DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)

LEGOLAND NEW YORK
COMMERCIAL RECREATION FACILITY

Harriman Drive
Town of Goshen, Orange County, New York
SEQRA Type 1 Action

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I. EXECUTIVE SUMMARY

A. Introduction

An Environmental Impact Statement contains relevant and material facts and analysis upon which agency decisions on a particular project are made. This Draft Environmental Impact Statement (DEIS) is intended to convey general and technical information regarding the potential environmental impacts of the Proposed Project to the Town of Goshen Planning Board (as Lead Agency), as well as several other agencies involved in the review of the Proposed Project, as described below. The DEIS is also intended to convey the same information to the interested public.

Merlin Entertainments Group US Holdings, Inc. ("Merlin Entertainments" or "Project Sponsor") proposes to construct a theme park and resort on approximately 140 acres of a 521.95 acre site consisting of 15 total parcels located off Harriman Drive in the Town of Goshen. The park, to be called LEGOLAND New York (sometimes hereinafter abbreviated as "LLNY"), will include rides and attractions, an aquarium, theaters, restaurants, a hotel and various back-of-house (administrative and maintenance) facilities including offices and staff areas as well as associated parking and drainage facilities. Generally, the site is laid out with the park in the center of the site. Restaurants, shops, rides and attractions within the park are organized into eight themed areas, surrounded by a ring road. The main guest parking area is located to the south of the park, the hotel is located in the south eastern corner of the site with its own separate parking and direct park entrance. The Back-of-House uses such as offices, maintenance buildings, and other staff areas are located in the northeastern corner of the site with separate access from Harriman Drive. The foregoing shall be collectively referred to herein as the "Proposed Project", "Preferred Project" or "Proposed Action".

Merlin Entertainments submitted a Full Environmental Assessment Form with the application package to the Town of Goshen on June 3, 2016 to initiate the SEQR process. On June 16, 2016 the Town of Goshen Planning Board declared its Intent to be Lead Agency for the review of the project. A Notice of Intent was circulated to the Involved Agencies on June 17, 2016. After waiting the required 30 days, and receiving no written objections, the Town of Goshen Planning Board declared itself Lead Agency and adopted a Positive Declaration requiring the preparation of an Environmental Impact Statement on July 21, 2016. On July 21, 2016 there was a public scoping process which culminated in the acceptance of the Scoping document, with the final version incorporating the Planning Board's required modifications accepted on August 18, 2016. As part of required agency review of the scoping document, Orange County Planning Department provided a comment letter dated July 29, 2016. The department provided feedback which was incorporated into the final adopted scoping document and this document responds to that document as required. This document follows the approved scoping outline. All SEQR documents are contained in Appendix A of this document.

B. Summary of Existing Conditions

The Project Site consists of 15 existing tax lots (11-1-45, 46, 47, 49.2, 58, 60, 62 through 69 and 15-1-59) comprising 521.95 acres located in the Town of Goshen and situated south of Harriman Drive, west of Arcadia Road, East of Reservoir Road and north of Conklingtown Road. The Project Site extends south to Conklingtown Road and east to Arcadia Road. The majority of the Project Site is vacant. Two residential dwellings are located along Harriman Drive on tax lot 11-1-47, an existing communications tower is located on tax lot 11-1-45 and other structures are in various states of deterioration.

Merlin Entertainments is the contract vendee of all of the parcels comprising the Project Site with the exception of certain parcels which were created for a planned but unbuilt phase of the Arcadia Hills subdivision. Those parcels were deeded to the Town of Goshen by the County of Orange after a tax foreclosure on July 25, 1984. Merlin Entertainments proposes to acquire those parcels, or portions thereof, from the Town of Goshen for their fair market value.

Portions of the site are located in the Rural (RU) and Hamlet Residential (HR) zoning districts as well as the Aquifer Overlay (AQ-3) and Scenic Road Overlay District and Stream Corridor and Reservoir Watershed Overlay District. The majority of the site is located in Orange County Agricultural District #2.

Surrounding land uses include mainly single family residential development. Arcadia Hills is located to the east of the site. The Glen Arden retirement community and the Elant senior housing and congregate care facility are located immediately to the west of the site in the Village of Goshen as well as Orange and Ulster County BOCES also located on Harriman Drive.

C. Project Description

Merlin Entertainments proposes to construct and operate a commercial recreation facility on approximately 140 acres of a 521.95 acre site consisting of 15 parcels located along the easterly side of Harriman Drive in the Town of Goshen. The commercial recreation facility will consist of the LEGOLAND New York theme park, including rides and attractions, an aquarium, theaters, restaurants, a 250 guest room hotel, retail and various supporting administrative (sometimes referred to as “back-of-house” facilities, including offices and staff areas, as well as associated on-site surface parking, and drainage facilities. The Project Sponsor proposes to seek public water and sewer services from the Village of Goshen, and the Village of Goshen has indicated its ability to serve the Project subject to certain conditions.

A total of 5,634 parking spaces will be provided onsite which includes the main guest lot, hotel parking and staff parking areas. Parking attendants will direct vehicles within the day-guest parking lot to ensure efficient and expedited parking of guest vehicles. Main access to the park will be from Harriman Drive. Vehicles will enter at one main gate and circulate south to the main parking area. The entrance road will allow for stacking of approximately 500 vehicles. Main entrance to the hotel will also be from the main entrance but a designated bypass lane will be provided for hotel guests. All deliveries will be in the ‘back-of-house’ area.

All traffic will be directed to access LEGOLAND New York via Exit 124 of NYS Route 17. From the exit, vehicles will travel east along the Route 17M connector Road, turn right onto South Street

and left onto Harriman Drive to the main access road. As part of the proposed project, comprehensive traffic upgrades and improvements are proposed throughout the study area including lane widening, new turning lanes, new traffic signalization, new signage, extending acceleration and deceleration lanes and ramp improvements on NYS Route 17. A full discussion of traffic mitigations and improvements are discussed in Section III-H below and in Appendix G.

The majority of the Project Site, or 444.54 acres will remain as a combination of undeveloped open space or manicured lawn and landscaping.

Hours of operation of the park will be 10AM to 8PM during peak season (June-August) and 10AM to 6PM during the shoulder season (April-May and September-October). Given the park will close at 8PM at the latest during summer months, internal park nighttime lighting will be minimal. Lighting is proposed along the entrance road, within parking lots and within the park. All lighting is proposed to be high efficiency LED fixtures varying in height and design based on the specific location within the site. Roadway and parking lot lights will be pole mounted, full cut-off light fixtures. Lighting within the park includes pole-mounted lights, string lights and bollards. Lighting levels at property lines will be at or near 0 except at access points on Harriman Drive where lighting is necessary for safety.

As part of the Proposed Action the Town Board is currently considering the adoption of a zoning overlay district to permit the use of the site for commercial recreation and all related accessory uses. The Town Board is also currently considering an amendment to the Town's Comprehensive Plan to encourage commercial development along the NYS Route 17 corridor.

D. List of Involved and Interested Agencies

The following agencies have been identified as Involved and Interested for this review.

1. Involved Agencies
   - NYS Department of Environmental Conservation
   - NYS Department of Transportation
   - Orange County Health Department
   - Orange County Industrial Development Agency
   - Town of Goshen Town Board
   - Town of Goshen Planning Board
   - Town of Goshen Highway Department
   - Town of Goshen Zoning Board of Appeals (if variances are required)
   - Village of Goshen Board of Trustees
   - Village of Goshen Department of Public Works

2. Interested Agencies
   - US Army Corps of Engineers
   - US Fish and Wildlife Services
   - NYS Department of Agriculture and Markets
   - New York State Department of Parks, Recreation and Historic Preservation
   - Empire State Development Corporation
   - Orange County Department of Planning
   - Orange –Ulster BOCES

- Goshen Central School District
- Town of Goshen Environmental Review Board
- Goshen Fire District
- Town of Goshen Police Department
- Village of Goshen Police Department
- Goshen Volunteer Ambulance Corps
- Town of Chester
- Village of Chester
- Village of Kiryas Joel
- Town of Wallkill
- Federal Highway Administration

E. Project Purpose, Public Need and Benefit

The purpose of the project is to construct LEGOLAND New York to serve the Hudson Valley and Tri-State Area market.

Orange County currently has a need for taxpaying tourist attractions and educational entertainment opportunities for children and young families. These two needs are both documented in numerous County Planning studies as well as the fact that school districts and parents throughout Orange County routinely and often transport children outside of the County and, in some cases, out of state for educational field trips. LEGOLAND New York will provide an unparalleled local educational experience.

LEGOLAND New York will offer year-round educational opportunities to schoolchildren throughout the region, with programs focused on STEM (Science, Technology, Engineering and Math) education. LEGOLAND New York will also partner with local schools and colleges to train and employ students interested in careers in hospitality, business, mechanical engineering, among other fields.

LEGOLAND New York will host, as it has in its other locations, educational programs for school trips with discounted tickets provided to school children and annual free passes donated to all educators in Orange County. The cost for student field trips start at $15 per student; this is equivalent to the field trip cost for other existing field trip locations within Orange County. Additionally, LEGOLAND New York will donate free tickets for field trips to area schools. Similar donations at LEGOLAND California have generated $1,000,000 in benefits to local schools.

Merlin Entertainments strongly supports charitable giving in a variety of ways. For instance, LEGOLAND New York, through its children's charity Merlin's Magic Wand, will engage in the local community. Merlin's Magic Wand provides seriously ill, disadvantaged or disabled children and their families with a fun filled day out to any Merlin attraction of their choosing. Since its

inception, Merlin's Magic Wand has provided over 260,000 children and their families with magical days out. And since 2012 Merlin's Magic Wand has donated over 40,000 tickets to children and their families in the United States alone.

LEGOLAND New York will also host at least one annual local Community Day to benefit local Not-For-Profit organizations and local school districts. Since LEGOLAND California opened in 1999, this program has provided $899,259 in cash donations to local organizations that have chosen to participate in the Community Day program. For Community Days, LEGOLAND New York would provide free tickets to the park to local Not-For-Profit organizations and local school districts. On Community Day, LEGOLAND New York would open and run the park for the benefit of these organizations. The organizations would keep the revenue from the sale of the free tickets.

LEGOLAND also supports local community institutions in a variety of ways. In 2015 LEGOLAND Florida remodeled the therapy rooms at The Howard Phillips Center for Children & Families. Also in 2015 LEGOLAND California remodeled the waiting room at the Rady's Children Hospital with interactive displays and more than 20 LEGO models, including a geyser periscope built from 17,000 LEGO bricks. LEGOLAND New York would provide similar support to Orange County institutions.

LEGOLAND New York will provide a significant economic benefit to the Town of Goshen and its surrounding areas. The project will employ 500 full-time employees, 300 part-time employees and 500 seasonal employees. The project will generate 800 construction jobs. Merlin Entertainments accepted the Orange County Industrial Development Agency's local labor policy and has agreed to enter a local project labor agreement guaranteeing at least 85% of the construction jobs will come from Orange County or surrounding Counties. In addition to onsite jobs, the site will use local vendors for a range of services such as food supply, pest control, laundry services and other suppliers, etc.

Local restaurants and hotel accommodations will benefit from additional tourists in the area. Based on similar-sized parks, between 1.5 and 2.5 million annual visitors are anticipated. It is estimated, since its opening in 2011 the LEGOLAND Resort in Winter Haven generated nearly $110 million in sales for off-site hotels and over $20 million in sales for off-site restaurants.

LEGOLAND New York's initial investment prior to opening day will cost $350,000,000, and by year five the investment is expected to reach $500,000,000. A PILOT agreement is an essential incentive for Merlin Entertainments to make this investment. LEGOLAND New York would make guaranteed PILOT payments of $1,400,000 annually beginning the first year the park opens.

- $1,022,000 annually would be paid to the Goshen Central School District, $210,000 annually would be paid to the Town of Goshen and $168,000 annually would be paid to the County.

- Over the duration of the PILOT agreement, payments would increase by 1.5% per year, compounded.

- Over the course of thirty years LEGOLAND New York will pay $52,600,000 in PILOT payments alone, of which $38,400,000 will go to the Goshen Central School District.

During the course of the 30 year PILOT term, LEGOLAND New York has also offered to pay the Town of Goshen a host community fee for every visitor. For each visitor up to 2,000,000 visits, LEGOLAND New York would pay the Town of Goshen 65¢, and 20¢ for each ticket thereafter – with no cap on payments. This would provide the Town of Goshen with at least **$1,300,000 annually**, based on 2,000,000 visitors, and substantially more depending on the success of the park. Over the duration of the host community fee agreement, payments would increase by 1.5% per year. Regardless of attendance, LEGOLAND New York would pay the Town of Goshen a minimum host community fee based on 800,000 visitors, or $520,000 annually. This amount is in addition to the PILOT payments that the Town of Goshen would receive.

The proposed LEGOLAND New York site currently generates only $91,185 in annual real property taxes. Under current zoning, the site could accommodate approximately 233 single family residences. Residential development would generate approximately 202 additional students within the Goshen Central School District. LEGOLAND New York would not generate any school children.

LEGOLAND New York would pay its full share of all special district tax assessments beginning year one. LEGOLAND New York would pay its full share of all water and sewer usage charges beginning year one. The Project Sponsor would pay the Village of Goshen the standard out-of-district user charges of $6.00 per 1,000 gallons for water (together with a $19,000 per year unit charge) and $9.20 per 1,000 gallons of sewer (together with a $272,000 per year unit charge). Based on water and sewer usage at LEGOLAND Windsor, which is a similarly sized seasonal park, anticipated annual revenue to be paid to the Village of Goshen would be $406,000 for water use and $576,520 for sewer use. These payments will provide the Village of Goshen with a significant source of revenue for future infrastructure improvements and debt reduction as may be determined by the Village Board.

LEGOLAND New York would also pay the County's hotel tax, generating approximately $30,000,000 over 30 years.

Sales tax receipts at LEGOLAND New York would generate approximately an additional $300,000,000 over 30 years. Orange County's sales tax revenue share would be $138,000,000.

Including annual increases, the total taxes and fees (PILOT payments, host community fees, hotel taxes and sales taxes) will generate approximately $421 million over 30 years.

As part of the Proposed Action the Project Sponsor would acquire certain town-owned lots within the Project Site which the Town acquired after a tax foreclosure in 1984. These town-owned lots are currently vacant and off the tax rolls. The Project Site also contains certain town-owned lots that are improved with wells that supply water to the Arcadia Hills Water District. However, those lots do not meet current NYSDOH wellhead protection area requirements. As part of the Proposed Action the Project Sponsor would offer additional land to the Town of Goshen surrounding the existing wells to ensure that the well sites meet NYSDOH requirements.

Additionally, solely as a benefit to the Town and specifically the Arcadia Hills Water District which has had historic water shortages, the Project Sponsor proposes to donate two wells which exist on the Project Site. Based on previous testing done in 1999 for a proposed residential subdivision on the Project Site known as the Lone Oak subdivision, the wells yielded between from 65 to 90 GPM. The project sponsor will offer the wells for dedication to the Town and provide an easement across the Project Site for the town to access these wells for future maintenance. The use of such wells can be determined at the Town's discretion but they will not be used for any purpose on the Project Site.

F. Summary of Existing Conditions, Potential Impacts, and Proposed Mitigation Measures

The following table summarizes existing conditions, potential impacts and proposed mitigation measures by topic area in the order they appear in the main body of the document.

Table I-1: Summary of Existing Conditions, Potential Impacts and Proposed Mitigations

Topic	Existing Conditions	Potential Impact	Mitigation Measures
Geology and Soils	The Trenton Group of shales underlies the entire area. Three areas of fracture trace exist on the site. Alden extremely stony soils (AC) are the largest soil group (+/-18.2 acres). Other soils present on the site include Erie, Bath-Nassau, Madalin and Mardin.	Total site disturbance for the Proposed Action will be 140 acres. After full build out of the project, 3,372,130 square feet (77.41 acres) will be made impervious and 132,977 square feet (3.1 acres) of porous pavers will be utilized in parking lot construction. A total of 436.38 acres of land will remain as open space and manicured lawn.	Adherence to the New York State Pollution Discharge Elimination System General Permit for Storm Water Discharges from Construction Activity, combined with the required SWPPP and soil BMPs, would further reduce the potential for soil erosion.
Topography	The Project Site contains both gentle and steeply sloping terrain. Generally the project's topographic high point, at an elevation of approximately 630 msl, is located on the western side of the site near the existing communications tower. The site slopes down is all directions from this point.	The development will require significant grading in the central portion of the Project Site to create a relatively flat area for park development, parking and the access road. Areas of steep slopes on the site will be disturbed. Approximately 11 acres of land which contains slopes of greater than 25% will be disturbed and regraded during construction.	Changes to site topography is an unavoidable adverse impact. The site has been designed to respect existing topography as much as possible. The plan meets the town's steep slope zoning requirements.
Surface Water	There are 63.96 acres of Federal jurisdictional wetlands on the Project Site. There are 52.75 acres of NYSDEC jurisdictional wetlands located along the eastern site boundary extended south via the Otter Kill and then off-site. The Otter Kill is a Class C, 16-mile-long tributary of the Moodna Creek that runs through the site and under NYS Route 17. The two Village of Goshen surface water reservoirs are located south and west of the Project Site.	As part of the site development, 3,267 square feet (0.075 acres) of Federal wetlands will be permanently disturbed. No NYSDEC wetlands or adjacent area will be disturbed. No floodplain encroachments are proposed. Pesticides are used within the theme park to control pests such as mosquitos. Herbicides are used to control weeds and algae. Surface water and stormwater on the site drain north, towards NYS Route 17 away from the Goshen Reservoirs.	Stormwater runoff from the developed areas of the Project Site will be treated to ensure water quality and will be consistent with NYSDEC regulations. The stormwater pollution prevention plan (SWPPP) complies with the NYSDEC State Pollution Discharge Elimination System General Permit for Stormwater Discharges.
Vegetation and Wildlife	The Project Site includes a mix of second growth forest,	Habitat assessments were completed for species identified as	To avoid disturbance to any possible Indiana and/or Northern

	successional farmfields, wetlands, and disturbed vegetative communities associated with the above-ground utility easements, and previous development. Several significant trees were identified as part of a tree survey completed for the developed portion of the site.	having potential to be onsite based on correspondence from the NYSDEC and USFWS including Bog Turtles, Indiana and Northern long-eared bats, Northern cricket frogs, Dwarf wedge mussel and small whorled pegonias. The evaluation concluded that the Project Site has the potential to provide habitat for Indiana and Northern long-eared bats and Northern cricket frogs. A Northern cricket frog survey was undertaken by a qualified biologist who determined no habitat was present.	long-eared bat summer habitat, the applicant will not clear any trees during the emergence period from April 1-October 31.
Ground Water/ Water Supply	Several wells exist on the Project Site. One well serves the dwelling on lot 11-1-45. Three wells located on parcels 11-1-58 and 11-1-49.2 are not currently in use. Three of the wells and a pump house which are part of the Arcadia Hills Water District are located on the subject property. The Village of Goshen operates a public water system for land within the Village and various outside users approved on a site by site basis. The system currently serves approximately 5,500 people through 1,750 service connections. Water sources include two surface water reservoirs and two Crystal Run Village Wells located in the Town of Wallkill. Based on Orange County GIS there are no aquifers underneath the Project Site.	The proposed project will not utilize groundwater from the site. Two existing wells will be offered for dedication to the Town of Goshen for municipal use. The remaining wells on the site will be capped consistent with Health Department Standards. Water demand is projected at 176,438 GPD with peak usage in July of approximately 255,394 GPD based on similar LEGOLAND parks. The project proposes to obtain potable water from the Village of Goshen municipal water system. The Village of Goshen has adopted a resolution agreeing to provide water supply to the project.	The use of municipal water eliminates potential impacts to groundwater at the site and to all adjacent users of groundwater. To reduce the overall use of water on the site, construction will include water saving fixtures consistent with NYS Building codes. Native plants will be used in the landscaping plan to reduce the need for irrigation. The Project Sponsor will pay all user-incurred fees for water usage consistent with the requirements of the Village of Goshen. All infrastructure will be constructed to Village specifications and will be reviewed and approved by the Village's consultant and the Village Board.
Wastewater	There is no wastewater infrastructure on the Project Site. A sewer main exists along Harriman Drive providing service to Arcadia Hills and the other uses along Harriman Drive. The Town of Goshen does not operate a public wastewater treatment system. The closest available public wastewater treatment facility is located in, and operated by the Village of Goshen which is approved to treat up to 2 million gallons of wastewater a day.	The project is anticipated to generate an average of 90,461.90 GPD of wastewater and a daily peak in the highest usage month (July) of approximately 130,689 GPD of wastewater. Wastewater collection will be provided by the Village of Goshen. The Village Board of Trustees passed a resolution agreeing to provide the Project Site with sewer services. The onsite sewer collection and conveyance system will be a looped system conveyed to a new sanitary sewer pump station and a new forcemain located within Harriman Drive.	The use of public wastewater collection and conveyance systems is more protective of onsite surface and ground water resources than onsite treatment. The Project Sponsor will pay a user fee to the Village of Goshen consistent with the adopted Village Board resolution.
Stormwater	The Project Site consists of two watersheds. Watershed A consists of approximately	The proposed development will require 6,054,527 square feet (140 acres) of site disturbance, of which	The SWPPP prepared for the proposed project contains a full erosion and sedimentation control

	1,216.22 acres of land encompassing the watershed of the Otter Kill to the south of NYS Route 17. Watershed B consists of approximately 164.86 acres of land encompassing the watershed to the on-site pond adjacent to Harriman Drive and outlet culvert beneath NYS Route 17.	3,610,448 sq ft will be made impervious. The site has been designed to limit post-development flow rates to less than or equal to pre-development flow rates at the study points. Twenty three stormwater areas are proposed for water quality treatment and stormwater quantity control. The study points utilized for the pre-development conditions were maintained and evaluated for post-development conditions.	plan as required. Several green infrastructure and runoff reduction measures would be implemented throughout the Project Site to control any water quality and quantity effects of post-construction increases in stormwater runoff volume. The implementation of this SWPPP will provide water quality treatment, control stormwater flows and reduce or minimize impacts related to stormwater to the greatest extent practical.
Traffic	The following intersections constitute the study area for the Traffic Impact Study: NYS Route 17A, NYS Route 207 and Matthews St/N. Connector Rd NYS Rt 17M (N. Connector Road) and Exit 124 On/Off Ramps NYS Rt 17M/N. Connector Rd and South St NYS Rt 17M and Route 17 Exit 125 WB On/Off Ramps Harriman Dr and Glen Arden Access Harriman Dr and BOCES Drive/Exit 125 EB On/Off Ramp Harriman Dr. and BOCES Access Drives South St at Harriman Dr South St and Reservoir Rd/Lower Reservoir Rd NYS Route 17A and Hatfield Ln/NYS Route 17 Exit 124 EB On/Off Ramp NYS Route 17M and Arcadia Rd NYS Route 17M and Duck Farm Rd NYS Route 17M and Old Chester Rd Orange Heritage Trail crossings at South St, Duck Farm Road/NYS Route 17M, and Old Chester Rd NYS Rt 207 and Main St/Church St NYS Rt 17M and West Avenue/Chester Shopping Center Driveway NYS Rt 17M and NYS Rt 94 NYS Rt 17M and Kings Highway (C.R. 13)/Lehigh Ave NYS Rt 17 (both eastbound and westbound) between Exits 125 and 124 (Weaving, Ramp Proper, Acceleration/Deceleration Analysis)	Based on similar-sized parks, between 1.5 and 2.5 million annual visitors are anticipated to the site. The trip generation for LEGOLAND varies depending on day of week. The peak daily traffic generation is in the order of 4,500 to 5,000 entering vehicles over the course of the day, with a peak hour generation of approximately 1,500 entering trips, based on the proposed operation.	As part of the proposed project comprehensive traffic upgrades and improvements are proposed throughout the study area including lane widening, new turning lanes, new traffic signalization, new signage, extending acceleration and deceleration lanes and ramp improvements on NYS Route 17.
Noise	Existing noise was recorded at 8 receptor locations around the	To determine potential noise which could be expected to be	The increases in noise levels at the receptors as a result of the project

	site. The receptors located closer to NYS Route 17 and NYS Route 17M corridors are influenced primarily by the existing traffic levels while other receptors are more heavily influenced by local or neighborhood noise levels. At two receptors background levels from the operations at the Tilcon Quarry were also noticeable at various times during measurements.	generated by the proposed park, a noise consultant was retained to measure noise levels around the existing LEGOLAND Resort in Carlsbad, California. Noise levels around that park ranged from 46-63.7 dBA. Fireworks could be used on the site on special occasions. Noise levels from fireworks are anticipated to range from 100 to 106 dBA at nearest property lines.	traffic are expected to be 3dBA or less at the majority of receptors. All rooftop HVAC equipment will be positioned away from adjacent receptors and as necessary The construction equipment used on-site will be inspected periodically to ensure that properly functioning muffler systems are used on all equipment. No equipment will idle unnecessarily.
Utilities and Solid Waste Disposal	The only current use of electricity and gas on the Project Site results from the existing residences on Lot 11-1-47. Orange and Rockland Utilities currently holds easements on the property associated with the second phase of Arcadia Hills which was never constructed. Both electric and gas lines exist along Harriman Drive. Orange and Rockland Utilities also maintains high tension wires which run across the full length of the Project Site. The only solid waste generation is also from the existing residences on Lot 11-1-47.	Orange and Rockland Utilities will provide electric and gas services to the Proposed Project. The LEGOLAND Florida Resort consumes approximately 1,092,809 kWh per month while the (seasonal) park in Windsor consumes an average of 724,624 kWh per month. No off-site improvements will be required to make utility connections. LEGOLAND New York will contract with a private hauler to transport solid waste to the Orange County Transfer Station in Goshen.	As both utility and solid waste services will be privately contracted and user-fee supported no mitigations are required.
Land Use and Zoning	The Project Site is currently located in the Town's rural (RU) and Hamlet Residential (HR) Zoning Districts in the AQ-3 overlay district. The Project Site also has portions within the Stream Corridor and Reservoir Watershed Overlay District and the Scenic Road Corridor Overlay. Surrounding land uses include residential, agricultural and commercial.	As part of the Proposed Action the 15 parcels which make up the current Project Site will be merged into a single lot under common ownership. The proposed theme park use is not permitted in its respective zoning districts. An amendment to the Town Zoning Law to create a Commercial Recreation Zoning Overlay District has been prepared to permit various recreational uses and accessory uses thereto. Such development shall require the issuance of a special permit and site plan approval by the Planning Board. The Town Board is also considering a modification to the Town Comprehensive Plan. The project is consistent with all relevant town and county plans.	Lighting levels after park operations close will be reduced to minimum security levels. The park closes at 8PM in the peak summer season. Lighting levels at property boundaries, with the exception of the access road, will be zero. Existing mature trees and shrubs are preserved around the periphery of the site to buffer the development from surrounding properties. The sites natural variations in topography will also work to visually buffer the site.
Community Services	The Town of Goshen Police Department serves the Town-Outside-Village (TOV) area, the Goshen Fire Department which includes three separate companies within the Town and Village of Goshen and GOVAC. The site is located within the	Based on reports from the LEGOLAND Resort in Winter Haven, the park is anticipated to generate 27 calls for police services, 7 calls to the local fire department, and 5 calls for	All structures on the site will be constructed consistent with NYS Building and Fire Codes. Fire alarms, suppression systems, and sprinklers would be provided as required.

	Goshen Central School District. The Town Hall of the Town of Goshen is located at 41 Webster Avenue within the Village of Goshen. Operations of the Building Department, Town Court, Tax Assessor and a number of other administrative offices are contained within this building.	ambulance services on a monthly basis. Water storage will be provided with a 522,000 gallon, glass-fused-to-steel potable water storage tank. Fire hydrants will be installed at all water main high points and at a maximum spacing of 400'. A 25-foot wide emergency access to the site will be provided via Arcadia Road.	LEGOLAND New York would have 24-hour security personnel on site as well as EMT staff and first aid building onsite to serve as first responders in the event of an emergency which would cut down on the need for calls to local service providers.
Fiscal	The Project Site is made up of 15 total tax parcels. In 2016, the total assessed value for the Project Site was $1,590,200. Total taxes for 2016 on the full site is $91,185.05.	The Project Site is expected to generate 500 Full-Time Employees which include all positions from executive and senior management, shift supervisors, technicians, administrative personnel and training staff. The applicant is seeking a thirty year Payment in Lieu of Taxes (PILOT) agreement from the Orange County Industrial Development Agency. This incentive program would provide an initial payment in year 1 of operation of $1,022,000 to the Goshen Central School District, $210,000.00 to the Town of Goshen, and $168,000.00 to the County of Orange. These payments will increase annually for the remainder of the thirty year period. The PILOT will guarantee payments of at least $52.6 million over 30 years. In addition to the PILOT, the applicant has agreed to pay $0.65 for each ticket sold, each year up to 2,000,000 visits and $0.20 for each ticket sold thereafter directly to the Town of Goshen. Based on the projected number of annual tickets sold at the Project Site, this would equate to an additional $1,300,000 annually to the Town of Goshen. The project would also pay County hotel tax, sales tax and would be expected to provide additional indirect and induced economic benefit to the entire region.	Revenue generated from the project outweighs costs to the project's various taxing jurisdictions. No mitigation is proposed.
Visual	The Project Site is mostly wooded around its periphery. As per the approved scoping document, images documenting existing views of the Project Site were taken from several different locations.	The nearest structure to the adjacent neighborhood is the ring road around guest parking lot which is approximately 1000 feet from the nearest residence. The closest building is in the back-of-house area which is approximately	Existing mature trees and shrubs are preserved around the periphery of the site to buffer the development from surrounding properties. The sites natural variations in topography will also work to visually buffer the site as

		1200 feet from the closest residences. Based on the analysis, the project is likely to be minimally visible from surrounding receptor locations. High points of the site such as the parking lot and hotel will be visible from Arcadia Road in multiple locations. No large signage will be placed along Harriman Drive. No disturbance or modifications of any kind will occur along Conklingtown Road. Site lighting for entrance roads and parking lots will consist of flat-lens, dark-sky friendly LED fixtures and have full cutoff shields to limit lateral spread of light. Lighting levels after park operations close at 8PM during peak season, will be reduced to minimum security levels.	the development will sit lower than surrounding land. To supplement natural vegetation and to soften the appearance of parking areas and proposed structures, a full landscaping plan has been prepared for the project.
Environmental Contamination	Majority of the subject property is vacant/wooded land but also supports dilapidated building foundations, a pond, utility easement, a residential dwelling, and a communications tower with evidence of farming activities. A Phase 1 Environmental Site Assessment was completed for the property. Two spill sites were identified in the NYSDEC Environmental Remediation Database search which were adjacent or in the immediate vicinity of the Project Site.	Based on distance and intervening roads and topography, none of the NYSDEC recorded contamination spills near the Project Site are anticipated to impact the Project Site. Common to agricultural properties, there is potential for the presence of pesticide residuals in the soils above regulated concentrations. A limited Phase 2 Environmental Assessment was completed for areas of the site which had a potential for ground contamination which concluded that concentrations of arsenic and lead in the shallow surface soils are believed to be naturally occurring and related to normal background concentrations in this local environment. No further testing or investigation was recommended.	Given that soils samples collected were found to be below all NYSDEC Soil Clean-up standards in the Phase II investigation and the majority of the areas which had the potential for contamination are to be removed from the site during construction, no additional mitigation measures are required.
Cultural Resources	Phase I and Phase II archeological investigations were prepared for the Project Site. NYSOPRHP records show that three previously recorded archaeological sites are within or adjacent to the site. Based on the reported prehistoric archeological sites a Phase IB was recommended for the areas which were believed to possibly	Two of the sites within the area to be disturbed are eligible for listing on the national register. One other site which was deemed eligible for listing will not be disturbed as part of the project development.	Prior to the start of construction, the project archeologist will develop a Phase III testing and recovery program for sites which are eligible for National Historic Register listing. The plan will be submitted to SHPO for review and concurrence. As a result of the implementation of the Phase III work, no significant adverse

	contain artifacts associated with those sites. Phase IB fieldwork included the excavation of 581 shovel tests across the LEGOLAND site. The study also identified two new archaeological sites. Subsequently, Phase II investigations were designed to gather data used to evaluate the NRHP eligibility status of the sites.		impacts to archeological resources will result from the project.
Agricultural	The Project Site is located within Orange County Agricultural District #2. Two of the parcels were previously used for farming. No farming activities currently take place on the site.	The location of the Project Site in an agricultural district does not preclude or otherwise restrict its development as proposed. Given that no farming currently takes place on the site and has not occurred in many decades, no adverse impacts to agricultural resources are anticipated.	No mitigation measures are required.
Air Quality	No air pollutants currently emanate from the existing site. The area of the Proposed Project is generally rural and does not have many large sources of pollution. Pollutant concentrations in the Town of Goshen meet established National standards.	During construction air quality could be temporarily affected by dust from disturbed areas during dry periods and emissions from construction vehicles and other machinery. Air Quality impacts for LEGOLAND New York would be limited to stationary emissions from HVAC units as well as mobile emissions from guest and employee vehicles, engine-powered rides, or maintenance machinery. Emissions of CO, NOx, VOC and Pb are associated with mobile emission sources; whereas emissions of SO2 are associated primarily with stationary sources. There will be no stationary sources emitting quantities of pollutants above EPA or NYSDEC permitting thresholds for this project.	New York State Environmental Conservation Law (ECL) prohibits heavy duty vehicles from idling for more than five minutes at a time which will reduce fuel usage and vehicle emissions at the site. Best Management Practices will be employed during construction activities in order to reduce the potential for fugitive dust generation at the site.
Construction	Phase 1 of the full build out of the site is anticipated to commence upon approval and take approximately 24 months. Approximately 800 construction jobs are anticipated to be generated over the entire course of construction of the project. Consistent with Town of Goshen construction noise regulations (Town Code Chapter 70), construction activities will take place Monday through Friday from 8:00AM to 8:00PM and Saturdays from 9:00AM to 8:00PM. Phase 1 construction on the site will begin in the north east corner/ back-of-house area of the site. This area will be established as the staging area and parking area for workers. Subsequent phases of construction will include the main park access drive and utility installation, followed by the main park area and finally, the main guest parking lot. Phase 2 of the full build out will be construction of the SeaLife Aquarium. This phase includes one 20,000 square foot building. Phase 2 is expected to begin approximately two to five years after the park initially opens and is estimated to take approximately 11 months from initial disturbance to the completion of construction.		

	Construction would follow all applicable federal, state, and local laws for building and safety. During construction wetlands will be protected with silt fencing and all erosion and sedimentation measures as described in the stormwater management plan (See Section III-G herein). Construction waste will be brought to a facility where all materials are separated and materials such as concrete and metal will be recycled.

G. Unavoidable Adverse Environmental Impacts

As part of the Proposed Development certain impacts, while mitigated to the greatest extent practicable, cannot be avoided. These impacts include soil disturbance, changes to topography, removal of existing mature vegetation, use of ground water, generation of sewage effluent, conversion of existing land use from vacant to commercial, generation of traffic.

H. Summary of Alternatives to the Proposed Action

1. No Action Alternative

This alternative analyzes the impacts associated with a scenario where no construction occurs on the Project Site. None of the impacts from the Proposed Action would occur and none of the benefits would be realized. Future development potential would remain the same.

2. Residential Build Out of Project

This alternative analyzes the impacts from a residential build out of the Project Site based on the Lone Oak residential subdivision which was approved on two of the parcels within the Project Site and a build out under current zoning for the remainder of the Project Site.

Based on the Town Zoning Code and the regulations of the current zoning designation of the Project Site and the restrictions of the AQ-3 overlay district, the number of permitted residential units would be the lesser number derived from either (1) 50% of the total amount of unconstrained land[1] or (2) dividing the total site acreage by three. This equates to approximately 101 residential lots, for a total build out of the Project Site of 233 new dwellings when adding the previously proposed dwellings from the Lone Oak Subdivision. When adding in the anticipated population[2] from the additional 101 units (329) plus the anticipated population from the approved Lone Oak subdivision this equates to a possible population generation resulting from residential building out of the Project Site of 760 additional residents who would reside in the Town of Goshen. Approximately 202 children would be expected to attend Goshen Central School District schools.

In terms of impacts, a single family residential subdivision would disturb more of the Project Site. Therefore impacts to soils, topography and onsite vegetation would be larger, but it would likely result in less overall impervious surfaces which would require less stormwater management. Impacts to wetlands and other surface water features would be similar to the Proposed Action. There would be no need for modifications to the zoning code or Town Comprehensive Plan and the project would be consistent with surrounding land uses. The project would still require community services including police, fire and ambulance services but would result in increased

[1] As defined by Section 97-84 of the Town of Goshen Zoning Code.
[2] The multiplier used is 3.26 which is the average family size in the Town of Goshen as provided by the 2010 US Census.

use of local parks and would generate school children and the associated costs per school child. Overall traffic generation would be less than the Proposed Action but none of the surrounding intersections improvements would be constructed. Access to the residential development would likely connect to the existing Arcadia Hills subdivision.

A residential subdivision would be expected to utilize ground water for supply to residents as was intended for the Lone Oak Subdivision. Based on 233, four-bedroom dwellings water usage would be anticipated to be approximately 102,520 gallons per day (GDP) which would be supplied by the onsite wells. While the total water usage is less than the proposed project (compared to a proposed average of 176,437 GPD), this would increase impacts to ground water in the vicinity and particularly could cause drawn down within the ground water wells for the Arcadia Hills residential subdivision which is known to have historic water shortages.

Because residential development generally consumes more municipal services than it generates tax revenue, residential development could result in a net negative fiscal cost of $683,994.99 to the site's various taxing jurisdictions. See fiscal analysis in Section III-M for a full analysis.

3. Alternate Emergency Ingress / Egress Locations

During initial planning stages of the project, Wedgewood Drive within the Arcadia Hills subdivision, was identified as a possible emergency road connection for the project. Wedgewood Drive is a dead end, gated stub road that was intended to connect to additional sections of the residential subdivision that were never constructed. The area of the road connection has already been graded and a gravel drive currently exists in this location which provides access to the Project Site to the Town of Goshen and the current property owners. Due to anticipated traffic concerns from residents of Arcadia Hills, a direct connection to Arcadia Road was determined by the Project Sponsor and representatives of the Town of Goshen to be the best option for emergency access.

4. Green / Sustainable Alternative

Under this alternative the project would incorporate additional sustainable infrastructure and design practices than are currently proposed for the project. Such practices could include solar panels or the use of wind turbines on the site to generate electricity for the project, rain barrels to collect rainwater for use in irrigation.

5. Alternate Municipal Water and Sewer Supply

The Project Sponsor proposes to seek water and sewer services from the Village of Goshen. The Village Board of Trustees has approved a resolution supporting this request subject to the completion of the SEQR process and several other factors. In the event water and sewer services are not available from the Village of Goshen, the Project Sponsor has evaluated the potential to obtain water and sewer services from the Town of Wallkill and the Village of Chester. Based on the analysis connections are feasible from an engineering perspective. However, several other factors, including permitting, infrastructure cost and obtaining rights to cross private property make these options not favorable from the Project Sponsor's perspective.

6. No Sale of Town-owned lots Alternative

Under this alternative the Proposed Project would be designed without any permanent development on the eight town-owned parcels which are part of the Project Site under the proposed plan (11-1-60, 11-1-62, 11-1-63, 11-1-64, 11-1-65, 11-1-66, 11-1-67, 11-1-68 and 11-1-69). As currently configured, most town-owned parcels run along a utility easement or are on the south side of the Arcadia Hills residential subdivision and not proposed to be developed as part of the Proposed Project. However, two of the parcels, 11-1-68 and 11-1-69 are more central within the site and, under the proposed plan, would be within areas proposed for parking. In the event the Proposed Project had to be designed to avoid these parcels, the hotel parking area would be shifted to the opposite side of the hotel, further east towards Arcadia Hills. The third day-guest parking lot from the east (right) would be reduced in size to approximately half its proposed size and the eastern most parking area would then need to be expanded further east towards Arcadia Hills to accommodate additional parking spaces.

Given the necessary grading on the site, the applicant would need to seek temporary easements from the Town to disturb and regrade the two centrally located lots but they would be seeded and would remain undeveloped.

This alternative would require a greater area of disturbance and it spreads the development further east and would require disturbance of Federal wetland area behind the hotel. A minor increase in noise impacts from parking areas being shifted closer to residences could also occur. All other impacts would be similar to those which are anticipated for the Proposed Project.

Certain town-owned lots contain wells that supply water to the Arcadia Hills Water District. However, those lots do not meet current NYSDOH wellhead protection area requirements. Under this alternative, the town-owned lots would continue to be noncompliant with NYSDOH standards. Town-owned lots would also remain property tax exempt.

I. Summary of Impacts on Energy Use and Solid Waste Management

Electricity will be the main source of energy used on the site for lighting, HVAC and ride operation. Orange and Rockland supplies the Town of Goshen with both electric and gas service. LEGOLAND Windsor, which is a seasonal park with no waterpark attractions, consumes an average of 724,624 kWh per month with a summer peak in 2015 of 1,003,755. Given the Proposed Action will also be seasonal in nature, it is anticipated electricity usage would be similar to the Windsor park with summer peaks, reduced usage in the shoulder seasons, and significantly reduced usage in winter months when outdoor operations are closed.

Other LEGOLAND parks generated approximately 79 tons of waste per month in 2015. Given the Proposed Action will be seasonal in nature, this amount reflects the peak season months and will be less in the shoulder seasons and significantly reduced in winter months when outdoor operations are closed. The Town of Goshen does not provide solid waste collection for commercial uses. Garbage and recycling removal services will be paid for by the Project Sponsor and provided by private hauler.

A park of similar size in California recycles two million pounds of material annually. Green waste is processed for use as mulch within the park.

J. Summary of Irreversible and Irretrievable Commitment of Resources

As a result of the Proposed Project, some unavoidable adverse impacts will occur in several impact areas. These would generally result from any development of the property and are proposed to be mitigated to the greatest extent practicable. These impacts include unavoidable and irretrievable disturbance of soils, changes to natural topography, removal of onsite existing mature vegetation, consumption of water and production of wastewater.

K. Summary of Growth Inducing Impacts

Growth from the construction of a LEGOLAND park can be expected to support commercial development by providing additional patrons for existing and potentially new restaurants and hotels in the Town and Village of Goshen as well as in surrounding municipalities such as the Town and Village of Chester and the City of Middletown and Town of Wallkill. Future commercial development, which is a key recommendation of the Town's 2009 Comprehensive Plan will support the tax base and provide jobs for local residents. Future commercial development lies within the discretion of the Town of Goshen and other municipalities, given their right to home rule and control over planning and development through local zoning and land use laws.

Growth from the new Crystal Run Village Well

As part of the Proposed Project and as per a preliminary agreement with the Village of Goshen to provide municipal water and sewer services to LEGOLAND New York, a new well would be developed and connected to the Village's existing public water system near the Village's existing wells off Stony Ford Road in the Town of Wallkill. Although the Village of Goshen's water supply has existing available capacity to serve the Proposed Project, the Village of Goshen seeks to augment its water supply to ensure that it has additional capacity for future needs. The Project Sponsor would compensate the Village for the development of this additional well. This well would be owned by the Village of Goshen and provide additional water to the Village's entire municipal water supply system which would expand the capacity of the Village's water supply system. The additional water supply will benefit the entire Village water district which includes all Village properties in terms of available water volume.

Increases to Village population or residential or commercial construction which could be expected to result from increased water system capacity would be minor. The Village is currently near fully developed. Patterns of development within the Village are established with mostly single family dwellings on lots ranging from 5,000 to 25,000 square feet. These smaller lots do not lend themselves to additional subdivision or redevelopment. Multi-family units are provided on second and third floors of the majority of commercial buildings in the downtown and several larger multi-family developments are spread throughout the Village. According to the 2014 American Community Survey the Village has 707 total multifamily units. Commercial zones, including a large area around Hatfield Lane zoned for industrial development currently exist. There are few large vacant sites where zoning could be changed to permit higher intensity uses based on new water capacity.

The proposed water system will include a water main from Harriman Drive onto the Project Site. This main will be owned and maintained by the Project Sponsor. It will not have the potential for others to access or tap into this water main to obtain residential water supply from the Village of

Goshen water system. Water storage will be provided with a 500,000 gallon, glass-fused-to-steel potable water storage tank to be located on the west side of the property at the high point on the site in the vicinity of the existing communications tower. This tank will be approximately 30 feet tall and 56 feet in diameter.

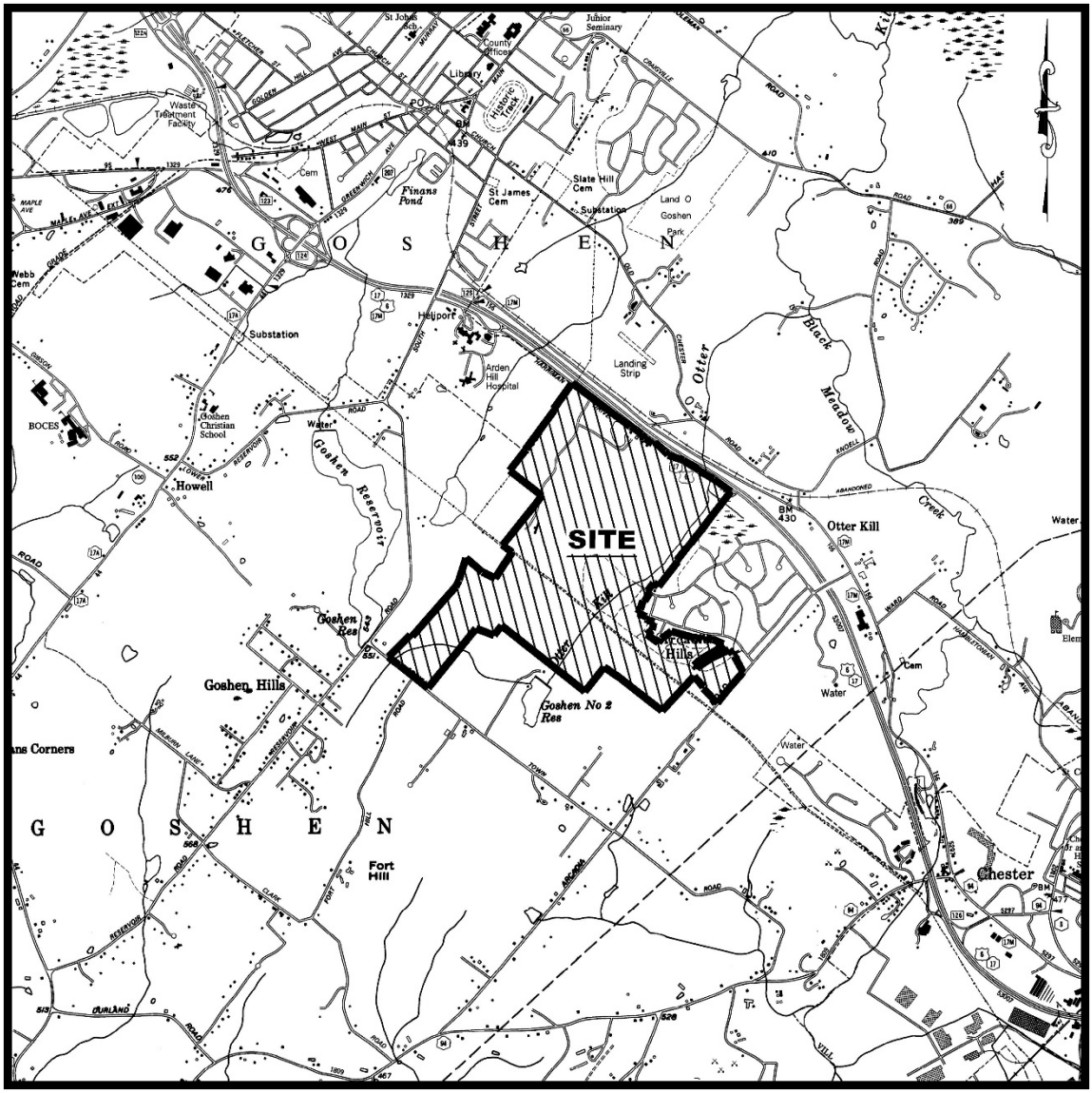
Any projects located outside of the Village of Goshen which request or propose to obtain water supply from the Village of Goshen municipal water supply system would require approval from the Village Board and would need to assess the available capacity of the water system at that time.

II. PROJECT DESCRIPTION

A. Site Location

The Project Site is generally located south of NYS Route 17, at exit 125, on the east side of the Town of Goshen. The Project Site has street frontage on Harriman Drive and extends south of Conklingtown Road and as far east as Arcadia Road. See Project Location Map, Figure II-1.

Figure II-1: Project Location



Source: NYSDOT Digital Raster Quadrangles for Goshen and Warwick and Lanc & Tully Engineering

The Project Site consists of 15 total tax parcels consisting of 521.95 total acres broken down as follows:

Table II-1: Tax Parcels by Size and Land Use

Tax Map Designation	Parcel Size	Current Land Use
11-1-45	18.243	Communications tower
11-1-46	104.88	Vacant
11-1-47	.80	Residential
11-1-58	108.74	Vacant
11-1-49.2	103.58	Vacant
15-1-59	166.72	Vacant
11-1-60*	2.68	Vacant/ Utility
11-1-62*	7.66	Vacant/ Utility
11-1-63*	.81	Vacant /Utility
11-1-64*	1.34	Vacant/ Utility
11-1-65*	0.50	Vacant/ Utility
11-1-66*	2.13	Vacant /Utility
11-1-67*	0.19	Vacant/ Utility
11-1-68*	2.09	Vacant /Utility
11-1-69*	1.57	Vacant /Utility

*Currently owned by the Town of Goshen

Merlin Entertainments is the contract vendee of all of the parcels comprising the Project Site with the exception of certain parcels identified above which were created for a planned but unbuilt phase of the Arcadia Hills subdivision. Lots 11-1-60, 11-1-62, 11-1-63, 11-1-64, 11-1-65, 11-1-66, 11-1-67, 11-1-68, and 11-1-69 were deeded to the Town of Goshen on July 25, 1984 by the County of Orange following the County's foreclosure on those lots due to nonpayment of taxes. Merlin Entertainments proposes to acquire certain of those parcels from the Town of Goshen for their fair market value.

Lots 11-1-60, 11-1-65 and 11-1-67 contain wells and associated improvements that are owned by the Town of Goshen Arcadia Hills Water District. Those lots do not meet current New York State Department of Health requirements for wellhead protection. Merlin Entertainments proposes to transfer sufficient land area from the surrounding lots to the Town of Goshen in order to provide the Town of Goshen with lots that meet current Department of Health requirements if possible, and if not possible, then to the greatest extent practicable given adjoining property constraints.

Lot 11-1-45, which is 18.243 acres in size and presently owned by PC Reservoir LLC, is improved by an existing communications tower. Lot 11-1-45 would be subdivided to create an approximately 1 acre remainder lot that would be retained by PC Reservoir LLC. Access to the remainder lot would be via easement over the property of the Project Sponsor.

Two ground water wells which were installed for the previously proposed Lone Oak residential subdivision but are not currently in use or part of the Arcadia Hills Water District are located on parcel 11-1-58. Two new lots would be created to facilitate the donation of the two Lone Oak wells to the Town of Goshen for future connection and use by the Arcadia Hills Water District.
As part of the Proposed Action the 15 parcels which make up the current Project Site will be merged into a single lot under common ownership. From this lot, a 1-acre lot will be created for the communications tower enclosure (See Figure II-2: Subdivision Plan). All existing associated communications infrastructure will remain operational on the site. A one acre lot will be subdivided from the Project Site and PC Reservoir, LLC will retain ownership of this land. The access drive and easement will reconfigured to provide access through the Project Site.

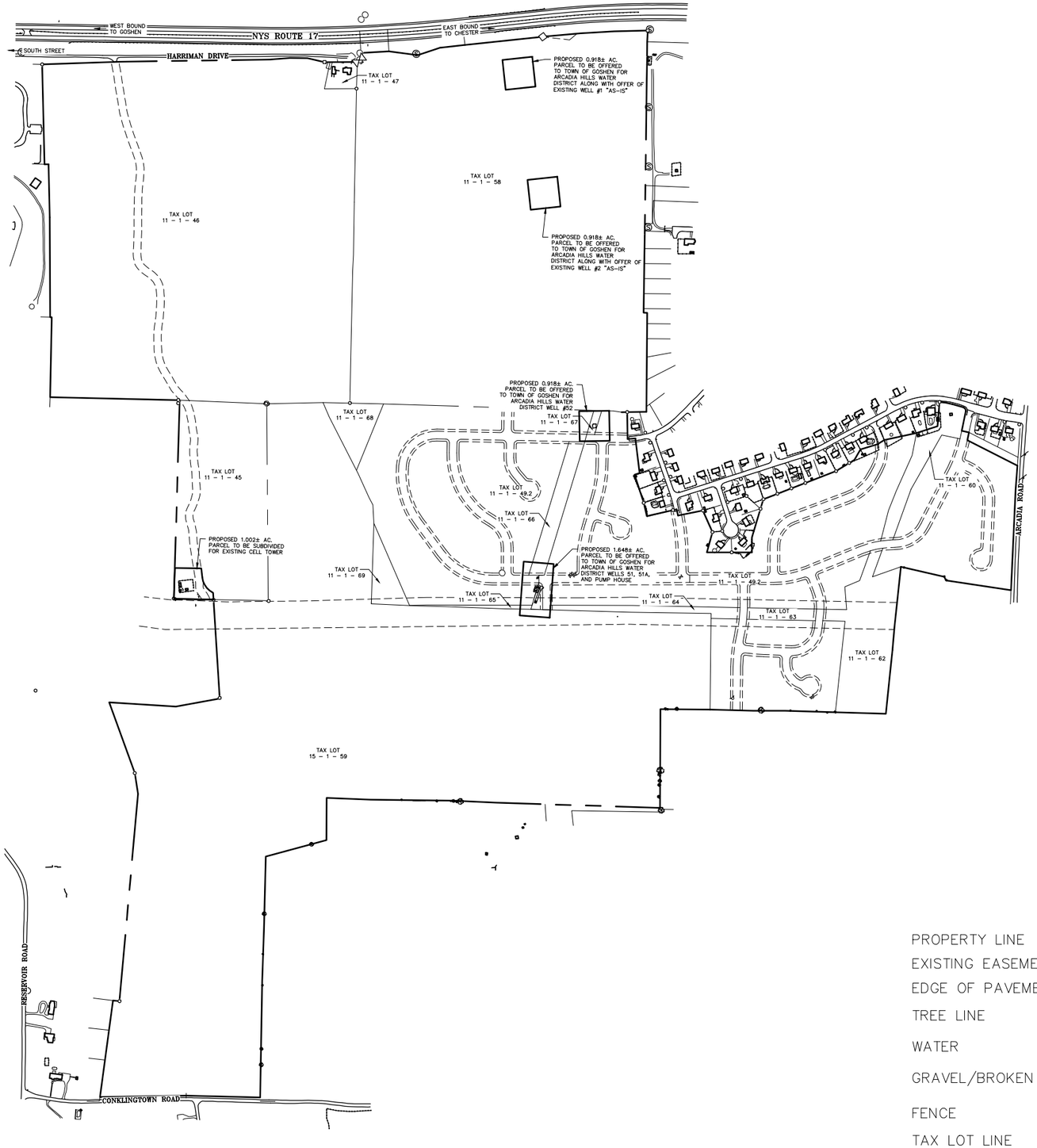
Existing zoning districts on the Project Site include Rural (RU) and Hamlet Residential (HR). Portions of the site are within the AQ-3, Scenic Road and Stream Corridor & Reservoir Overlay Districts. The majority of the Project Site is also located within Orange County Agricultural District #2.

Surrounding land uses include mainly single family residential development. Arden Hill and Elant senior housing and congregate care facility is located immediately to the west of the site in the Village of Goshen as well as Orange and Ulster County BOCES also located on Harriman Drive. See Section III –K for a map and more detailed description of surrounding land uses.

Existing utilities on the Project Site include Orange and Rockland high-tension electric transmission lines. In addition to the two ground water wells which were installed for the proposed Lone Oak residential subdivision but are not currently in use, one additional well was also drilled for the Lone Oak residential subdivision and is located on parcel 11-1-49.2; this well is proposed to be abandoned as it is located within the proposed development area. One Arcadia Hills Water District well is located on parcel 11-1-67, and Arcadia Hills Water District well and pump house are located on parcel 11-1-65 and one Arcadia Hills Water District well is located on parcel 11-1-49.2. It is noted that the Arcadia Hills well located on parcel 11-1-49.2 is not currently on land owned by the Town of Goshen and the other Arcadia Hills wells do not have adequate town-owned land around them to meet the 100 foot ownership and 200 foot control requirements of the NYS Health Department. A sewer force main is available in Harriman Drive which would need to be extended onto the site.

There are multiple existing easements on the Project Site. A 50-foot wide easement runs from Harriman Drive to existing tax lot 11-1-45 providing access via gravel drive to a fenced enclosure containing a communications tower and multiple equipment cabinets. A second easement, varying in width but generally approximately 80 feet wide, runs east-west through the entire property, approximately 3,700 feet from Harriman Drive controlled by Orange and Rockland Utilities to allow for the operation and maintenance of electrical transmission lines. Easements exist along both sides of roads which were rough graded as part of a proposed expansion of the Arcadia Hills residential development. The site is not subject to any other legal agreements.

Readily available information has been reviewed to develop a history of the previous uses of the subject property which included aerial photography, historical USGS topographic quadrangle maps, and historical Sanborn fire insurance maps. Based on these records, historic use of the



LOT CONSOLIDATION NOTE:

THE FOLLOWING EXISTING TAX PARCELS SHALL BE CONSOLIDATED AND ALL INTERNAL PARCEL LINES SHALL BE ELIMINATED:

11-1-45
11-1-46
11-1-47
11-1-49.2
11-1-58
11-1-60
11-1-62
11-1-63
11-1-64
11-1-65
11-1-66
11-1-67
11-1-68
11-1-69
15-1-59

GRID

LEGEND:

PROPERTY LINE
EXISTING EASEMENT
EDGE OF PAVEMENT
TREE LINE
WATER
GRAVEL/BROKEN PAVEMENT
FENCE
TAX LOT LINE

GRAPHIC SCALE

800 0 400 800 1600

(IN FEET)
1 inch = 800 ft.

