Chapter 10: Transportation

A. INTRODUCTION

As described in Chapter 1, "Project Description," based on projections issued by the national Centers for Disease Control, Memorial Sloan Kettering Cancer Center (MSKCC) expects that new cancer cases in New York City will increase from the current rate of 40,000 annually to 60,000 annually by 2050. While this increase is a projection among all age groups, this rise is being driven by two populations: older patients, whose cases are more acute and require more complex treatment, and younger patients who are being diagnosed with prostate, colon, and breast cancer at alarming rates. To meet this increase in patient volume and the new interventions that are needed to treat the growing number of acute cases, MSKCC will need to supplement its existing capacity with a purpose-built structure with 28 operating rooms (with four dedicated to interventional radiology procedures) and up to 206 patient beds including intensive care unit (ICU) and single rooms for immunocompromised patients, as well as medical support areas.

To fulfill this need, MSKCC is requesting a series of zoning actions to establish a building envelope to facilitate the development of a new 31-story (up to 598.3 feet including mechanical bulkhead), approximately 903,065 gross square foot (gsf) inpatient hospital building (the Proposed Project), also referred to as the "MSK Pavilion." It would be located on York Avenue between East 66th and East 67th Streets and would consist of 28 operating rooms, including recovery and intensive care facilities, up to 206 single-bedded patient rooms, clinical support, a double-height lobby, and 5 mechanical floors to house intensive technologies and air exchange systems. A two-story patient bridge across East 67th Street (Patient Bridge) connecting floors 5 and 6 of the Proposed Project with floors 8 and 9 of the Memorial Hospital building would serve as the primary connector for patients in either building to access medical services in the other building.

This chapter examines the potential effects of the Proposed Project on transportation systems. Specifically, it compares conditions in the future with the Proposed Project (the With Action condition) against conditions in the future without the Proposed Project (the No Action condition) to determine the potential for significant adverse impacts to transportation systems. The analyses consider the 2030 analysis year to identify potential impacts and, if warranted, determine project improvement measures that would be appropriate to address those impacts (Chapter 18, "Mitigation," presents details on the proposed mitigation measures). The travel demand projections, trip assignments, and capacity analysis presented in this chapter were conducted pursuant to the methodologies outlined in the 2021 *City Environmental Quality Review (CEQR) Technical Manual*.

BACKGROUND

As detailed in Chapter 1, "Project Description," the Development Site (Block 1461, portions of Lots 21 and 13) is in the Lenox Hill neighborhood of Manhattan. The Development Site contains two adjoining buildings that occupy the entire frontage of the west side of York Avenue between East 66th and East 67th Streets. Both buildings are owned and occupied by MSKCC, which provides

contract housing to its professional staff and students along with administrative space on lower floors.

In the existing condition, the 23-story-tall north building (Scholars) and the adjoining 20-story-tall south building (Sloan) contain approximately 242,856 gross square feet (gsf). Together, they accommodate a total of 355 dwelling units (DUs) primarily for medical students, interns, and residents for their terms of service or academic affiliation with MSKCC and approximately 45,039 gsf of hospital administrative office space. A 263-space below-grade parking garage connects the Scholars and Sloan buildings to the adjacent Rockefeller Research Labs (RRL, on Lot 13 and small portion of Lot 21), also owned by MSKCC, and only partially in the Development Site.[1] The Project Area is the previously established 2001 Large Scale Community Facility Development (the 2001 LSCFD) developed primarily with MSKCC's medical buildings ranging from 4 to 23 stories. This interconnected campus spanning over three city blocks (Block 1462 and portions of Blocks 1461 and 1463) is dedicated almost exclusively to cancer treatment and cancer research. Current patients in the Memorial Hospital building at 1275 York Avenue (across East 67th Street from the Development Site) on the Main Campus utilize these interconnections to access treatment centers, diagnostic centers, and procedural facilities throughout the Project Area. The Applicant's buildings are interconnected at many levels, including through tunnels running below both East 67th and East 68th Streets. In the No Action condition, the Development Site would continue in its existing functions.

In the With Action condition, the Proposed Project would replace the Scholars and Sloan buildings on Lot 21 with a new 31-story, approximately 903,065-gsf inpatient hospital building for MSKCC's exclusive use. It would have a population of 753 average weekday daily inpatient staff members, 648 average weekday daily inpatients and inpatient visitors, 84 average weekday daily ambulatory care staff, and 72 average weekday daily ambulatory care patients/visitors.

Adjacent to RRL the Proposed Project would create an internal through-block driveway running one-way from East 66th Street to East 67th Street (shown in **Figure 10-1**). The driveway and related pedestrian features would provide covered access to the Proposed Project. There would also be doors to the Proposed Project lobby on East 66th and East 67th Streets near the corners of York Avenue with increased circulation areas outside either end of the lobby. A two-story Pedestrian Bridge over East 67th Street would provide a medically necessary connection for staff and patients between the Proposed Project and Memorial Hospital on the block immediately to the north.

The below-grade garage would continue to have a total of 263 accessory parking spaces but would have an optimized layout, improved valet operations, additional reservoir spaces, and a relocated exit to separate entering and exiting traffic between the two cross streets. The same number of vehicles as today would enter the garage on East 66th Street. A small number of additional vehicles generated by the MSK Pavilion would enter the garage on East 67th Street after exiting the through-block driveway. All vehicles leaving the garage or MSK Pavilion through-block driveway would use East 67th Street. The RRL building would remain on the adjacent Lot 13 and a small portion of Lot 21 and there would be no redevelopment on that site other than for modifications to the below-grade garage, which would also provide new connections to the MSK Pavilion. There are no programmatic changes proposed for the RRL building; however, it would lose a small

[1] As described below and in the Reasonable Worst Case Development Scenario (RWCDS) Memorandum, a small portion of the ground floor of the RRL building will be demolished as part of the Proposed Project; however, it would not result in a change in programming or building population such that it would affect travel demand.

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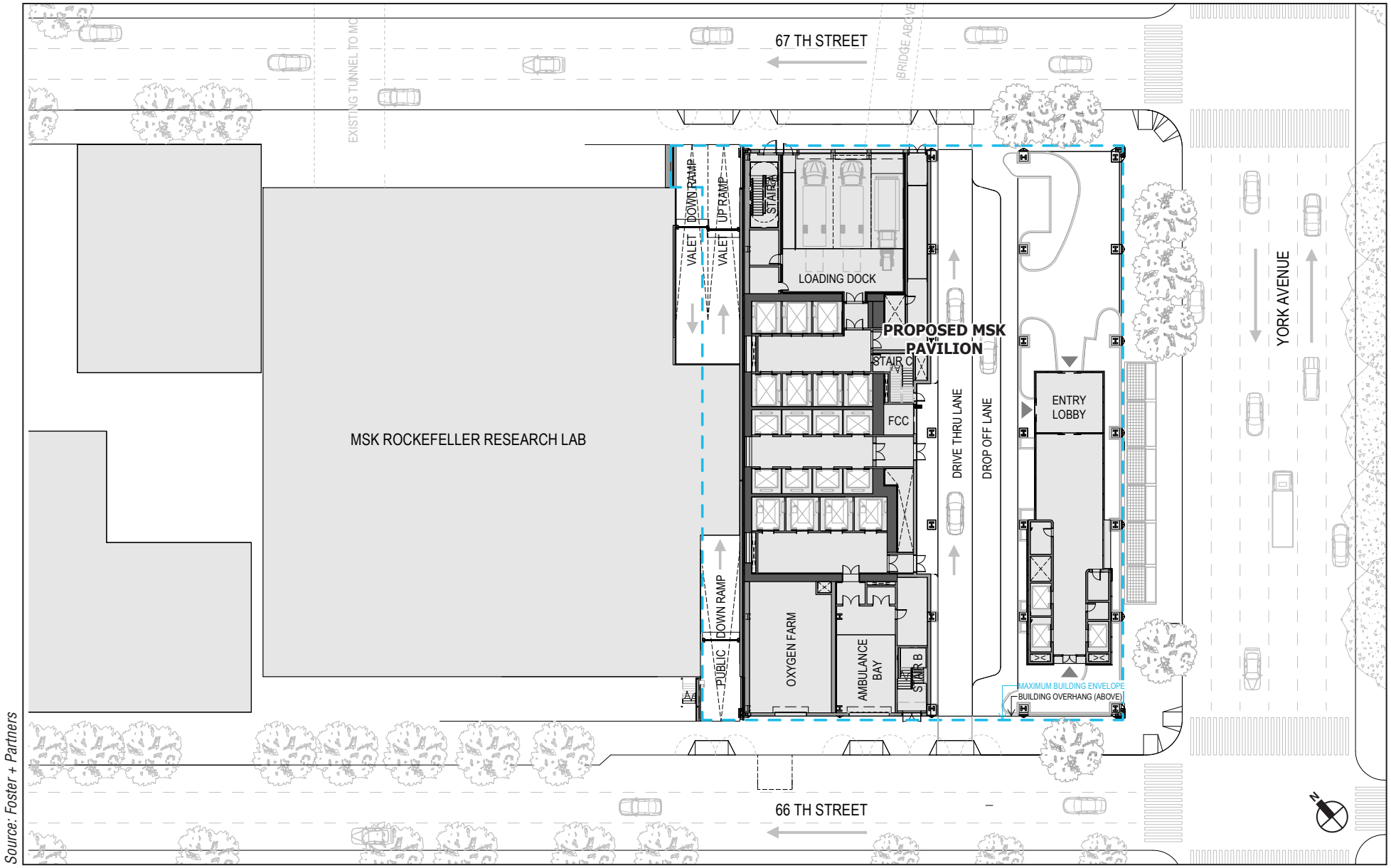


Source: Foster + Partners

NOTE: FOR ILLUSTRATIVE PURPOSES ONLY

Proposed Ground Floor Plan

MSK PAVILION

Figure 10-1

amount of ground floor space to accommodate the new garage ramp on East 67th Street. Since there would be no changes to the programming or population of the RRL building as part of the Proposed Project, no changes to travel demand are anticipated for that building.

Person trip generation is based on the population of staff, patients, and visitors,[2] and not the square footage of the space. Delivery trip generation is based on the square footage of the space. **Table 10-1** provides a comparison of the development programs between the No Action and With Action conditions.

Table 10-1
Program Summary

Components	No Action Condition	With Action Condition	Increment
Residential (DUs)	355	0	-355
Office (GSF)	45,039	0	-45,039
Inpatient (GSF)	0	812,759	812,759
Inpatient Staff	0	753	753
Inpatients and Inpatient Visitors	0	648	648
Ambulatory Care (GSF)	0	90,306	90,306
Ambulatory Care Staff	0	84	84
Ambulatory Care Patients/Visitors	0	72	72
Parking (spaces)	263	263	0

Notes: GSF = Gross Square Feet; Square footages shown are approximate; Parking Garage included in GSFs. A gross square footage of 901,697 gsf was used to calculate delivery trips. The increase to 903,065 gsf was verified to not change the delivery trip generation results.
Source: Memorial Sloan Kettering Cancer Center (MSKCC) Administration, Facilities, and Operations departments' projections.

B. PRINCIPAL CONCLUSIONS

TRAFFIC

Based on a detailed assignment of project-generated vehicle trips, two intersections were identified as warranting detailed analysis for the weekday PM peak hour. Analyses performed for these intersections showed that the Proposed Project would not result in any significant adverse traffic impacts.

TRANSIT

The Proposed Project's incremental subway trips would not exceed the *CEQR Technical Manual* analysis threshold of 200 or more peak hour subway trips at a station. Therefore, a detailed analysis of subway facilities is not warranted, and the Proposed Project is not expected to result in any significant adverse subway impacts.

In addition, incremental bus trips would be fewer than 50 peak hour bus riders on a bus route in a single direction. Therefore, based on *CEQR Technical Manual* guidelines, a detailed analysis of buses is not warranted, and the Proposed Project is not expected to result in any significant adverse bus line-haul impacts.

[2] Staff, patient, and visitor populations provided by MSKCC Administration, Facilities, and Operations departments.

CITYWIDE FERRY SERVICE

The Proposed Project's incremental Citywide Ferry Service (CWFS) trips would not exceed the *CEQR Technical Manual* analysis threshold of 25 or more passenger ferry trips in a single direction on a single route or 50 or more passengers at a ferry landing. Therefore, a detailed ferry landing or line-haul analysis is not warranted, and the Proposed Project would not result in any significant adverse ferry impacts.

PEDESTRIANS

The Proposed Project's incremental pedestrian trips would not exceed the *CEQR Technical Manual* analysis threshold of 200 or more peak hour pedestrian trips during any peak hour. Therefore, a detailed pedestrian analysis is not warranted, and the Proposed Project is not expected to result in any significant adverse pedestrian impacts.

PARKING

The Proposed Project would accommodate its own parking demand for patients and visitors on-site. Available public off-street parking would accommodate all parking demand from staff. There would not be a parking shortfall within ¼-mile of the Proposed Project under future conditions. Therefore, the Proposed Project is not expected to result in the potential for a significant parking shortfall.

STREET USER SAFETY

The Proposed Project would add modest pedestrian and vehicular trips to routes already traversed by heavy volumes at high crash locations in the study area. Therefore, the Proposed Project is not expected to result in the potential for significant adverse safety impacts.

C. PRELIMINARY ANALYSIS METHODOLOGY AND SCREENING ASSESSMENT

The *CEQR Technical Manual* identifies procedures for evaluating a proposed project's potential impacts on traffic, transit, ferry, pedestrian, and parking conditions. This methodology begins with the preparation of a trip generation analysis to determine the volume of person and vehicle trips associated with the Proposed Project, including the reassignment of existing vehicle trips already in the street network that would be diverted from the existing parking garage exit on East 66th Street to the proposed parking garage exit on East 67th Street. The results are then compared with the *CEQR Technical Manual*-specified thresholds (Level 1 screening analysis) to determine whether a Level 2 screening analysis is warranted. If the Proposed Project would result in 50 or more peak hour vehicle trips, 200 or more peak hour transit trips (subway/rail or bus riders), 50 or more peak hour CWFS ferry trips, and/or 200 or more peak hour pedestrian trips, a Level 2 screening analysis is undertaken.

For the Level 2 screening analysis, project generated trips would be assigned to specific intersections, transit routes, ferry routes, and pedestrian elements. If the results of this analysis show that the Proposed Project would generate 50 or more peak hour vehicle trips through an intersection, 50 or more peak hour bus riders on a bus route in a single direction, 200 or more peak hour subway passengers at any given station or on a subway line, 25 or more passenger ferry trips in a single direction on a single route, 50 or more passengers at a ferry landing, or 200 or more peak hour pedestrian trips per pedestrian element, further quantified analyses may be warranted to evaluate the potential for significant adverse traffic, transit, ferry, and pedestrian impacts and parking shortfalls.

LEVEL 1 SCREENING ASSESSMENT

A Level 1 trip generation screening assessment was conducted to estimate the number of person and vehicle trips by mode expected to be generated by the Proposed Project during the weekday AM, midday, and PM peak hours. These estimates were then compared to the *CEQR Technical Manual* thresholds to determine if a Level 2 screening and/or quantified operational analyses would be warranted.

TRANSPORTATION PLANNING ASSUMPTIONS

Trip generation factors for the No Action and With Action conditions were developed based on information from the *CEQR Technical Manual*, the 2017 *Greater East Midtown Rezoning FEIS*, the 2001 *Memorial Sloan Kettering Cancer Center Rezoning FEIS*, the 2013 *Memorial Sloan Kettering/CUNY-Hunter Project at 74th Street FEIS*, and the U.S. Census Bureau—as summarized in **Table 10-2**.

