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Mitigation

In accordance with the ~~2021~~2025 *City Environmental Quality Review (CEQR) Technical Manual,* where significant adverse impacts are identified, mitigation measures to reduce or eliminate the impacts to the fullest extent practicable are to be developed and evaluated.

Introduction

As detailed in the preceding chapters, approval of the Proposed Actions has the potential to result in significant adverse impacts related to operational traffic and pedestrians, and construction traffic, pedestrians, and noise. Mitigation measures have been identified to address those impacts where feasible and/or practical. As discussed below in more detail, partial mitigation is proposed for some of the significant adverse impacts resulting from the Proposed Actions. If no mitigation has been identified, an unavoidable significant adverse impact may result.

Principal Conclusions

Transportation

Traffic

Of the 13 intersections analyzed, the Proposed Actions would result in significant adverse traffic impacts at four intersections (at six specific traffic movements) during the weekday AM peak hour, four intersections (at six specific traffic movements) during the weekday midday peak hour, five intersections (at nine specific traffic movements) during the weekday PM peak hour, and five intersections (at seven specific traffic movements) during the Saturday peak hour. Standard traffic capacity improvements typically implemented by the New York City Department of Transportation (NYC DOT), such as signal timing modifications, could mitigate traffic impacts at two intersections

during the weekday AM peak hour, three intersections during the weekday midday peak hour, four intersections during the weekday PM peak hour, and two intersections during the Saturday peak hour. However, significant traffic impacts to the intersections listed below would remain unmitigated:

- Franklin Street and Quay Street (weekday midday, weekday PM, and Saturday peak hours)
- Franklin Street and Greenpoint Avenue (weekday AM peak hour)
- McGuinness Boulevard and Greenpoint Avenue (Saturday peak hour)
- West Street and Oak Street (weekday AM peak hour)
- Franklin Street and Milton Street (Saturday peak hour)

Pedestrians

Of the 22 pedestrian elements analyzed, the Proposed Actions would result in significant adverse pedestrian impacts at the intersection of Franklin Street and Quay Street (one crosswalk during the weekday AM, midday, PM, and Saturday peak hours; and at one corner during the Saturday peak hour). No feasible mitigation measures were identified, therefore the significant adverse impacts to these pedestrian elements would remain unmitigated.

Construction

Traffic

As discussed in **Chapter 18, Construction**, 13 intersections were analyzed for potential significant traffic impacts during the construction traffic peak hours. Significant impacts were identified at three intersections (at four specific traffic movements) during the weekday AM construction peak hour and four intersections (at six specific traffic movements) during the weekday PM construction peak hour. Where these impacts during construction can be expected to occur, traffic capacity improvements in the form of signal timing modifications are proposed to provide full mitigation where feasible. Significant traffic impacts could be fully mitigated at the three significantly impacted intersections during the weekday AM construction peak hour and three of the four significantly impacted intersections could be fully mitigated during the PM construction peak hour (one intersection would remain unmitigated).

Pedestrians

As described in **Chapter 18, Construction,** construction-related activities would generate 567 pedestrian trips during the weekday AM and PM construction peak hours. While the number of construction-related pedestrian trips would be substantially lower than pedestrian trips generated by the Proposed Development (1,262 pedestrian trips during the weekday AM commuter peak hour and 2,278 pedestrian trips during the PM commuter peak hour would be generated by the Proposed Development), significant impacts that could not be mitigated were identified at the south crosswalk at the intersection of Franklin Street and Quay Street under operational conditions. Therefore, it is possible that construction activities could result in significant adverse pedestrian impacts, although the potential for significant pedestrian impacts during construction would be no worse than what has been identified for the operational condition.

Noise

As described in **Chapter 18, Construction**, construction of the Proposed Development would have the potential to result in a significant adverse construction noise impact on the future building to be located at 3 West Street due to exceedances of the thresholds for exterior increase in noise and thresholds for acceptable interior noise levels for residential uses. No other receptors analyzed would experience significant adverse construction noise impacts.

Construction at the Development Site would be required to adhere to New York City's construction noise regulations, including the requirement to prepare and implement a Construction Noise Mitigation Plan and to construct an 8-foot-tall construction noise barrier, which is assumed in the noise modeling analysis. Even with these measures, construction noise would exceed the threshold for a significant adverse construction noise impact at one receptor location, 3 West Street, during certain phases of the construction work. Therefore, this significant adverse impact would be unmitigated.

Transportation

As discussed in **Chapter 12, Transportation**, the Proposed Actions would result in significant adverse traffic impacts at a number of locations in the study area, as well as significant adverse pedestrian impacts at one crosswalk and one corner. This section describes the mitigation measures that could reduce or eliminate significant impacts and indicates where impacts would remain unmitigated.

Traffic

The traffic study area analyzed includes 13 intersections. The Proposed Development would result in significant adverse traffic impacts at four intersections (at six specific traffic movements) during the weekday AM peak hour, four intersections (at six specific traffic movements) during the weekday midday peak hour, five intersections (at nine specific traffic movements) during the weekday PM peak hour, and five intersections (at seven specific traffic movements) during the Saturday peak hour. **Table 19-1** summarizes the number of impacted traffic intersections and number of impacted intersections that could be fully mitigated, and **Table 19-2** summarizes the significantly impacted traffic movements. Details of the intersection capacity analyses, and all traffic mitigation measures are summarized in **Table 19-3** to **Table 19-6**.

As discussed in **Chapter 12, Transportation**, many of the significantly impacted movements are movements that would operate at unacceptable levels of service under existing conditions and the No-Action condition. As shown in **Table 19-1**, two intersections would remain unmitigated during the weekday AM, one intersection would remain unmitigated during the weekday midday and weekday PM peak hours, and three intersections would remain unmitigated during the Saturday peak hour.

The majority of the 13 intersections analyzed would either not be significantly impacted or could be fully mitigated with readily implementable signal timing modifications. The measures identified represent some of the standard traffic capacity improvements that are typically implemented by NYC DOT. These proposed signal timing modifications would not worsen the pedestrian impacts identified in **Chapter 12, Transportation**.

As discussed in **Chapter 12, Transportation**, a new traffic signal would be installed at the intersection of Franklin Street and Meserole Avenue as proposed in the 2021 *ACME Fish Expansion FEIS*. However, as the timeline for the ACME project construction is unknown, there is a possibility that the signal at the intersection of Franklin Street and Meserole Avenue proposed in connection with that project may not be installed by the 2031 build year. In coordination with the lead agency and NYC DOT, an assessment was conducted for a scenario where the ACME project would not be constructed, and travel demand from that project and the proposed traffic signal would not materialize. Under this scenario, the intersection of Franklin Street and Meserole Avenue, specifically the westbound approach, would be significantly impacted during the weekday PM and Saturday peak hours. Mitigation measures, such as the installation of a traffic signal were explored, however, per the *Manual of Uniform Traffic Control Device, 11th Edition (MUTCD)* guidance, a traffic signal would not be warranted in the future without the addition of ACME-related traffic. Therefore, in addition to the unmitigated traffic impacts identified above, there would be the potential for unmitigated significant traffic impacts at this intersection during the weekday PM and Saturday peak hour without the ACME project (see **Appendix G** for details of this assessment).

Table 19-1 Traffic Impact Mitigation Summary

Intersections	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday Peak Hour
No significant impact	9	9	8	8
Fully mitigated impact	2	3	4	2
Unmitigated impact	2	1	1	3

Note: Includes 8 signalized intersections and 5 unsignalized intersections.

Table 19-2 Summary of Significantly Impacted Traffic Movements

Intersection	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday Peak Hour
Franklin Street and Quay Street	---	NBLT	NBLT	NBLT
Franklin Street and Calyer Street	SBLTR	SBLTR	SBLTR	SBLTR
Franklin Street and Greenpoint Avenue	WBLTR	WBLTR	WBLTR	WBLTR
	---	---	NBLTR	NBLTR
	SBLTR	SBLTR	SBLTR	---
Manhattan Avenue and Greenpoint Avenue	---	---	WBLTR	---
McGuinness Boulevard and Greenpoint Avenue	EBLTR	EBLTR	EBLTR	EBLTR
	WBL	---	WBL	---
	---	WBTR	WBTR	WBTR
West Street and Oak Street	EBLT	---	---	
Milton Street and Franklin Street	---	---	---	EBLTR

Notes: EB=Eastbound; WB=Westbound; NB=Northbound; SB=Southbound; L=Left turn; T=Through; R=Right turn
Shading denotes an unmitigated significant adverse traffic impact

Table 19-3 No-Action vs. With-Action vs. Mitigation Traffic Levels of Service – Weekday AM Peak Hour*

Intersection & Approach		No-Action Mvt	No-Action V/C	No-Action Ctrl Delay[1]	No-Action LOS	With-Action Mvt	With-Action V/C	With-Action Ctrl Delay[1]	With-Action LOS	Mitigation Mvt	Mitigation V/C	Mitigation Ctrl Delay[1]	Mitigation LOS	Mitigation Measures
Signalized Intersections														
Franklin Street and Meserole Avenue														
Meserole Ave	WB	LR	0.27	16.6	B	LR	0.31	17.2	B	LR	0.31	17.2	B	**No significant impact[4]**
Franklin Street	NB	T	0.44	10.7	B	T	0.46	10.9	B	T	0.46	10.9	B	
	SB	T	0.36	8.8	A	T	0.40	8.7	A	T	0.40	7.1	A	
Overall Intersection[2]		-	-	**11.0**	**B**	-	-	**11.2**	**B**	-	-	**10.6**	**B**	
Franklin Street and Quay Street														
Franklin Street	NB	LT	0.71	12.2	B	LT	0.95	35.2	D	LT	0.95	35.2	D	**No significant impact[4]**
	SB	TR	0.43	4.8	A	TR	0.55	5.1	A	TR	0.55	9.7	A	
Overall Intersection[2]		-	-	**8.9**	**A**	-	-	**21.1**	**C**	-	-	**23.3**	**C**	
Franklin Street and Calyer Street														
Franklin Street	NB	LTR	0.50	5.9	A	LTR	0.50	6.5	A	LTR	0.39	10.3	B	**Mitigated**
	SB	LTR	1.04	56.6	E	LTR	1.30	156.8	F	LTR	1.01	58.2	E	Modify signal timing from 60 sec cycle to 120 sec cycle: NB/SB phase green time shifts from 31 sec to 80 sec; Pedestrian-only phase shifts from 24 sec to 35 sec
Overall Intersection[2]		-	-	**37.8**	**D**	-	-	**108.0**	**F**	-	-	**42.7**	**D**	
Franklin Street and Oak Street														
Oak Street	EB	LR	0.27	16.8	B	LR	0.53	21.4	C	LR	0.53	21.4	C	**No significant impact[4]**
	WB	LR	0.17	15.7	B	LR	0.18	15.9	B	LR	0.18	15.9	B	
Franklin Street	NB	T	0.42	7.8	A	T	0.42	7.9	A	T	0.42	7.5	A	
	SB	T	0.57	6.4	A	T	0.61	7.1	A	T	0.61	6.9	A	
Overall Intersection[2]		-	-	**8.8**	**A**	-	-	**10.8**	**B**	-	-	**10.6**	**B**	

