

October 1, 2024

Bill McKenna Village Engineer Village of Oak Park 201 South Blvd Oak Park, IL 60302

**Subject:** Proposal for Professional Engineering Services -

**Manhole Inspections** 

Dear Mr. McKenna,

RJN Group, Inc (RJN) is pleased to submit this proposal to the Village of Oak Park (Village) to perform manhole inspections as part of the Village's 5-Year Sewer Plan.

RJN recently performed a pilot Closed Circuit Televising (CCTV) Review and Recommendations project in anticipation of the Village's annual Sewer Cleaning and Inspection project. The CCTV data was uploaded onto Clarity®, where the Village was able to start managing their CCTV program in one central repository.

### **Key Project Goals and Objectives**

As part of the Village's 5-Year Sewer Plan, the Village aims to start a manhole inspection program focused on assessing the condition of approximately 4,000 manholes. Since the Village already has a well-established CCTV program, performing manhole inspections either in the oldest parts of the system or in areas recently televised will give the Village a more thorough understanding of the condition of their sewer system.

This proposal will also help guide budgetary conversations and other Village programs to maximize the investment and establish a continuous plan for conducting investigations, rehabilitation, design, and construction for the Village sewer system. A detailed scope of services is provided in Exhibit A.

# **Project Approach**

## Manhole Inspections

A manhole inspection program provides many benefits to the Village, including mapping updates, identification of inflow and infiltration, confirmation of connecting pipes, and detection of structural problems in need of rehabilitation. Manhole inspections include a surface inspection of the manhole to identify defects from the frame down to the bench of the manhole as well as a 360-degree video for digital documentation of all defects and key parts of the manhole. Pipe sizes and inverts will also be documented. All data is collected digitally and able to be viewed online on Clarity®, and any updates will be incorporated into the Village's GIS.

# **Assuring Quality and Data Visibility**

### **Quality Management**

RJN is committed to providing **quality** deliverables. The completion of these inspections is critical in providing actionable results for the Village. As collection system specialists, RJN has built data review processes that ensure that all data is accurate. Our engineers and field inspection crews are trained and certified in NASSCO PACP and MACP inspection and review to ensure the highest quality data. RJN's internal Quality Control (QC) tools as well as our corporate training and Quality Assurance (QA) processes in place will ensure that the program will provide value for the Village.

### Clarity

Using Clarity®, RJN's in-house built data management and reporting software, the Village will have access to all manhole inspection data.



# **Price and Schedule Summary**

This project will be invoiced on a lump sum and unit price for a total not-to-exceed fee of \$99,100. RJN will begin this study immediately upon an agreement. Complete Scope of Services, Pricing, and Schedule are provided in the following exhibits:

- Exhibit A Scope of Services
- Exhibit B Pricing
- Exhibit C Schedule

We are looking forward to the opportunity to work with the Village of Oak Park on this important project. It is our pleasure to submit this proposal to you. Please feel free to contact Francisco Sobral at 217-714-1209 if you would like to discuss this proposal or have any questions.

Sincerely,

Francisco Sobral, PE

Client Manager

Tom Romza, PE
Regional Manager



RJN is proposing the following scope of services to the Village of Oak Park.

#### 1. Manhole Inspections – Approx. 460 manholes

- a. Provide equipment and personnel as necessary for manhole inspections.
- b. Use handheld electronic data collection equipment to collect manhole inspection data.
- c. Complete surface manhole inspections for manholes as outlined. Collect the following attribute data:
  - i. GPS locate of manhole (sub-meter mapping grade)
  - ii. Manhole diameter and material
  - iii. Connecting sewer diameters, invert measurements, and flow direction.
- d. Identify and document manhole condition, including:
  - i. Direct evidence of I/I
  - ii. Open pickholes in the lid
  - iii. Cover, frame, adjusting ring, and seal condition, including needed adjustments
  - iv. Cone condition and defects
  - v. Wall condition and defects
  - vi. Trough and bench condition and defects
- e. Take a minimum of four digital photographs and 360-degree video of each manhole structure
  - i. Surrounding area
  - ii. Manhole cover
  - iii. Topside looking down
  - iv. Manhole frame and adjustments
  - v. Any major manhole defects
- f. Upload and provide access to manhole inspection data, photos, and video on the web viewer Clarity ®.
- g. Provide data analysis as follows:
  - i. Compile field data and develop a complete list of defects
  - ii. Assign an estimated flow to each defect
  - iii. Determine a preliminary rehabilitation method for each manhole
  - iv. Create a summary of the estimated cost
  - v. The development of a detailed rehabilitation schedule is not included in the scope but can be added if the Village requests it.
- h. Structure inspections will be billed at a unit rate for each type of inspection. Inspections that cannot be completed due to inaccessibility or the inability to find the structure will be billed at ½ the unit rate of a surface inspection. RJN will notify the Village of the structures that were not inspected.

### 2. Summary Report and Data Access

- a. During the project, provide access to web viewer Clarity® that will provide status of data collection, access to data collected, including field collected media.
- b. Submit a pdf of draft report.
- c. Address Village comments on draft report and revise.
- d. Submit one digital copy of final report.
- e. Provide one digital copy of final report files, data, media, and GIS deliverables.
- f. Create a summary estimate of rehabilitation costs and prioritize improvements based on severity

#### 3. Project Management

- a. Provide project management services including invoicing, scope, schedule, fee tracking, and closeout services.
- b. Provide updates to Village staff throughout the duration of the project.
- c. Meet with Village staff as necessary to discuss progress of the project.

## **Items Requested from the Village**

- 1. Updated GIS geodatabases, shape files, or CADD atlases for the sanitary sewer collection system.
- 2. Access to manholes for Manhole inspection work. Assistance locating or opening seized/buried manholes as required.



Pricing for the Village of Oak Park Manhole Inspections project is as follows:

Pricing Terms for Invoicing: Unit Price, Lump Sum

Not-To-Exceed Total Cost: \$99,100

### **Cost Schedule**

	Task	Quantity	Cost per Unit	Туре	Fee
1000	Manhole Inspections	460	\$170	EACH	\$78,200
2000	Summary Report	-	-	LS	\$14,500
3000	Project Management and Meetings	-	-	LS	\$6,400
					\$99,100

# **Proposal Option**

This Proposal can be amended to include additional work upon joint approval by the Village and RJN.



RJN is prepared to start work immediately upon an Agreement. Schedule is based on a notice to proceed by the end of November 2024.

Task	Timeline		
Manhole Inspections	Will be completed by end of May 2025		
Summary Report	Will be completed within two months of completion of inspections		