07.17 · Technical amendments reserved

BEGA **TYPE 'A'** **77 753**

Bollard IP 65

Project · Reference number Date

Product data sheet

Application
One-sided LED bollard with 180° light output. Due to the stable construction of this luminaire it is suitable for areas in which a high requirement of a robust construction is necessary.
The used LED technique offers durability and optimal light output with low power consumption at the same time.

Product description
Luminaire made of aluminium alloy, aluminium and stainless steel
Borosilicate glass
Silicone gasket
Reflector made of pure anodised aluminium
Single side light exit 180°
Luminaire with mounting plate for bolting onto a foundation or an anchorage unit
Mounting plate with two pitch circles:
⌀ 70 mm, 3 elongated holes 7 mm wide
⌀ 100 mm, 3 elongated holes 9 mm wide
Luminaire can be aligned on the mounting plate around 360°
Mounting bracket with connection box 70 632 for through-wiring – for 2 cables up to 5 × 4□
with fuse Neozed D 01 · 6 A
LED power supply unit
220-240 V ∿ 0/50-60 Hz
DC 176-276 V
Safety class I
Protection class IP 65
Dust-tight and protection against water jets
Impact strength IK10
Protection against mechanical impacts < 20 joule
CE – Conformity mark
Weight: 8.6 kg

Inrush current
Inrush current: 21 A / 18.2 µs
Maximum number of luminaires of this type per miniature circuit breaker:
B 10 A: 50 luminaires
B 16 A: 50 luminaires
C 10 A: 50 luminaires
C 16 A: 50 luminaires

Lamp

Module connected wattage	9.2 W
Luminaire connected wattage	11.5 W
Rated temperature	t_a = 25 °C
Ambient temperature	$t_{a\,max}$ = 55 °C

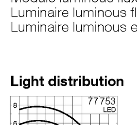
77 753

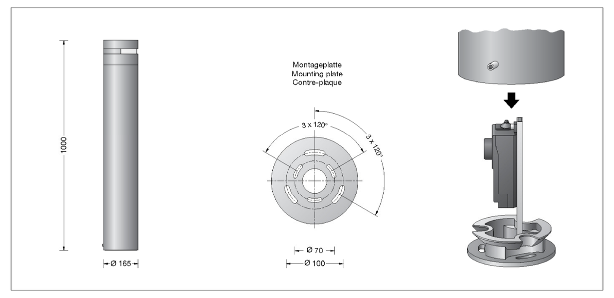
Module designation	LED-0434/830
Colour temperature	3000 K
Colour rendering index	R_a > 80
Module luminous flux	1040 lm
Luminaire luminous flux	411 lm
Luminaire luminous efficiency	35,7 lm/W

77 753 K4

Module designation	LED-0434/840
Colour temperature	4000 K
Colour rendering index	R_a > 80
Module luminous flux	1100 lm
Luminaire luminous flux	434 lm
Luminaire luminous efficiency	37,7 lm/W

Light distribution





Lifetime of the LED
Ambient temperature t_a = 15 °C
– at 50,000 h: L 70 B 10
– at 77,000 h: L 70 B 50

Ambient temperature t_a = 25 °C
– at 50,000 h: L 70 B 10
– at 71,000 h: L 70 B 50

max. ambient temperature t_a = 55 °C
– at 50,000 h: L 70 B 50
– at 53,000 h: L 70 B 50

Article No. 77 753
LED colour temperature optionally 3000 K or 4000 K
3000 K – Article number
4000 K – Article number + **K4**

Colour graphite or silver
graphite – article number
silver – article number + **A**

Accessory
70 895 Anchorage unit
Anchorage unit with mounting flange made of galvanised steel. Total length 400 mm.
3 stainless steel fixing screws M 8.
Pitch circle ⌀ 100 mm.

See the separate instructions for use.

BEGA Gantenbrink-Leuchten KG · Postfach 31 60 · 58689 Menden · info@bega.com · www.bega.com

DELTALIGHT®

Date
Name
Client
Project Name
Quote#
Type/Quantity **TYPE 'B'**

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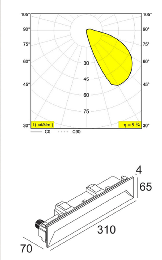
Specification Sheet

LOGIC W L
304 32 01 83 Weblink



Cutout shape/size:	BOX mm
Recessed depth:	110-135 mm
Available colors:	ALU GREY (304 32 01 83 A) WHITE (304 32 01 83 W) DARK GREY (304 32 01 83 N)

INCL.GLASS SBL
INCL.LED CLUSTER 9,5W / CRI>80 / 3000K / 1270lm
INCL.LED POWER SUPPLY 350mA-DC
INCL.1 x PG11

LED Technics:	Light source: 1270 lm // 9 W // 134 lm/W Luminaire: 116 lm // 11 W // 11 lm/W
220-240V / 50-60Hz	
Class:	I
Weight:	1 KG
Protection level:	IP65
Minimum distance:	n.a.
Requirements:	CONCRETE BOX 191 CONCRETE PACK LOGIC W L

For detailed installation instructions, please consult the manual. 304_32_01_XX_V03_HAND.pdf

WST LED
Architectural Wall Sconce

Catalog Number: WST LED P2 30K VF 120 E7WC DDBXD
Notes
Type: BX **TYPE 'BX'**

Hit the Tab key or mouse over the page to see all interactive elements.

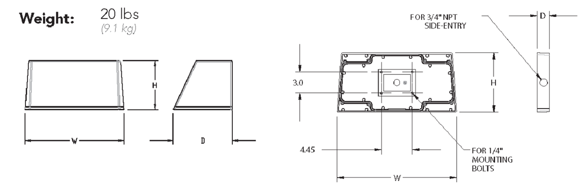
Introduction
The WST LED is designed with the specifier in mind. The traditional, trapezoidal shape offers a soft, non-pixilated light source for end-user visual comfort. For emergency egress lighting, the WST LED offers six battery options, including remote. For additional code compliance and energy savings, there is also a Bi-level motion sensor option. With so many standard and optional features, three lumen packages, and high LPW, the WST LED is your "go to" luminaire for most any application.

Specifications
Luminaire

Height:	8-1/2" (21.59 cm)
Width:	17" (43.18 cm)
Depth:	10-3/16" (25.9 cm)
Weight:	20 lbs (9.1 kg)

Optional Back Box (BBW)

Height:	4" (10.2 cm)
Width:	5-1/2" (14.0 cm)
Depth:	1-1/2" (3.8 cm)



Ordering Information
EXAMPLE: WST LED P1 40K VF MVOLT DDBTXD

Series	Performance Package	Color temperature	Distribution	Voltage	Mounting
WST LED	P1 1,500 Lumen package P2 3,000 Lumen package P3 6,000 Lumen package	27K 2700 K 30K 3000 K 40K 4000 K 50K 5000 K	VF Visual comfort forward throw VW Visual comfort wide	MVOLT[1] 120[1] 208[1] 240[1] 277[1] 347 480	**Shipped included** (blank) Surface mounting bracket **Shipped separately** BBW Surface-mounted back box[2] PBBW Premium surface-mounted back box[2,3]

Options		Finish (required)
PE Photoelectric cell, button type PER NEMA twist-lock receptacle only PER5 Five-wire receptacle only PER7 Seven-wire receptacle only DMG 0-10V dimming extend out back of housing for external control (no control)[4] PIR Motion/Ambient Light Sensor, 8-15' mounting height[5] PIR1FC3V Motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[5] PIRH 180° motion/ambient light sensor, 15-30' mounting height[5] PIRH1FC3V Motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[5] SF Single fuse (120, 277, 347V)[6] DF Double fuse (208, 240, 480V)[6] DS Dual switching[7] E7WH Emergency battery backup (7W)[8]	E7WC Emergency battery backup (cold, 7W)[8,9] E7WHR Remote emergency battery backup (remote 7W)[8,10] E20WH Emergency battery backup (20W)[8,11] E20WC Emergency battery backup (cold, 20W)[8,9,11] E23WHR Remote emergency battery backup (remote 20W)[8,10] LCE Left side conduit entry[12] RCE Right side conduit entry[12] **Shipped separately** RBPW Retrofit back plate[2] VG Vandal guard[13] WG Wire guard[13]	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone

Accessories
Ordered and shipped separately.

WSTVCPBBW DDBXD U	Premium Surface - mounted back box
WSBBW DDBTX U	Surface - mounted back box
RBPW DDBXD U	Retrofit back plate

NOTES
1 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with button type photocell (PE), fusing (SF, DF), or dual switching (DS).
2 Also available as a separate accessory; see accessories information.
3 Top conduit entry standard.
4 Not available with E7WH, E7WC, E7WHR, E20WC, E20WH, or E23WHR. Not available with PER5 & PER7.
5 Not available with PE, PER, PER5, PER7, VG or WG.
6 Not available with MVOLT option. Button photocell (PE) can be ordered with a dedicated voltage option. Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
7 Not available with E7WH, E7WC, E7WHR, E20WC, E20WH, or E23WHR. Used with inverter system. Not available with 347/480V. Not available with PE, PER, PER5 & PER7.
8 Not available with 347/480V.
9 Battery pack rated for -20° to 40°C.
10 Comes with PBBW.
11 Warranty period is 3-years.
12 Not available with BBW.
13 Must order with fixture; not an accessory.

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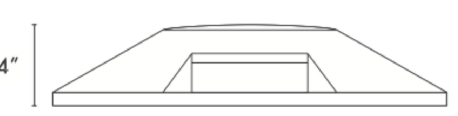
TYPE 'C' SLV®

BIG LED PLOT ROUND
LEDTEC

ETL cETL single 0.8 dbl. 0.8 quad. 0.7 0,5 t

Material:	Versions:	Art. No.:
Aluminum	silver grey	
	1 slot	4227371U
Accessory/Included parts:	2 slots	4227372U
Ground protective ring (incl.) LED insert (excl.)	4 slots	4227374U

Note:
Select the plot cover with 1, 2 or 4 light exit openings (slots). Then select the LED insert (see below) with the desired light color.



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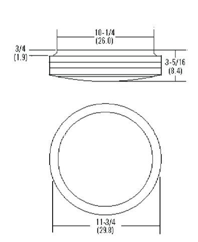
Main line: (813) 349 – 1900 • Fax line: (813) 349 – 1907 • www.slvlighting.com

LITHONIA LIGHTING®

Catalog Number: OLCFM 15 DDB
Notes
Type: C1 **TYPE 'C1'**

FEATURES & SPECIFICATIONS
INTENDED USE — The OLCFM provides years of maintenance-free general illumination for residential and commercial outdoor applications such as porches, covered walkways and store entrances.
CONSTRUCTION — Rugged cast-aluminum top-plate and outer-ring are protected by a thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.
Polycarbonate LED lens/cover protects LEDs.
Fixture weight = 2.98 lbs.
OPTICS — 96 high-performance LEDs produces up to 1077 lumens and maintain 70% of light output at 50,000 hours of service.
(LED lifespan based on IESNA LM-80-08 results and calculated per IESNA TM-21-11 methodology.)
White acrylic diffuser provides a soft white light at 4000K CCT
See Lighting Facts Labels for specific fixture performance.
ELECTRICAL — Fixture operates at 120 volts, 60 Hz.
Standard input = 16.6 watts
Operating temperature -40°C to 40°C.
Amps @ 120V = .131.
Surge protection = 2.5kV.
INSTALLATION — Mounts easily to existing junction box (by others).
LISTINGS — UL Listed to U.S. and Canadian safety standards for wet locations.
Designed for ceiling or wall mounting more than 4' above the ground.
Tested in accordance with IESNA LM-79 and LM-80 standards.
WARRANTY — 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
Note: Specifications subject to change without notice.

Outdoor General Purpose
OLCFM
OUTDOOR LED CAST FLUSH MOUNT



All dimensions are inches (centimeters) unless otherwise indicated.

ORDERING INFORMATION All configurations of this product are considered "standard" and have short lead times. **Example:** OLCFM 15 DDB

Series	Light Engine	Color Temperature (CCT)[1]	Voltage	Finish
OLCFM	15	(blank) 4000K	(blank) 120V	DDB Dark bronze WH White

Notes
1 Nominal Correlated Color Temperature (CCT) per ANSI C78.377-2008.

TYPE 'E' DUKE ENERGY.

Outdoor Lighting
Mini Bell LED

The Mini Bell LED is an energy-efficient luminaire with a classic, sophisticated design. This fixture is an excellent choice for illuminating pathways and residential communities.

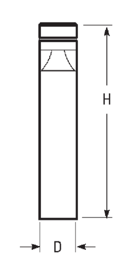
KBC8 LED
LED Specification Bollard

Catalog Number
Notes
Type: F / F2 **TYPE 'F' / 'F2'**

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

	8" Round (20.3 cm)
Height:	42" (106.7 cm)
Weight (max):	27lbs (12.25 kg)



Introduction
The KBC8 Bollard is a stylish, fully integrated LED solution for walkways. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting with a variety of optical and control options for customized performance.

With an expected service life of over 20 years of nighttime use and up to 70% in energy savings over comparable 100W metal halide luminaires, the KBC8 Bollard is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.

