13 MITIGATION

13.1 Introduction

According to the *CEQR Technical Manual*, where significant adverse impacts are identified, mitigation to reduce or eliminate the impacts to the fullest extent practicable is developed and evaluated. In addition, in the absence of a commitment to mitigation or when no feasible mitigation measures can be identified, a reasoned elaboration as to why mitigation is not practicable should be put forth, and the potential for unmitigated or unmitigable significant adverse impacts must be disclosed.

As presented in the previous chapters of this Draft Environmental Impact Statement (DEIS), the Proposed Actions have the potential to result in significant adverse impacts to active open space and transportation. Potential mitigation measures for each of these technical areas are identified below. Measures to further mitigate adverse impacts will be evaluated between the DEIS and Final Environmental Impact Statement (FEIS). Therefore, the FEIS will include more complete information and commitments on all practicable mitigation measures to be implemented with the Proposed Actions.

13.2 Principal Conclusions

Open Space

In the With-Action Condition, the Study Area's active open space ratio (OSR) would decrease by 12.10 percent and result in a significant adverse open space impact to active open space. Between the No-Action and With-Action conditions, the active OSR would decrease from 0.37 to 0.33 acres per 1,000 residents. The With-Action OSR would be well below the City's planning goal of 2.00 acres of active open space per 1,000 residents.

Potential mitigation measures are currently being explored by the Applicant in consultation with the Department of City Planning (DCP) – the Lead Agency – and the New York City Department of Parks and Recreation (NYC Parks). The potential mitigation measures will be refined between DEIS and the FEIS. The mitigation measures will reflect the nature and scope

of the open space impacts, taking into account the quantitative and qualitative assessments in Chapter 3, "Open Space." The *CEQR Technical Manual* lists potential mitigation measures for open space impacts. These measures may include, but are not limited to: creating new open space within the study area; funding for improvements, renovation, or maintenance at existing local parks and/or playgrounds; or improving open spaces to increase their utility or capacity to meet identified open space needs in the area, such as through the provision of additional active open space facilities. Although the mitigation measures being considered would increase the acreage and usability of active recreation resources for the additional population introduced by the Proposed Actions, opportunities to fully mitigate the significant adverse open space impact within the Study Area are very limited. As a consequence, the Proposed Actions' significant adverse open space impact may not be completely eliminated and, as a result, an unavoidable significant adverse open space impact would occur.

Transportation

In the With-Action Condition, the Proposed Actions would result in potentially significant adverse traffic impacts as detailed below. No potentially significant adverse impacts were identified for pedestrians, transit, parking and vehicular and pedestrian safety.

Traffic

As discussed in Chapter 5, "Transportation," the Proposed Actions would result in potentially significant adverse traffic impacts during one or more peak hours at five study area intersections. Specifically, there would be the potential for significant adverse traffic impacts at four intersections during the weekday AM peak hour, four intersections during the weekday midday peak hour, three intersections during the weekday PM peak hour and four intersections during the Saturday midday peak hour (see Table 13-1).

Table 13-1: Summary of Potentially Significant Adverse Traffic Impacts due to the Proposed Actions

ID	Intersection Name (Street Direction)	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday Midday Peak Hour
1	Richmond Terrace (EB/WB) & Jersey Street (NB/SB)	(1) WB Left-Turn (2) WB Through/Right-Turn	(1) WB Through/Right-Turn	(1) WB Through/Right-Turn	(1) WB Through/Right-Turn
2	Richmond Terrace (EB/WB) & Westervelt Avenue (NB)	(1) EB Approach	-	-	(1) EB Approach
6	Richmond Terrace (NB/SB) & Wall Street/Empire Mall Driveway (EB/WB)	(1) WB Approach	(1) WB Approach (2) NB Right-Turn	(1) WB Approach (2) NB Right-Turn	(1) WB Approach (2) NB Right-Turn
7	Victory Boulevard (EB/WB) & Bay Street (NB/SB)	-	(1) NB Left-Turn (2) NB Through/Right-Turn (3) SB Left-Turn/Through	(1) NB Left-Turn	(1) NB Through/Right-Turn (2) SB Left-Turn/Through
11	Hamilton Avenue (EB/WB) & St. Marks Place (NB/SB)	(1) EB Approach (2) WB Approach	(1) EB Approach (2) WB Approach	-	-

Notes:
Abbreviations: EB: Eastbound; WB: Westbound; NB: Northbound; and SB: Southbound.

The potentially significant adverse traffic impacts at ten (10) out of the twenty-four (24) impacted intersection approaches/lane groups (combined for all peak hours) could be mitigated with readily implementable traffic engineering measures, including the modification of traffic signal timings and the installation of All-Way STOP-Control (AWSC). At the intersection approaches/lane groups where no readily available measures have been identified to mitigate the potentially significant adverse traffic impacts, such measures will be explored between the DEIS and FEIS. These additional mitigation measures would be subject to review and approval by the New York City Department of Transportation (NYCDOT). In the event NYCDOT determines such mitigation measures to be feasible, the FEIS will be updated to reflect that previously-identified unmitigated significant adverse impacts could be

mitigated. In the absence of such determination by NYCDOT, the impacts would remain unmitigated.

Furthermore, implementation of the recommended mitigation measures is subject to review and approval by NYCDOT, and these mitigation measures will be further evaluated between the DEIS and FEIS in consultation with the Lead Agency and NYCDOT.

Air Quality

The Proposed Actions would result in a significant adverse air quality impact from mobile sources (traffic) at the intersection of St. Marks Place and Hamilton Avenue. At this intersection, concentrations of $PM_{2.5}$ would have the potential to exceed National Ambient Air Quality Standards (NAAQS) and CEQR *de minimis* thresholds.

The intersection of St. Marks Place and Hamilton Avenue would experience a significant adverse traffic impact that would be fully mitigated with the installation of an all-way STOP-control. This transportation mitigation would significantly reduce the delay times and improve the level of service at this intersection. With implementation of this traffic mitigation, the maximum annual incremental concentration of $PM_{2.5}$ would be significantly lower than the With-Action condition, and would not exceed NAAQS or CEQR *de minimis* thresholds. Therefore, the implementation of the traffic mitigations measures would fully mitigate the significant adverse air quality impact.

Construction

Traffic

As discussed in Chapter 11, "Construction," construction of the Proposed Project could result in potentially significant adverse traffic impacts during at least one of the weekday AM (6:00 AM – 7:00 AM) or PM (3:00 PM – 4:00 PM) construction peak hours at five study area intersections. Specifically, there would be the potential for significant adverse traffic impacts at three intersections during the weekday AM construction peak hour and four intersections during the weekday PM construction peak hour (see Table 13-2).