Table 19-3 No-Action vs. With-Action vs. Mitigation Traffic Levels of Service – Weekday AM Peak Hour*

Intersection & Approach		No-Action Mvt	No-Action V/C	No-Action Ctrl Delay[1]	No-Action LOS	With-Action Mvt	With-Action V/C	With-Action Ctrl Delay[1]	With-Action LOS	Mitigation Mvt	Mitigation V/C	Mitigation Ctrl Delay[1]	Mitigation LOS	Mitigation Measures
Franklin Street and Noble Street														
Noble Street	WB	LTR	0.17	15.6	B	LTR	0.19	16.0	B	LTR	0.19	16.0	B	**No significant impact[4]**
Franklin Street	NB	LT	0.53	10.5	B	LT	0.56	10.5	B	LT	0.56	10.0	A	
	SB	TR	0.62	7.9	A	TR	0.67	7.5	A	TR	0.67	10.9	B	
Overall Intersection[2]		-	-	**9.6**	**A**	-	-	**9.4**	**A**	-	-	**11.0**	**B**	
Franklin Street and Greenpoint Avenue														
Greenpoint Avenue	EB	LTR	0.30	17.6	B	LTR	0.38	18.9	B	LTR	0.29	26.1	C	**Partially Mitigated**
	WB	LTR	1.34	208.8	F	LTR	1.45	258.6	F	LTR	1.14	117.7	F	Modify signal timing from 60 sec cycle to 120 sec cycle: EB/WB phase green time shifts from 19 sec to 48 sec; NB/SB phase green time shifts from 24 sec to 55 sec; LPI of 7 sec remains
Franklin Street	NB	LTR	0.84	39.9	D	LTR	0.93	53.0	D	LTR	0.79	45.9	D	
	SB	LTR	0.96	52.6	D	LTR	1.01	64.5	E	LTR	0.91	55.0	E	
Overall Intersection[2]		-	-	**89.4**	**F**	-	-	**110.2**	**F**	-	-	**66.7**	**E**	
Manhattan Avenue and Greenpoint Avenue														
Greenpoint Avenue	EB	LT	0.54	31.5	C	LT	0.61	32.9	C	LT	0.61	27.2	C	**No significant impact[4]**
		R	0.05	22.4	C	R	0.06	21.6	C	R	0.06	14.7	B	
	WB	LTR	0.80	25.0	C	LTR	0.84	28.0	C	LTR	0.84	31.2	C	
Manhattan Avenue	NB	LTR	0.48	26.1	C	LTR	0.48	26.1	C	LTR	0.48	26.1	C	
	SB	LTR	0.84	44.4	D	LTR	0.84	45.1	D	LTR	0.84	45.1	D	
Overall Intersection[2]		-	-	**32.5**	**C**	-	-	**33.8**	**C**	-	-	**33.3**	**C**	

Table 19-3 No-Action vs. With-Action vs. Mitigation Traffic Levels of Service – Weekday AM Peak Hour*

Intersection & Approach		No-Action Mvt	No-Action V/C	No-Action Ctrl Delay[1]	No-Action LOS	With-Action Mvt	With-Action V/C	With-Action Ctrl Delay[1]	With-Action LOS	Mitigation Mvt	Mitigation V/C	Mitigation Ctrl Delay[1]	Mitigation LOS	Mitigation Measures
McGuinness Boulevard and Greenpoint Avenue														
Greenpoint Avenue	EB	LTR	1.15	163.9	F	LTR	1.35	240.7	F	LTR	1.16	157.6	F	**Mitigated**
	WB	L	0.88	85.1	F	L	0.93	96.4	F	L	0.82	70.1	E	Modify signal timing: Shift 3 sec of green time from NB/SB phase to EB/WB phase. [NB/SB phase green time shifts from 64 sec to 61 sec; EB/WB phase green time shifts from 36 sec to 39 sec] Shift offset from 26 sec to 28 sec
		TR	0.84	59.4	E	TR	0.87	63.1	E	TR	0.80	52.3	D	
McGuinness Boulevard	NB	L	0.28	18.9	B	L	0.30	19.4	B	L	0.32	22.0	C	
		TR	0.70	23.7	C	TR	0.72	24.3	C	TR	0.75	27.4	C	
	SB	L	0.37	23.5	C	L	0.38	24.0	C	L	0.42	28.3	C	
		TR	0.54	19.7	B	TR	0.54	19.7	B	TR	0.57	22.0	C	
Overall Intersection[2]		-	-	**44.7**	**D**	-	-	**55.8**	**E**	-	-	**45.7**	**D**	
Unsignalized Intersections														
West Street and Quay Street														
Quay Street	EB	L	-	7.3	A	L	-	8.0	A	L	-	8.0	A	**No significant impact**
	WB	TR	-	7.5	A	TR	-	8.1	A	TR	-	8.1	A	
Overall Intersection[2]		-	-	**7.5**	**A**	-	-	**8.1**	**A**	-	-	**8.1**	**A**	
West Street and Calyer Street														
Calyer Street	WB	R	-	10.7	B	R	-	14.8	B	R	-	14.8	B	**No significant impact**
West Street	NB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
Overall Intersection[2]		-	-	**3.8**	**A**	-	-	**3.0**	**A**	-	-	**3.0**	**A**	
West Street and Oak Street														
Oak Street	EB	LT	-	119.8	F	LT	-	300+	F	LT	-	300+	F	**Unmitigable**
West Street	NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	
Overall Intersection[2]		-	-	**52.4**	**F**	-	-	**138.1**	**F**	-	-	**138.1**	**F**	

Table 19-3 No-Action vs. With-Action vs. Mitigation Traffic Levels of Service – Weekday AM Peak Hour*

Intersection & Approach		No-Action Mvt	No-Action V/C	No-Action Ctrl Delay[1]	No-Action LOS	With-Action Mvt	With-Action V/C	With-Action Ctrl Delay[1]	With-Action LOS	Mitigation Mvt	Mitigation V/C	Mitigation Ctrl Delay[1]	Mitigation LOS	Mitigation Measures
Franklin Street and North 15th Street														
North 15th Street	WB	LR	-	15.0	B	LR	-	15.4	C	LR	-	15.4	C	**No significant impact**
Franklin Street	NB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
	SB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
Overall Intersection[2]		**-**	**-**	**0.5**	**A**	**-**	**-**	**0.7**	**A**	**-**	**-**	**0.7**	**A**	
Franklin Street and Milton Street														
Milton Street	EB	LTR	-	23.1	C	LTR	-	29.8	D	LTR	-	29.8	D	**No significant impact**
Franklin Street	NB	RT	-	0.0	A	RT	-	0.0	A	RT	-	0.0	A	
	SB	LT	-	1.0	A	LT	-	1.1	A	LT	-	1.1	A	
Overall Intersection[2]		**-**	**-**	**1.6**	**A**	**-**	**-**	**1.8**	**A**	**-**	**-**	**1.8**	**A**	

Notes:

Mvt=Movement; Ctrl=Control

[1] Control delay is measured in seconds per vehicle.

[2] Overall intersection v/c ratio is the critical lane groups' v/c ratio.

[3] Approach would not be significantly impacted as total approach volumes would be under 90 PCEs.

[4] Changes in delay due to signal timing mitigation at nearby intersection.

Shading denotes a significantly impacted movement

* This table has been updated from the DEIS

Table 19-4 No-Action vs. With-Action vs Mitigation Traffic Levels of Service – Weekday Midday Peak Hour

		No-Action				With-Action				Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
Signalized Intersections														
Franklin Street and Meserole Avenue														
Meserole Ave	WB	LR	0.24	16.2	B	LR	0.30	16.9	B	LR	0.30	16.9	B	**No significant impact[4]**
Franklin Street	NB	T	0.48	11.3	B	T	0.52	11.8	B	T	0.52	11.8	B	
	SB	T	0.35	8.6	A	T	0.38	7.8	A	T	0.38	6.9	A	
Overall Intersection[2]		-	-	**11.1**	**B**	-	-	**11.3**	**B**	-	-	**11.0**	**B**	
Franklin Street and Quay Street														
Franklin Street	NB	LT	0.78	14.6	B	LT	1.20	116.3	F	LT	1.20	116.3	F	**Unmitigable**
	SB	TR	0.45	6.6	A	R	0.60	6.2	A	R	0.6	13.0	B	
Overall Intersection[2]		-	-	**11.2**	**B**	-	-	**67.5**	**E**	-	-	**70.5**	**E**	
Franklin Street and Calyer Street														
Franklin Street	NB	LTR	0.53	5.8	A	LTR	0.53	5.8	A	LTR	0.40	10.4	B	**Mitigated**
	SB	LTR	0.84	19.4	B	LTR	1.13	86.6	F	LTR	0.88	35.1	D	Modify signal timing from 60 sec cycle to 120 sec cycle: NB/SB phase green time shifts from 31 sec to 80 sec; pedestrian-only phase shifts from 24 sec to 35 sec
Overall Intersection[2]		-	-	**13.8**	**B**	-	-	**58.0**	**E**	-	-	**26.4**	**C**	
Franklin Street and Oak Street														
Oak Street	EB	LR	0.18	15.7	B	LR	0.40	18.8	B	LR	0.40	18.8	B	**No significant impact[4]**
	WB	LR	0.07	14.6	B	LR	0.07	14.6	B	LR	0.07	14.6	B	
Franklin Street	NB	T	0.36	7.7	A	T	0.36	7.7	A	T	0.36	7.3	A	
	SB	T	0.58	7.7	A	T	0.65	8.6	A	T	0.65	8.1	A	
Overall Intersection[2]		-	-	**8.7**	**A**	-	-	**10.4**	**B**	-	-	**10.0**	**B**	

