

August 24, 2012

TO: Nicholas Agbobu
Engineering, Budget, and Office Operations

FROM: Robert Swartz 
Field Operations

**CONSOLIDATED SEWER MAINTENANCE DISTRICT
CONDITION ASSESSMENT PROGRAM REPORT
PROJECT Y0TV0910A**

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 (District) has completed the closed-circuit television (CCTV) inspection of 12,583 feet or approximately 0.8 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 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 Map (Enclosure 3)
- CCTV Sewer Inspection Project Schedule (Enclosure 4)

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.

 HK:

Attach.

bc: RS, FV, File (Y0TV0910A)

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

PROJECT NAME:	Y0TV0910A	PROJECT MGR:	Eric Liu
PROJECT DATE:	07/10/09	CONTACT NO:	(626) 300-3369
SUP. DISTRICT(s):	5	MAP PAGE(S):	1025,1066,1091&1092
Report By:	Hanna Kebede	Report Date:	08/13/2012

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 12,583 feet or 0.8 percent of the percent of the Unincorporated Los Angeles County sewer system maintained by the District's North Yard.

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 Y0TV0910A included sewer lines located in the Unincorporated County of Los Angeles area and in the Cities of Agoura Hills, Rancho Palos Verdes, Rolling Hills Estates, and Westlake Village. Enclosed for your reference is an overview map of the project area within your City (Enclosure 1).

DEFECT GRADE DESCRIPTION

The Quick Rating indicates the number of occurrences for the highest severity grade for each pipe segment for either maintenance or structural defects. A grade of 1 indicates that a pipe segment is in excellent condition with minor defects, while a grade of 5 indicates that a pipe segment may require immediate attention. 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 85.3 percent of the system televised was free of blockages or restrictions that would impede sewer flows. However, the remaining 14.7 percent of the inspected pipe segments within the Unincorporated County of Los Angeles area 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.

QUICK MAINTENANCE RATING TABLE

DEFECT GRADE	PIPE LENGTH (FT)	PERCENT TOTAL INSPECTED PIPE LENGTH	NO. SEGMENTS
1: Minor	5,400	42.9	23
2: Minor to Moderate	5,334	42.4	19
3: Moderate	325	2.6	2
4: Significant	1,302	10.3	6
5: Most Significant	222	1.8	1
TOTAL	12,583	100.0	51

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 lateral 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 99.1 percent of the system televised has adequate capacity. However, 0.9 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% 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 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% 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 100 percent of the inspected pipe segments within the Unincorporated County of Los Angeles were free of severe structural defects. 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: Minor	10,697	85.0	45
2: Minor to Moderate	1,272	10.1	4
3: Moderate	614	4.9	2
4: Significant	0	0	0
5: Most Significant	0	0	0
TOTAL	12,583	100.0	51

FUTURE PROJECTS

The Sewer Condition Assessment Program will be performing future closed-circuit television (CCTV) inspection of the remaining sewer lines within the Unincorporated Los Angeles County maintained by the North Yard. For your reference, the CCTV Sewer Inspection project schedule is listed in Enclosure 4.

ENCLOSURE 1:

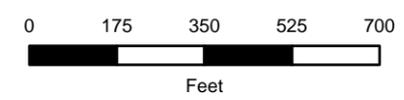
Project Overview Map

OVERVIEW MAP 1

CCTV PROJECT

Y0TV0910A

Supervisorial District 5
County Unincorporated

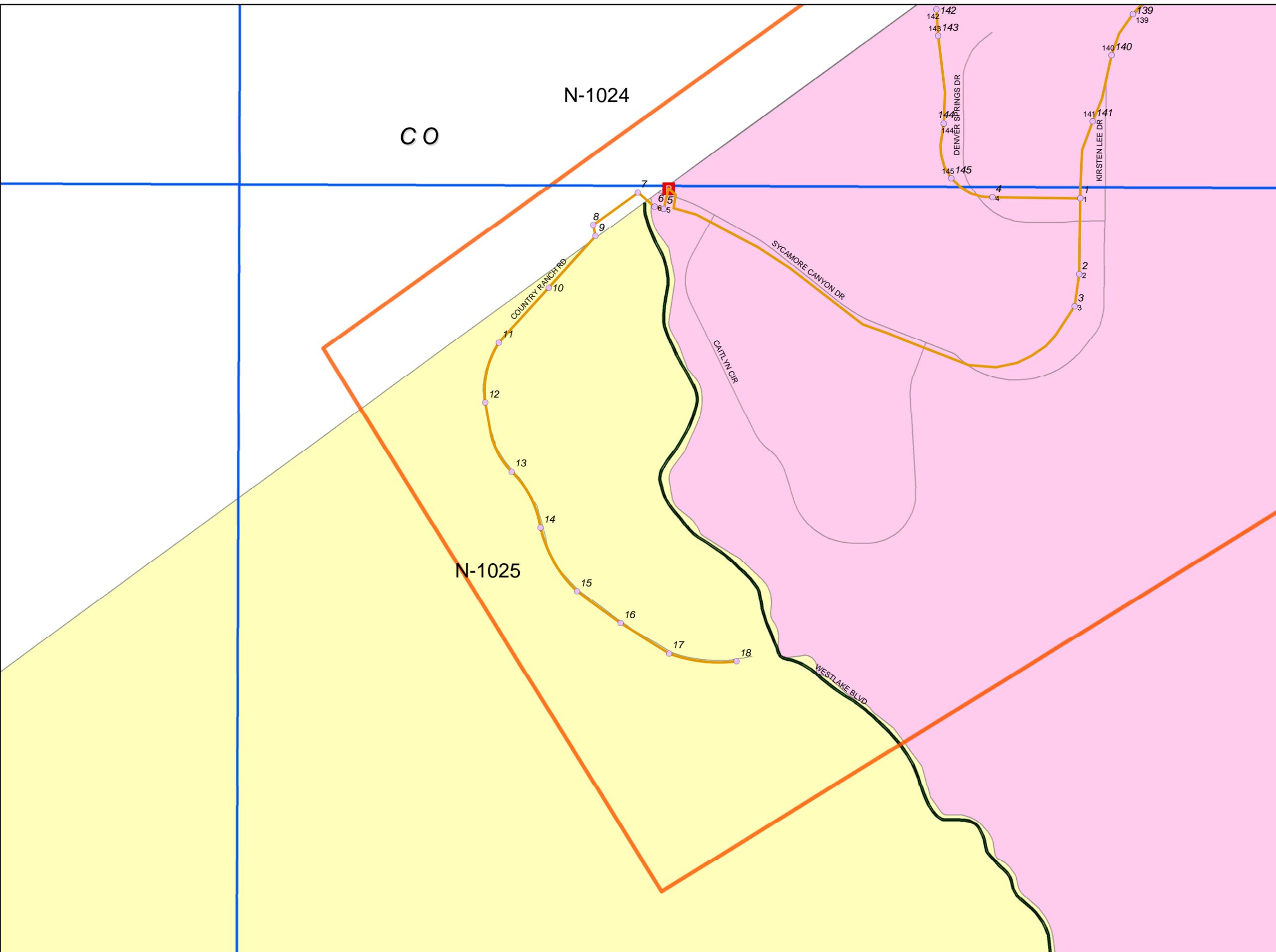


Legend

- SMD Sanitary Sewers
- 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
- Y0TV0910A

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AUGUST2012



AGOURA HILLS

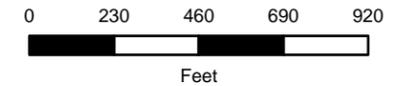
AGOURA HIL

OVERVIEW MAP 2

CCTV PROJECT

Y0TV0910A

Supervisorial District 5
County Unincorporated



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

□ Y0TV0910A

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AUGUST2012

N-1066

N-1091

N-1067

N-1092

CO

KANAN RD

CALETA RD

CORNELL RD

SILVER CREEK RD

HUNT CLUB LN

SILVER CREEK RD

CASTLE VIEW DR

OLD MILL CREEK LN

COUNTRY ESTATES WY

MEDEA MESA RD

COUNTRYSIDE DR

FRENCH CT

MALIBU VIEW CT

WAGON RD

WAGON RD

MEDEA CREEK RD

WAGON RD

OLD OAK RD

91

90

89

87

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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
UNINCORPORATED COUNTY NORTH (Y0TV0910A)
as of 07/10/09

Item No.	QMR	Start MH	End MH	Street	Observation: Location	Corrective Action Taken (Date Completed)
1	5131	1091-0152	1091-0153	HUNT CLUB LN	Deposits Attached Encrustation 0' & 82' : Camera Blocked @ 82'	Hydro 03/20/2012
2	4231	1091-0074	1091-0075	EASEMENT	Sag 70% & camera Underwater 95'-103': roots joint 102'	Hydro 08/06/2012
3	4221	1066-0087	1066-0041	EASEMENT	Alignment down 45% 0' & 69'	No action needed
4	4121	1091-0141	1091-0140	EASEMENT	Alignment down 45% 6'	No action needed
5	4121	1092-0002	1092-0003	EASEMENT	Deposits Attached Encrustation 239'	Hydro 08/06/2012
6	4111	1091-0151	1091-0152	HUNT CLUB LN	Deposits Attached Encrustation 46'-48' : Camera Blocked @ 48'	Hydro 03/14/2012
7	4100	1091-0144	1091-0143	EASEMENT	Alignment down 45% 6'	No action needed
8	312A	1091-0030	1091-0031	WAGON RD	Deposits Attached Encrustation 95'-139'	Hydro 03/14/2012
9	3128	1091-0031	1091-0032	WAGON RD	Roots Midium Lateral 179' & 196'	Lateral notice will be sent to property owner