Table 10-2
Travel Demand Factors

Use	Residential			Office			Inpatient – Staff			Inpatients and Inpatient Visitors		
Total Daily Person Trips or Daily Population	(1) Weekday 8.180 Trips/DU			(1) Weekday 18.0 Trips / KSF			(5) Weekday 753 Staff			(5) Weekday 648 Patients and Patient Visitors		
Temporal	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**
	(1)			(1)			(6)			(6)		
	9.3%	5.6%	8.5%	12.4%	11.0%	10.5%	52.0%	27.0%	55.0%	3.7%	11.3%	9.3%
Direction	(8)			(8)			(6)			(6)		
In	22%	50%	62%	86%	52%	16%	95%	35%	15%	85%	65%	60%
Out	78%	50%	38%	14%	48%	84%	5%	65%	85%	15%	35%	40%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Modal Split	(2)			(3,4)			(4,6)			(6)		
	AM	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**
Auto	8.0%	8.0%	8.0%	17.4%	2.0%	17.4%	17.4%	0.0%	17.4%	32.0%	32.0%	32.0%
Taxi	6.0%	6.0%	6.0%	2.2%	3.0%	2.2%	2.2%	0.0%	2.2%	11.0%	11.0%	11.0%
Ambulette	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Subway	42.0%	42.0%	42.0%	42.6%	6.0%	42.6%	42.6%	0.0%	42.6%	20.0%	20.0%	20.0%
Railroad	0.0%	0.0%	0.0%	7.2%	0.0%	7.2%	7.2%	0.0%	7.2%	0.0%	0.0%	0.0%
Bus	8.0%	8.0%	8.0%	12.4%	6.0%	12.4%	12.4%	0.0%	12.4%	17.0%	17.0%	17.0%
Ferry	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%
Bicycle	2.0%	2.0%	2.0%	0.8%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Walk	34.0%	34.0%	34.0%	17.2%	83.0%	17.2%	18.0%	100.0%	18.0%	20.0%	20.0%	20.0%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Vehicle Occupancy	(2,3) Weekday			(3,4) Weekday			(4,6) Weekday			(6) Weekday		
Auto	1.18			1.13			1.13			1.60		
Taxi	1.40			1.40			1.35			1.40		
Ambulette	0.00			0.00			0.00			0.00		
Daily Delivery Trip Generation Rate	(1) Weekday 0.06 Delivery Trips / DU			(1) Weekday 0.32 Delivery Trips / KSF			(6) Weekday 0.20 Delivery Trips / KSF					
	AM	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**			
Delivery Temporal	(1)			(1)			(6)					
	12%	9%	2%	10%	11%	2%	10.0%	9.0%	5.0%			
Delivery Direction	(1)			(1)			(6)					
In	50%	50%	50%	50%	50%	50%	50%	50%	50%			
Out	50%	50%	50%	50%	50%	50%	50%	50%	50%			
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%			

Table 10-2 (cont'd)
Travel Demand Factors

Use	Ambulatory Care – Staff			Ambulatory Care – Patients and Visitors			Inpatients and Inpatient Visitors
Total Daily Person Trips	(7) Weekday 3.0 Trips / Person			(7) Weekday 2.0 Trips / Person			
Temporal	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**	
	(7)			(7)			
	12.1%	8.1%	12.2%	4.0%	10.0%	7.5%	
Direction	(7)			(7)			
In	97%	52%	12%	100%	60%	20%	
Out	3%	48%	88%	0%	40%	80%	
Total	100%	100%	100%	100%	100%	100%	
Modal Split	(4,6)			(7)			
	AM	**MD**	**PM**	**AM**	**MD**	**PM**	
Auto	17.4%	0.0%	17.4%	53.0%	53.0%	53.0%	
Taxi	2.2%	0.0%	2.2%	14.0%	14.0%	14.0%	
Ambulette	0.0%	0.0%	0.0%	4.0%	4.0%	4.0%	
Subway	42.6%	0.0%	42.6%	16.0%	16.0%	16.0%	
Railroad	7.2%	0.0%	7.2%	0.0%	0.0%	0.0%	
Bus	12.4%	0.0%	12.4%	6.0%	6.0%	6.0%	
Ferry	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	
Bicycle	0.8%	0.0%	0.8%	0.0%	0.0%	0.0%	
Walk	17.2%	100.0%	17.2%	7.0%	7.0%	7.0%	
Total	100%	100%	100%	100%	100%	100%	
Vehicle Occupancy	(4,6) Weekday			(7) Weekday			
Auto	1.13			3.00			
Taxi	1.35			3.00			
Ambulette	0.00			3.00			
Daily Delivery Trip Generation Rate	(7) Weekday 0.20 Delivery Trips / KSF						
	AM	**MD**	**PM**				
Delivery Temporal	(7)						
	10.0%	9.0%	5.0%				
Delivery Direction	(7)						
In	50%	50%	50%				
Out	50%	50%	50%				
Total	100%	100%	100%				

Sources:
(1) 2021 *CEQR Technical Manual*
(2) U.S. Census Bureau, ACS 2015–2019 Five-Year Estimates – Journey-to-Work (JTW) Data: New York County census tracts 106.02, 110, 116, 118, 124, 126.
(3) *Greater East Midtown Rezoning FEIS* (2017)
(4) U.S. Census Bureau, ACS 2012–2016 Five-Year Estimates – Reverse Journey-to-Work (RJTW) Data: New York County census tracts 106.02, 110, 116, 118, 124, 126.
(5) MSKCC Administration, Facilities, and Operations departments
(6) *Memorial Sloan Kettering Cancer Center Rezoning FEIS* (2001)
(7) MSK/CUNY-Hunter Project at 74th Street FEIS (2013)
(8) Based on NYCDOT Trip Generation Surveys

Residential

The daily person trip rate and temporal and directional distributions are from the *CEQR Technical Manual*. Modal splits are from the U.S. Census American Community Survey (ACS) 2017–2019 Journey-to-Work (JTW) Data for New York Census Tracts 106.02, 110, 116, 118, 124, and 126. Vehicle occupancies are from the JTW data and the 2017 *Greater East Midtown Rezoning FEIS*. The delivery trip rate and temporal distributions are from the *CEQR Technical Manual*. The directional distribution is based on NYCDOT trip generation surveys.

Office

The daily person trip rate and temporal and directional distributions are from the *CEQR Technical Manual*. Modal splits are from the ACS 2012–2016 Reverse Journey-to-Work (RJTW) Data for New York Census Tracts 106.02, 110, 116, 118, 124, and 126 for the weekday AM and PM peak hours, and from the 2017 *Greater East Midtown Rezoning FEIS* for the weekday midday peak hour. Vehicle occupancies are from the RJTW data and the 2017 *Greater East Midtown Rezoning*

FEIS. The delivery trip rate and temporal distributions are from the *CEQR Technical Manual*. The directional distribution is based on NYCDOT trip generation surveys.

Inpatient Staff

Inpatient staff include those employees dedicated to inpatient services, including doctors, nurses, and clinicians. In addition, inpatient staff include hospital administration and the wide range of employees dedicated to inpatient support functions, for example, lab technicians, food service workers and building maintenance staff.

The daily person trip rate is derived from the daily inpatient staff population. Temporal and directional distributions, midday peak hour modal splits, and taxi occupancy are from the 2001 *Memorial Sloan Kettering Cancer Center Rezoning FEIS*. The weekday AM and PM peak hour modal splits and the auto occupancy are from the U.S. Census Bureau ACS RJTW Estimates for New York County census tracts 106.02, 110, 116, 118, 124, and 126. The daily delivery trip rate, and temporal and directional distributions are from the 2001 *Memorial Sloan Kettering Cancer Center Rezoning FEIS.*

Inpatients and Inpatient Visitors

The daily person trip rate is derived from the daily inpatient and inpatient visitor populations. Temporal and directional distributions, modal splits, and vehicle occupancies are from the 2001 *Memorial Sloan Kettering Cancer Center Rezoning FEIS*.

Ambulatory Care Staff

Ambulatory care staff include those employees dedicated to outpatient services. The daily person trip rate and temporal and directional distributions are from the 2013 *Memorial Sloan Kettering/CUNY-Hunter Project at 74th Street FEIS.* Modal splits are from the U.S. Census Bureau ACS RJTW Data for New York Census tracts 106.02, 110, 116, 118, 124, and 126 for the weekday AM and PM peak hours, and from the 2001 *Memorial Sloan Kettering Cancer Center Rezoning FEIS* for the weekday midday peak hour. Vehicle occupancies are from the RJTW data and the 2001 *Memorial Sloan Kettering Cancer Center Rezoning FEIS*. The delivery trip rate and temporal and directional distributions are from the 2013 *Memorial Sloan Kettering/CUNY-Hunter Project at 74th Street FEIS.*

Ambulatory Care Patients and Visitors

The daily person trip rate, temporal and directional distributions, modal splits, and vehicle occupancies are from the 2013 *Memorial Sloan Kettering/CUNY-Hunter Project at 74th Street FEIS.*

TRAVEL DEMAND PROJECTION SUMMARY

As summarized in **Table 10-3**, the No Action condition would generate 371, 256, and 331 person trips during the weekday AM, midday, and PM peak hours, respectively. Approximately 63, 38, and 52 vehicle trips would be generated during the same respective peak hours.

Table 10-3
Trip Generation Summary – No Action Condition

Program	Peak Hour	In/Out	Person Trip										Vehicle Trip				
			Auto	Taxi	Ambulette	Subway	Railroad	Bus	Ferry	Bicycle	Walk	Total	Auto	Taxi	Ambulette	Delivery	Total
Residential 355 DU	AM	In	5	4	0	25	0	5	0	1	20	60	4	12	0	1	17
		Out	17	13	0	88	0	17	0	4	72	211	14	12	0	1	27
		Total	22	17	0	113	0	22	0	5	92	271	18	24	0	2	44
	Midday	In	7	5	0	34	0	7	0	2	28	83	6	8	0	1	15
		Out	7	5	0	34	0	7	0	2	28	83	6	8	0	1	15
		Total	14	10	0	68	0	14	0	4	56	166	12	16	0	2	30
	PM	In	12	9	0	64	0	12	0	3	52	152	10	10	0	0	20
		Out	8	6	0	39	0	8	0	2	32	95	7	10	0	0	17
		Total	20	15	0	103	0	20	0	5	84	247	17	20	0	0	37
Office 45,039 GSF	AM	In	15	2	0	37	6	11	0	1	15	87	13	1	0	1	15
		Out	2	0	0	6	1	2	0	0	2	13	2	1	0	1	4
		Total	17	2	0	43	7	13	0	1	17	100	15	2	0	2	19
	Midday	In	1	1	0	3	0	3	0	0	38	46	1	2	0	1	4
		Out	1	1	0	3	0	3	0	0	36	44	1	2	0	1	4
		Total	2	2	0	6	0	6	0	0	74	90	2	4	0	2	8
	PM	In	2	0	0	6	1	2	0	0	2	13	2	1	0	0	3
		Out	12	2	0	30	5	9	0	1	12	71	11	1	0	0	12
		Total	14	2	0	36	6	11	0	1	14	84	13	2	0	0	15
Total	AM	In	20	6	0	62	6	16	0	2	35	147	17	13	0	2	32
		Out	19	13	0	94	1	19	0	4	74	224	16	13	0	2	31
		Total	39	19	0	156	7	35	0	6	109	371	33	26	0	4	63
	Midday	In	8	6	0	37	0	10	0	2	66	129	7	10	0	2	19
		Out	8	6	0	37	0	10	0	2	64	127	7	10	0	2	19
		Total	16	12	0	74	0	20	0	4	130	256	14	20	0	4	38
	PM	In	14	9	0	70	1	14	0	3	54	165	12	11	0	0	23
		Out	20	8	0	69	5	17	0	3	44	166	18	11	0	0	29
		Total	34	17	0	139	6	31	0	6	98	331	30	22	0	0	52

As summarized in **Table 10-4**, under the With Action condition, the Proposed Project would generate 445, 311, and 518 person trips during the weekday AM, midday, and PM peak hours, respectively. Approximately 107, 45, and 120 vehicle trips would be generated during the same peak hours. As previously described, a diversion would be created compared to existing/No Action conditions with the proposed garage exit relocation from East 66th Street to East 67th Street. The parking garage exit diversion would result in 32, 30, and 46 fewer vehicle trips during the weekday AM, midday, and PM peak hours, respectively, on East 66th Street proceeding west away from the Development Site, and the same numbers of vehicle trips added to East 67th Street proceeding west away from the Development Site. This would result in a localized traffic diversion that would reduce vehicle trips on East 66th Street at First and Second Avenues, and increase vehicle trips on East 67th Street at First and Second Avenues; the diversions would only affect those four intersections. There would be no change in volumes, or reassignment of the parking garage existing entering vehicle trips since the access would remain on East 66th Street between York and First Avenues and the number of parking spaces in the garage would remain constant between No Action and With Action. The net incremental trips from the comparison of the No Action to With Action development programs, excluding garage traffic diversions, are shown in **Table 10-5**. **Table 10-6** which is presented as part of the Level 2 Screening Assessment includes development program and garage traffic diversion trip increments to identify recommended analysis intersections.

Table 10-4
Trip Generation Summary – With Action Condition

Program	Peak Hour	In/Out	Person Trip										Vehicle Trip				
			Auto	Taxi	Ambulette	Subway	Railroad	Bus	Ferry	Bicycle	Walk	Total	Auto	Taxi	Ambulette	Delivery	Total
Inpatient Staff 753 Staff	AM	In	65	8	0	158	27	46	1	0	67	372	58	6	0	8	72
		Out	3	0	0	8	1	2	0	0	4	18	3	6	0	8	17
		Total	68	8	0	166	28	48	1	0	71	390	61	12	0	16	89
	Midday	In	0	0	0	0	0	0	0	0	71	71	0	0	0	7	7
		Out	0	0	0	0	0	0	0	0	132	132	0	0	0	7	7
		Total	0	0	0	0	0	0	0	0	203	203	0	0	0	14	14
	PM	In	11	1	0	26	4	8	0	0	11	61	10	7	0	4	21
		Out	61	8	0	150	25	44	1	0	63	352	54	7	0	4	65
		Total	72	9	0	176	29	52	1	0	74	413	64	14	0	8	86
Inpatients and Inpatient Visitors 648 Patients and Visitors	AM	In	6	2	0	4	0	3	0	0	4	19	4	2	0	0	6
		Out	1	0	0	0	0	0	0	0	0	1	1	2	0	0	3
		Total	7	2	0	4	0	3	0	0	4	20	5	4	0	0	9
	Midday	In	15	5	0	9	0	8	0	0	9	46	9	5	0	0	14
		Out	8	3	0	5	0	4	0	0	5	25	5	5	0	0	10
		Total	23	8	0	14	0	12	0	0	14	71	14	10	0	0	24
	PM	In	12	4	0	7	0	6	0	0	7	36	8	5	0	0	13
		Out	8	3	0	5	0	4	0	0	5	25	5	5	0	0	10
		Total	20	7	0	12	0	10	0	0	12	61	13	10	0	0	23
Ambulatory Staff 84 Staff	AM		5	1	0	13	2	4	0	0	5	30	4	1	0	1	6
		Out	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
		Total	5	1	0	13	2	4	0	0	5	30	4	2	0	2	8
	Midday	In	0	0	0	0	0	0	0	0	11	11	0	0	0	1	1
		Out	0	0	0	0	0	0	0	0	10	10	0	0	0	1	1
		Total	0	0	0	0	0	0	0	0	21	21	0	0	0	2	2
	PM	In	1	0	0	2	0	0	0	0	1	4	1	1	0	0	2
		Out	5	1	0	12	2	3	0	0	5	28	4	1	0	0	5
		Total	6	1	0	14	2	3	0	0	6	32	5	2	0	0	7
Ambulatory Patients/Visitors 72 Patients/Visitors	AM		3	1	0	1	0	0	0	0	0	5	1	0	0	0	1
		Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	3	1	0	1	0	0	0	0	0	5	1	0	0	0	1
	Midday	In	5	1	1	1	0	1	0	0	1	10	2	0	1	0	3
		Out	3	1	1	1	0	0	0	0	0	6	1	0	1	0	2
		Total	8	2	2	2	0	1	0	0	1	16	3	0	2	0	5
	PM	In	1	0	1	0	0	0	0	0	0	2	0	0	1	0	1
		Out	5	1	1	1	0	1	0	0	1	10	2	0	1	0	3
		Total	6	1	2	1	0	1	0	0	1	12	2	0	2	0	4
Total	AM	In	79	12	0	176	29	53	1	0	76	426	67	9	0	9	85
		Out	4	0	0	8	1	2	0	0	4	19	4	9	0	9	22
		Total	83	12	0	184	30	55	1	0	80	445	71	18	0	18	107
	Midday	In	20	6	1	10	0	9	0	0	92	138	11	5	1	8	25
		Out	11	4	1	6	0	4	0	0	147	173	6	5	1	8	20
		Total	31	10	2	16	0	13	0	0	239	311	17	10	2	16	45
	PM	In	25	5	1	35	4	14	0	0	19	103	19	13	1	4	37
		Out	79	13	1	168	27	52	1	0	74	415	65	13	1	4	83
		Total	104	18	2	203	31	66	1	0	93	518	84	26	2	8	120

