BREWSTER YARDS

DRAFT ENVIRONMENTAL IMPACT STATEMENT

160 & 132 Pugsley Road
TOWN OF SOUTHEAST
PUTNAM COUNTY, NEW YORK

Tax Parcels: 45.-1-10 & 45.-1-11

Lead Agency: TOWN OF SOUTHEAST PLANNING BOARD
1 Main Street, Brewster, NY 10509
Contact: Victoria Desidero, Assistant to the Planning Board
(845) 279-7736

Project Sponsor: ProSwing Sports Realty, Inc.
c/o KEANE & BEANE, PC
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DEIS Prepared by: KG+D ARCHITECTS, PC
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This DEIS can be viewed online at:
http://www.townofsoutheast-ny.com/383/ProSwing-Brewster-Yards

Lead Agency Acceptance Date:_____
Date of Public Hearing on DEIS:_____

Written Comments Will be Accepted by the Lead Agency
for Minimum Ten Days After the Close of the Public Hearing.

March 31, 2022

LIST OF CONSULTANTS

BREWSTER YARDS DEIS

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Consultants of the Project Sponsor that contributed to this document are:

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BREWSTER YARDS
Draft Environmental Impact Statement (DEIS)

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BREWSTER YARDS DEIS Distribution List

INVOLVED OR INTERESTED AGENCIES	
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New York State Department of Transportation Traffic Engineering & Safety Division Attn: SEQR Unit 4 Burnett Blvd. Poughkeepsie, NY 12603	Mary.McCullough@dot.ny.gov
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EXECUTIVE SUMMARY

A. Brief Description of the Proposed Action

Introduction

This Draft Environmental Impact Statement (DEIS) has been prepared in response to a Positive Declaration adopted by the Town of Southeast Planning Board. The Applicant / Project Sponsor (Proswing Sports Realty, Inc.) proposes to construct a commercial recreation complex for baseball and related sports, called “Brewster Yards”, on approximately 82 acres of land located on Pugsley Road and Fields Corner Road in the Town of Southeast, Putnam County, New York. The property is located in the RC Rural Commercial zoning district.

The Town of Southeast Planning Board has declared itself to be the Lead Agency for purposes of the requisite environmental review pursuant to the New York State Environmental Quality Review Act (SEQRA or SEQR). Based upon its review of an Environmental Assessment Form submitted with the Site Plan application for the project, the Planning Board has designated the proposed project a “Type 1 Action” under SEQRA for which a Draft Environmental Impact Statement (DEIS) must be prepared. No approval of the project can be issued by an agency until the SEQR process is concluded which is typically formalized in a Findings Statement adopted by the Lead Agency and findings by each of the Involved Agencies whose approval is required to implement the Action.

This DEIS has been prepared to evaluate the potential environmental impacts associated with the Brewster Yards development (the "Proposed Action") and has been prepared in accordance with Part 617 regulations implementing SEQRA. The contents and format of this DEIS follow the outline of the Adopted Scoping Document for Draft Environmental Impact Statement for the Proposed Development of Pugsley Road Site Baseball Complex, as adopted by the Town of Southeast Planning Board on October 25, 2021 (included in DEIS Appendix A).

Project Description

The Project Site comprises two parcels of undeveloped land separated by land owned by the Town (formerly Zimmer Road). Through an agreement with the Town the Applicant anticipates acquiring these premises following a positive conclusion to the environmental review of the site development plan. The two parcels will be subdivided so that a portion of each lot will remain in Town ownership as permanent open space, while the remaining portions acquired by the Applicant will be developed for recreational use.

Brewster Yards is proposed as the premier destination for young baseball and softball enthusiasts and is expected to attract local and regional visitation which will generate economic benefits, further economic development, job creation, and new tax revenue for the community. The site will include four (4) 325’ Baseball fields, one (1) 350’ Showcase Baseball field, four (4) 200’ Little League fields and one (1) multi-sport field of synthetic turf and a +35,000 square foot Recreation Building to house indoor sports and training facilities developed for year-round use. Project amenities will include food concessions located in several outbuildings, a central pedestrian/dining plaza, and playground. Programming of Brewster Yards’ facilities will include tournaments and baseball showcases that will give the young players opportunities to receive instruction from top notch coaches and exposure to college recruiters and professional scouts.

B. Approvals and Involved Agencies

Regulatory agencies having approval authority over one or more aspects of this application are listed below. State or local agencies having such approval authority are identified as "involved agencies" under SEQRA.

Town of Southeast Town Board – approval of land swap,
construction of a Town road (former Zimmer Road)

Town Planning Board / Architectural Review Board –
subdivision approval,
site plan approval,
stormwater pollution prevention plan,
wetlands permit,
erosion control permit,
architectural review report

Town Zoning Board – variances for minimum front yard setback,
environmental conservation buffer,
minimum front parking setback

Town Highway Superintendent – driveway permit

County Department of Planning - §239 Review

County Health Department – well and sewer/septic system construction permits,
approval of plans for a public water supply improvement

NY City Department of Environmental Protection –
sewer/septic approval,
stormwater pollution prevention plan approval

NYS Department of Environmental Conservation –
freshwater wetlands permit,
water withdrawal permit,
coverage under general permit for construction activities (GP-0-20-001)
wastewater SPDES permit

NYS Department of Transportation – Highway Work Permit for roadwork (if needed)

NYS Office of Parks, Recreation & Historic Preservation –
determination of impact on cultural resources

US Army Corps of Engineers – wetlands permit (if needed)

Interested Parties

In addition, the Town of Patterson is identified as an interested agency, while it issues no approvals for this project.

C. Summary of Potential Impacts and Proposed Mitigation Measures

1) Land Use, Zoning & Public Policy

Potential Impacts

Potential impacts to land use and zoning will be primarily related to the intensity of use since the site in its present condition is fully wooded with apparent human use limited to incidental recreation by the public. Regular and intensive use envisioned for the proposed recreational use will result in increased noise and increased traffic activity for the local area. (The added traffic is not projected to significantly impact the local roads north of the site for reasons explained in the Traffic section).

Noise generated from activities on the site will increase background noise levels periodically. The only sensitive receptors identified in the local area are two single family residences at the northern property line, where periodic increases in human-generated noise will be experienced from time to time and potentially above the level of the persistent traffic noise heard from the nearby highway.

The introduction of the proposed facility on the general land use pattern of the study area will not have an adverse effect on the variety of human uses, which include commercial/industrial activity to the south and east, a large warehouse soon to the west, and vehicular movement in the regional transportation corridor to the east. The typical outdoor activity on such commercial and industrial properties is largely centered on vehicular activity which would not experience an impact from the increased noise and traffic activity at the project site.

The proposed use will change the character of the land adjoining the two residential lots to the north from woodland to open land with recreational activity, which will necessitate the preservation of a vegetative buffer along the common property line to minimize the change.

There will be no zoning change necessary to accommodate the proposed project.

The proposed project will address relevant policy goals cited from the Town's Comprehensive Plan document and restated in the Croton Plan.

Policies related to natural resources - Development of the project plans has taken the policies related to natural resources of the site into consideration through the design process. The presence of wetlands, watercourses, topography and slopes, the ridgeline, woodland habitats and the sensitivity of the NYC water supply have played a part in the physical layout of project components and particulars of the design intended to protect these resources to the maximum extent practicable. Appropriate stormwater management techniques including use of permeable surfaces to encourage the infiltration of runoff water are key for any development in this watershed.

Policies related to the balance of economic environment, community character, natural resources and infrastructure - The proposed project will provide economic benefits directly to the community through tax revenues as well as increased revenues to the local economy through patronage of other businesses in the area. Further community benefit will be realized through providing needed recreation space for Town residents. The physical setting for the

proposed project allows it to fit into the landscape around it, preserving acres of trees within public open space such that its presence will result in minimal change to its surroundings while being in a location that is readily accessible from the regional transportation network.

Further, the Town of Southeast Town Board stated that the subject site "…will serve a greater public benefit if it were owned and developed for recreational use by a private project sponsor" in exchange for land to be acquired from the sponsor (at Starr Ridge Road) and dedicated as parkland.

The proposed project will benefit the community directly through tax revenues and employment. As a non-residential land use, the project will not generate additional population to the Town while providing additional recreational services available to school-aged children and young adults of local families.

Policies related to traffic - The project location close to the Route 312 and I-84 corridors will provide a readily accessible site for local and regional visitors via the existing transportation network without the need to expand the existing infrastructure.

This project is envisioned to enhance the virtues of the Town of Southeast as "the economic center of Putnam County" [Page 5-9, Comprehensive Plan] while maintaining its rural community character through preservation of the visual buffer of woodland along the I-84 corridor including the prominent ridgeline.

Mitigation Measures

While for most land uses in the surrounding area the proposed project will not necessitate particular measures to reduce its impact, the close proximity of the two nearby residential lots necessitates a buffer to mitigate the change in intensity of use. The project plan shows a buffer of 260 feet or more of existing woodland vegetation to be preserved between the closest proposed development disturbance and the northern property line of the subject site.

The project plan as proposed will be compatible with the general, relevant policies contained in the Comprehensive Plan Update and the Croton Plan, accounting for the various mitigation measures outlined in the topic-specific sections of this document.

2) Community Services

Potential Impacts to Police Services and Proposed Mitigation

No significant impacts of Brewster Yards' operations to State Police or County Sheriff services are identified. Putnam County is expected to receive approximately $90,000 annually in property tax revenues from the proposed project, a portion of which could be utilized to offset any potential impacts on the County Sheriff's Department.

Potential Impacts to Fire Prevention Services and Proposed Mitigation

The proposed site plan allows for internal access and circulation for emergency response vehicles to reach the baseball fields, multi-purpose field, concession plazas, and main building areas in case of an emergency response. The main building of the development would be

equipped with a sprinkler system. The project would generate over $15,000 in annual property tax revenues to the Fire District which could be utilized to offset any potential impacts to the Fire Department from Brewster Yards.

Potential Impacts to Emergency Medical Services and Proposed Mitigation

The proposed site plan allows for internal access and circulation for emergency response vehicles in case of an emergency response. Putnam County would receive approximately $90,000 annually in property tax revenues from the proposed project. A portion of this annual revenue could be utilized to offset any potential impacts to the Putnam County Bureau of Emergency Services that may occur from the proposed commercial sports recreation facility.

Potential Impacts to Public Works and Proposed Mitigation

The construction of Brewster Yards would increase local traffic and road usage during its seven day a week – year-round operation. The increased use of the local road network would likely increase the need for Southeast Highway Department maintenance. The projected increase of municipal tax revenues from the proposed project to the Town of Southeast by approximately $87,000 annually, a portion of which could be used to offset the incremental increase in road maintenance costs the Highway Department.

In response to concerns were raised by the Town Highway Superintendent to the Town's Engineering Consultant that improvements would be warranted on Fields Corner and Zimmer roads to address a perceived increase in traffic and resulting need for road maintenance by the Highway Department, the Applicant proposes to avert increased use of Fields Corner Road by signing at the project driveway for No Right Turns northward on Fields Corner Road. Improvement of the former Zimmer Road is proposed to a standard that is acceptable to the Town.

3) Economic Conditions

Potential Impacts - Construction Phase

The estimated construction cost of the proposed project, $28.3 million, is a direct benefit that is projected to result in indirect and induced benefits to the local economy listed in the table below.

Potential Economic Impacts - Construction Phase				
	Direct Effect	**Indirect Effect**	**Induced Effect**	**Total**
Output	$28,300,000	$3,903,742	$6,905,299	$39,109,041
Labor Wages	$12,763,905	$1,262,998	$2,052,483	$16,079,386
Jobs	212	24	53	289

Potential Impacts - Operation Phase

An average of 52 full time employees (FTE) are projected to be employed at Brewster Yards during operation. The direct benefit of this employment and resulting indirect and induced benefits to the local economy are listed in the table below. It is not expected that employees

associated with the project would relocate to the Town of Southeast because of their employment but would rather travel from other areas.

Potential Economic Impacts - Operation Phase				
	Direct Effect	**Indirect Effect**	**Induced Effect**	**Total**
Output	$19,363,204	$5,431,477	$4,826,477	$29,621,158
Labor Wages	$1,962,960	$627,640	$482,800	$2,444,040
Jobs	52	13	10	87
Notes: Source of Labor Wages: New York State, Department of Labor, Occupation Wages, Hudson Valley Region, 2021; General and Operations Managers – Median Annual Salary - $120,100; Food Preparation and Service-Related Workers, All Other – Median Annual Salary - $28,210; Grounds Cleaning and Maintenance Occupations - Median Annual Income - $36,240.				

Brewster Yards is expected to generate $777,528 in sales tax for Putnam County in year one.

Brewster Yards would result in the conversion of vacant town owned land to a private owned commercial sports recreation facility as well as the transfer of ownership of the Starr Ridge Road parcel to the Town of Southeast. With development at the Pugsley Road site, the Starr Ridge Road parcel would be transferred to town ownership and removed from the tax rolls. Therefore, the projected property taxes for the proposed development were calculated using the project's assessed value and the County and Town tax rates for 2022 less the 2022 tax revenues from the Applicant owned parcel located at 309 Starr Ridge Road. Projected property tax revenues are listed in the table below.

Projected Property Tax Revenues					
Levy Description	**Total Tax Levy**	**Rate (Per $1000 Assessed Valuation)**	***Project Site* Tax Revenues**	***Starr Ridge Road Parcel* Tax Revenues**	**Adjusted Tax Revenue of Proposed Project**
County Tax	46,687,781	3.016828	$87,718.72	(-$1,131.31)	$86,587.41
Town Tax	6,683,328	2.9395	$85,470.30	(-$1,102.31)	$84,367.99
Brewster Library	594,000	0.187809	$5,460.82	(-$70.43)	$5,390.39
Brewster Fire	1,700,964	0.530245	$15,417.66	(-$198.84)	$15,218.82
Brewster Central School District	78,965,175	28.487159	$828,306.14	($0.0)	$828,306.14
Total Putnam County and Town of Southeast			$1,022,373.64	(-$2,502.89)	$1,019,870.75
North Salem School District	40,227,073	19.963908	$0.0	(-$7,486.47)	(-$7,486.47)

Mitigation Measures

Due to the overall increase of property tax revenues realized from the proposed project, no mitigation measures are warranted or proposed. Annual revenue of $7,500 would be lost to the North Salem Central School District as a result of Brewster Yards, which represents approximately 0.016 percent of the total North Salem School District budget. The undeveloped Starr Ridge Road property would not incur any cost to the North Salem District as it would not generate any school age children in the proposed condition.

4) Visual Resources and Community Character

Potential Impacts

Visibility of Brewster Yards from the study vantage points may be possible to varying degrees, as demonstrated in the visual assessment, however no significant adverse visual impact has been identified to result from the proposed project. Areas of development that exist within the project viewshed, such as Southeast Executive Park, the Highlands Center, Terravest Corporate Park, and the public road corridors, (and Logistics Center soon to exist along the opposite side of Pugsley Road), all have elements that are visible to the public to varying degrees. This study demonstrates that there would be no detrimental effect on the use of public spaces in the study area nor on the public enjoyment of any designated aesthetic resource.

The field reconnaissance and assessment of factors related to the proposed lighting at Brewster Yards does not identify any situation where the proposed change at the site would result in a significantly adverse change to the landscape character or the nighttime visual experience. The addition of field lighting will not result in a stark contrast in visual character compared to the site environs, particularly given the scale and visibility of the subject site within the broader landscape. While the occurrence of some level of sky glow from sports field lighting is typically unavoidable, the project as proposed is not anticipated to dominate the view from any publicly accessible location in the studied viewshed.

Mitigation Measures

The location of the project within a wooded landscape that will buffer the use from virtually all viewpoints with a substantial amount of existing tree cover will preserve the character of the area. Placement of this use at this location addresses a stated goal of the Town Comprehensive Plan: “Future non-residential uses should be targeted to those areas where they will have minimal impact on … community character.”

The proposed architecture of the main recreation building and ancillary buildings in this project is designed to fit in the landscape of the site and to be complementary to the style, scale and quality of buildings found in the area.

In conformance with the Town Code, all proposed improvements at Brewster Yards will be situated so that none are visible above the top of the ridgeline or top of vegetation located on the ridgeline as viewed from the surrounding area, nor will any tree clearing occur on a ridgeline.

In reviewing the potential visibility of the proposed lighting (both as direct illumination and indirect sky glow), and compatibility of the project with the nearby residential uses, the following mitigating factors would reduce the extent of potential nighttime visual impact:

- Specification of light fixtures that incorporate the latest technology in lighting design for energy efficiency. Use of luminaires that will sufficiently light the project for its intended use.
- Specification of light fixtures designed to minimize stray light and outfitted with shields as appropriate to direct the light toward the sports surface.
- Specification of pole heights that will provide for optimal downlighting, thereby minimizing glare, stray and reflected light.
- Field lighting will be turned off when the field facilities are not in use.
- Outdoor activities at the project will be reduced when leaves are off the trees.
- Preservation of existing trees around the perimeter of the property to maintain a natural woods buffer to soften direct views to the playfields from local viewpoints.

5) Cultural Resources

Potential Impacts and Proposed Mitigation

Based on the results of the completed Phase 1A and 1B surveys, no archaeological sites or historic structures are located within the area of proposed site disturbance. Therefore, the proposed development of the Brewster Yards project will not affect any potentially significant cultural resources and no additional cultural resources investigations are warranted. In its letter dated February 7, 2022, the New York State Office of Parks, Recreation and Historic Preservation concurred with this recommendation.

As no impacts to historical or archaeological resources have been identified, no mitigation measures are proposed.

6) Natural Resources

Potential Impacts - Vegetation and Wildlife

The proposed action would result in a reduction of habitat available for wildlife that may inhabit or utilize the site, however, there are no NYS Species of Special Concern or otherwise protected animal species other than the northern long-eared bat which is listed as threatened.

The project plans depict approximately 33 acres to remain in their forested state within the project boundaries. The Project would directly disturb approximately 49 acres of trees on upland areas. This number includes the removal of 4.6 acres of upland within a Town of Southeast wetland buffer/controlled area.

Based on various database searches conducted, one state- and federal-listed species, the threatened northern long-eared bat, might be present on land within or near the project site. No other protected animal species, or any protected native plant, unique or locally rare plant or

animal, or significant habitat area is known or reasonably expected to exist on or in the immediate vicinity of the project site.

The northern long-eared bat is federally protected and there are known to be populations of this species with winter roosts (hibernacula) in Putnam County and adjacent counties. Avoiding the felling of trees from April through October serves to protect bats during the months when they are not in their winter hibernacula in caves and might be roosting in trees.

Mitigation Measures

The DEIS natural resource assessments recommend the following measures to mitigate the impacts to natural resources:

- Best practices will be used during the harvesting of trees to minimize disturbance of the soil in areas to be cleared and to provide protections for adjacent trees that are to be preserved.
- Harvesting of useful timber and chipping of unsaleable trees and limb trimmings for reuse as erosion control mulch during and after construction.
- Protection of standing trees to remain in accordance with NYSDEC guidelines which include construction perimeter fence protection, marking of individual and erection of temporary barrier fencing along the root protection zone of trees to be preserved, and creation of permanent tree wells around trees to be preserved in areas where the grade needs to be altered.
- Hazardous or diseased trees will be removed and all diseased and dead limbs pruned within 150 feet of proposed buildings.
- Healthy trees will be preserved wherever feasible. Large healthy trees to remain will be identified on a tree and forest preservation plan and on relevant site construction drawings.
- Bulk material, equipment, or vehicles shall not be stockpiled or parked with 10 feet of the trunk of any tree, nor within the drip line of any tree identified on the tree preservation plan. If any protected tree is inadvertently damaged, it shall be repaired under the direction of a certified arborist.
- An Erosion and Sediment Control Plan will designate the location of all temporary soil stockpiles, locating them outside of the critical root zone of all trees to be preserved.
- Preservation of 71.7 acres of trees on parcels to remain as Town parkland and 33 acres of trees on the project site.
- All trees on the Ridgeline Protection Area and on the steep sloped areas surrounding this designated area would remain.
- Wetlands, ponds, and the streams and watercourses that cross the property are excluded from direct impact of construction activities.
- Indirect impacts to existing hydrologic features would be mitigated by the application of Best Management Practices (BMPs) including erosion and sedimentation controls during the construction phase of the project, and by implementation of a post-construction stormwater management plan that includes detention and infiltration systems.
- To avoid potential impacts to bats that may be present on site during the summer roosting season, tree removal would not occur from April through October.

- A landscape plan will provide a transitional landscape from the edge of the proposed project into the bordering mature forest.
- The landscape plan would prioritize use of plants selected from the list of native tree, shrub, and perennials developed by the Town Planning Board.

7) Geological Resources

Potential Impacts - Soils, Topography, Geology

The site's soils are shown to have potential limitations on construction that may require corrective and preventative measures to address particular soil conditions encountered during construction. These potential impacts could involve construction on steeper slopes or in wet soil. The soils underlying the limits of disturbance (LOD) (primarily CrC and PnC soil types) generally have a moderate to slow infiltration rate and varied runoff potential. The project design incorporates appropriate measures to address the anticipated soil conditions.

The total area of proposed disturbance on the site will be approximately 49 acres. Based on the preliminary project plans, the cut and fill for the proposed development would be balanced, with total earthwork on the order of 210,000 cubic yards. The geotechnical studies conducted at the site indicate recommendations for grading of the project to account for existing soil conditions, especially in any area where structural fill for buildings is needed. Onsite soils would be appropriate to utilize as non-structural fill. Bedrock removal is not anticipated.

The highest elevations of the site, which are in a portion of the regulated Ridgeline Protection Area, would remain unaltered by the proposed development. Similarly, the lowest elevations on the site including NYSDEC Wetland LC-28 would remain unaltered by the proposed development.

Areas of the site proposed for development have estimated depth to bedrock of five feet or greater. No removal of bedrock is anticipated. In the unexpected case that bedrock is encountered and must be removed, this would be accomplished either by mechanical equipment or by blasting. If it is necessary, blasting activity would be done according to all applicable federal, state, and local regulations, including compliance with Chapter 71 – Explosives and Blasting of the Town Code of Southeast.

Mitigation Measures

The proposed project has been designed to incorporate the best alternatives for achieving the layout of structural features and the location of access roads while avoiding to the extent practicable the potential for adverse construction impacts to site wetlands, streams, watercourses and to any secondary impacts to the Middle Branch Reservoir drainage basin of New York City's water supply. Proposed mitigation measures include the following:

- Adoption and implementation of the Stormwater Pollution Prevention Plan (SWPPP) for the proposed project to avoid significant adverse impacts to soils and surface waters.
- The Preliminary SWPPP is included in the DEIS.
- Soil testing for proposed infiltration basins was performed including percolation testing, infiltration testing, and deep test pits and witnessed by personnel from the NYSDEP.

- Potential development limitations found in the natural soils would be addressed by appropriate engineered solutions.
- Temporary control measures during construction would include swales to divert clean water from construction areas, silt fencing to contain sediments within the LOD, sediment traps to allow for onsite treatment of silted waters, and re-seeding or mulching to stabilize areas of disturbed soils, including soil stockpiles.
- Temporary sediment and erosion controls would also include stabilized construction entrances and storm drain inlet protection.
- Grading operations would be phased to limit the extent of exposed soils present at one time, in conformance with General Permit GP-0-20-001.
- For any area of soil disturbance that exceeds five (5) acres at one time, a waiver must be obtained.
- Attention to particular soil conditions that would require special sediment and erosion control measures such as implementation of redundant silt fencing.
- Earthwork should be conducted outside of periods of rain and snowmelt to reduce the potential for soil loss.
- Prompt grading and compaction following disturbance of soils to reduce their moisture content and increase their stability. If compressible, organic soils are encountered, they should be relocated and replaced with structural fill.
- Areas of disturbed soils would be subjected to soil restoration techniques which might include mechanical decompaction and compost amendment, and the establishment of a permanent deep-rooted groundcover.
- The proposed project is designed to avoid steep slopes and conform to applicable provisions of the Town of Southeast Town Code.

8) Water Resources and Wetlands

Potential Impacts

Potential impacts to water resources and wetlands associated with the development and operation of the Project that must be ameliorated by the project design include: sedimentation during construction, release of pollutants from construction activities, post-development increases in pollutant loading in stormwater, post-development flooding and erosion from increased stormwater discharge in receiving watercourses.

The basin of the Middle Branch Reservoir in New York City's drinking supply watershed is designated as phosphorus-restricted by the NYCDEP, and therefore stormwater controls must be appropriate to reduce this nutrient to permitted concentrations through the application of effective stormwater control practices, including the capture and removal of sediment and debris from detention basins and the maintenance of vegetation within and around the basins to further increase the ability of the stormwater system to reduce the movement of phosphorous into downstream reservoirs.

Direct disturbance to wetlands on the property would be avoided in the current plans, however the Project would encroach into Town and NYSDEC Wetland Buffer/Controlled Areas, and NYCDEP Watercourse Limiting Areas in several locations.

Approximately 10.7 acres of impervious surfaces would be created on the site resulting in a localized increase in stormwater runoff that would be collected and directed into a system of stormwater management basins. Discharges from the basins would occur either as infiltration into the subsoils or as surface discharges of treated stormwater into the site wetlands or watercourses.

Chapter 78 of Southeast Code calls for mitigation for impairment of the hydrological benefits of the Town wetlands. These benefits, including the control of stormwater runoff and flooding, are provided by the storage capacity within wetlands and by the hydrologic adsorption functioning of their soils and vegetation. The Project utilizes infiltration basins to recharge upland areas of the site while controlling the rate and volume of surface water discharges into the site streams and wetlands. The stormwater flow controls provided by the Project are designed to protect the hydrologic functioning of the site wetlands.

Mitigation Measures

Measures to mitigate the impacts of the Project on the water resources and wetlands within and in the vicinity of the site include the following:

- no direct disturbances to wetlands or watercourses have been proposed
- land grading operations will be phased
- extent of impervious surfaces has been minimized
- rainwater infiltration practices will be utilized to reduce the volume of surface stormwater runoff exiting the site
- on-site soil testing was witnessed by NYCDEP to verify that the soils in the location of the proposed infiltration basins are adequate to support the design requirements for infiltration practices in accordance with the New York State Stormwater Management Design Manual.
- site-specific Preliminary Stormwater Management and Pollution Prevention Plan (SWPPP)
- stormwater management systems are designed to meet the requirements of local, regional, and state stormwater regulations including General Permit GP-0-20-001
- the SWPPP defines measures and procedures to be implemented for compliance with prevailing discharge standards. All proposed measures and procedures will be selected in accordance with the current NYS Design Manual standards.

The SWPPP design process evaluated existing (pre-construction) and post-construction stormwater runoff characteristics, including existing and post-development peak rates of stormwater discharge for the 1-, 10-, 25-- and 100-year 24-hour rainfall events. This analysis was the basis for developing the mitigation measures proposed to be incorporated into the project design.

The construction stage of the Project will be phased to minimize soil exposure in accordance with the General Permit. Temporary erosion and sediment control facilities to be installed and maintained throughout all construction phases as needed would include, but not necessarily be limited to:

- Stabilized construction entrances;
- Silt fence and/or haybale barriers;
- Storm drain inlet protection;
- Temporary sediment traps;
- Temporary soil stabilization by seeding and mulching;
- Temporary seed and mulch shall be applied to idle areas of exposed soil.

In general, permanent erosion and sediment control will be accomplished by measures that would include, but not necessarily be limited to:

- diverting stormwater runoff from steep slopes,
- controlling/reducing stormwater runoff velocities and volumes,
- surface stabilization by structural and landscape measures.
- riprap rock outlet protection at discharge end of all piped drainage systems
- designs in accordance with the New York State *Standards and Specifications for Erosion and Sediment Contro*l.
- Soil restoration where soils had been disturbed and are to be re-vegetated with lawn grass or landscaping.
- Permanent seeding and mulching of topsoil upon completion of final grade.

Construction phases will include the requisite stormwater inspections. To the extent that there is fuel use and waste generated during construction activities, such materials will be handled, stored and disposed of in accordance with federal, state, and local regulations.

9) Traffic and Transportation

Potential Impacts

The traffic impact study conducted for Brewster Yards determined the peak hour traffic volumes to be generated by the Proposed Project based on actual surveys of a similar sports facility. The estimated traffic volumes were combined with projected 2023 No-Build Traffic Volumes to establish the 2023 Build Traffic Volumes. A capacity analysis conducted for each peak traffic period at each study intersection in the Build condition identified the traffic impact associated with the project. Where the analysis showed a significant impact due to the addition of project traffic volumes to the roadway system, an improvement was recommended and implemented within the analysis, resulting in the 2023 Build with Improvements analysis.

The Traffic Study presented the following findings:

- The Proposed Project is provided good regional and local vehicular access via New York State Route 312, which ultimately connects to Interstate Route 84 to the east and US Route 6 to the west.

- The Proposed Project will be accessed from two STOP-controlled access driveways, one along Pugsley Road and one along Zimmer Road. The Proposed Project will seek to discourage drivers leaving the Site from making right-turns towards Fields Corner Road by installing No-Right-Turn traffic signs at their driveway approaches to Pugsley Road.

- The Proposed Project is projected to generate approximately 46 entering vehicles and 6 exiting vehicles during the Peak Weekday AM Hour, 239 entering vehicles and 45 exiting vehicles during the Peak Weekday PM Hour, and 265 entering vehicles and 218 exiting vehicles during the Peak Saturday Hour.

The traffic impact analysis concluded that the Proposed Project will have no significant traffic impacts on the adjacent roadway network with the recommended improvements. With the improvements recommended, all intersections will see minor increases in average delay and will be adequately mitigated.

Parking and Site Circulation

The parking requirement is based on Town Zoning regulations pursuant to athletic fields and a parking multiplier taken from the Institute of Transportation Engineers (ITE) *Parking Generation Manual*. The total number of parking spaces required for the Proposed Project is calculated to be 345 spaces. The Applicant's plan proposes a total of 449 parking spaces which exceeds the calculated parking requirement and is based on the expected peak parking need from the Applicant's experience at other recreation venues. Parking spaces are proposed to conform with the Town standard.

Vehicular circulation within the project was reviewed for passenger vehicles, emergency and delivery vehicles, and for pedestrian circulation. The internal driveways and parking lot aisles to be used by the public will allow for two-way vehicular traffic flow throughout the project for cars, buses, emergency vehicles and delivery vehicles. Turning movement diagrams are presented in the DEIS.

Pedestrian circulation will be accommodated throughout the project site, linking the parking areas with the recreation facilities via sidewalks, crosswalks and curb ramps. For pedestrians that may need to cross Zimmer Road from the main parking area to the showcase baseball field on the south side of the project, a marked and signed pedestrian crosswalk will be installed.

Mitigation Measures

Roadway improvements recommended in the traffic study (outlined above) are proposed to be undertaken by the project. In particular, traffic signal timing adjustments are proposed:

- Intersection of US Route 6 & NYS Route 312 for the Peak Weekday PM Hour and Peak Saturday Hour
- Intersection of NYS Route 312 & Pugsley Road (Alternative A) for the Peak Weekday PM Hour and Peak Saturday Hour
- NYS Route 312 & Interstate Route 84 Eastbound Ramps/Independent Way for the Peak Saturday Hour

- NYS Route 312 & Interstate Route 84 Westbound Ramps for the Peak Weekday PM Hour and Peak Saturday Hour

The following measures are proposed to further mitigate traffic impacts of the project:

- The Proposed Project will seek to discourage drivers leaving the Site from making right-turns towards Fields Corner Road by installing No-Right-Turn traffic signs at their driveway approaches to Pugsley Road.
- Once the proposed project is operational, the Applicant may solicit PART to determine if the project meets the requirements to be added as a regular or on-call stop along its bus route along NYS Route 312.
- Most construction employees will arrive and depart the Project Site out of phase with the peak traffic hours.
- Construction truck traffic is anticipated to access the Site via NYS Route 312 and Interstate Route 84 which will avoid traffic through residential neighborhoods and on local roads.
- No construction traffic will be allowed to utilize Fields Corner Road to Fair Street.

10) Infrastructure and Energy

Potential Impacts - On-site Water Supply

Water supply for the project site would be provided by a water supply system developed from on-site groundwater wells designed and constructed in accordance with the standards and subject to the approval of the Putnam County Department of Health (PCDOH).

Brewster Yards is expected to be utilized by patrons every day, but most during weekends. Design flows were calculated for an average weekday (3,476 gallons per day) (GPD) and weekend days (30,132 GPD). No irrigation is proposed. The water system for the project would be designed to meet the peak hourly demand on a weekend day. The peak hourly flow for the project's water system was calculated using a peaking factor of four (4) resulting in a peak hourly flow of 112 GPM.

The main recreation building would be equipped with a sprinkler system supplied from a water storage tank. The project's potable water and fire protection supply is proposed to be provided by two or more groundwater wells that meet the required maximum daily demand of 60,264 gpd or 42 GPM with the best well out of service, in accordance with the applicable standards. Exploration for the groundwater supply will include a 72-hour pump test to demonstrate there is an adequate supply of water with no significant adverse effects on any nearby water well.

Potential Impacts - Wastewater

A subsurface sewage treatment system (SSTS) is proposed to be constructed on the project site to treat the wastewater generated by the project. Due to the fluctuation of project site patrons anticipated throughout the week, as described above, a design flow of 11,092 GPD is utilized for the proposed SSTS. To accommodate fluctuations in daily site populations, the project will utilize a septic storage and dosing system to even out the flow to the SSTS. The SSTS area shown on the project plan will include the required primary and 100 percent reserve

absorption areas. The results of on-site soil testing demonstrated acceptable soils for this use per pertinent regulations.

With effluent levels above 5,000 GPD, a groundwater mounding analysis is required to evaluate the potential/extent of groundwater mounding in the area of the proposed SSTS.

Electrical Supply Impacts

The New York State Electric and Gas Corporation (NYSEG) service area includes the project site. Extension of existing electrical service will be required from one of the three nearby systems to service the project. The total peak electric load at the site is estimated to be 850kW. The estimated project load is not considered to be significant for a typical suburban power grid, however confirmation will be necessary from NYSEG.

Mitigation Measures

Based on the information available at the time of preparation of this document regarding groundwater supply, wastewater assimilation capacity on the site and electric supply available to the site, no unusual mitigation measures are proposed.

Infiltration from the SSTS will recharge of a portion of the water withdrawn from the groundwater aquifer thereby reducing the consumptive water withdrawal of the project. Adequacy of the groundwater supply to service this project will need to be proven based on the results of on-site well drilling and testing, in accordance with the applicable regulatory requirements and permit. Appropriate treatment and infiltration of sanitary effluent produced from the project during full occupancy will need to be demonstrated in order to obtain the requisite permits to operate the system.

Likewise, an adequate electric service connection will need to be obtained from the available electric grid, meeting all requirements of NYSEG, the service provider.

11) Air Quality

Potential Impacts

Temporary air quality impacts from construction activities were assessed along with a determination of long-term impacts from project induced traffic (mobile sources) and from heating and cooling equipment at the site (stationary sources).

Potential short-term adverse air quality impacts include the generation of fugitive dust and particulate matter during construction and emissions from construction equipment and vehicles. Construction related dust and equipment emissions will be temporary.

The primary generator of air emissions over the long term will be the operation of passenger vehicles travelling to and from the site. Carbon monoxide (CO) is the primary pollutant of concern for traffic generated air emissions. Three signalized intersections were found to have a level of service D or E that required further air quality analysis.

No significant adverse long-term air quality impacts are expected to result from the proposed Brewster Yards development. It is not anticipated that the ambient air quality standards would be exceeded based on the analysis.

Mitigation Measures

Mitigation measures proposed to limit the dispersal of dust to nearby residences during construction are identified. The fugitive dust control and management measures include earth-moving operation controls, track-out controls, high wind condition controls, and stabilizing soil stored or stockpiled on the project site.

- In dry conditions, apply water to soils access routes prior to and during earthwork and construction activity.
- Phase the project to limit and minimize the area disturbed at any one time.
- Provide a stabilized construction entrance to reduce the transport of soil to roadways.
- Remove materials from the exterior of trucks before leaving the site to prevent track-out of soil onto public roadways.
- Cover trucks with a tightly secured cover (tarp) before leaving the project site.
- Clean public roadways to remove all visible dirt tracked out of the construction site.
- Temporarily stabilize exposed soils left bare for 14 days which are not being graded, not under active construction or scheduled for permanent seeding within 21 days.
- Apply permanent stabilization as soon as conditions warrant.

Although exhaust emissions from construction equipment is not as significant as fugitive dust generation, particulate matter from diesel exhaust emission will also be controlled through proper tuning of the engine and maintenance of the air pollution controls.

12) Noise

Potential Impacts

The nearest sensitive noise receptors to the site are residences located to the north on Fields Corner Road and possibly Theodore Court near Fair Street. Local daytime ambient noise levels will increase both on and off of the project site during construction of the proposed project. Noise from construction activities is an expected consequence of any new development and cannot be avoided, however, it is a temporary impact that will cease upon project completion.

The level of impact from construction noise depends upon the type and number of pieces of equipment being operated, the duration of the construction activities, and the distance of the receptor from the noise source. The noisiest period of construction will occur during site clearing and grading activities, although all construction activities at the site are likely to produce increased noise levels of varying degrees. Rock removal will be required and blasting may be necessary. Blasting may produce brief periods of sound levels of up to 74 dBA within 500 feet of the blasting location, substantially higher than ambient conditions, but would be temporary

and short term. Blasting, if required, would be limited to the hours specified for "excavation" in the Town Code, as described above.

Grading for a stormwater basin and multi-sports field will occur within 250 feet of the nearest residential neighbor to the north, resulting in estimated noise levels of 70 to 80 dBA at the property line when tree clearing and grading is done in this area. Intermittent occurrences of noise from project construction may be noticeable for residents to the north and west, but such levels will be in the range of ambient daytime conditions given the distance from the source.

Once operational, the Brewster Yards development will generate noises typical of recreational sites with the greatest activity occurring in the spring, summer and fall and less activity during winter months. During outdoor games, voices, shouting and cheering would be expected to occur. This noise will be periodic and will vary in intensity and duration. Potential future noise levels at the project were estimated based on noise levels recorded at similar venues and measurements of ambient noise at the subject site. The average noise level at the northern property line (nearest neighbor) from active games at the multi-sports field 350 feet away was projected to be approximately 35 dBA. This is notably below the ambient noise conditions at the northern property line (42.1 to 44.5 dBA).

Loudspeakers are proposed at each ballfield for safety and general announcements. The central patron area (concession stand and visitor bleachers) of the baseball clover, the likely location for loudspeakers, is located approximately 1,000 feet from the northern property line. Assuming a peak sound level of 75 dBA from the loudspeakers at intermittent times, the noise level at the northern property line is estimated to periodically reach approximately 55 decibels. This peak is 5.5 to 8.3 dBA above the existing maximum sound levels measured at the northern property line in the existing conditions and may be considered intrusive.

The assessment also evaluated potential noise generated from landscaping activity, building heating and cooling equipment and traffic. None of these sources is expected to be intrusive to nearby residents.

Overall, noise levels from the Brewster Yards facility will meet the Town of Southeast Noise Ordinance requirements for maximum sound levels at the property lines for both continuous sound and impulsive sound.

Mitigation Measures

Construction activities must comply with the Town noise ordinances. To mitigate potential construction noise, major sitework operations including excavation and grading will occur only between times and on days it is allowed in the ordinances. No construction traffic will be allowed to use Fields Corner Road. All construction equipment will be required to be maintained and operated with appropriate mufflers to minimize equipment noise.

To reduce potential operational noise impacts to residences north of the site, loudspeakers at the ballfield clovers will only be used intermittently for general and safety announcements.

The project proposes to limit patron traffic from using Fields Corner Road by promoting access to and from the site via Route 312 and posting no right turn signs at the project exits onto Fields Corner Road which would minimize traffic-related noise to the neighborhoods to the north.

A mitigating factor with regard to noise from maintenance operations is that the play fields are proposed to be constructed with synthetic turf without the need for mowing.

D. Alternatives

The DEIS examines four alternatives:

- No Action Alternative - The No Action Alternative represents the scenario where no development would take place on the project site and this site would remain under its current ownership by the Town of Southeast. This is effectively an open space preservation alternative. The site would remain in its current undeveloped and underutilized condition.
- Alternative Development According to RC Zoning - The project site is zoned RC Rural Commercial. Current zoning would permit uses listed for the RC district, however its designation as open space precludes any change from its present use without an act of the NY State Legislature to alienate its present use for another stated purpose. Absent the proposed action, no alternative development (No Action) is anticipated at the project site and it would thus remain wooded and underused without improvements.
- Alternative Project Scale and Siting - Several site plan concept designs were created in the process of developing the proposed plan for Brewster Yards. These layouts are somewhat different in scale and siting of the recreation elements from the current proposed plan and demonstrate the overall extent of development that may be viable on this property. Subsequent to the initial application made to the Town, the Applicant continued to explore a Larger Building Alternative that would be approximately 26 percent larger and allow for increased project utilization in the winter when the outdoor fields would not be in use.
- Natural Turf Alternative - This alternative considers developing the baseball complex with natural turfgrass fields rather than synthetic turf.

The various impact topics are discussed in narrative assessments in the Alternatives section and quantitative comparisons are presented in the summary table reproduced below.

Alternative Impact Comparisons

	No Action (Existing Conditions) [1]	*Proposed Plan*	*Alternative Development per RC Zoning* [2]	*Alternative Project Scale and Siting*	*Natural Turf Alternative*
Developed Area					
Building Coverage, incl. outbuildings (square feet)	0	47,862	0	39,000-59,000	47,862
Pavement (acres)	0	9.6	0	10-11	9.6
Lawn / Landscaped (acres)	0	21.5	0	22-24	37.8
Synthetic Turf Surface (acres)	0	16.3	0	16-18	0
Open Space & Natural Areas					
Waterbodies (acres)	0.4	0.4	0.4	0.4	0.4
Wetlands (acres)	0.1	0.1	0.1	0.1	0.1
Woods, upland (acres)	81.3	33.3	81.3	28-33	33.3
Dedicated Open Space (acres)	81.8	0	81.8	0	0
Natural Resources					
Total Construction Disturbance (acres)	0	49	0	49-54	49
New Impervious Surface (acres)	0	10.7	0	11-12	10.7
Steep Slope Disturbance (>25%) (ac)	0	1.1	0	1-2	1.1
Tree Clearing (acres)	0	49	0	49-54	49
Soil Excavation (cubic yards)	0	±210,000	0	--	±210,000
Wetland Disturbance (acres)	0	0	0	0	0
Community Resources					
Trip Generation, weekend peak (trips/hour)	0	483	0	483-531	483
Water Demand / Sewer Flow, weekend peak (gpd)	0	30,132	0	30,132	30,132
Municipal Tax Revenues Generated (net annual) [3]	$0	$1,019,817	$0	--	$1,019,817

Notes: (1) Total acreage subject to development at Pugsley Road site = 81.78 acres
(2) Absent the proposed recreation use, no alternative development (No Action) is anticipated at the project site.
(3) See Section 4.0 for explanation of the net tax revenues (adjustment for affected School District).
Numbers may not add up to match totals due to rounding.
Source: Insite Engineering; KG+D Architects.

1.0 DESCRIPTION OF THE PROPOSED ACTION

1.1 Introduction to the DEIS

The Applicant / Project Sponsor (Proswing Sports Realty, Inc.) proposes to construct a commercial recreation complex for baseball and related sports, called "Brewster Yards", on approximately 82 acres of land located on Pugsley Road and Fields Corner Road in the Town of Southeast, Putnam County, New York. The site comprises two parcels of undeveloped land separated by land owned by the Town (formerly Zimmer Road). The property is located in the RC Rural Commercial zoning district.

The Town of Southeast Planning Board has declared itself to be the Lead Agency for purposes of the requisite environmental review pursuant to the New York State Environmental Quality Review Act (SEQRA or SEQR). Based upon its review of an Environmental Assessment Form submitted with the Site Plan application for the project, the Planning Board has designated the proposed project a "Type 1 Action" under SEQRA for which a Draft Environmental Impact Statement (DEIS) must be prepared. No approval of the project can be issued by an agency until the SEQR process is concluded which is typically formalized in a Findings Statement adopted by the Lead Agency and findings by each of the Involved Agencies whose approval is required to implement the Action.

Location of the Proposed Action

The Project Site consists of two parcels currently owned by the Town of Southeast and separated by the former Zimmer Road. These are tax map parcel numbers:

45.-1-10 and **45.-1-11**

Through an agreement with the Town wherein the Applicant anticipates acquiring these premises following a positive conclusion to this environmental review of the site development plan, application is being made by the project sponsor acting as a contract vendee. The two parcels will be subdivided so that a portion of each lot will remain in Town ownership as permanent open space, while the remaining portions acquired by the Applicant will be developed for recreational use. This DEIS will specifically address the two portions of land being considered for development.

Refer to the accompanying site location maps, Figures 1-1 and 1-2. The property is bounded by Pugsley Road and Fields Corner Road, unimproved (dirt) Town roads, to the west, a single-family residence lot to the north, Interstate Route 84 to the east, and Town-owned open space land to the south. West of Pugsley and Fields Corner roads is presently vacant, mostly wooded land upon which development of a commercial warehouse project was recently begun. The property boundary on the north is coincident with the Town of Patterson town line. Pugsley Road and Fields Corner Road intersect at a former crossroad with Barrett Road and Zimmer Road.[1] Pugsley Road ends at NYS Route 312 approximately 4,000 feet to the south. Fair Street (County Road 60) connects with Fields Corner Road approximately 4,000 feet to the north. The Project Site is readily accessible from I-84 via Route 312, the intersection of I-84 and Route 312 being approximately 1.0 mile away.

[1] According to the Deed, Zimmer Road is a former town highway, the land is owned by the Town with an easement in favor of the County to access the County lot to the east.

The property is currently and will remain in the RC Rural Commercial zoning district. No zoning change is contemplated for this proposal.

The natural setting of the project site consists of undulating topography almost entirely wooded. The site contains areas of wetlands, stream corridors, steep slopes and a small pond, all of which have regulatory limitations for development which are thoroughly described in this document. Upland portions of the property contain relatively open woodland habitats typical of the region, with prominent boulders throughout. The property is located within the watershed of the Middle Branch Reservoir to which the site drains, which is part of the New York City water supply system.

SEQRA Overview

This DEIS has been prepared to evaluate the possible environmental impacts associated with the proposed development for the subject property. The DEIS has been prepared in accordance with Section 8-0101, et. seq. of the Environmental Conservation Law and the regulations promulgated by the New York State Department of Environmental Conservation (NYSDEC) thereunder, which appears at 6 NYCRR, Part 617, (known as the New York State Environmental Quality Review Act).

The Scope of the DEIS was established by a scoping outline developed by the Town of Southeast Planning Board, acting as SEQRA lead agency, in cooperation with all other involved agencies. The Planning Board held a public scoping meeting on September 27, 2021, at which public comments were heard, and allowed for written comments on the draft Scope to be received through October 22, 2021. The Scope outlining the information to be covered in the DEIS was adopted by the Planning Board on October 25, 2021, was posted on the Town's website,[2] and is provided in Appendix A. Also provided in Appendix A is a copy of the SEQRA Environmental Assessment Form, Parts 1, 2 and 3, used by the lead agency in making its determination (Positive Declaration) that a DEIS must be prepared for the proposed action.

1.2 Project Purpose and Need

History

Early discussions about a project like this took place between the Project Sponsor and the Town which brought to light the possibility that parkland owned by the Town on Pugsley Road might be swapped with vacant land owned by the Sponsor on Starr Ridge Road in the Town of Southeast wherein the Pugsley Road parkland was underused and might be better suited for an active recreation facility. With support from Putnam County, the Town of Southeast petitioned the State Legislature in 2020 to authorize the Town "to alienate certain lands used as parkland and to dedicate certain other lands as parklands" for this purpose. The State Legislature passed and the NY State Governor signed legislation authorizing the Town to discontinue as parklands and to alienate lands on Pugsley Road and to convey portions of such lands to the Project Sponsor for the purpose of developing Sports and Recreation Facilities as permitted by the Town Code of the Town of Southeast.[3]

[2] Documents are posted on the Town's website: *http://southeast-ny.gov/383/Brewster-Yards-pka-ProSwing*

[3] The review for the land swap proposal, including the requisite SEQRA review, was undertaken by the Town, reviewed by the County, approved by the NY State Legislature, and signed by the Governor on October 7, 2020.

Subsequently, the Project Sponsor made application for site development plan approval at the Pugsley Road site. The Proposed Action involves approvals to develop a commercial recreation[4] complex on portions of the Pugsley Road lands and final Town approval for the land swap (transfer of ownership) of the subject land from Town to private ownership in fulfillment of the prior approval of a Home Rule resolution adopted by the Town Board and a Land Exchange Agreement authorized and executed by the Applicant and the Town of Southeast.[5]

Need for Recreation Facilities

While the Town of Southeast does not have a formal recreation plan for addressing recreation needs of its residents, anecdotal evidence indicates that there is a significant need for additional active recreation facilities to be available for Town residents, especially school-aged children. Additionally, there is continued interest by Town residents to preserve natural open space lands for conservation purposes as well as passive recreation. The Brewster Yards proposal is envisioned to address both of these priorities of the Town.

It is the Project Sponsor's intent to coordinate the operations of the proposed development with existing sports venues in the Town of Southeast to benefit Town residents. Not only will scheduling of playfield use provide priority to Town residents for certain time periods, but the facilities at Brewster Yards will also be available for scheduled programs and special events by the community and fundraisers by local charity organizations. It is anticipated, given the current demand for playfield space, that existing baseball and softball teams will make regular use of the new facilities. Local baseball and softball programs will not only benefit from playing on turf, state-of-the-art fields but, from off season training in the spacious, fully-turfed fieldhouse at Brewster Yards. This includes programs such as rec little league, travel little league and senior league, and local club travel baseball/softball.

Development Potential of Starr Ridge Road Site

The Starr Ridge Road property owned by the Project Sponsor which is subject to the aforementioned land swap consists of 94.9 acres of vacant land. The site is located in the R-160 Residence District where the principal land use is single family detached dwellings. Starr Ridge Road is a Scenic and Historic Route designated in the Town's Comprehensive Plan and Town Code. The Town of Southeast regulations stipulate that a buffer be protected along Starr Ridge Road to preserve the distinctive scenic and historic character of the corridor.

Establishment of the Starr Ridge Road site as public open space in return for allowing the Pugsley Road site to be developed for recreation would provide benefits to the Town. The Starr Ridge Road site will likely remain unimproved as a passive recreation site for hiking and the like, and its designation as permanent open space would preserve a natural resource for the community. Any future development activity at the Starr Ridge Road site is expected to be limited by the conservation protection imposed for the site upon its acquisition by the Town.

The adopted Town Comprehensive Plan does not include specific recommendations for the sites being considered for transfer, but the Plan includes discussion of development-related

[4] Commercial Recreation use (as defined in the Town Code) would comprise indoor and outdoor recreational activities such as ball fields, soccer, basketball, and fitness activities such as gymnastics, health and exercise facilities, with restaurant and retail accessory uses.

[5] Documents are posted on the Town's website: *http://southeast-ny.gov/364/Pugsley-Road-Alienation*

activity in these areas wherein it notes the scenic nature of Starr Ridge Road should be preserved while development along Pugsley Road is envisioned.

Development Potential of Pugsley Road Land

As earlier described, the two Town-owned parcels on Pugsley Road are proposed to be subdivided so that a portion of each lot will be acquired by the Applicant to be developed for recreational use while the remaining portions (approximately 71.7 acres) will remain in Town ownership as permanent open space. Given this designation, development potential of this land will be limited to possible improvements by the Town to enhance its passive recreational use, such as establishing hiking and nature trails.

As part of the approvals anticipated for Brewster Yards, the Applicant will include a 50'-wide easement to allow public access to continue to be possible from Pugsley, Zimmer and Fields Corner roads to the land that will remain in Town ownership. Of particular note is preservation of access to the ridgeline protection area located in the northeastern area of the property via access easements. (There are no formal trails existing on the site.) Access will be available to the public via an easement parallel to the northern property line from Fields Corner Road to the ridgeline open space lot (northwest property corner to northeast property corner), an easement following the eastern boundary from Zimmer Road northward to the ridgeline open space lot, and an easement following the eastern boundary from Zimmer Road southward to the open space lot that includes NYSDEC wetland LC-28. The alignment of the proposed access easement is illustrated in Figure 1-3. Two parking spaces will be allocated for users of the woodland trail at the proposed parking lot south of Zimmer Road (demand for such use is not known).

1.3 Project Description

The Brewster Yards project to be developed at the Pugsley Road site is proposed as the premier destination for young baseball and softball enthusiasts and is expected to attract local and regional visitation which will generate economic benefits, further economic development, job creation, and new tax revenue for the community. The site will include four (4) 325' Baseball fields, one (1) 350' Showcase Baseball field, four (4) 200' Little League fields and one (1) multi-sport field of synthetic turf and a ±35,000 square foot Recreation Building to house indoor sports and training facilities developed for year-round use. Project amenities will include food concessions located in several outbuildings, a Pro shop, a centrally located pedestrian/dining plaza, and playground for patrons.

Programming of Brewster Yards' facilities will include tournaments and baseball showcases that will give the young players opportunities to receive instruction from top notch coaches and exposure to college recruiters and professional scouts.

The Buildings

The proposed main Recreation Building is designed in a style and scale to create a sense of place for this baseball venue that is state-of-the-art, of ample size to provide functional indoor spaces for multiple activities, and is unique to the site and the region. The architectural features of the proposed main building are intended to express a scale that is in keeping with the nature of the landscape -- multiple rooflines with sloped roofs, one-story elements that reduce the scale of higher facades -- designed to fit within the surrounding context of an undulating landscape.

The smaller accessory buildings that will house the concessions will reflect the same architectural details of the main building.

Figures at the end of this section illustrate building floor plans, façade treatments and building materials of the main recreation building, the main concession building and concession buildings to be located at the center of the Little League and baseball field clovers, which style will be reflected in all the public buildings on the site. (Architectural designs will be further developed for purposes of review by the Town Planning Board/Architectural Review Board.) Refer to Table 1-1 which summarizes the floor areas and coverages of all proposed buildings.

Development of the building plans will include designs that screen any HVAC[6] equipment and integrate green building practices. The proposed main building will be sprinklered.

The main building will house two (2) synthetic turf fields (90' and 60' infields) with spectator viewing, space for batting cages or pitching tunnels, sports performance training space, multi-use function rooms, office and support spaces. The facilities will include three event rooms for rental to small groups for birthday parties and the like and an accessory retail component. Food concessions and a Pro shop will serve the same sports patrons who are on-site to use the ballfields -- the players and parents.

The Site Plan

The project site plans submitted with the project application to the Town and accompanying this document depict the layout and details for the proposed site improvements including building and playfield locations, grading, roadways and parking areas, drainage features, site amenities and pedestrian improvements.

The project will utilize on-site groundwater wells for potable water supply (two or more public water supply wells to be developed) and on-site sanitary disposal (via a conventional subsurface sewage treatment system).

The project ballfields are laid out in cloverleaf fashion with viewing, concession and restroom facilities available throughout the site. Each ballfield will be outfitted with a full complement of traditional baseball field facilities -- dugouts, bullpens, batting cages, and spectator stands. The stands at each baseball and Little League field will be designed to accommodate up to 80 spectators. A central pedestrian plaza is designed to accommodate a number of food vendor trucks, dining tables and chairs with canopies for shade, and a concession and restroom building. At the center of each clover will be a small concession building; the building at the baseball clover will have a second story viewing platform for talent scouts.

A centrally located playground is planned in proximity to the main pedestrian plaza, designed for various age groups with seating and shade for parents. Provisions for a hiking / fitness trail is also planned to circulate around the adjacent ridgeline area which will remain Town owned. Access to the wooded parklands that will remain in Town ownership will be maintained for the public.

A 350' "showcase" baseball field is proposed at the south end of the complex, traditionally outfitted like the other fields and with stands to accommodate approximately 200 spectators.

[6] Heating, ventilation, and air conditioning (HVAC).

The larger viewing stand raised to overlook the field will include a “press box” for scouts, with concession and restrooms.

A multi-sport field is planned at the north end of the complex to provide a play field for various sports and practice field space for baseball teams awaiting their time on the baseball fields. The stands will be designed to accommodate approximately 50 spectators.

All fields are planned to be constructed with synthetic turf to allow for all-season use and every field is proposed to be lighted for nighttime use. Each field will be outfitted with an electronic scoreboard and sound system for announcements. Scoreboards will be located at the outfield fence of each field; loudspeakers would typically be located at the central patron areas (near the concessions and bleachers) at all fields. Of course, each field will be surrounded by appropriate chain link fencing for safety. (Refer to Figures 1-10 to 1-13 that show the general locations of scoreboards, public address speakers, field lighting and the playground.)

The proposed plan will preserve a vegetative buffer around the perimeter of the developed area and re-establish buffers where needed. The project will preserve a vegetative buffer of over 16.5 acres to the residential properties to the north and to the ridgeline parcel to the northeast, in addition to preserving 26.8 acres in permanent open space for the ridgeline itself. On the west side of the project, there will be areas graded to accommodate stormwater management basins, and the internal driveway where new landscape plantings are planned to re-establish a vegetative buffer along Fields Corner Road. Likewise, grading is proposed to create driveway access points to the project along the repaved Zimmer Road and the proposed plan will include landscape plantings to buffer the developed area of the site. Grading for stormwater basins to the south and east sides of the baseball showcase field will occur near the property lines that adjoin land to remain in vegetative cover -- the County-owned parcel to the east and 44.8 acres in permanent open space to the south. A buffer of over five areas of existing woodlands will remain along the Pugsley Road frontage.

