

## **Legal Description**

222 N. Charter Street

BROOKS' ADDITION TO MADISON, BLK 8, ALL OF LOT 7 LYING S OF A LI NE DRAWN PARA  
TO & 60 FT S OF S LINE OF JOHNSON ST & THAT PART OF LOT 6 DESC AS FOL - BEG ON  
COMMON LOT LINE BETW LOTS 6 & 7, 75.5 FT S OF S LINE OF JOHNSON ST , TH W 25 FT,  
TH S 46 FT TO RR R/W, TH S ELY ALG R/W TO LINE BETW LOTS 6 & 7, TH N ALG SD LINE  
TO POB.



# City of Madison Fire Department

30 West Mifflin Street, 8<sup>th</sup> & 9<sup>th</sup> Floors, Madison, WI 53703-2579

Phone: 608-266-4420 • Fax: 608-267-1100 • E-mail: [fire@cityofmadison.com](mailto:fire@cityofmadison.com)

**Project Address:** 222 N. Charter Street

**Contact Name & Phone #:** Duane Johnson 608-836-3690

## FIRE APPARATUS ACCESS AND FIRE HYDRANT WORKSHEET

1. Is the building completely protected by an NFPA 13 or 13R automatic fire sprinkler system?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<b>If non-sprinklered</b> , fire lanes extend to within 150-feet of all portions of the exterior wall?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<b>If sprinklered</b> , fire lanes are within 250-feet of all portions of the exterior wall?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
2. Is the fire lane constructed of concrete or asphalt, designed to support a minimum load of 85,000 lbs?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
a) Is the fire lane a minimum unobstructed width of at least 20-feet?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Is the fire lane unobstructed with a vertical clearance of at least 13½-feet?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
c) Is the minimum inside turning radius of the fire lane at least 28-feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
d) Is the grade of the fire lane not more than a slope of 8%?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
e) Is the fire lane posted as fire lane? (Provide detail of signage.)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
f) Is a roll-able curb used as part of the fire lane? (Provide detail of curb.)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
g) Is part of a sidewalk used as part of the required fire lane? (Must support +85,000 lbs.)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
3. Is the fire lane obstructed by security gates or barricades? If yes:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
a) Is the gate a minimum of 20-feet clear opening?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Is an approved means of emergency operations installed, key vault, padlock or key switch?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
4. Is the Fire lane dead-ended with a length greater than 150-feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
If yes, does the area for turning around fire apparatus comply with IFC D103?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
5. Is any portion of the building to be used for high-piled storage in accordance with IFC Chapter 3206.6	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
If yes, see IFC 3206.6 for further requirements.			
6. Is any part of the building <u>greater than 30-feet</u> above the grade plane?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If yes, answer the following questions:			
a) Is the aerial apparatus fire lane parallel to one entire side of the building and covering at least 25% of the perimeter?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Is the near edge of the aerial apparatus fire lane between 15' and 30' from the building?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
c) Are there any overhead power or utility lines located across the aerial apparatus fire lane?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
d) Are there any tree canopies expected to grow across the aerial fire lane? (Based on mature canopy width of tree species)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
e) Does the aerial apparatus fire lane have a minimum unobstructed width of 26-feet?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
f) Is the space between the aerial lane and the building free of trees exceeding 20' in heights?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
7. Are all portions of the required fire lanes within 500-feet of at least (2) hydrants?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<i>Note: Distances shall be measured along the path of the hose lay as it comes off the fire apparatus.</i>			
a) Is the fire lane at least 26' wide for at least 20-feet on each side of the hydrants?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Is there at least 40' between a hydrant and the building?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
c) Are the hydrant(s) setback no less than 5-feet nor more than 10-feet from the curb or edge of the street or fire lane?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
d) Are hydrants located in parking lot islands a minimum of 3½-feet from the hydrant to the curb?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
e) Are there no obstructions, including but not limited to: power poles, trees, bushes, fences, posts located, or grade changes exceeding 1½-feet, within 5-feet of a fire hydrant?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<i>Note: Hydrants shall be installed and in-service prior to combustible construction on the project site.</i>			

Attach an additional sheet if further explanation is required for any answers.

This worksheet is based on **MGO 34.503** and **IFC 2012 Edition Chapter 5 and Appendix D**; please see the codes for further information.

***PD-Zoning Text***

222 N. Charter Street

September 19, 2018

Legal Description:

BROOKS' ADDITION TO MADISON, BLK 8, ALL OF LOT 7 LYING S OF A LINE DRAWN PARA TO & 60 FT S OF S LINE OF JOHNSON ST & THAT PART OF LOT 6 DESC AS FOL -  
BEG ON COMMON LOT LINE BETW LOTS 6 & 7, 75.5 FT S OF S LINE OF JOHNSON ST ,  
TH W 25 FT, TH S 46 FT TO RR R/W, TH S ELY ALG R/W TO LINE BETW LOTS 6 & 7, TH  
N ALG SD LINE TO POB.

A. Statement of Purpose: This zoning district is established to allow for the construction of a student housing building with 43 units.

B. Permitted Uses: Following are permitted uses:

1. Multifamily residential uses as shown on approved plans.
2. Accessory uses including but not limited to:
  - a. Accessory uses directly associated with those permitted uses including parking for residents and guests.
  - b. Temporary buildings for storage of building materials and equipment for construction purposes when on the same lot as a principle use for a period not to exceed the duration of such construction.

C. Lot Area: As shown on the approved plans.

D. Height Regulations: As shown on the approved plans.

E. Yard Regulations: As shown on the approved plans.

F. Landscaping: Site Landscaping will be provided as shown on the approved plans.

G. Usable Open Space Requirements: Usable open space will be provided as shown on the approved plans.

H. Parking & Loading: Off-street parking and loading shall be provided as shown on the approved plans.

I. Family Definition: The family definition shall coincide with the definition given in M.G.O. for the TR-UI zoning district.

J. Signage: As affirmed in MGO Sec. 31.13(4)(a), the Zoning Administrator has determined that signage will be allowed as per Chapter 31 of the Madison General Ordinances, as compared to the TR-UI (Traditional Residential Urban District I) zoning district.

K. Alterations and Revisions: Alterations shall only be approved according to MGO Sec. 28.098(6). Requests to alter a Planned Development District shall be made to the Director of Planning and Community and Economic Development. Upon receipt of the request, the Director shall determine if the request constitutes a major or minor alteration to the Planned Development District. The Director may refer any request for alteration to the Urban Design Commission for an advisory recommendation.

## HALO LED ICAT SHALLOW HOUSING for NEW CONSTRUCTION

The H2750ICAT is a dedicated LED new construction housing for use in shallow ceilings where 2x6 joist construction is used. The H2750ICAT is designed to fit in shallow insulated ceilings and can be in direct contact with ceiling insulation\*. This AIR-TITE housing design prevents airflow between conditioned and unconditioned spaces for savings on both heating and air conditioning costs. The LED connector system provides high efficacy code compliance when used with designated HALO LED modules and trims.

### DESIGN FEATURES

#### Housings

- Aluminum housing for greater heat dissipation. H2750ICAT housing is gasketed to prevent airflow from heated or air conditioned spaces

#### Plaster Frame

- Galvanized steel frame. Housing adjusts in plaster frame to accommodate up to 1-3/8" ceiling thickness.
- Regressed locking screw for securing hanger bars.
- Cutouts included for easily crimping hanger bars in position.

#### Slide-N-Side™ Junction Box

- Positioned to accommodate straight conduit runs.
- Seven 1/2" trade size conduit knockouts with true pry-out slots.
- Slide-N-Side wire traps allow non metallic sheathed cable to be installed without tools and without removing knockouts.
- Allows wiring connections to be made outside the box.
- Simply insert the cable directly into the trap after connections are made.
- Accommodates the following standard non-metallic sheathed cable type:
  - U.S. #14/2, #14/3, #12/2, #12/3
  - Canada: #14/2, #14/3, #12/2

#### GOT NAIL! Pass -N-Thru™ Bar Hangers

Bar Hanger features include

- Pre-installed nail easily installs in regular lumber, engineered lumber and laminated beams.
- Safety and Guidance system prevents snagging, ensures smooth, straight nail penetration and allows bar hangers to be easily removed if necessary
- Automatic leveling flange aligns the housing and allows holding the housing in place with one hand while driving nails.
- Housing can be positioned at any point within 24" joist spans
- Score lines allow tool-free shortening for 12" joists and bar hangers do not need to be removed for shortening.
- Bar hangers may be repositioned 90° on plaster frame
- Integral T-bar clip snaps onto T-bars – no additional clips are required.

#### LED Module Connection

Halo shallow LED modules simply install with a plug-in 120V/277V rated line voltage wiring connector (UL and CSA Listed Luminaire Disconnect). This non-screw-base connection preserves the high efficacy rating and prevents use of low efficacy incandescent sources (see LED Module specifications).

#### Caution

LED connection is rated for 120V and 277V input. Installer must verify LED module voltage is compatible with the applicable voltage input. If uncertain, consult a qualified electrician.