Table 10-5
Trip Generation Summary – Net Incremental Trips

Program	Peak Hour	In/Out	Person Trip										Vehicle Trip				
			Auto	Taxi	Ambulette	Subway	Railroad	Bus	Ferry	Bicycle	Walk	Total	Auto	Taxi	Ambulette	Delivery	Total
Total	AM	In	59	6	0	114	23	37	1	-2	41	279	50	-4	0	7	53
		Out	-15	-13	0	-86	0	-17	0	-4	-70	-205	-12	-4	0	7	-9
		Total	44	-7	0	28	23	20	1	-6	-29	74	38	-8	0	14	44
	Midday	In	12	0	1	-27	0	-1	0	-2	26	9	4	-5	1	6	6
		Out	3	-2	1	-31	0	-6	0	-2	83	46	-1	-5	1	6	1
		Total	15	-2	2	-58	0	-7	0	-4	109	55	3	-10	2	12	7
	PM	In	11	-4	1	-35	3	0	0	-3	-35	-62	7	2	1	4	14
		Out	59	5	1	99	22	35	1	-3	30	249	47	2	1	4	54
		Total	70	1	2	64	25	35	1	-6	-5	187	54	4	2	8	68

LEVEL 1 SCREENING

TRAFFIC

As shown in **Table 10-5**, the incremental trips generated by the Proposed Project would be 44, 7, and 68 vehicle trips during the weekday AM, midday, and PM peak hours, respectively, independent of the parking garage exit diversion volumes described above. The incremental vehicle trips would be greater than 50 vehicle trips during the weekday PM peak hour. The 32 and 30 vehicles per hour that would be reassigned due to the existing parking garage exit relocation combined with the 44 and 7 vehicles per hour of net trip generation increments combined have been evaluated against the street directions and using the Level 2 assessment of the PM peak hour, and would not result in 50 or more vehicles per hour at any intersections during the AM and midday peak hours. Therefore, a Level 2 screening assessment (presented in the section below) has been conducted for the weekday PM peak hour using the incremental trips generated by the project and existing parking garage exit diversion trips to determine if a quantified traffic analysis is warranted.

TRANSIT

As shown in **Table 10-5**, the incremental subway trips generated by the Proposed Project would be 28, -58, and 64 person trips by subway during the weekday AM, midday, and PM peak hours, respectively. Since these increments do not exceed the *CEQR Technical Manual* analysis threshold of 200 or more peak-hour subway trips, a detailed analysis of subway facilities or line-haul conditions is not warranted, and the Proposed Project is not expected to result in any significant adverse subway impacts.

Also shown in **Table 10-5**, the incremental bus trips generated by the Proposed Project would be 20, -7, and 35 person trips by bus during the weekday AM, midday, and PM peak hours, respectively. These incremental bus trips would not exceed the *CEQR Technical Manual* analysis threshold of 50 or more peak-hour bus riders. Therefore, a detailed bus line-haul analysis is also not warranted, and the Proposed Project is not expected to result in any significant adverse bus line-haul impacts.

The incremental railroad trips generated by the Proposed Project would be 23, 0, and 25 trips during the weekday AM, midday, and PM peak hours. These incremental rail trips are below the *CEQR Technical Manual* analysis thresholds of 200 or more peak hour rail trips; therefore, a detailed rail analysis is not warranted, and the Proposed Project would not result in any significant adverse rail impacts.

CITYWIDE FERRY SERVICE

The incremental ferry trips generated by the Proposed Project would be 1, 0, and 1 trips during the weekday AM, midday, and PM peak hours. The incremental ferry trips would be below the *CEQR Technical Manual* analysis threshold of 50 or more peak hour ferry passengers. Therefore, a detailed ferry landing or line-haul analysis is not warranted, and the Proposed Project would not result in any significant adverse ferry impacts.

PEDESTRIANS

All incremental person trips generated by the Proposed Project would traverse the pedestrian elements (i.e., sidewalks, corners, and crosswalks) surrounding the Development Site. As shown

in **Table 10-5**, the net incremental pedestrian trips generated by the Proposed Project would be 74, 55, and 187 person trips during the weekday AM, midday, and PM peak hours, respectively. Since the incremental pedestrian trips would not exceed the *CEQR Technical Manual* analysis threshold of 200 peak hour pedestrian trips during any peak hour, a detailed pedestrian analysis is not warranted, and the Proposed Project would not result in any significant adverse pedestrian impacts.

LEVEL 2 SCREENING ASSESSMENT

As part of the Level 2 screening assessment, project generated trips were assigned to specific intersections, transit facilities, and pedestrian elements near the Development Site. The *CEQR Technical Manual* states that further quantified analyses to assess the potential impacts of the Proposed Project on the transportation system may be warranted if the trip assignments were to identify key intersections incurring 50 or more peak hour vehicle trips or pedestrian elements incurring 200 or more peak hour pedestrian trips.

SITE ACCESS AND EGRESS

For the Development Site under the With Action condition, the doors would be located on East 67th and East 66th Streets just off York Avenue and the through-block driveway. The entrance to the one-way northbound driveway would be through a new curb cut on East 66th Street and the exit would be through a new curb cut on East 67th Street. The main garage entrance for patients and visitors to the campus (with the exception of MSK Pavilion) would be on East 66th Street, similar to the No Action condition, but the exit would be relocated to East 67th Street. Patients and visitors of the MSK Pavilion would be directed to use the through-block driveway for auto, taxi, and ambulette drop-offs. Vehicles exiting the through-block driveway seeking parking would enter the garage via the new garage curb cut on East 67th Street. There would be separate entering and exiting lanes at the East 67th Street curb cut for the garage. If a patient or visitor of MSK Pavilion has parked at the garage, their outbound trip would originate within the garage since direct access between the two areas would be provided. There would be a total of four service bays (including three loading docks): three on East 67th Street, which would be accessed via two new curb cuts, and one on East 66th Street (also accessed via a new curb cut). The service bay on East 66th Street is being contemplated for either an ambulance dock for the occasional use by full-sized ambulance drop-offs or pick-ups of patients, or potentially to separate clean and soiled materials between the East 66th Street and East 67th Street service bays. The default assumption for the purpose of transportation assessments in this chapter is that the service bay on East 66th Street would be used as an ambulance bay. In Section E, "Detailed Traffic Analysis," its potential use as a clean bay as an option is described. Both options are analyzed to maintain operational flexibility as the project evolves.

TRAFFIC

The most likely routes to and from the Development Site, prevailing travel patterns, commuter origin-destination (O-D) summaries from the census data, the configuration of the roadway network, and the anticipated locations of site access and egress, including the proposed relocation of the parking garage exit from East 66th Street to East 67th Street, were examined to develop trip assignment patterns. Because the on-site accessory parking spaces only serve the patients and visitors on a valet basis, auto trips generated by other uses are assumed to find parking at other available off-street parking resources in the study area. Auto trips generated by the With Action land uses that would be permitted to access the garage (inpatient and ambulatory patients and

visitors, totaling 8 vehicles per hour during the weekday PM peak hour entering the garage) have been assigned to drop off patients in the through-block driveway before entering the garage on East 67th Street; those With Action autos exiting the garage on East 67th Street would not return to the through-block driveway since there would be connections to the MSK Pavilion within the garage. Taxi and ambulette trips were assigned to the through-block driveway. And delivery trips were assigned to the Development Site's loading docks via DOT-designated truck routes. Since the service bay on East 66th Street may be used as an ambulance dock, all delivery trips have been assigned to the loading dock on East 67th Street. Traffic assignments for the autos, taxis, ambulettes, and deliveries for the various development uses are discussed below.

Residential

Auto trips generated by the No Action residential use were assigned to the surrounding roadway network based on the 2012–2016 U.S. Census ACS JTW O-D estimates. Many of the residential trips would be traveling to work destinations within the local region of Manhattan (46 percent), with the remaining trips traveling to Long Island (17 percent), Upstate New York (14 percent), New Jersey (12 percent), Brooklyn (6 percent), Pennsylvania (4 percent), and Connecticut (1 percent). Auto vehicle trips were assigned to the available off-site parking garages.

Office

Auto trips generated by the No Action office uses were assigned to the surrounding roadway network based on the 2012–2016 U.S. Census ACS RJTW O-D estimates. The Auto trips would originate from New Jersey (19 percent), Queens (18 percent), Upstate New York (16 percent), Long Island (15 percent), the Bronx (10 percent), Brooklyn (9 percent), within the local region of Manhattan (7 percent), Staten Island (3 percent), Connecticut (2 percent), and Pennsylvania (1 percent) and were assigned to the off-site parking garages.

Inpatient and Ambulatory Staff

Auto trips generated by the proposed inpatient and ambulatory staff were assigned to the surrounding roadway network based on the 2012–2016 U.S. Census ACS RJTW O-D estimates. The Auto trips would originate from New Jersey (19 percent), Queens (18 percent), Upstate New York (16 percent), Long Island (15 percent), the Bronx (10 percent), Brooklyn (9 percent), within the local region of Manhattan (7 percent), Staten Island (3 percent), Connecticut (2 percent), and Pennsylvania (1 percent) and were assigned to the available off-site parking garages.

Inpatient and Ambulatory Patients and Visitors

Auto trips generated by the proposed inpatient and ambulatory patients and visitors were generally assigned from local origins within the neighborhood and adjacent residential areas. Approximately 35 percent of vehicle trips would originate from north of the site, 35 percent of vehicle trips would originate from south of the site, and 30 percent of vehicle trips would originate from west of the site. Entering auto vehicle trips were assigned to the on-site accessory parking garage entrance on East 67th Street after traversing the through-block driveway, and exiting auto vehicle trips were assigned to exit the garage onto East 67th Street.

Taxis

Taxi pick-ups and drop-offs for residential and office use under the No Action condition were assigned to the building frontages along East 67th Street and York Avenue adjacent to the building entrances. Taxi trips generated by the Proposed Project would be directed to pick up and drop off passengers along the internal through-block driveway.

Ambulettes

Ambulettes generated by the Proposed Project would be directed to pick up and drop off patients along the internal through-block driveway.

Deliveries

Truck delivery trips for the various development uses were assigned based on DOT-designated truck routes and are expected to take place at the loading dock accessed from East 67th Street.

Summary

According to the *CEQR Technical Manual*, intersections expected to incur 50 or more incremental peak hour vehicle trips as a result of a proposed project would have the potential for significant adverse traffic impacts and should be assessed in a quantified traffic impact analysis. **Figure 10-2** shows the No Action project-generated vehicle trips for the weekday PM peak hour assigned to the traffic network. **Figure 10-3** shows the Proposed Project's project-generated vehicle trips including existing parking garage exit diversions from East 66th Street to East 67th Street for the PM peak hour assigned to the traffic network. **Figure 10-4** shows the incremental vehicle trips for the same peak hour and includes existing parking garage exit diversions from East 66th Street to East 67th Street. As summarized in **Table 10-6** and shown in **Figure 10-4**, two intersections would incur 50 or more incremental vehicle trips because of the Proposed Project and are recommended for detailed traffic analysis. Since detailed traffic analysis is warranted, assessments of parking demand and supply and street user safety within the area are also warranted and will be presented in the EIS.

Table 10-6
Traffic Level 2 Screening Analysis Results—Recommended Analysis Locations

Intersection	Incremental Vehicle Trips (Weekday) PM	Recommended Analysis Locations
Fifth Avenue and E 67th Street	11	
Park Avenue and E 67th Street	11	
Lexington Avenue and E 67th Street	22	
Lexington Avenue and E 63rd Street	10	
Third Avenue and E 67th Street	26	
Second Avenue and E 67th Street	52	✓
Second Avenue and E 64th Street	11	
Second Avenue and E 63rd Street	13	
First Avenue and E 72nd Street	12	
First Avenue and E 67th Street	51	✓
First Avenue and E 64th Street	12	
York Avenue and E 70th Street	12	
York Avenue and E 69th Street	12	
York Avenue and E 66th Street	25	
York Avenue and E 65th Street	14	
York Avenue and E 64th Street	20	
York Avenue and E 63rd Street	20	
FDR Drive and E 63rd Street	17	
FDR Drive and E 62nd Street	16	

Notes:
✓ denotes intersection recommended for the detailed traffic analysis.
Intersections with fewer than 10 Incremental Vehicle Trips are not presented in this table.

1.30.24

EAST 72 STREET
EAST 71 STREET
EAST 70 STREET
EAST 69 STREET
EAST 68 STREET
EAST 67 STREET
EAST 66 STREET
EAST 65 STREET
EAST 64 STREET
EAST 63 STREET

MADISON AVENUE
PARK AVENUE
LEXINGTON AVENUE
3 AVENUE
2 AVENUE
1 AVENUE
YORK AVENUE
FDR DRIVE

N

0 400 FEET

Project Area

Development Site

Off-Site Garages

On-Site Garage/Drive Thru

MSK PAVILION

No Action Project Generated Vehicle Trips
Weekday PM Peak Hour

Figure 10-2

1.30.24

EAST 72 STREET
EAST 71 STREET
EAST 70 STREET
EAST 69 STREET
EAST 68 STREET
EAST 67 STREET
EAST 66 STREET
EAST 65 STREET
EAST 64 STREET
EAST 63 STREET

MADISON AVENUE
PARK AVENUE
LEXINGTON AVENUE
3 AVENUE
2 AVENUE
1 AVENUE
YORK AVENUE
FDR DRIVE

N

0 400 FEET

Project Area

Development Site

Off-Site Garages

On-Site Garage/Drive Thru

MSK PAVILION

With Action Project Generated Vehicle Trips
Weekday PM Peak Hour

Figure 10-3

1.30.24

EAST 72 STREET
EAST 71 STREET
EAST 70 STREET
EAST 69 STREET
EAST 68 STREET
EAST 67 STREET
EAST 66 STREET
EAST 65 STREET
EAST 64 STREET
EAST 63 STREET

MADISON AVENUE
PARK AVENUE
LEXINGTON AVENUE
3 AVENUE
2 AVENUE
1 AVENUE
YORK AVENUE
FDR DRIVE

N

0 400 FEET

Project Area

Development Site

Off-Site Garages

On-Site Garage/Drive Thru

MSK PAVILION

With Action Incremental Vehicle Trips
Weekday PM Peak Hour

Figure 10-4

D. TRANSPORTATION ANALYSIS METHODOLOGIES

TRAFFIC OPERATIONS

The operations of the intersections in the study area were assessed using methodologies presented in the *2000 Highway Capacity Manual (HCM)* using the *Highway Capacity Software (HCS+ 5.5)*. The study area consists of two intersections which are both signalized. The *HCM* procedure evaluates the levels of service (LOS) for signalized intersections using average stop control delay, in seconds per vehicle, as described below.

SIGNALIZED INTERSECTIONS

The average control delay per vehicle is the basis for LOS determination for individual lane groups (grouping of movements in one or more travel lanes), the approaches, and the overall intersection. The levels of service are defined in **Table 10-7**.

