# 1.0 EXECUTIVE SUMMARY

This document represents a voluntary Draft Environmental Impact Statement ("DEIS") prepared pursuant to 6 NYCRR §617.6(a)(4) and 6 NYCRR §617.9. It is submitted for treatment by the lead agency as an "environmental assessment form," for the purpose of determining significance. The applicant, Motor Parkway Associates, LLC, ("MPA"), is proposing development in accordance with the Main Street Planned Development District ("MSPDD") on an approximately 12.66 acres of land located on the southwest corner of Veterans Memorial Highway (NYS Route 454) and Motor Parkway (CR 67) in the Incorporated Village of Islandia (Suffolk County Tax Map No. District 0504 - Section 1 - Block 1 - Lots 7-10). Specifically, the proposed action consists of (a) creation of a MSPDD, (b) the change of zone of the subject property from Office ("O") and MF-18 Multifamily Residential Owner-Occupied Condominium Overlay District ("MF-18 Overlay District") to MSPDD, and (c) approval of the Master Plan for Islandia Village Center in accordance with the MSPDD. The applicant has developed a Master Plan for the Islandia Village Center ("Master Plan") and this voluntary DEIS presents an analysis of said Master Plan.

This voluntary DEIS evaluates the following impact issues:

- Land Use and Zoning;
- Soils and Topography;
- Water Resources;
- Ecology;
- Community Services and Utilities;
- Transportation;
- Air Quality;
- Noise; and
- Aesthetics and Cultural Resources.

## BRIEF DESCRIPTION OF THE PROPOSED ACTION

The proposed Master Plan, as depicted herein, consists of residential, retail and commercial uses, with shared recreational and green areas, within one cohesive development. Specifically, the Master Plan consists of one, eight-story residential building with a total of 150 condominium units, one three-story hotel with 100 rooms, one seven-story hotel with 175 rooms, two, one-story restaurant buildings, and a combined retail and office use building.

**Residential Building (150 Condominium Units)**

The residential building is situated at the westerly portion of the site and would be used exclusively for residential purposes. There are 150 condominium units planned for the Residential Building, with an overall building gross floor area of 252,880 square feet. The 150 residential units would consist of 15 one-bedroom units and 135 two-bedroom units.

In the center of the residential building, there would be an outdoor swimming pool, and plaza area with seating would be provided. Additionally, a swimming pool and a 1,000±-square-foot fitness center would be provided within the building, and a parking garage with 263 stalls would be provided below the residential building.

**Three-Story Hotel (Marriott Fairfield Inn and Suites)**

The proposed three-story hotel, to be situated along Motor Parkway at the northern portion of the site, would provide 100 guest rooms on three floors, as well as a 310±-square-foot meeting room and a 275±-square-foot board room. The proposed hotel would have a total gross floor area of 43,740± square feet, with 14,640± square feet on the ground level and 14,550± square feet at each of the two remaining stories.

**Seven-Story Hotel (Hilton Embassy Suites)**

The proposed full-service hotel, situated at the southern portion of the site, would be seven stories in height (a maximum of 105 feet) and consist of a maximum of 175 rooms. The proposed hotel footprint and ground floor area is 41,368 square feet, with a gross floor area of each of floors two through seven of 19,110 square feet, for a total gross floor area of 156,028 square feet. Within the hotel building, a 4,884±-square-foot conference room, a 456±-square-foot board room, and an indoor swimming pool would be provided. Parking for 61 vehicles would be provided below the hotel building.

**Restaurant Pads**

The two proposed 7,000-square-foot building pads, situated side-by-side at the northeastern portion of the site, are each planned for development with a one-story restaurant use. It is anticipated that the occupying tenants would provide no more than 225 seats each. The proposed site layout provides for a patio area extending from the easternmost restaurant area, and an outdoor plaza is provided between the two restaurant uses.

**Retail/Office Pad**

The retail and office pad offers 15,000±-square-feet of retail space on the ground floor, and 16,922±-square-feet of office space on the second floor. The retail/office building would be situated at the center of the overall subject property.

**Village Green and Other Landscaped Areas**

A 0.59±-acre Village Green consisting of large lawn areas, a grass-terraced amphitheater-style seating area, and a walkable area with plantings, fountains and benches would be created in a central location among the residential building, the three-story hotel and the retail/office use building. The overall 0.59±-acre Village Green would be dedicated to the Incorporated Village of Islandia as part of the proposed action. The proposed MSPDD would include an extensive landscaping plan, consisting of tree-lined roadways, planted trees around buildings, low-lying shrubbery within the center aisles of the site access and egress points, and planted islands within the parking area. Sidewalks and paved crosswalks would also traverse the property to facilitate pedestrian access. There would also be planted trees within the recreational courtyard of the residential building.

**Parking and Access**

Parking areas are proposed to be constructed below the proposed residential building and seven-story hotel, providing 263 spaces and 61 spaces, respectively. Surface parking is also proposed, with 478 spaces to be situated throughout the site. As such, 802 parking spaces, in total, are proposed on the site.

Access to the proposed development would be provided from one access driveway, along Veterans Memorial Highway, and at two additional access driveways along Motor Parkway. The access along Veterans Memorial Highway would allow right-in and right-out turns only, as would the westernmost proposed access along Motor Parkway. The northern access, along Motor Parkway, would allow left- and right-in turns, but exiting traffic would be restricted to right-out turns only.

**Utilities**

The projected sanitary discharge for the overall site is estimated at 99,231 gallons per day ("gpd") and would be accommodated by the Windwatch Sewage Treatment Plant ("STP"). The applicant has obtained a Suffolk County Sewer Agency resolution of approval for the proposed expansion of Suffolk County Sewer District No. 13 – Windwatch from 350,000 gallons per day, to 700,000 gallons per day. The expansion would be more than sufficient to accommodate the sanitary flow generated by the proposed development, and additional flow from several other existing and proposed developments in the area. As part of the proposed project, a sewage pump station would be constructed at the southeast corner of the overall subject property to collect all sewage generated by the proposed development and convey same to the Windwatch STP for treatment.

The subject property is within the service area of the Suffolk County Water Authority, with infrastructure at the adjoining roadways. Natural gas and electricity are provided in the area by KeySpan Energy and Long Island Power Authority ("LIPA"), respectively. Consultations have been undertaken with both entities, and letters of availability of services have been provided. There would be no on-site fuel storage required.

The subject property is situated within the Hauppauge Union Free School District ("UFSD"), and within the service areas of the Hauppauge Fire Department and Suffolk County Police Department - Fourth Precinct.

**Required Permits and Approvals**

The following permits and approvals would be required to implement the proposed action:

**Required Permits and Approvals**

| Permits and Approvals | Agency |
|---|---|
| Creation of MSPDD, Change of Zone of Subject Property from O and MF-18 Overlay District to MSPDD and Approval of Master Plan | Board of Trustees |
| Site Plan | Board of Trustees |
| Sanitary and Water Connection (Article 6 Permit) | Suffolk County Department of Health Services |
| Water Supply | Suffolk County Water Authority |
| Zoning Referral | Suffolk County Planning Commission |
| Highway Work Permit | Suffolk County Department of Public Works<br>New York State Department of Transportation |
| Curb Cuts | Suffolk County Department of Public Works<br>New York State Department of Transportation |
| Approval for Expansion of and Connection To Windwatch Sewage Treatment Plant | Suffolk County Legislature |

## PROBABLE IMPACTS AND PROPOSED MITIGATION MEASURES

### LAND USE AND ZONING

Upon implementation of the proposed action, the subject parcel would be developed with an eight-story, 150-unit residential building, a three-story, 100-room hotel, a seven-story, 175-room hotel with ancillary conference space and associated amenities, a retail and office building (providing 15,000 square feet of retail space on the ground floor and 16,922 square feet of office space above), 14,000 square feet of restaurant uses (including two, 7,000-square-foot building pads) with 225 seats each. The gross floor area of all buildings (i.e., residential, hotel, restaurant and retail/office buildings) is 498,570 square feet, which represents a floor area ratio ("FAR") of 0.904.

The Master Plan includes tree-lined roadways and promenades, low-lying shrubbery within the center roadway aisles, and trees planted adjacent to the buildings to provide visual screening of buildings and to create an aesthetically-pleasing environment. Landscaping also includes planted islands within the parking area to break up the mass of the paved areas, as well as to serve as a traffic-calming measure. The proposed Village Green, centered among the residential building, three-story hotel and retail/office building, would consist of large green areas with benches, an amphitheater-style grass terraced seating area, and fountains; this would not only provide an on-site open space area for residents and visitors, but would also be a visual benefit to the on-site users (i.e., residents, hotel guests and patrons of the retail and restaurant establishments). The proposed design also provides street connectivity through the use of sidewalks and visible crosswalks to promote walking. Landscaped buffers at the property perimeter are also proposed to screen views from the interior and property exterior. Post-and-rail fencing is also proposed along the Motor Parkway and Veterans Memorial Highway frontages.

The design of the Master Plan incorporates several uses on the site and utilizes landscaping, walkways, and green areas to promote pedestrian activity and interaction between the spaces. Overall, the proposed plan provides for cohesive development of the subject property.

**Zoning**

The proposed action consists of the creation of an MSPDD and the change of zone of the subject property from "O" and "MF-18 Overlay District" to MSPDD to accommodate the development set forth in the Master Plan.

**Proposed Mitigation Measures**

In order to mitigate the potential significant adverse impacts to land use and zoning, the following measures will be employed:

- Tree-lined roadways and promenades, low-lying shrubbery within the center roadway aisles, and trees planted adjacent to the buildings will create an aesthetically-pleasing environment;
- Recreational amenities for the residential building would be provided on-site;
- Planted islands within the parking area will break up the mass of the paved areas and will serve as a traffic-calming measure;
- The proposed Village Green will be dedicated to the Village and would serve as an on-site open space area for residents and visitors;
- The proposed design provides street connectivity through the use of sidewalks and visible crosswalks to promote walking;

- Landscaped buffers at the property perimeter are proposed to screen views from the interior and property exterior; and

- Post-and-rail fencing would be installed at the Motor Parkway and Veterans Memorial Highway frontages.

## SOILS AND TOPOGRAPHY

### Probable Impacts of the Proposed Action

#### Soils

Soil types at the subject property include CuB, PlB and PlC soils. According to the Soil Survey, the CuB soils present moderate limitations for the siting of streets and parking lots, based on slope. The PlC soils present moderate limitations for the siting of buildings, and severe limitations for the siting of streets and parking lots, based on slope. All on-site soils present limitations for development with lawns and landscaping, based on the presence of a sandy surface layer. However, as the proposed development includes the grading of much of the subject property and, therefore, the potential engineering limitations associated with slopes would be overcome. Furthermore, grading activities would result in a mixing of surface layers, such that the sandy surface layer may not interfere with the planting of lawns and landscaping. The application of topsoil within landscaped areas would further reduce any limitations on the siting of lawns and landscaping.

Based on an Earthwork Analysis plan prepared by Nelson & Pope, the proposed grading plan includes 44,000 cubic yards of cut and 38,000 cubic yards of fill. Thus, 6,000 cubic yards of material would require removal from the subject site. Approximately 3,500 cubic yards of topsoil would be imported to the site.

Disturbance of soils across much of the 12.66±-acre site would result in erosion and sedimentation without proper controls. In order to minimize erosion and sedimentation during construction, the proposed controls would include minimizing the size of exposed areas and the length of time that areas are exposed, installing sediment barriers (e.g., silt fencing, hay bales, etc.) along the limits of disturbance and at drainage inlets for the duration of the work, stabilizing graded areas and stockpiles through the use of temporary seeding, and stabilizing the construction entrances with gravel-beds. All erosion and sedimentation control measures would be implemented in accordance with the *New York Standards and Specifications for Erosion and Sediment Control*. As such, no significant adverse impacts associated with erosion and sedimentation would be expected.

**Topography**

The existing site elevations outside of the proposed building footprints would not be significantly altered, where proposed grade changes are generally between zero and four feet. Retaining walls are proposed along the southern property boundary (south of the proposed seven-story hotel) to allow for proper parking facilities and on-site containment of stormwater, as well as on the north and west sides of the proposed three-story hotel to allow for the maintenance of the existing grade adjacent to Motor Parkway and the creation of an outdoor patio area off of the proposed hotel.

All proposed grade changes within the footprint of the seven-story hotel are less than five feet, including earthwork for the proposed subgrade parking garage. Grade changes at the proposed restaurant pad footprints range from zero to nine feet, with the greatest changes at the eastern portion of this area. Within the footprint of the western restaurant pad, grade changes would not exceed five feet.

Grade changes at the site of the proposed three-story hotel would be minimal at the eastern portion of the footprint, however, grade changes at the western portion of the footprint, where the steepest slopes are found under existing conditions, would be more significant (up to 13 feet).

The most significant grade changes would occur within the footprint of the proposed residential building. Up to 21 feet would be excavated to allow for the proposed building, including the parking garage to be constructed below. In this area, existing site elevations are greatest (up to 185± feet). However, the surrounding grade would remain essentially unaltered.

Overall, the proposed changes to the existing topography of the subject property have been minimized to the maximum extent practicable, given the existing topography of the site and the development objectives.

**Proposed Mitigation Measures**

In order to mitigate the potential impacts to soils and topography during and after construction activities, the following mitigation measures would be implemented:

- Minimization of the size of exposed areas and the length of time that areas are exposed;
- Installation of sediment barriers (e.g., silt fencing, hay bales, etc.) along the limits of disturbance and at drainage inlets for the duration of the work;
- Stabilization of graded areas and stockpiles through the use of temporary seeding;
- Stabilization of the construction entrances with gravel-beds; and

- The strategic grading and the installation of retaining walls to stabilize soils in areas of steep slopes.

## WATER RESOURCES

### Probable Impacts of the Proposed Action

#### Sanitary Disposal

All sanitary waste from the subject property would be accommodated by the Windwatch STP in Islandia. Therefore, there would be no on-site discharge and no associated sanitary impacts to groundwater. The applicant, MPA, has obtained a Suffolk County Sewer Agency resolution of approval for the proposed expansion of Suffolk County Sewer District No. 13 – Windwatch, from 350,000 to 700,000 gpd. The expansion would be more than sufficient to accommodate the sanitary flow generated by the proposed development, and additional flow from several other existing and proposed developments in the area. Therefore, as there will be no on-site sanitary discharge, no significant adverse impacts to groundwater from same would result upon implementation of the proposed action.

#### Water Use

The overall potable water demand among the proposed residential, hotel, retail/office and restaurant buildings is also estimated at 99,231 gpd. It is noted that, in order to reduce potable water use, all of the buildings would be equipped with low-flow plumbing features.

In addition to the potable water demand, there are irrigation demands for the areas to be landscaped. During the 20-week irrigation season (May through September), the total irrigation demand is 1.74 million gallons, or 4,767± gallons per day (averaged over 365 days). Thus, the total projected water demand would be 103,998 gpd.

The estimated 103,998 gpd of potable water required by the overall development would be provided by the Suffolk County Water Authority, via existing supplies within the roadways surrounding the subject property. The Suffolk County Water Authority confirmed the availability of water via an existing main along Motor Parkway, advising that the subject property is within a low-pressure area, and thus, the proposed distribution system should be designed accordingly. The applicant acknowledges this design request, and will comply with all Suffolk County Water Authority requirements to ensure that the distribution system properly addresses the pressure issue. The applicant's engineer provided correspondence to the Suffolk County Water Authority indicating, in pertinent part, that booster pumps for domestic and fire supply will be installed at the buildings, as necessary to meet the requirements of the Building and Fire Codes of New York State.

**Stormwater Runoff and Drainage**

The Erosion Control plan prepared for the proposed development includes both vegetative and structural controls to stabilize soils and reduce the potential impacts to soils during construction activities. The proposed erosion and sediment controls would include, among other things, minimizing the size of exposed areas and the length of time that areas are exposed; installing sediment barriers (e.g., silt fencing, hay bales, etc.) along the limits of disturbance and at drainage inlets for the duration of the work; stabilizing graded areas and stockpiles through the use of temporary seeding; and stabilizing the construction entrances with gravel-beds to prevent soil and loose debris from being tracked onto local roads.

The proposed development plan includes 9.80± acres of impervious surface area, which would increase stormwater runoff on the site. The balance of the 12.66±-acre subject property would be comprised of landscaped areas. According to the project engineer, stormwater management will be accomplished via a system of catch basins and leaching pools installed throughout the subject property. The calculations provided indicate that the proposed stormwater management system would accommodate a minimum five-inch rainfall event on-site.

Finally, the minimum depth to groundwater at the subject property is 40± feet below grade surface. Thus, there is a more than adequate separation distance between the base of the stormwater leaching pools and groundwater.

Overall, therefore, in that the proposed stormwater management plan would comply with prevailing regulations and would serve to collect and filter stormwater prior to groundwater recharge, the proposed increase in stormwater runoff would not result in significant adverse impacts to groundwater quality.

**Proposed Mitigation Measures**

In order to mitigate the potential significant adverse impacts associated with water use and stormwater runoff, the following measures will be employed:

- The proposed buildings would be fitted with low-flow plumbing fixtures to reduce potable water use;

- As the property is within a low-pressure area, as identified by the Suffolk County Water Authority, booster pumps for domestic and fire supply will be installed at the buildings, as necessary to meet the requirements of the Building and Fire Codes of New York State;

- Subject to the approval of the NYSDEC, the applicant will install an on-site irrigation well;

- Landscaped areas would be served by an irrigation system designed for high efficiency to reduce water demand.

- All stormwater would be contained and recharged on-site with the use of stormwater catch basins and leaching pools;

- The proposed drainage design would accommodate a five-inch storm event; and

- Erosion and sedimentation controls would be implemented during construction.

## ECOLOGY

### Probable Impacts of the Proposed Action

### Vegetation Impacts

It is projected that 12.66 acres of the site will be cleared to allow for the development. The impacts of the proposed project should be assessed in relation to a direct change in habitat, fragmentation and an increase in human activity. The proposed development plan would require clearing all of the Mined/Cleared Lands and the Successional Woodland on site.

After the construction of the project, approximately 2.86 acres, or 22.55 percent of the site, will be replanted with landscape species and turf. The plantings are proposed within the landscaped islands in the parking areas and adjacent to the proposed structures. This type of habitat is not currently found on site. The types and density of plant material used during the landscaping of the project would increase the desirability of these new habitats to the wildlife species listed in the above descriptions, as well as other species. However, the limited and fragmented landscaped areas proposed will not benefit the majority of the wildlife species. Both of these ecological communities are distributed throughout New York State. They are ranked by NYNHP as being both global and State "secure."

Paving - Hard Structures

The proposed project will result in 9.80 acres, or 77.45 percent of the site, being in Paving - Hard Structures. Paving - Hard Structures would consist of paved roadways, parking fields, sidewalks and patios/terraces, as well as the proposed buildings. This would create a different habitat than is currently found on site. This ecological community is distributed throughout New York State. It is ranked by NYNHP as being both global and State "secure."

**Wildlife Impacts**

The change in the habitat types found on site will impact wildlife species, however, as discussed earlier, most of the wildlife expected to be found on site are those species that are tolerant of human activity because of the relatively small size of the existing habitats and the intensity of the surrounding land uses. However, the significant shift in the types of habitats will impact the types and densities of the species that will use the site after construction.

The proposed project will remove all of the natural habitats found on site. Species that require any type of wooded or old-field habitat will be displaced from the site, and those that require cover for nesting and larger ranges for foraging will be the most impacted. Therefore, the wildlife expected to use this area of the site are those species that prefer heavily-developed urban habitats and those that are extremely tolerant of human activity. The habitats found on the project site are expected to provide suitable habitat for a limited variety of wildlife. While the species that will ultimately occupy the site will be tolerant of human activity, all species, including the tolerant ones, will be impacted by the proposed clearing, change in habitat and resultant increase in human activity, especially during construction.

In the short term, lands adjacent to the subject property will experience an increase in the abundance of wildlife populations due to displacement of individuals by the construction phase of the proposed project. Ultimately, competition between the displaced species and the species already utilizing the resources of the surrounding lands should result in a net decrease in population size for most species. The effect on the density and diversity of both local and regional populations should be minimal as the area represents only a small portion of the habitats available in the vicinity.

The use of plant material that would provide cover for nesting and foraging, as well as various food sources (seeds, nuts, berries, etc.), would help to increase the diversity and density of wildlife species, particularly bird species, after construction of the proposed project.

Consultations were undertaken, on behalf of the applicant, with the NYNHP, with respect to the potential presence of rare species or ecological communities at the subject property. NYNHP identified nine vascular plant species, listed as either endangered or threatened, were identified as being found in the vicinity of the site. None of the endangered plant species were found on the site. Of the five threatened species, only one was found on the site. However, the protection afforded to a threatened species, pursuant to 6 NYCRR Part 193.3(f), prohibits the destruction or removal of such species by parties other than the owner without consent. The owner of the property on which a threatened plant species is found is not prohibited from removing.

**Proposed Mitigation Measures**

Extensive landscaping is proposed, including a wide variety of plant species, which will provide diverse vegetative cover within landscaped areas and thus may reduce adverse impacts upon certain wildlife species.

## COMMUNITY SERVICES AND UTILITIES

### Probable Impacts of the Proposed Action

Educational Services

The subject property exists within the Hauppauge Union Free School District.

The estimated number of school-aged children on the site would range from 18± to 21±, with 9± of these children expected to attend public school (i.e., Hauppauge UFSD) (based on the Rutgers Study). Based on the latest publicly-available data for the Hauppauge Union Free School District, enrollment among all grades is 4,143 students. Thus, the anticipated number of school-aged children to be generated by the proposed residential building would represent an increase in enrollment between 0.43 and 0.51 percent. Data from existing multi-family, ownership residential communities within the Hauppauge UFSD indicates an estimated nine school-aged children would be generated by the proposed development. As the anticipated number of school-aged children to be generated by the proposed project represents less than a 0.51 percent increase in enrollment within the Hauppauge Union Free School District (if you assume the conservative overestimate of 21 school-aged children), no significant adverse impacts upon same are expected.

Moreover, the proposed development is expected to generate approximately $1,518,883 in annual taxes to be received by the Hauppauge UFSD. Based on a per-pupil expenditure of $16,983, and an estimated 21 school-aged children, the proposed development would represent a cost to the Hauppauge UFSD of $356,643. Therefore, based on these estimates, the development would result in an annual revenue of expenses to the Hauppauge UFSD of $1,162,240.

Emergency Services

The development of the site would increase the demand for fire protection and ambulance service, which is provided by the Hauppauge Fire Department. The proposed development will comply with the New York State building and fire codes to ensure adequate access for emergency services and sprinklering. The applicant will install hydrants and ensure adequate water pressure for fire protection. Finally, the residential building units and common areas will be equipped with central station monitoring equipment for early detection of fire.

There are several multi-story buildings within the service area of the Hauppauge Fire Department, including the Windwatch Hotel, Marriott Hotel, and Computer Associates. Therefore, it is not anticipated that this proposed development would create a fire protection condition requiring new equipment.

A meeting was held between the applicant's representatives and representatives of the Hauppauge Fire Department. Subsequent to the meeting of March 25, 2008, the applicant requested a letter from the Hauppauge Fire Department detailing its concerns. As no such letter was provided, the applicant compiled a list of the issues raised during the meeting. The applicant has addressed each of the issues raised by the Fire Department to the maximum extent practicable, as follows.

- Preparation of a fire truck turning radius graphic demonstrating adequate intersection radii;
- Creation of a break in a median to allow left turn-in and turn-out movements;
- Addition of mountable "pork-chop" medians at site access points;
- Pruning of vegetation to meet vertical clearance requirements for fire truck maneuvering;
- Allowance of adequate vertical clearance in the proposed parking garages; and
- Provision of additional fire hydrants.

These measures were described within a letter prepared by the applicant, and sent to the Hauppauge Fire Department.

The subject property is within the jurisdiction of the Suffolk County Police Department – Fourth Precinct. To minimize the impact on the Police Department, the proposed residential building would be accessed only by keycard entry. This would minimize non-resident trespass. Also, the proposed development would include central station monitoring to determine the need for emergency services in the event of an alert. A private security provider would be contracted by the applicant to patrol the proposed development. Furthermore, the proposed lighting design will provide well-lit areas consistent with recommended light levels for security purposes.

Consultations were undertaken with the Suffolk County Police Department with respect to the proposed development and its potential impacts on the Department. The Suffolk County Police Department did not identify any significant adverse impacts to the Fourth Precinct, in which the subject property is situated, and indicated, in pertinent part, that the "Police Department will adapt as necessary to protect and serve the community as it grows." Based on the foregoing, it is not expected that the proposed development would have a significant adverse impact on the Police Department.

Solid Waste/Carting Services

Each of the land uses within the proposed development would generate solid waste, and a licensed carter would be used for pick-up and disposal off-site. The proposed development is projected to generate approximately 3.817 tons of solid waste per day. All solid waste generated on the site would be contained in concealed dumpsters (e.g., fenced and screened enclosures). The separation of waste materials on-site, including paper, cardboard, plastics and glass, for recycling purposes, would be undertaken. A licensed private carter will serve the development, and all handling (including sorting) and disposal would be undertaken in accordance with established solid waste management practices. Thus, no significant adverse impacts to solid waste management practices would result.

**Utilities**

Implementation of the proposed action would result in the construction of 150 residential units, two hotels providing a total of 275 rooms, retail and office uses, and restaurant establishments. Thus, there would be a demand for electricity and natural gas from service providers (i.e., LIPA and KeySpan, respectively). The overall electric load would be 8,867 kilovolt-amperes ("KVA"), and the overall natural gas load would be 18,620 cubic feet per hour ("CFH"). Consultations were undertaken with LIPA and KeySpan, and letters confirming the availability of services have been provided.

The Suffolk County Water Authority has confirmed the availability of water via existing infrastructure within Motor Parkway. Specifically, a 10-inch main would extend from the existing 12-inch main within Motor Parkway to the west of the overall subject property. As such, no significant adverse impacts to water supply would be expected.

Sanitary waste generated by the proposed development would be accommodated by the existing Windwatch STP. The proposed development includes the creation of a sewage pump station at the southeast corner of the subject property to convey sanitary waste to the STP for treatment. An estimated 99,231 gpd of sanitary waste would be discharged to the Windwatch STP, which would be well within the plant capacity. Therefore, the volume of sanitary waste from the proposed development would not have significant adverse impacts on the Windwatch STP.

**Proposed Mitigation Measures**

The following measures would be incorporated into the project design or undertaken by the applicant to mitigate potential impacts upon community services and utilities:

- All of the buildings would be sprinklered and equipped with central station monitoring equipment for early detection of fire;

- The proposed residential building would be accessed only by keycard entry to prevent non-resident trespass. Also, the proposed development would include central station monitoring to determine the need for emergency services in the event of an alert and a private security provider would patrol the proposed development;

- The proposed lighting design will provide well-lit areas consistent with recommended light levels for security purposes;

- Use of computerized building management systems to maintain building efficiency;

- Use of high-performance glass windows;

- Use of energy-efficient appliances;

- Use of compact fluorescent light bulbs;

- Use of low-flow plumbing fixtures, so as to reduce the overall demand for potable water resources; and

- Provision of recycling facilities at convenient locations for use by site occupants.

## TRANSPORTATION

### Probable Impacts of the Proposed Action

### Site Trip Generation Analysis

The site-generated traffic estimates were projected for the Weekday A.M. and Weekday P.M. peak hours as well as the Saturday Midday peak hour. The highest site-generated traffic can be expected to occur on a Saturday during the midday period when an estimated 841 vehicle trips per hour will be generated by the proposed mixed-use development (471 in and 370 out). During the Weekday P.M. peak hour, the proposed mixed-use development is expected to generate 698 vehicle trips per hour (349 in and 349 out). During the Weekday A.M. peak hour, trip generation at the site will be lower when the site-generated traffic is expected to be 502 vehicles per hour (268 in and 234 out).

It is noted that not all of the site-generated traffic to the proposed mixed-use development will be new traffic added to the adjacent street system. The table below presents the projected trip generation for the proposed development, but adjusted for pass-by traffic for the affected components of the proposed development. The unaffected, and therefore, unadjusted components are also included below with the net traffic expected on adjacent streets.

**Adjusted Site-Generated Traffic Summary**

| Component | Use | Weekday A.M. Peak Hour | | Weekday P.M. Peak Hour | | Saturday Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | Enter | Exit | Enter | Exit | Enter | Exit |
| Residential | Residential Condominiums 150 Units (Land Use Code 230) | 12 | 59 | 56 | 28 | 46 | 40 |
| | Residential/Retail Internal Credit | -1 | -7 | -11 | -8 | -8 | -7 |
| | Residential/Office Internal Credit | -0 | -1 | -1 | -0 | N/A | N/A |
| | Residential/Restaurant Internal Credit (10%) | N/A | N/A | -5 | -2 | -4 | -4 |
| | Net Traffic | 11 | 51 | 39 | 18 | 34 | 29 |
| Retail | Shopping Center 15,000 S.F. (Land Use Code 820) | 30 | 20 | 86 | 93 | 131 | 121 |
| | Retail/Residential Internal Credit | -7 | -1 | -8 | -11 | -7 | -8 |
| | Retail/Office Internal Credit | -0 | -1 | -2 | -3 | N/A | N/A |
| | Pass-By Credit (25%/20%) | -5 | -4 | -19 | -19 | -24 | -22 |
| | Net Traffic | 18 | 14 | 57 | 60 | 100 | 91 |
| Office | General Office Building 16,922 S.F. (Land Use Code 710) | 40 | 5 | 17 | 81 | N/A | N/A |
| | Office/Residential Internal Credit | -1 | -0 | -0 | -1 | N/A | N/A |
| | Office/Retail Internal Credit | -1 | -0 | -3 | -2 | N/A | N/A |
| | Net Traffic | 38 | 5 | 14 | 78 | N/A | N/A |
| Restaurant | High-Turnover (Sit-Down) Restaurants 2-7,000 S.F. each (Land Use Code 932) | N/A | N/A | 93 | 60 | 176 | 104 |

| Component | Use | Weekday A.M. Peak Hour | | Weekday P.M. Peak Hour | | Saturday Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | Enter | Exit | Enter | Exit | Enter | Exit |
| | Residential/Restaurant Internal Credit (10%) | N/A | N/A | -2 | -5 | -4 | -4 |
| | Pass-By Credit (40%) | N/A | N/A | -36 | -22 | -68 | -40 |
| | Net Traffic | N/A | N/A | 55 | 33 | 104 | 60 |
| Hotels | Business Hotel 100 Rooms (Land Use Code 312) | 34 | 24 | 37 | 25 | 37 | 25 |
| | Hotel 175 Rooms (Land Use Code 310) | 68 | 49 | 60 | 62 | 76 | 76 |
| Total Gross Unadjusted Traffic | | 184 | 157 | 349 | 349 | 466 | 366 |
| Total Adjustments | | -15 | -14 | -87 | -73 | -115 | -85 |
| Total New Traffic on Adjacent Streets | | 169 | 143 | 262 | 276 | 351 | 281 |

### Planned Improvements

Several roadway modifications have recently been completed on the adjacent roadway network. A brief explanation of these roadway improvements can be found below:

- Motor Parkway at the North and South Service Roads of the Long Island Expressway - The bridge structure over the Long Island Expressway, Rte. 495, between the North and South Service Roads has been widened providing six traffic lanes (three in each direction, including left turn lanes).

- Motor Parkway at Veterans Memorial Highway - As part of the traffic mitigation required for the proposed Computer Associates Phase II expansion changes to the operation of this traffic signal are planned. A protected/permissive westbound left turn arrow will be added to the existing traffic signal. It is Dunn's understanding this expansion has been indefinitely postponed.

## Intersection Capacity Analysis

### Signalized Intersections

To determine the impact of the site-generated traffic on the adjacent roadways in the vicinity of the proposed mixed-use development, signalized intersection capacity analyses were performed at the signalized intersections noted below:

- Motor Parkway at the Long Island Expressway South Service Road;
- Motor Parkway at the Long Island Expressway North Service Road;
- Veterans Memorial Highway at Motor Parkway;

- Veterans Memorial Highway at the Long Island Expressway North Service Road; and
- Veterans Memorial Highway at the Long Island Expressway South Service Road.

The signalized capacity analyses were conducted at the referenced study intersections to examine traffic operations during the Weekday A.M. peak hour, Weekday P.M. peak hour, and Saturday peak hour.

The results of the existing and no-build conditions signalized capacity analyses indicate overall existing and future No-Build capacity constraints at the majority of the intersections in the study area with these intersections operating below acceptable overall levels of service ("LOS") during at least one peak time period. The generally accepted definition of "acceptable" LOS is LOS D or better. These below acceptable operational standards conditions exist or will exist regardless of whether or not the proposed action is implemented. The only intersection where the added site traffic causes an impact in overall intersection operating conditions from the No-Build Condition is at the intersection of Veterans Memorial Highway at the Long Island Expressway North Service Road. At this intersection, the overall intersection LOS slips from LOS D in the No-Build to LOS E in the Build during the weekday P.M. peak period.

As part of the Traffic Impact Study, methods of improving the operation of the already capacity-constrained intersections were investigated. All of these intersections currently experiencing capacity problems as well as the impacted Veterans Memorial Highway/Long Island Expressway North Service Road intersection were improved with minor timing changes. The timing changes either resulted in No-Build overall intersection LOS being restored or resulted in improvement in overall intersection LOS when compared to the overall intersection LOSs under the No-Build Condition for one or more time periods.

**Veterans Memorial Highway at Motor Parkway**

During the P.M. peak hour there is a Level of Service "F" in the Existing and No-Build conditions at the intersection of Veterans Memorial Highway and Motor Parkway. Although this Level of Service "F" <u>is not</u> caused by the proposed mixed-use development the operation of this intersection was analyzed again to look at ways to remedy the existing Level of Service "F" operation. An improved Level of Service "D" can be obtained in the P.M. peak Build Condition if the following roadway and traffic signal improvements are implemented by the NYSDOT or the SCDPW:

1. Construct one (1) additional northbound through lane on Veterans Memorial Highway;

2. Construct one (1) additional southbound through lane on Veterans Memorial Highway;

3. Add a westbound left turn arrow on Motor Parkway to the existing traffic signal operation;

4. Add an eastbound right turn overlap on Motor Parkway to the existing traffic signal operation; and

5. Change the traffic signal timing to accommodate the roadway and traffic signal improvements.

It should be noted that at this intersection the existing northbound left turn lane should be lengthened to accommodate the left turn volume expected during the 2009 Build Condition. The northbound left turn lane should be extended to a total distance of 400 feet.

**Unsignalized Intersections**

The proposed development will have two access points onto Motor Parkway and one access point onto Veterans Memorial Highway as noted below:

- Motor Parkway at the Proposed Westerly Site Access Drive;
- Motor Parkway at the Proposed Easterly Site Access Drive; and
- Veterans Memorial Highway at the Proposed Site Access Drive.

The westerly access drive on Motor Parkway will allow right turns only out of the site. It is proposed that an acceleration lane be constructed on Motor Parkway for exiting vehicles leaving the site via this driveway. Because an acceleration lane is being provided and this channelized right turn out of the driveway will be YIELD controlled, the interaction between the eastbound through traffic on Motor Parkway and the exiting site traffic will more likely operate like an exit ramp merge rather than an unsignalized intersection. For this reason, unsignalized capacity analyses were not performed at the westerly site access drive on Motor Parkway.

The proposed site access drive on Veterans Memorial Highway will allow right turns only into and out of the site due to the presence of a median on Veterans Memorial Highway in front of the access drive. It is proposed that both a deceleration lane and an acceleration lane be constructed on Veterans Memorial Highway for entering vehicles and exiting vehicles, respectively. The channelized right turn lane out of the site will be YIELD controlled. The provision of both a deceleration lane and an acceleration lane on Veterans Memorial Highway at the proposed site access drive allows both the entering and exiting site traffic to slow down or accelerate in a separate lane from the Veterans Memorial Highway southbound through traffic. As such, the interaction between the southbound through traffic on Veterans Memorial Highway and the entering site traffic will more likely resemble a ramp diverge rather than an unsignalized intersection. Likewise, the interaction between the southbound through traffic on Veterans Memorial Parkway and the exiting site traffic will operate similar to the proposed westerly site access drive (like an exit ramp merge) rather than a typical unsignalized intersection. For these reasons, unsignalized capacity analyses were not performed at the Veterans Memorial Highway site access drive as the gap analysis calculations that the HCS software performs and the level of services and delays for the movements involved are not applicable due to the geometric configuration of this site access drive.

Unsignalized intersection capacity analyses were performed at the Motor Parkway easterly site access drive to determine the ability of vehicles to safely negotiate turning movements at this four-legged unsignalized intersection. The site easterly access drive will allow both left and right turns into the site and right turns only out of the site. It is proposed that an acceleration lane be constructed on Motor Parkway for exiting vehicles leaving the site via this driveway.

The channelized right turn lane out of the site will be YIELD controlled. The provision of an acceleration lane on Motor Parkway at the proposed easterly site access allows the exiting site traffic to accelerate in a separate lane from the Motor Parkway through traffic. Because an acceleration lane is being provided and this channelized right turn out of the driveway will be YIELD controlled, the interaction between the eastbound through traffic on Motor Parkway and the exiting site traffic will operate similar to an exit ramp merge rather than a northbound to eastbound right turn first stopping at a two-way stop-controlled intersection, looking for a gap in the eastbound Motor Parkway through traffic, and then accelerating into the conflicting traffic stream. For the reasons mentioned above, the exiting channelized right turn lane at the proposed Easterly Site Access Drive was not included in the capacity analyses completed for this access drive.

The unsignalized intersection capacity analyses that were completed for the Motor Parkway at the Proposed Easterly Site Access Drive intersection were performed for the 2009 Build Scenario in accordance with the methodology set forth in the 2000 edition of the Highway Capacity Manual.

The analyses for the intersection of Motor Parkway at the Proposed Easterly Site Access Drive indicates that good levels of service (LOS C or better) are expected for westbound left-turning vehicles entering the easterly site access driveway with the low volume easterly office access opposite the proposed easterly site access drive operating at LOS C during both the weekday A.M. and P.M. peak hours.

**Examination of Proposed Access**

The points of access to the proposed development have been designed to be well-separated and to distribute traffic to the adjacent roadways at three points so as to minimize traffic congestion.

The site will have two access points onto Motor Parkway. The westerly access point will provide two lanes (one entering and one exiting). The westerly access drive will allow right turns only into and out of the site. The channelized right turn lane out of the site will be YIELD controlled. It is proposed that an acceleration lane be constructed on Motor Parkway for exiting vehicles leaving the site via this driveway.

The easterly access drive to Motor Parkway will provide two lanes (one entering and one exiting). The easterly access drive will allow both left and right turns into the site and right turns only out of the site. The channelized right turn lane out of the site will be YIELD controlled. It is proposed that an acceleration lane be constructed on Motor Parkway so that vehicles leaving the site have a lane separate from the through traffic on Motor Parkway in which to accelerate and adjust their speed. It should be noted that there are no intentions to signalize this easterly access drive as the Suffolk County Department of Public Works has indicated that they do not want this driveway signalized. However, should the Suffolk County Department of Public Works require that a sight distance easement be provided to the west of the easterly site driveway, the applicant is willing to allow such easement as is necessary to maximize and maintain sight distance visibility to the west.

The site will also have one access point onto Veterans Memorial Highway. This access drive will provide two lanes (one entering and one exiting). A median is present along Veterans Memorial Highway in front of the access drive. Therefore, the Veterans Memorial Highway access drive will allow right turns only into and out of the site. It is proposed that both a deceleration lane and an acceleration lane be constructed on Veterans Memorial Highway for entering vehicles and exiting vehicles, respectively. The channelized right turn lane out of the site will be YIELD controlled. The provision of both a deceleration lane and an acceleration lane on Veterans Memorial Highway at this site access will allow both the entering and exiting site traffic to slow down or accelerate in a separate lane so as not to unduly disrupt the flow of the southbound Veterans Memorial Highway through traffic.

**Roadway Modifications**

In order to enhance the flow of traffic and to maximize safety in the vicinity of the proposed development, the following significant roadway modifications are recommended:

- Motor Parkway at the Long Island Expressway South Service Road - Modify the weekday P.M. peak timing plan to allocate additional green time to the eastbound Long Island Expressway South Service Road Green Phase.

- Motor Parkway at the Long Island Expressway North Service Road - Modify the weekday A.M. peak timing plan to allocate additional green time to the westbound Long Island Expressway North Service Road Green Phase.

- Veterans Memorial Highway at Motor Parkway - (Refer to section with subheading “Veterans Memorial Highway at Motor Parkway” for discussion of roadway improvements at this intersection).

- Veterans Memorial Highway at the Long Island Expressway North Service Road: The following improvements are recommended:

    - Modify the weekday A.M. peak timing plan to allocate additional green time to both the westbound Long Island Expressway North Service Road Green Phase and the northbound Veterans Memorial Highway left turn lagging phase;
    - Modify the weekday P.M. peak timing plan to allocate additional green time to the westbound Long Island Expressway North Service Road Green Phase; and
    - Modify the Saturday Midday peak timing plan to allocate additional green time to the northbound Veterans Memorial Highway left turn lagging phase.

- Veterans Memorial Highway at the Long Island Expressway South Service Road: The following improvements are recommended:

    - Modify the weekday A.M. peak timing plan to allocate additional green time to the eastbound Long Island Expressway South Service Road Green Phase;
    - Modify the weekday P.M. peak timing plan to allocate additional green time to both the eastbound Long Island Expressway South Service Road Green Phase and the Veterans Memorial Highway Green Phase; and
    - Modify the Saturday Midday peak timing plan to allocate additional green time to the southbound Veterans Memorial Highway left turn lagging phase.

**Shared Parking Site Analysis**

The results of the shared parking analysis indicate that the peak period of parking demand on the site (excluding the condominiums) will occur at 6:00 PM on a weekend in July. At this time, the effects of the monthly and daily and hourly variations for each use and the effects of any captive adjustments result in the highest levels of parking demand over the course of the year. At that time, it is anticipated that 511 parking stalls will be needed to meet demand.

Not including the parking stalls within the condominium building, the site contains 539 parking stalls which can be shared amongst the balance of the uses on the site. The shared parking analysis indicates that the peak demand for these spaces will not exceed 511 spaces and that this demand will occur at 6:00 PM on a weekend day in July. At all other times the parking demand will be lower. This analysis indicates that even at this peak, a surplus of 28 vacant parking stalls will exist in the non-residential portions of the site. As such, the site plan for Islandia Village Center contains sufficient parking to serve the uses on the site.

**Conclusions**

The Traffic Impact Study has concluded that, with the proposed access plan and minor timing changes to the existing signal system, the proposed mixed-use development will have no significant adverse traffic impact on the adjacent highway network. Although the proposed development will add traffic to the adjacent roadway network, the traffic impact will be minimized and the additional traffic will be accommodated by the existing roadway system. The following points should be recognized:

1. The location and design of the access points will effectively distribute traffic to the adjacent roadways.

2. The section of Veterans Memorial Highway from the Long Island Expressway South Service Road in the south to Motor Parkway in the north rises from south to north on a fairly steady grade. This entire section of Veterans Memorial Highway contains no appreciable horizontal curves. As a result, no sight distance restrictions occur along the entire length of Veterans Memorial Highway within this study area.

3. Although there exist both horizontal and vertical curves on Motor Parkway the location of the driveways provide adequate sight distance for safe operations. The westerly driveway is located sufficiently west of this condition and will provide safe right turn in and out operation only. Although the easterly driveway is in proximity to this condition, this driveway will provide for both left and right turns entering the site, but only right turns exiting the site (with left turns out of the site being prohibited).

4. The points of access to the proposed development have been designed to be well-separated and to distribute traffic to the adjacent roadways at three points so as to minimize traffic congestion.