LANC & TULLY
ENGINEERING AND SURVEYING, P.C.
P.O. Box 687, Rt. 207
Goshen, N.Y. 10924
(845) 294-3700

FIGURE II-2
SUBDIVISION AND LOT MERGER PLAN

LEGOLAND NEW YORK
TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

Date:	SEPTEMBER 28, 2016
Revisions:	NOVEMBER 3, 2016
CAD File:	160042-EIS
Layout:	II-2 LOT CONS
Sheet No.:	1 OF 1
Drawing No.:	C3D D - 16 - 0042 - 01

Drawn By:	Checked By:	Scale:	Tax Map No.:
MK		1" = 800'	SEE SITE PLANS

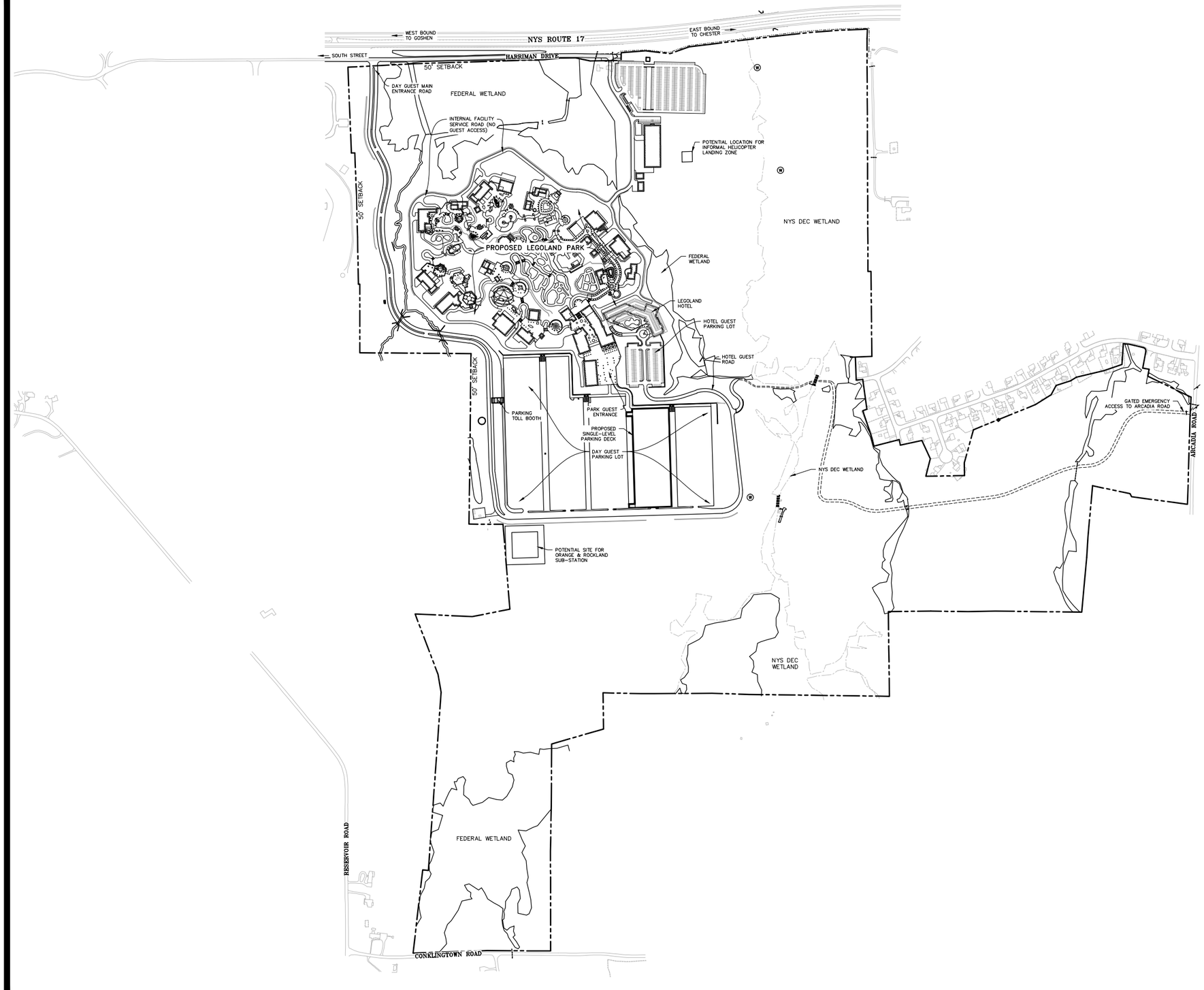
property has including a restaurant and hotel on tax parcels11-1-45 and 11-1-46, a residential use built on parcel 11-1-47 in approximately 1920 and agricultural uses on portions of parcels 11-1-58 and 11-1-49.2. A communications tower, built in 1998, currently operates on parcel 11-1-45 within a fenced enclosure. Apparently in the 1970's, construction of the eastern half of the site was initiated for an expansion of the Arcadia Hills single family residential development that was never completed. However, the gravel road system, drainage improvements, and developed wells are still evident in the field. Utility easements in favor of Orange and Rockland Utilities were also created as part of the unbuilt portions of Arcadia Hills.

B. Description of the Proposed Action

Merlin Entertainments, as Project Sponsor, proposes to construct a theme park and resort on approximately 140 acres of a 522 acre site consisting of 15 total parcels located off Harriman Drive in the Town of Goshen. The park, to be called LEOGLAND New York, will include rides and attractions, an aquarium, theaters, restaurants, a hotel and various back-of-house facilities including offices and staff areas as well as associated parking and drainage facilities. Merlin Entertainments will own and operate the site. Generally, the site is laid out with the park in the center of the site. Restaurants, shops, rides and attractions within the park are organized into eight themed areas, surrounded by a ring road. The main guest parking area is located to the south of the park, the hotel is located in the south eastern corner of the site with its own separate parking and direct park entrance. The back-of-house uses such as offices, maintenance buildings, and other staff areas are located in the northeastern corner of the site with separate access from Harriman Drive. See Figure II-3: Project Layout.

Based on similar-sized LEGOLAND parks, between 1.5 and 2.5 million annual visitors are anticipated to the site. According to the industry standard classification system, based on number of annual visitors and its family-oriented nature and the, LEGOLAND would be classified as a "family park". Commonly known theme parks such as Disney World in Orlando, Florida with typical annual attendance of 8-15 million visitors a year are classified as "Mega" parks while parks such as Six Flags Great Adventure and Hershey Park are considered "Regional" parks with an annual attendance of up to 4 million.

Architecture within the park will vary between the eight themed areas. Buildings vary in height, design, color and façade materials based on its theme within the park. Images are provided illustrating several representative buildings within the various areas including Heart Lake City (right), Miniland, Duplo Farm and Kingdoms (below) which will be featured in the proposed park.



GRAPHIC SCALE

800 0 400 800 1600

(IN FEET)

1 inch = 800 ft.

LANC & TULLY
ENGINEERING AND SURVEYING, P.C.
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FIGURE II-3
PROJECT LAYOUT

LEGOLAND NEW YORK

TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

Drawn By:	Checked By:	Scale:	Tax Map No.:
MK		1" = 800'	SEE SITE PLANS

Date: SEPTEMBER 28, 2016
Revisions: NOVEMBER 3, 2016
CAD File: 160042-EIS
Layout: II-3 PRJ LAYOUT
Sheet No.: 1 OF 1
Drawing No.: C3D
D - 16 - 0042 - 01

MINILAND

DUPLO FARM

KINGDOMS

The hotel will be built into the naturally sloping topography so that it is two stories from the front and four stories from the rear elevation. The façade will be a neutral color with multi-colored architectural details. The entrance way will feature an overhang to protect guest from bad weather and a three-story LEGO brick tower.

Main access to the park will be from Harriman Drive. Vehicles will enter at one main gate and circulate south to the main parking area. The entrance road will be designed with two lanes in each direction and a 10-foot, planted median in the center. The length of this road will allow for stacking of approximately 500 vehicles. Main entrance to the back-of-house maintenance and administration areas will be from a second entrance off Harriman Drive. Any loading or deliveries would be in the back-of-house area. Deliveries would be during normal park business hours and would be from local vendors and commercial currier service such as United Parcel Service or Federal Express. Deliveries are typically by appointment so as to stagger truck arrivals. At LEGOLAND Florida, food and beverage deliveries are scheduled between 6:00AM and noon while retail deliveries are scheduled from noon to 4:00PM. A similar system would be created for the Proposed Site. The back-of-house area has been designed to accommodate tractor trailers.

A twenty-five foot wide gravel emergency access will be provided to Arcadia Road from the site which will be gated with access via a Knox box.

A total of 5,634 total parking spaces are proposed onsite. The main guest parking lot has 4,415 total vehicle spaces which includes 3,631 standard on-grade spaces, 650 parking spaces on a parking deck, 71 spaces for busses and 63 handicapped accessible spaces, the hotel parking lot provides 252 at-grade parking spaces and 205 in a below-grade parking garage below the hotel. The staff parking lot in the back-of-house area contains 762 parking spaces. Parking attendants will direct vehicles within the day-guest parking lot to ensure efficient and expedited parking of guest vehicles. Each of the lots will have the required number of ADA accessible spaces as required by law. All loading and deliveries will be in the back-of-house area.

Hours of Operation of the park in summer months will be from 10:00AM to 8:00PM, seven days a week. During non-peak season the park will be open from 10:00AM to 6:00PM on weekdays and 10:00AM to 8:00PM on weekends. Food service would not be open outside of park hours. Employees would be expected to be onsite approximately 2 hours prior to park opening and maintenance and cleaning staff would be expected on remain on site approximately 1.5 to 2 hours after park closing. The park will be closed from November through March. The hotel, offices and aquarium will be opened year round but with reduced staff and significantly reduced numbers of visitors.

Operations at the park will include a 250-room hotel, 20,000 square foot aquarium, 81,000 square feet among five buildings in the back-of-house area (including administration offices, maintenance warehouse, landscaping building and trash collection) and a theme park consisting of 26 rides and attractions, 2 theaters, 10 retail areas, and approximately 15 restaurants (including both dine-in, counter service and food kiosks) in eight themed areas. All operations at the park are designed and intended for children ages 2 to 12. No alcoholic beverages will be served inside the park including all of the internal restaurants. Alcohol will be offered in the hotel with hours and regulations consistent with any applicable NYS laws and regulations.

The entire proposed commercial recreation facility, including all structures, venues, shops, restaurants and outdoor park areas will be consistent with the American with Disabilities Act and NYS Building Codes. LEGOLAND New York will employ a concierge tasked with attending to any guest with special needs including park or ride access. LEGOLAND staff would be available to assist with access to special ride areas, they are not permitted to lift guests into or out of a ride vehicle. Therefore, park guests must be able to transfer to ride vehicles with assistance from a member of their party. Any guest has the ability to contact the park in advance of their visit to speak directly with staff to discuss personal needs and a publication titled, "Guide for Guests with Disabilities" is available on the company website.

Public Improvements
The following public roadway improvements are proposed as part of the Project Sponsor's traffic mitigation plan. Many of these improvements are subject to approval by the NYSDOT or other agencies. See Section III-H below for a discussion of traffic and Appendix G for the full Traffic Impact Analysis.

- Widen the NYS Route 17-Exit 124 ramp to provide an additional lane on the off ramp and develop a channelized continuous right turn lane exiting the ramp and dual left turn lanes both entering and exiting the ramp;

- Widen the intersection of South Street and NYS Route 17M to provide separate left turn lanes on all approaches and separate channelized separate right turn lanes on the eastbound approach. Reconstruct the sidewalks at this intersection;

- Upgrade shoulders to full depth pavement on South Street between NYS Route 17M and Harriman Drive to provide a three to four lane roadway cross section;

- Widen the southbound approach to the South Street Bridge to allow for the added lane from the channelized right turn;

- Modify the South Street Bridge structure to accommodate an additional lane by widening and reconstructing the sidewalk on one side of the bridge only;

- Restripe the South Street Bridge approach to provide a left and left/through lane at the Harriman Drive intersection;

- Widen Harriman Drive to provide a two lane receiver for left turns from South Street;

- Widen the Harriman Drive westbound approach to South Street to provide a separate right and a separate left turn lane;

- Install adaptive traffic signal with full actuation at the intersection of South Street and Harriman Drive;

- Upgrade/replace the existing traffic signals at the NYS Route 17 Exit 124 westbound ramp/ Connector, and at the South Street and NYS Route 17M intersections;

- Install an actuated traffic signal at the Exit 125 westbound off ramp subject to NYSDOT approval;

- Interconnect traffic signals and install adaptive signal technology including video detection, software and hardware in accordance with NYSDOT requirements, as specified in their June 28, 2016 letter to the Town of Goshen, at the following intersections:

  - NYS Route 17M/South Street
  - NYS Route 17M/Exit 124 Westbound Off Ramp
  - South Street and Harriman Drive
  - NYS Route 17M/Exit 125 Westbound Off Ramp

- Modify the eastbound Exit 125 interchange to include additional stacking for its off ramp as well as construction of additional geometric improvements including possibly a roundabout or loop ramp consistent with preliminary NYSDOT plans for the potential interchange modification;

- Signalize the intersection of Harriman Drive and the Glen Arden access drive;

- Widen the Harriman Drive eastbound approach to provide a separate right turn lane for traffic entering the Glen Arden access;

- Reconstruct the existing vertical curve on Harriman Drive east of Glen Arden to improve sight distances consistent with the roadway design speed;

- Implement other various signing and striping improvements as shown on Figure III-12.

- Implement signal timing improvements at various area intersections;

- The Heritage Trail has three crossings in the area for which data was collected and analyzed. These include the crossing at Old Chester Road, at Duck Farm Road and at South Street.

  a) The Duck Farm Road crossing has very low traffic volumes, however, the close proximity to Route 17 was also considered. Based upon the existing conditions, recommendations for improvements include replacing signing with updated signage in conformance with the MUTCD and restriping the crossing with thermoplastic or epoxy striping to increase visibility. Also, clearing of vegetation on either side of the rail trail in the vicinity of the intersection to improve visibility for both motor vehicles and bicyclists/pedestrians.

  b) At the South Street Heritage Trail crossing, the traffic volumes are already significant and will increase with the local LEGOLAND traffic. This crossing should be considered for signal control. The signal control could be a “Rapidly Flashing Beacon” (RFB) in advance of the crossing to advise motorists of the crossing location and/or a fully signalized crossing, which would be actuated by pedestrians and would stop vehicles on South Street. Other vegetative pruning/clearing and signing updates are also recommended at this location.

c) At the intersection of the Heritage Trail crossing and Old Chester Road, the crossing is more visible than the other two crossings. However, new signing should be installed on both of the Old Chester Road approaches as well as the rail trail approaches and the striping of the crossing should be done with either an epoxy or thermoplastic striping for better visibility. Some minor pruning of vegetation in the northwest and northeast quadrant of the crossing would also improve visibility for motorists and trail users. At each of the crossings, in addition to the "Stop" signs on the rail crossing approaches, advanced "Stop Sign Ahead" intersection signing should also be installed.

- The existing deceleration lanes and acceleration lanes on NYS Route 17 at the Exits 124 and 125 ramps will be extended to improve the ability for vehicle movements to exit and enter onto the highway system;

- At the BOCES eastern driveway, in addition to the provision of a separate left turn lane, potential traffic signalization of the driveway has also been considered. If signal warrants are satisfied, a traffic signal would be installed to control exiting movements at this location.

All public road improvements would be owned and maintained by the respective agency which currently has jurisdiction over the road.

As part of the proposed project the Project Sponsor will replace the sewer force main in Harriman Drive from the site to an existing man hole approximately 800 feet east of South Street replacing an existing, aging pipe in this location currently serving the Arcadia Hills subdivision.

New Village Well

A new well is to be constructed on the existing Village well parcel located off Stony Ford Road in the Town of Wallkill. Currently there are two wells and a monitoring well on this property in a fenced enclosure on this site. A 12-inch watermain connects these wells to the Village of Goshen public water supply system. The Village has hired an independent hydrogeologist and engineer to drill one or more additional wells on this site to supplement the Village's public water supply. New wells are to be located approximately 200 feet west of the Village's two existing wells. Testing of potential wells is currently ongoing. The new well and all associated infrastructure will be owned and maintained by the Village of Goshen. The Project Sponsor will bear all costs related to the study, drilling and development of this well.

Areas to Remain Undeveloped

The majority of the Project Site, or 444.54 acres will remain undeveloped open space and, or manicured lawn. This area will include the majority of wetland areas and a large forested area on the south side of the utility easement extending to Conklingtown Road. Approximately 1,000 feet of undeveloped land will remain between the visitor parking area and the neighboring Arcadia Hills residential development. Approximately 1,200 feet of undeveloped land will remain between the back-of-house area and the nearest residence. The land will not be subject to any deed restriction or conservation easement as no such restrictions are required. Any additional development on the site will require compliance with SEQRA and site plan approvals from the Planning Board.

LEGOLAND New York proposes to buffer the development from surrounding properties by preserving existing mature trees and shrubs around the periphery of the site. The site's natural variations in topography will work to visually buffer the site as the development will sit lower than surrounding land. To supplement natural vegetation and to soften the appearance of parking areas and proposed structures, a full landscaping plan has been prepared for the project. Regulation of the buffers to adjoining occupied land will be provided through the use of mandatory setbacks that would prevent those areas from being utilized for park development, with the exception of utility, grading and roadway improvements. These setbacks would be incorporated into the proposed Commercial Recreation overlay district and would be enforceable by the Town of Goshen.

No disturbance within the Town's Scenic Road Overlay District (which runs along Conklingtown Road) will occur. It is approximately 3,300 feet from Conklingtown Road to the transmission lines that mark the nearest point of development.

Drainage and Utilities

The Project Sponsor proposes to seek public water and sewer services from the Village of Goshen. Sewer and water mains are accessible in Harriman Drive. Orange and Rockland will provide electric and gas service to the Project Site. The project will be an out-of-district user of Village utilities. All terminal manholes which may connect the subject property with Arcadia Hills will be disconnected and sealed to eliminate any existing infiltration and inflow from the existing sanitary sewer system. No additional utility districts are proposed to be formed. Electric and gas service are accessible via existing lines on Harriman Drive. A Stormwater Pollution Prevention Plan (SWPPP) has been prepared for the site to mitigate stormwater drainage impacts. The site has been designed to limit post-development flow rates to less than or equal to pre-development flow rates at all study points. Twenty three stormwater areas are proposed at the Project Site for water quality treatment and stormwater quantity control. Stormwater water quality treatment will be provided through a filtration using seven underground stormwater sand filters, fourteen bio-retention areas, and one dry swale. The bio-retention areas and dry swale also provide runoff reduction volume credit (RRV). A stormwater pond will provide quantity control for the project. In order to minimize site disturbance and mimic existing drainage patterns, existing topography was held to the greatest extent possible when determining the proposed site grading. The study points utilized for the pre-development conditions were maintained and evaluated for post-development conditions. A full discussion of stormwater management is provided in Section III-G of this document. The property owner will be responsible for ownership and maintenance of all stormwater and utility infrastructure within the properties boundaries (excluding any wells and related infrastructure which may be dedicated to the Town of Goshen).

Two wells which currently exist on parcel 11-1-58 are proposed to be offered for dedication to the Town of Goshen for the benefit of the Arcadia Hills Water District along with a 100' radius lot surrounding each well. These wells were drilled in 1996 and previously tested in 1999 as part of the investigation for a previously proposed residential subdivision on the Project Site. Wells were preliminarily tested at 15-25 and 50-65 gallons per minute respectively. Access easements would be provided to the Town of Goshen for future maintenance. No access road or physical disturbance would occur at the wells sites as this area is within the NYSDEC wetland area and any disturbance would require a permit. There would be no use of these wells by LEGOLAND New York.

Construction Phasing

Full build out of the site will occur in two construction phases. Phase 1 will include construction of the park and hotel with all associated roads, parking, infrastructure and landscaping. Construction of Phase 1 is expected to take approximately 24 months. Construction of Phase 1 will also be staged. Construction will begin with clearing in the north east corner/ back-of-house area. A staging area will be created in this area and parking area for workers. Subsequent stages of construction will include the main park access drive and utility installation, followed by the main park area and finally, the main guest parking lot. The area on the site plan designated for the SeaLife Aquarium will be graded and seeded but will remain as grass until construction of Phase 2 commences.

Phase 2 will include 20,000 square foot SeaLife Aquarium. Phase 2 is expected to begin approximately two to five years after the park initially opens and is estimated to take approximately 11 months for from initial disturbance to the completion of construction. There are no areas on the site, outside of the initial area of disturbance, designated for future growth. New rides and attractions would only be constructed within areas on the site plan which are identified as part of the theme park on the approved site plans. One example is the area in the northern area of the site between the ring road and Heart Lake City area of the park.

Relationship to Town and County Comprehensive Plans

While the project is consistent with the 2009 Town of Goshen Comprehensive Plan goal #4 to develop a strong and balanced economic base and to attract tax positive commercial developments to offset existing tax exempt lands and to pay for services required by the growing population the plan is currently proposed to be amended (see Town of Goshen Introductory Local Law #5 of 2016 in Appendix B) to amend Sections 3.3 and 3.5 of the Comprehensive Plan of the Town of Goshen to specifically encourage additional commercial uses in the Town along State Route 17 to increase tax and other revenues to offset the costs of providing residential services to Town residents.

The Orange County Comprehensive Plan, last updated in 2010, sets Priority Growth Areas in its Land Use Plan in and around Villages and along transportation corridors. The Project Site lies within the Plan's delineated Priority Growth Area which extends, along Route 17M from the Village of Goshen into the City of Middletown. The Plan recommends development within these areas to expand job growth and expand the tax base.

The project also directly supports the Orange County Economic Development Strategy (2015) and the Mid-Hudson Regional Economic Development Strategy updated annually by New York State and the Mid-Hudson Regional Economic Development Council. The Orange County Economic Development Strategy targets tourism as one of the main industries essential to economic development in Orange County. This plan recommends expanding tourism by both overnight accommodations to provide revenue to the County through the hotel occupancy tax and developments which emphasizes Orange County as a 'destination' within the Northeast. LEGOLAND New York accomplishes both of these goals.

Proposed Zoning

The Project Site is located in the HR and RU zoning districts. The proposed commercial recreation use is not permitted under Town zoning. As part of the Proposed Action, the Town Board is considering the creation of a zoning overlay district to allow a Commercial Recreation District on the 15 parcels which make up the Project Site (Introductory Local Law #4 of 2016). A copy of the introductory local law is attached in Appendix B of this document. This overlay district would establish a process of approval of the district, specifies which uses will be permitted and states the Overlay District shall terminate and cease to exist without further action by the Town Board if the Town Planning Board does not approve a special permit and site plan for a Commercial Recreation Facility within six (6) months of the effective date of this local law or, if so approved, the Commercial Recreation Facility is thereafter not built or otherwise abandoned. No variances or waivers are anticipated to be required for the project.

Town-owned Land

Within the Project Site, Lots 11-1-60, 11-1-62, 11-1-63, 11-1-64, 11-1-65, 11-1-66, 11-1-67, 11-1-68, and 11-1-69 were deeded to the Town of Goshen on July 25, 1984 by the County of Orange following the County's foreclosure on those lots due to nonpayment of taxes. Merlin Entertainments proposes to acquire those parcels, or portions thereof, from the Town of Goshen for their fair market value.

Lots 11-1-60, 11-1-65 and 11-1-67 contain wells and associated improvements that are owned by the Town of Goshen Arcadia Hills Water District. Those lots do not meet current New York State Department of Health requirements for wellhead protection. Merlin Entertainments proposes to transfer sufficient land area from the surrounding lots to the Town of Goshen in order to provide the Town of Goshen with lots that meet current Department of Health requirements.

The Town Board has the ability to sell town-owned land. Following the completion of the SEQRA review for the Project, the Town Board may determine to sell all or a portion of the town-owned lots to the Project Sponsor. Fair market value would be established by one or more appraisals, and determined by the Town Board. Fair market value of the town-owned lots should also consider the benefit to the Town in connection with the reconfiguration of the lots with town-owned wells that would be enlarged to meet current NYSDOH wellhead protection area standards.

If the Town Board declines to sell all or a portion of the town-owned lots to the Project Sponsor, the Proposed Action would proceed with the alternative design that does not include the town-owned lots as part of the Proposed Project.

C. Project Public Need and Benefit

The objective of the Project Sponsor is to construct a LEGOLAND New York themed commercial recreation facility to serve the Hudson Valley and Tri-State Area market. In terms of scale, LEGOLAND New York is intended as a 'Family-park'. Based on the industry standard rating system 'family parks' typically have an annual attendance of 1.5 to 2.5 million annual visitors, while 'Mega-parks' are defined as having a typical annual attendance of 8-15 million visitors.

Parks such as Six Flags Great Adventure and Hershey Park are considered 'Regional' parks with an annual attendance of up to 4 million.

LEGOLAND New York will be a great benefit to the Town of Goshen and its surrounding areas The project will employ 500 full-time employees, 300 part-time employees and 500 seasonal employees. The project will generate 800 construction jobs. Merlin Entertainments agrees with Orange County Industrial Development Agency's local labor policy and has agreed to enter a local labor agreement guaranteeing at least 85% of the construction jobs will come from Orange County or surrounding Counties. The project will employ 800 full-time employees, 500 part-time employees and 500 seasonal employees in addition to 800 construction jobs for which Merlin Entertainments has entered into a local labor agreement guaranteeing a preference for the use of local labor. In addition to onsite jobs, the site will use local vendors for a range of services such as pest control, laundry services, food suppliers, etc. Local restaurants and hotel accommodations will benefit from additional tourists in the area.

PILOT, Fees and Taxes

The applicant is seeking a 30 year Payment in Lieu of Taxes (PILOT) from the Orange County Industrial Development Agency. This incentive program would provide an initial payment in year 1 of operation of $1,022,000 to the Goshen Central School District, $210,000.00 to the Town of Goshen, and $168,000.00 to the County of Orange. These payments will increase at a compounded rate of 1.5% annually until year 5 when the Project Sponsor's investment in the site is expected to reach $500,000,000 as a result of the opening of the SeaLife Aquarium at which point the payment will increase to $1,500,000. This is anticipated to occur between years 2 to 5. The payment will then continue increasing annually at a compounding rate of 1.5% annually for the remainder of the thirty year period. The PILOT will guarantee payments of at least $52.6 million over 30 years.

Merlin Entertainments has also offered to pay a host community fee to the Town of Goshen. The Town of Goshen's share of real property tax revenue is 15% of real property tax receipts, while the Goshen Central School District receives 73% and the County of Orange receives the balance of 12%. To ensure that the Town of Goshen receives a significant share of the financial benefits from the Project, Merlin Entertainments would pay a host community fee for every visitor to the Town of Goshen. For each visitor up to 2,000,000 visits, Merlin Entertainments would pay the Town of Goshen 65¢, and 20¢ for each ticket thereafter – with no cap on payments. This would provide the Town of Goshen with at least $1,300,000 annually, based on 2,000,000 visitors, and substantially more depending on the success of the Project. This host community fee is in addition to the PILOT payment that the Town of Goshen would receive. The host community fee would be paid throughout the term of the 30 year PILOT. Consistent with the PILOT payment, the host community fee would increase by 1.5% per year. There would be a minimum payment based on 800,000 visitors, or $520,000, regardless of attendance.

In addition to the PILOT, the tax revenue from the project site will increase because nine town owned parcels which are currently tax exempt will no longer be exempt and the two parcels currently subject to agricultural exemptions will no longer qualify for such exemption.

The Orange County Hotel Occupancy Tax of 5% will be assessed to each hotel stay of the proposed 250 room hotel. Based on approximately 50,000 hotel room stays per year this is anticipated to be approximately $850,000 for Orange County. Over 30 years, LEGOLAND New York would generate approximately $30,000,000 in Hotel Occupancy Tax revenue for Orange County.

Sales tax receipts at LEGOLAND New York would generate approximately an additional $300,000,000 over 30 years. Orange County's sales tax revenue share would be $138,000,000.

Every year LEGOLAND New York will host a Community Day, as they have in its other locations, by donating all of the tickets to community organizations in Orange County who can then sell the tickets for profit creating a unique and unparalleled opportunity for fundraising by those organizations. Since LEGOLAND California opened in 1999, Community Day has provided $899,259 in cash donations to community organizations who have chosen to participate in this program.

Water Improvements
As a benefit to the Town and specifically the Arcadia Hills Water District which has had historic water shortages, the Project Sponsor will donate the two wells which exist on the Project Site. Based on previous testing done for a proposed residential subdivision on the Project Site, the wells were pumped simultaneously at 46 and 37.5 GPM, respectively, under the sustained drought condition that had been experienced from July 1998 through July 1999 for a combined rate of 83.5 GPM or a "yield" of about 120,240 GPD. The Project Sponsor will offer the wells for dedication and provide an easement across the project site for the town to access these wells for maintenance. The use of such wells can be determined at Town's discretion but they will not be used for any purpose on the Project Site.

D. Permits, Consultations, Submissions and Approvals Required

The following Involved Agencies have permitting authority over the Proposed Action:

- NYS Department of Environmental Conservation – SPDES (Stormwater Discharges), Municipal Sanitary Sewer Extension, and possible wetland disturbance (Article 24 Wetlands Permit and 401 Water Quality Certification)
- NYS Department of Transportation – Highway Work Permit(s) for NYS Route 17 and NYS Route 17M and possible Utility Work Permit(s)
- Orange County Department of Health - Municipal Water Service Extension
- Orange County Industrial Development Agency
- Town of Goshen Town Board – Approval of Introductory Local Laws 5 and 6 of 2016, sale of properties to Project Sponsor, and (on behalf of water district serving Arcadia Hills) acceptance of wells from Project Sponsor
- Town of Goshen Planning Board – Site Plan, Subdivision and Special Permit Approval
- Town of Goshen Zoning Board of Appeals – Potential Area Variance(s)
- Town of Goshen Highway Department – Highway Work Permit(s) for Harriman Drive and Arcadia Road
- Town of Goshen Zoning Board of Appeals- Any variances if necessary
- Village of Goshen Board of Trustees – Sewer and Water Service Agreements
- Village of Goshen Department of Public Works – Street Opening Permit for South Street

INTERESTED AGENCIES

The following agencies have been deemed Interested Agencies for the Proposed Action:

- US Army Corps of Engineers
- US Fish and Wildlife Services
- NYS Department of Agriculture and Markets
- New York State Department of Parks, Recreation and Historic Preservation
- Empire State Development Corporation
- Orange County Department of Planning
- Orange –Ulster BOCES
- Goshen Central School District
- Goshen Environmental Review Board
- Goshen Fire District
- Town of Goshen Police Department
- Village of Goshen Police Department
- Goshen Volunteer Ambulance Corp.
- Town of Chester
- Village of Chester
- Village of Kiryas Joel
- Town of Wallkill
- Federal Highway Administration

III. ENVIRONMENTAL SETTING: EXISTING CONDITIONS, POTENTIAL IMPACTS AND PROPOSED MITIGATION MEASURES

A. Geology and Soils

1. Existing Conditions

According to the Orange County Soil Survey, dated 1981 and prepared by the United States Department of Agriculture (USDA) Soil Conservation Service, the central portion of Orange County, including the Project Site, is located within the Hudson Mohawk Lowland Physiographic Province.

The bedrock of Orange County is fairly complex, the majority of the County consists of Hudson River slates and metamorphic crystalline rock formations largely composed of Quartzofeldspathic gneisses that are considered basement rocks of the Grenville Orogeny. The central portion is the least variable of the region. The Trenton Group of shales underlies the entire area. The Snake Hill Shale of the Ordovician Age is mapped as the principal member of this group.

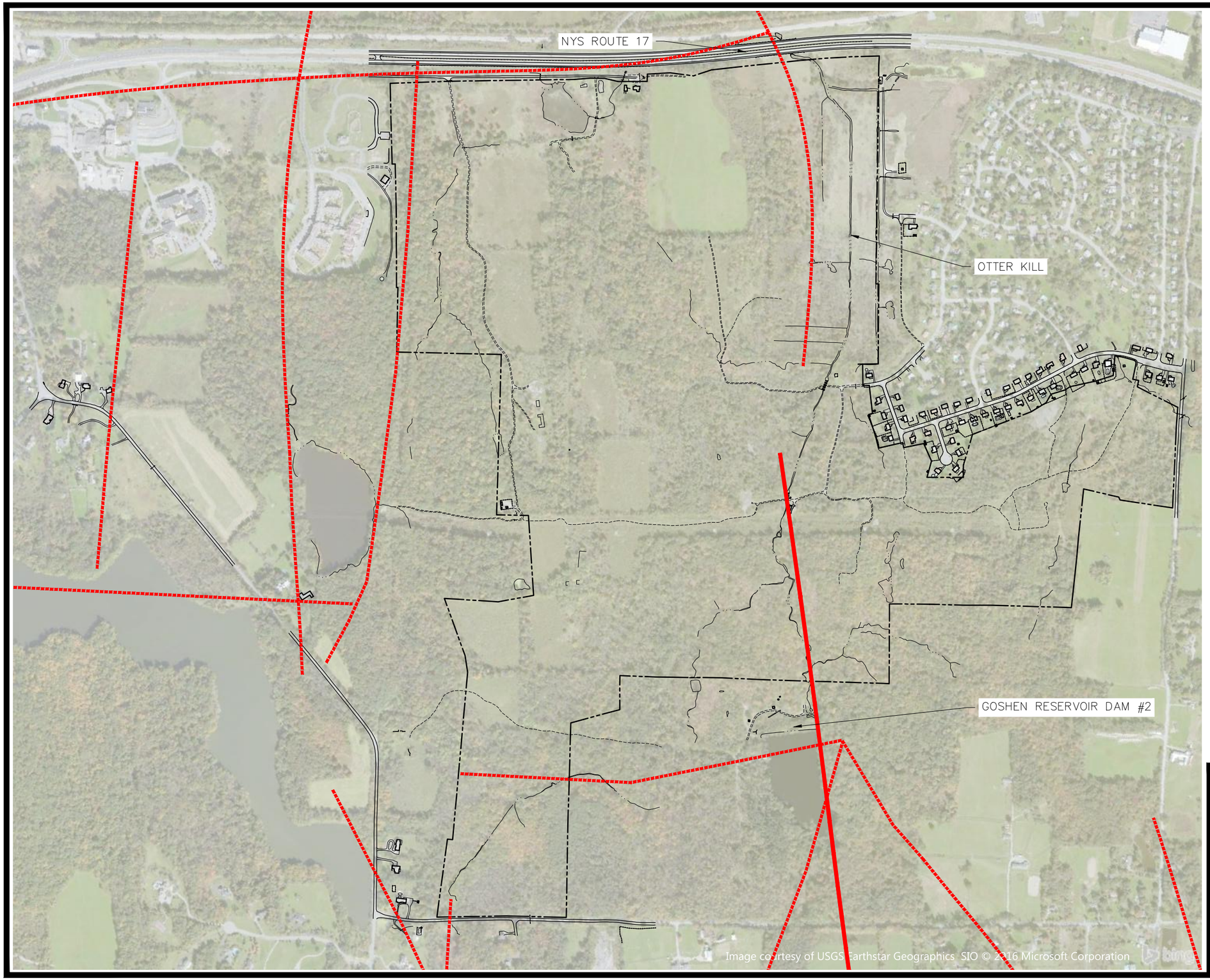
The area was undoubtedly impacted by glaciation during which the advance and retreat of the ice modified topography and soils. Researchers currently estimate that this ice age started some 300,000 years ago and that the last retreat of the ice occurred about 12,000 years ago. Ice advance tended to smooth out the ground surface and often deepened valleys that were oriented in the direction of the advance. Glacial deposits comprising till, kames, and fine silts and clays, are the dominant overburden material (material covering bedrock) in the county, and were deposited as glacial ice melted.

Fracture trace are linear geologic features observed in aerial photography, less than one mile in length, which are usually surficial expressions of vertical zones in bedrock which provide groundwater yields. Three separate areas of fracture trace exist on the site. One area runs north-south through parcel 11-1-58 within the wetland, one area runs along the western property boundary from Harriman Drive to Reservoir Road and a third runs through the rear of the site extending from the Greenhill Reservoir (see Figure III-1: Fracture Traces and Bedrock Faults).

According to the Orange County Soil Survey, the following soil classifications are present on the Project Site. See Figure III-2 for a map of the existing soils on the project site.

- Alden extremely stony soils (AC) cover approximately 18.2 acres or 3.5% of the Project Site. AC soils are deep, poorly drained soils typically in depressions and low areas. Depth to bedrock is greater than 72 inches. The water table is at, or near the surface for prolonged periods in spring. Permeability is moderately slow in the subsoil and substratum. Runoff is very slow and available water capacity is high.

- Bath – Nassau silt loam (BnB and BnC) covers approximately 8.9 acres or 1.7% of the Project Site. Bath-Nassau is a soil complex made up of about 50% Bath soils, 30% Nassau soils and 20% other soils which occur in such an intricate pattern they were not mapped separately. The



GRID

LEGEND

BEDROCK FAULTS

BED ROCK FRACTURE TRACES

GRAPHIC SCALE

800 0 400 800 1600

(IN FEET)

1 inch = 800 ft.

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FIGURE III-1
EXISTING FRACTURE TRACES AND BEDROCK FAULTS

LEGOLAND NEW YORK

TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

Date:	SEPTEMBER 28, 2016
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Sheet No.:	1 OF 1
Drawing No.:	C3D D - 16 - 0042 - 01

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ESR		1" = 800'	SEE SITE PLANS

soil complex consists of deep, well drained soils and shallow, somewhat excessively drained soils that formed in glacial till deposits derived from shale and slate. Runoff is slow to medium, available water capacity is moderate in Bath soils and low in Nassau soils. Depth to bedrock is 40-60 inches in Bath soils and 10-20 inches in Nassau soils.

- Erie gravelly silt loam (ErA and ErB) covers 116.8 acres or 22.5% of the Project Site. Erie soils are deep, somewhat poorly drained, nearly level soil was formed from glacial till deposits derived from shale, slate and sandstone. Depth to bedrock is greater than 60 inches. It has a seasonal high water table. Permeability is moderate, runoff is slow and available water capacity is moderate to low.

- Madalin silt loam (Ma) covers 73 acres of the Project Site, or 14.2%. Madalin soils are deep, poorly, to very poorly drained, nearly level soil formed in glacial lake deposits of silt and clay. Depth to bedrock can range from 5 to 30 feet. The water table is at, or near the surface for prolonged periods during the year and some areas are ponded for brief periods in the spring. Permeability is moderately slow in the surface layer and slow in the subsoil. Available water capacity is high and runoff is very slow. The soils are generally gravel-free with high organic content.

- Mardin gravelly silt loam (MdB, MdC and MdD) covers approximately 250 acres, or 47.9% of the Project Site. Mardin soils are deep and moderately well drained with a depth to bedrock of more than five feet. The water table is perched is early spring and excessively wet periods. Available water capacity moderate to low and runoff is slow to medium.

- Mardin (MNE) soils cover approximately 30 acres, or 5.6% of the Project Site. MNE soils are deep, moderately well drained, steep soils formed in glacial till deposits derived from sandstone, shale and slate. Depth to bedrock can range from 5 to 20 feet. The water table is perched in early spring and other excessive wet periods. Permeability is moderate in the surface layer and slow in the subsoil. Available water capacity is moderate to low and runoff is rapid.

- Rock-outcrop- Nassau complex (RSB) covers approximately 0.6 acres, or 0.1% of the Project Site. This soil complex consists of shallow, somewhat excessively drained Nassau soils and can contain areas of exposed bedrock. This is complex covers a very small area of the Project Site along Conklingtown Road. Depth to bedrock ranges from 0 to 18 inches. The seasonal high water table is seldom perched above the bedrock.

Figure III-2: Existing Soils

Source: USDA Natural Resources Conservation Service

Soils in several areas of the site have been previously disturbed by development. Grading occurred in the area of the communications tower enclosure, single family dwelling on lot 11-1-47 and the restaurant and inn that previously existed on the site and rough grading activities occurred to the south of the Arcadia Hills development where rough grading occurred for roads and drainage in association with a previously approved subdivision, in the area of the communications tower enclosure, single family dwelling on lot 11-1-47 and the restaurant and inn that previously existed on the site. There is currently approximately 45,608 square feet of impervious surfaces, including gravel areas on the site.

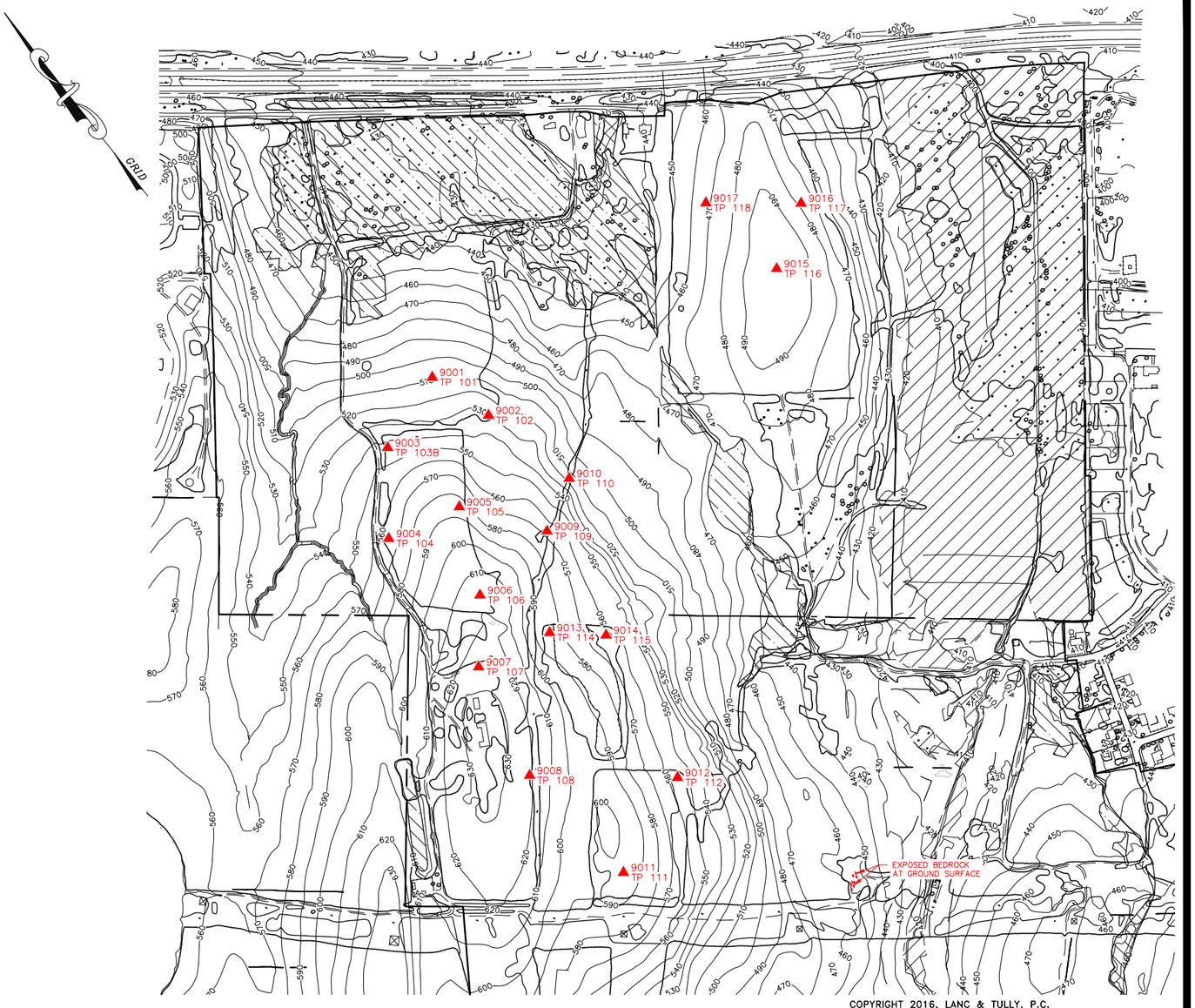
Test pits were completed on the site within the area of disturbance to confirm site soils and depth to bedrock. See Figure III-3: Test Pit Locations.

2. Potential Impacts

Total site disturbance for the proposed action will be 140 acres. After full build out of the project, 3,372,130 square feet (77.41 acres) will be made impervious and 132,977 square feet (3.1 acres) of porous pavers will be utilized in parking lot construction. A total of 444.54 acres of land will remain as undeveloped open space and manicured lawn.

According to the Orange County Soil Survey, erosion is a possible hazard of Mardin soils when vegetation is removed. The majority of the site soils are characterized by slow runoff which causes

P No.	Coordinate Location		Test Date	Comments	Range	Description
	Latitude	Longitude				
9001	W74.313349 (d)	N41.381981 (d)	10-Aug-16	NO GW, NO BR	Depth 240"	
					0-6	TOPSOIL
					6-156	SILT LOAM WITH SOME COBBLES
					156-240	GRAY CLAY
9002	W74.313004 (d)	N41.381175 (d)	10-Aug-16	GROUND WATER @ 228", NO BR	Depth 240"	
					0-12	TOPSOIL
					12-108	SILT LOAM WITH SOME COBBLES & GRAVEL
					108-240	GRAY CLAY WITH SOME COBBLES
9003	W74.314649 (d)	N41.381635 (d)	10-Aug-16	BEDROCK REFUSAL AT 156" COULD POSSIBLY BE INTERLOCKED BOULDERS AS REPORTED BY EXCAVATOR	Depth 156"	
					0-12	TOPSOIL
					12-156	SILT LOAM WITH SOME COBBLES & GRAVEL
9004	W74.315564 (d)	N41.380733 (d)	10-Aug-16	NO GW, NO BR	Depth 240"	
					0-12	TOPSOIL
					12-120	SILT LOAM WITH SOME GRAVEL
					120-240	GRAY CLAY WITH SOME COBBLES
9005	W74.314322 (d)	N41.380501 (d)	10-Aug-16	HARD DIGGING, NO GW, NO BR	Depth 240"	
					0-12	TOPSOIL
					12-240	SILT LOAM WITH A LOT OF COBBLES, STONES, & GRAVEL
9006	W74.314953 (d)	N41.379474 (d)	10-Aug-16	HARD DIGGING, NO GW, NO BR	Depth 240"	
					0-12	TOPSOIL
					12-240	SILT LOAM WITH A LOT OF COBBLES, STONES, GRAVEL, & FRAGMENTED SHALE
9007	W74.315705 (d)	N41.378779 (d)	11-Aug-16	HARD DIGGING BELOW 10', NO GW, NO BR	Depth 240"	
					0-12	TOPSOIL
					12-240	SILT LOAM WITH A LOT OF COBBLES, STONES, GRAVEL, & FRAGMENTED SHALE
9008	W74.316153 (d)	N41.377322 (d)	11-Aug-16	NO GW, NO BR	Depth 240"	
					0-12	TOPSOIL
					12-178	SILT LOAM WITH SOME COBBLES, STONES, GRAVEL, & FRAGMENTED SHALE
					178-240	GRAY CLAY WITH SOME COBBLES & STONES
9009	W74.313427 (d)	N41.379586 (d)	11-Aug-16	NO GW, NO BR	Depth 240"	
					0-12	TOPSOIL
					12-178	SILT LOAM WITH SOME COBBLES & GRAVEL
					178-240	GRAY CLAY WITH SOME COBBLES, STONES, & FRAGMENTED SHALE
9010	W74.312597 (d)	N41.379933 (d)	11-Aug-16	NO GW, NO BR	Depth 240"	
					0-12	TOPSOIL
					12-180	SILT LOAM WITH SOME COBBLES & GRAVEL
					180-240	GRAY CLAY WITH SOME COBBLES
9011	W74.315920 (d)	N41.375645 (d)	11-Aug-16	NO GW, NO BR	Depth 240"	
					0-12	TOPSOIL
					12-204	SILT LOAM WITH SOME COBBLES, STONES, & GRAVEL
					204-240	GRAY CLAY WITH SOME COBBLES, STONES, & FRAGMENTED SHALE
9012	W74.314243 (d)	N41.376161 (d)	12-Aug-16	MINOR SEEPAGE @ 88" (NOTE RAIN OVER PREVIOUS NIGHT)	Depth 258"	
					0-6	TOPSOIL
					6-88	SANDY LOAM WITH SILT, LITTLE GRAVEL
					88-128	CLAY LOAM WITH SOME COBBLES
					128-258	GRAY CLAY WITH A LOT OF COBBLES
9013	W74.314430 (d)	N41.378570 (d)	12-Aug-16	NO GW, NO BR, HARD DIGGING BELOW 12'	Depth 226"	
					0-6	TOPSOIL
					6-60	LT BROWN SANDY LOAM WITH SILT, LITTLE GRAVEL
					60-146	SANDY LOAM WITH SILT
					146-226	CLAY WITH A LOT OF COBBLES, HARD PAN
9014	W74.313720 (d)	N41.378110 (d)	12-Aug-16	NO GW, NO BR	Depth 232"	
					0-6	TOPSOIL
					6-160	SILT LOAM WITH SOME SAND, LITTLE GRAVEL
					160-232	GRAY CLAY WITH A LOT OF COBBLES
9015	W74.307746 (d)	N41.380395 (d)	12-Aug-16	NO GW, NO BR, HARD DIGGING BELOW 8'	Depth 186"	
					0-9	TOPSOIL
					9-42	LT. BROWN SILT LOAM WITH SOME SAND & GRAVEL
					42-62	SAND WITH SOME GRAVEL, LITTLE SILT, LITTLE COBBLE
					62-150	SILT LOAM WITH LITTLE SAND & GRAVEL
					150-186	SANDY LOAM WITH SOME SILT, SOME GRAVEL
9016	W74.306757 (d)	N41.380848 (d)	12-Aug-16	NO GW, NO BR, HARD DIGGING BELOW 10'	Depth 226"	
					0-12	TOPSOIL
					12-52	LT. BROWN SILT LOAM WITH SOME GRAVEL, LITTLE SAND
					52-226	SANDY LOAM WITH SOME COBBLES
9017	W74.307994 (d)	N41.381584 (d)	12-Aug-16	NO GW, NO BR, SOME MOTTLING 12-52" ABOVE HARDPAN	Depth 192"	
					0-12	TOPSOIL
					12-52	SILT LOAM WITH LITTLE SAND,LITTLE COBBLE, MOTTLING
					52-122	CLAY LOAM WITH SOME SAND & GRAVEL, HARDPAN
					122-192	CLAY LOAM WITH SOME SAND & GRAVEL, VERY DENSE HARDPAN



GRAPHIC SCALE

600 0 300 600 1200

(IN FEET)

1 inch = 600 ft.

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FIGURE III-3
TEST PIT LOCATIONS MAP

LEGOLAND NEW YORK
TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

Date:	NOVEMBER 3, 2016
Revisions:	
CAD File:	160042-TEST PIT LOC
Layout:	III-3 TEST PITS FIGURE
Sheet No.:	1 OF 1
Drawing No.:	C3D D - 16 - 0042 - 01

Drawn By:	Checked By:	Scale:	Tax Map No.:
MK		1" = 600'	SEE SITE PLANS

wet conditions on the site but does not present any complications or challenges for stormwater management.

Site geology does not limit the potential for development. However, construction activities in areas with exposed or shallow bedrock and areas where deep cuts are proposed may require blasting during construction. Blasting impacts are estimated to be minimal but permanent. Blasting effects are also expected to be localized. All blasting performed at the site would be designed and conducted such that surrounding features would not be impacted by the associated shock waves. Because details regarding blasting impacts and protocol are specifically associated with construction activities, these details will be addressed by the construction contractor through pre-blasting analysis and development of a blasting protocol. An alternative to blasting is hydraulic jackhammering. This alternative is a longer, more drawn out process (rather than a single blast) and also creates more dust and spreads noise over a longer period of time.

3. Proposed Mitigation Measures

Permanent disturbance of existing soils and changes to the site's soil makeup are unavoidable adverse environmental impacts.

Mitigation measures implemented during construction would include best management practices (BMPs) designed to minimize and reduce the potential for soil erosion from moderate levels to less-than-significant levels. Adherence to the *New York State Pollution Discharge Elimination System General Permit for Storm Water Discharges from Construction Activity*, combined with the required storm water pollution prevention plan and soil BMPs, would further reduce the potential for soil erosion. Proposed erosion and sediment control measures consistent with Section 97-42 of the Town Code are proposed. All erosion and sedimentation control measures shall be installed before any land disturbance. The BMPs would include but not be limited to the following:

- The smallest practical area of land shall be exposed at one time;
- When land is exposed during development, the exposure shall be the shortest practical period of time;
- Temporary vegetation and other protective measures shall be provided to ensure soil stabilization to steeply slope areas;
- Provide controls to reduce soil erosion and intercept/slow storm water flows;
- Cover stockpiled soil;
- Use dust suppressants, such as watering soils and unpaved roadways;
- Preserve existing vegetation where no construction activities are planned and wherever possible; and
- Replant/re-vegetate all exposed disturbed areas immediately upon completion of construction.

During the excavation process, all the topsoil in disturbed areas would be cleaned and reused on-Site; sound rock, if encountered, could be crushed and utilized as base material. Dewatering would be required during the construction of building foundations, underground utility trenching/excavations, and any additional subsurface construction. Note that suitable soils would be returned to the utility trenches and compacted to standard requirements after excavation; blast spoils would also be reused in construction of new wetlands and stream relocation, and blasting holes would be backfilled with native material from the original excavation.

As stated above, blasting may be required for excavation in areas of shallow bedrock. Any blasting would be strictly controlled and conducted according to all applicable regulations. Pre-blasting surveys of proximate structures would be conducted and vibration thresholds would be established. Blasting-induced vibration above established levels would be prohibited. If determined to be necessary, blasting mats would be placed over the area to be blasted in order to reduce noise and dust impacts. Any required blasting would be monitored. Monitoring points would take into consideration sensitive receptors. Monitoring equipment would be capable of monitoring both ground and airborne vibration. Pre-blasting surveys would identify water wells, and water quality testing of existing wells would be conducted. Monitoring would continue throughout the construction process.

B. Topography

1. Existing Conditions

As shown in the table below, the site contains both gentle and steeply sloping terrain. Generally the project's topographic high point, at an elevation of approximately 630 msl, is located on the western side of the site near the existing communications tower. The site slopes down in all directions from this point. The low areas of the site are along Harriman Drive with an elevation of approximately 420 msl. The southern portion of the site also slopes down from the vicinity of the communications tower to Conklingtown Road where elevations range from approximately 500 to 530 msl. See **Figure III-4: Existing Topography** which depicts existing site contours and Table III-1 which provides a breakdown of onsite slopes.

Table III-1: On Site Slopes

Slope Category	Acreage	Percent of Total Site
0-10%	300.9	57.5%
10-15%	120.4	23.0%
15-25%	73.8	14.1%
>25%	28.4	5.4%
TOTAL	523.6	100.0%

Source: Lanc & Tully Engineering

Offsite improvement areas are all previously disturbed and are relatively flat See Figure III-5. These areas of proposed roadway improvements include Harriman Drive, Route 17M collector road and NYS Route 17 Exit 124 ramps (refer to Section III-H for a full discussion and map of traffic related improvements).

2. Potential Impacts

The development will require significant grading in the central portion of the Project Site to create a relatively flat area for park development, parking and the access road. Within the park, there will be changes in elevations which will follow the general contours of the land. For example, each section of the guest parking area will step down from west to east. Ramps will be provided in

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GRAPHIC SCALE

800 0 400 800 1600

(IN FEET)

1 inch = 800 ft.

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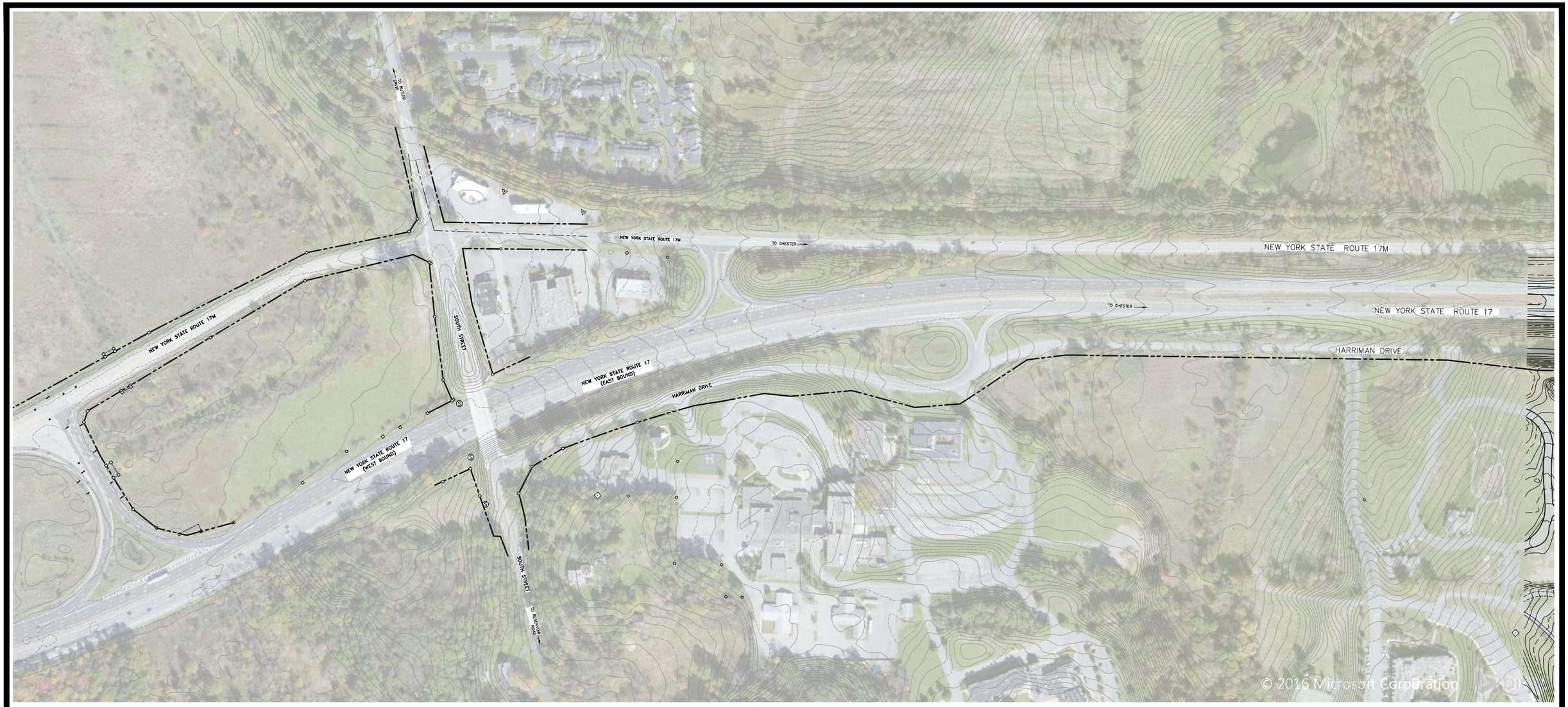
FIGURE III–4
EXISTING TOPOGRAPHY

LEGOLAND NEW YORK
TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

Date:	SEPTEMBER 28, 2016
Revisions:	NOVEMBER 3, 2016
CAD File:	160042-EIS
Layout:	III-4 EX TOPO
Sheet No.:	1 OF 1

Drawn By:	Checked By:	Scale:	Tax Map No.:	Drawing No.:
ESR		1" = 800'	SEE SITE PLANS	C3D D – 16 – 0042 – 01



GRID

GRAPHIC SCALE

300 0 150 300 600

(IN FEET)

1 inch = 300 ft.

