

**MEETING MINUTES**  
**VILLAGE OF HOOSICK FALLS/TOWN OF HOOSICK**  
**ENGINEERING REPORTS FOR:**  
**WATER EXPANSION**  
**SEWER EXPANSION**

MRB GROUP PROJECT No. 0825.16003.000/0825.16004.000  
 REVIEW SESSION

**Date:** 08/29/16**Time:** 1 pm**Location:** Municipal Building  
(24 Main St, Hoosick Falls, NY 12090)**Attendees:**

Name	Representing	Phone	Fax	Email
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(see attached sign-in sheet)

**1.0 ENGINEERING REPORT – SEWER SYSTEM EXPANSION**

- MRB Group indicated that the primary focus of the Engineering Report was evaluating the potential for expanding the Village's sanitary sewer system south along NYS Route 22 to the Hoosick Falls Central School. The proposed project planning area comprises approximately 63 parcels, which includes 14 vacant parcels. Total estimated flow for the planning area is approximately 32,000 gallons per day (gpd) based on existing conditions, and approximately 38,000 gpd assuming future development of vacant parcels. The proposed scope of the project comprises a sewer extension approximately 10,000 linear feet in length, extending from the Tops supermarket at the northern limit south to the Central School.
- Two (2) alternatives were evaluated in the Engineering Report: Alternative #1 (Combination Gravity Sewers/Force Main) and Alternative #2 (Low Pressure Sewers). Alternative #1 consists of conventional gravity sewers, two (2) centralized pumping stations, and sanitary force mains. Alternative #2 consists of small diameter low pressure sewers, 40 simplex grinder pump units (rated up to 700 gpd) and 10 duplex units (rated up to 3,000 gpd). MRB Group circulated copies of the figures that were included in the report that illustrate the proposed sewer alignment, preliminary locations of gravity sewers/centralized pumping stations/force mains for Alternative #1, and a preliminary grinder

- pump layout including pipe diameters for Alternative #2. Sample equipment information for the E-One grinder pumps was also provided to the group, which was used as the basis for developing the costs for Alternative #2.
- Based on a cost analysis, Alternative #2 was determined to be significantly less costly than Alternative #1. The project cost for Alternative #2 is approximately \$1.8 million.
  - The group discussed some of the concerns associated with grinder pumps, specifically related to operation & maintenance (O&M). It was noted that each grinder pump has an individual alarm at the control panel, which will activate when there are mechanical and/or electrical issues. These alarms are not tied into a larger monitoring system (such as SCADA), therefore there is some reliance on homeowners notifying the municipality when a grinder pump alarm is activated. When pumps malfunction, it is typical for the entire pump core to be pulled and replaced with a new core. Therefore, it is recommended that the Village maintain an inventory of spare pump cores. The project cost estimate for Alternative #2 does include an initial allowance for purchase of several pump cores. Dan Merrills, WWTP Superintendent for the Village, indicated that the Village already has two (2) E-One pumps installed at one of the Village's pumping stations. They have been problematic from an O&M standpoint and have required replacement on a regular basis, which has become costly. It was recommended that MRB Group research other grinder pump manufacturers.
  - It was clarified that it may be possible to extend sewers south of the Central School if future needs develop, but this would also need to consist of low pressure sewers and grinder pumps to be compatible with the infrastructure being proposed as part of Alternative #2. Pipe sizing to accommodate a future extension could be evaluated in more detail during preliminary design.
  - There was a brief discussion related to anticipated project scoring from NYSEFC, on the basis of project need. Although the PFOA contamination issue was documented in the report, MRB Group noted that it may be a challenge to tie this directly to the need for public sewers. Recent issues with the septic system at the Tops supermarket and concerns with the age of the Central School's sand filter treatment system were identified in the report, but if there are other documented cases of septic system violations/deficiencies this would have the potential to increase the project score. MRB Group will verify with the Rensselaer County Health Department whether there are any other issues, beyond those already documented in the report, within the project planning area.
  - MRB Group also noted that grinder pumps are typically installed on private property in the vicinity of existing septic systems, which necessitates obtaining an easement from each property owner.

- A question was posed about whether or not property owners would be required to connect to the public sewer system once constructed. It was noted that the Village's Sewer Use Law may already include language that requires homeowners to connect if public sewers are available. The Village indicated that this can be reviewed and modified as necessary.
- The Village and Town concurred with submitting the Engineering Report to NYSEFC, with Alternative #2 identified as the preferred alternative.

## 2.0 ENGINEERING REPORT – WATER SYSTEM EXPANSION

- MRB Group indicated that the Engineering Report for the proposed water system expansion was developed based on the outline identified in the "Recommended Standards for Water Works" ("10 State Standards"). The report includes a description of the existing water system, justification of project, and a description of the proposed improvements.
- Since the Joint Work Session held on August 2, 2016, an additional five (5) potential service areas have been added for consideration based on feedback from the NYSDOH (Tim Vickerson) and from the Village Board meeting on August 9, 2016. These areas are identified below:
  - MS1 – Mechanic Street Extension, Pike Street, and Sunrise Drive
  - H1/H2 – Hill Road
  - 7E-1 – NYS Route 7 (Hamlet of Hoosick)

Elevation data, parcel information, well sampling results, and the number of POETs installed, were reviewed for each of the above areas. There was group consensus to continue to include these areas in the final report.

