APPENDIX E
Noise

APPENDIX E.1
Noise Monitoring Results

Measured Site	Location	Time	$L_{eq(1)}$	$L_{1(1)}$	$L_{10(1)}$	$L_{50(1)}$	$L_{90(1)}$	$L_{min(1)}$	$L_{max(1)}$
1	West 60th Street between Amsterdam Avenue and Columbus Avenue	AM	71.5	78.8	74.2	69.8	67.0	64.0	88.0
		Midday	71.8	79.2	74.6	70.2	67.0	63.8	92.4
		PM	70.9	77.6	73.2	69.6	67.2	64.1	84.8
		Saturday MD	75.7	82.3	76.5	74.7	72.3	66.9	93.2
2	West 62nd Street between Amsterdam Avenue and Columbus Avenue	AM	72.9	79.9	75.8	71.6	65.6	63.7	83.8
		Midday	71.6	78.9	73.4	70.4	69.0	67.9	84.7
		PM	70.4	78.6	72.7	68.6	66.2	64.7	81.8
		Saturday MD	71.7	79.3	74.3	70.1	66.7	64.9	84.8
3	Amsterdam Avenue between 60th Street and 61st Street	AM	70.8	77.1	72.9	69.9	66.1	62.6	85.8
		Midday	71.1	80.8	73.5	68.8	65.5	63.6	83.8
		PM	70.4	75.9	72.8	69.4	66.1	64.1	83.6
		Saturday MD	69.3	76.1	71.4	66.9	64.8	63.7	87.4
Note: Measurements were performed on May 17, 2007, January 10, 2008, and July 18, 2009.									
Source: AKRF, Inc. Acoustics Department									

APPENDIX E.2
Noise Analysis Results

Penn Plaza Noise Analysis Results

				Existing							No Build 2014				Build 2014 Increment					
Receptor Location	Site	Hour	Direction	Total Volume	% Auto	% Medium	% Heavy	% Bus	PCEs	Leq(1)	Total Volume	PCEs	Leq(1)	Change	Increment Autos	Incre. Medium Truck	Incre. Heavy Truck	Total PCEs	Leq(1)	Change
Seven Avenue between 32nd and 33rd Streets	1	AM	South	1720	93.1%	5.3%	1.3%	0.3%	3955	71.5	1877	4316	71.9	0.4	21	2	1	4380	71.9	0.1
		MD		1565	89.4%	4.2%	0.0%	6.5%	4060	71.8	1687	4377	72.1	0.3	68	7	2	4638	72.4	0.3
		PM		1620	94.8%	3.5%	0.0%	1.7%	2764	70.9	1775	3029	71.3	0.4	62	1	0	3112	71.4	0.1
		Sat. MD		1360	89.4%	4.2%	0.0%	6.5%	3529	75.7	1446	3752	76.0	0.3	68	0	0	3820	76.0	0.1
32nd Street between Six and Seven Avenues	2	AM	East	250	80.6%	9.7%	0.0%	9.7%	952	72.9	298	1135	73.7	0.8	13	0	0	1148	73.7	0.0
		MD		300	94.5%	4.1%	0.0%	1.4%	518	71.6	301	520	71.6	0.0	29	0	0	549	71.9	0.2
		PM		285	90.2%	0.0%	0.0%	9.8%	758	70.4	287	763	70.4	0.0	24	0	0	787	70.6	0.1
		Sat. MD		180	94.5%	4.1%	0.0%	1.4%	311	71.7	173	299	71.5	-0.2	32	0	0	331	72.0	0.4
33rd Street between Six and Seven Avenues	3	AM	West	190	83.3%	10.4%	0.0%	6.3%	629	70.8	209	692	71.2	0.4	4	2	1	739	71.5	0.3
		MD		245	83.1%	11.3%	0.0%	5.6%	811	71.1	260	860	71.4	0.3	8	7	2	1062	72.3	0.9
		PM		210	88.5%	7.3%	0.0%	4.2%	543	70.4	214	553	70.5	0.1	4	1	0	578	70.7	0.2
		Sat. MD		225	83.1%	11.3%	0.0%	5.6%	745	69.3	233	771	69.5	0.2	7	0	0	778	69.5	0.0