   The site will have two access points on Motor Parkway. The westerly access point will provide two lanes (one entering and one exiting). The westerly access drive will allow right turns only into and out of the site. The channelized right turn lane out of the site will be YIELD controlled. It is proposed that an acceleration lane be constructed on Motor Parkway for exiting vehicles leaving the site via this driveway.

   The easterly access drive on Motor Parkway will provide two lanes (one entering and one exiting). The easterly access drive will allow both left and right turns into the site and right turns only out of the site. The channelized right turn lane out of the site will be YIELD controlled. It is proposed that an acceleration lane be constructed on Motor Parkway so that vehicles leaving the site have a lane separate from the through traffic on Motor Parkway in which to accelerate and adjust their speed. It should be noted that there are no intentions to signalize this easterly access drive as the Suffolk County Department of Public Works has indicated that they do not want this driveway signalized.

However, should the Suffolk County Department of Public Works require that a sight distance easement be provided to the west of the easterly site driveway, the applicant is willing to allow such easement as is necessary to maximize and maintain sight distance visibility to the west.

Due to the presence of a median on Veterans Memorial Highway, the Veterans Memorial Highway access drive will have two lanes (one entering and one exiting) and will allow right turns only into and out of the site. It is proposed that both a deceleration lane and an acceleration lane be constructed on Veterans Memorial Highway for entering vehicles and exiting vehicles, respectively. The channelized right turn lane out of the site will be YIELD controlled. The provision of both a deceleration lane and an acceleration lane on Veterans Memorial Highway at this site access will allow both the entering and exiting site traffic to slow down or accelerate in a separate lane so as not to unduly disrupt the flow of the southbound Veterans Memorial Highway through traffic.

5. As part of this study, capacity analyses have been performed at a number of signalized intersections in the study area to determine Existing, Future No-Build and Build conditions for this project. These analyses have revealed that without the construction of the proposed development, the majority of the locations studied are already operating under capacity constrained conditions, below acceptable overall LOS D. These below acceptable operational standards conditions exist or will exist in the No-Build Condition regardless of whether the proposed action is implemented. The only intersection where the added site traffic causes an impact in overall intersection operating conditions (i.e. a degradation in overall intersection LOS from the No-Build Condition) is at the intersection of Veterans Memorial Highway at the Long Island Expressway North Service Road. At this intersection, the overall intersection LOS slips from LOS D in the No-Build to LOS E in the Build during the weekday P.M. peak period.

6. The Build with Modifications condition analyzed the effectiveness of minor timing changes to the existing signal system to address existing capacity problems as well as the one noted degradation in LOS from the No-Build to Build Condition. The results of the analyses performed indicate that all of the capacity issues and the single LOS degradation case can be remedied with minor timing changes, either resulting in No-Build overall intersection LOS being restored or resulting in overall intersection LOS that is better than the No-Build Condition, even with the addition of the site traffic.

7. In order to enhance the flow of traffic and to maximize safety in the vicinity of the proposed development, the following significant roadway modifications are recommended:

- Motor Parkway at the Long Island Expressway South Service Road:

    - Modify the weekday P.M. peak timing plan to allocate additional green time to the eastbound Long Island Expressway South Service Road Green Phase.

- Motor Parkway at the Long Island Expressway North Service Road:

    - Modify the Weekday A.M. peak timing plan to allocate additional green time to the westbound Long Island Expressway North Service Road Green Phase.

- Veterans Memorial Highway at Motor Parkway:

    - Extend the existing northbound left turn lane to a total distance of 400 feet.

- Veterans Memorial Highway at the Long Island Expressway North Service Road:

    - Modify the weekday A.M. peak timing plan to allocate additional green time to both the westbound Long Island Expressway North Service Road Green Phase and the northbound Veterans Memorial Highway left turn lagging phase;
    - Modify the weekday P.M. peak timing plan to allocate additional green time to the westbound Long Island Expressway North Service Road Green Phase; and

    - Modify the Saturday Midday peak timing plan to allocate additional green time to the northbound Veterans Memorial Highway left turn lagging phase.

- Veterans Memorial Highway at the Long Island Expressway South Service Road:

    - Modify the weekday A.M. peak timing plan to allocate additional green time to the eastbound Long Island Expressway South Service Road Green Phase;

    - Modify the weekday P.M. peak timing plan to allocate additional green time to both the eastbound Long Island Expressway South Service Road Green Phase and the Veterans Memorial Highway Green Phase; and

    - Modify the Saturday Midday peak timing plan to allocate additional green time to the southbound Veterans Memorial Highway left turn lagging phase.

8. Intersection capacity analyses conducted for the intersection of Veterans Memorial Highway and Motor Parkway shows a Level of Service "F" for the Weekday P.M. Peak Hour in the Existing and No-Build conditions. This is not caused by the proposed mixed-use development.

9. Supplemental Capacity Analyses was conducted for the intersection of Veterans Memorial Highway and Motor Parkway and looked at ways to eliminate the existing Level of Service "F" operation. An improved Level of Service "D" can be obtained with the addition of an additional travel lane in each direction on Veterans Memorial Highway, changes in the existing traffic signal operation and adding a westbound left turn phase. The changes developed in this analysis are intended to remedy an existing condition and not an impact of the proposed development.

   It is recommended that the N.Y. State Department of Transportation or the Suffolk County Department of Public Works consider the implementation of the intersection improvements.

10. The site plan for Islandia Village Center contains a total of 802 parking stalls. Of these 263 are contained within the residential condominium building, meeting Village Code Requirements for the residential component of the site plan.

11. A Shared Parking Analysis was performed for the non-residential portions of the proposed Islandia Village Center. In determining the quantity of parking that should be provided on the site it is important to recognize the interaction among uses in a multi-use development. A shared parking analysis of the site following procedures in the Urban Land Institute Report *Shared Parking* indicates that peak parking demands for the non-residential portion of the site will be 511 stalls at 6:00 p.m. on a weekend day in July. As 539 stalls are provided for these uses, the analysis indicates a surplus of parking will exist on site, even on the highest demand day of the year.

12. The site of the proposed mixed-use development is served by public transportation in the form of bus service provided by Suffolk County Transit. Currently, the S-54 bus travels along Veterans Memorial Highway and Motor Parkway in the vicinity of the site. This service will be available to the residents, visitors, patrons, and employees of the proposed development, further reducing impacts. This study, however, took no credit for use of this service in reducing site generated traffic.

13. Discussions held with a representative of Suffolk County Transit revealed that at present the existing S-54 bus line buses are operating under capacity. The Suffolk County Transit representative noted that it is common practice to add buses should the buses approach their capacity and further, elaborated that should the proposed development's impact cause the buses to near or surpass their capacities due to the increase in population/ridership, additional buses would be added (as was done in the past with the S-92 bus line) to ensure that ridership on the buses does not near capacity and those from the proposed development choosing to utilize the S-54 bus line service will be accommodated.

14. Due to the excellent patrol coverage and the close proximity of the firehouse, it should be recognized that excellent emergency services are available to service the proposed development.

No significant adverse traffic impacts will occur with the proposed development of the mixed-use site and minor changes to the existing signal system as indicated by the detailed traffic engineering examination and analysis.

**Proposed Mitigation Measures**

The following transportation mitigation measures have been incorporated into the proposed project:

- Although there exist both horizontal and vertical curves on Motor Parkway the location of the driveways provide adequate sight distance for safe operations. The westerly driveway has been located sufficiently west of this condition and will provide safe right turn in and out operation only. Although the easterly driveway is in proximity to this condition, this driveway will provide for both left and right turns entering the site, but only right turns exiting the site (with left turns out of the site being prohibited);

- The points of access to the proposed development have been designed to be well-separated and to distribute traffic to the adjacent roadways at three points so as to minimize traffic congestion;

- Modification of the Weekday P.M. peak timing plan at the intersection of Motor Parkway at the Long Island Expressway South Service Road to allocate additional green time to the eastbound Long Island Expressway South Service Road Green Phase;

- Modification of the Weekday A.M. peak timing plan at the intersection of Motor Parkway at the Long Island Expressway North Service Road to allocate additional green time to the westbound Long Island Expressway North Service Road Green Phase;

- At the intersection of Veterans Memorial Highway at the Long Island Expressway North Service Road: modification of the Weekday A.M. peak timing plan to allocate additional green time to both the westbound Long Island Expressway North Service Road Green Phase and the northbound Veterans Memorial Highway left turn lagging phase; modification of the Weekday P.M. peak timing plan to allocate additional green time to the westbound Long Island Expressway North Service Road Green Phase; and modification of the Saturday Midday peak timing plan to allocate additional green time to the northbound Veterans Memorial Highway left turn lagging phase; and

- At the intersection of Veterans Memorial Highway at the Long Island Expressway South Service Road: modification of the Weekday A.M. peak timing plan to allocate additional green time to the eastbound Long Island Expressway South Service Road Green Phase; modification of the weekday P.M. peak timing plan to allocate additional green time to both the eastbound Long Island Expressway South Service Road Green Phase and the Veterans Memorial Highway Green Phase; and modification of the Saturday Midday peak timing plan to allocate additional green time to the southbound Veterans Memorial Highway left turn lagging phase.

## AIR QUALITY

### Probable Impacts of the Proposed Action

All of the five signalized intersections were eliminated from further consideration by the screening analysis; thus, none of the intersections requires a microscale CO analysis. Given the relatively low emission factors, CO concentrations predicted in a microscale analysis would likely be well below ambient standards. Therefore, the project would not have a significant air quality impact.

### Proposed Mitigation Measures

In order to reduce the potential for air quality impacts, the proposed action includes the creation of additional queuing lanes at the intersection of Veterans Highway and Motor Parkway that would decrease vehicular delay, thereby decreasing vehicular emissions due to idling.

## NOISE

### Probable Impacts of the Proposed Action

Freudenthal & Elkowitz Consulting Group, Inc. evaluated the potential noise impacts associated with the construction and operation of the proposed development. Three sensitive receptors, nearest to the subject property, were evaluated.

Sensitive Receptor 1 is located on MacArthur Boulevard at a distance of approximately 330 feet from the property line. Motor Parkway is situated between the subject site and Sensitive Receptor 1. Sensitive Receptor 2 is located on Motor Parkway at a distance of approximately 418 feet from the property line. Veterans Memorial Highway and Motor Parkway are situated between the subject site and Sensitive Receptor 2. Sensitive Receptor 3 is located at the southeast corner of Hoffman Lane and John Way at a distance of approximately 665 feet from the property line. Veterans Memorial Highway is situated between the subject site and Sensitive Receptor 3. Sensitive Receptor 4 is located at the northeast corner of Veterans Memorial Highway and Expressway Drive North. Veterans Memorial Highway is situated between the subject site and Sensitive Receptor 4.

When evaluating the sound level at the sensitive receptor due to the highest noise levels at the site during construction, the significant distance from the site reduces the noise levels to 67 dB, 64 dB, 62 dB and 62 dB at Receptors 1, 2, 3 and 4 respectively. However, all of the receptors are located on the opposite sides of Motor Parkway and/or Veterans Memorial Highway. Additionally, vegetation and developed properties separate the site from all receptors. Vegetation reduces noise levels by 3 dB to as much as 10 dB. Developed properties would further obscure noise from sources at the subject property. Therefore, it can be concluded that the projected noise levels would be reduced to levels typical of suburban neighborhoods at all receptors. As such, construction activities at the site would not adversely affect the sensitive noise receptors. Furthermore, as the construction activities would occur only between the hours of 7:00 a.m. and 8:00 p.m. on weekdays, same would be in compliance with the relevant provisions of the Code of the Incorporated Village of Islandia.

### Proposed Mitigation Measures

Notwithstanding the above, to reduce noise levels during construction, the following mitigation measures would be implemented:

- Noise-control features (e.g., mufflers, shields, temporary enclosures etc.) would be employed to reduce the noise levels of construction equipment by 3 dBA to 16 dBA. Pumps and compressors would be relocated in screened-off areas, out of the line of sight of the closest residential receptors (EPA, 1971); and

- The proposed installation of fencing with geograde material that delimits the construction site would result in a 5 dBA reduction in sound level.

Overall, therefore, construction noise would be attenuated to mitigate significant adverse impacts to surrounding properties. Also, construction-related noise impacts would continue over the construction period, and would cease upon completion of construction.

## AESTHETICS AND CULTURAL RESOURCES

### Probable Impacts of the Proposed Action

### Aesthetics

Due to the topography of the subject property, which slopes downward from the roadways to the interior of the site, the buildings have been designed to fit within the existing contours and, thus, have staggered elevations.

The project architect has coherently designed the proposed residential condominium building to include shared functional open space and off-street parking, with consistent landscaping throughout. The exterior building construction and design reflects a style of architecture that is traditional in proportion and primary materials, but modern and "pared down" in the detailing. The exterior finish on all buildings will be coordinated in appearance, and the exterior facades will be designed to avoid blank walls through the use of facade modulation, changes in materials, windows, and/or other design features. The exterior facades would be constructed with brick, cast stone and limited stucco to complement the building's architectural style.

The proposed buildings will provide a moderate amount of variation in building mass form and style to provide character. Wherever appropriate, walls and roofs will include separations, changes in plane and height, and architectural elements such as cornices, balconies, and banding to break-up the mass of buildings.

Building massing and fenestration will have a vertical and not a horizontal emphasis. Also, buildings will have a "bottom, middle and top" rather that a uniform exterior to visually express that the ground floor functions are different from the upper floor functions and to create traditional proportions for the overall building. Window glass, particularly at street level, will be clear or lightly tinted so as to show active interiors that contribute to the active pedestrian environment.

Each building will be oriented toward the internal roadway, with primary entrances facing the internal roadway. However, buildings will address all of the streets or public spaces that they face. All buildings will also be designed to provide pedestrian and vehicular connections to other buildings in the proposed development. Techniques for complying with this requirement include, but are not limited to: (1) locating parking areas behind or under buildings, and (2) providing each building with direct pedestrian access from the main internal roadway fronting the buildings, and from all structured parking areas. Also, the proposed development will conform to the provisions of the Americans with Disabilities Act ("ADA") and the Fair Housing Act ("FHA").

Lighting

The proposed project will include the provision of site lighting throughout all common areas of the development. Twenty-foot poles with dual light fixtures would be installed within landscape islands in all parking areas, and poles with single fixtures would be installed along the site perimeter adjacent to all paved areas. The specific style of lamppost is proposed for its "Village" or "downtown" appearance, which would be consistent with the intended atmosphere of the overall proposed development. The proposed lighting plan has been designed to provide adequate levels of illumination for the safety of site patrons and pedestrians throughout all parking areas and walkways without creating any significant sources of off-site light spill.

Landscaping

Extensive plantings would be provided throughout the site to provide aesthetically-pleasant views throughout the site, and from off-site areas, and to balance the scale of the proposed buildings from all perspectives. Attention has been paid in choosing the species mix to provide aesthetic benefits during all seasons, to the maximum extent practicable.

Large trees are chosen for planting along the site perimeters, and within select parking islands, typically including a mix of Red and White Oaks, Red Maples and/or American Elms, with average mature heights of 60 – 70 feet or taller. Also provided among the taller species are medium-height species, such as Little Leaf Linden and others, and various shrubs and ground covers, to provide attractive and diverse views and screening at all heights.

Other landscaped islands would be planted with low-lying shrubs and ground covers, including St. Johns Wort, Anthony Waterer Spirea, Parsons Juniper and others, to enhance the aesthetics while allowing for adequate and safe visibility across parking areas. Often, smaller trees are provided within these areas to allow for some shade and screening.

Trees and hedges are proposed along building exteriors throughout the development, to soften views of the buildings. Site access points are each planted with a variety of ground covers, shrubs and medium-height trees to create defined and attractive entrances. The proposed pump station, at the southeast corner of the site, is surrounded by Arborvitae to provide dense, year-round screening of the facility.

Overall, the proposed landscaping would provide aesthetically-pleasant and interesting views from all on- and off-site perspectives, and soften, screen and compliment views of the proposed buildings.

Shadows

During the winter months, the eight-story residential building and three-story hotel would cast shadows onto portions of Motor Parkway, and the seven-story hotel would cast a shadow over a small portion of Veterans Memorial Highway. The area affected by the shadow cast by the proposed eight-story residential building would include the multi-story commercial office building at the northeast during early morning hours only. No significant portion of any surrounding roadway would be shaded during all daylight hours. During summer months, only small areas would be shaded by the proposed structures, and no shadows would be cast onto off-site areas during the hours analyzed. No significant impacts due to shadows cast by the proposed structures are anticipated.

**Cultural Resources**

As no local, state or national historic or cultural resources are known to exist at the subject property or vicinity, no adverse impacts upon same would result upon implementation of the proposed action.

**Proposed Mitigation Measures**

In order to ensure that no significant adverse aesthetic impacts would result, the following mitigation measures have been incorporated into the design of the Master Plan:

- The extensive landscaping will soften views of the buildings, create a pedestrian-friendly environment, and will promote walking;

- The proposed residential condominium building has been coherently designed to include shared functional open space and off-street parking;

- The exterior building construction and design would reflect a style of architecture that is traditional in proportions and primary materials but modern and “pared down” in its detailing;

- Exterior facades of buildings would be designed to avoid blank walls through the use of facade modulation, changes in materials, windows, and/or other design features;

- The buildings would provide a moderate amount of variation in building mass, form and style to provide character. Wherever appropriate, walls and roofs would include separations, changes in plane and height, and architectural elements such as cornices, balconies, and banding to break-up the building mass;

- The exterior facades of all buildings would be constructed with brick, cast stone and limited stucco to complement the building's architectural style. Vinyl or metal siding would be prohibited, with the exception of fascias, soffits, cornices and other architectural detailing which shall be compatible with, or complement, the character of the exterior design;

- The building massing and fenestration would have a vertical emphasis;

- Window glass, particularly at the street level, would be clear or lightly tinted so as to show active interiors that contribute to the active pedestrian environment; and

- All buildings would be designed to provide pedestrian and vehicular connections to other buildings in the MSPDD.

## ALTERNATIVES AND THEIR IMPACTS

### No-Action Alternative

The No-Action Alternative would involve leaving the site as an undeveloped parcel. This could be contrary to the prior Consent Agreement between the Village and the applicant. Moreover, this alternative would be contrary to the applicant's right to develop the site. Also, the No-Action Alternative would be inconsistent with the acknowledgement in the Village's *Comprehensive Plan Update*, which identified the subject parcel as "the largest and likely the most valuable undeveloped property in the Village."

### As-of-Right Development Alternative

The As-of-Right Development Plan provides a four-story, 191,200 square-foot office-use building on the southeast portion of the site. Pursuant to the Village Code parking requirement of one space per 200 square feet of office area, the As-of-Right Plan provides the requisite 956 stalls (including 20 handicap stalls). The site would be accessed from both Veterans Memorial Highway and Motor Parkway.

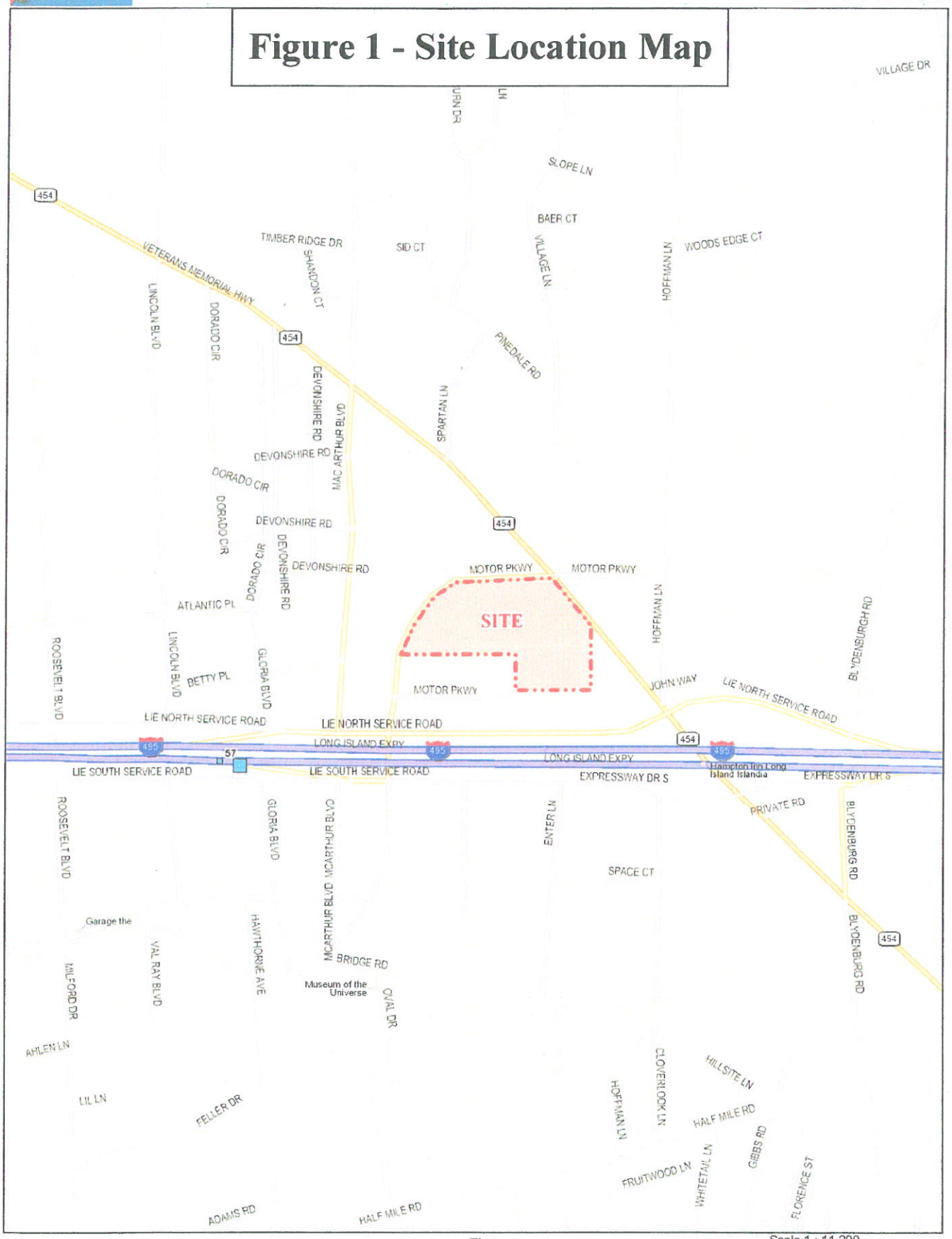
# 2.0 DESCRIPTION OF THE PROPOSED ACTION

## 2.1 Project Description and Proposed Site Layout

The proposed action consists of (a) creation of a Main Street Planned Development District ("MSPDD"), (b) the change of zone of the subject property from Office ("O") and MF-18 Multifamily Residential Owner-Occupied Condominium Overlay District ("MF-18 Overlay District") to MSPDD, and (c) approval of the Master Plan for Islandia Village Center in accordance with the MSPDD. The subject property was the subject of a Consent Agreement executed on May 11, 2006 (hereinafter, the "Consent Agreement") between the Village Board of Trustees and the applicant, Motor Parkway Associates, LLC. ("MPA"), to review the proposed creation of a MSPDD on the approximately 12.66 acres of land located on the southwest corner of Veterans Memorial Highway (NYS Route 454) (herein after referred to as "Veterans Memorial Highway") and Motor Parkway (CR 67) (herein after referred to as "Motor Parkway") in the Village of Islandia (Suffolk County Tax Map ["SCTM"] Nos. District 0504 - Section 1 - Block 1 - Lots 7-10 – hereinafter, the "subject property") (see Figure 1).

The proposed Master Plan, as depicted herein, consists of residential, retail and commercial uses, with shared recreational and green areas, within one cohesive development. Specifically, the Master Plan consists of one, eight-story residential building with a total of 150 condominium units, one three-story hotel with 100 rooms, one seven-story hotel with 175 rooms, two, one-story restaurant buildings, and a combined retail and office use building.

# Figure 1 - Site Location Map

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TN
MN (13.6°W)

Scale 1 : 11,200
1" = 933.3 ft
Data Zoom 14-2

**Residential Building (150 Condominium Units)**

The residential building, as depicted on the Master Plan in Appendix A, is situated at the westerly portion of the site and would be used exclusively for residential purposes. There are 150 condominium units planned for the residential building, with an overall building gross floor area of 252,880 square feet. The 150 residential units would consist of 15 one-bedroom units and 135 two-bedroom units.

The elevation of the residential building, having eight stories, would not exceed 100 feet above the grade of Motor Parkway (excluding the tower element at the southeast corner of the building). The tower element would extend approximately 30 feet from the main roof deck and is purely an architectural feature to enhance the aesthetic character of the building when viewing it from within the site and surrounding area, including the interior tree-lined promenades and roadways (see renderings in Appendix C and detailed discussion in Section 11.0 of this DEIS). In the center of the residential building, there would be an outdoor swimming pool for the private use of condominium residents, and a plaza area with seating would be provided. Additionally, a swimming pool and a 1,000±-square-foot fitness center would be provided within the building, and a parking garage with 263 stalls would be provided below the residential building.

Due to the proposed height of this building, a question was raised as to whether clearance was required from the Federal Aviation Administration ("FAA"). According to research performed by the project engineer, Nelson & Pope (see Appendix D), as no structures are proposed that will extend greater than 200 feet above ground level, and as the subject property is greater than 20,000 feet from the nearest runway, no notice to the FAA is required.

**Three-Story Hotel (Marriott Fairfield Inn and Suites)**

The proposed three-story hotel, to be situated along Motor Parkway at the northern portion of the site, would provide 100 guest rooms on three floors, as well as a 310±-square-foot meeting room and a 275±-square-foot board room. The proposed hotel would have a total gross floor area of 43,740± square feet, with 14,640± square feet on the ground level and 14,550± square feet at each of the two remaining stories. The overall building height would not exceed 50 feet in height.

**Seven-Story Hotel (Hilton Embassy Suites)**

The proposed full-service hotel, situated at the southern portion of the site, would be seven stories in height (a maximum of 105 feet) and consist of a maximum of 175 rooms. The proposed hotel footprint and ground floor area is 41,368 square feet, with a gross floor area of each of floors two through seven of 19,110 square feet, for a total gross floor area of 156,028 square feet. Within the hotel building, a 4,884±-square-foot conference room, a 456±-square-foot board room, and an indoor swimming pool would be provided. Parking for 61 vehicles would be provided below the hotel building.

**Restaurant Pads**

The two proposed 7,000-square-foot building pads, situated side-by-side at the northeastern portion of the site, are each planned for development with a one-story restaurant use. It is anticipated that the occupying tenants would provide no more than 225 seats each. The proposed site layout provides for a patio area extending from the easternmost restaurant area, and an outdoor plaza is provided between the two restaurant uses.

**Retail/Office Pad**

The retail and office pad offers 15,000±-square-feet of retail space on the ground floor, and 16,922±-square-feet of office space on the second floor. The retail/office building would be situated at the center of the overall subject property.

**Village Green and Other Landscaped Areas**

A 0.59±-acre Village Green consisting of large lawn areas, a grass-terraced amphitheater-style seating area, and a walkable area with plantings, fountains and benches would be created in a central location among the residential building, the three-story hotel and the retail/office use building. The overall 0.59±-acre Village Green would be dedicated to the Incorporated Village of Islandia as part of the proposed action. The proposed MSPDD would include an extensive landscaping plan (see Appendix A), consisting of tree-lined roadways, planted trees around buildings, low-lying shrubbery within the center aisles of the site access and egress points, and planted islands within the parking area. Sidewalks and paved crosswalks would also traverse the property to facilitate pedestrian access. There would also be planted trees within the recreational courtyard of the residential building.

**Parking and Access**

Parking areas are proposed to be constructed below the proposed residential building and seven-story hotel, providing 263 spaces and 61 spaces, respectively.[1] Surface parking is also proposed, with 478 spaces to be situated throughout the site. As such, 802 parking spaces, in total, are proposed on the site.

[1] Pursuant to the Consent Agreement, parking structures would be below the proposed condominium and hotel buildings.

Access to the proposed development would be provided from one access driveway, along Veterans Memorial Highway, and at two additional access driveways along Motor Parkway. The access along Veterans Memorial Highway would allow right-in and right-out turns only, as would the westernmost proposed access along Motor Parkway. The northern access, along Motor Parkway, would allow left- and right-in turns, but exiting traffic would be restricted to right-out turns only.

**Utilities**

The projected sanitary discharge for the overall site is estimated at 99,231 gallons per day ("gpd") and would be accommodated by the Windwatch Sewage Treatment Plant ("STP"). According to the applicant, an expansion from 350,000 gpd to 700,000 gpd was approved by the Suffolk County Sewer Agency for the Windwatch STP, which would be more than sufficient to accommodate the sanitary flow generated by the proposed development.

The subject property is within the service area of the Suffolk County Water Authority, with available infrastructure at the adjoining roadways. Natural gas and electricity are provided in the area by KeySpan Energy and Long Island Power Authority ("LIPA"), respectively. Consultations with both entities have been initiated, and details of the expected loads provided, and availability of services has been confirmed. There would be no on-site fuel storage required.

The subject property is situated within the Hauppauge Union Free School District ("UFSD"), and within the service areas of the Hauppauge Fire Department and Suffolk County Police Department - Fourth Precinct.

**Site Data for the Master Plan**

Relevant site data, as provided by the project engineer, Nelson & Pope, based on the Master Plan in Appendix A of this DEIS, are as follows:

**Table 1 – Site Data for the Existing Site and Post-Development Conditions**

| Coverage | Existing | Proposed Action |
|---|---|---|
| Area of Buildings, Roads and Pavement | 0 | 426,986 sq. ft. (9.80± acres) |
| Area of Lawn/Landscaping | 0 | 124,349 sq. ft. (2.86± acres) |
| Native Vegetation – Meadow/Wooded (Includes unvegetated areas) | 551,335 sq. ft. (12.66± acres) | 0 |
| Total Area | 551,335 sq. ft. (12.66± acres) | 551,335 sq. ft. (12.66± acres) |

**Proposed Phasing**

The applicant is proposing to construct the development in three phases, as follows:

- Phase I will include the site work, the construction of the proposed Embassy Suites, and the construction of the restaurant, retail and office space. It is expected that this phase will take approximately two years to complete;

- Phase II will include the construction of the proposed Marriott Hotel, with an anticipated nine-month construction period; and

- Phase III will include the construction of the proposed residential condominiums. It is expected that this phase will take approximately two years to complete.

This phasing has been developed for two basic reasons. The first is that the applicant wants to have all the amenities and supportive uses (e.g., retail, restaurants, office) constructed and all infrastructure in place prior to the construction of the residential uses. Furthermore, as construction of the infrastructure and other uses (aside from residential) are expected to take almost three years, it is not optimal, from either a functional or marketing standpoint, to construct and occupy residential units until all other construction is completed, as such an extended period of continuous construction would be inconvenient and disruptive to residents of the site.

## 2.2 Site and Project History

In or about September 2002, the Village Board of Trustees (the "Village Board") resolved to update its Comprehensive Plan and retained planning consultants to study, among other things, existing land use patterns and proposed changes, including the creation of a new, high-density residential zoning district. On December 28, 2004, after study and consideration, the Board adopted the *Village of Islandia Comprehensive Plan Update ("Comprehensive Plan Update")*, which recommended, among other things, the creation of the "MF-18 Multifamily Residential Overlay District" ("MF-18 Overlay District") for certain qualifying lands in the Village zoned "Office" District (which included the subject property).

In considering and approving the *Comprehensive Plan Update*, the Board, with the assistance of its planning consultants, conducted an environmental impact review pursuant to the State Environmental Quality Review Act ("SEQRA"), which consisted of a Draft Generic Environmental Impact Statement ("DGEIS"), and a Final Generic Environmental Impact Statement ("FGEIS"). The aforesaid GEIS analyzed, among other things, the potential impacts of the creation and application of the proposed MF-18 Overlay District upon air quality, land resources, aesthetic resources, groundwater and surface water resources, archaeological resources, open space and recreation, traffic and transportation, energy, noise and odor impacts, public health, and the growth and character of the community.

Upon the conclusion of its SEQRA review, the Board approved a SEQRA Findings Statement, dated December 28, 2004, in which it made various findings as Lead Agency under SEQRA, and concluded, among other things, that development of the subject property pursuant to the proposed MF-18 Overlay District was "consistent with social, economic and other essential considerations from among the reasonable alternatives available" and "avoid[ed] or minimize[d] adverse environmental impacts to the maximum extent practicable."

By Resolution dated March 7, 2005, the Board adopted a SEQRA Negative Declaration and Notice of Determination of Non-Significance in connection with the creation of the MF-18 Overlay District, in which it found that: (1) "no significant adverse impact is expected to occur to air, land resources, aesthetic resources, groundwater or surface water resources, archaeological resources, open space and recreation, transportation, energy, noise and odor impacts and public health," (2) "no significant impacts are expected on the growth and character of the community," and (3) "the proposed amendments . . . will not have a negative impact on the environment and community characteristics of the Village of Islandia."

Also, by Resolution dated March 7, 2005, the Board adopted Local Law 1 of 2005, which enacted the proposed MF-18 Overlay District and amended other sections of the Code to be consistent with the provisions of the MF-18 Overlay District. Pursuant to said Local Law 1 of 2005, owners of qualifying properties in the Village zoned Office District (including the subject property) could apply for a Special Permit for a proposed condominium development in accordance with the requirements of the MF-18 Overlay District. The provisions of the Code regarding the MF-18 Overlay District permitted, *inter alia*, construction of residential owner-occupied condominiums up to a maximum height of 175 feet and/or fourteen (14) stories, and a restaurant as an accessory use.

On March 30, 2005, MPA filed with the Village an application for a Special Permit for a proposed condominium project and accessory restaurant in the MF-18 Overlay District ("2005 Application"). However, by Resolution dated May 11, 2005, Local Law 2 of 2005 was enacted, which created Chapter 178 of the Code, and imposed a ninety (90) day moratorium on applications and approvals for properties located in the MF-18 Overlay District. By Resolution dated August 9, 2005, the Board enacted Local Law 8 of 2005, which extended the moratorium for another ninety (90) days. By Resolution dated November 29, 2005, the Board enacted Local Law 11 of 2005, which extended the moratorium for another sixty (60) days. By Resolution dated February 7, 2006, the Board enacted Local Law 2 of 2006, which extended the moratorium for another sixty (60) days.

During the period of the moratorium and its extensions, and in response to concerns expressed by Board members, MPA and Board members engaged in ongoing good faith discussions and meetings regarding the potential submission by MPA of a revised application calling for a reduction in the height of the proposed condominium structures and the creation of a mixed-use PDD for the subject property. Same was memorialized in the Consent Agreement executed on May 11, 2006, which included, among other things, the agreement by MPA to withdraw the 2005 Application and submit a new application ("the PDD Application"), calling for creation of a mixed-use PDD.

Approval of the PDD Application would be subject to review under SEQRA. Upon execution of the Consent Agreement, MPA withdrew the 2005 Application.

In August, 2006, MPA filed a Voluntary Draft Environmental Impact Statement to evaluate the development of two, eight-story residential condominium buildings inclusive of 225 residential units, 8,000 square feet of retail space and a Suffolk County Police Department sub-station; a six-story hotel, inclusive of 240 rooms, 20,000 square feet of conference space, a 250-seat eating area, a 3,000-square-foot spa and 7,000 square feet of ancillary shops and offices; an 8,000-square-foot, single-story restaurant use (300 seats); and a 4,000-square-foot, single story retail use; a Village Green area with lawn and seating areas; and a parking garage for 212 spaces. The proposed MSPDD concept has since been amended to that evaluated herein.

## 2.3 Project Purpose, Need and Benefits

The purpose of the proposed action is to develop the subject property, in a cohesive and proper fashion, such that the development objectives of the applicant and the public objectives and needs of the Village can be met (especially given the history of the development of this property).

Accordingly, the project has been designed to be a mixed-use, smart growth, walkable community that will provide the benefits of establishing a sense of place for residents and businesses, and provide a Main Street identity and character for a village that has no downtown district. The centerpiece of the MSPDD will be the Village Green, which will add the character of a traditional town square. The creation and approval of the MSPDD will enable the village to acquire a dedicated Village Green; require discretionary off-site public improvements; and qualify for grants in aid and subsidies pertaining to the creation, enhancement and maintenance of a downtown business district.

In addition, the development of this property as proposed, with an estimated total market value of $115,598,300, would, based upon current equalization rate of 9.64 percent and current tax rates, would yield total taxes of approximately $2,154,515. The Hauppauge Union Free School District would be expected to receive approximately $1,518,883 per year in annual taxes, and the Village tax is projected to be approximately $62,000 annually.

A question was raised as to whether the applicant would be incorporating workforce housing into the proposed development. The applicant is not proposing to provide affordable housing at this location. However, if the Village desires that units be set aside for affordable housing purposes, the applicant is willing to do so.

## 2.4 Required Permits and Approvals

The following permits and approvals would be required to implement the proposed action:

**Table 2 – Required Permits and Approvals**

| Permits and Approvals | Agency |
|---|---|
| Creation of MSPDD, Change of Zone of Subject Property from O and MF-18 Overlay District to MSPDD and Approval of Master Plan | Board of Trustees |
| Site Plan | Board of Trustees |
| Sanitary and Water Connection (Article 6 Permit) | Suffolk County Department of Health Services |
| Water Supply | Suffolk County Water Authority |
| Zoning Referral | Suffolk County Planning Commission |
| Highway Work Permit | Suffolk County Department of Public Works<br>New York State Department of Transportation |
| Curb Cuts | Suffolk County Department of Public Works<br>New York State Department of Transportation |
| Approval for Expansion of and Connection To Windwatch Sewage Treatment Plant | Suffolk County Legislature |

# 3.0 LAND USE AND ZONING

## 3.1 Existing Conditions

### Land Use

The subject property consists of 12.66 acres of undeveloped land situated on the southwest corner of NYS Route 454 and CR 67 in the Village of Islandia. The subject property has frontage on both roadways and is surrounded by professional offices and commercial uses. Photographs of the site and surrounding area are included in Appendix F of this DEIS.

### Zoning

The subject property is zoned "Office" ("O") (see Figure 2), with an "MF-18 Multifamily Residential Owner-Occupied Condominium Overlay District" ("MF-18 Overlay District"), pursuant to special permit requirements. Surrounding zoning is primarily "O," with limited "Professional" ("P") and "Highway Commercial" ("HC") zoning districts.

# VILLAGE OF ISLANDIA

## SUFFOLK COUNTY, NEW YORK
## ZONING MAP

NORTH

SITE

LONG ISLAND EXPRESSWAY

GRAPHIC SCALE

-400 0 200 400 800 1600

( IN FEET )

### LEGEND

| | |
|---|---|
| GREENBELT (G) | G |
| AGRICULTURE (AG) | AG |
| LOW DENSITY RESIDENCE (L) | L |
| MEDIUM DENSITY RESIDENCE (M) | M |
| MULTIFAMILY RESIDENCE (MF) | MF |
| PROFESSIONAL (P) | |
| NEIGHBORHOOD RETAIL (NR) | |
| HIGHWAY COMMERCIAL (HC) | HC |
| COMMUNITY RETAIL (CR) | CR |
| OFFICE (O) (MF-18 OVERLAY DISTRICT PER SPECIAL PERMIT REQUIREMENTS) | O |
| OFFICE/INDUSTRY (OI) | OI |
| INDUSTRY (I) | I |
| VILLAGE LINE | |
| DISTRICT BOUNDARY | |

ORIGINALLY ADOPTED JULY 1995

SCALE: 1" = 400'

| REVISION DATE | SECTION, BLOCK, LOT |
|---|---|
| 5/22/99 | REVISED 9-1-10.3 & 10.4 |
| 1/27/00 | REVISED 7-1-10.4 |
| 2/15/00 | REVISED 10-1-10 |
| 7/6/00 | REVISED 18-1-41.1 & 41.2 |
| 9/8/00 | REVISED 18-1-47 & 48 |
| 3/14/01 | REVISED L.I.L.C.O. TO L.I.P.A. |
| 4/24/01 | REVISED 04-1-15 TO 15.1-15.10 |
| | REVISED 09-1-32 ROAD WIDENING |
| 4/24/01 | REVISED 11-1-2.2 & 2.3 TO 11-1-2.4 |
| 9/24/01 | REVISED 09-2-3 ROAD WIDENING |
| 2/26/02 | REVISED 14-2-22 TO 14-2-22.1 & 22.2 |
| | DEWEY STREET TO 9-1-47 |
| 6/26/02 | REVISED 9-2-2 & 9-1-31 & 9-1-33 |
| 8/18/03 | REVISED 14-1-23 to 14-1-23.1 & 14-1-23.2 |
| | REVISED 17-1-14, 15 & 16 to 17-1-16.1 & 16.2 |
| 4/15/04 | REVISED 7-1-7 TO 7-1-7.1 & 7.2-1-1 INCLUSIVE 2B |
| 3/28/05 | REVISED 9-2-2,3 & 4 to 9-2-4.1 |
| 8/15/05 | REVISED MF-18 OVERLAY DISTRICT (LL 1-2005) |
| 12/14/05 | REVISED 14-2-40.6, 7-1-10.5 & 10.6 |
| 3/15/06 | REVISED 6-1-1, 8-2 & 9-1 RAYMOND DR |

FIGURE 2

Cashin Associates, P.C.
ENGINEERS · ARCHITECTS · PLANNERS

Permitted uses in the “O” zoning district include offices and banks. There are several special permit uses, including hotels. Residential owner-occupied condominium uses are permitted within the MF-18 Overlay District and subject to the special permit requirements. Pursuant to §177-59(B), the special permit requirements for the MF-18 Overlay District are as follows:

*(a) The site shall be currently zoned "O" Office.*

*(b) The site shall be at least 520,000 square feet in size.*

*(c) The site shall have at least 400 feet of frontage along a roadway defined in the Village of Islandia Comprehensive Plan as a major arterial, defined as Motor Parkway and Veterans Memorial Highway.*

*(d) The site shall be at least 500 feet from the nearest residentially zoned property in the Village of Islandia.*

**Comprehensive Plan Update**

The MF-18 Overlay District was based upon the *Comprehensive Plan Update*, prepared in August 2003. Overall, the *Comprehensive Plan Update* was prepared to primarily focus on the land use policies on the remaining undeveloped properties within the Village boundaries. The subject property was discussed in detail in Section 3.3 - Land Use Plan of the *Comprehensive Plan Update*, as one of two parcels where land use changes were being contemplated.

The subject parcel was identified as “the largest and likely the most valuable undeveloped property in the Village.” The *Comprehensive Plan Update* explains the prior uses considered for the site, including hotel and office development and high-rise luxury residential development.

The high-rise luxury residential development was noted as favorable as "[s]uch a development would take full advantage of the site's access and views. On an FAR basis, such development would be considerably denser than allowed by current zoning…its impacts would be of an entirely different character than office or hotel development." A high-rise residential tower was noted as having "significant impacts on the Village's image." However, due to the Village's interest, the *Comprehensive Plan Update* examined this development concept which resulted in the creation of the MF-18 Overlay District.

The MF-18 Overlay District was intended to (1) provide housing opportunities for an aging population; (2) enhance and diversify the Village's tax base; (3) create a landmark development on a visible site; and (4) expand and enhance the Village's open space resources. The *Comprehensive Plan Update* set forth specific design parameters and bulk requirements for this overlay district, as follows:

- *Permitted uses would be multifamily residential units, restaurant/catering facilities, and retail/services ancillary to the residential units.*
- *The minimum site area would be 12 acres.*
- *Frontage on a roadway defined as a major arterial…(i.e., Veterans Memorial Highway or county route 67) would be required.*
- *The maximum permitted residential density would be 18 units per acre, up to a maximum of 225 units.*
- *The maximum allowed building FAR would* [sic] *0.85. The amount of commercial space, including the ancillary retail and restaurant, would be capped at 30,000 square feet.*
- *Building height would be capped at 14 stories or 175 feet.*[2]
- *A minimum of 40 percent of the site area would be set-aside as landscaped open space. Landscaping plans including standards for tree plantings should be required.*

[2] The Village amended the MF-18 when the moratorium expired (see Section 2.0 of this DEIS), limiting the height to eight stories in that district.

