

**Engineering Inc.** 155 E. Front Street (rear) Lititz, PA 17543 Phone (717) 625-1930 Fax (717) 625-1931

December 10, 2008

Bethel Township Municipal Authority PO Box 24 Bethel, PA 19507 ATTN:David Younker, Chairman

RE: Monthly Report for November '08

Dave and Board Members.

This office has been working on the following items this past month and would like to update the Board as follows: (items denoted with "\*" have accompanying information in the Board's packet. Items denoted with "\*\*" have been forwarded to board members prior correspondence this month).

## **DEVELOPMENT PLANS FOR BOARD ACTION (POTENTIAL VISITORS):**

- 1. Horning's Market Land Development Plan (Village of Bethel): Last month we received a request from the developer asking the Board to consider granting additional sewage conveyance/treatment capacity for an expansion (LD Plan) to the existing site. (The original site was approved for a flow rate of 1,150 GPD (5 EDU's at the current 250 GPD/EDU). According to the request, the proposed expansion (10 employees to 35) will require an additional 875 GPD (4 EDU's). The developer has requested specific direction on plan approval for their site development.
- 2. <u>Andrew Zeiset Subdivision Plan (Village of Bethel)</u>: This office has reviewed the proposed development plans and have issued our comments (separate correspondence \*) to the Board. The applicant and his engineer are asking the Board's action on the following specific items:
  - a. Approval of the plan by the Board. Based upon our review of the current plan there is nothing (no infrastructure proposed) to approve.
  - b. The site access (proposed subdivision) is unclear. It appears that the proposed future driveway/local road is located parallel to and approximately fifty feet north of the existing Authority driveway. There is a note on the plan referencing the relocation of an existing driveway which needs further explanation in the event that this relocation would affect the Authority's site access.
  - c. The applicant will be required to provide adequate sewer plans showing the existing and proposed infrastructure servicing the site consistent with Authority standards.

3. <u>Jeffrey Martin Subdivision Plan (Village of Frystown):</u> This office has reviewed the proposed development plans and have issued our comments (separate correspondence \*) to the Board.

## FINANCING MATTERS (PENNVEST & PENNWORKS):

- 4. \*This office is recommending payment of invoices (separate correspondence to the Board) for the construction project for the following listed contracts (through to 11/21/08) which would require Board action for payment. The payment details are attached (separate correspondence) and summarized as follows:
  - a. Contract # 2 Bethel collection lines (90% complete to date).
  - b. Contract # 4 Bethel Wastewater Treatment Plant (39% complete).
  - c. Contract # 5 Frystown Wastewater Treatment Plant (38% complete).
  - d. Contract # 8 Electrical Systems for WWTP and appurtenances (24% complete).

## **CONSTRUCTION MANAGEMENT AND LOGISTICS:**

- 5. \*We continue providing the Board with our inspection reports (email) and have provided hard copies for Board Members of this past month's activities. In summary the work has been progressing as follows:
  - a. Contract # 1 Frystown Collection Lines. The work this past month included temporary paving restoration (waiting for favorable paving weather to complete). Generally, the substantial remaining work includes the following items (to date 91% complete):
    - i. Continued Trench Restoration.
    - ii. Paving of the alleys and Roadways.
  - b. Contract # 2 Bethel Collection Lines. The work on the collection lines (Gravity & Force Mains) in Bethel is now complete. Generally, the outstanding main line work at this point includes the following areas:
    - i. Continued Trench Restoration.
    - ii. Paving of the alleys and Roadways.
  - c. Contracts # 3 # 8 This office continues receiving various submittals of shop drawings, etc. that we have been reviewing and distributing as necessary to other parties (electrical engineer, mechanical engineer, plumbing engineer, etc).
    - i. The foundation (Bethel WWTP) was poured yesterday. Masonry wall construction should begin in the following days.

## PLAN REVISIONS AND/OR CHANGE ORDERS:

- 6. As part of our review of the shop drawings for air release valves (force mains) it was determined that the type of valves (as recommended by the pump manufacturer) and physical maintenance of these valves required taller concrete vaults. Furthermore in reviewing the options for the type of valve (cast iron vs. stainless steel) we would recommend the stainless steel for longevity. We authorized a field change order for the following and are asking for the Board's concurrence with this field revision:
  - a. Two (2) extra vertical feet (depth) on four (4) concrete vaults (air release valves).
  - b. Recommending the use of ARI stainless steel air release valves as recommended by the pump manufacturer.
- 7. \*Excavation (Frystown wet well) has revealed significant groundwater in the vicinity of the Frystown facilities (influent lift station and building). Additionally there is standing water conditions in the vicinity of the control buildings (pump stations) which should be further evaluated. We are asking the Board to authorize Alternative Environmental Solutions to complete their investigative work (Time and Materials basis) associated with groundwater in the vicinity of the buildings. This work would include (but not limited) to the following:
  - a. Excavation of test pits with backhoes to determine ground water levels.
  - b. Drilling of test wells to determine depth of groundwater in the bedrock.
  - c. Evaluation of this data to determine the best way to handle the groundwater and protect the building structures.
- 8. No significant plan changes (only field modifications) occurred this past month. However, we do have the following change order(s) requested for Board consideration:
  - a. \*Contract # 8: J.B. Electric has submitted a change order to address the final electric service design with MET-ED that has changed the transformer location and various equipment and installation charges.

#### **DEVELOPMENT PLANS FOR BOARD INFORMATION/UPDATE:**

9. This office received a phone call from the developer's engineer for the Bethel Elementary school site expansion. They indicated that they would be forwarding development plans for our review last month but to date we have not received them.

# **PUBLIC RELATIONS/ MISC. INFORMATION:**

10. We continue updating items on our website and certainly welcome any further suggestions on how this may be used for disseminating the project information.

## **ACTION ITEM STATUS:**

- 11. The following listed items Draft are a secondary priority as the review of submittals (shop drawings, development plans, etc.) diminishes:
  - a. Draft Technical Manual.
  - b. Lateral Specifications and details (Board directed last month to utilize the SDR-35 pipe for laterals).
  - c. Nutrient credits versus infrastructure improvements.
- 12. This office continues working as needed with the ongoing 537 plan revisions. As an update, this past month the following items were addressed:
  - a. This office is awaiting further direction on this matter.

Should there be any questions, please feel free to contact me.

Sincerely,

## Vision Engineering, Inc.

Bethel Township Municipal Authority Engineer

John K. Roche, P.E.

cc: Terry Parish, Esq. (w/attachments)