Ordering Information
EXAMPLE: KBC8 LED 16C 700 40K SYM MVOLT DDBXD

KBC8 LED	12C	530	30k	ASY	120			DBLXD
Series	**LEDs**	**Drive current**	**Color temperature**	**Distribution**	**Voltage**	**Control options**	**Other options**	**Finish** (required)
KBC8 LED	**Asymmetric** 12C 12 LEDs[1] **Symmetric** 16C 16 LEDs[2]	350 350mA 450 450mA[3,4] 530 530mA 700 700mA	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted AMBLW Amber limited wavelength[3,4]	ASY Asymmetric[1] SYM Symmetric[2]	MVOLT[5] 120[5] 208[5] 240[5] 277[5] 347[4]	**Shipped installed** PE Photoelectric cell, button type DMG 0-10V dimming driver (no controls) ELCW Emergency battery backup[6]	**Shipped installed** SF Single fuse (120, 277, 347V)[4,7] DF Double fuse (208, 240V)[4,7] H24 24" overall height H30 30" overall height H36 36" overall height FG Ground-fault festoon outlet L/AB Without anchor bolts (3 bolt base) L/AB4 4 bolt retrofit base without anchor bolts[8]	DWHXD White DNAXD Natural aluminum DDBXD Dark bronze DBLXD Black DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white **Striping**[9] SDDB Dark bronze SDWH White SDBL Black SDNA Natural aluminum SDTG Tennis green SDBR Bright red SDBUA Dark blue SDYLB Yellow

Accessories
Ordered and shipped separately.
MRAB U Anchor bolts for KBC8 LED[8]

NOTES
1 Only available in the 12C, ASY version.
2 Only available in the 16C, SYM version.
3 Only available with 450 AMBLW version.
4 Not available with ELCW.
5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options), or photocontrol (PE option).
6 Not available with 347V. Not available with fusing. Not available with 450 AMBLW.
7 Single fuse (SF) requires 120, 277, or 347 voltage option. Double fuse (DF) requires 208 or 240 voltage option.
8 MRAB U not available with L/AB4 option.
9 Striping is available only in the colors listed.

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TYPE 'R'

GE Evolve™
LED Roadway Lighting
ERL1-ERLH-ERL2

The **Evolve** LED Roadway Luminaire is optimized for customers requiring a LED solution for local, collector and major roadways. GE's unique reflective optics are designed to optimize application efficiency and minimize glare. The modern design incorporates the heat sink directly into the unit for heat transfer to prolong LED life. This reliable unit has a 100,000 hour design life, significantly reducing maintenance needs and expense over the life of the fixture. This efficient solution lowers energy consumption compared to a traditional HID fixture for additional operating cost savings.

Features:
- Optimized roadway photometric distributions
- Evolve™ light engine consisting of reflective technology designed to optimize application efficiency and minimize glare
- 70 CRI at 2700K, 3000K and 4000K typical.
- -40°C to 50°C UL Ambient Typical.
- ULOR = 0 (zero uplight)
- Designed & Assembled in USA

Applications:
- Local Roadways
- Collector Roadways
- Major Roadway/Streets

Compatible with **LightGrid™** Outdoor Wireless Control System

To learn more about **GE Evolve LED Roadway Lighting**, go to: www.currentbyge.com

2

The signatures affixed below certify that this sheet has been reviewed and approved solely per the certifications signed on the cover sheet of these construction plans.

CM – Engineering	Date	Public Works – Env. Programs	Date
CM – Transportation	Date	Planning	Date
CM – Building Inspections	Date	Planning – Transportation	Date
Public Works – Water/Sewer	Date	Fire	Date
Public Works – Electric	Date	Parks, Recreation & Cultural Res.	Date
Public Works – S & E	Date		

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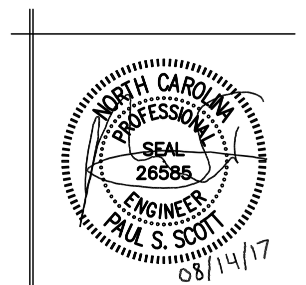

FINAL DRAWING
-
FOR REVIEW PURPOSES ONLY

		DATE
PROJECT:	15074	
ISSUE	Permit Set	06-19-17
REVISIONS:		
DRAWN BY:	PSS	
CHECKED BY:	PSS	
CONTENT:	SITE LIGHTING CUT SHEETS	

SL3

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Aug 14, 2017-2:22pm

LITHONIA LIGHTING®

Catalog Number	OLCS 8 DDB
Notes	
Type	S2 — TYPE 'S2'

FEATURES & SPECIFICATIONS

INTENDED USE — The OLCS provides years of maintenance-free general illumination for residential and commercial outdoor applications such as walkways, doorways/entrances, columns, and stairways.

CONSTRUCTION — Rugged cast-aluminum housing is protected by a thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

Polycarbonate LED lens/cover protects LEDs.

Fixture weight = 2.4 lbs.

OPTICS — 48 high-performance LEDs produce up to 513 lumens and maintain 70% of light output at 50,000 hours of service.

(LED lifespan based on IESNA LM-80-08 results and calculated per IESNA TM-21-11 methodology.)

White polycarbonate diffuser provides a soft white light at 4000K CCT.

See Lighting Facts Labels for specific fixture performance.

ELECTRICAL — Fixture operates at 120 volts, 60 Hz.

Standard input = 8.9 watts.

Operating temperature : -30°C to 40°C.

Amps @ 120V = .076.

Surge protection = 2.5kV.

INSTALLATION — Mounts easily to recessed junction box (by others).

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

Designed for wall mounting more than 4' above the ground.

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

WARRANTY — 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

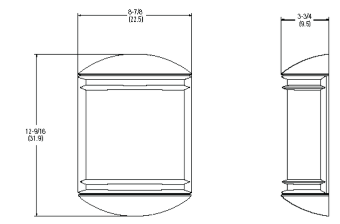
Actual performance may differ as a result of end-user environment and application.

Note: Specifications subject to change without notice.

Outdoor General Purpose

OLCS

OUTDOOR LED CAST SCONCE



All dimensions are inches (centimeters) unless otherwise indicated.

ORDERING INFORMATION All configurations of this product are considered "standard" and have short lead times. **Example:** OLCS 8 DDB

OLCS				
Series	**Light engines**	**Color temperature (CCT)[1]**	**Voltage**	**Finish**
OLCS	8	(blank) 4000K	(blank) 120V	DDB Dark bronze WH White

Notes
1 Nominal Correlated Color Temperature (CCT) per ANSI C78.377-2008.

TYPE 'W'

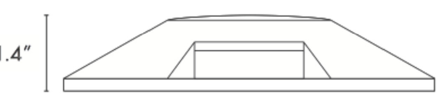
BIG LED PLOT ROUND

LEDTEC

SLV®

Material:	Versions:	Art. No.:
Aluminum	silver grey	
	1 slot	4227371U
Accessory/Included parts:	2 slots	4227372U
Ground protective ring (incl.)	4 slots	4227374U
LED insert (excl.)		

Note:
Select the plot cover with 1, 2 or 4 light exit openings (slots). Then select the LED insert (see below) with the desired light color.



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TYPE 'X'

DELTALIGHT®

USA / deltalight.us / +1(954) 677 9800
Canada / deltalight.ca / +1(905) 813 6130

Date
Name
Client
Project Name
Quote#
Type/Quantity

Features
Corrosion protected, powder coated aluminum

Application
For accent lighting Residential, commercial, retail, and hospitality spaces

Dimming Options
Refer to housing or power supply spec sheet.

Listings

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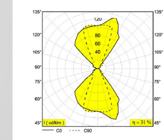
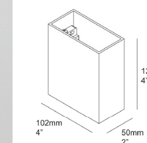
Specification Sheet

YUPI X LED WW
6 279 91 22 — Weblink





Available colors:	ALU GREY (6 279 91 22 A)
INCL.2 x POWERLED WHITE 1,1-1,6W / 3000K EXCL.LED POWER SUPPLY 350-500mA-DC	
LED Technics:	Light source: 336 lm // 3 W // 117 lm/W Luminaire: 104 lm // 4 W // 28 lm/W
Class 2	Yes
Ada	N.a.
BACKPLATE	
MUD KIT INSTALLATION	
Weight:	1.1 LBS
Protection level:	IP65 - suitable for wet locations
Minimum distance:	n.a.
Options:	MUD KIT 5 COVERPLATE S 105 LED POWER SUPPLY 350 / 500mA-DC DIM

For detailed installation instructions, please consult the manual. 6_279_91_22_HAND.pdf

LITHONIA LIGHTING®

Catalog Number	
Notes	
Type	PP — TYPE 'PP'

FEATURES & SPECIFICATIONS

INTENDED USE — Streets, walkways, parking lots and surrounding areas.

CONSTRUCTION — Rugged, die-cast, single-piece aluminum housing with nominal wall thickness of 1/8". Die-cast door frame has impact-resistant, tempered, glass lens (3/16" thick). Door frame is fully gasketed with one-piece tubular silicone. **US. Patent No. D447,590. Canada Patent No. 94324.**

Finish: Standard finish is dark bronze polyester powder finish. Additional architectural colors available.

OPTICS — Anodized, segmented reflectors for superior uniformity and control. Reflectors attach with tool-less fasteners and are rotatable and interchangeable. Four full cutoff distributions available: Type II (roadway), Type III (asymmetric), Type IV (forward throw) and Type V (symmetric square).

ELECTRICAL — Ballast: Electronic high-frequency, multi-volt ballast with a starting temperature 0°F (-18°C). Ballasts are mounted on a removable power tray with tool-less latch and have positive locking disconnect plugs.

Socket: Four-pin, white thermoplastic body with quick-connect push-in wiring terminals. Copper alloy.

INSTALLATION — Integral arm for pole or wall mounting. Optional mountings available.

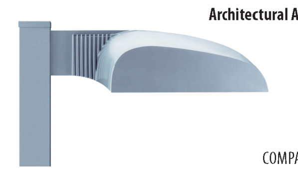
LISTINGS — UL Listed (standard). CSA Certified (see Options). UL listed for 25°C ambient and wet locations. IP65 Rated.

WARRANTY — 1-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application.
Specifications subject to change without notice.

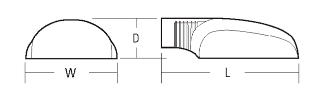
AERIS™
Architectural Area & Roadway Luminaires

AS1



COMPACT FLUORESCENT: 32W-70W
10' to 15' Mounting

Specifications
EPA: 0.7 ft²
Length: 22-1/4 (56.4)
Width: 13 (33.0)
Depth: 6-3/8 (15.9)
*Weight: 25.9 lbs (11.8 kg)



All dimensions are inches (centimeters) unless otherwise indicated.
*Weight as configured in example below.

NIGHTTIME FRIENDLY

ORDERING INFORMATION Lead times vary depending on options selected. Consult with your sales representative. **Example:** AS1 42TRT SR4SC MVOLT SPA LPI

AS1	42TRT	SR3	120		SPA/WBA			
Series	**Wattage**	**Distribution**	**Voltage**	**Ballast**	**Mounting**	**Options**	**Finish[10]**	**Lamp[11]**
AS1	2/32TRT[1] 42TRT 2/42TRT[1] 57TRT 70TRT	SR2 Segmented type II roadway SR3 Segmented type III asymmetric SR4SC Segmented type IV forward throw, sharp cutoff SR5S Segmented type V symmetric square	120 277 347 MVOLT[2]	(blank) Electronic 0° F	SPA Square pole mounting RPA Round pole mounting WBA Wall bracket (up or down)[3] Shipped separately[4,5] ASKMA1 Mast arm adapter SPA19/AS Square pole adaptor (DM19 to SPA) RPA19/AS Round pole adaptor (DM19 to RPA)	Shipped installed in fixture BDP In-fixture ballast disconnect plug GMF Internal slow-blow fusing[6] GLR Internal fast-blow fusing[6] PER NEMA twist-lock receptacle only (no photocontrol) HS Houseside shield (SR2, SR3)[4,7] CSA CSA certified ELDW Emergency battery pack (32°F min. operating temp.)[8] Shipped separately[4] PE1 NEMA twist-lock PE (120, 208, 240V) PE3 NEMA twist-lock PE (347V) PE4 NEMA twist-lock PE (480V) PE7 NEMA twist-lock PE (277V) SC Shorting cap for PER option VG Vandal guard[9]	(blank) Dark bronze DBL Black DGC Charcoal gray DMB Medium bronze DNA Natural aluminum DWH White Super Durable Finishes DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white	LPI lamp included L/LP Less lamp

Note: Aeris™ has a unique drilling template that requires an Aeris drilling pattern to be specified when ordering poles. See example below.
Example: SSA 20 4C **DM19AS** DDB
Aeris Drilling Pattern
DM19AS 1 at 90 degrees
DM28AS 2 at 180 degrees
DM29AS 2 at 90 degrees
DM39AS 3 at 90 degrees
DM49AS 4 at 90 degrees
DM32AS 3 at 120 degrees (round poles only)

Accessories: Tenon Mounting Slipfitter
Order as separate catalog number. Must be used with pole mounting (RPA).

Tenon O.D.	One	Two@180°	Two@90°	Three@120°	Three@90°	Four@90°
2-3/8"	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8"	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Notes
1 Available with SR3 only.
2 Optional multi-volt electronic ballast capable of operating on any line voltage from 120 to 277V.
3 Mounted in lens-up orientation, fixture is damp location listed only.
4 May be ordered as an accessory.
5 Must specify finish when ordered as an accessory.
6 Must specify voltage. Not available with MVOLT.
7 Order AS1SR2/3HS U as an accessory.
8 Not available with 2/42TRT. ELDW with compact fluorescent does not satisfy North Carolina code criteria for state owned buildings per 2012 NC Building Code: 1006.3 and 1006.4.
9 Order AS1VG U as an accessory.
10 See www.lithonia.com/archcolors for additional color options.
11 Must be specified. 35K lamp with LPI.

TYPE 'R/E'

DUKE ENERGY.

Outdoor Lighting
Sanibel LED

Subject to variance from manufacturer. Contact us for region-specific details.

The beauty of the stylish Sanibel LED is its remarkable versatility. Its sleek simplicity, with a gently curved bracket that helps cast light downward, is at home virtually anywhere – from more formal traditional neighborhoods to beachfront communities and other casual locales.

LED (Light Emitting Diode)	70 | 150 watts
Mounting heights	15', 20', 25'
Colors	Black Green
Poles	Style A, C

For additional information, visit us at duke-energy.com/OutdoorLighting or call us toll free at 866.769.6417.

The signatures affixed below certify that this sheet has been reviewed and approved solely per the certifications signed on the cover sheet of these construction plans.

