Appendix B **Air Quality and Noise**

AIR QUALITY

Durst West 57th Street Wind Tunnel Results
Riverside Center Buildings 2 & 5
Maximum Predicted PM2.5 Concentration (μg/m^3)

Year 2006	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Location	*Roof*	*Roof*	*Roof*	*Mech. Intak*	*34th Flr*	*26th Flr*	*18th Flr*	*33rd Flr*	*25th Flr*	*17th Flr*	*24th Flr*	*17th Flr*	*17th Flr*	*11th Flr*	*11th Flr*
Receptor Ht (ft)	*mid-roof*	*mid-roof*	*mid-roof*	*427*	*357*	*277*	*197*	*347*	*267*	*187*	*257*	*187*	*187*	*127*	*127*
COUNT >=5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COUNT >=2	0	0	0	0	0	0	1	0	0	0	1	3	1	1	0
MAX 24-Hour	1.78	1.81	1.73	0.70	1.84	1.81	2.07	0.95	1.28	1.98	2.29	3.44	3.36	2.87	1.81
Avg Annual	0.014	0.016	0.015	0.007	0.018	0.015	0.018	0.009	0.012	0.015	0.020	0.033	0.016	0.012	0.011

Year 2007	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Location	*Roof*	*Roof*	*Roof*	*Mech. Intak*	*34th Flr*	*26th Flr*	*18th Flr*	*33rd Flr*	*25th Flr*	*17th Flr*	*24th Flr*	*17th Flr*	*17th Flr*	*11th Flr*	*11th Flr*
Receptor Ht (ft)	*mid-roof*	*mid-roof*	*mid-roof*	*427*	*357*	*277*	*197*	*347*	*267*	*187*	*257*	*187*	*187*	*127*	*127*
COUNT >=5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COUNT >=2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MAX 24-Hour	0.90	1.43	1.53	0.74	1.22	1.68	1.07	0.82	1.90	0.92	1.94	1.88	1.28	0.96	0.78
Avg Annual	0.006	0.012	0.010	0.007	0.015	0.013	0.010	0.009	0.012	0.008	0.015	0.019	0.011	0.007	0.006

Year 2008	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Location	*Roof*	*Roof*	*Roof*	*Mech. Intak*	*34th Flr*	*26th Flr*	*18th Flr*	*33rd Flr*	*25th Flr*	*17th Flr*	*24th Flr*	*17th Flr*	*17th Flr*	*11th Flr*	*11th Flr*
Receptor Ht (ft)	*mid-roof*	*mid-roof*	*mid-roof*	*427*	*357*	*277*	*197*	*347*	*267*	*187*	*257*	*187*	*187*	*127*	*127*
COUNT >=5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COUNT >=2	0	0	2	1	2	3	2	1	2	1	3	3	0	0	0
MAX 24-Hour	1.14	1.02	4.33	2.29	3.60	4.57	4.00	2.22	4.45	3.53	4.97	4.82	0.81	0.61	1.33
Avg Annual	0.014	0.019	0.038	0.017	0.037	0.036	0.035	0.023	0.033	0.028	0.039	0.050	0.011	0.007	0.013

Year 2009	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Location	*Roof*	*Roof*	*Roof*	*Mech. Intak*	*34th Flr*	*26th Flr*	*18th Flr*	*33rd Flr*	*25th Flr*	*17th Flr*	*24th Flr*	*17th Flr*	*17th Flr*	*11th Flr*	*11th Flr*
Receptor Ht (ft)	*mid-roof*	*mid-roof*	*mid-roof*	*427*	*357*	*277*	*197*	*347*	*267*	*187*	*257*	*187*	*187*	*127*	*127*
COUNT >=5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COUNT >=2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
MAX 24-Hour	1.13	1.00	1.26	1.13	1.84	0.92	1.01	1.03	0.61	0.65	1.07	1.50	2.06	1.74	1.34
Avg Annual	0.007	0.008	0.009	0.008	0.012	0.006	0.006	0.006	0.005	0.004	0.007	0.012	0.011	0.008	0.007

Year 2010	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Location	*Roof*	*Roof*	*Roof*	*Mech. Intak*	*34th Flr*	*26th Flr*	*18th Flr*	*33rd Flr*	*25th Flr*	*17th Flr*	*24th Flr*	*17th Flr*	*17th Flr*	*11th Flr*	*11th Flr*
Receptor Ht (ft)	*mid-roof*	*mid-roof*	*mid-roof*	*427*	*357*	*277*	*197*	*347*	*267*	*187*	*257*	*187*	*187*	*127*	*127*
COUNT >=5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COUNT >=2	1	4	0	0	0	0	2	0	1	1	2	5	4	3	2
MAX 24-Hour	2.09	2.65	1.63	0.82	1.68	1.94	2.46	0.78	2.58	3.25	4.38	4.87	4.40	3.32	2.46
Avg Annual	0.028	0.037	0.014	0.009	0.021	0.017	0.020	0.009	0.017	0.020	0.034	0.054	0.049	0.035	0.029