Table 19-4 No-Action vs. With-Action vs Mitigation Traffic Levels of Service – Weekday Midday Peak Hour

		No-Action				With-Action				Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
Franklin Street and Noble Street														
Noble Street	WB	LTR	0.14	15.2	B	LTR	0.16	15.5	B	LTR	0.16	15.5	B	**No significant impact[4]**
Franklin Street	NB	LT	0.44	9.2	A	LT	0.46	9.0	A	LT	0.46	8.4	A	
	SB	TR	0.62	6.1	A	TR	0.70	5.7	A	TR	0.7	13.8	B	
Overall Intersection[2]		-	-	**8.0**	**B**	-	-	**7.6**	**A**	-	-	**11.9**	**B**	
Franklin Street and Greenpoint Avenue														
Greenpoint Avenue	EB	LTR	0.27	17.3	B	LTR	0.35	18.7	B	LTR	0.27	25.7	C	**Mitigated**
	WB	LTR	1.20	149.1	F	LTR	1.40	235.0	F	LTR	1.05	87.6	F	Modify signal timing from 60 sec cycle to 120 sec cycle: EB/WB phase green time shifts from 19 sec to 48 sec; NB/SB phase green time shifts from 24 sec to 55 sec. LPI of 7 sec remains
Franklin Street	NB	LTR	0.80	37.9	D	LTR	0.86	44.6	D	LTR	0.75	44.1	D	
	SB	LTR	1.04	72.6	E	LTR	1.10	91.6	F	LTR	0.99	71.5	E	
Overall Intersection[2]		-	-	**77.8**	**E**	-	-	**109.0**	**F**	-	-	**63.8**	**E**	
Manhattan Avenue and Greenpoint Avenue														
Greenpoint Avenue	EB	LT	0.48	30.4	C	LT	0.54	31.1	C	LT	0.54	25.9	C	**No significant impact[4]**
		R	0.12	23.4	C	R	0.13	23.3	C	R	0.13	16.9	B	
	WB	LTR	0.72	33.1	C	LTR	0.79	36.4	D	LTR	0.79	37.7	D	
Manhattan Avenue	NB	LTR	0.55	28.4	C	LTR	0.55	28.4	C	LTR	0.55	28.4	C	
	SB	LTR	0.77	38.3	D	LTR	0.77	38.9	D	LTR	0.77	38.9	D	
Overall Intersection[2]		-	-	**33.0**	**C**	-	-	**34.1**	**C**	-	-	**33.2**	**C**	

Table 19-4 No-Action vs. With-Action vs Mitigation Traffic Levels of Service – Weekday Midday Peak Hour

		No-Action				With-Action				Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
McGuinness Boulevard and Greenpoint Avenue														
Greenpoint Avenue	EB	LTR	1.05	107.0	F	LTR	1.25	179.5	F	LTR	1.07	109.3	F	**Mitigated**
	WB	L	0.73	59.6	E	L	0.76	63.7	E	L	0.67	51.4	D	Modify signal timing: Shift 3 sec of green time from NB/SB phase to EB/WB phase. [NB/SB phase green time shifts from 63 sec to 60 sec; EB/WB phase green time shifts from 37 sec to 40 sec]
		TR	0.92	69.8	E	TR	0.96	78.3	E	TR	0.89	61.6	E	
McGuinness Boulevard	NB	L	0.30	19.7	B	L	0.32	20.4	C	L	0.34	23.1	C	
		TR	0.57	21.0	C	TR	0.58	21.2	C	TR	0.61	23.7	C	
	SB	L	0.32	20.5	C	L	0.32	20.8	C	L	0.35	23.6	C	
		TR	0.50	19.6	B	TR	0.51	19.8	B	TR	0.53	22.0	C	
Overall Intersection[2]		-	-	**39.2**	**D**	-	-	**50.0**	**D**	-	-	**40.2**	**D**	
Unsignalized Intersections														
West Street and Quay Street														
Quay Street	EB	L	-	7.3	A	L	-	7.7	A	L	-	7.7	A	**No significant impact**
	WB	TR	-	7.7	A	TR	-	8.7	A	TR	-	8.7	A	
Overall Intersection[2]		-	-	**7.7**	**A**	-	-	**8.6**	**A**	-	-	**8.6**	**A**	
West Street and Calyer Street														
Calyer Street	WB	R	-	10.7	B	R	-	14.8	B	R	-	14.8	B	**No significant impact**
West Street	NB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
Overall Intersection[2]		-	-	**2.8**	**A**	-	-	**3.1**	**A**	-	-	**3.1**	**A**	
West Street and Oak Street														
Oak Street	EB	LT	-	24.8	C	LT	-	55.0	F[3]	LT	-	55.0	F[3]	**No significant impact**
West Street	NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	
Overall Intersection[2]		-	-	**9.3**	**A**	-	-	**12.2**	**B**	-	-	**12.2**	**B**	

Table 19-4 No-Action vs. With-Action vs Mitigation Traffic Levels of Service – Weekday Midday Peak Hour

		No-Action				With-Action				Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
Franklin Street and North 15th Street														
North 15th Street	WB	LR	-	14.1	B	LR	-	14.9	B	LR	-	14.9	B	**No significant impact**
Franklin Street	NB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
	SB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
Overall Intersection[2]		**-**	**-**	**0.6**	**A**	**-**	**-**	**0.9**	**A**	**-**	**-**	**0.9**	**A**	
Franklin Street and Milton Street														
Milton Street	EB	LTR	-	37.3	E	LTR	-	61.5	F[3]	LTR	-	61.5	F[3]	**No significant impact**
Franklin Street	NB	RT	-	0.0	A	RT	-	0.0	A	RT	-	0.0	A	
	SB	LT	-	0.9	A	LT	-	1.0	A	LT	-	1.0	A	
Overall Intersection[2]		**-**	**-**	**3.8**	**A**	**-**	**-**	**5.6**	**A**	**-**	**-**	**5.6**	**A**	

Mvt=Movement; Ctrl=Control

[1] Control delay is measured in seconds per vehicle.

[2] Overall intersection v/c ratio is the critical lane groups' v/c ratio.

[3] Approach would not be significantly impacted as total approach volumes would be under 90 PCEs.

[4] Changes in delay due to signal timing mitigation at nearby intersection.

Shading denotes a significantly impacted movement

Table 19-5 No-Action vs. With-Action vs Mitigation Traffic Levels of Service – Weekday PM Peak Hour*

Intersection & Approach		No-Action Mvt	No-Action V/C	No-Action Ctrl Delay[1]	No-Action LOS	With-Action Mvt	With-Action V/C	With-Action Ctrl Delay[1]	With-Action LOS	Mitigation Mvt	Mitigation V/C	Mitigation Ctrl Delay[1]	Mitigation LOS	Mitigation Measures
SIGNALIZED INTERSECTIONS														
Franklin Street and Meserole Avenue														
Meserole Ave	WB	LR	0.65	23.8	C	LR	0.75	28.0	C[5]	LR	0.75	28.0	C[5]	**No significant impact[4]**
Franklin Street	NB	T	0.56	12.3	B	T	0.60	13.0	B	T	0.60	13.0	B	
	SB	T	0.35	1.5	A	T	0.39	1.6	A	T	0.39	1.6	A	
Overall Intersection[2]		-	-	**12.6**	**B**	-	-	**14.3**	**B**	-	-	**14.3**	**B**	
Franklin Street and Quay Street														
Franklin Street	NB	LT	1.15	94.4	F	LT	1.74	300+	F	LT	1.74	300+	F	**Unmitigable[4]**
	SB	TR	0.41	4.1	A	R	0.58	4.3	A	R	0.58	10.7	B	
Overall Intersection[2]		-	-	**63.7**	**F**	-	-	**222.2**	**F**	-	-	**224.5**	**F**	
Franklin Street and Calyer Street														
Franklin Street	NB	LTR	0.72	7.8	A	LTR	0.72	7.8	A	LTR	0.56	12.8	B	**Mitigated**
	SB	LTR	0.80	16.3	B	LTR	1.19	110.5	F	LTR	0.92	37.9	D	Modify signal timing from 60 sec cycle to 120 sec cycle: NB/SB phase green time shifts from 31 sec to 80 sec; pedestrian-only phase shifts from 24 sec to 35 sec
Overall Intersection[2]		-	-	**12.0**	**B**	-	-	**65.4**	**E**	-	-	**26.9**	**C**	
Franklin Street and Oak Street														
Oak Street	EB	LR	0.22	16.1	B	LR	0.51	20.6	C	LR	0.51	20.6	C	**No significant impact[4]**
	WB	LR	0.07	14.6	B	LR	0.07	14.6	B	LR	0.07	14.6	B	
Franklin Street	NB	T	0.57	8.9	A	T	0.57	8.9	A	T	0.57	10.7	B	
	SB	T	0.53	6.8	A	T	0.62	7.4	A	T	0.62	6.7	A	
Overall Intersection[2]		-	-	**8.9**	**A**	-	-	**10.6**	**B**	-	-	**11.0**	**B**	

