

A. INTRODUCTION

In the areas where significant adverse impacts are identified (transportation, and construction-period transportation and noise), mitigation measures to reduce or eliminate impacts to the maximum extent practicable are developed and evaluated. As described below, measures to further mitigate adverse impacts have been refined and evaluated between the Draft and Final Environmental Impact Statement (EIS). Therefore, this Final EIS (FEIS) includes additional measures and commitments on all practicable mitigation measures to be implemented in conjunction with the Proposed Actions. These measures are discussed below. Areas in which the Proposed Project would result in significant adverse impacts that cannot be fully mitigated are discussed in Chapter 18, “Unavoidable Adverse Impacts.”

Of particular note, many members of the public and elected officials commented on the need for a new full-time Long Island Rail Road (LIRR) station to help mitigate transportation impacts identified in the DEIS by providing enhanced mass transit options to the Proposed Project. Following the public comment period, LIRR has determined that a new LIRR Elmont Station could be developed along the Main Line. Therefore, in coordination with ESD and the Applicant, LIRR has developed plans to construct in two phases a new LIRR Elmont Station adjacent to the North Lot. This LIRR Elmont Station is fully described and analyzed in this chapter.

PRINCIPAL CONCLUSIONS

TRANSPORTATION

As discussed in Chapter 11, “Transportation,” the Proposed Project would result in significant adverse impacts on the local street network, the highway network, and bus service, as well as potential impacts to parking. Significant adverse impacts on LIRR service, pedestrian circulation and vehicular and pedestrian safety were not identified. An extensive set of proposed mitigation measures have been developed to address these impacts consisting of a new LIRR Elmont Station that would be added to the LIRR Main Line; implementation of a comprehensive Transportation Management Plan (TMP); standard traffic engineering improvements; and adjustments to bus service. The TMP includes a combination of demand management strategies aimed at reducing the volume of project-generated peak hour vehicular trips, changing travel patterns to redistribute traffic away from critical highway segments, and shifting demand from auto to alternate modes of transportation. The TMP would be implemented from the opening of the arena and then reviewed and refined on a regular basis at meetings with stakeholders such as transportation agencies, police departments, and local municipalities, enabling continued improvement and adaptation to reflect actual field conditions. A monitoring program during Proposed Project operations would be undertaken to identify which of the mandated demand management strategies are most effective at minimizing impacts to the maximum extent feasible. The TMP would identify actions needed for different days of the year, and for different types and sizes of events. The TMP would serve as an integral component of Proposed Project operations and it would be included in the environmental commitments that would be required of the Applicant.

Traffic

Local Street Network

Of the 38 intersections analyzed on the local street network, the Proposed Project would result in significant adverse traffic impacts at six intersections during the weekday AM peak hour, six intersections during the weekday PM peak hour, nine intersections during the Saturday midday peak hour, six intersections during the Saturday PM peak hour, and two intersections during the Saturday night peak hour.

The mitigation analyses presented in this chapter indicate that the majority of the aforementioned intersections with significant adverse traffic impacts could be fully mitigated via implementation of standard traffic engineering improvements such as: the installation of new traffic signals at currently unsignalized intersections, modification of signal phasing and timing at currently signalized intersections, deployment of traffic enforcement agents (TEAs) before arena events, implementation of turn prohibitions where needed, geometric improvements at specific intersections to provide improved channelization, lane re-striping, and/or new lane designations. With such measures, significant adverse traffic impacts would be fully mitigated at all but three traffic movements at one intersection during the weekday AM peak hour, one traffic movement at one intersection during the weekday PM peak hour, six traffic movements at two intersections during the Saturday midday peak hour, and two traffic movements at one intersection during the Saturday PM peak hour.

Implementation of the recommended traffic engineering improvements is subject to review and approval by the New York State Department of Transportation (NYSDOT), the Nassau County Department of Public Works (NCDPW), or the New York City Department of Transportation (NYCDOT), depending upon the location of the intersection. If any of these measures are deemed infeasible and no alternative mitigation measures can be identified at a particular location, then the identified significant adverse traffic impacts at such location would be unmitigated.

It is acknowledged that certain routes in the vicinity of the traffic study area may be susceptible to traffic diversions by drivers using mobile navigation apps with real-time traffic data (e.g., Google Maps or Waze) to avoid congestion, or by other motorists with a high degree of familiarity with the local street network. As discussed below, as part of the Proposed Project, a comprehensive TMP has been developed and reviewed with relevant agencies. The TMP includes a monitoring plan that would be used to determine the extent to which traffic diversions may occur as a result of traffic congestion caused by project-generated vehicle trips. A key element of the TMP aimed at reducing the potential for traffic diversions onto sensitive local residential streets is for NYAP to partner with navigation app providers such as Waze to define local streets that could be designated as “unavailable” to through traffic during event arrival and departure periods so that through traffic would not be routed to them. If it is determined that traffic diversions are occurring on a recurrent basis at unacceptable levels, potential mitigation measures to address such impacts could involve refinements to the TMP to further reduce the volume of project-generated vehicle trips during peak hours and/or the implementation of signage, turn restrictions, or traffic calming measures along routes susceptible to traffic diversions.

Highway Network

Of the 37 highway segments analyzed on the northbound and southbound Cross Island Parkway between the Southern State Parkway and Jamaica Avenue, the Proposed Project would result in significant adverse traffic impacts to six highway segments during the weekday AM peak hour, 15 highway segments during the weekday PM peak hour, 24 highway segments during the Saturday midday peak hour, 22 highway segments during the Saturday PM peak hour, and 21

highway segments during the Saturday night peak hour. Of the five merge and weaving segments analyzed at the interchanges of the Cross Island Parkway with the Long Island Expressway and Grand Central Parkway, the Proposed Project would result in significant adverse traffic impacts at one weaving segment during the Saturday midday peak hour and two merge segments during the Saturday PM peak hour. Additionally, micro-simulation analyses performed for the Cross Island Parkway showed that the Proposed Project would result in substantial increases in “unserved” vehicles (unmet demand) that could not be processed during the weekday PM and Saturday PM peak hours.

The identification of significant adverse impacts on the highway network is not unusual for projects of this scale. Many of these highway segments operate at congested or near-congested conditions in at least one direction during some of those peak periods under existing conditions; the Cross Island Parkway is in immediate proximity to the Project Sites, and it is projected to be used by up to 90 percent of those driving to the Proposed Project. Widening of the Cross Island Parkway is neither practical nor reasonably feasible, and has been precluded as an option. However, an extensive set of proposed mitigation measures has been developed to minimize and reduce the magnitude of these impacts consisting of the addition of a new LIRR Elmont Station on the LIRR Main Line and implementation of a comprehensive TMP, which contains a suite of transportation demand management strategies aimed at reducing the volume of project-generated peak hour vehicular trips, changing travel patterns to redistribute traffic away from key segments of the Cross Island Parkway, and shifting demand from auto to alternate modes of transportation (including the LIRR, shuttle buses, and charter buses).

The proposed mitigation measures would reduce the level of additional congestion on the Cross Island Parkway by eliminating all of the unmet demand in both the northbound and southbound directions during the weekday PM peak hour and in the southbound direction during the Saturday PM peak hour. The proposed mitigation measures would also substantially reduce the unmet demand in the northbound direction during the Saturday PM peak hour, and the use of demand management strategies in the TMP could further reduce or eliminate the remaining unmet demand by redirecting some of the arena patrons to approach the Project Sites via the southbound direction of the parkway by using a partnership with a navigation app provider.

With these measures in place, unmitigated impacts would be reduced to 3, 11, 22, 20, and 14 highway segments along the northbound and southbound Cross Island Parkway between the Southern State Parkway and Jamaica Avenue during the weekday AM, weekday PM, Saturday midday, Saturday PM, and Saturday night peak hours, respectively. One unmitigated impact would remain at one highway segment at the interchange of the Cross Island Parkway with the Long Island Expressway during the Saturday midday peak hour.

The traffic analyses for the 2021 With Action condition use a conservative approach in that they have assessed scenarios with sold-out arena events, along with trips associated with the retail village and other project uses, and daytime racing at Belmont Park with no reductions to project-generated trips associated with non-arena uses. As such, the With Action analyses represent worst-case scenarios and may not be indicative of what would typically occur during most days over the course of the year.

LIRR Service

A new LIRR Elmont Station would be added to the LIRR Main Line adjacent to the North Lot. This new mitigation measure would provide additional transit service to the Project Sites, including new direct train service to/from points east and additional train service to/from points

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

west. The new LIRR Elmont Station would also provide full-time train service to the local community, with parking available for commuters in the North Lot and pedestrian access from Bellerose Terrace.

The new LIRR Elmont Station would be constructed in two phases. The first phase would involve construction of a south platform that would only provide eastbound service and would be completed in 2021, prior to the opening of the arena. The second phase would involve construction of a north platform, a pedestrian overpass between the north and south platforms, and extension of the south platform. Westbound train service at the north platform would be accommodated following the completion of the LIRR Third Track and East Side Access projects (expected in 2023). The “Interim Conditions” section below summarizes the assessment of transportation conditions with only the eastbound platform of the new LIRR Elmont Station in operation.

With the addition of a new LIRR Elmont Station on the LIRR Main Line (providing service in both the eastbound and westbound service) and the implementation of further incentives to use transit through the TMP, it is expected that the LIRR would be used by up to 30 and 24 percent of arena patrons arriving for weekday and Saturday events, respectively. The new LIRR Elmont Station would be operated in conjunction with the existing LIRR Belmont Park Station on the spur. On days with scheduled events at the proposed arena, the LIRR would continue to provide shuttle service between Jamaica Station and Belmont Park Station with two trains before and after events. The specifics of the operating plan for the new LIRR Elmont Station would be determined by the LIRR and trains selected to stop at the new station—which would include trains on the Hempstead, Huntington/Port Jefferson, Oyster Bay, and/or Ronkonkoma branches—would be chosen based on available capacity.

Two shuttle trains and regularly scheduled trains traveling along the LIRR Main Line would have sufficient capacity to accommodate the projected ridership traveling to the Project Sites without impacts to regular commuter service, except that after a sold-out hockey game or concert on a weeknight or a Saturday night, when the LIRR operates less frequent service, one additional eastbound train would need to be provided to accommodate eastbound riders. After an arena event it is possible that up to two additional trains (for a total of four) could be operated out of Belmont Park Station to provide additional service to points east or west, if necessitated by customer demand. As this need for additional train service would occur outside of the weekday PM commuter peak period, it would not impact regular commuter service. It is unlikely that the Proposed Project would result in any impacts to platforms, stairways, or ramps at Belmont Park Station.

One of the demand management strategies to shift project-generated auto trips to transit would include a shuttle bus service between the Project Sites and the LIRR Rockville Centre Station to allow arena patrons along the Babylon Branch to travel to the arena without having to transfer trains at Jamaica and backtrack to Belmont Park. It is expected that westbound trains traveling along the Babylon Branch before events and eastbound trains traveling along the Babylon Branch after events would have sufficient capacity to accommodate the projected ridership for a sold-out hockey game.

The LIRR anticipates that the new LIRR Elmont Station would not be expected to generate new commuter ridership but would instead result in a shift of existing riders living in Bellerose Terrace and Elmont that currently use other stations. With the operation of the new LIRR Elmont Station, existing levels of commuter service would be maintained to other LIRR stations (e.g., Queens Village, Bellerose, Floral Park) and the addition of the new LIRR Elmont Station would not be anticipated to result in an impact to commuter service.

Bus Service

It is likely that the Proposed Project would result in a significant adverse impact to Nassau Inter-County Express (NICE) and MTA bus routes during time periods before and after sold-out arena events, requiring some increases in bus service to accommodate bus rider trips made by arena patrons. Bus operators typically adjust their service based on ridership and market demand and it is anticipated that such increases in service would be coordinated with NYAP as part of the TMP for the arena. While additional bus service may be needed on public bus routes, it is likely this would occur during off-peak periods when additional buses already part of the NICE bus or MTA bus fleet would be available. Additionally, as of June 23, 2019, NICE has committed to adding more buses and an expanded schedule to its “Flexi” route serving Elmont and Valley Stream. The TMP also includes operation of a shuttle bus route between the arena and Downtown Jamaica, which could be used by arena patrons as an alternate to the public transit routes providing service to and from Queens. Absent the implementation of increased frequency of bus service before and after sold-out arena events, which would fully mitigate the significant adverse impact, the identified significant adverse impact to bus service would be unmitigated.

Following consultation with NICE, NYAP has committed to install bus pull-outs and shelters along both sides of Hempstead Turnpike adjacent to the Project Sites to alleviate congestion in travel lanes when buses stop to drop-off and pick-up passengers and to provide bus stops in closer proximity to the project components and the Belmont Park Racetrack for employees and visitors that would use the N1, N6, and N6X bus routes.

Parking

Although the parking demand for the Proposed Project and the combined parking demand for the Proposed Project and Belmont Park on racing days could be accommodated on-site, it is acknowledged that there is a possibility that some attendees may attempt to park for free in the surrounding neighborhoods and walk to the arena. NYAP would take a proactive approach to prevent off-site parking from occurring, including coordinating with the Town of Hempstead to modify the regulations of the existing Elmont Special Parking District, closing the Mayfair Avenue Gate near the North Lot to pedestrians, and restricting pedestrian access from the new LIRR Elmont Station to the North Lot to LIRR ticketholders. As part of the TMP, a monitoring plan would require parking accumulation studies and observations of the effectiveness of parking restrictions, including assessment of the use of on-street parking spaces in the surrounding residential neighborhoods during different types of events and on non-event days. If it is determined that project-generated vehicles are parking off-site in the surrounding neighborhoods on a recurrent basis, NYAP would coordinate with stakeholders, including local municipalities, to monitor parking conditions and prevent these areas from being impacted by parking demand generated by arena events. Potential mitigation measures to address such impacts could include strict enforcement of existing parking regulations by ticketing and/or towing illegally parked vehicles, or implementing new parking regulations on streets in the surrounding areas.

Interim Conditions

Eastbound service at the new LIRR Elmont Station would be available in time for the opening of the arena in 2021, but westbound service at the new station would not be available until the LIRR Third Track and East Side Access projects are completed, which is expected to occur in 2023. During this interim 2021-2023 period, demand management strategies would be utilized as described in the TMP to reduce the volume of project-generated peak hour vehicular trips, including the implementation of shuttle bus service between a station on the LIRR Main Line to intercept arena patrons traveling to/from portions of Nassau and Suffolk Counties that are served

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

by the Huntington/Port Jefferson and Ronkonkoma branches so that riders would not have to transfer at Jamaica and backtrack to Belmont Park.

During interim conditions, two shuttle trains would operate from Jamaica Station to Belmont Park Station prior to arena events and from the Belmont Park Station to Jamaica Station following arena events. It is expected that the eastbound platform at the new LIRR Elmont Station would result in increased LIRR ridership by arena patrons because more frequent service would be provided from points west prior to events. After an event, all westbound service would be operated out of Belmont Park Station, but if necessitated by customer demand, up to two additional westbound trains could be operated from Belmont Park Station to Jamaica Station. No impacts to LIRR service are anticipated during the interim period.

In the interim period prior to westbound service at the new LIRR Elmont Station, there would be an increased number of project-generated vehicle trips on the local street and highway networks and traffic conditions would be expected to be slightly worse compared to the conditions analyzed with both eastbound and westbound train service available at the new LIRR Elmont Station, however overall traffic conditions would still be largely improved compared to the conditions analyzed in Chapter 11, "Transportation," due to the multiple strategies aimed at reducing the volume of project-generated peak hour vehicular trips including the addition of the eastbound platform at the new LIRR Elmont Station and the other demand management strategies that would be implemented as part of the TMP.

CONSTRUCTION

Transportation

As described in Chapter 15, "Construction," construction activities associated with the Proposed Actions during the projected peak quarter of construction would result in significant adverse traffic impacts at three intersections during the 6:00 AM – 7:00 AM peak hour and three intersections during the 5:15 PM to 6:15 PM peak hour. Implementation of traffic engineering improvements such as the installation of new traffic signals at currently unsignalized intersections and modification of signal phasing and timing at currently signalized intersections would provide mitigation for all of the anticipated significant adverse traffic impacts at those locations except for the intersection of Hempstead Avenue and Springfield Boulevard, which would remain unmitigated in the weekday PM construction peak hour. Implementation of the recommended traffic engineering improvements for these intersections is subject to review and approval by NYSDOT or NYCDOT, depending upon the location of the intersection. In the absence of the application of traffic mitigation measures during construction, these construction-period impacts would remain unmitigated or partially unmitigated.

Noise

Chapter 15, "Construction," concludes that construction of the Proposed Project would have the potential to result in significant adverse construction noise impacts at residential locations immediately adjacent to Site B. As a result of the construction noise levels that would occur over an extended duration, residences along Huntley Road, both sides of Wellington Road between Hempstead Turnpike and 109th Avenue, the west side of Wellington Road between 109th Avenue and Hathaway Avenue, and the north side of Hathaway Avenue west of Wellington Road would have the potential to experience significant adverse construction noise impacts.

