

May 20, 2011

TO: Nicholas Agbobu
Engineering, Budget, and Office Operations

 FROM: Robert Swartz
Field Operations

**CONSOLIDATED SEWER MAINTENANCE DISTRICT
CONDITION ASSESSMENT PROGRAM REPORT
PROJECT Y0TV0910B**

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 1,675 feet or approximately 0.1 percent of the sewer system within Unincorporated County maintained by the District's East Yard.

The attached report outlines the structural and maintenance ratings of our 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)
- 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)
- 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 Program.

EL

Attach.
bc: RS, FV, File (Y0TV0910B)

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

PROJECT NAME:	Y0TV0910B	PROJECT MGR:	Kari Eskridge
PROJECT DATE:	07/21/2010	CONTACT NO:	(626) 300-3390
SUP. DISTRICT(S):	1	MAP PAGE(S):	2073 □ 2074
Report By:	Eric Liu	Report Date:	04/26/2011

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 1,675 feet or approximately 0.1 percent of the Unincorporated Los Angeles County sewer system maintained by the District's East 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 our system based on industry standards.

PROJECT AREA AND DESCRIPTION

Project Y0TV0910B included sewer lines located in the Unincorporated County of Los Angeles area and in the Cities of Cudahy, Pico Rivera, Santa Fe Springs and South El Monte. Enclosed for your reference is an overview map of the project area within the unincorporated County 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: 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 61.0 percent of the system televised was free of blockages or restrictions that would impede sewer flows. However, the remaining 39.0 percent of the inspected pipe segments within the Unincorporated County of Los Angeles area had a PACP maintenance grade of 4 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.

QUICK MAINTENANCE RATING TABLE

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Excellent	0	0.0	0
2: Good	1,021	61.0	4
3: Fair	0	0.0	0
4: Poor	654	39.0	2
5: Immediate Attention	0	0.0	0
TOTAL	1,675	100.0	6

High Water Levels

Our inspection revealed that approximately 83.3 percent of the system televised has adequate capacity. However, the remaining 16.7 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 of camera underwater or sags in the line. A sewer pipe can be considered at capacity when 50% 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% or greater due to heavy flows in adjoining pipes, a restriction 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% 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.

Infiltration

Our inspection revealed that infiltration was not detected in any pipe segment in the unincorporated County area.

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

STRUCTURAL REPORT

Our inspection revealed that approximately 80.7 percent of the inspected pipe segments within the Unincorporated County of Los Angeles were free of severe structural defects. However, the remaining 19.3 percent of the inspected pipe segments had a PACP structural grade of 5 as indicated in the Quick Structural Rating Table shown below. The segment has been placed on a priority list based on the severity and the need for action. Item 1 in the Quick Structural Rating Report Priority List (Enclosure 3) 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. A copy of the actual inspection report for this segment is included in Enclosure 4.

QUICK STRUCTURAL RATING TABLE

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Excellent	1,352	80.7	5
2: Good	0	0.0	0
3: Fair	0	0.0	0
4: Poor	0	0.0	0
5: Immediate Attention	323	19.3	1
TOTAL	1,675	100.0	6

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 East Yard. For your reference, the CCTV Sewer Inspection project schedule is listed in Enclosure 5.

ENCLOSURE 1:

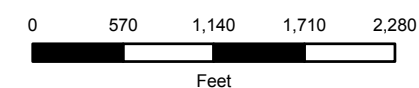
Project Overview Map

OVERVIEW MAP

COUNTY UNINCORPORATED

CCTV PROJECT
Y0TV0910B

Cities of Cudahy, Pico Rivera, Santa Fe Springs, South El Monte & County Unincorporated