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FIGURE III-5
OFF SITE EXISTING TOPOGRAPHY

LEGOLAND NEW YORK
TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

Date:	SEPTEMBER 28, 2016
Revisions:	NOVEMBER 3, 2016
CAD File:	160042-EIS
Layout:	III-5 OFF SITE TOPO
Sheet No.:	1 OF 1
Drawing No.:	C3D D - 16 - 0042 - 01

Drawn By:	Checked By:	Scale:	Tax Map No.:
ESR		1" = 300'	SEE SITE PLANS

several areas of topography change to ensure the full park is accessible to all guests. The proposed high point of the site will be 615 msl on the west side of the site in the vicinity of the proposed parking toll plaza. The proposed low point within the developed portion of the site will be 460 msl near the back-of-house area. A visual depiction of the proposed grading is provided on Figure III-6.

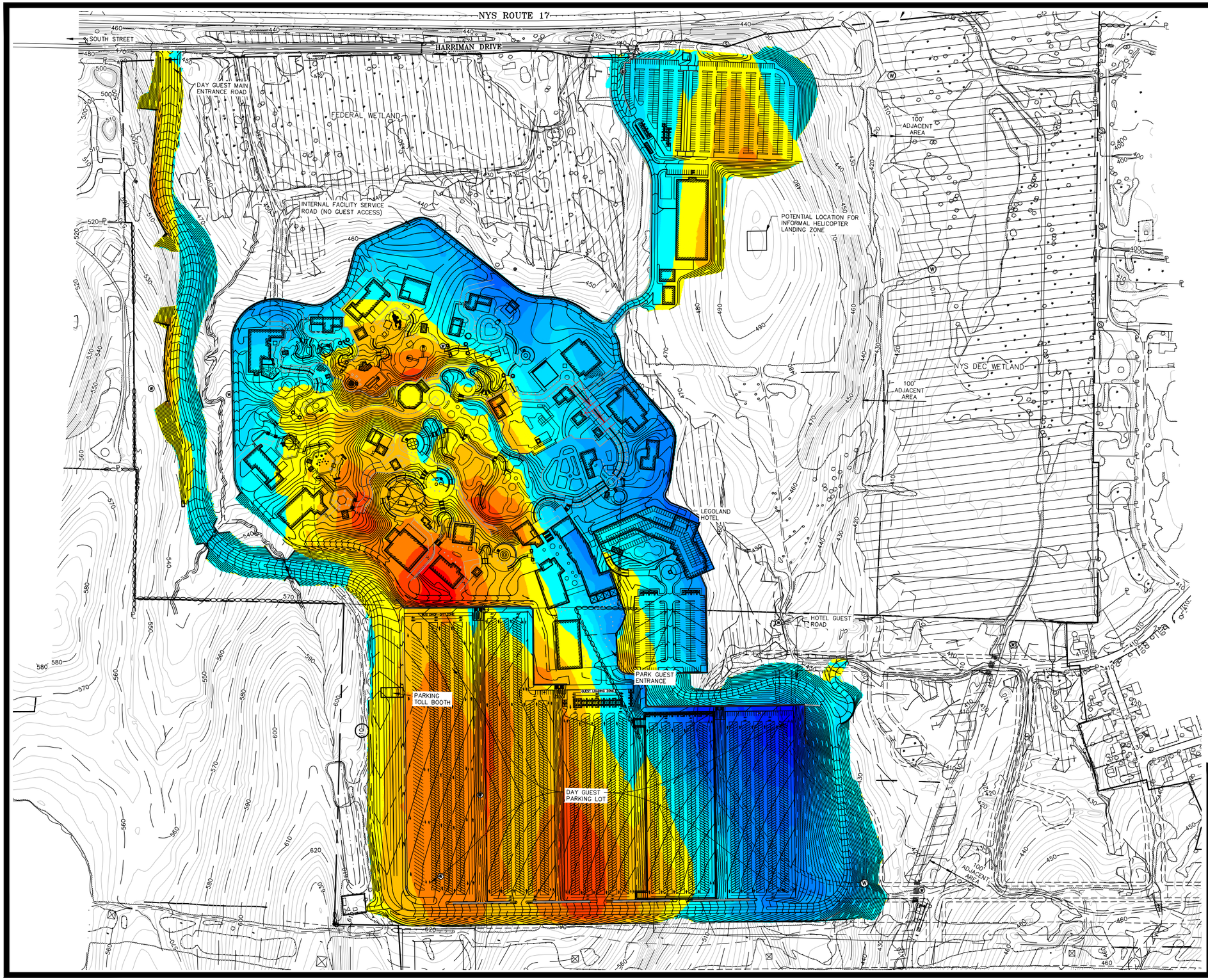
To accommodate the significant changes in existing elevation on-site and provide for appropriate slopes within the proposed LEGOLAND park, numerous ramps/stairways, terraces, and retaining walls are provided. Retaining walls are used both around the perimeter of the park & entrance roads to limit site grading impacts to the surrounding existing site and within the park between the various attraction groupings. There are approximately 13,660 linear feet of retaining walls along the entrance roads and park perimeter reaching to a maximum height of 56' with the majority in the 30'-40' range. Internal of the park there are an additional 6,800 linear feet of retaining walls with a maximum height of 28' with the majority in the 15-20' range. Retaining walls are to be precast concrete with a decorative exterior. A detail of the walls are provide in the full set of site plans.

Retaining walls reduce the overall amount of necessary disturbance and allows preservation of the wetland areas and other sensitive areas on the site.

Areas of steep slopes on the site will be disturbed. Approximately 11 acres of land which contains slopes of greater than 25% will be disturbed and regraded during construction. Section 97-46 of the Town of Goshen Zoning code regulates development of land containing steep slopes. The code requires any development which proposes to disturb slopes over 25% shall (1) provide an adequate erosion control and drainage plan so that erosion and sedimentation do not occur during or after construction, (2) minimize the cutting of trees, shrubs and natural vegetation, (3) not create safety hazards due to excessive road or driveway grades and (4) allow for engineering review of plans and construction activities by the Town to ensure compliance with the Town code. The code further stipulates that no certificates of occupancy will be granted until erosion control and drainage measures are satisfactorily completed. The proposed development will be consistent with all of these regulations. A full Stormwater Pollution Prevention Plan (SWPPP) with erosion control measures consistent with NYSDEC standards has been provided (see Section III-G for a full discussion). Road grades will be a maximum of 8%. All plans and materials will be reviewed by the Town Engineer.

3. Proposed Mitigation Measures

Changes to site topography are an unavoidable adverse impact. The site is being designed to respect existing topography as much as possible. The plan meets the Town's steep slope zoning requirements. However, the Project Sponsor continues to revise the site plan to reduce the overall amount of anticipated grading and excess cut of materials from the site.



CUT / FILL ANALYSIS TABLE

RANGE	COLOR	RANGE DEPTH NEGATIVE=CUT POSITIVE=FILL	RANGE 2D AREA	RANGE VOLUME
1		−50.0' TO −40.0'	21,270 SF	2,167 CY
2		−40.0' TO −30.0'	163,330 SF	31,876 CY
3		−30.0' TO −20.0'	709,156 SF	188,203 CY
4		−20.0' TO −10.0'	978,662 SF	514,641 CY
5		−10.0' TO 0.0'	1,033,113 SF	883,544 CY
6		0.0' TO 10.0'	925,646 SF	833,434 CY
7		10.0' TO 20.0'	608,809 SF	547,871 CY
8		20.0' TO 30.0'	462,073 SF	363,755 CY
9		30.0' TO 40.0'	336,981 SF	209,049 CY
10		40.0' TO 50.0'	215,265 SF	106,761 CY
11		50.0' TO 60.0'	83,439 SF	52,838 CY
12		60.0' TO 70.0'	65,224 SF	28,978 CY
13		70.0' TO 80.0'	35,730 SF	8,314 CY
14		80.0' TO 90.0'	7,527 SF	618 CY

GRAPHIC SCALE

400 0 200 400 800

(IN FEET)

1 inch = 400 ft.

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FIGURE III–6
CUT AND FILL ANALYSIS

LEGOLAND NEW YORK

TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

Drawn By: MK	Checked By:	Scale: 1" = 400'	Tax Map No.: SEE SITE PLANS	Drawing No.: C3D D – 16 – 0042 – 01

Date: SEPTEMBER 21, 2016
Revisions:
CAD File: 160042–CUTFILL ANALYSIS
Layout: III–6 CutFill
Sheet No.: 1 OF 1

C. Surface Water Resources

1. Existing Conditions

This section discusses the surface water resources which exist on the subject Project Site. See Figure III-7: Surface Water Resources for a visual depiction.

The Otter Kill is a 16-mile-long tributary of the Moodna Creek that runs from the Goshen Greenhill Reservoir north through the site and under NYS Route 17 through Hamptonburgh, joining with the Black Meadow Creek and eventually with the Moodna Creek to the Hudson River. It is classified by the NYSDEC as a Class C stream and a permit from the NYSDEC would be required for any disturbance. As per the Overlay Districts Map in the adopted Town Comprehensive Plan there is a stream corridor overlay zone associated within the Otter Kill on all land within 150 feet of the mean high water level of this stream. As per 97-26 of the zoning code, no principal structures are permitted within 100 feet of the creek, no accessory structures 200 square feet or larger are permitted within 50 feet of the creek and no hazardous materials may be stored within 100 feet of the creek.

There is also a 100-year floodplain associated with the Otter Kill.

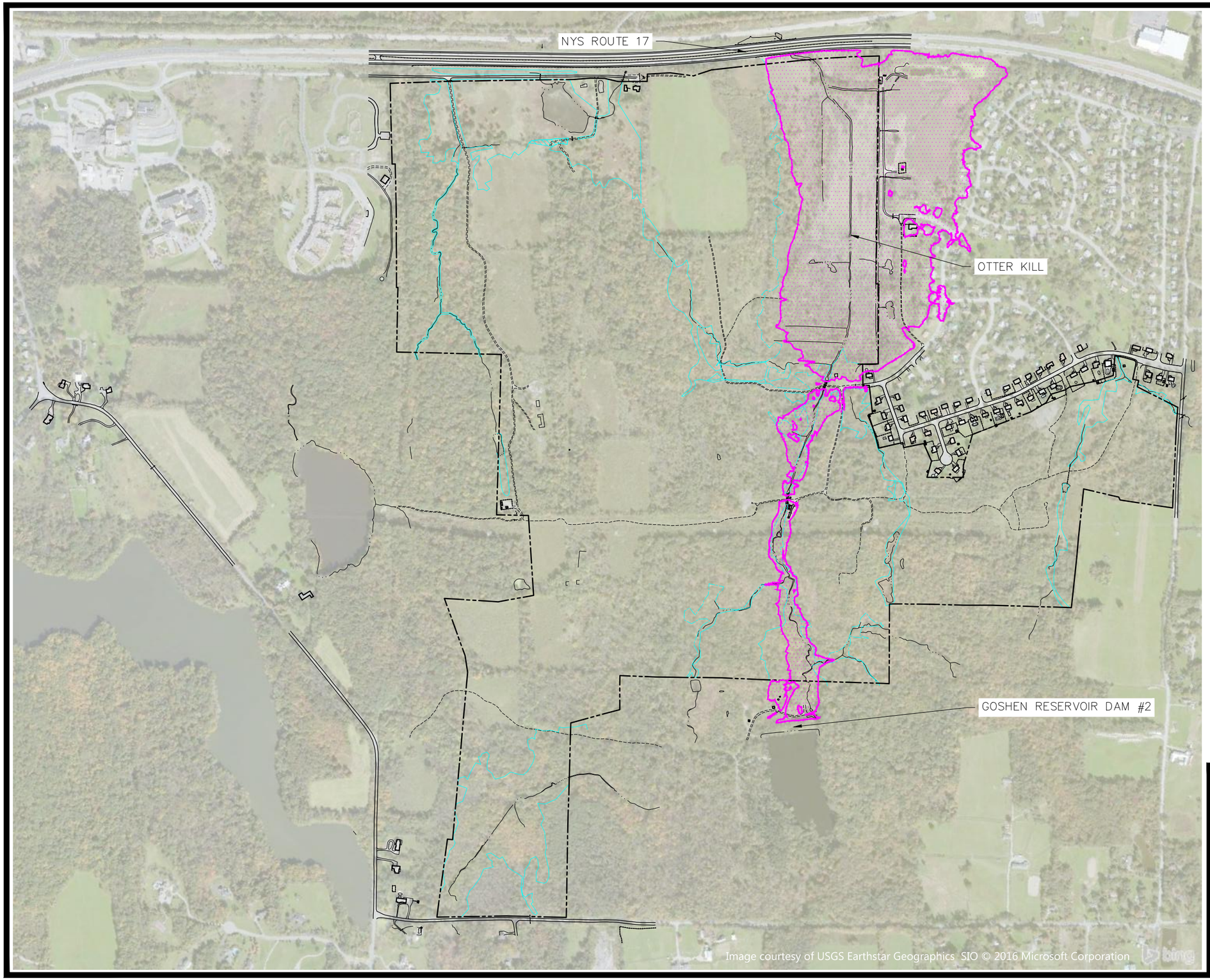
The Town zoning defines wetlands as follows: "*An area of land that is characterized by hydrophytic vegetation, saturated soils, or periodic inundation which is classified as a wetland by either the New York State Department of Environmental Conservation or the United States Army Corps of Engineers. See § 97-45.*"

The US Army Corp of Engineers criteria to establish a wetland includes, "Areas which contain hydrophytic vegetation, hydric soils and wetland hydrology which are either adjacent to or part of a tributary system of waters of the United States.

The NYSDEC defines Freshwater Wetlands in the Freshwater Wetlands Act of the NYS Environmental Conservation Law as, "Lands and waters of the state as shown on the freshwater wetlands map which contain any of the following: lands and submerged lands commonly called marshes, swamps, sloughs, bogs, and flats supporting aquatic or semi-aquatic vegetation".

Wetlands on the Project Site have been delineated by a certified wetlands specialist who met with representatives from the NYSDEC and the Army Corps of Engineers on the project site to confirm the delineation. A map has been submitted to both agencies for review and signature to confirm jurisdiction (jurisdictional determination) which will be submitted to the town upon receipt. As per this delineation there are 62.66 acres of Federal jurisdictional wetlands on the Project Site. These areas are mainly located along Harriman Drive and in the southern portion of the site along Conklingtown Road. There are 52.75 acres of NYSDEC jurisdictional wetlands located along the eastern site boundary extended south via the Otter Kill and then off-site. State jurisdictional wetlands have a 100 foot regulated buffer area around them in which disturbance must also not occur. This area constitutes another 15.97 acres of additional land.

The overall drainage basin/watershed for this subject property has been defined using information available on the Orange County Water Authority mapping, USGS Mapping, and the site survey. The drainage occurring on and through the Project Site has been divided into two watershed areas corresponding to culvert crossings under NYS Route 17. *Watershed A* consists of approximately



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LEGEND

- EXISTING WATERCOURSE
- FEDERAL WETLAND
- NYSDEC WETLAND
- FEMA 100 YEAR FLOOD ZONE

GRAPHIC SCALE

800 0 400 800 1600

(IN FEET)

1 inch = 800 ft.

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FIGURE III-7
SURFACE WATER RESOURCES

LEGOLAND NEW YORK

TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

Date:	SEPTEMBER 28, 2016
Revisions:	NOVEMBER 3, 2016
CAD File:	160042-EIS
Layout:	III-7 SRF WTR
Sheet No.:	1 OF 1
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Checked By:	
Scale:	1" = 800'
Tax Map No.:	SEE SITE PLANS
Drawing No.:	C3D D - 16 - 0042 - 01

1,216.22 acres of land encompassing the watershed of the Otter Kill to the south of NYS Route 17. *Watershed B* consists of approximately 164.86 acres of land encompassing the watershed to the on-site pond adjacent to Harriman Drive and outlet culvert beneath NYS Route 17. A full analysis of stormwater can be found in Section III-G of this document.

Village Reservoirs

The two Village of Goshen surface water reservoirs are located south and west of the Project Site. The Prospect Reservoir (also identified as Reservoir #1), located off Lower Reservoir Road, is approximately 47 acres and serves as the main water source for the Village of Goshen public water system with the Greenhill Reservoir (also identified as Reservoir #2), is approximately 8 acres is size and is located directly south of the Project Site with access from Conklingtown Road, serving as a secondary back-up source. Combined the reservoirs are approved by the NYSDEC for a maximum water taking of up to 1 million gallons per day.

Reservoir #2 Dam (State ID 179-0957) is an earthen dam approximately 500 feet long and 30 feet wide located on the north side of the reservoir. The dam is classified as Class A- low hazard (unlikely to pose a threat of personal injury, substantial economic loss or substantial environmental damage).

2. Potential Impacts

As part of the site development, 3,267 square feet (0.075 acres) of Federal wetlands will be permanently disturbed. This falls under the 0.1 acre disturbance threshold and no individual permit nor any compensatory wetland mitigation will be required. An additional +/- 430 square feet will be temporarily disturbed for grading but will remain undeveloped post-construction.

No NYSDEC wetlands will be disturbed as part of this development nor will any of the NYSDEC 100-foot adjacent buffer area. No encroachments to the Otter Kill are proposed. Stormwater will continue to drain to the Otter Kill after water quality and volume treatment as described further in Section III-G. The creek is within the NYSDEC designated wetland area and therefore a 100-foot regulated buffer area will be provided around the entire wetland area. This 100-foot area is also known as a 'riparian buffer' which provides benefits such as stream stabilization, erosion control, filtration of pollutants which may be carried by stormwater, reduces the potential for flooding and also provides shade, temperature control and critical habitat. The function of this buffer area will not be impacted. Therefore no impacts to this creek or the Moodna Creek to which this creek flows are anticipated.

Wetlands will continue to serve the same function as they currently provide which include habitat areas, drainage areas as well as a physical and visual buffer between the project and adjacent properties.

No encroachment into the floodplain is proposed. The closest portion of the project to the floodplain is the hotel access road which is 230 feet from the floodplain. The elevation of the roadway in this location is twenty-eight above the flood elevation. The back-of-house parking area is located 365' away from the floodplain. The parking lot elevation is proposed at 469' which is 61' higher than the floodplain elevation 408 msl). The hotel parking garage is 745' away from

floodplain and proposed at an elevation 100' higher. No flooding impacts, nor impacts to the function of the floodplain are anticipated.

Wetlands in the vicinity of the Village of Goshen well site are under Federal Jurisdiction. The wells themselves are not located in a wetland and the area was filled at the time of construction so the wells and associated infrastructure are not located within the floodplain. New test wells are not proposed to be located within wetland areas. Access roads exist on the site to areas of the new wells. No NYSDEC permitting would be required for the construction of the new well.

No new physical connections to the Heritage Trail are proposed and therefore no surface water impacts will result.

Pesticides are used within the theme park as necessary to control pests such as mosquitos. At this time, no alternatives to pesticides are being considered by the Project Sponsor. Herbicides are used to control weeds and algae. Chemicals will be used according to manufactures labeling and all applicable NYSDEC standards. All chemicals will be stored in enclosed buildings. These chemicals will only be used within the park area not in undisturbed areas of the site and therefore no impacts to surface water are anticipated. While it is possible, for these chemicals to enter stormwater within the park, all stormwater is treated for water quality consistent with NYSDEC standards prior to entering the local watershed.

A private snow removal company would be contracted for snow removal along the entrance way, in the back-of-house and hotel parking areas during winter months. Salt or other de-icing agents would be brought in by the contractor and not stored on site. Stormwater from parking areas will flow into catch basins for treatment prior to release offsite. It is unlikely de-icing agents would negatively impact surface water resources.

As more fully explained in Section III-G, surface water and stormwater on the site drains north, towards NYS Route 17 away from the Goshen Reservoirs. The closest portion of the proposed project to Goshen Reservoir #2, located directly south of the site, is approximately 1,700 feet which will all remain undisturbed. Based on topography and distance, no impacts to the Goshen Reservoirs are anticipated. The Goshen water supply wells are located in the Town of Wallkill; therefore water quality would not be impacted by development of the site. Water Supply and impacts to water quantity related to the project are further discussed in Section III-E.

Based on the NYSDEC Guidance for Dam Hazard Classification, dam classification may change due to downstream development but there are no specific criteria or amount of development which triggers a change in classification. Based on analysis of the storage and impoundment volumes, site conditions, upstream and downstream slopes, elevations, vegetation and distance to proposed development it is not believed that the proposed development will impact dam classification.

3. Proposed Mitigation Measures

Stormwater runoff from the developed areas of the Project Site will be treated to ensure water quality and will be consistent with NYSDEC regulations. The stormwater pollution prevention plan (SWPPP) is described in Section III-G below. The SWPPP complies with the NYSDEC State Pollution Discharge Elimination System General Permit for Stormwater Discharges.

Specifications for the operation, inspection, and maintenance of stormwater control practices are also included in the SWPPP provided with this DEIS. With the implementation of the project specific SWPPP, including the proposed Erosion and Sediment Control Plan and the post-construction stormwater controls, potential adverse impacts to on-site or downstream water resources can be adequately mitigated. Topsoil stockpiles will be temporarily stabilized and ringed by silt fences.

D. Vegetation and Wildlife

EcolSciences, Inc. was retained to conduct an environmental assessment of the Project Site focusing on potential threatened and endangered species habitat of the proposed LEGOLAND New York Theme Park ("Site") located in the Town of Goshen, Orange County, New York. A full copy of the report, including mapping, agency correspondence and staff qualifications can be found in Appendix C of this document.

Prior to conducting the on-site investigation, EcolSciences collected background information on local conditions and rare wildlife records from the United States Fish and Wildlife Service (USFWS) and New York Natural Heritage Program (NYNHP) database. EcolSciences has also assembled a collection of reference materials regarding threatened and endangered species from prior studies, scientific journals, State protocols, recovery plans and "fact-sheets." Together, these reports provide information regarding the natural history, habitat requirements and survey methodologies for each species.

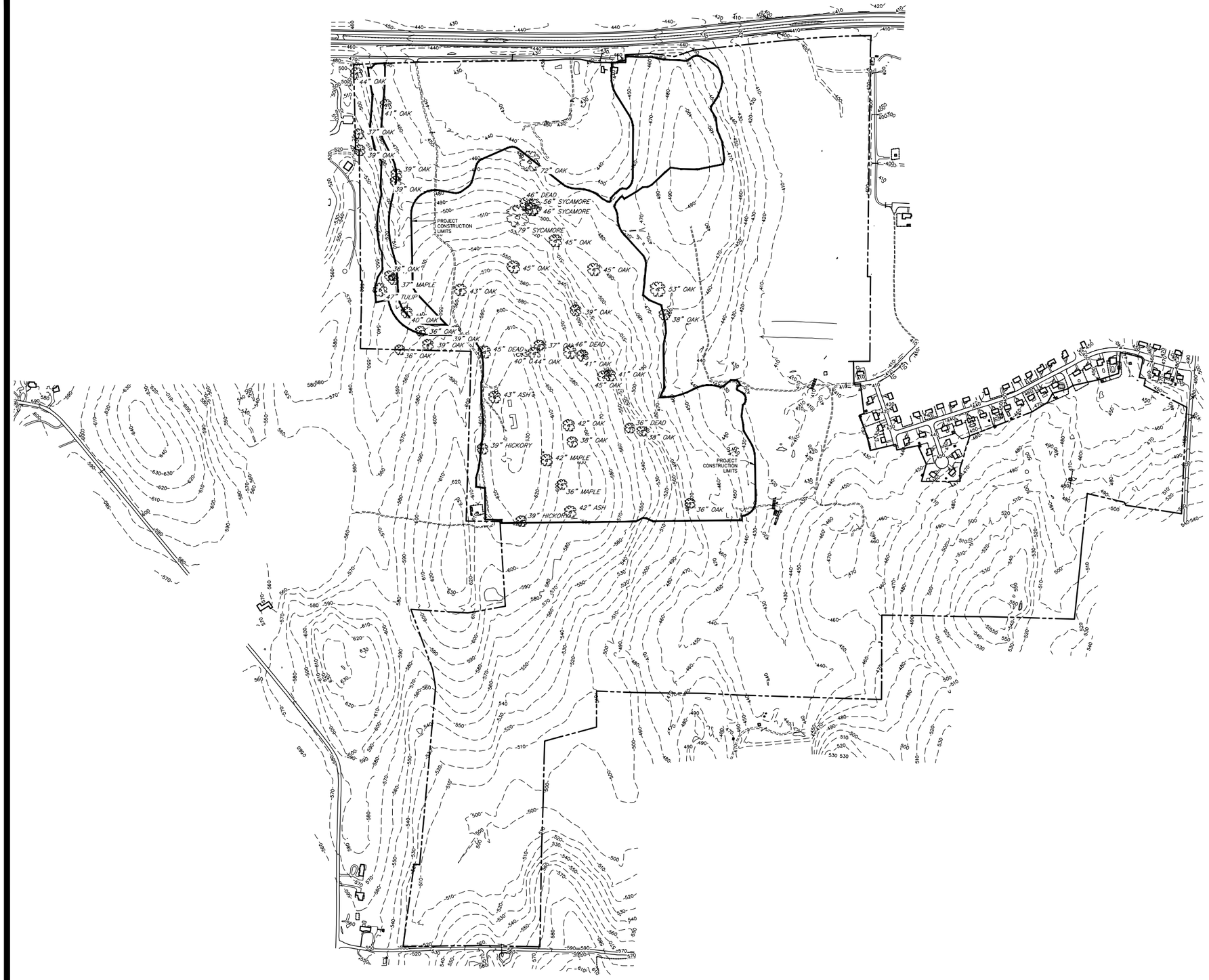
1. Existing Conditions

Vegetated Communities

The Project Site includes a mix of second growth forest, successional farm fields, wetlands, and disturbed vegetative communities associated with the above-ground utility easements, and previous development (former hotel and road improvements associated with an approved but unbuilt residential subdivision). The forested communities represent approximately 347 acres of the Project Site and include a mix of deciduous forest species including white oak, northern red oak, tulip poplar, sugar maple, red maple, American beech, hickory species, and shagbark hickory. Significant, mature trees, over 36 inches in diameter, have been surveyed and identified by species on the Project Site in areas which are to be disturbed. As shown in Figure III-8: Significant Trees, approximately 45 of such trees are located within the proposed area of disturbance. The successional farm fields include dense thickets of multiflora rose, autumn olive, and bush honeysuckle. A large emergent wetland area associated with a former farm pond located south of Harriman Road is characterized by mineral soils with sedges, tussock sedge, cattail, and common reed. Most of the other wetlands are located within forested and scrub/shrub areas, associated with on-site intermittent stream channels. The total wetland area on the site includes 116.72 acres. None of the on-site stream channels appear to have year round flow, except for the northernmost portion of Otter Kill and a large man-made swale constructed along the perimeter of New York State wetland GO-41, west of Gumwood Drive.

Threatened and Endangered Species

NYSDEC Heritage Program and US Fish and Wildlife Service were contacted for concerns. Based on the IPaC report from the USFWS, the site is located within the range of five Federally threatened



GRAPHIC SCALE

800 0 400 800 1600

(IN FEET)

1 inch = 800 ft.

LANC & TULLY
ENGINEERING AND SURVEYING, P.C.
P.O. Box 687, Rt. 207
Goshen, N.Y. 10924
(845) 294-3700

FIGURE III-8
SIGNIFICANT TREES WITHIN THE AREA OF DISTURBANCE

LEGOLAND NEW YORK
TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

Date:	SEPTEMBER 28, 2016
Revisions:	NOVEMBER 3, 2016
CAD File:	160042-EIS
Layout:	III-8 TREE SVY
Sheet No.:	1 OF 1
Drawing No.:	C3D
Drawn By:	MK
Checked By:	
Scale:	1" = 800'
Tax Map No.:	SEE SITE PLANS
	D - 16 - 0042 - 01

or endangered species known from Orange County; bog turtle (*Glyptemys muhlenbergii*), Indiana bat (*Myotis sodalis*), Northern long-eared bat (*Myotis septentrionalis*), dwarf wedge-mussel (*Alasmidonta heterodon*), and small whorled pogonia (*Isotria medeoloides*). In addition, the USFWS lists twenty-one migratory bird species of conservation concern that may occur within the project area.

The New York Natural Heritage Program (NYNHP) was established in 1985 and is a partnership between the NYSDEC and the State University of New York College of Environmental Science and Forestry. The NYNHP maintains a database on New York's flora and fauna to deliver information to partners working in natural resource conservation. To obtain records of known rare species on the site, EcolSciences requested a review of the NYNHP database for the property. In their response dated July 5, 2016, the NYNHP did not have records for any rare species or habitats on or adjacent to the site (correspondence from both agencies is provided at the end of Appendix C)

A separate July 14, 2016 letter from the NYSDEC, indicated the presence of Northern cricket frog (*Acris crepitans*), "in the proximity of the site".

Based on these correspondence the project biologist evaluated the Project Site for potential habitat as follows:

<u>Bog Turtle – Federal Status: Threatened, NYS Status: Endangered</u>
Bog Turtle (*Glyptemys muhlenbergii*), is New York's smallest turtle, reaching a maximum length of 4.5 inches. It is one of seventeen species of turtles found in New York State, including marine turtles. A bright yellow or orange blotch on each side of its head and neck are a distinctive feature of this species. Bog turtle habitat is recognized by three criteria; suitable hydrology, soils and vegetation. Hydrology is the driving force behind a wetland system and is extremely important in maintaining the soil and vegetative characteristics preferred by this species. In general, appropriate wetland hydrology consists of shallow, spring-fed seepages with water or soil saturation present year-round. Hydrology to the wetlands is typically provided by calcium-enriched seepages and groundwater discharges although surface flows may not always be evident and "pseudo-rivulets" developed within game trails may be present. Suitable soils generally consist of organic mucks or muck-like soils. The characteristic mucky soils are often easily compressed.

Vegetatively, an open, emergent wetland community that may be interspersed with shrub/scrub areas and with a forested wetland perimeter generally characterized bog turtle habitats. Wet meadows, marshes, pastures, swamps and more acidic "poor" fens are typical habitats. Common emergent wetland species include hydrophytic grasses and sedges, including tussock sedge (*Carex stricta*), woolgrass (*Scirpus cyperinus*), soft rush (*Juncus effuses*) and rice cut grass (*Leersia oryzoides*). Associated herbaceous species include skunk cabbage (*Symplocarpus foetidus*), arrowhead (*Sagittaria latifolia*), sweet flag (*Acorus calamus*) and cattail (*Typha* sp.). Shrubby vegetation includes alder (*Alnus* sp.), shrubby cinquefoil (*Dasiphora fruticosa*) and red maple (*Acer reubrum*) saplings. In disturbed areas, purple loosestrife (*Lythrum salicaria*), reed canary grass (*Phalaris arundinacea*) and multiflora rose (*Rosa multiflora*) are also common (USFWS, 2001; NJDEP, 1995).

Bog turtles commonly use open, emergent areas for foraging and basking. Nests are often placed in the open, on top of tussock sedge hummocks. Also, in grazed areas, the turtles often use pockets of standing water in old hoof-prints for basking. For over-wintering, the turtles may crawl into the soft substrate, use old muskrat borrows, or be found around the roots of woody vegetation.

EcolSciences' USFWS Recognized Qualified bog turtle surveyor completed New York Phase 1 habitat assessments of the on-site emergent wetlands. The on-site emergent wetlands identified along the Gumwood swale was not determined to be potential habitat since the NYSDEC wetland maps do not identify the wetland as potential habitat, the swale effectively removes most surface hydrology from the wetland, and absence of muck like soils and was not further surveyed. The emergent wetlands around the Harriman Road pond, and emergent inclusions within the large forested wetland located north of Conklingtown Road are characterized by cattail, tussock sedge, purple loosestrife, reed canary grass, skunk cabbage, jewelweed, sweet flag, and woolgrass. These species can be associated with disturbed potential bog turtle habitats, but do not include the common calciphiles often found in New York bog turtle habitats. The wetland soils, identified by the Orange County, Soil Survey (SCS, 1981) as Madalin silt loam (Ma) are characterized as poorly drained to very poorly drained silt loams formed in former silt/clay lake beds with very poor permeability. In the field, the soils were not characterized by the soft muck or muck-like soil associated with bog turtle habitats. None of the soils were probable to depths of over 3 inches or greater.

In addition, none of the emergent wetlands were characterized by surface rivulets, springs, or other surface or groundwater features that could support a year round bog turtle population. In the absence of these critical habitat features, the emergent wetlands identified within the site were determined not to provide potential bog turtle habitat. Bog turtle Habitat Evaluation Field Forms supporting this determination are found in Appendix C along with annotated color photographs documenting the emergent wetlands.

Based upon the field inspection, EcolSciences concludes that there are no on-site habitats which meet the very specific habitat criteria common to bog turtle sites in the New York portion of the USFWS Hudson/Housatonic/Wallkill Recovery Unit.

<u>Indiana Bat - Federal and NYS Status: Endangered</u>

The Indiana bat is a temperate, insectivorous bat whose life cycle can be coarsely divided into two primary phases: hibernation and reproduction. Indiana bats emerge from the caves in which they hibernate (i.e., hibernacula) in early spring; males disperse and remain solitary until mating season at the end of the summer while pregnant females form maternity colonies in which to rear the young. Maternity colonies generally occur in riparian and floodplain forests under the loose bark of dead or dying trees. Indiana bat roosting sites have been documented in numerous species of deciduous trees. Factors influencing the stability of a particular tree as a roost site include the tree's solar exposure, location in relation to other trees, and the tree's spatial relationship to water sources and foraging areas. Studies have shown that Indiana bats show a strong site fidelity to summer colony areas (USFWS, 2015, NJDEP, 2013, NYSDEC, 2010). Common roost trees include shagbark hickory, silver maple and other species with cracks or loose bark.

Indiana bat populations in the northeastern United States are affected by the rapid spread of white-nose syndrome, the most devastating wildlife disease in recent history. By the end of 2011, this

unprecedented threat had killed 5.7 to 6.7 million bats in the United States since its discovery in 2007 based on photographs taken in 2006. In New York, the Indiana bat population had decreased from 52,779 to 15,564 by the end of 2015.

Northern Long-eared Bat - Federal and NYS Status: Threatened

Like Indiana bats, Northern long-eared bats hibernate in caves or mines during winter and emerge in early spring, with males dispersing and remaining solitary until mating season at the end of the summer, and pregnant females forming maternity colonies in which to rear young. The Northern long-eared bat is found throughout New York State and appears to be associated with mature un-fragmented interior forest. Northern long-eared bats may be found in uplands as well as along forested streams and vernal habitats. Some studies indicate that they select forest hilltops rather than the lowland forest favored by Indiana bats. However, like Indiana bats, they will roost in dead and live trees under exfoliating (loose) bark, in fissures, crevices, and cavities (U.S. Fish and Wildlife Service 2015). Northern long-eared bats have been known to roost in human structures including houses, sheds, barns, and man-made bat boxes. Maternity roosts tend to be in large diameter trees, but individuals have been found in trees as small as 3 inch diameter at breast height (DbH). Northern long-eared bats hibernate in caves and mines where the air temperature is constant, preferring cooler areas with high humidity (U.S. Fish and Wildlife Service 2013).

Like Indiana bats, the Northern long-eared bat population is affected by white nose syndrome, and was recently declared a threatened species by the U.S Fish and Wildlife service in April 2015.

EcolSciences conducted field habitat evaluations between June and August 2016 to investigate the potential for Indiana and Northern long eared bats. Both forested uplands and forested wetlands occur within the site. The western portion of the site where the previous development disturbances occurred is generally associated with younger trees or smaller diameter at breast height (DBH) and height. In this portion of the site cluttered vines, shrubs, and small trees characterize the understory. Most of the remaining forested areas are characterized by second growth trees including tulip poplar, sugar maple, red maple, white oak, northern red oak, and shagbark hickory. This forest community includes scattered dead snags, live trees with dead limbs, and several trees with exfoliating bark, fissures, holes, and crevices. The understory varies from sparse with scattered shrubs/saplings to extremely cluttered with dense shrubs, brambles and hanging vines. The open and closed forest community, identified snags, trees with exfoliating bark (shagbark hickory), hilltops, proximity to streams and ponds, and wetlands all confirm that the site could be potential Indiana and Northern long-eared bat habitat. Based on the observed conditions the assessment confirmed potential forested roosting habitat for the Indiana bat and Northern long-eared bat.

Northern Cricket Frog – Federal Status: Unlisted, NYS Status: Endangered

The northern cricket frog is one of New York State's smallest vertebrates. This frog is an aquatic species, and although it belongs to the tree-frog family it does not climb very much. Adults average only 1 inch (2.5 cm) in length; the male is usually smaller than the female. Cricket frogs exhibit a myriad of patterns and combinations of black, yellow, orange or red on a base of brown or green. Distinguishing characteristics are small size, dorsal warts, a blunt snout, a dark triangular-shaped spot between the eyes, and a ragged, longitudinal stripe on the thigh.

Northern cricket frog populations across much of their range have declined due to (among other factors) development and loss of wetland and upland habitats, water quality degradation (from road salts, fertilizers, etc.) and threats posed by commonly used agricultural and household chemicals and pesticides (which may be acutely toxic or which may skew sex ratios or otherwise diminish reproduction). In addition, northern cricket frogs are also expected to be susceptible to loss of populations from disease, persistent drought, severe winters, and similar events due to their low site populations, short life spans, high predation losses, and possible poor winter survival. Due to their relatively short life spans, cricket frogs may have a reduced ability to recover from environmental stressors.

Northern cricket frog breeding habitat may include any permanent body of freshwater, including lakes, ponds, rivers, and streams that exhibit sunny, open canopy shallows, gently sloping muddy banks, and abundant aquatic or shoreline vegetation. Preferred habitats tend towards slower and shallower water bodies with a mat of floating vegetation and organic debris and tend not to be deep, open waters or those with swift current. Use of non-traditional wetland habitats including cattail marshes and red maples swamps has also been documented, along with use of man-made wetlands which provide the desired structure.

Male northern cricket frogs use vegetated aquatic areas for calling and females use them for egg deposition. Breeding occurs in water, where the female lays numerous individual eggs or small clusters of eggs on vegetation, substrate or loosely.

In addition to the preferred characteristics of the wetlands, northern cricket frog breeding habitats are typically bordered by at least some surrounding forest, which provides for upland foraging and dispersal and, in some cases, potential overwintering locations. Current data indicates that upland behaviors generally take place within 1,500 feet of known breeding locations. While using these terrestrial habitats, northern cricket frogs may be found taking cover beneath grasses or other vegetation.

The diagnostic call of the northern cricket frog consists of a “cricket-like” chirp or trill. Sporadic daytime calling begins in early to mid-spring and generally extends well into the night as the season progresses (May to August) when nighttime temperatures exceed 60F. Increased vocalization appears to be correlated with warm, humid and still conditions.

Based on the presence of the on-site pond and man-made swale, potential Northern cricket frog habitat was identified on-site. However, further inspection of the pond indicated that the pond receives runoff from the adjacent highways and may serve as a detention area for water quality treatment. Road runoff including road salt, particulates, petroleum products, and waste oil are some of the materials that may enter the wetland/pond after heavy rains. Road salts in particular have been found to be extremely toxic to frogs. As such, the pond likely does not provide the high water quality generally associated with Northern cricket frog habitat. Similarly, the man-made wetland ditch displayed evidence of extensive eutrophication with a dense algae bloom observed on its entire surface. So a similar concern regarding the water quality was raised. No cricket frogs were heard spontaneously calling from either area during EcolSciences’ June 4, 21, or 24, 2016 field investigations. Cricket frogs are known to actively call during the day in the early breeding season (May-June).

As noted above, the July 5, 2016 New York Natural Heritage Program response did not identify Northern cricket frog as a species that may occur on-site when their response was solicited on June 3, 2016. However, in a letter dated July 14, 2016, NYSDEC indicated the presence of Northern cricket frog "in the proximity of the site" and requested a site biological assessment for this species. Although a habitat assessment can be conducted at any time of year, a presence/absence survey for Northern cricket frog in accordance with NYSDEC standard protocols *should be conducted between May 20 and July 10, with at least one survey performed in June and each survey separated by seven (7) or more days.* Since the recommendation for a survey was not provided to the applicant until after the survey period, it was determined with NYSDEC input that a modified late-season Northern cricket frog survey be conducted to determine if there was any evidence of Northern cricket frog presence on the Site.

The Northern cricket frog survey was conducted in accordance with many of the protocols established in the *Guidelines for Reviewing Projects for Potential Impacts to the Northern Cricket Frog* (S. Joule, 2009, G. Kenny, 2010). This protocol was also affirmed in the *Recovery Plan for New York State Populations of the Northern Cricket Frog (Acris crepitans)* (NYDEC, 2015). Based on these guidelines, qualified surveyors with knowledge of northern cricket frog ecology and experience identifying frog calls conducted a field survey July 28, 31, and August 5, 2016 to identify if northern cricket frog vocalization could be heard from the on-site waterbodies. Due to the late season, surveys were conducted as quickly as possible to take advantage of appropriate weather conditions. The two (2) on-site survey station locations focused on the areas of potentially suitable on-site open water habitats. The large off-site Goshen Reservoir located at the intersection of Reservoir and Conklingtown Roads was also surveyed. Northern cricket frogs are not known from this location, but the large size of the reservoir and its close proximity to the site made it a potential cricket frog location.

The fourth survey location is Glenmere Lake with a large confirmed Northern cricket frog population. Glenmere Lake is located in Warwick, New York approximately 2.0 miles from the Site. Based on a review of aerial mapping, the large "floating mat" wetlands located near the Warwick Road cul-de-sac appeared to provide excellent cricket frog habitat. The various sites, including the control sites, are described as follows.

- Harriman Road Pond – is at a man-made pond located along Harriman Road. The approximately 3 acre pond appears to collect road runoff from Highway 6 and Harriman Road. The pond is located on a formerly farmed parcel and extensive alterations of the drainage were observed including bermed pond edges, man-made culverts, and a gravel road around portions of the pond. The pond edge is characterized by a dense edge of cattail and scattered areas of common reed. The pond surface is generally open with areas of dense algae/duckweed observed. The pond does not exhibit the classic floating/matted vegetation characteristic breeding Northern cricket frog populations. Due to extensive road noise along Harriman Road, the survey stations consisted of a transect along the eastern and southern edges of the pond.

- Gumwood Drive Swale – is a man-made swale/ditch located along the eastern edge of the site along Gumwood Drive. The swale follows a gravel road that leads to a series of well houses for the Town of Goshen Water. Water quality of the swale appears stagnant with a heavy layer of duckweed. Marsh purslane forms dense rooted vegetation mats across the shallower

portions of the swale. Culverts lead into the swale from adjacent wetlands. The adjacent area includes maintained lawn to the east and reed canary grass, woolgrass, smartweed, sweetflag and purple loosestrife dominated the western side of the wet meadow constituting New York State wetland GO-41. Water levels in the adjacent wetlands appear significantly lowered by the adjacent swale. Due to the length of the swale, the survey consisted of walking the length of the swale along the open water perimeter. The extent of highway noise each evening determined how far the surveyor approached toward the highway.

- Goshen Reservoir (Reservoir #1), Reservoir Road – In addition to the on-site water courses, surveys were conducted on the Goshen Reservoir located west of Reservoir Road, approximately 750 feet from the site at the nearest point, but approximately 4,800 feet from the onsite Harriman Road pond. The Reservoir was surveyed due to its size (49 acres) and proximity to the site. The survey location was limited to one area located on the southern portion of the wetland, near the intersection of Reservoir and Conklingtown Roads. The Reservoir is a large open body of water. A small common reed/purple loosestrife wetland was identified to the south and a cattail dominated wetland was identified to the north within the survey area. The survey location consisted of one point adjacent to the reservoir playing the tape toward the north and south identified wetlands.

- Glenmere Lake, Warwick Place – The control site for this study was Glenmere Lake located off of Warwick Place, in the Town of Warwick. Glenmere Lake is the home of one of Orange County's largest Northern cricket frog populations and is located approximately three (3) miles south of the Site. Warwick Place provided a convenient cul-de-sac access the south central portion of Glenmere Lake. The road provides a clear overview of the lake and associated wetlands. Extensive floating and emergent wetlands characterized the survey area. Shrub islands and lily pads dominated much of the water surface. The survey location consisted of multiple points from the Warwick Place cul-de-sac playing toward Glenmere Lake.

It should be noted that the vegetative characteristics of the documented Northern cricket frog habitat at Glenmere Lake, differed significantly from all the other survey sites by the extensive area of lily pads, shrub islands, and other submerged/rooted vegetation observed within the shallow lake.

At the selected stations, each survey involved playback of recorded cricket frog calls in attempt to elicit a vocal response. The recording was played multiple times at each station, with silent listening before and between each recording. An additional period of silent listening followed the last of the recordings before proceeding to the next sampling point. Each survey location was surveyed for a minimum of ten (10) minutes. In addition, surveyors remained alert at all times for any spontaneous vocalizations that were not elicited by the playback. All surveys were conducted during evening hours beginning generally within 30 minutes after sunset, when other frog species were found to be extensively calling, and ending before midnight. Surveys all occurred on warm nights (66 to 74 F) with moderate to high humidity (64 to 75%) and little to no wind (0 to 3 on Beaufort Scale). On July 28 and July 31, heavy rains immediately preceded the survey. On August 5, no rains occurred before the survey, however extremely humid, warm, overcast weather characterized the survey period. Survey dates were each separated by a minimum of three (3) days.

On July 28 and August 3, Northern cricket frogs were heard spontaneous calling from the wetlands/waters of Glenmere Lake. Additional northern cricket frogs began responding when the taped calls were played. No northern cricket frogs were calling or responded to taped calls on August 5 at Glenmere Lake. No Northern cricket frogs were heard calling or responded to the tape at any of the on-site survey locations or at the Goshen Reservoir location. The summary of survey results is found in Table 3 of the Biological Assessment in Appendix C.

Although the survey was conducted outside of the recommended Northern cricket frog survey time-frame of May 20-July 10, 2016 these observations of calling cricket frogs at a known site on two of the three survey dates validates the timing and methods of the survey that was conducted on the Project Site and confirmed the absence of Northern cricket frogs on-site. DEC concurs and stated that no further Northern cricket frog surveys are required.

Dwarf Wedge Mussel- Federal and NYS Status: Endangered

The dwarf wedge mussel is a small freshwater mussel that spends the majority of its life buried almost completely in the bottom of streams and rivers. This rare mussel has a dark brown to yellow-brown ovate, bivalve shell with a blue, to silvery white inside and can reach a maximum length of 1.5 inches. Typical habitat for this mussel includes running waters of all sizes, from small brooks to large rivers. The only location in Orange County where the dwarf wedge mussel has been identified is in the lower reaches of the Neversink River where a population of at least 10,000 exist[3]. Although the Project Site contains a portion of the Otter Kill, the project biologist conducted a habitat assessment of the portion of the river bordering the Project Site. The onsite stream was heavily silted and flowing tan/ brown in color. This river is not suitable for the dwarf wedge mussel due to its high turbidity and the requirement of the dwarf wedge mussel for clean, shallow water. No impacts to the dwarf wedge mussel are anticipated.

Based on the initial site investigation, no appropriate habitat was identified for dwarf wedge mussel. All of the on-site stream channels were found to be largely ephemeral in nature and not conducive to supporting a mussel population throughout the year. During EcolSciences' summer field investigation, the stream channels were characterized by intermittent puddles of water in streambeds characterized by cobble, rock, silt, sand, and occasional muck soils. With limited ability to move, dwarf wedge mussels are dependent on consistent stable stream flows. The on-site stream channels do not provide sufficient habitat and no additional field habitat assessments for dwarf wedge mussel was conducted.

Small-Whorled Pogonia- Federal Status: Threatened, NYS Status: Endangered

The small-whorled pogonia is a member of the orchid family. It usually has a single grayish-green stem that grows about 10 inches tall when in flower and about 14 inches when bearing fruit. The small-whorled pogonia favors open, dry, deciduous forests with low nutrient, acidic soils that are very stony, fine sandy loams and contain a thick layer of dead leaves. These forests are usually dominated by such tree species as maple, oak, beech, hickory, pine and sometimes hemlock. They require filtered sunlight and sparse shrub and herbaceous layers. They often grow on slopes near small streams. They also require a slow movement of water, often restricted by a characteristic in soil referred to as a fragipan. Fragipan are "brittle, loamy, cement-like layers below the surface of

[3] http://www.dec.ny.gov/animals

the soil which are low in porosity and force the water to drain laterally instead of vertically." (USFWS 2008, Massachusetts Natural Heritage Endangered Species Program, 2009). This species has been located only seven times in New York State, with only two recent records in 1976 in Onondaga County and again in Schunnemunk Mountain State Park in Orange County in 2010.

During the June site investigation, small-whorled pogonia stalks, leaves or flowers would have been visible. Although USFWS identified small-whorled pogonia as potentially occurring in Orange County, based on available literature, the State of New York has only one known population of the Federally protected plant species and it is not found in the vicinity of the Site. This species was not identified on the Project Site and it is the opinion of the botanist that this species does not occur on the site. Therefore, no additional field habitat assessment for small whorled pogonia was conducted.

Species of Special Concern

Special concern species are species that are not endangered or threatened. These are species that the NYSDEC feels could become listed if the reasons for their "decline" are not addressed. In many instances, many of these species are quite common and widespread in NYS but there is not good data on their distribution. As part of the site biological assessment an inventory of avian species utilizing the site in the spring and early summer was compiled as well as an evaluation of the Second Atlas of Breeding Birds of New York which was reviewed for possible species which could be located on the Project Site. While the bird list predominantly consists of common year-round and summer residents of woodlots and successional fields, an adult Cooper's hawk (*Accipiter cooperii*), a New York species of special concern, has territory that includes a portion of the on-site woodland. Two USFWS-listed birds of conservation concern, wood thrush (*Hylocichla mustelina*) and willow flycatcher (*Empidonax trailli*), are also likely to nest on-site. No physical habitat was identified during the site investigation. A full list of fifty-two birds identified during the site visits is provided in the habitat assessment in Appendix C. No other species of special concern are believed to be located on the site.

Other Onsite Species

During the habitat assessment, other wildlife observations were also collected. In addition to the 52 avian species inventoried and discussed above, six (6) mammal species; white-tailed deer, muskrat, gray squirrel, eastern chipmunk, raccoon, and opossum were observed on site by sight, sign, or track. In addition to those species which were observed it is likely the site also supports species of mammals including mouse, mole, skunk and eastern cottontail. One large bat (species unknown) was observed foraging over New York State wetland GO-41. Herptile species observed included American toad, green frog, northern gray tree frog, bullfrog, painted turtle, and common snapping turtles, also observed by sign or direct observation during the site visits. Other reptiles and amphibians which could also be supported on the site include common garter snakes, northern water snake, wood frog, spring peeper and spotted salamander.

Off-site Areas

In addition to disturbance on the Project Site itself, the project will involve the disturbance of several off site areas for traffic improvements and as part of the development of a new Village well on the Village's existing well site in the Town of Wallkill. An assessment of the habitat characteristics for each off-site improvement area was conducted in August 2016. The project

biologist evaluated these areas for all of the species that were evaluated in the Habitat Assessment prepared for the Project Site.

All of the off-site improvement areas were reviewed for the habitats for these species. As with the LEGOLAND site, no permanent streams occurred at any of the off-site study areas, so habitat for dwarf wedge mussel does not occur. Similarly Small-Whorled Pogonia is known from only one site in New York and is not anticipated to occur within any of these disturbed off-site areas proposed for road and well improvements. Evaluations of habitats for the remaining species were made for each area.

A brief description of each area proposed for modification and its potential to provide habitat for the above-listed threatened and/or endangered species follows:

Possible Roundabout - A possible roundabout is proposed at the intersection of Harriman Drive and Route 6/17A located west of the LEGOLAND site. The roundabout will replace the current intersection. The area southwest of the roundabout is paved parking associated with the existing commercial development. The areas to the northeast and northwest are maintained lawn/mowed emergent wetlands. No habitat for threatened or endangered species is associated with these habitats.

Construction of the roundabout will result in encroachments into a palustrine emergent wetland located at the southeast corner of the existing intersection. Emergent wetlands may provide habitat for the Federally threatened, State endangered bog turtle. Emergent wetlands with an open water component may support the State endangered Northern cricket frog. The identified wetlands include cattail, goldenrod, purple loosestrife, small-flowered agrimony, and New York ironweed. Scattered stems of tree-of-heaven and red cedar occur within the potential round about development area. The wetland soils are dense mineral soils, with no visible saturation. No surface hydrology was observed. The hydrology of the wetland appears limited to a roadside ditch drainage system. The absence of any open water component indicates that the area is not habitat for Northern cricket frog. In the absence of muck-like soils and sufficient surface hydrology, the wetlands do not provide appropriate bog turtle habitat. The proximity of busy roadways, extensive pavement, and commercial development likely preclude the successful use of the existing roadways and proposed roundabout by most wildlife species.

Intersection of Harriman Drive and South Street - This intersection proposes minor expansion of the existing roads to provide turning lanes. All expansion will occur with maintained lawn or shoulders of the existing roads. No tree removal appears necessary. No wetlands, watercourse, or ponds are impacted or occur in close proximity. No habitat for the above listed threatened or endangered species occur at this intersection

Intersection of South Street and Route 17M - This very busy intersection includes minor road widening associated with turn lanes. The area to the east of the intersection is largely pavement associated with existing commercial uses. Based on the provided design drawings, the improvements will not impact the majestic sycamore tree located northeast of the intersection. The lands located to the northwest and northeast of the intersection are largely associated with lawn/early successional field vegetation. Emergent wetlands dominated by narrow-leaved goldenrod appear located outside of any potential road improvements. Scattered aspen saplings

also appear to be located outside of the road improvements. These small trees do not provide habitat for Northern long-eared or Indiana bats. Removal of trees of greater than 3 inch DBH during the bat active season may impact bats. However, no tree removal is proposed on the project during this period, so no impacts are anticipated. No habitat for the other species was observed in or adjacent to the road improvement area.

Upgrade and widen intersection of Route 6/17A and Route 17M - Improvements at this intersection includes a new continuous right turn lane that will be located southeast of the existing intersection. The turn lane will encroach into a common reed dominated wetland. The location of the existing intersection between two busy roadways likely precludes most successful use of the wetlands by any wildlife species. Dense common reed and absence of water does not provide appropriate habitat for the wetland dependent bog turtle or Northern cricket frog. If no tree removal is proposed, scattered small red maple and pin oak observed in the vicinity of the new turn lane, no bat habitat is impacted by the road improvements. If tree removal is required, but conducted when the bats are in hibernation, no impacts to overall potential bat habitats are anticipated.

Proposed Well – Potable water for the project will be provided by the Village of Goshen from its well site off Stony Ford Road in the Town of Wallkill. The Village's wellhouse and two production wells are located along a gravel/asphalt millings roadway within a fenced enclosure. Any additional wells proposed on the Village owned property can also be accessed from this existing road. New wells are proposed between 200 and 400 feet from the existing fenced facility, but will be located outside of the fenced enclosure. The vegetative community along the roadway is forested wetlands with pin oak and red maple dominating the overstory. The shrub stratum includes spicebush, highbush blueberry, and winterberry as well as vines of poison ivy and Virginia creeper. The sparse ground cover includes jumpseed, stout woodreed, and sensitive fern. No streams, watercourses, or ponds were observed along the existing roadway in the area of the proposed wells.

Since many of the trees along the access road are greater than 3 inch DBH, the forested area may provide Indiana or Northern long-eared bat tree roosts. However, the development of the new wells will require minimal vegetative disturbance to drill the well or excavate a trench for a new waterline. No additional well house or fenced enclosures are proposed, therefore minimal ground disturbance and no tree removal is proposed. In the absence of tree clearing during the bat active period, construction of the proposed wells should not impact threatened or endangered species habitat.

2. Potential Impacts

After full build out of the project, 3,372,130 square feet (77.41 acres) will be made impervious and 132,977 square feet (3.1 acres) of porous pavers will be utilized in parking lot construction. A total of 436.38 acres of land will remain as undeveloped open space and manicured lawn.