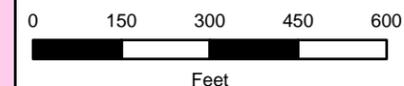
ENCLOSURE 2

CCTV PROJECT

YOTV0910A

Supervisorial District 5
County Unincorporated

QUICK
MAINTENANCE
RATING
(QMR)



Legend

SMD Sanitary Sewers

QMR

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

SMD Manholes

Other

Manhole Type

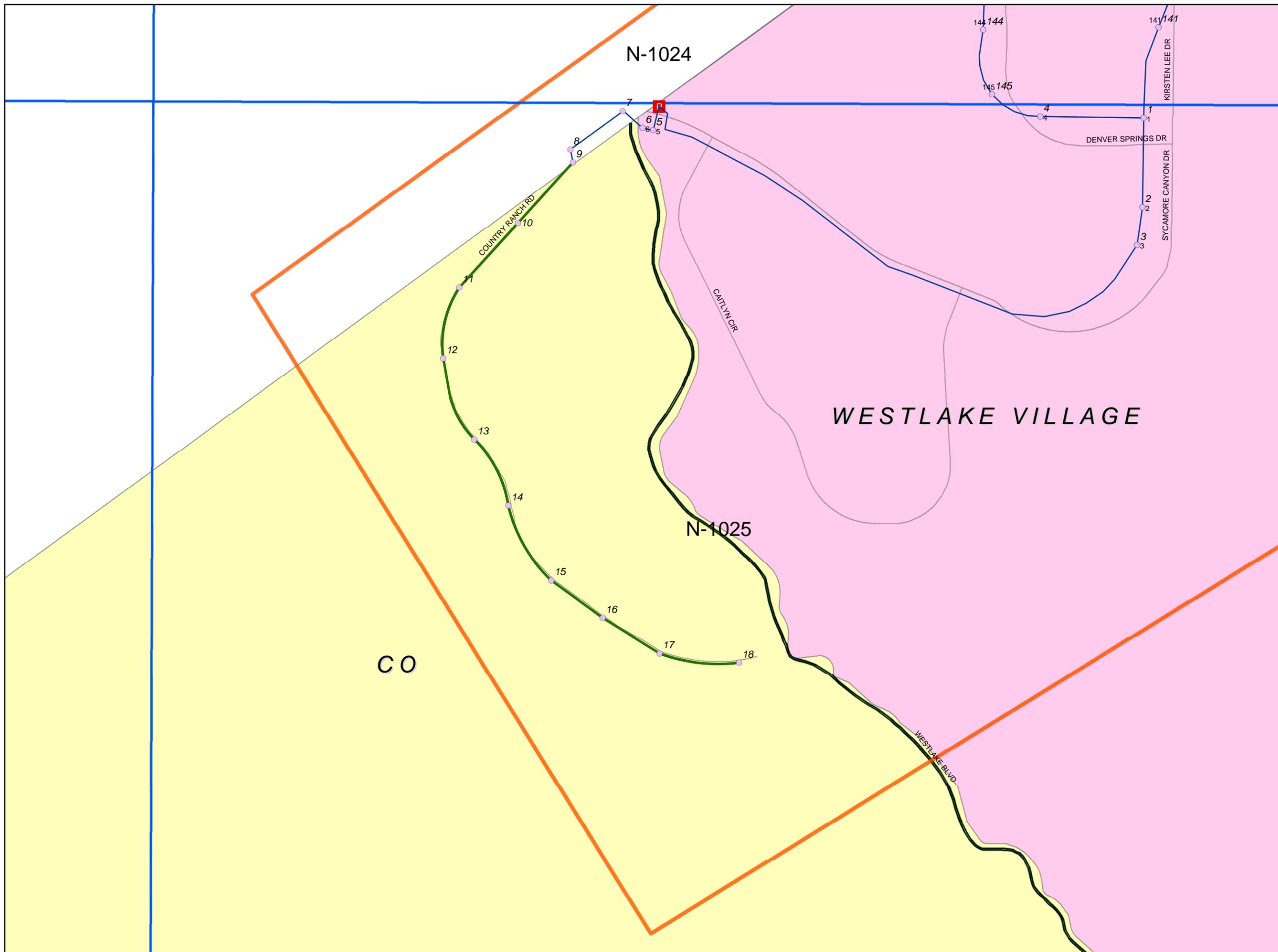
- Standard
- DROP
- Shallow
- Trap
- Siphon
- SMD Pump Stations
- SMD Treatment Plants