Table 13-2: Summary of Potentially Significant Adverse Traffic Impacts due to Construction

ID	Intersection Name (Street Direction)	Weekday AM Construction Peak Hour	Weekday PM Construction Peak Hour
1	Richmond Terrace (EB/WB) & Jersey Street (NB/SB)	(1) EB Through/Right-Turn	(1) WB Through/Right-Turn
2	Richmond Terrace (EB/WB) & Westervelt Avenue (NB)	(1) EB Approach	-
3	Richmond Terrace (NB/SB) & Nicholas Street/Parking Garage Driveway (EB/WB)	-	(1) WB Approach
6	Richmond Terrace (NB/SB) & Wall Street/Empire Mall Driveway (EB/WB)	(1) WB Approach	(1) WB Approach (2) NB Right-Turn
7	Victory Boulevard (EB/WB) & Bay Street (NB/SB)	-	(1) SB Left-Turn/Through

Notes:
Abbreviations: EB: Eastbound; WB: Westbound; NB: Northbound; and SB: Southbound.

The potentially significant adverse traffic impacts at five (5) out of the eight (8) impacted intersection approaches/lane groups (combined for the weekday AM and PM construction peak hours) could be mitigated with readily implementable traffic signal timing modifications.

At the intersection approaches/lane groups where no readily available measures have been identified to mitigate the potentially significant adverse traffic impacts, such measures will be explored between the DEIS and FEIS. These additional mitigation measures would be subject to review and approval by NYCDOT. In the event NYCDOT determines such mitigation measures to be feasible, the FEIS will be updated to reflect that previously-identified unmitigated significant adverse impacts could be mitigated. In the absence of such determination by NYCDOT, the impacts would continue to remain unmitigated.

Furthermore, implementation of the recommended mitigation measures is subject to review and approval by NYCDOT, and these mitigation measures will be further evaluated between the DEIS and FEIS in consultation with the Lead Agency and NYCDOT.

Noise

As described in Chapter 11, "Construction," the Proposed Actions have the potential to result in a temporary significant adverse construction-period noise impact because of the duration and magnitude of the projected construction-period noise levels. Significant adverse construction noise impacts were identified where project-generated construction has the potential to exceed CEQR impact criteria at up to 20 properties.

The Applicant has committed to implementing certain controls that exceed the noise control measures required by the New York City Noise Control Code. These measures include using auger drills in lieu of impact pile drivers and ventilation fans that would not exceed a noise level of 91-dBA and constructing a 15-foot-tall construction barrier that would extend along the full perimeter of the site except along Projected Development Site 1's frontage to Richmond Terrace, where an 8-foot-tall construction barrier would be placed. However, even with these measures, elevated construction-period noise levels are predicted to occur at certain locations.

Additional measures, as feasible, to avoid potential significant adverse noise impacts will be explored between the draft and final EIS in consultation with DCP. If additional path control mitigation measures are not able to be implemented because they are not feasible and practicable mitigation, there would be significant adverse construction-period noise impacts that would remain unmitigated.

13.3 Open Space

As discussed in Chapter 3, "Open Space," in the With-Action Condition, the active open space ratio within the Study Area would decrease by 12.1 percent (0.04 points, from 0.37 to 0.33 acres per 1,000 residents), and would be below the *CEQR Technical Manual* open space ratio guideline of 2.00 acres of active open space per 1,000 residents. Accordingly, the Proposed Actions would result in a significant adverse indirect open space impact to the Study Area's active open space.

To avoid the significant adverse open space impact, the acreage of active open space created in the With-Action Condition would need to increase by approximately 0.40 acres (8 percent of the Study Area's No-Action active open space acreage). Alternatively, the number of dwelling units that could be developed on the projected development sites would have to be reduced to 444 dwelling units, which would represent an approximately 50 percent decrease (453 fewer dwelling units) from the With-Action Condition of 897 dwelling units.

Just beyond the Study Area are two significant active open space resources: Lyons Pool and Stapleton Waterfront Esplanade. Further, the Tompkinsville Esplanade is a planned waterfront open space that is being led by the New York City Economic Development Corporation. The

Tompkinsville Esplanade would consist of a new quarter-mile long public waterfront open space between Lighthouse Plaza and the Stapleton Waterfront Esplanade, allowing for a continuous greenway between the Staten Island Ferry Terminal and the Clifton neighborhood. Independent of the Proposed Actions, the Tompkinsville Esplanade would provide additional passive and active open space in the Study Area, and is being designed with input from NYC Parks.

Across the borough, Staten Island is home to more than 170 parks totaling approximately 12,300 acres—more than one-third of the borough's total land area. These open space resources include both passive and active resources. Just beyond the Study Area, there are publicly accessible open spaces with active recreational uses such as Stapleton Waterfront Esplanade and Lyons Pool. Other regional open spaces beyond the Study Area that project-generated users would be expected to use include: Snug Harbor Cultural Center, an approximately 83-acre cultural center; Goodhue Park, an approximately 38-acre park; and Clove Lake Park, an approximately 193-acre park.

Potential mitigation measures for the identified significant adverse open space impact are currently being explored by the Applicant in consultation with DCP – the Lead Agency – and NYC Parks. The potential mitigation measures will be refined between the DEIS and the FEIS, and will reflect the nature and scope of the open space impacts, taking into account the quantitative and qualitative assessments in Chapter 3, "Open Space." The *CEQR Technical Manual* lists potential mitigation measures for open space impacts. These measures may include, but are not limited to, creating new open space within the Study Area; funding for improvements, renovation, or maintenance at existing local parks and/or playgrounds; or improving open spaces to increase their utility or capacity to meet identified open space needs in the area, such as through the provision of additional active open space facilities. Although the mitigation measures being considered would increase the amount and usability of passive and active recreation resources for the additional population introduced by the Proposed Actions, opportunities to create new publicly-accessible open space resources in the Study Area to fully mitigate the identified significant adverse open space impact are very limited. As a consequence, the Proposed Actions' significant adverse open space impact may not be completely eliminated and, as a result, the significant adverse impact may not be fully mitigated.

13.4 Transportation

Traffic

As discussed in Chapter 5, "Transportation," the Proposed Actions would result in potentially significant adverse traffic impacts during one or more peak hours at five study area intersections. Specifically, there would be the potential for significant adverse traffic impacts at four intersections during the weekday AM peak hour, four intersections during the weekday midday peak hour, three intersections during the weekday PM peak hour and four intersections during the Saturday midday peak hour (see Table 13-1). In total, the Proposed Actions would result in potentially significant adverse traffic impacts during one or more peak hours at ten (10) intersection approaches/lane groups in the study area, summarized as follows:

- The westbound left-turn of Richmond Terrace at Jersey Street during the weekday AM peak hour.
- The westbound through-right movement of Richmond Terrace at Jersey Street during the weekday AM, midday, PM and Saturday midday peak hours.