Table 10-7
Level of Service Criteria for Signalized Intersections

LOS	Average Control Delay
A	≤ 10.0 seconds
B	>10.0 and ≤ 20.0 seconds
C	>20.0 and ≤ 35.0 seconds
D	>35.0 and ≤ 55.0 seconds
E	>55.0 and ≤ 80.0 seconds
F	>80.0 seconds

Source: Transportation Research Board. *Highway Capacity Manual*, 2000.

Although the HCM methodology calculates a volume-to-capacity (v/c) ratio, there is no strict relationship between v/c ratios and LOS as defined in the *HCM*. A high v/c ratio indicates substantial traffic passing through an intersection, but a high v/c ratio combined with low average delay actually represents the most efficient condition in terms of traffic engineering standards, where an approach or the whole intersection processes traffic close to its theoretical maximum capacity with minimal delay. However, very high v/c ratios—especially those approaching or greater than 1.0—are often correlated with a deteriorated LOS. Other important variables affecting delay include cycle length, progression, and green time. LOS A and B indicate good operating conditions with minimal delay. At LOS C, the number of vehicles stopping is higher, but congestion is still fairly light. LOS D describes a condition where congestion levels are more noticeable and individual cycle failures (a condition where motorists may have to wait for more than one green phase to clear the intersection) can occur. Conditions at LOS E and F reflect poor service levels, and cycle breakdowns are frequent. The *HCM* methodology also provides for a summary of the total intersection operating conditions. The analysis chooses the two critical movements (the worst case from each roadway) and calculates a summary critical v/c ratio. The overall intersection delay, which determines the intersection's LOS, is based on a weighted average of control delays of the individual lane groups. Within New York City, LOS D or better (average control delay less than or equal to 55.0 seconds of delay) is considered as acceptable operations.

Significant Impact Criteria

According to the criteria presented in the *CEQR Technical Manual*, impacts are considered significant and require examination of mitigation if they result in an increase in the With Action condition of 5 or more seconds of delay in a lane group over No Action levels within LOS E. For No Action LOS F, a 4-second increase in delay is considered significant. In addition, impacts are considered significant if levels of service deteriorate from acceptable A, B, C, or D in the No Action condition to unacceptable LOS E or F in the With Action condition.

VEHICULAR AND PEDESTRIAN SAFETY EVALUATION

An evaluation of vehicular and pedestrian safety is necessary for intersections where project-generated trips are expected to traverse that have been identified as high crash locations, at a Vision Zero priority intersection or where five or more pedestrian/bicyclist injury crashes occurred in any consecutive 12 months of the most recent 3-year period for which data are available. Additionally, any location along a Vision Zero priority corridor where three or more pedestrian/bicyclist injury crashes occurred in any consecutive 12 months of the most recent 3-year period should also be identified as a high crash location. For these locations, crash trends are identified to determine whether projected vehicular and pedestrian traffic would further impact safety at these locations. The determination of potential significant safety impacts depends on the type of area where the project site is located, traffic volumes, accident types and severity, and other contributing factors.

E. DETAILED TRAFFIC ANALYSIS

As described above in Section C, "Preliminary Analysis Methodology and Screening Assessment," two intersections have been selected for analysis in the weekday PM peak hour.

EXISTING CONDITIONS

ROADWAY NETWORK AND TRAFFIC STUDY AREA

The key roadways in the study area include Second Avenue, First Avenue, and East 67th Street. The physical and operational characteristics of the study area roadways are as follows:

- Second Avenue is a one-way southbound roadway that operates between the Bowery and East Harlem neighborhoods. Within the study area it operates with three moving lanes, a protected bike lane, and one bus only lane with a curb-to-curb width of approximately 60 feet. Curbside parking is available along the east side of the street. The M15 and M15-SBS bus routes operate along Second Avenue.
- First Avenue is a one-way northbound roadway that operates between the Bowery and East Harlem neighborhoods. Within the study area it operates with four moving lanes, a protected bike lane, and one bus only lane with a curb-to-curb width of approximately 70 feet. Curbside parking is not available along both sides of the street. The M15 and M15-SBS bus routes operate along First Avenue.
- East 67th Street is a local roadway that operates one-way westbound between York Avenue and Fifth Avenue with a curb-to-curb width of approximately 30 feet. Curbside parking is available along the south side of the street adjacent to the Development Site.

TRAFFIC CONDITIONS

Traffic data were collected in November 2022 for the weekday PM peak period via a combination of video intersection counts and 24-hour Automatic Traffic Recorder (ATR) counts. Existing peak period traffic volumes were developed based on these counts. For analysis, the highest peak hour traffic volumes (from 6:00 PM to 7:00 PM) during the PM peak period based on the collected data was used. As directed by DOT, data collected after September 2022 does not need to be compared and calibrated against historical data collected prior to the COVID-19 pandemic.

Inventories of roadway geometry, traffic controls, bus stops, and parking regulations/activities were recorded to provide appropriate inputs for the operational analyses. Official signal timings were also obtained from DOT for use in the analysis of the study area signalized intersections. **Figure 10-5** shows the existing traffic volumes for the weekday PM peak hour.

LEVELS OF SERVICE

A summary of the existing conditions traffic analysis results is presented in **Table 10-8**. Details on level-of-service, v/c ratios, and average delays are presented in **Table 10-9**. The capacity analysis indicates that all of the study area's intersection approaches/lane groups operate acceptably—at LOS D or better (delays of 55 seconds or less per vehicle for signalized intersections and 35 seconds or less per vehicle for unsignalized intersections)—during both analysis peak hours.

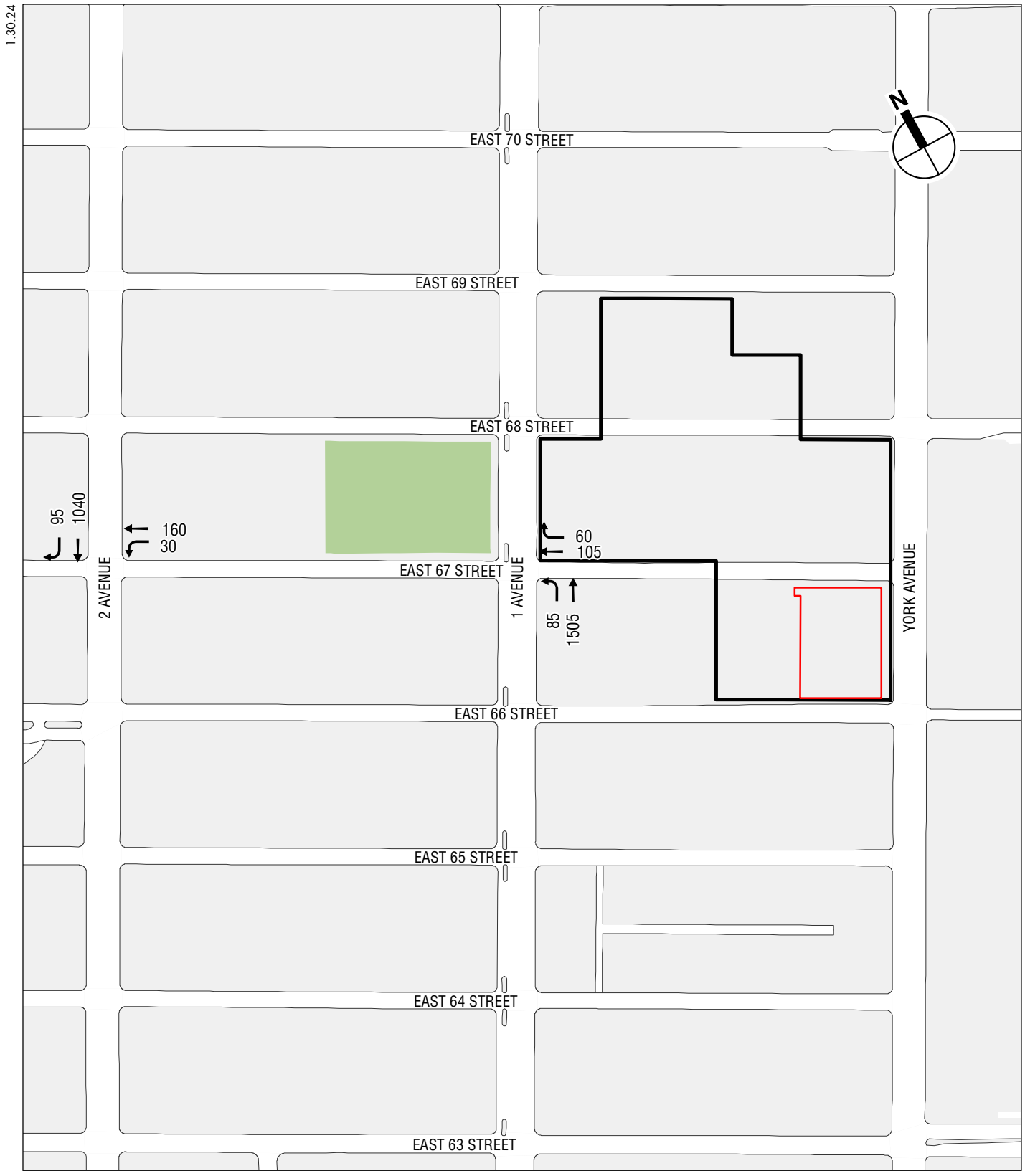
Table 10-8
Existing Conditions Traffic Analysis Results

Level of Service	Analysis Peak Hour Weekday PM
Signalized Intersections	
Lane Groups at LOS A/B/C	5
Lane Groups at LOS D	1
Lane Groups at LOS E	0
Lane Groups at LOS F	0
Total	6
Lane Groups with v/c ≥ 0.90	0

Table 10-9
Existing Conditions Level of Service Analysis

Approach	Weekday PM			
	Lane Group	v/c Ratio	Delay (sec)	LOS
First Avenue & E 67th Street				
Westbound	TR	0.55	32.4	C
Northbound	L	0.21	13.1	B
	T	0.62	16.9	B
	Intersection		18.3	B
Second Avenue & E 67th Street				
Westbound	LT	0.52	40.8	D
Southbound	T	0.57	19.2	B
	R	0.35	18.6	B
	Intersection		22.7	C

Notes: L = Left Turn, T = Through, R = Right Turn, LOS = Level of Service



2022 Existing Traffic Volumes
Weekday PM Peak Hour

MSK PAVILION

Figure 10-5

THE FUTURE WITHOUT THE PROPOSED PROJECT

The No Action condition was developed by increasing existing traffic levels by the expected growth in overall travel through and within the study area. As per *CEQR Technical Manual* guidelines, an annual background growth rate of 0.25 percent was assumed for the years 2023 through 2027 and an annual background growth rate of 0.125 percent was assumed for the years 2028 through 2030. There are ~~three~~ four background development projects expected to occur in the No Action condition (No Build projects) within a ¼-mile study area of the Proposed Project by the 2030 build year. The ~~three~~ four development projects are located at 403 East 65th Street, 537 East 71st Street, 242 East 71st Street, and 310 East 67th Street, which would construct an approximately 30,000 gsf (150-seat) pre-k school, an approximately 94,000 gsf hospital expansion with inpatient services, a mixed used building with approximately 134 dwelling units and 8,585 gsf retail, and a new building for the New York Blood Center (approximately 206,400 gsf medical office community facility and 389,800 gsf of commercial lab space), respectively.

TRAFFIC OPERATIONS

The No Action condition traffic volumes are shown in **Figure 10-6** for the weekday PM peak hour. The No Action condition traffic volumes were projected by layering the background growth and trips generated by the three discrete no build projects that would generate trips during the weekday PM peak hour at 537 East 71st Street, 242 East 71st Street, and 310 East 67th Street on top of the existing traffic volumes (the pre-k school at 403 East 65th Street is not anticipated to generate a meaningful number of trips during the weekday PM peak hour). A summary of the 2030 No Action condition traffic analysis results is presented in **Table 10-10**. Details on level-of-service, v/c ratios, and average delays are presented in **Table 10-11**.

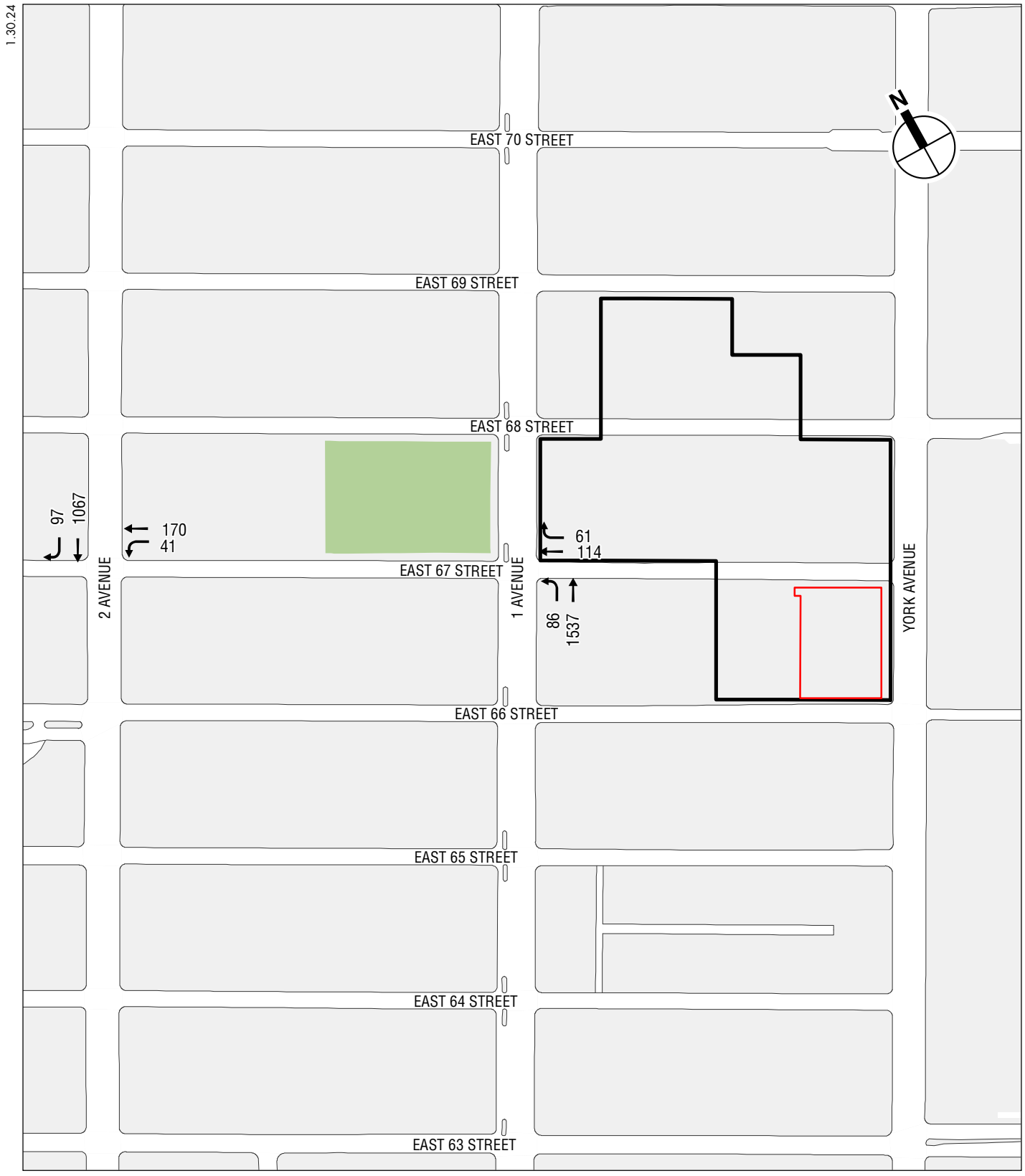
Table 10-10
2030 No Action Traffic Analysis Results

Level of Service	Analysis Peak Hour Weekday PM
Signalized Intersections	
Lane Groups at LOS A/B/C	5
Lane Groups at LOS D	1
Lane Groups at LOS E	0
Lane Groups at LOS F	0
Total	**6**
Lane Groups with v/c ≥ 0.90	0

Table 10-11
Existing and 2030 No Action Conditions Level of Service Analysis

Approach	Weekday PM							
	2022 Existing				2030 No Action			
	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS
First Avenue and East 67th Street								
Westbound	TR	0.55	32.4	C	TR	0.58	33.4	C
Northbound	L	0.21	13.1	B	L	0.22	13.1	B
	T	0.62	16.9	B	T	0.83	23.0	C
	Intersection		18.3	B	Intersection		23.6	C
Second Avenue and East 67th Street								
Westbound	LT	0.52	40.8	D	LT	0.58	42.4	D
Southbound	T	0.57	19.2	B	T	0.58	19.5	B
	R	0.35	18.6	B	R	0.36	18.9	B
	Intersection		22.7	C	Intersection		23.4	C

Notes: L = Left Turn, T = Through, R = Right Turn, LOS = Level of Service



2030 No Action Traffic Volumes
Weekday PM Peak Hour

MSK PAVILION

Figure 10-6

Based on the analysis results presented in **Table 10-12**, all of the approaches/lane-groups will operate at the same LOS as in the existing conditions or within LOS D or better (delays of 55 seconds or less per vehicle for signalized intersections and 35 seconds or less per vehicle for unsignalized intersections) for both peak hours.