Where the project will disturb existing vegetation within the 50’-wide environmental conservation buffer required by the Town Code along the property lines, plantings will include trees, shrubs and groundcovers of native and ornamental plant species that are appropriate to the region and suitable to the site conditions.

Access

Access to Brewster Yards by vehicle will be via Route 312 and Pugsley Road to the main driveway loop. Parking will be provided in the parking area that wraps past the front of the main building and when there is greater attendance, additional parking will be available in three smaller lots elsewhere on the site. An area for bus parking is also provided at the driveway loop. Overall, the parking is sized to accommodate the peak weekend use of the site. (Refer to the table of building floor areas, parking and loading spaces below.)

Several internal access points are proposed to allow for emergency response vehicles to reach the baseball fields, multi-purpose field, concession plazas, and main building areas.

There will be a single gateway pedestrian entrance for patrons from the main parking lot to the east side of the main building, past a ticketing window. Ticketing will be managed through an online app so that patrons will already have purchased their tickets upon arriving at the site. Virtually all areas of the project will be designed to be accessible in conformance with the American with Disabilities Act (ADA).

Off-site physical improvements planned or expected to be necessary to accommodate public access to this project are limited to the reconstruction of the former Zimmer Road which will entail widening, grading, drainage measures and paving approximately 975 lineal feet of roadway to a cross-section that is acceptable to the Town. (It is anticipated that the cost of improvement of Zimmer Road can be shared between the Applicant and the Town of Southeast.) Pugsley Road, which at present is a narrow, unimproved and seasonal Town road is scheduled to be improved to Town road standards (widened, graded and paved), and the intersection of Pugsley Road and Route 312 is also scheduled to be improved to a signalized intersection, as part of the next-door Logistics project. Pugsley Road is expected to be fully operational for two-way traffic in 2023 prior to the opening of Brewster Yards.

Based on the evaluation of traffic infrastructure in the area of the project undertaken for this EIS, the project proposal includes implementing adjustments to traffic signal timing at four locations:

- Intersection of US Route 6 & NYS Route 312 - Traffic signal timing adjustments during the Peak Weekday PM Hour and Peak Saturday Hour
- Intersection of NYS Route 312 & Pugsley Road (Logistics Alternative A) - Traffic signal timing adjustments during the Peak Weekday PM Hour and Peak Saturday Hour
- NYS Route 312 & Interstate Route 84 Eastbound Ramps / Independent Way - Traffic signal timing adjustments during the Peak Saturday Hour
- NYS Route 312 & Interstate Route 84 Westbound Ramps - Traffic signal timing adjustments during the Peak Weekday PM Hour and Peak Saturday Hour

Programming

Programmatic planning for use of the site is currently being developed by the project sponsor, but in general the expected site use will attract youngsters and their parents every week day in after school hours and throughout the day on Saturdays, Sundays and holidays. The expected hours of operation, once the venue is fully operational, are as follows:

- Monday - Friday: Winter 3PM-10PM In Season 10AM-10PM
- Weekends / Holidays: 8AM-10PM

Use of the main recreation building for indoor activities will be greatest during the “off-season” (November to mid-March) with modest use of the fields, weather permitting. Anticipated wintertime project use by up to 213 persons (players, spectators and staff) is anticipated at any one time.

The Spring/Summer/Fall “in-season” operation will run from mid-March to the end of October. During non-school days, outdoor field use will be programmed for two teams on each of nine fields throughout the day and fourteen teams “on deck” (up to 1023 persons -- players, spectators and staff) and using other site amenities, including concessions, batting cages, the multi-sport field for practice, playground and the recreation building facilities. On school days, after-school field use is expected to be two teams on each of up to five fields and eight teams “on deck” (up to 358 persons). During peak use the project is anticipated to employ up to 63 people.

Use of the project facilities will be available to all residents of the Town of Southeast, of Putnam County, and of the greater region, without prejudice. The facilities at Brewster Yards will expand

upon the existing baseball venues in the community, providing additional opportunities for the existing Little League, softball and baseball teams from the greater region. The project is envisioned by the project sponsor to be a family-oriented recreational venue designed to respond to existing regional demand for popular sports activities that would serve and benefit the Town and the broader region.

The following table summarizes lot and building floor areas, coverages, and computation of required off-street parking based on the latest plans included in DEIS Appendix M. Parking generation for indoor recreation is calculated using the average parking generation rate for a recreational center (4.00/1000 gross square feet) documented in Parking Generation published by the Institute of Transportation Engineers, as there is no comparable use listed in Town Code §138. Parking would accommodate concurrent usage of the indoor and outdoor facilities, and consecutive field use.

The proposed land use does not require provision of a loading space on the site plan, pursuant to Code §138-69.

Table 1-1
Schedule of Areas, Parking & Loading

Total Lot Area:	81.78	Acres (2 lots)		
Building Areas:	Gross Floor Area		Building Coverage	
Main Building	34,855	Square feet	34,855	Square feet
Concession/Restrooms North	3,684	Square feet	3,684	Square feet
Concession - Large Clover	1,360	Square feet	784	Square feet
Concession - Small Clover	576	Square feet	576	Square feet
Concession - MP Field	612	Square feet	612	Square feet
Concession/Restrooms South	1,625	Square feet	1,625	Square feet
Maintenance Building	1,152	Square feet	1,152	Square feet
Water Treatment Building	350	Square feet	350	Square feet
Batting Cages (building)	4,224	Square feet	4,224	Square feet
Total Building Areas:	48,438	Sq. Ft. GFA	47,862	Sq. Ft. Coverage
			0.016	FAR of N Lot Area (Lot 10.1)
			0.002	FAR of S Lot Area (Lot 11.1)
Total Pavement Area:	9.6	Acres		
Outside Storage Area:	None			
Computation of required off-street parking and loading spaces:				
Use:		Loading	Parking	Factor
Recreation in Building (sf)	35,459	0	142	1 space / 250 sf (ITE)
Athletic Fields (seats)	1,001	0	201	1 space / 5 spectator seats
Public Trail Use		0	2	
Total Spaces Required:		0	345	
Total Spaces Provided:		0	449	
3/30/2022	*Numbers are based on the preliminary building and site plans.*			

Build Year & Construction Schedule

Following conclusion of the environmental review process with findings that will allow the project to obtain the requisite permits, project construction is anticipated to begin in Winter 2022-23 and proceed continuously to completion in Summer 2024. For purposes of the DEIS analyses, 2023 is used as the "build year".

1.4 Required Approvals/Permits and Involved Agencies

Regulatory agencies having approval or permitting authority over one or more aspects of this application are listed below. Addresses for the agencies, Town departments, Town consultants and known interested parties to whom copies of the SEQR documents will be distributed are listed in Appendix A. State or local agencies having such approval or permitting authority are identified as "involved agencies" under SEQRA.

Agency Approvals

This action will involve a decision by the Town of Southeast Planning Board (the SEQR lead agency) whether to approve the project proposal once the environmental review process is completed. The Board's decision will take into account input received from affected Town departments and the Town's professional consultants, as well as from all involved agencies and interested parties. In addition, the Town Board and other local boards will review specific aspects of the project plans. If physical improvements are needed within the Town road right-of-way for this project, the Town Highway Department will need to issue appropriate permits.

The project plans used to assess potential environmental impacts for the purpose of the SEQR review are considered progress plans and may be revised through input from the SEQR review. Final development plans will be developed for the buildings and site improvements in accordance with the requirements of approving agencies prior to any construction work.

The Putnam County Department of Planning, Development & Public Transportation will review the project proposal under the requirements of General Municipal Law section 239-m relative to inter-community and county-wide considerations.

The Putnam County Department of Health has review and approval responsibility for infrastructure systems that would provide water supply and sanitary waste disposal functions for the project. The project would utilize on-site systems since this site is not located in a public sewer or water district.

New York State regulations require that the site plans be reviewed and approved with regard to stormwater discharges from construction activities and from operation of the planned facilities. In accordance with the requirements of the NYSDEC General Permit for Stormwater Discharges from Construction Activity, the Town of Southeast, as the responsible "MS4" (Municipal Separate Storm Sewer System) Coordinator, must review and approve the site-specific Stormwater Pollution Prevention Plan (SWPPP) prepared for the proposed project. Any construction activity which disturbs over 5,000 square feet within the New York City Watershed is subject to these requirements.

Additionally, NYSDEC will regulate the on-site groundwater well system proposed for water supply for the project, and has jurisdiction regarding any disturbance to a State-designated

wetland or its adjacent “buffer” area. A wastewater SPDES permit will be required for the septic system as it will treat greater than 1,000 gallons per day.

As this project will utilize State roads for access, the NYS Department of Transportation (NYSDOT) will be involved in permitting for improvements to the State transportation system, if improvements are necessary.

As the project site is located within the New York City East of Hudson Watershed, the New York City Department of Environmental Protection (NYCDEP) also regulates sanitary waste disposal and stormwater management systems for the project.

A determination of the potential effect of the project on historical and archaeological resources will need to be obtained from the NYS Office of Parks, Recreation and Historic Preservation (OPRHP).

Required approvals and the involved agencies are listed below.

Approvals and Involved Agencies

Town of Southeast Town Board –	approval of land swap, construction of a Town road (former Zimmer Road)
Town Planning Board / Architectural Review Board –	subdivision approval, site plan approval, stormwater pollution prevention plan, wetlands permit, erosion control permit, architectural review report
Town Zoning Board –	variances for minimum front yard setback, environmental conservation buffer, minimum front parking setback
Town Highway Superintendent –	driveway permit
County Department of Planning -	§239 Review
County Health Department –	well and sewer/septic system construction permits, approval of plans for a public water supply improvement
NY City Department of Environmental Protection –	sewer/septic approval, stormwater pollution prevention plan approval
NYS Department of Environmental Conservation –	freshwater wetlands permit, water withdrawal permit, coverage under general permit for construction activities (GP-0-20-001) wastewater SPDES permit
NYS Department of Transportation –	Highway Work Permit for roadwork (if needed)
NYS Office of Parks, Recreation & Historic Preservation –	determination of impact on cultural resources
US Army Corps of Engineers –	wetlands permit (if needed)

Interested Parties

In addition, the Town of Patterson is identified as an interested agency, while it issues no approvals for this project.

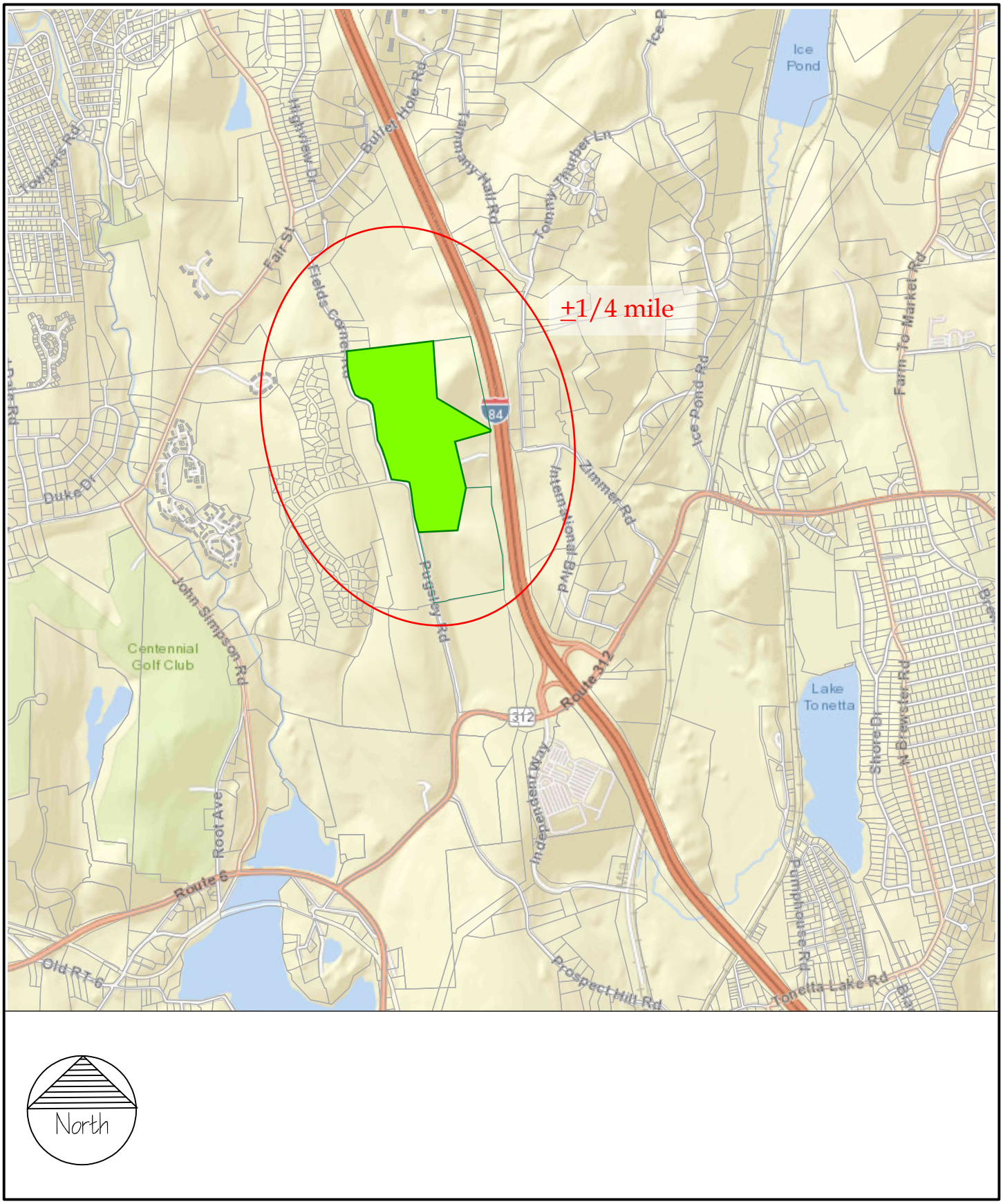
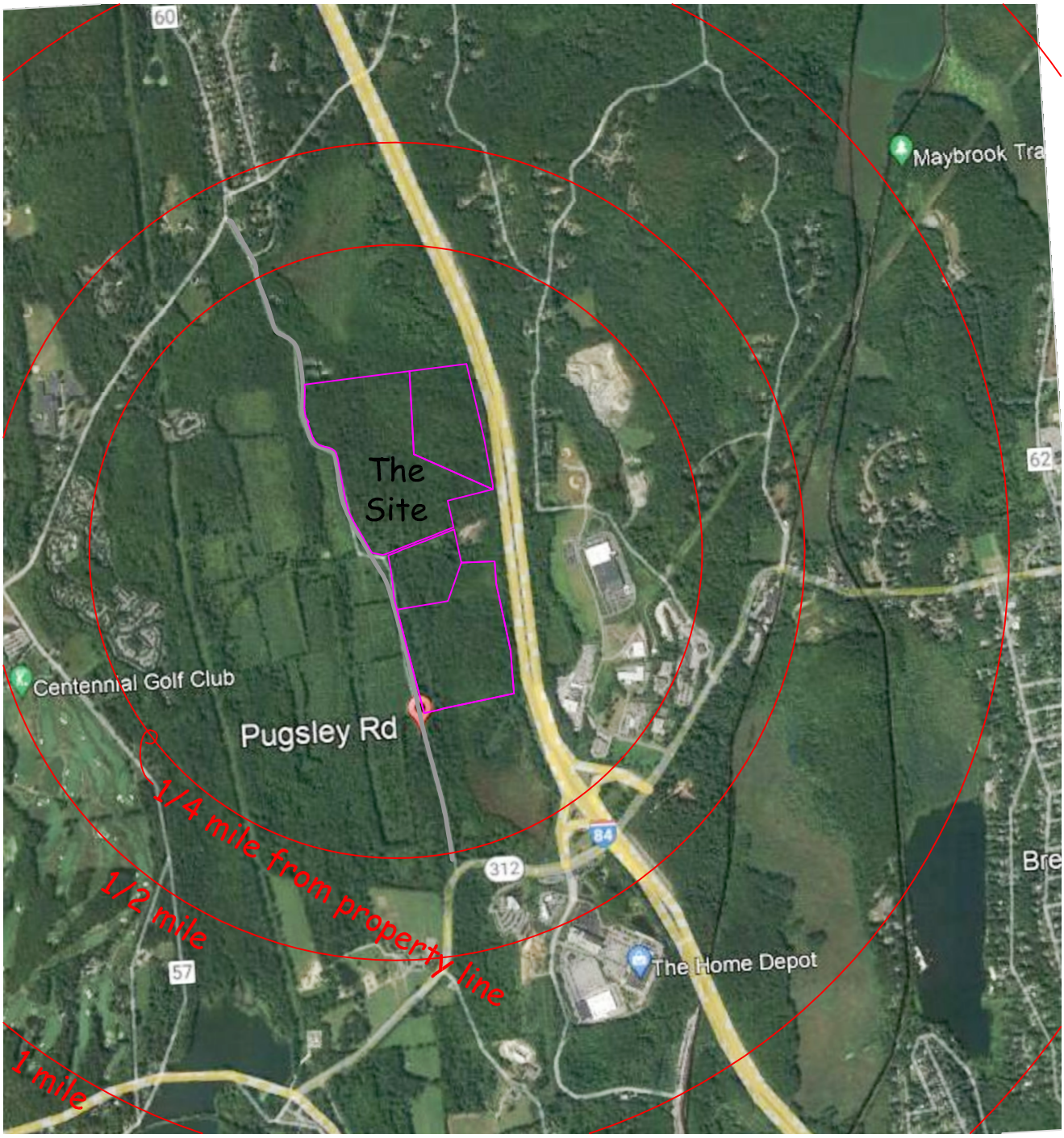


Figure 1-1: Location Map
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York
Source: Putnam County GIS

1/20/22
Scale: Approx. 1:36,000
KG+D 2020-1054



North

Scale:

0 1/4mi. 1/2mi. 1 mi.

Figure 1-2: Aerial of Site Vicinity

BREWSTER YARDS

Town of Southeast, Putnam County, New York

Source: Google Earth Imagery

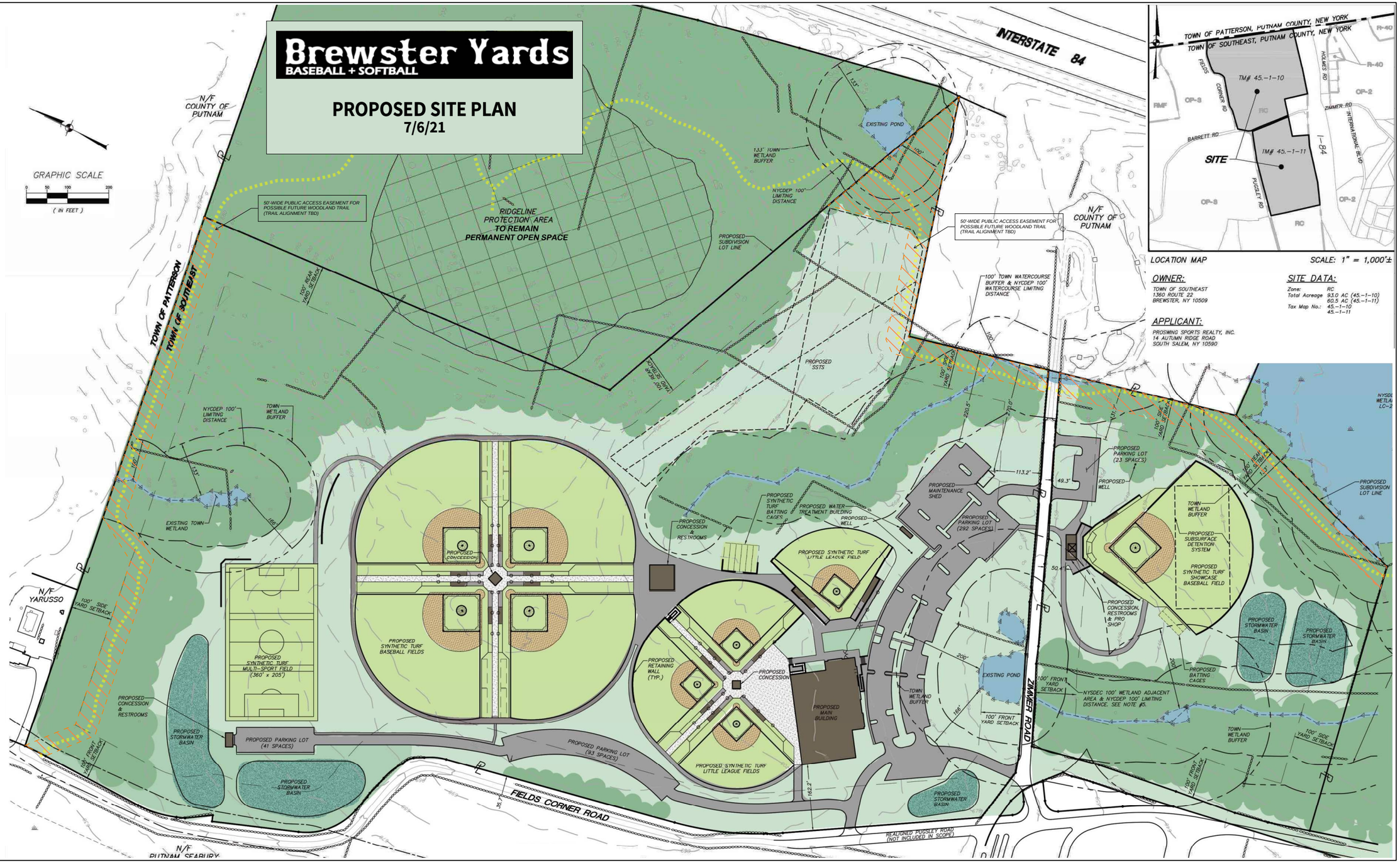
1/20/22

Scale: As Shown

KG+D 2020-1054

Brewster Yards
BASEBALL + SOFTBALL

PROPOSED SITE PLAN
7/6/21



LOCATION MAP SCALE: 1" = 1,000'±

OWNER:
TOWN OF SOUTHEAST
1360 ROUTE 22
BREWSTER, NY 10509

APPLICANT:
PROSWING SPORTS REALTY, INC.
14 AUTUMN RIDGE ROAD
SOUTH SALEM, NY 10590

SITE DATA:

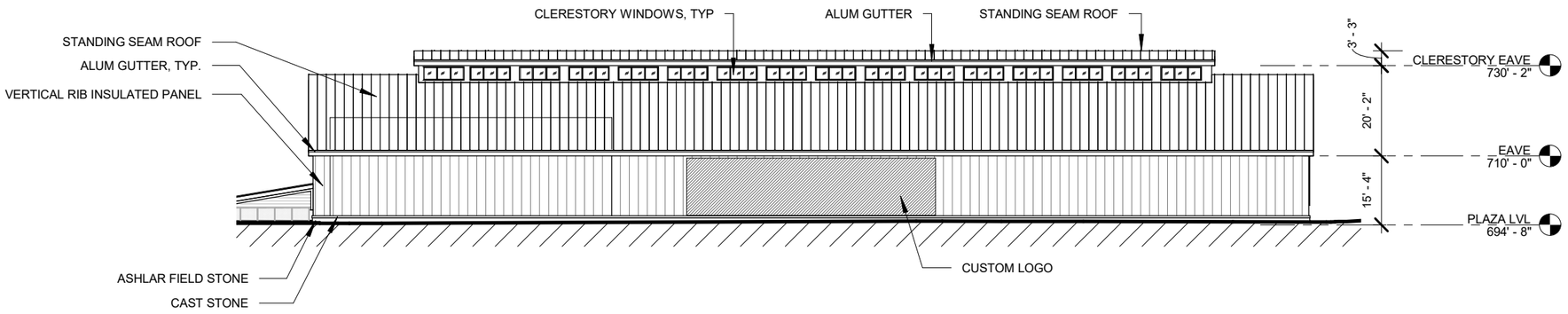
Zone:	RC
Total Acreage	93.0 AC (45.-1-10)
	60.5 AC (45.-1-11)
Tax Map No.:	45.-1-10
	45.-1-11

3/24/22
Scale: As Shown
KG+D 2020-1054

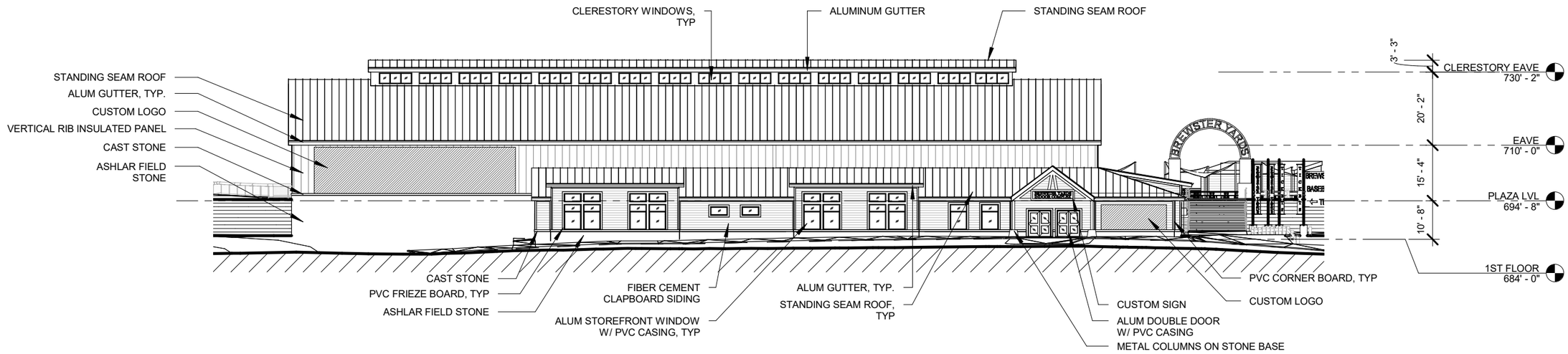
PROJECT ARCHITECT:
KG+D Architects, PC
285 Main Street, Mount Kisco, NY 10549

PROJECT ENGINEER:
Insite Engineering, Surveying & Landscape Architecture, PC.
3 Garrett Place, Carmel, New York 10512

Figure 1-3: Proposed Site Plan
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York
Source: Insite Engineering Site Plan



2 - NORTH ELEVATION



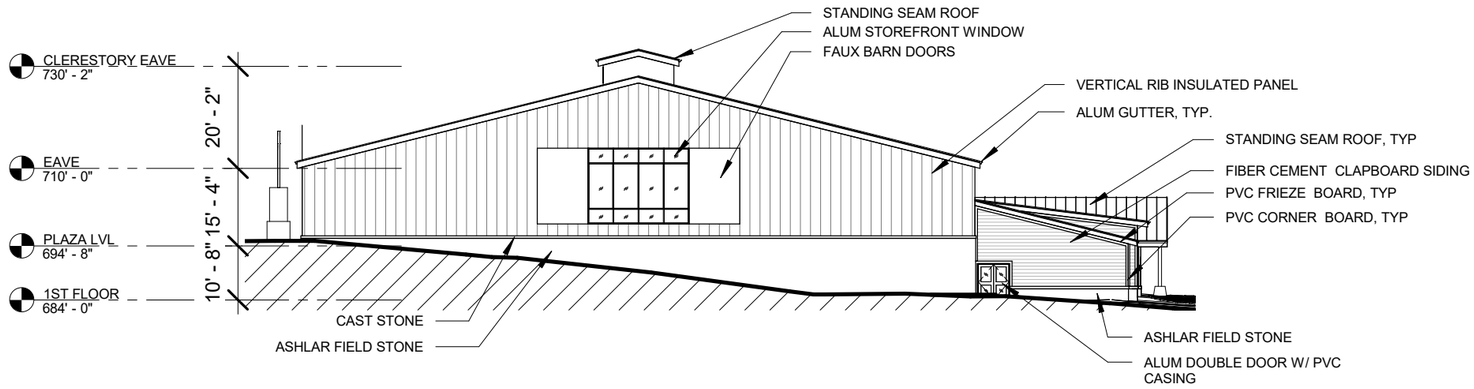
1 - SOUTH ELEVATION

KG+D Architects, PC
285 Main Street, Mount Kisco, New York 10549
914.666.5900 kgdarchitects.com

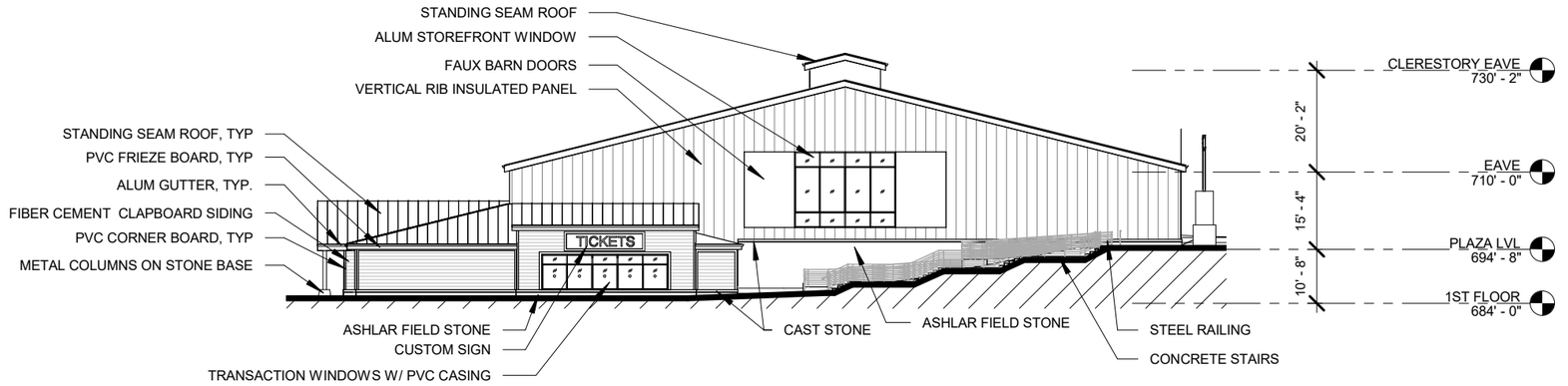
BREWSTER SPORTS COMPLEX

SCALE: 1" = 30'-0"
DATE: 02/17/22

FIG. 1 - 4
Recreation Building Elevations
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York



2 - WEST ELEVATION



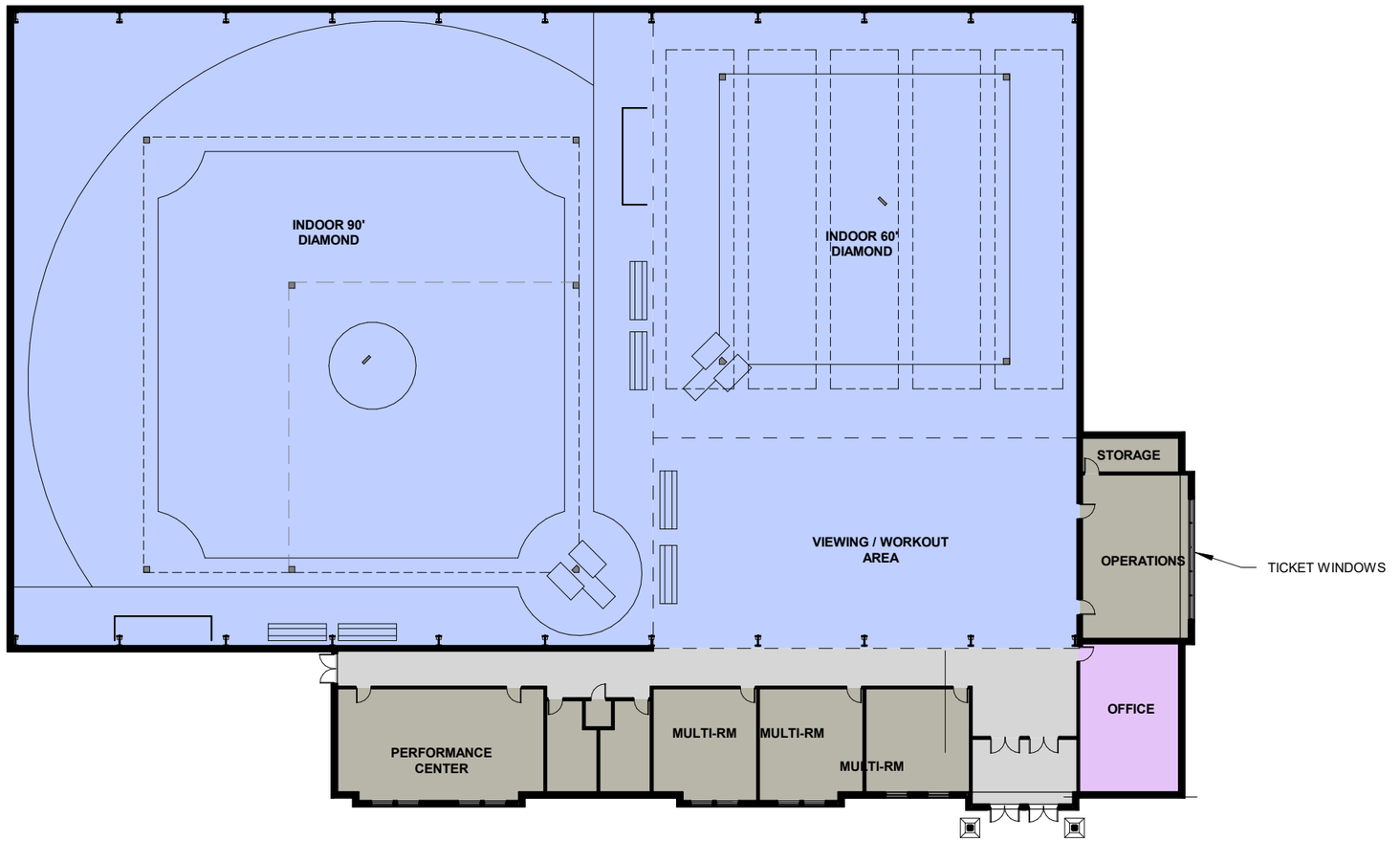
1 - EAST ELEVATION

KG+D Architects, PC
285 Main Street, Mount Kisco, New York 10549
914.666.5900 kgdarchitects.com

BREWSTER SPORTS COMPLEX

SCALE: 1" = 30'-0"
DATE: 02/17/22

FIG. 1 - 5
Recreation Building Elevations
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York



Room Schedule - Indoor Sports...	
Name	Area
OFFICE	630 SF
OPERATIONS	745 SF
MULTI-RM	460 SF
MULTI-RM	490 SF
MULTI-RM	490 SF
WOMEN	185 SF
MEN	185 SF
JAN	30 SF
PERFORMANCE CENTER	975 SF
INDOOR 60' DIAMOND	7,715 SF
VIEWING / WORKOUT AREA	3,770 SF
INDOOR 90' DIAMOND	17,335 SF
HALLWAY	1,410 SF
LOBBY	290 SF
STORAGE	145 SF
Grand total: 15	34,855 SF

Legend:

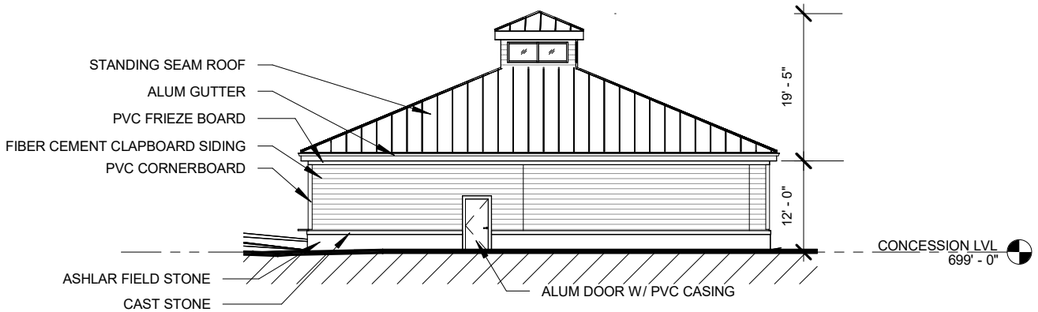
- ADMINISTRATION
- CIRCULATION
- SUPPORT
- RECREATION / PUBLIC USE

KG+D Architects, PC
285 Main Street, Mount Kisco, New York 10549
914.666.5900 kgdarchitects.com

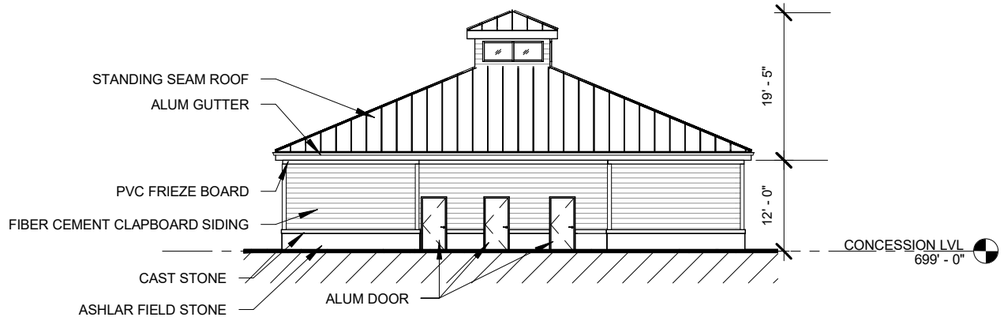
BREWSTER SPORTS COMPLEX

SCALE: 1" = 30'-0"
DATE: 02/17/22

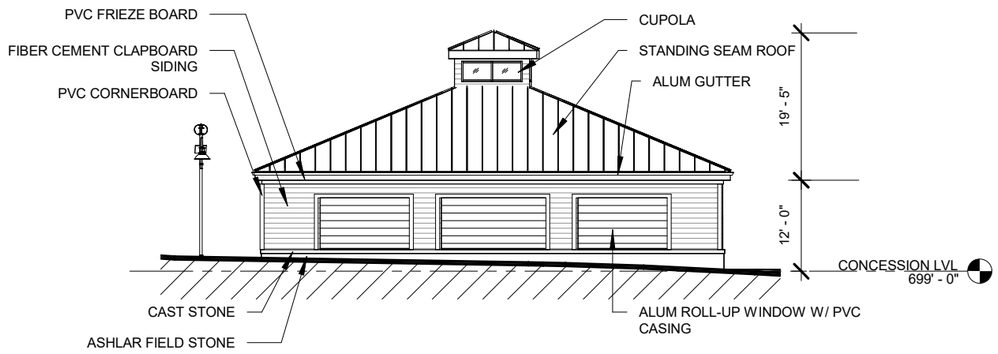
FIG. 1 - 6
Recreation Building Floor Plan
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York



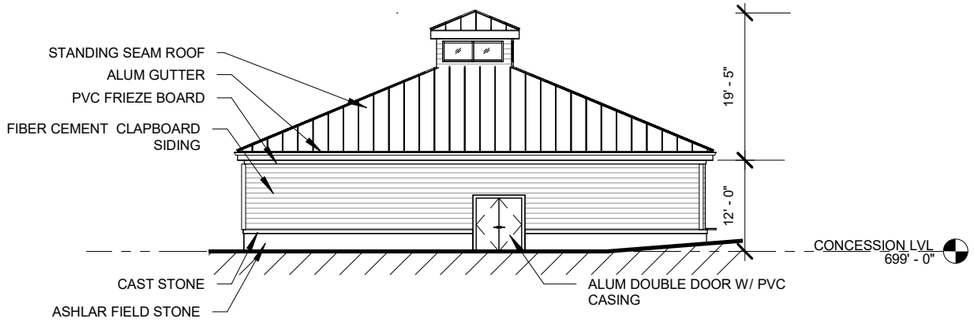
4 - CONCESSION - SOUTHWEST ELEVATION



5 - CONCESSION - SOUTHEAST ELEVATION



3 - CONCESSION - NORTHWEST ELEVATION



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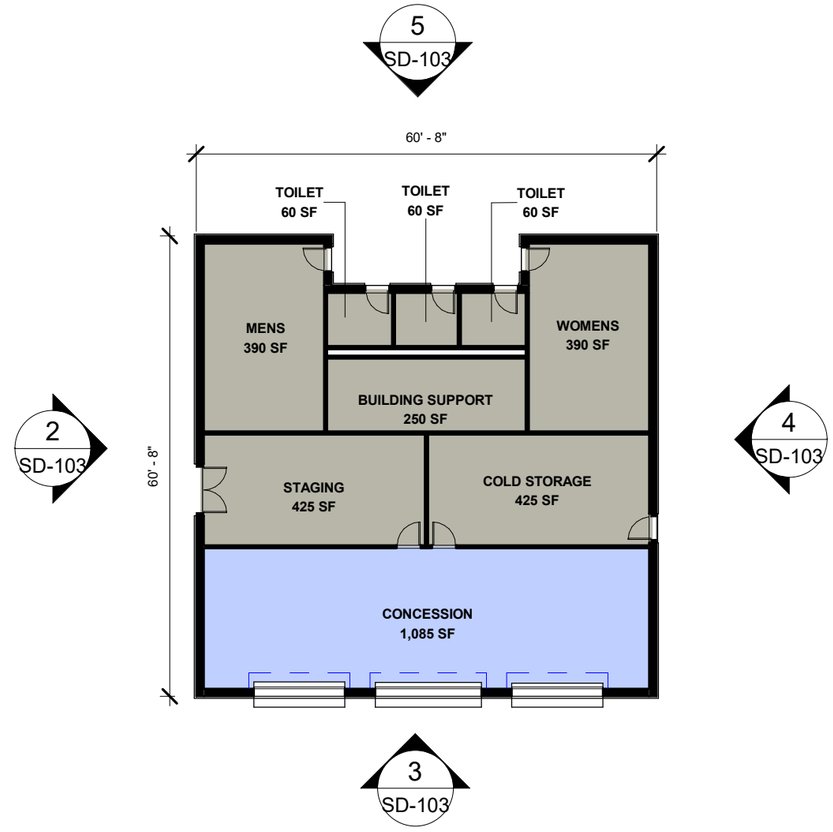


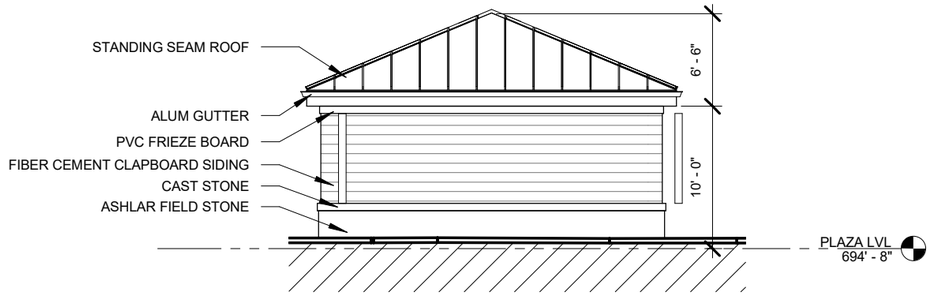
1 - CONCESSION FLOOR PLAN

KG+D Architects, PC
285 Main Street, Mount Kisco, New York 10549
914.666.5900 kgdarchitects.com

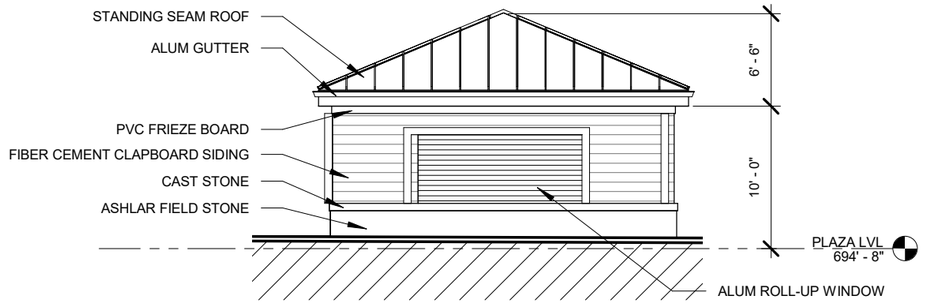
BREWSTER SPORTS COMPLEX

SCALE: 1" = 20'-0"
DATE: 02/17/22

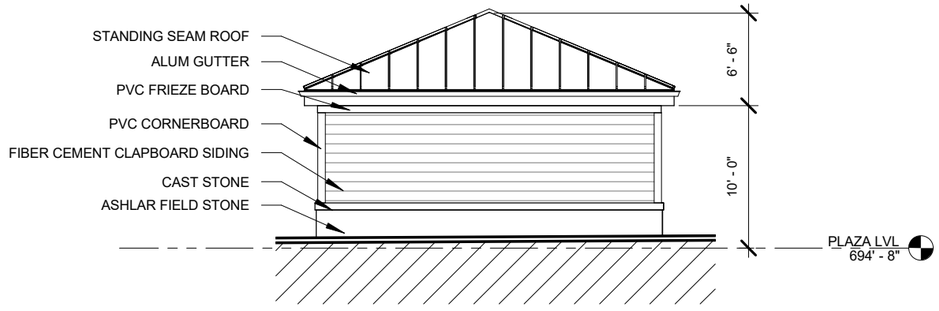
FIG. 1 - 7
Main Concession Building
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York



4 - CONCESSION - EAST ELEVATION



4 - CONCESSION - EAST ELEVATION



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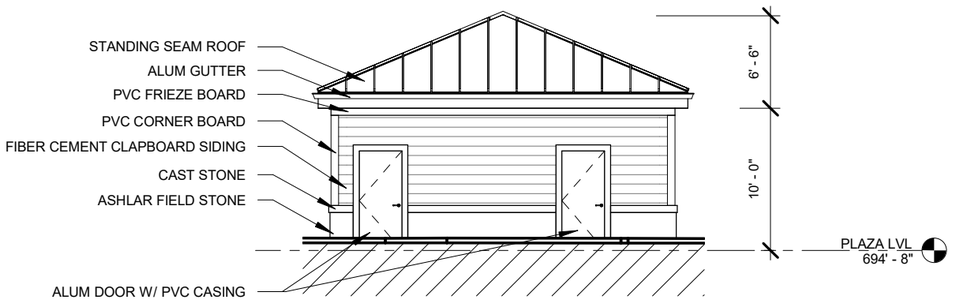

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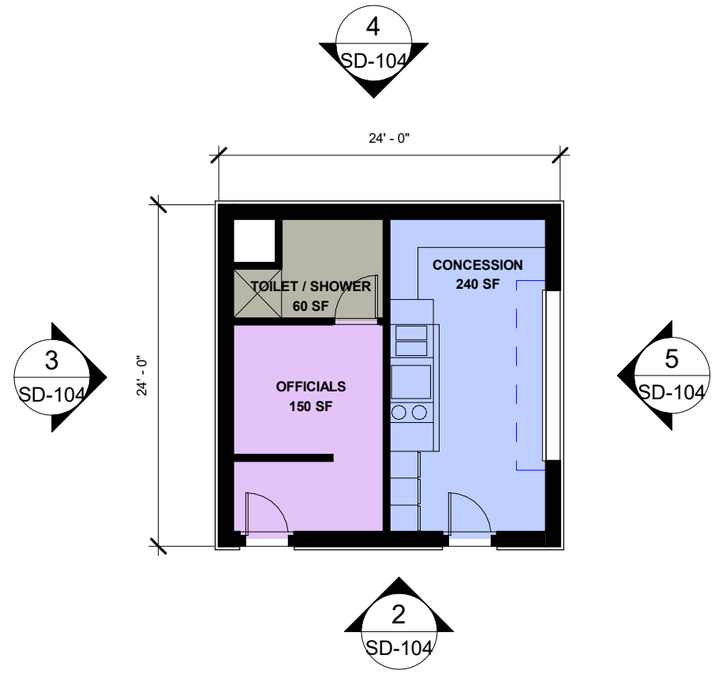


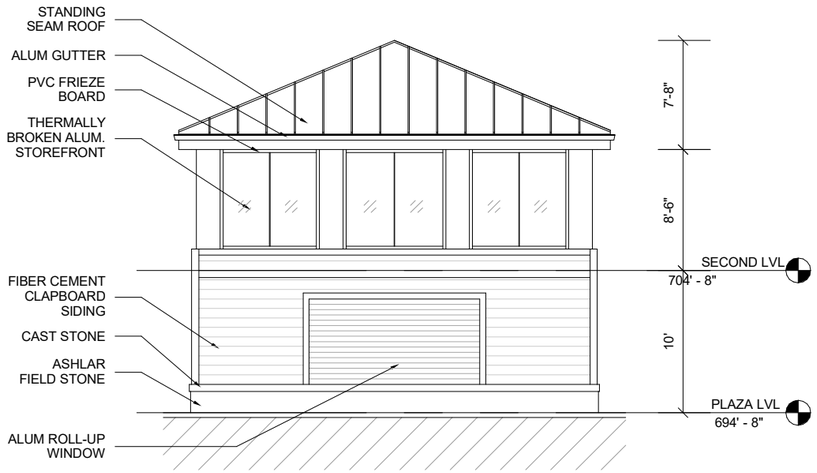
1 - Floor Plan

KG+D Architects, PC
285 Main Street, Mount Kisco, New York 10549
914.666.5900 kgdarchitects.com

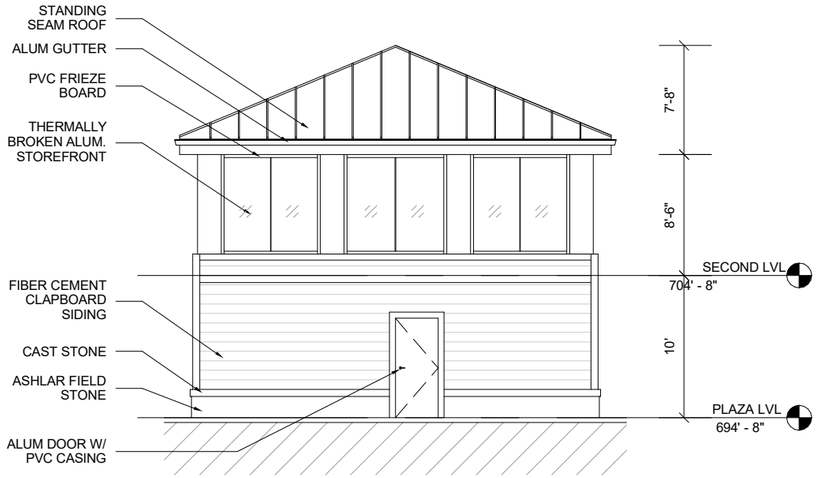
BREWSTER SPORTS COMPLEX

SCALE: 3/32" = 1' - 0"
DATE: 02/17/22

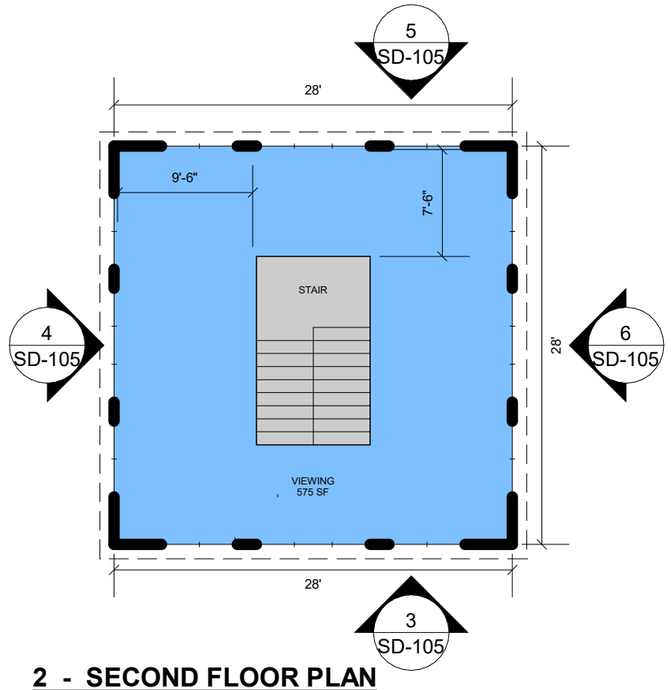
FIG. 1 - 8
LL Clover Concession Building
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York



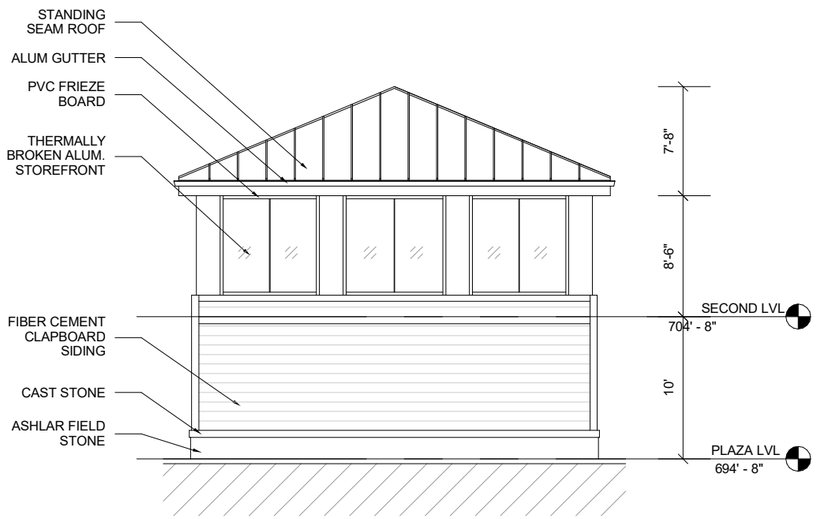
6 - EAST ELEVATION



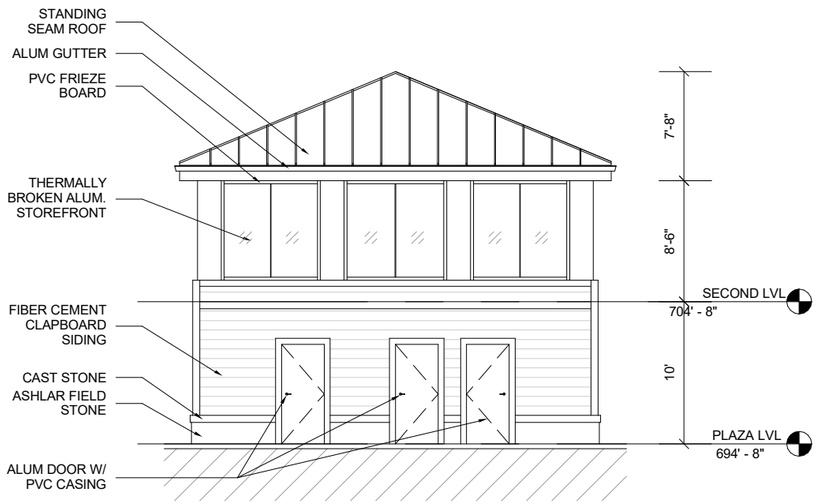
5 - NORTH ELEVATION



2 - SECOND FLOOR PLAN



4 - WEST ELEVATION



3 - SOUTH ELEVATION

1 - FIRST FLOOR PLAN

KG+D Architects, PC
285 Main Street, Mount Kisco, New York 10549
914.666.5900 kgdarchitects.com

BREWSTER SPORTS COMPLEX

SCALE: 3/32" = 1' - 0"
DATE: 02/17/22

FIG. 1 - 9
BB Clover Concession Building
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York

Figure 1-10
View of Tickets Plaza
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York

Figure 1-11
Aerial View of Baseball Clover
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York

Figure 1-12
Playground View
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York

Figure 1-13
Aerial View of Concession Plazas
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York

2.0 LAND USE, ZONING & PUBLIC POLICY

2.1 Existing Conditions

Land Use

The site of the proposed project is presently vacant, wooded land, owned by the Town as public open space. An irregular pattern of old stone walls is evidence of past agricultural use although the rugged nature of the topography suggests that it would likely have been used as pastureland as opposed to cultivated farm fields. There is also evidence on the site that it is lightly used at present for passive activities such as walking and hunting.

Land in the immediate area surrounding the Pugsley Road site is largely vacant, undeveloped woods or old field overgrowth. Refer to Figure 1-2 which highlights the area generally within one-quarter mile. Directly adjacent to the north, in the Town of Patterson, are two single-family residence lots, surrounded by woodlands. Directly west on the opposite side of Pugsley and Fields Corners roads is the site of the proposed Commercial Campus warehouse project, which recently started construction. Directly to the south is wooded, open space land which is largely designated wetlands. Directly to the east abutting the central portion of the subject site is a single, County-owned parcel that is presently being used as a vegetative debris dump site by the County Highway Department. Along the east side of the property is Interstate Route 84, a major limited access highway and regional east/west transportation corridor. Further east is a mix of single-family lots, a Town recreation complex, and a number of commercial/industrial buildings (Terravest Corporate Park). The Interstate physically isolates the site from uses on the east side of the highway.

Land in the larger site vicinity is developed in a mix of uses, including single-family residences to the north in the adjoining Town of Patterson, Tilly Foster Farm to the south, a County-owned property that is open to the public for various community-related activities, and commercial/retail development on properties further to the south of NYS Route 312.

The physical character of the Pugsley Road corridor is a rural road with portions bordered by woodlands, and with stone walls along some portions.

Zoning

The site area is zoned RC Rural Commercial allowing the following permitted uses: craft workshop, nursery, office, restaurant, recreation and kennel; and accessory uses: outside storage, private utilities, restaurant, retail, personal services and professional services. Additionally, the opposite side of Pugsley Road is zoned OP-3 Office Park. This zoning would allow a variety of other uses including bed-and-breakfast/country inn, equestrian center, farm use and residential, although the neighboring property has recently been approved by the Town for a warehouse use.

