December 4, 2008

TO:

Nick Agbobu

Engineering, Budget, and Office Operations

FROM

Robert Swartz
Field Operations

CONSOLIDATED SEWER MAINTENANCE DISTRICT CONDITION ASSESSMENT PROGRAM REPORT PROJECT Y0TV0506F

This memo 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 17,914 feet or approximately 1.4 percent of the sewer system within Unincorporated County maintained by the District's North Yard

The attached 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 Map (Enclosure 3)
- Sample Inspection Report (Enclosure 4)
- CCTV Sewer Inspection Project Schedule (Enclosure 5)

The Condition Assessment Report will provide details regarding the maintenance and structural condition of our sewer mainlines. This information can be included in our 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.

PK.kk

Attach

bc: RS, FV, File (Y0TV0506F), SPINDLE

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):
 3
 MAP PAGE(S):
 1044 & 1067

 Report By:
 Phyo Kyaw
 Report Date:
 11/17/08

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 17,914 feet or approximately 1.4 percent of the Unincorporated County of Los Angeles' sewer system maintained by the District's North Yard.

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

PROJECT AREA AND DESCRIPTION

Project Y0TV0506F included sewer lines located in the 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 (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 may require 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: Sever 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 90.8 percent of the system televised was free of blockages or restrictions that would impede sewer flows. However, the remaining 9.2 percent of the inspected pipe segments within the Unincorporated County of Los Angeles area 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	3,530	19.7	18
2: Good	11,874	66.4	54
3: Fair	847	4.7	3
4: Poor	1,402	7.8	6
5: Immediate Attention	261	1.4	1
TOTAL	17,914	100.0	82

STRUCTURAL REPORT

Our inspection revealed that 100 percent of the inspected pipe segments within the Unincorporated County of Los Angeles were free of severe structural defects as indicated in the Quick Structural Rating Table shown below. A color-coded map showing the Quick Structural Rating for each pipe segment is located in Enclosure 3.

QUICK STRUCTURAL RATING TABLE

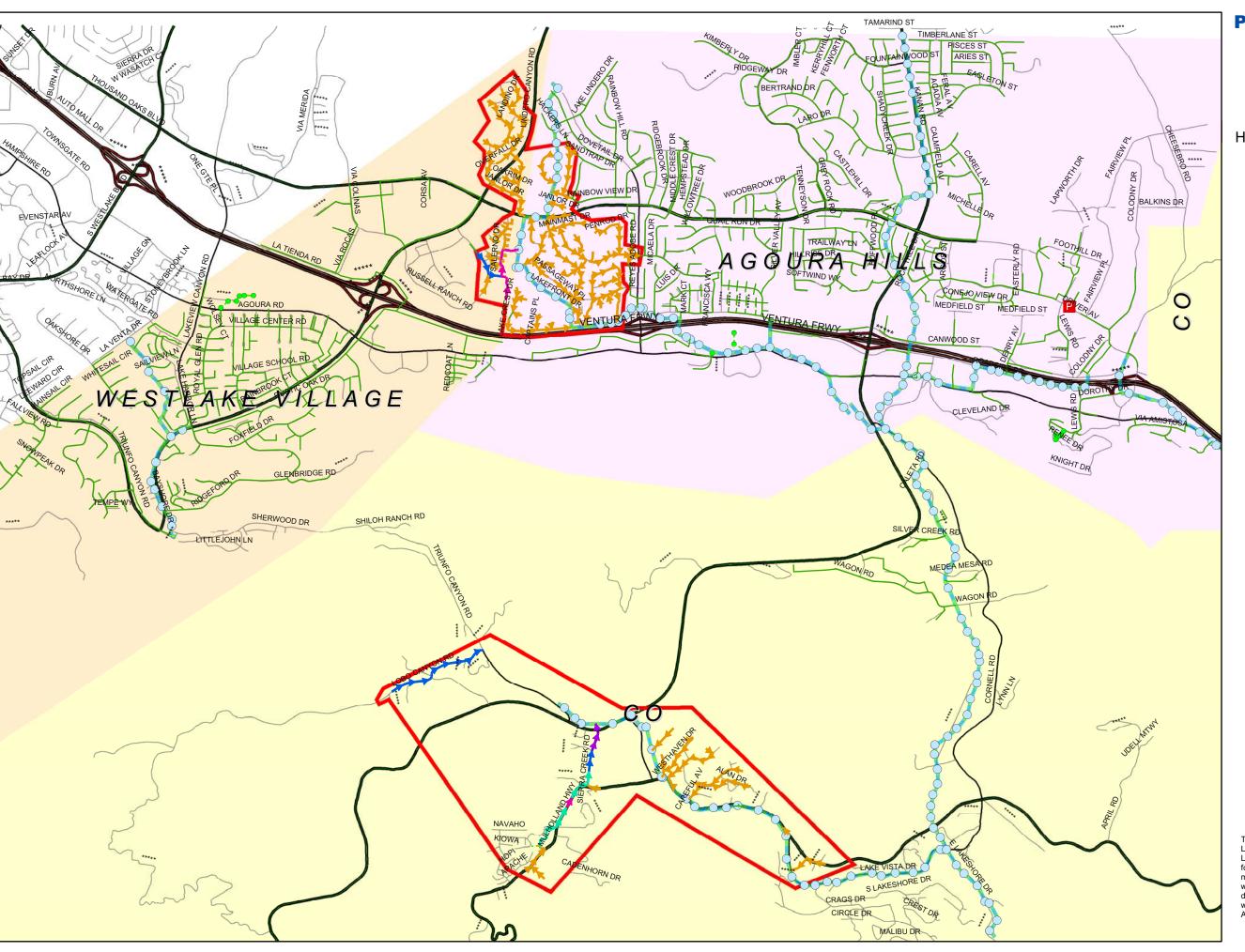
DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Excellent	14,483	80.8	70
2: Good	1,483	8.3	5
3: Fair	1,948	10.9	7
4: Poor	0	0.00	0
5: Immediate Attention	0	0.00	0
TOTAL	17,914	100.0	82