APPENDIX E.3
Results at Receptors

Noise Analysis Results in L10 (2014)

Note: This L10 calculation sheet is valid for the following in addition to Residential 7 AM - 10 PM: school, museum, library, court, house of worship, transient hotel or motel, public meeting room, auditorium, out patient public health facility, commercia

Categories	
L10 < or equal 65 dBA	accepatble
65 < L10 < or equal 70 dBA	marginaly acceptable
70 < L10 < or equal 80 dBA	marginaly acceptable
L10 > 80 dBA	clearly unacceptable

Receptor Location	Site	Hour	NB Change	Existing L10	Category (Existing L10 noise levels)	Existing L10 + NB Change = NB L10	Category (NB L10 noise levels)	Build Change	No Build L10	No Build L10 + Build Change = L10	Category (B L10 noise levels)	CEQR criteria 45 dB(A)	Building Attenuation required
Seven Avenue between 32nd and 33rd Streets	1	AM	0.4	74.2	MARGINALLY UNACCEPTABLE	74.6	MARGINALLY UNACCEPTABLE	0.1	74.6	74.6	MARGINALLY UNACCEPTABLE	50	25
		MD	0.3	74.6	MARGINALLY UNACCEPTABLE	74.9	MARGINALLY UNACCEPTABLE	0.3	74.9	75.2	MARGINALLY UNACCEPTABLE	50	25
		PM	0.4	73.2	MARGINALLY UNACCEPTABLE	73.6	MARGINALLY UNACCEPTABLE	0.1	73.6	73.7	MARGINALLY UNACCEPTABLE	50	24
		Sat. MD	0.3	76.5	MARGINALLY UNACCEPTABLE	76.8	MARGINALLY UNACCEPTABLE	0.1	76.8	76.8	MARGINALLY UNACCEPTABLE	50	27
32nd Street between Six and Seven Avenues	2	AM	0.8	75.8	MARGINALLY UNACCEPTABLE	76.6	MARGINALLY UNACCEPTABLE	0.0	76.6	76.6	MARGINALLY UNACCEPTABLE	50	27
		MD	0.0	73.4	MARGINALLY UNACCEPTABLE	73.4	MARGINALLY UNACCEPTABLE	0.2	73.4	73.7	MARGINALLY UNACCEPTABLE	50	24
		PM	0.0	72.7	MARGINALLY UNACCEPTABLE	72.7	MARGINALLY UNACCEPTABLE	0.1	72.7	72.9	MARGINALLY UNACCEPTABLE	50	23
		Sat. MD	-0.2	74.3	MARGINALLY UNACCEPTABLE	74.1	MARGINALLY UNACCEPTABLE	0.4	74.1	74.6	MARGINALLY UNACCEPTABLE	50	25
33rd Street between Six and Seven Avenues	3	AM	0.4	72.9	MARGINALLY UNACCEPTABLE	73.3	MARGINALLY UNACCEPTABLE	0.3	73.3	73.6	MARGINALLY UNACCEPTABLE	50	24
		MD	0.3	73.5	MARGINALLY UNACCEPTABLE	73.8	MARGINALLY UNACCEPTABLE	0.9	73.8	74.7	MARGINALLY UNACCEPTABLE	50	25
		PM	0.1	72.8	MARGINALLY UNACCEPTABLE	72.9	MARGINALLY UNACCEPTABLE	0.2	72.9	73.1	MARGINALLY UNACCEPTABLE	50	23
		Sat. MD	0.2	71.4	MARGINALLY UNACCEPTABLE	71.6	MARGINALLY UNACCEPTABLE	0.0	71.6	71.6	MARGINALLY UNACCEPTABLE	50	22