STATE OF ILLINOIS) SS COUNTY OF DU PAGE)

I, Shirley J. Siebert, City Clerk of Wood Dale, Illinois DO HEREBY CERTIFY that as such City Clerk and keeper of the records, that the foregoing is a true and correct copy of Resolution #R-18-21 A RESOLUTION SEEKING TO APPROVE A CONTRACT BETWEEN THE CITY OF WOOD DALE AND RJN GROUP FOR THE FY 2019 SANITARY SEWER REHABILITATION DESIGN AND CONSTRUCTION OBSERVATION IN THE NOT TO EXCEED AMOUNT OF \$59,880.00

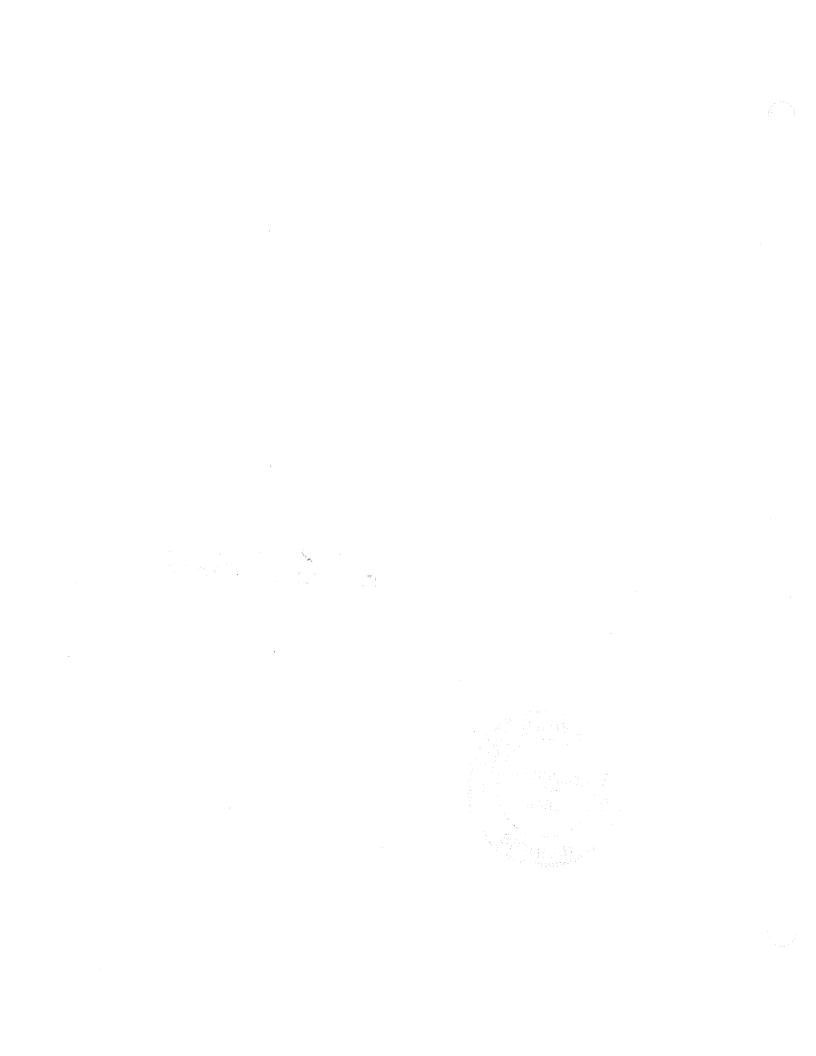
To The City Of Wood Dale, DuPage County, Illinois, IN WITNESS WHEREOF, I have hereunto Subscribed my name and affixed the seal of the City of Wood Dale, this 24TH day of May, 2018.

Shirley J. Siebert, City Clerk

City of Wood Dale DuPage County, Illinois

SEAL





Resolution #R-18-21

A RESOLUTION SEEKING TO APPROVE A CONTRACT BETWEEN THE CITY OF WOOD DALE AND RJN GROUP FOR THE FY 2019 SANITARY SEWER REHABILITATION DESIGN AND CONSTRUCTION OBSERVATION IN THE NOT TO EXCEED AMOUNT OF \$59,880.00

Passed:

May 24, 2018

Approved:

May 24, 2018

I, Shirley J. Siebert, as the Clerk for the City of Wood Dale, hereby certify that the attached is a true and correct copy of #R-18-21 A RESOLUTION SEEKING TO APPROVE A CONTRACT BETWEEN THE CITY OF WOOD DALE AND RJN GROUP FOR THE FY 2019 SANITARY SEWER REHABILITATION DESIGN AND CONSTRUCTION OBSERVATION IN THE NOT TO EXCEED AMOUNT OF \$59,880.00

passed and approved by the by the City Council of the City of Wood Dale on May 24, 2018 and hereby published in pamphlet form on May 24, 2018.

Shirley J. Siebert

City Clerk

SEAL





RESOLUTION NO. R-18-21

A RESOLUTION SEEKING TO APPROVE A CONTRACT BETWEEN THE CITY OF WOOD DALE AND RJN GROUP FOR THE FY 2019 SANITARY SEWER REHABILITATION DESIGN AND CONSTRUCTION OBSERVATION IN AN AMOUNT NOT TO EXCEED \$59,880

WHEREAS, the City of Wood Dale (hereinafter the "City") is a body politic and corporate, organized and existing pursuant to the Illinois Municipal Code, 65 ILCS 5/1-1-1 et seq.; and

WHEREAS, the City is authorized and empowered under the Illinois Municipal Code, and its Ordinances adopted pursuant thereto, to enter into agreements and to contract for goods and services; and

WHEREAS, the Mayor and the City Council of the City seek to ensure that the City is run effectively and efficiently; and

WHEREAS, the Mayor and the City Council of the City, seeks the RJN Group for the FY 2019 Sanitary Sewer Rehabilitation; and

WHEREAS, these services are necessary to maintain and promote an effective and efficient City Government; and

WHEREAS, after diligent review of the qualifications and services of RJN Group the Mayor and the City Council find RJN Group is the most qualified firm to perform the duties sought by the City; and

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF WOOD DALE, DUPAGE COUNTY, AN ILLINOIS CORPORATION, as follows:

<u>SECTION 1:</u> The recitals set forth above are incorporated herein and made a part hereof.

<u>SECTION 2:</u> The Mayor is authorized to execute said Agreement on behalf of the City of Wood Dale, which signature shall be attested to by the City Clerk.

<u>SECTION 3:</u> The City Manager, staff and/or the City Attorney shall take the steps necessary to put the terms and conditions of the Agreement into effect.

<u>SECTION 4:</u> That all ordinances and resolutions, or parts thereof in conflict with the provisions of this Resolution are, to the extent of such conflict, hereby repealed.

<u>SECTION 5:</u> That this Resolution shall be in full force and effect from and after its adoption, approval and publication in pamphlet form as provided by law.

PASSED this 24th day of May 2018

AYES: Alderman Catalans, Jakab, Messina, Susmarski, E. Wesley, woods

NAYS: Alderman R. Wesley

ABSENT: Alderman Somentino

APPROVED this 24th day of May 2018

SIGNED: annungato Julise

Annunziato Pulice, Mayor

ATTEST

Shirley J. Siebert, City Clerk



REQUEST FOR COMMITTEE ACTION

Referred to Committee:

May 10, 2018

Subject:

FY 2019 Sanitary Sewer Rehabilitaiton Design

and Construction Observation

Matt York, Public Works Director

Staff Contact: Department:

Public Works

TITLE: Approval of Contract for the FY 2019 Sanitary Sewer Rehabilitation Design and Construction Observation with RJN Group in an Amount Not to Exceed \$59,880

RECOMMENDATION:

Staff recommends that the City enters into a contract with RJN Group to provide Sanitary Sewer Rehabilitation and Construction Observation in an amount not to exceed \$59,880.00.

BACKGROUND:

In 2010 and 2011, the City of Wood Dale began working with RJN Group to look at Inflow and Infiltration (I/I) into our Sanitary Sewer System. To put it simply, anything that is not sewage but is in our Sanitary Sewer System is considered I/I. We see this happen during storm events, flows at the treatment plant go from a standard of 1.85 million gallons a day (mgd) to 3.686 mgd (March 26, 2015). If there was no I/I in our system we would not see any change in the mgd at the treatment plant based upon rain or snow melt conditions. Any water that goes into the treatment plant needs to be treated, so the more water in the system, the higher cost it is to treat the water.

In May 2015, the City Council awarded a contract to RJN to analyze sewer televising of Section 2 and 3 to develop what projects need to be done and when they need to be

completed. In 2016, we were able to complete the HIGH Priority Repairs in Area 2 The findings from the 2015 reports are as follows:

Type of Work	Area	Priority	Estimated Cost
Manhole Repair	2	Completed	\$236,793.91
Manhole Repair	3	Medium-High	\$202,620.00
Mainline Repair	2	Completed	\$229,510.00
Mainline Repair	Repair 2 Medium		\$304,631.00
Mainline Repair	2	Low	\$328,515.00
Mainline Repair	3	Completed	\$251,745.00
Mainline Repair	3	Medium	\$291,595.00
Mainline Repair	3	Low	\$486,250.00

In FY 2019, we are working on HIGH PRIORITY Manhole Repairs in AREA 3. Attached to this memo is a map of the areas in question.

ANALYSIS:

City Staff has been in consultation with RJN Group regarding their recommendation on the order of work to be completed. The Approved CIP for Engineering and Construction Management for this project was \$45,000. Even though estimated project costs for is \$326,000, which is also over budget, our hope is that the costs will come in lower than that. This work will be sent out to bid immediately and work should be completed by the end of this fiscal year. The Council approved \$345,00 in the FY 2019 CIP for I&I projects.

