

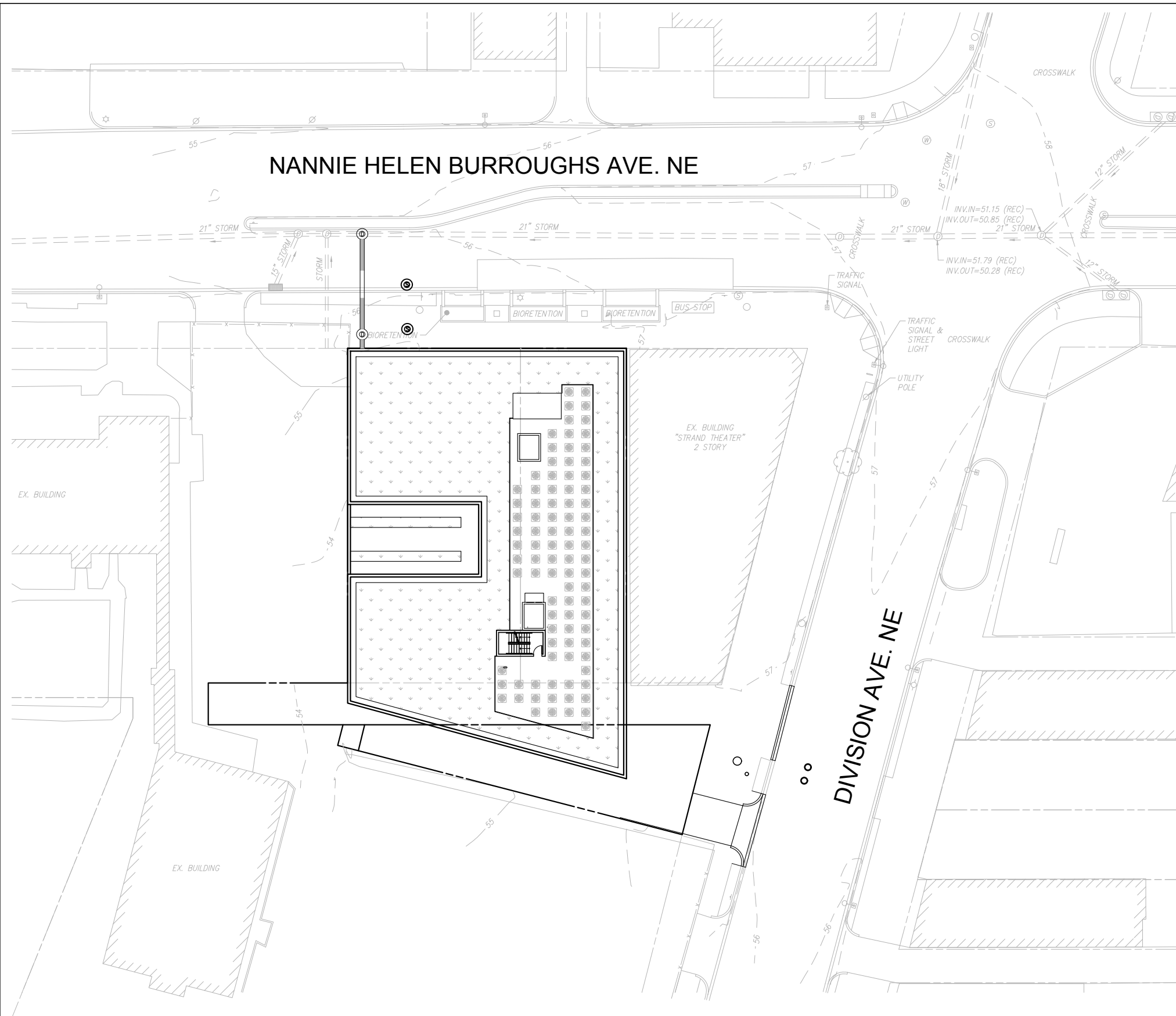
STRAND RESIDENCES

5127-5131 Nannie Helen Burroughs Ave., NE
 Washington, DC
 Square: 5196 Lot No: 805, 19 Zone: C-1

PGN Architects, PLLC
 210 7th Street SE - Suite 201
 Washington, DC 20003
 (P) 202-822-5995 (F) 202-822-0908

EROSION AND SEDIMENT CONTROL DETAILS CIV0520

5/8/2017
 ZONING COMMISSION
 District of Columbia
 CASE NO.17-10
 EXHIBIT NO.4AS



STORMWATER MANAGEMENT NARRATIVE:

ACCORDING TO THE 2013 SWM GUIDEBOOK FOR THE DISTRICT OF COLUMBIA, THIS PROJECT SITE DEVELOPMENT IS CATEGORIZED AS A "MAJOR LAND DISTURBANCE" FOR THE ENTIRETY OF THE BUILDING FOOTPRINT, THUS REQUIRING A STORMWATER RETENTION VOLUME (SWR_v) BASED ON THE 1.2" STORM EVENT. IN ADDITION TO THE RETAINED VOLUME, THE SWM FACILITIES MUST PROVIDE 15-YR STORM CONTROL FOR PEAK DISCHARGE TO THE PRE-PROJECT RATE.

