Village of Mount Prospect, Illinois

2015 Combined Sewer Televising Condition Assessment



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ABBREVIATIONS

CCTV	-	closed circuit televising
CIP	-	Capital Improvement Plan
CIPP	-	cured-in-place pipe
ESRI	-	Environmental Systems Research Institute, Inc.
GIS	-	Geographic Information System
GPS	-	Global Positioning System
ID	-	identification
MH	-	manhole
MWRDGC	-	Metropolitan Water Reclamation District of Greater Chicago
NASSCO	-	National Association of Sewer Service Companies
PACP	-	Pipeline Assessment Certification Program
PVC	-	polyvinyl chloride
RCP	-	reinforced concrete pipe
VCP	-	vitrified clay pipe
MH	-	Manhole

DEFINITIONS

Infiltration

Water other than wastewater that enters a sewage collection system (including sewer service connections) from the ground through such sources as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.

Inflow

Water other than wastewater that enters a sewage collection system (including sewer service connections) from sources such as roof leaders, cellar drains, yard drains, areadrains, foundation drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm water, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration.

EXECUTIVE SUMMARY

The Village of Mount Prospect owns and operates a combined sewer system that was constructed between the 1920s and 1950s. In 2002, the Village began a comprehensive evaluation of the system which included a field survey to locate all manholes, catch basins and inlets; and televising of the sewers. Each sewer segment televised was evaluated using a structural grading system developed from the Village's Hansen asset management software. Each sewer segment was assigned a condition grade from one to five, with five being the worst. A prioritized multi-year rehabilitation program was then developed to be used as a roadmap for future repairs. That evaluation led to an annual combined sewer rehabilitation program beginning in 2006. From 2006 through 2013, approximately $7.43 million has been spent rehabilitating all of the Grade 4 and 5 sewers, as well as a portion of the Grade 3 sewers.

In 2015, the Village commissioned another program to re-televise all of the sewers that have not been rehabilitated to determine their current conditions. This latest evaluation determined that significant deterioration of the sewers continue. Approximately 32% of the sewers fall into the Grade 4 and 5 categories, and another 22% in the Grade 3 category. The Grade 5 sewers require rehabilitation within one to two years, Grade 4 within three to four years, and Grade 3 within five to ten years. The majority of the structural defects can be rehabilitated by lining the sewers with cured-in-place pipe (CIPP). In most cases, CIPP can be installed without excavation, although a few combined sewers will require excavation and replacement of a section of pipe prior to CIPP installation.

Approximately 18,000 feet of previously lined sewers were also televised to ensure the reliability of the rehabilitation technology. The review showed that all of the previous CIPP repairs televised remain intact and in good condition. This is to be expected since CIPP repairs are designed for a minimum 50-year service life.

Table 1 presents the estimated total project costs for all the recommended rehabilitation work including contingencies and engineering design and construction fees.

TABLE 1

Total Project Cost by Sewer Grade

Item	Suggested Completion Years	Cost
Construction Cost		
Grade 5	2015-2017	$ 3,337,000
Grade 4	2018-2019	$ 4,562,000
Grade 3	2020-2030	$ 7,561,000
Total Project Cost		$15,460,000

1. INTRODUCTION

1.1 General

The Village of Mount Prospect, Illinois is located approximately 22 miles northwest of downtown Chicago in Cook County. The Village encompasses an area of approximately 10.37 square miles. The 2010 Census reported the Village's population as 54,167.

Like many older Illinois communities, portions of the Village's sanitary sewer system include combined sewers (sewers designed and constructed to collect and convey both sanitary sewage and stormwater runoff). The combined sewer system was constructed between the 1920s and 1950s and consists of approximately 260,000 feet of combined sewers ranging in size from 8-inch diameter sewers that serve residential streets to 72-inch diameter interceptors that convey flow to the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) interceptor sewers. The system is located in the central portion of the Village bound approximately by Kensington Road to the north, Mount Prospect Road to the east, Golf Road to the south and Busse Road to the west. New construction of this type of sewer is no longer permitted and separate sanitary and storm sewers are currently required. The pipe material consists primarily of vitrified clay pipe (VCP) and reinforced concrete pipe (RCP). There is also a small quantity of ductile iron and polyvinyl chloride (PVC) truss pipe.

2. PREVIOUS EVALUATION (2002)

2.1 Background

In the early 2000's, the Public Works staff uncovered some combined sewers that were in need of rehabilitation. Because the system was nearing the end of its expected life cycle of 50 to 75 years, the Village decided to undertake a comprehensive evaluation of the entire combined sewer system in 2002. This consisted of the following:

- Perform an Asset Survey to collect attribute information for all inlets, catch basins, manholes and mainline sewers.
- Clean and perform closed circuit televising (CCTV) of approximately 260,000 feet of combined sewer.
- Enter the observations of each inspection into the Village's Hansen asset management software.
- Assess the structural condition and generate an objective, numerical defect rating of each sewer segment televised using the Hansen software rating system.
- Development of a prioritized rehabilitation program based on the structural ratings including expected costs for each repair.
- Provide the Village with an asset inventory of the combined sewers system through a Geographic Information System (GIS) and Hansen Asset Management Software.

2.2 Methodology

2.2.1 Asset Survey

An asset survey was conducted to obtain spatial coordinates for all of the combined sewer structures in the study area. The asset survey served as a base for the GIS generated as part of the project and provided the list of combined sewers for CCTV inspection.

A Trimble® GeoX hand-held Global Positioning System (GPS) unit was used to collect GPS-based data. This unit was used strictly to collect spatial data (coordinates). Where spatial data collection with GPS was not feasible (due to excessive tree cover or other canopy), a Sokkia© Total Station with an SDR33 data collector was utilized. Spatial data was downloaded from the collection devices into Trimble's® GPS Pathfinder Office, where it was exported into an Environmental Systems Research Institute, Inc. (ESRI) "shapefile" for GIS importation. Northing, easting, and elevation and structure identification (IDs) were obtained for a total of 3177 structures in the study area.

Structure ID numbers were recorded as an attribute for each structure that was surveyed. Combined sewer manhole IDs were assigned using the following naming convention: X-CS, where X is the section number from the Village's existing utility atlases and CS is the specific combined sewer manhole within each section. For example, "8S-CS5"is the name for combined sewer manhole

"5" on section "8S" of the Village's utility atlas. Inlets and catch basins are numbered sequentially (starting at one) and are referenced to the manhole (MH) to which they are tributary. For example, "8S-CS5-IN1812" is the name for combined sewer inlet "1812" (which is tributary to "MH 8S-CS5"). Where available, manhole IDs from Mount Prospect's existing combined sewer atlas were used. Where no existing manhole ID was available, one was assigned by the survey crew.

2.2.2 Asset Attribute Information

Asset attribute information was collected for each structure surveyed. Attributes recorded include structure type, materials of construction, inlet and outlet pipe information (locations, material and diameter), direction of flow, and rim to invert depth information. Asset attribute information was collected for inventory purposes and was added to the GIS database.

2.2.3 Closed Circuit Television (CCTV) Inspection

CCTV inspection is utilized to assess the condition of the sewer lines. A specially designed camera is inserted into the sewer and used to visually inspect the interior of the sewer. The camera is either pulled through by a winch at the downstream manhole, or it is mounted to a self-propelled, remote controlled "crawler".

In order to effectively determine the structural condition of the pipe with CCTV inspection, the majority or the interior of the pipe needs to be visible during inspection. Where required, debris and roots are removed prior to televising using a high powered water jet (jetting). Also, in sewers where the water level is high enough to submerge the camera, the water level is lowered by using the jetter ahead of the camera (effectively "pushing" the water out of the way).

The CCTV camera is equipped with lights and is capable of rotating 360 degrees to observe the entire interior of the sewer. As the camera is guided through the pipe, the operator notes the location of any structural defects that are observed as well as the locations of service laterals, root intrusions, pipe size or material changes, and buried manholes. These items are cataloged for later use when assessing the structural condition of the sewer. The CCTV inspection is recorded in both VHS and DVD formats. Written inspection logs documenting the inspection and operator observations accompany the CCTV inspection videos.

An office review was conducted for each CCTV inspection and inspection log. The location (in terms of number of feet from the upstream manhole) and severity of each structural defect was identified and a defect code was assigned. The televising revealed a wide range of construction materials. The majority (96%) of the combined sewers is constructed of either VCP or RCP. The remainder of the sewers (4%) is constructed of either ductile iron or PVC pipe. All of these are common construction materials for both sanitary and combined sewers, although some materials (such as VCP) have been used less frequently in recent years. Each material has advantages and disadvantages to its use. One of the main disadvantages of VCP pipe is that it is very brittle. Incorrect installation and trench settlement often result in cracked or shattered pipe. One of the main disadvantages of RCP pipe is that it is susceptible to hydrogen sulfide deterioration, which reduces the wall thickness (and, therefore, strength) of the pipe.

2.2.4 Hansen Asset Management Software

The Village of Mount Prospect currently uses Hansen Asset Management Software to track and manage portions of its infrastructure. The software stores data for each asset including construction material, date of installation, and inspection and maintenance records. It has built in functions that allow a municipality to prioritize and track maintenance of infrastructure.

Asset survey and inventory data collected in the field was compiled and used to populate the Hansen database for the combined sewer system. In addition, CCTV inspection data was manually entered for each combined sewer using the established defect codes. Each code was assigned a structural defect value that allowed the software to calculate a numerical "structural defect rating".

Hansen allows the user to input many different categories of defects including infiltration/inflow (clear waters entering the sewer); root intrusion; joint condition; debris accumulation; service lateral type and condition; pipe misalignments; cracked pipe; and structural failures. There are several defect codes within each Grade, and each code has an associated defect value. Based on the type and number of defects entered, Hansen calculates four defect ratings for each sewer segment: structural rating, root rating, infiltration/inflow rating, and an overall rating. The overall rating is calculated from a weighted average of the other three ratings. In general, the more severe and numerous the defects are, the higher the rating.

The previous study focused on the structural condition of the combined sewers, and; therefore, only the structural rating was considered significant. The root and infiltration/inflow ratings are significant only from a maintenance perspective.

2.2.5 Condition Grades

After the sewer observation codes were entered into the Hansen software, a condition grade was assigned to each individual sewer. The overall condition grades are defined in Table 2 below.

TABLE 2

Condition Grades

Grade	Description
Grade 5	Sewer segment in severe structural condition with sections of deformed or collapsed pipe.
Grade 4	Sewer segment in very poor structural condition with sections of shattered and broken pipe.
Grade 3	Sewer in poor structural condition, with many sections of cracked or fractured pipe.
Grade 2	Sewer in good condition with only minor defects.
Grade 1	Sewer in very good condition.

Rehabilitation for Grade 5 sewers were recommended for repair within one to two years. Grade 4 sewers were recommended for repair within three to four years. Grade 3 sewers were

recommended for repair within five to ten years. Grade 2 sewers had minor defects that did not require rehabilitation at that time, but were recommended to be re-inspected from time to time to verify that the defects had not worsened.

2.2.6 Rehabilitation Methods

There are several techniques for sewer rehabilitation. Each sewer segment must be reviewed individually to determine which rehabilitation technique(s) is most appropriate given the structural and maintenance condition of the pipe. In short, "one size does not fit all". The following rehabilitation techniques were considered for this project.

Cured-In-Place Pipe (CIPP)

CIPP involves inserting a resin-impregnated flexible liner into an existing deteriorated sewer from one manhole to another. The liner is then expanded to the shape of the sewer using water or air. The medium used to expand the liner is heated to a designated curing temperature which hardens the resin to form a rigid structural repair. After curing, service laterals are reinstated from the inside of the sewer with remotely controlled cutters. The finished product is at least as strong as the original pipe and is expected to have a minimum 50-year design life. The rigid liner does not contain any joints within the repair, which eliminates the possibility of future leaks due to joint separation or root intrusion. Other advantages of this repair method are that it is usually significantly less expensive than open cut replacement, causes minimal disruption; and can be completed in a short amount of time.

CIPP installation is conducted in situ and generally requires no excavation. CIPP can typically be installed through minor to moderately deformed pipe without additional work, although severely deformed pipe must first be excavated and replaced prior to CIPP installation.

Because CIPP is inserted into an existing sewer, the inside diameter of the host sewer will be decreased by the thickness of the liner. However, this decrease in flow capacity is minimal and is offset by the improved structural condition of the pipe. Also, lining with CIPP can increase a pipe's smoothness and reduce root intrusion, resulting in improved flow characteristics and increased capacity.

Sewer Replacement

Where a CIPP repair is not possible due to a partially or fully collapsed pipe, excavation and replacement (E&R) is necessary. This method is generally the most expensive and most disruptive technique. In most cases, an E&R repair is only necessary on a portion of sewer segment. After the repair is complete, a full manhole-to-manhole liner is typically installed to complete the rehabilitation of the sewer section. All sewers requiring an E&R repair are grouped into Grade 5.

2.2.7 Previous Recommendations

Of the approximately 260,000 feet of combined sewers inspected in the previous study, 8% were in severe structural condition (Grade 5) requiring rehabilitation within 1 to 2 years, 11% were in very

poor structural condition (Grade 4) requiring rehabilitation within 3 to 4 years, 21% had moderate structural defects (Grade 3 sewers) requiring rehabilitation within 5 to 10 years, 36% had minor structural defects (Grade 2 sewers) requiring monitoring and 25% had no structural defects (Grade 1 sewers). The most common structural defects found were cracked and shattered VCP and hydrogen sulfide deterioration of RCP.

The majority of the structural defects were recommended to be rehabilitated using CIPP. In most cases, the CIPP could be installed without excavation, although some combined sewers required excavation and replacement of a section of pipe prior to CIPP installation. The estimated total project cost for all rehabilitation was $14,426,000 to be completed over a ten-year period as shown in Table 3.

TABLE 3

2002 - Total Project Cost by Grade

Grade	Cost
Grade 5	$ 2,480,000
Grade 4	$ 2,548,000
Grade 3	$ 5,240,000
Grade 2	$ 4,158,000
Grade 1	$ 0
Total Project Cost	$14,426,000

2.2.8 Previous Project Funding

In October 2005, a Water and Sewer Rate Study and Combined Sewer Project Funding Solution was presented by the Director of Finance to provide a funding source for the combined sewer project as well as correct deficit spending in the Water and Sewer Fund.

It was recommended that the Five-Year Capital Improvement Plan (CIP) (2006-2010) include an annual budget of $1 million to fund the combined sewer repairs. This resulted in an implementation of a monthly service fee for all users of $5.00.

2.2.9 Rehabilitation Work Completed to Date

The first combined sewer rehabilitation program was conducted in 2006. The program continued annually through 2013. Table 4 lists the annual project totals for both CIPP and spot repairs.

TABLE 4

Sewer Rehabilitation Annual Costs

Sewer Rehabilition Year	Cured-In-Place Pipe	E&R	Total Year End Cost
2006	$1,000,378	$ 123,814	$1,124,192
2007	$ 865,965	$ 206,132	$1,072,097
2008	$ 904,183	$ 185,484	$1,089,667
2009	$ 812,175	$ 90,574	$ 902,749
2010	$ 836,543	$ 160,247	$ 996,790
2011	$ 504,157	$ 246,825	$ 750,982
2012	$ 585,820	$ 263,494	$ 849,314
2013	$ 404,863	$ 241,195	$ 646,058
Total	$5,914,084	$1,517,765	$7,431,849

It should be noted that approximately 20% of the total rehabiliation dollars spent was for the critical Grade 5 E&R repairs. The significance of this value will be discussed later in this report.

Table 5 lists the percentages of sewers rehabilitated by Grade.

TABLE 5

2002 Sewer Rehabilitation Completed Recommendations

Sewer Grade	Rehabilitation Complete
5	100%
4	100%
3	31%
2	8%
1	1%

3. 2015 EVALUATION

3.1 General

All recommended repairs for Grades 4 and 5 sewers have been completed as well as approximately 31% of the Grade 3 repairs. Since its been approximately 13 years since the combined sewer system was last televised, the Village decided to re-inspect all of the sewers that were not rehabilitated to re-evaluate their conditions and develop an updated prioritization schedule. In addition, approximately 18,000 feet of rehabilitated sewers were re-televised to monitor the integrity of the repair work. The work was completed by Visu-Sewer of Illinois, LLC between October 2014 and July 2015. In total, approximately 210,000 feet of combined sewer was inspected, as shown in Exhibit A.

3.2 Hansen Rating System

All inspection data from each sewer televised was manually entered into the Village's Hansen Asset Management Software, similar to the previous study. However, the observation and defect codes used were updated to the latest version of the Pipeline Assessment Certification Program (PACP) developed by the National Association of Sewer Service Companies (NASSCO). This coding system was developed to provide the industry with the ability to accurately assess their infrastructure using tools that are common to the nation as a national standard. The MWRDGC has recently required all sewer televising be conducted in conformance with PACP standards. Although the actual codes differ from those used in the previous evaluation, the same basic logic is used for assigning sewer segments a defect rating Grade as listed in Table 2.

Appendix 1 lists the observation codes used for the evaluations. Each code was assigned a numerical defect rating from 1 – 5. Minor defects that have little impact on the structural integrity of the sewer were assigned a rating of 1, while significant defects that severely affect the structural integrity were assigned a rating of 5. The Hansen software also totalizes non-structural defects such as infiltration/inflow (clear water entering the sewer), root intrusion, accumulation of mineral deposits and debris accumulation. However, these are operation and maintenance issues. This study, as well as the previous study, focused only on the structural condition of the sewers. An overall structural rating was calculated for each sewer section using the following formula:

> Overall Structural Rating = (No. of Grade 5 defects x 5) + (No. of Grade 4 defects x 4) + (No. of Grade 3 defects x3) + (No. of Grade 2 defects x 2) + (No. of Grade 1 defects x 1)

It should be noted that the prioritization list is not based solely on the overall structural rating since a sewer segment with a high number of smaller, less significant defects may have an overall structural rating higher than a sewer segment that has only one or two significant, Grade 5 defects. For this reason, the priority list is based first on the worst defect within a sewer segment, then on the overall structural rating within that Grade. This is to ensure that a higher priority is placed on

rehabilitating a sewer segment with a single severe defect (Grade 5) rather than a sewer segment with numerous minor defects (Grade 3).

3.3 Recommended Repairs

Appendix 2 contains the prioritization table for the recommended rehabilitation work first sorted from Grade 5 to Grade 1, then by the overall structural rating. Appendix 3 is sorted by the upstream manhole ID number to assist in finding a specific pipe segment. As with the previous study, rehabilitation for Grade 5 sewers are recommended for repair within one to two years. Grade 4 sewers are recommended for repair within three to four years. Grade 3 sewers were recommended for repair within five to ten years. Table 6 shows the total project costs broken down by overall condition grade.

TABLE 6

2015 Evaluation Project Costs - Categories 3, 4 and 5

Item	Cost
Construction Cost	
Grade 5	$ 2,780,000
Grade 4	$ 3,800,000
Grade 3	$ 6,300,000
Subtotal	$12,880,000
Contingency (10%)	$ 1,290,000
Design and Construction Engineering (10%)	$ 1,290,000
Total Project Cost	$15,460,000

It should be noted that of the estimated total rehabilitation costs for the Grades 3, 4 and 5 repairs, only $35,000 (0.3%) of it is for critical repairs requiring excavation and replacement. This is compared to approximately $1.52 million (20%) spent on E&R repairs from the 2002 evaluation.

Review of the 18,000 feet of lined sewers showed that all of the previous CIPP repairs televised remain intact and in good condition. This is to be expected since CIPP repairs are designed for a minimum 50-year service life.

4. REHABILITATION SCHEDULE

An important factor to realize is that all sewers continue to degrade with time. Ultimately, every sewer in every system will require rehabilitation or replacement. The Village has been proactive in inspecting, evaluating and repairing their deteriorated combined sewer system over the past 13 years. By continuing with this diligent rehabilitation program, the burden of repairing the system can be planned and budgeted within the financial capabilities of the Village.

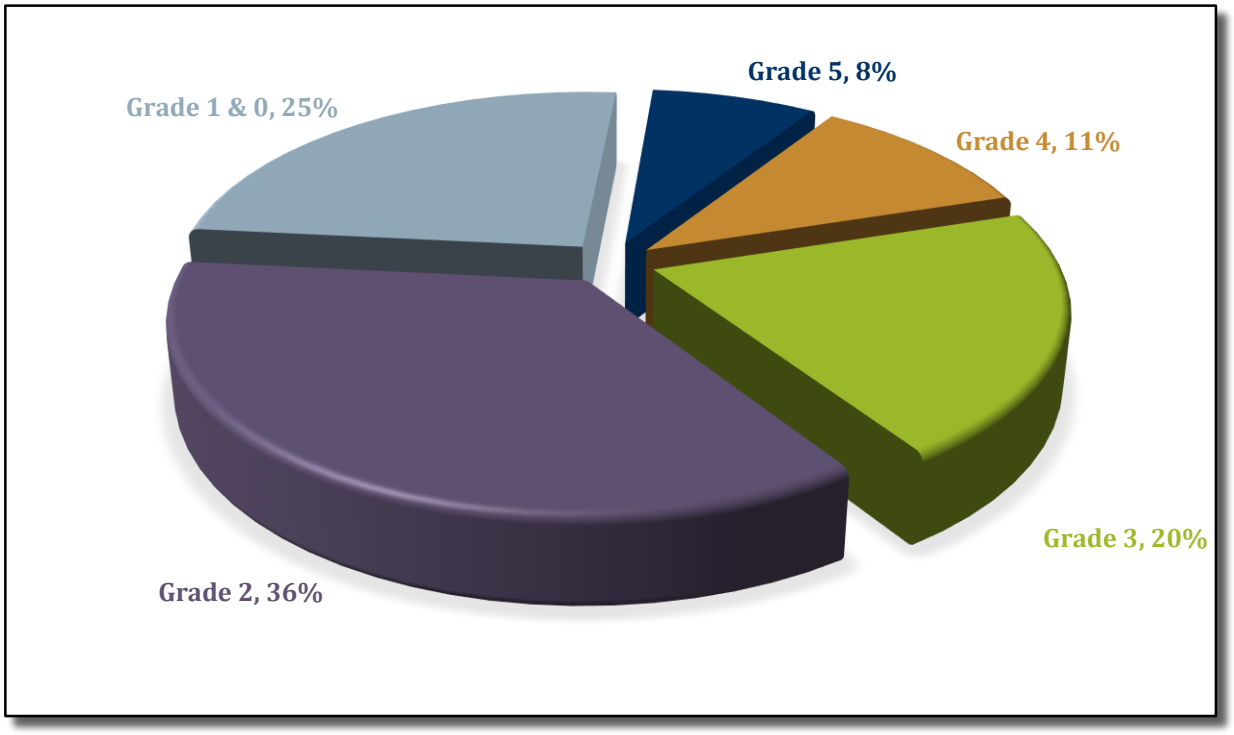
The Village has budgeted approximately $1 million each year for a combined sewer rehabilitation project. Based on this annual budget, rehabilitation of the Grade 5, 4 and 3 sewers will take approximately 3, 4 and 6 years, respectively. Since the Grade 5 repairs should be completed within one to two years, the Village should consider accelerating the program over the next couple of years. While CIPP is proposed for individual segments, it is often more cost-effective to line multiple segments at a time. Therefore, some cost savings may be achieved by re-grouping the rehabilitation so that consecutive sewers are lined in the same year, regardless of priority. This is why some previous Grade 2 repairs were completed before completion of all Grade 3 repairs.

5. COMPARISON BETWEEN 2002 AND 2015 EVALUATIONS

This section of the report discusses the findings of the 2002 and 2015 evaluations to better understand the rate at which the combined sewers are deteriorating. Figure 1 illustrates the percentage of sewers from the 2002 evaluation grouped by defect grade.

FIGURE 1

Structural Pipe Grade Totals - 2002

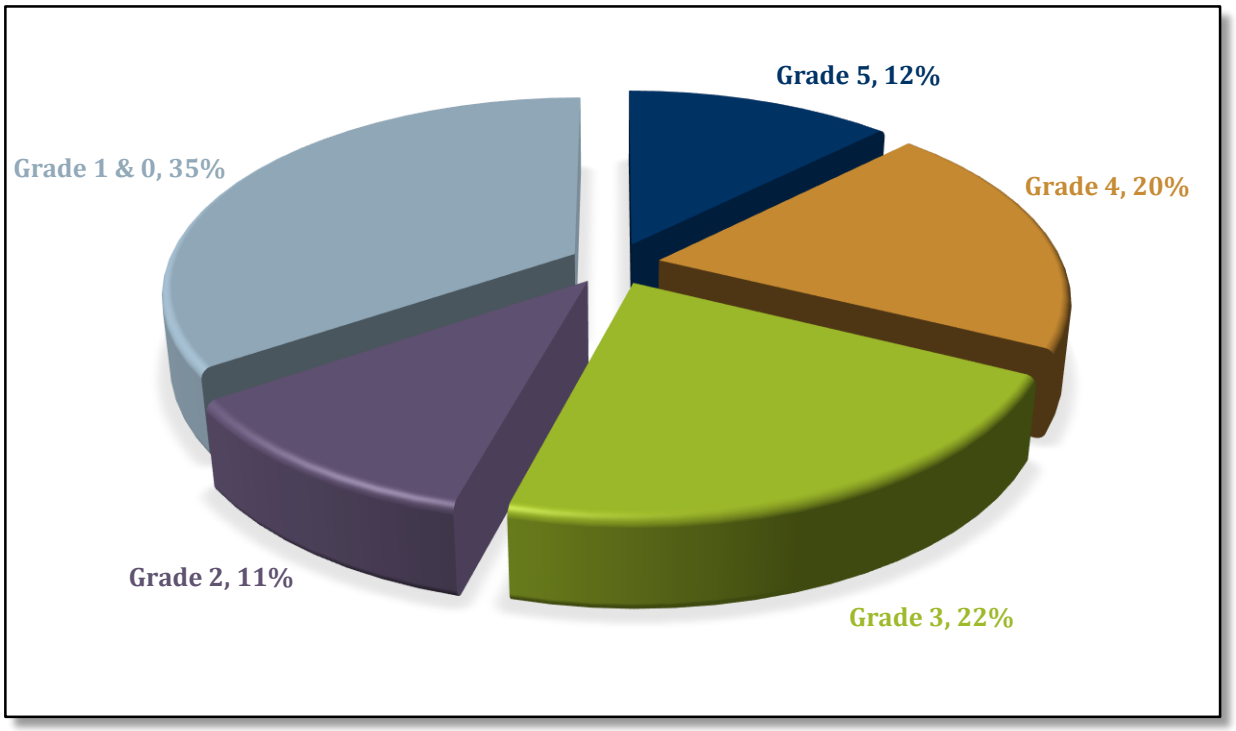


As the figure shows, approximately 40% of the sewers inspected fell into the Grades 3, 4 and 5 categories. These sewers ranged in age from approximately 50 to 80 years old. Recall that all of the Grade 4 and 5 repairs were completed as well as approximately 31% of the Grade 3 sewers.

Figure 2 illustrates the percentage of sewers from the 2015 evaluation grouped by defect grade.

FIGURE 2

Structural Pipe Grade Totals - 2015



As the figure shows, in the past 13 years, approximately 32% of the previous Grades 1, 2 and 3 defects are now Grades 4 and 5.

Figure 3 shows the percentages of previous Grade 1 sewers that are now Grades 1, 2, 3, 4 or 5.

FIGURE 3

2002 Pipe Segment Grade 1

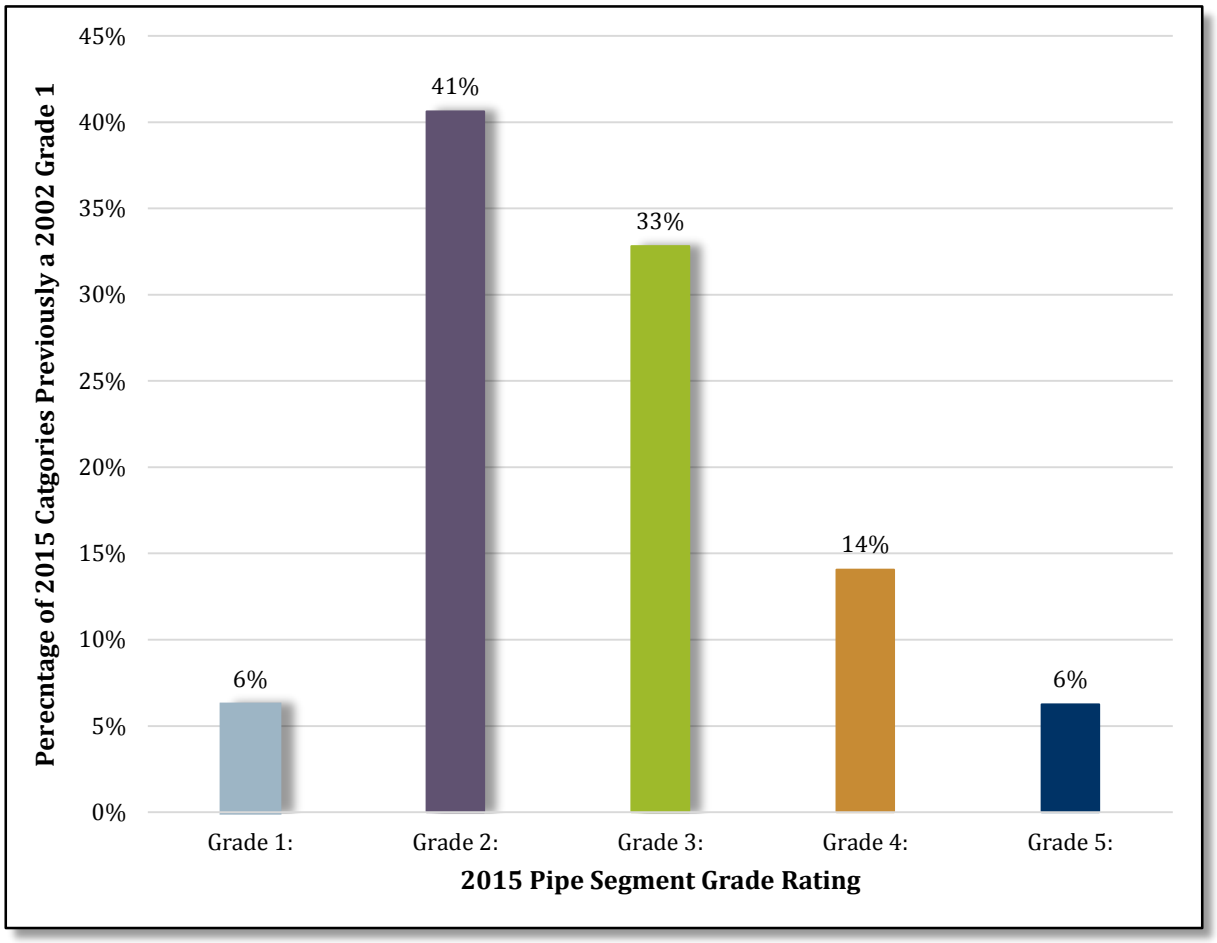


Figure 4 shows the percentage of previous Grade 2 sewers that are now Grades 2, 3, 4 or 5.

