

# Town of Newburgh, Indiana

---

## **Capacity, Management, Operation and Maintenance (CMOM)**

**“An Information Management System  
for Newburgh’s Sanitary Sewer System”**



**March 2017**

---

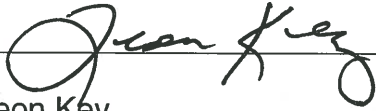
Prepared By:



**COMMONWEALTH™  
ENGINEERS, INC.**

A wealth of resources to master a common goal.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine, imprisonment, or both, for knowing violations.



Date: 2-9-17

Leon Key  
Town of Newburgh  
Wastewater Treatment Facilities Superintendent

## **NEWBURGH WASTEWATER TREATMENT FACILITIES 2016 ACCOMPLISHMENTS**

The Town of Newburgh originally completed their Capacity, Management, Operation and Maintenance (CMOM) program in October of 2002. The document was reviewed by the US EPA during the negotiations associated with a Federal Consent Decree. In keeping with the terms of the negotiated Consent Decree, the CMOM document was revised on July 29, 2005. The update was required to comply with updated federal CMOM guidelines and the Town agreed to conduct annual audits of the program during the effective term of the Consent Decree. The Decree required not only a general program audit, but also an annual report on sewer system overflow (SSO) events and a progress report on system deficiency corrections.

It is the intent of this letter report to provide the above-referenced information. Specifically, information will be provided on:

- 1) The Utilities accomplishments during 2016
- 2) A listing of SSO events during the year
- 3) Delineation of future projects designed to correct system deficiencies
- 4) Listing of anticipated projects to meet system needs as identified through master planning activities

It is imperative that we differentiate between items 3) and 4) above. In prior reports, we offered a basis for distinguishing between the above referenced activities while satisfying the terms of the Consent Decree. We continue to ascribe to this distinction, and therefore continue to define system deficiencies as follows:

“A deficiency is a mechanical and/or structural limitation in the Utility’s infrastructure that results in a lack of hydraulic sanitary sewer capacity leading to an SSO event. In Newburgh’s case, this would be generally associated with wet weather conditions. Sufficiency of the wet weather, hydraulic capacity shall be based upon a calibrated XP-SWMM model with an upper limit flow rate based upon a single event (i.e. no rainfall in the previous 48 hours) 5 year, 2 hour theoretical precipitation event. The 5 year, 2-hour theoretical event shall be established by utilizing the Huff 1<sup>st</sup> quartile intensity distribution for the City of Evansville, Indiana as found in the Stormwater Drainage Manual (HERPICC). The Town completed the installation of a weather station at their wastewater treatment plant capable of recording precipitation data on 10-minute intervals. Therefore, rainfall data now come directly from the wastewater treatment plant site. If an SSO event occurs, the precipitation data for the period surrounding the SSO event will be reviewed, and the recurrence interval and duration of the storm(s) will be calculated.

- A. If the storm is a single event (i.e. no rainfall in the previous 48 hours) and has a recurrence interval or rainfall depth greater than a 5 year, 2 hour event, the event shall be considered a Force Majeure occurrence. Table 1 shows this delineation for various storm events.
- B. If multiple concurrent storms (i.e. a 6 month, 2-hour storm followed by a 1 yr, 1 hour storm) cause a SSO event, it shall be presumed that the combined effect of these multiple concurrent storms exceeds the effect of a single event 5 year, 2 hour storm and shall be considered a Force Majeure occurrence.”

**Table 1**  
**Delineation of Force Majeure Occurrences for Newburgh, IN<sup>1</sup> based upon Discreet**  
**Rainfall Occurrence with No Regard to Antecedent Rainfall Events.**

Duration	Recurrence Interval									
	2-Month	3-Month	4-Month	6-Month	9-Month	1-Year	2-Year	5-Year	10-Year	25-Year
10-day	2.50"	2.73"	2.90"	3.17"	3.46"	3.68"	4.28"	5.22"	6.07"	7.40"
5-day	2.20"	2.40"	2.55"	2.79"	3.04"	3.24"	3.76"	4.59"	5.33"	6.50"
72-hr	2.00"	2.18"	2.32"	2.53"	2.77"	2.94"	3.42"	4.17"	4.85"	5.91"
48-hr	1.85"	2.02"	2.15"	2.35"	2.56"	2.73"	3.17"	3.86"	4.49"	5.48"
24-hr	1.62"	1.77"	1.88"	2.05"	2.24"	2.39"	2.77"	3.38"	3.93"	4.79"
18-hr	1.53"	1.67"	1.78"	1.94"	2.12"	2.26"	2.62"	3.20"	3.71"	4.53"
12-hr	1.41"	1.54"	1.64"	1.79"	1.95"	2.08"	2.42"	2.95"	3.42"	4.18"
6-hr	1.22"	1.33"	1.41"	1.54"	1.69"	1.79"	2.08"	2.54"	2.95"	3.60"
3-hr	1.03"	1.13"	1.20"	1.31"	1.43"	1.52"	1.77"	2.15"	2.50"	3.05"
2-hr	0.92"	1.01"	1.07"	1.17"	1.28"	1.36"	1.58"	1.93"	2.24"	2.73"
1-hr	0.72"	0.77"	0.81"	0.87"	0.93"	0.98"	1.11"	1.30"	1.47"	1.72"
30-min	0.69"	0.74"	0.78"	0.83"	0.90"	0.94"	1.06"	1.25"	1.41"	1.65"
15-min	0.55"	0.59"	0.62"	0.66"	0.71"	0.75"	0.84"	0.99"	1.12"	1.31"
10-min	0.44"	0.47"	0.50"	0.53"	0.57"	0.60"	0.68"	0.80"	0.90"	1.05"
5-min	0.27"	0.29"	0.31"	0.33"	0.35"	0.37"	0.42"	0.49"	0.55"	0.65"

<sup>1</sup> Based on HERPICC Stormwater Drainage Manual, July 1995.

 Not considered Force Majeure single event occurrence.

 Considered Force Majeure occurrence.

Contrasted to this are the planned improvement projects designed to meet the increased demands being placed on the system due to growth. Although growth can ultimately result in a system deficiency due to overloading, the distinction being made above is that a deficiency is a condition that has already manifested itself into an SSO event.

The Town of Newburgh recognizes that it must remain proactive in its approach to collection system maintenance and capacity management. To that end, the following sections summarize; accomplishments from 2016, SSO's observed in 2016, known system deficiencies, and a prioritized list of future projects.

**A. 2016 Accomplishments:**

**Newburgh Wastewater Treatment Facilities  
2016 Summary of Accomplishments**

1. Completed forty-two sanitary sewer point repairs at a cost of **\$112,405** (Attachment 13).
2. Video inspected **17,216** feet of sanitary sewer mains (Attachment 04).
3. Jet cleaned approximately **176,098** feet of sanitary sewers (Attachments 01 & 02).
4. Performed acoustic evaluation of **95,544** feet of sanitary sewer mains using the SL-RAT (See Attachments 02 & 15).
5. Completed the Epworth & Telephone Road Lift station, gravity lines and 2 force mains for the Epworth Rd. Corridor. Project Cost: **\$4,815,000**.
6. Initiated Engineering Task Orders & Continued engineering for 60 sanitary sewer project designs, project studies, and capacity studies. Total engineering cost for 2016: **\$1,274,089** (Attachment 06).
7. Completed the Willow Pond Basin Sanitary Sewer Study.
8. Completed the Master Lift Station Emergency Response SOP.
9. Completed the field work necessary to recalibrate Newburgh's Hydraulic SWMM Model.
10. Added two new positions to the Newburgh staff: 1 in Collection System O&M and 1 in WWTP Maintenance.
11. Issued 5 new Fat, Oil & Grease discharge permits to food service establishments (Attachment 20); inspected 94 FOG traps and interceptors (Attachment 21); and issued 12 FOG NOV's (Attachment 20).

12. Completed the field work necessary to obtain the GPS coordinates of 107 manholes in our collection system. The GPS coordinates were then integrated into our ARC GIS collection system map. This is a component of our asset management system. The work is on-going (Attachment 18).
13. Continued the process of integrating Granite XP sanitary sewer video information with the ARC GIS collection system map. Defects found during video surveillance have been linked with the specific line segment on the ACR GIS map for lines video inspected. This is a component of our asset management system, and the work is on-going.
14. Continued to integrate information obtained from the Warrick County GIS map with the Newburgh ARC GIS collection system map. County information transferred to the Newburgh map include property addresses, property lines, and subdivision boundaries. This is a component of our asset management system, and the work is on-going. Added several new subdivisions to the database.
15. Continued development an ARC GIS map layer, which identifies the sanitary sewer overflows by color coded location, year, and cause. The years included in the layer are 2006 through the present, and the overflow events included are coded as to cause which include the following:
  - a. Grease
  - b. Roots
  - c. Debris
  - d. Precipitation
  - e. Equipment Failure
  - f. Grit
  - g. Construction Related
  - h. Human Error
  - i. Main Line Defect
  - j. Manhole Obstruction
  - k. Base overflow locations.

This is a component of our asset management system, and the work is on-going.

16. Continued development of an ARC GIS map layer that identifies the sanitary sewers on the Newburgh preventative maintenance list for periodic jet cleaning. The lines are color coded as to the year they were placed on the list, 2006 through the present. This is a component of our asset management system, and the work is on-going.

17. Continued development of an ARC GIS map layer which identifies the sanitary sewers that have been video inspected. Line segments are color coded as to the year the line was video inspected, 2006 through the present. This is a component of our asset management system, and the work is ongoing.
18. Inspected 35 manholes, raised 15 manholes to grade elevations, and repaired 38 manholes. (Attachments 17 & 19).
19. Replaced the pumps and bases at The Master Lift Station and at Lift Station Number 3.
20. Completed the Halston Gravity Sanitary Sewer Extension.
21. Completed the design and easement acquisition for the Deaconess Lift Station Upgrade, Force Main & Gravity Sanitary Sewer Project.
22. Completed bench & field trials to determine if the WWTP was capable of Biological Phosphorus Removal.
23. Completed bench & field trials to determine the feasibility of using Sodium Aluminate to remove phosphorus from the WWTP effluent.
24. Completed the design and easement acquisition for the Kingston Lift Station Elimination Project.
25. Completed the design and easement acquisition for the Lincoln Avenue Phase III Sanitary Sewer Relocation Project.
26. Initiated the design of the Triple Crown Lift Station Elimination Project.
27. Initiated the design of the Oak Grove Phase III Sanitary Sewer Relocation Project.
28. Issued a \$14,000,000 bond to fund 55 priority one projects.

**Other noteworthy accomplishments are further described below:**

- Additional Capital Improvements Projects completed in 2016 are listed at the beginning of the Project Priority List (PPL) included in this report.
- During 2016, the Collection System Maintenance Staff has completed the following tasks:
  - i) Cleaned a total of 176,098 feet of sanitary sewer mains via high pressure

jetting (see **Attachment 1 & 2**). Of this total, 15,786 feet were associated with general line cleaning and 160,312 feet were associated with preventative maintenance on problematic sewer reaches. The lines cleaned for preventative maintenance purposes relate back to a citizen complaint or as a result of observations during video inspection. They are cleaned annually, semi-annually, or quarterly depending on the type and severity of the problem. This log is kept current and a copy for 2016 has been included in **Attachments 01-03**.

- ii) TV inspected 17,216 feet of sanitary sewer mains (see **Attachment 4**).
  - iii) Performed 42 sanitary sewer point repairs at a cost of \$112,405.06 (see **Attachment 13**). Repair costs in 2016 averaged approximately \$2,676 per repair.
  - iv) Performed 148 lateral service connection inspections for compliance with the Town's construction standards (see **Attachment 7**).
- The Town developed and prioritized a list of point repairs that need to be completed and pipe reaches that should be considered for slip lining. **Attachment 8A** lists repair needs from 2013 to date. **Attachment 8B** is a cumulative list of needs identified in the years prior to 2013. Contractor bids have been received on some of them, but many have not been bid. Virtually all of these defects have been around for many years, and, as such, are not considered to represent an imminent threat to the integrity of the system and hence, will be repaired as funds become available. Any emergency repairs are handled immediately and any repair requiring long term planning is placed on the preventative maintenance list. As previously described, the Town spent approximately \$112,405 for point repairs in 2016. The Utility Committee prioritizes repairs to focus on emergencies, potential overflows, and customer complaints. The 2017 budget for point repairs is \$250,000. **Attachment 9** provides a list of proposed future slipline repairs needed. **Attachment 12** contains a subset of the projects included in **Attachments 8A and 8B** that need to occur before certain slipline repairs can be made.
  - The Town provided the required training to Collection System O&M personnel (**Attachment 10**).
  - Utilization of a sewer rapid assessment program to identify and anticipate capacity problems so that maintenance efforts can target problem areas in advance. Initially, segments are cleaned and evaluated with the "Sanitary Sewer Rapid Assessment Tool" (SL-RAT) to establish a baseline score. Known problem areas are re-evaluated with the SLRAT and compared to the baseline score. A lower score indicates a need for preventative maintenance



cleaning. This evaluation can be done rapidly allowing maintenance personnel to more efficiently focus efforts on problem areas.

**B. 2016 SSO Event Listing:**

The summary of the bypass/overflow incident logs for 2016 is included as **Attachment 11**. A total of 9 events occurred. The majority were associated with equipment failure and line clogs. The total SSO volume was estimated to be 1,800 gallons for the entire year. During 2016, the wastewater treatment plant treated approximately 941.27 million gallons of raw sewage. This SSO volume only represents 0.00019% of the total treated flow.

**C. Delineation of system deficiency projects:**

The system wide flow monitoring/modeling study completed in 2007 resulted in high priority projects that are needed to correct system deficiencies that have resulted in SSO events. Major projects have been completed that have provided positive results in reducing I/I and have helped reduce the SSO problems in the system. Detailed below are descriptions and the current status of uncompleted projects also intended to reduce I/I and eliminate SSO problems:

- **Triple Crown/Green Springs Valley Sewer Rehab Project**  
The 2007 Sanitary Sewer Flow Modeling Report identified deficiencies of the sewers in the vicinity of this study area. The flow model indicated that there was the potential for sanitary sewer overflows. The department observed the flows in this system during storm events and found that the sanitary sewer flow model correctly predicted sanitary sewer overflows. The utility moved this project from the watch list to the priority list after learning the sewer had insufficient hydraulic capacity during storm events. The project is currently in the redesign and land acquisition phase. The Utility continues to hold this project at the top of the priority list and funds are available to complete construction.