CM – Engineering	Date	Public Works – Env. Programs	Date
CM – Transportation	Date	Planning	Date
CM – Building Inspections	Date	Planning – Transportation	Date
Public Works – Water/Sewer	Date	Fire	Date
Public Works – Electric	Date	Parks, Recreation & Cultural Res.	Date
Public Works – S & E	Date		

JDAVIS

INTERIORS | LANDSCAPE
JDAVIS ARCHITECTS
510 South Wilmington Street
Raleigh, NC 27601
tel 919.835.1500

ARCHITECTURE
JDAVIS ARCHITECTS
1518 Walnut St., Suite 1308
Philadelphia, PA 19102
tel 215.545.0121

LIGHTHOUSE ENGINEERING
400 W. Morgan Street, Suite 100
Raleigh, North Carolina, 27603
tel 919.835.9781
fax 919.835.9754
MECHANICAL ELECTRICAL PLUMBING

Leon Capital Group
Hillstone - Chapel Hill
Hendrick Volvo Site
Chapel Hill, NC

NORTH CAROLINA PROFESSIONAL SEAL 26585 ENGINEER PAUL S. SCOTT 08/14/17

FINAL DRAWING
-
FOR REVIEW PURPOSES ONLY

		DATE
PROJECT:	15074	
ISSUE	Permit Set	06-19-17
REVISIONS:		
1	Site Comments	08-07-17
DRAWN BY:	PSS	
CHECKED BY:	PSS	
CONTENT:	SITE LIGHTING CUT SHEETS	

SL4

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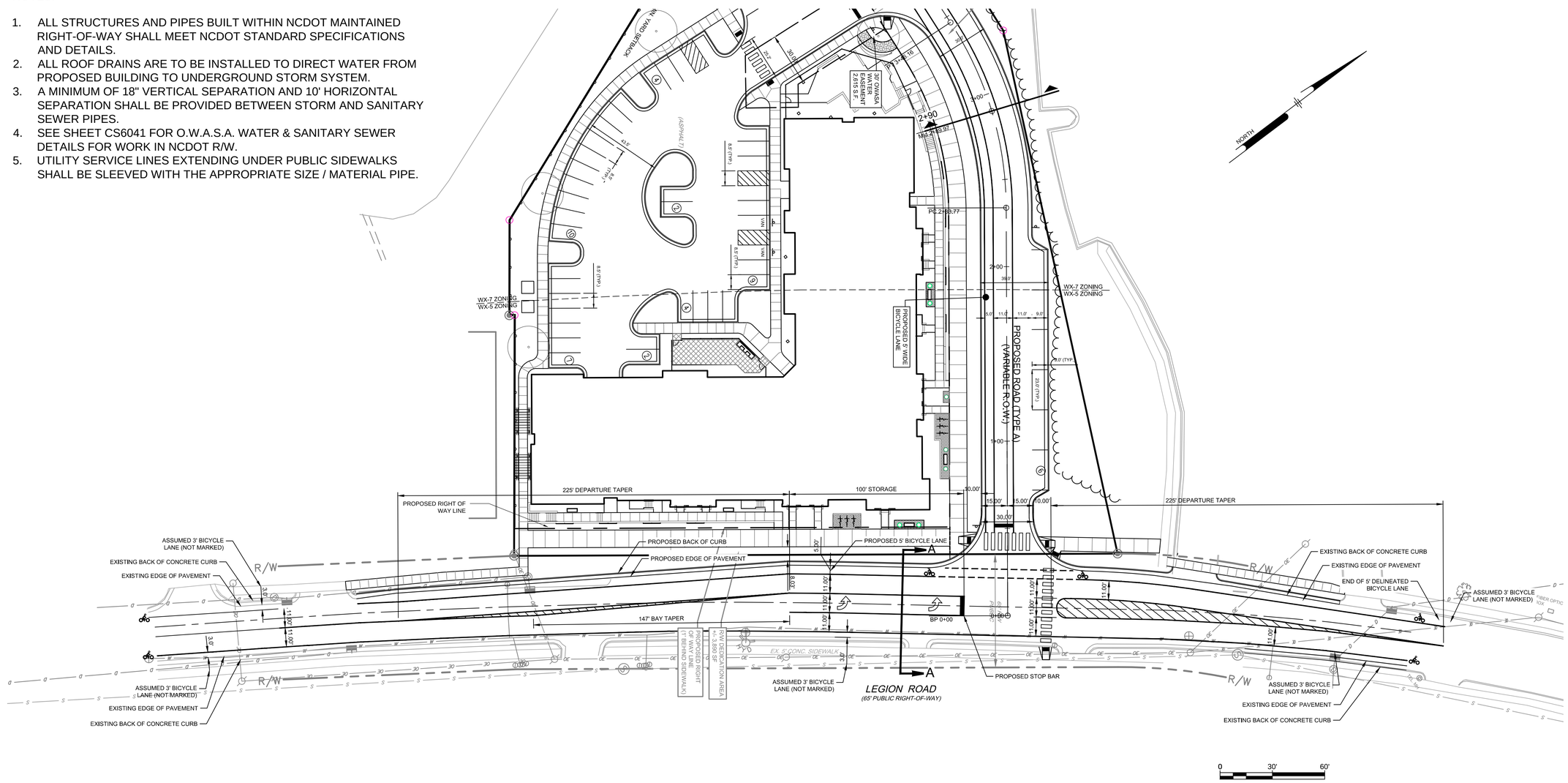
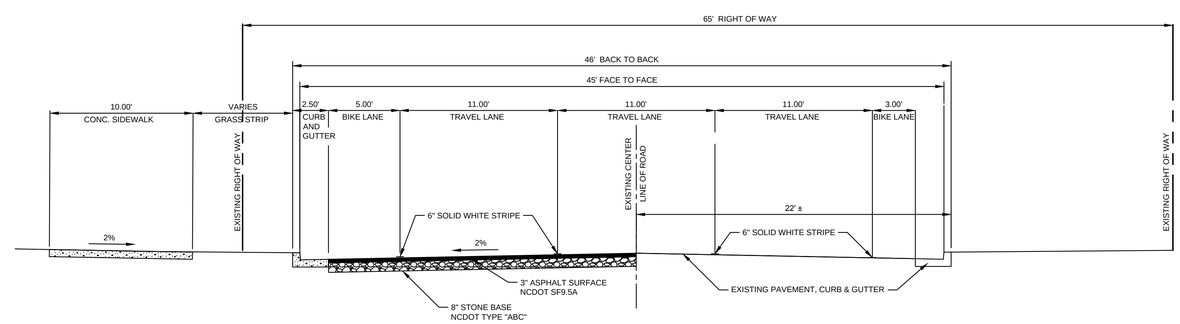
JDA-1702-SL4.dwg
Aug 14, 2017-2:24pm

NOTES:

1. ALL STRUCTURES AND PIPES BUILT WITHIN NCDOT MAINTAINED RIGHT-OF-WAY SHALL MEET NCDOT STANDARD SPECIFICATIONS AND DETAILS.
2. ALL ROOF DRAINS ARE TO BE INSTALLED TO DIRECT WATER FROM PROPOSED BUILDING TO UNDERGROUND STORM SYSTEM.
3. A MINIMUM OF 18" VERTICAL SEPARATION AND 10' HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN STORM AND SANITARY SEWER PIPES.
4. SEE SHEET CS6041 FOR O.W.A.S.A. WATER & SANITARY SEWER DETAILS FOR WORK IN NCDOT R/W.
5. UTILITY SERVICE LINES EXTENDING UNDER PUBLIC SIDEWALKS SHALL BE SLEEVED WITH THE APPROPRIATE SIZE / MATERIAL PIPE.





TYPICAL WIDENING ROAD SECTION A-A
1" = 5'

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401 Providence Road #200
Chapel Hill, NC 27514
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HILLSTONE CHAPEL HILL
1730 FORDHAM BLVD.
CHAPEL HILL, NORTH CAROLINA 27514

LEGION ROAD WIDENING PLAN

LEON CAPITAL GROUP
5970 FAIRVIEW ROAD, SUITE 450
CHARLOTTE, NORTH CAROLINA 28210

NO.	DATE	REVISIONS	BY
4	7/31/2017	TOWN COMMENT REVISIONS REVIEW #4	WRA
3	6/15/2017	TOWN COMMENT REVISIONS REVIEW #3	WRA
2	4/7/2017	TOWN COMMENT REVISIONS REVIEW #2	WRA
1	2/20/2017	REVISIONS PER TOWN'S REVIEW COMMENTS	WRA

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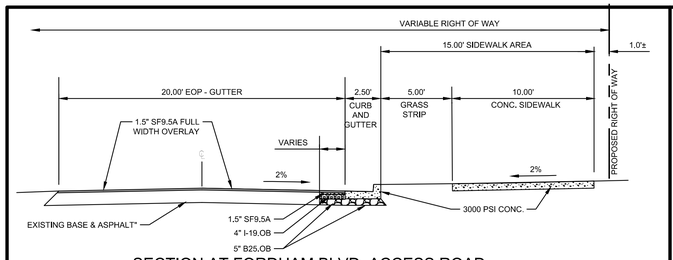
PROJECT	LCGR1602
DATE	DECEMBER 7, 2016
DRAWING SCALE	1" = 30'
DRAWN BY	WRA
APPROVED BY	TAS

CS2701

P:\Projects\LCGRCOM\LCGR1602-Apartment Site\DESIGN_PUBLISH\CS2701.dwg PLOTTED: 8/17/2017 3:18 PM, BY: Donald Chilly PLOTSTYLE: Pennoni NCS.stb PROJECT STATUS: DESIGN DEVELOPMENT



SECTION AT FORDHAM BLVD. ACCESS ROAD

SCALE: 1" = 5'

NOTES:

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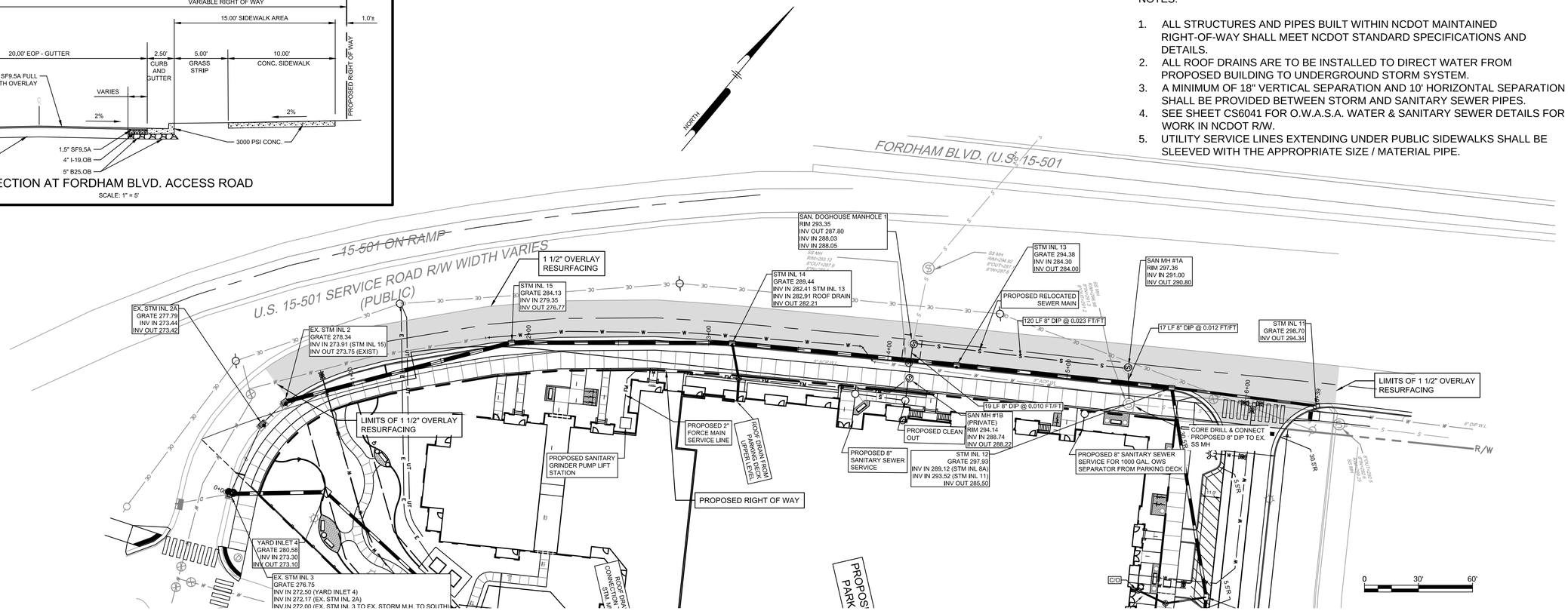
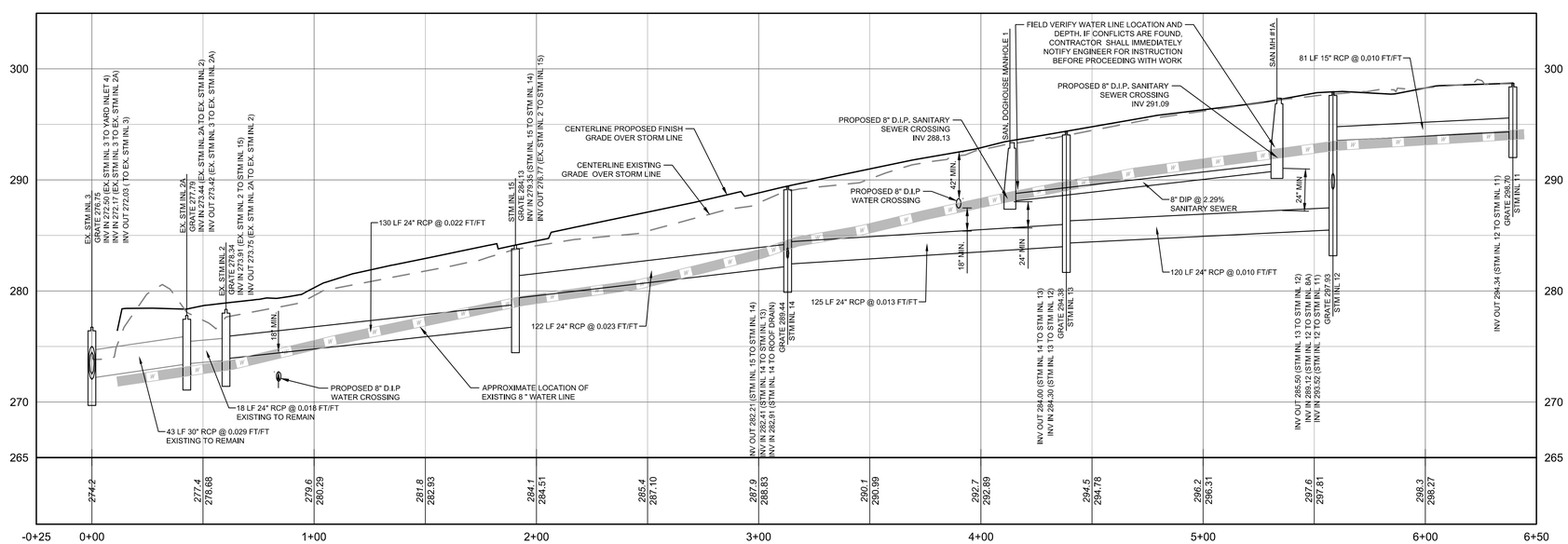


