

DECEMBER 20, 2018

CIVIL

STANDARD DRAWING LEGEND

FOR ENTIRE PLAN SET
(NOT TO SCALE)

EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE	EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
	ONSITE PROPERTY LINE / R.O.W. LINE			OVERHEAD WIRE	
	NEIGHBORING PROPERTY LINE / INTERIOR PARCEL LINE			UNDERGROUND TELEPHONE LINE	
	EASEMENT LINE			UNDERGROUND CABLE LINE	
	SETBACK LINE			STORM SEWER	
				SANITARY SEWER MAIN	
	CONCRETE CURB & GUTTER			HYDRANT	
				SANITARY MANHOLE	
				STORM MANHOLE	
	UTILITY POLE WITH LIGHT			WATER METER	
	POLE LIGHT			WATER VALVE	
	TRAFFIC LIGHT			GAS VALVE	
	UTILITY POLE			GAS METER	
	TYPICAL LIGHT			TYPICAL END SECTION	
	ACORN LIGHT			HEADWALL OR ENDWALL	
	TYPICAL SIGN			YARD INLET	
	PARKING COUNTS			CURB INLET	
				CLEAN OUT	
	CONTOUR LINE			ELECTRIC MANHOLE	
	SPOT ELEVATIONS			TELEPHONE MANHOLE	
				ELECTRIC BOX	
	SANITARY LABEL			ELECTRIC PEDESTAL	
	STORM LABEL			MONITORING WELL	
	SANITARY SEWER LATERAL			TEST PIT	
	UNDERGROUND WATER LINE			BENCHMARK	
	UNDERGROUND ELECTRIC LINE			BORING	
	UNDERGROUND GAS LINE				

GENERAL NOTES:

- THE PLAN IS BASED ON THE FOLLOWING DOCUMENTS AND INFORMATION
 - ENTITLED: "ALTA/ACSM LAND TITLE SURVEY, KETTLER INC., 300 MORSE STREET, NE, A&T LOTS 805, 817, & 819, SQUARE 3587, DISTRICT OF COLUMBIA", PREPARED BY: BOHLER ENGINEERING, PROJECT NUMBER: DC142264, DATED: 2/26/15
 - DIGITAL ARCHITECTURAL PLANS: ENTITLED: "815-18 MTW_FLOOR PLAN - CIVIL - P01.DWG" PREPARED BY: DESIGN COLLECTIVE, DATE RECEIVED: 11/29/18
 - DIGITAL ARCHITECTURAL PLANS: ENTITLED: "815-18 MTW BUILDING B_FLOOR PLAN - CIVIL - LEVEL 1.DWG" PREPARED BY: DESIGN COLLECTIVE, DATE RECEIVED: 11/20/18
 - DIGITAL ARCHITECTURAL PLANS: ENTITLED: "18 1017 MORSE ST - LEVEL 01.DWG" PREPARED BY: BRININSTOOL-LYNCH, DATE RECEIVED: 10/17/18
 - DIGITAL ARCHITECTURAL PLANS: ENTITLED: "A-100P1.DWG" PREPARED BY: GENSLER, DATE RECEIVED: 10/11/18
 - DIGITAL ARCHITECTURAL PLANS: ENTITLED: "1ST FLOOR.DWG" PREPARED BY: ECA, DATE RECEIVED: 10/23/18
 - DIGITAL LANDSCAPE PLANS: ENTITLED: "L-SP-W1511.DWG" PREPARED BY: OCULUS, DATE RECEIVED: 9/28/18
- LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE. ALL LOCATIONS AND SIZES ARE BASED ON UTILITY MARK OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PLANS AND UTILITY MARK OUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE, AND TYPE BY THE PROPER UTILITY COMPANIES.

SHEET INDEX

SHEET TITLE	SHEET NUMBER
GENERAL NOTES AND LEGEND	C-100
DEMOLITION PLAN	C-101
SITE PLAN - STAGE II PUD	C-201
SIGNAGE AND STRIPING PLAN	C-202
UTILITY PLAN	C-300
DC WATER EASEMENT EXHIBIT	C-301
EROSION AND SEDIMENT CONTROL PLAN (PHASE I)	C-400
EROSION AND SEDIMENT CONTROL PLAN (PHASE II)	C-401
STORMWATER MANAGEMENT PLAN - OVERALL	C-500
STORMWATER MANAGEMENT PLAN CALCULATIONS - OVERALL	C-501-502

