

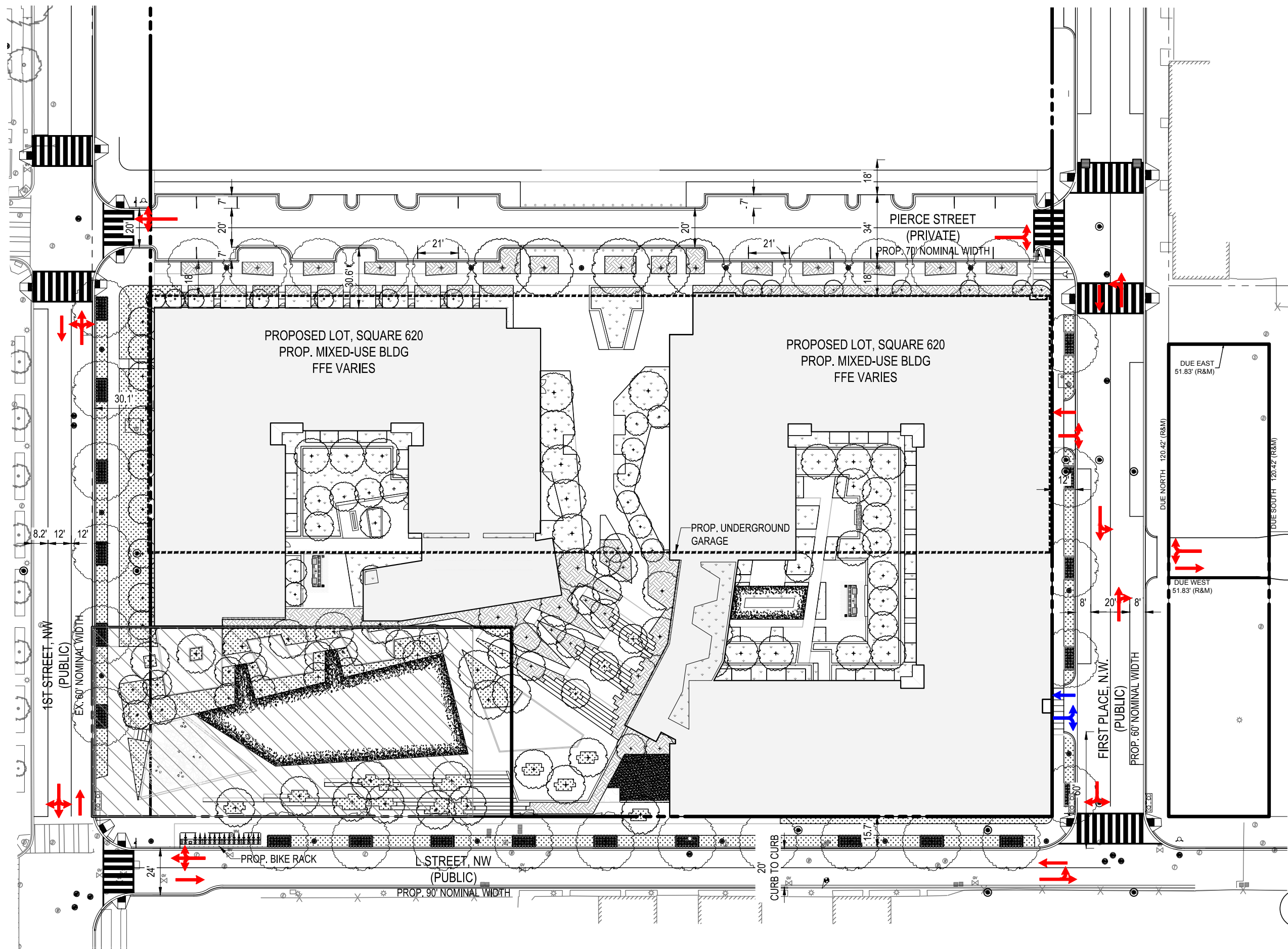
EROSION AND SEDIMENT CONTROL LEGEND		
TITLE	KEY	SYMBOL
SAFETY FENCE	SAF	
SILT FENCE	SF	
TEMPORARY STONE CONSTRUCTION ENTRANCE WITH WASH RACK	SCE	
CURB INLET PROTECTION	CIP	
AT GRADE INLET PROTECTION	AGIF	
TREE PROTECTION	TP	

EROSION & SEDIMENT CONTROL NARRATIVE

EROSION AND SEDIMENT CONTROL AND RUNOFF PROTECTION SHALL BE PROVIDED THROUGH DOE APPROVED PRACTICES DURING ALL PHASES OF CONSTRUCTION. IT IS ANTICIPATED AT THIS TIME THAT EXISTING DRAINAGE DIVIDES SHALL BE UTILIZED FOLLOWING DEMOLITION OF EXISTING SITE FEATURES. CURB INLET PROTECTION, AT GRADE INLET PROTECTION, TEMPORARY STONE CONSTRUCTION ENTRANCE, TREE PROTECTION, SAFETY FENCE AND SILT FENCE SHALL BE USED FOR EACH DRAINAGE AREA TO MITIGATE SEDIMENT LADEN RUNOFF FROM LEAVING THE SITE. IT IS ANTICIPATED THAT DETAILS OF THIS PLAN SHALL BE DESIGNED AS CONSTRUCTION PHASING FOR THIS PROJECT IS FINALIZED.