- MRB Group circulated copies of the proposed project phasing plan, which currently comprises six (6) phases and covers both the water system expansion and improvements to the Village's water system. There was significant discussion about the proposed scope of each phase.
- Phase 1 included both service areas 22S-1 (Village boundary south to Central School) and 22S-2 (Central School to Hoosac School). Information on service area 22S-2 was re-examined by the group, including proposed scope and budgetary cost (approximately 10,000 linear feet of water main - \$1.2 million), the number of parcels served (10 total, 7 occupied), and well sampling results (5 sampled, 1 between 2 and 20 ppt PFOA, and 4 less than 2 ppt PFOA). The group agreed that based on this information, service area 22S-2 should be shifted into a later phase.
- Village personnel expressed concerns about waiting until Phase 4, as initially proposed, to address chronic low pressure issues within the Village (areas surrounding the Rensselaer Street tank). According to the Village, property owners have complained for several years about these issues. The Village has identified this as a high priority and requested that this be included in Phase 1.

- There was some discussion on how to resolve the issues, including the installation of a new water storage tank in the Fairbanks Road area, raising the Rensselaer Street tank, etc. MRB Group will examine potential options in further detail.
- Due to the number of parcels with well sampling results above 70 ppt PFOA in service area MS1, the potential to shift this area into Phase 1 was also discussed.
  - Service area 7E-1 (hamlet of Hoosick) was also identified as an area of concern based on the well sampling results. This area is currently being proposed to be served from 22S-2, which would require a crossing of the Hoosic River and the railroad by extending a water main along NYS Route 7. This segment would serve very few properties. Alternately, this area could be served from Hill Road (H1/H2). The group consensus was to serve from H1/H2 and eliminate the segment of piping that includes the river crossing and rail crossing. Provisions can still be made for a future connection between 22S-2 and 7E-1 by installing tees, valves, etc. to allow for looping of the water system.
  - From a project scoring standpoint, NYSDOH clarified that as long as there is documentation regarding "private well contamination", the proposed project will receive points. However, the actual contamination level (e.g., 20 ppt PFOA vs 70 ppt PFOA) is less important to the overall scoring.
  - In developing the phasing plan, MRB Group indicated that efforts were made to establish phases with budgetary costs of approximately \$5 million, based on the current maximum grant allocation from NYSEFC of \$3 million (or 60% of the project cost, whichever is less). There was a question regarding whether the Village or the Town would be the project applicant for each phase. At this time, the project listing forms will be submitted with the Village identified as the applicant, but NYSDOH indicated that this could be revised in the future as needed. As the \$3 million grant amount is the maximum that can be awarded to any one municipality within a 5-year timeframe, the potential to have the Village and the Town apply separately for different phases may help to maximize grant opportunities through the NYSEFC.

### **3.0 FIRE FLOW DEMANDS/REQUIREMENTS**

- MRB Group provided a summary of information that has been gathered to date regarding fireflow demands/requirements, including the basic needed fire flow that has been defined for the Village of Hoosick Falls (2,500 gpm) and certain properties located in the vicinity of North Hoosick (750 – 2,500 gpm). It was noted that the basic needed fire flows have been established by the Insurance Services Office (ISO) based on a variety of factors, including building construction type, square footage, distance between buildings, etc. This is not necessarily representative of what the water system can actually supply. Absent hydrant flow data (see Section 4.0 below) which would indicate what the Village's water system can currently supply, the Engineering Report states

that waterline extensions will be designed to provide the minimum Fire Suppression Rating Schedule (FSRS) fire flow of 250 gallons per minute (gpm) for a duration of 2 hours. *(Subsequent to the meeting, MRB Group revised the minimum design fire flow to 500 gpm based on further review of the parcels to be served in the various service areas)*

#### **4.0 HYDRAULIC ANALYSIS/HYDRANT FLOW TESTING**

- MRB Group indicated that certain assumptions were made regarding water system expansion and improvements to the Village's water system that will need to be verified through further hydraulic analysis. The Engineering Report recommends that a hydraulic model be developed and calibrated prior to any improvements being designed or constructed, in order to better quantify impacts of proposed system changes, including an increase in demands from water system expansion. As a starting point, MRB Group is requesting that Village personnel perform hydrant flow testing to document both existing water pressure (static/residual) and flow at various hydrant locations.

#### **5.0 SCHEDULE/ACTION ITEMS**

- MRB Group will revise the proposed phasing plan and corresponding budgetary costs based on feedback from the review session and will circulate them to the Village and Town prior to submittal of the final report to NYSEFC/NYSDOH.
- Deadline for submittal to both the Drinking Water State Revolving Fund (DWSRF) and Clean Water State Revolving Fund (CWSRF) programs for IUP listing is Friday, September 2, 2016.

The above is my summation of our meeting. If you have any additions, comments and/or corrections please contact me for incorporation into the minutes. After five (5) days, we will accept these minutes as an accurate summary of our discussion and enter them into the permanent record of the project.

Respectfully submitted,

*Michelle Baines*

Michelle Baines, P.E.  
MRB Group Engineering, Architecture & Surveying, P.C.