Table 10-12
2030 With Action Traffic Analysis Results

Level of Service	Analysis Peak Hour Weekday PM
Signalized Intersections	
Lane Groups at LOS A/B/C	4
Lane Groups at LOS D	2
Lane Groups at LOS E	0
Lane Groups at LOS F	0
Total	6
Lane Groups with v/c ≥ 0.90	0

PROBABLE IMPACTS OF THE PROPOSED PROJECT

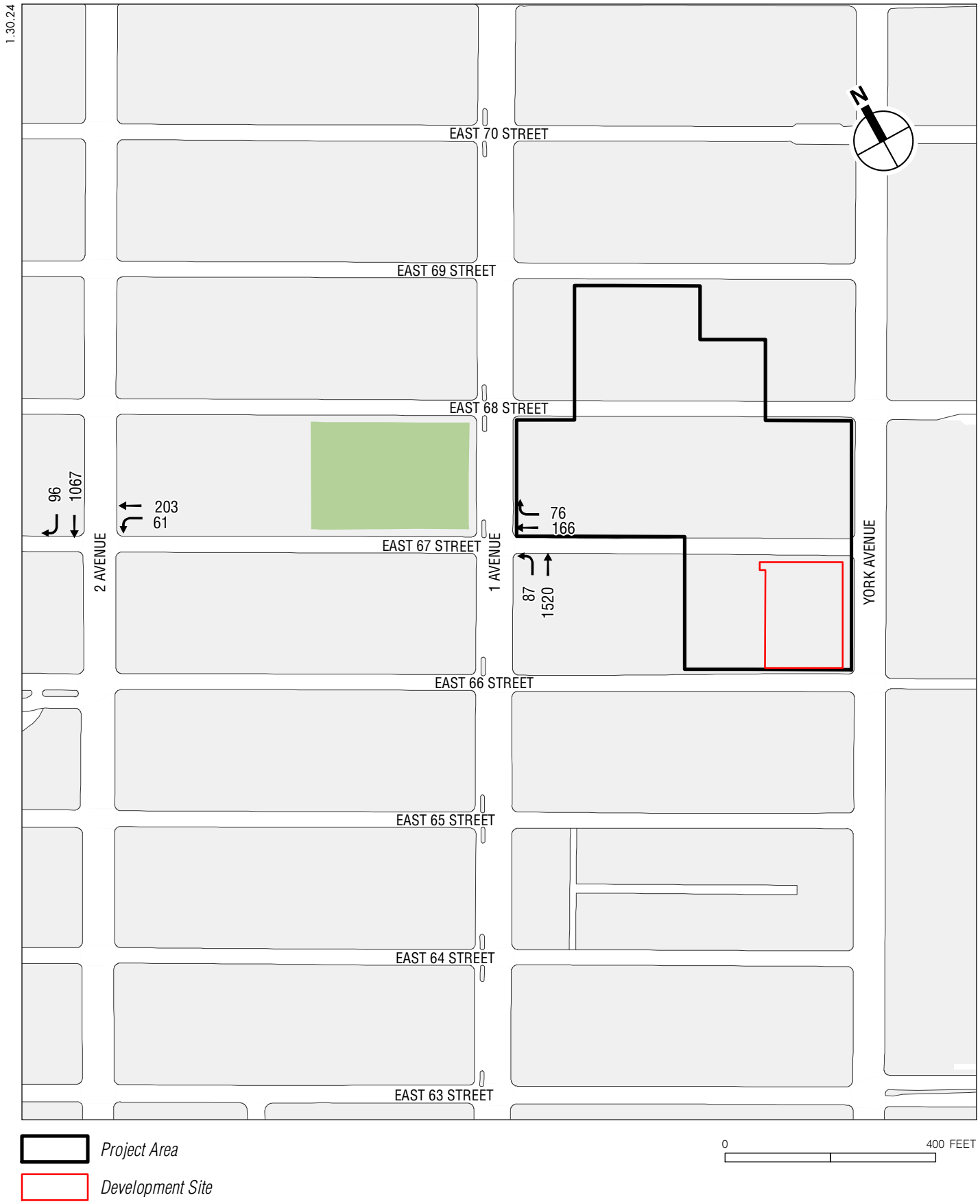
In the With Action condition, the Scholars and Sloan buildings on Lot 21 would be replaced with a new 31-story, approximately 901,697-gsf primarily inpatient hospital building for MSKCC's exclusive use. It would have a population of 753 average weekday daily inpatient staff members, 648 average weekday daily inpatients and inpatient visitors, 84 average weekday daily ambulatory care staff, and 72 average weekday daily ambulatory care patients/visitors.

Adjacent to RRL the Proposed Project would create an internal through-block driveway running one-way from East 66th Street to East 67th Street. The driveway and related pedestrian features would provide covered access to the Proposed Project. There would also be doors to the Proposed Project lobby on East 66th and East 67th Streets near the corners of York Avenue with increased corner circulation areas due to the set-back entrances and building façade of the lobby.

The below-grade garage would continue to have a total of 263 accessory parking spaces but would have an optimized layout, improved valet operations, additional reservoir spaces, and a relocated exit to separate entering and exiting traffic between the two cross streets. The same number of vehicles as today would enter the garage on East 66th Street. A small number of additional vehicles generated by the MSK Pavilion would enter the garage on East 67th Street after exiting the through-block driveway. All vehicles leaving the garage or MSK Pavilion through-block driveway would use East 67th Street. The RRL building would remain on the adjacent Lot 13 and a small portion of Lot 21 and there would be no redevelopment on that site other than for modifications to the below-grade garage, which would also provide new connections to the MSK Pavilion. There are no programmatic changes proposed for the RRL building; however, it would lose a small amount of ground floor space to accommodate the new garage ramp on East 67th Street. Since there would be no changes to the programming or population of the RRL building as part of the Proposed Project, no changes to travel demand are anticipated for that building.

TRAFFIC OPERATIONS

The 2030 With Action condition traffic volumes are shown in **Figure 10-7** for the weekday PM peak hour. The 2030 With Action traffic volumes were prepared by subtracting the existing/No Action project-generated trips (see **Table 10-3**) and layering on top of the No Action condition traffic volumes the incremental vehicle trips shown in **Figures 10-2 and 10-3** and the garage exit



2030 With Action Traffic Volumes
Weekday PM Peak Hour

MSK PAVILION

Figure 10-7

diversion described above in Section C, "Preliminary Analysis Methodology and Screening Assessment." A summary of the 2030 With Action condition traffic analysis results is presented in **Table 10-12**. Details on level-of-service, volume-to-capacity (v/c) ratios, and average delays are presented in **Table 10-13**.

Table 10-13
2030 No Action and With Action Conditions Level of Service Analysis

	Weekday PM							
	2030 No Action				2030 With Action			
Approach	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS
First Avenue and East 67th Street								
Westbound	TR	0.58	33.4	C	TR	0.79	45.1	D
Northbound	L	0.22	13.1	B	L	0.22	13.2	B
	T	0.83	23.0	C	T	0.82	22.6	C
	Intersection		23.6	C	Intersection		25.3	C
Second Avenue and East 67th Street								
Westbound	LT	0.58	42.4	D	LT	0.73	50.2	D
Southbound	T	0.58	19.5	B	T	0.58	19.5	B
	R	0.36	18.9	B	R	0.36	18.9	B
	Intersection		23.4	C	Intersection		25.8	C

Notes: L = Left Turn, T = Through, R = Right Turn, LOS = Level of Service
+ Denotes an increase in delay that exceeds the *CEQR Technical Manual* significant adverse impact threshold

As presented in **Table 10-13**, the Proposed Project would not result in any intersections incurring additional delays exceeding the *CEQR Technical Manual* significant adverse impact threshold during the weekday PM peak hour and would not result in any significant adverse traffic impacts.

The Applicant would establish a Transportation Monitoring Plan (TMP) for the weekday AM, midday, and PM peak hours at the proposed entrances to the through-block driveway and garage on East 66th Street and East 67th Street and the traffic analysis locations at First Avenue and East 67th Street and Second Avenue and East 67th Street, as well as a TMP during the construction AM and construction PM peak hours at selected construction scenario traffic analysis locations. The TMP would document any queuing at the proposed entrances to the through-block driveway and garage on East 66th Street and East 67th Street. The purpose of the TMP would be to confirm the accuracy of the With Action trip generation and vehicle trip assignment assumptions, taking into consideration other planned or approved projects and changes to background conditions not anticipated in the FEIS.

The TMP would include a detailed trip generation survey, in addition to data collection and traffic and pedestrian analyses. To potentially improve traffic conditions where a partially mitigated impact at York Avenue and East 63rd Street and an unmitigated impact at the FDR Drive Southbound Service Road and East 62nd Street during the construction 3-4 PM peak hour has been identified in the FEIS, the TMP would introduce a two-week pilot during construction to add 3-4 PM to the existing hours of the Traffic Enforcement Agent (TEA) already at York Avenue and East 63rd Street and a new TEA presence at the FDR Drive Southbound Service Road and East 62nd Street from 3-4 PM. The Applicant would coordinate with DOT at the end of the two-week pilot to determine whether TEAs should be continued at those locations. The scope of work for the TMP would be developed by the Applicant, submitted to DOT for review and approval, and undertaken by the Applicant during construction and then again within a year following the Proposed Project's full occupancy. The Applicant would be responsible for all costs associated with the TMP and any subsequent improvements measures, including any improvements to

address issues at the proposed entrances to the through-block driveway and garage on East 66th Street and East 67th Street, recommended as part of the TMP.~~The Applicant would establish a traffic monitoring plan (TMP) at the proposed entrances to the through-block driveway and garage on East 66th Street and East 67th Street and the traffic analysis locations at First Avenue and East 67th Street and Second Avenue and East 67th Street to be undertaken within a year following the Proposed Project's full occupancy. The Applicant, prior to performing any TMP, would submit a scope of work for DOT review and approval. The TMP would document any queuing at the proposed entrances to the through-block driveway and garage on East 66th Street. The purpose of the TMP would be to confirm the accuracy of the With-Action trip generation and vehicle trip assignment assumptions, taking into consideration other planned or approved projects and changes to background conditions not anticipated in the DEISFEIS. Should DOT conclude that the above analysis demonstrates that any queuing at the proposed entrances to the through-block driveway and garage on East 66th Street is occurring, the Applicant would cooperate with DOT to assess improvements to address these conditions.~~

OPTIONAL USE OF EAST 66TH STREET FOR CLEAN BAY

For transportation assessment purposes, the default assumption for the use of the service bay on East 66th Street would be as an ambulance bay. An optional use would be to use it as a clean bay so that incoming clean materials can be separated from outgoing soiled materials. The steps previously described under Section C, "Preliminary Analysis Methodology and Screening Assessment" and Section D, "Transportation Analysis Methodologies" have been applied to this option, which would only affect transportation operations and would have no noticeable effects on other technical areas assessed in the ~~DEIS~~FEIS. This option would maintain operational flexibility as the project evolves.

For the clean bay option, the delivery trip assignments were revised to assign two of the four in and out delivery vehicles in the PM peak hour to East 66th Street to represent clean bay trips, with the remaining delivery trips assigned to East 67th Street. No ambulance trips would be generated by the Proposed Project, but some ambulances are expected to use the East 66th Street service bay assuming it is to operate as an ambulance bay; however, there would be zero to one ambulance trips to service bay during peak hours. Under the clean bay option, the ambulances that were assumed to use the service bay would continue to service the Applicant's needs elsewhere on its campus. The results of the revised trip assignments for the clean bay option are similar to the default assumption (use of East 66th Street as an ambulance bay). In the clean bay option, no additional intersections would incur peak hour vehicle trips exceeding *CEQR Technical Manual* screening assessment thresholds and no intersections analyzed for the default assumption would incur additional delays exceeding the *CEQR Technical Manual* significant adverse impact thresholds. Therefore, the optional use of East 66th Street for a clean bay would have no different effect on transportation operations compared to the default assumption of its use as an ambulance bay.

F. STREET USER SAFETY EVALUATION

Crash data for the study area intersections were obtained from DOT for the time period between January 1, 2017 and December 31, 2019. The data obtained quantify the total number of reportable crashes (involving fatality, injury, or more than $1,000 in property damage), fatalities, and injuries during the study period, as well as a yearly breakdown of vehicular crashes with pedestrians and bicycles at each location.

During this period, a total of 962 reportable and non-reportable crashes, zero fatalities, 345 injuries, and 155 pedestrian/bicyclist-related crashes occurred at the study area intersections. A rolling total of the crash data and a review of the Vision Zero priority intersections and corridors identified nineteen high crash locations in the 2017 to 2019 period, at intersections along Second Avenue, First Avenue, and York Avenue between East 63rd Street and East 73rd Street. **Table 10-14** depicts total crash characteristics by intersection during the study period, as well as a breakdown of pedestrian and bicycle crashes by year and location. **Table 10-15** shows a detailed description of each pedestrian/bicycle-related crash at the high crash locations during the three-year period. As detailed below for each high crash location, most incidents were attributed to inattentiveness and failure to yield by motorists, as well as pedestrians and bicyclists.