FIGURE 4

2002 Pipe Segment Grade 2

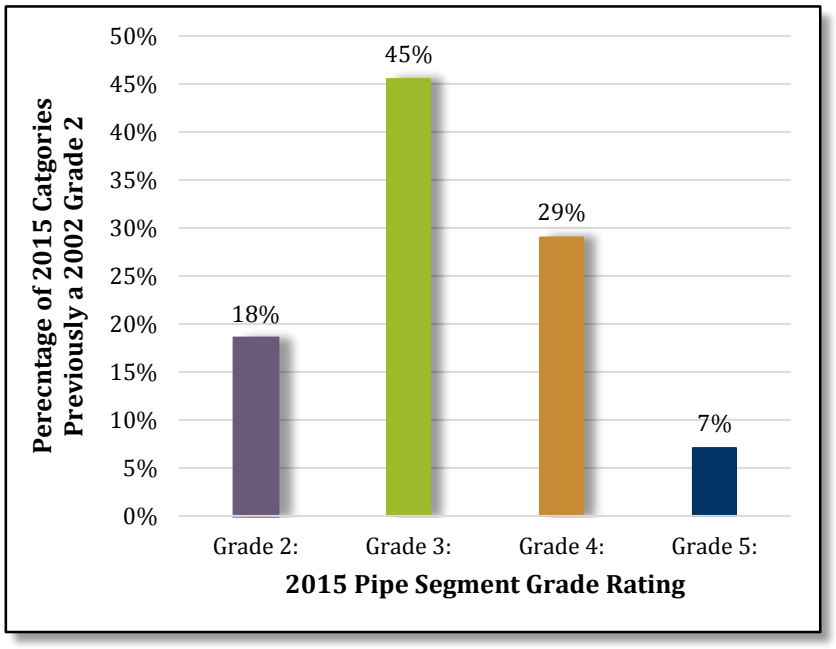
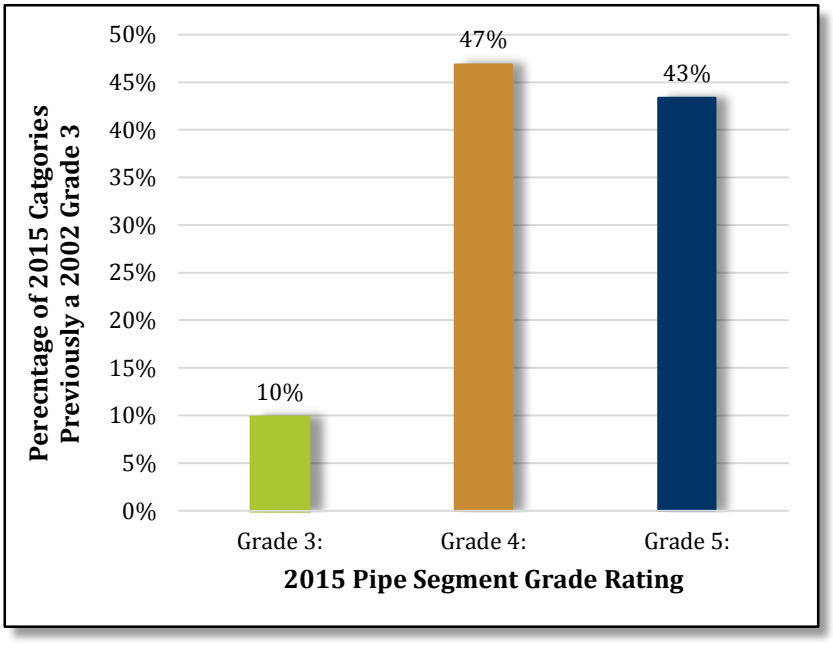


Figure 5 shows the percentage of previous Grade 3 sewers that now Grades 3, 4 or 5.

FIGURE 5

2002 Pipe Segment Grade 3



Structural Defect Code	Description	Grade Factor
B	**BROKEN (5-15)**	
B1	PIPE BROKEN - DEFECT NOTED AT ONE CLOCK POSITION (5-15)	3.00
B2	PIPE BROKEN - DEFECT EXPANDS OVER TWO CLOCK POSITIONS (5-15)	4.00
B3	PIPE BROKEN - DEFECT EXPANDS OVER THREE CLOCK POSITIONS (5-15)	5.00
BSV	BROKEN -SOIL VISIBLE BEYOND DEFECT (5-15)	5.00
BSV-C	BROKEN - SOIL VISIBLE BEYOND DEFECT CONTINUOUS (5-15)	5.00
BVV	BROKEN-VOID VISIBLE BEYOND DEFECT (5-15)	5.00
BVV-C	BROKEN-VOID VISIBLE BEYOND DEFECT CONTINOUS (5-15)	5.00
BRICKWORK	**BRICKWORK (5-77)**	
DB	BRICKWORK - DISPLACED (5-75)	3.00
DI	BRICKWORK - DROPPED INVERT (5-75)	5.00
MB	BRICKWORK - MISSING (5-75)	4.00
MM-L	MISSING MORTAR - LARGER (5-75)	3.00
MM-M	MISSING MORTAR - MEDIUM (5-75)	3.00
MM-S	MISSING MORTAR - SMALL (5-75)	2.00
C	**CRACK (5-1)**	
CC	CIRCUMFERENTIAL CRACK (5-2)	1.00
CH2	HINGE CRACK - TWO CRACKS (5-2)	4.00
CH2-C	CONTINUOUS HINGE CRACK - TWO CRACKS (5-2)	4.00
CH3	HINGE CRACK - THREE CRACKS (5-2)	5.00
CH3-C	CONTINUOUS HINGE CRACK - THREE CRACKS(5-2)	5.00
CH4	HINGE CRACK - FOUR CRACKS OR GREATER (5-2)	5.00
CH4-C	CONTINUOUS HINGE CRACK - FOUR CRACKS OR GREATER (5-2)	5.00
CL	LONGITUDINAL CRACK (5-2)	2.00
CL-C	CONTINUOUS LONGITUDINAL CRACK - (5-2)	2.00
CM	MULTIPLE CRACK (5-2)	3.00
CM-C	CONTINUOUS MULTIPLE CRACK - (5-2)	3.00
CS	SPIRAL CRACK (5-2)	2.00
CS-C	CONTINUOUS SPIRAL CRACK - (5-2)	2.00
D	**DEFORMED (5-19)**	
D1	PIPE DEFORMED - LESS THAN 10%	4.00
D1-C	CONTINUOUS PIPE DEFORMED - LESS THAN 10%	4.00
D2	PIPE DEFORMED - GREATER THAN 10%	5.00
D2-C	CONTINUOUS PIPE DEFORMED - GREATER THAN 10%	5.00
DH	DEFORMED HORIZONTALLY (BRICK) (5-19)	5.00

Structural Defect Code	Description	Grade Factor
D	**DEFORMED (5-19)**	
DH-C	CONTINUOUS DEFORMED HORIZONTALLY - (BRICK)(5-19)	5.00
DV	DEFORMED VERTICALLY (BRICK) (5-19)	5.00
DV-C	CONTINUOUS DEFORMED VERTICALLY - (BRICK)(5-19)	5.00
F	**FRACTURE (5-7)**	
FC	CIRCUMFERENTIAL FRACTURE (5-7)	2.00
FH2	HINGE FRACTURE - TWO FRACTURES (5-7)	4.00
FH2-C	CONTINUOUS HINGE FRACTURE - TWO FRACTURES (5-7)	4.00
FH3	HINGE FRACTURE - THREE FRACTURES (5-7)	5.00
FH3-C	CONTINUOUS HINGE FRACTURE - THREE FRACTURES (5-7)	5.00
FH4	HINGE FRACTURE - FOUR FRACTURES OR GREATER (5-7)	5.00
FH4-C	CONTINUOUS HINGE FRACTURE - FOUR FRACTURES OR GREATER (5-7)	5.00
FL	LONGITUDINAL FRACTURE (5-7)	3.00
FL-C	CONTINUOUS LONGITUNDINAL FRACTURE (5-7)	3.00
FM	MULTIPLE FRACTURE (5-7)	4.00
FM-C	CONTINUOUS MULTIPLE FRACTURE (5-7)	4.00
FS	SPIRAL FRACTURE (5-7)	3.00
FS-C	CONTINUOUS SPIRAL FRACTURE (5-7)	3.00
H	**HOLE (5-17)**	
H1	HOLE IN PIPE - NOTED AT ONE CLOCK POSITION	3.00
H2	HOLE IN PIPE - DEFECT EXPANDS OVER TWO CLOCK POSITIONS (5-17)	4.00
H3	HOLE IN PIPE - DEFECT EXPANDS OVER THREE CLOCK POSITIONS (5-17)	5.00
HSV	HOLE-SOIL VISIBLE BEYOND DEFECT (5-17)	5.00
HSV-C	CONTINUOUS HOLE IN PIPE- SOIL VISIBLE BEYOND DEFECT	5.00
HVV	HOLE-VOID VISIBLE BEYOND DEFECT (5-17)	5.00
HVV-C	CONTINUOUS HOLE IN PIPE - VOID VISIBLE BEYOND DEFECT	5.00
J	**JOINT (5-26)**	
JAL	JOINT ANGULAR - LARGE (5-26)	2.00
JAL-C	CONTINUOUS JOINT ANGULAR - LARGE	2.00
JAM	JOINT ANGULAR - MEDIUM (5-26)	1.00
JAM-C	CONTINUOUS JOINT ANGULAR - MEDIUM	1.00
JOL	JOINT OFFSET (DISPLACED) - LARGE (5-26)	2.00
JOL-C	CONTINUOUS JOINT OFFSET (DISPLACED) - LARGE	2.00
JOM	JOINT OFFSET (DISPLACED) - MEDIUM (5-26)	1.00
JOM-C	CONTINUOUS JOINT OFFSET (DISPLACED) - MEDIUM	1.00

Structural Defect Code	Description	Grade Factor
J	**JOINT (5-26)**	
JSL	JOINT SEPARATED (OPEN) - LARGE (5-26)	2.00
JSL-C	CONTINUOUS JOINT SEPARATED (OPEN) - LARGE	2.00
JSM	JOINT SEPARATED (OPEN) - MEDIUM (5-26)	1.00
JSM-C	CONTINUOUS JOINT SEPARATED (OPEN) - MEDIUM	1.00
K	**BUCKLING (5-45)**	
KD	DIMPLING BUCKLING (5-45)	0.00
KD-C	DIMPLING BUCKLING CONTINUOUS	0.00
KI	INVERSE CURVATURE (5-45)	0.00
KI-C	INVERSE CURVATURE CONTINUOUS	0.00
KW	WALL BUCKLING (5-45)	0.00
KW-C	WALL BUCKLING - CONTINUOUS	0.00
LF	**LINING FAILURE (5-49)**	
LFAC	ABANDONED CONNECTION (5-49)	0.00
LFAS	ANNULAR SPACE (5-49)	3.00
LFB	BLISTERED LINING (5-49)	3.00
LFB-C	CONTINUOUS BLISTERED LINING	3.00
LFBK	BUCKLED LINING (5-49)	3.00
LFBK-C	CONTINUOUS BUCKLED LININING	3.00
LFBU	BULGES (5-50)	3.00
LFBU-C	CONTINUOUS BULGES	3.00
LFCS	SERVICE CUT SHIFTED (5-49)	3.00
LFD	DETACHED LINING (5-49)	3.00
LFDC	DISCOLORATION (5-50)	3.00
LFD-C	CONTINUOUS DETACHED LINING	3.00
LFDC-C	CONTINUOUS DISCOLORATION	3.00
LFDE	DEFECTIVE END (5-49)	3.00
LFDL	DELAMINATION (5-50)	3.00
LFDL-C	CONTINUOUS DELAMINATION	3.00
LFOC	OVERCUT SERVICE (5-49)	3.00
LFPH	PINHOLES (5-50)	3.00
LFPH-C	CONTINUOUS PINHOLES	3.00
LFRS	RESIN SLUG (5-50)	3.00
LFUC	UNDERCUT SERVICE (5-49)	3.00
LFW	WRINKLED LINING (5-49)	3.00
LFW-C	CONTINUOUS WRINKLED LINING	3.00

Structural Defect Code	Description	Grade Factor
LF	**LINING FAILURE (5-49)**	
LFZ	LINING FAILURE OTHER	0.00
RP	**POINT REPAIR (5-71)**	
RPL	LOCALIZED PIPELINER (5-69)	0.00
RPL-D	LOCALIZED PIPELINER - DEFECTIVE (5-69)	4.00
RPP	PATCH REPAIR (5-69)	0.00
RPP-D	PATCH REPAIR - DEFECTIVE (5-69)	4.00
RPR	PIPE REPLACED (5-69)	0.00
RPR-D	PIPE REPLACED - DEFECTIVE (5-69)	4.00
RPZ	POINT REPAIR - OTHER (5-69)	0.00
RPZ-D	POINT REPAIR OTHER - DEFECTIVE (5-69)	0.00
S	**SURFACE DAMAGE (5-31)**	
SAM-C	AGGREGATE MISSING - CHEMICAL (5-31)	4.00
SAM-CC	CONTINUOUS AGGREGATE MISSING - CHEMICAL	4.00
SAM-M	AGGREGATE MISSING - MECHANICAL (5-31)	4.00
SAM-MC	CONTINUOUS AGGREGATE MISSING - MECHANICAL	4.00
SAM-Z	AGGREGATE MISSING - CAUSE NOT EVIDENT (5-31)	4.00
SAM-ZC	CONTINUOUS AGGREGATE MISSING - CAUSE NOT EVIDENT	4.00
SAP-C	AGGREGATE PROJECTING - CHEMICAL (5-31)	3.00
SAP-CC	CONTINUOUS AGGREGATE PROJECTING - CHEMICAL	3.00
SAP-M	AGGREGATE PROJECTING - MECHANICAL (5-31)	3.00
SAP-MC	CONTINUOUS AGGREGATE PROJECTING - MECHANICAL	4.00
SAP-Z	AGGREGATE PROJECTING - CAUSE NOT EVIDENT (5-31)	3.00
SAP-ZC	CONTINUOUS AGGREGATE PROJECTING - CAUSE NOT EVIDENT	3.00
SAV-C	AGGREGATE VISIBLE - CHEMICAL (5-31)	3.00
SAV-CC	CONTINUOUS AGGREGATE VISIBLE- CHEMICAL	3.00
SAV-M	AGGREGATE VISIBLE - MECHANICAL (5-31)	3.00
SAV-MC	CONTINUOUS AGGREGATE VISIBLE - MECHANICAL	3.00
SAV-Z	AGGREGATE VISIBLE - CAUSE NOT EVIDENT (5-31)	3.00
SAV-ZC	CONTINOUS AGGREGATE VISIBLE - CAUSE NOT EVIDENT	3.00
SCP	CORROSION METAL PIPE (5-32)	3.00
SMW-C	MISSING WALL CHEMICAL ATTACK (5-32)	5.00
SMW-CC	CONTINUOUS MISSING WALL - CHEMICAL	5.00
SMW-M	MISSING WALL - MECHANICAL (5-32)	5.00
SMW-MC	CONTINUOUS MISSING WALL - MECHANICAL	5.00
SMW-Z	MISSING WALL - CAUSE NOT EVIDENT (5-32)	5.00

Structural Defect Code	Description	Grade Factor
S	**SURFACE DAMAGE (5-31)**	
SMW-ZC	CONTINUOUS MISSING WALL - CAUSE NOT EVIDENT	5.00
SRC-C	REINFORCEMENT CORRODED - CHEMICAL (5-31)	5.00
SRC-CC	CONTINUOUS REINFORCEMENT CORRODED - CHEMICAL	5.00
SRC-M	REINFORCEMENT CORRODED - MECHANICAL (5-31)	5.00
SRC-MC	CONTINUOUS REINFORCEMENT CORRODED - MECHANICAL	5.00
SRC-Z	REINFORCEMENT CORRODED - CAUSE NOT EVIDENT (5-31)	5.00
SRC-ZC	CONTINUOUS REINFORCEMENT CORRODED - CAUSE NOT EVIDENT	5.00
SRI-C	ROUGHNESS INCREASED - CHEMICAL (5-31)	1.00
SRI-CC	CONTINUOUS ROUGHNESS INCREASED - CHEMICAL	1.00
SRI-M	ROUGHNESS INCREASED - MECHANICAL (5-31)	1.00
SRI-MC	CONTINUOUS ROUGHNESS INCREASED - MECHANICAL	1.00
SRI-Z	ROUGHNESS INCREASED - CAUSE NOT EVIDENT (5-31)	1.00
SRI-ZC	CONTINUOUS ROUGHNESS INCREASED - CAUSE NOT EVIDENT	1.00
SRP-C	REINFORCEMENT PROJECTING - CHEMICAL (5-31)	3.00
SRP-CC	CONTINUOUS REINFORCEMENT PROJECTING - CHEMICAL	3.00
SRP-M	REINFORCEMENT PROJECTING - MECHANICAL (5-31)	3.00
SRP-MC	CONTINUOUS REINFORCEMENT PROJECTING - MECHANICAL	3.00
SRP-Z	REINFORCEMENT PROJECTING -CAUSE NOT EVIDENT (5-31)	3.00
SRP-ZC	CONTINUOUS REINFORCEMENT PROJECTING - CAUSE NOT EVIDENT	3.00
SRV-C	REINFORCEMENT VISIBLE - CHEMICAL (5-31)	5.00
SRV-CC	CONTINUOUS REINFORECEMENT VISIBLE - CHEMICAL	5.00
SRV-M	REINFORCEMENT VISIBLE - MECHANICAL (5-31)	5.00
SRV-MC	CONTINUOUS REINFORCEMENT VISIBLE - MECHANICAL	5.00
SRV-Z	REINFORCEMENT VISIBLE - CAUSE NOT EVIDENT (5-31)	5.00
SRV-ZC	CONTINUOUS REINFORCEMENT VISIBLE - CAUSE NOT EVIDENT	5.00
SSS-C	SURFACE SPALLING - CHEMICAL ATTACK (5-32)	2.00
SSS-CC	CONTINUOUS SURFACE SPALLING - CHEMICAL	2.00
SSS-M	SURFACE SPALLING - MECHANICAL (5-32)	2.00
SSS-MC	CONTINUOUS SURFACE SPALLING - MECHANICAL	2.00
SSS-Z	SURFACE SPALLING - CAUSE NOT EVIDENT (5-32)	2.00
SSS-ZC	CONTINUOUS SURFACE SPALLING - CAUSE NOT EVIDENT	2.00
SZ-C	SURFACE DAMAGE OTHER - CHEMICAL ATTACK (5-32)	0.00
SZ-CC	CONTINUOUS SURFACE DAMAGE OTHER - CHEMICAL	0.00
SZ-M	SURFACE DAMAGE OTHER - MECHANICAL (5-32)	0.00
SZ-MC	CONTINUOUS SURFACE DAMAGE OTHER - MECHANICAL	0.00
SZ-Z	SURFACE DAMAGE OTHER - CAUSE NOT EVIDENT (5-32)	0.00
SZ-ZC	SURFACE DAMAGE OTHER - CAUSE NOT EVIDENT CONTINUOUS	0.00

Structural Defect Code	Description	Grade Factor
WF	**WELD FAILURE (5-67)**	
WFC	WELD FAILURE - CIRCUMFERENTIAL (5-67)	2.00
WFL	WELD FAILURE - LONGITUDINAL (5-67)	2.00
WFM	WELD FAILURE - MULTIPLE (5-67)	3.00
WFS	WELD FAILURE - SPIRAL (5-67)	2.00
WFZ	WELD FAILURE - UNIDENTIFIED (5-67)	0.00
X	**COLLAPSE (5-23)**	
XB	BRICK COLLAPSE (5-23)	5.00
XP	PIPE COLLAPSE (5-23)	5.00

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
19S-CS13	19S-CS14	20368		33	357	0	5	1,712	$ 71,300	$ -	$ -	$ 71,300
9S-CS14	9S-CS13	20213	VCP	30	362	0	5	1,544	$ 63,263	$ -	$ -	$ 63,263
19S-CS1	19S-CS13	20367		33	310	1	5	1,371	$ 61,920	$ 150	$ -	$ 62,070
19S-CS15	19S-CS16	20370		33	317	2	5	1,280	$ 63,340	$ 300	$ -	$ 63,640
19S-CS16	19S-CS17	20371		33	218	2	5	1,155	$ 43,660	$ 300	$ -	$ 43,960
25S-CS52	25S-CS50	20277	VCP	21	218	3	5	1,078	$ 27,288	$ 450	$ -	$ 27,738
15N-CS6	15N-CS11	20330	VCP	12	348	13	5	925	$ 24,360	$ 1,950	$ -	$ 26,310
15N-CS21	15N-CS29	19687	VCP	18	261	9	5	914	$ 26,120	$ 1,350	$ -	$ 27,470
19S-CS14	19S-CS15	20369		33	262	0	5	910	$ 52,400	$ -	$ -	$ 52,400
8S-CS4	8S-CS5	19908	VCP	21	359	4	5	845	$ 44,850	$ 600	$ -	$ 45,450
10S-CS17	10S-CS20	19983	VCP	24	317	14	5	786	$ 47,565	$ 2,100	$ -	$ 49,665
19S-CS17	19S-CS2	20262		33	215	0	5	658	$ 42,940	$ -	$ -	$ 42,940
25S-CS50	25S-CS6	20086	VCP	21	218	1	5	632	$ 27,188	$ 150	$ -	$ 27,338
9S-CS13	9S-CS26	20218	VCP	33	353	2	5	621	$ 70,680	$ 300	$ -	$ 70,980
24S-CS38	24S-CS1	20030	VCP	18	264	3	5	578	$ 26,350	$ 450	$ -	$ 26,800
14N-CS63	14N-CS68	20184	VCP	18	218	9	5	578	$ 21,810	$ 1,350	$ -	$ 23,160
6N-CS27	6N-CS22	19635	VCP	12	331	11	5	564	$ 23,170	$ 1,650	$ -	$ 24,820
9S-CS31	9S-CS25	19974	VCP	24	265	8	5	526	$ 39,765	$ 1,200	$ -	$ 40,965
25S-CS23	25S-CS21	20050	VCP	21	121	3	5	523	$ 15,125	$ 450	$ -	$ 15,575
26S-CS41	26S-CS61	20066	VCP	15	164	0	5	511	$ 13,940	$ -	$ -	$ 13,940
7S-CS39	7S-CS61	20186	VCP	15	176	6	5	502	$ 14,926	$ 900	$ -	$ 15,826
5N-CS31	5N-CS34	19609	VCP	18	228	8	5	494	$ 22,780	$ 1,200	$ -	$ 23,980
26S-CS32	26S-CS58	20063	VCP	12	202	4	5	452	$ 14,112	$ 600	$ -	$ 14,712
26S-CS33	26S-CS51	19539	VCP	12	235	5	5	441	$ 16,443	$ 750	$ -	$ 17,193
9S-CS3	9S-CS6	20209	VCP	12	286	15	5	424	$ 20,034	$ 2,250	$ -	$ 22,284
6S-CS21	6S-CS26	19861	VCP	12	219	7	5	412	$ 15,337	$ 1,050	$ -	$ 16,387
5N-CS14	5N-CS17	19604	VCP	18	217	8	5	365	$ 21,730	$ 1,200	$ -	$ 22,930
7S-CS31	7S-CS35	20192	VCP	12	172	8	5	363	$ 12,026	$ 1,200	$ -	$ 13,226
18S-CS6	19S-CS18	20422	VCP	24	795	1	5	350	$ 119,250	$ 150	$ -	$ 119,400
10S-CS30	10S-CS34	20106	VCP	15	299	8	5	348	$ 25,432	$ 1,200	$ -	$ 26,632
15N-CS68	15N-CS73	19793	VCP	15	147	2	5	320	$ 12,461	$ 300	$ -	$ 12,761
9S-CS23	9S-CS22	20294	VCP	27	494	6	5	317	$ 76,555	$ 900	$ -	$ 77,455
14N-CS59	14N-CS63	20183	VCP	18	218	10	5	311	$ 21,780	$ 1,500	$ -	$ 23,280
17S-CS22	17S-CS18	20254	VCP	12	154	1	5	296	$ 10,745	$ 150	$ -	$ 10,895
7S-CS37	8S-CS62	19884	VCP	12	195	6	5	290	$ 13,664	$ 900	$ -	$ 14,564
6N-CS28	6N-CS23	19641	VCP	12	260	11	5	286	$ 18,207	$ 1,650	$ -	$ 19,857
7S-CS32	7S-CS26	19887	VCP	12	223	7	5	284	$ 15,575	$ 1,050	$ -	$ 16,625
26S-CS30	26S-CS27	20083	VCP	15	181	4	5	261	$ 15,402	$ 600	$ -	$ 16,002
3N-CS20	3N-CS23	19529	VCP	15	252	10	5	241	$ 21,420	$ 1,500	$ -	$ 22,920
14N-CS8	14N-CS15	19729	VCP	15	310	12	5	220	$ 26,367	$ 1,800	$ -	$ 28,167
7S-CS11	7S-CS13A	20104	VCP	21	138	1	5	219	$ 17,263	$ 150	$ -	$ 17,413
5N-CS38	5N-CS70	20311		15	215	7	5	208	$ 18,233	$ 1,050	$ -	$ 19,283
26S-CS36	26S-CS37	20080	VCP	12	169	3	5	205	$ 11,809	$ 450	$ -	$ 12,259
7S-CS16	7S-CS8	20202	VCP	15	243	1	5	204	$ 20,689	$ 150	$ -	$ 20,839
8S-CS63	8S-CS62	19946	VCP	12	202	4	5	199	$ 14,126	$ 600	$ -	$ 14,726
25S-CS6	16S-CS45	19750	VCP	27	172	0	5	190	$ 26,676	$ -	$ -	$ 26,676
20S-CS1	9S-CS23	20008	VCP	24	386	7	5	189	$ 57,840	$ 1,050	$ -	$ 58,890
9S-CS4	9S-CS7	20208	VCP	18	347	15	5	172	$ 34,660	$ 2,250	$ -	$ 36,910
15S-CS13	15S-CS17	20004	VCP	30	251	7	5	161	$ 43,873	$ 1,050	$ -	$ 44,923
8S-CS126	8S-CS13	19900	VCP	12	277	11	5	158	$ 19,418	$ 1,650	$ -	$ 21,068

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
6N-CS36	6N-CS37	19702	VCP	12	40	0	5	144	$ 8,000	$ -	$ -	$ 8,000
10S-CS27	10S-CS23	19985	VCP	12	309	11	5	144	$ 21,630	$ 1,650	$ -	$ 23,280
14N-CS3	14N-CS7	19728	VCP	12	311	10	5	128	$ 21,784	$ 1,500	$ -	$ 23,284
16S-CS31	16S-CS72MWRD	20091	VCP	24	132	1	5	124	$ 19,800	$ 150	$ -	$ 19,950
15S-CS3	15S-CS5	19937	VCP	15	198	4	5	114	$ 16,805	$ 600	$ -	$ 17,405
5N-CS33	5N-CS38	20314	VCP	15	218	11	5	105	$ 18,530	$ 1,650	$ -	$ 20,180
6N-CS39	6N-CS48	19654	VCP	12	171	9	5	103	$ 11,984	$ 1,350	$ -	$ 13,334
9S-CS20	9S-CS23	20293	VCP	12	300	8	5	100	$ 21,000	$ 1,200	$ -	$ 22,200
10S-CS24	10S-CS25	19991	VCP	12	183	4	5	82	$ 12,824	$ 600	$ -	$ 13,424
13N-CS12	4N-CS3	19715	VCP	15	316	2	5	80	$ 26,869	$ 300	$ -	$ 27,169
8N-CS52	8N-CS50	20157	VCP	15	297	8	5	79	$ 25,279	$ 1,200	$ -	$ 26,479
14N-CS13	14N-CS21	20111	VCP	15	311	10	5	79	$ 26,452	$ 1,500	$ -	$ 27,952
6S-CS9	6S-CS15	19860	VCP	12	216	10	5	72	$ 15,092	$ 1,500	$ -	$ 16,592
7S-CS54	17S-CS6	20190	VCP	18	293	14	5	65	$ 29,250	$ 2,100	$ -	$ 31,350
5S-CS3	5S-CS4	19841	VCP	12	261	2	5	59	$ 18,242	$ 300	$ -	$ 18,542
13N-CS11	4N-CS1	20174	VCP	12	319	2	5	56	$ 22,323	$ 300	$ -	$ 22,623
10S-CS24	10S-CS33	19992	VCP	12	463	21	5	52	$ 32,389	$ 3,150	$ -	$ 35,539
24S-CS19	24S-CS20	20016	VCP	12	330	6	5	50	$ 23,100	$ 900	$ -	$ 24,000
8N-CS64	8N-CS59	20361		15	24	0	5	48	$ 9,000	$ -	$ -	$ 9,000
7S-CS68	7S-CS3	19895	VCP	12	250	1	5	48	$ 17,500	$ 150	$ 7,500	$ 25,150
8S-CS30	8S-CS17	19906	VCP	12	454	18	5	47	$ 31,752	$ 2,700	$ -	$ 34,452
10S-CS11	10S-CS16	19978	VCP	12	343	11	5	44	$ 23,982	$ 1,650	$ -	$ 25,632
10S-CS27	10S-CS29	19984	VCP	12	376	15	5	38	$ 26,306	$ 2,250	$ -	$ 28,556
10S-CS37	10S-CS26	19989	VCP	12	195	9	5	38	$ 13,650	$ 1,350	$ -	$ 15,000
24S-CS32	24S-CS30	20032	RCP	12	338	5	5	36	$ 23,674	$ 750	$ -	$ 24,424
3N-CS28	3N-CS27	20305		15	375	0	5	35	$ 31,850	$ -	$ -	$ 31,850
7S-CS24	7S-CS16	20201	VCP	12	267	4	5	35	$ 18,662	$ 600	$ 7,500	$ 26,762
9S-CS17	9S-CS19	20295	VCP	12	211	7	5	34	$ 14,791	$ 1,050	$ -	$ 15,841
8S-CS5	8S-CS10	19909	VCP	24	274	10	5	33	$ 41,025	$ 1,500	$ -	$ 42,525
25S-CS3	25S-CS9	20035	VCP	8	337	12	5	30	$ 15,161	$ 1,800	$ -	$ 16,961
26S-CS34	26S-CS31	20070	VCP	18	252	7	5	23	$ 25,230	$ 1,050	$ -	$ 26,280
26S-CS24	26S-CS53	20072	VCP	18	219	5	5	20	$ 21,910	$ 750	$ -	$ 22,660
6S-CS75	6S-CS1	19845	VCP	8	207	3	5	19	$ 9,306	$ 450	$ -	$ 9,756
8S-CS38	8S-CS39	19922	VCP	12	141	10	5	19	$ 9,877	$ 1,500	$ -	$ 11,377
25S-CS9	25S-CS14	20036	VCP	12	321	8	5	15	$ 22,442	$ 1,200	$ -	$ 23,642
25S-CS55	26S-CS13	20058	VCP	21	20	0	5	14	$ 12,000	$ -	$ -	$ 12,000
16N-CS8	16N-CS7	19560	VCP	15	273	4	5	12	$ 23,222	$ 600	$ -	$ 23,822
6S-CS20	7S-CS21	20099		12	203	5	5	12	$ 14,210	$ 750	$ -	$ 14,960
16S-CS43	16S-CS38	20245	VCP	12	193	2	5	11	$ 13,496	$ 300	$ -	$ 13,796
7N-CS10	7N-CS5	20287	VCP	21	325	7	5	11	$ 40,638	$ 1,050	$ -	$ 41,688
15N-CS38	15N-CS27	19685	VCP	12	57	0	5	10	$ 9,000	$ -	$ -	$ 9,000
24S-CS24	24S-CS25	20012	RCP	12	210	8	5	9	$ 14,707	$ 1,200	$ -	$ 15,907
15N-CS29	15N-CS31	19688	RCP	36	320	0	5	8	$ 79,950	$ -	$ -	$ 79,950
24S-CS43	24S-CS4	20126	RCP	12	158	4	5	8	$ 11,060	$ 600	$ -	$ 11,660
7S-CS13	7S-CS90	20417	VCP	21	51	0	5	7	$ 12,000	$ -	$ -	$ 12,000
16S-CS83	16S-CS21	20416		18	5	0	5	5	$ 11,000	$ -	$ 20,000	$ 31,000
20S-CS8	20S-CS7	20338	VCP	18	572	0	5	5	$ 57,230	$ -	$ -	$ 57,230
24S-CS36	24S-CS34	20028	RCP	18	92	1	5	5	$ 9,200	$ 150	$ -	$ 9,350
25S-CS11	25S-CS13	20053	VCP	12	206	3	5	5	$ 14,420	$ 450	$ -	$ 14,870
3N-CS29	3N-CS34	20222		12	5	0	5	5	$ 9,000	$ -	$ -	$ 9,000