DEVELOPER

KETTLER INC.
1751 PINNACLE DR. #700
MCLEAN, VA 22102

GENERAL NOTES AND LEGEND

14 December, 2018



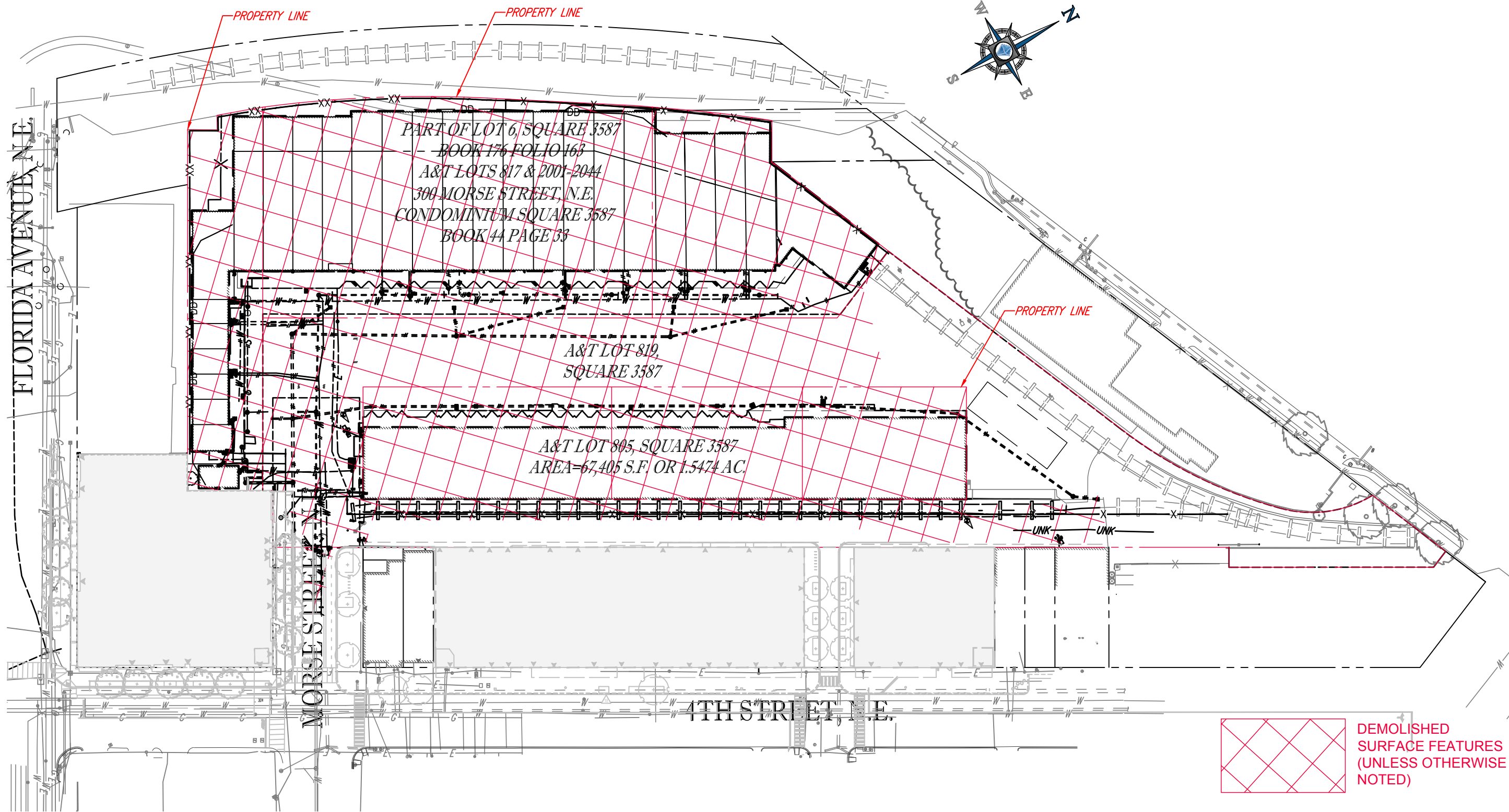
BOHLER
DC

MARKET TERMINAL - STAGE TWO PUD



KETTLER

C100



EXISTING CONDITIONS / DEMOLITION PLAN

SCALE: 1" = 100'

14 December, 2018



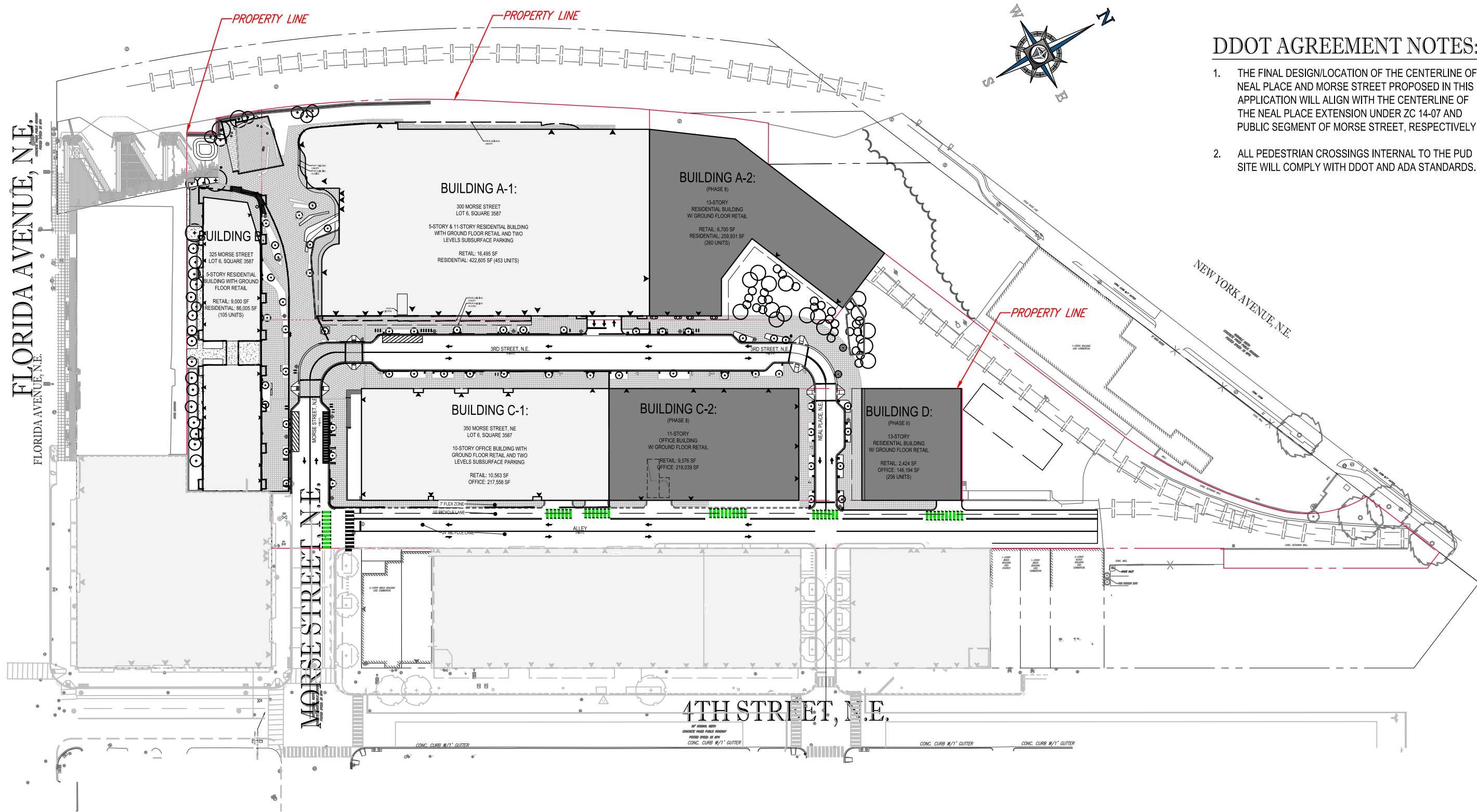
BOHLER
DC

MARKET TERMINAL - STAGE TWO PUD



KETTLER

C101



ALLEY NOTE:

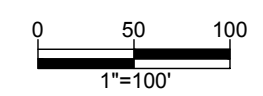
ALLEY IMPROVEMENTS BY OTHERS PER PUD NO. 14-07.

DDOT AGREEMENT NOTES:

1. THE FINAL DESIGN/LOCATION OF THE CENTERLINE OF NEAL PLACE AND MORSE STREET PROPOSED IN THIS APPLICATION WILL ALIGN WITH THE CENTERLINE OF THE NEAL PLACE EXTENSION UNDER ZC 14-07 AND PUBLIC SEGMENT OF MORSE STREET, RESPECTIVELY.
2. ALL PEDESTRIAN CROSSINGS INTERNAL TO THE PUD SITE WILL COMPLY WITH DDOT AND ADA STANDARDS.

