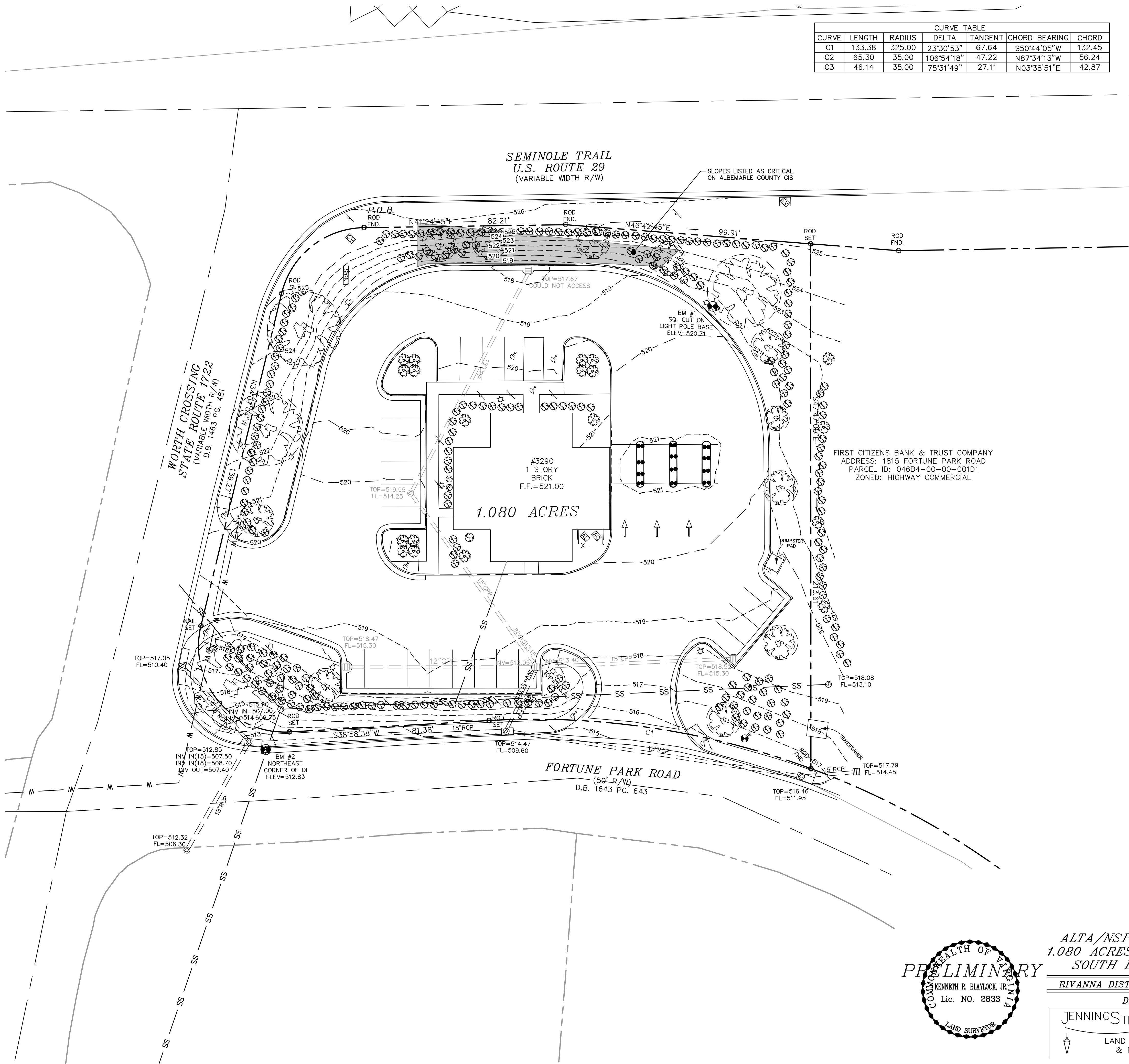
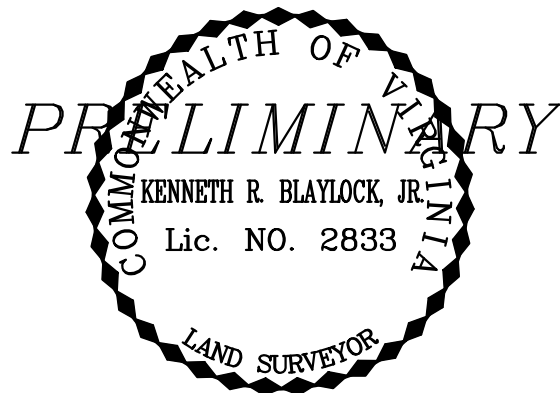
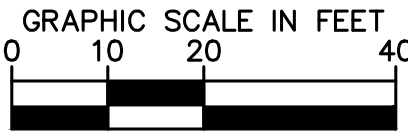
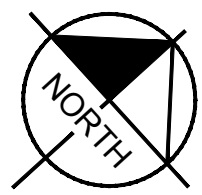


