Staff Report

Devens Enterprise Commission

Date: April 29, 2024

To: Devens Enterprise Commission

From: Neil Angus, DEC Director

RE: Level 2 Unified Permit – 33 Lake George St. Unified Permit Application

Owner: MassDevelopment

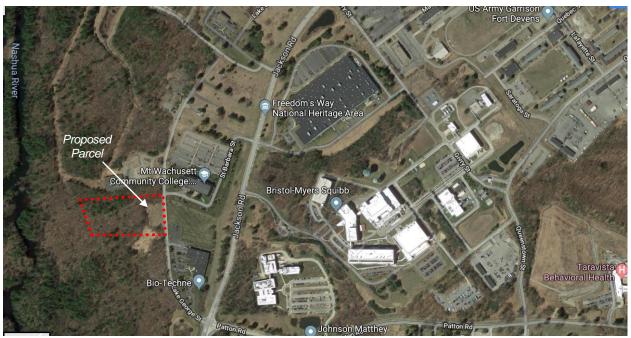
Applicant: Jonas Angus - TPE Solutions, Inc. **Engineer:** Kasey Ferreira, Howard Stein Hudson

Location: 33 Lake George Street, Devens, MA ((Parcel ID # 008.0-0021-0401.0)

Zoning: Innovation and Technology and Business District, Watershed Water Resources Protection

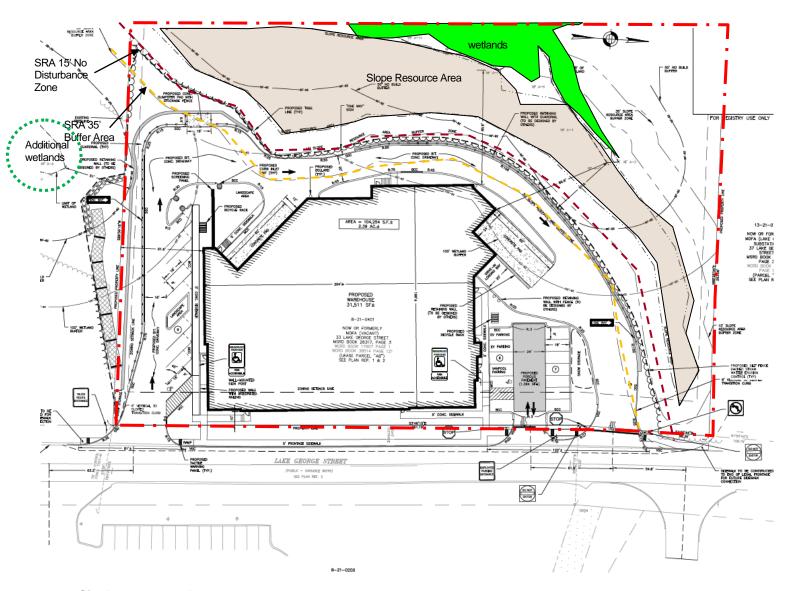
Overlay District, Viewshed Overlay District, Slope Resource Area.

Premises and Proposed Project: The Applicant is seeking a Level 2 Unified Permit application including Site Plan approval and Wetland Notice of Intent for the construction of a +/-31,511 sf building (34,179 GFA) with associated parking, grading, drainage, landscaping, lighting and utility improvements on a proposed +/- 6.65 acre parcel located off Lake George Street, just behind the former Mount Wachusett Community College building at 27 Jackson Road, north of Bio-Techne and west of the Nashua River:



The site is located on a plateau high above the river and borders the Oxbow National Wildlife Refuge property. The site contains a cleared open field area (fill from past Army activities) and is adjacent to a brownfield site (former landfill area remediated by the Army). The northern and western boundaries of the site are heavily forested and drop off steeply to a large wetland system and floodplain associated with the Nashua River.

TPE Solutions is proposing to construct a new building to accommodate their warehousing, office, and lab operations. The site layout includes 22 parking spaces and associated site utilities, drainage, landscaping, and lighting improvements. The property contains wetland resource areas, as well as slope resource areas:



Site Issues at a Glance:

Zoning:

The property is located within the Innovation and Technology Business (ITB) District. TPE Solutions specializes in both off-the shelf and custom TPE Products. TPE is an elastomer that is processed into final articles with equipment used for thermoplastics, such as injection molding, blow molding, extrusion, compression molding, thermoforming. TPE is proposing office, research and development, light manufacturing and warehousing. These uses are consistent with the ITB Zoning District Development Goals and Permitted Uses in Article V and VI of the Devens By-Laws.

TPE Solutions is currently located in the Town of Shirley. In accordance with the Devens non-compete agreement with the surrounding towns, MassDevelopment has notified Shirely of the proposed development and Shirley has indicated they cannot accommodate TPE's expansion.

