



## 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 (SWRV) 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 = 46,940 sf  
 REQUIRED SWRV = 4,459 cf

THE SWRV 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:

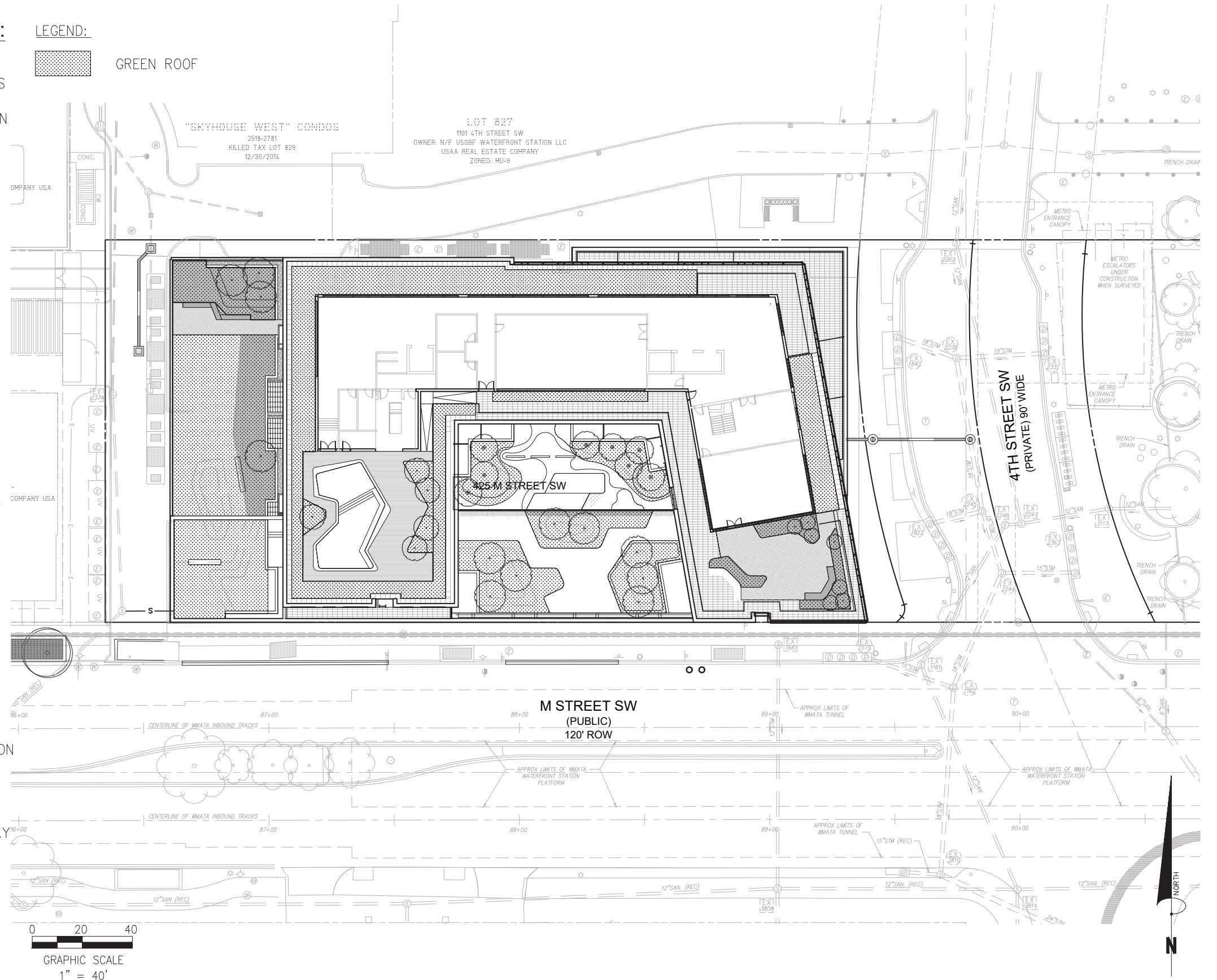
ASSUMED 6" GREEN ROOF AT 0.50 POROSITY

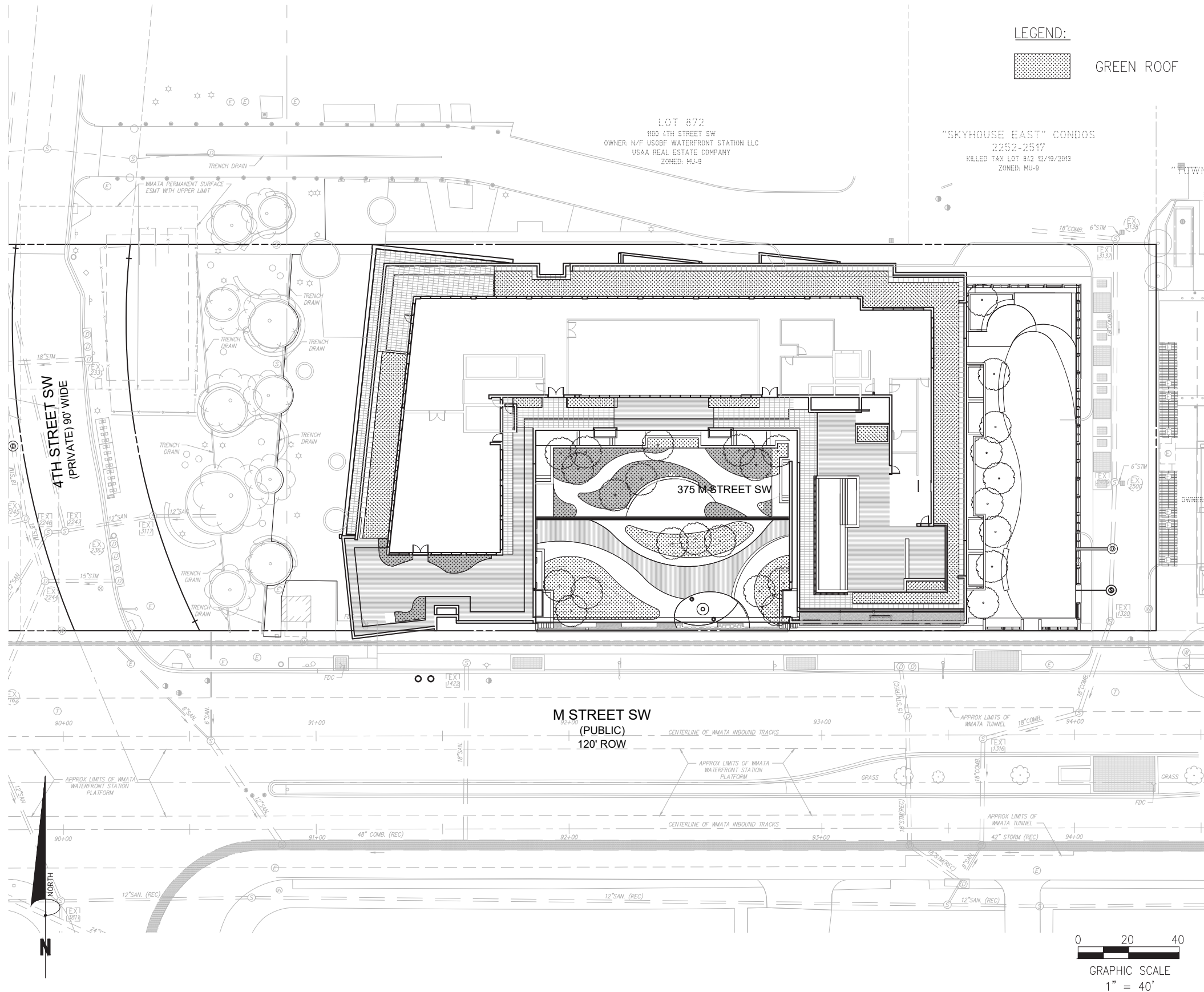
±17,900 sf OF 6" GREEN ROOF IS REQUIRED TO MEET RETENTION REQUIREMENTS.

CONCEPTUAL STORMWATER MANAGEMENT PROVIDED FOR PUD REVIEW ONL. 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.

### LEGEND:

 GREEN ROOF





**LEGEND:**  
 GREEN ROOF

**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<sub>v</sub>) 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 = 61,063 sf  
 REQUIRED SWR<sub>v</sub> = 5,801 cf

THE SWR<sub>v</sub> 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  
 ±23,200 sf OF 6" GREEN ROOF IS REQUIRED TO MEET RETENTION REQUIREMENTS.

CONCEPTUAL STORMWATER MANAGEMENT PROVIDED FOR PUD REVIEW ONL. 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.





# LEED v4 for BD+C: New Construction and Major Renovation

## Project Checklist

Project Name: 425 M St SW

Date: 7/2/18

Y ? N

1			Credit	Integrative Process	1
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<b>11</b>	<b>3</b>	<b>18</b>	<b>Location and Transportation</b>		<b>16</b>
		16	Credit	LEED for Neighborhood Development Location	16
1			Credit	Sensitive Land Protection	1
		2	Credit	High Priority Site	2
4	1		Credit	Surrounding Density and Diverse Uses	5
5			Credit	Access to Quality Transit	5
	1		Credit	Bicycle Facilities	1
	1		Credit	Reduced Parking Footprint	1
1			Credit	Green Vehicles	1

<b>6</b>	<b>2</b>	<b>2</b>	<b>Sustainable Sites</b>		<b>10</b>
Y			Prereq	Construction Activity Pollution Prevention	Required
1			Credit	Site Assessment	1
		2	Credit	Site Development - Protect or Restore Habitat	2
1			Credit	Open Space	1
1	2		Credit	Rainwater Management	3
2			Credit	Heat Island Reduction	2
1			Credit	Light Pollution Reduction	1