DOCUMENTS ATTACHED

- ✓ RJN Proposal
- ✓ RJN Cost Proposal for Construction Activities
- ✓ RJN Report (Area 2/3)



April 12, 2018

Mr. Matthew R. York Public Works Director City of Wood Dale 720 North Central Avenue Wood Dale, Illinois 60191

SUBJECT:

CITY OF WOOD DALE, IL

PROPOSAL FOR PROFESSIONAL ENGINEERING SERVICES - 2018 MANHOLE REHABILITATION DESIGN AND CONSTRUCTION OBSERVATION (AREA 3)

Dear Mr. York,

RJN Group, Inc. (RJN) is pleased to submit this proposal to the City of Wood Dale (City) to provide Professional Engineering and Construction Observation services to prepare a bid package for manhole rehabilitation and for construction observation of the rehabilitation project. This proposal includes preparation and design of the 2018 Manhole Rehabilitation Project, bidding services, and construction observations, management, and documentation of the rehabilitation project. The manhole rehab recommendations outlined in the RJN 2013 SSES Report comprise the preliminary recommendations to be reviewed and included in the bid package.

PROPOSED SCOPE OF WORK

The City has recently completed sewer rehabilitation in Areas 1, 2, and 3 and has completed manhole rehabilitation in Areas 1 and 2. Based on the recommendations for manhole rehabilitation within Area 3, the City has decided to perform manhole rehabilitation in this area as budget allows. The proposed scope of work includes design and construction observation for Area 3 and is as follows:

Design and Bidding Assistance

- 1. Provide the following field checks:
 - a. Identify surface restoration requirements (as applicable)
 - b. Identify potential traffic control needs during construction
- 2. Review of the preliminary manhole recommendations
- 3. Prepare manhole rehabilitation maps and schedule for recommended work.
- 4. Bidding Documents:
 - Prepare front end bid documents and detailed specifications.
 - Prepare bid package with plans, front end documents, details, and specifications.
 Submit a pdf of the final bid package to the City.



Page 2 Mr. Matthew York April 12, 2018

- 5. Prepare an opinion of probable construction cost.
- 6. Provide bidding assistance including:
 - Printing of documents,
 - Distribution of invitations to potential bidders
 - Answering bid-related questions,
 - Attendance at bid opening
 - Evaluation and tabulation of bids
 - Preparation of recommendation letter

Resident Engineering and Construction Observation Services

In addition to the contract management and other office services required, we recommend the following construction observation services:

- 1. Prepare Contract Documents for execution by City and Contractor. Review Contractor's insurance documents.
- 2. Coordinate preconstruction meeting, with agenda preparation, attendance, writing and distribution of meeting minutes.
- 3. Review Contractor's shop drawings and construction phasing.
- 4. Ensure contractor provides notification to the residents of impacts to sewer service and access to driveways.
- 5. Provide up to 200 hours of construction observation during the project. This is based on 160 hours of full time observation during key parts of the project and 40 hours of part time observation. This includes the final walk through, preparation of punch list, and final inspection.
- 6. Provide daily documentation of construction activities, including digital photos of the project. Provide periodic inspection of traffic control measures. Submit weekly updates to the City with the daily reports and photos.
- 7. RJN will inspect each manhole and surrounding area during and after construction, to ensure no damage has occurred. This includes the final walk through, preparation of punch list, and final inspection.
- Provide contract management, including review of Contractor's payment requests, preparation of change orders, and contract closeout.
- 9. Prepare and submit two copies of record drawings to the City.



Page 3 Mr. Matthew York April 12, 2018

Project Management

Provide project management services and attend up to three (3) meetings with the City.

SCHEDULE

Design and Bidding Assistance

The bid package will be provided to the City within 8 weeks of a Notice to Proceed.

Resident Engineering and Construction Observation Services

The Contractor will set the schedule in compliance with the Contract Documents.

PROPOSED FEE

The proposed Scope of Services will be invoiced on a time and materials basis with an overall not-to-exceed maximum billing of \$59,880 as outlined in the enclosed Summary of Engineering Services Fees.

It is our pleasure to submit this proposal to the City of Wood Dale. Please feel free to contact Yann Gallin at (630) 682-4700 x320 if you would like to discuss this proposal or have any questions. We are looking forward to the opportunity to continue working with the City on this important project.

Sincerely,

RJN Group, Inc.

Michael N. Young, P.E.

Michael M. young

Principal

Yann Gallin Project Manager

Yann Gallin

Enclosure

EXHIBIT A

City of Wood Dale 2018 Manhole Rehabilitation Design and Construction Observation Engineering Fee

		195	185	145	120	130	115	105	90	70	Total	Labor
Task No.	Task Description	PD	SPM	PM	PE	SRE	RE	ET	GIS	FT/CL	Hours	 Cost
1001	Manhole Recommendation Field Checks & Review		2	6	8			4	8		28	\$ 3,340.00
1001	Manhole Rehabilitation Maps and Schedules		_	8	16			4		16	44	\$ 4,620.00
1002	Specifications	1	2	8	12			4		4	31	\$ 3,865.00
1003	Cost Estimate	1	2	2	4						9	\$ 1,335.00
1004	Bidding Assistance	1	-	6	8			4		2	21	\$ 2,585.00
2001	Contracts, Public Coordination and Pre-Con Meeting	•	2	6	8	6				2	24	\$ 3,120.00
2002	Shop Drawings and Surface TV		_	2	4	_	2				8	\$ 1,000.00
2002	Field Observation and Reports, Punchlist and Final Insp	1	2	8		40	160	16			227	\$ 27,005.00
2003	Contract Management and Pay Requests	•	2	6	6	4	8	-		2	28	\$ 3,540.00
2004	Record Drawings		_	2	4	•	-	6	6		18	\$ 1,940.00
3001	Project Management, Administration, & Coordination	2	4	12	4	4		-		10	36	\$ 4,570.00
3001	Project Meetings & Communication	-	•	8	6	•				2	16	\$ 2,020.00
	•			·	•							\$ 550.00
9901 9902	Mileage Printing and Miscellaneous Expenses											\$ 390.00
5502	TOTAL		16	74	80	54	170	38	14	38	490	\$ 59,880.00

PD - Project Director
SPM - Senior Project Manager
PM - Project Manager
PE - Project Engineer
RE - Resident Engineer

ET - Engineering Technician GIS - Geographic Information Specialist

FT/CL - Field Technician/Clerical

2018 Manhole Rehabilition - Quantity and Cost Summary City of Wood Dale, IL

	Recommended Rehabilitation	Unit	Quantity	Unit Rehab Cost	Total Rehab Cost			
	Replace Cover	each	73	\$300	\$21,900			
L	Replace Frame and Cover	each	1	\$2,500	\$2,500			
atio	Seal and Adjust Manhole Frame	each	66	\$2,100	\$138,600			
iii iii	Internal Chimney Seal	each	20	\$800	\$16,000			
hal	Grout Manhole Joint	each joint	20	\$600	\$12,000			
Manhole Rehabilitation	Curtain Grout bottom 18"	each	4	\$500	\$2,000			
힏	Repair Bench & Trough	each	17	\$1,000	\$17,000			
lan	Replace Bench & Trough	each	10	\$2,200	\$22,000			
	Manhole Sealing Cementitious	vert ft	260	\$250	\$65,000			
				Subtotal:	\$297,000			
			\$29,700					
	RECOMMENDED REHABILITATION TOTAL:							



August 14, 2015

Mr. Matthew R. York Director of Public Works City of Wood Dale 720 North Central Avenue Wood Dale, Illinois 60191

SUBJECT:

CITY OF WOOD DALE - AREA 2 TELEVISING REVIEW AND REHABILITATION PLAN FOR

AREAS 2 AND 3 - SUMMARY LETTER AND RECOMMENDATIONS

Dear Mr. York:

RJN Group, Inc. (RJN) is pleased to submit this summary of main line sewer recommendations resulting from the televising inspections completed within Area 2 compiled with the previous main line sewer televising and manhole recommendations within Area 3.

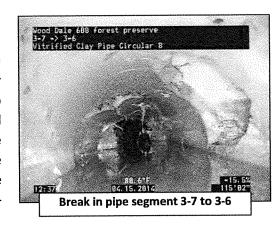
PROJECT BACKGROUND

The City of Wood Dale (City) has begun a program of inspection, analysis, and rehabilitation in Areas 1, 2 and 3. Mainline sewer rehabilitation in Area 1 and manhole rehabilitation in Areas 1 and 2 have been completed. RJN was tasked with reviewing the televising records for Area 2 and developing a rehabilitation plan for Areas 2 and 3.

TELEVISING REVIEW

FIELD DATA COLLECTION

In-house inspections of sanitary sewer mains within Area 2 were performed by the City between March and June 2014. One hundred thirty four (134) closed-circuit television (CCTV) video files of 113 sewer segments totaling approximately 23,000 linear feet were provided to RJN Group staff, who performed review, documentation, and recommended rehabilitation methods. Twelve (12) segments were incomplete or missing footage for a substantial length of the pipe. Fifteen (15) segments were missing footage for the entire length. These segments will need to be cleaned and retelevised to determine the rehabilitation work needed.





Page 2 Mr. Matthew R. York August 14, 2015

Televising the entire sanitary sewer system provides the following benefits:

- Evaluation of condition of the sewer, including determination of whether rehabilitation is required and how urgently the repair is needed.
- Identification of sanitary connections, whether they are active or plugged, and the condition of break-in connections, including broken pipe and visible inflow and infiltration (I/I).
- Identification of defects that are cost-effective to repair.