**D. Delineation of master planning improvement projects:**

The list of projects delineated on the 2017 Project Priority List includes a compilation of various projects the Town has identified as part of their yearly review of the system. This is a comprehensive list of all projects known to date. The projects are prioritized based on judgment of the severity of the problem and overall impact to the operation and functionality of the system. Priority Level 1 (PL 1) projects are high priority projects that are intended to alleviate current or eminent capacity issues and defects that may otherwise cause overflows. PL 2 projects address defects, maintenance issues, exposed sewers and other improvements to better manage existing and anticipated flow in the system. PL 3 projects progress further down the priority list and are intended to accommodate growth and maintain system integrity. The Town has targeted Projects 1 through 10 to actively pursue in 2017. These

projects are further described below:

- **Project 01: Collection System Emergency/Non-Emergency High Priority Point Repairs**

As previously mentioned in this report, the Town has budgeted \$250,000 for on-going priority point repairs. This effort is perpetual and will continue through 2017.

- **Project 02: Halston FM Replacement and Reroute**

This force main is a maintenance issue and has a history of pipeline failures. The force main will be replaced as needed to improve integrity. New routes will be considered to facilitate construction, improve maintenance, and enhance serviceability. The lift station will also be upgraded and rehabilitated at the time of the FM re-route.

- **Project 03: Deaconess Lift Station Force Main Upgrade**

Growth continues to provide more flow to this existing lift station. This project will increase capacity of the station and force main to prevent it from becoming overloaded. Construction is expected to start in February 2017 and is anticipated to be complete by the end of the year.

- **Project 04: Kingston Lift Station Elimination**

This project is currently under construction. The opportunity exists to eliminate this lift station with a new gravity flow sewer. Eliminating this mechanical component will improve system capacity and reduce the likelihood of overflows from a mechanical failure.

- **Project 05: Sewer Relocation – Phase III Lincoln Avenue Widening**

This project is under construction and will require relocation of portions of the sewer system which provides the opportunity to correct select defects, restrictions, and capacity limiting issues in the subject sewers.

- **Project 06: Triple Crown Lift Station Elimination**

This lift station can be eliminated with the installation of a new gravity sewer to the Master Lift Station. Once completed, the project will increase overall system capacity and reduce surcharges that occur in the Green Springs Valley Subdivision during severe storm events. The redirected flows from the Kingston Lift Station Elimination will be also transported by this new gravity sewer. This project is in the design and property acquisition phase.

- **Project 07: Replace Pump Bases at Lift Station No. 2**

The utility has indicated that two pump bases at Lift Station No. 2 have reached their useful life and will need to be replaced. This project involves the replacement of the bases and check valves at this location.

- **Project 08: WWTP New NPDES Permit Limitations**  
New NPDES Permit requirements has set new ammonia, cyanide and phosphorous limits that Newburgh must comply within a 36-month period. Study is currently in progress and will result in recommended improvements and cost associated with those improvements.
- **Project 09: WWTP Upgrade of Integration and Controls**  
This project will involve the upgrading of SBR PLC components, SCADA computer operating system, and Wonderware licenses in order to maintain the performance of the system.
- **Project 10: Sanitary Sewer Collection System Modeling Study and Master Plan**  
Flow metering and data collection will be performed to recalibrate and update the existing hydraulic model. The new model will be used to identify deficiencies and develop action plans to upgrade the system. The 20-year Sewer Utility Master Plan will be updated to incorporate the results of the modelling study with projection of future flows and development.

These projects demonstrate the proactive nature of the Town in planning for their future needs. The full 2017 Project Priority List is included on the following pages:

**2017 Project Priority List**

<b>Project Number</b>	<b>Project Description</b>	<b>Priority Level</b>	<b>Construction Cost Estimate</b>	<b>Total Project Cost Estimate</b>	<b>Current or Anticipated Funding Source</b>	<b>Cost Estimate Source or Accuracy Level</b>
1	On-Going Collection System Emergency/ Nonemergency High Priority Point Repairs	1	\$250,000	\$270,000	Improvement Fund	Owner
2	Halston Lift Station FM Replacement/Reroute	1	\$475,200	\$762,500	2016 SRF	Engineer
3	Deaconess L. S. Upgrade, Gravity Sewer and FM	1	\$1,853,500	\$2,278,330	2016 SRF	Engineer
4	Kingston Lift Station Elimination	1	\$1,190,442	\$1,534,642	2016 Bond	Engineer
5	Sewer Relocation - Phase III Lincoln Avenue Widening	1	\$727,584	\$1,075,484	2016 SRF	Engineer
6	Triple Crown Lift Station Elimination	1	\$3,588,980	\$4,086,040	2016 Bond	Engineer
7	Lift Station No. 2: Replace Pump Bases on Pump No.'s 1 & 2	1	\$87,496	\$109,796	2016 Bond	Engineer
8	WWTP Project: Prompted by the new requirements of the NPDES Permit. Newburgh will have 36 months to comply. There are new ammonia limits, new cyanide limits, an new phosphorus limits. The treatability study phase is in progress. The study will result in recommended WWTP improvements and the costs associated with those improvements.	1	\$600,000	\$750,000	2016 Bond	Engineer, Preliminary Estimate for Placeholder
9	WWTP: a. Upgrade SBR PLC components from SLC 500 to Compactlogix (Cost: \$101,500.00) b. Upgrade SCADA Computer to windows 7 c. Upgrade Wonderware licenses to windows 7 d. Upgrade Wonderware addressing for compatibility with Compactlogix (b,c, and d cost estimate: \$89,635.00)	1	\$191,135	\$238,919	2016 Bond	Owner
10	Collection System Flow Study and Sewer System Model Update/Recalibration Project Cost of \$330,000 to be shared: \$240,000 by SRF & \$90,000 by Bond.	1	\$90,000	\$90,000	2016 Bond	Engineer
11	Victoria/Lincolnwood Exposed Force Main.	1	\$153,590	\$191,988	2016 Bond	Engineer
12	Plum & Jennings MH replacement	1	\$82,966	\$103,708	2016 Bond	Engineer
13	Main Street Sanitary Sewer Project: to correct problems between MH 09-33 and MH 09-180A 11-15. The original project area was from MH 09-33 to MH 09-180A. The project area has been expanded to the following: from MH 09-40 to MH 09-33 and from 09-33 to MH 09-180A.	1	\$173,161	\$216,451	2016 Bond	Engineer
14	Update Newburgh Design & Construction Standards	1	\$15,000	\$15,000	2016 Bond	Owner
15	Blue Lake LS Standby Power/Capacity Upgrade	1	\$322,000	\$402,500	2016 Bond	Engineer
16	Phelps Drive Sewer Repair	1	not available		2016 Bond	
17	Triple Crown/Green Springs Valley Sanitary Sewer Interceptor Improvement Project	1	\$800,000	\$975,000	2016 Bond	Engineer
18	Eliminate Central Towers Lift Station (Option 2) Construction Cost: \$849,200 Project Cost: \$1,061,500	1	\$849,200	\$1,061,500	2016 Bond	Engineer

**2017 Project Priority List**

<b>Project Number</b>	<b>Project Description</b>	<b>Priority Level</b>	<b>Construction Cost Estimate</b>	<b>Total Project Cost Estimate</b>	<b>Current or Anticipated Funding Source</b>	<b>Cost Estimate Source or Accuracy Level</b>
19	Install fences & Nitro-Nox containment systems for Powers Place, Paradise Park, and Victoria National Lift Stations.	1	\$160,125	\$200,156	2016 Bond	Engineer
20	Sewer Relocation - Oak Grove Rd Improvements	1	\$1,000,000	\$1,250,000	2016 Bond	Engineer
21	Lift Station No. 1 FM Erosion Problem. Options 1N & 1S	1		\$223,700	2016 Bond	Engineer
22	Forest Park Drive exposed sanitary sewer in 2 location. Need to reroute the sewer in 2 locations.	1	\$120,070	\$150,088	2016 Bond	Engineer
23	South Broadview — 5322 Timberwood Drive Exposed Sewer near MH 14-24. Proceed with engineered temporary repair.	1	\$132,539	\$165,674	2016 Bond	Engineer
24	South Broadview, West Timberwood: Exposed Sewer between MH 14-23 & MH 14-61. Proceed with engineered temporary repair.	1	\$80,000	\$100,000	2016 Bond	Engineer
25	Jefferies Lane Sanitary Sewer Project A lateral and main line are exposed, and a manhole also needs to be replaced..	1	\$50,000	\$70,000	2016 Bond	Engineer
26	Exposed Lateral, 4222 Hedgewood, Rabbit Run	1	\$12,500	\$12,500	Improvement Fund	Owner
27	Exposed Sewer Westlake Drive	1	\$25,200	\$36,300	2016 Bond	
28	Forest Park Exposed Sewer	1	\$120,000		Future Bond	Engineer
29	8277 Sycamore Drive Sewer Project: Will correct an exposed lateral and sanitary sewer main.	1	\$56,000	\$81,000	2016 Bond	Engineer
30	5156 Sleepy Hollow Road Rehab Project: The sanitary sewer lateral is exposed at a ditch crossing (south of MH 20-226) and the casing pipe is deteriorated badly. The manhole base of MH 20-225 is badly deteriorated. The 8-inch sanitary sewer main between MH's 20-225 and 20-226 is exposed at a ditch crossing.	1	\$125,000	\$156,250	2016 Bond	Engineer, Preliminary Estimate for Placeholder
31	Lenn Lane Sanitary Sewer Project: Sanitary MH 15-140 is leaking allowing I&I. There may be easement issues.	1	\$106,000	\$132,500	2016 Bond	Engineer
32	Meadowbrook Subdivision Sanitary Sewer Replacement: The sanitary sewer main between MH 15-91 and 15-92 is collapsing. The pipe material is a very thin walled SDR 41 pipe.	1	\$85,000	\$110,000	2016 Bond	Engineer
33	Forrest Park Sanitary Sewer Rehab Project: a ditch and concrete culvert runs over the top of an 8-inch sanitary sewer in the area of MH 14-254. The line segment (MH 14-253 to MH 14-254) has several sags and is cracked and taking on water from the ditch. MH 14-254 is also plagued with sever I&I and needs to be replaced.	1		\$202,200	2016 Bond	Engineer, Preliminary Estimate for Placeholder
34	Cypress Court Sanitary Sewer Project: MH 19-13 is sinking and needs to be replaced (the base of the MH has disintegrated). Also there are severe line sags upstream and downstream of MH 19-13 which need to be corrected.	1	\$176,400	\$194,000	2016 Bond	Engineer
35	Acorn Drive: sanitary sewer repairs needed in the sanitary sewer main between MH 15-134 and 15-133. Problems in this line generated an overflow incident. Need to replace 3 active lateral taps, 8 feet of each lateral, and at 50 feet of main.	1	\$131,736	\$165,000	2016 Bond	Engineer
36	4699 Colony Drive Sanitary Sewer Project The sanitary sewer between MH 11-137 and MH 11-138: Video inspection revealed a line that is in horrible condition. The line needs to be either replaced or slip-lined.	1	\$11,300	\$16,300	2016 Bond	Engineer

**2017 Project Priority List**

<b>Project Number</b>	<b>Project Description</b>	<b>Priority Level</b>	<b>Construction Cost Estimate</b>	<b>Total Project Cost Estimate</b>	<b>Current or Anticipated Funding Source</b>	<b>Cost Estimate Source or Accuracy Level</b>
37	Savannah Drive: sanitary sewer repairs needed in the sanitary sewer main between MH 14-238 and MH 15-144. a. There are 3 sanitary sewer repairs needed: * A 4-foot main line repair, * An 8-foot main line repair with a lateral tap and 12 feet of 6-inch lateral, * Up to 100 feet of main line replacement.	1	\$45,200	\$72,200	2016 Bond	Engineer
38	8268 Oak Drive Sewer Project: The 6-inch lateral line servicing the property at 8283 Oak Drive crosses the property at 8268 Oak Drive before tapping an 8-inch main. The lateral line servicing 8283 needs to be replaced, and the owner of 8268 refused to sign a right-of-entry. Need to verify that the lateral is located in the ROW. In addition, according to the Green Spring Valley easement drawing, the 8-inch main where the lateral is tapped (east of Oak Drive) is not in an easement.	1	\$5,000	\$6,250	2016 Bond	Engineer
39	4166 Pine Drive Sewer Rehab - Full length lining MH 15-20 to 15-21.	1	\$50,000	\$64,000	2016 Bond	Engineer
40	Pecan Lane Sanitary Sewer Project: Will correct a sanitary sewer problem located just south of MH 15-233.	1	\$22,000	\$38,000	2016 Bond	Engineer
41	6522 & 6544 Yorkshire Court Sanitary Sewer Replacement (MH 21-45 to MH 21-43)	1		\$100,400	2016 Bond	Engineer
42	Interior Manhole Lining for 18-inch MLS Trunk Line	1	\$24,000	\$24,000	2016 Bond	Owner
43	Victoria Lift Station Upgrade	1	\$1,700,000	\$2,125,000	2016 Bond	Engineer, Preliminary Estimate for Placeholder
44	Post Office Lift Station Upgrade	1	\$148,300	\$185,375	2016 Bond	Engineer
45	Kenosha Hill LS Elimination	1	\$146,660	\$183,325	2016 Bond	Engineer
46	8311 North Birch Dr. SS Rehab Project	1		\$120,000	2016 Bond	Engineer
47	Reroute Sanitary Sewer, Sycamore Dr. at Hwy 261	1	\$136,500	\$170,625	2016 Bond	Engineer
48	Sanitary Sewer under Homes at 420 Cypress & 415 Locust (MH 09-111 to 09-101)	1	\$130,279	\$175,279	2016 Bond	Engineer
49	7322 Oakdale Drive Sanitary Sewer Project: 190 foot slip lining project from MH 15-118 to MH 15-124. Project is located in Twin Oaks, Section B.	1	not available		2016 Bond	
50	Sewer Main With Hammer Tap Under Mark's Mattress Along Hwy 261 in Newburgh Plaza	1	not available		2016 Bond	
51	Belly in Main at Newburgh Plaza	1	not available		2016 Bond	
52	River Ridge Subdivision; Easements, Mapping and FM Relocation	1	not available		2016 Bond	
53	Manhole Repair Projects per Attachment 28 of the 2014 CMOM Report (101 manholes) Hold	1	\$63,850	\$76,620		Engineer
54	Manhole Rehabilitation/Lining Projects per Attachment 28 (2014 CMOM Report) (37 manholes) Hold	1	\$87,525	\$105,030		Engineer