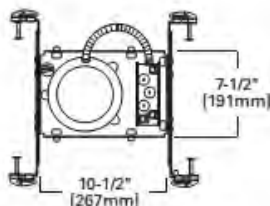
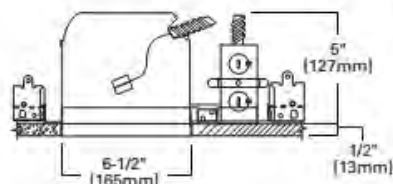
#### Labels

- UL/cUL Listed 1598 Luminaire
- CE Marking - "Conformité Européenne" conformity with the Council of European Communities Directives, meeting internationally recognized compliance when used with ML56 Series LED modules
- UL/cUL Listed for Feed Through
- UL/cUL Listed for Damp Location
- UL/cUL Listed for Wet Location with select trims
- UL/cUL Listed for direct contact with insulation and combustible material\*
- Rated for 20W maximum

#### Qualification

May be used with qualified Halo LED modules and designated trims for High Efficacy Luminaire Compliance:

- State of California Title 24
- International Energy Conservation Code (IECC)
- Washington State Energy Code
- New York State Energy Conservation Construction Code - AIR-TITE™ Compliant
- Certified under ASTM-E283 standard for air-tight construction



Catalog #	<b>H2750ICAT/5609930/691WB</b>	Type
Project		<b>A</b>
Comments	<b>FRONT MAIN ENTRY EXTERIOR</b>	Date
Prepared by		



## H2750ICAT

**6" New Construction IC AIR-TITE™ Housing For Designated Halo LED Modules and Trims**  
-RA56 Series  
-RL56 Series  
-ML56 Series

**High Efficacy LED Housing**

**FOR USE IN INSULATED CEILINGS**

**FOR DIRECT CONTACT WITH INSULATION\***

**FOR USE IN SHALLOW CEILINGS**

**air-tite™**



Qualified and compliant with select trims. Refer to ENERGY STAR® Qualified Products List and CEC (T24) Appliance Database for listings.



## ORDERING INFORMATION - RL56 SERIES

SAMPLE NUMBER: H2750ICAT - RL560WH6927

Order housing, light module, trim and separately.

Housing	RL56 Series - Compatible LED Retrofit Modules
<b>H2750ICAT</b> = 6" Dedicated LED Insulated Ceiling, AIR-TITE New Construction Housing for Shallow Ceilings	<b>80 CRI</b> <b>RL560WH6827</b> = 5" / 6" Retrofit Baffle - Trim LED Module, 80CRI, 2700K, Matte White <b>RL560SN6827</b> = 5" / 6" Retrofit Baffle - Trim LED Module, 80CRI, 2700K, Satin Nickel <b>RL560WH6830</b> = 5" / 6" Retrofit Baffle - Trim LED Module, 80CRI, 3000K, Matte White <b>RL560SN6830</b> = 5" / 6" Retrofit Baffle - Trim LED Module, 80CRI, 3000K, Satin Nickel <b>RL560WH6835</b> = 5" / 6" Retrofit Baffle - Trim LED Module, 80CRI, 3500K, Matte White  <b>90 CRI</b> <b>RL560WH6927</b> = 5" / 6" Retrofit Baffle - Trim LED Module, 90CRI, 2700K, Matte White <b>RL560SN6927</b> = 5" / 6" Retrofit Baffle - Trim LED Module, 90CRI, 2700K, Satin Nickel <b>RL560WH6930</b> = 5" / 6" Retrofit Baffle - Trim LED Module, 90CRI, 3000K, Matte White <b>RL560SN6930</b> = 5" / 6" Retrofit Baffle - Trim LED Module, 90CRI, 3000K, Satin Nickel <b>RL560WH6935</b> = 5" / 6" Retrofit Baffle - Trim LED Module, 90CRI, 3500K, Matte White

## ORDERING INFORMATION - RA56 SERIES

SAMPLE NUMBER: H2750ICAT - RA5606927WH

Order housing, light module, trim and separately.

Housing	RA56 Series - Compatible LED Retrofit Modules
<b>H2750ICAT</b> = 6" Dedicated LED Insulated Ceiling, AIR-TITE New Construction Housing for Shallow Ceilings	<b>Very Wide Flood - VWFL Models</b> <b>RA5606927WH</b> = 5" / 6" LED Adjustable Gimbal, 90CRI, 2700K, White, Very Wide Flood <b>RA5606930WH</b> = 5" / 6" LED Adjustable Gimbal, 90CRI, 3000K, White, Very Wide Flood  <b>Narrow Flood - NFL Models</b> <b>RA5606927NFLWH</b> = 5" / 6" LED Adjustable Gimbal, 90CRI, 2700K, White, Narrow Flood <b>RA5606930NFLWH</b> = 5" / 6" LED Adjustable Gimbal, 90CRI, 3000K, White, Narrow Flood

## ORDERING INFORMATION - ML56 SERIES

SAMPLE NUMBER: H2750ICAT - ML5606830 - 696WB

Order housing, light module, trim and separately.

Housing	ML56 LED Light Modules	ML56 LED Trims	ML56 System Accessories
<b>H2750ICAT</b> = 6" Dedicated LED Insulated Ceiling, AIR-TITE New Construction Housing for Shallow Ceilings	<b>600 Series / 80 CRI</b> <b>ML5606827</b> = 5" / 6" LED Retrofit Downlight Light Module, 600 lumen, 80CRI, 2700K <b>ML5606830</b> = 5" / 6" LED Retrofit Downlight Light Module, 600 lumen, 80CRI, 3000K <b>ML5606835</b> = 5" / 6" LED Retrofit Downlight Light Module, 600 lumen, 80CRI, 3500K <b>ML5606840</b> = 5" / 6" LED Retrofit Downlight Light Module, 600 lumen, 80CRI, 4000K  <b>600 Series / 90 CRI</b> <b>ML5606927</b> = 5" / 6" LED Retrofit Downlight Light Module, 600 lumen, 90CRI, 2700K <b>ML5606930</b> = 5" / 6" LED Retrofit Downlight Light Module, 600 lumen, 90CRI, 3000K <b>ML5606935</b> = 5" / 6" LED Retrofit Downlight Light Module, 600 lumen, 90CRI, 3500K <b>ML5606940</b> = 5" / 6" LED Retrofit Downlight Light Module, 600 lumen, 90CRI, 4000K  <b>900 Series / 80 CRI</b> <b>ML5609827</b> = 5" / 6" LED Retrofit Downlight Light Module, 900 lumen, 80CRI, 2700K <b>ML5609830</b> = 5" / 6" LED Retrofit Downlight Light Module, 900 lumen, 80CRI, 3000K <b>ML5609835</b> = 5" / 6" LED Retrofit Downlight Light Module, 900 lumen, 80CRI, 3500K <b>ML5609840</b> = 5" / 6" LED Retrofit Downlight Light Module, 900 lumen, 80CRI, 4000K  <b>900 Series / 90 CRI</b> <b>ML5609927</b> = 5" / 6" LED Retrofit Downlight Light Module, 900 lumen, 90CRI, 2700K <b>ML5609930</b> = 5" / 6" LED Retrofit Downlight Light Module, 900 lumen, 90CRI, 3000K <b>ML5609935</b> = 5" / 6" LED Retrofit Downlight Light Module, 900 lumen, 90CRI, 3500K <b>ML5609940</b> = 5" / 6" LED Retrofit Downlight Light Module, 900 lumen, 90CRI, 4000K  <b>1200 Series / 80 CRI</b> <b>ML5612827</b> = 5" / 6" LED Light Module, 1200 lumen, 80CRI, 2700K <b>ML5612830</b> = 5" / 6" LED Light Module, 1200 lumen, 80CRI, 3000K <b>ML5612835</b> = 5" / 6" LED Light Module, 1200 lumen, 80CRI, 3500K <b>ML5612840</b> = 5" / 6" LED Light Module, 1200 lumen, 80CRI, 4000K  <b>1200 Series / 90 CRI</b> <b>ML5612927</b> = 5" / 6" LED Light Module, 1200 lumen, 90CRI, 2700K <b>ML5612930</b> = 5" / 6" LED Light Module, 1200 lumen, 90CRI, 3000K <b>ML5612935</b> = 5" / 6" LED Light Module, 1200 lumen, 90CRI, 3500K <b>ML5612940</b> = 5" / 6" LED Light Module, 1200 lumen, 90CRI, 4000K	<b>690 Series - 6" LED Trims</b> <b>Non-Conductive "Dead Front" Baffles</b> <b>691WB</b> = 6" LED Trim, Polymer "Dead-Front", Shallow White Baffle & Flange (For use with 600 Series LED Light Modules only)  <b>Semi-Regressed Eyeballs</b> <b>694WB</b> = 6" LED Directional Trim, White Eyeball, Baffle & Flange <b>694SNB</b> = 6" LED Directional Trim, Satin Nickel Eyeball, Baffle & Flange <b>694TBZB</b> = 6" LED Directional Trim, Tuscan Bronze Eyeball, Baffle & Flange  <b>Shallow Baffle</b> <b>696WB</b> = 6" LED Trim, White Shallow Baffle & Flange	<b>ML56CLIP</b> = 6" Friction Clip Kit - For use with non-tension spring housings. 6" clips included. <b>WW6955C</b> = Wall Wash Insert - Specular Kick Reflector for 695WW (1 included with trim). For double wall washing or replacement. <b>TRM690WH</b> = 6" LED Oversize Trim Ring for use with 59" series trims, White 6.9" I.D., 9.5" O.D. Ring slips over LED trim. Inset design allows 6" trim to fit into oversize ring for an even trim surface <b>EBA560PK</b> = Replacement screwbase adapter to LED disconnect with cap  <b>ML56-1200 Series Beam Forming Optic Media</b> <b>BFR56NFL</b> = Beam forming reflector kit, narrow flood, 25° nominal <b>BFR56MH</b> = Media holder, accepts one 3.45" lens. Requires BFR56NFL & L345SF, order separately. <b>L345SF</b> = 3.45" diameter soft focus lens. Requires BFR56NFL and BFR56MH, order separately.