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
8S-CS76	8S-CS77	19945	VCP	12	39	0	5	5	$ 8,000	$ -	$ -	$ 8,000
9S-CS35	9S-CS37	20297	RCP	36	363	0	4	1,155	$ 90,850	$ -	$ -	$ 90,850
6N-CS23	6N-CS18	19642	VCP	12	336	12	4	938	$ 23,513	$ 1,800	$ -	$ 25,313
9S-CS9	9S-CS11	20211	VCP	15	294	9	4	794	$ 24,999	$ 1,350	$ -	$ 26,349
9S-CS8	9S-CS10	20215	VCP	15	344	13	4	781	$ 29,215	$ 1,950	$ -	$ 31,165
15S-CS9	15S-CS12	19755	VCP	18	297	11	4	572	$ 29,700	$ 1,650	$ -	$ 31,350
6N-CS18	6N-CS13	19643	VCP	15	317	10	4	559	$ 26,945	$ 1,500	$ -	$ 28,445
3N-CS34	3N-CS33	19558	VCP	15	187	0	4	524	$ 15,929	$ -	$ -	$ 15,929
3N-CS32	3N-CS31	19533	VCP	15	189	0	4	518	$ 16,023	$ -	$ -	$ 16,023
5N-CS50	5N-CS54	19617	VCP	21	302	6	4	511	$ 37,700	$ 900	$ -	$ 38,600
5N-CS34	5N-CS39	19610	VCP	18	208	9	4	508	$ 20,760	$ 1,350	$ -	$ 22,110
3N-CS61	3N-CS43	20307	VCP	15	171	3	4	480	$ 14,569	$ 450	$ -	$ 15,019
15S-CS48	15S-CS49	19771	VCP	15	351	8	4	478	$ 29,818	$ 1,200	$ -	$ 31,018
15S-CS6	15S-CS9	19754	VCP	15	298	8	4	464	$ 25,330	$ 1,200	$ -	$ 26,530
5N-CS39	5N-CS43	19611	VCP	18	217	7	4	452	$ 21,730	$ 1,050	$ -	$ 22,780
3N-CS62	3N-CS61	20291	VCP	15	197	5	4	419	$ 16,711	$ 750	$ -	$ 17,461
8N-CS33	8N-CS26	20136	RCP	15	220	9	4	418	$ 18,675	$ 1,350	$ -	$ 20,025
15N-CS4	15N-CS10	19780	VCP	12	340	16	4	411	$ 23,772	$ 2,400	$ -	$ 26,172
5N-CS8	5N-CS10	19602	VCP	18	201	6	4	408	$ 20,060	$ 900	$ -	$ 20,960
9S-CS5	9S-CS8	20214	VCP	12	298	11	4	407	$ 20,839	$ 1,650	$ -	$ 22,489
17S-CS26	17S-CS22	20253	VCP	12	144	4	4	406	$ 10,087	$ 600	$ -	$ 10,687
6N-CS29	6N-CS24	19647	VCP	12	270	12	4	402	$ 18,921	$ 1,800	$ -	$ 20,721
26S-CS9	26S-CS16	20074	VCP	12	206	4	4	391	$ 14,420	$ 600	$ -	$ 15,020
8S-CS78	8S-CS84	19950	VCP	15	174	8	4	390	$ 14,807	$ 1,200	$ -	$ 16,007
9S-CS6	9S-CS9	20210	VCP	12	297	13	4	387	$ 20,797	$ 1,950	$ -	$ 22,747
7N-CS15	7N-CS11	19659	VCP	21	305	12	4	384	$ 38,163	$ 1,800	$ -	$ 39,963
7S-CS47	7S-CS53	20195	VCP	15	229	7	4	357	$ 19,423	$ 1,050	$ -	$ 20,473
19S-CS18	19S-CS1	20423	VCP	24	295	0	4	354	$ 44,265	$ -	$ -	$ 44,265
5N-CS54	6N-CS42	19701	VCP	18	191	1	4	352	$ 19,060	$ 150	$ -	$ 19,210
10S-CS15	10S-CS18	19977	VCP	15	346	10	4	346	$ 29,410	$ 1,500	$ -	$ 30,910
10S-CS12	10S-CS17	19982	VCP	24	322	12	4	342	$ 48,240	$ 1,800	$ -	$ 50,040
26S-CS5	26S-CS8	20077	VCP	12	195	4	4	342	$ 13,678	$ 600	$ -	$ 14,278
3N-CS12	3N-CS11	19584	VCP	15	247	2	4	329	$ 20,953	$ 300	$ -	$ 21,253
17S-CS34	17S-CS26	20252	VCP	12	145	1	4	328	$ 10,178	$ 150	$ -	$ 10,328
5N-CS29	5N-CS32	19594	VCP	15	217	8	4	328	$ 18,411	$ 1,200	$ -	$ 19,611
8S-CS9	8S-CS3	19904	VCP	15	293	12	4	327	$ 24,922	$ 1,800	$ -	$ 26,722
7N-CS35	7N-CS31	19712	VCP	12	267	13	4	325	$ 18,704	$ 1,950	$ -	$ 20,654
7N-CS2	7N-CS6	19711	VCP	21	324	12	4	317	$ 40,513	$ 1,800	$ -	$ 42,313
10S-CS6	10S-CS10	19980	VCP	18	216	8	4	308	$ 21,590	$ 1,200	$ -	$ 22,790
5N-CS32	5N-CS37	19595	VCP	15	220	7	4	305	$ 18,666	$ 1,050	$ -	$ 19,716
5N-CS44	5N-CS50	19614	VCP	21	327	8	4	290	$ 40,838	$ 1,200	$ -	$ 42,038
3N-CS2	3N-CS7	19572	VCP	15	276	4	4	285	$ 23,418	$ 600	$ -	$ 24,018
13N-CS8	13N-CS12	20175	VCP	12	324	7	4	284	$ 22,652	$ 1,050	$ -	$ 23,702
7S-CS59	6S-CS62	20196	VCP	21	319	0	4	256	$ 39,838	$ -	$ -	$ 39,838
17S-CS14	17S-CS10	20255	VCP	12	157	6	4	242	$ 11,004	$ 900	$ -	$ 11,904
7N-CS27	7N-CS22	19663	VCP	18	298	15	4	239	$ 29,830	$ 2,250	$ -	$ 32,080
15S-CS4	15S-CS8	20001	VCP	30	442	16	4	238	$ 77,298	$ 2,400	$ -	$ 79,698
8S-CS11	8S-CS4	19907	VCP	15	300	13	4	238	$ 25,492	$ 1,950	$ -	$ 27,442
5N-CS10	5N-CS14	19603	VCP	18	218	9	4	237	$ 21,760	$ 1,350	$ -	$ 23,110
14N-CS21	14N-CS34	20113	VCP	18	313	13	4	237	$ 31,270	$ 1,950	$ -	$ 33,220

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
5N-CS49	5N-CS50	19616	VCP	12	215	9	4	235	$ 15,036	$ 1,350	$ -	$ 16,386
15N-CS10	15N-CS16	19781	VCP	15	298	10	4	233	$ 25,296	$ 1,500	$ -	$ 26,796
15S-CS8	15S-CS13	20003	VCP	30	440	17	4	226	$ 76,913	$ 2,550	$ -	$ 79,463
7S-CS35	7S-CS38	20193	VCP	12	180	6	4	225	$ 12,621	$ 900	$ -	$ 13,521
6N-CS12	6N-CS7	19638	VCP	15	364	13	4	221	$ 30,957	$ 1,950	$ -	$ 32,907
4N-CS29	4N-CS27	19550	VCP	10	116	0	4	212	$ 7,000	$ -	$ -	$ 7,000
4N-CS4	4N-CS5	19585	VCP	15	360	5	4	208	$ 30,566	$ 750	$ -	$ 31,316
3N-CS11	3N-CS17	19527	VCP	15	164	3	4	204	$ 13,906	$ 450	$ -	$ 14,356
6S-CS52	6S-CS67	19856	VCP	24	128	4	4	202	$ 19,200	$ 600	$ -	$ 19,800
18S-CS3	18S-CS4	20260	VCP	12	376	8	4	201	$ 26,320	$ 1,200	$ -	$ 27,520
6N-CS14	6N-CS9	19648	VCP	18	345	15	4	200	$ 34,450	$ 2,250	$ -	$ 36,700
26S-CS12	26S-CS11	20078	VCP	15	216	2	4	196	$ 18,369	$ 300	$ -	$ 18,669
3N-CS38	3N-CS35	19531	VCP	12	237	11	4	193	$ 16,555	$ 1,650	$ -	$ 18,205
5N-CS23	5N-CS27	19607	VCP	18	105	3	4	192	$ 10,520	$ 450	$ -	$ 10,970
14N-CS2	14N-CS6	19725	VCP	12	300	10	4	185	$ 20,993	$ 1,500	$ -	$ 22,493
7S-CS53	7S-CS57	19564	VCP	15	265	13	4	179	$ 22,551	$ 1,950	$ -	$ 24,501
26S-CS61	26S-CS40	20067	VCP	15	179	0	4	174	$ 15,224	$ -	$ -	$ 15,224
3N-CS41	2N-CS22	19535	PVC	18	235	1	4	173	$ 23,470	$ 150	$ -	$ 23,620
5N-CS22	5N-CS23	19606	VCP	18	95	4	4	163	$ 9,520	$ 600	$ -	$ 10,120
6S-CS22	6S-CS27	19864	VCP	12	183	6	4	158	$ 12,831	$ 900	$ -	$ 13,731
7S-CS22	7S-CS23	19889	VCP	12	274	10	4	158	$ 19,208	$ 1,500	$ -	$ 20,708
17S-CS12	17S-CS8	20258	VCP	12	172	1	4	151	$ 12,040	$ 150	$ -	$ 12,190
10S-CS32	10S-CS15	19976	VCP	15	295	14	4	145	$ 25,075	$ 2,100	$ -	$ 27,175
7S-CS49	7S-CS54	20189	VCP	18	293	13	4	144	$ 29,310	$ 1,950	$ -	$ 31,260
6N-CS44	6N-CS43	19698	VCP	21	158	2	4	138	$ 19,750	$ 300	$ -	$ 20,050
14N-CS15	14N-CS23	19730	VCP	15	314	10	4	138	$ 26,648	$ 1,500	$ -	$ 28,148
5N-CS26	5N-CS42	19598	VCP	15	216	4	4	133	$ 18,335	$ 600	$ -	$ 18,935
8S-CS40	8S-CS46	19939	VCP	12	368	13	4	128	$ 25,739	$ 1,950	$ -	$ 27,689
8S-CS96	8S-CS114	19951	VCP	15	153	8	4	127	$ 13,039	$ 1,200	$ -	$ 14,239
7S-CS69	8S-CS24	19934	VCP	12	205	5	4	120	$ 14,329	$ 750	$ -	$ 15,079
3N-CS9	3N-CS7	19575	VCP	15	231	4	4	113	$ 19,618	$ 600	$ -	$ 20,218
17S-CS16	17S-CS12	20257	VCP	12	148	0	4	112	$ 10,388	$ -	$ -	$ 10,388
15N-CS76	15N-CS65	19792	RCP	12	122	3	4	112	$ 8,533	$ 450	$ -	$ 8,983
6N-CS45	6N-CS44	19697	VCP	21	193	4	4	111	$ 24,150	$ 600	$ -	$ 24,750
5N-CS42	5N-CS33	19599	VCP	15	217	6	4	109	$ 18,428	$ 900	$ -	$ 19,328
8S-CS46	8S-CS22	19940	VCP	15	330	15	4	109	$ 28,050	$ 2,250	$ -	$ 30,300
7N-CS31	7N-CS26	19713	VCP	15	326	12	4	103	$ 27,668	$ 1,800	$ -	$ 29,468
7N-CS11	7N-CS6	19660	VCP	21	347	12	4	99	$ 43,313	$ 1,800	$ -	$ 45,113
3N-CS35	3N-CS30	19532	VCP	12	196	6	4	98	$ 13,727	$ 900	$ -	$ 14,627
16N-CS47	7N-CS2	19823	VCP	18	294	7	4	87	$ 29,370	$ 1,050	$ -	$ 30,420
3N-CS17	3N-CS18	19528	VCP	15	187	5	4	86	$ 15,895	$ 750	$ -	$ 16,645
8S-CS68	8S-CS74	19948	VCP	15	151	10	4	82	$ 12,861	$ 1,500	$ -	$ 14,361
7S-CS40	7S-CS39	20185	VCP	10	169	3	4	78	$ 9,295	$ 450	$ -	$ 9,745
5S-CS10	15S-CS4	19562	VCP	30	182	6	4	75	$ 31,815	$ 900	$ -	$ 32,715
4N-CS6	4N-CS5	19586	VCP	21	201	2	4	74	$ 25,088	$ 300	$ -	$ 25,388
5N-CS27	5N-CS31	19608	VCP	18	220	8	4	72	$ 21,950	$ 1,200	$ -	$ 23,150
15S-CS29	15S-CS55MWRD	19762	VCP	18	107	1	4	64	$ 10,740	$ 150	$ -	$ 10,890
17S-CS10	17S-CS5	20256	VCP	12	160	3	4	63	$ 11,200	$ 450	$ -	$ 11,650
14N-CS1	14N-CS5	19717	VCP	10	321	6	4	63	$ 17,633	$ 900	$ -	$ 18,533
14N-CS23	14N-CS38	19731	VCP	18	314	11	4	62	$ 31,410	$ 1,650	$ -	$ 33,060

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
6N-CS17	6N-CS12	19637	VCP	15	291	10	4	62	$ 24,752	$ 1,500	$ -	$ 26,252
6S-CS67	6S-CS66	19857	VCP	24	76	2	4	61	$ 11,460	$ 300	$ -	$ 11,760
15S-CS38	15S-CS57MWRD	19773	VCP	12	123	6	4	60	$ 8,624	$ 900	$ -	$ 9,524
26S-CS52	26S-CS30	20082	VCP	15	76	2	4	60	$ 9,000	$ 300	$ -	$ 9,300
3N-CS23	3N-CS27	19530	VCP	15	190	6	4	58	$ 16,108	$ 900	$ -	$ 17,008
7N-CS16	7N-CS12	19665	VCP	21	306	10	4	58	$ 38,238	$ 1,500	$ -	$ 39,738
15N-CS70	6N-CS2	19799	VCP	18	336	12	4	57	$ 33,550	$ 1,800	$ -	$ 35,350
16S-CS78	16S-CS20	20116		18	217	5	4	57	$ 21,690	$ 750	$ -	$ 22,440
7S-CS25	7S-CS31	20191	VCP	12	174	2	4	57	$ 12,159	$ 300	$ -	$ 12,459
4N-CS1	4N-CS2	19540	VCP	15	202	1	4	57	$ 17,196	$ 150	$ -	$ 17,346
9S-CS18	9S-CS20	20221	VCP	12	279	12	4	56	$ 19,544	$ 1,800	$ -	$ 21,344
26S-CS58	26S-CS42	20064	VCP	12	116	0	4	55	$ 8,141	$ -	$ -	$ 8,141
8S-CS51	8S-CS41	19936	VCP	18	145	0	4	55	$ 14,510	$ -	$ -	$ 14,510
16N-CS49	7N-CS3	19824	VCP	18	304	7	4	54	$ 30,400	$ 1,050	$ -	$ 31,450
9S-CS1	9S-CS4	20207	VCP	18	282	15	4	53	$ 28,220	$ 2,250	$ -	$ 30,470
14N-CS49	14N-CS59	20182	VCP	15	216	9	4	51	$ 18,326	$ 1,350	$ -	$ 19,676
6N-CS15	6N-CS10	19653	VCP	15	325	6	4	51	$ 27,634	$ 900	$ -	$ 28,534
16S-CS34	16S-CS35	20093	VCP	12	220	1	4	47	$ 15,400	$ 150	$ -	$ 15,550
18S-CS5	18S-CS6	20259	RCP	24	378	2	4	42	$ 56,760	$ 300	$ -	$ 57,060
7S-CS43	7S-CS48	20187	VCP	15	329	13	4	42	$ 27,965	$ 1,950	$ -	$ 29,915
8S-CS74	8S-CS78	19949	VCP	15	152	7	4	39	$ 12,920	$ 1,050	$ -	$ 13,970
8S-CS62	8S-CS68	19947	RCP	15	198	6	4	38	$ 16,813	$ 900	$ -	$ 17,713
8N-CS42	8N-CS36	20151	VCP	15	320	6	4	36	$ 27,200	$ 900	$ -	$ 28,100
8N-CS43	8N-CS39	20129	VCP	15	313	1	4	35	$ 26,580	$ 150	$ -	$ 26,730
10S-CS29	20S-CS5	19987	VCP	12	324	14	4	34	$ 22,701	$ 2,100	$ -	$ 24,801
15N-CS71	6N-CS3	19800	VCP	18	333	13	4	32	$ 33,250	$ 1,950	$ -	$ 35,200
6N-CS38	6N-CS45	19696	VCP	12	248	10	4	32	$ 17,325	$ 1,500	$ -	$ 18,825
16S-CS45	16S-CS40	20249	VCP	27	220	5	4	31	$ 34,131	$ 750	$ -	$ 34,881
10S-CS23	10S-CS38	19986	VCP	12	332	14	4	29	$ 23,240	$ 2,100	$ -	$ 25,340
25S-CS45	25S-CS46	20301		15	404	0	4	29	$ 34,366	$ -	$ -	$ 34,366
5N-CS41	5N-CS70	19596		21	331	5	4	27	$ 41,313	$ 750	$ -	$ 42,063
5N-CS21	5N-CS22	19605	VCP	18	15	0	4	26	$ 11,000	$ -	$ -	$ 11,000
6N-CS35	6N-CS39	19692	VCP	12	248	10	4	23	$ 17,381	$ 1,500	$ -	$ 18,881
26S-CS31	26S-CS24	20071	VCP	18	231	6	4	21	$ 23,100	$ 900	$ -	$ 24,000
8S-CS36	8S-CS37	19920	VCP	12	82	3	4	20	$ 8,000	$ 450	$ -	$ 8,450
8S-CS2	8S-CS3	19901	VCP	18	374	3	4	20	$ 37,380	$ 450	$ -	$ 37,830
14S02	24S-CS33	20031	RCP	12	250	4	4	19	$ 17,507	$ 600	$ -	$ 18,107
6N-CS25	6N-CS20	19651	VCP	12	241	5	4	19	$ 16,898	$ 750	$ -	$ 17,648
6S-CS4	6S-CS77	19877	VCP	12	135	6	4	18	$ 9,443	$ 900	$ -	$ 10,343
6S-CS38	6S-CS41	19872	VCP	12	201	6	4	17	$ 14,056	$ 900	$ -	$ 14,956
7N-CS30	7N-CS25	19708	VCP	12	284	6	4	17	$ 19,852	$ 900	$ -	$ 20,752
26S-CS26	26S-CS22	19751	VCP	12	128	1	4	17	$ 8,932	$ 150	$ -	$ 9,082
15N-CS16	15N-CS24	19782	VCP	15	296	9	4	16	$ 25,135	$ 1,350	$ -	$ 26,485
24S-CS13	24S-CS14	20020	RCP	18	279	5	4	16	$ 27,910	$ 750	$ -	$ 28,660
5N-CS46	5N-CS47	19623	VCP	12	286	3	4	16	$ 20,041	$ 450	$ -	$ 20,491
6S-CS49	6S-CS78	20326	VCP	15	187	6	4	14	$ 15,921	$ 900	$ -	$ 16,821
5N-CS48	5N-CS49	19615	VCP	12	218	8	4	13	$ 15,225	$ 1,200	$ -	$ 16,425
7N-CS14	7N-CS10	20286	VCP	18	325	4	4	13	$ 32,480	$ 600	$ -	$ 33,080
26S-CS69	26S-CS3	19568	VCP	12	137	2	4	12	$ 9,604	$ 300	$ -	$ 9,904
24S-CS14	24S-CS7	20021	VCP	18	321	6	4	11	$ 32,140	$ 900	$ -	$ 33,040

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
24S-CS34	24S-CS38	20029	VCP	18	311	5	4	11	$ 31,100	$ 750	$ -	$ 31,850
17S-CS36	17S-CS34	20251	VCP	12	247	6	4	10	$ 17,255	$ 900	$ -	$ 18,155
7N-CS33	7N-CS29	19669	VCP	12	200	4	4	10	$ 13,979	$ 600	$ -	$ 14,579
8S-CS81	8S-CS82	19966	RCP	18	174	4	4	10	$ 17,360	$ 600	$ -	$ 17,960
14N-CS5	14N-CS10	19718	VCP	12	196	4	4	8	$ 13,685	$ 600	$ -	$ 14,285
25S-CS10	25S-CS16	20039	VCP	12	355	10	4	8	$ 24,857	$ 1,500	$ -	$ 26,357
8S-CS77	9S-CS24	19943	VCP	15	241	3	4	8	$ 20,485	$ 450	$ -	$ 20,935
9S-CS18	9S-CS16	20212	VCP	12	314	11	4	8	$ 21,959	$ 1,650	$ -	$ 23,609
6N-CS34	6N-CS35	19691	VCP	12	41	2	4	7	$ 8,000	$ 300	$ -	$ 8,300
8S-CS121	8S-CS26	20131		8	185	4	4	7	$ 8,330	$ 600	$ -	$ 8,930
3N-CS31	3N-CS30	19534	VCP	15	184	0	4	6	$ 15,623	$ -	$ -	$ 15,623
24S-CS39	24S-CS10	19569	RCP	15	42	0	4	4	$ 9,000	$ -	$ -	$ 9,000
17N-CS6	17N-CS22	20332	RCP	36	541	1	3	970	$ 135,350	$ 150	$ -	$ 135,500
17N-CS22	17N-CS7	20331		36	494	0	3	884	$ 123,475	$ -	$ -	$ 123,475
25S-CS47	15S-CS71	20410	RCP	36	490	0	3	854	$ 122,575	$ -	$ -	$ 122,575
17N-CS5	17N-CS6	19834	RCP	36	478	0	3	853	$ 119,375	$ -	$ -	$ 119,375
8N-CS28	8N-CS25	20164	RCP	15	423	11	3	776	$ 35,964	$ 1,650	$ -	$ 37,614
26S-CS53	26S-CS46	20276	RCP	27	394	1	3	706	$ 61,117	$ 150	$ -	$ 61,267
10S-CS38	10S-CS36	19998	RCP	27	389	0	3	705	$ 60,311	$ -	$ -	$ 60,311
8N-CS37	8N-CS28	20163	RCP	15	389	14	3	699	$ 33,099	$ 2,100	$ -	$ 35,199
10S-CS36	10S-CS33	19999	RCP	30	381	1	3	688	$ 66,728	$ 150	$ -	$ 66,878
10S-CS33	9S-CS35	20000	RCP	30	382	0	3	686	$ 66,763	$ -	$ -	$ 66,763
7S-CS49	7S-CS47	20198	RCP	24	372	0	3	666	$ 55,830	$ -	$ -	$ 55,830
7N-CS8	7N-CS9	19667	RCP	48	371	0	3	662	$ 166,950	$ -	$ -	$ 166,950
8S-CS15	8S-CS16	19914	RCP	27	370	0	3	662	$ 57,319	$ -	$ -	$ 57,319
7N-CS18	8N-CS31	19673	RCP	27	366	0	3	653	$ 56,715	$ -	$ -	$ 56,715
24S-CS1	24S-CS2	20026	RCP	30	354	1	3	634	$ 61,915	$ 150	$ -	$ 62,065
8S-CS94	8S-CS112	19968	VCP	18	349	4	3	627	$ 34,900	$ 600	$ -	$ 35,500
26S-CS57	26S-CS53	20270	VCP	24	350	0	3	626	$ 52,515	$ -	$ -	$ 52,515
25S-CS39	25S-CS47	20034	RCP	36	371	0	3	625	$ 92,750	$ -	$ -	$ 92,750
8S-CS45	9S-CS27	19972	RCP	33	346	0	3	619	$ 69,280	$ -	$ -	$ 69,280
16N-CS13	16N-CS17	19828	RCP	36	341	1	3	608	$ 85,225	$ 150	$ -	$ 85,375
7N-CS5	7N-CS6	19710	RCP	42	341	1	3	608	$ 119,315	$ 150	$ -	$ 119,465
15N-CS46	15N-CS52	19788	RCP	10	330	7	3	607	$ 18,161	$ 1,050	$ -	$ 19,211
8N-CS35	8N-CS38	20155	RCP	36	333	0	3	594	$ 83,125	$ -	$ -	$ 83,125
5N-CS71	5N-CS58	19624	RCP	42	330	0	3	590	$ 115,640	$ -	$ -	$ 115,640
6N-CS7	6N-CS8	19639	RCP	36	329	0	3	589	$ 82,350	$ -	$ -	$ 82,350
25S-CS38	25S-CS58	20062	RCP	30	322	0	3	580	$ 56,385	$ -	$ -	$ 56,385
6N-CS1	6N-CS6	19629	RCP	30	321	13	3	574	$ 56,210	$ 1,950	$ -	$ 58,160
8S-CS21	8S-CS39	19917	RCP	30	320	0	3	572	$ 55,983	$ -	$ -	$ 55,983
15N-CS37	15N-CS46	19787	RCP	10	316	6	3	568	$ 17,353	$ 900	$ -	$ 18,253
26S-CS47	26S-CS48	20337	RCP	30	314	0	3	563	$ 54,950	$ -	$ -	$ 54,950
5N-CS58	5N-CS55	19625	RCP	42	315	0	3	562	$ 110,180	$ -	$ -	$ 110,180
5N-CS6	5N-CS13	19600	RCP	30	308	0	3	556	$ 53,918	$ -	$ -	$ 53,918
25S-CS58	25S-CS39	20033	RCP	30	308	0	3	551	$ 53,848	$ -	$ -	$ 53,848
6N-CS6	6N-CS7	19634	RCP	36	309	0	3	551	$ 77,150	$ -	$ -	$ 77,150
15N-CS55	15N-CS61	19797	RCP	15	298	8	3	539	$ 25,364	$ 1,200	$ -	$ 26,564
15N-CS54	15N-CS60	19795	RCP	15	296	11	3	533	$ 25,169	$ 1,650	$ -	$ 26,819
15N-CS61	15N-CS70	19798	RCP	15	297	9	3	533	$ 25,220	$ 1,350	$ -	$ 26,570
15N-CS60	15N-CS69	19796	RCP	15	298	9	3	529	$ 25,322	$ 1,350	$ -	$ 26,672

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
24S-CS2	25S-CS1	20027	RCP	30	293	0	3	527	$ 51,275	$ -	$ -	$ 51,275
5N-CS13	5N-CS58	19601	RCP	30	294	1	3	524	$ 51,433	$ 150	$ -	$ 51,583
8N-CS27	8N-CS23	20154	RCP	15	278	9	3	512	$ 23,639	$ 1,350	$ -	$ 24,989
8N-CS29	8N-CS64	20360		15	268	2	3	479	$ 22,763	$ 300	$ -	$ 23,063
15N-CS17	15N-CS25	19785	RCP	10	258	5	3	459	$ 14,174	$ 750	$ -	$ 14,924
25S-CS17	25S-CS18	20042	RCP	24	250	0	3	448	$ 37,500	$ -	$ -	$ 37,500
15N-CS25	15N-CS37	19786	RCP	10	249	6	3	445	$ 13,701	$ 900	$ -	$ 14,601
2N-CS26	2N-CS30	20232		18	251	0	3	434	$ 25,060	$ -	$ -	$ 25,060
24S-CS31	24S-CS1	20025	RCP	27	239	4	3	430	$ 37,092	$ 600	$ -	$ 37,692
7N-CS7	7N-CS8	19661	RCP	42	227	0	3	398	$ 79,275	$ -	$ -	$ 79,275
8S-CS42	8S-CS45	19932	RCP	33	216	0	3	385	$ 43,220	$ -	$ -	$ 43,220
24S-CS7	24S-CS31	20024	RCP	27	215	5	3	382	$ 33,387	$ 750	$ -	$ 34,137
25S-CS18	25S-CS12	20043	RCP	24	208	6	3	375	$ 31,200	$ 900	$ -	$ 32,100
8S-CS69	8S-CS75	19956	RCP	21	207	0	3	369	$ 25,925	$ -	$ -	$ 25,925
8S-CS14	8S-CS15	19913	RCP	27	199	0	3	356	$ 30,845	$ -	$ -	$ 30,845
6N-CS49	6N-CS1	20419	RCP	30	193	12	3	344	$ 33,758	$ 1,800	$ -	$ 35,558
16N-CS17	16N-CS18	19829	RCP	36	186	0	3	329	$ 46,425	$ -	$ -	$ 46,425
5S-CS9	5S-CS2	19839	VCP	12	165	1	3	327	$ 11,515	$ 150	$ -	$ 11,665
8S-CS13	8S-CS14	19912	RCP	27	178	0	3	319	$ 27,606	$ -	$ -	$ 27,606
16N-CS18	16N-CS19	19830	RCP	36	173	0	3	308	$ 43,325	$ -	$ -	$ 43,325
8N-CS31	8N-CS60	20145	RCP	30	178	0	3	306	$ 31,063	$ -	$ -	$ 31,063
6S-CS37	6S-CS44	19855	VCP	24	202	6	3	268	$ 30,285	$ 900	$ -	$ 31,185
26S-CS6	26S-CS9	20073	VCP	12	204	7	3	236	$ 14,259	$ 1,050	$ -	$ 15,309
26S-CS43	26S-CS7	20267	RCP	42	213	0	3	232	$ 74,655	$ -	$ -	$ 74,655
25S-CS57	25S-CS22	20056	RCP	21	126	0	3	223	$ 15,700	$ -	$ -	$ 15,700
2N-CS32	2N-CS27MWRD	20425		18	127	0	3	223	$ 12,650	$ -	$ -	$ 12,650
17N-CS7	8N-CS9	19835	RCP	36	119	0	3	211	$ 29,800	$ -	$ -	$ 29,800
15S-CS44	15S-CS48	19770	VCP	12	345	4	3	195	$ 24,143	$ 600	$ -	$ 24,743
8S-CS26	8S-CS34	19924	VCP	12	169	5	3	181	$ 11,858	$ 750	$ -	$ 12,608
15S-CS71	TARP-003	20421	RCP	36	101	0	3	178	$ 25,275	$ -	$ -	$ 25,275
8S-CS3	8S-CS4	19905	VCP	21	379	2	3	156	$ 47,363	$ 300	$ -	$ 47,663
26S-CS49	26S-CS43	20266	RCP	27	82	0	3	144	$ 12,710	$ -	$ -	$ 12,710
15N-CS77	15N-CS76	19791		12	78	0	3	137	$ 8,000	$ -	$ -	$ 8,000
17S-CS32	17S-CS44	20383		12	120	2	3	126	$ 8,379	$ 300	$ -	$ 8,679
15S-CS70	15S-CS18	20420	VCP	18	124	2	3	126	$ 12,390	$ 300	$ -	$ 12,690
26S-CS48	26S-CS49	20273		27	69	0	3	121	$ 10,757	$ -	$ -	$ 10,757
26S-CS46	26S-CS47	20272	RCP	30	63	0	3	112	$ 11,078	$ -	$ -	$ 11,078
25S-CS14	25S-CS15	20037	RCP	18	64	0	3	110	$ 11,000	$ -	$ -	$ 11,000
10S-CS10	10S-CS12	19981	VCP	21	218	8	3	102	$ 27,188	$ 1,200	$ -	$ 28,388
6N-CS42	6N-CS43	19700	VCP	21	224	1	3	101	$ 28,000	$ 150	$ -	$ 28,150
19S-CS8	19S-CS4	20228	CONC	90	332	0	3	91	$ 282,455	$ -	$ -	$ 282,455
15S-CS17	15S-CS22	19752	VCP	30	147	6	3	87	$ 25,725	$ 900	$ -	$ 26,625
15N-CS52	15N-CS77	19789	RCP	10	39	0	3	85	$ 7,000	$ -	$ -	$ 7,000
15S-CS22	15S-CS65MWRD	19753	VCP	30	250	9	3	85	$ 43,698	$ 1,350	$ -	$ 45,048
2N-CS22	2N-CS23	19570	VCP	18	384	2	3	81	$ 38,400	$ 300	$ -	$ 38,700
2N-CS30	2N-CS32	20424		18	48	0	3	81	$ 11,000	$ -	$ -	$ 11,000
8N-CS20	8N-CS22	20135	RCP	12	167	0	3	77	$ 11,718	$ -	$ -	$ 11,718
14N-CS73	14N-CS40	20313	VCP	12	162	0	3	75	$ 11,340	$ -	$ -	$ 11,340
8S-CS24	8S-CS26	19923	VCP	12	140	3	3	66	$ 9,814	$ 450	$ -	$ 10,264
7S-CS26	7S-CS25	19888	VCP	12	211	5	3	62	$ 14,770	$ 750	$ -	$ 15,520

