



**VILLAGE OF DOBBS FERRY BOARD OF TRUSTEES**  
**REGULAR MEETING AGENDA**

**MEETING DATE:** March 26, 2024

**AGENDA ITEM SECTION:** Resolutions

**AGENDA ITEM NO. :** 3

**AGENDA ITEM:**

**Resolution:** Consider a resolution authorizing the Village Administrator to accept a project proposal to commence with a Sanitary Sewer Evaluation Survey (SSES)

**ITEM BACKUP DOCUMENTATION:**

1. Draft resolution
2. AI Engineers proposal and scope of work for a Village-wide Sanitary Sewer Evaluation Survey

**RESOLUTION OF THE BOARD OF TRUSTEES OF THE VILLAGE OF DOBBS FERRY AUTHORIZING THE  
VILLAGE ADMINISTRATOR TO ACCEPT PROJECT PROPOSAL TO COMMENCE WITH A SANITARY SEWER  
EVALUATION SURVEY (SSES)**

**WHEREAS**, the Village of Dobbs Ferry has identified a need for comprehensive evaluation and improvement of its sanitary sewer system through a Sanitary Sewer Evaluation Survey (SSES); and

**WHEREAS**, AI Engineers, Inc., Dolph Rotfeld Engineering Division (AIE/DRE) has submitted a proposal and scope of work to fulfill this need in accordance with the Village's request; and

**WHEREAS**, AIE/DRE's proposal outlines a systematic and iterative process for assessment, investigation, and rehabilitation of the sanitary sewer system, including preliminary review, flow monitoring, analysis of flow data, investigation, rehabilitation, and final engineering report; and

**WHEREAS**, the proposed scope of work provides for additional corrective action as necessary to address identified issues within the sanitary sewer system; and

**WHEREAS**, the proposed fees for the outlined services have been determined to be reasonable and appropriate for the scope of work outlined in the proposal.

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Trustees of the Village of Dobbs Ferry accepts the proposal and scope of work submitted by AI Engineers, Inc., Dolph Rotfeld Engineering Division (AIE/DRE) for Professional Engineering Services for a Sanitary Sewer Evaluation Survey (SSES); and

**BE IT FURTHER RESOLVED** that the Village Administrator is authorized and directed to enter into a contract with AI Engineers, Inc., Dolph Rotfeld Engineering Division (AIE/DRE) for the provision of the outlined services in accordance with the terms and conditions specified in the proposal; and

**BE IT FURTHER RESOLVED** that payment for the services rendered by AI Engineers, Inc., Dolph Rotfeld Engineering Division (AIE/DRE) shall be made in accordance with the fee schedule outlined in the proposal, subject to the percentage of work completed as indicated in the monthly invoices; and

**BE IT FURTHER RESOLVED** that the Village Administrator is authorized to take any and all actions necessary to implement this resolution.



## Dolph Rotfeld Engineering Division

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February 21, 2024

Robert Yamuder  
Village Administrator  
Village of Dobbs Ferry  
112 Main Street  
Dobbs Ferry, NY 10522

**RE: Professional Engineering Services for  
Sanitary Sewer Evaluation Survey (SSES)  
Scope and Fee Estimate**

Dear Mr. Yamuder:

**AI Engineers, Inc., Dolph Rotfeld Engineering Division (AIE/DRE)** is pleased to submit our proposal and scope of work as requested in response to the Village's request to provide Engineering Consulting Services for a Village-wide Sanitary Sewer Evaluation Survey. Our approach is a systematic iterative process of assessment, investigation and rehabilitation.

Our scope of work will include the following work items.

**SANITARY SEWER EVALUATION SURVEY (SSES):**

1. Preliminary Review

The 1994 Westchester County SSES for the North Yonkers and Saw Mill Sewer Districts will be reviewed and analyzed. The mapping from the report will be utilized and an updated map produced to include construction since the SSES was completed based on Village records. Inflow and infiltration data from the report will be studied. Problems found will be put into a chart showing location, source, whether it is infiltration or inflow and estimated flow into the sanitary sewer. Village records will be checked if problems have been eliminated and will serve as a starting

point to determine the condition and work required to optimize the Village's sanitary sewer system.

2. Flow Monitoring

Village-Wide measurement of sewage flows should be conducted in either the Spring or the Fall for a period of 6 to 8 weeks. Rainfall measurement will be measured concurrently. AIE/DRE will prepare a plan identifying number and location of flow monitoring devices based on the preliminary review and will provide bid documents for a flow monitoring program including rainfall measurement for the Village to procure a contractor. AIE/DRE will provide construction administration services and oversight of the selected contractor for this phase.

3. Analysis of Flow Data

The flow monitoring data will be compiled and reviewed and an Engineering Report that analyzes the wet weather impact will be prepared by AIE/DRE that determines the comparative degree of infiltration and inflow (I / I) in each of the Village's subsystems. Recommendations will be made as to which neighborhoods require smoke and dye testing investigation or CCTV inspection due to evidence of significant I / I.

