

## Appendix B

### SEQR Full Environmental Assessment Form – Part 3

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**PART 3****EVALUATION OF THE IMPORTANCE OF IMPACTS**

## Responsibility of Lead Agency

Part 3 must be prepared if one or more impact(s) is considered to be potentially large, even if the impact(s) may be mitigated.

**Instructions**

Discuss the following for each impact identified in column 2 of Part 2:

1. Briefly describe the impact.
2. Describe (if applicable) how the impact could be mitigated or reduced to a small to moderate impact by project change(s).
3. Based on the information available, decide if it is reasonable to conclude that this impact is important.

To answer the question of importance, consider:

- The probability of the impact occurring
- The duration of the impact
- Its irreversibility, including permanently lost resources of value
- Whether the impact can or will be controlled
- The regional consequence of the impact
- Its potential divergence from local needs and goals
- Whether known objections to the project relate to this impact

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## EXPANDED ENVIRONMENTAL ASSESSMENT

### I. PROJECT DESCRIPTION

#### A. Propose Development

Scannell Properties is proposing to construct a 1,015,740 ± square foot sales distribution center on two parcels totaling 116.3 ± acres along NYS Route 9 in the Town of Schodack, Rensselaer County, New York. The main parcel consists of 73 ± acres and the other parcel of 43 ± acres. The two properties will be consolidated into one as part of this project. The proposed facility will be constructed in its entirety in one phase. There will be two employee shifts per day. The receiving shifts will be from 7:00 am to 5:30 pm and 6:00 pm to 4:30 am Monday through Friday. The shipping shifts will be from 7:30 am to 6:00 pm and 6:30 pm to 5:00 am Monday through Friday.

The project site is currently zoned Planned Development District (PD-3) and the proposed use, sales distribution center, is an allowed use within this district subject to site plan approval. Because the project site is located within the Town's Water Quality Control District, the project does require a special permit. In addition the property is not located within a water or a sewer district, therefore district extensions will be required.

The project includes associated on-site roadways, parking, utility infrastructure, landscaping, and stormwater management facilities. There will be two (2) driveway entrances to the site off of NYS Route 9; one dedicated driveway for employees and one dedicated driveway for trucks. A security gate with a Guard House will be provided at the truck entrance. Approximately 1,050 parking spaces will be provided for employees and approximately 300 parking spaces will be provided for truck trailers. Off-site improvements will include extension of water, sewer, and natural gas mains to the project site. The off-site utilities will be extended from their current terminus along NYS Route 20 south of NYS Route 150.

Additional project information is provided in the site plan package of drawings that accompany this EAR.

#### B. Project Implementation

Implementation of the project involves several approvals including the following:

1. Coordinated SEQRA review by the Town of Schodack Planning Board (Lead Agency), as the action is considered to be a "Type I" action.
2. Site Plan review and approval by the Schodack Planning Board.
3. Special Permit from Schodack Planning Board for development within a Direct Recharge Area of the groundwater aquifer per the Water Quality Control District requirements.
4. Schodack Town Board approval for the extension of the existing water and sewer districts to cover the project site.
5. NYSDEC and NYSDOH approvals for extension of the water and sewer mains to the project site.

6. NYSDOT review and approval of the Traffic Impact Study.
7. NYSDOT approval of two (2) new curb cuts onto NYS Route 9.
8. Town of Schodack work permits for connection to the Town sanitary sewer system.
9. Town of Schodack work permits for connection to the Town water main.
10. Town of Schodack (MS4) approval and acceptance of the Stormwater Pollution Prevention Plan (SWPPP), which is to be prepared in compliance with the NYSDEC General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002), as well as approval for disturbing more than five (5) acres of land at one time.

The following review agencies may be included in the necessary project review process:

1. Town of Schodack Town Board
  - a. SEQRA Review - Involved Agency
  - b. Extension of water and sewer districts to the proposed project.
  - c. Acceptance of dedication of new water and sewer mains, as necessary.
2. Town of Schodack Planning Board
  - a. SEQRA Review - Lead Agency
  - b. Site Plan review/approval.
  - c. Special Use Permit per Water Quality Control requirements
  - d. SWPPP and 5-acre Waiver approval
3. Town of Schodack Department of Public Works
  - a. Permits for water and sewer service connections
4. Rensselaer County Industrial Development Agency
  - a. Potential project financing
5. Rensselaer County Planning Board
  - a. SEQRA review - Interested Agency
  - b. Site Plan Review Recommendation
6. Rensselaer County Health Department
  - a. SEQRA review - Involved Agency
  - b. Approval of water and sewer main extensions
  - c. Approval of water and sewer district extensions

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7. New York State Department of Health
    - a. SEQRA review - Involved Agency
    - b. Approval of water main extension
    - c. Approval of water and sewer district extensions
  
  8. New York State Department of Environmental Conservation
    - a. SEQRA Review - Involved Agency
    - b. General Permit for Stormwater Discharges
    - c. Approval of sewer main extension
    - d. Approval of water and sewer district extensions
  
  9. New York State Department of Transportation
    - a. SEQRA Review - Involved Agency
    - b. Approval of Traffic Impact Study
    - c. Permits for curb cuts and work in NYSDOT right-of-way
  
  10. New York State Office of Parks, Recreation and Historic Preservation
    - a. SEQRA Review - Involved Agency
    - b. Sign-off on Archaeological and Historic Impacts
  
  11. U. S. Army Corps of Engineers
    - a. Wetlands Jurisdictional Determination

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## II. IMPACT ANALYSIS AND MITIGATION MEASURES

### A. Impact on Zoning

The site is zoned Planned Development District (PD-3). The proposed sales distribution center facility is a permitted use within the PD-3 zoning district. Because the project site is located within the Town's Water Quality Control District, the project also requires a special permit. There are no specific use and bulk zoning regulations applicable to this site; however, the Schodack Planning Board will establish appropriate bulk regulations as part of the Site Plan Review process.

The project is consistent with the Town of Schodack Comprehensive Plan (January 2011), particularly Guiding Principle #5: Encourage business growth around the I-90 exits and the Route 9 Corridor to build a strong tax base for public services and to provide retail and service business support for Town Residents.

The project is also consistent with the Route 9 Corridor Development Plan (July 2006) as follows:

- Traffic is concentrated where flow will be minimal and highway access greatest.
- The facility will provide employment opportunities.
- The Facility is a clean operation that does not threaten the aquifer more than the existing activity.
- The facility is not water intensive and does not use or generate hazardous materials.

