1544-0941	1544-0940	Easement South of MONTEMALAGA	Broken: 46'-52'	Point Repair	
5	5100	1544-0949	1544-0950	WOODFERN DR	Broken: 51'-54'	Point Repair	
6	5100	1544-0166	1544-0165	WHITESTONE RD	Hole: base of MH 165	CSMD will repair MH base.	
7	4A31	1544-0188	1544-0189	Easement between IRONWOOD & BARKSTONE	Fractures: 35', 43', 46', 52', 181'	Lining: MH to MH	190
8	4632	1544-0142	1544-0141	SPRING CREEK RD	Fractures: 7', 196', 200', 281', 311', 332', 342'	Lining: MH to MH	350
9	4532	1544-0169	1544-0170	WHITESTONE RD	Fractures: 44', 67', 114', 130', 197', 261'; hole: base of MH 170	Lining: MH to MH; CSMD will repair MH base.	282
10	4231	1544-0360	1544-0359	Easement East of FINECREST	Broken: 187'-192'	Lining: MH to MH	198
11	4221	1544-0942	1544-0941	Easement South of MONTEMALAGA	Broken: 6'; fractures: 18', 43'	Structural integrity intact. No action needed.	
12	4200	1544-0176	1544-0367	FINECREST DR	Fracture: 130', 170'; hole: base of MH 367	Lining: MH to MH; CSMD will repair MH base.	178
13	4200	1544-0203	1544-0202	Easement East of GRAYBLAKE	Fractures: 22'-28'	Lining: MH to MH	59
14	4138	1544-0362	1544-0361	FLAMBEAU DR	Fractures: 18', 55', 155', 158', 191', 262'; hole: base of MH 361	Lining: MH to MH; CSMD will repair MH base.	335
15	4132	1544-0168	1544-0169	WHITESTONE RD	Fracture: 194', 244'	Structural integrity in tact. No action needed.	
16	4131	1544-0237	1544-0245	Easement North of BARKSTONE	Fractures: 177', 183'	Structural integrity in tact. No action needed.	
17	4131	1544-0212	1544-0211	Easement East of MENOMINEE	Fracture: 45'	Structural integrity in tact. No action needed.	
18	4121	1544-0144	1544-0145	SPRING CREEK RD	Fractures: 64', 347'; hole: base of MH 145	CSMD will repair MH base.	
19	4121	1544-0165	1544-0164	WHITESTONE RD	Fractures: 105', 128'	Structural integrity in tact. No action needed.	
20	4100	1544-0146	1544-0147	SPRING CREEK RD	Fracture: 346'	Structural integrity in tact. No action needed.	
21	4100	1544-0957	1544-0956	Easement South of WOODFERN	Fracture: 40'	Structural integrity in tact. No action needed.	
22	4100	1544-0179	1544-0174	GRAYSLAKE RD	Fracture: 5'	Structural integrity in tact. No action needed.	
23	4100	1544-0197	1544-0196	MONTEMALAGA DR	Fracture: 66'	Structural integrity in tact. No action needed.	
24	4100	1544-0195	1544-0193	GRAYSLAKE RD	Fracture: 179'; hole: base of MH 193	CSMD will repair MH base.	



ENCLOSURE 3 CCTV PROJECT YOTV0809C

RANCHO PALOS VERDES

QUICK STRUCTURAL RATING (QSR)





0	270	540	810	1,080			
Eeet							

Legend

SMD Sanitary Sewers QSR DEFECT GRADES

- 1: MINOR
- 2: MINOR TO MODERATE
- 3: MODERATE
- 4: SIGNIFICANT
- 5: MOST SIGNIFICANT

SMD Manholes

Other

Manhole Type

- Standard
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- Shallow
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- Siphon
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- WTP SMD Treatment Plants

Maintained by Others:

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- Non SMD Sanitary Sewers
- Non SMD Maintained MH
- SMD Operations Maps

CCTV PROJECT AREA

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OCTOBER 2011

ENCLOSURE 4:

Infrastructure Inspection Reports for Grades 4 and 5



1461 Harbor Avenue Long Beach Ca. 90813-2741

				Inonact	ion ronort		ong Beach Ca. 90 62) 436-7600, Fax:		28
	Date:	P.O	.#:	Weather:	ion report Surveyed By	section r	number:	PSI	र:
Т	20111026 otal Pipe Length:	Y0TV0 Survey Ci		1 Dry System Owner:	B. FUGATE Clean Date:	39 Pre-Cle		772 Map G	
	52	LACE		RPV	10/26/2011	J Jet		154	
Stree	et: 0		Flo	ow Control: N	Not Controlled	Start MH:	1544-026	6	
City:				ear Renewed		End MH:	1544-026	5	
		sement/Right of W	-	pe/Media #: D	/D	pipe length:	56 ft		
	son for inspectio of Sewer:	n: F Routine A SS Sanitary				Circular 8/8 CP Pipe Length: 5	2		
	n. Area:	0265/1544-0			Lining Method: Category:				
Rem	ark::	NO DE	FECTS DETECT	ED					
	1:150	position	observa	tion			MPEG	photo	grade
	1544-0266	0.00	Water Le	n Manhole, Survey Bo evel, 5 % of cross sec ark, 5 % of cross sec	ctional area			1	M 2 M 2
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		13.50		•	0 o'clock, within 8 incl		00:02:06	2	S 4
%		19.00	Fracture	multiple, from 05 to t	9 o´clock, within 8 incl	1: YES	00:03:03	3	S 4
		23.90	Fracture	Multiple, from 12 to 1	1 o'clock, within 8 incl	n: YES			S 4
«		29.00	Fracture	Multiple, from 03 to 0	19 o´clock, within 8 incl	n: YES			S 4
		33.70	Broken, a	at 07 o´clock, within 8	inch: YES				S 5
		33.70			0 o'clock, within 8 incl				S 4
		38.90	Fracture	Multiple, from 06 to 0	11 o´clock, within 8 incl	n: YES			S 4
	t	43.60	Fracture	Multiple, from 05 to 1	0 o'clock, within 8 incl	n: YES			S 4
		54.00	Fracture	Circumferential, from	04 to 08 o´clock, with	in 8 inch: YES			S 2
	1544-0265	56.00	Downstre	eam Manhole, Survey	[,] Ends, MH 1544-0265				
	QSR	QMR	SPR	MPR	OPR	SPRI	MPRI		OPRI
	5147	2200	35	4	39	3.89	2		3.55



1461 Harbor Avenue Long Beach Ca. 90813-2741 Tel: (562) 436-7600, Fax: (562) 495-1528

			Inspect	ion report				
	Date: 20090126	P.O.#: Y0TV0809C	Weather: 1 Dry	Surveyed By: B. FUGATE	section nu	mber:	PSI 773	
Т	otal Pipe Length:	Survey Customer:	System Owner:	Clean Date:	Pre-Clea		Map G	rid #:
	275	LACDPW	RPV	01/26/2009	J Jetti	ng	154	4
Stree		BEAU DR		Not Controlled	Start MH:	1544-013		
City:			Year Renewed		End MH:	1544-036		
	ation Code: C Ligh	C F	Tape/Media #:		pipe length:	297.56 ft		
	son for inspection: of Sewer:			5	Circular 8/8 P Pipe Length: 275	5		
	n. Area:	SS Sanitary 0135/1544-0362/1544		Lining Method:				
	n: Alea. hark::	NONE		Category:				
		nonz						
	1:750	position ob	servation			MPEG	photo	grade
		Up	stream Manhole, Survey E	egins 1544-0135			50	
		<u>0.00</u> Wa	iter Level, 5 % of cross se	ctional area				M 2
	1544-0135	0.00 Wa	ter Mark, 5 % of cross se	ctional area				M 2
		4.32 Taj	Factory Made Active, at	03 o´clock, 6", within 8 in	ich: YES	00:01:10	51	
		14.46 Taj	o Factory Made Active, at	09 o´clock, 6", within 8 in	ich: YES	00:01:51	52	
		42.88 Fra	cture Multiple, from 08 to	04 o´clock, within 8 inch:	YES	00:04:11	53, b	S 4
		44.09 Bro	oken Void Visible, from 12	to 02 o´clock, within 8 in	ch: YES	00:04:36	55, b	S 5
		<u>48.81</u> Ta	o Factory Made Active, at	03 o´clock, 6", within 8 in	ich: YES	00:05:58	57	
		<u>53.63</u> Taj	o Factory Made Active, at	09 o´clock, 6", within 8 in	ich: YES	00:06:22	58	
ĸ		<u>64.17</u> Ta	o Factory Made Active, at	09 o´clock, 6", within 8 in	ich: YES	00:07:04	59	
\$		108.36Ta	o Factory Made Active, at	09 o´clock, 6", within 8 in	ich: YES	00:09:16	60	
\$		<u>109.36</u> Cra	ack Spiral, from 11 to 04 o	clock, within 8 inch: YES	3	00:09:34	61, b	S 2
)		<u>111.47</u> Taj	o Factory Made Active, at	03 o´clock, 6", within 8 in	ich: YES	00:10:37	63	
		172.73 Ta	o Factory Made Active, at	03 o´clock, 6", within 8 in	ich: YES	00:13:15	64	
			o Factory Made Active, at	09 o´clock, 6", within 8 in	ich: YES	00:13:43	65	
		<u>211.60</u> Cra	ack Longitudinal, at 09 o´c	ock, within 8 inch: YES		00:15:10	66, b	S 2
		<u>218.03</u> Ro	ots Fine Joint, from 09 to (3 o´clock, within 8 inch:	YES	00:15:43	68, b	
			o Factory Made Active, at	09 o´clock, 6", within 8 in	ich: YES	00:16:14	70	
		230.48 Ta	o Factory Made Active, at	09 o´clock, 6", within 8 ir	ich: YES	00:16:50	71	
		 Cra	ack Spiral, from 10 to 03 o	clock, within 8 inch: YES	3	00:17:13	72, b	S 2
		 	o Factory Made Active, at	03 o´clock, 6", within 8 ir	ich: YES	00:17:53	74	
		 	o Factory Made Active, at	09 o´clock, 6", within 8 in	ich: YES	00:19:28	75	
	1544-0362	294.95 Ta	o Factory Made Active, at	03 o´clock, 6", within 8 ir	ich: YES	00:20:37	76	
		297.56 Do	wnstream Manhole, Surve	y Ends 1544-0362		00:21:43	77	
	QSR	QMR SPR		OPR	SPRI	MPRI		OPRI
	5141	2200 15	4	19	3	2	1	2.71