For residences that do not have insulated glass windows, the Applicant would offer to provide and install laminated glass storm windows or replacement insulated glass windows for each window that faces the construction noise source. For residences that do not have alternate means of

ventilation (i.e., air conditioning), the Applicant would offer to provide and install one through-window air conditioning unit for each room that has a window that faces the construction noise source to allow for the maintenance of a closed-window condition. A survey and in-field verification would be undertaken to confirm which residences would be eligible for this mitigation. With the provision of such measures, the façades of these buildings would be expected to provide approximately 25 dBA window/wall attenuation. Therefore, interior noise levels would be reduced to less than the 45 dBA threshold recommended for residential use during worst case construction activity. Consequently, construction noise impacts at these receptors would be fully mitigated.

For the outdoor spaces (e.g., yards, decks) of the residences adjacent to Site B, there would be no feasible or practicable measures to mitigate the construction noise impacts. However, outdoor spaces could still be used without the effects of construction noise outside of the hours that construction would occur, i.e., during the late afternoon, night time, and on most weekends.

EFFECT OF NEW LIRR ELMONT STATION ON OTHER ANALYSIS AREAS

The analysis finds that provision of the new LIRR Elmont Station as mitigation for transportation impacts would not result in significant adverse impacts to: land use, zoning, and community character; community facilities and utilities; open space and recreational resources; historic and cultural resources; visual resources; socioeconomic conditions; hazardous materials; natural resources; air quality; noise; climate change; and construction. Additionally the provision of the new train station would not affect the analysis of water resources, and would not change the conclusions for irreversible and irretrievable resources or growth-inducing aspects of the Proposed Project.

B. TRANSPORTATION

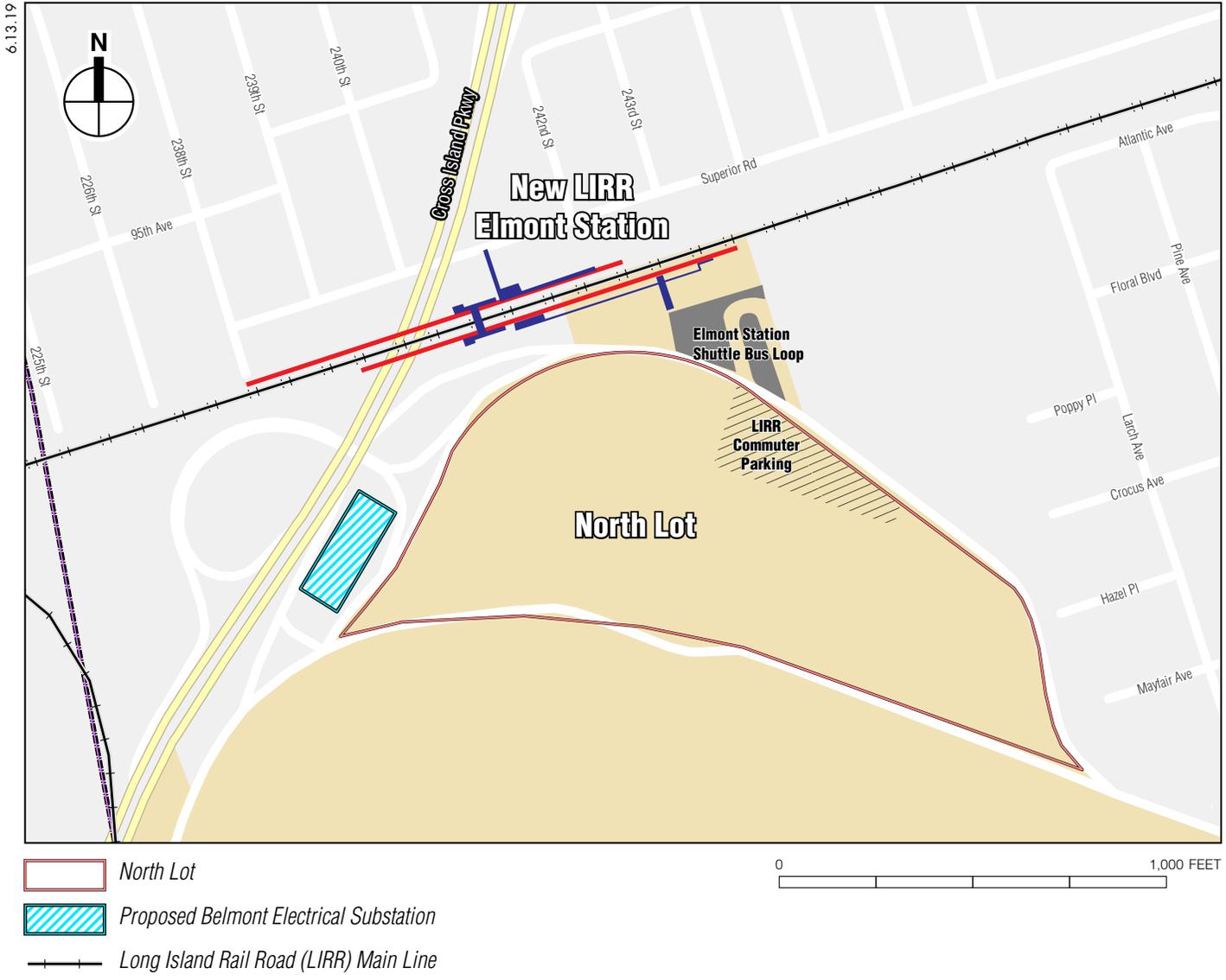
As discussed in Chapter 11, “Transportation,” the Proposed Project would result in significant adverse impacts on the local street network, the highway network, and bus service, as well as potential impacts to parking. Significant impacts on LIRR service, pedestrian circulation, and vehicular and pedestrian safety were not identified. This section describes the mitigation measures that could reduce or eliminate significant impacts, or indicates whether impacts would remain unmitigated. An extensive set of proposed mitigation measures have been developed to address these impacts consisting of the addition of a new LIRR Elmont Station on the LIRR Main Line, implementation of a comprehensive Transportation Management Plan (TMP), standard traffic engineering improvements, and adjustments to bus service.

PROPOSED TRAFFIC MITIGATION MEASURES

NEW LIRR ELMONT STATION

In response to public comments received on the DEIS and to minimize the Proposed Project’s impacts on transportation—primarily traffic impacts to the Cross Island Parkway due to project-generated traffic associated with events at the arena—a new LIRR Elmont Station would be added to the LIRR Main Line. This new mitigation measure would provide additional transit service to the Project Sites, including new direct train service to/from points east and additional train service to/from points west. The new LIRR Elmont Station would also provide full-time train service to the local community, with parking available for commuters in the North Lot.

As shown in Figure 17-1, the new LIRR Elmont Station would be located on the LIRR Main Line between the Queens Village and Bellerose stations, adjacent to the North Lot. It would consist of



New LIRR Elmont Station

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

an eastbound platform on the south side of the tracks and a westbound platform on the north side of the tracks. The new LIRR Elmont Station would be fully ADA accessible and include high-level platforms with an overhead canopy. The two platforms would be connected by a pedestrian overpass accessible by staircases and elevators; street-level access would be provided to the commuter parking area and a shuttle bus stop in the North Lot and Superior Road in Bellerose Terrace via staircases and ramps. When the arena hosts an event, shuttle bus service would be provided to transport arena patrons between the new LIRR Elmont Station and Site A; this route would operate to/from the bus platforms on the east side of the LIRR Belmont Park Station on the spur via Red Road along the west side of the racetrack and would be separate from the shuttle bus route that would serve arena patrons parking in the North Lot. When the arena is not hosting an event, shuttle bus service would also be provided between the new LIRR Elmont Station and the retail village. A total of 150 parking spaces in the North Lot would be reserved for use by commuters, which would be located closest to the new LIRR Elmont Station. It is anticipated that commuter parking permits would be made available for purchase by Town of Hempstead residents, including those living in Elmont.

The new LIRR Elmont Station would be constructed in two phases. The first phase would involve construction of an eight car-long south platform that would only provide eastbound service (i.e., Hempstead Branch trains originating from points west that are destined to Hempstead). This phase would be completed in 2021, prior to the opening of the arena. The second phase would involve construction of a north platform that is at least ten cars long, the pedestrian overpass with elevators between the north and south platforms, and extension of the south platform to accommodate 12 car trains. Westbound train service at the north platform would be accommodated following the completion of the LIRR Third Track and East Side Access projects (expected in 2023). The transportation analyses presented below are based on full operation of the new LIRR Elmont Station with train service in both the eastbound and westbound directions. An assessment of transportation conditions with only the eastbound platform of the new LIRR Elmont Station in operation is provided in the “Interim Conditions” section below.

During times preceding and following an arena event, the new LIRR Elmont Station would be operated in conjunction with the existing LIRR Belmont Park Station on the spur. On days with scheduled events at the proposed arena, the LIRR would continue to provide two round trip shuttle trains between Jamaica Station and Belmont Park Station, with eastbound trains arriving at Belmont Park prior to the start of the event and westbound trains departing from Belmont Park following the conclusion of the event. Trains selected to stop at the new LIRR Elmont Station would be chosen based on available capacity (which would include trains on the Hempstead, Huntington/Port Jefferson, Oyster Bay, and/or Ronkonkoma branches). Following an arena event, it is possible that up to two additional trains could be operated out of Belmont Park Station to provide additional service to points east or west, if necessitated by customer demand.¹ As discussed in Chapter 11, “Transportation,” the Belmont Park Station has two high-level platforms, which could hold up to four trains of 10 cars each and allow riders to board a train immediately following an event. During times when there is no arena event taking place, the service plan for the new LIRR Elmont Station would be expected to be similar to the LIRR Bellerose Station, which has hourly service during off-peak hours and half-hourly service during peak hours. The

¹ Post-event eastbound train service from the LIRR Belmont Park station on the spur would only be possible after the completion of the LIRR Third Track and East Side Access projects.

specifics of the operating plan for the new LIRR Elmont Station would be determined by the LIRR, and trains selected to stop at the new station would be chosen based on available capacity.

The addition of the new LIRR Elmont Station would be expected to result in substantially increased ridership by arena patrons due to the following factors:

- Direct train service to Belmont Park would be available for arena patrons traveling to/from points east (e.g., Hempstead, Huntington/Port Jefferson, Oyster Bay and Ronkonkoma branches) without the need to backtrack to Jamaica and transfer trains back eastward via the Belmont Park spur.
- Direct train service would be available for arena patrons traveling to/from the LIRR's Manhattan Terminals (Penn Station and Grand Central Terminal) and other stations in the City Terminal Zone (e.g., Atlantic Terminal and Woodside) without having to transfer trains at Jamaica.²
- More frequent service would be provided for arena patrons traveling to/from points west, which would facilitate travel for arena patrons making transfers to other modes (e.g., subway or bus) or other LIRR branches and would also provide transit options for early-arriving and late-departing arena patrons, including those who may use the food and beverage retail uses near the arena before or after an event.

Updated modal splits and ridership projections for arena patrons were developed to account for changes in travel patterns that would occur with the addition of the new LIRR Elmont Station and the implementation of demand management strategies including further incentives to use transit. The New York Islanders ticket sales data by ZIP Code used to determine the modal splits and ridership projections in Chapter 11, "Transportation," were also used to identify the proportion of arena patrons from Nassau and Suffolk Counties who could potentially take advantage of direct train service to the new LIRR Elmont Station via trains to/from the Hempstead, Huntington/Port Jefferson, Oyster Bay, and Ronkonkoma branches. Updated modal split projections were also developed for arena patrons originating from Manhattan, Brooklyn, and Queens as well as the portions of Nassau and Suffolk without direct train service to the new LIRR Elmont Station who could potentially take advantage of the more frequent train service to Belmont Park. Approximately 30 percent of arena patrons would be projected to use the LIRR to travel to a weeknight sold-out hockey game with the addition of a new LIRR Elmont Station providing both eastbound and westbound service, incentives to use transit, and the provision of parking for commuters.

Based on the results of its 2012-2014 origin-destination survey, the LIRR anticipates that the new LIRR Elmont Station would also be used by commuters residing in Elmont and Bellerose Terrace. The station itself would not be expected to generate new commuter ridership but would instead result in a shift of existing riders that currently use other stations (mostly Queens Village, Bellerose, Floral Park, Valley Stream, and Rosedale). The decision of commuters to switch to use the new LIRR Elmont Station would be based on convenience (i.e., the availability of parking and proximity to their home). Vehicular access to the commuter parking in the North Lot would be provided via Exit 26D of the Cross Island Parkway, which provides access and egress to both directions of the parkway, and the Red Road running along the west side of the racetrack and the

² Service to Grand Central Terminal would be available following the completion of the LIRR East Side Access project.

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

south and west sides of the arena, which provides a connection to the local street network at the intersection of Hempstead Turnpike at Locustwood Boulevard/Gate 5 Road.

TRANSPORTATION MANAGEMENT PLAN (TMP)

As part of mitigation for the Proposed Project, NYAP would implement a comprehensive TMP to minimize traffic impacts to the maximum extent feasible. The TMP would serve as an integral component of Proposed Project operations and it would be included in the environmental commitments that would be required of the Applicant. NYAP would appoint a full-time transportation manager to coordinate the TMP, which would be implemented from the opening of the arena and then reviewed and refined on a regular basis at meetings with stakeholders such as transportation agencies, police departments, and local municipalities, enabling continued improvement and adaptation to reflect actual conditions.

A draft TMP has been prepared concurrently with publication of this Final EIS and is included in **Appendix J**. This document has been reviewed with relevant agencies (including NYSDOT, NCDPW, and NYCDOT) and would continue to be refined in consultation with stakeholders prior to opening of the Proposed Project components and afterward through ongoing monitoring and evaluation of its effectiveness. The TMP would identify actions needed for different days of the year, and for different types and sizes of events. Numerous sports and entertainment venues have implemented similar TMPs in congested urban and suburban environments using many of these strategies to create an effective overall coordinated plan that is regularly reviewed and modified to increase its effectiveness to reduce vehicular traffic volumes overall. The TMP consists of three components: a set of demand management strategies, a monitoring plan, and an operations plan.

Demand Management Strategies

The TMP includes five types of demand management strategies aimed at reducing the volume of project-generated peak hour vehicular trips, changing travel patterns to redistribute traffic away from critical highway segments, and shifting demand from auto to alternate modes of transportation. No single strategy or action could create the level of traffic reduction or traffic redistribution being sought. Rather, a combination of multiple measures and strategies would reduce congestion and significant adverse traffic impacts to the highway and local street networks. The analyses presented in this chapter evaluate a set of demand management strategies developed to reduce the amount of traffic congestion that has been projected on the Cross Island Parkway in the weekday PM and Saturday PM peak hours during the arrival period for a sold-out hockey game (18,000 seats) at the arena. These demand management strategies are further discussed in the draft TMP provided in **Appendix J**, which includes case studies of where these types of strategies have been successfully implemented at other sports venues in the United States.

Reduce Background Pre-Event Peak Hour Traffic on the Cross Island Parkway

The objective of this strategy is to reroute some of the background through traffic away from the Cross Island Parkway to other north-south limited access highways in the hour or so preceding the start of an arena event by making drivers aware of projected congestion on the Cross Island Parkway.

For many motorists, it may be self-evident that they should try to avoid major highways immediately adjacent to major sports venues in the hour or so immediately preceding or following a major sports event or concert. This is readily apparent today for highways adjacent to major sports venues in the New York metropolitan area such as Citi Field, Yankee Stadium, and MetLife Stadium. But motorists who are not aware of a special event that is taking place that day contribute to overcrowding on key local highways without knowing it and cannot change course until it is

too late. Advising background traffic (motorists not attending an event) of an upcoming arena event and to avoid using the Cross Island Parkway near Belmont Park before and after large events would result in some motorists changing their travel patterns by shifting to alternate routes, traveling earlier or later in the day, or even by traveling on a different day if possible, thus reducing the volume of traffic on the Cross Island Parkway during the peak arrival and departure hours and reducing the extent of congestion projected in the With-Action analyses.

Background traffic using the Cross Island Parkway in the vicinity of the Project Sites could be diverted using a combination of signage, mobile navigation apps, and media advisories. In coordination with NYSDOT and NYCDOT, variable message signs could be used to advise motorists on east-west limited access highways such as the Long Island Expressway, Northern State Parkway, Southern State Parkway, Grand Central Parkway, and Belt Parkway of anticipated conditions on the Cross Island Parkway near Belmont Park and to use alternate routes such as the Meadowbrook State Parkway, Wantagh Parkway, and Seaford-Oyster Bay Expressway. Variable message signage does not need to advise motorists of any single alternate highway in particular to use, but would merely advise, starting earlier on the day of an event, via a message such as “BELMONT PARK EVENT, TODAY AT 7:30 PM, PLAN ALT ROUTE.” In addition, permanent or temporary variable message signs could also be placed on the Cross Island Parkway near and approaching Belmont Park to advise motorists of anticipated conditions prior to major events.

Event scheduling information would also be shared with mobile navigation apps such as Waze to alert drivers in real time about events taking place at the arena. To minimize potential diversions of traffic to local streets, the transportation management team, in coordination with stakeholders, would partner with navigation app providers such as Waze to define specific local residential streets which might otherwise be used as traffic diversion routes, such as Plainfield Avenue in Floral Park, to be designated by the navigation app provider as an “unavailable” road during event arrival and departure periods. Through traffic would not be routed to these “unavailable” roads even though they would not be officially closed. The list of unavailable local roadways would be coordinated with stakeholders as their “closure” must be requested by the entity with jurisdiction of the roadway. The TMP would also proactively use radio and other media outlets to advise motorists of event congestion on the Cross Island Parkway and the use of alternate routes.