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
8S-CS27	8S-CS20	19902	RCP	12	196	8	3	60	$ 13,685	$ 1,200	$ -	$ 14,885
16N-CS55	16N-CS44	19827	RCP	15	29	0	3	50	$ 9,000	$ -	$ -	$ 9,000
26S-CS14	26S-CS12	20076	VCP	15	158	0	3	49	$ 13,422	$ -	$ -	$ 13,422
8N-CS16	8N-CS18	19559		66	127	0	3	49	$ 76,080	$ -	$ -	$ 76,080
17S-CS23	17S-CS19	20329	VCP	12	145	2	3	47	$ 10,171	$ 300	$ -	$ 10,471
8S-CS114	8S-CS108	19952	VCP	15	128	7	3	46	$ 10,880	$ 1,050	$ -	$ 11,930
7N-CS12	7N-CS8	19666	VCP	21	345	12	3	45	$ 43,175	$ 1,800	$ -	$ 44,975
7S-CS61	7S-CS43	19896	VCP	15	152	6	3	42	$ 12,937	$ 900	$ -	$ 13,837
7N-CS22	7N-CS16	19664	VCP	18	339	13	3	41	$ 33,900	$ 1,950	$ -	$ 35,850
15N-CS32	15N-CS34	19682	RCP	60	324	0	3	34	$ 178,310	$ -	$ -	$ 178,310
10S-CS3	10S-CS6	19979	VCP	12	104	2	3	33	$ 7,245	$ 300	$ -	$ 7,545
8S-CS15	8S-CS9	20339		15	311	9	3	33	$ 26,427	$ 1,350	$ -	$ 27,777
18S-CS4	18S-CS6	20261	VCP	15	267	7	3	33	$ 22,695	$ 1,050	$ -	$ 23,745
26S-CS59	26S-CS39	20068	VCP	15	161	2	3	32	$ 13,719	$ 300	$ -	$ 14,019
7S-CS25	7S-CS21	20098	VCP	12	230	7	3	32	$ 16,121	$ 1,050	$ -	$ 17,171
6N-CS22	6N-CS17	19636	VCP	12	360	13	3	32	$ 25,165	$ 1,950	$ -	$ 27,115
7N-CS21	7N-CS15	19658	VCP	18	337	12	3	29	$ 33,650	$ 1,800	$ -	$ 35,450
16S-CS24	16S-CS30	20278	VCP	18	218	10	3	25	$ 21,770	$ 1,500	$ -	$ 23,270
9S-CS15	9S-CS37	20323		12	327	15	3	24	$ 22,862	$ 2,250	$ -	$ 25,112
10S-CS8	10S-CS31	19975	VCP	12	143	7	3	23	$ 10,024	$ 1,050	$ -	$ 11,074
6N-CS13	6N-CS8	19644	VCP	18	334	14	3	23	$ 33,440	$ 2,100	$ -	$ 35,540
7N-CS26	7N-CS21	19657	VCP	18	319	12	3	23	$ 31,900	$ 1,800	$ -	$ 33,700
9S-CS17	9S-CS15	20216	VCP	12	315	11	3	23	$ 22,036	$ 1,650	$ -	$ 23,686
16S-CS37	16S-CS36	20094	VCP	12	202	3	3	21	$ 14,147	$ 450	$ -	$ 14,597
8S-CS20	8S-CS125	19903	RCP	12	141	8	3	21	$ 9,835	$ 1,200	$ -	$ 11,035
20S-CS4	20S-CS2	20010	VCP	15	130	0	3	21	$ 11,067	$ -	$ -	$ 11,067
25S-CS40	25S-CS45	20300		10	427	1	3	21	$ 23,458	$ 150	$ -	$ 23,608
7S-CS23	7S-CS19	19890	VCP	12	121	1	3	21	$ 8,491	$ 150	$ -	$ 8,641
14N-CS16	14N-CS24	19745	RCP	18	338	0	3	21	$ 33,750	$ -	$ -	$ 33,750
8S-CS125	8S-CS15	20428	RCP	12	133	5	3	21	$ 9,338	$ 750	$ -	$ 10,088
20S-CS3	20S-CS4	20009	VCP	15	204	6	3	18	$ 17,340	$ 900	$ -	$ 18,240
6N-CS3	6N-CS8	19640	VCP	21	322	10	3	18	$ 40,263	$ 1,500	$ -	$ 41,763
7S-CS89	7S-CS15	20327		12	120	3	3	18	$ 8,379	$ 450	$ -	$ 8,829
6S-CS3	6S-CS4	19876	VCP	12	51	1	3	16	$ 8,000	$ 150	$ -	$ 8,150
8S-CS35	8S-CS36	19919	VCP	12	115	1	3	16	$ 8,071	$ 150	$ -	$ 8,221
6N-CS20	6N-CS15	19652	VCP	15	326	6	3	14	$ 27,668	$ 900	$ -	$ 28,568
8S-CS34	8S-CS47	19926	VCP	12	77	1	3	14	$ 8,000	$ 150	$ -	$ 8,150
26S-CS27	26S-CS23	20084	VCP	15	177	5	3	13	$ 15,011	$ 750	$ -	$ 15,761
6N-CS33	6N-CS38	19695	VCP	12	249	15	3	13	$ 17,416	$ 2,250	$ -	$ 19,666
7S-CS28	7S-CS24	20200	VCP	12	246	4	3	13	$ 17,192	$ 600	$ -	$ 17,792
7N-CS20	7N-CS14	20285	VCP	18	326	7	3	12	$ 32,550	$ 1,050	$ -	$ 33,600
6N-CS46	6N-CS45	19693	VCP	21	374	3	3	12	$ 46,725	$ 450	$ -	$ 47,175
8S-CS47	8S-CS58	19927	VCP	15	241	0	3	12	$ 20,468	$ -	$ -	$ 20,468
7S-CS29	7S-CS23	20206	VCP	12	235	2	3	11	$ 16,457	$ 300	$ -	$ 16,757
15S-CS7	15S-CS8	20002	VCP	18	361	0	3	10	$ 36,060	$ -	$ -	$ 36,060
6N-CS4	6N-CS9	19646	VCP	21	321	12	3	10	$ 40,175	$ 1,800	$ -	$ 41,975
18S-CS11	18S-CS5	20387		10	199	0	3	9	$ 10,918	$ -	$ -	$ 10,918
26S-CS51	26S-CS26	20081	VCP	12	109	3	3	9	$ 7,595	$ 450	$ -	$ 8,045
6N-CS32	6N-CS33	19694	VCP	12	41	2	3	8	$ 8,000	$ 300	$ -	$ 8,300
8N-CS51	8N-CS44	20141	VCP	12	246	6	3	8	$ 17,241	$ 900	$ -	$ 18,141

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
24S-CS10	24S-CS11	20018	RCP	15	209	9	3	7	$ 17,774	$ 1,350	$ -	$ 19,124
24S-CS28	24S-CS26	20014	VCP	18	103	3	3	7	$ 10,270	$ 450	$ -	$ 10,720
4N-CS20	4N-CS21	19553	RCP	8	207	0	3	7	$ 9,311	$ -	$ -	$ 9,311
8N-CS53	8N-CS51	20140	VCP	12	336	10	3	7	$ 23,548	$ 1,500	$ -	$ 25,048
15N-CS31	15N-CS33	19779	RCP	36	322	0	3	6	$ 80,525	$ -	$ -	$ 80,525
15N-CS72	6N-CS4	19802	VCP	18	334	13	3	6	$ 33,420	$ 1,950	$ -	$ 35,370
7S-CS27	7S-CS29	19561	VCP	12	44	0	3	6	$ 8,000	$ -	$ -	$ 8,000
7S-CS3	7S-CS63	19878	VCP	15	202	3	3	6	$ 17,136	$ 450	$ -	$ 17,586
5N-CS70	5N-CS43	19612	RCP	21	327	5	3	5	$ 40,825	$ 750	$ -	$ 41,575
6N-CS30	6N-CS25	19650	VCP	12	359	6	3	5	$ 25,109	$ 900	$ -	$ 26,009
6S-CS2	6S-CS6	19848	VCP	12	208	0	3	5	$ 14,532	$ -	$ -	$ 14,532
7S-CS7	7S-CS8	19891	VCP	12	42	0	3	5	$ 8,000	$ -	$ -	$ 8,000
7S-CS8	7S-CS6	20203	VCP	15	40	0	3	5	$ 9,000	$ -	$ -	$ 9,000
8S-CS58	8S-CS65	19928	VCP	15	121	2	3	5	$ 10,285	$ 300	$ -	$ 10,585
9S-CS24	9S-CS25	20220	VCP	15	134	0	3	5	$ 11,390	$ -	$ -	$ 11,390
26S-CS56	26S-CS55	20274	VCP	12	136	2	3	4	$ 9,527	$ 300	$ -	$ 9,827
4N-CS17	4N-CS18	19548	RCP	30	192	2	3	4	$ 33,618	$ 300	$ -	$ 33,918
8N-CS39	8N-CS38	20160	VCP	15	13	0	3	4	$ 9,000	$ -	$ -	$ 9,000
10S-CS14	10S-CS13	19994	VCP	8	325	4	3	3	$ 14,630	$ 600	$ -	$ 15,230
10S-CS7	10S-CS13	19993	VCP	8	333	5	3	3	$ 14,985	$ 750	$ -	$ 15,735
14N-CS21	14N-CS22	20112	RCP	12	15	1	3	3	$ 8,000	$ 150	$ -	$ 8,150
15S-CS45	15S-CS42	19772	RCP	12	168	2	3	3	$ 11,732	$ 300	$ -	$ 12,032
24S-CS26	24S-CS20	20015	VCP	12	317	6	3	3	$ 22,190	$ 900	$ -	$ 23,090
24S-CS40A	24S-CS18	20340		12	71	2	3	3	$ 8,000	$ 300	$ -	$ 8,300
25S-CS21	25S-CS57	20055	RCP	21	275	0	3	3	$ 34,313	$ -	$ -	$ 34,313
25S-CS22	25S-CS55	20057		48	73	0	3	3	$ 32,805	$ -	$ -	$ 32,805
25S-CS8	25S-CS11	20052	VCP	12	205	2	3	3	$ 14,315	$ 300	$ -	$ 14,615
26S-CS14	26S-CS46	20362	RCP	30	33	0	3	3	$ 18,000	$ -	$ -	$ 18,000
3N-CS55	3N-CS54	19577	RCP	24	235	1	3	3	$ 35,280	$ 150	$ -	$ 35,430
4N-CS37	5N-CS24	19592	VCP	12	29	0	3	3	$ 8,000	$ -	$ -	$ 8,000
6N-CS48	6N-CS46	19655	VCP	12	77	3	3	3	$ 8,000	$ 450	$ -	$ 8,450
7N-CS34	7N-CS30	19707	VCP	12	292	3	3	3	$ 20,447	$ 450	$ -	$ 20,897
7S-CS48	7S-CS49	20188	VCP	18	15	0	3	3	$ 11,000	$ -	$ -	$ 11,000
8N-CS4	8N-CS19	20138	VCP	8	311	11	3	3	$ 14,013	$ 1,650	$ -	$ 15,663
8N-CS41	8N-CS32	20143	VCP	15	276	8	3	3	$ 23,418	$ 1,200	$ -	$ 24,618
8N-CS47	8N-CS42	20150	VCP	15	279	6	3	3	$ 23,732	$ 900	$ -	$ 24,632
8N-CS49	8N-CS47	20149	VCP	15	104	0	3	3	$ 8,866	$ -	$ -	$ 8,866
8S-CS108	8S-CS109	19954	RCP	33	373	0	3	3	$ 74,580	$ -	$ -	$ 74,580
8S-CS27	8S-CS35	19918	VCP	12	221	6	3	3	$ 15,477	$ 900	$ -	$ 16,377
15N-CS26	15N-CS30	19680	RCP	60	326	0	2	225	$ 179,245	$ -	$ -	$ 179,245
20S-CS2	20S-CS1	20007	VCP	24	423	8	2	107	$ 63,375	$ 1,200	$ -	$ 64,575
20S-CS6	20S-CS7	20011	VCP	15	127	2	2	98	$ 10,761	$ 300	$ -	$ 11,061
14N-CS41	15N-CS26	19749	RCP	48	214	0	2	80	$ 96,390	$ -	$ -	$ 96,390
20S-CS7	20S-CS2	20006	VCP	21	463	7	2	79	$ 57,863	$ 1,050	$ -	$ 58,913
26S-CS3	16S-CS48	20096	VCP	12	181	1	2	76	$ 12,663	$ 150	$ -	$ 12,813
26S-CS40	26S-CS34	20069	VCP	18	214	2	2	44	$ 21,370	$ 300	$ -	$ 21,670
16N-CS5	16N-CS10	19806	RCP	24	181	0	2	33	$ 27,090	$ -	$ -	$ 27,090
5N-CS55	5N-CS56	19626	RCP	42	240	0	2	31	$ 83,965	$ -	$ -	$ 83,965
10S-CS28	20S-CS3	19990	VCP	12	414	15	2	30	$ 28,987	$ 2,250	$ -	$ 31,237
14N-CS19	14N-CS30	19726	VCP	18	314	12	2	25	$ 31,350	$ 1,800	$ -	$ 33,150

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
7S-CS5	8S-CS1	20205	VCP	18	216	2	2	22	$ 21,600	$ 300	$ -	$ 21,900
14N-CS24	14N-CS39	19747	RCP	24	317	0	2	22	$ 47,595	$ -	$ -	$ 47,595
6S-CS58	6S-CS62	19859	VCP	24	151	6	2	22	$ 22,665	$ 900	$ -	$ 23,565
5N-CS43	5N-CS44	19613	VCP	21	140	2	2	14	$ 17,500	$ 300	$ -	$ 17,800
14N-CS18	14N-CS25	19722	PVC	18	221	4	2	12	$ 22,050	$ 600	$ -	$ 22,650
16S-CS36	16S-CS35	20095	VCP	12	201	0	2	12	$ 14,070	$ -	$ -	$ 14,070
6N-CS40	6N-CS47	19704	VCP	12	227	3	2	12	$ 15,869	$ 450	$ -	$ 16,319
6S-CS31	6S-CS35	19865	VCP	12	217	8	2	12	$ 15,162	$ 1,200	$ -	$ 16,362
5N-CS53	5N-CS60	20292	VCP	15	170	2	2	8	$ 14,442	$ 300	$ -	$ 14,742
8S-CS22	8S-CS19	19941	VCP	15	310	13	2	7	$ 26,350	$ 1,950	$ -	$ 28,300
10S-CS28	10S-CS37	19988	VCP	12	80	2	2	6	$ 5,621	$ 300	$ -	$ 5,921
14N-CS17	14N-CS18	19721	VCP	15	212	4	2	6	$ 18,012	$ 600	$ -	$ 18,612
15S-CS36	15S-CS61MWRD	19769	VCP	12	98	1	2	6	$ 6,860	$ 150	$ -	$ 7,010
24S-CS4	24S-CS6	20022	RCP	15	309	10	2	6	$ 26,265	$ 1,500	$ -	$ 27,765
26S-CS37	26S-CS38	20079	VCP	15	169	1	2	6	$ 14,365	$ 150	$ -	$ 14,515
5S-CS2	5S-CS3	19840	VCP	12	292	1	2	6	$ 20,440	$ 150	$ -	$ 20,590
5S-CS4	5S-CS5	19842	VCP	8	65	0	2	6	$ 2,930	$ -	$ -	$ 2,930
5S-CS5	6S-CS75	19843	VCP	8	183	2	2	6	$ 8,235	$ 300	$ -	$ 8,535
6S-CS66	6S-CS58	19858	VCP	24	176	6	2	6	$ 26,370	$ 900	$ -	$ 27,270
7N-CS41	7N-CS26	19714	RCP	8	161	0	2	6	$ 7,250	$ -	$ -	$ 7,250
7S-CS34	7S-CS32	19886		12	225	3	2	6	$ 15,736	$ 450	$ -	$ 16,186
7S-CS4	7S-CS5	20204	VCP	15	106	0	2	6	$ 9,019	$ -	$ -	$ 9,019
8S-CS90	8S-CS91	19969	VCP	8	156	2	2	6	$ 6,998	$ 300	$ -	$ 7,298
14N-CS20	14N-CS31	19736	RCP	24	328	0	2	4	$ 49,140	$ -	$ -	$ 49,140
14N-CS25	14N-CS26	19723	VCP	18	94	2	2	4	$ 9,380	$ 300	$ -	$ 9,680
14N-CS31	14N-CS33	19737	RCP	42	271	0	2	4	$ 94,885	$ -	$ -	$ 94,885
14N-CS33	14N-CS35	19738	RCP	42	49	0	2	4	$ 16,975	$ -	$ -	$ 16,975
25S-CS4	25S-CS10	20038	VCP	8	305	9	2	4	$ 13,739	$ 1,350	$ -	$ 15,089
5N-CS51	5N-CS74	20358		15	76	0	2	4	$ 6,494	$ -	$ -	$ 6,494
6N-CS26	6N-CS21	19631	VCP	24	260	9	2	4	$ 38,940	$ 1,350	$ -	$ 40,290
7S-CS34	7S-CS36	19885	VCP	12	216	4	2	4	$ 15,141	$ 600	$ -	$ 15,741
7S-CS81	7S-CS-IN1114	20384	RCP	24	133	0	2	4	$ 19,950	$ -	$ -	$ 19,950
9S-CS19	9S-CS22	20296	VCP	12	128	0	2	4	$ 8,960	$ -	$ -	$ 8,960
14N-CS14	14N-CS22	19740	RCP	24	310	0	2	3	$ 46,455	$ -	$ -	$ 46,455
14N-CS65	5N-CS6	20181	RCP	21	334	0	2	3	$ 41,800	$ -	$ -	$ 41,800
16S-CS65	16S-CS58	20247	VCP	12	210	1	2	3	$ 14,693	$ 150	$ -	$ 14,843
3N-CS54	3N-CS52	19578	RCP	30	332	0	2	3	$ 58,119	$ -	$ -	$ 58,119
8S-CS71	8S-CS73	19942	VCP	12	179	1	2	3	$ 12,544	$ 150	$ -	$ 12,694
10S-CS21	10S-CS14	19995	VCP	8	295	4	2	2	$ 13,257	$ 600	$ -	$ 13,857
10S-CS3	10S-CS4	19567	RCP	10	105	0	2	2	$ 5,781	$ -	$ -	$ 5,781
14N-CS22	14N-CS35	19741	RCP	24	335	0	2	2	$ 50,220	$ -	$ -	$ 50,220
14N-CS39	14N-CS41	19748	RCP	48	109	0	2	2	$ 49,095	$ -	$ -	$ 49,095
14N-CS69	14N-CS26	20114		12	273	0	2	2	$ 19,131	$ -	$ -	$ 19,131
15N-CS14	15N-CS22	19690	RCP	27	318	0	2	2	$ 49,321	$ -	$ -	$ 49,321
15N-CS28	15N-CS29	19686	RCP	30	123	0	2	2	$ 21,578	$ -	$ -	$ 21,578
15N-CS64	15N-CS72	19801	VCP	18	301	10	2	2	$ 30,100	$ 1,500	$ -	$ 31,600
16N-CS1	16N-CS2	19803	RCP	18	149	0	2	2	$ 14,910	$ -	$ -	$ 14,910
16N-CS11	16N-CS12	19808	RCP	30	166	0	2	2	$ 29,050	$ -	$ -	$ 29,050
16N-CS15	16N-CS25	19810	RCP	66	285	0	2	2	$ 170,760	$ -	$ -	$ 170,760
16N-CS2	16N-CS3	19804	RCP	18	144	0	2	2	$ 14,390	$ -	$ -	$ 14,390

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
16N-CS25	16N-CS32	19811	RCP	66	351	0	2	2	$ 210,480	$ -	$ -	$ 210,480
16N-CS45	16N-CS46	19816	RCP	24	158	0	2	2	$ 23,760	$ -	$ -	$ 23,760
17N-CS3	17N-CS4	19837	RCP	21	345	0	2	2	$ 43,063	$ -	$ -	$ 43,063
19S-CS11	19S-CS8	20224	CONC	90	461	0	2	2	$ 391,510	$ -	$ -	$ 391,510
24S-CS25	24S-CS26	20013	RCP	12	349	7	2	2	$ 24,423	$ 1,050	$ -	$ 25,473
4N-CS21	4N-CS24	19555	VCP	8	172	0	2	2	$ 7,727	$ -	$ -	$ 7,727
4N-CS22	4N-CS23	19588	RCP	36	175	0	2	2	$ 43,675	$ -	$ -	$ 43,675
5N-CS24	5N-CS28	19618	VCP	12	245	6	2	2	$ 17,129	$ 900	$ -	$ 18,029
5N-CS36	5N-CS40	19622	VCP	12	227	5	2	2	$ 15,883	$ 750	$ -	$ 16,633
5N-CS56	5N-CS69	19627	RCP	42	526	0	2	2	$ 183,960	$ -	$ -	$ 183,960
6S-CS11	6S-CS12	19850	VCP	12	18	1	2	2	$ 1,239	$ 150	$ -	$ 1,389
6S-CS12	6S-CS14	19852	VCP	12	195	5	2	2	$ 13,643	$ 750	$ -	$ 14,393
6S-CS18	6S-CS20	19854	VCP	12	198	7	2	2	$ 13,860	$ 1,050	$ -	$ 14,910
6S-CS6	6S-CS11	19849	VCP	12	178	7	2	2	$ 12,432	$ 1,050	$ -	$ 13,482
6S-CS77	7S-CS9	20107	VCP	18	56	0	2	2	$ 5,550	$ -	$ -	$ 5,550
7N-CS23	7N-CS19	19671	VCP	15	398	14	2	2	$ 33,864	$ 2,100	$ -	$ 35,964
7N-CS38	7N-CS39	19674	VCP	12	41	0	2	2	$ 2,898	$ -	$ -	$ 2,898
7N-CS39	7N-CS40	19675	VCP	12	112	1	2	2	$ 7,868	$ 150	$ -	$ 8,018
7S-CS15	7S-CS14	20328	VCP	12	32	0	2	2	$ 2,240	$ -	$ -	$ 2,240
7S-CS60	17S-CS5	20197	VCP	21	42	0	2	2	$ 5,263	$ -	$ -	$ 5,263
7S-CS78	7S-CS74	20378	RCP	60	202	1	2	2	$ 111,265	$ 150	$ -	$ 111,415
8N-CS55	8N-CS52	20156	VCP	12	295	9	2	2	$ 20,671	$ 1,350	$ -	$ 22,021
8N-CS61	8N-CS49	20148	VCP	12	236	8	2	2	$ 16,499	$ 1,200	$ -	$ 17,699
8S-CS57	8S-CS51	19935	RCP	15	38	0	2	2	$ 3,264	$ -	$ -	$ 3,264
8S-CS64	8S-CS62	20132	RCP	15	236	0	2	2	$ 20,060	$ -	$ -	$ 20,060
8S-CS80	8S-CS89	19962	VCP	8	219	2	2	2	$ 9,869	$ 300	$ -	$ 10,169
8S-CS82	8S-CS94	19967	RCP	12	114	0	2	2	$ 7,980	$ -	$ -	$ 7,980
8S-CS83	9S-CS83	19565	VCP	8	229	1	2	2	$ 10,301	$ 150	$ -	$ 10,451
8S-CS89	8S-CS110	19963	VCP	15	349	0	2	2	$ 29,665	$ -	$ -	$ 29,665
9S-CS26	9S-CS12	20217		33	9	0	2	2	$ 1,740	$ -	$ -	$ 1,740
26S-CS22	26S-CS50	20265	RCP	12	109	1	1	3	$ -	$ -	$ -	$ -
8S-CS109	8S-CS110	19961	RCP	33	155	0	1	2	$ -	$ -	$ -	$ -
14N-CS30	14N-CS34	19727	RCP	27	321	0	1	1	$ -	$ -	$ -	$ -
25S-CS7	25S-CS8	20051	VCP	8	52	1	1	1	$ -	$ -	$ -	$ -
4N-CS26	4N-CS33	19590	VCP	8	303	0	1	1	$ -	$ -	$ -	$ -
5N-CS45	5N-CS46	20283	VCP	12	300	1	1	1	$ -	$ -	$ -	$ -
6S-CS14	6S-CS18	19853	VCP	12	199	4	1	1	$ -	$ -	$ -	$ -
6S-CS40	6S-CS69	20319	RCP	21	375	0	1	1	$ -	$ -	$ -	$ -
8N-CS50	8N-CS48	20158	VCP	15	79	0	1	1	$ -	$ -	$ -	$ -
8N-CS7	8N-CS25	20165	VCP	8	434	11	1	1	$ -	$ -	$ -	$ -
8S-CS23	8S-CS119	19898	VCP	12	106	4	1	1	$ -	$ -	$ -	$ -
07S-BT20	7S-CS56	19944		12	51	0	0	0	$ -	$ -	$ -	$ -
10S-CS13	10A1SMWRD02	20399		8	47	0	0	0	$ -	$ -	$ -	$ -
10S-CS35	10S-CS34	20110		12	40	0	0	0	$ -	$ -	$ -	$ -
14N-CS10	14N-CS11	19719	VCP	12	110	2	0	0	$ -	$ -	$ -	$ -
14N-CS11	14N-CS17	19720	VCP	15	99	1	0	0	$ -	$ -	$ -	$ -
14N-CS13	14N-CS14	19739	RCP	15	12	1	0	0	$ -	$ -	$ -	$ -
14N-CS19	14N-CS20	19735	RCP	12	15	1	0	0	$ -	$ -	$ -	$ -
14N-CS23	14N-CS24	19746	RCP	12	15	1	0	0	$ -	$ -	$ -	$ -
14N-CS26	14N-CS30	19724	RCP	24	304	0	0	0	$ -	$ -	$ -	$ -

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
14N-CS27	14N-CS31	19734	CONC	36	304	0	0	0	$ -	$ -	$ -	$ -
14N-CS35	14N-CS39	19742	RCP	48	327	0	0	0	$ -	$ -	$ -	$ -
14N-CS37	14N-CS73	20312	VCP	12	160	0	0	0	$ -	$ -	$ -	$ -
14N-CS38	14N-CS42	19732	RCP	30	132	0	0	0	$ -	$ -	$ -	$ -
14N-CS47	14N-CS72	20315	VCP	12	219	10	0	0	$ -	$ -	$ -	$ -
14N-CS50	14N-CS51	20176	RCP	12	109	0	0	0	$ -	$ -	$ -	$ -
14N-CS51	14N-CS53	20177	RCP	12	15	0	0	0	$ -	$ -	$ -	$ -
14N-CS53	14N-CS54	20178	RCP	12	17	0	0	0	$ -	$ -	$ -	$ -
14N-CS54	14N-CS55	20179	RCP	12	156	0	0	0	$ -	$ -	$ -	$ -
14N-CS57	14N-CS47	20180	VCP	12	218	8	0	0	$ -	$ -	$ -	$ -
14N-CS72	14N-CS36	20109	VCP	12	206	6	0	0	$ -	$ -	$ -	$ -
14N-CS9	14N-CS16	19744	RCP	18	295	0	0	0	$ -	$ -	$ -	$ -
15N-CS13	15N-CS14	19689	PVC	12	9	1	0	0	$ -	$ -	$ -	$ -
15N-CS19	15N-CS26	19679	RCP	24	193	0	0	0	$ -	$ -	$ -	$ -
15N-CS20	15N-CS27	19677	PVC	18	189	6	0	0	$ -	$ -	$ -	$ -
15N-CS20	15N-CS19	19678	VCP	12	17	1	0	0	$ -	$ -	$ -	$ -
15N-CS22	15N-CS30	19778	RCP	27	278	0	0	0	$ -	$ -	$ -	$ -
15N-CS30	15N-CS32	19681	RCP	60	321	0	0	0	$ -	$ -	$ -	$ -
15N-CS33	15N-CS36	19783	RCP	36	326	1	0	0	$ -	$ -	$ -	$ -
15N-CS34	15N-CS35	19683	RCP	60	298	0	0	0	$ -	$ -	$ -	$ -
15N-CS35	16N-CS12	19684	RCP	60	63	0	0	0	$ -	$ -	$ -	$ -
15N-CS36	16N-CS13	19784	RCP	36	71	0	0	0	$ -	$ -	$ -	$ -
15N-CS69	6N-CS49	20418	RCP	30	128	5	0	0	$ -	$ -	$ -	$ -
15N-CS73	16N-CS43	19794	VCP	12	41	1	0	0	$ -	$ -	$ -	$ -
15N-CS77	16N-CS30	19790	VCP	12	36	1	0	0	$ -	$ -	$ -	$ -
15S-CS10	15S-CS11	19756	PVC	15	246	7	0	0	$ -	$ -	$ -	$ -
15S-CS11	15S-CS15	19757	PVC	15	202	6	0	0	$ -	$ -	$ -	$ -
15S-CS15	15S-CS19	19758	PVC	15	184	4	0	0	$ -	$ -	$ -	$ -
15S-CS19	15S-CS23	19759	PVC	18	258	2	0	0	$ -	$ -	$ -	$ -
15S-CS20	15S-CS24	19763	PVC	8	217	3	0	0	$ -	$ -	$ -	$ -
15S-CS23	15S-CS25	19760	PVC	18	116	2	0	0	$ -	$ -	$ -	$ -
15S-CS24	15S-CS26	19764	PVC	8	125	2	0	0	$ -	$ -	$ -	$ -
15S-CS25	15S-CS29	19761	PVC	18	153	2	0	0	$ -	$ -	$ -	$ -
15S-CS26	15S-CS31	19765	RCP	8	129	2	0	0	$ -	$ -	$ -	$ -
15S-CS31	15S-CS29	19766	DI	12	42	0	0	0	$ -	$ -	$ -	$ -
15S-CS41	15S-CS37	19768	CIPP	12	247	10	0	0	$ -	$ -	$ -	$ -
15S-CS52	15S-CS51	19776	PVC	8	178	4	0	0	$ -	$ -	$ -	$ -
15S-CS53	15S-CS52	19775	PVC	8	148	6	0	0	$ -	$ -	$ -	$ -
15S-CS54	15S-CS53	19774	PVC	8	198	4	0	0	$ -	$ -	$ -	$ -
16N-CS10	16N-CS11	19807	RCP	27	143	0	0	0	$ -	$ -	$ -	$ -
16N-CS12	16N-CS15	19809	RCP	66	333	0	0	0	$ -	$ -	$ -	$ -
16N-CS16	16N-CS27	19818	PVC	12	164	4	0	0	$ -	$ -	$ -	$ -
16N-CS19	16N-CS21	19831	RCP	36	181	1	0	0	$ -	$ -	$ -	$ -
16N-CS21	16N-CS23	19832	RCP	36	183	0	0	0	$ -	$ -	$ -	$ -
16N-CS23	17N-CS5	20364	RCP	36	307	2	0	0	$ -	$ -	$ -	$ -
16N-CS26	16N-CS33	19820	PVC	15	331	12	0	0	$ -	$ -	$ -	$ -
16N-CS27	16N-CS26	19819	PVC	12	165	8	0	0	$ -	$ -	$ -	$ -
16N-CS30	16N-CS32	19812	RCP	24	345	0	0	0	$ -	$ -	$ -	$ -
16N-CS32	16N-CS37	19813	RCP	66	254	0	0	0	$ -	$ -	$ -	$ -
16N-CS33	16N-CS39	19821	PVC	15	99	4	0	0	$ -	$ -	$ -	$ -