1461 Harbor Avenue Long Beach Ca. 90813-2741

VV		Inspect	ion report	Tel: (562)	436-7600, Fax:	(562) 495-15	28
Date: 20090213	P.O.#: Y0TV0809C	Weather: 1 Dry	Surveyed By: B. FUGATE	section nur 216	nber:	PSI 765	
Total Pipe Length: 226		System Owner: RPV	Clean Date: 02/13/2009	Pre-Clear J Jettin		Map G 154	rid #:
Street: 0 City: RPV Location Code: D Eas	sement/Right of Way	Flow Control: N Year Renewed Tape/Media #:	Not Controlled	Start MH: End MH: pipe length:	1544-094 1544-093 228.09 ft	9	
Reason for inspectior Use of Sewer: Drain. Area: Remark::	n: F Routine Assessment SS Sanitary 0939/1544-0940/1544 None	t	-	Circular 8/8 P Pipe Length: 226			
1:575	position ob	servation			MPEG	photo	grade
1544-0940		stream Manhole, Survey B ater Level, 5 % of cross se	-			17, b	M 2
		ater Mark, 5 % of cross sec acture Multiple, from 12 to 7		YES	00:01:42	19, b	M 2 S 4
	<u>70.78</u> Ta	p Factory Made Active, at (13 o´clock, 6", within 8 ir	nch: YES	00:03:14	21	
	<u>136.74</u> Ro	ots Fine Joint, from 03 to 0	9 o´clock, within 8 inch:	YES	00:05:43	22, b	
		p Factory Made Active, at 0 ots	3 o´clock, 6", within 8 ir	nch: YES, Remark:	00:06:46	24	
	<u>197.57</u> Ta	p Factory Made Capped, a	: 03 o´clock, 6", within 8	inch: YES	00:07:37	25	
1544-0939		le Soil Visible, from 07 to 0 wnstream Manhole, Surve		YES	00:08:40 00:09:05	26, b 28	S 5



1461 Harbor Avenue Long Beach Ca. 90813-2741

VVIII V						Beach Ca. 908 436-7600, Fax: (5		28
Data		D.O. #	-	ion report			DO	<u></u>
Date: 200902		P.O.#: Y0TV0809C	Weather: 1 Dry	Surveyed By: B. FUGATE	section num	nder:	PSF 765	
Total Pipe L 144	ength:	Survey Customer: LACDPW	System Owner: RPV	Clean Date: 02/13/2009	Pre-Clear J Jettin		Map G 154	
Street:	0		Flow Control: N	Not Controlled	Start MH:	1544-0941		
City:	RPV		Year Renewed		End MH:	1544-0940		
ocation Code	D Easeme	nt/Right of Way	Tape/Media #:		pipe length:	146.37 ft		
Reason for ins	pection:	F Routine Assessment	t	-	Fircular 8/8 P Pipe Length: 144			
Jse of Sewer:		SS Sanitary		Lining Method:				
Drain. Area:		0940/1544-0941/1544		Category:				
Remark::		A THE FLOW						
1:375	i pos	sition ob	servation			MPEG	photo	grade
1544-094	11	<u>0.00</u> Do	wnstream Manhole, Survey	Begins 1544-0940			29	
	\sim	0.00 Wa	ater Level, 5 % of cross sec	ctional area				M 2
	$\checkmark \bigcirc$	0.00 Wa	ater Mark, 5 % of cross sec	tional area				M 2
		<u>6.43</u> Ta	p Factory Made Active, at 0	9 o´clock, 6", within 8 ind	ch: YES	00:00:51	30	
	<u></u>		acture Multiple, from 12 to 1 oken, from 12 to 12 o´clock,		YES	00:02:32 00:02:49	31, b 33, b	S 4 S 4
1544-094	10 1.	<u>46.37</u> Up	stream Manhole, Survey Er	nds 1544-0941		00:09:37	35	
QSR		QMR SPR	MPR	OPR	SPRI	MPRI	1	OPRI
4200		2200 8	4	12	4	2	-	3



1461 Harbor Avenue Long Beach Ca. 90813-2741

Use of Sewer: 2 Drain. Area: 0 Remark:: 1:725 posi 1544-0949 0 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		Incoacti	on ronort		436-7600, Fax:		
Total Pipe Length: 305 Street: WOODFERN City: RPV Location Code: C Light High Reason for inspection: Use of Sewer: Streat: 1:725 posi 1544-0949 0 1544-0949 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P.O.#:	Weather:	On report	section nu	mber:	PSF	र:
305 Street: WOODFERN City: RPV Location Code: C Light High Reason for inspection: F Use of Sewer: S Drain. Area: C Remark:: 1:725 posi 1544-0949 C 5 7 7 7 17 17 17 17 17 17 17 1	Y0TV0809C	1 Dry	B. FUGATE	37		765 [,]	18
City: RPV Location Code: C Light High Reason for inspection: R Use of Sewer: S Drain. Area: C Remark:: 1:725 posi 1544-0949 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Survey Customer: LACDPW	System Owner: RPV	Clean Date: 01/29/2009	Pre-Clear J Jettir		Map G 154	
Location Code: C Light High Reason for inspection:	RN DR	Flow Control: N	lot Controlled	Start MH:	1544-094	9	
Reason for inspection: I Use of Sewer: S Drain. Area: O Remark:: 1:725 1:725 position 1544-0949 O 5 7' 7' 0 170 170 171 170 172 20'		Year Renewed		End MH:	1544-095	0	
Use of Sewer: 2 Drain. Area: 0 Remark:: 1:725 posi 1544-0949 0 5 7 7 7 17 17 17 17 17 17 17	ighway	Tape/Media #:	1	pipe length:	293.45 ft		
Drain. Area: 0 Remark:: 1:725 posi 1544-0949 0 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	F Routine Assessment		U U	rcular 8/8 Pipe Length: 305			
Remark::	SS Sanitary		Lining Method:	Fipe Length. 303			
1:725 positive for the second	0949/1544-0950/1544		Category:				
	None						
	osition obse	ervation			MPEG	photo	grade
27	0.00 Wate 0.00 Wate 51.90 Hole	tream Manhole, Survey Be er Level, 5 % of cross sec er Mark, 5 % of cross sect e Soil Visible, from 12 to 12 Factory Made Active, at 03	tional area ional area : o´clock, within 8 inch: Y		00:03:30 00:04:31	1 2, b 4	M 2 M 2 S 5
200	<u>176.59</u> Tap	Factory Made Active, at 03	3 o´clock, 6", within 8 incl	n: YES	00:08:20	5	
0		Factory Made Active, at 03		n: YES	00:12:04 00:13:13	6 7	
QSR Q 5100 2	QMR SPR	MPR	OPR	SPRI	MPRI		OPRI



1461 Harbor Avenue Long Beach Ca. 90813-2741 Tel: (562) 436-7600, Fax: (562) 495-1528

				Incroc	tion report	Tel: (56)	2) 436-7600, Fax	: (562) 495-15	28
	Date:	P	0.#:	Weather:	tion report	section n	umber:	PSI	2 .
	20090127	YOTV	/0809C	1 Dry	B. FUGATE	18		772	56
Т	otal Pipe Leng 216		Customer: CDPW	System Owner: RPV	Clean Date: 01/27/2009	Pre-Clea J Jett		Map G 15 4	
Stre	et: WH	HITESTONE RD		Flow Control: N	Not Controlled	Start MH:	1544-010	66	
City	: RP	v		Year Renewed		End MH:	1544-010	65	
Loc	ation Code: C I	₋ight Highway		Tape/Media #:		pipe length:	354 ft		
	ison for inspect	tion: F Routine	Assessment		-	Circular 8/8 P Pipe Length: 21	6		
	of Sewer:	SS Sanita	•		Lining Method:	F Fipe Length. 21	0		
	in. Area:		-0166/1544		Category:				
Ren	nark::	None	•						
	1:875	position	obs	ervation			MPEG	photo	grade
	1544-0166	0.00 0.00 0.00 10.74 11.34 43.67 43.67 69.97 119.97 139.35	Wat Wat Tap Roo Tap Tap Tap	tream Manhole, Survey E er Level, 5 % of cross se er Mark, 5 % of cross se Factory Made Active, at ts Fine Joint, from 12 to Factory Made Active, at ts Ball Lateral, at 09 o'ck Factory Made Active, at Factory Made Active, at Factory Made Active, at	ectional area ectional area 03 o´clock, 6", within 8 ir 12 o´clock, within 8 inch: 09 o´clock, 6", within 8 ir ock, 5 %, within 8 inch: ` 03 o´clock, 6", within 8 ir 09 o´clock, 6", within 8 ir	YES nch: YES YES nch: YES nch: YES	00:01:14 00:01:23 00:02:51 00:03:07 00:04:13 00:06:16 00:07:27	54, b 56 57, b 59 60, b 62 63 64	M 2 M 2 M 4
		<u>195.97</u> 212.13		Factory Made Active, at Factory Made Active, at			00:09:31 00:10:11	65 66	
		275.28 281.40		Factory Made Active, at Factory Made Active, at			00:12:11 00:12:31	67 68	
	1544-0165	<u>344.65</u> 354.00		Factory Made Active, at e, at 07 o´clock, within 8			00:14:41	69	S 5
	1944-0103	001.00							
	QSR	QMR	SPR	MPR	OPR	SPRI	MPRI		OPRI