FUTURE PROJECTS

The Sewer Condition Assessment Program will be performing future closed-circuit television (CCTV) inspection of the remaining sewer lines within the Unincorporated County of Los Angeles maintained by the North Yard. For your reference, the CCTV Sewer Inspection project schedule is listed in Enclosure 5.

ENCLOSURE 1:

Project Overview Map

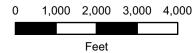


YOTV0506F

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

SMD Manholes

Other

MH Type

Standard

⊗ Siphon

Sipilo

♦ Trap

Shallow

▲ Drop

P SMD Pump Satations

WTP SMD Treatment Plants

Maintained by Others:

Trunk Sewerlines

---- Non SMD Sanitary Sewers

Trunk Mh

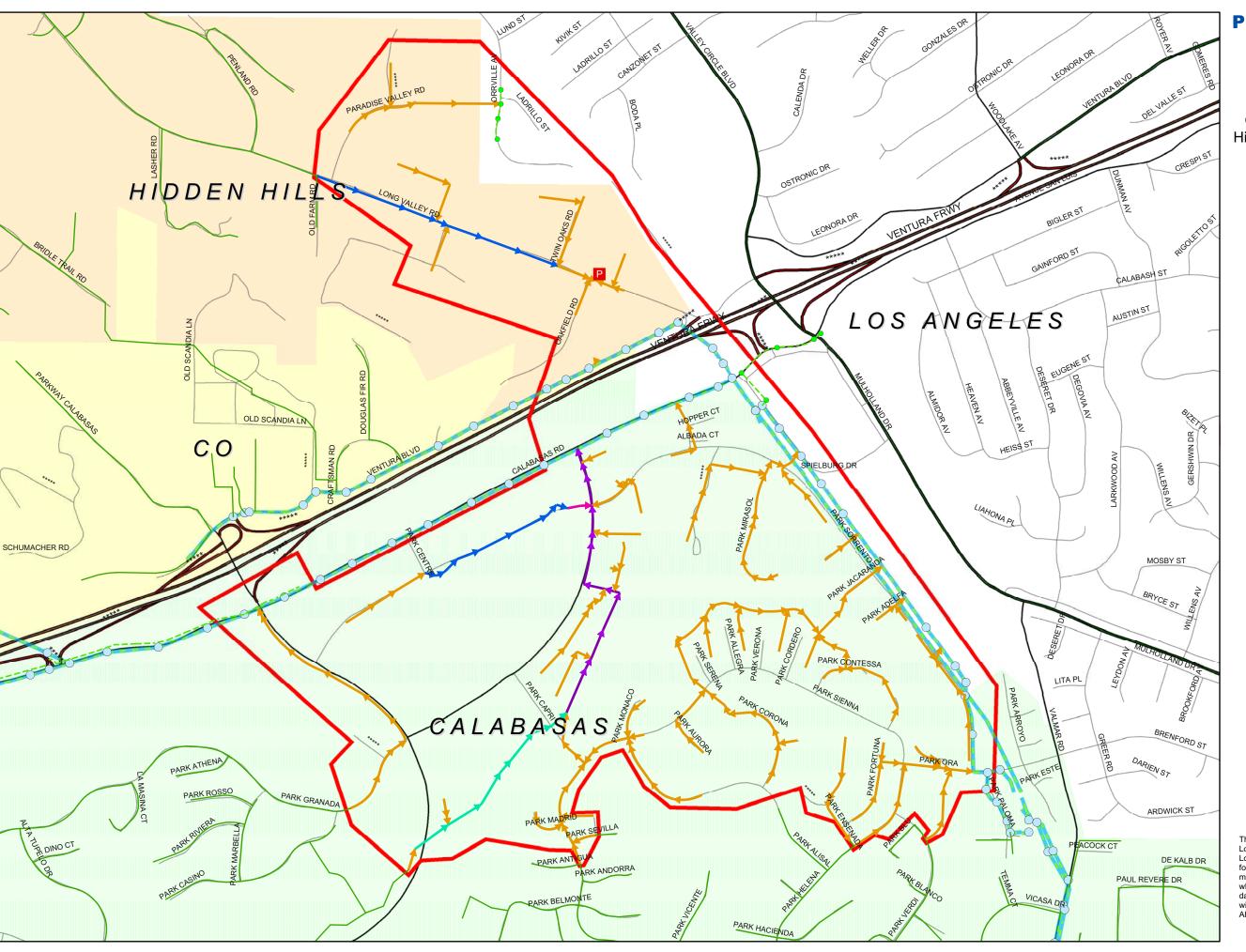
Non SMD Maintained MH

SMD Operations Maps
Y0TV0506F

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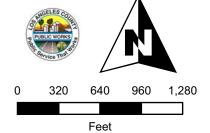
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SEPTEMBER 2008



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

TrapShallow

= Silalio

▲ Drop

P SMD Pump Satations

WTP SMD Treatment Plants

Maintained by Others:

Trunk Sewerlines

---- Non SMD Sanitary Sewers

Trunk Mh

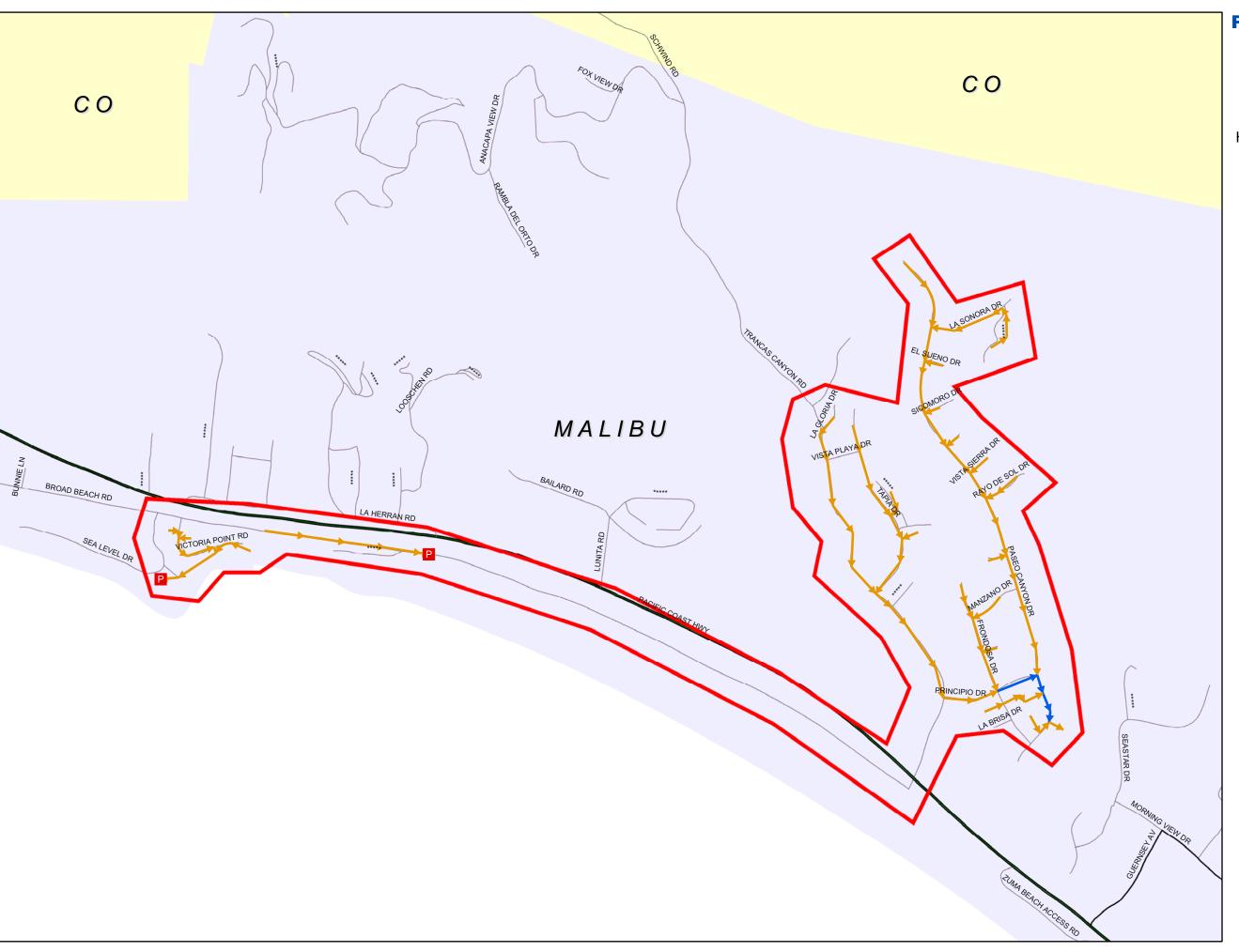
Non SMD Maintained MH

SMD Operations Maps
Y0TV0506F

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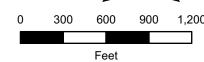
SEPTEMBER 2008



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





Legend

SMD Sanitary Sewers

— Other

→ 8

1

SMD Manholes

Other

MH Type

Standard

⊗ Siphon

. _

♦ Trap

Shallow

Drop

P SMD Pump Satations

WTP SMD Treatment Plants

Maintained by Others:

Trunk Sewerlines

---- Non SMD Sanitary Sewers

Trunk Mh

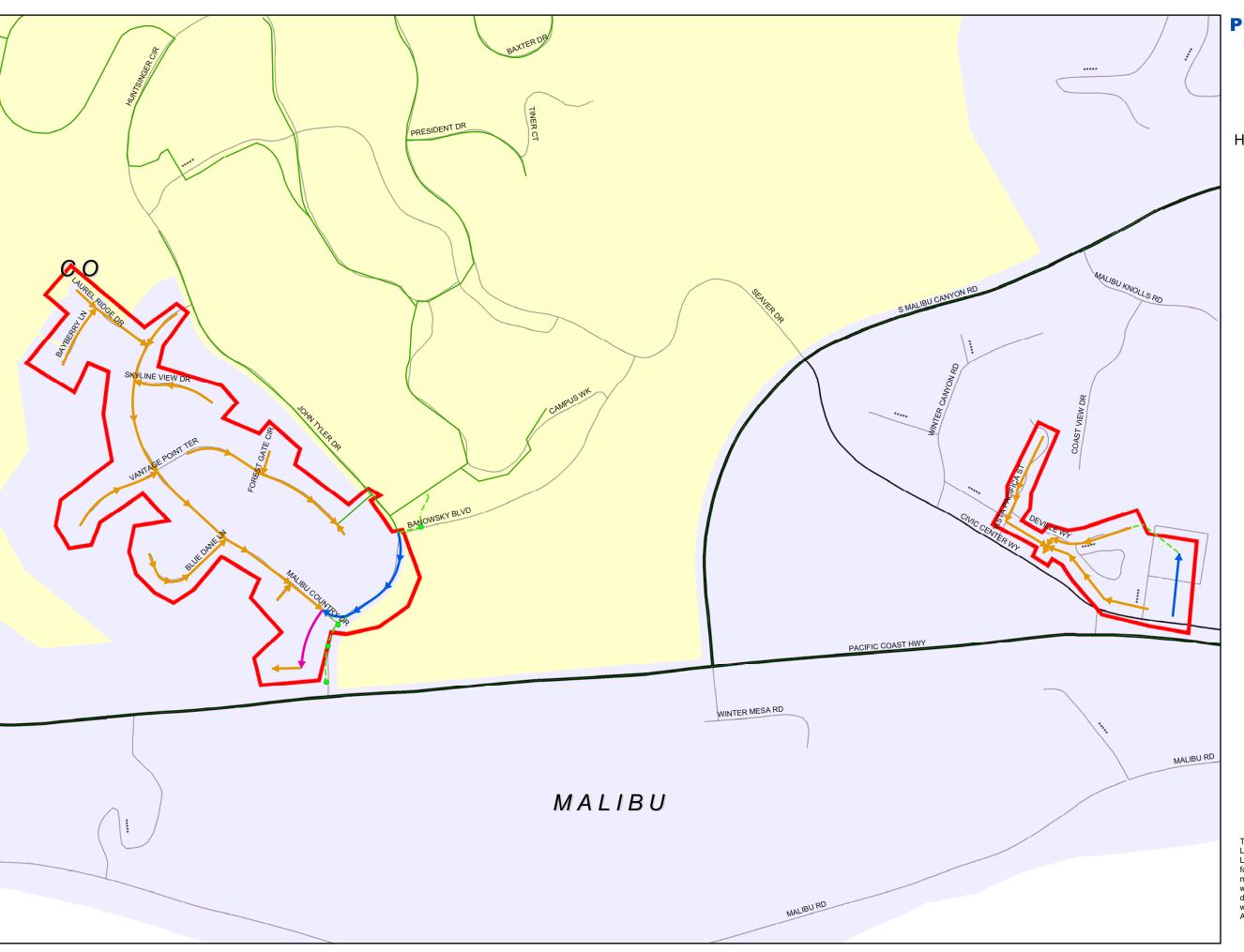
Non SMD Maintained MH

SMD Operations Maps

Y0TV0506F

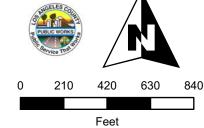
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SEPTEMBER 2008



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

SMD Manholes

Other

MH Type

Standard

⊗ Siphon

♦ Trap

Shallow

▲ Drop

P SMD Pump Satations

WTP SMD Treatment Plants

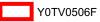
Maintained by Others:

Trunk Sewerlines
---- Non SMD Sanitary Sewers

Trunk Mh

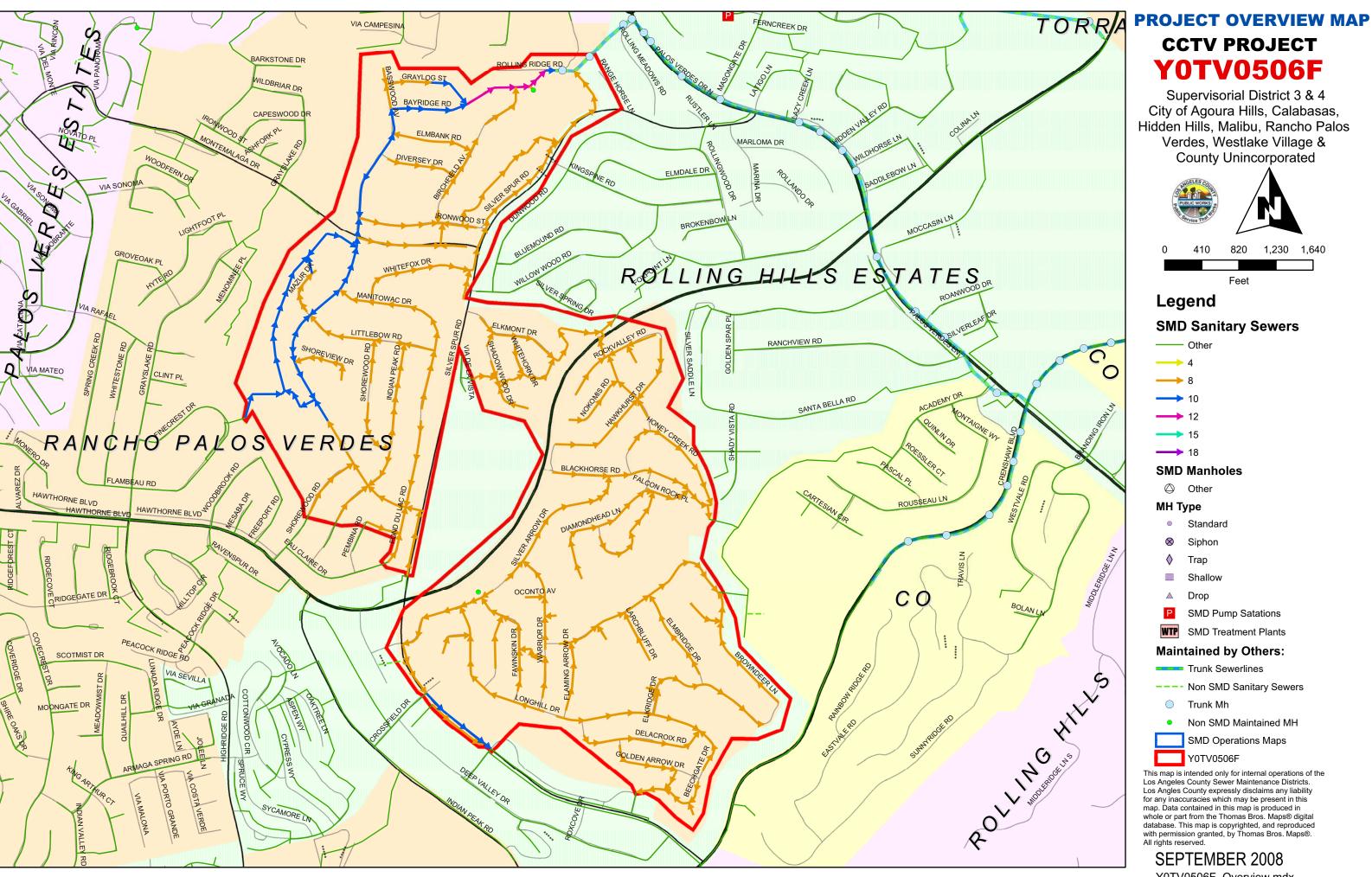
Non SMD Maintained MH

SMD Operations Maps



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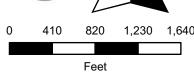
SEPTEMBER 2008



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

SMD Manholes

Other

MH Type

Standard

 \otimes Siphon

 \Diamond Trap