The *Comprehensive Plan Update* included a quantitative analysis of the above design parameters, although the Consent Agreement expanded and/or modified these parameters. However, the proposed MSPDD has been amended to that which is being evaluated herein.

## 3.2 Probable Impacts of the Proposed Action

### Land Use

Upon implementation of the proposed action, the subject parcel would be developed with an eight-story, 150-unit residential building, a three-story, 100-room hotel, a seven-story, 175-room hotel with ancillary conference space and associated amenities, a retail and office building (providing 15,000 square feet of retail space on the ground floor and 16,922 square feet of office space above), and 14,000 square feet of restaurant uses (including two, 7,000-square-foot building pads with 225 seats each). The gross floor area of all buildings (i.e., residential, hotel, restaurant and retail/office buildings) is 498,570 square feet. This represents a floor area ratio ("FAR") of 0.904.

The Master Plan places the residential building at the western portion of the property, fronting Motor Parkway. On-site recreational amenities for the 150 condominium units include indoor and outdoor pools, a fitness center and community space. Parking has been designed to be located under the residential building, providing a total of 263 spaces.

The proposed 100-room, three-story hotel is proposed at the northerly end of the site, fronting on Motor Parkway. The proposed 175-room, seven-story hotel is proposed at the southerly end of the site. The two, 225-seat, 7,000-square-foot restaurant pads would be situated at the easterly portion of the site, and the two-story retail/office building would be situated at the central portion of the site. A parking area with 61 stalls is proposed below the seven-story hotel, and surface parking areas would surround each of the buildings to provide a total of 802 spaces on the site.

The Master Plan includes tree-lined roadways and promenades, low-lying shrubbery within the center roadway aisles, and trees planted adjacent to the buildings to provide visual screening of buildings and to create an aesthetically-pleasing environment. Landscaping also includes planted islands within the parking area to break up the mass of the paved areas, as well as to serve as a traffic-calming measure. The proposed Village Green, centered among the residential building, three-story hotel and retail/office building, would consist of large green areas with benches, an amphitheater-style grass terraced seating area, and fountains; this would not only provide an on-site open space area for residents and visitors, but would also be a visual benefit to the on-site users (i.e., residents, hotel guests and patrons of the retail and restaurant establishments).

The amphitheatre and associated open space is proposed to be dedicated to the Incorporated Village of Islandia, although the applicant will be responsible to maintain the area. Use of the amphitheatre is anticipated to be during off-peak hours for the proposed development. Accordingly, based upon the parking analysis contained in Section 8.0, ample parking is expected to be available. Electricity will be provided, so that Village activities can be held after sundown.

The proposed design also provides street connectivity through the use of sidewalks and visible crosswalks to promote walking. Landscaped buffers at the property perimeter are also proposed to screen views from the interior and property exterior. Post-and-rail fencing is also proposed along the Motor Parkway and Veterans Memorial Highway frontages.

The design of the Master Plan incorporates several uses on the site and utilizes landscaping, walkways, and green areas to promote pedestrian activity and interaction between the spaces. Overall, the proposed plan provides for cohesive development of the subject property.

The proposed 150 condominium units would consist of 15 one-bedroom units and 135 two-bedroom units.[3] Based on *Residential Demographic Multipliers – Estimates of the Occupants of New Housing*, Rutgers University Center for Urban Policy Research (June 2006) (hereinafter the "Rutgers Study"), which indicates that the average household size of one-bedroom, owner-occupied units is 1.77 persons and that the average household size of two-bedroom, owner-occupied units is 1.88 persons,[4] the 150 condominium units would yield a total resident population of 281 persons.

The projected increases in population and housing would result in both direct and indirect impacts on the community services (including educational and emergency services), utilities and the road system. These impact issues are addressed in the Sections 7.0 and 8.0 of this DEIS.

**Zoning**

The proposed action consists of the creation of an MSPDD and the change of zone of the subject property from "O" and "MF-18 Overlay District" to MSPDD to accommodate the development set forth in the Master Plan. The proposed MSPDD is included in Appendix B of this DEIS.

It is respectfully submitted that the proposed action is consistent with Village's *Comprehensive Plan Update,* as it relates to the creation of the MF-18 Overlay district. The current proposal to create the MSPDD incorporates the same uses permitted by the underlying (i.e., "O") and floating zone ("MF-18 Overlay District") classifications -- hotels, offices, residential condominiums.

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[3] As the plan is conceptual at this time, the final unit count may vary.

[4] Represents the rates for owner-occupied units within structures with greater than five units, in New York, with values greater than $269,500 for one-bedroom units or greater than $329,500 for two-bedroom units.

Also, because the application introduces residential uses on this property, albeit in a less-intensive manner than that permissible under the "MF-18 Overlay District," such development is consistent with the *Comprehensive Plan Update*. Moreover, as hotels are permitted under the existing "O" zoning district, with a special permit, such use is consistent with the overall comprehensive plan of the Village, which includes not only the *Comprehensive Plan Update*, but also the Village's zoning code and zoning map.

## 3.3 Proposed Mitigation Measures

In order to mitigate the potential significant adverse impacts to land use and zoning, the following measures will be employed:

- Tree-lined roadways and promenades, low-lying shrubbery within the center roadway aisles, and trees planted adjacent to the buildings will create an aesthetically-pleasing environment;

- Recreational amenities for the residential building would be provided on-site;

- Planted islands within the parking area will break up the mass of the paved areas and will serve as a traffic-calming measure;

- The proposed Village Green will be dedicated to the Village and would serve as an on-site open space area for residents and visitors;

- The proposed design provides street connectivity through the use of sidewalks and visible crosswalks to promote walking;

- Landscaped buffers at the property perimeter are proposed to screen views from the interior and property exterior; and

- Post-and-rail fencing would be installed at the Motor Parkway and Veterans Memorial Highway frontages.

# 4.0 SOILS AND TOPOGRAPHY

## 4.1 Existing Conditions

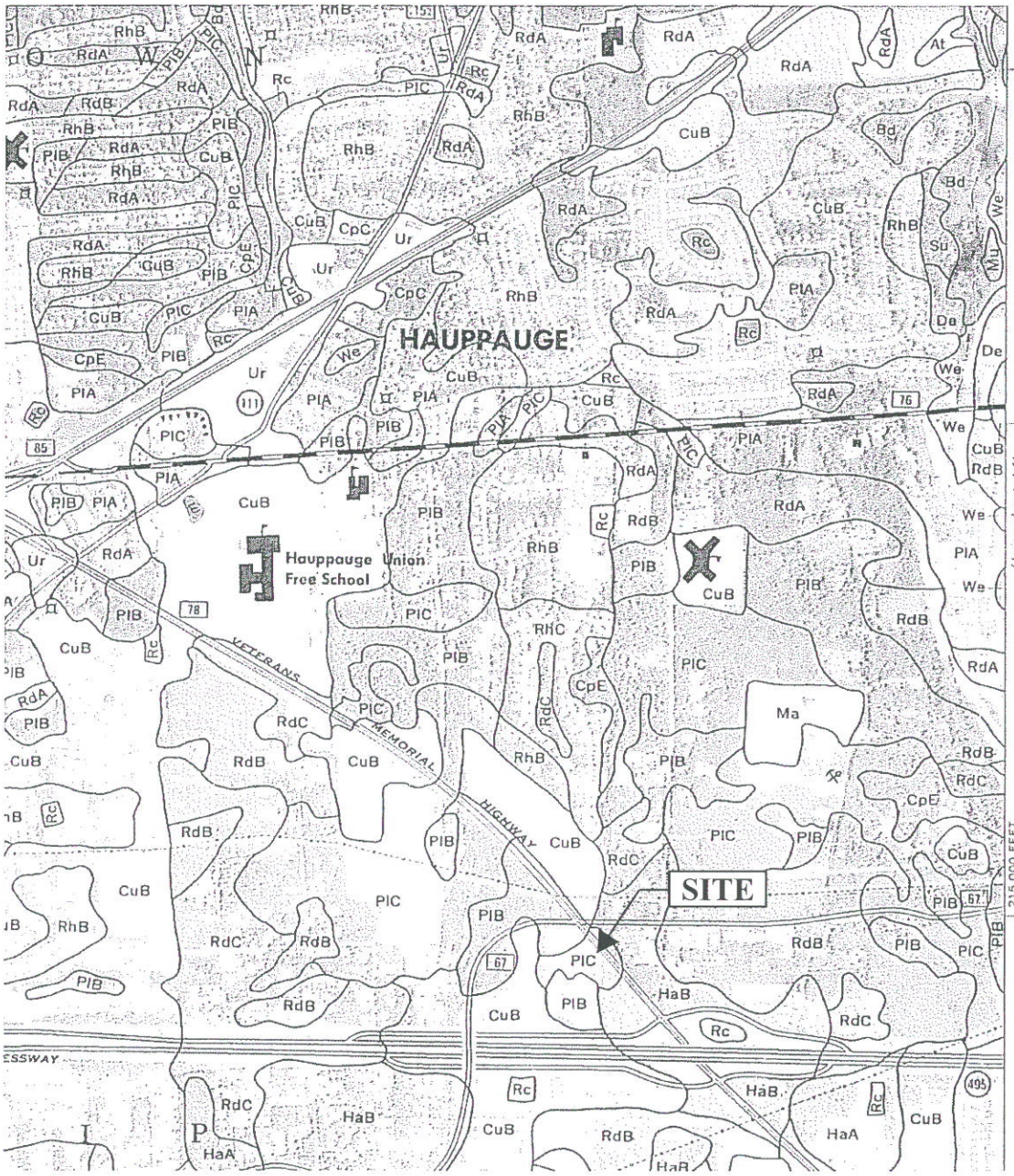
### Soils

According to the *Soil Survey of Suffolk County, New York* (USDA, 1975) (hereinafter "Soil Survey"), soils are classified according to distinct characteristics and placed (according to these characteristics) into "series" and "mapping units." A "series" is a group of mapping units formed from particular disintegrated and partly weathered rocks which lie approximately parallel to the surface and which are similar in arrangement and differentiating characteristics such as color, structure, reaction, consistency, mineralogical composition and chemical composition. "Mapping units" differ from each other according to slope and may differ according to characteristics such as texture.

According to the Soil Survey, the mapping units found at the subject property include Cut and Fill land, gently sloping ("CuB"), Plymouth loamy sand, three to eight percent slopes ("PlB") and Plymouth loamy sand, eight to fifteen percent slopes ("PlC") (see Figure 3) . The following represents the properties of each on-site soil type, as provided by the Soil Survey:

Cut and Fill Land

Cut and fill land is made up of areas that have been altered in grading operations for housing developments, shopping centers, and similar nonfarm uses. Generally, the initial grading consists of cuts and fills for streets or parking lots. During this phase, excess soil material is stockpiled for final grading and topdressing around houses or other buildings.




Source: United States Department of Agriculture, *Soil Survey of Suffolk County, New York* Sheet No. 65, 1975.
Scale: 1 : 20,000 (approx.)

**FIGURE 3**

Areas of Cut and fill land contain deep cuts in or near the sandy substratum of the soil or sandy fills of 28 inches or more. Generally, cuts are so deep or fills so thick that identification of soils by series is not possible. The soil material making up the upper 40 inches of this unit contains as much as 12 inches of sandy loam, loam, or silt loam in some places. The 29 inches that remain are loamy fine sand or coarser textured material. Cut and fill land is generally associated with Carver and Plymouth soils.

The soil material that remains after grading operations are completed has low available moisture capacity, is droughty, and is low to very low in natural fertility.

The areas of cut and fill land have severe limitations to use in establishing and maintaining lawns and landscaping. The areas are not suited to farming operations because of the alteration to existing soil material and the presence of buildings and other works of man.

Cut and fill land, gently sloping ("CuB") – This unit is made up of level to gently sloping areas that have been cut and filled for nonfarm uses. Slopes ranging from 1 to 8 percent; and because of final grading around houses and other buildings, slopes are generally complex. The areas generally are large, but some areas are about 5 acres is size.

Cut and fill land makes up at least 75 percent of this unit. Texture is dominantly loamy fine sand or coarser textured material throughout. The 25 percent that remains consists of areas of soils of the Carver, Haven, Plymouth, or Riverhead series. The areas of these soils are smaller than 5 acres.

Included with this land type in mapping are small areas of Riverhead and Haven soils, graded, 0 to 8 percent slopes, and small areas that have more than 12 inches of sandy loam, loam, or silt loam in the upper 40 inches.

This land type has few, if any, limitations to use as building sites. Capability unit not assigned; woodland suitability group not assigned.

Plymouth Series

The Plymouth series consists of deep, excessively drained, coarse-textured soils that formed in a mantle of loamy sand or sand over thick layers of stratified coarse sand and gravel. These nearly level to steep soils are located throughout the county on broad, gently sloping to level outwash plains and on undulating to steep moraines. Native vegetation consists of white oak, black oak, pitch pine, and scrub oak.

In a representative profile, the surface layer is very dark grayish-brown loamy sand, about four inches thick, in wooded areas. In cultivated areas, the surface layer is mixed with material formerly in the upper part of the subsoil, and there is a brown to dark-brown plow layer of loam about ten inches thick. The subsoil is yellowish-brown and brown, very friable, loose loamy sand to a depth of about 27 inches. The substratum, to a depth of about 58 inches, is yellowish-brown, loose, gravelly, coarse sand.

Plymouth soils have low to very low available moisture capacity. Natural fertility is low. Internal drainage is good. Permeability is rapid in all these soils except in those of the silty substratum phase. Permeability is moderate in the silty layer of soils in the silty substratum phase.

Plymouth loamy sand, 3 to 8 percent slopes ("PlB") – This soil is found on moraines and outwash plains. Slopes are undulating, or they located along the sides of intermittent drainageways. The undulating areas are generally large while areas along intermittent drainageways are narrow, long, and follow the course of the drainage channel.

The hazard of erosion is slight on this Plymouth soil. This soil tends to be droughty.

This soil is fairly well suited to the crops commonly grown in the county. Some areas were formerly used for farming, but most are now in brush or idle. In the western part of the county, this soil is used mainly for housing developments.

Plymouth loamy sand, 8 to 15 percent slopes ("PlC") – This moderately sloping soil is found on moraines and outwash plains. Where it occurs on moraines, slopes are often rolling, and the surface is broken by closed depressions. On outwash plains this soil is located on the short side slopes found along intermittent drainageways. Areas on moraines are fairly large, but most other areas are small, long and narrow.

The hazard of erosion is moderate to severe because of slope and the sandy texture of this soil. Slope and droughtiness are the main limitations on this soil for most non-farm uses.

This Plymouth soil is not well suited to crops commonly grown in the county. Most of this soil is found in wooded areas. Small acreages are cleared and farmed with adjoining areas of level or gently sloping soils. Such areas are used mainly for growing grasses, but some of these areas are idle. Where extensive excavating is not needed, some areas are used for estate-type housing developments.

The Soil Survey includes the potential engineering limitations for each mapping unit, as they relate to the siting of various uses. The relevant limitations offered for each of the on-site mapping units are summarized in Table 3 below:

**Table 3 - Engineering Limitations of On-Site Soils**

| | **CuB** | **PlB** | **PlC** |
|---|---|---|---|
| **Homesites**[5] | SL | SL | M(A) |
| **Streets and Parking Lots** | M(A) | M(A) | S(A) |
| **Lawns, Landscaping and Golf Fairways** | S(B) | S(B) | S(B) |

Engineering and Planning Limitation Rating:
M = Moderate - Limitations are harder to correct or not possible to correct entirely.
S = Severe – Limitations are difficult or expensive to overcome.
SL = Slight - Few or no limitations or limitations can be overcome at little cost.

Reasons for Limitations:
(A) Slopes
(B) Sandy Surface Layer

Source: *Soil Survey of Suffolk County, New York,* United States Department of Agriculture, Soil Conservation Service, 1975.

A Phase I Environmental Site Assessment ("ESA") was prepared for the subject property by Freudenthal & Elkowitz Consulting Group, Inc., dated March 2008, which evaluated various existing and/or potential environmental conditions at the subject property, including soil conditions.

As part of the scope of the Phase I ESA, records of cognizant agencies were reviewed to investigate former activities and land uses at the subject property. Available information can identify prior soil disturbances (e.g., soil stripping, excavation, filling, etc.). The Village of Islandia Tax Assessor, the Village of Islandia Building Department, the Village of Islandia Fire Marshal, and the Suffolk County Department of Health Services had no records relating to the subject property or historical uses. Therefore, available information relating to prior uses at the subject property was limited to historic aerial photography. Aerial photography from 1957, 1966, 1976, 1980 and 1994 was reviewed and described within the Phase I ESA.

[5] The *Soil Survey of Suffolk County* evaluates the engineering and planning limitations of soils for the development of homesites. However, as the Soil Survey does not include ratings for other types of buildings, the homesites evaluation is used to determine potential limitations for the development of the proposed buildings.

The descriptions of the subject property include that, prior to 1976, the subject property was largely undeveloped, with up to three small residences occupying portions thereof, and that the central portion of the site was cleared between 1956 and 1966. By 1976, the majority of the wooded areas were cleared, topsoil stripped, and the three former structures were no longer present. The 1980 photograph depicts the subject property as cleared, with some areas revegetated. The Phase I ESA indicates that the aerial photographs do not provide evidence of sand mining, digging and/or backfilling at the subject property.

The Phase I ESA indicates that the former structures identified at the subject property (via aerial photography) could be associated with abandoned or out-of-service underground storage tanks ("USTs") and/or sanitary systems at the northern portions of the subject property. In order to address this issue, prior to redevelopment, a geophysical survey of the subject property will be conducted in the vicinity of the former structures to identify any abandoned or out-of-service USTs and/or sanitary systems that may be present. Further, any such structures would be removed, soil samples collected in their vicinity, and any impacted soils excavated and removed from the site in accordance with all relevant NYSDEC and SCDHS regulations or protocols.

**Topography**

According to the Topographic Map prepared by Nelson & Pope (see Appendix E), elevations at the subject property range between 130± and 188± feet above mean sea level ("amsl"). Site elevations generally increase, gradually, from southeast to northwest, with the highest elevations at the northwest portion of the site along Motor Parkway, and the lowest elevations along the southeastern corner of the property. As depicted by the Slope Analysis - Existing Conditions plan prepared by Nelson & Pope (see Appendix H), approximately 88 percent of the site is comprised of slopes less than 10 percent. The areas of steeper slopes are limited to the southeast corner of the site, narrow areas along the northern perimeter, and few, narrow areas at the site's interior.

## 4.2 Probable Impacts of the Proposed Action

### Soils

As stated above, soil types at the subject property include CuB, PlB and PlC soils. According to the Soil Survey, the CuB soils present moderate limitations for the siting of streets and parking lots, based on slope. The PlC soils present moderate limitations for the siting of buildings, and severe limitations for the siting of streets and parking lots, based on slope. All on-site soils present limitations for development with lawns and landscaping, based on the presence of a sandy surface layer. However, as the proposed development includes the grading of much of the subject property and, therefore, the potential engineering limitations associated with slopes would be overcome. Furthermore, grading activities would result in a mixing of surface layers, such that the sandy surface layer may not interfere with the planting of lawns and landscaping. The application of topsoil within landscaped areas would further reduce any limitations on the siting of lawns and landscaping.

Based on an Earthwork Analysis plan prepared by Nelson & Pope, the proposed grading plan includes 44,000 cubic yards of cut and 38,000 cubic yards of fill. Thus, 6,000 cubic yards of material would require removal from the subject site. Approximately 3,500 cubic yards of topsoil would be imported for landscaping purposes.

Disturbance of soils across much of the 12.66±-acre site would result in erosion and sedimentation without proper controls. In order to minimize erosion and sedimentation during construction, the proposed controls would include minimizing the size of exposed areas and the length of time that areas are exposed, installing sediment barriers (e.g., silt fencing, hay bales, etc.) along the limits of disturbance and at drainage inlets for the duration of the work, stabilizing graded areas and stockpiles through the use of temporary seeding, and stabilizing the construction entrances with gravel-beds.

All erosion and sedimentation control measures would be implemented in accordance with the *New York Standards and Specifications for Erosion and Sediment Control*. As such, no significant adverse impacts associated with erosion and sedimentation would be expected.

**Topography**

Based on the Grading and Drainage plan (see Appendix A) and the Earthwork Analysis plan (see Appendix H) prepared by Nelson & Pope, existing site elevations outside of the proposed building footprints would not be significantly altered, where proposed grade changes are generally between zero and four feet. Retaining walls are proposed along the southern property boundary (south of the proposed seven-story hotel) to allow for proper parking facilities and on-site containment of stormwater, as well as on the north and west sides of the proposed three-story hotel to allow for the maintenance of the existing grade adjacent to Motor Parkway and the creation of an outdoor patio area off of the proposed hotel.

All proposed grade changes within the footprint of the seven-story hotel are less than five feet, including earthwork for the proposed subgrade parking garage. Grade changes at the proposed restaurant pad footprints range from zero to nine feet, with the greatest changes at the eastern portion of this area. Within the footprint of the western restaurant pad, grade changes would not exceed five feet.

Grade changes at the site of the proposed three-story hotel would be minimal at the eastern portion of the footprint, however, grade changes at the western portion of the footprint, where the steepest slopes are found under existing conditions, would be more significant (up to 13 feet).

The most significant grade changes would occur within the footprint of the proposed residential building. Up to 21 feet would be excavated to allow for the proposed building, including the parking garage to be constructed below. In this area, existing site elevations are greatest (up to 185± feet). However, the surrounding grade would remain essentially unaltered.

Overall, the proposed changes to the existing topography of the subject property have been minimized to the maximum extent practicable, given the existing topography of the site and the development objectives.

## 4.3 Proposed Mitigation Measures

In order to mitigate the potential impacts to soils and topography during and after construction activities, the following mitigation measures would be implemented:

- Minimization of the size of exposed areas and the length of time that areas are exposed;

- Installation of sediment barriers (e.g., silt fencing, hay bales, etc.) along the limits of disturbance and at drainage inlets for the duration of the work;

- Stabilization of graded areas and stockpiles through the use of temporary seeding;

- Stabilization of the construction entrances with gravel-beds; and

- The strategic grading and the installation of retaining walls to stabilize soils in areas of steep slopes.

# 5.0 WATER RESOURCES

## 5.1 Existing Conditions

As discussed in Section 4.1 of this DEIS, elevations at the subject property range between 130 and 188 feet amsl. According to the USGS *Water Table of the Upper Glacial Aquifer on Western Long Island, New York in March – April 2000* (Plate 1A, 2002), the water table below the subject property is at approximately 40 feet amsl (see Figure 4). Thus, the depth to groundwater at the subject property ranges between 90± and 148± feet below grade surface.

### *Special Groundwater Protection Areas*

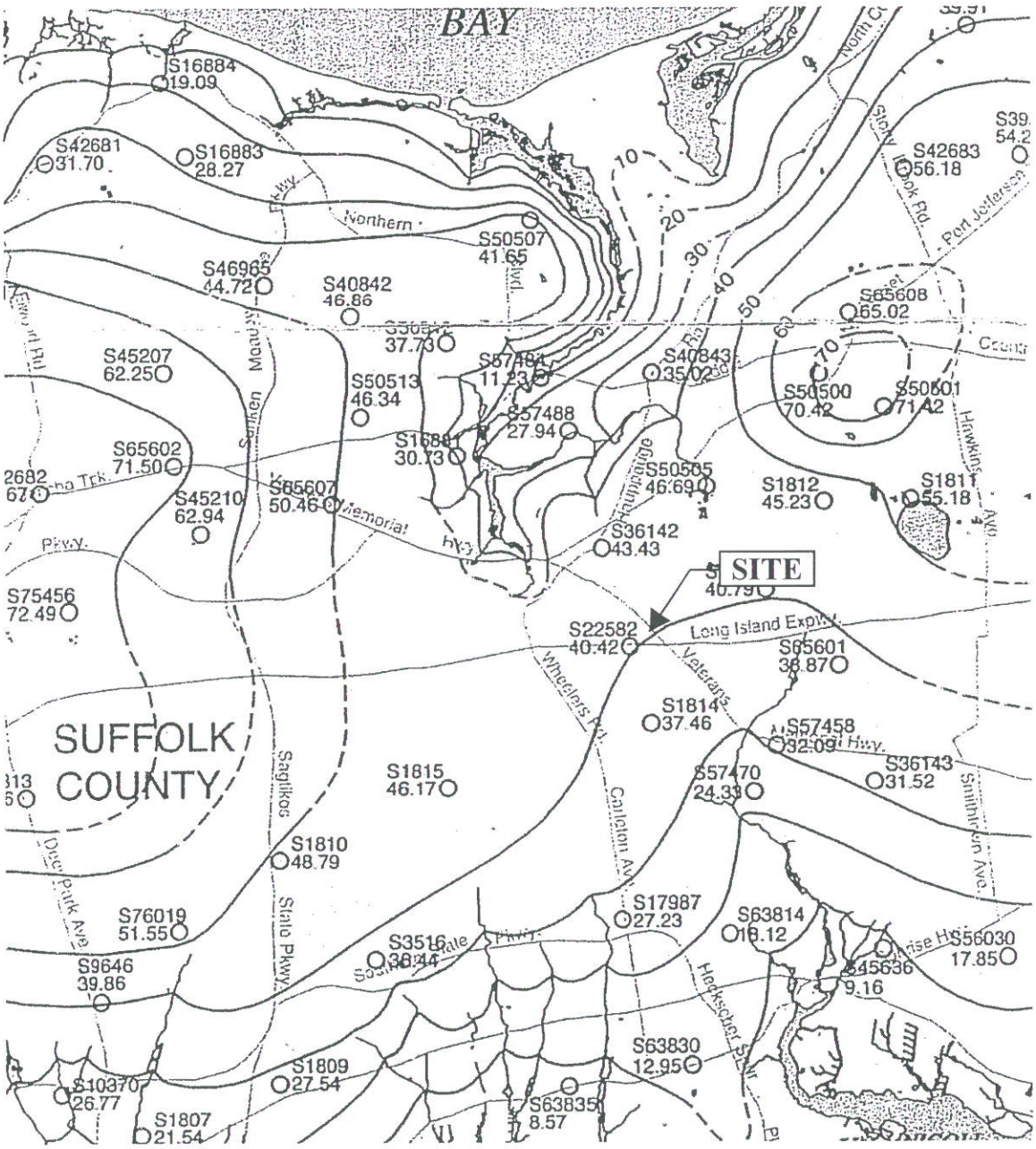
Special Groundwater Protection Areas ("SGPAs") are significant, largely undeveloped or sparsely developed geographic areas of Long Island that provide recharge to portions of the deep flow aquifer system. They represent a unique final opportunity for comprehensive, preventive management to preclude or minimize land use activities that can have a deleterious impact on groundwater. Nine SGPAs are located on Long Island: North Hills; Oyster Bay; West Hills/Melville; Oak Brush Plains; South Setauket Woods; Central Suffolk; Southold; South Fork; and Hither Hills. The subject property is not situated in a SGPA.

### Sanitary Disposal

The subject site is currently undeveloped, and therefore, no sanitary waste is generated and there are no on-site sanitary disposal systems.

### Water Use

As the subject property is currently undeveloped, no potable water is used at the site.




Source: United States Geological Survey, *Water Table of the Upper Glacial Aquifer on Western Long Island, New York in March - April 2000*, Plate 1A, 2002.

Scale: 1 : 125,000 (approx.)

**FIGURE 4**

**Stormwater Runoff and Drainage**

The subject property is currently undeveloped, and there are no drainage structures on the site.

## 5.2 Probable Impacts of the Proposed Action

**Sanitary Disposal**

***Compliance with Article 6 of the Suffolk County Sanitary Code***

Suffolk County has promulgated various regulations and standards that are designed to protect the water resources of Long Island. Article 6 of the Suffolk County Sanitary Code ("SCSC") specifically governs sanitary wastewater discharges. The regulations contained in Article 6 protect water resources by limiting the "population density equivalent" within specific Groundwater Management Zones. The subject property is situated within Groundwater Management Zone I, and therefore, pursuant to Article 6 of the SCSC, the maximum permitted sanitary discharge, if on-site sanitary systems are used, is 600 gpd per acre. However, the proposed action does not include the use of on-site sanitary systems, but, rather, an existing sewage treatment plant. Therefore, the density restrictions in Article 6 of the SCSC do not apply to the proposed development.

All sanitary waste from the subject property would be accommodated by the Windwatch STP in Islandia. Therefore, there would be no on-site discharge and no associated sanitary impacts to groundwater. The projected sanitary discharge from the proposed development has been calculated by Nelson & Pope, and is included in Table 4 below.

**Table 4 – Projected Sewage Flow**

| Use | Quantity | Design Flow | Total Flow |
|---|---|---|---|
| Residential – Condominiums (Units < 1,200 sq. ft.) | 15 units | 225 gpd/unit | 3,375 gpd |
| Residential – Condominiums (Units > 1,200 sq. ft.) | 135 units | 300 gpd/unit | 40,500 gpd |
| Residential – Fitness Center | 1,000 sq. ft. | 0.30 gpd/sq. ft. | 300 gpd |
| Residential – Indoor Pool | 2,500 sq. ft., 125 bathers | 5 gpd/bather | 625 gpd |
| Residential – Outdoor Pool | 920 sq. ft., 46 bathers | 5 gpd/bather | 230 gpd |
| Retail Space (Wet Store) | 15,000 sq. ft. | 0.15 gpd/sq. ft. | 2,250 gpd |
| Office Space (Medical) | 16,922 sq. ft. | 0.10 gpd/sq. ft. | 1,694 gpd |
| Hotel – Rooms (Rooms > 400 sq. ft.) | 175 rooms | 150 gpd/room | 26,250 gpd |
| Hotel – Conference Space | 4,884 sq. ft. | 0.06 gpd/sq. ft. | 293 gpd |
| Hotel – Board Room | 456 sq. ft. | 0.06 gpd/sq. ft. | 28 gpd |
| Hotel – Rooms (Rooms < 400 sq. ft.) | 97 rooms | 100 gpd/room | 9,700 gpd |
| Hotel – Rooms (Rooms > 400 sq. ft.) | 3 rooms | 150 gpd/room | 450 gpd |
| Hotel – Conference Space | 310 sq. ft. | 0.06 gpd/sq. ft. | 19 gpd |
| Hotel – Board Room | 275 sq. ft. | 0.06 gpd/sq. ft. | 17 gpd |
| Restaurant Pad | 7,000 sq. ft. (225 seats) | 30 gpd/seat | 6,750 gpd |
| Restaurant Pad | 7,000 sq. ft. (225 seats) | 30 gpd/seat | 6,750 gpd |
| **Total** | | | 99,231 gpd |

The applicant, MPA, has obtained a Suffolk County Sewer Agency resolution of approval for the proposed expansion of Suffolk County Sewer District No. 13 – Windwatch, from 350,000 to 700,000 gpd (see copy of resolution in Appendix I). The expansion would be more than sufficient to accommodate the sanitary flow generated by the proposed development, and additional flow from several other existing and proposed developments in the area. Therefore, as there will be no on-site sanitary discharge, no significant adverse impacts to groundwater from same would result upon implementation of the proposed action.

**Water Use**

The overall potable water demand among the proposed residential, hotel, retail/office and restaurant buildings is also estimated at 99,231 gpd. It is noted that, in order to reduce potable water use, all of the buildings would be equipped with low-flow plumbing features.

In addition to the potable water demand, there are irrigation demands for the areas to be landscaped. During the 20-week irrigation season (May through September), based on a plant water demand of two inches per week, the 124,349 square feet of landscaped area would receive approximately 3.10 million gallons. However, an average of 17.5 inches[6] of rainfall during the irrigation season would reduce the total demand by approximately 1.36 million gallons. Thus, the total irrigation demand during the irrigation season is 1.74 million gallons, or 4,767± gallons per day (averaged over 365 days). Thus, the total projected water demand would be 103,998 gpd.

The estimated 103,998 gpd of potable water required by the overall development would be provided by the Suffolk County Water Authority, via existing supplies within the roadways surrounding the subject property. In a letter, dated September 17, 2007, the Suffolk County Water Authority confirmed the availability of water via an existing main along Motor Parkway (see copy of correspondence within Appendix J). The Suffolk County Water Authority advised that the subject property is within a low-pressure area, and thus, the proposed distribution system should be designed accordingly. The applicant acknowledges this design request, and will comply with all Suffolk County Water Authority requirements to ensure that the distribution system properly addresses the pressure issue. The applicant's engineer provided correspondence to the Suffolk County Water Authority indicating, in pertinent part, that booster pumps for domestic and fire supply will be installed at the buildings, as necessary to meet the requirements of the Building and Fire Codes of New York State (see Appendix J).

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[6] National Oceanic and Atmospheric Administration. *Monthly Precipitation Probabilities and Quintiles, 1971-2000*. Climatography of the United States, No. 81, Supplement No. 1, Page 37. 2002.

The Village Engineer requested that the use of an irrigation well be considered for this site, as opposed to the use of water from the Suffolk County Water Authority, despite the fact that the Suffolk County Water Authority has indicated that it can supply the requested water to the proposed development. Subject to the approval of the New York State Department of Environmental Conservation ("NYSDEC"), the applicant is willing to install an irrigation well. Application for same will be made to the NYSDEC upon granting of zoning approval by the Board of Trustees of the Incorporated Village of Islandia. If NYSDEC approves the application, an irrigation well will be installed.

In order to minimize the irrigation demand of the proposed development, the applicant intends to incorporate drip irrigation, micro-misters and subsurface irrigation within planned water use zones (high, moderate, low) that reflect the particular demands of the individual landscape species. The irrigation systems would include rain sensor shut-offs and other weather-based controls, and the systems would be inspected and adjusted regularly to ensure high efficiency. Landscaped areas would be mulched to conserve moisture and prevent evaporation from the soil, reducing the demand for irrigation during periods of limited rainfall. With the aforementioned measures employed, the water demand from irrigation would be reduced thereby minimizing impacts associated with water consumption.

## Stormwater Runoff and Drainage

### *Compliance with the Phase II Stormwater Regulations and Proposed Drainage Methods*

The U.S. Environmental Protection Agency ("USEPA") stormwater program was promulgated in 1990 under the Clean Water Act ("CWA") and was recognized as the *Phase I Rule*. The *Phase I Rule* required a NPDES permit to control stormwater runoff from (1) "medium" or "large" municipal separate storm sewer systems (MS4s) generally serving populations of 100,000 or greater, (2) construction activity disturbing five acres or greater, and (3) ten categories of industrial activity. On March 10, 2003, the USEPA expanded the scope of its stormwater management program to include smaller construction sites and the operators of MS4s in urbanized areas, and the expanded program is known as the *Storm Water Phase II Final Rule*. Specifically, the *Storm Water Phase II Final Rule* expanded permit coverage to "operators of small construction activities that disturb equal to or greater than one and less than five acres of land."

The New York State Pollutant Discharge Elimination System ("SPDES") Permit is an NPDES-approved program with permits issued in accordance with the Environmental Conservation Law ("ECL"), which extends permitting coverage to pollutant discharges to "Waters of New York State," such as groundwater.[7]

[7] As excerpted from the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-02-01).

For construction activities involving any size disturbance (less than one acre, one to five acres, or five acres or greater), a SPDES General Permit for Stormwater Discharges from Construction Activity (GP-02-01) ("SPDES General Permit") must be obtained, and requires that a Notice of Intent ("NOI") be filed with the NYSDEC, after completing a Stormwater Pollution Prevention Plan ("SWPPP"). The SWPPP includes two plan components: (1) Erosion and Sediment Control ("ESC") plan, and (2) Water Quality and Quantity Control ("WQQP") plan. As the proposed development would include the disturbance of all or most of the site (i.e., greater than 5 acres), a SPDES General Permit will be required prior to undertaking any construction activities on the site.

The NYSDEC provides technical standards for each of the above plan components. For erosion and sediment control, the technical standards are included in the "*New York Standards and Specifications for Erosion and Sediment Control"* published by the Empire State Chapter of the Soil and Water Conservation Society (March 2003). For the design of water quality and quantity controls (post-construction stormwater control practices), the technical standards are detailed in the *"New York State Stormwater Design Manual."*

*New York Standards and Specifications for Erosion and Sediment Control*

The standards and specifications within the *New York Standards and Specifications for Erosion and Sediment Control* have been developed "to reduce the impacts of soil loss from construction sites to receiving water bodies and adjacent properties." This publication provides extensive guidance on computing runoff and standards for vegetative, bio-technical and structural measures for erosion and sediment control. A general discussion of vegetative and structural controls follows.

As discussed on page 2.2 of the *New York Standards and Specifications for Erosion and Sediment Control*, the preservation of existing groundcover is the most effective way to protect the soil surface and limit erosion. "Where land disturbance is necessary, temporary seeding or mulching must be used on areas which will be exposed for more than 14 days. Permanent stabilization should be performed as soon as possible after completion of grading. ESC plans must contain provisions for permanent stabilization of disturbed areas. Selection of permanent vegetation will include the following considerations for each plant series: 1) establishment requirements; 2) adaptability to site conditions; 3) aesthetic and natural resource values; 4) maintenance requirements." Structural controls "may be necessary when disturbed areas cannot be promptly stabilized with vegetation, [and] may be temporary or permanent."

The Erosion Control plan prepared for the proposed development (see Appendix A) includes both vegetative and structural controls to stabilize soils and reduce the potential impacts to soils during construction activities. The proposed erosion and sediment controls would include, among other things, minimizing the size of exposed areas and the length of time that areas are exposed; installing sediment barriers (e.g., silt fencing, hay bales, etc.) along the limits of disturbance and at drainage inlets for the duration of the work; stabilizing graded areas and stockpiles through the use of temporary seeding; and stabilizing the construction entrances with gravel-beds to prevent soil and loose debris from being tracked onto local roads.

*New York State Stormwater Design Manual*

The Water Quality and Quantity Control plan to be prepared as part of the SWPPP must be designed to meet required "sizing criteria and pollutant removal goals," which are set forth in Chapters 4 and 5 of the *New York State Stormwater Design Manual*. Chapter 4 outlines a unified approach for sizing stormwater management practices ("SMPs") "to meet pollutant removal goals, reduce channel erosion, prevent overbank flooding and help extreme floods." Water quality volume (denoted as "WQv"), is designed to improve water quality sizing to capture and treat 90 percent of the average annual stormwater runoff volume, and is directly related to the amount of impervious cover created at a site. By meeting the WQv requirements through employment of acceptable SMPs, the water quality objectives of capturing and treating 90 percent of stormwater will be met.

The *New York State Stormwater Design Manual* outlines five main groups of acceptable SMPs, including stormwater ponds; stormwater wetlands; infiltration practices; filtering practices; and open channel practices. All of the acceptable SMPs are based on the following criteria:

- *Capture and treatment of the full WQv;*
- *Capable of removal of 80 percent TSS*[8] *and 40 percent TP;*[9]
- *Acceptable longevity in the field; and*
- *Pretreatment mechanism.*

The design of SMPs requires an approach that considers land use, physical feasibility, watershed/regional factors, stormwater management capability, and community/environmental factors. These considerations are summarized in the Land Use Selection Matrix (Table 7.1) in the *New York State Stormwater Management Design Manual*, and, according to same, the proposed development should be characterized as commercial within an urbanized environment.

[8] Total Suspended Solids (suspended inorganic and organic material)
[9] Total Phosphorus

As such, the selection matrix specifies that applicable treatment practices should be comprised of infiltration or filters.

The proposed development plan includes 9.80± acres of impervious surface area, which would increase stormwater runoff on the site. The balance of the 12.66±-acre subject property would be comprised of landscaped areas. According to the project engineer and depicted on the Drainage Calculation/Structure Table plan in Appendix A of this DEIS, stormwater management will be accomplished via a system of catch basins and leaching pools installed throughout the subject property. The calculations provided indicate that the proposed stormwater management system would accommodate a minimum five-inch rainfall event on-site.[10]

Finally, as indicated in Section 5.1 of this DEIS, the minimum depth to groundwater at the subject property is 40± feet below grade surface. Thus, there is a more than adequate separation distance between the base of the stormwater leaching pools and groundwater.

Overall, therefore, in that the proposed stormwater management plan would comply with prevailing regulations and would serve to collect and filter stormwater prior to groundwater recharge, the proposed increase in stormwater runoff would not result in significant adverse impacts to groundwater quality.

[10] It should be noted that certain perimeter landscaped areas (i.e., adjoining the retaining walls) are not included in the stormwater management system. The stormwater associated with this landscaping area will infiltrate the ground and recharge.

***Consistency with the Nonpoint Source Management Handbook***

The *Nonpoint Source Management Handbook* was reviewed as to recommendations for controlling nonpoint sources of groundwater contamination. Discussion of the proposed project's consistency with the relevant stormwater recommendations follows:

Stormwater Runoff

1. *Minimize grade changes and site clearing. Preserve swales in their natural state. Avoid disturbance of existing grades, vegetation or soils and the alteration of surface hydrology.*

   According to the slope analysis prepared by the project engineer, approximately 12 percent of the site consists of slopes greater than 10 percent. The proposed grading plan would decrease the total area of steep slopes by two percent. As the property is undeveloped and largely vegetated, the proposed project will require clearing. As such, the existing drainage patterns across the site will be affected. However, all stormwater runoff will be controlled and accommodated on-site.

   Therefore, while there would be ground disturbance upon implementation of this action, the proposed grading and drainage plans, will comply with the intent of this recommendation (i.e., to control stormwater and to protect ground and surface water quality). There are no swales on the subject site, and thus, there would be no impacts to same.

   While the proposed clearing may not technically be consistent this recommendation, a substantial benefit that is being proposed as part of this development is the Village Green with amphitheatre, which is an amenity that the Village has indicated it desires. Accordingly, as opposed to the dedication of a passive park, the vegetation of which would remain uncleared, the public amenity of the Village Green requires clearing.

2. *Provide temporary on-site areas to receive stormwater runoff flows that are generated by construction and other site development activities. Do not allow increased sediment resulting from the construction or operation phase of site development to leave the site or to be discharged into stream corridors, marine or freshwater wetlands. Minimize the amount of soil area exposed to rainfall and the period of exposure. Cover or plant exposed soils as soon as possible.*

As indicated in Item No. 1 above, all stormwater would be accommodated on-site. As part of the erosion and sedimentation control measures, as detailed above, to the extent practicable, the size of exposed areas and the length of time that areas are exposed will be minimized. As such, the proposed action will comply with this recommendation.

4. *Stabilize exposed slopes during and after construction by using temporary and/or permanent structural or nonstructural stabilization measures.*

There are steep slopes on the subject site, and grade stabilization methods will be employed to stabilize soils during and after construction activities. As such, the proposed action will comply with this recommendation.

## 5.3 Proposed Mitigation Measures

In order to mitigate the potential significant adverse impacts associated with water use and stormwater runoff, the following measures will be employed:

- The proposed buildings would be fitted with low-flow plumbing fixtures to reduce potable water use;

- As the property is within a low-pressure area, as identified by the Suffolk County Water Authority, booster pumps for domestic and fire supply will be installed at the buildings, as necessary to meet the requirements of the Building and Fire Codes of New York State;

- Subject to the approval of the NYSDEC, the applicant will install an on-site irrigation well;

- Landscaped areas would be served by an irrigation system designed for high efficiency to reduce water demand.

