THE CITY OF NEW YORK
OFFICE OF THE MAYOR
NEW YORK, NY 10007

ERRATA

To: Recipients of the Charleston Mixed-Use Development Final Environmental Impact
        Statement (FEIS)

From: Robert Kulikowski, Ph.D.

Date: September 10, 2013

Re: Errata – Replacement Pages for the Charleston Mixed-Use Development FEIS
        CEQR No. 13DME001R

Please find the attached replacement pages for pp. 4-18, 4-24 and 4-29 of the Charleston
Mixed-Use Development FEIS, dated August 30, 2013. The replacement pages correct the
following errors relating to the mitigation measures that were identified for the intersection of
Veterans Road East-Drumgoole Road West/Bloomingdale Road for the 2015 and 2020 Analysis
Years:

- During the Saturday midday peak hour in 2015 and 2020, the correct mitigation is to
  restripe the southbound approach to accommodate one 11.5 foot through lane and one
  11.5 foot through/right-turn lane. The FEIS (pp. 4-18 and 4-24) incorrectly stated that
  the southbound approach should be restriped to accommodate one 12 foot through
  lane and one 12 foot through/right-turn lane.

- During the Saturday midday peak hour in 2015, the correct mitigation is to reallocate
  two seconds of green time from the north-south phase to the eastbound phase. The
  FEIS (p. 4-18) incorrectly stated that two seconds of green time from the eastbound
  phase, one second of green time from the westbound phase, and eight seconds of green
  time from the north-south phase, should be reallocated to create a northbound lagging
  phase with an eastbound right-turn overlap (11 seconds total).

- The correct Level of Service analysis results associated with the above-referenced
  mitigations for the Saturday midday peak hour in 2015 were not reflected in Table 4-2

of the FEIS. The correct Level of Service analysis results for the Saturday midday peak hour in 2015 are shown in Table 4-2 on p. 4-29, attached to this memo

These errors have been corrected in the attached replacement pages and the revised text is indicated in **bold** or (for changes in Table 4-2) highlighted in a dashed box. Correction of these errors does not alter the conclusions of the Charleston Mixed-Use Development FEIS. Please replace pp. 4-18, 4-24 and 4-29 of the FEIS with the attached pages. These errors have also been corrected in the online version of the FEIS posted on the MOEC website at: http://www.nyc.gov/html/oec/html/ceqr/13dme001r.shtml. We apologize for any inconvenience this may have caused.

Boscombe Avenue/Tyrellan Avenue:

- Modify the traffic signal hardware to provide for a southbound right-turn overlap phase to operate concurrently with a new eastbound-only lagging phase. <u>As part of this mitigation measure, upgraded traffic signal hardware will be required to accommodate the proposed phasing change. The new hardware will require a more robust and flexible traffic signal controller (ASTC 12) that could accommodate multiple traffic timing and phasing plans, including a protected left-turn arrow for the eastbound approach and a protected right-turn arrow for the southbound approach.</u>

- During the weekday midday peak hour, reallocate <u>11</u> ~~seven~~ seconds of green time from the east-west phase to the <u>eastbound-only lagging phase with a protected southbound right-turn overlap</u> ~~north-south phase~~.

- During the weekday PM peak hour, reallocate <u>seven</u> ~~four~~ seconds of green time from the east-west phase to the north-south phase.

- During the Saturday midday peak hour, reallocate <u>15</u> ~~14~~ seconds of green time from the east-west phase to the eastbound-only lagging phase with a protected southbound right-turn overlap.

Englewood Avenue/Veterans Road West:

- During the Saturday midday peak hour, reallocate one second of green time from the north-south phase to the east-west phase.

Englewood Avenue/Veterans Road East:

- During the Saturday midday peak hour, reallocate three seconds of green time from the northbound phase to the east-west phase.

Veterans Road East-Drumgoole Road West/Bloomingdale Road:

- During the weekday PM peak hour, reallocate one second of green time from the westbound phase to the north-south phase.