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LEGEND

- DECIDUOUS TREE
- SHRUB
- BOLLARD
- HANDICAP PARKING/RAMP
- BENCHMARK
- CLEANOUT
- ELECTRIC METER
- HVAC UNIT
- ELECTRIC VAULT
- CABLE VAULT
- TELEPHONE PEDESTAL
- SIGN
- FIRE HYDRANT
- WATER VALVE
- WATER METER
- GRATE INLET
- DRAINAGE MANHOLE
- SANITARY MANHOLE
- LIGHT POLE



ALTA/NSPS LAND TITLE SURVEY OF
1.080 ACRES OF LAND LOCATED ON THE
SOUTH LINE OF SEMINOLE TRAIL

RIVANNA DISTRICT * ALBEMARLE COUNTY, VIRGINIA

DATE: OCTOBER 23, 2020

JENNINGSSTEPHENSON P.C.

LAND SURVEYORS
& PLANNERS

10160 STAPLES MILL ROAD
SUITE 103
GLEN ALLEN, VA 23060
PHONE - 804-545-6235
FAX - 804-545-6259
J.N. 20-667

GREEN CLEAN
3290 WORTH XING
PREPARED FOR
GREEN CLEAN

ALBEMARLE COUNTY VIRGINIA

EXISTING
CONDITIONS

KHA PROJECT
113414010
DATE
10/23/2020
SCALE AS SHOWN
DESIGNED BY CBB
DRAWN BY STM
CHECKED BY RRP

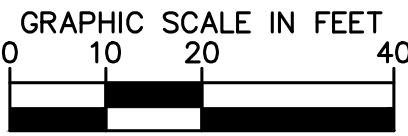
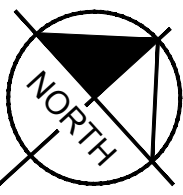
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Plotted By: Baum, Carter Sheet Set: kha Layout: CS-101 SITE PLAN October 23, 2020 09:38:57am K:\RIG-01\113414 - Green Clean\010 - Seminole Trail - Aldemarle County\CAD\PlanSheets\CS-101 SITE PLAN.dwg
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CURVE TABLE						
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD BEARING	CHORD
C1	133.38	325.00	23°30'53"	67.64	S50°44'05"W	132.45
C2	65.30	35.00	106°54'18"	47.22	N87°34'13"W	56.24
C3	46.14	35.00	75°31'49"	27.11	N03°38'51"E	42.87