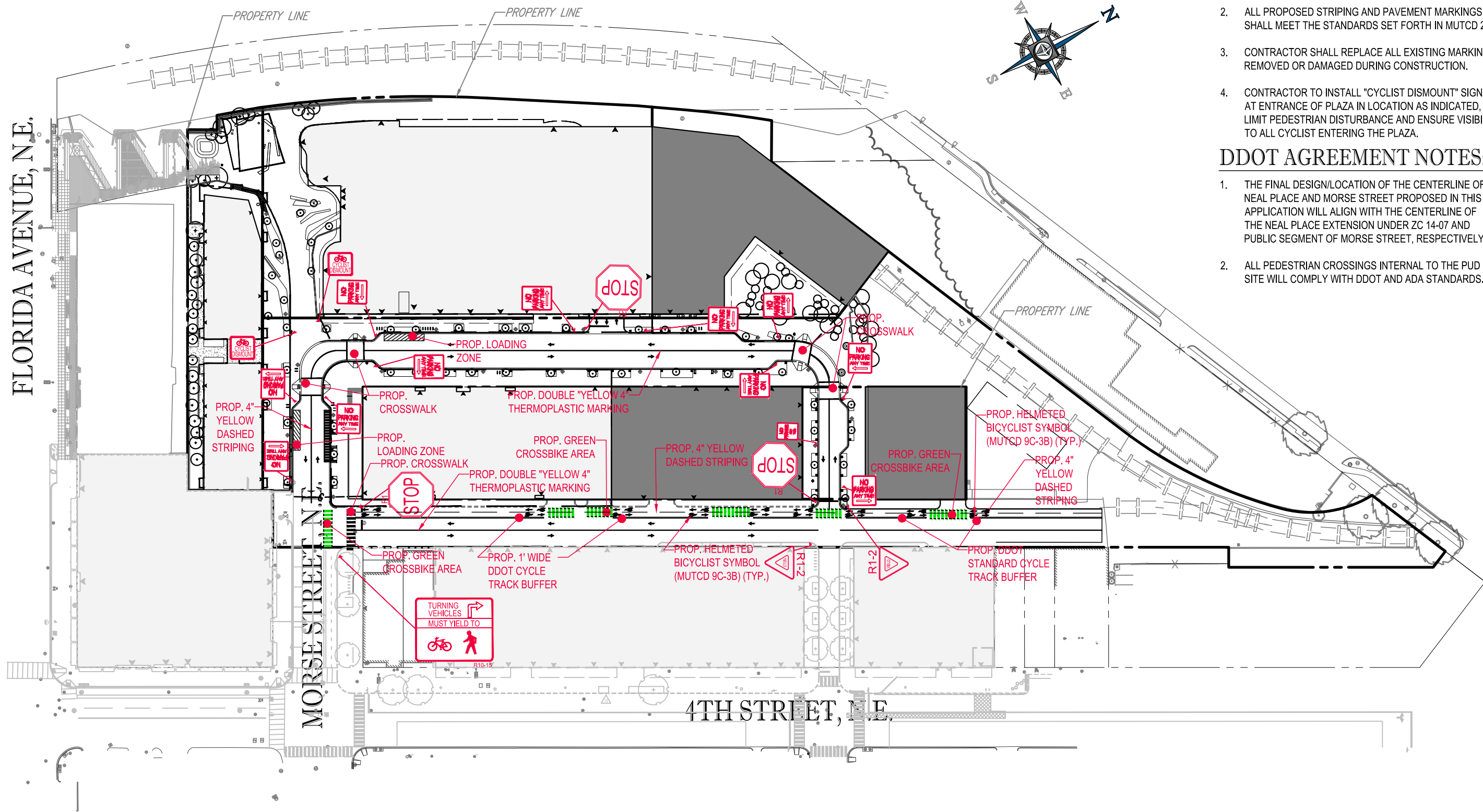
SITE PLAN - STAGE II PUD

SCALE: 1" = 100'



14 December, 2018

FLORIDA AVENUE, N.E.



SIGNAGE AND STRIPING NOTES:

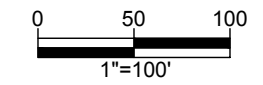
1. ALL PROPOSED SIGNS SHALL COMPLY WITH MUTCD 2009.
2. ALL PROPOSED STRIPING AND PAVEMENT MARKINGS SHALL MEET THE STANDARDS SET FORTH IN MUTCD 2009.
3. CONTRACTOR SHALL REPLACE ALL EXISTING MARKINGS REMOVED OR DAMAGED DURING CONSTRUCTION.
4. CONTRACTOR TO INSTALL "CYCLIST DISMOUNT" SIGNAGE AT ENTRANCE OF PLAZA IN LOCATION AS INDICATED, TO LIMIT PEDESTRIAN DISTURBANCE AND ENSURE VISIBILITY TO ALL CYCLIST ENTERING THE PLAZA.

DDOT AGREEMENT NOTES:

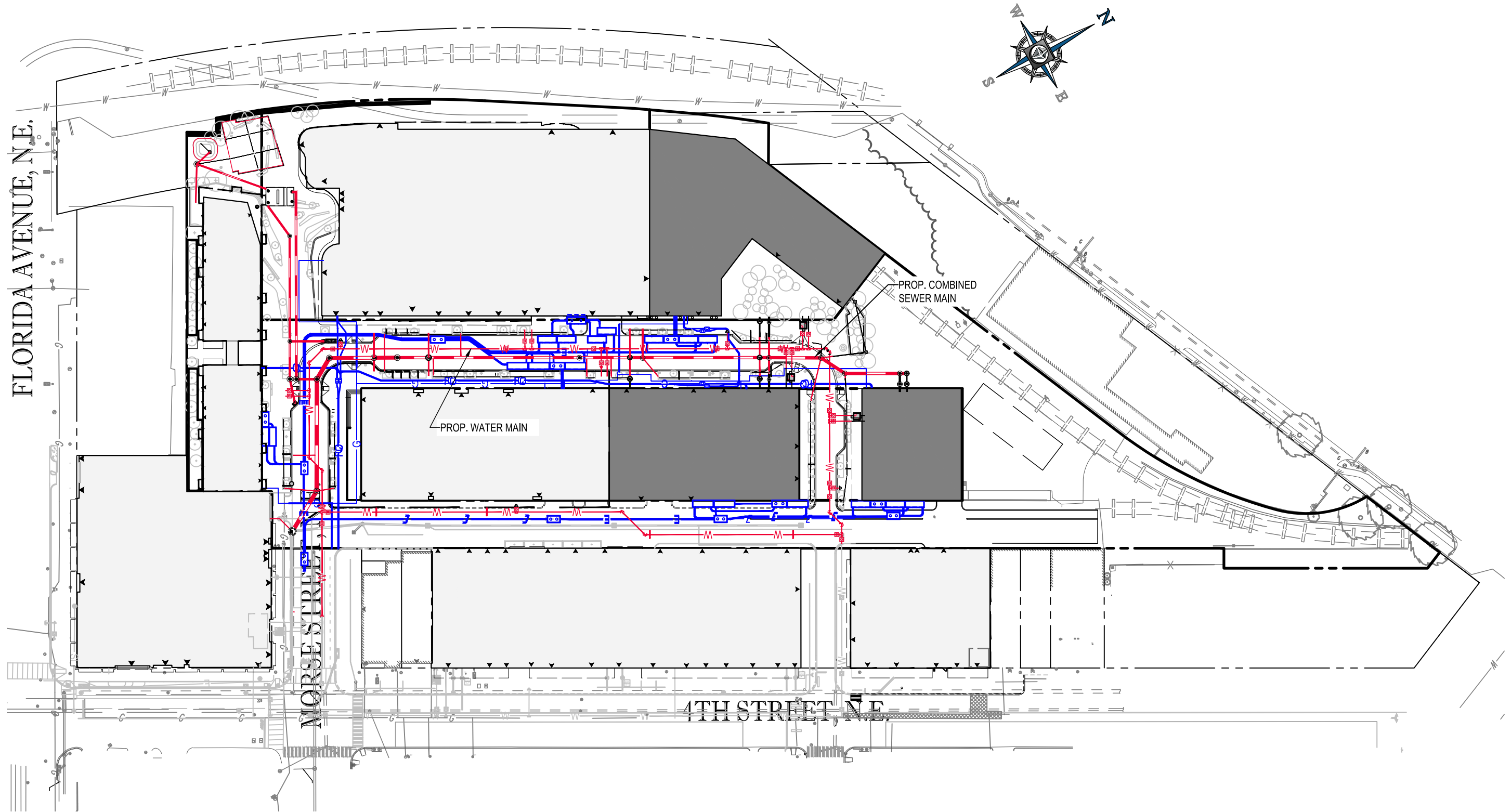
1. THE FINAL DESIGN/LOCATION OF THE CENTERLINE OF NEAL PLACE AND MORSE STREET PROPOSED IN THIS APPLICATION WILL ALIGN WITH THE CENTERLINE OF THE NEAL PLACE EXTENSION UNDER ZC 14-07 AND PUBLIC SEGMENT OF MORSE STREET, RESPECTIVELY.
2. ALL PEDESTRIAN CROSSINGS INTERNAL TO THE PUD SITE WILL COMPLY WITH DDOT AND ADA STANDARDS.