This demand management strategy is not expected to cause trips to re-route to the local street network in the vicinity of the Project Sites because the available signalized north-south roads (e.g., Elmont Road, Plainfield Avenue, Springfield Boulevard) near the Project Sites do not provide travel time savings over limited access highways because they are more circuitous, feature numerous traffic signals and stop signs, and have lower speed limits and do not have direct access into the Project Sites.

It is estimated that this strategy would divert ten percent of northbound through vehicles and five percent of southbound through vehicles using the Cross Island Parkway during the weekday PM peak hour. The use of alternate routes is expected to be higher in the northbound direction during this time period because the east-west limited access highways have more capacity in the westbound direction compared to the eastbound direction (e.g., there would likely be more diversions using the northbound Meadowbrook State Parkway to the westbound Northern State Parkway than there would be in the opposite direction). For the Saturday PM peak hour, it is anticipated that ten percent of both northbound and southbound through vehicles using the Cross Island Parkway would be diverted. As discussed above, these trips would be diverted to alternate limited access highways or to travel during other times of the day.

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

A similar type of strategy to divert background traffic is used during events at MetLife Stadium, where variable message signs and media advisories are used when events are held at MetLife Stadium to advise motorists of congestion on the New Jersey Turnpike's Western Spur (Exits 16W and 18W) and the use of the Turnpike's Eastern Spur (Exits 16E, 17, and 18E) as an alternate route.

Increase Vehicle Occupancy by Encouraging Carpooling and Pooled Ride Hailing

The objective of this strategy is to encourage carpooling and pooled ride hailing to increase the average vehicle occupancy of both autos and "rideshare" services such as Uber and Lyft, reducing the amount of project-generated vehicle trips.

To promote the use of carpooling, NYAP would implement a parking permit program that would sell permits to season-ticket holders or single-game ticket purchasers based on the number of tickets purchased (e.g., one parking spot for every four or five tickets). As another incentive to carpool, parking spaces located in closer proximity to the arena (such as the South Lot) would be restricted to permit holders. Non-permit holders would be required to park in other locations such as the parking beneath the retail village or the North Lot. Limiting the sales of on-site parking permits would control on-site demand and encourage more arena patrons to carpool.

NYAP would also commit to establishing a partnership with one or more rideshare operators to encourage patrons to use pooled rideshare options (e.g., UberPOOL, Lyft Line). A specific Islanders-based rideshare app would be created to inform patrons about pooled rideshare options from any point of origin as an alternative to patrons taking their own rideshare vehicle, which is generally less expensive than single-ride options.

It is estimated that this strategy would increase average vehicle occupancies (AVO) for autos and rideshare vehicles from 2.75 to 3.10 for a weeknight hockey game and from 3.00 to 3.40 for a Saturday night hockey game.

A similar type of strategy to increase carpooling has been used at the Meadowlands Sports Complex during the construction of MetLife Stadium when a parking permit system was implemented for most of the on-site parking areas to control parking demand, which resulted in a 14 percent increase in AVO. MetLife Stadium continues to use a parking permit system for on-site parking areas at New York Giants and New York Jets games.

Reduce Peak Hour Auto Trips by Changing Arrival Patterns

The objective of this strategy is to encourage some arena patrons to arrive to the Project Sites early and prior to the peak hour preceding the start of an arena event.

The Proposed Project includes a substantial number of on-site dining, shopping, entertainment, and plaza space amenities near the arena, which would make it easier for patrons to plan their pre-event activities (as noted in the original developer RFP, these earlier arrivals would not be allowed to participate in tailgating activities). Incentives for arena patrons to arrive prior to 6:30 PM on weekdays (for events scheduled to start at 7:30 PM) or prior to 6:00 PM on Saturdays (for events scheduled to start at 7:00 PM) would include discounts for parking, entertainment, or dining options at the adjacent retail development on Site A. These incentives would be offered to season ticket holders or single-game ticket purchasers at the time they purchase their tickets. NYAP would also present these options via email communications and on the arena website. Other strategies could include specific actions such as scheduling and promoting pregame and postgame events and activities in the plazas (e.g., live music, Islanders alumni and mascot appearances, games for adults and children, promotions, drawings and contests, food and beverage vendors, and interactive sponsor booths), holding pregame and postgame television and radio shows in

locations that are accessible to arena patrons; and encouraging arena patrons to arrive early to watch teams warm up before games.

It is estimated that this strategy would result in a shift of seven percent of arena patrons to arrive prior to the peak hour for a weeknight hockey game (reducing the temporal distribution of peak hour arrivals from 65 percent to 58 percent) and a shift of 10 percent of arena patrons to arrive prior to the peak hour for a Saturday night hockey game (reducing the temporal distribution of peak hour arrivals from 65 percent to 55 percent).

As an example, surveys conducted at the Barclays Center in Brooklyn indicate that approximately five percent of arena patrons visited other nearby businesses prior to weeknight events and approximately nine percent of arena patrons visited other nearby businesses prior to weekend events, which effectively reduced the percentage of arena patrons arriving to the area in the peak hour prior to the start of an event.

Shift Project-Generated Auto Trips to Transit

The objective of this strategy is to shift project-generated auto trips to transit (rail or bus) modes by providing incentives for more arena patrons to take the LIRR, providing incentives for large groups attending events to travel using charter buses, and operating a combination of shuttle bus routes providing access to other transit services and remote parking facilities.

A transportation section on the arena's and Islanders' apps and websites would be created to provide information about transportation options to the arena for event attendees. This would include maps and schedules for public transportation services operating to and from the site. The arena could also provide real-time transit departure information at key locations within the arena, pre-event communications to attendees and social media services to promote the benefits of taking the train to the game (e.g., not having to worry about traffic and getting to the game on time, saving on parking and gas costs, avoiding drinking and driving, etc.), especially for events with high expected attendance levels.

As discussed above, a new LIRR Elmont Station would be added to provide additional train service to the Project Sites, including new direct service to/from points east and more frequent service to/from points west. The new LIRR Elmont Station would also provide full-time service to the local community, with weekday parking available for commuters in the North Lot. To promote the use of the LIRR as a travel mode, incentives such as raffle entries, discounts off concessions or merchandise, and/or fast-track security lines would be offered to arena patrons using transit.

Additionally, arena patrons who regularly commute to New York City using other LIRR branches that would not provide direct service to the new LIRR Elmont Station (e.g., Babylon, Far Rockaway, Long Beach, Port Washington, West Hempstead) would have an option of driving to the Project Sites on a weekday morning, parking in the North Lot, using the new LIRR Elmont Station for their inbound morning commute, return to Belmont Park via the LIRR prior to the arena event, and have their cars available for the return trip home (there would be ample daytime parking capacity in the North Lot to accommodate these users). It is anticipated that parking in the North Lot would be operated similar to the commuter parking at Citi Field in that commuter parking rates would be in effect during the morning and then an event parking rate would take effect in the afternoon.

To further enhance the use of the LIRR as a travel mode by arena patrons, a shuttle bus service would operate between the LIRR Rockville Centre Station and the arena to intercept arena patrons traveling to/from portions of Nassau and Suffolk Counties that are served by the Babylon Branch

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

so that riders would not have to transfer at Jamaica and backtrack to the existing Belmont Park Station on the spur or the new LIRR Elmont Station. Shuttle buses would operate from Rockville Centre to the arena during a multi-hour period prior to an event and from the arena to the Rockville Centre Station during a multi-hour period following an event to provide options to transfer to/from regularly scheduled trains operating along the Babylon Branch. It is anticipated that shuttle buses would operate along Ocean Avenue, Nassau Boulevard, and Hempstead Turnpike and would enter and exit the Project Sites at Gate 5 Road.

A similar type of shuttle bus service would also be implemented between the arena and Downtown Jamaica to provide connections to other transit services such as the E, F, J, and Z subway lines and to local bus routes. Shuttle buses would operate from Jamaica to the arena during a multi-hour period prior to an event and from the arena to Jamaica during a multi-hour period following an event to provide options to transfer to/from regularly scheduled subways and buses and would enter and exit the Project Sites using the Cross Island Parkway ramps to the bus platform area on the east side of the LIRR Belmont Park Station, similar to the route used by buses on the Q2 and Q110 bus routes.

A shuttle bus service would also be implemented to intercept auto trips at remote park-and-ride facilities farther east in Nassau and Suffolk Counties, from locations such as state parks and other large facilities with available parking in the evening (e.g., hospitals, office complexes, and designated park-and-ride locations). Connecting shuttle buses would operate from the remote parking facilities to the arena during a multi-hour period prior to an event and from the arena to the remote parking facilities during a multi-hour period following an event. As these parking facilities would be located east of Belmont Park, it is anticipated that shuttle buses would operate through the study area along Hempstead Turnpike and would enter and exit the Project Sites at Gate 5 Road. As an example, the Regional Transportation Commission of Southern Nevada (RTC) operates a special service called the RTC Golden Knights Express before and after NHL games in Las Vegas, providing multiple departures to four park-and-ride locations in the surrounding area.

It is anticipated that shuttle bus services would be operated to meet the anticipated demand, as evaluated as part of the monitoring plan based on actual utilization and scaled back for events with lower volumes of auto trips during the pre-event peak hour, such as for hockey games with lower attendance levels and concerts with a more spread out distribution of arriving arena patrons. The locations of connecting transit services and park-and-ride lots may be adjusted after implementation to maximize the effectiveness of this demand management strategy. Shuttle bus services would be operated by MTA Bus Company, MTA New York City Transit, NICE or private bus operators under contract with NYAP.

Group sales programs would also provide incentives for arena patrons receiving promotional or complimentary tickets as well as large group sales to ride to events together in charter buses and reduce the number of trips made by private autos. As an example, the Barclays Center partners with an official charter bus sponsor that offers 10 percent off travel for all groups traveling to events at the arena. During the 2017-18 season, the Islanders provided an average of about 1,000 complimentary tickets per game.

With the provision of these demand management strategies, for a weeknight hockey game it is estimated that 29 percent of arena patrons would use the LIRR to travel directly to the arena, one percent of arena patrons would use commuter parking (park in the North Lot in the morning, commute to work via the LIRR, take the train to the game, and drive home after the game), three percent of arena patrons would use the shuttle bus from Jamaica, five percent of arena patrons would take the LIRR to Rockville Centre and then complete their trip to the arena by shuttle bus,

seven percent of arena patrons would drive to remote parking facilities and then complete their trip to the arena by shuttle bus, and two percent of arena patrons would travel to the arena by charter bus. For a Saturday night hockey game, it is estimated that 24 percent of arena patrons would use the LIRR to travel directly to the arena, three percent of arena patrons would use the shuttle bus from Jamaica, three percent of arena patrons would use or take the LIRR to Rockville Centre and then complete their trip to the arena by shuttle bus, five percent of arena patrons would drive to remote parking facilities and then complete their trip to the arena by shuttle bus, and two percent of arena patrons would travel to the arena by charter bus.

Manage and Customize Travel Routes for Project-Generated Auto Trips to Reduce Congestion

The objective of this strategy is to use mobile navigation apps such as Waze to provide customized directions from the travel origins of arena patrons to parking facilities and approach the Project Sites using the least congested direction of the Cross Island Parkway.

NYAP would partner with a mobile navigation app provider such as Waze to generate customized driving directions for arena patrons to each on-site parking facility based on real-time traffic conditions. The Waze platform includes the Global Events Partner program, which is currently used by over 100 facilities worldwide. As an example, for arena patrons who have the option to approach the Project Sites via the northbound or southbound direction of the Cross Island Parkway (e.g., for patrons originating from locations between the Northern and Southern State Parkways such as Bethpage, East Meadow, and Levittown who could take either of the two parkways to access the Cross Island Parkway), a partnership would allow the navigation app to direct these patrons onto the less congested route in order to balance traffic demands on the Cross Island Parkway in the northbound and southbound directions.

Monitoring Plan

During Proposed Project operations, a monitoring plan would be undertaken for the detailed measurement of actual transportation conditions for different types of arena events, to assess event day performance, and determine the effectiveness of the overall TMP, including each of the demand management strategies and the on-site operations plan. The assessment tools would include patron surveys, field surveys, traffic counts and observations, the use of transportation analytics data (e.g., Google Maps and StreetLight), and/or aerial time-lapse queuing observations. The key measures of effectiveness that would be utilized include:

- Travel times and/or speeds on the Cross Island Parkway, Hempstead Avenue/Turnpike, and other major roadways in the local street network;
- Queue lengths and durations on these roadways on event and non-event days;
- Mode share studies and arrivals by time before event by mode;
- Time to clear the Project Sites after an event;
- Vehicle occupancy surveys;
- Traffic counts on the Cross Island Parkway mainline and ramp locations on representative event days and non-event days;
- Parking accumulation studies;
- Observations of the effectiveness of neighborhood parking restrictions; and
- First responder activity and response times at the Project Sites and emergency response times for the surrounding area on event and non-event days.

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

Before the opening of the arena, the scope of work for the monitoring program would be finalized. Monitoring would then be conducted on a regular basis, including monthly surveys after the opening of the Proposed Project, quarterly surveys during the first two years of operation, and annual surveys thereafter for hockey and other representative large events. The results of these surveys would be reported to ESD.

The monitoring program would help identify the demand management strategies proving to be most effective and those that are not, thus enabling continued improvement of the TMP on a regular basis and allowing it to adapt to reflect actual conditions. The demand management strategies would be reviewed with stakeholders and adjusted as needed to achieve the projected reduction in project-generated peak hour vehicular trips. Over time, monitoring of traffic conditions under different types of events (e.g., hockey games, concerts, and family events), event sizes (e.g., full house versus half house), and ranges of attendance levels (e.g., sold-out events, non-sellout events with significant sales, and events with limited sales) would allow NYAP to implement a set of demand management strategies that is tailored to match the level of traffic experienced during different events.

Operations Plan

The TMP also includes an operations plan for coordination with stakeholders and managing the internal movement of vehicles and pedestrians within the Project Sites during events. The Proposed Project would include an on-site operations center led by a full-time transportation manager that would be a central point for monitoring and coordinating all transportation operations during an event, including the arrival and departure periods. The on-site operations center, which would also be available for use by stakeholders, would share real-time information with relevant agencies and coordinate responses to incidents during events.

The transportation manager would oversee day-to-day operations for the Project Sites, including establishing decision-making and communication protocols, the provision of pre-event communications to arena patrons to allow them to make decisions on how to travel to the Project Sites, and the staffing of on-site personnel to manage crowds and the flow of pedestrians, traffic and parking operations, internal shuttle buses, external shuttle buses providing connections to remote parking locations and other transit services, charter buses, and rideshare drop-off and pick-up locations. Truck deliveries to the Project Sites would be monitored, scheduled, and managed by on-site management for the arena, hotel, and retail village.

TRAFFIC ENGINEERING AND OPERATIONAL IMPROVEMENTS

Standard traffic engineering and operational improvements such as the installation of new traffic signals at currently unsignalized intersections, modification of signal phasing and timing at currently signalized intersections, deployment of TEAs before arena events, implementation of turn prohibitions where needed, and geometric improvements at specific intersections to provide improved channelization, lane re-striping, and/or new lane designations have been developed as proposed mitigation measures to address many of the impacts to the local street network.

TRAVEL DEMAND ANALYSIS

Updated weekday and Saturday travel demand estimates were prepared for the proposed arena and non-arena uses to account for the new LIRR Elmont Station and the implementation of demand management strategies for a sold-out hockey game at the arena on a weekday evening and a Saturday evening. As previously discussed in the “New LIRR Elmont Station” section, approximately 30 percent of arena patrons would be projected to use the LIRR to travel to a

weeknight sold-out hockey game with the addition of a new LIRR Elmont Station providing both eastbound and westbound service, incentives to use transit, and the provision of parking for commuters. The 30 percent LIRR modal split includes use of both the new LIRR Elmont Station and the existing LIRR Belmont Park Station. The LIRR is estimated to be used by 24 and 17 percent of arena patrons arriving on a Saturday for a sold-out hockey game and a sold-out Disney on Ice show, respectively. Table 17-1 presents the modal split and AVO assumptions for arena patrons with the proposed mitigation measures.

Table 17-1
Proposed Arena Patron Modal Splits and AVOs with Mitigation

Day	Auto	Taxi	LIRR	Transit Bus	Charter Bus	Shuttle Bus			AVO
						Jamaica	Rockville Centre	Remote Parking	
Hockey Games									
Weekday	48%	3%	30% ¹	2%	2%	3%	5%	7%	3.10
Saturday	58%	3%	24%	2%	2%	3%	3%	5%	3.40
Disney on Ice									
Saturday	78%	3%	17%	2%	-	-	-	-	3.90
Notes:									
(1) LIRR modal split for weekday hockey games includes arena patrons using commuter parking in the North Lot.									

In addition to trips generated by the Proposed Project, the updates to the travel demand analysis also account for the commuter parking associated with the new LIRR Elmont Station, with autos entering the North Lot during the weekday AM peak hour and autos departing the North Lot during the weekday PM peak hour. A total of 150 parking spaces would be provided for commuters in the North Lot. It was conservatively assumed that these parking spaces would be fully utilized during the weekday midday period. The temporal distributions for commuter parking were based on a review of existing LIRR ridership data on the Hempstead Branch during the weekday AM and PM peak periods from the Spring and Fall of 2017.³ It was assumed that arena patrons using commuter parking in the North Lot would have the same temporal distribution of arrivals as regular commuters during the weekday AM peak period. To provide for a conservative analysis, the auto and taxi modal splits for the non-arena uses (i.e., retail, office, hotel, and community space) were not adjusted to take credit for trips that may shift from driving to using transit with the addition of the new LIRR Elmont Station, which would provide service during off-peak periods during times with no arena events.