Table 10-14
Crash Summary

Intersection		Study Period						Crashes by Year						
		All Crashes by Year						Pedestrian			Bicycle			
North-South Roadway	East-West Roadway	2017	2018	2019	All Crashes Highest 12- Month Rolling	Total Fatalities	Total Injuries	2017	2018	2019	2017	2018	2019	Ped + Bike 12 consecutive month maximum
Second Avenue	**E 63rd Street**	16	39	35	45	0	26	1	1	3	0	1	0	4
Second Avenue	**E 64th Street**	3	9	9	14	0	6	0	1	1	1	1	0	3
Second Avenue	**E 65th Street**	2	13	11	16	0	7	0	1	1	0	0	1	3
Second Avenue	**E 66th Street**	7	9	9	11	0	12	0	0	3	2	3	1	4
Second Avenue	E 67th Street	3	3	4	6	0	8	1	1	0	1	0	1	2
Second Avenue	E 68th Street	2	3	3	4	0	5	0	1	0	1	0	1	2
Second Avenue	E 69th Street	0	2	5	6	0	1	0	0	1	0	0	0	1
Second Avenue	E 70th Street	2	11	7	12	0	3	0	0	0	1	1	0	1
Second Avenue	**E 71st Street**	3	6	7	7	0	8	1	2	0	1	2	1	5
Second Avenue	**E 72nd Street**	8	12	14	15	0	14	2	2	0	2	0	0	5
First Avenue	**E 62nd Street**	16	38	23	40	0	36	7	6	2	1	2	1	9
First Avenue	E 63rd Street	3	12	4	12	0	11	0	2	1	1	0	0	2
First Avenue	E 64th Street	5	12	6	14	0	5	2	1	0	0	0	1	2
First Avenue	E 65th Street	2	6	6	8	0	1	0	0	0	0	0	0	0
First Avenue	E 66th Street	4	7	6	9	0	6	0	0	1	2	1	0	2
First Avenue	E 67th Street	7	10	7	15	0	10	0	0	0	0	0	0	0
First Avenue	**E 68th Street**	3	13	4	15	0	9	1	3	1	1	0	0	4
First Avenue	**E 69th Street**	4	6	8	8	0	7	0	0	4	0	0	0	4
First Avenue	**E 70th Street**	7	7	5	10	0	6	2	1	0	0	1	0	3
First Avenue	E 71st Street	3	8	8	9	0	5	0	0	0	0	0	2	2
First Avenue	**E 72nd Street**	9	6	8	14	0	11	2	0	0	3	0	0	5
First Avenue	E 73rd Street	3	7	9	10	0	8	0	0	0	1	1	2	2
York Avenue	**E 61st Street**	20	33	34	40	0	21	5	1	2	0	0	0	5
York Avenue	**E 62nd Street**	13	35	28	40	0	21	3	1	1	0	1	1	3
York Avenue	E 63rd Street	6	25	15	25	0	18	0	2	0	0	0	0	2
York Avenue	E 64th Street	4	9	5	10	0	6	0	0	0	0	0	0	0
York Avenue	E 65th Street	3	5	1	7	0	4	1	0	0	0	0	0	1
York Avenue	**E 66th Street**	5	3	3	6	0	4	1	0	0	2	0	1	3
York Avenue	E 67th Street	1	10	3	11	0	4	0	0	0	0	0	0	0
York Avenue	**E 68th Street**	5	8	6	9	0	8	1	3	1	0	0	0	3
York Avenue	E 69th Street	2	6	5	7	0	3	0	0	0	0	0	0	0
York Avenue	**E 70th Street**	5	16	9	17	0	11	2	3	2	0	0	0	4
York Avenue	**E 71st Street**	8	16	8	20	0	11	2	2	1	0	0	0	4
York Avenue	**E 72nd Street**	5	16	11	17	0	13	1	3	2	0	1	1	4
York Avenue	**E 73rd Street**	4	8	14	15	0	16	0	3	3	1	0	0	5

Notes: Bold text denotes high crash location, where there were five or more pedestrian/bicycle injury crashes in any consecutive 12-month period or intersections along a Vision Zero priority corridor with three or more pedestrian/bicycle injury crashes in any consecutive 12-month period.
All intersections listed are within the Vision Zero priority corridor.
Source: DOT January 1, 2017 to December 31, 2019 crash data.

Table 10-15
Vehicle and Pedestrian Crash Details

Intersection	Year	Date	Time	Crash Class		Action of Vehicle	Action of Pedestrian	Cause of Crash			
				Injured	Killed			Left/Right Turns	Pedestrian Error / Confusion	Driver Inattention	Other
Second Avenue and E 63rd Street	2017	4/26	18:17	X		Making Left Turn – South	Crossing, No Signal or Crosswalk	X			Unknown
	2018	4/5	7:35	X		Going Straight Ahead – South	Crossing, No Signal or Crosswalk		X		
		5/11	17:54	X		Changing Lanes – South	Unknown			X	Driver Inexperience
	2019	2/20	19:03	X		Going Straight Ahead – South	Crossing Against Signal		X		
		4/4	12:50	X		Making Left Turn – South	Crossing, No Signal or Crosswalk	X	X		
		5/28	5:03	X		Going Straight Ahead – West	Other Actions in Roadway			X	Driver Inexperience
Second Avenue and E 64th Street	2017	4/29	20:27	X		Slowed or Stopping – South	Unknown			X	Passenger Distraction
	2018	6/9	14:00	X		Making Left Turn – Southeast	Crossing with Signal	X		X	Failure to Yield Right of Way
		9/8	12:20	X		Going Straight Ahead – East	Unknown				Unknown
	2019	2/15	8:57	X		Making Left Turn – East	Crossing with Signal	X		X	
Second Avenue and E 65th Street	2018	12/21	16:40	X		Making Left Turn – Southeast	Crossing, No Signal, Marked Crosswalk	X			Failure to Yield Right of Way
	2019	2/10	22:30	X		Making Left Turn – Southeast	Unknown	X		X	
		3/21	19:15	X		Going Straight Ahead – Unknown	Unknown				Unknown
Second Avenue and E 66th Street	2017	2/7	8:11	X		Going Straight Ahead – South	Unknown				Unknown
		8/28	16:00	X		Making Left Turn on Red – East	Unknown	X		X	Aggressive Driving/Road Rage
	2018	2/4	5:22	X		Going Straight Ahead – West	Unknown		X	X	Traffic Control Devices Disregarded
		5/9	8:47	X		Making Right Turn – East	Unknown	X	X	X	Driver Inexperience
		9/19	18:45	X		Going Straight Ahead – South	Unknown				Unknown
	2019	3/2	0:05	X		Making Left Turn – West	Crossing with Signal	X		X	Failure to Yield Right of Way
		4/4	19:27	X		Making Right Turn – East	Not in Roadway	X			Unknown
		4/30	21:40	X		Parked – West	Unknown				Unknown
		8/1	16:30	X		Going Straight Ahead – West	Crossing, No Signal or Crosswalk		X		Failure to Yield Right of Way

Table 10-15 (cont'd)
Vehicle and Pedestrian Crash Details

Intersection	Year	Date	Time	Crash Class		Action of Vehicle	Action of Pedestrian	Cause of Crash			
				Injured	Killed			Left/Right Turns	Pedestrian Error / Confusion	Driver Inattention	Other
Second Avenue and E 71st Street	2017	1/19	18:55	X		Making Left Turn – Southwest	Crossing with Signal	X			Unsafe Speed
		5/15	21:25	X		Going Straight Ahead – West	Unknown		X		
	2018	1/25	18:20	X		Merging – South	Unknown		X	X	Driver Inexperience
		3/12	8:00	X		Making Left Turn – South	Crossing with Signal	X			Unknown
		4/29	17:05	X		Going Straight Ahead – South	Other Actions in Roadway				Unknown
		5/5	18:25	X		Going Straight Ahead – South	Unknown				Unknown
	2019	3/19	9:05	X		Making Left Turn on Red – South	Unknown	X	X		Following too Closely
Second Avenue and E 72nd Street	2017	1/26	14:30	X		Making U Turn – East	Unknown		X		Turning Improper
		9/26	23:07	X		Going Straight Ahead – West	Crossing, No Signal or Crosswalk				Unknown
		11/1	19:50	X		Changing Lanes – South	Unknown			X	Passing or Lane Usage Improperly
		11/2	19:30	X		Making Right Turn – South	Crossing with Signal	X	X		
	2018	1/16	10:20	X		Making Left Turn – Southeast	Crossing Against Signal	X			Traffic Control Devices Disregarded
		10/7	9:20	X		Going Straight Ahead – East	Crossing Against Signal			X	Failure to Yield Right of Way
First Avenue and E 62nd Street	2017	1/18	0:45	X		Making Left Turn – East	Crossing with Signal	X		X	
		3/17	9:38	X		Making Left Turn – East	Crossing with Signal	X		X	Failure to Yield Right of Way
		4/3	15:30	X		Making Right Turn – East	Crossing with Signal	X			Passing or Lane Usage Improperly
		4/22	10:09	X		Making Left Turn – Northeast	Crossing with Signal	X		X	
		7/3	19:15	X		Making Left Turn – North	Crossing with Signal	X			Alcohol Involvement
		8/17	7:10	X		Going Straight Ahead – East	Working in Roadway			X	
		9/17	19:25	X		Going Straight Ahead – North	Crossing with Signal			X	Other (Vehicle)
		11/29	23:05	X		Going Straight Ahead – East	Unknown			X	
	2018	5/13	13:10	X		Making Left Turn – Northeast	Crossing with Signal	X		X	
		5/17	21:07	X		Making Left Turn – Northeast	Crossing with Signal	X		X	Unsafe Speed
		7/18	15:40	X		Starting in Traffic – East	Crossing Against Signal			X	
		8/4	11:50	X		Making Left Turn – North	Crossing with Signal	X			Failure to Yield Right of Way
		9/12	12:39	X		Making Left Turn – North	Crossing with Signal	X		X	Failure to Yield Right of Way
		9/25	10:15	X		Making Left Turn – North	Unknown	X			Unknown

Table 10-15 (cont'd)
Vehicle and Pedestrian Crash Details

Intersection	Year	Date	Time	Crash Class		Action of Vehicle	Action of Pedestrian	Cause of Crash			
				Injured	Killed			Left/Right Turns	Pedestrian Error / Confusion	Driver Inattention	Other
First Avenue and E 62nd Street (cont'd)	2018 (cont'd)	11/9	18:30	X		Making Left Turn – Northeast	Crossing with Signal	X			Unknown
		11/9	18:30	X		Making Left Turn – Northeast	Crossing with Signal	X			Unknown
	2019	1/1	1:25	X		Making Left Turn – North	Crossing with Signal	X			Unknown
		8/1	17:53	X		Making Left Turn – Northeast	Crossing with Signal	X		X	Failure to Yield Right of Way
		8/14	13:51	X		Going Straight Ahead – East	Unknown				Unknown
First Avenue and E 68th Street	2017	6/2	11:40	X		Making Left Turn – North	Crossing with Signal	X		X	Failure to Yield Right of Way
		7/10	18:15	X		Other – East	Unknown				Other (Vehicle)
	2018	9/18	20:40	X		Making Left Turn – Northeast	Crossing with Signal	X			Failure to Yield Right of Way
		10/17	14:28	X		Making Left Turn – Northwest	Crossing with Signal	X		X	
		12/23	14:40	X		Backing – West	Crossing, No Signal or Crosswalk			X	Backing Unsafely
	2019	2/15	16:41	X		Going Straight Ahead – North	Crossing with Signal				Unknown
First Avenue and E 69th Street	2019	4/9	8:00	X		Going Straight Ahead – North	Crossing Against Signal			X	
		5/11	14:40	X		Going Straight Ahead – West	Unknown				Unknown
		12/16	7:15	X		Unknown – Unknown	Crossing with Signal				Unknown
		12/17	7:15	X		Unknown – Unknown	Crossing with Signal				Unknown
First Avenue and E 70th Street	2017	1/20	13:50	X		Backing – South	Crossing, No Signal or Crosswalk				Unknown
		7/9	17:06	X		Making Left Turn – Northeast	Crossing with Signal	X			Failure to Yield Right of Way
	2018	3/21	18:04	X		Making Left Turn – Northeast	Crossing with Signal	X		X	
		6/7	22:20	X		Entering Parked Position – West	Unknown			X	Backing Unsafely
First Avenue and E 72nd Street	2017	3/29	20:20	X		Going Straight Ahead – East	Unknown			X	
		8/3	15:00	X		Stopped in Traffic – Northwest	Unknown				Unknown
		8/19	10:40	X		Going Straight Ahead – East	Unknown			X	
		10/30	6:32	X		Making Left Turn – South	Crossing with Signal	X			Turning Improper
		11/29	15:15	X		Making Left Turn – Northwest	Crossing with Signal	X			Failure to Yield Right of Way

Table 10-15 (cont'd)
Vehicle and Pedestrian Crash Details

Intersection	Year	Date	Time	Crash Class		Action of Vehicle	Action of Pedestrian	Cause of Crash			
				Injured	Killed			Left/Right Turns	Pedestrian Error / Confusion	Driver Inattention	Other
York Avenue and E 61st Street	2017	1/5	9:45	X		Backing – Southeast	Crossing, No Signal or Crosswalk				Not Entered
		8/1	21:00	X		Going Straight Ahead – West	Other Actions in Roadway				Aggressive Driving/Road Rage
		8/25	20:00	X		Unknown – Unknown	Crossing with Signal			X	Driver Inexperience
		9/15	2:30	X		Going Straight Ahead – West	Other Actions in Roadway				Alcohol Involvement
		9/15	13:00	X		Making Left Turn – West	Other Actions in Roadway	X			Traffic Control Devices Disregarded
	2018	2/8	14:41	X		Making Left Turn – West	Not in Roadway	X			Passing or Lane Usage Improperly
	2019	1/4	12:06	X		Unknown – Unknown	Unknown				Not Entered
		11/8	10:47	X		Going Straight Ahead – North	Other Actions in Roadway			X	
York Avenue and E 62nd Street	2017	1/24	6:07	X		Making Right Turn – North	Crossing with Signal			X	
		2/24	7:35	X		Making Left Turn – Northeast	Crossing with Signal			X	
		9/20	9:05	X		Making Left Turn – North	Crossing with Signal			X	
	2018	11/9	18:05	X		Going Straight Ahead – East	Crossing with Signal				Failure to Yield Right of Way
		12/27	10:12	X		Going Straight Ahead – South	Unknown				Unknown
	2019	2/24	17:15	X		Making Left Turn – East	Crossing with Signal	X		X	Failure to Yield Right of Way
		11/28	15:04	X		Making Right Turn – East	Unknown	X	X		
York Avenue and E 66th Street	2017	5/17	16:10	X		Going Straight Ahead – North	Crossing with Signal		X		Traffic Control Devices Disregarded
		6/14	17:00	X		Going Straight Ahead – North	Crossing with Signal			X	Passing or Lane Usage Improperly
		12/12	14:00	X		Making Right Turn – West	Crossing with Signal	X			Following too Closely
	2019	9/5	6:17	X		Making Left Turn – West	Crossing with Signal	X			Unknown
York Avenue and E 68th Street	2017	7/15	7:50	X		Going Straight Ahead – South	Working in Roadway				Aggressive Driving/Road Rage
	2018	7/27	14:46	X		Backing – East	Crossing, No Signal or Crosswalk			X	Backing Unsafely
		11/5	11:50	X		Going Straight Ahead – West	Emerge from Behind Parked Vehicle		X		Unknown
		11/11	20:40	X		Stopped in Traffic – North	Crossing, No Signal or Crosswalk		X		Failure to Yield Right of Way
	2019	10/29	19:30	X		Unknown – Unknown	Unknown			X	Failure to Yield Right of Way

Table 10-15 (cont'd)
Vehicle and Pedestrian Crash Details

Intersection	Year	Date	Time	Crash Class		Action of Vehicle	Action of Pedestrian	Cause of Crash			
				Injured	Killed			Left/Right Turns	Pedestrian Error / Confusion	Driver Inattention	Other
York Avenue and E 70th Street	2017	1/31	15:00	X		Going Straight Ahead – West	Unknown				Unknown
		12/5	16:00	X		Making U Turn – West	Unknown			X	Passing or Lane Usage Improperly
	2018	4/4	13:55	X		Going Straight Ahead – North	Crossing with Signal			X	Passenger Distraction
		5/31	19:31	X		Making Right Turn – Northeast	Crossing with Signal	X		X	Failure to Yield Right of Way
		11/28	15:15	X		Going Straight Ahead – East	Unknown				Failure to Yield Right of Way
	2019	3/14	17:45	X		Making Left Turn – Northeast	Crossing with Signal	X		X	View Obstructed/Limited
		8/15	9:20	X		Going Straight Ahead – North	Crossing, No Signal or Crosswalk			X	
York Avenue and E 71st Street	2017	9/14	7:40	X		Other – East	Crossing, No Signal or Crosswalk				Unknown
		12/5	6:35	X		Making Left Turn – West	Crossing with Signal	X		X	Failure to Yield Right of Way
	2018	3/6	18:50	X		Backing – West	Emerge from Behind Parked Vehicle				Failure to Yield Right of Way
		8/17	5:55	X		Making Left Turn – Northeast	Crossing, No Signal or Crosswalk	X	X	X	
	2019	9/11	13:11	X		Making Right Turn – West	Unknown	X			Failure to Yield Right of Way
York Avenue and E 72nd Street	2017	10/30	21:14	X		Making Left Turn – Northeast	Crossing with Signal				Failure to Yield Right of Way
	2018	1/11	15:45	X		Going Straight Ahead – East	Unknown			X	
		2/4	20:10	X		Making Left Turn – West	Crossing with Signal	X		X	Failure to Yield Right of Way
		3/1	12:50	X		Making Left Turn – West	Crossing with Signal	X			Unknown
		11/29	17:30	X		Making Left Turn – Northwest	Crossing with Signal	X			Failure to Yield Right of Way
	2019	2/12	21:00	X		Making Right Turn – Southeast	Crossing with Signal	X			Unknown
		2/19	13:50	X		Making Left Turn – North	Crossing with Signal	X		X	Failure to Yield Right of Way
		9/4	19:35	X		Going Straight Ahead – North	Unknown			X	
York Avenue and E 73rd Street	2017	5/18	11:45	X		Making Left Turn – West	Unknown	X		X	Unsafe Speed
	2018	1/17	18:00	X		Making Right Turn – East	Crossing With Signal	X		X	Failure to Yield Right of Way
		11/6	7:45	X		Unknown – Unknown	Working in Roadway				Unknown
		12/21	7:25	X		Making Left Turn – East	Crossing Against Signal	X	X	X	
	2019	1/22	9:12	X		Making Left Turn – East	Crossing with Signal	X		X	Failure to Yield Right of Way
		11/3	4:42	X		Making Left Turn – East	Crossing, No Signal, Marked Crosswalk	X		X	Failure to Yield Right of Way
		11/3	4:25	X		Unknown – Unknown	Unknown				Unknown

SECOND AVENUE AND EAST 63RD STREET

Based on the review of the crash history at the intersection of Second Avenue and East 63rd Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides three high visibility crosswalks (north, east, and west crosswalks). In addition, countdown timers are present on the north crosswalk. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately 11 vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes. Additional safety measures, such as installing countdown timers on the east and west crosswalks, could be implemented at the discretion of DOT to further improve safety at this intersection.