The development is focused in the center of the site and is designed to avoid wetland areas to the greatest extent possible. As part of the site development, 3,267 square feet (0.075 acres) of Federal wetlands will be permanently disturbed. This falls under the 0.1 acre disturbance threshold and no individual permit will be required. An additional +/- 430 square feet will be temporarily disturbed for grading but will remain undeveloped post-construction. No NYSDEC wetlands will be

disturbed as part of this development nor will any areas of NYSDEC wetland 100-foot buffer. No encroachments to the Otter Kill are proposed. After development of the site, 115 acres of wetland areas will remain on the site to continue to support wildlife species. Species which may be present or use this wetland area as habitat will continue to be able to do so with minimal impact.

As a result of the project development some common species which currently occupy the site may be displaced from the Project Site. No Bog Turtles, Northern Cricket Frogs, Dwarf Wedge Mussel or Small-Whorled Pogonia will be displaced by the proposed project based on the conclusions of the Biological Assessment that the project site does not meet the criteria to provide habitat for these species.

Based on the biologist's conclusion that the site is a possible habitat for Indiana and Northern long-eared bats, the clearing of trees for the development of the proposed project could impact potential habitat.

265.79 acres of deciduous forest habitat will remain on the site after construction and development of the proposed project. Several mature trees will be removed for grading and construction activities. The forested area to remain will not be fragmented, but will continue to seamlessly connect to adjacent properties on both the east and west of the site as it does today to facilitate movement of species in this area.

11.4 of successional farm fields will remain and brush areas will remain post construction.

3. Proposed Mitigation Measures

As discussed above, the project has been designed to avoid impacts to on-site wetlands and stream corridors. Where necessary, proposed wetland crossings will be constructed with open-bottom box culverts. Open bottom box culverts are the preferred stream and wetland crossing method recommended by the NYSDEC for protecting water quality and will allow amphibious species to pass safely underneath the road surface. Structures will be designed and installed so that the natural stream flow and bottom substrate are mimicked throughout the crossing and so that the structure does not constrict or fragment the stream. All recommended Best Management Practices will be adhered to.

Development of the site has been designed to focus development in the central area of the site and will minimize impacts to areas outside of the disturbance area. This ensures that connectivity of habitat is preserved including hedgerows, stream corridors, tree lines, and forest habitat. The on-site utility alignment may also provide a valuable upland travel corridor for bats through the site. Maintaining habitat connectivity, especially along the sites riparian corridors, allows bats to move through the property and provides access to the large emergent aquatic habitats that may support concentrated insect diversity and density.

All onsite tree clearing will be conducted during the bats hibernation period, generally between November 1 and March 31 during the hibernation period of the Indiana and Northern Long Eared Bats to avoid impacts to any active roost trees. Indiana and Northern long-eared bats generally hibernate in communal caves or old mine shafts, many of which have already been identified and protected by New York State. The Project Site does not provide hibernacula potential. Therefore, until the bats disperse to their summer range, tree clearing in the winter months will not negatively

impact bats usage of the site. To off-set any potential incidental take of the Indiana and northern long-eared bat due to indirect effects, the Proposed Project would avoid disturbance of approximately 265.79 total acres of woodland on the Project Site that would maintain Indiana and Northern long-eared bats with potential foraging and roosting habitat. In addition to forest areas, there would also be over 115 acres of wetland areas and 40 acres of successional fields which will also remain.

The applicant will incorporate into their landscaping plan high quality potential roost trees wherever possible. In addition, the project landscaping plan will incorporate high quality native species for supplemental planting throughout the development site. These trees may include shagbark and bitternut hickory, black locust, and American elm. The project will avoid the intensive use of insecticides or herbicides outside of the park area that may impact prey species or vegetation. Unless damaged trees are a danger to the theme park visitors; snags, dead limbs, or other potential roosting habitat will be allowed to remain outside the park area until they no longer provide potential bat habitat.

As detailed in Section III-N below, other features of the Proposed Project and measures that would be implemented to minimize potential impacts to Indiana and Northern long-eared bats would include Best Management Practices for outdoor nighttime lighting, with LED, down-cast, night-sky friendly light fixtures, reduction of lighting levels to minimum security levels and no nighttime operation of park.

E. Groundwater and Water Supply

1. Existing Conditions

There is one well on Lot 11-1-47 within the Project Site which serves the existing multi-family dwelling on that lot. Three wells are located on parcels 11-1-58 and 11-1-49.2 which are not in use. These wells were tested as part of the environmental investigation for the Lone Oak residential subdivision which was previously proposed on that parcel (SDEIS accepted February 19, 2009). That testing, done by Leggette, Brashears and Graham. Inc (LBG) determined that three of the existing bedrock wells were suitable to supply water to the 132 dwelling units which were proposed on the site with 431 projected residents. Well 1 is 500 feet deep, Well 2 is 300 feet deep and Well 3 is 600 feet deep. All wells were drilled in 1996.

Well 1 was determined to have a yield of 15-25 GPM. Based on the results of a 72-hour, simultaneous pump test, it was established that Wells 2 and 3 could be pumped simultaneously at 46 and 37.5 GPM, respectively, under the sustained drought condition that had been experienced from July 1998 through July 1999. (See LBG well testing report in Appendix D for additional information regarding these wells including water quality data and hydrographs)

Four of the wells and a pump house which are part of the Arcadia Hills Water District are located on the subject property. Three wells are located on land owned by the Town of Goshen (11-1-60, 11-1-65 and 11-1-67). One of the wells is located on privately owned land (11-1-49.2). The pump house is located partially on Town-owned land. This infrastructure is owned and maintained by the water district which serves the existing residential subdivision.

Based on Orange County GIS there are no aquifers underneath the Project Site. The nearest aquifers (sand and gravel) are located on the north side of Route 17 in the vicinity of Ward Road and east of the Project Site in the Town and Village of Chester. Groundwater budgets are generally utilized to compare proposed use of groundwater with estimated recharge to evaluate aquifer impacts. Typically, groundwater recharge is equivalent to precipitation and surface water inflow. Typically in Orange County, recharge to groundwater is estimated at 400,000 GPD per square mile or 625 gallons per day per acre. Rainfall is estimated in Orange County to be approximately 43 inches per year. As this project is not utilizing groundwater and is designed to be in compliance with NYSDEC stormwater practices and the final design will have more than 380 acres of undeveloped open space no impacts to groundwater are anticipated. If the proposed project was intending to utilize groundwater for supply purposes, while also altering the land surface of the recharge area, a more detailed analysis would be required.

The Town of Goshen operates four public water districts. The closest is the Arcadia Hills Water District to the immediate east of the Project Site. The Arcadia Hills Water District serves approximately 822 people via 258 service connections from 11 ground water wells.

The Village of Goshen operates a public water system for land within the Village and various outside users approved on a site by site basis. The system currently serves approximately 5,500 people through 1,750 service connections. Water sources include two surface water reservoirs and two Crystal Run Village Wells located off Stony Ford Road in the Town of Wallkill. The Green Hill reservoir, located off Conklingtown Road, runs into the Prospect Reservoir, located off Lower Reservoir Road, where water is gravity fed into the Village's Water Filtration Plant before distribution throughout the system. Glenmere Lake is an approved emergency source. The total water produced from all sources in 2015 was 239 million gallons and the total usage reported from June 2015 to June 2016 was 237 million gallons. According to water system operational records, the water system has a capacity of 1.8 million gallons per day (GPD) with a 2015 average daily system demand of 655,178 GPD and a peak single day consumption of 888,400 GPD based on the Village's annual water quality report.

2. Potential Impacts

To determine anticipated water demand, usage from LEGOLAND Windsor was utilized as a benchmark due to the similar size and seasonal nature of the park. LEGOLAND Windsor is a 150-acre park with approximately 2.2 million visitors per year with two water attractions but no waterpark such as those provided in Florida and California. In 2015 the LEGOLAND Windsor Resort had a combined average water usage for the park and hotel of 176,438 GPD with peak usage in July of approximately 255,394 GPD. By comparison, the month of the least water use was December with a usage of 49,127 GPD. Existing LEGOLAND Parks in California and Florida are not comparable for water usage because both of these parks contain water parks which consume more water than is anticipated to be used at the Goshen Project Site.

No use of ground water is proposed for the Proposed Action. Two of the wells on the Project Site developed as part of the Lone Oak residential subdivision will be offered for dedication to the Town of Goshen and Arcadia Hills Water District for their municipal use along with a 100 foot radius area as required by the NYS Health Department. An additional 100 foot easement area (200 foot total) would be delineated to protect water quality consistent with the regulations. In addition

to areas to be dedicated, easements will also be provided to the Town for future access and maintenance of these areas. No roads or other structures will be constructed near the wells as it would require wetland disturbance and permitting.

Wells and infrastructure on the Project Site which are currently part of the Arcadia Hills Water District system will be subdivided from the property and offered for dedication to the Town of Goshen and Arcadia Hills Water District. Other wells on the Project Site will be abandoned in place consistent with NYS Health Department Standards. Based on the NYS Health Department Recommended Standards for Water Works all wells shall be sealed to prevent undesirable exchange of water for one aquifer to another. Preferable fill material is neat cement grout. Fill materials shall be applied to the well hole through a pipe, tremie, or bailer.

Potable water for the Proposed Action will be provide via the Village of Goshen public water system. On August 8, 2016 the Village Board of Trustees passed a resolution agreeing to provide the Project Site water subject to the receipt of final engineering studies by the Village's designated engineer, completion of SEQR and final contractual agreements. This decision was based upon the findings of an independent engineering study which demonstrated that the Village's water supply could provide adequate service to both existing Village water customers and all other potential future system users currently within the Village based on existing zoning (see signed resolution and water supply analysis in Appendix E).

The project's water distribution system will include running approximately 12,680 feet of ductile iron water main connecting to the water main in Harriman Drive and running south along the proposed access road to the booster station and storage tank, running along the ring road and down to the back-of-house facilities and looping back around. Water storage will be provided with a 522,000 gallon, glass-fused-to-steel potable water storage tank to be located on the west side of the property. This tank will be approximately 30 feet tall and 56 feet in diameter and will provide adequate storage for fire flow capacity. The project will be designed to meet ISO fire flow standards of minimum 20 psi for fire suppression. Fire hydrants will be installed at all water main high points and at a maximum spacing of 400' along the length of the water mains. A hydrant will be available at the closest point to the Arcadia Hills subdivision for an emergency connection.

The water main in Harriman Drive would be owned and maintained by the Village of Goshen. All water infrastructure on the LEGOLAND New York property would be owned and maintained by the property owner. See Figure III-9: On Site Water System. No easements for maintenance are required; however, should easements be determined to be necessary, the Project Sponsor will coordinate with the Town and Village of Goshen.

Water would be treated with Ph controller and chlorine prior to its use in any attractions as required by the New York State Department of Health.

To supplement the water supply of the Village of Goshen the Project Sponsor offered to fund the drilling and development of an additional well on Village of Goshen-owned well site in the Town of Wallkill. The Village has retained an independent hydrogeologist and has begun a groundwater exploration program. To date soil borings have been completed in the wellfield, soil samples of the sand and gravel material encountered have been secured and analyzed. The new well is anticipated to be located approximately 200 feet west of the two existing wells. A test well will

be installed in the upcoming weeks and pump test and water quality testing will be completed as part of this program. A water taking application and design plans will be submitted to the regulatory agencies for review and approval to convert the test well into a production well. This well would be owned, operated and maintained by the Village of Goshen.

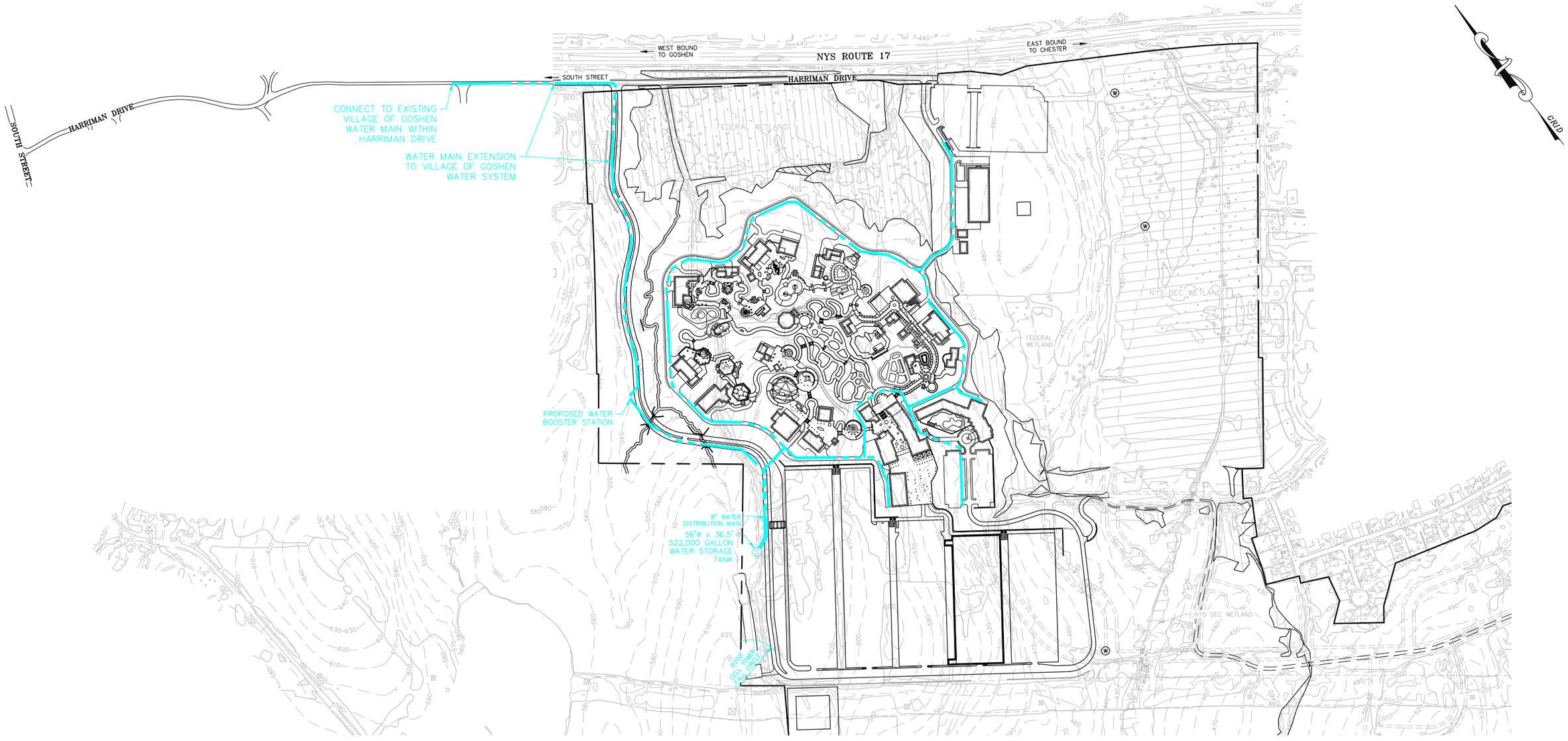
As shown in Figure III-9, public water supply will be brought to the Project Site which could, theoretically, be extended to the adjacent residential neighborhood. There is no intent to connect this neighborhood to the Project Site's water system or the Village's water system at this time. No study was done to determine if the Village's water supply system has the capacity to serve this development. These studies would be done by the Town's Arcadia Hills Water District and any connection would require additional approval from the Village of Goshen Board of Trustees and the Town of Goshen Town Board.

Chemical storage on the site would include cleaning supplies, waterproof sealant, paint, fuel, motor oil, and landscaping herbicides and pesticides. All hotel cleaning chemicals would be stored inside the hotel. All other chemicals used at the theme park would be stored in locked storage buildings in the back-of-house area. Gasoline and diesel fuel are stored in above ground tanks in a lined enclosure with the capacity to hold the full volume of fuels in the event of a leak. Spill kits and fire extinguishers are located in all areas of chemical storage and any other applicable OSHA standards will be adhered to.

It would be unlikely that these chemicals would have any impact on groundwater as they are all stored in enclosed buildings. The onsite well located closest to the hotel is approximately 400 feet, while the closest well to the back-of-house warehouse and landscaping storage area is just over 900 feet. The theme park is not open during winter months and would therefore have no use for de-icing chemicals. A private snow removal company would be contracted for snow removal in the back-of-house and hotel parking areas during winter months. Salt or other de-icing agents would be brought in by the contractor and not stored on site. Stormwater from parking areas will flow into catch basins for treatment prior to release offsite. It is unlikely de-icing agents would negatively impact water resources.

3. Proposed Mitigation Measures

The use of municipal water eliminates potential impacts to groundwater at the site and to all adjacent users of groundwater. There will be no use of well water by the Project Sponsor.



GRAPHIC SCALE

600 0 300 600 1200

(IN FEET)

1 inch = 600 ft.

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FIGURE III–9
ON SITE WATER SYSTEM

LEGOLAND NEW YORK

TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

Date:	SEPTEMBER 28, 2016
Revisions:	NOVEMBER 3, 2016
CAD File:	160042-G_U PLAN
Layout:	III–9 WATER SYSTEM
Sheet No.:	1 OF 1
Drawing No.:	C3D D – 16 – 0042 – 01

Drawn By:	Checked By:	Scale:	Tax Map No.:
MK		1" = 600'	SEE SITE PLANS

To reduce the overall use of water on the site, construction will include water saving fixtures consistent with NYS Building codes. Onsite fountains and other water attractions (i.e.: 'Rescue Academy' shown right) will recycle water. Laundry services for the hotel are sent off-site which will reduce onsite water usage. Native plants will be used in the landscaping plan to reduce the need for irrigation.

The Project Sponsor will pay all user-incurred fees for water usage consistent with an agreement with the Village of Goshen that would be drafted and executed following the completion of SEQR. Water revenue shall provide a significant benefit to the Village of Goshen.

All infrastructure will be constructed to Village specifications and will be reviewed by the Village's consultant as well as the Town Engineer.

Potable water usage is an unavoidable adverse environmental impact for development of the site.

F. Wastewater Management

1. Existing Conditions

There is no wastewater infrastructure on the Project Site. A sewer main exists along Harriman Drive providing service to Arcadia Hills and the other uses along Harriman Drive. The wastewater collection and conveyance system in Arcadia Hills conveys sewage effluent to the Village of Goshen Sewer Treatment Plant. The system consists of a 6" forcemain with 2 pump stations with backup generators. Infrastructure was last upgraded last in 2012.

The Town of Goshen does not operate a public wastewater treatment system.

The closest available public wastewater treatment facility is located in, and operated by the Village of Goshen. The Village of Goshen Wastewater Treatment Plant, located on Cypress Road, is approximately 2.5 miles from the Project Site. Based on its current SPDES permit the plant has a capacity of 2 million gallons per day and currently the plant accepts a summer usage peak of 774,000 gallons per day according to the Village's independent engineering consultant.

2. Potential Impacts

Recorded wastewater volume at the LEGOLAND Windsor Resort which is a 150-acre seasonal park hosting approximately 2.2 million visitors per year with two water attractions but no waterpark such as those at LEGOLAND Florida and LEGOLAND California, totaled 33,018,594 gallons of wastewater annually in 2015 for the park and hotel which equates to an average of 90,461.90 GPD. As anticipated, summer flow demands are higher than other seasons. The Proposed Action is anticipated to generate a daily peak in the highest usage month (July) of

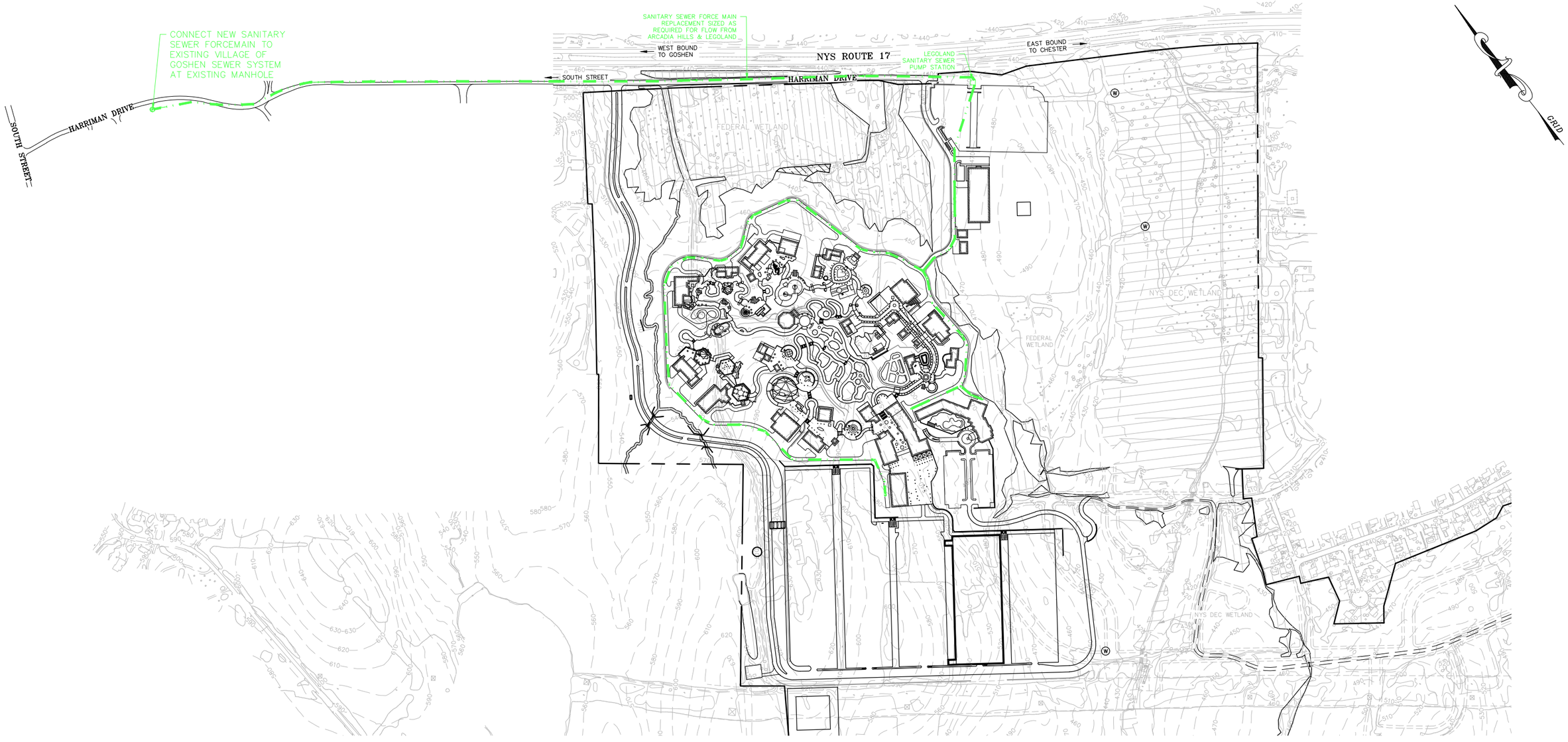
approximately 130,689 GPD of wastewater. By comparison, the lowest wastewater volume was recorded in January generating 26,025 GPD. Existing LEGOLAND Parks in California and Florida are not comparable for water usage because both of these parks are open year round and contain water rides which increase wastewater generation over that which is anticipated at the Goshen Project Site. Based on the capacity stated above, and a buildout analysis that considers a potential build out of the Village the Village's system can accommodate the Proposed Action. This finding has been confirmed by the Village's engineering consultant. A report from the Village's reviewing engineer has been provided in Appendix E.

Wastewater collection and conveyance services for the Proposed Action will be provided by the Village of Goshen. The project would be an "Out of District" user of the Goshen Sewer District. On August 8, 2016 the Village Board of Trustees passed a resolution agreeing to provide the Project Site with sewer service subject to the receipt of final engineering studies by the Village's designated engineer, completion of SEQR and final contractual agreements (see signed resolution in Appendix E). This decision was based upon the findings of an independent engineering study which demonstrated that the Village's sewer treatment plant could adequately accept effluent from both existing Village sewer customers and all other potential future system users currently within the Village, based on existing zoning.

The onsite sewer collection and conveyance system will be a looped system generally following the proposed service road and conveyed to a new sanitary sewer pump station to be installed in the back-of-house area near the existing end of Harriman Drive. An existing sanitary sewer forcemain is located within Harriman Drive and currently conveys wastewater from the Arcadia Hills sanitary sewer pump station. A portion of this existing forcemain will be replaced by the Project Sponsor with a new forcemain within Harriman Drive which will be sized to accommodate the flow capacity demands of both the existing Arcadia Hills pump station and the new LEGOLAND pump station. The existing Arcadia Hills forcemain will be connected to the newly installed forcemain in the vicinity of the existing end of Harriman Drive. The remainder of the existing Arcadia Hills sanitary sewer forcemain from Harriman Drive to the Arcadia Hills pump station will remain in-place and undisturbed. The new force main will travel west to an existing man hole in Harriman drive where the new force main will connect to the existing Village collection system. See Figure III-10 for map of the proposed system. Based on pipe sizing and calculations of anticipated flows, it does not appear that the project would cause any choke points between the project site and the Village of Goshen Wastewater Treatment Plant and no upgrades will be necessary. An engineering report of the proposed system has been provided in Appendix E.

All onsite improvements will be owned and maintained by the property owner. All offsite infrastructure will be owned and maintained by the Village of Goshen. Both on and offsite infrastructure will be constructed prior to the issuance of any certificate of occupancy for the park. No Transportation Corporation or Sewer Works Corporation would be required. No easements for maintenance are required; however, should easements be determined to be necessary, the Project Sponsor will coordinate with the Village of Goshen.

Use of the Village of Goshen public wastewater system is more protective of surface and groundwater resources than the creation of an onsite treatment which would include discharge to surface water resources.



GRAPHIC SCALE

600 0 300 600 1200

(IN FEET)

1 inch = 600 ft.

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FIGURE III–10
ON SITE SEWER SYSTEM

LEGOLAND NEW YORK

TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

Drawn By: MK	Checked By:	Scale: 1" = 600'	Tax Map No.: SEE SITE PLANS	Drawing No.: C3D D – 16 – 0042 – 01

Date: SEPTEMBER 28, 2016
Revisions: NOVEMBER 3, 2016
CAD File: 160042-G_U PLAN
Layout: III–10 SEWER SYSTEM
Sheet No.: 1 OF 1

Pump station noise would be barely discernable above grade particularly given the existing ambient noise from NYS Route 17 in the immediate vicinity.

No odor is associated with the onsite collection and conveyance system as the system is mostly gravity fed. As odors would negatively impact guests' experience as well as potential surrounding properties, any odors which are deemed noticeable once the park is in operation would be remediated with charcoal filters at the proposed sewer pump station.

3. Proposed Mitigation Measures

The Project Sponsor will pay all user-incurred fees for wastewater generation consistent with the agreement with the Village of Goshen.

All terminal manholes which may connect the subject property with Arcadia Hills will be disconnected and sealed to eliminate any existing infiltration and inflow from the existing sanitary sewer system.

The wastewater system improvements and sewer usage revenue shall provide a significant benefit to the Village of Goshen and, as a result, grant funding for the required wastewater system improvements shall be sought. The wastewater system design will be reviewed by the Village Engineer, Town Engineer and NYSDEC. All infrastructure will be constructed to Village specifications and installed prior to the issuance of a Certificate of Occupancy for the project. Ultimately the Town Building Inspector and Town Engineer will be responsible for ensuring any mitigation measures are carried out as approved by the Planning Board.

G. Stormwater Management

1. Existing Conditions

Stormwater runoff and its subsequent impact to receiving water bodies led Federal, State and Local officials to set new standards on stormwater discharge to attempt to restore stream water quality and control peak flow rates for specific storm events. 40 CFR, Part 122 prohibits point source discharges of stormwater to waters of the United States without a permit issued under the National Pollutant Discharge Elimination System (NPDES). The EPA delegated the administration of the NPDES program to the NYSDEC, which regulates stormwater through the SPDES regulations currently in effect. Current regulations require that any construction site proposing a disturbance of one acre or greater prepare a Stormwater Pollution Prevention Plan. A Stormwater Pollution Prevention Plan (SWPPP) has been prepared consistent with NYSDEC design manual standards. A full copy of this document can be found in Appendix F of this document. The SWPPP is summarized below.

According to the NYSDEC, a watershed is an area of land that drains water into a specific body of water. Watersheds include networks of rivers, streams, and lakes and the land area surrounding them. Watersheds are separated by high elevation geographic features (mountains, hills, ridges). There are 17 major watersheds in New York State. The Project Site lies within the Lower Hudson River Watershed which consists of 4,982 square miles of land. Within this watershed there are more than a dozen subwatersheds. The Project Site is within the Moodna Creek Watershed and the Lower Otter

Kill subbasin of that watershed. On the Project Site itself, there are 2 distinct drainage areas, or watersheds, separated by area of higher elevation on the site at the utility easement.

Watershed A consists of approximately 1,216.22 acres of land encompassing the watershed of the Otter Kill to the south of NYS Route 17. Wetlands located in this watershed generally follow the Otter Kill and its tributaries. Arcadia Hills, a large residential subdivision, is located to the east of the Otter Kill, adjacent to NYS Route 17. Portions of Arcadia Road, Conklingtown Road, Reservoir Road, and Fort Hill Road are also in this watershed. Several farms and larger residential lots are south of Conklingtown Road. Approximately 67.13 acres of impervious cover exists in this watershed consisting of roads, buildings, and driveways. Village of Goshen Water Supply Reservoir #2 and its associated dam are also located in this watershed. The Otter Kill flows through the reservoir before entering the project area, the watershed area tributary to the reservoir is approximately 483.56 acres. A distributary splits from the Otter Kill just upstream of the reservoir which flows around the reservoir and rejoins the Otter Kill to the north. Due to the location of Goshen Reservoir #2 and dam within a larger watershed and the presence of a distributary around the reservoir, the detention capability of the reservoir will be negligible. Stormwater runoff in the watershed is collected by smaller ditches and unnamed tributaries to the Otter Kill, then flows through and around Goshen Reservoir #2. The Otter Kill then flows north through several culverts, along the west side of Arcadia Hills, where it splits again before rejoining at the NYS Route 17 culvert crossing.

Watershed B consists of approximately 164.86 acres of land encompassing the watershed to the on-site pond adjacent to Harriman Drive and outlet culvert beneath NYS Route 17. The majority of the area is woods and wetland areas. A deteriorated access road runs south to the remains of a restaurant and a communications tower. A portion of Harriman Drive and two residential dwellings are located in this area. Approximately 2.48 acres of impervious cover exists in this watershed consisting of roads, buildings and driveways. A small pond exists near the highest point adjacent to the communications tower. The upper pond discharges to a ditch that runs north to the larger northern pond. The larger pond discharges to a ditch and culvert beneath NYS Route 17. The ditch eventually joins the Otter Kill to the north of NYS Route 17. Figure III-11 depicts the pre-development watershed areas.

2. Potential Impacts

Stormwater runoff is generated when precipitation from rain and snowmelt events flows over land or impervious surfaces such as paved streets, parking lots and rooftops and does not seep into the ground. Consequently, it accumulates and transports chemicals, nutrients, sediment or other pollutants and debris. If the runoff is not captured or it is discharged without first being treated, it can adversely affect water quality in the receiving lakes, rivers and estuaries.

The proposed development includes a theme park, hotel, parking areas, back-of-house facilities and associated utilities which will require 6,054,527 square feet (140 acres) of site disturbance, of which 3,372,130 square feet (77.41 acres) will be made impervious (including 132,977 of pervious pavement areas which are considered impervious for the purposes of this analysis as a worst case scenario). The site has been designed to limit post-development flow rates to less than or equal to pre-development flow rates at all study points. Twenty three stormwater areas are proposed at the Project Site for water quality treatment and stormwater quantity control. Stormwater water quality treatment will be provided through a filtration using seven underground stormwater sand filters,

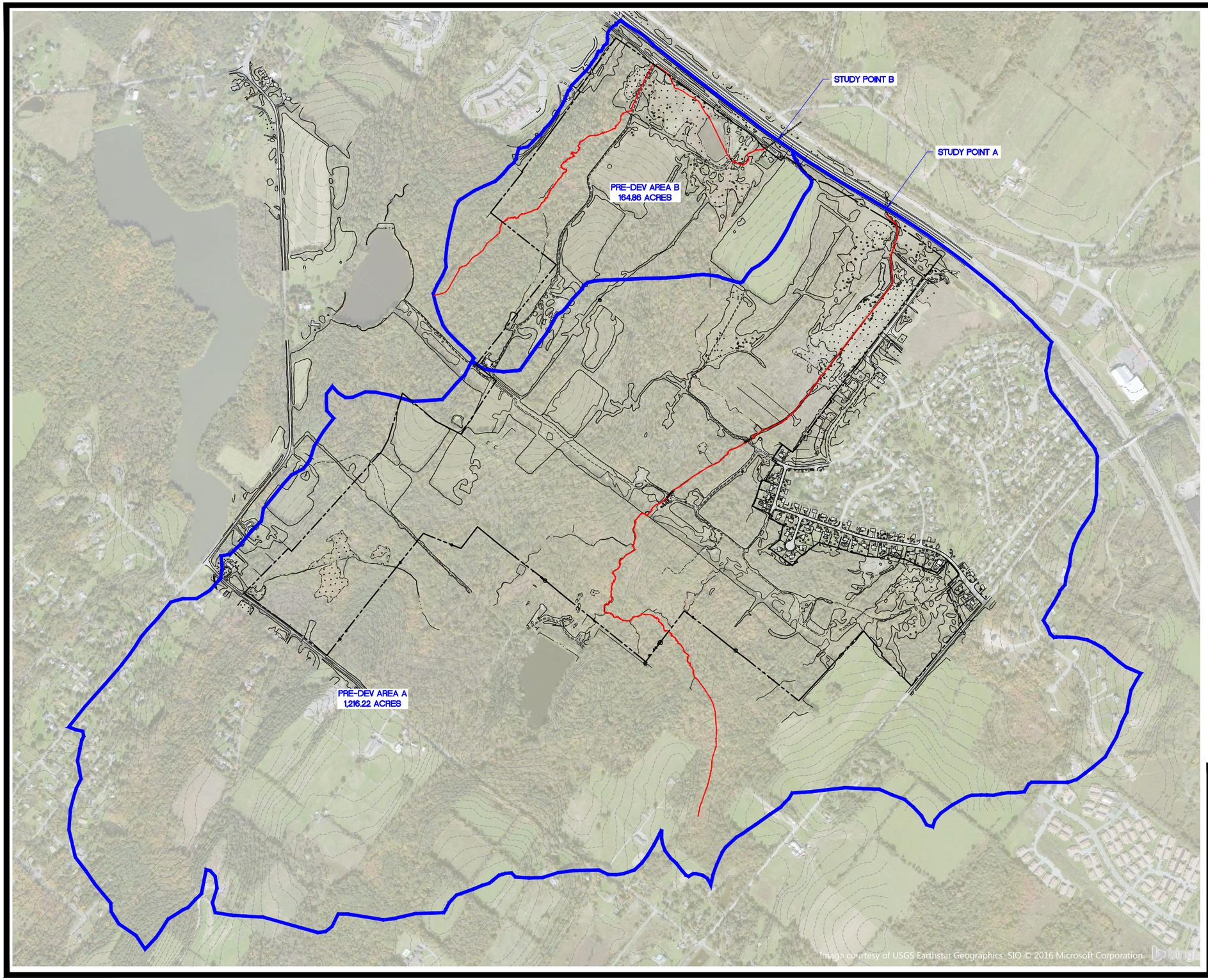

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FIGURE III-11
PRE-DEVELOPMENT WATERSHED AREAS

LEGOLAND NEW YORK
TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

Date:	SEPTEMBER 28, 2016
Revisions:	NOVEMBER 3, 2016
CAD File:	160042-EIS
Layout:	III-11 PRE
Sheet No.:	1 OF 1
Drawing No.:	C3D D - 16 - 0042 - 01

Drawn By:	Checked By:	Scale:	Tax Map No.:
ESR		1" = 1,000'	SEE SITE PLANS

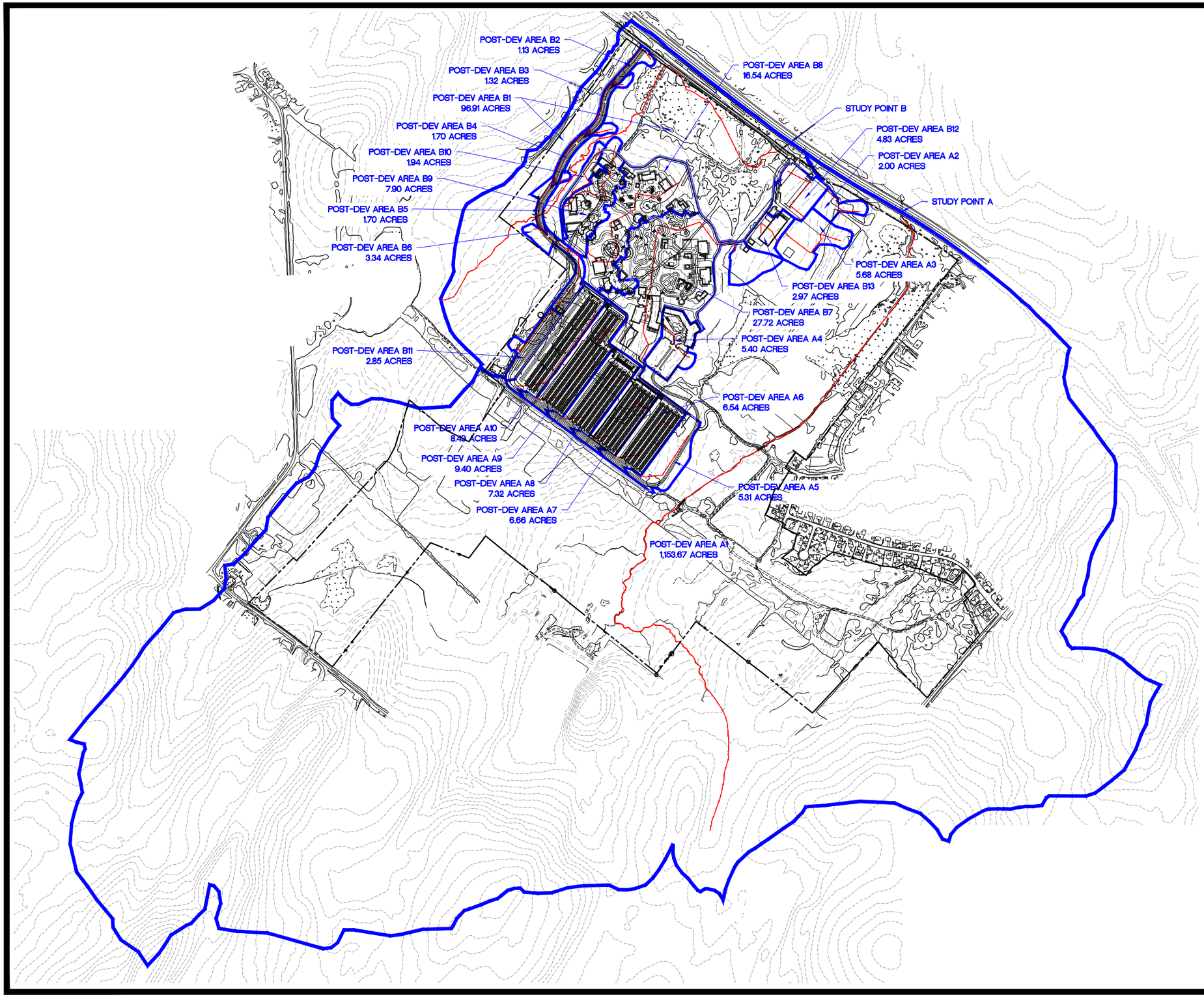

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FIGURE III–12
POST–DEVELOPMENT DRAINAGE AREAS

LEGOLAND NEW YORK
TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

Date:	SEPTEMBER 28, 2016
Revisions:	NOVEMBER 3, 2016
CAD File:	160042–EIS
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Drawn By:	Checked By:	Scale:	Tax Map No.:	Drawing No.:
ESR		1" = 1,000'	SEE SITE PLANS	C3D D – 16 – 0042 – 01

fourteen bio-retention areas, and one dry swale. The bio-retention areas and dry swale also provide runoff reduction volume credit (RRV). A stormwater pond will provide quantity control for the project. In order to minimize site disturbance and mimic existing drainage patterns, existing topography was held to the greatest extent possible when determining the proposed site grading. The study points utilized for the pre-development conditions were maintained and evaluated for post-development conditions. Below is a description of each watershed subarea that correlates with Figure III-12: Post-development Drainage Area. The post-development peak discharge for each area is summarized in Table 3 of the full SWPPP found in Appendix F.

Watershed A1 consists of approximately 1,153.67 acres of land encompassing the watershed of the Otter Kill to the south of NYS Route 17, surrounding the area that is captured by proposed stormwater practices. The majority of this area is outside the project limits and will not change from pre-development conditions. Proposed improvements in this area include the perimeter grading around the project, emergency access to Arcadia Road, and hotel access road. Approximately 3.40 acres of impervious cover is proposed in this area including the gravel emergency access and hotel access road. Portions of the area surrounding the project are located near on-site wetlands and buffers and will use the sheetflow to riparian buffers green infrastructure technique for water quality treatment. No stormwater practices are proposed for this area. Stormwater runoff in this area follows pre-development patterns.

Watershed A2 consists of approximately 2.00 acres of area that is captured by proposed bio-retention area A2. This area includes a portion of the back-of-house facility parking area. Approximately 0.40 acres of impervious cover is proposed in this area. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to bio-retention area A2. The bio-retention area will provide water quality treatment and runoff reduction volume. The stormwater treatment system will discharge to the wetland area surrounding the Otter Kill.

Watershed A3 consists of approximately 5.68 acres of area that is captured by proposed bio-retention area A3. This area includes a portion of the back-of-house facility. Approximately 3.49 acres of impervious cover is proposed in this area, including the proposed parking area and buildings. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to bio-retention area A3. The bio-retention area will provide water quality treatment and runoff reduction volume. The stormwater treatment system will discharge to the wetland area surrounding the Otter Kill.

Watershed A4 consists of approximately 5.40 acres of area that is captured by proposed bio-retention area A4. This area includes the proposed hotel and parking area. Approximately 3.63 acres of impervious cover is proposed in this area, including the proposed parking area and hotel. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to bio-retention area A4. The bio-retention area is located off-line by use of an upstream diversion structure that will divert storms larger than the 1-year storm around the bio-retention area. The bio-retention area will provide water quality treatment and runoff reduction volume. The stormwater treatment system will discharge to the adjacent wetland area that flows to the Otter Kill.

Watershed A5 consists of approximately 5.31 acres of area that is captured by proposed underground sand filter A5. This area includes one of the proposed theme park visitor parking areas. Approximately 4.26 acres of impervious cover is proposed in this area, including the

proposed parking area and walkways. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to underground sand filter A5. The underground sand filter is located off-line by use of an upstream diversion structure that will divert storms larger than the 1-year storm around the system. The underground sand filter consists of a chamber system with a sand filter bed beneath a portion of the system to provide water quality treatment. The stormwater treatment system will discharge to the Otter Kill.

Watershed A6 consists of approximately 6.54 acres of area that is captured by proposed underground sand filter A6. This area includes one of the proposed theme park visitor parking areas. Approximately 5.51 acres of impervious cover is proposed in this area, including the proposed parking area and walkways. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to underground sand filter A6. The underground sand filter is located off-line by use of an upstream diversion structure that will divert storms larger than the 1-year storm around the system. The underground sand filter consists of a chamber system with a sand filter bed beneath a portion of the system to provide water quality treatment. The stormwater treatment system will discharge to the Otter Kill.

Watershed A7 consists of approximately 6.66 acres of area that is captured by proposed underground sand filter A7. This area includes one of the proposed theme park visitor parking areas. Approximately 5.47 acres of impervious cover is proposed in this area, including the proposed parking area and walkways. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to underground sand filter A7. The underground sand filter is located off-line by use of an upstream diversion structure that will divert storms larger than the 1-year storm around the system. The underground sand filter consists of a chamber system with a sand filter bed beneath a portion of the system to provide water quality treatment. The stormwater treatment system will discharge to the Otter Kill.

Watershed A8 consists of approximately 7.32 acres of area that is captured by proposed underground sand filter A8. This area includes one of the proposed theme park visitor parking areas. Approximately 6.14 acres of impervious cover is proposed in this area, including the proposed parking area and walkways. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to underground sand filter A8. The underground sand filter is located off-line by use of an upstream diversion structure that will divert storms larger than the 1-year storm around the system. The underground sand filter consists of a chamber system with a sand filter bed beneath a portion of the system to provide water quality treatment. The stormwater treatment system will discharge to the Otter Kill.

Watershed A9 consists of approximately 9.40 acres of area that is captured by proposed underground sand filter A9. This area includes one of the proposed theme park visitor parking areas. Approximately 7.72 acres of impervious cover is proposed in this area, including the proposed parking area and walkways. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to underground sand filter A9. The underground sand filter is located off-line by use of an upstream diversion structure that will divert storms larger than the 1-year storm around the system. The underground sand filter consists of a chamber system with a sand filter bed beneath a portion of the system to provide water quality treatment. The stormwater treatment system will discharge to the Otter Kill.

Watershed A10 consists of approximately 8.49 acres of area that is captured by proposed underground sand filter A10. This area includes one of the proposed theme park visitor parking areas. Approximately 7.94 acres of impervious cover is proposed in this area, including the proposed parking area and walkways. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to underground sand filter A10. The underground sand filter is located off-line by use of an upstream diversion structure that will divert storms larger than the 1-year storm around the system. The underground sand filter consists of a chamber system with a sand filter bed beneath a portion of the system to provide water quality treatment. The stormwater treatment system will discharge to the Otter Kill.

Watershed B1 consists of approximately 96.91 acres of land encompassing the watershed to the existing on-site pond adjacent to Harriman Drive and outlet culvert beneath NYS Route 17, surrounding the area that is captured by proposed stormwater practices. The majority of this area is outside the project limits and will not change from pre-development conditions. Proposed improvements in this area include the perimeter grading around the project and Harriman Drive. Approximately 1.50 acres of impervious cover is proposed in this area. Portions of the area surrounding the project are located near on-site wetlands and buffers and will use the sheetflow to riparian buffers green infrastructure technique for water quality treatment. No stormwater practices are proposed for this area. Stormwater runoff in this area follows pre-development patterns.

Watershed B2 consists of approximately 1.13 acres of area that is captured by proposed bio-retention area B2. This area includes a portion of the theme park entrance road. Approximately 0.51 acres of impervious cover is proposed in this area. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to bio-retention area B2. The bio-retention area will provide water quality treatment and runoff reduction volume. The stormwater treatment system will discharge to the wetland area surrounding the existing on-site pond.

Watershed B3 consists of approximately 1.32 acres of area that is captured by proposed bio-retention area B3. This area includes a portion of the theme park entrance road. Approximately 0.67 acres of impervious cover is proposed in this area. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to bio-retention area B3. The bio-retention area will provide water quality treatment and runoff reduction volume. The stormwater treatment system will discharge to the wetland area surrounding the existing on-site pond.

Watershed B4 consists of approximately 1.70 acres of area that is captured by proposed bio-retention area B4. This area includes a portion of the theme park entrance road. Approximately 0.71 acres of impervious cover is proposed in this area. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to bio-retention area B4. The bio-retention area will provide water quality treatment and runoff reduction volume. The stormwater treatment system will discharge to a small on-site stream that flows to the wetland area surrounding the existing on-site pond.

Watershed B5 consists of approximately 1.44 acres of area that is captured by proposed bio-retention area B5. This area includes a portion of the theme park entrance. Approximately

0.60 acres of impervious cover is proposed in this area. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to bio-retention area B5. The bio-retention is located off-line by use of an upstream diversion structure that will divert storms larger than the 1-year storm around the bio-retention area. The bio-retention area will provide water quality treatment and runoff reduction volume. The stormwater treatment system will discharge to a small on-site stream that flows to the wetland area surrounding the existing on-site pond.

Watershed B6 consists of approximately 3.34 acres of area that is captured by proposed bio-retention area B6. This area includes a portion of the theme park entrance up to the parking control structure. Approximately 1.68 acres of impervious cover is proposed in this area. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to bio-retention area B6. The bio-retention area is located off-line by use of an upstream diversion structure that will divert storms larger than the 1-year storm around the bio-retention area. The bio-retention area will provide water quality treatment and runoff reduction volume. The stormwater treatment system will discharge to a small on-site stream that flows to the wetland area surrounding the existing on-site pond.

Watershed B7 consists of approximately 27.72 acres of area that encompasses the majority of the theme park area. This area includes a portion of the theme park and theme park service road. Approximately 13.83 acres of impervious cover is proposed in this area, including a portion of the perimeter service road, walkways, and areas surrounding rides. 2.48 acres of porous pavers are proposed in the pedestrian areas of the theme park. Porous pavers have been assumed to be impervious in the stormwater model, but pervious for the water quality calculations. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to bio-retention area B7. The bio-retention area will provide water quality treatment and runoff reduction volume. The bio-retention area includes a diversion forebay which allows larger storms to bypass the filter bed and flow to stormwater pond B7. Stormwater pond B7 is a dry basin design and will provide channel protection volume and quantity control. The stormwater treatment system will discharge to the wetland area surrounding the existing on-site pond

Watershed B8 consists of approximately 16.54 acres of area that encompasses a portion of the theme park area that is captured by proposed bio-retention area B8. This area includes a portion of the theme park and theme park service road. Approximately 6.98 acres of impervious cover is proposed in this area, including a portion of the perimeter service road, walkways, and areas surrounding rides. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to bio-retention area B8. The bio-retention area is located off-line by use of an upstream diversion structure that will divert storms larger than the 1-year storm around the bio-retention area. The bio-retention area will provide water quality treatment and runoff reduction volume. The stormwater treatment system will discharge to the wetland area surrounding the existing on-site pond.

Watershed B9 consists of approximately 6.25 acres of area that encompasses a portion of the theme park area that is captured by proposed bio-retention area B9. This area includes a portion of the theme park and theme park service road. Approximately 3.43 acres of impervious cover is proposed in this area, including a portion of the perimeter service road, walkways, and areas surrounding rides. 0.57 acres of porous pavers are proposed in the pedestrian areas of the theme park. Porous pavers have been assumed to be impervious in the stormwater model, but pervious

for the water quality calculations. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to bio-retention area B9. The bio-retention area is located off-line by use of an upstream diversion structure that will divert storms larger than the 1-year storm around the bio-retention area. The bio-retention area will provide water quality treatment and runoff reduction volume. The stormwater treatment system will discharge to a small on-site stream that flows to the wetland area surrounding the existing on-site pond.

Watershed B10 consists of approximately 1.94 acres of area that encompasses a portion of the theme park area that is captured by proposed bio-retention area B10. This area includes a portion of the theme park and theme park service road. Approximately 0.91 acres of impervious cover is proposed in this area, including a portion of the perimeter service road, walkways, and areas surrounding rides. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to bio-retention area B10. The bio-retention area is located off-line by use of an upstream diversion structure that will divert storms larger than the 1-year storm around the bio-retention area. The bio-retention area will provide water quality treatment and runoff reduction volume. The stormwater treatment system will discharge to a small on-site stream that flows to the wetland area surrounding the existing on-site pond.

Watershed B11 consists of approximately 2.85 acres of area that is captured by proposed bio-retention area B11. This area includes a portion of the theme park entrance between parking control structure and parking areas. Approximately 1.72 acres of impervious cover is proposed in this area. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to bio-retention area B11. The bio-retention area is located off-line by use of an upstream diversion structure that will divert storms larger than the 1-year storm around the bio-retention area. The bio-retention area will provide water quality treatment and runoff reduction volume. The stormwater treatment system will discharge to the adjacent pond and wetland area that flows to the wetland area surrounding the existing on-site pond.

Watershed B12 consists of approximately 4.83 acres of area that is captured by proposed underground sand filter B12. This area includes a portion of the back-of-house facility parking area and access road. Approximately 3.96 acres of impervious cover is proposed in this area. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to underground sand filter B12. The underground sand filter is located off-line by use of an upstream diversion structure that will divert storms larger than the 1-year storm around the system. The underground sand filter consists of a chamber system with a sand filter bed beneath a portion of the system to provide water quality treatment. The stormwater treatment system will discharge to the adjacent wetland area.

Watershed B13 consists of approximately 2.97 acres of area that is captured by proposed underground sand filter B12. This area includes a portion of the back-of-house facility and access road. Approximately 1.26 acres of impervious cover is proposed in this area. Stormwater runoff from this area will be collected by a stormwater collection system and conveyed to bio-retention area B13. The bio-retention area is located off-line by use of an upstream diversion structure that will divert storms larger than the 1-year storm around the bio-retention area. The bio-retention area will provide water quality treatment and runoff reduction volume. The stormwater treatment system will discharge to the adjacent wetland area.

Downstream Structures

Two existing outlet culvert structures which run underneath NYS Route 17 will continue to receive stormwater from the Project Site (identified as Study Points A and B). As discussed above, a 96 acre portion of the Project Site along Harriman Drive will continue to drain directly to one of these structures. The majority of this area is outside the project limits and will not change from pre-development conditions. The remainder of the Project Site will drain to other areas of the site which, as described in the pre-development conditions eventually drain to one of these Study Points. The SWPPP concludes the overall stormwater peak flowrates to these structures will be reduced from the pre-development condition as a result of mitigation practices to be implemented on the site. Given no increase in stormwater peak flowrates to these structures is proposed, no impacts to the structures are anticipated.

Temporary Construction Impacts

The project will require coverage under SPDES general permit (GP-0-15-002) for construction activities. During construction activities vegetation is removed which increases the probability of erosion, dust and sedimentation in surface water resources.

Off-site areas

Disturbance for construction of off-site traffic improvements will also require a SWPPP consistent with NYSDEC standards. Stormwater management of off-site areas will be handled with a combination of dry swales and bio swales. Final designs will be completed by the NYSDOT once designs for roadway improvements are finalized as they will be performing much of the off-site roadwork.

3. Proposed Mitigation Measures

The SWPPP prepared for the proposed project contains a full erosion and sedimentation control plan as required. Details of the plan are summarized below and discussed in full in Appendix F. The implementation of this SWPPP will provide water quality treatment, control stormwater flows and reduce or minimize impacts related to stormwater to the greatest extent practical. It is noted that no oil/ separator is required for this project, and no vegetated roof decks are proposed.

Several green infrastructure and runoff reduction measures would be implemented throughout the Project Site to control any water quality and quantity effects of post-construction increases in stormwater runoff volume. NYSDEC requires that the water quality volume (WQv) be treated through use of specific green infrastructure practices. The design of these practices is based on promoting infiltration of the WQv. The treatment provided by the green infrastructure practices is called the runoff reduction volume (RRv). NYSDEC requires the RRv to be equal to the WQv unless site-specific conditions would not allow the full treatment using green infrastructure practices. Green practices, particularly underground filter areas also control stormwater temperature increases which could occur from holding stormwater in a detention pond being exposed to sunlight. Green infrastructure techniques to be employed including the following:

- Sheetflow to Riparian Buffers

Undisturbed natural areas, and specifically riparian buffers and areas that drain to the wetland buffers can be deducted from the water quality volume. In order to claim this practice, all flow must enter the buffer in sheetflow form. Areas along the north side of Harriman Drive, portions of the emergency access to Arcadia Road, and perimeter of the project grading have been removed from the water quality volume using this practice. 223,108 square feet has been removed from the drainage area and 65,659 square feet has been removed from the impervious cover area.

- Tree Planting

Planting trees on a development site reduces stormwater volume thus reducing impacts and provides bank stabilization. Trees planted adjacent to impervious cover allow the drainage area to be reduced when calculating the water quality volume. The method of reduction chosen for this site is 100 square feet of drainage area for each tree. Landscaping trees are proposed throughout the site along access roads, within parking areas and internal to the park area. See proposed landscaping plan on the full set of site plans.

- Bio-Retention Areas

Fourteen bio-retention areas are proposed throughout the project. They have been designed to treat runoff from the lawn areas, proposed paved areas, and the building roofs. Soil types in the locations of the bio-retention areas are hydrologic soil group D, therefore the systems will be installed with underdrains. 40% of the treatment volume of the bio-retention areas can be claimed as runoff reduction volume and remaining volume will be claimed as water quality volume. The majority of the bio-retention areas will be located off-line from larger storms through using upstream diversion structures. Diversion structure calculations and treatment volume for the bio-retention areas are provided in the full SWPPP in Appendix F. A total 62,975 cubic feet of treatment will deducted from the water quality volume, the remaining 94,463 cubic feet will treat standard water quality.

- Porous Pavers

Pervious types of pavements that provide an alternative to conventional paved surfaces, designed to infiltrate rainfall through the surface, thereby reducing stormwater runoff from a site and providing some pollutant uptake in the underlying soils. Porous pavers will be used in the pedestrian areas and walkways in the theme park area. Porous pavers consist of interlocking paver blocks with spaces between blocks to allow infiltration and a stone layer beneath the pavement designed to temporarily hold the water quality volume while it infiltrates. Swales and catch basins will be installed at the low points to allow stormwater from storm events larger than the water quality storm to exit the area. An underdrain will also be used to ensure proper drainage of larger storms. The area of porous pavers is 132,997 square feet. This area will be deducted from the impervious area in the water quality volume calculation.

- Dry Swale

The natural drainage paths, or properly designed channels, can be used instead of constructing underground storm sewers or concrete open channels to increase time of concentration, reduce the peak discharge, and provide infiltration. A dry swale is proposed for treating runoff from the south side of Harriman Drive. The total length of swale with a slope of 4% or less is 1,500 feet. The dry swale will have a minimum 1 foot bottom width, 1 foot depth, with 3 horizontal to 1 vertical side slopes. Soil types in this area are hydrologic soil group D, meaning the up to 20% of the treatment volume of the dry swale can be claimed as runoff reduction volume and remaining

volume will be claimed as water quality volume. 645 cubic feet of treatment will deducted from the water quality volume, the remaining 2,580 cubic feet will treat standard water quality.