Tables 17-2 and 17-3 provide a summary comparing the estimated person and vehicle trip generation for the Proposed Project with and without the proposed traffic mitigation measures for the five analysis peak hours. As shown in Table 17-2, there would be a net increase of 165 inbound person trips during the weekday AM peak hour (reflecting arena patrons who would use the commuter parking in the North Lot), and residents who would use the new LIRR Elmont Station), a net increase of 165 outbound person trips during the weekday AM peak hour (reflecting arena patrons and residents who would use the new LIRR Elmont Station), a net reduction of 1,165 inbound person trips during the weekday PM peak hour (primarily reflecting the demand management strategy for arena patrons to arrive early), a net increase of 95 outbound person trips during the weekday PM peak hour (reflecting residents who would use the new LIRR Elmont Station), and a net reduction of 1,800 person trips during the Saturday PM peak hour (reflecting the demand management strategy for arena patrons to arrive early). Table 17-3 shows that there would be a net increase of 121 vehicle trips during the weekday AM peak hour (reflecting arena

³ Customer counts for all revenue trains are provided in the LIRR 2017 Ridership Book.

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

patrons and residents who would use the commuter parking in the North Lot), a net decrease of 1,861 vehicle trips during the weekday PM peak hour (primarily reflecting the new LIRR Elmont Station and the demand management strategies), a net decrease of 325 vehicle trips during the Saturday midday peak hour (reflecting the new LIRR Elmont Station), a net decrease of 1,768 vehicle trips during the Saturday PM peak hour (reflecting the new LIRR Elmont Station and the demand management strategies), and a net decrease of 1,648 vehicle trips during the Saturday night peak hour (reflecting the new LIRR Elmont Station and the demand management strategies). Detailed trip generation tables are presented in **Appendix F**.

Table 17-2

Person Trip Comparisons: Proposed Project With and Without Mitigation

Analysis Scenario	Auto		Taxi		Subway		LIRR		Transit Bus		Charter Bus		Shuttle Bus		Walk		Total	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Weekday AM Peak Hour																		
With Mitigation	856	169	8	2	18	4	18	169	110	25	0	0	0	0	62	6	1,072	375
Without Mitigation	727	169	8	2	18	4	18	4	110	25	0	0	0	0	26	6	907	210
Difference	129	0	0	0	0	0	0	165	0	0	0	0	0	0	36	0	165	165
Weekday PM Peak Hour																		
With Mitigation	5,279	565	316	6	7	12	3,234	12	248	75	209	0	1,566	0	9	53	10,868	723
Without Mitigation	9,979	505	354	6	7	12	1,411	12	273	75	0	0	0	0	9	18	12,033	628
Difference	-4,700	60	-38	0	0	0	1,823	0	-25	0	209	0	1,566	0	0	35	-1,165	95
Saturday Midday Peak Hour																		
With Mitigation	1,800	10,195	46	360	22	31	218	1,986	158	414	0	0	0	0	34	45	2,278	13,031
Without Mitigation	1,915	11,345	46	360	22	31	103	836	158	414	0	0	0	0	34	45	2,278	13,031
Difference	-115	-1,150	0	0	0	0	115	1,150	0	0	0	0	0	0	0	0	0	0
Saturday PM Peak Hour																		
With Mitigation	6,164	759	302	10	11	18	2,387	18	261	113	198	0	1,089	0	16	29	10,428	947
Without Mitigation	10,718	759	356	10	11	18	830	18	297	113	0	0	0	0	16	29	12,228	947
Difference	-4,554	0	-54	0	0	0	1,557	0	-36	0	198	0	1,089	0	0	0	-1,800	0
Saturday Night Peak Hour																		
With Mitigation	156	8,177	1	409	4	9	4	3,249	23	323	0	270	0	1,485	5	13	193	13,935
Without Mitigation	156	12,227	1	409	4	9	4	954	23	323	0	0	0	0	5	13	193	13,935
Difference	0	-4,050	0	0	0	0	0	2,295	0	0	0	270	0	1,485	0	0	0	0

Table 17-3

Vehicle Trip Comparisons: Proposed Project With and Without Mitigation

Analysis Scenario	Auto Trips		Internal Capture Trips Credit		Pass-by Trips Credit		Balanced Taxi Trips		Charter/Shuttle Bus Trips		Primary Trips	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Weekday AM Peak Hour												
With Mitigation	782	153	-1	-1	0	0	10	10	0	0	791	162
Without Mitigation	661	153	-1	-1	0	0	10	10	0	0	670	162
Difference	121	0	0	0	0	0	0	0	0	0	121	0
Weekday PM Peak Hour												
With Mitigation	1,860	515	-47	-14	-55	-135	111	111	44	6	1,913	483
Without Mitigation	3,774	462	-47	-14	-55	-135	138	138	0	0	3,810	451
Difference	-1,914	53	0	0	0	0	-27	-27	44	6	-1,897	32
Saturday Midday Peak Hour												
With Mitigation	1,050	3,415	-223	-294	-181	-261	122	122	0	0	768	2,982
Without Mitigation	1,080	3,710	-223	-294	-181	-261	122	122	0	0	798	3,277
Difference	-30	-295	0	0	0	0	0	0	0	0	-30	-295
Saturday PM Peak Hour												
With Mitigation	2,074	691	-115	-47	-74	-148	100	100	31	4	2,016	600
Without Mitigation	3,817	691	-115	-47	-74	-148	130	130	0	0	3,758	626
Difference	-1,743	0	0	0	0	0	-30	-30	31	4	-1,742	-26
Saturday Night Peak Hour												
With Mitigation	145	2,620	-18	-86	-27	-75	124	124	8	33	232	2,616
Without Mitigation	145	4,277	-18	-86	-27	-75	140	140	0	0	240	4,256
Difference	0	-1,657	0	0	0	0	-16	-16	8	33	-8	-1,640

Notes:
(1) Auto trips for weekday peak hours include arena patrons and residents using commuter parking in the North Lot

Based on the results of the LIRR's 2012-2014 origin-destination survey, it is estimated that all resident commuters parking at the new LIRR Elmont Station would be driving from Elmont and all Bellerose Terrace residents would walk to the new station. During the weekday AM peak hour, arena patrons using the commuter parking were assigned to travel to the North Lot using the Cross Island Parkway via Exit 26D. Elmont residents using the commuter parking were assigned to enter the Project Sites at Gate 5 and would travel to the North Lot using the internal site roadways. As discussed in Chapter 11, "Transportation," the portion of the Red Road adjacent to the arena would be closed during times of events when it would solely provide access for buses, emergency vehicles, and pre-screened VIP vehicles. As the weekday PM peak hour includes a hockey game at the arena, Elmont residents using the commuter parking during this time period were assigned to exit the North Lot using Exit 26D on the Cross Island Parkway, travel south along the parkway, and use Exit 26B to travel east along Hempstead Avenue/Turnpike.

The Project-generated vehicle trips described above were added to the No Action traffic volumes to produce Mitigated With Action traffic volume networks. Detailed traffic volume maps for the weekday AM, weekday PM, Saturday midday, Saturday PM, and Saturday night peak hours for the Mitigated With Action condition are presented in Appendix F.

TRAFFIC

LOCAL STREET NETWORK

As identified in Chapter 11, "Transportation," the Proposed Project is expected to create significant adverse traffic impacts at 11 intersections during one or more analyzed peak hours; specifically the impacted locations comprise six intersections during the weekday AM peak hour, six intersections during the weekday PM peak hour (which includes arrivals for a sold-out hockey game), nine intersections during the Saturday midday peak hour (which includes departures for a sold-out Disney on Ice event), six intersections during the Saturday PM peak hour (which includes

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

arrivals for a sold-out hockey game), and two intersections during the Saturday night peak hour (which includes departures from a sold-out hockey game).

Table 17-4 below presents a summary of intersections that would have significant adverse traffic impacts during one or more analyzed peak hours, and indicates whether the proposed traffic mitigation measures could fully mitigate the impacts. As shown in the table, most of the significant adverse traffic impacts would occur along the segment of Hempstead Avenue/Turnpike in the vicinity of the Project Sites between the intersections of Springfield Boulevard and School Road/Marguerite Avenue. Most of the impacted intersections could be fully mitigated, except one intersection—Hempstead Avenue at Springfield Boulevard—would remain unmitigated during the weekday AM and Saturday midday peak hours; and an additional intersection—Hempstead Avenue at 225th Street—would remain unmitigated during the weekday PM, Saturday midday, and Saturday PM peak hours.

Table 17-4

Summary of Significant Adverse Traffic Impacts on the Local Street Network

Intersection	Peak Hour				
	Weekday AM	Weekday PM	Saturday Midday	Saturday PM	Saturday Night
Hempstead Turnpike at Locustwood Boulevard/Gate 5 Road		●	●	●	●
<u>Hempstead Turnpike at Elmont Road</u> ‡	●				
Hempstead Turnpike at Louis Avenue & School Road/Marguerite Avenue		●	●	●	
Hempstead Turnpike at Terrace Avenue			●		
Plainfield Avenue at Tulip Avenue	●				
Jericho Turnpike at Plainfield Avenue/Emerson Avenue	●		●		
Jericho Turnpike at New Hyde Park Road			●		
Jamaica Avenue at 213th Street/Hempstead Avenue	●				
Hempstead Avenue at Springfield Boulevard	○	●	○	●	
Hempstead Avenue at 225th Street	●	○	○	○	
Hempstead Avenue at Cross Island Parkway Southbound off-ramp	●	●	●	●	
Hempstead Avenue at Cross Island Parkway Northbound off-ramp		●	●	●	●
Key:					
● Mitigated impact					
○ Unmitigated impact					
‡ <u>Intersection would be impacted as a result of the implementation of commuter parking at the new LIRR Elmont Station</u>					

A discussion of the recommended traffic engineering and operational improvements that would be needed to mitigate significant adverse impacts at each impacted intersection is provided below. These additional mitigation measures include standard traffic engineering improvements such as the installation of new traffic signals at currently unsignalized intersections, modification of signal phasing and timing at currently signalized intersections, deployment of TEAs before arena events,

implementation of turn prohibitions where needed, geometric improvements at specific intersections to provide improved channelization, lane re-striping, and/or new lane designations.

Implementation of these measures is subject to review and approval by NYSDOT, the NCDPW, or NYCDOT, depending upon the location of the intersection. If any of these measures are deemed infeasible and no alternative mitigation measures can be identified at a particular location, then the identified significant adverse traffic impacts at such location would be unmitigated.

A summary of proposed traffic mitigation measures, detailed traffic level of service tables showing the effects of proposed mitigation measures, and schematic drawings of proposed traffic mitigation measures are presented in **Appendix F**.

Hempstead Turnpike at Locustwood Boulevard/Gate 5 Road

As described in Chapter 11, “Transportation,” the analysis of the Proposed Project’s transportation impacts accounted for proposed improvements at the intersection of Hempstead Turnpike at Locustwood Boulevard/Gate 5 Road as part of the 2021 With Action condition. These improvements were developed as part of the project design process to address site access and egress to the parking facilities located on the north side of Hempstead Turnpike, including the new parking within and below the hotel’s podium, the South Lot, and the East Lot. This section discusses measures that would mitigate the significant adverse traffic impacts identified at this location.

The significant adverse impact at the eastbound Hempstead Turnpike left turn movement of this intersection during the weekday PM peak hour (which includes departures from a sold-out hockey game) could be fully mitigated with the implementation of the new LIRR Elmont Station and demand management strategies.

The significant adverse impact at the southbound Gate 5 Road right turn movement of this intersection during the Saturday midday peak hour (which includes departures for a sold-out Disney on Ice event) could be fully mitigated by modifying the signal timing, using cones and signage to temporarily provide a free-flowing southbound right turn from Gate 5 Road to Hempstead Turnpike, and using cones and signage to temporarily reconfigure Hempstead Turnpike to include one westbound left turn lane, two westbound through lanes, and one westbound right turn lane.

The significant adverse impacts at the eastbound Hempstead Turnpike left turn movement and southbound Gate 5 Road right turn movement of this intersection during the Saturday PM peak hour could be fully mitigated by modifying the signal timing.

The significant adverse impact at the southbound Gate 5 Road right turn movement of this intersection during the Saturday night peak hour (which includes departures from a sold-out hockey game) could be fully mitigated by using cones and signage to temporarily reconfigure Gate 5 Road to include two southbound right turn lanes, one southbound shared left turn and through lane, and one northbound receiving lane, using cones and signage to temporarily reconfigure Hempstead Turnpike and close the inner eastbound left turn lane, and temporarily prohibiting northbound left turns from Locustwood Boulevard to Hempstead Turnpike (northbound vehicles would be directed to make left turns at the intersection of Hempstead Turnpike at Wellington Road, which is the next intersection where a northbound left turn to Hempstead Turnpike is possible).

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

Schematic drawings of the proposed mitigation measures involving temporary changes to operational patterns during event egress periods in the Saturday midday and Saturday night peak hours are presented in **Appendix F**.

Hempstead Turnpike at Elmont Road

The significant adverse impact at the northbound left turn movement of this intersection during the weekday AM peak hour, which is a new impact as a result of the addition of commuter parking at the new LIRR Elmont Station, could be fully mitigated by modifying the signal timing.

Hempstead Turnpike at Louis Avenue & School Road/Marguerite Avenue

The significant adverse impact at the eastbound approach of this intersection during the weekday PM, Saturday midday, and Saturday PM peak hours could be fully mitigated by modifying the signal timing.

Hempstead Turnpike at Terrace Avenue

The significant adverse impact at the eastbound left turn movement of this intersection during the Saturday midday peak hour could be fully mitigated by modifying the signal timing.

Plainfield Avenue at Tulip Avenue

The significant adverse impact at the northbound approach of this intersection during the weekday AM peak hour could be fully mitigated by modifying the signal timing.

Jericho Turnpike at Plainfield Avenue/Emerson Avenue

The significant adverse impacts at the westbound left turn movement and northbound approach of this intersection during the weekday AM peak hour could be fully mitigated by modifying the signal timing.

The significant adverse impact at the westbound left turn movement of this intersection during the Saturday midday peak hour could be fully mitigated by modifying the signal timing.

Jericho Turnpike at New Hyde Park Road

The significant adverse impact at the eastbound shared through and right turn movement of this intersection during the Saturday midday peak hour could be fully mitigated by modifying the signal timing.

Jamaica Avenue at 213th Street/Hempstead Avenue

The significant adverse impact at the northbound shared left turn and through movement of this intersection during the weekday AM peak hour could be fully mitigated by modifying the signal timing.

Hempstead Avenue at Springfield Boulevard

The significant adverse impacts at the westbound left turn, northbound shared through and right turn, and southbound left turn movements of this intersection during the weekday AM peak hour, which would experience an increase of approximately 5 to 15 project-generated trips, could not be mitigated. During the Saturday midday peak hour, the significant adverse impacts at the eastbound left turn, westbound left turn, westbound shared through and right movements, and southbound left turn movements of this intersection, which would experience an increase of about 5 to 45 project-generated trips could not be mitigated. Given the presence of lead pedestrian intervals (allowing for exclusive pedestrian crossings) and geometric constraints, modifying the signal timing to reallocate green time is not feasible without creating new unavoidable impacts at

other intersection movements. Therefore, the significant adverse impacts during this period are considered unavoidable (refer to Chapter 18, “Unavoidable Adverse Impacts”).

During the weekday PM peak hour, an additional impact was created at the eastbound shared through and right turn movement due to the implementation of shuttle buses as part of the demand management strategies in the Transportation Management Plan. The significant adverse impact at the eastbound shared through and right turn, and westbound left turn movements of this intersection during the weekday PM peak hour could be fully mitigated by modifying the signal timing.

The significant adverse impacts at the eastbound left turn and westbound left turn movements of this intersection during the Saturday PM peak hour could be fully mitigated by modifying the signal timing.

Hempstead Avenue at 225th Street

The significant adverse impact at the eastbound approach of this intersection during the weekday AM peak hour could be fully mitigated by modifying the signal timing.

The significant adverse impact at the eastbound through movement of this intersection during the weekday PM peak hour, and eastbound shared through and right turn and westbound de facto left turn movements during the Saturday midday and Saturday PM peak hours could not be mitigated. Given the requirement for minimum pedestrian crossing time at crosswalks and geometric constraints, modifying the signal timing to reallocate green time is not feasible without creating new unavoidable impacts at other intersection movements. Therefore, the significant adverse impacts during this period are considered unavoidable (refer to Chapter 18, “Unavoidable Adverse Impacts”).

Hempstead Avenue at Cross Island Parkway Southbound Off-Ramp

The significant adverse impacts at the northbound right turn movement of this intersection during the weekday AM, weekday PM, Saturday midday, and Saturday PM peak hours could be fully mitigated by creating curb extensions and a bus lay-by lane on the south side of Hempstead Avenue upstream of the intersection to create a lane addition for the off-ramp leading away from the intersection. This would eliminate the need for vehicles on the off-ramp to wait for gaps in eastbound traffic after stopping at the stop sign. During the event arrival periods in the weekday PM and Saturday PM peak hours, a TEA would be used to temporarily provide a free-flowing northbound right turn for vehicles on the off-ramp, with the TEA stopping traffic in instances when pedestrians would use the south crosswalk. An additional TEA could be deployed at this location when necessary during event arrival periods to monitor queue lengths on the off-ramp and prevent queues from spilling back onto the Cross Island Parkway mainline. Schematic drawings of the proposed curb extensions and bus lay-by lane are presented in **Appendix F**.

