

CLERK'S CONTRACT and AGREEMENT COVER PAGE

Legistar File ID#: 2015-0685

Innoprise Contract #: C15-0120

Year: 2015-2019

Amount:

Department: Public Works - John Ingram/Doug Medland

Contract Type: Professional Engineering

Contractors Name: RJN Group, Inc.

Contract Description: Comprehensive Sanitary Sewer Evaluation
2015 \$30,000
2016 & 2017 \$50,000
2018 & 2019 TBD
C16-0048 (2016-0264) Addendum A Sanitary Flow Monitoring \$147,320
C17-0043 (2017-0145) Addendum B Strategic Flow Monitoring (I/I) \$82,300
C17-0116 (2017-0550) Addendum C Smoke Testing & Manhole Inspections
(\$129195)

MAYOR
Keith Pekau

VILLAGE CLERK
John C. Mehalek

14700 S. Ravinia Avenue
Orland Park, IL 60462
708.403.6100
OrlandPark.org



TRUSTEES

Kathleen M. Fenton
James V. Dodge
Patricia A. Gira
Carole Griffin Ruzich
Daniel T. Calandriello
Michael F. Carroll

October 30, 2017

Mr. Joseph Sullivan
RJN Group, Inc.
175 McDonald Avenue, Suite B
Joliet, Illinois 60431

RE: Addendum C dated September 21, 2017
Smoke Testing & Manhole Inspections (proposal dated May 15, 2017)

Dear Mr. Sullivan:

Enclosed is a copy of the addendum dated September 21, 2017 for the change to provide engineering services for the Smoke Testing & Manhole Inspection program. Please attach this to the original Comprehensive Sanitary Sewer Evaluation contract dated November 17, 2015.

If you have any questions, please call me at 708-403-6173.

Sincerely,



Denise Domalewski
Purchasing & Contract Administrator

Encl:

cc: Bill Cunningham
Doug Medland

MAYOR
Keith Pekau

VILLAGE CLERK
John C. Mehalek

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TRUSTEES

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April 26, 2017

Mr. Joseph Sullivan
RJN Group, Inc.
175 McDonald Avenue, Suite B
Joliet, Illinois 60431

RE: Addendum C dated September 21, 2017
Smoke Testing & Manhole Inspections (proposal dated May 15, 2017)

Dear Mr. Sullivan:

This notification is to inform you that on August 21, 2017, the Village of Orland Park Board of Trustees approved awarding RJN Group, Inc. the change in scope to the contract in accordance with the proposal you submitted dated May 15, 2017, for Professional Engineering Services for Smoke Testing & Manhole Inspections. Please sign two (2) copies of the attached addendum and return both copies to my attention at Village of Orland Park, 14700 S. Ravinia Avenue, Orland Park, Illinois 60462. You may alternatively send me a signed copy electronically to ddomalewski@orlandpark.org. I will return a fully executed addendum and signed proposal for your files.

If you have any questions, please call me at 708-403-6173.

Sincerely,



Purchasing & Contract Administrator

cc: Bill Cunningham
Doug Medland

ADDENDUM C to
Comprehensive Sanitary Sewer Evaluation Contract

Dated
November 17, 2015

Amended
April 19, 2016
April 26, 2017

Between
The Village of Orland Park, Illinois ("VILLAGE") and RJN Group ("CONTRACTOR")

WHEREAS, on November 17, 2015, a certain Agreement regarding Comprehensive Sanitary Sewer Evaluation Professional Engineering Services between the Village and the Contractor was executed (hereinafter referred to as the "Agreement"); and

WHEREAS, on April 19, 2016, a certain Agreement regarding Comprehensive Sanitary Sewer Evaluation Professional Engineering Services between the Village and the Contractor was amended (hereinafter referred to as the "Addendum A"); and

WHEREAS, on April 26, 2017, a certain Agreement regarding Comprehensive Sanitary Sewer Evaluation Professional Engineering Services between the Village and the Contractor was amended (hereinafter referred to as the "Addendum B"); and

WHEREAS, the Village wishes to modify the Scope of Work for 2017 and 2018.