Legend

SMD Sanitary Sewers

→ 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

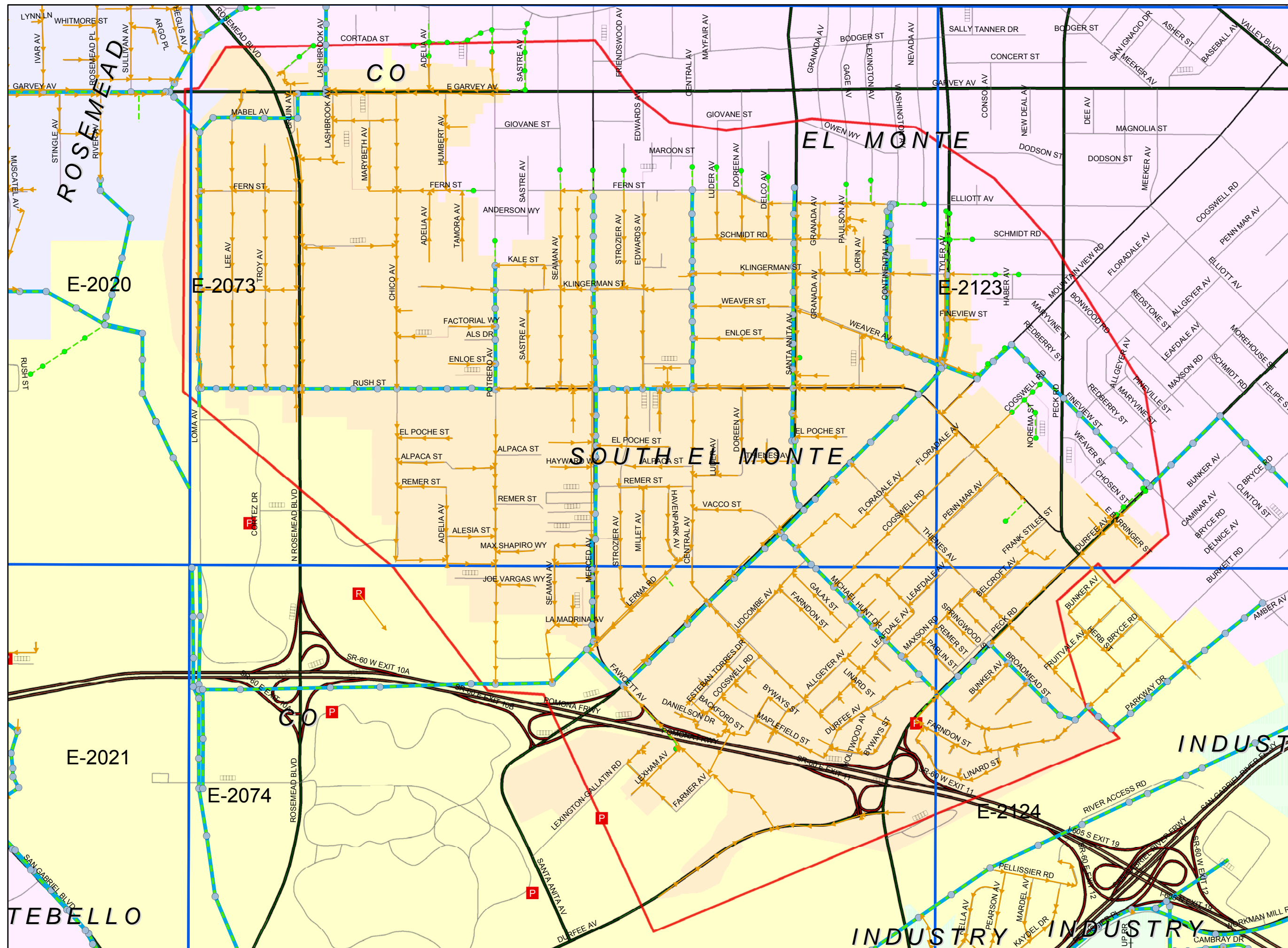
● Non SMD Maintained MH

□ SMD Operations Maps

▭ CCTV PROJECT AREA

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APRIL 2011



LYNN LN
WHITMORE ST
IVAR AV
ROSEMEAD PL
SULLIVAN AV
ARGO PL
REGISAN
ROSEMEAD BLVD
GARVEY AV
STINGLE AV
MUSCATEL AV
RUSH ST
E-2020
E-2073
E-2074
E-2021