**2017 Project Priority List**

<b>Project Number</b>	<b>Project Description</b>	<b>Priority Level</b>	<b>Construction Cost Estimate</b>	<b>Total Project Cost Estimate</b>	<b>Current or Anticipated Funding Source</b>	<b>Cost Estimate Source or Accuracy Level</b>
55	Sanitary Sewer Point Repairs per CMOM Attachments 08A & 08B (1,102 point repairs) (Average 2015 point repair cost: \$4,018.00) Hold	1	\$4,427,836	\$5,534,795		Engineer
56	Sanitary Sewer Slip Line Projects per 2014 CMOM Attachments 09A & 09B ( 98 line segments) Hold	1	\$1,170,339	\$1,404,396		Engineer
57	Martin Rd: Need to replace sewer between MH 20-53 & MH 20-52.	1	not available			
58	Lakevale Subdivision, Hillside Drive: Line segment between MH 13-90 & 13-89 is sagging and has root issues.	1	not available			
59	Kenosha Hills, Swawnee Drive: Grade issues between MH's: 03-04 to 03-04A, 03-04A to 03-07, & 03-07 to 03-06.	1	not available			
60	Sharon Road: Line segment between MH 10-106 & 10-159 is sagging.	1	not available			
61	Hwy 261 near Mark's Matress: Grade issue between MH 10-150 and 10-149.	1	not available			
62	South Broadview, Jefferies Lane: Main line dects between MH 14-181 and 14-182.	1	not available			
63	604 Village Lane: grade issues between MH 03-4A and 03-06.	1	not available			
64	Manhole 07-6-51, located southwest of the intersection of Frame and Hwy 66, is buried 56 inches deep. The MH needs to be raised, and to do this a fence will need to be removed. We are also aware that there are other utilities in the area. Our drawings indicate that the MH is in a 20-foot drainage and PUE. CEI will verify that the manhole is actually in the easement and will develop corrective action plan and a quote package for the project.	2	not available			
65	Sycamore Drive and SR 261 Sanitary Sewer Relocation Project	2	not available			
66	6588 Westlake Road: sanitary sewer line that is under a swimming pool	2	not available			
67	Sanitary Sewer CCIP Project	2	not available			
68	Misc. Slip Lining Projects	2	\$121,400			
69	4529 Bridgestone Blvd & Lincoln Ave	2	not available			
70	7888 Melody Lane	2	not available			
71	8288 Lincoln Avenue, Sewer Main near Foundation, Thornbrook Sub	2	not available			
72	South Broadview — Sharon Road Sewer Reconstruction, Grade correction MH 10-161 to 10-106	2	\$70,000			Engineer
73	Adams Street, MH 9-122 to MH 9-123. Entire main has offset joints, 1 protruding hammer tap.	2	not available			

**2017 Project Priority List**

<b>Project Number</b>	<b>Project Description</b>	<b>Priority Level</b>	<b>Construction Cost Estimate</b>	<b>Total Project Cost Estimate</b>	<b>Current or Anticipated Funding Source</b>	<b>Cost Estimate Source or Accuracy Level</b>
74	4444 Pine Drive, Broadview	2	not available			
75	5955 Westchester Drive, Whispering Hills	2	not available			
76	8022 North Birch Drive Sewer Relocation (East)	2	not available			
77	Colonial Hills Interceptor Improvements	2	model check			
78	4641 Brighton Court, Tree Over Main Line	2	not available			
79	4655 Lincoln Avenue	2	not available			
80	Ashbury Park Manhole Conflict, decorative blocking over manhole	2	not available			
81	Forest Park Sewer Rehab	2	not available			
82	Sharon Rd. conflict with storm sewer	2	not available			
83	Unmapped sewer connecting to MH 09-16	2	not available			
84	Main Line Replacements per Attachment 27 of the 2014 CMOM Report (97 line segments)	2	not available			
85	5422 Jeffries Lane Sewer Project	2	not available			
86	Kimberly Lane Sewer Rehabilitation (10264 Powers Dr.) (Previously "Tree removal and repair at 10265 Powers Drive" on 2011 PPL)	3	not available			
87	Green Springs Valley, Chestnut and Lincoln Ave	3	not available			
88	Heathervale Subdivision, Lines in entire subdivision are in poor condition.	3	not available			
89	Powers Place Sewer Relocation	3	not available			
90	Poplar Drive Exposed Sewer	3	not available			
91	Hillcrest Sanitary Sewer From MH 9-135 to MH 9-123: 10 Problems Found	3	not available			
92	Lamey Lane Sanitary Sewer From MH 5-17 to 5-18: Entire Line Has Off-set Joints	3	not available			
93	7588 Broadview: sewer relocation	3	not available			
94	Unnumbered MH east of MH 03-48, Lincoln Ave.	3	not available			
95	Main & Plum Sanitary Sewer Slip Lining	3	not available			
96	Royal Highlands Sewer Grade Adjustment/ Gas Line Conflict	3	not available			



**2017 Project Priority List**

<b>Project Number</b>	<b>Project Description</b>	<b>Priority Level</b>	<b>Construction Cost Estimate</b>	<b>Total Project Cost Estimate</b>	<b>Current or Anticipated Funding Source</b>	<b>Cost Estimate Source or Accuracy Level</b>
97	Green Springs Valley Sewer Relocation	3	not available			
98	Bell Oaks Drive, MH 11-157 to 11-158	3	not available			
99	Powers Place: easements & lines under homes	3	not available			
100	Woods Tower /Kenosha Hills, Grade Problem	3	not available			
101	Whispering Hill Subdivision, 6866 Pleasant Valley Court	3	not available			
102	Green Springs Valley Easements	3	not available			
103	Broadview Easements and Mapping	3	not available			
104	Whispering Hills Easements and Mapping	3	not available			
105	Birch Street MH/Tree Conflict Project	3	not available			
106	SCADA System of Various LS	3	not available			
107	Slip Lining Study and Preliminary Engineering	3	not available			
108	Old Town Sewer Improvements per SWMM modeling	3	not available			
109	Lincolnwood LS	3	not available			

# **ATTACHMENT 1**

## **LINES JET CLEANED**

## 2016 JET CLEANING

<u>SUBDIVISION</u>	<u>ADDRESS</u>	<u>DISTANCE JETTED</u>	<u>MH#</u>	<u>TO</u>	<u>MH#</u>	<u>MATERIALS FLUSHED</u>	<u>NOZZLE TYPE</u>	<u>Date of Cleaning</u>	<u>Recommendation &amp;/or Comments</u>
South Broadview	7488 Jeffries	335	14-59		14-58	Roots	Root cutter	1/4/2016	
South Broadview	5444 Jeffries	257	14-58		14-57	Roots	Root cutter	1/4/2016	
South Broadview	5388 Jeffries (in front street)	147	14-57		14-184	Roots	Root cutter	1/4/2016	
South Broadview	5388 Jeffries (in front street)	490	14-57		14-56	Roots	Root cutter	1/4/2016	
Grove Rd. Ext	7011 Oak Grove Road	0	16-173		17-15			1/4/2016	
Twin Oaks	7366 Oakpark	394	15-114		15-113	Roots	Root cutter	1/5/2016	
Twin Oaks	7355 Oakdale	252	15-117		15-119	Roots	Root cutter	1/5/2016	
Twin Oaks	7411 Oakdale	400	15-119		15-120	Roots	Root cutter	1/5/2016	
Heritage	5033 New York	210	20-189		14-236			1/8/2016	
Colonial Hills	10677 Gettysburgh	0	02-68		02-67			1/25/2016	Already been counted on CMOM
Landmark	10522 Drexton Place	0	02-52		02-09CO			1/27/2016	Already been counted on CMOM
Colonial Hills	10799 Williamsburg	0	02-65		02-57			1/27/2016	Already been counted on CMOM
Kenosha Hills	10343 Chippewa (next to shed)	13	02-99		02-Stub5			1/27/2016	
Kenosha Hills	10400 Tecumseh Dr	8	02-111		02-Stub2			1/28/2016	
Lakeland Ct	5920 Lisa Lane	71	02-135		02-23CO			1/28/2016	
Rabbit Run	4144 Hedgewood Ct	260	07-14A		07-14			1/28/2016	
Town	217 Monroe & Posey	230	09-60		09-59			1/29/2016	
Town	By Newburgh Elementary	42	09-59		09-58			1/29/2016	
Town	By Newburgh Elementary	74	09-58		09-57			1/29/2016	
Lakeland Ct	5848 Jeffrey Lane	130	02-134		02-04CO			2/1/2016	
Forrest Park	579 Forest Park	152	13-171		13-172			2/1/2016	
Town	415 Locust	108	09-101		09-101A			2/1/2016	
Town	408 Locust	171	09-101A		09-102			2/1/2016	
Town	Section & Locust	0	09-102		09-103			2/2/2016	Already been counted on CMOM
Town	334 Cypress on Section St	163	09-102A		09-102			2/2/2016	
Town	W. side of 662 W. Jennings (alley)	144	05-28		05-29			2/3/2016	
Town	1000 Phelps Dr	315	05-40		05-41			2/3/2016	
Epworth Village	Newburgh Health Care Center	0	02-14		02-15			2/3/2016	Previously done in 2012
Epworth Village	5777 Epworth Rd	0	02-25		02-05			2/3/2016	Previously done in 7/11/11
Epworth Village	SW Corner Epworth & 662	254	02-28		02-27			2/3/2016	

**NOTE: TYPICAL - SEE CD FOR FULL ATTACHMENT**

## **ATTACHMENT 2**

### **PREVENTATIVE MAINTENANCE JET CLEANING**

		(Lt Yellow) Debris & Roots		(Tan) Roots		(Grey) Silt		(Lavender) Mud				Grease																			
2016 PREVENTATIVE MAINTENANCE JET CLEANING																															
										First Quarter (Jan, Feb, March)			Second Quarter (Apr, May, June)			Third Quarter (July, Aug, Sept)			Fourth Quarter (Oct, Nov, Dec)												
SUBDIVISION	ADDRESS	Rat ID No.	RAT Base # & Date	DISTANCE CLEANED & TELEVISED	TX or RX	MH#	TX or RX	MH#	Type	JET or RAT	Rat ID No.	Rat Code No.	Date of Inspection	JET or RAT	Rat ID No.	Rat Code No.	Date of Inspection	JET or RAT	Rat ID No.	Rat Code No.	Date of Inspection	JET or RAT	Rat ID No.	Rat Code No.	Date of Inspection	Recommended Resolution	Date Resolved				
<b>JET ONLY LIST</b>																															
Powers Place	10122 Kimberly Ln JET ONLY			163		01-15		01-12	Roots (must root cut backwards)					Root cut			5/5/2016 LW CP	Root cut								8/8/2016 LW EH	Jet	10/28/16 DS AM	Added per TV done 9/2/14 (CMOM Rat score was 2)		
Cricklewood	10455 Cricklewood Jet Only	27	Base #1 11/5/13	302		02-06		02-05	Under water	Jet			2/29/16 DS AM	Jet			5/5/2016 LW CP	Jet								8/8/2016 LW EH	Jet	10/21/16 DS LW	Also on Main Line Repl.		
Kenosha Hills	5055 Kenosha Jet Only	30	Base #0 11/5/13	166		02-96		02-80	Belly/100% under water	Jet			2/29/16 DS AM	Jet			5/5/2016 LW CP	Jet								8/8/2016 LW EH	Jet	10/21/16 DS LW	Grade issue/CEI project		
Lakeland	5900 Kraeger (Rivenwind Apts) Jet Only		N/A	362		02-127		02-130A	Grease & Grit	Jet			2/29/16 DS AM	Jet			5/3/16 RY MJ	Jet								8/8/2016 LW EH	Jet	10/26/16 DS JJ	Project 16-06 to replace MH 02-127 due to overflow 5/3/16 Moved from Vac PM 2013 Complaint recd 2/14/11 at 5900 Kraeger Ln		
Lakeland Ct	Next to fence at playground, NE (Jet Only list until MH is raised)		Raise MH	402		02-130A		02-144A	Roots	Jet			3/16/16 AM MB	Root cut			5/5/2016 LW CP	Jet								8/8/2016 LW EH	Jet	10/14/16 DS AM	Added per TV done 8/5/14 (MH 02-144A need raised)		
Lakeland Ct	Kraeger Ln behind Apt R1 & R2 (Jet Only list until MH is raised)		Raise MH	286		02-144A		02-144	Roots	Jet			3/16/16 AM MB	Root cut			5/5/2016 LW CP	Jet								8/8/2016 LW EH	Jet	10/14/16 DS AM	Added per TV done 8/5/14 / MH 02-144 & 02-144A needs raised		
Town	601 Water St Jet Only	36	Base #5 11/5/13	211		05-31		09-02	Grease & Silt	Jet			2/29/16 DS AM	Jet			5/5/2016 LW CP	Jet								8/8/2016 LW EH	Jet	10/14/16 DS AM	Moved from Vac to Jet in 2013		
Town	512 Water St Jet Only	37	Base #6 11/5/13	206		09-02		09-03	Grease & Silt	Jet			2/29/16 DS AM	Jet			5/5/2016 LW CP	Jet								8/8/2016 LW EH	Jet	10/14/16 DS AM	Moved from Vac to Jet in 2013/Already on Slipline List (TV done 8/24/15)		
Town	3 Yorkshire Dr CK MH for grease every other mo. Jet Only	2091	Base #9 1/27/16	10		05-47		05-46	Roots/Grease	Jet			2/29/16 DS AM	Jet			5/25/16 AM EH	Vac								8/1/16	Jet	10/28/16 DS AM			
Town	Phelps Dr & Williams Ln CK MH for grease every other mo. Jet Only		N/A	5		Siphon		05-47	Roots/Grease	Jet			2/29/16 DS AM	Jet			5/25/16 AM EH	Vac								8/1/16	Jet	10/28/16 DS AM	Jet flush & Vac MH's		
Town	1000 A Knob Hill Dr Jet Only		N/A	129		06-49		06-48	Grease	Jet			2/29/16 DS AM	Jet			5/5/2016 LW CP	Jet								8/8/2016 LW EH	Jet	10/26/16 DS JJ			
Town	719 Village Ln Jet Only		N/A	145		06-59		06-60	Grease	Jet			2/29/16 DS AM	Jet			5/5/2016 LW CP	Jet								8/4/2016 LW SS	Jet	10/21/16 DS LW	Moved from Vac to Jet 2013		
Town	607 Village Ln Jet Only		N/A	304		06-60		10-112	Grease	Jet			2/29/16 DS AM	Jet			5/5/2016 LW CP	Jet								8/4/2016 LW SS	Jet	10/21/16 DS LW	Line replace / Very High priority Moved from Vac to Jet 2013		
Frame Rd	4011 Woodstone Do not root cut until MH raised			358		07-51		07-48	Roots Roots	Jet			3/16/16 AM MB	Jet			5/5/2016 LW CP	Jet								8/8/2016 LW EH	Jet	10/28/16 DS AM			
Town	Jefferson & Posey			330		09-30		09-31	(must remove weir in MH 09-30 before root cut done)					Jet			5/4/16 SS RY	Jet								8/8/2016 LW EH	Jet	11/1/16 DS AM	Added per the Yrly TV done on 12/9/15		
Town	216 Jennings Only jet 70 ft (pipe reduces)			70		09-36B		Stub North	Roots (only jet 70 ft)	Jet			3/31/2016				6/8/16	Jet								8/8/2016 LW EH	Jet	11/1/16 DS AM	Added per complaint & TV done 3/31/16 (Sent to CEI)		
Town	321 Sycamore Jet Only	116	Base #0 11/29/13	372	RX	09-93	TX	09-94	Belly/foreign object	Jet			3/16/16 AM MB	Jet			5/6/16 AM LW	Jet								8/8/2016 LW EH	Jet	11/1/16 DS AM			
Town	Gray & Hillcrest Jet Only	50	Base #4 11/8/13	393	RX	09-135	TX	09-137	Roots (use 8" root cutter)					Jet			5/4/16 SS RY	Root cut								8/16/2016 LW TA	Jet	11/1/16 DS AM	Added per TV done 5/15/13		
Town	State & Sharon Streets Jet Only/DO NOT JET PAST 10-104	788	Base #3 8/29/14	390	TX	10-72	RX	10-104	Grease DO NOT JET PAST MH 10-104					Jet			4/28/16 SS RY	Jet								9/6/16 SS JJ	Jet	10/28/16 DS AM	Added per LG on 3/6/13		
Town	State & 4th Streets Jet Only	787	Base #2 8/29/14	329	RX	10-73	TX	10-72	Grease	Jet			3/22/16 AM MB	Jet			4/28/16 SS RY											10/28/16 DS AM	This was jetted & TV done 12/6/12 (Re-TV done 8/27/14-leave on PM for grease) Moved from Vac PM in 2013		
Broadview Estates	8400 Sharon Rd Jet Only		N/A	195		10-106		10-159	Grease, grit & rags	Jet			3/22/16 AM MB	Jet			4/28/16 SS RY											10/26/16 DS JJ			
Town	Law Dr & Sharon Rd Jet Only		N/A	332		10-107		10-108	Grease					Jet			4/28/16 SS RY											10/26/16 DS JJ	Also on Slipline 07		
Copper Creek	5311 Ellington Jet Only		N/A	482		40-213		40-216	Grease/sag	Jet			3/1/16 DS AM	Jet			5/6/16 AM LW	Jet									8/8/16 LW EH	Jet	10/26/16 DS JJ	Take off list when repairs done - (sent to CEI/this project done by CEI & BBI in Dec 2016) Complaint 5322 Claiborn 3/24/14	

