

X. WORKFORCE ENHANCEMENT FACTORS

C. SUSTAINABILITY AND RESOURCE MANAGEMENT

4. STORM WATER

Submit as Exhibit X. C.4. a description of plans for management of storm water including any plans to use Institute for Sustainable Infrastructure techniques to minimize impact of storm water and maximize its reuse.

The storm water facility on the project site will include the gravity collection system and the stormwater quality and detention facilities. All stormwater will be designed in accordance with the New York State Department of Environmental Protection's (NYSDEC) Pollution Discharge Elimination System (SPDES) for Discharges for Construction Activities, General Permit GP0-10-0001 (General Permit), the NYSDEC Stormwater Design Manual and the Village of South Blooming Grove requirements. The storm water facilities will discharge onsite.

The storm water facilities will be design to minimize impact by providing water quality and detention. Water quality measures will be provided to meet the pollutant removal goals by capturing and treating 90% of the average annual stormwater runoff volume. The water quality treatment facilities will capture and teat the full water quality volume to provide 80% TSS removal and 40% TP removal. Detention facilities will provide storage for the Stream Channel Protection Volume requirements to protect stream channels from erosion through the extended detention of the one (1)-year, 24-hour storm event, the overbank flood control to prevent an increase in the frequency and magnitude of out-of-bank flooding to attenuate the post development 10-year, 24-hour peak discharge rate to predevelopment rates and the Extreme Flood Control criteria is to prevent the increased risk of flood damage from large storm events, maintain boundaries of the pre-development 100-year floodplain and provide storage to attenuate the post development 100-year, 24-hour peak discharge rate to predevelopment rates.

The planning for the project will avoid or minimize land disturbance by preserving natural areas. The conservation design includes layout the elements of the project in such a way that the site design takes advantage of a site's natural features, preserves the more sensitive areas and identifies any site and opportunities to prevent or reduce negative effects of development. Green Infrastructure Practices will be implemented to avoid or minimize land disturbance by preserving natural areas. The design includes laying out the elements of the project in such a way that the site design takes advantage of a site's natural features and preserves the more sensitive areas. The techniques covered include in the project include:

1. Preservation of Undisturbed Areas - Delineate and conserve to minimize impact to undisturbed forests, native vegetated areas, riparian corridors, wetlands, and natural terrain.

2. Reduction of Clearing and Grading - Limit clearing and grading to the minimum amount needed for roads, driveways, foundations, utilities and stormwater management facilities.
3. Locating Development in Less Sensitive Areas – Minimize impact to sensitive resource areas such as floodplains, steep slopes, wetlands, mature forests and critical habitats by locating development to fit the terrain in areas that will create the least impact. The project is located mainly in areas of prior disturbance (the prior sand and gravel mining operation and the golf driving range)
4. Parking Reduction - Reduce imperviousness on parking lots by providing compact car spaces and efficient parking lanes, minimizing stall dimensions and using multi-storied parking deck.

Sustainable Infrastructure and Runoff Reduction techniques will be achieved by applying Green Infrastructure Techniques including conservation of natural areas by retaining the pre-development hydrologic and water quality characteristics of undisturbed natural areas by restoring and/or permanently conserving these areas on a site and stormwater practices designed to infiltrate rainfall through the surface, thereby reducing stormwater runoff from a site and groundwater recharge. The landscaped area of the site will use native and drought resistant plant material to minimize the need for irrigation. Where practical the use of rainwater harvesting to capture and store stormwater runoff to be used for irrigation systems will be implemented. With the implementation of these practices, the re-use of storm water will be maximized through infiltration and irrigation.