Wetlands and Steep Slopes:

The Applicant has designed the layout of the site to maximize developable area. The adjacent steep slopes and wetland resource areas are currently protected by mature forest cover that is providing soil stability, habitat, and a natural buffer. Portions of the proposed development and proposed limits of disturbance

encroach into the steep slope resource area (SRA) setbacks. The applicant has conducted a geotechnical study to evaluate the proposed development and proximity to the steep slopes. The GTR geotechnical report lists a number of design and construction measures that need to be included into the proposed retaining walls to ensure their long-term strength and stability. Due to the size of the proposed retaining walls and their location on-top of steep slopes and close to wetland resource areas, the recommendations listed in the GTR geotechnical report should be required as a condition of any approval. The SRA 15-foot' No Disturbance Zone, as defined by 974 CMR 3.06, should not be impacted at all. This should be reinforced as a condition of approval as portions of the proposed wall are right on the 15' line and some of the geotextile stabilization at the base of the walls encroaches into the 15' foot setback. The Applicant's Geotechnical engineer has indicated there are wall construction methods that will not require them to work from the slope side. Performance specifications associated with the guard rail and site walls, detailing the design and loading requirements, should be included (vehicle surcharge, maximum slope at toe, etc.). Design loads of the pad and dumpster the walls support should be included in the performance specifications as well.

The wetland resource area to the south is part of an open field the was previously disturbed as part of the remedial activities on the adjacent lot. While the proposed grading is up to the 25' no disturbance area, the proposed plantings will help better stabilize the soils, provide more productive and diverse wetland buffer habitat, and help avoid invasive species colonization (with the proper control measures). This grading will reduce the height of the retaining walls, however, it will require a grading easement from MassDevelopment (which MassDevelopment has agreed to).

Stormwater Management:

The DEC's peer review engineers have reviewed the plans and proposed stormwater management system 974 CMR 4.08 requires the use of low-impact development techniques for stormwater management. The applicant has included biofiltration landscape islands for pre-treatment, and underground infiltration systems, as well as porous pavement. The Applicant has submitted an operation and maintenance (O&M). This plan should be signed by the project owner and be updated to address all requirements under 974 CMR 3.04 and 4.08, including snow management. No snow is to be dumped over any of the retaining walls. Waivers have been requested for greenfield requirements and closed drainage systems being designed to meet the 25-year storm event. The greenfield requirement appears to have been met on-site as the public sidewalk is within the road right-of-way and not on the site. The closed drainage system for the loading docks has been isolated for spill containment. Because the Project will disturb more than one (1) acre of land, a Notice of Intent shall be submitted to the Environmental Protection Agency (EPA) for coverage under the National Pollution Discharge Elimination System (NPDES) Construction General Permit. As part of this application the Applicant is required to prepare a Stormwater Pollution Prevention Plan (SWPPP) and implement the measures in the SWPPP. This will be a condition of approval.

Landscaping/Lighting:

The DEC's peer review Landscape Architects have reviewed the plans and identified a few questions with realistic limits of clearing and the proposed retaining walls. The applicant should confirm that they will be able to fully operate machinery within the proposed limits without requiring any expansion of the limits of clearing. The proposed grading and Drainage plan shows post-erosion and sediment controls outside of the limits of disturbance. These conflicts should be resolved prior to the DEC acting on this application. The Applicant also need to submit updated architectural drawing showing the revised landscaping along the front of the building.

Lighting levels around the perimeter of the building facing the viewshed are extremely high in some areas (up to 27 footcandles). The applicant should reduce the lighting levels to a more consistent level (closer to 0.5fc across the site) and proposed trees need to be shown on this plan to ensure they are not blocking any lighting. Plans should also include a lighting schedule, with reduced illumination when the facility is closed.

Access/Safety:

The project proposes two new entrances off Lake George Street. There is ample sight distance in both directions on Lake George Street to facilitate safe turning movements in and out of the site. A "right turn

only" sign should be placed at the northern-most exit driveway from the site as Lake George is currently a dead end and there is no turn-around. The Applicant is proposing sidewalks to connect the proposed parking lots with the front of the building. The proposed sidewalk along Lake George Street is within the road right-of-way to provide pedestrian access and allow the applicant to plant more landscape screening between the building and the roadway. The site is located in between the Bill Ashe Trail and Lake George Trail and this sidewalk would eventually connect to the existing sidewalks in front of Bio-Techne – which connect into the entire Devens sidewalk system and Oxbow National Wildlife Refuge Trail System.

