CARMINAWOOD
DESIGN

May 28, 2024

Town of Hamburg Town and Planning Boards
6100 South Park Avenue
Hamburg, New York 14075

Re: **Proposed Redevelopment Mixed Use Project**
Gateway Building
3556 Lake Shore Road
Town of Hamburg

Dear Members of the Town & Planning Boards:

This letter has been prepared for the purpose of providing the Town & Planning Boards with a summary of the manner by which runoff from the Project Site will be properly handled. As a result of the need to install an on-site stormwater management complying the stringent applicable standards, the proposed project will not result in any potentially significant adverse stormwater impacts.

In connection with the Town's evaluation of potential stormwater runoff impacts, it is important to mention that the Engineer's Report to be prepared by our firm will provide calculations that confirm that the storm water management system to be constructed as part of the multifamily project will comply with the applicable stringent stormwater quality and quantity standards of the New York State Department of Environmental Conservation ("NYSDEC") SPDES General Permit for Stormwater Discharges from Construction Activity Permit No. GP-0-20-001 and the Town of Hamburg. This project will fall under the NYSDEC classification of "redevelopment with an increase in impervious cover". This will provide certain credit and requirement reductions for previously developed portions of the site. The fully engineered plans, Engineer's Report and SWPPP will need to be reviewed and approved by the Camie Jarrell, P.E., of GHD and the Town's Engineering Department in connection with the future Site Plan Application review process prior to the commencement of any on-site construction activities.

The following sections of this letter provide a summary of the manner by which runoff from the impervious surfaces within the project will be handled.

I. Storm Water Design Narrative:

A stormwater collection system currently exists for the site which discharges to Rush Creek. As much of this existing system will be preserved and reused as possible while accommodating the proposed redevelopment. A storm water

collection system is proposed for the redeveloped areas including access aisles, parking spaces and the proposed townhome buildings and recreation space. This system will consist of inlets placed on the Project Site to collect runoff from their respective tributary areas, including impervious surfaces. The proposed inlets will be connected by a series of storm pipes which will convey the runoff to the storm water management area on the east side of the site. The storm water management area will be designed in accordance with the New York State Department of Environmental Conservation ("NYSDEC") Stormwater Management Design Manual. This area will provide both water quality and water quantity storage components.

The existing drainage path of the Project Site runoff under existing conditions is generally towards Rush Creek on the north side of the site. In the developed condition, any developed areas will be conveyed to the storm water management area and ultimately discharge to Rush Creek. This will prevent water from the developed areas of the site from sheet draining offsite. The discharge from the storm water management area will be controlled by our engineered outlet control structure to not exceed the current existing rate of runoff to the existing ditch under all storm events which include the 10 year, 25 year & 100 year storm events. The storm water management area will be a wet pond and the intent is that it will be a feature of the recreation area and include fountains to maintain water quality.

Note that Rush Creek is classified by NYSDEC as a 303(d) waterbody and will therefore require the appropriate methods implemented to prevent further impairment following redevelopment.

Detention System:

The proposed storm water management system will consist of bioretention areas throughout the site where required followed by wet pond, this system will provide runoff reduction, volume attenuation and water quality treatment. The Concept Plan for the proposed redevelopment project prepared by our firm shows the storm water management area located on the east potion of the site. This location will maintain the general drainage paths, similar to existing conditions which also providing an amenity for the enjoyment of the recreation area users. This storm water management ssytem will be designed based on the applicable stringent standards to ensure they provide adequate stormwater runoff capacity.

The NYSDEC Stormwater Management Design Manual requires (5) five different criteria be considered when designing a storm water management system. Those criteria are Water Quality, Runoff Reduction Volume, Channel Protection,

Overbank Flooding and Extreme Storm Protection. Below is a summary of each item and how it will be incorporated into the proposed multifamily project.

Water Quality:

The NYSDEC requires water quality treatment prior to discharge. The goal of the design will be to achieve 100% of the water quality volume requirement by applying a practice recognized in the design manual, a Standard SMP with Runoff Reduction capacity. Standard SMP's include bioretention which will be incorporated into this project.

Runoff Reduction Volume:

As stated above, the goal is for the total water quality volume for the site to be reduced by the implementation of a Standard SMP used to achieve the Water quality requirement. The design methodology will be based on the NYSDEC Stormwater Management Design Manual five-step process for Stormwater Management Planning as outlined in Chapter 3.

This project will incorporate several Runoff Reduction techniques such as:

- Bioretention
- Preservation of natural resources
- Tree planting

Channel Protection:

The NYSDEC requires that extended detention be provided for the proposed 1-year storm event. The storage volume will be accommodated in the proposed storm water management area and the outlet will be restricted through the use of an engineered outlet structures designed in accordance with NYSDEC criteria.

Overbank Flooding:

The NYSDEC requires that the 10-year proposed storm event be attenuated with detention and that the outlet be restricted to the 10-year existing storm event. The storage volume will be accommodated in the proposed storm water management area and the outlet will be restricted through the use of an engineered outlet structures designed in accordance with NYSDEC criteria.

Extreme Storm Protection:

The NYSDEC requires that the 100-year proposed storm event be attenuated with detention and that the outlet be restricted to the 100-year existing storm event. The storage volume will be accommodated in the proposed storm water management area and the outlet will be restricted through the use of an engineered outlet structures designed in accordance with NYSDEC criteria.

Design Criteria:

Storm pipes: 10-year storm

Detention: Designed to contain the 1-year, 10-year, 25-year, 50-year and the 100-year 24-hour design storms for the post-development peak rates of runoff, while restricting the outflow rate equal to the 1-year, 10-year, 25-year, 50-year and the 100-year 24-hour design storms for the pre-development peak rates of runoff respectively.

In accordance with Town of Hamburg and NYSDEC requirements a Notice of Intent and Stormwater Pollution Prevention Plan ("SWPPP") will be prepared for the proposed project due to the total disturbance of greater than one (1) acre.

As demonstrated by the above overview, the proposed redevelopment project will include storm water management improvements per the applicable stringent standards of both the Town of Hamburg and the NYSDEC. This will ensure that the project will not result in any potentially significant drainage or flooding impacts and provide water quality.

II. Conclusion:

As outlined in detail above, the installation of an on-site stormwater management system complying with the applicable stringent stormwater quality and quantity standards as described above, ensures the proposed redevelopment project will not result in any potentially significant adverse drainage impacts.

The fully engineered plans, Engineer's Report and SWPPP will need to be reviewed by the GHD, the Town Engineering Department and involved agencies to confirm compliance with the applicable stormwater quality and quantity standards of the NYSDEC.

Please contact me at 716-550-3342 with any questions regarding this letter or the proposed multifamily project.

Sincerely,

Carmina Wood Design

R. Christopher Wood, P.E.

Cc: Town Board
Planning Board