- The eastbound approach of Richmond Terrace at Westervelt Avenue during the weekday AM and Saturday midday peak hours.
- The westbound approach of the Empire Mall Driveway at Richmond Terrace during the weekday AM, midday, PM and Saturday midday peak hours.
- The northbound right-turn of Richmond Terrace at Wall Street/Empire Mall Driveway during the weekday midday, PM and Saturday midday peak hours.
- The northbound left-turn of Bay Street at Victory Boulevard during the weekday midday and PM peak hours.
- The northbound through-right movement of Bay Street at Victory Boulevard during the weekday midday and Saturday midday peak hours.
- The southbound left-through movement of Bay Street at Victory Boulevard during the weekday midday and Saturday midday peak hours.
- The eastbound approach of Hamilton Avenue at St. Marks Place during the weekday AM and midday peak hours.
- The westbound approach of Hamilton Avenue at St. Marks Place during the weekday AM and midday peak hours.

As discussed below and summarized in Table 13-3 to Table 13-6, the potentially significant adverse traffic impacts at ten (10) out of the twenty-four (24) impacted intersection approaches/lane groups (combined for all peak hours) could be mitigated with readily implementable traffic engineering measures, including the modification of traffic signal timings and the installation of AWSC. At the intersection approaches/lane groups where no readily available measures have been identified to mitigate the potentially significant adverse traffic impacts, such measures will be explored between the DEIS and FEIS. These additional mitigation measures would be subject to review and approval by NYCDOT. In the event NYCDOT determines such mitigation measures to be feasible, the FEIS will be updated to reflect that previously-identified unmitigated significant adverse impacts could be mitigated. In the absence of such determination by NYCDOT, the impacts would remain unmitigated.

Table 13-7 to Table 13-10 summarize the volume-to-capacity (v/c) ratios, delays and Levels of Service (LOS) for the impacted intersections in the With-Action with Mitigation Condition and compares them to the No-Action and With-Action conditions for the weekday AM, midday, PM and Saturday midday peak hours, respectively. Per *CEQR Technical Manual* guidelines, a potentially significant adverse traffic impact is considered to be mitigated when the LOS in the With-Action with Mitigation Condition, as compared to the No-Action Condition, does not exceed the significant impact criteria discussed in Chapter 5, "Transportation."

Implementation of the recommended mitigation measures is subject to review and approval by NYCDOT, and these measures will be further evaluated between the DEIS and FEIS in consultation with the Lead Agency and NYCDOT.

Richmond Terrace and Jersey Street

In the weekday midday, PM and Saturday midday peak hours, the potentially significant adverse traffic impact to the westbound through-right movement could be mitigated as follows:

- Shift one (1) second from the northbound/southbound phase to the eastbound/ westbound phase.

In the weekday AM peak hour, the potentially significant adverse traffic impacts would remain unmitigated in the future with the Proposed Project. Measures to mitigate these potentially significant adverse impacts will be explored between the DEIS and FEIS, and would be subject to review and approval by NYCDOT. In the event NYCDOT determines such mitigation measures to be feasible, the FEIS will be updated to reflect that previously-identified unmitigated significant adverse impacts could be mitigated. In the absence of feasible mitigation measures, the impacts would continue to remain unmitigated in the weekday AM peak hour.

Richmond Terrace and Westervelt Avenue

In the weekday AM and Saturday midday peak hours, the potentially significant adverse traffic impact to the eastbound approach could be mitigated as follows:

- Shift one (1) second from the northbound phase to the eastbound/westbound phase.

Richmond Terrace and Wall Street/Empire Mall Driveway

In the weekday AM peak hour, the potentially significant adverse traffic impact to the westbound approach could be mitigated as follows:

- Shift one (1) second from the northbound/southbound phase to the westbound phase.

In the weekday midday, PM and Saturday midday peak hours, the potentially significant adverse traffic impacts would remain unmitigated in the future with the Proposed Project. Measures to mitigate these potentially significant adverse impacts will be explored between the DEIS and FEIS, and would be subject to review and approval by NYCDOT. In the event NYCDOT determines such mitigation measures to be feasible, the FEIS will be updated to reflect that previously-identified unmitigated significant adverse impacts could be mitigated. In the absence of feasible mitigation measures, the impacts would continue to remain unmitigated in the weekday midday, PM and Saturday midday peak hours.

Victory Boulevard and Bay Street

In the weekday midday, PM and Saturday midday peak hours, the potentially significant adverse traffic impacts would remain unmitigated in the future with the Proposed Project. Measures to mitigate these potentially significant adverse impacts will be explored between the DEIS and FEIS, and would be subject to review and approval by NYCDOT. In the event NYCDOT determines such mitigation measures to be feasible, the FEIS will be updated to reflect that previously-identified unmitigated significant adverse impacts could be mitigated. In the absence of feasible mitigation measures, the impacts would continue to remain unmitigated in the weekday midday, PM and Saturday midday peak hours.

Hamilton Avenue and St. Marks Place

In the weekday AM and midday peak hours, the potentially significant adverse traffic impacts to the eastbound and westbound approaches could be mitigated by installing All-Way STOP-Control (AWSC) at this location.

Table 13-3: Summary of Recommended Traffic Mitigation Measures – Weekday AM Peak Hour

ID	Intersection Name	No-Action Signal Timing	Recommended Mitigation Measures	Recommended Signal Timing
1	Richmond Terrace & Jersey Street	EB/WB: Green = 51 s NB/SB Left-Turns: Green = 10 s NB/SB: Green = 29 s EB: Green = 10 s	Unmitigable.	-
2	Richmond Terrace & Westervelt Avenue	EB/WB: Green = 73 s NB: Green = 37 s	(1) Shift 1 second from the NB phase to the EB/WB phase.	EB/WB: Green = 74 s NB: Green = 36 s
6	Richmond Terrace & Wall Street/Empire Mall Driveway	NB/SB: Green = 68 s WB: Green = 8 s EB/WB: Green = 29 s	(1) Shift 1 second from the NB/SB phase to the WB phase.	NB/SB: Green = 67 s WB: Green = 9 s EB/WB: Green = 29 s
11	Hamilton Avenue & St. Marks Place	-	(1) Install All-Way Stop Control (AWSC) at this location.	-

Notes:
Abbreviations: EB: Eastbound; WB: Westbound; NB: Northbound; SB Southbound.