The Devens Fire Department has reviewed the turning radiuses of the proposed parking and perimeter drive and is comfortable with the one-way access around the entire building. The applicant has added one new hydrant for the property as the existing hydrants in the vicinity are all on the opposite side of Lake George Street.

Parking/Traffic:

The Applicant is proposing a total of 22 parking spaces, with 3 loading docks and 2 drive-in bays. Ten employees are expected to be accessing this facility during normal business hours (8AM-6PM). The business expected to generate up to four (4) truck deliveries per day. Lake George Street and the controlled intersection at Jackson and Lake George Street have ample capacity to serve this small increase in traffic. While the traffic generated from this project will be minimal, the Applicant should consider all TDM strategies listed under 974CMR 3.04(3)(a)10 and implement these where feasible to reduce traffic. The total number of parking spaces is below the maximum allowed and the applicant has added additional spaces on the south side of the parcel to demonstrate that the site could accommodate more parking if needed. These additional spaces would not need to be constructed and could be held in reserve if the applicant does not need them at this point.

Utilities:

Sewer, water, electric, communications, and fire alarm connections are available in the Lake George Street right of way. The Applicant is working with Devens utilities and Fire to coordinate proper connections. The fire alarm service panel connection proposed across the street will need to be relocated to the utility box behind 27 Jackson as the proposed box that the applicant is currently connecting to does not have any capacity for an additional line.

Viewshed:

The Applicant has conducted a viewshed analysis of the building that demonstrates the 28' high building should be adequately screened by existing buildings (Federal Medical Facility) and existing vegetation (~70-80ft. tall) between the viewshed and the building. There is a potential line of sight from the top of Prospect Hill to the site however, the existing mature vegetation should help screen that view. In any case, to ensure any impact is minimized, rooftop equipment and upper building surfaces/finishes will need to be non-reflective and additional plantings have been added to screen the south-facing retaining wall and building from the viewshed and public trail on the adjacent parcel to the south.

Industrial Performance Standards:

Noise - The Applicant has oriented the building and loading areas to minimize noise exposure to neighboring properties. There are very few rooftop mechanicals and all manufacturing processes will occur within the building so there is little concern for potential nuisance conditions from this project.

Light – Staff has requested the applicant look at reducing the intensity of lighting around the building perimeter to the south, to reduce the overall lighting profile of the project facing the viewshed.

Air Quality and Electromagnetic Interference – the project as proposed does not trigger the need for any Air permits from the MA DEP and there do not appear to be any activities that would cause electromagnetic interference. Dumpster pad enclosure details need to be provided to ensure proper containment and screening.

MassDevelopment Real Estate, Engineering and Utilities:

Building Elevation drawings are still being reviewed by MassDevelopment in order for the Applicant to obtain Design Review Approval from MassDevelopment. Devens Utilities and Engineering have reviewed the

plans and are requesting the applicant include the Eliminator" hood, or equivalent, for catch basins (oil-water separator). The connection of the new water service to the existing water main at Lake George Street. A live tap might be necessary to keep from cutting off water service to 27 Jackson Road so note #3 on Sheet C.2 should be corrected. The applicant will need to install valves where necessary tapping sleeve detail and the hydrant detail.

Proposed Waiver Requests: The Applicant has requested the following waivers:

1. 974 CMR 3.02(3)(b)(6)(a) "Individual Marking of Trees".

The applicant notes that they have worked extensively to limit areas of disturbance to that necessary for a viable project at the location and has proposed landscape walls and retaining walls around the limits of development to prevent further intrusion to the existing trees, buffer zones, and resource areas. Upon demarcation of the limit of work, all trees greater than 12" caliper within 10' of the limit of work will be fitted with orange construction fencing 12" beyond the dripline of the tree to prevent physical intrusion into the root system of the trees. Additionally, the project proposes a significant landscape plan to both screen the property but also replace the vegetative cover lost due to construction.

Staff would recommend the DEC require the applicant to clarify and confirm the limits of disturbance and tree clearing on the northern and westerly limits of the project prior to any clearing.

2. 974 CMR 3.02(3)(a): The Site Plan shall be 24" x 36" and at scale of 1" = 40' unless an alternative scale is approved by the Director.

The Site Plan has been prepared at a scale of 1" = 20'. The DEC Director administratively approved this waiver as part of the Determination of Completeness.

3. 974 CMR 3.02(3)(a)(6): Topography for the entire site in 2' intervals [...]

1' contour intervals provided (greater detail). The DEC Director administratively approved this waiver as part of the Determination of Completeness.

4. 974 CMR 3.04(1)(a): Front Yard Setrback: 25'

In an attempt to minimize impact to Slope Resource Areas (SRAs) toward the rear of the site, the building and loading areas were shifted toward Lake George Street an additional 15'. Relief from the front setback requirement to 10' will significantly reduce direct SRA and no-disturb buffer impact. As Lake George Street is a low volume roadway, no negative impact is anticipated by reducing the front yard requirement.