### B. Impact on Land

A geotechnical study of the site was conducted by Dente Group, A Terracon Company of Watervliet, New York (Dente) for this project. The study included test borings, soil sampling, laboratory testing, and a summary report. The purpose of the report is to understand the existing subsurface conditions on the site and obtain recommendations for the proposed development. The results of the report are consistent with a site that can support the proposed development. The full report, Preliminary Geotechnical Evaluation, Sales Distribution Center, Schodack, New York dated April 17, 2018 is included in Appendix E.

A large portion of the project site is existing agricultural land and has been actively farmed for decades. Therefore, a large portion of this property has been significantly altered in the past. The remainder of the site is unused forest.

Construction of paved areas and buildings will result in alteration of the existing ground. Approximately 79 ± acres of the present ground cover will be disturbed during construction. The development of the site will require that some fill material (e.g. driveway and parking stone sub-base) will be imported to the project site to achieve the proposed grades.

According to the Rensselaer County Soil Survey, Natural Resources Conservation Service website (NRCS), there are seven (7) mapped soils identified within the project boundary. Hoosic gravelly sandy loam, 0 to 5 percent slopes (HoA), Hoosic gravelly sandy loam, 3 to 8 percent slopes (HoB), Hoosic gravelly sandy loam, rolling (HoC), Hoosic gravelly sandy loam, hilly (HoD), and Hoosic gravelly sandy loam, steep (HoE) have a hydrologic soil group A, meaning these soils have a high infiltration rate when thoroughly wet. These soils make up the majority of the site; approximately 89%. Castile gravelly silt loam, 0 to 5 percent slopes (CbA),

and Natchaug muck, 0 to 2 percent slopes, have a hydrologic soil group A/D and B/D respectively, meaning these soils have a low infiltration rate when thoroughly wet. These soils make up a minority of the site; approximately 11%. In general, the majority of the on-site soils are types of soils are adequate for supporting the proposed project. Where unsuitable soils are encountered, they will be removed and disposed of in accordance with all local, state, and federal regulations. Refer to Appendix D for NRCS soils information and Appendix E for the Geotechnical Engineering Report.

It is estimated that about 609,000 cubic yards of soil will need to be cut for use as on-site fill for construction of the building, driveways, parking and stormwater management facilities. The site will be designed to balance the on-site cuts and fills to the greatest extent possible and it is anticipated that no structural soil will need to be imported onto the site. Topsoil will be stripped, stockpiled and re-used on site; because less topsoil will be needed in the final condition is anticipated that approximately 120,000 CY of topsoil may be exported from the site. In addition there is an existing pond in the center of the site that is expected to contain approximately 10,000 CY of unsuitable material; this too will be exported from the site. Some material, such as crushed stone sub-base material for building slabs, driveways and parking will be imported to the site, the following are estimated import quantities needed for the site work: 77,300 CY of subbase stone; 10,000 TONS of asphalt, 3,000 CY of concrete. However, some on-site material may be able to be processed on-site and used for the sub-base material.

Bedrock was encountered in some of the test borings performed by Dente at depth varying from 11 to 23 feet below existing grade. There is no rock shown at the depths expected for building, pavement, or pond excavation, so no rock excavation is currently expected. However, the bedrock encountered appears weathered; therefore, if rock excavation is required it is anticipated that removal with a large track mounted backhoe with rock teeth will be possible and no blasting would be utilized.

Based on the Geotechnical Engineering Report (refer to Appendix E), groundwater was encountered only in the extreme west and east portions of the site. Borings B-1 and B-10, on the west edge of the site show groundwater at a depth of approximately 26 feet. On the east edge borings B-9, B-13, and B-14 show groundwater at 20, 15, and 8 feet respectively. Based on this information, all grading will occur above the elevation of the groundwater encountered in the borings; as such there is no anticipated impact to aquifer.

During construction, erosion control measures such as silt fence, diversion swales/berms and sediment traps/basins will be installed to mitigate the potential for erosion of soils and downstream siltation. The proposed stormwater sedimentation basins will function as temporary sediment traps/basins during construction. Upon the completion of construction those temporary facilities will be converted to permanent facilities. All erosion and sediment control measures will be constructed in accordance with the latest edition of the New York State Standards and Specifications for Erosion and Sediment Controls.

Common industry practices, such as the spraying of water to control dust and confining construction work periods to those permitted by the Town, will further mitigate the normal unavoidable short-term impacts associated with construction.

Based on the above, the proposed project will not have a significant impact on land.

### C. Impact on Water

Wetlands: A wetland delineation of the site was conducted by Quenzer Environmental LLC of Selkirk, New York (Quenzer) for this project. (Quenzer was previously named Bagdon Environmental, A Division of Novus Engineering, P.C. and completed a portion of their work under this name in 2016). The purpose of the delineation was to identify any existing wetlands or waters of the US on the project site. The results of the report are consistent with a site that can support the proposed development. The delineation found that there are no jurisdictional wetlands on the property. Two reports, Wetland Delineation Report, Waters of the United States, Palmer-Otterbeck Parcel - U.S. Route 9, Town of Schodack, Rensselaer County New York dated January 2016, and Wetland Delineation and Endangered Species Screening, Sales Distribution Center Site, Beaudoin Parcel – Tax Map 200.00-6-22.1 (43± Acres), and Palmer-Otterbeck parcel – Tax Map 200.-6-13 (73± Acres), Town of Schodack – Rensselaer County, NY dated April 2018 are included in Appendix F.

Quenzer (then named Bagdon Environmental) performed a wetland investigation on the larger of the two properties (73.6 ± acres, tax map parcel 200.00-6-1.3) as described in their 2016 report.

Quenzer collected and reviewed available background information and maps including a topographic map, wetland maps, soils map and descriptions, surface water classification maps, flood rate insurance maps, and an aerial photograph to locate potential wetlands on the site, and determined there are no mapped stated-regulated (i.e. NYSDEC) wetlands on the site.

Quenzer utilized methods described in the Army Corps of Engineers wetland delineation manual to search for wetlands within the two properties. A total of three (3) wetlands were identified, delineated, and are referred to as Wetland A (0.066 acres), Wetland B (1.505 acre), Wetland C (0.449 acre). There were no streams or other waters of the US identified on this property. The delineated wetland boundaries are shown on Figure 2 within the 2016 report.

Quenzer concluded that all three wetlands within the site are isolated wetlands as they have no outlets and therefore no connection to waters of the U.S. On April 22, 2016 the USACOE concurred and issued a jurisdictional determination stating that the three wetlands on the property do not meet the criteria of water of the United States; and therefore, do not fall under the jurisdiction of the USACOE.

Quenzer performed a wetland investigation on the other property (43 ± acres, tax map parcel 200.00-6-22.1) as described in their 2018 report.