SECOND AVENUE AND EAST 64TH STREET

Based on the review of the crash history at the intersection of Second Avenue and East 64th Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides four high visibility crosswalks. In addition, countdown timers are present on the north and south crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately 11 vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes. Additional safety measures, such as installing countdown timers on the east and west crosswalks, could be implemented at the discretion of DOT to further improve safety at this intersection.

SECOND AVENUE AND EAST 65TH STREET

Based on the review of the crash history at the intersection of Second Avenue and East 65th Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides four high visibility crosswalks. In addition, countdown timers are present on the north and south crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately nine vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes. Additional safety measures, such as installing countdown timers on the east and west crosswalks, could be implemented at the discretion of DOT to further improve safety at this intersection.

SECOND AVENUE AND EAST 66TH STREET

Based on the review of the crash history at the intersection of Second Avenue and East 66th Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides five high visibility crosswalks (north, south, east, west from the northwest corner to pedestrian refuge island, and west from the pedestrian refuge island to southwest corner). In addition, countdown timers are present on all crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume decrease of 60 vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes.

SECOND AVENUE AND EAST 71ST STREET

Based on the review of the crash history at the intersection of Second Avenue and East 71st Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides four high visibility crosswalks. In addition, countdown timers are present on the north and south crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately three vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes. Additional safety measures, such as installing countdown timers on the east and west crosswalks, could be implemented at the discretion of DOT to further improve safety at this intersection.

SECOND AVENUE AND EAST 72ND STREET

Based on the review of the crash history at the intersection of Second Avenue and East 72nd Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides four high visibility crosswalks. In addition, countdown timers are present on all crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately seven vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes.

FIRST AVENUE AND EAST 62ND STREET

Based on the review of the crash history at the intersection of First Avenue and East 62nd Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides four high visibility crosswalks. In addition, countdown timers are present on the north and south crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume decrease of three vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes. Additional safety measures, such as installing countdown timers on the east and west crosswalks, could be implemented at the discretion of DOT to further improve safety at this intersection.

FIRST AVENUE AND EAST 68TH STREET

Based on the review of the crash history at the intersection of First Avenue and East 68th Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides four high visibility crosswalks. In addition, countdown timers are present on the north and south crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately two vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes. Additional safety measures, such as installing countdown timers on the east and west crosswalks, could be implemented at the discretion of DOT to further improve safety at this intersection.

FIRST AVENUE AND EAST 69TH STREET

Based on the review of the crash history at the intersection of First Avenue and East 69th Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides four high visibility crosswalks. In

addition, countdown timers are present on the north and south crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately six vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes. Additional safety measures, such as installing countdown timers on the east and west crosswalks, could be implemented at the discretion of DOT to further improve safety at this intersection.

FIRST AVENUE AND EAST 70TH STREET

Based on the review of the crash history at the intersection of First Avenue and East 70th Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides four high visibility crosswalks. In addition, countdown timers are present on the north and south crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately six vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes. Additional safety measures, such as installing countdown timers on the east and west crosswalks, could be implemented at the discretion of DOT to further improve safety at this intersection.

FIRST AVENUE AND EAST 72ND STREET

Based on the review of the crash history at the intersection of First Avenue and East 72nd Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides four high visibility crosswalks. In addition, countdown timers are present on all crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately 12 vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes.

YORK AVENUE AND EAST 61ST STREET

Based on the review of the crash history at the intersection of York Avenue and East 61st Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides four high visibility crosswalks. In addition, countdown timers are present on the north and south crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately three vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes. Additional safety measures, such as installing countdown timers on the east and west crosswalks, could be implemented at the discretion of DOT to further improve safety at this intersection.

YORK AVENUE AND EAST 62ND STREET

Based on the review of the crash history at the intersection of York Avenue and East 62nd Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides four high visibility crosswalks. In addition, countdown timers are present on the north and south crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately three vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes. Additional safety

measures, such as installing countdown timers on the east and west crosswalks, could be implemented at the discretion of DOT to further improve safety at this intersection.

YORK AVENUE AND EAST 66TH STREET

Based on the review of the crash history at the intersection of York Avenue and East 66th Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides three high visibility crosswalks (north, south and west crosswalks) and one school crosswalk (east). In addition, countdown timers are present on the north and south crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately 26 vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes. Additional safety measures, such as installing countdown timers on the east and west crosswalks, could be implemented at the discretion of DOT to further improve safety at this intersection.

YORK AVENUE AND EAST 68TH STREET

Based on the review of the crash history at the intersection of York Avenue and East 68th Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides four high visibility crosswalks. In addition, countdown timers are present on the north and south crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately eight vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes. Additional safety measures, such as installing countdown timers on the east and west crosswalks, could be implemented at the discretion of DOT to further improve safety at this intersection.

YORK AVENUE AND EAST 70TH STREET

Based on the review of the crash history at the intersection of York Avenue and East 70th Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides four high visibility crosswalks. In addition, countdown timers are present on the north and south crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately 12 vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes. Additional safety measures, such as installing countdown timers on the east and west crosswalks, could be implemented at the discretion of DOT to further improve safety at this intersection.

YORK AVENUE AND EAST 71ST STREET

Based on the review of the crash history at the intersection of York Avenue and East 71st Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides four high visibility crosswalks. In addition, countdown timers are present on the north and south crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately seven vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes. Additional safety

measures, such as installing countdown timers on the east and west crosswalks, could be implemented at the discretion of DOT to further improve safety at this intersection.

YORK AVENUE AND EAST 72ND STREET

Based on the review of the crash history at the intersection of York Avenue and East 72nd Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides four high visibility crosswalks. In addition, countdown timers are present on all crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately seven vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes.

YORK AVENUE AND EAST 73RD STREET

Based on the review of the crash history at the intersection of York Avenue and East 73rd Street, no prevailing trends with regard to geometric deficiencies were identified as the primary causes of recorded crashes. The intersection is signalized and provides four high visibility crosswalks. In addition, countdown timers are present on all crosswalks. In terms of project-generated activity, this intersection would experience incremental peak hour volume increases of approximately 7 vehicle trips during the weekday PM peak hour. Therefore, the Proposed Project is not anticipated to exacerbate any of the current causes of these crashes.

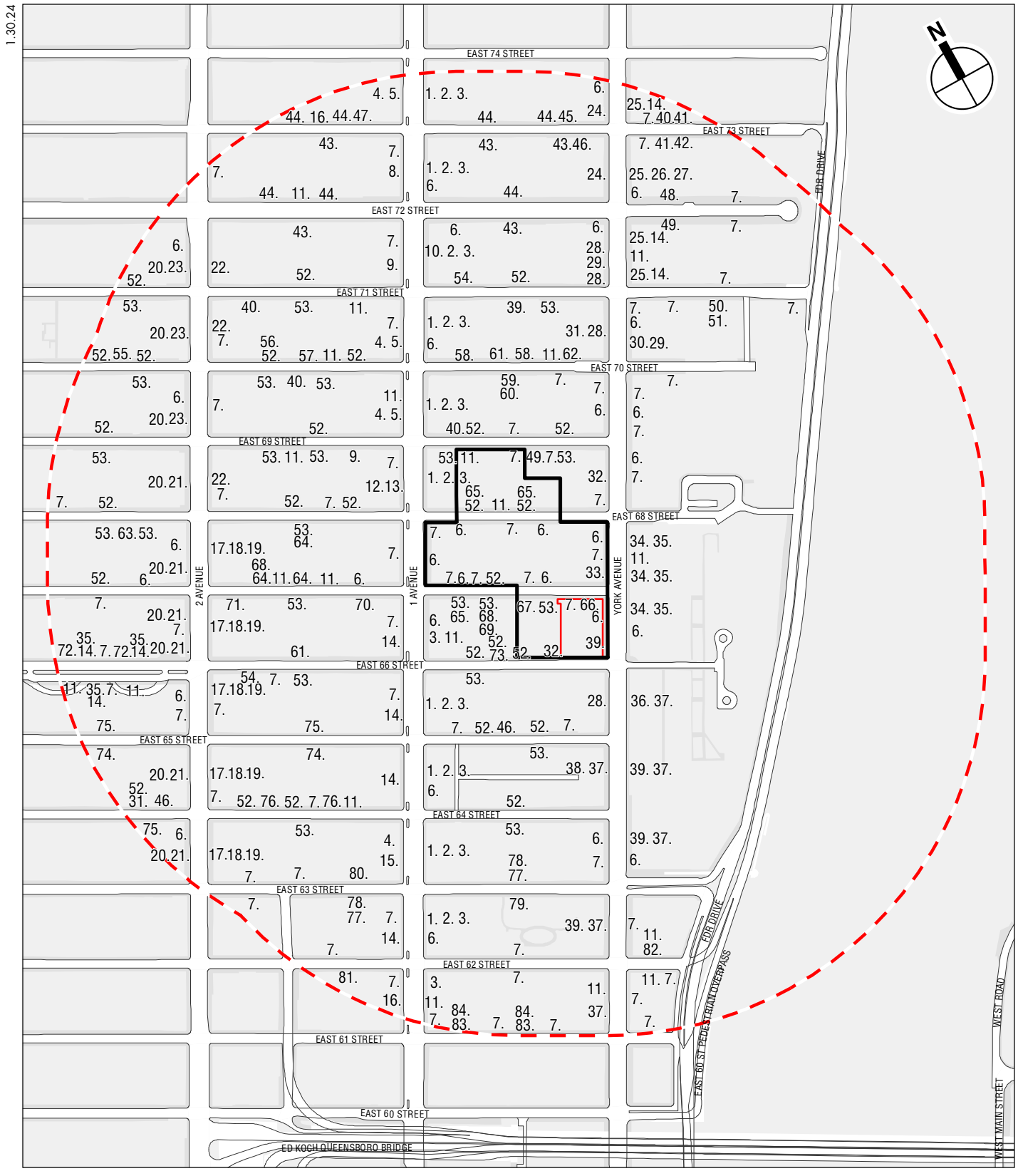
G. PARKING ASSESSMENT

EXISTING CONDITIONS

An inventory of on- and off-street parking conditions was conducted in the vicinity of the rezoning area in June 2023 and June 2022. The ¼ mile on-street survey involved recording curbside regulations and performing general observations of weekday daytime utilization. The ¼ mile off-street survey provided an inventory of the area's public parking facilities and their legal capacities and daytime utilization.

ON-STREET PARKING

Curbside parking regulations within a ¼-mile of the Project Area are illustrated in **Figure 10-8** and summarized in **Table 10-16**. The curbside regulations in the area generally include two-hour metered parking, three-hour commercial vehicles only metered parking, no standing regulations, and alternate-side parking to accommodate street cleaning regulations. Based on field observations, on-street parking in the area is generally at or near full utilization during weekday daytime hours.