- <u>During the Saturday midday peak hour, prohibit on-street parking on the west side of Bloomingdale Road between Veterans Road East and Churchill Avenue and restripe the southbound approach to accommodate one **11.5** foot through lane and one **11.5** foot through/right-turn lane.</u>

- During the Saturday midday peak hour, reallocate <u>two</u> ~~three~~ seconds of green time from the **<u>north-south</u> ~~eastbound~~** phase~~, one second of green time from the westbound phase, and five seconds of green time from~~ <u>to</u> the **<u>eastbound</u> ~~north-south~~** phase ~~to create a northbound lagging phase with an eastbound right-turn overlap (nine seconds total)~~.

Pleasant Plains Avenue-Amboy Road/Bloomingdale Road:

- During the weekday AM peak hour, reallocate one second of green time from the east-west phase to the north-south phase.

The improvement measures stated above are designed to accommodate the future traffic volumes projected to occur on the roadway network during critical periods of peak traffic activity under the future with the Proposed Project condition; specifically, during the peak 15-minute periods, by the 2015 year. The resulting year 2015 Mitigated With-Action condition operational performance measures with the improvement measures identified above are shown in **Table 4-2**.

~~Potential Traffic Mitigation Measures due to Proposed West Shore Expressway Ramp Improvements~~

~~As discussed in~~ **Chapter 2-13**~~, NYSDOT plans to improve the southbound West Shore Expressway (WSE) ramp system and adjacent intersections north of Englewood Avenue just north of the Project Area by the end of 2014. The impacts of these ramps on traffic conditions will be analyzed for the FEIS when sufficient program information is available. Until results from those studies are available, it is conservatively assumed that ramp-related increases in traffic volumes at the following three intersections would potentially worsen already identified significant traffic impacts and/or create additional significant impacts in one or more peak hour in 2015:~~

- Prohibit on-street parking on the west side of Bloomingdale Road between Veterans Road East and Churchill Avenue, and restripe the southbound approach to accommodate one **11.5** ~~12~~-foot through lane and one **11.5** ~~12~~-foot through/right-turn lane.
- During the weekday AM peak hour, reallocate two seconds of green time from the westbound phase to the eastbound phase~~, and reallocate 10 seconds from the north-south phase to create a northbound lagging phase with an eastbound right-turn overlap~~.
- During the weekday midday peak hour, reallocate two seconds of green time from the westbound phase to the eastbound phase.
- During the weekday PM peak hour, reallocate one second of green time from the westbound phase to the eastbound phase.
- During the Saturday midday peak hour, reallocate one second of green time from the westbound phase, plus three seconds of green time from the north-south phase, to the eastbound phase (four seconds total).

Pleasant Plains Avenue-Amboy Road/Bloomingdale Road:

- During the weekday AM peak hour, reallocate <u>four</u> ~~three~~ seconds of green time from the east-west phase to the north-south phase.
- During the weekday PM peak hour, reallocate one second of green time from the east-west phase to the north-south phase.
- During the Saturday midday peak hour, reallocate one second of green time from the east-west phase to the north-south phase.

Arthur Kill Road/Bloomingdale Road:

- Restripe the westbound approach to accommodate one <u>10</u> ~~11~~-foot exclusive left-turn lane and one <u>10</u>~~11~~-foot exclusive through lane.
- During the weekday PM peak hour, reallocate <u>14</u> ~~13~~ seconds of green time from the east-west phase to create <s>a</s> <u>an</u> 11<s>10</s>-second lagging westbound phase, and add three seconds of green time to the northbound phase.
- During the Saturday midday peak hour, reallocate <u>18</u> ~~17~~ seconds of green time from the east-west phase to create a lagging westbound phase.
- <u>As part of these mitigation measures, upgraded traffic signal hardware will be required to accommodate the proposed phasing change. The new hardware will require a more robust and flexible traffic signal controller (ASTC 12) that could accommodate multiple traffic timing and phasing plans, including a protected left-turn arrow for the westbound approach.</u>

~~Sharrotts Road/Arthur Kill Road:~~

- ~~The Proposed Project is projected to result in a marginally unmitigable impact on the eastbound and westbound approaches at this stop-controlled intersection during the Saturday midday peak hour, according to CEQR criteria. However, the delays at this intersection are projected to exceed the CEQR threshold of mid-LOS "D" by only 5.0 seconds on the stop-controlled eastbound approach, and by only 0.3 seconds on the stop-controlled westbound approach, and only during the Saturday midday peak hour. Furthermore, all approaches at the intersection will operate under capacity with delays corresponding to LOS "D" or better—which represents an acceptable operational level for an unsignalized intersection—during all four peak hours analyzed. Therefore, no mitigation measures are proposed at this intersection for the potential significant traffic impact identified during the Saturday midday peak hour, and a marginally unmitigable impact will remain during that hour.~~

Englewood Avenue/Arthur Kill Road:

- Restripe the westbound approach to accommodate one exclusive left-turn lane and one exclusive right-turn lane.