Solite® is a registered trademark of AGC Flat Glass North America.

## FEATURES & SPECIFICATIONS

### INTENDED USE

Provides years of maintenance-free illumination for outdoor use in residential & commercial applications. Ideal for applications such as lighting walkways and stairways.

### CONSTRUCTION

Cast-aluminum housing with corrosion-resistant paint in either dark bronze or white finish.

ADA compliant.

### OPTICS

4000K CCT LEDs.

Polycarbonate lens protects the LED from moisture, dirt and other contaminants.

**LUMEN MAINTENANCE:** The LED will deliver 70% of its initial lumens at 50,000 hour average LED life. See Lighting Facts label on page 2 for performance details.

### ELECTRICAL

MVOLT driver operates on any line voltage from 120-277V.

Operating temperature -30°C to 40°C.

1KV surge protection standard.

### INSTALLATION

Surface mount to universal junction box (provided by others).

### LISTINGS

UL Listed to U.S. and Canadian safety standards for wet locations.

Tested in accordance with IESNA LM-79 and LM-80 standards.

### WARRANTY

Five-year limited warranty.

Full warranty terms located at [www.AcuityBrands.com/CustomerResources/Terms\\_and\\_Conditions.aspx](http://www.AcuityBrands.com/CustomerResources/Terms_and_Conditions.aspx).

Note: Specifications are subject to change without notice.

Actual performance may differ as a result of end-user environment and application.

Catalog Number
Notes
Type

Outdoor General Purpose

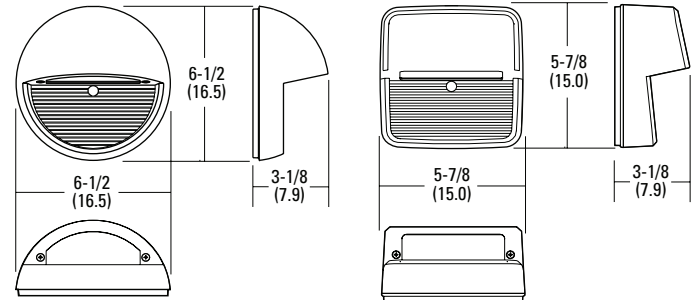
# OLSR & OLSS

LED STEP LIGHT



### Specifications

All dimensions are inches (centimeters)



### ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

**Example:** OLSS DDB

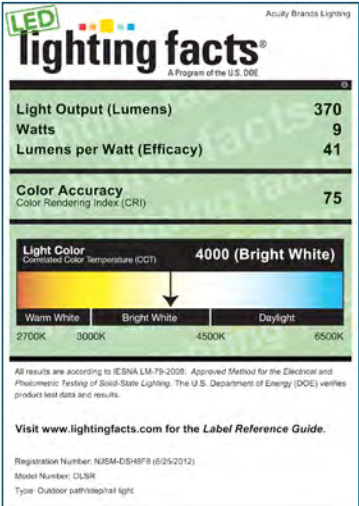
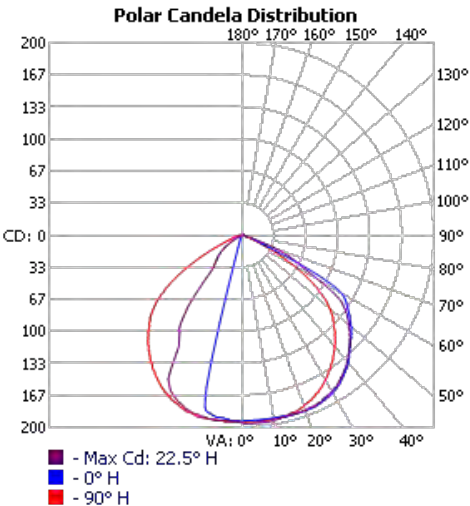
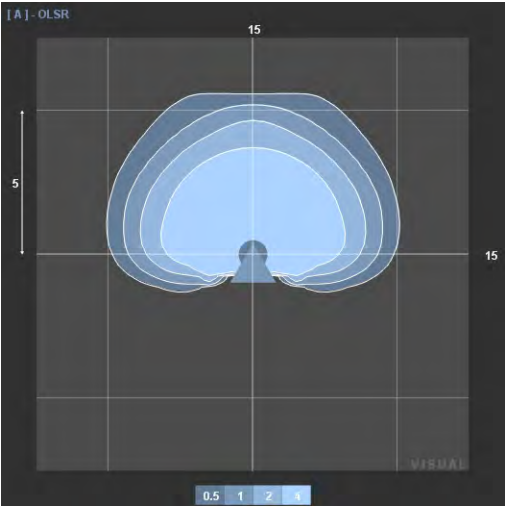
Series	Color temperature (CCT)	Voltage	Finish
OLSR Step light round	(blank) 4000K	(blank) MVOLT (120V-277V)	DDB Dark bronze
OLSS Step light square			WH White

# OLSR & OLSS LED Step Light

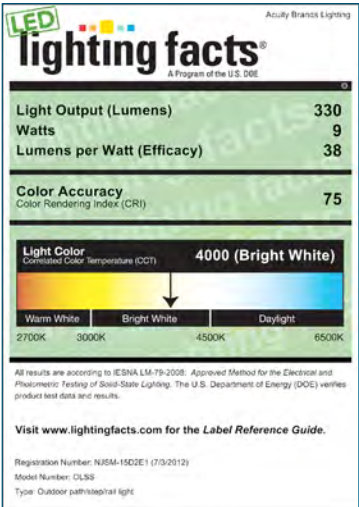
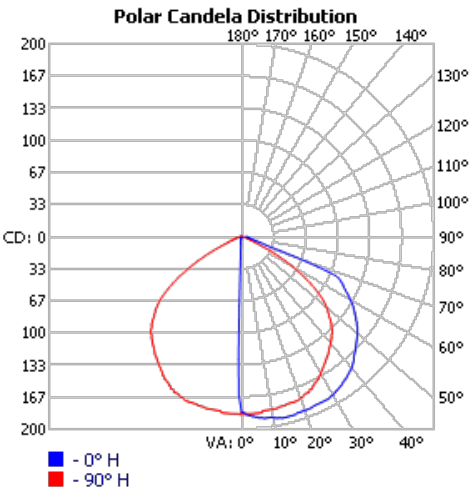
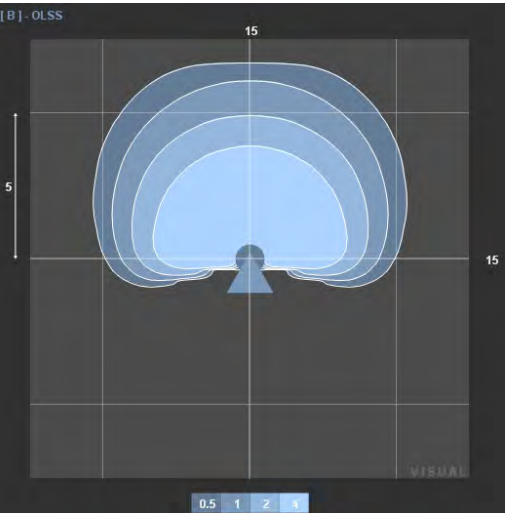
## PHOTOMETRICS

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's Outdoor LED homepage  
Tested in accordance with IESNA LM-79 and LM-80 standards.

### OLSR



### OLSS







Natural Function  
Natural Beauty



Patented in the U.S.  
and Canada

FULLY-GROWN INVISIBLE  
MODULAR GREEN ROOF SYSTEM

*"The Hybrid System"*

SIMPLE

EFFECTIVE

ATTRACTIVE

Jon Olson • 616-935-1983 • 800-875-1392 • [Jono@liveroof.com](mailto:Jono@liveroof.com)





### Sedum kamtschaticum

(see-dum kam-chat-i-kum)

Kamchatka Sedum

Zone 3

Evergreen



1"-2"; full sun to moderate shade. From Siberia and super cold hardy, Kamchatka sedum displays rich green evergreen foliage that takes on purplish hues in wintertime.