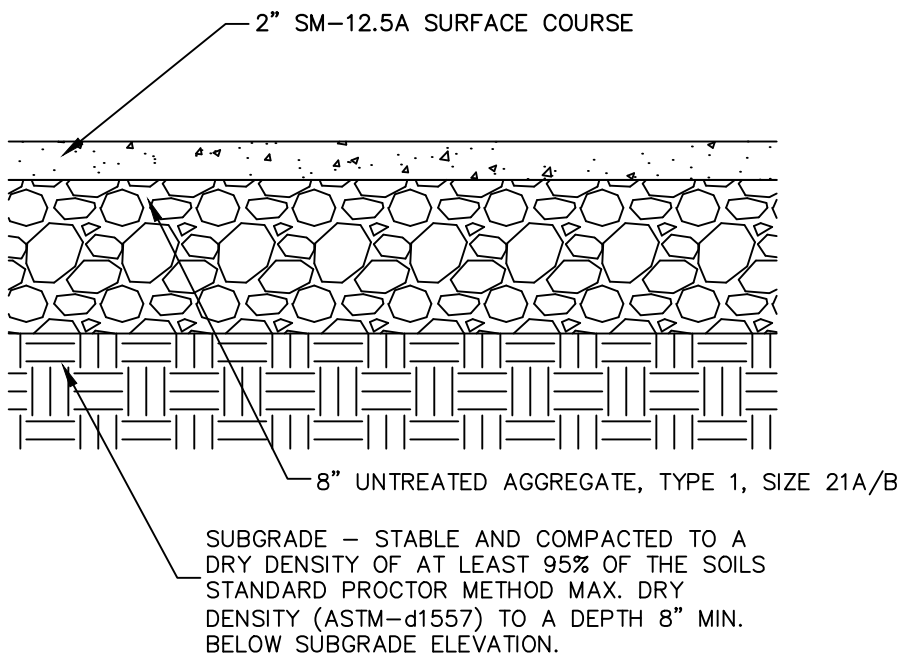


SITE PLAN LEGEND

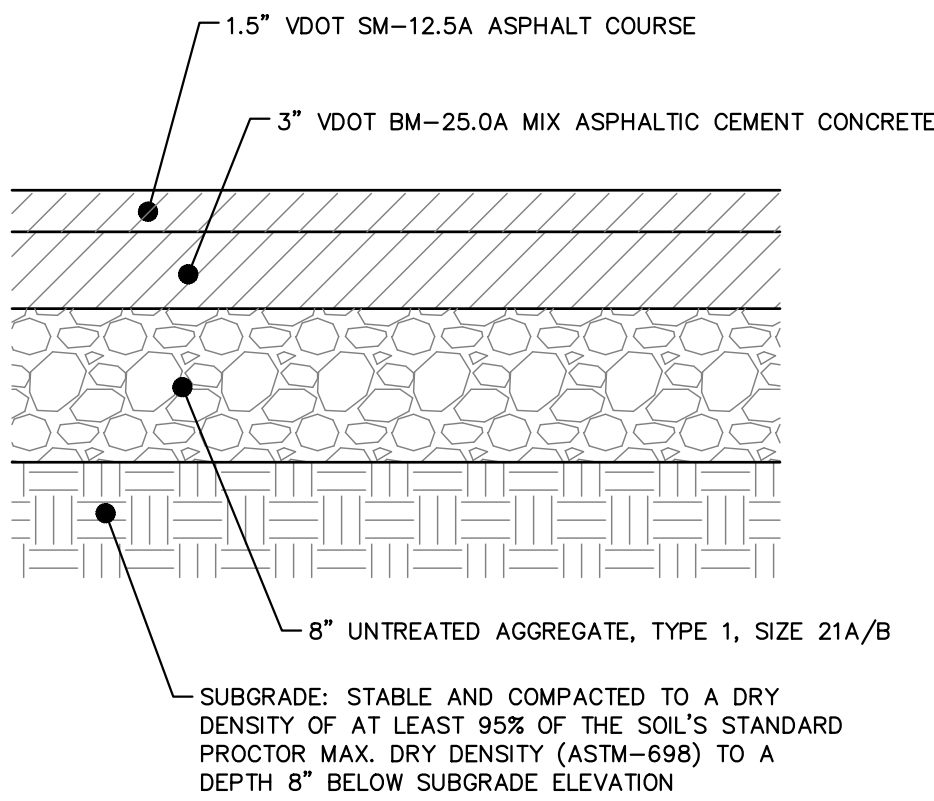
- HEAVY DUTY CONCRETE
- CONCRETE SIDEWALK
- LIGHT DUTY ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- CURB & GUTTER

SITE PLAN NOTES

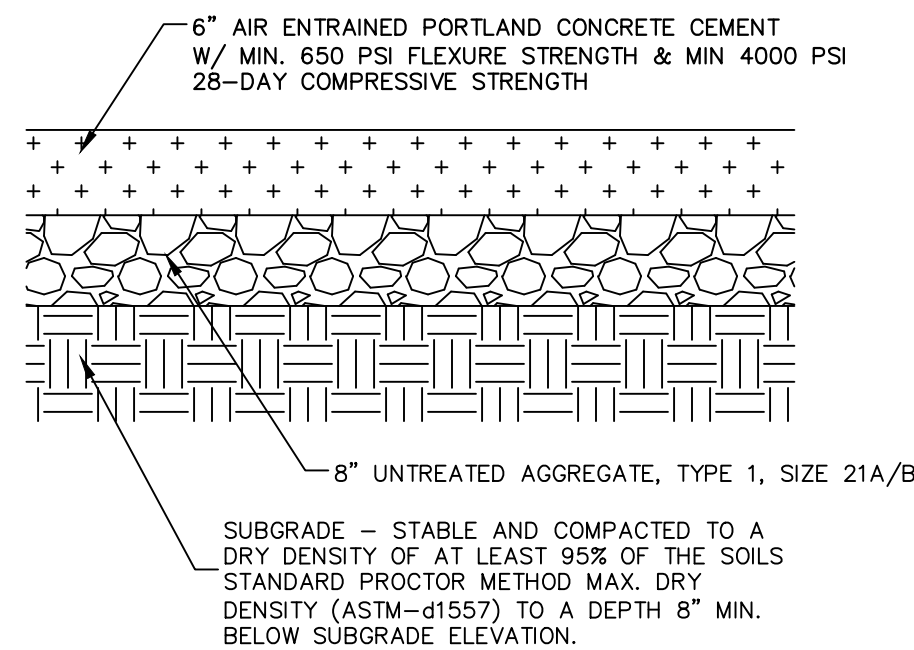
- ALL CURB RADII ARE 5.0' UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL STOP SIGNS, DIRECTIONAL SIGNS, AND STRIPING SHOWN ON THE PLANS.
- TWO COATS OF TRAFFIC PAINT SHALL BE SUPPLIED FOR ALL PAVEMENT STRIPING.
- REFER TO FINAL GEOTECHNICAL REPORT FOR FINAL PAVEMENT SECTIONS.