4.0 MITIGATION MEASURES

Table 4-2 (cont'd)
Peak Hour Level-of-Service Analysis Results, Year 2015 Comparison of Future No-Action and Mitigated With-Action Traffic Conditions

Intersection	Approach	Movement	AM v/c (No-Action)	AM Avg Control Delay (No-Action)	AM LOS (No-Action)	AM v/c (Mitigated)	AM Avg Control Delay (Mitigated)	AM LOS (Mitigated)	AM Change in Delay	AM Impact?	MD v/c (No-Action)	MD Avg Delay (No-Action)	MD LOS (No-Action)	MD v/c (Mitigated)	MD Avg Delay (Mitigated)	MD LOS (Mitigated)	MD Change in Delay	MD Impact?	PM v/c (No-Action)	PM Avg Delay (No-Action)	PM LOS (No-Action)	PM v/c (Mitigated)	PM Avg Delay (Mitigated)	PM LOS (Mitigated)	PM Change in Delay	PM Impact?	Sat v/c (No-Action)	Sat Avg Delay (No-Action)	Sat LOS (No-Action)	Sat v/c (Mitigated)	Sat Avg Delay (Mitigated)	Sat LOS (Mitigated)	Sat Change in Delay	Sat Impact?
SIGNALIZED INTERSECTIONS																																			
Boscombe Avenue / Tyrellan Avenue	EB	DefL	0.47	16.8	B	0.50	17.4	B	0.6		0.64	20.9	C	0.65	21.5	C	0.6		0.59	19.1	B	0.77	30.6	C	11.5		0.74	24.0	C	0.73	24.7	C	0.7	
	EB	TR	0.03	11.4	B	0.03	11.4	B	0.0		0.04	11.5	B	0.04	11.5	B	0.0		0.04	11.5	B	0.04	15.4	B	3.9		0.04	11.6	B	0.04	11.6	B	0.0	
	WB	LTR	0.10	11.9	B	0.10	11.9	B	0.0		0.08	11.8	B	0.10	17.1	B	5.3		0.05	11.6	B	0.05	15.5	B	3.9		0.06	11.7	B	0.08	19.4	B	7.7	
	NB	LTR	0.07	17.4	B	0.07	17.4	B	0.0		-	-	-	-	-	-	-		0.01	16.9	B	0.01	12.9	B	-4.0		0.00	16.8	B	0.00	16.8	B	0.0	
	NB	DefL	-	-	-	-	-	-	-	-	0.01	16.9	B	0.01	16.9	B	0.0		-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
	NB	TR	-	-	-	-	-	-	-	-	0.01	16.9	B	0.01	16.9	B	0.0		-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
	SB	LT	0.10	17.8	B	0.10	17.8	B	0.0		0.14	18.3	B	0.14	18.3	B	0.0		0.12	18.0	B	0.10	13.7	B	-4.3		0.16	18.4	B	0.16	18.4	B	0.0	
	SB	R	0.42	22.1	C	0.55	24.8	C	2.7		0.83	36.1	D	0.94	39.6	D	3.5		0.75	31.2	C	0.94	43.0	D	11.8		1.01	63.7	E	1.07	67.4	E	3.7	
	Overall		0.45	17.5	B	0.52	18.9	B	1.4		0.72	25.6	C	0.94	29.5	C	3.9		0.66	23.3	C	0.86	34.7	C	11.4		0.86	40.2	D	1.04	46.4	D	6.2	