CORTADA ST
ADELIA AV
SASTRE AV
FRIENDSWOOD AV
CENTRAL AV
MAYFAIR AV
GRANADA AV
BODGER ST
SALLY TANNER DR
BOGGER ST
CONCERT ST
SAN IGNAO DR
ASHER ST
BASEBALL AV
VALLEY BLVD
MABEL AV
LASHBROOK AV
E GARVEY AV
GIOVANE ST
EDWARDS AV
MAYFAIR AV
GRANADA AV
BODGER ST
SALLY TANNER DR
BOGGER ST
CONCERT ST
SAN IGNAO DR
ASHER ST
BASEBALL AV
VALLEY BLVD
MABEL AV
LASHBROOK AV
E GARVEY AV
GIOVANE ST
EDWARDS AV
MAYFAIR AV
GRANADA AV
BODGER ST
SALLY TANNER DR
BOGGER ST
CONCERT ST
SAN IGNAO DR
ASHER ST
BASEBALL AV
VALLEY BLVD

ROSEMEAD
E-2020
E-2073
E-2074
E-2021

CO
EL MONTE
SOUTH EL MONTE

INDUST
INDUST

INDUST

INDUST

INDUST

INDUST

INDUST

TEBELLO

ENCLOSURE 2:

- Quick Maintenance Rating Report
Priority List
- Quick Maintenance Rating Map
- High Water Levels
- High Water Levels Map

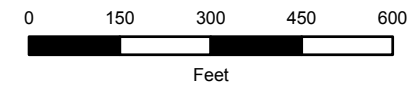
ENCLOSURE 2
QUICK MAINTENANCE RATING REPORT PRIORITY LIST
COUNTY UNINCORPORATED EAST YARD (Y0TV0910B)
as of 11/08/10

ITEM NO.	QMR	START MH	END MH	STREET	OBSERVATION	CORRECTIVE ACTION TAKEN
1	4121	2074-0008	2074-0009	Easement on Lerma by Merced	Sag: 82' - 112'	No action needed.
2	4121	2074-0008	2074-TRNK	Easement on Lerma by Merced	Root ball: 154'	Contractor cleaned at inspection: 03/18/2010

ENCLOSURE 2
 CCTV PROJECT
 YOTV0910B

COUNTY
 UNINCORPORATED

QUICK
 MAINTENANCE
 RATING
 (QMR)



Legend

SMD Sanitary Sewers

QMR

— 2: GOOD

— 4: POOR

SMD Manholes

⊙ Other

Manhole Type

● Standard

▲ DROP

◻ Shallow

◇ Trap

⊗ Siphon

Ⓟ SMD Pump Stations

Ⓜ SMD Treatment Plants

Maintained by Others:

— Trunk Sewerlines

- - - Non SMD Sanitary Sewers

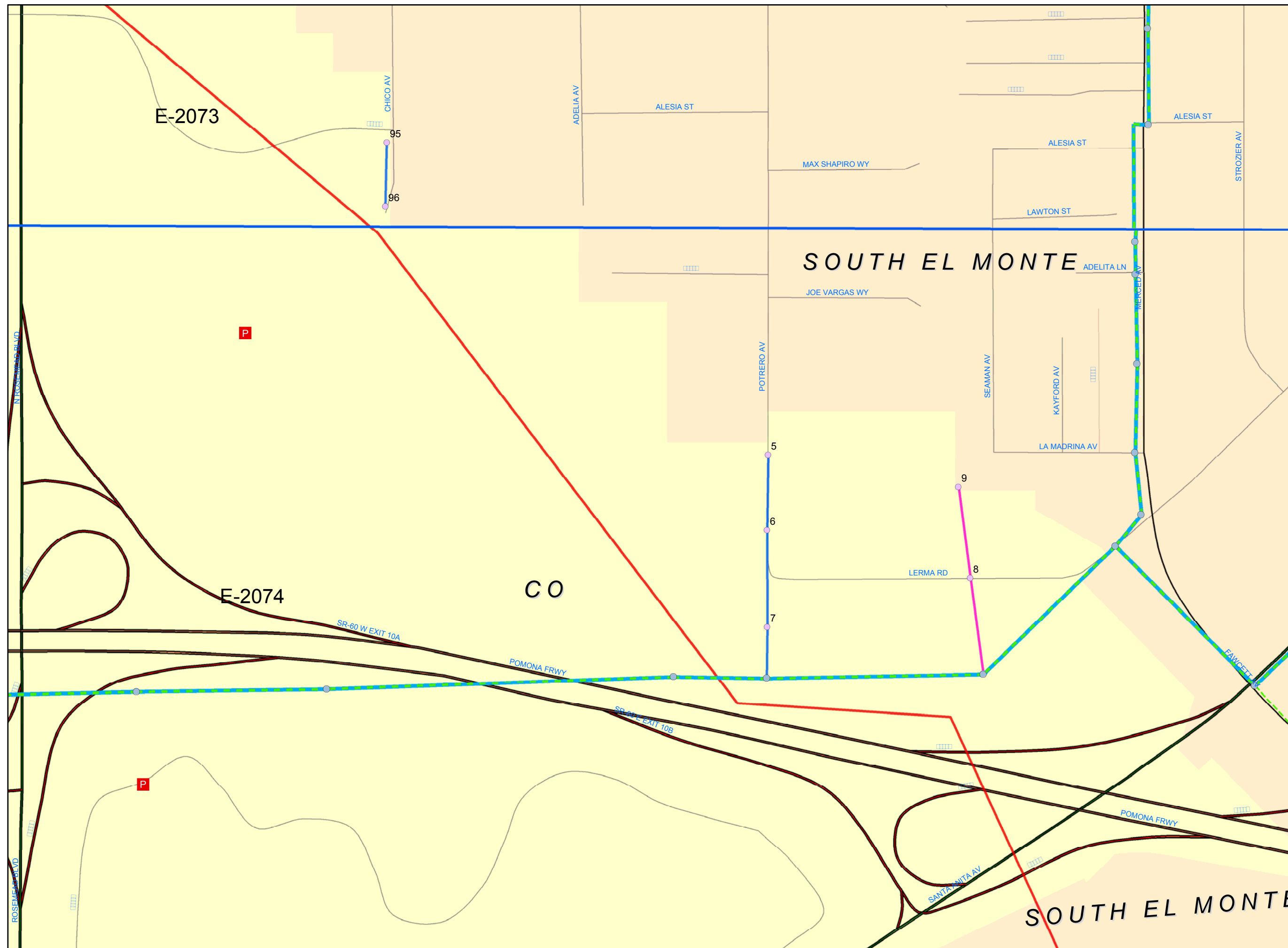
● Non SMD Maintained MH

□ SMD Operations Maps

▭ CCTV PROJECT AREA

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APRIL 2011



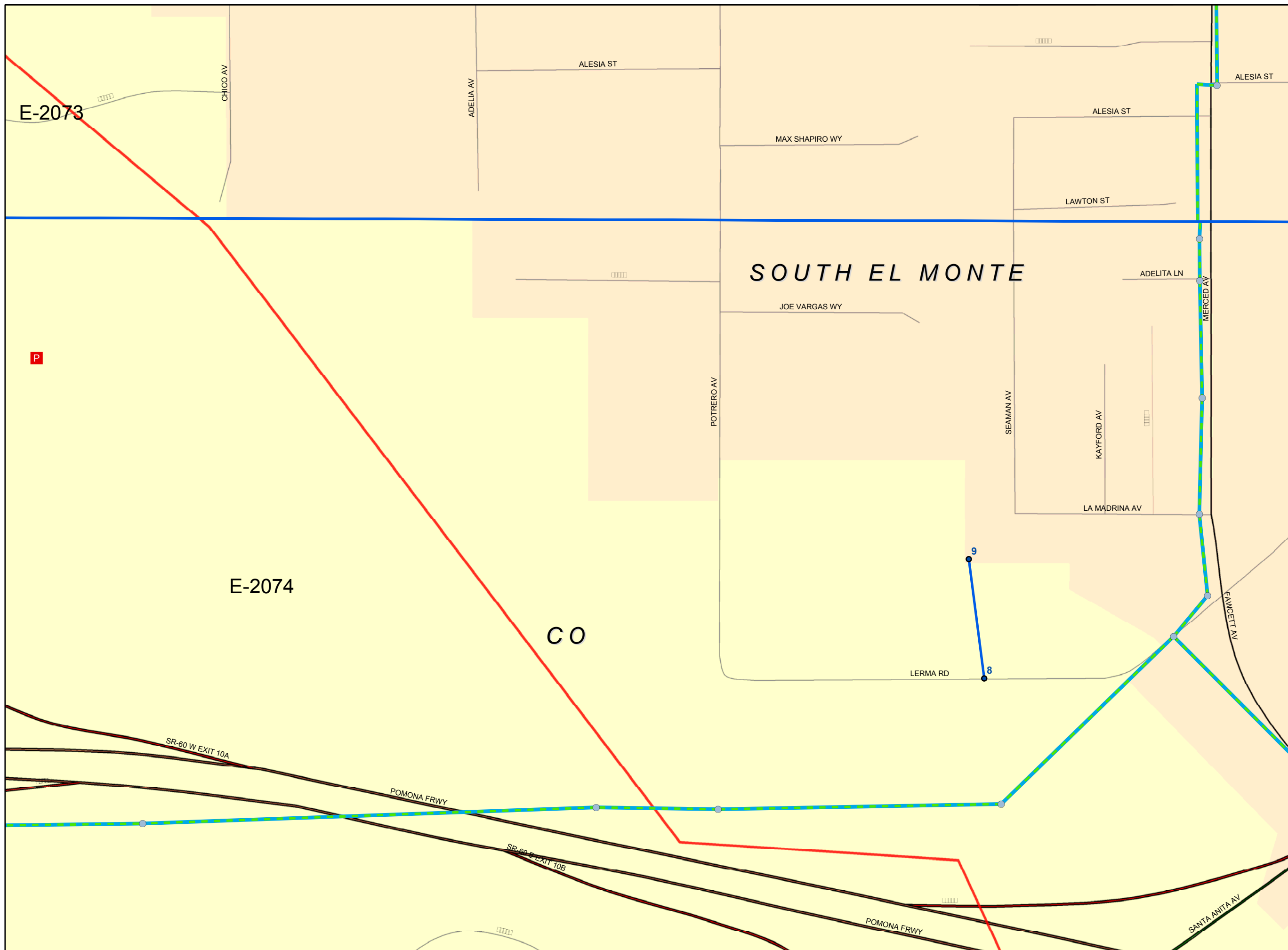
ENCLOSURE 2
HIGH WATER LEVELS
COUNTY UNINCORPORATED EAST YARD (YOTV0910B)
as of 11/08/10