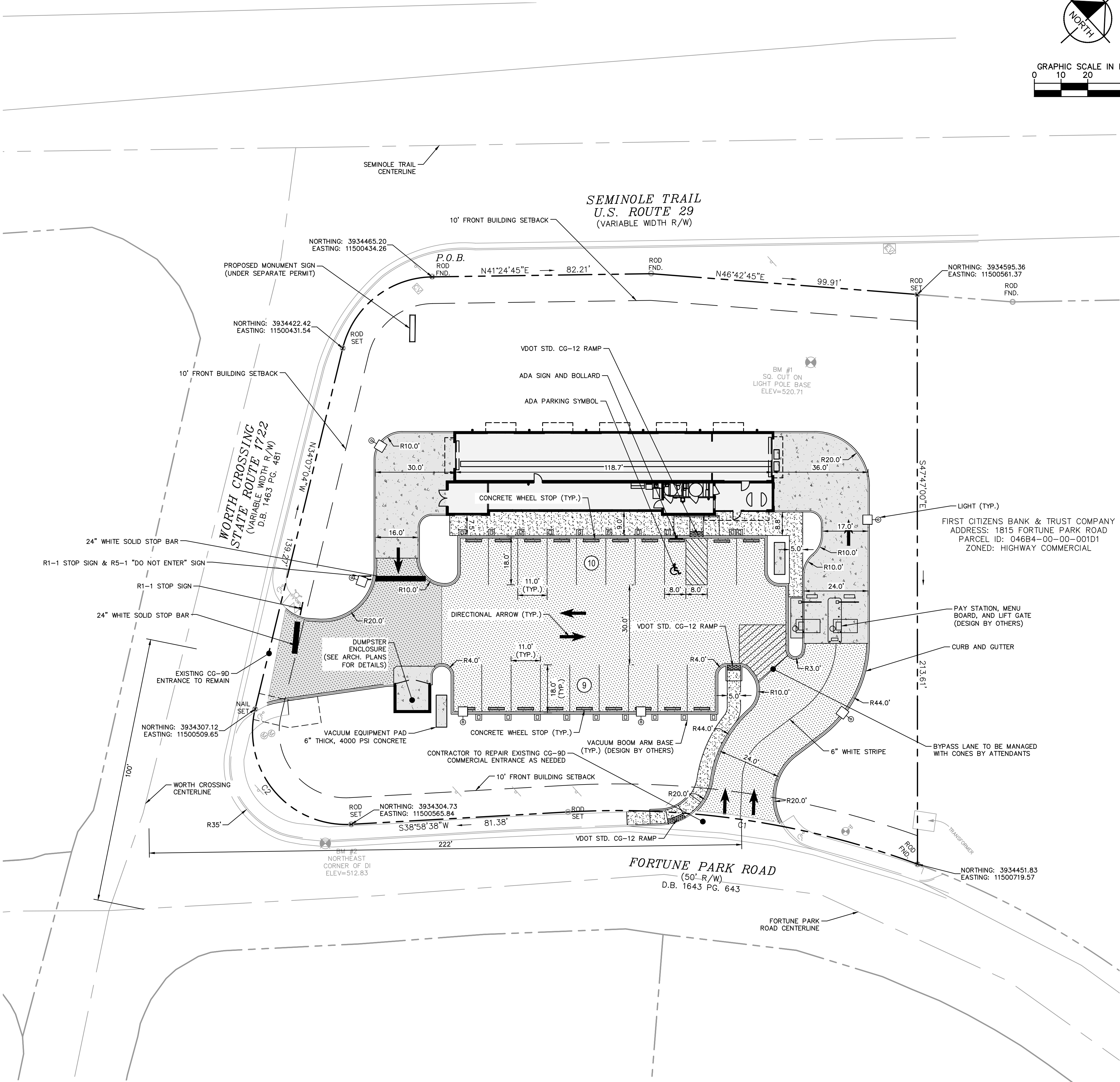
LIGHT DUTY ASPHALT PAVEMENT SECTION
NOT TO SCALE



HEAVY DUTY ASPHALT SECTION
NOT TO SCALE

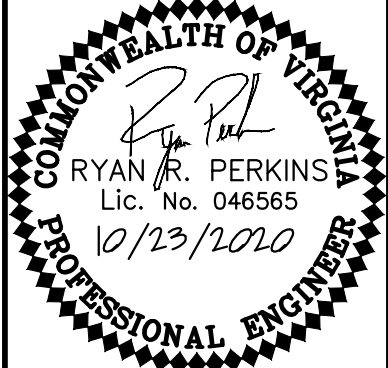


HEAVY DUTY CONCRETE PAVEMENT SECTION
NOT TO SCALE



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113414010	10/23/2020	AS SHOWN	CBE	STM	RRP