Bulk regulations stipulated for the RC district and applicable to the prospective use are:

- Minimum Lot Size of 200,000 sf (4.59 acres); minimum configuration of 400’ by 400’.
- Minimum Yard of 100’ on all sides; Parking setback of 100’ on all sides.
- Maximum Lot Coverage of 45%

- Maximum Building Height of 3 stories or 35'.
- Minimum Open Space on the lot of 55%.

An environmental conservation buffer of 50 feet is required to be preserved in a site development; that is defined in the Town Code as a vegetated buffer to screen the land use from adjoining properties or public rights-of-way. Additionally, the Town Zoning Map designates certain areas to be a Ridgeline Overlay District, defined by the Code as the uppermost 50 vertical feet of a hill or mountain above a minimum elevation of 500 feet above mean sea level (irrespective of zoning district lines). There are numerous such areas mapped in the Town, including two north/south ridges paralleling the west side of Pugsley Road and the round-topped topographic knoll located in the northeast corner of the subject property.

2.2 Existing Public Policy

Town of Southeast Comprehensive Plan Update 2014

Public policy as relates to land use in the Town of Southeast is guided primarily by the Town Comprehensive Plan which was last updated in 2014. Future development of the site area is addressed generally in the Comprehensive Plan in discussions of the I-84/Route 312 area and in a more specific Future Land Use map, where the site area is designated for "lower density commercial". Following the adoption of the 2002 Comprehensive Plan, the Town implemented a "Rural Commercial" (RC) Zoning District at key entry points into the Town and specific parcels of notable rural character. [Page 5-6, Comprehensive Plan] The properties on the east side of Pugsley Road, including the project site, are included in the RC designation. Subsequently in 2007, the Town acquired the subject site for the purposes of open space preservation and recreation.

While the Town Comprehensive Plan Update (adopted 8/21/2014) does not identify the subject Pugsley Road site as dedicated open space, nor does its Open Space & Conservation Map (Figure 4-3, Comprehensive Plan), the Plan Update advocates for increasing available parks and recreation facilities and recommends that *"…The Town should also pursue opportunities for public private partnerships in the development of recreational resources which would benefit the Town."* [page 9-5].

In descriptions of the general area of this site, the Plan advocates tourist-oriented development, recreation, commercial activity related to tourism, and other uses that would maintain the scenic and rural quality of the area and its gateway location. The project site is located within the I-84/Route 312 Interchange area which is identified in the Comprehensive Plan as a potential commercial area. [Figure 7-1, Comprehensive Plan]

Discussion in the Plan with regard to economic development refers to the site area:

> The Town of Southeast seeks a diversified base of business and industry to strengthen the Town's tax base and to provide employment opportunities for area residents while preserving the Town's rural residential character and protecting the Town's portion of the regional drinking water supply. Future non-residential uses should be targeted to those areas where they will have minimal impact on water quality, traffic, and community character.

> The Town envisions commercial growth continuing in the following areas: … The I-84/Route 312 interchange—This area is envisioned as a node of commercial activity. Continued development within the Terravest Corporate Park, the Highlands Center, and any potential development in the "Campus at Fields Corner" along Pugsley Road would be compatible with this vision. [Page 7-4, Comprehensive Plan]

Town of Southeast Croton Plan

Around 2002, the Town of Southeast worked with the Putnam County Division of Planning and Development to create a plan to be part of a watershed-wide "Comprehensive Croton System Water Quality Protection Plan" ("Croton Plan"). The Comprehensive Croton Plan supports the implementation of the New York City Department of Environmental Protection (NYCDEP) Watershed Regulations[1] which were implemented to protect the water quality of the New York City (NYC) drinking water supply. Most every watershed community has its town-specific Croton Plan.

The project site is located within the watershed of the Middle Branch Reservoir of New York City's drinking water supply, which is a NYSDEC Priority waterbody and is designated as phosphorus-restricted by the NYCDEP. The Reservoir is threatened by high levels of nutrients primarily resulting from conventional in-ground septic systems. Therefore the project design, in particular its stormwater management techniques, must limit or reduce its nutrient levels to permitted concentrations, including the capture and removal of sediment and debris in runoff, maintenance of vegetative cover wherever possible, and appropriate design of the onsite septic system to reduce the movement of nutrients into downstream waters.

The project site is located within a large commercial growth focus area identified in the Croton Plan, encompassing land that is currently zoned OP (Office Park) and RC (Rural Commercial) and surrounding the site on three sides. [FA/C/S4, Figure 2.3-1, Croton Plan] This area is characterized as commercial office park and an area envisioned for commercial growth that is not served by centralized sewage collection or treatment. Various analyses conducted in the preparation of the Plan used projections of new commercial growth in the I-84/Route 312 growth area consistent with the Town's Comprehensive Plan. [Page 3-16, Croton Plan]

Recommendations in the Comprehensive Plan Update and reiterated in the Croton Plan generally do not relate to site specific development projects although some topics in the plans can be applied to planning and development at the site level. In particular, topics concerned with natural resource protection are certainly relevant to a natural site that is being considered for development. Economic development "while preserving the town's rural residential character and protecting the Town's portion of the regional drinking water supply" is also relevant to a "lower density commercial" use.

2.3 Future Without the Proposed Project

With this site under its current ownership by the Town of Southeast and its designation as dedicated open space, future development would be limited to improvements related to passive human activities and preservation of natural resources. Such use could include public access

[1] "Rules and Regulations for the Protection from Contamination, Degradation and Pollution of New York City Water Supply and its Sources," more commonly referred to as the New York City Department of Environmental Protection (NYCDEP) Watershed Regulations.

for hiking, nature walks, trail biking and the like, and improvements that could enhance such activities -- development of a fitness trail, for example.

Current zoning would permit uses listed above for the RC district, however its designation as open space precludes any change from its present use without an act of the NY State Legislature to alienate its present use for another stated purpose. Under the language adopted by the Town Board, the alienation approved for the proposed recreation use is "specifically conditioned upon such site being deed restricted to prohibit the site from being used for any purpose other than Recreation as may be defined by the Town of Southeast Zoning Code."[2]

Absent the proposed project, it is anticipated that the project site would remain wooded and underused without improvements.

2.4 Potential Impacts

Land Use & Zoning

The potential impact of the proposed project on land use and zoning that presently surround the site will be primarily related to the intensity of use since the site in its present condition is fully wooded with apparent human use limited to incidental recreation by hikers and hunters. Regular and intensive use envisioned for the proposed recreational use will result in increased noise and increased traffic activity for the local area. The added traffic is not projected to significantly impact the local roads north of the site (for reasons explained in the Traffic section).

Ambient noise from activities on the site will increase background noise levels periodically (see further description in the Noise section). The only sensitive receptors identified in the local area are two single family residences at the northern property line, where periodic increases in human-generated ambient noise will be experienced from time to time and potentially above the level of the persistent traffic noise heard from the nearby highway.

The introduction of the proposed facility on the general land use pattern of the study area will not have an adverse effect on the variety of human uses, which include commercial/industrial activity to the south and east, and soon to the west, and vehicular movement in the regional transportation corridor to the east. The typical outdoor activity on such commercial and industrial properties is largely centered on vehicular activity which would not experience an impact from the increased noise and traffic activity at the project site.

The proposed use will change the character of the land adjoining the two residential lots to the north from woodland to open land with recreational activity, which will necessitate the preservation of a vegetative buffer along the common property line to minimize the change.

There will be no zoning change necessary to accommodate the proposed project.

[2] Town of Southeast Town Board, Resolution 12/2020 Requesting the New York State Legislature Introduce Home Rule Legislation to Authorize the Discontinuance and Alienation of Parkland Located on Pugsley Road", adopted February 20, 2020.

Public Policy

The following summary outlines ways in which the proposed project will address relevant policy goals cited from the Comprehensive Plan document (and are also restated in the Croton Plan). These issues are further discussed in the corresponding subject chapters of this DEIS.

- *Natural Resources - The Town of Southeast is committed to protecting its natural resources as a critical component of the Town's quality-of-life, rural and scenic character, and the region's water supply. Wetlands, watercourses, open space, woodlands, and agricultural lands contribute to the quality and character of Southeast, and their preservation, enhancement, and restoration must be considered in all actions that may affect them. [p. 4-10, Comprehensive Plan]*

Development of the project plans has taken the natural resources of the site into consideration through the design process. The presence of wetlands, watercourses, topography and slopes, the ridgeline, woodland habitats and the sensitivity of the NYC water supply have played a part in the physical layout of project components and particulars of the design intended to protect these resources to the maximum extent practicable. Appropriate stormwater management techniques including use of permeable surfaces to encourage the infiltration of runoff water are key for any development in this watershed.

- *Land use - The Town of Southeast seeks to balance a healthy economic environment with quality residential and commercial character while protecting the integrity of its natural resources and infrastructure. [p. 5-23]*
- *Community character - Maintain the Town's picturesque rural character while allowing for appropriate commercial development. [p. 5-23]*
- *Community facilities and services - The Town of Southeast is committed to providing its residents with adequate, accessible, and efficient community facilities and services. [p. 9-6]*

The proposed project will provide economic benefits directly to the community through tax revenues as well as increased revenues to the local economy through patronage of other businesses in the area. Further community benefit will be realized through providing needed recreation space for Town residents. The physical setting for the proposed project allows it to fit into the landscape around it, preserving acres of trees within public open space such that its presence will result in minimal change to its surroundings while being in a location that is readily accessible from the regional transportation network.

In its formal request to the NY State Legislature to authorize the discontinuance and alienation of the existing parkland, the Town of Southeast Town Board stated that the subject site "…will serve a greater public benefit if it were owned and developed for recreational use by a private project sponsor" in exchange for land to be acquired from the sponsor (at Starr Ridge Road) and dedicated as parkland.

- *Economic development - The Town of Southeast seeks a diversified base of business and industry to strengthen the Town's tax base and to provide employment opportunities for area residents while preserving the Town's rural residential character and protecting the Town's portion of the regional drinking water supply. Future non-residential uses should be targeted to those areas where they will have minimal impact on water quality, traffic, and community character. [p. 7-4]*

The proposed project will benefit the community directly through tax revenues and employment. As a non-residential land use, the project will not generate additional population to the Town while providing additional recreational services available to school-aged children and young adults of local families.

- *Traffic - The Town of Southeast is committed to maintaining an efficient, uncongested, safe and well-maintained network of roadways to serve local and through-travelers, especially residents, businesses, and visitors. In addition, the Town is committed to maintaining the rural flavor of Southeast by protecting the character of many of its rural and scenic roadways. [p. 8-7]*

The project location that is close to the Route 312 and I-84 corridors will provide a readily accessible site for local and regional visitors via the existing transportation network without the need to expand the existing infrastructure.

This project is envisioned to enhance the virtues of the Town of Southeast as "the economic center of Putnam County" [Page 5-9, Comprehensive Plan] while maintaining its rural community character through preservation of the visual buffer of woodland along the I-84 corridor including the prominent ridgeline.

2.5 Mitigation Measures

Land Use & Zoning

While for most land uses in the surrounding area the proposed project will not necessitate particular measures to reduce its impact, the close proximity of the two nearby residential lots necessitates that a buffer be preserved or enhanced, with vegetation or otherwise treated, to mitigate the change in intensity of use. Recreation uses are generally considered to be compatible with residential uses in proximity to each other, however the intensity of recreational use anticipated at Brewster Yards should be mitigated so it doesn't significantly impact its residential neighbors. The project plan shows a buffer of 260 feet or more of existing woodland vegetation to be preserved between the closest proposed development disturbance and the northern property line of the subject site.

There will be no zoning change necessary to accommodate the proposed project.

Public Policy

The project plan as proposed will be compatible with the general, relevant policies contained in the Comprehensive Plan Update and the Croton Plan, accounting for the various mitigation measures outlined in the topic-specific sections of this document. The project plans include appropriate provisions to preserve sensitive natural resources (including wetlands, watercourses, steep slopes, and the ridgeline) and provisions for protection of stormwater quality to the greatest extent practicable.

3.0 COMMUNITY SERVICES

3.1 Introduction

The Applicant is proposing a commercial baseball-centered recreation facility, Brewster Yards, on approximately 82 acres of land located on Pugsley Road and Fields Corner Road in the Town of Southeast, Putnam County, New York.

The proposed project would be an indoor and outdoor baseball-centered facility. The project is expected to be completed in 2023. Brewster Yards would include the following amenities: nine (9) baseball/little league fields, one (1) multi-purpose field, concession buildings, support buildings, and ±35,000 square foot indoor recreation facility. Provision for a hiking / fitness trail is also planned on the site to circulate around the adjacent ridgeline area which will remain Town owned and open to the public.

Brewster Yards is to be utilized year-round. The hours of operation are planned to be as follows: Monday through Friday: 10am to 10pm – in season, 3pm to 10pm - off season/winter; Saturday, Sunday, and Holidays: 8am to 10pm.

The Spring/Summer/Fall "in-season" operation will run from mid-March to the end of October. During non-school days, outdoor field use will be programmed for two teams on each of nine fields throughout the day and fourteen teams "on deck" (up to 1023 persons -- players, spectators and staff) and using other site amenities, including concessions, batting cages, the multi-sport field for practice, playground and the recreation building facilities. On school days, after-school field use is expected to be two teams on each of up to five fields and eight teams "on deck" (up to 358 persons). During peak use the project is anticipated to employ up to 63 people.

The main access to the project site would be directly from Pugsley Road. Several internal access points are proposed to allow for emergency response vehicles to reach the baseball fields, multi-purpose field, concession plazas, and main building areas. The main building of the Brewster Yards would be equipped with a sprinkler system.

The proposed project would create potential demand for additional community services such as police, fire, emergency medical services and public works in the Town of Southeast.

This section evaluates the potential impacts to local community services from the proposed project Brewster Yards and other pending/approved projects in the local area proposed for the 2023 build year.

3.2. Police

3.2.1 Existing Conditions

Police protection for the Brewster Yards (project site) and the greater Town of Southeast would be provided for by the Putnam County Sheriff's Department (Sheriff's Department) and the Brewster Barracks of the New York State (NYS) Police Department (Troop K, Zone 2).

Putnam County Sheriff Department

Putnam County Sheriff's Department is located at 3 County Center, Carmel, Putnam County, New York, four miles from the project site. The Sheriff's Department Uniform Patrol Division consists of Deputy Sheriffs and Special Patrol Officers that comprise the following sectors: Road Patrol, Youth and Community Services Bureau, Putnam County Building Security detail, and the Putnam County Department of Social Services detail. Road Patrol is further divided into the following units: Commercial Vehicle Safety Enforcement Unit, the Marine Unit, the Accident Investigation and Reconstruction Unit, the Bicycle Patrol Unit, the Motorcycle Unit, the Putnam County ERT and the K-9 Unit. Six (6) new vehicles were purchased for Road Patrol in 2020.

The Sheriff's Department consists of approximately 60 uniformed officers including a sheriff, undersheriff, and five (5) captains. The current sheriff is Sheriff Kevin McConville. The project site is four (4) miles from the Putnam County Sheriff's Department.

Refer to Appendix B, Correspondence, for the inquiry for information sent to the Putnam County Sheriff Department.[1]

NYS Police, Brewster Barracks, Troop K, Zone 2

The NYS Police Troop K Zone 2 is located along NYS Route 22 in the Village of Brewster, Putnam County, New York, five (5) miles from the project site. The Brewster Barracks of the NYS Police has specific police powers within Putnam County, New York. There are currently 30 uniformed officers employed at this location. Refer to Appendix B, Correspondence, for communications to the NYS Police.

3.2.2 Future without the Proposed Project

Analysis of the future without the project is based upon the development of the area surrounding the project site in both the Towns of Southeast and Patterson in 2023 and the project site remaining in its undeveloped condition. The following projects are assumed to be built, occupied, and operating in year 2023: Commercial Campus at Fields Corner Project (aka Northeast Interstate Logistics Center), Ace Endico Expansion, Barrett Hill residential development, Terravest Senior Housing, and various smaller projects including Starr Ridge, Stateline Retail, Salsa Fresca, Volz-Cloverleaf, Alfacor.

Individual community service evaluations were prepared for the larger projects to be completed in year 2023 (i.e., Northeast Interstate Logistics Center and Ace Endico Expansion) by various consulting firms for the towns of proposed development. Measures to mitigate potential impacts from the larger projects proposed to the serving community departments included but not limited to PILOT programs, additional tax revenues and proposed onsite security measures. The smaller projects proposed for 2023 would create an average cumulative increase in police department services. This average normal growth along with mitigation measures proposed for the larger than average projects would not create significant impact to the Putnam County Sheriff's Department and/or the NYS Police, Troop K, Zone 2 serving the Town of Southeast and greater Putnam County from the future without the proposed project.

[1] Inquiry letters were sent to community services providers dated November 17, 2021. The follow-up inquiries dated January 5, 2022, which provided updated project information with renewed request for a response, are included in Appendix B.

3.2.3 Potential Impacts to Police Services

Conversion of currently undeveloped/vacant land to a year-round recreation facility would increase the daily population on the project site and travelling to and from the site.

Letters were sent to both the Putnam County Police Department and NYS Police Department, Troop K, Zone 2 in November 2021 and January 2022. The letters included a project description and a request for input on how the proposed development may impact their department's ability to service the project site and greater area. No response was received. Refer to Appendix B, Correspondence, for the inquiries for information sent to the Putnam County Sheriff's Department and the NYS Police Department, Troop K, Zone 2.

Due to the nature of the project which will primarily draw family groups with children, no significant impacts of Brewster Yards' operations to State Police or County Sheriff services are identified. With the project to be developed on a newly constructed Town road and off of a State and Interstate route, the patronage of the project including its non-resident component, will utilize roads that are sufficient to accommodate the projected traffic without need for traffic control by police or traffic safety personnel.

Putnam County is expected to receive approximately $90,000 annually in property tax revenues from the proposed project once fully operational. A portion of this increase in property taxes could be utilized to offset any potential impacts the proposed development may have on the County Sheriff's Department. Refer to Section 4.0, Economic Conditions, for a detailed property tax analysis of the proposed project.

3.3 Fire Prevention Services

3.3.1 Existing Conditions

Fire protection services for the project site and the Town of Southeast is provided by approximately 150 volunteers of the Brewster-Southeast Joint Fire District. The Lt. Michael E. Neuner Fire Headquarters is located at 501 North Main Street and the Charles K. Doyle Station No. 1 is located on Route 312 & North Brewster Road, Brewster, Putnam County, New York. The fire stations are three miles and two miles from the project site, respectively.

The Brewster-Southeast Joint Fire District equipment totals 9 vehicles including two engines, a brush truck, a ladder truck, a tanker, a tanker pumper, one rescue, a utility vehicle, and one fire-police vehicle. Based on the calls for the last three years, the Brewster Fire Department averages about 2,500 calls a year.[2]

3.3.2 Future without the Proposed Project

As noted, there are other approved/pending projects in the vicinity of the proposed project that would be built and occupied in the year 2023. The future without the proposed project would assess the potential impacts to the Brewster-Southeast Joint Fire District and Brewster Fire Department from the identified projects and the project site in its current undeveloped condition in year 2023. Refer above to Section 3.2.2, Future without the Proposed Project for a list of the pending/approved projects.

[2]Source: Brewster Fire Department. Brewster Fire Department Calls: 2021 (Jan-Oct): 2007; 2020 – 2350 calls; 2019 – 2550 calls). <brewsterfiredepartment.org>. 17 November 2021.

Individual community service evaluations for the town of proposed development were prepared for the larger mentioned projects to be completed in year 2023 (i.e., Northeast Interstate Logistics Center and Ace Endico Expansion). Measures to mitigate potential impacts from the larger projects proposed to the serving community departments included but not limited to PILOT programs, additional tax revenues, mutual agreements between applicants and fire department services for usage of emergency water supply from sites and proposed fire hydrants and sprinklered buildings. The smaller projects proposed for 2023 would create an average cumulative increase in fire protection services. This average normal growth along with mitigation measures proposed for the larger than average projects would not create significant impact to the Southeast-Brewster Joint Fire District and the Brewster Fire Department from the future without the proposed project.

3.3.3 Potential Impacts to Fire Prevention Services

The construction of Brewster Yards would result in a change in land use and increase in the daily population utilizing the project site and traveling to and from the site. A letter was prepared and sent to the Brewster Fire within Brewster-Southeast Joint Fire District in November 2021 and January 2022 requesting input regarding the Fire Department service area and potential impacts of the proposed project on the Department and overall Fire District. The pending and approved projects, noted in Section 3.2.2, Future without the Proposed Project, were also noted in the letter which requested a response on the potential impacts to the Fire Department and District from development in year 2023 and going forward. Refer to Appendix B, Correspondence, for the inquiry for information sent to the Brewster Fire Department.

The proposed site plan allows for internal access and circulation for emergency response vehicles to reach the baseball fields, multi-purpose field, concession plazas, and main building areas. The main building of the development would be equipped with a sprinkler system.

The proposed project would generate over $15,000 in annual property tax revenues to the Fire District. These annual revenues could be utilized to offset any potential impacts to the Fire Department from the operation of Brewster Yards. Refer to Section 4.0, Economic Conditions, for a detailed evaluation of the tax revenues projected as a result of Brewster Yards.

3.4 Emergency Medical Services

3.4.1 Existing Conditions

Emergency Medical Services for Putnam County fall under the control of the Putnam County Bureau of Emergency Services (PCBES). The physical office and fire training facilities of PCBES are in Carmel, Putnam County, New York.

According the PCBES website, there are five ambulance services located in Putnam County serving a population of approximately 100,000 people within 231 square miles (one ambulance service per 20,000 people and/or 46 square miles). These five ambulance services provide emergency and non-emergency medical transport for patients going to hospitals, medical centers, and other health care facilities in Putnam County. The closest EMS to the project is located approximately 4.2 miles (8 minutes) away in Carmel hamlet.

Putnam County's Comprehensive Emergency Management Plan and the Fire and Emergency Medical Services (EMS) Mutual Aid Plans establish protocols and provide guidance for all Putnam County municipalities. Putnam 9-1-1 Emergency Communications Center is the central

communications center for EMS, Fire and Police services for the county. In an emergency, first responders from town, villages, or Putnam County would respond including the following agencies: NYS Police, PCBES, Putnam County Sheriff's Department, Putnam County Fire Police, Brewster Police Department, Carmel Police Department, Kent Police Department, Brewster Volunteer Fire Department, Carmel Volunteer Fire Department, Cold Spring Volunteer Fire Department, Kent Volunteer Fire Department, Lake Mahopac Volunteer Fire Department, Mahopac Volunteer Fire Department, Putnam Valley Volunteer Fire Department, Cold Spring Volunteer Fire Department.

3.4.2 Future without the Proposed Project

As noted, there are other approved/pending projects in the vicinity of the proposed project that would be built and occupied in the year 2023. The future without the proposed project would assess the potential impacts to the Emergency Medical Services for Putnam County from the identified projects and the project site in its current undeveloped condition in year 2023. Refer above to Section 3.2.2, Future without the Proposed Project for a list of the pending/approved projects.

Individual community service evaluations were prepared on the larger projects to be completed in year 2023 (i.e., Northeast Interstate Logistics Center and Ace Endico Expansion). Measures to mitigate potential impacts from the larger projects proposed to the serving community departments included but not limited to PILOT programs, additional tax revenues, proposed emergency site accesses and mutual agreements between applicants and emergency services regarding emergency water supply usage. The smaller projects proposed for 2023 would create an average cumulative increase on emergency medical services within Putnam County. This average normal growth along with mitigation measures proposed for the larger than average projects would not create significant impact to the Emergency Medical Services of Putnam County from the future without the proposed project.

3.4.3 Potential Impacts to Emergency Medical Services

The construction of Brewster Yards would result in the increase in land use and daily population traveling to and from the site and on the project site. Letters were sent to the PCBES in November 2021 and January 2022. Refer to Appendix B for the inquiry for information sent. No response was received at the time of this document's production.

Putnam County would receive approximately $90,000 annually in property tax revenues from the proposed project. A portion of this annual revenue could be utilized to offset any potential impacts to the PCBES that may occur from the proposed commercial sports recreation facility. Refer to Section 4.0 for a more detailed discussion of the economic conditions associated with the proposed project.

3.5 Public Works

3.5.1 Existing Conditions

The Town of Southeast Highway Department (Highway Department) is located on Palmer Road in the Village of Brewster, Putnam County, New York. The Highway Department presently

consists of 16 full time employees that provide services to Town of Southeast's 95-mile road system.[3] The Highway Department includes the following station types and equipment:

- Maintenance and Storage Garage: 80-foot by 150-foot building that houses the Highway Department's vehicles and equipment as well as administrative offices, a motor vehicle maintenance and repair shop and operations center.
- Salt Storage Building: 60-foot by 112-foot building utilized for storing road salt and sand salt mixture.
- Liquid Calcium Chloride Spray Station: station used for anti-icing and de-icing operations.
- Refueling Station: a computerized vehicle and equipment refueling station.
- Inventory: Highway Department maintains sand, gravel, crushed stone, cold mix and asphalt and drainage material inventories.

3.5.2 Future without the Proposed Project

As noted, there are other approved/pending projects in the vicinity of the proposed project that would be built and occupied in the year 2023. The future without the proposed project would assess the potential impacts to the Town of Southeast Highway Department from the identified projects and the project site in its current undeveloped condition in year 2023. Refer above to Section 3.2.2, Future without the Proposed Project for a list of the pending/approved projects.

Individual community service evaluations were prepared on the larger projects to be completed in year 2023 (i.e., Northeast Interstate Logistics Center and Ace Endico Expansion). Measures to mitigate potential impacts from the larger projects proposed to the serving community departments were included. In particular to the project site area, the Logistics project proposes to improve Pugsley Road as a paved road to Town standards, including adding a traffic signal at its intersection with NYS Route 312. The smaller projects proposed for 2023 would create an average cumulative increase on Highway Department services within Putnam County. This average normal growth along with the type of larger projects proposed and mitigated, impacts to the Town of Southeast Highway Department are not anticipated from the future without the proposed project.

3.5.3 Potential Impacts to Public Works

The construction of Brewster Yards would result in the change of undeveloped land to a commercial recreational facility and would increase local traffic and road usage during its seven (7) day a week – year-round operation. The increased use of the local Southeast's Road network would likely increase the need for the Town of Southeast Highway Department's services. Letters were prepared and mailed to the Town of Southeast Highway Department in November 2021 and January 2022 requesting feedback and general evaluation of potential impacts from the proposed development et al. in year 2023. Refer to Appendix B for the inquiry for information sent.

[3] Source: Town of Southeast Highway Department. Highway Department Services: Road resurfacing and repairs, Installations and maintenance of swales and sluiceways, Installation and maintenance of curbs and gutters, Installation, and maintenance of piped drainage systems, Grading of gravel roads and shoulders, Roadside mowing, tree trimming and brush and weed control, Installation and maintenance of guide rails and posts, Snow removal, Street sweeping. <Highway Department | Southeast, NY (townofsoutheast-ny.com)>

The projected tax revenues from the proposed project upon completion would include an increase of taxes revenues to the Town of Southeast by approximately $87,000 annually. A portion of this tax revenue could be used to offset the incremental increase in road maintenance costs the Highway Department would incur from the operation of Brewster Yards.

3.6 Mitigation Measures

As noted above, the proposed development is not expected to significantly impact the ability of Emergency Medical Services, Police and Fire Departments to service the project site in case of emergency. To address the possibility that an emergency response will be needed at the project, the vertical and horizontal alignments of the proposed driveways have been designed in accordance with current standards for access and maneuverability by emergency vehicles, including direct access to all the play fields and common areas used by patrons. Turning movement templates are illustrated in the Traffic Study, DEIS Appendix J, for the critical turns in the project.

In response to the initial inquiry sent to the Highway Superintendent, concerns were raised by the Superintendent to the Town's Engineering Consultant that improvements would be warranted on Fields Corner and Zimmer roads to address a perceived increase in traffic flow to and from the developed project site and to allow the roads to be properly maintained by the Highway Department with increased use. In anticipation of such concerns and with knowledge of public concerns raised about increased use of Fields Corner Road from development of the Logistics project, the Applicant proposes to avert such use by the project traffic by signing at the project driveway for No Right Turns northward on Fields Corner Road. In addition, the current project proposal includes improvement of the former Zimmer Road to a standard that is acceptable to the Town. The ultimate disposition of these roads will need to be addressed to the satisfaction of the Town during the site plan review process.

4.0 ECONOMIC CONDITIONS

4.1 Introduction

The Applicant is proposing a commercial baseball-centered recreation facility, Brewster Yards, on approximately 82 acres of land located on Pugsley Road and Fields Corner Road in the Town of Southeast, Putnam County, New York. The project site consists of two land parcels separated by land owned by the Town of Southeast (formerly Zimmer Road). The proposed project would include the securing of approvals to develop portions of the Pugsley Road lands and, through an agreement with the Town following a positive conclusion to this environmental review of the site development plan, transfer of ownership of the subject land from town to private ownership (parcel to Applicant ownership) as well as a transfer of private ownership (a parcel owned by the Applicant) to town ownership.

The proposed project would be an indoor and outdoor baseball-centered facility. The project is expected to be completed in 2023. Brewster Yards would include the following amenities: nine (9) baseball/little league fields, one (1) multi-purpose field, concession buildings, support buildings, and ±35,000 square foot indoor recreation facility. Provision for a hiking / fitness trail is also planned on the site to circulate around the adjacent ridgeline area which will remain Town owned and open to the public.

Brewster Yards is to be utilized year-round. The hours of operation are planned to be as follows: Monday through Friday: 10am to 10pm – in season, 3pm to 10pm - off season/winter; Saturday, Sunday, and Holidays: 8am to 10pm.

The Applicant's projections of site usage are based on similar facilities in the Northeast region. Weekday afterschool and weekend patronage during the baseball season is projected to be up to 1023 persons -- players, spectators and staff. On school days, after-school field use is expected to be up to 358 persons. During peak use the project is anticipated to employ up to 63 people.

The main access to the project site would be directly from Pugsley Road. Several internal access points are proposed to allow for emergency response vehicles to reach the baseball fields, multi-purpose field, concession plazas, and main building areas. The main building of the Brewster Yards would be equipped with a sprinkler system.

Economic Analysis

The proposed project will create a significant economic benefit for the Town of Southeast and the greater Putnam County.

For the economic analysis, the proposed project is evaluated in two phases: the construction and operation phase. The construction phase is the time from construction commencement to completion. The operation phase includes the time when the project is up and running and is fully operational. The operational phase analysis also accounts for the loss in tax revenues from land owned by the Applicant that would transfer to town ownership as a result of the proposed development.

The potential economic impacts associated with these two phases include:

- Direct Impacts: all direct effects from the construction or operation phase on the local economy (i.e., costs of labor, equipment, material).
- Indirect Impacts: indirect impacts refer to direct business to business purchases for the project. (i.e., purchase of supplies, materials, and services for the project).
- Induced Impacts: induced impacts are the economic impacts from the spending and consumption of those directly and indirectly involved with the project. (i.e., the income spent on different economic services by employees involved directly or indirectly with the project).

4.2 Existing Conditions

The property proposed for development ("project site") consists of two parcels of land on Pugsley Road located in and currently owned by the Town of Southeast. These lands would be transferred from town ownership to private ownership as part of the proposed development. Additionally, an agreement between the Town and the Applicant (subject to approval of this project) would result in a separate parcel of land on Starr Ridge Road currently owned by the Applicant to be transferred to Town ownership. These three parcels of land and associated tax revenues, or lack thereof due to Town ownership, were utilized to evaluate the existing and potential economic conditions and impacts from the proposed development.

Project Site

The current market value of the project site is over $1.7 million. However, due to its present status as town-owned parkland, the current annual property taxes generated by the project site is $0.0. There is no sales tax revenue generated by the unimproved project property. Refer below to Table 4-1 for details of the project site's current economic conditions.

Table 4-1
Existing Economic Conditions - Project Site
Tax Block & Lot, Market Value, Annual Property Taxes

Tax Block & Lot	Address	Current Owner	Acres	Market Value	Date of Assessment	Annual Property Taxes
45.-1-10	160 Pugsley Road	Town of Southeast *Class 330*	93.01	$789,040	July 1, 2020	$0
45.-1-11	132 Pugsley Road	Town of Southeast *Class 330*	60.45	$985,600	July 1, 2020	$0
Totals			**153.46**	**$1,774,640**		**$0**

Starr Ridge Road Parcel

The parcel of land owned by the Applicant is located at 309 Starr Ridge Road, Town of Southeast, Putnam County, New York. The parcel consists of 94.884 acres of undeveloped land and holds the market value of $375,000 as of July 1, 2020, assessment date. The tax revenues from the parcel of land owned by the Applicant are distributed to Putnam County, Town of Southeast (Town, Fire, Library) and the North Salem Central School District. Refer below to Table 4-2 for the most recent economic conditions for this parcel of land.[1]

Table 4-2
Existing Economic Conditions - Starr Ridge Road Site
Tax Block & Lot, Market Value, Annual Property Taxes

Tax Block & Lot	Address	Current Owner	Acres	Market Value	Dates of Assessment	Annual Property Taxes
79.-1-10.12	309 Starr Ridge Road	ProSwing Sports Realty, Inc. *Class 332*	94.884	$375,000	July 1, 2020	$9,989.36

According to the 2022 Town and County and 2021-2022 School tax bills, the Starr Ridge Road parcel generated the following amounts to Putnam County, the Town of Southeast and North Salem Central School District:

- Putnam County: $1,131.31
- Town of Southeast: $1,102.31
- Brewster Library; $70.43
- Brewster Fire: $198.84
- North Salem Central School District: $7,486.47
- Total: $9,989.36

4.3 Future without the Proposed Project

Project Site

Without the proposed development, the property would continue to allot $0.0 in tax revenues to the Town of Southeast, Brewster Library and Fire Department, Brewster Central School District, and the greater Putnam County.

Starr Ridge Road Parcel

Without development at either the Starr Ridge Road or Pugsley Road site, the parcel of land owned by the Applicant would continue to generate approximately $10,000 in annual tax

[1] Source: Town of Southeast: Town and County 2022 Tax Bill and North Salem Central 2021-2022.

revenues to the Town of Southeast, Putnam County, and the North Salem Central School District.

With or without the proposed development, the Town of Southeast and Putnam County would still incur potential economic impacts associated with the other pending or approved projects within the Town of Southeast slated for completion in 2023. Refer to Section 3.0, Community Services, Subsection, 3.2.2 Future without the Proposed Project for a list of approved and pending projects used for analysis.

However, since the North Salem Central School District is located outside the boundaries of the Town of Southeast, the School District would continue to benefit from the approximate $7,500 annual tax revenues from the Starr Ridge Road parcel to the School District in the future without the project scenario.

Should the proposed development not occur at the Pugsley Road site, and the contemplated land transfer not occur, future development is possible at the Starr Ridge Road parcel thereby increasing the aforementioned tax revenues to the Town of Southeast, Putnam County, and the North Salem Central School District. This scenario has not been included in this assessment.

4.4 Potential Impacts

4.4.1 Construction Phase

The estimated construction cost of the proposed project is $28.3 million, according to the Applicant. This direct benefit to the local economy is projected to result in indirect and induced benefits, as outlined in the table below.

Table 4-3
Potential Economic Impacts
Construction Phase

	Direct Effect	Indirect Effect	Induced Effect	Total
Output	$28,300,000	$3,903,742	$6,905,299	$39,109,041
Labor Wages	$12,763,905	$1,262,998	$2,052,483	$16,079,386
Jobs	212	24	53	289

For the construction phase, it is estimated that 212 jobs (person-years) would be created and added to the local economy and the estimated income for these construction phase jobs would be $12,763,905. Additionally, it was evaluated that $3,903,742 would indirectly be projected to the local economy from other businesses involved with the construction phase of the project (business to project business operations). The induced effect output, which is disposable

income spent by the various direct employees associated with the construction phase of the project would be $6,905,299.[2]

The construction phase of the proposed project is estimated to create a total of 289 jobs. The direct construction phase jobs would consist of 212 of the total 289 jobs created. Twenty-four (24 jobs) would be created indirectly from businesses providing goods and services to the project and 53 jobs are expected to be created from the induced effect spending habits (disposable income) of the project's direct employees of the construction phase of the project.

4.4.2 Operation Phase

Based on information provided by the Applicant, an average of 52 full time employees (FTE) are projected to be employed at Brewster Yards during operation.[3] Of these projected employees, four (4) would be assumed to hold general and operations managerial positions, 32 FTEs would be assumed to work in food preparation and serving portion of the facility (assumed to include ticket booth jobs) and 16 employees would be assumed to be employed under building and grounds sector of the Brewster Yards.[4]

Due to the lower income nature of most employment opportunities (direct, indirect, and induced) projected with Brewster Yards and the accessibility of the project site from surrounding areas, it is not expected that employees associated with the project would relocate to the Town of Southeast because of their employment but would rather travel from other areas.

Table 4-4
Potential Economic Impacts
Operation Phase

	Direct Effect	Indirect Effect	Induced Effect	Total
Output	$19,363,204	$5,431,477	$4,826,477	$29,621,158
Labor Wages	$1,962,960	$627,640	$482,800	$2,444,040
Jobs	52	13	10	87

Notes: Source of Labor Wages: New York State, Department of Labor, Occupation Wages, Hudson Valley Region, 2021; General and Operations Managers – Median Annual Salary - $120,100; Food Preparation and Service-Related Workers, All Other – Median Annual Salary - $28,210; Grounds Cleaning and Maintenance Occupations - Median Annual Income - $36,240.

[2] Source: IMPLAN, Local Zip Code Data, 10509
[3] Source: Applicant. In season (8 months): 63 full time employees; Off Season (4 months): 34 full time employees; Average 52 employees.
[4] Assumptions: 52 employees: Average based on information from Applicant (See footnote 2); Positions: Four (4) assumed for general operations management; Two-thirds of the remaining 48 employees assumed to be median salary for food and services and one-third of the remaining 48 would be assumed to work for grounds and maintenance.

At full operation for year one (1) of Brewster Yards, it is anticipated that $19,363,204 would be placed directly into the local economy.[5] As noted, an average of 52 jobs, with the wage production of $1,962,960, are estimated to be created during the operation phase of proposed project within its first year of opening. Indirect output to the economy from business-to-business operations associated with Brewster Yards would result in $5,431,477 and $4,826,477 is expected from secondary spending by employees, businesses and suppliers attached to the project during its first year of operation. Refer to Table 4-4 for further operation phase details.[6]

Sales Tax Revenues

According to the Applicant's preliminary market study in August of 2021, Brewster Yards is expected to generate $777,528 in sales tax for Putnam County in year one (1). This projection is conservative for Putnam County Sales tax is 4.375 percent and SFA evaluated utilizing a 4.0 percent sales tax for evaluation purposes.

Property Taxes

To assess the potential fiscal impacts of the proposed development including the transfers of property ownerships (i.e., private to town and vice versa), annual property tax revenues for the project site and the Starr Ridge Road parcel were calculated by estimating the future assessed value of the proposed development and multiplying that value by the tax rate applicable to each taxing jurisdiction.

Projected Tax Revenues and Losses

Consistent with fiscal impact methodology, property tax revenues were determined by what would be generated if the proposed development were completed and occupied today. [7] This approach recognizes that development often requires several years to be completed and that inflation will increase costs and revenues over time. It assumes that the rising costs of public services will be matched by comparable increases in revenues generated by rising tax rates, with all other factors being held constant.

Brewster Yards would result in the conversion of vacant town owned land to a private owned commercial sports recreation facility as well as the transfer of ownership of the Starr Ridge Road parcel to the Town of Southeast. The market value of the project site, with the proposed improvements, would result in an increase in property tax revenues and to estimate the tax revenues that would be generated by the proposed development, the market value and the assessed value for the proposed development must be estimated and calculated. Additionally, the loss of tax revenues as result of the transfer of the Starr Ridge Road property to town ownership must be evaluated and addressed as well.

Projected Assessed Values

The market assessed value of Brewster Yards would be based on the proposed sales value of the completed project at its Town of Southeast location. For analysis purposes, the market

[5] Source: Proprietary Market Study Executive Summary, Brewster Yards, Dated August 2021. Economic Impact Year One Output: $19,363,204.
[6] Source: New York State, Department of Labor, Occupation Wages, Hudson Valley Region, 2021; All Occupations -– Median Annual Salary -$48,280.
[7] The Fiscal Impact Handbook, Robert Burchell and David Listokin, 1978.

value was assumed to be the cost of the proposed project and the current combined market value of the two land parcels less the percentage of subdivided land to remain in Town ownership.

According to the Town of Southeast Tax receiver, the market value of Lot 45.-1-10 is $789,040. As part of the proposed project, Lot 45.-1-10 would be subdivided into two lots: Lot 45.-1-10.1 (71 percent) to be conveyed to the Applicant and Lot 45.-1-10.2 (29 percent) to remain Town owned (parkland). Therefore, an estimated market value for Lot.45.-10.1 would be $560,218.[8] The market value of Lot 45.-1-11 is $985,600.[9] As with the above noted parcel, Lot 45.-1-11 would be subdivided into Lot 45.-1-11.1 (26 percent) conveyed to the Applicant and Lot 45.-1-11.2 (74 percent) would remain under Town ownership as parkland. The estimated market value for Lot.45.-11.1 of $256,256.

The market assessed value of Brewster Yards would result in an amount of $29,076,474.[10]

The assessed value of the proposed project was determined by multiplying the market value by the Town's 2021 equalization rate of 100 percent. Therefore, the assessed value of the Brewster Yards project would be $29,076,474.[11]

Just to note, the full market value of the Starr Ridge Road parcel is $375,000, according to the Town of Southeast's assessment conducted on July 1, 2020. The 2022 tax revenues for the Starr Ridge Road parcel were utilized to show the loss in tax revenues from the proposed transfer of ownership (private to town).

Adjusted Property Taxes from Proposed Development

The projected property taxes for the proposed development were calculated using the project's assessed value and the County and Town tax rates for 2022 less the 2022 tax revenues from the Applicant owned parcel located at 309 Starr Ridge Road. With development at the Pugsley Road site, the Starr Ridge Road parcel would be transferred to town ownership and removed from the tax rolls, thus this reduction in tax revenues was subtracted from the projected increase from the Pugsley Road development.

The total annual property tax revenue to Putnam County and the Town of Southeast (including the Brewster Central School District, Fire Department and Library) would be $1,019,970.75 adjusted.

Refer to Table 4-5, Projected County and Town Property Tax Revenues, for the detailed breakdown of the projected and adjusted tax revenues expected from the proposed development.

[8] Market Values of Property: Lot 45.-1-10 - $789,040 dated 7.1.2020 – Source: Town of Southeast – Tax Receiver. Estimated Market Value for Lot 45.-1-10.1 is $520,218 - 71 percent of the market value of Lot 45.-1-10.
[9] Market Value of Property: 45.-1-11 - $985,600 dated 7.1.2020 – source is Town of Southeast – Tax Receiver. Estimated Market Value for Lot 45.-1-10.1 is $256,256 - 26 percent of the market value of Lot 45.-1-10
[10] Sources: Construction cost for proposed project: 28.3 million - source is Applicant; Estimated Market Value: Lot 45.-1-10.1 $520,218; Lot 45.-1-11.1 - $256,256. Estimated Market Value of two parcels: $776,474. Total Market Value: $29,076,474.
[11] Putnam County 2021. "Equalization Rates - NYS ORPS Municipal Profiles." New York State Office of Real Property Services. 2021. 10 December 2021 and 28 March 2022. http://www.tax.ny.gov .

Table 4-5
Projected County and Town Property Tax Revenues

Levy Description	Total Tax Levy	Rate (Per $1000 Assessed Valuation)	*Project Site* Tax Revenues	*Starr Ridge Road Parcel* Tax Revenues	Adjusted Tax Revenue of Proposed Project
Putnam County and Town of Southeast					
County Tax	46,687,781	3.016828	$87,718.72	(-$1,131.31)	$86,587.41
Town Tax	6,683,328	2.9395	$85,470.30	(-$1,102.31)	$84,367.99
Brewster Library	594,000	0.187809	$5,460.82	(-$70.43)	$5,390.39
Brewster Fire	1,700,964	0.530245	$15,417.66	(-$198.84)	$15,218.82
Brewster Central School District	78,965,175	28.487159	$828,306.14	($0.0)	$828,306.14
Total			**$1,022,373.64**	**(-$2,502.89)**	**$1,019,870.75**
North Salem School District					
North Salem School District	40,227,073	19.963908	$0.0	(-$7,486.47)	(-$7,486.47)
Total			**$0.0**	**(-$7,486.47)**	**(-$7,486.47)**

Putnam County

Putnam County would receive approximately $90,000 annually in adjusted property tax revenue from the completed Brewster Yards project.

Town of Southeast

The Town of Southeast would receive approximately $84,000 annually in adjusted tax revenues from the project site after completion. Annual adjusted property tax revenues to the Brewster Fire Department and the Brewster Library would be $15,218.82 and $5,390.39, respectively. The Brewster Central School District would receive over $800,000 annually in tax revenues from the completed project without the generation of any new school age children.

North Salem Central School District

As a result of the proposed project, the North Salem Central School District would see a $7,500 annual loss in tax revenues.

4.5. Mitigation Measures

Due to the overall increase of property tax revenues realized from the proposed project, no mitigation measures are warranted and therefore, not proposed. Annual revenue of $7,500 would be lost to the North Salem Central School District as a result of Brewster Yards, however, this represents approximately 0.016 percent of the total North Salem School District's budget.[12] Further, the currently undeveloped property does not incur any cost to the North Salem District as it does not generate any school age children, nor will it in the proposed condition.

[12] Source: Town of North Salem – North Salem Central School District 2021-2022 approved budget - $45,914,756

5.0 Visual Resources

5.1 Existing Conditions

Introduction

A visual resources assessment was conducted to determine whether the proposed facility is potentially within the viewshed of a designated aesthetic resource and whether there are potential significant impacts that require measures to eliminate, mitigate or compensate for an adverse visual effect.

This assessment was conducted by a NYS Registered Landscape Architect in accordance with generally accepted methods used in professional practice to determine whether the proposed action is potentially visible from local area roadways and other public places, and whether there are potential significant impacts that require measures to eliminate, mitigate or compensate for an adverse visual effect. This assessment follows a methodology outlined in a New York State Department of Environmental Conservation (NYSDEC) policy and guidance memorandum for assessing and mitigating visual impacts.[1] Much of the terminology in this assessment comes from the NYSDEC guidance. The memorandum relates to assessing and mitigating visual impacts of proposed facilities that may be located in visual proximity to visually sensitive land uses.

Viewshed is defined as the geographic area from which a facility may be seen. An *aesthetic resource* is a formally designated place visually accessible to the public for the purpose of enjoying its beauty. For the purposes of this assessment, that resource may be designated by a local jurisdiction, a State agency, or a Federal agency. Additionally, other scenic and cultural resources may be considered significant aesthetic resources for the purposes of the visual assessment based on their unique characteristics. In this study, places that are designated or otherwise identified for their scenic quality within the potential viewshed of the proposed project are considered aesthetic resources and are evaluated.

A visual assessment is an analytical technique that determines the viewshed of a particular facility, identifies aesthetic resources within the viewshed, determines the *potential impact* of the facility on aesthetic resources, and identifies strategies to avoid, eliminate or reduce adverse impacts. This assessment incorporated the use of digital technology to create graphic line-of-sight analyses to define the potential viewshed and demonstrate potential visibility of the proposed facility from particular viewpoints located within the viewshed study area. A *line-of-sight profile* is a to-scale graphic depiction of the topographic relief taken along a straight path between two selected locations, with a straight line depicting the potential line of sight between those two locations. This evaluation is based on available topographic mapping and verified through in-field reconnaissance.

It is noted that mere visibility of a facility, even startling visibility, does not automatically mean it has an adverse visual or aesthetic impact. Aesthetic impact occurs when there is a demonstrated detrimental effect on the public enjoyment of an aesthetic resource. Variables that may affect the actual visual experience include atmospheric perspective (diminishing clarity and

[1] New York State Department of Environmental Conservation, "Assessing and Mitigating Visual Impacts", Program Policy DEP-00-2, NYSDEC Division of Environmental Permits, July 2000.

contrast of visible elements due to atmospheric interference), and size perspective (reduction of apparent size of objects as distance increases).

Existing Visual Setting and Views into the Site

The project site of the Brewster Yards project is located in rolling wooded terrain in a setting of mixed land uses and natural land cover. Current development in the area consists of an interstate transportation corridor directly adjacent to the east; two rural residential house lots to the north surrounded by wooded County-owned land; suburban residential development further to the north; a formerly farmed tract to the west that is currently being cleared of overgrowth and developed into an interstate logistics (warehouse) use; and wooded Town-owned land to the south. Further afield are areas of commercial development to the south (Southeast Executive Park and the Highlands Center), concentrated at the intersection of NYS Route 312 and Interstate 84, and industrial development to the east of the Interstate on International Boulevard (including Terravest Corporate Park). Due to the notably rolling topography of the region, views from most locations are limited by the nearby hills, woodland vegetation and curving roadway corridors.

Of note is a small, isolated Ridgeline Overlay District depicted on the Town's Zoning Map that is located in the northeast corner of the site. The uppermost 50 feet in elevation of a rocky, wooded knoll, which are the highest elevations in the immediate project area, are designated as a Ridgeline Protection Area in the Town Code, given its potential visibility from surrounding areas.

Potential views from publicly accessible areas in the site vicinity were investigated for this assessment and are described below. Other than the aforementioned Ridgeline Protection Area, there were no other significant aesthetic resources or public facilities of cultural importance identified within the site viewshed that would be sensitive to changes in the visual environment as relates to the subject project proposal.

Visual Surveys

A visual survey was conducted in the study area in October 2021 to identify locations in the vicinity where the project site may be visible from roads and properties with public access. At the time of the surveys, leaves were on the trees. During times of the year when trees are in offl leaf condition, the project site may be somewhat more visible although, given the density of the existing vegetation surrounding the site and in the intervening areas between the investigated viewpoints and the site, potential visibility would not be expected to differ significantly from the discussion in this section. The extent of the survey was initially determined by inspection of US Geological Survey (USGS) topographic mapping with the aid of Google Earth imagery. Thus, the initial survey task established the *potential viewshed* of the site and the proposed project. In this case the viewshed potentially extends up to one mile to the north, 0.75 mile to the south, and less than 0.25 mile to the east and west of the project site.

There were no prominent or sensitive visual features identified to exist on the project site.

Figure 5-1 provides a topographic map indicating potential visibility of the project site from locations within a one-mile radius of the site based on available mapping. Potential visibility was investigated from the following sites in particular that were identified in the DEIS Scoping document:

- A location on I-84 north of the site;
- A location on I-84 south of the site;
- Garrity Boulevard (to the east);
- Independent Way (to the southeast);
- International Boulevard (to the south); and
- Pugsley Road and Fields Corner Road (north and south of the site).

The field survey refined this initial assessment based on actual factors that limit visibility of the site: stationary factors such as topography, vegetation, and buildings, and transitory factors like activities of the potential viewer and direction of travel of the potential viewer. The field survey verified specific publicly-accessible locations in the identified viewshed where the site, and potentially the proposed project, could be visible. The actual viewshed of the project site is limited by intervening topography and existing tree cover, which varies from every potential view point. Figure 5-1, Key Map to Visual Sections, provides an overview of the study area and identifies the views, photographs and sight lines described below. Figure 5-1 shows the locations where post-development line-of-sight profiles were constructed (shown in subsequent figures) that cross the project site. Photographs reproduced in Appendix I show images taken from the study vantage points that depict the existing conditions and are further described below.

The survey included identification of prominent land forms, land cover types, and the visual character of the site and local area. Photographs taken from select locations in the study area depict the visual character and context of the areas surrounding the project site.

View from I-84 North of the Site[2]

Existing views toward the site from Interstate 84 while traveling eastbound are limited by heavy tree cover existing on the rising topography to the north of the site. A photograph from this vantage point is provided in Appendix I, Image I-1.1. For viewers in vehicles on I-84, the angle of view occurs above the foreground treeline that exists off-site and thus clearly above the subject property. Due to the intervening tree cover and topography, site visibility is obscurred from this location until the vehicle passes directly by the County-owned parcel that adjoins the site. Visual exposure from this latter viewpoint would be limited in winter by the angle of view (looking directly to the right from a vehicle moving at highway speed) and further obscurred by the roadside vegetation in months of the year when leaves are on the trees.

Visual exposure of the surrounding landscape experienced by a viewer from a moving vehicle, especially traveling at highway speeds, is reduced by the distractions or obstructions of highway travel, other vehicles, the median barriers and signs.

View from I-84 South of the Site

Existing views toward the site from Interstate 84 while traveling westbound are limited by the tree cover that exists between the highway and the site, and further reduced by the ameliorating effects of distance. Photographs from Interstate 84 westbound vantage points are provided in Appendix I, Image I-2.1 and Image I-2.2. For a limited period of view for viewers in automobiles travelling at highway speed, the sight line occurs over the treeline that exists off-site and

[2] Interstate-84 is an east/west route, however the highway in this locale is physically oriented north/south.

appears to expose the treetops on the subject property. This view would be similar in any season of the year.

It is further noted that visual exposure for either eastbound or westbound travelers is reduced by the distractions of highway travel and obstructions of other vehicles, the median barriers and signs.

View from Garrity Boulevard

Garrity Boulevard is a residential street that climbs up and wraps around a hill located one mile to the west of the project site. Existing publicly accessible views toward the site from Garrity Boulevard are limited to breaks in the tree cover that exists on properties on this local street. Such views are further reduced by the ameliorating effects of distance. From this street, one vantage point was identified where a view toward the project site may be possible through an opening in the trees at the driveway of a residence near the crest of Garrity Boulevard. This view over the top of the residence would be similar in any season of the year. The narrow vista is shown in the photograph from this vantage point provided in Appendix I, Image I-3.1.

View from Independent Way

Independent Way is a Town road that runs from Route 312 past the Highlands Center (Home Depot/Kohl's commercial complex) and over a hill to the Southeast train station. Thus, significant commuter traffic leaving the train station may potentially experience a view toward the horizon to the north and toward the project site from a high vantage point. Existing views were investigated from the high point in Independent Way and from the nearby Town-owned multiple use area called "Sunset Ridge at the Highlands" off of Independent Way. The existing view toward the north from either vantage point exposes a panorama of the landscape where the outline of the designated ridgeline is prominent. A photograph from Independent Way vantage point is provided in Appendix I, Image I-4.1. A photograph from Sunset Ridge vantage point are provided in Image I-4.2. The latter view looks over the roof of what is called Southeast Executive Park. There are no landmarks on the subject property that are visible from this location.

For potential viewers travelling north on Independent Way this view is experienced for a brief period at the crest of the hill while approaching Route 312, thus the potential visual experience is reduced by the distractions of the road. Potential viewers on the Sunset Ridge property, when it is open to the public in the future, would likely experience this view while stationary or engaged in leisure activities. (At the time of the field survey this property was not officially open to the public as it was being used as a construction staging area.)

View from International Boulevard

International Boulevard is a Town road that runs north from Route 312 and generally parallel to Interstate 84, serving several industrial businesses and corporate offices in Terravest Corporate Park. A portion of the road rises above the elevation of the Interstate thereby providing a panoramic view toward the western landscape. The existing view from International Boulevard that revealed the greatest potential view toward the site was identified and photographed from the southern driveway into Ace Endico Corporation. A photograph from this vantage point is provided in Appendix I, Image I-5.1. The rise of the ridgeline area at the north end of the site is clearly visible on the right side of this view.

For a short length of International Boulevard the view over Interstate 84 and beyond the opposite treeline is possible, although viewers in automobiles would be travelling in a direction perpendicular to the view and would be subject to the aforementioned distractions of driving. This view would be similar in any season of the year.

View from Pugsley Road

Existing views on Pugsley Road are limited to short distance views of the narrow road corridor, given the extensive tree cover on both sides. At certain locations where the grades allow there are views into the adjacent woodland understory for short distances. In winter months when leaves are off the trees visibility into the adjacent woodlands would be greater, while there would still be no long distance views out of the corridor due to the tree cover and curvilinear road alignment. Being a narrow, rural road, a portion of which is unpaved, the number of possible viewers is very small. The unpaved portion of Pugsley Road is legally closed to traffic in the winter.

A photograph from Pugsley Road looking north toward the intersection of Zimmer Road provided in Appendix I, Image I-6.1 illustrates the visual character of the project site access within the context of its surroundings.

View from Fields Corner Road

Like the experience from Pugsley Road, existing views on Fields Corner Road are limited to short distance views of the narrow road corridor and nearby woodland, given the varying grades and thick tree cover on both sides. A photograph from this vantage point is provided in Appendix I, Image I-7.1. In winter months when leaves are off the trees visibility into the adjacent woodlands would be greater, while there would still be no long distance views out of the corridor due to the tree cover and curvilinear road alignment. Approaching the project site the road is unpaved, serving only two residences near the Town line at the northern boundary of the site and thus the number of possible viewers is very small. The portion of Fields Corner Road in the Town of Southeast is legally closed to traffic in the winter.

5.2 Future Without the Proposed Project

Without any development on the subject site, the visual character of the property would remain a fully wooded site, available to passive public uses such as walking and mountain biking, although there are few established trails.

5.3 Potential Visual Impacts

Construction of the project will require removal of existing woodland cover over a sizable area of the site. Given the nature of the proposed program, clearing and grading is necessary to achieve relatively level playing fields, thus potentially creating a change to the visual character of the site area when viewed from off-site. Tree clearing will occur well below the highest elevations of the site thereby preserving the designated ridgeline protection area at the north end of the property, which as can be seen in many of the existing conditions photographs, will retain its prominent landform and remain tree covered.