- All stormwater would be contained and recharged on-site with the use of stormwater catch basins and leaching pools;

- The proposed drainage design would accommodate a five-inch storm event; and

- Erosion and sedimentation controls would be implemented during construction.

# 6.0 ECOLOGY

## 6.1 Existing Conditions

### Terrestrial Ecology

### Vegetation Setting

An ecological survey was performed by Thomas W. Cramer, ASLA in September 2007 to identify and evaluate the potential impacts to ecological resources upon implementation of the proposed action.

Based on physical inspection, the site was cleared in the past and apparently stripped of topsoil. In general, the site can be divided into two habitat types: "Mined/Cleared Lands" and "Successional Woodlands." Both of these habitats are a direct result of human activities on the site. Figure 5 provides an illustration of the approximate locations of the habitats on site. The locations and quantities are based on field inspections and aerial photograph interpretation. In the field, there is no definite dividing line between the habitats; instead they blend one into the other. Table 5, below, provides a breakdown of the quantities and percentages for each.

**Figure 5 – Existing Habitats**

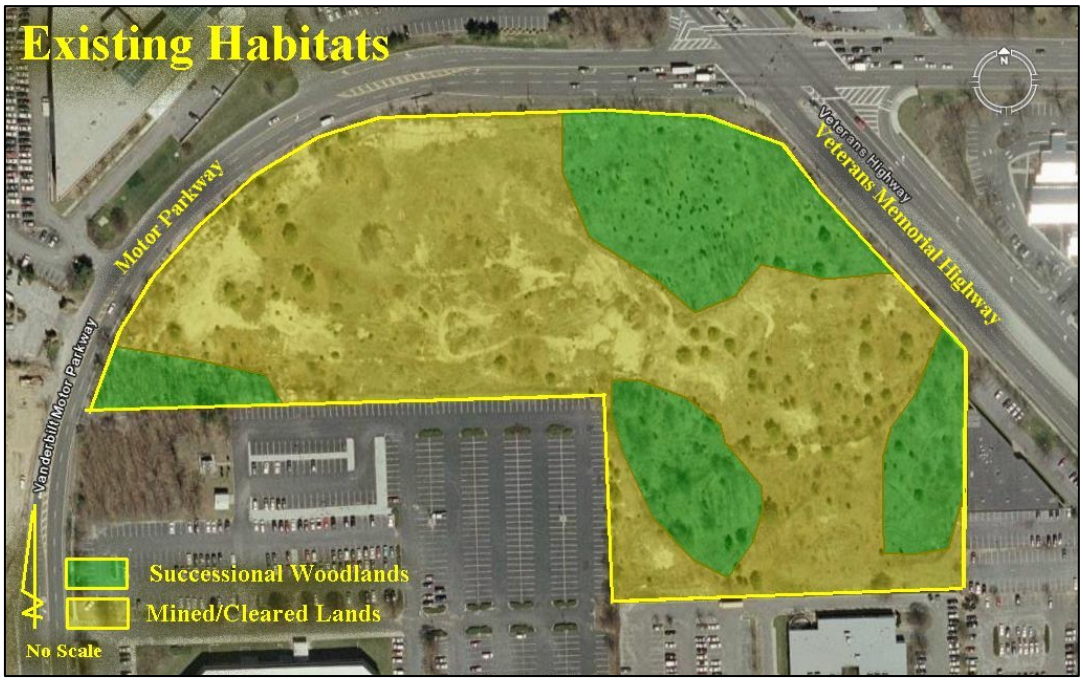


**Table 5 – Site Quantities**

| | Areas | | Percent |
|---|---|---|---|
| Mined/Cleared Land | 387,985 sq.ft. | (8.91 acres) | 70.38% |
| Successional Woodlands | 163,350 sq.ft. | (3.75 acres) | 29.62% |
| Total Site | 551,335 sq.ft. | (12.66 acres) | 100.00% |

The NYSDEC New York Natural Heritage Program's ("NYNHP") publication "Ecological Communities of New York State" (Reschke, et. al., 2002) provides detailed discussion of various ecological communities found within New York State. The document also provides information on the ranking (i.e., rarity) both globally and within New York State. This document has been used and references are provided on how it relates to the site in the preparation of this section of the DEIS.

Mined/Cleared Land

The Mined/Cleared Land occupies the largest habitat on the site, at approximately 8.91 acres or 70.38 percent of the site. This habitat can be broken down into two ecological communities, which relate to the density of vegetation found in each. The one with the least amount of vegetation is most closely defined by the NYNHP as the following:

> **"Gravel mine:** an excavation in a gravel deposit from which gravel has been removed. Often these are dug into glacial deposits such as eskers or kames. Vegetation may be sparse if the mine is active; there may be substantial vegetative cover if the mine has been inactive for several years. Near-vertical slopes are used by bank swallows (*Riparia riparia*) for nesting sites."

The Gravel Mine is found throughout New York State. It is ranked "demonstrably secure" globally and also in New York State by NYNHP.

While it is unknown if this site was actually mined for the sand and gravel, it is clear that the entire site was at least cleared and stripped of the topsoil in the past. This has resulted in a condition over the site similar to that described in the Gravel Mine community by the NYNHP, with the exception of the near vertical slopes. There are numerous slopes, mounds and piles of material with near level areas in between, that also suggest significant earth-moving in the past. Through the years, natural plant succession has progressed at various rates on the site and has resulted in different ecological habitats and communities.

Even after what appears to have been many years of inactivity on the site, there are still large areas that are substantially unvegetated within this community, as depicted in Figure 5 above. These unvegetated areas are also devoid of any topsoil or organic material, and represent areas of sand, gravel, and/or large cobbles, resulting in a very dry, barren condition. Only the most drought-tolerant of the pioneer plants are found scattered in this area.

The photographs on the following page illustrate these barren areas.

*Gravel Mine Ecological Community*

The second ecological community, as well as the largest portion of the Mined/Cleared Land, is colonized with a greater number and mix of pioneer plant species. These pioneer plant species are the first species to colonize an area after clearing and/or abandonment. The following is a definition of the closest ecological community to this portion of the Mined/Cleared Land habitat as described by NYNHP:

> **"Successional Old Field:** a meadow dominated by forbs and grasses that occurs on sites that have been cleared and plowed (for farming or development), and then abandoned.

Characteristic herbs include goldenrods (*Solidago altissima, S. nemoralis, S. rugosa, S. juncea, S. canadensis,* and *Euthamia graminifolia*), bluegrasses (*Poa pratensis, P. compressa*), timothy (*Phleum pratense*), quackgrass (*Agropyron repens*), smooth brome (*Bromus inermis*), sweet vernal grass (*Anthoxanthum odoratum*), orchard grass (*Dactylis glomerata*), common chickweed (*Cerastium arvense*), common evening primrose (*Oenothera biennis*), oldfield cinquefoil (*Potentilla simplex*), calico aster (*Aster lateriflorus*), New England aster (*Aster novae-angliae*), wild strawberry (*Fragaria virginiana*), Queen-Anne's lace (*Daucus corota*), ragweed (*Ambrosia artemisiifolia*), hawkweeds (*Hieracium* spp.), dandelion (*Taraxacum officinale*), and ox-tongue (*Picris hieracioides*). Shrubs may be present, but collectively they have less than 50% cover in the community. Characteristic shrubs include gray dogwood (*Cornus foemina* ssp. *racemosa*), silky dogwood (*Cornus amomum*), arrowwood (*Viburnum recognitum*), raspberries (*Rubus* spp.), sumac (*Rhus typhina, R. glabra*), and eastern red cedar (*Juniperus virginiana*). A characteristic bird is the field sparrow (*Spizella pusilla*). This is a relatively short-lived community that succeeds to a shrubland, woodland, or forest community."

This ecological community is distributed throughout New York State. It is ranked "apparently secure" both globally and in New York State by NYNHP.

*Successional Old Field Ecological Community*

As discussed above, it is expected that the entire site was cleared and abandoned at about the same time; however, certain areas of the site were probably more conducive to the re-establishment of vegetation than others. The first areas to be revegetated were those that still contained some topsoil and organic material after the clearing. These could include areas at the bottoms of slopes where fine material and organics would erode. The less fertile areas of the site would take longer to be revegetated. On this site, the most fertile areas would have been the habitats identified as the "Successional Woodland," which will be discussed later.

Succession is the process by which an area that has been cleared or otherwise disturbed reverts to the original vegetative habitat. Successional old field, scrubland and woodland habitats are stages in the process of succession. The first species to colonize a cleared area are generally herbaceous weeds and other plants with wide seed dispersal. These early successional species are replaced first by woody shrubs, then by saplings of tree species that seed from adjacent wooded habitat or landscaped areas. As time progresses, the trees dominate in both abundance and height, and light penetration is reduced. The tree and shrub species that first colonized the area are then replaced by more shade tolerant species. The resulting forest generally resembles the original forest, although there may be significant differences in species composition, particularly if non-native species have been introduced in the surrounding area.

Successional Woodland

The Successional Woodland habitat found on the site represents the area that developed vegetative cover first on the site. This was due in part to the existing soil conditions and available seed sources. Given the earlier establishment of the pioneer plants, these areas have progressed further along the natural successional process. There are more tree species and the shrub and forbs are those that are typically shade tolerant because of the increased canopy of the trees. The following is a definition of the closest ecological community as described by NYNHP:

> **"Successional maritime forest:** a successional hardwood forest that occurs in low areas near the seacoast. This forest is a variable type that develops after vegetation has burned or land cleared (such as pastureland or farm fields). The trees may be somewhat stunted and flat-topped because the canopies are pruned by salt spray. The forest may be dominated by a single species, or there may be two or three co-dominants. Characteristic canopy trees include black oak (*Quercus velutina*), post oak (*Quercus stellata*), shadbush (*Amelanchier canadensis*), white oak (*Quercus alba*), black cherry (*Prunus serotina*), black gum (*Nyssa sylvatica*), sassafras (*Sassafras albidum*), and red maple (*Acer rubrum*). A small number of eastern red cedar (*Juniperus virginiana*) may be present. Vines that are common in the understory and subcanopy include riverbank grape (*Vitis riparia*), poison ivy (*Toxicodendron radicans*), Virginia creeper (*Parthenocissus quinquefolia*), and greenbrier (*Smilax* spp.). Shrublayer and groundlayer dominants are variable. Bayberry (*Myrica pensylvanica*) is a common shrub. Certain introduced species are commonly found in this forest, including black locust (*Robinia pseudoacacia*), privet (*Ligustrum* spp.), Asiatic bittersweet (*Celastrus orbiculatus*), Japanese honey suckle (*Lonicera japonica*), multiflora rose (*Rosa multiflora*), and wineberry (*Rubus phoenicolasius*). Any of these may be dominant or co-dominant in a successional maritime forest. Characteristic animals include gray gatbird (*Dumetella carolinensis*), eastern towhee (*Pipilo erythrophthalamus*) and white-tailed deer (*Odocoileus virginianus*).

This forest represents an earlier seral stage of other maritime forests, such as maritime post oak forest, maritime holly forest, maritime red cedar forest, and probably others. Soil and moisture regime will usually determine which forest type succeeds from this community. A few disturbance-climax examples occur, maintained by severe and constant salt spray."

This ecological community is distributed in the Coastal Lowlands ecozone, in low areas near the coast of Long Island. It is ranked "apparently secure" both globally and in New York State by NYNHP. It should be noted that the above definition, while containing many of the species found on site, is not an exact match for the habitat. The above is a community more typical of moist conditions, immediately adjacent to the shoreline. However, the similarities to this definition are greater than others provided by the NYNHP. The most significant differences are the lack of any shadbush (*Amelanchier canadensis*), black gum (*Nyssa sylvatica*), or red maple (*Acer rubrum*) on site. Instead, there are more drought tolerant tree species such as pitch pine (*Pinus rigida*), chestnut oak (*Quercus montana*), red oak (*Q. rubra*), scarlet oak (*Q. coccinea*) aspens (*Populus spp.*), and gray birch (*Betula populifolia*). The tree tops have not been pruned by salt spray, and the white-tailed deer is not expected on the site because of the intensity of development surrounding the area.

*Successional Woodland Habitat*

Table 6 represents a list of vegetation observed or expected on site given the habitats present. The list of plant species is based upon field investigations conducted by Thomas W. Cramer, ALSA in September 2007. Care was taken to identify any species that might be unusual for the area. This list is also not meant to be all-inclusive.

**Table 6 – Plant Species List**

| | Common Name | Scientific Name |
|---|---|---|
| ***Trees*** | | |
| | Norway maple | *Acer platanoides* |
| | tree-of-heaven | *Alianthus altissimo* |
| | Hercules' club | *Aralia elata* |
| | devil's club | *Aralia spinosa* |
| | gray birch | *Betula populifolia* |
| | white birch | *Betula papyrifolia* |
| | northern catalpa | *Catalpa bignonioides* |
| | hawthorne | *Craetagus spp.* |
| | honey locust | *Gleditsia triacanthus* |
| | eastern red cedar | *Juniperus virginiana* |
| | mulberry | *Morus alba* |
| | pitch pine | *Pinus rigida* |
| | eastern cottonwood | *Populus deltoids* |
| | bigtooth aspen | *Populus grandidenta.* |
| | black cherry | *Prunus serotina* |
| | choke cherry | *Prunus virginiana* |
| | white oak | *Quercus alba* |
| | scarlet oak | *Quercus coccinea* |
| | scrub (bear) oak | *Quercus ilicifolia* |
| | mossycup (bur) oak | *Quercus macrocarpa* |
| | blackjack oak | *Quercus marilandia* |
| | chestnut oak | *Quercus prinus* |
| | northern red oak | *Quercus rubra* |
| | post oak | *Quercus stellata* |
| | black oak | *Quercus velutina* |
| | black locust | *Robinia psuedo-acacia* |
| | Sassafras | *Sassafras albiduin* |
| ***Shrubs and Vines*** | | |
| | chokeberry | *Aronia spp.* |
| | Asiatic bittersweet | *Celastrus orbiculatus* |
| | sweetfern | *Comptonia peregrine* |
| | silverberry | *Elaeagnus commutate* |

| Common Name | Scientific Name |
|---|---|
| autumn olive | *Elaeagnus umbellate* |
| black huckleberry | *Gaylussica baccata* |
| golden heather | *Hudsonia ericoides* |
| beach heather | *Hudsonia tomentosa* |
| bush clover | *Lespedeza spp.* |
| honeysuckle | *Lonicera spp.* |
| stagger-bush | *Lyonia mariana* |
| bayberry | *Myrica pensylvanica* [p] |
| Virginia creeper | *Parthenocissus quinquefolia* |
| multiflora rose | *Rosa:multiflora* |
| pasture rose | *Rosa spp.* |
| buckthorn | *Rhamnus spp.* |
| winged sumac | *Rhus copallina* |
| smooth sumac | *Rhus glabra* |
| stag horn sumac | *Rhus typhina* |
| currant | *Ribes lacustr* |
| brambles | *Rubus spp.* |
| common dewberry | *Rubus flagellaris* |
| greenbrier | *Smilax rotundifolia* |
| carrion flower | *Smilax herbacea* |
| nightshade | *Solanum dulcamara* |
| common nightshade | *Solanum nigrum* |
| meadowsweet | *Spiraea corymbosa* |
| poison-ivy | *Toxicodendron radicans* |
| low bush blueberry | *Vaccinium angustifolium* |
| grape | *Vitis spp.* |
| ***Herbs and Groundcovers*** | |
| yarrow | *Achillia millefoliilm* |
| redtop | *Agrostis gigantean* |
| garlic mustard | *Alliaria petiolata* |
| wild onion | *Allium stellatum* |
| big bluestem grass | *Andropogon gerardii* |
| little bluestem grass | *Andropogon scoparius* |
| broomsedge | *Andropogon virginicus* |
| pigweed | *Amaranthus spp.* |
| ragweed | *Ambrosia artemisiifolia* |
| dogbane | *Apocynum maculosa* |
| cress | *Arabis spp.* |
| bearberry | *Arctostaphylos uva-ursi* |
| mugwort | *Artemisia vulgaris* |
| common milkweed | *Asclepias syrica* |
| milkweed | *Asclepias spp* |
| asters | *Aster spp* |
| wood aster | *Aster divaricatus* |

| Common Name | Scientific Name |
|---|---|
| stiff-leaved aster | *Aster linariifolius* |
| wild indigo | *Baptisia tinctoria* |
| yellow rocket | *Barbarea vulgaris* |
| false nettle | *Boehmaria cylindrical* |
| mustard | *Brassica spp.* |
| Pennsylvania sedge | *Carex pensylvania* |
| knapweed | *Centurea spp.* |
| common lamb's quarters | *Chenopodium album* |
| spotted wintergreen | *Chimaphila maculata [p]* |
| stripped pipsissewa | *Chimaphila umbellate[p]* |
| chicory | *Cichorium intybus* |
| enchanter's nightshade | *Circacea quadrisulcata* |
| thistle | *Cirsium spp* |
| crown vetch | *Coronilla varia* |
| broom | *Cytisus scoparius* |
| orchard grass | *Dactylis glomerata* |
| poverty grass | *Danthonia spicata* |
| Queen Anne's lace | *Daucus carota* |
| little-leaf tick-trefoil | *Desmodium ciliare [t]* |
| deptford pink | *Dianthus armeria* |
| cypress spurge. | *Euphorbia cyparissias* |
| common strawberry | *Fragaria virginiana* |
| wintergreen | *Gaultheria procurnbens [p]* |
| avens | *Geum spp* |
| ground ivy | *Glechoma hederaceae* |
| woodland sunflower | *Helianthus divaricatus* |
| hawkweed | *Hieracium spp* |
| orange grass | *Hypericum gentianoides* |
| common St. Johnswort | *Hypericum perforatum* |
| pinweed | *Lechea spp.* |
| peppergrass | *Lepidium virginicum* |
| round-headed bush clover | *Lespedeza capitata* |
| hairy bush clover | *Lespedeza hirta* |
| trailing bush clover | *Lespedeza procumbens* |
| blue toadflax | *Linaria Canadensis* |
| butter-n-eggs | *Linaria vulgaris* |
| rye grass | *Lolium spp* |
| wild lupine | *Lupinnus perenis* |
| white campion | *Lychnis alba* |
| club moss | *Lycopodium spp. [p]* |
| evening primrose | *Oenethera biennis* |
| sweet cicely | *Osmorhiza claytoni* |
| panic grass | *Panicum spp* |
| timothy | *Phleum pretense* |

| Common Name | Scientific Name |
|---|---|
| poke weed | *Phytolacca Americana* |
| plantain | *Plantago spp* |
| bluegrass | *Poa spp* |
| jointweed | *Polygonelza articulate* |
| milkwort | *Polygala nuttallii* |
| hair cap moss | *Polytrichium spp* |
| gall-of-the-earth | *Prenathus spp* |
| cinquefoils | *Potentilla spp* |
| bracken fern | *Pteridium aquilinum* |
| common buttercup | *Ranunculus acris* |
| hooked buttercup | *Ranunculus recurvatus* |
| sheep sorrel | *Rumex acetosella* |
| dock | *Rumex crispus* |
| bouncing bet | *Saponaria officinalis* |
| goldenrod | *Solidago spp* |
| Indian grass | *Sorghastrum nutans* |
| common dandelion | *Taraxacum officinale* |
| goat's-rue | *Tephrosia virginiana* |
| clover | *Trifolium spp* |
| hop clover | *Trifolium agrarium* |
| rabbit-foot clover | *Trifolium arvense* |
| common mullein | *Verbascum thapsus* |
| cow vetch | *Vicia cracca* |
| spring vetch | *Vida satvia* |
| cocklebur | *Xanthium chinense* |

*[p]* NYS exploitably vulnerable native protected plant
*[t]* NYS threatened native protected plant

The plant species found or expected to be on the site are all common species and are prevalent in the area. Six species were identified as being on or potentially on the site that are protected native plants under 6 NYCRR Part 193.3. Five species were considered exploitably vulnerable native plants under 6 NYCRR Part 193.3(e). Exploitably vulnerable native plants are species that are likely to become threatened in the near future throughout all, or a significant portion, of their ranges within the State if causal factors continue unchecked. The five species are bayberry *(Myrica pensylvanica),* wintergreen *(Gaultheria procurnbens),* spotted wintergreen (*Chimaphila maculate),* stripped pipsissewa (*Chimaphila umbellate),* and club moss *(Lycopodium spp.).* Only the bayberry was confirmed on site; however, the other species can be expected given existing conditions. There was one threatened native plant, as defined by 6 NYCRR Part 193.3(c), found on site. This species is the little-leaf tick-trefoil *(Desmodium ciliare*) and was found in one small clump in approximately the center of the site. Threatened native plants are those that are likely to become endangered within the foreseeable future throughout all or a significant portion of their ranges in the State. Listed plants are those with six to fewer than 20 extant sites; or 1,000 to fewer than 3,000 individuals; or restricted to not less than four or more than seven USGS 7.5 minute series maps; or species listed as threatened by the United States Department of Interior in the Code of Federal Regulations.

As part of this review, correspondence with the NYNHP was undertaken to determine if the NYNHP had any records of any rare or state-listed animals or plants, significant natural communities, or other significant habitats in their databases for this site or in the immediate vicinity. The NYNHP identified nine protected native vascular plant species of record in the vicinity of the site (see Table 7 below).

**Table 7 – Protected Native Plants**

| **Common Name (as listed in Part 193.3)** | ***Scientific Name (as listed in Part 193.3)*** | **NY Legal Status** | **EO Rank/Last Report** |
|---|---|---|---|
| Collins' Sedge | *Carex collinsii* | Endangered | Historical/1936 |
| Hairy Small-leaf Tick-Trefoil | *Desmodium ciliare* | Threatened | Historical/1928 |
| Slender Crabgrass | *Digitaria filiformis* | Threatened | Historical/1923 |
| Velvety Bush Clover | *Lespedeza stuevei* | Threatened | Historical/1924 |
| Southern Yellow Flax | *Linum medium* var. *texanum* | Threatened | Historical/1921 |
| Catfoot | *Pseudognaphalium helleri ssp micradenium (Gnaphalium helleri* var. *micradenium)* | Endangered | Historical/1925 |
| Silvery Aster | *Symphyotrichum concolor var. concolor (Aster concolor)* | Endangered | Historical/1918 |
| Flax-Leaf Whitetop | *Sericocarpus linifolius (Aster solidagineus)* | Threatened | Historical/1921 |
| Coastal Goldenrod | *Solidago latissimifolia (Solidago elliottii)* | Endangered | Historical/1919 |

It should be noted that four of the above species are listed under a different scientific name in 6 NYCRR Part 193.3; however, the common names are the same as those identified by the NYNHP letter. It is important to note that all of the species listed are considered "historical" entries in the NYNHP database. Eight of the species were last reported in the area between 1919 and 1928, or between 80 and 90 years ago. One species was last reported as late as 1936, over 70 years ago.

Four of the above plants, including Collins' Sedge *(Carex collinsi)*, Catfoot *(Pseudognaphalium helleri ssp micradenium* now *Gnaphalium helleri* var. *micradenium)*, Silvery Aster *(Symphyotrichum concolor var. concolor* now *Aster concolor)*, and the Coastal Goldenrod *(Solidago latissimifolia* now *Solidago elliottii)* are endangered native plant species in New York State (6 NYCRR Part 193.3b). Endangered species are any species which meet one of the following criteria: (1) are native species in imminent danger of extirpation or extinction in New York; or (2) are species listed as endangered by the United States Department of the Interior in the Code of Federal Regulations (50 CFR part 17 [see section 182.1a(1) of this Part]). This species is classified as having typically 6 to 20 occurrences, few remaining individuals, limited acreage, or miles of stream or other factor of its biology making it especially vulnerably to very vulnerable in New York. The four plant species were not observed on the site.

The remaining five (5) species, Hairy Small-leaf Tick-Trefoil *(Desmodium ciliare),* Slender Crabgrass *(Digitaria filiformis),* Velvety Bush Clover *(Lespedeza stuevei),* Southern Yellow Flax *(Linum medium* var. *texanum),* and Flax-Leaf Whitetop *(Sericocarpus linifolius,* now *Aster solidagineus)* are threatened native plant species in New York State (6 NYCRR Part 193.3c). Threatened native plants are those species likely to become endangered within the foreseeable future throughout all or a significant portion of their ranges in the state. Listed plants are those with six to fewer than 20 extant sites, or 1,000 to fewer than 3,000 individuals, or restricted to not less than four or more than seven USGS 7.5 minute series maps, or species listed as threatened by the United State Department of Interior in the Code of Federal Regulations.

Two of the above native plants, Collins' Sedge (*Carex collinsii)* and the Coastal Goldenrod *(Solidago latissimifolia* now *Solidago elliottii),* both endangered species, are considered "Obligate Wetland" (OBL) plant species in this region. An OBL plant species occurs almost always (estimated probability 99%) under natural conditions in wetlands. As discussed previously, this site does not contain any wetlands, nor are there any in the area of the subject site. Therefore, these species will not be found on the site or in the area.

Similarly, Southern Yellow Flax, also known as Stiff Yellow Flax *(Linum medium* var. *texanum),* is usually found in rocky habitat, open woods, prairies, glades, as well as sandy and muddy lakeshores. It is also typically found in acid soils. While some suitable habitat might exist on site, it would likely be too dry for this species. This species was not observed on the site.

Slender Crabgrass *(Digitaria filiformis*) is found in sandy soil or sterile open ground. Likewise, Hairy Small-leaf Tick-Trefoil *(Desmodium ciliare*) is found in medium to dry soils, full sun. This specie is extremely drought tolerant. Conditions suitable for both of these species are found on site. As noted previously, a small grouping (+/- 15 feet in diameter) of the Hairy Small-leaf Tick-Trefoil *(Desmodium ciliare*), a threatened species, was identified in approximately the center of the site. No Slender Crabgrass *(Digitaria filiformis*) was found on the site during field investigation.

Velvety Lespedeza *(Lespedeza stuevei*), Catfoot *(Pseudognaphalium helleri ssp micradenium,* now *Gnaphalium helleri* var. *micradenium*), Flax-Leaf Whitetop *(Sericocarpus linifolius,* now *Aster solidagineus*) and the Eastern Silvery Aster *(Symphyotrichum concolorvar concolor,* now *Aster solidagineus*) are all found in similar habitats. These species prefer dry, sandy open woods and forest clearings, such as oak-pine woods and barrens, as well as roadsides. Portions of the site would contain habitat that would be appropriate for these species. Furthermore, with the exception of the Flax-Leaf Whitetop *(Sericocarpus linifolius,* now *Aster solidagineus*), all of the other species would have been in bloom during field inspection, with the flowering period of the *A. solidagineus* having just past. Given the relatively sparse vegetation on site, the flowering periods, and the other characteristic of these species, they should have been evident during field investigation if they were present on site. None of these species were observed on site during field investigations.

As noted, suitable habitat exists for some of the species listed above. However, only one of the species was identified as being on site, the Hairy Small-Leaf Tick-Trefoil *(Desmodium ciliare*). The proposed project will remove the *D. ciliare* as well as eliminate potential habitat of the other species listed above from the site if they are found there. Again, it should be noted that all of the listings provided by the NYNHP database are "Historical," most of which have not been reported in the area for almost 90 years.

Both exploitably vulnerable and threatened protected native plants are given the same protection under New York State Conservation Law. In order to control the "causal factors," 6 NYCRR Part 193.3(f) states that: *"It is a violation for any person, anywhere in the state, to pick, pluck, sever, remove, damage by the application of herbicides or defoliants, or carry away, without the consent of the owner, any protected plant. Each protected plant so picked, plucked, severed, removed, damaged or carried away shall constitute a separate violation."* No endangered or rare plant species, as defined under 6 NYCRR Part 193.3(b) and (d), were found on site.

**Wildlife Setting**

The abundance and diversity of wildlife on site is determined by available habitat on and adjacent to a site. This site represents the largest vacant parcel in the area. Most of the areas surrounding the site are office and industrial facilities consisting of hard surfaces (paving, buildings, etc.), landscaping and a few, small, isolated wooded spots left within individual developed sites.

The high-density commercial/industrial development in the vicinity has left the subject site, for the most part, as an isolated "natural" area surrounded by development. Due to the mobility and home range size of many wildlife species, wildlife will be expected to use the subject site and the adjoining habitat areas as a whole. It is expected that only human-tolerant species of wildlife will use the adjoining developed sites and the subject site.

For discussion purposes, the wildlife found on site has been divided into their respective groupings: Birds, Mammals and Reptiles/Amphibians. The following is a discussion of the species that are expected to be common to the site based on the existing habitats on-site and in the immediate surrounding areas. These discussions are also based upon the field inspections conducted. The discussion and lists are not meant to be all-inclusive, but are intended to provide a representation of the wildlife found or expected to be found on site

Birds

Bird species are the most common and abundant of the wildlife species found and expected to be found on the site. Birds that prefer a mix of woodland, edge and urban habitats are the most likely to be present on the property because of the existing habitat on and surrounding the site. Species that are considered forest interior species, that is those that are secretive, not tolerant of human activity, and require large undisturbed natural habitats, will not be present on site. Generally, these latter species are also the species that are protected by the NYSDEC, under 6 NYCRR Part 182, since human activity has reduced and limited potential habitat for them.

Table 8 is a list of the bird species observed or expected on site given the habitats both present and in the immediate area of the site. This list is not meant to be all-inclusive, but provides a detailed representation of what was or may be found on site.

**Table 8 – Bird Species List**

| Common Name | Scientific Name |
|---|---|
| house finch | Carpodacus mexicanus |
| common flicker | Colaptus auratus |
| rock dove | Columba livia |
| eastern wood-peewee | Contopus virens |
| American crow | Corvus brachyrhynchos |
| blue jay | Cyanocitta cristatta |
| gray catbird | Dumetella carolinensis |
| common yellowthroat | Geothlypis trichas |
| barn swallow | Hirundo rustica |
| northern mockingbird | Mimus polyglottos |
| song sparrow | Melospiza melodia |
| brown-headed cowbird | Molothroughs ater |
| house sparrow | Passer domesticus |
| black capped chickadee | Parus atricapillus |
| tufted titmouse | Parus bicolor |
| common grackle | Quiscalus quiscula |
| chipping sparrow | Spizella passerine |
| European starling | Sturnus vulgaris |
| brown thrasher | Toxostoma rufum |

| Common Name | Scientific Name |
|---|---|
| house wren | Troglodytes aedon |
| American robin | Turdus migratorius |
| eastern kingbird | Tyrannus tyrannus |
| red-eyed vireo | Vireo olivaceus |
| mourning dove | Zenaida macroura |
| white-crowned sparrow | Zonotrichia leucophrys |

Additional information regarding these species and others is found within Appendix K.

While few birds were observed during the field survey, seed-eating birds, including grosbeaks, finches, and sparrows, are expected to be relatively common on site. The most common sparrow that breeds on Long Island is the song sparrow; the introduced house sparrow is also abundant. Both species are found in forest openings, suburban areas and overgrown field habitats and are expected on site and in the surrounding areas.

Many sparrows are generally not tolerant of human activity, with the exception of the chipping sparrow, which is found to be abundant around man-made structures, and the white-crowned sparrow, which is often found in suburban areas and parks.

The northern mockingbird, brown thrasher, and gray catbird are thrasher species that are generally expected to utilize the site and surrounding areas, as this group generally prefers more open habitats. The American robin and the European starling both have similar habitat requirements as the thrashers. These species are common in fields and suburban areas, feed on insects and fruits, and are expected on site. With the exception of the brown thrasher, all of these species were directly observed on site.

Birds from the blackbird family also feed on a mix of insects, seeds, fruit and aquatic fauna. The grackle was observed on site and the brown-headed cowbird might be expected. These birds generally prefer open woodlands and field habitats and are probably found throughout the area as they are relatively tolerant of development. The cowbird is a nest parasite which lays eggs in the nests of other birds.

Two doves are found on Long Island -- these include the mourning dove and the introduced rock dove, also known as the domestic pigeon. Both are common in suburban areas, parks, cultivated fields and along roadsides. The mourning dove typically nests in overgrown areas and tangled vines, while the rock dove prefers to nest on buildings and other structures. Both dove species are likely to breed on site and in the local area. The mourning dove was observed on-site.

A few smaller insect feeding birds are found in overgrown areas, including the wrens and titmice. The house wren is the only wren expected on site. The house wren is commonly found in suburban areas and edge habitats, as well as in forest understory where it feeds on insects. The tufted titmouse and the black-capped chickadee were observed on site; all of these are year-round residents on Long Island. They typically breed in woodlands and are expected to forage on site. Similar birds which may also utilize the site outside of the breeding season are kinglets, which are winter visitors on Long Island and are found in both forested and open habitats.

A common Long Island swallow is the barn swallow which adjusts well to human activity. The barn swallow nests on barns and other buildings, but may use natural nest sites as well. It will nest in cavities of trees, but is also a common resident in nesting boxes and bird houses. The barn swallow was observed on site.

The site and surrounding area is suitable for use by raptor and owl species, most of which nest or roost in forested areas, preying primarily on small mammals in adjacent field and scrub habitats. The eastern screech owl is the most common owl on Long Island. The screech owl might nest on-site as it is relatively tolerant of humans.

Mammals

Table 9 contains a list of the mammal species that are expected to occur on site because of existing conditions in the area or immediately surrounding it. This list is not meant to be all-inclusive but was prepared as part of several field inspections to provide a detailed representation of what was or may be found on site.

**Table 9 – Mammal Species**

| Common Name | Scientific Name |
|---|---|
| eastern cottontail | Sylvilagus floridanus |
| eastern mole | Scalopus aquaticus |
| house mouse | Mus musculus |
| Raccoon | Procyon lotor |
| black rat | Rattus rattus |
| Norway rat | Rattus norvegicus |
| short-tailed shrew | Blarina breuicauda |
| eastern gray squirrel | Sciurus carolinensis |
| pine vole | Microtus pinetorum |

Additional information regarding these species and others is found within Appendix K.

Small rodents and insectivores such as mice, shrews and voles are the most abundant mammals expected on site, but a number of larger mammals may be present where suitable habitat is available.

Eastern moles are insectivores and are found on Long Island. This mole is found in a variety of upland habitats, including woodlands, fields and suburban lawns throughout the Island. Moles dig tunnels which are also used by mice and shrews. The species is probably most common in the rich soils of deciduous woodlands along the north shore; it is also found in pine barrens, dunes and salt marsh borders, but seems to avoid fresh water swamps and marshes.

Several rodents are found on Long Island. Mice are typically omnivorous, feeding on grasses, herbs, roots, tubers and, occasionally, small invertebrates. The white-footed mouse is abundant in a wide variety of habitats including wetlands, dry fields, woods and occasionally in buildings. It is one of the most common mammals on the Island. The house mouse, black rat, and Norway rat are introduced European species which prefer to be near human structures and are considered pests. These species are likely to be present on, as well as in, the vicinity of the site.

Of the larger rodents, the eastern gray squirrel is common on Long Island. Gray squirrels were abundant on site and are quite tolerant of humans, using both woodland and open habitats as long as large, nut bearing trees are present for foraging and nesting. On Long Island, they are most common in the oak woodlands of the north shore, but they are also present in pine barrens where they feed on pine seeds. The species may become a pest and individuals are often found in the attics of older buildings. The eastern gray squirrel was abundant on site and several squirrels and their nests were observed.

The eastern cottontail is the most common rabbit on Long Island. The cottontails occupy a variety of habitats including both dry and swampy woods, fields, bogs, dunes and shrublands. It is tolerant of humans and utilizes suburban lawns and gardens extensively if food is available.

The raccoon is common throughout Long Island but prefers brushy wooded habitats near water. The raccoon is tolerant of humans and may become a pest, foraging in trash cans, gardens and agricultural fields. They will occasionally cause damage by denning in attics and other structures. Tracks were observed on the site.

Amphibians and Reptiles

Although no reptiles or amphibians were observed on the property, the site may support a limited number of terrestrial species. Table 10 contains a list of the reptile and amphibian species that are expected to occur on site because of existing conditions in the area. This list is not meant to be all-inclusive, but was prepared as part of several field inspections to provide a detailed representation of what was or may be found on site.

**Table 10 – Reptile & Amphibian Species List**

| **Common Name** | ***Scientific Name*** |
|---|---|
| eastern milk snake | *Lampropettis d. triangulum* |
| eastern garter snake | *Thamnophis sirtalis* |

For the most part, reptile and amphibian species are considered less mobile than bird and mammal species; therefore, if suitable habitat is not on the site they would not be expected. Additional information regarding these species and others is found within the Appendix K.

Only two species of reptiles might be found on the property; these are the eastern garter snake and the eastern milk snake. All of these species are terrestrial species found in a variety of habitats. The garter snake is relatively tolerant of human activity, but prefers moist soils and would be most likely to be present in the successional woodlands on site. The milk snake is found in soils of varying moisture content. These snakes are all colubrid snakes, which means that they feed on whole animals such as worms, insects or small amphibians.

Since the site does not contain any water sources and since there are none in the area, there are no amphibians expected to occupy the site.

## 6.2 Probable Impacts of the Proposed Action

### Vegetation Impacts

It is projected that 12.66 acres of the site will be cleared to allow for the development. The impacts of the proposed project should be assessed in relation to a direct change in habitat, fragmentation and an increase in human activity. The proposed development plan would require clearing all of the Mined/Cleared Lands and the Successional Woodland on site. Table 11, below, provides a breakdown of the changes in habitats on site after the construction of the project.

**Table 11 – Proposed Site Quantities**

| | Areas | Percent | Change in Acres | Percent of Change |
|---|---|---|---|---|
| Landscaping | 124,349 sq. ft. (2.86 acres) | 22.55% | +2.86 | +100.00% |
| Paving - Hard Structures | 426,986 sq. ft. (9.80 acres) | 77.45% | +9.80 | +100.00% |
| Mined/Cleared Land | 0.00 | 0.00% | -8.91 | -100.00% |
| Successional Woodland | 0.00 | 0.00% | -3.75 | -100.00% |
| Total Site | 551,335 sq. ft. (12.66 acres) | 100.00% | 0.00 | 0.00% |

Landscaping

After the construction of the project, approximately 2.86 acres, or 22.55 percent of the site, will be replanted with landscape species and turf. The plantings are proposed within the landscaped islands in the parking areas and adjacent to the proposed structures. This type of habitat is not currently found on site. This habitat can be further defined under two of the NYNHP ecological communities: “Flower/Herb Garden” and “Mowed Lawn with Trees.” The following are the definitions of these communities as described by NYNHP:

**"Flower/Herb Garden:** residential, commercial, or horticultural land cultivated for the production of ornamental herbs and shrubs. This community includes gardens cultivated for the production of culinary herbs. Characteristic birds include American robin (*Turdus migratorius*) and mourning dove (*Zenaida macroura*)."

**"Mowed Lawn with Trees:** residential, recreational, or commercial land in which the groundcover is dominated by clipped grasses and forbs, and it is shaded by at least 30% cover of trees. Ornamental and/or native shrubs may be present, usually with less than 50% cover. The groundcover is maintained by mowing. Characteristic animals include gray squirrel (*Sciurus carolinensis*), American robin (*Turdus migratorius*), mourning dove (*Zenaida macroura*), and mockingbird (*Mimus polyglottos*)."

The types and density of plant material used during the landscaping of the project would increase the desirability of these new habitats to the wildlife species listed in the above descriptions, as well as other species. However, the limited and fragmented landscaped areas proposed will not benefit the majority of the wildlife species. Both of these ecological communities are distributed throughout New York State. They are ranked by NYNHP as being both global and State "secure."

Paving - Hard Structures

The proposed project will result in 9.80 acres, or 77.45 percent of the site, being in Paving - Hard Structures. Paving - Hard Structures would consist of paved roadways, parking fields, sidewalks and patios/terraces, as well as the proposed buildings. This would create a different habitat than is currently found on site. The following is a definition of the closest ecological communities to this habitat as described by NYNHP:

**"Paved road/path:** a road or pathway that is paved with asphalt, concrete, brick, stone, etc. There may be sparse vegetation rooted in cracks in the paved surface."

**"Urban structure exterior:** the exterior surfaces of metal, wood, or concrete structures (such as commercial buildings, apartment buildings, houses, bridges) or any structural surface composed of inorganic materials (glass, plastics, etc.) in an urban or densely populated suburban area. These sites may be sparsely vegetated with lichens, mosses, and terrestrial algae; occasionally vascular plants may grow in cracks. Nooks and crannies may provide nesting habitat for birds and insects, and roosting sites for bats. Characteristic birds include common nighthawk (*Chordeiles minor*) on rooftops, American robin (*Turdus migratorius*) on porches or under shelter, and exotic birds such as rock dove (*Columba livia*) and house sparrow (*Passer domesticus*)."

This ecological community is distributed throughout New York State. It is ranked by NYNHP as being both global and State "secure."

**Wildlife Impacts**

The change in the habitat types found on site will impact wildlife species, however, as discussed earlier, most of the wildlife expected to be found on site are those species that are tolerant of human activity because of the relatively small size of the existing habitats and the intensity of the surrounding land uses. However, the significant shift in the types of habitats will impact the types and densities of the species that will use the site after construction.

The proposed project will remove all of the natural habitats found on site. Species that require any type of wooded or old-field habitat will be displaced from the site, and those that require cover for nesting and larger ranges for foraging will be the most impacted. Therefore, the wildlife expected to use this area of the site are those species that prefer heavily-developed urban habitats and those that are extremely tolerant of human activity. The habitats found on the project site are expected to provide suitable habitat for a limited variety of wildlife. While the species that will ultimately occupy the site will be tolerant of human activity, all species, including the tolerant ones, will be impacted by the proposed clearing, change in habitat and resultant increase in human activity, especially during construction.

In determining impacts upon the existing wildlife populations, it is assumed that equilibrium in population size is established for each species as determined by availability of resources in the habitat. Thus, the removal of habitat will cause an impact on the abundance and diversity of wildlife using the site. Although the assumption that species are at equilibrium is an oversimplification, and population sizes of many species are controlled below the carrying capacity by other factors, it does provide a worst-case scenario in determining the impact of habitat loss.

In the short term, lands adjacent to the subject property will experience an increase in the abundance of wildlife populations due to displacement of individuals by the construction phase of the proposed project. Ultimately, competition between the displaced species and the species already utilizing the resources of the surrounding lands should result in a net decrease in population size for most species. The effect on the density and diversity of both local and regional populations should be minimal as the area represents only a small portion of the habitats available in the vicinity.

Birds

Literature suggests that many avian species are able to utilize both urban and suburban environments. Birds such as the crow, dove, blue jay, American robin, northern mockingbird, brown thrasher, gray catbird, grackle, and the brown-headed cowbird will be temporarily affected by development of the property. These birds usually adjust relatively well to human activity and while a few may occasionally utilize the remaining habitat on site, individuals will likely be displaced. Species such as the starling, robin, rock dove, catbird, brown headed cowbird, and mocking bird may remain relatively stable (although at a reduced density) following the construction phase of the project provided suitable nesting areas are available in the proposed landscaping.

Some smaller birds that also typically adjust well to development include the sparrows. These seed-eating species are generally found in wooded edge habitats and buffer zones and, thus, populations are likely to be limited to the larger areas of landscaping provided suitable food sources are included as part of the proposed landscaping. Species from these groups expected on site include the house sparrow, song sparrow, and house finch. The purple finch would likely decline in number on site following construction. The white-crowned sparrow may be present as a winter visitor. Populations of the majority of these species are likely to decrease following construction, or may only be an occasional visitor to the site. However, mitigation measures such as planting to increase diversity and vegetative cover will help these species to a limited extent. Species which should not be impacted, although their numbers will be reduced, include the introduced house finch, a pest which prefers to nest on buildings, as well as the chipping sparrow. No significant regional impacts are expected to these species due to the presence of suitable habitat elsewhere in the vicinity.