Durst West 57th Street Wind Tunnel Results
Riverside Center Buildings 1-5
Maximum Predicted PM2.5 Concentration (μg/m^3)

Year 2006	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Location	*Roof*	*Roof*	*Roof*	*Mech. Intak*	*34th Flr*	*26th Flr*	*18th Flr*	*33rd Flr*	*25th Flr*	*17th Flr*	*24th Flr*	*17th Flr*	*17th Flr*	*11th Flr*	*11th Flr*
Receptor Ht (ft)	*mid-roof*	*mid-roof*	*mid-roof*	*427*	*357*	*277*	*197*	*347*	*267*	*187*	*257*	*187*	*187*	*127*	*127*
COUNT >=5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COUNT >=2	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
MAX 24-Hour	0.63	1.32	0.58	0.58	0.96	1.26	1.67	1.23	1.36	1.49	3.15	2.95	3.18	3.02	2.16
Avg Annual	0.025	0.030	0.007	0.015	0.017	0.016	0.019	0.019	0.017	0.016	0.023	0.020	0.016	0.015	0.013

Year 2007	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Location	*Roof*	*Roof*	*Roof*	*Mech. Intak*	*34th Flr*	*26th Flr*	*18th Flr*	*33rd Flr*	*25th Flr*	*17th Flr*	*24th Flr*	*17th Flr*	*17th Flr*	*11th Flr*	*11th Flr*
Receptor Ht (ft)	*mid-roof*	*mid-roof*	*mid-roof*	*427*	*357*	*277*	*197*	*347*	*267*	*187*	*257*	*187*	*187*	*127*	*127*
COUNT >=5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COUNT >=2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
MAX 24-Hour	0.67	0.68	0.40	1.30	1.49	1.45	1.35	2.21	1.67	1.17	1.38	1.27	1.36	1.24	0.93
Avg Annual	0.029	0.031	0.005	0.022	0.021	0.017	0.016	0.024	0.018	0.013	0.013	0.009	0.012	0.007	0.009

Year 2008	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Location	*Roof*	*Roof*	*Roof*	*Mech. Intak*	*34th Flr*	*26th Flr*	*18th Flr*	*33rd Flr*	*25th Flr*	*17th Flr*	*24th Flr*	*17th Flr*	*17th Flr*	*11th Flr*	*11th Flr*
Receptor Ht (ft)	*mid-roof*	*mid-roof*	*mid-roof*	*427*	*357*	*277*	*197*	*347*	*267*	*187*	*257*	*187*	*187*	*127*	*127*
COUNT >=5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COUNT >=2	0	0	0	1	1	2	2	1	1	0	0	0	0	0	0
MAX 24-Hour	0.78	0.71	0.65	3.04	3.51	2.74	2.69	4.09	2.42	1.52	1.63	1.91	1.20	1.57	0.94
Avg Annual	0.032	0.034	0.010	0.027	0.033	0.033	0.036	0.033	0.027	0.025	0.019	0.017	0.014	0.012	0.012

Year 2009	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Location	*Roof*	*Roof*	*Roof*	*Mech. Intak*	*34th Flr*	*26th Flr*	*18th Flr*	*33rd Flr*	*25th Flr*	*17th Flr*	*24th Flr*	*17th Flr*	*17th Flr*	*11th Flr*	*11th Flr*
Receptor Ht (ft)	*mid-roof*	*mid-roof*	*mid-roof*	*427*	*357*	*277*	*197*	*347*	*267*	*187*	*257*	*187*	*187*	*127*	*127*
COUNT >=5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COUNT >=2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MAX 24-Hour	0.60	1.25	0.35	0.98	1.06	0.93	1.11	0.72	0.76	0.66	1.20	1.03	1.80	1.26	1.11
Avg Annual	0.027	0.031	0.005	0.011	0.008	0.007	0.007	0.006	0.005	0.005	0.008	0.007	0.009	0.006	0.008