1461 Harbor Avenue Long Beach Ca. 90813-2741

			Inspect	ion report	TCI. (302)	436-7600, Fax:	(302) 433-132	20
	Date: 090130	P.O.#: Y0TV0809C	Weather: 1 Dry	Surveyed By: B. FUGATE	section nur 57	nber:	PSF 772	
Total F	Pipe Length: 183	Survey Customer: LACDPW	System Owner: RPV	Clean Date: 01/30/2009	Pre-Clear J Jettin		Map G 154	
Street: City:	0 RPV		Flow Control: N Year Renewed	Not Controlled	Start MH: End MH:	1544-018		
-		nent/Right of Way	Tape/Media #:		pipe length:	191.05 ft		
	or inspection:	F Routine Assessmer	•	Dia/Height: C Ci	rcular 8/8	101.001		
Jse of Se	•	SS Sanitary		-	Pipe Length: 183			
Drain. Are	ea:	0188/1544-0189/1544		Lining Method: Category:				
Remark::		None						
	1:475 p	position o	bservation			MPEG	photo	grade
	4-0188	0.00 W 7.33 R 15.06 R 19.58 R 35.94 Fi 43.27 Fi 46.08 Fi 52.91 S1 Fi	Vater Level, 5 % of cross service Mark, 5 % of cross service Mark, 5 % of cross service Service Mark, 5 % of cross service Service Mark, from 12 to 1 and the Joint, from 12 to 1 and the Joint, from 12 to 1 and the Multiple, from 03 to 0 and the Multiple, from 0 and	ctional area 2 o'clock, within 8 inch: Y 2 o'clock, within 8 inch: Y 06 o'clock, 10 %, within 8 09 o'clock, within 8 inch: Y 12 o'clock, within 8 inch: Y 09 o'clock, within 8 inch: Y	ES 3 inch: YES YES YES YES, start	00:00:31 00:00:57 00:01:17 00:01:59 00:02:27 00:02:43 00:03:09 00:04:17	52, b 54, b 56, b 58, b 60, b 62, b 64, b	M 2 M 2 S 4 S 4 S 4 S 4 S 4 S 4
154	4-0189		racture Longitudinal, at 02 o ownstream Manhole, Survey			00:06:35 00:07:03	<mark>66, b</mark> 68	S 3
QS		QMR SP	R MPR	OPR	SPRI	MPRI		OPRI
	81	5122 47	7 9	56	3.92	3		3.73



1461 Harbor Avenue Long Beach Ca. 90813-2741 Tel: (562) 436-7600, Fax: (562) 495-1528

				Inspect	ion report				
	Date: 20090126	P.O Y0TV0	809C	Weather: 1 Dry	Surveyed By: B. FUGATE	section nu 1		PSR: 77343	
To	otal Pipe Length: 250	Survey C LACE		System Owner: RPV	Clean Date: 01/26/2009	Pre-Clea J Jetti		Map G 154	
Stree	et: SPRIN	G CREEK RD		Flow Control: N	Not Controlled	Start MH:	1544-014	12	
City:	RPV			Year Renewed		End MH:	1544-014	11	
_oca	ation Code: C Light	t Highway		Tape/Media #:		pipe length:	350.17 ft		
Reas	son for inspection:	F Routine A	ssessment		•	Circular 8/8	_		
Jse	of Sewer:	SS Sanitary			Material: VC Lining Method:	P Pipe Length: 25	0		
Draiı	n. Area:	0141/1544-0	142/1544		Category:				
Rem	nark::	None							
	1:875	position	obse	ervation			MPEG	photo	grade
		0.00	Upst	ream Manhole, Survey B	egins 1544-0142			48	
	/	0.00	Wate	er Level, 5 % of cross se	ctional area				M 2
	_ //	0.00	Wate	er Mark, 5 of cross sectio	nal area				M 2
	1544-0142	5.22	Тар	Factory Made Active, at ()3 o´clock, 6", within 8 in	ch: YES	00:00:53	49	
		7.63		ture Multiple, from 12 to			00:01:13	50, b	S 4
		8.53		Factory Made Active, at 0			00:01:27	52	
		47.79		Factory Made Active, at 0			00:03:14	53	
				-			00:03:51	54	
		61.54		Factory Made Active, at (
		112.24		Factory Made Active, at			00:05:44	55	
		125.59		Factory Made Active, at (00:06:18	56	
\$		133.12		ture Longitudinal, at 12 o			00:06:47	57, b	S 3
۶.		174.89	Тар	Factory Made Active, at (09 o´clock, 6", within 8 in	ch: YES	00:08:16	59	
2		188.14	Тар	Factory Made Active, at 0	03 o´clock, 6", within 8 in	ch: YES	00:08:49	60	
2		194.06	Crac	k Longitudinal, at 03 o´cl	ock, within 8 inch: YES		00:09:08	61, b	S 2
		196.77	Frac	ture Multiple, from 05 to 0	09 o´clock, within 8 inch:	YES	00:09:37	63, b	S 4
		200.59	Frac	ture Multiple, from 12 to (05 o´clock, within 8 inch:	YES	00:10:07	65, b	S 4
		231.11	Frac	ture Multiple, from 09 to (03 o´clock, within 8 inch:	YES	00:11:19	67, b	S 4
		239.24	Тар	Factory Made Active, at 0)9 o´clock, 6", within 8 in	ch: YES	00:12:14	69	
		249.28	Тар	Factory Made Active, at (03 o´clock, 6", within 8 in	ch: YES	00:12:52	70	
		281.70	Frac	ture Multiple, from 12 to	12 o´clock, within 8 inch:	YES	00:14:14	71, b	S 4
		299.88	Тар	Factory Made Active, at ()3 o´clock, 6", within 8 in	ch: YES	00:15:01	73	
	1	312.32	Frac	ture Multiple, from 12 to	12 o´clock, within 8 inch:	YES	00:15:33	74, b	S 4
		332.50		ture Circumferential, from			00:16:45	76, b	S 2
		342.64		k Multiple, from 07 to 11			00:17:33	78, b	S 3
	1544-0141			nstream Manhole, Surve			00:18:24	80	00
		350.17	DOW		y Enuo 1077-0141		00.10.24	00	
	QSR	QMR	SPR	MPR	OPR	SPRI	MPRI		OPRI
	4632	2200	34	4	38	3.4	2		3.17



1461 Harbor Avenue Long Beach Ca. 90813-2741 Tel: (562) 436-7600, Fax: (562) 495-1528

				_		Tel: (56)	2) 436-7600, Fax	(562) 495-15	28
				Inspect	tion report				
	Date: 20090126		O.#: '0809C	Weather: 1 Dry	Surveyed By: B. FUGATE	section n 5	umber:	PSI 772	
T	otal Pipe Leng 206		Customer:	System Owner: RPV	Clean Date: 01/26/2009	Pre-Clea J Jett		Map G 154	
Stre					Not Controlled	Start MH:	1544-010		
City:				Year Renewed	Not controlled	End MH:	1544-017		
-		₋ight Highway		Tape/Media #:		pipe length:	284.42 ft		
	son for inspect		Assessment		Dia/Height: C	Circular 8/8			
Jse	of Sewer:	SS Sanitar	у			P Pipe Length: 20	6		
Drai	in. Area:	0169/1544-	-0170/1544		Lining Method: Category:				
Rem	nark::	None							
	1:700	position	obse	ervation			MPEG	photo	grade
		0.00 6.02 44.07 44.98 65.36 67.46 114.85 116.16 130.31 138.24	Tap Frac Tap Roof Frac Tap Frac	ture Multiple, from 09 to Factory Made Active, at Factory Made Active, at ts ture Multiple, from 09 to ture Multiple, from 04 to Factory Made Active, at ture Multiple, from 09 to	ectional area 03 o´clock, 6", within 8 ir 03 o´clock, within 8 inch 10 o´clock, 6", within 8 ir 03 o´clock, 6", within 8 ir 03 o´clock, within 8 inch 07 o´clock, within 8 inch 09 o´clock, 6", within 8 inch 03 o´clock, within 8 inch 03 o´clock, 6", within 8 inch	YES nch: YES nch: YES, Remark: YES nch: YES YES	00:01:55 00:03:22 00:03:41 00:04:29 00:04:42 00:06:46 00:07:03 00:07:40 00:08:06	22 23, b 25 26 27, b 29, b 31 32, b 34	M 2 S 4 S 4 S 4 S 4
		189.14 197.88 209.42	Tap Frac	Factory Made Active, at ture Spiral, from 05 to 10 Factory Made Active, at	09 o´clock, 6", within 8 ir <mark>) o´clock, within 8 inch: Y</mark> 03 o´clock, 6", within 8 ir	nch: YES Y <mark>ES</mark>	00:09:48 00:10:24 00:11:11	35 36, b 38	S 3
	1544-0170	261.83 263.23 268.85 284.42	Tap Frac	Factory Made Active, at	09 o´clock, within 8 inch 09 o´clock, 6", within 8 ir o [´] clock, within 8 inch: YE ey Ends 1544-0170	nch: YES	00:13:56 00:14:19 00:14:44 00:15:31	39, b 41 42, b 44	S 4 S 3
	QSR 4532	QMR 2200	SPR 26	MPR 4	OPR 30	SPRI 3.71	MPRI 2		0PRI 3.33



1461 Harbor Avenue Long Beach Ca. 90813-2741

			Inspect	tion report	Tel: (56	2) 436-7600, Fax:	(562) 495-15	28
Date: 20090304	P.O Y0TV0		Weather: 1 Dry	Surveyed By: B. FUGATE	section n		PSI 771	
Total Pipe Len 197		ustomer: S	System Owner: RPV	Clean Date: 03/03/2009	Pre-Cle	aned:	Map G 154	rid #:
	PV Easement/Right of W ction: F Routine A	Year Vay Tape ssessment	Control: N Renewed /Media #:		Start MH: End MH: pipe length: Circular 10/10 P Pipe Length: 19	1544-036 1544-038 197.61 ft	59	
Drain. Area:	SS Sanitary 0359/1544-0			Lining Method: Category:				
Remark::	Cracks	5						
1:500	position	observatio	n			MPEG	photo	grade
1544-0360	0.00		-	Begins 1544-0360			2	
\mathbf{K}	0.00		I, 5 % of cross se					M 2 M 2
0	9.33			o'clock, within 8 inch: Y	ES	00:00:54	3, b	S 3
	21.18	Tap Factor	/ Made Active, at	12 o´clock, 6", within 8 in	ch: YES	00:03:00	5	
ł	<u>151.04</u>	Crack Long	itudinal, at 02 o´c	lock, within 8 inch: YES		00:07:16	10, b	S 2
	187.67	Fracture M	ultiple, from 08 to	04 o´clock, within 8 inch:	YES	00:08:57	12, b	S 4
1544-0359	190.28	Fracture M	ultiple, from 11 to	08 o´clock, within 8 inch:	YES	00:09:37	14, b	S 4
	197.61	Downstrear	n Manhole, Surve	y Ends 1544-0359		00:10:54	16	
QSR	QMR	SPR	MPR	OPR	SPRI	MPRI		OPRI
4231	2200	13	4	17	3.25	2		2.83