Other smaller, insect feeding birds such as the black-capped chickadee, tufted titmouse, and white-breasted nuthatch are also fairly tolerant of development as long as large trees with plenty of food sources remain. Numbers of these species are expected to decline due to loss of habitat, but some individuals may continue to utilize the proposed landscape trees after they have developed. The house wren is very tolerant of development, and no significant impacts to this species are expected.

The barn swallow may increase in numbers following development, as suitable nesting habitat for the species would increase. However, as humans typically destroy nest sites attached to structures, nest success of this species would likely decline.

The vireos are also relatively sensitive to development and will suffer local impacts from the proposed project.

The eastern wood peewee is more vulnerable to development, but is occasionally found in suburban habitats. Numbers of this species are expected to decline on site, although regional populations should not be significantly impacted.

Other species of birds which prefer a mix of woodland and field habitat would be displaced as a result of the proposed action. The density of the birds, as well as the number of species, would be expected to abandon the site due to the loss of habitat and intensity of human activity.

Mammals

The mammals found on the site will also be impacted by the proposed clearing, habitat loss and increase in human activity. As with the avian species, most species, especially intolerant species, are expected to relocate to other areas and local populations are expected to reach a lower equilibrium population density.

The short-tailed shrew is commonly found in open woodlands and field habitats but can live in a variety of habitats and will use several different food sources. Although limited numbers may potentially utilize the landscaped areas, the number of individuals is certain to decrease at the site. It is likely that local populations of this shrew will be impacted, but regional population change should not be significant.

The eastern mole is commonly found in woodlands and field habitats with sandy or light loamy soils. They are also common in lawns and landscaped areas when their preferred habitat is destroyed or not available. The species has been known to utilize landscaped and revegetated areas; however, those revegetated areas proposed on the project site are not expected to provide suitable habitat. As such, impacts to individuals currently utilizing the project site are expected.

The house mouse and Norway rat are introduced pests found in or near humans in field habitats, with the Norway rat and black rat also found in urban settings near moist areas. They will eat almost anything and usually cause problems for homeowners. Populations may increase slightly subsequent to development.

The eastern gray squirrel prefers hardwood forests with large, nut-producing trees. Squirrels usually adjust quite easily to urban areas where larger trees remain for feeding and nesting, and are expected to use the landscaped areas and remaining buffers. Relocated squirrels have been known to cause extensive damage to houses by gnawing holes in roofs and eaves to gain access to shelter. Maintaining the buffer areas will help to reduce the impacts to this species; local populations will likely be reduced. However, given the minimal habitat that will remain following development, populations are likely to relocate.

The eastern cottontail seems to do well in both suburban and natural habitat, which may be due in part to its variable home range, which varies from 1/2 acre up to 40 acres depending on conditions. It also has a large number of food sources that are available in almost any setting. If present, local populations will decrease and it is expected that this species would relocate to a more preferred habitat in the general area.

Development of the existing habitat will also have impacts on raccoon population. These species prefer wooded areas with brush and hollow logs to den in. The raccoon has a variable home range of about one to two miles. These species are some of the most common nuisance animals to homeowners. If the natural habitat is removed, these species may invade under buildings, attics and chimneys in search of places to den. No suitable habitat will remain within the development portion. The raccoon also forages for food in neighborhood garbage cans. Clearing of the site may push some individuals into the surrounding areas, but no significant regional impact is expected given their tolerance of humans and existing habitats in the general area.

Amphibians and Reptiles

The incidence of reptiles on the site is expected to be low in both density and diversity and no amphibians are expected. Although the reptiles species which may be found on site could adjust well to suburban areas, they are often less mobile than avian and mammal species and likely to suffer direct elimination during construction. Any individuals that are destroyed are not likely to be replaced from populations remaining in the vicinity of the site, as no suitable habitat will remain. There will be local impacts to snake species if they exist on site.

In conclusion, the use of plant material that would provide cover for nesting and foraging, as well as various food sources (seeds, nuts, berries, etc.), would help to increase the diversity and density of wildlife species, particularly bird species, after construction of the proposed project.

To supplement the ecological investigation described in the preceding sections of this document, consultations were undertaken, on behalf of the applicant, with the NYNHP, with respect to the potential presence of rare species or ecological communities at the subject property. As indicated in Section 6.1, NYNHP identified nine vascular plant species, listed as either endangered or threatened, were identified as being found in the vicinity of the site. None of the endangered plant species were found on the site. Of the five threatened species, only one was found on the site. However, the protection afforded to a threatened species, pursuant to 6 NYCRR Part 193.3(f), prohibits the destruction or removal of such species by parties other than the owner without consent. The owner of the property on which a threatened plant species is found is not prohibited from removing.

## 6.3 Proposed Mitigation Measures

Extensive landscaping is proposed, including a wide variety of plant species, which will provide diverse vegetative cover within landscaped areas and thus may reduce adverse impacts upon certain wildlife species. Furthermore, as identified on the landscaping plan (see Appendix A), effort has been made to include native species in the proposed variety of species to the maximum extent practicable.

# 7.0 COMMUNITY SERVICES AND UTILITIES

## 7.1 Existing Conditions

### Community Facilities and Services

The subject property is within the Hauppauge Union Free School District and the service areas of the Hauppauge Fire Department and the Suffolk County Police Department – Fourth Precinct. As the subject property is presently undeveloped, no school-aged children reside at the subject property and no significant demand for fire and police protection services exists. Additionally, no solid waste is generated.

### Utilities

The subject property is presently undeveloped, and thus, no demand exists for utilities, including electricity, natural gas, potable water, or sewage facilities.

## 7.2 Probable Impacts of the Proposed Action

### Community Facilities and Services

Educational Services

The subject property exists within the Hauppauge Union Free School District. To evaluate the potential number of school-aged children that could be generated, three published sources were reviewed, including:

- National Association of Home Builders. *Study Finds Multifamily Construction Does Not Contribute to School Crowding*. September 2004;

- Rutgers University Center for Urban Policy Research. *Residential Demographic Multipliers – Estimates of the Occupants of New Housing*. 2006; and

- Urban Land Institute. *Development Impact Assessment Handbook*. 2004.

The increase in population would result in the generation of school-aged children. Based on the Rutgers Study, each of the proposed one-bedroom units would generate 0.14 school-aged children, and each of the two-bedroom units would also generate 0.14 school-aged children.[11] Applied to the 150 proposed units, the data indicates that approximately 21 school-aged children would be generated. The Rutgers Study also presents specific data for the projected number school-aged children that would be expected to attend public school. According to same, the factors include 0.10 school-aged children per one-bedroom unit and 0.05 school-aged children per two-bedroom unit[12] or a total of nine school-aged children in the 150-unit building attending public school.

Based on the National Association of Home Builders, *Study Finds Multifamily Construction Does Not Contribute to School Crowding*, September 7, 2004, a factor 0.119 school-aged children per housing unit is provided.[13] When applied to the proposed 150 residential units, approximately 18± school-aged children would be generated.

Based on the Development Impact Assessment Handbook (2004) published by the Urban Land Institute, condominium factors of 0.1393 school-aged children per two-bedroom unit and zero school-aged children per one-bedroom unit are provided.[14] When applied to the proposed development, approximately 19 school-aged children would be generated.

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[11] Represents the rates for owner-occupied units within structures with greater than five units, in New York, with values greater than $269,500 for one-bedroom units or greater than $329,500 for two-bedroom units.
[12] Represents the rates for owner-occupied units within structures with greater than five units, in New York, with values greater than $269,500 for one-bedroom units or greater than $329,500 for two-bedroom units.
[13] Represents the rate for owner-occupied units within 20+-unit multi-family residential structures
[14] Represents the rates for townhouse units in the northeast United States.

Overall, therefore, the estimated number of school-aged children on the site would range from 18± to 21±, with 9± of these children expected to attend public school (i.e., Hauppauge UFSD) (based on the Rutgers Study).

Based on the latest publicly-available data for the Hauppauge Union Free School District,[15] enrollment among all grades is 4,143 students. Thus, the anticipated number of school-aged children to be generated by the proposed residential building would represent an increase in enrollment between 0.43 and 0.51 percent.

In order to confirm the projections made, a Freedom of Information request was filed with the Hauppauge Union Free School District, which provided information regarding the number of school-aged children that reside within representative existing multi-family, ownership residential communities within the Hauppauge Union Free School District. Four such communities were identified within the District, including the The Hamlet at Windwatch, Hauppauge Green, The Lakes at Honey Hollow, and Stonebridge Estates. The number of school-aged children and the number of residential units at each of these communities is presented below in Table 12**.**

**Table 12 - School-Aged Children in Existing Multi-Family Developments**

| Community | Number of School-Aged Children | Number of Residential Units | Number of School-Aged Children per Unit |
|---|---|---|---|
| **The Hamlet at Windwatch** | 9 | 228 | 0.039 |
| **Hauppauge Green** | 4 | 28 | 0.143 |
| **The Lakes at Honey Hollow** | 10 | 88 | 0.114 |
| **Stonebridge Estates** | 2 | 105 | 0.019 |
| **Totals** | **25** | **449** | **0.056** |

[15] Enrollment data is for the 2004-2005 school year, as provided via the New York State Education Department website at http://www.oms.nysed.gov/faru/Profiles/18th/webmasterfile0405.xls.

As indicated in Table 12, the average number of school-aged children per residential unit within the existing multi-family residential developments in the Hauppauge Union Free School District is approximately 0.056. Applied to the 150 proposed residential units, this factor yields an estimated nine school-aged children to be generated by the proposed development. As the projections above indicate that up to 21 school-aged children may be generated, such estimates are considered to be an overestimate.

As the anticipated number of school-aged children to be generated by the proposed project represents less than a 0.51 percent increase in enrollment within the Hauppauge Union Free School District (if you assume the conservative overestimate of 21 school-aged children), no significant adverse impacts upon same are expected.

Moreover, the proposed development is expected to generate approximately $1,518,883 in annual taxes to be received by the Hauppauge Union Free School District. Based on a per-pupil expenditure of $16,983,[16] and an estimated 21 school-aged children, the proposed development would represent a cost to the Hauppauge Union Free School District of $356,643. Therefore, based on these estimates, the development would result in an annual revenue of expenses to the Hauppauge Union Free School District of $1,162,240.

Emergency Services

The development of the site would increase the demand for fire protection and ambulance service, which is provided by the Hauppauge Fire Department. The proposed development will comply with the New York State building and fire codes to ensure adequate access for emergency services and sprinklering. The applicant will install hydrants and ensure adequate water pressure for fire protection. Finally, the residential building units and common areas will be equipped with central station monitoring equipment for early detection of fire.

[16] Per-pupil expenditure data is for the 2004-2005 school year, as provided via the New York State Education Department website at http://www.oms.nysed.gov/faru/Profiles/18th/webmasterfile0405.xls.

There are several multi-story buildings within the service area of the Hauppauge Fire Department, including the Windwatch Hotel, Marriott Hotel, and Computer Associates. Therefore, it is not anticipated that this proposed development would create a fire protection condition requiring new equipment.

A meeting was held between the applicant's representatives and representatives of the Hauppauge Fire Department. Subsequent to the meeting of March 25, 2008, the applicant requested a letter from the Hauppauge Fire Department detailing its concerns. As no such letter was provided, the applicant compiled a list of the issues raised during the meeting. The applicant has addressed each of the issues raised by the Fire Department to the maximum extent practicable, as follows.

- Preparation of a fire truck turning radius graphic demonstrating adequate intersection radii;
- Creation of a break in a median to allow left turn-in and turn-out movements;
- Addition of mountable "pork-chop" medians at site access points;
- Pruning of vegetation to meet vertical clearance requirements for fire truck maneuvering;
- Allowance of adequate vertical clearance in the proposed parking garages; and
- Provision of additional fire hydrants.

These measures were described within a letter prepared by the applicant, and sent to the Hauppauge Fire Department.

The subject property is within the jurisdiction of the Suffolk County Police Department – Fourth Precinct. To minimize the impact on the Police Department, the proposed residential building would be accessed only by keycard entry. This would minimize non-resident trespass. Also, the proposed development would include central station monitoring to determine the need for emergency services in the event of an alert. A private security provider would be contracted by the applicant to patrol the proposed development. Furthermore, the proposed lighting design will provide well-lit areas consistent with recommended light levels for security purposes.

Consultations were undertaken with the Suffolk County Police Department with respect to the proposed development and its potential impacts on the Department. The Suffolk County Police Department did not identify any significant adverse impacts to the Fourth Precinct, in which the subject property is situated, and indicated, in pertinent part, that the "Police Department will adapt as necessary to protect and serve the community as it grows" (see Appendix L). Based on the foregoing, it is not expected that the proposed development would have a significant adverse impact on the Police Department.

Solid Waste/Carting Services

Each of the land uses within the proposed development would generate solid waste, and a licensed carter would be used for pick-up and disposal off-site. Solid waste generation is projected as follows:

**Table 13 - Projected Solid Waste**

| **Use** | **Units** | **Factor**[17] | **Total Volume** |
|---|---|---|---|
| Residential Condominium | 150 units/281 persons[18] | 3.5 lbs per person per day | 0.492± ton per day |
| Hotel Rooms | 275 rooms | 3 lbs per room per day | 0.413± ton per day |
| Hotel – Conference Space and Meeting Rooms | 5,925 sq. ft. | 1 lb per 100 sq. ft. per day | 0.029± ton per day |
| Restaurant (Pads) | 450 seats | 2 lbs per meal served | 2.70± tons per day[19] |
| Retail | 15,000 sq. ft. | 13 lbs per 1,000 sq. ft. per day | 0.098± ton per day |
| Office | 16,922 sq. ft. | 1 lb per 100 sq. ft. per day | 0.085± ton per day |
| **Total** | | | 3.817 tons per day |

[17] Source: Salvato, Joseph; Nelson Nemerow and Franklin Agardy. 2003. *Environmental Engineering: Fifth Edition.* John Wiley & Sons, Inc. New Jersey. pp 768.
[18] Using factors of 1.77 persons per one-bedroom unit and 1.88 persons per two-bedroom unit, based on the Rutgers Study (see Section 3.2), the projected population for the residential component is 281± persons.
[19] Assumes 100 percent occupancy for lunch and dinner, and 6 daily turnovers in total (2700 meals per day).

As indicated in Table 13 above, the proposed development is projected to generate approximately 3.817 tons of solid waste per day. All solid waste generated on the site would be contained in concealed dumpsters (e.g., fenced and screened enclosures). The separation of waste materials on-site, including paper, cardboard, plastics and glass, for recycling purposes, would be undertaken.

A licensed private carter will serve the development, and all handling (including sorting) and disposal would be undertaken in accordance with established solid waste management practices. Thus, no significant adverse impacts to solid waste management practices would result.

**Utilities**

Implementation of the proposed action would result in the construction of 150 residential units, two hotels providing a total of 275 rooms, retail and office uses, and restaurant establishments. Thus, there would be a demand for electricity and natural gas from service providers (i.e., LIPA and KeySpan, respectively). Correspondence has been sent by the project engineers to LIPA and KeySpan (see correspondence within Appendix M), describing the proposed project and including the anticipated gas and electricity loads for all proposed uses. According to G.C. Eng & Associates, P.C., the overall electric load would be 8,867 kilovolt-amperes ("KVA"), and the overall natural gas load would be 18,620 cubic feet per hour ("CFH"). Letters indicating the availability of services have been issued by both LIPA and KeySpan (see correspondence within Appendix M).

As discussed in Section 5.0 of this DEIS, the proposed development would use approximately 103,998 gallons of potable water on a daily basis (including irrigation). The Suffolk County Water Authority has confirmed the availability of water via existing infrastructure within Motor Parkway. Specifically, a 10-inch main would extend from the existing 12-inch main within Motor Parkway to the west of the overall subject property. As such, no significant adverse impacts to water supply would be expected.

Sanitary waste generated by the proposed development would be accommodated by the existing Windwatch STP. The proposed development includes the creation of a sewage pump station at the southeast corner of the subject property to convey sanitary waste to the STP for treatment. An estimated 99,231 gpd of sanitary waste would be discharged to the Windwatch STP, for which, as discussed in Section 5.0, capacity would be available. Therefore, the volume of sanitary waste from the proposed development would not have significant adverse impacts on the Windwatch STP.

## 7.3 Proposed Mitigation Measures

The following measures would be incorporated into the project design or undertaken by the applicant to mitigate potential impacts upon community services and utilities:

- All of the buildings would be sprinklered and equipped with central station monitoring equipment for early detection of fire;

- The proposed residential building would be accessed only by keycard entry to prevent non-resident trespass. Also, the proposed development would include central station monitoring to determine the need for emergency services in the event of an alert and a private security provider would patrol the proposed development;

- The proposed lighting design will provide well-lit areas consistent with recommended light levels for security purposes;

- Use of computerized building management systems to maintain building efficiency;

- Use of high-performance glass windows;

- Use of energy-efficient appliances;
- Use of compact fluorescent light bulbs;
- Use of low-flow plumbing fixtures, so as to reduce the overall demand for potable water resources; and
- Provision of recycling facilities at convenient locations for use by site occupants.

# 8.0 TRANSPORTATION

## 8.1 Existing Conditions

A Traffic Impact Study was prepared by Dunn Engineering Associates, P.C. to assess the traffic impact of the proposed development with particular emphasis on its impact on the surrounding street and highway network. A summary of the analysis is included below and the Traffic Impact Study, in its entirety, is annexed hereto as Appendix N.

### Existing Roadway Network

The subject site is located on the southwest corner of the intersection of Motor Parkway and Veterans Memorial Highway, with direct access onto both Motor Parkway and Veterans Memorial Highway.

- Motor Parkway (Suffolk County Road 67) is a major east/west Suffolk County highway facility providing direct access to the site. In the vicinity of the proposed development, Motor Parkway contains two eastbound travel lanes and one westbound travel lane, with additional turning lanes at major intersections.

- Veterans Memorial Highway (New York State Route 454) is a major east/west New York State highway facility which also provides direct access to the site. However, in the vicinity of the site Veterans Memorial Highway traverses in a northwest to southeast direction consisting of two northwest bound travel lanes and two southeast bound travel lanes with additional turning lanes at major intersections.

- The Long Island Expressway, Interstate Route 495, consists of six east/west general purpose lanes (three in each direction). In addition, one High Occupancy Vehicle ("HOV") lane is also provided in each direction. Eastbound and westbound traffic destined to the site can enter and exit the Long Island Expressway at Exit 57, Veterans Memorial Highway.

- The Long Island Expressway North Service Road is a major westbound Suffolk County highway facility providing indirect access to the site. In the vicinity of the site the North Service Road provides three westbound travel lanes.

- The Long Island Expressway South Service Road is a major eastbound Suffolk County highway facility providing indirect access to the site. In the vicinity of the site the South Service Road provides two eastbound travel lanes with additional turning lanes at major intersections.

**Major Intersections**

The following intersections are located in the vicinity of the site and were investigated as part of this study:

- Motor Parkway at the Long Island Expressway South Service Road (signalized - west and south of the site).

- Motor Parkway at the Long Island Expressway North Service Road (signalized - west and south of the site).

- Veterans Memorial Highway at Motor Parkway (signalized - north of the site).

- Veterans Memorial Highway at the Long Island Expressway North Service Road (signalized - east and south of the site).

- Veterans Memorial Highway at the Long Island Expressway South Service Road (signalized - east and south of the site).

**Grades and Sight Distances**

In the vicinity of the site, Veterans Memorial Highway has a consistent down grade from northwest to southeast but there are no vertical curves which affect sight distance. There are no appreciable horizontal curves. As a result, no sight distance restrictions occur in the vicinity of the access drive on Veterans Highway.

Motor Parkway contains both a crest vertical curve as well as a horizontal curve along the site frontage. However, the proposed westerly site driveway is located at a significant distance west of these curves and adequate sight distance exists to provide for safe right turn in and out operation only. Although the easterly site driveway on Motor Parkway is in proximity to this condition, this driveway will provide for both left and right turns entering the site but only right turns exiting the site (with left turns out of the site being prohibited). Evaluation of conditions indicates that with clearing of existing vegetation on site west of the easterly driveway sight distance to standards can be achieved. Should the Suffolk County Department of Public Works require that a sight distance easement be provided to the west of the easterly site driveway, the applicant is willing to allow such easement as is necessary to maximize and maintain sight distance visibility to the west.

**Existing Traffic Volumes**

Available traffic flow information was obtained from the Suffolk County Department of Public Works. The 2007 Average Annual Daily Traffic ("AADT") on Motor Parkway in the vicinity of the site is approximately 11,299 vehicles per day.

Available traffic flow information was also obtained from the New York State Department of Transportation. The 2001 AADT on Veterans Memorial Highway in the vicinity of the site is approximately 22,290 vehicles per day.

An examination of the traffic volume information reveals that the peak traffic conditions occur during the weekday hours of 7:00 to 9:00 a.m. and 4:00 to 6:00 p.m. The available traffic volume information is contained in the section of the Appendix entitled "Traffic Volume Counts."

In addition, to supplement the available machine traffic count data, manual intersection turning movement counts were collected on a weekday from 7:00 A.M. to 9:00 A.M. and from 4:00 P.M. to 6:00 P.M. Manual intersection turning movement counts were also collected on a Saturday from 11:00 A.M. to 2:00 P.M. The manual counts were collected in June 2006.

Figures 4, 5 and 6, 2006 Traffic Volumes in the Traffic Impact Study (see Appendix N), present the traffic volumes that existed on the roadway network surrounding the site in June 2006 during the Weekday A.M., Weekday P.M. and Saturday peak hours, respectively. Figures 7, 8, 9, 2009 No-Build Volumes in the Traffic Impact Study (see Appendix N), present the projected volumes on the roadway network surrounding the site for the year 2009 during the Weekday A.M., Weekday P.M. and Saturday peak hours, respectively. The no-build volumes include a linear 1.5 percent per year normal traffic growth to account for growth of background traffic over the three-year period from the year when the manual counts were collected (year 2006) to the projected 2009 horizon (no-build) year.

**Accident Records**

Information was obtained from both the Suffolk County Department of Public Works and the New York State Department of Transportation regarding accidents that have occurred in the immediate vicinity of the site for the latest three years for which data is available. This data consists of computer generated verbal description summaries of each reportable and non-reportable accident case in the vicinity of the site. It should be noted that accident source documents (MV-104) are unavailable to private parties due to confidentiality concerns. Without the availability of the source documents needed in order to complete a more detailed accident analysis, only a general evaluation of accidents in the area can be made. The majority of the accident data reviewed was obtained from the Suffolk County Department of Public Works. This data on County roadways was available through 2005. Data on the sole NYSDOT roadway segment Veterans Memorial Highway was obtained from NYSDOT and reflect through 2007. Table 14 below presents the number of accidents that have occurred on Motor Parkway and Veterans Memorial Highway in the vicinity of the site.

## Table 14 – Accident Summary

| Location | Number of Accidents | | | |
|---|---|---|---|---|
| | 2000 | 2001 | 2002 | 2003 |
| Motor Parkway at the Long Island Expressway South Service Road | 14 | 30 | 36 | 19* |
| Motor Parkway between the Long Island Expressway North and South Service Roads | 0 | 0 | 1 | 1* |
| Motor Parkway at the Long Island Expressway North Service Road | 18 | 24 | 29 | 27* |
| Motor Parkway between the Long Island Expressway North Service Road and Veterans Memorial Highway | 2 | 1 | 2 | 1* |
| Motor Parkway at Veterans Memorial Highway | 35 | 32 | 40 | 12* |
| Veterans Memorial Highway between Motor Parkway and Long Island Expressway North Service Road | 7 | 6 | 10 | N/A |
| Veterans Memorial Highway at the Long Island Expressway North Service Road | 14 | 17 | 11 | N/A |
| Veterans Memorial Highway at the Long Island Expressway South Service Road | 15 | 13 | 10 | N/A |

***Source:*** Suffolk County Department of Public Works, N.Y. State Department of Transportation.
***Note:*** *Suffolk County Department of Public Works Accident Records to 11/18/2003.

**Existing Emergency Services**

The availability of police protection and fire protection services in the vicinity of the proposed site is excellent. The area of the proposed site is patrolled by the Fourth Precinct of the Suffolk County Police Department. At present, numerous Suffolk County Police patrols pass the site.

The site is located in the Hauppauge Fire District and the nearest firehouse is the Hauppauge Fire Department. The firehouse is located approximately 1 1/2 miles north of the site at 855 Wheeler Road. The firehouse is located on the east side of Wheeler Road (New York State Route 111) and on the north side of Veterans Memorial Highway.

Due to the proximity of the firehouse and the presence of police patrols, excellent emergency services are available to service the subject property.

## 8.2 Probable Impacts of the Proposed Action

**Site Trip Generation Analysis**

Information on trip generation rates for numerous land uses are contained in the Institute of Transportation Engineers (ITE) report *Trip Generation, Seventh Edition*. This report was utilized to determine trip generation rates for the proposed mixed-use development. Trip generation rates were determined for 150 units of residential condominiums, 15,000 square feet of retail space, 16,922 square feet of office space, two high-turnover (sit-down) restaurants (7,000 square feet each), a business hotel and an Embassy hotel to determine the total trip generation for the proposed development. It should be noted that trip generation estimates were prepared only for the trip-generating components of the proposed development.

The “Trip Generation” report contains a general listing for Residential Condominiums (Land Use Code 230) which is based on 59 field studies. This category was utilized to determine trip generation rates for the residential condominium component of the proposed development.

It should be noted that only residents of the 150 residential condominium units will have access to the fitness center, community space and an indoor/outdoor pool. As such, these additional uses will generate no outside demand but will tend to lessen trips made by residents because services will be provided on site. Therefore, trip generation estimates were prepared for 150 residential condominium units as users of the fitness center, community space and indoor/outdoor pool components will have been counted already among the total trips generated by the proposed residential condominium units.

The ITE describes a High-Turnover (Sit-Down) Restaurant (Land Use Code 932) as an eating establishment with a high turnover rate with turnover rates of approximately one hour or less. Generally, high-turnover (sit-down) restaurants serve lunch and dinner, may serve breakfast, and may be open 24 hours per day. The restaurants in this land use are often part of a chain operation and are moderately priced. This restaurant category was utilized to determine the trip generation for the two proposed restaurants in the development. The trip generation estimates for the two restaurants were determined for only the Weekday P.M. and Saturday midday peak hours as both restaurants will be closed during the Weekday A.M. peak hour.

Shopping Center (Land Use Code 820) and General Office Building (Land Use Code 710) were utilized to determine trip generation rates for the retail and office components of the proposed development. The trip generation estimates for the retail component were determined for both the Weekday A.M. and Weekday P.M. peak hours as well as the Saturday midday peak hour. For the office component, only the weekday A.M. and P.M. peak hour trip generation estimates were determined as the office building will be closed on Saturday.

The proposed business hotel will be similar to those categorized under Business Hotel (Land Use Code 312) and so the trip generation estimates for the proposed 100-room business hotel were determined using the ITE weekday A.M. and P.M. peak hour average trip generation rates.

The proposed Embassy hotel will contain 175 rooms, a 4,884 square foot conference/banquet room, and a small restaurant. Hotel (ITE Land Use Code 310) contains trip data based on studies of hotels offering similar amenities as the Embassy hotel proposed. For the purpose of trip generation, this category was utilized to determine trip generation estimates for the proposed Embassy hotel.

It is noted that the proposed site plan for Islandia Village Center includes an approximately one-half acre area central to the site referred to as the Village Green. This area is intended to be deeded to the Village of Islandia for Village use. The exact use of this area for events held by the Village is unknown. Although it may be utilized as a venue for small concerts or other events any such use would be intermittent and at this point is not defined. An attempt at predicting the potential traffic generation, and impacts, of any of these events would be difficult to do with any accuracy. In addition, in the performance of impact studies for site developments it is not common practice to evaluate and design for events that take place on an irregular or infrequent basis. For the reasons noted above, this study does not attempt to evaluate traffic that may occasionally occur due to the use of the Village Green but focuses on the daily recurring activity of the conventional uses on the site.

Table 15 presents the site-generated traffic estimates anticipated during the Weekday A.M. and Weekday P.M. peak hours as well as the Saturday Midday peak hour.

## Table 15 – Summary of Site-Generated Traffic

| Component | Use | Weekday A.M. Peak Hour | | Weekday P.M. Peak Hour | | Saturday Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | Enter | Exit | Enter | Exit | Enter | Exit |
| Residential | Residential Condominiums<br>150 Units<br>(Land Use Code 230) | 12 | 59 | 56 | 28 | 46 | 40 |
| Retail | Shopping Center<br>15,000 S.F.<br>(Land Use Code 820) | 30 | 20 | 86 | 93 | 131 | 121 |
| Office | General Office Building<br>16,922 S.F.<br>(Land Use Code 710) | 40 | 5 | 17 | 81 | N/A | N/A |
| Restaurant | High-Turnover (Sit-Down) Restaurants<br>2-7,000 S.F. each<br>(Land Use Code 932) | N/A | N/A | 93 | 60 | 176 | 104 |
| Lodging | Business Hotel<br>100 Rooms<br>(Land Use Code 312) | 34 | 24 | 37 | 25 | 37 | 25 |
| | Hotel 175 Rooms<br>(Land Use Code 310) | 68 | 49 | 60 | 62 | 76 | 76 |
| Total | | 184 | 157 | 349 | 349 | 466 | 366 |

**Note1:** The proposed hotel will be a full-service hotel which provides amenities including a restaurant, conference facilities, spa, and ancillary shops and services.

Review of the trip generation data above demonstrates that the highest site-generated traffic can be expected to occur on a Saturday during the midday period when an estimated 841 vehicle trips per hour will be generated by the proposed mixed-use development (471 in and 370 out). During the Weekday P.M. peak hour, the proposed mixed-use development is expected to generate 698 vehicle trips per hour (349 in and 349 out). During the Weekday A.M. peak hour, trip generation at the site will be lower when the site-generated traffic is expected to be 502 vehicles per hour (268 in and 234 out).

It should be noted that not all of the site-generated traffic to the proposed mixed-use development will be new traffic added to the adjacent street system. Land uses such as discount stores, shopping centers, supermarkets, retail centers, retail establishments, certain restaurants, banks, service stations, and convenience markets attract traffic from the passing stream of traffic.

The ITE notes that where this phenomenon occurs, trips can be broken down into the following three categories: primary trips, diverted linked trips, and pass-by trips. A primary trip for shopping is one in which the purpose of the trip is to go to and from the shopping site. The trip pattern is generally home-to-shopping site-to-home. A diverted linked trip or a pass-by is one in which the shopping destination is a secondary part of the primary trip, such as work-to-shopping site-to-home. The diverted link trip involves a route diversion from one roadway to another, for example, to reach a shopping center or retail store. The pass-by-trip comes directly from the traffic stream passing the facility on the adjacent street system and does not require a diversion from another roadway. It is essential that this phenomenon be recognized when examining the traffic impact of such a development on the street system.

Information presented in the *Trip Generation* report indicates that up to 89 percent of traffic patronizing shopping centers is already on the roadway network for another purpose. For the purposes of this study a 25 percent pass-by credit was used for the retail component on weekday mornings and afternoons, and a 20 percent pass-by credit was used for the retail component on Saturdays. No credit for internalizing traffic was taken. In this manner, a conservative estimate of the traffic generated by the retail component was presented.

Information presented in the *Trip Generation* report indicates that up to 63 percent of traffic patronizing high-turnover restaurants is already on the roadway network for another purpose. For the purpose of this analysis, a pass-by credit of 40 percent has been used. No credit for internalizing traffic was taken. In this manner, a conservative estimate of the traffic expected to be generated by the proposed restaurant is presented.

Table 16 below presents the adjustments for pass-by for the affected components of the proposed development. The unaffected, and therefore, unadjusted components are also included in Table 16 along with the net traffic expected on adjacent streets.

**Table 16 - Adjusted Site-Generated Traffic Summary**

| Component | Use | Weekday A.M. Peak Hour | | Weekday P.M. Peak Hour | | Saturday Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | Enter | Exit | Enter | Exit | Enter | Exit |
| Residential | Residential Condominiums<br>150 Units<br>(Land Use Code 230) | 12 | 59 | 56 | 28 | 46 | 40 |
| | Residential/Retail<br>Internal Credit | -1 | -7 | -11 | -8 | -8 | -7 |
| | Residential/Office<br>Internal Credit | -0 | -1 | -1 | -0 | N/A | N/A |
| | Residential/Restaurant<br>Internal Credit (10%) | N/A | N/A | -5 | -2 | -4 | -4 |
| | Net Traffic | 11 | 51 | 39 | 18 | 34 | 29 |
| Retail | Shopping Center<br>15,000 S.F.<br>(Land Use Code 820) | 30 | 20 | 86 | 93 | 131 | 121 |
| | Retail/Residential<br>Internal Credit | -7 | -1 | -8 | -11 | -7 | -8 |

| Component | Use | Weekday A.M. Peak Hour | | Weekday P.M. Peak Hour | | Saturday Peak Hour | |
|---|---|---|---|---|---|---|---|
| | | Enter | Exit | Enter | Exit | Enter | Exit |
| | Retail/Office Internal Credit | -0 | -1 | -2 | -3 | N/A | N/A |
| | Pass-By Credit (25%/20%) | -5 | -4 | -19 | -19 | -24 | -22 |
| | Net Traffic | 18 | 14 | 57 | 60 | 100 | 91 |
| Office | General Office Building 16,922 S.F. (Land Use Code 710) | 40 | 5 | 17 | 81 | N/A | N/A |
| | Office/Residential Internal Credit | -1 | -0 | -0 | -1 | N/A | N/A |
| | Office/Retail Internal Credit | -1 | -0 | -3 | -2 | N/A | N/A |
| | Net Traffic | 38 | 5 | 14 | 78 | N/A | N/A |
| Restaurant | High-Turnover (Sit-Down) Restaurants 2-7,000 S.F. each (Land Use Code 932) | N/A | N/A | 93 | 60 | 176 | 104 |
| | Residential/Restaurant Internal Credit (10%) | N/A | N/A | -2 | -5 | -4 | -4 |
| | Pass-By Credit (40%) | N/A | N/A | -36 | -22 | -68 | -40 |
| | Net Traffic | N/A | N/A | 55 | 33 | 104 | 60 |
| Hotels | Business Hotel 100 Rooms (Land Use Code 312) | 34 | 24 | 37 | 25 | 37 | 25 |
| | Hotel 175 Rooms (Land Use Code 310) | 68 | 49 | 60 | 62 | 76 | 76 |
| Total Gross Unadjusted Traffic | | 184 | 157 | 349 | 349 | 466 | 366 |
| Total Adjustments | | -15 | -14 | -87 | -73 | -115 | -85 |
| Total New Traffic on Adjacent Streets | | 169 | 143 | 262 | 276 | 351 | 281 |

**Directional Distribution Analysis**

In order to determine the origins and destinations of vehicles entering and exiting the proposed development, directional distribution analyses were performed. Because of the variety and nature of the proposed land uses, two separate directional distributions were developed, one for the proposed residential condominiums and another for the proposed retail office/restaurant/hotel components of the development, in order to establish the most suitable assignment of site-generated traffic for the overall development.

The directional distribution analysis for the proposed residential condominiums component of the development utilized demographic data available from the United States Census Bureau. Utilizing the available demographic data, the projected traffic patterns on the roadways in the study area were determined taking into account the nature of the available approach roadways and the proposed site driveway locations. It should be noted that both the New York State Department of Transportation office of Traffic Engineering and Safety and the Suffolk County Department of Public Works office of Highway Planning and Permits were provided with the proposed site plan and the Traffic Impact Study, for their review and comment, via correspondence dated October 5, 2007 (see Appendix N).

It was assumed that the directional distribution of traffic to the retail, office, restaurant, and hotel portions of the proposed development would be similar to that for a previously proposed development for this site. The directional distribution of traffic for a proposed hotel/office development was previously approved by the New York State Department of Transportation during its review of the Computer Associates Phase II expansion project. The arrival and departure patterns were based on analysis of employee zip code data with an adjustment for future relocation of a portion of Computer Associates work force east of the site due to new hires and employee relocation.

This overall distribution had been agreed to and was the basis of ongoing analyses associated with the Computer Associates project for the State. Traffic generated by the previously proposed hotel/office development was included as another development in the Computer Associates project.

The directional distributions for the previously proposed hotel/office development were utilized as a basis for the directional distributions for the retail, office, restaurant, and hotel components of the currently proposed development. The directional distributions were modified in the immediate vicinity of the site to reflect the current locations of the proposed four uses (retail, office, restaurant, and full-service hotel) and the proposed driveways. It is our understanding that the Computer Associates Phase II expansion has been indefinitely postponed.

Figure 10, Directional Distribution of Site-Generated Traffic-Residential Condominiums, included in the Traffic Impact Study in Appendix N of this DEIS indicates the percent of traffic that will arrive at and depart from the residential condominium portion of the development via the existing roadways. It should be noted that only right turns in and out will be permitted at the westerly site access driveway on Motor Parkway and at the site access driveway on Veterans Memorial Highway. At the easterly site access driveway on Motor Parkway, both left and right turns into and right turns out of the driveway will be permitted (left turns out of the easterly Motor Parkway access drive will be prohibited).

Figure 11, Directional Distribution of Site-Generated Traffic-Retail/Office/Restaurants/Hotels, included in the Traffic Impact Study in Appendix N of this DEIS, indicates the percent of traffic that will arrive at and depart from the retail, restaurant, and hotel components of the development via the existing roadways.

**Traffic Assignment Analysis**

The trip generation estimates for the proposed development and the directional distributions were utilized to assign the project site-generated traffic volumes at the proposed site access points and on the adjacent roadway network. Traffic assignment figures are included in the Traffic Impact Study in Appendix N of this DEIS.

**Planned Improvements**

Several roadway modifications have recently been completed on the adjacent roadway network. A brief explanation of these roadway improvements can be found below:

- Motor Parkway at the North and South Service Roads of the Long Island Expressway - The bridge structure over the Long Island Expressway, Rte. 495, between the North and South Service Roads has been widened providing six traffic lanes (three in each direction, including left turn lanes).
- Motor Parkway at Veterans Memorial Highway - As part of the traffic mitigation required for the proposed Computer Associates Phase II expansion changes to the operation of this traffic signal are planned. A protected/permissive westbound left turn arrow will be added to the existing traffic signal. It is Dunn's understanding this expansion has been indefinitely postponed.

The latest available Nassau-Suffolk Transportation Improvement Program ("TIP") does not list any projects involving the reconstruction and improvement of roadways serving the proposed development prior to its expected completion.

## Intersection Capacity Analysis

### Signalized Intersections

To determine the impact of the site-generated traffic on the adjacent roadways in the vicinity of the proposed mixed-use development, signalized intersection capacity analyses were performed at the signalized intersections noted below:

- Motor Parkway at the Long Island Expressway South Service Road;
- Motor Parkway at the Long Island Expressway North Service Road;
- Veterans Memorial Highway at Motor Parkway;
- Veterans Memorial Highway at the Long Island Expressway North Service Road; and
- Veterans Memorial Highway at the Long Island Expressway South Service Road.

The signalized capacity analyses were conducted at the referenced study intersections to examine traffic operations during the Weekday A.M. peak hour, Weekday P.M. peak hour, and Saturday peak hour. These intersection capacity analyses calculations were performed in accordance with the methodology set forth in the latest (2000) edition of the Highway Capacity Manual.

#### Methodology

The signalized intersection capacity analysis methodology evaluates the average control delay per vehicle to determine intersection level of service. Several variables impact the measure of control delay, including quality of progression, cycle length, green ratio, and volume-to-capacity (V/C) ratio for the lane group in question.

Level of service for a signalized intersection is defined in terms of the average control delay per vehicle during a peak 15 minute analysis period. Control delay consists of initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Six levels of service, from A to F, have been established as measures of vehicle delay. These levels and their related control delay criteria are summarized in Table 17.

**Table 17 - Signalized Intersections – Level of Service Criteria**

| Level of Service | Control Delay (seconds per vehicle) |
|---|---|
| A | <10.0 |
| B | 10.1 - 20.0 |
| C | 20.1 - 35.0 |
| D | 35.1 - 55.0 |
| E | 55.1 - 80.0 |
| F | >80.0 |
| ***Source:*** Highway Capacity Manual 2000, Transportation Research Board, National Research Council, Washington, D.C. 2000. | |

Intersection capacity analyses were first performed to examine the existing levels of service (2007 Existing Conditions). The manual counts collected in June 2006 were adjusted to 2007 by utilizing a linear growth factor of 1.5 percent per year to determine the total traffic that would be present on the roadways in the existing 2007 year. The 1.5 percent annual growth factor used in the 2009 No-Build Condition capacity analyses was based on the results of the NYSDOT's LITP 2000 planning study and is specific to the Town of Islip.

The capacity analyses were then rerun to examine the future 2009 levels of service before the development of the proposed site (2009 No-Build Condition). This examination projected the 2007 existing volumes to the 2009 horizon year with the same linear growth factor of 1.5 percent per year to determine the total traffic that would be present in the future 2009 year before the construction of the proposed development. The 2009 No-Build Condition also includes all of the roadway modifications recently completed in the vicinity of the site.

Next, capacity analyses were performed to examine future 2009 levels of service with the added traffic from the proposed mixed-use development (2009 Build Condition). This analysis reflects conditions which could be expected to prevail when the proposed mixed-use development is completed and opened/operating/occupied.

Finally, minor timing changes were made to the existing signal system to assure safe and efficient traffic flow in the vicinity of the site. Capacity analyses were performed to examine conditions with the addition of traffic from the proposed mixed-use development and the minor timing changes to the existing signal system (2009 Build Condition with Modifications). The results of these analyses are contained in Table 18. Detailed computer printouts with all input and output parameters can be found in the section of the Appendix to the Traffic Impact Study entitled "Intersection Capacity Analyses Results."

The results of the existing and no-build conditions signalized capacity analyses indicate overall existing and future No-Build capacity constraints at the majority of the intersections in the study area with these intersections operating below acceptable overall levels of service ("LOS") during at least one peak time period. The generally accepted definition of "acceptable" LOS is LOS D or better. These below acceptable operational standards conditions exist or will exist regardless of whether or not the proposed action is implemented. The only intersection where the added site traffic causes an impact in overall intersection operating conditions from the No-Build Condition is at the intersection of Veterans Memorial Highway at the Long Island Expressway North Service Road. At this intersection, the overall intersection LOS slips from LOS D in the No-Build to LOS E in the Build during the weekday P.M. peak period.

As part of the Traffic Impact Study, methods of improving the operation of the already capacity-constrained intersections were investigated. All of these intersections currently experiencing capacity problems as well as the impacted Veterans Memorial Highway/Long Island Expressway North Service Road intersection were improved with minor timing changes. The results of this analysis are presented in Table 18.

As can be seen in Table 18 below, the timing changes either resulted in No-Build overall intersection LOS being restored or resulted in improvement in overall intersection LOS when compared to the overall intersection LOSs under the No-Build Condition for one or more time periods.