<b>4</b>	<b>1</b>	<b>6</b>	<b>Water Efficiency</b>		<b>11</b>
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
1	1		Credit	Outdoor Water Use Reduction	2
2		4	Credit	Indoor Water Use Reduction	6
		2	Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1

<b>12</b>	<b>16</b>	<b>7</b>	<b>Energy and Atmosphere</b>		<b>33</b>
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
6			Credit	Enhanced Commissioning	6
4	12	4	Credit	Optimize Energy Performance	18
	1		Credit	Advanced Energy Metering	1
	2		Credit	Demand Response	2
		3	Credit	Renewable Energy Production	3
	1		Credit	Enhanced Refrigerant Management	1
2			Credit	Green Power and Carbon Offsets	2

<b>2</b>	<b>6</b>	<b>5</b>	<b>Materials and Resources</b>		<b>13</b>
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
	3	2	Credit	Building Life-Cycle Impact Reduction	5
	1	1	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
	1	1	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
	1	1	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
2			Credit	Construction and Demolition Waste Management	2

<b>7</b>	<b>7</b>	<b>2</b>	<b>Indoor Environmental Quality</b>		<b>16</b>
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
2			Credit	Enhanced Indoor Air Quality Strategies	2
1	2		Credit	Low-Emitting Materials	3
1			Credit	Construction Indoor Air Quality Management Plan	1
	2		Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
1	1		Credit	Interior Lighting	2
	2	1	Credit	Daylight	3
		1	Credit	Quality Views	1
1			Credit	Acoustic Performance	1

<b>6</b>	<b>0</b>	<b>0</b>	<b>Innovation</b>		<b>6</b>
5			Credit	Innovation	5
1			Credit	LEED Accredited Professional	1

<b>2</b>	<b>2</b>	<b>0</b>	<b>Regional Priority</b>		<b>4</b>
1			Credit	Regional Priority: Access to Quality Transit	1
1			Credit	Regional Priority: Green Vehicles	1
	1		Credit	Regional Priority: Reduced Parking Footprint	1
	1		Credit	Regional Priority: Rainwater Management	1

<b>51</b>	<b>37</b>	<b>40</b>	<b>TOTALS</b>		<b>Possible Points: 110</b>
Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110					





# LEED v4 for BD+C: New Construction and Major Renovation

## Project Checklist

Project Name: 375 M St SW

Date: 7/2/18

Y ? N

1			Credit	Integrative Process	1
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### 11 3 18 Location and Transportation 16

16			Credit	LEED for Neighborhood Development Location	16
1			Credit	Sensitive Land Protection	1
		2	Credit	High Priority Site	2
4	1		Credit	Surrounding Density and Diverse Uses	5
5			Credit	Access to Quality Transit	5
	1		Credit	Bicycle Facilities	1
	1		Credit	Reduced Parking Footprint	1
1			Credit	Green Vehicles	1

### 6 2 2 Sustainable Sites 10

Y			Prereq	Construction Activity Pollution Prevention	Required
1			Credit	Site Assessment	1
		2	Credit	Site Development - Protect or Restore Habitat	2
1			Credit	Open Space	1
1	2		Credit	Rainwater Management	3
2			Credit	Heat Island Reduction	2
1			Credit	Light Pollution Reduction	1

### 4 1 6 Water Efficiency 11

Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
1	1		Credit	Outdoor Water Use Reduction	2
2		4	Credit	Indoor Water Use Reduction	6
		2	Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1

### 12 16 7 Energy and Atmosphere 33

Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
6			Credit	Enhanced Commissioning	6
4	12	4	Credit	Optimize Energy Performance	18
	1		Credit	Advanced Energy Metering	1
	2		Credit	Demand Response	2
		3	Credit	Renewable Energy Production	3
	1		Credit	Enhanced Refrigerant Management	1
2			Credit	Green Power and Carbon Offsets	2

### 2 6 5 Materials and Resources 13

Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
	3	2	Credit	Building Life-Cycle Impact Reduction	5
	1	1	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
	1	1	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
	1	1	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
2			Credit	Construction and Demolition Waste Management	2

### 7 7 2 Indoor Environmental Quality 16

Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
2			Credit	Enhanced Indoor Air Quality Strategies	2
1	2		Credit	Low-Emitting Materials	3
1			Credit	Construction Indoor Air Quality Management Plan	1
	2		Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
1	1		Credit	Interior Lighting	2
	2	1	Credit	Daylight	3
		1	Credit	Quality Views	1
1			Credit	Acoustic Performance	1

### 6 0 0 Innovation 6

5			Credit	Innovation	5
1			Credit	LEED Accredited Professional	1

### 2 2 0 Regional Priority 4

1			Credit	Regional Priority: Access to Quality Transit	1
1			Credit	Regional Priority: Green Vehicles	1
	1		Credit	Regional Priority: Reduced Parking Footprint	1
	1		Credit	Regional Priority: Rainwater Management	1

### 51 37 40 TOTALS Possible Points: 110

Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110