On-Street Parking Regulations

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Figure 10-8

Table 10-16
On-Street Parking Regulations

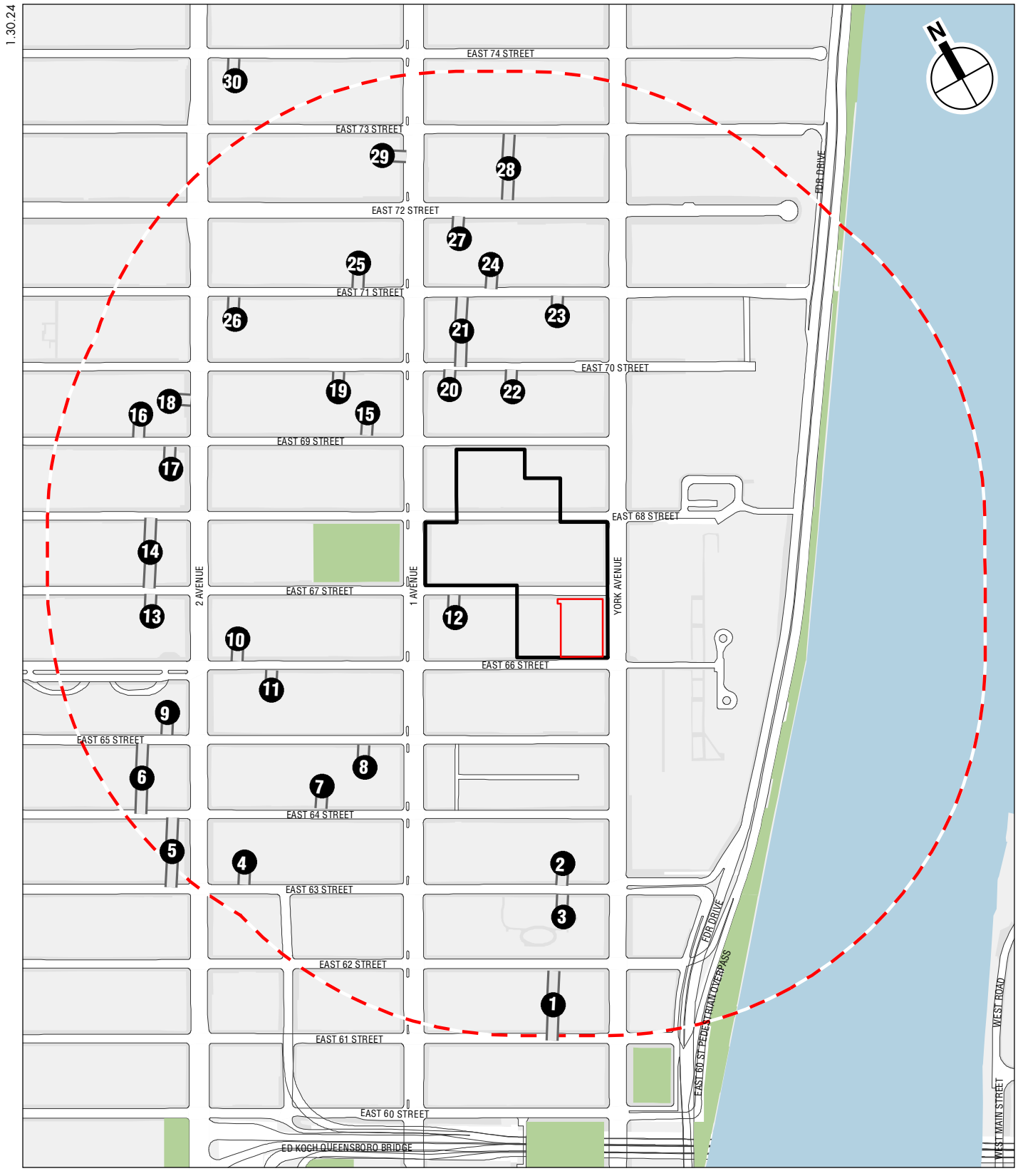
Map ID	Regulation	Map ID.	Regulation
1	2 HMP Commercial Vehicles Only Mon-Fri 9AM-7PM	43	NP Tues Fri 9AM-10:30AM
2	2 HMP Sat 9AM-7PM	44	NP Mon Thurs 9AM-10:30AM
3	NS Mon-Fri 7AM-9AM	45	Truck Loading Only Tues Fri 8AM-5PM
4	3 HMP Commercial Vehicles Only Mon-Fri 7AM-4PM	46	NP Mon Fri 8AM-6PM
5	2 HMP Mon-Fri 4PM-7PM, Sat 8AM-7PM	47	Carshare Parking Only Others NS Anytime
6	Bus Stop NS Anytime	48	Truck Loading Only Tues Fri 8AM-6PM
7	NS Anytime	49	Truck Loading Only Tues Fri 7AM-7PM
8	3 HMP Commercial Vehicles Only Mon-Fri 6AM-9PM	50	Ambulette Only Mon-Fri 10AM-4PM
9	3 HMP Commercial Vehicles Only 8AM-6PM Except Sun	51	NS Mon-Fri 7AM-10AM, 4PM-7PM
10	3 HMP Commercial Vehicles Only Mon-Fri 9AM-7PM	52	NP Mon Thurs 11AM-12:30PM
11	NP Anytime	53	NP Tues Fri 11AM-12:30PM
12	2 HMP Mon-Fri 1PM-7PM, Sat 8AM-7PM	54	NS Mon-Fri 7AM-7PM
13	3 HMP Commercial Vehicles Only Mon-Fri 7AM-1PM	55	Authorized Vehicles Only US Postal Service
14	2 HMP 8AM-7PM Except Sun	56	Truck Loading Only Mon Thurs 6PM-10PM
15	2 HMP Mon-Fri 4PM-7PM, Sat 9AM-7PM	57	NP Mon-Fri 7AM-7PM
16	Authorized Vehicles Only Consul – C, Diplomat – A & D License Plate	58	3 HMP Commercial Vehicles Only Mon-Fri 8AM-7PM
17	3 HMP Commercial Vehicles Only 8AM-3PM Except Sun	59	3 HMP Commercial Vehicles Only Mon-Fri 10AM-7PM
18	NP Mon, Tues, Thurs, Fri 7:30AM-8:30AM	60	NS Mon-Fri 8AM-10AM
19	NS 3PM-8PM Except Sun	61	NS Mon-Fri 8AM-7PM
20	NS Mon-Fri 7AM-10AM, 2PM-7PM	62	Ambulance Only
21	3 HMP Commercial Vehicles Only Mon-Fri 10AM-2PM, Sat 9AM-7PM	63	3 HMP Commercial Vehicles Only Mon-Fri 7AM-7PM
22	2 HMP 8:30AM-7PM Except Sun	64	Authorized Vehicles Only DOE School Days 7AM-4PM
23	2 HMP Mon-Fri 10AM-2PM, Sat 9AM-7PM	65	2 HMP 9AM-10PM Except Sun
24	NP Mon, Thurs 8AM-8:30AM	66	Electric Vehicle Charging Only
25	NP 7:30AM-8AM Except Sun	67	NS 6AM-6PM Except Sun
26	2HMP 10AM-7PM Except Sun	68	NS School Days 7AM-4PM
27	Truck Loading Only 8AM-10AM Except Sun	69	Flea Market Loading Only Sat 6AM-5PM
28	NP Mon-Thurs 11AM-12:30PM	70	3 HMP Commercial Vehicles Only Mon-Fri 8AM-6PM
29	Ambulette Only	71	NS Mon-Fri 9AM-4PM
30	Taxi Stand Mon-Fri 7AM-10AM	72	NP Tues Fri 7:30AM-8AM
31	2HMP 9AM-7PM Except Sun	73	NS School Days 7AM-6PM
32	NS 7AM-7PM All Days	74	NS 8AM-7PM Except Sun
33	NS 7AM-9PM All Days	75	3 HMP Commercial Vehicles Only 8AM-7PM Except Sun
34	2HMP 8AM-10PM Except Sun	76	3 HMP Commercial Vehicles Only 7AM-7PM Except Sun
35	NP Mon, Tues, Thurs, Fri 7:30AM-8AM	77	NS 7AM-7PM Except Sun
36	2 HMP 10AM-4PM Except Sun	78	NS 7PM-Midnight All Days
37	NS 7AM-10AM. 4PM-7PM Except Sun	79	Truck Loading Only 7AM-7PM Except Sun
38	NP 10AM-4PM Except Sun	80	2HMP 7AM-7PM Except Sun
39	NP 7AM-7PM Except Sun	81	NS 7PM-Midnight Except Sun
40	NP Mon-Fri 8AM-6PM	82	NS Mon-Fri 3PM-8PM
41	Truck Loading Only Mon-Fri 10AM-7PM	83	NS 7AM-10AM, 3PM-8PM Except Sun
42	NS Mon-Fri 7AM-10AM	84	Truck Loading Only 10AM-3PM Except Sun

Notes:
NP = No Parking; NS = No Standing; HMP = Hour Metered Parking; Sun = Sunday; Mon = Monday; Tues = Tuesday; Weds = Wednesday; Thurs = Thursday; Fri = Friday; Sat = Saturday
Sources:
Survey conducted by AKRF, Inc.: June 2023

OFF-STREET PARKING

Off-street publicly accessible parking lots and garages within a ¼-mile of the Project Area were surveyed in June 2022 (see **Figure 10-9**). Each facility's operating license and legal capacity were noted. Based on responses given by parking attendants and visual inspections, where possible, estimates were made on the parking occupancy or utilization at each facility for the weekday morning, midday, evening, overnight, and Saturday time periods. A summary of the recorded information and the area's overall off-street public parking supply and utilization is presented in **Table 10-17**.

Within the parking study area, 30 public parking facilities were inventoried. The combined capacity of these facilities totals 4,173 parking spaces. Overall, they were 79 percent, 89 percent, and 78 percent utilized, with 897, 468, and 932 parking spaces available during the weekday morning, midday, and evening time periods, respectively.



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Off-Street Parking Facilities

Figure 10-9

Table 10-17
Existing Off-Street Parking Utilization – 1/4 Mile Study Area

Map #	Name/Address	License Number	Licensed Capacity	Utilization Rate			Utilized Spaces			Available Spaces		
				AM	MD	PM	AM	MD	PM	AM	MD	PM
1	East 61st Street Garage LLC / 425 East 61st Street	2054405	225	85%	90%	75%	191	203	169	34	22	56
2	Enterprise York Garage / 1175 York Avenue	1460721	94	90%	100%	100%	85	94	94	9	0	0
3	SP+ Parking / 420 East 63rd Street	2056035	290	50%	75%	40%	145	218	116	145	72	174
4	301-63 Garage LLC / 301 East 63rd Street	1470793	39	95%	95%	80%	37	37	31	2	2	8
5	245 E Garage Corp. / 245 East 64th Street	1379214	225	90%	90%	85%	203	203	191	22	22	34
6	SP Plus Corporation / 222 East 65th Street	2020005	300	85%	80%	70%	255	240	210	45	60	90
7	337 Garage LLC / 337 East 64th Street	2047160	300	80%	85%	80%	240	255	240	60	45	60
8	East 65th Street Garage LLC / 1189 First Avenue	2086766	69	90%	90%	75%	62	62	52	7	7	17
9	Eastside 65 Parking LLC / 200 East 66th Street	2106173	255	80%	85%	70%	204	217	179	51	38	76
10	SP Plus Corporation / 301 East 66th Street	2021747	70	80%	100%	70%	56	70	49	14	0	21
11	315 E 65th Parking LLC / 322 East 66th Street	1251169	50	75%	100%	70%	38	50	35	12	0	15
12	Lenox Hill Garage LLC / 400 East 67th Street	2102375	142	80%	85%	75%	114	121	107	28	21	35
13	LAZ Parking NY/NJ LLC / 265 East 66th Street	2028693	197	70%	85%	75%	138	167	148	59	30	49
14	67th and 2nd Garage Inc. / 254 East 69th Street	699352	150	70%	85%	80%	105	128	120	45	22	30
15	333 E 69th Street Garage LLC / 333 East 69th Street	2095786	67	85%	100%	90%	57	67	60	10	0	7
16	SYGMA Parking Inc. / 219 East 69th Street	2093168	52	70%	100%	90%	36	52	47	16	0	5
17	222 E. 69th Garage Corp. / 222 East 69th Street	367720	157	90%	100%	85%	141	157	133	16	0	24
18	Gemat Parking Corp. / 233 East 69th Street	2026148	53	85%	95%	70%	45	50	37	8	3	16
19	May Parking Corp / 330 East 70th Street	1215447	25	70%	100%	90%	18	25	23	7	0	2
20	70th Park OPS LLC / 400 East 70th Street	2054849	56	90%	100%	85%	50	56	48	6	0	8
21	400 E 71st St Garage LLC / 400 East 71st Street	2101876	180	75%	100%	90%	135	180	162	45	0	18
22	SP Plus Corp. / 404-430 East 70th Street	0369751	190	75%	90%	90%	143	171	171	47	19	19
23	The NY Presbyterian Hospital Laurence G. Paysun House / 426-438 East 71st Street	2072506	174	80%	85%	75%	139	148	131	35	26	43
24	422 East 72nd Street Garage LLC / 422 East 72nd Street	2094608	77	85%	95%	95%	65	73	73	12	4	4
25	355 East 71st Street Garage LLC / 1325 First Avenue	2076388	268	75%	85%	80%	201	228	214	67	40	54
26	Rainbow Parking / 300 East 71st Street	367503	57	85%	100%	85%	48	57	48	9	0	9
27	420 East 72nd Garage Corp / 420 East 72nd Street	1412461	51	80%	95%	75%	41	48	38	10	3	13
28	East 72nd Street Realty LLC / 1353-1367 York Avenue	1070441	235	75%	90%	90%	176	212	212	59	23	23
29	Vancity Parking Inc / 355 East 72nd Street	2092450	31	90%	100%	90%	28	31	28	3	0	3
30*	300 East 74th Street Car Park LLC / 300 East 74th Street	1076826	94	85%	90%	80%	80	85	75	14	9	19
1/4-Mile Area Totals			**4,173**	**79%**	**89%**	**78%**	**3,276**	**3,705**	**3,241**	**897**	**468**	**932**

Note: MD = Midday
Sources: Survey conducted by AKRF Inc., June 2022

THE FUTURE WITHOUT THE PROPOSED PROJECT (NO ACTION CONDITION)

Overall public parking utilization is expected to experience the same annual background growth rate of 0.25 percent for the years 2023 through 2027 and a background growth rate of 0.0125 percent for the years 2028 to 2030. As presented in **Table 10-18**, accounting for the parking demand generated from background growth and discrete no build projects' parking demand absent the Proposed Project, the 2030 No Action condition public parking utilization is expected to increase to 85 percent, 96 percent, and 84 percent during the weekday morning, midday, and evening time periods, respectively.

Table 10-18
Existing and 2030 No Action Parking Supply and Utilization

	Weekday AM	Weekday Midday	Weekday PM
Existing Public Parking Supply	4,173	4,173	4,173
Existing Public Parking Demand	3,276	3705	3241
Existing Public Parking Utilization	**79%**	**89%**	**78%**
2030 No Action Public Parking Supply Total	4,173	4,173	4,173
2030 No Action Background Incremental Demand	54	61	53
2030 No Action Projects Incremental Demand	210	222	214
2030 No Action Public Parking Demand Total	3,540	3,988	3,508
2030 No Action Public Parking Utilization	**85%**	**96%**	**84%**
2030 No Action Available Spaces	**633**	**185**	**665**

THE FUTURE WITH THE PROPOSED PROJECT (WITH ACTION CONDITION)

The weekday parking demand projections for the Proposed Project's staff are presented in **Table 10-19**. As shown in **Table 10-20**, accounting for the No Action parking supply and demand utilization, and the parking demand generated by the Proposed Project, the With Action public parking utilization is expected to increase to 87 percent, 98 percent, and 86 percent of the off-street parking capacity in the study area, with approximately 534, 85, and 565 spaces available during the weekday morning, midday, and evening time periods, respectively. Therefore, the Proposed Project would not result in a parking shortfall.

Table 10-19
Incremental Parking Demand – Weekday

Hour	Inpatient Staff	Ambulatory Staff	Total
12 AM–01 AM	0	0	0
01 AM–02 AM	0	0	0
02 AM–03 AM	0	0	0
03 AM–04 AM	0	0	0
04 AM–05 AM	0	0	0
05 AM–06 AM	0	0	0
06 AM–07 AM	9	0	9
07 AM–08 AM	25	2	27
08 AM–09 AM	80	6	86
09 AM–10 AM	90	9	99
10 AM–11 AM	90	10	100
11 AM–12 PM	90	10	100
12 PM–01 PM	90	10	100
01 PM–02 PM	90	10	100
02 PM–03 PM	90	10	100
03 PM–04 PM	90	10	100
04 PM–05 PM	90	8	98
05 PM–06 PM	46	5	51
06 PM–07 PM	32	2	34
07 PM–08 PM	22	0	22
08 PM–09 PM	12	0	12
09 PM–10 PM	6	0	6
10 PM–11 PM	0	0	0
11 PM–12 AM	0	0	0

Table 10-20
2030 No Action and 2030 With Action Parking Supply and Utilization – ¼-Mile

	Weekday AM	Weekday Midday	Weekday PM
2030 No Action Public Parking Supply	4,173	4,173	4,173
2030 No Action Public Parking Demand	3,540	3,988	3,508
2030 No Action Public Parking Utilization	**85%**	**96%**	**84%**
Proposed Project Parking Demand	99	100	100
Proposed Project Parking Demand Accommodated by Public Parking	99	100	100
2030 With Action Public Parking Demand Total	3,639	4,088	3,608
2030 With Action Public Parking Utilization	**87%**	**98%**	**86%**
2030 With Action Available Spaces	**534**	**85**	**565**

There would be modest increase in parking demand generated by MSK Pavilion patients and visitors which would be accommodated within the redesigned and improved MSKCC garage. During the weekday AM, midday, and PM peak hours, there would be 5, 11, and 8 inbound trips from project-generated parking demand. Currently, the garage does not optimally accommodate the incoming demand during a short period of time on weekdays from approximately 11 AM to 12 PM due to the number of reservoir spaces, allotted area for valet operations within the garage, combined entrance/exit ramps, internal circulation and vertical circulation, and other inefficiencies. This condition would be improved with the Proposed Project to reduce or eliminate the existing, suboptimal conditions, which sometimes do not allow MSKCC to fill all available spaces during the peak demand period. As previously stated, the redesigned and improved garage

would have an optimized layout, improved valet operations, additional reservoir spaces, and a relocated exit to separate entering and exiting traffic between the two cross streets. The operation of the through-block driveway for patient and visitor vehicular access for MSK Pavilion would work in concert with the adjoining garage. Additionally, MSKCC would implement new policies to improve parking operations and more efficiently use the 263 spaces, such as restricting use to only accept patients and visitors destined to MSKCC facilities for appointments that day using a QR code or other technology, providing timed arrival windows, and changes in valet staff protocols. ✷