**NOTE: TYPICAL – SEE CD FOR FULL ATTACHMENT**

# **ATTACHMENT 3**

## **WASTEWATER FACILITY COLLECTION SYSTEM COMPLAINT LOG**

Create a New Record



NEWBURGH WASTEWATER TREATMENT FACILITY COLLECTION SYSTEM  
COMPLAINT LOG

Complaint Record ID

Date  (mm/dd/yy)

Time  (hh:mm AM or PM)

Type of Complaint

Type of Complaint, Other

Address

Subdivision

Owner's Name

Owner's Phone Number

Complaint Received By:

Complaint, Additional

Employee Findings

Employee Findings

Employee Findings

Employee Findings, Other (describe)

Upstream MH:

Downstream MH:

Blockage Found  Feet From Manhole Number

Main Line Defect Found  Feet From Manhole Number

Findings, Additional Information:

Action Taken

Action Taken

Action Taken

Action Taken, Other (describe)

Action Taken, Additional Information

Further Action Required:

Jet Cleaned Main From MH #  To MH #

Televised Lateral Line, Date Completed:  (mm/dd/yy)

Main Line Was Repaired, Date Repaired:  (mm/dd/yy)

Repaired Lateral Line Within The Utility Easement, Date Repaired  (mm/dd/yy)

Lateral Tap Repaired, Date Repaired:  (mm/dd/yy)

Televised Main From MH #  To MH #  Date:  (mm/dd/yy)

Comments

Personnel on Site (1)  Personnel on Site (2)  Personnel on Site (3)

Report Prepared By:

Save Record:

NOTE: TYPICAL - SEE CD FOR FULL ATTACHMENT

**ATTACHMENT 4**

**LINES TELEVISED**



Newburgh Wastewater Treatment Facility  
 6366 Vanada Road  
 Newburgh IN 47630  
 Phone: 812-853-6412  
 Fax: 812-853-1731



## 2016 CMOM TV FOOTAGE

Address	Line Segment ID	Downstream MH	TV Date	TV Footage
10522 DREXTON PLACE	L02-09CO	02-52	01/27/2016	34.60
10799 WILLIAMSBURGH NEXT TO CREEK	L02-65	02-57	01/27/2016	14.90
10343 CHIPPEWA DR. NEXT TO SHED	L02-Stub5	02-99	01/27/2016	13.00
10400 TECUMSEH DR OUTSIDE OF NW CORNER OF FENCE	L02-Stub2	02-111	01/28/2016	8.00
5920 LISA LN	L02-23CO	02-135	01/28/2016	71.00
INTERSECTION OF POSEY AND MONROE	L09-60	09-59	01/29/2016	228.50
SOUTH SIDE OF NEWBURGH ELEMENTRY	L09-59	09-58	01/29/2016	42.00
5848 JEFFREY LANE	L02-04CO	02-134	02/01/2016	130.10
579 FOREST PARK DR.	L13-171	13-172	02/01/2016	151.50
416 LOCUST	L09-101	09-101A	02/01/2016	279.30
SECTION AND LOCUST	L09-102	09-103	02/02/2016	199.90
334 CYPRES ON SECTION ST	L09-102A	09-102	02/02/2016	163.00
610 WEST JENNINGS	L05-28	05-29	02/03/2016	144.40
1000 PHELPS	L05-40	05-41	02/03/2016	314.80
110 LOCUST	L09-106	09-105	02/04/2016	343.10
320 E JENNINGS	L09-116	09-115	02/04/2016	208.00

**NOTE: TYPICAL – SEE CD FOR FULL ATTACHMENT**

## **ATTACHMENT 5**

### **COLLECTION SYSTEM LINE REPAIRS**

## 2016 SEWER REPAIRS

2016 SEWER REPAIRS																				
		No Right of Entry Recd		No Video Recd						REPAIRS PENDING		COMP. ONLY \ NO INV.								
Subdivison	Address	Proj. No.	Right of Entry Recd	Video Recd	Iran Statement Effective 11/1/12	PRIORITY	GXP Corrected	Line Segment ID	Type of Repair	Company	Bid Cost	Adj. to Org. Bid Amt.	Cost Breakout			Bid Date	Repair Date	TV Date	Complaint Information	
													Line Maint.	Manhole	Force Main					
REPAIRS COMPLETED IN 2016																				
Fieldstone	4411 Foxmore (rear)	14-61	Yes	Yes	Yes	High	Yes	L11-94	Ground rod in main line	Stemaly	2,110.60	0.00	2,110.60				12/12/14	08/11/16	08/27/14	None
Royal Highlands	5577 Lakeside Drive	14-66	YES	YES	Yes	High	Yes	L27-19	Pipe crushes (16.0 & 21.2 ft from MH 27-19) 9 ft 8 in truss (9 ft deep)	Hydromax	6,155.00	0.00	6,155.00				09/18/14	03/07/16	09/03/14	CHANGE ORDER NEEDS ENTEED!!!!
Royal Highlands	5577 Lakeside Drive	14-66A	YES	YES	Yes	High	Yes	L27-19	Change order to remove concrete under asphalt	Hydromax	1,915.00	0.00	1,915.00				CHANGE Order NEED ENTERED	03/07/16	09/03/14	CHANGE ORDER NEEDS ENTEED!!!!
Lakeland Ct	10097 Bourbon (tap for 10080 Bourbon)	14-68	YES	YES	Yes	High	Yes	L02-149	Saddle tap 99% blocked (5.6 ft from MH 02-149)	Stemaly	2,027.60	0.00	2,027.60				12/12/14	02/18/16	09/17/14	N/A
Springcorner	5477 Springcorner	14-69	Yes	Yes	Yes	High	Yes	L20-04CO	8x6 Wye, 6 ft of lateral & 6 ft truss (71.5 ft from MH 20-78)	Stemaly	2,427.60	0.00	2,427.60				12/12/14	05/20/16	10/03/14	N/A
Stonegate	4699 Colony Dr	14-70	Yes	Yes	Yes	High	Yes	L11-137	Replace MH 11-137	Stemaly	5,909.30	0.00		5,909.30			12/12/14	11/14/16	06/16/14	4699 Colony
Whispering Hills	5566 Greensboro (tap for 5588 Greensboro)	14-77	Yes	Yes	Yes	High	Yes	L20-106 StubS	Replace rooted tap	Stemaly	1,873.10	0.00	1,873.10	Problem with Invoice			01/06/15	04/29/16	12/02/14	Complaint 12/1/14 at 5602 Greensboro
Wyngate	8131 Wyngate Cr	15-12	Yes	N/A	Yes	High	Yes	MH 10-211	Raise MH 10-211	Hydromax	4,675.00	0.00		4,675.00			02/10/15	04/30/16	N/A	
Twin Oaks	7466 Oak Park (back yd)	15-19	Yes	Yes	Yes	High	Yes	L15-113 StubW	6 ft 8 in truss,wye, & 6 ft 6 in SDR	Stemaly	1,964.64	0.00	1,964.64				04/10/15	08/19/16	03/24/15	7488 Oakpark on 3/23/15
Twin Oaks	7488 Oak Park (back yd)	15-20	Yes	Yes	Yes	High	Yes	L15-113 StubW	6 ft 8 in truss,wye, & install lamphole C.O.	Stemaly	2,530.62	0.00	2,530.62				04/10/15	08/19/16	03/24/15	7488 Oakpark on 3/23/15
Lakeridge Crossing	2200 Kenyon Ridge	15-21	Yes	Yes	Yes	High	Yes	L23-18	4 ft 8 in truss	Stemaly	1,637.64	0.00	1,637.64				04/10/15	08/12/16	03/25/15	2200 Kenyon Ridge on 3/25/15
South Broadview	5457 Landview Dr or Behind 5400 Sherwood	15-24	Yes	N/A	Yes	High	Yes	N/A	Replace MH 14-68- Rehab MH 14-68 (grout,	Hydromax	6,400.00	(2,650.00)		3,750.00			05/01/15	03/23/16	04/14/15	5457 Landview on 4/2/15
Blue Lake	2411 Holbrook	15-26	Yes	Yes	Yes	High	Yes	L23-126	Replace 8x6 wye, 8 in truss & 6 in SDR 26	Stemaly	2,106.93	0.00	2,106.93				05/27/15	08/26/16	05/13/15	Rat score dropped to "3"
Blue Lake	2411 Holbrook	15-26A	Yes	Yes	Yes	High	Yes	L23-126	Additional stone & SDR 26 pipe	Stemaly	104.63	0.00	104.63				05/27/15	08/26/16	05/13/15	Rat score dropped to "3"

