

September 21, 2020

Via E-Mail

Mayor and Council
Berkeley Heights Township
29 Park Avenue
Berkeley Heights, New Jersey 07922

Re: **Project Status Update and Outlook**
West Side Drainage Study
Berkeley Heights Township, Union County, New Jersey
NEA File No.: BERKMUN20.010

Honorable Mayor Angie D. Devanney and Councilmembers:

Neglia Engineering Associates (“NEA”) was previously retained by the Township to perform a study of a drainage system in the western portion of the municipality. The purpose of the study was to identify deficiencies or conditions within the existing stormwater conveyance systems that may contribute to or exacerbate flooding, erosion, or other adverse conditions. Additionally, the study will also provide specific recommendations for improving the drainage conveyance systems in the subject drainage area.

On Tuesday, August 18th, NEA attended a Mayor and Council meeting to present the preliminary findings of the study, as well as conceptual-level recommendations for addressing the drainage issues. At that time, NEA was only able to convey the 10-year design storm event. Since the August meeting, NEA was able to revise the system model to safely and effectively convey the 25-year design storm. This means that the new drainage system will discharge the 25-year storm event without surcharging, or backing-up inlets. Presently, the existing system cannot safely accommodate a 1-year storm event. As such, this presents a significant improvement compared to existing conditions. Additionally, the 25-year design storm is the industry standard for new municipal drainage system capacity.

As mentioned during the August 18th meeting, NEA and the Township were also working to secure funding from the New Jersey Infrastructure Bank (“NJIB”) for the project. On Tuesday, September 15th, NEA and Township representatives attended a preliminary conference call with the NJIB to express the Township’s interest in obtaining funding for the drainage project. The NJIB was receptive to the project and recommends that the Township proceed to the next steps. It should be noted that there has not been any commitment or confirmation of acceptance for the project, nor is such typically provided at this time. Based on the call, below is an anticipated schedule of the next steps from conception through construction.

- **Step 1:** Preparation of construction documents (plans and specifications) and permitting applications and supporting documents (multiple State and County agency permits required for this work, and must be in-hand for funding from NJIB) [**6 – 12 months**];
- **Step 2:** Securing of temporary easements from multiple private property owners for the construction of improved drainage systems and/or stream improvements, as well as permanent easements for future inspection, maintenance, and repairs of the new infrastructure. Private property owners must co-sign permit applications. Once easements are secured, and permitting applications endorsed by all parties, such can be submitted to the various agencies with jurisdiction over the project. This can happen somewhat concurrently with Step 1, as long as final easement scopes can be determined before 100% completion of design [**3 – 6 months**];
- **Step 3:** Submit permitting application and supporting documents to State and County agencies for permitting review and approval (Note: this time is estimated, and due to pandemic conditions, the normal



regulatory review periods have been extended and are therefore subject to change and outside factors) [**6 – 9 months**];

- **Step 4:** Submit all plans, specifications, easement agreements, and financial documentation to NJIB for funding processing and approval [**3 – 6 months**]; and
- **Step 5:** Commence construction. Depending on the final scope of the work, NEA preliminarily anticipates construction would last approximately **12 – 18 months**.

The report is virtually complete at this time. However, as per further direction from the Township, NEA is currently compiling mapping and a list of properties that will be impacted by the construction, and will therefore require coordination of easements. Once completed, NEA will provide a draft of the report to the Township for review prior to submission of the final report. NEA anticipates completing this draft within the next few weeks.

NEA has prepared a conceptual level estimate of the probable cost of construction for the proposed drainage improvements. At this time, NEA has preliminarily estimated the cost for this project to reside in the ballpark of \$15 to 20 million. The reason for the large range of cost is that there are many unknowns for the project. Due to the significant amount of unknown information at this time, there are several allowances in the estimate to provide adequate budget should certain conditions arise or to address uncertain expenses required for construction, such as:

- Private property restoration (i.e. driveways, patios, lawns/landscaping, sheds, gazebos, pools/spas, walls, etc.)
- Removal and replacement unsuitable soils or rock;
- Relocation of existing utilities; construction of new larger pipes may require existing utilities to be relocated. Generally, pressurized or otherwise non-gravity driven utilities, such as potable water, natural gas, electric, and telecommunications, do not require expansive improvements in order to relocate. However, relocating existing gravity-driven sanitary sewers, other storm sewers, or force mains driven by a pumping station may require extensive improvements to relocate these systems, either horizontally and/or vertically speaking. Because a full utility inventory, inclusive of ground penetrating radar, has not yet been performed, the full extent of these relocations is undetermined at this time. Such would be confirmed during the construction phase of the project.

We trust you will find the above in order. Should you have any questions, please do not hesitate to contact the undersigned.

Very truly yours,
Neglia Engineering Associates

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Cc: Ana P. Minkoff, RMC – Municipal Clerk (via e-mail)
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