PLAN OF FORDHAM BLVD. ACCESS ROAD

SCALE: 1" = 30'



STORM LINE - ACCESS ROAD 9+00

HORIZONTAL SCALE: 1" = 30'

VERTICAL SCALE: 1" = 6'

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CHAPEL HILL, NORTH CAROLINA 27514

FORDHAM BLVD. ACCESS ROAD IMPROVEMENTS

LEON CAPITAL GROUP
5970 FAIRVIEW ROAD, SUITE 450
CHARLOTTE, NORTH CAROLINA 28210

NO.	DATE	REVISIONS	BY
4	7/31/2017	TOWN COMMENT REVISIONS REVIEW #4	WRA
3	6/15/2017	TOWN COMMENT REVISIONS REVIEW #3	WRA
2	4/17/2017	TOWN COMMENT REVISIONS REVIEW #2	WRA
1	2/20/2017	REVISIONS PER TOWN'S REVIEW COMMENTS	WRA

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PROJECT	LCGR1602
DATE	DECEMBER 7, 2016
DRAWING SCALE	1" = 30'
DRAWN BY	WRA
APPROVED BY	TAS

CS2702

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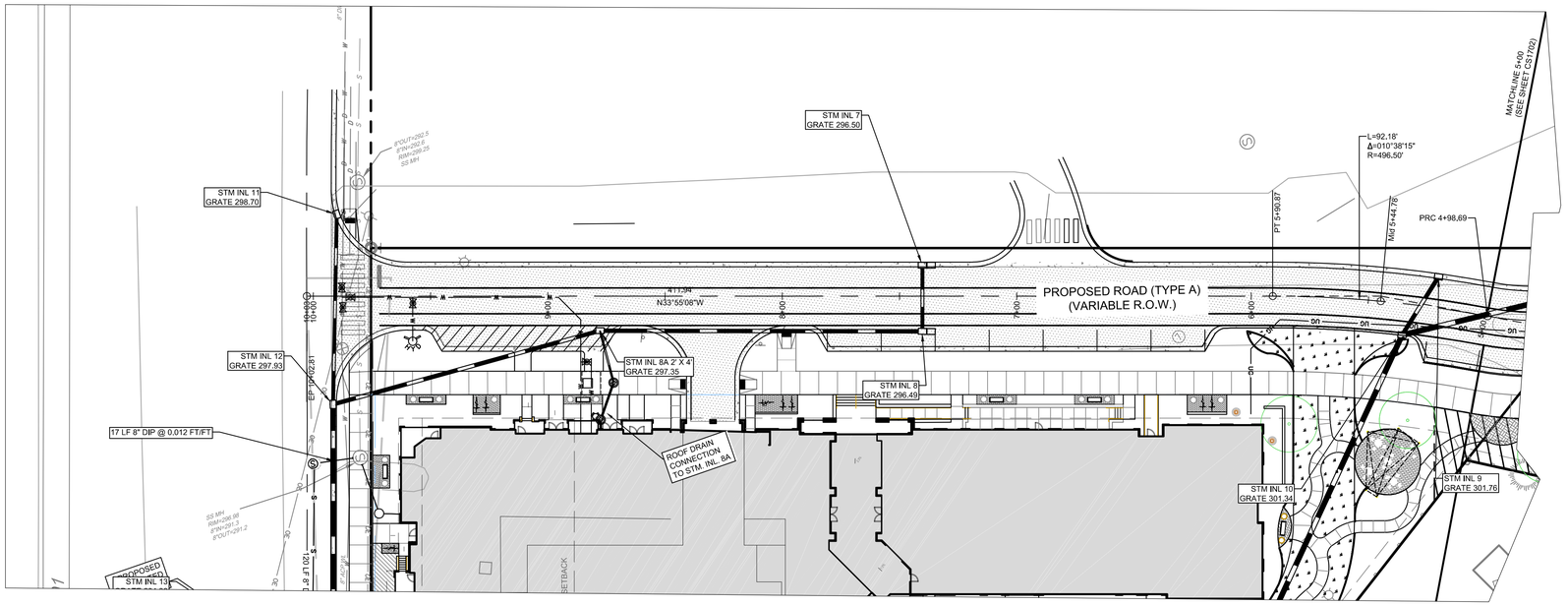
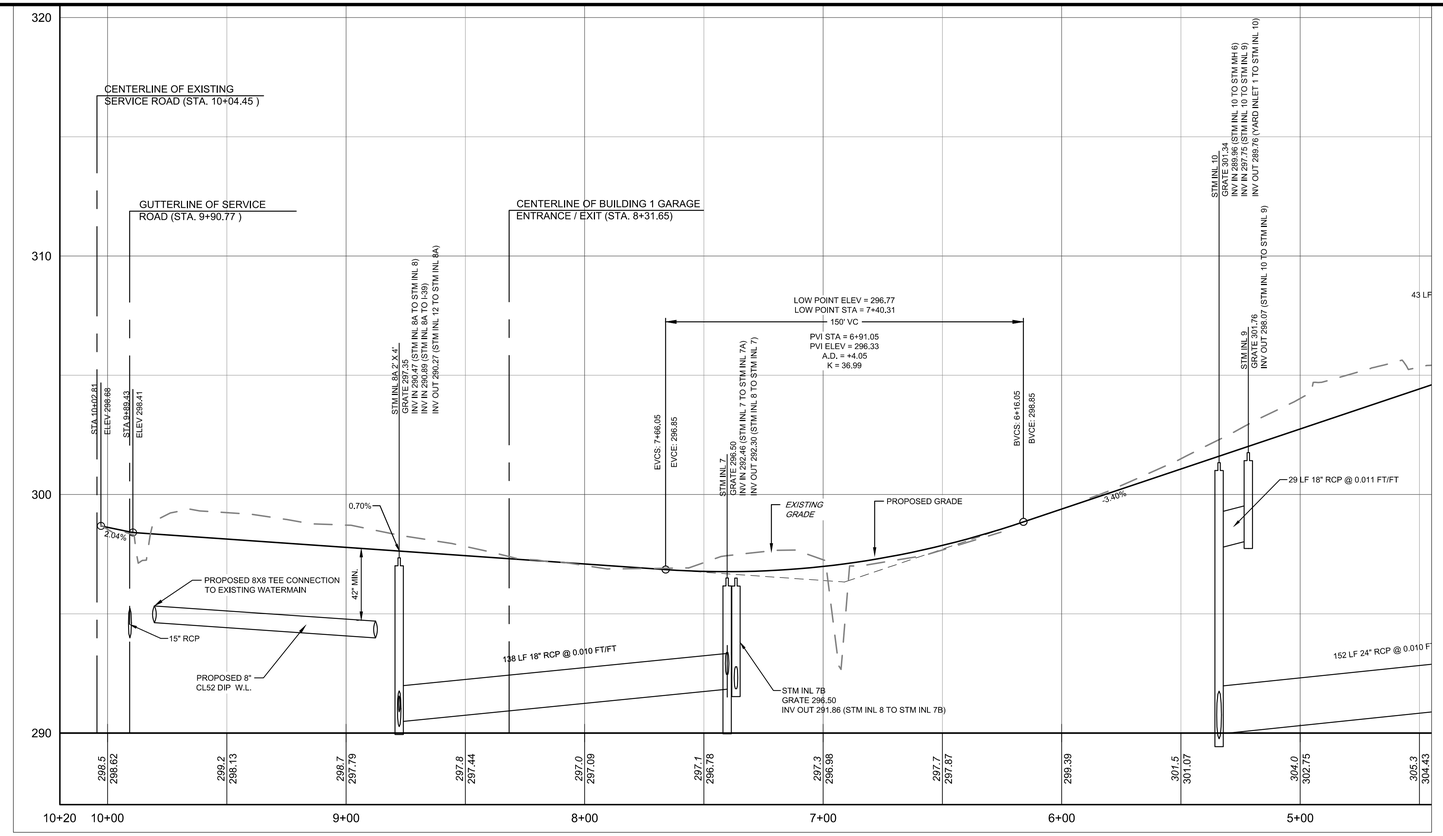


PLAN
SCALE: 1" = 30'



SCALE: HORIZONTAL 1" = 30'
VERTICAL 1" = 3'

0 30' 60'

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NORTH CAROLINA PROFESSIONAL SEAL 030511 ENGINEER TIMOTHY A. SMITH

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CHAPEL HILL, NORTH CAROLINA 27514

PROPOSED ROAD PLAN AND PROFILE

LEON CAPITAL GROUP
5970 FAIRVIEW ROAD, SUITE 450
CHARLOTTE, NORTH CAROLINA 28210

DATE	NO.	REVISIONS	BY
2/8/2017	1	REVISIONS PER TOWN'S REVIEW COMMENTS	WRA
4/7/2017	2	TOWN COMMENT REVISIONS REVIEW #2	WRA
6/15/2017	3	TOWN COMMENT REVISIONS REVIEW #3	WRA
7/31/2017	4	TOWN COMMENT REVISIONS REVIEW #4	WRA

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PROJECT	LCGR1602
DATE	DECEMBER 7, 2016
DRAWING SCALE	1" = 30'
DRAWN BY	WRA
APPROVED BY	TAS

CS3501

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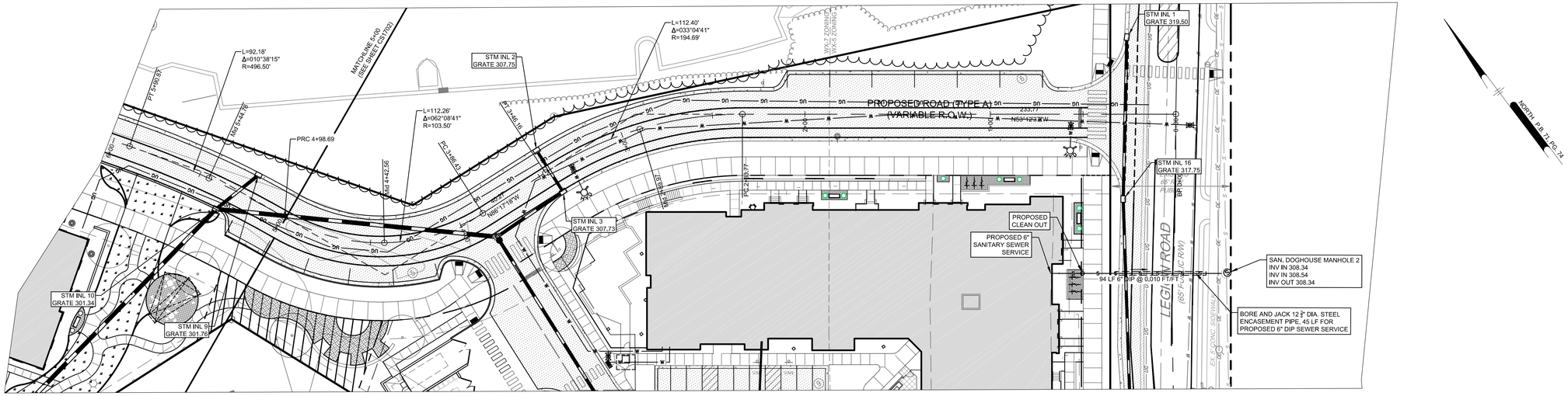
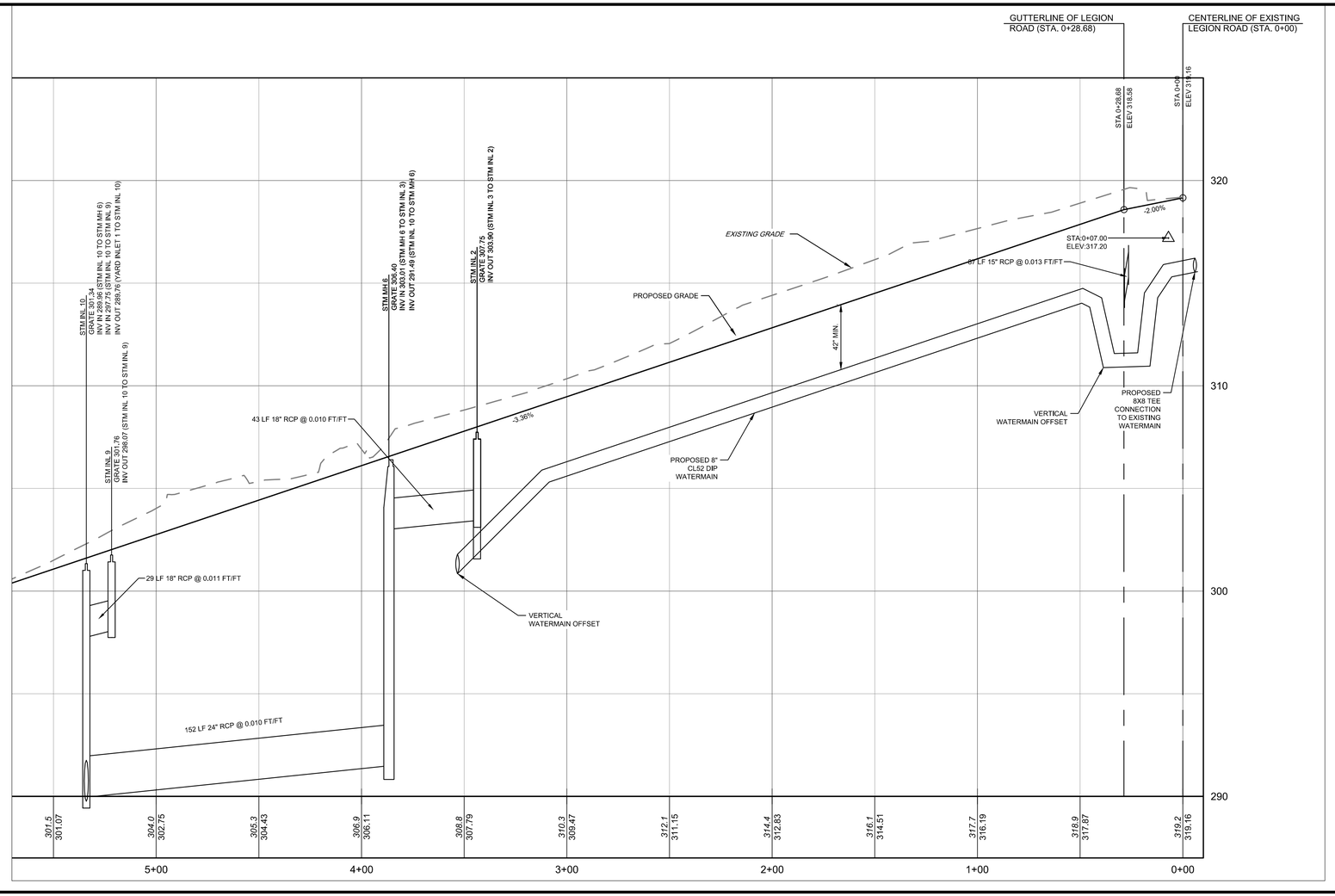