Staff have no concerns with this waiver request.

5. 974 CMR 3.06(4)(b): 35' Slope Resource Area (SRA) Buffer.

All proposed impacts to the SRA occur outside the fifteen-foot no disturb buffer, while maintaining functionality and viability of the development. A geotechnical report has been prepared to evaluate the future slope stability and no negative effects are anticipated.

974 CMR 3.06 allows for disturbance in the 35' buffer if the DEC makes a finding that the geotechnical report satisfactorily demonstrates there will be no impacts to the SRA. Should the DEC make this finding, there is no need for this waiver request.

6. 974 CMR 3.02(3)(b)(6): Marking of Trees to Remain

This project will remove all vegetation within the limit of work, and replant as part of a significant landscaping effort. All possible vegetation that can remain, will be left in place. Commission staff has indicated that in lieu of this requirement, that the silt fence and additional flagging be installed and approved prior to the start of work. This will clearly delineate the limits of work and therefore, the limit of tree removal.

If this waiver is granted, a condition of approval will require the limits of disturbance to be survey located in the field and trees to remain marked prior to any cutting.

7. 974 CMR 3.04(4)(b)(4): Post Indicator Valve(s)

This site will not be subject to hazardous chemicals or other materials that may be harmful to the environment. The post indicator valves require that they be manually opened prior to each rainfall event, which is a cumbersome requirement that is unlikely to be followed due to rain events that may occur outside of typical business hours.

The Applicant has amended their site plan to isolate the loading dock drainage and include a gate valve on the pipe from the loading dock catch basins. Therefore this waiver request should be withdrawn.

8. 974 CMR 4.08(3)(C) "The post development peak rate of stormwater discharge off-site shall not be greater than the pre-development peak rates".

The project has been designed to maximize the available landscaping area to be protective of the viewshed district. In doing so, the project has revised a previous depression in front of the building to the currently proposed landscaping berm to increase the landscaped aesthetic of the frontage along Lake George Street. Devens engineering has also required that the project install a frontage sidewalk along Lake George Street to allow for future connections, should future development or improvements to Lake Geroge Street occur. In adding the public sidewalks along Lake Geroge Street, in tandem with providing a landscaping berm along the frontage to maintain a positive aesthetic look, the runoff from the added sidewalk must drain to the street. As the sidewalks are being constructed within the Right of Way as a public amenity, the Applicant does not feel as though allowing the minimal runoff to go to Lake George Street will be detrimental to Lake George Street as the minimal increase will run along Lake George Street to the extents of the property, where it will runoff and return to a country drainage pattern utilizing roadside swales and overland flow to infiltrate be managed in the same state as it currently exists.

The Applicant should modify the plans to meet this requirement. Driveway aprons are permitted to flow off-site as long as they do not create a ponding or erosion issue off-site.

9. 974 CMR 4.08(6)(b) "Closed drainage systems and swales shall be designed to accommodate the 25-year storm event based on the rational method without surcharging."

This waiver request is based upon the current HydroCAD model showing no system surcharging or infiltration system discharging through the 50-year storm event. A table showing all pipe velocities in the 2-year and 25-year storm event has been included as Appendix L of the Supplemental Data Report, which shows all pipes conforming to the velocity requirements, except in scenarios of low flow causing low velocity required to isolate loading dock drainage per the loading dock drainage requirements.

The Applicant should modify the plans to meet this requirement.

Process: The application was submitted on March 12, 2024 and the Determination of Completeness was issued on March 19, 2024. Copies of the application were received by the surrounding Towns on March 25, 2024. Legal notices were placed in Nashoba Publications on March 29 and April 5, 2024. All abutting property owners were duly notified by certified mail. The 30-day Town comment period expired on April 24, 2024. No comments were received. The 75 day review period for the DEC to act on this application ends on June 2, 2024.

Comments and Recommendations: All of the issues discussed in this report have been forwarded to the Applicant and they have requested a continuance to allow them time to address these issues. They are currently working on responses and revisions and have engaged a geotechnical engineer to assist them. As of the writing of this report, we are still waiting for the MA DEP file #, the Wetland Delineation report, and the existing conditions plan showing the existing trees to be preserved and those to be removed. Once the Commission and public have had an opportunity to ask questions and hear responses from the Applicant, the Commission should continue the public hearing to the May 9, 2024 virtual meeting at 7:30AM in order to allow additional time for the applicant to submit the remaining items, and for the DEC's peer review consultants to fully complete their review of the revised plans.