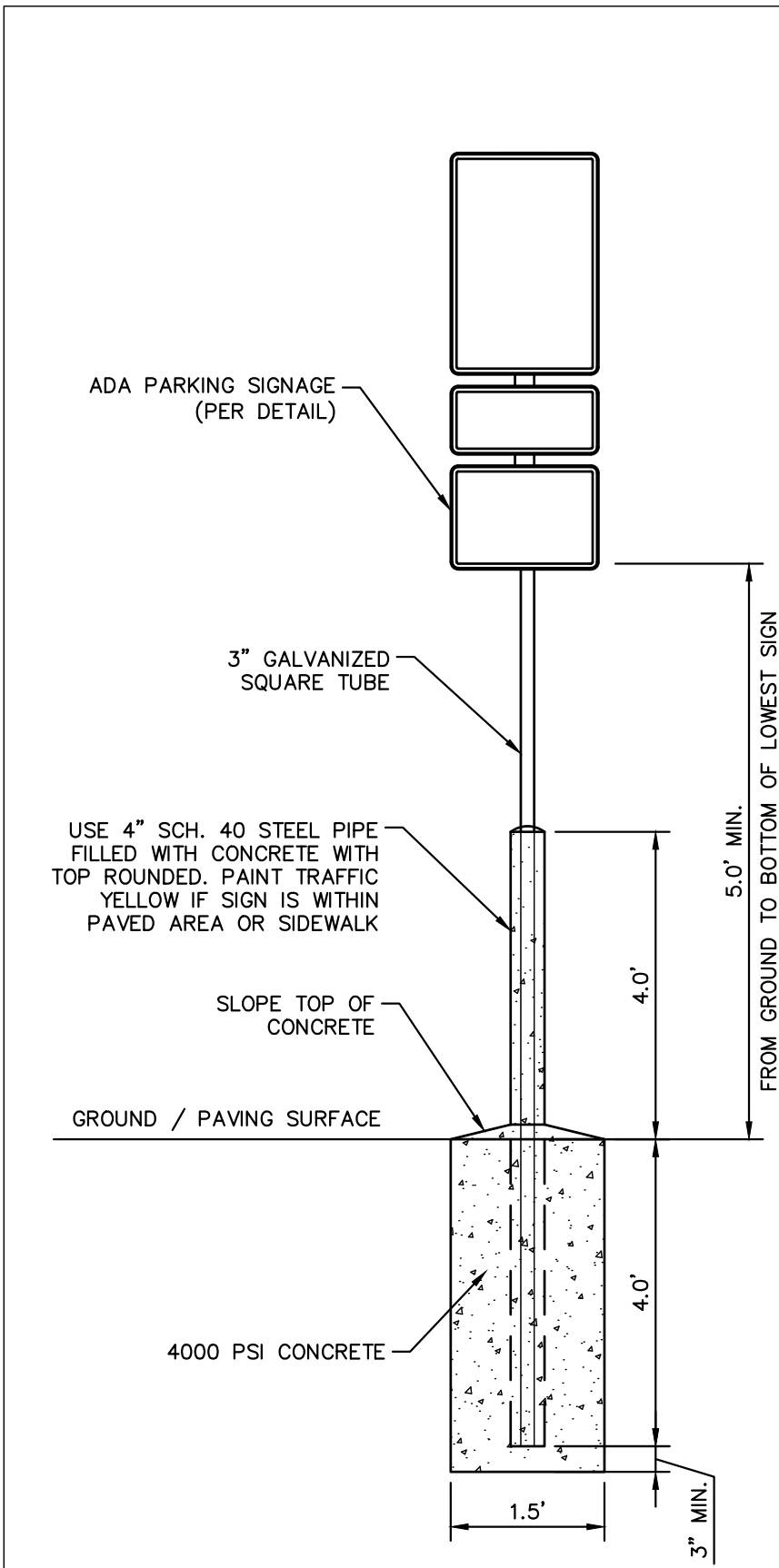
SITE PLAN

GREEN CLEAN
3290 WORTH XING
PREPARED FOR
GREEN CLEAN
ALBEMARLE COUNTY

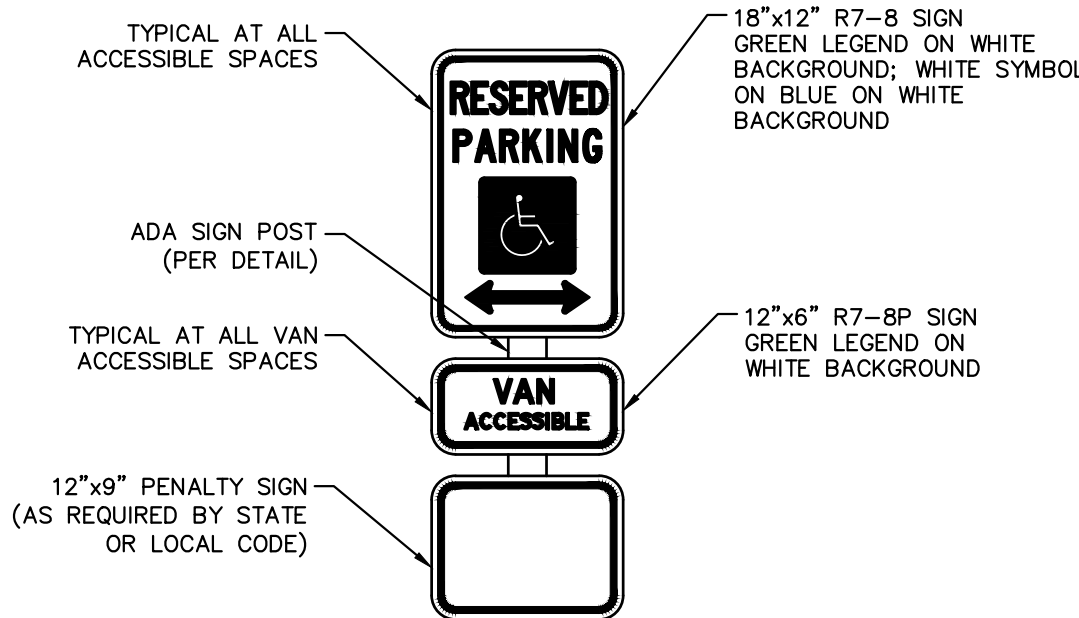
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CS-101