NOTE: TYPICAL - SEE CD FOR FULL ATTACHMENT

# **ATTACHMENT 6**

## **ENGINEERING TASK ORDERS**

# 2016 Commonwealth Task Orders

Project		Billed 2013	Billed 2014	Billed 2015	January	February	March	April	May	June	July	August	September	October	November	December	Total Paid	Remaining	Billed/Pd in 2016	
<b>Deaconess Force Main and LS Rehabilitation 2013-03</b>																				
Preliminary Design 4/24/13	Lump Sum	39,750.00	32398.00	7352.00													39,750.00	0.00		
Easement Preparation 4/24/13	Lump Sum	7,480.00	5984.00	1496.00													7,480.00	0.00		
Easement Acquisition Assistance / 4/24/13	Hourly Estimates	2,570.00															0.00	2,570.00		
Final Design Phase 9/10/14		77,400.00	38700.00	38700.00													77,400.00	0.00		
Bidding and Negotiating Phase 9/10/14		9,800.00												4900.00	4900.00		9,800.00	0.00		
Construction Phase 9/10/14		23,700.00													1684.22		1,684.22	22,015.78		
Post-Construction Phase 9/10/14		2,200.00															0.00	2,200.00		
Resident Project Representative 9/10/14		138,200.00															0.00	138,200.00		
Soil Borings		10,000.00	67.12	265.87		42.79		32.79							9199.54		9,608.11	391.89		
Erosion Control		3,490.00					3245.99	229.51									3,475.50	14.50		
Record Drawings		4,200.00															0.00	4,200.00		
Permit Assistance		2,600.00				85.58		1005.41	1269.21	163.94				67.68			2,591.82	8.18		
Easement Preparation		6,900.00	167.78	3278.32		85.58	2735.45	213.94	410.68								6,891.75	8.25		
Buy American Compliance Assistance for SRF		1,500.00															0.00	1,500.00		
Additional Final Design		4,500.00											4500.00				4,500.00	0.00		
Reimbursable Expenses to Engineer 9/10/14	\$28,690.00																0.00	0.00		
<b>Total</b>		334,290.00	38,382.00	47,782.90	42,244.19	0.00	213.95	5,981.44	1,481.65	1,679.89	163.94	0.00	0.00	4,500.00	4,967.68	15,783.76	0.00	163,181.40	171,108.60	34772.31
<b>Kingston Lift Station Rehabilitation 2013-04 / signed 4/10/13</b>																				
Preliminary Design	Lump Sum	11,300.00	11,300.00														11,300.00	0.00		
Final Design	Lump Sum	6,350.00	6,350.00														6,350.00	0.00		
Bidding/Negotiating	Lump Sum	2,600.00															0.00	2,600.00		
Construction Engineering	Hrly NTE	6,000.00															0.00	6,000.00		
Post Construction	Hrly NTE	850.00															0.00	850.00		
As-Built Drawings	Hrly NTE	1,350.00															0.00	1,350.00		
<b>Total</b>		28,450.00	17,650.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17,650.00	10,800.00	0.00	
<b>Kingston Lift Station Elimination / signed 9/10/14</b>																				
Preliminary Design Phase		41,300.00	12,390.00	28,910.00													41,300.00	0.00		
Final Design Phase		19,900.00		19,900.00													19,900.00	0.00		
Bidding and Negotiating Phase		10,800.00											2,700.00	2,700.00	5,400.00		10,800.00	0.00		
Construction Phase		15,300.00													4,227.68		4,227.68	11,072.32		
Post-Construction Phase		1,600.00															0.00	1,600.00		
Resident Project Representative		109,300.00															0.00	109,300.00		
Soil Borings		9,087.00	67.12	65.58										8,954.30			9,087.00	0.00		
Record Drawings		1,667.00													598.00		598.00	1,069.00		
Easement Preparation and Negotiation		4,900.00		4,357.38	513.46			16.51									4,887.35	12.65		
Surveying		5,800.00				983.64	196.73	4,611.02									5,791.39	8.61		
Erosion Control		3,956.00		1,396.79	171.15	600.97	1,757.15				17.80				12.14		3,956.00	0.00		
Permit Assistance		11,390.00		4,125.82	2,503.36	1,857.53	1,020.88	864.10						851.46			11,228.14	161.86		
Permitting		5,745.00									1,490.00		4,255.00				5,745.00	0.00		
Wetland Delineation		4,255.00									3,404.00	851.00					4,255.00	0.00		
American Iron and Steel (for SRF Projects)		1,500.00															0.00	1,500.00		
Final Design Lump Sum		7,500.00											7,500.00				7,500.00	0.00		
Compensation for Additional Services	\$27,600.00																0.00	0.00		
<b>Total</b>		254,000.00	0.00	12,457.12	58,755.57	3,187.97	3,442.14	2,974.76	5,491.63	0.00	0.00	4,916.79	851.00	14,455.00	12,505.76	10,237.82	0.00	129,275.56	124,724.44	58,062.87
<b>Lincoln Avenue Phase III Widening Sanitary Sewer Relocation Project 2014-01</b>																				
Study and Report Phase / 1/28/14		13,500.00	13,499.78														13,499.78	0.22		
Erosion Control Plan / 2/12/14	Hourly	3,300.00	175.43	701.70						591.97	1,748.96						3,218.06	81.94		
Erosion Control Plan		900.00									676.80						676.80	223.20		
Record Drawings / 2/12/14	Hourly	2,500.00															0.00	2,500.00		
Record Drawings		600.00															0.00	600.00		
Permit Assistance / 2/12/14	Hourly	11,200.00	116.95	1,213.20	279.76	1,127.91	17.28		262.30	2,032.83	1,353.60	3,871.17		155.82			10,430.82	769.18		
Permit Assistance		1,200.00							262.30	652.69	17.81		17.81	187.01			1,137.62	62.38		
Preliminary Design Phase		40,200.00	40,200.00														40,200.00	0.00		
Preliminary Design Phase		13,400.00				1,340.00	10,720.00	1,340.00									13,400.00	0.00		
Final Design Phase		21,700.00		1,085.00	19,530.00	1,085.00											21,700.00	0.00		
Final Design Phase		8,900.00						2,225.00	4,895.00	1,335.00	445.00						8,900.00	0.00		
Bidding or Negotiating Phase		8,500.00												4,250.00	4,250.00		8,500.00	0.00		
Construction Phase		24,100.00															0.00	24,100.00		

**NOTE: TYPICAL - SEE CD FOR FULL ATTACHMENT**

# **ATTACHMENT 7**

## **SEWER LATERAL INSPECTIONS**

**NEWBURGH SEWER DEPARTMENT**  
**SUBDIVISION INSPECTIONS**

SUB	LOCATION	OWNER	CONTRACTOR	LOT#	DATE INSPECT.	COMPLETE OR INCOMP.	RE-INSPT	INSPTR'S INITIALS	REASON INSP. NOT COMPLETE: SUMPPUMP DOWNSPOUT OTHER	DATE / TIME JOB WILL BE COMPLETE	CONTRACTOR / REP'S SIGNATURE	ACCT #:
HERITAGE PLACE 1st ADD	HERITAGE PLACE 1st ADD	PRUDEN,JACK	TREES	11	03/15/00	COMPLETE	N/A	RL				
COUNTRY PLACE	9366 BRITTNEY	LOCKHART,DW	LOCKHART	2	10/25/46	COMPLETE	N/A	TS/TW				
KENOSHA HILLS SEC "C"	5100 TIPPECANOE	KAISER CONST	BAYER	63	09/14/53	COMPLETE	N/A	TW				
SUDAMAR HEIGHTS	SUDAMAR HEIGHTS	SAUER,WM.	HORNBECK,J	61	12/29/72	COMPLETE	N/A	JF				
SOUTH BROADVIEW, SEC "B"	SOUTH BROADVIEW	HAAS,BUD	HAAS,BUD	299	06/15/74	COMPLETE	N/A	TK/LK				
GREEN SPRING VALLEY-5	GREEN SPRING VALLEY	YOUNG&ZINT	STRADNER	45	02/01/75	COMPLETE	N/A	DB				
HILLVIEW	HILLVIEW	HUFFMAN,JAMES	YOUNG,RICHARD	19	02/07/75	COMPLETE	N/A	RL				
OLD STONE ESTATES	OLD STONE ESTATES	JACOBS,KEN	WILDERMAN	4	02/23/75	COMPLETE	N/A	RL				
PHELPS	4TH & MONROE	NIX,GERALD	SCHERER PLUMBING		03/01/75	COMPLETE	N/A	RL				
GREEN SPRING VALLEY-5	GREEN SPRING VALLEY	TOLLEY,JIM	BARNETT	27	03/17/75	INCOMPLETE	N/A		TRENCH COVERED			
COLONIAL HILLS	COLONIAL HILLS	HORNBECK	BOWEN,GARY	24	03/21/75	COMPLETE	N/A	RL				
EPWORTH VILLAGE 2	EPWORTH VILLAGE	PEPPELMEYER,RAY		21	03/21/75	COMPLETE	N/A	RL				
PARK PLACE	PARK PLACE	WALTERS, KENT	HOBGOOD	3	03/25/75	COMPLETE	N/A	DB				
GREEN SPRING VALLEY-1	GREEN SPRING VALLEY	KIEGEL,R.	TREES	28	03/26/75	COMPLETE	N/A	RL				
SOUTH BROADVIEW, SEC "A"	SOUTH BROADVIEW	UEBELHOR	WEINZAPPEL	8	04/03/75	COMPLETE	N/A	RL				
SOUTH BROADVIEW, SEC "A"	SOUTH BROADVIEW	UEBELHOR	WEINZAPPEL	34	04/03/75	COMPLETE	N/A	RL				
SOUTH BROADVIEW, SEC "C"	SOUTH BROADVIEW		WEINZAPPEL	21	04/03/75	COMPLETE	N/A	RL				
GREEN SPRING VALLEY-1	GREEN SPRING VALLEY	KIEGEL,R.	TREES	27	04/04/75	COMPLETE	N/A					
TWIN OAKS SEC B	TWIN OAKS SEC B		PRESTIGE HOMES CRANE BROS	74	04/11/75	COMPLETE	N/A	RL				
TWIN OAKS SEC B	TWIN OAKS SEC B		PRESTIGE HOMES CRANE BROS	76	04/11/75	COMPLETE	N/A	RL				
TWIN OAKS SEC B	TWIN OAKS SEC B		PRESTIGE HOMES CRANE BROS	79	04/11/75	COMPLETE	N/A	RL				
TWIN OAKS SEC B	TWIN OAKS SEC B		PRESTIGE HOMES PRESTIGE HOMES	62	04/11/75	COMPLETE	N/A	RL				
TWIN OAKS	TWIN OAKS		PRESTIGE HOMES CRANE BROS	57	04/16/75	COMPLETE	N/A	KH				
TWIN OAKS	TWIN OAKS		PRESTIGE HOMES CRANE BROS	58	04/16/75	COMPLETE	N/A	RL				
TWIN OAKS SEC B	TWIN OAKS SEC B		PRESTIGE HOMES BINNEL,HAROLD	60	04/16/75	COMPLETE	N/A	KH				
RUSTIC HILLS IV	6544 VALLEY ROAD	SCHENETZKE,DON	ELLIOTT	3	04/17/75	COMPLETE	N/A	RL				
GREEN SPRING VALLEY-5	GREEN SPRING VALLEY	NEIDIG REALTY	STRADNER	9	04/18/75	COMPLETE	N/A	RL				
SOUTH BROADVIEW, SEC "A"	SOUTH BROADVIEW	KALABUS,ANDY	FOSTER,ROY	62	04/20/75	COMPLETE	N/A	RL				
SOUTH BROADVIEW, SEC "A"	SOUTH BROADVIEW	WOODS,PETE	WOODS,PETE	18	04/20/75	COMPLETE	N/A	RL				
GREEN SPRING VALLEY-5	GREEN SPRING VALLEY	FOLLEY,JIM		2	04/23/75	COMPLETE	N/A	DB				
GREEN SPRING VALLEY-5	GREEN SPRING VALLEY	POEHLEIN	STRADNER,R.	61	04/28/75	COMPLETE	N/A	RL				
SOUTH BROADVIEW, SEC "A"	SOUTH BROADVIEW	HAAS,OSCAR	WEINZAPPEL	53	04/28/75	COMPLETE	N/A	RL				
SOUTH BROADVIEW, SEC "A"	SOUTH BROADVIEW	HAAS,OSCAR	WEINZAPPEL	63	04/28/75	COMPLETE	N/A	RL				
COLONIAL HILLS	COLONIAL HILLS	FOSTER,ANDY	EPPERSON,JAY	1	05/01/75	COMPLETE	N/A	RL				
COLONIAL HILLS	COLONIAL HILLS	PRESTIGE	EPPERSON,JAY	2	05/01/75	COMPLETE	N/A	RL				
COLONIAL HILLS	COLONIAL HILLS	KLINE,RONALD	EPPERSON,JAY	3	05/01/75	COMPLETE	N/A	RL				
COLONIAL HILLS	COLONIAL HILLS	GORE,DON	EPPERSON,JAY	5	05/01/75	COMPLETE	N/A	RL				
COLONIAL HILLS	COLONIAL HILLS	LAMM,JIM	EPPERSON,JAY	6	05/01/75	COMPLETE	N/A	RL				
COLONIAL HILLS	COLONIAL HILLS	HORNER,BOBLEY	EPPERSON,JAY	7	05/01/75	COMPLETE	N/A	RL				
COLONIAL HILLS	COLONIAL HILLS	VANZILEN	EPPERSON,JAY	11	05/01/75	COMPLETE	N/A	RL				
COLONIAL HILLS	COLONIAL HILLS	MADDEN,ERNEST	TREES	4	05/01/75	COMPLETE	N/A	RL				
COLONIAL HILLS	COLONIAL HILLS	PRUDER	TREES	22	05/02/75	COMPLETE	N/A	RL				
SOUTH BROADVIEW, SEC "A"	SOUTH BROADVIEW	SHEKELL,GENE	BARNETT,DON	24	05/05/75	COMPLETE	N/A	RL				
SOUTH BROADVIEW, SEC "A"	SOUTH BROADVIEW	FOSTER	FOSTER	61	05/05/75	COMPLETE	N/A	RL				
COLONIAL HILLS	COLONIAL HILLS	EPPERSON,JAY	EPPERSON,JAY	20	05/06/75	COMPLETE	N/A	RL				
PHELPS	3RD ST NEWBURGH	MATTINGLY	KENEIPP CONST	TOWN	05/06/75	COMPLETE	N/A	DB				
COLONIAL HILLS	COLONIAL HILLS	EPPERSON,JAY	EPPERSON,JAY	23	05/15/75	COMPLETE	N/A	RL				
HUTCHINSON/KINCADE	626 E. JENNINGS ST	MITCHELL,JIMMY	PIERCE,ROBERT		05/18/75	COMPLETE	N/A	RL				
FOREST PARK	FOREST PARK	WHITEHOUSE,WM	GOEDDE	38	05/19/75	COMPLETE	N/A	RL				
COLONIAL HILLS	COLONIAL HILLS	PRESTIGE	CRANE BROS.	19	05/20/75	COMPLETE	N/A	RL				

**NOTE: TYPICAL – SEE CD FOR FULL ATTACHMENT**

# **ATTACHMENT 8A**

## **DEFECTS IDENTIFIED FOR FUTURE REPAIRS**



Newburgh Wastewater  
 Treatment Facility  
 6366 Vanada Road  
 Newburgh IN 47630  
 Phone: 812-853-6412  
 Fax: 812-853-1731