CCTV INSPECTION RESULTS - AREA 2

Closed-circuit television inspection identified several sewer segments containing fractures and breaks that will need rehabilitation. In general, the segments requiring rehabilitation work were made of vitrified clay pipe (VCP). There were three (3) sewer segments that may require a point repair before lining. The remaining defects appear to be good candidates for cured-in-place-pipe (CIPP) lining rehabilitation. Sewer segments with severe structural defects or significant I/I were categorized as high priority. Sewer segments with less severe structural defects and I/I sources were categorized as medium or low priority, depending on condition of the segment. Segments with little or no structural deficiencies were not recommended for CIPP lining. Segments that have been recommended for CIPP with high priority should be rehabilitated before the conditions worsen and point repairs become necessary. Sewer lining is an effective way to rehabilitate a mainline sewer and protect it from structural failure. Table 1 summarizes the findings from CCTV review of Area 2.

TABLE 1
MAINLINE SEWER PRIORITY FOR REHABILITATION – AREA 2

Pipe Diameter	Point Repairs	High Priority	Medium Priority	Low Priority	No Action Required PVC or Lined.	Re-Televise	Televise	Total
(in)	(each)	(total ft)	(total ft)	(total ft)	(total ft)	(total ft)	(total ft)	(ft)
8 inch	4	3,508	6,404	7,211	1,898	1,531	1,588	22,140
10 inch	0	302	931	724	1,064	1,155	605	4,781
12 inch	0	0	0	0	0	62	0	62
Total:	4	3,810	7,335	7,935	2,962	2,748	2,193	26,983



Page 3 Mr. Matthew R. York August 14, 2015

CCTV INSPECTION RESULTS - AREA 3

Television review of the mainline sewers in Area 3 was completed by RJN Group in 2013. Approximately 27,100 linear feet of public sector sewer main was reviewed from Area 3. Seven (7) sewer segments were abandoned during televising due to blockages in the line or because the sewer was already lined with CIPP liner. Four (4) of these segments will require re-televising.

No point repair recommendations were made for the segments in Area 3. However, there were numerous structural deficiencies identified in the mainline sewers. The structural defects that have been identified appear to be good candidates for lining with CIPP.

Three (3) segments (5-16 to 5-1, 2-37 to 2-33, and 2-2 to 2-3) were not classified for a lining priority because the CCTV survey was abandoned and there was not enough footage to make a recommendation. These sewer segments contained severe roots or blockages that will need removal and cleaning so the lines can be re-televised. CCTV for 1-8 to 1-9 was blurry and also needs to be re-televised. Table 2 summarizes the findings from CCTV review of Area 3.

TABLE 2
MAINLINE SEWER PRIORITY FOR REHABILITATION – AREA 3

Pipe Diameter	High Priority	rity Priority Priority PVC or Lined.		Re-Televise	Total	
(in)	(total ft)	(total ft)	(total ft)	(total ft)	(total ft)	(ft)
8 inch	5,005	4,709	9,411	537	737	20,399
10 inch	0	711	1,078	0	0	1,789
12 inch	0	0	914	3,241	0	4,155
15 inch	0	252	281	71	155	759
Total:	5,005	5,672	11,684	3,849	892	27,102

MANHOLE INSPECTION

MANHOLE INSPECTION RESULTS - AREA 3

Manhole inspection for Area 3 was completed by RJN Group in 2013. Manhole inspection is a method of visually checking the structure condition for indications of I/I. Surface manhole inspections involve assessing all the parts of the structure that are visible from the surface, as shown in Figure 1.



Page 4 Mr. Matthew R. York August 14, 2015

Location and inspection of all manholes in study areas included the following:

- Location and identification number
- Pipe connectivity to connecting structures
- Potential for ponding or sheeting on manhole cover
- Cover type, fit, description, distance above or below grade, evidence of inflow
- · Frame adjustment, seal, evidence of inflow
- Corbel construction, condition, evidence of inflow
- Wall construction, condition, evidence of infiltration
- Bench/trough construction, condition, deposition, evidence of infiltration
- Pipe Seal construction, condition, and evidence of infiltration
- Surcharging or evidence of surcharging
- Indication of groundwater level

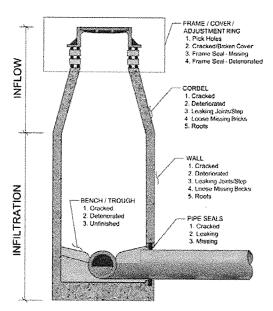


FIGURE 1: MANHOLE DIAGRAM WITH RELATED DEFECTS

Surface manhole inspections were performed for 118 manholes. Table 3 summarizes the necessary repairs to various manholes within Area 3. This table also provides a cost estimate for the recommended repairs. Appendix C contains a detailed list of rehabilitation recommendations for each manhole.

TABLE 3
MANHOLE REHABILITATION AND COSTS – AREA 3

	Recommended Rehabilitation	Unit	Quantity	Unit Rehab Cost	Total Rehab Cost
	Replace Cover	each	73	\$300	\$21,900
Manhole Rehabilitation	Replace Frame and Cover	each	1	\$1,500	\$1,500
	Seal and Adjust Manhole Frame	each	66	\$1,100	\$72,600
	Internal Chimney Seal	each	20	\$400	\$8,000
eha	Grout Manhole Joint	each	20	\$550	\$11,000
e EX	Curtain Grout bottom 18"	each	4	\$650	\$2,600
p	Repair Bench & Trough	each	17	\$800	\$13,600
Mar	Replace Bench & Trough	each	10	\$1,400	\$14,000
	Manhole Sealing Cementitious	vert ft	260	\$150	\$39,000
	Secretaria de la contrata de la composição			Subtotal:	\$184,200
			109	6 Contingency	\$18,420
	RECO	MMENDED	\$202,620		



Page 5 Mr. Matthew R. York August 14, 2015

RECOMMENDATIONS

MAINLINF SEWER REHABILITATION FOR AREAS 2 AND 3

It is recommended that the City complete sewer rehabilitation for high priority sewers with a CIPP lining and point repair program. The City should also have CCTV inspection incorporated into the lining and point repair program for any segments that still require inspection. Due to the large quantity of high priority mainline sewer repairs that are needed, the City will not be able to complete all of the high priority repairs within its \$300,000 budget. The cost for high priority rehabilitation in Area 2 is estimated at \$229,510 and the cost for high priority rehabilitation in Area 3 is estimated \$251,745.

It is recommended that the point repairs and lining be completed in Area 2 first, as point repairs are the highest priority and Area 3 does not contain any sewers in need of a point repair. In addition to completing Area 2, the City should try to complete as much rehabilitation work in Area 3 as budget allows, by incorporating an alternate in the CIPP Bid for additional lining. Tables 4 and 5 show the cost estimates for Area 2 and Area 3, respectively. Maps showing the mainline sewer rehabilitation recommendations are given in Appendix A. A detailed list of sewer defects and rehabilitation recommendations from the sewer televising results is presented in Appendix B.

TABLE 4
HIGH PRIORITY - MAINLINE REPAIRS – AREA 2

	Description	Unit	Quantity	Unit Rehab Cost	Total Rehab Cost
	Pre-Construction Cleaning & Televising	LF	3,250	\$3.50	\$11,375
	Pre-Construction Heavy Cleaning	LF	600	\$5.00	\$3,000
<u>e</u>	Cured-In-Place Sewer Line (8" diameter)	LF	3,525	\$32.00	\$112,800
Mainline	Cured-In-Place Sewer Line (10" diameter)	LF	325	\$35.00	\$11,375
ž	Internal Service Reinstatement	EA	80	\$150.00	\$12,000
ĮĘ,	Protruding Tap Removal	EA	2	\$400.00	\$800
Priority	Point Repair	EA	3	\$10,000.00	\$30,000
Fig	Emergency Point Repair (up to 10' depth, < 5' in length)	EA	1	\$10,000.00	\$10,000
	Additional Televising to Complete Area 2	LF	4,940	\$3.50	\$17,290
1 -				Subtotal:	\$208,640
			10	\$20,870	
		REHABILIT	\$229,510		



Page 6 Mr. Matthew R. York August 14, 2015

TABLE 5
HIGH PRIORITY - MAINLINE REPAIRS – AREA 3

	Description	Unit	Quantity	Unit Rehab Cost	Total Rehab Cost
	Pre-Construction Cleaning & Televising	LF	5,010	\$3.50	\$17,535.00
ø	Pre-Construction Heavy Cleaning	LF	0	\$5.00	\$0.00
틆	Cured-In-Place Sewer Line (8" diameter)	LF	5,010	\$32.00	\$160,320.00
Mainline	Cured-In-Place Sewer Line (10" diameter)	LF	0	\$35.00	\$0.00
Andrew Color	Internal Service Reinstatement	EA	167	\$150.00	\$25,050.00
<u>i</u>	Protruding Tap Removal	EA	7	\$400.00	\$2,800.00
High Priority	Emergency Point Repair (up to 10' depth, < 5' in length)	EA	2	\$10,000.00	\$20,000.00
	Additional Televising to Complete Area 3	LF	900	\$3.50	\$3,150.00
				Subtotal:	\$228,855.00
	PECONAN	ENIDED		Contingency	\$22,890.00 \$251,745.00

Closed-circuit television video review identified several sewer segments that were prioritized as medium and low priority for CIPP lining as well. It is recommended that the City wait until all high priority lining is completed City-wide, then re-visit the medium and low priority sewers for lining. Tables 6 and 7 show the cost estimates for Area 2 and Area 3 - medium and low priority lining, respectively.