Shallow

Drop

SMD Pump Satations

WTP SMD Treatment Plants

Maintained by Others:

Trunk Sewerlines

---- Non SMD Sanitary Sewers

Trunk Mh

Non SMD Maintained MH

SMD Operations Maps

Y0TV0506F

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ENCLOSURE 2:

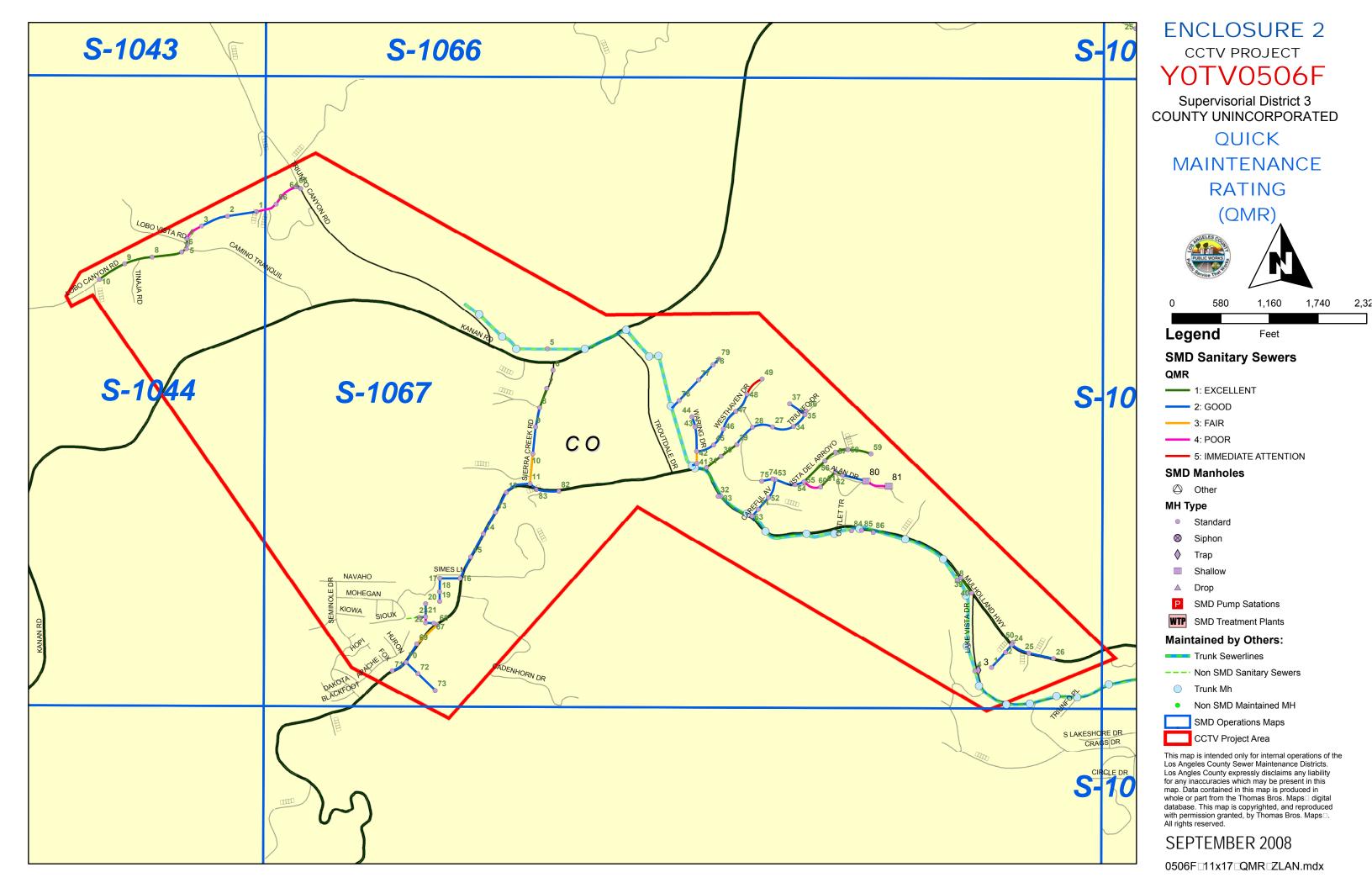
- Quick Maintenance Rating Report Priority List
- Quick Maintenance Rating Map