- Underground Sand Filter Areas

Underground sand filters are proposed for treating runoff from the theme park visitor parking areas and a portion of the back of house parking area. Soil types at the site are hydrologic soil group D, no infiltration is expected in these areas, and therefore no runoff reduction will be claimed for this practice. The entrance rows of each system will consist of a separator row wrapped with a geotextile and will provide pre-treatment for the sand filter area. Water quality will be provided by sand filtration beds installed under the separator rows. Additional rows in the system will provide channel protection volume.

Collection and holding of stormwater causes evaporation. In order to ensure maximum ground water recharge, no collection of stormwater for reuse on the Project Site is proposed.

Erosion and Sediment Control

The SPDES General Permit (GP-0-15-002) for construction activities requires that an Erosion and Sediment Control Plan be developed. This plan has provided as part of the Site Plans, and will be available at Town Hall and the Project Site at the time of construction. The plan will also be in compliance with current regulations, including construction sequence, both short- and long-term maintenance of facilities, storage of materials and temporary and permanent structures.

The following temporary and permanent erosion control practices are proposed for use during construction and for long-term protection. All erosion and sediment control practices will be checked for stability and operation following every runoff-producing rainfall, but in no case less than once every week. Any needed repairs will be made immediately to maintain all practices as designed and installed for their appropriate phase of the project. Sediment will be removed from the sediment trap and inlet protection device when storage capacity has been approximately 50% filled. Sediment will be removed from behind the sediment fence when it becomes about 0.5 feet deep at the fence. The sediment fence will be repaired as necessary to maintain a barrier.

- Stabilized Construction Entrance:

A stabilized pad of aggregate underlain with geotextile located at any point where traffic will be entering or leaving a construction site to or from a public right-of-way, street, alley, sidewalk, or parking area. The purpose of stabilized construction entrance is to reduce or eliminate the tracking of sediment onto public rights-of-way or streets. Stabilized construction entrances will be placed as shown on the Sediment and Erosion Control Plans.

- Siltation Fence:

A temporary barrier of geotextile fabric installed on the contours across a slope used to intercept sediment laden runoff from small drainage areas of disturbed soil. The purpose of a silt fence is to reduce runoff velocity and effect deposition of transported sediment loads. Limits imposed by ultraviolet stability of the fabric will dictate the maximum period the silt fence may be used (approximately one year). Silt fence will be placed as shown on the Sediment and Erosion Control Plans.

- Sediment Traps:

A temporary sediment control device formed by excavation and/or embankment to intercept sediment laden runoff and retain the sediment. The purpose of the structure is to intercept

sediment-laden runoff and trap the sediment in order to protect drainage ways, properties, and rights-of-way below the sediment trap from sedimentation. Stone outlet sediment traps will be used at the locations shown on the Sediment and Erosion Control Plans.

- Sediment Basins:

A temporary barrier or dam constructed across a drainage way or at other suitable locations to intercept sediment laden runoff to trap and retain the sediment to reduce the amount of sediment leaving the disturbed area in order to protect drainage ways, properties, and rights-of-way below the sediment basin. Sediment basins are proposed in the areas of the proposed bio-retention areas, calculations for the sizing of the temporary sediment basins are provided in the full SWPPP.

- Diversion Swales:

A temporary excavated drainage way. The purpose of a temporary swale is to prevent runoff from entering disturbed areas by intercepting and diverting it to a stabilized outlet or to intercept sediment laden water and divert it to a sediment trapping device. Diversion swales will be used for diverting clean runoff around the project area and for intercept sediment laden runoff and directing it to sediment traps/basins. Diversion swales will be placed as shown on the Sediment and Erosion Control Plans.

- Water Bars:

A ridge or ridge and channel constructed diagonally across a sloping road or utility right-of-way that is subject to erosion. The purpose is to limit the accumulation of erosive velocity of water by diverting surface runoff at pre-designed intervals. Water bars will be placed as necessary during construction.

- Storm Drain Inlet Protection:

A temporary, somewhat permeable barrier, installed around inlets in the form of a fence, berm, or excavation around an opening, trapping water and thereby reducing the sediment content of sediment laden water by settling. The purpose is to prevent heavily sediment laden water from entering a storm drain system through inlets. Curb drop, filter fabric drop, and excavated drop inlet protection will be used throughout the site. Inlet protection will only be used in road areas before pavement is placed. Locations of inlet protection are shown on Sediment and Erosion Control Plans.

- Level Spreaders:

A temporary non-erosive outlet for concentrated runoff, constructed to disperse flow uniformly across a slope. The purpose is to convert concentrated flow to sheet flow and release it uniformly over a stabilized area. Level spreaders will be used at the ends of diversion swales used for diverting clean runoff around the project area. Level spreader locations are shown on the Sediment and Erosion Control Plans.

- Slope Stabilization Matting:

Matting made of synthetic or natural fibers that is placed on steep slopes to allow newly planted vegetation to take root and protect the slope from erosion before vegetation is fully established. Locations of slope stabilization matting are shown on Sediment and Erosion Control Plans.

- Rock Outlet Protection:

A section of rock protection placed at the outlet of the culverts, conduits, or channels. The purpose of the rock outlet protection is to reduce the depth, velocity, and energy of water, such that the flow will not erode the receiving downstream reach. Rock outlet protection is proposed at all pipe discharge points. See the Sediment and Erosion Control Plans for locations of rock outlet protection.

- Pipe Slope Drain:

A temporary structure placed from the top of a slope to the bottom of a slope to convey surface runoff down slopes without causing erosion. Pipe slope drains are proposed along the benched slopes along the western side of the project. See the Sediment and Erosion Control Plans for locations of pipe slope drains.

- Demolition:

During demolition dust released from demolished sidewalks, buildings, structures and, or on site grading operations will be controlled using Dust Control measures as specified in the N.Y.S. Erosion and Sediment Control Specification Manual. Storm drain inlets vulnerable to stormwater discharge carrying dust, soil, or debris will be protected using Storm Drain Inlet Protection. Process water and slurry resulting from saw cutting and surfacing operations will be prevented from entering the waters of the State by implementing Saw cutting and Surfacing Pollution Prevention measures.

All other Best Management Practices will be administered as required. Several additional specific measures for the construction phase and implementing the SWPPP are discussed in Appendix F. Based upon the results of this analysis, the site has demonstrated the ability to meet all NYSDEC requirements for stormwater quantity and quality and any impacts to the existing watershed and downstream waters should be negligible.

The revised design of guest parking areas with parking garages and decks reduces the overall amount of impervious surfaces. The creation of impervious surfaces is an unavoidable adverse environmental impact, which is mitigated through the design and construction of the proposed stormwater control measures.

H. Traffic

A traffic study was prepared by Maser Consulting, P.A. to evaluate the potential traffic impacts associated with the project on the surrounding roadway network based on the requirements of the Scoping Document, dated August 18, 2016 as adopted by the Town of Goshen Planning Board. Turning movement traffic counts collected by representatives of Maser Consulting, P.A., together with machine Automatic Traffic Recorder (ATR) counts collected along various key roadway

segments serving the project and surrounding area, were utilized to establish the Existing Traffic Volumes for the study area intersections and roadway segments as identified in the Scoping Document. A full copy of the Traffic Impact Study and all supporting data can be found in Appendix H of this document.

The Existing Traffic Volumes were then projected to the future Design Years to take into account expected increases in traffic due to normal background traffic growth and to also account for other potential development traffic in the local area and region as outlined in the Scoping Document.

Estimates of the traffic to be generated by the project during Summer peaks and also for typical conditions were computed based on information published by the Institute of Transportation Engineers (ITE) and specific traffic count and attendance data provided by LEGOLAND based on their Carlsbad, California facility. Anticipated distribution patterns were established to assign the site generated traffic to the roadway network. These distributions were based on a combination of existing travel patterns, population data, together with visitor origin projections provided by Merlin Entertainments. These volumes were added to the No-Build Traffic Volumes to obtain the Design Year Build Traffic Volumes for the various peak hours.

Based on the procedures contained in the *2010 Highway Capacity Manual*, the traffic volumes were then compared to roadway capacities to determine existing and future Levels of Service and operating conditions. Recommendations for improvements were then made for the Project based on the results of the analyses.

1. Existing Conditions

The following roads and intersections comprise the study area for the Traffic Impact Analysis:

NYS Route 17 (Future I-86)

NYS Route 17, which runs throughout Orange County, is classified as an urban principal arterial expressway presently under the jurisdiction of the NYSDOT. The roadway originates at the New Jersey State Line and runs parallel to I-87 through the Village of Sloatsburg and the Town of Tuxedo. In the Woodbury/Harriman area, the roadway intersects with NYS Route 32 and separates at Exit 131, running in a westerly direction as a four-lane divided highway. The roadway continues and widens to six lanes in the Town of Goshen between Exit 123 and Exit 124. The roadway has an Average Annual Daily Traffic (AADT) of approximately 63,000 vehicles per day in the vicinity of Exits 124 and 125.

It also has an interchange with NYS Route 17M at Exit 123 to the west. The Roadway then transitions to a four-lane divided roadway with a diamond type interchange with Exit 122A (also in Goshen). The roadway then continues north through the Town of Wallkill and into Sullivan County. In the vicinity of the project, the roadway has three 12 foot travel lanes, with an 8 foot paved shoulder per direction. Based on the latest pavement data report available from NYSDOT, the pavement is generally considered to be in excellent condition and was last repaved (mill and fill) in 2012. The terrain along the roadway is classified as rolling. The roadway generally has a 65 MPH posted speed limit, which is reduced in various sections to 55 MPH. NYS Route 17 has

been planned to be converted to Interstate 86, however, the current timing of this and any associated improvements is currently unknown.

Interstate 84

Interstate 84, which is classified as an urban principal arterial interstate, runs in an east/west direction throughout Putnam, Dutchess and Orange Counties, connecting from Connecticut through to Pennsylvania. The roadway will provide regional access to the Project Site from areas east and west via a full cloverleaf interchange (Exit 121) with NYS Route 17 approximately 5.0 miles west of the site location. In the vicinity of the NYS Route 17 interchange, the roadway is a four-lane divided highway with two 12-foot travel lanes and a 10-foot paved shoulder per direction, with a posted speed limit of 65 MPH. Based on the latest pavement data report available from NYSDOT, the pavement is generally considered to be in good condition. The terrain along the roadway is classified as rolling. It should be noted that all movements to and from NYS Route 17 are free flow movements via the full cloverleaf interchange.

Interstate 87 (New York State Thruway)

Interstate 87 (New York State Thruway), which is classified as an urban principal arterial Interstate highway, runs in a north/south direction throughout New York State. The roadway will provide regional access to the project site from areas north and south via an interchange with NYS Route 17 located approximately 12.0 miles east of the site. In the vicinity of the NYS Route 17 interchange, the roadway has four 12-foot wide travel lines and a paved shoulder per direction with an AADT of approximately 41,900 vehicles per day. This reduces to three lanes per direction south of the interchange area and two lanes per direction north of the interchange area. Based on the latest pavement data report available from NYSDOT, the pavement is generally considered to be in good condition. The terrain along the roadway is classified as rolling. (See further discussion regarding the Harriman Interchange improvements in Section IV.

NYS Route 17M

NYS Route 17M, which is classified as an urban major collector, under the jurisdiction of the NYSDOT travels parallel to NYS Route 17 in Orange County. NYS Route 17M traverses from the Village and Town of Monroe, from the east through both the Village and Town of Chester and into the Town of Goshen. It provides access to many existing commercial facilities throughout much of its length. It traverses in a generally northwest/southeast direction and typically has one lane in each direction plus separate turn lanes at some key intersections. Based on the latest pavement data report available from NYSDOT and field inspection, the pavement is generally considered to be in fair to good condition. The terrain along the roadway is classified as rolling with some horizontal and vertical alignment changes. In the vicinity of the site, the roadway has two 12-foot travel lanes and paved shoulders varying in width between 3 and 10 feet, and a posted Village speed limit of 30 MPH near South Street, which increases to 55 MPH east of the Goshen Village line. Within the study area, NYS Route 17M has signalized intersections with both Arcadia Road and South Street and has an AADT of approximately 8,000 vehicles per day between South

Street and Exit 125 and 6,400 vehicles per day at the Exit 125 intersection. NYS Route 17M provides access to the project from areas east and west. Parking is prohibited along the roadway within the study area. The area of NYS Route 17M east of South Street is characterized by primarily straight horizontal alignment with some vertical curves which are consistent with the posted speed of the roadway. Sight distances are generally good throughout this area, although the existing vertical curve limits the sight distance east of Arcadia Drive and in the immediate area to the east near the Palacio Restaurant and Catering facility.

N. Connector Road

N. Connector Road, which traverses in an east/west direction between signalized intersections with South Street and NYS Route 17A/NYS Route 207 varies in width from a two to five lane roadway. The roadway has an AADT of 5,600 vehicles per day between South Street and the Exit 124 intersection. It has a separate right and left turn lane at its intersection with NYS Route 17 Exit 124 and is under the jurisdiction of the NYSDOT. It has 12-foot travel lanes with a paved shoulder ranging from approximately 5 to 10 feet on the southern edge of the roadway and is curbed along the northern edge of the roadway. The N. Connector Road has a posted Village speed limit of 30 MPH and parking is prohibited along the roadway. The pavement is in poor condition with significant areas of distressed pavement sections which have been patched. Sight distances along this roadway are good and the roadway has good vertical and horizontal alignment.

South Street

South Street is a two lane roadway under the Village of Goshen's jurisdiction originating at a "T" intersection with Lower Reservoir Road/Reservoir Road and traversing north, terminating at an "All-Way Stop" sign controlled intersection with S. Church Street. Between Lower Reservoir Road and NYS Route 17M the roadway is classified as an urban major collector with an AADT of approximately 6,000 vehicles per day north of Harriman Drive and an AADT of approximately 3,000 vehicles per day south of Harriman Drive. Within the study area, the roadway has a signalized intersection with NYS Route 17M/N. Connector Road and an unsignalized, "T" intersection with Harriman Drive. The roadway has approximately 12-foot travel lanes with a striped paved shoulder which varies from approximately 2-feet to 8-feet between South Street and Harriman Drive. It has a posted speed limit of 30 MPH and parking is prohibited along the portion of the roadway near the site. The pavement is in generally fair to good condition in this area.

Harriman Drive

Harriman Drive is a two lane roadway classified as an urban major collector under local jurisdiction partially with the Town of Goshen and partially with the Village of Goshen. The roadway has an AADT of 3,860 vehicles per day between South Street and the Exit 125 intersection. It originates at a "Stop" signed controlled "T" intersection with South Street and traversing in an easterly direction, terminating approximately 1.0 mile east of its intersection with South Street. Within the study area, Harriman Drive also intersects with the NYS Route 17 Exit 125 Eastbound on/off ramp/BOCES driveway at a slightly offset "Stop" sign controlled

intersection. The roadway has a posted speed limit of 35 MPH east of the Exit 125 intersection, and has one travel lane per direction with approximately a 2 to 3 foot paved shoulder on both sides. Parking is prohibited along the roadway near BOCES but there are no signs prohibiting parking east of BOCES Drive. The pavement is in fair condition with some areas of distress between South Street and the Exit 125 ramp intersection. Harriman Drive pavement is in poor condition from BOCES Drive and extending past the Glen Arden access roadway. East of that, the pavement condition is very poor. Also, immediately east of Glen Arden access drive, there is a sharp vertical curve which restricts sight distance. (See Sections IV and V for additional discussion.)

Reservoir Road

Reservoir Road, which originates opposite of South Street at a "Stop" sign controlled intersection with Lower Reservoir Road, is classified as an urban Major Collector. The roadway continues in a generally southerly direction as a two lane roadway. Pavement is in good condition. The roadway terminates at a "Stop" sign controlled "T" intersection with NYS Route 17A. Portions of the roadway have a double yellow centerline. The roadway has a posted speed of 40 MPH and there is a northbound advisory speed of 20 MPH approaching the intersection with Lower Reservoir Road, due to the horizontal alignment. The speed limit changes to 30 MPH north of the intersection on South Street entering into the Village of Goshen.

Matthews Street

Matthews Street is a two lane local roadway under Village of Goshen jurisdiction. The roadway originates at a "T" intersection with West Main Street Extension and traversing eastbound, widening to three and then four lanes (3 EB, 1 WB) approaching the roadways termination at a full movement signalized intersection with NYS Route 17A/NYS Route 207 (Study area intersection No. 1). The roadway has a double yellow centerline striping with a curbed shoulder, with a posted speed limit of 30 MPH. There is a Coach USA/Short Line Bus Stop located at the Park and Ride which has free commuter parking adjacent to the roadway serving the Town of Goshen community with trips to and from the Port Authority in New York City and surrounding municipalities in Orange County, New York. Parking is prohibited along the roadway within the study area. The alignment of this road is generally straight with good sight distances. The pavement is in fair to good condition.

Duck Farm Road

Duck Farm Road is a two lane Town Road, which originates at a "Stop" sign controlled "T" intersection with NYS Route 17M. It continues in a northerly direction crossing the Heritage Trail and terminates at a "T" intersection with Old Chester Road. It has a posted town speed limit of 35 MPH and parking is not permitted near the rail trail.

Old Chester Road

Old Chester Road is a Town roadway that originates at a "Stop" sign controlled intersection with NYS Route 17M east of the site. The roadway continues north and then west after crossing the Heritage Trail. The intersection with Knoell Road is a "Stop" sign controlled "T" intersection continuing from this intersection, Old Chester Road traverses in a westerly direction and has a 35 MPH posted speed limit. It has a double yellow centerline and minimal shoulder area on either

side of the roadway. West of Duck Farm Road, the alignment of Old Chester Road changes to a more northwesterly direction. Entering into the Village of Goshen at the intersection with South Street, the speed limit changes to 30 MPH and the roadway designation changes to South Church Street. Church Street runs in a generally east/west direction from South Street to Main Street intersecting at a signalized intersection.

NYS Route 207/NYS Route 17A (Greenwich Avenue)

NYS Route 207 is a state highway which runs in a north/south direction originating at the intersection with Matthews Street, where it has multilane approaches and aligns with NYS Route 17A. NYS Routes 207 and 17A are both classified as urban minor arterials under the jurisdiction of the NYSDOT. The roadway continues north through the Village of Goshen (Greenwich Avenue) and also intersecting with Main Street north of the Village, it traverses into the Town of Hamptonburgh. The roadway has a speed limit of 30 MPH with the Village. Its designation changes to NYS Route 17A south of Matthews Street and it intersects with Hatfield Lane and the NYS Route Exit 124 Eastbound on/off ramp at a signalized intersection. It continues south and approaching Coates Drive, the roadway reduces to a two lane roadway with a 40 MPH posted speed in this vicinity. South of here, it increases to 45 MPH. North of Matthews Street, the intersection has an AADT of 10,000 vehicles per day, while south of Matthews Street the intersection has an AADT of 11,500 vehicles per day.

Church Street

Church Street, i.e., North and South Church Street, is a village roadway. West of NYS Route 207, the roadway is classified as an urban major collector. This roadway has one lane in each direction with double yellow center line. It has sidewalks and curbing on both sides. Parking is permitted along both sides of Church Street in some sections. The roadway originates at an "All-Way Stop" sign controlled intersection with South Street, extends in a northwesterly direction, intersecting with other local roads including Phillips Place, Kelsey Lane, Park Place and intersecting at a five-legged signalized intersection with NYS Route 207 (Main Street/Greenwich Avenue). North of the intersection, the designation changes to North Church Street, which intersects with other local roads including St. John Street, Canal Street, Montgomery Street and Murray Avenue. The roadway continues in a northerly direction into the Town of Goshen where the designation changes to Phillipsburg Road. It has a 30 MPH posted speed limit.

Study Intersections and Existing Traffic Volumes

Automatic Traffic Recorded (ATR) Machine traffic counts were performed for a two week period while BOCES was in session as required. Note that similar detailed turning movement data for seasonal (July/August) conditions were also collected as per the Scoping Document to address the seasonal effects at these localized intersections. Appendix E of the full Traffic Impact Study provides a summary of the dates of the machine traffic counts by location. The manual turning movement counts were compared to all ATR counts collected as part of in the Data Collection program. At those locations were the manual counts did not fall within 10% of the ATR counts, they were adjusted based on the ATR counts and then balanced between intersections where appropriate. All of the existing volumes shown on the figures contained in the traffic appendix reflect these adjustments. Relative to a comparison with historical traffic data, the counts were found to be generally consistent with and reflective of normal growth and seasonal variation. The historical comparison of traffic volume patterns was based on comparisons with other previous

studies in the area including numerous studies prepared by John Collins Engineers, P.C. including Long Oaks Estates, Youngs Grove, Meadows of Goshen, Goshen Executive Center and Match Point Sports as well as the Goshen Town Wide Traffic Study that was prepared by Stantec.

NYS Route 17M/N. Connector Road and South Street

NYS Route 17M intersects with South Street at a signalized full movement intersection opposite the North Connector Road. All approaches consist of one travel lane and have paved shoulders. Crosswalks are provided in the north/south direction crossing the N. Connector Road and NYS Route 17M. Note that there are sidewalks on the bridge and at the intersection of South Street and NYS Route 17M, there are sidewalks connecting from the bridge to South Street. There are crosswalks across both the east and west legs of the intersection but the sidewalk only continues on the west side along the South Street north leg. There are no sidewalks on the Route 17M or the North Connector approaches.

NYS Route 17M and Route 17 Exit 125 Westbound On/Off Ramps

The NYS Route 17 Exit 125 Westbound On/Off Ramp intersects with NYS Route 17M at a "Stop" sign controlled "T" intersection. All approaches to the intersection consist of one lane. Sight distances are good at the intersection. The Off Ramp approach is characterized by a very short tangent section approaching NYS Route 17M and a sharp exiting radius from NYS Route 17. A guiderail separates the on and off ramps at this location.

Harriman Drive and BOCES Drive/Exit 125 Eastbound On/Off Ramp

BOCES Drive intersects with Harriman Drive at an unsignalized intersection, which is slightly offset from the NYS Route 17 Exit 125 Eastbound On/Off Ramp. All approaches consist of one lane and the BOCES Drive and Harriman Drive approaches are controlled by "Stop" signs.. The existing offset alignment results in driver confusion, which significantly reduces the capacity and safety of this intersection.

NYS Route 17M (N. Connector Road) and Exit 124 On/Off Ramps

The NYS Route 17 Exit 124 On/Off Ramps intersect at a signalized "T" intersection with the N. Connector Road. The Off Ramp approach widens to two lanes at the signalized intersection with a separate left and a separate right turn lane exiting the ramp. The North Connector Road westbound approach consists of one through lane and a separate left turn lane. The N. Connector eastbound approach consists of one through lane and a channelized right turn lane onto the ramp. There are no pedestrian accommodations at this intersection.

South Street at Harriman Drive

Harriman Drive intersects with South Street at a "Stop" sign controlled "T" intersection. The Harriman Drive approach consists of one lane approaching the intersection. The South Street northbound approach consists of a single lane. The South Street southbound approach consists of a separate left turn lane and a separate through lane. The South Street Bridge crossing Route 17 is located immediately north of this intersection.

Harriman Drive and BOCES Access Drives

The BOCES campus has several access connections to Harriman Drive. The westernmost driveway (location 10) is a one-way only entry driveway, the center driveway (location 9) is a one-

way exit driveways and the eastern driveway (location 8) is a full movement access. Each of these existing driveways is "Stop" sign controlled and all approaches at this location consist of one lane. Note that BOCES also has access to Harriman Drive via BOCES Drive, which intersects opposite the Exit 125 Eastbound On/Off Ramp at an offset intersection. Analysis of BOCES site driveway flows were considered for the peak pick up and drop off time occurring at the facility when school was in session.

Harriman Drive and Glen Arden Retirement Community Access

The Glen Arden Retirement Community intersects with Harriman Drive at a "Stop" controlled "T" intersection. The Glen Arden access road is a boulevard type access road. Harriman Drive consists of one lane in each direction at this location with no centerline striping.

NYS Route 17A, NYS Route 207 and Matthews Street/N. Connector Road

This full movement intersection is controlled by an actuated traffic signal. The Matthews Street approach consists of three lanes in the form of a separate left turn lane, a through lane and a shared through/right turn lane. The North Connector Road approach consists of a separate left turn lane, a through lane and a separate right turn lane. The NYS Route 207 southbound approach consists of a dual left turn lane and one through lane and one through/right lane. The NYS Route 207/17A northbound approach consists of a separate left turn lane, two through lanes and separate channelized right turn lane for movements onto the N. Connector Road. There are currently only sidewalks along the frontage of the Gulf Station located in the northwest quadrant of this intersection and on the south side of Matthews Street leading to the Park-n-Ride.

NYS Route 17A and Hatfield Lane/NYS Route 17 Exit 124 EB On/Off Ramp

Hatfield Lane intersects with NYS Route 17A at full movement intersection opposite the Exit 124 Eastbound On/Off Ramp. The intersection is, controlled by an actuated traffic signal. The northbound and southbound NYS Route 17A approaches are multi-lane approaches including two through lanes with separate left turn lanes. The westbound Route 17 Exit 124 Off Ramp approach consists of a separate left turn lane, a through lane and a channelized right turn lane. The eastbound Hatfield Lane approach consists of a separate left turn lane and a shared through/right turn lane. There are presently no sidewalks at this location.

NYS Route 17 Mainline (both eastbound and westbound) between Exits 125 and 124 (Weaving, Ramp Proper, Acceleration/Deceleration Analysis)

NYS Route 17 has several intersections in the area including a cloverleaf interchange with I-84 (Exit 121) in the Town of Wallkill. Exit 122, also in the Town of Wallkill, has been recently reconstructed by NYSDOT and a modified intersection with the off ramps signalized at their connections with East Main Street and Crystal Run Road. In the Town of Goshen, Exit 122A is a diamond type intersection at Fletcher Street. The off ramps are "Stop" sign controlled at this location. Exit 123 is a directional interchange connecting traffic from NYS Route 17 to and from NYS Route 17M/U.S. Route 6. Exit 124 consists of two portions; the eastbound on/off ramp connects with NYS Route 17A at Hatfield Lane and the westbound on/off ramp connects to the N. Connector Road. In this vicinity, NYS Route 17 consists of three lanes in each direction. NYS Route 17 Exit 125 also has separate eastbound and westbound portions. The eastbound on/off ramp intersects with Harriman Drive while the westbound on/off ramp intersects with NYS Route 17M east of South Street. This section of NYS Route 17 transitions from two to three lanes in the vicinity of this interchange traveling westbound and a reduction from three to two lanes eastbound.

The Route 17 mainline and ramp analyses are contained in Appendix D of the Traffic Impact Study. This appendix also includes analysis of an alternative design scenario with the Route 17 mainline increased from two to three lanes in this vicinity which could also be used as an "HOV" lane if desired by NYSDOT.

During certain Summer Sunday Peak conditions, the traffic counts and observations indicate that NYS Route 17 Eastbound experiences major congestion. This is the result of downstream conditions including the effect of the existing delays at the Harriman Toll Plaza, which creates traffic backups on NYS Route 17 Eastbound starting in the mid to late afternoon. When this occurs, traffic diverts from NYS Route 17 and utilizes Exit 124 and Exit 125 Eastbound to access NYS Route 17M. The traffic continues on NYS Route 17M through the Town of Goshen into the Village of Chester and continues east parallel to NYS Route 17. This traffic effects primarily the eastbound through movements through the various intersections along this route. As a result of additional background traffic increases along the NYS Route 17 corridor, especially as a result of major traffic generators

NYS Route 207 and Main Street/Church Street

The roadways intersect at a signalized five-legged intersection. The eastbound Main Street approach consists of a single lane with parking permitted on both sides of the roadway in the vicinity of the intersection. The NYS Route 207 westbound approach consists of a separate left turn lane, a through lane and a separate right turn lane. The southeast-bound N. Church Street approach consists of a left/through lane and a separate right turn lane. The northwest-bound S. Church Street approach consists of a shared left/through lane and a separate channelized right turn lane. The northeast-bound NYS Route 207 approach consists of a separate left turn lane and a shared through/right turn lane. Sidewalks and signalized pedestrian crosswalks are present on all approaches at the intersection.

South Street and Reservoir Road/Lower Reservoir Road

Lower Reservoir Road intersects with South Street and Reservoir Road at a "Stop" sign controlled "T" intersection. The Lower Reservoir Road leg is on the outside of a horizontal curve, which results in a wide intersection where the "Stop" sign on Lower Reservoir Road is et back from the intersection. All approaches to this intersection consist of one lane with some widening at the approaches to the intersection. Also, there are no sidewalks at the intersection of Lower Reservoir Road and South Street. (See Section V for recommended striping improvements at this location.)

NYS Route 17M and Old Chester Road

Old Chester Road intersects with NYS Route 17M at a "Stop" sign controlled intersection aligning opposite an existing commercial driveway. The approaches to this intersection all consist of one lane. North of the intersection, there is an at-grade crossing with the Heritage Trail. No sidewalks exist at this intersection.

NYS Route 17M and Duck Farm Road[4]

Duck Farm Road intersects with NYS Route 17M at a "Stop" sign controlled "T" intersection. There is also a crossing with the Heritage Trail located approximately 55 feet north of the NYS

[4] The scope identifies this road is Duck Cedar Road.

Route 17M intersection. All approaches to this intersection consist of one lane. There are no sidewalks at this intersection.

NYS Route 17M and Arcadia Road

Arcadia Road intersects with NYS Route 17M at a signalized "T" intersection. All approaches to the intersection consist of one lane. There are no sidewalks on either roadway.

NYS Route 17M and West Avenue/Chester Shopping Center Driveway (Village of Chester)

West Avenue intersects with NYS Route 17M (Brookside Avenue) at a full movement intersection opposite the driveway to the Chester Shoprite Shopping Center. The intersection is controlled by a fully actuated traffic signal. The approaches consist of separate left turn lanes and through lanes as well as a separate right turn lane on the northbound approach. West Avenue has a separate right lane and a shared through/left lane. There are signalized pedestrian crosswalks on all legs and no sidewalks on the west side of NYS Route 17M at this intersection.

NYS Route 17M and NYS Route 94 (Village of Chester)

NYS Route 17M intersects with NYS Route 94 at a signalized full movement intersection. All approaches have separate left turn lanes and the intersection also has a separate right turn lane on the northbound approach. Note that the westbound approach has a dual left turn lane and there are two through lanes in the eastbound and westbound directions along NYS Route 17M. There are sidewalks on all corners and pedestrian actuation and crosswalks are present.

NYS Route 17M and Kings Highway (C.R. 13)/Lehigh Avenue (Village of Chester)

NYS Route 17M and Kings Highway intersect at a signalized intersection with Lehigh Avenue offset from Kings Highway. There is one through lane in each direction and a separate right turn lane eastbound on Route 17M and traffic is controlled by an actuated traffic signal. Note that the northbound Kings Highway traffic destined to NYS Route 17M eastbound and Lehigh Avenue make a right turn onto Route 17M under separate channelized right turn yield control.

Orange Heritage Trailway crossings at South Street, Duck Farm Road/NYS Route 17M, and Old Chester Road

There are three (3) Heritage Trail crossings in proximity to the site including South Street, Duck Farm Road and Old Chester Road. Each of these crossings is at grade with some signing and striping identifying drivers and users of the trail of the crossings.

Table III-2 below summarized existing Levels of Service at study area intersections on various peak times. The measure for Level of Service (LOS) varies by type of intersection and type of roadway. Control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a measure of driver discomfort and fuel consumption. LOS 'A' describes operations with a control delay of 10 seconds per vehicle or less and a volume-to-capacity ratio no greater than 1.0. LOS 'B' describes operations with control delay between 10 and 20 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. LOS 'C' describes operations with control delay between 20 and 35 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. LOS 'D' describes operations with control delay between 35 and 55 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. LOS 'E' describes operations with control delay between 55 and 80 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. LOS 'F' describes

operations with control delay exceeding 80 seconds per vehicle or a volume-to-capacity ratio greater than 1.0.

For a full detailed summary of Levels of Service as well as a more detailed breakdown by approach and lane as well as information regarding measured delay times, v/c ratios and queue lengths, refer to Tables 1-9 in the full Traffic Impact Study.

Queue Summary Tables are provided including identification of those areas where the expected queues exceed available storage lengths. For those locations where the storage lengths were exceeded, turn lane improvements were identified and included as off-site improvements where necessary.

Table III-2: Existing Level of Service

Study Intersection[5]	LEVEL OF SERVICE					
	Weekday AM Peak	Weekday PM Peak	Saturday Peak	Sunday Peak	Summer Friday PM	Summer Sunday PM
Route 207 & North Connector Road/ Matthews Street	C	C	B	B	C	B
North Connector Road & NYS Route 17 Exit 124 on/off Ramps	B	B	B	B	B	B
North Connector Road/Route 17M & South Street	B	B	B	B	B	B
Route 17M & NYS Route 17 Exit 125 on/off ramps	B	C	B	B	C	C
Harriman Drive and Glen Arden Retirement Community Access	A	A	A	A	A	A
Harriman Drive and NYS Route 17 Exit 125 EB on/off ramps & BOCES	A	A	A	A	A	C
Harriman Drive & BOCES Access Drives	B	A	A	A	A	A
South Street and Harriman Drive	B	A	A	A	A	B
Reservoir Road/ South Street & Lower Reservoir Road	A	A	A	A	A	A
NYS Route 17A/ Route 207 & Hatfield Lane/ NYS Route 17 Exit 124 On/off ramp	C	C	B	B	C	B
Route 17M & Arcadia Road	A	A	A	A	A	A
Route 17M & Duck Farm Road	A	B	B	A	B	B
Route 17M & Old Chester Road	B	B	B	B	B	B
Route 207 & West Main Street & Church Street	D	D	C	C	D	C
Route 17M & West Avenue/ Chester Mall	B	B	B	B	B	B
Route 17M and Route 94/Academy Avenue	C	B	C	C	C	C
Route 17M & Kings Highway	B	C	B	B	C	D
Route 17M & Lehigh Avenue	B	C	B	A	C	A
Route 17 17 Eastbound Mainline, Weave and Ramps	B	B	A	A	B	B
Route 17 17 Westbound Mainline, Weave and Ramps	B	B	B	A	C	B

[5] Note that while traffic counts were recorded at the Orange County Heritage Trail crossings, no Level of Service is calculated as these are not vehicular intersections and therefor they are not included in this table.

Public Transportation / Pedestrian Access

According to 2014 US Census Data, only 4.6% of the total, working population in the Town of Goshen (including the Village) travels to work via public transportation. The following options are available around the Project Site.

Bus Services

The area surrounding the Project Site location is serviced by Coach USA/Short Line bus stops located at the Park and Ride lot on Matthews Street and the Main Street Bus Stop within the Village of Goshen. These stops provide service via Coach USA/Short Line to New York City during the AM and PM peak hours, nearby hubs including the Woodbury Common Premium Outlet Center and the Galleria at Crystal Run, and a connection to the Orange Westchester Link (OWL), providing access to the greater White Plains area with once-daily weekday round trips. Additionally, the Main Line Trolley Route provided by Coach USA/Short Line provides access to the area surrounding the site from municipalities in Orange County, including Middletown, Wallkill, Chester, Monroe, Harriman, and Woodbury Common.

Regional Train Services

In addition to the bus services, regional rail service is provided in Orange County via the Port Jervis Line operated by NJ Transit, which extends from Rockland County into Orange County with stops in Harriman, Campbell Hall (Hamptonburgh) and Middletown. Additionally, Metro North also provides train service on the east side of the Hudson River with stops in Westchester, Putnam and Dutchess Counties. The key locations along that line include Tarrytown, Croton and Peekskill in Westchester County, and Beacon in Dutchess County.

Pedestrian Facilities

Existing pedestrian facilities in the vicinity of the site include the Orange County Heritage Trail, which runs parallel to NYS Route 17 and NYS Route 17M throughout this portion of the county. The Heritage Trail originates in the Village of Monroe and currently terminates in the Town of Goshen at Harley Road. The Heritage Trail is planned to be extended to the west into the City of Middletown. It locally connects the areas of the Town and Village of Chester, the Town of Goshen and Village of Goshen. The trail is used by both pedestrians and bicyclists. The only existing sidewalks in the immediate vicinity of the site, other than the Heritage Trail, are located along the South Street Bridge and the portion of South Street from the bridge connecting towards the Village of Goshen and the Heritage Trail north of the North Connector Road and Route 17M (Chester Avenue) intersection.

Accident Data

All available accident data for the surrounding roadways for the latest five years was obtained from the New York State Department of Transportation and summarized by type, contributing factors, weather conditions, and severity. In addition, as per the Scoping Document, accident reports from the Village of Goshen and Town of Goshen Police Departments were also requested and are summarized in Table A.1 of the full Traffic Impact Study.. There is a significant overlap of these with the New York State database since the State's system contains all reported accident. Accidents within the study area are summarized on Table III-3 for the five year period from 2010 to 2015. An analysis has also been provided of the accident rates. Based on this information compared to the statewide average rate for similar facilities, none of the intersections exhibit a

high rate of accidents.[6] Furthermore, based on correspondence from NYSDOT, dated August 24, 2016, as contained in Appendix F of the full Traffic Impact Study, no priority investigation locations (PIL) were identified.

Table III-3: Accident Data

Roadways/ Intersections	Number of Accidents	Rate Per vehicle	State-wide Average
NYS Route 17 between exits 125 and 123 WB	149	1.74	1.1
NYS Route 17 between exits 125 and 123 EB	137	1.59	1.1
Route 17M/Matthews Street between Route 207 and Duck Farm Road	86	2.9	2.47
NYS Route 17A/ Route 207 between Coates Drive and Clowes Avenue	61	4.85	2.47
Reservoir Road/South Street between Lower Reservoir Road and Butler Drive	35	3.33	2.47
Harriman Drive between South Street and NYS Route 17 Exit 125 ramp	10	3.89	2.47

Source: NYS Police

Based on a review of the accident summaries, a significant portion of the observed accidents were found to be left turn and rear-end accidents as well as a result of excessive speeds. Various improvement measures, such as additional signing, striping, turn lanes and other measures, were identified to address these conditions as summarized in the traffic mitigation section below. Also note that at some locations where improvements are proposed by LEGOLAND New York, such improvements will help address some of these existing problem locations.

Simulation Modeling

This particular analysis will calibrate the findings to account for actual observed conditions in the field and apply those adjustment factors to the future intersection analysis. Simulation modeling was prepared for all peak hours. Copies of all files were submitted on a disk to the town's reviewing traffic engineer for review.

2. Potential Impacts

Based on similar-sized parks, between 1.5 and 2.5 million annual visitors are anticipated to visit the site. The trip generation for LEGOLAND varies depending on day of week. The peak daily traffic generation is in the order of 4,500 to 5,000 entering vehicles over the course of the day, with a peak hour generation of approximately 1,500 entering trips, based on the proposed operation. In comparison to other significant regional traffic generators in the area, such as Woodbury Common, the Galleria at Crystal Run and the Palisades Center, data indicates that these facilities generate daily volumes of between 15,000 and 25,000 entering vehicles.

[6] As defined by the adopted scoping document as twice the statewide average for similar facilities.

No Build Condition

LEGOLAND New York is expected to be opened and operating in the 2019-2020 timeframe. In order to reflect background traffic increases as well as traffic from other potential developments in the area, and analyze conditions after full maturity of the Park, the Existing Traffic Volumes were projected to a future Design Year of 2021. A growth factor of 1% per year was utilized to account for other miscellaneous growth in the area. This growth factor was developed based on historic data and what has been used in other similar traffic studies in the area. This growth factor has also been confirmed by NYSDOT. Historical traffic volume data available in the NYSDOT Traffic Data Report indicates that NYS Route 17M had an AADT of 6,334 vehicles per day in 2007, while in 2014, the AADT was 6,413 vehicles per day, which equates to a 0.18% per year growth rate. Contributing traffic from the following developments (obtained from studies prepared for the specific development or computed based on the size of the development utilizing the Institute of Transportation Engineers (ITE) Trip Generation data) was also considered. Appendix A of the full Traffic Impact Study provides traffic volume data from each of these developments and applies this volume throughout the study area intersections for each peak hour. The location and source of data for each development considered is also provided.

It should be noted that the increases in traffic as a result of these background developments results in total background increases on NYS Route 17 of between 18% and 46% over the existing volumes, depending on which time period is being considered. These volumes were then distributed to the locations included in our study area.

- Montreign Casino - Town of Thompson, New York
- Amy's Kitchen and SOS - Town of Goshen, New York
- Kiryas Joel proposed Annexation Petitions
- Youngs Grove Subdivision - Town of Goshen, New York
- Maplewood Subdivision - Town of Goshen, New York
- Clovewood - Village of South Blooming Grove, New York
- Heritage Estates - Town of Goshen, New York
- Orange County Gospel Fellowship Church - Town of Goshen, New York
- Kikkerfrosch Brewery - Town of Goshen, New York (Application has been withdrawn)
- Bethel Woods - Town of Bethel, New York[7]
- Veria Lifestyles Wellness Resort - Town of Thompson, New York
- Chestnut Ridge - Village of Bloomingburg, New York
- Fiddler's Green – Goshen, New York

As a result of increases in traffic due to natural growth and other developments in the region and immediate area, certain intersections will experience increases in delays during peak hours. Most

[7] This is an existing facility located on NYS Route 17B in Sullivan County, northwest of the Project site. During the time of the summer traffic counts, typical concert series events were scheduled at the facility and any traffic destined to and from that facility was captured in the traffic volume counts collected during those time periods. A calendar of events was reviewed and is appended to the full Traffic Impact Study.

significantly, the NYS Route 17 corridor traffic volumes will be increased as a result of the Montreign Casino traffic and traffic from other major regional generators.

NYSDOT, Orange County DPW and the Town of Goshen Highway Department were contacted and relevant studies reviewed to identify any planned improvements, which would affect the study area roadways. Previous studies have identified potential future area traffic improvements along NYS Route 17M and NYS Route 17 within the study area. These potential future improvements are discussed below for informational purposes. Based on discussions with NYSDOT, there is currently no plan to complete these improvements or timetable for when they would be implemented and therefore they have not been included in the analyses contained herein except as required in the Scoping Document. It should be noted that the recently approved NYSDOT 5-Year Capital Program for the fiscal five year period of 2015-16 through 2019-20 includes funds for the Harriman Interchange (Exit 131) as well as for extensions of the Heritage Trail.

- NYS Route 17M at NYS Route 17 (Future I-86) - Potential future improvements were identified for the NYS Route 17 interchange (Exit 123) with NYS Route 17M as well as to upgrade Exits 124 and 125 also in the Town of Goshen in conjunction with the conversion of NYS Route 17 to Interstate 86. These potential NYSDOT improvements are diagramed below.

As part of these potential improvements Exit 123 would be reconfigured to a half diamond interchange configuration. To accommodate this option, NYS Route 17M would be realigned to connect with Mathews Street and West Main Street on the northeast side of NYS Route 17, rather than directly connecting to NYS Route 17 as it does currently. New ramps to and from the east would be built to connect NYS Route 17 to the newly realigned NYS Route 17M/Mathews Street. The short segment of Police Highway between Hatfield Lane and NYS Route 17M would be eliminated and replaced by an extension of Hatfield Lane. This would require the relocation of this street access to a point further from the new NYS Route 17 eastbound on-ramp.

The Exit 124 (NYS Route 17A/NYS Route 207) westbound on and off-ramps would be shifted to the east, closer to South Street. As part of this modification, the Exit 125 (NYS Route 17M/South Street) westbound on and off-ramps would be eliminated.

The eastbound on and off-ramps at Exit 124 (NYS Route 17A/NYS Route 207) would remain unchanged, but their terminus would be redesigned to connect with a potential extension of Hatfield Lane, built as part of a public/private partnership, that would run from NYS Route 207 to South St. The Exit 125 (NYS Route 17M/South Street) eastbound ramps would be reconstructed to terminate in a roundabout. This would also require the redesign of the intersecting access roadways. Together these improvements would result in improved access to and from NYS Route 17 and NYS Route 17M. As previously indicated there is currently no timetable for the implementation of these improvements and therefore they have not been considered in the traffic analysis conducted herein.

- Harriman Interchange Improvements - NYSDOT has indicated that funding has been allocated in the amount of approximately $100 million dollars to advance the reconstruction of the Harriman Exit 131 interchange near the Woodbury Common Premium Outlets. (See Appendix I.)

• I-84 ITS Improvements - NYSDOT has an Intelligent Transportation System (ITS) improvement project for I-84 in Orange County, which is scheduled for completion in the next 5 years.

In addition, to the above there are also some privately funded intersection improvements planned by the Amy's Kitchen development at the intersection of NYS Route 17M and Training Center Lane.

Anticipated Site-Generated Traffic

Based on information provided by Merlin Entertainments together with other information published by the Institute of Transportation Engineers (ITE) for this type of facility, estimates of the peak hour site generated traffic volumes were identified. The Traffic Impact Study provides a summary of the daily variations of volumes for each of the hours of the day, by day of the week represented as a percentage of the total daily entering and exiting volume. This information is based on the hourly traffic volume data collected at the existing LEGOLAND facility located in Carlsbad California and annual attendance at both California and Florida parks. It should be noted that this hourly traffic volume information includes daily attendees, hotel guests, deliveries and staff trips.

Annual attendance data on a daily and hourly basis at LEGOLAND Florida and LEGOLAND California constitutes confidential and proprietary commercial information which Merlin Entertainments does not made publicly available. If this data was disclosed it would constitute a security risk and could cause substantial injury to the competitive position of Merlin Entertainments. Nonetheless, to assist the Town of Goshen with its review of the potential traffic impacts from the Proposed Project, Merlin Entertainments can provide this data to the Town and its consultants. Given that the daily attendance data is commercial information, it is exempt from disclosure consistent with the provisions of the New York Public Officers Law § 87(2)(d).

Generally all staff arrive to the site about 1.5 hours prior to park opening and leave about 2 hours after the closing time. There are some mid shifts and people who come and go all day but most staff start coming in after 8:00 AM. It should also be noted that LEGOLAND Goshen plans to coordinate with Orange County Transit for bus operations for their staff by enhancing the current public transportation services. As an example, in Florida, LEGOLAND Florida Resort pays a fee to local public transportation service to provide all of its staff with a bus pass (good for bus transportation at all times on local bus services).

On a Peak Summer Saturday the average total trips (entering and exiting) generated by the LEGOLAND facility per hour is anticipated to be approximately 700 vehicles per hour. During a Typical Summer Weekday (i.e. non-holiday) the average total trips generated by the LEGOLAND facility per hour is anticipated to be approximately 450 vehicles per hour. Note that these average hourly rates generally occur between 9:00 AM and 8:00 PM.

The primary arrival path to the Project Site is expected to be traffic traveling westbound on Route 17. Based on the ATR data and turning movement counts, the time periods of the highest inflow are generally between 10:00 am and 12:00 noon. Times when the westbound flow is typically at its lower levels, i.e., commuter traffic is eastbound in the morning and westbound in the afternoon.

A capacity analysis was conducted at each of the study area intersections utilizing the Site Generated Traffic Volumes which were added to the roadway network utilizing the arrival and departure distributions. These volumes were then added to the No-Build Traffic Volumes to obtain the Build Traffic Volumes and the results, including delays, levels of service and queue lengths. Resulting Levels of Service are provided on Tables 1-9 of the full Traffic Impact Study. It should be noted that for the Typical Weekday Peak AM and Typical Weekday Peak PM Hours analyzed in the report, the peak commuter hour traffic volumes were utilized at each of the area intersections. This includes the peak entering and exiting time periods for the BOCES Driveway intersections with Harriman Drive. This provides a conservative analysis of these time periods as the peak LEGOLAND periods for entering and exiting traffic, which are typically later than both the AM and PM peak times, was then applied to these traffic volumes

Traffic data was also compiled for various segments of NYS Route 17 between Exits 121 and Exits 131 to identify current volumes on the typical and summer season basis in order to determine the potential impacts from the increased traffic from the project. The Automatic Machine Recorders (ATR) count data was collected on NYS Route 17 both eastbound and westbound at several locations including between Exit 121 and Exit 123, between Exit 123 and Exit 126 and between Exit 126 and Exit 131. This information was utilized together with the ramp volumes and project generated volumes to complete an analysis of the various ramps.

The NYS Route 17 Mainline analysis included the evaluation of traffic volumes on various segments on NYS Route 17 relative to the expected increases in volumes from the Project. Specifically, in the vicinity of the site where traffic movements are expected to utilize ramps for entering and exiting the NYS Route 17 mainline, ramp merge and diverge analysis as well as weaving section analysis between ramps was completed for the segment from Exit 123 through Exit 125. In addition, the Route 17 intersections beyond this area were also assessed to determine the location where the Project would add in excess of 100 vehicle trips during one peak hour. This is summarized in Table SGT-6 contained in Appendix B of the full Traffic Impact Study. The anticipated hourly traffic volumes generated by the site along Route 17 between Exits 122 and 122A and between Exits 130A and 131 are also summarized in this location. Based on these tables, the only locations other than the mainline of Route 17 expected to experience an increase in traffic volumes of 100 vehicles or greater during any peak hour are the I-84 WB On Ramp to Route 17 EB and the Route 17 WB Off Ramp to I-84 EB. These ramps, along with the mainline of Route 17 in the vicinity of Exits 122 and 130, have been analyzed. The traffic volume projections for each of these locations for each of the peak hours are summarized in Tables TC-5 through TC-11 contained in Appendix B of the full Traffic Impact Study. The analyses procedures were completed, as per the procedures outlined in the 2010 Highway Capacity Manual.

Onsite Circulation and Parking

Upon entering the site guests of the site would travel south along the main entrance road which is to be designed with a two-lane boulevard with a planted median. The design of the site with parking in the rear is intended to allow for vehicles to stack onsite if necessary and not queue onto local roadways. The length of the main access road allows for the stacking of approximately 500 vehicles. This access road leads directly to the guest parking lot. A bypass lane will be provided to access the hotel parking directly. Parking tolls will be collected upon exiting the park, again to ensure guests enter the park as efficiently as possible.

Busses will be directed to drop off at the main gate of the park via the third parking area. They will then circulate back to the bus parking area in the western most parking area.

Employees will enter the site via a separate entrance from Harriman Drive into the back-of-house area. All delivery vehicles will also enter in this location. This entrance will controlled with a manned security both. An internal ring road will provide employees and emergency service personnel access to internal areas of the park.

A total of 5,663 total parking spaces are proposed onsite. The main guest parking lot has 4,344 total vehicle spaces which includes 3,631 standard on-grade spaces, 650 parking spaces on a parking deck, 71 spaces for busses and 63 handicapped accessible spaces. The hotel parking lot provides 252 at-grade parking spaces and 205 in a below-grade parking garage below the hotel. The staff parking lot in the back-of-house area contains 762 parking spaces. By comparison LEGOLAND California has 5,182 total parking spaces and LEGOLAND Florida has 4,180 spaces. Based on an average rate of 4 persons per car, the parking lot could accommodate approximately 18,920[8] patrons with its main guest and hotel parking areas.[9] Given that the peak daily attendance day was assumed to be 20,000, it is anticipated that proposed parking could accommodate the peak attendance day with the remaining guests (1,080 or 5.4%) arriving via shuttle from surrounding hotels or via bus from regional train stations or the New York Metropolitan Area. The actual percentage utilizing shuttle services from area hotels is anticipated to be greater than this percentage.

Possible Elimination of Exit 125

NYSDOT, Orange County DPW and the Town of Goshen Highway Department were contacted to identify any planned improvements, which would affect the study area roadways. The NYSDOT has identified several potential improvements to the Goshen area exits along NYS Route 17 as part of the conversion of NYS Route 17 to Interstate 86. A diagram of all potential improvements is provided in the full Traffic Study. There is currently no plan to complete these improvements or timetable for when they would be implemented and therefore they have not been included in the analyses contained herein except as required in the Scoping Document.

The Exit 124 (NYS Route 17A/NYS Route 207) westbound on and off-ramps would be shifted to the east, closer to South Street. As part of this modification, the Exit 125 (NYS Route 17M/South Street) westbound on and off-ramps would be eliminated.

Westbound ramp to Harriman Drive from Exit 125 (Flyover)

A plan was developed to identify the feasibility of a new ramp construction that would connect NYS Route 17 westbound via a modified Exit 125 interchange. This would include a new westbound off ramp in the vicinity of Duck Farm Road, which would "flyover" Route 17 and connect with Harriman Drive. This ramp would serve the existing uses along Harriman Drive including BOCES, Glen Arden and Elant as well as the LEGOLAND property. It would also provide access to South Street. This type of improvement would involve both federal and state review and approvals and would require significant review and input from these other agencies to

[8] 4,344 (main guest lot) + 252 (at grade hotel parking) + 205 (below grade hotel parking) – 71 (bus parking) = 4,730 (parking spaces) x 4 persons per car = 18,920 patrons.
[9] This calculation does not include the 71 parking spaces for busses, or those patrons arriving by bus.

determine whether this could be approved. This plan also illustrates the potential for a direct ramp connection from Harriman Drive to NSY Route 17 Eastbound. It is noted that under this scenario the proximity to a direct connection onto NYS Route 17 eastbound would likely reduce the number of vehicles that would travel into the Village of Goshen to patronize restaurants or other businesses. A copy of the Conceptual Layout for this potential alternative is provided in the Appendices of the full Traffic Impact Study in Appendix G.

Harriman Drive Vertical Curve

There is an existing vertical curve on Harriman Drive east of the Glen Arden site access. An existing vertical profile for this section of roadway was developed and compared with the design speed of the roadway to determine if this curve has a negative impact on sight distance. This analysis shows that the curve is substandard and should be improved.

Pedestrian and Bicycle Connections

Due to the family-nature of the park, coupled with the location of the Project and the distances to the surrounding areas, it is not anticipated that significant pedestrian and bicycle traffic will be generated by the site. It would be more likely for employees to travel to the site via bicycle than guests. At its closest point, the Orange County Heritage Trail is approximately 4,900 feet from the proposed project entrance. Improvements along South Street and Harriman Drive as well as multiple recommended improvements at the Duck Farm Road, South Street and Old Chester Road Heritage Trail crossings (as discussed below) will allow for bicycle access and bicycle racks will be placed in the back-of-house area to accommodate those who may wish to commute via bicycle. While Route 17M has shoulders for pedestrian and bicycle usage, actual usage is limited due to the proximity of the Heritage Trail.

Construction Impacts

Based on the proposed grading plan the site will require 196,187 cubic yards of fill to be brought to the site which will require trucks entering and 15 exiting the site over the course of the day over the course of the two year construction period. This equates to between 2 and 3 trucks entering the site per hour. In addition to large trucks, the construction of the project will create 800 construction jobs which will result in workers traveling to and from the site each day. As the Project Sponsor has entered into a Project Labor Agreement, the majority of workers are anticipated to come from Orange County and immediately surrounding counties. Construction related traffic and trucks would enter the site via Harriman Drive with the majority expected to arrive to and from Route 17. Please see additional construction related impacts discussed in Section III-S of this DEIS.

The Applicant will coordinate with the Town on the timetable for completion of offsite road improvements and will prepare appropriate Maintenance and Protection of Traffic plans for this work. These plans would include details on any necessary re-routing and necessary traffic control such as flagmen, temporary signage or lane closures. It is anticipated that some of the offsite activities will occur concurrently.

Emergency Vehicle Access and Response Times

The LEGOLAND New York facility is proposed to be serviced by two access points along Harriman Drive; one for guests and a separate entrance for deliveries, employees and other back-

of-house functions. A separate emergency vehicle access connection to Arcadia Road will be provided at the request of the emergency services providers. This access will be a 25-foot wide secured access, which will not be available to other motorists. It will be designed in accordance with the requirements of the emergency service providers and is shown on the Site Plan. The distances and approximate travel times to and from each of the local emergency responders facilities to the site, has been identified in the full Traffic Impact Study and are more fully discussed in the Community Services Section (III-L). The Project Sponsor implements crisis management plans at all of their facilities in order to be able to respond to emergencies including such events as fires, crashes, inclement weather, bomb threats, active shooter incidents, etc. These are coordinated with the area emergency services including state, county and local police and other involved agencies including fire department and emergency service personnel. Coordination with these agencies is ongoing will continue during operation of the site with specific procedures which would be modified according to their needs. These would include emergency routing plans, identification of on-site and off-site staging areas as well as provision of all building plans including emergency access points, etc.

3. Proposed Mitigation Measures

Onsite Mitigation

To ensure traffic does not back up onto public roads the site has been designed with a main access road which is 3,000 feet long. This will allow for vehicles to stack on the Project Site, if necessary.

It is the objective of the Project Sponsor to get cars into the site and parked as quickly as possible. To this end, parking attendants will manage a 'speed parking' system whereby staff direct vehicles to the next available parking space within the day-guest parking lot to ensure safe, efficient and expedited parking of guest vehicles. Parking tolls will be paid when exiting to ensure no unnecessary vehicle back-ups upon park entrance.

Due to the location of the Project and the distances to the surrounding areas, it is not anticipated that significant pedestrian and bicycle traffic will be generated by the site. However, the improvements along Harriman Drive and the South Street Bridge would be designed to accommodate bicycle traffic and bicycle racks will be placed within the back-of-house area to accommodate and encourage park employees to travel to work via bicycle.

LEGOLAND site generated traffic peaks are typically after the morning commuter peak and outside of the afternoon commuter peak traffic hours. A Traffic Management Plan should be established for accommodating traffic on peak days. This would include procedures for coordination with emergency services in the area. During these time periods, traffic control agents may also be utilized at key locations.

The Project proposes to provide shuttle bus services to and from area hotels including the Holiday Inn Express in Chester as well as to the other numerous hotels located in the Town of Wallkill on Crystal Run Road, including the Holiday Inn, Marriott, Hampton Inn and Microtel. Shuttle services will be coordinated with the anticipated visitors and reservations will be coordinated to provide the necessary frequency of service, based on the number of expected visitors. An automated system will be developed so that hotel patrons visiting LEGOLAND can arrange the shuttle via smart phone applications.