TABLE 6
MEDIUM AND LOW PRIORITY - MAINLINE REPAIRS – AREA 2

				Priority	: Medium	Priority: Low		
	Description	Unit	Unit Rehab Cost	Quantity	Total Rehab Cost	Quantity	Total Rehab Cost	
15	Pre-Construction Cleaning & Televising	LF	\$3.50	7,225	\$25,288	7,950	\$27,825	
F	Pre-Construction Heavy Cleaning	LF	\$5.00	0	\$0	0	\$0	
Priority	Cured-In-Place Sewer Line (8" diameter)	LF	\$32.00	6,425	\$205,600	7,225	\$231,200	
	Cured-In-Place Sewer Line (10" diameter)	LF	\$35.00	800	\$28,000	725	\$25,375	
& Low	Internal Service Reinstatement	EA	\$150.00	115	\$17,250	95	\$14,250	
	Protruding Tap Removal	EA	\$400.00	2	\$800	0	\$0	
Medium	Emergency Point Repair (up to 10' depth, < 5' in length)	EA	\$10,000.00	0	\$0	0	\$0	
		i kaliji i		Subtotal:	\$276,938	Subtotal:	\$298,650	
				6 Contingency	 Substitute of the product of the control 	10% Contingency	\$29,865	
		11.1		TOTAL (MED):	\$304,631	TOTAL (LOW):	\$328,515	



Page 7 Mr. Matthew R. York August 14, 2015

TABLE 7
MEDIUM AND LOW PRIORITY - MAINLINE REPAIRS - AREA 3

	and the second s		step out of the service of the	Priority	: Medium	Priority: Low		
	Description	Unit	Unit Rehab Cost	Quantity	Total Rehab Cost	Quantity	Total Rehab Cost	
	Pre-Construction Cleaning & Televising	LF	\$3.50	6,361	\$22,264	11,000	\$38,500	
	Pre-Construction Heavy Cleaning	LF	\$5.00	0	\$0	0	\$0	
Priority	Cured-In-Place Sewer Line (8" diameter)	LF	\$32.00	5,398	\$172,736	8,725	\$279,200	
[윤	Cured-In-Place Sewer Line (10" diameter)	LF	\$35.00	711	\$24,885	1,078	\$37,730	
	Cured-In-Place Sewer Line (12" diameter)	LF	\$40.00	0	\$0	914	\$36,560	
Low	Cured-In-Place Sewer Line (15" diameter)	LF	\$50.00	252	\$12,600	281	\$14,050	
∞ _	Internal Service Reinstatement	EA	\$150.00	212	\$31,800	240	\$36,000	
Ι <u>Ξ</u>	Protruding Tap Removal	EA	\$400.00	2	\$800	0	\$0	
Medium	Emergency Point Repair (up to 10' depth, <5' in length)	EA	\$10,000.00	0	\$0	0	\$0	
				Subtotal:	\$265,085	Subtotal:	\$442,040	
			10%	Contingency	\$26,510	10% Contingency	\$44,210	
			TO.	OTAL (MED):	\$291,595	TOTAL (LOW):	\$486,250	

RECOMMENDED 3-YEAR PROGRAM

Based on the annual budget range of \$250,000 to \$300,000 for system rehabilitation in the form of point repairs, cured-in-place lining, and manhole repairs, RJN recommends the following schedule in order to complete the work:

- Fall 2015: Begin CIPP rehabilitation of high priority locations within Area 2. In three (3) locations, a point repair may be necessary prior to lining the particular sewer segment. Occasionally a lining contractor can line through a hole or defect in a pipe that may be considered a point repair. If these locations are determined to not need repair by the contractor, those monies could be used for lining additional segments. Pricing for emergency point repairs should also be included in order to prevent the hassle of securing a price once the contract has been awarded. Televising of any incomplete or missing segments within Area 2 should also be completed.
- 2016: Complete CIPP of high priority areas within Area 3.
- 2017: Perform manhole rehabilitation within Area 3. Complete SSES in Area 4, including smoke testing, manhole inspection, dye flooding, and sewer televising.



Page 8 Mr. Matthew R. York August 14, 2015

In tandem with the lining and manhole rehabilitation work from 2015-2017, development of the Area 4 CIPP locations and manhole improvements should be performed in anticipation for 2018 completion.

It has been a pleasure working with the City of Wood Dale on this project. We look forward to continuing to support the City with collection system solutions. Please contact us if you have any questions or require further clarification.

Sincerely yours,

RJN Group, Inc.

John M. Welch, PE, CFM Senior Project Manager

ENCLOSURES

Catherine Buckley, El Staff Engineer

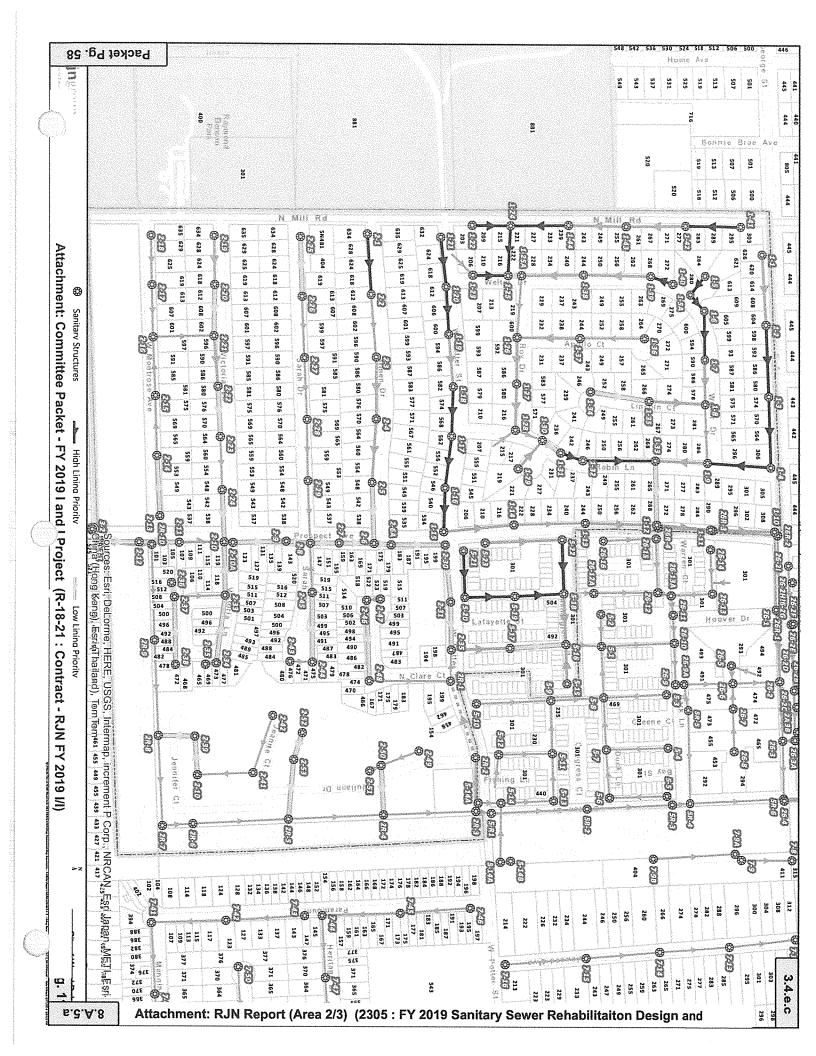
Catherine Buckley

APPENDIX A

EXHIBITS – AREAS 2 AND 3 LINING AND POINT REPAIRS

Attachment: Committee Packet - FY 2019 I and I Project (R-18-21: Contract - RJN FY 2019 III)