4. Investigation

Based on the analysis of the flow data, sanitary sewer subsystems that exhibit significant I / I will be investigated. When there is evidence of infiltration, the investigation will include sanitary sewer pipe cleaning for CCTV inspection and manhole inspection. Manhole inspection will include GPS location data to be provided by the contractor. This information can be added at a nominal cost per manhole and utilized as part of any GIS mapping of the system. When there is evidence of inflow, the investigation will include smoke and dye testing. AIE/DRE will prepare plans, specifications and bid documents (3 bids anticipated, CCTV, Smoke Testing and Manhole Inspection) for procurement of contractors by the Village. We will administer the bid process, make recommendations for award and set up preliminary meetings with successful bidders before the investigation commences. AIE/DRE will also



provide construction administration services and inspection during this phase. Our inspectors will provide daily oversight and documentation of all CCTV, smoke testing and dye testing operations by the contractor; the Project Manager will review and track all requisitions for payment.

5. Rehabilitation - CIPP / Manhole Lining

The results of CCTV investigation will reveal any defective sewer pipe. Defective pipe that is a candidate for rehabilitation will be recommended for Cured in Place Pipe (CIPP) lining. Pipe requiring excavation and replacement will be evaluated on a case-by-case basis and repaired separately under our current Engineering Services Agreement. Defective pipe issues can be prioritized and will be lined whenever possible because it is more cost effective. Manholes will also be evaluated and recommended for rehabilitation where applicable. AIE/DRE will prepare plans, specifications and bid documents for the needed work for procurement of contractors by the Village. We will administer the bid process and set up preliminary meetings with successful bidders before the project commences. Our inspectors will provide daily oversight and documentation of all CIPP lining and manhole rehabilitation operations by the contractor; the Project Manager will review and track all requisitions for payment.

6. Final Engineering Report

The Village-Wide measurement of sewage flows done previously in this study will be replicated in either the Spring or the Fall for a period of 6 to 8 weeks. AIE/DRE will then provide a Final Engineering Report that will compare the impact of I / I on Village sewers before and after the rehabilitation work. The Report will document the investigation and rehabilitation work completed. Data from the second round of flow monitoring will be analyzed to determine if additional investigation is required and recommendations for achieving further flow reduction.

**ADDITIONAL SERVICES:**

7. Additional Corrective Action

As noted previously this investigation will reveal where corrective action requires the excavation and replacement of sewer mains or manholes, or where positive smoke test results indicate inflow into sanitary sewer mains and disconnection of the source is required. In these instances AIE/DRE will evaluate the corrective action needed and will assist the Village to enforce removal of illegal and improper connections, or will design new facilities as needed under our existing Engineering Services Agreement as a separate item.

1	Preliminary Review –Analysis/Update Mapping (Lump Sum)	\$ 20,000.00
2	Flow Monitoring – Contract Prep/Administration (Lump Sum)	\$ 15,000.00
3	Analysis of Flow Data – (Lump Sum)	\$ 20,000.00
4	Investigation – Prepare (3) bid documents, (Lump Sum) Investigation – Contractor Administration (T & M)*	\$ 30,000.00 \$ 50,000.00 to \$ 75,000.00
5	Rehabilitation - Prepare bid documents, (Lump Sum) Rehabilitation – Contractor Administration – (T & M)*	\$ 25,000.00 \$ 60,000.00 to \$ 80,000.00
6	Final Engineering Report (Lump Sum)	\$ 25,000.00
	Estimated Budget*	\$245,000.00 to \$290,000.00*
	ADDITIONAL SERVICES:	
7	Additional Corrective Action	T.B.D.

#### **FEE AND METHOD OF PAYMENT:**

Our fee for the work items set forth above shall be allocated as follows:

\* T & M fees will vary depending on the extent of the contracts – quantities of sewer rehabilitation to be determined by Investigation and to be billed on an hourly basis for personnel assigned in accordance with our current hourly rate schedule.

Costs associated with flow monitoring, CCTV, smoke testing, manhole inspection/GPS location and CIPP lining contractors will be direct costs to the Village and not included in this fee estimate. These items will be contracted



directly with the Village through typical public bidding procurement policies to be administered with AIE/DRE's assistance.

Fees do not include reimbursable expenses such as printing and reproduction costs and express delivery other than first class mail and any other sub-consultants deemed to be required and not outlined in the above scope. All work outside of this scope will be based on the personnel assigned and the hourly rates in conformance with our current agreement for professional engineering services. No work shall proceed outside of this scope without prior written authorization.

AIE/DRE carries coverage for general liability and professional liability insurance, Workman's Compensation and NYS Disability insurance. Certificates will be provided upon execution of this proposal.

Payments shall be made within thirty days upon receipt of the monthly invoice which shall be based on the percentage of work completed. Please indicate your acceptance of this proposal in the designated space below and return to this office.

We look forward to working together with you on this exciting project.

Respectfully submitted,

A handwritten signature in black ink that reads "Anthony Oliveri".

Anthony Oliveri P.E.  
Vice President



**Dolph Roffeld Engineering Division**

Agreed to this \_\_\_\_\_ day of \_\_\_\_\_ 2024

By: \_\_\_\_\_  
For the Village of Dobbs Ferry