NOW, THEREFORE, for and in consideration of the foregoing and the mutual covenants herein contained, it is agreed by and between the parties hereto as follows:

1. In the event of any conflict or inconsistency between the provisions of this Addendum and the Agreement, the provisions of this Addendum shall control.
2. SECTION 1: THE CONTRACT DOCUMENTS of said Agreement shall be amended to include "Addendum C dated September 21, 2017" and Proposal date May 15, 2017 for 2017 Smoke Testing & Manhole Inspections – MWRD Priority Sewer Basin 1st Half"
3. SECTION 2: SCOPE OF THE WORK AND PAYMENT of said Agreement shall be amended to include the following:

"I. Provide engineering services to assist in the completion of a Smoke Testing & Manhole Inspection Program for the 1st half of the MWRD priority sewer basin at a cost not to exceed \$129,195.00 as detailed in the proposal dated May 25, 2017."
4. All of the other terms, covenants, representations and conditions of said Agreement not deleted or amended herein shall remain in full force and effect during the effective term of said Agreement.
5. This Addendum may be executed in two or more counterparts, each of which taken together, shall constitute one and the same instrument.

ADDENDUM C to
Comprehensive Sanitary Sewer Evaluation Contract

Dated
November 17, 2015

Amended
April 19, 2016
April 26, 2017

Between
The Village of Orland Park, Illinois ("VILLAGE") and RJN Group ("CONTRACTOR")

This Addendum, made and entered into effective the 21st day of September, 2017, shall be attached to and form a part of the Agreement dated the 17th day of November, 2015 and shall take effect upon signature below by duly authorized agents of both parties.

AGREED AND ACCEPTED

FOR: THE VILLAGE OF ORLAND PARK

By: 

Print Name: Joseph S. LaMingo

Its: Village Manager

Date: 10/13/17

FOR: RJN Group

By: 

Print Name: Michael N. Young

Its: Senior Vice President

Date: 9/25/17

May 15, 2017

Mr. John J. Ingram
Infrastructure Maintenance Director
Village of Orland Park
15655 Ravinia Avenue
Orland Park, Illinois 60462

SUBJECT: PROPOSAL FOR PROFESSIONAL ENGINEERING SERVICES FOR 2017 SMOKE TESTING AND MANHOLE INSPECTIONS – MWRD PRIORITY SEWER BASIN 1ST HALF

Dear Mr. Ingram:

RJN Group, Inc. (RJN) is pleased to submit this proposal to provide Professional Engineering Services to assist the Village of Orland Park (Village) in the completion of a Smoke Testing and Manhole Inspection Program for the 1st half of the MWRD priority sanitary sewer Basin.

In 2015, RJN was selected by the Village for the Comprehensive Sanitary Sewer Evaluation consultant role to, "Provide assistance in developing and implementing a Village-wide comprehensive sanitary sewer evaluation & repair program." This proposal is for sewer evaluation services as part of "Year-2" of the Village's Sanitary Sewer Inflow and Infiltration (I/I) Capital Improvement Program (CIP).

RJN is a civil engineering and field services firm that specializes in inspecting, studying, analyzing, and designing sewer collection systems. RJN's service offerings include flow monitoring, hydraulic modeling, smoke testing, manhole inspections, dyed water flooding, private property inspections, televising review, and a full range of rehabilitation and new design related to collection systems, lift stations, and storage facilities. We have worked with hundreds of communities and have evaluated over a quarter-billion feet of sewers in our 40-year history.

PROJECT UNDERSTANDING AND APPROACH

RJN conducted comprehensive flow monitoring for the Village sanitary sewer system in 2016. Based on these results, three basins came up as the highest priority for follow up SSES and rehabilitation. One of these basins is also identified as the Short-Term High Priority Area identified and submitted to the Metropolitan Water Reclamation District of Greater Chicago (MWRD) for the new Inflow and Infiltration Control Program (IICP). Smoke testing, manhole inspections, closed circuit television inspection and rehabilitation for "High Priority" defects found in this critical area are mandatory under the new MWRD IICP program. It is our understanding that the Village is interested in conducting the first half of the inspections for this basin in 2017 and completing the

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Mr. John Ingram
May 15, 2017

remainder of the smoke testing and manhole inspections in the MWRD priority basin in 2018. This work includes approximately 470 manhole inspections and 91,700 LF of smoke testing in 2017 as shown in the attached exhibit.