APPENDIX B RECOMMENDATION TABLES – AREAS 2 AND 3

City of Wood Dale, IL Mainline Rehabilitation Recommendations Area 2

Upstream MH	Downstream MH	Diameter	Material	GIS Length	Recommendation/Lining Priority	Comments
11-32	11-31	8	VCP	246	HEA	Capped service @ 220'
3-3	3-2	8	VCP	171	High	
3-7	3-6	8	VCP	200	High	PR: 8' in length; includes 2 active services
3-9 3-12	3-10 3-11	<u>8</u>	VCP VCP	273 318	Best Nels P	PR: 4' in length; try to line through
3-13	3-12	8	VCP	303	Nets P	R: 5' in length; includes 1 capped, 2 active service
3-14	3-16	8	VCP	318	High	
3-21	3-22	8	VCP	276	HZP	Extensive roots; incompl video
3-23	3-22	8	VCP	306	High	Extensive roots, meompi rices
3-24	3-23	8	VCP	308	Heh	
6-1	6-2	10	VCP	302	High	Extensive roots; incompl video
11-10	11-11	8	Trans	309	High	
11-21 6A-6	11-20 6A-7	<u>8</u>	Truss VCP	262	High	**************************************
11-31	11-27A	8	Truss	218 266	High Medium	
11-35	11-34	8	Truss	108	Medium	·
11-44	11-43	10	Truss	360	Medium	
3-6	3-5	8	VCP	235	Medium	
3-8	3-7	8	VCP	275	Medium	
3-11	3-6	10	VCP	312	Medium	
3-18	3-17	8	VCP	273	Medium	
3-19	3-18	8	VCP	273	Medium	
3-22 11-3	3-17 11-4	10	VCP	259	Medium	
11-3	11-4	<u>8</u> 8	VCP VCP	314 334	Medium	
11-7	11-8	8	VCP	330	Medium Medium	
11-8	11-9	8	VCP	219	Medium Medium	
11-11	11-12	8	VCP	178	Medium	
11-12	11-16	8	VCP	280	Medium	
11-13	11-15	8	VCP	263	Medium	
11-14	11-15	8	VCP	153	Medium	
11-15	11-12	8	VCP	188	Medium	
11-16 11-17	11-17	8	VCP	180	Medium	
11-17	11-19 11-24	8	VCP	400 231	Medium	
11-26	11-27	8	Truss Truss	112	Medium Medium	Ugayar alonging
14-78	14-76	8	VCP	304	Medium	Heavy cleaning
30-17	30-16	8	VCP	328	Medium	
30-18	30-17	8	VCP	325	Medium	
30-19	30-18	8	VCP	312	Medium	
34-10	34-9	8	PVC	150	Medium	
34-6	34-4		PVC	258	Medium	
3-8A 11-34	3-8 11-33	8	PVC Truss	115	Medium	
11-37	11-36	10	Truss	247 332	Low Low	
3-1	2-12	10	VCP	161	Low	
3-5	3-4	8	VCP	228	Low	
11-5	11-6	8	VCP	329	Low	
11-9	11-10	8	VCP	120	Low	***************************************
11-18	11-19	8	Truss	98	Low	
11-22	11-26	8	VCP	166	Low	
11-24	11-26	8	Truss	257	Low	
11-28 11-29	11-29 11-30	<u>8</u> 8	Truss VCP	228	Low	
11-30	11-30	8	Truss	163	Low Low	
11-18A	11-18	8	Truss	60	Low	
11-24E	11-42D	8	PVC	85	Low	
11-4A	11-4	8	Truss	73	Low	
14-77	11-40	8	PVC	318	Low	
14-91	14-78	8	PVC	202	Low	
14-91A	14-91	8	PVC	167	Low	
30-1 30-10	11-18A 30-11	8	Truss	125	Low	
30-10	30-11	8	Truss Truss	120 200	Low Low	
30-11	30-9	8	PVC	76	Low	
30-14	30-13	8	Truss	224	Low	
30-15	30-14	8	Truss	49	Low	
30-2	30-1	8	Truss	251	Low	
30-3	30-4	8	VCP	203	Low	
30-4	30-5	8	Truss	110	Low	
30-5	30-6	8	Truss	402	Low	
30-6	30-2	8	Truss	109	Low	· · · · · · · · · · · · · · · · · · ·
30-7 30-9	30-6 30-8	8	Truss	102	Low	
3-20E	30-8 3-20D	8	Truss PVC	147 340	Low Low	
34-1	34-2	8	PVC	240	Low	
34-2	11-21	8	PVC	177	Low	
	34-2	8	PVC	185	Low	

City of Wood Dale, IL

Mainline Rehabilitation Recommendations Area 2

Upstream MH	Downstream MH	Diameter	Material	GIS Length	Recommendation/Lining Priority	Comments
34-4	34-3	8	PVC	207	Low	
34-4	34-5	8	PVC	303	Low	
34-7	34-6	8	PVC	213	Low	
34-8	34-7	8	PVC	155	Low	
34-9	34-7	8	PVC	111	Low	
6A-4	6A-3	10	Lined	231	Low	
6A-7	6A-4	8	VCP	182	Low	6A-4 is a drop manhole
11-36	11-35	10	Truss	78	None	
11-40	11-39	8	PVC	130	None	
11-41	11-39	10	Truss	287	None	
11-42	11-41	10	Truss	289	None	
11-24F	11-24E	8	PVC	90	None	
11-24G	11-24F	8	PVC	148	None	
11-42A	11-42	10	Truss	257	None	
11-42C	11-42D	8	Truss	358	None	
14-74	14-75	8	PVC	271	None	
14-75	14-76	8	PVC	215	None	
3-20A	3-20	8	PVC	111	None	
3-20B	3-20A	8	PVC	150	None	
3-20C	3-208	8	PVC	80	None	
3-20D	3-20C	8	PVC	345	None	
6A-3	6A-8	10	Lined	153	None	
11-38	11-37	10	Truss	337	Incomplete	
11-39	11-38	10	Truss	322	Incomplete	
3-2	3-1	12	VCP	62	Incomplete	
3-15	3-11	10	VCP	266	Incomplete	
3-15	3-17	8	VCP	313	Incomplete	
3-20	3-21	8	VCP	279	Incomplete	
11-4	11-5	8	VCP	98	Incomplete	
11-20	11-26	8	Truss	308	Incomplete	
14-76	14-77	8	PVC	159	Incomplete	***************************************
30-14A	30-14	8	Truss	236	Incomplete	
30-144	30-14	8	VCP	138	Incomplete	
6A-5	6A-4	10	PVC	230	Incomplete	
11-23	11-16	8	Asbestos	163	No CCTV Received - Televise	***************************************
11-23	11-10	8	Asbestos	252	No CCTV Received - Televise	
11-33 11-42B	11-42A	8	PVC	192	No CCTV Received - Televise	
11-428	11-42A	10	Truss Pipe	26	No CCTV Received - Televise	
11-43 11-4B	11-42A 11-4A	8	VCP	193	No CCTV Received - Televise	
3-10	3-11	8	VCP	273	No CCTV Received - Televise	
3-10 3-14A	3-11	8	PVC	13	No CCTV Received - Televise	
3-14A 3-14B	3-14A	8	PVC	91	No CCTV Received - Televise	
3-14B 3-14C	3-14A 3-14B	8	PVC	117	No CCTV Received - Televise	
3-14C 3-17	3-148	10	VCP	52	No CCTV Received - Televise	
3-17	3-15	10	VCP	222	No CCTV Received - Televise	
3-4 3-88	3-3 3-8A	8	PVC	113	No CCTV Received - Televise	
3-88 30-13	30-12	8	Truss Pipe	76	No CCTV Received - Televise	
30-13	30-12	8	Truss Pipe	105	No CCTV Received - Televise	
6-2	6-3	10	VCP	305	No CCTV Received - Televise	
0-4	1 6-3	1 10	I VCF	303	1 NO GOLF RECEIVED - TELEFISE	

City of Wood Dale, IL

Mainline Rehabilitation Recommendations

Area 3

	La respectation and		T	Area 3	
Upstream MH	Downstream MH	Diameter	Material	GIS Length	Recommendation/Lining Priority
1-2	1-3	8	VCP	306	High
1-3	1-4	8	VCP	303	Histo
1-5	1-5A	8	VCP	110	High
1-5A	1-6	8	VCP	101	Biza -
1-6	1-7	8	VCP	210	Welt
1-15	1-16	8	VCP	189	Nigh
1-17	1-16	8	VCP	223	Heb
1-18	1-17	8	VCP	214	High
1-20	1-21	8	VCP	214	Weh
1-20	1-19	8	VCP	206	Mais
1-22	1-24	8	VCP	165	Hish
1-23	1-25	8	VCP	151	enge Hele
1-24	1-25	8	VCP	215	- Greek High
1-40	1-39	8	VCP	103	
1-41	1-42	8		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	High
1-41	1-42	8	VCP	243	High
5-18		<u>8</u> 8	VCP	250	- Miles
······	5-19		VCP	212	<u> Algh</u>
5-20	5-21	8	VCP	201	High
5-20	5-19	8	VCP	213	Kigè
5-22	5-18	8	VCP	232	High
1-31	1-32	8	VCP	104	High
1-32	1-33	8	VCP	310	
1-4	1-9	8	VCP	268	
2-1	2-2	8	VCP	262	
1-1	1-2	8	VCP	302	Medium
1-11	1-10	10	VCP	273	Medium
1-12	1-11	10	VCP	244	Medium
1-13	1-12	8	VCP	307	Medium
1-26	1-27	8	VCP	199	Medium
1-27	1-28	8	VCP	200	Medium
1-30	1-29	8	VCP	163	Medium
1-35	1-8	8	VCP	255	Medium
1-38	1-25A	8	VCP	266	Medium
1-39	1-38	8	VCP	289	Medium
1-42	1-43	8	VCP	258	Medium
1-43	1-44	8	VCP	247	Medium
5-15	5-16	8	VCP	170	Medium
5-18	5-16	8	VCP	218	Medium
5-22	5-23	8	VCP	330	Medium
1-15	1-14	8	VCP	301	Medium
1-9	1-33	8	VCP	237	Medium
2-11	2-10	10	VCP	194	Medium
2-19	2-20	8	VCP	212	Medium
2-21	2-22	8	VCP	218	Medium
2-3	2-4	8	VCP	264	Medium
2-35	5-17	15	VCP	252	Medium
2-4	2-5	8	VCP	273	Medium
1-7	1-8	8	VCP	193	
1-19	1-18	8	VCP		Medium
1-19	1-26	8		226	Medium
			VCP	270	Medium
1-13	1-14	8	VCP	304	Low
1-34	1-35	8	VCP	255	Low
1-25	1-25A	8	VCP	62	Low
1-25A	1-26	8	VCP	267	Low