Quenzer collected and reviewed available background information and maps including a topographic map, wetland maps, soils map and descriptions, surface water classification maps, flood rate insurance maps, and an aerial photograph to locate potential wetlands on the site, and determined there are no mapped stated-regulated (i.e. NYSDEC) wetlands on the site.

Quenzer utilized methods described in the Army Corps of Engineers wetland delineation manual to search for wetlands within the two properties. A total of two (2) wetlands were identified, delineated, and are referred to as Wetland A (0.5 acres) and Wetland B (0.3 acre). There were no streams or other waters of the US identified on this property. The delineated wetland boundaries are shown on Figure 2 within the 2018 report.

Quenzer concluded that the two wetlands within the site are isolated wetlands as they have no outlets and therefore no connection to waters of the U.S. A jurisdictional determination is pending from the

USACOE.

Based on the above, the project will not impact any wetlands under the jurisdiction of the USACOE or the NYSDEC.

Stormwater Runoff: A drainage study of the site was conducted by McFarland Johnson, Inc. of Saratoga Springs, New York (MJ) for this project. The study included an analysis of the existing and proposed hydrology and hydraulics to ensure that the proposed development does not significantly affect the environment. The results of the report are consistent with a site that can support the proposed development. The full report, Drainage Design Report, April 2018, Sales Distribution Center, Schodack, New York Rensselaer County dated April 2018 is included in Appendix G.

Although the project will alter the existing site topography, the existing drainage pattern will be maintained on the north and south sides of the property. There are three (3) analysis points where peak stormwater runoff is evaluated for both existing and proposed conditions. Analysis Point #1 is located in the far northwest corner of the site; Analysis Point #2 is located in the northeast corner of the site, and Analysis Point #3 is located in the southern portion of the site, meeting existing flow patterns.

The construction of buildings and paved areas is expected to increase the rate and volume of stormwater run-off. The increase in run-off will be mitigated by the inclusion of stormwater management facilities designed to temporarily detain and infiltrate stormwater run-off during storm events and slowly release and/or infiltrate stormwater after the storm event. These facilities are designed in accordance with the NYSDEC Stormwater Design Manual and consist of Sedimentation Basins for pre-treatment prior to discharging into Infiltration Basins that will provide stormwater detention and water quality treatment.

Stormwater run-off from the building, driveways and parking areas will be collected in a series of catch basins and directed through a piping network to the stormwater management facilities. The stormwater infiltration basins will be sized to mitigate the Water Quality Volume (WQv), the Runoff Reduction Volume (RRv), the Channel Protection Volume (CPv), the Overbank Flood (Qp), and the Extreme Storm (Qf). Each of these is addressed below:

- Water Quality Volume: The required WQv is provided in three Infiltration Basins.
- Runoff Reduction Volume: The RRv is achieved by infiltrating a substantial portion of the run-off to meet the minimum RRv requirement.
- Channel Protection Volume: The CPv requires that a minimum of 24-hour detention be provided for the 1-year, 24-hour storm event. This requirement is met since the infiltration basins will infiltrate 100% of the 1-year storm event.
- Overbank Flood: The Qp requires that there be no net increase in peak runoff for the 10-year, 24 hour storm event. This requirement is met since the infiltration basins will infiltrate 100% of the 10-year storm event.
- Extreme Storm: The Qf requires that there be no net increase in peak runoff for the 100-year, 24 hour storm event. This requirement is met since the infiltration basins will infiltrate 100% of the 100-year storm event.

The existing topography of the site is varying with high and low spots, and there are no noticeable discharge points from the site. In the existing condition runoff collects in the low spots and infiltrates into the ground. As noted above all of the proposed design storm events will be fully infiltrated which will

mimic the existing condition and foster recharge of the groundwater aquifer.

This project will be required to comply with the State Pollutant Discharge Elimination System (SPDES) Phase II General Permit for Stormwater Discharges from Construction Activities (GP-0-15-002). As part of these requirements a Stormwater Pollution Prevention Plan (SWPPP) will be prepared describing erosion and sedimentation control measures.

The Town of Schodack is an MS4 community and therefore this project will comply with the NYSDEC Phase II stormwater regulations and will incorporate Best Management Practices (BMP's) to ensure that water quality on site will be protected. BMP's to be employed will, at a minimum, include:

- Temporary Erosion and Sediment Control Measures shall include:
  - Silt fencing placed around construction areas prior to grading activities;
  - Diversion Channels to prevent runoff from leaving the site
  - Land clearing activities shall be done only in areas where earthwork will be performed and shall progress as earthwork is needed;
  - Permanent seeding and planting of all unpaved areas using the hydro-mulching grass seeding technique;
  - Mulching exposed areas, where specified;
  - Temporary seeding and planting of all unpaved areas using the hydro-mulching grass seeding technique within 14 days of disturbance;
  - Frequent watering to minimize wind erosion during construction; and
  - Rock check dams
  
- Permanent structural practices for this site shall include:
  - Outlet protection using stone riprap as specified;
  - Utilize storm sewer collection system that will be tested for water tightness;
  - Sedimentation basins will also serve as a temporary sediment basin;
  - Vegetated and/or riprap lined swales.

All erosion and sediment control measures will be designed in accordance with the New York State Standards and Specifications for Erosion and Sediment Controls. The site contractor will be required to adhere to all erosion and sediment control measures as defined in the MS4 approved SWPPP.

The building will be constructed in a single phase with a total building area of approximately 1,015,740 ± SF. MS4 (Town of Schodack) approval to disturb more than five (5) acres at a time will be required. To obtain the five acres waiver, at least two site inspections be required to be performed during construction by a qualified professional, every seven days, for as long as the disturbed area exceeds five acres. This increased frequency of inspection will ensure that the erosion and sediment control facilities are functioning as designed and that there are no impacts to the waters of the U.S.

Based on the above, there will not be a significant impact on stormwater runoff from the project site.

Water Usage: Water will be supplied through the Town of Schodack municipal water system. The project site is located near Water District #CWD101, but is currently not within the District. The water district will be extended to encompass the project site, which will require approval by the Schodack Town Board, the NYS Department of Health and the NYS Department of Environmental Conservation.

Based upon actual water usage from a similarly sized facility, the projected water usage for the sales distribution center facility is estimated to be 6,000 GPD. It is planned to extend the municipal water main to the project site from the existing 12-inch main located in the vicinity of the intersection of Routes 9 & 20. Refer to the Offsite Utility Plans for the location of the existing main and the proposed extension to the project site.

The water system serving Water District #CWD101 has a capacity of 0.5 MGD and current usage is approximately 130,000 GPD. Therefore, the system has sufficient capacity to meet the water demand of 6,000 GPD for this project.