Table 19-5 No-Action vs. With-Action vs Mitigation Traffic Levels of Service – Weekday PM Peak Hour*

Intersection & Approach		No-Action Mvt	No-Action V/C	No-Action Ctrl Delay[1]	No-Action LOS	With-Action Mvt	With-Action V/C	With-Action Ctrl Delay[1]	With-Action LOS	Mitigation Mvt	Mitigation V/C	Mitigation Ctrl Delay[1]	Mitigation LOS	Mitigation Measures
Franklin Street and Noble Street														
Noble Street	WB	LTR	0.19	15.9	B	LTR	0.23	16.7	B	LTR	0.23	16.7	B	**No significant impact[4]**
Franklin Street	NB	LT	0.64	8.9	A	LT	0.67	10.1	A	LT	0.67	9.9	A	
								10.0						
	SB	TR	0.57	5.8	A	TR	0.65	6.3	A	TR	0.65	8.7	A	
Overall Intersection[2]		-	-	**8.1**	**A**	-	-	**8.8**	**A**	-	-	**9.8**	**A**	
Franklin Street and Greenpoint Avenue														
Greenpoint Avenue	EB	LTR	0.40	19.4	B	LTR	0.48	21.2	C	LTR	0.39	28.8	C	**Mitigated**
	WB	LTR	1.29	182.4	F	LTR	1.52	280.1	F	LTR	1.29	182.8	F	Modify signal timing from 60 sec cycle to 120 sec cycle: EB/WB phase green time shifts from 19 sec to 47 sec; NB/SB phase green time shifts from 24 sec to 56 sec. LPI of 7 sec remains
Franklin Street	NB	LTR	1.17	119.7	F	LTR	1.23	147.8	F	LTR	1.05	92.0	F	
	SB	LTR	1.09	91.0	F	LTR	1.17	120.0	F	LTR	1.05	87.6	F	
Overall Intersection[2]		-	-	**115.2**	**F**	-	-	**157.0**	**F**	-	-	**105.4**	**F**	
Manhattan Avenue and Greenpoint Avenue														
Greenpoint Avenue	EB	LT	0.62	32.2	C	LT	0.67	32.7	C	LT	0.65	25.7	C	**Mitigated**
		R	0.10	22.4	C	R	0.11	22.3	C	R	0.10	14.8	B	Modify signal timing: Shift 2 sec of green time from NB/SB phase to EB/WB phase. [NB/SB green time shifts from 55 sec to 53 sec. EB/WB green time shifts from 55 sec to 57 sec
	WB	LTR	0.91	42.7	D	LTR	1.02	63.7	E	LTR	0.96	44.7	D	
Manhattan Avenue	NB	LTR	0.44	25.1	C	LTR	0.44	25.1	C	LTR	0.46	26.9	C	
	SB	LTR	0.80	41.1	D	LTR	0.81	42.0	D	LTR	0.84	47.2	D	
Overall Intersection[2]		-	-	**36.4**	**D**	-	-	**43.1**	**D**	-	-	**37.0**	**D**	

Table 19-5 No-Action vs. With-Action vs Mitigation Traffic Levels of Service – Weekday PM Peak Hour*

Intersection & Approach		No-Action Mvt	No-Action V/C	No-Action Ctrl Delay[1]	No-Action LOS	With-Action Mvt	With-Action V/C	With-Action Ctrl Delay[1]	With-Action LOS	Mitigation Mvt	Mitigation V/C	Mitigation Ctrl Delay[1]	Mitigation LOS	Mitigation Measures
McGuinness Boulevard and Greenpoint Avenue														
Greenpoint Avenue	EB	LTR	1.75	300+	F	LTR	2.16	300+	F	LTR	1.75	300+	F	**Mitigated**
	WB	L	0.96	108.9	F	L	0.99	117.7	F	L	0.85	77.9	E	Modify signal timing: Shift 3 sec of green time from NB/SB phase to EB/WB phase. [NB/SB phase green time shifts from 64 sec to 61 sec; EB/WB phase green time shifts from 36 sec to 39 sec]
		TR	1.01	89.7	F	TR	1.09	111.6	F	TR	1.00	83.9	F	
McGuinness Boulevard	NB	L	0.40	24.6	C	L	0.41	25.1	C	L	0.46	30.1	C	
		TR	0.60	20.8	C	TR	0.60	21.0	C	TR	0.63	23.4	C	
	SB	L	0.39	22.8	C	L	0.39	23.0	C	L	0.43	26.7	C	
		TR	0.67	22.5	C	TR	0.67	22.6	C	TR	0.70	25.4	C	
Overall Intersection[2]		-	-	**83.1**	**F**	-	-	**114.1**	**F**	-	-	**85.0**	**F**	
UNSIGNALIZED INTERSECTIONS														
West Street and Quay Street														
Quay Street	EB	L	-	7.3	A	L	-	7.8	A	L	-	7.8	A	**No significant impact**
	WB	TR	-	7.9	A	TR	-	9.5	A	TR	-	9.5	A	
Overall Intersection[2]		-	-	**7.9**	**A**	-	-	**9.3**	**A**	-	-	**9.3**	**A**	
West Street and Calyer Street														
Calyer Street	WB	R	-	10.4	B	R	-	15.4	C	R	-	15.4	C	**No significant impact**
West Street	NB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
Overall Intersection[2]		-	-	**2.7**	**A**	-	-	**3.3**	**A**	-	-	**3.3**	**A**	
West Street and Oak Street														
Oak Street	EB	LT	-	76.8	F	LT	-	300+	F[3]	LT	-	300+	F[3]	**No significant impact**
West Street	NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	
Overall Intersection[2]		-	-	**22.0**	**C**	-	-	**82.7**	**F**	-	-	**82.7**	**F**	

Table 19-5 No-Action vs. With-Action vs Mitigation Traffic Levels of Service – Weekday PM Peak Hour*

Intersection & Approach		No-Action Mvt	No-Action V/C	No-Action Ctrl Delay[1]	No-Action LOS	With-Action Mvt	With-Action V/C	With-Action Ctrl Delay[1]	With-Action LOS	Mitigation Mvt	Mitigation V/C	Mitigation Ctrl Delay[1]	Mitigation LOS	Mitigation Measures
Franklin Street and North 15th Street														
North 15th Street	WB	LR	-	16.8	C	LR	-	18.8	C	LR	-	18.8	C	**No significant impact**
Franklin Street	NB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
	SB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
Overall Intersection[2]		**-**	**-**	**0.9**	**A**	**-**	**-**	**1.4**	**A**	**-**	**-**	**1.4**	**A**	
Franklin Street and Milton Street														
Milton Street	EB	LTR	-	42.0	E	LTR	-	82.5	F[3]	LTR	-	82.5	F[3]	**No significant impact**
Franklin Street	NB	RT	-	0.0	A	RT	-	0.0	A	RT	-	0.0	A	
	SB	LT	-	1.0	A	LT	-	1.1	A	LT	-	1.1	A	
Overall Intersection[2]		**-**	**-**	**2.6**	**A**	**-**	**-**	**4.5**	**A**	**-**	**-**	**4.5**	**A**	

Mvt=Movement; Ctrl=Control

[1] Control delay is measured in seconds per vehicle.

[2] Overall intersection v/c ratio is the critical lane groups' v/c ratio.

[3] Approach would not be significantly impacted as total approach volumes would be under 90 PCEs.

[4] Changes in delay due to signal timing mitigation at nearby intersection.

[5] In the No-Action condition, a new traffic signal would be installed in conjunction with the ACME project. With this signal no significant adverse impact would occur. However, as set forth in **Appendix G**, absent the traffic signal there would be the potential for a significant adverse impact to the westbound approach. Without the additional traffic volume related to the ACME project, a traffic signal would not be warranted, therefore, significant traffic impacts at this intersection would remain unmitigated.

Shading denotes a significantly impacted movement

* This table has been updated from the DEIS

Table 19-6 No-Action vs. With-Action vs Mitigation Traffic Levels of Service – Saturday Peak Hour

Intersection & Approach		No-Action Mvt	No-Action V/C	No-Action Ctrl Delay[1]	No-Action LOS	With-Action Mvt	With-Action V/C	With-Action Ctrl Delay[1]	With-Action LOS	Mitigation Mvt	Mitigation V/C	Mitigation Ctrl Delay[1]	Mitigation LOS	Mitigation Measures
SIGNALIZED INTERSECTIONS														
Franklin Street and Meserole Avenue														
Meserole Ave	WB	LR	0.27	16.6	B	LR	0.38	18.0	B[5]	LR	0.38	18.0	B[5]	**No significant impact[4]**
Franklin Street	NB	T	0.56	12.3	B	T	0.60	13.0	B	T	0.60	13.0	B	
	SB	T	0.29	7.5	A	T	0.34	7.3	A	T	0.34	6.6	A	
Overall Intersection[2]		-	-	**11.5**	**B**	-	-	**12.3**	**B**	-	-	**12.0**	**B**	
Franklin Street and Quay Street														
Franklin Street	NB	LT	0.99	39.4	D	LT	1.64	300+	F	LT	1.64	300+	F	**Unmitigable[4]**
	SB	TR	0.40	6.3	A	R	0.61	6.2	A	R	0.61	12.1	B	
Overall Intersection[2]		-	-	**27.7**	**C**	-	-	**190.8**	**F**	-	-	**193.1**	**F**	
Franklin Street and Calyer Street														
Franklin Street	NB	LTR	0.70	7.4	A	LTR	0.71	6.7	A	LTR	0.53	11.2	B	**Mitigated**
	SB	LTR	0.87	23.1	C	LTR	1.32	168.2	F	LTR	1.00	52.3	D	Modify signal timing from 60 sec cycle to 120 sec cycle: NB/SB phase green time shifts from 31 sec to 81 sec; pedestrian-only phase shifts from 24 sec to 34 sec
Overall Intersection[2]		-	-	**15.4**	**B**	-	-	**101.9**	**F**	-	-	**35.4**	**D**	
Franklin Street and Oak Street														
Oak Street	EB	LR	0.26	16.6	B	LR	0.60	23.0	C	LR	0.60	23.0	C	**No significant impact[4]**
	WB	LR	0.05	14.4	B	LR	0.05	14.5	B	LR	0.05	14.5	B	
Franklin Street	NB	T	0.39	7.5	A	T	0.39	7.5	A	T	0.39	8.2	A	
	SB	T	0.51	6.6	A	T	0.59	7.2	A	T	0.59	7.4	A	
Overall Intersection[2]		-	-	**8.5**	**A**	-	-	**11.3**	**B**	-	-	**11.6**	**B**	