## Table 18 - Summary of Signalized Intersection Capacity Analyses

| Location | Time Period | 2007 Existing (Note 1) | | | 2009 No Build (Note 2) | | | 2009 Build (Note 3) | | | 2009 Build with Modifications (Note 4) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LOS | Delay | V/C | LOS | Delay | V/C | LOS | Delay | V/C | LOS | Delay | V/C |
| Motor Parkway at the Long Island Expressway South Service Road | A.M. Peak Hour | C | 21.5 | 0.67 | C | 22.1 | 0.68 | C | 22.9 | 0.68 | N.I.N. | N.I.N. | N.I.N. |
| | P.M. Peak Hour | E | 76.5 | 0.89 | F | 85.0 | 0.91 | F | 83.1 | 0.91 | D | 36.0 | 0.91 |
| | Sat. Peak Hour | B | 18.5 | 0.33 | B | 18.6 | 0.34 | B | 19.0 | 0.36 | N.I.N. | N.I.N. | N.I.N. |
| Motor Parkway at The Long Island Expressway North Service Road | A.M. Peak Hour | D | 47.8 | 0.99 | E | 56.2 | 1.03 | E | 62.9 | 1.05 | D | 38.4 | 1.03 |
| | P.M. Peak Hour | C | 22.8 | 0.74 | C | 23.3 | 0.76 | C | 24.1 | 0.79 | N.I.N. | N.I.N. | N.I.N. |
| | Sat. Peak Hour | B | 18.0 | 0.35 | B | 18.1 | 0.36 | B | 18.2 | 0.39 | N.I.N. | N.I.N. | N.I.N. |
| Veterans Memorial Highway at Motor Parkway | A.M. Peak Hour | D | 45.3 | 0.88 | D | 42.0 | 0.90 | D | 47.4 | 0.96 | See Note 5 | | |
| | P.M. Peak Hour | F | 99.2 | 1.10 | F | 106.8 | 1.14 | F | 110.8 | 1.21 | | | |
| | Sat. Peak Hour | C | 33.1 | 0.46 | C | 28.0 | 0.47 | C | 31.4 | 0.63 | | | |
| Veterans Memorial Highway at the Long Island Expressway North Service Road | A.M. Peak Hour | F | 83.6 | 0.88 | F | 91.7 | 0.91 | F | 97.5 | 0.96 | D | 48.3 | 0.96 |
| | P.M. Peak Hour | D | 46.8 | 0.84 | D | 49.3 | 0.86 | E | 58.4 | 0.95 | D | 49.5 | 0.95 |
| | Sat. Peak Hour | E | 57.5 | 0.46 | E | 61.1 | 0.48 | E | 59.6 | 0.58 | C | 32.2 | 0.58 |
| Veterans Memorial Highway at the Long Island Expressway South Service Road | A.M. Peak Hour | E | 65.7 | 0.92 | E | 69.1 | 0.95 | E | 68.9 | 0.97 | D | 50.6 | 0.97 |
| | P.M. Peak Hour | E | 76.6 | 1.02 | F | 85.4 | 1.05 | F | 89.7 | 1.09 | E | 79.5 | 1.09 |
| | Sat. Peak Hour | C | 23.7 | 0.49 | C | 24.2 | 0.50 | C | 33.5 | 0.54 | C | 26.5 | 0.54 |

**N.I.N.:** No Improvement Necessary.

**Note 1:** The 2007 existing traffic volumes were determined by adjusting the traffic count data collected in June 2006 to the current 2007 year. The June 2006 manual counts were adjusting by utilizing a linear 1.5% per year normal traffic growth rate.

**Note 2:** 2009 No Build Condition includes a linear 1.5% per year normal traffic growth rate.

**Note 3:** Same as Note 1 and includes the traffic generated by the proposed development.

**Note 4:** Same as Note 2 and includes minor timing changes to the existing signal system.

**Note 5:** Refer to section to follow (Subheading **"Veterans Memorial Highway at Motor Parkway"**) for discussion of roadway improvements at this intersection and Table 19 for results of the **Supplemental Signalized Intersection Capacity Analysis**.

**Veterans Memorial Highway at Motor Parkway**

Further examination of Table 18 above, Summary of Intersection Capacity Analysis shows that during the P.M. peak hour there is a Level of Service "F" in the Existing and No-Build conditions at the intersection of Veterans Memorial Highway and Motor Parkway.

Although this Level of Service "F" is not caused by the proposed mixed-use development the operation of this intersection was analyzed again to look at ways to remedy the existing Level of Service "F" operation. An examination of Table 19 below, Summary of Supplemental Signalized Intersection Capacity Analysis, Veterans Memorial Highway at Motor Parkway, shows that an improved Level of Service "D" can be obtained in the P.M. peak Build Condition if the following roadway and traffic signal improvements are implemented by the NYSDOT or the SCDPW.

- Construct one (1) additional northbound through lane on Veterans Memorial Highway;
- Construct one (1) additional southbound through lane on Veterans Memorial Highway;
- Add a westbound left turn arrow on Motor Parkway to the existing traffic signal operation;
- Add an eastbound right turn overlap on Motor Parkway to the existing traffic signal operation; and
- Change the traffic signal timing to accommodate the roadway and traffic signal improvements.

**Table 19 - Summary of Supplemental Signalized Intersection Capacity Analysis**
**Veterans Memorial Highway at Motor Parkway**

| Location | Time Period | 2007 Existing | | | 2009 No Build with Improvements (Note 1) | | | 2009 Build with Improvements (Note 2) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | LOS | Delay | V/C | LOS | Delay | V/C | LOS | Delay | V/C |
| Veterans Memorial Highway at Motor Parkway | A.M. Peak Hour | D | 45.3 | 0.88 | D | 37.6 | 0.74 | D | 39.6 | 0.80 |
| | P.M. Peak Hour | F | 99.2 | 1.10 | D | 45.9 | 0.78 | D | 49.8 | 0.94 |
| | SAT. Peak Hour | C | 33.1 | 0.46 | C | 28.7 | 0.38 | C | 31.8 | 0.51 |

**Note 1:** 2009 No Build with Improvements Condition includes a linear 1.5% per year normal traffic growth rate and the roadway improvements described in this section.

**Note 2:** Same as Note 1 and includes the traffic generated by the proposed development.

The modifications noted above can eliminate the LOS F that currently exists during the weekday P.M. peak hour. These can be accomplished within the existing right-of-way. These improvements are not proposed by the developer of the mixed-use development but should be considered by the NYSDOT. The detailed computer printouts of the supplemental capacity analysis are contained in the section of the Appendix entitled "Intersection Capacity Analysis Results."

It should be noted that at this intersection the existing northbound left turn lane should be lengthened to accommodate the left turn volume expected during the 2009 Build Condition. The northbound left turn lane should be extended to a total distance of 400 feet.

**Unsignalized Intersections**

The proposed development will have two access points onto Motor Parkway and one access point onto Veterans Memorial Highway as noted below:

- Motor Parkway at the Proposed Westerly Site Access Drive;
- Motor Parkway at the Proposed Easterly Site Access Drive; and
- Veterans Memorial Highway at the Proposed Site Access Drive.

The westerly access drive on Motor Parkway will allow right turns only out of the site. It is proposed that an acceleration lane be constructed on Motor Parkway for exiting vehicles leaving the site via this driveway. Because an acceleration lane is being provided and this channelized right turn out of the driveway will be YIELD controlled, the interaction between the eastbound through traffic on Motor Parkway and the exiting site traffic will more likely operate like an exit ramp merge rather than an unsignalized intersection. For this reason, unsignalized capacity analyses were not performed at the westerly site access drive on Motor Parkway.

The proposed site access drive on Veterans Memorial Highway will allow right turns only into and out of the site due to the presence of a median on Veterans Memorial Highway in front of the access drive. It is proposed that both a deceleration lane and an acceleration lane be constructed on Veterans Memorial Highway for entering vehicles and exiting vehicles, respectively. The channelized right turn lane out of the site will be YIELD controlled. The provision of both a deceleration lane and an acceleration lane on Veterans Memorial Highway at the proposed site access drive allows both the entering and exiting site traffic to slow down or accelerate in a separate lane from the Veterans Memorial Highway southbound through traffic. As such, the interaction between the southbound through traffic on Veterans Memorial Highway and the entering site traffic will more likely resemble a ramp diverge rather than an unsignalized intersection. Likewise, the interaction between the southbound through traffic on Veterans Memorial Parkway and the exiting site traffic will operate similar to the proposed westerly site access drive (like an exit ramp merge) rather than a typical unsignalized intersection. For these reasons, unsignalized capacity analyses were not performed at the Veterans Memorial Highway site access drive as the gap analysis calculations that the HCS software performs and the level of services and delays for the movements involved are not applicable due to the geometric configuration of this site access drive.

Unsignalized intersection capacity analyses were performed at the Motor Parkway easterly site access drive to determine the ability of vehicles to safely negotiate turning movements at this four-legged unsignalized intersection. The site easterly access drive will allow both left and right turns into the site and right turns only out of the site. It is proposed that an acceleration lane be constructed on Motor Parkway for exiting vehicles leaving the site via this driveway. The channelized right turn lane out of the site will be YIELD controlled. The provision of an acceleration lane on Motor Parkway at the proposed easterly site access allows the exiting site traffic to accelerate in a separate lane from the Motor Parkway through traffic. Because an acceleration lane is being provided and this channelized right turn out of the driveway will be YIELD controlled, the interaction between the eastbound through traffic on Motor Parkway and the exiting site traffic will operate similar to an exit ramp merge rather than a northbound to eastbound right turn first stopping at a two-way stop-controlled intersection, looking for a gap in the eastbound Motor Parkway through traffic, and then accelerating into the conflicting traffic stream. For the reasons mentioned above, the exiting channelized right turn lane at the proposed Easterly Site Access Drive was not included in the capacity analyses completed for this access drive.

In examining earlier proposals for development of the subject site, the potential for construction of a traffic signal at the easterly driveway on Motor Parkway was evaluated. Subsequently, the Suffolk County Department of Public Works has indicated that they do not want this driveway signalized. Therefore, only unsignalized conditions were considered.

The unsignalized intersection capacity analyses that were completed for the Motor Parkway at the Proposed Easterly Site Access Drive intersection were performed for the 2009 Build Scenario in accordance with the methodology set forth in the 2000 edition of the Highway Capacity Manual.

Methodology

The unsignalized intersection capacity analysis methodology evaluates the average control delay per vehicle to determine level of service. Level of service for a two-way stop-controlled intersection is defined solely for each minor movement. Several variables impact the measure of delay for a two-way stop-controlled intersection, including the level of conflicting traffic impeding a minor street movement and the size and availability of gaps in the conflicting traffic stream.

Level of service for an unsignalized intersection is defined in terms of average control delay per vehicle during a peak 15 minute analysis period. Control delay consists of initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Six levels of service, ranging from A to F, have been established as measures of vehicle delay. These levels and their related control delay criteria are summarized in Table 20, Unsignalized Intersections - Level of Service Criteria.

**Table 20 - Unsignalized Intersections - Level of Service Criteria**

| Level of Service | Control Delay (seconds per vehicle) |
|---|---|
| A | ≤10.0 |
| B | 10.1 - 15.0 |
| C | 15.1 - 25.0 |
| D | 25.1 - 35.0 |
| E | 35.1 - 50.0 |
| F | >50.0 |
| ***Source:*** Highway Capacity Manual 2000, Transportation Research Board, National Research Council, Washington, D.C. 2000. | |

Table 21 below, summarizes the results of the analyses for the intersection of Motor Parkway at the Proposed Easterly Site Access Drive. A review of the results indicates that excellent levels of service (LOS B or better) are expected for westbound left-turning vehicles entering the easterly site access driveway with the low volume easterly office access opposite the proposed easterly site access drive operating at LOS D and LOS C during the weekday A.M. and P.M. peak hours, respectively.

**Table 21 - Summary of Unsignalized Intersection Capacity Analyses – Motor Parkway at the Proposed Easterly Site Access Drive, 2009 Build**

| Location/Movement | Flow Rate (pcph) | | | Movement or Shared Capacity (pcph) | | | Average Control Delay (sec./veh.) | | | Level of Service | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A.M. | P.M. | SAT. | A.M. | P.M. | SAT. | A.M. | P.M. | SAT. | A.M. | P.M. | SAT. |
| Eastbound to Northbound Left Turn From Motor Parkway Into the Easterly Office Access Opposite the Proposed Easterly Site Access Drive | 41 | 5 | 0 | 729 | 1045 | 1298 | 10.2 | 8.5 | 7.8 | B | A | A |
| Westbound to Southbound Left Turn From Motor Parkway Into the Proposed Easterly Site Access Drive | 37 | 73 | 100 | 920 | 825 | 1181 | 9.1 | 9.8 | 8.3 | A | A | A |
| Combined Southbound Left Turn/ Right Turn Approach | 10 | 84 | 0 | 180 | 277 | --- | 26.2 | 23.6 | --- | D | C | --- |

**Weekday Midday Traffic Conditions**

As part of the Traffic Impact Study and also to address one of the comments raised by Cashin Associates, P.C. after its review of the voluntary DEIS for the Village of Islandia, an examination of weekday midday traffic conditions was performed. This examination was performed to determine the need for weekday midday detailed capacity analysis at study intersections in evaluating the potential traffic impacts of the proposed development.

The first step in this process is the comparison of weekday midday traffic volumes on area roadways with those that occur during the traditionally analyzed A.M. and P.M. peak weekday commuting periods. As noted previously, traffic flow information was obtained from both the Suffolk County Department of Public Works and the New York State Department of Transportation. These available data captured entire day's worth of volume data, allowing for direct comparison of midday data to the traditional A.M. and P.M. peak periods. The two-way hourly traffic volumes on Motor Parkway (C.R. 67) and Veterans Memorial Highway (NYS Route 454), and the one-way hourly traffic volumes on the Long Island Expressway North and South Service Roads were compiled for these three periods and is compared in Table 22, Weekday Midday Peak Period Volume Comparison.

Table 22 presents the two-way midday peak hour volume (one-way, in the case of the North and South Service Roads) and the Weekday A.M. and P.M. peak hourly volume at specific locations on Motor Parkway, Veterans Memorial Highway, and the LIE North and South Service Roads side-by-side. Also presented is the percentage of the midday peak hour that the A.M. and P.M. peak hours represent. Values greater than 100 percent indicate a volume higher than the midday volume. These higher instances are shown shaded.

A review of the data indicates that all locations either the A.M. or P.M. volumes are higher, and in eight of ten instances, both are higher. This examination indicates that if capacity problems existed they would be evident in the analysis performed for the traditional peak periods.

The second part of this weekday midday evaluation involves the trip generation characteristics of the proposed Islandia Village Center development. The proposed development consists of a number of different uses on the site which can be categorized, in general, as residential, retail, office, restaurant and lodging. These uses represent the components of the development that drive the trip generation of the site.

**Table 22 - Weekday Midday Peak Volume Comparison**

| Loc. No. | Count Location | Weekday Midday Peak 2-Way Hourly Volume | Weekday A.M. Peak | | Weekday P.M. Peak | |
|---|---|---|---|---|---|---|
| | | | 2-Way Hourly Volume | Percent of Midday | 2-Way Hourly Volume | Percent of Midday |
| 1 | Motor Parkway, 800' South of the LIE South Service Road | 868 | 906 | 104.38% | 976 | 112.44% |
| 2 | Motor Parkway, 100' North of the LIE South Service Road | 776 | 957 | 123.32% | 750 | 96.65% |
| 3 | Motor Parkway, 500' East of the LIE North Service Road | 780 | 1149 | 147.31% | 1085 | 139.10% |
| 4 | Motor Parkway, 400' East of Veterans Memorial Highway | 822 | 1432 | 174.21% | 1369 | 166.54% |
| 5 | Veterans Memorial Highway, 400' East of Sycamore Avenue | 2568 | 2940 | 114.49% | 2958 | 115.19% |
| 6 | LIE North Service Road, 200' East of Lincoln Avenue | 211* | 1046* | 495.73% | 236* | 111.85% |
| 7 | LIE North Service Road, 1000' East of Motor Parkway | 1027* | 1736* | 169.04% | 1206* | 117.43% |
| 8 | LIE North Service Road, 1000' East of Blydenburgh Road | 273* | 993* | 363.74% | 427* | 156.41% |
| 9 | LIE South Service Road, 200' East of Lincoln Avenue | 234* | 173* | 73.93% | 1596* | 682.05% |
| 10 | LIE South Service Road, 1000' East of Motor Parkway | 1257* | 1436* | 114.24% | 2449* | 194.83% |

*Denotes 1-way hourly volumes as both the LIE North and South Service Roads service one-way traffic.
Shaded areas indicate time period peak is greater than Midday.

Weekday trip generation for the majority of the land uses is clustered around the traditional Weekday A.M. and P.M. peak hours of commuter periods. The highest level of hourly trips to and from office and residences occurs during the morning commuting times of 7:00 a.m. and 9:00 a.m. and 4:00 p.m. and 6:00 p.m. involving trips to and from places of employment. Published information on the off-peak (weekday midday) traffic generation characteristics is not included in the ITE *Trip Generation* publication. This may be due to the fact that midday traffic generation is lower and analysis of this period therefore not critical in gauging impacts.

Data on daily variation in retail shopping center is available in *Trip Generation*. This data indicates that between the hours of 10:00 a.m. and 2:00 p.m., a maximum of 7.6 percent of the daily traffic entering a shopping center does so within any 1 hour period. Likewise, a maximum of 8.4 percent of the daily traffic exiting a shopping center does so in a 1 hour period. In contrast, during the Weekday P.M. peak hour of 5:00 p.m. to 6:00 p.m., 10.3 percent of the daily entering traffic and 11.0 percent of the daily exiting traffic at the shopping center is expected to occur. This means that during the Weekday P.M. peak hour entering and exiting volumes can be expected to exceed midday volumes by 36 percent and 23 percent respectively. Clearly, the midday period does not approach weekday P.M. peak traffic levels for shopping centers.

The ITE *Trip Generation* publication does not include any data on the trip generation rates for the midday peak period for restaurants or lodging. Hotels generally have morning check-out times and afternoon check-in times.

It is assumed that the restaurant portion of the site will have a relatively high level of activity related to lunch time. However, the peak trip generation of the development as a whole is dominated by the retail, office, hotel and residential components which clearly peak outside of the midday weekday period.

Based on the foregoing, given that background traffic levels and site trip generation levels are lower during the weekday midday peak when compared to other peaks analyzed, it is concluded that analysis of weekday midday conditions is not warranted in determining potential traffic impacts.

Analysis of the conventional Weekday A.M. and P.M. peaks, and the Saturday peak will reveal project impacts. Therefore, this Traffic Impact Study presents a worst case scenario and no further additional roadway modifications beyond those already described in this report would be identified even if the weekday midday traffic conditions were examined.

**Examination of Proposed Access**

The points of access to the proposed development have been designed to be well-separated and to distribute traffic to the adjacent roadways at three points so as to minimize traffic congestion.

The site will have two access points onto Motor Parkway. The westerly access point will provide two lanes (one entering and one exiting). The westerly access drive will allow right turns only into and out of the site. The channelized right turn lane out of the site will be YIELD controlled. It is proposed that an acceleration lane be constructed on Motor Parkway for exiting vehicles leaving the site via this driveway.

The easterly access drive to Motor Parkway will provide two lanes (one entering and one exiting). The easterly access drive will allow both left and right turns into the site and right turns only out of the site. The channelized right turn lane out of the site will be YIELD controlled. It is proposed that an acceleration lane be constructed on Motor Parkway so that vehicles leaving the site have a lane separate from the through traffic on Motor Parkway in which to accelerate and adjust their speed. It should be noted that there are no intentions to signalize this easterly access drive as the Suffolk County Department of Public Works has indicated that they do not want this driveway signalized. However, should the Suffolk County Department of Public Works require that a sight distance easement be provided to the west of the easterly site driveway, the applicant is willing to allow such easement as is necessary to maximize and maintain sight distance visibility to the west.

The site will also have one access point onto Veterans Memorial Highway. This access drive will provide two lanes (one entering and one exiting). A median is present along Veterans Memorial Highway in front of the access drive. Therefore, the Veterans Memorial Highway access drive will allow right turns only into and out of the site. It is proposed that both a deceleration lane and an acceleration lane be constructed on Veterans Memorial Highway for entering vehicles and exiting vehicles, respectively. The channelized right turn lane out of the site will be YIELD controlled. The provision of both a deceleration lane and an acceleration lane on Veterans Memorial Highway at this site access will allow both the entering and exiting site traffic to slow down or accelerate in a separate lane so as not to unduly disrupt the flow of the southbound Veterans Memorial Highway through traffic.

**Roadway Modifications**

In order to enhance the flow of traffic and to maximize safety in the vicinity of the proposed development, the following significant roadway modifications are recommended:

- Motor Parkway at the Long Island Expressway South Service Road - Modify the weekday P.M. peak timing plan to allocate additional green time to the eastbound Long Island Expressway South Service Road Green Phase.

- Motor Parkway at the Long Island Expressway North Service Road - Modify the weekday A.M. peak timing plan to allocate additional green time to the westbound Long Island Expressway North Service Road Green Phase.

- Veterans Memorial Highway at Motor Parkway - (Refer to section with subheading “Veterans Memorial Highway at Motor Parkway” for discussion of roadway improvements at this intersection).

- Veterans Memorial Highway at the Long Island Expressway North Service Road: The following improvements are recommended:

    - Modify the weekday A.M. peak timing plan to allocate additional green time to both the westbound Long Island Expressway North Service Road Green Phase and the northbound Veterans Memorial Highway left turn lagging phase;
    - Modify the weekday P.M. peak timing plan to allocate additional green time to the westbound Long Island Expressway North Service Road Green Phase; and
    - Modify the Saturday Midday peak timing plan to allocate additional green time to the northbound Veterans Memorial Highway left turn lagging phase.

- Veterans Memorial Highway at the Long Island Expressway South Service Road: The following improvements are recommended:

    - Modify the weekday A.M. peak timing plan to allocate additional green time to the eastbound Long Island Expressway South Service Road Green Phase;
    - Modify the weekday P.M. peak timing plan to allocate additional green time to both the eastbound Long Island Expressway South Service Road Green Phase and the Veterans Memorial Highway Green Phase; and
    - Modify the Saturday Midday peak timing plan to allocate additional green time to the southbound Veterans Memorial Highway left turn lagging phase.

**Parking**

The proposed Islandia Village Center constitutes a multi-use development as it includes diverse land-use components including residential, retail, office, restaurants and hospitality. Conventional parking codes are intended to ensure adequate parking for various uses on stand-alone sites. In determining the quantity of parking that should be provided on this site it is important to recognize the interaction among these uses. Application of code requirements to a multi-use site, particularly those with complimentary uses, will result in significant over-parking. Over-parking results in unnecessary pavement and reduces site area available for other site elements such as landscaping, common areas and the Village Green.

The proposed site plan for Islandia Village Center may appear at casual observation to be somewhat lacking in parking provided. However, much of this perception is due to a significant portion of the provided parking being under buildings. In addition to what is evident, the plan provides 61 parking spaces under the large hotel and 263 parking spaces below the condominium building. In all, the proposed site plan includes a total of 802 parking spaces. These spaces are sufficient to meet the needs of the site given the proposed uses and their parking characteristics.

The concept of shared parking results in parking being provided on a site in order to account for the varying peak times of the uses on the site. It also accounts for the relationship of the uses on the site to each other. The proposed Islandia Village Center contains uses that make it an ideal candidate for the application of a shared parking strategy.

The Urban Land Institute ("ULI") is a non-profit education and research institute established in 1936 which today has more than 26,000 members in 80 countries. The ULI is the recognized international leader on issues related to land use and parking issues.

**Shared Parking**

The ULI defines shared parking as follows: “the use of a parking space to serve two or more individual land uses without conflict or encroachment.” The ability to share parking spaces is the result of two conditions:

1. Variations in the accumulation of vehicles by hour, by day, or by season at the individual land uses; and

2. Relationships among the land uses that result in visiting multiple land uses on the same auto trip.

The four non-residential components of the site will experience their peak parking needs at different times of the day and even days of the week. Hotel uses require their greatest amount of parking during the overnight period while offices, and retail require very little. Retail requires the most parking on the weekend when the offices require very little. The type of restaurants proposed require very little parking in the morning while the hotel may still require a significant amount early in the morning as the guests have not left yet.

In addition to variations in parking demand by time-of-day, individual land-uses peak parking demands also vary by weekday vs. weekend and month of year. Furthermore, the parking accumulation of visitors to a site varies from that of employees over time. When these variations are accounted for and all the uses on the site are considered together, the peak demand of the entire site can be determined. This actual peak demand can be significantly lower than the simple sum of the peak demands of the individual uses.

In addition to the consideration of time differences in parking peaks, the effect of internal capture on a multi-use site works to further reduce parking demands. Internal capture is best illustrated in the example of residents of the condominiums on the site patronizing the retail or restaurant uses. These persons utilize these uses but do not add to parking demand. Likewise, employees of the hotel, offices, restaurants, and retail, or even guests at the hotel will patronize other uses on the site.

**Shared Parking Site Analysis**

Given the different peak times needed to serve the parking needs of each use, the same parking areas can be used to serve the combined uses. Given these different peak times, the provision of parking to conventional code levels would result in a significant excess of paved areas on the site. Parking can be significantly reduced from conventional code levels and be sufficient to serve the site uses.

The ULI report *Shared Parking*[20] contains data on the various elements of shared parking and sets forth a procedure for shared parking analysis of a mixed use site. Prior to performing a shared parking analysis, components of the site which cannot or should not share parking spaces are isolated. In this case, the residential condominiums have indoor parking isolated from the rest of the site. It would be unreasonable to expect employees or visitors to the other uses on the site to use parking stalls within the condominium building. Therefore, this component is treated separately.

The condominium building, as proposed, provides 263 parking stalls. Given the 150 units proposed, parking is provided at 1.75 stalls per unit. This rate meets Village Code parking requirements for this use. As such, the parking provided for the condominiums is expected to be adequate to meet demand. The balance of the site, the parking areas that can be shared, contain 539 parking stalls.

[20] Smith, Mary S., Shared Parking, Second Edition, Washington, D.C.: ULI-The Urban Land Institute and the International Council of Shopping Centers, 2005.

It should be noted that in the shared parking analysis, while other uses will not take advantage of the condominium parking, residents of the condominium will patronize the proposed restaurants and retail space to an extent. They will likely do this without moving their vehicles out of the condominium lot. This will result in lower actual parking demands for the retail and restaurant space that is accounted for in a captive adjustment in the shared parking procedure.

The procedures set forth in the ULI Shared Parking report were utilized to determine the actual peak parking needs of the site as a composite. In this procedure, the quantity of parking required for each of the uses on an hourly, weekly, and monthly basis is determined. The sum of the demands for each of these uses represents the peak parking demand for the site at that particular time. Figure 25 of the Traffic Impact Study (see Appendix N of this DEIS) presents in graphical form, the projected demands of each of the four non-residential uses on the site at four times of the day.

The results of the shared parking analysis indicate that the peak period of parking demand on the site (excluding the condominiums) will occur at 6:00 PM on a weekend in July. At this time, the effects of the monthly and daily and hourly variations for each use and the effects of any captive adjustments result in the highest levels of parking demand over the course of the year. At that time, it is anticipated that 511 parking stalls will be needed to meet demand. The results of the analysis for 6:00 PM on a weekend day in July are summarized in Table 23 below. The data in Table 23 illustrates the various factors that are incorporated in the shared parking analysis. The analysis, in its entirety, is contained in the section of the Appendix entitled “Shared Parking Analysis.”

## Table 23 - Peak Parking Needs, July Weekend

| | | | | | | | | 6:00 P.M. | |
|---|---|---|---|---|---|---|---|---|---|
| **Land Use** | **Unit** | **Size** | **Independent Variable** | **Base Rate** | **July Monthly Adjustment Factor** | **Non-Captive Adjustment** | **Adjusted Number of Spaces Required** | **Time Factor** | **Required Spaces** |
| Hotel (Leisure) | Rooms | 175 | Visitor | 1.0 | 100% | 100% | 175 | 85% | 149 |
| | | | Employee | 0.18 | 100% | 100% | 32 | 60% | 19 |
| Meeting/Banquet | ksf GLA | 4.88 | Visitor | 30.0 | 100% | 60% | 88 | 100% | 88 |
| | | | Employee | N/A | 100% | 100% | 0.0 | 60% | 0 |
| Restaurant/Lounge | Empl. | 8 | Visitor | 0.0 | 98% | 20% | 0 | 55% | 0 |
| | | | Employee | 1.0 | 100% | 100% | 8 | 95% | 8 |
| Restaurant | ksf GLA | 14.0 | Visitor | 12.75 | 98% | 90% | 157 | 70% | 110 |
| | | | Employee | 2.25 | 100% | 100% | 32 | 95% | 30 |
| Shopping Center | ksf GLA | 15.0 | Visitor | 3.2 | 64% | 90% | 28 | 80% | 22 |
| | | | Employee | 0.8 | 80% | 100% | 10 | 85% | 8 |
| Office | ksf GLA | 16.9 | Visitor | 0.03 | 95% | 100% | 0 | 5% | 0 |
| | | | Employee | 0.35 | 95% | 100% | 6 | 5% | 0 |
| Hotel (Business) | Rooms | 100 | Visitor | 0.9 | 98% | 100% | 88 | 75% | 66 |
| | | | Employee | 0.18 | 100% | 100% | 18 | 60% | 11 |
| **Total Hourly Adjusted Parking Required, Weekday** | | | | | | | | | 511 |

It should be noted however, that this projection contains in its calculation assumptions that in this case will tend to overstate parking demand. These assumptions are related to hotel occupancy rates as well as the use of the meeting rooms in the larger of the hotels.

The Shared Parking base parking ratios reflect a 100% occupancy of rooms for weekdays at business motels and on weekends at leisure hotels, and a 90% occupancy of rooms on weekends at business hotels and on weekdays at leisure hotels. This assumption does not fall in line with and is in fact significantly higher than those on Long Island, based on historical data. A feasibility study performed for this site looked at historical occupancy rates at similar competing hotels within a radius of approximately 13 miles of the site. This research indicates that occupancy rates in this area have averaged 72.2% over the last 10 years. In 2007, this rate was 73.2%. Clearly, the percent occupancies assumed in the analysis overestimate what guest demand will actually be by 15 to 25%. In all likelihood, demand related to hotel guests will be lower than that predicted, resulting in a lower peak overall demand than forecast.

The second assumption regarding the hotels that is likely to overstate demand is Shared Parking's treatment of the meeting rooms in the larger hotel. The procedure does not contain a category for meeting rooms but treats this approximately 5,000 square feet of space as what is referred to as meeting/banquet space. A review of the previous Table 10 illustrates that this space is subject to a base parking rate of 30 spaces per 1,000 square feet. Even with the non-captive adjustment the procedure predicts a demand of 88 parking spaces at 6:00 P.M. on a weekend. It is the expectation that these rooms will be utilized for business meetings. It is unlikely that the number of persons that would need to be present to call for 88 parked vehicles on a weekend evening would be present, much less on a weekend.

Even with the conservative assumptions included in the shared parking analysis, it still results in a surplus of parking on the site.

As noted previously, not including the parking stalls within the condominium building, the site contains 539 parking stalls which can be shared amongst the balance of the uses on the site. The shared parking analysis indicates that the peak demand for these spaces will not exceed 511 spaces and that this demand will occur at 6:00 PM on a weekend day in July. At all other times the parking demand will be lower. This analysis indicates that even at this peak, a surplus of 28 vacant parking stalls will exist in the non-residential portions of the site. As such, the site plan for Islandia Village Center contains sufficient parking to serve the uses on the site.

Village Green Parking

The Village Green will be open for public use to visitors of the site and the residents of the Village of Islandia. While it is expected that the vast majority of the time, users of this space will be on-site already visiting a site use, it is acknowledged that periodically the site may be used by the Village for organized activities. These activities may draw a significant number of people to the site for an event and consequently require a significant number of parking spaces. As discussed above, given the conservative nature of a number of assumptions in the parking demand model, it is expected that additional surplus beyond the 28 spaces noted above will be available. As with any special event, parking accommodations must be considered prior and the need for potential off-site accommodation, perhaps in adjacent areas, considered. The developer of the site, and in the future site management, will work with the Village in coordinating these events to ensure accommodation.

The applicant and the Village will enter into an agreement requiring notice and coordination of the scheduling of any public assembly events at the Village Green. The scheduling of events at the Village Green will be limited to dates and times that do not coincide with the peak operational hours of Islandia Village Center restaurants and hotel conference center events.

**Bus Service**

It should be noted that not all residents, visitors, or patrons will drive to the site in a personal vehicle. Some may elect to utilize existing transit service and some may elect to car pool. Recent studies conducted by the NYSDOT indicate an average vehicle occupancy of 1.2 people on the Long Island Expressway in the vicinity of the site.

However, over 40 miles of HOV lane are available on the Long Island Expressway in the eastbound and westbound directions from Exit 32 to Exit 64. Due to the congestion in the general use lanes and the availability of the HOV lanes, it is expected that motorists, in general, will begin to use the HOV lane by carpooling to work. Thus, it can be expected that some residents, visitors, and patrons to the site will make use of the HOV lanes by carpooling.

There is currently one Suffolk County Transit bus that passes the vicinity of the site. This bus route is the S-54: Patchogue to Walt Whitman Mall. The S-54 bus traverses a route between the Village of Patchogue and the Walt Whitman Mall in Huntington. In the vicinity of the site the route travels along Veterans Memorial Highway and Motor Parkway in the vicinity of the site. Signed bus stops exists on both sides of Motor Parkway adjacent to the Metropolitan Life Insurance Site (just west of Islandia Village Center). Additional signed stops exist westbound on Motor Parkway opposite the site and on westbound Veterans Memorial Highway near Hoffman Lane. A bus passes the vicinity of the site every half hour in each direction.

In addition to the Suffolk County Transit Service that is available, the Long Island Rail Road Stations at Central Islip and Ronkonkoma are a relatively short distance away from the proposed site.

Discussions held with a representative of Suffolk County Transit revealed that at present the existing S-54 bus line buses are operating under capacity. The Suffolk County Transit representative noted that it is common practice to add buses should the buses approach their capacities and further elaborated that should the proposed development's impact cause the buses to near or surpass their capacities due to the increase in population/ridership, additional buses would be added (as was done in the past with the S-92 bus line) to ensure that ridership on the buses does not near capacity and those from the proposed development choosing to utilize the S-54 bus line service will be accommodated.

**Internal Circulation and Cross Access**

The applicant, along with the project architect, ADL III, has designed the Islandia Village Center with intention to integrate and balance community, aesthetic, and environmental values with transportation safety, maintenance and performance goals. Context sensitive solutions have been applied where possible, while taking into consideration different stakeholders' concerns and issues. While position, shape and topography of the site limit the ability for true grid creation, the design maximizes the connectivity and circulation network for both automobiles and pedestrians. Extensive consideration has been given to pedestrian realm, with the following elements incorporated in the design to create a pleasant and protected environment -- pedestrian in scale -- as perceived by persons who are traveling slowly and observing from street level:

- building placements, their form, massing and relationship to street;
- architectural elements easily perceived and engaging (building frontages and maximized glazing);
- street design with all urban street elements (sidewalks, lighting, furniture, trees) that encourage walking;
- green spaces and plazas with all elements that boost outdoor activity; and
- streets with traffic calming elements (roundabout, landscaped medians on boulevard, integrated sidewalks and paved crosswalks, on-street parking, smaller curb radii, minimum street widths allowed, street trees etc).

With respect to the potential to provide vehicular cross-access to adjoining properties, and to continue the "main street" that is being established on the subject property, the street network within the site has been designed to such that it can readily connect to adjacent properties. The easiest vehicular connection to the south would be at the roundabout, with the extension of the north-south boulevard. Same has been depicted on the Master Plan and Alignment Plan I in Appendix A.

The applicant and its counsel contacted Ivy Realty, owner of the MetLife office building at the southwest of the subject property, requesting permission for cross-access and parking access. Negotiations are ongoing, and the applicant believes that the potential exists for future cross-access at the aforementioned location.

**Shadow Effects on Roadway**

It is noted that the proximity of both the proposed seven-story condominium building and the proposed three-story hotel to the south side of Motor Parkway may result in shadows on Motor Parkway during certain times of the day, particularly during the winter months. Although the heights of the two buildings may shadow Motor Parkway so that de-icing does not benefit from the effects of sunshine on the pavement, these shadowing effects are not unique. During the winter months, shadowing due to the heights of existing building structures and roadside vegetation is a prevalent condition in numerous other locations and dealt with accordingly during winter maintenance activities.

**Emergency and Delivery Vehicle Access**

The configuration of the site plan ensures adequate access and circulation of both emergency and delivery vehicles. The traffic circle roundabouts, circulation roadway, parking areas and access points depicted on the site plan, have been designed to facilitate emergency and delivery truck movements. The roundabouts are designed with mountable aprons, other geometric features, to allow ease of movement at this critical point.

**Conclusions**

The Traffic Impact Study has concluded that, with the proposed access plan and minor timing changes to the existing signal system, the proposed mixed-use development will have no significant adverse traffic impact on the adjacent highway network.

Although the proposed development will add traffic to the adjacent roadway network, the traffic impact will be minimized and the additional traffic will be accommodated by the existing roadway system. The following points should be recognized:

1. The location and design of the access points will effectively distribute traffic to the adjacent roadways.

2. The section of Veterans Memorial Highway from the Long Island Expressway South Service Road in the south to Motor Parkway in the north rises from south to north on a fairly steady grade. This entire section of Veterans Memorial Highway contains no appreciable horizontal curves. As a result, no sight distance restrictions occur along the entire length of Veterans Memorial Highway within this study area.

3. Although there exist both horizontal and vertical curves on Motor Parkway the location of the driveways provide adequate sight distance for safe operations. The westerly driveway is located sufficiently west of this condition and will provide safe right turn in and out operation only. Although the easterly driveway is in proximity to this condition, this driveway will provide for both left and right turns entering the site, but only right turns exiting the site (with left turns out of the site being prohibited).

4. The points of access to the proposed development have been designed to be well-separated and to distribute traffic to the adjacent roadways at three points so as to minimize traffic congestion.

The site will have two access points on Motor Parkway. The westerly access point will provide two lanes (one entering and one exiting). The westerly access drive will allow right turns only into and out of the site. The channelized right turn lane out of the site will be YIELD controlled. It is proposed that an acceleration lane be constructed on Motor Parkway for exiting vehicles leaving the site via this driveway.

The easterly access drive on Motor Parkway will provide two lanes (one entering and one exiting). The easterly access drive will allow both left and right turns into the site and right turns only out of the site. The channelized right turn lane out of the site will be YIELD controlled. It is proposed that an acceleration lane be constructed on Motor Parkway so that vehicles leaving the site have a lane separate from the through traffic on Motor Parkway in which to accelerate and adjust their speed. It should be noted that there are no intentions to signalize this easterly access drive as the Suffolk County Department of Public Works has indicated that they do not want this driveway signalized. However, should the Suffolk County Department of Public Works require that a sight distance easement be provided to the west of the easterly site driveway, the applicant is willing to allow such easement as is necessary to maximize and maintain sight distance visibility to the west.

Due to the presence of a median on Veterans Memorial Highway, the Veterans Memorial Highway access drive will have two lanes (one entering and one exiting) and will allow right turns only into and out of the site. It is proposed that both a deceleration lane and an acceleration lane be constructed on Veterans Memorial Highway for entering vehicles and exiting vehicles, respectively. The channelized right turn lane out of the site will be YIELD controlled. The provision of both a deceleration lane and an acceleration lane on Veterans Memorial Highway at this site access will allow both the entering and exiting site traffic to slow down or accelerate in a separate lane so as not to unduly disrupt the flow of the southbound Veterans Memorial Highway through traffic.

5. As part of this study, capacity analyses have been performed at a number of signalized intersections in the study area to determine Existing, Future No-Build and Build conditions for this project. These analyses have revealed that without the construction of the proposed development, the majority of the locations studied are already operating under capacity constrained conditions, below acceptable overall LOS D. These below acceptable operational standards conditions exist or will exist in the No-Build Condition regardless of whether the proposed action is implemented. The only intersection where the added site traffic causes an impact in overall intersection operating conditions (i.e. a degradation in overall intersection LOS from the No-Build Condition) is at the intersection of Veterans Memorial Highway at the Long Island Expressway North Service Road. At this intersection, the overall intersection LOS slips from LOS D in the No-Build to LOS E in the Build during the weekday P.M. peak period.

6. The Build with Modifications condition analyzed the effectiveness of minor timing changes to the existing signal system to address existing capacity problems as well as the one noted degradation in LOS from the No-Build to Build Condition. The results of the analyses performed indicate that all of the capacity issues and the single LOS degradation case can be remedied with minor timing changes, either resulting in No-Build overall intersection LOS being restored or resulting in overall intersection LOS that is better than the No-Build Condition, even with the addition of the site traffic.

7. In order to enhance the flow of traffic and to maximize safety in the vicinity of the proposed development, the following significant roadway modifications are recommended:

- Motor Parkway at the Long Island Expressway South Service Road
    - Modify the weekday P.M. peak timing plan to allocate additional green time to the eastbound Long Island Expressway South Service Road Green Phase;

- Motor Parkway at the Long Island Expressway North Service Road

    - Modify the Weekday A.M. peak timing plan to allocate additional green time to the westbound Long Island Expressway North Service Road Green Phase;

- Veterans Memorial Highway at Motor Parkway

    - Extend the existing northbound left turn lane to a total distance of 400 feet.

- Veterans Memorial Highway at the Long Island Expressway North Service Road:

    - Modify the weekday A.M. peak timing plan to allocate additional green time to both the westbound Long Island Expressway North Service Road Green Phase and the northbound Veterans Memorial Highway left turn lagging phase;
    - Modify the weekday P.M. peak timing plan to allocate additional green time to the westbound Long Island Expressway North Service Road Green Phase; and
    - Modify the Saturday Midday peak timing plan to allocate additional green time to the northbound Veterans Memorial Highway left turn lagging phase.

- Veterans Memorial Highway at the Long Island Expressway South Service Road:

    - Modify the weekday A.M. peak timing plan to allocate additional green time to the eastbound Long Island Expressway South Service Road Green Phase;
    - Modify the weekday P.M. peak timing plan to allocate additional green time to both the eastbound Long Island Expressway South Service Road Green Phase and the Veterans Memorial Highway Green Phase; and
    - Modify the Saturday Midday peak timing plan to allocate additional green time to the southbound Veterans Memorial Highway left turn lagging phase.

8. Intersection capacity analyses conducted for the intersection of Veterans Memorial Highway and Motor Parkway shows a Level of Service "F" for the Weekday P.M. Peak Hour in the Existing and No-Build conditions. This is not caused by the proposed mixed-use development.

9. Supplemental Capacity Analyses was conducted for the intersection of Veterans Memorial Highway and Motor Parkway and looked at ways to eliminate the existing Level of Service "F" operation. An improved Level of Service "D" can be obtained with the addition of an additional travel lane in each direction on Veterans Memorial Highway, changes in the existing traffic signal operation and adding a westbound left turn phase. The changes developed in this analysis are intended to remedy an existing condition and not an impact of the proposed development.

    It is recommended that the N.Y. State Department of Transportation or the Suffolk County Department of Public Works consider the implementation of the intersection improvements.

10. The site plan for Islandia Village Center contains a total of 802 parking stalls. Of these 263 are contained within the residential condominium building, meeting Village Code Requirements for the residential component of the site plan.

11. A Shared Parking Analysis was performed for the non-residential portions of the proposed Islandia Village Center. In determining the quantity of parking that should be provided on the site it is important to recognize the interaction among uses in a multi-use development. A shared parking analysis of the site following procedures in the Urban Land Institute Report *Shared Parking* indicates that peak parking demands for the non-residential portion of the site will be 511 stalls at 6:00 p.m. on a weekend day in July. As 539 stalls are provided for these uses, the analysis indicates a surplus of parking will exist on site, even on the highest demand day of the year.

12. The site of the proposed mixed-use development is served by public transportation in the form of bus service provided by Suffolk County Transit. Currently, the S-54 bus travels along Veterans Memorial Highway and Motor Parkway in the vicinity of the site. This service will be available to the residents, visitors, patrons, and employees of the proposed development, further reducing impacts. This study, however, took no credit for use of this service in reducing site generated traffic.