## Defects Identified by GXP

Address	Line Segment ID	MH ID:	Direction:	Line Problem	Rating %	Distance:	Date
NEXT TO LAKE ON SOUTH SHORE LAKE VALE	L13-238	13-239	Downstream	Sag	80	0	4/17/2013 1:28:08 PM
Town / 919 Jefferson St	L10-67	10-239	Downstream	Joint Offset	70	0	1/16/2013 11:04:18 AM
Town / 905 Jefferson ST	L10-239	10-66	Downstream	Joint Offset	70	0	1/16/2013 12:29:20 PM
810 Jefferson	L10-66	10-65	Downstream	Joint Offset	70	0	1/16/2013 2:13:00 PM
5533 MARTIN NORTH SIDE OF DRIVEWAY	L20-67	20-68	Downstream	Sag	80	0	5/9/2014 1:41:51 PM
8311 BIRCH	L11-249	11-248	Downstream	Crack	70	0	12/11/2015 8:38:21 AM
	L09-133	09-134	Downstream	Lateral Connection Problem	70	0.5	5/16/2013 11:17:33 AM
421 GRAY	L09-123	09-114	Downstream	Joint - Infiltration	70	0.5	12/18/2013 9:45:02 AM
7411 OAKLAWN	L15-122	15-124	Downstream	Lateral Connection Problem	70	0.8	10/17/2014 8:07:09 AM
EAST OF EPWORTH LS	L03-53	03-52A	Downstream	Sag	80	0.8	10/9/2015 12:46:49 PM
CASTLE ELEMENTRY	L16-16	16-170	Downstream	Crack	90	0.9	6/2/2014 10:30:35 AM
512 WATERS	L09-02	05-31	Downstream	Crack	70	1.2	12/8/2015 8:26:11 AM

NOTE: TYPICAL – SEE CD FOR FULL ATTACHMENT

## **ATTACHMENT 8B**

### **PREVIOUS DEFECTS IDENTIFIED FOR FUTURE REPAIRS**

**DEFECTS IDENTIFIED FOR FUTURE REPAIRS PRIOR 2013**

SUBDIVISION	ADDRESS	PROJECT NUMBER	PRIORITY	MH#		MH#	REPAIR NEEDED	FT LOC	STATUS	TV DONE
Ashbury	4322 Ashbury Park Dr		Normal	03-71		03-72	Hammer tap, rts	334.0	Not bid	4/21/2010
Ashbury	4366 Partridge		Normal	03-74		03-76	Hole in main 3:00	139.0	Not bid	2/8/2011
Bell Oaks	Yard between Lefler & Blockbuster		Normal	11-62		11-63	Offset jnt 3"	33.0	Not bid	9/2/2011
Bell Oaks	Newburgh Chiropractor		Normal	11-154		11-155	Sad tap, hole w/maj. l&l	170.0	Not bid	8/23/2011
Bell Oaks	Wendy's		Normal	New MH 15-245		15-30	45° elbow unpassible	235.0	Not Bid	9/27/2011
Blue Lake	2988 Briarcliff Dr		Normal	22-01		22-02	Sad Tap R2:00 20% rts	171.0	Not bid	6/11/2012
Blue Lake	6588 Oakshire Ct	08-101	Normal	22-27		22-28	Hole in main	320.4 363.0	Bid/pulled homeowner refused to sign ROE	4/4/2000
Blue Lake	2522 Briarcliff		Normal	23-123		23-122	Sad tap 12:00/maj l&l	257.0	Not bid	6/13/2012
Broadview	4266 Pine		Normal	15-40		15-22	Protruding Tap	57.0	Not bid	7/17/2009
Broadview	Concord Green Apts		Normal	15-49		15-47	Jnt crk at bottom/mod dirt	191.0	Not Bid	8/2/2012
Broadview II	Pine Dr		Normal	15-64		15-Stub17	Prot tap 1/2 into main, rts @ con 60%	132.0	Not Bid	9/17/2012
Broadview II	4513 Pine Dr		Normal	15-64		15-63	45° Bend with dirt & rts 30%	58.0	Not Bid	9/17/2012
Broadview	4322 Hillsdale		Normal	15-91		15-90A New MH	Bad tap/blockage	111.0	Not Bid	9/22/2009
Broadview	7688 Meadow		Normal	15-172		15-171	Hammer tap L 9:00 15-02CO is between these 2 manholes	244.00	Not Bid	07/11/11
Broadview	7599 Meadow	09-10	Normal	15-177		15-176	Bad Tap	267.00	Not Bid	03/10/09
Broadview	7577 Meadow		Normal	15-177		15-176	Protruding Tap	352.60	Not Bid	03/10/09
Broadview	7611 Broadview		Normal	15-187		15-188	Bad tap, roots	349.00	Not Bid	11/23/09
Broadview B	7972 Ridgemont	08-73	Normal	15-212		15-211	Tap, right, roots/hvy	296.5	Not Bid	8/23/2007
Broadview B	7988 Meadow	08-74	Normal	15-211		15-212	Tap, right separate	75.9	Not Bid	8/24/2007
Broadview B	8000 Meadow	08-194	Normal	15-211		11-277	Bad tap/roots	63.8	Not Bid	2/20/2008
Broadview B	Ridgemont (need #)	08-195	Normal	15-211		11-277	Tap,R,8" line offset	144.0	Not Bid	2/20/2008
Broadview B	8044 Meadow	08-196	Normal	15-211		11-277	Old rep, tap, offset jnt	225-252	Not Bid	2/20/2008
Broadview B	8044 Meadow	08-197	Normal	15-211		11-277	Tap, L, roots	281.3	Not Bid	2/20/2008
Broadview B	8088 Meadow	08-198	Normal	15-211		11-277	Tap, L, roots	387.0	Not Bid	2/20/2008
Broadview B	7788 Meadow Ln		Normal	15-214		15-09CO	Cracked jnt 12:00	148.0	Not Bid	7/19/2012
Broadview B	7788 Meadow Lane		Normal	15-214		15-09CO	HamTap R3:00 (sad)/crk Tap R3:00 (fac)/cap busted	158.0 161.0	Not bid	7/19/2012
Broadview B	7788 Meadow Lane		Normal	15-214		15-09CO	RIJ 5% RIJ 80% / unpassable	194.0 195.0	Not bid	7/19/2012
Colonial Hills	10699 Monticello		Normal	02-65		02-19CO to 02-22CO	Tap L, crushed	175.6	Not bid	3/10/2010
Colonial Hills	10599 Monticello		Normal	02-65		02-19CO to 02-22CO	RIJ, hvy 70%	662.0	Not bid	3/10/2010
Colonial Hills	10688 Monticello		Normal	02-68		02-67	Hammer tap 10:00	108.5	Not Bid	12/17/2009
Colonial Hills	10722 Monticello		Normal	02-68		02-67	Hammer tap 10:00	294.4	Not Bid	12/17/2009
Colonial Hills	10733 Gettysburg	08-77	Normal	02-67 02-68		02-67 02-67	Hammer tap 2:00	63.1 328.0	Not Bid	5/22/2007 12/17/09
Colonial Hills	10733 Gettysburg		Normal	02-68		02-67	2" Hole in main 2" Hole in main	357.7 359.0	Not Bid	12/17/2009
Colonial Hills	10877 Williamsburg Ct	08-79	Normal	02-67 02-71		02-71 02-67	Tap, top, roots/lgt	225.2 81.0	Not Bid	5/22/2007 12/9/2009
Colonial Hills	10833 Williamsburg	10-09	Normal	02-71		02-67	Hammer tap, 12:00	276.0	Bid in 3/2010	12/9/2009
Colonial Hills	10600 Monticello 10611 Gettysburg		Normal	02-69		02-68	Hammer tap, 10:00, rts Hammer tap, 12:00, rts	44.6 48.0	Not Bid See GXP done- 7/21/14	12/17/2009
Colonial Hills	10644 Monticello		Normal	02-69		02-68	HT L 10:00, rts & crk	254.0	Not Bid	12/17/2009
Colonial Hills	10655 Gettysburg		Normal	02-69		02-68	HT R 2:00, water	263.0	Not Bid	12/17/2009
Colonial Hills	10666 Monticello		Normal	02-69		02-68	HT 12:00, water	326.0	Not Bid	12/17/2009

**NOTE: TYPICAL – SEE CD FOR FULL ATTACHMENT**

## **ATTACHMENT 9**

### **PROPOSED SLIPLINE REPAIRS**

## Proposed Sliplines - Submitted to Commonwealth Eng. For Review

	<u>SUBDIVISION</u>	<u>ADDRESS</u>	<u>DISTANCE</u>	<u>Line Segment ID</u>	<u>MH#</u>	<u>TO</u>	<u>MH#</u>	<u>Type</u>	<u>Footage Location</u>	<u>TV Date</u>	<u>Recommended Resolution</u>	<u>Date Resolved</u>	<u>Comments</u>
1	Colonial Hills	10855 Williamsburg	407	L02-68	02-68		02-67	Roots		5/17/2006 5/22/2007 12/17/2009	Jet PM List 4 Future Repairs Slipline		
2	Colonial Hills	10855 Williamsburg	334	L02-69	02-69		02-68	Roots		10/2/2006 12/17/2009 7/21/14 part	Jet PM List 6 Future Repairs Slipline		
3	Colonial Hills	10855 Williamsburg	309	L02-71	02-67		02-71	Roots		10/2/2006 5/22/2007 12/9/2009	2 Future Repairs Slipline		
4	Colonial Hills	10599 Williamsburg DR	400	L02-177	02-178		02-177	Bellies		6/26/2006 5/24/2007 1/24/2008 4/7/2009 4/7/2010	Jet PM list 3 Future Repairs Slipline		
5	Powers Place	10011 Kimberly Ln	322	L05-02	05-02		01-22	Bellies & Roots in jnts		4/6/2006 8/1/2006 6/7/2007 1/24/2008 8/17/2009	Jet PM List 2 Future Repairs Slipline		
6	Town	35 Williams Ln	395	L05-10	05-11		05-10	Roots in jnts		11/3/2006 9/8/2015 4/26/2016	Jet PM List rootx, slipline		
7	Town	28 Williams ln	393	L05-11	05-11		05-12	Roots in joint		11/3/2006 9/8/2015	Jet PM List Slipline		
8	Town	Across from Knob Hill Trailer Ct	331	L06-46	06-45		06-46	Roots in jnts & sep jnts		2/15/2006 11/6/2007 11/19/2007 5/25/2012	Jet PM List 3 Future Repairs Slipline		
9	Town	W Jennings by Funeral Home	209	L09-12	09-12		09-11	Bellies, roots in jnts, & offsets		7/13/2006 11/14/2007 1/29/2008 2/4/2008 4/7/2009	Jet PM List 2 Future Repairs Slipline		
10	Darby Hills	2 Old Orchard	109	L10-29	10-29		10-30	Offset & Roots		7/6/2006 11/14/2007 3/26/2012	Yrly Jet PM List Slipline		
11	Darby Hills	400 Darby Hills Dr	100	L10-31	10-63		10-31	Offsets & roots in line		7/6/2006 1/30/2008 3/26/2012	Yrly Jet PM List Slipline		
12	Town	Cypress & Sharon Rds	328	L10-108	10-108		10-107	Bellies, roots in jnts, & offsets		2/27/2007 6/13/2007 3/24/2008 10/1/2010	Jet PM List Slipline		

**NOTE: TYPICAL - SEE CD FOR FULL ATTACHMENT**

# **ATTACHMENT 10**

## **EMPLOYEE TRAINING RECORD**

## TRAINING COMPLETION SCHEDULE

NOTE: Recommended training hours per year (5 hours)

<u>EMPLOYEE</u>	<u>DATE</u>	<u>TRAINING TOPIC</u>	<u>TRAINER</u>	<u>Hours</u>
Hodges, Ed	25-Oct-2016	Class 4 Wastewater Collection System Operator	Indiana Water Environment Assoc.	n/a
Moore, Alec	25-Oct-2016	Class 1 Wastewater Collection System Operator	Indiana Water Environment Assoc.	n/a
Baumhoer, Kenny	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Burch, Mike	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Dill, Heath	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Goldsberry, Leroy	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Heck, Misty	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Hodges, Ed	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Jewell, Joshua	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Jolly, Marcus	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Kc, Rajiv	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Key, Leon	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Larkins, Rodney	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Madden, Cathy	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Martin, Darin	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Merta, Scott	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Moore, Alec	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Musser, James	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Parker, Clyde	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Powell, Russell	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Ruff, Jim	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Sanders, Sean	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Schmitt, Dana	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Simon, Dave	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Warren, Logan	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Young, Rick	12-Oct-2016	Fire Extinguisher Training	Tri-State Fire (Dan McNeily)	0.5
Baumhoer, Kenny	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1
Dill, Heath	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1
Goldsberry, Leroy	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1
Hodges, Ed	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1
Jewell, Joshua	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1
Jolly, Marcus	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1
Kc, Rajiv	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1
Larkins, Rodney	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1
Martin, Darin	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1
Merta, Scott	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1
Moore, Alec	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1
Musser, James	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1
Parker, Clyde	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1
Pendergraft, Brad	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1
Powell, Russell	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1
Ruff, Jim	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1
Sanders, Sean	5-Oct-2016	Fall Protection Training	Richard w/ United Scale	1