Item No.	QMR	START MH	END MH	STREET	OBSERVATION	SAG (ft)
1	4121	2074-0008	2074-0009	Easement on Lerma by Merced	High water level; Sag (50%): 82' - 112'	30

ENCLOSURE 2

CCTV PROJECT Y0TV0910B COUNTY UNINCORPORATED

HIGH WATER LEVELS



Legend

— High Water Levels

SMD Manholes

⊙ Other

Manhole Type

● Standard

▲ DROP

■ Shallow

◇ Trap

⊗ Siphon

● MH: High Water Levels

■ SMD Pump Stations

■ SMD Treatment Plants

Maintained by Others:

— Trunk Sewerlines

--- Non SMD Sanitary Sewers

● Non SMD Maintained MH

□ SMD Operations Maps

□ Y0TV0910B

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FEBRUARY 2011

ENCLOSURE 3:

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

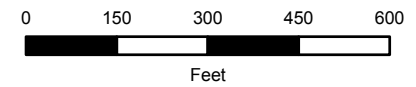
ENCLOSURE 3
QUICK STRUCTURAL RATING REPORT PRIORITY LIST
COUNTY UNINCORPORATED EAST YARD (Y0TV0910B)
as of 11.08.10

ITEM NO.	QSR	START MH	END MH	STREET	OBSERVATION: LOCATION	PROPOSED CORRECTIVE ACTION	LENGTH OF REPAIR (FT)
1	5100	2074-0008	2074-0009	Easement on Lerma by Merced	Broken (tap break-in) with concrete patch visible: 200'	Point Repair	

ENCLOSURE 3
 CCTV PROJECT
 YOTV0910B

COUNTY
 UNINCORPORATED

QUICK
 STRUCTURAL
 RATING
 (QSR)