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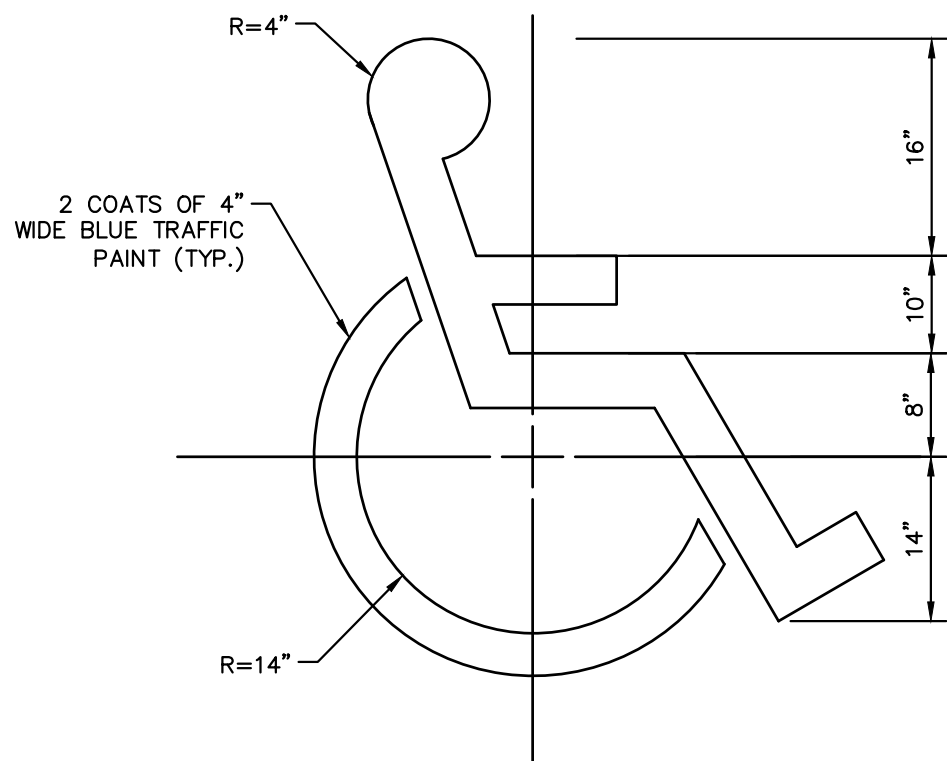


ADA PARKING SIGN POST

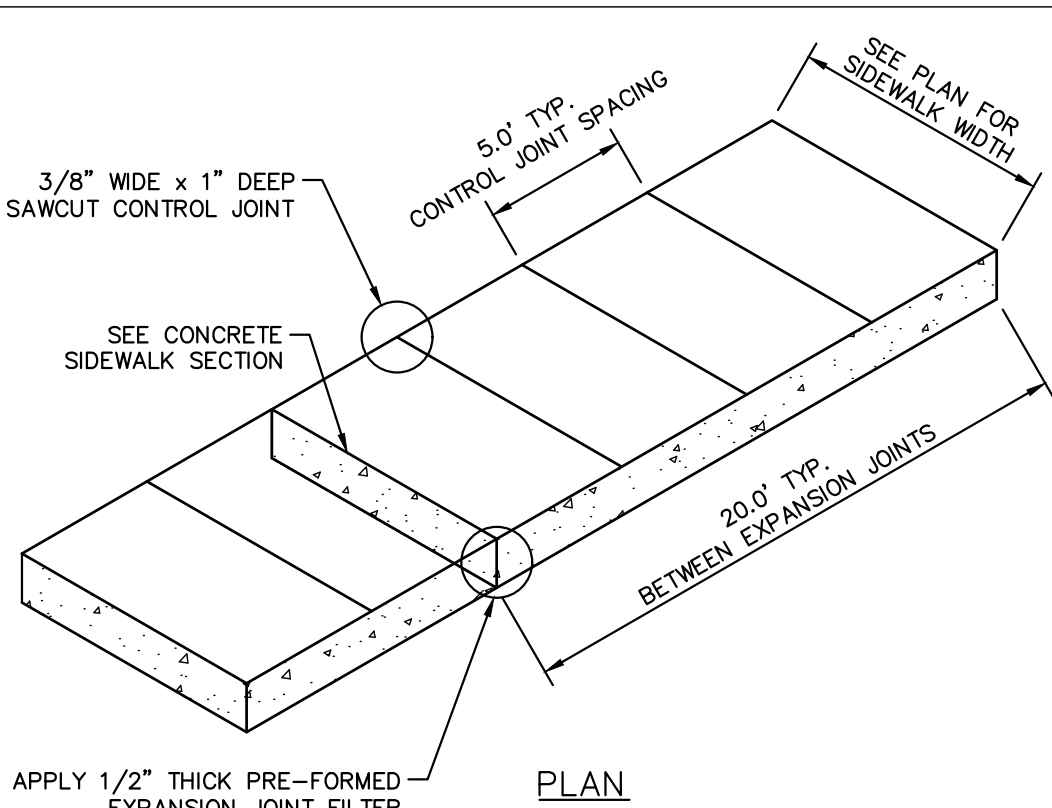


NOTE: SIGNS DENOTED HERE ARE TO BE PER MUTCD SPECIFICATIONS.