The project design is laid out generally in terraces with the baseball clover set at the highest elevations of the developed area. This configuration will result in a broad terrace with the

highest physical element being the proposed sports lighting towers that are shown in the post-development profile views discussed below.

Sight line profile drawings were prepared to illustrate potential visibility of the project after development from the study vantage points previously discussed. Figure 5-1 is a key map to views and sight line profiles described below. The profiles are depicted in to-scale drawings generated from available topographic mapping and aerial imagery, with actual tree lines shown. Woodland tree cover in the study area is generally 50 to over 70 feet in height. The illustrative profiles depict the elements that are located directly on the line of the profile or close to the profile line. The profiles include horizontal elevation lines for reference, shown at 200-foot intervals.

There are no vantage points identified in the surrounding area from which the project would create a prominent visual change, a dominant visual element or glaring incongruity with the surrounding landscape. There is no viewpoint from which the entire development would be visible. No portion of the project would protrude above the ridgeline as defined by the Zoning Code.

Views from I-84 North of the Site

The potential sight line toward the project from a point north on Interstate 84 (traveling eastbound) is depicted in Figure 5-2, Sight Line Profile 1. From this location, existing trees on land between the highway and the site direct the sight line above the trees and significantly higher than the site itself. Thus, project visibility would not be possible from points north on I-84.

Views from I-84 South of the Site

The potential sight line toward the project from a point south on Interstate 84 (traveling westbound) is depicted in Figure 5-3, Sight Line Profile 2. From this location, existing trees on land between the highway and the site are situated on lower topography so that the sight line at the treeline would occur above the project site however the view may potentially reveal the sports lighting above the fields when they are lit at night. At this distance, approximately one-half mile away, the light poles would not be a noticable visual element in the broad landscape view in the daytime. At nighttime, the sports lights would likely be visible to travellers for a brief period as they pass on the highway. Given the distance and angle of view it is not anticipated that this visibility would have an adverse effect. By contrast, the existing lighting that is readily seen on the opposite side of I-84 from industrial development on International Boulevard is closer to the viewer, significantly brighter and noticably more prominent than the proposed sports lighting would be.

As previously described, the visual exposure of distant elements in the landscape is reduced for travelers at highway speed by the distractions on and near the highway.

View from Garrity Boulevard

The potential sight line toward the project from a point on Garrity Boulevard, a residential street to the east, is depicted in Figure 5-4, Sight Line Profile 3. From this location, sight lines through existing trees along Garrity Boulevard and between this street and the site obstruct the potential half-mile view. Treelines visible from this vantage point are located about half the distance to the project site and obscure further view toward the west.

View from Independent Way

A potential viewpoint at Independent Way, a Town road, is located one mile to the south. The potential sight line toward the project is depicted in Figure 5-5, Sight Line Profile 4. From one particular location experienced primarily by commuters riding north on Independent Way, the sight line would occur over intervening trees and might reveal the tree clearing and lights of the ballfield clovers that would be situated higher on the site. Given the distance and expanse of the overall view experienced from this location and the intervening visual distraction of power lines, in addition to the movement of the viewer while cresting the hill on Independent Way, view of the project would be neither prominent nor in stark contrast to its surrroundings. At this distance the project lighting would not be a noticable visual element in the daytime. At nighttime, the sports lighting would likely be visible to travelers passing the crest of the hill for a very brief period.

Likewise, the potential view to the north from the Sunset Ridge multiple use area, when it is ultimately opened to the public, would include visibility of the proposed project site within a broad landscape view to the horizon -- visibility of the project would be neither prominent nor in stark contrast to the surrrounding landscape.

View from International Boulevard

For a short length of International Boulevard at its highest elevation, the view over Interstate 84 and beyond from vehicles passing by the Ace Endico Corporation facility may reveal the southern portion of the project -- the clearing for the showcase baseball field and possibly the roofline of the proposed recreation building. See post-development Figure 5-6, Sight Line Profile 5. The tree cover to remain on the slopes on the east side of the sitewould obscure view of proposed improvements on the north end of the site.

The low angle of view would obscure view of the ground, however the field lighting would be visible at night to a limited number of viewers who travel the north portion of International Boulevard.

View from Pugsley Road and Fields Corner Road

The potential sight line to the project from Pugsley Road is illustrated in post-development Figure 5-2. The northbound approach to the site entrance will allow direct view of the project driveway and the recreation building. This experience would be notably different than the existing views along Pugsley Road primarily due to the road widening improvements (by the Logistics project) that will occur regardless of the Brewster Yards project, although much of the corridor would remain a woods-lined roadway. In close proximity to Brewster Yards views from the road would open onto various features of the new development, with portions filtered through a landscaped buffer.

The potential sight line to the project from Fields Corner Road is illustrated in post-development Figure 5-3. The southbound approach to the site would be filtered by a buffer of existing woods 260 feet deep or more that would remain at the north end of the site. This depth of woods would partially obscure the removal of tree cover where the ballfields are developed at the north end of the project, especially during the non-winter months.

Landscaping, Lighting and Architecture

Site landscaping and lighting designs are preliminary at this time and will be part of the construction documents to be approved for this development. The landscape plan will include a street tree pattern for driveways and parking areas, shade trees and ornamental flowering trees around the plaza areas, and buffer planting where appropriate around the perimeter of the developed areas. The plan must conform with Town of Southeast Code regarding landscaping of parking areas. A color perspective rendering showing the landscaping at the time of project opening is provided in Figure 5-7; Figure 5-8 shows the landscaped project five to ten years later.

Site lighting is proposed to illuminate the site at night to provide pedestrian and vehicle safety and security throughout the developed portion of the project and will be designed to comply with applicable Town standards. A regular pattern of pole-mounted lights will illuminate the entrance area and internal driveways and parking lots. Sports lighting is proposed for every playfield. Modern lighting design for sports fields using LED technology is anticipated to create well lit play fields while limiting stray light outside the intended areas.

The conceptual site lighting design for the project depicted in Figure 5-9 includes playfield lighting and general landscape lighting with an assessment of light levels out to the property lines. No measurable light trespass from the project would occur at the property lines, except in the vicinity of the site driveway, in conformance with Town lighting regulations.

Maximum light levels in the pavement (pedestrian and vehicle circulation) areas would be approximately 4 to 10 footcandles (fc) within the property lines (measured three feet above the ground surface). Luminare mounting heights and luminare styles will be specified that will provide sufficient ground illumination while minimizing the light spillage to non-pavement areas. Light levels on the playfields is designed according to standard sportsfield illumination for safe play -- average infield level of 50 fc and outfield level of 30 fc. Field lighting will be turned off when the field facilities are not in use. It is anticipated that a minimum level of all-night illumination will be maintained at the buildings for safety and security after operating hours.

Intensity of the light near ground level is the determining factor relative to impacts to neighboring uses and it can be measured in the field. While portions of the illuminated site would be visible from off-site, lamp characteristics and pole spacing in this project will be designed to avoid measurable light emissions at the property line and have minimal effect on neighboring residential uses. No significant adverse effect of night lighting is expected from this project.

The architecture of the buildings has been developed to conceptual level at this time. Figures in section 1 of this document illustrate the current building plans. The main building will be designed to reflect a modern facility in general keeping with the rural residential character in the local area.

Effect on the Night Sky

Brightness of the night sky occurs from both natural and human-made sources and varies from night to night and place to place. The sources of the natural component of sky glow include sunlight reflected off the moon and the upper atmosphere, and starlight scattered in the atmosphere. The predominant human-made source is outdoor electric lighting. Light that is either emitted directly upward from a light source, reflected off surfaces on the ground, or scattered by particles in the atmosphere may produce a luminous “glow” in the night sky.

Sky glow is highly variable due to the numerous variables that affect brightness of the night sky which change constantly. Sky glow is difficult to measure and quantify in any meaningful way. As in most cases, the impact of light from the proposed project is relative to the existing light levels experienced in the area surrounding the site.

Qualitatively, for an outdoor project with sports field lighting of the size proposed here, some level of sky glow under certain atmospheric conditions is typically unavoidable. Several of the sight lines described above would include potential nighttime visibility of the field lighting in the project. Direct view of the light fixtures would be avoided or minimized by the style of lighting proposed (LED light fixtures) that direct light downward to the ground surface rather than outward, in addition to the angle of view from these vantage points. Also, elements on the ground illuminated by the field lights are low in profile so they would not be in the line of sight from these vantage points nor are they highly reflective. Thus, reflected light which would otherwise contribute to sky glow over the project site can be expected to be minimal.

Cumulative Effects

Tilly Foster Farm, a Putnam County education/recreation facility, is open to the public and during the summer months holds outdoor events including music concerts. There is no significant outdoor lighting at this site with the possible exception of the summertime concerts when portable light towers are installed for periodic weekend events.[3] The lighting at Tilly Foster Farm is not known to create an obvious visual effect from off-site viewpoints or sky glow.

As previously described, the potential cumulative effect of lighting at the project site, lighting at the Logistics project site[4] and lighting at the Tilly Foster Farm cannot practically be assessed in a quantitative manner. Overall, the developed area at the Logistics site entails approximately 50 acres at two buildings[5], around which the circulation areas will be illuminated to modest light levels -- average levels of 1.33 to 1.76 footcandles, and maximum level of 4.6 footcandles, measured at the ground. The building areas are situated on two ridgelines oriented parallel to Pugsley Road and generally within 600 to 900 feet of the proposed fields at Brewster Yards. The Logistics project plans call for LED lighting from 17' poles that is typically directed downward to the ground such that stray light that would affect the night sky is minimized. Based on the lighting information provided on the plans of the two Pugsley Road projects, the potential cumulative effect of night lighting from Brewster Yards and Logistics once fully developed would not be expected to create significant outdoor illumination levels affecting neighboring properties or the greater study area. Lighting from the adjacent property will not increase the maximum or average illumination values at Brewster Yards.

There would be increased intensity of land use on Pugsley Road that results from the Brewster Yards and Logistics projects. Consequently, periodic increases in noise, traffic and light pollution are possible. As a sports events venue, Brewster Yards would attract activities that result in noise, traffic and light which would change the character of the neighborhood on a very local scale, given that the neighborhood consists of sizable tracts of wooded, vacant land, existing and future commercial enterprises, active transportation corridors, and two single family

[3] Conversation with Katie Hanrahand, General Manager, Tilly Foster Farm, 1/18/22.

[4] The Commercial Campus at Fields Corner project was also called Northeast Interstate Logistics Center and is currently called Lincoln Logistics Brewster.

[5] Commercial Campus at Fields Corner FEIS site plans.

homes. The potential effects of an increase in traffic from Brewster Yards is assessed in section 11 of this DEIS and an increase in ambient noise is assessed in section 14.

As described above, no significant change in measurable light levels at night would be expected along Pugsley Road given the modern LED type of lighting proposed which is designed to control stray light. Illumination of the facilities at Brewster Yards, however, would allow the playfields to be visible at night from the local road and illumination in the Logistics project would also be visible, in contrast to the existing condition where there is no artificial light source or nighttime human activity on Pugsley Road. The nighttime visibility of lights in the Brewster Yards and Logistics developments would change the local character from a rural neighborhood to a developed suburban neighborhood. Any change in measurable light levels would be negligible. Such change is not considered to be a signficant adverse impact.

In summary, the field reconnaissance and assessment of factors related to the proposed lighting at Brewster Yards does not identify any situation where the proposed change at the site would result in a significantly adverse change to the landscape character or the nighttime visual experience. The addition of field lighting will not result in a stark contrast in visual character compared to the site environs, particularly given the scale and visibility of the subject site within the broader landscape. While the occurrence of some level of sky glow from sports field lighting is typically unavoidable, the project as proposed is not anticipated to dominate the view from any publicly accessible location in the studied viewshed.

Visibility of this facility from the study vantage points may be possible to varying degrees, as demonstrated, however no significant adverse visual impact has been identified to result from the proposed project. Areas of development that exist within the project viewshed, such as Southeast Executive Park, the Highlands Center, Terravest Corporate Park, and the public road corridors, (and Logistics Center soon to exist along the opposite side of Pugsley Road), all have elements that are visible to the public to varying degrees. This study demonstrates that there would be no detrimental effect on the use of public spaces in the study area nor on the public enjoyment of any designated aesthetic resource.

5.4 Mitigation Measures

The described changes in views toward the site will not result in an adverse change in visual character of the surrounding landscape. To the contrary, the location of the project within a wooded landscape that will buffer the use from virtually all viewpoints with a substantial amount of existing tree cover will preserve the character of the area. Placement of this use at this location addresses a stated goal of the Town Comprehensive Plan: “Future non-residential uses should be targeted to those areas where they will have minimal impact on … community character.” [Page 7-4, Comprehensive Plan]

The proposed architecture of the main recreation building and ancillary buildings in this project is designed to fit in the landscape of the site and to be complementary to the style, scale and quality of buildings found in the area.

In conformance with the Town Code, all proposed improvements at Brewster Yards will be situated so that none are visible above the top of the ridgeline or top of vegetation located on the ridgeline as viewed from the surrounding area, nor will any tree clearing occur on a ridgeline. [§138-12I, Performance Standards.]

Measures to Minimize Adverse Effects

In reviewing the potential visibility of the proposed lighting (both as direct illumination and indirect sky glow), and compatibility of the project with the nearby residential uses, the following mitigating factors would reduce the extent of potential nighttime visual impact:

- Conformance with the recommended practice for sports and recreational area lighting as published by the Illuminating Engineering Society of North America (IESNA). [Southeast Code §138-98.G]
- Specification of light fixtures that incorporate the latest technology in lighting design for energy efficiency. Use of luminaires that will sufficiently light the project for its intended use.
- Specification of light fixtures designed to minimize stray light and outfitted with shields as appropriate to direct the light toward the sports surface.
- Specification of pole heights that will provide for optimal downlighting, thereby minimizing glare, stray and reflected light.
- Field lighting will be turned off when the field facilities are not in use.
- Outdoor activities at the project will be reduced when leaves are off the trees.
- Preservation of existing trees around the perimeter of the property to maintain a natural woods buffer to soften direct views to the playfields from local viewpoints.

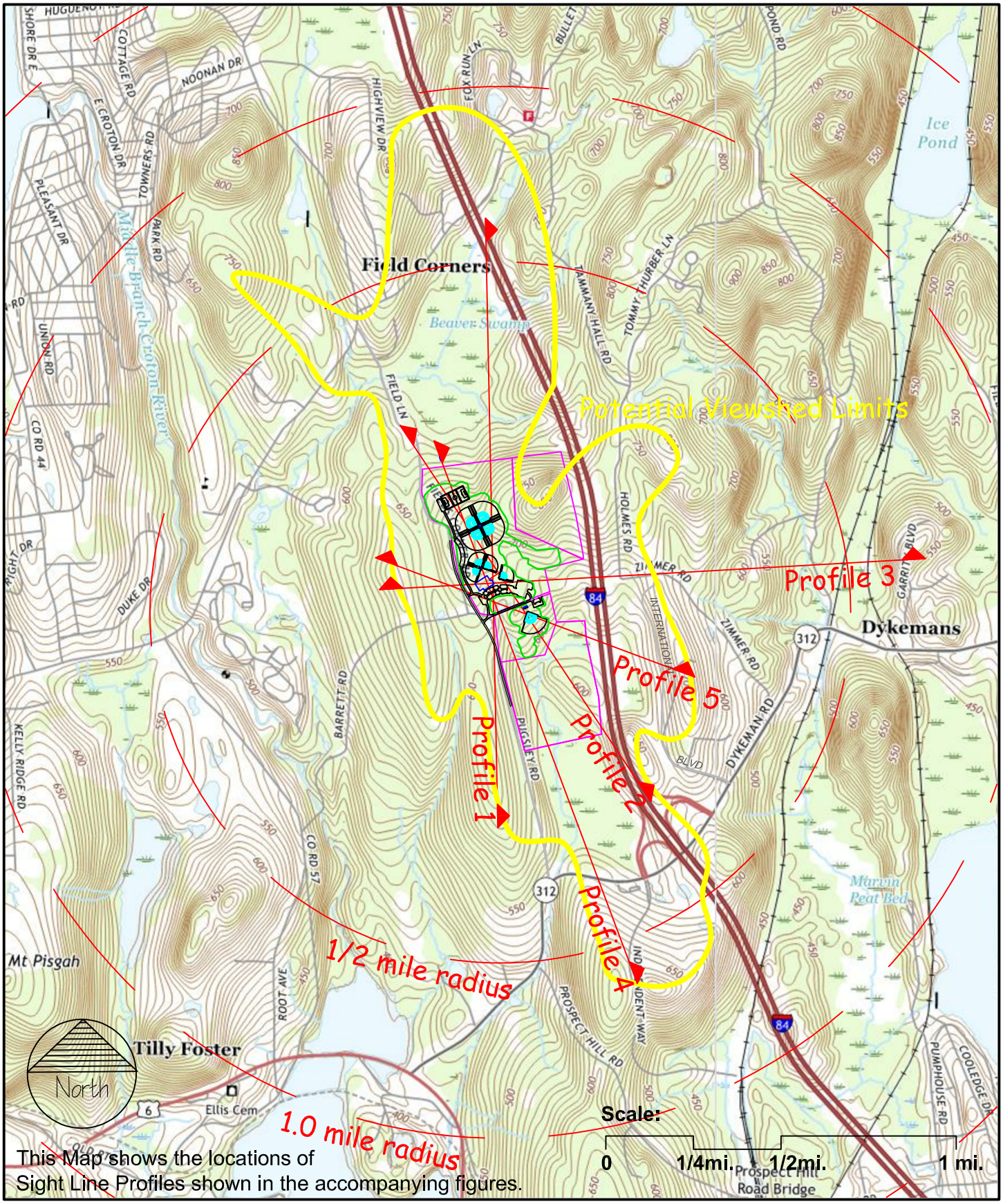


Figure 5-1: Profile Location Map

BREWSTER YARDS DEIS

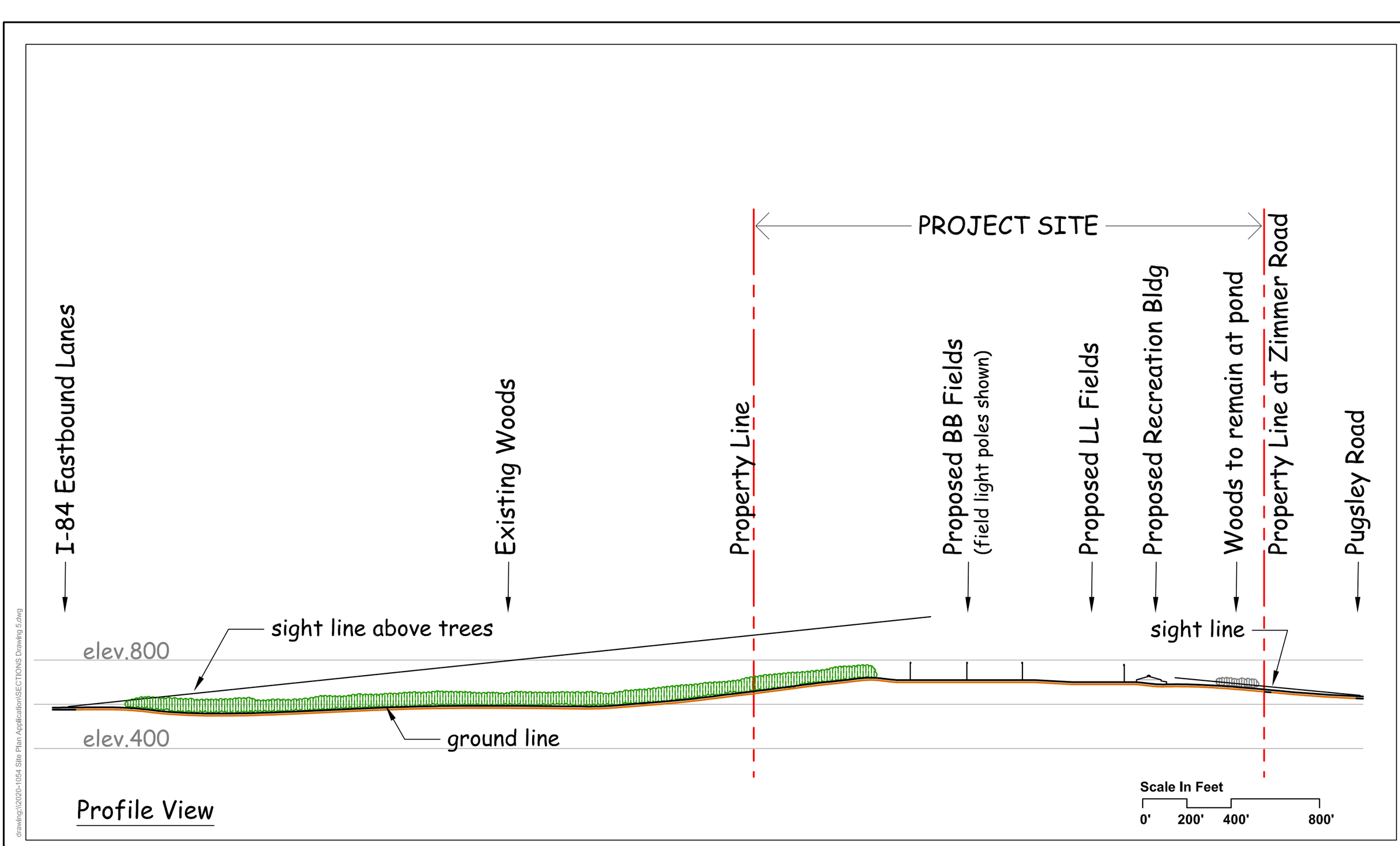
Town of Southeast, Putnam County, New York

Base Map: USGS Topography

12/20/21

Scale: As Shown

KG+D 2020-1054



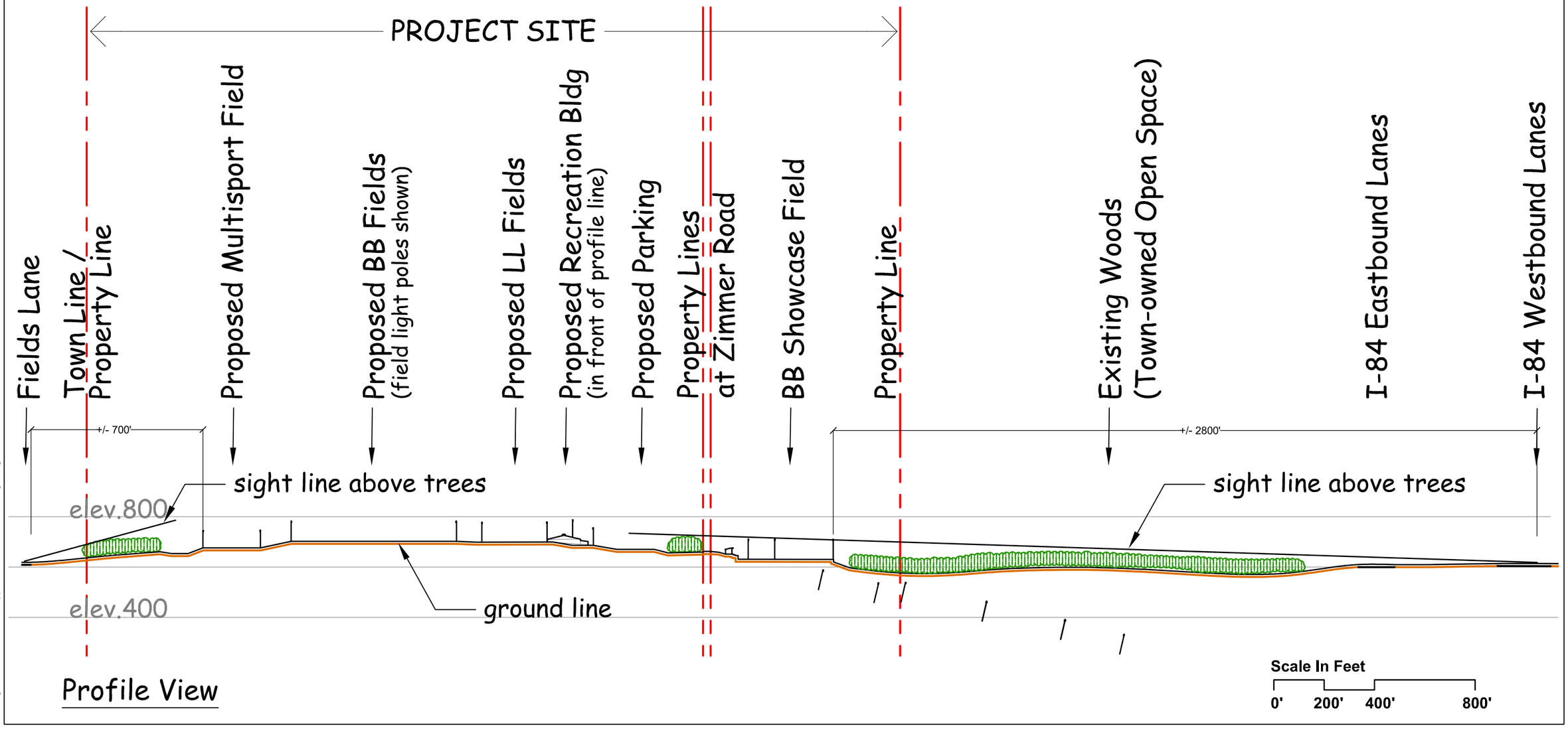
Profile View

drawing:\2020-1054 Site Plan Application\SECTIONS Drawing 5.dwg

This Figure depicts Sight Line Profile 1 From I-84 Eastbound taken through the project site as shown in Figure 5-1, Key Map to Visual Assessment.

12/20/21
Scale: 1" = 400' (at 11x17)
KG+D 2020-1054

Figure 5-2: Sight Line Profile 1
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York
Data Source: Insite Engineering Site Plan, USGS Topographic Mapping, Aerial Imagery

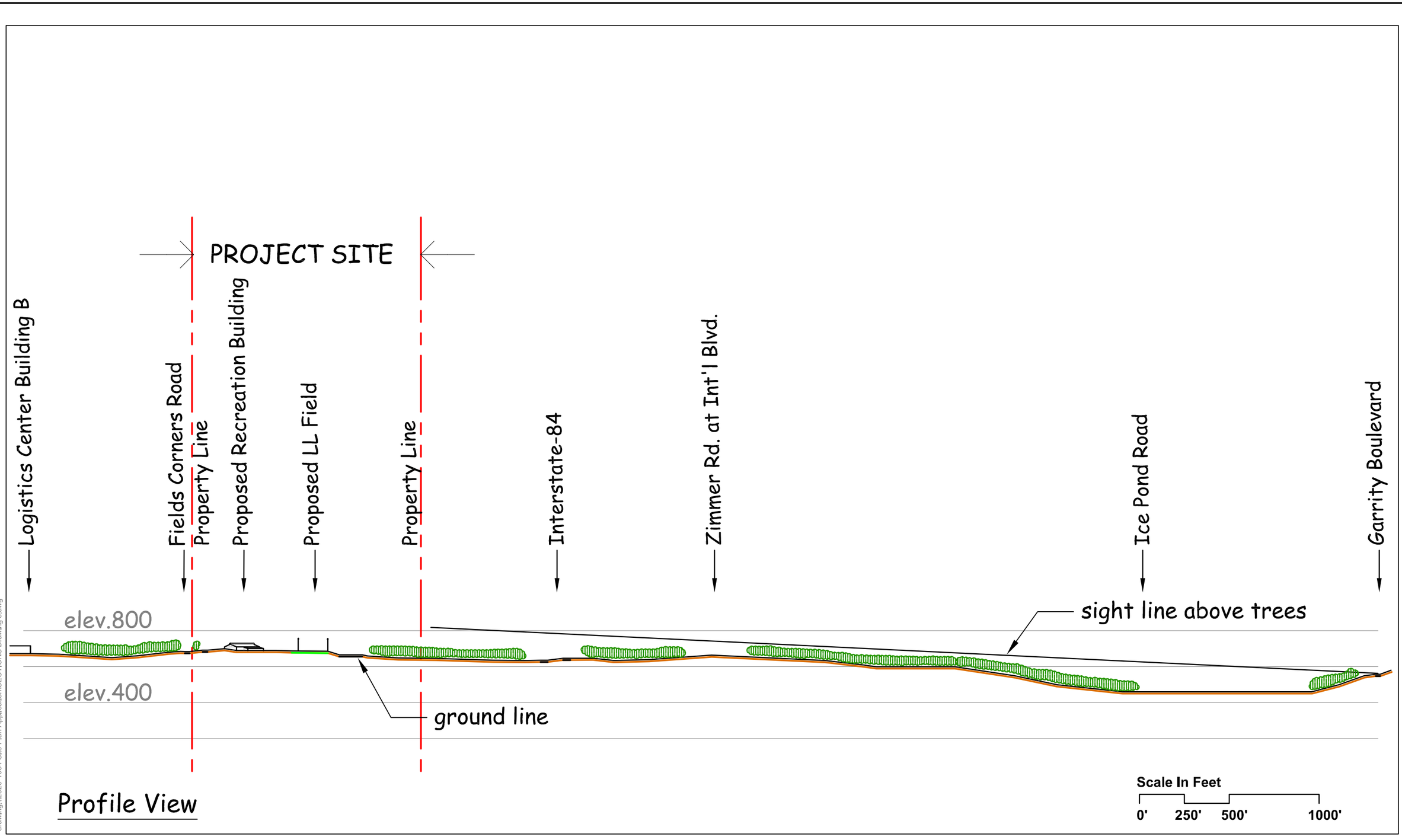


Profile View

This Figure depicts Sight Line Profile 2 From I-84 Westbound taken through the project site as shown in Figure 5-1, Key Map to Visual Assessment.

12/20/21
Scale: 1" = 400' (at 11x17)
KG+D 2020-1054

Figure 5-3: Sight Line Profile 2
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York
Data Source: Insite Engineering Site Plan, USGS Topographic Mapping, Aerial Imagery



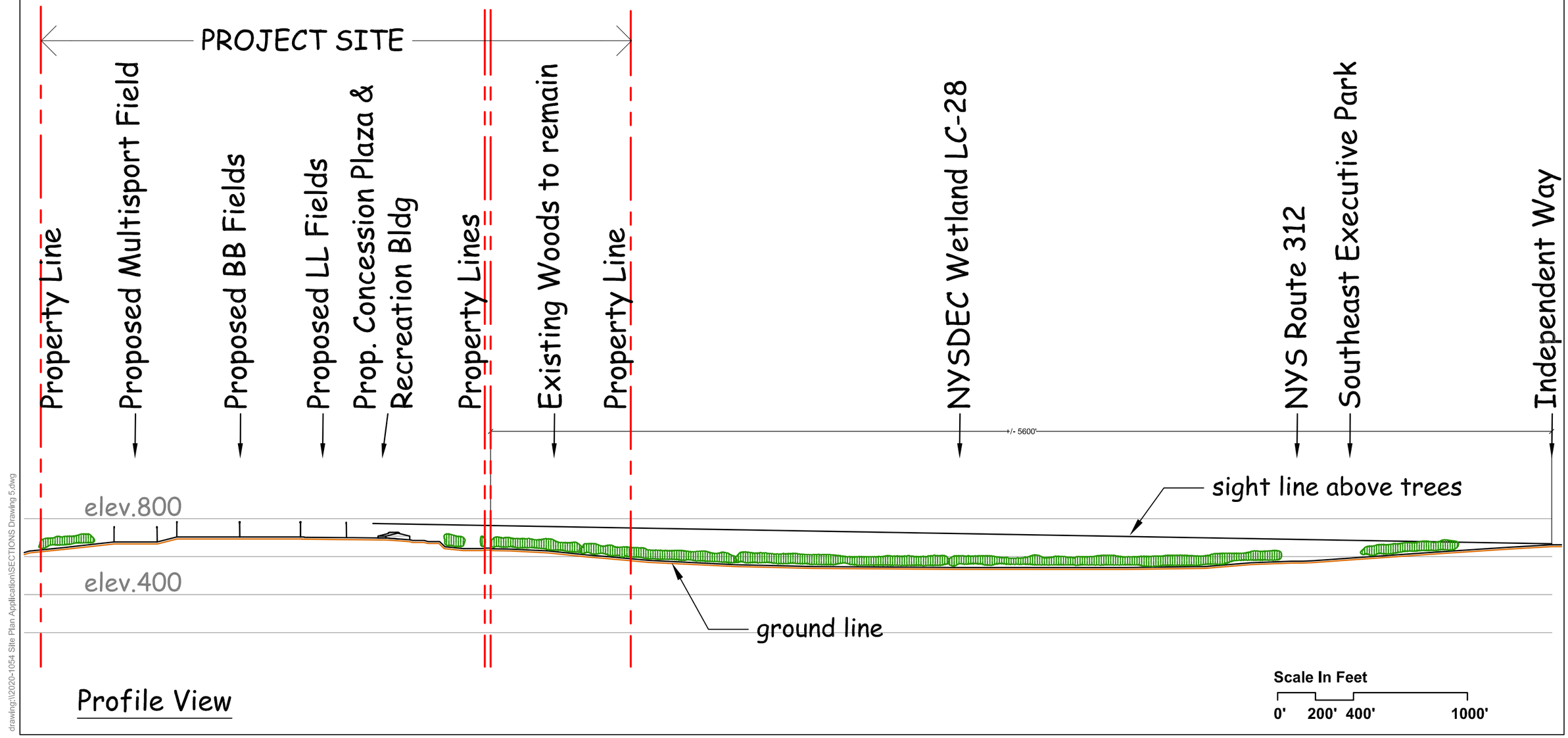
Profile View

drawing:\\2020-1054 Site Plan Application\SECTIONS Drawing 5.dwg

This Figure depicts Sight Line Profile 3 From Garrity Boulevard taken through the project site as shown in Figure 5-1, Key Map to Visual Assessment.

12/20/21
Scale: 1" = 500' (at 11x17)
KG+D 2020-1054

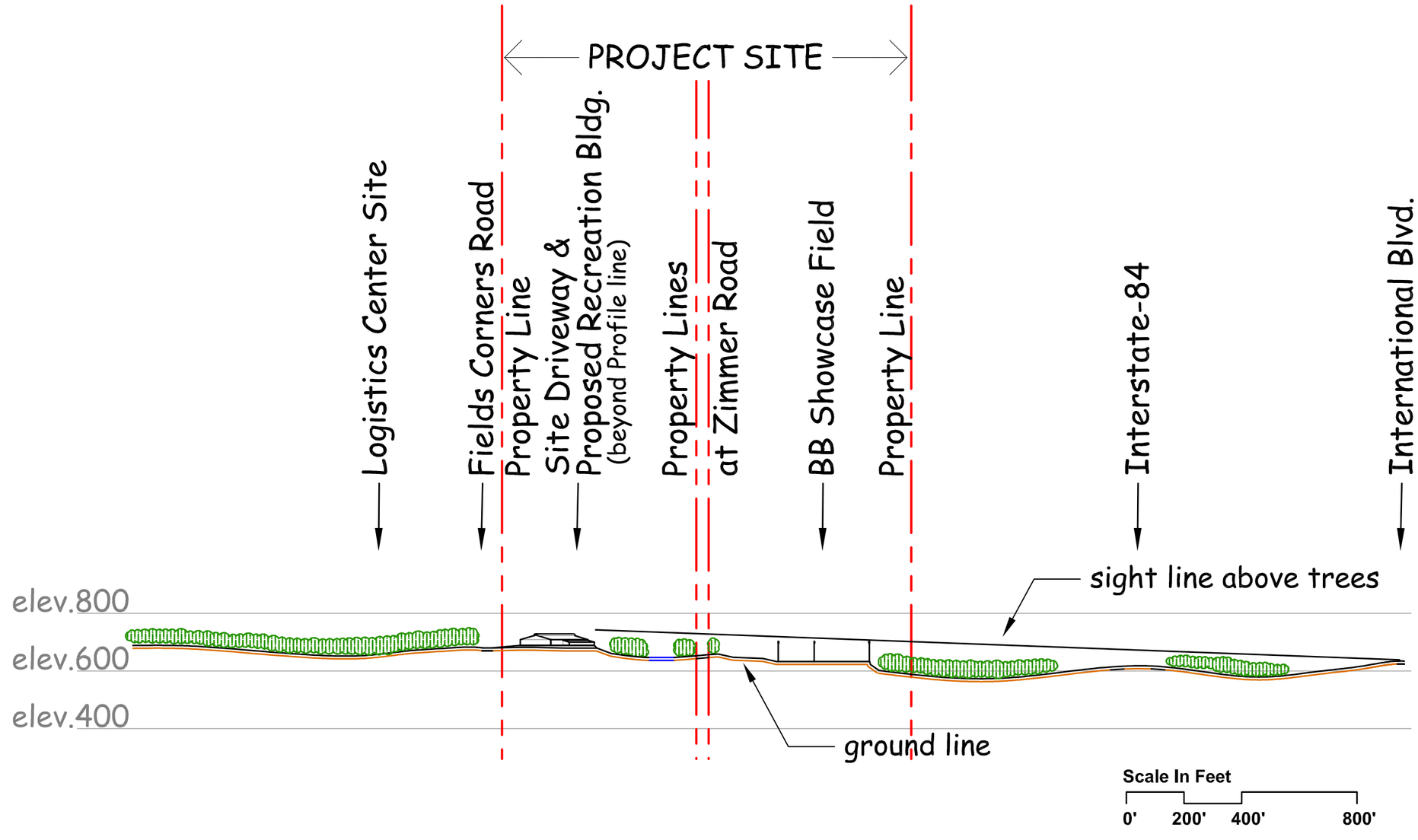
Figure 5-4: Sight Line Profile 3
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York
Data Source: Insite Engineering Site Plan, USGS Topographic Mapping, Aerial Imagery



This Figure depicts Sight Line Profile 4 From Independent Way taken through the project site as shown in Figure 5-1, Key Map to Visual Assessment.

12/20/21
Scale: 1" = 525' (at 11x17)
KG+D 2020-1054

Figure 5-5: Sight Line Profile 4
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York
Data Source: Insite Engineering Site Plan, USGS Topographic Mapping, Aerial Imagery



Profile View

This Figure depicts Sight Line Profile 5 From International Blvd. taken through the project site as shown in Figure 5-1, Key Map to Visual Assessment.

12/20/21
Scale: 1" = 400' (at 11x17)
KG+D 2020-1054

Figure 5-6: Sight Line Profile 5
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York
Data Source: Insite Engineering Site Plan, USGS Topographic Mapping, Aerial Imagery

Figure 5-7
Birdseye View of Project Entrance on "Day 1"
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York

Figure 5-8
Birdseye View of Project Entrance
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York

Key to Luminaire Mounting Heights:
BB Field lighting: A, B and C poles at 70’ and 80’
LL Field lighting: A and B poles at 60’, 70’ and 80’
MP Field lighting: S poles at 70’
Parking area lighting: P poles at 40’
Pedestrian area lighting: mounted on field light poles: at 15’, 16’ and 23’

Brewster Yards

Brewster, NY

GRID SUMMARY	
Name:	**Property Spill**
Spacing:	30.0’
Height:	3.0’ above grade

ILLUMINATION SUMMARY	
HORIZONTAL FOOTCANDLES	
	Entire Grid
Scan Average:	0.0353
Maximum:	0.74
Minimum:	0.00
No. of Points:	320
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C, D, E, F, G, H, I, J, K, L, M
No. of Luminaires:	**379**
Total Load:	347.76 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

musco Lighting
We Make It Happen.

SCALE IN FEET 1 : 120
0’ 120’ 240’

ENGINEERED DESIGN By: - File #207986B - 07-Dec-21

This plan shows illumination levels in footcandles at the property lines modeled from the light pole layout shown.

Figure 5-9
Conceptual Site Lighting Plan
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York
Source: Musco Lighting, Dec. 2021

6.0 CULTURAL RESOURCES

Introduction

This DEIS section provides a summary of the Phase 1A Literature Search and Sensitivity Assessment and Phase 1B Archaeological Field Reconnaissance Survey report prepared for the Brewster Yards project by Hudson Valley Cultural Resources Consultants, Ltd. (HVCRC) in January 2022. Refer to DEIS Appendix K for the complete report.

6.1 Phase 1A Literature Search and Sensitivity Assessment

Phase 1A research generally entails library research of available recorded documents, and sometimes interviews of knowledgeable individuals, to determine the likelihood that archeological and/or historic resources could be located within the proposed area of disturbance. For purposes of the archaeological assessment, the area of proposed site disturbance is considered the Area of Potential Effect, or APE. Wetlands are located outside the boundaries of the Project APE.

Records Research

Files of the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) and the New York State Museum (NYSM) were reviewed for information regarding previously recorded archeological sites within one mile (1.6 km) of the Project Site. Six archaeological sites have been previously identified within one mile and these were determined to not be impacted by the proposed undertaking.

More than ten archaeological surveys have been completed for sites within one mile of the Project Site and identified precontact archaeological sites in that area. HVCRC consulted historical documents and maps available at the Library of Congress, David Rumsey Cartography Associates and the New York Public Library, examining historical maps of Putnam County to identify possible structures, previous road alignments and other landscape features or alterations that could affect the likelihood that archeological and/or historic resources could be located within the Project APE. These maps are included in the archaeologist's report, with the approximate boundaries of the Project APE superimposed.

An 1854 map shows a barn or outbuilding in the Project APE, which on later maps was no longer shown. On USGS mapping prepared in 1960 and 1980 a structure is shown on adjacent land (now the County-owned parcel) and another along the eastern boundary of the APE. In a 1981 aerial image, portions of the Project site are divided into farm fields, bounded by forested land to the north and south of the APE.

Precontact Period Sensitivity

Precontact period archaeological sensitivity is based primarily on proximity to previously documented precontact archeological sites, known Precontact period resources, and physiographic characteristics, such as topography and proximity to freshwater. In addition to the precontact period sites identified in the area, the project's location a short distance from wetland areas and the Croton River, combined with the fact that undisturbed and level terrain exists

within the Project APE makes this landscape moderately sensitive for precontact cultural resources.

Historic Sensitivity

Careful examination of the historic and topographical maps available indicate that the Project APE has been agricultural land for a significant portion of the nineteenth and early twentieth centuries. The topographical maps and aerial images indicate that the mid-nineteenth century outbuilding located in the southern portion of the site was removed before the onset of the twentieth century. A second outbuilding was constructed on the south side of Zimmer Road in the late twentieth century, which currently exists as foundation remains. The Project APE is considered to have a low historic sensitivity.

National Register Eligible/Listed Sites

The National Register Database and OPRHP files were reviewed to identify structures on or in the vicinity of the Project APE that have been listed on the National Register of Historic Places or identified as National Register Eligible. No historic properties (listed or eligible for listing) are located on or within a one-half mile radius of the Project APE.

6.2 Phase 1B Archaeological Field Reconnaissance Survey

When the Phase 1A analysis identifies potential sensitivity for cultural resources on the project site, a Phase 1B Archaeological Field Reconnaissance Survey, including subsurface investigations, should be completed to determine the presence or absence of cultural resources in areas that may have the potential to yield cultural resources. The results of the Phase 1A described above confirmed that the entire Project APE is located in an area of precontact period activity. In addition, the landscape closely conforms to an ecological model that indicates that the level, undisturbed portions of the Project APE are moderately to highly sensitive for precontact cultural materials. Therefore, Phase 1B field investigations were undertaken.

For the field investigations, areas were identified during an intensive walkover inspection which evaluated the landscape to determine areas of prior disturbance, slopes in excess of 12% grade, and/or saturated or wet soils (to be excluded from testing in accordance with State standards). Evidence of former land usage was also documented. A 50-foot grid for shovel testing was established along transects conforming to the land surface and the boundaries of the Project APE. The locations of the transects, shovel tests and disturbed areas were recorded on a field map. Hand-dug shovel tests were excavated 50 feet apart and at least 10 cm into sterile subsoil, unless impeded by rocks or other obstructions. All soils excavated were screened through 0.25-inch hardware cloth. Shovel test profiles were recorded, including stratigraphic depths, Munsell soil color, texture and inclusions, disturbances and artifacts.

In total, 488 test holes were excavated within the APE. None of the completed shovel tests yielded significant cultural material, nor are they indicative of an archaeological site. In the southern extent of the Project APE two upright stones were identified which are consistent with other stone property markers identified in the Town of Southeast. These stones do not exhibit any markings or carvings and there are no buried features associated with these markers. No significant built features were identified in the Project APE.

Based on the results of the survey, and the sparse recovery of cultural material within the boundaries of the Project APE, the proposed is not considered to have an adverse effect on archaeologically significant sites.

Conclusions

Based on the results of the completed Phase 1B survey, no archaeological sites or historic structures are located within the area of proposed site disturbance (the APE). Therefore, the proposed development of the Brewster Yards project will not affect any potentially significant cultural resources. In the opinion of HVCRC, no additional cultural resources investigations are warranted for the proposed Project. In its letter dated February 7, 2022, the New York State Office of Parks, Recreation and Historic Preservation concurred with this recommendation. (See Appendix B.)

6.3 Future Without the Proposed Project

As no historical or archaeological resources have been identified at the project site, no change in circumstances would be expected relative to such resources with or without the proposed project.

6.4 Proposed Mitigation Measures

As no impacts to historical or archaeological resources have been identified, no mitigation measures are proposed.

7.0 NATURAL RESOURCES

The Applicant is proposing a commercial baseball-centered recreation facility, Brewster Yards, on land totaling approximately 82 acres located on Pugsley Road and Fields Corner Road in the Town of Southeast, Putnam County, New York. This section provides a biological habitat assessment and overall description of the natural conditions found on the project site's 82 acres and assesses probable impacts to the terrestrial, avian, and aquatic wildlife habitats described and to the regional wildlife that could utilize the site as residents or transients.

Existing Conditions

7.1 Vegetation and Habitats

Seasonal field reconnaissance of existing project site conditions was conducted by Ecological Analysis (EA) staff biologists on November 26 and November 27, 2019; June 2, 2020; March 30 and September 21, 2021. Site visits were conducted to identify wildlife habitat, survey for individuals of wildlife species or indications of their presence, and record vegetation observed. A list of the 137 taxa of plant life observed on the property is included in Appendix F.

The project site features three habitat/ecosystem regional variants[1]:

1. Uplands – Oak-hickory hardwood forest.
2. Wetlands – Palustrine red maple hardwood forest.
3. Stream corridors – Rocky headwater streams, watercourses.

Figure 7-1, located at the end of this section, illustrates the location and extent of the two existing onsite upland and wetland vegetation communities/habitats in relation to the other natural resources (wetlands, watercourses, and steep slopes) as well as the constrained lands within the outline of the proposed project improvements. Photographs of these specific habitat areas, and a figure indicating the location of each photograph, are presented in Appendix F. The mapped natural resources that extend to the property boundary continue beyond to unmapped areas across the site's boundary lines.

Intermittent (i.e., seasonal) streams were observed on the project site, originating at Wetland B and at the pond within Wetland D. These streams flow through rocky corridors into an offsite basin of New York State Department of Environmental Conservation (NYSDEC) Wetland LC-28 before traversing underneath New York State (NYS) Route 312 through a culvert, to form a tributary to the Middle Branch of the Croton River.

The property is fully undeveloped and covered by mixed hardwood forest at present. However, the presence of extensive lengths of pastoral period stone walls throughout the project site reflects the site's historic agricultural usage. The current forest cover of the project site includes the following areas: forested wetlands, young hardwood upland forests, and mature upland woodlands.

[1] Adapted from: Edinger, G. J., D. J. Evans, S. Gebauer, T. G. Howard, D. M. Hunt, and A. M. Olivero (editors). 2014. Ecological Communities of New York State. Second Edition. A revised and expanded edition of Carol Reschke's Ecological Communities of New York State. New York Natural Heritage Program, New York State Department of Environmental Conservation, Albany, NY.

The mature upland woodlands were identified in the southeastern portion of the site between the two basins of NYSDEC Wetland LC-28. Younger aged upland forested areas of the project site are dominated by species of oak trees in diversely wooded tracts of second growth woods that also include black cherry, sweet birch, white ash, American beech, and hickory.

Wetland forested areas appeared undisturbed by any prior land-clearing activity and present a closed tree canopy dominated by red maple, American elm, and green ash. During inspections, it was noted that many of the ash trees around the wetlands and in upland areas had larval exit holes of the emerald ash borer beetle (*Agrilus planipennis*), which is an invasive and rapidly lethal wood-boring insect spreading throughout ash tree populations of Northeastern states.

The northwestern portion of the site, dominated by sweet birch and younger aged specimens of other common sitewide trees, was observed as a re-forested area that was primarily open field or pasturage as recently as 30 years past. The understory in this portion of the site has developed into a thicket of mostly exotic, and invasive, shrubs and forbs. The most prevalent exotic and invasive shrubs observed on the project site included: multiflora rose, autumn olive, bush honeysuckle, and privet. Less commonly observed were mature, flowering, or fruiting specimens of winged euonymus. Some of the more commonly noted of the exotic, invasive forbs included: narrowleaf bittercress, Asiatic tearthumb (mile-a-minute vine), Oriental lady's thumb, garlic mustard, and Nepalese browntop (Japanese stilt grass).

The bedrock knoll within the Ridgeline Protection Area (RPA) in the northeastern portion of the site is dominated by mature chestnut oak, American beech, pignut, and shagbark hickories over a sparse understory of their saplings, lowbush blueberry, and various Rubus spp. Mature shagbark hickories were present, but uncommonly observed. Rock polypody fern covers portions of the exposed bedrock in the RPA, and marginal woodfern are present within areas of rock talus at the base of bedrock exposures.

Many species of oaks and hickories, as well as beech and birch trees, are highly productive of high value food sources, in the form of mast forage, seeds, and various forms of insect life, including phytophagous, wood-boring, and inquiline species. These provide a wide diversity of food sources for both large and small species of wildlife and birds. The higher elevation portions of the property, that sustain forests dominated by these species, present high value wildlife habitat. In contrast, many of the invasive species of undergrowth that are dominant in the western and central portions of the site, have low to moderate value as wildlife habitat or food sources.

EA staff requested a jurisdictional determination of the possible effects to plant and animal species from NYSDEC, Region 3. Correspondence from NYSDEC noted no species are known to occur on or near the project site according to its records from the New York Natural Heritage Program's (NHP) database. Refer to Appendix B, Correspondence, for the NYSDEC letter dated September 1, 2021.

A query of the NYSDEC Environmental Resource Mapper (ERM) website did not identify any listed plant species or NYS "Species of Special Concern" on or near the property.[2]

[2] Sources: NYSDEC website: https://gisservices.dec.ny.gov/gis/erm/; Species of Concern: as defined in Section 182.2(i) of 6NYCRR Part 182, "Species of Special Concern" are any native species for which a welfare concern or risk of endangerment has been documented in NYS. The NYSDEC considers that while Species of Special Concern warrant "attention and consideration," information is insufficient to justify listing them with the protected status of either Endangered or Threatened.

A query of the NYSDEC EAF Mapper website similarly identified no other plant or animal species listed by the federal government or NYS as an endangered or threatened species, nor was the property noted to include any "Significant Natural Community." [3] The NYSDEC EAF Mapper inquiry additionally noted that the project site was not known to contain any unique geological features, significant natural communities, or rare plants. Refer to Appendix F for the NYSDEC EAF output.

Based on the searches conducted above, there would be no other protected plant species, or any protected native plant, unique or locally rare plant, or significant habitat area known or reasonably expected to exist on or in the immediate vicinity of the project site. Seasonal field reconnaissance of existing project site conditions was conducted by EA biologists on November 26 and 27, 2019; June 2, 2020; March 30 and September 21, 2021. During each of these onsite surveys, the plants observed were all regionally common species.

7.2 Wildlife

Regional mammalian wildlife species expected within the forested habitat existing across the project site are listed in Appendix F. Portions of the forest that have sparse undergrowth offer habitat for larger mammalian species, such as white tail deer and eastern coyote. The more disturbed portions of the site, where a dense undergrowth is present, would provide shelter and foraging for resident and migratory songbirds, smaller mammalian species, reptiles, and amphibians.

Bird species noted to be present within the vicinity of the site are documented in the records of the NYSDEC Breeding Bird Atlas (BBA).[4] This atlas was referenced to generate a list of birds observed by others during the two 5-year survey periods of 1980-1985 and 2000-2005. The surveys were conducted in nine-square mile "blocks." The project site is located within the eastern portion of "Atlas Block 6058B". Refer to Appendix F for the NYSDEC BBA. Throughout the 10 years of breeding bird observations within this Atlas Block, a total of 94 species of birds were recorded.

Of the 94 species of birds recorded from 1980-2005, none are species that are afforded either NYS or federal protection as endangered or threatened species. Two species, listed by NYS as Species of Special Concern, are the whip-poor-will (*Caprimulgus vociferus*) observed in 1981 but not later, and Cooper's hawk (*Accipiter cooperii*) noted on one date in 2004.

Of the remaining 92 bird species on this BBA generated list, nine are game species (wood duck, mallard, black duck, ruffed grouse, Canada goose, American crow, wild turkey, ring-necked pheasant, and American woodcock), and three are unprotected, exotic species (rock pigeon, house sparrow, and European starling). All other 80 species of birds on this list are afforded protection status as songbirds.

The several sections of streams have populations of northern two-lined salamanders, and larval populations of caddis flies, mayflies, and stoneflies. Around the watercourses, streams, and the three small ponds on site, spring peepers, wood frogs, green frogs, bullfrogs, red-spotted newts, and eastern red-backed salamanders were noted. Each of the three ponds was observed to have populations of bullfrog tadpoles, indicating that these ponds are likely to be year-round

[3] NYSDEC website: https://gisservices.dec.ny.gov/eafmapper/
[4] New York State Breeding Bird Atlas. Accessed December 9, 2021. http://www.dec.ny.gov/animals/7312.html

waterbodies and not to be functioning as vernal pools. The ponds were observed to be flooded during each of EA's visits to the site.

EA staff requested a jurisdictional determination of the possible effects to plant and animal species from NYSDEC, Region 3. Correspondence from NYSDEC noted one state- and federally listed species, the threatened northern long-eared bat, which might occur on or near the project site according to its records from the NHP database. Refer to Appendix B, Correspondence, for the NYSDEC letter dated September 1, 2021.

The query of the ERM website did not identify any other NYS "Species of Special Concern," or any unlisted wildlife species on or near the property.

A query of the NYSDEC EAF Mapper website similarly identified no other animal species listed by the federal government or NYS as an endangered or threatened species. Refer to Appendix F for the NYSDEC EAF output.

Based on the searches conducted above, there would be no other protected animal species, unique or locally rare animal known or reasonably expected to exist on or in the immediate vicinity of the project site. Seasonal field reconnaissance of existing project site conditions was conducted by EA staff biologists on November 26 and 27, 2019; June 2, 2020; March 30 and September 21, 2021. During each of these onsite surveys, the wildlife observed were all regionally common species.

While the northern long-eared bat is federally protected, the United States Fish and Wildlife Service (USFWS) has designated no areas of critical habitat anywhere within the distribution range of this species for preventing the "taking" of this bat. However, there are known to be populations of this species with winter roosts (hibernacula) in both Putnam County and adjacent counties. The nearest known winter hibernaculum for northern long-eared bats is located approximately four miles southwest of the project site.[5] The project site presents potential summer roosting, brooding, and foraging habitat for all regional species of bats.

7.3 Future Without the Project

Unless otherwise developed, the entirety of the two existing parcels which include the project site and land proposed to remain Town owned, comprising 153.8± acres in total, would remain in their wooded condition, and the streams, watercourses, and wetlands would remain undisturbed by proposed project improvements. A Future without the Project, however, would result in an increase throughout the site of many of the observed invasive plant species.

7.4 Potential Impacts

The proposed action would result in a reduction of habitat available on site for wildlife species that may inhabit or utilize the site, however, there are no NYS Species of Special Concern or otherwise protected animal species other than the northern long-eared bat which is listed as threatened. Loss of habitat may result in a population reduction of wildlife species by the alteration of behavior such as nesting, breeding, foraging, or over-wintering activities.

Of the entire 153.8± acres of the two parcels, 82.2± acres would be subdivided and acquired from the Town for the proposed project. The balance of the land (71.6± acres -- 26.8 acres of parcel

[5] https://fws.gov/media/nleb-winter-hibernacula-locations

10 and 44.8 acres of parcel 11) would remain as Town owned open space lands in their natural state. These open space lands would include the areas of the two basins of NYSDEC Wetland LC-28, the upland rises between these two basins, and the RPA located in the northeastern portion of the site.

The project plans depict additional land, approximately 33 acres, to remain in their forested state within the project boundaries. The Project would directly disturb approximately 49 acres of trees from upland areas, by conversion to sports fields, ancillary facilities, connecting open landscaped grounds, roads, and parking areas. This number includes the removal of 4.6 acres of upland woodlands that are within Town of Southeast Wetland Buffer/Controlled Area. Trees at the perimeter of the site would remain undisturbed, especially in protected buffer areas surrounding wetlands and watercourses.

As regionally supported by the USFWS, all felling of trees would be conducted from November 1 through March 31. Avoiding the felling of trees from April through October serves to protect bats during the months when they are not in their winter hibernacula in caves and might be roosting in trees. This period of closure to all site logging activity also protects any northern long-eared bat, and other bat species, that may be seasonally present during the summer pupping season (June 1 to July 31), if any potential maternal roosting trees are in fact ever in use in the site's woods.

