
Chapter 10: Mitigation

10.1 Introduction

In accordance with the *2014 CEQR Technical Manual*, this chapter presents and evaluates possible mitigation measures to reduce or eliminate, to the fullest extent practicable, significant impacts identified in the preceding chapters associated with the proposed actions. Measures have been examined to fully mitigate the anticipated significant adverse impacts in the area of Transportation, described further below.

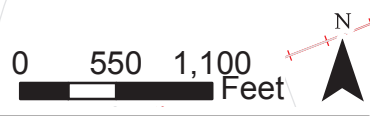
10.2 Transportation

As discussed in Chapter 5, “Transportation,” the proposed project would result in significant traffic impacts at two intersections: the intersection of Ditmars Boulevard and 94th Street and the intersection of Ditmars Boulevard/111th Street and Astoria Boulevard. Figure 10.1 shows the location of these intersections. These impacts would occur during the weekday AM peak hours (impacts are not expected during the weekday midday and PM peak hours) and could be fully mitigated by the measures identified below. Detailed traffic levels of service and a description of the identified mitigation measures are provided in Table 10.1.

Ditmars Boulevard and 94th Street: Impacts to the westbound Ditmars Boulevard left turn movement could be mitigated by shifting two seconds of green time from the southbound 94th Street lead phase to the eastbound-westbound Ditmars Boulevard phase.

Ditmars Boulevard/111th Street and Astoria Boulevard: The northbound 111th Street approach could be fully mitigated by installing a “No Standing 7 AM to 10 AM Monday through Friday” parking regulation along the east curb extending 100 feet from the stop bar (a loss of four parking spaces) to provide an additional travel lane during the AM peak period.

These traffic improvements fall within the jurisdiction of NYCDOT for implementation. Approximately four parking spaces would be lost along 111th Street between Astoria Boulevard and Northern Boulevard during the AM peak period. Designated truck loading zones and bus overlay areas would not be affected by the proposed parking regulations.