Based on the above, this project will not have a significant impact on the municipal water system.

**Sanitary Sewer:** The projected sanitary sewer discharge from the sales distribution center facility is estimated to be 6,000 GPD, based upon actual usage from a similarly sized facility. It is planned to extend the municipal sanitary sewer to the project site from the existing 12-inch main located in the vicinity of the intersection of Routes 9 & 20. Refer to the Offsite Utility Plans for the location of the existing main and the proposed extension to the project site.

Sanitary sewer will be collected and directed to the Town of Schodack municipal sanitary sewer system. The project site is located near a Sanitary Sewer District, but is currently not within the District. The sewer district will be extended to encompass the project site, which will require approval by the Schodack Town Board, the NYS Department of Health and the NYS Department of Environmental Conservation.

Sanitary wastewater collected within the Sewer District is directed to the Town of East Greenbush municipal sewer system. The Town of Schodack has an agreement with the Town of East Greenbush for the discharge of up to 45,000 GPD into the East Greenbush sewer system. The Town of Schodack is currently sending 25,000 GPD to East Greenbush. Therefore, there is sufficient reserve capacity to accept the additional wastewater from the proposed project.

Based on the above, this project will not have a significant impact on the municipal sanitary sewer system.

**Groundwater Aquifer:** According to the Schodack Terrace and Valatiekill Aquifer map provided in Appendix H, the project site is located over a groundwater aquifer and lies within the Direct Recharge Area Boundary. As such, the site is subject to the requirements of Town Code Chapter 223 Water Quality Control. Provided below is a summary of the requirements (in italics) that are or may be perceived to be applicable to the development of the proposed project, followed by either how the project complies with the requirement or justification as to why the requirement is not applicable.

*Uses permitted under the Town of Schodack Zoning Law (Chapter 219) are permitted in the Water Quality Control District subject to the provisions of Chapter 223 Water Quality Control (223-6.C.1).* Sales Distribution Center is an allowed use within the PDD district.

*Permits for wastewater disposal shall be obtained from the Rensselaer County Department of Health (RCDOH) or the New York State Department of Environmental Conservation (NYSDEC) as required and provided to the Town (223-6.C.1.c).* Appropriate approvals will be obtained from the RCDOH and/or the NYSDEC, as applicable. All wastewater will be collected and be treated at an approved existing off-

site wastewater treatment facility.

*There shall be no open storage of hazardous materials or petroleum (223-6.C.1.f).* There will be no open storage of petroleum or hazardous materials.

*Hazardous material storage for commercial/industrial uses that is not regulated by NYSDEC shall only occur on an enclosed, impervious surface that is bermed or otherwise constructed to contain spills or leaks (223-6.C.1.h).* The operator intends to use hydrogen fuel cells to power their forklifts used inside the distribution center. As such there will be no hazardous material stored onsite.

*Petroleum shall be stored in individual containers with a capacity less than 60 gallons or in aboveground tanks. The tanks shall be installed on an impervious surface and be fully enclosed by a structure that prevents exposure to outside weather or have a secondary containment with a minimum capacity equal to that of the tanks (223-6.C.1.i).* Petroleum will not be stored on-site, therefore this section is not applicable to the project.

*For parking lots and vehicle storage or sales areas regularly holding 100 vehicles or more for at least five days per week, or at vehicle washing facilities, gasoline sales and motor vehicle service stations, an impervious surface (e.g., asphalt or concrete) with water flow directed towards an appropriately sized and maintained oil/water separator or water quality inlet structure shall be required. Collected petroleum product and other waste materials shall be removed as needed by a hauler licensed by the NYSDEC. The Planning Board may require oil/water separators or water quality inlet structures for other uses where petroleum is stored or transferred or where less than 100 commercial trucks or construction vehicles are stored. This provision may be waived if the site requires and has obtained a NYSDEC SPDES permit (223-6.C.1.j).* The project will provide off-line oil water separators at the end of each closed drainage system before discharge into the sediment forebays. In addition, each drainage structure will have a 2 foot sump and a hooded outlet to further trap sediment and oil providing additional water quality volume and resulting in cleaner runoff.

*Excavations or cut-ins that expose groundwater within the Wellhead Protection Area are prohibited. This provision does not apply to temporary (less than 60 days) construction-related excavations or cut-ins (223-6.C.1.m).* The project is not within a Wellhead Protection Area.

Based on the Geotechnical Engineering Report (refer to Appendix E), groundwater was encountered only in the extreme west and east portions of the site. Borings B-1 and B-10, on the west edge of the site show groundwater at a depth of approximately 26 feet. On the east edge borings B-9, B-13, and B-14 show groundwater at 20, 15, and 8 feet respectively. Based on this information, all grading will occur above the elevation of the groundwater encountered in the borings; as such there is no anticipated impact to aquifer.

The project will comply with all applicable requirements of the Water Quality Control regulations. In addition, it should be noted that this project will employ infiltration as part of the stormwater management system design. As such, recharge of the groundwater aquifer will be promoted. Refer to the Stormwater Runoff section of this report for additional information.

Based on the above, the project will not have a significant impact on the groundwater aquifer.

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#### D. Impact on Air

No fixed source point emissions are anticipated as part of the proposed development. The proposed building within the development will be cooled by electrically powered systems. Heating will be supplied by natural gas, which is a clean burning fuel. Therefore, potential impacts on air would be due to the emissions from car and truck traffic associated with the proposed facility. It is anticipated that there would be a maximum of 1017 passenger vehicle trips during the weekday AM and PM peak hours; and a maximum of 26 truck trips.

Standard operating procedures for the inbound and outbound truck traffic is as outlined below:

- Inbound trucks coming into the site first check in at the security gate and then either: 1) drop off their loaded or empty trailer in one of the parking spaces in the yard; or 2) go to one of the loading docks to unload their freight; or 3) pick up either an empty or a loaded trailer from the yard.
- Trucks that drop off their trailer will usually pick up a loaded or empty trailer when they leave.
- Trucks that go to the loading dock leave once their delivery is made.
- All outbound trucks check in at the security gate before they leave the site.

There is typically a minimal amount of time that trucks will be idling and waiting to drop off or pick up a trailer. In the event that they are waiting for a period of more than five (5) minutes, they must turn off their engine in accordance with the New York State Heavy Duty Vehicle Idling Law (6 NYCRR Subpart 217-3).