ENCLOSURE 2 QUICK MAINTENANCE RATING REPORT PRIORITY LIST UNINCORPORATED LOS ANGELES COUNTY SUPERVISORIAL DISTRICT 3 (Y0TV0506F) as of 08:04:06

Item No.	QMR	Start MH	End MH	Street	Observation	Corrective Action Taken
1	5121	1067-0048	1067-0049	WESTHAVEN DR	Deposits: End MH 1067-0049	Remove deposit and clean MH (Completed 11 12 08)
2	4123	1067-0081	1067-0080	ALAN DR	Roots; Debris	Hyrojet (Completed 11 12 108)
3	4121	1067-0022	1067-0021	MULHOLLAND HWY	Pipe alignment change	No action needed.
4	4100	1044-0001	1067-0066	ALAN DR	Pipe alignment change	No action needed.
5	4100	1044-0004	1044-0003	LOBO CYN RD	Pipe alignment change	No action needed.
6	4100	1067-0066	1067-0065	LOBO CYN RD	Pipe alignment change	No action needed.

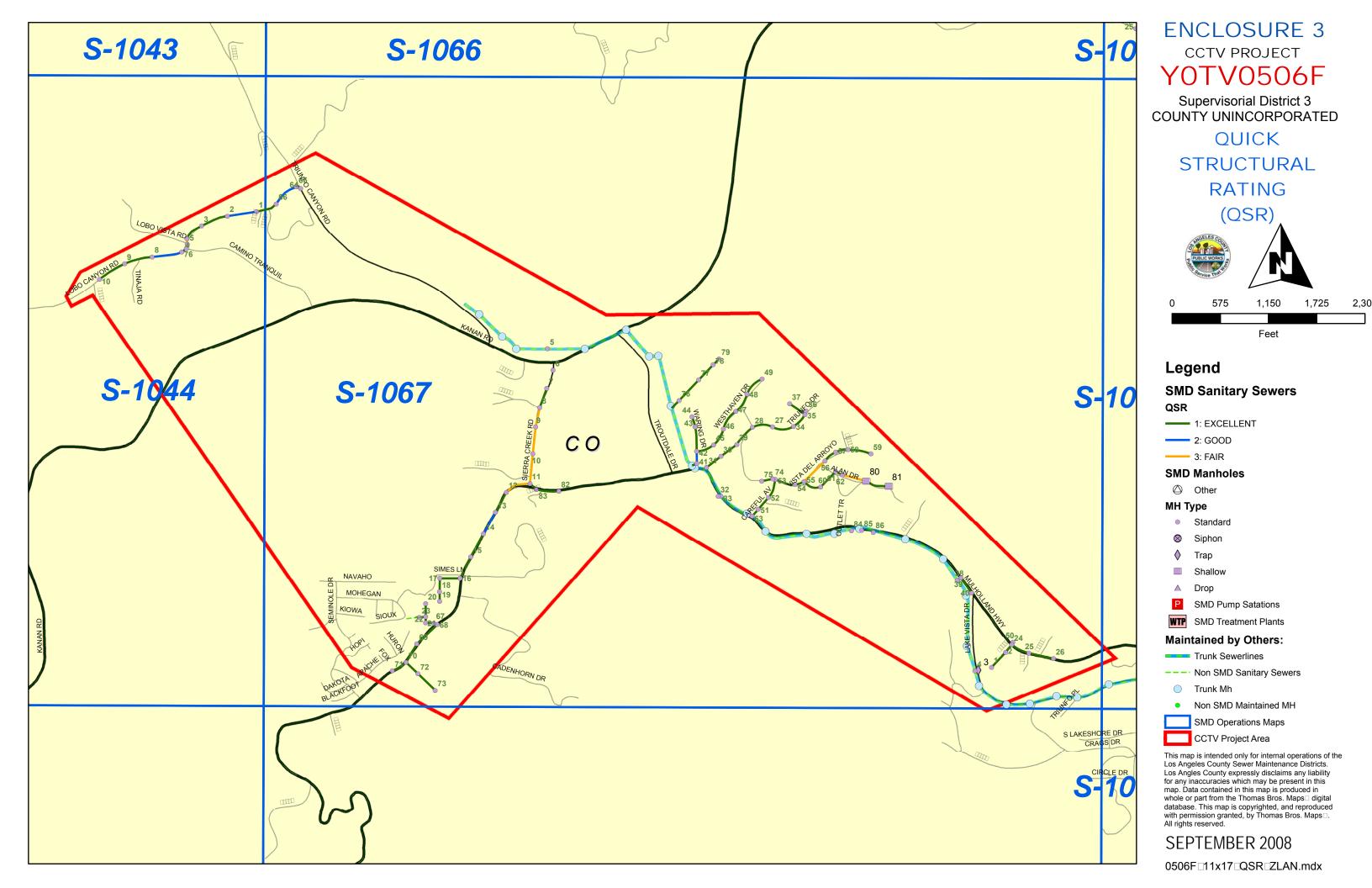
The following line segment received a Quick Maintenance Rating of above 4000 due to the observation of Root Ball or Deposit inside the lateral connection. CSMD does not maintain lateral lines: it is the responsibility of the parcel owner to maintain their respective lateral lines to facilitate the flow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