Maintained by Others:

- Trunk Sewerlines
- Non SMD Sanitary Sewers
- Non SMD Maintained MH
- SMD Operations Maps
- YOTV0910A

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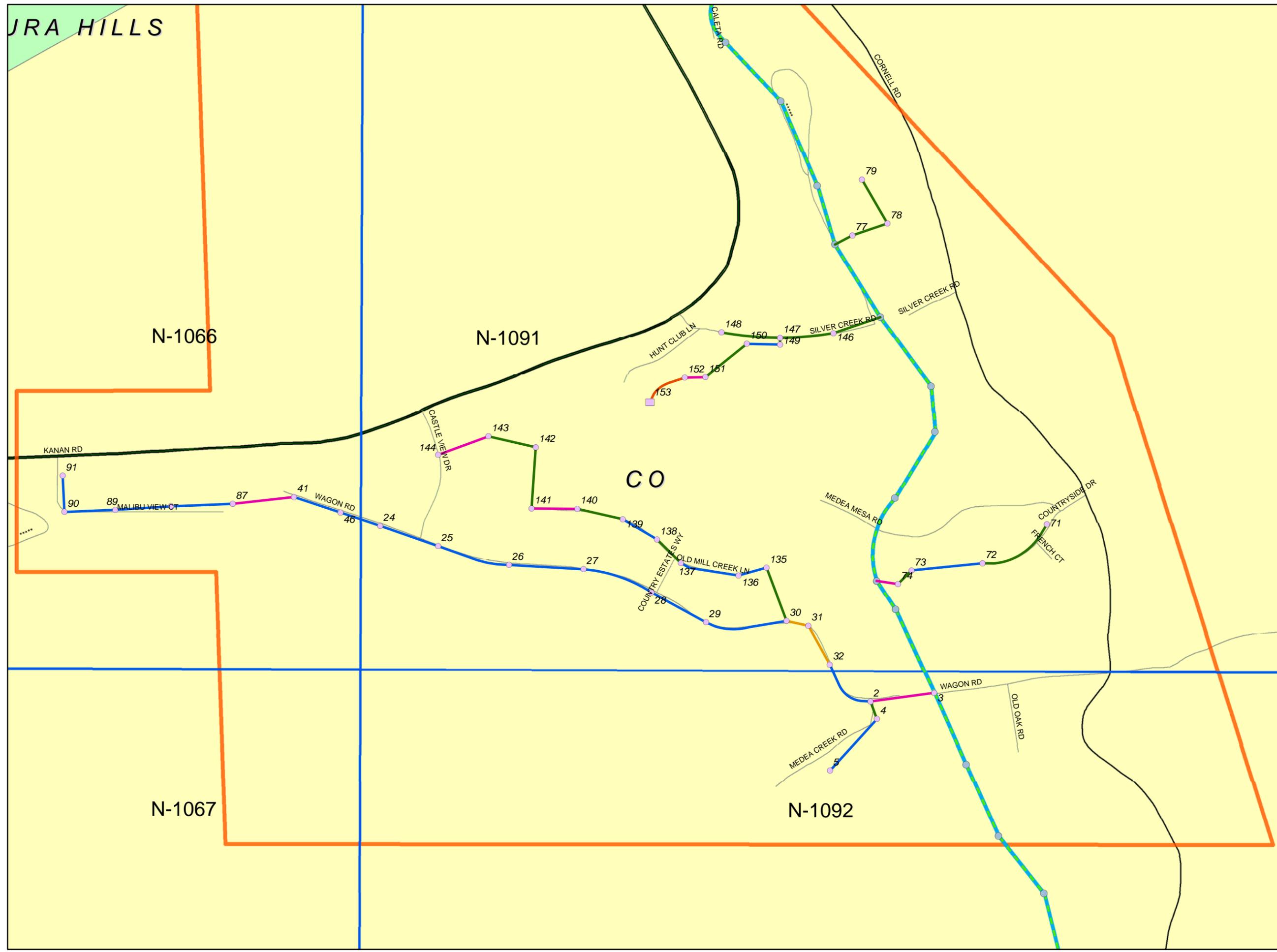
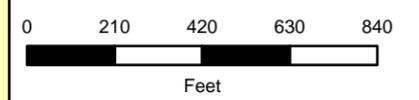


JRA HILLS

ENCLOSURE 2 CCTV PROJECT YOTV0910A

Supervisorial District 5
County Unincorporated

QUICK
MAINTENANCE
RATING
(QMR)