Legend

SMD Sanitary Sewers

- QSR**
- 1: EXCELLENT
 - 5: IMMEDIATE ATTENTION

SMD Manholes

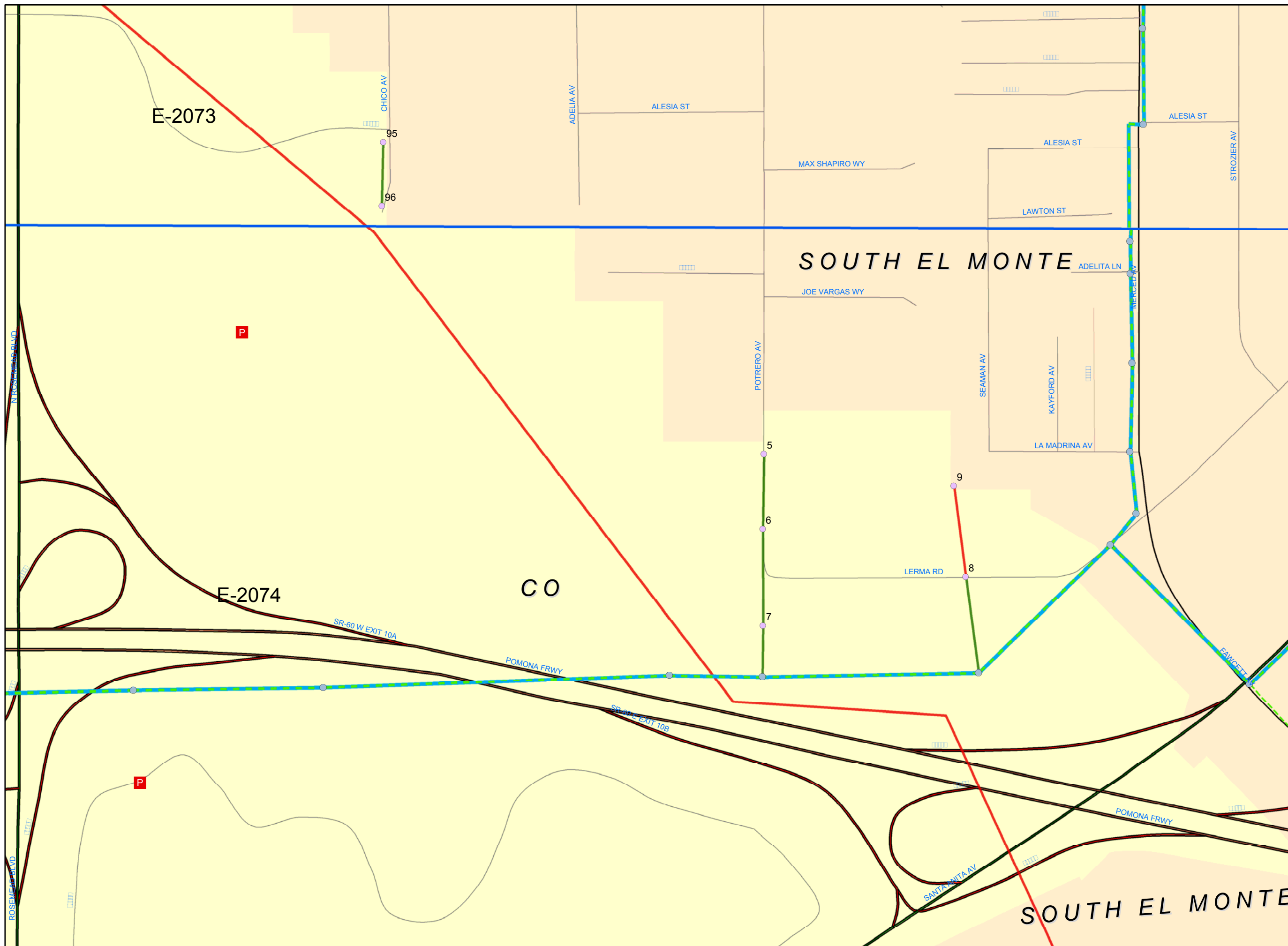
- Other
- Standard
- DROP
- Shallow
- Trap
- Siphon
- SMD Pump Stations
- SMD Treatment Plants

Maintained by Others:

- Trunk Sewerlines
- Non SMD Sanitary Sewers
- Non SMD Maintained MH
- SMD Operations Maps
- CCTV PROJECT AREA

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APRIL 2011



ENCLOSURE 4:

Infrastructure Inspection Reports
for Grades 4 and 5



Inspection report

Date: 20100318	P.O. #: Y0TV0910B	Weather: 1 Dry	Surveyed By: J SALAS	section number: 846	PSR: 120441
Total Pipe Length: 323	Survey Customer: LACDPW	System Owner: ZLAE	Clean Date: 03/18/2010	Pre-Cleaned: H Heavy Cleaning	Map Grid #: 2074