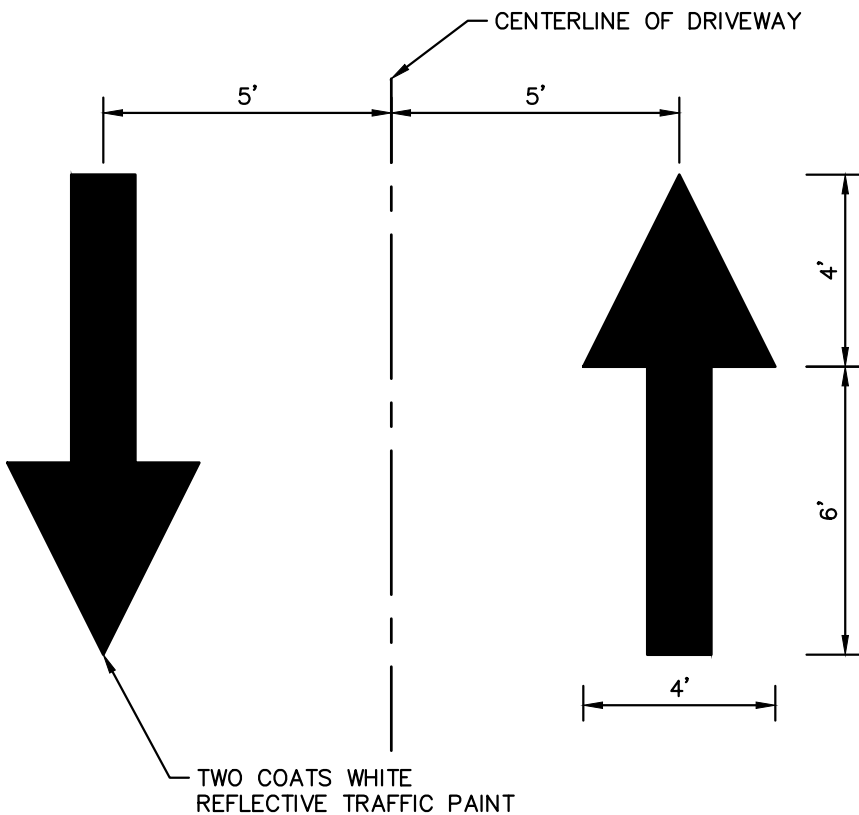
ADA PARKING SIGNAGE



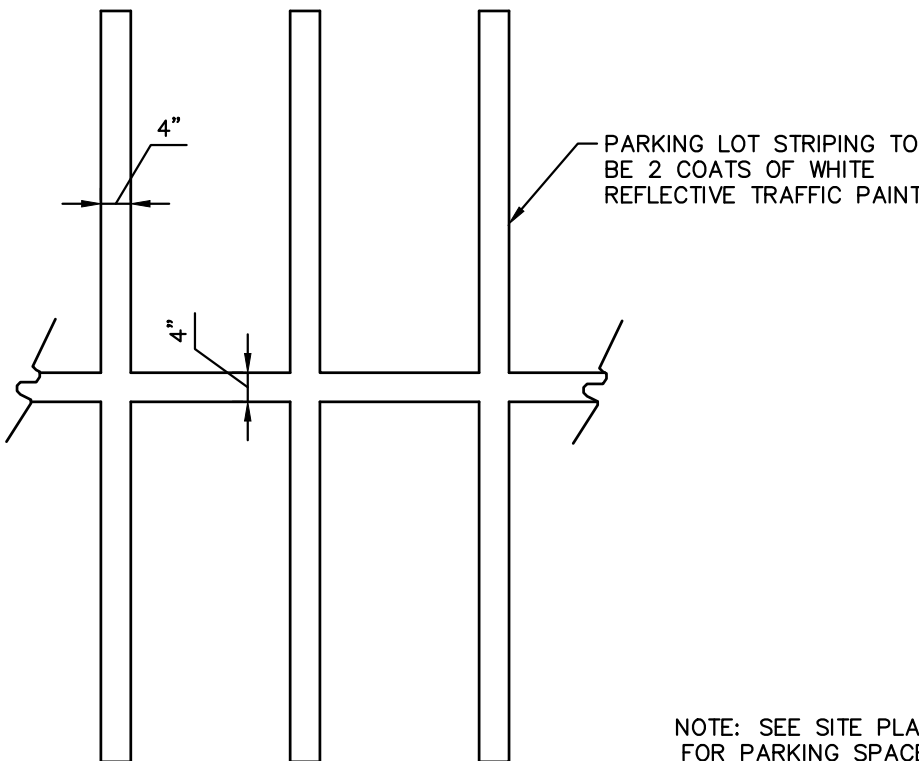
ADA PARKING SYMBOL