Year 2010	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Location	*Roof*	*Roof*	*Roof*	*Mech. Intak*	*34th Flr*	*26th Flr*	*18th Flr*	*33rd Flr*	*25th Flr*	*17th Flr*	*24th Flr*	*17th Flr*	*17th Flr*	*11th Flr*	*11th Flr*
Receptor Ht (ft)	*mid-roof*	*mid-roof*	*mid-roof*	*427*	*357*	*277*	*197*	*347*	*267*	*187*	*257*	*187*	*187*	*127*	*127*
COUNT >=5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COUNT >=2	0	0	0	0	0	0	1	0	1	1	4	2	2	2	1
MAX 24-Hour	1.12	1.74	0.80	1.29	1.30	1.58	2.14	1.76	2.08	2.31	3.84	3.52	3.18	2.94	2.17
Avg Annual	0.017	0.033	0.013	0.012	0.019	0.020	0.022	0.030	0.028	0.026	0.044	0.037	0.033	0.027	0.021

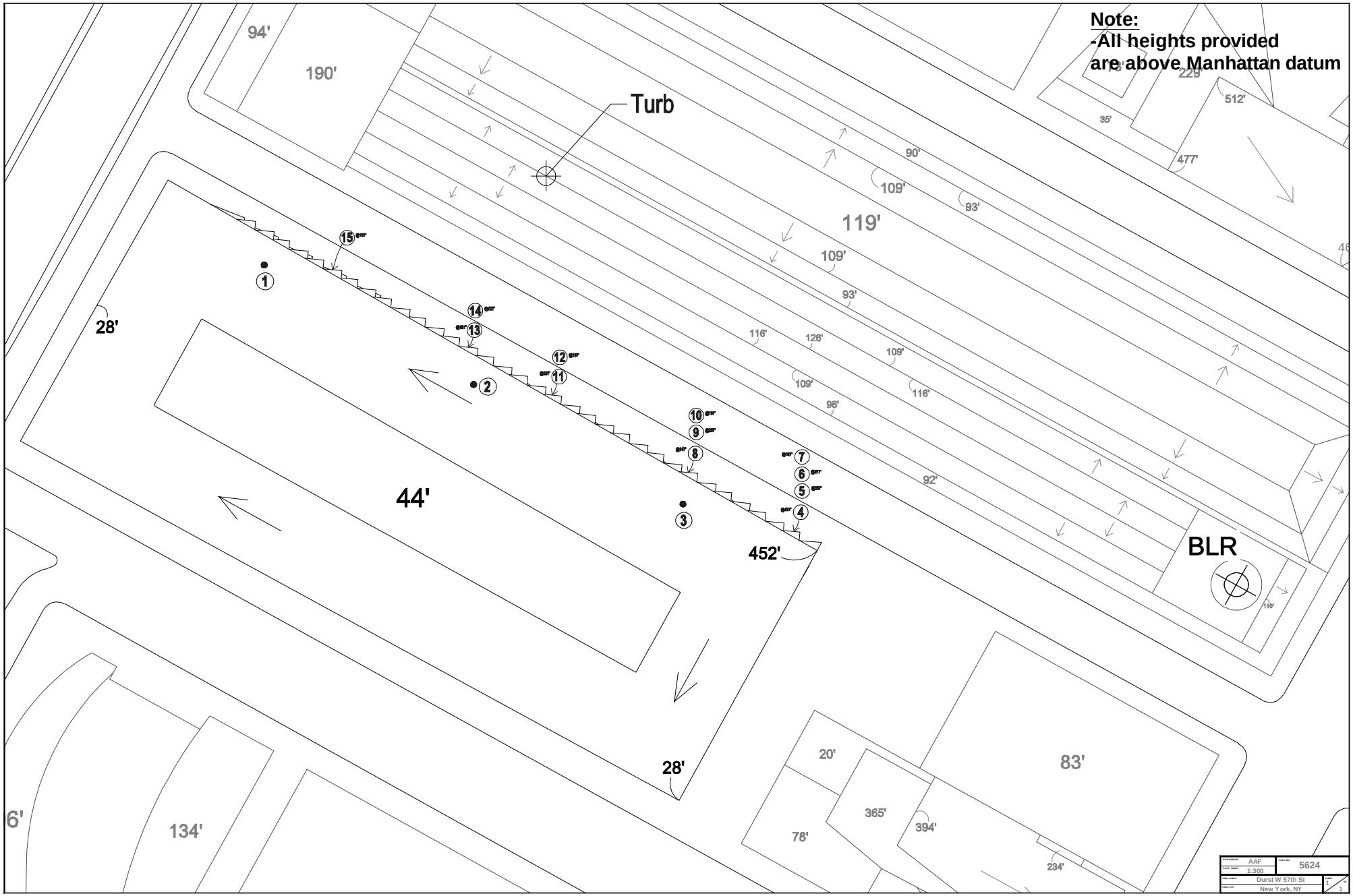
Note:
-All heights provided
are above Manhattan datum
Turb
BLR
94'
190'
119'
109'
93'
90'
116'
126'
96'
92'
28'
44'
452'
28'
20'
78'
365'
394'
83'
234'
134'
35'
477'
512'
229'
110'
AAF
1:300
5624
Durst W 57th St
New York, NY
1
1