City of Wood Dale, IL Mainline Rehabilitation Recommendations Area 3

Upstream MH	Downstream MH	Diameter	Material	GIS Length	Recommendation/Lining Priority
1-33	1-12	10	VCP	276	Low
1-36	1-37	8	VCP	276	Low
2-10	2-10A	10	VCP	41	Low
2-10	2-39	8	VCP	168	Low
2-10A	2-9	10	VCP	227	Low
2-12	2-11	10	VCP	172	Low
2-13	2-14	8	VCP	258	Low
2-14	2-15	8	VCP	257	Low
2-15	2-16	8	VCP	251	Low
2-16	2-21	8	VCP	260	Low
2-17	2-16	8	VCP	227	Low
2-17	2-18		VCP	5	Low
2-20	2-21	8	VCP	220	Low
2-22	2-23	8	VCP	217	Low
2-23	2-24	8	VCP	228	Low
2-24	2-10	8	VCP	225	Low
2-25	2-26	8	VCP	257	Low
2-26	2-27	8	VCP	263	Low
2-27	2-28	8	VCP	266	Low
2-28	2-29	8	VCP	262	Low
2-29	2-8	8	VCP	268	Low
2-30	2-31	12	VCP	246	Low
2-31	2-35	12	VCP	207	Low
2-33	2-10	8	VCP	230	Low
2-34	2-33	8	VCP	291	Low
2-35	2-34	8	VCP	51	Low
2-36	2-37	8	VCP	65	Low
2-38	2-37	8	VCP	290	Low
2-39	2R-8	8	VCP	158	Low
2-41	2-10	8	VCP	238	Low
2-42	2-41	8	VCP	259	Low
2-43	2-44	8	VCP	99	Low
2-44	2-45	8	VCP	296	Low
2-45	2-8	8	VCP	213	Low
2-46	2-48	8	PVC	343	Low
2-49	2-50	8	VCP	174	Low
2-5	2-6	8	VCP	262	Low
2-50	2R-4	8	VCP	213	Low
2-51	2-50	8	VCP	58	Low
2-52	2-53	8	VCP	123	Low
2-53	2R-5	8	VCP	257	Low
2-6	2-6A	12	VCP	77	Low
2-6A	2-30	12	VCP	232	Low
2-7	2-6	12	VCP	152	Low
2-8	2-7	10	VCP	126	Low
2-9	2-8	10	VCP	108	Low
3-1	2-12	10	VCP	169	Low
5-17	5-16	15	VCP	240	Low
1-28	1-30	8	Lined	127	No Lining Needed
2-47	2-46	8	PVC	63	No Lining Needed
2-48	2R-1	8	PVC	347	No Lining Needed
2R-1	2-35	12	PVC	136	No Lining Needed
2R-10	2R-9	12	PVC	407	No Lining Needed

City of Wood Dale, IL Mainline Rehabilitation Recommendations Area 3

Upstream MH	Downstream MH	Diameter	Material	GIS Length	Recommendation/Lining Priority
2R-2	2R-1	12	PVC	342	No Lining Needed
2R-2	2R-3	12	PVC	231	No Lining Needed
2R-3	5R-1	15	PVC	71	No Lining Needed
2R-4	2R-3	12	PVC	393	No Lining Needed
2R-5	2R-4	12	PVC	405	No Lining Needed
2R-6	2R-5	12	PVC	404	No Lining Needed
2R-7	2R-6	12	PVC	133	No Lining Needed
2R-8	2R-7	12	PVC	384	No Lining Needed
2R-9	2R-8	12	PVC	406	No Lining Needed
5-16	5-1	15	VCP	155	Clean and Re-Televise
1-8	1-9	8	VCP	252	Re-televise
2-2	2-3	8	VCP	269	Root Cut & Re-Televise
2-37	2-33	8	VCP	216	Root Cut & Re-Televise

APPENDIX C MANHOLE REHABILITATION RECOMMENDATION TABLES – AREA 3

City of Wood Dale Year 3 Priority Area Manhole Rehabilitation Schedule

	Manhol	Manhole Information							Recommendations	ations			
WHW	Address	Surface	MH Location	Manhole	Replace	Replace Frame	Seal and Adjust	Internal	Grout Wall	Curtain Grout	Curtain Grout Bench and Trough	Replace Bench	Manhole Sealing
	CEST INDE	Description	Description	Depth	Cover	and Cover	Manhole Frame	Chimney Seal	Joint	bottom 18"	Repair	and Trough	Cementitious
1-1-1	626 George St	Precast / N/A	Paved	6.1	X			×			×		
1-1-10	308 Prospect Av	Precast / N/A	Paved	12.15				×					
1-1-11	290 Prospect Av	Precast / N/A	Paved	10.55	×			×					
1-1-12	272 Prospect Av	Precast / N/A	Non-Paved	6	×		×						
1-1-13	244 Prospect Av	Precast / N/A	Paved	7.54	×		×				×		
1-1-14	222 Prospect Av	Precast / N/A	Non-Paved	7	×		×						
1-1-15	534 Potter St	Precast / N/A	Non-Paved	6.35	×								
1-1-16	546 irmen Dr	Precast / N/A	Non-Paved	6.5	×		×				×		
1-1-17	562 Irmen Dr	None / N/A	Paved	5.5	×								
1-1-18	582 Potter St	Precast / N/A	Non-Paved	6.45	×		×						
1-1-19	600 Irmen Dr	Precast / N/A	Paved	7.18	×			×					
1-1-2	604 George St	Precast / N/A	Paved	6.72	×		×						
1-1-20	612 Potter St	Precast / N/A	Non-Paved	8	×		×						×
1-1-21	632 Potter St	Precast / N/A	Non-Paved	8.3	×							×	
1-1-22	203 Mill Rd	Precast / N/A	Paved	7	×		×						
1-1-23	210 Welter Dr	Precast / N/A	Non-Paved	8.3	×		×		2				
1-1-24	221 Mill Rd	Precast / N/A	Paved	9.25	×			×					
1-1-25	216 Welter Dr	Precast / N/A	Non-Paved	7.95	×		×						
1-1-25A	222 Welter Dr	Precast / N/A	Non-Paved	7.55	×		×						
1-1-26	600 Roy Dr	Precast / N/A	Paved	7.2	×		×						
1-1-27	ROY DR Roy Dr	Precast / N/A	Non-Paved	7.62	×		×						
1-1-28	216 Roy Dr	Precast / N/A	Non-Paved	6.5			×						
1-1-29	2199 Robin Ln	Precast / N/A	Non-Paved	7.4	×		×						×
1-1-3	574 George St	Precast / N/A	Paved	6,84	×			×			×		
1-1-30	236 Robin Ln	Precast / N/A	Non-Paved	7.68	×		~			×			
1-1-31	242 Robin Ln	Precast / N/A	Non-Paved	8,65			×		T		×		
1-1-32	246 Robin Ln	Precast / N/A	Non-Paved	8.8	×								
1-1-33	268 Robin Ln	Precast / N/A	Non-Paved	10.86	×								
1-1-34	246 Lincoln Ct	Precast / N/A	Non-Paved	98'9					1				
1-1-35	266 Lincoln Ct	Precast / N/A	Paved	8.46	×			×	H				
1-1-36	270 Apollo Ct	Precast / N/A	Non-Paved	5.7			×						×
1-1-37	244 Apollo Ct	Precast / N/A	Non-Paved	6.5			×						×
1-1-38	244 Welter Dr	Precast / N/A	Non-Paved	7,55	×						×		
1-1-4	306 Robin Ln	Precast / N/A	Paved	6.1	×		×						×
1-1-40	280 Welter Dr	Precast / N/A	Non-Paved	5.7	×						×		
1-1-41	303 Mill Rd	Poured / N/A	Paved	6.64	×							×	
1-1-42	277 Mill Rd	Precast / N/A	Paved	7	×		×						
1-1-43	261 Mill Rd	Precast / N/A	Paved	8.48	×						×		
1-1-44	239 Mill Rd	Precast / N/A	Paved	8.64	×		×		1		×		

Page 1 of 3

Attachment: Committee Packet - FY 2019 I and I Project (R-18-21: Contract - RJN FY 2019 III)