Carried upon sprawling stems, the leaves make an excellent backdrop to the early summerborne, brilliant yellow, star shaped flowers. Heat and drought tolerant and requiring of little maintenance.



### Sedum reflexum GreenGlow®

(see-dum re-fleks-um) Patent # 23323

Sedum GreenGlow®

Zone 3

Evergreen



3"-4"; 6"-8" in bloom, full sun to light shade. GreenGlow® straddles the spectrum between green and yellow. More chartreuse than green, it tends to glow and gives off an iridescent green tone to its lovely sprucelike evergreen foliage. The foliage texture and the height of its flower stalks help to make

this plant unique and will bring contrast to the roofscape.



### Sedum spurium 'John Creech'

(see-dum spew-ree-um)

'John Creech' Sedum

Zone 3

Semi-Evergreen



1"-2" in bloom; full sun to light shade. Super dense growing, 'John Creech' smothers the ground with its compact habit of succulent medium green semi-evergreen foliage.

Flowering mid summer, 'John Creech' bears upright stems topped with clusters of pinkish-purple florets.



### Sedum spurium 'Pink Jewel'

(see-dum spew-ree-um)

'Pink Jewel' Sedum

Zone 3

Semi-Evergreen



1 1/2"-2"; full sun to light shade. 'Pink Jewel' resembles 'Dragon's Blood' but with more compact, red-suffused foliage. Its summerborne flowers are a lovely clear pink.



### Sedum spurium 'Roseum'

(see-dum spew-ree-um)

Pink Flowered Sedum

Zone 3

Semi-Evergreen



1"-2"; full sun to light shade. 'Roseum' is a very pleasing, drought and disease resistant selection with cheerful, clear, lime green semi-evergreen foliage. It fills the role of a sedum that is very "green" in color and thus is great for contrast with the dark red, blue, and purple members of the genus. 'Roseum' displays pink summerborne flowers, and in this case, they are a clear, soft, pastel pink and borne in relatively low numbers. The unique aspect of this is that the flowers and foliage complement each other and can be appreciated at the same time.



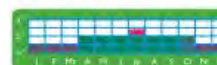
### Sedum spurium 'Tricolor'

(see-dum spew-ree-um)

Tricolor Sedum

Zone 3

Semi-Evergreen



1"-2"; full sun to light shade. This cultivar is distinct for its variegated semi-evergreen foliage of pink, white, and green. Blooming during summer, its flowers are a soft pale pink. No doubt, it is one of the most colorfully foliaged of all LiveRoof plants and fantastic for infusing color highlights.

# LiveRoof® System Specifications

MODULE SIZE	<b>LiveRoof Standard:</b> 1' x 2' x 3-1/4" (soil height appx. 4.25") Soil fills soil elevator, plants and soil obscure module edges.
MODULE WEIGHT	<b>Standard:</b> 14 oz./sq. ft.
MATERIAL	100% recycled polypropylene (avg. 10% post-consumer, 90% post-industrial) 100 mil. thick walls.
WATER DISPERSAL	Approx. 10.0 gal. per min. per lineal foot. <i>Hi-Flow option available with standard and deep module.</i>
MODULE COLOR	Black or gray
WEIGHT VEGETATED (fully saturated)	<b>LiveRoof Standard:</b> approx. 27-29 lbs./SF
DRAINAGE	<a href="#">Positive drain holes</a> , at lowest point in module.
SOIL MEDIA	Proprietary <a href="#">LiveRoof specified engineered soil</a> , based upon German FLL granulometric specifications, 94+% by dry weight inorganic content for minimal shrinkage/decomposition. (92% in British Columbia). Dry weight approx. 60-65 lbs/cu.ft. May vary somewhat with local grower.
ACCEPTABLE PROTECTIVE UNDERLYING MATERIALS	Modules to be placed directly upon heavy duty (HDPE, Polypropylene, TPO, EPDM or recyclable PVC) slip sheet/root barrier of 40-60 mil. thickness with effectively bonded seams. This is placed as an additional protective barrier above roof waterproofing membrane and extended 3 inches vertically along parapet to ward against edge abrasion. This may also be glued to parapet if manufacturer approves.  Confirm suitability of waterproofing membrane with manufacturer. Alternatively low profile drain boards work well and manufacturers of cold fluid applied reinforced urethane membranes typically warrant their systems for use in conjunction with the LiveRoof® system.
IRRIGATION SYSTEM	<a href="#">Irrigation is recommended</a> for backup during prolonged hot, dry and windy weather patterns. Simple overhead system is inexpensive and effective insurance. <i>Irrigation requirements are dependent on plant selection, climate and roof design.</i>  In hot, humid or arid climates, irrigation systems should always be installed and used as needed given weather conditions. Similarly, irrigation systems are necessary on pitched green roofs and those in wind-challenged conditions, such as in coastal areas and on tall buildings.  If LiveRoof Lite system is used, irrigation will be essential in all climates.



	If the Deep system is used and populated with non-succulents, irrigation is also essential.
EDGE TREATMENTS	Coengineered <a href="#">RoofEdge®</a> aluminum edging with adequate drain perforations recommended. Any edging should allow for adequate drainage (extending to the bottom of the edging) with sidewalls tall enough to completely cover the modules and contain the soil.
PAVERS	Coengineered <a href="#">LiveRoof RoofStone®</a> recommended.
WIND UPLIFT	Patent-pending <a href="#">WindDisc™</a> method for improving wind uplift resistance is recommended for green roofs subject to high wind conditions.
PLANTS	Drought-tolerant, hardy RoofTop Proven™ plants recommended. Consult the <a href="#">Licensed Grower</a> in your region for specific recommendations.
CONVEYANCE METHOD	Prevegetated modules to be delivered by <a href="#">Hoppit®</a> or other appropriately engineered conveyance device.

## PART 1: GENERAL

### 1.1. SCOPE

Provide equipment, materials, tools, and labor to install vegetated roofing modules. Modules to include growth media and plants. This work shall also include edge treatments, custom shaping of modules, and installing paver stones or ballast, slip sheet/root barrier and irrigation system, if specified.

### 1.2 SUBMITTALS

- A. Product data for vegetated roofing systems.
- B. Planting mix design indicating species.
- C. Shop Drawings: Indicating layout of modules, pavers, irrigation, and green roof area (ft² or m²).
- D. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
- E. Maintenance instructions for inclusion into owner's manuals.