Best practices will be used during the harvesting of trees from the property in order to cause minimal disturbance of the soil in areas to be cleared and to provide protections for adjacent trees that are to be preserved as features within the landscaping of the final site design. Standard practices would include the harvesting of useful timber and the on-site chipping of unsaleable trees and limb trimmings for reuse as erosion control mulch in the project both during and after construction. Protection of all remaining standing trees will be accomplished according to standard guidelines of the NYSDEC. These steps will include construction perimeter fence protection, marking of individual trees that are designated to be preserved, the erection of temporary barrier fencing along the root protection zone of these trees to avoid construction impacts, and the creation of permanent tree wells around these trees that are in areas where the grade needs to be altered.

All healthy trees shall be preserved wherever feasible as required by §123-34 of the Town Code. Hazardous or diseased trees shall be removed and all diseased and dead limbs pruned within 150 feet of all proposed buildings. Large healthy trees to remain that are located at the perimeter of the limit of disturbance shall be clearly marked for preservation in the field, and on a tree and forest preservation plan, as well as on relevant site construction drawings in the site development plan set. Such trees and their root systems shall be protected prior to construction by wood framing or construction fence installed around each tree so identified to be protected during construction and a continuous perimeter fence shall be erected at the edge of disturbance to be maintained throughout the course of the construction process. Bulk material, equipment, or vehicles shall not be stockpiled or parked with 10 feet of the trunk of any tree, nor within the drip line of any tree individually identified on the tree preservation plan. If any protected tree is inadvertently damaged, it shall be repaired under the direction of a certified arborist.

An Erosion and Sediment Control Plan will be developed designating the location of all temporary soil stockpiles, locating them outside of the critical root zone of all trees to be preserved. The final Erosion and Sediment Control Plan will be developed during the detailed site plan review process.

7.5 Mitigation Measures

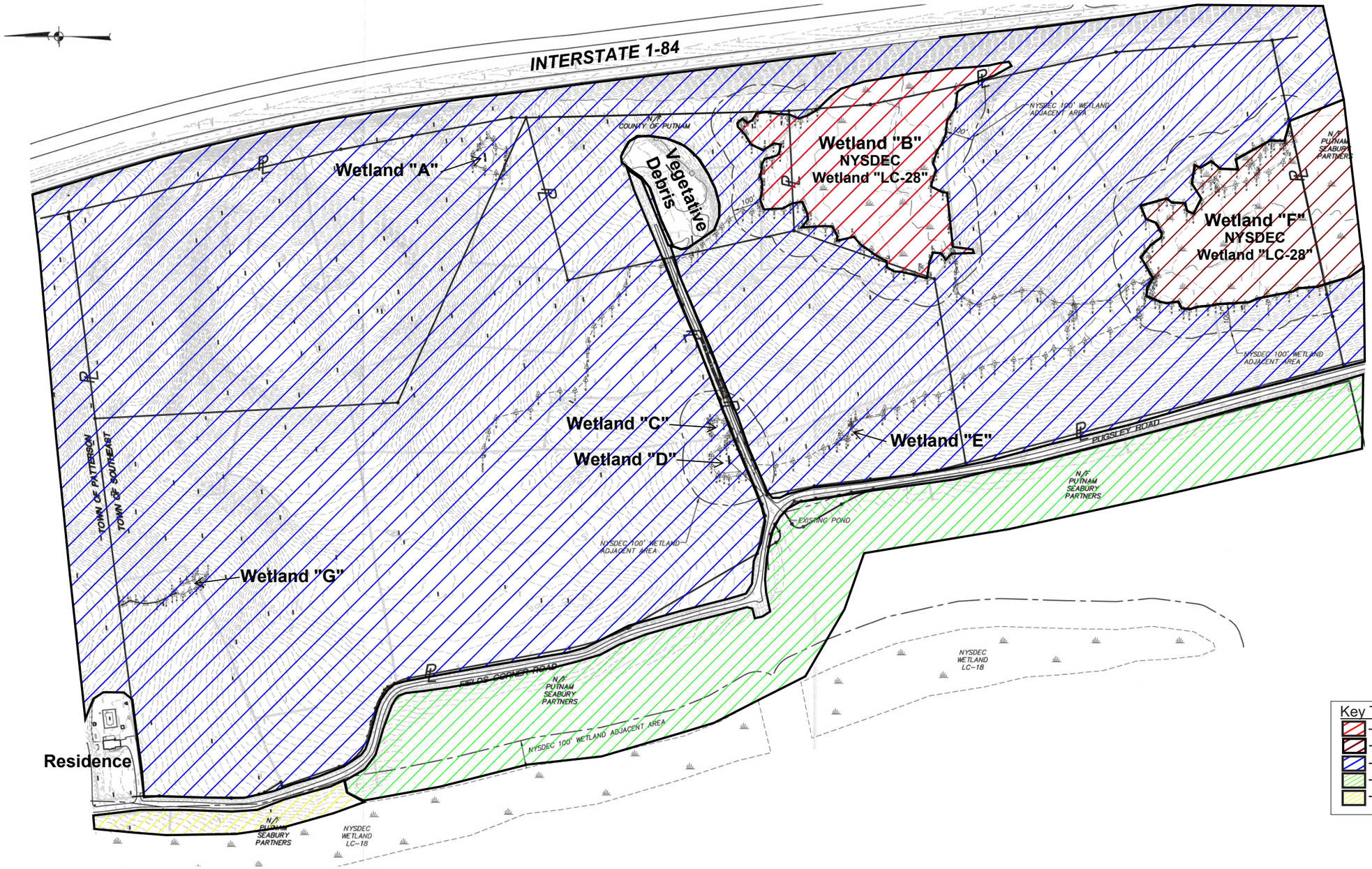
The avoidance of direct, adverse activities is the primary process by which planners mitigate potential environmental impacts. For this project, the preservation of nearly half (71.7± acres) of the existing parcels as Town parkland, in combination with approximately 33 acres of the project site that would remain undisturbed by project improvements, would leave 105± acres (approximately 68%) of the site in its existing undeveloped condition. All ridgeline trees within the RPA would remain, as would the trees in the steep sloped areas surrounding this RPA.

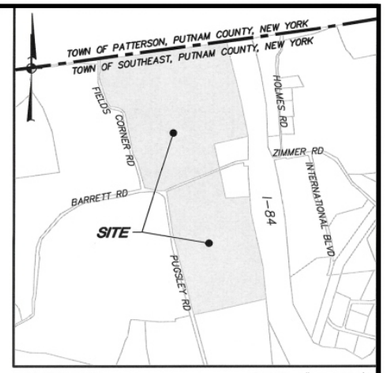
To protect the on-site wetlands, small ponds, and the streams and watercourses that cross the property, these hydrologic features were excluded from direct impact of construction activities. Indirect impacts from construction activities in these hydrologic features would be mitigated by the application of Best Management Practices (BMPs) for erosion and sedimentation control during the construction phases of the project, and by implementation of a post-construction stormwater management plan that includes detention and infiltration systems.

As suggested by the NYSDEC NHP, to avoid any potential direct impacts to bats that may be present on site during the summer roosting season, tree removal would not occur during this period, from April through October of any year.

A landscape plan will be developed to provide a transitional landscape from the edge of the proposed project into the bordering areas of mature forest. The proposed landscaping will create a gradual transition from areas of brushy, short field habitat into the neighboring areas of tall forest trees. The landscaping plan for this project would prioritize use of appropriate plants selected from the list of native tree, shrub, and perennials that has been developed by the Town Planning Board.[6] Some of these plantings of native vegetation would provide shelter and food sources for some of the mammalian and avian wildlife species present on site. The final landscape plans will be developed during the detailed site plan review process. In our professional opinion, no further mitigation measures are warranted.

[6] "Native Tree, Shrub and Perennial Recommendations", Planning Board / Architectural Review Board 2020. *http://www.townofsoutheast-ny.com/DocumentCenter/View/4126/NATIVE-PLANT-LIST-2020*





LOCATION MAP SCALE: 1" = 1,000'±

OWNER:

TOWN OF SOUTHEAST
1360 ROUTE 22
BREWSTER, NY 10509

APPLICANT:

PROSWING SPORTS REALTY, INC.
14 AUTUMN RIDGE ROAD
SOUTH SALEM, NY 10580

SITE DATA:

Zone: RC
Total Acreage 93.0 AC (45.-1-10)
60.5 AC (45.-1-11)
Tax Map No.: 45.-1-10
45.-1-11

GENERAL NOTES:

1. Property lines shown taken from map entitled "Map of Alienation Parcels Prepared for Prosswing..." dated March 6, 2020 prepared by Insite Engineering, Surveying, and Landscape Architecture P.C
2. Existing topography and site features shown hereon derived from Aerial Photogrammetry, created from a drawing entitled "Pugsley Road", by Geomaps International photo dated November 30, 2019 and obtained January 13, 2020. Elevations show hereon are in vertical datum NAVD 88. The contour interval is 2'.
3. Wetlands shown hereon were flagged by Ecological Analysis on November 27, 2019 and field located by Insite Engineering, Surveying, and Landscape Architecture P.C. on December 18, 2019.
4. Wetland flag "WL F72-A" was modified in the field by Sarah Powliczak of the NYSDEC on July 9, 2020. This drawing reflects the modified location of the wetland flag.

LEGEND

- EXISTING PROPERTY LINE
- 100' YARD SETBACK
- EXISTING APPROXIMATE EDGE OF ROAD
- 710 EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING WATERCOURSE
- EXISTING WETLAND SYMBOL
- EXISTING WETLAND LIMIT LINE
- NYSDEC 100' WETLAND ADJACENT AREA

Key To Significant Habitat Types

- Palustrine Forested Wetland
- Palustrine Scrub-Shrub / Forested Wetland
- Oak-Hickory Upland Forest
- Successional Old Field/Shrubland
- Woodland Transitional

GRAPHIC SCALE
0 75 150 300
(IN FEET)

NYSDEC FRESHWATER WETLAND BOUNDARY VALIDATION

The freshwater wetland boundary as represented on these plans accurately depicts the limits of Freshwater Wetland LC-28 as delineated by Ecological Analysis on November 27, 2019.

DEC Staff: [signature] 07/29/2020 Surveyor/Engineer: [signature]

Date Valid: 07/29/2025 Expiration Date: 07/29/2025 SEAL

JOHN M. WATSON NEW YORK LICENSED PROFESSIONAL ENGINEER No. 77301

Wetland boundary delineations as validated by the New York State Department of Environmental Conservation remain valid for five (5) years unless existing exempt activities, area hydrology, or land use practices change (e.g., agricultural to residential). After five (5) years the boundary must be revalidated by DEC staff. Revalidation may include a new delineation and survey of the wetland boundary.

Any proposed construction, grading, filling, excavating, clearing or other regulated activity in the freshwater wetland or within 100 feet of the wetland boundary as depicted on this plan requires a permit from the NYS Department of Environmental Conservation under Article 24 of the Environmental Conservation Law (Freshwater Wetlands Act) prior to commencement of work.

Figure 7-1: Habitat Map
BREWSTER YARDS DEIS
160 & 132 Pugsley Road, (T) Southeast, Putnam County, NY

Ecological Analysis

Base Map: Wetland Validation Map by Insite Engineering, Surveying & Landscape Architecture, PC 8-20-21

Scale: Graphic **Date:** 3/29/22

8.0 GEOLOGY

8.1 Introduction

The Applicant is proposing a commercial baseball-centered recreation facility, Brewster Yards, on approximately 82 acres of land located on Pugsley Road and Fields Corner Road in the Town of Southeast, Putnam County, New York. The project site consists of two land parcels totaling 153± acres.

A portion of this land, 72± acres, would be retained by the Town for parkland use, and the remainder, 82± acres, would be transferred to private ownership for the purpose of developing the proposed project. Of this 82± acres, the proposed improvements would disturb approximately 49 acres of land, primarily within upland portions of the site. The areas to be disturbed would include 4.6 acres of uplands that are within Town wetland buffer areas and would re-grade other upland portions of the property where slopes exceed 15 percent.

8.2 Existing Conditions

The project site is located within the eastern end of the Reading Prong of the New England Upland physiographic province of the greater Appalachian Range.[1] The Reading Prong extends for approximately 150 miles from Reading, Pennsylvania, through northern New Jersey and southeastern New York, and into the westernmost portions of Connecticut and Massachusetts. In southeastern New York, the Reading Prong is present as the Hudson Highlands, a region formed of Precambrian igneous and metamorphic bedrock. Bedrock composition in the region of the project site is described as biotite-quartz-gneiss or amphibolite-gneiss overlain by locally derived glacial tills.[2] The soils that have developed in these areas of glacial till are primarily sandy loams, but range from clayey, silty, or sandy soils to areas dominated by inclusions of cobbles and boulders. The site is characterized by a stable overburden of sandy-silty soils above shallow to deep bedrock.

Land cover at the site consists of a naturally vegetated oak-hickory hardwood forest developed on sandy, loamy soils of glacial till containing various proportions of cobbles and boulders. The soil overburden overlays a foundation of shallow to deep bedrock. A New York State Department of Environmental Conservation (NYSDEC) Wetland, LC-28, is located on the southern portion of the site, in a seasonally flooded area of red maple hardwood forest. The site also contains areas of steep slopes. A single prominent area of exposed bedrock, which is a Town of Southeast protected ridgeline feature, is located within the northern portion of the site.

8.2.1 Soils

Soil mapping of the project area is available from the *Soil Survey* published by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) -- see Figure 8-1. Soil mapping of the two Town-owned parcels, the project site, and the land within the Limit

[1] John James Prucha, David M. Scotford and Robert M. Sneider. 1968. Bedrock geology of parts of Putnam and Westchester Counties, New York, and Fairfield County, Connecticut. Geological Survey, New York State Museum and Science Service.
[2] Fisher, D.W., Y.W. Isachsen, and L.V. Richard. 1970. Geologic Map of New York; Lower Hudson Sheet No. 15. NYS Museum.

of Disturbance (LOD) was researched in the NRCS website.[3] The thirteen mapped soils present within the LOD are described in Table 8-1 and their extent on the site is shown on Drawing No. SS-1 of the Plan Sheet set (DEIS Appendix M). These soil types are formed in dense glacial tills that are derived from the local granite, schist, and gneiss bedrocks and are present on the ridges and slopes of hilly terrain and on the till plains of previously glaciated uplands.

Table 8-1
List of Soils within the LOD

Map Unit Symbol	Soil Name
ChC	Charlton fine sandy loam, 8-15 percent slopes
CrC	Charlton-Chatfield complex, 0-15 percent slopes, very rocky
CsD	Chatfield-Charlton complex, 15-35 percent slopes, very rocky
CtC	Chatfield-Hollis-Rock outcrop complex, 0-15 percent slopes
HrF	Hollis-Rock outcrop complex, 35-60 percent slopes
LcB	Leicester loam, 3-8 percent slopes, stony
PnB	Paxton fine sandy loam, 3-8 percent slopes
PnC	Paxton fine sandy loam, 8-15 percent slopes
RdB	Ridgebury complex, 3-8 percent slopes
RgB	Ridgebury complex, 0-8 percent slopes, very stony
Sh	Sun loam
WdB	Woodbridge loam, 3-8 percent slopes
WdC	Woodbridge loam, 8-15 percent slopes

Adapted from: USDA. 1994. Soil Survey of Putnam and Westchester Counties, New York.

The soils that predominate across the LOD are CrC and PnC. These are well drained, coarse-loamy upland soils which include a soil (PnC) identified as a farmland soil of statewide importance. The geotechnical investigation conducted in 2021 for purposes of evaluating soils and subsurface conditions across the LOD by Skylands Engineering, LLC (Skylands) found a distribution of soils that is broadly in agreement with the mapped USDA soils presented in Table 8-1 and with their approximate locations on site, as shown on Drawing No. SS-1 of the Plan Set. Refer to Appendix H for the Geotechnical Report prepared by Skylands, dated July 2021.

Generally, the CrC and PnC soils at this site are “well drained”, meaning groundwater is typically at least 18 inches (PnC) to over 80 inches (CrC) below the surface. On-site borings by Skylands confirmed that groundwater is well below the surface. While portions of this site are notably quite rocky, and surficial bedrock is encountered in certain places, bedrock is typically over 65 inches below the surface.

For all the soils within the LOD, the Soil Survey presents general restrictive features associated with each soil that, unless mitigated, would affect any planning of the specific site developments. These restrictive features are summarized in Appendix G, Soil Limitations. Any anticipated limitations to disturbances or usages of these soils, as presented in the generalized descriptions

[3] Soil Survey, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. http://websoilsurvey.sc.egov.usda.gov/. Accessed [March 2, 2021].

of Soil Limitations table, do not preclude the use of actual onsite investigations during construction operations to either identify any less restrictive limitations that may be present on this site, or to identify engineered solutions to the limitations that might be found at specific locations.

8.2.2 Topography

An existing topographic survey map of the project site, in two-foot contours, is shown on Drawing No. EX-1 of the accompanying Plan Set (DEIS Appendix M). Drawing No. SS-1 of the Plan Set identifies those areas of the property with steep slopes (i.e., slopes with a grade equal to or greater than 25 percent). Existing slopes of ≥25 percent are present on 15.7 acres, or 10.2 percent of the two-parcel site, but comprise a small area within the Limit of Disturbance (LOD) as shown in Table 8-2, below. Drawing No. OPG-1 of the Plan Set shows the clearing and grading limit lines, designated as "LOD".

Field observations noted by Skylands during geotechnical investigations indicated no evidence of slope instability within the perimeter of the LOD, which is consistent with the high relative density and silt content of the soils and the lack of high groundwater also noted during the subsurface investigations.[4]

Table 8-2
Slopes Analysis

Slope	Two Parcel Site		Project LOD	
	Acres	Percent	Acres	Percent
0-15 %	106.3	69.3%	41.9	86.4%
15-25 %	31.5	20.5%	5.5	11.3%
≥ 25 %	15.7	10.2%	1.1	2.3%
TOTALS:	153.5	100.0%	48.5	100.0%

Source: Insite Engineering, Drawing SS-1, 1/28/22.

Elevations across the site range from high spots of approximately 810 feet above mean sea level (MSL) at the bedrock knoll in the northeast portion of the site, to low spots of approximately 550 feet above MSL at locations across the NYSDEC wetland that is in the southern portion of the site. This topography allows the surface stormwater drainage from the site to generally flow from north to south, from the protected ridgeline area to the NYSDEC wetland. Smaller portions of the site are in drainages that cross the northern and northwestern boundaries of Lot 45.-10.1.

The highest elevations on the site correspond with a small, isolated, Ridgeline Protection Area (RPA) that is depicted as Ridgeline Overlay District on the Town's Zoning Map. [5]

8.2.3 Bedrock

The prominent areas of bedrock exposures occur within the single RPA locus mapped on the site. The depth to bedrock varies from zero to over 17 feet below the surface. Two series of subsurface

[4] Skylands Engineering, LLC. 2021. Geotechnical Report – ProSwing Sports Training Facility. 5 pp. + appendices.
[5] http://southeast-ny.gov/DocumentCenter/View/140/Zoning-Map-PDF

investigations were conducted on the project site and found underlying bedrock, or suspected bedrock, at depths of up to 17 feet. Skylands' Geotechnical Report includes a table listing the findings of the investigative soil borings, including "depth to auger refusal" which indicates the likely presence of bedrock. A location map of the boring locations overlaid on the project layout and tabulation of the results from the field investigation are provided in DEIS Appendix J, sub-appendix. Shallow (less than one foot depth) or surface bedrock was found in four locations where improvements are proposed within the LOD.

A series of 33 Deep Soil Test borings was dug by Insite Engineering in May of 2020 within the limits of the LOD. The borings were excavated to a depth of approximately 80 inches to 90 inches below grade, unless either auger (rock) refusal occurred, or the water table was met at a shallower depth. Of the 33 borings advanced, ten (10) were met with auger refusal, at depths ranging from 12 inches to 89 inches below grade.[6] Nine (9) of the ten (10) borings that met with auger refusal were either within or near Town wetland buffers of either Wetlands C and D, or of NYSDEC Wetland LC-28. The sole remaining test boring met with refusal was located within the area of the proposed baseball fields in the northwest portion of the site. The boring auger met refusal at 76 inches below grade at this location.

A series of 43 additional subsurface borings was advanced in June 2021.[7] This series was located within the LOD area of the two parcels, with a focus on those areas of the site to be developed with buildings, roads, stormwater management basins, and sports fields. Depth to bedrock, or to suspected bedrock, was found to be up to 17 feet below grade at most boring loci, although there were areas of surface bedrock exposures near some of the designated sampling sites, resulting in auger refusal at depths as shallow as 6 inches below grade.

8.3 Future Without the Project

Absent the approval of this project, the entirety of the 153± acres of land would remain in their wooded condition, and the streams, watercourses and wetlands would remain undisturbed by any project improvements affecting the soils and the topography of the site. The Town would retain ownership of the land.

8.4 Potential Impacts of the Proposed Project

8.4.1 Impact to Soils

The site's soils are likely to be moisture sensitive due to their high silt content. Exposed and disturbed soils can result in elevated moisture content, increased water infiltration, and softening of the subgrade, leading to increased potential for soil erosion during and post-construction. Soil Limitations, located in Appendix G, depicts the degree and kind of soil limitations related to these soils in relation to general building site developments. The three classifications of soil limitations that USDA soil surveys utilize -- slight, moderate, severe, presented in the Soil Limitations Table in Appendix G -- refer to the susceptibility of each soil type to those limitations under conditions where no corrective or preventative measures is feasible. Corrective and preventative measures such as special planning and site design measures can directly address particular soil conditions that may be encountered during construction operations -- for example installation of subsurface

[6] Boring result location: 12 inches below grade - north of Barrett Road; 89 inches below grade - located in the Town's wetland buffer applied to the pond at Wetland D.
[7] Skylands Engineering, LLC. 2021. Geotechnical Report – ProSwing Sports Training Facility. 5 pp. + appendices.

drainage where groundwater is encountered. Post-construction site management practices can be applied to overcome some limitations, such as allowing planted vegetation to colonize steeper graded slopes rather than conventional mowing.

Soils within the LOD are grouped within three of the four USDA designated Hydrologic Soil Groups (HSGs): A, B, C, or D. Refer to Soil Limitations in Appendix G. Based on features of permeability, depth to water table, depth to impermeable soil horizons, and vegetative cover, each HSG includes groupings of those soils that have similar patterns of potential for both surface runoff and subsurface infiltration of stormwaters.

The soils underlying the LOD are CrC and PnC, which are designated as HSG – B and HSG – C, respectively. Group B soils have a moderate infiltration rate and moderately low runoff potential when thoroughly wet. Group C soils have a slow infiltration rate and moderately high runoff potential when thoroughly wet. The other minor soils present within the LOD are rated as HSG – D or are assigned to paired hydrologic soil groupings.[8] Soils in these groups have high runoff potential when thoroughly wet. No Group A soils are present within the LOD or underlying the two parcels of the site, soils in this group have the highest infiltration rates and lowest runoff potential under all conditions of water saturation. The grouping of soils within the LOD include a good portion of USDA HSG – B soils which would be expected to be conducive to stormwater infiltration.

The total area of proposed disturbance on the site will be approximately 49 acres. A preliminary earthwork analysis of the project plans indicates that the cut and fill for the proposed development would be balanced, with total earthwork on the order of 210,000 cubic yards. There would be no requirement to either truck excess cut from the site or to bring in any fill material to the site. (Import of other construction materials, such as granular base material for pavements and synthetic turf fields, will be required.) Based on the geotechnical studies conducted, it is expected that little to none of the soils to be excavated would be suitable for reuse on the site in any area where structural fill for buildings is needed. Onsite soils would be appropriate to utilize as non-structural fill in other areas within the LOD where earthwork is to be conducted. Bedrock removal is not proposed, therefore, conventional earth moving equipment could be appropriately utilized to conduct grading and earthwork activities of the proposed development.

A stormwater collection and conveyance system would be installed to accommodate the proposed construction. This system would capture and convey stormwater runoff to several stormwater management catch basins for final treatment prior to infiltration into the subsoils, or to discharge from the basin flow control structures. This system would be designed to meet the requirements of applicable local, New York City Department of Environmental Protection (NYCDEP), and NYSDEC ordinances and guidelines. These regulatory controls include:

- Town of Southeast Town Code, Chapter 119 – Stormwater Management and Erosion and Sediment Control.
- NYCDEP Rules and Regulations for the Protection from Contamination, Degradation, and Pollution of the New York City Water Supply and its Sources (Section 18-39 of the Watershed Regulations).
- NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities, General Permit GP-0-20-001.

[8] When assigned a paired rating (e.g., A/D), a soil has the initial rating when the soil is fully drained, but the second rating when the soil is saturated.

Areas with Charlton-Chatfield (CrC and CsD) soils are most conducive to the siting of infiltration basins, while areas of Paxton soils (PnB and PnC) would require specific feasibility analysis to reduce post-development runoff volumes from the basins proposed in these areas.

8.4.2 Impact to Topography

The highest elevations of the site, which are in the portion that includes the RPA and are within the existing bounds of Lot 45.-1-10, would remain unaltered by the proposed development. The majority of this RPA would be subdivided off as Lot 10.2 and would be retained by the Town of Southeast as permanent open space and a small portion of this RPA would remain within the protection of the 100-foot rear yard setbacks on Lot 45.-1-10.1. Similarly, the lowest elevations on the site, including the two broad, low-lying basins of Lot 45.-1-10 and Lot 45.-1-11 composing NYSDEC Wetland LC-28, would remain unaltered by the proposed development. Therefore, the broad topographical profile of the two lots would not be significantly altered.

The proposed project is designed to avoid most areas of steep slopes that are present on the parcels, thereby avoiding significant adverse modification of the site topography within the LOD. However, within those areas of steep slopes that would be impacted in order to complete the final approved design of the project, the design changes to the topography of the site would adhere to all applicable provisions of the Town Code. Conventional methods of temporary erosion and sediment control which would be utilized during the construction process are presented in Section 15.3. A slope disturbance analysis for the area within the Project LOD was presented in Table 8-2. Depending on the angle of the slope to be protected, and the physical characteristics of the soils to be stabilized, measures that are typically used to prevent slope failure include, but are not limited to, the following:

- retaining walls;
- cribbing stacks;
- gabions;
- rip-rapping;
- emplacement of driven piles along slopes;
- anchored wire netting;
- terraces;
- installation of drainage features, including placing weep holes in retaining walls and/or redirecting drainage through the placement of French drains.

Engineering drawings showing the proposed alteration of topography by grading are included in DEIS Appendix M. The Overall Grading Plan (OPG-1) shows the full site on one sheet with the LOD outlined for clarity.

8.4.3 Impact to Bedrock

All the prominent areas of bedrock exposures, which occur primarily within the single RPA locus mapped on the site, are excluded from the LOD, and would remain unaltered by the development of Brewster Yards. Areas of the site that are found to have bedrock within the depth of proposed improvements will require rock removal. Four particular locations of such shallow rock identified in the Skylands investigation are: Boring BP-1 (at multipurpose field) where approximately nine feet of cut is proposed; Boring BP-6 (at baseball clover) where approximately nine feet of cut is

proposed; Boring BP-8 (at Little League clover) where approximately 12 feet of cut is proposed; and Boring BP-12 (at baseball showcase field) where approximately 15 feet of cut is proposed.

Rock removal would be accomplished either by mechanical equipment or by blasting, depending on the type of rock encountered and extent of removal required. If it is necessary, blasting activity would be done according to all applicable federal, state, and local regulations, including compliance with Chapter 71 – Explosives and Blasting of the Town Code of Southeast.

8.5 Mitigation Measures

The proposed project has been designed to incorporate the best alternatives evaluated for achieving the layout of structural features and the location of access roads while avoiding to the extent practicable the potential for adverse construction impacts to site wetlands, streams, watercourses and to any secondary impacts to the Middle Branch Reservoir drainage basin of New York City's water supply.

The provisions of the Stormwater Pollution Prevention Plan (SWPPP) to be adopted for the proposed project would provide for the avoidance of any significant adverse impacts to the soils and surface waters on the site. Refer to Appendix E for the Preliminary Stormwater Pollution Prevention Plan. Soil testing performed for the SWPPP infiltration basins was witnessed by personnel from the NYCDEP, including percolation testing, infiltration testing, and deep test pits. As previously identified, those areas of the LOD with Charlton-Chatfield (CrC and CsD) soils are most conducive to the application of infiltration basins, while those areas with Paxton soils (PnB and PnC) would require design considerations to accommodate infiltration needs in basins proposed in these areas. As previously noted, potential development limitations of the natural soils identified in the USDA Soil Survey or that might be found at specific locations would need to be addressed by appropriate engineered solutions.

Actions imposed on the project site by the SWPPP would mitigate impacts related to soil erosion and sedimentation of onsite and downstream waterbodies and watercourses. Temporary control measures taken throughout construction would include swales to divert clean water from construction areas, silt fencing to contain sediments within the LOD, sediment traps to allow for onsite treatment of silted waters, and re-seeding or mulching to stabilize areas of disturbed soils, including soil stockpiles. The temporary sediment and erosion controls utilized would also include stabilized construction entrances and storm drain inlet protection to control the unregulated movement of soil from the site.

The grading operations for the proposed project would be phased to limit the extent of exposed soils present on site at one time, in conformance with General Permit GP-0-20-001. Due to the size of some project elements --- for example the baseball clover covers about 10 acres that would need to be built in one continuous operation -- it is possible that a waiver may be requested to allow defined areas of disturbance to exceed five (5) acres at one time, provided there are provisions made for erosion and sediment control to mitigate the larger work area in accordance with such waiver.

Portions of the site where Paxton soils are to be disturbed would require that the sediment and erosion control features address the greater proportion of fine particulates present in these soils, for example, through implementation of redundant silt fencing. Earthwork should be conducted outside of periods of rain and snowmelt to reduce the potential for soil loss from the site. When feasible, exposed soils would be graded and compacted following their disturbance to reduce

their moisture content and increase their stability. If compressible, organic soils are encountered, they should be relocated and replaced with structural fill.

Soil restoration is required under the General Permit to be applied across areas of the developed site where soils had been disturbed and are to be re-vegetated with grass lawn or landscaping. All areas of disturbed or relocated soils within the LOD would be subjected to soil restoration techniques intended to recover the original properties and porosities of the soils. Restoration techniques to be applied include mechanical decompaction and compost amendment, followed by leveling to final grade and the establishment of a permanent deep-rooted groundcover to help maintain the restored soil structure.

Areas of the site where bedrock, boulders, or copious amounts of cobble are removed would be backfilled with compacted structural fill to reduce erosional impacts in these areas. The proposed project is designed to avoid most of the 15.7 acres of steep slopes present on the original two lot parcels. Approximately one (1.1) acre of the existing steep slope area is located within the LOD. All design changes to the topography of the site would adhere to applicable provisions of the Town of Southeast Town Code. Therefore, no significant adverse modification of the site topography would occur.

The SWPPP is designed to replicate pre-development hydrology to the maximum extent practicable, maintaining the existing drainage patterns across the site which presently allows most site surface and subsurface flows to enter NYSDEC Wetland LC-28. All water discharged from the site would remain within the watershed of the Croton Reservoir system.

Map Scale: 1:6,090 if printed on A portrait (8.5" x 11") sheet.

Meters
0 50 100 200 300

Feet
0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84

N

USDA Natural Resources Conservation Service

Figure 8-1
Soils Map
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York
Source: USDA NRCS Web Soil Survey, accessed 3/2/21

9.0 WATER RESOURCES AND WETLANDS

9.1 Introduction

The Project is located within the Middle Branch of the Croton River watershed of the New York City water supply. The Project must therefore be developed and managed in compliance with all state, regional and local requirements that control the amount of stormwater pollutants entering into this protected water supply. Surface water and wetland features within the entire two lot, 153± acres site from which the Project site would be subdivided, include two streams, one seasonally dry watercourse, a NYSDEC wetland, and three small ponds.

Drainage across the site originates in lands that are generally wooded or brushy. Other properties that abut the Project site include similar woodlands, brush lands, fallow fields, highway-adjacent property (federal interstate highway I-84), and single-family homes. Presently, run-off from the site is expected to be typical of that from undeveloped and wooded land, and is not expected to contain any significant concentrations of pesticides or fertilizers, coliform bacteria from animal waste, or any pollutants from septic systems. Runoff from I-84 that would have the potential for carrying some organic and inorganic pollutants flows toward NYSDEC wetland LC-28 south of the project site.

Town and State Regulations

Disturbances conducted within wetland, watercourse, or controlled buffer land are subject to regulations when they include activities regulated by controlling authorities. The Town of Southeast, in Chapter 78 – Freshwater Wetlands of the Town Code, lists regulated activities and permit requirements applicable to work conducted in any controlled area related to wetlands or watercourses. Such provisions are listed in §78-3B, and include the following:

1. Any form of dredging, draining, or excavation and any grading or removal of soil, mud, sand, gravel, silt or other earth material from any controlled area, either directly or indirectly; or
2. Any form of dumping, filling or deposition of any soil, stones, sand, gravel, mud, rubbish, or fill of any kind in any controlled area, either directly or indirectly; or
3. Erecting any building or other structure, construction of any road, driveway or motor vehicle parking facility, drivings or pilings, installation of any pipe or other conduit or the placing of any other obstructions within a controlled area, whether or not the same affect the ebb and flow of water; or
4. The use of any chemicals, dyes, fertilizers, herbicides or similar materials in any controlled area such that the same may cause pollution of waters; or
5. Creating a diversion of water flow in any watercourses; or
6. Creating an increase or decrease in the flow, velocity or volume of water in any watercourse; or
7. Introducing any influents of high thermal content such that the same are capable of causing deleterious ecological effect; or
8. Destroying or permitting the destruction of any trees or other plant life within the controlled area of a watercourse or wetland. These actions shall be reviewed by the administering authority so as to determine if such acts affect the prevailing surface water runoff conditions, directly or indirectly; or

9. Any other activity which substantially impairs any of the several functions served by the wetlands and watercourses or the benefits derived therefrom.

Exclusions from the above Town regulations in §78-3B include emergency work which is necessary to protect public health and safety or to prevent damage to property activities, and is performed within proper scope and with proper notification to the Town. Also excluded are activities related to decorative landscaping; including the addition of trees and plants, or the trimming, pruning, and bracing of any tree.

Town and State regulations governing activities in and near designated wetlands are very similar. Disturbances of a State-regulated wetland within 100' of such wetland boundary are subject to NYSDEC regulations when they include activities regulated by that authority.

NYCDEP Regulations

The New York City Department of Environmental Protection (NYCDEP) also lists regulated activities and permit requirements applicable to work conducted in any controlled area related to wetlands or watercourses occurring within the watershed of the City's water supply. Watershed activities that meet any of the following regulatory criteria require NYCDEP to review and approve a project's application that is submitted by the party seeking to conduct any of the listed activities. This agency's Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and its Sources[1] apply to each of the following activities:

1. Residential septic systems;
2. Intermediate-sized wastewater treatment systems;
3. Wastewater treatment plants;
4. Construction of a paved driveway or other impervious surfaces adjacent to a stream;
5. Crossing, diverting or piping a stream;
6. Construction of a house or other structure adjacent to a stream or watercourse;
7. Connection to an existing sewer system with a service lateral;
8. A land clearing or land grading project, involving two or more acres, located at least in part within the limiting distance of 100 feet of a watercourse or wetland, or within the limiting distance of 300 feet of a reservoir, reservoir stem or controlled lake or on a slope exceeding 15 percent;
9. Application and storage of fertilizers;
10. Discharge from agricultural activities;
11. Siting of junkyards or solid waste management facilities; and
12. Discharge or storage of other hazardous materials, petroleum products, pesticides, highway maintenance materials, or other sewage.

9.2 Existing Conditions – Water Resources

Surface water resources within the ±153-acre site from which the Project site would be subdivided include two streams (one identified a seasonally dry watercourse), and three small ponds of 0.24

[1] NYCDEP. 2019. Rules and Regulations for the Protection from Contamination, Degradation and pollution of the New York City Water Supply and its Sources. Final Regulations. November 29, 2019.

acre, 0.08 acre, and 0.27 acre in size; Wetland A, Wetland C and Wetland D, respectively, as shown on Figure 9-1 (Drawing WV-1, Wetland Validation Map). Regulatory controlled areas surrounding these resources, shown in Figure 9-2, are delineated on the survey mapping used for the proposed project drawings.

The generally elevated topographic position of the site in relation to its surroundings causes the property to receive water inputs primarily from localized rainfall onto the site. Runoff from I-84 flows overland via drainage swales and culverts into NYSDEC wetland LC-28 at a point south of the project site.

Figure 9-3 shows mapped surface water resources within one-quarter mile of the site from National Wetlands Inventory mapping.

The highest elevations of the site are at the designated ridgeline area in the northeast region of the property and a downgradient bench generally in the center of the northern parcel. This highest terrain has sloping grades to the south and the north. Drainage from the property follows these grades as either overland sheet flow, subsurface flows, or surface streams and defined watercourses. Flow to the south enters NYSDEC Freshwater Wetland LC-28 (a NYSDEC Class II wetland) and exits as a NYSDEC regulated stream (NYSDEC Regulation No. 864-194, a Class C stream). Flow to the north includes an intermittent stream which departs, off-site, into a stream NYSDEC Regulation No. 864-196, a Class C stream which runs through portions of the off-site NYSDEC Freshwater Wetland LC-18 (a NYSDEC Class I wetland).

The streams that exit NYSDEC Wetland LC-28 and LC-18 are minor tributaries to the Middle Branch of the Croton River.

The Town has two large aquifers that have been identified and described in the Town's Comprehensive Plan[2]. These are located approximately 2.25 miles (the aquifer southwest of Bog Brook Reservoir), and 4 miles (the aquifer around Haines Pond) distant from the Project site, and these aquifer resources are therefore unlikely to be affected either by rainwater infiltration or any surface water discharges that occur at the Project site.

9.3 Existing Conditions – Wetlands

Wetlands on the two-lot site were delineated by Ecological Analysis (EA) on November 26-27, 2019, based on the criteria and definitions appropriate to each regulatory jurisdiction. Seven wetland areas are present on the site, each of which is protected by Town of Southeast regulations, and six of which are protected by US Army Corps of Engineers (USACE) regulations. The one of the seven site wetlands which is not regulated by the USACE is a small (372 square feet) perennial pond (Wetland A) which is an isolated surface water feature.

One of the wetlands (encompassing the areas of Wetlands B, C, D, and F) is large enough to also be regulated by the NYSDEC (NYSDEC Freshwater Wetland LC-28). All of the NYSDEC regulated wetlands received a signed 5-year validation by the NYSDEC on July 29, 2020 (Drawing No. WV-1 Wetland Validation Map). The two smallest of the wetland areas are small stream-adjacent features. One of these, Wetland E, is hydrologically connected to Wetland LC-28 via the stream draining across the western portion of the property, while the other, Wetland G, is near

[2] AKRF. 2014. Town of Southeast Comprehensive Plan Update. August 21, 2014.

the northern border of the property and outflows into a separate drainage system (NYSDEC Wetland LC-18) located off of the property to the north.

A representative of NYCDEP visited the site and validated the watercourses and wetland delineations.

Controlled areas of upland that are present around the site's wetlands are protected under the NYSDEC and Town regulations.[3] NYSDEC and NYCDEP authorities typically extend wetland buffers horizontally for 100 feet from the line of a wetland delineation. Town of Southeast extends wetland buffers for variable distances, of from 100 feet to 200 feet, from the line of a wetland delineation, based on Hydrologic Soil Groups and slope percentage. The function of these buffer areas is to lessen any adverse impacts to the wetland proper related to human generated disturbances.

The wetland buffers around all of the site wetlands are densely canopied, upland, forested/brushy habitats, dominated by red maple, spicebush, highbush blueberry, multiflora rose, and autumn olive. Understory herbs, sedges, and ferns most frequently recorded in the areas surrounding the wetland borders include sensitive and cinnamon ferns, skunk cabbage, greater bladder and tussock sedges, phragmites, northern bugleweed, nodding beggarticks, and water plantain.

Figure 9-2 shows the general extent and location of the wetland buffers (controlled areas) around each of the site wetlands. Wetland buffers are protected by regulatory agencies as these areas provide several biological and physical functions that together act to protect the integrity of wetlands in natural conditions and from manmade alterations to the landscape. These functions include the protection of wildlife habitat, the reduction of inputs of nutrient, toxins, and sediments into a wetland, and the minimization of hydrological alterations to the seasonal fluctuations of ground and surface water inflow to a wetland. Table 9-1 presents the characteristics of the site wetland buffers depicted on Figure 9-2.

[3] Controlled areas adjacent to designated wetlands are variously referred to as controlled area, adjacent area, buffer area, or limiting distance.

Table 9-1
Wetland Buffer Types

Location/ Designation	Type of Cover in Buffer	Percent Cover by Type*	Wetland Protection Function		
			Wildlife Habitats	Pollutant Reduction	Hydrological Cycles
Wetlands					
Wetland A	woodland	100%	✓	✓	✓
Wetland B	woodland	100%	✓	✓	✓
Wetland C & D	woodland	90%	✓	✓	✓
Wetland C & D	Pugsley Road	10%	no wetland function		
Wetland E	woodland	100%	✓	✓	✓
Wetland G	woodland	100%	✓	✓	✓
Wetland LC-18 (offsite)	woodland and Fields Corner Road	100%	✓	✓	✓
Watercourses					
WC-1	woodland	90%	✓	✓	✓
WC-1	vegetation dump	10%	no wetland function		
WC-2	woodland	100%	✓	✓	✓
WC-3	woodland	100%	✓	✓	✓
WC-4	woodland	100%	✓	✓	✓
NOTES:					
* Percent type refers to area shown in Figure 9-2.					
The term buffer refers to: Town regulated wetland Controlled Area, NYSDEC regulated Adjacent Area, NYCDEP regulated Limiting Area.					

The site was reviewed for the existence of vernal pools by EA on March 30, 2021, and no vernal pools were identified.

Federal Emergency Management Agency (FEMA) mapping accessed on March 2, 2021, shows that the Project is located within an Area of Minimal Flood Hazard, and therefore no flooding issues are expected to affect the Project. The Project site is not located within, or near to, any FEMA-mapped 100-year floodplain.

9.4 Future Without the Project

Unless otherwise developed, the entirety of the 153.8± acres of the two undivided parcels would remain in their wooded condition throughout the upland and wetland terrains. The existing watersheds with their included streams, watercourses, and wetlands, would remain undisturbed by Project improvements. Drainage patterns across the site would remain an unaltered feature

of this portion of the Middle Branch of the Croton River watershed. Ownership of the land would be retained by the Town.

9.5 Potential Impacts

Potential impacts to the on- and off-site water resources and wetlands that might be associated with the development and the operational activities of the Project that must be ameliorated by the project design include: sedimentation during construction, release of chemical pollutants from construction activities (e.g. fuels and lubricants), post-development increases in pollutant loading in stormwater, post-development flooding from increased peak rates of stormwater discharge, and bed and bank erosion in receiving watercourses resulting from increased stormwater discharge velocities.

Without appropriate mitigation incorporated into the proposed action, disturbance of the project site would have the potential to increase the volume and velocity of stormwater following the clearing and conversion of the present land cover into impervious surfaces and landscaped areas. If not controlled, these activities might lead to accelerated erosion and sedimentation both during and after construction of the Project. Sedimentation within the receiving streams, ponds, and wetlands, if not mitigated, could result in nutrient enrichment, increased turbidity, increased transport of pollutants, shielding of pathogens from disinfection processes, and clogging of the gills of aquatic organisms.

The basin of the Middle Branch Reservoir in New York City's drinking supply watershed is designated as phosphorus-restricted by the NYCDEP, and therefore stormwater controls must be appropriate to reduce this nutrient to permitted concentrations through the application of effective stormwater control practices, including the capture and removal of sediment and debris from detention basins and the maintenance of vegetation within and around the basins in order to further increase the ability of the stormwater system to reduce the movement of phosphorous into downstream reservoirs.

The Project improvements would disturb approximately 49 acres of land, primarily within upland portions of the site, while avoiding direct impacts to the site wetlands and watercourses. Table 9-2 lists the sizes of upland areas within regulated wetland buffers that would be disturbed by the proposal, by jurisdiction.

Table 9-2
Wetland Buffer Disturbance

Location/ Designation	Type of Cover in Buffer	Percent Cover by Type*	Disturbed Town Controlled Area (ac)	Disturbed NYSDEC Adjacent Area (ac)	Disturbed NYCDEP Limiting Area (ac)
Wetlands					
Wetland A	woodland	100%	0.04		
Wetland B	woodland	100%	0.22		
Wetland C & D	woodland	90%	2.46	0.25	0.25
Wetland C & D	Pugsley Road	10%	0.51	0.28	0.16
Wetland E	woodland	100%	0.43		
Wetland G	woodland	100%	0.30		0.03
Wetland LC-18 (offsite)	woodland and Fields Corner Road	100%	0.15		
Watercourses					
WC-1	woodland	90%	0.37		0.37
WC-1	vegetation dump	10%			
WC-2	woodland	100%	0.66		0.24
WC-3	woodland	100%			
WC-4	woodland	100%			0.03
		Totals:	5.14	0.53	1.08
NOTES:					
* Percent type refers to area shown in Figure 9-2.					
The term buffer refers to: Town regulated wetland Controlled Area, NYSDEC regulated Adjacent Area, NYCDEP regulated Limiting Area.					
Some areas listed are counted under more than one regulatory jurisdiction.					

Direct disturbance to wetlands on the property would be avoided in the plans proposed for this Project, however the Project would encroach into some Town Wetland Controlled Areas, NYSDEC Wetland Buffer areas, and/or NYCDEP Watercourse Limiting Areas in several locations, as shown on drawings SP-1 through SP-4 of the accompanying engineering plans (DEIS Appendix M). These specific impacts would occur within the Controlled Areas surrounding the onsite wetlands and watercourses in the following locations:

For the Project development proposed within Lot 10 (north lot), the disturbances are:

1. A corner of the synthetic turf multi-sport field and the associated retaining wall would encroach into the 166-foot Town of Southeast Wetland Controlled Area;
2. Approximately half of the parking lot associated with the main building, along with the western-most entrance from Zimmer Road and associated welcome sign, would encroach into either the 166-foot or 200-foot Town of Southeast Wetland Controlled Area;

3. A portion of the stormwater detention basin adjacent to the western-most entrance from Zimmer Road would encroach into the 166-foot Town of Southeast Wetland Controlled Area; and an associated drainage line would cross through this Controlled Area;
4. A portion of the sewer main would cross through the 200-foot Town of Southeast Wetland Controlled Area;
5. A directional-drilled sewer force main would cross through the 100-foot Town of Southeast Watercourse Controlled Area and NYCDEP 100-foot Watercourse Limiting Distance.

For the Project development proposed within Lot 11 (south lot), the disturbances are:

1. The majority of the access road along with a portion of the concession/restroom building, a portion of the bleacher seats and associated retaining wall, a corner of the batting cages, and a small corner of the synthetic turf showcase baseball field would encroach into the 200-foot Town of Southeast Wetland Controlled Area;
2. Portions of the two stormwater basins would encroach into the 200-foot Town of Southeast Wetland Controlled Area and/or the 133-foot Town of Southeast Wetland Controlled Area, as well as the NYCDEP 100-foot Limiting Distance;
3. A drainage line running from Zimmer Road to the northern-most stormwater basin would cross through the 200-foot Town of Southeast Wetland Controlled Area, with a portion of it crossing the NYSDEC 100-foot Wetland Adjacent Area and the NYCDEP 100-foot Limiting Distance.

Approximately 10.7 acres of impervious surfaces would be created on the site, resulting in a localized increase in stormwater runoff from these surfaces. The majority of this stormwater runoff would be collected and directed into constructed drainage features that would flow into a system of stormwater management basins. Discharges from the basins would occur either as infiltration into the subsoils of the basins, or as surface discharges of treated stormwater into the site wetlands or watercourses.

Chapter 78 of Southeast Town Code seeks for provisions to be made by developers to mitigate the impairment of the hydrological benefits provided to the Town by its wetlands. These benefits, including the control of stormwater runoff and flooding, are provided by the storage capacity within wetlands and by the hydrologic adsorption functioning of their soils and vegetation. The Project utilizes infiltration basins that will allow for stormwater recharge into upland areas of the site while controlling the rate and volume of surface water discharges into the site streams and wetlands. The stormwater flow controls provided by the Project are designed to protect the hydrologic functioning of the site wetlands.

9.6 Mitigation Measures

Measures to mitigate the impacts of the Project on the water resources and wetlands within and in the vicinity of the site include the following: no direct disturbances to wetlands or watercourses have been proposed; land grading operations will be phased; the creation of impervious surfaces has been minimized; and rainwater infiltration practices will be utilized to reduce the volume of surface stormwater runoff exiting the site.

In order to best maintain pre-development hydrologic characteristics within the New York City water supply watershed, NYCDEP encourages the use of infiltration practices “to minimize loss

of annual recharge to groundwater by maximizing the use of stormwater infiltration practices where suitable soil conditions exist". Consistent with this standard of the NYCDEP Rules and Regulations, infiltration practices have been proposed for the treatment of stormwater runoff from the proposed impervious surfaces of the Project. On-site soil testing was witnessed by NYCDEP to verify that the soils in the location of the proposed infiltration basins are adequate to support the design requirements for infiltration practices in accordance with the New York State Stormwater Management Design Manual (*Design Manual*)[4].

Included with this document, as Appendix E, is the site-specific Preliminary Stormwater Management and Pollution Prevention Plan[5] (SWPPP) prepared by the project engineer. The stormwater management system for the proposed project has been designed to meet the requirements of local, regional, and state stormwater ordinances and guidelines, including but not limited to those of the Town of Southeast, the NYSDEC, and the NYCDEP. The SWPPP defines measures and procedures to be implemented so as to ensure compliance with prevailing discharge standards. Such measures, where necessary, include conveyance systems, retention basins, detention ponds and flow control devices. All proposed measures and procedures will be selected in accordance with the current *Design Manual* standards.

The SWPPP design process evaluated existing (pre-construction) and post-construction stormwater runoff characteristics, including existing and post-development peak rates of stormwater discharge for the 1-, 10-, 25- and 100-year 24-hour rainfall events. This analysis was the basis for the assessment of potential impacts on surface water resources anticipated from the proposed action and was the basis for developing the mitigation measures proposed as part of the project. A description of each such drainage basin is provided in Appendix E. The descriptions include specific characteristics (e.g., size and composition) of all drainage structures and a summary of the path of flow from the project to receiving water bodies. The results of the study are summarized below and the supporting calculations are presented in the SWPPP.

SWPPP's are dynamic plans in that they are often updated in response to changing site conditions. Erosion and sediment control measures will be reviewed twice weekly for appropriateness and efficacy. Additional measures, that may not be included in the preliminary SWPPP, can be called for in the field to address specific developing concerns.

The *Design Manual* was prepared by the NYSDEC to provide standards to applicants for the design of stormwater management practices (SMPs) that would protect the waters of the State of New York from the impacts of urban stormwater runoff. The current (January, 2015) version of this manual includes the incorporation of Green Infrastructure practices and enhanced phosphorus removal standards for projects located within the East of the Hudson Watershed. The *Design Manual* was used to analyze pre- and post-development runoff quality and to design, select, and locate the treatment methods proposed for the Project. The project specific preliminary stormwater management plan is included in the engineering plans that accompany this document.

The following codes/regulations from several authorities have been used to design the SWPPP:

- NYSDEC: Phase II SPDES General Permit for Stormwater Discharges from Construction Activities, General Permit GP-0-20-001;
- NYSDEC: Stormwater Management Design Manual;

[4] NYSDEC. 2015. New York State Stormwater Management Design Manual. www.dec.ny.gov/chemical/29072.html

[5] Insite Engineering, Surveying & Landscape Architecture, P.C. Preliminary Stormwater Pollution Prevention Plan

- NYSDEC: Standards and Specifications for Erosion and Sediment Control;
- NYCDEP: Rules and Regulations for the Protection from Contamination, Degradation, and Pollution of the New York City Water Supply and its Sources (Section 18-39 of the Watershed Regulations);
- Town of Southeast Town Code, Chapter 119: Stormwater Management and Erosion and Sediment Control.

Stormwater runoff across the project site generally flows from north to south from the protected ridgeline area to the NYSDEC wetland, with a smaller volume of stormwater runoff that leaving the project site across the northern property line. This existing pattern of stormwater runoff was utilized to both qualitatively and quantitatively analyze the stormwater runoff treatment measures and replicate the natural systems on the project site. The USDA hydrologic soils groups (HSGs) present on the Project grounds consist of "B", "C", and "D". HSGs are identified according to their water infiltration and transmission rate (i.e. their rainwater runoff potential when thoroughly wet), and these three HSGs include those soils that have moderately low runoff potential (HSG-B), to moderately high runoff potential (HSG-C), to high runoff potential (HSG-D).

Stormwater runoff will be captured and treated in multiple SMPs across the project site. Pretreatment for the proposed SMPs shall be provided either through the use of dry sedimentation basins or by the use of hydrodynamic separators upstream of SMPs. Flow splitters will be included upstream of infiltration basins to send the water quality volume to the downstream SMP while bypassing excess volumes generated by larger storms. The SMPs proposed are infiltration basins design to meet the requirements of the *Design Manual*. These requirements are intended to replicate pre-development hydrology to the maximum extent practicable through the implementation of infiltration practices.

The construction stage of the Project will be phased to limit the extent of exposed soils present on site at one time, in conformance with General Permit GP-0-20-001. Due to the size of some project elements --- for example the baseball clover covers about 10 acres that would need to be built in one continuous operation -- it is possible that a waiver may be requested to allow defined areas of disturbance to exceed five (5) acres at one time, provided there are provisions made for erosion and sediment control to mitigate the larger work area in accordance with such waiver.

Temporary erosion and sediment control facilities would be installed and maintained throughout all construction phases to reduce the impacts of sediments and siltation within the water features of this and off-site properties. These measures would include, but not necessarily be limited to:

- Stabilized construction entrances;
- Silt fence and/or haybale barriers;
- Storm drain inlet protection;
- Temporary sediment traps;
- Temporary soil stabilization by seeding and mulching;
- Temporary seed and mulch shall be applied to idle areas of exposed soil.

A description of the proposed permanent erosion and sediment control facilities is provided in Appendix E. In general, permanent erosion and sediment control will be accomplished by diverting stormwater runoff from steep slopes, controlling/reducing stormwater runoff velocities and volumes, and final surface stabilization by the site's structural and landscaping features. Landscaped areas and seeded lawn areas control stormwater runoff by preventing soil erosion,

reducing runoff volumes and velocities, and by providing a filter medium to settle out some of the entrained particulates in the runoff. Permanent seeding should optimally be undertaken in the spring from March 21st through May 20th and in late summer from August 15th to October 15th. All of the permanent facilities would be designed to be relatively maintenance free requiring only periodic scheduled inspections. The owner will provide maintenance for all the permanent erosion and sediment control facilities.

The discharge end of all piped drainage systems will be provided with riprap rock outlet protection aprons. These will be sized in accordance with the New York State Standards and Specifications for Erosion and Sediment Control[6] (referenced as the "Blue Book"). Rock outlet protection acts to reduce the depth, velocity, and energy of water, such that discharging flows will not erode the receiving downstream reach.

Other than the buildings and paved surfaces, disturbed surfaces will be stabilized with vegetation within 14 days of final grading. Permanent seed mix and mulch shall be applied to idle areas to minimize the amount of exposed soil, in accordance with the Blue Book. Application rates for the seed and mulch will be specified in the erosion and sediment control drawings to be prepared for this project.

Construction phase details associated with the implementation and maintenance of the proposed stormwater facilities and erosion control measures will be specified in the SWPPP prepared for this project.. The erosion control plan will include associated details and notes to aid the contractor in implementing the plan. During construction, a Construction Site Log Book (Log Book) is required to be kept per NYSDEC SPDES General Permit GP-0-20-001. Erosion and sediment control inspections are required to be conducted under coverage of the SPDES permit (at a minimum of twice weekly), and an updated Log Book and a copy of the SWPPP is required to be kept on site for the duration of the construction activities. The required Log Book format is given in the appendices of the Blue Book.