SIGNAGE AND STRIPING PLAN

SCALE: 1" = 100'

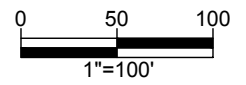


14 December, 2018

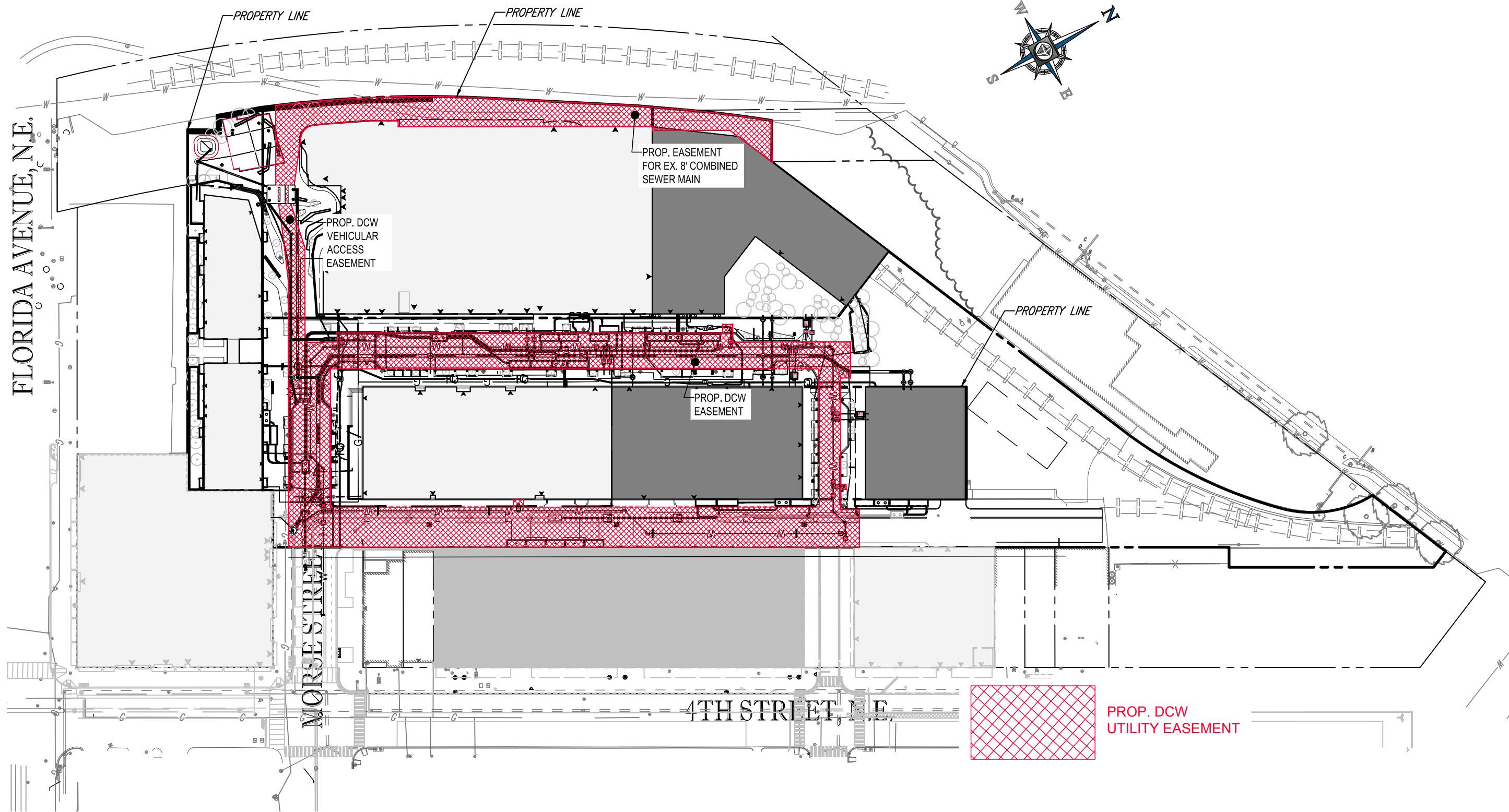


UTILITY PLAN

SCALE: 1" = 100'



14 December, 2018



DC WATER EASEMENT EXHIBIT

SCALE: 1" = 100'