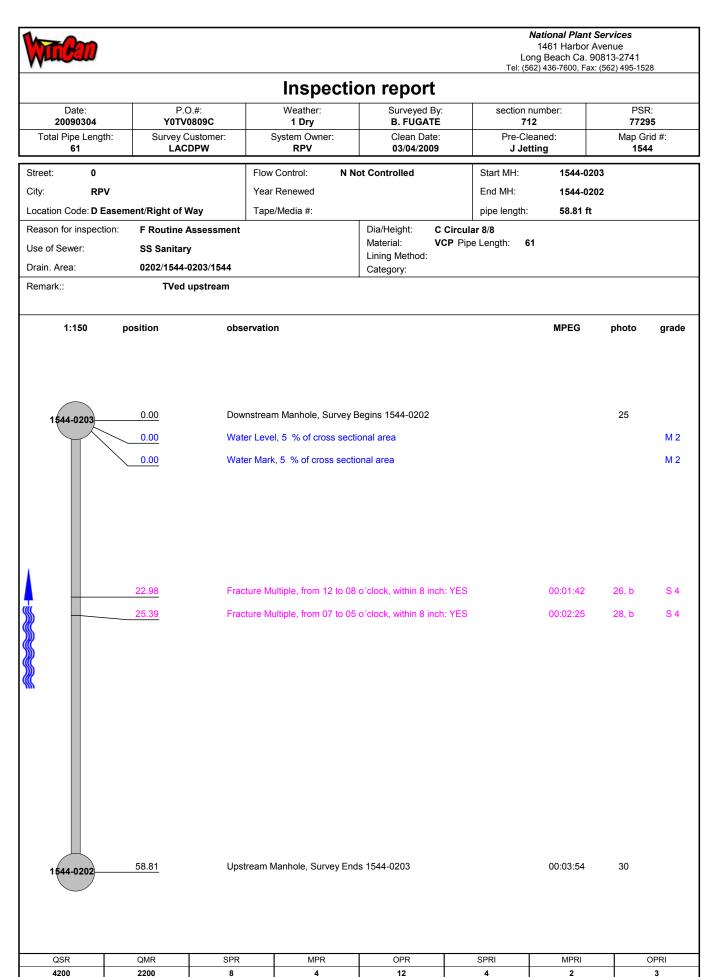
1461 Harbor Avenue Long Beach Ca. 90813-2741

			Inspect	ion report	Tel: (562)	436-7600, Fax:	(562) 495-152	28
	Date:	P.O.#:	Weather:	Surveyed By:	section nur	mber:	PSI	
Т	20090213 otal Pipe Length:	Y0TV0809C Survey Customer:	1 Dry System Owner:	B. FUGATE Clean Date:	218 Pre-Clear	ned:	765 ⁻ Map G	
	121	LACDPW	RPV	02/13/2009	J Jettir		154	
Stre	et: 0		Flow Control: N	Not Controlled	Start MH:	1544-094	12	
City	RPV		Year Renewed		End MH:	1544-094	11	
Loc	ation Code: D Ease	ement/Right of Way	Tape/Media #:		pipe length:	125.59 ft		
Rea	son for inspection:	F Routine Assessme	nt		Circular 8/8			
Use	of Sewer:	SS Sanitary		Material: VC	P Pipe Length: 121			
Dra	in. Area:	0941/1544-0942/1544		Category:				
Ren	nark::	A THE FLOW						
	1:325	position o	bservation			MPEG	photo	grade
	1544-0942	0.00 W 0.00 W 7.03 F 10.94 T. 20.18 F 43.57 F	ownstream Manhole, Survey /ater Level, 5 % of cross sed /ater Mark, 5 % of cross sed racture Multiple, from 02 to 0 ap Factory Made Capped, at racture Circumferential, from racture Multiple, from 12 to 1 ap Factory Made Active, at 1	ctional area ctional area 05 o'clock, within 8 inch: c 03 o'clock, 6", within 8 n 08 to 12 o'clock, within 2 o'clock, within 8 inch:	inch: YES 8 inch: YES YES	00:00:36 00:01:53 00:03:05 00:06:52 00:08:22	36 37, b 39 40 41, b 43	M 2 S 4 S 2 S 4
		<u>110.63</u> T	ap Factory Made Active, at 0 ap Factory Made Active, at 0 ap Factory Made Active, at 0	3 o´clock, 6", within 8 in	ch: YES	00:10:48 00:11:08 00:12:07	44 45 46	
	1544-0941	<u>125.49</u> T						
	1544-0941 QSR		pstream Manhole, Survey Er	nds 1544-0942 OPR	SPRI	00:13:48 MPRI	47	OPRI



1461 Harbor Avenue Long Beach Ca. 90813-2741

VV				Increati			62) 436-7600, Fax		28
	Date:	P.0	#	Weather:	on report	section	number:	PSI	۶ .
20	090303	YOTVO	809C	1 Dry	B. FUGATE	6	67	772	66
	Pipe Length: 116	: Survey Co LACE		System Owner: RPV	Clean Date: 03/03/2009		eaned: tting	Map G 15 4	
Street:	FINE	CREST DR	FI	ow Control: N N	lot Controlled	Start MH:	1544-01	76	
City:	RPV		Y	ear Renewed		End MH:	1544-03	67	
Location (Code: C Lig	ght Highway	Т	ape/Media #:	1	pipe length:	177.54 ft	t	
Reason fo	or inspectio	n: F Routine A	ssessment			Circular 8/8 CP Pipe Length: 1	140		
Use of Se	ewer:	SS Sanitary			Material: Vo	F Fipe Lengui.	116		
Drain. Are	ea:	0176/1544-0	367/1544		Category:				
Remark::									
1	1:450	position	observa	tion			MPEG	photo	grade
154	4-0176	0.00 0.00 0.00 13.45 47.07	Water L Water N Tap Fac	m Manhole, Survey Be evel, 5 % of cross sect lark, 5 % of cross sect tory Made Active, at 03 tory Made Active, at 05	tional area ional area 3 o´clock, 6", within 8 i		00:01:22 00:02:47	103 104 105	M 2 M 2
		94.24 114.61		tory Made Active, at 03 tory Made Active, at 05			00:04:39 00:05:40	106 107	
		<u>130.17</u>	Fracture	Multiple, from 03 to 08	3 o´clock, within 8 inch	: YES	00:06:27	108, b	S 4
		170.71	Fracture	Multiple, from 04 to 08	3 o´clock, within 8 inch	: YES	00:08:05	110, b	S 4
1544	4-0367	177.54	Downstr	eam Manhole, Survey	Ends 1544-0367		00:09:03	112	
QSF	R I	QMR	SPR	MPR	OPR	SPRI	MPRI		OPRI
420		2200	8	4	12	4	2		3
				VOTV0900CE		•			



YOTV0809CF.mdb	//	page: 1	



1461 Harbor Avenue Long Beach Ca. 90813-2741 Tel: (562) 436-7600, Fax: (562) 495-1528

				Inspecti	ion report				
	Date: 20090303	P.O Y0TV0		Weather: 1 Dry	Surveyed By: B. FUGATE	section num	nber:	PSF 771:	
Т	otal Pipe Lengt 318		istomer:	System Owner: RPV	Clean Date: 03/03/2009	Pre-Clear J Jettin		Map G 1 54	rid #:
Stre	eet: FLA	AMBEAU DR		Flow Control: N I	Not Controlled	Start MH:	1544-036	62	
City	: RP'	v		Year Renewed		End MH:	1544-036	61	
-00	ation Code: C L	ight Highway		Tape/Media #:		pipe length:	334.2 ft		
	ason for inspect	ion: F Routine A	ssessment		Dia/Height: C Circu Material: VCP Pi	Ilar 8/8 pe Length: 318			
	of Sewer:	SS Sanitary	000/4544		Lining Method:				
	in. Area: nark::	0361/1544-0 Cracks			Category:				
\en	naix	Clacks							
	1:594	position	ob	servation			MPEG	photo	grade
		0.00	Up	stream Manhole, Survey Be	egins 1544-0362			24	
	1544-0362	0.00	Wa	ter Level, 5 % of cross sec	ctional area				M 2
		0.00	Wa	ter Mark, 10 % of cross se	ctional area				M 2
		11.64	Cra	ack Spiral, from 10 to 02 o´c	clock, within 8 inch: YES		00:02:50	32, b	S 2
		18.17	Cra	ack Spiral, from 12 to 05 o´c	clock, within 8 inch: YES		00:03:50	34, b	S 2
		42.75	Тар	o Factory Made Active, at 0	9 o´clock, 6", within 8 inch: \	′ES	00:04:57	36	
		55.50	Cra	ack Spiral, from 01 to 05 o´c	clock, within 8 inch: YES		00:05:47	37, b	S 2
		56.50	Тар	o Factory Made Active, at 0	3 o´clock, 6", within 8 inch: \	′ES	00:06:05	39	
		78.88	Cra	ack Spiral, from 11 to 01 o´c	clock, within 8 inch: YES		00:07:27	40, b	S 2
\$		108.89	Тар	o Factory Made Active, at 0	9 o´clock, 6", within 8 inch: \	′ES	00:09:07	42	
þ		122.44	Тар	o Factory Made Active, at 03	3 o´clock, 6", within 8 inch: \	′ES	00:09:54	43	
8		130.17	Fra	cture Spiral, from 08 to 03	o´clock, within 8 inch: YES		00:10:19	44, b	S 3
ľ		148.63	Cra	ack Multiple, from 11 to 02 c	o´clock, within 8 inch: YES		00:11:26	46, b	S 3
		154.15	Fra	cture Spiral, from 10 to 03	o´clock, within 8 inch: YES		00:12:04	48, b	S 3
		158.37	Fra	cture Spiral, from 10 to 01	o´clock, within 8 inch: YES		00:12:28	50, b	S 3
		174.43	Cra	ack Longitudinal, at 12 o´clo	ock, within 8 inch: YES		00:13:07	52, b	S 2
		176.53	Тар	o Factory Made Active, at 0	9 o´clock, 6", within 8 inch: \	′ES	00:13:24	54	
		183.16	Тар	o Factory Made Active, at 0	3 o´clock, 6", within 8 inch: \	′ES	00:13:47	55	
		191.09	Fra	cture Multiple, from 07 to 0	5 o´clock, within 8 inch: YES	5	00:14:08	56, b	S 4
		221.50	Cra	ack Spiral, from 09 to 04 o´c	clock, within 8 inch: YES		00:15:21	58, b	S 2
		240.36	Тар	o Factory Made Active, at 0	9 o´clock, 6", within 8 inch: \	′ES	00:16:08	60	
		241.77	Fra	cture Spiral, from 09 to 01	o´clock, within 8 inch: YES		00:16:18	61, b	S 3