Legend

SMD Sanitary Sewers

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

SMD Manholes

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ENCLOSURE 2
HIGH WATER LEVELS
UNINCORPORATED COUNTY NORTH (Y0TV0910A)
as of 07/10/09

Item No.	QMR	Start MH	End MH	Street	Observation	
1	4231	1091-0074	1091-0075	EASEMENT	High water level	Entire Segment

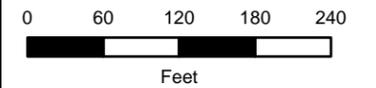
ENCLOSURE 2

CCTV PROJECT

Y0TV0910A

Supervisorial District 5
County Unincorporated

HIGH WATER LEVEL



Legend

— HIGH WATER LEVEL

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

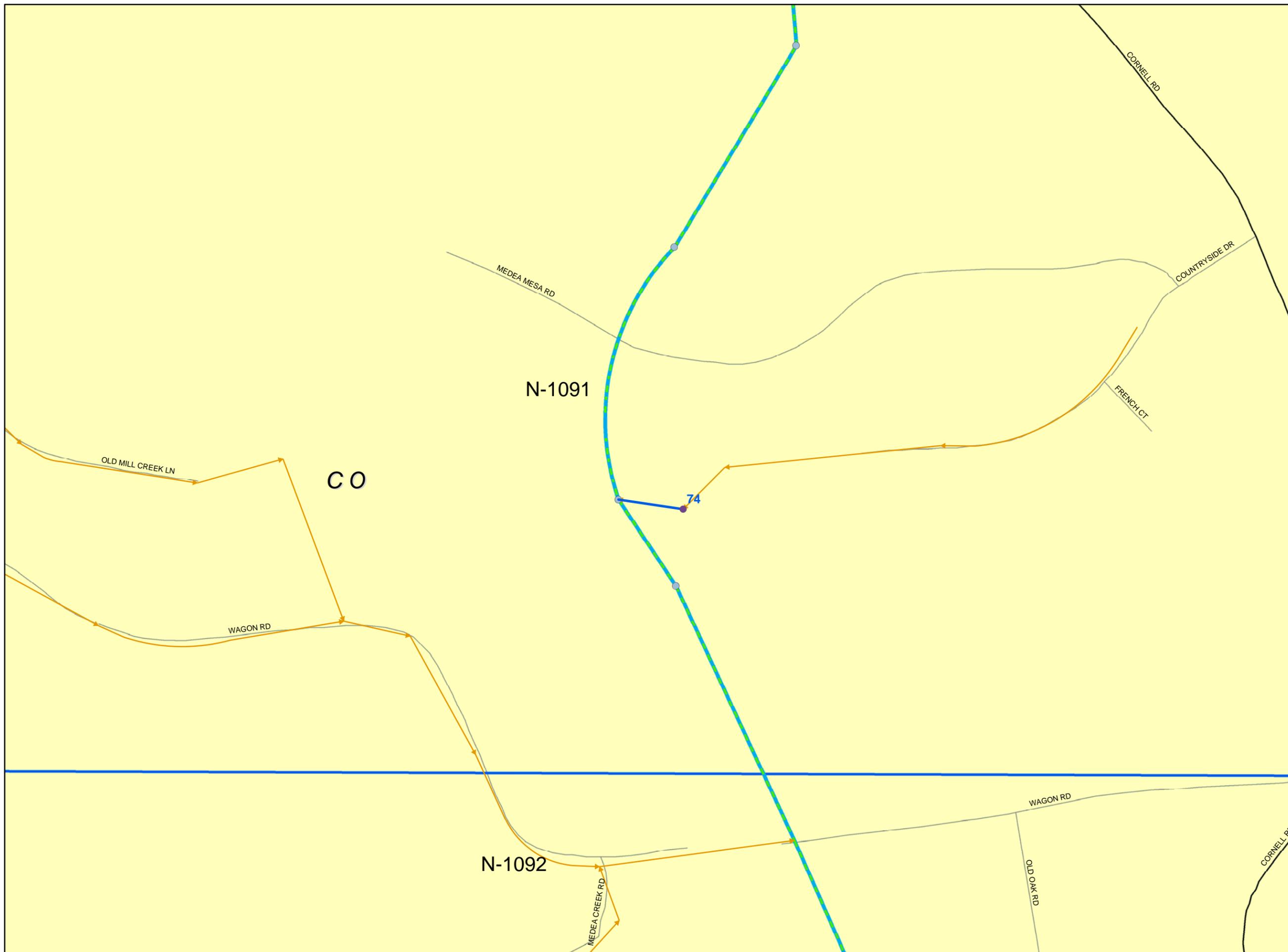
● Non SMD Maintained MH

□ SMD Operations Maps

□ Y0TV0910A

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AUGUST 2012





GAIL FARBER, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

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

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

August 19, 2010

Current Property Owner
3476 Marengo Ave
Altadena, CA 91001

Dear Property Owner:

SEWER LATERAL ROOT INTRUSION 3476 MARENGO AVE, ALTADENA, CALIFORNIA 91001

As the agency responsible for the maintenance of the sanitary sewer system in your area, the County of Los Angeles Consolidated Sewer Maintenance District (District) is providing you with this letter informing you that the sewer lateral serving the property located at 3476 Marengo Ave, Altadena, California 91001, requires maintenance and is in violation of **County Code 20.24.080 Maintenance of Sewer Laterals**, which states:

"All house laterals, industrial connection sewers, septic tank outlet connections to STEP system, and appurtenances thereto 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, and all devices or safeguards which are required by this Division 2 for the operation thereof shall be maintained in good working order."

Using closed-circuit television (CCTV) camera technology, the District recently televised the sanitary sewer mainline and discovered 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

IN REPLY PLEASE

REFER TO FILE:

SM-1

Current Property Owner
August 19, 2010
Page 2

your sewer lateral within 90 days to remove roots and any other obstructions that may cause a sewage backup. Failure to do so may result in future overflows and subject you to civil prosecution, reimbursement costs, and fines up to \$1,000. Reference 20.24.160 Violation - Penalty; 20.24.170 Continued violations; 20.32.690 Reimbursement for repairs and maintenance following violations.

Prior to your plumbing contractor servicing your lateral, please notify the District's sewer maintenance yard in your area at (626) 446-5227 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, Mr. Fernando Villaluna, Sewer Maintenance Division, at (626) 300-3380 or fvillalun@dpw.lacounty.gov.

For your reference, we have enclosed photos of your lateral 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 of Public Works keep the public's sewers clean and in good working order.

Very truly yours,

GAIL FARBER
Director of Public Works

JOHN T. WALKER
Assistant Deputy Director
Sewer Maintenance Division

PK:

Enc.

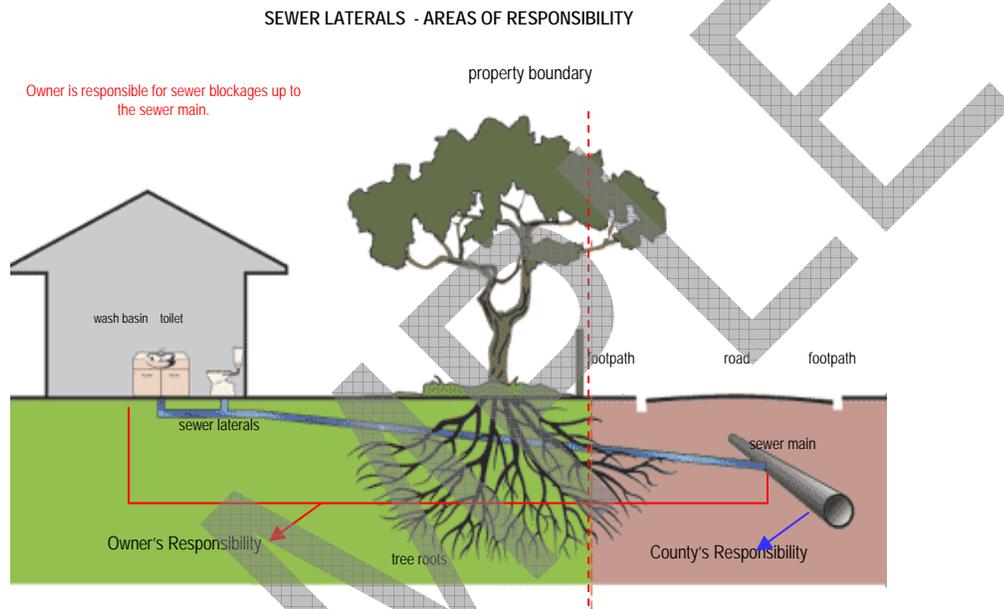
bc: JW, KL, RS, FV, RH, File (Lateral Notice), SPINDLE

3476 MARENGO AVE
ALTADENA
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 backups can cause tremendous damage to the interior of a home. In order to minimize these, the District provides 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 Map

