

STORMWATER MANAGEMENT SUMMARY

THERE ARE TWO REQUIREMENTS TO SATISFY THE CURRENT STORMWATER REGULATIONS - THE ON-SITE RETENTION VOLUME AND THE PUBLIC RIGHT-OF-WAY (PROW) RETENTION VOLUME. THE VOLUME REQUIRED TO BE RETAINED ON-SITE (SWRV) IS EQUAL TO APPROXIMATELY 30,340 CUBIC FEET. THE VOLUME REQUIREMENT FOR THE PROW IS EQUAL TO APPROXIMATELY 6,384 CUBIC FEET.

TO SATISFY THE ON-SITE RETENTION VOLUME, THE CURRENT DESIGN INCLUDES SIX INTENSIVE GREEN ROOFS WITH A DRAINAGE LAYER. PROPOSED GREEN ROOF AREAS TO MEET RETENTION REQUIREMENTS ARE INTENSIVE ROOFS WITH APPROXIMATE FOOTPRINT OF 85,330 SF AND OVER 8" OF MEDIA DEPTH. THE PROJECT ALSO INCLUDES BIORETENTION FACILITIES WITH AN APPROXIMATE FOOTPRINT OF 988 SF AND PERMEABLE PAVEMENT WITH AN APPROXIMATE FOOTPRINT OF 1,041 SF.

TO SATISFY THE PUBLIC RIGHT-OF-WAY RETENTION VOLUME, THE CURRENT DESIGN INCLUDES ENGINEERED TREE PITS AND WILL REQUIRE APPROXIMATELY 17,250 SF OF PERMEABLE PAVEMENT OR LARGER ENGINEERED TREE PITS TO MEET THE STORMWATER RETENTION VOLUME OR DEMONSTRATE THAT STORMWATER MANAGEMENT IS BEING UTILIZED TO THE MAXIMUM EXTENT PRACTICABLE (MEP).


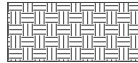

THE SIZE AND DEPTH OF THE BMPS WILL BE DETERMINED WITH FINAL CONSTRUCTION DOCUMENTS, HOWEVER THE FINAL DESIGN WILL MEET THE REQUIRED ON-SITE STORMWATER RETENTION VOLUME (25,154 CF) AND THE PUBLIC RIGHT-OF-WAY STORMWATER RETENTION VOLUME (6,384 SF).

GREEN AREA RATIO SUMMARY

THE GAR FOR A SITE WITHIN THE C-3-C ZONE IS 0.20. TO SATISFY THE GAR REQUIREMENT, THE CURRENT DESIGN INCLUDES APPROXIMATELY 85,330 SF OF INTENSIVE GREEN ROOF (8" AND GREATER), 988 SF OF BIORETENTION FACILITIES, AND 1,041 SF OF PERMEABLE PAVEMENT, AND LANDSCAPING.

THE SIZE AND DEPTH OF THE GREEN ROOF AREAS ALONG WITH PLANT SPECIES WILL BE DETERMINED WITH FINAL CONSTRUCTION DOCUMENTS, HOWEVER THE FINAL DESIGN WILL MEET THE REQUIRED GREEN AREA RATIO (0.20).

LEGEND

- GREEN ROOF (GREATER THAN 8") 
- PROP. BIORETENTION FACILITY 
- PROP. PERMEABLE PAVEMENT 

BOHLER DC
 SITE CIVIL AND CONSULTING ENGINEERING
 PROGRAM MANAGEMENT LANDSCAPE ARCHITECTURE
 LAND SURVEYING PERMITTING SERVICES TRANSPORTATION SERVICES
 SUSTAINABLE DESIGN

REVISIONS			
REV	DATE	COMMENT	BY
	08/14/15	STAGE 1 PUD	SN
	01/22/16	REV. STAGE 1 PUD	SL

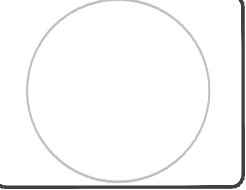
NOT APPROVED FOR CONSTRUCTION


 THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE OF VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
 (VA 1-800-245-8848) (PA 1-800-245-1770) (DC 1-800-257-7777) (VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

PROJECT No.:	DC142200
DRAWN BY:	KR
CHECKED BY:	KC
DATE:	07/14/15
SCALE:	1" = 80'
CAD I.D.:	DAI

PROJECT: PUD SET
 FOR SURSUM CORDA CO-OP
 LOCATION OF SITE FIRST STREET, NW & L STREET, NW WASHINGTON, DC

BOHLER DC
 1301 PENNSYLVANIA AVE., NW, STE. 825 WASHINGTON, DC 20004
 Phone: (202) 524-5700 Fax: (202) 524-5701
 DC@BohlerEng.com