SITE AREA DISTURBED = 17,061 sf
 REQUIRED SWR_v = 1,621 cf

THE SWR_v REQUIREMENT IS ACHIEVED BY THE DESIGN AND IMPLEMENTATION OF GREEN ROOF. THE RUNOFF FROM THE EXISTING BUILDING IS ROUTED DIRECTLY TO GREEN ROOF AREAS FOR TREATMENT. ADDITIONALLY, THE DETENTION REQUIREMENT WILL BE MET THROUGH A COMBINATION OF GREEN ROOF AND DETENTION VAULT. THE STORAGE CAPACITY OF THESE FACILITIES ARE SIZED TO ATTENUATE THE 2-YR STORM PEAK DISCHARGE BACK TO PRE-DEVELOPMENT CONDITION AND THE 15-YR STORM PEAK DISCHARGE BACK TO PRE-PROJECT CONDITIONS.

DESIGN CRITERIA IS BASED OFF THE DISTRICT'S 2013 SWM GUIDEBOOK FOR GREEN ROOF.

STORMWATER MANAGEMENT EXEMPTIONS:

CHAPTER 21 DCMR :: 517
 THE FOLLOWING DEVELOPMENT ACTIVITIES SHALL BE EXEMPT FROM THE PROVISIONS OF THE STORM WATER MANAGEMENT REQUIREMENTS:

- CUTTING A TRENCH FOR UTILITY WORK AND RELATED REPLACEMENT OF SIDEWALKS AND RAMPS
- REPAVING OR REMILLING THAT DOES NOT EXPOSE THE UNDERLYING SOIL.

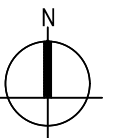
GREEN ROOF PROVIDED:

ASSUMED 6" GREEN ROOF AT 0.50 POROSITY

±6,500 sf OF 6" GREEN ROOF IS REQUIRED TO MEET RETENTION REQUIREMENTS.

PLAN CURRENTLY SHOWS 7,716 SQUARE FEET OF GREEN ROOF.

CONCEPTUAL STORMWATER MANAGEMENT PROVIDED FOR PUD REVIEW ONLY. DURING THE FINAL ENGINEERING PHASE, STORMWATER MANAGEMENT DESIGN WILL BE ADVANCED AND MAY USE OTHER METHOD WHICH WILL PROVIDE THE REQUIRED RETENTION TO BE IN ACCORDANCE WITH THE 2013 SWM GUIDEBOOK FOR THE DISTRICT OF COLUMBIA.



