

Ground and Surface Water Quality & Quantity

The Westerly boundary of the Hospital property is adjacent to the Bronx River and located within the FEMA flood zone. However, the proposed addition overlay is not located in the 100-year flood zone or floodway.

Borings have been performed in the vicinity of the proposed addition. Groundwater was observed at approximately 26 ft in depth. The depth to groundwater is approximately 14 feet below the lowest proposed grade. It is not anticipated that groundwater will be encountered during construction.

Typically, stormwater runoff can require permit coverage under the New York State General Permit (GP-0-10-001). Coverage under the General Permit would be obtained from the New York State Department of Environmental Conservation (NYSDEC). However, this project does not require coverage, as the disturbance is less than one acre in area.

However, the Village of Bronxville has more restrictive requirements for stormwater. The Village of Bronxville requires any project that is tributary to a water body included on the New York State 303(d) list must adhere to the design requirements of the New York State Stormwater Management Design Manual (NYSSMDM). The NYSSMDM provides design guidelines for properly selecting and designing stormwater practices that will treat the stormwater runoff.

This project is proposing the use of Green Infrastructure (GI) practices for treating stormwater runoff. The GI Practice selected includes a green roof system. The project will use both intensive and extensive designs. The GI practice will provide sufficient water quality treatment.

Due to the increase in impervious area, the project will also need to comply with requirements of stormwater runoff flow rates. The project is proposing the use an underground attenuation system to limit the peak flow rates of stormwater runoff.

Both of the proposed stormwater practices are designed to provide mitigation of stormwater runoff. Therefore, following the NYSSMDM design guidelines and meeting the Village of Bronxville Stormwater regulations, the proposed building addition will not have an adverse impact to the receiving water body, the Bronx River.