A. IMPACTS TO	None/	Negligible	Minor	Moderate	Major	More Data
ENVIRONMENTAL	NA NA			EA/EIS	EA/EIS	Needed to
RESOURCES				required	required	Determine
4. Water quality/quantity		X				

Explain: While surface and groundwater water quality and quantity impacts could result due to the proposed project, the implementation of mitigation procedures, as outlined below, would result in negligible adverse impacts.

Additional impervious surfaces for turf sports fields and parking areas have the potential to increase runoff during storm events, change water temperatures, cause sedimentation and turbidity, and impact nutrient concentrations in surface waters. Potential impacts to surface waters would be minimized as stormwater associated with new impervious surfaces would be directed to stormwater management facilities to treat the stormwater prior to discharge to local surface waters. Middlesex County would maintain and monitor the implemented BMPs to minimize potential impacts to surface water quality. Additionally, short-term construction activities would result in the disturbance of land, potentially resulting in soil erosion and sedimentation of waterways and wetlands. These water resources, as well as any surface conduits to the aquifer recharge area, have the potential to carry contaminates and sediment into the groundwater and nearby surface waters. These impacts are typically successfully controlled or minimized through the implementation of an approved Soil Erosion and Sediment Control (SESC) Plan and the installation of accepted SESC countermeasures.

During construction of the project, groundwater quality degradation has the potential to occur as a result of spills or leaks of oil containing and oil storage equipment. The potential for such impacts to groundwater would be addressed proactively by Middlesex County enforcing equipment and material staging requirements noted in the NJPDES General Permit 5G3 for Construction Activity Stormwater. Middlesex County and their contractors would comply with the Stormwater Management Rules (N.J.A.C. 7:8) and apply strategic use of BMPs.

The project would increase impervious surface area, potentially causing a long-term decrease in groundwater recharge rates, an increase in stormwater runoff, and introduction of additional automotive pollutants (i.e., oil, fuel) at the location of the proposed parking lot. Areas with higher groundwater recharge rates are assumed to have the highest potential for contamination and a reduction in recharge rates as a result of increased impervious surfaces. While the Project study area is largely comprised of land with a recharge rate of 0 inches per year, potential impacts to the groundwater aquifers would be minimized as stormwater associated with new impervious surfaces would be directed to stormwater management facilities to treat the stormwater prior to recharge into the groundwater. Middlesex County would maintain and monitor the implemented BMPs to minimize potential impacts to water quality and groundwater recharge.

NPS COMMENT: Please address Executive Order 11988 Flood Plain Management as well as Section 404 of the Clean Water Act due to the runoff from artificial turf

A. IMPACTS TO ENVIRONMENTAL RESOURCES	None/ NA	Negligible	Minor	Moderate EA/EIS required	Major EA/EIS required	More Data Needed to Determine
5. Stream flow characteristics	Х		6			

Explain: No direct impacts to streams are anticipated as a result of the project. The project area has a riparian zone associated with the nearby regulated water features and impacts to this riparian zone are anticipated to result from construction. Approximately 0.1 acres of riparian zone are anticipated to be disturbed by proposed temporary and permanent regulated activities; however, these impacts would have no impact on stream flow characteristics. As a result, no negative impacts are anticipated.

A. IMPACTS TO ENVIRONMENTAL	None/ NA	Negligible	Minor	Moderate EA/EIS	Major EA/EIS	More Data Needed to
RESOURCES	INA			required	required	Determine
6. Marine/estuarine	X	177711-1711-1	1 - 11 - 22 - 11			

Explain: According to the NJDEP Surface Water Quality Standards, streams within the area of the Project are classified as Freshwater 2 Non-Trout/Saline-Estuarine 1 (FW2-NT/SE1). The dual designation indicates water where a boundary between fresh and saline water exists somewhere along the watercourse due to tidal influence. The FW2 designation indicates these freshwater tributaries are not considered to have exceptional or unique ecological, recreational, or water supply significance, and NT identifies surface waters that are generally not suitable for trout.

While the NJDEP Surface Water Quality Standards classify the waters within the Project area as Saline/Estuarine, no waterways are located within the Project's limit of disturbance; therefore, no adverse