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
16N-CS37	16N-CS46	19814	RCP	66	402	0	0	0	$ -	$ -	$ -	$ -
16N-CS38	16N-CS48	20115	PVC	18	312	7	0	0	$ -	$ -	$ -	$ -
16N-CS39	16N-CS38	19822	PVC	18	215	8	0	0	$ -	$ -	$ -	$ -
16N-CS4	16N-CS5	19805	RCP	21	216	0	0	0	$ -	$ -	$ -	$ -
16N-CS43	16N-CS45	19815	PVC	12	176	0	0	0	$ -	$ -	$ -	$ -
16N-CS46	16N-CS50	19817	RCP	66	368	0	0	0	$ -	$ -	$ -	$ -
16N-CS48	16N-CS47	19557		18	57	0	0	0	$ -	$ -	$ -	$ -
16N-CS50	16N-CS52	19825	RCP	66	367	0	0	0	$ -	$ -	$ -	$ -
16N-CS52	8N-CS1	19676	RCP	66	285	0	0	0	$ -	$ -	$ -	$ -
16S-CS13	16S-CS17	20088	CIPP	18	217	6	0	0	$ -	$ -	$ -	$ -
16S-CS15	16S-CS19	19777	CIPP	18	190	6	0	0	$ -	$ -	$ -	$ -
16S-CS25	16S-CS28	20089	CIPP	24	228	9	0	0	$ -	$ -	$ -	$ -
16S-CS28	16S-CS31	20090	CIPP	24	234	9	0	0	$ -	$ -	$ -	$ -
16S-CS30	16S-CS32	20279	CIPP	18	180	4	0	0	$ -	$ -	$ -	$ -
16S-CS39	16S-CS38	20246	CIPP	8	183	5	0	0	$ -	$ -	$ -	$ -
16S-CS46	16S-CS42	20092	CIPP	12	215	7	0	0	$ -	$ -	$ -	$ -
16S-CS58	16S-CS61MWRD	20248	RCP	42	140	0	0	0	$ -	$ -	$ -	$ -
16S-CS60	16S-CS40	20223		12	123	0	0	0	$ -	$ -	$ -	$ -
16S-CS70	16S-CS76MWRD	20117	RCP	72	145	2	0	0	$ -	$ -	$ -	$ -
16S-CS81	16S-CS70	19563	RCP	72	615	0	0	0	$ -	$ -	$ -	$ -
16S-CS9	16S-CS13	20087	CIPP	18	213	9	0	0	$ -	$ -	$ -	$ -
17N-CS1	17N-BT09	20414	RCP	15	212	1	0	0	$ -	$ -	$ -	$ -
17N-CS2	17N-CS3	19836	RCP	18	339	0	0	0	$ -	$ -	$ -	$ -
17N-CS4	8N-CS6	20335	RCP	21	73	0	0	0	$ -	$ -	$ -	$ -
19S-CS2	19S-CS9	20263	VCP	36	95	0	0	0	$ -	$ -	$ -	$ -
19S-CS4	19S-CS5	20225		58	656	0	0	0	$ -	$ -	$ -	$ -
19S-CS5	19S-CS6	20226		58	670	2	0	0	$ -	$ -	$ -	$ -
19S-CS6	19S-CS7MWRD	20227		58	552	2	0	0	$ -	$ -	$ -	$ -
19S-CS9	19S-CS10MWRD	20264	RCP	36	103	1	0	0	$ -	$ -	$ -	$ -
24S-CS11	24S-CS13	20019	RCP	18	225	6	0	0	$ -	$ -	$ -	$ -
24S-CS20	24S-CS14	20017	VCP	15	311	6	0	0	$ -	$ -	$ -	$ -
24S-CS41	24S-CS24	20347	RCP	12	192	6	0	0	$ -	$ -	$ -	$ -
24S-CS6	24S-CS7	20023	RCP	15	282	6	0	0	$ -	$ -	$ -	$ -
25S-CS1	25S-CS38	20061	RCP	30	7	0	0	0	$ -	$ -	$ -	$ -
25S-CS12	25S-CS39	20044	RCP	24	544	14	0	0	$ -	$ -	$ -	$ -
25S-CS13	25S-CS21	20054	VCP	15	74	1	0	0	$ -	$ -	$ -	$ -
25S-CS16	25S-CS17	20041	RCP	24	63	0	0	0	$ -	$ -	$ -	$ -
25S-CS25	25S-CS16	20040	RCP	18	292	9	0	0	$ -	$ -	$ -	$ -
25S-CS28	25S-CS27	20049	RCP	21	65	2	0	0	$ -	$ -	$ -	$ -
25S-CS31	25S-CS28	20048	VCP	15	247	4	0	0	$ -	$ -	$ -	$ -
25S-CS36	25S-CS41	20046	VCP	8	47	0	0	0	$ -	$ -	$ -	$ -
25S-CS41	25S-CS31	20047	VCP	12	155	1	0	0	$ -	$ -	$ -	$ -
25S-CS44	25S-CS28	20045	VCP	18	17	0	0	0	$ -	$ -	$ -	$ -
25S-CS46	25S-CS54	20302		15	384	0	0	0	$ -	$ -	$ -	$ -
25S-CS49	16S-CS59	20298		24	319	3	0	0	$ -	$ -	$ -	$ -
25S-CS51	25S-CS49	20060		21	396	0	0	0	$ -	$ -	$ -	$ -
25S-CS54	25S-CS51	20391		24	389	0	0	0	$ -	$ -	$ -	$ -
25S-CS6	26S-CS45	20363		12	19	0	0	0	$ -	$ -	$ -	$ -
26S-CS13	25S-CS53	20059	PVC	21	107	0	0	0	$ -	$ -	$ -	$ -
26S-CS13	26S-CS43	20390		21	6	0	0	0	$ -	$ -	$ -	$ -

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
26S-CS16	26S-CS15	20075	VCP	18	199	0	0	0	$ -	$ -	$ -	$ -
26S-CS23	26S-CS21	20085	CIPP	18	157	2	0	0	$ -	$ -	$ -	$ -
26S-CS42	26S-CS41	20065	VCP	12	85	1	0	0	$ -	$ -	$ -	$ -
26S-CS45	16S-CS58	20275	RCP	42	403	0	0	0	$ -	$ -	$ -	$ -
26S-CS50	26S-CS13	20304	RCP	12	128	0	0	0	$ -	$ -	$ -	$ -
26S-CS53	26S-CS16	20271		18	25	0	0	0	$ -	$ -	$ -	$ -
26S-CS67	26S-CS3	19538	CIPP	12	184	6	0	0	$ -	$ -	$ -	$ -
26S-CS7	26S-CS44	20268	RCP	42	407	0	0	0	$ -	$ -	$ -	$ -
3N-CS1	3N-CS2	19571	VCP	12	290	6	0	0	$ -	$ -	$ -	$ -
3N-CS10	3N-CS46	19573	VCP	12	111	3	0	0	$ -	$ -	$ -	$ -
3N-CS27	3N-CS30	19536	VCP	15	1	0	0	0	$ -	$ -	$ -	$ -
3N-CS28	3N-CS32	20348		12	1	0	0	0	$ -	$ -	$ -	$ -
3N-CS46	3N-CS9	19574	VCP	12	180	8	0	0	$ -	$ -	$ -	$ -
3N-CS52	3N-CS53	19580	RCP	30	156	1	0	0	$ -	$ -	$ -	$ -
3N-CS53	3N-CS7	19581	RCP	33	152	0	0	0	$ -	$ -	$ -	$ -
3N-CS56	3N-CS55	19576	RCP	24	84	0	0	0	$ -	$ -	$ -	$ -
3N-CS7	3N-CS8	19582	RCP	30	4	0	0	0	$ -	$ -	$ -	$ -
3N-CS8	4N-CS15	19583	RCP	30	154	0	0	0	$ -	$ -	$ -	$ -
4N-CS10	4N-CS13	19587	RCP	30	206	3	0	0	$ -	$ -	$ -	$ -
4N-CS11	4N-CS14	19543	RCP	26	123	2	0	0	$ -	$ -	$ -	$ -
4N-CS14	4N-CS19	19545	RCP	26	308	2	0	0	$ -	$ -	$ -	$ -
4N-CS15	4N-CS16	19546	RCP	30	160	1	0	0	$ -	$ -	$ -	$ -
4N-CS16	4N-CS17	19547	RCP	30	150	2	0	0	$ -	$ -	$ -	$ -
4N-CS18	4N-CS19	19549	RCP	30	18	0	0	0	$ -	$ -	$ -	$ -
4N-CS19	4N-CS22	19552	RCP	36	358	6	0	0	$ -	$ -	$ -	$ -
4N-CS2	4N-CS3	19541	VCP	15	220	2	0	0	$ -	$ -	$ -	$ -
4N-CS21	4N-CS22	19554	VCP	10	17	0	0	0	$ -	$ -	$ -	$ -
4N-CS23	4N-CS25	19589	RCP	36	171	1	0	0	$ -	$ -	$ -	$ -
4N-CS25	5N-CS73	20334		42	124	0	0	0	$ -	$ -	$ -	$ -
4N-CS28	4N-CS19	19537	RCP	24	86	0	0	0	$ -	$ -	$ -	$ -
4N-CS3	4N-CS11	19542	RCP	26	356	7	0	0	$ -	$ -	$ -	$ -
4N-CS31	4N-CS32	19551	RCP	12	57	0	0	0	$ -	$ -	$ -	$ -
4N-CS5	4N-CS10	19716	RCP	30	192	0	0	0	$ -	$ -	$ -	$ -
4N-CS8	4N-CS14	19544	RCP	10	215	0	0	0	$ -	$ -	$ -	$ -
5N-CS28	5N-CS35	19619	VCP	12	329	8	0	0	$ -	$ -	$ -	$ -
5N-CS35	4N-CS41	19620		12	76	0	0	0	$ -	$ -	$ -	$ -
5N-CS35	5N-CS36	19621	VCP	12	65	1	0	0	$ -	$ -	$ -	$ -
5N-CS40	5N-CS45	20282	VCP	12	56	0	0	0	$ -	$ -	$ -	$ -
5N-CS57	5N-CS60	20284	RCP	42	738	0	0	0	$ -	$ -	$ -	$ -
5N-CS60	6S-CS74	20317	RCP	60	61	0	0	0	$ -	$ -	$ -	$ -
5N-CS68	5S-CS5	20229		12	54	0	0	0	$ -	$ -	$ -	$ -
5N-CS69	5N-CS57	19628	RCP	42	531	0	0	0	$ -	$ -	$ -	$ -
5N-CS73	5N-CS71	20333	RCP	42	210	1	0	0	$ -	$ -	$ -	$ -
5S-CS1	5S-CS8	19838	VCP	12	156	0	0	0	$ -	$ -	$ -	$ -
5S-CS6	5S-CS7	19844	RCP	42	393	0	0	0	$ -	$ -	$ -	$ -
5S-CS7	6S-CS59	19874	RCP	42	379	0	0	0	$ -	$ -	$ -	$ -
5S-CS8	5S-CS9	20316	VCP	12	6	0	0	0	$ -	$ -	$ -	$ -
6N-CS11	6N-CS6	19633	RCP	33	324	14	0	0	$ -	$ -	$ -	$ -
6N-CS16	6N-CS11	19632	RCP	33	331	15	0	0	$ -	$ -	$ -	$ -
6N-CS37	6N-CS40	19703	VCP	12	245	1	0	0	$ -	$ -	$ -	$ -

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
6N-CS43	7S-CS1	19706	VCP	15	40	0	0	0	$ -	$ -	$ -	$ -
6N-CS47	7N-CS38	19705	VCP	12	31	0	0	0	$ -	$ -	$ -	$ -
6N-CS8	6N-CS9	19645	RCP	42	323	0	0	0	$ -	$ -	$ -	$ -
6N-CS9	6N-CS10	19649	RCP	42	320	0	0	0	$ -	$ -	$ -	$ -
6S-CS1	6S-CS73	19846	VCP	8	22	1	0	0	$ -	$ -	$ -	$ -
6S-CS10	6S-CS16	19863	CIPP	12	212	8	0	0	$ -	$ -	$ -	$ -
6S-CS17	6S-CS23	19868	CIPP	12	184	6	0	0	$ -	$ -	$ -	$ -
6S-CS23	6S-CS28	19869	VCP	12	220	8	0	0	$ -	$ -	$ -	$ -
6S-CS28	6S-CS32	19870	CIPP	12	218	9	0	0	$ -	$ -	$ -	$ -
6S-CS32	6S-CS36	19871	CIPP	12	217	8	0	0	$ -	$ -	$ -	$ -
6S-CS35	6S-CS39	19866	PVC	12	14	0	0	0	$ -	$ -	$ -	$ -
6S-CS39	6S-CS40	19867	RCP	21	371	0	0	0	$ -	$ -	$ -	$ -
6S-CS59	6S-CS60	20280	RCP	42	372	0	0	0	$ -	$ -	$ -	$ -
6S-CS60	6S-CS61	20281	RCP	42	368	0	0	0	$ -	$ -	$ -	$ -
6S-CS61	6S-CS64	20100	VCP	15	12	0	0	0	$ -	$ -	$ -	$ -
6S-CS61	6S-CS65	20101	RCP	42	378	0	0	0	$ -	$ -	$ -	$ -
6S-CS64	16S-CS9	20231	CIPP	18	218	7	0	0	$ -	$ -	$ -	$ -
6S-CS65	16S-CS81	20102	RCP	72	655	3	0	0	$ -	$ -	$ -	$ -
6S-CS68	6S-CS65	20321	RCP	60	542	10	0	0	$ -	$ -	$ -	$ -
6S-CS69	6S-CS68	20118	RCP	60	647	12	0	0	$ -	$ -	$ -	$ -
6S-CS7	6S-CS13	19875	RCP	18	148	0	0	0	$ -	$ -	$ -	$ -
6S-CS7	6S-CS77	20400		8	22	0	0	0	$ -	$ -	$ -	$ -
6S-CS70	6S-CS69	20119	RCP	60	582	11	0	0	$ -	$ -	$ -	$ -
6S-CS72	6S-CS70	20097	RCP	60	789	1	0	0	$ -	$ -	$ -	$ -
6S-CS73	6S-CS2	19847	VCP	12	219	2	0	0	$ -	$ -	$ -	$ -
6S-CS74	6S-CS72	20120	RCP	60	197	0	0	0	$ -	$ -	$ -	$ -
7N-CS19	7N-CS18	19672	VCP	15	52	0	0	0	$ -	$ -	$ -	$ -
7N-CS29	7N-CS23	19670	VCP	15	196	6	0	0	$ -	$ -	$ -	$ -
7N-CS40	7S-CS5	20108	RCP	12	41	0	0	0	$ -	$ -	$ -	$ -
7N-CS9	8N-CS22	19668	RCP	60	370	0	0	0	$ -	$ -	$ -	$ -
7S-CS12	7S-CS62	19881	PVC	12	244	3	0	0	$ -	$ -	$ -	$ -
7S-CS13A	7S-CS13	20105	VCP	21	3	0	0	0	$ -	$ -	$ -	$ -
7S-CS18	7S-CS12	19880	CONC	12	201	1	0	0	$ -	$ -	$ -	$ -
7S-CS19	7S-CS89	20395		12	9	0	0	0	$ -	$ -	$ -	$ -
7S-CS2	7S-CS80	20381	PVC	18	21	0	0	0	$ -	$ -	$ -	$ -
7S-CS47	6S-CS68	20199	RCP	30	371	0	0	0	$ -	$ -	$ -	$ -
7S-CS59	7S-CS60	20124	VCP	21	18	0	0	0	$ -	$ -	$ -	$ -
7S-CS62	7S-CS2	20125		12	9	0	0	0	$ -	$ -	$ -	$ -
7S-CS63	7S-CS2	19879	VCP	15	172	0	0	0	$ -	$ -	$ -	$ -
7S-CS64	7S-CS65	19892	PVC	66	230	0	0	0	$ -	$ -	$ -	$ -
7S-CS65	7S-CS66	19893		66	219	0	0	0	$ -	$ -	$ -	$ -
7S-CS67	7S-CS62	20127	PVC	12	9	0	0	0	$ -	$ -	$ -	$ -
7S-CS72	7S-CS3	20376	PVC	12	21	0	0	0	$ -	$ -	$ -	$ -
7S-CS73	7S-CS73	20373	RCP	60	44	2	0	0	$ -	$ -	$ -	$ -
7S-CS75	7S-CS79	20379		12	212	1	0	0	$ -	$ -	$ -	$ -
7S-CS76	7S-CS78	20372	RCP	60	259	1	0	0	$ -	$ -	$ -	$ -
7S-CS77	7S-CS72	20375	PVC	12	4	0	0	0	$ -	$ -	$ -	$ -
7S-CS79	7S-CS72	20377		12	285	2	0	0	$ -	$ -	$ -	$ -
7S-CS80	7S-CS1	19882	PVC	18	328	2	0	0	$ -	$ -	$ -	$ -
7S-CS-IN1114	7S-CS82	20385	RCP	24	135	0	0	0	$ -	$ -	$ -	$ -

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
8N-CS1	8N-CS3	20133	RCP	66	396	0	0	0	$ -	$ -	$ -	$ -
8N-CS10	8N-CS11	20128		66	4	0	0	0	$ -	$ -	$ -	$ -
8N-CS11	8N-CS12	20171		66	25	0	0	0	$ -	$ -	$ -	$ -
8N-CS12	8N-CS15	20172		66	146	0	0	0	$ -	$ -	$ -	$ -
8N-CS13	8N-CS14	20167	RCP	36	35	0	0	0	$ -	$ -	$ -	$ -
8N-CS14	8N-CS58	20168	RCP	36	88	0	0	0	$ -	$ -	$ -	$ -
8N-CS15	8N-CS16	20173		66	176	0	0	0	$ -	$ -	$ -	$ -
8N-CS19	8N-CS23	20139	VCP	10	332	11	0	0	$ -	$ -	$ -	$ -
8N-CS21	08N-BT01	20103		21	7	0	0	0	$ -	$ -	$ -	$ -
8N-CS22	8N-CS23	20137	RCP	60	364	0	0	0	$ -	$ -	$ -	$ -
8N-CS23	8N-CS56	20161	RCP	60	285	1	0	0	$ -	$ -	$ -	$ -
8N-CS3	8N-CS5	20134	RCP	66	390	0	0	0	$ -	$ -	$ -	$ -
8N-CS32	8N-CS31	20144	VCP	15	28	0	0	0	$ -	$ -	$ -	$ -
8N-CS38	9N-CS3	19656	RCP	42	393	0	0	0	$ -	$ -	$ -	$ -
8N-CS44	8N-CS41	20142	VCP	15	352	9	0	0	$ -	$ -	$ -	$ -
8N-CS48	8N-CS43	20159	VCP	15	244	1	0	0	$ -	$ -	$ -	$ -
8N-CS5	8N-CS8	20169	RCP	66	39	0	0	0	$ -	$ -	$ -	$ -
8N-CS54	8N-CS61	20147	VCP	12	294	6	0	0	$ -	$ -	$ -	$ -
8N-CS58	8N-CS62	20121	RCP	36	121	0	0	0	$ -	$ -	$ -	$ -
8N-CS6	8N-CS21	20122	RCP	21	398	0	0	0	$ -	$ -	$ -	$ -
8N-CS60	8N-CS35	20146	RCP	30	200	0	0	0	$ -	$ -	$ -	$ -
8N-CS62	8N-CS67	20433		60	211	5	0	0	$ -	$ -	$ -	$ -
8N-CS8	8N-CS10	20170	RCP	66	64	0	0	0	$ -	$ -	$ -	$ -
8N-CS9	8N-CS13	20166	RCP	36	46	0	0	0	$ -	$ -	$ -	$ -
8S-CS1	8S-CS2	19897	VCP	18	8	0	0	0	$ -	$ -	$ -	$ -
8S-CS10	8S-CS117	19910	VCP	24	274	8	0	0	$ -	$ -	$ -	$ -
8S-CS106	8S-CS109	19960	RCP	21	89	0	0	0	$ -	$ -	$ -	$ -
8S-CS110	8S-CS111	19964	RCP	33	211	0	0	0	$ -	$ -	$ -	$ -
8S-CS111	8S-CS113	19965	RCP	33	371	0	0	0	$ -	$ -	$ -	$ -
8S-CS112	08S-BT20	20130		15	7	0	0	0	$ -	$ -	$ -	$ -
8S-CS113	19S-CS11	20406		36	375	0	0	0	$ -	$ -	$ -	$ -
8S-CS120	8S-CS119	19899		12	32	1	0	0	$ -	$ -	$ -	$ -
8S-CS122	8S-CS34	19925		12	28	0	0	0	$ -	$ -	$ -	$ -
8S-CS16	8S-CS21	19916	RCP	30	319	1	0	0	$ -	$ -	$ -	$ -
8S-CS37	8S-CS38	19921	VCP	12	24	4	0	0	$ -	$ -	$ -	$ -
8S-CS39	8S-CS41	19930	RCP	33	10	0	0	0	$ -	$ -	$ -	$ -
8S-CS39	8S-CS40	19938	VCP	15	7	0	0	0	$ -	$ -	$ -	$ -
8S-CS41	8S-CS42	19931	RCP	33	151	0	0	0	$ -	$ -	$ -	$ -
8S-CS46	8S-CS45	19933	VCP	15	1	0	0	0	$ -	$ -	$ -	$ -
8S-CS64	8S-CS69	19955	VCP	21	162	0	0	0	$ -	$ -	$ -	$ -
8S-CS65	8S-CS57	19929	PVC	12	138	4	0	0	$ -	$ -	$ -	$ -
8S-CS70	8S-CS71	20230		12	8	0	0	0	$ -	$ -	$ -	$ -
8S-CS73	8S-CS76	20380	VCP	12	230	1	0	0	$ -	$ -	$ -	$ -
8S-CS75	8S-CS79	19957	RCP	21	106	0	0	0	$ -	$ -	$ -	$ -
8S-CS79	8S-CS85	19958	RCP	21	177	0	0	0	$ -	$ -	$ -	$ -
8S-CS85	8S-CS99	19959	RCP	21	163	0	0	0	$ -	$ -	$ -	$ -
8S-CS91	8S-CS92	19970	VCP	8	49	1	0	0	$ -	$ -	$ -	$ -
8S-CS92	8S-CS93	19971	VCP	8	217	3	0	0	$ -	$ -	$ -	$ -
9N-CS1	9N-CS6	20430	RCP	48	161	0	0	0	$ -	$ -	$ -	$ -
9N-CS3	9N-CS4	20288	RCP	42	299	0	0	0	$ -	$ -	$ -	$ -

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
9N-CS4	MWRD-001MH	20289	RCP	42	308	0	0	0	$ -	$ -	$ -	$ -
9S-CS25	9S-CS38	20005		83	215	0	0	0	$ -	$ -	$ -	$ -
9S-CS28	9S-CS27	20219		33	6	0	0	0	$ -	$ -	$ -	$ -
9S-CS28	9S-CS25	20357		57	770	1	0	0	$ -	$ -	$ -	$ -
9S-CS33	9S-CS19	20324	RCP	8	33	0	0	0	$ -	$ -	$ -	$ -
9S-CS34	19S-CS12	20355		58	419	3	0	0	$ -	$ -	$ -	$ -
9S-CS37	9S-CS28	19973	RCP	36	364	0	0	0	$ -	$ -	$ -	$ -
9S-CS38	9S-CS34	20342		83	116	1	0	0	$ -	$ -	$ -	$ -
9S-CS83	9S-CS38	19566	VCP	15	61	0	0	0	$ -	$ -	$ -	$ -
MWRD-001MH	9N-CS1	20290	RCP	42	204	0	0	0	$ -	$ -	$ -	$ -
								Total Cost	**$ 15,697,949**	**$ 372,150**	**$ 35,000**	**$ 16,105,099**
								Category 5	$ 2,652,465	$ 85,800	$ 35,000	$ 2,773,265
								Category 4	$ 3,645,787	$ 161,400	$ -	$ 3,807,187
								Category 3	$ 6,194,653	$ 90,000	$ -	$ 6,284,653
								Category 2	$ 3,205,045	$ 34,950	$ -	$ 3,239,995

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
07S-BT20	7S-CS56	19944		12	51	0	0	0	$ -	$ -	$ -	$ -
10S-CS10	10S-CS12	19981	VCP	21	218	8	3	102	$ 27,188	$ 1,200	$ -	$ 28,388
10S-CS11	10S-CS16	19978	VCP	12	343	11	5	44	$ 23,982	$ 1,650	$ -	$ 25,632
10S-CS12	10S-CS17	19982	VCP	24	322	12	4	342	$ 48,240	$ 1,800	$ -	$ 50,040
10S-CS13	10A1SMWRD02	20399		8	47	0	0	0	$ -	$ -	$ -	$ -
10S-CS14	10S-CS13	19994	VCP	8	325	4	3	3	$ 14,630	$ 600	$ -	$ 15,230
10S-CS15	10S-CS18	19977	VCP	15	346	10	4	346	$ 29,410	$ 1,500	$ -	$ 30,910
10S-CS17	10S-CS20	19983	VCP	24	317	14	5	786	$ 47,565	$ 2,100	$ -	$ 49,665
10S-CS21	10S-CS14	19995	VCP	8	295	4	2	2	$ 13,257	$ 600	$ -	$ 13,857
10S-CS23	10S-CS38	19986	VCP	12	332	14	4	29	$ 23,240	$ 2,100	$ -	$ 25,340
10S-CS24	10S-CS25	19991	VCP	12	183	4	5	82	$ 12,824	$ 600	$ -	$ 13,424
10S-CS24	10S-CS33	19992	VCP	12	463	21	5	52	$ 32,389	$ 3,150	$ -	$ 35,539
10S-CS27	10S-CS29	19984	VCP	12	376	15	5	38	$ 26,306	$ 2,250	$ -	$ 28,556
10S-CS27	10S-CS23	19985	VCP	12	309	11	5	144	$ 21,630	$ 1,650	$ -	$ 23,280
10S-CS28	10S-CS37	19988	VCP	12	80	2	2	6	$ 5,621	$ 300	$ -	$ 5,921
10S-CS28	20S-CS3	19990	VCP	12	414	15	2	30	$ 28,987	$ 2,250	$ -	$ 31,237
10S-CS29	20S-CS5	19987	VCP	12	324	14	4	34	$ 22,701	$ 2,100	$ -	$ 24,801
10S-CS3	10S-CS4	19567	RCP	10	105	0	2	2	$ 5,781	$ -	$ -	$ 5,781
10S-CS3	10S-CS6	19979	VCP	12	104	2	3	33	$ 7,245	$ 300	$ -	$ 7,545
10S-CS30	10S-CS34	20106	VCP	15	299	8	5	348	$ 25,432	$ 1,200	$ -	$ 26,632
10S-CS32	10S-CS15	19976	VCP	15	295	14	4	145	$ 25,075	$ 2,100	$ -	$ 27,175
10S-CS33	9S-CS35	20000	RCP	30	382	0	3	686	$ 66,763	$ -	$ -	$ 66,763
10S-CS35	10S-CS34	20110		12	40	0	0	0	$ -	$ -	$ -	$ -
10S-CS36	10S-CS33	19999	RCP	30	381	1	3	688	$ 66,728	$ 150	$ -	$ 66,878
10S-CS37	10S-CS26	19989	VCP	12	195	9	5	38	$ 13,650	$ 1,350	$ -	$ 15,000
10S-CS38	10S-CS36	19998	RCP	27	389	0	3	705	$ 60,311	$ -	$ -	$ 60,311
10S-CS6	10S-CS10	19980	VCP	18	216	8	4	308	$ 21,590	$ 1,200	$ -	$ 22,790
10S-CS7	10S-CS13	19993	VCP	8	333	5	3	3	$ 14,985	$ 750	$ -	$ 15,735
10S-CS8	10S-CS31	19975	VCP	12	143	7	3	23	$ 10,024	$ 1,050	$ -	$ 11,074
13N-CS11	4N-CS1	20174	VCP	12	319	2	5	56	$ 22,323	$ 300	$ -	$ 22,623
13N-CS12	4N-CS3	19715	VCP	15	316	2	5	80	$ 26,869	$ 300	$ -	$ 27,169
13N-CS8	13N-CS12	20175	VCP	12	324	7	4	284	$ 22,652	$ 1,050	$ -	$ 23,702
14N-CS1	14N-CS5	19717	VCP	10	321	6	4	63	$ 17,633	$ 900	$ -	$ 18,533
14N-CS10	14N-CS11	19719	VCP	12	110	2	0	0	$ -	$ -	$ -	$ -
14N-CS11	14N-CS17	19720	VCP	15	99	1	0	0	$ -	$ -	$ -	$ -
14N-CS13	14N-CS14	19739	RCP	15	12	1	0	0	$ -	$ -	$ -	$ -
14N-CS13	14N-CS21	20111	VCP	15	311	10	5	79	$ 26,452	$ 1,500	$ -	$ 27,952
14N-CS14	14N-CS22	19740	RCP	24	310	0	2	3	$ 46,455	$ -	$ -	$ 46,455
14N-CS15	14N-CS23	19730	VCP	15	314	10	4	138	$ 26,648	$ 1,500	$ -	$ 28,148
14N-CS16	14N-CS24	19745	RCP	18	338	0	3	21	$ 33,750	$ -	$ -	$ 33,750
14N-CS17	14N-CS18	19721	VCP	15	212	4	2	6	$ 18,012	$ 600	$ -	$ 18,612
14N-CS18	14N-CS25	19722	PVC	18	221	4	2	12	$ 22,050	$ 600	$ -	$ 22,650
14N-CS19	14N-CS30	19726	VCP	18	314	12	2	25	$ 31,350	$ 1,800	$ -	$ 33,150
14N-CS19	14N-CS20	19735	RCP	12	15	1	0	0	$ -	$ -	$ -	$ -
14N-CS2	14N-CS6	19725	VCP	12	300	10	4	185	$ 20,993	$ 1,500	$ -	$ 22,493
14N-CS20	14N-CS31	19736	RCP	24	328	0	2	4	$ 49,140	$ -	$ -	$ 49,140
14N-CS21	14N-CS22	20112	RCP	12	15	1	3	3	$ 8,000	$ 150	$ -	$ 8,150
14N-CS21	14N-CS34	20113	VCP	18	313	13	4	237	$ 31,270	$ 1,950	$ -	$ 33,220
14N-CS22	14N-CS35	19741	RCP	24	335	0	2	2	$ 50,220	$ -	$ -	$ 50,220
14N-CS23	14N-CS38	19731	VCP	18	314	11	4	62	$ 31,410	$ 1,650	$ -	$ 33,060