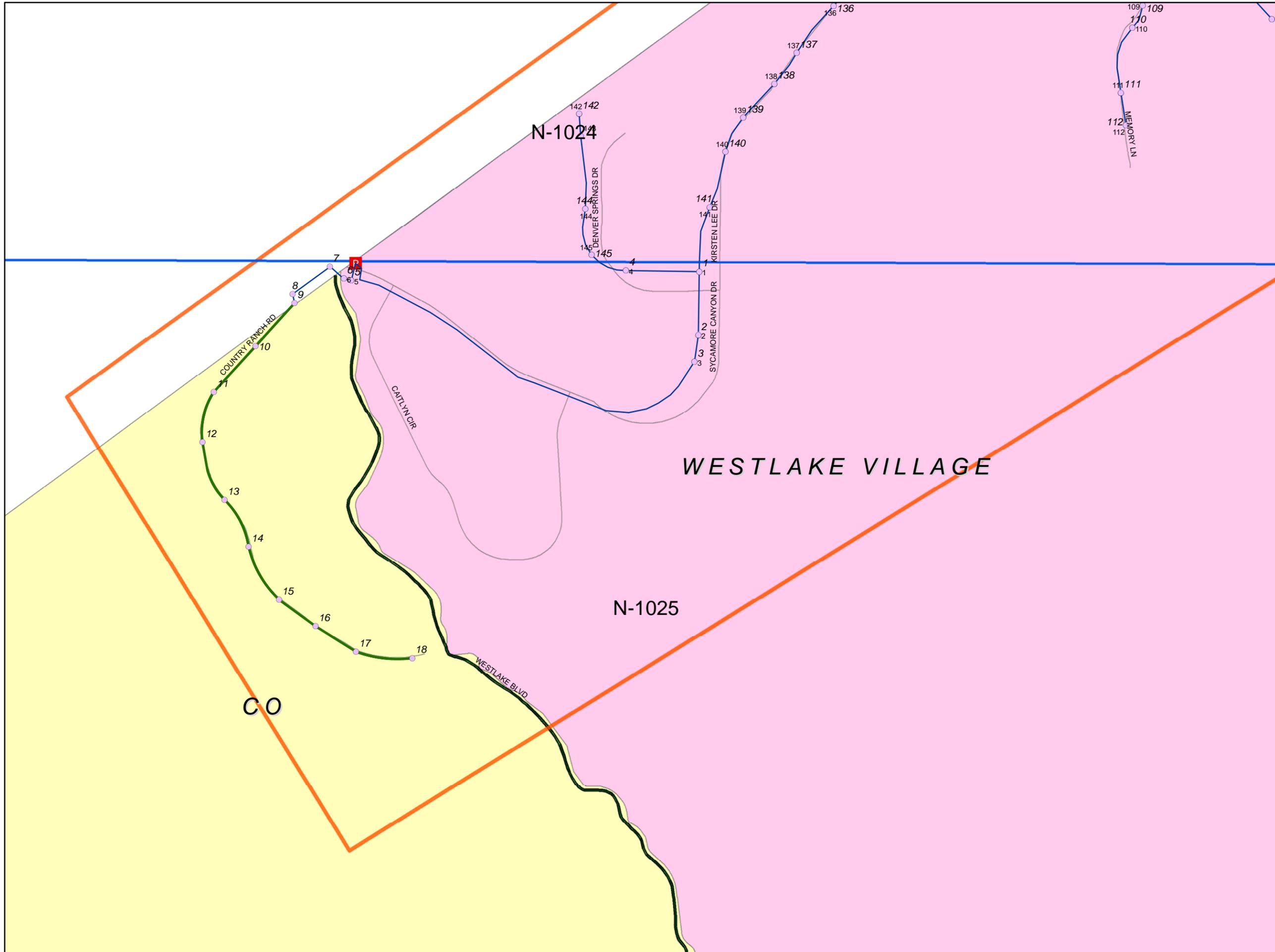
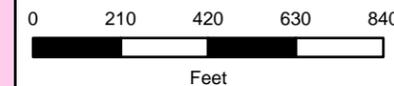
ENCLOSURE 3

CCTV PROJECT

YOTV0910A

Supervisorial District 5
County Unincorporated

QUICK STRUCTURAL RATING (QSR)



Legend

SMD Sanitary Sewers

- QSR
- 1: MINOR
- 2: MINOR TO MODERATE
- 3: MODERATE

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
- YOTV0910A

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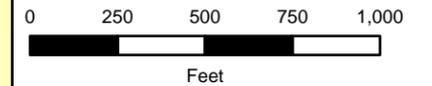
ENCLOSURE 3

CCTV PROJECT

Y0TV0910A

Supervisorial District 5
County Unincorporated

QUICK STRUCTURAL RATING (QSR)