PLAN
SCALE: 1" = 30'



0 30' 60'

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HILLSTONE CHAPEL HILL

1730 FORDHAM BLVD.
CHAPEL HILL, NORTH CAROLINA 27514

PROPOSED ROAD PLAN AND PROFILE

LEON CAPITAL GROUP
5970 FAIRVIEW ROAD, SUITE 450
CHARLOTTE, NORTH CAROLINA 28210

DATE	NO.	REVISIONS	BY
7/31/2017	4	TOWN COMMENT REVISIONS REVIEW #4	WRA
6/15/2017	3	TOWN COMMENT REVISIONS REVIEW #3	WRA
4/7/2017	2	TOWN COMMENT REVISIONS REVIEW #2	WRA
2/8/2017	1	REVISIONS PER TOWN'S REVIEW COMMENTS	WRA

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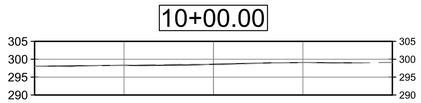
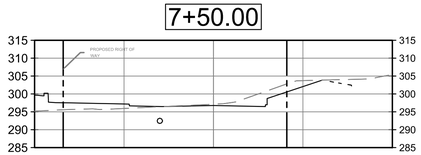
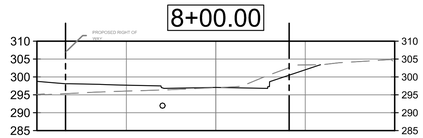
PROJECT	LCGR1602
DATE	DECEMBER 7, 2016
DRAWING SCALE	1" = 30'
DRAWN BY	WRA
APPROVED BY	TAS

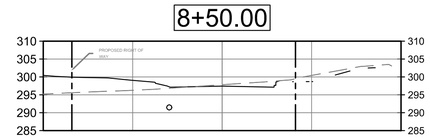
CS3502

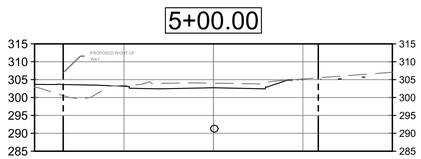
P:\Projects\LCGROUP\LCGR1602-Apartment Site\DESIGN_PUBLISH\CS3502.dwg PLOTTED: 8/18/2017 4:35 PM, BY: Donald Chilly PLOTSTYLE: Pennoni NCS.ctb PROJECT STATUS: DESIGN/DEVELOPMENT

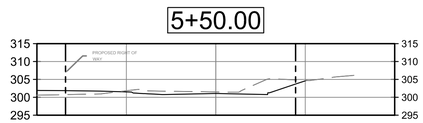


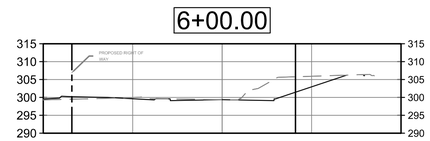


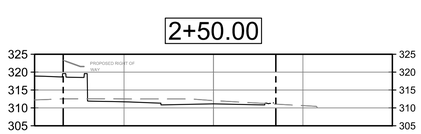


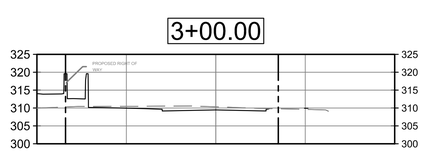


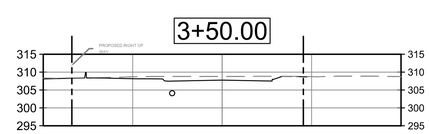


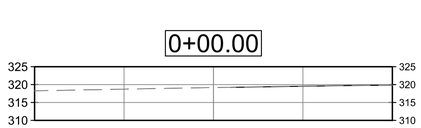


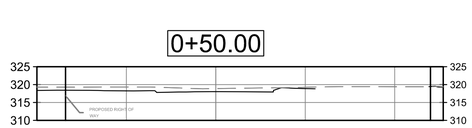


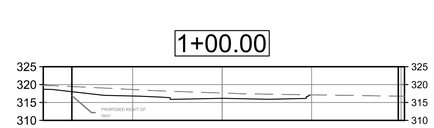












HORIZONTAL 0 20' 40'

VERTICAL 0 20' 40'

P:\Projects\LCGRC\MLLCGR1602-Apartment Site\DESIGN_PUBLISH\CS3503.dwg PLOTTED: 8/18/2017 4:38 PM, BY: Donald Chilly PLOTSTYLE: Pennoni.MCS.ctb PROJECT STATUS: DESIGN DEVELOPMENT

PHILIP POST & ASSOCIATES
A Division of PENNONI Firm License F-1267
PENNONI ASSOCIATES INC.
401 Providence Road #200
Chapel Hill, NC 27514
T 919.929.1173 F 919.493.6548

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

NOT FOR CONSTRUCTION

HILLSTONE CHAPEL HILL
1730 FORDHAM BLVD.
CHAPEL HILL, NORTH CAROLINA 27514

NEW STREET CROSS SECTIONS

LEON CAPITAL GROUP
5970 FAIRVIEW ROAD, SUITE 450
CHARLOTTE, NORTH CAROLINA 28210

DATE	NO.	REVISIONS	BY
7/31/2017	4	TOWN COMMENT REVISIONS REVIEW #4	WRA
6/15/2017	3	TOWN COMMENT REVISIONS REVIEW #3	WRA
4/17/2017	2	TOWN COMMENT REVISION REVIEW #2	WRA
2/20/2017	1	REVISIONS PER TOWN'S REVIEW COMMENTS	WRA

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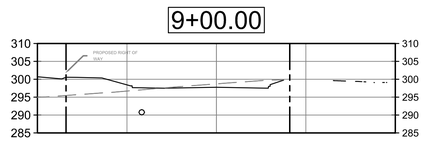
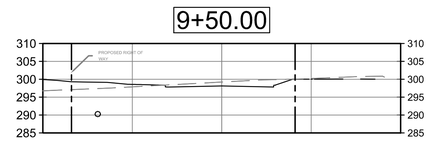
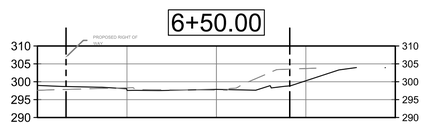
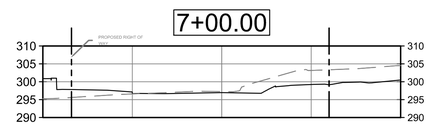
PROJECT	LCGR1602
DATE	APRIL 10, 2017
DRAWING SCALE	1" = 30'
DRAWN BY	WRA
APPROVED BY	TAS

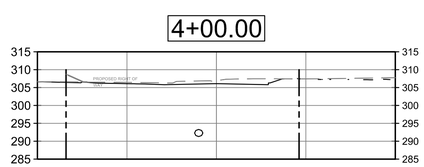
CS3503

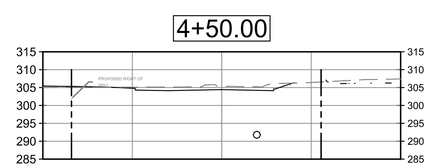


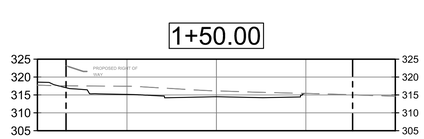


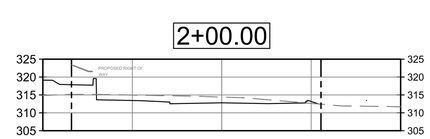












HORIZONTAL 0 20' 40'

VERTICAL 0 20' 40'

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401 Providence Road #200
Chapel Hill, NC 27514
T 919.929.1173 F 919.493.6548

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NOT FOR CONSTRUCTION

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1730 FORDHAM BLVD.
CHAPEL HILL, NORTH CAROLINA 27514

NEW STREET CROSS SECTIONS

LEON CAPITAL GROUP
5970 FAIRVIEW ROAD, SUITE 450
CHARLOTTE, NORTH CAROLINA 28210

DATE	NO.	REVISIONS	BY
7/31/2017	4	TOWN COMMENT REVISIONS REVIEW #4	WRA
6/15/2017	3	TOWN COMMENT REVISIONS REVIEW #3	WRA
4/7/2017	2	TOWN COMMENT REVISION REVIEW #2	WRA
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PROJECT	LCGR1602
DATE	DECEMBER 7, 2016
DRAWING SCALE	1" = 30'
DRAWN BY	WRA
APPROVED BY	TAS

CS3504

P:\Projects\LCGRCOM\LCGR1602-Apartment Site\DESIGN_PUBLISH\CS3504.dwg PLOTTED: 8/18/2017 4:37 PM, BY: Donald Chilly PLOTSTYLE: Pennoni.MCS.ctb PROJECT STATUS: DESIGN DEVELOPMENT

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PENNONI ASSOCIATES INC.
401 Providence Road #200
Chapel Hill, NC 27514
T 919.929.1173 F 919.493.6548

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1730 FORDHAM BLVD.
CHAPEL HILL, NORTH CAROLINA 27514

EASEMENTS AND RIGHT-OF-WAY PLAN

LEON CAPITAL GROUP
5970 FAIRVIEW ROAD, SUITE 450
CHARLOTTE, NORTH CAROLINA 28210

DATE	NO.	REVISIONS	BY
7/31/2017	4	TOWN COMMENT REVISIONS REVIEW #4	WRA
6/15/2017	3	TOWN COMMENT REVISIONS REVIEW #3	WRA
4/7/2017	2	TOWN COMMENT REVISIONS REVIEW #2	WRA
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PROJECT	LCGR1602
DATE	DECEMBER 7, 2016
DRAWING SCALE	1" = 40'
DRAWN BY	WRA
APPROVED BY	TAS

CS3601

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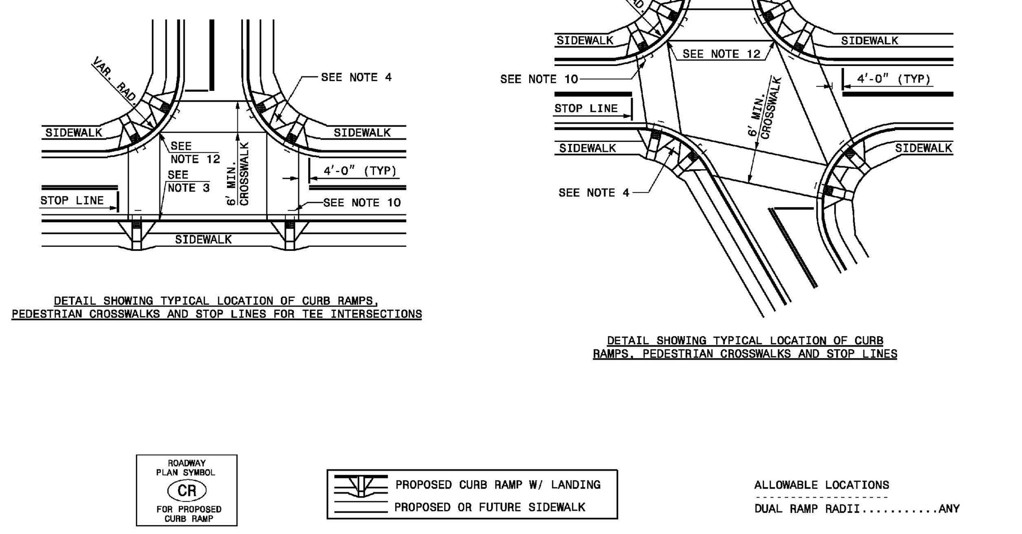
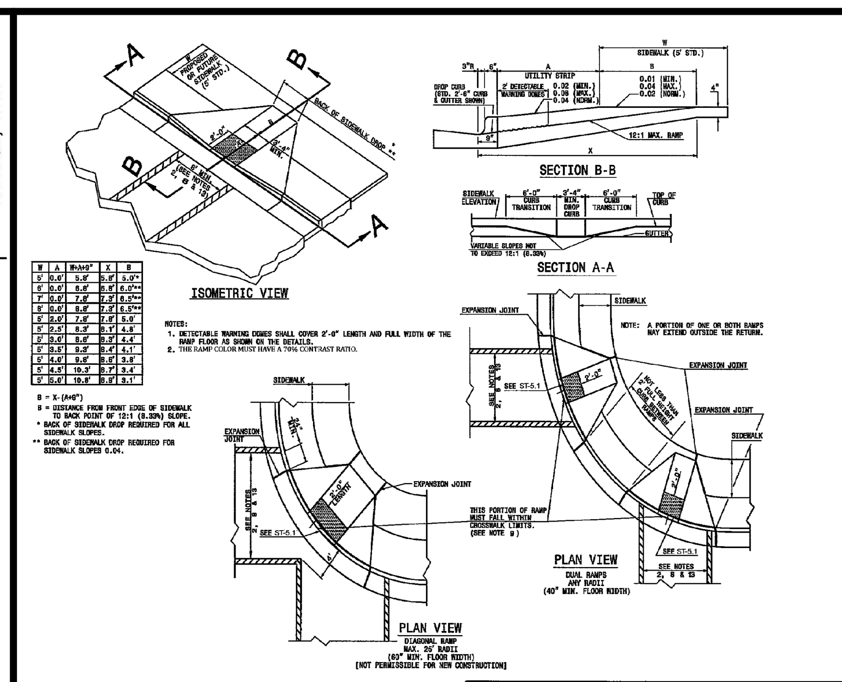