14 December, 2018



BOHLER
DC

MARKET TERMINAL - STAGE TWO PUD

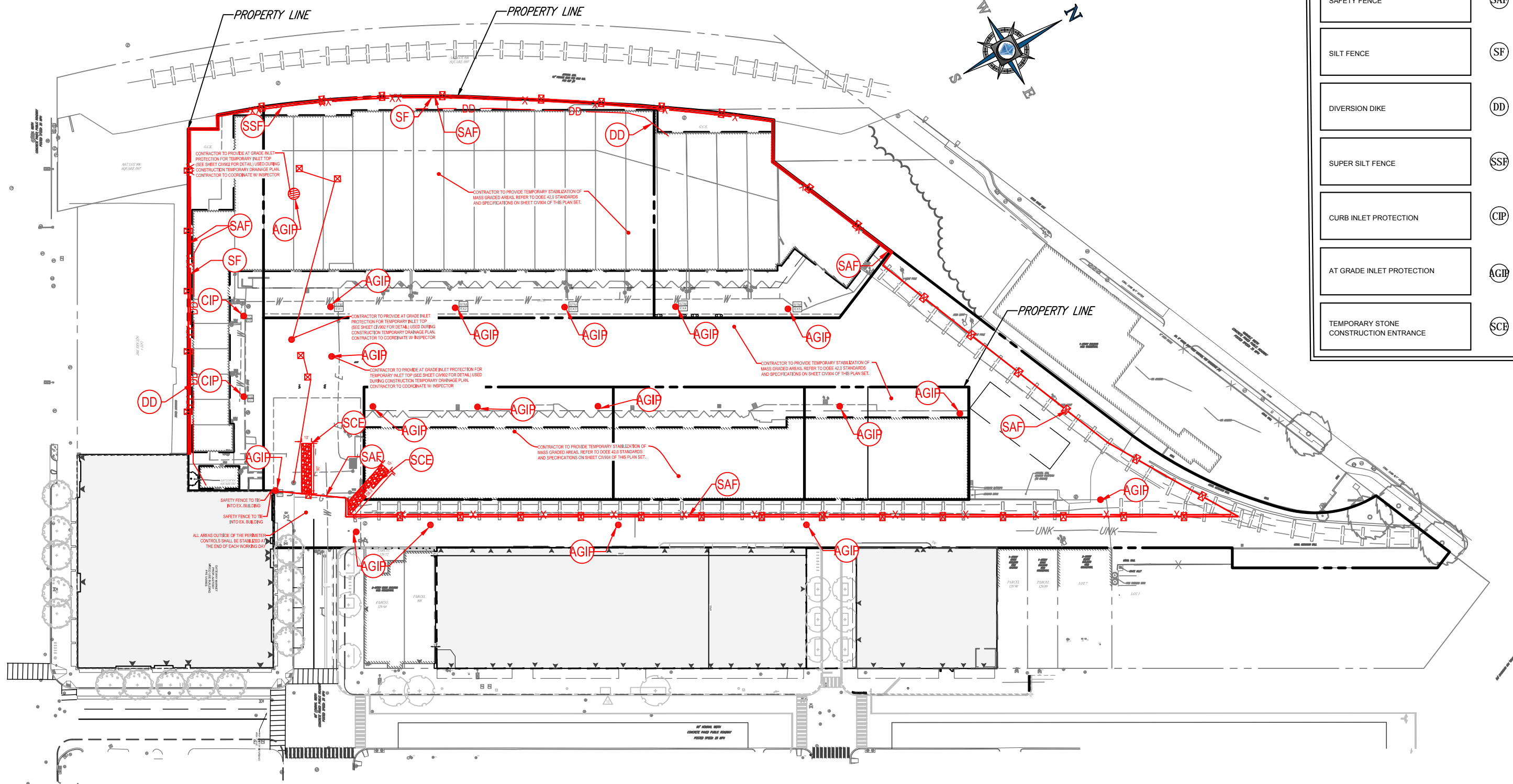


KETTLER

C301

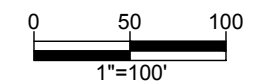
EROSION AND SEDIMENT CONTROL LEGEND

TITLE	KEY	SYMBOL
SAFETY FENCE	(SAF)	— [X] —
SILT FENCE	(SF)	— X —
DIVERSION DIKE	(DD)	— DD —
SUPER SILT FENCE	(SSF)	— XX —
CURB INLET PROTECTION	(CIP)	⊗
AT GRADE INLET PROTECTION	(AGIP)	⊗
TEMPORARY STONE CONSTRUCTION ENTRANCE	(SCE)	⊗



EROSION AND SEDIMENT CONTROL PLAN (PHASE I)

SCALE: 1" = 100'



14 December, 2018



BOHLER
DC

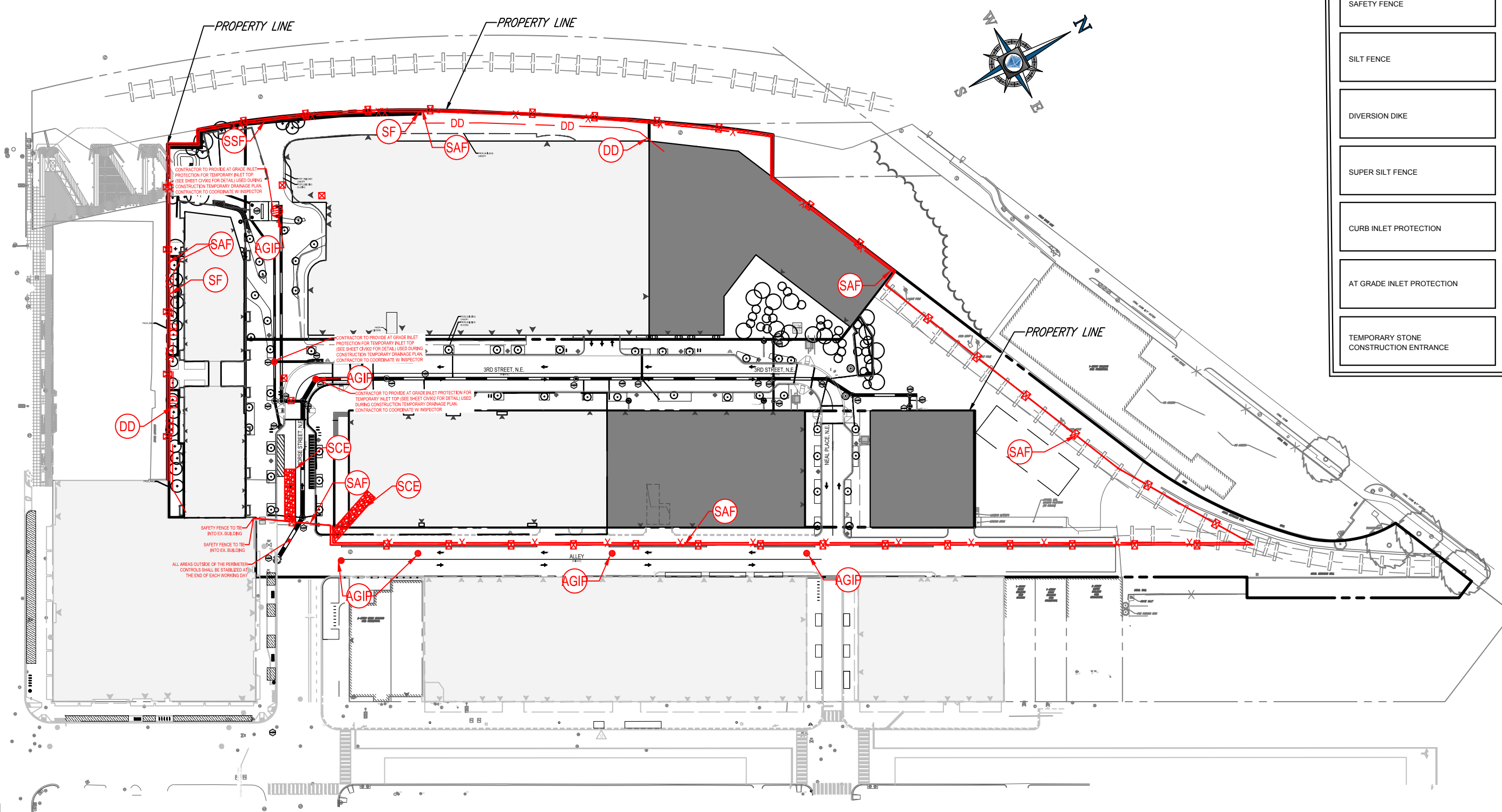
MARKET TERMINAL - STAGE TWO PUD



KETTLER

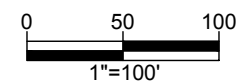
C400

EROSION AND SEDIMENT CONTROL LEGEND		
TITLE	KEY	SYMBOL
SAFETY FENCE	(SAF)	— X —
SILT FENCE	(SF)	— X —
DIVERSION DIKE	(DD)	— DD —
SUPER SILT FENCE	(SSF)	— XX —
CURB INLET PROTECTION	(CIP)	⊗
AT GRADE INLET PROTECTION	(AGIP)	⊗
TEMPORARY STONE CONSTRUCTION ENTRANCE	(SCE)	⊗



EROSION AND SEDIMENT CONTROL PLAN (PHASE II)

SCALE: 1" = 100'