Hempstead Avenue at Cross Island Parkway Northbound Off-Ramp

The significant adverse impacts at the southbound right turn movement of this intersection during the weekday PM, Saturday midday, Saturday PM, and Saturday night peak hours could be fully mitigated with the installation of a new traffic signal with a 90-second cycle and two phases and widening of the northbound off-ramp at the southbound intersection approach to two 11-foot-wide travel lanes. Based on existing and projected vehicle volumes, this traffic signal has been found to conditionally satisfy the Manual of Uniform Traffic Control Devices’ (MUTCD) peak hour warrant (Warrant 3). Schematic drawings of the proposed geometric changes are presented in **Appendix F**.

Potential for Traffic Diversions to Local Streets

As acknowledged in Chapter 11, “Transportation,” certain routes in the vicinity of the traffic study area may be susceptible to traffic diversions by drivers using mobile navigation apps with real-time traffic data (e.g., Google Maps or Waze) to avoid congestion, or by other motorists with a high degree of familiarity with the local street network.

As part of the TMP, a monitoring plan has been developed that would include the collection of traffic volume data along the Cross Island Parkway and major roadways in the local street network for different types of arena events (a draft monitoring plan is included in Appendix J). Such data would be used to determine the extent to which traffic diversions actually occur as a result of traffic congestion caused by project-generated vehicle trips. The TMP also includes a comprehensive set of demand management strategies aimed at reducing the volume of project-generated peak hour vehicular trips, changing travel patterns that redistribute traffic away from critical highway segments, and shift demand from auto to alternate modes of transportation that eliminate or substantially reduce the amount of unmet demand that has been projected on the Cross Island Parkway during the weekday PM and Saturday PM peak hours. These strategies would be reviewed and refined on a regular basis at meetings with stakeholders such as transportation agencies, police departments, and local municipalities. A key element of the TMP aimed at reducing the potential for traffic diversions onto sensitive local residential streets is for NYAP to partner with navigation app providers such as Waze to define local streets that could be designated as “unavailable” to through traffic during event arrival and departure periods so that through traffic would not be routed to them. If it is determined that traffic congestion caused by project-generated vehicle trips are causing traffic diversions to occur on a recurrent basis at unacceptable levels, additional mitigation measures to address such impacts could involve refinements to the TMP to further reduce the volume of project-generated vehicle trips during peak hours and/or the implementation of signage, turn restrictions, or traffic calming measures along routes susceptible to traffic diversions.

Several professional sports franchises including the Detroit Lions, Toronto Maple Leafs, and Washington Nationals have partnered with Waze as part of its Global Event Partner Program, which helps event organizers optimize traffic flow to sports and entertainment venues by allowing the operator to integrate parking facility information into the app, allowing users who have paid for parking in advance to get customized directions to a specific lot based on their origin. Event partners can monitor Waze traffic data in real-time and obtain traffic data for each event day that could be used to better understand travel patterns to improve traffic management during events. Similarly, stakeholders such as transportation agencies and local municipalities could partner with Waze by becoming a member of Waze’s Connected Citizens Program, allowing them to provide information related to construction and road closures and receiving real-time incident information and other traffic data.

HIGHWAY NETWORK

As described in Chapter 11, “Transportation,” the Proposed Project would result in significant adverse traffic impacts to six highway segments during the weekday AM peak hour, 15 highway segments during the weekday PM peak hour, 24 highway segments during the Saturday midday peak hour, 22 highway segments during the Saturday PM peak hour, and 21 highway segments during the Saturday night peak hour along the northbound and southbound Cross Island Parkway between the Southern State Parkway and Jamaica Avenue. The Proposed Project would also result in significant adverse traffic impacts at one weaving segment during the Saturday midday peak hour and two merge segments during the Saturday PM peak hour at the interchanges of the Cross

Island Parkway with the Long Island Expressway and Grand Central Parkway. Additionally, VISSIM micro-simulation analyses performed for the segments of the Cross Island Parkway adjacent to the Project Sites showed that the Proposed Project would result in substantial increases in “unserved” vehicles (unmet demand) that could not be processed during the weekday PM and Saturday PM peak hours with a sold-out hockey game.

The identification of significant adverse impacts on the highway network is not unusual for projects of this scale. Many of these highway segments operate at congested or near-congested conditions in at least one direction during some of those peak periods under existing conditions; the Cross Island Parkway is in immediate proximity to the Project Sites, and it is projected to be used by up to 90 percent of those driving to the Proposed Project. Widening of the Cross Island Parkway to provide more capacity is neither practical nor reasonably feasible, and has been precluded as an option. However, an extensive set of proposed mitigation measures has been developed to reduce the volumes on the CIP as much as possible during the pre-game arrival peak hours and thus reduce the magnitude of potential impacts. These measures consist of the addition of a new LIRR Elmont Station on the LIRR Main Line and implementation of a comprehensive TMP comprised of demand management strategies to reduce and manage traffic demand.

The highway segments along the northbound and southbound Cross Island Parkway between the Southern State Parkway and Jamaica Avenue were evaluated quantitatively using the VISSIM micro-simulation model to determine the number of vehicles that could be processed with the proposed mitigation measures in place.⁴ Table 17-5 presents a comparison of the unmet demand, or “unserved” vehicles that could not be processed by the Cross Island Parkway based on the results of the VISSIM micro-simulation model in the future With Action and Mitigated With Action conditions for the peak hours analyzed. As shown in the table, the proposed mitigation measures would eliminate all of the unmet demand in both the northbound and southbound directions during the weekday PM peak hour. During the Saturday PM peak hour, the proposed mitigation measures would eliminate all of the unmet demand in the southbound direction and substantially reduce the unmet demand in the northbound direction from 1,501 vehicles to 289 vehicles. However, with the demand management strategies of the TMP in place, it is expected that the remaining unmet demand in this peak hour could be further reduced or eliminated by using a partnership with a navigation app provider to direct some of the arena patrons traveling northbound along the Cross Island Parkway to instead approach the Project Sites via the southbound direction of the parkway. Detailed tables providing a comparison of the total vehicular demand and the number of vehicles that could be processed by the Cross Island Parkway in the future With Action and Mitigated With Action conditions are presented in Appendix F.

⁴ The demand management strategy to encourage arena patrons to arrive prior to the peak hour preceding the start of an arena event was accounted for in the VISSIM models by including the associated vehicle trips in the initialization (warmup) period, which consists of a one hour period before the analyzed peak hour.

Table 17-5
Summary of Cross Island Parkway Vehicle Demand Analysis

Peak Hour	Unmet Demand					
	Northbound merge segment at the Southern State Parkway on-ramp			Southbound mainline at Hillside Ave overpass		
	With Action	Mitigated With Action	Net Change	With Action	Mitigated With Action	Net Change
Weekday AM	677	767	90	28	28	0
Weekday PM	1,230	0	-1,230	1,604	0	-1,604
Saturday MIDDAY	5	10	5	0	0	0
Saturday PM	1,501	289	-1,212	1,094	0	-1,094
Saturday Night	0	0	0	35	36	1

The highway segments along the northbound and southbound Cross Island Parkway between the Southern State Parkway and Jamaica Avenue were also evaluated quantitatively using the VISSIM micro-simulation model to determine whether the proposed mitigation measures could fully mitigate the impacts. **Table 17-6** below presents a summary of the highway segments that would have significant adverse traffic impacts and indicates whether the proposed traffic mitigation measures could fully mitigate the impacts. The overall findings of the level of service analyses are:

- For the weekday AM peak hour, all three highway segments impacted in the northbound direction would be fully mitigated. In this instance, conditions would slightly improve as a result of congested locations having a “metering” effect on adjacent downstream segments of the highway network. The three highway segments impacted in the southbound direction would remain unmitigated.
- For the weekday PM peak hour, of the eight highway segments impacted in the northbound direction, four segments would be fully mitigated and four segments would remain unmitigated. The seven highway segments impacted in the southbound direction would remain unmitigated.
- For the Saturday midday peak hour, all nine highway segments impacted in the northbound direction would remain unmitigated. Of the 15 highway segments impacted in the southbound direction, two segments would be fully mitigated and 13 segments would remain unmitigated.
- For the Saturday PM peak hour, of the five highway segments impacted in the northbound direction, two segments would be fully mitigated and three segments would remain unmitigated. The 17 highway segments impacted in the southbound direction would remain unmitigated.
- For the Saturday night peak hour, of the nine highway segments impacted in the northbound direction, one segment would be fully mitigated and eight segments would remain unmitigated. Of the 12 highway segments impacted in the southbound direction, six segments would be fully mitigated and six segments would remain unmitigated.

Detailed traffic level of service tables showing the effects of proposed traffic mitigation measures are presented in **Appendix F**.

Table 17-6
Summary of Significant Adverse Traffic Impacts on the Cross Island Parkway

	Peak Hour					
	Weekday AM	Weekday PM	Saturday Midday	Saturday PM	Saturday Night	
Northbound	Merge segment at the Southern State Parkway on-ramp	○				
	Merge segment at the on-ramp from Linden Blvd		○			
	Mainline between the Linden Blvd on-ramp and Belmont Racetrack off-ramp (Exit 26A)		○			
	Diverge segment at the Belmont Racetrack off-ramp (Exit 26A)					
	Mainline between the Belmont Racetrack off-ramp and on-ramp (Exit 26A)					
	Weaving segment between the Belmont Racetrack on-ramp (Exit 26A) and the Hempstead Ave off-ramp		○	○		
	Mainline between the Hempstead Ave off-ramp and on-ramp					
	Merge segment at the Hempstead Ave on-ramp		●	○	●	
	Mainline between the Hempstead Ave on-ramp and the Belmont Racetrack (Exit 26D) on-ramp			○	●	
	Weaving segment between the Belmont Racetrack (Exit 26D) on-ramp and off-ramp			○		
	Mainline between the Belmont Racetrack (Exit 26D) on-ramp and the Jamaica Ave off-ramp			○		
	Diverge segment at the off-ramp to Jamaica Ave		●	○	○	
	Mainline between the Jamaica Ave off-ramp and on-ramp	●	●	○	○	
	Merge segment at the Jamaica Ave on-ramp	●	●	○	○	
	Mainline north of the Jamaica Ave on-ramp	●		○	○	
	Southbound	Diverge segment at the off-ramp to Jamaica Ave		○		○
		Mainline between the Jamaica off-ramp and the Jamaica Ave on-ramp		○		○
		Merge segment at the Jamaica Ave on-ramp		○		○
Mainline between the Jamaica Ave on-ramp and the Belmont Racetrack (Exit 26D) off-ramp			○		○	
Diverge segment at the Belmont Racetrack (Exit 26D) off-ramp					○	
Mainline between the Belmont Racetrack (Exit 26D) off-ramp and on-ramp					○	
Merge segment at the Belmont Racetrack (Exit 26D) on-ramp				○	○	
Mainline between the Belmont Racetrack (Exit 26D) on-ramp and the Hempstead Ave WB off-ramp				○	○	
Diverge segment at the Hempstead Ave WB off-ramp				○	○	
Mainline between the Hempstead Ave WB off-ramp and on-ramp				○	○	
Merge segment at the Hempstead Ave WB on-ramp		○	○	○	○	
Weaving segment between the Hempstead Ave WB on-ramp and Hempstead Ave EB off-ramp		○	○	○	○	
Diverge segment at the Hempstead Ave EB off-ramp		○	○	○	○	
Mainline between the Hempstead Ave EB off-ramp and on-ramp					○	
Weaving segment between the Hempstead Ave EB on-ramp and the Belmont Racetrack (Exit 26A) off-ramp				●	○	
Mainline between the Belmont Racetrack (Exit 26A) off-ramp and on-ramp				●	○	
Merge segment at the Belmont Racetrack (Exit 26A) on-ramp				○	○	
Mainline between the Belmont Racetrack (Exit 26A) on-ramp and the Linden Blvd off-ramp				○		
Diverge segment at the off-ramp to Linden Blvd				○		
Mainline between the Linden Blvd off-ramp and on-ramp				○		
Merge segment at the Linden Blvd on-ramp			○			
Diverge segment at the Southern State Parkway off-ramp			○			

Key:
 ● Mitigated impact
 ○ Unmitigated impact

The key merges and weaving segments analyzed at the interchanges of the Cross Island Parkway with the Long Island Expressway and Grand Central Parkway were evaluated quantitatively to determine whether the proposed mitigation measures could fully mitigate the impacts. During the Saturday midday peak hour, the significant adverse impact at the weaving segment on the collector-distributor road following the off-ramps from the northbound and southbound Cross Island Parkway to the eastbound Long Island Expressway and service road would remain unmitigated. During the Saturday PM peak hour, the significant adverse impacts at the merge segment on the southbound Cross Island Parkway at the on-ramp from the westbound Long Island

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

Expressway and the merge segment on the southbound Cross Island Parkway at the on-ramp from the westbound Grand Central Parkway both would be fully mitigated. Detailed traffic level of service tables showing the effects of proposed mitigation measures are presented in Appendix F.

Even with the addition of the new LIRR Elmont Station and the demand management strategies of the TMP in place, there would still be some highway segments where the proposed mitigation measures would not be sufficient to fully mitigate significant adverse traffic impacts (see Chapter 18, “Unavoidable Adverse Impacts”). However, the traffic analyses for the 2021 With Action condition use a conservative approach in that they have assessed representative worst-case scenarios with sold-out arena events along with trips associated with the retail village and other Proposed Project uses and daytime racing at Belmont Park. Overall, the conditions identified in the analysis of peak hours that include trips by arena patrons for sold-out events are expected to occur at only limited instances over the course of the year, and non-sell-out conditions on most days with arena events would experience fewer trips. The analyses neither account for the presence of empty arena seats due to no-shows, which according to Islanders and NHL data are typically 8-10 percent even for major games, nor take reductions for the retail uses attributable to a stay-away factor, which would involve shoppers who choose to stay away from the Project Sites during times of major arena events. As such, the With Action analyses represent worst-case scenarios and may not be indicative of what would typically occur during most days over the course of the year.

LIRR SERVICE

As described above in the “Travel Demand Analysis” section, with the new LIRR Elmont Station and the implementation of demand management strategies for a sold-out hockey game at the arena, the LIRR is estimated to be used by 30 percent of arena patrons for a weekday evening hockey game, 17 percent of arena patrons for a Saturday midday Disney on Ice show, and 24 percent of arena patrons for a Saturday evening hockey game. The LIRR modal split for the weekday evening events includes one percent of arena patrons who would use commuter parking (i.e., park in the North Lot in the morning, commute to work via the LIRR, take the train to the game, and drive home after the event). Table 17-7 summarizes the projected amount of LIRR ridership to both the Belmont Park Station and the new LIRR Elmont Station by arena patrons based on these modal split assumptions and the attendance level for a sold-out hockey game, a sold-out concert, and a sold-out Disney on Ice event based on the pre-event origins and post-event destinations of arena patrons.

Table 17-7

Project-Generated LIRR Trips by Arena Patrons with New Elmont Station

<u>Analysis Period</u>	<u>Type of Arena Event</u>	<u>Total Attendance</u>	<u>LIRR Modal Split</u>	<u>Projected LIRR Ridership</u>		
				<u>To/From Points East on Main Line</u>	<u>To/From Points West</u>	<u>Total</u>
<u>Weekday Evening</u>	<u>Hockey</u>	<u>18,000</u>	<u>30%</u>	<u>2,603</u>	<u>2,797</u>	<u>5,400</u>
	<u>Concert</u>	<u>19,000</u>	<u>30%</u>	<u>2,748</u>	<u>2,952</u>	<u>5,700</u>
<u>Saturday Midday</u>	<u>Disney on Ice</u>	<u>11,500</u>	<u>17%</u>	<u>975</u>	<u>980</u>	<u>1,955</u>
<u>Saturday Evening</u>	<u>Hockey</u>	<u>18,000</u>	<u>24%</u>	<u>2,154</u>	<u>2,166</u>	<u>4,320</u>
	<u>Concert</u>	<u>19,000</u>	<u>24%</u>	<u>2,274</u>	<u>2,286</u>	<u>4,560</u>

Notes:
(1) LIRR modal split for weekday evening events includes one percent of arena patrons using commuter parking in the North Lot, which would arrive via the LIRR from points west prior to the event. These patrons would not use trains following the event and would instead depart via auto.

During times preceding and following an arena event, the new LIRR Elmont Station would be operated in conjunction with the existing LIRR Belmont Park Station on the spur. On days with

scheduled events at the proposed arena, the LIRR would continue to provide shuttle service between Jamaica Station and Belmont Park Station with two eastbound trains arriving at Belmont Park prior to the start of the event and two westbound trains departing from Belmont Park following the conclusion of the event. As described in Chapter 11, "Transportation," these trains would have a capacity of about 1,920 seated passengers, or up to about 2,400 passengers if standees are included.

It is anticipated that the two shuttle trains to and from Belmont Park Station would carry most of the riders traveling to/from points west, including riders from other LIRR branches (e.g., Far Rockaway, Long Beach, Port Washington, West Hempstead) that would transfer at Jamaica, and the remaining riders traveling to/from points west would use regularly scheduled trains traveling along the LIRR Main Line. It was assumed that, at a minimum, eastbound and westbound Hempstead Branch trains would stop at the new LIRR Elmont Station prior to and after an event.