13. Discussions held with a representative of Suffolk County Transit revealed that at present the existing S-54 bus line buses are operating under capacity. The Suffolk County Transit representative noted that it is common practice to add buses should the buses approach their capacity and further, elaborated that should the proposed development's impact cause the buses to near or surpass their capacities due to the increase in population/ridership, additional buses would be added (as was done in the past with the S-92 bus line) to ensure that ridership on the buses does not near capacity and those from the proposed development choosing to utilize the S-54 bus line service will be accommodated.

14. Due to the excellent patrol coverage and the close proximity of the firehouse, it should be recognized that excellent emergency services are available to service the proposed development.

No significant adverse traffic impacts will occur with the proposed development of the mixed-use site and minor changes to the existing signal system as indicated by the detailed traffic engineering examination and analysis.

## 8.3 Proposed Mitigation Measures

The following transportation mitigation measures have been incorporated into the proposed project:

- Although there exist both horizontal and vertical curves on Motor Parkway the location of the driveways provide adequate sight distance for safe operations. The westerly driveway has been located sufficiently west of this condition and will provide safe right turn in and out operation only. Although the easterly driveway is in proximity to this condition, this driveway will provide for both left and right turns entering the site, but only right turns exiting the site (with left turns out of the site being prohibited);

- The points of access to the proposed development have been designed to be well-separated and to distribute traffic to the adjacent roadways at three points so as to minimize traffic congestion;

- Modification of the Weekday P.M. peak timing plan at the intersection of Motor Parkway at the Long Island Expressway South Service Road to allocate additional green time to the eastbound Long Island Expressway South Service Road Green Phase;

- Modification of the Weekday A.M. peak timing plan at the intersection of Motor Parkway at the Long Island Expressway North Service Road to allocate additional green time to the westbound Long Island Expressway North Service Road Green Phase;

- At the intersection of Veterans Memorial Highway at the Long Island Expressway North Service Road: modification of the Weekday A.M. peak timing plan to allocate additional green time to both the westbound Long Island Expressway North Service Road Green Phase and the northbound Veterans Memorial Highway left turn lagging phase; modification of the Weekday P.M. peak timing plan to allocate additional green time to the westbound Long Island Expressway North Service Road Green Phase; and modification of the Saturday Midday peak timing plan to allocate additional green time to the northbound Veterans Memorial Highway left turn lagging phase; and

- At the intersection of Veterans Memorial Highway at the Long Island Expressway South Service Road: modification of the Weekday A.M. peak timing plan to allocate additional green time to the eastbound Long Island Expressway South Service Road Green Phase; modification of the weekday P.M. peak timing plan to allocate additional green time to both the eastbound Long Island Expressway South Service Road Green Phase and the Veterans Memorial Highway Green Phase; and modification of the Saturday Midday peak timing plan to allocate additional green time to the southbound Veterans Memorial Highway left turn lagging phase.

# 9.0 AIR QUALITY

## 9.1 Existing Conditions

An Air Quality Analysis was prepared by EEA, Inc. to evaluate the potential air quality impacts of the proposed development. A summary of the analysis is included below and the Air Quality Analysis, in its entirety, is annexed hereto as Appendix O.

### Ambient Air Quality Standards

Criteria pollutants are those for which National Ambient Air Quality Standards (NAAQS) have been established, and include sulfur dioxide ($SO_2$), carbon monoxide (CO), ozone ($O_3$), nitrogen dioxide ($NO_2$), inhalable particulates (i.e., particulates less than 10 μm in diameter-$PM_{10}$), fine particulates (i.e., particulates less than 2.5 μm in diameter-$PM_{2.5}$), and lead (Pb). The NAAQS and the New York State Standards for these criteria pollutants are shown in Table 24. The New York State Standards also include hydrocarbons (HC) and total suspended particulates (TSP), which are no longer federal criteria pollutants, and several less common pollutants, such as beryllium. The primary standards listed in the table are intended to protect human health, and the secondary standards are designed to protect public welfare.

Particulates and $SO_2$ are pollutants primarily associated with fossil fuel combustion in stationary sources. CO, HC, and $NO_2$, as well as other nitrogen oxides ($NO_x$), are attributed to both mobile and stationary sources. Carbon monoxide and HC are products of the incomplete combustion (PIC) of fossil fuels. Hydrocarbons are also emitted to the atmosphere by the evaporation of volatile organic compounds (VOCs), such as from gasoline, inks, and oil-based paints. $NO_x$ can form either as a product of the combustion of nitrogen-containing fuels or the reaction of nitrogen and oxygen in combustion air at very high temperatures. $O_3$ generally is not emitted directly to the atmosphere, but is produced photochemically by the interactions of VOCs, $NO_x$ and sunlight. Pb has been mainly associated with mobile sources as a result of the combustion of leaded gasoline.

**Table 24**
**Ambient Concentrations**

| Pollutant | Monitoring Station | Averaging Period | Ambient Standard[b] | Measured Concentration[a] Highest | Measured Concentration[a] 2nd Highest |
|---|---|---|---|---|---|
| Carbon Monoxide (CO) | Queensboro Comm. College<br>56th Ave. & Springfield Blvd.<br>Queens | 8-hour Average<br>1-hour Average | 9 ppm[c]<br>35 ppm[c] | 2.1 ppm<br>3.1 ppm | 1.6 ppm<br>2.4 ppm |
| Nitrogen Dioxide ($NO_2$) | Eisenhower Park<br>Merrick Avenue<br>Hempstead | Annual Arithmetic Mean | 0.053 ppm | 0.018 ppm | |
| Ozone ($O_3$) | Babylon<br>E. Farmingdale Water Dist.<br>Gazza Boulevard | 8-hour Average[d]<br>1-hour Average | 0.08 ppm[e]<br>0.12 ppm[f] | 0.089 ppm (4th highest)<br>0.139 ppm | <br>0.129 ppm |
| Lead (Pb) | JHS 126<br>424 Leonard Street<br>Brooklyn | Quarterly Average | 1.5 $\mu g/m^3$ | 0.02 $\mu g/m^3$ | 0.02 $\mu g/m^3$ |
| Particulate ($PM_{10}$) | Eisenhower Park<br>Merrick Avenue<br>Hempstead | Annual Arithmetic Mean<br>24-hour Average | 50 $\mu g/m^3$[g]<br>150 $\mu g/m^3$[c] | 15 $\mu g/m^3$<br>46 $\mu g/m^3$ | <br>35 $\mu g/m^3$ |
| Particulate ($PM_{2.5}$) | Babylon<br>E. Farmingdale Water Dist.<br>Gazza Boulevard | Annual Arithmetic Mean<br>24-hour Average | 15 $\mu g/m^3$[h]<br>35 $\mu g/m^3$[i] | 11.0 $\mu g/m^3$<br>32.0 $\mu g/m^3$ (98th percentile) | |
| Sulfur Dioxide ($SO_2$) | Eisenhower Park<br>Merrick Avenue<br>Hempstead | Annual Arithmetic Mean<br>24-hour Average<br>3-hour Average | 0.03 ppm<br>0.14 ppm[c]<br>0.50 ppm[c] | 0.004 ppm<br>0.020 ppm<br>0.042 ppm | <br>0.020 ppm<br>0.042 ppm |

Notes:

a. Measured during 2006, except CO and $PM_{10}$ measured during 2005.
b. ppm = parts per million
   $\mu g/m^3$ = micrograms per cubic meter
c. Not be exceeded more than once per year.
d. The ozone 8-hour standard replacing the 1-hour standard.
e. To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.08 ppm.
f. Number of days with concentration above standard not to exceed 1 day per year when averaged over the last 3 years.
g. To attain this standard, the 3-year average of the weighted annual mean $PM_{10}$ concentration at each monitor within an area must not exceed 50 $\mu g/m^3$.
h. To attain this standard, the 3-year average of the weighted annual mean $PM_{2.5}$ concentrations from single or multiple community-oriented monitors must not exceed 15.0 $\mu g/m^3$.
i. To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 65 $\mu g/m^3$.

Source: NYSDEC and USEPA websites.

**Ambient Air Quality Conditions**

Ambient air quality is monitored by the NYSDEC at numerous sampling stations throughout the state. Data for calendar years 2005 and 2006 from the monitoring stations closest to the project site are shown above in Table 24. A comparison of the monitored ambient levels in this table with the corresponding standards reveals that, except for $O_3$, none of the standards was exceeded. Based on ambient air quality levels measured over the years at many monitoring stations in the region, the project site is in an area that has been designated by the USEPA as a "moderate" nonattainment area for $O_3$ (8-hour standard). The $O_3$ nonattainment area encompasses New York City, Long Island, Westchester and Rockland Counties, and the seven southern-most towns in Orange County. A CO maintenance area includes New York City and Nassau and Westchester Counties. The maintenance area had been a CO nonattaiment area, but is now in attainment of the CO standards. The project area is in an attainment area or unclassified area with respect to the other criteria pollutants.

## 9.2 Probable Impacts of the Proposed Action

The potential air quality impacts of the proposed Islandia Village Center were determined using the methodology in the NYSDOT Environmental Analysis Bureau (EAB) *Environmental Procedures Manual* (EPM, Air Quality Chapter 1.1, January 2001). The criteria established in the EPM were consulted to determine which pollutants needed to be considered in the air quality analysis. As previously noted in Section 1.1, $NO_x$, HC, Pb, and CO are pollutants associated with mobile sources. The impacts of Pb and CO, however, occur in the vicinity of the emission sources, and are important on a local or microscale level. Because of their role in ozone formation, which occurs over an extended period of time and at some distance from the source, $NO_x$ and HC are important on a regional or mesoscale level, but are not significantly affected by most individual projects. Pb emissions from motor vehicles have decreased significantly as a result of Pb being phased out as an additive in motor vehicle fuels. As a result, microscale Pb analyses for projects are not needed or warranted. Therefore, CO was the pollutant of concern for this analysis.

**Air Quality Screening Analysis**

An air quality screening analysis has been conducted using the three-step procedure in the EPM. The purpose of the screening was to determine if any of the signalized intersections analyzed in the Traffic Study should be considered for a microscale analysis of CO emissions. The screening evaluated weekday and Saturday peak hours for 2009 Build conditions. The steps and results of the screening analysis are summarized in Table 25 and discussed below.

Level of Service Screening

The first step of the procedure is used to screen intersections based on the peak hour level of service (LOS). Intersections with an LOS of A, B, or C can be eliminated from further consideration, and the remaining intersections are passed on to the next level of screening (Step 2). Since the EPM notes that intersections controlled by stop signs are not expected to require an air quality analysis, only signalized intersections were considered.

The five signalized intersections considered in the Traffic Impact Study are shown in Figure 6 and listed in Table 26 below. Under Build conditions, all of these intersections would operate at LOS D, E or F during one or more of the peak. Accordingly, the above intersections were evaluated for the applicable peak hours in the second step.

**Table 25**
**Screening Summary**

| Intersection | Peak Hour | Screening Step 1 | 2 | 3 |
|---|---|---|---|---|
| 1. Veterans Highway (Rt 454) | AM | X | | --- |
| and | PM | X | X | |
| Motor Parkway (CR 67) | Sat | | --- | --- |
| 2. Veterans Highway (Rt 454) | AM | X | | --- |
| and | PM | X | X | |
| LIE North Service Road (Rt 495) | Sat | X | X | |
| 3. Veterans Highway (Rt 454) | AM | X | | --- |
| and | PM | X | | --- |
| LIE South Service Road (Rt 495) | Sat | | --- | --- |
| 4. Motor Parkway (CR 67) | AM | X | | --- |
| and | PM | | --- | --- |
| LIE North Service Road (Rt 495) | Sat | | --- | --- |
| 5. Motor Parkway (CR 67) | AM | | --- | --- |
| and | PM | X | | --- |
| LIE South Service Road (Rt 495) | Sat | | --- | --- |

Notes:
Step 1 = Level of Service Screening
Step 2 = Capture Criteria Screening
Step 3 = Volume Threshold Screening

[X] = screening criteria were met (i.e., screening thresholds exceeded)
[ ] = screening criteria were not met (i.e., screening thresholds not exceeded)
[---] = scenario eliminated from screening in previous step

**Figure 6**
**Project Area Map**

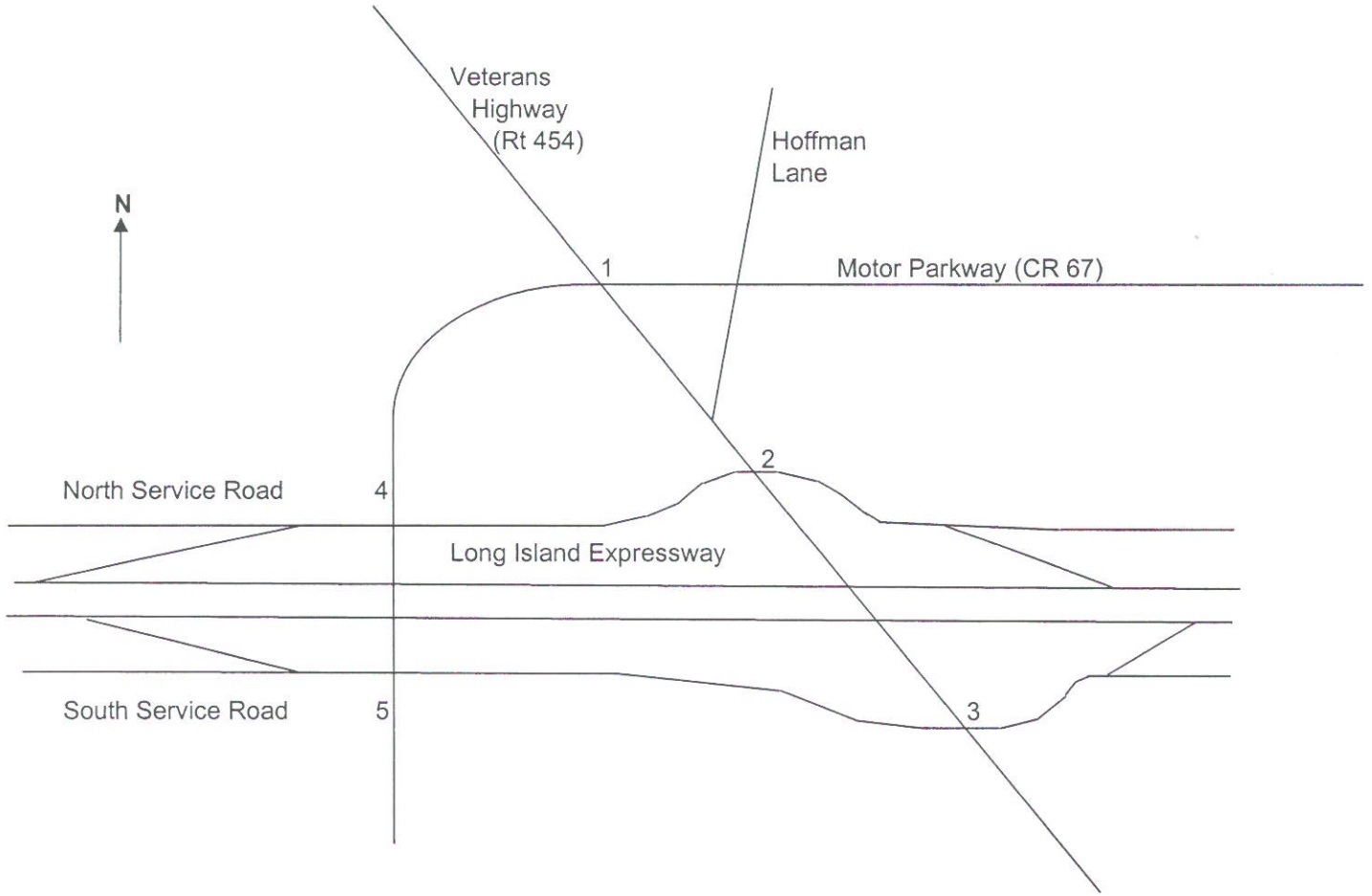

**Table 26**
**Intersection Level of Service Screening**

| Intersection | Peak Hour | Build Intersection LOS | Build w/Mit Intersection LOS | No-Build Intersection LOS |
|---|---|---|---|---|
| 1. Veterans Highway (Rt 454) | AM | **D** | **D** | **D** |
| and | PM | **F** | **D** | **F** |
| Motor Parkway (CR 67) | Sat | C | C | C |
| 2. Veterans Highway (Rt 454) | AM | **F** | **D** | **F** |
| and | PM | **E** | **D** | **D** |
| LIE North Service Road (Rt 495) | Sat | **E** | C | **E** |
| 3. Veterans Highway (Rt 454) | AM | **E** | **D** | **E** |
| and | PM | **F** | **E** | **F** |
| LIE South Service Road (Rt 495) | Sat | C | C | C |
| 4. Motor Parkway (CR 67) | AM | **E** | **D** | **E** |
| and | PM | C | | C |
| LIE North Service Road (Rt 495) | Sat | B | | B |
| 5. Motor Parkway (CR 67) | AM | C | | C |
| and | PM | **F** | **D** | **F** |
| LIE South Service Road (Rt 495) | Sat | B | | B |

Notes:
1. Build LOS D, E, F exceed the screening thresholds; proceed to Step 2.
2. No-Build LOSs shown for comparison; not used in screening.

Capture Criteria Screening

This screening considered the following five criteria in terms of changes between the No-Build and Build alternatives:

1. A 10 percent or more reduction in the source-receptor distance
2. A 10 percent or more increase in traffic volume
3. A 10 percent or more increase in vehicle emissions
4. Any increase in the number of queued lanes
5. A 20 percent reduction in travel speed

If any of the criteria were met, the scenario passed on to the third, and final, level of screening.

Of these criteria, source-receptor distance, vehicle emissions, the number of queued (intersection approach) lanes and travel speed would remain unchanged between the No-Build and Build alternatives at all of the intersections. The change in traffic volumes under Build conditions was calculated to determine if the second criterion was met. As shown in Table 27 below, two intersections, Veterans Highway at Motor Parkway and at the LIE North Service Road, would experience a traffic volume increase of 10 percent or more on at least one leg of the intersection during at least one of the evaluated peak hours. As a result, these intersections and peak hours needed to be evaluated in the third and final step. The proposed mitigation for the intersection of Veterans Highway and Motor Parkway includes additional queuing lanes. Therefore, the AM and Saturday peak periods were also evaluated in the third screening step, even though these peak hours had been eliminated in the first two screening steps.

**Table 2.**
**Capture Criteria Screening**

| Intersection | Peak Hour | Traffic Volume - North Leg | | | Traffic Volume - South Leg | | | Traffic Volume - East Leg | | | Traffic Volume - West Leg | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | No-Build | Build | Increase | No-Build | Build | Increase | No-Build | Build | Increase | No-Build | Build | Increase |
| 1. Veterans Highway (Rt 454) | AM | 2,923 | 2,955 | 1.1% | 2,599 | 2,722 | 4.7% | 1,659 | 1,690 | 1.9% | 1,453 | 1,579 | 8.7% |
| and | PM | 3,454 | 3,499 | 1.3% | 3,087 | 3,242 | 5.0% | 1,579 | 1,628 | 3.1% | 1,222 | 1,397 | **14.3%** |
| Motor Parkway (CR 67) | | | | | | | | | | | | | |
| 2. Veterans Highway (Rt 454) | AM | 2,609 | 2,800 | 7.3% | 3,221 | 3,299 | 2.4% | 2,335 | 2,393 | 2.5% | 2,567 | 2,628 | 2.4% |
| and | PM | 3,226 | 3,569 | **10.6%** | 4,095 | 4,250 | 3.8% | 1,165 | 1,253 | 7.6% | 1,576 | 1,690 | 7.2% |
| LIE North Service Road (Rt 495) | Sat | 1,707 | 2,094 | **22.7%** | 2,230 | 2,396 | 7.4% | 602 | 719 | **19.4%** | 793 | 909 | **14.6%** |
| 3. Veterans Highway (Rt 454) | AM | 3,220 | 3,298 | 2.4% | 3,716 | 3,754 | 1.0% | 642 | 682 | 6.2% | 1,288 | 1,288 | 0.0% |
| and | PM | 4,094 | 4,252 | 3.9% | 4,276 | 4,339 | 1.5% | 2,231 | 2,326 | 4.3% | 2,479 | 2,479 | 0.0% |
| LIE South Service Road (Rt 495) | | | | | | | | | | | | | |
| 4. Motor Parkway (CR 67) | AM | 1,450 | 1,518 | 4.7% | 1,523 | 1,600 | 5.1% | 2,268 | 2,329 | 2.7% | 2,497 | 2,545 | 1.9% |
| and | | | | | | | | | | | | | |
| LIE North Service Road (Rt 495) | | | | | | | | | | | | | |
| 5. Motor Parkway (CR 67) | | | | | | | | | | | | | |
| and | PM | 1,224 | 1,341 | 9.6% | 1,183 | 1,209 | 2.2% | 2,127 | 2,127 | 0.0% | 2,100 | 2,191 | 4.3% |
| LIE South Service Road (Rt 495) | | | | | | | | | | | | | |



Notes:

1. The 5 capture criteria are:
   a. ≥10% reduction in source-receptor distance
   b. ≥10% increase in traffic volume
   c. ≥10% increase in vehicle emissions
   d. Increase in the number of queued lanes
   e. ≥20% reduction in speed (if speed ≤30 mph)
2. Of the 5 criteria, only criterion b has the potential to be met, as the Build Alternative would not affect the other criteria at the above intersections, except at intersection 1 (see note 4).
3. If criterion b is met, proceed to Step 3.
4. At intersection 1 (Veterans Highway and Motor Parkway, proposed mitigation would add additional queue lanes, thereby meeting criterion d. As a result, this intersection was passed along to Step 3 for all three peak periods.

Volume Threshold Screening

This screening step compared the peak hour approach volume with a threshold volume determined from EPM Table 3c, based on the corresponding queue (idle) and free-flow emission factors. If the approach volume exceeded the corresponding threshold volume, the intersection would be a candidate for a microscale analysis for that peak hour.

The emission factors were determined from the USEPA MOBILE6.2 emission factor tables available on the NYSDOT EAB website. Emission factors were obtained for 2008 for idling (0 mph) and for the free-flow speeds of 40, 55 and 60 mph (see Table 28). A composite emission factor for each speed was calculated based on the percentage distribution of 27 vehicle types, which was obtained from the EAB website.

As shown in Table 29, all of the threshold volumes were 4,000 vehicles, much higher than any of the approach volumes. Therefore, none of the intersections met the screening threshold.

The high threshold volumes were the result of the relatively low queue and free-flow emission factors, as MOBILE6.2 emission factors are based on warmed-up vehicle operation. The previous MOBILE5B emission factors were based on a high percentage of cold-start vehicles, which have higher emissions. When the MOBILE6.2 emission factors replaced the MOBILE5B emission factors, USEPA had determined that vehicles reach a warmed-up condition relatively quickly (about a minute after start-up), so the warmed-up (running) emission factors are appropriate. As a result, emission factors are significantly lower than before.

**Table 28**
**MOBILE6.2 Emission Factors**

Roadway: Arterials

| Veh. Class | EPM Vehicle Class (%) | Allowed on Road | Adjusted Vehicle Class (%) | 2009 | | | | | | | | Vehicle Class Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 0 mph | | 40 mph | | 55 mph | | 60 mph | | |
| | | | | CO EF | EF x Veh Cl | CO EF | EF x Veh Cl | CO EF | EF x Veh Cl | CO EF | EF x Veh Cl | |
| LDGV | 58.46 | X | 58.46 | 50.60 | 29.58 | 4.88 | 2.85 | 5.98 | 3.50 | 6.34 | 3.71 | Light-Duty Gasoline Vehicles (Passenger Cars) |
| LDGT1 | 5.59 | X | 5.59 | 44.70 | 2.50 | 4.50 | 0.25 | 5.51 | 0.31 | 5.85 | 0.33 | Light-Duty Gasoline Trucks 1 (0-6,000 lbs. GVWR; 0-3,750 lbs. LVW) |
| LDGT2 | 18.73 | X | 18.73 | 47.10 | 8.82 | 4.76 | 0.89 | 5.84 | 1.09 | 6.20 | 1.16 | Light-Duty Gasoline Trucks 2 (0-6,000 lbs. GVWR; 3,750-5,750 lbs. LVW) |
| LDGT3 | 8.37 | X | 8.37 | 43.55 | 3.65 | 4.34 | 0.36 | 5.34 | 0.45 | 5.67 | 0.47 | Light-Duty Gasoline Trucks 3 (6,001-8,500 lbs. GVWR; 0-3,750 lbs. LVW) |
| LDGT4 | 3.65 | X | 3.65 | 44.00 | 1.61 | 4.39 | 0.16 | 5.40 | 0.20 | 5.74 | 0.21 | Light-Duty Gasoline Trucks 4 (6,001-8,500 lbs. GVWR; 3,750-5,750 lbs. LVW) |
| HDGV2B | 1.03 | X | 1.03 | 117.20 | 1.21 | 5.30 | 0.05 | 5.85 | 0.06 | 6.74 | 0.07 | Class 2B Heavy-Duty Gasoline Vehicles (8,501-10,000 lbs. GVWR) |
| HDGV3 | 0.35 | X | 0.35 | 114.03 | 0.40 | 6.86 | 0.02 | 7.56 | 0.03 | 8.72 | 0.03 | Class 3 Heavy-Duty Gasoline Vehicles (10,001-14,000 lbs. GVWR) |
| HDGV4 | 0.17 | X | 0.17 | 114.03 | 0.19 | 6.67 | 0.01 | 7.36 | 0.01 | 8.48 | 0.01 | Class 4 Heavy-Duty Gasoline Vehicles (14,001-16,000 lbs. GVWR) |
| HDGV5 | 0.16 | X | 0.16 | 172.05 | 0.28 | 10.07 | 0.02 | 11.10 | 0.02 | 12.80 | 0.02 | Class 5 Heavy-Duty Gasoline Vehicles (16,001-19,500 lbs. GVWR) |
| HDGV6 | 0.17 | X | 0.17 | 273.27 | 0.46 | 16.00 | 0.03 | 17.63 | 0.03 | 20.33 | 0.03 | Class 6 Heavy-Duty Gasoline Vehicles (19,501-26,000 lbs. GVWR) |
| HDGV7 | 0.17 | X | 0.17 | 260.60 | 0.44 | 15.25 | 0.03 | 16.82 | 0.03 | 19.39 | 0.03 | Class 7 Heavy-Duty Gasoline Vehicles (26,001-33,000 lbs. GVWR) |
| HDGV8A | 0.17 | X | 0.17 | 396.02 | 0.67 | 23.18 | 0.04 | 25.55 | 0.04 | 29.47 | 0.05 | Class 8A Heavy-Duty Gasoline Vehicles (33,001-60,000 lbs. GVWR) |
| LDDV | 0.20 | X | 0.20 | 9.62 | 0.02 | 0.60 | 0.00 | 0.59 | 0.00 | 0.64 | 0.00 | Light-Duty Diesel Vehicles (Passenger Cars) |
| LDDT12 | 0.19 | X | 0.19 | 4.36 | 0.01 | 0.27 | 0.00 | 0.27 | 0.00 | 0.29 | 0.00 | Light-Duty Diesel Trucks 1 & 2 (0-6,000 lbs. GVWR) |
| LDDT34 | 0.49 | X | 0.49 | 5.17 | 0.03 | 0.33 | 0.00 | 0.32 | 0.00 | 0.35 | 0.00 | Light-Duty Diesel Trucks 3 & 4 (6,001-8,500 lbs. GVWR) |
| HDDV2B | 0.12 | X | 0.12 | 7.76 | 0.01 | 0.49 | 0.00 | 0.48 | 0.00 | 0.52 | 0.00 | Class 2B Heavy-Duty Diesel Vehicles (8,501-10,000 lbs. GVWR) |
| HDDV3 | 0.13 | X | 0.13 | 9.59 | 0.01 | 0.60 | 0.00 | 0.59 | 0.00 | 0.64 | 0.00 | Class 3 Heavy-Duty Diesel Vehicles (10,001-14,000 lbs. GVWR) |
| HDDV4 | 0.12 | X | 0.12 | 11.47 | 0.01 | 0.72 | 0.00 | 0.70 | 0.00 | 0.77 | 0.00 | Class 4 Heavy-Duty Diesel Vehicles (14,001-16,000 lbs. GVWR) |
| HDDV5 | 0.13 | X | 0.13 | 12.22 | 0.02 | 0.77 | 0.00 | 0.75 | 0.00 | 0.82 | 0.00 | Class 5 Heavy-Duty Diesel Vehicles (16,001-19,500 lbs. GVWR) |
| HDDV6 | 0.21 | X | 0.21 | 14.04 | 0.03 | 0.88 | 0.00 | 0.86 | 0.00 | 0.94 | 0.00 | Class 6 Heavy-Duty Diesel Vehicles (19,501-26,000 lbs. GVWR) |
| HDDV7 | 0.31 | X | 0.31 | 16.98 | 0.05 | 1.07 | 0.00 | 1.04 | 0.00 | 1.14 | 0.00 | Class 7 Heavy-Duty Diesel Vehicles (26,001-33,000 lbs. GVWR) |
| HDDV8A | 0.36 | X | 0.36 | 28.41 | 0.10 | 1.79 | 0.01 | 1.75 | 0.01 | 1.90 | 0.01 | Class 8A Heavy-Duty Diesel Vehicles (33,001-60,000 lbs. GVWR) |
| HDDV8B | 0.33 | X | 0.33 | 25.61 | 0.08 | 1.61 | 0.01 | 1.57 | 0.01 | 1.71 | 0.01 | Class 8B Heavy-Duty Diesel Vehicles (> 60,000 lbs. GVWR) |
| HDGB | 0.10 | X | 0.10 | 252.40 | 0.25 | 14.77 | 0.01 | 16.29 | 0.02 | 18.78 | 0.02 | Gasoline Buses (School, Transit and Urban) |
| HDDBT | 0.10 | X | 0.10 | 88.39 | 0.09 | 5.56 | 0.01 | 5.43 | 0.01 | 5.91 | 0.01 | Diesel Transit and Urban Buses |
| HDDBS | 0.19 | X | 0.19 | 20.95 | 0.04 | 1.32 | 0.00 | 1.29 | 0.00 | 1.40 | 0.00 | Diesel School Buses |
| MC | 0.00 | X | 0.00 | 231.56 | | 5.84 | | 5.00 | | 11.02 | | Motorcycles (Gasoline) |
| Total/Comp | 100.00 | 100.00 | 100.00 | | 50.56 | | 4.76 | | 5.81 | | 6.18 | |

Notes:

1. EPM = NYSDOT Environmental Procedures Manual
2. CO EF = Carbon Monoxide Emission Factor (g/mi/vehicle), except (g/hr/vehicle) for 0 mph (idle).

Table 29
**Volume Threshold Screening**

| Intersection | Peak Hour | Northbound Approach | | | | Southbound Approach | | | | Eastbound Approach | | | | Westbound Approach | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | EF-Q | EF-FF | VOL-T | VOL-A | EF-Q | EF-FF | VOL-T | VOL-A | EF-Q | EF-FF | VOL-T | VOL-A | EF-Q | EF-FF | VOL-T | VOL-A |
| 1. Veterans Highway (Rt 454) | AM | 50.56 | 6.18 | 4,000 | 1,705 | 50.56 | 6.18 | 4,000 | 1,103 | 50.56 | 4.76 | 4,000 | 663 | 50.56 | 4.76 | 4,000 | 1,002 |
| and | PM | 50.56 | 6.18 | 4,000 | 1,281 | 50.56 | 6.18 | 4,000 | 2,194 | 50.56 | 4.76 | 4,000 | 797 | 50.56 | 4.76 | 4,000 | 611 |
| Motor Parkway (CR 67) | Sat | 50.56 | 6.18 | 4,000 | 940 | 50.56 | 6.18 | 4,000 | 933 | 50.56 | 4.76 | 4,000 | 403 | 50.56 | 4.76 | 4,000 | 414 |
| 2. Veterans Highway (Rt 454) | | | | | | | | | | | | | | | | | |
| and | PM | 50.56 | 6.18 | 4,000 | 2,065 | 50.56 | 6.18 | 4,000 | 2,063 | -- | -- | -- | -- | 50.56 | 5.81 | 4,000 | 1,253 |
| LIE North Service Road (Rt 495) | Sat | 50.56 | 6.18 | 4,000 | 1,163 | 50.56 | 6.18 | 4,000 | 1,177 | -- | -- | -- | -- | 50.56 | 5.81 | 4,000 | 719 |

Notes:

1. Legend
   EF-Q = Queue Emission Factor
   EF-FF = Free-Flow Emission Factor
   VOL-T = Threshold Volume
   VOL-A = Approach Volume
2. Free-Flow Speed: Motor Parkway = 40 mph, LIE North Service Road = 55 mph, Veterans Highway = 60 mph.
3. If the approach volume exceeds the threshold volume, the intersection is a candidate for a microscale analysis.

**Conclusions**

All of the five signalized intersections were eliminated from further consideration by the screening analysis; thus, none of the intersections requires a microscale CO analysis. Given the relatively low emission factors, CO concentrations predicted in a microscale analysis would likely be well below ambient standards. Therefore, the project would not have a significant air quality impact.

## 9.3 Proposed Mitigation Measures

In order to reduce the potential for air quality impacts, the proposed action includes the creation of additional queuing lanes at the intersection of Veterans Highway and Motor Parkway that would decrease vehicular delay, thereby decreasing vehicular emissions due to idling.

# 10.0 NOISE

## 10.1 Existing Conditions

Under existing conditions, the subject property is undeveloped. Thus, no significant sources of noise are present at the subject property.

## 10.2 Probable Impacts of the Proposed Action

Freudenthal & Elkowitz Consulting Group, Inc. evaluated the potential noise impacts associated with the construction and operation of the proposed development.

Human perception of noise is affected by amplitude, frequency and distance from the source as well as by the number and duration of noise events in a given period of time. Noise levels are measured in units known as decibels ("dB"). The decibel scale is a logarithmic scale, not a linear one, such as the scale of length.

The sound pressure levels of multiple sources are not mathematically added. For example, if a sound pressure level of 70 dB is added to another sound of 70 dB, the total is only a three-decibel increase (to 73 dB), not a double to 140 dB. Furthermore, if two sounds are of different levels, the lower level adds less to the higher, and if this difference is as much as 10 dB, the lower level adds almost nothing to the higher level. In other words, adding a 60-decibel sound to a 70-decibel sound increases the total sound pressure level by less than one decibel. As excerpted from the NYSDEC's Program Policy Memorandum, *Assessing and Mitigating Noise Impacts* (rev. February 2, 2001), Table A, with the noted source as USEPA, Protective Noise Levels, 1978, (see Table 30, below) the effect of combining sound levels is as follows:

**Table 30 - Approximate Addition of Sound Levels**

| Difference Between Two Sound Levels | Add to the Higher of the Two Sound Levels |
|---|---|
| 1 dB or less | 3 dB |
| 2 to 3 dB | 2 dB |
| 4 to 9 dB | 1 dB |
| 10 dB or more | 0 dB |

Decibel measurements are adjusted on different scales to correspond to the range of hearing of the human ear. A-weighting is recommended by the USEPA to describe environmental noise. Table 31 contains decibel readings of noise levels of common sources in dB(A). It should be noted that noise levels can be mitigated by measures such as vegetation, fencing and soil berms. For example, a vegetated buffer containing tree belts 30 meters (98.4 feet) wide by 15 meters (49.2 feet) tall have been found to reduce noise by as much as 10 dB and more typically between 6 dB and 8 dB.[21] Other studies yielded lower values of noise attenuation by forest belts of approximately 3-5 dB(A) for belts 10-to-30 meters (32.8-to-98.4 feet) in width and 5-to-15 meters (16.4-to-49.2 feet) in height.[22]

[21] Cook, David I., Date Unknown. *Trees, Solid Barriers, and Combinations: Alternatives for Noise Control.*
[22] Reethof, Gerhard and Oliver H. McDaniel, Date Unknown, *Acoustics and the Urban Forest.*

**Table 31 - Noise Levels of Common Sources**

| Sound Source | Sound Pressure level dB(A) |
|---|---|
| Air Raid Siren at 50 feet (Threshold of Pain) | 120 |
| Maximum Level at Rock Concerts (Rear Seats) | 110 |
| On Platform by Passing Subway Train | 100 |
| On Sidewalk by Passing Heavy Truck or Bus | 90 |
| On Sidewalk by Typical Highway | 80 |
| On Sidewalk by Passing Automobiles with Mufflers | 70 |
| Typical Urban Area Background/Busy Noise | 60 |
| Typical Suburban Area at Background | 50 |
| Quiet Suburban Area at Night | 40 |
| Typical Rural Area at Night | 30 |
| Isolated Broadcast Studio | 20 |
| Audiometric (Hearing Testing) Booth | 10 |
| Threshold of Hearing | 0 |

Notes: A change of 3 dB(A) is a just-noticeable change in Sound Pressure Level (SPL)
A change of 10 dB(A) is perceivable as a doubling or halving in SPL

Source: City Environmental Quality Review Technical Manual, Mayor's Office of Environmental Coordination, City of New York, December 1993, p. 3R-2.

People judge the relative magnitude of sound sensation by subjective terms such as "loudness" or "noisiness." In the NYSDEC publication, *Assessing and Mitigating Noise Impacts* (2001), the anticipated human reaction to an increase in sound level is quantified. Table 32 below is directly excerpted from the NYSDEC publication. It is important to note that for increases less than 5 dB, the effects are unnoticed or tolerable. The NYSDEC indicates that increases ranging from 0 - 3 dB, there should be "no appreciable effect on receptors."

**Table 32 - Human Reaction to Increases in Sound Pressure Level**

| Increase in Sound Pressure (dBA) | Human Reaction |
|---|---|
| Under 5 | Unnoticed to tolerable |
| 5 – 10 | Intrusive |
| 10 – 15 | Very Noticeable |
| Over 20 | Very Objectionable to intolerable |

(Down and Stocks – 1978)

To evaluate the potential adverse impacts associated with construction noise, typical construction equipment noise levels were used to estimate corresponding noise levels at the closest residential receptors. Table 33 below presents Sound Pressure Levels (SPLs) of typical construction equipment, which may be used at the site. It is important to note that the SPL drops at a rate of six decibels for each doubling of distance from a point source to a receptor when traveling over hard surfaces. However, when the ground is soft, a noise attenuation of up to nine decibels for each doubling of distance is expected.[23] For example, the noise level from a jackhammer at 50 feet would be 82 dB(A) and at 100 feet over a hard surface, it would be 76 dB(A), and 73 dB(A), where lawn predominates the surface.

[23] *The Noise Guidebook*, U.S. Department of Housing and Urban Development, 1985.

**Table 33 - Maximum Noise Levels of Common Construction Machines**

| Noise Source | Noise Level (dBA) | |
|---|---|---|
| | **50 Feet** | **100 Feet** |
| Jackhammer | 82 | 76 |
| Steamroller | 83 | 77 |
| Street Paver | 80 | 74 |
| Backhoe | 83 | 77 |
| Street Compressor | 67 | 61 |
| Front-end Loader | 79 | 73 |
| Street Cleaner | 70 | 64 |
| Idling Haul Truck | 72 | 66 |
| Cement Mixer | 72 | 66 |

Source: Cowan, James P., *Handbook of Environmental Acoustics*, 1994

The nearest sensitive receptors, which consist of single-family homes and an assisted living facility, were identified and are depicted on Figure 7.

# Aerial View of Subject Property and Surrounding Area

## Nearest Sensitive Noise Receptor Figure

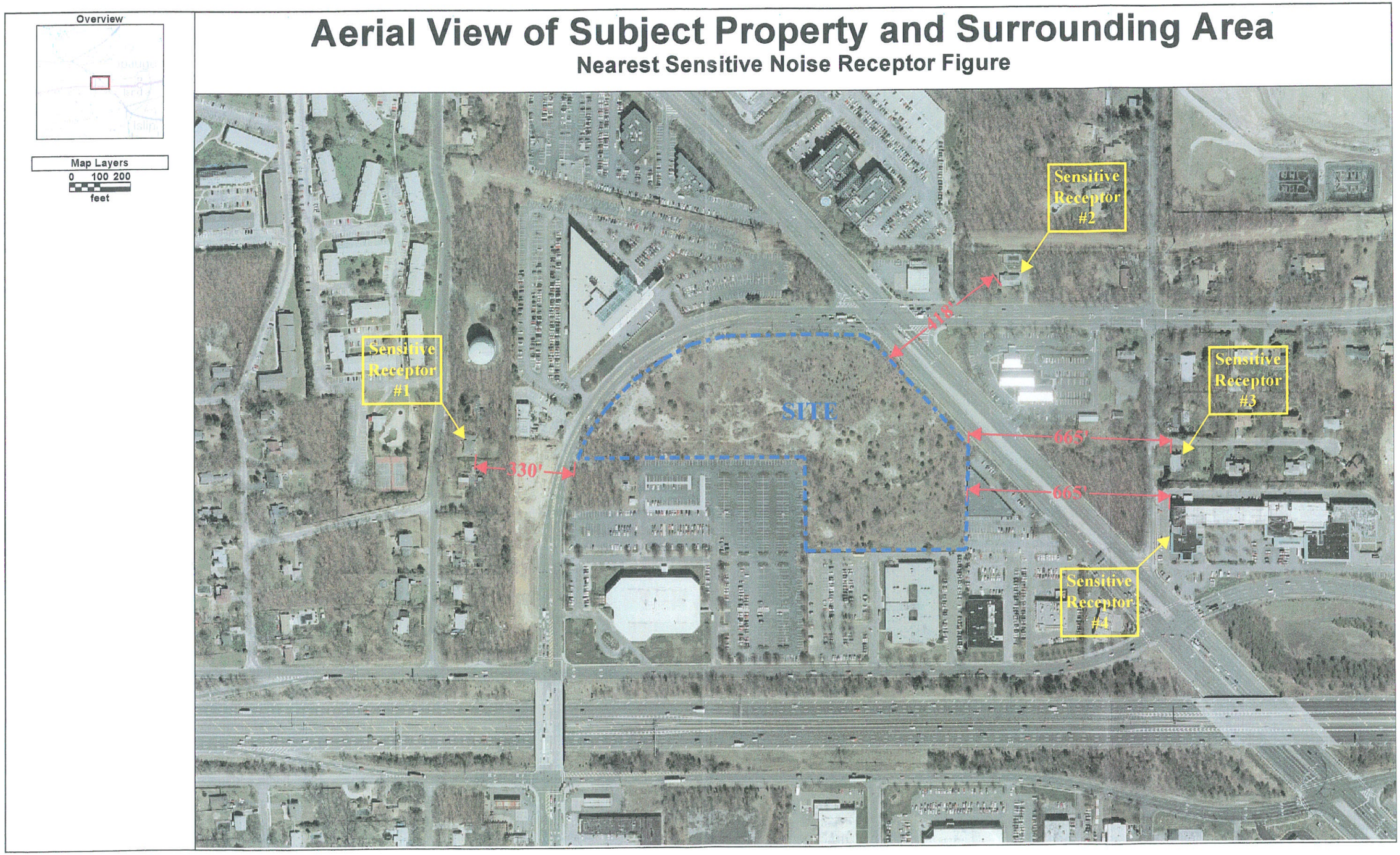


**FIGURE 7**

Sensitive Receptor 1 is located on MacArthur Boulevard at a distance of approximately 330 feet from the property line (see Figure 7). Motor Parkway is situated between the subject site and Sensitive Receptor 1.

Sensitive Receptor 2 is located on Motor Parkway at a distance of approximately 418 feet from the property line (see Figure 7). Veterans Memorial Highway and Motor Parkway are situated between the subject site and Sensitive Receptor 2.

Sensitive Receptor 3 is located at the southeast corner of Hoffman Lane and John Way at a distance of approximately 665 feet from the property line (see Figure 7). Veterans Memorial Highway is situated between the subject site and Sensitive Receptor 3.