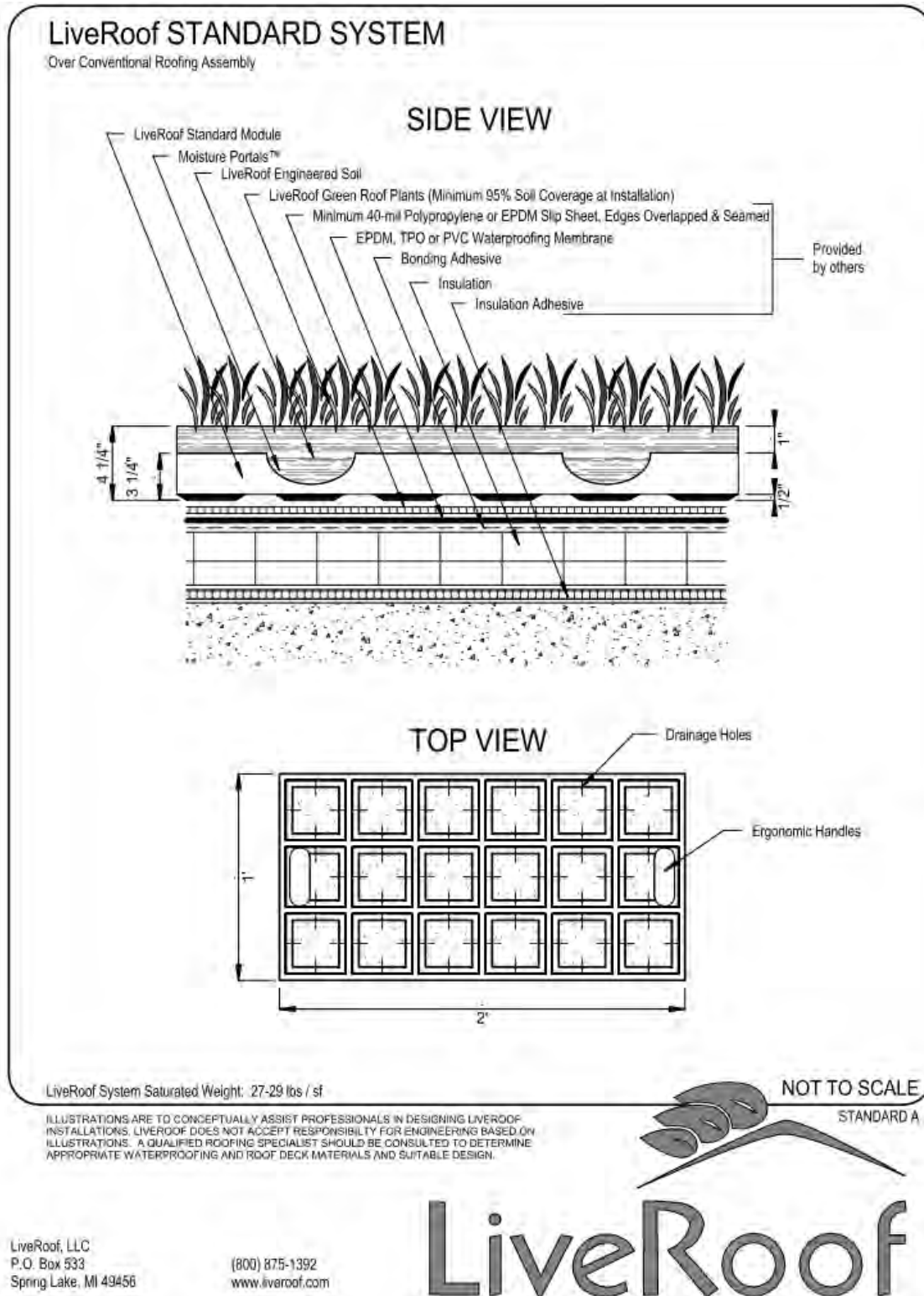
### 1.3 QUALITY ASSURANCE

- A. No deviation should be made from this specification. Installer assumes liability for any deviations from specification.
- B. Only LiveRoof Certified Installer personnel shall complete all work.
- C. Prior to installing LiveRoof modules, the following procedures are to be conducted:
  1. The building Owner, Architect, or Engineer shall verify that the roof is properly designed and constructed to adequately support the load of the LiveRoof system.
  2. The roof is to be flood tested for water tightness for 24 hours. Water testing shall be witnessed and confirmed in writing by Owner's Representative and/or Design Professional, Waterproofing Contractor, Membrane Manufacturer, and Installation Contractor.
  3. Slip sheet/root barrier to be properly installed, seams overlapped and bonded, in accord with architect's and manufacturer's specifications.
  4. The roof is to be inspected and determined ready to accept the



# DETAIL DRAWINGS

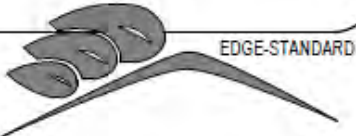
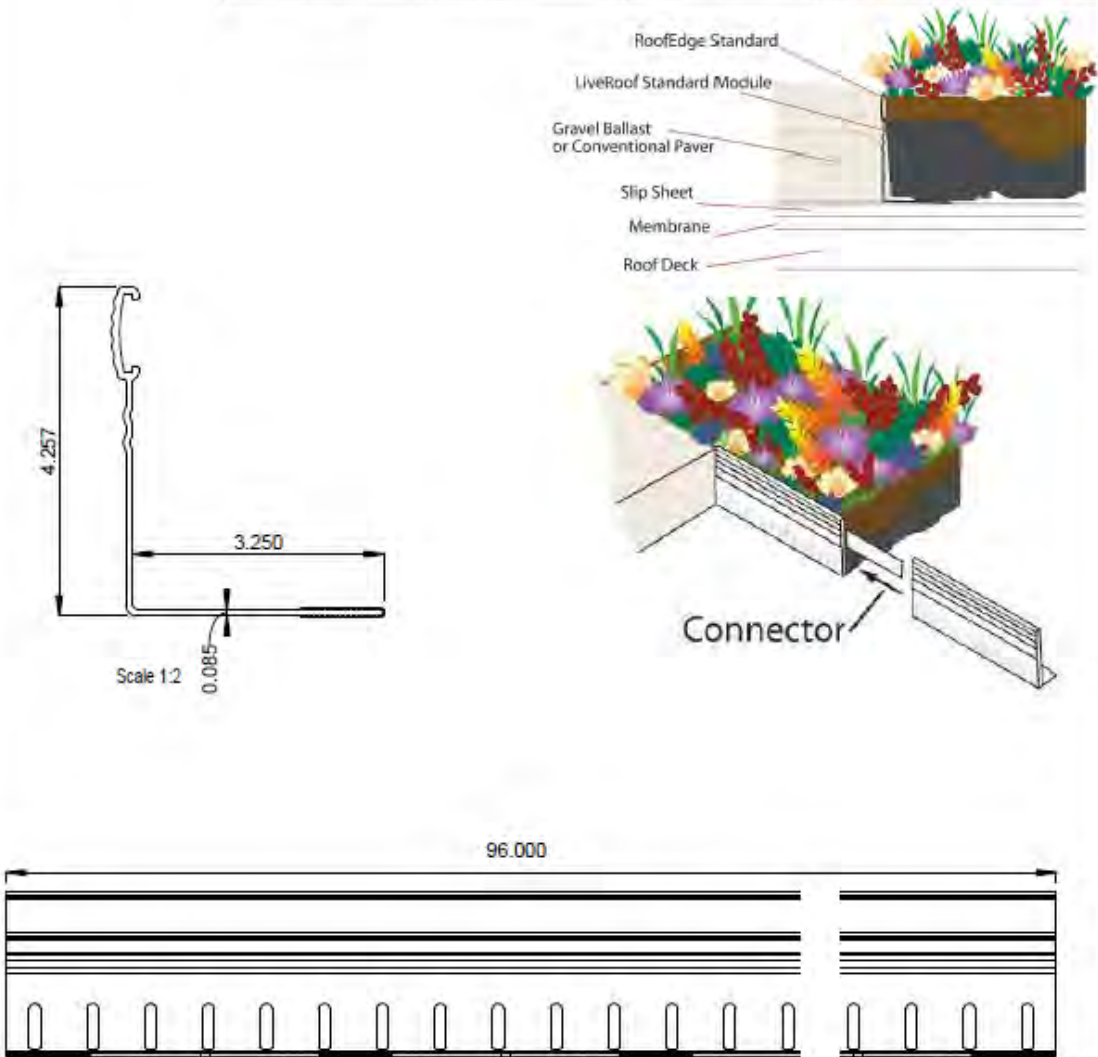
## STANDARD 4.25" MODULE DETAIL



RoofEdge® STANDARD DETAIL

RoofEdge Standard Aluminum Edge Restraint

PART NUMBER	LIVEROOF SYSTEM	DIMENSIONS	FINISH
STD-MILL-96	STANDARD	4.25"x 3.25"x 96"	MILL
STD-BRONZE-96	STANDARD	4.25"x 3.25"x 96"	BRONZE ANODIZE
STD-BLACK-96	STANDARD	4.25"x 3.25"x 96"	BLACK ANODIZE



EDGE-STANDARD

LiveRoof

LiveRoof Global, LLC  
P.O. Box 533  
Spring Lake, MI 49456

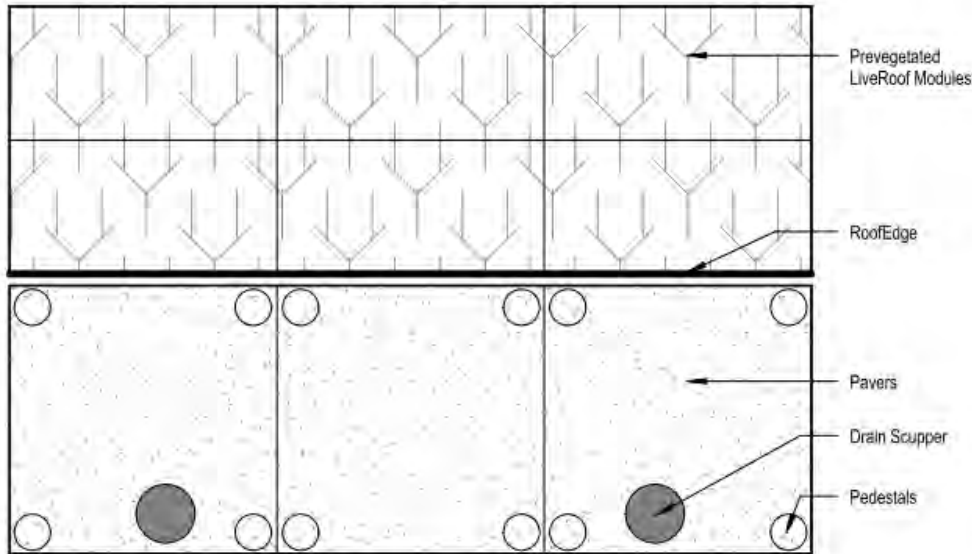
(800) 875-1392  
[www.liveroof.com](http://www.liveroof.com)

## PAVER & PEDESTAL APPLICATION

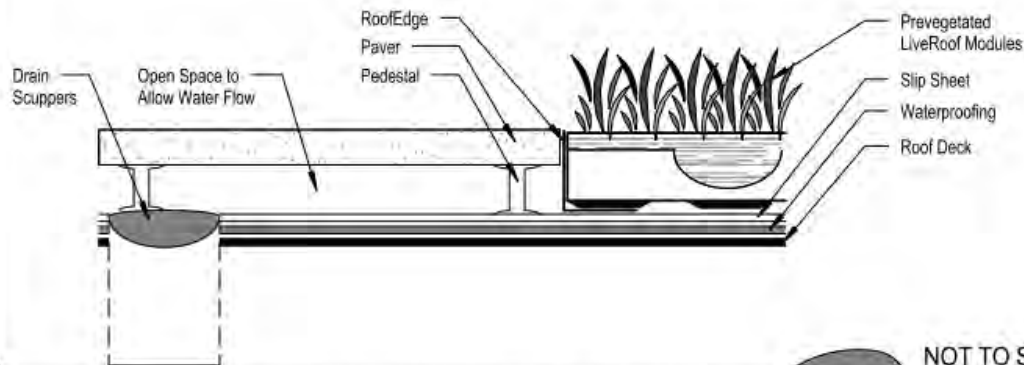
### PAVER APPLICATION

Using RoofEdge™ and Pedestals  
Recommended for LiveRoof Maxx 8"  
and for level applications with Standard (4.25") and Deep (6") Systems