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
14N-CS23	14N-CS24	19746	RCP	12	15	1	0	0	$ -	$ -	$ -	$ -
14N-CS24	14N-CS39	19747	RCP	24	317	0	2	22	$ 47,595	$ -	$ -	$ 47,595
14N-CS25	14N-CS26	19723	VCP	18	94	2	2	4	$ 9,380	$ 300	$ -	$ 9,680
14N-CS26	14N-CS30	19724	RCP	24	304	0	0	0	$ -	$ -	$ -	$ -
14N-CS27	14N-CS31	19734	CONC	36	304	0	0	0	$ -	$ -	$ -	$ -
14N-CS3	14N-CS7	19728	VCP	12	311	10	5	128	$ 21,784	$ 1,500	$ -	$ 23,284
14N-CS30	14N-CS34	19727	RCP	27	321	0	1	1	$ -	$ -	$ -	$ -
14N-CS31	14N-CS33	19737	RCP	42	271	0	2	4	$ 94,885	$ -	$ -	$ 94,885
14N-CS33	14N-CS35	19738	RCP	42	49	0	2	4	$ 16,975	$ -	$ -	$ 16,975
14N-CS35	14N-CS39	19742	RCP	48	327	0	0	0	$ -	$ -	$ -	$ -
14N-CS37	14N-CS73	20312	VCP	12	160	0	0	0	$ -	$ -	$ -	$ -
14N-CS38	14N-CS42	19732	RCP	30	132	0	0	0	$ -	$ -	$ -	$ -
14N-CS39	14N-CS41	19748	RCP	48	109	0	2	2	$ 49,095	$ -	$ -	$ 49,095
14N-CS41	15N-CS26	19749	RCP	48	214	0	2	80	$ 96,390	$ -	$ -	$ 96,390
14N-CS47	14N-CS72	20315	VCP	12	219	10	0	0	$ -	$ -	$ -	$ -
14N-CS49	14N-CS59	20182	VCP	15	216	9	4	51	$ 18,326	$ 1,350	$ -	$ 19,676
14N-CS5	14N-CS10	19718	VCP	12	196	4	4	8	$ 13,685	$ 600	$ -	$ 14,285
14N-CS50	14N-CS51	20176	RCP	12	109	0	0	0	$ -	$ -	$ -	$ -
14N-CS51	14N-CS53	20177	RCP	12	15	0	0	0	$ -	$ -	$ -	$ -
14N-CS53	14N-CS54	20178	RCP	12	17	0	0	0	$ -	$ -	$ -	$ -
14N-CS54	14N-CS55	20179	RCP	12	156	0	0	0	$ -	$ -	$ -	$ -
14N-CS57	14N-CS47	20180	VCP	12	218	8	0	0	$ -	$ -	$ -	$ -
14N-CS59	14N-CS63	20183	VCP	18	218	10	5	311	$ 21,780	$ 1,500	$ -	$ 23,280
14N-CS63	14N-CS68	20184	VCP	18	218	9	5	578	$ 21,810	$ 1,350	$ -	$ 23,160
14N-CS65	5N-CS6	20181	RCP	21	334	0	2	3	$ 41,800	$ -	$ -	$ 41,800
14N-CS69	14N-CS26	20114		12	273	0	2	2	$ 19,131	$ -	$ -	$ 19,131
14N-CS72	14N-CS36	20109	VCP	12	206	6	0	0	$ -	$ -	$ -	$ -
14N-CS73	14N-CS40	20313	VCP	12	162	0	3	75	$ 11,340	$ -	$ -	$ 11,340
14N-CS8	14N-CS15	19729	VCP	15	310	12	5	220	$ 26,367	$ 1,800	$ -	$ 28,167
14N-CS9	14N-CS16	19744	RCP	18	295	0	0	0	$ -	$ -	$ -	$ -
14S02	24S-CS33	20031	RCP	12	250	4	4	19	$ 17,507	$ 600	$ -	$ 18,107
15N-CS10	15N-CS16	19781	VCP	15	298	10	4	233	$ 25,296	$ 1,500	$ -	$ 26,796
15N-CS13	15N-CS14	19689	PVC	12	9	1	0	0	$ -	$ -	$ -	$ -
15N-CS14	15N-CS22	19690	RCP	27	318	0	2	2	$ 49,321	$ -	$ -	$ 49,321
15N-CS16	15N-CS24	19782	VCP	15	296	9	4	16	$ 25,135	$ 1,350	$ -	$ 26,485
15N-CS17	15N-CS25	19785	RCP	10	258	5	3	459	$ 14,174	$ 750	$ -	$ 14,924
15N-CS19	15N-CS26	19679	RCP	24	193	0	0	0	$ -	$ -	$ -	$ -
15N-CS20	15N-CS27	19677	PVC	18	189	6	0	0	$ -	$ -	$ -	$ -
15N-CS20	15N-CS19	19678	VCP	12	17	1	0	0	$ -	$ -	$ -	$ -
15N-CS21	15N-CS29	19687	VCP	18	261	9	5	914	$ 26,120	$ 1,350	$ -	$ 27,470
15N-CS22	15N-CS30	19778	RCP	27	278	0	0	0	$ -	$ -	$ -	$ -
15N-CS25	15N-CS37	19786	RCP	10	249	6	3	445	$ 13,701	$ 900	$ -	$ 14,601
15N-CS26	15N-CS30	19680	RCP	60	326	0	2	225	$ 179,245	$ -	$ -	$ 179,245
15N-CS28	15N-CS29	19686	RCP	30	123	0	2	2	$ 21,578	$ -	$ -	$ 21,578
15N-CS29	15N-CS31	19688	RCP	36	320	0	5	8	$ 79,950	$ -	$ -	$ 79,950
15N-CS30	15N-CS32	19681	RCP	60	321	0	0	0	$ -	$ -	$ -	$ -
15N-CS31	15N-CS33	19779	RCP	36	322	0	3	6	$ 80,525	$ -	$ -	$ 80,525
15N-CS32	15N-CS34	19682	RCP	60	324	0	3	34	$ 178,310	$ -	$ -	$ 178,310
15N-CS33	15N-CS36	19783	RCP	36	326	1	0	0	$ -	$ -	$ -	$ -
15N-CS34	15N-CS35	19683	RCP	60	298	0	0	0	$ -	$ -	$ -	$ -

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
15N-CS35	16N-CS12	19684	RCP	60	63	0	0	0	$ -	$ -	$ -	$ -
15N-CS36	16N-CS13	19784	RCP	36	71	0	0	0	$ -	$ -	$ -	$ -
15N-CS37	15N-CS46	19787	RCP	10	316	6	3	568	$ 17,353	$ 900	$ -	$ 18,253
15N-CS38	15N-CS27	19685	VCP	12	57	0	5	10	$ 9,000	$ -	$ -	$ 9,000
15N-CS4	15N-CS10	19780	VCP	12	340	16	4	411	$ 23,772	$ 2,400	$ -	$ 26,172
15N-CS46	15N-CS52	19788	RCP	10	330	7	3	607	$ 18,161	$ 1,050	$ -	$ 19,211
15N-CS52	15N-CS77	19789	RCP	10	39	0	3	85	$ 7,000	$ -	$ -	$ 7,000
15N-CS54	15N-CS60	19795	RCP	15	296	11	3	533	$ 25,169	$ 1,650	$ -	$ 26,819
15N-CS55	15N-CS61	19797	RCP	15	298	8	3	539	$ 25,364	$ 1,200	$ -	$ 26,564
15N-CS6	15N-CS11	20330	VCP	12	348	13	5	925	$ 24,360	$ 1,950	$ -	$ 26,310
15N-CS60	15N-CS69	19796	RCP	15	298	9	3	529	$ 25,322	$ 1,350	$ -	$ 26,672
15N-CS61	15N-CS70	19798	RCP	15	297	9	3	533	$ 25,220	$ 1,350	$ -	$ 26,570
15N-CS64	15N-CS72	19801	VCP	18	301	10	2	2	$ 30,100	$ 1,500	$ -	$ 31,600
15N-CS68	15N-CS73	19793	VCP	15	147	2	5	320	$ 12,461	$ 300	$ -	$ 12,761
15N-CS69	6N-CS49	20418	RCP	30	128	5	0	0	$ -	$ -	$ -	$ -
15N-CS70	6N-CS2	19799	VCP	18	336	12	4	57	$ 33,550	$ 1,800	$ -	$ 35,350
15N-CS71	6N-CS3	19800	VCP	18	333	13	4	32	$ 33,250	$ 1,950	$ -	$ 35,200
15N-CS72	6N-CS4	19802	VCP	18	334	13	3	6	$ 33,420	$ 1,950	$ -	$ 35,370
15N-CS73	16N-CS43	19794	VCP	12	41	1	0	0	$ -	$ -	$ -	$ -
15N-CS76	15N-CS65	19792	RCP	12	122	3	4	112	$ 8,533	$ 450	$ -	$ 8,983
15N-CS77	16N-CS30	19790	VCP	12	36	1	0	0	$ -	$ -	$ -	$ -
15N-CS77	15N-CS76	19791		12	78	0	3	137	$ 8,000	$ -	$ -	$ 8,000
15S-CS10	15S-CS11	19756	PVC	15	246	7	0	0	$ -	$ -	$ -	$ -
15S-CS11	15S-CS15	19757	PVC	15	202	6	0	0	$ -	$ -	$ -	$ -
15S-CS13	15S-CS17	20004	VCP	30	251	7	5	161	$ 43,873	$ 1,050	$ -	$ 44,923
15S-CS15	15S-CS19	19758	PVC	15	184	4	0	0	$ -	$ -	$ -	$ -
15S-CS17	15S-CS22	19752	VCP	30	147	6	3	87	$ 25,725	$ 900	$ -	$ 26,625
15S-CS19	15S-CS23	19759	PVC	18	258	2	0	0	$ -	$ -	$ -	$ -
15S-CS20	15S-CS24	19763	PVC	8	217	3	0	0	$ -	$ -	$ -	$ -
15S-CS22	15S-CS65MWRD	19753	VCP	30	250	9	3	85	$ 43,698	$ 1,350	$ -	$ 45,048
15S-CS23	15S-CS25	19760	PVC	18	116	2	0	0	$ -	$ -	$ -	$ -
15S-CS24	15S-CS26	19764	PVC	8	125	2	0	0	$ -	$ -	$ -	$ -
15S-CS25	15S-CS29	19761	PVC	18	153	2	0	0	$ -	$ -	$ -	$ -
15S-CS26	15S-CS31	19765	RCP	8	129	2	0	0	$ -	$ -	$ -	$ -
15S-CS29	15S-CS55MWRD	19762	VCP	18	107	1	4	64	$ 10,740	$ 150	$ -	$ 10,890
15S-CS3	15S-CS5	19937	VCP	15	198	4	5	114	$ 16,805	$ 600	$ -	$ 17,405
15S-CS31	15S-CS29	19766	DI	12	42	0	0	0	$ -	$ -	$ -	$ -
15S-CS36	15S-CS61MWRD	19769	VCP	12	98	1	2	6	$ 6,860	$ 150	$ -	$ 7,010
15S-CS38	15S-CS57MWRD	19773	VCP	12	123	6	4	60	$ 8,624	$ 900	$ -	$ 9,524
15S-CS4	15S-CS8	20001	VCP	30	442	16	4	238	$ 77,298	$ 2,400	$ -	$ 79,698
15S-CS41	15S-CS37	19768	CIPP	12	247	10	0	0	$ -	$ -	$ -	$ -
15S-CS44	15S-CS48	19770	VCP	12	345	4	3	195	$ 24,143	$ 600	$ -	$ 24,743
15S-CS45	15S-CS42	19772	RCP	12	168	2	3	3	$ 11,732	$ 300	$ -	$ 12,032
15S-CS48	15S-CS49	19771	VCP	15	351	8	4	478	$ 29,818	$ 1,200	$ -	$ 31,018
15S-CS52	15S-CS51	19776	PVC	8	178	4	0	0	$ -	$ -	$ -	$ -
15S-CS53	15S-CS52	19775	PVC	8	148	6	0	0	$ -	$ -	$ -	$ -
15S-CS54	15S-CS53	19774	PVC	8	198	4	0	0	$ -	$ -	$ -	$ -
15S-CS6	15S-CS9	19754	VCP	15	298	8	4	464	$ 25,330	$ 1,200	$ -	$ 26,530
15S-CS7	15S-CS8	20002	VCP	18	361	0	3	10	$ 36,060	$ -	$ -	$ 36,060
15S-CS70	15S-CS18	20420	VCP	18	124	2	3	126	$ 12,390	$ 300	$ -	$ 12,690

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
15S-CS71	TARP-003	20421	RCP	36	101	0	3	178	$ 25,275	$ -	$ -	$ 25,275
15S-CS8	15S-CS13	20003	VCP	30	440	17	4	226	$ 76,913	$ 2,550	$ -	$ 79,463
15S-CS9	15S-CS12	19755	VCP	18	297	11	4	572	$ 29,700	$ 1,650	$ -	$ 31,350
16N-CS1	16N-CS2	19803	RCP	18	149	0	2	2	$ 14,910	$ -	$ -	$ 14,910
16N-CS10	16N-CS11	19807	RCP	27	143	0	0	0	$ -	$ -	$ -	$ -
16N-CS11	16N-CS12	19808	RCP	30	166	0	2	2	$ 29,050	$ -	$ -	$ 29,050
16N-CS12	16N-CS15	19809	RCP	66	333	0	0	0	$ -	$ -	$ -	$ -
16N-CS13	16N-CS17	19828	RCP	36	341	1	3	608	$ 85,225	$ 150	$ -	$ 85,375
16N-CS15	16N-CS25	19810	RCP	66	285	0	2	2	$ 170,760	$ -	$ -	$ 170,760
16N-CS16	16N-CS27	19818	PVC	12	164	4	0	0	$ -	$ -	$ -	$ -
16N-CS17	16N-CS18	19829	RCP	36	186	0	3	329	$ 46,425	$ -	$ -	$ 46,425
16N-CS18	16N-CS19	19830	RCP	36	173	0	3	308	$ 43,325	$ -	$ -	$ 43,325
16N-CS19	16N-CS21	19831	RCP	36	181	1	0	0	$ -	$ -	$ -	$ -
16N-CS2	16N-CS3	19804	RCP	18	144	0	2	2	$ 14,390	$ -	$ -	$ 14,390
16N-CS21	16N-CS23	19832	RCP	36	183	0	0	0	$ -	$ -	$ -	$ -
16N-CS23	17N-CS5	20364	RCP	36	307	2	0	0	$ -	$ -	$ -	$ -
16N-CS25	16N-CS32	19811	RCP	66	351	0	2	2	$ 210,480	$ -	$ -	$ 210,480
16N-CS26	16N-CS33	19820	PVC	15	331	12	0	0	$ -	$ -	$ -	$ -
16N-CS27	16N-CS26	19819	PVC	12	165	8	0	0	$ -	$ -	$ -	$ -
16N-CS30	16N-CS32	19812	RCP	24	345	0	0	0	$ -	$ -	$ -	$ -
16N-CS32	16N-CS37	19813	RCP	66	254	0	0	0	$ -	$ -	$ -	$ -
16N-CS33	16N-CS39	19821	PVC	15	99	4	0	0	$ -	$ -	$ -	$ -
16N-CS37	16N-CS46	19814	RCP	66	402	0	0	0	$ -	$ -	$ -	$ -
16N-CS38	16N-CS48	20115	PVC	18	312	7	0	0	$ -	$ -	$ -	$ -
16N-CS39	16N-CS38	19822	PVC	18	215	8	0	0	$ -	$ -	$ -	$ -
16N-CS4	16N-CS5	19805	RCP	21	216	0	0	0	$ -	$ -	$ -	$ -
16N-CS43	16N-CS45	19815	PVC	12	176	0	0	0	$ -	$ -	$ -	$ -
16N-CS45	16N-CS46	19816	RCP	24	158	0	2	2	$ 23,760	$ -	$ -	$ 23,760
16N-CS46	16N-CS50	19817	RCP	66	368	0	0	0	$ -	$ -	$ -	$ -
16N-CS47	7N-CS2	19823	VCP	18	294	7	4	87	$ 29,370	$ 1,050	$ -	$ 30,420
16N-CS48	16N-CS47	19557		18	57	0	0	0	$ -	$ -	$ -	$ -
16N-CS49	7N-CS3	19824	VCP	18	304	7	4	54	$ 30,400	$ 1,050	$ -	$ 31,450
16N-CS5	16N-CS10	19806	RCP	24	181	0	2	33	$ 27,090	$ -	$ -	$ 27,090
16N-CS50	16N-CS52	19825	RCP	66	367	0	0	0	$ -	$ -	$ -	$ -
16N-CS52	8N-CS1	19676	RCP	66	285	0	0	0	$ -	$ -	$ -	$ -
16N-CS55	16N-CS44	19827	RCP	15	29	0	3	50	$ 9,000	$ -	$ -	$ 9,000
16N-CS8	16N-CS7	19560	VCP	15	273	4	5	12	$ 23,222	$ 600	$ -	$ 23,822
16S-CS13	16S-CS17	20088	CIPP	18	217	6	0	0	$ -	$ -	$ -	$ -
16S-CS15	16S-CS19	19777	CIPP	18	190	6	0	0	$ -	$ -	$ -	$ -
16S-CS24	16S-CS30	20278	VCP	18	218	10	3	25	$ 21,770	$ 1,500	$ -	$ 23,270
16S-CS25	16S-CS28	20089	CIPP	24	228	9	0	0	$ -	$ -	$ -	$ -
16S-CS28	16S-CS31	20090	CIPP	24	234	9	0	0	$ -	$ -	$ -	$ -
16S-CS30	16S-CS32	20279	CIPP	18	180	4	0	0	$ -	$ -	$ -	$ -
16S-CS31	16S-CS72MWRD	20091	VCP	24	132	1	5	124	$ 19,800	$ 150	$ -	$ 19,950
16S-CS34	16S-CS35	20093	VCP	12	220	1	4	47	$ 15,400	$ 150	$ -	$ 15,550
16S-CS36	16S-CS35	20095	VCP	12	201	0	2	12	$ 14,070	$ -	$ -	$ 14,070
16S-CS37	16S-CS36	20094	VCP	12	202	3	3	21	$ 14,147	$ 450	$ -	$ 14,597
16S-CS39	16S-CS38	20246	CIPP	8	183	5	0	0	$ -	$ -	$ -	$ -
16S-CS43	16S-CS38	20245	VCP	12	193	2	5	11	$ 13,496	$ 300	$ -	$ 13,796
16S-CS45	16S-CS40	20249	VCP	27	220	5	4	31	$ 34,131	$ 750	$ -	$ 34,881

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
16S-CS46	16S-CS42	20092	CIPP	12	215	7	0	0	$ -	$ -	$ -	$ -
16S-CS58	16S-CS61MWRD	20248	RCP	42	140	0	0	0	$ -	$ -	$ -	$ -
16S-CS60	16S-CS40	20223		12	123	0	0	0	$ -	$ -	$ -	$ -
16S-CS65	16S-CS58	20247	VCP	12	210	1	2	3	$ 14,693	$ 150	$ -	$ 14,843
16S-CS70	16S-CS76MWRD	20117	RCP	72	145	2	0	0	$ -	$ -	$ -	$ -
16S-CS78	16S-CS20	20116		18	217	5	4	57	$ 21,690	$ 750	$ -	$ 22,440
16S-CS81	16S-CS70	19563	RCP	72	615	0	0	0	$ -	$ -	$ -	$ -
16S-CS83	16S-CS21	20416		18	5	0	5	5	$ 11,000	$ -	$ 20,000	$ 31,000
16S-CS9	16S-CS13	20087	CIPP	18	213	9	0	0	$ -	$ -	$ -	$ -
17N-CS1	17N-BT09	20414	RCP	15	212	1	0	0	$ -	$ -	$ -	$ -
17N-CS2	17N-CS3	19836	RCP	18	339	0	0	0	$ -	$ -	$ -	$ -
17N-CS22	17N-CS7	20331		36	494	0	3	884	$ 123,475	$ -	$ -	$ 123,475
17N-CS3	17N-CS4	19837	RCP	21	345	0	2	2	$ 43,063	$ -	$ -	$ 43,063
17N-CS4	8N-CS6	20335	RCP	21	73	0	0	0	$ -	$ -	$ -	$ -
17N-CS5	17N-CS6	19834	RCP	36	478	0	3	853	$ 119,375	$ -	$ -	$ 119,375
17N-CS6	17N-CS22	20332	RCP	36	541	1	3	970	$ 135,350	$ 150	$ -	$ 135,500
17N-CS7	8N-CS9	19835	RCP	36	119	0	3	211	$ 29,800	$ -	$ -	$ 29,800
17S-CS10	17S-CS5	20256	VCP	12	160	3	4	63	$ 11,200	$ 450	$ -	$ 11,650
17S-CS12	17S-CS8	20258	VCP	12	172	1	4	151	$ 12,040	$ 150	$ -	$ 12,190
17S-CS14	17S-CS10	20255	VCP	12	157	6	4	242	$ 11,004	$ 900	$ -	$ 11,904
17S-CS16	17S-CS12	20257	VCP	12	148	0	4	112	$ 10,388	$ -	$ -	$ 10,388
17S-CS22	17S-CS18	20254	VCP	12	154	1	5	296	$ 10,745	$ 150	$ -	$ 10,895
17S-CS23	17S-CS19	20329	VCP	12	145	2	3	47	$ 10,171	$ 300	$ -	$ 10,471
17S-CS26	17S-CS22	20253	VCP	12	144	4	4	406	$ 10,087	$ 600	$ -	$ 10,687
17S-CS32	17S-CS44	20383		12	120	2	3	126	$ 8,379	$ 300	$ -	$ 8,679
17S-CS34	17S-CS26	20252	VCP	12	145	1	4	328	$ 10,178	$ 150	$ -	$ 10,328
17S-CS36	17S-CS34	20251	VCP	12	247	6	4	10	$ 17,255	$ 900	$ -	$ 18,155
18S-CS11	18S-CS5	20387		10	199	0	3	9	$ 10,918	$ -	$ -	$ 10,918
18S-CS3	18S-CS4	20260	VCP	12	376	8	4	201	$ 26,320	$ 1,200	$ -	$ 27,520
18S-CS4	18S-CS6	20261	VCP	15	267	7	3	33	$ 22,695	$ 1,050	$ -	$ 23,745
18S-CS5	18S-CS6	20259	RCP	24	378	2	4	42	$ 56,760	$ 300	$ -	$ 57,060
18S-CS6	19S-CS18	20422	VCP	24	795	1	5	350	$ 119,250	$ 150	$ -	$ 119,400
19S-CS1	19S-CS13	20367		33	310	1	5	1,371	$ 61,920	$ 150	$ -	$ 62,070
19S-CS11	19S-CS8	20224	CONC	90	461	0	2	2	$ 391,510	$ -	$ -	$ 391,510
19S-CS13	19S-CS14	20368		33	357	0	5	1,712	$ 71,300	$ -	$ -	$ 71,300
19S-CS14	19S-CS15	20369		33	262	0	5	910	$ 52,400	$ -	$ -	$ 52,400
19S-CS15	19S-CS16	20370		33	317	2	5	1,280	$ 63,340	$ 300	$ -	$ 63,640
19S-CS16	19S-CS17	20371		33	218	2	5	1,155	$ 43,660	$ 300	$ -	$ 43,960
19S-CS17	19S-CS2	20262		33	215	0	5	658	$ 42,940	$ -	$ -	$ 42,940
19S-CS18	19S-CS1	20423	VCP	24	295	0	4	354	$ 44,265	$ -	$ -	$ 44,265
19S-CS2	19S-CS9	20263	VCP	36	95	0	0	0	$ -	$ -	$ -	$ -
19S-CS4	19S-CS5	20225		58	656	0	0	0	$ -	$ -	$ -	$ -
19S-CS5	19S-CS6	20226		58	670	2	0	0	$ -	$ -	$ -	$ -
19S-CS6	19S-CS7MWRD	20227		58	552	2	0	0	$ -	$ -	$ -	$ -
19S-CS8	19S-CS4	20228	CONC	90	332	0	3	91	$ 282,455	$ -	$ -	$ 282,455
19S-CS9	19S-CS10MWRD	20264	RCP	36	103	1	0	0	$ -	$ -	$ -	$ -
20S-CS1	9S-CS23	20008	VCP	24	386	7	5	189	$ 57,840	$ 1,050	$ -	$ 58,890
20S-CS2	20S-CS1	20007	VCP	24	423	8	2	107	$ 63,375	$ 1,200	$ -	$ 64,575
20S-CS3	20S-CS4	20009	VCP	15	204	6	3	18	$ 17,340	$ 900	$ -	$ 18,240
20S-CS4	20S-CS2	20010	VCP	15	130	0	3	21	$ 11,067	$ -	$ -	$ 11,067

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
20S-CS6	20S-CS7	20011	VCP	15	127	2	2	98	$ 10,761	$ 300	$ -	$ 11,061
20S-CS7	20S-CS2	20006	VCP	21	463	7	2	79	$ 57,863	$ 1,050	$ -	$ 58,913
20S-CS8	20S-CS7	20338	VCP	18	572	0	5	5	$ 57,230	$ -	$ -	$ 57,230
24S-CS1	24S-CS2	20026	RCP	30	354	1	3	634	$ 61,915	$ 150	$ -	$ 62,065
24S-CS10	24S-CS11	20018	RCP	15	209	9	3	7	$ 17,774	$ 1,350	$ -	$ 19,124
24S-CS11	24S-CS13	20019	RCP	18	225	6	0	0	$ -	$ -	$ -	$ -
24S-CS13	24S-CS14	20020	RCP	18	279	5	4	16	$ 27,910	$ 750	$ -	$ 28,660
24S-CS14	24S-CS7	20021	VCP	18	321	6	4	11	$ 32,140	$ 900	$ -	$ 33,040
24S-CS19	24S-CS20	20016	VCP	12	330	6	5	50	$ 23,100	$ 900	$ -	$ 24,000
24S-CS2	25S-CS1	20027	RCP	30	293	0	3	527	$ 51,275	$ -	$ -	$ 51,275
24S-CS20	24S-CS14	20017	VCP	15	311	6	0	0	$ -	$ -	$ -	$ -
24S-CS24	24S-CS25	20012	RCP	12	210	8	5	9	$ 14,707	$ 1,200	$ -	$ 15,907
24S-CS25	24S-CS26	20013	RCP	12	349	7	2	2	$ 24,423	$ 1,050	$ -	$ 25,473
24S-CS26	24S-CS20	20015	VCP	12	317	6	3	3	$ 22,190	$ 900	$ -	$ 23,090
24S-CS28	24S-CS26	20014	VCP	18	103	3	3	7	$ 10,270	$ 450	$ -	$ 10,720
24S-CS31	24S-CS1	20025	RCP	27	239	4	3	430	$ 37,092	$ 600	$ -	$ 37,692
24S-CS32	24S-CS30	20032	RCP	12	338	5	5	36	$ 23,674	$ 750	$ -	$ 24,424
24S-CS34	24S-CS38	20029	VCP	18	311	5	4	11	$ 31,100	$ 750	$ -	$ 31,850
24S-CS36	24S-CS34	20028	RCP	18	92	1	5	5	$ 9,200	$ 150	$ -	$ 9,350
24S-CS38	24S-CS1	20030	VCP	18	264	3	5	578	$ 26,350	$ 450	$ -	$ 26,800
24S-CS39	24S-CS10	19569	RCP	15	42	0	4	4	$ 9,000	$ -	$ -	$ 9,000
24S-CS4	24S-CS6	20022	RCP	15	309	10	2	6	$ 26,265	$ 1,500	$ -	$ 27,765
24S-CS40A	24S-CS18	20340		12	71	2	3	3	$ 8,000	$ 300	$ -	$ 8,300
24S-CS41	24S-CS24	20347	RCP	12	192	6	0	0	$ -	$ -	$ -	$ -
24S-CS43	24S-CS4	20126	RCP	12	158	4	5	8	$ 11,060	$ 600	$ -	$ 11,660
24S-CS6	24S-CS7	20023	RCP	15	282	6	0	0	$ -	$ -	$ -	$ -
24S-CS7	24S-CS31	20024	RCP	27	215	5	3	382	$ 33,387	$ 750	$ -	$ 34,137
25S-CS1	25S-CS38	20061	RCP	30	7	0	0	0	$ -	$ -	$ -	$ -
25S-CS10	25S-CS16	20039	VCP	12	355	10	4	8	$ 24,857	$ 1,500	$ -	$ 26,357
25S-CS11	25S-CS13	20053	VCP	12	206	3	5	5	$ 14,420	$ 450	$ -	$ 14,870
25S-CS12	25S-CS39	20044	RCP	24	544	14	0	0	$ -	$ -	$ -	$ -
25S-CS13	25S-CS21	20054	VCP	15	74	1	0	0	$ -	$ -	$ -	$ -
25S-CS14	25S-CS15	20037	RCP	18	64	0	3	110	$ 11,000	$ -	$ -	$ 11,000
25S-CS16	25S-CS17	20041	RCP	24	63	0	0	0	$ -	$ -	$ -	$ -
25S-CS17	25S-CS18	20042	RCP	24	250	0	3	448	$ 37,500	$ -	$ -	$ 37,500
25S-CS18	25S-CS12	20043	RCP	24	208	6	3	375	$ 31,200	$ 900	$ -	$ 32,100
25S-CS21	25S-CS57	20055	RCP	21	275	0	3	3	$ 34,313	$ -	$ -	$ 34,313
25S-CS22	25S-CS55	20057		48	73	0	3	3	$ 32,805	$ -	$ -	$ 32,805
25S-CS23	25S-CS21	20050	VCP	21	121	3	5	523	$ 15,125	$ 450	$ -	$ 15,575
25S-CS25	25S-CS16	20040	RCP	18	292	9	0	0	$ -	$ -	$ -	$ -
25S-CS28	25S-CS27	20049	RCP	21	65	2	0	0	$ -	$ -	$ -	$ -
25S-CS3	25S-CS9	20035	VCP	8	337	12	5	30	$ 15,161	$ 1,800	$ -	$ 16,961
25S-CS31	25S-CS28	20048	VCP	15	247	4	0	0	$ -	$ -	$ -	$ -
25S-CS36	25S-CS41	20046	VCP	8	47	0	0	0	$ -	$ -	$ -	$ -
25S-CS38	25S-CS58	20062	RCP	30	322	0	3	580	$ 56,385	$ -	$ -	$ 56,385
25S-CS39	25S-CS47	20034	RCP	36	371	0	3	625	$ 92,750	$ -	$ -	$ 92,750
25S-CS4	25S-CS10	20038	VCP	8	305	9	2	4	$ 13,739	$ 1,350	$ -	$ 15,089
25S-CS40	25S-CS45	20300		10	427	1	3	21	$ 23,458	$ 150	$ -	$ 23,608
25S-CS41	25S-CS31	20047	VCP	12	155	1	0	0	$ -	$ -	$ -	$ -
25S-CS44	25S-CS28	20045	VCP	18	17	0	0	0	$ -	$ -	$ -	$ -