STRAND RESIDENCES

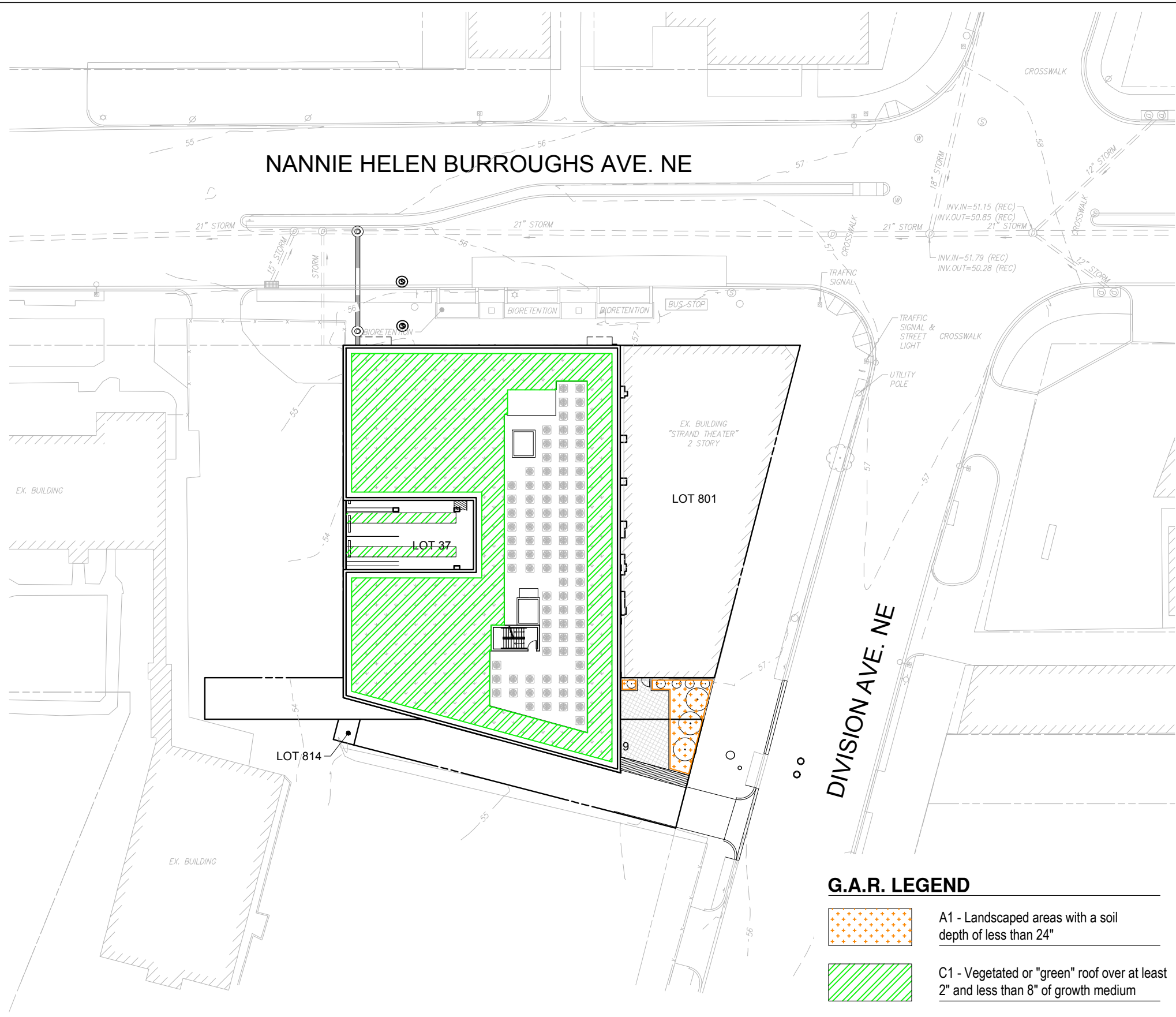
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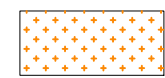
STORMWATER MANAGEMENT PLAN

CIV0710

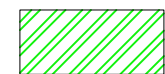
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G.A.R. LEGEND

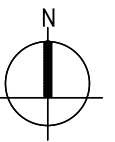


A1 - Landscaped areas with a soil depth of less than 24"



C1 - Vegetated or "green" roof over at least 2" and less than 8" of growth medium

Green Area Ratio Scoresheet		Ward	Lot	Square	Zoning District
Address: 5127-5131 Nannie Helen Burroughs Ave, NE		7	801,805,19	5196	C-1
Other / RZA Order		enter sq ft of lot		multipl	SCORE
Lot size (enter this value first) *		17,061			0.305
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"	enter sq ft 400	0.3	120.0	
2	Landscaped areas with a soil depth of 24" or greater	enter sq ft 0	0.6	-	
3	Bioretention facilities	enter sq ft 0	0.4	-	
B Plantings (credit for plants in landscaped areas from Section A)					
1	Groundcovers, or other plants less than 2' tall at maturity	enter sq ft 317	0.2	63.4	
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)	enter number of plants 4	36	0.3	10.8
3	Tree canopy for all new trees 2.5" to 6" diameter or equivalent - calculated at 50 sq ft per tree	enter number of trees 3	150	0.5	75.0
4	Tree canopy for new trees 6" diameter or larger or equivalent - calculated at 250 sq ft per tree	enter number of trees 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	enter number of trees 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	enter number of trees 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	enter number of trees 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	enter number of trees 0	0	0.8	-
9	Vegetated wall, plantings on a vertical surface	enter sq ft 0	0.6	-	
C Vegetated or "green" roofs					
1	Over at least 2" and less than 8" of growth medium	enter sq ft 7,716	0.6	4,629.6	
2	Over at least 8" of growth medium	enter sq ft 0	0.8	-	
D Permeable Paving***					
1	Permeable paving over at least 6" and less than 24" of soil or gravel	enter sq ft 0	0.4	-	
2	Permeable paving over at least 24" of soil or gravel	enter sq ft 0	0.5	-	
E Other					
1	Enhanced tree growth systems***	enter sq ft 0	0.4	-	
2	Renewable energy generation	enter sq ft 0	0.5	-	
3	Approved water features	enter sq ft 0	0.2	-	
		sub-total of sq ft =		8,619	
H Bonuses					
1	Native plant species	enter sq ft 3,086	0.1	308.6	
2	Landscaping in food cultivation	enter sq ft 0	0.1	-	
3	Harvested stormwater irrigation	enter sq ft 0	0.1	-	
		Green Area Ratio numerator =		5,207	
*** Permeable paving and structural soil together may not qualify for more than one third of the Green Area Ratio score. Total square footage of all permeable paving and enhanced tree growth					



STRAND THEATER

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