14 December, 2018



BOHLER
DC

MARKET TERMINAL - STAGE TWO PUD



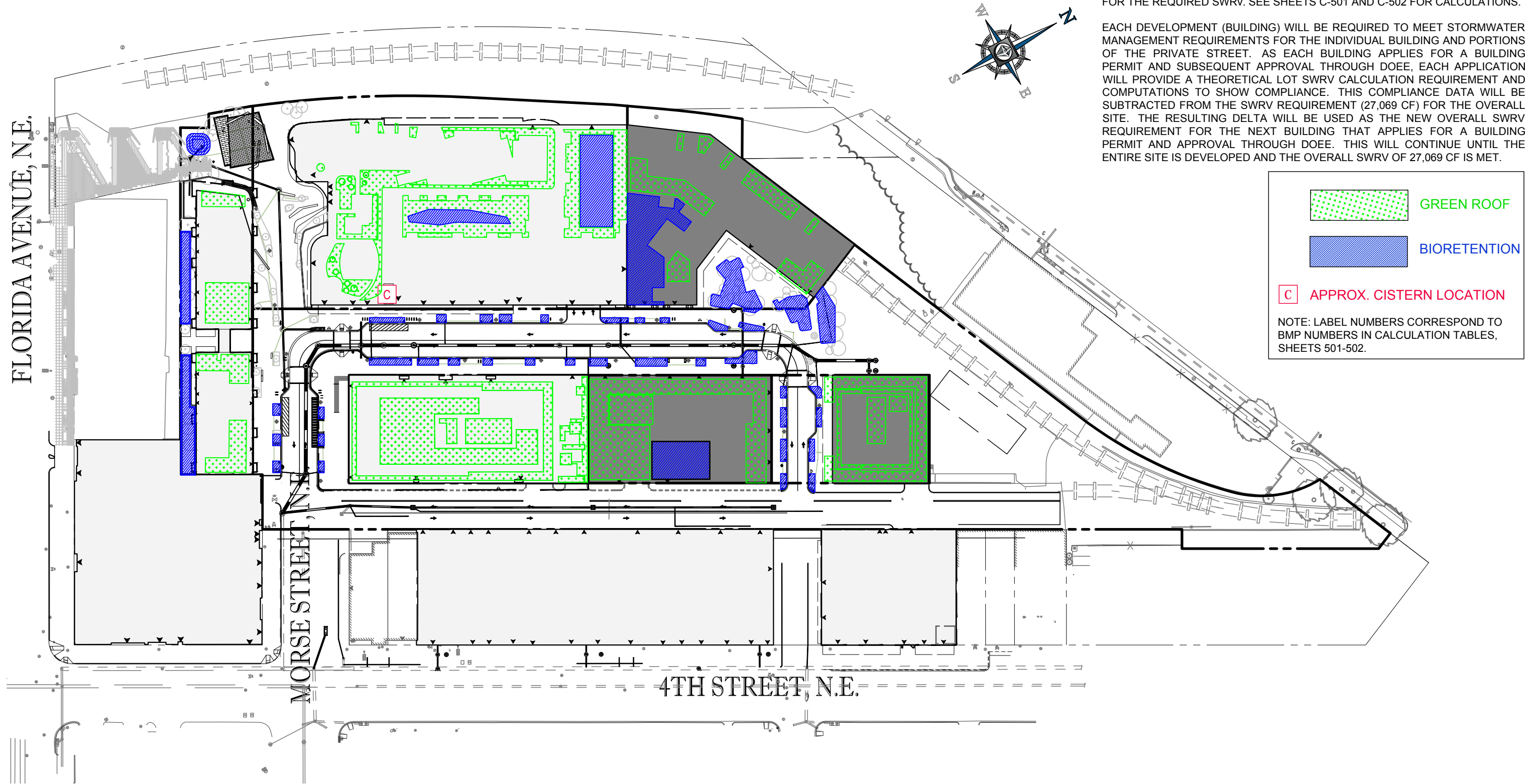
KETTLER

C401

STORMWATER MANAGEMENT PLAN NARRATIVE

THE TOTAL DISTURBED AREA IS 292,676 SF AND HAS A SWRV REQUIREMENT OF 27,069 CF. GREEN ROOFS, BIORETENTION FACILITIES, A CISTERN, AND STREETScape BIORETENTION PLANTERS WILL BE IMPLEMENTED TO PROVIDE FOR THE REQUIRED SWRV. SEE SHEETS C-501 AND C-502 FOR CALCULATIONS.

EACH DEVELOPMENT (BUILDING) WILL BE REQUIRED TO MEET STORMWATER MANAGEMENT REQUIREMENTS FOR THE INDIVIDUAL BUILDING AND PORTIONS OF THE PRIVATE STREET. AS EACH BUILDING APPLIES FOR A BUILDING PERMIT AND SUBSEQUENT APPROVAL THROUGH DOEE, EACH APPLICATION WILL PROVIDE A THEORETICAL LOT SWRV CALCULATION REQUIREMENT AND COMPUTATIONS TO SHOW COMPLIANCE. THIS COMPLIANCE DATA WILL BE SUBTRACTED FROM THE SWRV REQUIREMENT (27,069 CF) FOR THE OVERALL SITE. THE RESULTING DELTA WILL BE USED AS THE NEW OVERALL SWRV REQUIREMENT FOR THE NEXT BUILDING THAT APPLIES FOR A BUILDING PERMIT AND APPROVAL THROUGH DOEE. THIS WILL CONTINUE UNTIL THE ENTIRE SITE IS DEVELOPED AND THE OVERALL SWRV OF 27,069 CF IS MET.

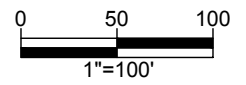


	GREEN ROOF
	BIORETENTION
	APPROX. CISTERN LOCATION

NOTE: LABEL NUMBERS CORRESPOND TO BMP NUMBERS IN CALCULATION TABLES, SHEETS 501-502.

STORMWATER MANAGEMENT PLAN - OVERALL

SCALE: 1" = 100'



14 December, 2018

BUILDING A1

GREEN ROOF														
GREEN ROOF#	SURFACE AREA (SF)	TOTAL CDA (SF)	EX IMP (SF)	PROP. IMP (SF)	MEDIA DEPTH (in.)	DRAINAGE LAYER DEPTH (IN)	LOCATION	STORAGE PROVIDED	Max SWRv	IRRIGATED? IF YES, 50% STORAGE APPLIED	50% STORAGE PROVIDED	SWRv PROVIDED	NOTES	
1-1	46	46	46	46	42	1	Building A1 Roof	86	6	no	N/A	6		
1-2	48	48	48	48	42	1	Building A1 Roof	89	6	no	N/A	6		
1-3	28	28	28	28	42	1	Building A1 Roof	52	4	no	N/A	4		
1-4	76	76	76	76	42	1	Building A1 Roof	142	10	no	N/A	10		
1-5	66	66	66	66	42	1	Building A1 Roof	128	9	no	N/A	9		
1-6	2,960	2,960	2,960	2,960	6	1	Building A1 Roof	984	398	no	N/A	398		
1-7	166	166	166	166	12	1	Building A1 Roof	98	22	no	N/A	22		
1-8	281	281	281	281	12	1	Building A1 Roof	165	38	no	N/A	38		
1-9	52	52	52	52	42	1	Building A1 Roof	97	7	no	N/A	7		
1-10	445	445	445	445	6	1	Building A1 Roof	148	60	no	N/A	60		
1-11	705	705	705	705	12	1	Building A1 Roof	414	95	no	N/A	95		
1-12	681	681	681	681	6	1	Building A1 Roof	220	92	no	N/A	92		
1-13	50	50	50	50	96	1	Building A1 Roof	80	7	no	N/A	7		
1-14	28	28	28	28	96	1	Building A1 Roof	45	4	no	N/A	4		
1-15	13	13	13	13	96	1	Building A1 Roof	21	2	no	N/A	2		
1-16	20	20	20	20	96	1	Building A1 Roof	32	3	no	N/A	3		
1-17	20	20	20	20	96	1	Building A1 Roof	32	3	no	N/A	3		
1-18	13	13	13	13	96	1	Building A1 Roof	21	2	no	N/A	2		
1-19	20	20	20	20	96	1	Building A1 Roof	32	3	no	N/A	3		
1-20	20	20	20	20	96	1	Building A1 Roof	32	3	no	N/A	3		
1-21	20	20	20	20	96	1	Building A1 Roof	32	3	no	N/A	3		
1-22	28	28	28	28	96	1	Building A1 Roof	45	4	no	N/A	4		
1-23	20	20	20	20	96	1	Building A1 Roof	32	3	no	N/A	3		
1-24	35	35	35	35	10	1	South Courtyard	18	5	no	N/A	5		
1-25	44	44	44	44	10	1	South Courtyard	22	6	no	N/A	6		
1-26	95	95	95	95	10	1	South Courtyard	28	7	no	N/A	7		
1-27	3,465	3,465	3,465	3,465	10	1	South Courtyard	1741	466	no	N/A	466		
1-28	51	51	51	51	10	1	South Courtyard	26	7	no	N/A	7		
1-29	144	144	144	144	10	1	South Courtyard	72	19	no	N/A	19		
1-30	1,922	1,922	1,922	1,922	10	1	North Courtyard	966	259	yes	483	259	50% STORAGE CREDIT APPLIED	
1-31	1,379	1,379	1,379	1,379	10	1	North Courtyard	693	186	yes	346	186	50% STORAGE CREDIT APPLIED	
TOTAL SA	12,901													
TOTAL								5,765	1,736			1,736		
MEDIA RETENTION VALUE								0.51	HYDROTECH (LiteTop Growing Media)					
DRAINAGE LAYER RETENTION VALUE								0.93	DOEE					