8.A.5.a

	8.	Α		5.	a
الم	_		-	7.	-
4					
충					
2					

City of Wood Dale Year 3 Priority Area Manhole Rehabilitation Schedule

Address Description <		Manhol	Manhole Information							Recommendations	ations			
CST MANUSE DE PROMETOR REAL NATION PARCE NATION PROMETOR PROMETOR PROMETOR PROMETOR PROMETOR PROMETOR PROMETOR PROMETOR PROMETOR NATION PROMETOR NATIO			Surface	MH Location	Manhole	Replace	Replace Frame	Seal and Adjust	Internal	Grout Wall	Curtain Grout	Bench and Trough	Replace Bench	Manhole Sealing
Exercised No. Exercised No	MH No.	Address	Description	Description	Depth	Š	and Cover	Manhole Frame	Chimney Seal	Joint	bottom 18"	Repair	and Trough	Cementitions
280 Weler Dr Preset VA Preset 286	1-1-5	621 Welter Dr	Precast / N/A	Paved	8.8	×								×
SGS Weler DP Precist VIA Non-Pased 9.6	1-1-5A	280 Welter Dr	Precast / N/A	Paved	9.8	×			×					
State Name Decease Name 18.4 X	1-1-6	605 Welter Dr	Precast / N/A	Paved	9.6	×			×					
STR Incholt C. Present NAM Non-Paved 9.52	1-1-7	590 Welter Dr	Precast / N/A	Non-Paved	10.4	×		×				×		
Sign Welter Dr. Precast VIAI Non-Paved 3.0.6	1-1-8	578 Lincoln Ct	Precast / N/A	Non-Paved	9.52	Х				2				
135 Prospect AM Precast VIAIA Non-Paved 8.4 X X X X X X X X X	1-1-9	286 Welter Dr	Precast / N/A	Non-Paved	10.6							×		
1139 Prospect AM	1-2-1	634 Irmen Dr	Precast / N/A	Non-Paved	8.4			×				×		
123 Frogetor An Precest / MA Paved 115.3 X X X X X X X X X	1-2-10	119 Prospect Av	Precast / N/A	Paved	12.3	X			×	2			×	
110 Progect An Precest / IAI	1-2-10A	123 Prospect Av	Precast / N/A	Paved	11.53			×						
101 Prospect A	1-2-11	107 Prospect Av	Precast / N/A	Paved	13.58	×		×						×
SST Montrose Av Precast / MA Paved 5.64 X X SSS Montrose Av Precast / MA Precast / MA Paved 7.68 X X SSS Montrose Av Precast / MA Precast / MA Paved 7.34 X X X SSS Montrose Av Precast / MA Precast / MA Precast / MA Non-Paved 8.3 X <td>1-2-12</td> <td>101 Prospect Av</td> <td>Precast / N/A</td> <td>Paved</td> <td>14.86</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>×</td>	1-2-12	101 Prospect Av	Precast / N/A	Paved	14.86									×
559 Montrose Av Precast / MA Paved 748 X 551 Montrose Av Precast / MA Paved 17.68 X X 651 Montrose Av Precast / MA Paved 17.60 X X X 651 Montrose Av Precast / MA Precast / MA Precast / MA Precast / MA Non-Paved 8.9 X X X X 652 Montrose Av Precast / MA Non-Paved 8.9 X <td< td=""><td>1-2-13</td><td>537 Montrose Av</td><td>Precast / N/A</td><td>Paved</td><td>5.64</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>×</td></td<>	1-2-13	537 Montrose Av	Precast / N/A	Paved	5.64									×
SSI Montrose Av Precast / N/A Paved 3.12 X 6.59 Montrose Av Precast / N/A Paved 3.12 X 6.53 Montrose Av Precast / N/A Paved 3.54 X X 6.53 Montrose Av Precast / N/A Non-Paved 8.9 X X X 6.53 Montrose Av Precast / N/A Non-Paved 8.7 X X X 6.53 Montrose Av Precast / N/A Non-Paved 8.7 X X X 6.53 Montrose Av Precast / N/A Non-Paved 8.7 X X X 6.53 Montrose Av Precast / N/A Non-Paved 9.2 X X X X 6.18 Victoria In Precast / N/A Non-Paved 9.28 X X X X 5.66 Victoria In Precast / N/A Non-Paved 8.65 X X X X 6.38 Sarah Dr Precast / N/A Non-Paved 8.5 X X X X <	1-2-14	559 Montrose Av	Precast / N/A	Paved	7.48	×			×			×		
597 Montrose Av Precast / N/A Paved 73.2 X 651 Montrose Av Precast / N/A Paved 73.4 X X 652 Montrose Av Precast / N/A Paved 73.4 X X 652 Montrose Av Precast / N/A Non-Paved 8.9 X X 652 Montrose Av Precast / N/A Non-Paved 8.74 X X 652 Montrose Line Average In / A Non-Paved 8.74 X X X 658 Victoria Lin Precast / N/A Non-Paved 9.28 X X X X 589 Victoria Lin Precast / N/A Non-Paved 9.34 X X X X 584 Victoria Lin Precast / N/A Non-Paved 9.34 X X X X 583 Sarah Dr Precast / N/A Non-Paved 8.34 X X X X 583 Sarah Dr Precast / N/A Non-Paved 8.31 X X X X	1-2-15	581 Montrose Av	Precast / N/A	Paved	7.68	×								×
653 Montrose Av Precast NAA Paved 756 X <t< td=""><td>1-2-16</td><td>597 Montrose Av</td><td>Precast / N/A</td><td>Paved</td><td>9.12</td><td>×</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>×</td></t<>	1-2-16	597 Montrose Av	Precast / N/A	Paved	9.12	×								×
635 Montrose Av Precast / MA Paved 734 X	1-2-17	619 Montrose Av	Precast / N/A	Paved	7.96	X								
632 Montrose Av Precast /N/A Non-Paved 8.9 X	1-2-18	635 Montrose Av	Precast / N/A	Paved	7.34	×			×					
612 Irmen Dr Precast / N/A Non-Paved 8 X X I X I X I X I X I X I X I X I X I X I X I X I X I X X I X <	1-2-19	632 Montrose Av	Precast / N/A	Non-Paved	8.9	Х		×				×		
618 Victoria Ln Precast / N/A Non-Paved 9 X X 1 X 1 602 Victoria Ln Precast / N/A Non-Paved 9 X X 1 X X 564 Victoria Ln Precast / N/A Non-Paved 11.22 X X 1 X X 6.28 Sarah Dr Precast / N/A Non-Paved 8.65 X X 1 X X 6.28 Sarah Dr Precast / N/A Non-Paved 8.65 X X X X X X 5.93 Sarah Dr Precast / N/A Non-Paved 8.7 X <td>1-2-2</td> <td>612 Irmen Dr</td> <td>Precast / N/A</td> <td>Non-Paved</td> <td>8</td> <td>×</td> <td></td> <td>×</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>×</td>	1-2-2	612 Irmen Dr	Precast / N/A	Non-Paved	8	×		×						×
602 Victoria Ln Precast / N/A Non-Paved 9 X X 1 Percast / N/A Non-Paved 9.28 X X 1 Percast / N/A Non-Paved 1.128 X X 1 Percast / N/A Non-Paved 1.128 X X 1 Percast / N/A Non-Paved 9.34 X X 1 X Percast / N/A Non-Paved 9.35 X	1-2-20	618 Victoria Ln	Precast / N/A	Non-Paved	8.74	×		×		1	×			
S80 Victoria Ln Precast / N/A Paved 9.28 X	1-2-21	602 Victoria Ln	Precast / N/A	Non-Paved	6	X		×						
564 Victoria Ln Precast /N/A Non-Paved 11.22 X X A 548 Victoria Dr Poured / N/A Non-Paved 8.65 X X X X 6628 Sarah Dr Precast / N/A Non-Paved 8.95 X X X X 559 Sarah Dr Precast / N/A Non-Paved 8.4 X X X X 559 Sarah Dr Precast / N/A Non-Paved 8.4 X X X X 559 Sarah Dr Precast / N/A Non-Paved 8.7 X X X X 559 Sarah Dr Precast / N/A Non-Paved 8.7 X X X X 559 Sarah Dr Precast / N/A Non-Paved 8.7 X X X X 193 Prospect Av Precast / N/A Non-Paved 8.24 X X X X 473 Victoria Dr Precast / N/A Non-Paved 8.7 X X X X <tr< td=""><td>1-2-22</td><td>580 Victoria Ln</td><td>Precast / N/A</td><td>Paved</td><td>9.28</td><td>×</td><td></td><td></td><td>×</td><td></td><td></td><td></td><td></td><td></td></tr<>	1-2-22	580 Victoria Ln	Precast / N/A	Paved	9.28	×			×					
548 Victoria Dr. Poured / N/A Non-Paved 8.65 X X A 638 Sarah Dr. Precast / N/A Non-Paved 8.65 X X 1 X 631 Sarah Dr. Precast / N/A Non-Paved 8.93 X X X X 591 Sarah Dr. Precast / N/A Non-Paved 8.4 X X X X 590 Irman Dr. Precast / N/A Non-Paved 8.7 X X X X 199 Prospect Av. Precast / N/A Non-Paved 8.31 X X X X X 118 N Jasoch Ir. Precast / N/A Non-Paved 8.21 X <td>1-2-23</td> <td>564 Victoria Ln</td> <td>Precast / N/A</td> <td>Non-Paved</td> <td>11.22</td> <td>X</td> <td></td> <td>×</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td>	1-2-23	564 Victoria Ln	Precast / N/A	Non-Paved	11.22	X		×		1				
628 Sarah Dr Precast / N/A Non-Paved 8.65 X X 1 A 613 Sarah Dr Precast / N/A Non-Paved 9.34 X X X X 591 Sarah Dr Precast / N/A Non-Paved 8.4 X X X X 553 Sarah Dr Precast / N/A Non-Paved 8.7 X X X X 553 Sarah Dr Precast / N/A Non-Paved 8.31 X X X X 199 Prospect Av Precast / N/A Non-Paved 8.21 X X X X 207 Lafayette St Precast / N/A Non-Paved 8.21 X X X X 445 Victoria Dr Precast / N/A Non-Paved 8.21 X X X X 450 Victoria Dr Precast / N/A Non-Paved 8.7 X X X X 5516 Victoria Dr Precast / N/A Non-Paved 8.7 X X X <t< td=""><td>1-2-24</td><td>548 Victoria Dr</td><td>Poured / N/A</td><td>Non-Paved</td><td>11.68</td><td>×</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>×</td></t<>	1-2-24	548 Victoria Dr	Poured / N/A	Non-Paved	11.68	×								×
613 Sarah Dr Precast / N/A Non-Paved 8.95 X X 1 X X 553 Sarah Dr Precast / N/A Non-Paved 8.4 X <td< td=""><td>1-2-25</td><td>628 Sarah Dr</td><td>Precast / N/A</td><td>Non-Paved</td><td>8.65</td><td>×</td><td></td><td>×</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	1-2-25	628 Sarah Dr	Precast / N/A	Non-Paved	8.65	×		×						
591 Sarah Dr Precast / N/A Non-Paved 8.95 X	1-2-26	613 Sarah Dr	Precast / N/A	Non-Paved	9.34	×		×		1				
569 Sarah Dr Precast / N/A Non-Paved 9 X <	1-2-27	591 Sarah Dr	Precast / N/A	Non-Paved	8.95	×		×		1		×		
553 Sarah Dr Precast / N/A Non-Paved 9 X A 590 Irmen Dr Precast / N/A Non-Paved 8.7 X X X X 199 Prospect Av Precast / N/A Paved 8.31 X X X X 207 Lafayette St Precast / N/A Non-Paved 8.44 X X X X 473 Victoria Dr Precast / N/A Non-Paved 8.21 X X X X 469 Victoria Dr Precast / N/A Non-Paved 8.7 X X X X 508 Victoria Dr Precast / N/A Non-Paved 8.7 X X X X 508 Victoria Dr Precast / N/A Non-Paved 9.7 X X X X 478 Victoria Dr Precast / N/A Non-Paved 8.6 X X X 465 Jennifer Ct Precast / N/A Paved 9.98 X X X X	1-2-28	569 Sarah Dr	Precast / N/A	Non-Paved	8.4	×		×				×		
590 Irmen Dr Precast / N/A Non-Paved 8.7 X X Annocess of the control of the	1-2-29	553 Sarah Dr	Precast / N/A	Non-Paved	6	×								×
199 Prospect Av Precast / N/A Paved Paved 8.31	1-2-3	590 Irmen Dr	Precast / N/A	Non-Paved	8.7	×		×						
207 Lafayette St Precast / N/A Non-Paved 10.95 X X A 118 N Jason Ln Precast / N/A Non-Paved 8.44 X X X X 473 Victoria Dr Precast / N/A Non-Paved 8.71 X X X X 516 Victoria Dr Precast / N/A Non-Paved 8.7 X X X 478 Victoria Dr Precast / N/A Non-Paved 8.7 X X X 478 Victoria Dr Precast / N/A Non-Paved 8.6 X X X 465 Jennifer Ct Precast / N/A Paved 9.98 X X X	1-2-30	199 Prospect Av	Precast / N/A	Paved	8.31	×		×						×
118 N Jason Ln Precast / N/A Non-Paved 8.44 Non-Paved 8.21 X A 73 Victoria Dr Precast / N/A Non-Paved 8.21 X	1-2-31	207 Lafayette St	Precast / N/A	Non-Paved	10.95	×		×						
473 Victoria Dr Precast / N/A Non-Paved 8.21 X	1-2-33	118 N Jason Ln	Precast / N/A	Non-Paved	8.44					1				
469 Victoria Dr Precast / N/A Non-Paved 7.95 X	1-2-34	473 Victoria Dr	Precast / N/A	Non-Paved	8.21			×						×
516 Victoria Dr Precast / N/A Non-Paved 8.7 X	1-2-35	469 Victoria Dr	Precast / N/A	Non-Paved	7.95			×					×	
508 Victoria Dr Precast / N/A Non-Paved 9.7 X X X X Annowable Annowable <th< td=""><td>1-2-36</td><td>516 Victoria Dr</td><td>Precast / N/A</td><td>Non-Paved</td><td>8.7</td><td></td><td></td><td>×</td><td></td><td>2</td><td></td><td></td><td>×</td><td></td></th<>	1-2-36	516 Victoria Dr	Precast / N/A	Non-Paved	8.7			×		2			×	
478 Victoria Dr Precast / N/A Paved 8.6 465 Jennifer Ct Precast / N/A Paved 9.98	1-2-37	508 Victoria Dr	Precast / N/A	Non-Paved	9.7			×						×
465 Jennifer Ct Precast / N/A Paved 9.98	1-2-38	478 Victoria Dr	Precast / N/A	Paved	8.6				×					
	1-2-39	465 Jennifer Ct	Precast / N/A	Paved	9.98				×					