Benefits to doing these inspections are identifying inflow and infiltration (I/I) entering the collection system through public sector and private sector sources as well as ensuring manholes are thoroughly investigated so that proper rehabilitation techniques are applied at each structure.

The scope of this proposal is to perform smoke testing and manhole inspections, take detailed measurements and observations for each defect observed and make rehabilitation recommendations for all defects identified in the service areas as shown on the attached exhibit.

Manhole Inspections – Manhole inspections provide the system owner with an accurate assessment of the physical attributes of existing structures, including location, structural defects, potential I/I sources, and rehabilitation recommendations. A typical RJN manhole inspection program uses both surface as well as full-descent techniques to inspect and document all topside and subsurface manhole components. Physical dimensioning and evaluation of the manhole cover, adjustment, cone, wall, trough, bench, and connecting sewers are performed for each structure.

Using the methods outlined below, RJN will inspect manholes to identify various defects and make rehabilitation recommendations for each structure. RJN's use of state-of-the-art technology to collect, manage, and analyze manhole inspection data ensures accuracy and completeness of data. Inspectors record data in the field with handheld iPad devices, on iForm software with GPS locating technology. This data is managed in the office using ArcGIS software. In house software tools assist with evaluation of the data for determination and prioritization of the repairs necessary to keep the system in its best condition while getting the most value for your dollar.

Some structures may be inaccessible (paved over, buried, seized, etc.) and thus there may be a minimum percentage (~1%-3%) of structures that cannot be inspected. RJN will provide a list of inaccessible structures to the Village and can return to the structures if they are made accessible while RJN inspections are ongoing.

Smoke Testing – RJN will use smoke testing to identify various defects in the collection system, as well as to find contributing sources of I/I. Common identified concerns include leaky manholes, cracked main lines and laterals, connected downspouts, directly connected storm sewers, connected foundation drains, area, patio, and driveway drains, and broken cleanouts. Additionally cross connections such as leaking storm sewers crossing sanitary sewers can also be identified.

In the smoke testing process, non-toxic air/smoke mix is blown into a sewer segment through manholes at both ends. Defects are identified by where smoke exits the ground or a structure. Smoke testing is only as effective as the process used. RJN's process is to use a 4-person crew and smoke test only one segment at a time with two smoke blowers, one on each manhole at the two

ends of a sewer segment. When necessary, sandbagging is used to minimize smoke entering other segments. RJN uses handheld mobile data collectors to collect smoke testing results. A GPS mapping grade location is provided for each defect, and a digital photo is taken. This data is then integrated into GIS in order to assist in mapping defects and organizing the results.

SCOPE OF SERVICES

Our proposed scope of services is as follows:

Manhole Inspections:

1. Provide equipment and personnel as necessary for manhole inspections.
2. Use handheld electronic data collection equipment for collecting manhole inspection data.
3. Complete surface manhole inspections for approximately (470) manholes as outlined. Collect the following attribute data, as it can be determined:
 - a. Mapping grade GPS locate of manhole;
 - b. Manhole diameter;
 - c. Manhole material;
 - d. Pipe invert measurements;
 - e. Connecting sewer diameter(s), material(s); and flow direction.
4. Identify and document manhole condition, including:
 - a. Direct evidence of I/I;
 - b. Open pick holes in lid;
 - c. Frame and adjusting ring condition, including needed adjustments and chimney seals;
 - d. Cone condition and defects;
 - e. Wall condition and defects;
 - f. Trough, bench and pipe seal condition and defects.
5. Take a minimum of four digital photographs at each manhole structure
 - a. Surrounding area;
 - b. Manhole cover;
 - c. Topside - looking down; and
 - d. Manhole frame.
6. Complete full-descent manhole inspections for approximately (10) manholes as outlined. Provide all tasks above as well as perform a confined space entry, full-depth inspection with additional digital photographs and observations of the bench, trough and all pipe connections.
7. Provide standard traffic control measures (portable signs and cones) at each site in or near a roadway. If a higher level of traffic control is required, RJN crews will contact Village staff and request traffic control assistance.