Legend

SMD Sanitary Sewers

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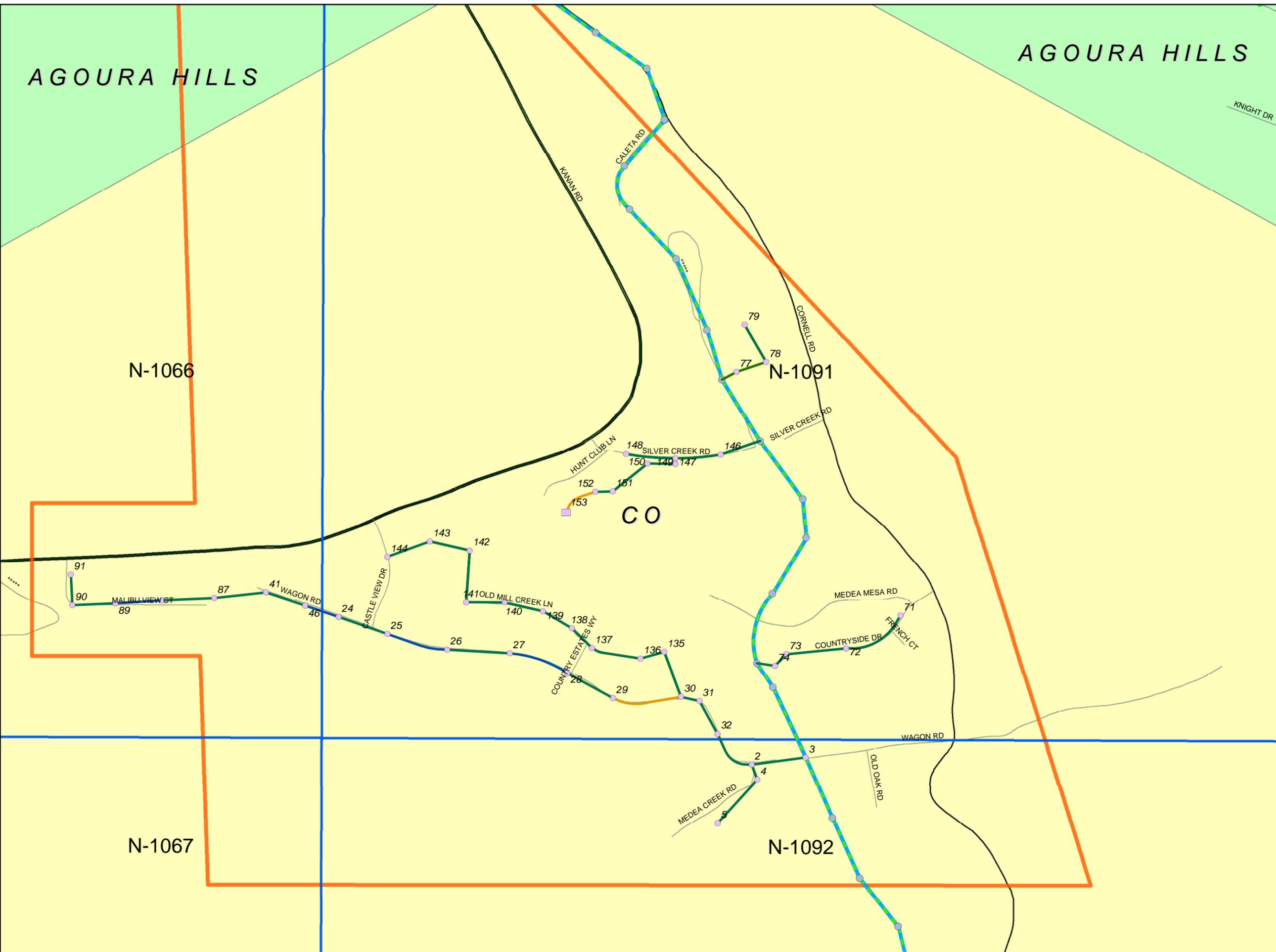
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N-1067

N-1091

N-1092

CO



ENCLOSURE 4:

CCTV Sewer Inspection Project Schedule

CCTV PROJECT SCHEDULE

Unincorporated North Yard

FISCAL YEAR	PROJECT NAME	LENGTH (FT)	STATUS
2005-2006	Y0TV0506F	137,627	COMPLETED
2006-2007	Y0TV0607C	1,757	COMPLETED
2008-2009	Y0TV0809D	38,974	COMPLETED
2009-2010	Y0TV0910A	12,583	COMPLETED
2009-2010	Y0TV0910B	4,177	REPORT IN PROGRESS
2009-2010	Y0TV0910D	38,027	REPORT IN PROGRESS
2012-2013	Y0TV1213A	394,285	FUTURE
2012-2013	Y0TV1213B	107,788	FUTURE
2013-2014	Y0TV1314A	272,626	FUTURE
2013-2014	Y0TV1314B	49,188	FUTURE
2014-2015	Y0TV1415A	455,932	FUTURE
9999-9999	-	3,449	FUTURE

TOTAL (FT): 1,516,413
TOTAL (MILES) 287