National Plant Services 1461 Harbor Avenue Long Beach Ca. 90813-2741 Tel: (562) 436-7600, Fax: (562) 495-1528

Inspection report

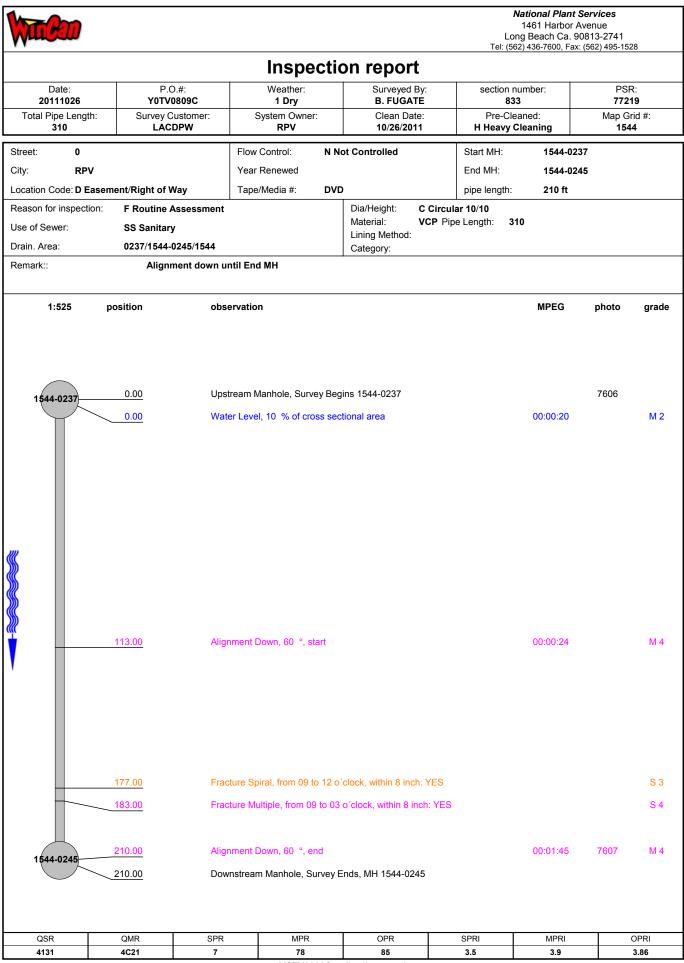
Т	Date: 20090303 Total Pipe Length: 318	P.O. Y0TV03 Survey Cu LACD	809C Istomer:	Weather: 1 Dry System Owner: RPV	Surveyed By: B. FUGATE Clean Date: 03/03/2009	section number: 670 Pre-Cleaned: J Jetting	PSR: 77122 Map Grid 1544	
	1:594	position	obse	rvation		MPEG	photo	grade
"		252.01	Crack	Spiral, from 09 to 02 o´cl	ock, within 8 inch: YES	00:16:56	64, b	S 2
)		258.83	Crack	Spiral, from 11 to 02 o´cl	ock, within 8 inch: YES	00:17:24	66, b	S 2
		262.34	Crack	Multiple, from 07 to 01 o	clock, within 8 inch: YES	00:17:44	68, b	S 3
5		268.97	Crack	Spiral, from 10 to 02 o´cl	ock, within 8 inch: YES	00:18:07	70, b	S 2
		275.99	Crack	CLongitudinal, at 10 o´cloc	k, within 8 inch: YES	00:18:36	72, b	S 2
		278.90	Crack	Multiple, from 10 to 04 o	clock, within 8 inch: YES	00:18:54	74, b	S 3
		295.76	Crack	Spiral, from 11 to 02 o´cl	ock, within 8 inch: YES	00:19:51	76, b	S 2
	1544-0361	299.18	Fract	ure Spiral, from 11 to 02 o	clock, within 8 inch: YES	00:20:11	78, b	S 3
		304.50	Tap F	actory Made Active, at 03	o'clock, 6", within 8 inch: YES	00:20:45	80	
		313.83	Crack	Spiral, from 03 to 05 o´cl	ock, within 8 inch: YES	00:21:30	81, b	S 2
		319.65	Crack	Spiral, from 01 to 04 o´cl	ock, within 8 inch: YES	00:21:54	83, b	S 2
	//	324.97	Tap F	actory Made Active, at 09	o´clock, 6", within 8 inch: YES	00:22:20	85	
	\	334.20	Down	stream Manhole, Survey E	Ends 1544-0361	00:23:00	86	

4138	<u>4138</u> <u>2200</u> <u>54</u> <u>4</u> <u>58</u> <u>2.45</u> <u>2</u> <u>2.42</u>										
QSR	QSR QMR SPR MPR OPR SPRI MPRI OPRI										



1461 Harbor Avenue Long Beach Ca. 90813-2741 Tel: (562) 436-7600, Fax: (562) 495-1528

			1115	bech	on report				
	Date: 20090126	P.O.#: Y0TV08090	Weather		Surveyed By: B. FUGATE	section nur 4	nber:	PSI 772	
Т	otal Pipe Length 251	: Survey Custon	ner: System Ov RPV	wner:	Clean Date: 01/26/2009	Pre-Clear J Jettir		Map G 154	
tree	et: WHI	TESTONE RD	Flow Control:	N N	ot Controlled	Start MH:	1544-016	68	
ity:	RPV		Year Renewed			End MH:	1544-016	69	
oca	tion Code: C Lig	ght Highway	Tape/Media #:			pipe length:	254.4 ft		
eas	son for inspectio	on: F Routine Asses	sment		Dia/Height: C Ci	rcular 8/8			
se	of Sewer:	SS Sanitary			Material: VCP Lining Method:	Pipe Length: 251			
rair	n. Area:	0168/1544-0169/	1544		Category:				
em	ark::	None							
	1:625	nosition	observation				MPEG	nhoto	arad
	1:625	position	observation				MPEG	photo	grad
·))))))))))))))))))))))))))))))))))))	1\$44-0168	0.00 0.00 0.00 6.02 9.64 43.27 46.68 104.21 117.86	Tap Factory Made Ac Tap Factory Made Ac Tap Factory Made Ac Tap Factory Made Ac	cross sectiona es sectiona ctive, at 09 ctive, at 03 ctive, at 09 ctive, at 03 ctive, at 10	onal area	n: YES n: YES n: YES n: YES	00:01:20 00:01:59 00:03:46 00:04:23 00:07:45 00:08:24	1 2, b 4 5 6 7 8	M 2 M 2
		167.56 168.66 170.87 185.33 194.36 232.51	Tap Factory Made Ac Roots Crack Circumferentia Tap Factory Made Ac Fracture Multiple, from	ctive, at 09 I, from 08 t ctive, at 03 m 09 to 03	clock, within 8 inch: YES oʻclock, 6", within 8 incl oʻ11 oʻclock, within 8 incl oʻclock, 6", within 8 incl oʻclock, within 8 inch: Y oʻclock, 6", within 8 inch: Y	n: YES, Remark: ch: YES n: YES ES	00:10:13 00:10:36 00:10:52 00:11:36 00:12:02 00:13:43	9, b 11 12, b 14 15, b 17	S 3 S 1 S 4
		232.51				1. 1EO			_
		244.96	Fracture Longitudinal	, at 03 o´cl	ock, within 8 inch: YES		00:14:38	18, b	S 3
	1544-0169	254.40	Downstream Manhole	e, Survey E	nds 1544-0169		00:15:10	20	
	QSR	QMR	SPR M	PR	OPR	SPRI	MPRI		OPRI