Table 19-6 No-Action vs. With-Action vs Mitigation Traffic Levels of Service – Saturday Peak Hour

		No-Action				With-Action				Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
Franklin Street and Noble Street														
Noble Street	WB	LTR	0.31	17.5	B	LTR	0.35	18.5	B	LTR	0.35	18.5	B	**No significant impact[4]**
Franklin Street	NB	LT	0.47	8.8	A	LT	0.50	8.9	A	LT	0.50	8.6	A	
	SB	TR	0.73	11.6	B	TR	0.83	13.0	B	TR	0.83	18.5	B	
Overall Intersection[2]		-	-	**11.3**	**B**	-	-	**12.1**	**B**	-	-	**14.9**	**B**	
Franklin Street and Greenpoint Avenue														
Greenpoint Avenue	EB	LTR	0.39	19.3	B	LTR	0.47	21.1	C	LTR	0.38	28.0	C	**Mitigated** Modify signal timing from 60 sec cycle to 120 sec cycle: EB/WB phase green time shifts from 19 sec to 48 sec; NB/SB phase green time shifts from 24 sec to 55 sec. LPI of 7 sec remains
	WB	LTR	1.23	156.5	F	LTR	1.42	236.7	F	LTR	1.23	146.6	F	
Franklin Street	NB	LTR	0.95	56.5	E	LTR	1.03	78.7	E	LTR	0.89	60.4	E	
	SB	LTR	0.86	35.6	D	LTR	0.94	46.9	D	LTR	0.86	46.5	D	
Overall Intersection[2]		-	-	**75.5**	**E**	-	-	**108.1**	**F**	-	-	**77.3**	**E**	
Manhattan Avenue and Greenpoint Avenue														
Greenpoint Avenue	EB	LT	0.48	29.8	C	LT	0.54	30.5	C	LT	0.54	24.6	C	**No significant impact[4]**
		R	0.14	23.6	C	R	0.16	23.5	C	R	0.16	16.7	B	
	WB	LTR	0.92	37.9	D	LTR	1.00	43.3	D	LTR	1.00	43.5	D	
Manhattan Avenue	NB	LTR	0.69	35.4	D	LTR	0.69	35.6	D	LTR	0.69	35.6	D	
	SB	LTR	0.63	31.6	C	LTR	0.64	32.1	C	LTR	0.64	32.1	C	
Overall Intersection[2]		-	-	**33.9**	**C**	-	-	**36.1**	**D**	-	-	**34.7**	**C**	

Table 19-6 No-Action vs. With-Action vs Mitigation Traffic Levels of Service – Saturday Peak Hour

		No-Action				With-Action				Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
McGuinness Boulevard and Greenpoint Avenue														
Greenpoint Avenue	EB	LTR	1.57	300+	F	LTR	2.01	300+	F	LTR	1.84	300+	F	**Unmitigable**
	WB	L	0.63	51.0	D	L	0.66	53.4	D	L	0.63	50.0	D	Modify signal timing: Shift 1 sec of green time from NB/SB phase to EB/WB phase. [NB/SB phase green time shifts from 63 sec to 62 sec; EB/WB phase green time shifts from 37 sec to 38 sec]
		TR	1.15	134.8	F	TR	1.22	159.1	F	TR	1.18	145.0	F	
McGuinness Boulevard	NB	L	0.69	45.1	D	L	0.71	48.1	D	L	0.74	52.8	D	
		TR	0.64	22.4	C	TR	0.65	22.6	C	TR	0.66	23.5	C	
	SB	L	0.62	36.4	D	L	0.63	37.6	D	L	0.65	40.9	D	
		TR	0.69	23.7	C	TR	0.70	23.9	C	TR	0.71	24.8	C	
Overall Intersection[2]		**-**	**-**	**72.3**	**E**	**-**	**-**	**99.4**	**F**	**-**	**-**	**89.4**	**F**	
UNSIGNALIZED INTERSECTIONS														
West Street and Quay Street														
Quay Street	EB	L	-	7.5	A	L	-	8.1	A	L	-	8.1	A	**No significant impact**
	WB	TR	-	7.7	A	TR	-	9.2	A	TR	-	9.2	A	
Overall Intersection[2]		**-**	**-**	**7.7**	**A**	**-**	**-**	**9.0**	**A**	**-**	**-**	**9.0**	**A**	
West Street and Calyer Street														
Calyer Street	WB	R	-	10.6	B	R	-	15.8	C	R	-	15.8	C	**No significant impact**
West Street	NB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
Overall Intersection[2]		**-**	**-**	**2.9**	**A**	**-**	**-**	**3.2**	**A**	**-**	**-**	**3.2**	**A**	
West Street and Oak Street														
Oak Street	EB	LT	-	41.9	E	LT	-	194.1	F[3]	LT	-	194.1	F[3]	**No significant impact**
West Street	NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	
Overall Intersection[2]		**-**	**-**	**16.3**	**C**	**-**	**-**	**43.9**	**E**	**-**	**-**	**43.9**	**E**	

Table 19-6 No-Action vs. With-Action vs Mitigation Traffic Levels of Service – Saturday Peak Hour

		No-Action				With-Action				Mitigation				
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
Franklin Street and North 15th Street														
North 15th Street	WB	LR	-	16.4	C	LR	-	18.1	C	LR	-	18.1	C	**No significant impact**
Franklin Street	NB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
	SB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
Overall Intersection[2]		**-**	**-**	**0.9**	**A**	**-**	**-**	**1.5**	**A**	**-**	**-**	**1.5**	**A**	
Franklin Street and Milton Street														
Milton Street	EB	LTR	-	53.4	F	LTR	-	116.2	F	LTR	-	116.2	F	**Unmitigable**
Franklin Street	NB	RT	-	0.0	A	RT	-	0.0	A	RT	-	0.0	A	
	SB	LT	-	1.2	A	LT	-	1.2	A	LT	-	1.2	A	
Overall Intersection[2]		**-**	**-**	**7.8**	**A**	**-**	**-**	**14.9**	**B**	**-**	**-**	**14.9**	**B**	

Mvt=Movement; Ctrl=Control

[1] Control delay is measured in seconds per vehicle.

[2] Overall intersection v/c ratio is the critical lane groups' v/c ratio.

[3] Approach would not be significantly impacted as total approach volumes would be under 90 PCEs.

[4] Changes in delay due to signal timing mitigation at nearby intersection.

[5] In the No-Action condition, a new traffic signal would be installed in conjunction with the ACME project. With this signal no significant adverse impact would occur. However, as set forth in **Appendix G**, absent the traffic signal there would be the potential for a significant adverse impact to the westbound approach. Without the additional traffic volume related to the ACME project, a traffic signal would not be warranted, therefore, significant traffic impacts at this intersection would remain unmitigated.

Shading denotes a significantly impacted movement

Franklin Street Corridor

Four of the eight intersections analyzed along Franklin Street would be significantly impacted during one or more peak hours. Of these four significantly impacted intersections, three would remain unmitigated during at least one peak hour.

Franklin Street and Quay Street

This intersection would be significantly impacted during the weekday midday, weekday PM, and Saturday peak hours analyzed (the northbound approach would be significantly impacted). Significant impacts to this intersection during the weekday midday, PM, nor Saturday peak hours could not be mitigated.

Franklin Street and Calyer Street

This intersection would be significantly impacted during all four peak hours analyzed (the southbound approach would be impacted). The impact to the southbound approach could be mitigated via signal timing modifications in the weekday AM, weekday midday, weekday PM, and Saturday peak hours.

Franklin Street and Greenpoint Avenue

Significant impacts at this intersection would occur during all four peak hours analyzed. The westbound approach would be impacted during all four peak hours analyzed. The northbound approach would be impacted during the weekday PM and Saturday peak hours. The southbound approach would be impacted during the weekday AM, weekday midday, and weekday PM peak hours. Significant impacts at this intersection could be fully mitigated via signal timing modifications during the weekday midday, PM and Saturday peak hours. Significant impacts during the weekday AM peak hour could not be fully mitigated.

Franklin Street and Milton Street

This intersection would be significantly impacted during the Saturday peak hour (the eastbound approach would be impacted). This impact could not be mitigated.

Greenpoint Avenue Corridor

The two other Greenpoint Avenue intersections analyzed (not including the intersection of Franklin Street and Greenpoint Avenue summarized above) would be significantly impacted during at least one peak hour.

Manhattan Avenue and Greenpoint Avenue

This intersection would be significantly impacted during the weekday PM peak hour (the westbound approach would be impacted) and could be mitigated via signal timing modifications.

McGuinness Boulevard and Greenpoint Avenue

Significant impacts would occur at this intersection during all four peak hours analyzed. The eastbound approach would be impacted during all four peak hours analyzed. The westbound left-

turn movement would be impacted during the weekday AM and weekday PM peak hours. The westbound shared through-right movement would be impacted during the weekday midday, weekday PM, and Saturday peak hours. Significant impacts during the weekday AM, weekday midday, and weekday PM peak hours could be mitigated via signal timing modifications. The impacts during the Saturday peak hour would remain unmitigated.

West Street and Oak Street

This intersection would be significantly impacted during the weekday AM peak hour (the eastbound approach would be impacted). This impact could not be mitigated.

Implementation

Implementation of these measures would be subject to review and approval by NYC DOT. If, prior to implementation, NYC DOT determines that an identified mitigation measure is infeasible, and no alternative and equivalent measure is identified, then that impact would remain unmitigated and would constitute an unavoidable adverse impact.