Bricktown Way / Veterans Road West	EB	L	0.14	15.3	B	0.21	15.9	B	0.6		0.30	16.9	B	0.49	19.7	B	2.8		0.30	16.8	B	0.49	19.7	B	2.9		0.51	19.6	B	0.77	27.1	C	7.5	
	EB	R	0.00	14.0	B	0.00	14.0	B	0.0		0.04	14.4	B	0.04	14.4	B	0.0		0.04	14.4	B	0.04	14.4	B	0.0		0.06	14.5	B	0.06	14.5	B	0.0	
	NB	LT	0.07	7.3	A	0.07	7.3	A	0.0		0.15	7.8	A	0.15	7.8	A	0.0		0.18	7.9	A	0.18	7.9	A	0.0		0.19	8.0	A	0.20	8.1	A	0.1	
	SB	TR	0.48	9.9	A	0.54	10.5	B	0.6		0.62	11.4	B	0.76	13.5	B	2.1		0.53	10.5	B	0.65	11.8	B	1.3		0.71	12.1	B	0.87	15.8	B	3.7	
	Overall		0.35	10.0	B	0.41	10.6	B	0.6		0.50	11.4	B	0.66	13.6	B	2.2		0.44	10.7	B	0.59	12.4	B	1.7		0.63	12.6	B	0.83	16.8	B	4.2	
Englewood Avenue / Veterans Road West	EB	TR	0.01	10.2	B	0.01	10.2	B	0.0		0.01	10.2	B	0.01	10.2	B	0.0		0.01	10.2	B	0.01	10.2	B	0.0		0.01	10.2	B	0.00	9.7	A	-0.5	
	WB	L	0.43	14.6	B	0.44	14.9	B	0.3		0.47	15.2	B	0.50	15.7	B	0.5		0.42	14.4	B	0.45	14.9	B	0.5		0.93	39.4	D	0.96	42.7	D	3.3	
	WB	LT	0.45	15.0	B	0.46	15.3	B	0.3		0.49	15.7	B	0.52	16.2	B	0.5		0.44	14.9	B	0.47	15.4	B	0.5		0.33	13.3	B	0.33	12.7	B	-0.6	
	NB	L	0.01	10.3	B	0.01	10.4	B	0.1		0.00	10.2	B	0.00	10.3	B	0.1		0.02	10.4	B	0.02	10.5	B	0.1		0.02	10.6	B	0.04	11.4	B	0.9	
	NB	R	0.18	9.2	A	0.21	9.3	A	0.1		0.39	10.7	B	0.49	11.7	B	1.0		0.44	11.1	B	0.54	12.5	B	1.4		0.57	13.0	B	0.71	16.5	C	3.5	
	SB	LTR	0.24	11.6	B	0.28	11.9	B	0.3		0.28	11.9	B	0.37	12.6	B	0.7		0.29	11.9	B	0.37	12.6	B	0.7		0.32	12.2	B	0.46	14.0	B	1.8	
	Overall		*	12.5	B	*	12.7	B	0.2		*	12.5	B	*	13.4	B	0.5		*	12.5	B	*	13.2	B	0.8		*	22.8	C	*	24.3	C	1.5	
Englewood Avenue / Veterans Road East	EB	LT	0.30	15.7	B	0.34	16.0	B	0.3		0.55	19.6	B	0.65	21.9	C	2.3		0.71	24.6	C	0.81	30.2	C	5.6		1.02	64.5	E	1.04	63.7	E	-0.8	
	EB	R	0.05	13.1	B	0.07	13.3	B	0.2		0.11	13.6	B	0.17	14.1	B	0.5		0.12	13.7	B	0.19	14.3	B	0.6		0.17	14.1	B	0.23	12.8	B	-1.3	
	WB	LTR	0.11	13.6	B	0.11	13.6	B	0.0		0.09	13.4	B	0.09	13.4	B	0.0		0.13	13.8	B	0.13	13.8	B	0.0		0.16	14.1	B	0.14	11.9	B	-2.2	
	NB	LTR	0.26	9.4	A	0.27	9.5	A	0.1		0.25	9.3	A	0.26	9.4	A	0.1		0.25	9.3	A	0.26	9.4	A	0.1		0.33	9.9	A	0.39	12.1	B	2.2	
	Overall		0.28	11.1	B	0.30	11.3	B	0.2		0.37	13.0	B	0.42	14.2	B	1.2		0.44	15.2	B	0.49	17.7	B	2.5		0.62	30.8	C	0.70	32.3	C	1.5	