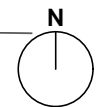
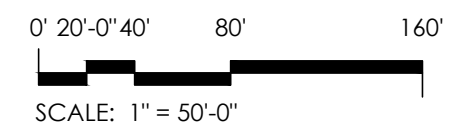
C-700 EROSION AND SEDIMENT CONTROL PLAN

TBCS Owner I LLC | SURSUM CORDA | 1112 FIRST TERRACE NW



LEGEND

- VEHICULAR CIRCULATION
- LOADING/SERVICE CIRCULATION
- AREA OUTSIDE OF PUD PROPERTY



PRELIMINARY SPRINKLER CALCULATIONS

SYSTEM PARAMETERS

1 System Type:	Wet Pipe
2 Hazard Classification:	Ordinary Hazard
3 Density:	0.15 (gpm/ft)
4 Remote Area:	1500 (square feet)
5 Hose Stream Allowance	0 INSIDE (gpm)
	0 OUTSIDE (gpm)
6 Elevation Difference:	120 (feet)
7 Maximum Sprinkler Coverage:	225 (square feet)
8 Sprinkler K factor:	5.6

LOSSES

1 Building Height:	120	X	0.433 (psi/ft)	52.0 PSI
2 End Sprinkler Pressure:				36.3 PSI
<i>(P=Q/K)^2, where Q=sprinkler coverage X density & K=Sprinkler head K factor</i>				
3 Standpipe Pressure Requirement:	100 (psi)		<i>added pressure:</i>	63.7 PSI
4 Backflow Preventer loss:	5.0 (psi)			5.0 PSI
<i>(typically 5-10 psi, refer to cutsheet)</i>				
5 Average Friction loss - Interior Piping	600 (ft.)	X	0.015 (psi/ft.)	9.0 PSI
6 Average Friction loss - Exterior Piping	300 (ft.)	X	0.015 (psi/ft.)	4.5 PSI
7 TOTAL PRESSURE DEMAND				170.5 PSI
8 Safety Factor	10%			17.0 PSI
9 FINAL PRESSURE DEMAND				187.5 PSI
10 Available Pressure				47.0 PSI
11 Fire Pump Boost Required				140.5 PSI

ESTIMATED DEMAND

1 Most Remote Area:	1500	X	0.15 (density)	225 GPM
2 Balance Factor:	30%			67.5 GPM
3 Standpipe Requirement	1000 (gpm)			1000 GPM
4 Inside Hose Stream	0 (gpm)			0 GPM
5 Total INSIDE Demand				1292.5 GPM
6 Outside Hose Stream	0 (gpm)			0 GPM
7 TOTAL FLOW DEMAND				1292.5 GPM

Sursum Corda Apartments						DATE	October 23, 2018
WATER DEMAND						BY	NLM
						JOB NO.	2018243
ITEM NO.	FIXTURE DESCRIPTION	NO. OF FIXTURES	LOAD VALUES (wsfu)			CALCULATED FIXTURE UNITS	
			COLD	HOT	TOTAL		
1	Bathroom Group (Private Flush tank))	822	2.7	1.5	3.6	= 2959.2	
2	Bathroom Group (Private Flush valve)	0	6.0	3.0	8.0	= 0	
3	Bathtub	0	1.0	1.0	1.4	= 0	
4	Bathtub (Public)	0	3.0	3.0	4.0	= 0	
5	Bidet (Private)	0	1.5	1.5	2.0	= 0	
6	Coimbination fixture (Private)	0	2.25	2.25	3.0	= 0	
7	Dishwashing Machine (Private)	538	-	1.4	1.4	= 753.2	
8	Drinking fountain (Offices, etc.)	10	0.25	-	0.3	= 2.5	
9	Kitchen sink/Pantry/Workstation	538	1.0	1.0	1.4	= 753.2	
10	Kitchen sink (Hotel, restaurant)	0	3.0	3.0	4.0	= 0	
11	Laundry trays (1 to 3) (Private)	0	1.0	1.0	1.4	= 0	
12	Lavatory (Private)	10	0.5	0.5	0.7	= 7	
13	Lavatory (Public)	0	1.5	1.5	2.0	= 0	
14	Service sink (Offices, etc.)	15	2.25	2.25	3.0	= 45	
15	Shower head (Public)	0	3.0	3.0	4.0	= 0	
16	Shower head (Private)	0	1.0	1.0	1.4	= 0	
17	Urinal (Public 1" flush valve)	6	10.0	-	10.0	= 60	
18	Urinal (Public 3/4" flush valve)	0	5.0	-	5.0	= 0	
19	Urinal (Public flush tank)	0	3.0	-	3.0	= 0	
20	Washing Machine (Private)	538	1.0	1.0	1.4	= 753.2	
21	Washing machine (Public)	0	2.25	2.25	3.0	= 0	
22	Washing machine (15 lb. Public)	0	3.0	3.0	4.0	= 0	
23	Water closet (Private Flush valve)	0	6.0	-	6.0	= 0	
24	Water closet (Private Flush tank)	10	2.2	-	2.2	= 22	
25	Water closet (Public Flush valve)	15	10.0	-	10.0	= 150	
26	Water closet (Public Flush tank)	0	5.0	-	5.0	= 0	
27	Water closet (Public or private Flushometer)	0	2.0	-	2.0	= 0	
28	Kitchen (Commercial)	0	20.0	20.0	35.0	= 0	
29	Dishwashing Machine Kitchen	0	-	15.0	15.0	= 0	
30	Hydrants	20	2.0	-	2.0	= 40	
TOTAL CALCULATED FIXTURE UNITS			3609	3101		5545	
CALCULATED SYSTEM DEMAND			(GALLONS PER MINUTE)			630	
<i>(Based on IPC Table E102)</i>							
BLDG WATER SERVICE PIPE SIZE			(INCHES DIAMETER)			6"	

THIS SHEET INTENTIONALLY LEFT BLANK