Pedestrians

As discussed in **Chapter 12, Transportation**, a total of 22 pedestrian elements were analyzed. The Proposed Actions would result in significant adverse impacts at the south crosswalk at the intersection of Franklin Street and Quay Street during the weekday AM, midday, PM, and Saturday peak hours; and at the southwest corner at the same intersection during the Saturday peak hour. A summary of the significant impact findings at the pedestrian analysis locations is provided in **Table 19-7**.

Table 19-7 Summary of Elements with Significant Adverse Pedestrian Impacts

Peak Hour	Elements Analyzed	Elements with No Significant Impacts	Mitigated Elements	Unmitigated Elements
Sidewalks				
Weekday AM	10	10	0	0
Weekday Midday	10	10	0	0
Weekday PM	10	10	0	0
Saturday	10	10	0	0
Crosswalks				
Weekday AM	4	3	0	1
Weekday Midday	4	3	0	1
Weekday PM	4	3	0	1
Saturday	4	3	0	1

Table 19-7 Summary of Elements with Significant Adverse Pedestrian Impacts

Peak Hour	Elements Analyzed	Elements with No Significant Impacts	Mitigated Elements	Unmitigated Elements
Corner Areas				
Weekday AM	8	8	0	0
Weekday Midday	8	8	0	0
Weekday PM	8	8	0	0
Saturday	8	7	0	1

The south crosswalk at the intersection of Franklin Street and Quay Street is 15 feet wide, consistent with the adjacent Quay Street south sidewalk to the west of Franklin Street. A typical measure to mitigate significant impacts to a crosswalk would be to widen the crosswalk. However, as the extent of crosswalk widening would result in a crosswalk that is much wider than the adjacent sidewalk, this would not conform with NYC DOT's guidelines and is therefore considered not feasible. Modification of the intersection signal timing would also worsen significant traffic impacts at this intersection. Therefore, as shown in **Table 19-8**, significant impacts to this crosswalk during the four analysis peak hours could not be mitigated.

Table 19-8 Pedestrian Levels of Service Summary – Significantly Impacted Crosswalks

		No-Action			With-Action			Mitigation			
Intersection	**Crosswalk**	**Volume**	**A.P.S.**	**LOS**	**Volume**	**A.P.S.**	**LOS**	**Volume**	**A.P.S.**	**LOS**	**Mitigation Measure**
Weekday AM Peak Hour											
Franklin Street and Quay Street	South	355	49.7	B	823	19.8	D	823	19.8	D	**Unmitigable**
Weekday Midday Peak Hour											
Franklin Street and Quay Street	South	467	34.4	C	1,037	14.1	E	1,037	14.1	E	**Unmitigable**
Weekday PM Peak Hour											
Franklin Street and Quay Street	South	478	39.7	C	1,251	13.7	E	1,251	13.7	E	**Unmitigable**
Saturday Peak Hour											
Franklin Street and ~~Noble~~Quay Street	South	505	28.2	C	1,376	8.9	E	1,376	8.9	E	**Unmitigable**

LOS= Level of Service
Units: Volume=pedestrians per hour; Average Pedestrian Space (A.P.S.)=square feet per pedestrian
Shading denotes a significant adverse impact.

There are protected bike lanes along both sides of the southwest corner (along the south side of Quay Street and the west side of Franklin Street). Therefore, typical measures to mitigate corner impacts, specifically widening of the corner reservoir area (corner bulb-outs), would not be feasible

as it would encroach upon the protected bike lanes. Therefore, as shown in **Table 19-9**, significant impacts to this corner during the Saturday peak hour could not be mitigated.

Table 19-9 Pedestrian Levels of Service Summary – Significantly Impacted Corners

		No-Action			With-Action			Mitigation			
Intersection	**Corner**	**Volume**	**A.P.S.**	**LOS**	**Volume**	**A.P.S.**	**LOS**	**Volume**	**A.P.S.**	**LOS**	**Mitigation Measure**
Saturday Peak Hour											
Franklin Street and ~~Noble~~Quay Street	Southwest	187	131.7	A	272	22.4	D	272	22.4	D	**Unmitigable**

LOS= Level of Service
Units: Volume=pedestrians per hour; Average Pedestrian Space (A.P.S.)=square feet per pedestrian
Shading denotes a significant adverse impact.

As the mitigation measures identified above to address significant traffic impacts could have an effect on pedestrian operations, a review of the crosswalk and corner levels of service at the pedestrian analysis locations was conducted. This review confirmed that all crosswalks and corners, except for the significantly impacted pedestrian elements identified in **Table 19-8** and **Table 19-9**, would operate at LOS C or better, and that traffic mitigation would not result in new significant pedestrian impacts or worsen significant pedestrian impacts.

Construction

Transportation

As discussed in **Chapter 18, Construction**, construction of the Proposed Development would result in significant adverse traffic impacts at a number of locations in the study area. Additionally, during construction the potential for significant adverse pedestrian impacts would be no worse than what has been identified for the operational condition. This section describes the mitigation measures that could reduce or eliminate significant impacts during construction and indicates where impacts would remain unmitigated.

Traffic

As discussed in **Chapter 18, Construction**, 13 intersections were analyzed for potential significant traffic impacts during the construction traffic peak hours. Significant impacts were identified at three intersections (at four specific traffic movements) during the weekday AM construction peak hour and four intersections (at six specific traffic movements) during the weekday PM construction peak hour. Detailed descriptions of future conditions without construction (No-Action condition), with construction (With-Action condition), and with construction mitigation (Mitigation condition) traffic levels of service, and traffic mitigation measures, are presented in **Table 19-10** and **Table 19-11**.

Where impacts during construction are expected to occur, traffic capacity improvements in the form of signal timing modifications are proposed to provide full mitigation (see **Table 19-10** and **Table 19-11**). Significant traffic impacts could be fully mitigated at the three significantly impacted

intersections during the weekday AM construction peak hour and three of the four significantly impacted intersections during the PM construction peak hour (one intersection would remain unmitigated). These mitigation measures would also be subject to DOT review and approval. If DOT determines that an identified improvement is infeasible, and no alternative and equivalent measure is identified, then the impact would be unmitigated and would constitute an unavoidable significant adverse impact.

Table 19-10 Future Construction Conditions Traffic Levels of Service – Weekday AM Peak Hour

		No-Action without Construction				With-Action with Construction				Mitigation with Construction				
Intersection and Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
Signalized Intersections														
Franklin Street and Quay Street														
Franklin Street	NB	LT	0.37	10.2	B	LT	1.06	74.2	E	LT	0.97	47.6	D	**Mitigated**
	SB	TR	0.24	5.7	A	TR	0.56	8.1	A	TR	0.52	5.0	A	Modify signal timing: Shift 2 sec of green time from Pedestrian-only phase to NB/SB phase. [Pedestrian-only phase shifts from 24 sec to 22 sec; NB/SB phase green time shifts from 36 sec to 38 sec]
Overall Intersection[2]		-	-	**8.3**	**A**	-	-	**44.7**	**D**	-	-	**28.6**	**C**	
Franklin Street and Calyer Street														
Franklin Street	NB	LTR	0.29	3.9	A	LTR	0.29	5.3	A	LTR	0.29	6.3	A	**No significant impact[3]**
	SB	LTR	0.47	8.0	A	LTR	0.71	10.3	B	LTR	0.71	10.7	B	
Overall Intersection[2]		-	-	**6.3**	**A**	-	-	**8.8**	**A**	-	-	**9.4**	**A**	
Franklin Street and Oak Street														
Oak Street	EB	LR	0.12	15.1	B	LR	0.17	15.6	B	LR	0.17	15.6	B	**No significant impact[3]**
	WB	LR	0.09	14.8	B	LR	0.09	14.8	B	LR	0.09	14.8	B	
Franklin Street	NB	T	0.26	5.1	A	T	0.26	7.3	A	T	0.26	6.9	A	
	SB	T	0.31	3.7	A	T	0.52	5.3	A	T	0.52	6.2	A	
Overall Intersection[2]		-	-	**6.1**	**A**	-	-	**7.4**	**A**	-	-	**7.8**	**A**	

Table 19-10 Future Construction Conditions Traffic Levels of Service – Weekday AM Peak Hour

		No-Action without Construction				With-Action with Construction				Mitigation with Construction				
Intersection and Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
Franklin Street and Noble Street														
Noble Street	WB	LTR	0.09	14.8	B	LTR	0.17	15.6	B	LTR	0.17	15.6	B	**No significant impact[3]**
Franklin Street	NB	LT	0.32	6.6	A	LT	0.34	8.5	A	LT	0.34	8.3	A	
	SB	TR	0.35	6.4	A	TR	0.53	8.4	A	TR	0.53	11.4	B	
Overall Intersection[2]		-	-	**7.2**	**A**	-	-	**9.2**	**A**	-	-	**10.8**	**B**	
Franklin Street and Greenpoint Avenue														
Greenpoint Avenue	EB	LTR	0.17	15.8	B	LTR	0.21	16.3	B	LTR	0.16	23.8	C	**Mitigated** Modify signal timing from 60 sec cycle to 120 sec cycle: EB/WB phase green time shifts from 19 sec to 48 sec; NB/SB phase green time shifts from 24 sec to 55 sec; LPI of 7 sec remains.
	WB	LTR	0.66	43.0	D	LTR	1.17	147.1	F	LTR	0.88	48.5	D	
Franklin Street	NB	LTR	0.42	20.0	B	LTR	0.46	21.3	C	LTR	0.39	26.8	C	
	SB	LTR	0.52	17.8	B	LTR	0.58	19.3	B	LTR	0.50	26.3	C	
Overall Intersection[2]		-	-	**25.2**	**C**	-	-	**64.5**	**E**	-	-	**34.0**	**C**	
Manhattan Avenue and Greenpoint Avenue														
Greenpoint Avenue	EB	LT	0.26	23.5	C	LT	0.29	23.6	C	LT	0.29	23.2	C	**No significant impact[3]**
		R	0.03	20.8	C	R	0.03	20.6	C	R	0.03	18.9	B	
	WB	LTR	0.43	12.0	B	LTR	0.75	14.9	B	LTR	0.75	17.2	B	
Manhattan Avenue	NB	LTR	0.30	21.9	C	LTR	0.30	21.9	C	LTR	0.30	21.9	C	
	SB	LTR	0.46	25.2	C	LTR	0.46	25.2	C	LTR	0.46	25.2	C	
Overall Intersection[2]		-	-	**20.3**	**C**	-	-	**20.2**	**C**	-	-	**21.0**	**C**	