1461 Harbor Avenue Long Beach Ca. 90813-2741

Provide Provide Year Reneved End MH: 1544-0211 Tape/Media #: Dain/height: Christing 157.91 ft Basen for impedior: F Routine Assessment: Dain/height: Christing 160 Material SS Saniay Dain/height: Christing 160 Year Additional SS Saniay Year Reneved Christing Christing Year O2111/544-0212/1544 Dain/height: Christing Christing 160 Tamah: Additional Additional Additional Christing 160 14400 position observation MPEG photo gr 144021 0.00 Under Level, 5 % of cross sectional area N 144022 0.00 Water Level, 5 % of cross sectional area N 144023 Christing and 80 of clock, within 8 inch: YES 000328 42, b S 14448 Christing and 80 of clock, within 8 inch: YES 000358 42, b S 144489 Tap Factory Made Active, at 10 of clock, 6", within 8 inch: YES 000358 45, b S 144489 Tap Factory Made Capped, at 09 of clock, 6", within 8 inch: YES 000358 45, b S 144489 Tap Factory Made Capped, at 09 of	Date: P.O.#: Weather: Surveyed By: section number: Still Total Pipe Length: Survey Custome: System Owne: Glain Date: Pic-Clained: Me Street: 0 Flow Control: N Nct Controlled Start Mit: 1544-0212 Child Pipe Length: N Nct Controlled Start Mit: 1544-0212 Location Code: D EssementRight of Way Tape/Media #: Piok Controlled End Mit: 1544-0212 Location Code: D EssementRight of Way Tape/Media #: Dia/Height: C Circular 88 Material: Us of Sever: SS Santary Dia/Height: C Circular 88 Material: VP Pipe Length: 169 Jinin Area: AGAINST THE FLOW Downstream Manhole, Survey Begins 1544-0211 39 39 1:400 position observation MPEG pho 1:400 position observation MPEG 0003-28 40, 1:400 position observation MPEG 0003-26 40, 1:444 Downstream	V V P							g Beach Ca. 9 2) 436-7600, Fax:		28
2002:16 VETVG896C 1 Dry E. PLGATE 361 7735 Total Pipe Length: Survey Costoner: System Owner: Clean Date Pipe Clean date Map Gain #: 1.444 #: Nitest: 0 Pipe Clean date N Not Controlled Start MH: 154:40212 Head Cost Very Pipe Clean date Pipe Clean date Imped Main #: 194:4021 Pipe Clean date Very Pipe Clean date Start MH: 154:40212 Pipe Clean date Very Pipe Clean date Distribution: 17736 Pipe Length: 159 Very Very Pipe Length: 150 Using Mithod. Using Mithod. 150 Very Downstream Manhole. Survey Begins 1544-0211 30 Weter Level, 5 % of coss sectional area N N 144027 0.00 Weter Level, 5 % of coss sectional area N N N N N N N N N N N N N N N N N N N <	2000216 Y0TV0808C 1 Dry B.FUGATE 3 st Total Pipe Length Siveter Ostern Done: Clean Date: Pre-Cleaned: J Joiting: Me Street: 0 Flow Control: N Not Controlied Start MH: 1544-0212 City: RPV Year Renewed End MH: 1544-0211 Location Code: Desement/Right of Way Tape/Media #: Clin/Height: C Circular 88 Use of Swar: S S Siniary Dia/Height: C Circular 88 Method: Darin: Area: 0211/1544.0212/1544 Category: Remark:: AGAINST THE FLOW 1400 position observation Method: Singter Code J Joint Area: 0.00 Water Renew Singter Code Category: Remark: AGAINST THE FLOW 14400 position observation MPEC pho 0.00 Water Renew Singter Code 0.003.28 40, 14402 0.00 Water Mark, 5 % of cross sectional area 0.003.28 40, <					-	-				
190 LACDPW RPV 0.2/6/2009 J Jetting 154 Struet: 0 Plow Control: N Not Controlled Statut MH: 1544-0212 Control: F Routine Assessment End MH: 1544-0211 Pipe Longth: 157.91 ft Baseon of Inspection: F Soutine Assessment Dia/Hight: C Circular 8.8 Metricit: VCP Pipe Longth: 160 Prain Area: 2311/1544-0212/1544 Castory: Castory: Castory: Castory: Note: AGAINST THE FLOW Downstroam Manhole, Survey Bogins 1544-0211 30 Vater Level, 5 % of cross sectional area N 10:400 position observation MPEG photo gr 10:400 position observation MITH Pipe Longth: 160 10:	150 LACDPW RPV 0.2/16/209 J Jetting Street: 0 Flow Control:: N Not Controlled Start MH: 1544-0212 City: RPV Year Renewed End MH: 1544-0211 End MH: 1544-0211 Uscation Cock: D Sament-Right of Way TapeModia #: D an Height: C Circular 8/8 Miterial: VCP Pipe Length: 160 Use of Sever: SS Sanitary D an Height: C Circular 8/8 Miterial: VCP Pipe Length: 160 Drain Area: 0211/1544-0212/1544 Category: Readow Category: Readow Category: 1400 position observation MPEG phol 1400 position observation MPEG phol 144.0212 0.00 Water Level, 5 % of cross sectional area 0.00 Water Mark, 5 % of cross sectional area 0.00 Water Mark, 5 % of cross sectional area 0.00.01.28 40. 144.02 Crack Longitudinal, at 09 o'clock, within 8 inch: YES 0.00.5.35 44. 124.44.59 Tap Factory Made Active, at 09 o'clock, 6", within 8 inch: YES 00.09.32 48 145.29 Fracture Multiple, from 03 to 06 o'clock, 6", within 8 inch: YES 00.09.32 48 145.29 </th <th></th>										
Provide Provide Year Reneved End MH: 1544-0211 Tape/Media #: Dain/height: Christing 157.91 ft Basen for impedior: F Routine Assessment: Dain/height: Christing 160 Material SS Saniay Dain/height: Christing 160 Year Additional SS Saniay Year Reneved Christing Christing Year O2111/544-0212/1544 Dain/height: Christing Christing 160 Tamah: Additional Additional Additional Christing 160 14400 position observation MPEG photo gr 144021 0.00 Under Level, 5 % of cross sectional area N 144022 0.00 Water Level, 5 % of cross sectional area N 144023 Christing and 80 of clock, within 8 inch: YES 000328 42, b S 14448 Christing and 80 of clock, within 8 inch: YES 000358 42, b S 144489 Tap Factory Made Active, at 10 of clock, 6", within 8 inch: YES 000358 45, b S 144489 Tap Factory Made Capped, at 09 of clock, 6", within 8 inch: YES 000358 45, b S 144489 Tap Factory Made Capped, at 09 of	City: RPV Year Renewed End MH: 1544-0211 Location Code: D Easement/Right of Way Tape/Media #: Dia/Height: C Circular 88 Reason for inspection: F Routine Assessment Dia/Height: C Circular 88 Use of Sever: 0.0111644-0212/1544 Dia/Height: C Circular 88 Remark:: AGAINST THE FLOW Category: Category: 1440 position observation MPEG pho 144422 0.00 Water Level, 5 % of cross sectional area 0.003-28 40, 144428 Crack Longitudinal, at 09 o'clock, within 8 inch: YES 00.03-28 40, 144489 Tap Factory Made Active, at 03 o'clock, within 8 inch: YES 00.03-28 45, 144489 Tap Factory Made Active, at 10 o'clock, 6°, within 8 inch: YES 00.09-32 48 144489 Tap Factory Made Capped, at 09 o'clock, 6°, within 8 inch: YES 00.09-32	Tot									
Reason for inspection: F Noutine Assessment Dia/Height: C Circular 8.8 Material: VCP Pipe Longh: 180 Itama Area: 0211/1544.4212/1544 Category: Category: 160 Itama Area: 0211/1544.4212/1544 Category: Category: Itama Area: AGAINST THE FLOW MPEG photo gr Itago position observation MPEG photo gr Itago position Obvinstream Manhole, Survey Begins 154-0211 39 gr Material: 0.00 Water Level, 5 % of cross sectional area n n Itago position 0.00 Water Level, 5 % of cross sectional area n n Itago position 0.00 Water Level, 5 % of cross sectional area n n Itago position 0.00 Crack Huitple, from 02 to 06 o'clock, within 8 inch: YES 00.005:58 42, b S Itago position Itago position Itago position Itago position 00:00:55 41 S Itago position Itago position<	Reason for inspection: F Routine Assessment Dial/Height: C Circular 8/8 Use of Sewer: SS Sanitary Dial/Height: C Circular 8/8 Drain. Area: 0211/1544-0212/1544 Dial/Height: C Circular 8/8 Drain. Area: 0211/1544-0212/1544 Category: AGAINST THE FLOW AGAINST THE FLOW 1:440 position observation MPEG 1:440 position observation MPEG phot 1:440 0:000 Downstream Manhole, Survey Begins 1544-0211 39 0:000 Water Level, 5 % of cross sectional area 000 0003-28 40, 0:000 25:75 Crack Multiple, from 02 to 06 o'clock, within 8 inch: YES 00:03-28 40, 42:48 Crack Longitudinal, at 09 o'clock, within 8 inch: YES 00:03:28 40, 42:48 Crack Longitudinal, at 09 o'clock, within 8 inch: YES 00:03:55 45, 47:89 Tap Factory Made Active, at 10 o'clock, 6°, within 8 inch: YES 00:09:32 48 75:75 Tap Factory Made Capped, at 09 o'clock, 6°, within 8 inch: YES 00:09:32 48 15:01 Linstream Manhole, Suree: Erds 15/d4/0212	City:	RP		Y	ear Renewed	Not Controlled	End MH:	1544-021	11	
be of Sewer: SS Sanitary Material: VCPR Pipe Length: 160 Uning Method: Category: Category: 1400 Downstream Marhole, Survey Begins 1544-0211 39 1:400 position observation MPEG photo gr 1:400 position observation MPEG photo gr 1:400 position observation MPEG photo gr 1:41021 0.00 Ooverstream Marhole, Survey Begins 1544-0211 39 39 1:41021 0.00 Water Lavel, 5 % of cross sectional area N 1:41021 0.00 Water Lavel, 5 % of cross sectional area N 1:41021 0.00 Water Lavel, 5 % of cross sectional area N 1:4248 Crack Longhudnal, at 09 o'clock, within 8 inch: YES 00.00:328 40, b 5 1:428 Tap Factory Made Active, at 00 o'clock, within 8 inch: YES 00.00:328 45, b 5 1:428 Tap Factory Made Active, at 00 o'clock, within 8 inch: YES 00.00:32 48 1:510 1:57.91 Upstream Marhole, Survey Ends 1544-0212 00.13.34 49	Jse of Sewer: SS Sanitary Material: VCP Pipe Length: 160 Drain, Area: 0211/1544-0212/1544 Category: Category: Remark:: AGAINST THE FLOW Actional provided in the pro			-	-		Dia/Height: C		157.91 ft		
Open Area 0211/1544-0212/1544 Category: Remark:: AGAINST THE FLOW 1:400 position observation MPEG photo gr 1:400 position observation Alexa position alexa position <td>Drain. Area: 0211/1544-0212/1544 Category: Termark:: AGAINST THE FLOW 1:400 position observation MPEG phot 1:410212 0:00 Water Level, 5 % of cross sectional area 39 2:5.75 Crack Multiple, from 02 to 06 o'clock, within 8 inch: YES 00:03:28 40, 4:2.48 Crack Longitudinal, at 09 o'clock, within 8 inch: YES 00:05:35 44, 4:4.89 Tap Factory Made Active, at 10 o'clock, 6°, within 8 inch: YES 00:06:27 47, 75.75 Tap Factory Made Capped, at 09 o'clock, 6°, within 8 inch: YES 00:09:32 48 75.75 Tap Factory</td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>Material: VC</td> <td></td> <td>0</td> <td></td> <td></td>	Drain. Area: 0211/1544-0212/1544 Category: Termark:: AGAINST THE FLOW 1:400 position observation MPEG phot 1:410212 0:00 Water Level, 5 % of cross sectional area 39 2:5.75 Crack Multiple, from 02 to 06 o'clock, within 8 inch: YES 00:03:28 40, 4:2.48 Crack Longitudinal, at 09 o'clock, within 8 inch: YES 00:05:35 44, 4:4.89 Tap Factory Made Active, at 10 o'clock, 6°, within 8 inch: YES 00:06:27 47, 75.75 Tap Factory Made Capped, at 09 o'clock, 6°, within 8 inch: YES 00:09:32 48 75.75 Tap Factory		-				Material: VC		0		
1:40 position observation MPEG photo gr 1:40 position Obversitean Manhole, Survey Begins 1544-0211 39 39 1:40 0.00 Water Level, 5 % of cross sectional area N 0:00 Water Mark, 5 % of cross sectional area N 1:40 Crack Multiple, from 02 to 06 o' clock, within 8 inch: YES 00:03:28 40, b 5 1:42.48 Crack Longhudinal, at 09 o' clock, within 8 inch: YES 00:03:56 42, b 5 1:42.49 Fracture Multiple, from 02 to 06 o' clock, within 8 inch: YES 00:00:55 44, b 5 1:43.90 Tap Factory Made Active, at 10 o' clock, 6°, within 8 inch: YES 00:00:52 48 1:57.75 Tap Factory Made Capped, at 09 o' clock, 6°, within 8 inch: YES 00:00:32 48 1:54.021 1:57.31 Upstream Manhole, Survey Ends 1544-0212 01:13:34 49	1.400 position MPEG photon 16440217 0.00 Downstream Manhole, Survey Begins 1544-0211 39 0.00 Water Level, 5 % of cross sectional area 39 0.00 Water Mark, 5 % of cross sectional area 39 25.75 Crack Multiple, from 02 to 06 o'clock, within 8 inch: YES 00.03:28 40, 42.48 Crack Longitudinal, at 09 o'clock, within 8 inch: YES 00.03:28 42, 44.89 Tap Factory Made Active, at 03 o'clock, 6°, within 8 inch: YES 00.05:88 45, 75.75 Tap Factory Made Capped, at 00 o'clock, 6°, within 8 inch: YES 00.09:32 48 75.75 Tap Factory Made Capped, at 09 o'clock, 6°, within 8 inch: YES 00.09:32 48	Drain	. Area:	0211/1544	-0212/1544		-				
1 0.00 Downstream Manhole, Survey Begins 1544-0211 39 0.00 Water Level, 5 % of cross sectional area N 0.00 Water Mark, 5 % of cross sectional area N 25.75 Crack Multiple, from 02 to 06 o'clock, within 8 inch: YES 00.04.58 42, b S 42.48 Crack Longitudinal, at 00 o'clock, within 8 inch: YES 00.04.58 42, b S 44.89 Tap Factory Made Active, at 03 o'clock, 6°, within 8 inch: YES 00.05.56 45, b S 47.89 Tap Factory Made Active, at 00 o'clock, 6°, within 8 inch: YES 00.09.32 48 75.75 Tap Factory Made Capped, at 09 o'clock, 6°, within 8 inch: YES 00.09.32 48 154.021 157.91 Upstream Manhole, Survey Ends 1544-0212 00.13.34 49	1644-021 0.00 Downstream Manhole, Survey Begins 1544-0211 39 0.00 Water Level, 5 % of cross sectional area Water Mark, 5 % of cross sectional area 0.00 25.75 Crack Multiple, from 02 to 06 o'clock, within 8 inch: YES 0.03.28 40, 42.48 Crack Longitudinal, at 09 o'clock, within 8 inch: YES 0.00.55.5 42, 45.29 Tap Factory Made Active, at 03 o'clock, 6*, within 8 inch: YES 0.00.55.5 45, 75.75 Tap Factory Made Active, at 10 o'clock, 6*, within 8 inch: YES 00.09.32 48	Rema	ark::	AGAI	INST THE FLOW						
ODD Water Level, 5 % of cross sectional area N 0.00 Water Mark, 5 % of cross sectional area N 25.75 Crack Multiple, from 02 to 06 o clock, within 8 inch: YES 00.03.28 40, b S 42.48 Crack Longitudinal, at 09 o clock, within 8 inch: YES 00.04.58 42, b S 44.89 Tap Factory Made Active, at 03 o clock, 6°, within 8 inch: YES 00.05.58 45, b S 45.20 Tap Factory Made Active, at 10 o clock, 6°, within 8 inch: YES 00.03.27 47 Tap Factory Made Active, at 10 o clock, 6°, within 8 inch: YES 00.03.22 48 1000 Tap Factory Made Capped, at 09 o clock, 6°, within 8 inch: YES 00.03.22 48 1010 Tap Factory Made Capped, at 09 o clock, 6°, within 8 inch: YES 00.03.32 48 1010 Upstream Manhole, Survey Ends 1544-0212 00.13.34 49	157.91 Water Level, 5 % of cross sectional area 0.00 Water Mark, 5 % of cross sectional area 25.75 Crack Multiple, from 02 to 06 o'clock, within 8 inch: YES 00:03:28 40, 42.48 Crack Longitudinal, at 09 o'clock, within 8 inch: YES 00:04:58 42, 44.89 Tap Factory Made Active, at 03 o'clock, 6", within 8 inch: YES 00:05:58 45, 45.29 Fracture Multiple, from 03 to 06 o'clock, within 8 inch: YES 00:05:58 45, 73.75 Tap Factory Made Active, at 10 o'clock, 6", within 8 inch: YES 00:09:32 48 75.75 Tap Factory Made Capped, at 09 o'clock, 6", within 8 inch: YES 00:09:32 48		1:400	position	observa	tion			MPEG	photo	grade
QSR QMR SPR MPR OPR SPRI MPRI OPRI	157.91 Upstream Manhole, Survey Ends 1544-0212 00:13:34 49		1544-0212	0.00 0.00 25.75 42.48 44.89 45.29 47.89	Water Lu Water M Crack M Crack Lu Tap Fac Tap Fac	evel, 5 % of cross sec lark, 5 % of cross sec ultiple, from 02 to 06 ongitudinal, at 09 o´cl tory Made Active, at 0 Multiple, from 03 to 0 tory Made Active, at 1	ctional area ctional area o'clock, within 8 inch: Y ock, within 8 inch: YES 03 o'clock, 6", within 8 ir 06 o'clock, within 8 inch: 0 o'clock, 6", within 8 ir	nch: YES : YES nch: YES	00:04:58 00:05:35 00:05:58 00:08:27	40, b 42, b 44 45, b 47	M 2 M 2 S 3 S 2 S 4
	QSR QMR SPR MPR OPR SPRI MPRI							SPRI			OPRI
4131 2200 9 4 13 3 2 2.6											