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
25S-CS45	25S-CS46	20301		15	404	0	4	29	$ 34,366	$ -	$ -	$ 34,366
25S-CS46	25S-CS54	20302		15	384	0	0	0	$ -	$ -	$ -	$ -
25S-CS47	15S-CS71	20410	RCP	36	490	0	3	854	$ 122,575	$ -	$ -	$ 122,575
25S-CS49	16S-CS59	20298		24	319	3	0	0	$ -	$ -	$ -	$ -
25S-CS50	25S-CS6	20086	VCP	21	218	1	5	632	$ 27,188	$ 150	$ -	$ 27,338
25S-CS51	25S-CS49	20060		21	396	0	0	0	$ -	$ -	$ -	$ -
25S-CS52	25S-CS50	20277	VCP	21	218	3	5	1,078	$ 27,288	$ 450	$ -	$ 27,738
25S-CS54	25S-CS51	20391		24	389	0	0	0	$ -	$ -	$ -	$ -
25S-CS55	26S-CS13	20058	VCP	21	20	0	5	14	$ 12,000	$ -	$ -	$ 12,000
25S-CS57	25S-CS22	20056	RCP	21	126	0	3	223	$ 15,700	$ -	$ -	$ 15,700
25S-CS58	25S-CS39	20033	RCP	30	308	0	3	551	$ 53,848	$ -	$ -	$ 53,848
25S-CS6	16S-CS45	19750	VCP	27	172	0	5	190	$ 26,676	$ -	$ -	$ 26,676
25S-CS6	26S-CS45	20363		12	19	0	0	0	$ -	$ -	$ -	$ -
25S-CS7	25S-CS8	20051	VCP	8	52	1	1	1	$ -	$ -	$ -	$ -
25S-CS8	25S-CS11	20052	VCP	12	205	2	3	3	$ 14,315	$ 300	$ -	$ 14,615
25S-CS9	25S-CS14	20036	VCP	12	321	8	5	15	$ 22,442	$ 1,200	$ -	$ 23,642
26S-CS12	26S-CS11	20078	VCP	15	216	2	4	196	$ 18,369	$ 300	$ -	$ 18,669
26S-CS13	25S-CS53	20059	PVC	21	107	0	0	0	$ -	$ -	$ -	$ -
26S-CS13	26S-CS43	20390		21	6	0	0	0	$ -	$ -	$ -	$ -
26S-CS14	26S-CS12	20076	VCP	15	158	0	3	49	$ 13,422	$ -	$ -	$ 13,422
26S-CS14	26S-CS46	20362	RCP	30	33	0	3	3	$ 18,000	$ -	$ -	$ 18,000
26S-CS16	26S-CS15	20075	VCP	18	199	0	0	0	$ -	$ -	$ -	$ -
26S-CS22	26S-CS50	20265	RCP	12	109	1	1	3	$ -	$ -	$ -	$ -
26S-CS23	26S-CS21	20085	CIPP	18	157	2	0	0	$ -	$ -	$ -	$ -
26S-CS24	26S-CS53	20072	VCP	18	219	5	5	20	$ 21,910	$ 750	$ -	$ 22,660
26S-CS26	26S-CS22	19751	VCP	12	128	1	4	17	$ 8,932	$ 150	$ -	$ 9,082
26S-CS27	26S-CS23	20084	VCP	15	177	5	3	13	$ 15,011	$ 750	$ -	$ 15,761
26S-CS3	16S-CS48	20096	VCP	12	181	1	2	76	$ 12,663	$ 150	$ -	$ 12,813
26S-CS30	26S-CS27	20083	VCP	15	181	4	5	261	$ 15,402	$ 600	$ -	$ 16,002
26S-CS31	26S-CS24	20071	VCP	18	231	6	4	21	$ 23,100	$ 900	$ -	$ 24,000
26S-CS32	26S-CS58	20063	VCP	12	202	4	5	452	$ 14,112	$ 600	$ -	$ 14,712
26S-CS33	26S-CS51	19539	VCP	12	235	5	5	441	$ 16,443	$ 750	$ -	$ 17,193
26S-CS34	26S-CS31	20070	VCP	18	252	7	5	23	$ 25,230	$ 1,050	$ -	$ 26,280
26S-CS36	26S-CS37	20080	VCP	12	169	3	5	205	$ 11,809	$ 450	$ -	$ 12,259
26S-CS37	26S-CS38	20079	VCP	15	169	1	2	6	$ 14,365	$ 150	$ -	$ 14,515
26S-CS40	26S-CS34	20069	VCP	18	214	2	2	44	$ 21,370	$ 300	$ -	$ 21,670
26S-CS41	26S-CS61	20066	VCP	15	164	0	5	511	$ 13,940	$ -	$ -	$ 13,940
26S-CS42	26S-CS41	20065	VCP	12	85	1	0	0	$ -	$ -	$ -	$ -
26S-CS43	26S-CS7	20267	RCP	42	213	0	3	232	$ 74,655	$ -	$ -	$ 74,655
26S-CS45	16S-CS58	20275	RCP	42	403	0	0	0	$ -	$ -	$ -	$ -
26S-CS46	26S-CS47	20272	RCP	30	63	0	3	112	$ 11,078	$ -	$ -	$ 11,078
26S-CS47	26S-CS48	20337	RCP	30	314	0	3	563	$ 54,950	$ -	$ -	$ 54,950
26S-CS48	26S-CS49	20273		27	69	0	3	121	$ 10,757	$ -	$ -	$ 10,757
26S-CS49	26S-CS43	20266	RCP	27	82	0	3	144	$ 12,710	$ -	$ -	$ 12,710
26S-CS5	26S-CS8	20077	VCP	12	195	4	4	342	$ 13,678	$ 600	$ -	$ 14,278
26S-CS50	26S-CS13	20304	RCP	12	128	0	0	0	$ -	$ -	$ -	$ -
26S-CS51	26S-CS26	20081	VCP	12	109	3	3	9	$ 7,595	$ 450	$ -	$ 8,045
26S-CS52	26S-CS30	20082	VCP	15	76	2	4	60	$ 9,000	$ 300	$ -	$ 9,300
26S-CS53	26S-CS16	20271		18	25	0	0	0	$ -	$ -	$ -	$ -
26S-CS53	26S-CS46	20276	RCP	27	394	1	3	706	$ 61,117	$ 150	$ -	$ 61,267

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
26S-CS56	26S-CS55	20274	VCP	12	136	2	3	4	$ 9,527	$ 300	$ -	$ 9,827
26S-CS57	26S-CS53	20270	VCP	24	350	0	3	626	$ 52,515	$ -	$ -	$ 52,515
26S-CS58	26S-CS42	20064	VCP	12	116	0	4	55	$ 8,141	$ -	$ -	$ 8,141
26S-CS59	26S-CS39	20068	VCP	15	161	2	3	32	$ 13,719	$ 300	$ -	$ 14,019
26S-CS6	26S-CS9	20073	VCP	12	204	7	3	236	$ 14,259	$ 1,050	$ -	$ 15,309
26S-CS61	26S-CS40	20067	VCP	15	179	0	4	174	$ 15,224	$ -	$ -	$ 15,224
26S-CS67	26S-CS3	19538	CIPP	12	184	6	0	0	$ -	$ -	$ -	$ -
26S-CS69	26S-CS3	19568	VCP	12	137	2	4	12	$ 9,604	$ 300	$ -	$ 9,904
26S-CS7	26S-CS44	20268	RCP	42	407	0	0	0	$ -	$ -	$ -	$ -
26S-CS9	26S-CS16	20074	VCP	12	206	4	4	391	$ 14,420	$ 600	$ -	$ 15,020
2N-CS22	2N-CS23	19570	VCP	18	384	2	3	81	$ 38,400	$ 300	$ -	$ 38,700
2N-CS26	2N-CS30	20232		18	251	0	3	434	$ 25,060	$ -	$ -	$ 25,060
2N-CS30	2N-CS32	20424		18	48	0	3	81	$ 11,000	$ -	$ -	$ 11,000
2N-CS32	2N-CS27MWRD	20425		18	127	0	3	223	$ 12,650	$ -	$ -	$ 12,650
3N-CS1	3N-CS2	19571	VCP	12	290	6	0	0	$ -	$ -	$ -	$ -
3N-CS10	3N-CS46	19573	VCP	12	111	3	0	0	$ -	$ -	$ -	$ -
3N-CS11	3N-CS17	19527	VCP	15	164	3	4	204	$ 13,906	$ 450	$ -	$ 14,356
3N-CS12	3N-CS11	19584	VCP	15	247	2	4	329	$ 20,953	$ 300	$ -	$ 21,253
3N-CS17	3N-CS18	19528	VCP	15	187	5	4	86	$ 15,895	$ 750	$ -	$ 16,645
3N-CS2	3N-CS7	19572	VCP	15	276	4	4	285	$ 23,418	$ 600	$ -	$ 24,018
3N-CS20	3N-CS23	19529	VCP	15	252	10	5	241	$ 21,420	$ 1,500	$ -	$ 22,920
3N-CS23	3N-CS27	19530	VCP	15	190	6	4	58	$ 16,108	$ 900	$ -	$ 17,008
3N-CS27	3N-CS30	19536	VCP	15	1	0	0	0	$ -	$ -	$ -	$ -
3N-CS28	3N-CS27	20305		15	375	0	5	35	$ 31,850	$ -	$ -	$ 31,850
3N-CS28	3N-CS32	20348		12	1	0	0	0	$ -	$ -	$ -	$ -
3N-CS29	3N-CS34	20222		12	5	0	5	5	$ 9,000	$ -	$ -	$ 9,000
3N-CS31	3N-CS30	19534	VCP	15	184	0	4	6	$ 15,623	$ -	$ -	$ 15,623
3N-CS32	3N-CS31	19533	VCP	15	189	0	4	518	$ 16,023	$ -	$ -	$ 16,023
3N-CS34	3N-CS33	19558	VCP	15	187	0	4	524	$ 15,929	$ -	$ -	$ 15,929
3N-CS35	3N-CS30	19532	VCP	12	196	6	4	98	$ 13,727	$ 900	$ -	$ 14,627
3N-CS38	3N-CS35	19531	VCP	12	237	11	4	193	$ 16,555	$ 1,650	$ -	$ 18,205
3N-CS41	2N-CS22	19535	PVC	18	235	1	4	173	$ 23,470	$ 150	$ -	$ 23,620
3N-CS46	3N-CS9	19574	VCP	12	180	8	0	0	$ -	$ -	$ -	$ -
3N-CS52	3N-CS53	19580	RCP	30	156	1	0	0	$ -	$ -	$ -	$ -
3N-CS53	3N-CS7	19581	RCP	33	152	0	0	0	$ -	$ -	$ -	$ -
3N-CS54	3N-CS52	19578	RCP	30	332	0	2	3	$ 58,119	$ -	$ -	$ 58,119
3N-CS55	3N-CS54	19577	RCP	24	235	1	3	3	$ 35,280	$ 150	$ -	$ 35,430
3N-CS56	3N-CS55	19576	RCP	24	84	0	0	0	$ -	$ -	$ -	$ -
3N-CS61	3N-CS43	20307	VCP	15	171	3	4	480	$ 14,569	$ 450	$ -	$ 15,019
3N-CS62	3N-CS61	20291	VCP	15	197	5	4	419	$ 16,711	$ 750	$ -	$ 17,461
3N-CS7	3N-CS8	19582	RCP	30	4	0	0	0	$ -	$ -	$ -	$ -
3N-CS8	4N-CS15	19583	RCP	30	154	0	0	0	$ -	$ -	$ -	$ -
3N-CS9	3N-CS7	19575	VCP	15	231	4	4	113	$ 19,618	$ 600	$ -	$ 20,218
4N-CS1	4N-CS2	19540	VCP	15	202	1	4	57	$ 17,196	$ 150	$ -	$ 17,346
4N-CS10	4N-CS13	19587	RCP	30	206	3	0	0	$ -	$ -	$ -	$ -
4N-CS11	4N-CS14	19543	RCP	26	123	2	0	0	$ -	$ -	$ -	$ -
4N-CS14	4N-CS19	19545	RCP	26	308	2	0	0	$ -	$ -	$ -	$ -
4N-CS15	4N-CS16	19546	RCP	30	160	1	0	0	$ -	$ -	$ -	$ -
4N-CS16	4N-CS17	19547	RCP	30	150	2	0	0	$ -	$ -	$ -	$ -
4N-CS17	4N-CS18	19548	RCP	30	192	2	3	4	$ 33,618	$ 300	$ -	$ 33,918

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
4N-CS18	4N-CS19	19549	RCP	30	18	0	0	0	$ -	$ -	$ -	$ -
4N-CS19	4N-CS22	19552	RCP	36	358	6	0	0	$ -	$ -	$ -	$ -
4N-CS2	4N-CS3	19541	VCP	15	220	2	0	0	$ -	$ -	$ -	$ -
4N-CS20	4N-CS21	19553	RCP	8	207	0	3	7	$ 9,311	$ -	$ -	$ 9,311
4N-CS21	4N-CS22	19554	VCP	10	17	0	0	0	$ -	$ -	$ -	$ -
4N-CS21	4N-CS24	19555	VCP	8	172	0	2	2	$ 7,727	$ -	$ -	$ 7,727
4N-CS22	4N-CS23	19588	RCP	36	175	0	2	2	$ 43,675	$ -	$ -	$ 43,675
4N-CS23	4N-CS25	19589	RCP	36	171	1	0	0	$ -	$ -	$ -	$ -
4N-CS25	5N-CS73	20334		42	124	0	0	0	$ -	$ -	$ -	$ -
4N-CS26	4N-CS33	19590	VCP	8	303	0	1	1	$ -	$ -	$ -	$ -
4N-CS28	4N-CS19	19537	RCP	24	86	0	0	0	$ -	$ -	$ -	$ -
4N-CS29	4N-CS27	19550	VCP	10	116	0	4	212	$ 7,000	$ -	$ -	$ 7,000
4N-CS3	4N-CS11	19542	RCP	26	356	7	0	0	$ -	$ -	$ -	$ -
4N-CS31	4N-CS32	19551	RCP	12	57	0	0	0	$ -	$ -	$ -	$ -
4N-CS37	5N-CS24	19592	VCP	12	29	0	3	3	$ 8,000	$ -	$ -	$ 8,000
4N-CS4	4N-CS5	19585	VCP	15	360	5	4	208	$ 30,566	$ 750	$ -	$ 31,316
4N-CS5	4N-CS10	19716	RCP	30	192	0	0	0	$ -	$ -	$ -	$ -
4N-CS6	4N-CS5	19586	VCP	21	201	2	4	74	$ 25,088	$ 300	$ -	$ 25,388
4N-CS8	4N-CS14	19544	RCP	10	215	0	0	0	$ -	$ -	$ -	$ -
5N-CS10	5N-CS14	19603	VCP	18	218	9	4	237	$ 21,760	$ 1,350	$ -	$ 23,110
5N-CS13	5N-CS58	19601	RCP	30	294	1	3	524	$ 51,433	$ 150	$ -	$ 51,583
5N-CS14	5N-CS17	19604	VCP	18	217	8	5	365	$ 21,730	$ 1,200	$ -	$ 22,930
5N-CS21	5N-CS22	19605	VCP	18	15	0	4	26	$ 11,000	$ -	$ -	$ 11,000
5N-CS22	5N-CS23	19606	VCP	18	95	4	4	163	$ 9,520	$ 600	$ -	$ 10,120
5N-CS23	5N-CS27	19607	VCP	18	105	3	4	192	$ 10,520	$ 450	$ -	$ 10,970
5N-CS24	5N-CS28	19618	VCP	12	245	6	2	2	$ 17,129	$ 900	$ -	$ 18,029
5N-CS26	5N-CS42	19598	VCP	15	216	4	4	133	$ 18,335	$ 600	$ -	$ 18,935
5N-CS27	5N-CS31	19608	VCP	18	220	8	4	72	$ 21,950	$ 1,200	$ -	$ 23,150
5N-CS28	5N-CS35	19619	VCP	12	329	8	0	0	$ -	$ -	$ -	$ -
5N-CS29	5N-CS32	19594	VCP	15	217	8	4	328	$ 18,411	$ 1,200	$ -	$ 19,611
5N-CS31	5N-CS34	19609	VCP	18	228	8	5	494	$ 22,780	$ 1,200	$ -	$ 23,980
5N-CS32	5N-CS37	19595	VCP	15	220	7	4	305	$ 18,666	$ 1,050	$ -	$ 19,716
5N-CS33	5N-CS38	20314	VCP	15	218	11	5	105	$ 18,530	$ 1,650	$ -	$ 20,180
5N-CS34	5N-CS39	19610	VCP	18	208	9	4	508	$ 20,760	$ 1,350	$ -	$ 22,110
5N-CS35	4N-CS41	19620		12	76	0	0	0	$ -	$ -	$ -	$ -
5N-CS35	5N-CS36	19621	VCP	12	65	1	0	0	$ -	$ -	$ -	$ -
5N-CS36	5N-CS40	19622	VCP	12	227	5	2	2	$ 15,883	$ 750	$ -	$ 16,633
5N-CS38	5N-CS70	20311		15	215	7	5	208	$ 18,233	$ 1,050	$ -	$ 19,283
5N-CS39	5N-CS43	19611	VCP	18	217	7	4	452	$ 21,730	$ 1,050	$ -	$ 22,780
5N-CS40	5N-CS45	20282	VCP	12	56	0	0	0	$ -	$ -	$ -	$ -
5N-CS41	5N-CS70	19596		21	331	5	4	27	$ 41,313	$ 750	$ -	$ 42,063
5N-CS42	5N-CS33	19599	VCP	15	217	6	4	109	$ 18,428	$ 900	$ -	$ 19,328
5N-CS43	5N-CS44	19613	VCP	21	140	2	2	14	$ 17,500	$ 300	$ -	$ 17,800
5N-CS44	5N-CS50	19614	VCP	21	327	8	4	290	$ 40,838	$ 1,200	$ -	$ 42,038
5N-CS45	5N-CS46	20283	VCP	12	300	1	1	1	$ -	$ -	$ -	$ -
5N-CS46	5N-CS47	19623	VCP	12	286	3	4	16	$ 20,041	$ 450	$ -	$ 20,491
5N-CS48	5N-CS49	19615	VCP	12	218	8	4	13	$ 15,225	$ 1,200	$ -	$ 16,425
5N-CS49	5N-CS50	19616	VCP	12	215	9	4	235	$ 15,036	$ 1,350	$ -	$ 16,386
5N-CS50	5N-CS54	19617	VCP	21	302	6	4	511	$ 37,700	$ 900	$ -	$ 38,600
5N-CS51	5N-CS74	20358		15	76	0	2	4	$ 6,494	$ -	$ -	$ 6,494

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
5N-CS53	5N-CS60	20292	VCP	15	170	2	2	8	$ 14,442	$ 300	$ -	$ 14,742
5N-CS54	6N-CS42	19701	VCP	18	191	1	4	352	$ 19,060	$ 150	$ -	$ 19,210
5N-CS55	5N-CS56	19626	RCP	42	240	0	2	31	$ 83,965	$ -	$ -	$ 83,965
5N-CS56	5N-CS69	19627	RCP	42	526	0	2	2	$ 183,960	$ -	$ -	$ 183,960
5N-CS57	5N-CS60	20284	RCP	42	738	0	0	0	$ -	$ -	$ -	$ -
5N-CS58	5N-CS55	19625	RCP	42	315	0	3	562	$ 110,180	$ -	$ -	$ 110,180
5N-CS6	5N-CS13	19600	RCP	30	308	0	3	556	$ 53,918	$ -	$ -	$ 53,918
5N-CS60	6S-CS74	20317	RCP	60	61	0	0	0	$ -	$ -	$ -	$ -
5N-CS68	5S-CS5	20229		12	54	0	0	0	$ -	$ -	$ -	$ -
5N-CS69	5N-CS57	19628	RCP	42	531	0	0	0	$ -	$ -	$ -	$ -
5N-CS70	5N-CS43	19612	RCP	21	327	5	3	5	$ 40,825	$ 750	$ -	$ 41,575
5N-CS71	5N-CS58	19624	RCP	42	330	0	3	590	$ 115,640	$ -	$ -	$ 115,640
5N-CS73	5N-CS71	20333	RCP	42	210	1	0	0	$ -	$ -	$ -	$ -
5N-CS8	5N-CS10	19602	VCP	18	201	6	4	408	$ 20,060	$ 900	$ -	$ 20,960
5S-CS1	5S-CS8	19838	VCP	12	156	0	0	0	$ -	$ -	$ -	$ -
5S-CS10	15S-CS4	19562	VCP	30	182	6	4	75	$ 31,815	$ 900	$ -	$ 32,715
5S-CS2	5S-CS3	19840	VCP	12	292	1	2	6	$ 20,440	$ 150	$ -	$ 20,590
5S-CS3	5S-CS4	19841	VCP	12	261	2	5	59	$ 18,242	$ 300	$ -	$ 18,542
5S-CS4	5S-CS5	19842	VCP	8	65	0	2	6	$ 2,930	$ -	$ -	$ 2,930
5S-CS5	6S-CS75	19843	VCP	8	183	2	2	6	$ 8,235	$ 300	$ -	$ 8,535
5S-CS6	5S-CS7	19844	RCP	42	393	0	0	0	$ -	$ -	$ -	$ -
5S-CS7	6S-CS59	19874	RCP	42	379	0	0	0	$ -	$ -	$ -	$ -
5S-CS8	5S-CS9	20316	VCP	12	6	0	0	0	$ -	$ -	$ -	$ -
5S-CS9	5S-CS2	19839	VCP	12	165	1	3	327	$ 11,515	$ 150	$ -	$ 11,665
6N-CS1	6N-CS6	19629	RCP	30	321	13	3	574	$ 56,210	$ 1,950	$ -	$ 58,160
6N-CS11	6N-CS6	19633	RCP	33	324	14	0	0	$ -	$ -	$ -	$ -
6N-CS12	6N-CS7	19638	VCP	15	364	13	4	221	$ 30,957	$ 1,950	$ -	$ 32,907
6N-CS13	6N-CS8	19644	VCP	18	334	14	3	23	$ 33,440	$ 2,100	$ -	$ 35,540
6N-CS14	6N-CS9	19648	VCP	18	345	15	4	200	$ 34,450	$ 2,250	$ -	$ 36,700
6N-CS15	6N-CS10	19653	VCP	15	325	6	4	51	$ 27,634	$ 900	$ -	$ 28,534
6N-CS16	6N-CS11	19632	RCP	33	331	15	0	0	$ -	$ -	$ -	$ -
6N-CS17	6N-CS12	19637	VCP	15	291	10	4	62	$ 24,752	$ 1,500	$ -	$ 26,252
6N-CS18	6N-CS13	19643	VCP	15	317	10	4	559	$ 26,945	$ 1,500	$ -	$ 28,445
6N-CS20	6N-CS15	19652	VCP	15	326	6	3	14	$ 27,668	$ 900	$ -	$ 28,568
6N-CS22	6N-CS17	19636	VCP	12	360	13	3	32	$ 25,165	$ 1,950	$ -	$ 27,115
6N-CS23	6N-CS18	19642	VCP	12	336	12	4	938	$ 23,513	$ 1,800	$ -	$ 25,313
6N-CS25	6N-CS20	19651	VCP	12	241	5	4	19	$ 16,898	$ 750	$ -	$ 17,648
6N-CS26	6N-CS21	19631	VCP	24	260	9	2	4	$ 38,940	$ 1,350	$ -	$ 40,290
6N-CS27	6N-CS22	19635	VCP	12	331	11	5	564	$ 23,170	$ 1,650	$ -	$ 24,820
6N-CS28	6N-CS23	19641	VCP	12	260	11	5	286	$ 18,207	$ 1,650	$ -	$ 19,857
6N-CS29	6N-CS24	19647	VCP	12	270	12	4	402	$ 18,921	$ 1,800	$ -	$ 20,721
6N-CS3	6N-CS8	19640	VCP	21	322	10	3	18	$ 40,263	$ 1,500	$ -	$ 41,763
6N-CS30	6N-CS25	19650	VCP	12	359	6	3	5	$ 25,109	$ 900	$ -	$ 26,009
6N-CS32	6N-CS33	19694	VCP	12	41	2	3	8	$ 8,000	$ 300	$ -	$ 8,300
6N-CS33	6N-CS38	19695	VCP	12	249	15	3	13	$ 17,416	$ 2,250	$ -	$ 19,666
6N-CS34	6N-CS35	19691	VCP	12	41	2	4	7	$ 8,000	$ 300	$ -	$ 8,300
6N-CS35	6N-CS39	19692	VCP	12	248	10	4	23	$ 17,381	$ 1,500	$ -	$ 18,881
6N-CS36	6N-CS37	19702	VCP	12	40	0	5	144	$ 8,000	$ -	$ -	$ 8,000
6N-CS37	6N-CS40	19703	VCP	12	245	1	0	0	$ -	$ -	$ -	$ -
6N-CS38	6N-CS45	19696	VCP	12	248	10	4	32	$ 17,325	$ 1,500	$ -	$ 18,825

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
6N-CS39	6N-CS48	19654	VCP	12	171	9	5	103	$ 11,984	$ 1,350	$ -	$ 13,334
6N-CS4	6N-CS9	19646	VCP	21	321	12	3	10	$ 40,175	$ 1,800	$ -	$ 41,975
6N-CS40	6N-CS47	19704	VCP	12	227	3	2	12	$ 15,869	$ 450	$ -	$ 16,319
6N-CS42	6N-CS43	19700	VCP	21	224	1	3	101	$ 28,000	$ 150	$ -	$ 28,150
6N-CS43	7S-CS1	19706	VCP	15	40	0	0	0	$ -	$ -	$ -	$ -
6N-CS44	6N-CS43	19698	VCP	21	158	2	4	138	$ 19,750	$ 300	$ -	$ 20,050
6N-CS45	6N-CS44	19697	VCP	21	193	4	4	111	$ 24,150	$ 600	$ -	$ 24,750
6N-CS46	6N-CS45	19693	VCP	21	374	3	3	12	$ 46,725	$ 450	$ -	$ 47,175
6N-CS47	7N-CS38	19705	VCP	12	31	0	0	0	$ -	$ -	$ -	$ -
6N-CS48	6N-CS46	19655	VCP	12	77	3	3	3	$ 8,000	$ 450	$ -	$ 8,450
6N-CS49	6N-CS1	20419	RCP	30	193	12	3	344	$ 33,758	$ 1,800	$ -	$ 35,558
6N-CS6	6N-CS7	19634	RCP	36	309	0	3	551	$ 77,150	$ -	$ -	$ 77,150
6N-CS7	6N-CS8	19639	RCP	36	329	0	3	589	$ 82,350	$ -	$ -	$ 82,350
6N-CS8	6N-CS9	19645	RCP	42	323	0	0	0	$ -	$ -	$ -	$ -
6N-CS9	6N-CS10	19649	RCP	42	320	0	0	0	$ -	$ -	$ -	$ -
6S-CS1	6S-CS73	19846	VCP	8	22	1	0	0	$ -	$ -	$ -	$ -
6S-CS10	6S-CS16	19863	CIPP	12	212	8	0	0	$ -	$ -	$ -	$ -
6S-CS11	6S-CS12	19850	VCP	12	18	1	2	2	$ 1,239	$ 150	$ -	$ 1,389
6S-CS12	6S-CS14	19852	VCP	12	195	5	2	2	$ 13,643	$ 750	$ -	$ 14,393
6S-CS14	6S-CS18	19853	VCP	12	199	4	1	1	$ -	$ -	$ -	$ -
6S-CS17	6S-CS23	19868	CIPP	12	184	6	0	0	$ -	$ -	$ -	$ -
6S-CS18	6S-CS20	19854	VCP	12	198	7	2	2	$ 13,860	$ 1,050	$ -	$ 14,910
6S-CS2	6S-CS6	19848	VCP	12	208	0	3	5	$ 14,532	$ -	$ -	$ 14,532
6S-CS20	7S-CS21	20099		12	203	5	5	12	$ 14,210	$ 750	$ -	$ 14,960
6S-CS21	6S-CS26	19861	VCP	12	219	7	5	412	$ 15,337	$ 1,050	$ -	$ 16,387
6S-CS22	6S-CS27	19864	VCP	12	183	6	4	158	$ 12,831	$ 900	$ -	$ 13,731
6S-CS23	6S-CS28	19869	VCP	12	220	8	0	0	$ -	$ -	$ -	$ -
6S-CS28	6S-CS32	19870	CIPP	12	218	9	0	0	$ -	$ -	$ -	$ -
6S-CS3	6S-CS4	19876	VCP	12	51	1	3	16	$ 8,000	$ 150	$ -	$ 8,150
6S-CS31	6S-CS35	19865	VCP	12	217	8	2	12	$ 15,162	$ 1,200	$ -	$ 16,362
6S-CS32	6S-CS36	19871	CIPP	12	217	8	0	0	$ -	$ -	$ -	$ -
6S-CS35	6S-CS39	19866	PVC	12	14	0	0	0	$ -	$ -	$ -	$ -
6S-CS37	6S-CS44	19855	VCP	24	202	6	3	268	$ 30,285	$ 900	$ -	$ 31,185
6S-CS38	6S-CS41	19872	VCP	12	201	6	4	17	$ 14,056	$ 900	$ -	$ 14,956
6S-CS39	6S-CS40	19867	RCP	21	371	0	0	0	$ -	$ -	$ -	$ -
6S-CS4	6S-CS77	19877	VCP	12	135	6	4	18	$ 9,443	$ 900	$ -	$ 10,343
6S-CS40	6S-CS69	20319	RCP	21	375	0	1	1	$ -	$ -	$ -	$ -
6S-CS49	6S-CS78	20326	VCP	15	187	6	4	14	$ 15,921	$ 900	$ -	$ 16,821
6S-CS52	6S-CS67	19856	VCP	24	128	4	4	202	$ 19,200	$ 600	$ -	$ 19,800
6S-CS58	6S-CS62	19859	VCP	24	151	6	2	22	$ 22,665	$ 900	$ -	$ 23,565
6S-CS59	6S-CS60	20280	RCP	42	372	0	0	0	$ -	$ -	$ -	$ -
6S-CS6	6S-CS11	19849	VCP	12	178	7	2	2	$ 12,432	$ 1,050	$ -	$ 13,482
6S-CS60	6S-CS61	20281	RCP	42	368	0	0	0	$ -	$ -	$ -	$ -
6S-CS61	6S-CS64	20100	VCP	15	12	0	0	0	$ -	$ -	$ -	$ -
6S-CS61	6S-CS65	20101	RCP	42	378	0	0	0	$ -	$ -	$ -	$ -
6S-CS64	16S-CS9	20231	CIPP	18	218	7	0	0	$ -	$ -	$ -	$ -
6S-CS65	16S-CS81	20102	RCP	72	655	3	0	0	$ -	$ -	$ -	$ -
6S-CS66	6S-CS58	19858	VCP	24	176	6	2	6	$ 26,370	$ 900	$ -	$ 27,270
6S-CS67	6S-CS66	19857	VCP	24	76	2	4	61	$ 11,460	$ 300	$ -	$ 11,760
6S-CS68	6S-CS65	20321	RCP	60	542	10	0	0	$ -	$ -	$ -	$ -