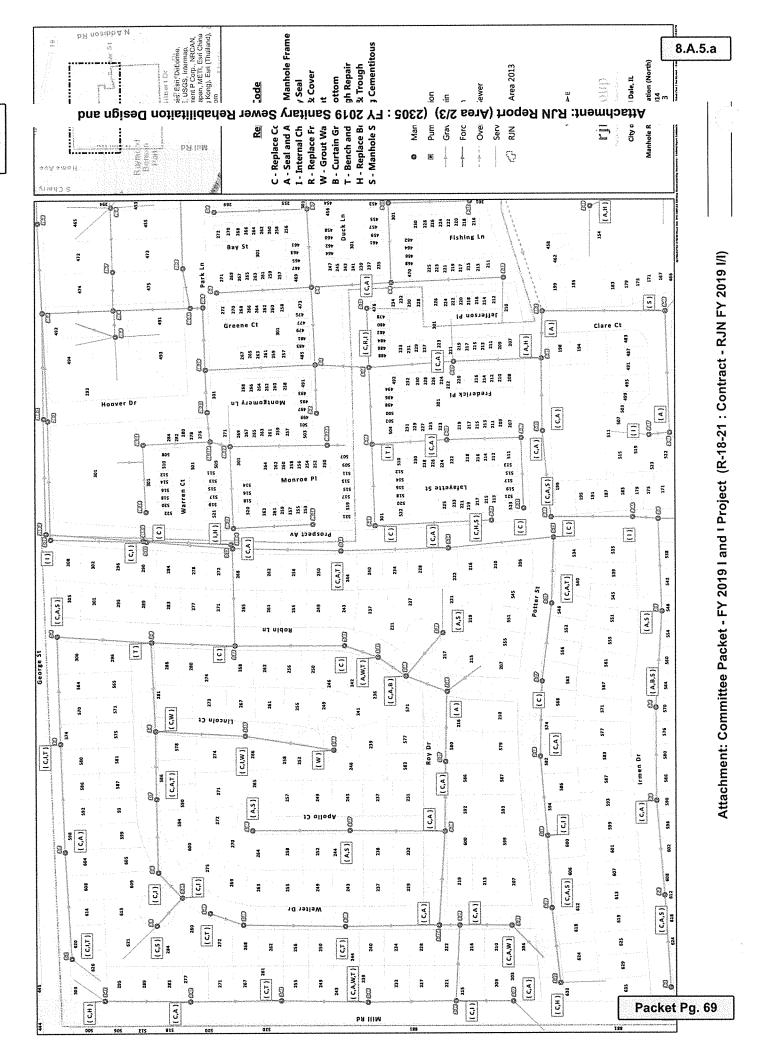
Page 2 of 3

Year 3 Priority Area Manhole Rehabilitation Schedule City of Wood Dale

										lations			
ON FIM	Addrage	Surface	MH Location	Manhole	Replace	Replace Frame	Seal and Adjust	Internal	Grout Wall	Curtain Grout	Grout Wall Curtain Grout Bench and Trough	Replace Bench	Manhole Sealing
ON LIM	Addiess	Description	Description	Depth	Cover	and Cover	Manhole Frame	Chimney Seal	Joint	bottom 18"	Repair	and Trough	Cementitions
1-2-4	570 Irmen Dr	Precast / N/A	Non-Paved	9.8	×		×			×			×
1-2-41	456 Jeanne Ct	Precast / N/A	Non-Paved	99'9			×	***************************************					
1-2-42	472 Jeanne Ct	Precast / N/A	Non-Paved	9			×						
1-2-43	476 Sarah Ct	Precast / N/A	Non-Paved	9.25			×		1				
1-2-44	475 Sarah Ct	Precast / N/A	Paved	9.43									×
1-2-46	518 Clare Ct	Precast / N/A	Paved	7.98			×						
1-2-47	523 Clare Ct	Precast / N/A	Paved	7.7				×					
1-2-48	474 Clare Ct	Precast / N/A	Non-Paved	9.5									×
1-2-49	186 Juliann Dr	Precast / N/A	Non-Paved	7.56			×					×	
1-2-5	548 Irmen Dr	Precast / N/A	Non-Paved	8.22			×						×
1-2-50	178 Juliann Dr	Precast / N/A	Non-Paved	8.8			×						
1-2-51	170 Juliann Dr	Precast / N/A	Non-Paved	8.38			×						
1-2-52	465 Jeanne Ct	Precast / N/A	Non-Paved	7.28			×					×	×
1-2-53	457 Jeanne Ct	Precast / N/A	Non-Paved	10.96			×					×	
1-2-6A	183 Prospect Av	Precast / N/A	Paved	8.83				×					
1-26R-3	290 Prospect Av	Precast / N/A	Paved	9.15	×								
1-26R-4	268 Prospect Av	Precast / N/A	Paved	7.4				×				×	
1-2-7	159 Prospect Av	Precast / N/A	Paved	9.11	×			×					
1-2-8	147 Prospect Av	Precast / N/A	Non-Paved	9.79	×		×						
1-2-9	143 Prospect Av	Precast / N/A	Paved	10.11	×		×						
1-2R-1	199 Clare Ct	Precast / N/A	Non-Paved	10.78			×						
1-2R-10	101 Prospect Av	Precast / N/A	Non-Paved	13.56									×
1-2R-2	215 FISHING LN	Precast / N/A	Paved	11.92	×			×					Marie Control of the
1-2R-3	216 STATION	Precast / N/A	Non-Paved	12.7			×						
1-2R-4	170-1 Juliann Dr	Precast / N/A	Non-Paved	18,04			×						×
1-2R-5	139-1 Juliann Dr	Precast / N/A	Non-Paved	16.12			×						×
1-2R-6	112 Juliann Dr	Precast / N/A	Non-Paved	14.66			×						
1-2R-7	APT Jennifer Ct	Precast / N/A	Non-Paved	13.6			×						
1-2R-8	APT Jennifer Ct	Precast / N/A	Paved	18.56			×						
1-2R-9	488 W Jason Ln	Precast / N/A	Non-Paved	13.94			×		1	×			×
1-5-15	478 WASHINGTON SQ	Precast / N/A	Non-Paved	8.6	×		×						
1-5-16	488 Frederick PI	Precast / N/A	Paved	13.4		X							
1-5-17	220 Frederick Pl	Precast / N/A	Non-Paved	14.1	×		×						
1-5-18	504 WASHINGTON	Precast / N/A	Paved	12							×		
1-5-19	223 Frederick Pl	Precast / N/A	Non-Paved	12.3	×		×						
1-5-20	511 Potter St	Precast / N/A	Non-Paved	10.1	×		×						
1-5-21	523 Potter St	Precast / N/A	Non-Paved	8.14	×								
1-5-22	240 Prospect Av	Precast / N/A	Non-Paved	8.7	×								
1-5-23	213 Prospect Av	Precast / N/A	Non-Payed	7.98	×							>	;

Page 3 of 3

8.A.5.a Packet P Attachment: Committee Packet - FY 2019 I and I Project (R-18-21: Contract - RJN FY 2019 III)



3.4 4.