Street: ZLAE	Flow Control: N Not Controlled	Start MH: 2074-0008
City: ZLAE	Year Renewed	End MH: 2074-0009
Location Code: D Easement Right of Way	Tape/Media #	pipe length: 337.57 ft

Reason for inspection: F Routine Assessment	Dia/Height: C Circular 8 8
Use of Sewer: SS Sanitary	Material: VCP Pipe Length: 323
Drain. Area: 0008 2074-0009 2074	Lining Method:
	Category:

Remark: **MH #'S REVERSED ON MAP**

1:825	position	observation	MPEG	photo	grade
	0.00	Downstream Manhole, Survey Begins 2074-0008		15384	
	0.00	Water Level, 5' of cross sectional area			
	0.00	Water Mark, 10' of cross sectional area			M 2
	26.28	Tap Factory Made Capped, at 03 o'clock, 6", within 8 inch: YES	00:02:05	15385	
	28.95	Tap Factory Made Capped, at 09 o'clock, 6", within 8 inch: YES	00:02:19	15386	
	85.51	Water Level, Sag in pipe, 60' of cross sectional area	00:03:58		M 4
	111.55	Water Level, 20' of cross sectional area	00:05:43		
	116.16	Tap Factory Made Capped, at 03 o'clock, 6", within 8 inch: YES	00:05:58	15387	
	118.75	Tap Factory Made Capped, at 09 o'clock, 6", within 8 inch: YES	00:06:10	15388	
	150.46	Water Level, 10' of cross sectional area	00:07:16		
	161.16	Water Level, 5' of cross sectional area	00:07:37		
	200.78	Broken, from 07 to 11 o'clock, within 8 inch: YES	00:08:46	15389, b	S 5
	202.30	Tap Break-In Active, at 09 o'clock, 6", within 8 inch: YES	00:09:04	15391	
	218.01	Tap Factory Made Capped, at 03 o'clock, 6", within 8 inch: YES	00:09:43	15392	
	220.43	Tap Factory Made Capped, at 03 o'clock, 6", within 8 inch: YES	00:09:56	15393	
	310.70	Tap Factory Made Capped, at 09 o'clock, 6", within 8 inch: YES	00:12:40	15394	
	313.19	Tap Factory Made Capped, at 03 o'clock, 6", within 8 inch: YES	00:12:56	15395	
	337.57	Upstream Manhole, Survey Ends 2074-0009	00:14:05	15396	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5100	4121	5	6	11	5	3	3.67

ENCLOSURE 5:

CCTV Sewer Inspection Project Schedule

FUTURE PROJECTS

The Sewer Condition Assessment Program will be performing future closed-circuit television (CCTV) inspection of the remaining sewer lines within Unincorporated East Yard according to the following schedule.

FISCAL YEAR	PROJECT NAME	LENGTH (FT)	PERCENTAGE OF SYSTEM	STATUS
2005-2006	Y0TV0506D	48,866	1.4	COMPLETE
2005-2006	Y0TV0506E	158,895	4.5	COMPLETE
2007-2008	Y0TV0708E	2,354	0.1	COMPLETE
2007-2008	Y0TV0708F	195,437	5.5	COMPLETE
2008-2009	Y0TV0809A	206,361	5.8	COMPLETE
2008-2009	Y0TV0809C	300,303	8.4	COMPLETE
2009-2010	Y0TV0910B	1,675	0.1	COMPLETE
2009-2010	Y0TV0910C	223,850	6.3	REPORT IN PROGRESS
2010-2011	Y0YV1011A	494,197	13.9	IN PROGRESS
2011-2012	Y0TV1112B	342,712	9.7	FUTURE
2011-2012	Y0TV1112C	178,844	5.0	FUTURE
2012-2013	Y0TV1213C	210,509	5.9	FUTURE
2013-2014		302,553	8.5	FUTURE
2013-2014		107,732	3.0	FUTURE
2013-2014		303,199	8.5	FUTURE
2014-2015		291,658	8.2	FUTURE
2014-2015		141,202	4.0	FUTURE
2015-2016		1,435	0.1	FUTURE
2015-2016		40,904	1.1	FUTURE
TOTAL		3,552,686	100.0	