Based on a review of existing LIRR ridership data from the Spring and Fall of 2017, it is expected that eastbound trains traveling along the LIRR Main Line before events and westbound trains traveling along the LIRR Main Line after events would have sufficient capacity to accommodate the additional arena patrons traveling to/from points west, provided that some additional eastbound trains on the Huntington/Port Jefferson, Oyster Bay, or Ronkonkoma branches stop at the new LIRR Elmont Station prior to an arena event during the weekday PM peak period. The specifics of the operating plan for the new LIRR Elmont Station would be determined by the LIRR, and trains selected to stop at the new station would be chosen based on available capacity. Based on a review of the existing LIRR ridership data, it is estimated that eastbound commuter trains operating from west of Jamaica would have sufficient capacity to accommodate the additional riders traveling to arena events during the weekday PM peak period. As described above in the "Demand Management Strategies" section, the TMP would include discounts for parking, entertainment, or dining options at the adjacent retail development as incentives for arena patrons to arrive to the Project Sites early and prior to the peak hour preceding the start of an arena event. These strategies would also be used to help minimize crowding on eastbound trains stopping at the new LIRR Elmont Station during the weekday PM peak period.

For arena patrons traveling to/from points east, it was assumed that, at a minimum, westbound trains originating from the Huntington/Port Jefferson and Ronkonkoma branches would stop at the new LIRR Elmont Station prior to an event and eastbound trains destined to the Hempstead, Huntington/Port Jefferson, and Ronkonkoma branches would stop at the new LIRR Elmont Station after an event. It was also assumed that arena patrons could use the Oyster Bay Branch to travel to/from the arena without changing trains at Jamaica as these trains could stop at the new LIRR Elmont Station or passengers could transfer between Oyster Bay Branch and Huntington/Port Jefferson Branch or Ronkonkoma Branch trains at Mineola. Based on a review of existing LIRR ridership data from the Spring and Fall of 2017, it is expected that regularly scheduled trains traveling along the LIRR Main Line in the westbound direction would have sufficient capacity during the weekday PM and Saturday PM periods to accommodate arena patrons from points east arriving for a hockey game or a concert. It is also expected that regularly scheduled trains traveling along the LIRR Main Line in the eastbound and westbound directions would have sufficient capacity during the Saturday midday period to accommodate arena patrons for a Disney on Ice show that are traveling to/from points east. After a sold-out hockey game or concert on a weeknight or a Saturday night, when the LIRR operates less frequent service, it is estimated that regularly scheduled service alone would not be sufficient to accommodate all of the departing arena patrons traveling to points east and that one additional eastbound train would need to be provided on the Ronkonkoma Branch to accommodate eastbound riders. As described above in the "New LIRR Elmont Station" section, after an arena event it is possible that up to two additional

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

trains could be operated out of Belmont Park Station to provide additional service to points east or west, if necessitated by customer demand. As an alternative, additional eastbound service could also operate from the new LIRR Elmont Station. As this need for additional train service would occur outside of the weekday PM commuter peak period, which runs from 4:00 PM to 8:00 PM, it would not impact regular commuter service.

As described above in the “Demand Management Strategies” section, one of the strategies to shift project-generated auto trips to transit would involve implementing a NYAP-funded shuttle bus service between the Project Sites and the LIRR Rockville Centre Station to allow arena patrons in Nassau and Suffolk Counties along the Babylon Branch to travel to the arena without having to transfer trains at Jamaica and backtrack to/from the Belmont Park Station or the new LIRR Elmont Station. Based on a review of existing LIRR ridership data from the Spring and Fall of 2017, it is expected that westbound trains traveling along the Babylon Branch before events and eastbound trains traveling along the Babylon Branch after events would have sufficient capacity to accommodate the projected ridership for a sold-out hockey game, which would amount to a total of 900 and 540 riders for a weeknight and Saturday night hockey game, respectively, as long as riders would be distributed among multiple trains. It is estimated that these riders would be distributed onto at least two trains as the Babylon Branch currently provides half-hourly service during the time periods when arena patrons would be expected to travel, and some riders would use the food and beverage retail uses near the arena before or after an event.

As described above in the “New LIRR Elmont Station” section, the LIRR anticipates that the new LIRR Elmont Station would not be expected to generate new commuter ridership but would instead result in a shift of existing riders living in Bellerose Terrace and Elmont that currently use other stations. With the operation of the new LIRR Elmont Station, existing levels of commuter service would be maintained at other LIRR stations (e.g., Queens Village, Bellerose, Floral Park). The addition of the new LIRR Elmont Station would not be anticipated to result in an impact to commuter service.

An assessment of transportation conditions with only the eastbound platform of the new LIRR Elmont Station in operation is provided in the “Interim Conditions” section below.

BUS SERVICE

It is likely that the Proposed Project would result in a significant adverse impact to NICE and MTA bus routes during time periods before and after sold-out arena events, requiring some increases in bus service to accommodate bus rider trips made by arena patrons. Bus operators typically adjust their service based on ridership and market demand and it is anticipated that such increases in service on the N6, N6X, Q2, and/or Q110 bus routes would be coordinated with NYAP as part of the TMP for the arena. While additional bus service may be needed on public bus routes, it is likely this would occur during off-peak periods when additional buses already part of the NICE bus or MTA bus fleet would be available. Additionally, as of June 23, 2019, NICE has committed to adding more buses and an expanded schedule to its “Flexi” route serving Elmont and Valley Stream.

As described in the “Demand Management Strategies” section above, one of the components of the TMP would involve operation of a shuttle bus service between the arena and Downtown Jamaica before and after arena events. Utilization of this shuttle bus route would be reviewed as part of the monitoring plan and could be adjusted after implementation to meet the anticipated demand and maximize the effectiveness of this strategy, which could also serve as an alternate to the public transit routes providing service to and from Queens. Absent the implementation of increased frequency of

bus service before and after sold-out arena events, which would fully mitigate the significant adverse impact, the identified significant adverse impact to bus service would be unmitigated.

Following consultation with NICE, NYAP has committed to install bus pull-outs and shelters along both sides of Hempstead Turnpike adjacent to the Project Sites to alleviate congestion in travel lanes when buses stop to drop-off and pick-up passengers and to provide bus stops in closer proximity to the project components and the Belmont Park Racetrack for employees and visitors that would use the N1, N6, and N6X bus routes. These pull-outs would include amenities such as shelters and electronic shelter information.

PARKING

As described in Chapter 11, “Transportation,” the parking demand for the Proposed Project and the combined parking demand for the Proposed Project and Belmont Park on racing days could be accommodated on-site. In the Mitigated With Action condition, there would be a net reduction of approximately 100 parking spaces in the North Lot to account for internal circulation for the additional shuttle bus route operating to and from the new Elmont Station on the LIRR Main Line. There would be no changes to the number of parking spaces on the South and East Lots between the With Action and Mitigated With Action conditions. While the addition of the new LIRR Elmont Station would result in new parking demand by commuters in the North Lot, this parking would primarily occur during the day on weekdays and would not significantly overlap with arena events taking place on a weekday evening or a Saturday. Furthermore, the addition of the new LIRR Elmont Station and the implementation of the demand management strategies included in the TMP would result in a net reduction of parking demand by arena patrons during events.

Parking demand projections were prepared for both a hockey game and a concert at the arena on a weekday evening and a Saturday evening and Disney on Ice shows at the arena on a Saturday with the new LIRR Elmont Station and the demand management strategies for a sold-out hockey game and a concert at the arena on a weekday evening and a Saturday evening. The parking demand projections for weekday and Saturday concerts were based on the same modal splits and AVO used in the With Action analysis, with the demand management strategies scaled back since a hockey game represents the worst-case analysis scenario for traffic conditions (a concert has lower volumes of auto trips during the pre-event peak hour since the temporal distribution of arena patrons arriving for a concert is more spread out). **Table 17-8** provides a comparison of the modal splits and AVO with the new LIRR Elmont Station and the implementation of demand management strategies for a sold-out hockey game and a sold-out concert on a weekday and a Saturday. As shown in the table, it is assumed that a sold-out concert would have a higher auto modal split compared to a hockey game because it would not implement the demand management strategies involving shuttle bus services providing connections to remote park-and-ride facilities and the LIRR Rockville Centre Station. It is also conservatively assumed that a sold-out concert would not implement the demand management strategy involving encouraging arena patrons to arrive to the Project Sites prior to the peak hour preceding the start of an event since the temporal distribution of arrivals to a concert is more spread out compared to a hockey game.

Table 17-8

Comparison of Proposed Arena Patron Modal Splits and AVOs with Mitigation

Day	Auto	Taxi	LIRR	Transit Bus	Charter Bus	Shuttle Bus			AVO
						Jamaica	Rockville Centre	Remote Parking	
Hockey Games									
Weekday	48%	3%	30% ¹	2%	2%	3%	5%	7%	3.10
Saturday	58%	3%	24%	2%	2%	3%	3%	5%	3.40
Concerts									
Weekday	60%	3%	30% ¹	2%	2%	3%	=	=	3.10
Saturday	66%	3%	24%	2%	2%	3%	=	=	3.40

Note: (1) LIRR modal split for weekday hockey games and concerts includes arena patrons using commuter parking in the North Lot.

Table 17-9 presents a comparison of the projected parking supply and demand for each of the analyzed scenarios and shows that the parking demand for the Proposed Project would be accommodated by the parking supply of the Project Sites and the North, South, and East Lots. The maximum parking demand for the Proposed Project and the combined parking demand for the Proposed Project and Belmont Park on racing days would occur from 12:00 PM to 1:00 PM during the Saturday midday period (a demand of 7,266 spaces). In this instance, it was assumed that racetrack patrons would park in the North, South, and East Lots could utilize shuttle buses to travel to the Grandstand or Clubhouse. Detailed parking accumulation profiles showing the hourly entering trips, exiting trips, and parking accumulation by land use are presented in Appendix F.

Table 17-9

2021 Mitigated With Action Parking Supply and Demand

Analysis Period	Type of Arena Event	Peak Hour	Parking Supply			Parking Demand			Available Spaces
			Sites A and B	North, South, and East Lots ¹	Total	Proposed Project	Belmont Park	Total	
Weekday Evening	Hockey	7–8 PM	1,940	5,764	7,704	4,087	0	4,087	3,617
Weekday Evening	Concert	8–9 PM	1,940	5,764	7,704	4,978	0	4,978	2,726
Saturday Midday	Disney on Ice	12–1 PM	1,940	5,764	7,704	5,236	2,030	7,266	438
Saturday Evening	Hockey	6–7 PM	1,940	5,764	7,704	4,483	0	4,483	3,221
Saturday Evening	Concert	8–9 PM	1,940	5,764	7,704	4,677	0	4,677	3,027

Note: (1) Totals exclude approximately 150 spaces from the North Lot that would be used for the staging of rideshare vehicles during arena events.

With implementation of the proposed mitigation measures, there would be a reduction in peak parking demand of 2,457 spaces during a weeknight sold-out hockey game, a reduction of 1,868 spaces during a weeknight sold-out concert, a reduction of 275 spaces during a Saturday sold-out Disney on Ice show, a reduction of 2,047 spaces during a Saturday night sold-out hockey game, and a reduction of 1,885 spaces during a Saturday night sold-out concert. With this substantial reduction in parking demand by arena patrons during events, it is estimated that there would be reduced reliance on the North and East Lots, with the East Lot only needed in limited instances over the course of the year, such as during certain Saturdays during the midday period when the peak parking demand from the retail village would overlap with the parking demand from a large to mid-size event at the arena or daytime racing at Belmont Park. There would be a sufficient number of spaces in the East Lot to accommodate the parking of charter buses, coach buses, and shuttle buses used as part of the demand management strategies.

Although the parking demand for the Proposed Project and the combined parking demand for the Proposed Project and Belmont Park on racing days could be accommodated on-site, it is acknowledged that there is a possibility that some attendees may attempt to park for free in the surrounding neighborhoods and walk to the arena. However, NYAP would take a proactive

approach to prevent off-site parking from occurring. NYAP would take a proactive approach to prevent off-site parking from occurring, including coordinating with the Town of Hempstead to modify the regulations of the existing Elmont Special Parking District, closing the Mayfair Avenue Gate near the North Lot to pedestrians, and restricting pedestrian access from the new LIRR Elmont Station to the North Lot to LIRR ticketholders. The Mayfair Avenue Gate near the North Lot would be closed to pedestrians to prevent arena patrons from parking in the West End of Floral Park, walking into the Belmont Park property, and then taking a shuttle bus to the arena. Additionally, LIRR tickets would be required to be presented for pedestrian access from the new LIRR Elmont Station to the North Lot to prevent arena patrons from parking in Bellerose Terrace and catching a shuttle bus to the arena. As discussed above, a monitoring plan is included as part of the TMP that would require parking accumulation studies and observations of the effectiveness of neighborhood parking restrictions. This would assess the use of on-street parking spaces in the surrounding residential neighborhoods during different types of events and on non-event days. If it is determined that project-generated vehicles are parking off-site in the surrounding neighborhoods on a recurrent basis, NYAP would coordinate with stakeholders, including local municipalities, to monitor parking conditions and prevent these areas from being impacted by arena events. Potential mitigation measures to address such impacts could include strict enforcement of existing parking regulations by ticketing and/or towing illegally parked vehicles, or by implementing new parking regulations on streets in the surrounding areas.

INTERIM CONDITIONS

Eastbound service at the new Elmont Station on the LIRR Main Line would be available in time for the opening of the arena in 2021 (when it would only be served by the Hempstead Branch), but westbound service at the new station would not be available until the LIRR Third Track and East Side Access projects are completed, which is expected to occur in 2023. During this interim period, additional demand management strategies would be utilized to reduce the volume of project-generated peak hour vehicular trips until westbound LIRR service at the new LIRR Elmont Station is ready. This would include implementation of shuttle bus service between a station on the LIRR Main Line (e.g., New Hyde Park or Mineola) to intercept arena patrons traveling to/from portions of Nassau and Suffolk Counties that are served by the Huntington/Port Jefferson and Ronkonkoma branches so that riders would not have to transfer at Jamaica and backtrack to Belmont Park. Shuttle buses would operate to the arena during a multi-hour period prior to an event and from the arena to the station during a multi-hour period following an event to provide options to transfer to/from regularly scheduled trains operating along the LIRR Main Line. Similar to the other shuttle bus routes providing access to other transit services and remote parking facilities, it is anticipated that shuttle buses to a LIRR Main Line station would be operated by NICE or private bus operators under contract with NYAP to meet the anticipated demand, as evaluated as part of the monitoring plan based on actual utilization and scaled back for events with lower volumes of auto trips during the pre-event peak hour, such as for hockey games with lower attendance levels and concerts with a more spread out distribution of arriving arena patrons. Operation of the shuttle bus service to a LIRR Main Line station during the interim period would be coordinated with the LIRR and construction of the LIRR Third Track project.

For weeknight events, arena patrons from Nassau and Suffolk Counties who regularly commute to New York City using the LIRR would have an option of taking their normal train to work, use the LIRR to travel to Belmont Park prior to the arena event, and then return home by the LIRR (via the Hempstead Branch or transferring at Jamaica), rideshare services, or carpooling with other arena patrons. After an event, direct eastbound LIRR train service would be available from the new LIRR Elmont Station to stations along the Hempstead Branch, shuttle bus service would be

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

available to a station on the LIRR Main Line (providing connections to eastbound trains on the Huntington/Port Jefferson and Ronkonkoma branches), and, if necessitated by customer demand, up to two additional westbound trains could be operated out of Belmont Park Station to Jamaica Station to provide connections to other LIRR branches.

Table 17-10 presents the modal split and AVO assumptions for arena patrons with the proposed mitigation measures for interim conditions. The LIRR is estimated to be used by 18 and 12 percent of arena patrons arriving for a sold-out hockey game on a weeknight and a Saturday night, respectively, and the shuttle bus to a station on the LIRR Main Line is estimated to be used by three percent of arena patrons arriving for a sold-out hockey game on both a weeknight and a Saturday night.

**Table 17-10
Proposed Arena Patron Modal Splits and AVOs
with Mitigation for Interim Conditions**

Day	Auto	Taxi	LIRR	Transit Bus	Charter Bus	Shuttle Bus				AVO
						Jamaica	LIRR Main Line	Rockville Centre	Remote Parking	
Hockey Games										
Weekday	57%	3%	18%	2%	2%	3%	3%	5%	7%	3.10
Saturday	67%	3%	12%	2%	2%	3%	3%	3%	5%	3.40
Notes:										
(1) LIRR modal split for weekday hockey games includes LIRR commuters taking the train to the game and using the Hempstead Branch or Uber to return home.										

TRAFFIC

During interim conditions, driving by auto is estimated to be used by 57 and 67 percent of arena patrons arriving for a sold-out hockey game on a weeknight and a Saturday night, respectively, which represents an increase of nine percent for both time peak hours compared to full operation of the new LIRR Elmont Station with train service in the eastbound and westbound directions. This would result in an overall increase of 303 and 262 vehicle trips during the weekday PM and Saturday PM peak hours, respectively. The shuttle bus trips from a station on the LIRR Main Line to the arena would also add a total of nine and eight vehicle trips during these same peak hours, respectively. Detailed trip generation tables are presented in Appendix F.