Table 13-4: Summary of Recommended Traffic Mitigation Measures – Weekday Midday Peak Hour

ID	Intersection Name	No-Action Signal Timing	Recommended Mitigation Measures	Recommended Signal Timing
1	Richmond Terrace & Jersey Street	EB/WB: Green = 58 s NB/SB Left-Turns: Green = 6 s NB/SB: Green = 30 s EB: Green = 6 s	(1) Shift 1 second from the NB/SB phase to the EB/WB phase.	EB/WB: Green = 59 s NB/SB Left-Turns: Green = 6 s NB/SB: Green = 29 s EB: Green = 6 s
6	Richmond Terrace & Wall Street/Empire Mall Driveway	NB/SB: Green = 63 s WB: Green = 13 s EB/WB: Green = 29 s	Unmitigable.	-
7	Victory Boulevard & Bay Street	NB/SB: Green = 26 s EB/SB Right-Turn: Green = 20 s WB: Green = 22 s East/West Crosswalk LPI: Walk = 7 s	Unmitigable.	-
11	Hamilton Avenue & St. Marks Place	-	(1) Install All-Way Stop Control (AWSC) at this location.	-

Notes:
Abbreviations: EB: Eastbound; WB: Westbound; NB: Northbound; SB Southbound; LPI: Lead Pedestrian Interval

Table 13-5: Summary of Recommended Traffic Mitigation Measures – Weekday PM Peak Hour

ID	Intersection Name	No-Action Signal Timing	Recommended Mitigation Measures	Recommended Signal Timing
1	Richmond Terrace & Jersey Street	EB/WB: Green = 58 s NB/SB Left-Turns: Green = 6 s NB/SB: Green = 30 s EB: Green = 6 s	(1) Shift 1 second from the NB/SB phase to the EB/WB phase.	EB/WB: Green = 59 s NB/SB Left-Turns: Green = 6 s NB/SB: Green = 29 s EB: Green = 6 s
6	Richmond Terrace & Wall Street/Empire Mall Driveway	NB/SB: Green = 63 s WB: Green = 13 s EB/WB: Green = 29 s	Unmitigable.	-
7	Victory Boulevard & Bay Street	NB/SB: Green = 56 s EB/SB Right-Turn: Green = 20 s WB: Green = 22 s East/West Crosswalk LPI: Walk = 7 s	Unmitigable.	-
11	Hamilton Avenue & St. Marks Place	-	(1) Install All-Way Stop Control (AWSC) at this location.	-

Notes:
Abbreviations: EB: Eastbound; WB: Westbound; NB: Northbound; SB Southbound; LPI: Lead Pedestrian Interval

Table 13-6: Summary of Recommended Traffic Mitigation Measures – Saturday Midday Peak Hour

ID	Intersection Name	No-Action Signal Timing	Recommended Mitigation Measures	Recommended Signal Timing
1	Richmond Terrace & Jersey Street	EB/WB: Green = 35 s NB/SB Left-Turns: Green = 6 s NB/SB: Green = 23 s EB: Green = 6 s	(1) Shift 1 second from the NB/SB phase to the EB/WB phase.	EB/WB: Green = 36 s NB/SB Left-Turns: Green = 6 s NB/SB: Green = 22 s EB: Green = 6 s
2	Richmond Terrace & Westervelt Avenue	EB/WB: Green = 48 s NB: Green = 32 s	(1) Shift 1 second from the NB phase to the EB/WB phase.	EB/WB: Green = 49 s NB: Green = 31 s
6	Richmond Terrace & Wall Street/Empire Mall Driveway	NB/SB: Green = 40 s WB: Green = 6 s EB/WB: Green = 29 s	Unmitigable.	-
7	Victory Boulevard & Bay Street	NB/SB: Green = 26 s EB/SB Right-Turn: Green = 20 s WB: Green = 22 s East/West Crosswalk LPI: Walk = 7 s	Unmitigable.	-
11	Hamilton Avenue & St. Marks Place	-	(1) Install All-Way Stop Control (AWSC) at this location.	-

Notes:
Abbreviations: EB: Eastbound; WB: Westbound; NB: Northbound; SB Southbound; LPI: Lead Pedestrian Interval

Table 13-7: LOS Comparison Summary – Weekday AM Peak Hour

						No-Action			With-Action			With-Action with Mitigation		
ID	Intersection Name	Control	Street Name	Direction	Lane Group	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS
1	Richmond Terrace & Jersey Street	Signal	Richmond Terrace	EB	L	0.00	18.5	B	0.00	19.3	B	0.00	19.3	B
					TR	1.06	74.6	E	1.07	77.5	E	1.07	77.5	E
				WB	L	0.62	61.2	E	0.82	94.5	F	0.82	94.5	F
					TR	0.97	60.1	E	1.01	69.3	E	1.01	69.3	E
			Jersey Street	NB	L	0.09	25.1	C	0.10	25.2	C	0.10	25.2	C
					TR	0.24	38.4	D	0.27	39.0	D	0.27	39.0	D
				SB	L	0.00	24.2	C	0.00	24.2	C	0.00	24.2	C
					TR	0.00	34.5	C	0.00	34.5	C	0.00	34.5	C
				Overall Intersection		-	*66.1*	*E*	-	*71.7*	*E*	-	*71.7*	*E*
2	Richmond Terrace & Westervelt Avenue	Signal	Richmond Terrace	EB	TR	1.14	91.7	F	1.16	100.3	F	1.15	93.4	F
				WB	LT	0.56	16.2	B	0.58	16.7	B	0.57	16.0	B
			Westervelt Avenue	NB	LR	0.34	34.1	C	0.37	34.7	C	0.38	35.7	D
				Overall Intersection		-	*62.1*	*E*	-	*66.7*	*E*	-	*62.6*	*E*
6	Wall Street & Richmond Terrace	Signal	Wall Street	EB	LTR	0.57	46.8	D	0.60	48.3	D	0.60	48.3	D
			Empire Mall Driveway	WB	LR	0.97	77.7	E	1.00	85.8	F	0.96	75.8	E
			Richmond Terrace	NB	T	0.27	13.7	B	0.28	13.8	B	0.29	14.4	B
					R	0.39	16.1	B	0.42	16.8	B	0.43	17.5	B
				SB	LT	0.59	13.0	B	0.64	13.9	B	0.65	14.8	B
				Overall Intersection		-	*28.7*	*C*	-	*30.2*	*C*	-	*29.0*	*C*
11	Hamilton Avenue & St. Marks Place	TWSC[1]/ AWSC[2]	Hamilton Avenue	EB	LR	1.44	252.5	F	3.05	993.7	F	0.51	12.3	B
				WB	LR	0.61	32.7	D	1.16	145.9	F	0.42	11.2	B
			St. Marks Place	NB	T	-	0.0	A	-	0.0	A	0.27	10.7	B
				Overall Intersection		-	*Note 3*	*Note 3*	-	*Note 3*	*Note 3*	-	*11.6*	*B*

Notes:
1. Two-Way STOP-Control
2. All-Way STOP-Control
3. Intersection delay and LOS information are not provided by HCS.
4. Shading denotes an unmitigable potentially significant adverse traffic impact.