BIORETENTION														
FACILITY	SURFACE AREA, BOT. (SF)	SURFACE AREA, TOP (SF)	TOTAL CDA (SF)	EX IMP (SF)	PROP. IMP (SF)	FREEBOARD (FT)	PONDING DEPTH (FT)	MEDIA DEPTH (FT)	GRAVEL DEPTH (FT)	STORAGE PROVIDED	SWRv (CF)	Max SWRv	SWRv PROVIDED	NOTES
1-33	3,196	3,196	21,670	21,670	12,972	0.5	1.5	2	1	7,670	4,952	2,295	2,295	North Courtyard
1-33	1,202	1,202	12,972	12,972	12,972	0.5	1.5	2	1	2,898	1,731	1,746	1,731	South Courtyard
TOTAL										10,568	6,383	4,662	4,647	

CISTERN						
Size (Gal.)	Size (CF)	CDA (SF)	Max SWRv	Storage (CF)	SWRv Provided (CF)	
15000	2005.215	16876	858	669	858.10	

Building A1		
SWRv provided:	7242 CF	
(SRCs used:	0 CF)	
Storage provided:	17189 CF	

BUILDING A2

GREEN ROOF												
GREEN ROOF#	SURFACE AREA (SF)	TOTAL CDA (SF)	PROP. IMP (SF)	MEDIA DEPTH (in.)	DRAINAGE LAYER DEPTH (IN)	LOCATION	STORAGE PROVIDED	Max SWRv	SWRv	SWRv PROVIDED	NOTES	
1	4,500	4,500	0	8	1		1406	606	606	606	lower roof	
TOTAL							1,406	606	606	606		
MEDIA RETENTION VALUE								0.45	per manufacturer (TBD)			
DRAINAGE LAYER RETENTION VALUE								0.15	DOEE			

BIORETENTION													
FACILITY	SURFACE AREA, BOT. (SF)	SURFACE AREA, TOP (SF)	TOTAL CDA (SF)	PROP. IMP (SF)	PROP. PERVIOUS (SF)	FREEBOARD (FT)	PONDING DEPTH (FT)	MEDIA DEPTH (FT)	GRAVEL DEPTH (FT)	STORAGE PROVIDED	SWRv (CF)	Max SWRv	SWRv PROVIDED
A	1,498	1,498	3,298	1,800	0	0.5	0.5	2.5	0.833	2,185	1,311	444	444
B	367	367	1,817	1,150	300	0.5	0.5	2.5	0.833	935	921	215	215
podium	4,200	4200	20,000	15,800.0	0	0.5	0.5	2.5	0.833	6,125	3,675	2,692	2,692
TOTAL										8,845	1,632	659	3,350

Tree Planting		
Location	#	SWRv (CF)
In Bioretention	5	50

Building A2		
SWRv provided:	4150 CF	
(SRCs used:	144 CF)	
Storage provided:	10251 CF	

BUILDING B

BIORETENTION													
FACILITY#	SURFACE AREA, BOT. (SF)	SURFACE AREA, TOP (SF)	TOTAL CDA (SF)	EX IMP (SF)	PROP. IMP (SF)	FREEBOARD (FT)	PONDING DEPTH (FT)	MEDIA DEPTH (FT)	GRAVEL DEPTH (FT)	STORAGE PROVIDED	SWRv (CF)	Max SWRv	SWRv PROVIDED
1	802	802	4,608	4,608	4,608	0.5	0.5	3	3	1,323	794	620	620
2	1,360	1,360	7,813	7,813	7,813	0.5	0.5	3	3	2,244	1,346	1,052	1,052
TOTAL			2,162	10,259						3,567	2,140	1,672	1,672

GREEN ROOF										
GREEN ROOF #	SURFACE AREA (SF)	TOTAL CDA (SF)	MEDIA DEPTH (in.)	MEDIA RETENTION VALUE	DRAINAGE LAYER DEPTH (in.)	DRAINAGE RETENTION VALUE	STORAGE PROVIDED	Max SWRv	SWRv PROVIDED	NOTES
1	634	634	4	0.51	1	0.93	157	85	85	extensive
2	1890	1890	4	0.51	1	0.93	468	254	254	extensive
3	1159	1159	4	0.51	1	0.93	287	156	156	extensive
4	1336	1336	4	0.51	1	0.93	331	180	180	extensive
TOTAL	5019	5019					1242		675	

MEDIA		VALUE	BRAND
DRAINAGE LAYER		0.93	ROCKWOOL (HYDROTECH)

Building B		
SWRv provided:	2347 CF	
(SRCs used:	0 CF)	
Storage provided:	4810 CF	

BUILDING C1

GREEN ROOF										
GREEN ROOF #	SURFACE AREA (SF)	TOTAL CDA (SF)	MEDIA DEPTH (in.)	MEDIA RETENTION VALUE	DRAINAGE LAYER DEPTH (in.)	DRAINAGE RETENTION VALUE	STORAGE PROVIDED	Max SWRv	SWRv PROVIDED	NOTES
1	6823	6823	6	0.48	1	0.15	1723	918	918	
2	308	308	6	0.48	1	0.15	78	41	41	
3	1226	1226	6	0.48	1	0.15	310	165	165	
4	3767	3767	8	0.48	1	0.15	1253	507	507	
5	75	75	42	0.48	1	0.15	127	10	10	
6	136	136	42	0.48	1	0.15	230	18	18	
7	107	107	18	0.48	1	0.15	78	14	14	
8	106	106	42	0.48	1	0.15	179	14	14	
9	136	136	42	0.48	1	0.15	290	18	18	
10	158	158	42	0.48	1	0.15	267	21	21	
11	690	690	18	0.48	1	0.15	505	93	93	
TOTAL	13532	13532					4981		1821	

Building C1		
SWRv provided:	3161 CF	
(SRCs used:	1340 CF)	
Storage provided:	4981 CF	