1-12 STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR **CURB RAMP** PROPOSED CURB AND GUTTER

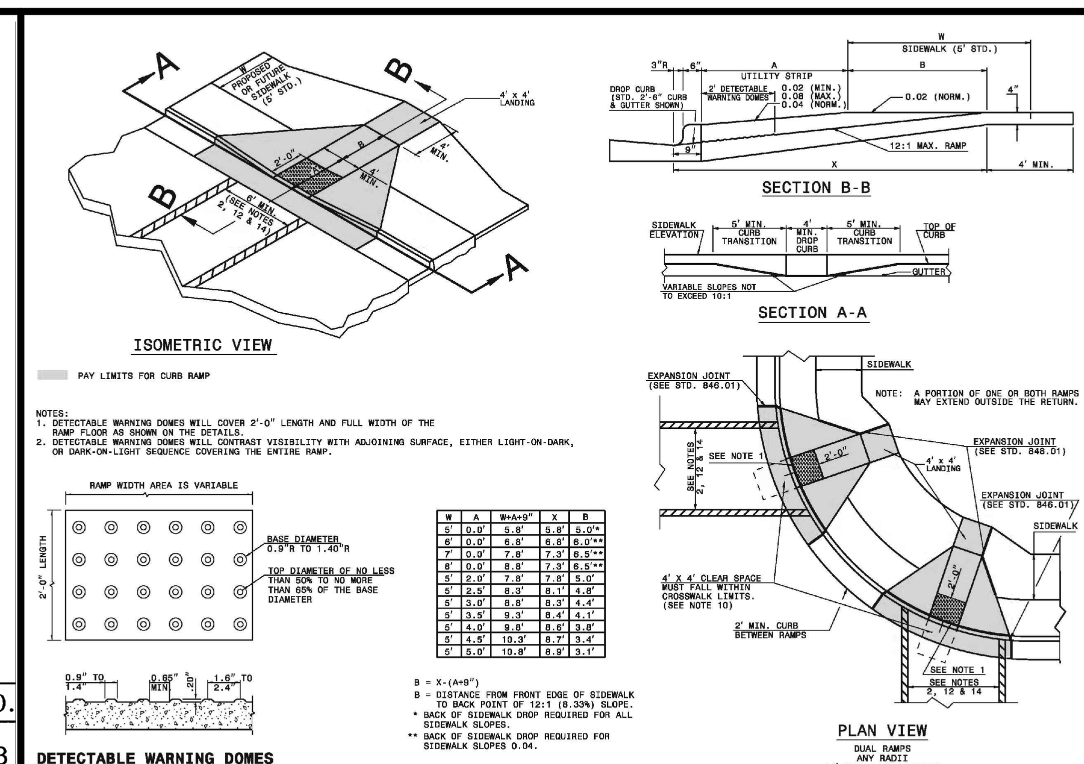
SHEET 2 OF 3 848.05



NOTE: DRAWING NOT TO SCALE
SOURCE: NCDOT STANDARD DRAWINGS

TITLE:	REVISIONS		DET.NO.
ACCESSIBLE RAMP	09/03 02/08	JH ER	ST - 5.3

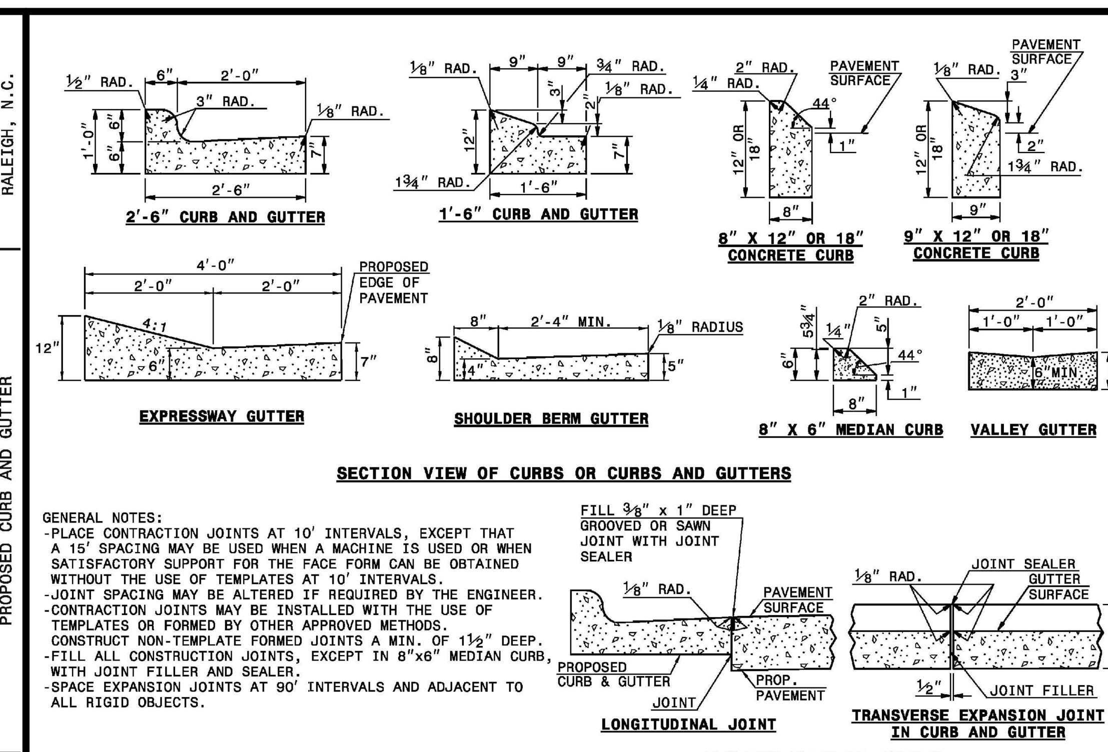
ENGINEERING DEPARTMENT STANDARD DETAILS



1-12 STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR **CURB RAMP** PROPOSED CURB AND GUTTER

SHEET 1 OF 3 848.05

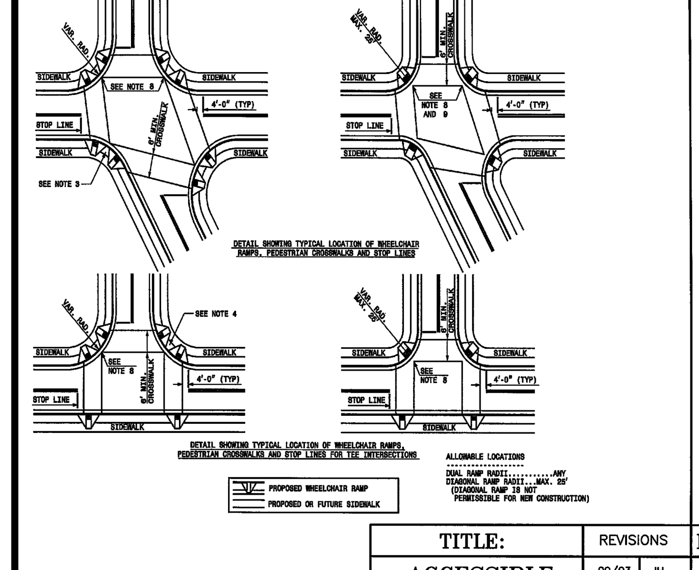


GENERAL NOTES:
- PLACE CONTRACTION JOINTS AT 10' INTERVALS, EXCEPT THAT A 15' SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10' INTERVALS.
- JOINT SPACING MAY BE ALTERED IF REQUIRED BY THE ENGINEER.
- CONTRACTION JOINTS MAY BE INSTALLED WITH THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. CONSTRUCT NON-TEMPLATE FORMED JOINTS A MIN. OF 1½" DEEP.
- FILL ALL CONSTRUCTION JOINTS, EXCEPT IN 8"x6" MEDIAN CURB, WITH JOINT FILLER AND SEALER.
- SPACE EXPANSION JOINTS AT 90' INTERVALS AND ADJACENT TO ALL RIGID OBJECTS.

1-12 STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR **CONCRETE CURB, GUTTER AND CURB & GUTTER**

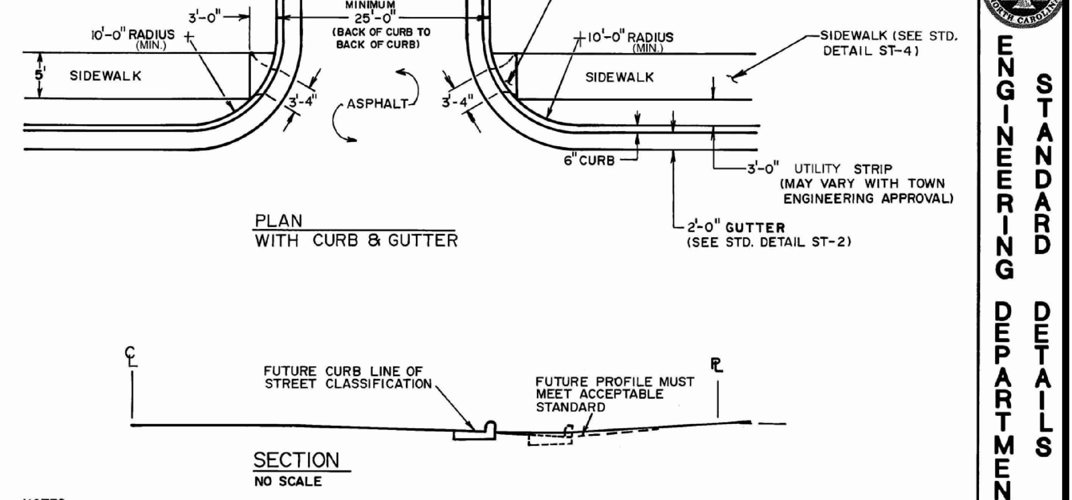
SHEET 1 OF 3 846.01



NOTE: DRAWING NOT TO SCALE
SOURCE: NCDOT STANDARD DRAWINGS

TITLE:	REVISIONS		DET.NO.
ACCESSIBLE RAMP	09/03	JH	ST - 5.2

ENGINEERING DEPARTMENT STANDARD DETAILS

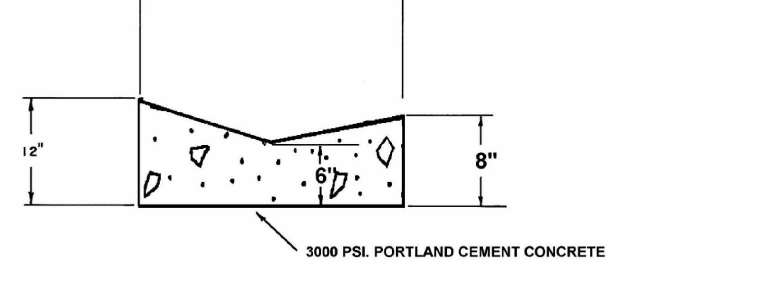


NOTES:
1. FOR COMMERCIAL & MULTI-FAMILY USES ONLY.
2. DRIVES TO BE GRADED TO DRAIN TOWARD STREET FROM PROPERTY LINE & AWAY FROM STREET FROM PROPERTY LINE UNLESS STORM DRAINAGE STRUCTURES ARE PROVIDED TO INTERCEPT STORM FLOWS.
3. DRIVE GRADE PROFILE SHALL BE DESIGNED TO TIE IN WITH ULTIMATE WIDENING OF STREET.