TOP VIEW



SIDE VIEW



NOT TO SCALE

PAVER B  
v2011-04-18

ILLUSTRATIONS ARE TO CONCEPTUALLY ASSIST PROFESSIONALS IN DESIGN OF LIVEROOF APPLICATIONS. LIVEROOF DOES NOT ACCEPT RESPONSIBILITY FOR ENGINEERING BASED ON ILLUSTRATIONS. A QUALIFIED STRUCTURAL ENGINEER SHOULD BE CONSULTED TO DETERMINE APPROPRIATE AND SUITABLE DESIGN. PAVER WALKWAYS NEAR PARAPETS SHOULD BE DESIGNED FOR SAFE USE, TAKING INTO ACCOUNT WIND FACTORS.

LiveRoof, LLC  
P.O. Box 533  
Spring Lake, MI 49456

(800) 875-1392  
www.liveroof.com

# LiveRoof

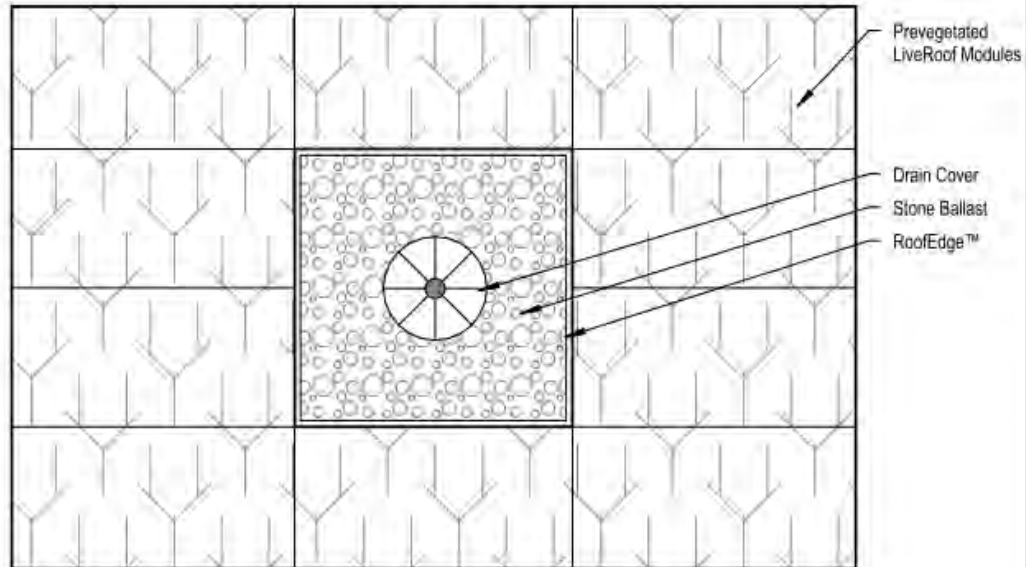


## DRAIN APPLICATION

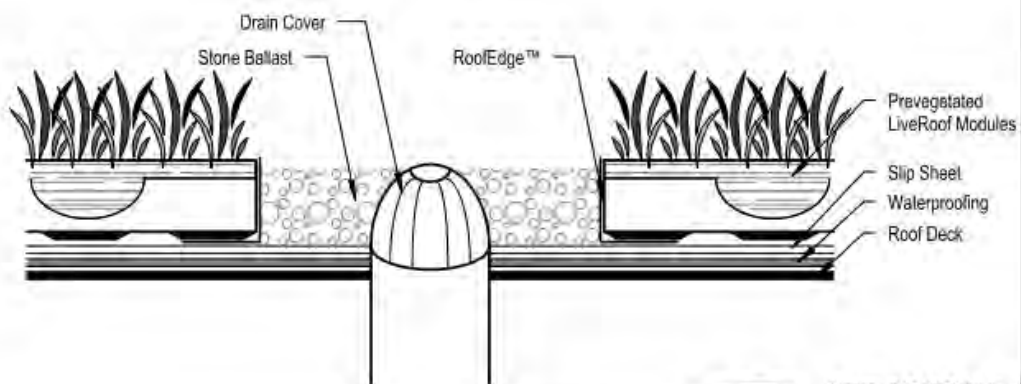
### Drain Application

Using Roof Edge and Stone Ballast

TOP VIEW



SIDE VIEW



NOT TO SCALE

DRAIN COMPONENTS AND FLASHING SHOULD BE INSTALLED ACCORDING TO MANUFACTURER INSTRUCTION

DRAIN A

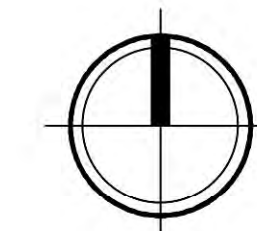
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# LiveRoof