With the additional vehicle trips from arena patrons during the interim period, traffic conditions on the local street network is estimated to be slightly worse compared to the conditions analyzed with both eastbound and westbound train service available at the new LIRR Elmont Station, but they would still be improved compared to the conditions analyzed in Chapter 11, "Transportation," due to the addition of the eastbound platform at the new LIRR Elmont Station and the combined effects of the other demand management strategies that would be implemented as part of the TMP. Level of service tables showing the effects of proposed mitigation measures that only include standard traffic engineering improvements (excluding the new LIRR Elmont Station and the implementation of demand management strategies in the TMP) are presented for informational purposes in Appendix F. A comparison of these results indicates that during the time periods analyzed with arena events, there would only be one less intersection with significant impacts during the weekday PM peak hour with the addition of the new LIRR Elmont Station (with both eastbound and westbound service) and the implementation of the demand management strategies. Otherwise, there would be no differences in the total number of intersections with significant impacts or the total number of intersections with unmitigated impacts between the two scenarios during the time periods analyzed with arena events.

With the additional auto trips from arena patrons during the interim period, traffic conditions on the highway network are estimated to be somewhat worse compared to the conditions analyzed with both eastbound and westbound train service available at the new LIRR Elmont Station, but they would still be largely improved compared to the conditions analyzed in Chapter 11, “Transportation,” due the addition of the eastbound platform at the new LIRR Elmont Station and the combined effects of the other demand management strategies that would be implemented as part of the TMP. As noted above, during the interim period without westbound service at the new LIRR Elmont Station, there would be an increase of 303 and 262 vehicle trips during the weekday PM and Saturday PM peak hours, respectively, compared to the conditions analyzed above with both eastbound and westbound train service available at the new LIRR Elmont Station. As such, when added to the unmet demand values in **Table 17-5** above, it is estimated that at a maximum there would be an unmet demand of up to 303 total vehicles (in the northbound and southbound directions combined) during the weekday PM peak hour and up to 551 total vehicles (in the northbound and southbound directions combined) during the Saturday PM peak hour. However, these projected levels of unmet demand represent a substantial reduction in the total unmet demand that was projected in the future With Action condition in Chapter 11, “Transportation,” which amounted to an unmet demand of 2,834 total vehicles (in the northbound and southbound directions combined) during the weekday PM peak hour and an unmet demand of 2,595 total vehicles (in the northbound and southbound directions combined) during the Saturday PM peak hour. Furthermore, the monitoring program would help identify the demand management strategies proving to be most effective and those that are not, thus enabling continued improvement of the TMP on a regular basis and allowing it to adapt to reflect actual conditions.

LIRR SERVICE

During interim conditions, it is expected that the two shuttle trains from Jamaica Station to Belmont Park Station would carry most of the riders traveling from points west, including riders from other LIRR branches (e.g., Far Rockaway, Long Beach, Port Washington, West Hempstead) that would transfer at Jamaica, and the remaining riders traveling from points west prior to a game would use regularly scheduled trains traveling along the Hempstead Branch that would stop at the new LIRR Elmont Station. After an event, all westbound service would be operated out of Belmont Park Station.

Based on a review of the existing LIRR ridership data, it is expected that eastbound commuter trains operating from west of Jamaica would have sufficient capacity to accommodate the additional riders traveling to arena events during the weekday PM peak period. As described in the “Demand Management Strategies” section, the TMP would include discounts for parking, entertainment, or dining options at the adjacent retail development as incentives for arena patrons to arrive to the Project Sites early and prior to the peak hour preceding the start of an arena event. These strategies would also be used to help minimize crowding on eastbound trains stopping at the new LIRR Elmont Station during the weekday PM peak period. There would also be sufficient available capacity on regularly scheduled trains operating along the Huntington/Port Jefferson and Ronkonkoma branches to accommodate the projected amount of riders traveling to/from points east that would use shuttle buses to connect to a station on the LIRR Main Line (e.g., New Hyde Park or Mineola).

After an event, there would be sufficient capacity to accommodate eastbound riders using the new LIRR Elmont Station to travel to stations along the Hempstead Branch. There would also be sufficient capacity to accommodate riders traveling west, as the two shuttle trains would make return trips from Belmont Park Station to Jamaica Station and up to two additional westbound

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

trains could operate from Belmont Park Station to Jamaica Station to provide connections to other LIRR branches, as necessitated by customer demand.

BUS SERVICE

During interim conditions, the Proposed Project would result in significant adverse impacts to NICE and MTA bus service and would likely require some increases in bus service during time periods before and after sold-out arena events to accommodate bus rider trips made by arena patrons, no different than conditions with full operation of the new LIRR Elmont Station with train service in both the eastbound and westbound directions.

PARKING

As the combined parking demand for the Proposed Project and Belmont Park on racing days could be accommodated on-site without the demand management strategies or full operation of the new LIRR Elmont Station, the parking provided on the Project Sites and the North, South, and East Lots would be sufficient to accommodate all of the parking demand on-site during interim conditions.

C. CONSTRUCTION

TRANSPORTATION

TRAFFIC

As described in Chapter 15, “Construction,” construction activities associated with the Proposed Actions during the projected peak quarter of construction would result in significant adverse traffic impacts at three intersections during the 6:00 AM – 7:00 AM peak hour and three intersections during the 5:15 PM – 6:15 PM peak hour. Implementation of traffic engineering improvements such as the installation of new traffic signals at currently unsignalized intersections and modification of signal phasing and timing at currently signalized intersections would fully mitigate all of the anticipated significant adverse construction traffic impacts except for the intersection of Hempstead Avenue and Springfield Boulevard, which would have one unmitigated significant adverse impact during the weekday PM construction peak hour. In the absence of the application of traffic mitigation measures during construction, these construction-period impacts would remain unmitigated or partially unmitigated.

A discussion of the recommended mitigation measures/improvements that would be needed to mitigate significant adverse impacts at each impacted intersection is provided below. Implementation of the recommended traffic engineering improvements for these intersections is subject to review and approval by NYS DOT or NYCDOT, depending upon the location of the intersection. If any of these measures are deemed infeasible and no alternative mitigation measures can be identified at a particular location, then the identified significant adverse construction traffic impacts at such location would be unmitigated.

A summary of proposed traffic mitigation measures, detailed traffic level of service tables showing the effects of proposed mitigation measures, and schematic drawings of proposed traffic mitigation measures are presented in **Appendix F**.

Hempstead Turnpike at Locustwood Boulevard/Gate 5 Road

The significant adverse impacts at the southbound approach of this intersection during the weekday PM construction peak hour could be fully mitigated by modifying the signal timing.

Jamaica Avenue at 213th Street/Hempstead Avenue

The significant adverse impacts at the northbound left turn and shared left-through movements of this intersection during the weekday AM construction peak hour could be fully mitigated by modifying the signal timing.

Hempstead Avenue at Springfield Boulevard

The significant adverse impacts at the eastbound left turn and westbound shared through and right turn movements of this intersection during the weekday AM construction peak hour could be fully mitigated by modifying the signal timing. The significant adverse impact at the westbound left turn movement of this intersection during the weekday PM construction peak hour could not be mitigated. Given the presence of lead pedestrian intervals (allowing for exclusive pedestrian crossings) and geometric constraints, modifying the signal timing to reallocate green time is not feasible without creating new unavoidable impacts at other intersection movements. Therefore, the significant adverse impacts during this period are considered unavoidable (refer to Chapter 18, “Unavoidable Adverse Impacts”).

Hempstead Avenue at Cross Island Parkway Northbound Off-Ramp

The significant adverse impacts to the northbound off-ramp right turn movement at this intersection during the weekday AM and PM construction peak hours could be fully mitigated by advancing the proposed mitigation for this location described above, which involves the installation of a new traffic signal with a 90-second-cycle and two phases and widening of the northbound off-ramp at the southbound intersection approach to two 11-foot-wide travel lanes.

NOISE

Chapter 15, “Construction,” concludes that construction of the Proposed Project would have the potential to result in significant adverse construction noise impacts at residential locations immediately adjacent to Site B.

As a result of the construction noise levels that would occur over an extended duration, residences along Huntley Road, both sides of Wellington Road between Hempstead Turnpike and 109th Avenue, the west side of Wellington Road between 109th Avenue and Hathaway Avenue, and the north side of Hathaway Avenue west of Wellington Road would have the potential to experience significant adverse construction noise impacts. These residences consist of single-family homes that generally have insulated glass windows and some form of alternate means of ventilation (i.e., air conditioning), which would be expected to provide at least 25 A-weighted decibels (dBA) window/wall attenuation. Buildings with these specifications would be expected to experience interior noise levels at times during the most noise-intensive construction activities up to approximately 45 dBA, which is generally regarded as acceptable for residential use.⁵ With these façade noise attenuation measures already in place, there are no additional feasible and practicable mitigation measures that would be effective in further reducing the construction noise.

For residences that do not have insulated glass windows, the Applicant would offer to provide and install laminated glass storm windows or replacement insulated glass windows for each window that faces the construction noise source. For residences that do not have alternate means of ventilation (i.e., air conditioning), the Applicant would offer to provide and install one through-window air conditioning unit for each room that has a window that faces the construction noise source to allow for the maintenance of a closed-window condition. A survey and in-field

⁵ <https://www.hudexchange.info/onecpd/assets/File/Noise-Guidebook-Chapter-2.pdf>

verification would be undertaken to confirm which residences would be eligible for this mitigation. With the provision of such measures, the façades of these buildings would be expected to provide approximately 25 dBA window/wall attenuation. Therefore, interior noise levels would be reduced to less than the 45 dBA threshold recommended for residential use during worst case construction activity. Consequently, construction noise impacts at these receptors would be fully mitigated.

For the outdoor spaces (e.g., yards, decks) of the residences adjacent to Site B, there would be no feasible or practicable measures to mitigate the construction noise impacts. However, outdoor spaces could still be used without the effects of construction noise outside of the hours that construction would occur, i.e., during the late afternoon, night time, and on most weekends.

D. EFFECT OF NEW LIRR ELMONT STATION ON OTHER ANALYSIS AREAS

This section presents an assessment of the new LIRR Elmont Station's potential environmental effects on its surrounding neighborhood. The provision of the new train station would not affect the analysis of water resources and would not change the conclusions for irreversible and irretrievable resources or growth-inducing aspects of the Proposed Project. All other environmental issue areas are considered. The analyses assume full operation of the new LIRR Elmont Station (i.e., train service in both the eastbound and westbound directions).

LAND USE, ZONING, AND COMMUNITY CHARACTER

Because the new Elmont Station would be built mostly within the LIRR right-of-way (ROW), there would be no significant adverse impacts. Land use within the LIRR ROW would continue to consist of railroad transportation. Development outside of the ROW would be limited to a walkway extending from Superior Road to the station entrance and emergency egress paths from the north/westbound platform to Superior Road and to the foot of 238th Street and from the south/eastbound platform to the area west of the Cross Island Parkway. In addition, a sidewalk would provide access to the station platforms from the North Lot. Parking for the new Elmont Station would be located within the North Lot.

The area immediately surrounding the new station would continue to have a mix of uses that include residential homes, the North Lot, the Floral Park-Bellerose School, and transportation-related uses of the LIRR and Cross Island Parkway.

Based on the location of the new Elmont Station, no significant adverse impacts to community character are anticipated. There would be no new building—only stairs, platforms with canopies, seating, and a pedestrian overpass connecting the north and south platforms. Passengers from the Project Sites would access the train platform from the North Lot.

The LIRR anticipates that the new LIRR Elmont Station would not generate new commuter ridership but would instead result in a shift of existing riders living in Bellerose Terrace and Elmont who currently use other stations. Commuter parking for this station would be available in the North Lot, adjacent to the south platform. Since there would be no dedicated parking available on the north side of the tracks, passenger access from adjacent neighborhoods would be limited to pedestrians and vehicle drop-offs along Superior Road. NYAP would take a proactive approach to prevent off-site parking from occurring, including coordinating with the Town of Hempstead to implement or modify on-street parking regulations proximate to the station.

The addition of the new station is estimated to remove vehicle trips associated with the Proposed Project from the local roadway network. In addition, the analyses in this chapter indicate there would be no significant adverse visual, cultural, noise or socioeconomic impacts associated with the LIRR Elmont Station. Therefore, the LIRR Elmont Station would not have a significant adverse impact on community character.

COMMUNITY FACILITIES AND UTILITIES

The new LIRR Elmont Station would not place additional demands on community resources; it would not result in the displacement of any existing community facilities or utilities and would not generate additional employees or visitors such that emergency services or other community facilities would be adversely affected. As with other existing LIRR stations, security and policing would be provided by a combination of the MTA Police Department and the Nassau County Police Department. Track fires and/or fires at the platforms would be handled by the MTA/LIRR. There would be no new development that would create demand for water supply or sewage treatment, and any solid waste generated at the station would be disposed of by the MTA/LIRR. Any energy needs for the new station would be provided by LIRR and would not adversely affect the supply or distribution of power to the surrounding area.

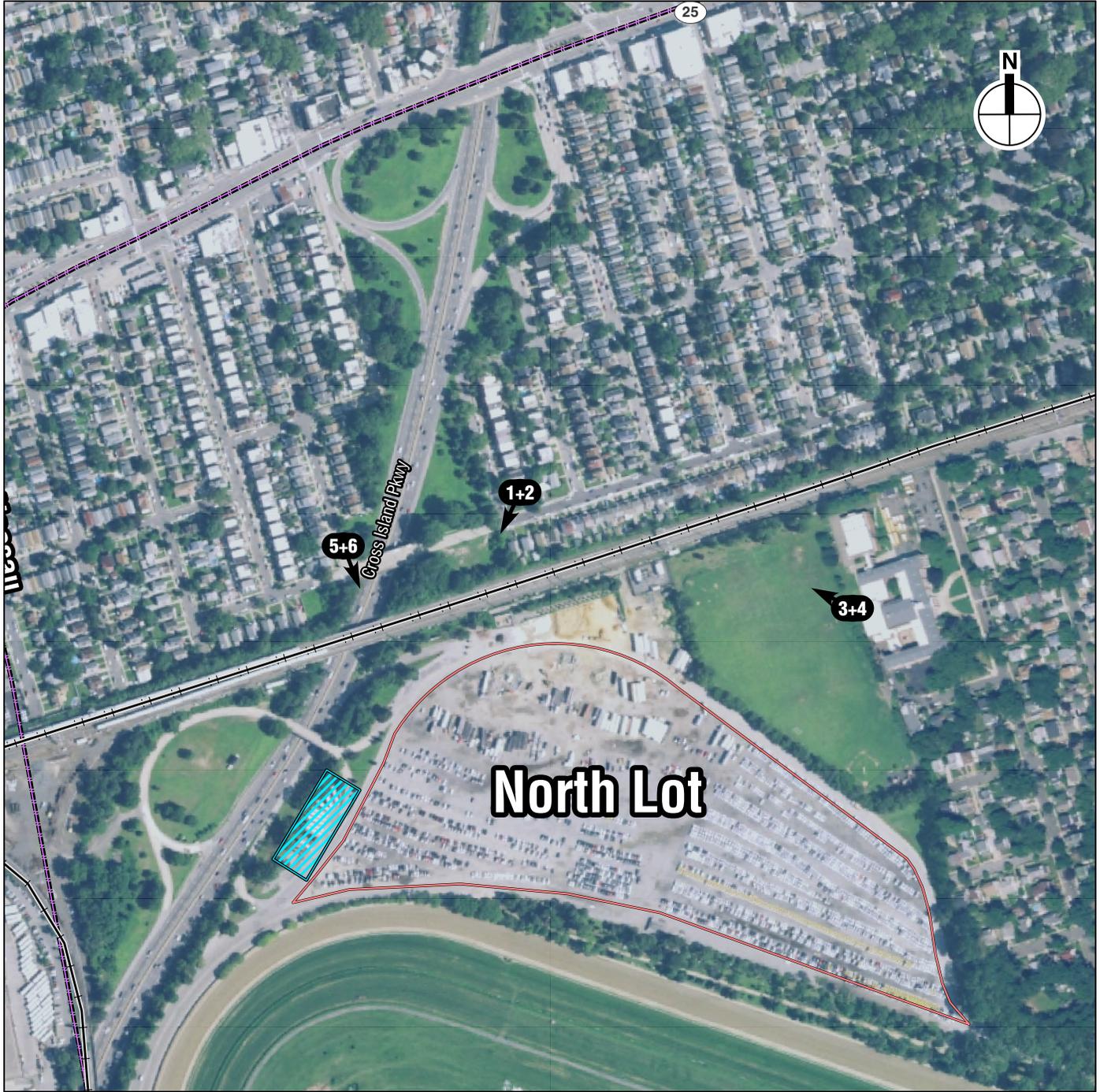
OPEN SPACE AND RECREATIONAL RESOURCES

The new Elmont Station would not directly affect any of the resources identified in Chapter 4, “Open Space and Recreational Resources.” In addition, there would be no new worker or visitor population (beyond those already identified as resulting from the Proposed Project) that would create additional demand for open space resources. The new Elmont Station would be built mostly within the LIRR ROW. However, planned pedestrian access/egress points would require sidewalks to be installed in portions of the Cross Island Parkway ROW and would require necessary approvals from the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP). Within these areas, improvements would be made including visual barriers, walkways and benches.