**NOTE: TYPICAL – SEE CD FOR FULL ATTACHMENT**

## **ATTACHMENT 11**

### **BYPASS / OVERFLOW INCIDENT REPORTS**



**Newburgh Wastewater Treatment Facilities  
2016 Bypass/Overflow Incident Report**

	Location Of SSO	Date SSO Began	Time SSO Began	Date SSO Ended	Time SSO Ended	Overflowed To (Location):	Overflow Volume (mg)	SSO Volume (Est/Act)	WWTP Flow During SSO (mgd)	Aquatic life Killed (Yes or No)	Reason For SSO	Precipitation (Inches)	Details Of SSO (As Described by the Incident Report)	Actions Taken (As Described by the Incident Report)	Additional Information / Additional Action Required / Current Status of Projects (As of March , 2017 Review)
1	10711 Willow Creek Rd	2/6/16	5:15 PM	2/6/16	8:12 PM		0.000075	Est	3.4	No	Line Blockage		Sewage released from MH 02-08. Roots & grit were jetted from sewer line.	Removed blockage & cleaned up debris. Will televise main as soon as possible.	Sanitary sewer point repair was completed on 9-26-16.
2	MLS ARV No 6 7700 Vann Road	2/9/16	3:10 PM	2/9/16	4:45 PM		0.00005	Est	3.6	No	Equipment Failure		The Master Lift Station force main air relief valve developed a small leak.	Vacuumed sewage from the ARV pit & ground to a vacuum tank truck. Shut off the isolation valve to the ARV thus eliminating the leak.	No further action is required.
3	ARV No. 2 on the Lincolnwood lift station force main	4/4/16	12:20 PM	4/4/16	1:43 PM	Private property & Cypress Creek	0.000125	Est	2.7	No	Equipment Failure		The air relief valve's float pin broke resulting in the discharge.	Immediately repaired the ARV. E. coli warning signs were posted in the area and will remain until testing indicates that E. Coli levels have returned to a safe level. ARV's are inspected on a routine schedule. No further action is pending.	No further action is required.
4	Manhole No. 02-127 5900 Kreager Lane	5/3/16	2:00 PM	5/3/16	3:15 PM	Private Property	0.000075	Est	3.2	No	Line Blockage		Roots, rags, and grease clogged the line and created the overflow.	Removed blockage & cleaned up debris around manhole. Vacuumed up standing liquid around the manhole. The line is on the PM list for periodic jet cleaning. The line will be TV inspected and any defects found will be scheduled for corrective action.	A sanitary sewer point repair is necessary to correct the problem. The project has been bid. We are awaiting contractor mobilization.
5	By-Pass Pump set-up at Manhole No. 07-181	6/16/16	5:22 PM	6/16/16	5:50 PM	Private Property	0.000065	Est	2.3	No	Construction Related		A contractor working for the Town was installing a new manhole on an existing 15-inch gravity line. To facilitate this, the contractor set up a by-pass pump to pump sewage around the affected area. A fitting on the discharge side of the pump failed causing the sewage release.	The pump was shut down and the defective fitting was replaced immediately. No further action is necessary.	No further action is required.
6	MH No. 14-234 & MH No. 14-234A 7091 Savanah Dr.	7/28/16	2:55 PM	7/28/16	5:30 PM	Private Property	0.0006	Est	2.6	No	Line Blockage		Found Rip-rap in the bottom of MH No. 14-234 clogging the line.	Removed blockage & cleared the blockage by removing the rip-rap from the bottom of the manhole. No further action required.	No further action is required.
7	Clean-out at 607 Village Ln	8/4/16	12:23 AM	8/14/16	12:37 AM	Private Property	0.0001	Est	2.3	No	Line Blockage		A grease clog developed due to a sag in the sewer main.	Removed blockage. The line segment is on the preventative maintenance list and the cleaning frequency will be increased. The line segment was last cleaned on 5/5/16. The line segment replacement is on our priority one project list which has received funding through a recent 14 million dollar bond issue. We expect to replace the line in the near future.	A sanitary sewer point repair is necessary to correct the problem. The project has been placed on our PPL and is expected to be funded and proceed in 2017.
8	MH No. 13-191 606 St Catherine	9/8/16	7:07 AM	9/8/16	9:00 AM	Private Property	0.000075	Est	1.9	No	Line Blockage		The 8-inch main was clogged with roots.	Removed blockage & cleaned up debris. The line segment will be placed on our preventative maintenance list for periodic cleaning.	A sanitary sewer point repair is necessary to correct the problem. The project has been bid. We are awaiting contractor mobilization.
9	Old Stonehouse Lift Station	9/16/16	8:00 AM	9/16/16	8:40 AM	Private Property	< 0.00005	Est	2.0	No	Power Failure & Equipment Failure		A power failure occurred and the alarm dialer failed due to a defective AT&T telephone line.	AT&T was contacted and instructed to repair the defective phone line. No further action is required.	No further action is required.

Total Overflow Volume: 0.0018 MG  
 Total Treated Flow: 941.27 MG  
 % Overflow/Treated Volume: 0.00019%

**NOTE: TYPICAL – SEE CD FOR FULL ATTACHMENT**

## **ATTACHMENT 12**

### **REPAIRS NEEDED PRIOR TO SLIPLINING**

## POSSIBLE REPAIRS TO DO BEFORE SLIPLINE CAN BE DONE

SUBDIVISION	ADDRESS	PROJECT NUMBER	DEG 1-10	MH#	MH#	REPAIR NEEDED	FT LOC	STATUS	TV DONE
Broadview	Concord Green Apts		Normal	15-49	15-47	Jnt crk at bottom/mod dirt	191.0	Not Bid	8/2/2012
Broadview II	Pine Dr		Normal	15-64	15-Stub17	Prot tap 1/2 into main, rts @ con 60%	132.0	Not Bid	9/17/2012
Broadview	7688 Meadow		Normal	15-172	15-171	Hammer tap L 9:00	244.00	Not Bid	07/11/11
Broadview B	Meadow Lane		Normal	15-177	15-178	Lateral connection problem	320.5	Not Bid	10/31/2014
Broadview B	8000 Meadow	08-194	Emergency	15-211	11-277	Bad tap/roots	63.8	Not Bid	2/20/2008
Broadview B	Ridgemont (need #)	08-195	High	15-211	11-277	Tap,R,8" line offset	144.0	Not Bid	2/20/2008
Broadview B	8044 Meadow	08-196	High	15-211	11-277	Old rep, tap, offset jnt	225-252	Not Bid	2/20/2008
Broadview B	8044 Meadow	08-197	Emergency	15-211	11-277	Tap, L, roots	281.3	Not Bid	2/20/2008
Broadview B	8088 Meadow	08-198	Emergency	15-211	11-277	Tap, L, roots	387.0	Not Bid	2/20/2008
Broadview B	7972 Ridgemont	08-73	Normal	15-212	15-211	Tap, right, roots/hvy	296.5	Not Bid	8/23/2007
Broadview B	7988 Meadow	08-74	Normal	15-211	15-212	Tap, right separate	75.9	Not Bid	8/24/2007
Buslers	4055 apt A Pine Drive		Normal	15-223	15-25	Separate jnt, water	2.0	Not Bid	3/26/2010
Busler's/Pine Dr	4011 Pine Dr	08-225	Normal	15-223	15-25	Hammer tap	89.9	Not Bid	3/18/2008 3/26/2010
Busler's/Pine Dr	4011 Pine Dr	08-226	Normal	15-223	15-25	Hammer tap	91.7	Not Bid	3/18/2008 3/26/2010
Colonial Hills	10688 Monticello		Normal	02-68	02-67	Hammer tap 10:00	108.5	Not Bid	12/17/2009
Colonial Hills	10722 Monticello		Normal	02-68	02-67	Hammer tap 10:00	294.4	Not Bid	12/17/2009
Colonial Hills	10733 Gettysburg	08-77	Normal	02-68	02-67	Hammer tap 2:00	328.0	Not Bid	12/17/09
Colonial Hills	10733 Gettysburg		Normal	02-68	02-67	2" Hole in main 2" Hole in main	357.7 359.0	Not Bid	12/17/2009
Colonial Hills	10600 Monticello 10611 Gettysburg		Normal	02-69	02-68	Hammer tap, 10:00, rts Hammer tap, 12:00, rts	44.6 48.0	Not Bid	12/17/2009
Colonial Hills	10644 Monticello		Normal	02-69	02-68	HT L 10:00, rts & crk	254.0	Not Bid	12/17/2009
Colonial Hills	10655 Gettysburg		Normal	02-69	02-68	HT R 2:00, water	263.0	Not Bid	12/17/2009
Colonial Hills	10666 Monticello		Normal	02-69	02-68	HT 12:00, water	326.0	Not Bid	12/17/2009
Colonial Hills	10877 Williamsburg Ct	08-79	Normal	02-71	02-67	Tap, top, roots/lgt	81.0	Not Bid	12/9/2009
Colonial Hills	10833 Williamsburg	10-09	Normal	02-71	02-67	Hammer tap, 12:00	276.0	Bid in 3/2010	12/9/2009
Colonial Hills	10677 Williamsburg Dr	08-163	Normal	02-178	02-177	Offset jnt & tap	30.0 33-36	Repair & Slipline Not Bid	1/24/2008 4/17/10
Colonial Hills	10655 Williamsburg Dr		Normal	02-178	02-177	Hammer tap L 10:00	151.0	Not Bid	4/17/2010
Colonial Hills	10611 Williamsburg Dr		Normal	02-178	02-177	Hammer tap L 10:00	332.0	Not Bid	4/17/2010

**NOTE: TYPICAL – SEE CD FOR FULL ATTACHMENT**

# **ATTACHMENT 13**

## **SEWER PROJECTS AND REPAIR COSTS**

**2016 Sewer Repairs**

<b>Date Paid</b>	<b>Vendor</b>	<b>Sewer Repair Address</b>	<b>Amount Paid in 2016</b>	<b>Check #</b>
1/1/16	NONE			
2/1/16	NONE			
3/10/16	Stemaly	10097 Bourbon Street #16-68	2,027.60	40886
3/24/16	Hydromax	5577 Lakeside #14-66	6,155.00	40956
3/24/16	Hydromax	5577 Lakeside #14-66A	1,915.00	40956
4/1/16	NONE			
5/2/16	Hydromax	5400 Sherwood	3,750.00	41128
5/26/16	Stemaly	4799 Briarwood	2,571.90	41266
6/9/16	Stemaly	5477 Spring Corner #14-69	2,427.60	41340
7/14/16	Hydromax	5903 Brookstone #16-07	4,169.20	41507
7/14/16	Hydromax	122 W Main Street #16-08	3,805.00	41507
8/11/16	Hydromax	6266 Ferstel Road #15-29	4,000.00	41649
8/11/16	Peyronnin	6644 Oak View #16-04	5,300.00	41662
8/11/16	Peyronnin	5411 Park Drive #16-03	4,450.00	41662
8/11/16	Stemaly	595 Forest Park #15-41	3,364.48	41665
8/25/16	Hydromax	7579 Broadview	3,300.00	41732
9/15/16	David Enterprises	66/Lincoln-Asphalt Patch	347.49	41802
9/15/16	David Enterprises	Frame/Village Lane-Asphalt Patch	306.35	41802
9/15/16	Hydromax	8131 Wyngate #15-12	4,675.00	41817
9/15/16	Hydromax	7266 Nottingham #16-10	2,310.00	41817
9/15/16	Hydromax	7266 Nottingham #16-10A	630.00	41817
		Reimbursed from WOW/Time Warner	-2,940.00	
9/15/16	Stemaly	5566 Greensboro #14-77	1,873.10	41835
9/15/16	Stemaly	4411 Foxmoor #14-61	2,110.60	41835
9/15/16	Stemaly	2200 Kenyon #15-21	1,637.64	41835
9/15/16	Stemaly	7488 Oak Park #15-20	2,530.62	41835
9/15/16	Stemaly	7466 Oak Park #15-19	1,964.64	41835
9/15/16	Stemaly	2433 Holbrook #15-27	2,106.93	41835
9/29/16	Stemaly	4288 Mary Joetta #15-30	1,877.08	41934
		Reimbursed from WOW Cable	-1,877.08	
9/29/16	Stemaly	2411 Holbrook #15-26	2,106.93	41934
9/29/16	Stemaly	2411 Holbrook #15-26A	104.63	41934
9/29/16	Stemaly	6511 Heathervale #15-31	2,084.08	41934
9/29/16	Stemaly	5466 West Sherwood #15-32	3,039.16	41934
10/13/16	Stemaly	18 Williams #15-38	9,671.16	41991
10/13/16	Stemaly	18 Williams #15-38A	536.67	41991

**NOTE: TYPICAL – SEE CD FOR FULL ATTACHMENT**

## **ATTACHMENT 14**

### **PREVENTATIVE MAINTENANCE VIDEO INSPECTION**



# **ATTACHMENT 15**

## **SL-RAT SANITARY SEWER FOOTAGE**



## 2016 CMOM RAT FOOTAGE

Name	Downstream MH	Line Footage	Year
L01-15	01-14	67	2016
L01-43	01-42	130	2016
L02-105	02-108	87	2016
L02-13	02-14	396	2016
L02-131	02-143	28	2016
L02-14	02-15	387	2016
L02-142	02-131	23	2016
L02-147	02-131	110	2016
L02-15	02-124	329	2016
L02-179	02-12	119	2016
L02-22CO	02-21CO	119	2016
L02-41	02-39	242	2016
L02-43	02-42	367	2016
L02-44	02-43	368	2016
L02-76	02-72	275	2016
L04-12	04-13	98	2016
L04-13	04-04	276	2016
L05-33	05-14	28	2016
L05-35	05-43	255	2016
L05-41	05-18	3	2016
L05-42	05-41	122	2016
L05-43	05-44	47	2016
L05-46	05-47	5	2016
L06-26	06-31	400	2016
L06-45	06-44	178	2016
L06-61	06-60	10	2016
L06-64	06-63	55	2016
L07-133	07-193	17	2016
L07-14A	07-14	265	2016
L07-165	07-164	73	2016
L07-184	07-185	81	2016
L07-188	07-22	63	2016
L07-41	07-40	133	2016
L07-57	07-41	125	2016

**NOTE: TYPICAL – SEE CD FOR FULL ATTACHMENT**

# **ATTACHMENT 16**

## **PROPOSED MAIN LINE REPLACEMENTS**

## Main Line Replacement

Year Added	SUBDIVISION	ADDRESS	MH#	TO	MH#	Footage Location	Recommended Resolution	Date Resolved	TV Date	Cues Total Pipe Score
2010	Powers	10264 Powers	01-13		01-02CO	Entire line	Line replacement/Take to Council for recommendation		11/09/10	
2009	Powers	10133 Kimberly	01-17		01-18	Total	Yrly TV Maint. List Line replacement project <b>Turned over To CEI</b>		8/27/2009 4/12/11 1/9/12 7/8/13 12/1/14 12/8/15	<b>50.00</b> <b>94.91</b>
2007	Cricklewood	10455 Cricklewood	02-06		02-14	?	Possible main repair		03/28/07	
2007	Cricklewood	10455 Cricklewood	02-06		02-05	All 302'	Possible main repair		03/28/07	
2010	Epworth Village	5822 Garden Valley	02-16		02-15	175 - 187	Line replacement 2 future repairs on this segment		04/06/10	
2010	Epworth Village	10377 Cricklewood	02-16		02-15	216 - 225	Line replacement 2 future repairs on this segment		04/06/10	
2010	Epworth Village	5633 Garden Valley	02-19		02-21	Entire line	Line replacement		03/04/10	
2010	Epworth Village	5777 Garden Valley	02-22		02-21	Entire line	Line replacement		03/04/10	
2010	Epworth Village	5833 Garden Valley	02-23		02-22	Entire line	Line replacement		03/08/10	
2006	Colonial Hills	Gettysburgh	02-67		02-68	68-??? 206-???	Repair Main 4 future repairs on this segment		5/17/06 5/22/07 12/17/09 1/25/16	<b>100.00</b>
2009	Colonial Hills	10877 Williamsburg	02-71		02-67	120' - 133'	Line replacement 2 future repairs on this segment		5/22/07 12/9/09	
2010	Kenosha Hills	10477 Chippewa	02-80		02-96	Entire line	Line replacement		7/29/2010 11/4/13	<b>56.17</b>
2007	Kenosha Hills	10255 Marquette 10255 Marquette & into St.	02-84		02-91	191-237 249-270	Possible main repair 1 future repairs on this segment		04/03/07	
2010	Kenosha Hills	10311 Chippewa	02-90		02-103	Entire line	Line replacement		07/26/10	
2007 2010	Kenosha Hills	10366 Chippewa	02-102		02-101	Entire line	Line replacement 1 future repairs on this segment		07/26/10	
2010	Kenosha Hills	10377 Shawnee Dr	02-112		02-102	Entire line	Line replacement		08/10/10	
2010	Gaslight Square	5800 Morningside	02-117		02-118	27' - 90'	Line replacement		03/05/10	