The United States Environmental Protection Agency (EPA) and the New York State Department of Environmental Conservation (NYSDEC) measure and record emissions which are or could be harmful to people. The main sources of harmful emissions are grouped into four categories:

- Pointsources, which include facilities like factories and electric power plants.
- Mobilesources include cars and trucks, lawn mowers, airplanes and anything else that moves and emits pollution into the air.
- Biogenicsources include trees and vegetation, gas seeps, and microbial activity.
- Area sources consist of smaller stationary sources such as dry cleaners and degreasing operations.

The mobile air pollution sources include all types of vehicles traveling to and from the proposed development. Vehicles emit hydrocarbons, nitrogen oxides, carbon monoxides and particulates. Vehicular emissions are influenced predominately by operating speed, idling mode and operating time. Vehicular emissions are also influenced by the age of the vehicle and condition of the vehicle and condition of the vehicle emission control system. Due to the increasingly stringent emission control standards, total vehicular emissions are anticipated to decrease until such time as all automobiles are emission control-equipped.

The effect of automobiles on air quality was assessed using NYSDEC publication Air Guide-23, "Indirect Sources of Air Contamination," dated June 29, 1989. This publication contains a three-level process for evaluating air quality impacts. If the criteria set forth in the first level (Level I) are violated, then a second level (Level II) is required. If the criteria set forth in the second level are violated, then a third level is required. Each air quality evaluation level is more detailed and sophisticated than the previous level. The results of the air quality evaluation demonstrate if the proposed development may cause violation of State

or Federal AAQS.

The Air Guide-23 Level I analysis guidelines state that all major intersections located within a distance of up to one mile from the project and influenced by at least 50 peak-hour vehicles of site-generated traffic should be considered for analysis, and that Level I analysis on Air Guide-23 requires no further air quality evaluation if overall levels of service (LOS) at major intersections within one mile of the proposed development are C or better. As stated in the Traffic Impact Study, all intersections analyzed for this project will operate at an overall levels of service (LOS) of C or better after this project is fully operational. Therefore, the impact on air is insignificant and no further analysis is required.

Based on the above, this project will not have a significant impact on air.

#### E. Impact on Plants and Animals

An endangered species screening was conducted on the site by Quenzer Environmental LLC of Selkirk, New York (Quezner) for this project. The purpose of the screening was to identify any rare (i.e. endangered or threatened) species on the project site. The results of the screening are that no rare species are present on the site. The full report, Wetland Delineation and Endangered Species Screening, Sales Distribution Center Site, Beaudoin Parcel – Tax Map 200.00-6-22.1 (43± Acres), and Palmer-Otterbeck parcel – Tax Map 200.-6-13 (73± Acres), Town of Schodack – Rensselaer County, NY dated April 2018 is included in Appendix F.

As documented in the 2018 report by Quezner, the site consists of actively farmed upland, upland forest, successional forest, northern hardwood forest, emergent wetland, forested/scrub-shrub wetland, a small pond and a vernal pool wetland.

A large portion of the property is actively farmed upland, which comprise the eastern two thirds of the site. The dominant species found in this area was corn (*Zea mays*). In the upland forest species included: black cherry (*Prunus serotina*), smooth sumac (*Rhus glabra*), blackberry (*Rubus occidentalis*), honeysuckle (*Lonicera morrowii*), multiflora rose (*Rosa multiflora*), Canada goldenrod (*Solidago canadensis*), False baby's breath (*Galium mollugo*), and horse nettle (*Solanum carolinense*). In the wetland areas the following species were found: red maple (*Acer rubrum*), green ash (*Fraxinus pennsylvanica*), buttonbush (*Cephalanthus occidentalis*), sycamore (*Platanus occidentalis*), winterberry (*Ilex verticillata*), loosestrife (*Lythrum salicaria*), northern willowherb (*Epilobium glandulosum*), arrowleaf tearthumb (*Polygonum sagittatum*), and tussock sedge (*Carex stricta*). The hardwood forests consist of: quaking aspen (*Populus tremuloides*), big-tooth aspen (*P. grandidentata*), balsam poplar (*P. balsamifera*), paper birch (*Betula papyrifera*), or graybirch (*B. populifolia*), pin cherry (*Prunus pensylvanica*), black cherry (*P. serotina*), red maple (*Acer rubrum*), white pine (*Pinus strobus*), with lesser amounts of white ash (*Fraxinus americana*), green ash (*F. pennsylvanica*), and American elm (*Ulmus americana*).

Quenzer biologists conducted two field investigations; on the larger parcel on November 17<sup>th</sup> 2015, and on the smaller parcel on April 2<sup>nd</sup> and 9<sup>th</sup> of 2018. Plant communities found on the project site are common habitats in New York State and this site did not contain any rare plant species. No endangered, threatened, or rare federally-listed or state-listed species were recorded on the site and none are expected to occur.

Quenzer contacted the NYSDEC Natural Heritage Program. They reported no known species or unique communities in the project vicinity. See Appendix I for records of the communications.

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Based on the above, the project will not have a significant impact on plants and animals.

F. Impact on Aesthetic Resources

Impacts on aesthetic resources are essentially related to visual impacts of this project. According to the NYSDEC Policy on Assessing and Mitigating Visual Impacts (DEP-00-2), an aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. In order for an impact to occur, a project, by virtue of its visibility, must clearly interfere with or reduce the public's enjoyment and/or appreciation of the appearance of an inventoried resource (e.g. a cooling tower plume blocks the view from a State Park overview).

An assessment has been completed and is included in Appendix J that identifies the inventoried resources within a five-mile radius of the project site. The closest of the listed resources within a five-mile radius is approximately 1 mile away. With the areas hilly topography and vegetation, the project is not expected to be visible from Therefore, based on the State's criteria this project will not have a significant visual impact on inventoried State resources.

Although the project does not have a visual impact based on the NYSDEC guidelines, there are potential visual impacts to the surrounding neighbors; and while the adjacent residential neighborhood is not considered an inventoried resource, it is considered in this report. The potential visual impacts and mitigations to the adjacent residential neighborhoods are addressed below.

Visual Impacts on Neighbors: The proposed project is located in between two residential neighborhoods; one to the north and one to the south of the project site. The visual impact on the neighborhoods are assessed by reviewing a cross-section through the neighborhood into the project site. This is done to determine the potential visibility of the proposed building from the neighboring properties. Refer to Appendix J for the cross-sections and their locations.