Table 13-8: LOS Comparison Summary – Weekday Midday Peak Hour

						No-Action			With-Action			With-Action with Mitigation		
ID	Intersection Name	Control	Street Name	Direction	Lane Group	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS
1	Richmond Terrace & Jersey Street	Signal	Richmond Terrace	EB	L	0.01	25.2	C	0.01	25.3	C	0.01	25.5	C
					TR	0.73	23.9	C	0.75	24.8	C	0.74	23.7	C
				WB	L	0.25	20.3	C	0.29	21.5	C	0.27	20.6	C
					TR	1.11	95.8	F	1.13	104.6	F	1.12	96.2	F
			Jersey Street	NB	L	0.18	28.4	C	0.18	28.4	C	0.19	29.1	C
					TR	0.32	39.6	D	0.39	41.1	D	0.40	42.3	D
				SB	L	0.00	26.1	C	0.00	26.2	C	0.00	26.9	C
					TR	0.00	33.8	C	0.00	33.8	C	0.00	34.5	C
				Overall Intersection		-	*59.9*	*E*	-	*64.4*	*E*	-	*60.0*	*E*
6	Wall Street & Richmond Terrace	Signal	Wall Street	EB	LTR	0.40	41.6	D	0.41	42.2	D	0.41	42.2	D
			Empire Mall Driveway	WB	LR	1.26	170.7	F	1.28	178.9	F	1.28	178.9	F
			Richmond Terrace	NB	T	0.38	17.5	B	0.42	18.1	B	0.42	18.1	B
					R	1.04	85.8	F	1.06	92.0	F	1.06	92.0	F
				SB	LT	0.65	24.0	C	0.70	25.6	C	0.70	25.6	C
				Overall Intersection		-	*70.9*	*E*	-	*72.5*	*E*	-	*72.5*	*E*
7	Victory Boulevard & Bay Street	Signal	Victory Boulevard	EB	L	0.60	39.5	D	0.60	39.5	D	0.60	39.5	D
					LT	0.62	40.0	D	0.62	40.0	D	0.62	40.0	D
				WB	LTR	0.18	27.9	C	0.18	27.9	C	0.18	27.9	C
			Bay Street	NB	L	1.89	474.6	F	1.90	479.9	F	1.90	479.9	F
					TR	1.13	107.1	F	1.21	136.4	F	1.21	136.4	F
				SB	LT	1.27	161.1	F	1.38	209.4	F	1.38	209.4	F
					R	0.68	19.7	B	0.69	19.7	B	0.69	19.7	B
				Overall Intersection		-	*122.5*	*F*	-	*149.6*	*F*	-	*149.6*	*F*
11	Hamilton Avenue & St. Marks Place	TWSC[1]/ AWSC[2]	Hamilton Avenue	EB	LR	1.14	139.7	F	5.21	2,042.0	F	0.38	10.5	B
				WB	LR	0.80	83.6	F	9.28	4030.0	F	0.30	9.5	A
			St. Marks Place	NB	T	-	0.0	A	-	0.0	A	0.31	10.6	B
				Overall Intersection		-	*Note 3*	*Note 3*	-	*Note 3*	*Note 3*	-	*10.2*	*B*

Notes:
1. Two-Way STOP-Control
2. All-Way STOP-Control

3. Intersection delay and LOS information are not provided by HCS.
4. Shading denotes an unmitigable potentially significant adverse traffic impact.

Table 13-9: LOS Comparison Summary – Weekday PM Peak Hour

						No-Action			With-Action			With-Action with Mitigation		
ID	Intersection Name	Control	Street Name	Direction	Lane Group	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS
1	Richmond Terrace & Jersey Street	Signal	Richmond Terrace	EB	L	0.01	25.4	C	0.01	25.4	C	0.01	25.5	C
					TR	0.84	30.0	C	0.86	32.0	C	0.85	30.3	C
				WB	L	0.37	24.0	C	0.44	26.7	C	0.41	25.1	C
					TR	1.14	103.7	F	1.15	109.6	F	1.13	101.1	F
			Jersey Street	NB	L	0.18	28.3	C	0.18	28.3	C	0.18	29.0	C
					TR	0.26	37.9	D	0.31	39.1	D	0.33	40.1	D
				SB	L	0.00	26.1	C	0.00	26.2	C	0.00	26.8	C
					TR	0.00	33.8	C	0.00	33.8	C	0.00	34.5	C
				Overall Intersection		-	*65.6*	*E*	-	*68.8*	*E*	-	*64.1*	*E*
6	Wall Street & Richmond Terrace	Signal	Wall Street	EB	LTR	0.40	41.5	D	0.42	42.1	D	0.42	42.1	D
			Empire Mall Driveway	WB	LR	1.21	149.9	F	1.23	158.5	F	1.23	158.5	F
			Richmond Terrace	NB	T	0.34	17.1	B	0.38	17.6	B	0.38	17.6	B
					R	1.00	71.9	E	1.09	101.7	F	1.09	101.7	F
				SB	LT	0.76	27.9	C	0.72	29.0	C	0.72	29.0	C
				Overall Intersection		-	*63.3*	*E*	-	*69.4*	*E*	-	*69.4*	*E*
7	Victory Boulevard & Bay Street	Signal	Victory Boulevard	EB	L	0.88	80.5	F	0.88	80.5	F	0.88	80.5	F
					LT	0.94	92.5	F	0.94	92.5	F	0.94	92.5	F
				WB	LTR	0.16	42.5	D	0.16	42.5	D	0.16	42.5	D
			Bay Street	NB	L	1.94	496.3	F	2.14	587.8	F	2.14	587.8	F
					TR	0.73	29.2	C	0.77	31.0	C	0.77	31.0	C
				SB	LT	0.87	36.4	D	0.90	38.4	D	0.90	38.4	D
					R	0.65	15.3	B	0.65	15.3	B	0.65	15.3	B
				Overall Intersection		-	*58.2*	*E*	-	*62.9*	*E*	-	*62.9*	*E*
11	Hamilton Avenue & St. Marks Place	TWSC[1]/ AWSC[2]	Hamilton Avenue	EB	LR	0.21	12.1	B	0.29	15.3	C	0.28	9.7	A
				WB	LR	0.23	13.1	B	0.49	19.6	C	0.29	9.5	A
			St. Marks Place	NB	T	-	0.0	A	-	0.0	A	0.38	11.1	B
				Overall Intersection		-	*Note 3*	*Note 3*	-	*Note 3*	*Note 3*	-	*10.2*	*B*

Notes:
1. Two-Way STOP-Control
2. All-Way STOP-Control
3. Intersection delay and LOS information are not provided by HCS.
4. Shading denotes an unmitigable potentially significant adverse traffic impact.