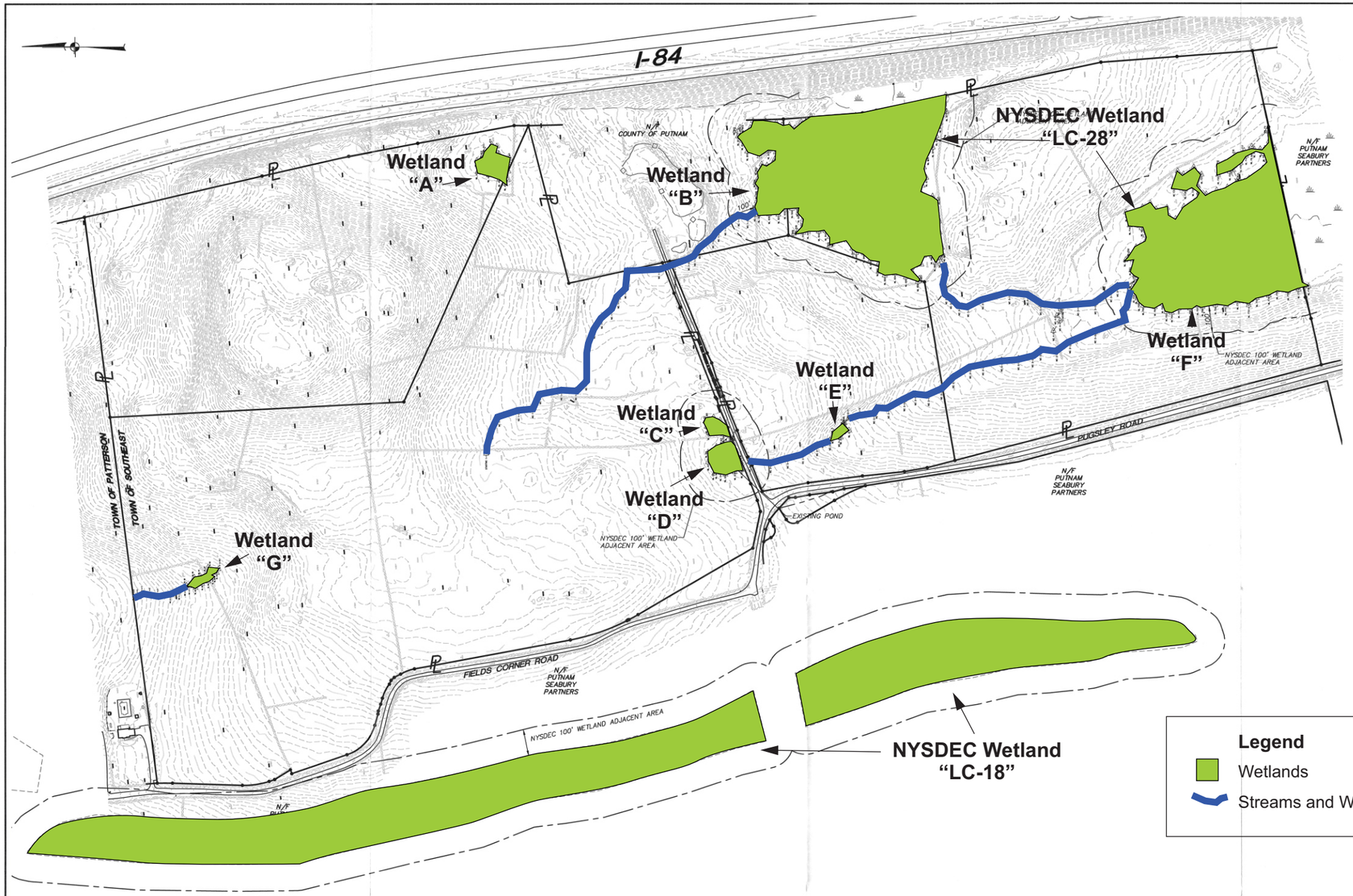
Although it is not anticipated that any hazardous waste materials will result from construction, protocols for handling of any hazardous waste materials will be including in the SWPPP. Such waste shall be disposed of in accordance with federal, state, and local regulations. No hazardous waste shall be disposed of on-site. Hazardous waste materials shall be stored in appropriate and clearly marked containers and segregated from the other non-waste materials. All hazardous waste shall be stored in a structurally sound and sealed shipping containers located in the staging areas.

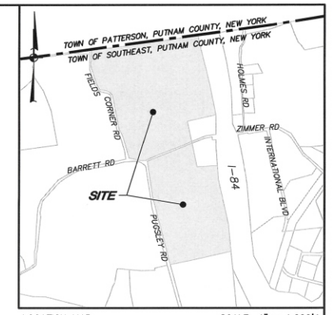
Throughout the construction of the project several types of vehicles and equipment will be used onsite. Fueling of the equipment shall occur within the limits of the construction staging area. All equipment fluids generated from minor maintenance activities shall be disposed of into designated drums and stored in accordance with other hazardous waste storage in the staging areas. Ample supplies of absorbent, spill-cleanup materials, and spill kits shall be located in the construction staging area. All spills shall be cleaned up immediately upon discovery. Any spill large enough to discharge to surface water will be immediately reported to the local fire/police departments, NYCDEP, NYSDEC, and the National Response Center (1-800-424-8802).

[6] Lake Jr, E. W, et al. 2016. New York State Standards and Specifications for Erosion and Sediment Control. www.dec.ny.gov/chemical/29066.html

Portable toilet facilities shall be provided on site during the entire length of construction. The sanitary facilities shall be located in the project staging area, or in an alternate area away from the construction activities on the site. The portable toilets shall be inspected weekly for evidence of leaking holding tanks.

The property owner will be responsible for the long-term maintenance of the erosion control and stormwater facilities, including the following measures. Inspections should be conducted of the infiltration systems on a semi-annually basis, as well as after major storm events. Each Spring, the paved areas should be cleaned to remove the winter's accumulation of traction sand, and all catch basin, sumps, and pipes should be checked for debris or blockages and cleaned as required. During the annual cleaning process, the catch basins and pipes should be inspected for structural integrity and overall condition, with repairs and/or replacement made as required in order to maintain the functionality of the stormwater control system.





LOCATION MAP SCALE: 1" = 1,000'±

OWNER:
TOWN OF SOUTHEAST
1360 ROUTE 22
BREWSTER, NY 10509

SITE DATA:
Zone: RC
Total Acreage 93.0 AC (45.-1-10)
60.5 AC (45.-1-11)
Tax Map No.: 45.-1-10
45.-1-11

APPLICANT:
PROSWING SPORTS REALTY, INC.
14 AUTUMN RIDGE ROAD
SOUTH SALEM, NY 10590

GENERAL NOTES:

1. Property lines shown taken from map entitled "Map of Alienation Parcels Prepared for Proswing..." dated Mach 6, 2020 prepared by Insite Engineering, Surveying, and Landscape Architecture P.C.
2. Existing topography and site features shown hereon derived from Aerial Photogrammetry, created from a drawing entitled "Pugsley Road", by Geomaps International photo dated November 30, 2019 and obtained January 13, 2020. Elevations show hereon are in vertical datum NAVD 88. The contour interval is 2'.
3. Wetlands shown hereon were flagged by Ecological Analysis on November 27, 2019 and field located by Insite Engineering, Surveying, and Landscape Architecture P.C. on December 18, 2019.
4. Wetland flag "WL F72-A" was modified in the field by Sarah Powliczak of the NYSDEC on July 9, 2020. This drawing reflects the modified location of the wetland flag.

LEGEND

- EXISTING PROPERTY LINE
- 100' YARD SETBACK
- EXISTING APPROXIMATE EDGE OF ROAD
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING WATERCOURSE
- EXISTING WETLAND SYMBOL
- EXISTING WETLAND LIMIT LINE
- NYSDEC 100' WETLAND ADJACENT AREA

GRAPHIC SCALE
0 75 150 300
(IN FEET)
1 inch = 150 ft.

NYSDEC FRESHWATER WETLAND BOUNDARY VALIDATION

The freshwater wetland boundary as represented on these plans accurately depicts the limits of Freshwater Wetland LC-28 as delineated by Ecological Analysis on November 27, 2019.

DEC Staff: Sarah Powliczak 07.09.2020 Surveyor/Engineer:

Date Valid: 7/24/2025 Expiration Date: 7/24/2025 SEAL

JOHN M. WATSON NEW YORK LICENSED PROFESSIONAL ENGINEER No. 77351

Wetland boundary delineations as validated by the New York State Department of Environmental Conservation remain valid for five (5) years unless existing exempt activities, area hydrology, or land use practices change (e.g., agricultural to residential). After five (5) years the boundary must be revalidated by DEC staff. Revalidation may include a new delineation and survey of the wetland boundary.

Any proposed construction, grading, filling, excavating, clearing or other regulated activity in the freshwater wetland or within 100 feet of the wetland boundary as depicted on this plan requires a permit from the NYS Department of Environmental Conservation under Article 24 of the Environmental Conservation Law (Freshwater Wetlands Act) prior to commencement of work.

Figure 9-1: Site Area Wetlands & Watercourses Map
Brewster Yards
160 & 132 Pugsley Road, (T) Southeast, Putnam County, NY

Ecological Analysis

Source: Insite Engineering, Surveying & Landscape Architecture, P.C. 7-06-21
Scale: Graphic **Date:** 01/29/22

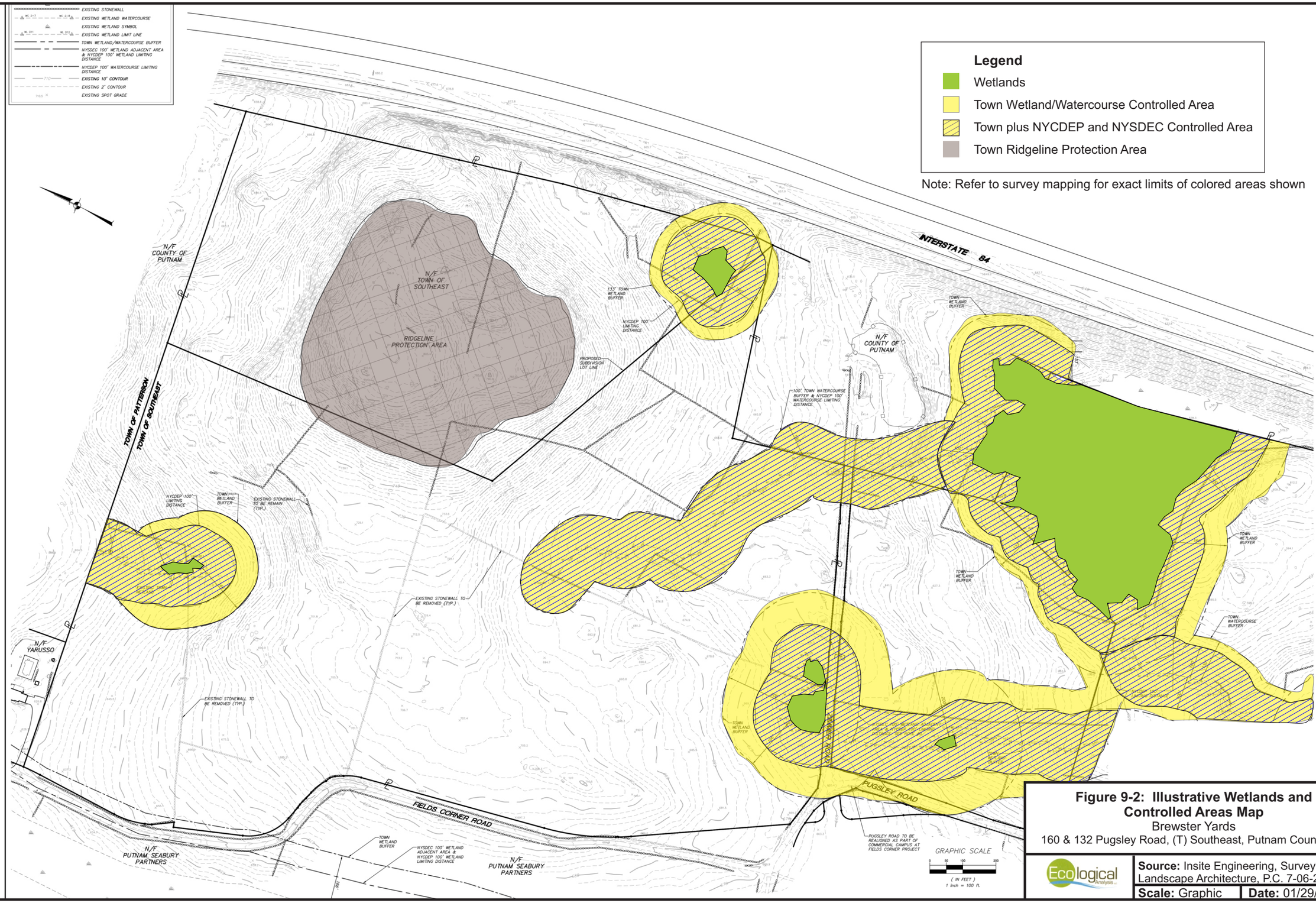
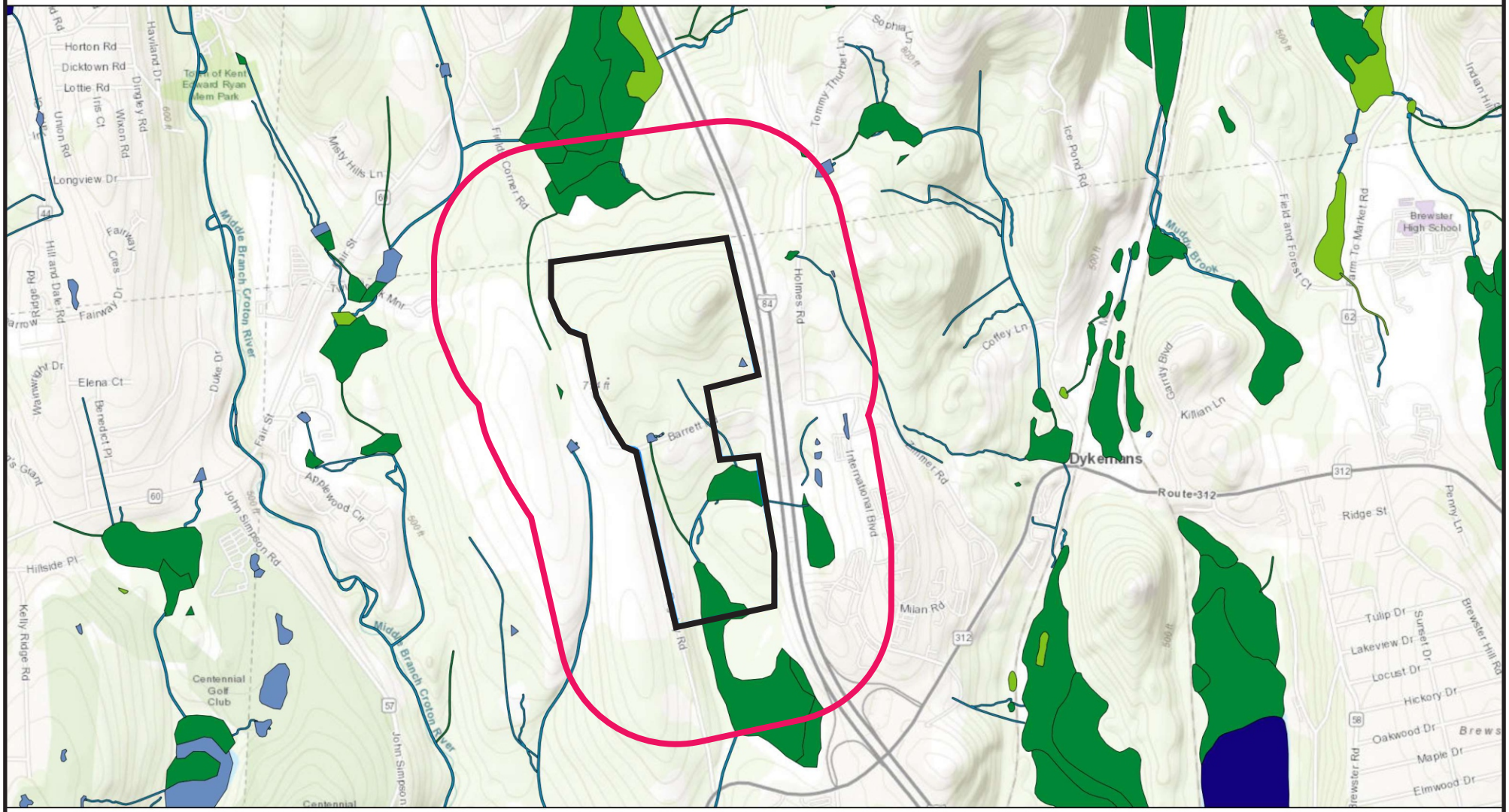


Figure 9-2: Illustrative Wetlands and Controlled Areas Map
Brewster Yards
160 & 132 Pugsley Road, (T) Southeast, Putnam County, NY

Ecological Analysis

Source: Insite Engineering, Surveying & Landscape Architecture, P.C. 7-06-21
Scale: Graphic | **Date:** 01/29/22



Legend:

- Site
- 1/4 mi offset

Wetlands

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

1:18,056

0 0.15 0.3 0.6 mi

Figure 9-3: NWI Features Map (National Wetlands Inventory)

Brewster Yards

160 & 132 Pugsley Road, (T) Southeast, Putnam County, NY

Ecological Analysis

Source: US Fish and Wildlife Service

Scale: Graphic | **Date:** 01/26/22

10.0 STORMWATER MANAGEMENT

Introduction

This DEIS section provides a summary of the preliminary stormwater management study undertaken for the project. In accordance with the applicable New York State regulations, this study is called a Stormwater Pollution Prevention Plan (SWPPP), which addresses pre- and post-development stormwater analyses, temporary stormwater management including soil erosion control measures to be implemented during construction, and permanent stormwater management measures to be built and maintained for the life of the project. Refer to Appendix E for the engineer's preliminary report.

The preliminary SWPPP will be amended and completed during the process of finishing the site development plans for this project, and will be subject to review per the requirements of the applicable General Permit (SPDES GP-0-20-001) of the New York State Department of Environmental Conservation (NYSDEC) and approvals by the Town of Southeast and the New York City Department of Environmental Protection (NYCDEP).

10.1 Existing Conditions

The project site is located on two parcels bordered by Interstate 84 to the east and Pugsley Road and Fields Corner Road to the west with a narrow road (variously referred to as Barrett Road or Zimmer Road) running east and west between the two parcels. Land cover at the site mainly consists of forested areas. NYSDEC wetland, LC-28 is located on the southern portion of the site. The site also consists of areas of steep slopes and Town of Southeast protected ridgeline on the northern end of the site.

Stormwater runoff across the project site generally flows from north to south from the highpoint at the ridgeline area to the NYSDEC wetland. Two Design Lines are utilized in the SWPPP to analyze the stormwater runoff both qualitatively and quantitatively. Design Line 1, which is located along the northern property line, is used to analyze the stormwater runoff that leaves the project site to the north. Design Line 2 is located along the onsite NYSDEC wetland.

The following is a general description of the input data used to calculate the pre- and post-development stormwater runoff values in accordance with NYSDEC design requirements. The precipitation values for the 1-Year, 10-Year, 25-year, and 100-Year 24-hour design storm events and rainfall distribution curves utilized for the SWPPP were obtained from information provided by the Northeast Regional Climate Center (NRCC) and the Natural Resources Conservation Service (NRCS) which is available online at *www.precip.eas.cornell.edu*.

The values used for the design storms analyzed are listed below.

Design Storm	24-Hour Rainfall
1-Year	2.76”
10-Year	4.94”
25-Year	6.21”
100-Year	8.77”

Runoff curve number (CN) values utilized in the SWPPP analyses, which are based on mapped soil types and actual land use/land cover, were referenced from the USDA, SCS publication *Urban Hydrology for Small Watersheds*.

The SWPPP provides complete engineering calculations to quantify existing stormwater flow rates and provide stormwater flow volumes and peaks in post-development conditions to demonstrate conformance with the applicable regulations.

10.2 Future Without the Proposed Project

The project site would remain in its current undeveloped condition and would not present any need for manmade stormwater management systems in the scenario of a future without the project.

10.3 Potential Impacts of the Proposed Project

The stormwater management system for the proposed project has been designed to meet the requirements of local, regional, and state stormwater ordinances and guidelines. Specifically, the following codes / regulations have been used to design the SWPPP for Brewster Yards:

- NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities, General Permit GP-0-20-001 (GP-0-20-001).
- NYCDEP Rules and Regulations for the Protection from Contamination, Degradation, and Pollution of the New York City Water Supply and its Sources (Rules and Regulations).
- Town of Southeast Town Code, Chapter 119 – Stormwater Management and Erosion and Sediment Control.

Since the subject project proposes disturbance of more than one acre, coverage under the State's General Permit No. GP-0-20-001 is required. To meet the requirements of this permit, the latest edition of the NYSDEC *New York State Stormwater Management Design Manual* (Design Manual) was referenced for the design of the proposed stormwater management system. The *Design Manual* specifies five design criteria that are discussed in detail the site-specific SWPPP prepared for this project. The criteria are Runoff Reduction Volume (RRv), Water Quality Volume (WQv), Stream Channel Protection Volume (CPv), Overbank Flood Control (Qf), and Extreme Storm Control (Qp). The first two requirements relate to treating water quality, while the latter pertain to stormwater quantity (peak flow) attenuation.

Further, being located within the New York City East of Hudson Watershed, the General Permit requires compliance with the Enhanced Phosphorus Removal Standards of the *Design Manual* since post-construction stormwater management practices are proposed.

The Runoff Reduction Volume (RRv) criterion is intended to replicate pre-development hydrology by maintaining preconstruction infiltration, peak flow runoff, discharge volume, as well as minimizing concentrated stormwater flow. This requirement has been achieved on the project by providing an infiltration practice which will capture runoff from a percentage of the impervious area in the project and remove it from the stormwater discharge from the site.

The stormwater infiltration practices have been sized to capture and treat the entire water quality volume (WQv) from the proposed project, in accordance with the *Design Manual*

including the standards for Enhanced Phosphorus Removal. The stormwater management practices have been designed to treat the runoff volume produced during the 1-year 24-hour design storm.

The Stream Channel Protection (CPv) criterion, which is intended to protect stream channels from erosion, is accomplished by the 24-hour extended detention of the 1-year, 24-hour storm event. The stormwater infiltration system has been designed with a storage volume greater than the volume of runoff from the 1-year storm to fully infiltrate the volume of runoff from the 1-year, 24-hour design storm. Thus, the CPv has been met for the project. Actual infiltration rates tested in the areas of the proposed infiltration practice were equal to or exceeded the minimum 0.5 inches/hour requirement.

The Overbank Flood Control (Qp) requirement is intended to prevent an increase in the frequency and magnitude of out-of-bank flooding events generated by urban development. Overbank control requires storage to attenuate the post-development 10-year, 24-hour peak discharge to pre-development rates. The Extreme Flood Control (Qf) requirement is intended to prevent the increased risk of flood damage from large storm events, maintain the boundaries of the pre-development 100-year floodplain, and protect the physical integrity of stormwater management practices. Extreme flood control requires storage to attenuate the post-development 100-year, 24-hour peak discharge to pre-development rates. As shown in the preliminary SWPPP and in Table 10-1, attenuation for both the 10-year and 100-year 24-hour storms has been provided, thus satisfying the Qp and Qf requirements.

Table 10-1
Existing and Proposed Conditions Peak Flows

24-HOUR DESIGN STORM PEAK FLOWS (c.f.s.)								
	1-YEAR		10-YEAR (Channel Protection Volume)		25-YEAR		100-YEAR (Extreme Flood Control)	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Design Line 1	3.02	1.84	23.34	15.04	38.30	24.81	72.15	70.44
Design Line 2	2.94	4.46*	28.52	27.38	49.12	43.48	96.74	93.70

*The post development peak flow for the 1-year, 24 hour storm has no design criteria requiring mitigation as outlined in the NYSSMDM. A decrease in Tc path length and duration for the subcatchment outside the project area resulted in an increase in peek flow and a decrease in total runoff volume. Additionally, CPv criterion for the design line have been achieved through complete infiltration of the 1-year, 24-hour storm within the project area.

The SWPPP also describes how the proposed project will meet the standards of the NYCDEP per Section 18-39 of the Rules and Regulations, where the following thresholds apply:

(i) Plans for development or sale of land that will result in the disturbance of five (5) or more acres of total land area.

(iii) Construction of a new industrial, institutional, municipal, commercial, or multi-family residential project that will result in the creation of an impervious surface totaling over 40,000 square feet in size.

(iv) A land clearing project, involving two or more acres, located at least in part within the limiting distance of 100 feet of a watercourse or wetland, or within the limiting distance of 300 feet of a reservoir, reservoir stem or controlled lake or on a slope exceeding 15 percent.

Given the project's location within the NYC East of Hudson Watershed, the stormwater design is developed in accordance with Chapter 10 (Enhanced Phosphorus Removal Supplement) of the *Design Manual* as well as NYCDEP Watershed Rules and Regulations. These enhanced design requirements require targeted practices which are larger and more efficient at the removal of phosphorus than standard practices. Per *Design Manual* Section 10.1.3 Treatment Performance Goals, (specifically goals 3 and 4), stormwater practices will be designed in accordance with Chapter 10 to meet the phosphorus removal goals. Specifically, the stormwater practices provide a minimum of 80% net removal of particulate phosphorus and 60% net removal of dissolved phosphorus.

Goals 3 and 4 cited below from the *Design Manual* identify metrics for determining appropriate criteria for enhanced phosphorus removal:

> Goal 3 - For flows that are treated by the system (i.e., flows that are not effectively bypassed), median effluent concentration of particulate phosphorus shall be at or below 0.1 mg/L. This effluent concentration of particulate phosphorus is equivalent to a net removal of particulate phosphorus of 80%, given a median influent concentration of 0.5 mg/L.
>
> Goal 4 - For flows that are treated by the system (i.e., flows that are not effectively bypassed) the median effluent concentration of dissolved phosphorus shall be at or below 0.06 mg/L. This effluent concentration of dissolved phosphorus is equivalent to a net removal of dissolved phosphorus of 60%, given a median influent concentration of 0.15 mg/L.

Although design of enhanced stormwater practices in accordance with Chapter 10 is required per NYSDEC standards, supplemental simple method phosphorus loading calculations show that the pre-development phosphorus load is equivalent to the post-development phosphorus load from the completed project. The SWPPP calculations support the basis of Chapter 10 of the *Design Manual*, in that stormwater practices designed in accordance with the enhanced phosphorus standards will meet regional goals of not increasing phosphorus from new development.

In summary, the preliminary SWPPP in DEIS Appendix E employs hydrologic modeling software and methodologies used in contemporary engineering practice with the incorporation of recent rainfall data and distributions provided by the NRCC storm events in accordance with NYSDEC requirements. The study assesses the existing conditions and quantitatively describes the expected stormwater flows and peaks resulting from the proposed project. The SWPPP establishes that post-development stormwater peak flows will be below existing peak flows and includes measures to ensure that stormwater runoff from the site in the post-development condition will not adversely affect adjacent and downstream drainage systems. There are no adverse effects on quality and quantity of water resources identified to result from stormwater runoff and increased impervious surfaces in the project. The SWPPP demonstrates the project can comply with NYCDEP and NYSDEC stormwater requirements.

10.4 Mitigation Measures

The project permitting documents will be subject to review per the requirements of GP-0-20-001 and approvals by the Town of Southeast and NYCDEP.

The stormwater collection and conveyance systems for the project will consist of catch basins and HDPE pipe sized to collect and convey at minimum the 10-year, 1-hour design storm as required by the NYCDEP and NYSDEC regulations.

Erosion and sediment control during the construction operations are intended to accomplish four basic principles: diversion of clean water, containment of sediment, treatment of dirty water, and stabilization of disturbed areas with the overall purpose of minimizing or avoiding adverse effects on downgradient waters. The SWPPP includes measures for monitoring and maintaining temporary erosion and sediment controls throughout the construction process. In general, the following temporary methods and materials should be used to control erosion and sedimentation from the project site:

- Stabilized Construction Entrance
- Silt Fence Barriers
- Storm Drain Inlet Protection
- Temporary Soil Stabilization
- Temporary Sediment Trap

Permanent erosion and sediment control will be accomplished by diverting stormwater runoff from steep slopes, controlling/reducing stormwater runoff velocities and volumes, and vegetative and structural surface stabilization. All of the permanent facilities proposed are relatively maintenance free and will require periodic inspections.

The prior chapter of this DEIS, in section 9.6, includes additional descriptions of particular requirements of the NYS Standards and Specifications for Erosion and Sediment Control that will be incorporated into the project-specific stormwater management plan.

Construction phase best management practices associated with the implementation and maintenance of the overall project stormwater management plan will be specified in the project documents, including the following:

- Scheduling and sequencing of the construction work
- Minimizing periods of exposed soils
- Establishment and management of material and equipment staging areas
- Regular monitoring of stormwater management / erosion control practices
- Reporting on stormwater management / erosion control inspections
- Waste management and spill prevention plans
- Implementing appropriate soil restoration measures
- Regular monitoring and maintenance of vegetative stabilization areas until established

Post-construction green infrastructure / stormwater management practices listed in the table below from the SWPPP are proposed in the Brewster Yards project. Two conventional stormwater management practices, infiltration basin and dry extended detention basin, will also provide environmental benefits as green practices.

Table 10-2
Proposed Post-Construction Green Infrastructure

NYSDEC Chapter 5 Requirements	Remarks		
	Design Line 1	Design Line 2	
Practices			
Preservation of Undisturbed Areas	●	●	See Note #1
Preservation of Buffers	●	●	See Note #1
Reduction of Clearing & Grading	●	●	See Note #2
Locating Development in Less Sensitive Areas	●	●	See Note #1
Soil Restoration	●	●	See Note #3
Roadway Reduction	●	●	See Note #2
Sidewalk Reduction	●	●	See Note #2
Parking Reduction	●	●	
Conservation of Natural Areas	●	●	See Note #1

● = Practice Used in Accordance with Chapter 5 Requirements

Notes:

1. Although no formal calculations have been provided, the subject project has provided conservation of natural areas, development in less sensitive areas and preservation of buffers and undisturbed areas to the maximum extent practical.
2. The reduction in clearing and grading as well as the driveway and parking areas foot print reduction will be enforced with the approval of the project SWPPP. Notes on the project plans, establish that any changes in the project plans would require an amended approval from the necessary regulatory agencies.
3. Soil restoration notes have been provided on the project plans.
4. Two (2) infiltration practices have been designed as a standard stormwater management practice (SMP) and are proposed for treatment of the RRv and WQv from the proposed development.

11.0 TRAFFIC & TRANSPORTATION

Introduction

This DEIS section provides a summary of the traffic study conducted for the project. Refer to Appendix J for the complete report.

11.1 Existing Conditions

A study of existing and proposed conditions was undertaken by DTS Provident Design Engineering, LLP, in late 2021. Area roads described for the study were:

- Interstate Route 84 - a multi-lane, limited access interstate highway
- US Route 6 (Carmel Avenue) - two-lane
- New York State Route 312 - two-lane
- Pugsley Road - a two-way, unimproved Town road
- Fields Corner Road - a seasonal dirt road, closed in the winter

The study takes into account the recently approved Northeast Interstate Logistics Center project[1] to be located on Pugsley and Fields Corner roads. The Logistics Center proposes to improve Pugsley Road to provide proper lane widths, shoulders, grades and turning radii meeting Town road standards from NYS Route 312 to Barrett Road right-of-way (ROW). Improvements at the Pugsley Road/Route 312 intersection are also proposed by the Logistics Center, to meet NYS Department of Transportation (NYSDOT) standards.

Existing road conditions and traffic volumes were recorded at the following intersections, the locations of which are shown in Figure 11-1:

- US Route 6 and New York State Route 312
- New York State Route 312 and Pugsley Road
- New York State Route 312 and Interstate Route 84 Eastbound Ramps/Independent Way
- New York State Route 312 and Interstate Route 84 Westbound Ramps
- Fair Street and Fields Corner Road

With existing traffic conditions known to not be representative of typical (pre-COVID) conditions, traffic volumes recorded in 2017/18 from the Logistics Center traffic study were utilized and escalated 1.0 percent per year for four years to represent 2021 volumes. This approach was verified from automatic traffic recorder (ATR) counts taken for one week in October 2021 on Route 312. Peak traffic volumes were identified for weekday AM, weekday PM and Saturday peak hour time periods when traffic impacts would be at their greatest. Any potential traffic impacts from the proposed project would be less throughout the rest of the day.

Based on the traffic data collected, the following Peak Roadway Hours were determined:

- Peak Weekday AM Roadway Hour: 7:30 – 8:30 AM
- Peak Weekday PM Roadway Hour: 5:00 – 6:00 PM
- Peak Saturday Roadway Hour: 12:15 – 1:15 PM

[1] The Northeast Interstate Logistics Center project is currently called Lincoln Logistics Brewster and was formerly called Commercial Campus at Fields Corner.

The 2021 Existing Traffic Volumes used in this study are shown in DEIS Appendix J, Figure 2.

A capacity analysis was conducted for each peak traffic period at each of the study intersections to identify the existing Levels of Service for each traffic movement and each intersection as a whole.[2]

The traffic study also included collection and assessment of accident statistics. Accident data was obtained from the NYSDOT for the segment of NYS Route 312 from its intersection with US Route 6 to its intersection with the Interstate 84 Westbound Ramps, including the intersections contained in this Study, as well as Pugsley Road/Fields Corner Road from its intersection with NYS Route 312 to its intersection with Fair Street. The data reviewed was for the latest available three-year period from April 2018 to March 2021. The accident summary provided in the traffic report recites the numbers of accidents reported at the study intersections (see Section 4 of DEIS Appendix J). Copies of the accident data are contained in DEIS Appendix J (sub-appendix E of the Traffic Study).

11.2 Future Without the Proposed Project (No Build Condition)

For purposes of the traffic analyses, the anticipated build year for the proposed project is 2023. The traffic study utilized a 1.0 percent per year growth factor to account for background traffic growth and other projects that may contribute traffic to the study area. The 2023 Build Traffic Volumes taken from the Commercial Campus at Fields Corner FEIS, which included general background traffic volume growth and traffic volumes associated with several proposed nearby development projects, were combined with traffic from the additional proposed developments identified by the Town's Traffic Consultant to form the 2023 No-Build Traffic Volumes (illustrated in Figure No. 3 in DEIS Appendix J).

As part of the Logistics Center project and irrespective of the Brewster Yards project, the intersection at NYS Route 312 and Pugsley Road will be upgraded with additional through lanes, turn lanes and a traffic signal to accommodate traffic volumes associated with that project. The FEIS for that project presented two options for improvements to the intersection, identified as Alternative A and Alternative B. (These are described further in Section 3.2 of the Traffic Study report.) The NYSDOT will ultimately decide which improvement option will be constructed, however that is unknown at the time of the Brewster Yards traffic study. Therefore, this study analyzed both improvement Alternatives.

The capacity analysis conducted for each peak traffic period at each of the study intersections in the No Build condition identified the anticipated Levels of Service for each intersection in 2023 without the proposed project. The results of the capacity analyses are shown in the Level of Service Summary Table 11-2.

[2] Capacity analysis is a method by which traffic volumes are compared to calculated roadway and intersection capacities to evaluate future traffic conditions. The methodology utilized is described in the 2010 Highway Capacity Manual published by the Transportation Research Board. The term "Level of Service" provides a qualitative rating for the average delay experienced at an intersection. The definitions of Level of Service are provided in Appendix B of the Traffic Report. In general, Level of Service "A" represents the best traffic operating condition.

11.3 Potential Impacts (Build Condition)

The study developed arrival and departure patterns for the Proposed Project (illustrated in Figures No. 4 and 5 in DEIS Appendix J). The project will seek to discourage drivers leaving the site from making right-turns towards Fields Corner Road by installing No-Right-Turn traffic signs at the driveway approaches to Pugsley Road. However, to assess potential impacts to the intersection of Fair Street and Fields Corner Road from site-generated traffic, the study assumes 1.0 percent of the traffic volumes exiting the site would travel towards Fair Street via Fields Corner Road.

Peak hour traffic volumes to be generated by the Proposed Project were determined based on actual surveys of a similar facility utilizing StreetLight Data. This facility is the Connecticut Sportsplex located in North Branford, CT. Similar to the Proposed Project, the Sportsplex facility contains a comparable mix of recreational fields and an indoor facility as the Proposed Project. Traffic volumes were surveyed during summer months and non-summer months at the Sportsplex and used the highest hour of trip generation to provide a conservative analysis. Based upon these data, trip generation anticipated for the Proposed Project is tabulated below:

Table 11-1

BREWSTER YARDS TRIP GENERATION TABLE					
Peak Weekday AM Hour		**Peak Weekday PM Hour**		**Peak Saturday Hour**	
Enter	**Exit**	**Enter**	**Exit**	**Enter**	**Exit**
46	6	239	45	265	218

Accounted for in the peak volumes projected for this facility is utilization of the site for various simultaneous or overlapping activities -- practice sessions, on-field and in-building training classes, playground use, parent spectators, event room use in the building and tournaments. All activities at the site will center around one primary focus of the project: baseball and softball. Facility use will vary hour-to-hour and day-to-day depending on the programming, season of the year and events scheduled.

The Applicant's projections of site usage are based on similar facilities in the Northeast region. Weekday afterschool and weekend patronage during the baseball season is projected to be up to 1023 persons -- players, spectators and staff. On school days, after-school field use is expected to be up to 358 persons. During peak use the project is anticipated to employ up to 63 people.

The estimated traffic volumes listed in the Trip Generation table above were assigned to the roadway network with the Arrival and Departure Distributions to form the Site-generated Traffic Volumes, which are illustrated on Figure No. 6 in DEIS Appendix J.

The Site-generated Traffic Volumes were combined with the 2023 No-Build Traffic Volumes to form the 2023 Build Traffic Volumes, which are illustrated on Figure No. 7 in DEIS Appendix J.

The capacity analysis conducted for each peak traffic period at each of the study intersections in the Build condition identified the traffic impact associated with the project. Where the analysis

showed a significant impact due to the addition of project traffic volumes to the roadway system, an improvement was recommended and implemented within the analysis, resulting in the 2023 Build with Improvements analysis. The capacity analyses worksheets are contained in DEIS Appendix J (sub-appendix D of the Traffic Study).

Field observations and detailed analysis undertaken in preparation of the Traffic Study resulted in the following findings:

- The Proposed Project is provided good regional and local vehicular access via New York State Route 312, which ultimately connects to Interstate Route 84 to the east and US Route 6 to the west.
- The Proposed Project and associated parking areas will be accessed from two STOP-controlled access driveways, one along Pugsley Road and one along Zimmer Road. The Proposed Project will seek to discourage drivers leaving the Site from making right-turns towards Fields Corner Road by installing No-Right-Turn traffic signs at their driveway approaches to Pugsley Road.
- Based upon Trip Generation rates obtained from an analysis of a similar type and size facility located in Connecticut, it is anticipated that the Proposed Project will generate approximately 46 entering vehicles and 6 exiting vehicles during the Peak Weekday AM Hour, 239 entering vehicles and 45 exiting vehicles during the Peak Weekday PM Hour, and 265 entering vehicles and 218 exiting vehicles during the Peak Saturday Hour.
- The table below summarizes the results of the capacity analyses conducted for each intersection in the Study. Average delay, expressed in seconds per vehicle, is listed below each Level of Service (LOS).
- The following roadway improvements are recommended in association with the Proposed Project:
    - Intersection of US Route 6 & NYS Route 312 traffic signal timing adjustments during the Peak Weekday PM Hour and Peak Saturday Hour
    - Intersection of NYS Route 312 & Pugsley Road (Alternative A) traffic signal timing adjustments during the Peak Weekday PM Hour and Peak Saturday Hour
    - NYS Route 312 & Interstate Route 84 Eastbound Ramps/Independent Way traffic signal timing adjustments during the Peak Saturday Hour
    - NYS Route 312 & Interstate Route 84 Westbound Ramps traffic signal timing adjustments during the Peak Weekday PM Hour and Peak Saturday Hour

Table 11-2

BREWSTER YARDS
LEVEL OF SERVICE SUMMARY TABLE
2023 NO-BUILD VS. 2023 BUILD/BUILD WITH IMPROVEMENTS

	PEAK AM HOUR			PEAK PM HOUR			PEAK SAT HOUR		
	2023 NO-BUILD	2023 BUILD	2023 BUILD W/ IMPV.	2023 NO-BUILD	2023 BUILD	2023 BUILD W/ IMPV.	2023 NO-BUILD	2023 BUILD	2023 BUILD W/ IMPV.
INTERSECTION	LOS DELAY	LOS DELAY	LOS DELAY	LOS DELAY	LOS DELAY	LOS DELAY	LOS DELAY	LOS DELAY	LOS DELAY
US Rt. 6 & NY Rt. 312	C 28.0	C 29.0	-	D 41.1	D 52.3	D 46.7	D 41.8	E 57.1	D 46.9
NY Rt. 312 & Pugsley Rd. (Alternative A)	A 8.0	A 8.1	-	B 10.2	B 15.6	B 11.2	A 5.1	B 12.8	B 11.4
NY Rt. 312 & Pugsley Rd. (Alternative B)	A 4.8	A 6.2	-	A 7.1	B 10.4	-	A 2.5	B 11.6	-
NY Rt. 312 & I-84 EB Ramps/Independent Way	D 42.2	D 42.4	-	D 50.1	D 51.6	-	D 53.4	E 62.9	D 56.2
NY Rt. 312 & I-84 WB Ramps	C 20.4	C 21.5	-	D 54.2	E 76.6	D 42.9	D 36.8	E 57.9	C 33.6
Fair St. & Fields Corner Rd.	c 18.5	c 18.5	-	b 14.2	b 14.3	-	b 12.4	b 12.3	-

Table Notes:

- Unsignalized intersection Level of Service is represented by lowercase letters.
- Signalized intersection Level of Service is represented by UPPERCASE letters.
- Delays are provided for the most critical side street approach for unsignalized intersections.
- Delay is presented in Seconds per Vehicle.
- "Build w/ Impv." represents the Build condition with the infrastructure improvements recommended in the Traffic Study for the respective intersections/time periods. A "-" indicates no improvements are recommended for the particular intersection during the respective time period.
- At the intersection of NYS Route 312 & Pugsley Road, "Alternative A" and "Alternative B" represent the two intersection geometry layouts studied in the FEIS for the Northeast Interstate Logistics Center project. These are described further in Section 3.2 of the Traffic Study report.

The traffic impact analysis concludes that the Proposed Project will have no significant traffic impacts on the adjacent roadway network with the recommended improvements. With the improvements recommended, all intersections will see minor increases in average delay and will be adequately mitigated.

Parking

The Town Zoning regulations do not appear to have a comparable parking ratio for the recreation building use so the Applicant has applied a parking multiplier taken from the Institute

of Transportation Engineers (ITE) *Parking Generation Manual*. The following parking ratios are required for each associated use:

- Recreation in Building - 1 parking space per 250 square feet [3]
- Athletic Field Seating - 1 space per 5 spectator seats [4]

Based on the foregoing, the total number of parking spaces required for the Proposed Project would be 345 parking spaces, as listed in Table 11-3. The Applicant's plan proposes a total of 449 parking spaces which exceeds the calculated parking requirement but is based on the expected peak parking need from the Applicant's observations at similar recreation venues (approximately 50 spaces per active ballfield). Two parking spaces will be allocated for users of the woodland trail at the proposed parking lot south of Zimmer Road (demand for such use is not known). These parking numbers do not include the additional 8 bus parking spaces proposed, which is again based on the expected peak need from the Applicant's observations (two buses/two teams on up to four fields at one time).

Table 11-3

Computation of required off-street parking and loading spaces:				
Use:		Loading	Parking	Factor
Recreation in bldg (sf)	35,459	0	142	1 space / 250 sf (ITE)
Athletic Fields (seats)	1,001	0	201	1 space / 5 spectator seats
Public Trail Use		0	2	
Total Spaces Required:		0	345	
Total Spaces Provided:		0	449	

The proposed land use does not require provision of a loading space on the site plan, pursuant to Code §138-69.

Site Circulation

Review of vehicular circulation within the project was undertaken for passenger vehicles, emergency and delivery vehicles, and pedestrian circulation.

The internal driveways and parking lot aisles to be used by the public will measure 24 feet in width to allow for two-way vehicular traffic flow throughout the project. Parking spaces are proposed to be 9 feet by 18 feet in accordance with the Town standard.

Buses, emergency vehicles and delivery vehicles will utilize the same travel ways as for passenger vehicles. Turning movement diagrams for buses and emergency vehicles are illustrated on Figures No. F-1, F-2 and F-3 contained in DEIS Appendix J (sub-appendix F of the Traffic Study). The turning diagrams demonstrate that the layout of site elements will be able to accommodate these larger vehicles without significant impact to circulation. As the site design details are developed through site plan review, adjustments are likely to improve on turning and other aspects of circulation.

[3] Source: ITE Parking Generation Manual, 5th Edition – Land Use 495 (Recreational Community Center)
[4] Source: Town of Southeast Zoning Regulations (§138-67.G)

Pedestrian circulation will be accommodated throughout the project site, linking the parking areas with the recreation facilities via sidewalks, crosswalks and curb ramps. For pedestrians that may need to cross Zimmer Road from the main parking area to the showcase baseball field on the south side of the project, a marked and signed pedestrian crosswalk will be installed.

Public Transportation

The Putnam Area Rapid Transit (PART) system currently runs a weekly bus route, Route No. 3, along NYS Route 312 and Fair Street. This route runs hourly on Monday through Friday, from 8:00 AM to 5:00 PM. Requests can be made to PART to determine if potential site usage will warrant a service route change. Once the proposed project is operational, the Applicant may solicit PART to determine if the project meets the requirements to be added as a regular or on-call stop along this route.

Construction Impacts

The vast majority of construction employees will arrive and depart the Project Site out of phase with the Peak Weekday AM and Peak Weekday PM traffic hours. Construction truck traffic is anticipated to access the Site primarily from nearby Interstate Route 84. Access to and from Interstate 84 is within 1.5 miles of the site via NYS Route 312. This access route is in a commercial area and therefore will not impact the area residential neighborhoods and local roads. No construction traffic will be allowed to utilize Fields Corner Road to Fair Street.

11.4 Mitigation Measures

The following measures are proposed to mitigate traffic impacts of the project:

- The Proposed Project will seek to discourage drivers leaving the Site from making right-turns towards Fields Corner Road by installing No-Right-Turn traffic signs at their driveway approaches to Pugsley Road. The Brewster Yards website will include in directions that all traffic to and from the site shall use Pugsley Road from NYS Route 312. North of the northerly site driveway, no improvement is proposed to Fields Corner Road. Signage will state the unimproved condition of the road north of the site driveway.
- The following roadway improvements are recommended as part of the project:
    - Intersection of US Route 6 & NYS Route 312 traffic signal timing adjustments during the Peak Weekday PM Hour and Peak Saturday Hour
    - Intersection of NYS Route 312 & Pugsley Road (Alternative A) traffic signal timing adjustments during the Peak Weekday PM Hour and Peak Saturday Hour
    - NYS Route 312 & Interstate Route 84 Eastbound Ramps/Independent Way traffic signal timing adjustments during the Peak Saturday Hour
    - NYS Route 312 & Interstate Route 84 Westbound Ramps traffic signal timing adjustments during the Peak Weekday PM Hour and Peak Saturday Hour
- Once the proposed project is operational, the Applicant may solicit PART to determine if the project meets the requirements to be added as a regular or on-call stop along its bus route along NYS Route 312.
- Most construction employees will arrive and depart the Project Site out of phase with the peak traffic hours.

- Construction traffic will be directed to access the site via NYS Route 312 and Interstate Route 84 which will avoid traffic traveling through residential neighborhoods and on local roads.
- No construction traffic will be allowed to utilize Fields Corner Road to Fair Street.

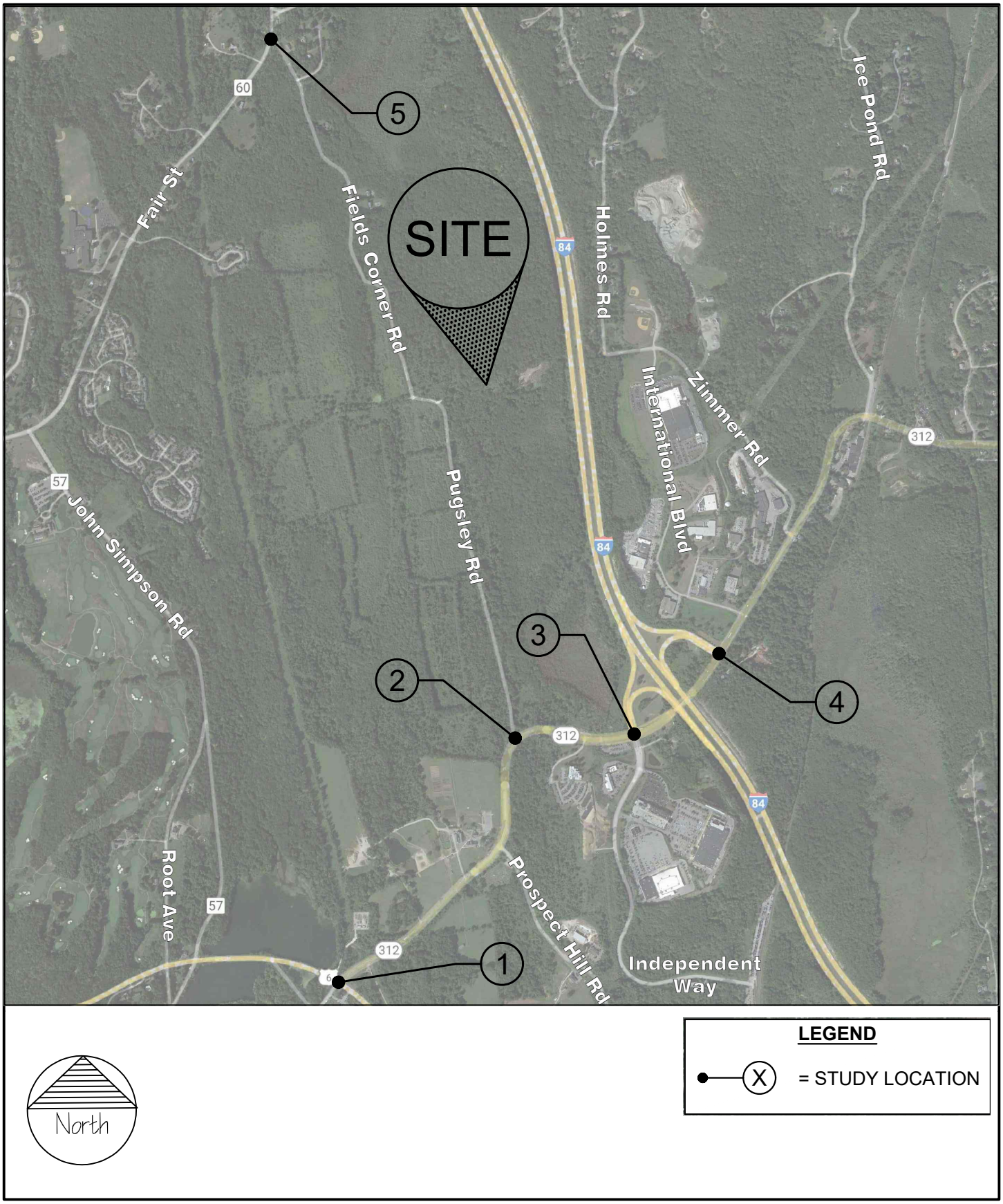


Figure 11-1: Traffic Study Intersections
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York

3/31/22
Scale: Approx. 1:36,000
KG+D 2020-1054

12.0 INFRASTRUCTURE AND ENERGY

12.1 Introduction

The Applicant is proposing a commercial baseball-centered recreation facility, Brewster Yards, on approximately 82 acres of land located on Pugsley Road and Fields Corner Road in the Town of Southeast, Putnam County, New York.

The proposed project would be an indoor and outdoor baseball-centered facility. The project is expected to be completed in 2023. Brewster Yards would include the following amenities: nine (9) baseball/little league fields, one (1) multi-purpose field, concession buildings, support buildings, and ±35,000 square foot indoor recreation facility.

Brewster Yards is to be utilized year-round. The hours of operation are planned to be as follows: Monday through Friday: 10am to 10pm – on season, 3pm to 10pm - off season/winter; Saturday, Sunday, and Holidays: 8am to 10pm.

The Applicant's projections of site usage are based on similar facilities in the Northeast region. Weekday afterschool and weekend patronage during the baseball season is projected to be up to 1023 persons -- players, spectators and staff. On school days, after-school field use is expected to be up to 358 persons. During peak use the project is anticipated to employ up to 63 people.

The proposed project would create new demands for potable water supply, electric supply and for sanitary wastewater disposal. This section evaluates the potential impacts for the new demands created by the project on the local infrastructure and energy systems.

12.2 Existing Conditions

12.1.2 On-site Water Supply - Existing Conditions

The project site is undeveloped and does not currently have a water supply system in place or available for public use. Any new development will need to obtain potable water from drilled groundwater wells.

The project site is located within the watershed of the New York State Wetland LC-28 and an unnamed tributary to Middle Branch Reservoir. Three ponds and several watercourses were identified on the project site. Figures in chapter 9 illustrate surface waters on and near the project site. The project site is not located over, or immediately adjoining, a primary, principal, or sole source aquifer.

Information about the existing groundwater resources in the project area is taken from groundwater investigations conducted at the neighboring property to the west. The DEIS for Northeast Interstate Logistics Center identified three groundwater wells that were pump tested in 2004 and demonstrated sustainable yields of 30 gallons per minute (gpm), 56 gpm and 60 gpm. Figure 12-1 reproduces the Well Location map from that study. Two of these wells are proposed to be used for water supply of the Logistics project (wells OW-3 and NW-4). Water samples collected and tested from the three wells were found to meet New York State Subpart

5-1 drinking water standards in 2004. Additionally, the testing found no direct hydraulic connection between the groundwater tapped by these bedrock wells and surface waters.

12.2.2 On-site Sanitary Wastewater - Existing Conditions

The project site is currently undeveloped, forested land and does not currently have a wastewater system in place or available to it. The project site includes areas of steep slopes, ridgeline, and wetlands, however in certain areas the underlying site conditions have been determined to be suitable for an onsite subsurface treatment system (conventional septic system). Refer to Section 8.0 of this DEIS for a detailed discussion of the geology and soils underlying the project site and Appendix D for the Preliminary Wastewater Engineer's Report prepared by Insite Engineering. As noted in the Engineer's Report, the underlying site conditions have been found to be suitable for an onsite subsurface treatment system (conventional septic system).

The following information is taken from the USDA *Soil Survey* to summarize the general characteristics of the existing soil types mapped by USDA NRCS in the area identified for installation of the on-site septic field. It is noted that the soil mapping unit boundaries and listed "limitations" are generalized for the purposes of the *Soil Survey* and do not substitute for the in-field investigations (percolation / infiltration testing and deep test pit inspections) that were used for design of the subsurface sewage treatment system (SSTS).

- Charlton-Chatfield complex (**CrC**) - moderate slopes (3-15%), very rocky;
    - Chartton portion is ±50%;
    - Chatfield portion is ±30%;
    - Limitations to construction of subsurface septic systems relate primarily to depth to rock;

- Chatfield-Charlton complex (**CsD**) - slopes (15-35%), very rocky;
    - Chatfield portion is ±45%;
    - Chartton portion is ±35%;
    - Limitations to construction of subsurface septic systems relate to slopes and depth to rock;

- Charlton is deep to a restrictive layer (>80");
- Chatfield may have bedrock at 20" to 41" depth;
    - Both are upland soils, depth to water table >80";
    - Neither is prone to flooding.

Testing data collected from test pits dug in the area of the proposed septic field confirm that there is no bedrock or groundwater at depths of at least 84 inches below the ground surface. See Figures 12-2 and 12-3.

12.2.3 Electrical Supply - Existing Conditions

Currently, the project site does not have electric services from New York State Gas and Electric Corporation (NYSEG). However electric services appear to exist nearby on Fields Corner Road to the north, on Pugsley Road to the south, and at the Putnam County property to the east.

12.3 Future without the project

12.3.1 Water Supply, Wastewater Disposal, and Electric Supply

The project site would remain in its current undeveloped condition and would not present any demands for water and energy supply nor create a need for the disposal of sanitary wastewater in the scenario of a future without the project. These services would likely not be extended to the project site without any known need.

12.4 Potential Impacts

12.4.1 On-site Water Supply Impacts

Water supply for the project site would be provided by a new public water supply system including on-site water wells. This new water system would be designed and constructed in accordance with the standards and subject to the approval of the Putnam County Department of Health (PCDOH).

The average daily water design flow for Brewster Yards is based on the hydraulic loading rates published in the New York State Department of Environmental Conservation (NYSDEC) publication of Design Standards for Intermediate Sized Wastewater Treatment Systems (NYSDEC, 2014) which were utilized to calculate the average daily sewer design flows for the proposed project.

As noted throughout this document, Brewster Yards is expected to be utilized by patrons most during weekend hours than during weekday operations. Due to the fluctuation of project site visitors throughout the entire week, a design flow was calculated for an average weekday and weekend. The proposed water wells on-site would need to yield 3,476 gallons per day (gpd) during weekdays and 30,132 gpd on the weekends. No irrigation is proposed.

The water system for the project would be designed to meet the peak hourly demand on a weekend day of 30,132 gpd. The average hourly flow calculated for the proposed project is 28 gpm. The peak hourly flow for the project's water system was calculated using a peaking factor of four (4) resulting in a peak hourly flow of 112 gpm.[1]

The main recreation building would be equipped with a sprinkler system supplied from a water storage tank. During the design of the building plans, fire sprinkler demands for this system would be calculated by the project's mechanical engineer and provided in the building construction plans.

The project's potable water and fire protection supply is proposed to be provided by a minimum of two advanced water wells that would meet the required maximum daily demand of 60,264 gpd or 42 gpm with the best well out of service.[2] Two or more wells would need to be developed to meet the 42 gpm demand with the best well out of service, in accordance with the applicable standards.

Exploration for the groundwater water supply will include a 72-hour pump test to demonstrate there is an adequate supply of potable water for Brewster Yards during operation as well as for

[1] Source: Putnam County Health Department – Peak Hourly Flow fate of four (4).
[2] Calculation: 60,264 gpd is two times the average daily flow of 30,132 gpd.

fire protection, with no significant adverse effects on any nearby water well. Refer to Appendix C for the Preliminary Water Engineer's Report including further details pertaining to the development of the public water supply for the proposed project.

12.4.2 On-site Sanitary Wastewater Impacts

Proposed Subsurface Sewage Treatment System (SSTS)

A subsurface sewage treatment system (SSTS) is proposed to be constructed on the project site to treat the wastewater generated by the project for which permits/approvals will be required from NYSDEC and New York City Department of Environmental Protection (NYCDEP). The hydraulic loading rates published in NYSDEC publication of Design Standards for Intermediate Sized Wastewater Treatment Systems (NYSDEC, 2014) were utilized to calculate the average daily sewer design flows for the proposed project.