Section View 1 is taken from one of the northern residence that is closest to the proposed facility. The grade elevation is approximately 347 at the viewpoint from the property. The building finished floor will be at elevation 336± and the maximum height of the building is approximately 45 feet. Colored elevations of the building are also provided in Appendix J for reference. As shown in the cross-section, views from the neighboring property will be screened by the existing vegetation (tree line) which is estimated to be 30 to 40 feet tall. Section View 2 is taken from another northern residence that is closest to the proposed facility. The grade elevation is approximately 328 at the viewpoint from the property. As shown in the cross-section, views from the neighboring property will be screened by the existing vegetation (tree line) which is estimated to be 30 to 40 feet tall, and the proposed landscaped berm (see Landscape Plans in Appendix J). Section View 3 is taken from the southern residence that is closest to the proposed facility. The grade elevation is approximately 347 at the viewpoint from the property. The building finished floor will be at elevation 336± and the maximum height of the building is approximately 45 feet. As shown in the cross-section, views from the neighboring property will be screened by the existing vegetation (tree line) which is estimated to be 30 to 40 feet tall.

Based on the above, the proposed landscaped berm along the northern edge of the site, along with maintaining the existing tree lines along the north and south property line, will provide adequate mitigation to screen views from the adjacent residential neighborhoods.

### Site Lighting

Lighting will be provided for the parking lot areas surrounding the building, the fire access road and along the driveway into the site. The lighting will consist of energy efficient LED light fixtures with a color temperature range of 2700k to 3000k. The lights will have edges that extend below the level of the fixture to reduce the potential for source glare and light spillage.. The light fixtures will be mounted on poles and on the building ranging in height from 20 to 40 feet. Refer to the Site Lighting Plans prepared by LSI Industries provided with the site plans for more detail. The foot-candle level will be zero at the property line, except for the driveway where lighting will extend to Route 9 and light the driveway intersection for safety.

Based on the above, the project will not have a significant impact on aesthetic resources.

### G. Impact on Historical and Archaeological Resources

A full Phase 1 Archeological Sensitivity Assessment & Survey of the project site was conducted on the site by Historical Archeological Zoological Explorations – H.A.Z.Ex of Ithaca, New York (H.A.Z.Ex) for this project. The purpose of the study was to analyze the effects of the proposed project on any cultural resources. The conclusion of the report is that the proposed development is not anticipated to affect any known cultural resources. The full report, Phase 1 Archeological Sensitivity Assessment & Survey for the Sales Distribution Center Development Town of Schodack, County of Rensselaer, New York dated April 2018 is included in Appendix M.

Historical Archeological Zoological Explorations – H.A.Z.Ex, completed a Phase 1 Archeological Sensitivity Assessment & Survey of the project site (Appendix K). The assessment was conducted in compliance with 33 CFR 61, Section 14.09 of the NYS Parks Law, New York State Historic Preservation Office (SHPO) guidelines, and the New York Archaeological Council's Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State (NYAC 1994). The full property was walked and over 1,200 shovel tests were conducted in search of artifacts. The recommendations of the assessment found that no potential cultural resources were identified on the site, and no further investigation was recommended.

The New York State Office of Parks, Recreation and Historic Preservation (OPRHP) was contacted to review the project, and on April 30, 2018 issued their concurrence that the project will have no impact on archaeological and/or historic resources listed in or eligible for the New York State and National Registers of Historic Places. The letter of concurrence is included in Appendix M.

Based on the above, the project will not have a significant impact on historical or archaeological resources.

### H. Impact on Open Space and Recreation

The project will disturb approximately 79 ± acres, out of a total 116± acres. Of the 79 ± acres disturbed areas, 23± acres (29 percent) will be buildings, 28± acres (35 percent) will be asphalt or concrete, and the remaining 28 acres (35 percent) will be restored to lawn area or utilized for stormwater management facilities. Overall 65 of the total 116 acres remaining as open green space (56 percent), and 37 of the total 116 acres will remain undisturbed.

Although the construction of the sale distribution center facility will result in the reduction of current open space, the project site is currently woodland and agricultural farmland. The property is privately owned and maintained and does not currently provide a recreational benefit to the community. In addition, the development of this land is compatible with the Town zoning and Comprehensive Plan.

Based on the above, the project will not have a significant impact on open space and recreation.

#### I. Impact on Transportation

A Traffic Impact Study (TIS) was performed by McFarland-Johnson, Inc, of Saratoga Springs, New York (MJ) for the proposed sales distribution center project dated March 29, 2018 (Revised June 8, 2018) and is included in Appendix L. The purpose of this study is to evaluate traffic operations for the weekday morning and evening peak hours for 2018 Base Conditions as well as the 2019 Build and No-Build Conditions within the study area which included the following intersections:

- US Route 9/20 @ NYS Route 150 (Schodack Valley Rd.) - *Signalized*
- US Route 9 @ US Route 20 (Main Intersection)- *Signalized*
- US Route 9 @ US Route 20 (Channelized Movements West) - *Un-Signalized*
- US Route 9 @ US Route 20 (Channelized Movements East) - *Un-Signalized*
- US Route 9 @ Maple Hill Road (CR 6) - *Un-Signalized*
- US Route 9 @ Richwood Drive - *Un-Signalized*
- US Route 9/20 @ I-90 Westbound Off-Ramp – *Un-Signalized*
- US Route 9/20 @ I-90 Eastbound On-Ramp – *Un-Signalized*

Conclusions and Recommendations: MJ has evaluated the traffic operations within the study area surrounding the proposed Sales Distribution Center in Schodack, NY. Results from the 2019 Build conditions indicate that the proposed project will produce no noticeable increase in delay to the traveling public within the existing study area intersections and that access into and out of the proposed development can be provided in a safe manner with the proposed roadway configurations shown on the concept site plan and the proposed signal mitigation.

Based on the completed capacity analysis, MJ offers the following conclusion and recommendations:

- The proposed distribution center is projected to create 577 trips during the morning peak hour and 1043 trips during the evening peak hour based on projected staffing/shifts provided by a similar sales distribution center.
- The employee driveway for the proposed development shall have a dedicated right turn and a dedicated left turn lane and the existing center two-way left turn lane will be re-stripped to provide a dedicated northbound left turn lane into the site with permissive/protected signal phasing. Although it is not technically needed from a traffic capacity standpoint, due to the high volume of southbound right turn movements it is recommended that dedicated southbound right turn lane be constructed at the proposed driveway as well.
- The secondary truck driveway will see significantly less volume as it is restricted to truck traffic only and a proposed stop-sign control for this approach is acceptable to provide adequate traffic operations.

- A signal warrant analysis revealed that two warrants were met for the proposed employee entrance. Based on additional assessment of the impacts of a signal, it is recommended that a traffic signal be installed and existing traffic signal time be adjusted for the sales distribution center and be constructed prior to the opening of the facility.
- The proposed driveways locations have site distance that meets the AASHTO design guidelines; however, it is recommended that when the driveways are constructed, existing vegetation and any proposed features should be removed from the driver's sight line. This is particularly true for the view to the south from the truck entrance.
- The existing surrounding roadway network has adequate capacity to accommodate the additional traffic generated by the proposed development with negligible impacts to the traveling public.