The Project Sponsor will make every effort to encourage the use of public transportation to the Project Site to reduce automobile trips. With the anticipated regional, draw including from urban centers south and east of the site, the traffic study recommends that bus service connecting from various collecting points, such as the LEGOLAND Discovery Center in Yonkers, NY and a pickup point in Manhattan, be developed to encourage bus transport to and from the site to reduce the number of automobile trips. These types of transit accommodations could also be coordinated with other major generators in the area such as Woodbury Common Premium Outlets. For example, Woodbury Common currently has express bus service to and from Manhattan. This type of service could be expanded to include LEGOLAND as a separate destination. Possible coordination of services with the Harriman Train Station and possibly other stations along the Harlem Line are being explored for a transit connection to the site.

Partnerships with tour bus companies to operate bus options from New York City are also under investigation.

Off Site Mitigation

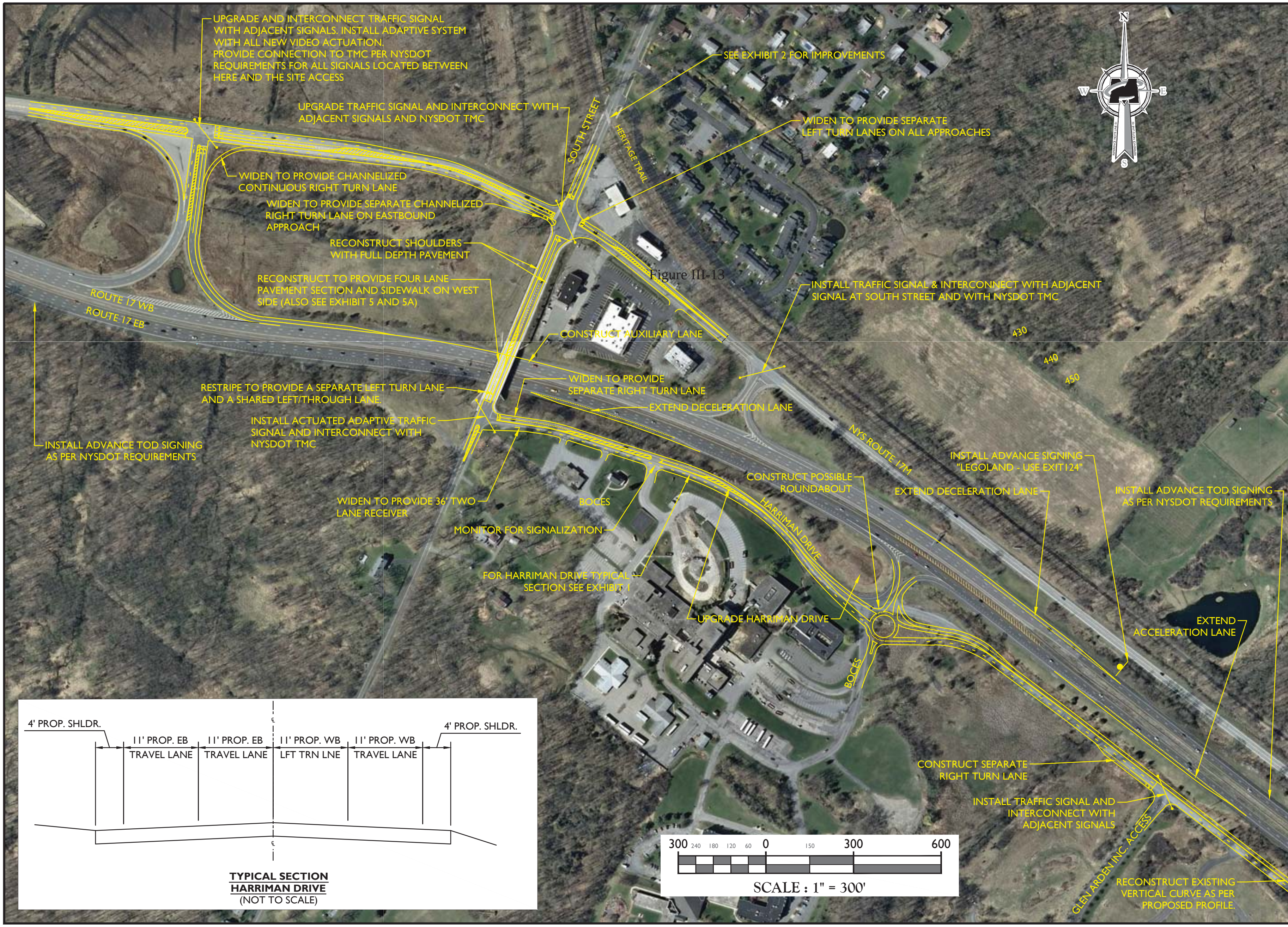
Based upon a review of the results of the capacity analysis and a review of the surrounding roadway network, several offsite roadway improvements have been identified for the area. These include extending deceleration and acceleration lanes on NYS Route 17, additional lane construction, provision of separate turn lanes, new signalization and upgrades to existing signals were identified. Figure III-13 shows area roadway improvements proposed as part of the development and are summarized below. The Project Sponsor plans to pursue any available funding for the study area infrastructure improvements.

Many of the following improvements to NYS Route 17 and the surrounding road network are improvements previously identified by NYSDOT as part of long term planning for the conversion of NYS Route 17 to Interstate 86. The implementation of these improvements will advance the conversion and will provide a regional traffic benefit. As a result, the Project Sponsor has requested that New York State and Orange County fund the cost of these improvements. That request is currently under consideration. The responsibility for ensuring any necessary measures are carried out and the timing of measures will be coordinated and determined by NYSDOT.

- LEGOLAND traffic arriving from NYS Route 17 from the east will be directed via signing to use the Exit 124 Interchange. The applicant proposes to widen the NYS Route 17-Exit 124 ramp to provide an additional lane on the off ramp and develop a channelized continuous right turn lane exiting the ramp and dual left turn lanes both entering and exiting the ramp. However, given that the NYSDOT proposes upgrades as part of the Interstate 86 conversion, continued coordination with NYSDOT on the potential Exit 124 and Exit 125 interchange modifications for this conversion will be required.

- Widen the intersection of South Street and NYS Route 17M to provide separate left turn lanes on all approaches and separate channelized separate right turn lanes on the eastbound approach. Reconstruct the sidewalks at this intersection;

- Upgrade shoulders to full depth pavement on South Street between NYS Route 17M and Harriman Drive to provide a three to four lane roadway cross section;



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REV	DATE	DRAWN BY	DESCRIPTION
1	6/27/16	RGD	MODIFIED ROUNDABOUT LAYOUT AND ROUTE 17M/SOUTH STREET INTERSECTION
2	7/8/16	JFM	ADDED NEW AERIALS.
3	9/8/16	M.J.A.	ADDED GLEN ARDEN ACCESS IMPROVEMENTS.
4	10/28/16	M.J.A.	ADDED R.O.W., GRADES, WETLANDS.
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CONCEPT IMPROVEMENT PLAN FOR

LEGOLAND PARK

NYS ROUTE 17/17M,
SOUTH STREET &
HARRIMAN DRIVE
TOWN OF GOSHEN
ORANGE COUNTY
NEW YORK

WESTCHESTER OFFICE
11 Bradhurst Avenue
Hawthorne, NY 10532
Phone: 914.347.7500
Fax: 914.347.7266

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	06/06/16	RGD	PJG

PROJECT NUMBER:	DRAWING NAME:
16000699A	R-CNPT

SHEET TITLE: CONCEPTUAL PLAN

SHEET NUMBER: FIGURE III-13

- Widen the southbound approach to the South Street Bridge to allow for the added lane from the channelized right turn;

- Modify the South Street Bridge structure to accommodate an additional lane by widening and reconstructing the sidewalk to be on one side of the bridge to accommodate bicycles and pedestrians;

- Restripe the South Street Bridge approach to provide a left and left/through lane at the Harriman Drive intersection;

- Widen Harriman Drive to provide a two lane receiver for left turns from South Street;

- Widen the Harriman Drive westbound approach to South Street to provide a separate right and a separate left turn lane;

- Install adaptive traffic signal with full actuation at the intersection of South Street and Harriman Drive;

- Upgrade/replace the existing traffic signals at the NYS Route 17 Exit 124 westbound ramp/N. Connector, and at the South Street and NYS Route 17M intersections;

- Install an actuated traffic signal at the Exit 125 westbound off ramp subject to NYSDOT approval;

- Interconnect traffic signals and install adaptive signal technology including video detection, software and hardware in accordance with NYSDOT requirements, as specified in its June 28, 2016 letter to the Town of Goshen, at the following intersections:

    - NYS Route 17M/South Street
    - NYS Route 17M/Exit 124 Westbound Off Ramp
    - South Street and Harriman Drive
    - NYS Route 17M/Exit 125 Westbound Off Ramp

- Modify the eastbound Exit 125 interchange to include additional stacking for off ramp as well as construction of additional geometric improvements including possibly a roundabout or loop ramp consistent with preliminary NYSDOT plans for the potential interchange modification;

- Signalize the intersection of Harriman Drive and the Glen Arden access drive;

- Widen the Harriman Drive eastbound approach to provide a separate right turn lane for traffic entering the Glen Arden access;

- Reconstruct the existing vertical curve on Harriman Drive east of Glen Arden to improve sight distances consistent with the roadway design speed;

- Implement other various signing and striping improvements as shown on Figure III-13;

- Implement signal timing improvements at various area intersections;

- The Heritage Trail has three crossings in the area for which data was collected and analyzed. These include the crossing at Old Chester Road, at Duck Farm Road and at South Street.

    - The Duck Farm Road crossing has very low traffic volumes crossing this, however, the close proximity to Route 17 was also considered. Based upon the existing conditions, recommendations for improvements include replacing signage with updated signage in conformance with the MUTCD and restriping the crossing with thermoplastic or epoxy striping to increase visibility. Also, clearing of vegetation on either side of the rail trail in the vicinity of the intersection to improve visibility for both motor vehicles and bicyclists/pedestrians.

    - At the South Street Heritage Trail crossing, the traffic volumes are already significant and will increase with the local LEGOLAND traffic. This crossing should be considered for signal control. The signal control could be a "Rapidly Flashing Beacon" (RFB) in advance of the crossing to advise motorists of the crossing location and/or a fully signalized crossing, which would be actuated by pedestrians and would stop vehicles on South Street. Other vegetative pruning/clearing and signing updates are also recommended at this location.

    - At the intersection of the Heritage Trail crossing and Old Chester Road, the crossing is more visible than the other two crossings. However, new signing should be installed on both of the Old Chester Road approaches as well as the rail trail approaches and the striping of the crossing should be done with either an epoxy or thermoplastic striping for better visibility. Some minor pruning of vegetation in the northwest and northeast quadrant of the crossing would also improve visibility for motorists and trail users. At each of the crossings, in addition to the "Stop" signs on the rail crossing approaches, advanced "Stop Sign Ahead" intersection signing should also be installed.

- Providing the parking areas on the southern end of the Project site with the entrance to the parking spaces at the southwest corner of the site will allow for maximum vehicle stacking within the Project site and this will negate any potential queuing effects on the external network. The proposed "pay as you leave" for parking treatment will significantly improve processing/parking of inbound vehicles to the Project to ensure this.

- The possible closure/modification of the NYS Route 17 westbound Exit 125 was included in the analysis. If this occurs, the existing traffic using this exit could be redirected to Exit 124 off ramp. The proposed improvements discussed herein will handle the additional volume resulting from this closure.

- <u>NYS Route 17 Ramp and Mainline Improvements</u> - Based on the results of the NYS Route 17 Mainline, Ramp and Weaving analyses, the existing deceleration lanes and acceleration lanes at the Exits 124 and 125 ramps should be extended to improve the ability for vehicle movements to exit and enter onto the highway system. An additional analysis of NYS Route

17 mainline with through lanes in this vicinity extending approximately 3,500 feet east of the current transition is also included in the Traffic Impact Study.

- At the BOCES eastern driveway, in addition to the provision of a separate left turn lane, potential traffic signalization of the driveway has also been considered. If signal warrants are satisfied, a traffic signal would be installed to control exiting movements at this location.

- At the intersection of Harriman Drive and the access drive to the Project, a traffic signal should be installed to allow traffic from the hotel and offices to exit the site. Inbound flow from Harriman Drive to the main parking area will be channelized to maintain free flow into the parking area and will not be part of the signal control.

Emergency Access
A separate emergency vehicle access connection to Arcadia Road will be provided at the request of the emergency services providers in the area. This access will be gated and not be available to other motorists. This access will be approximately 25 feet wide gravel drive which will run from the proposed parking area along gravel roads constructed for a previously constructed subdivision on the property. Also, to ensure the best and more efficient emergency response, the Project Sponsor has agreed to hold emergency evacuation drills at the park to be coordinated with park staff, onsite emergency services and local emergency service providers. This will ensure proper training and seamless coordination in the event of an emergency.

Traffic generation is an unavoidable adverse environmental impact. Mitigation measures have been provided as noted above.

I. Noise

1. Existing Conditions

Existing noise levels were measured to obtain the ambient (background) noise levels at eight area receptor locations as identified in the LEGOLAND Scoping Document, dated August 18, 2016, as adopted by the Town of Goshen Planning Board. The existing and future noise levels were then compared to Town requirements as well as recommended noise level guidelines as per the NYSDEC publication entitled, *Assessing and Mitigating, Noise Impacts*, revised February, 2001 to determine whether there will be any significant impact on the various receptors in the area.

Sensitive receptors in close proximity to the Project Site include Orange Ulster BOCES and Glen Arden Retirement Community and the Orange County Heritage Trail. Each of these locations was considered when establishing the specific receptor locations described below.

A single value of broad band noise levels is established using a frequency weighting that simulates human perception and is used to characterize the noise environment and to assess any impact on noise sensitive areas. Governmental noise criteria generally specify noise level guidelines in the units of A-weighted noise or decibels (dBA). The A-weighted noise measurement has been found to correlate well with the response of the human ear which is relatively insensitive to low frequencies. Table III-4 below provides a summary of some typical A-weighted noise levels. Governmental Guidelines typically stipulate that noise impacts be evaluated in terms of noise

levels designated L_{eq}. The L_{eq} (equivalent Sound Level) is an equivalent level "energy average" over a specified period of time. This measure is useful for characterizing environmental noise including highway noise since it specifically accounts for both the duration and magnitude of sound.

Table III-4: Range of Typical Environmental A-weighted Noise Levels

Rock Band at close range	110
Jet Flyover at 1000 ft	105
Gas Lawn Mower at 3 ft	98
Inside Subway Train	95
Shouting at 3 ft	78
Normal Speech at 3 ft	65
Library	35-40
Optimum sleep level	35 or less
Threshold for hearing	5

Source: Maser Consulting, PA

Noise measurement surveys were conducted at locations (receptors) on and off the site to provide a representative sampling and to identify ambient noise levels in the area. At those locations closer to NYS Route 17, traffic volumes were also observed to determine the relationship between noise levels and existing traffic volumes. The noise measurements were collected by representatives of Maser Consulting P.A. The noise measurements were taken with a Bruel and Kjaer Type 1-Precision integrating Sound Level Meter – Type 2236. The meter was calibrated prior to actual measurements using a Bruel and Kjaer Acoustical Calibrator Model No. 4231. The actual measurements and calibration procedures followed were completed in conformance with American National Standards Institute (ANSI) criteria.

The microphones used in the measurements were located, without obstruction from stationary objects at a height of five feet above a ground surface. Measurements taken included a L_{eq} level, and L_{90} and an L_{max} for each location. The measurements were collected on 10 and 15 minute intervals to identify the noise character at each receptor. The existing sound levels measurements were taken on Thursday, August 11, 2016 and Tuesday, August 23, 2016. Weekend readings were measured on Saturday, August 13, 20106 and Saturday September 3, 2016.

The receptors evaluated are identified on a map with associated photographs of locations in the full noise report in Appendix H but are generally described as follows:

Receptor 1 - Near the west site property line boundary just east of the Glen Arden Upper Parking Lot

Receptor 2 - Near the east site property line boundary past the gate and turn on Gumwood Drive terminus

Receptor 3 - Near the east site property line boundary in the vicinity of the Wedgewood Drive terminus

Receptor 4 - On the south site property line boundary north of Conklingtown Road

Receptor 5 - North of the site on Orange County Heritage Trail (approximately 150' west of Duck Farm Road)

Receptor 6 - South of Harriman Drive on the site, at the western site boundary, southeast of Glen Arden

Receptor 7 - Near the east site property line boundary south of Wedgewood Drive and Peachwood Lane (Paper Street)

Receptor 8 - To the west of the site at Lower Reservoir Road intersection with South Street

The summary of existing noise levels measured at the receptor locations is provided on Table III-5 below. The receptors located closer to NYS Route 17 and NYS Route 17M corridors are influenced primarily by the existing traffic levels while receptors R4, R6 and R8 are more heavily influenced by local or neighborhood noise levels. At various receptors such as R2 and R3, background levels from the operations at the Tilcon Quarry were also noticeable at various times during measurements. The quarry was operational during all weekday noise measurements.

Table III – 5a: Existing Noise Levels

Receptor ID	Date and Time of Measurement	Decibel Level Recorded
Receptor 1	8/11/16 10:45 AM-12:00PM	54.6
Receptor 1	8/11/16 12:00PM – 5:30PM	56.1
Receptor 2	8/11/16 10:45 AM-12:00PM	46.5
Receptor 2	8/11/16 12:00PM – 5:15PM	48.8
Receptor 3	8/11/16 10:45 AM-12:00PM	51.7
Receptor 3	8/11/16 12:00PM – 5:30PM	51.8
Receptor 4	8/11/16 10:45 AM-12:00PM	43.7
Receptor 4	8/11/16 12:00PM – 5:30PM	58.0
Receptor 5	8/11/16 10:45 AM-12:00PM	62.3
Receptor 5	8/11/16 12:00PM – 5:30PM	62.9
Receptor 6	8/23/16 10:45 AM-12:00PM	49.6
Receptor 6	8/23/16 12:00PM – 5:30PM	62.8
Receptor 7	8/23/16 10:45 AM-12:00PM	51.1
Receptor 7	8/23/16 12:00PM – 5:30PM	50.9
Receptor 8	8/23/16 10:45 AM-12:00PM	55.6
Receptor 8	8/23/16 12:00PM – 5:30PM	60.4

Source: Maser Consulting, PA

Table III – 5b: Existing Saturday Noise Levels

Receptor ID	Date and Time of Measurement	Decibel Level Recorded
Receptor 1 AM	8/13/16 10:00 AM –4:45 PM	55.3
Receptor 1 PM		55.5
Receptor 2 AM	8/13/16 10:00 AM –4:45 PM	47.2
Receptor 2 PM		48.2
Receptor 3 AM	8/13/16 10:00 AM –4:45 PM	57.3
Receptor 3 PM		48.6
Receptor 4 AM	8/13/16 10:00 AM –4:45 PM	55.4
Receptor 4 PM		57.8
Receptor 5 AM	8/13/16 10:00 AM –4:45 PM	62.1
Receptor 5 PM		61.7
Receptor 6 AM	9/03/16 10:00 AM –4:45 PM	47.9
Receptor 6 PM		48.3
Receptor 7 AM	9/03/16 10:00 AM –4:45 PM	42.1
Receptor 7 PM		43.6
Receptor 8 AM	9/03/16 10:00 AM –4:45 PM	55.6
Receptor 8 PM		59.1

Source: Maser Consulting, PA

2. Potential Impacts

The NYSDEC publication, *Assessing and Mitigating Noise Impacts*, revised February 2, 2001, provides guidance for evaluating noise impact assessments. It identifies typical thresholds for establishing significant impacts, and discusses potential methods of avoidance and measures to reduce or mitigate noise impacts.

The guidelines summarize the following:

- Increases in noise of under 3 dBA should have no appreciable effect on receptors;
- Increases of between 3 to 6 dBA may have the potential for impacts where the sensitive receptors such as hospitals or schools are present;
- Increases of more than 6 dBA may require a more detailed analysis of potential impacts depending on the ambient noise levels under existing conditions and the character of surrounding receptors; and
- Increases of 10 dBA are very significant and mitigation measures should be implemented to avoid impacts in such cases.

The document also suggests that the addition of a noise source should not result in the noise level exceeding 65 dBA near residential receptors.

In addition to the NYSDEC guidance, the Town of Goshen Town Code in Chapter 70, "Noise," at § 70-2 Item O, "Prohibited noise," prohibits any noise exceeding 75 dBA at the adjoining property

line and also describes loud, disturbing and unnecessary noises that would be considered a violation of the ordinance.

The future sound levels in the area will be the result of existing sound levels (primarily from existing traffic), sound levels from equipment operating on the site, sounds emitting from the activities on site as well as from increased traffic generation from the Project. In order to assess the future sound levels, the noise from various sources including HVAC equipment, other onsite fixed position equipment, that due to traffic added to the adjoining network, traveling on site and accessing the parking areas was added to the existing ambient levels. It should be noted that several of the receptors will be between 1,000 and 2,000 feet away from the noise sources resulting from the Project. This distance separation will help minimize any sound level increases at those particular locations. Other receptors will be primarily affected by increased sound levels due to the increased traffic, however, it is important to note that, a doubling of a traffic volume is required in order to result in 3 dBA increase in sound levels which would be the minimum typically perceptible.

To determine potential noise which could be expected to be generated by the proposed park, a noise consultant was retained to measure noise levels around the existing LEGOLAND Resort in Carlsbad, California. This park consists of 128 acres off a major highway with both commercial and residential uses in close proximity. The Carlsbad park experienced just over 2.3 million visitors each of the last three years which is similar, if not higher, than can be expected at the Goshen facility. The main way in which the Carlsbad park is not similar to the proposed park is that is has a waterpark. To not skew results, no noise readings were taken in the immediate vicinity of the waterpark.

Sound surveys were conducted during sunny and warm summer days with temperatures between 75-80 degrees Fahrenheit at various locations around the park. As was done for the existing conditions measurements, units of sound are expressed as decibels (dB) and the "A"- weighted filter is used to be consistent with the analysis at the New York locations. Surveys were conducted using a type 1 Sound Level Meter, per ANSI S1.4. Results of surveys are presented in Table III-6 below.

Table III – 6: Sound Survey of Existing Conditions LEGOLAND California

DATE	TIME		LOCATION	SOUND LEVEL AT RECEPTOR (DbA)
	Start	End		
7/19/2016	17:35	17:50	1- Inside Park at Castle Hill/ Dragon Coaster	63.7
7/19/2016	18:06	18:21	2- Castle Hill - 100 feet from property line	52.5
7/19/2016	18:25	18:40	3- Castle Hill - 100 feet from property line	57.4
7/27/2016	10:42	11:12	3- Alternate time	57.8
7/19/2016	18:45	18:55	4- 250' from property line	46.4
7/27/2016	12:02	12:12	5- Adjacent hotel property across from Land of Adventure with maintenance buildings to the right	55.2
7/27/2016	13:45	13:55	6- inside park at Fun Town/ DUPLO/ Junior Driving School	56.2
7/19/2016	19:50	20:20	7 – LEGOLAND Drive and Park exit	59.4
7/26/2016	9:31	10:31	8 – Park entrance	58.5

Fireworks could be used at the site for special holiday celebrations such as the Fourth of July or Halloween. Typical fireworks displays at the park last approximately 20 minutes and would only occur on weekends. While decibel levels of fireworks can reach up to 150dBA at close range, based on noise measurements at the LEGOLAND Florida Resort during the Brick or Treat Halloween Celebration, noise levels are anticipated to range from 100 to 106 dBA at nearest property lines. Fireworks would only be used by certified professionals and would take place on weekends at approximately 8pm. Times and dates would be coordinated with Town officials as necessary.

During scoping, several residents noted that the Project Site was in or near an area previously referred to as Echo Ridge. The exact location of Echo Ridge is not known and could not be determined, although there was previously a historic marker sign located on Reservoir Road. The historic marker was reported to be located on Reservoir Road over 2,900 feet from the nearest point of the development of the Project. Town and Village of Goshen Historian, Edward Connor was also contacted[10] and had no recollection of hearing or reading about an echo phenomenon in the vicinity of the Project Site. He believed the historic marker was identifying a farm property on Reservoir Road. As shown by the measurements taken, no atypical acoustic phenomena were observed.

3. Proposed Mitigation Measures

[10] Phone conversation with project planner on 10/31/16

As can be seen from a review of the sound level tables, the increases in noise levels at the receptors as a result of the project traffic are expected to be 3dBA or less at the majority of receptors.

In the vicinity of the access road closest to Glen Arden Retirement Community, the majority of the road is at a depressed elevation and a retaining wall is proposed along this property boundary which creates a mitigating acoustic barrier from this adjoining property. If a retaining wall is not constructed in this location, the noise analysis recommends the consideration of a sound wall along a portion of the access road with additional plantings between the access road and the adjoining property.

Noise levels at the property lines do not warrant mitigation on the east side of the Project Site. Additionally, all rooftop HVAC equipment will be positioned away from adjacent receptors and as necessary, or will include potential acoustic screening to limit any increased noise levels. It is anticipated that the on-site mitigation, *i.e.*, the HVAC attenuation and landscape screening, will mitigate noise to all surrounding properties. Therefore, no unavoidable adverse environmental impacts from noise are anticipated.

The construction equipment used on-site will be inspected periodically to ensure that properly functioning muffler systems are used on all equipment. No equipment will idle unnecessarily.

J. Utilities and Solid Waste Disposal

1. Existing Conditions

The only current use of electricity and gas on the Project Site results from the existing residences on Lot 11-1-47. Orange and Rockland Utilities currently holds an easement around roads which were intended to be built as part of an expansion of the Arcadia Hills residential development. No infrastructure was installed in this area but the easement area was dedicated.

Both electric and gas lines exist along Harriman Drive. Gas runs along Harriman Drive from South Street to the Project Site and currently provides service to Lot 11-1-47. Electric supply runs across NYS Route 17 and connects to a pole on Harriman Drive in the vicinity of the same lot to provide electric service.

Orange and Rockland Utilities also maintains high tension wires which run across the full length of the Project Site. This easement varies in exact width but is generally approximately 180 feet wide.

The only solid waste generation is also from the existing residences on Lot 11-1-47.

2. Potential Impacts

Orange and Rockland Utilities will provide electric and gas services to the Proposed Project. To project the amount of electricity usage, data from other existing LEGOLAND facility was reviewed. The LEGOLAND Florida Resort consumes approximately 1,092,809 kWh per month while the park in Windsor which is a seasonal park with no waterpark attractions consumes an average of 724,624 kWh per month with a summer peak in 2015 of 1,003,755. Given the Proposed Action will be seasonal in nature, it is anticipated electricity usage would be more similar to the

Windsor park with summer peaks and reduced usage in the shoulder seasons and significantly reduced in winter months when outdoor operations are closed.

It is likely electric service would be derived from the high tension wires. No off-site improvements or upgrades will be required to make utility connections but utility poles along Harriman Drive may need relocating. The project engineer met with representatives of Orange and Rockland Utilities on June 16, 2016. The agency did not express any concerns with the project but did discuss the use of the site for a possible sub-station at some point in the future. This substation would be located either within the existing O&R easement or in the immediate vicinity of this location and will be coordinated with the property owner at such time the station is planned. The substation would be approximately set on a 200' by 200' concrete pad surrounded by an 8' fence. Orange and Rockland Utilities also expressed a willingness to abandon the easement that was created around the previously proposed residential subdivision roads.

Standby, emergency generator power will be provided to support fire alarms, refrigeration and freezer units, hotel emergency lighting and basic functions for the aquarium. Generators would only be used in the event of an emergency and no impacts are anticipated.

LEGOLAND New York will contract with a private hauler to transport solid waste to the Orange County Transfer Station in Goshen. Other LEGOLAND parks in Florida and California generated approximately 79 tons of waste per month in 2015. Given the Proposed Action will be seasonal in nature, this amount reflects the peak season months and will be less in the shoulder seasons and significantly reduced in winter months when outdoor operations are closed. Based on this monthly waste generation, it is anticipated that a private solid waste collection would be required two to three times per week during the peak season. Trucks would enter the site at the back-of-house entrance. Actual routes taken to the Project Site would depend on the private company's schedule and preference. Waste will be transported to the Orange County Transfer Station #1 located on Training Center Lane south of NYS Route 17M and to private recycling facilities. LEGO bricks are made from plastic and do not contain toxic chemicals. All LEGO bricks are recycled.

All trash is collected and held in the back-of-house area in enclosed buildings to control odor and limit visibility of trash. As waste from the site is expected to be collected regularly, odor is not anticipated to be an issue.

Regarding the amount of solid waste that can be expected to be generated during construction of LEGOLAND New York, such solid waste would include the demolition of the existing residences located on Harriman Drive as well as the removal of all abandoned structures on the project site including the former hotel as well as any packaging or waste materials associated with construction materials brought to the site. The Project Sponsor estimates the amount of solid waste generated as a result of construction activity to be approximately 3,400 cubic yards based on a standard multiplier provided by the EPA.

As with solid waste that would be generated during the operation of the Proposed Project, LEGOLAND New York will contract with a private hauler to transport construction-related solid waste to the Orange County Transfer Station in Goshen or construction debris recycling center. Based on the expected utilization of 25 cubic yard containers, the removal of 3,400 cubic yards of solid waste would result in approximately 136 vehicular trips during construction.

3. Proposed Mitigation Measures

In an effort to reduce the total amount of solid waste which would be transported to the Orange County Transfer Station and ultimately to a landfill, LEGOLAND parks recycle material such as cardboard, office paper, traffic cones, cooking oils, motor oil, light bulbs, shrink wrap, scrap metal, pallets, LEGO brick, foam brick, plastics (grades 1-7) and batteries. Within the park, recycling receptacles are placed next to trash receptacles to encourage guests to also recycle. LEGOLAND California recycles 2 million pounds of materials annually. LEGOLAND New York will also engage in an environmental sustainability program. Several sustainable landfill diversion measures will be undertaken as they are currently done at existing LEGOLAND facilities as follows:

- Placement of receptacles around the park with all trash receptacles;
- Green waste such as landscaping trimmings, are processed into mulch;
- High Density polyethylene (HDPE) plastics such as food and beverages containers, are recycled into benches and trash receptacles; and
- Cooking oils are recycled to be used for biodiesel fuel.

Energy use is an unavoidable adverse environmental impact.

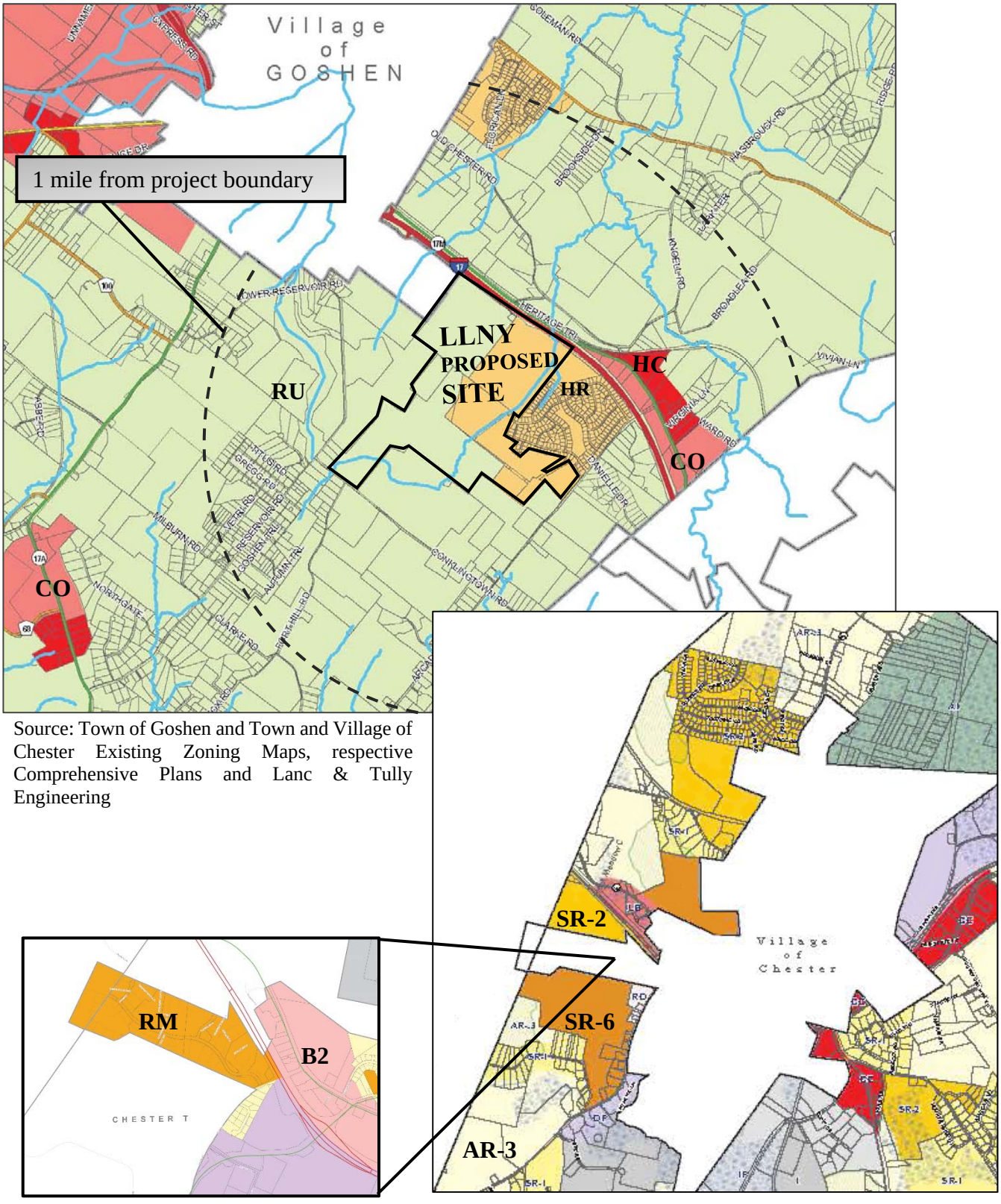
K. Land Use and Zoning

1. Existing Conditions

Zoning

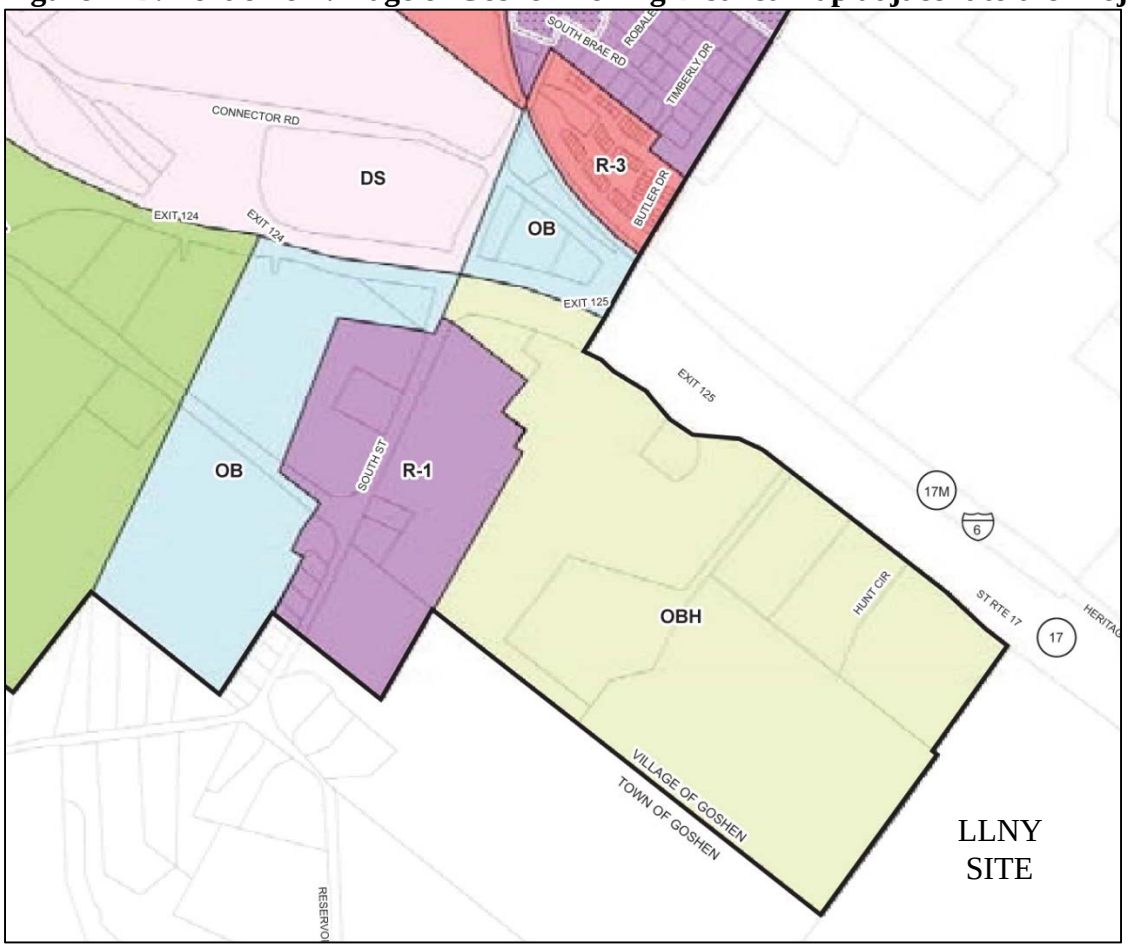
The Project Site is currently located in the Town's rural (RU) and Hamlet Residential (HR) Zoning Districts. Adjacent land to the west of the site in the Village of Goshen is zoned Office Business Hospital (OBH). Land in the Town of Chester along the border with the Town of Goshen is zoned suburban residential (SR-2 and SR-6), and Agricultural Residential (AR.3). Zoning in the Village of Chester closest to the site is Residential – Multiple Dwelling (RM) with business and manufacturing districts further east along NYS Route 17. Zoning within one mile of the project site is illustrated on Figures III-14A and III-14B.

Figure III-14A: Existing Zoning within 1 mile of the Project Site



Source: Town of Goshen and Town and Village of Chester Existing Zoning Maps, respective Comprehensive Plans and Lanc & Tully Engineering

Figure 14B: Portion of Village of Goshen Zoning District Map adjacent to the Project Site



Source: Orange County Department of Planning

The property is located in the Town's Aquifer (AQ-3) Overlay District. All development projects within this overlay district are subject to § 97-27 of the zoning code. The regulations in this section set the maximum potential limit for density or intensity of development on a particular site and are based primarily upon the findings of the Town-Wide Potable Water Planning Study (January, 2003). Based on these regulations, non-residential uses, not served by public water and sewer, shall be evaluated on a case-by-case basis for their impact on groundwater supply and quality, and such uses shall be subject to such restrictions on operations, use of materials, waste management, and stormwater control as the Planning Board deems necessary to protect groundwater resources from pollution (See § 97-27.C). This section also establishes the water testing protocol for testing the wells proposed to service the Project Site which is not applicable to this project because no groundwater is proposed to be used for water supply.

The zoning regulations for the Stream Corridor and Reservoir Watershed Overlay District require a minimum 150-foot setback from the mean high water level of the subject watercourse to principal structures. On the Project Site this overlay runs along the Otter Kill.

Scenic Road Corridor Overlay requires development within 500 feet of the Right-of-Way of a designated roadway to be consistent with the scenic character and must minimize removal of

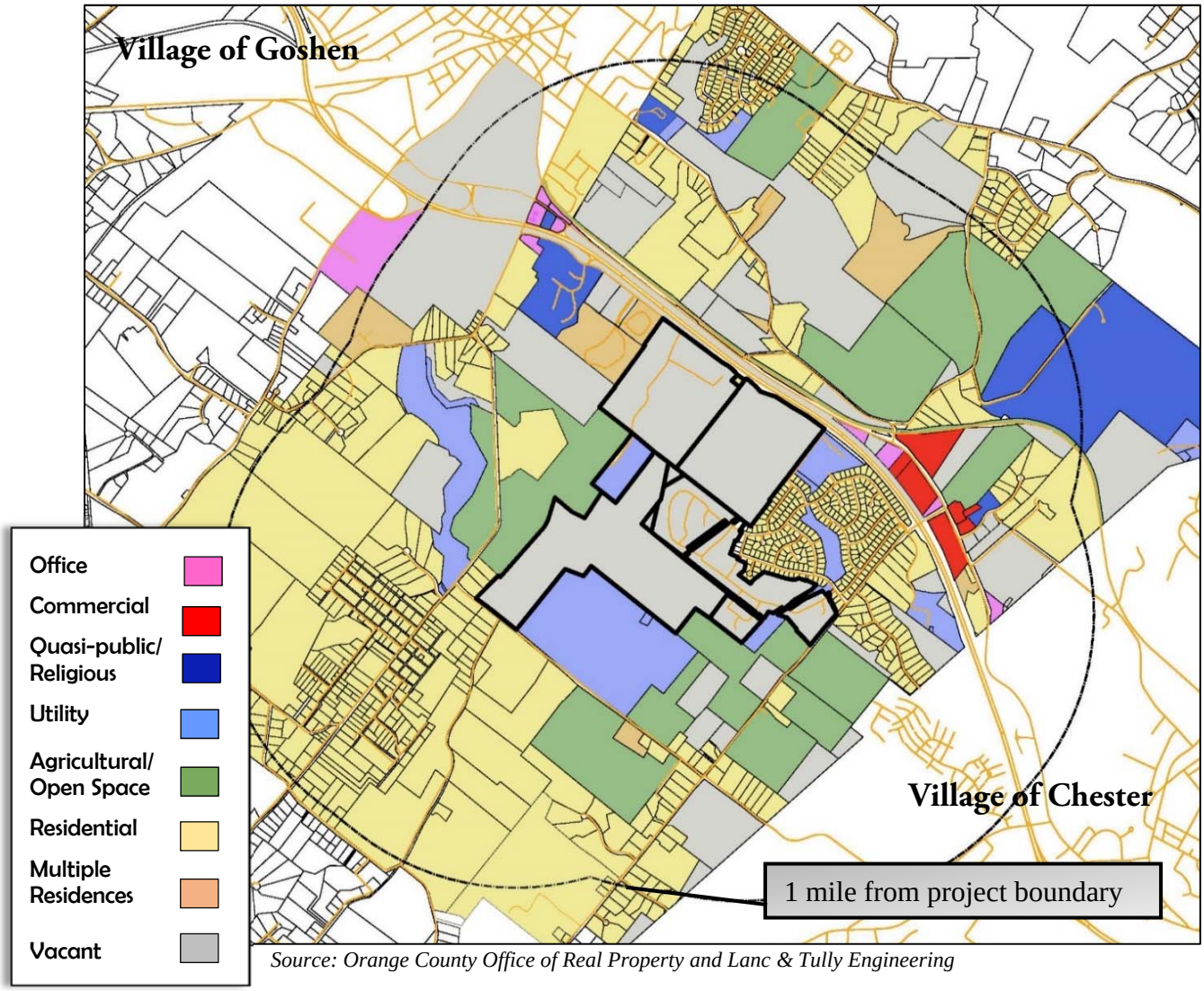
vegetation in order to maintain the aesthetic quality of the area (see Section 97-29 of the Town Zoning Code). On the Project Site this overlay district runs along Conklingtown Road.

Land Use

The majority of the Project Site is currently vacant. Lot 11-1-47 contains two multi-family residential structures. Lot 11-1-45 contains an active communications tower in a fenced enclosure with several equipment cabinets. Other portions of the site contain remains of a demolished hotel and barn which burned down several years ago. Eight of the parcels which make up the Project Site are currently owned by the Town of Goshen, some of the parcels were intended utility use but no development has occurred on these lots.

Surrounding land uses within one mile of the Project Site include mainly single family residential uses on lots of varying sizes. Arden Hill and Elant senior housing and congregate care facility is located immediately to the west of the site in the Village of Goshen as well as Orange and Ulster County BOCES also located on Harriman Drive. Also in the immediate vicinity are agricultural uses with commercial to the north/ northeast of the site along Route 17M. Commercial uses include offices, a restaurant and two commercial recreation uses including a golf course and a pool and tennis center. Commercial uses continue along Route 17M into the Village of Chester. Areas south of Route 17 in the Town of Chester are single family residential uses at varying densities. Whispering Hills multi-family development is the closest area of the Village of Chester to the Project Site.

Figure III-15: Existing Land Use



Source: Orange County Office of Real Property and Lanc & Tully Engineering

No historic markers or cemeteries exist on the Project Site. A sign denoting "Echo Ridge" was previously identified on Reservoir Road over 2,900 feet from the nearest point of the development of the Project. This sign was believed to be identifying a farm property by the Town Historian.

2. Potential Impacts

Lot merger and Re-subdivision

As part of the Proposed Action the 15 parcels which make up the current project site will be merged into a single lot under common ownership. From this lot, a 1-acre lot will be created for the communications tower enclosure. All existing associated communications infrastructure will remain operational on the site. A one acre lot will be subdivided from the project site and PC Reservoir, LLC will retain ownership of this land. The access drive and easement will be reconfigured to provide access through the Project Site.

Two lots, 0.918 acres each will be subdivided for the two wells proposed to be dedicated to the Town and Arcadia Hills Water District will provide the required well protection area and two lots will be created for wells and other Arcadia Hills Water District infrastructure which was found to

be located on the Project Site. Access easements will be provided to each of these lots for any necessary Town access and maintenance.

Zoning

The proposed theme park use is not permitted in its respective zoning districts. An amendment to the Town Zoning Law to create a Commercial Recreation Zoning Overlay District has been prepared to permit various recreational uses and accessory uses thereto proposed as part of the LEGOLAND New York development (See Appendix B for a copy of Town of Goshen Introductory Local Law 6 of 2016). Such development shall require the issuance of a special permit and site plan approval by the Planning Board, subject to the relevant procedures and required findings set forth within Article IX of the Zoning Law. Pursuant to §265 of NYS Town Law, the Town Board has the authority to amend its zoning code and zoning map subject to review by the County Planning Department, the Town Planning Board and review under SEQRA.

Pursuant to this Local Law a Commercial Recreation Facility shall be defined as *"A business operated for profit offering fully planned, integrated recreational and educational uses including, but not limited to, rides and attractions, an aquarium, theaters, restaurants, hotels, retail offerings and various supporting administrative facilities including offices and staff areas, as well as associated parking and drainage facilities."*

Based on this zoning the minimum lot area of 200 acres shall be required to apply this overlay district. The proposed site consists of 521.86 total acres. A minimum front, side and rear setback will be established for the CR Overlay District by Local Law #6 of 2016. The project will adhere to all minimum standards therein. As currently proposed, the project maintains an approximately 276 foot side setback and approximately 350 front setback from Harriman Drive. No other parcels could be zoned CR without Town Board approval. As buffers are provided between this site and other town parcels, the zoning is not anticipated to have long term impacts other parcels in the Town.

This zoning district would not replace the underlying zoning but would be an overlay district superseding underlying regulations for this project should Planning Board approve the required site plan and special permit. Where a conflict exists between the development standards contained in the overlay regulations and any bulk, Use Table, guideline, standard, regulation, or any other limitation or restriction in the Town Code, the development standards in the CR Overlay district regulations shall govern. If the project does not receive the required site plan and special permit, the zoning overlay district would expire and be null and void.

The adoption of this overlay zone will reduce the total amount of land within the Town on which housing can be constructed. Particularly given the Project Site is one of the few sites in the Town of Goshen zoned Hamlet Residential (HR) which permits multi-family housing units. The **Three County Regional Housing Needs Assessment,** prepared in 2009 for Orange, Ulster and Dutchess Counties, was prepared in response to the rapid increase in housing values and in-migration of residents that occurred in the Region in the late 1990's and early 2000's which far exceeded the rise in income levels during the same time period. While housing stock supplies increased in Orange County few of the new units delivered to the market were targeted toward low or moderate income buyers. To address this need, the study provides forecasts of the expected need for affordable housing over the study period from 2006 to 2020. Affordable housing is defined based

on US Department of Housing and Urban Development guidelines. Owner occupied housing is affordable if not more than 30% of a household's gross income is spent on a mortgage payment, utilities, taxes, and insurance. For renter units, the HUD standard is that no more than 30% of a renter household's income should be spent on rent and utilities (including fuel for heat, hot water and cooking, electricity for lights, water and waste water charges, and trash removal). After quantifying the need for affordable housing, an estimate of future affordable housing "targets" was made for each County and Town (including Villages) from 2006 to 2020 in order to address the current and projected affordable housing needs. The identified affordable housing target for the Town of Goshen is 3,401 owner-occupied units and 1,442 rental units by 2020. Projections for Goshen include both the Town and Village of Goshen. Based on the 2014 American Community Survey the Town and Village of Goshen have 1,311 multifamily housing units which are considered affordable. Currently 5 additional affordable units are under Town Planning Board review (within Rolling Ridge and Maplewood Village residential subdivisions) and an additional 8 multifamily units are under review by the Village Planning Board.

To meet additional projected housing needs the Town of Goshen has a mandatory affordable housing requirement for all residential developments containing more than 10 units (Section 97-24 of the Town Zoning Code). The Town has several large tracts of vacant land with the potential for large residential developments. While the Town's HR zone permits multifamily units, very few have been constructed on HR-zoned land and only one, mostly built out, area around Hambletonian Park in the Town remains zoned for multi-family development as several parcels were removed from this district in 2009. Aside from the HR zone, the town permits accessory apartments in all single family residential units in all residential zones subject to the availability of adequate utilities. Based on the Town Comprehensive Plan's assumption that approximately 85% of the Town's single housing stock would be appropriate to add an accessory apartment, this provision could provide up to 2,980 additional rental[11] units into the Town thus making it possible for Goshen to meet the Three County Housing Needs Assessment target for rental housing.

No impacts would occur related to the AQ-3 Overlay District as no groundwater will be used to provide water to the Project Site. No disturbance would occur within the Stream Corridor Overlay district. No development or site disturbance is proposed along Conklingtown Road within the Scenic Corridor Overlay District.

Land Use

The existing residential use will be removed from the site along with any other structures except the existing communications tower. The communications tower will remain operational on the site on a separate one-acre lot as discussed above. The access drive and easement will be reconfigured to provide access to the communications tower and related equipment through the Project Site.

The proposed LEGOLAND New York will be in contrast to the immediately surrounding land use patterns in the Town. However, the proposed project design seeks to concentrate development in disturbed areas and areas in the center of the site in order to allow for large buffers between the proposed project and adjacent land uses. The nearest residential structure to the parks closest point, the loop road at the outer edge of the guest parking lot, is approximately 1,000 feet away.

[11] Based on the total number of single family dwellings in the Town as per the 2014 American Communities Survey.

Approximately 1,000 feet between the park and the residential neighborhood to the east will remain in their current vegetated state.

The LEGOLAND New York theme park will be open from April through October only. Due to the focus of the LEGOLAND brand on young children, hours of operation of the park in summer months will be from 10:00AM to 8:00PM, seven days a week. During the non-peak season the park will be open from 10:00AM to 6:00PM on weekdays and 10:00AM to 8:00PM on weekends. The hotel, aquarium and offices will be open year- round, typically with much lower visitor attendance during winter months.

Planning Documents

The **Town of Goshen Comprehensive Plan** states the following in regards to the Town's intent,

"*A Comprehensive Plan is a statement of a community's land use goals that takes into consideration the growth, scale, location, intensity, and diversity of development desired, and strategies for the location of commercial and industrial uses to improve the local economy… It is not in every respect a detailed instruction manual that identifies exactly what to do or what will happen. It does not predict the future, although it does look ahead and expresses the Town's goals for the future. It does not always prescribe exact courses of action, because certain actions must be developed with care in response to a wide variety of situations that may arise after the Comprehensive Plan is adopted and before its next revision. It would be short-sighted to mandate only one way to accomplish a community's goals in a Comprehensive Plan, when creativity and responsiveness to public input and evolving community needs over time may result in better solutions. A Comprehensive Plan is also a living document, intended to be reviewed and revised as needed."*

While the Project Sponsor believes the Proposed Action is consistent with the 2009 Town of Goshen Comprehensive Plan goal #4 to develop a strong and balanced economic base and to attract tax positive commercial developments to offset existing tax exempt lands and to pay for services required by the growing population, the Town Board is currently considering an amendment to the plan (see Town of Goshen Introductory Local Law #5 of 2016 in Appendix B). The Town Board is considering amendments to Sections 3.3 and 3.5 of the Comprehensive Plan of the Town of Goshen to specifically encourage additional commercial uses in the Town along State Route 17 to increase tax and other revenues to offset the costs of providing residential services to Town residents. These amendments would be consistent with the Orange County Comprehensive Plan and the Orange County Economic Development Strategy, as discussed below.

The **Orange County Comprehensive Plan**, last updated in 2010 sets Priority Growth Areas in its Land Use Plan in and around Villages and along transportation corridors. The Project Site lies within the Plans delineated Priority Growth Area which extends, along Route 17M from the Village of Goshen into the City of Middletown. The Plan recommends development within these areas to expand job growth and expand the tax base.

The **Orange County Economic Development Strategy** (2015) targets tourism as one of the main industries imperative to economic development in the County. The goals of this plan include expanding tourism by expansion of both overnight accommodations to provide revenue to the County through the hotel occupancy tax and developments which emphasizes Orange County as a 'destination' within the Northeast. The Proposed Action accomplishes both of these goals.

The **Orange County Water Master Plan** was adopted in 2010 as an amendment to the 2009 County Comprehensive Plan. The plan identifies Goshen as one of several communities which has, or is projected to have, water supply shortages. Given the time period of this study, the report does not take the Crystal Run Village Wells into account as they were only approved as emergency sources at that time. Therefore, while the plan shows that by 2018 the Village of Goshen would be experiencing a water shortage, the Village supplemented its water supply to address this issue (see Section III-E for discussion of the Village's current water supply). The plan recommends municipal policy actions to conserve water and protect watersheds areas. The Village of Goshen has not adopted such polices but the system is consistent with all NYSDEC and Orange County Health Department regulations.

Orange County Open Space Plan was prepared by Orange County Planning Department in 2004. The plan inventories a wide variety of recreational and open space resources and touts their many benefits. The plan also reinforces the "Priority Growth Area" concept as described in the Orange County Comprehensive Plan. The Project Site lies within this designated area where growth is recommended. Recommendations in this plan are County-wide and are set on a five-year horizon, expiring in 2009. The plan, therefore does not address present day open space goals or make any longer term recommendations for development of land.

The **Hudson River Estuary Action Agenda** is a conservation and restoration blueprint for the Hudson River and its watershed that guides the work of the Estuary Program and its partners. The Action Agenda defines challenges and identifies practical solutions that can be carried out by civic leaders, policy makers, and citizens working together. The 2015 - 2020 Action Agenda is organized around six key benefits including clean water, resilient communities, vital estuary ecosystems, fish, wildlife and habitats, natural scenery, and education, river access, recreation and inspiration. The document touts the benefits of the watershed and provides a dozen recommendations. This document does not offer site or development specific recommendations.

The **Moodna Creek Watershed and Management Plan** was prepared by the Orange County Water Authority in 2010 to increase public awareness of water resource issues, in general, and the Moodna Creek, in particular, so that watershed stakeholders are better equipped to make decisions that will positively impact the watershed and the local quality of life. The Project Site lies within the 180-square mile Moodna Creek Watershed and more specifically the Otter Kill South Subbasin which consists of about 16 square miles in Goshen and Hamptonburgh. The recommendations of the watershed plan are largely directed at Orange County and the municipalities to adopt regulations or participate in the Greenway Compact Program. While several specific sites are discussed, none are in the Town of Goshen. The Town of Goshen is consistent with the plan's recommendations to develop zoning regulations which require riparian buffers from surface water resources and to require habitat assessment as part of the development approval process. The proposed project incorporates riparian buffers of at least 100 feet around all onsite wetlands and the Otter Kill consistent with the intent of this plan as well as NYSDEC and Town regulations.

The **Town of Goshen Open Space and Farmland Protection Plan** was adopted in July of 2003 with the goal of maintaining the visual appeal and the rural character of the landscape, while simultaneously improving the overall quality of life of the community by enhancing and protecting the economic vitality, natural resources, wildlife habitat and environmental health of the Town. The plan was initiated during a residential building moratorium in the Town which was enacted in response to a reported 500 residential units pending approval before the Planning Board. At the

time there was a need to control growth and protect sensitive resources given the projections for sharp increases in residential growth. Since this time, the housing market has largely subsided and much of the proposed development of the time was not constructed. Also since this time, the Village of Goshen has added new water supply wells and constructed a new Wastewater Treatment Plant to improve services with the potential to accommodate growth. There are no specific recommendations for the Project Site in the plan. Portions of the site are identified as 'forest' in the plan. Viewsheds along Arcadia Road and Conklingtown Road in the vicinity of the Project Site are also discussed as important to maintain. Given the project proposes to preserve wetland areas, a significant amount of forest habitat, and important viewsheds and also proposes the use of public water and sewer which are more protective of the environment, the Proposed Action is consistent with the objectives of this plan.

The Wildlife Conservation Society completed the **Southern Wallkill Biodiversity Plan** for the Towns of Chester, Goshen, and Warwick in 2005. Its subtitle was "Balancing Development and the Environment in the Hudson River Estuary Watershed." The intent behind the plan was to identify vital biologically diverse areas for conservation purposes and to establish a regional, multi-town approach to land use planning to promote wildlife and habitat conservation. The project sought to address the impacts of sprawl on natural ecosystems. The plan stresses the importance of open space linkages to serve as secondary habitats for species. The Project Site is not identified as a primary habitat or conservation area. The proposal is consistent with the goal of establishing linkages between natural resources as it provides for a natural undisturbed buffer along wetland areas and the Otter Kill and allows for undisturbed land south of the utility easement and along Conklingtown Road which will connect to wooded areas on both the east and west of the site as it does today.

