

### **III.J Utilities**

#### **I. Water Supply**

##### **a. Introduction and Principal Conclusions**

There are three wells on the property which were drilled in association with the previous approvals of the Campus at Fields Corner development on the property. A water supply and distribution system was designed and a Public Water Supply Permit was issued in 2005 by NYSDEC for the system to serve the 143 single family homes and the 237,000 s.f. of commercial space, and to use a supply of water of up to 78,010 gallons per day(gpd).

The proposed project is estimated to use approximately 29,000 gpd, including irrigation. The proposed groundwater withdrawal from the on-site bedrock wells of 29,000 gpd is significantly less than the previously permitted 78,010 gpd. It is also significantly less than the estimated groundwater recharge to the bedrock aquifer underlying the project site under normal precipitation conditions of 205,000 gpd and drought conditions of 133,250 gpd. The available groundwater recharge is sufficient to meet the water demand of the project.

Extensive information on the existing wells is provided in the Groundwater chapter of this DEIS, including previous testing of the wells and the potential for drawdown effects.

##### **b. Existing Conditions**

There are three wells on the property which were drilled in association with the previous approvals of the Campus at Fields Corner development on the property. The existing wells are identified as OW-1, NW-4 and OW-3. A water supply and distribution system was designed and a Public Water Supply Permit was issued in

2005 by NYSDEC for the system to serve the 143 single family homes and the 237,000 s.f. of commercial space, and to use a supply of water of up to 78,010 gallons per day(gpd). A 200,000 gallon water storage tank was approved as part of the system, which included the necessary water supply associated with fire suppression. Except for the existing wells, none of the previously approved infrastructure was installed. The Applicant will write a letter to NYSDEC requesting that the previously issued Water Supply Permit be rescinded.

**c. Future Without the Proposed Project**

The potential water supply would not be expected to change in the future without the proposed project.

**d. Anticipated Impacts**

**i. Proposed Water Usage**

The proposed project is estimated to use approximately 29,000 gpd, including irrigation. Approximately 17,000 gpd are associated with the employees, based on a rate of 15 gpd utilized in the NYSDEC 2014 Wastewater Standards For Intermediate Sized Systems. The proposed groundwater withdrawal from the onsite bedrock wells OW-3 and NW-4 of 29,000 gpd is significantly less than the previously permitted 78,010 gpd. The existing well OW-1 will not be used since a temporary wetland crossing would be required to install the service line from OW-1 and wells OW-3 and NW-4 will provide sufficient capacity. The Applicant will submit currently proposed design information to the Putnam County Department of Health (PCDH) in association with a permit application. . The projected groundwater withdrawal is also significantly less than the estimated groundwater recharge to the bedrock aquifer underlying the project site under normal precipitation conditions of 205,000 gpd and drought conditions of 133,250 gpd. The available

groundwater recharge is sufficient to meet the water demand of the project. Additional water quality testing is being conducted at the request of PCDH.

A preliminary analysis has been completed for the currently proposed logistics center based on the requirements of the current adopted editions of The State of New York Building Codes (International Building Codes), Fire Safety Code, Department of Public Health Regulations, National Electrical Code, and applicable standards including NFPA 13 Standard for the Installation of Sprinkler Systems and NFPA 72 National Fire Alarm Code. The fire protection system will include Early Suppression Fast-Response (ESFR) Sprinklers. Since the specific tenants are not known at this time, the fire suppression system is being designed conservatively with an approximately 269,000 gallon water storage tank. A more detailed discussion of the water tank and its requirements are found in “Utilities” Section III.I.2.d.

ii. **Zone of Influence of Existing Wells**

Water-level data collected from the 1992 and 2004 pumping tests demonstrated that pumping-related water-level drawdown effects in the bedrock aquifer were limited to the onsite wells and a small area to the northeast of OW-3. The pumping test data also showed that interference effects decreased with a decrease in the pumping rates in the onsite wells. Therefore, the planned withdrawal of 29,000 gpd (20.1 gpm) is not anticipated to have any significant effect on offsite wells or the bedrock aquifer in the area. The PCDOH, the regulatory permitting agency for the planned non-transient, non-community public water system, was contacted to determine whether the department would require additional yield testing or offsite well monitoring to confirm results from the prior tests conducted on the proposed supply wells. The PCDOH responded that the existing drawdown testing data was sufficient, and no additional testing was required relative to the potential of drawdown and that water quality testing is the only current testing requested.