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Mr. John Ingram
May 15, 2017

Smoke Testing

8. Prepare a draft resident smoke testing notification letter for the Village to send to the affected residents and business owners. The letters will include RJN contact information for use during smoke testing.
9. Prepare smoke testing door hangers to be hung by RJN staff at each address less than one week prior to smoke testing. These hangers will also include RJN contact information.
10. Notify the Village, County, or Township as necessary and the local fire and police dispatch and departments of planned smoke testing activities, including daily email updates.
11. Provide equipment, personnel, and smoke as necessary for smoke testing.
12. During smoke testing, erect smoke testing signs near the testing area and answer resident and the Village's questions on-site as well as through phone calls.
13. Use handheld electronic data collection equipment for collecting smoke testing data.
14. Smoke test approximately 91,700 linear feet of sanitary sewers as shown in the attached exhibit.
15. GPS locate (mapping grade) each identified defect and take a minimum of one digital photograph of each defect.

Data Analysis, Program Management & Reporting:

16. Provide data analysis as follows:
 - a. Compile field data and develop complete list of defects;
 - b. Incorporate results into GIS;
 - c. Assign an estimated flow to each defect; and
 - d. Determine an appropriate rehabilitation method and estimate an associated cost for each defect.
17. Provide the following in a summary letter report:
 - a. Summary of work completed
 - b. GIS maps of identified defects;
 - c. List of defects prioritized by cost effectiveness for rehabilitation;
 - d. Summary of I/I identified, and analyzed;
 - e. Recommendations for follow up SSES, rehabilitation and construction.
18. Submit up to three (3) color copies and a pdf of draft report.
19. Provide digital copies of data, GIS geodatabase, and photographs.
20. Address Village comments on draft report and submit up to three (3) bound color copies of final report and a pdf of final report files.
21. Provide project management services for the duration of the project.

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Mr. John Ingram
May 15, 2017

22. Attend (2) meetings with Village to discuss project phases & recommendations.

ITEMS REQUESTED FROM ORLAND PARK

We request the following items from the Village:

1. Access to the manholes for inspections.
2. Assistance with traffic control where needed in high traffic locations.
3. We request that the Village finalize the draft smoke testing letters and send to the businesses and residents within the study area.

SCHEDULE

In order to achieve the best results, manholes inspections should be conducted during wet weather conditions, while for smoke testing a period of dry weather is necessary. Based on proper weather conditions and a Notice to Proceed on June 6, 2017, RJN will complete the project including all field services, data analysis and project correspondence by February 28, 2018.

PROPOSED FEE

The proposed Scope of Services will be invoiced on a unit price basis per the following fee schedule.

Task Description	Quantity	Units	Unit Price	Cost
Perform Surface Manhole Inspection & Data Analysis	470	MH	\$80.00	\$37,600.00
Follow Up Full-Descent Manhole Inspection & Data Analysis	10	MH	\$120.00	\$1,200.00
Perform Smoke Testing & Data Analysis	91,700	LF	\$0.85	\$77,945.00
Draft Report, Final Report & Digital Data Deliverables	1	LS	\$7,500.00	\$7,500.00
Meetings & Project Management	1	LS	\$4,950.00	\$4,950.00
				\$129,195.00

It is our pleasure to submit this proposal to the Village of Orland Park. Please feel free to contact us at (630) 682-4700 x 337 if you would like to discuss this proposal in detail. We are looking forward to the opportunity to continue working with the Village on this important project.

Sincerely,

RJN Group, Inc.



Michael N. Young, P.E.
Principal



Joseph Sullivan
Project Manager

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Mr. John Ingram
May 15, 2017


Accepted by Orland Park Illinois:

By:

Name:

Title:

Date:



Joseph S. LaMorgo

Village Manager

10/13/17

[illegible]

rjngroup
The Choice for Collection System Solutions

- Sanitary Manholes MWRD Manhole Force Main
Lift Stations Sanitary Sewer MWRD Main



**Village of Orland Park, IL
2017 & 2018 Proposed Study Areas
Smoke Testing & Manhole Inspections
May 2017**

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