HISTORIC AND CULTURAL RESOURCES

As described in Chapter 5 “Historic and Cultural Resources,” the historic resources analysis considers the potential of the Proposed Project to affect historic and cultural resources, including architectural historic resources (“architectural resources”) and buried archaeological resources. The historic resources analysis also considers the potential of the Proposed Project to have direct (physical) or indirect (visual/contextual) impacts on architectural resources in the study area. There are no known or potential archaeological or architectural resources on the station site, and thus the new LIRR Elmont Station would not have any direct or indirect impacts to on-site archaeological or architectural resources.

On the north side of the LIRR tracks, an approximately 100-foot-long paved path would extend from Superior Road to the station entrance (see **Figure 17-3**). Another path would extend to the station entrance on the south side of the LIRR tracks from the North Lot. Visual screening barriers would be located along the north and south platforms. Visual barriers of solid material would also extend east of the station platform to the signal bridge. South of the station, the Proposed Project would include a shuttle bus stop adjacent to the station and a parking lot with approximately 150 parking spaces in the North Lot. A privacy screen and buffer composed of a hedge row with dense evergreen vegetation would be provided along the edge of the North Lot, following the western and southwestern boundary with the Floral Park-Bellerose School. The hedgerow would be located along the fence facing the North Lot.



-  North, South, and East Parking Lots
-  Proposed Belmont Electrical Substation
-  Long Island Rail Road (LIRR)
-  Photograph View Direction and Reference Number

0 1,000 FEET





Existing Conditions 1



Mitigated Conditions with New LIRR Elmont Station 2

Mitigation — View southwest from Superior Road and 242nd Street

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

The Floral Park-Bellerose School is an architectural resource located approximately 400 feet from the new LIRR Elmont Station, separated by a playing field and within view of the Proposed Project. Due to the distance of this historic resource from the new LIRR Elmont Station, it would not be adversely affected through project construction activities, including falling debris and ground-borne construction vibration.

The existing setting of the Floral Park-Bellerose School includes the LIRR right-of-way and tall infrastructure located along it including utility poles with overhead wires and a signal bridge that spans across the railroad tracks, as well as a substation surrounded by a tall chain-link fence at the northwest corner of the playing fields behind the school (see view of existing conditions in **Figure 17-4**). Looking northwest from the rear of the school, the view would be somewhat altered to include a portion of the pedestrian overpass, which would be visible in the distance and partially blocked by existing trees (see view in **Figure 17-4**). Views of the lower portions of the pedestrian overpass would also be blocked by the proposed fence with privacy screening that would be provided along the North Lot, following the western and southwestern boundary with the Floral Park-Bellerose School. As the Colonial Revival-style school building fronts onto Larch Avenue with its long façade with a central portico built in stone and projecting end bays, views towards the principal façade of the school building would not be altered.

The new LIRR Elmont Station would be located adjacent to the North Lot and substation, northwest of the recreation fields and the new LIRR Elmont Station would not adversely alter the setting of the Floral Park-Bellerose School. The new LIRR Elmont Station elements would be minimally visible and would not constitute features that are out of context with the existing setting, nor would the Project elements obstruct or impinge on views of the Floral Park-Bellerose School. Therefore, the new LIRR Elmont Station would not have any direct or indirect impacts to the Floral Park-Bellerose School.

VISUAL RESOURCES

The new LIRR Elmont Station would consist of a 12-car platform on the south side of the tracks and at least a 10-car platform on the north side of the tracks. An approximately 24-foot-tall pedestrian overpass would connect the two platforms over the LIRR tracks. A staircase and elevator would be located at both ends of the pedestrian overpass. On the north side of the LIRR tracks, an approximately 100-foot-long concrete path would extend from Superior Road to the station entrance (see **Figure 17-3**). Another path would extend to the station entrance on the south side of the LIRR tracks from the North Lot.

Visual screening barriers would be located along the north and south platforms of the new LIRR Elmont Station. On both platforms, an approximately 15-foot-wall and overhanging canopy of translucent material would extend the length of the platform. In addition, on the north side of the station a 14-foot-tall visual barrier of solid material would extend east of the station platform to the signal bridge, blocking views from the station of the backyards of the residences that line the south side of Superior Road. On the south side of the station, a visual barrier of solid material would extend east of the station platform to the signal bridge. The new LIRR Elmont Station would also include three emergency paths of egress west of the station entrance. These restricted-access entrances would have limited use. A shuttle bus stop and a parking lot would be located south of the LIRR station; during times of an arena event, shuttle bus service would be provided to transport arena patrons between the LIRR Elmont Station and Site A. A total of approximately 150 parking spaces in the North Lot would be used by commuters, which would be located closest to the Elmont Station. A privacy screen and buffer composed of a hedgerow with dense evergreen vegetation would be provided along the North Lot, following the western and southwestern



Existing Conditions **3**



Mitigated Conditions with New LIRR Elmont Station **4**

Mitigation — View west across the
Floral Park-Bellerose School
recreation grounds

boundary with the Floral Park-Bellerose School. The hedgerow would be located along the fence facing the North Lot.

As described in Chapter 6, “Visual Resources,” the visual resources analysis identifies sensitive aesthetic and visual resources in the study area and locations from which sensitive viewers may perceive changes in the visual environment. The Floral Park-Bellerose School at 2 Larch Avenue is a sensitive aesthetic and visual resource within view of the new LIRR Elmont Station. The school is a State/National Register eligible property and the school playground is a recreation space. As described in Chapter 6, “Visual Resources,” the two-story school building fronts onto Larch Avenue with a long façade with a central portico built in stone and projecting end bays. On Larch Avenue and Poppy Place, the building does not have views of the LIRR ROW. However, the playground and recreation space at the rear of the school have western views of the existing LIRR ROW and new LIRR Elmont Station area. Views from the school and playground currently include a substation surrounded by a tall chain-link fence at the northwest corner of the playing fields (see existing conditions view in **Figure 17-4**). Tall utility poles with overhead wires and a tall LIRR signal bridge that spans over the LIRR tracks are also visible above the chain-link fencing that lines the northern edge of playing fields. The new LIRR Elmont Station would be located adjacent to the North Lot and substation, northwest of the recreation fields. Views from the recreation fields would continue to include the substation and the LIRR ROW with tall utility poles and signal bridge, and part of the pedestrian overpass that would span over the tracks (see view 4 in **Figure 17-4**). The privacy screen along the North Lot would also be visible at the edge of the recreation fields. The new LIRR Elmont Station would not impact any views to visual or aesthetic resources or substantially alter the visual character of the view.

As also described in Chapter 6, “Visual Resources,” the visual resources analysis includes certain locations from which sensitive viewers may perceive changes in the visual environment, including on residential streets. Superior Road and adjoining streets near the new station site are developed with single-family houses. The segment of Superior Road adjacent to the proposed entry to the new LIRR Elmont Station and access to the pedestrian overpass is a two-way street with a sidewalk on the north side (see existing conditions view in **Figure 17-3**). Superior Road crosses the Cross Island Parkway, with guardrails on both sides and a chain-link barrier. The segment of Superior Road between 242nd and 240th Streets includes undeveloped parcels on either side of the Cross Island Parkway that include grassy areas and trees, including the area on the south side of Superior Road between the Cross Island Parkway and 242nd Street, where the proposed walkway to the station entrance and access to the overhead pedestrian overpass would be located. East and west of this area, Superior Road is characterized by detached single-family houses. Views from Superior Road between 242nd and 238th Streets currently consist of the LIRR tracks, tall utility poles with overhead wires, some trees, with trains visible as they pass through the area (see existing condition views in **Figures 17-3 and 17-5**). The station entrance, the screening barrier lining the north platform, and the pedestrian overpass would be visible from Superior Road, 240th Street, and 242nd Street (see views in **Figures 17-3 and 17-5**). Views from these locations include views of the LIRR tracks, tall utility poles with overhead wires, a portion of undeveloped land with grassy areas and trees, the bridge that carries Superior Road over the Cross Island Parkway, as well as views of Cross Island Parkway. The new LIRR Elmont Station would not affect views to any visual or aesthetic resources and would be consistent with the existing visual setting, which currently includes views of rail and highway infrastructure.

The walkway that would extend from Superior Road to the station entrance and the three emergency egress paths—one from the north platform to Superior Road west of the Cross Island Parkway, one from the north platform to the foot of 238th Street, and one from the south platform



Existing Conditions 5



Mitigated Conditions with New LIRR Elmont Station 6

Mitigation — View south from Superior Road and 240th Street

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

extending into the embankment west of the Cross Island Parkway—would consist of narrow concrete paths. The pedestrian connection from the north station entrance to Superior Road could require the removal of some vegetation, allowing for views of the screening barrier lining the north platform, but the larger trees and shrubs would be retained along the access path. The proposed main entry path and emergency paths would not alter the setting of Superior Road and 238th Street, which currently includes views of the LIRR ROW, including the LIRR tracks, trains visible as they pass through the area, and fencing barriers along the rail corridor. No views to aesthetic resources would be blocked or affected.

SOCIOECONOMIC CONDITIONS

The new station would not result in any significant adverse environmental impacts due to changes in socioeconomic conditions; it would not result in direct or indirect displacement of residences or businesses. The new station would provide improved transit access for residents, employees, and visitors to the area. In addition, as detailed in Appendix I of the FEIS, construction of the new LIRR Elmont Station would result in over 750 full-time equivalent temporary construction jobs.

HAZARDOUS MATERIALS

Although an American Society of Testing and Materials' (ASTM) International Standard Practice E1527-13 Report (Phase I Environmental Site Assessment Standard) was not performed due to site access constraints, a document review was performed in accordance with that standard practice in order to define the historical uses of the station site and identify any potential environmental concerns that could warrant further consideration. The document review, performed in June 2019 and found in this FEIS Appendix J, included: a review of environmental databases maintained by the USEPA, State, and local agencies within the approximate minimum search distances (the environmental database report was provided by Environmental Data Resources, Inc. [EDR]); a review of physical characteristics of the station site through a review of referenced sources for topographic, geologic, soils, and hydrologic data; and a review and interpretation of historical aerial photographs, Sanborn Fire Insurance Maps, and topographic maps to identify previous activities on and proximate to the station site.

Based on the information gathered as a result of the document review, the following historical uses of the site were identified as a potential environmental concern:

- A portion of the site has been developed with railroad tracks since at least 1897;
- A LIRR Substation facility has occupied the eastern portion of the site since at least 1976; and
- An electric utility easement with transformers appear to be present in the 2013 Aerial photograph on the eastern portion of the site.

In addition, although the listings identified in the databases for Belmont Park (2150 Hempstead Turnpike, Elmont) are likely south of the new LIRR station site, the actual locations cannot be confirmed. Therefore, the following environmental concerns with regard to the Belmont Park portion of the station site were identified:

- The EDR listed the site as a Resource Conservation and Recovery Act (RCRA) Non Generator; due to ignitable waste and waste containing PCBs being generated at the property.
- According to the EDR database, there were/are numerous petroleum containing tanks on the Belmont Park and several leaking tanks were reported from 1988 to 2014. In addition, one spill to a dry well was reported in 2007. All spills have been closed to the satisfaction of the NYSDEC.

- According to the EDR and the City Directory, Sure Shot Transmissions reportedly operated from 2005 to 2013 as an automotive transmission repair shop.

Due to historical usages identified in the document review, prior to any development of the new LIRR Elmont Station, NYAP, in coordination with LIRR, would undertake a Phase II Environmental Site Assessment in order to evaluate the need for specialized handling of soil and/or groundwater, if dewatering is required.

With the incorporation of the following measures, the potential for significant adverse effects related to hazardous materials would be avoided:

- Preparation of a subsurface investigation protocol for ESD and LIRR review. Upon approval of the protocol, the investigation (typically including laboratory analysis of soil, groundwater and soil vapor samples from the site) would be implemented and a report prepared for ESD and LIRR along with the proposed remediation plan (i.e., measures to be implemented prior to or as part of construction to avoid impacts to the health and safety of workers, the community, and future site occupants) which would include a construction health and safety plan.
- Soil to be disposed of off-site would be sampled prior to excavation at a frequency sufficient to meet disposal facility requirements. This would include the areas of excavation (trenching), which are yet to be finalized, at the parking areas and the area where the new substation is proposed.
- Excavated material would be handled and disposed of in accordance with applicable federal, state, and local regulatory requirements.

NATURAL RESOURCES

Most of the area that would be affected by construction of the new Elmont Station is within the LIRR ROW and does not contain any natural features. Some construction activities would take place on State-controlled land within the Cross Island Parkway right-of-way and may require limited removal of some trees. Planned work in these areas would be coordinated with OPRHP and tree surveys, replacement, or other design measures may be undertaken if warranted.

AIR QUALITY

The new LIRR Elmont Station would not result in any significant adverse air quality impacts. LIRR trains along the main line in this area operate on electric service. Therefore, any additional trains operating from the new Elmont Station to serve arena patrons would not result in any increase in locomotive emissions. The new LIRR Elmont Station is intended to shift project-generated auto trips to transit. Compared with the Proposed Project without this mitigation measure, the proposed LIRR Elmont Station would reduce vehicle travel and therefore would lower emissions on a regional scale. Furthermore, as discussed in the transportation section of this chapter, the proposed station would not be expected to increase overall LIRR commuter ridership. The addition of the Elmont Station and an associated 150-space parking area on the North Lot that would be used by local LIRR commuters would result in local shifts in commuting patterns. However, based on traffic projections for the new station, any increases in vehicles at local intersections would be very minor, and would not be expected to exceed any of the criteria used to determine if an air quality analysis of mobile sources of emissions may be warranted (see Chapter 12, "Air Quality," for a discussion of the criteria). Therefore, no analysis of mobile sources is warranted.

Belmont Park Redevelopment Civic and Land Use Improvement Project FEIS

NOISE

The addition of the proposed platforms would not result in an increase in rail traffic along the line adjacent to any residences or other receptors. At the residences nearest the platforms, the speed of train pass-by events would be reduced, which would tend to reduce railway noise emissions, and at other locations, the speed of train pass-by events would not be affected. In the absence of changes to rail traffic volumes or increases in train speed, the proposed platforms would not have the potential to result in noise level increases at any nearby receptors and would consequently not result in significant noise impacts.

CLIMATE CHANGE

As noted in Chapter 14, "Climate Change," the Proposed Project would be consistent with emissions reduction goals and would be located outside of potential future flood zones. Similarly, the new Elmont Station would be located well above future flood elevations and would be consistent with GHG reduction goals. Among the elements of the Proposed Project that would result in reduced GHG emissions is its development in an area served by public transit. The new Elmont Station would further increase access to transit to and from the site in support the goal of minimizing GHG emissions.

CONSTRUCTION

The new LIRR Elmont Station would be constructed in two phases. The first phase would involve construction of an eight-car-long south platform that would provide only eastbound service (i.e., Hempstead Branch trains originating from points west that are destined to Hempstead). This phase would take approximately 14 months, and would be completed in 2021, prior to opening of the arena. The second phase would involve construction of a north platform that would be at least ten cars long, the pedestrian overpass with elevators between the north and south platforms, and extension of the south platform to accommodate 12-car trains. This phase of construction is anticipated to take approximately 23 months to complete in 2022. Westbound train service at the north platform would be accommodated following the completion of the LIRR Third Track and East Side Access projects (expected in 2023).

TRANSPORTATION

Construction activities associated with the LIRR Elmont Station would generate construction worker and truck traffic. However, these activities are anticipated to generate only a relatively modest increase in construction-related vehicle trips. In addition, these construction vehicle trips would be temporary, as they would cease upon completion of construction. Work Zone Traffic Control (WZTC) plans would be developed and implemented as necessary to ensure minimum disruption of traffic or pedestrian flow. Accordingly, construction activities associated with the LIRR Elmont Station would not have the potential to result in significant adverse transportation impacts.

NOISE

The residences located on Superior Road represented by Receptor 1 (see Figure 13-1) would be located at least 50 feet from the north platform construction work area, at least 120 feet from the south platform work area, and at least 320 feet from the pedestrian bridge construction work area. Based on the construction noise emission levels of 66 to 75 dBA (L_{eq}) for platform and canopy construction and pedestrian bridge construction as described in the LIRR Expansion Project FEIS, construction noise at these receptors would be expected to reach 66 to 75 dBA during north

platform construction, 58 to 67 dBA during south platform construction, and 42 to 51 dBA during pedestrian bridge construction. This would result in noise level increases of 11 to 19 dBA during north platform construction, 3 to 11 dBA during south platform construction, and less than 3 dBA during pedestrian bridge construction.

The construction of each platform would have a duration of up to approximately 15 months, which includes three months of foundation construction followed by 12 months to install the platform and then fit it out with lighting, ramps, and access/egress paths. The construction of the pedestrian bridge would last approximately 5 months. While construction noise may be readily noticeable and intrusive at times, the duration of construction would be limited, and the range of predicted construction noise levels would result in exceedances of the 10 dBA threshold only for the most noise-intensive construction activities (i.e., the highest predicted noise emission levels) when they would occur nearest to receptors (i.e., work at the boundary of the construction area immediately adjacent to receptors). Construction of the proposed platforms and pedestrian bridge would consequently not result in any significant noise impacts at this receptor or the other residences that it represents. Since these are the receptors nearest the platform and pedestrian bridge construction work areas with the greatest potential to experience noise from construction of the proposed platforms and pedestrian bridge, other receptors would also not have the potential to experience significant noise impacts from construction of the platforms and pedestrian bridge. *