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Total treet: ity: ocatior eason	RPV n Code: C Ligh n for inspection: Sewer: Area:		1809C ustomer: DPW sssessment	Weather: 1 Dry System Owner: RPV Flow Control: N Year Renewed Tape/Media #:	•	Start MH: End MH: pipe length: ircular 8/8 Pipe Length: 279	ned: ng 1544-014 1544-014 352.08 ft	45	46 rid #:
treet: ity: ocatior eason se of S rain. A emark	279 SPRIN RPV n Code: C Ligh n for inspection: Sewer: Area: <::	LÁCI IG CREEK RD It Highway F Routine A SS Sanitary 0144/1544-0 None	SSESSMENT	System Owner: RPV Flow Control: Year Renewed	01/27/2009 Not Controlled Dia/Height: C Ci Material: VCP Lining Method:	J Jetti Start MH: End MH: pipe length: ircular 8/8	ng 1544-014 1544-014 352.08 ft	154 14 45	
ity: ocatior eason se of S rain. A emark	RPV n Code: C Ligh n for inspection: Sewer: Area: (::	nt Highway F Routine A SS Sanitary 0144/1544-0 None)145/1544	Year Renewed	Dia/Height: C Ci Material: VCP Lining Method:	End MH: pipe length: ircular 8/8	1544-014 352.08 ft	45	
ity: ocatior eason se of S rain. A emark	RPV n Code: C Ligh n for inspection: Sewer: Area: (::	nt Highway F Routine A SS Sanitary 0144/1544-0 None)145/1544	Year Renewed	Dia/Height: C Ci Material: VCP Lining Method:	End MH: pipe length: ircular 8/8	1544-014 352.08 ft	45	
eason se of S rain. A emark	n for inspection: Sewer: Area: <::	F Routine A SS Sanitary 0144/1544-0 None)145/1544	Tape/Media #:	Material: VCP Lining Method:	ircular 8/8			
se of S rain. A emark	Sewer: Area: <::	SS Sanitary 0144/1544-0 None)145/1544		Material: VCP Lining Method:		9		
rain. A emark	Area: <::	0144/1544-(None	0145/1544		Lining Method:	Pipe Length: 27	9		
emark	« ::	None			-				
			obse						
15	1:875	position	obse						
15				ervation			MPEG	photo	grade
		0.00 0.00 23.19 62.75 64.15 88.95 110.13 131.82 158.12 159.02 201.39	Wate Tap F Root: Tap F Root: Tap F Root: Tap F Root: Root:	s Factory Made Active, at s ture Circumferential, froi Factory Made Active, at s Fine Joint, from 07 to Factory Made Active, at s Fine Joint, from 10 to		h: YES, Remark: B inch: YES h: YES fES h: YES h: YES, Remark: fES	00:01:59 00:04:08 00:04:36 00:05:42 00:06:47 00:07:52 00:08:58 00:09:09 00:10:39	2 3 4, b 6 7, b 9 10 11, b 13	M 2 M 2 S 2
		230.81 273.87	·		03 o´clock, 6", within 8 inc 09 o´clock, 6", within 8 inc		00:11:49	14 15	
		303.49	Tap I	Factory Made Active, at	03 o´clock, 6", within 8 inc	h: YES	00:14:34	16	
		339.83	Tap I	Factory Made Active, at	h: YES	00:16:10	17		
1		347.96	Fract	ture Multiple, from 03 to	09 o'clock, within 8 inch: Y	(ES	00:16:40	18, b	S 4
15	544-0145	352.08	Dowr	nstream Manhole, Surve	ey Ends 1544-0145		00:17:12	20	
Q		QMR							