3. Proposed Mitigation Measures

The lighting associated with the Proposed Project will include a comprehensive package of design features. Types of lighting includes bollards, string lights and pole-mounted lights along the access road, in parking areas and internal to the theme park. Fixtures and mounting height will vary by location on the site with architectural design which coordinates with each of the various themed lands within the park. Site lighting for entrance roads and parking lots will consist of flat-lensed dark-sky friendly LED fixtures. It is anticipated poles within the entrance roads would be on poles of 20-30' high while guest parking area poles would be 30-40' high. Lighting along the access road and within parking areas are proposed to have full cutoff shields to limit lateral spread of light and would be dark-sky friendly, meaning that light would not be projected up from the fixture. Lighting within entrance roads and parking lots will be zoned to provide illumination within specific portions of the site only during hours of needed use. It is anticipated that all lighting within the guest parking areas and guest entrance road will be dimmed to 50% illumination one hour after the park closes. After the lighting is dimmed, occupancy sensors installed on each light fixture will provide for localized full illumination until activity is no longer detected. During the overnight hours lighting within the main guest parking areas will be turned off while the guest entrance road and hotel parking areas will remain on at 50% illumination throughout the overnight hours to provide for hotel guest comfort and security. During the overnight hours occupancy sensors will continue to operate allowing localized full illumination when activity is detected.

It is anticipated during the off season when the main LEGOLAND park is not open, lighting within the parking areas serving the main park will be kept off at all times and only the areas being used

for hotel guests or visitors to SeaLife will be illuminated in a similar fashion as described above. Lighting levels at property boundaries, with the exception of the access road, will be zero.

Lighting levels after park operations close will be reduced to minimum security levels. The park closes at 8PM in the peak summer season with staff typically leaving park approximately 1.5 to 2 hours after park closing. Therefore lighting levels will be reduced at or shortly after 10PM at the latest on the site. Nighttime lighting hours would be reduced during the shoulder season (April-May and September-October) when the park closes at 6PM and further reduced during winter months when the majority of park operations are closed.

Existing mature trees and shrubs are preserved around the periphery of the site to buffer the development from surrounding properties. The sites natural variations in topography will also work to visually buffer the site as the development will sit lower than surrounding land along Arcadia Road and lower than the adjacent Glen Arden property. To supplement the natural vegetation, extensive landscaping is proposed along all roadways, parking areas and within the theme park itself to create a park atmosphere within the theme park. Landscaping proposed is a mix of evergreen and deciduous trees, shrubs, flowering bushes and ornamentals which will provide visual interest, visual and noise mitigating barriers. Shade trees will be located within a 10-foot divider running within the center of the entrance road, a dense mix of evergreens and shade trees line both sides of the service road as it runs parallel to Harriman Drive and a mix of multiple species of trees and bushes are proposed to buffer the staff parking area which is the site's closest point to Harriman Drive in the back-of-house area. Landscaping consist of native species which will reduce the amount of necessary irrigation and incorporate well into the site's existing flora and fauna.

Preservation of forest habitat which connects to adjacent properties on both the east and west sides of the site which is essential for species to continue to move safely within the larger habitat. The Proposed Project is designed to ensure consistency with recommendations in both the Open Space Plan and the Southern Wallkill Biodiversity Plan

The project design will incorporate well protection areas around the wells which will be dedicated to the Town and the Arcadia Hills Water District. Additional wetland protection areas will be provided in addition to existing regulated wetland buffers.

Change in land use is an unavoidable adverse environmental impact.

L. Community Services

1. Existing Conditions

Police Services

The Town of Goshen Police Department serves the Town-Outside-Village (TOV) area and operates from the Town Department of Public Works facility at 44 Police Drive approximately 3 miles from the Proposed Site. Response time to the site would be approximately five minutes. The Town Police force consists of a Police Chief, six full time officers and 14 part-time officers. Equipment consists of police vehicles, radar and surveillance equipment and firearms. Additional

police coverage for the Proposed Site is available from the Orange County Sheriff's office located in the Village of Goshen and the NYS Police.

The Orange County Sheriff's office is located at 110 Wells Farm Road, Goshen, NY, approximately 4 miles from the Project Site. The Orange County Sheriff's Office currently consists of 107 uniformed sworn personnel (excluding corrections officers). Typical response time to the Project Site is approximately five minutes.

The NYS Police Troop F provides coverage for a five-county area (Rockland, Orange, Ulster, Sullivan, and Green Counties) and employs approximately 500 personnel. Troop F has approximately 20 stations and is capable of drawing manpower from any of these stations in the event of an emergency. Troopers will respond to any complaint received regardless of jurisdiction and maintain great coordination and cooperation with local forces. Troop F also provides special experts to local forces, including homicide investigators when requested. Troop F also has special detail assignments patrolling Interstate Highway 84 and NYS Route 17/Future 86, and provides 24-hour local coverage for the various towns in Orange County.

Fire

The Goshen Fire District includes three separate companies within the Town and Village of Goshen. The district has 180 volunteer members. According to the Fire District's website they receive an average- of 550 calls a year. The district owns and maintains eight fire engines, three SUV's, an ATV, a special operations vehicle and a rescue truck. All three companies, the Cataract, Dikeman and Minisink are located within the Village of Goshen off of Route 207. Response times are anticipated to be five minutes.

Other local fire departments which could provide mutual aid if necessary include the Village of Chester Fire Department located at 81 Main Street in Chester approximately 5 miles from the site and the Village of Florida Fire Department located at 19 South Main Street in Florida, approximately 6 miles from the site.

Ambulance

Goshen Volunteer Ambulance Corps (GOVAC) has approximately 20 members and operates three ambulances, one fly car and two bicycles. The team responds to over 800 calls a year in the Town and Village of Goshen and the Town of Hamptonburgh. The facility is located at 7 New Street, approximately 1.5 miles from the Proposed Site. Response time would be expected to be less than five minutes.

In addition, Orange County operates an Emergency Services Center at 22 Wells Farm Road, Goshen, NY, approximately 2.3 miles from the Project Site. The Department of Emergency Services comprises five divisions: Emergency Communications (911); Emergency Management; Fire Services; Police Liaison Services; and Emergency Medical Services. The 88,000 square foot secure facility houses the Divisions of Emergency Communications, Emergency Management, Police Liaison Services and Emergency Medical Services. The Division of Fire Services operates at the Orange County Fire Training Center located at 9 Fire Training Center Lane, New Hampton, NY, approximately 4 miles from the Project Site.

Town Hall Services
The Town Hall of the Town of Goshen is located at 41 Webster Street within the Village of Goshen. Operations of the Building Department, Town Court, Tax Assessor and a number of other administrative offices are contained within this building. The total Town population as of was 13,671[12]. As the Village and Village Hall provide many services to its residents, Town Hall is likely to mainly serve a population of 8,233 (Town outside Village).

Recreation Services
The Town and Village have a join Parks and Recreation Department which operates out of Craigville Park on Craigville Road. The Department maintains all Town and Village Parks which includes Bruen Park, Craigville Park, Erie Street Park, Church Park (Village Green). Ganley Park, Lions Park and Salesian Park as well as Goshen Senior Center. Goshen Central School District maintains recreational parks and athletic fields at each of the four schools in the district.

2. Potential Impacts

Police
The guest entrance road and the back-of-house entrance of the park will both be controlled via a security booth. Visitors to the park will only be permitted to enter through one main gate.

Police reports for the last two years at the existing LEGOLAND Florida Resort were reviewed. Over the course of a year 326 calls for police services were made from September 2014 to September 2015. Given the Florida report is a year-round park, the proposed park would be expected to generate the same monthly rate (27 calls/month) from April through October which would equate to 189 calls for police services. Representatives from the Town also met with the Chief and Captain of the Winter Haven Police Department on October 28, 2016 to better understand potential concerns and/or impacts from the project. At the LEGOLAND park in California 30 calls for police services were made in 2014 and 2015.

On July 15, 2016 the project engineer met with Police Chief James McDowell to obtain any specific site concerns. The Chief did not express any major issues with the park design or the Town's ability to provide service to the project. Plans will continue to be coordinated with all emergency services. On July 20, 2016, project representatives met with Orange County Sheriff Carl DuBois. The Sheriff had no major concerns with the ability of his office to serve the project. The potential to locate a small substation for police services was discussed which can easily be accommodated and will allow for a seamless relationship between onsite park security and police.

Project representatives contacted and met with James Watt, Village of Goshen Police Chief to preliminarily discuss project plans. Chief Watt did not express any specific concerns, but requested a follow up meeting once project plans and particularly traffic plans are further developed and made available to the involved and interested agencies. We will continue to coordinate with Chief Watt and the Village of Goshen as project site planning continues.

NYS State Police Troop F Headquarters in Middletown was contacted and did not feel necessary to review project plans at this time. It should be noted that the State Police provide only supplemental support in the Town of Goshen, which is primarily served by the Town of Goshen

[12] US Bureau of the Census, 2010-2014 American Community Survey 5-year Estimates

Police Department. The Project Sponsor expects that the State Police would only respond to the Project Site if requested to do so by the Town of Goshen Police.

No special equipment related to the project would be necessary. Any additional costs related to servicing the project would be offset by PILOT and host community fees paid to the Town of Goshen.

Fire

All structures on the site will be constructed consistent with NYS Building and Fire Codes. Fire alarms, suppression systems, and sprinklers would be provided as required.

Water storage will be provided with a 522,000 gallon, glass-fused-to-steel potable water storage tank to be located on the west side of the property. This tank will be approximately 30 feet tall and 56 feet in diameter and will provide adequate storage for fire flow capacity. Fire hydrants will be installed at all water main high points and at a maximum spacing of 400' along the length of the water mains.

The project engineer met with Department Chief Elmer Budd on July 13, 2016 to discuss plans and receive concerns on the project. Representatives from the Village of Chester and Village of Florida fire departments were invited to an additional meeting with the project engineer and Goshen Fire Chief Elmer Budd on October 26, 2016. Questions from that meeting included the nature of internal fire suppression infrastructure including hydrants and sprinklers, evacuation procedures, emergency egress and ongoing coordination with the department.. Plans will continue to be coordinated with all emergency services.

The last four years of fire calls were reviewed and sent to the Goshen Fire Department for their review. In 2015, the LEGOLAND Resort in Winter Haven, Florida made 84 calls to the local Fire Department with 10 of those calls logged by the department as canceled calls or false/ unintentional alarms. Given the seasonal nature of the Goshen resort, it would be expected the number of total annual calls for fire service would be generated at the same monthly rate but only from April through October which would equate to approximately 49 calls to the local Fire Department. Additional costs incurred as a result of the increased number of calls will be offset by tax revenue paid to the district. At the LEGOLAND park in California 117 calls for local fire and ambulance services were made in 2014 and 2015.

The Project Sponsor will continue to coordinate with the Goshen Fire District as park planning continues.

Ambulance

Most frequent medical concerns at other existing parks are heat stroke and minor scrapes from falls. In the event additional medical attention or ambulance services are required, park staff will contact GOVAC via 911. Since January of 2011, the Polk County Ambulance was called to LEGOLAND Winter Haven 238 times. Given the seasonal nature of the proposed Goshen resort, it would be expected the number of total annual calls for service would be generated at a similar monthly rate but only from April through October which would equate to approximately 35 annual calls for ambulance service. At the LEGOLAND park in California 117 calls for local fire and ambulance services were made in 2014 and 2015.

No additional costs are anticipated to GOVAC.

Although multiple attempts to contact local ambulance services were unsuccessful, project representatives met with Brendan Casey, Commissioner of Orange County Emergency Services on October 18, 2016. The main concern discussed was emergency access to the park.

The Project Sponsor would look to coordinate onsite medical services with the local hospitals and health care providers to best coordinate needs and services. ORMC recently expanded and has no capacity issues. Mr. Steven Sugrue, Vice President, Greater Hudson Valley Health System has been made aware of the project. No adverse impacts to local hospitals are anticipated.

Town Hall Services
The proposed project is not expected to result in a significant demand on Town Hall services, including the court, with the exception of an additional demand on the Building Department for inspections during the construction of the project. No additional costs to taxpayers are anticipated.

Recreation Services
The proposed project will provide both indoor and outdoor recreation attractions on a County and Region-wide level. It will not generate demand for additional recreation services outside of the park. No negative impacts to Town or Village Recreation Services are anticipated.

3. Proposed Mitigation Measures

LEGOLAND New York will have 24-hour, year round security team at the park which will serve as first-responders in the event of an incident, and will work closely with local police departments, as necessary..

LEGOLAND New York will also have a team of certified Emergency Medical Technicians (EMTs) on the site and will have a First Aid facility at the park. These EMTs will have motorized carts for speed of access and would serve as first responders in the event of any medical issue or in the event a park patron stops at the First Aid building with a medical concern.

A 25-foot wide emergency access to the site will be provided via Arcadia Road. Portions of this road currently exist but new portions will be constructed of compacted item 4 and be gated with a Knox box accessible only to emergency service personnel. The road will not require paving as the theme park is not open during winter months.

The possibility of a landing location for an emergency helicopter was discussed at the meeting with Orange County Emergency Service personnel. Similarly, emergency helicopters landed at Arden Hill Hospital (now BOCES) when it was operations for many years within the parking lot and the service is currently provided at other regional hospitals including Crystal Run in Middletown. A landing location requires an approximately 80 foot by 80 foot space. A landing location could be accommodated either within any of the parking areas or behind the back-of-house area. LEGOLAND staff will continue to work closely with County and local emergency services to ensure coordination in response to emergencies.

Each of the existing LEGOLAND facilities has a site specific emergency evacuation plan. A copy of the LEGOLAND Florida Resort plan will be provided, as an example, directly to local emergency service providers. As this document contains sensitive information it cannot be

released publicly. The Project Sponsor has agreed to hold emergency evacuation drills at the park to be coordinated with staff, onsite emergency services and local emergency service providers. This will ensure proper training and seamless coordination in the event of an emergency. It is anticipated a final emergency evacuation, lockdown procedure and other safety/ security plans will be derived collaboratively from these training exercises.

Also, to that end, the Project Sponsor has agreed to hold emergency evacuation drills at the park to be coordinated with staff, onsite emergency services and local emergency service providers. This will ensure proper training and seamless coordination in the event of an emergency.

LEGOLAND New York will pay full taxes to the Goshen Fire District to offset any costs associated with providing services at the Project Site. Based on the project assessed value of $83,017,947 and 2016 district tax rates this will result in a projected annual tax revenue of $190,883.17. Other town services including courts and hospitals are user-fee supported services and no costs would be attributed directly to LEGOLAND.

No unavoidable adverse impacts are anticipated to community resources.

M. Fiscal and Economic Impacts

1. Existing Conditions

Fiscal impact assessment does not attempt to project the amount of taxes and costs that the project will have in the future. There are too many unknown variables outside the control of the Project Sponsor to reliably predict what revenues and costs will be generated at a future date. Rather, in order to determine the "impact" of the Proposed Action on local taxing jurisdiction finances, fiscal impact assessment examines what the implications would have been were the project completed and occupied in the current year. This eliminates the need to predict tax rates, tax expenditures and the relative valuation of residential and nonresidential real property, as the current conditions are known and not subject to debate. The construction and operation of the project will result in increased economic and fiscal activity in Orange County and the broader New York State economy in the form of employment, employee compensation, economic output, and tax revenues. This analysis assesses the potential impacts of the Proposed Project on local taxing jurisdiction finances, estimates the likely municipal costs associated with the Proposed Project and estimates amounts of primary and secondary economic activity and tax revenue that can be anticipated to be generated by construction and operations of the Proposed Project.

Current Employment Outlook

In 2016 there were an estimated 15,063 employees working in the Town of Goshen (see Table III-7). These employees represent approximately 8.5% percent of the total employment in Orange County. The Arts, entertainment and recreation section represents 1.4% of employment in Goshen and only 1.5% of the total Orange County employment.

Table III-7: Employment by Industry Sector, 2016

	Town of Goshen		Orange County	
	Number	**Percent**	**Number**	**Percent**
Agriculture, Forestry, Fishing and Hunting	62	0.4%	530	0.3%
Mining	10	0.1%	98	0.1%
Utilities	50	0.3%	685	0.4%
Construction	772	5.1 %	7,364	4.2%
Manufacturing	247	1.6%	8,940	5.0%
Wholesale Trade	539	3.6%	7,458	4.2%
Retail Trade	926	6.1%	28,964	16.3%
Transportation and Warehousing	222	1.5%	6,196	3.5%
Information	139	0.9%	3,271	1.8%
Finance and Insurance	342	2.3%	4,510	2.5%
Real Estate and Rental and Leasing	407	2.7%	4,404	2.5%
Professional, Scientific, and Technical Services	859	5.7%	7,103	4.0%
Management of Companies and Enterprises	0	0.0%	177	0.1%
Administrative and Support and Waste Management and Remediation Services	307	2.0%	4,281	2.4%
Educational Services	1,326	8.8%	20,718	11.7%
Health Care and Social Assistance	2,686	17.8%	25,332	14.3%
Arts, Entertainment, and Recreation	214	2.8%	2,663	1.5%
Accommodation and Food Services	421	4.3%	12,552	7.1%
Other Services (except Public Administration)	1,726	11.5%	11,997	6.8%
Public Administration	3,745	24.9%	19,290	10.9%
Unclassified Establishments	63	0.4%	886	0.5%
Total	**15,063**	**100.0%**	**177,419**	**100.0%**

Source: ESRI Business Analyst, Inc, Business Summary Report.

Tax Revenue Generated by the Project Site

The Project Site is made up of 15 total tax parcels. In 2016, the total assessed value for the Project Site was $1,598,500. Two of the parcels, 11-1-46 and 15-1-59, are currently subject to a New York State Agricultural Exemption which means the parcels' overall taxes collected are lowered based on a reduced assessed value. Such exemptions only apply to parcels which meet specific criteria set by New York State and must be applied for each year by the individual property owner. Nine of the parcels are currently owned by the Town of Goshen and are wholly exempt from property taxes. These parcels are located in the Chester Union Free School District but do not generate any revenue for this district based on their tax exemption. The table below summarizes current tax revenue generated from the site.

Table III-8: Existing Tax Revenue

TAX ID	Current Owner	2016 Assessed Value	2016 MUNICIPAL (County, Town, Highway, Part Town and Goshen Fire)	2015 SCHOOL	TOTAL
11-1-45	PC Reservoir LLC	$575,000	$31,085.33	$20,354.51	$51,439.84
11-1-46*	Goshen Land Owner LLC	$149,400	$1,560.91	$3,671.92	$5,232.83
15-1-59*		$238,400	$1,599.96	$3,763.78	$5,363.74
11-1-47	Brian Carey and Joan Marie Carey	$174,900	$2,631.90	$6191.31	$8,823.21
11-1-58	Fini Bros.	$177,800	$2,675.54	$6293.97	$8,969.51
11-1-49.2		$226,500	$3,369.49	$7,986.43	$11,355.92
11-1-60	Town of Goshen	$8,300	$0	$0	$0
11-1-62		$16,300	$0	$0	$0
11-1-63		$400	$0	$0	$0
11-1-64		$700	$0	$0	$0
11-1-65		$19,200	$0	$0	$0
11-1-66		$1,100	$0	$0	$0
11-1-67		$6,700	$0	$0	$0
11-1-68		$2,000	$0	$0	$0
11-1-69		$1,800	$0	$0	$0
TOTALS:		$1,598,500	$42,923.13	$48,261.92	$91,185.05

Source: Orange County Office of Real Property * Lots currently subject to Agricultural Exemption

2. Potential Impacts

According to the Orange County Economic Development Strategy, "Tourism, as a whole has a significant impact on the economy of the county. In 2012, more than 4 million tourists visited Orange County, spending over $430 million. This relative windfall contributed $28,785,397 in local taxes, lowering tax bills of residents. Overnight visitors to Orange County also paid the hotel occupancy tax, or "bed tax" of 5% instituted by the County in 2009…. In 2012 the figure was $2,867,763, an increase of 10% over the initial two year period."

Payment in Lieu of Taxes (PILOT)

The applicant is seeking a thirty year Payment in Lieu of Taxes (PILOT) agreement from the Orange County Industrial Development Agency. As part of the PILOT, the applicant makes annual payments to its various taxing jurisdictions based on an agreed upon sum instead of paying taxes based on property assessment. The applicant would also be subject to a waiver of sales tax on construction materials. This incentive program would provide an initial payment in year 1 of operation of $1,022,000 to the Goshen Central School District, $210,000.00 to the Town of

Goshen, and $168,000.00 to the County of Orange. These payments will increase at a compounded rate of 1.5% annually until year 5 by which time the SeaLife Aquarium is expected to open and the Project Sponsor's investment in the Project reaches $500,000,000; at that point the payment will increase to $1,900,000. The payment will then continue increasing annually at a compounding rate of 1.5% for the remainder of the thirty year period. The PILOT will guarantee payments to the taxing jurisdictions of at least $52.6 million over 30 years.

Special Taxing District Revenue

The PILOT incentive does not apply to special taxing districts, therefore in addition to any PILOT payments, the property owner will continue to pay the full amount of tax assessment payments to Goshen Fire District 1.

Taxes will be paid to the Goshen Fire District based on the full assessed value of the project. The Director of the Orange County Department Real Property anticipates that the project would be assessed at $83,017,947. Based on the 2016 tax rates that would require an annual payment to the Goshen Fire District of $190,883.17.

Host Community Agreement

In addition to the PILOT, and for the duration of the thirty year PILOT term, the applicant has agreed to pay $0.65 for each ticket sold, each year up to 2,000,000 visits and $0.20 for each ticket sold thereafter - with no cap on payments - directly to the Town of Goshen. Based on the projected number of annual tickets sold at the Project Site, this would provide the Town of Goshen with an additional $1,300,000 annually, or more depending on the success of the park.

Over the duration of the host community fee agreement, payments would increase by 1.5% per year. Regardless of attendance, LEGOLAND New York would pay the Town of Goshen a minimum host community fee based on 800,000 visitors, or $520,000 annually.

Additional Tax Revenue

Based on Orange County's 5% hotel tax and an anticipated 50,000 hotel room stays per year, the proposed 250-room hotel room will also generate an additional $850,000 annually in revenue for Orange County, and approximately $30,000,000 over 30 years.

New York State sales tax in Orange County is 8.125%. Revenues are shared between New York State, Orange County and the MTA for all retail sales at the Project Site. Based on anticipated retail and food and beverage sales receipts at the Project Site, it is anticipated the project will generate approximately $4,500,000 in annual sales tax. Over 30 years, sales tax receipts at LEGOLAND New York would generate approximately an additional $300,000,000. Orange County's sales tax revenue share would be approximately $138,000,000.

Additional Overall Economic Benefits

To evaluate the economic impact of the LEGOLAND New York, this study has employed commonly used regional economic development models which calculate the economic multipliers associated with jobs and income in affected industries. These multipliers account for the additional spending and resulting jobs from the initial project investment and continued operation.

For example, a construction worker would divide up the income he receives between savings and spending. His spending would be divided up between various retail stores (food, fuel, clothing, etc.) as well as other services. This spending would increase the profits of those businesses and lead to more income, and potentially more jobs, in those industries. This process (i.e. ripple effect) continues until the additional effects can no longer be felt. Along the way, some of the money will not find its way to other industries (saved money) or may leave the local economy through imports. Those leakages will diminish the effects over time.

Using the IMPLAN software and cross-industry multipliers calculated for Orange County, this study provides detailed estimates of the impacts of the Proposed Project. The analysis was conducted based on Proposed Project's activities in Orange County as well as their estimated impact on external businesses throughout the region. For example, the Carlsbad, California park currently uses local vendors for such services as laundry, vehicle repair, furniture repair, janitorial services and multiple food vendors including a local chocolatier and local farms for fresh produce.

The analysis that follows estimates the magnitude of the economic and fiscal activity that will be generated by LEGOLAND New York, by first considering the one-time effects of constructing the project, and next considering the ongoing effects of its full-scale operations.

Construction Period, One-Time Benefits

The total construction cost utilized for the purpose of this economic impact analysis is $342 million. This includes approximately $222 million in hard costs and $120 million for soft costs including labor, design, engineering, legal, and other related costs but excludes other values such as the value of the land.

Construction activities would have positive effects on the local economy in terms of increased economic activities and related direct, indirect, and induced job generation. The most direct effect would be job opportunities for local and regional area residents who work in the construction trades. Based on the total project investment and experience at other similar projects, a total of 800 direct construction jobs over the course of the approximately 24 month construction period. While specific contractors for the Proposed Project have not been selected, as part of the PILOT agreement Merlin Entertainments has agreed to hire a minimum of 85% of the construction labor force from the surrounding seven-county region (subject to the availability of qualified trades).

As discussed above, when new direct jobs are introduced to an area, those jobs lead to the creation of additional indirect and induced jobs. Indirect employment resulting from construction expenditures will include jobs in industries that provide goods and services to the contractors, and induced employment will include jobs generated by new economic demand from households spending salaries earned through the direct and indirect jobs.

Based on the IMPLAN model's economic multipliers for Orange County tourism sectors, construction of the project will support an additional 137 indirect and induced person-years of employment within Orange County, bringing the total number of jobs from construction activities to 937.

Long Term

The Project Site is expected to generate 500 Full-Time Employees which include all positions from executive and senior management, shift supervisors, technicians, administrative personnel and training staff. Based on expected salaries total Direct Employee Compensation is estimated between $25,365,000 and $36,575,000 for all Full Time Employees. A majority of employees are anticipated to come from Orange County. Full time employees at LEGOLAND New York would fall within the following categories:

Table III-9: Full Time Employees

Job Type	Number of Employees
Senior Management	40
Management	65
Supervision/Professional	120
Senior Technical	50
Technical	35
Administrative/Office	45
Area Lead/Shift Supervision	50
Trainers	50
Front Line	45
Total Full Time Employees: 500	

Anticipated salaries within these categories constitutes confidential and proprietary commercial information which Merlin Entertainments does not made publicly available. If this data was disclosed it would cause substantial injury to the competitive position of Merlin Entertainments. Nonetheless, to assist the Town of Goshen with its review of the potential fiscal and economic benefits associated with the Proposed Project, Merlin Entertainments can provide this data to the Town and its consultants. Given that the anticipated salary data is commercial information, it is exempt from disclosure consistent with the provisions of the New York Public Officers Law § 87(2)(d).

In addition to full time employees, the park will also generate approximately 300 part time employees and 500 seasonal employees. This is equivalent to approximately 900 FTE workers for the purposes of this analysis.

According to the Orange County Economic Strategy, "Tourism, as a whole has a significant impact on the economy of the county. In 2012, more than 4 million tourists visited Orange County, spending over $430 million. This relative windfall contributed $28,785,397 in local taxes, lowering person tax bills of residents. Overnight visitors to Orange County also paid the hotel occupancy tax, or "bed tax" of 5% instituted by the County in 2009…. In 2012 the figure was $2,867,763, an increase of 10% over the initial two year period."

As of 4Q 2015, there were approximately 10,300 businesses operating in Orange County, employing 142,510 workers[13]. Orange County is part of the Hudson Valley Labor Market Region, which is defined by the New York State Department of Labor to include Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, and Westchester counties. Orange County businesses represent approximately 13.5 percent of businesses in the seven-county Hudson Valley Region (the Region), and Orange County employment comprises 15.6 percent of Regional employment (914,764 employees). While trending upward since 2010, economic conditions in the Region have not yet recovered to pre-recession levels.

It is estimated based on a similar analysis, since its opening in 2011 the LEGOLAND Resort in Winter Haven generated nearly $110 million in sales for off-site hotels and over $20 million in sales for off-site restaurants. Total direct economic output from operations to industries including restaurants, hotels, housing, real estate, wholesale trade and construction was project at $467,954,651 for five year period from 2010 to 2015.

For the Proposed Project, the total impact is based upon the impacts of their direct activities as well as the indirect and induced spending that occurs as a result of the direct activities. The Direct Effect measures the economic impact of Proposed Project's employment and construction activities. The Indirect Effect measures the economic impact of project suppliers, for example the jobs created in the food services industry due to their purchase of food to prepare and sell in their parks. Benefits would be expected for other local vendors in service sectors such as dry cleaning, hotels, gas stations, food suppliers, etc. The Induced Effect measures the economic impact of changes to household expenditures due to increased employment for both the Proposed Project and their suppliers. An example of Induced Effect would be a LEGOLAND employee spending more money at a restaurant because they have higher income. The table below measures the indirect and induced economic impacts of the park operations on an annual basis. It is anticipated these economic benefits would be experienced each year. Other parks in Florida and California experienced increases in the number of annual guests from year 1 to year 5. The proposed Action would likely start with lower guest numbers which would increase over the first five years and level off.

[13] Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 4Q 2015.

Table III-10: Secondary Fiscal Benefits

	Portion in Orange County	Total in New York State
Employment (full-time equivalent jobs)		
Direct	900	900
Indirect	115.7	138
Induced	137.13	168.6
Total	1152.83	1206.6
Employee Compensation (2016 dollars)		
Direct	$30,979,000	$30,979,000
Indirect	$6,218,372.34	$6,859166.14
Induced	$7,189925.05	$9,828,627.54
Total	$44,387,297.39	$47,666,793.68
Total Economic Output or Demand (2016 dollars)		
Direct	$26,088,117.49	26,088,117.49
Indirect	$1,862,483.31	$1,995,994.67
Induced	$11,902,536.72	$15,093,457.94
Total	$39,853,137.52	$43,177,570.10

Costs

Municipal costs from the Proposed Project were estimated using the Proportional Valuation Method to project the average cost of non-residential development on a local taxing jurisdiction. The methodology for the proportional valuation is based on guidance found in *The Fiscal Impact Handbook: Estimating Local Costs and Revenues of Land Development*.[14] The method involves two steps:

- First a proportion of the local real property tax costs are apportioned to residential and nonresidential development based on the proportion of total value in nonresidential use and also the proportion of total land parcels used for nonresidential purposes.
- Second, a portion of the total nonresidential real property tax cost is apportioned to the new use based on its value compared with total nonresidential value and a refinement coefficient based on the size of the proposed relative to the average existing nonresidential use. The refinement coefficient is used because larger (and higher value) nonresidential facilities generate lower costs than multiple smaller nonresidential facilities of equivalent value.

The proportional valuation method depends on the value and number of parcels in residential and nonresidential use within a municipality. New York State Office of Real Property maintains this data for Towns, but not for Villages. The Town contains 1,945 commercial properties[15]. Since the Village contains a significant amount of nonresidential real property compared with the unincorporated town, use of town-wide assessment data is likely to overstate the nonresidential costs in Part-Town jurisdictions. This makes the analysis conservative for part-town jurisdictions (i.e.; costs may be overestimated). As shown in the table below, total costs of the project to its taxing jurisdictions are estimated at $78,808.76.

[14] Robert W. Burchell and David Listokin, *The Fiscal Impact Handbook: Estimating Local Costs and Revenues of Land Development* (Transaction Publishers, 2012).

[15] Calculated by deducting residential, vacant and public parks/forest property classes from the total parcel count. All numbers provided by NYS Office of Real Property Tax Services

Table III-11: Cost to Taxing Jurisdictions

Taxing Jurisdiction	Estimated Cost
Orange County	$28,313.64
Town of Goshen	$10,510.71
Part Town	$6,720.70
Town Highway	$19678.04
Goshen Fire 1	$13,585.67
Goshen Library	$0
Goshen CSD	$0
Chester Union Free School District	$0
Total	**$78,808.76**

Source: Town of Goshen Adopted Budget 2016, 2016 Orange County Legislative Budget, NYS Office of Real Property Services, Orange County Office of Real Property and Lanc & Tully Engineering

The proposed access road from Harriman Drive will be a private road and therefore would be maintained by the Project Sponsor. Costs to the Town Highway Department would only be related to general road maintenance and plowing of Town roads including Harriman Drive as is their current responsibility. These costs are taken into consideration in the above calculation and would be offset by $210,000 PILOT payment (in year 1 with annual increases) and additional host community fees to the Town. The road is proposed to be widened as part of this project. This road improvement, as is the case for all proposed roadway improvements, would be funded by the Project Sponsor with no costs to the Town of Goshen.

As there is no development proposed on the portions of the lots located within the Chester Union Free School District, and no additional student population is being generated by the project, no costs or other impacts to any school district will occur.

3. Proposed Mitigation Measures

Given the total revenue generated from the PILOT, host community fee, hotel tax, sales tax and special district taxes exceed the costs to the project's taxing jurisdictions no additional mitigation measures are required.

N. Visual Resources

1. Existing Conditions

The NYSDEC Policy DEP-00-2 Assessing and Mitigating Visual Impacts defines aesthetic impact as an impact which, *"...occurs when there is a detrimental effect on the perceived beauty of a place of structure. Mere visibility, even startling visibility of a project proposal, should not be a threshold for decision making. Instead a project, by virtue of its visibility, must clearly interfere with or reduce the public's enjoyment and/or appreciation of the appearance of an inventoried resource"*

As per the approved scoping document, images documenting existing views of the Project Site were taken from several different locations. Images were taken from approximately 5 feet from grade using a 35mm digital camera. No editing has been done to the images. The locations from which each photo has been taken has been described below. See Figure III-16 for a map of the locations.

IMAGE 1A

IMAGE 1B

Images by Lanc & Tully Engineering

Figure III-16: Visual Receptor Locations

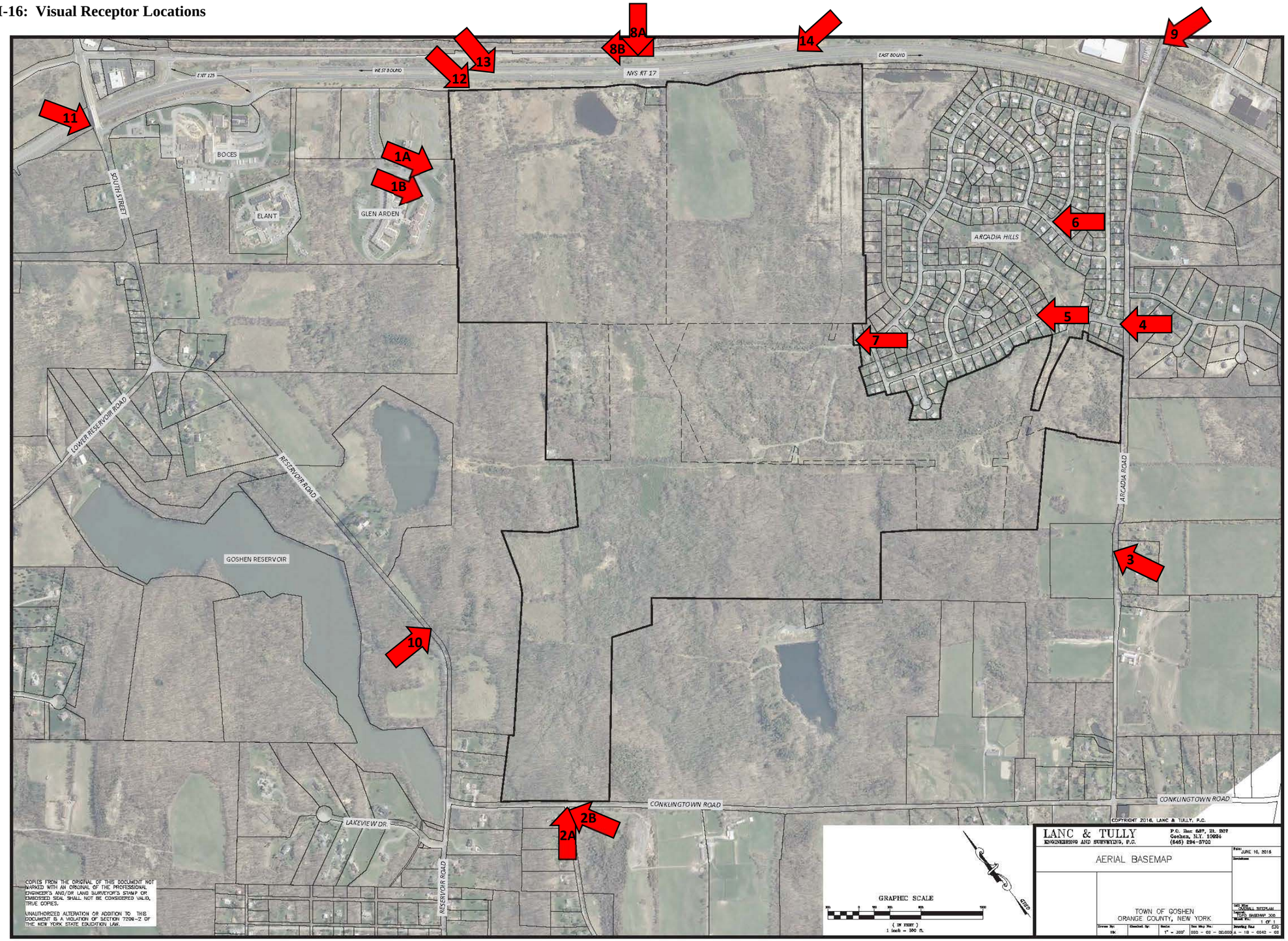


IMAGE 1A and 1B are from the Glen Arden property adjacent to the property. **IMAGE 1A** has been taken from the eastern most public road access on the Glen Arden Senior Assisted Living property looking east towards the location of the proposed access road. The road was constructed for additional development which was planned on the site and never constructed. While the access road gets relatively close to the shared property boundary, the residential structures are further west on the site. A buffer of mature trees and brush exists between the properties, as well as, several man-made berms created by dumping of fill along this area of the property. **IMAGE 1B** is from the eastern most area of the parking lot of the Glen Arden facility approximately 240 feet from the property boundary shared with the Project Site. As shown in the image, changes in topography and dense vegetation block views onto the site from this vantage point.

Images by Lanc & Tully Engineering

IMAGE 2A and **2B** are taken from the intersection of Fort Hill Road and Conklingtown Road. **IMAGE 2A** is looking north at the Project Site. Even during leaf-off conditions, this view is characterized by dense, mature vegetation. As discussed elsewhere in this document, there is a Town Scenic Road Overlay District along Conklingtown Road in this location. **IMAGE 2B** is looking west along Conklingtown Road showing the entirety of the project site's approximately 1,000 feet of road frontage in this location. Both images illustrate the dense, mature vegetation, thick underbrush and varying topography that exists along this corridor. For reference, it is approximately 3,300 feet from Conklingtown Road to the transmission lines which mark the southernmost point of any proposed development.

IMAGE 3, below, is looking west over the site from property 15-1-51.1/ 166 Arcadia Road bordering the Project Site on its east side, approximately 2,200 feet south of Cherrywood Drive. The image is taken from the highest point of elevation along the road to provide the best possible vantage point into the Project Site. There are several agricultural properties and large-lot single family homes along Arcadia Road in this area. In the distance of this image you can faintly see the transmission towers which cut across the project site and will mark the southernmost point of any proposed development.

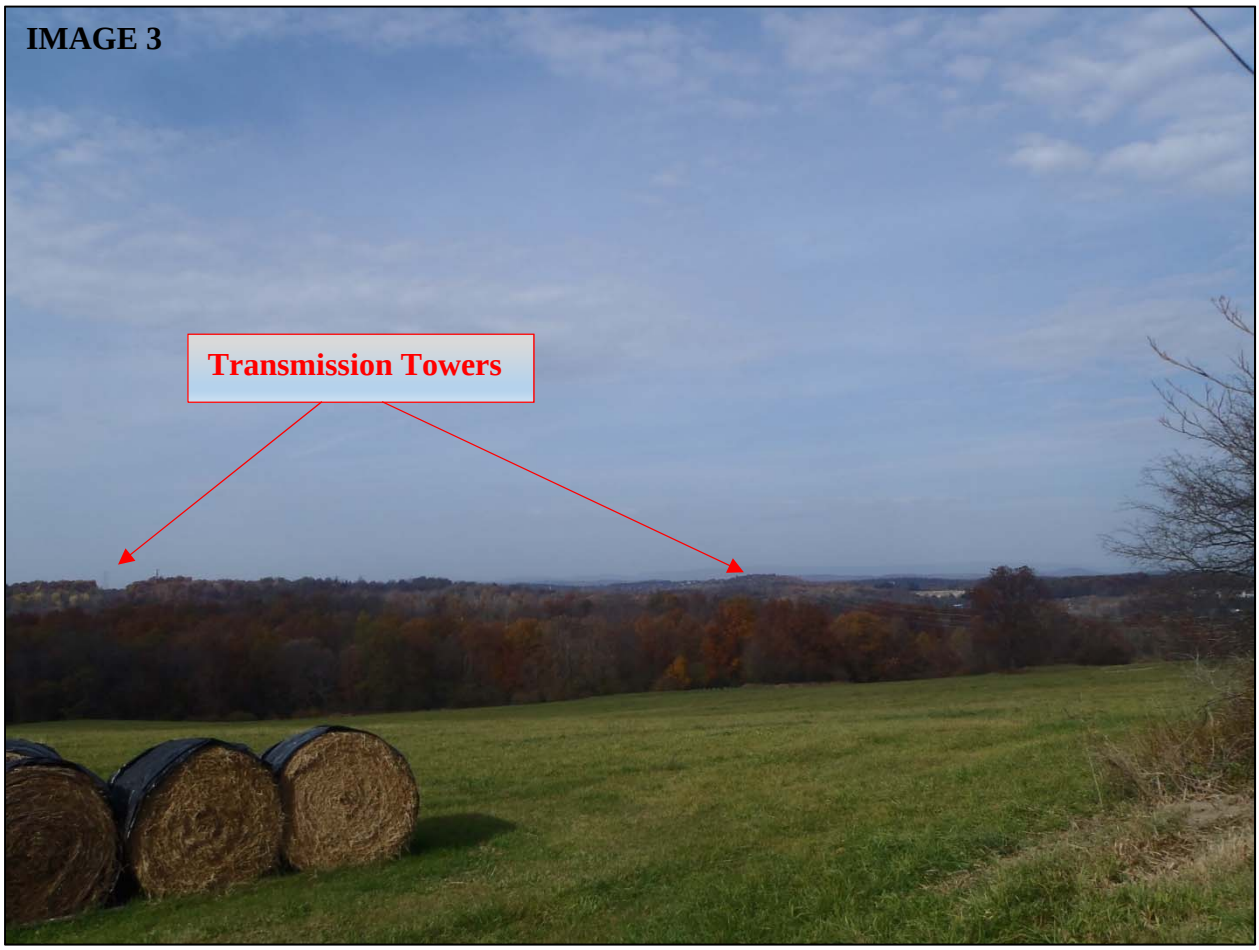


Image by Lanc & Tully Engineering

IMAGE 4 is from the intersection of Arcadia Road and Cherrywood Drive looking west at the Arcadia Hills residential development with the Project Site in the background with majority leaf-off conditions. This development consists of single family dwellings constructed in the early to mid-1970's on lots ranging from 15,000 to 25,000 square feet. It is approximately 2,600 feet from the location shown to the end of Cherrywood Drive where the Project Site begins. While the Project Sponsor will own land directly south of this site, no development will occur on that land. This location and other points along Arcadia Road are the highest elevations within the Arcadia Hills development.

Image by Lanc & Tully Engineering

IMAGE 5 is from the intersection of Cherrywood Drive and Elmwood Drive just west of IMAGE 4 within the Arcadia Hills residential subdivision. As shown in the image, this location is lower in topography than the previous location and as a result of lower topography, the curvature of the road and intervening vegetation the Project Site is not visible. This location is approximately 1,675 feet to the property line and approximately 2,700 feet from areas proposed for development with the NYSDEC wetland area in between the Arcadia Hills and any proposed development.

Image by Lanc & Tully

IMAGE 6 is from the intersection of Glenwood Drive and Larchwood Drive within the Arcadia Hills residential subdivision, north of the previous two images during majority leaf-off conditions. This location is approximately 1,800 feet to the closest property boundary of the Project Site but is further away from areas proposed for development, at approximately 3,100 feet. Similar to IMAGE 5, this vantage point is protected by lower topography, road curvature and intervening vegetation and the site will not be visible from this location.

Image by Lanc & Tully Engineering

IMAGE 7 is from the terminus of Wedgewood Drive in the Arcadia Hills residential subdivision looking west into the Project Site during leaf-off conditions. Wedgewood Drive was constructed with a stub road with the intent that it would connect with future phases of development which were planned on the Project Site but ultimately not constructed. As shown in the image, a gated, paved access road runs from Wedgewood drive into the site to provide the Town of Goshen access to Town-owned land and water infrastructure.

Image by Lanc & Tully Engineering

IMAGE 8A and 8B are taken from the Orange County Heritage Trail approximately 500 feet from the property boundary on the north side of Route 17M (the clearing nearest to the Project Site entrance). The trail, owned and operated by Orange County, is a 10-foot wide paved walking and biking path which runs from Monroe to Goshen in the bed of the former Erie Railroad. In this vicinity, the trail runs parallel to Route 17M, approximately 60 feet from the edge of pavement. **IMAGE 8A** is from the intersection of Duck Farm Road and the Heritage Trail looking south at Route 17M with NYS Route 17 immediately beyond the trees. As shown in the photo, even at the road clearing during majority leaf-off conditions, the Project Site is not visible from this location due to both the Heritage Trail being topographically lower and existing, mature vegetation along Route 17M and New York State Route 17. **IMAGE 8B** is further west along the Heritage Trail illustrating the dense vegetation which creates secluded views and noise buffering for users of the trail.

IMAGE 8A

Images by Lanc & Tully Engineering

IMAGE 8B

IMAGE 9 is taken from Old Chester Road at its intersection with Route 17M looking southwest with the Project Site in the background at the far right of the image. As shown in this image, commercial developent exists along Route 17 M in this location which is also visible from the Heritage Trail. This location is approximately 1,450 feet to the property boundary and approximaltey 2,500 feet to any site disturbance with Route 17M and NYS Route 17 in between. While this location is directly across from the Arcadia Hills residential developent, note that it not visible from this location due to differences in topography and the billboard on the south side of the street.

IMAGE 10 is taken from Reservoir Road, approximately 1,700 feet north of Conklingtown Road during leaf-off conditions. The image is looking east in the direction of the Project Site with the Village of Goshen reservoir just beyond the tree line on the west (left) side of the road. As illustrated by the image, both sides of are densely vegetated and no structures are visible from this location. This location is approximately 2,480 feet to the transmission tower easement which will be the southern limit of any development on the Project Site. While this area is topographically high at just under 600 feet msl, the dense mature vegetation along the road blocks any views onto the Project Site and much of the Project site sits lower than this location.

IMAGE 10

IMAGE 11 is from the southwest corner of the intersection of South Street and Route 17M connector road looking southeast at South Street Bridge. This is a signalized intersection located within the Village of Goshen with both residential and commercial development visible. Medical offices which front on Route 17M can be seen in the foreground. The BOCES complex is directly behind these offices on Harriman Drive but is not visible due to changes in topography. This location is approximately 3,885 feet from the property boundary. The Project Site is not visible from this location.

Image by Lanc & Tully Engineering

Image by Lanc & Tully Engineering

IMAGE 12 is from Harriman Drive at the approximate location of the proposed site entrance looking south onto the Project Site. This location is approximately 2,000 feet from the NYS Route 17 on ramp. As shown the site is vegetated with dense, overgrown shrubs and grasses at this location.

IMAGE 13

IMAGE 13 is from the shoulder of the east bound side of NYS Route 17 with the access gate for the communications tower access road just barely visible and the Project Site in the background. In this location, NYS Route 17 and Harriman Drive are separated by approximately 80 feet of dense brush. The land around the access gate is largely wetlands and will not be disturbed as part of the project.

IMAGE 14

IMAGE 14 is from the west bound shoulder of NYS Route 17 looking south/ southwest over the Project Site. The existing residential structure on parcel 11-1-47, located along Harriman Drive is visible from this location.

Historic and Aesthetic Resources

No designated historic resources are in the immediate vicinity of the site. The closest sites on the National Historic Register are the Everett-Bradner House and the George Wisner House. Also in the vicinity are Goshen's First Presbyterian Church and its associated Historic District which includes properties along South Street, north of NYS Route 17. Other Town-designated historic resources[16] within the vicinity of the site include the S.S. Fitzgerald House (Reservoir Road), George Conkling House (Conklingtown Road), N.C. Coleman House (Reservoir Road), Tyler House (Arcadia Road), District #6 Schoolhouse (Reservoir Road), Mabee-Dunning Cemetery (Reservoir Road), the Young Cemetery (South Street) and the Conklingtown Burial Ground (Conklingtown Road). The Project Site is not visible from any National, State or local historic and aesthetic resources.

The Orange County Heritage Trail, a County Park, runs parallel to NYS Route 17 and NYS Route 17M throughout this portion of the county. The Heritage Trail originates in the Village of Monroe and currently terminates in the Town of Goshen at Harley Road. The Heritage Trail is planned to be extended to the west into the City of Middletown. It locally connects the areas of the Town and Village of Chester, the Town of Goshen and Village of Goshen. The trail is used by both pedestrians and bicyclists.

No town or village parks are in the immediate vicinity of the Project Site.

2. Potential Impacts

The Proposed Action will include the construction of a 140-acre commercial recreation facility on the Project Site which will consist of indoor and outdoor rides, theaters, restaurants, offices, and a 250-room hotel. The tallest structure on the Project Site will be the four-story hotel. The hotel is designed to be two-stories from the front (south façade) of the building and four in the rear (north) to reduce the overall visual impact of the structure. Renderings of the hotel follow this page. Architecture within the park will vary between the eight themed areas. Buildings vary in height, design, color and façade materials based on its theme within the park. Images are provided in Chapter II of this document illustrating several representative buildings within the various areas including Heart Lake City, Miniland, Duplo Farm and Kingdoms which will be featured in the proposed park.

The nearest structure to the adjacent neighborhood is the ring road around guest parking lot which is approximately 1000 feet from the nearest residence. The closest building is in the back-of-house area which is approximately 1200 feet from the closest residences. The area between these structures and the residences will be undeveloped open space and views will remain as they are today.

Based on proposed grading and site design the proposed project is likely to be visible from areas east of the Project Site which are higher in elevation. As shown in **POST DEVELOPMENT**

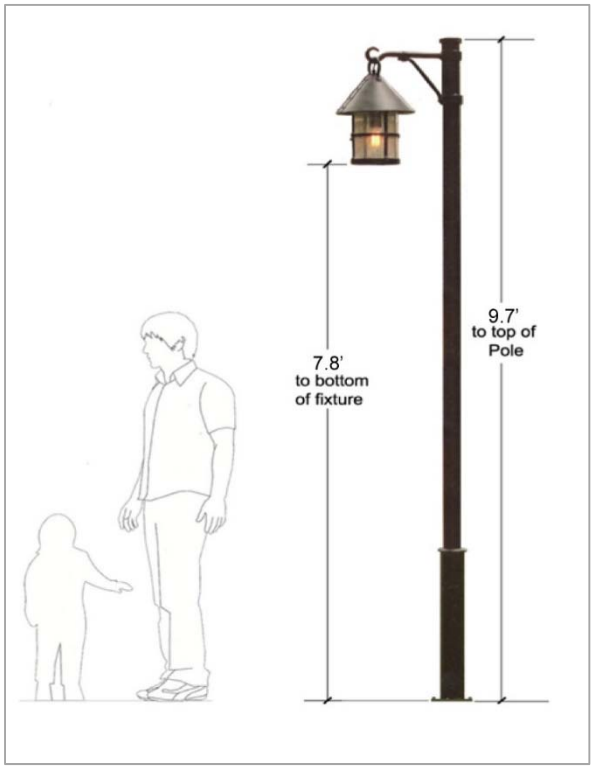
[16] As per the Town of Goshen 2009 Comprehensive Plan

IMAGE 3 and **POST DEVELOPMENT IMAGE 4** which show the proposed LEGOLAND New York development as it would be expected to be visible from Arcadia Road in two separate locations. Based on the topography, intervening dense vegetation these are the only locations besides the project entrance on Harriman Drive where the project would be anticipated to be visible.

From Harriman Drive visibility of the park will be minimal. Approximately 75 feet along Harriman Drive will be cleared of its natural vegetation for the installation of the access road and to ensure adequate sight distance. No large signage will be placed along Harriman Drive; rather a small directional sign will denote the main guest access road and direct motorists into the park. A large LEGOLAND entrance sign will at the main gate to the park and other internal rides, attractions and restaurants will have identification signage. None of the internal signage will be visible outside of the Project Site. Back-of-house buildings may be visible from Harriman Drive as they are the closest park structures to the street but they will be both screened with landscaping and painted gray or green to blend in with the natural surroundings.

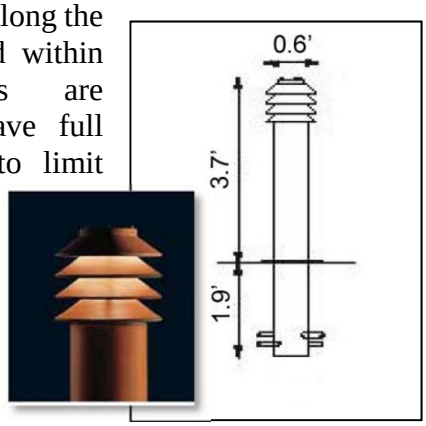
Based on distance, changes in topography and intervening vegetation there will be little, if any, visibility of the Project Site from the Orange County Heritage Trail.

No disturbance or modifications of any kind will occur along Conklingtown Road. No disturbance will occur within the Town's Scenic Road Overlay Zone.



The lighting associated with the Proposed Project will include a comprehensive package of design features. Types of lighting includes bollards, string lights and pole-mounted lights along the access road, in parking areas and internal to the theme park. Fixtures and mounting height will vary by location on the site with architectural design which coordinates with each of the various themed lands within the park (see example left and below).

Site lighting for entrance roads and parking lots will consist of flat-lens, dark-sky friendly LED fixtures. It is anticipated lighting within the entrance roads would be on poles of 20-30' high while guest parking area poles would be 30-40' high. Lighting along the access road and within parking areas are proposed to have full cutoff shields to limit lateral spread of light and would be dark-sky friendly, meaning that light would not be projected up from the fixture. Lighting within entrance roads and parking lots will be zoned to provide illumination within specific portions of the site only during hours of needed use. It is anticipated that all lighting within the



POST DEVELOPMENT IMAGE 3

POST DEVELOPMENT IMAGE 4


LEGOLAND HOTEL

guest parking areas and guest entrance road will be dimmed to 50% illumination one hour after the park closes. After the lighting is dimmed, occupancy sensors installed on each light fixture will provide for localized full illumination until activity
is no longer detected. During the overnight hours lighting within the main guest parking areas will be turned off while the guest entrance road and hotel parking areas will remain on at 50% illumination throughout the overnight hours to provide for hotel guest comfort and security. During the overnight hours occupancy sensors will continue to operate allowing localized full illumination when activity is detected.

Lighting levels after park operations close will be reduced to minimum security levels. The park closes at 8PM in the peak summer season with staff typically leaving park approximately 1.5 to 2 hours after park closing. Therefore lighting levels will be reduced at or shortly after 10PM at the latest on the site. Nighttime lighting hours would be reduced during the shoulder season (April-May and September-October) when the park closes at 6PM and further reduced during winter months when the majority of park operations are closed.

To demonstrate nighttime sky lighting levels in the parking lot, the image above was taken from the existing LEGOLAND Florida Resort on a Saturday night at approximately 9:00PM in the main guest parking area. The hotel is the background of this photograph but lighting levels are too dim for the hotel to be visible from this location. Light fixtures have minimum glare outside of the immediate area.

It is anticipated during the off-season when the main LEGOLAND park is not open, lighting within the parking areas serving the main park will be kept off at all times and only the areas being used for hotel guests or visitors to SeaLife will be illuminated in a similar fashion as described above. Lighting levels at property boundaries, with the exception of the access road, will be zero.

3. Proposed Mitigation Measures

As part of the public information sessions several comments were made regarding visual impacts. Based on these comments, the site was designed to be sensitive to these concerns. The hotel was reduced in height from five stories which is currently the height at the Winter Haven location to four stories to keep the hotel more hidden within the existing tree canopy.

Existing mature trees and shrubs are preserved around the periphery of the site to buffer the development from surrounding properties. The sites natural variations in topography will also work to visually buffer the site as the development will sit lower than surrounding land along Arcadia Road and lower than the adjacent Glen Arden Retirement Community. To supplement the natural vegetation, extensive landscaping is proposed along all roadways, parking areas and within the theme park itself to create a park atmosphere within the theme park. Landscaping proposed is a mix of evergreen and deciduous trees, shrubs, flowering bushes and ornamentals which will provide visual interest, visual and noise mitigating barriers. Shade trees will be located within a 10-foot divider running within the center of the entrance road, a dense mix of evergreens and shade trees line both sides of the service road as it runs parallel to Harriman Drive and a mix of multiple species of trees and bushes are proposed to buffer the staff parking area which is the site's closest point to Harriman Drive in the back-of-house area. See Sheets 33 to 39 of the full set of site plans.

No unavoidable adverse environmental impacts are anticipated to visual resources.

O. Environmental Contamination

1. Existing Conditions

A Phase 1 Environmental Site Assessment was completed for the property by Maser Consulting (A copy of the full report is provided in Appendix I of this document). This environmental assessment was conducted in general conformance with the American Society for Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (E1527-13). The objective of the assessment was to identify known or suspected Recognized Environmental Conditions (RECs), Controlled Recognized Environmental Conditions (CRECs) and Historic Recognized Environmental Conditions (HRECs) in connection with the subject property. To achieve this objective, the assessment included a review of historical records, mapping and regulatory databases and visual observations of the subject and surrounding properties followed by preparing this report providing the findings thereof. The onsite investigation was completed on June 9, 2016.

Maser Consulting searched NYSDEC's Environmental website database for information on the subject property. This database contains records of the sites being addressed under one of NYSDEC Division of Environmental Remediation's (DER's) remedial programs – State Superfund, Brownfield Cleanup, Environmental Restoration and Voluntary Cleanup. This database also includes the Registry of Inactive Hazardous Waste Disposal Sites and information on Institutional and Engineering Controls in New York State. No records were identified for the subject property.

Two properties were identified in the NYSDEC Environmental Remediation Database search which were adjacent or in the immediate vicinity of the Project Site. These include a spill site at 71 Old Chester Road (spill #0210257), on the north side of NYS Route 17, approximately 3,300 feet from the Project Site identified as an unknown quantity of fuel oil which was closed in 2003 and a spill at the corner of Conklingtown Road and Reservoir Road (spill #9602333) identified as a 1 gallon spill of transformer oil which was closed in 1996.