Table 13-10: LOS Comparison Summary – Saturday Midday Peak Hour

						No-Action			With-Action			With-Action with Mitigation		
ID	Intersection Name	Control	Street Name	Direction	Lane Group	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS
1	Richmond Terrace & Jersey Street	Signal	Richmond Terrace	EB	L	0.01	18.2	B	0.01	18.0	B	0.01	18.1	B
					TR	0.81	26.7	C	0.83	28.2	C	0.82	26.2	C
				WB	L	0.46	27.7	C	0.56	32.7	C	0.52	29.7	C
					TR	1.11	94.2	F	1.14	104.0	F	1.11	91.1	F
			Jersey Street	NB	L	0.08	18.2	B	0.08	18.2	B	0.09	18.9	B
					TR	0.25	28.4	C	0.31	29.4	C	0.32	30.5	C
				SB	L	0.00	17.5	B	0.00	17.5	B	0.00	18.2	B
					TR	0.00	25.0	C	0.00	25.0	C	0.00	25.7	C
				Overall Intersection		-	*57.1*	*E*	-	*61.9*	*E*	-	*55.3*	*E*
2	Richmond Terrace & Westervelt Avenue	Signal	Richmond Terrace	EB	TR	0.94	36.5	D	0.99	46.2	D	0.97	41.0	D
				WB	LT	0.71	20.3	C	0.73	21.0	C	0.72	19.8	B
			Westervelt Avenue	NB	LR	0.25	21.6	C	0.26	21.9	C	0.27	22.7	C
				Overall Intersection		-	*28.1*	*C*	-	*33.1*	*C*	-	*30.1*	*C*
6	Wall Street & Richmond Terrace	Signal	Wall Street	EB	LTR	0.23	23.5	C	0.24	23.7	C	0.24	23.7	C
			Empire Mall Driveway	WB	LR	1.71	351.7	F	1.74	367.5	F	1.74	367.5	F
			Richmond Terrace	NB	T	0.30	16.5	B	0.34	17.0	B	0.34	17.0	B
					R	1.54	283.0	F	1.59	306.5	F	1.59	306.5	F
				SB	LT	0.81	29.0	C	0.86	33.1	C	0.86	33.1	C
				Overall Intersection		-	*188.3*	*F*	-	*193.3*	*F*	-	*193.3*	*F*
7	Victory Boulevard & Bay Street	Signal	Victory Boulevard	EB	L	0.68	41.9	D	0.68	41.9	D	0.68	41.9	D
					LT	0.73	44.4	D	0.73	44.4	D	0.73	44.4	D
				WB	LTR	0.11	27.0	C	0.11	27.0	C	0.11	27.0	C
			Bay Street	NB	L	1.98	512.4	F	1.98	512.4	F	1.98	512.4	F
					TR	0.97	55.7	E	1.04	74.0	E	1.04	74.0	E
				SB	LT	1.14	110.2	F	1.25	152.5	F	1.25	152.5	F
					R	0.62	16.9	B	0.62	16.9	B	0.62	16.9	B
				Overall Intersection		-	*90.6*	*F*	-	*110.3*	*F*	-	*110.3*	*F*
11	Hamilton Avenue & St. Marks Place	TWSC[1]/ AWSC[2]	Hamilton Avenue	EB	LR	0.14	10.1	B	0.18	12.0	B	0.25	8.7	A
				WB	LR	0.17	11.2	B	0.42	16.0	C	0.28	8.9	A
			St. Marks Place	NB	T	-	0.0	A	-	0.0	A	0.21	9.3	A
				Overall Intersection		-	*Note 3*	*Note 3*	-	*Note 3*	*Note 3*	-	*8.9*	*A*

Notes:
1. Two-Way STOP-Control
2. All-Way STOP-Control
3. Intersection delay and LOS information are not provided by HCS.
4. Shading denotes an unmitigable potentially significant adverse traffic impact.

13.5 Air Quality

As discussed in Chapter 6, "Air Quality," the Proposed Actions could not rule out significant adverse impacts and therefore would result in a significant adverse air quality impact from mobile sources (traffic) at the intersection of St. Marks Place and Hamilton Avenue. At this intersection, concentrations of $PM_{2.5}$ would have the potential to exceed CEQR *de minimis* thresholds.

The intersection of St. Marks Place and Hamilton Avenue would experience a significant adverse traffic impact that would be fully mitigated with the installation of an all-way STOP-control. This transportation mitigation would significantly reduce the delay times and increase traffic flows through this intersection. Table 13-11 shows that with this transportation mitigation in place, the air quality conditions would also be fully mitigated as concentrations of $PM_{2.5}$ would be below both NAAQS and *de minimis* thresholds.

Table 13-11: Mobile Source Air Quality Concentrations – St. Marks Pl and Hamilton Ave

Pollutant of	Without Mitigation		With Mitigation		CEQR Thresholds	
Concern (µg/m³)	Increment	With-Action	Increment	With-Action	De Minimis	NAAQS
$PM_{2.5}$ – 24hr	22.96	59.94	-7.68	29.30	10.25	35.00
$PM_{2.5}$ – Annual	3.52	12.51	-1.53	7.46	0.1	12.00

13.6 Construction

Traffic

As discussed in Chapter 11, "Construction," the peak number of trips generated by construction of the Proposed Project is expected to occur in the second quarter of 2023 (seventh quarter of construction [Q7]). During this quarter, construction of the Proposed Project could result in potentially significant adverse traffic impacts during at least one of the weekday AM (6:00 AM – 7:00 AM) or PM (3:00 PM – 4:00 PM) construction peak hours at five study area intersections. Specifically, there would be the potential for significant adverse traffic impacts at three intersections during the weekday AM construction peak hour and four intersections during the weekday PM construction peak hour (see Table 13-2). In total, construction of the Proposed Project could result in eight potentially significant adverse traffic impacts during either construction peak hour at the following seven intersection approaches/lane groups in the study area:

- The eastbound through-right movement of Richmond Terrace at Jersey Street during the weekday AM construction peak hour.
- The westbound through-right movement of Richmond Terrace at Jersey Street during the weekday PM construction peak hour.
- The eastbound approach of Richmond Terrace at Westervelt Avenue during the weekday AM construction peak hour.
- The westbound approach of the Parking Garage Driveway/Nicholas Street at Richmond Terrace during the weekday PM construction peak hour.
- The westbound approach of the Empire Mall Driveway at Richmond Terrace during the weekday AM and PM construction peak hours.
- The northbound right-turn of Richmond Terrace at Wall Street during the weekday PM construction peak hour.
- The southbound left-through movement of Bay Street at Victory Boulevard during the weekday PM construction peak hour.

As discussed below and summarized in Table 13-12 and Table 13-13, the potentially significant adverse traffic impacts at five (5) out of the eight (8) total impacted intersection approaches/lane groups (spanning the weekday AM and PM construction peak hours) could be mitigated with readily implementable traffic signal timing modifications. At the intersection approaches/lane groups where no readily available measures have been identified to mitigate the potentially significant adverse traffic impacts, such measures will be explored between the DEIS and FEIS. These additional mitigation measures would be subject to review and approval by NYCDOT. In the event NYCDOT determines such mitigation measures to be feasible, the FEIS will be updated to reflect that previously-identified unmitigated significant adverse impacts could be mitigated. In the absence of such determination by NYCDOT, the impacts would continue to remain unmitigated.