102-05 Ditmars Blvd. Garage
 Queens, New York 11369

Significantly Impacted Locations

Figure
10.1

● Impacted Traffic Location

TABLE 10.1
102-05 DITMARS BOULEVARD PARKING GARAGE EIS
WEEKDAY AM PEAK HOUR -- NO ACTION VS. WITH ACTION VS. MITIGATION

INTERSECTION & APPROACH	NO ACTION				WITH ACTION				MITIGATION				MITIGATION MEASURE	
	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS		
SIGNALIZED INTERSECTIONS														
1 WESTBOUND GRAND CENTRAL PARKWAY SERVICE ROAD AND 94TH STREET														
94th Street	NB	L	0.36	9.7	A	L	0.37	9.8	A	L	0.37	9.8	A	- No improvements needed.
		T	0.22	8.2	A	T	0.22	8.2	A	T	0.22	8.2	A	
	SB	T	0.32	22.5	C	T	0.32	22.5	C	T	0.32	22.5	C	
Grand Central Pkwy WB Service Road	WB	LT	1.07	82.7	F	LT	1.08	84.6	F	LT	1.08	84.6	F	
		R	-	29.9	D	R	-	30.0	D	R	-	30.0	D	
Overall Intersection	-	0.66	43.9	D	-	0.67	44.6	D	-	0.67	44.6	D		
2 DITMARS BOULEVARD AND 94TH STREET														
94th Street	NB	TR	0.66	35.8	D	TR	0.66	35.8	D	TR	0.66	35.8	D	- Modify signal timing: Shift 2 s from the SB lead phase to the EB/WB phase [EB/WB phase green time shifts from 35 s to 37 s; SB lead phase green time shifts from 16 s to 14 s; NB/SB through phase green time remains at 24 s].
	SB	L	0.33	33.0	C	L	0.34	33.2	C	L	0.39	35.2	D	
		T	0.55	16.7	B	T	0.55	16.7	B	T	0.58	18.3	B	
Ditmars Boulevard	EB	L	0.34	20.8	C	L	0.34	20.8	C	L	0.32	19.2	B	
		TR	0.67	25.6	C	TR	0.72	26.8	C	TR	0.68	24.5	C	
	WB	L	0.67	47.8	D	L	0.78	66.0	E	L	0.68	48.2	D	
		R	0.17	7.4	A	R	0.17	7.4	A	R	0.17	7.4	A	
Overall Intersection	-	0.60	23.8	C	-	0.65	24.9	C	-	0.62	23.7	C		
3 DITMARS BOULEVARD AND EASTBOUND GRAND CENTRAL PARKWAY ON-RAMP/97TH STREET														
Ditmars Boulevard	EB	L	0.60	3.3	A	L	0.60	3.5	A	L	0.60	3.5	A	- No improvements needed.
		T	0.07	0.0	A	T	0.09	0.0	A	T	0.09	0.0	A	
	WB	TR	0.30	9.2	A	TR	0.31	9.2	A	TR	0.31	9.2	A	
Overall Intersection	-	0.76	5.0	A	-	0.76	4.9	A	-	0.76	4.9	A		
4 DITMARS BOULEVARD AND 27TH AVENUE														
Ditmars Boulevard	NB	LT	0.45	11.4	B	LT	0.49	11.8	B	LT	0.49	11.8	B	- No improvements needed.
	SB	TR	0.29	9.9	A	TR	0.29	9.9	A	TR	0.29	9.9	A	
27th Avenue	EB	LR	0.17	14.3	B	LR	0.17	14.3	B	LR	0.17	14.3	B	
Overall Intersection	-	0.34	11.0	B	-	0.36	11.3	B	-	0.36	11.3	B		
5 DITMARS BOULEVARD/111TH ST AND ASTORIA BOULEVARD														
Ditmars Boulevard/111th Street	NB	LTR	1.04	121.8	F	LTR	1.12	144.6	F	LTR	0.60	53.5	D	- Install "No Standing 7 AM to 10 AM Mon - Fri" regulations along the east side of the NB approach for 100 feet to daylight the approach.
	SB	L	0.88	56.3	E	L	0.88	56.3	E	L	0.88	56.3	E	
		R	-	8.6	A	R	-	8.6	A	R	-	8.7	A	
Astoria Boulevard	EB	LT	0.44	22.5	C	LT	0.44	22.6	C	LT	0.44	22.6	C	
	WB	TR	0.98	48.2	D	TR	1.00	52.6	D	TR	1.00	52.6	D	
Overall Intersection	-	0.96	47.0	D	-	0.99	51.0	D	-	0.90	45.3	D		
6 NORTHERN BOULEVARD AND 114TH STREET														
114th Street	SB	LTR	0.32	43.7	D	LTR	0.32	43.7	D	LTR	0.32	43.7	D	- No improvements needed.
Northern Boulevard	EB	T	0.60	31.3	C	T	0.60	31.3	C	T	0.60	31.3	C	
		R	0.70	37.9	D	R	0.70	37.9	D	R	0.70	37.9	D	
	WB	LT	0.86	16.1	B	LT	0.87	16.4	B	LT	0.87	16.4	B	
Overall Intersection	-	0.73	22.2	C	-	0.73	22.4	C	-	0.73	22.4	C		
UNSIGNALIZED INTERSECTIONS														
7 DITMARS BOULEVARD AND MARRIOTT HOTEL ENTRANCE/23RD ROAD														
Ditmars Boulevard	NB	LTR	-	0.0	A	LTR	-	0.0	A	LTR	-	0.0	A	- No improvements needed.
	SB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	
- to Marriott Hotel Entrance/23rd Road		L	-	9.4	A	L	-	9.5	A	L	-	9.5	A	
- to The Parking Spot			-	-	-	L	-	9.2	A	L	-	9.2	A	
Marriott Entrance/Exit	WB	LR	-	18.3	C	L	-	26.5	D	L	-	26.5	D	
			-	-	-	R	-	10.7	B	R	-	10.7	B	
The Parking Spot	WB		-	-	-	R	-	10.2	B	R	-	10.2	B	
Overall Intersection	-	-	1.7	B	-	-	2.3	A	-	-	2.3	A		

(1) Control delay is measured in seconds per vehicle.
(2) Overall intersection V/C ratio is the critical lane groups' V/C ratio.