Englewood Avenue / Bloomingdale Road	EB	LR	0.15	17.5	B	0.20	18.0	B	0.5		0.35	19.9	B	0.51	22.6	C	2.7		0.31	19.3	B	0.45	21.4	C	2.1		0.48	21.9	C	0.67	26.8	C	4.9	
	SB	LT	0.39	8.3	A	0.39	8.3	A	0.0		0.31	7.6	A	0.31	7.6	A	0.0		0.50	9.2	A	0.50	9.2	A	0.0		0.40	8.3	A	0.40	8.3	A	0.0	
	SB	TR	0.52	9.4	A	0.52	9.4	A	0.0		0.34	7.7	A	0.34	7.7	A	0.0		0.48	9.0	A	0.48	9.0	A	0.0		0.39	8.2	A	0.39	8.2	A	0.0	
	Overall		0.40	9.5	A	0.42	9.7	A	0.2		0.34	9.0	A	0.40	11.3	B	1.4		0.44	10.3	B	0.48	11.1	B	0.8		0.42	10.9	B	0.48	13.0	B	2.1	
Sharrotts Road / Bloomingdale Road	EB	LR	0.30	16.2	B	0.30	16.2	B	0.0		0.27	15.9	B	0.27	15.9	B	0.0		0.49	18.7	B	0.49	18.7	B	0.0		0.47	18.4	B	0.47	18.4	B	0.0	
	NB	LT	0.58	13.3	B	0.61	13.7	B	0.4		0.51	12.1	B	0.59	13.5	B	1.4		0.61	13.4	B	0.69	15.1	B	1.7		0.61	13.4	B	0.73	16.5	B	3.1	
	SB	TR	0.50	11.8	B	0.54	12.4	B	0.6		0.42	10.8	B	0.51	11.8	B	1.0		0.58	12.7	B	0.66	14.2	B	1.5		0.57	12.6	B	0.68	14.8	B	2.2	
	Overall		0.47	13.1	B	0.48	13.5	B	0.4		0.42	12.1	B	0.47	13.0	B	0.9		0.56	14.2	B	0.61	15.4	B	1.2		0.55	14.1	B	0.62	16.0	B	1.9	
Veterans Road East-Drumgoole Road West / Bloomingdale Road	EB	L	0.02	22.7	C	0.02	22.7	C	0.0		0.05	23.1	C	0.05	23.1	C	0.0		0.02	22.7	C	0.02	22.7	C	0.0		0.12	23.7	C	0.10	21.7	C	-2.0	
	EB	R	0.33	27.5	C	0.38	28.6	C	1.1		0.60	34.2	C	0.78	44.9	D	10.7		0.55	32.3	C	0.70	39.2	D	6.9		0.76	41.5	D	0.82	41.5	D	0.0	
	WB	LTR	0.67	21.0	C	0.67	21.0	C	0.0		0.69	21.2	C	0.69	21.2	C	0.0		0.84	23.6	C	0.89	26.5	C	2.9		0.90	26.0	C	0.90	26.0	C	0.0	
	NB	L	0.38	23.8	C	0.52	30.3	C	6.5		0.40	21.9	C	0.63	32.0	C	10.1		0.44	26.0	C	0.71	44.3	D	18.3		0.58	30.9	C	0.56	25.8	C	-5.1	
	NB	T	0.36	16.8	B	0.36	16.8	B	0.0		0.31	16.1	B	0.31	16.1	B	0.0		0.35	16.5	B	0.33	15.6	B	-0.9		0.38	16.9	B	0.42	19.0	B	2.1	
	SB	TR	0.95	30.5	C	0.95	30.5	C	0.0		0.60	19.8	B	0.60	19.8	B	0.0		0.83	28.6	C	0.79	25.3	C	-3.3		0.66	20.7	C	0.45	18.0	B	-2.7	
	Overall		0.74	24.1	C	0.74	24.4	C	0.3		0.63	21.4	C	0.67	23.3	C	1.9		0.78	24.8	C	0.81	26.8	C	2.0		0.77	25.2	C	0.75	25.1	C	-0.1	