SHEET TITLE: STORMWATER MANAGEMENT PLAN

SHEET NUMBER: **700**

ZONING COMMISSION District of Columbia
 CASE NO. 15-20
 EXHIBIT NO. 2015-01

Green Area Ratio Scoresheet

Address: **Sursum Corda - 1st St NW & M St NW**

Ward: Lot: Square: District:

Other / BZA Order:

enter sq ft of lot: mu:

Lot size (enter this value first): **312,325** SCORE: **0.221**

Landscape Elements		Square Ft.	Factor	Total
A Landscaped areas (select one of the following for each area)				
1	Landscaped areas with a soil depth of less than 24"	<input type="text" value="0"/>	0.3	-
2	Landscaped areas with a soil depth of 24" or greater	<input type="text" value="0"/>	0.6	-
3	Bioretention facilities	<input type="text" value="988"/>	0.4	395.2
B Plantings (credit for plants in landscaped areas from Section A)				
1	Groundcovers, or other plants less than 2' tall at maturity	<input type="text" value="0"/>	0.2	-
2	Plants, not including grasses, 2' or taller at maturity - calculated at 9 sq ft per plant (typically planted no closer than 18" on center)	<input type="text" value="0"/>	0	0.3
3	Tree canopy for all new trees 2.5" to 6" diameter or equivalent - calculated at 50 sq ft per tree	<input type="text" value="0"/>	0	0.5
4	Tree canopy for new trees 6" diameter or larger or equivalent - calculated at 250 sq ft per tree	<input type="text" value="0"/>	0	0.6
5	Tree canopy for preservation of existing tree 6" to 12" diameter or larger or equivalent - calculated at 250 sq ft per tree	<input type="text" value="0"/>	0	0.7
6	Tree canopy for preservation of existing tree 12" to 18" diameter or larger or equivalent - calculated at 600 sq ft per tree	<input type="text" value="0"/>	0	0.7
7	Tree canopy for preservation of all existing trees 18" to 24" dia. or equivalent - calculated at 1300 sq ft per tree	<input type="text" value="0"/>	0	0.7
8	Tree canopy for preservation of all existing trees 24" diameter or larger or equivalent - calculated at 2000 sq ft per tree	<input type="text" value="0"/>	0	0.8
9	Vegetated wall, plantings on a vertical surface	<input type="text" value="0"/>	0.6	-

C Vegetated or "green" roofs				
1	Over at least 2" and less than 8" of growth medium	<input type="text" value="0"/>	0.6	-
2	Over at least 8" of growth medium	<input type="text" value="85,330"/>	0.8	68,264.0
D Permeable Paving***				
1	Permeable paving over at least 6" and less than 24" of soil or gravel	<input type="text" value="1,041"/>	0.4	416.4
2	Permeable paving over at least 24" of soil or gravel	<input type="text" value="0"/>	0.5	-
E Other				
1	Enhanced tree growth systems ***	<input type="text" value="0"/>	0.4	-
2	Renewable energy generation	<input type="text" value="0"/>	0.5	-
3	Approved water features	<input type="text" value="0"/>	0.2	-
		<i>sub-total of sq ft = 87,558</i>		
H Bonuses				
1	Native plant species	<input type="text" value="0"/>	0.1	-
2	Landscaping in food cultivation	<input type="text" value="0"/>	0.1	-
3	Harvested stormwater irrigation	<input type="text" value="0"/>	0.1	-
		<i>Green Area Ratio numerator = 69,076</i>		
*** Permeable paving and structural soil together may not qualify for more than one third of the Green				
<i>Total square footage of all permeable paving and enhanced tree growth</i>				416

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SITE CIVIL AND CONSULTING ENGINEERING


PROGRAM MANAGEMENT LANDSCAPE ARCHITECTURE

LAND SURVEYING PERMITTING SERVICES TRANSPORTATION SERVICES

SUSTAINABLE DESIGN

REVISIONS			
REV	DATE	COMMENT	BY
	08/14/15	STAGE 1 PUD	SN
	01/22/16	REV. STAGE 1 PUD	SL

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PROJECT No.:	DC142200
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CHECKED BY:	KC
DATE:	07/14/15
SCALE:	N/A
CAD I.D.:	SD1

PROJECT:

PUD SET

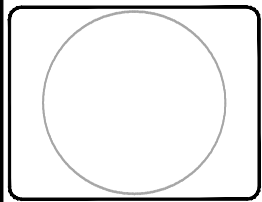
FOR

SURSUM CORDA CO-OP

LOCATION OF SITE
FIRST STREET, NW &
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WASHINGTON, DC

BOHLER DC

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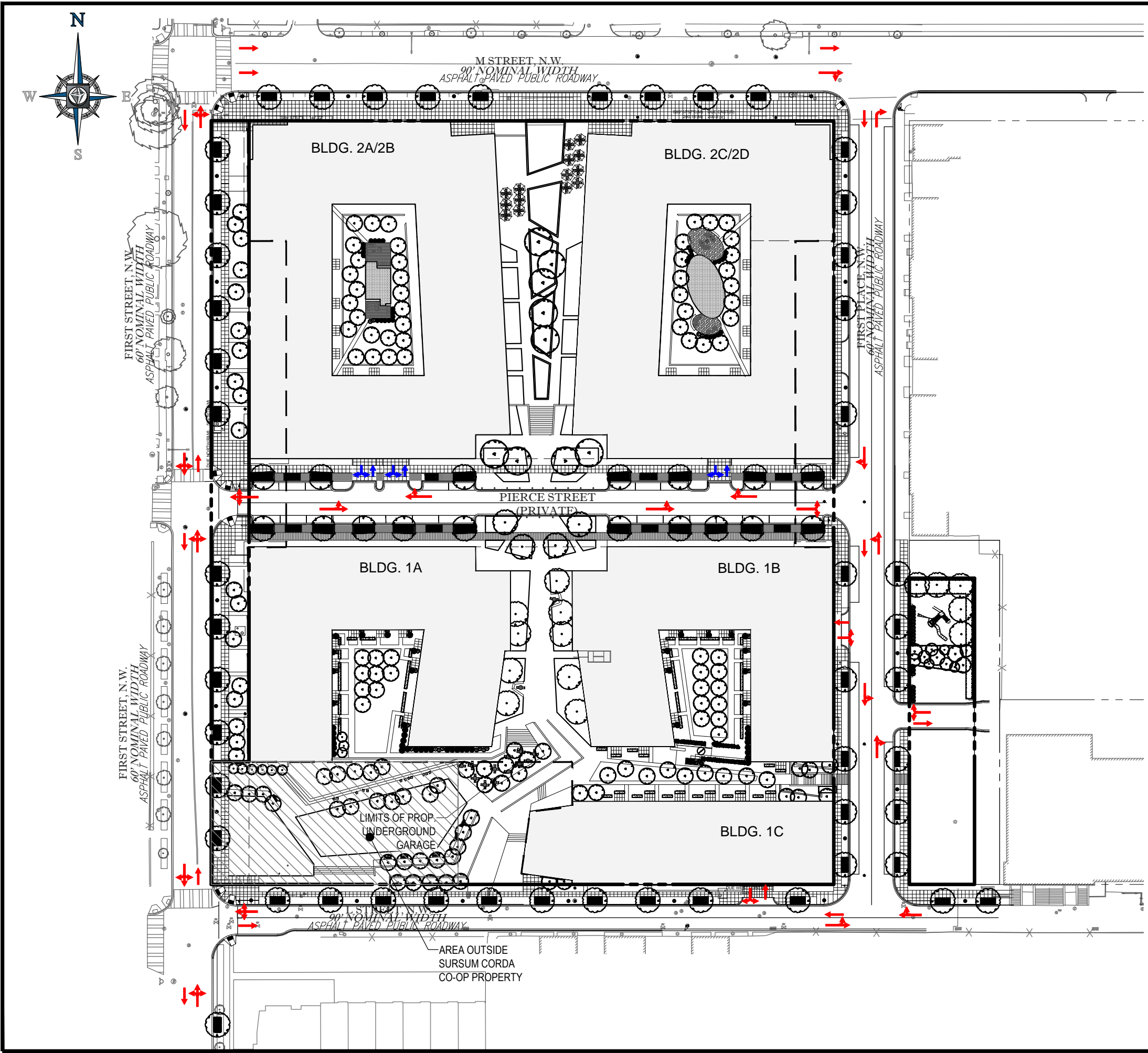


SHEET TITLE:

GREEN AREA RATIO WORKSHEET

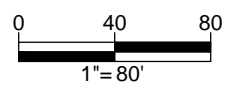
SHEET NUMBER:

C-701



LEGEND

- VEHICULAR CIRCULATION
- LOADING/SERVICE CIRCULATION
- AREA OUTSIDE SURSUM CORDA CO-OP PROPERTY



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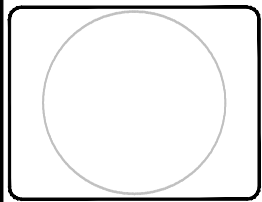
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SHEET TITLE:
CIRCULATION PLAN
 SHEET NUMBER:
C-800