Sensitive Receptor 4 is located at the northeast corner of Veterans Memorial Highway and Expressway Drive North, at a distance of 665 feet from the property line (see Figure 7). Veterans Memorial Highway is situated between the subject site and Sensitive Receptor 4.

**Table 34 - Sensitive Receptor Noise Levels**

| Sensitive Receptor | Distance from Subject Property | Maximum Noise Level at 50 feet (See Table 33) | Noise Level at Sensitive Receptor |
|---|---|---|---|
| 1 | 330 feet | 83 dB(A) | 67± dB(A) |
| 2 | 418 feet | 83 dB(A) | 64± dB(A) |
| 3 | 665 feet | 83 dB(A) | 62± dB(A) |
| 4 | 665 feet | 83 dB(A) | 62± dB(A) |

When evaluating the sound level at the sensitive receptor due to the highest noise levels at the site during construction, the significant distance from the site reduces the noise levels to 67 dB, 64 dB, 62 dB and 62 dB at Receptors 1, 2, 3 and 4, respectively. However, all of the receptors are located on the opposite sides of Motor Parkway and/or Veterans Memorial Highway. Additionally, vegetation and/or developed properties separate the site from all receptors. As indicated earlier in this section, vegetation reduces noise levels by 3 dB to as much as 10 dB. Developed properties would further obscure noise from sources at the subject property. Therefore, it can be concluded that the projected noise levels in Table 34, above, would be reduced to levels typical of suburban neighborhoods at all receptors. As such, construction activities at the site would have no effect on the sensitive noise receptors.

With respect to construction noise impacts to proximate commercial properties, the applicant will comply with the relevant provisions of the Code of the Incorporated Village of Islandia. Specifically, construction and related activities would occur only between the hours of 7:00 a.m. and 8:00 p.m. on weekdays[24] (see §118 of the Code of the Incorporated Village of Islandia).

## 10.3 Proposed Mitigation Measures

Notwithstanding the above, to reduce noise levels during construction, the following mitigation measures would be implemented:

- Noise-control features (e.g., mufflers, shields, temporary enclosures etc.) would be employed to reduce the noise levels of construction equipment by 3 dBA to 16 dBA. Pumps and compressors would be relocated in screened-off areas, out of the line of sight of the closest residential receptors (EPA, 1971); and

[24] Weekdays are defined within the Code of the Incorporated Village of Islandia as any day Monday through Saturday which is not a state or federal legal holiday.

- The proposed installation of fencing with geograde material that delimits the construction site would result in a 5 dBA reduction in sound level.[25]

Overall, therefore, construction noise would be attenuated to mitigate significant adverse impacts to surrounding properties. Also, construction-related noise impacts would continue over the construction period (see Section 2.0) and would cease upon completion of construction.

[25] This value is based on the lowest degree of difficulty for the installation of any type of barrier: Federal Highway Administration, *Highway Traffic Noise in the United States – Problem and Response*, U.S. Department of Transportation, 2000.

# 11.0 AESTHETICS AND CULTURAL RESOURCES

## 11.1 Existing Conditions

### Aesthetics

The site is located on two major roadways that are primarily developed with commercial uses proximate to the site. Both roadways are dominated with views of single-and multi-story commercial buildings at varying setbacks. The subject property is visible from both Motor Parkway and Veterans Memorial Highway, although dense vegetation along the site frontage restricts views into the site. Along both frontages are numerous overhead utilities, street lights and roadway signage. Photographs of the site and surrounding area are included in Appendix F of this DEIS.

### Cultural Resources

According to publicly-available resources, including but not limited to those maintained by the New York State Office of Parks, Recreation and Historic Preservation ("OPRHP"), no known historic or cultural resources exist at the subject property or vicinity. The Incorporated Village of Islandia does not designate any properties within the village as historic, and thus, no such local landmarks exist at, or proximate to, the subject property.

## 11.2 Probable Impacts of the Proposed Action

### Aesthetics

Due to the topography of the subject property, which slopes downward from the roadways to the interior of the site, the buildings have been designed to fit within the existing contours and, thus, have staggered elevations.

The proposed residential building would be visible from several different vantage points. The visibility of this site was favorably addressed in the *Comprehensive Plan Update* (see Section 3.0 of this DEIS), as the then-proposed buildings, which were proposed at a greater height, were thought to "create a landmark development on a visible site." The proposed architectural embellishments throughout the buildings will create a varied and appealing view.

The residential building would include a tower element at its southeast corner. This architectural feature would extend 30 feet from the main roof deck, and its intent is to lend a distinct visual element to the proposed residential structures. It would be visible from many vantage points, including the surrounding roadways, the on-site hotel, and the interior tree-lined promenades and roadways.

The proposed buildings will be most visible from the immediately-surrounding roadways, including Motor Parkway and Veterans Memorial Highway, and from surrounding nearby properties. Attention has been paid in considering the site layout such that views from all directions toward the site, as well as views within the site, would not include features such as parking lots, but instead would highlight aesthetically-pleasant buildings with appropriately-scaled landscaping features and an inviting, walkable environment.

Several architectural renderings and photographic simulations have been prepared by the project architect to depict views of individual buildings, and overall perspective drawings, to evaluate the potential visual impacts of the proposed development (see Appendix C). Also provided within Appendix C are a video "fly-through" animation of the proposed development (provided on Compact Disc), prepared by the project architect, and still images which were captured from the video. An analysis of these renderings and simulations follows.

Views from Veterans Memorial Highway

Included among these representations is a rendering of the site from along the east side of Veterans Memorial Highway, opposite the subject property. As depicted in this rendering, the proposed development would exhibit an inviting, pedestrian-friendly appearance. Each of the proposed buildings would have a distinctive, but compatible architectural design, appropriate for each use. Also, the landscape design proposed along the site boundary would obscure or soften views of the larger buildings given the perspective from the roadway, height of the proposed trees and distance between the viewpoint location and the individual buildings. The proposed parking is dispersed throughout the site, however, is somewhat concentrated at the northeast corner of the site. Special care has been given to including and improving pedestrian enclosure along existing thoroughfares along the perimeter of the site. On Veterans Memorial Highway, the proposed wall of low hedges with the addition of post-and-rail fencing, combined with the row of planted trees, provides a sense of enclosure for pedestrians and screening of the parking lot beyond. The additional renderings in Appendix C, as well as the video provided, provided from several viewpoints within the subject property, also echo these concepts.

Photographic simulations were also prepared from the driveway on the property to the north of the subject property ("Parisi property"), and from a parking area within the adjacent property to the south-southwest ("MetLife property"), to evaluate the potential visual impacts of the proposed development from these viewpoints. Also provided, for comparative purposes, is an existing conditions photograph from each viewpoint location, on which the simulations were based.

Views from the Parisi Property

Visible in the existing conditions photograph from the Parisi property are the areas of existing overgrown vegetation and disturbed areas, and numerous overhead utilities. As illustrated by the simulation, the proposed landscaping and post-and-rail fencing serve to enhance overall views of the site. The three-story hotel building and residential building are visible in the horizon, however, that the first-floor elevations of these buildings are well below the existing grade at Motor Parkway reduces the overall impact. Furthermore, the installation of landscaping along the site perimeter and the architectural variations that have been incorporated into the design of each building softens views and effectively mitigates any potential visual impact. The seven-story hotel, partially visible beyond the three-story hotel, does not dominate the horizon or have any substantial visual impact, given the change in grade and distance between the viewpoint location and the site of this hotel. The proposed retail, office and restaurant buildings, though inconspicuous from this viewpoint, add an attractive heterogeneity to the overall views of the site.

Views from the Met Life Property

The existing conditions photograph taken from the MetLife property shows the western portion of the subject property, at left, and the southern portion at right. Visible are the vegetated areas that border the MetLife property, overhead utilities and light poles. The office building on the Parisi property is partially visible at the center of the photograph.

The simulation provided illustrates that several of the proposed buildings would be at least partially visible from this viewpoint, the most substantial being the proposed seven-story hotel and the residential building. The existing perimeter vegetation at the MetLife property serves to partially screen the hotel, and the narrow profile of the building is unobtrusive from this perspective. The residential building, though of significant mass, has been designed to incorporate changes in plane and height, elements such as balconies and cornices, and other features to veil the mass of the building. It should also be noted that the simulation does not depict the proposed landscaping improvements. As depicted on the Landscape Plan (see Appendix A), a mix of Red Oak, Red Maple and Sweetgum trees are proposed between the MetLife property and the residential building, which would reach average mature heights of 50 - 60 feet or taller and further mitigate any potential adverse visual impacts from this perspective.

Visibility from along the Long Island Expressway

The proposed development would be visible by westbound traffic from along a 356±-foot portion of the Long Island Expressway, at the overpass at Veterans Memorial Highway (see perspective figure within Appendix C). Though the proposed development would be visible, it is expected that the proposed seven-story hotel would obscure views of the remaining proposed buildings. In the eastbound direction, it is expected that none of the proposed buildings would be visible or will be well-screened by existing evergreen foliage and the Motor Parkway overpass.

Views from Within the Site and Pedestrian Perspectives

At the pedestrian level, extensive landscaping would soften views of the buildings, and would create an aesthetically-pleasing environment. The landscaping design includes tree-lined roadways and promenades, and trees planted adjacent to the buildings to provide visual screening of buildings. Also, low-lying shrubbery within the center aisles of the access and egress points, planted islands within the parking area, and lawn areas within large open space areas (i.e., Village Green) are proposed. Sidewalks and paved crosswalks would also traverse the property to facilitate pedestrian access and to promote walking. The extensive and consistent landscaping throughout the site serves to create a cohesive development.

The video “fly-through” presentation offers perspectives of the proposed development from the pedestrian or drivers-eye level, traveling along the proposed internal boulevards. As illustrated by the video, the interactions of the proposed uses, the placement, massing and design of the proposed buildings, the central location of the Village Green among the various uses, and the landscaping design serve to offer a traditional “downtown” impression along the internal boulevards.

Proposed Architectural Design

The project architect has coherently designed the proposed residential condominium building to include shared functional open space and off-street parking, with consistent landscaping throughout.

The exterior building construction and design reflects a style of architecture that is traditional in proportion and primary materials, but modern and “pared down” in the detailing. The exterior finish on all buildings will be coordinated in appearance, and the exterior facades will be designed to avoid blank walls through the use of facade modulation, changes in materials, windows, and/or other design features. The exterior facades would be constructed with brick, cast stone and limited stucco to complement the building’s architectural style.

The proposed buildings will provide a moderate amount of variation in building mass form and style to provide character. Wherever appropriate, walls and roofs will include separations, changes in plane and height, and architectural elements such as cornices, balconies, and banding to break-up the mass of buildings.

Building massing and fenestration will have a vertical and not a horizontal emphasis. Also, buildings will have a “bottom, middle and top” rather that a uniform exterior to visually express that the ground floor functions are different from the upper floor functions and to create traditional proportions for the overall building. Window glass, particularly at street level, will be clear or lightly tinted so as to show active interiors that contribute to the active pedestrian environment.

Each building will be oriented toward the internal roadway, with primary entrances facing the internal roadway. However, buildings will address all of the streets or public spaces that they face. All buildings will also be designed to provide pedestrian and vehicular connections to other buildings in the proposed development. Techniques for complying with this requirement include, but are not limited to: (1) locating parking areas behind or under buildings, and (2) providing each building with direct pedestrian access from the main internal roadway fronting the buildings, and from all structured parking areas. Also, the proposed development will conform to the provisions of the Americans with Disabilities Act ("ADA") and the Fair Housing Act ("FHA").

Lighting

The proposed project will include the provision of site lighting throughout all common areas of the development (see Lighting Plan within Appendix A). Twenty-foot poles with dual light fixtures would be installed within landscape islands in all parking areas, and poles with single fixtures would be installed along the site perimeter adjacent to all paved areas. The proposed lighting plan has been designed to provide adequate levels of illumination for the safety of site patrons and pedestrians throughout all parking areas and walkways without creating any significant sources of off-site light spill.

As depicted by the site lighting detail provided on the Lighting Plan, 20-foot-tall, arched lampposts with downward-facing fixtures are contemplated for installation throughout the subject property. A total of 22 single-lamp poles and 59 double-lamp poles would be installed. The specific style of lamppost is proposed for its "Village" or "downtown" appearance, which would be consistent with the intended atmosphere of the overall proposed development.

Pursuant to the International Dark-Sky Association publication, Information Sheet 77 – "Recommended Lighting Levels for Exterior Lighting," the Illuminating Engineering Society of North America ("IESNA") sets forth minimum and average light levels for basic or typical conditions, and for enhanced security conditions.[26] For parking areas with medium levels of activity, with examples of community shopping centers and offices provided, the recommended horizontal illuminance is 3.6 footcandles – average. As indicated on the proposed Lighting Plan prepared by Nelson & Pope, the average footcandle is 2.73, and is therefore consistent with the IESNA recommended levels.

It is also noted that, to minimize light spill onto adjacent properties, the selected fixtures throughout the entire site prevent upward light spill.

Landscaping

Based on the Landscape Plan prepared by Nelson & Pope (see Appendix A), extensive plantings would be provided throughout the site to provide aesthetically-pleasant views throughout the site, and from off-site areas, and to balance the scale of the proposed buildings from all perspectives. Attention has been paid in choosing the species mix to provide aesthetic benefits during all seasons, to the maximum extent practicable.

Large trees are chosen for planting along the site perimeters, and within select parking islands, typically including a mix of Red and White Oaks, Red Maples and/or American Elms, with average mature heights of 60 – 70 feet or taller. Also provided among the taller species are medium-height species, such as Little Leaf Linden and others, and various shrubs and ground covers, to provide attractive and diverse views and screening at all heights.

[26] The enhanced conditions apply to areas where personal security or vandalism is a potential issue.

Other landscaped islands would be planted with low-lying shrubs and ground covers, including St. Johns Wort, Anthony Waterer Spirea, Parsons Juniper and others, to enhance the aesthetics while allowing for adequate and safe visibility across parking areas. Often, smaller trees are provided within these areas to allow for some shade and screening.

Trees and hedges are proposed along building exteriors throughout the development, to soften views of the buildings. Site access points are each planted with a variety of ground covers, shrubs and medium-height trees to create defined and attractive entrances. The proposed pump station, at the southeast corner of the site, is surrounded by Arborvitae to provide dense, year-round screening of the facility.

Overall, the proposed landscaping would provide aesthetically-pleasant and interesting views from all on- and off-site perspectives, and soften, screen and compliment views of the proposed buildings.

Shadow Analysis

A shadow analysis was prepared by the project architect (see Appendix C). The figure provided depicts the shadows to be cast by the proposed buildings at 9:00 a.m., 12:00 p.m. and 3:00 p.m. at each of the summer and winter solstices, to illustrate the range of shadows cast over the course of a year. The shadow zones cover the largest areas during the winter months, and the proposed eight-story residential building and seven-story hotel would cast the largest shadows.

During the winter, the area affected by the shadow cast by the proposed eight-story residential building would include the multi-story commercial office building at the northeast, along the north side of Motor Parkway, during the early-morning hours only. At all time periods analyzed, the shadow cast by the eight-story residential building would shade some portion of Motor Parkway. The proposed three-story hotel would also cast a shadow onto Motor Parkway during winter months. However, no significant portion of the roadway would be shaded during all daylight hours. The proposed seven-story hotel would cast a shadow over a small portion of Veterans Memorial Highway in the afternoon.

All additional areas to be affected by shadows of the proposed structures, during the winter, are undeveloped, improved with parking areas only, or are within the subject property. A small, landscaped area at the north of the proposed eight-story residential building would be shaded during all daylight hours in winter, as would the patio area at the north of the proposed three-story hotel. A section of the east-west internal drive between the seven-story hotel and the proposed restaurant pads would also be shaded during all daylight hours in the winter.

During the summer, only small areas would be shaded by the proposed structures, and no shadows would be cast onto off-site areas during the hours analyzed.

Based on the above, no significant impacts due to shadows cast by the proposed structures are anticipated.

**Cultural Resources**

As no local, state or national historic or cultural resources are known to exist at the subject property or vicinity, no adverse impacts upon same would result upon implementation of the proposed action.

## 11.3 Proposed Mitigation Measures

In order to ensure that no significant adverse aesthetic impacts would result, the following mitigation measures have been incorporated into the design of the Master Plan:

- The extensive landscaping will soften views of the buildings, create a pedestrian-friendly environment, and will promote walking;

- The proposed residential condominium building has been coherently designed to include shared functional open space and off-street parking;

- The exterior building construction and design would reflect a style of architecture that is traditional in proportions and primary materials but modern and "pared down" in its detailing;

- Exterior facades of buildings would be designed to avoid blank walls through the use of facade modulation, changes in materials, windows, and/or other design features;

- The buildings would provide a moderate amount of variation in building mass, form and style to provide character. Wherever appropriate, walls and roofs would include separations, changes in plane and height, and architectural elements such as cornices, balconies, and banding to break-up the building mass;

- The exterior facades of all buildings would be constructed with brick, cast stone and limited stucco to complement the building's architectural style. Vinyl or metal siding would be prohibited, with the exception of fascias, soffits, cornices and other architectural detailing which shall be compatible with, or complement, the character of the exterior design;

- The building massing and fenestration would have a vertical emphasis;

- Window glass, particularly at the street level, would be clear or lightly tinted so as to show active interiors that contribute to the active pedestrian environment; and

- All buildings would be designed to provide pedestrian and vehicular connections to other buildings in the MSPDD.

# 12.0 UNAVOIDABLE ADVERSE EFFECTS

The environmental impacts associated with the implementation of the proposed action have been described in Sections 3.0 through 11.0 of this DEIS, and mitigation measures for most of these impacts have been evaluated herein. Those impacts that cannot be either entirely avoided or fully mitigated are described below.

Short-Term Impacts

There will be several temporary construction-related impacts that cannot be completely mitigated. These impacts are associated with the site preparation and development (including grading, foundation excavation, installation of utilities and construction of building and parking facilities). It is anticipated that these impacts will cease upon completion of the construction phase of the project. Specific impacts are identified below:

- Despite the implementation of erosion and sedimentation control measures, minor erosion may occur;

- There is the potential for minor releases of fugitive dust during dry periods. However, as necessary, a water truck will be brought to the site; and

- Slight increases in noise levels at the site boundaries may result from construction activities. However, no construction activities will be implemented during sensitive late night hours (i.e., between 7:00 pm and 7:00 am).

It is expected that these impact will be of a short duration, that is, they will cease upon completion of construction.

Long-Term Impacts

Several long-term impacts association with project implementation have been identified. Mitigation measures have been proposed to reduce or eliminate most of the long-term impacts. Those adverse environmental long-term impacts, which cannot be fully mitigated, are set forth below:

- The 12.66± acres of undeveloped property would be converted to a mixed-use developments, thus modifying not only land use, but views from the surrounding roadways;

- The proposed development would utilize some of the existing capacity at the Windwatch STP;

- There would be an increased demand for water supply from the Suffolk County Water Authority;

- There would be an increase in Village population and school-aged children, some of whom may attend the Hauppauge UFSD;

- There would be an increased demand for services from the Hauppauge Fire Department and the Suffolk County Police Department;

- There would be increased demand on energy resources from KeySpan and LIPA;

- The proposed development would increase the number of housing units in the Village; and

- Traffic would increase on Veterans Memorial Highway and Motor Parkway, although traffic mitigation measures will be employed.

## 13.0 ALTERNATIVES AND THEIR IMPACTS

This section examines the SEQRA-mandated No-Action Alternative, pursuant to 6 NYCRR Part 617 and an As-of-Right Development Plan consisting of a 191,200 square-foot, four-story office-use building. A comparative summary of the proposed action and the alternative development plan follows in Table 35 below.

**Table 35 - Comparative Analysis of the Proposed Action and As-of-Right Development**

| | **Proposed Action** | **Alternative Plan** |
|---|---|---|
| **Land Use** | Mixed-Use (Residential, Hotel, Retail, Restaurant and Office) | Office |
| **Gross Building Area** | 498,570 square feet | 191,200 square feet |
| **Buildings, Roads and Pavement** | 426,986 square feet (9.80± acres) | 330,793 sq. ft. (7.59± acres) |
| **Lawn/Landscaping** | 124,349 square feet (2.86± acres) | 115,683 sq. ft. (2.66± acres) |
| **Natural Vegetation** | 0 square feet | 104,859 sq. ft. (2.41± acres) |
| **Water Usage (Potable & Irrigation)** | 103,998 gpd | 15,880 gpd |
| **Sanitary Flow** | 99,231 gpd | 11,472 gpd |
| **Projected Population** | 281 persons | 0 persons |
| **School-Aged Children** | 18 – 21 children | 0 children |
| **Solid Waste Generation** | 3.817 tons per day | 0.956 tons per day |
| **Trip Generation** | | |
| *Weekday AM Peak Hour* | 312 trips | 316 trips |
| *Weekday PM Peak Hour* | 538 trips | 294 trips |
| *Saturday Peak Hour* | 632 trips | 79 trips |
| **Floor Area Ratio** | 0.904 | 0.347 |
| **Electric Demand** | 8,867 KVA | 3,047 KVA |
| **Natural Gas Demand** | 18,620 CFH | 4,200 CFH |

## 13.1 No-Action Alternative

The No-Action Alternative would involve leaving the site as an undeveloped parcel. This could be contrary to the prior Consent Agreement between the Village and the applicant. Moreover, this alternative would be contrary to the applicant's right to develop the site. Also, the No-Action Alternative would be inconsistent with the acknowledgement in the Village's *Comprehensive Plan Update*, which identified the subject parcel as "the largest and likely the most valuable undeveloped property in the Village."

## 13.2 As-of-Right Development Alternative

The As-of-Right Development Plan included in Appendix P of this DEIS provides a four-story, 191,200 square-foot office-use building on the southeast portion of the site. Pursuant to the Village Code parking requirement of one space per 200 square feet of office area, the As-of-Right Plan provides the requisite 956 stalls (including 20 handicap stalls). The site would be accessed from both Veterans Memorial Highway and Motor Parkway.

Relevant site data, as provided by the project engineers, Nelson & Pope, based on the As-of-Right Plan in Appendix P of this DEIS, are as follows:

**Table 36 - Site Data for the As-of-Right Development Plan**

| **Lot Coverage** | **Existing** | **Alternative Plan** |
|---|---:|---:|
| Buildings, Roads and Pavement | 0 | 330,793 sq. ft. (7.59± acres) |
| Lawn/Landscaping | 0 | 115,683 sq. ft. (2.66± acres) |
| Natural Vegetation | 551,335 sq. ft. (12.66± acres) | 104,859 sq. ft. (2.41± acres) |
| Total Area | 551,335 sq. ft. (12.66± acres) | 551,335 sq. ft. (12.66± acres) |

**Land Use and Zoning**

The subject property is surrounded by professional offices and commercial uses. As such, the As-of-Right Development Plan for situating office use on the site would be consistent with the surrounding properties. The site is situated within the Office ("O") zoning district (and within the MF-18 Overlay District). As indicated in Section 3.1 of this DEIS, permitted uses in the "O" zoning district include offices and banks.

A consistency analysis with the bulk requirements of the Office ("O") zoning district is provided in Table 37 below.

**Table 37 - Zoning Compliance Table for Office (O) District**

| **Bulk Requirement** | **Required** | **Provided** |
|---|---|---|
| Minimum Plot Area | 40,000 square feet | 551,335 square feet |
| Minimum Plot Width | 100 feet | N/A |
| Maximum Building Height | 4 stories / 60 feet | 4 stories / 60 feet |
| Minimum Front Yard | 50 feet | 108.2 feet |
| Minimum Side Yard | 25 feet | 96.4 feet |
| Minimum Rear Yard | 25 feet | 161.1 feet |
| Maximum Floor Area Ratio | 0.35 | 0.347 |
| Minimum Landscape Area | 40% | 40% |

**Soils and Topography**

Soil types at the subject property include CuB, PlB and PlC soils. Due to the possible presence of slopes, the CuB soils present moderate limitations for streets and parking lots and the PlC soils present moderate limitations for the siting of buildings, and severe limitations for the siting of streets and parking lots. All of the on-site soils have limitations for lawn and landscaped areas based on the presence of a sandy surface layer.

Similar to the proposed action, the As-of-Right Development Plan would include the grading of significant portions of the subject property to soften steep slopes, as necessary. Additionally, grading activities would result in a mixing of surface layers, in most areas of the site, such that the sandy surface layer may not interfere with the planting of lawns and landscaping. The application of topsoil within landscaped areas would further reduce any limitations on the siting of lawns and landscaping. As such, the potential engineering limitations would be overcome.

The As-of-Right Development Plan would involve the grading of the subject site. According to the Earthwork Analysis included in Appendix P of this DEIS, approximately 13,000 cubic yards of material would be cut and 25,000 cubic yards of fill material would be required for the development. As such, approximately 12,000 cubic yards of fill material would need to obtained and exported to the site.

As indicated in Section 4.1 of this DEIS, approximately 88 percent of the site exhibits slopes less than 10 percent, and the remaining 12 percent of the site consists of steeper slopes, which are limited to the southeast corner of the site, narrow areas along the northern perimeter, and few, narrow areas at the site's interior. The As-of-Right Development Plan would increase the area of slopes of less than 10 percent to 90.9 percent of the subject property. The remaining 9.1 percent of the subject property would consist of slopes greater than 10 percent.

It would be expected that the erosion and sedimentation control measures for the alternative plan would be similar to that of the proposed action. As such, the potential erosion and sedimentation impacts during construction would be mitigated.

Overall, the As-of-Right Development Plan would not be expected to result in significant adverse impacts to soils or topography.

**Water Resources**

The projected sanitary flow for the 191,200 square-foot office building would be 11,472 gpd (based on a factor of 0.06 gpd/square foot). As discussed in Section 5.0, approval has been granted for the expansion of the Windwatch STP from 350,000 gpd to 700,000 gpd, and the projected sanitary flow is well within the plant capacity. Therefore, the As-of-Right Development Plan would not be expected to result in significant adverse impacts associated with sanitary discharge.

Potable water demand for the commercial building, under the As-of-Right Development Plan would be 11,472 gpd. In addition to the potable water demand of the office, the site area to be landscaped would require irrigation during the 20-week irrigation season (May through September). The area to be landscaped includes 115,683 square feet, and based on a plant water demand of two inches per week, this area represents an irrigation demand of approximately 2.86 million gallons over the 20-week irrigation season.

An average of 17.5 inches[27] of rainfall during the irrigation season would reduce the total plant water demand by approximately 1.25 million gallons. The total irrigation demand during the irrigation season would be 1.61 million gallons, or 4,408 gallons per day (averaged over 365 days). Thus, the total potable water demand at the subject property, under this alternative, including irrigation, would be 15,880 gpd, which is 88,228 gpd less than the proposed development plan. Same would be provided by the Suffolk County Water Authority, via existing supplies within the roadways surrounding the subject property.

All stormwater runoff would be controlled on-site with the use of drywells.

Overall, the As-of-Right Development Plan would not be expected to result in significant adverse impacts to water resources.

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[27] National Oceanic and Atmospheric Administration. *Monthly Precipitation Probabilities and Quintiles, 1971-2000*. Climatography of the United States, No. 81, Supplement No. 1, Page 37. 2002.

**Ecology**

The As-of-Right Development Plan would retain 2.41± acres of the overall 12.66± acres of natural vegetation. As indicated in the ecological survey presented in Section 6.0 of this DEIS, the high-density commercial/industrial development in the vicinity has left the subject site, for the most part, as an isolated "natural" area surrounded by development. Therefore, although this alternative development would retain a greater area of natural vegetation, because of the isolated natural area, there would not be significant ecological benefits associated with this alternative.

**Community Facilities and Utilities**

As discussed in Section 7.0 of the DEIS, the subject property is within the Hauppauge UFSD and the service areas of the Hauppauge Fire Department and the Suffolk County Police Department – Fourth Precinct. The As-of-Right development alternative does not include a residential component, and thus, no school-aged children would be generated. The four-story office-use building would increase the demand for fire, ambulance and police protection services, however, to a lesser extent than would the proposed development. The office building would be designed in compliance with the New York State building and fire codes, and would represent a similar demand as do the numerous existing multi-story office uses in the surrounding area. Therefore, development under this alternative would not create any condition requiring new fire protection equipment, and no significant adverse impact to community facilities would be anticipated.

As provided by G.C. Engineering & Associates, P.C., the anticipated electric and natural gas loads for the four-story office use would be 3,047 KVA and 4,200 CFH, respectively, as compared to the demands of 8,867 KVA and 18,620 CFH under the proposed action.

**Transportation**

Using ITE trip generation data, the traffic volume generated by a 192,000± square-foot office building was estimated. The trip generation is summarized in Table 38 below:

**Table 38 - Trip Generation for As-of-Right Development Plan and Comparison to Proposed Development Plan**

| Development | Weekday | | | | Saturday Peak Hour | |
|---|---|---|---|---|---|---|
| | A.M. Peak Hour | | P.M. Peak Hour | | | |
| | Enter | Exit | Enter | Exit | Enter | Exit |
| General Office Building<br>192,000 S.F.<br>(Land Use Code 710) | 278 | 38 | 50 | 244 | 43 | 36 |
| Proposed Islandia Village Center<br>(New traffic on roadway network generated by the proposed development from Table 15) | 169 | 143 | 262 | 276 | 351 | 281 |

Note: All trips in vehicles per hour.

Review of the data in Table 38 above indicates that, based on ITE, the proposed action can be expected to generate more traffic than the alternate as-of-right use. The As-of-Right Development Plan includes 956 parking stalls, which complies with the Village parking requirement of one space per 200 square feet of office area. Overall, the As-of-Right Development Plan would not be expected to result in significant adverse impacts to water resources.

**Air Quality and Noise**

As indicated in Section 9.0 of this DEIS, the proposed development plan would not result in significant adverse air quality impacts. Based on the trip generation data presented above, the As-of-Right Development Plan would generate fewer trips than the proposed development. As such, no significant adverse air quality impacts would be expected from the alternative development.

As there are no significant adverse noise impacts associated with the proposed action, there would be no such impacts associated with the As-of-Right Development Plan.

**Aesthetics and Cultural Resources**

The As-of-Right Development Plan would include a use that is consistent with surrounding multi-story office buildings. However, from a visual perspective, the subject property would be dominated, in large part, with a parking area. As indicated on the As-of-Right Plan in Appendix P of this DEIS, approximately 268,916 square feet or 6.17 acres of the 12.66-acre site would be comprised of paved parking areas and driveways.

The project architect has prepared conceptual photographic simulations of the four-story office building (see Appendix C), to allow for a comparative visual impact analysis of this alternative versus the proposed plan. The simulations include a perspective from the MetLife property and from the Parisi property. These simulations depict the four-story office building as a typical architectural style, consistent with the existing office buildings in the surrounding area. Though of a smaller mass than the proposed residential building or seven-story hotel, the four-story office use still has substantial size. Development under this alternative would likely include some enhancement of the streetscape of the subject property, as depicted in the perspective from the Parisi property. However, views across the site would be of large, often vacant parking areas without the aesthetic benefit of numerous landscaped areas and variation of views. Thus, though this alternative would include the development of only one, four-story building, which would be less obtrusive, in terms of mass, as compared with the proposed development, the aesthetic benefits and overall character of the site that would be afforded by the proposed development would not be provided.

As no local, state or national historic or cultural resources are known to exist at the subject property or vicinity, no adverse impacts upon same would result upon implementation of the As-of-Right Development Plan.

## 14.0 IRRETRIEVABLE AND IRREVERSIBLE COMMITMENT OF RESOURCES

Certain additional resources related to the construction aspects of the development will be committed. These resources include, but are not limited to, concrete, asphalt, lumber, paint and topsoil. Mechanical equipment resources will be committed to assist personnel in the construction at the property. The operation of construction equipment will require electricity, water resources and fossil fuels. Furthermore, the construction phase of the proposed project will require the commitment of manpower resources as well as time.

## 15.0 GROWTH-INDUCING ASPECTS

Growth-inducing aspects are generally described as the long-term secondary effects of the proposed action. The proposed action would result in the conversion of undeveloped land to a mixed-use residential, commercial and retail community.

As discussed in Section 3.2 of this document, and based on the Rutgers Study, the projected 150 condominium units would result in a total population of 281 persons on the site. The addition of approximately 281 persons within the proposed 150 residential units would create a demand for additional commercial, retail and institutional uses. The concept of providing a mixed-use community would assist in allowing future residents to meet some of their needs within the community without the need to travel by automobile. The proposed development would provide high quality infrastructure and other establishments to meet the demands of the future residents.

The proposed action will result in the generation of a significant number of employment opportunities in the commercial and residential uses on the site. Given the range of employment opportunities to be offered, it is likely that the some of the jobs generated would be filled by persons either living on-site or within the region.

With regard to traffic growth, the proposed mitigation measures would minimize potential adverse impacts associated with implementation of the proposed action. The required mitigation, however, does not include construction of new roadways. Therefore, it is unlikely that the proposed traffic mitigation measures would induce additional growth in the area.

The proposed project does not involve expanding either the sewer district or constructing a new sewage treatment plant. As such, the construction of the proposed development will not induce growth relating to sewer expansion. The proposed development would also be connected to existing public water lines. No new mains are needed to serve the proposed development.

The development of the site would increase the demand for fire protection and ambulance service, which is provided by the Hauppauge Fire Department. In order to accommodate the proposed development, the Hauppauge Fire Department may require additional personnel. There are several multi-story buildings within the service area of the Hauppauge Fire Department, including the Windwatch Hotel, Marriott Hotel, and Computer Associates. Therefore, it is not anticipated that this proposed development would create a fire protection condition requiring new equipment.

Based upon the above analysis, the proposed action is not expected to result in significant growth inducing impacts in the Incorporated Village of Islandia or the surrounding area.

## 16.0 USE AND CONSERVATION OF ENERGY

Implementation of the proposed action would result in the construction of 150 condominium units, hotels providing a total of 275 rooms, retail and office uses, and restaurant establishments. Thus, there would be an increase in the demand for electricity and natural gas from service providers (i.e., LIPA and KeySpan). As discussed in Section 7.2 of this DEIS, the proposed development would represent an electric load of 8,867 KVA and a natural gas load of 18,620 CFH. Consultations have been undertaken with LIPA and KeySpan to request confirmation of service availability. Both providers have confirmed that services would be available to the proposed development (see Appendix M). Furthermore, the New York State Energy Code requirements will be met (or exceeded), and conservation measures will be incorporated into the design, to the maximum extent practicable.

Various energy-efficient and "green" design features have been incorporated into the proposed project. Such features are described below, with the associated environmental benefits indicated:

1. Efficient irrigation design
   - Reduces water consumption during irrigation season;

2. High-performance glass windows
   - Maximizes daylight;
   - Minimizes seasonal heat gain/loss;

3. Computerized building management system
   - Maintains maximum building efficiency;

4. Efficient Fixtures
   - Energy Star appliances and compact fluorescent lighting reduce energy consumption;

5. Extensive street plantings
    - Reduces stormwater runoff;
    - Reduces “heat island” effect;
    - Improves air quality;

6. Low-maintenance landscaping
    - Reduces irrigation demand;
    - Reduces need for pesticide applications; and

7. Recycling facilities within buildings
    - Makes recycling convenient for tenants.

With the above-described measures and features incorporated into the project design, the potential impacts associated with new development on energy resources (e.g., natural gas and electricity) would be minimized to the maximum extent practicable.

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**VOLUNTARY DRAFT ENVIRONMENTAL IMPACT STATEMENT**
**MAIN STREET PLANNED DEVELOPMENT DISTRICT**
**PROPOSED ISLANDIA VILLAGE CENTER**
**SOUTHWEST CORNER OF VETERANS MEMORIAL HIGHWAY (NYS ROUTE 454)**
**AND MOTOR PARKWAY (CR 67)**
**INCORPORATED VILLAGE OF ISLANDIA**
**SUFFOLK COUNTY, NEW YORK**

**PROJECT LOCATION:** 12.66± acres located on the southwest corner of Veterans Memorial Highway (NYS Route 454) and Long Island Motor Parkway (CR 67) in the Incorporated Village of Islandia, Suffolk County, New York. Suffolk County Tax Map Nos. District 0504 - Section 1 - Block 1 - Lots 7-10.

**APPLICANT:**
Motor Parkway Associates, LLC
1000 Grand Boulevard
Deer Park, New York 11729

Contact: Vincent Pizzulli, Esq.
(631) 574-4510

**LEAD AGENCY:**
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Board of Trustees
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**DATE OF PREPARATION:** August 2006
Revised November 2007
Revised May 2008

**AVAILABILITY OF DOCUMENT:** This document represents a voluntary Draft Environmental Impact Statement (DEIS) prepared in accordance with 6 NYCRR §617.9. It is submitted for treatment by the lead agency as an "environmental assessment form," for the purpose of determining significance pursuant to 6 NYCRR §617.6(a)(4). Copies are available for public review and comment at the offices of the lead agency.

## Table of Contents

**Page**


1.0 EXECUTIVE SUMMARY ..... i
2.0 DESCRIPTION OF THE PROPOSED ACTION ..... 1
2.1 Project Description and Proposed Site Layout ..... 1
2.2 Site and Project History ..... 8
2.3 Project Purpose, Need and Benefits ..... 11
2.4 Required Permits and Approvals ..... 12
3.0 LAND USE AND ZONING ..... 13
3.1 Existing Conditions ..... 13
3.2 Probable Impacts of the Proposed Action ..... 17
3.3 Proposed Mitigation Measures ..... 21
4.0 SOILS AND TOPOGRAPHY ..... 22
4.1 Existing Conditions ..... 22
4.2 Probable Impacts of the Proposed Action ..... 29
4.3 Proposed Mitigation Measures ..... 31
5.0 WATER RESOURCES ..... 32
5.1 Existing Conditions ..... 32
5.2 Probable Impacts of the Proposed Action ..... 34
5.3 Proposed Mitigation Measures ..... 45
6.0 ECOLOGY ..... 46
6.1 Existing Conditions ..... 46
6.2 Probable Impacts of the Proposed Action ..... 69
6.3 Proposed Mitigation Measures ..... 77
7.0 COMMUNITY SERVICES AND UTILITIES ..... 78
7.1 Existing Conditions ..... 78
7.2 Probable Impacts of the Proposed Action ..... 78
7.3 Proposed Mitigation Measures ..... 85
8.0 TRANSPORTATION ..... 87
8.1 Existing Conditions ..... 87
8.2 Probable Impacts of the Proposed Action ..... 93
8.3 Proposed Mitigation Measures ..... 136
9.0 AIR QUALITY ..... 138
9.1 Existing Conditions ..... 138
9.2 Probable Impacts of the Proposed Action ..... 140
9.3 Proposed Mitigation Measures ..... 150
10.0 NOISE ..... 151
10.1 Existing Conditions ..... 151
10.2 Probable Impacts of the Proposed Action ..... 151
10.3 Proposed Mitigation Measures ..... 158
11.0 AESTHETICS AND CULTURAL RESOURCES ..... 160
11.1 Existing Conditions ..... 160
11.2 Probable Impacts of the Proposed Action ..... 160
11.3 Proposed Mitigation Measures ..... 170

12.0 UNAVOIDABLE ADVERSE EFFECTS .....172
13.0 ALTERNATIVES AND THEIR IMPACTS.....174
13.1 No-Action Alternative ..... 175
13.2 As-of-Right Development Alternative..... 175
14.0 IRRETRIEVABLE AND IRREVERSIBLE COMMITMENT OF RESOURCES .....183
15.0 GROWTH-INDUCING ASPECTS.....184
16.0 USE AND CONSERVATION OF ENERGY.....186
17.0 BIBLIOGRAPHY.....188

## List of Appendices

Appendix A – Project Plans
Appendix B – Village Comments in Correspondence Dated January 22, 2008, December 17, 2007 and September 11, 2006, and Proposed Use District Regulations: Main Street Planned Development District
Appendix C – Architectural Renderings, as prepared by ADL III Architecture, P.C.
Appendix D – Federal Aviation Administration References
Appendix E – Topographic Map of Property, as prepared by Nelson & Pope
Appendix F – Photographs of Site and Surrounding Area
Appendix G – Slope Analysis – Existing Conditions, as prepared by Nelson & Pope
Appendix H – Earthwork Analysis Plan and Slope Analysis – Proposed Conditions, as prepared by Nelson & Pope
Appendix I – Windwatch Sewage Treatment Plant Resolution
Appendix J – Suffolk County Water Authority Correspondence
Appendix K – Wildlife Database Appendix, as prepared by Cramer Consulting Group, Inc.
Appendix L – Emergency Services Correspondence
Appendix M – Electric and Natural Gas Service Provider Correspondence
Appendix N – Traffic Impact Study and Correspondence
Appendix O – Air Quality Analysis, as prepared by EEA, Inc.
Appendix P – As-of-Right Alternative Development Plans, as prepared by Nelson & Pope

## List of Figures

Figure 1 – Site Location Map ..... 2
Figure 2 – Zoning Map ..... 14
Figure 3 – Soil Survey Map ..... 23
Figure 4 – Water Table Elevation ..... 33
Figure 5 – Existing Habitats ..... 47
Figure 6 – Project Area Map ..... 143
Figure 7 – Nearest Sensitive Noise Receptors ..... 156

## List of Tables

Table 1 – Site Data for the Existing Site and Post-Development Conditions ..... 7
Table 2 – Required Permits and Approvals ..... 12
Table 3 - Engineering Limitations of On-Site Soils ..... 27
Table 4 – Projected Sewage Flow ..... 35
Table 5 – Site Quantities ..... 47
Table 6 – Plant Species List ..... 54
Table 7 – Protected Native Plants ..... 59
Table 8 – Bird Species List ..... 63
Table 9 – Mammal Species ..... 66
Table 10 – Reptile & Amphibian Species List ..... 68
Table 11 – Proposed Site Quantities ..... 69
Table 12 - School-Aged Children in Existing Multi-Family Developments ..... 80
Table 13 - Projected Solid Waste ..... 83
Table 14 – Accident Summary ..... 92
Table 15 – Summary of Site-Generated Traffic ..... 96
Table 16 - Adjusted Site-Generated Traffic Summary ..... 98
Table 17 - Signalized Intersections – Level of Service Criteria ..... 104
Table 18 - Summary of Signalized Intersection Capacity Analyses ..... 107
Table 19 - Summary of Supplemental Signalized Intersection Capacity Analysis ..... 109
Table 20 - Unsignalized Intersections - Level of Service Criteria ..... 112
Table 21 - Summary of Unsignalized Intersection Capacity Analyses – Motor Parkway at the Proposed Easterly Site Access Drive, 2009 Build ..... 113
Table 22 - Weekday Midday Peak Volume Comparison ..... 115
Table 23 - Peak Parking Needs, July Weekend ..... 124
Table 24 – Ambient Concentrations ..... 139
Table 25 – Screening Summary ..... 142
Table 26 – Intersection Level of Service Screening ..... 144
Table 27 – Capture Criteria Screening ..... 146
Table 28 – MOBILE6.2 Emissions Factors ..... 148
Table 29 – Volume Threshold Screening ..... 149
Table 30 - Approximate Addition of Sound Levels ..... 152
Table 31 - Noise Levels of Common Sources ..... 153
Table 32 - Human Reaction to Increases in Sound Pressure Level ..... 154
Table 33 - Maximum Noise Levels of Common Construction Machines ..... 155
Table 34 - Sensitive Receptor Noise Levels ..... 157
Table 35 - Comparative Analysis of the Proposed Action and As-of-Right Development ..... 174
Table 36 - Site Data for the As-of-Right Development Plan ..... 175
Table 37 - Zoning Compliance Table for Office (O) District ..... 176
Table 38 - Trip Generation for As-of-Right Development Plan and ..... 180