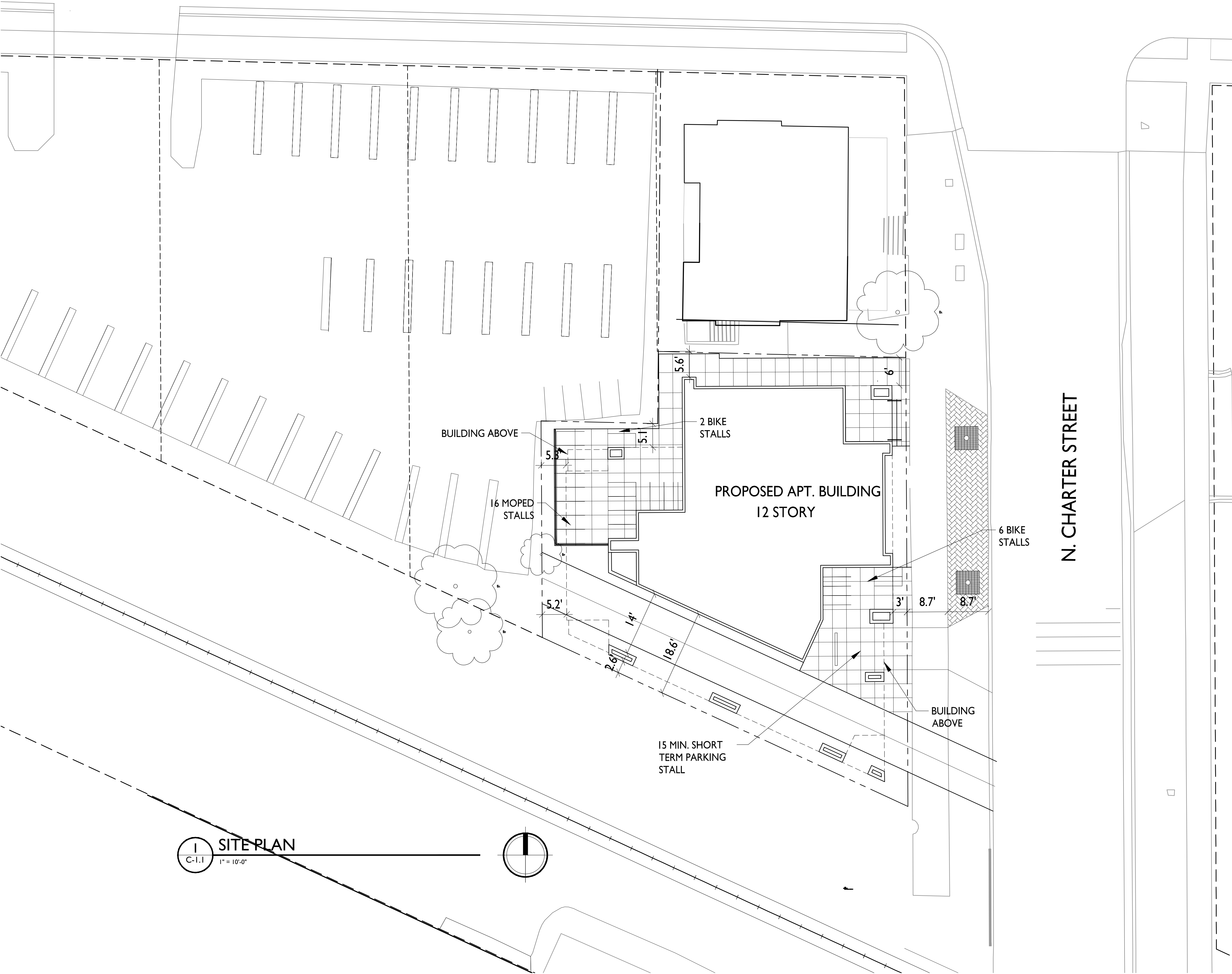
Aerial Site Plan  
N. Charter Street



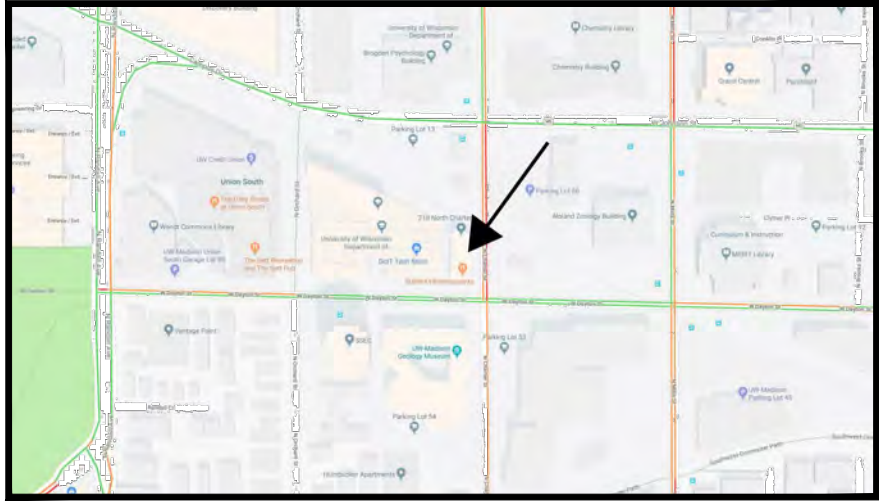


W. JOHNSON STREET

N. CHARTER STREET



I SITE PLAN  
C-1.1 1" = 10'-0"



SITE LOCATOR MAP

SHEET INDEX

SITE	SITE PLAN
C-1.1	FIRE DEPARTMENT ACCESS
C-1.2	USABLE OPEN SPACE
C-1.3	LOT COVERAGE
C-1.4	SITE LIGHTING PLAN
C-1.5	EXISTING CONDITIONS
C-2.0	DEMOLITION PLAN
C-3.0	GRADING & EROSION CONTROL PLAN
C-4.0	UTILITY PLAN
C-5.0	CONSTRUCTION DETAILS
C-6.0	CONSTRUCTION DETAILS
C-7.0	PLANTING PLAN
L-1.0	

ARCHITECTURAL

A-1.0	BASEMENT PLAN
A-1.1	FIRST FLOOR PLAN
A-1.2	SECOND & THIRD FLOOR PLAN
A-1.3	FOURTH - ELEVENTH FLOOR PLAN
A-1.4	TWELFTH FLOOR PLAN
A-2.1	ELEVATIONS
A-2.2	ELEVATIONS
A-2.3	3-D RENDERING
A-2.4	3-D RENDERING
A-2.5	3-D RENDERING

SITE DEVELOPMENT DATA:

DENSITIES:	
TOTAL LOT AREA	5,812 S.F. / .1334 ACRES
DWELLING UNITS	43 UNITS
BEDROOMS	96 BEDROOMS
DENSITY	322 UNITS/ACRE
LOT COVERAGE	719 BEDROOMS/ACRE
USABLE OPEN SPACE	4,848 S.F. (83.4%)
	2,451 S.F.
BUILDING HEIGHT	12 STORIES
DWELLING UNIT MIX:	
ONE BEDROOM	11
TWO BEDROOM	21
THREE BEDROOM	1
FOUR BEDROOM	10
TOTAL DWELLING UNITS	43
BICYCLE & MOPED PARKING:	
BIKE SURFACE	4 STALLS
BIKE SURFACE GUEST	4 STALLS
MOPED SURFACE	16 STALLS
BIKE UNDERGROUND GARAGE-WALL HUNG	46 STALLS
BIKE UNDERGROUND GARAGE STD. 2'x6'	47 STALLS
TOTAL	117 STALLS

GENERAL NOTES:

1. ALL WORK IN THE PUBLIC RIGHT OF WAY SHALL BE PERFORMED BY A CITY LICENSED CONTRACTOR.
2. ALL DAMAGE TO THE PAVEMENT ADJACENT TO THIS DEVELOPMENT SHALL BE RESTORED IN ACCORDANCE WITH THE CITY OF MADISON'S PAVEMENT PATCHING CRITERIA.
3. THE CONTRACTOR SHALL REPLACE ALL CURB AND GUTTER ADJACENT TO THIS DEVELOPMENT AS DEEMED NECESSARY BY THE CITY ENGINEER.
4. THE MAXIMUM RUNNING SLOPE OF ALL WALKS SHALL BE 1:20. THE MAXIMUM SLOPE OF RAMP SHALL BE 1:12. THE MAXIMUM CROSS SLOPE AT ALL WALKS & RAMP SHALL BE 1:50.
5. RAMP WITH A RISE OVER 6 INCHES SHALL HAVE HANDRAILS ON BOTH SIDES.
6. ALL STAIRWAYS WITH MORE THAN ONE RISER SHALL HAVE HANDRAILS ON BOTH SIDES.

ISSUED  
Issued for Land Use & UDC - Sept. 19, 2018

PROJECT TITLE  
222 N. Charter  
Street

SHEET TITLE  
Site Plan

SHEET NUMBER

C-1.1  
PROJECT NO.

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W. JOHNSON STREET

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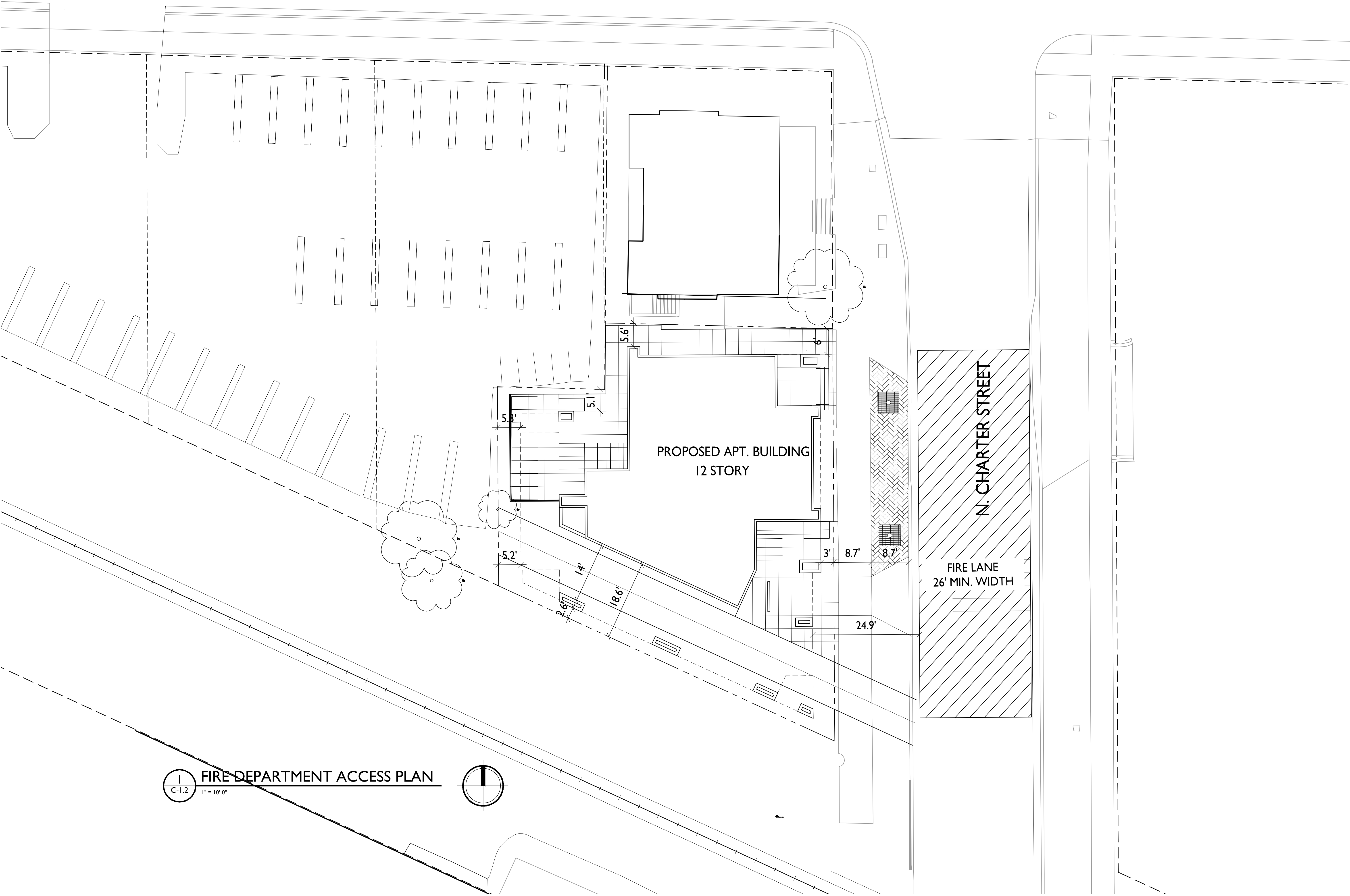
PROJECT TITLE  
222 N. Charter Street