NO SCALE

TITLE	REVISIONS			DET.NO.
DRIVEWAY-STREET TYPE, CURB & GUTTER SECTION	NO	DATE	BY	D-3

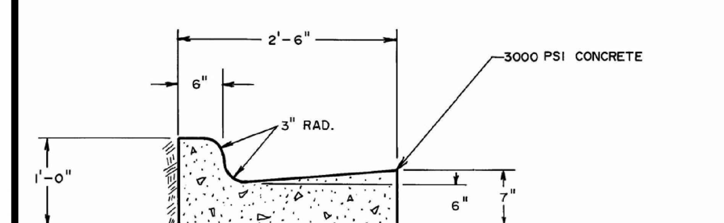
ENGINEERING DEPARTMENT STANDARD DETAILS



MANAGER'S PRIOR APPROVAL REQUIRED
FIRE LANE ENTRANCE

TITLE	REVISIONS			DET.NO.
VALLEY CURB AND GUTTER SECTION	NO	DATE	BY	ST-2C

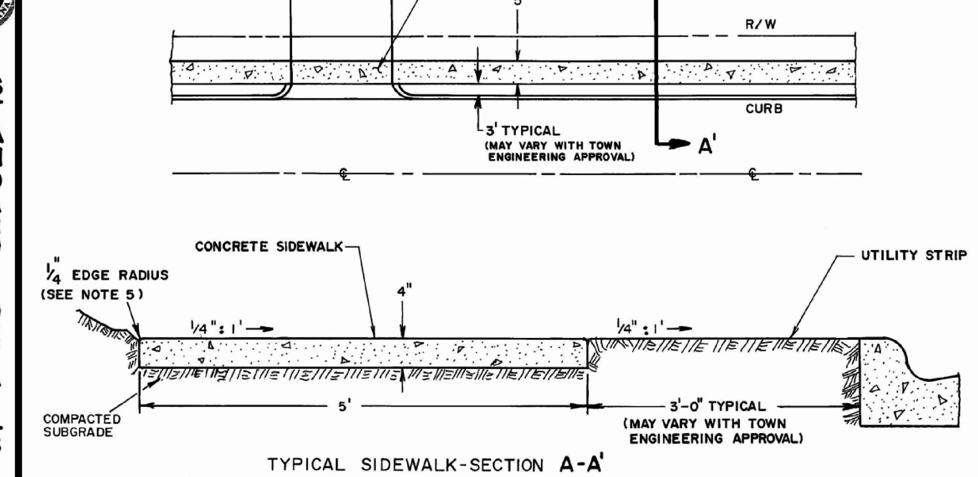
ENGINEERING DEPARTMENT STANDARD DETAILS



SCALE: 1"=1'-0"

TITLE	REVISIONS			DET.NO.
CURB & GUTTER SECTION	NO	DATE	BY	ST-2

ENGINEERING DEPARTMENT STANDARD DETAILS



NOTES:
1. ALL CONCRETE 3000 PSI.
2. SEE STANDARD DETAIL "D-1" FOR THROUGH DRIVEWAY SPECIFICATIONS.
3. EXPANSION JOINTS 50' APART MAXIMUM.
4. CONTROL JOINT EVERY 5 FEET.
5. ALL SIDEWALKS SHALL BE CONSTRUCTED WITH TOOLED ¼" EDGE RADIUS.
6. IF UTILITY STRIP IS COMPLETELY ELIMINATED, SIDEWALK SHALL BE PLACED DIRECTLY AT BACK-OF-CURB, WITH ¼" EDGE RADIUS.

NO SCALE

TITLE	REVISIONS			DET.NO.
TYPICAL SIDEWALK	NO	DATE	BY	ST-4

ENGINEERING DEPARTMENT STANDARD DETAILS

NOTES:

1. CONSTRUCT THE WALKING SURFACE WITH SLIP RESISTANCE AND A 70% CONTRASTING COLOR TO THE SIDEWALK.
2. CROSSWALK WIDTHS AND CONFIGURATION MAY VARY BUT MUST CONFORM TO TRAFFIC DESIGN STANDARDS.
3. PROVIDE WHEELCHAIR RAMPS AT LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. LOCATE WHEELCHAIR RAMPS AS DIRECTED BY THE ENGINEER WHERE EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. AFFECT PLACEMENT. WHERE TWO RAMPS ARE INSTALLED, PLACE NOT LESS THAN TWO FEET OF FULL HEIGHT CURB BETWEEN THE RAMPS. PLACE DUAL RAMPS AS PERPENDICULAR TO THE TRAVEL LANE BEING CROSSED AS POSSIBLE .
4. DO NOT EXCEED 0.08 (12:1) SLOPE ON THE WHEELCHAIR RAMP IN RELATIONSHIP TO THE GRADE OF THE STREET.
5. CONSTRUCT WHEELCHAIR RAMPS 40" (3'–4") OR GREATER FOR DUAL RAMPS AND 60" (5'–0") OR GREATER FOR DIAGONAL RAMPS.
6. USE CONCRETE WITH A SIDEWALK FINISH IN ORDER TO OBTAIN A ROUGH NON–SKID TYPE SURFACE.
7. PLACE A 1/2" EXPANSION JOINT WHERE THE CONCRETE WHEELCHAIR RAMP JOINS THE CURB AS SHOWN ON DETAIL ST–5A.
8. PLACE THE INSIDE PEDESTRIAN CROSSWALK LINES NO CLOSER IN THE INTERSECTION BY BISECTING THE INTERSECTION RADII, WITH ALLOWANCE OF A 4' CLEAR ZONE IN THE VEHICULAR TRAVELWAY WHEN ONE RAMP IS INSTALLED. (SEE NOTE 13)
9. COORDINATE THE CURB CUT AND THE PEDESTRIAN CROSSWALK LINES SO THE FLOOR OF THE WHEELCHAIR RAMP WILL FALL WITHIN THE PEDESTRIAN CROSSWALK LINES. PLACE DIAGONAL RAMPS WITH FLARED SIDES SO 24" OF FULL HEIGHT CURB FALLS WITHIN THE CROSSWALK MARKINGS ON EACH SIDE OF THE FLARES.
10. CONSTRUCT THE PEDESTRIAN CROSSWALK A MINIMUM OF 6 FEET. A CROSSWALK WIDTH OF 8 FEET OR GREATER IS DESIRABLE.
11. USE STOP LINES, NORMALLY PERPENDICULAR TO THE LANE LINES, WHERE IT IS IMPORTANT TO INDICATE THE POINT BEHIND WHICH VEHICLES ARE REQUIRED TO STOP IN COMPLIANCE WITH A TRAFFIC SIGNAL, STOP SIGN OR OTHER LEGAL REQUIREMENT. AN UNUSUAL APPROACH SKEW MAY REQUIRE THE PLACEMENT OF THE STOP LINE TO BE PARALLEL TO THE INTERSECTION ROADWAY.
12. TERMINATE PARKING A MINIMUM OF 20 FEET BACK OF PEDESTRIAN CROSSWALK.
13. PLACE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION AND THE NORTH CAROLINA SUPPLEMENT TO THE MUTCD.

SOURCE: NCDOT STANDARD DRAWINGS

TITLE:	REVISIONS		DET.NO.
ACCESSIBLE RAMP	09/03	JH	ST - 5.4

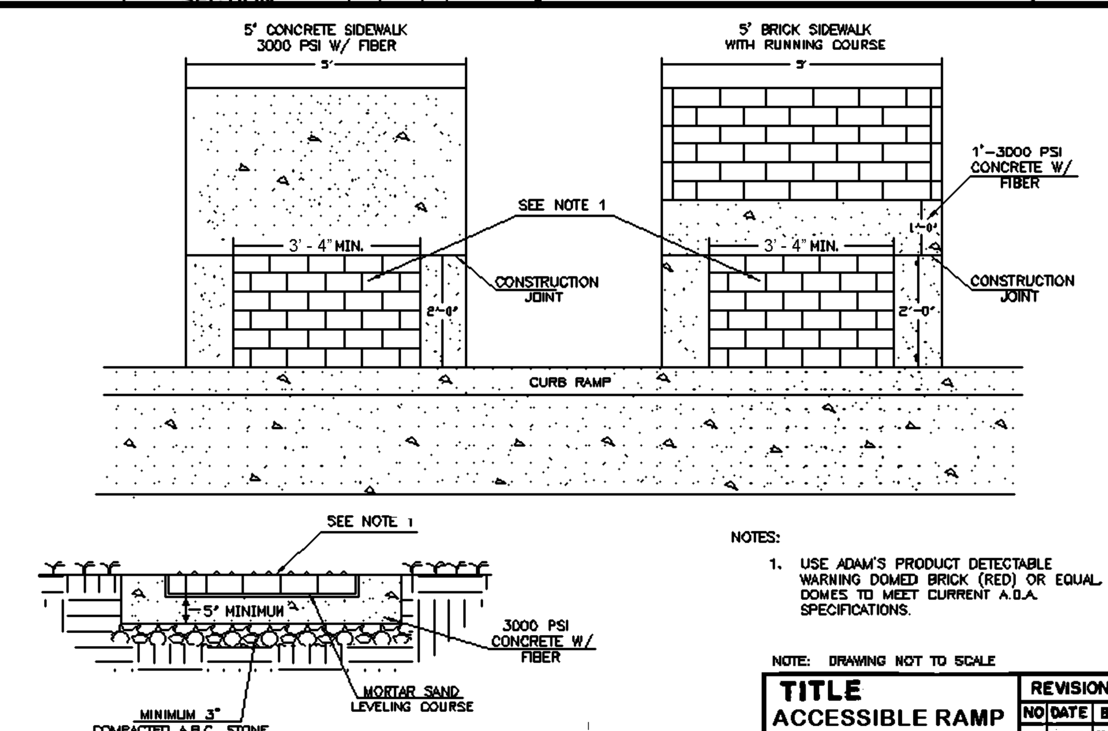
ENGINEERING DEPARTMENT STANDARD DETAILS

NOTES:
1. CONSTRUCT THE RAMP SURFACE TO BE STABLE, FIRM, AND SLIP RESISTANT. CONSTRUCT THE CURB RAMP TYPE AS SHOWN IN THE PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER.
2. LOCATE CURB RAMPS AND PLACE PEDESTRIAN CROSSWALK MARKINGS AS SHOWN IN THE PAVEMENT MARKING PLANS. WHEN FIELD ADJUSTMENTS REQUIRE MOVING CURB RAMPS OR MARKINGS AS SHOWN, CONTACT THE SIGNING AND DELINEATION UNIT OR LOCATE AS DIRECTED BY THE ENGINEER.
3. COORDINATE THE CURB RAMP AND THE PEDESTRIAN CROSSWALK MARKINGS SO A 4'x4' CLEAR SPACE AT THE BASE OF THE CURB RAMP WILL FALL WITHIN THE PEDESTRIAN CROSSWALK LINES.
4. SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL LANE IS 4' MINIMUM.
5. REFER TO THE PAVEMENT MARKING PLANS FOR STOP BAR LOCATIONS AT SIGNALIZED INTERSECTIONS. IF A PAVEMENT MARKING PLAN IS NOT PROVIDED, CONTACT THE SIGNAL DESIGN SECTION FOR THE STOP BAR LOCATIONS OR LOCATE AS DIRECTED BY THE ENGINEER.
6. TERMINATE PARKING A MINIMUM OF 20' BACK OF A PEDESTRIAN CROSSWALK.
7. CONSTRUCT CURB RAMPS A MINIMUM OF 4' WIDE.
8. CONSTRUCT THE RUNNING SLOPE OF THE RAMP 8.33% MAXIMUM.
9. ALLOWABLE CROSS SLOPE ON SIDEWALKS AND CURB RAMPS WILL BE 2% MAXIMUM.
10. CONSTRUCT THE SIDE FLARE SLOPE A MAXIMUM OF 10% MEASURED ALONG THE CURB LINE.
11. CONSTRUCT THE COUNTER SLOPE OF THE GUTTER OR STREET AT THE BASE OF THE CURB RAMP A MAXIMUM OF 5% AND MAINTAIN A SMOOTH TRANSITION.
12. CONSTRUCT LANDINGS FOR SIDEWALK A MINIMUM OF 4'x4' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION. CONSTRUCT LANDINGS FOR MEDIAN ISLANDS A MINIMUM OF 5'x5' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION.
13. TO USE A MEDIAN ISLAND AS A PEDESTRIAN REFUGE AREA, MEDIAN ISLANDS WILL BE A MINIMUM OF 6' WIDE. CONSTRUCT MEDIAN ISLANDS TO PROVIDE PASSAGE OVER OR THROUGHT THE ISLAND.
14. SMALL CHANNELIZATION ISLANDS THAT CAN NOT PROVIDE A 5'X5' LANDING AT THE TOP OF A RAMPS, WILL BE CUT THROUGH LEVEL WITH THE SURFACE STREET.
15. CURB RAMPS WITH RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP. THE ADJACENT SURFACE IS PLANTING OR OTHER NON-WALKING SURFACE OR THE SIDE APPROACH IS SUBSTANTIALLY OBSTRUCTED.
16. PLACE A ½" EXPANSION JOINT WHERE THE CONCRETE CURB RAMP JOINS THE CURB AS SHOWN IN ROADWAY STANDARD DRAWING 848.01
17. PLACE ALL PEDESTRIAN PUSH BUTTON ACTUATORS AND CROSSING SIGNALS AS SHOWN IN THE PLANS OR AS SHOWN IN THE MUTCD.
18. CURB RAMPS THROUGH MEDIAN ISLANDS, SINGLE RAMPS AT DUAL CROSSWALKS OR LIMITED R/W SITUATIONS, WILL BE HANDLED BY SPECIAL DETAILS. CONTACT THE CONTRACT STANDARDS AND DEVELOPMENT UNIT FOR THE DETAILS OR FOR A SPECIAL DESIGN.