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
6S-CS69	6S-CS68	20118	RCP	60	647	12	0	0	$ -	$ -	$ -	$ -
6S-CS7	6S-CS13	19875	RCP	18	148	0	0	0	$ -	$ -	$ -	$ -
6S-CS7	6S-CS77	20400		8	22	0	0	0	$ -	$ -	$ -	$ -
6S-CS70	6S-CS69	20119	RCP	60	582	11	0	0	$ -	$ -	$ -	$ -
6S-CS72	6S-CS70	20097	RCP	60	789	1	0	0	$ -	$ -	$ -	$ -
6S-CS73	6S-CS2	19847	VCP	12	219	2	0	0	$ -	$ -	$ -	$ -
6S-CS74	6S-CS72	20120	RCP	60	197	0	0	0	$ -	$ -	$ -	$ -
6S-CS75	6S-CS1	19845	VCP	8	207	3	5	19	$ 9,306	$ 450	$ -	$ 9,756
6S-CS77	7S-CS9	20107	VCP	18	56	0	2	2	$ 5,550	$ -	$ -	$ 5,550
6S-CS9	6S-CS15	19860	VCP	12	216	10	5	72	$ 15,092	$ 1,500	$ -	$ 16,592
7N-CS10	7N-CS5	20287	VCP	21	325	7	5	11	$ 40,638	$ 1,050	$ -	$ 41,688
7N-CS11	7N-CS6	19660	VCP	21	347	12	4	99	$ 43,313	$ 1,800	$ -	$ 45,113
7N-CS12	7N-CS8	19666	VCP	21	345	12	3	45	$ 43,175	$ 1,800	$ -	$ 44,975
7N-CS14	7N-CS10	20286	VCP	18	325	4	4	13	$ 32,480	$ 600	$ -	$ 33,080
7N-CS15	7N-CS11	19659	VCP	21	305	12	4	384	$ 38,163	$ 1,800	$ -	$ 39,963
7N-CS16	7N-CS12	19665	VCP	21	306	10	4	58	$ 38,238	$ 1,500	$ -	$ 39,738
7N-CS18	8N-CS31	19673	RCP	27	366	0	3	653	$ 56,715	$ -	$ -	$ 56,715
7N-CS19	7N-CS18	19672	VCP	15	52	0	0	0	$ -	$ -	$ -	$ -
7N-CS2	7N-CS6	19711	VCP	21	324	12	4	317	$ 40,513	$ 1,800	$ -	$ 42,313
7N-CS20	7N-CS14	20285	VCP	18	326	7	3	12	$ 32,550	$ 1,050	$ -	$ 33,600
7N-CS21	7N-CS15	19658	VCP	18	337	12	3	29	$ 33,650	$ 1,800	$ -	$ 35,450
7N-CS22	7N-CS16	19664	VCP	18	339	13	3	41	$ 33,900	$ 1,950	$ -	$ 35,850
7N-CS23	7N-CS19	19671	VCP	15	398	14	2	2	$ 33,864	$ 2,100	$ -	$ 35,964
7N-CS26	7N-CS21	19657	VCP	18	319	12	3	23	$ 31,900	$ 1,800	$ -	$ 33,700
7N-CS27	7N-CS22	19663	VCP	18	298	15	4	239	$ 29,830	$ 2,250	$ -	$ 32,080
7N-CS29	7N-CS23	19670	VCP	15	196	6	0	0	$ -	$ -	$ -	$ -
7N-CS30	7N-CS25	19708	VCP	12	284	6	4	17	$ 19,852	$ 900	$ -	$ 20,752
7N-CS31	7N-CS26	19713	VCP	15	326	12	4	103	$ 27,668	$ 1,800	$ -	$ 29,468
7N-CS33	7N-CS29	19669	VCP	12	200	4	4	10	$ 13,979	$ 600	$ -	$ 14,579
7N-CS34	7N-CS30	19707	VCP	12	292	3	3	3	$ 20,447	$ 450	$ -	$ 20,897
7N-CS35	7N-CS31	19712	VCP	12	267	13	4	325	$ 18,704	$ 1,950	$ -	$ 20,654
7N-CS38	7N-CS39	19674	VCP	12	41	0	2	2	$ 2,898	$ -	$ -	$ 2,898
7N-CS39	7N-CS40	19675	VCP	12	112	1	2	2	$ 7,868	$ 150	$ -	$ 8,018
7N-CS40	7S-CS5	20108	RCP	12	41	0	0	0	$ -	$ -	$ -	$ -
7N-CS41	7N-CS26	19714	RCP	8	161	0	2	6	$ 7,250	$ -	$ -	$ 7,250
7N-CS5	7N-CS6	19710	RCP	42	341	1	3	608	$ 119,315	$ 150	$ -	$ 119,465
7N-CS7	7N-CS8	19661	RCP	42	227	0	3	398	$ 79,275	$ -	$ -	$ 79,275
7N-CS8	7N-CS9	19667	RCP	48	371	0	3	662	$ 166,950	$ -	$ -	$ 166,950
7N-CS9	8N-CS22	19668	RCP	60	370	0	0	0	$ -	$ -	$ -	$ -
7S-CS11	7S-CS13A	20104	VCP	21	138	1	5	219	$ 17,263	$ 150	$ -	$ 17,413
7S-CS12	7S-CS62	19881	PVC	12	244	3	0	0	$ -	$ -	$ -	$ -
7S-CS13	7S-CS90	20417	VCP	21	51	0	5	7	$ 12,000	$ -	$ -	$ 12,000
7S-CS13A	7S-CS13	20105	VCP	21	3	0	0	0	$ -	$ -	$ -	$ -
7S-CS15	7S-CS14	20328	VCP	12	32	0	2	2	$ 2,240	$ -	$ -	$ 2,240
7S-CS16	7S-CS8	20202	VCP	15	243	1	5	204	$ 20,689	$ 150	$ -	$ 20,839
7S-CS18	7S-CS12	19880	CONC	12	201	1	0	0	$ -	$ -	$ -	$ -
7S-CS19	7S-CS89	20395		12	9	0	0	0	$ -	$ -	$ -	$ -
7S-CS2	7S-CS80	20381	PVC	18	21	0	0	0	$ -	$ -	$ -	$ -
7S-CS22	7S-CS23	19889	VCP	12	274	10	4	158	$ 19,208	$ 1,500	$ -	$ 20,708
7S-CS23	7S-CS19	19890	VCP	12	121	1	3	21	$ 8,491	$ 150	$ -	$ 8,641

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
7S-CS24	7S-CS16	20201	VCP	12	267	4	5	35	$ 18,662	$ 600	$ 7,500	$ 26,762
7S-CS25	7S-CS21	20098	VCP	12	230	7	3	32	$ 16,121	$ 1,050	$ -	$ 17,171
7S-CS25	7S-CS31	20191	VCP	12	174	2	4	57	$ 12,159	$ 300	$ -	$ 12,459
7S-CS26	7S-CS25	19888	VCP	12	211	5	3	62	$ 14,770	$ 750	$ -	$ 15,520
7S-CS27	7S-CS29	19561	VCP	12	44	0	3	6	$ 8,000	$ -	$ -	$ 8,000
7S-CS28	7S-CS24	20200	VCP	12	246	4	3	13	$ 17,192	$ 600	$ -	$ 17,792
7S-CS29	7S-CS23	20206	VCP	12	235	2	3	11	$ 16,457	$ 300	$ -	$ 16,757
7S-CS3	7S-CS63	19878	VCP	15	202	3	3	6	$ 17,136	$ 450	$ -	$ 17,586
7S-CS31	7S-CS35	20192	VCP	12	172	8	5	363	$ 12,026	$ 1,200	$ -	$ 13,226
7S-CS32	7S-CS26	19887	VCP	12	223	7	5	284	$ 15,575	$ 1,050	$ -	$ 16,625
7S-CS34	7S-CS36	19885	VCP	12	216	4	2	4	$ 15,141	$ 600	$ -	$ 15,741
7S-CS34	7S-CS32	19886		12	225	3	2	6	$ 15,736	$ 450	$ -	$ 16,186
7S-CS35	7S-CS38	20193	VCP	12	180	6	4	225	$ 12,621	$ 900	$ -	$ 13,521
7S-CS37	8S-CS62	19884	VCP	12	195	6	5	290	$ 13,664	$ 900	$ -	$ 14,564
7S-CS39	7S-CS61	20186	VCP	15	176	6	5	502	$ 14,926	$ 900	$ -	$ 15,826
7S-CS4	7S-CS5	20204	VCP	15	106	0	2	6	$ 9,019	$ -	$ -	$ 9,019
7S-CS40	7S-CS39	20185	VCP	10	169	3	4	78	$ 9,295	$ 450	$ -	$ 9,745
7S-CS43	7S-CS48	20187	VCP	15	329	13	4	42	$ 27,965	$ 1,950	$ -	$ 29,915
7S-CS47	7S-CS53	20195	VCP	15	229	7	4	357	$ 19,423	$ 1,050	$ -	$ 20,473
7S-CS47	6S-CS68	20199	RCP	30	371	0	0	0	$ -	$ -	$ -	$ -
7S-CS48	7S-CS49	20188	VCP	18	15	0	3	3	$ 11,000	$ -	$ -	$ 11,000
7S-CS49	7S-CS54	20189	VCP	18	293	13	4	144	$ 29,310	$ 1,950	$ -	$ 31,260
7S-CS49	7S-CS47	20198	RCP	24	372	0	3	666	$ 55,830	$ -	$ -	$ 55,830
7S-CS5	8S-CS1	20205	VCP	18	216	2	2	22	$ 21,600	$ 300	$ -	$ 21,900
7S-CS53	7S-CS57	19564	VCP	15	265	13	4	179	$ 22,551	$ 1,950	$ -	$ 24,501
7S-CS54	17S-CS6	20190	VCP	18	293	14	5	65	$ 29,250	$ 2,100	$ -	$ 31,350
7S-CS59	7S-CS60	20124	VCP	21	18	0	0	0	$ -	$ -	$ -	$ -
7S-CS59	6S-CS62	20196	VCP	21	319	0	4	256	$ 39,838	$ -	$ -	$ 39,838
7S-CS60	17S-CS5	20197	VCP	21	42	0	2	2	$ 5,263	$ -	$ -	$ 5,263
7S-CS61	7S-CS43	19896	VCP	15	152	6	3	42	$ 12,937	$ 900	$ -	$ 13,837
7S-CS62	7S-CS2	20125		12	9	0	0	0	$ -	$ -	$ -	$ -
7S-CS63	7S-CS2	19879	VCP	15	172	0	0	0	$ -	$ -	$ -	$ -
7S-CS64	7S-CS65	19892	PVC	66	230	0	0	0	$ -	$ -	$ -	$ -
7S-CS65	7S-CS66	19893		66	219	0	0	0	$ -	$ -	$ -	$ -
7S-CS67	7S-CS62	20127	PVC	12	9	0	0	0	$ -	$ -	$ -	$ -
7S-CS68	7S-CS3	19895	VCP	12	250	1	5	48	$ 17,500	$ 150	$ 7,500	$ 25,150
7S-CS69	8S-CS24	19934	VCP	12	205	5	4	120	$ 14,329	$ 750	$ -	$ 15,079
7S-CS7	7S-CS8	19891	VCP	12	42	0	3	5	$ 8,000	$ -	$ -	$ 8,000
7S-CS72	7S-CS3	20376	PVC	12	21	0	0	0	$ -	$ -	$ -	$ -
7S-CS73	7S-CS73	20373	RCP	60	44	2	0	0	$ -	$ -	$ -	$ -
7S-CS75	7S-CS79	20379		12	212	1	0	0	$ -	$ -	$ -	$ -
7S-CS76	7S-CS78	20372	RCP	60	259	1	0	0	$ -	$ -	$ -	$ -
7S-CS77	7S-CS72	20375	PVC	12	4	0	0	0	$ -	$ -	$ -	$ -
7S-CS78	7S-CS74	20378	RCP	60	202	1	2	2	$ 111,265	$ 150	$ -	$ 111,415
7S-CS79	7S-CS72	20377		12	285	2	0	0	$ -	$ -	$ -	$ -
7S-CS8	7S-CS6	20203	VCP	15	40	0	3	5	$ 9,000	$ -	$ -	$ 9,000
7S-CS80	7S-CS1	19882	PVC	18	328	2	0	0	$ -	$ -	$ -	$ -
7S-CS81	7S-CS-IN1114	20384	RCP	24	133	0	2	4	$ 19,950	$ -	$ -	$ 19,950
7S-CS89	7S-CS15	20327		12	120	3	3	18	$ 8,379	$ 450	$ -	$ 8,829
7S-CS-IN1114	7S-CS82	20385	RCP	24	135	0	0	0	$ -	$ -	$ -	$ -

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
8N-CS1	8N-CS3	20133	RCP	66	396	0	0	0	$ -	$ -	$ -	$ -
8N-CS10	8N-CS11	20128		66	4	0	0	0	$ -	$ -	$ -	$ -
8N-CS11	8N-CS12	20171		66	25	0	0	0	$ -	$ -	$ -	$ -
8N-CS12	8N-CS15	20172		66	146	0	0	0	$ -	$ -	$ -	$ -
8N-CS13	8N-CS14	20167	RCP	36	35	0	0	0	$ -	$ -	$ -	$ -
8N-CS14	8N-CS58	20168	RCP	36	88	0	0	0	$ -	$ -	$ -	$ -
8N-CS15	8N-CS16	20173		66	176	0	0	0	$ -	$ -	$ -	$ -
8N-CS16	8N-CS18	19559		66	127	0	3	49	$ 76,080	$ -	$ -	$ 76,080
8N-CS19	8N-CS23	20139	VCP	10	332	11	0	0	$ -	$ -	$ -	$ -
8N-CS20	8N-CS22	20135	RCP	12	167	0	3	77	$ 11,718	$ -	$ -	$ 11,718
8N-CS21	08N-BT01	20103		21	7	0	0	0	$ -	$ -	$ -	$ -
8N-CS22	8N-CS23	20137	RCP	60	364	0	0	0	$ -	$ -	$ -	$ -
8N-CS23	8N-CS56	20161	RCP	60	285	1	0	0	$ -	$ -	$ -	$ -
8N-CS27	8N-CS23	20154	RCP	15	278	9	3	512	$ 23,639	$ 1,350	$ -	$ 24,989
8N-CS28	8N-CS25	20164	RCP	15	423	11	3	776	$ 35,964	$ 1,650	$ -	$ 37,614
8N-CS29	8N-CS64	20360		15	268	2	3	479	$ 22,763	$ 300	$ -	$ 23,063
8N-CS3	8N-CS5	20134	RCP	66	390	0	0	0	$ -	$ -	$ -	$ -
8N-CS31	8N-CS60	20145	RCP	30	178	0	3	306	$ 31,063	$ -	$ -	$ 31,063
8N-CS32	8N-CS31	20144	VCP	15	28	0	0	0	$ -	$ -	$ -	$ -
8N-CS33	8N-CS26	20136	RCP	15	220	9	4	418	$ 18,675	$ 1,350	$ -	$ 20,025
8N-CS35	8N-CS38	20155	RCP	36	333	0	3	594	$ 83,125	$ -	$ -	$ 83,125
8N-CS37	8N-CS28	20163	RCP	15	389	14	3	699	$ 33,099	$ 2,100	$ -	$ 35,199
8N-CS38	9N-CS3	19656	RCP	42	393	0	0	0	$ -	$ -	$ -	$ -
8N-CS39	8N-CS38	20160	VCP	15	13	0	3	4	$ 9,000	$ -	$ -	$ 9,000
8N-CS4	8N-CS19	20138	VCP	8	311	11	3	3	$ 14,013	$ 1,650	$ -	$ 15,663
8N-CS41	8N-CS32	20143	VCP	15	276	8	3	3	$ 23,418	$ 1,200	$ -	$ 24,618
8N-CS42	8N-CS36	20151	VCP	15	320	6	4	36	$ 27,200	$ 900	$ -	$ 28,100
8N-CS43	8N-CS39	20129	VCP	15	313	1	4	35	$ 26,580	$ 150	$ -	$ 26,730
8N-CS44	8N-CS41	20142	VCP	15	352	9	0	0	$ -	$ -	$ -	$ -
8N-CS47	8N-CS42	20150	VCP	15	279	6	3	3	$ 23,732	$ 900	$ -	$ 24,632
8N-CS48	8N-CS43	20159	VCP	15	244	1	0	0	$ -	$ -	$ -	$ -
8N-CS49	8N-CS47	20149	VCP	15	104	0	3	3	$ 8,866	$ -	$ -	$ 8,866
8N-CS5	8N-CS8	20169	RCP	66	39	0	0	0	$ -	$ -	$ -	$ -
8N-CS50	8N-CS48	20158	VCP	15	79	0	1	1	$ -	$ -	$ -	$ -
8N-CS51	8N-CS44	20141	VCP	12	246	6	3	8	$ 17,241	$ 900	$ -	$ 18,141
8N-CS52	8N-CS50	20157	VCP	15	297	8	5	79	$ 25,279	$ 1,200	$ -	$ 26,479
8N-CS53	8N-CS51	20140	VCP	12	336	10	3	7	$ 23,548	$ 1,500	$ -	$ 25,048
8N-CS54	8N-CS61	20147	VCP	12	294	6	0	0	$ -	$ -	$ -	$ -
8N-CS55	8N-CS52	20156	VCP	12	295	9	2	2	$ 20,671	$ 1,350	$ -	$ 22,021
8N-CS58	8N-CS62	20121	RCP	36	121	0	0	0	$ -	$ -	$ -	$ -
8N-CS6	8N-CS21	20122	RCP	21	398	0	0	0	$ -	$ -	$ -	$ -
8N-CS60	8N-CS35	20146	RCP	30	200	0	0	0	$ -	$ -	$ -	$ -
8N-CS61	8N-CS49	20148	VCP	12	236	8	2	2	$ 16,499	$ 1,200	$ -	$ 17,699
8N-CS62	8N-CS67	20433		60	211	5	0	0	$ -	$ -	$ -	$ -
8N-CS64	8N-CS59	20361		15	24	0	5	48	$ 9,000	$ -	$ -	$ 9,000
8N-CS7	8N-CS25	20165	VCP	8	434	11	1	1	$ -	$ -	$ -	$ -
8N-CS8	8N-CS10	20170	RCP	66	64	0	0	0	$ -	$ -	$ -	$ -
8N-CS9	8N-CS13	20166	RCP	36	46	0	0	0	$ -	$ -	$ -	$ -
8S-CS1	8S-CS2	19897	VCP	18	8	0	0	0	$ -	$ -	$ -	$ -
8S-CS10	8S-CS117	19910	VCP	24	274	8	0	0	$ -	$ -	$ -	$ -

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
8S-CS106	8S-CS109	19960	RCP	21	89	0	0	0	$ -	$ -	$ -	$ -
8S-CS108	8S-CS109	19954	RCP	33	373	0	3	3	$ 74,580	$ -	$ -	$ 74,580
8S-CS109	8S-CS110	19961	RCP	33	155	0	1	2	$ -	$ -	$ -	$ -
8S-CS11	8S-CS4	19907	VCP	15	300	13	4	238	$ 25,492	$ 1,950	$ -	$ 27,442
8S-CS110	8S-CS111	19964	RCP	33	211	0	0	0	$ -	$ -	$ -	$ -
8S-CS111	8S-CS113	19965	RCP	33	371	0	0	0	$ -	$ -	$ -	$ -
8S-CS112	08S-BT20	20130		15	7	0	0	0	$ -	$ -	$ -	$ -
8S-CS113	19S-CS11	20406		36	375	0	0	0	$ -	$ -	$ -	$ -
8S-CS114	8S-CS108	19952	VCP	15	128	7	3	46	$ 10,880	$ 1,050	$ -	$ 11,930
8S-CS120	8S-CS119	19899		12	32	1	0	0	$ -	$ -	$ -	$ -
8S-CS121	8S-CS26	20131		8	185	4	4	7	$ 8,330	$ 600	$ -	$ 8,930
8S-CS122	8S-CS34	19925		12	28	0	0	0	$ -	$ -	$ -	$ -
8S-CS125	8S-CS15	20428	RCP	12	133	5	3	21	$ 9,338	$ 750	$ -	$ 10,088
8S-CS126	8S-CS13	19900	VCP	12	277	11	5	158	$ 19,418	$ 1,650	$ -	$ 21,068
8S-CS13	8S-CS14	19912	RCP	27	178	0	3	319	$ 27,606	$ -	$ -	$ 27,606
8S-CS14	8S-CS15	19913	RCP	27	199	0	3	356	$ 30,845	$ -	$ -	$ 30,845
8S-CS15	8S-CS16	19914	RCP	27	370	0	3	662	$ 57,319	$ -	$ -	$ 57,319
8S-CS15	8S-CS9	20339		15	311	9	3	33	$ 26,427	$ 1,350	$ -	$ 27,777
8S-CS16	8S-CS21	19916	RCP	30	319	1	0	0	$ -	$ -	$ -	$ -
8S-CS2	8S-CS3	19901	VCP	18	374	3	4	20	$ 37,380	$ 450	$ -	$ 37,830
8S-CS20	8S-CS125	19903	RCP	12	141	8	3	21	$ 9,835	$ 1,200	$ -	$ 11,035
8S-CS21	8S-CS39	19917	RCP	30	320	0	3	572	$ 55,983	$ -	$ -	$ 55,983
8S-CS22	8S-CS19	19941	VCP	15	310	13	2	7	$ 26,350	$ 1,950	$ -	$ 28,300
8S-CS23	8S-CS119	19898	VCP	12	106	4	1	1	$ -	$ -	$ -	$ -
8S-CS24	8S-CS26	19923	VCP	12	140	3	3	66	$ 9,814	$ 450	$ -	$ 10,264
8S-CS26	8S-CS34	19924	VCP	12	169	5	3	181	$ 11,858	$ 750	$ -	$ 12,608
8S-CS27	8S-CS20	19902	RCP	12	196	8	3	60	$ 13,685	$ 1,200	$ -	$ 14,885
8S-CS27	8S-CS35	19918	VCP	12	221	6	3	3	$ 15,477	$ 900	$ -	$ 16,377
8S-CS3	8S-CS4	19905	VCP	21	379	2	3	156	$ 47,363	$ 300	$ -	$ 47,663
8S-CS30	8S-CS17	19906	VCP	12	454	18	5	47	$ 31,752	$ 2,700	$ -	$ 34,452
8S-CS34	8S-CS47	19926	VCP	12	77	1	3	14	$ 8,000	$ 150	$ -	$ 8,150
8S-CS35	8S-CS36	19919	VCP	12	115	1	3	16	$ 8,071	$ 150	$ -	$ 8,221
8S-CS36	8S-CS37	19920	VCP	12	82	3	4	20	$ 8,000	$ 450	$ -	$ 8,450
8S-CS37	8S-CS38	19921	VCP	12	24	4	0	0	$ -	$ -	$ -	$ -
8S-CS38	8S-CS39	19922	VCP	12	141	10	5	19	$ 9,877	$ 1,500	$ -	$ 11,377
8S-CS39	8S-CS41	19930	RCP	33	10	0	0	0	$ -	$ -	$ -	$ -
8S-CS39	8S-CS40	19938	VCP	15	7	0	0	0	$ -	$ -	$ -	$ -
8S-CS4	8S-CS5	19908	VCP	21	359	4	5	845	$ 44,850	$ 600	$ -	$ 45,450
8S-CS40	8S-CS46	19939	VCP	12	368	13	4	128	$ 25,739	$ 1,950	$ -	$ 27,689
8S-CS41	8S-CS42	19931	RCP	33	151	0	0	0	$ -	$ -	$ -	$ -
8S-CS42	8S-CS45	19932	RCP	33	216	0	3	385	$ 43,220	$ -	$ -	$ 43,220
8S-CS45	9S-CS27	19972	RCP	33	346	0	3	619	$ 69,280	$ -	$ -	$ 69,280
8S-CS46	8S-CS45	19933	VCP	15	1	0	0	0	$ -	$ -	$ -	$ -
8S-CS46	8S-CS22	19940	VCP	15	330	15	4	109	$ 28,050	$ 2,250	$ -	$ 30,300
8S-CS47	8S-CS58	19927	VCP	15	241	0	3	12	$ 20,468	$ -	$ -	$ 20,468
8S-CS5	8S-CS10	19909	VCP	24	274	10	5	33	$ 41,025	$ 1,500	$ -	$ 42,525
8S-CS51	8S-CS41	19936	VCP	18	145	0	4	55	$ 14,510	$ -	$ -	$ 14,510
8S-CS57	8S-CS51	19935	RCP	15	38	0	2	2	$ 3,264	$ -	$ -	$ 3,264
8S-CS58	8S-CS65	19928	VCP	15	121	2	3	5	$ 10,285	$ 300	$ -	$ 10,585
8S-CS62	8S-CS68	19947	RCP	15	198	6	4	38	$ 16,813	$ 900	$ -	$ 17,713

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
8S-CS63	8S-CS62	19946	VCP	12	202	4	5	199	$ 14,126	$ 600	$ -	$ 14,726
8S-CS64	8S-CS69	19955	VCP	21	162	0	0	0	$ -	$ -	$ -	$ -
8S-CS64	8S-CS62	20132	RCP	15	236	0	2	2	$ 20,060	$ -	$ -	$ 20,060
8S-CS65	8S-CS57	19929	PVC	12	138	4	0	0	$ -	$ -	$ -	$ -
8S-CS68	8S-CS74	19948	VCP	15	151	10	4	82	$ 12,861	$ 1,500	$ -	$ 14,361
8S-CS69	8S-CS75	19956	RCP	21	207	0	3	369	$ 25,925	$ -	$ -	$ 25,925
8S-CS70	8S-CS71	20230		12	8	0	0	0	$ -	$ -	$ -	$ -
8S-CS71	8S-CS73	19942	VCP	12	179	1	2	3	$ 12,544	$ 150	$ -	$ 12,694
8S-CS73	8S-CS76	20380	VCP	12	230	1	0	0	$ -	$ -	$ -	$ -
8S-CS74	8S-CS78	19949	VCP	15	152	7	4	39	$ 12,920	$ 1,050	$ -	$ 13,970
8S-CS75	8S-CS79	19957	RCP	21	106	0	0	0	$ -	$ -	$ -	$ -
8S-CS76	8S-CS77	19945	VCP	12	39	0	5	5	$ 8,000	$ -	$ -	$ 8,000
8S-CS77	9S-CS24	19943	VCP	15	241	3	4	8	$ 20,485	$ 450	$ -	$ 20,935
8S-CS78	8S-CS84	19950	VCP	15	174	8	4	390	$ 14,807	$ 1,200	$ -	$ 16,007
8S-CS79	8S-CS85	19958	RCP	21	177	0	0	0	$ -	$ -	$ -	$ -
8S-CS80	8S-CS89	19962	VCP	8	219	2	2	2	$ 9,869	$ 300	$ -	$ 10,169
8S-CS81	8S-CS82	19966	RCP	18	174	4	4	10	$ 17,360	$ 600	$ -	$ 17,960
8S-CS82	8S-CS94	19967	RCP	12	114	0	2	2	$ 7,980	$ -	$ -	$ 7,980
8S-CS83	9S-CS83	19565	VCP	8	229	1	2	2	$ 10,301	$ 150	$ -	$ 10,451
8S-CS85	8S-CS99	19959	RCP	21	163	0	0	0	$ -	$ -	$ -	$ -
8S-CS89	8S-CS110	19963	VCP	15	349	0	2	2	$ 29,665	$ -	$ -	$ 29,665
8S-CS9	8S-CS3	19904	VCP	15	293	12	4	327	$ 24,922	$ 1,800	$ -	$ 26,722
8S-CS90	8S-CS91	19969	VCP	8	156	2	2	6	$ 6,998	$ 300	$ -	$ 7,298
8S-CS91	8S-CS92	19970	VCP	8	49	1	0	0	$ -	$ -	$ -	$ -
8S-CS92	8S-CS93	19971	VCP	8	217	3	0	0	$ -	$ -	$ -	$ -
8S-CS94	8S-CS112	19968	VCP	18	349	4	3	627	$ 34,900	$ 600	$ -	$ 35,500
8S-CS96	8S-CS114	19951	VCP	15	153	8	4	127	$ 13,039	$ 1,200	$ -	$ 14,239
9N-CS1	9N-CS6	20430	RCP	48	161	0	0	0	$ -	$ -	$ -	$ -
9N-CS3	9N-CS4	20288	RCP	42	299	0	0	0	$ -	$ -	$ -	$ -
9N-CS4	MWRD-001MH	20289	RCP	42	308	0	0	0	$ -	$ -	$ -	$ -
9S-CS1	9S-CS4	20207	VCP	18	282	15	4	53	$ 28,220	$ 2,250	$ -	$ 30,470
9S-CS13	9S-CS26	20218	VCP	33	353	2	5	621	$ 70,680	$ 300	$ -	$ 70,980
9S-CS14	9S-CS13	20213	VCP	30	362	0	5	1,544	$ 63,263	$ -	$ -	$ 63,263
9S-CS15	9S-CS37	20323		12	327	15	3	24	$ 22,862	$ 2,250	$ -	$ 25,112
9S-CS17	9S-CS15	20216	VCP	12	315	11	3	23	$ 22,036	$ 1,650	$ -	$ 23,686
9S-CS17	9S-CS19	20295	VCP	12	211	7	5	34	$ 14,791	$ 1,050	$ -	$ 15,841
9S-CS18	9S-CS16	20212	VCP	12	314	11	4	8	$ 21,959	$ 1,650	$ -	$ 23,609
9S-CS18	9S-CS20	20221	VCP	12	279	12	4	56	$ 19,544	$ 1,800	$ -	$ 21,344
9S-CS19	9S-CS22	20296	VCP	12	128	0	2	4	$ 8,960	$ -	$ -	$ 8,960
9S-CS20	9S-CS23	20293	VCP	12	300	8	5	100	$ 21,000	$ 1,200	$ -	$ 22,200
9S-CS23	9S-CS22	20294	VCP	27	494	6	5	317	$ 76,555	$ 900	$ -	$ 77,455
9S-CS24	9S-CS25	20220	VCP	15	134	0	3	5	$ 11,390	$ -	$ -	$ 11,390
9S-CS25	9S-CS38	20005		83	215	0	0	0	$ -	$ -	$ -	$ -
9S-CS26	9S-CS12	20217		33	9	0	2	2	$ 1,740	$ -	$ -	$ 1,740
9S-CS28	9S-CS27	20219		33	6	0	0	0	$ -	$ -	$ -	$ -
9S-CS28	9S-CS25	20357		57	770	1	0	0	$ -	$ -	$ -	$ -
9S-CS3	9S-CS6	20209	VCP	12	286	15	5	424	$ 20,034	$ 2,250	$ -	$ 22,284
9S-CS31	9S-CS25	19974	VCP	24	265	8	5	526	$ 39,765	$ 1,200	$ -	$ 40,965
9S-CS33	9S-CS19	20324	RCP	8	33	0	0	0	$ -	$ -	$ -	$ -
9S-CS34	19S-CS12	20355		58	419	3	0	0	$ -	$ -	$ -	$ -

Upstm MH	Dnstm MH	Inspection No.	Pipe Mtrl.	Pipe Dia.	Televised Length	Laterals	Segment Grade	Overall Struct. Rating	Recommendations & Estimate Of Probable Cost			
									CIPP Cost	Reinst. Cost	Spot Repair Cost	Total Rehab. Cost
9S-CS35	9S-CS37	20297	RCP	36	363	0	4	1,155	$ 90,850	$ -	$ -	$ 90,850
9S-CS37	9S-CS28	19973	RCP	36	364	0	0	0	$ -	$ -	$ -	$ -
9S-CS38	9S-CS34	20342		83	116	1	0	0	$ -	$ -	$ -	$ -
9S-CS4	9S-CS7	20208	VCP	18	347	15	5	172	$ 34,660	$ 2,250	$ -	$ 36,910
9S-CS5	9S-CS8	20214	VCP	12	298	11	4	407	$ 20,839	$ 1,650	$ -	$ 22,489
9S-CS6	9S-CS9	20210	VCP	12	297	13	4	387	$ 20,797	$ 1,950	$ -	$ 22,747
9S-CS8	9S-CS10	20215	VCP	15	344	13	4	781	$ 29,215	$ 1,950	$ -	$ 31,165
9S-CS83	9S-CS38	19566	VCP	15	61	0	0	0	$ -	$ -	$ -	$ -
9S-CS9	9S-CS11	20211	VCP	15	294	9	4	794	$ 24,999	$ 1,350	$ -	$ 26,349
MWRD-001MH	9N-CS1	20290	RCP	42	204	0	0	0	$ -	$ -	$ -	$ -
								Total Cost	**$ 15,697,949**	**$ 372,150**	**$ 35,000**	**$ 16,105,099**
								Category 5	$ 2,652,465	$ 85,800	$ 35,000	$ 2,773,265
								Category 4	$ 3,645,787	$ 161,400	$ -	$ 3,807,187
								Category 3	$ 6,194,653	$ 90,000	$ -	$ 6,284,653
								Category 2	$ 3,205,045	$ 34,950	$ -	$ 3,239,995

Village of Mount Prospect, Illinois
2015 Combined Sewer Televising Condition Assessment
2015 Study Area

Exhibit A