STORMWATER MANAGEMENT PLAN CALCULATIONS - OVERALL



INFRASTRUCTURE

STANDARD BIORETENTION												
FACILITY (Drainage Area #)	SURFACE AREA, BOT. (SF)	SURFACE AREA, TOP (SF)	TOTAL CDA (SF)	PROP. IMP (SF)	FREEBOARD (FT)	PONDING DEPTH (FT)	MEDIA DEPTH (FT)	GRAVEL DEPTH (FT)	STORAGE PROVIDED	SWRv (CF)	Max SWRv	SWRv PROVIDED
1	184	184	2,446	2,446	0.83	0.25	2.50	1.25	253	152	329	152
2	80	80	1,636	1,636	0.83	0.25	2.50	1.25	110	66	220	66
3	104	104	727	727	0.83	0.25	2.50	1.25	143	86	98	86
4	104	104	1,562	1,562	0.83	0.25	2.50	1.25	143	86	210	86
5	64	64	2,360	2,360	0.83	0.25	2.50	1.25	88	53	318	53
7	47	47	860	860	0.83	0.25	2.50	1.25	65	39	116	39
8	47	47	4,923	4,195	0.83	0.25	2.50	1.25	65	39	590	39
11	306	306	2,036	2,036	0.83	0.25	2.50	1.25	421	252	274	252
12	154	154	1,116	1,116	0.83	0.25	2.50	1.25	212	127	150	127
13	84	84	1,312	1,312	0.83	0.25	2.50	1.25	116	69	177	69
14	70	70	1,154	1,154	0.83	0.25	2.50	1.25	96	58	155	58
15	70	70	1,508	1,508	0.83	0.25	2.50	1.25	96	58	203	58
16	69	69	887	887	0.83	0.25	2.50	1.25	95	57	119	57
17	144	144	1,719	1,719	0.83	0.25	2.50	1.25	198	119	231	119
18	265	265	2,278	2,278	0.83	0.25	2.50	1.25	364	219	307	219
19	76	76	1,180	1,180	0.83	0.25	2.50	1.25	105	63	159	63
20	282	282	2,409	2,409	0.83	0.25	2.50	1.25	388	233	324	233
21	96	96	2,144	2,144	0.83	0.25	2.50	1.25	132	79	289	79
22	72	72	1,048	1,048	0.83	0.25	2.50	1.25	99	59	141	59
24	72	72	926	926	0.83	0.25	3.50	1.25	117	70	125	70
25	96	96	1,120	1,120	0.83	0.25	5.50	1.25	204	122	151	122
26	72	72	2,574	2,574	0.83	0.25	5.00	1.25	144	86	346	86
35	123	561	27,060	17,360	0.50	1.50	6.00	1.25	759	455	2,680	455
36	874	874	8,847	6,334	0.25	1.50	2.00	1.25	2,185	1,311	941	941
TOTAL									6,596	3,958	8,653	3,588

STANDARD BIORETENTION												
FACILITY (Drainage Area #)	SURFACE AREA, BOT. (SF)	SURFACE AREA, TOP (SF)	TOTAL CDA (SF)	PROP. IMP (SF)	FREEBOARD (FT)	PONDING DEPTH (FT)	MEDIA DEPTH (FT)	GRAVEL DEPTH (FT) ABOVE UNDERDRAIN	STORAGE PROVIDED	SWRv (CF)	Max SWRv	SWRv PROVIDED
6	130	130	1,381	1,381	0.83	0.25	2.50	0.17	122	73	186	73
9	270	270	4,464	4,434	0.83	0.25	2.50	0.17	254	153	598	153
10	85	85	3,649	3,165	0.83	0.25	2.50	0.17	80	48	443	48
23	96	96	96	96	0.83	0.00	0.00	0	-	-	13	-
27	72	72	673	673	0.83	0.25	3.83	0.17	92	55	91	55
28	97	97	1,045	1,045	0.83	0.25	3.33	0.17	112	67	141	67
29	120	120	705	705	0.83	0.25	4.00	0.17	158	95	95	95
30	100	100	794	794	0.83	0.25	3.67	0.17	123	74	107	74
31	139	139	619	619	0.83	0.25	3.50	0.17	166	99	83	83
32	108	108	834	834	0.83	0.25	3.00	0.17	115	69	112	69
33	95	95	825	825	0.83	0.25	2.50	0.17	89	54	111	54
34	140	140	1,143	1,143	0.83	0.25	2.50	0.17	132	79	154	79
TOTAL									1,444	866	2,133	850

PERMEABLE PAVING				
Location	SA (SF)	SWRv (CF)	Storage (CF)	Gravel D(ft)
37	2,299	103	1,609	2

Infrastructure	
image snips to include: bio, Per. Pave., trees	
SWRv provided:	4308 CF
(SRCs used:	1931 CF)
Storage provided:	9649 CF

BUILDING C2

BIORETENTION												
FACILITY	SURFACE AREA, BOT. (SF)	SURFACE AREA, TOP (SF)	TOTAL CDA (SF)	PROP. IMP (SF)	FREEBOARD (FT)	PONDING DEPTH (FT)	MEDIA DEPTH (FT)	GRAVEL DEPTH (FT)	STORAGE PROVIDED	SWRv (CF)	Max SWRv	SWRv PROVIDED
6	2,350	2,350	10,610	10,610	0.50	1.00	2.00	1	4,465	2,679	1,428	1,428
TOTAL									4,465	2,679	1,428	1,428

GREEN ROOF												
GREEN ROOF#	SURFACE AREA (SF)	TOTAL CDA (SF)	PROP. IMP (SF)	MEDIA DEPTH (in.)	DRAINAGE LAYER DEPTH (IN)	LOCATION	STORAGE PROVIDED	Max SWRv	SWRv PROVIDED	NOTES		
13	8,680	8,680	8,680	5	1		1953	1168	1168			
14	1,370	1,370	1,370	3	1		192	184	184			
TOTAL							2,145	1,353	1,353			

MEDIA RETENTION VALUE	0.51	HYDROTECH (Litetop Growing Media)
DRAINAGE LAYER RETENTION VALUE	0.15	DOEE

Building C2	
SWRv provided:	2780 CF
(SRCs used:	0 CF)
Storage provided:	6610 CF

BUILDING D

GREEN ROOF												
GREEN ROOF#	SURFACE AREA (SF)	TOTAL CDA (SF)	PROP. IMP (SF)	MEDIA DEPTH (in.)	DRAINAGE LAYER DEPTH (IN)	LOCATION	STORAGE PROVIDED	Max SWRv	SWRv PROVIDED			
Penthouse	3,420	3,420	0	10	1	Building D	1496	460	460			
Upper Roof	492	492	0	8	1	Building D	173	66	66			
Upper Roof	727	727	0	8	1	Building D	256	98	98			
Upper Roof	913	913	0	8	1	Building D	322	123	123			
Upper Roof	287	287	0	10	1	Building D	126	39	39			
TOTAL							2,373	786	786			

MEDIA RETENTION VALUE	0.51	HYDROTECH
DRAINAGE LAYER RETENTION VALUE	0.15	DOEE

Building D	
SWRv provided:	1563 CF
(SRCs used:	777 CF)
Storage provided:	2373 CF

OVERALL SUMMARY

OVERALL SUMMARY	
TOTAL SWRv Required:	27069 CF
TOTAL SWRv Provided:	25551 CF
TOTAL Storage Required:	50500 CF
TOTAL Storage Provided:	55863 CF
TOTAL SRCs used:	4192 CF
(NOTE: as required, more than 50% of the SWRv credit is achieved using BMPs)	

STORMWATER MANAGEMENT PLAN CALCULATIONS - OVERALL