Table 19-10 Future Construction Conditions Traffic Levels of Service – Weekday AM Peak Hour

Intersection and Approach		No-Action without Construction				With-Action with Construction				Mitigation with Construction				Mitigation Measures
		Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	
McGuinness Boulevard and Greenpoint Avenue														
Greenpoint Avenue	EB	LTR	0.44	53.8	D	LTR	0.65	67.3	E	LTR	0.54	57.9	E	**Mitigated**
	WB	L	0.35	37.1	D	L	0.36	37.5	D	L	0.31	33.1	C	Modify signal timing: Shift 4 sec of green time from NB/SB phase to EB/WB phase. [NB/SB phase green time shifts from 64 sec to 60 sec; EB/WB phase green time shifts from 36 sec to 40 sec]; LPI of 10 sec remains.
		TR	0.53	40.3	D	TR	0.88	64.6	E	TR	0.79	50.6	D	
McGuinness Boulevard	NB	L	0.12	14.8	B	L	0.13	14.9	B	L	0.14	17.2	B	
		TR	0.46	18.4	B	TR	0.46	18.4	B	TR	0.49	21.1	C	
	SB	L	0.11	14.9	B	L	0.11	14.9	B	L	0.13	17.2	B	
		TR	0.34	16.6	B	TR	0.35	16.8	B	TR	0.38	19.3	B	
Overall Intersection[2]		-	-	**24.2**	**C**	-	-	**31.2**	**C**	-	-	**29.5**	**C**	
Franklin Street and Oak Street														
Oak Street	EB	LR	0.12	15.1	B	LR	0.17	15.6	B	LR	0.17	15.6	B	**No significant impact[3]**
	WB	LR	0.09	14.8	B	LR	0.09	14.8	B	LR	0.09	14.8	B	
Franklin Street	NB	T	0.26	5.1	A	T	0.26	7.3	A	T	0.26	6.9	A	
	SB	T	0.31	3.7	A	T	0.52	5.3	A	T	0.52	6.2	A	
Overall Intersection[2]		-	-	**6.1**	**A**	-	-	**7.4**	**A**	-	-	**7.8**	**A**	
Unsignalized Intersections														
West Street and Quay Street														
Quay Street	EB	L	-	7.0	A	L	-	7.3	A	L	-	7.3	A	**No significant impact**
	WB	TR	-	7.0	A	TR	-	7.3	A	TR	-	7.3	A	
Overall Intersection[2]		-	-	**7.0**	**A**	-	-	**7.3**	**A**	-	-	**7.3**	**A**	

Table 19-10 Future Construction Conditions Traffic Levels of Service – Weekday AM Peak Hour

		No-Action without Construction				With-Action with Construction				Mitigation with Construction				
Intersection and Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mitigation Measures**
West Street and Calyer Street														
Calyer Street	WB	R	-	9.2	A	R	-	9.5	A	R	-	9.5	A	**No significant impact**
West Street	NB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
Overall Intersection[2]		**-**	**-**	**3.6**	**A**	**-**	**-**	**2.6**	**A**	**-**	**-**	**2.6**	**A**	
West Street and Oak Street														
Oak Street	EB	LT	-	14.8	B	LT	-	16.3	C	LT	-	16.3	C	**No significant impact**
West Street	NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	
Overall Intersection[2]		**-**	**-**	**4.6**	**A**	**-**	**-**	**4.0**	**A**	**-**	**-**	**4.0**	**A**	
Franklin Street and North 15th Street														
North 15th Street	WB	LR	-	12.1	B	LR	-	13.4	B	LR	-	13.4	B	**No significant impact**
Franklin Street	NB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
	SB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
Overall Intersection[2]		**-**	**-**	**0.5**	**A**	**-**	**-**	**2.4**	**A**	**-**	**-**	**2.4**	**A**	
Franklin Street and Meserole Avenue														
Meserole Ave	WB	LR	-	12.3	B	LR	-	20.4	C	LR	-	20.4	C	**No significant impact**
Franklin Street	NB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
	SB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
Overall Intersection[2]		**-**	**-**	**0.8**	**A**	**-**	**-**	**2.7**	**A**	**-**	**-**	**2.7**	**A**	

Table 19-10 Future Construction Conditions Traffic Levels of Service – Weekday AM Peak Hour

Intersection and Approach		No-Action without Construction				With-Action with Construction				Mitigation with Construction				Mitigation Measures
		Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	
Franklin Street and Milton Street														
Milton Street	EB	LTR	-	15.6	C	LTR	-	22.8	C	LTR	-	22.8	C	**No significant impact**
Franklin Street	NB	RT	-	0.0	A	RT	-	0.0	A	RT	-	0.0	A	
	SB	LT	-	0.7	A	LT	-	0.6	A	LT	-	0.6	A	
Overall Intersection[2]		**-**	**-**	**1.3**	**A**	**-**	**-**	**1.4**	**A**	**-**	**-**	**1.4**	**A**	

Mvt=Movement; Ctrl=Control; Sec=Second(s)

[1] Control delay is measured in seconds per vehicle.

[2] Overall intersection v/c ratio is the critical lane groups' v/c ratio.

[3] Changes in delay due to signal timing mitigation at nearby intersection.

Shading denotes a significantly impacted movement

Table 19-11 Future Construction Conditions Traffic Levels of Service – Weekday PM Peak Hour

Intersection and Approach		No-Action without Construction				With-Action with Construction				Mitigation with Construction				Mitigation Measures
		Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	
Signalized Intersections														
Franklin Street and Quay Street														
Franklin Street	NB	LT	0.93	35.9	D	LT	1.08	76.6	E	LT	0.97	57.1	D	**Mitigated**
	SB	TR	0.43	6.2	A	R	0.52	6.0	A	R	0.48	9.1	A	Modify signal timing: Shift 2 sec of green time from Pedestrian-only phase to NB/SB phase. [Pedestrian-only phase shifts from 24 sec to 22 sec; NB/SB phase green time shifts from 36 sec to 38 sec]
Overall Intersection[2]		-	-	**24.5**	**C**	-	-	**46.8**	**D**	-	-	**28.7**	**C**	
Franklin Street and Calyer Street														
Franklin Street	NB	LTR	0.61	6.3	A	LTR	0.62	5.6	A	LTR	0.48	11.1	B	**Mitigated**
	SB	LTR	0.73	12.6	B	LTR	1.19	112.4	F	LTR	0.92	38.1	D	Modify signal timing from 60 sec cycle to 120 sec cycle: NB/SB phase green time shifts from 31 sec to 80 sec; Pedestrian-only phase shifts from 24 sec to 35 sec.
Overall Intersection[2]		-	-	**9.6**	**A**	-	-	**69.6**	**E**	-	-	**27.3**	**C**	
Franklin Street and Oak Street														
Oak Street	EB	LR	0.19	15.8	B	LR	0.87	40.0	D	LR	0.87	40.0	D	**No significant impact[4]**
	WB	LR	0.07	14.6	B	LR	0.07	14.7	B	LR	0.07	14.7	B	
Franklin Street	NB	T	0.42	7.7	A	T	0.42	7.8	A	T	0.42	8.0	A	
	SB	T	0.50	5.8	A	T	0.51	5.9	A	T	0.51	4.3	A	
Overall Intersection[2]		-	-	**7.9**	**A**	-	-	**17.6**	**B**	-	-	**17.1**	**B**	

Table 19-11 Future Construction Conditions Traffic Levels of Service – Weekday PM Peak Hour

Intersection and Approach		No-Action without Construction				With-Action with Construction				Mitigation with Construction				Mitigation Measures
		Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	
Franklin Street and Noble Street														
Noble Street	WB	LTR	0.14	15.4	B	LTR	0.15	15.5	B	LTR	0.15	15.5	B	**No significant impact[4]**
Franklin Street	NB	LT	0.48	8.2	A	LT	0.61	11.5	B	LT	0.61	10.9	B	
	SB	TR	0.54	6.6	A	TR	0.55	6.6	A	TR	0.55	13.3	B	
Overall Intersection[2]		-	-	**7.9**	**A**	-	-	**9.6**	**A**	-	-	**12.2**	**B**	
Franklin Street and Greenpoint Avenue														
Greenpoint Avenue	EB	LTR	0.35	18.5	B	LTR	0.40	19.5	B	LTR	0.36	31.6	C	**Mitigated** Modify signal timing from 60 sec cycle to 120 sec cycle: EB/WB phase green time shifts from 19 sec to 42 sec; NB/SB phase green time shifts from 24 sec to 61 sec; LPI of 7 sec remains.
	WB	LTR	1.18	139.9	F	LTR	1.20	147.3	F	LTR	1.14	129.9	F	
Franklin Street	NB	LTR	0.82	37.4	D	LTR	1.14	111.9	F	LTR	0.87	52.3	D	
	SB	LTR	0.83	32.6	C	LTR	0.87	36.9	D	LTR	0.68	29.0	C	
Overall Intersection[2]		-	-	**60.6**	**E**	-	-	**88.6**	**F**	-	-	**61.9**	**E**	
Manhattan Avenue and Greenpoint Avenue														
Greenpoint Avenue	EB	LT	0.40	27.3	C	LT	0.58	31.4	C	LT	0.58	27.6	C	**No significant impact[4]**
	EB	R	0.09	22.1	C	R	0.10	22.4	C	R	0.10	17.4	B	
	WB	LTR	0.73	29.7	C	LTR	0.79	32.8	C	LTR	0.79	29.1	C	
Manhattan Avenue	NB	LTR	0.42	24.7	C	LTR	0.53	27.9	C	LTR	0.53	27.9	C	
	SB	LTR	0.78	39.1	D	LTR	0.78	39.4	D	LTR	0.78	39.4	D	
Overall Intersection[2]		-	-	**31.1**	**C**	-	-	**33.2**	**C**	-	-	**31.1**	**C**	