South Service Road-Drumgoole Road East / Bloomingdale Road	EB	LTR	0.15	16.8	B	0.15	16.8	B	0.0		0.09	16.2	B	0.09	16.2	B	0.0		0.12	16.5	B	0.12	16.5	B	0.0		0.19	17.2	B	0.19	17.2	B	0.0	
	NB	LTR	0.38	8.8	A	0.40	9.0	A	0.2		0.41	9.1	A	0.45	9.5	A	0.4		0.42	9.1	A	0.45	9.5	A	0.4		0.46	9.6	A	0.51	10.2	B	0.6	
	SB	L	0.57	11.0	B	0.58	11.3	B	0.3		0.44	10.0	A	0.46	10.4	B	0.4		0.62	12.1	B	0.64	12.9	B	0.8		0.67	14.0	B	0.71	15.8	B	1.8	
	SB	TR	0.65	11.2	B	0.66	11.4	B	0.2		0.48	9.6	A	0.51	9.9	A	0.3		0.59	10.5	B	0.62	10.9	B	0.4		0.53	9.9	A	0.58	10.4	B	0.5	
	Overall		0.48	10.8	B	0.49	11.0	B	0.2		0.35	9.7	A	0.37	10.1	B	0.4		0.45	10.7	B	0.47	11.2	B	0.5		0.51	11.2	B	0.54	12.0	B	0.8	
Pleasant Plains Avenue-Amboy Road / Bloomingdale Road	EB	LTR	0.09	14.7	B	0.09	15.3	B	0.6		0.06	14.4	B	0.06	14.4	B	0.0		0.09	14.7	B	0.09	14.7	B	0.0		0.06	14.4	B	0.06	14.4	B	0.0	
	WB	L	0.34	18.1	B	0.35	18.8	B	0.7		0.56	21.9	C	0.56	21.9	C	0.0		0.53	21.4	C	0.53	21.4	C	0.0		0.54	21.6	C	0.54	21.6	C	0.0	
	WB	T	0.02	14.1	B	0.02	14.7	B	0.6		0.04	14.2	B	0.04	14.2	B	0.0		0.04	14.2	B	0.04	14.2	B	0.0		0.02	14.1	B	0.02	14.1	B	0.0	
	WB	R	0.20	16.0	B	0.21	16.7	B	0.7		0.21	16.1	B	0.21	16.1	B	0.0		0.21	16.0	B	0.21	16.0	B	0.0		0.19	15.8	B	0.19	15.8	B	0.0	
	NB	LTR	0.48	19.7	B	0.49	19.2	B	-0.5		0.68	22.8	C	0.73	24.9	C	1.6		0.66	22.8	C	0.70	24.0	C	1.2		0.75	24.5	C	0.81	26.9	C	2.4	
	SB	LTR	1.01	37.7	D	1.01	37.0	D	-0.7		0.73	25.3	C	0.79	27.9	C	2.6		0.87	26.5	C	0.93	30.9	C	4.4		0.80	26.8	C	0.88	31.9	C	5.1	
	Overall		0.67	26.8	C	0.69	26.6	C	-0.2		0.64	22.6	C	0.67	24.1	C	1.5		0.70	22.8	C	0.73	25.0	C	2.2		0.67	23.6	C	0.71	26.3	C	2.7	
Arthur Kill Road / Bloomingdale Road	EB	TR	0.32	14.3	B	0.33	14.5	B	0.2		0.35	14.7	B	0.38	15.0	B	0.3		0.43	15.7	B	0.46	16.2	B	0.5		0.44	15.7	B	0.48	16.4	B	0.7	
	WB	LT	0.29	14.0	B	0.38	15.3	B	1.3		0.36	15.0	B	0.66	22.8	C	7.8		0.36	15.0	B	0.70	24.5	C	9.5		0.43	16.5	B	0.89	41.3	D	24.8	
	NB	LR	0.55	24.8	C	0.59	25.9	C	1.1		0.52	24.1	C	0.65	27.7	C	3.6		0.55	24.8	C	0.72	30.5	C	5.7		0.46	23.1	C	0.64	27.8	C	4.7	
	Overall		0.42	18.0	B	0.47	18.7	B	0.7		0.43	17.9	B	0.66	21.9	C	4.0		0.48	18.4	B	0.71	23.6	C	5.2		0.45	18.0	B	0.78	28.2	C	10.2	

Text changed from FEIS dated August 2013