**NOTE: TYPICAL – SEE CD FOR FULL ATTACHMENT**

# **ATTACHMENT 17**

## **MANHOLE INSPECTIONS / REPAIRS**

## 2016 MANHOLE INSPECTIONS/REPAIRS

MANHOLE#	SUBDIVISION	ADDRESS	FUTURE REPAIRS AND/OR CLEANING REQUIRED	INSPECTION DATE	WORK PERFORMED BY	REPAIR DATE
01-15	Powers Place	10122 Kimberly Lane	Needs rehab for roots (bring tripod)	9/2/14 (TV)	NSD review to line or monoform	
02-03CO E. of MH 02-134	Lakeland Ct	5844 Jeffries	Replaced lid	02/01/16	NSD	10/13/2016
02-29	Landmark Truck Line	SR 662	Replaced casting and kent sealed	9/8/16 (TV)	NSD	10/13/2016
02-34	SR 662	Across the street from 10644 SR 662 W	Replaced casting, lid & kent sealed	7/2/15 (RAT) 7/30/15 (TV)	NSD	10/18/2016
02-65	Colonial Hills	10777 Williamsburg	Casting needs replace (main line is cased in storm ditch)	1/27/16 (TV)	NSD	10/18/2016
02-113	Kenosha Hills	10288 Tecumseh	Roots & concrete	1/2/14 (locate)	NSD review to line or monoform	
02-127	Olde River Town	5873 Picadilly (behind Apt P1)	MH needs rehab	5/4/16 (LG)	Contractor	
03-04A	Kenosha Hills	10241 Shawnee Dr	MH needs sealed	5/30/2014 (RAT)	NSD	
05-03	Powers Place	9988 Kimberly Lane	Needs roots removed & barrells sealed	7/23/14 (Rat)	NSD review to line or monoform	
06-55	Hwy 662	Hwy 662 & Frame	Replaced casting, lid & kent sealed	12/23/15 Profile	NSD	10/18/2016
07-70	Stonecreek	10041 Stonecreek Cr	Upstream pipe offset from invert restricting flow/chip out main to South of this MH	2/23/12 (TV)	NSD	
07-130	Fieldcrest Place	Fieldcrest Place Circle	Replaced casting, lid & kent sealed	6/27/14 (TV)	NSD	10/18/2016

**NOTE: TYPICAL – SEE CD FOR FULL ATTACHMENT**

# **ATTACHMENT 18**

## **MANHOLES WITH GPS LOCATION**

# Manholes With GPS Locations for 2016

Manhole Number	GPS Year
04-35	2016
04-36	2016
04-37	2016
04-38	2016
04-39	2016
04-40	2016
04-41	2016
04-42	2016
04-43	2016
04-44	2016
04-45	2016
04-46	2016
04-47	2016
04-48	2016
04-49	2016
04-50	2016
04-51	2016
04-52	2016
04A-01	2016
04A-02	2016
04A-03	2016
04A-04	2016
04A-05	2016
04A-06	2016
04A-07	2016
04A-08	2016
04A-09	2016
04A-10	2016
04A-11	2016
04A-12	2016
04A-13	2016
04A-14	2016
04A-15	2016

**NOTE: TYPICAL – SEE CD FOR FULL ATTACHMENT**

## **ATTACHMENT 19**

### **MANHOLES TO LOCATE & RAISE**



<b>MANHOLES TO RAISE</b>				
<b>PENDING FROM 2007 TO PRESENT</b>				
<b>Date Completed</b>	<b>MH</b>	<b>Instructions</b>	<b>Address or Location</b>	<b>Comments</b>
11/15/16	01-46	Raised 3 inches/depth 4' 6"	Huntington Creek 10433 Ashton Ct.	Per pink card 11/15/16
	02-30	Needs raised	Landmark Trunk Line	Per rat list 6/24/15
	02-31	Needs raised	Landmark Trunk Line	Per rat list 6/24/15
	02-44	Needs located & raised	Landmark 10611 Hampton (back yd under fence)	Per rat list 7/6/15
	02-144A Proj 14-53	Buried (3 ft deep - staked & flagged) (286 ft south of MH 02-144)	Lakeland Ct Kreager Ln (behind Apt R1 & R2)	Per TV sheet 8/5/14
	03-04CO	Buried under stone & brick sidewalk	Ashbury Parke 4222 Ashbury Parke	Per TV 5/13/14 (probably will not raise)
	03-35	Buried under pool deck	Thornbrook 4581 Brighton Ct	From TV sheet 6/15/11
	07-04CO	Raise (Cleanout n. of MH 07-30)	Country Place 4100 Greenwood	TV 5/30/12
	07-05CO	Raise (Cleanout n. of MH 07-35)	Country Place 4133 Roseview	TV 6/1/12
	07-09CO	Raise (C.O. west of 07-08) <a href="#">Driveway over cleanout &amp; tap</a>	Rabbit Run 4211 Trinity	TV 7/24/11
	07-11CO	Raise (Cleanout se of MH 07-39)	Country Place 4166 Roseview	TV 5/30/12
	07-25	Dead end manhole <a href="#">Raise/ aggregate driveway over it</a>	Rabbit Run 4022 Ridgetop	TV 7/21/10 TV 3/7/11
	07-51	Raise 3 to 4 ft	Woodstone 4000 Candlewood (NE corner in back yd. next to sprinkler system & Ameritech pedestal)	TV 10/7/14
	07-124	Raise	Fieldcrest Place Empty Lot/Ameritech Cable box #4575 on W. side of Rd.	
	07-144	Buried 6"	Linwood Estates	TV done 5/19/11
10/03/16	08-05	Lowered 3 inches	Arbor Point	Lowered by Developer
05/23/16	08-24	Raised 2 ft. barrell	Arbor Pointe Lot 80	BMB raised for Murphy Homes
05/23/16	08-25	Raised 2 ft. barrell	Arbor Pointe Lot 80	BMB raised for Murphy Homes
05/23/16	08-26	Raised 2 ft. barrell	Arbor Pointe Lot 79	BMB raised for Murphy Homes
10/03/16	08-32	Raised 3 feet	Arbor Point	Raised by Developer
10/03/16	08-51	Lowered 1.08 ft	Warrick Wellness Trail Ext.	Lowered by Developer
10/03/16	08-52	Raised 6 inches	Warrick Wellness Trail Ext.	Raised by Developer

**NOTE: TYPICAL – SEE CD FOR FULL ATTACHMENT**

## **ATTACHMENT 20**

### **FAT, OIL, AND GREASE (FOG) STATUS REPORT**

**Newburgh Wastewater Treatment Facilities  
FOG NOV Status Report**

Updated: January 11, 2017

Business	NOV Sent	NOV Response Due By	Interceptor Cleaned	Questionnaire Received	FOG Discharge Permit	Re-inspection	Status
Acapulco's Permit No. 112613	6/24/13 5/7/15	5/27/15	10/1/13 6/13/15 ? 7/10/15	11/06/13	To UC on 12-4-13	10-25-13 Passed 7/09/15 Failed 61% Full 7/10/15	In Compliance 5-7-15 NOV Letter Sent 78% Full Interceptors. No Response 5-31-15. 6-1-15 Chris sending NOV with Fine. 7-10-15: In Compliance Passed
American Legion Permit No. 062415	1/6/15 5/07/15	2/6/15 5/27/15			Approved by Council on 7-8-15	12-18-14: Failed	Must apply for a FOG Permit NOV needs to be sent.  Per 4-28-15 internal mtg: Susan will send first NOV. 6-1-15: Received request for interceptor waiver.  Interceptor waiver granted 6-10-15. Permit was approved by Council on 7-8-15.  There is a 180 day compliance schedule in the permit. Compliance is required by January 7, 2016.  1-22-16: LKey spoke to Jerry Blake via telephone. Mr. Blake was informed what was needed to comply: * Submit vendor detail sheets for grease trap (GT) approval. * Replace existing 22 gpm GT with a new 50 gpm GT. *24 hrs prior to install new GT call the Utility Office to schedule an inspection. *Installation must be inspected and approved by the Newburgh staff to achieve compliance.  2-22-16 50 GPM Grease Trap Installed and Inspected. Looks Good In Compliance
Arbys Permit No. 082813	06/26/13	07/26/13	08/21/13	08/20/13	Passed by Council on 9/11/13	8/23/13: Passed	In Compliance

**NOTE: TYPICAL – SEE CD FOR FULL ATTACHMENT**

## **ATTACHMENT 21**

### **GREASE INTERCEPTOR INSPECTIONS**

## Newburgh Wasterwater Treatment Facilities

### 2016 Grease interceptor Inspections

	Business	Contact	Phone #	FOG Amt.	Sludge Amt.	Date/Time	Total Depth	Comments
1	Acapulco's North 1500 Gln Int.	Melvin Ortez	453-9232	Inf- 0" Eff- 21"	Inf- 0" Eff- 5"	10/11/16 8:08 AM	43"	N-49 % S-30%
2	South 1500 Gln Int.	Melvin Ortez	453-9232	Inf- 8" Eff- 22"	Inf-0" Eff- 0"	This tank not full	43"	Tot-40% Full
3	Angelo's ( Little ) 50 GPM Trap	Bassam Jawabreh	431-6810	3"	6"	10/19/16 1:26 PM	16"	57% Full
4	Angelo's ( Little ) 20 GPM Trap	Bassam Jawabreh	431-6810	2"	1"	10/20/16 2:34 PM	11"	27% Full
5	American Legion	Bucky Honaker	858-9069	1"	2"	10/17/16 1:22 PM	18"	17% Full
6	Arby's	Joe Shelton	207-4698	8"	1"	10/6/16 12:56 PM	63"	15% Full
7	Archie & Clydes	Danny Bradley	490-7778	12"	4"	10/6/16 9:19 AM	80"	20% Full
8	Azzip Pizza	Brad Niemier	483-2400	1"	3"	10/14/16 10:48 AM	17"	24% Full
9	Beef-O-Bradys	John Greenwell	490-9464	Inf- 8" Eff- 8"	Inf- 0" Eff- 3"	10/6/16 1:11 PM	43"	23 % Full
10	Bell Oaks Terrace	Karen Lee	858-0488	Inf- 14" Eff- 12"	Inf- 8" Eff- 4"	10/6/16 2:14 PM	36"	53% Full
11	Boston's Pizza	Chris King	853-3400	Inf- 18" Eff- 28"	Inf- 6" Eff- 8"	10/6/16 8:07 AM	76"	40 % Full
12	Brentwood Meadows	Rosann Miller	858-7200	Inf- 25" Eff- 16"	Inf- 18" Eff- 6"	10/13/16 1:53 PM	43"	76 % Full
13	Lynn Auto Body (Old Bruce Hall)	Brian Lynn	629-5017	Skim	18"	10/10/16 1:24 PM	22"	82% Full
14	Burger King	Aaron Metcalf	858-3931	Inf- 12" Eff- 16"	Inf- 6" Eff- 8"	10/17/16 2:16 PM	60"	35% Full
15	Cafe Arzau Under Deck	Penny Nejad	842-2200	2"	2"	10/19/16 8:15 AM	12"	33% Full
16	Caf'e Arzau Liquor Room	Penny Nejad	842-2200	3"	8"	10/19/16 8:22 AM	12"	92% Full
17	Cancun Riviera Grl North 1500 Gal	Frandy Labrador-Quiroz	550-5528	Inf- 20" Eff- 16"	Inf- 12" Eff- 1"	10/5/16 1:27 PM	44"	N 56% S .01%
18	South 1500 Gal	Frandy Labrador-Quiroz	550-5528	Inf- .50" Eff- .50"	Inf- 0" Eff- 0"	10/5/16 1:27 PM	45"	Total 28% Full
19	Casey's	Tim Russell	853-8923	Inf- 4" Eff- 2"	Inf- 0" Eff- 0"	10/5/16 12:41 PM	60"	.05% Full
20	John H Castle Elementary School	Debra Scales	853-8878	0"	8"	10/11/16 2:13 PM	86"	9 % Full
21	Castle High School	John Stucker	853-3331	1"	2"	10/12/16 1:39 PM	50"	6 % Full
22	Castle North Middle School	Dave Forston	202-0522	0"	2"	10/12/16 1:28 PM	48"	4 % full
23	Castle South Middle School	John Burchrum	490-7930	Inf- .25" Eff-0"	Inf- 0" Eff- 0"	10/13/16 1:42 PM	68"	.37 % Full
24	China Village	Maggie Sung	858-8238	Inf- 14" Eff- 8"	Inf- 2" Eff- 4"	10/6/16 9:47 AM	42"	34% Full
25	Circle "S" Epworth & Hwy 662	Hugh	547-6435	No Grease Trap				
26	Circle "S" Hwy 66 & Sharon Road	Hugh	547-6435	No Grease Trap				
27	Cleo's Bakery	Mary Jean Kellams	853-0500	.25"	3"	10/19/16 9:24 AM	11"	30% Full

**NOTE: TYPICAL – SEE CD FOR FULL ATTACHMENT**