Due to the fluctuation of project site visitors anticipated throughout the week, as described above, a design flow was calculated for an average weekday and weekend. The volume of sanitary wastewater expected to be generated at Brewster Yards would be 3,476 gpd on weekdays and 30,132 gpd during weekend days. A design flow of 11,092 gpd would be utilized for the proposed project based on the average flow for a full week. Refer to Appendix D, Preliminary Wastewater Engineering Report, for detailed calculations associated with the design of the project sanitary treatment system.

The wastewater collection system is proposed of individual sewer service connections with cleanouts from each proposed building associated with Brewster Yards. The sewer service would connect to via a sewer main to proposed septic tanks. To accommodate fluctuations in daily site populations, the project will utilize a septic storage and dosing system to even out the flow to the SSTS. The SSTS area shown on the project plan will include the required primary and 100 percent reserve absorption areas.

The SSTS area is proposed on the southeastern portion of the northern parcel. In December 2020, deep test holes were advanced and percolation testing performed on the project site to confirm depth of suitable soil and percolation rate of the site's soil in the SSTS area shown on the plans. Soil testing on the project site was conducted in the presence of staff from Insite Engineering, Surveying, and Landscape Architects, P.C., and Putnam County Health Department. The results of the soil testing demonstrated acceptable soils for this use per pertinent regulations. Refer to engineer's information in Figures 12-2 and 12-3 showing the soil testing information.

Infiltration and recharge of a portion of the water withdrawn from the groundwater aquifer back into the groundwater system through the use of an onsite septic system will reduce the consumptive water withdrawal of the project.

With effluent levels above 5,000 gpd, a groundwater mounding analysis is required to evaluate the potential/extent of groundwater mounding in the area of the proposed SSTS. A mounding analysis will be conducted using the Hantush Equation for "Formation of a Groundwater Mound Under a Rectangular Recharge Area" (Hantush, 1967). The Hantush Equation for groundwater mounding is commonly used by hydrogeologists to determine the effects of subsurface discharge to the groundwater table or an underlying low permeability strata such as clay or bedrock. Findings will be reported in the Final Environmental Impact Statement (FEIS).

12.4.3 Electrical Supply Impacts

The New York State Electric and Gas Corporation (NYSEG) service area includes the project site. Extension of existing electrical service will be required from one of the three nearby systems to service the project.

The total peak electric load at the site is estimated to be 850kW, including service to the recreation building for its full usage, to all the proposed fields for sports lighting and scoreboards, and throughout the site for lighting, concessions and other patron amenities. With the end of a service line present at the County-owned parcel on former Zimmer Road (via a line over Interstate 84), this line may provide a nearby connection for the project.

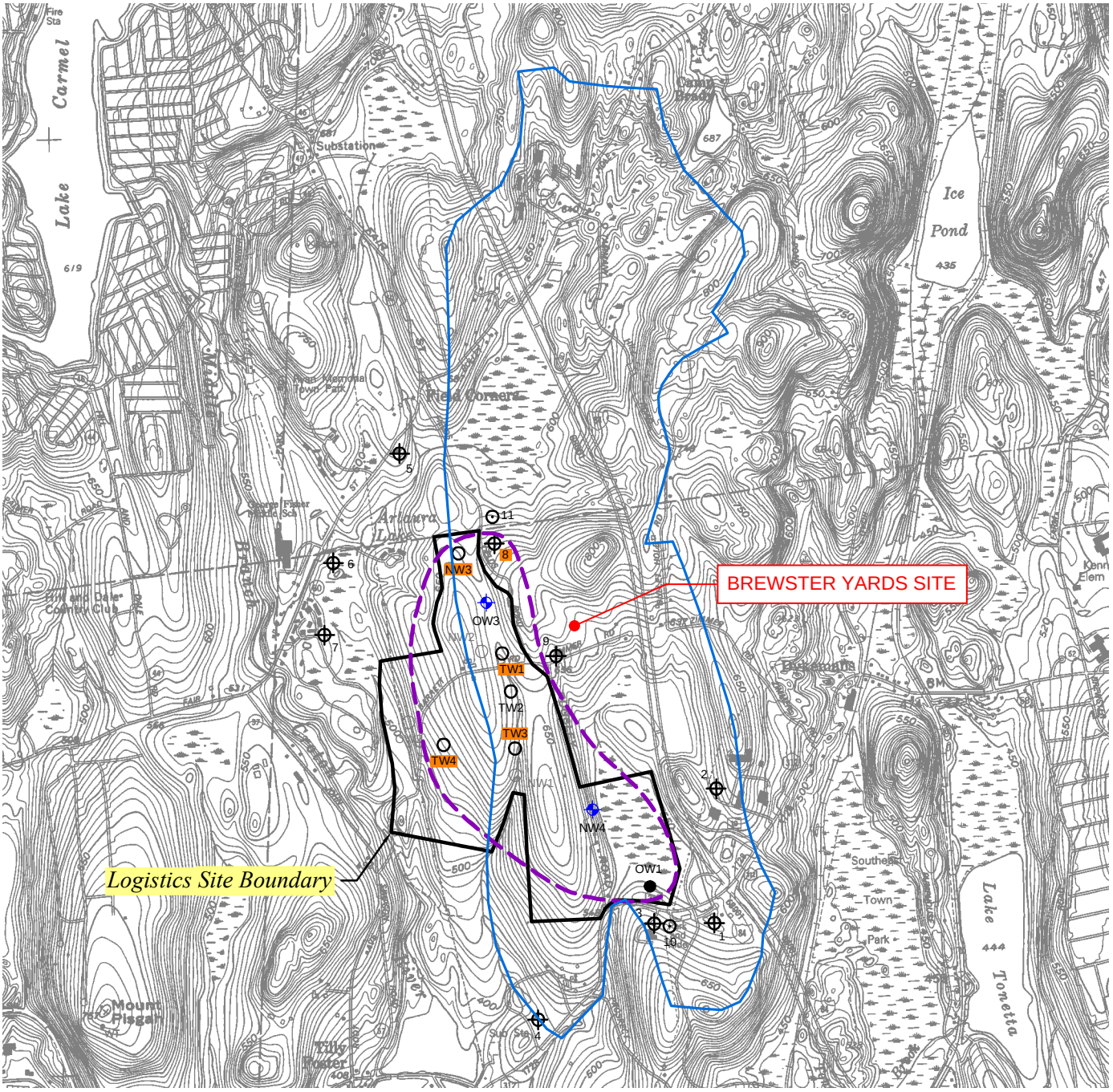
An inquiry via email was sent to NYSEG on December 7, 2021, requesting distribution line confirmation and additional information about hook up access to the project site. An additional request was placed into a NYSEG representative on December 10, 2021, requesting information and cost of new electric service for the estimated peak operational electric load of the proposed project. No response from NYSEG has been received.

The estimated project load is not considered to be significant for a typical suburban power grid, however further determination will be necessary from NYSEG. If potential impact on the available electric service capacity is identified, it will be addressed in the FEIS prepared for Brewster Yards.

12.5 Mitigation Measures

Based on the information available at the time of preparation of this document regarding groundwater supply, wastewater assimilation capacity on the site and electric supply available to the site, no unusual mitigation measures are proposed.

Adequacy of the groundwater supply to service this project will need to be proven based on the results of on-site well drilling and testing, in accordance with the applicable regulatory requirements and permit. Appropriate treatment and infiltration of sanitary effluent produced from the project during full occupancy will need to be demonstrated in order to obtain the requisite permits to operate the system. Likewise, an adequate electric service connection will need to be obtained from the available electric grid, meeting all requirements of NYSEG, the service provider.



SOURCE: USGS DIGITAL QUADRANGLE LAKE CARMEL AND BREWSTER, NEW YORK.

LEGEND

- PUMPING WELL (1992 AND 2004)
- PUMPING WELL (1992 and 2004) PROPOSED AS SUPPLY WELL FOR NORTHEAST INTERSTATE LOGISTICS CENTER
- OFFSITE MONITORING WELL (JUNE 1992)
- OFFSITE MONITORING WELL (MARCH 2004)
- ONSITE MONITORING WELL
- ONSITE WELL NOT MEASURED
- WATERSHED FOR ONSITE PUMPING WELLS
- DRAWDOWN MEASURED IN MONITORING WELL DURING JUNE 1992 AND/OR MARCH2004 PUMPING TEST
- APPROXIMATE AREA OF INFLUENCE IN BEDROCK AQUIFER FROM PUMPING ONSITE WELLS BASED ON JUNE 1992 AND MARCH 2004 PUMPING TESTS

0 2500

SCALE IN FEET

NORTHEAST INTERSTATE LOGISTIC CENTER SOUTHEAST, NEW YORK

WELL LOCATION AND WATERSHED MAP

DATE	REVISED

PREPARED BY:

WSP USA
4 Research Drive
Suite 204
Shelton, Connecticut 06484
(203) 929-8555

DRAWN:	RAC	CHECKED:	SS	DATE:	03/12/18	FIGURE:	III.F–1

Figure 12-1: Well Location and Watershed Map

Source of this figure: Draft Environmental Impact Statement, Northeast Interstate Logistics Center, prepared by JMC, dated June 2018.

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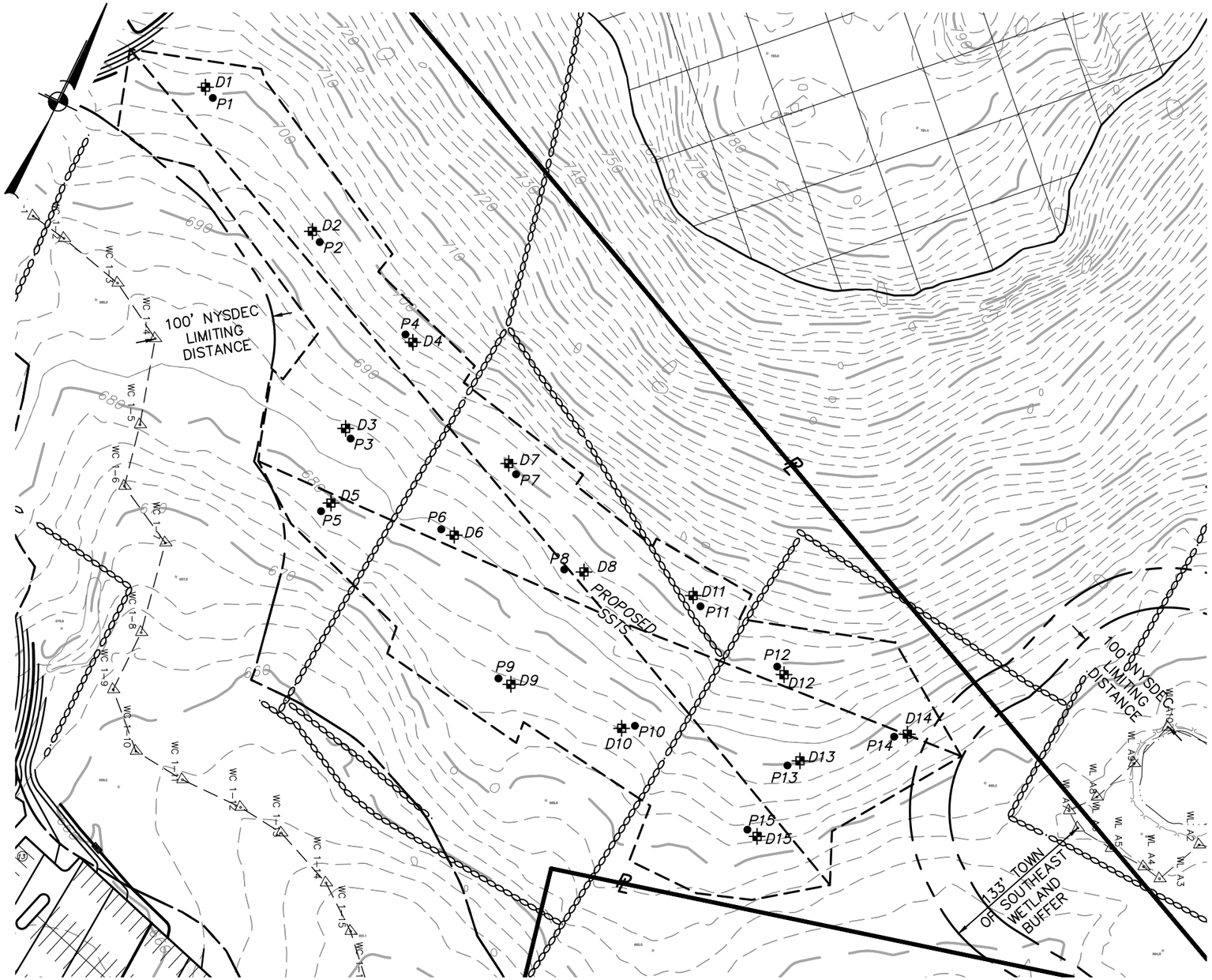

SITE PLAN

SCALE: 1" = 100'

LEGEND

- EXISTING PROPERTY LINE
- D1 — DEEP TEST HOLE
- P1 — PERCOLATION TEST HOLE
- EXISTING STONE WALL
- WC 1-9 / WC 1-8 — EXISTING WETLAND FLAG
- 680 — EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR

GENERAL NOTES:

1. Property lines shown taken from map entitled "Map of Alienation Parcels Prepared for Proswing..." dated March 6, 2020 prepared by Insite Engineering, Surveying, and Landscape Architecture P.C
2. Existing topography and site features shown hereon derived from Aerial Photogrammetry, created from a drawing entitled "Pugsley Road", by Geomaps International photo dated November 30, 2019 and obtained January 13, 2020. Elevations show hereon are in vertical datum NAVD 88. The contour interval is 2'.
3. Wetlands shown hereon were flagged by Ecological Analysis on November 27, 2019 and field located by Insite Engineering, Surveying, and Landscape Architecture P.C. on December 18, 2019.
4. NYCDEP watercourses within the vicinity of a NYSDEC wetland are assumed to located within the NYSDEC wetland boundary.

SOIL TESTING NOTE:

This map is provided to illustrate the Deep Test and Percolation Test locations witnessed by Insite Engineering, Surveying & Landscape Architecture, P.C., Putnam County Department Of Health & New York City Department of Environmental Protection for the design of the SSTS.

GRAPHIC SCALE

100 0 50 100 200

(IN FEET)
1 inch = 100 ft.

PROJECT:
BREWSTER YARDS
160 & 132 PUGSLEY ROAD, TOWN OF SOUTHEAST, PUTNAM COUNTY, NY

DRAWING:
SSTS WITNESSED SOIL TESTING

PREPARED BY:
INSITE
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
3 Garrett Place • Carmel, New York 10512
Phone (845) 225-9690 • Fax (845) 225-9717
www.insite-eng.com

DATE:	02-28-22
SCALE:	1" = 100'
PROJECT NO.:	19249.100
FIGURE:	1

Figure 12-2
SSTS Witnessed Soil Testing
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York

DEEP TESTS

DEEP TESTS OBSERVED: 12–11–20

DEEP TESTS OBSERVED BY:
ERIC SCHLOBOHM, PE, & KIRSTEN MILLER, INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

DEEP TESTS D 1 – D 15 WITNESSED BY: GENE REED, PUTNAM COUNTY DEPARTMENT OF HEALTH & MELISSA NG, NYC DEP ON 12–11–20

NOTE: NO GROUNDWATER, MOTTLING, OR ROCK ENCOUNTERED UNLESS NOTED.

D 1:	0"–12":	TOPSOIL
	12"–24":	RED BROWN SANDY LOAM
	24"–84"+:	MEDIUM BROWN FINE SAND
D 2:	0"–12":	TOPSOIL
	12"–24":	RED BROWN SANDY LOAM
	24"–72":	MEDIUM BROWN FINE SAND
	72"–96"+:	LIGHT BROWN FINE SAND
D 3:	0"–12":	TOPSOIL
	12"–30":	RED BROWN SANDY LOAM
	36"–66":	MEDIUM BROWN FINE SAND
	66"–92"+:	LIGHT BROWN FINE SAND
D 4:	0"–12":	TOPSOIL
	12"–24":	RED BROWN SANDY LOAM
	24"–66":	MEDIUM BROWN FINE SAND
	66"–92"+:	LIGHT BROWN FINE SAND
D 5:	0"–12":	TOPSOIL
	12"–36":	RED BROWN SANDY LOAM
	36"–100"+:	MEDIUM BROWN FINE SAND
D 6:	0"–12":	TOPSOIL
	12"–30":	RED BROWN SANDY LOAM
	30"–92"+:	MEDIUM BROWN FINE SAND
D 7:	0"–12":	TOPSOIL
	12"–24":	RED BROWN SANDY LOAM
	24"–60":	MEDIUM BROWN FINE SAND
	60"–92"+:	LIGHT BROWN FINE SAND
D 8:	0"–12":	TOPSOIL
	12"–24":	RED BROWN SANDY LOAM
	24"–66":	MEDIUM BROWN FINE SAND
	66"–96"+:	LIGHT BROWN FINE SAND
D 9:	0"–12":	TOPSOIL
	12"–24":	RED BROWN SANDY LOAM
	24"–87"+:	MEDIUM BROWN FINE SAND
D 10:	0"–12":	TOPSOIL
	12"–30":	RED BROWN SANDY LOAM
	30"–84"+:	MEDIUM BROWN FINE SAND
D 11:	0"–12":	TOPSOIL
	12"–30":	RED BROWN SANDY LOAM
	30"–80":	MEDIUM BROWN FINE SAND
	80"–96"+:	TAN SAND
D 12:	0"–6":	TOPSOIL
	6"–18":	RED BROWN SANDY LOAM
	18"–70":	MEDIUM BROWN FINE SAND
	70"–86"+:	TAN SAND W/ DEGRADED ROCK
D 13:	0"–12":	TOPSOIL
	12"–24":	RED BROWN SANDY LOAM
	24"–96"+:	MEDIUM BROWN FINE SAND
D 14:	0"–6":	TOPSOIL
	6"–18":	RED BROWN SANDY LOAM
	18"–48":	MEDIUM BROWN FINE SAND
	48"–84"+:	TAN SAND
D 15:	0"–6":	TOPSOIL
	6"–18":	RED BROWN SANDY LOAM
	18"–88"+:	MEDIUM BROWN FINE SAND

PERCOLATION TESTS

TEST PERFORMED: 12/11/20

TEST PERFORMED BY: ERIC SCHLOBOHM, P.E., KIRSTEN MILLER, & CHRIS ZAZZERO, INSITE ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.
WITNESSED BY: GENE REED PUTNAM COUNTY DEPARTMENT OF HEALTH

P 1:	9 MIN	P 9:	5 MIN
P 2:	10 MIN	P 10:	5 MIN
P 3:	8 MIN	P 11:	8 MIN
P 4:	7 MIN	P 12:	15 MIN
P 5:	7 MIN	P 13:	3 MIN
P 6:	11 MIN	P 14:	10 MIN
P 7:	8 MIN	P 15:	15 MIN
P 8:	7 MIN		

PROJECT:
BREWSTER YARDS
160 & 132 PUGSLEY ROAD, TOWN OF SOUTHEAST, PUTNAM COUNTY, NY

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SSTS WITNESSED SOIL TESTING

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DATE:	02–28–22
SCALE:	AS NOTED
PROJECT NO.:	19249.100
FIGURE:	2

Figure 12-3
SSTS Witnessed Soil Testing
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York

13.0 AIR QUALITY

13.1 Existing Conditions

Air quality is a relative measure of the amount of noxious substances that occur in the air and that are caused by natural and human processes. Certain airborne gases and particles can cause or contribute to the deterioration and /or destruction of biological life as well as damage to property and other physical components of the environment. Air quality in any particular location is influenced by contaminants discharged into the atmosphere and by regional and local climatic and weather conditions. Atmospheric conditions such as sunlight, rainfall, temperature, and wind speed can disperse, intensify or alter the compositions of air contaminants.

Air Quality Standards and Compliance

The United States Environmental Protection Agency (EPA) and the New York State Department of Environmental Conservation (NYSDEC) have promulgated Ambient Air Quality Standards (AAQS) intended to protect the public health and welfare. These standards are designed to protect the most vulnerable segment of the population such as children, the elderly and the infirm, which are more susceptible to respiratory infections and other air quality-related health problems. Locations or source-receptors that would be considered are schools, hospitals and convalescent homes as well as other related facilities.

Several air contaminants have been identified by the EPA as being of concern nationwide. These pollutants include carbon monoxide (CO), nitrogen dioxide ($NO_{2)}$, ozone (O_3) (also termed photochemical oxidants), particulate matter, sulfur dioxide (SO_2), and lead (Pb). The sources of these contaminants, their effect on human health and the nation's welfare, and their final disposition in the atmosphere vary considerably. Particulate standards include only those particles with nominal diameters less than 10 microns which are inhalable.

National Ambient Air Quality Standards (NAAQS) are mandated by the Federal Clean Air Act (1990). Standards promulgated by the EPA include primary and secondary standards. National Primary Standards are levels of air quality necessary, with a margin of safety, to protect the public health. National Secondary Standards are levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant, such as an adverse effect on vegetation. For all contaminants except sulfur dioxide and suspended particulates, the primary and secondary standards are identical.

With the enactment of the Clean Air Act and subsequent amendments, each state was required to develop a State Implementation Plan (SIP) to provide a regulatory framework in which to implement requirements of the Act. The New York SIP adopted Ambient Air Quality Standards (AAQS) from a list of seven criteria pollutants established by the EPA. These pollutants were selected by the EPA based on a list of pollutants of primary concern nationwide. Attainment of the AAQS is required under the Act, and each State has a designated time period in which to bring nonconforming areas into compliance. The AAQS establish levels to protect the health (primary standard) and welfare (secondary standard) of the general public with an adequate margin of safety.

Table 13-1 lists federal and state air quality standards.

Table 13-1
Ambient Air Quality Standards
New York State and Federal Standards

Pollutant[1]	Avg Period	Conc.	Units	Stat[2]
Sulfur Dioxide	12 consecutive months	0.03	PPM	Arithmetic Mean (A.M)
	1-hour	75	PPB	Maximum, Primary
	3-hour	0.50	PPM	Maximum, Secondary
Carbon Monoxide	8-hour	9	PPM	Maximum, Primary
	1-hour	35	PPM	Maximum, Primary
Ozone	8-hour	0.07	PPM	Maximum, Primary and Secondary
Nitrogen Dioxide	12 consecutive months (annual)	53	PPB	Annual Mean, Primary and Secondary
	1-hour	100	PPB	Maximum, Primary
Lead [3]	3 consecutive months	0.15	µg/m³	Not to be exceeded, Primary and Secondary
Particulate Pollution ($PM_{2.5}$)	12 consecutive months	12	µg/m³	Annual Mean, Primary
	12 consecutive months	15	µg/m³	Annual Mean, Secondary
	24-hours	35	µg/m³	Primary and Secondary
Inhalable Particulates (PM_{10}) [4]	24-hours	150	µg/m³	Primary and Secondary
Total Suspended Particulates (TSP) [5]	12 consecutive months	75	µg/m³	Geometric Mean (G.M.)
	24-hours	250	µg/m³	Maximum

-PPM – parts per million.
-PPB – parts per billion.
-µg/m³ - micrograms per cubic meter.
[1] New York State also has standards for beryllium, fluorides, hydrogen sulfide, and settleable particulates (dustfall). Ambient monitoring for these pollutants is not currently conducted.
[2] All maximum values are concentrations not to be exceeded more than once per calendar year. (Federal Ozone Standard not to be exceeded more than three days in three calendar years).
[3] Federal standard for lead not yet officially adopted by NYS, but is currently being applied to determine compliance status.
[4] Federal standard for PM_{10} not yet officially adopted by NYS, but is currently being applied to determine compliance status.
[5] New York State also has 30, 60, and 90-day standards as well as geometric mean standards of 45, 55, and 65 µg/m³ in Part 257 of NYCRR. While these TSP standards have been superseded by the above PM_{10} standards, TSP measurements may still serve as surrogates to PM_{10} measurements in the determination of compliance status.

Principal sources of air pollutants are summarized in Table 13-2, below.

Table 13-2
Principal Sources of Air Pollutants

Pollutant	Principal Sources
Carbon Monoxide (CO)	Motor Vehicles (90%) Other Combustion Sources (10%)
Oxidants (primarily Ozone)	Produced by the Action of Sunlight on HC and NO_x Compounds in the Atmosphere
Nitrogen Oxides (NO_x)	Stationary Source Combustion (50%) Mobile Sources (50%)
Hydrocarbons (HC)	Motor Vehicles (60%) Industrial Process and Evaporative Losses from Storage Facilities (40%)
Particulates (part)	Many Sources (Stationary and Mobile) Including Crushing and Grinding Operations and Natural Resources
Sulfur Dioxide (SO_2)	Electric Power Generation (40%) Space Heating (30%) Other Combustion of Fuels in Industrial Processes (30%)

Sources:
DGEIS for IBM - Proposed Re-zoning, IBM Properties, Town of Fishkill, October 3, 1983, prepared by Ronald A. Freeman Associates, P.C. Consulting Engineers
NYSDEC Region 3, NYS Air Quality Report, Ambient Air Monitoring System Annual Report 1992-DAR-93-1
Note: The percentage figures represent approximate contributions for the sources identified in middle-latitude areas. For more specific information, refer to the annual reports of the Council on Environmental Quality.

Sources of air pollution are generally characterized as mobile or non-point sources (transportation-related) or stationary sources (e.g., a smokestack). In general, the primary pollutants related to mobile sources are carbon monoxide (CO), nitrogen oxides (NOx), and Hydrocarbons. Oxidants, primarily ozone results from the breakdown of NOx compounds in the atmosphere by sunlight. Total suspended particulates are the result of both mobile sources, as well as industrial sources and operations.

Stationary sources, primarily manufacturing or utility operations, result in the addition of sulfur dioxides (SO_2), nitrogen oxides (NOx), hydrocarbons and particulates to the atmosphere.

Existing Air Quality

New York State is divided into nine Air Quality Control Regions (AQCR), in order to evaluate air quality by geographic regions. The NYSDEC has a network of ambient air monitoring stations located throughout the State in each of the AQCR's in order to evaluate the attainment status of each region with respect to the SIP.

The proposed project site is located in Region 3: Hudson Valley AQCR, one of nine regions in New York State monitored for compliance with Federal and State AAQS. The Federal criteria pollutants currently monitored within the Region 3 include:

- sulfur dioxide (SO_2);
- ozone (O_3);
- inhalable particulates ($PM_{2.5}$); and,
- lead.

The remaining criteria pollutants, carbon monoxide (CO) and nitrogen dioxide ($NO_{2)}$, are not monitored in the Region 3 AQCR, but are monitored in Region 2 AQCR, which includes the five boroughs of New York City. The sources of these contaminants, their effect on human health and the nation's welfare, and their final disposition in the atmosphere vary considerably.

NYSDEC maintains a number of monitoring stations in the Hudson Valley to measure existing ambient air quality. Monitoring stations are sometimes operated over limited periods of time and certain stations are utilized to sample only certain parameters. Table 13-3 lists stations referenced in the NYSDEC *Air Quality Report* and the pollutants monitored at each. Monitoring stations are located at White Plains in Westchester County; Mt. Ninham in Putnam County; Valley Central, Newburgh, and Wallkill in Orange County; and Millbrook in Dutchess County.

Table 13-3
NYSDEC Air Quality Monitoring

Stations	**Parameters**			
	Lead	Sulfur dioxide	Inhalable particulates	Ozone
NYSDEC Region 3				
Wallkill	✓			
Mt. Ninham (Town of Carmel)		✓	✓	✓
Newburgh (F)			✓	
Newburgh (C)			✓	
White Plains			✓	✓
Valley Central				✓
Millbrook				✓
Rockland County (C)			✓	✓

(F) – Federal Reference Method or Federal Equivalent Method.
(C) – Continuous, used for AQI calculations. Values based on 24-hour averages of 1-hour values. Source: *2020 Region 3 Air Quality Data*, NYSDEC Division of Air Resources

The above table, Table 13-3, summarizes the regional data collected. Table 3-4 shows the Mount Ninham specific air quality results, the monitoring station which is located approximately 3.7 miles west/northwest of the project site and therefore provides air quality data in the general vicinity of the site. The specific air quality for the remainder of the NYSDEC Region 3 stations can be found in the New York State Ambient Air Quality Report for 2020 (the relevant excerpt is in DEIS Appendix L).

Table 13-4 Regional Air Quality Data Summary				
Monitoring Location	**Pollutant**	**Concentration**	**Air Quality Standard**	**Within Standard?**
Mt. Ninham	Ozone (O_3)	0.065 ppm (2)	0.07 ppm (2)	Yes
Mt. Ninham	Sulfur Dioxide (SO_2)	0.12 ppb (1)	30 ppb (1)	Yes
NOTES: (1) Annual Arithmetic Mean in parts per billion (ppb). (2) 4th Highest Daily Maximum 8-Hour Average in parts per million (ppm). Source: NYSDEC, Region 3, Air Quality Data 2020.				

Based upon 2020 data, all monitored contaminants, except for ozone, have achieved acceptable levels within the region.

Ozone levels exceeding the air quality standards are found throughout the northeastern United States, and non-attainment of the standard is more of a regional than a local problem, and cannot be resolved without coordinated regional air pollution control programs. The State of New York and surrounding states have developed coordinated regulatory programs to bring the region into compliance.

Air contaminants which typically are of concern with respect to vehicle-related projects (mobile sources) include ozone, carbon monoxide, nitrogen oxides, and lead. Air contaminants typically of concern with respect to heating and hot water systems of commercial projects (stationary sources) include sulfur dioxide and inhalable particulate matter.

Existing Air Pollution Sources

Vehicle Generated Air Quality Impacts – Existing Conditions

The primary pollutants associated with vehicular exhaust emissions are nitrogen dioxide (NO_2), hydrocarbons (HC), and carbon monoxide (CO). Since short-term exposure to elevated CO concentrations can have acute health impacts, state and federal standards have been developed for ambient CO concentrations to protect the health and welfare of the general public. There are no currently enforced short-term health standards for NO_2 and HC. The primary concern with these pollutants is their role in the photochemical reactions that lead to the formation of secondary pollutants known as ozone (O_3) and "smog". Recent (3-year average) ozone levels meet air quality standards in the upper Hudson Valley and therefore are not a pollutant of concern for the area.

Land in the vicinity of the project area generally supports a mixture of residential, commercial, and light industrial uses and includes Interstate-84. Existing sources of air pollution in the vicinity include vehicle and engine exhaust, and emissions from commercial, and residential heating and hot water systems.

Existing Air Pollution Receptors

Potential sensitive receptors in the vicinity of the project include residential dwellings located at the northern property border and further to the north near Fair Street and Theodore Trail. Those latter neighbors are a minimum of 1,800 feet from the project site.

13.2 Future Without the Proposed Project

Without the proposed project, the air quality of the project area would maintain levels of contaminants generally consistent with the levels reported above. Ambient air quality is dependent on numerous factors and varies over time. No significant change in air quality affecting local receptors is anticipated to result if the proposed project is not developed.

13.3 Potential Impacts

Temporary air quality impacts from construction activities were assessed along with a determination of long-term impacts from project induced traffic (mobile sources) and from heating and cooling equipment at the site (stationary sources).

Short-Term Construction Air Impacts

Potential short-term adverse air quality impacts that may result from the proposed project include the generation of fugitive dust and particulate matter during construction and emissions from construction equipment and vehicles.

The construction of the proposed Brewster Yards development will involve grading activities that may result in the release of fugitive dust and particulate matter from the project site. During this period, dust from the site may be released into the air and carried off-site by wind. Construction-related air emissions will result from the use of diesel fuel as a source of energy for construction vehicles and equipment. Mitigation measures are proposed as a part of the project during construction to limit the generation of dust and potential emissions from construction equipment. On-site generation of construction related dust and equipment emissions will be temporary.

During and following project construction, unvegetated areas on the site would be either developed or fully landscaped, thereby reducing the potential for dust generation from the project area long-term.

Long-Term Air Quality Impacts

The primary generator of air emissions from the Brewster Yards project will be the operation of passenger vehicles travelling to and from the site. The potential impact from the project-generated traffic was evaluated using the New York State Department of Transportation (NYSDOT) Environmental Procedures Manual (EPM) Chapter 1, Section 9, Projects Needing Air Quality Analysis (January, 2001). Carbon monoxide (CO) is the primary pollutant of concern for traffic generated air emissions and is used by the NYSDOT as a screening tool since CO generally has local impacts and higher concentrations of CO are limited within a short distance of heavily traveled roadways.

The site of the proposed project is not regionally significant from an air quality standpoint, therefore it is “exempt” from the EPA’s conformity rules and is not required to be part of the “regional emissions analysis or part of the TIP”; therefore, a mesoscale air quality analysis is not required and the air quality impact analyses for Brewster Yards focus on local (microscale) air quality impacts and evaluating compliance with the CO standards.

According to the NYSDOT EPM, signalized intersections with level of service C or better, do not require air quality analysis. Three (3) signalized intersections examined in the traffic analyses (Chapter 11) were found to have a LOS D or E, as listed below:

- NY Route 312 and NY Route 6
- NY Route 312 and I-84 Eastbound Ramps/Independent Way
- NY Route 312 and I-84 Westbound Ramps

Two unsignalized, stop sign controlled intersections provide access to the site on Fields Corner Road at the north and Pugsley Road to the south. Fields Corner Road intersects Fair Street north of the site. Pugsley Road intersects NY Route 312 south of the site.

The NYSDOT EPM states: *"It is not expected that intersections in a build alternative controlled by stop signs will require an air quality analysis*". Thus, while some non-signalized intersections may have a Build level of service lower than "C", the screening analysis concludes that traffic volumes associated with stop sign controlled intersections are not sufficiently high to warrant further CO microscale analysis. The level of CO at a stop sign controlled intersection would not exceed ambient air quality standards.

The three signalized intersections analyzed in the traffic study, were evaluated as having a level of service D or E for the build condition during the peak PM hour and the peak Saturday hour. Therefore, the NYSDOT EPM was used to further evaluate these intersections to determine the need for a microscale air quality analysis. The screening criteria are as follows:

- 10 percent or more reduction in the source-receptor distance;
- 10 percent or more increase in traffic volume on affected roadways between the No Build and Build scenarios;
- 10 percent or more increase in vehicle emissions;
- Any increase in the number of queued lanes; and,
- 20 percent reduction in speed.

Evaluation of the projected traffic and the criteria above indicates the proposed project will not exceed any of the criteria for further CO micro-scale air quality analysis. Therefore, a microscale air quality analysis is not required for the three signalized intersections, as it is not anticipated that the ambient air quality standards would be exceeded based on the screening analysis.

The proposed Brewster Yards development will not be of a scale to be regionally significant with regard to air quality attainment and therefore should not interfere with the any of the ongoing programs to bring the area into compliance with the ozone standards.

Stationary Sources

The primary generators of air emissions from the proposed recreational development include heating and cooling equipment for the on-site building and emissions from maintenance equipment such as lawn mowers and landscaping equipment. Air contaminants typically of concern with respect to heating and hot water systems are sulfur dioxide and inhalable particulate matter related to the use of fuel oil. It is anticipated that the heating and cooling system for the main recreational building and offices will be modern energy efficient equipment with minimal emissions. The building is proposed to be heated with either propane or electric service.

Maintenance and landscaping equipment such as mowers, tractors and power tools will be new energy efficient equipment which will result in lower emissions than older equipment. Some equipment is anticipated to be electric, further reducing emissions. Also, the extent of areas

needing lawn mowing is relatively small since the play fields are proposed to have synthetic turf surfaces.

Given the projected volume of traffic, the installation of new and efficient heating systems, and proposed energy efficient landscaping, no significant adverse long-term air quality impacts are expected to result from the proposed Brewster Yards development.

13.4 Mitigation Measures

Short-term Fugitive Dust Emissions

Construction activities on the project site may generate airborne or fugitive dust during ground clearing and excavation activities. Throughout the construction period, passage of delivery trucks and other vehicles over temporary dirt roads and other exposed soil surfaces could also generate fugitive dust. The anticipated duration of the construction period is approximately 18 to 21 months. Construction activity will be limited to the hours set forth in the Town of Southeast Code (Section 69-10 – Excavation). Excavation and grading work shall be limited to the hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, and 7:00 a.m. to 1:00 p.m. on Saturday. On-site mitigation measures are proposed as part of the project during construction to limit the dispersal of dust to nearby residences.

Fugitive Dust Controls

To mitigate against potential impacts associated with fugitive dust that may be generated by earthwork activities, a separate fugitive dust control plan has been developed. The fugitive dust control and management measures include earth-moving operation controls, track-out controls, high wind condition controls, and stabilizing soil stored or stockpiled on the project site.

A summary of fugitive dust controls to be implemented are as follows:

Earth-moving operation controls

- When dry conditions occur, apply water by means of truck, hoses, and/or sprinklers prior to and during earthwork and construction activity.

- Cover trucks with a tightly secured cover (tarp) before leaving the project site.

- Maintain low speeds on Pugsley Road and Fields Corner Roads.

- Phase the project to limit and minimize the area disturbed at any one time.

Track-out controls

- A stabilized construction entrance will be provided with a lined stone and gravel pad of appropriate dimensions to reduce the transport of soil to adjacent roadways.

- Wash, vacuum, or sweep to remove materials from the exterior of the trucks over gravel pad before leaving the site to prevent track-out of soil onto public paved roadways.

- Limit load size and cover trucks with a tightly secured cover (tarp).

- Sweep and keep clean public roadways to remove all visible dust tracked-out onto public roadways as a result of active operations.

Soil stored or stockpiled

- Any exposed soils that are left bare for a period of 14 days and not under active construction will be stabilized with temporary seed mix and mulch.

- Mulching or hydroseeding will be applied to ground with low slopes that have been stripped of natural vegetation.

- Seeding, mulch or sodding will be applied to soils for permanent stabilization if conditions warrant.

The Construction Manager would be responsible for ensuring the appropriate controls are implemented during day-to-day operations. Implementation of these controls would prevent dust from exiting the property, and prevent public nuisances.

Although exhaust emissions from construction equipment is not as significant as fugitive dust generation, particulate matter from diesel exhaust emission will also be controlled through proper tuning of the engine and maintenance of the air pollution controls. This will minimize additional contribution to site generated particulate emissions during construction.

Vehicle Generated Impacts

The carbon monoxide screening analysis of vehicle generated emissions documents that the additional site traffic would not result in adverse air quality impacts at the primary intersections accessing the site. Proposed traffic mitigation measures were included in all screening air quality impact analyses. Based on the intersection capacity analysis, the projected vehicle queues at the study intersections resulting from the project would not be significant enough to cause air quality concerns.

Conclusion

Based on air quality analysis described above, no significant air quality impact to local receptors is anticipated to result from the proposed project.

14.0 Noise

14.1 Existing Conditions

Noise can be defined as undesirable or "unwanted sound". Even though noise is somewhat subjective, it should be considered when considering the impact of development. Most of the sounds heard in the environment are not composed of a single frequency, but are a band of frequencies, each with a different intensity or level. Levels of noise are measured in units called decibels. Since the human ear cannot perceive all pitches or frequencies equally well, these measures are adjusted or weighted to correspond to human hearing.

This adjusted unit is known as the A-weighted decibel, or dBA. The dBA is useful for gauging and comparing the subjective loudness of sounds. Table 14-1 provides typical dBA levels for various common sounds.

Table 14-1
Relative Loudness of Common Sounds
Expressed in Decibels (dBA)

Source	dBA
Human breathing	5
Rustle of leaves	20
Whisper	30
Quiet library sounds	40
Average office, refrigerator	50
Near freeway auto traffic	60
Washing machine	70
School cafeteria with untreated surfaces	80
Noisy factory	85
Noisy urban street	90
Auto horn at 10 feet	100
Accelerating motorcycle at few feet away	110
Threshold of feeling: hard rock band	120
Threshold of pain	130
Jet engine at 300 feet	140

Source: based on "The Noise Guidebook", U.S. Department of Housing and Urban Development, March 1985.

Since dBA describes a noise level at just one instant and since ambient noise levels are constantly varying, other ways of describing noise levels, especially over extended periods, are needed. A commonly used descriptor is the Leq.

The Leq noise level is the level of a constant noise source which has been averaged over a period of time, based upon a measurement over a certain time period. A one decibel change in noise is the smallest change detectable by the human ear under suitable laboratory conditions. Under normal conditions, a change in noise level of two or three decibels is required for the

average person to notice a difference. Table 14-2 shows the typical perception of noise change. Ten dBA represents a doubling or halving of the perceived loudness of sound.

Table 14-2 **Perception of Noise Changes**	
Change (dBA) **Human Perception of Change**	
2-3	Barely perceptible
5	Readily noticeable
10	A doubling or halving of the loudness of sound
20	A dramatic change
40	Difference between a faintly audible sound and a very loud sound
Source: Bolt Beranek and Neuman, Inc., Fundamentals and Abatement of Highway Traffic Noise, Report No. PB-222-703. Prepared for Federal Highway Administration, June 1973.	

The table below, taken from a NYS Department of Environmental Conservation (NYSDEC) publication, discusses the human perceptions to an increase in sound pressure levels, or decibel levels. The table provides a basis to evaluate how off-site sensitive receptors are affected by changes in noise levels.

Table 14-3 **Human Reaction to Increases in Sound Pressure Level (dB)**	
Increase in Sound Pressure (dB)	**Human Reaction**
Under 5	Unnoticed to tolerable
5 - 10	Intrusive
10 - 15	Very noticeable
15 - 20	Objectionable
Over 20	Very objectionable to intolerable
Source: NYSDEC *Assessing and Mitigating Noise*, 2001 (taken from Down and Stocks - 1978)	

According to the NYSDEC *Assessing and Mitigating Noise Impacts*, the goal for any permitted operation should be to minimize increases in sound pressure level above ambient levels at the chosen point of sound reception. Increases ranging from 0 to 3 dB should have no appreciable effect on receptors.[1]

Noise Standards and Regulations

The following specific guidelines apply to ambient noise levels in the Town of Southeast.

[1] Assessing and Mitigating Noise Impacts, New York State Department of Environmental Conservation, DEP-00-1, Revised February 2, 2001.

Town of Southeast Noise Ordinance

Chapter 96 - Noise, of the Southeast Town Code regulates noise. According to the Code, the purpose of the ordinance is the "prevent the generation of excessive, unnecessary or unusually loud noise withing the Town of Southeast, for the purpose of preserving, protecting and promoting the public health, comfort, convenience, safety, welfare, and prosperity of its inhabitants".

The Noise Code provides maximum sound levels that should not be exceeded, depending on land use categories. In the Code, daytime is defined as 7:00 a.m. to 8:00 p.m. and nighttime from 8:01 p.m. to 6:59 a.m. The following noise levels are prohibited:

A. Continuous Sound. Maximum sound level in dBA: slow response receiving land use category:

Class	***Day***	***Night***
Class A (Residential)	*65*	*55*
Class B (Retail/commercial)	*70*	*60*
Class C (Office/warehouse/light industrial)	*80*	*70*

B. Impulsive Sound. Maximum sound level in dBA: fast response receiving land use category

Class	***Day***	***Night***
Class A (Residential)	*75*	*65*
Class B (Retail/commercial)	*80*	*70*
Class C (Office/warehouse/light industrial)	*90*	*80*

Certain deductions in the maximum sound levels listed above are applied for specific repetitions of impulsive sounds. Exceptions to the above sound limits are provided in the Code including for; construction activity during approved periods, snowblowers, lawnmowers, emergency work and for agriculture.

NYSDEC Noise Guidance Policy

The NYSDEC has issued a guidance policy for the evaluation of noise from facilities regulated by the Department, entitled *Assessing and Mitigating Noise Impacts*. The purpose of the policy is to provide direction to NYSDEC staff and the regulated community for the evaluation of sound levels generated from existing and proposed facilities. The policy presents noise impact assessment methods, examines the circumstances under which sound creates significant noise impacts, and identifies avoidance and mitigative measures to reduce or eliminate noise impacts.

In the assessment of noise impacts, multiple factors need to be considered, including the ambient noise levels, future noise levels, the location of the noise sources compared to the receptor locations, increases in Sound Pressure Levels over existing conditions, and sharp and startling noise.

As stated in the NYSDEC policy, the goal of any permitted operation should be to minimize the increase in sound pressure level above ambient levels at the selected sound receptors. Increases ranging from 0 to 3 dBA should have no appreciable affect on receptors. Increases

from 3 to 6 dBA may have the potential for adverse noise impact only in cases where the most sensitive receptors are present. Noise level increases of more than 6 dBA may require a closer analysis of impact potential depending upon the character of surrounding land uses and receptors.

Federal Noise Guidance Policy

The United States Department of Housing and Urban Development (HUD) has adopted environmental criteria, and guidelines for determining acceptability of federally assisted projects (24 CFR Part 51 – Environmental Criteria and Standards). The standards consider an exterior noise level of 65 dBA to be acceptable for residential uses. These standards reflect a goal of the US Environmental Protection Agency (EPA) that continuous exterior noise levels do not exceed 65 decibels. The exterior noise goal for *exterior uses* established by HUD and the EPA is 55 decibels (see Title 24 CFR, Section 51.101A(8)).

The 65-decibel criterion is more restrictive than the criteria used by the Federal Highway Administration (FHWA) design standards for noise. The FHWA uses 67 decibels as a noise criterion for residential areas (23 CFR 772 – *Procedures for Abatement of Highway Traffic Noise and Construction Noise*). The FHWA regulations apply to any highway or multi-modal projects that require FHWA approval or Federal funding. Although the proposed Brewster Yards recreational development is not a FHWA or HUD funded project, the noise standards applied to HUD and FHWA projects can be used for reference and as a comparison of noise levels.

Existing Ambient Noise Levels

The project site is currently vacant wooded land. A small area next to the center of the property near Interstate 84 is used by Putnam County for the disposal of tree limbs and landscaping debris. Therefore, the only activity creating any noise near the property are occasional County vehicles accessing the County property adjoining the site.

Sensitive noise receptors are land uses and facilities that are dependent on a state of serenity and quiet. Land uses that are typically considered to be sensitive to noise would be residences, schools, hospitals, churches, cemeteries, libraries, nature preserves and certain types of outdoor recreation areas. Sensitive noise receptors for the Brewster Yards project are the existing nearby residences, since there are no nearby hospitals, schools or other community settings where excessive noise could potentially create problems.

Existing residences near the site are shown in Figure 14-1. As shown in the Figure, two residences are located near the northern property line on Fields Corner Road. Approximately 11 residences are located further to the north near Fair Street and along Theodore Court. A multi-family development known as Twin Brook Manor with approximately 41 residences is located on Twin Brook Court, west of the site. Further to the west is the Hunters Glen multi-family residential community, with access from Fair Street. Due to intervening topography and distance from the site (greater than 2,850 feet), the Hunters Glen residential community is not considered a sensitive noise receptor for the Brewster Yards project.

In December 2021, Tim Miller Associates, Inc. (TMA) collected ambient noise levels on the project site. Noise monitoring locations were selected to assess existing (ambient) noise levels

both on the property and in the vicinity of sensitive receptors. Noise monitoring locations are shown in Figure 14-1. Location 1 was located near the northern property border near the closest residence to the site. Location 2 was located in the central portion of the site, in the vicinity of the future entrance driveway on Fields Corner Road / Pugsley Road. Location 3 was located off-site near the Theodore Court residences, approximately 1,850 feet north of the site.

Measurements were collected continuously over an approximate 24-hour period on December 3rd through the 4th. Measurements were collected on a Friday through Saturday period to account for future Saturday sport event activity on the property. The noise meter at Location 1 stopped collecting measurements after approximately 8 hours (Friday at 12:00 a.m.). In order to collect morning and afternoon measurements, additional noise readings were collected over a 24-hour period from December 12 through December 13.

The measurements were collected with a Casella 633 SL Type 1 meter, which meets the requirements referenced in the Town Code (ANSI S1.4-1983 (R2006). The meters were calibrated prior to measurements. Weather conditions during the monitoring were cloudy and approximately 28 to 40 degrees with a light breeze on December 3 and 4. On December 12 and 13, the weather was clear and approximately 35 to 45 degrees with a light breeze. The meters were mounted on tripods approximately four feet from the ground and a wind screen was used.

The noise monitoring done for Brewster Yards was undertaken at times when there were no known outdoor events occurring at Tilly Foster Farm. Tilly Foster Farm is a Putnam County educational/recreation facility open to the public and during summer months holds outdoor events including music concerts. Tilly Foster Farm is located directly south of the project site on Route 312, approximately 4,000 feet south of the southernmost proposed baseball field. Figure 14-2, Project Composite Map, shows the location of Tilley Foster Farm in relation to the Brewster Yards site. According to facility staff, five to six events are scheduled in the summer (except none was held in 2021), typically on a Saturday night until 10:00 p.m.[2] Temporary loudspeakers are used for the concerts. The noise monitoring done for Brewster Yards did not account for the occasional noise reported from Tilly Foster Farm music events.

The elevation of the fields used for concerts is approximately 500 to 565 feet. An intervening ridge between the Farm and the Brewster Yards site and residents to the north is at an elevation of approximately 675 feet. Given the distance and intervening topography and vegetation, the periodic noise generated from Tilly Foster Farm concerts is likely to be attenuated to levels of the existing ambient sound measured at the northern boundary of the project site (Location 1).

Noise Monitoring Results

Table 14-4 indicates the locations, times and noise levels recorded. Although 24 hours of noise readings were collected, the following periods were identified as potentially sensitive time periods for residential neighbors: Weekend 8:00 to 9:00 a.m.(morning), 1:00 to 2:00 p.m. (when the facility will be busiest) and 9:00 to 10 p.m. (evening).

[2] Conversation with Katie Hanrahand, General Manager, Tilly Foster Farm, 1/18/22.

Table 14-4 Noise Measurements			
Noise Monitoring Location	**Noise Measurements (dBA) (Average Leq / LAFMax)**		
	8:00 to 9:00 a.m.	1:00 to 2:00 p.m.	9:00 to 10:00 p.m.
Location 1	42.1 / 46.7	44.5/48.4	44.2 / 49.5
Location 2	44.3 / 51.7	41.2 / 49.5	43.8 / 52.4
Location 3	36.1 / 42.0	45.1 / 51.2	36.7 / 42.4
Source: Tim Miller Associates, Inc. 2021.			

The Leq, listed above, is the Equivalent continuous sound level, or a time averaged sound level. It is the most commonly used value to describe sound levels that vary over time. The Leq is the average sound level over the one-hour selected period. The LAFMax is the maximum Sound Level with 'A' Frequency weighting and Fast Time weighting during the measurement period (one minute).

It was observed that the dominant noise source on and near the property is the traffic on Interstate 84 as well as traffic on Fair Street north of the site and Route 312 south of the site. Residential activity, such as landscape maintenance at the residences near the site may result in periodic daytime noise. Given the rural setting, the property and environs have relatively low levels of both daytime and evening noise, as indicated by the noise measurements collected.

14.2 Future Without the Proposed Project

Without the proposed project, the ambient noise levels in the project area would remain generally consistent with the levels reported above. As described, residences to the north of the Brewster Yards project site may experience occasional sounds from Tilly Foster Farm summer concerts, but given the topography and distance, the sound level would not be considered to be intrusive.

The Logistics Warehouse development (formerly known as the Commercial Campus at Fields Corner) has recently received site plan approval for 930,000 square feet of industrial warehouse space on a 340-acre parcel at Route 312 and Pugsley Road. The Logistics Warehouse development will be located directly west of the Brewster Yards project, as shown in Figure 14-2. The Logistics Warehouse project will increase noise levels in the project vicinity from construction, traffic and operations according to an assessment in the Commercial Campus at Fields Corner DEIS dated June 2018. The noise assessment concluded that the project would not exceed any of the threshold limits established in the Town Code and the project has no significant projected noise impacts.

No significant change in ambient noise affecting local receptors that was projected from the Logistics Warehouse project is anticipated to result if Brewster Yards is not developed.

14.3 Potential Impacts

Short Term Construction-related Noise

Local daytime ambient noise levels will increase both on and off of the project site during construction of the proposed Brewster Yards development. Noise from construction activities is

an expected consequence of any new development and cannot be avoided. Noise resulting from construction activities is a temporary impact, and will cease upon completion of the project. Table 14-5 shows typical maximum sound levels for diesel powered equipment and activities representative of a construction project at a range of receptor distances.

Table 14-5
Construction Noise Levels
(dBA)

	Maximum Sound Level			
Equipment/Activity	**50 feet**	**200 feet**	**500 feet**	**1000 feet**
Backhoe	82-84	70-72	62-64	56-58
Blasting	93-94	81-82	73-74	67-68
Concrete Pump	74-84	62-72	54-64	48-58
Generator	71-87	59-75	51-67	45-61
Hauler	83-86	71-74	63-66	57-60
Loader	86-90	74-78	66-70	60-64
Rock Drill	83-99	71-87	63-79	57-73
Trucks	81-87	69-75	61-67	55-61

Source: Tim Miller Associates, Inc., 2005.

For sensitive receptors such as residences, the level of impact from construction noise sources depends upon the type and number of pieces of construction equipment being operated, the duration of the construction activities, as well as the distance of the receptor from the construction sites. The noisiest period of construction will occur during site clearing and grading activities, when sections of the site are prepared for the proposed improvements; although all construction activities at the site are likely to produce increased noise levels..

Grading for a stormwater basin and multi-sports field will occur within 250 feet of the nearest residential neighbor at the northern property line along Fields Corner Road. Noise levels of 70 to 80 dBA will occur at the residential property line when tree clearing and grading is done in this area. As indicated, this will be temporary noise as the improvements are constructed and will be limited to the hours specified for “excavation” in the Town Code (Section 69-10), *“7:00 a.m. to 5:00 p.m., Monday through Friday, and 7:00 a.m. to 1:00 p.m. on Saturday”.* Noise from construction will conform to the Town Code.

Based upon the preliminary grading plan, rock removal will be required and blasting may be necessary in certain locations with cuts of greater than 10 feet. The noise from blasting, if it is determined to be needed, will be temporary and short term for nearby residents. As shown in Table 14-5, blasting may produce brief periods of sound levels of up to 94 dBA within 50 feet of the blast location. This noise level would be reduced to 74 dBA within 500 feet of the blasting location, but substantially higher than ambient conditions. Blasting, if required, will be limited to the hours specified for “excavation” in the Town Code, as described above.

Construction noise levels from construction occurring further to the south from the closest neighbors on Fields Corner Road will be lower. Intermittent occurrences of noise from project construction may be noticeable for residents to the north near Theodore Court and to the west on Twin Brook Court, but such levels will be in the range of ambient daytime conditions given the distance between the property and those residences (see Table 14-1).

Long-Term Noise Effects

Once operational, the Brewster Yards development will generate noises typical of recreational developments with the greatest activity occurring in the spring, summer and fall and less activity during the winter. Anticipated noise from the development would include: human activity during games such as voices and cheering, landscaping maintenance, heating and cooling equipment (stationary source), and noise from traffic traveling to and from the site (mobile source).

Loudspeakers are proposed at specific areas of the Brewster Yards development for safety and general information announcements. Speakers will be located at the baseball and Little League "clover" fields for general announcements. Speakers will also be located at the baseball and Little League showcase fields. The potential noise from this activity is further described below.

According to the applicant, the facilities are proposed to be open on the following schedule during which games and activity will occur on-site.

Winter Months – Off Season (November to mid-March)
Monday to Friday: 3 p.m. to 10 p.m.
Weekends/ holidays: 8 a.m. to 10 p.m.

Summer/Fall Months - In Season (Mid-March - End of October)
Monday to Friday: 10 a.m. to 10 p.m.
Weekends/ holidays: 8 a.m. to 10 p.m.

During outdoor games, voices, shouting and cheering would be expected to occur. This noise will be periodic and change during the duration of the activity. TMA has monitored noise at soccer games in Orange County and Rockland County in 2015 and at a summer camp with basketball games in 2011. The noise from these activities is expected to be similar to games at the Brewster Yards facility. In 2009, TMA collected noise measurements at a festival venue with outdoor music and loudspeakers. These noise assessments were part of the Site Plan review process in all cases and therefore, are public record information.

In 2015 noise measurements collected at youth soccer games at an open field in Pine Island, NY and at the Torne Valley sports complex in Hillburn, NY. These locations are similar to the proposed Brewster Yards development, but the Torne Valley location is a stadium type facility with spectator stands and buildings at the two sides of the field. Sound levels were collected 20 feet from the field at each location. Noise levels averaged 55 dBA during the game at Pine Island and 61 dBA at the Torne Valley location. As comparison, the noise measured at Camp Ramah in Dover New York, during an afternoon period with camper activity was 57.4 dBA. This sound level is within the range of levels measured at two soccer games. The logarithmic average of the two soccer games is 59.0 dBA.

A noise study was completed by TMA in 2009 for a sports facility and festival venue called the Hudson Valley Sportsdome. The applicant was seeking site plan approval for events with outdoor speakers and sound system. Sound level measurements were collected with a band playing with speakers. Peak noise levels were recorded at 75 dBA at 100 feet from the sound system.

The noise studies mentioned above did not assess the noise from batting. Batting baseballs produces a short, impulsive sound that varies somewhat depending upon the type of bat (wood, composite, aluminum) and the baseball. The sound from batting can be expected to be within the range of sounds from a loudspeaker, or 75 dBA at 100 feet from the source.

Noise Modelling

Potential future noise from the proposed Brewster Yards facility can be estimated at the property lines using standard noise measurement techniques. The NYSDEC Program Policy *Assessing and Mitigating Noise Impacts* was referenced in this analysis.