1-12 STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR **CURB RAMPS** NOTES

SHEET 3 OF 3 848.05

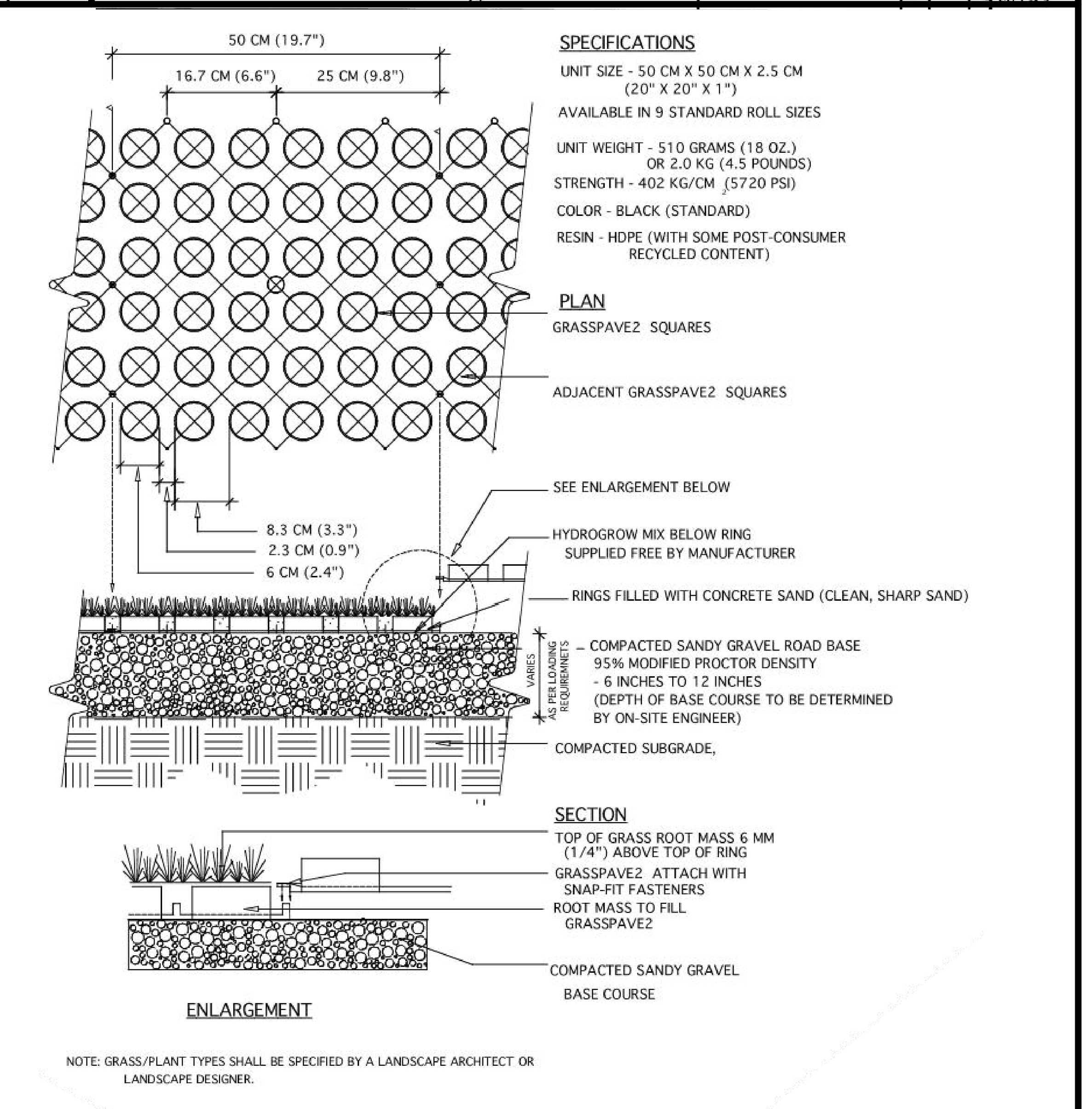


NOTES:
1. USE ADAM'S PRODUCT DETECTABLE WARNING DOMED BRICK (RED) OR EQUAL. DOMES TO MEET CURRENT A.D.A. SPECIFICATIONS.

NOTE: DRAWING NOT TO SCALE

TITLE	REVISIONS			DET.NO
ACCESSIBLE RAMP WITH DETECTABLE WARNING DOMES	NO	DATE	BY	ST-5.1
		4/11/06	MCR	
		5/8/07	LRT	

ENGINEERING DEPARTMENT STANDARD DETAILS



SPECIFICATIONS
UNIT SIZE - 50 CM X 50 CM X 2.5 CM (20" X 20" X 1")
AVAILABLE IN 9 STANDARD ROLL SIZES
UNIT WEIGHT - 510 GRAMS (18 OZ.) OR 2.0 KG (4.5 POUNDS)
STRENGTH - 402 KG/CM (5720 PSI)
COLOR - BLACK (STANDARD)
RESIN - HDPE (WITH SOME POST-CONSUMER RECYCLED CONTENT)

PLAN
GRASSPAVE2 SQUARES
ADJACENT GRASSPAVE2 SQUARES

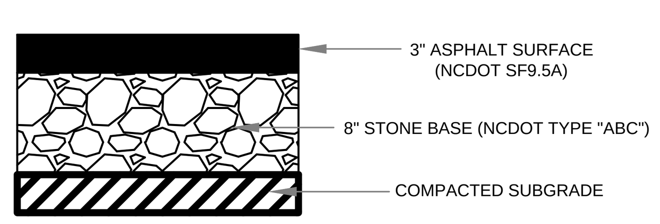
SEE ENLARGEMENT BELOW
HYDROGROW MIX BELOW RING SUPPLIED FREE BY MANUFACTURER
RINGS FILLED WITH CONCRETE SAND (CLEAN, SHARP SAND)
- COMPACTED SANDY GRAVEL ROAD BASE 95% MODIFIED PROCTOR DENSITY - 6 INCHES TO 12 INCHES (DEPTH OF BASE COURSE TO BE DETERMINED BY ON-SITE ENGINEER)
COMPACTED SUBGRADE,

SECTION
TOP OF GRASS ROOT MASS 6 MM (1/4") ABOVE TOP OF RING
GRASSPAVE2 ATTACH WITH SNAP-FIT FASTENERS
ROOT MASS TO FILL GRASSPAVE2
COMPACTED SANDY GRAVEL BASE COURSE

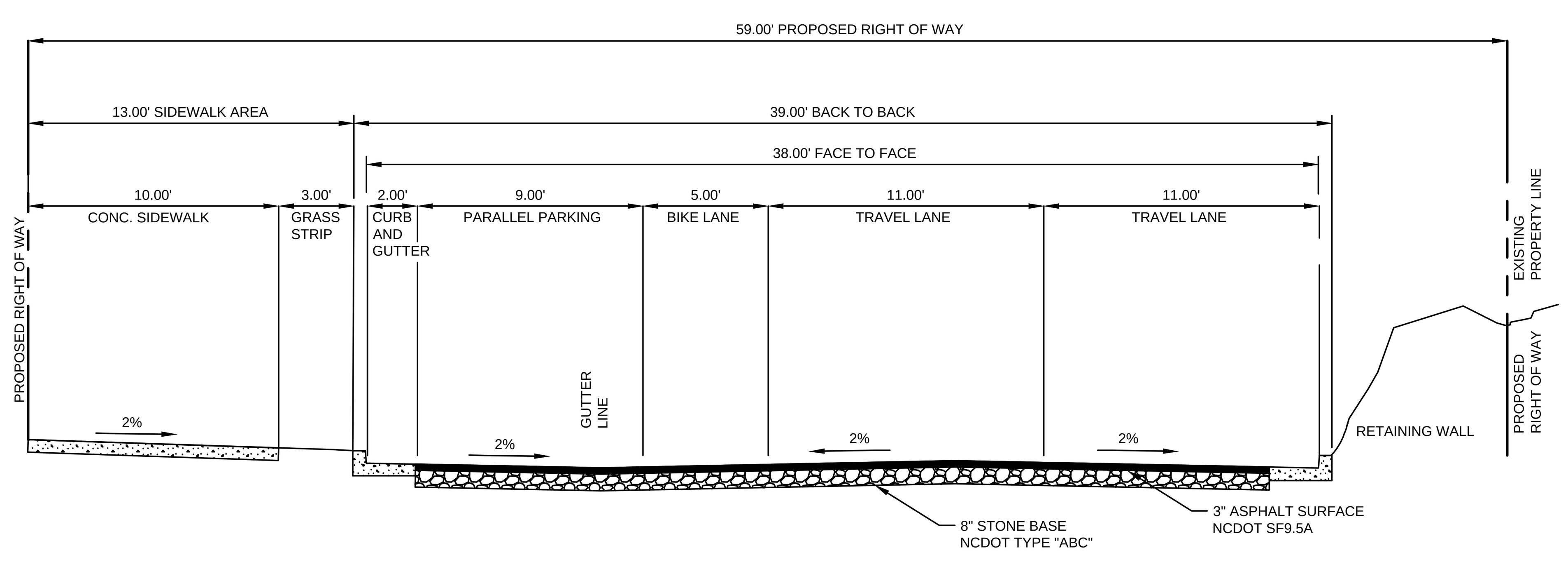
ENLARGEMENT

NOTE: GRASS/PLANT TYPES SHALL BE SPECIFIED BY A LANDSCAPE ARCHITECT OR LANDSCAPE DESIGNER.

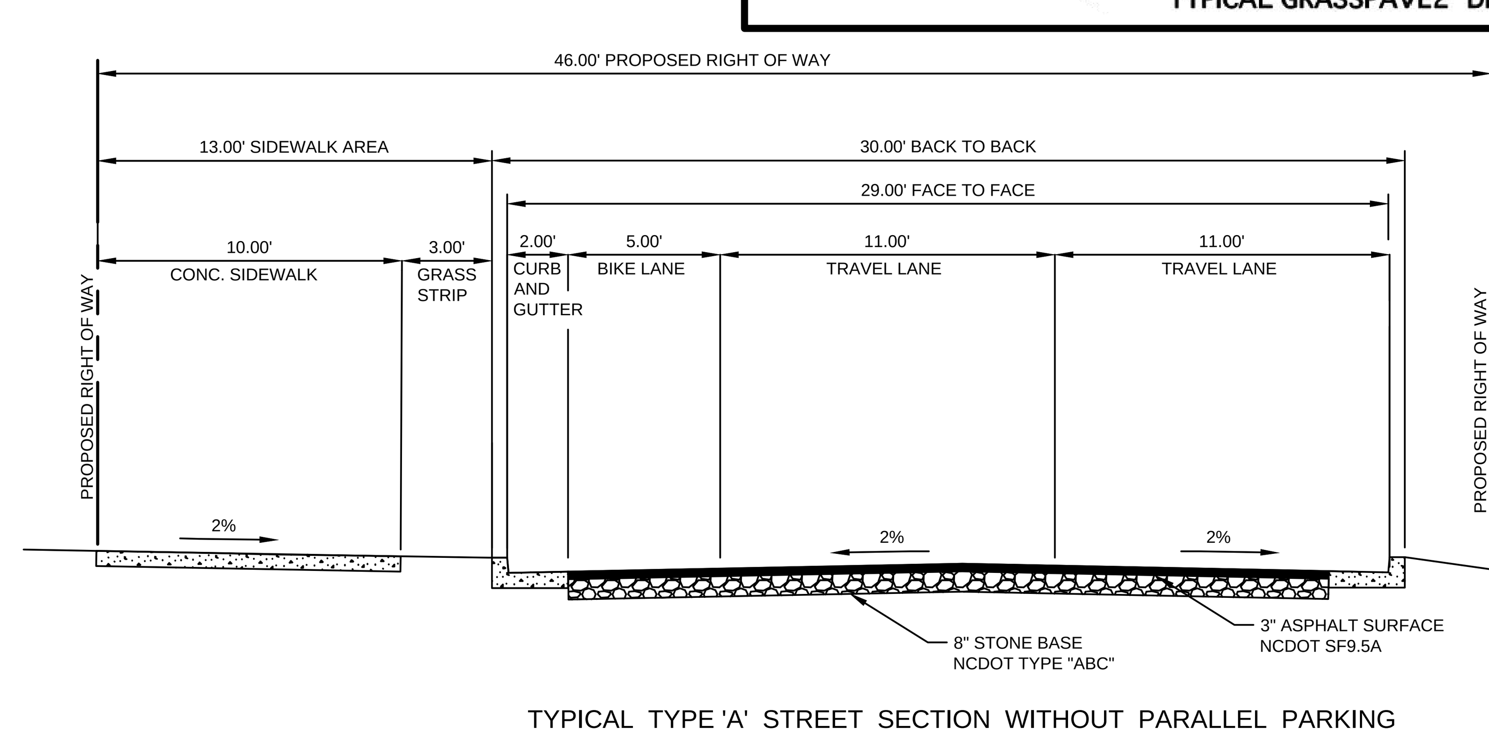
TYPICAL GRASSPAVE2 DETAIL



TYPICAL PAVING SECTION FOR NEW TYPE 'A' STREET



TYPICAL TYPE 'A' STREET SECTION WITH PARALLEL PARKING
1" = 5'



TYPICAL TYPE 'A' STREET SECTION WITHOUT PARALLEL PARKING
1" = 5'

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A Division of Pennoni
Firm License F-1267

PENNONI ASSOCIATES INC.
401 Providence Road #200
Chapel Hill, NC 27514
T 919.929.1173 F 919.493.6548

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

NOT FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030517 TIMOTHY A. SMITH 8-17-17

HILLSTONE CHAPEL HILL
1730 FORDHAM BLVD.
CHAPEL HILL, NORTH CAROLINA 27514

SITE DETAILS

LEON CAPITAL GROUP
5970 FAIRVIEW ROAD, SUITE 450
CHARLOTTE, NORTH CAROLINA 28210

DATE	NO.	REVISIONS	BY
7/31/2017	4	TOWN COMMENT REVISIONS REVIEW #4	DMC
6/15/2017	3	TOWN COMMENT REVISIONS REVIEW #3	WRA
4/7/2017	2	TOWN COMMENT REVISIONS REVIEW #2	WRA
2/20/2017	1	REVISIONS PER TOWN'S REVIEW COMMENTS	WRA

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PROJECT	LCGR1602
DATE	DECEMBER 7, 2016
DRAWING SCALE	1" = 30'
DRAWN BY	WRA
APPROVED BY	TAS

CS6001

P:\Projects\LCGRCOM\LCGR1602-Apartment Site\DESIGN_PUBLISH\CS6001.dwg PLOTTED: 8/17/2017 3:24 PM, BY: Donald Chitty PLOTSTYLE: Pennoni NCS.stb PROJECT STATUS: DESIGN DEVELOPMENT