Table 13-14 and Table 13-15 summarize the v/c ratios, delays and LOS for the impacted intersections in the With-Action with Mitigation Condition and compares them to the Existing, No-Action and With-Action conditions for the weekday AM and PM construction peak hours, respectively. Per *CEQR Technical Manual* guidelines, a potentially significant adverse traffic impact is considered to be mitigated when the LOS in the With-Action with Mitigation

Condition, as compared to the No-Action Condition, does not exceed the significant impact criteria discussed in Chapter 5, "Transportation."

Implementation of the recommended mitigation measures is subject to review and approval by NYCDOT, and these measures will be further evaluated between the DEIS and FEIS in consultation with the Lead Agency and NYCDOT.

Richmond Terrace and Jersey Street

In the weekday AM construction peak hour, the potentially significant adverse traffic impact to the eastbound through-right movement could be mitigated as follows:

- Shift three (3) seconds from the northbound/southbound left-turn phase to the eastbound/westbound phase.

In the weekday PM construction peak hour, the potentially significant adverse traffic impact would remain unmitigated in the future during construction of the Proposed Project. Measures to mitigate this potentially significant adverse impact will be explored between the DEIS and FEIS, and would be subject to review and approval by NYCDOT. In the event NYCDOT determines such mitigation measures to be feasible, the FEIS will be updated to reflect that the previously-identified unmitigated significant adverse impact could be mitigated. In the absence of feasible mitigation measures, the impact would continue to remain unmitigated in the weekday PM construction peak hour.

Richmond Terrace and Westervelt Avenue

In the weekday AM construction peak hour, the potentially significant adverse traffic impact to the eastbound approach could be mitigated as follows:

- Shift three (3) seconds from the northbound phase to the eastbound/westbound phase.

Richmond Terrace and Nicholas Street/Parking Garage Driveway

In the weekday PM construction peak hour, the potentially significant adverse traffic impact to the westbound approach could be mitigated as follows:

- Shift two (2) seconds from the northbound/southbound phase to the eastbound/ westbound phase.

Richmond Terrace and Wall Street/Empire Mall Driveway

In the weekday AM construction peak hour, the potentially significant adverse traffic impact to the westbound approach could be mitigated as follows:

- Shift one (1) second from the northbound/southbound phase to the westbound phase.

In the weekday PM construction peak hour, the potentially significant adverse traffic impacts would remain unmitigated in the future during construction of the Proposed Project. Measures to mitigate these potentially significant adverse impacts will be explored between the DEIS and FEIS, and would be subject to review and approval by NYCDOT. In the event NYCDOT determines such mitigation measures to be feasible, the FEIS will be updated to reflect that previously-identified unmitigated significant adverse impacts could be mitigated. In the absence of feasible mitigation measures, the impacts would continue to remain unmitigated in the weekday PM construction peak hour.

Victory Boulevard and Bay Street

In the weekday PM construction peak hour, the potentially significant adverse traffic impact to the southbound left-through movement could be mitigated as follows:

- Shift three (3) seconds from the eastbound approach/southbound right-turn phase to the northbound/southbound phase.

Table 13-12: Summary of Recommended Traffic Mitigation Measures – Weekday AM Construction Peak Hour

ID	Intersection Name	No-Action Signal Timing	Recommended Mitigation Measures	Recommended Signal Timing
1	Richmond Terrace & Jersey Street	EB/WB: Green = 51 s NB/SB Left-Turns: Green = 10 s NB/SB: Green = 29 s EB: Green = 10 s	(1) Shift 3 seconds from the NB/SB left-turn phase to the EB/WB phase.	EB/WB: Green = 54 s NB/SB Left-Turns: Green = 7 s NB/SB: Green = 29 s EB: Green = 10 s
2	Richmond Terrace & Westervelt Avenue	EB/WB: Green = 73 s NB: Green = 37 s	(1) Shift 3 seconds from the NB phase to the EB/WB phase.	EB/WB: Green = 76 s NB: Green = 34 s
6	Richmond Terrace & Wall Street/Empire Mall Driveway	NB/SB: Green = 68 s WB: Green = 8 s EB/WB: Green = 29 s	(1) Shift 1 second from the NB/SB phase to the WB phase.	NB/SB: Green = 67 s WB: Green = 9 s EB/WB: Green = 29 s

Notes:
Abbreviations: EB: Eastbound; WB: Westbound; NB: Northbound; SB Southbound.

Table 13-13: Summary of Recommended Traffic Mitigation Measures – Weekday PM Construction Peak Hour

ID	Intersection Name	No-Action Signal Timing	Recommended Mitigation Measures	Recommended Signal Timing
1	Richmond Terrace & Jersey Street	EB/WB: Green = 58 s NB/SB Left-Turns: Green = 6 s NB/SB: Green = 30 s EB: Green = 6 s	Unmitigable.	-
3	Richmond Terrace & Nicholas Street/Parking Garage Driveway	NB/SB: Green = 73 s EB/WB: Green = 37 s	(1) Shift 2 seconds from the NB/SB phase to the EB/WB phase.	NB/SB: Green = 71 s EB/WB: Green = 39 s
6	Richmond Terrace & Wall Street/Empire Mall Driveway	NB/SB: Green = 63 s WB: Green = 13 s EB/WB: Green = 29 s	Unmitigable.	-
7	Victory Boulevard & Bay Street	NB/SB: Green = 26 s EB/SB Right-Turn: Green = 20 s WB: Green = 22 s East/West Crosswalk LPI: Walk = 7 s	(1) Shift 3 seconds from the EB/SB right-turn phase to the NB/SB phase.	NB/SB: Green = 29 s EB/SB Right-Turn: Green = 17 s WB: Green = 22 s East/West Crosswalk LPI: Walk = 7 s

Notes:
Abbreviations: EB: Eastbound; WB: Westbound; NB: Northbound; SB Southbound; LPI: Lead Pedestrian Interval.