Table 19-11 Future Construction Conditions Traffic Levels of Service – Weekday PM Peak Hour

Intersection and Approach		No-Action without Construction				With-Action with Construction				Mitigation with Construction				Mitigation Measures
		Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	
McGuinness Boulevard and Greenpoint Avenue														
Greenpoint Avenue	EB	LTR	1.24	162.9	F	LTR	1.75	380.8	F	LTR	1.35	202.8	F	**Partially Mitigated[4]**
	WB	L	0.69	57.6	E	L	0.98	116.4	F	L	0.75	61.5	E	Modify signal timing: Shift 5 sec of green time from NB/SB phase to EB/WB phase. [NB/SB phase green time shifts from 64 sec to 59 sec; EB/WB phase green time shifts from 36 sec to 41 sec]; LPI of 10 sec remains.
		TR	0.89	64.5	E	TR	0.90	65.6	E	TR	0.79	48.4	D	
McGuinness Boulevard	NB	L	0.37	23.1	C	L	0.37	23.1	C	L	0.45	30.7	C	
		TR	0.61	21.0	C	TR	0.61	21.0	C	TR	0.66	25.2	C	
	SB	L	0.35	21.5	C	L	0.35	21.5	C	L	0.40	27.5	C	
		TR	0.65	22.0	C	TR	0.65	22.1	C	TR	0.70	26.6	C	
Overall Intersection[2]		-	-	**44.3**	**D**	-	-	**85.6**	**F**	-	-	**57.2**	**E**	
Unsignalized Intersections														
West Street and Quay Street														
Quay Street	EB	L	-	7.3	A	L	-	7.6	A	L	-	7.6	A	**No significant impact**
	WB	TR	-	7.6	A	TR	-	10.7	B	TR	-	10.7	B	
Overall Intersection[2]		-	-	7.6	A	-	-	10.6	B	-	-	10.6	B	
West Street and Calyer Street														
Calyer Street	WB	R	-	9.7	A	R	-	12.8	B	R	-	12.8	B	**No significant impact**
West Street	NB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
Overall Intersection[2]		-	-	**2.7**	**A**	-	-	**1.2**	**A**	-	-	**1.2**	**A**	
West Street and Oak Street														
Oak Street	EB	LT	-	30.9	D	LT	-	62.8	F[3]	LT	-	62.8	F[3]	**No significant impact**
West Street	NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	
Overall Intersection[2]		-	-	**8.4**	**A**	-	-	**7.0**	**A**	-	-	**7.0**	**A**	

Table 19-11 Future Construction Conditions Traffic Levels of Service – Weekday PM Peak Hour

Intersection and Approach		No-Action without Construction				With-Action with Construction				Mitigation with Construction				Mitigation Measures
		Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	Mvt	V/C	Ctrl Delay[1]	LOS	
Franklin Street and North 15th Street														
North 15th Street	WB	LR	-	15.8	C	LR	-	16.8	C	LR	-	16.8	C	**No significant impact**
Franklin Street	NB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
	SB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
Overall Intersection[2]		**-**	**-**	**0.8**	**A**	**-**	**-**	**0.8**	**A**	**-**	**-**	**0.8**	**A**	
Franklin Street and Meserole Avenue														
Meserole Ave	WB	LR	-	29.4	B	LR	-	91.0	F[3]	LR	-	90.1	F[3]	**No significant impact[4]**
Franklin Street	NB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
	SB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	
Overall Intersection[2]		**-**	**-**	**2.2**	**A**	**-**	**-**	**6.6**	**A**	**-**	**-**	**6.6**	**A**	
Franklin Street and Milton Street														
Milton Street	EB	LTR	-	25.7	D	LTR	-	47.8	E[3]	LTR	-	47.8	E[3]	**No significant impact**
Franklin Street	NB	RT	-	0.0	A	RT	-	0.0	A	RT	-	0.0	A	
	SB	LT	-	0.6	A	LT	-	0.7	A	LT	-	0.7	A	
Overall Intersection[2]		**-**	**-**	**1.6**	**A**	**-**	**-**	**2.9**	**A**	**-**	**-**	**2.9**	**A**	

Mvt=Movement; Ctrl=Control; Sec=Second(s)

[1] Control delay is measured in seconds per vehicle.

[2] Overall intersection v/c ratio is the critical lane groups' v/c ratio.

[3] Approach would not be significantly impacted as total approach volumes would be under 90 PCEs.

[4] Changes in delay due to signal timing mitigation at nearby intersection.

Shading denotes a significantly impacted movement

Pedestrians

As described in **Chapter 18, Construction**, construction-related activities would generate 567 pedestrian trips during the weekday AM and PM construction peak hours. While the number of construction-related pedestrian trips would be substantially lower than pedestrian trips generated by the Proposed Development (1,262 pedestrian trips during the weekday AM commuter peak hour and 2,278 pedestrian trips during the PM commuter peak hour would be generated by the Proposed Development), significant impacts were identified that could not be mitigated at the south crosswalk at the intersection of Franklin Street and Quay Street under operational conditions. Therefore, it is possible that construction activities could result in the same significant adverse pedestrian impacts, although the potential for these significant pedestrian impacts during construction would be no worse than what has been identified for the operational condition.

Noise

Construction of the phased development at the two Development Sites would involve standard construction activities and practices for buildings in New York City. Foundation/excavation and superstructure/exterior phases of construction are typically when the noisiest activities occur. The interior phases of construction typically involve minimal exterior equipment and substantially quieter noise conditions. The Development Site is near existing residential and commercial land uses. Based on the proximity of these noise-sensitive land uses, there would be potential for the project to result in high exterior and interior noise levels at existing noise receptors.

Construction noise from stationary sources has been evaluated for seven different phases of construction. As described in **Chapter 18, Construction**, construction of the Proposed Development would have the potential to result in a significant adverse construction noise impact on the future building to be located at 3 West Street due to exceedances of the thresholds for exterior increase in noise and thresholds for acceptable interior noise levels for residential uses. No other receptors analyzed would experience significant adverse construction noise impacts.

Construction at the development site would be required to adhere to New York City's construction noise regulations, including the requirement to prepare and implement a Construction Noise Mitigation Plan and to construct an 8-foot-tall construction noise barrier, as well as additional measures (i.e., limiting the usage of generators) beyond what are required by the code, which is assumed in the noise modeling analysis. Even with these measures, construction noise would exceed the threshold for a significant adverse construction noise impact at one receptor location, 3 West Street, during certain phases of the construction work.

Noise from construction activities and some construction equipment is regulated by the New York City Noise Control Code. The New York City Noise Code (Section 24-228) limits noise from non-impulsive construction equipment to a maximum of 85 dBA, as measured 50 feet from the source. The code also limits noise from paving breakers, such as jackhammers, to 95 dBA at a distance of 1 meter and requires use of a pneumatic discharge muffler that provides an insertion loss of 5 dBA.

In addition, the New York City Noise Control Code limits construction activities to weekdays between the hours of 7:00 AM and 6:00 PM. Project-specific noise control measures would be described in the Construction Noise Mitigation Plan and can include a variety of source and path controls.

In terms of source controls (i.e., reducing noise levels at the source or during the most sensitive time periods), the following measures, under New York regulations, would be implemented:

- The contractor would self-certify that all construction tools and equipment have been maintained to not generate excessive or unnecessary noise and that the noise emissions would not exceed the levels specified in Subchapter 5 of the NYC Noise Control Code and Table 22-1 of the *CEQR Technical Manual*.
- Where feasible, practical, and safe, the use of back-up alarms would be minimized and/or quieter back-up alarms would be installed in accordance with OSHA standards.
- Vehicles would not be allowed to idle more than three minutes, in accordance with New York City Administrative Code §24-163.
- The contractor would implement a training program to inform workers of methods that can minimize construction noise.

The following measure, beyond New York regulations, would be implemented as a Project Component Related to the Environment (PCRE):

- Grid power would be used instead of the generators during Foundation, Superstructure, and Finishing phase. In the event that grid power is not sufficient or not yet available, generators would be used on a temporary basis.

In terms of path controls (e.g., placement of equipment, implementation of barriers or enclosures between equipment and sensitive receptors), the following measures, included under New York regulations, for construction would be implemented:

- DOB regulations require a perimeter barrier or "construction noise barrier," and when the site is within 200 feet of a receptor the barrier shall be constructed in a specific manner (as described in the New York City Noise Code) to provide sufficient sound attenuation. Section 3307.7 of the New York City Building Code requires a solid perimeter noise barrier made out of wood or other suitable material be constructed where a new building is being constructed or a building is being demolished to grade.
- Where logistics allow, noisy equipment, such as cranes, concrete pumps, concrete trucks, and delivery trucks, could be located away from and shielded from sensitive receptor locations.
- Should noise complaints occur during construction, the contractor shall use path noise control measures such as temporary noise barriers and jersey barriers.

With adherence to existing construction noise regulations and the implementation of a Construction Noise Mitigation Plan, including an 8-foot construction noise barrier, construction noise would be reduced but would still exceed the threshold for a significant adverse construction noise impact. Even assuming insulated glass windows and alternate means of ventilation, the future residential building located at 3 West Street could experience a potential significant adverse construction noise impact in the event that the future building is constructed and occupied prior to or during the construction of the Proposed Development. No practicable and feasible measures were identified to fully mitigate this significant adverse construction noise impact. Consequently, the significant adverse construction noise impact predicted to occur at the above-mentioned receptor would be unavoidable, as discussed in **Chapter 21, Unavoidable Adverse Impacts**.