SHEET TITLE  
Fire Department Access Plan

SHEET NUMBER

C-1.2

PROJECT NO.  
© Knothe & Bruce Architects, LLC



W. JOHNSON STREET

LOT COVERAGE

TOTAL LOT AREA

= 5,812 SF

LOT COVERAGE = 4,848 SF (83.4%)

knothe  
ARCHITECTS

Phone: 7601 University Ave, Ste 201  
608.836.3690 Middleton, WI 53562

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Issued for Land Use & UDC - Sept. 19, 2018

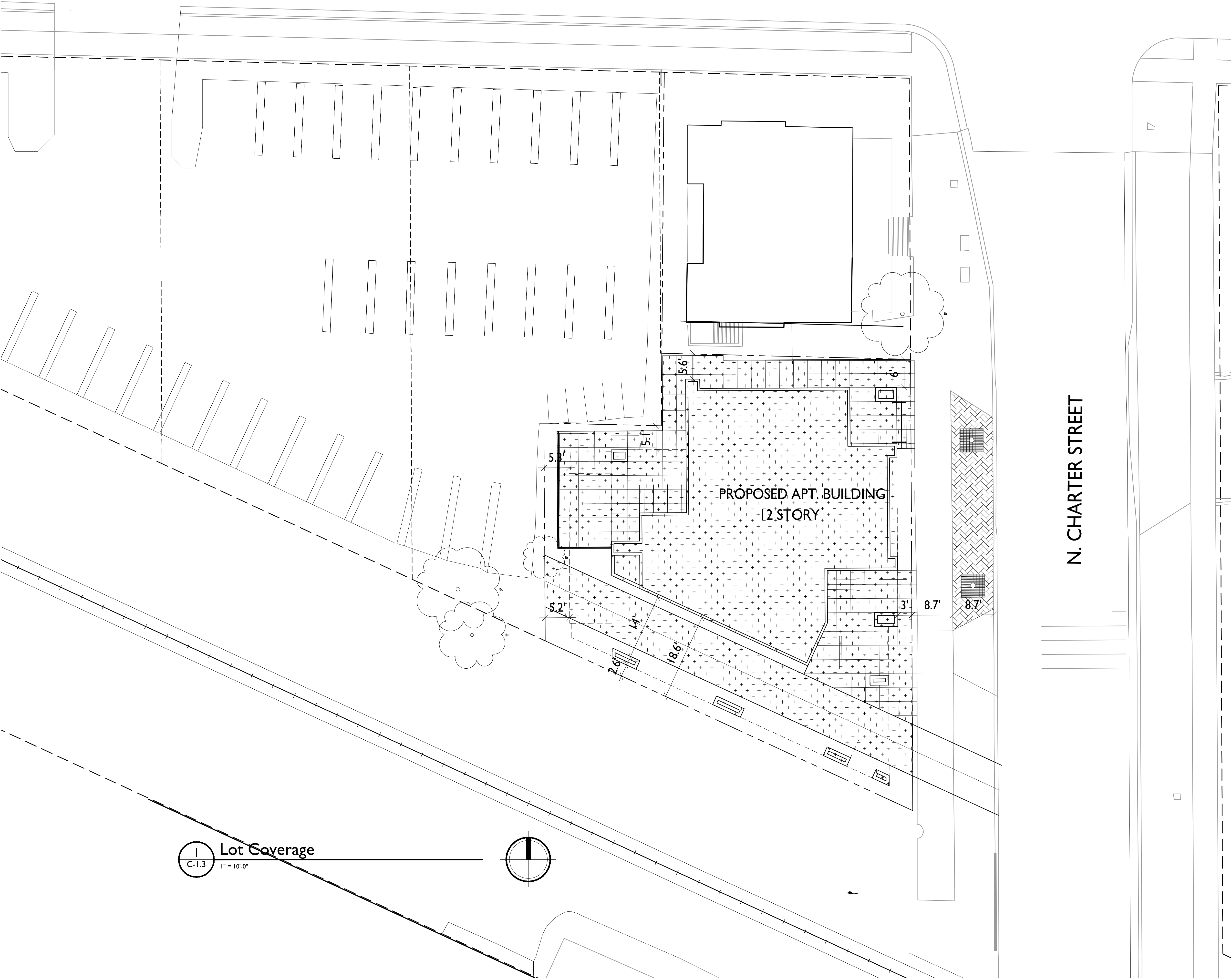
PROJECT TITLE  
222 N. Charter Street

SHEET TITLE  
Lot Coverage

SHEET NUMBER

C-I.3

PROJECT NO.  
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W. JOHNSON STREET

USABLE OPEN SPACE

DECKS & BALCONIES, ROOF TERRACE    = 2,451 SF

knothe  
ARCHITECTS

Phone: 7601 University Ave, Ste 201  
608.836.3690    Middleton, WI 53562

bruce  
ARCHITECTS

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PROJECT TITLE

222 N. Charter Street

SHEET TITLE

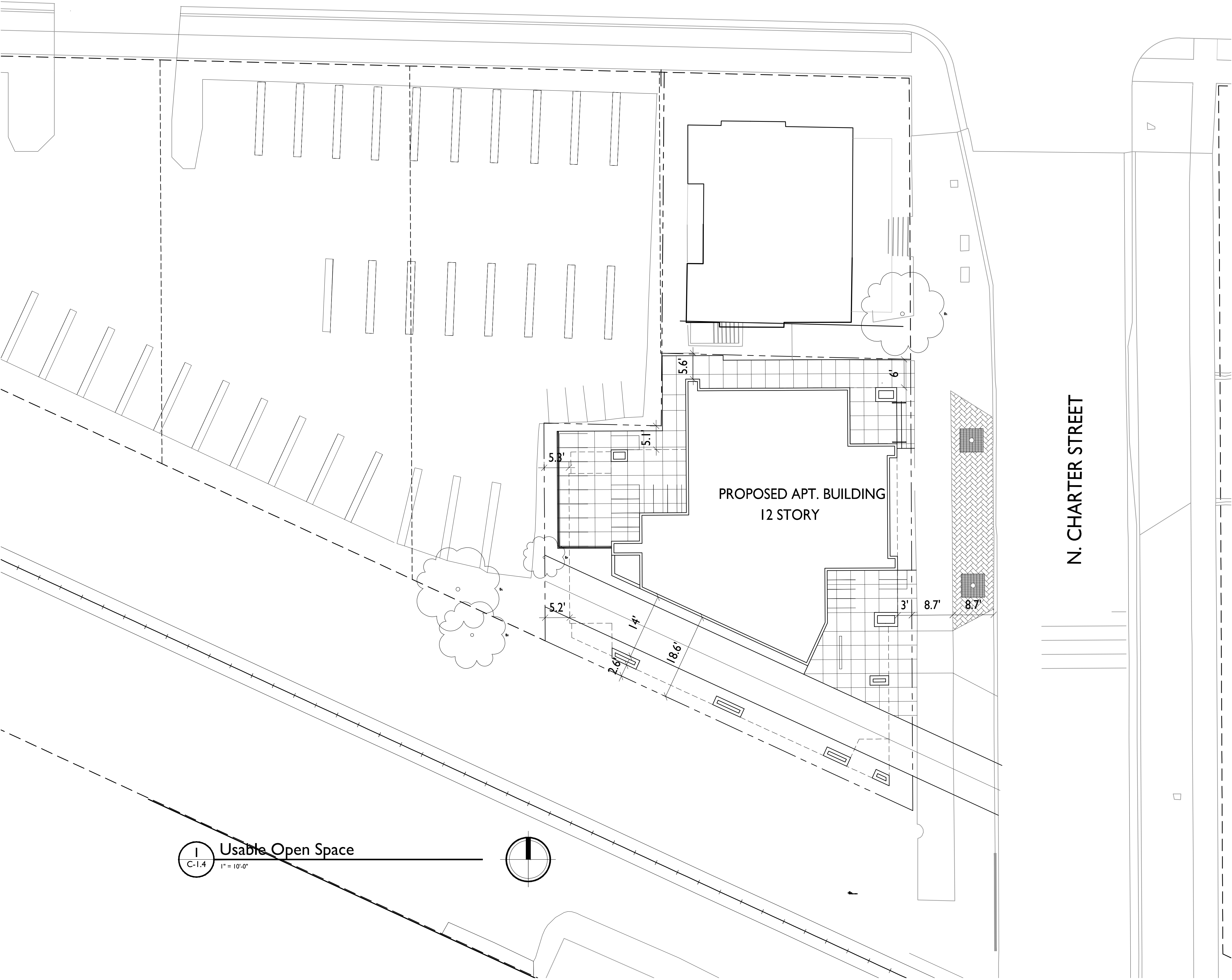
Usable Open Space

SHEET NUMBER

C-1.4

PROJECT NO.

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I

C-1.4

Usable Open Space

I

1" = 10'-0"