Majority of the subject property is vacant/wooded land but also supports dilapidated building foundations, a pond, utility easement, a residential dwelling, and a communications tower with evidence of farming activities on parcel 11-1-58.

During the site visit some solid waste was observed in the vicinity of the dilapidated buildings such as trash, construction debris, tires, and other miscellaneous household waste items. No hazardous waste, areas of historic fill or chemical drums were identified nor were any odors or soil stains which would suggest environmental contamination may be present.

2. Potential Impacts

Based on distance and intervening roads and topography, none of the NYSDEC recorded contamination spills near the Project Site are anticipated to impact the Project Site.

At the time of the site reconnaissance, two dilapidated building foundations were identified on SBL 11-1-45 and 11-1-46. Furthermore, according to historic topographic maps, structures were also identified on SBL 15-1-59 prior to 1906. The utilities used at these structures are unknown and a potential exists for heating materials such as coal or petroleum to have been stored on the property. In addition, it is unknown whether the former structures utilized any septic systems which may have had the potential to impact subsurface soils or groundwater.

Common to agricultural properties, there is potential for the presence of pesticide residuals in the soils above regulated concentrations. This is true for such recalcitrant pesticides as DDT, dieldrin, arsenic, and lead for sites that have not been actively farmed in the recent past. The former agricultural use at the subject property is considered a REC as it represents a potential for release of hazardous materials into the soil and/or groundwater on site. Based on our review of aerial photographs, the subject property appears to have supported agricultural use prior to 1940 to the present. Further investigation is warranted.

Based on the preliminary site evaluations, a limited Phase 2 Environmental Assessment was completed for areas of the site which had a potential for ground contamination as discussed above. On August 30 and 31, 2016, a field crew from Maser Consulting collected a series of soil samples in each of the eleven fields potentially identified as being historically used for agricultural purposes. Soil sampling was facilitated with the use of hand tools. The top vegetative layer (root zone) was scraped with a shovel at each location to an approximate depth of 1 to 2 inches below grade. The shovel was pre-cleaned between uses. Dedicated, disposable trowels were then used to collect a soil sample from below the root zone to approximately 2 to 6 inches below grade. Samples were immediately placed on ice and delivered to the lab on the day of collection. Sampling locations were demarcated in the field with wooden stakes.

Soils were analyzed for pesticides, lead and arsenic at Hampton Clark/Veritech labs of Fairfield, New Jersey, a New York State approved laboratory, on a standard laboratory turn-around schedule. A detailed laboratory report of the soil samples is provided in the Environmental Site Assessment in Appendix J. Of the twenty-two soil samples collected from each of the eleven fields, no pesticides were identified. All sample analyses identified pesticides as non-detectable. Arsenic and lead (common components of historically used agricultural pesticides) were identified at detectable levels in all twenty-two (22) samples analyzed. Arsenic levels ranged from 3.1mg/Kg to 7.3mg/Kg; and lead ranged from 13mg/Kg to 44mg/Kg. Even at the maximum observed

concentrations, both arsenic and lead are identified to be below all soil and groundwater clean-up criteria maintained by NYSDEC. Maser Consulting believes the concentrations of arsenic and lead in the shallow surface soils are believed to be naturally occurring and related to normal background concentrations in this local environment. No further testing or investigation was recommended.

3. Proposed Mitigation Measures

Given that soils samples collected were found to be below all NYSDEC Soil Clean-up standards in the Phase II investigation and the majority of the areas which had the potential for contamination are to be removed from the site during construction, no additional mitigation measures are required.

P. Cultural Resources

1. Existing Conditions

Phase I and Phase II archeological investigations were prepared for the Project Site by Landmark Archeology, Inc. The Phase I investigation included Phase IA background research and Phase IB shovel testing. The Phase I archaeological survey considered an Area of Potential Effect (APE) of approximately 196 acres (79.3 ha). Phase II investigations were conducted at identified sites as required. Archaeological fieldwork was performed from June 1 to August 26, 2016. All Phase I and II work was conducted in accordance with guidelines established in *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York* by the New York Archaeological Council (NYAC 1994) and adopted by the Office of Parks, Recreation and Historic Preservation (OPRHP).

Historic maps reviewed as part of the Phase IA study included the years 1875 (Beers 1875) and 1908 (USGS 1908). Copies of the maps are provided in Appendix J. Both maps show a structure in the northeastern portion of the APE along Harriman Drive. The structure is associated with the name ES & E. Seely on the 1875 map. Aside from this structure, both maps show the remaining project area as undeveloped with no structures within or adjacent to the APE. A road along the same route as Harriman Drive is depicted on both maps, but it does not extend along the entire northern edge of the APE as Harriman Drive does today.

Based on the literature research there are no properties or structures on the National Register of Historic Places on or adjacent to the project site.

The OPRHP records show that three previously recorded archaeological sites are within or adjacent to the APE (See the summary report in Appendix J for a map of the sites). Two of the sites are within the APE, and one site is approximately 59 meters (194 ft) east of the APE. These three sites are prehistoric archaeological sites.

A Phase IA/IB archaeological investigation was completed in 2000 that overlaps with the eastern portion of the current APE. The investigation was conducted for the proposed Arcadia Hills Section II and the Lone Oak Estates residential development and included 217 acres (Hartgen

2000:1). Of the 217 acres, approximately 49.9 acres (20.2 ha) fall within the current APE. The study identified the aforementioned three sites.

Based on the reported prehistoric archeological sites a Phase IB was recommended for the areas of the APE which were believed to possibly contain artifacts associated with those sites. Phase IB fieldwork included the excavation of 581 shovel tests (stps) across the LEGOLAND APE. Generally, shovel tests were spaced at a 15-meter interval along transects spaced 15 meters apart. Selectively placed shovel tests also were excavated based on landform considerations. Shovel tests were not excavated in areas of excessive slope (>12-15%), in areas with standing water or in areas that were highly disturbed. All excavated soils were screened through ¼-inch hardware mesh. Each shovel test was backfilled upon completion and its location was recorded with a sub-meter precision *Trimble Geo XT GPS* receiver.

As a result of the Phase IB fieldwork the locations of two of the previously identified sites were adjusted and one of the sites (identified as site 07106.000123) was larger than previously anticipated in the 2000 study. The current study also identified two new archaeological sites (identified as LEGOLAND Sites 4 and 5 on the map within the full study). Subsequently, Phase II investigations were designed to gather data used to evaluate the NRHP eligibility status of the sites. Site eligibility is based on NRHP criteria of significance (36CFR60.6, Federal Register 1976).

Site 07106.000121

This site consists of 3.5 acres. The site is assigned to the Late Archaic cultural period (4000-1000 BC) based on the recovery of a project point similar to the Poplar Island style projectile point of the Late Archaic cultural period (Hartgen 2000:11). The Phase II investigation yielded few artifacts, found no cultural features and did not recover any diagnostic artifacts with which to assign cultural affiliation of the site. Based on these results and upon concurrence by the OPRHP, the site does not meet NRHP eligibility criteria. No further archaeological work is recommended for this site.

Site 07106.000122

This site consists of 1.5 acres. The 2000 Phase I study found a Late Archaic Poplar Island-like projectile point at this site. The NRHP eligibility of this site has not been determined. Avoidance of the site by project activities is recommended. If avoidance is not feasible, Phase II archaeological investigations are recommended to determine NRHP eligibility of the site.

Site 07106.000123

This site consists of 1.79 acres. The site is tentatively assigned to the Terminal Archaic cultural period (1700-700 BC) based on the recovery of a projectile point interpreted to be an Orient Fishtail point. Archaeological deposits appear intact in unplowed A- and B-horizon soils. Based on these results, the site is likely to yield information important in prehistory and meets NRHP eligibility criterion d. Avoidance of the site by project activities is recommended. If avoidance is not feasible, Phase III data recovery is recommended to mitigate adverse impacts to the site.

LEGOLAND Site 4

This site consists of 0.73 acres. This site was identified by the current Phase I study and further investigated by Phase II work. No culturally diagnostic artifacts were recovered from the site with

which to assign cultural affiliation. However, excavations identified a sub-plow zone pit feature and documented archaeological deposits in unplowed B-horizon soils. Based on these results, the site is likely to yield information important in prehistory and meets NRHP eligibility criterion d. Avoidance of the site by project activities is recommended. If avoidance is not feasible, Phase III data recovery is recommended to mitigate adverse impacts to the site.

LEGOLAND Site 5

This site consists of 0.3 acres. The prehistoric component of this site is represented by a single artifact: a Jack's Reef Pentagonal projectile point which is associated with the late Middle Woodland cultural period (AD 500-1000). The historic component of the site is represented by fragments of beverage glass, pieces of whiteware ceramics, and small brick fragments. This component is interpreted to be associated with the occupation of the structure shown on historic maps of the area as well as trash from more recent years. The structure is no longer standing; it burned down in the recent past. No temporally discrete historic archaeological deposits or features were identified at the site. Based on these results and upon concurrence by the OPRHP, the site does not meet NRHP eligibility criteria. No further archaeological work is recommended for this site.

2. Potential Impacts

As part of the development of the LEGOLAND New York development, several of the identified archeological sites will be disturbed. Site 07106.000121, Site 07106.000123, LEGOLAND Site 4 and LEGOLAND Site 5 are all located in areas proposed be disturbed. Avoidance of these areas is not possible given the desire to preserve wetland areas on the site and topographical constraints of the project.

Site 07106.000122 is within the wetland area and will not be disturbed as part of this project. It will be preserved in place.

As per the findings of the Archeological Investigation, Site 07106.000123 and LEGOLAND Site 4 are eligible for NRHP listing and will require data recovery prior to any disturbance in this area in order to preserve all artifacts.

3. Proposed Mitigation Measures

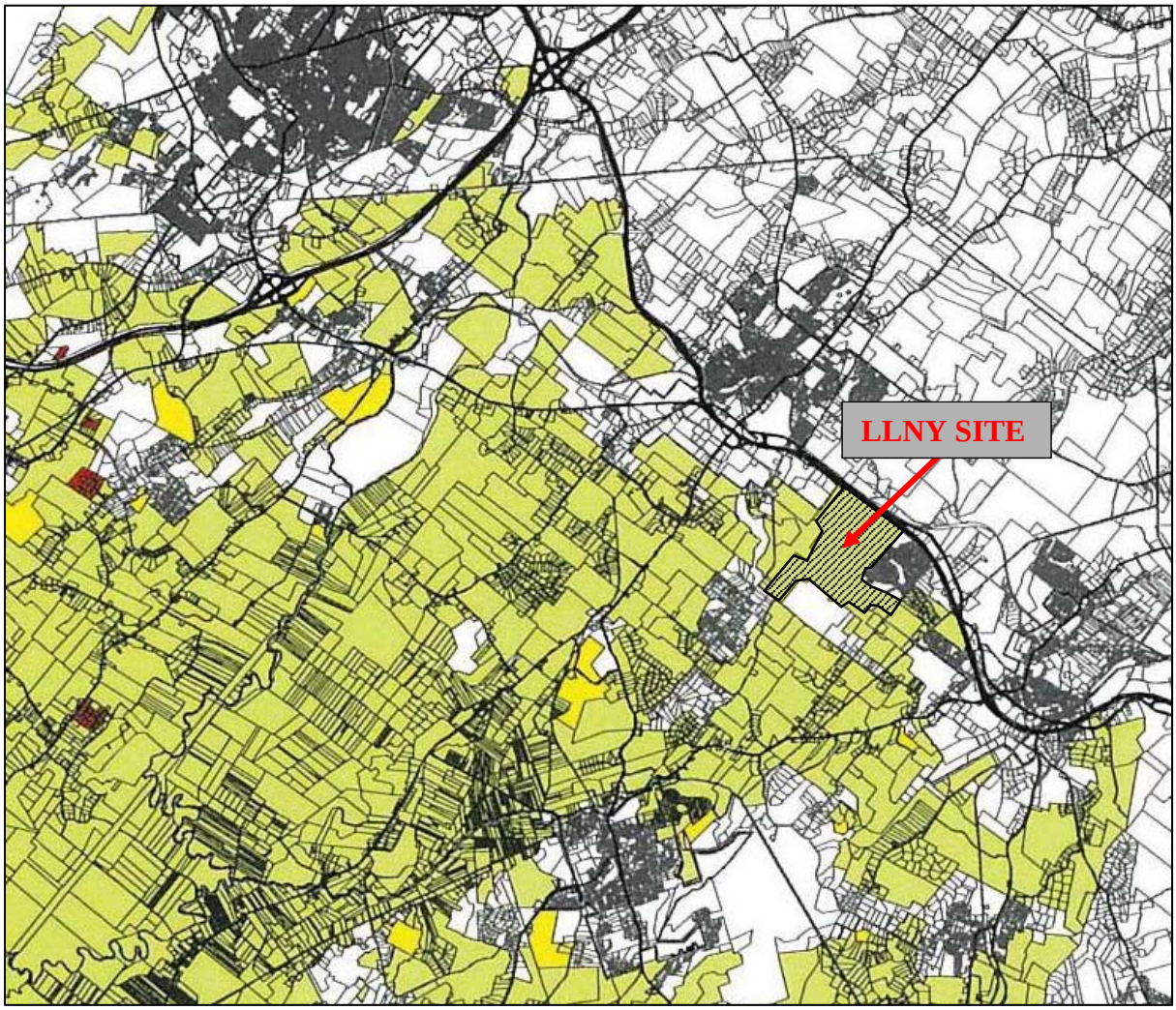
Prior to the start of construction, the project archeologist will develop a Phase III testing and recovery program for Site 07106.000123 and LEGOLAND Site 4 in consultation with the NYS Office of Parks, Recreation and Historic Preservation (SHPO). The plan will be submitted to SHPO for review and concurrence, with a copy to the Town of Goshen. As a result of the implementation of the Phase III work, no significant adverse impacts to archeological resources will result from the project.

Q. Agricultural

1. Existing Conditions

The Project Site is located within Orange County Agricultural District #2. County Agricultural Districts 1 and 2 were created in November 1972 to encourage agricultural activities to continue on agriculturally viable land. Parcels 11-1-46 and 15-1-59 were both previously used for agricultural purposes, although that activity ceased more than ten years ago.

Figure III-17: Orange County Agricultural Districts



Source: Orange County Planning Department

The most recent USDA Census of Agriculture shows 658 farms in Orange County on approximately 88,000 acres of land. Although today there is much less farmland and many fewer farms than historical highs, farming remains a dynamic, growing, and viable industry in the County. Between 2007 and 2012 there has been a 2.5% increase in the number of farms and a 9% increase in the number of acres being farmed[17].

[17] Orange County Farming Protection Plan, Orange County Planning Department, 2015

2. Potential Impacts

The location of the Project Site in an agricultural district does not preclude or otherwise restrict its development as proposed. Given that no farming currently takes place on the site and that much of the area once suitable for farming has been disturbed, no adverse impacts to agricultural resources are anticipated.

Once construction is underway on the Project Site, none of the parcels will be permitted to seek an agricultural assessment reduction as two of them currently do today. As per the NYS Department of Taxation a payment for conversion of the land will be required which is equal to five times the taxes saved in the most recent year that the land received an agricultural assessment. In addition, interest of 6 percent per year compounded annually will be added to the payment amount for each year that the land received an agricultural assessment, not exceeding five years.

As discussed in greater detail in Section III- O above, a limited Phase 2 Environmental Assessment was completed for areas of the site which had a potential for ground contamination as a result of historic agricultural use. On August 30 and 31, 2016, a field crew from Maser Consulting collected a series of soil samples in each of the eleven fields potentially identified as being historically used for agricultural purposes. Soils were analyzed for pesticides, lead and arsenic at Hampton Clark/Veritech labs of Fairfield, New Jersey, a New York State approved laboratory. A detailed laboratory report of the soil samples is provided in the Environmental Site Assessment in Appendix J. Of the twenty-two soil samples collected from each of the eleven fields, no pesticides were identified. Arsenic and lead (common components of historically used agricultural pesticides) were identified at detectable levels in all twenty-two (22) samples analyzed. Arsenic levels ranged from 3.1mg/Kg to 7.3mg/Kg; and lead ranged from 13mg/Kg to 44mg/Kg. Even at the maximum observed concentrations, both arsenic and lead are identified to be below all soil and groundwater clean-up criteria maintained by NYSDEC.

The project is likely to have a positive impact on local farms based on their need for fresh fruits and vegetables for onsite restaurants and the desire to purchase from local suppliers whenever possible.

A small garden may be kept onsite for use in the hotel restaurant as is currently done at LEGOLAND Florida Resort. As shown in the adjacent image, this garden would be minor in nature. No pesticides, machinery or additional staff would be associated with the maintenance of this garden. No sale of any agricultural products would take place.

3. Proposed Mitigation Measures

As no agricultural uses currently take place on the site or on any immediately adjacent parcels, no site restrictions, dedications or deed restrictions to control the use of the land are proposed.

R. Air Quality

1. Existing Conditions

The NYSDEC, Division of Air Resources operates an ambient air monitoring network for various air contaminants within the State. Air quality monitoring stations for Orange County are located in Valley Central (Montgomery), Newburgh, Wallkill (2) and Scotchtown.

The National Clean Air Act (CAA), which was last amended in 1990, requires the EPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. As required by the CAA, primary and secondary NAAQS have been established for six major air pollutants: CO, NO_2, ozone, respirable PM (both $PM_{2.5}$ and PM_{10}), SO_2, and lead. The primary standards represent levels that are requisite to protect the public health, allowing an adequate margin of safety. The secondary standards are intended to protect the nation's welfare, and account for air pollutant effects on soil, water, visibility, materials, vegetation, and other aspects of the environment. The primary standards are generally either the same as the secondary standards or more restrictive. In general, existing air quality in the Town of Goshen is good with the average Air Quality Index (AQI) less than the national average.

Inhalable Particulate Matter, less than 2.5 microns, is measured at the Newburgh monitoring station and has been below the annual mean standard since 2000. Lead levels contained in those particulates have been measured in Wallkill and the maximum average quality values have been well below the recommended parts per billion. Ozone and carbon monoxide levels are all monitored. Ozone is the only pollutant that exceeds standards both in NYSDEC Region 3 and statewide. These levels of ozone are attributed to hydrocarbon emissions originating from the Midwestern states and as such, are not considered a local enforcement emissions issue.

No air pollutants currently emanate from the existing site. The area of the Proposed Project is generally rural and does not have many large sources of pollution. The area is identified by the NYSDEC as an 'attainment area' denoting it meets the NAAQS for ozone[18].

The existing air quality can be characterized based on pollutant concentrations measured by the New York State Department of Environmental Conservation at air quality monitoring stations in the region. Representative concentrations are presented in **Table III-11**. The data presented below demonstrates that pollutant concentrations in Goshen are substantially lower than NAAQS. While there is no monitoring in the area for NO_2, PM_{10}, CO, or SO_2, given the nature of the area and based on the above concentrations of $PM_{2.5}$, ozone, and lead, it can be assumed that air quality in the area of the Proposed Project is generally good and substantially lower than those standards as well.

[18] As per a 2011 recommendation from the Assistant Commissioner of the Office of Air Resources, Climate Change and Energy, Jared Snyder.

Table III-12: Existing Pollutant Concentrations in Goshen

Pollutant	Period	Statistical Form	Concentration	Monitoring Station
$PM_{2.5}$	Annual	3-year average	7.3 µg/m^3	Newburgh
	24-hour	98th percentile, 3-year average	19.7 µg/m^3	
Ozone	8-hour	Annual 4th Highest, 3-year average	60 ppb	Valley Central High School
Lead	3-month	maximum rolling average	0.03 µg/m^3	Wallkill

Notes: The statistical form is the form defined for the NAAQS.
Sources: NYSDEC. New York State Ambient Air Quality Report for 2014. 2012-2014 data.

2. Potential Impacts

The State Environmental Quality Review Act (SEQRA) regulations state that the significance of a predicted consequence of a project (i.e., whether it is material, substantial, large or important) should be assessed in connection with its setting (e.g., urban or rural), its probability of occurrence, its duration, its irreversibility, its geographic scope, its magnitude, and the number of people affected.[19] In terms of the magnitude of air quality impacts, any action predicted to increase the concentration of a criteria air pollutant to a level that would exceed the concentrations defined by the NAAQS would be deemed to have a potential significant adverse impact.

In addition, in order to maintain concentrations lower than the NAAQS in attainment areas, or to ensure that concentrations will not be significantly increased in non-attainment areas, NYSDEC has published a policy to provide interim direction for evaluating $PM_{2.5}$ impacts.[20] This policy applies only to facilities applying for permits or major permit modifications under SEQRA that emit 15 tons of $PM_{2.5}$ or more annually. The policy states that such a project will be deemed to have a potentially significant adverse impact if the project's maximum impacts are predicted to increase $PM_{2.5}$ concentrations by more than 0.3 µg/m^3 averaged annually or more than 5 µg/m^3 on a 24-hour basis. Projects that exceed either the annual or 24-hour threshold will be required to prepare an Environmental Impact Statement (EIS) to assess the severity of the impacts, to evaluate alternatives, and to employ reasonable and necessary mitigation measures to minimize the $PM_{2.5}$ impacts of the source to the maximum extent practicable.

Based on the type of use and the total anticipated generated traffic, the Proposed Project's annual emissions of $PM_{2.5}$ are estimated to be well below the 15-ton-per- year threshold under NYSDEC's $PM_{2.5}$ policy guidance.

Construction related Impacts
During construction air quality could be temporarily affected by dust from disturbed areas during dry periods and emissions from construction vehicles and other machinery. Carbon monoxide (CO) and other emissions associated with engine combustion are generally localized, causing elevated concentrations within a relatively short distance from heavily traveled areas or areas where several vehicles or pieces of machinery are operating simultaneously. Impacts from construction vehicles is anticipated to be minor for several reasons including proper maintenance of equipment, requiring vehicles to maintain strict minimal speed limits on site, controlling unnecessary idling for vehicles and

[19] New York State Environmental Quality Review Regulations, 6 NYCRR § 617.7
[20] NYSDEC. *CP33: Assessing and Mitigating Impacts of Fine Particulate Emissions*. December 29, 2003.

equipment and providing sufficient onsite parking for construction workers. Further, according to the NYS DOT's Environmental Procedures Manual, emissions from construction vehicles and equipment is temporary and "self-correcting once the project is completed".

Operational Impacts
Air Quality impacts for LEGOLAND New York would be limited to stationary emissions from HVAC units as well as mobile emissions from guest and employee vehicles, engine-powered rides, or maintenance machinery. Emissions of CO, NOx, VOC and Pb are associated with mobile emission sources; whereas emissions of SO2 are associated primarily with stationary sources. Most rides are powered by electricity not gas-powered engines and several rides utilize solar power.

Based on NYSDOT policy on Air Quality, last updated in 2012, Ozone (O3), carbon monoxide (CO) and particulate matter under 10 microns in diameter (PM_{10}) are the primary transportation-related NAAQS. Many attractions involve unstructured play for children to build and play with LEGO bricks which require no power. Air pollution from vehicle emissions increases at a particular location with the occurrence of vehicle idling. The proposed onsite circulation, with parking fees paid on the way out to get vehicles in and parked as quickly and efficiently as possible is designed to eliminate the stacking, or idling of vehicles. Other proposed roadway improvements including light timing, construction of turning lanes and extension of acceleration and deceleration lanes will also improve vehicle queuing and idling times.

There will be no stationary sources emitting quantities of pollutants above EPA or NYSDEC permitting thresholds for this project. As a result of the absence of regulated stationary sources on the Project Site, the applicant proposes that no further screening is warranted.

The scoping document also required discussion of potential cumulative air quality impacts associated with other projects in and around the Town that were evaluated for traffic generation in the Traffic Impact Study including the following:

- Montreign Casino - Town of Thompson, New York
- Amy's Kitchen and SOS - Town of Goshen, New York
- Kiryas Joel proposed Annexation Petitions
- Youngs Grove Subdivision - Town of Goshen, New York
- Maplewood Subdivision - Town of Goshen, New York
- Heritage Estates - Town of Goshen, New York
- Orange County Gospel Fellowship Church - Town of Goshen, New York
- Kikkerfrosch Brewery - Town of Goshen, New York (project withdrawn)
- Bethel Woods - Town of Bethel
- Veria Lifestyles Wellness Resort - Town of Thompson, New York
- Chestnut Ridge - Village of Bloomingburg, New York

To the extent information is publicly known and available to the Project Sponsor, the Project Sponsor is unaware of any particular point source generator proposed at any of these projects that would meet or exceed the thresholds to be regulated by the New York State Department of Environmental Conservation. Publicly available SEQRA documentation from the projects listed above, including Amy's Kitchen manufacturing

facility, the Montreign Casino and the KJ Annexation Petitions, did not include any quantitative analyses regarding air quality impacts associated with post-development build conditions. Additionally, as noted above, the Kikkerfrosch Brewery has been formally withdrawn by its project sponsor.

Apart from point source generation, air quality impacts are otherwise most associated with traffic related air quality impacts. Reducing such air quality impacts is best achieved through the reduction of traffic congestion as the NYSDOT policy concludes that as intersection Level of Service increases, air quality impacts are reduced. In general, background increases in traffic on NYS Route 17, and any necessary associated improvements are overseen by the NYSDOT. As noted by NYSDOT,

> *In keeping with the Department's mission to "ensure our customers - those who live and travel in New York State -- have a safe, efficient, balanced and environmentally sound transportation system," and in light of the health and environmental effects of unacceptable air quality and the requirements of the Clean Air Act Amendment 1990 (CAAA90), it is the policy of the New York State Department of Transportation (NYSDOT) to reduce violations of ambient air quality standards by way of transportation actions when reasonable and feasible. NYSDOT Environmental Procedures Manual, Chapter 1.1 at page 7.*

The Final Scope required the Project Sponsor to consider these projects in its analysis of potential air quality impacts. The Project Sponsor included this analysis in its Traffic Impact Study and proposed a comprehensive package of measures that could, if implemented, serve to reduce traffic congestion and, as a result, improve overall air quality. Such improvements are difficult to ascertain, as air quality is the result of a variety of factors beyond the Project Sponsor's control. Nonetheless, the Project Sponsor identified various traffic improvements as mitigation measures for this Project. These measures will not only improve traffic conditions that would result from the Project, but, to the extent that traffic congestion is lessened, would be a contributing factor in the improvement of overall air quality. Other traffic improvements that could be made to NYS Route 17 that could improve overall air quality are within the jurisdiction and responsibility of NYSDOT.

3. Proposed Mitigation Measures

New York State Environmental Conservation Law (ECL) prohibits heavy duty vehicles, including diesel trucks and buses, from idling for more than five minutes at a time. This restriction will reduce fuel usage and vehicle emissions at the site and will be strictly adhered to.

While a waiver will be sought from the NYSDEC from the requirement limiting disturbed areas on the site to five acres, limiting fugitive dust will still be a priority during construction operations. Limiting the amount of disturbed soils on the site reduces the potential for fugitive dust generation at the site. The following Best Management Practices will be followed:

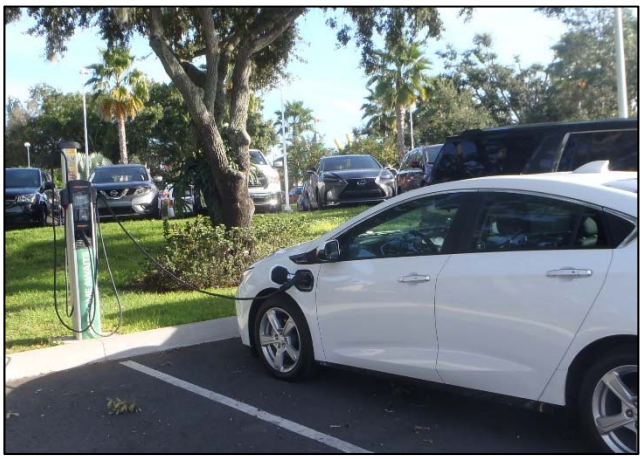
- Minimize the area of grading at any one time to minimize exposed soils and stabilize exposed areas with mulch and seed as soon as practicable. Should finished plantings not be feasible or economically possible due to continuous construction activities, temporary stabilization plantings are to be implemented;

- Minimize vehicle movement over areas of exposed soils and covering all trucks transporting soils;
- Spray unpaved areas, subject to traffic, with water to reduce dust generation;
- Stabilize the construction entrance to avoid tracking soils onto paved surfaces; and
- Potential exhaust emissions from construction vehicles will be controlled though the proper tuning of the vehicles engine and maintenance of the vehicles' air pollution controls. All vehicles will be properly inspected.

To reduce emissions multiple rides at LEGOLAND New York will use solar power instead of fuel-powered engines including cars at the "driving school" attraction.

Electric vehicle charging stations are proposed in the parking area to encourage use of low, or zero emission vehicles as is currently provided at other parks.

No unavoidable adverse impacts are anticipated to air quality.



Electric vehicle charging station at LLFR Image by Lanc & Tully Engineering.

S. Construction

This section describes the schedule, techniques, and logistics for construction of the Proposed Project. In general, conventional construction techniques and equipment would be used, consistent with other projects in New York. This would include the use of controlled blasting to remove rock from the Site, excavation for concrete formwork and underground utilities, structural steel, precast and poured-in-place concrete, and framing of exterior building envelopes.

Construction is anticipated to commence in February of 2017 and take approximately 24 months. Consistent with Town of Goshen construction noise regulations (Town Code Chapter 70), construction activities will take place Monday through Friday from 8:00AM to 8:00PM and Saturdays from 9:00AM to 8:00PM.

As discussed in more detail in Section III-D above, all on-site tree clearing will be conducted between November 1 and March 30 in order to avoid disturbance of any potential Indiana and Northern long-eared bat habitat.

Full build out of the site will occur in two construction phases. Phase 1 will include construction of the park and hotel with all associated roads, parking, infrastructure and landscaping. Construction of Phase 1 is expected to take approximately 24 months. Construction of Phase 1 will also be broken into phases. Construction will begin with clearing in the northeast corner/ back-of-house area. A staging area will be created in this area and parking area for workers. Subsequent stages of construction will include the main park access drive and utility installation, followed by the main park area and finally, the main guest parking lot. The area on the site plan designated for the SeaLife Aquarium will be graded and seeded but will remain as grass until construction of Phase 2 commences.

Phase 2 will include 20,000 square foot SeaLife Aquarium. Phase 2 is expected to begin approximately two to five years after the park initially opens and is estimated to take approximately 11 months for from initial disturbance to the completion of construction. There are no areas on the site, outside of the initial area of disturbance, designated for future growth. New rides, attractions would only be constructed within areas on the site plan which are currently identified as part of the theme park.

Construction would follow all applicable federal, state, and local laws for building and safety. All applicable permits and licenses would be obtained prior to the start of construction, and copies of such would be on-site during the construction period. A copy of the Stormwater Pollution Prevention Plan (see section III-G) would be available on-site during the construction period. The contractor would establish working conditions consistent with all applicable U.S. Department of Labor Occupational Safety and Health Administration (OSHA) requirements to ensure public and contractor safety. A *Health and Safety Plan*, consistent with the standards, would be developed and implemented. Standard construction methods would be used for traffic, noise, vibrations, and dust control, consistent with all applicable laws. Standard BMPs would be followed for non-stormwater management, soil stabilization, sediment control, tracking control, waste management, and material pollution control.

Construction would require material and equipment delivery to the Project Site and trucking of fill material to the Project Site. Based on the proposed grading plans, approximately 196,187 cubic yards of fill (approximately 294,280 tons but may vary based on exact material to be brought in) will be required to be brought to the site. This would require approximately 7,840 truck trips over the course of the construction period. This plan is currently being refined to produce a more balanced to reduce the amount of material to be brought onto the site. The majority of the truck trips would come from and leave via NYS Route 17. Other roads that could expect construction vehicles include South Street, Route 17M and Harriman Drive. Speed limits on all roads in the Village of Goshen is 30MPH while Harriman Drive has a posted speed limit of 35 east of exit 125. Construction waste will be brought to a facility where all materials are separated and materials such as concrete and metal will be recycled.

Construction related traffic and trucks would enter the Site via Harriman Drive at the location of the back-of-house entrance road. This access minimizes use of town roads and areas of residential development such as Arcadia Road and Conklingtown Road. This area of the site would serve as the construction parking and staging area. A stabilized pad of aggregate underlain with geotextile will be placed at the construction entrance to the construction site. The purpose of stabilized

construction entrance is to reduce or eliminate the tracking of sediment onto public rights-of-way or streets.

Trucks would exit the site via the Construction Tracking Pad where any dirt or debris would be cleaned from the wheels, tires, and undercarriage to prevent trucks from tracking mud onto local roads.

In general terms, Site preparation, excavation, and foundations are the first, and perhaps the most disagreeable, activities in the development of a site. Depending on site characteristics, these activities, which would typically take several months to complete, would be characterized by a large amount of truck activity and large pieces of equipment (dump trucks, loaders, graders, excavators, pile drivers, concrete trucks and pumpers, etc.). Impacts could include noise from trucks and equipment, including back-up alarms on trucks and construction vehicles, the visual presence of the construction site and associated equipment, fugitive dust and engine emissions, traffic congestion from increased trucking activity, and restrictions to travel lanes.

Sustainable construction practices (also referred to as green building techniques) to be employed on the site include recycling construction materials such as concrete and steel. Sustainable stormwater practices to be employed during construction include several green infrastructure and runoff reduction measures. The treatment provided by the green infrastructure practices is called the runoff reduction volume (RRv). NYSDEC requires the RRv to be equal to the WQv unless site-specific conditions would not allow the full treatment using green infrastructure practices. Green practices, particularly underground filter areas also control stormwater temperature increases which could occur from holding stormwater in a detention pond while being exposed to sunlight. Green infrastructure techniques to be employed include sheetflow to Riparian Buffers, Tree Planting, bio-retention areas, porous pavers, dry swale, and underground sand filter areas.

Permanent damage to town and County roads is anticipated to be minimal as the roads construction vehicles would take to get to the site, including Harriman Drive and portions of South Street and Route 17M, are anticipated to be improved as part of this project.

A full SWPPP which includes an erosion control and sedimentation plan has been prepared for the project. During construction the following temporary practices are proposed to protect wetlands and other surface water resources which include the use of silt fence, sediment traps, sediment basins, diversion swales, storm drain inlet protection, slope stabilization and slope drains.

Other Pollution Prevention Measures as described in the SWPPP include the following:

All onsite pollutants, to control including waste materials and demolition debris, shall be handled and disposed of in a manner conforms to all applicable Federal and State regulations that does not cause contamination of stormwater. Good housekeeping and preventative measures will be taken to ensure that the site will be kept clean, well organized, and free of debris. If required, BMPs to be implemented specific sources of pollutants are discussed below.

<u>Vehicles, construction equipment, and/or petroleum product storage/dispensing:</u>

- All vehicles, equipment, and petroleum product storage/dispensing areas will be observed regularly during site observations to detect any leaks or spills, and to identify maintenance needs to prevent leaks or spills.
- Onsite fueling tanks and petroleum product storage containers shall include secondary containment.
- Spill prevention measures, such as drip pans, will be used when conducting maintenance and repair of vehicles or equipment.
- In order to perform emergency repairs on site, temporary plastic will be placed beneath and, if raining, over the vehicle.
- Contaminated surfaces shall be cleaned immediately following any discharge or spill incident. Contaminated soil shall be removed from site and disposed of in accordance with all current Federal and State Regulations.

Chemical storage:

- Any chemicals stored in the construction areas will conform to the appropriate manufacturer's recommendations and or the appropriate State/Federal Regulations. All chemicals shall have cover, containment, and protection provided on site, per all Federal and NYSDEC regulations.
- Application of agricultural chemicals, including fertilizers and pesticides, shall be conducted in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Manufacturers' recommendations for application procedures and rates shall be followed.

Demolition:

- Dust released from demolished sidewalks, buildings, structures or on site grading operations will be controlled using Dust Control measures as specified in the N.Y.S. Erosion and Sediment Control Specification Manual.
- Storm drain inlets vulnerable to stormwater discharge carrying dust, soil, or debris will be protected using Storm Drain Inlet Protection.
- Process water and slurry resulting from saw cutting and surfacing operations will be prevented from entering the waters of the State by implementing Saw cutting and Surfacing Pollution Prevention measures.

Concrete and grout:

- Process water and slurry resulting from concrete work will be prevented from entering the waters of the State by implementing Concrete Handling measures.

Envision Standards will not be employed during construction. Envision is a system of sustainable construction for municipal infrastructure systems such as sewer treatment plants. Only one project in New York, New Jersey, Connecticut or Pennsylvania has been designed under this program which was a sewer treatment plant in Brooklyn, New York. These standards do not appear to be relevant.

Off-site improvements

Off-site improvements necessary prior to operation of the facility include the installation of utilities including water and sewer mains in Harriman Drive. The responsibility and timing of traffic improvements including lane widening, new turning lanes, new traffic signalization, new signage, extending acceleration and deceleration lanes and ramp improvements on NYS Route 17 would be coordinated with the NYSDOT.

IV. UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

Unavoidable adverse impacts are those physical changes to the Project Site or the immediate vicinity which cannot be avoided if the project is implemented. As discussed in Chapter III of this document, the magnitude of each of the impacts is mitigated to the greatest extent practicable but some of the impacts are unavoidable.

The Proposed Project will result in clearing and regrading of 140 acres of land. Permanent disturbance of existing soils and changes to the site's soil makeup are unavoidable adverse environmental impacts as well as, unavoidable changes to the site's natural topography and removal of vegetation including mature trees.

The construction of the Proposed Action will result in the unavoidable conversion of the site's existing land use from vacant to commercial recreation.

Development on the Project Site will create 3,477,451 square feet (79.8 acres) of impervious surfaces including roads, buildings and parking areas. Creation of impervious surfaces is an unavoidable adverse environmental impact.

Construction and operation of the Proposed Project will result in the unavoidable creation of solid waste at the site.

The operation of a commercial recreation facility will result in the unavoidable use of water and generation of wastewater and will generate vehicle trips to the Project Site from construction vehicles, visitors, employees and deliveries. Impacts will be reduced during winter months when the LEGOLAND commercial recreation facility operations are limited.

Construction and operation of the commercial recreation facility will create noise at the site above existing levels. Noise impacts will be reduced during winter months (November through March) when the LEGOLAND commercial recreation facility operations are limited to indoor uses only.

V. ALTERNATIVES TO THE PROPOSED ACTION

A. No Action Alternative

This alternative analyzes the impacts associated with a scenario where no construction occurs on the project site. None of the impacts from the Proposed Action would occur and none of the project benefits would be realized. No disturbance to the site, including no soil disturbance, tree clearing or grading would occur. No noise or traffic would emanate from the site. Community service requirements would remain as currently exists, however the school district would not receive the agreed upon PILOT payment of $1,022,000 in the initial year of park operation or additional annual payments and would lose approximately $52.6 million over 30 years. Local Orange County school districts would have to continue to bus children out of the County for educational school trips as is current practice since no resources exist currently within Orange County. The site would continue to generate taxes based on the current assessed value with agricultural exemptions and pay approximately $91,000 (based on current tax rates). The town would not receive any money generated from park ticket sales and Orange County would not receive any increased hotel or sales taxes.

The development potential would remain the same and the site would be able to be developed with residential development including both single family and multi-family dwellings.

B. Build Out Under Existing Zoning

For the purposes of this analysis it has been assumed that the 132 residential units can be constructed on parcels 11-1-58 and 11-1-49.2 based on the SEQR analysis that was prepared for the Lone Oak Subdivision in 2007-2009. Approximately 306 acres of land remain after subtracting those parcels from the overall project site. Based on the Town Zoning Code and the regulations of the current zoning designation of the project site and the restrictions of the AQ-3 overlay district, the number of permitted residential units would be the lesser number derived from either (1) 50% of the total amount of unconstrained land[21] or (2) dividing the total site acreage by three. Based on the current wetland delineation and slope analysis on the property, the total amount of unconstrained land is approximately 212 acres yielding a possible 106 residential lots. However, dividing the total remaining acreage by three yields 101 total potential lots that could be built on the remaining portions of the project site.

Combining the 132 Lone Oak units with 101 possible additional lots equates to a total build out of the project site of 233 new dwellings. When adding in the anticipated population[22] from the additional 101 units (329) plus the anticipated population from the approved Lone Oak subdivision (431) this equates to 760 additional residents in the Town of Goshen.

While the Proposed Commercial Recreation Facility would not generate any school children, a residential project would increase the population in the Town of Goshen School District. In order

[21] As defined by Section 97-84 of the Town of Goshen Zoning Code.
[22] The multiplier used is 3.26 which is the average family size in the Town of Goshen as provided by the 2010 US Census.

to calculate the number of projected public school children for new construction, multipliers from the Residential Demographic Multipliers from the Rutgers University Center for Urban Policy Research (2006) is utilized based on the number of bedrooms and anticipated sales price of the units. For 4-bedroom, single family detached dwellings with an anticipated sales price of over $329,500 the multiplier is 0.87 which equates to a total projected public school generation of 202.

Impacts from Residential Buildout

In terms of impacts which could be expected to be generated by the residential buildout of the site as compared to the Proposed Action, a residential subdivision would disturb more of the overall project site as it would be more spread out across the site and, therefore impacts to soils, topography and onsite vegetation would be greater. No public parking areas would be constructed and a residential project would likely result in less overall impervious surfaces which would have less impacts on stormwater. Impacts to wetlands and other surface water features would be similar to the Proposed Action. There would be no need for modifications to the zoning code or Town Comprehensive Plan and the project would be consistent with surrounding land uses. Overall traffic generation would be less than the Proposed Action but none of the surrounding intersections improvements would be constructed.

A residential subdivision would be expected to utilize ground water wells to supply water to residents as was approved for the Lone Oak Subdivision. Based on 233, four-bedroom dwellings water usage would be anticipated to be approximately 102,520 gallons per day (GDP) which would be supplied by the onsite wells. This would increase impacts to ground water and could possibly impact ground water supplies in neighboring properties.

The project would still require community services including police, fire and ambulance services but would result in increased public roads which would require Town maintenance, increased use of local parks and would generate school children and the associated costs per school child. The following analysis projects the net fiscal impacts to the project site's various taxing jurisdictions including Goshen Central School District impacts.

Utilizing an average sales price for new single family dwellings from the Multiple Listing Service (MLS) for the Town of Goshen (outside of the Village) each dwelling would be anticipated to have a market value of approximately $420,000 which equates to an overall market value of $97,860,000 for the entire build out. Based on 2016 Equalization Rates of .65 the project would have a total assessed value of $63,609,000.

When applying this assessed value to the various taxing jurisdictions and their 2016 tax rates the project could be expected to generate $3,208,892.70 in tax revenue (see breakdown in Table V-1 below).

Table V-1: Tax Revenue Generated from Residential Build Out

	2016 Tax Rate	AV	Projected Tax Revenue for Site Build Out
Orange County	$5.981000	63,609,000	$380,445.43
Town of Goshen	$2.618200	63,609,000	$166,541.08
Part Town	$1.390600	63,609,000	$88,454.68
Town Highway	$2.7589	63,609,000	$175,490.87
Goshen Fire 1	$2.299300	63,609,000	$146,256.17
2015-16 Goshen Library	$0.973689	63,609,000	$61,935.38
15-16 Goshen CSD	$34.425460	63,609,000	$2,189,769.09
Total			$3,208,892.70

Source: Orange County Office of Real Property and Lanc & Tully Engineering

To calculate costs of a residential development the Per Capita Costs for each jurisdiction must be calculated. This is done using formulae found in the *New Practitioner's Guide to Fiscal Impact Analysis*. The Per Capita Multiplier Method estimates the average cost per person of operating expenses to project an annual cost assignable to a population change. The technique begins by refining local costs to include those related to residential assessed valuation. Then it expresses all municipal costs per person. These per capita costs are multiplied by the estimated project population and are the incremental costs attributable to the project.

This cost can then be compared against the calculated tax revenue for each jurisdiction to calculate the net fiscal impact to each taxing jurisdiction. For the purposes of this analysis, populations for the Fire District and library were assumed to be the same as the Town of Goshen despite minor differences in district boundaries.

It is noted that the impact on the Orange County jurisdiction is not calculated. This is because the fiscal impact methods employed require the use of detailed assessment data organized by land use code. This information is not available for Counties in New York as it is for Towns, therefore it is impractical to attempt to calculate a per capita residential cost of the County services. For a subdivision of this size and value, it is unlikely to have impacts realized on a County-wide level.

As shown in **Table V-2** below, a residential build out of the property would result in a negative overall fiscal impact. The Town could expect a positive overall net impact of $137,233.76 (including part town) which would be less than what would be generated annually by the Proposed Action under the PILOT program. The Goshen Central School District, due to the need to provide services to school children generated by a residential build out coupled with the reduced amount of site assessment from a residential project of the site, would experience the greatest negative fiscal impact of -$930,551.17.

Table V-2: Net Fiscal Impact from Residential Buildout

Taxing Jurisdiction	Per Capita Cost	Projected Population	Total Cost of Residential Buildout	Projected Revenue for Residential Buildout	Net Fiscal Impact
Town of Goshen	$79.76	760	$60,617.60	$166,541.08	$105,923.48
Part Town	$75.19	760	$57,144.40	$88,454.68	$31,310.28
Town Highway	$186.95	760	$142,082.00	$175,490.87	$33,408.87
Goshen FD #1 (Based on Cost of Town wide Fire Services)	$80.95	760	$61,522.00	$146,256.17	$84,734.17
Library (Town wide)	$93.10	760	$70,756.00	$61,935.38	($8,820.62)
Goshen CSD	$15,447.13	202	$3,120,320.26	$2,189,769.09	($930,551.17)
TOTAL NET FISCAL IMPACT:					($683,994.99)

Source: Town of Goshen Adopted Budget 2016, Goshen Central School District 2015-2016 Budget, NYS Office of Real Property Services, Orange County Office of Real Property and Lanc & Tully Engineering

C. Alternate Emergency Ingress / Egress Locations

Based on comments from meeting with the Goshen Fire Department, the applicant was asked to provide emergency access for the project. As proposed, the project will provide emergency access to Arcadia Road via a 25 foot wide gravel drive. In addition to frontage on Arcadia Road, the Project could propose an emergency connection to the terminus of Wedgewood Drive in the Arcadia Hill development. Wedgewood Drive is a dead end, gated stub road and was intended to connect to additional sections of the residential subdivision that were never constructed. The area of the road connection has already been graded and a gravel drive currently exists in this location which provides site access to the Town of Goshen as the current property owners. A connection to Wedgewood Drive instead of a direct connection to Arcadia Road would require less roadway to be constructed as the distance to this location is closer to the proposed park.

Due to traffic concerns from residents of Arcadia Hills, a direct connection to Arcadia Road was determined by the Town of Goshen to be the best option for emergency access.

D. Green / Sustainable Alternative

Under this alternative the project would incorporate additional sustainable infrastructure and design practices than are currently proposed for the project. Such practices could include solar panels or the use of wind turbines on the site to generate electricity for the project. Either infrastructure could be installed in the guest parking lot. Solar panels would be affixed to a steel structure which would span each of the individual parking lot areas. The number of shade trees in the parking area would need to be reduced so allow full sun on the panels. The use of solar panels could provide electricity to the park and would reduce the use of electricity from the grid. Panels

would be expected to have visual impacts greater than what is expected for the Proposed Project. The installation of solar panels was only recently approved as a permitted use by the Town of Goshen. It does not appear that wind turbines are permitted uses in the Town of Goshen.

Rain cisterns could be used for use in irrigation purposes. Rain cisterns would be connected to roof leaders to collect, store and reuse rainwater to be then released into landscaping areas. This practice would reduce the amount of water from the municipal water system used for irrigation. Rain Cisterns are typically only used during summer months, and need to be detached and decommissioned in winter months to avoid freezing.

Other impacts from this alternative would be the same under the Proposed Project.

E. Alternate Municipal Water and Sewer Supply

The Proposed Project is seeking approval from the Village of Goshen to obtain water and sewer services. A resolution from the Village Board of Trustees has been adopted stating that the Village intends to contract with the Project Sponsor to provide the services subject to the completion of SEQR and review and approval of the proposed system by its water and sewer consultant.

Prior to entering into this agreement with the Village of Goshen, other municipal options were reviewed by the Project Sponsor. The Village of Chester operates a public water system of which, the closest point for potential access is located in Whispering Hills. Any connection would require approximately 6,300 linear feet of water main and would require approval from the Village of Chester Board of Trustees and would also require obtaining easements for crossing property 15-1-51.2 in the Town of Goshen (Ellman Dairy Farm field). While the water rate for out of district users is $7.15 per 1000 gallons which is less than the agreed upon rate in the Village of Goshen, connection to the Village of Chester system would cost an additional $1,032,000 (assuming prevailing wage) to run piping to access the system.

The possibility of connecting to the public water system of the Town of Wallkill was also evaluated. The three possible connection locations were Crystal Run Road, East Main Street and Echo Lake Road. While the Town of Wallkill stated that capacity exists in their public water supply system, each of the connection locations were in excess of 21,000 linear feet which would all cost more than $2.6 million to connect to the system and each of the connections would require running infrastructure through highly-traveled roads including Route 207 though the center of the Village of Goshen and NYS Route 17 which would require additional permits and could have traffic impacts. However, the Town of Wallkill out-of-district water rate of $5.00 per 1,000 gallons would represent a significant long term savings to the Project Sponsor. In that scenario, the Village of Goshen would not receive the financial benefit of the sale of water at its existing rates to the Project.

F. Alternative without the acquisition of Town-owned Properties

Under this alternative the Proposed Project would be designed without any permanent development on the eight town-owned parcels which are part of the Project Site under the proposed plan (11-1-60, 11-1-62, 11-1-63, 11-1-64, 11-1-65, 11-1-66, 11-1-67, 11-1-68 and 11-1-69). As

currently configured, most town-owned parcels run along a utility easement or are on the south side of the Arcadia Hills residential subdivision and not proposed to be developed as part of the Proposed Project. However, two of the parcels, 11-1-68 and 11-1-69 are more central within the site and, under the proposed plan, would be within areas proposed for parking. In the event the Proposed Project had to be designed to avoid these parcels, the hotel parking area would be shifted to the opposite side of the hotel, further east towards Arcadia Hills. The third day-guest parking lot from the east (right) would be reduced in size to approximately half its proposed size and the eastern most parking area would then need to be expanded further east towards Arcadia Hills to accommodate additional parking spaces.

Given the necessary grading on the site, the applicant would need to seek temporary easements from the Town to disturb and regrade the two centrally located lots but they would be seeded and would remain undeveloped.

This alternative would require a greater area of disturbance and it spreads the development further east and would require disturbance of Federal wetland area behind the hotel. A minor increase in noise impacts from parking areas being shifted closer to residences could also occur. All other impacts would be similar to those which are anticipated for the Proposed Project.

Certain town-owned lots contain wells that supply water to the Arcadia Hills Water District. However, those lots do not meet current NYSDOH wellhead protection area requirements. Under this alternative, the town-owned lots would continue to be noncompliant with NYSDOH standards. Town-owned lots would also remain property tax exempt.

VI. PROJECT IMPACTS ON USE AND CONSERVATION OF ENERGY AND SOLID WASTE MANAGEMENT

Energy Sources

Electricity will be the main source of energy used on the site for lighting, HVAC and ride operation. Orange and Rockland supplies the Town of Goshen with both electric and gas service. Infrastructure exists in the vicinity of the site for connection. The LEGOLAND Florida resort consumes approximately 1,092,809 kWh per month while the park in Windsor which is a seasonal park with no waterpark attractions consumes an average of 724,624 kWh per month with a summer peak in 2015 of 1,003,755. Given the Proposed Action will be seasonal in nature, it is anticipated electricity usage would be more similar to the Windsor park with summer peaks and reduced usage in the shoulder seasons and significantly reduced in winter months when outdoor operations are closed. Natural gas is available at the site and could be used for heating.

The US Green Building Council's Leadership in Energy and Environmental Design (LEED) program does not include a certification program for theme parks. The program could be followed for the proposed hotel or office building. Consistency with LEED is not currently part of the proposed project. However, several sustainable measures will be undertaken at the park to reduce energy usage.

Solar technology will be used to supplement traditional electric power on the site. LEGOLAND Park in Winter Haven was the first park in North America to use solar power to power rides. At Ford Junior Driving School, the 12 ride vehicles are charged entirely with solar power (see image), letting kids take the wheel for a quiet, energy-efficient circuit around a mock road.

Alternate fuel, electric vehicles are used for internal circulation within the commercial recreation facility by staff and emergency services. A two-car electric vehicle charging station is available at the LEGOLAND Hotel at the park in Winter Haven available to all guests.

Solid Waste

Other LEGOLAND parks in Florida and California generated approximately 79 tons of waste per month in 2015. Given the Proposed Action will be seasonal in nature, this amount reflects the peak season months and will be less in the shoulder seasons and significantly reduced in winter months when outdoor operations are closed.

The Town of Goshen does not provide solid waste collection for commercial uses. Garbage and recycling removal services will be provided by private hauler. Based on the Florida and California Parks, it is anticipated two to three solid waste pick-ups per week during the peak season. Actual

routes taken to the Project Site would depend on the private company's schedule and preference. Waste will be transported to the Orange County Transfer Station #1 located on Training Center Lane south of NYS Route 17M and to private recycling facilities.

LEGOLAND parks recycle material such as cardboard, office paper, traffic cones, cooking oils, motor oil, light bulbs, shrink wrap, scrap metal, pallets, LEGO brick, foam brick, plastics (grades 1-7) and batteries. LEGOLAND California recycles 2 million pounds of materials annually. In an effort to reduce the total amount of solid waste which would be transported to the Orange County Transfer Station and ultimately to a landfill, LEGOLAND New York will also engage in an environmental sustainability program.

Several sustainable landfill diversion measures will be undertaken as they are currently done at existing LEGOLAND facilities as follows:

- Placement of receptacles around the park with all trash receptacles;
- Green waste such as landscaping trimmings, are processed into mulch;
- High Density polyethylene (HDPE) plastics such as food and beverages containers, are recycled into benches (see LLFR bench, right) and trash receptacles; and
- Cooking oils are recycled to be used for biodiesel fuel.

VII. Irreversible and Irretrievable Commitment Of Resources

This chapter summarizes the proposed project and its impacts in terms of the loss of environmental resources, both in the immediate future and in the long term.

Soils

As a result of site grading and filling activities, the project will irreversibly modify the existing soil make up on the site and will remove soils from the project site to create a developable area.

Topography

As a result of site grading and filling activities, the Proposed Action will result in the irreversible conversion of the sites topography. Several areas of the site were previously disturbed and graded including areas where roads were constructed for a residential subdivision which was never constructed, the central portion of the site which previously contained a restaurant and Lot 11-1-47 which currently is developed with residential structures.

Vegetation

As a result of the Proposed Action, 140 acres of the site's natural vegetation will be disturbed. After construction, 82.88 acres will be converted to impervious surface including 3.05 acres of porous pavers utilized to mitigate stormwater impacts and promote groundwater recharge.

Groundwater

As a result of the Proposed Action, average water usage for the park and hotel is estimated to be 176,438 GPD with peak usage in July of approximately 255,394 GPD. Water will be supplied from the Village of Goshen's public water supply system. Additional capacity is available from the site's existing wells, but the on-site usage will reduce this capacity.

VII. GROWTH INDUCING IMPACTS

Growth from the construction of a LEGOLAND park can be expected to include supporting commercial development by providing additional patrons for existing and potentially new restaurants and hotels. As discussed in Section III-K, Land Use and Zoning, vacant and underdeveloped land exists in the Town along Route 17M on which commercial development is permitted and recommended by the Town of Goshen 2009 Comprehensive Plan Update. Other land within the Village of Goshen particularly on Clowes Avenue and along Greenwich Avenue/NYS Route 207 as well as further east in the Village and Town of Chester where commercial development is also permitted. Future commercial development, which is a key recommendation of the Town's 2009 Comprehensive Plan will support the tax base and provide jobs for local residents.

No additional growth outside of the project site would be expected to result from the adoption of Local Laws 5 and 6.

There would be no growth resulting from providing public sewer services to the project site. The proposed sewer main is proposed to run from Arcadia Hills to the project site along Harriman Drive. No additional properties will be served and no additional vacant parcels which do not already have access to public sewer will be provided access via this new sewer main.

Likewise, no growth would result from the sale of land currently owned by the Town of Goshen. These parcels are small, abnormally shaped, and isolated; the majority of which do not have street frontage. These parcels were created as part of the expansion of the Arcadia Hills residential subdivision which was never constructed. They are of little, to no value if not combined with the larger project site.

Growth from new Crystal Run Village Well

As part of the proposed project and as per a preliminary agreement with the Village of Goshen to provide municipal water and sewer services to LEGOLAND New York, a new well would be developed and connected to the Village's existing public water system near the Village's existing wells off Stony Ford Road in the Town of Wallkill. This well would be owned by the Village of Goshen and provide additional water to the Village's entire municipal water supply system. This would expand the capacity of the Village's water supply system. The additional water supply will benefit the entire Village water district which includes all Village properties in terms of available water volume.

Increases to Village population or residential or commercial construction which could be expected to result from increased water system capacity would be minor. The Village is currently nearly built out and patterns of development are established with mostly single family dwellings on lots ranging from 5,000 to 25,000 square feet. These smaller lots do not lend themselves to additional subdivision. Multi-family units are provided on second and third floors of the majority of commercial buildings in the downtown and several larger multi-family developments are spread throughout the Village. According to the 2014 American Community Survey the Village has 707 total multifamily units. Commercial zones, including a large area around Hatfield Lane zoned for industrial development currently exist. There are few large vacant sites where zoning could be changed to permit higher intensity uses based on new water capacity.

The proposed water system will include a water main from Harriman Drive onto the project site. This main will be owned and maintained by the Project Sponsor. It will not have the potential for others to access or tap into this water main to obtain residential water supply from the Village of Goshen water system.

Any projects located outside of the Village of Goshen which request or propose to obtain water supply from the Village of Goshen municipal water supply system would require approval from the Village Board and would need to assess the available capacity of the water system at that time.