

June 29, 2026

2260085

Mr. Cameron Van Wyngarden, Superintendent
Plainfield Charter Township
6161 Belmont Avenue NE
Belmont, MI 49306

(via email: vanwyngardenc@plainfieldmi.org)

RE: Engineering Services Summary
**Plainfield Charter Township Water System
Source Water Alternatives Study – Phase 2**

Dear Mr. Van Wyngarden:

In accordance with recent discussions, we are providing background information, a description of the scope of services included in this proposal, the anticipated schedule for the study, and an estimate of the engineering fees for the proposed **Source Water Alternatives Analysis – Phase 2**.

Background

Source water limitations began in 2016 when the Versluis Well Field was taken offline. Past investigation activities at select sites were completed with the mindset to replace the entire capacity of the Versluis Well Field at one location. However, no single site was found capable of such capacity. The first phase of a high-level evaluation of source water alternatives was completed in early 2026. The Phase 1 study identified three alternatives for continued investigation for the long-term solution. First, maximizing the existing source water has significant benefits now and may help delay the need for a long-term solution. Second, a series of vertical wells and/or horizontal collector wells along Coit Avenue has been identified as a potential long-term solution that is locally focused. Last, seeking regional partners and funding for a Lake Michigan source water alternative has been identified as a solution that spans multiple counties.

Purpose

The proposed efforts in this scope of work are intended to support the Township's pursuit of three source water alternatives. This narrowed focus on three alternatives is intended to empower the Township with information on next steps. At the conclusion of the Phase 2 study, it is our intent to provide sound technical information for determining the path forward.

Engineering Scope and Fee Estimates

The engineering scope of services for the Phase 2 study are proposed to be conducted on an as-directed basis for the following three work areas. Work in each area will be conducted in parallel as practical, and as directed by the Township:

1. East Well Field Expansion Investigation

The Phase 1 Source Water Alternative Study identified maximizing existing source water capacity as a priority.

- Conduct soil boring to 60-feet of depth just north of air stripper building, convert to monitoring well if appropriate, conduct sieve analysis and water quality testing.
- Develop summary memo and EGLE request for Test Well Site Approval letter.
 - Estimated Engineering Cost: \$7,500
 - Estimated Drilling Cost: \$9,000 (billed directly to Township)

2. Coit Avenue Well Field Investigation

The Phase 1 Source Water Alternative Study identified a series of raw water collection systems along Coit Avenue, from Jupiter to approximately 1,000-feet west of Hunsberger, as a potential source water alternative. The goal of this Phase 2 study would be to achieve proof of concept for at least 4 million gallons per day of source water capacity. Four sites are identified below for investigation and are listed in order of east to west for proximity to the WTP:

- Area 1: Private Property. No soil boring or water quality information have been collected on this privately owned property. Four soil borings and two monitoring wells are proposed to further explore the feasibility of a vertical or horizontal well. Scope includes sieve analysis, water quality testing, and floodplain/wetland access coordination.
 - Estimated Engineering Cost: \$23,000
 - Estimated Drilling Cost: \$30,000 (billed directly to Township)
- Area 2: County Property. No soil boring or water quality information have been collected on this County owned property. Four soil borings and two monitoring wells are proposed to further explore the feasibility of a vertical or horizontal well. Scope includes sieve analysis, water quality testing, and floodplain/wetland access coordination.
 - Estimated Engineering Cost: \$23,000
 - Estimated Drilling Cost: \$30,000 (billed directly to Township)
- Area 3: Township Property. Limited soil boring and water quality information have been collected on two Township owned properties. Two additional soil borings and monitoring wells are proposed to further explore the feasibility of a vertical or horizontal well. Scope includes sieve analysis and water quality testing.
 - Estimated Engineering Cost: \$14,500
 - Estimated Drilling Cost: \$11,000 (billed directly to Township)
- Area 4: Private Property. Limited soil boring and water quality information have been collected on this privately owned property. Four additional soil borings and two monitoring wells are proposed to further explore the feasibility of a horizontal well. Scope includes sieve analysis and water quality testing.
 - Estimated Engineering Cost: \$18,500
 - Estimated Drilling Cost: \$22,500 (billed directly to Township)

For each site, we are prepared to participate in a meeting with the property owner for purposes of securing an access agreement, where applicable. The above estimates do not include preparation of access agreement documents or the cost of obtaining the agreements. We also

propose the following activities to pursue “proof of concept” source water collection options at minimum cost:

- Preliminary engineering and cost estimates when source water collection appears favorable.
- Summary memo and EGLE request for Test Well Site Approval letter, if appropriate.
- Due to the unknowns at each site, we propose to meet with the Township after investigation activities at each site to discuss the path forward.

3. Lake Michigan Source Water Alternative

Another long-term solution identified in the Phase 1 Source Water Alternative Study is a partnership for Lake Michigan source water. We envision the following work scope:

- Conduct a desktop feasibility study of a regional partnership approach to large infrastructure projects of this nature. A summary report would analyze large infrastructure projects through regional partnership, identify the reliability benefits, and summarize ownership models of similar projects.
- Provide technical support and participate in discussions with Community Partners (assume six meetings), Regulatory Agencies (assume two meetings), and Funding Agency/Legislative (assume two meetings).
- Estimated Engineering Cost: \$51,000

Progress Review Meetings

This proposal includes a kickoff meeting with the Plainfield Township team and progress meetings (assume 4) to review status and confirm approach and direction.

Schedule

We will begin work as soon as it is authorized. It is estimated that work on the East Well Field may be completed in 2026. Investigation activities in the Coit Avenue area will proceed as directed by the Township and as property access agreements are obtained, with activities at each site estimated to take approximately 3 months. The Lake Michigan feasibility study is proposed to be concluded by December 2026, with various meetings planned throughout 2026 and 2027. A final summary report is anticipated by December 2027.

Estimate of Fees

The engineering services fees for this project are estimated to be \$137,500, and drilling fees are estimated to be \$103,000 (billed directly to Plainfield Township), should all activities be authorized by the Township. Work will be completed in accordance with the terms of our Master Agreement for General Engineering Services.

Mr. Cameron VanWyngarden
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Please don't hesitate to contact us with any questions.

Sincerely,

Prein&Newhof



Kevin L. Gritters, P.E.



Mark R. Prein, P.E

KG/ES

cc: Rick Solle, P.E., Director of Public Services (via email)
Adam Zawisza, Finance Director (via email)