Existing Conditions: Evaluation of the existing and future traffic conditions within the Study Area requires an understanding of the existing transportation system. Data such as roadway geometrics, traffic signal timings and peak hour traffic volumes provide the basis for a thorough understanding of existing conditions and the requisite data necessary to provide projections of future traffic conditions typical, under the Build scenario.

The project is located on the west side of US Route 9, which is a five-lane north-south minor arterial road and an annual average daily traffic (AADT) volume of 6,900. US Route 9 serves as a North-South connector between Interstate 90 interchanges 11 and 12, providing access to businesses and homes in the area as well as the state, county and local collector roadway network. The posted speed limit is 55 mph with a center two-way left turn lane within the project study area.

2018 Existing Traffic Volumes: Existing traffic volumes were established for this project by performing manual turning movement counts (TMC). Traffic counts were video recorded from 4:00 to 6:00 PM and 7:00 to 9:00 AM on Thursday/Friday, March 15-16, 2018, respectively. Supplementary traffic data was also collected on Tuesday, June 5, 2018 from 7:00 to 8:30 AM and 4:30 to 6:00 PM. The TMC data shows that the weekday traffic in the study area peaks between 7:00-8:00 AM in the morning and 4:45-5:45 PM in the evening. Speed data and 24-hour directional traffic data was also obtained utilizing radar data collection on US Route 9 in front of the proposed project site.

Analysis of the base condition allows the TIS to develop a comparison to future conditions and enables the study to calibrate the traffic model to mimic the present real-life operations that are observed.

2019 Background (No-Build) Volumes: The 2018 base traffic volumes were grown by an annual background growth rate of 1.0% per year, based on a review of the historic traffic volume data available for US Route 9 provided in the NYSDOT annual traffic volume data reports.

Trip Generation: The proposed distribution center is scheduled to be completed by August 2019. For analysis purposes, site generated traffic was estimated using traffic data available from a similar distribution center currently operated by the same end user. The facility will operate on separate day and nighttime shifts associated with two separate operations, receiving employees and shipping employees. Because of this, the majority of the employee traffic to/from the site occurs during the following shifts:

- Day Shift Receiving 7:00AM to 5:30PM
- Day Shift Shipping 7:30AM to 6:00PM
- Night Shift Receiving 6:00PM to 4:30AM

- Night Shift Shipping 6:30PM to 5:00AM

The truck traffic is consistently projected to be between 15-30 trips per hour during the daytime hours (8AM-8PM) and lighter volumes (0 to 15 trips per hour) during the nighttime hours (8PM-8AM). Shown in the Table below are the resulting trip generation volumes for the proposed project.

**Trip Generation Table**

Type of Land Use	Source	Vehicle Type	Weekday Early Morning Peak (4:30-5:30AM)			Weekday Morning Peak (6:30-7:30AM)			Weekday Evening Peak (5:30-6:30PM)		
			Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
1,000,000 SF Distribution Center	Similar Facility	Employees	34	414	448	570	3	573	414	603	1017
		Trucks	3	3	6	1	3	4	15	11	26
		<b>Total</b>	<b>37</b>	<b>417</b>	<b>454</b>	<b>571</b>	<b>6</b>	<b>577</b>	<b>429</b>	<b>614</b>	<b>1043</b>

\* Trip Generation Data provided by end user's similar distribution center traffic volume data.

Trip Distribution: Trip distribution for the proposed project included consideration of the existing traffic patterns in the area, previous distribution center traffic studies completed as well as the general residential base for potential employee locations in the region. The study projected that 70% of employee traffic would head north out of the site onto US Route 9 while the remaining 30% would head south. It is also assumed that nearly all of the truck traffic will head north to utilize the I-90 Interchange 11; however an alternative truck distribution was also analyzed for a shipping operations primarily to the south.

2019 Build Traffic Volumes: Weekday morning and evening peak hour traffic volumes were calculated associated with the 2019 build conditions. These volumes represent the 2018 base volumes combined with the addition of the estimated trips generated by the proposed project as well as the background annual traffic growth. As a conservative measure, the proposed development's peak hour of traffic generation was combined with the existing background traffic's peak hours. These peak hours may be offset by 15 to 45 minutes; however, the background traffic in the area is fairly consistent during the overall commuter peak periods (7-9AM and 4-6PM) such that combining the peak volumes was determined to be the most appropriate and accurate means of determining the overall 2019 Build volumes.

Traffic Operations Analysis – Intersection Capacity Analysis: The proposed development, with the proposed traffic signal, has a negligible effect on the traffic operations in the study area. Described below is a detailed breakdown of the impacts, if any, on the study area intersections' operations as a result of traffic from the proposed development.

No. 1 – US Route 9/20 at NYS Route 150 (Schodack Valley Rd.)

This signalized intersection is operating efficiently today during the morning peak hour and evening peak hour considering the high volume of traffic entering this intersection. The intersection will have minor increases in delay as a result of the proposed development's traffic; however, these impacts can be mitigated with slight modifications to the intersections signal timings as shown in Table 4. With the proposed timing changes the intersection will operate at similar levels of service with the additional traffic, as the overall intersection levels of operation are maintained. The only impacts are negligible increases in delay for turning movements during the evening peak hour; however, all individual movements will operate at acceptable levels with

LOS 'C' or better projected. Only timing signal changes are recommended at this intersection as a result of the proposed development.

No. 2 – US Route 9 at US Route 20

This 2-Phase signalized intersection only services the conflicting through movements at the 'Y' interchange, resulting in acceptable levels of operations for all scenarios (LOS 'C' or better). No noticeable impacts from the proposed development are projected at this intersection.

No. 3 – US Route 9 at US Route 20 (East Connections)

This un-signalized intersection has low stop sign controlled volumes as it provides specific movements for US Route 9 NB traffic turning onto US Route 20 SB and vice versa. This intersection has good operations for all scenarios (LOS 'B' or better). The proposed development has no impacts as all LOS are maintained, and the vehicle delays are not projected to change.

No. 4 – US Route 9 at US Route 20 (West Connections)

This un-signalized intersection has low stop sign controlled volumes as it provides specific movements for US Route 20 NB traffic turning onto US Route 9 SB and vice versa. This intersection has good operations for all scenarios (LOS 'C' or better). The proposed development is projected to increase the delay for the left turn movements at the stop sign by approximately 7 seconds; however, acceptable levels of service are maintained.