Onsite subsurface wastewater disposal is also planned for the project. Infiltration and recharge of a portion of the water withdrawn back into the groundwater system through the use of an onsite septic system will reduce the consumptive water withdrawal of the project, further reducing the potential for cumulative aquifer impacts.

Fertilizers and pesticides will be applied in accordance with state and federal law as well as with the manufacturer's guidelines, and as such are not anticipated to have an impact on groundwater or surface water resources.

**e. Mitigation Measures**

No significant adverse impacts to the bedrock aquifer or watershed are anticipated from the planned groundwater withdrawal. Additionally, based on the existing well pumping test data, no significant adverse impacts to existing offsite wells near the project site are anticipated from pumping in onsite wells OW-3 and NW-4. Therefore, no mitigation measures in regard to the planned groundwater withdrawal are warranted.

**2. Sanitary Sewer**

**a. Existing Conditions**

There are currently no on-site sanitary sewer systems in operation. The sewage treatment plant approved for the Campus at Fields Corner development is no longer proposed.

**b. Future Without the Proposed Project**

The areas associated with the proposed subsurface sanitary sewer disposal areas would remain as existing without the proposed project.

**c. Anticipated Impacts**

Subsurface sewage disposal systems (SSDS) are proposed rather than the previously approved sewage treatment plant. As mentioned above, the currently proposed water usage is substantially less than the usage associated with the previously proposed Campus at Fields Corner development. Each building will have its own SSDS (septic field) which will consist of a primary field with a capacity of up to 5,000 gpd as well as a 100% expansion area. The SSDS areas are shown on the site plans as well as in Figures III.C-1 and III.C-2. The design flow of approximately 17,000 gpd are associated with the employees, based on a rate of 15 gpd utilized in the NYSDEC 2014 Wastewater Standards For Intermediate Sized Systems. Subsurface testing of each area has been conducted recently and witnessed by PCDOH. The tests include depths to groundwater or rock and the percolation rate of the soil. The test results are included in Appendix J-1. The design of the SSDS will be refined based on the results of the subsurface testing during the PCDOH permitting process.

**d. Mitigation Measures**

The SSDS have been designed to be fully compliant with all applicable regulations. There will be no off-site or other adverse impacts and no mitigation is required.

### **3. Electric**

#### **a. Existing Conditions**

While electric service was previously provided to the former residences within the property, there is currently no electric service.

#### **b. Future Without the Proposed Project**

Existing site conditions would remain without the proposed project.

#### **c. Anticipated Impacts**

New York State Electric and Gas Corporation (NYSEG) serves the area and has indicated that it will gladly provide electric service to the site, as indicated in Appendix I-2. It is anticipated that each building will have its own point of electric service, and individual utility meter. The total estimated electric load at the site is 2,343 KW. A load letter has been submitted to NYSEG requesting new electric service.

According to NYSEG representatives, new overhead utility distribution lines may be required to bring power from Route 312 to Pugsley and Barret Road. If required, the total estimated length of new overhead distribution is approximately 5,400 feet.

#### **d. Mitigation Measures**

The Applicant will continue to coordinate with NYSEG regarding the utility extension.

#### 4. **Gas**

##### a. **Existing Conditions**

There is currently no natural gas supplied to the site.

##### b. **Future Without the Proposed Project**

Existing site conditions would remain without the proposed project.

##### c. **Anticipated Impacts**

Similar to the electric service, NYSEG provides gas service to the vicinity of the site and has indicated that it will gladly provide gas service to the site, as indicated in Appendix I-2. According to NYSEG representatives, there is a gas main servicing The Highlands Shopping Center located at the intersection of Independent Way and Route 312 across from the site. A load letter has been submitted to NYSEG requesting gas services for the new buildings. The total gas load input is 184,000 CFH. This quantity includes the heating load and domestic water heating load for the four buildings. Depending on the service and pressure available, it is anticipated that a 6-inch high-pressure main will be required to meet the load of all four buildings.

##### d. **Mitigation Measures**

The Applicant will continue to coordinate with NYSEG regarding the utility extension.