Assuming an average noise level of 59.0 dBA during games at the edge of the field (source location), estimates can be made for potential noise at the nearest property line. The property line to the closest residence (north) is 350 feet from the multi-sports field.

Sound decreases over distance according to the inverse square rule, where each doubling of distance from the noise source decreases the sound by 6 dBA. In addition, approximately 250 feet of existing vegetation will be retained at the northern edge of the site which will provide some noise attenuation. The property slopes to lower elevations towards the northern property line, but no topography is between the field and the property line.

Based upon the above, the projected average noise level from active games on the multi-sports field at the northern property line (nearest neighbor) would be approximately 35 dBA. This noise level is below the ambient noise conditions at the northern property line which range from 42.1 to 44.5 during the selected monitoring periods.

As indicated, loudspeakers are proposed to be used for general announcements at the four baseball fields located in the northern portion of the site. The fields are arranged around a central concession stand and visitor bleachers for all four fields will be clustered in that area. The central patron area, the likely location for loudspeakers, is located approximately 1,000 feet from the northern property line (nearest neighbor). Proposed batting cages will be located along the sidelines of each of the baseball fields, in the vicinity of the outfield. A cluster of additional cages is proposed to be located in the vicinity of the Little League clover.

Assuming a peak sound level of 75 dBA from the loudspeakers at intermittent times, and the impulsive sound from batting also in the range of 75 dBA, the noise level at the northern property line is estimated to periodically reach approximately 55 decibels. This level is below the daytime and nighttime maximum sound levels in the Town Code (75 dBA / 65 dBA). However, this peak noise level is 5.5 to 8.3 dBA above the existing maximum sound levels measured at the northern property line. According to the NYSDEC guidance, an increase of sound pressure ranging from 5 to 10 dBA may be considered intrusive. The DEC Noise policy cites guidance of the USEPA as relates to human health, indicating that “In general, the EPA’s “Protective Noise Levels” guidance found that noise levels at [or below] 55 dBA was sufficient to protect human health and welfare and, in most cases, did not create an annoyance (EPA 550/9-79-100, November 1978).” [3]

[3] Ibid.

Landscape maintenance activity is expected to occur during weekday daytime periods when games are not scheduled. Occasional noise from landscape maintenance during weekday daytime periods in the spring, summer and fall months is not expected to be intrusive to nearby residents and would be consistent with current residential lawn maintenance activity. It is noted that the play fields are proposed to be constructed with synthetic turf without the need for mowing.

Heating and cooling equipment at the Brewster Yards facility will be limited to the main office and indoor sports activity building, located in the west central portion of the site. Air conditioning units would likely be placed on the roof or at the edge of the building. The building is located approximately 1,800 feet (one-third mile) south of the nearest residence at the northern property border. Noise from air conditioning units would be attenuated over such a distance and would not be noticeable at the northern property line.

The Brewster Yards development will increase traffic on Pugsley Road with visitors travelling to and from the site. There are no residents (sensitive noise receptors) located on Pugsley Road which accesses NY Route 312. As discussed, several residences are located north of the site on Fields Corner Road and on Theodore Court near Fair Street. With the proposed limitation on patron traffic using Fields Corner Road to access this project, existing residents will experience very limited growth in traffic from current conditions once the facility is operational. According to the traffic impact study (see Chapter 11 – Traffic and Transportation), approximately 2 percent of project traffic will access the site from the north and Fields Corner Road during Saturday peak periods. Approximately 5 vehicles per hour to and from the development would travel on Fields Corners Road during peak Saturday periods and fewer cars during morning and evening periods. This level of traffic is not expected to create a noticeable noise impact to existing residences.

Based upon the above, noise levels from the Brewster Yards facility will meet the Town of Southeast Noise Ordinance requirements for maximum sound levels at the property lines for both continuous sound and impulsive sound.

Cumulative Noise Impacts

As new development occurs in the vicinity of Pugsley Road and Fields Corner Road, including the Brewster Yards and Logistics Warehouse projects, the noise environment for existing residents will change. The Tilly Foster Farm is an existing use that holds outdoor concerts occasionally during the summer season. Those concerts will continue to be part of the local noise environment. The noise from Tilley Foster Farm concerts is not expected to create a significant cumulative noise impact to residents north of the Brewster Yards site. This is due to the distance between the Farm and the residential properties (see Figure 14-2).

The Logistics Warehouse project is located west of the project site, and Pugsley Road / Fields Corner Road. The Logistics Warehouse project completed a comprehensive noise assessment that evaluated the effects of that development for the resident directly north of the Brewster Yards site (Location 1 of the Brewster Yards study). Traffic-generated noise from the Logistics Warehouse was estimated to be close to ambient conditions (within 2 dBA). The operational noise was projected to be well below 55 dBA and the Noise Ordinance threshold. The cumulative noise effects from the Logistics Warehouse and the Brewster Yards developments are not expected to be significant for existing residents.

14.4 Mitigation Measures

Construction Noise

Construction activities must comply with the Towns' noise ordinances. To mitigate against potential noise impacts, construction including excavation and grading will be limited to the hours specified for "excavation" in the Town Code (Section 69-10), *"7:00 a.m. to 5:00 p.m., Monday through Friday, and 7:00 a.m. to 1:00 p.m. on Saturday".* Noise from construction will conform to the Town Code. No work will be conducted on Sundays and legal holidays.

No construction traffic will be allowed to use Fields Corner Road. All construction equipment will be required to be maintained and operated with appropriate mufflers to minimize equipment noise.

Operational Noise

To reduce the potential noise impacts to residences north of the site, loudspeakers will only be used intermittently for general and safety announcements and will not be used at the two clover fields or the multipurpose field for play-by-play announcements. The baseball field closest to the residence at the northern property line is approximately 650 feet to the south. Natural attenuation over this distance will reduce the potential for noise impacts from activity at that field.

The project proposes to limit patron traffic from using Fields Corner Road by promoting access to and from the site via Route 312 and posting no right turn signs at the project exits onto Fields Corner Road which would minimize traffic-related noise to the neighborhood to the north.

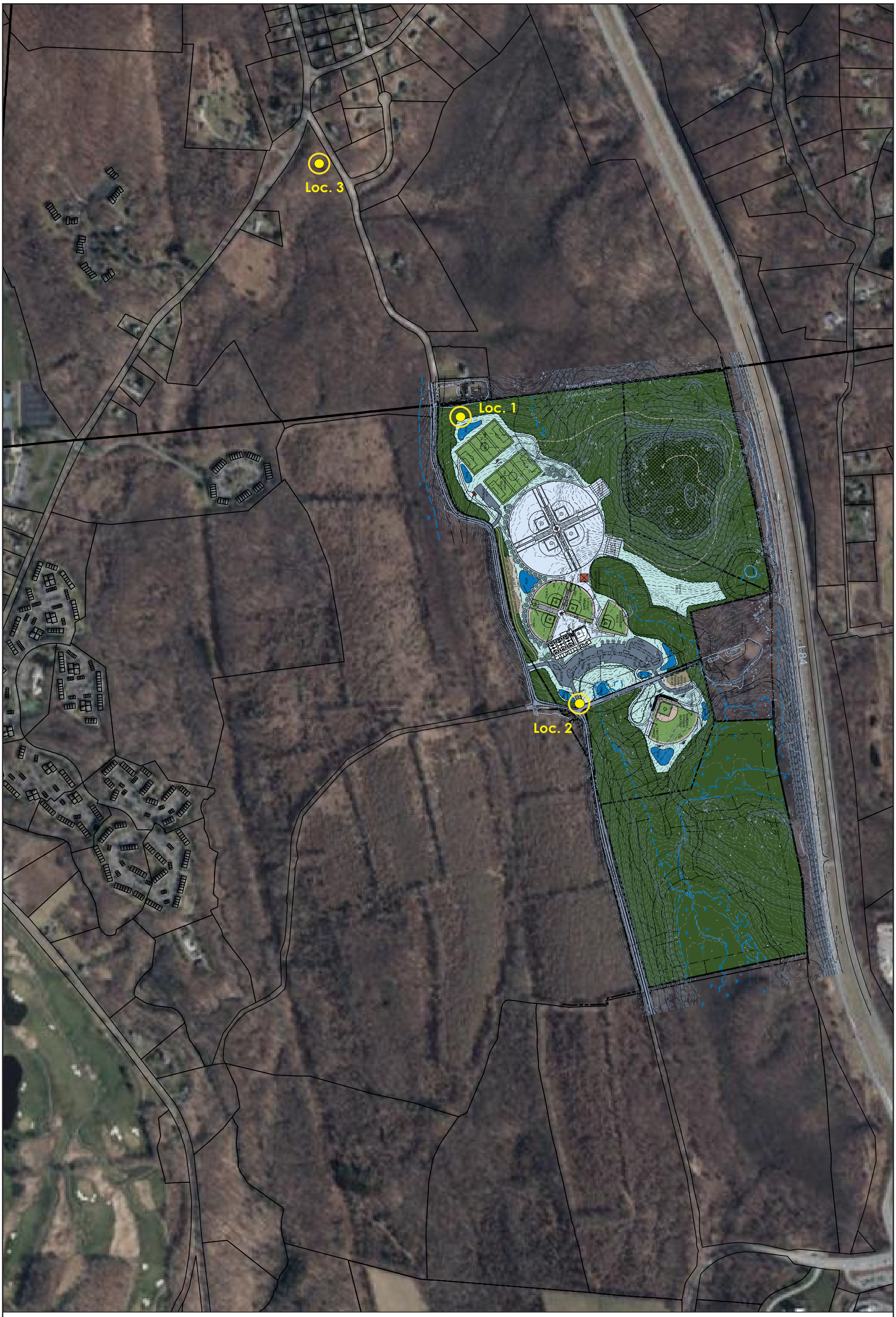

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Figure 14-1: Noise Monitoring Location Plan
Brewster Yards
Town of Southeast, Putnam County, New York
Source: Putnam Co. GIS and KG+D Architects PC
Approx. Scale: 1 inch = 650 feet

Tim Miller Associates, Inc.,10 North Street, Cold Spring, New York 10516 (845) 265-4400 Fax (845) 265-4418

File 04031 08/03/05

Figure 14-2: Project Composite Map
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York
Composite of Brewster Yards plan, Logistics plan & Tilly Foster Trails map on USGS Topo

3/31/22
Scale: Approx. 1:16,600
KG+D 2020-1054

15.0 CONSTRUCTION IMPACTS

15.1 Construction Phasing & Schedule

Phasing of the site development operations is anticipated in order to manage the various aspects of the project -- site preparation, earthwork, building construction and site improvements -- although the construction will be carried out in one continuous process. Tree clearing at the beginning of the construction process will only occur during the months of November through March.

Construction is expected to occur over an 18- to 21-month period. A construction phasing plan will be developed to allow for the sequential development of the site, accommodating an efficient earthwork sequence to move excavated materials to fill areas of the project and appropriately manage stormwater during construction operations. The first phase will include site preparation and the installation of temporary stormwater management practices, including soil erosion control features. Erosion control measures such as protective construction fencing to establish disturbance limits, silt fencing, diversion swales and stabilized construction entrances will be installed prior to any excavation or grading on the site.

A preliminary sequence envisioned for construction operations, for purposes of the DEIS, is shown in Figure 15-1. Outlined therein are operations necessary for site preparation, earthwork, construction and site stabilization. Development of the final Stormwater Pollution Prevention Plan (SWPPP) for this project will include further detailing for purposes of implementation in the construction process.

Equipment and materials storage / staging areas have not been determined at this time. All equipment and materials storage will occur within the property boundaries, outside of wetland and stream buffers and outside of tree root zones. The site-specific stormwater management plan will identify locations for these storage / staging areas as part of the construction sequencing plan. Site security during the construction process will be accomplished with construction fencing (typically chain link fencing) around the perimeter of construction areas and may include 24/7 video monitoring or personnel. All active construction areas will be secured 24 hours a day for safety of the public. Lighting for project security is anticipated to be localized at equipment and materials storage areas and at the project trailers. Deliveries during the construction period will be managed to ensure orderly arrival and unloading, with access to the site strictly via the newly improved Pugsley Road intersection at NYS Route 312. Truck routes will primarily use Interstate 84 and Route 312.

Hours of construction work will conform with Town regulations, within these hours: Monday to Friday 7:00 AM to 8:00 PM, and Saturday 9:00 AM to 5:00 PM. Excavation work that can generate noticeable noise will be further limited, as discussed below. No construction work will be scheduled to occur on Sunday or holidays.

A site and building construction project of this size can be anticipated to involve an estimated 212 construction jobs (person-years) created and added to the local economy.

15.2 Potential Impacts and Mitigation of Traffic, Air Quality & Noise during Construction

Traffic

The vast majority of construction employees will arrive and depart the Project Site out of phase with the weekday AM and PM peak traffic hours. Construction truck traffic is anticipated to access the site primarily from nearby Interstate Route 84, which is within 1.5 miles of the site via NYS Route 312. This access route is in an area of commercial development and therefore will avoid impacts to residential neighborhoods and local roads. No construction traffic will be allowed to utilize Fields Corner Road to Fair Street.

Air Quality

The construction of the proposed Brewster Yards development will involve grading activities that may result in the release of fugitive dust and particulate matter from the project site. During this period, dust from the site may be released into the air and carried off-site by wind. Air emissions will result from the use of diesel fuel as a source of energy for construction vehicles and equipment. Mitigation measures are proposed as a part of the project during construction to limit the generation of dust and potential emissions from construction equipment.

Generation of dust and equipment emissions from construction will be temporary and will cease at the conclusion of construction. Further discussion of the mitigation of fugitive dust is provided in Section 13.4 of the DEIS.

Noise

Local daytime ambient noise levels will increase on and off the project site during construction operations at the Brewster Yards development. Noise from construction activities is an expected consequence of any new development and cannot be avoided.

The level of impact from construction noise sources depends upon the type and number of pieces of construction equipment being operated, the duration of their activity, and the distance of a sensitive receptor from the construction site. The period of most noise impact will occur during site clearing and grading activities early in the construction period, although all construction activities at the site are likely to produce increased noise levels. In particular, rock removal that could involve blasting would cause temporary and short term noise that is substantially higher than ambient conditions.

Grading for proposed improvements at the north end of the site will occur within 250 feet of the nearest residential neighbor. Noise above measured ambient levels will occur at the residential property line when tree clearing and grading is done in this area. This will be temporary noise as the improvements are constructed and will be limited to between the hours specified for “excavation” in the Town Code (Section 69-10) -- “7:00 AM to 5:00 PM, Monday through Friday, and 7:00 AM to 1:00 PM on Saturday”. As further described in DEIS section 14, noise from construction will conform to the Town of Southeast Town Code.

Intermittent occurrences of noise from project construction occurring elsewhere on the project site may be noticeable to the closest neighbors on Fields Corner Road and residents to the north near Theodore Court and to the west on Twin Brook Court, but such levels will be in the

range of ambient daytime conditions given the distance between the property and those residences.

Noise resulting from construction activities is a temporary impact and will cease upon completion of construction.

15.3 Temporary Stormwater Management Practices

This project will employ conventional stormwater management practices that are typical for development projects in this region and based on the standards of the New York State Department of Environmental Conservation as published in its design manuals: *New York State Stormwater Management Design Manual* and *New York State Standards and Specifications for Erosion and Sediment Controls.*

Temporary erosion and sediment control measures that are typically used in a project of this size include the following:

- swales to divert clean water from construction areas
- silt fencing to contain sediments within the limits of disturbance (LOD)
- sediment traps to allow for onsite treatment of silted waters
- re-seeding or mulching to stabilize areas of disturbed soils
- reuse of native soils stockpiled during construction.
- stabilized construction entrances
- storm drain inlet and outlet protection
- phased land grading operations
- scheduling of earthwork outside of seasonal periods of rainfall and snowmelt
- prompt stabilization of exposed soils following their disturbance
- reuse of organic soils, if encountered, in areas of non-structural fill

All areas of disturbed or relocated soils within the LOD would be subjected to soil restoration techniques intended to recover the original properties and porosities of the soils. Restoration techniques could include mechanical decompaction and compost amendment, followed by fine grading and the establishment of a permanent deep-rooted groundcover.

Areas of the site where bedrock, boulders, or copious amounts of cobble are removed would be backfilled with structural fill and compacted to reduce erosional impacts in these areas.

The proposed project is designed to avoid most areas of steep slopes that are present on the parcels, thereby avoiding significant adverse modification of the site topography. All design changes to the topography of the site would adhere to applicable provisions of the Town Code.

Temporary stormwater management practices will be removed or replaced, depending on their purpose, to conform to the site-specific SWPPP designed and approved for the project. The SWPPP will be designed to replicate pre-development hydrology to the maximum extent practicable, maintaining the existing drainage patterns across the site.

Potential temporary impacts to soils and topography that inevitably occur on a construction site will be avoided or minimized through the implementation of the approved erosion and sediment control plans during construction and implementation of permanent measures specified in the

SWPPP. Key elements of the permanent measures to protect water quality of onsite and downstream waterbodies and watercourses will include the following:

- layout of project elements respective of the existing topography and drainage patterns
- utilizing site-specific information from soil testing for project design -- percolation testing, infiltration testing, and deep test pit observations
- avoiding wetlands and watercourses, including their respective buffer areas
- limiting the extent of exposed soils at any one time
- implementing an approved, site-specific SWPPP

Figure 15-1
BREWSTER YARDS DEIS

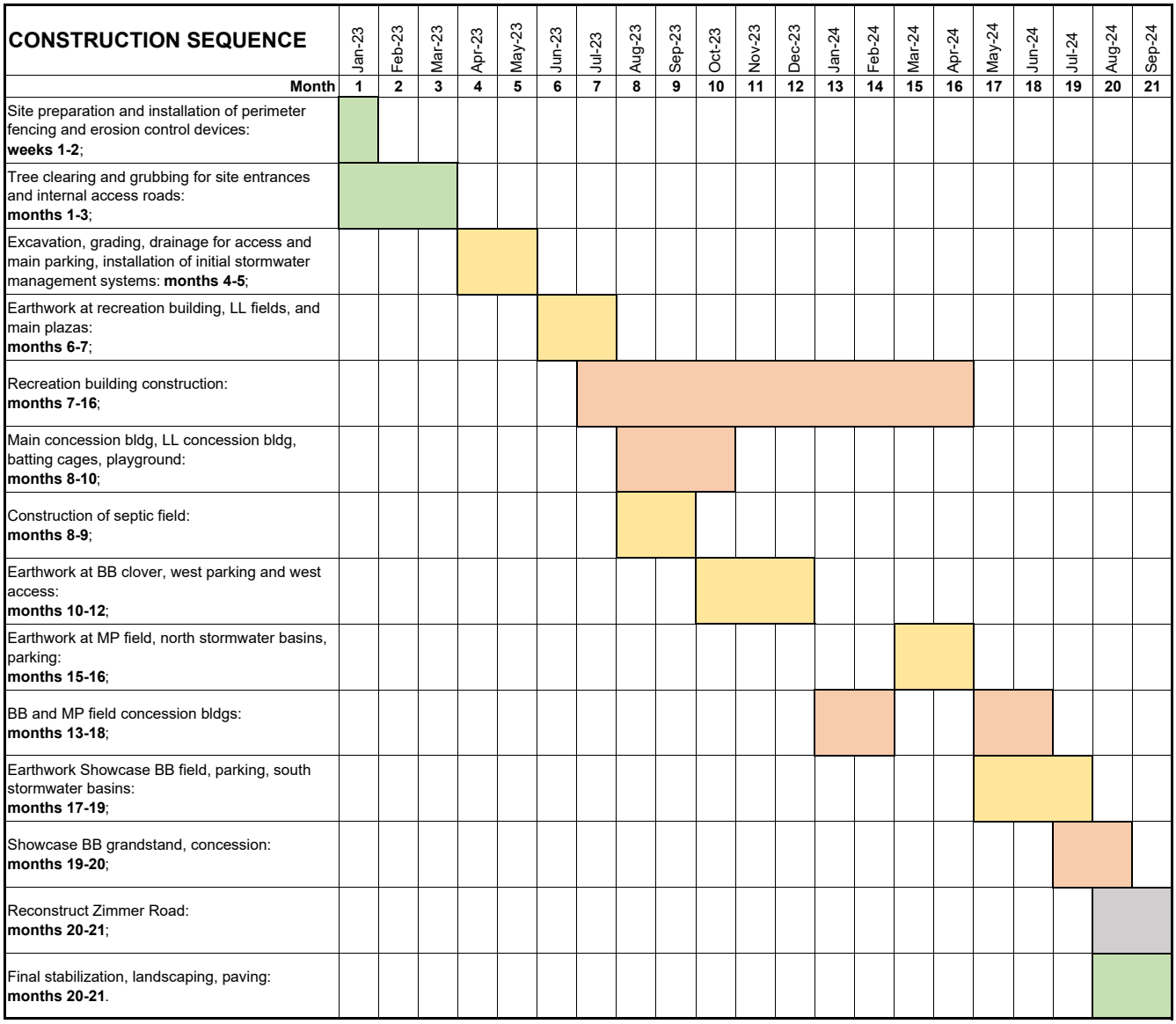


Figure 15-1: Construction Sequence
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York

16.0 ALTERNATIVES

This section provides narrative descriptions of development alternatives assessed for the project site at Pugsley Road (approximately 82 acres subject to alienation[1]). Various impact topics are discussed in the narrative assessments and quantitative comparisons are presented in the summary table at the end of the section.

16.1 No Action Alternative

The No Action Alternative represents the scenario where no development would take place on the project site and this site would remain under its current ownership by the Town of Southeast. This is effectively an open space preservation alternative. The site would remain in its current undeveloped and underutilized condition. A summary of impacts of No Action as compared to the proposed action is presented below.

Land Use and Zoning: This site would remain in Town ownership, undeveloped and under permanent protection as public open space for passive recreation. There would be no resulting land use or zoning impacts. The creation of an active recreational resource for the Town residents and the region in an area where there is a demand for such use would not be realized.

Community Services and Economics: Under the No Action alternative there would be no impacts to community services and no change in municipal property tax revenues. This site would continue to generate no tax revenues.

Cultural Resources, Visual Resources and Community Character: There would be no change to the visual environment in the No Action alternative. The site would remain vacant and wooded.

Vegetation and Wildlife: The site would continue to provide undisturbed woodland habitat for resident and transient wildlife that currently utilize the property, without disturbance to approximately 49 acres of land.

Geology, Soils and Topography: There would be no disturbance to the soil, topography, or underlying geology under the No Action alternative. No excavation of grading of the existing soils would occur on the project site.

Water Resources and Wetlands: There would be no change in the patterns of surface or subsurface movement of water under the No Action alternative. There would be no use of the existing groundwater resource. No disturbance of wetlands or their regulated areas would occur the under the No Action alternative.

Traffic and Transportation: No traffic would be generated by the site and no impacts to traffic patterns or transportation systems would result.

[1] Town of Southeast Town Board, Resolution 12/2020 Requesting the New York State Legislature Introduce Home Rule Legislation to Authorize the Discontinuance and Alienation of Parkland Located on Pugsley Road", adopted February 20, 2020.

Infrastructure and Energy: No impact to existing utilities would occur in the No Action alternative.

Air and Noise Environment: The ambient air quality and noise conditions in the site area would remain unchanged in the No Action alternative.

While the use of the site as a public open space resource would continue in the No Action alternative (although there is little evidence of such use), this alternative would not realize the primary goal of the Project Applicant to create an active recreation facility to serve the needs of the Town and the wider region, nor address the statement of the Town that such a recreation site could "serve a greater public benefit". In its formal request to the NY State Legislature to authorize the alienation of the existing parkland designation of the subject Pugsley Road land, the Town of Southeast Town Board stated that the subject site "…will serve a greater public benefit if it were owned and developed for recreational use by a private project sponsor" in exchange for land to be acquired from the sponsor at Starr Ridge Road and dedicated as parkland. [2]

16.2 Alternative Development per RC Zoning

The project site is zoned RC Rural Commercial allowing the following permitted uses: craft workshop, nursery, office, restaurant, recreation and kennel; and accessory uses: outside storage, private utilities, restaurant, retail, personal services and professional services.

Current zoning would permit uses listed for the RC district, however its designation as open space precludes any change from its present use without an act of the NY State Legislature to alienate its present use for another stated purpose.[3]

With this site under its current ownership by the Town of Southeast and its designation as dedicated open space, future development would be limited to improvements related to passive human activities and preservation of natural resources. Such use could include public access for hiking, nature walks, trail biking and the like, and improvements that could enhance such activities -- development of a fitness trail, for example.

Absent the proposed action, no alternative development (No Action) is anticipated at the project site and it would thus remain wooded and underused without improvements.

16.3 Alternative Project Scale and Siting

Several site plan concept designs were created in the process of developing the proposed plan for Brewster Yards. From study of the site topography and other physical constraints of the land, and accessibility through the landscape, the program evolved into the current project description. Figures 16-1 and 16-2 depict the scale and siting in two early site concepts.

Figure 16-1 (Concept Sketch 1) shows the main project entrance taken from Fields Corner Road, a centrally located 30,000 square foot (sf) main building, eight Baseball / Little League

[2] Ibid.

[3] Under the language adopted by the Town Board, the alienation approved for the proposed recreation use is "specifically conditioned upon such site being deed restricted to prohibit the site from being used for any purpose other than Recreation as may be defined by the Town of Southeast Zoning Code." -- Town of Southeast Town Board, Resolution 12/2020.

fields in two clovers, three concession/restroom buildings and three multi-sport fields in a layout that concentrated the fields toward the north end of the site. The sketch, which was an overlay on the available topographic information for the site, shows areas where steeply graded slopes would be necessary to accomplish plateaus for the playfields and shows an approximate limit of grading line / edge of clearing.

Figure 16-2 (Concept Sketch 4) shows the main project entrance taken from the Pugsley Road / Fields Corner Road intersection, a 40,000 sf main building located internal to the project, eight Baseball / Little League fields in two clovers plus a Baseball stadium at the south end, several concession/restroom buildings and two multi-sport fields in a layout that concentrated the fields in gentler slopes toward the west side of the site. This sketch also shows steeply graded slopes where necessary, a septic field area and the post-development tree line.

Natural constraints of the property noted on these concept plans include wetlands, steep slopes and the Ridgeline Protection Area, in addition to the irregular shape of the property itself.

These plans generally illustrate where areas on the property are situated that are conducive to grading and accessibility, and protective of natural systems of the site, particularly its wetlands and watercourses. These layouts are somewhat different in scale and siting of the recreation elements from the current proposed plan and demonstrate the overall extent of development that may be viable on this property. Table 16-1 lists the ranges of quantifiable features for comparison of the proposed project plan with Concept Sketch 1, Concept Sketch 4 and the Larger Building Alternative described below. As these plans have not been developed beyond conceptual stage, the ranges represent estimates. Items denoted by a dash (--) cannot be determined. Notable differences between the two Concept Sketches and the Proposed Plan include building coverage, amount of development versus natural areas remaining, and trip generation.

Larger Building Alternative

Subsequent to the initial application made to the Town for this project, the Applicant has continued to explore a building footprint of approximately 44,100 sf that would allow for two 90-foot infields rather than one 60’ and one 90’ “field” inside the building. This footprint would be approximately 26 percent larger and allow for increased project utilization in the winter when the outdoor fields would not be in use. Topics of consideration that could be affected by a larger building are summarized below.

Land Use and Zoning: Conceptually, expansion of the building would occur on the west end of the proposed building footprint. This plan would not change conformance with the zoning requirements for setbacks, building coverage, FAR, or open space.

Visual Resources and Community Character: This alternative considers a building that is larger in footprint, thereby expanding the length of the north and south facades and roof line with no change to the height of the structure or elevation of the roof peak. The larger building would be of the same architectural character as the proposed building and would be situated within the area of disturbance shown in the proposed site plan and thus it would create no significant difference from the proposed building regarding visibility, extent of tree clearing or character of the neighborhood.

Clearing and Grading: The larger building would be situated in the same location and within the area of clearing and grading disturbance shown in the proposed site plan, its expanded footprint being accommodated without any significant change to the extent of site disturbance. Adjustments of the grading around the building would accommodate the building footprint increase. Spatially, the larger building footprint would fit in the space with minor adjustments to the site features and a negligible change in earthwork (cuts and fills).

Stormwater: This plan would increase the area of impervious surface to a small extent and could be accommodated in the design of the stormwater management systems.

Water and Wastewater: This plan would not change the projected maximum on-site population which is the basis for design of the water supply and septic system.

Traffic and Parking: This plan would not change the projected trip generation and effects on traffic from the project. An increase in recreational space in the building will incrementally increase the number of required parking spaces to accommodate the building users, from 345 spaces to 381 spaces. However, the number of parking spaces shown on the proposed site plan is greater than 381 spaces, as it is based on the projected site population when there is maximum usage of the outdoor fields and, thus the increase in building size would be accommodated by the proposed site parking.

16.4 Natural Turf Alternative

This alternative considers developing the baseball complex with natural turfgrass fields rather than synthetic turf. This design would alter the type of construction of the field surface to utilize a material that would be more porous than synthetic turf, thereby allowing for runoff water to be more readily infiltrated directly into the ground. As a playfield surface, however, a grass surface is prone to compaction during usage so that it becomes less pervious and thus muddy during wet periods to the extent that such a field becomes unusable for play during portions of the year.

The construction “cross-section” to build a playfield surface that will support the growth of live grass is somewhat different than a surface designed to shed surface water thereby allowing for use whether it is wet or dry. As is experienced at the existing natural grass fields in the Town, wet field conditions result in periods of time when the facilities need to be closed to use, in addition to recovery times required for grass fields after intensive use.

Topics of consideration that could be affected by a natural turf alternative are summarized below.

Clearing and Grading - The earthwork necessary to construct natural turf fields would generally be the same as for synthetic turf fields. Thus, the extent of site disturbance to develop this alternative would be the same as for the proposed plan.

Natural Resources - Establishment and maintenance of natural grass playfields would require applications of fertilizers, fungicides and pesticides periodically over the life of the project, which in turn create the potential for environmental degradation through contamination of runoff water and groundwater. While grass surfaces would infiltrate greater amounts of surface water, thereby increased potential for groundwater recharge, natural grass would require irrigation that would increase the project water demand from groundwater sources.

Economic Conditions - The on-going maintenance requirements in addition to reduced availability for use by patrons would increase operational costs and reduce the economic viability of a recreation facility with natural turf fields. Based on average costs and usage rates of ballfields across North America published by Fieldturf.com, natural grass playfields typically cost half as much as synthetic turf to build, but cost four times as much to maintain, and are scheduled for use 25 weeks of the year versus 44 weeks.[4] Reduced patronage would result in reduced tax revenue generated to receiving entities.

With regard to usage factors related to site population such as traffic generation, water and sewer demand, the natural turf alternative would experience less patronage overall as described above, but experience the same peak populations so impacts on traffic and infrastructure would be similar for this alternative compared to the proposed project.

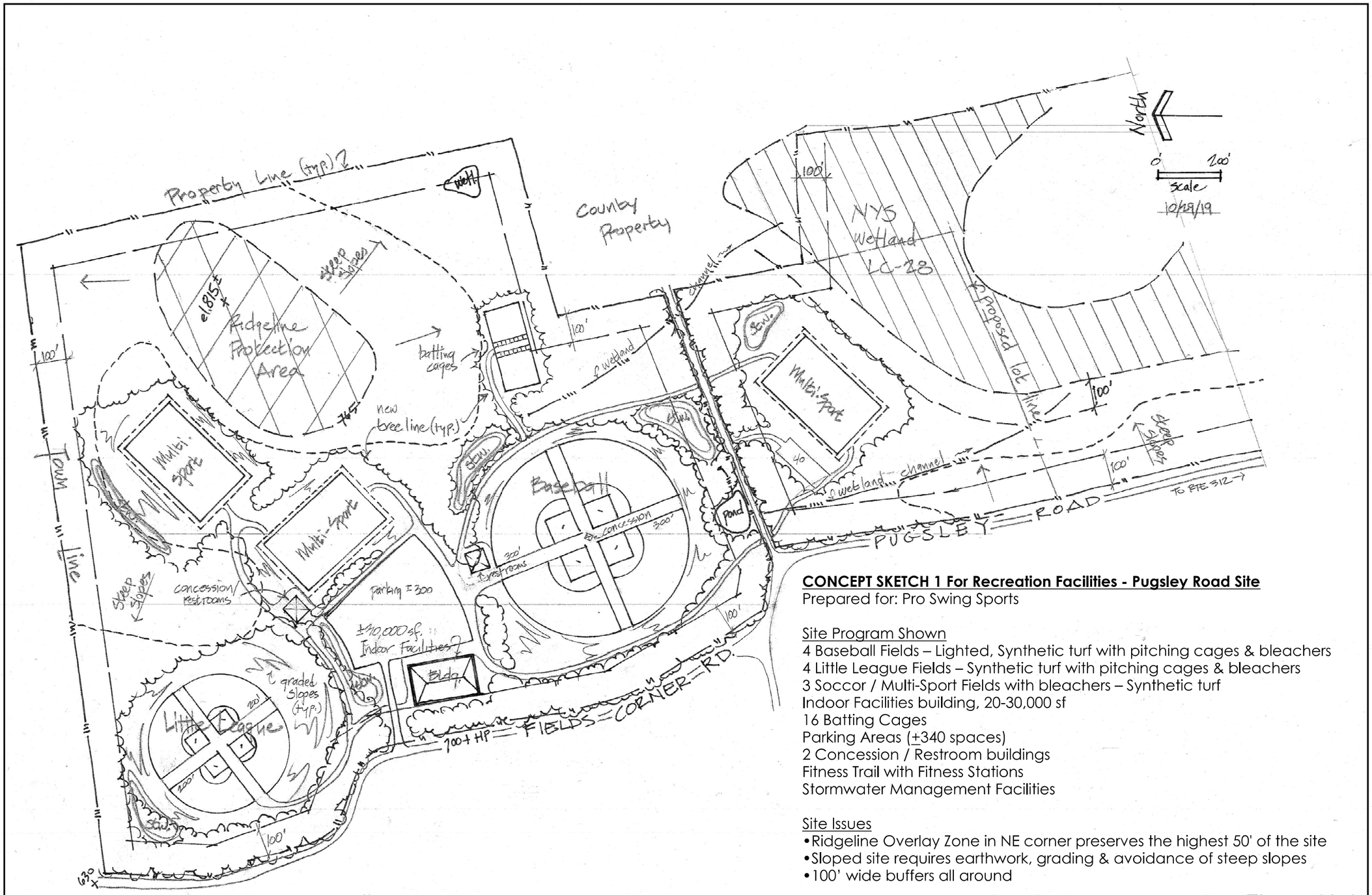
Importantly, a natural turfgrass alternative would not realize the primary goal of the Applicant to create an economically viable recreation facility to serve the needs of the Town and the wider region. Lacking the physical requirements of the facilities to provide opportunities for nearly year-round outdoor recreation, this alternative would not be pursued by the Applicant.

[4] Fieldturf.com accessed 2/14/22.

Table 16-1
Alternative Impact Comparisons

	No Action (Existing Conditions) [1]	*Proposed Plan*	*Alternative Development per RC Zoning* [2]	*Alternative Project Scale and Siting*	*Natural Turf Alternative*
Developed Area					
Building Coverage, incl. outbuildings (square feet)	0	47,862	0	39,000-59,000	47,862
Pavement (acres)	0	9.6	0	10-11	9.6
Lawn / Landscaped (acres)	0	21.5	0	22-24	37.8
Synthetic Turf Surface (acres)	0	16.3	0	16-18	0
Open Space & Natural Areas					
Waterbodies (acres)	0.4	0.4	0.4	0.4	0.4
Wetlands (acres)	0.1	0.1	0.1	0.1	0.1
Woods, upland (acres)	81.3	33.3	81.3	28-33	33.3
Dedicated Open Space (acres)	81.8	0	81.8	0	0
Natural Resources					
Total Construction Disturbance (acres)	0	49	0	49-54	49
New Impervious Surface (acres)	0	10.7	0	11-12	10.7
Steep Slope Disturbance (>25%) (ac)	0	1.1	0	1-2	1.1
Tree Clearing (acres)	0	49	0	49-54	49
Soil Excavation (cubic yards)	0	±210,000	0	--	±210,000
Wetland Disturbance (acres)	0	0	0	0	0
Community Resources					
Trip Generation, weekend peak (trips/hour)	0	483	0	483-531	483
Water Demand / Sewer Flow, weekend peak (gpd)	0	30,132	0	30,132	30,132
Municipal Tax Revenues Generated (net annual) [3]	$0	$1,019,817	$0	--	$1,019,817

Notes: (1) Total acreage subject to development at Pugsley Road site = 81.78 acres
(2) Absent the proposed recreation use, no alternative development (No Action) is anticipated at the project site.
(3) See Section 4.0 for explanation of the net tax revenues (adjustment for affected School District).
Numbers may not add up to match totals due to rounding.
Source: Insite Engineering; KG+D Architects.



CONCEPT SKETCH 1 For Recreation Facilities - Pugsley Road Site
Prepared for: Pro Swing Sports

Site Program Shown
4 Baseball Fields – Lighted, Synthetic turf with pitching cages & bleachers
4 Little League Fields – Synthetic turf with pitching cages & bleachers
3 Soccor / Multi-Sport Fields with bleachers – Synthetic turf
Indoor Facilities building, 20-30,000 sf
16 Batting Cages
Parking Areas (±340 spaces)
2 Concession / Restroom buildings
Fitness Trail with Fitness Stations
Stormwater Management Facilities

Site Issues
- Ridgeline Overlay Zone in NE corner preserves the highest 50' of the site
- Sloped site requires earthwork, grading & avoidance of steep slopes
- 100' wide buffers all around

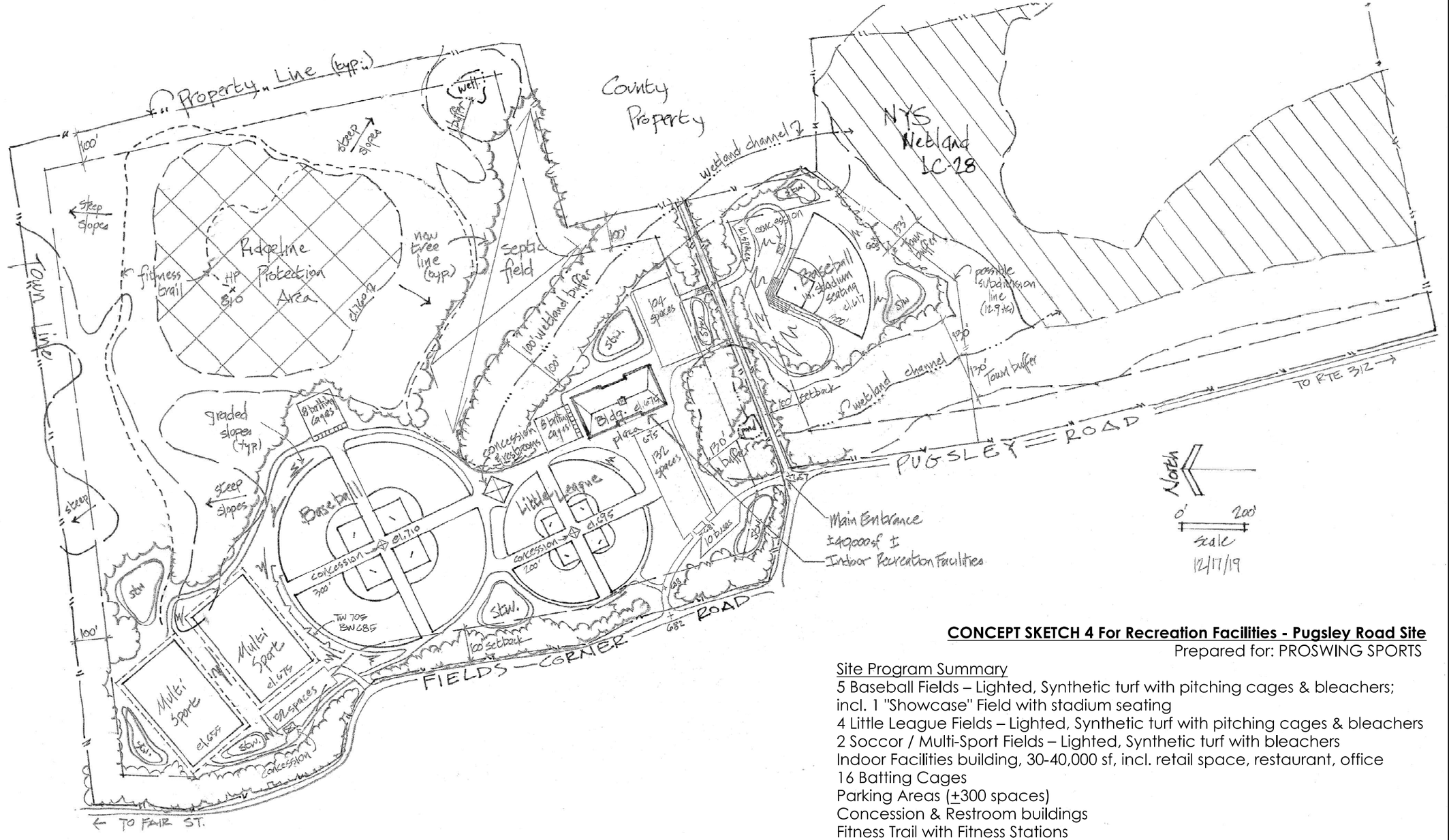
160 & 132 Pugsley Road
TOWN OF SOUTHEAST, NEW YORK

KG+D listen imagine build

Figure 16-1
Site Plan Alternative "Concept 1"
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York

KG+D Architects, PC, 285 Main Street, Mount Kisco, NY 10549

Site Issues
- Ridgeline Overlay Zone in NE corner preserves the highest 50' of the site
- Sloped site requires earthwork, grading & avoidance of steep slopes
- 100' wide setback all around & 100'-166' wide wetland buffers



CONCEPT SKETCH 4 For Recreation Facilities - Pugsley Road Site
Prepared for: PROSWING SPORTS

Site Program Summary
5 Baseball Fields – Lighted, Synthetic turf with pitching cages & bleachers; incl. 1 "Showcase" Field with stadium seating
4 Little League Fields – Lighted, Synthetic turf with pitching cages & bleachers
2 Soccor / Multi-Sport Fields – Lighted, Synthetic turf with bleachers
Indoor Facilities building, 30-40,000 sf, incl. retail space, restaurant, office
16 Batting Cages
Parking Areas (±300 spaces)
Concession & Restroom buildings
Fitness Trail with Fitness Stations
Stormwater Management ("stw.") & Septic Facilities

160 & 132 Pugsley Road
TOWN OF SOUTHEAST, NEW YORK

KG+D listen imagine build

KG+D Architects, PC, 285 Main Street, Mount Kisco, NY 10549

Figure 16-2
Site Plan Alternative "Concept 4"
BREWSTER YARDS DEIS
Town of Southeast, Putnam County, New York

17.0 MITIGATION SUMMARY

Below is a summary of the mitigation measures proposed to address potential adverse impacts that are identified in the preceding DEIS sections. This section is not a comprehensive list of all mitigation measures that are incorporated into the project -- refer to more detailed discussions in the preceding DEIS sections.

17.1 Land Use, Zoning & Public Policy

- The plan proposes a buffer of 260 feet or more of existing woodland vegetation to be preserved between the closest proposed development disturbance and the two nearby residential lots north of the site.
- In the context of its location within the greater community, the project will maintain the Town's rural community character through preservation of the visual buffer of woodland along the I-84 corridor including the prominent ridgeline.
- With regard to the change in intensity of use of the subject site, the project "…will serve a greater public benefit if it were owned and developed for recreational use by a private project sponsor" in exchange for land to be acquired from the sponsor (at Starr Ridge Road) and dedicated as parkland.
- The proposed project will benefit the community directly through tax revenues and employment. As a non-residential land use, the project will not generate additional population to the Town while providing additional recreational services available to school-aged children and young adults of local families.

17.2 Community Services

- Putnam County is expected to receive approximately $90,000 annually in property tax revenues from the proposed project, portions of which could be utilized to offset any potential impacts on the County Sheriff's Department and the Putnam County Bureau of Emergency Services.
- The project would generate over $15,000 in annual property tax revenues to the Fire District which could be utilized to offset any potential impacts to the Fire Department.
- The projected increase of municipal tax revenues from the proposed project to the Town of Southeast by approximately $87,000 annually, a portion of which could be used to offset the incremental increase in road maintenance costs of the Highway Department.
- The Applicant proposes to avert increased use of Fields Corner Road by signing at the project driveway for No Right Turns northward on Fields Corner Road. This project proposes to leave Fields Corner Road north of the project as a seasonal unpaved road and does not include improvements that could otherwise increase northbound traffic and increased need for road maintenance.
- Improvement of the former Zimmer Road is proposed to a standard that is acceptable to the Town.

17.3 Economic Conditions

Due to the overall increase of property tax revenues realized from the proposed project, no mitigation measures are warranted or proposed.

17.4 Visual Resources and Community Character

- The proposed architecture of the main recreation building and ancillary buildings is designed to fit in the landscape of the site and to be complementary to the style, scale and quality of buildings found in the area.
- In conformance with the Town Code, all proposed improvements at Brewster Yards will be situated so that none are visible above the top of the ridgeline or top of vegetation located on the ridgeline as viewed from the surrounding area, nor will any tree clearing occur on a ridgeline.

In reviewing the potential visibility of the proposed lighting (both as direct illumination and indirect sky glow), and compatibility of the project with the nearby residential uses, the following mitigating factors would reduce the extent of potential nighttime visual impact:

- Specification of light fixtures that incorporate the latest technology in lighting design for energy efficiency. Use of luminaires that will sufficiently light the project for its intended use.
- Specification of light fixtures designed to minimize stray light and outfitted with shields as appropriate to direct the light toward the sports surface.
- Specification of pole heights that will provide for optimal downlighting, thereby minimizing glare, stray and reflected light.
- Field lighting will be turned off when the field facilities are not in use.
- Outdoor activities at the project will be reduced when leaves are off the trees.
- Preservation of existing trees and addition of new landscaping around the perimeter of the property to maintain a vegetated buffer to soften direct views to the playfields from local viewpoints.

17.5 Cultural Resources

The proposed development will not affect any potentially significant cultural resources and no additional cultural resources investigations are warranted. No mitigation measures are proposed.

17.6 Natural Resources

- Best practices will be used during the harvesting of trees to minimize disturbance of the soil in areas to be cleared and to provide protections for adjacent trees that are to be preserved.
- Protection of standing trees to remain in accordance with NYSDEC guidelines which include construction perimeter fence protection, marking of individual and erection of temporary barrier fencing along the root protection zone of trees to be preserved, and creation of permanent tree wells around trees identified to be preserved in areas where the grade needs to be altered.
- Preservation of 71.7 acres of trees on parcels to remain as Town parkland and 33 acres of trees on the project site, including all trees on the Ridgeline Protection Area and on the steep sloped areas surrounding this area.

- Wetlands, ponds, streams and watercourses will be protected from direct impact of construction activities.
- Indirect impacts to existing hydrologic functions would be mitigated by the application of Best Management Practices (BMPs) including erosion and sedimentation controls during the construction phase of the project, and by implementation of a post-construction stormwater management plan that includes detention and infiltration systems.
- To avoid potential impacts to bats that may be present on site, tree removal would not occur from April through October.
- A landscape plan will provide a transitional landscape from the edge of the proposed project into the bordering mature forest.
- The landscape plan would prioritize use of plants selected from the list of native tree, shrub, and perennials developed by the Town Planning Board.

17.7 Geological Resources

- Adoption and implementation of the Stormwater Pollution Prevention Plan (SWPPP) for the proposed project to avoid significant adverse impacts to soils and surface waters.
- Temporary sediment and erosion control measures during construction in accordance with NYSDEC stormwater standard practices would include swales to divert clean water from construction areas, silt fencing to contain sediments within the LOD, sediment traps to allow for onsite treatment of silted waters, and re-seeding or mulching to stabilize areas of disturbed soils, including soil stockpiles.
- Grading operations would be phased to limit the extent of exposed soils present at one time, in conformance with General Permit GP-0-20-001.

17.8 Water Resources and Wetlands

- No direct disturbances to wetlands or watercourses have been proposed.
- Land grading operations will be phased.
- Extent of impervious surfaces has been minimized.
- Rainwater infiltration practices will be utilized to reduce the volume of surface stormwater runoff exiting the site.
- Stormwater management systems are designed to meet the requirements of local, regional, and state stormwater regulations including general permit GP-0-20-001.
- The SWPPP defines measures and procedures to be implemented for compliance with prevailing discharge standards. All proposed measures and procedures will be selected in accordance with the current NYS Design Manual standards.

17.9 Traffic and Transportation

- The Proposed Project will seek to discourage drivers leaving the Site from making right-turns towards Fields Corner Road by installing No-Right-Turn traffic signs at the driveway approaches to Pugsley Road.
- Most construction employees will arrive and depart the Project Site out of phase with the peak traffic hours.

- Construction truck traffic is anticipated to access the Site via NYS Route 312 and Interstate Route 84 which will avoid traffic through residential neighborhoods and on local roads.
- No construction traffic will be allowed to utilize Fields Corner Road to Fair Street.

17.10 Infrastructure and Energy

- Infiltration from the SSTS will recharge of a portion of the water withdrawn from the groundwater aquifer thereby reducing the consumptive water withdrawal of the project.

17.11 Air Quality

Conventional construction practices will be implemented to avoid or minimize adverse effects on air quality. The proposed development will not have a significant adverse effect on air quality for which mitigation measures are proposed.

17.12 Noise

Conventional construction practices will be implemented to avoid or minimize adverse effects on the noise environment. The proposed development will not have a significant adverse effect from noise for which mitigation measures are proposed.

- No construction traffic will be allowed to use Fields Corner Road.
- To reduce potential operational noise impacts to residences north of the site, loudspeakers will only be used intermittently for general and safety announcements and will not be used at the two clover fields or the multipurpose field for play-by-play announcements.

- The project proposes to limit patron traffic from using Fields Corner Road by promoting access to and from the site via Route 312 and posting no right turn signs at the project exits onto Fields Corner Road which would minimize traffic-related noise to the neighborhoods to the north.

- A mitigating factor with regard to noise from maintenance operations is that the play fields are proposed to be constructed with synthetic turf without the need for mowing.

18.0 OTHER EFFECTS

18.1 Unavoidable Adverse Impacts

Development of Brewster Yards project will result in particular adverse environmental impacts that cannot be avoided if the project is implemented regardless of the mitigation measures considered in the previous sections of this document. Many of these impacts are temporary as they would occur during the construction of the project and cease with the completion of construction. Others are associated with the long-term operation of the project.

Short-Term Effects

- Site construction will remove existing vegetation and disturb soils where grading occurs. Areas graded to create transitions to undisturbed areas will be restored with vegetation.
- Indirect impacts to wildlife will occur as construction displaces resident wildlife until construction is completed and the wildlife can move back into the area.
- Increased susceptibility to soil erosion and sedimentation in downgradient drainage systems as vegetative cover is removed and earth moving occurs. Potential reduced functions of surface water resources, wetlands and adjacent areas until construction areas are stabilized.
- Increase in local area traffic with construction and delivery vehicles, including truck traffic.
- Short-term effects on air quality and increased dust emissions in the site area during construction.
- Short-term construction noise in the site area.

Long-Term Effects

- Potential increased demand on community services (State Police, County Sheriff, Fire Department, EMS), local road maintenance.
- Slight reduction in annual property tax revenue to North Salem Central School District.
- Site construction will permanently impact soils where excavation, filling and grading occur as well as where impervious pavement or buildings are built.
- Site construction will eliminate vegetative cover and wildlife habitat in areas proposed for development.
- Localized increase in traffic volumes.
- Withdrawal of groundwater from the aquifer.
- Increase in energy use to operate the project.
- Periodic increases in ambient noise levels.

18.2 Irreversible and Irretreivable Commitment of Resources

The Proposed Action would irreversibly change approximately 49 acres of undeveloped, wooded land with development improvements that will be different in physical makeup and site use. The natural resource functions of the existing woodland would be irretreivably lost, particularly the loss of natural habitat for animals that utilize the site for nesting, food and cover. The proposal would increase impervious surfaces by approximately 11 acres and add approximately 16 acres of pervious synthetic turf playfields, which necessitate constructed stormwater management systems to treat the increase in surface runoff from these surfaces. Once committed to this use, the land would be unavailable to other uses for the foreseeable future.

Resources would be irretrievably committed by implementation of the Proposed Action -- certain materials and energy required for construction and for operation and maintenance of the project after construction is completed. Construction of the project would involve the commitment of a variety of natural resources, most of which would be sourced from off-site locations. These would include manufactured products as well as natural products -- concrete, asphalt, steel and other metals, lumber, glass and earth materials such as gravel. It should be noted that many of the materials utilized in construction may at some time in the future be recycled or reused.

There would also be future commitment of the groundwater resources at the site.

Operation of construction equipment and delivery of imported products would involve the consumption of fossil fuels, and the completed facility would consume energy via electricity and fossil fuels that are produced elsewhere.

The construction phase of the project would require a substantial commitment of manpower, which can be viewed as beneficial to the community and the local economy. Employment of construction workers and a variety of construction-related occupations would provide a short term beneficial economic impact to the surrounding area. Likewise, creation of jobs to operate the facility would provide a long term economic benefit.

Other manpower commitments which could be required from the community would involve emergency services of the police department, fire department or ambulance corps.

Refer to the prior DEIS sections for specific descriptions of the resources cited above.

18.3 Growth Inducing and Cumulative Impacts

The area surrounding the project site currently includes retail and service establishments which largely serve local businesses and residents as well as transient patrons passing through the area. Existing local businesses would likely experience an increase in business activity from the proposed project induced from the increased patron traffic that would visit the project area enroute to and from the Brewster Yards project. Such growth would affect the local supermarkets, delicatessens, restaurants, gas stations, and other businesses.

The anticipated increase in construction and employment opportunities would be expected to generate concomitant revenues to the community and the Town of Southeast. The induced

growth would be expected to strengthen the local economy as well as increase opportunities for local employment and sales. However it is not expected that employees associated with this project would relocate to the Town of Southeast because of their employment.

With induced growth to area businesses being the result of new patronage to Brewster Yards, called pass-by traffic, that growth would not induce additional traffic growth in the area. It is possible that this project would generate further economic development in the area to a modest degree.

Refer to discussion of projected direct, indirect, and induced benefits to the local economy related to the construction and operational phases of the subject proposal in DEIS section 4.4.

There would be increased intensity of land use on Pugsley Road that results from the Brewster Yards and Logistics projects and there will likely be periodic increases in noise, traffic activity and lighting evident at night. As a sports events venue, Brewster Yards would attract activities that result in noise, traffic and light affecting the character of the neighborhood that currently consists of sizable tracts of wooded, vacant land, existing and future commercial enterprises, active transportation corridors, and two single family homes.

While the presence of new lighting at the Brewster Yards and Logistics projects will likely be evident at night from the local area roads, any change in measurable light levels would be negligible and not a signficant adverse impact. Further discussion is presented in DEIS section 5.3.

The potential effects of increased traffic from the Brewster Yards and Logistics projects is assessed in section 11 of this DEIS. The adverse effects of the cumulative traffic were identified in the traffic study under the Build scenario (with no improvements) and are proposed to be mitigated by the recommendations made for signal timing adjustments that would account for both projects (Build with Improvements).
As new development occurs at the Brewster Yards and Logistics sites, the noise environment for existing residents nearby will likely change. However based on assessment of the cumulative noise effects from the two projects and the occassional outdoor concerts held at Tilly Foster Farm, they are not expected to cause significant noise above existing ambient levels. (DEIS section 14.3) The cumulative operational noise was projected to be well below 55 dBA and the Town's regulatory threshold in its Noise Ordinance.

18.4 Effects on the Use and Conservation of Energy Resources

Construction and operation of the proposed project would consume energy -- electricity and fossil fuels -- that are produced elsewhere.

Specific mechanical systems have not yet been designed in sufficient detail to permit examination of the extent of energy consumption or conservation in this project. However, the design for the buildings would take into account the availability of electricity and fossil fuels that would be relied upon to service the site. Given the rising costs of energy and increasing concerns for environmental stewardship, the buildings would be designed in ways that minimize uses of energy.

Energy consumption would occur during construction and operation of the proposed Project. During construction, energy would be used for power equipment and construction vehicles. Once construction is completed and the Project occupied, energy would be required for heating, air conditioning, and the use of various appliances and electrical equipment. The completed project would place long-term demands on various energy sources for space heating, air conditioning, water heating, refrigerators and lighting as well as other appliances and incidental electrical uses. Indoor climate control systems will demand the largest quantities of energy consumed over the lifetime of the project. Energy efficient heating, cooling and insulation systems will be utilized to conserve energy resources associated with climate control.

Energy conservation in New York is regulated at the State level for new construction. The code specifies basic requirements that are mandatory for newly constructed buildings that apply to heating and cooling systems, hot water systems, electrical systems, construction materials, equipment specifications and building sealing and insulation. The Brewster Yards development would be constructed in accordance with requirements of the New York State Energy Code.

In addition, the New York State Energy Research and Development Authority and the Public Service Commission promote compliance with Energy Star® and New York Energy Smart℠ programs for construction that encourage the use of energy conserving appliances, materials, technologies and building techniques. Compliance with provisions of these energy conservation programs would reduce the overall long-term energy consumption of the project. The Applicant will incorporate applicable components of these provisions and Green Building standards.