No. 5 – US Route 9 at Maple Hill Rd. (CR 6)

This un-signalized intersection has good operations for all scenarios (LOS 'C' or better). The proposed development is projected to increase the delay for the left turn movements at the stop sign approach on Maple Hill Road by an average of 3 seconds and 4 seconds during the morning and evening peak hours, respectively. This minor increase in delay results in the LOS change from a 'B' to a 'C' for this individual movement; however, the overall intersection LOS remains at an 'A' LOS. Good operating conditions remain after incorporating the proposed development's traffic.

No. 6 – US Route 9 at Richwood Drive

This un-signalized intersection has good operations for all scenarios (LOS 'C' or better). The proposed development is projected to increase the delay for the side street approach by an average of 4 seconds and 6 seconds during the morning and evening peak hours, respectively. This minor increase in delay results in the LOS change from a 'B' to a 'C' for this individual movement; however, the overall intersection LOS remains at an 'A' LOS. No mitigation is recommended at this intersection as good operating conditions remain after incorporating the proposed development's traffic.

No. 7 – US Route 9/20 & I-90 Westbound Exit 11 Off-Ramp

This un-signalized intersection has good operations for the morning peak hour (LOS 'C'); however, left turn from the off-ramp experience some delay in the evening peak hour for all scenarios. The proposed development is projected to increase the delay for off-ramp approach by an average of 5 seconds and 13 seconds during the morning and evening peak hours, respectively. These minor increases in delay results in no LOS change from the background to the build scenarios and the overall intersection LOS remains at an 'A' LOS as the US Route 9/20 traffic remains a free flow condition. No mitigation is recommended at this intersection as no degradation of operating conditions result after incorporating the proposed development's traffic.

#### No. 8 – US Route 9/20 & I-90 Eastbound Exit 11 On-Ramp

This un-signalized intersection has free flow conditions for all movements except the northbound left turns to enter the on-ramp; therefore, it operates at a LOS 'A' for all scenarios. The proposed development is projected to increase the delay for the left turn movement by an average of roughly 1 second during both the morning and evening peak hours, respectively. This minor increase in delay results in the no LOS in the morning peak hour and a LOS change from a 'A' to a 'B' for this individual approach in the evening peak. The overall intersection LOS remains at unchanged at an 'A' LOS as the US Route 9/20 traffic remains a free flow condition. No mitigation is recommended at this intersection as good operating conditions remain after incorporating the proposed development's traffic.

#### No. 9 – US Route 9 at Proposed Employee Driveway

The proposed distribution center development project will add considerable volume of passenger car traffic to the roadway network at this intersection during the four primary shift changes at the distributions center. Due to the proposed volume of traffic at this stop-sign controlled intersection the assessment showed that left turning vehicles exiting the proposed development would experience unacceptably long vehicle delays between 4.5 to 5 minutes during the evening peak hour. Although not calculated, similar exiting delays would also occur during the early morning (4:30-5:30AM) release of employees. As a result of the signal warrant analysis that was performed (see later section of this report) a signal was analyzed at this proposed intersection.

After the implementation of a new semi-actuated, 2-phase traffic signal at this intersection, acceptable levels of operation were provided with overall LOS 'A' and 'B' during the morning and evening peak hours respectively and LOS 'C' or better for all individual movements. The semi-actuated traffic signal will allow the signal to rest in green for US Route 9 until traffic is detected on the driveway, providing acceptable levels of operations for all movements and 'A' LOS for the traveling public through traffic on US Route 9.

#### No. 10 – US Route 9 at Proposed Truck Driveway

The proposed distribution center development project will add consistent low volume truck traffic at this intersection through the day. Due to the proposed volume of truck traffic at this intersection the proposed stop-sign control provides acceptable LOS for the morning and evening peak hours, with proposed LOS 'C' or better. The proposed driveway will have a negligible impact on the traveling public on US Route 9 as this will be a free movement.

Sight Distance Analysis: The sight distance at the proposed site entrances was measured to determine if the available intersection sight distances meet the AASHTO recommended values. As shown in the follow Table, adequate site distance is available at the proposed entrances onto US Route 9:

**Sight Distance Summary Table**

SIGHT DISTANCE CALCULATIONS					
Location	Speed Limit	Direction	AASHTO Recommended Sight Distance	Available Sight Distance	Visual Restriction
Proposed Employee Entrance at US Route 9	55 mph	Looking Left	525 feet	>700 feet	Horizontal Curve
	55 mph	Looking Right	687 feet	820 feet	Vertical Curve
Proposed Truck Entrance at US Rotue 9	55 mph	Looking Left	849 feet	>1000 feet	None
	55 mph	Looking Right	1010 feet	1059 feet	Vertical Curve

**Signal Warrant Analysis:** Signal warrants were reviewed for the study area’s un-signalized intersections in accordance with the Federal Highway Administrations; *Manual of Uniform Traffic Control Devices*, 2009 edition. The site entrances were reviewed to see if the volume of employee or truck traffic warranted the consideration of a signal. This analysis showed that the employee intersection meets two of the MUTCD signal warrants for the proposed build conditions. Warrants 3A and 3B, the peak hour warrants are met for the evening peak hour. Based on these warrants being met, a signal was assessed to determine what impacts it would have, both positive and negative, on the overall traffic operations.

From a capacity standpoint, the signal will elevate the failing operation of a stop sign controlled intersection (4.5-minute delay for exiting employees) and provide adequate levels of operations for the proposed site driveway with minor increases in delay to the operations of the US Route 9 northbound/southbound traffic. A semi-actuated signal is proposed, which can rest on green for the northbound/southbound approaches to minimize the impacts on US Route 9. Between the high volumes and speed of vehicles along this straight stretch of US Route 9, the ability to make a left turn safely onto US Route 9 is difficult during the peak hours. Particularly, the high volumes of exiting traffic during shift changes. As a result of this assessment, a signal is proposed to be installed at this intersection.

**J. Impact on Energy**

National Grid (NG) currently provides natural gas and electric in the Town of Schodack and it is anticipated that the proposed distribution center facility will utilize National Grid for these services. Request for Service letters will be prepared and transmitted to National Grid. It is anticipated that they will be capable of meeting the projects demands.

The electric distribution system on site will consist of a below ground duct bank system with ground mounted transformers. Natural gas will be piped underground into the building mechanical room to run the buildings heating system.

**K. Impact on Growth and Character of Community or Neighborhood**

The sales distribution center will not significantly alter the character of community, as the Route 9/20 corridor is principally commercial use. There is an existing distribution center within 3 miles of the proposed project. Since this property is zoned PD-3, the community planned on the development of this property to generate new jobs and support the growth of the Town of Schodack. The sales distribution center project will be a benefit to economic development in the Town and County.