Table 13-14: LOS Comparison Summary – Weekday AM Construction Peak Hour

						Existing			No-Action			With-Action			With-Action with Mitigation		
ID	Intersection Name	Control	Street Name	Direction	Lane Group	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS
1	Richmond Terrace & Jersey Street	Signal	Richmond Terrace	EB	L	0.11	15.2	B	0.00	16.0	B	0.00	16.0	B	0.00	14.4	B
					TR	0.75	26.2	C	0.89	36.8	D	0.98	51.8	D	0.94	40.9	D
				WB	L	0.06	20.8	C	0.22	25.4	C	0.36	34.0	C	0.27	25.9	C
					TR	0.66	32.2	C	0.82	40.1	D	0.83	40.3	D	0.78	35.2	D
			Jersey Street	NB	L	0.08	25.0	C	0.08	25.0	C	0.08	25.0	C	0.09	27.0	C
					TR	0.16	36.9	D	0.21	37.9	D	0.22	38.0	D	0.22	38.0	D
				SB	L	0.02	24.4	C	0.00	24.1	C	0.00	24.1	C	0.00	26.1	C
					TR	0.03	34.9	C	0.00	34.5	C	0.00	34.5	C	0.00	34.5	C
			Overall Intersection			-	*28.3*	*C*	-	*37.5*	*D*	-	*46.1*	*D*	-	*38.2*	*D*
2	Richmond Terrace & Westervelt Avenue	Signal	Richmond Terrace	EB	TR	0.80	21.4	C	0.96	31.4	C	1.06	56.5	E	1.01	41.2	D
				WB	LT	0.34	12.5	B	0.46	14.3	B	0.46	14.3	B	0.44	12.6	B
			Westervelt Avenue	NB	LR	0.28	33.0	C	0.29	33.1	C	0.36	34.6	C	0.39	37.5	D
			Overall Intersection			-	*20.0*	*B*	-	*26.0*	*C*	-	*41.6*	*D*	-	*32.2*	*C*
6	Wall Street & Richmond Terrace	Signal	Wall Street	EB	LTR	0.46	43.3	D	0.45	42.8	D	0.46	43.2	D	0.46	43.2	D
			Empire Mall Driveway	WB	LR	0.03	25.7	C	0.97	76.7	E	0.99	82.2	F	0.95	73.1	E
			Richmond Terrace	NB	T	0.20	13.0	B	0.22	13.1	B	0.27	13.7	B	0.28	14.2	B
					R				0.37	15.8	B	0.37	15.8	B	0.38	16.5	B
				SB	LT	0.31	9.3	A	0.48	11.3	B	0.51	11.7	B	0.51	12.5	B
			Overall Intersection			-	*16.1*	*B*	-	*29.1*	*C*	-	*29.7*	*C*	-	*28.3*	*C*

Table 13-15: LOS Comparison Summary – Weekday PM Construction Peak Hour

						Existing			No-Action			With-Action			With-Action with Mitigation		
ID	Intersection Name	Control	Street Name	Direction	Lane Group	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS	v/c ratio	Delay (sec)	LOS
1	Richmond Terrace & Jersey Street	Signal	Richmond Terrace	EB	L	0.02	16.5	B	0.01	25.4	C	0.01	25.4	C	0.01	25.4	C
					TR	0.52	17.6	B	0.73	23.8	C	0.73	23.8	C	0.73	23.8	C
				WB	L	0.07	16.9	B	0.28	20.9	C	0.42	24.5	C	0.42	24.5	C
					TR	0.84	36.9	D	1.14	107.6	F	1.25	152.4	F	1.25	152.4	F
			Jersey Street	NB	L	0.21	28.8	C	0.22	28.9	C	0.22	28.9	C	0.22	28.9	C
					TR	0.20	37.1	D	0.32	39.6	D	0.32	39.6	D	0.32	39.6	D
				SB	L	0.01	26.2	C	0.00	26.1	C	0.00	26.1	C	0.00	26.1	C
					TR	0.03	34.1	C	0.00	33.8	C	0.00	33.8	C	0.00	33.8	C
			Overall Intersection			-	*29.0*	*C*	-	*65.9*	*E*	-	*89.8*	*F*	-	*89.8*	*F*
3	Nicholas Street & Richmond Terrace	Signal	Nicholas Street	EB	LTR	0.15	30.8	C	0.16	30.8	C	0.17	31.2	C	0.16	29.6	C
			Wheel Driveway	WB	LR	0.08	29.7	C	0.12	30.3	C	0.73	47.5	D	0.69	43.7	D
			Richmond Terrace	NB	UTR	0.29	6.6	A	0.45	7.8	A	0.45	7.8	A	0.46	9.0	A
				SB	LTR	0.25	11.3	B	0.42	13.2	B	0.42	13.2	B	0.43	14.4	B
			Overall Intersection			-	*11.2*	*B*	-	*12.1*	*B*	-	*17.9*	*B*	-	*18.0*	*B*
6	Wall Street & Richmond Terrace	Signal	Wall Street	EB	LTR	0.40	41.7	D	0.41	42.2	D	0.43	42.7	D	0.43	42.7	D
			Empire Mall Driveway	WB	LR	0.02	22.5	C	1.27	175.8	F	1.29	182.8	F	1.29	182.8	F
			Richmond Terrace	NB	T	0.28	16.3	B	0.36	17.3	B	0.36	17.3	B	0.36	17.3	B
					R				1.08	95.9	F	1.09	99.9	F	1.09	99.9	F
				SB	LT	0.27	16.2	B	0.69	25.2	C	0.77	28.7	C	0.77	28.7	C
			Overall Intersection			-	*19.6*	*B*	-	*74.5*	*E*	-	*76.0*	*E*	-	*76.0*	*E*
7	Victory Boulevard & Bay Street	Signal	Victory Boulevard	EB	L	0.22	30.4	C	0.49	35.9	D	0.49	35.9	D	0.57	41.9	D
					LT	0.24	30.6	C	0.50	36.1	D	0.50	36.1	D	0.59	42.3	D
				WB	LTR	0.17	27.9	C	0.18	27.9	C	0.18	27.9	C	0.18	27.9	C
			Bay Street	NB	L	0.92	88.5	F	1.92	490.7	F	1.92	490.7	F	1.92	489.2	F
					TR	0.57	30.2	C	1.03	71.0	E	1.03	71.0	E	0.92	45.3	D
				SB	LT	0.62	31.0	C	1.18	124.8	F	1.29	172.5	F	1.15	110.4	F
					R	0.31	11.5	B	0.68	19.4	B	0.68	19.4	B	0.68	19.3	B
			Overall Intersection			-	*32.7*	*C*	-	*101.3*	*F*	-	*120.8*	*F*	-	*89.5*	*F*

Notes:
1. Shading denotes an unmitigable potentially significant adverse traffic impact.

Noise

As discussed in Chapter 11, "Construction," project-generated construction has the potential to result in significant adverse construction noise impacts at several sensitive receptor sites in the vicinity because of the duration and magnitude of the projected construction-period noise levels. Project-generated construction would comply with the noise control measures of the New York City Noise Control Code. In addition, the Applicant is committed to implementing certain noise reduction measures. These measures include constructing a 15-foot-tall construction barrier that would extend along the full perimeter of the site except along Projected Development Site 1's frontage to Richmond Terrace, where an 8-foot-tall construction barrier would be placed. The Applicant would also commit to using auger drills in lieu of impact pile drivers and ventilation fans that would not exceed a noise level of 91-dBA.

Additional measures, as feasible, to avoid potential significant adverse noise impacts will be explored between the Draft and Final EIS in consultation with DCP. If no feasible and practicable mitigation measures are identified, the construction noise impact would remain unmitigated.