ltem No.	QMR	Start MH	End MH	Street	Observation
1	4121	1067-0060	1067-0055	TRIUNFO DR	Roots in lateral



ENCLOSURE 3:

Quick Structural Rating Map



ENCLOSURE 4:

Sample Inspection Report



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

Inspection report

		<u>-</u>			
Date: 20060712	P.O.#: Y0TV0506F	Weather: 1 Dry	Surveyed By: NPS D Beck	section number: 451	PSR: 762979
Total Pipe Length: 271.8	Survey Customer: LACDPW	System Owner: ZLAS	Clean Date:	Pre-Cleaned: J Jetting	Map Grid #: 1067

Street:	ALAN DE	R.	Flow Control:	N N	ot Controlled		Start MH:	1067-0081	
City:	ZLAS		Year Renewed				End MH:	1067-0080	
Location Cod	e: C Light H	lighway	Tape/Media #:	002			pipe length:	271.8 ft	
Reason for inspection: F Routine Assessment					Dia/Height:	C Circul	ar 8/8		
Hea of Sower: SS Sanitary				Material:	VCP Vitr	ified Clay Pipe P	ipe Length: 260		

Lining Method:

Category:

Use of Sewer:

SS Sanitary

1067

VCP Vitrified Clay Pipe Pipe Length:

Drain. Area: Remark:

0000

2300

0

1:67	5 position	observatio	on			MPEG	photo	grade
1067-00	0.00	Manhole				00:01:02		
	42.33	Water Leve	el, Sag in pipe, 10 %	of cross sectional are	ea	00:03:30		M 2
	86.43 104.61	Alignment Roots Ball		oʻclock, 15 %, within	B inch: YES	00:05:12 00:05:59	487a	M 2
	190.9 <u>4</u>	Water Leve	el, Sag in pipe, 10 %	of cross sectional are	ea	00:09:25	488 a	M 2
1067-00	271.80	Manhole				00:12:38		
QSR	QMR	SPR		OPR				

0

ENCLOSURE 5:

CCTV Sewer Inspection Project Schedule

Unincorporated North	CCTV PROJECT SCHEDUL				
FISCAL Y	EAR	YARD	SUP DIST	PROJECT NAME	LENGTH (FT)*
2005-20	006	N	5	Y0TV0506F	17,914
2007-20	008	N	5	Y0TV0708D	198
2008-20	009	N	5	4_18	193
2008-20	009	N	5	5_12	39,096
2009-20)10	N	5	3_1	13,409
2009-20)10	N	5	5_33	36,481
2010-20)11	N	5	5_11	7,495
2011-20)12	N	5	3_3	104,324
2012-20)13	N	5	5_3	105,698
2012-20)13	N	5	5_4	88,468
2012-20)13	N	5	5_6	77,266
2013-20)14	N	5	5_8	778
2014-20)15	N	5	3_2	59,232
2014-20)15	N	5	5_1	251,504
2014-20)15	N	5	5_2	263,133
2014-20)15	N	5	5_21	5,333
2014-20)15	N	5	5_5	53,230
2015-20)16	N	5	5_10	192,614
2015-20)16	N	5	5_18	2,899
				TOTAL (FT)	1,319,265
				TOTAL (MILES	250

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