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				Inspect	ion report	l el: (56	2) 436-7600, Fax:	(562) 495-15	20
	Date:	P.	0.#:	Weather:	Surveyed By:	section n	umber:	PS	२:
	20090127		/0809C	1 Dry	B. FUGATE	17		772	
	otal Pipe Lengt 191		Customer: CDPW	System Owner: RPV	Clean Date: 01/27/2009	Pre-Cle J Jett		Map G 15 4	
Stre	et: WH	ITESTONE RD		Flow Control: N	Not Controlled	Start MH:	1544-016	65	
City	RP	v		Year Renewed		End MH:	1544-016	64	
Loc	ation Code: C L	ight Highway		Tape/Media #:		pipe length:	134.23 ft	:	
Rea	son for inspect	ion: F Routine	Assessment			Circular 8/8			
Use	of Sewer:	SS Sanitar	У		Material: VC Lining Method:	CP Pipe Length: 19	1		
Drai	n. Area:	0164/1544	-0165/1544		Category:				
Ren	nark::	None							
	1:350	position	obse	ervation			MPEG	photo	grade
	1544-0165	0.00 0.00 0.00 11.34	Wate	ream Manhole, Survey E er Level, 5 % of cross se er Mark, 5 % of cross se Factory Made Active, at f	ectional area	nch: YES	00:01:40	71	M 2 M 2
		71.18 83.83	·	Factory Made Active, at Factory Made Active, at			00:03:40 00:04:11	73 74	
		105.31	Fract	ture Circumferential, fror	n 03 to 05 o´clock, withi	n 8 inch: YES	00:05:00	75, b	S 2
		123.38	Tap I	Factory Made Active, at	09 o´clock, 6", within 8 i	nch: YES	00:05:55	77	
		128.50	Fract	ture Multiple, from 03 to	09 o´clock, within 8 inch	: YES	00:06:15	78, b	S 4
	1544-0164	134.23	Dowr	nstream Manhole, Surve	y Ends 1544-0164		00:07:01	80	
	QSR	QMR	SPR	MPR	OPR	SPRI	MPRI		OPRI



1461 Harbor Avenue Long Beach Ca. 90813-2741

— 			Inspect	ion report				
т	Date: 20090127	P.O.#: Y0TV0809C	Weather:	Surveyed By: B. FUGATE	section num	ber:	PSF	
	Total Pipe Length		er: System Owner: RPV	Clean Date: 01/27/2009	10 Pre-Cleane J Jetting		7734 Map G 154	rid #:
Stre City	: RPV		Year Renewed	Not Controlled	Start MH: End MH:	1544-014	17	
Rea Use Drai	ation Code: C Li ason for inspectio of Sewer: in. Area: nark::				pipe length: ular 8/8 Vipe Length: 375	350.17 ft	:	
	1:875	position	observation			MPEG	photo	grade
	1544-0146	0.00 0.00 0.00	Upstream Manhole, Survey Be Water Level, 5 of cross section Water Mark, 5 % of cross sec	nal area			101	M 2 M 2
	F	67.56 76.70	Tap Factory Made Active, at 0 Tap Factory Made Active, at 0			00:02:35 00:03:02	102 103	
		133.52 153.10	Tap Factory Made Active, at 0 Tap Factory Made Active, at 0			00:04:48 00:05:34	104 105	
		206.81 232.81	Tap Factory Made Active, at 0 Tap Factory Made Active, at 0			00:07:37 00:08:32	106 107	
		264.34 279.30	Roots Fine Joint, from 08 to 10 Tap Factory Made Active, at 0	,		00:09:33 00:10:09	108, b 110	
		312.22	Tap Factory Made Active, at 0			00:12:43	111 112 b	6.4
	1544-0147	<u>346.66</u> <u>350.17</u>	Fracture Multiple, from 03 to 0 Downstream Manhole, Survey		3	00:12:43 00:13:18	112, b 114	S 4
	QSR 4100	QMR 2200	SPR MPR 4 4	OPR 8	SPRI 4	MPRI 2		OPRI 2.67

	at Con					Lo	National Plant 1461 Harbor A ng Beach Ca. 9 52) 436-7600, Fax	Avenue 0813-2741	28
				Inspecti	ion report				
	Date: 20090129	P.O. Y0TV0		Weather: 1 Dry	Surveyed By B. FUGATE			PS 765	
Т	otal Pipe Length 65	n: Survey Cu		System Owner: RPV	Clean Date: 01/29/2009	Pre-Cle J Jet		Map G 154	
Stre	et: 0			Flow Control: N	Not Controlled	Start MH:	1544-09	57	
City		,		Year Renewed		End MH:	1544-09		
-		asement/Right of W	av	Tape/Media #:		pipe length:	65.26 ft		
	ison for inspectio	_	-	-	Dia/Height: C	Circular 8/8			
	of Sewer:	SS Sanitary			Material: V	CP Pipe Length: 6	5		
	in. Area:	0956/1544-0	957/1544		Lining Method: Category:				
	nark::		FLOW		Calegory.				
i ten	indirit		12011						
	1:175	position	obs	ervation			MPEG	photo	grade
	1544-0957	0.00 0.00 0.00	Wat	vnstream Manhole, Survey ter Level, 5 % of cross sec ter Mark, 5 % of cross sec	tional area			26	M 2 M 2
		40.76	Frac	cture Multiple, from 03 to 0	7 o´clock, within 8 incl	n: YES	00:05:32	27, b	S 4
		58.63	Тар	Factory Made Active, at 0	3 o´clock, 6", within 8	inch: YES	00:07:05	29	
	1544-0956	65.26	Ups	tream Manhole, Survey Er	nds 1544-0957		00:07:40	30	
	QSR	QMR	SPR	MPR	OPR	SPRI	MPRI		OPRI
	4100	2200	4	4	8	4	2		2.67



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	Net NATA COM					Tel: (562	2) 436-7600, Fax:	(562) 495-15	28
				Inspect	tion report				
	Date: 20090129		O.#: 70809C	Weather: 1 Dry	Surveyed By: B. FUGATE	section nu 221		PSI 772	
Т	otal Pipe Lengt 350		Customer: CDPW	System Owner: RPV	Clean Date: 01/29/2009	Pre-Clea J Jetti		Map G 15 4	
Stre	et: GR	AYSLAKE RD		Flow Control: N	Not Controlled	Start MH:	1544-017	79	
City	: RP	v		Year Renewed		End MH:	1544-017	74	
_0Ca	ation Code: C L	ight Highway.		Tape/Media #:		pipe length:	314.34 ft	:	
Rea	son for inspect	ion: F Routine	Assessment			Circular 8/8			
Jse	of Sewer:	SS Sanitar	У		Material: VC Lining Method:	CP Pipe Length: 35	0		
Drai	in. Area:	0174/1544-	-0179/1544		Category:				
Rem	nark::	AGAI	NST FLOW						
	1:775	position	obse	rvation			MPEG	photo	grade
	1544-0179	0.00 0.00 5.82 59.05 61.56 125.13 135.17	Wate Fract Tap F Tap F	Factory Made Active, at Factory Made Active, at		nch: YES nch: YES nch: YES	00:01:27 00:03:52 00:04:04 00:06:27 00:06:53	14, b 16 17 18 19	M 2 M 2 S 4
·))) \		188.10 200.85 234.50 251.27	Tap F Roots	Factory Made Active, at	09 o´clock, 6", within 8 ii 03 o´clock, 6", within 8 ii 04 o´clock, within 8 inch: 09 o´clock, 6", within 8 ii	nch: YES YES	00:08:48 00:09:20 00:10:58 00:11:39	20 21 22, b 24	
		262.41	Roots	s Fine Joint, from 08 to (04 o´clock, within 8 inch:	YES	00:13:03	25, b	
		267.23	Tap F	actory Made Active, at	03 o´clock, 6", within 8 ii	nch: YES	00:13:31	27	
	1544-0174	<u>309.21</u> <u>314.34</u>	·	Factory Made Active, at eam Manhole, Survey E	03 o´clock, 6", within 8 iı Ends 1544-0179	nch: YES	00:15:47 00:16:23	28 29	
	005	QMR	SPR						
	QSR			MPR	OPR	SPRI	MPRI		OPRI



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				Inspect	ion report	Tel: (56	2) 436-7600, Fax	(562) 495-15	28
	Date:	P.(D.#:	Weather:	Surveyed By:	section n	umber:	PSI	र:
т	20090202 Total Pipe Lengt		0809C Customer:	1 Dry System Owner:	B. FUGATE Clean Date:	240 Pre-Cle		772 Map G	
1	162		DPW	RPV	02/02/2009	J Jett		154 Nap	
Stre	et: MO	NTEMALAGA DR		Flow Control: N	Not Controlled	Start MH:	1544-019	97	
City	: RP	v		Year Renewed		End MH:	1544-019	96	
Loca	ation Code: C L	ight Highway		Tape/Media #:		pipe length:	150.1 ft		
Rea	ison for inspecti	ion: F Routine	Assessment		•	Circular 8/8	-		
Use	of Sewer:	SS Sanitar	у		Material: VC Lining Method:	CP Pipe Length: 16	52		
Drai	in. Area:	0196/1544-	0197/1544		Category:				
Ren	nark::	TVed	upstream						
	1:375	position	obs	ervation			MPEG	photo	grade
	1544-0197	0.00 0.00 0.20 10.10 25.20 66.50	Wat Wat Roo Roo	nstream Manhole, Survey er Level, Sag in pipe, 5 % er Mark, 5 % of cross sec ts Fine Joint, from 03 to 0 ts Fine Joint, from 03 to 0 ts Fine Joint, from 02 to 0	6 of cross sectional are ctional area 6 o´clock, within 8 inch: 6 o´clock, within 8 inch: 9 o´clock, within 8 inch:	YES YES YES	00:00:00 00:00:00 00:00:47 00:01:18 00:01:59	61 62, b 64, b 66, b	M 2 M 2 S 4
	1544-0196	125.70 150.10		ts Fine Joint, from 08 to 0 tream Manhole, Survey E		YES	00:07:51 00:09:52	70, b 72	
	QSR	QMR	SPR	MPR	OPR	SPRI	MPRI		OPRI
	4100	2200	4	4	8	4	2	1	2.67