Table 1
Receptor Descriptions

Receptor Number	Receptor Identification
1	Roof
2	Roof
3	Roof
4	Mech. Intake
5	34th floor
6	26th floor
7	18th floor
8	33rd floor
9	25th floor
10	17th floor
11	24th floor
12	17th floor
13	17th floor
14	11th floor
15	11th floor

NOISE

AM Peak Hour Traffic volumes	West 57th St Noise Sites 2, 3, 4	AM Peak Hour Traffic volumes	Route 9A Noise Site 1
Existing Volume (See Figure 10-2)	1040	Existing Volume (See Riverside Center FSEIS)	8765
No Build Volume (See Figure 10-3)	1215	No Build Volume (See Riverside Center FSEIS)	9576
Total Build (See Figures 10-4 and 10-5)	1209	Total Build (See Riverside Center FSEIS and Figure 10-5)	9576
dB Increment	0.7	dB Increment	0.4

MD Peak Hour Traffic volumes	West 57th St Noise Sites 2, 3, 4	MD Peak Hour Traffic volumes	Route 9A Noise Site 1
Existing Volume (See Figure 10-2)	851	Existing Volume (See Riverside Center FSEIS)	5930
No Build Volume (See Figure 10-3)	967	No Build Volume (See Riverside Center FSEIS)	6712
Total Build (See Figures 10-4 and 10-5)	975	Total Build (See Riverside Center FSEIS and Figure 10-5)	6712
dB Increment	0.6	dB Increment	0.5

PM Peak Hour Traffic volumes	West 57th St Noise Sites 2, 3, 4	PM Peak Hour Traffic volumes	Route 9A Noise Site 1
Existing Volume (See Figure 10-2)	1006	Existing Volume (See Riverside Center FSEIS)	7560
No Build Volume (See Figure 10-3)	1118	No Build Volume (See Riverside Center FSEIS)	8637
Total Build (See Figures 10-4 and 10-5)	1135	Total Build (See Riverside Center FSEIS and Figure 10-5)	8637
dB Increment	0.5	dB Increment	0.6

Sat MD Peak Hour Traffic volumes	West 57th St Noise Sites 2, 3, 4	Sat MD Peak Hour Traffic volumes	Route 9A Noise Site 1
Existing Volume (See Figure 10-2)	843	Existing Volume (See Riverside Center FSEIS)	6243
No Build Volume (See Figure 10-3)	953	No Build Volume (See Riverside Center FSEIS)	7076
Total Build (See Figures 10-4 and 10-5)	985	Total Build (See Riverside Center FSEIS and Figure 10-5)	7076
dB Increment	0.7	dB Increment	0.5

625 West 57th Street Noise Site 5 TNM Traffic Inputs

Vehicle Mix (from Riverside South FSEIS)	
	East
Auto	89.0%
MT	4.3%
HT	1.9%
Bus	4.8%
	West
Auto	90.9%
MT	5.4%
HT	1.8%
Bus	1.9%

ExAM	57th Street	58th Street
East Total:	650	146
Auto	579	130
MT	28	7
HT	13	3
Bus	32	8
West Total:	390	
Auto	355	
MT	22	
HT	8	
Bus	8	

NB AM	57th Street	58th Street
East Total:	719	169
Auto	640	151
MT	31	8
HT	14	4
Bus	35	9
West Total:	496	
Auto	451	
MT	27	
HT	9	
Bus	10	

BdAM	57th Street	58th Street
East Total:	718	234
Auto	639	209
MT	31	11
HT	14	5
Bus	35	12
West Total:	491	
Auto	447	
MT	27	
HT	9	
Bus	10	

625 West 57th Street Site 5 Noise Modeling Results

Site	Location	Time	dBA											
			Measured Existing Leq	Measured Existing L10	TNM Existing Leq	Adjustment Factor	TNM NB Leq	Actual NB Leq	Actual NB L10	NB Increase	TNM Build Leq	Actual Build Leq	Actual Build L10	Build Increase
5	Eastern edge of project site between W57th St and W58th St	AM	66.7	68.4	62.8	-3.9	63.0	66.9	68.6	0.2	63.0	66.9	68.6	0.0