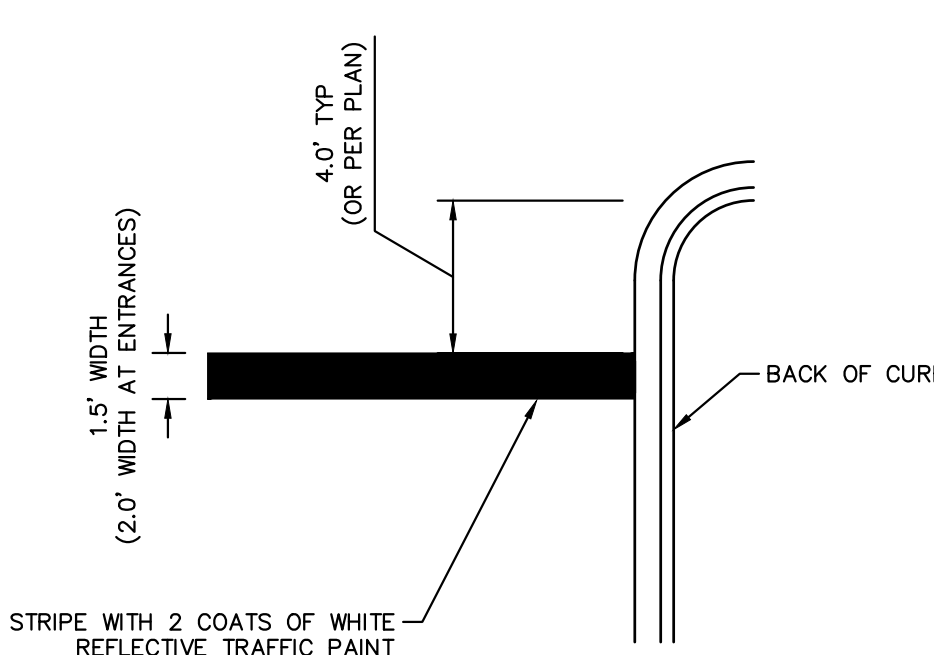
CONCRETE SIDEWALK



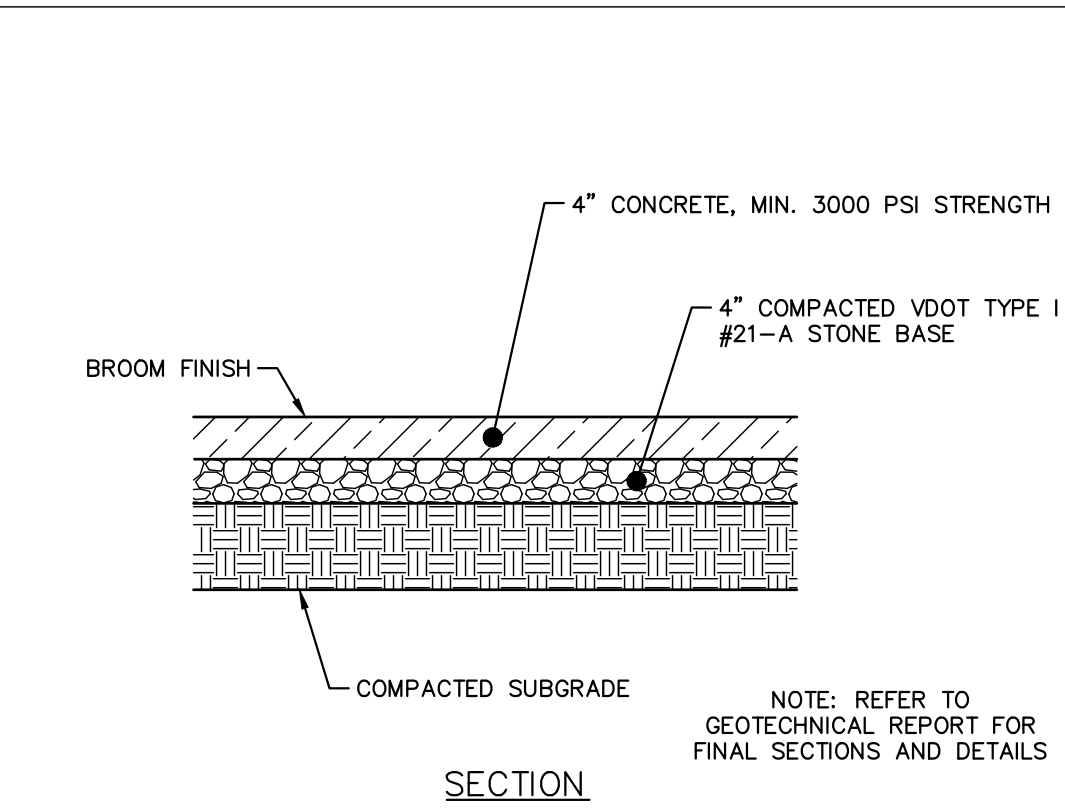
DIRECTIONAL ARROW



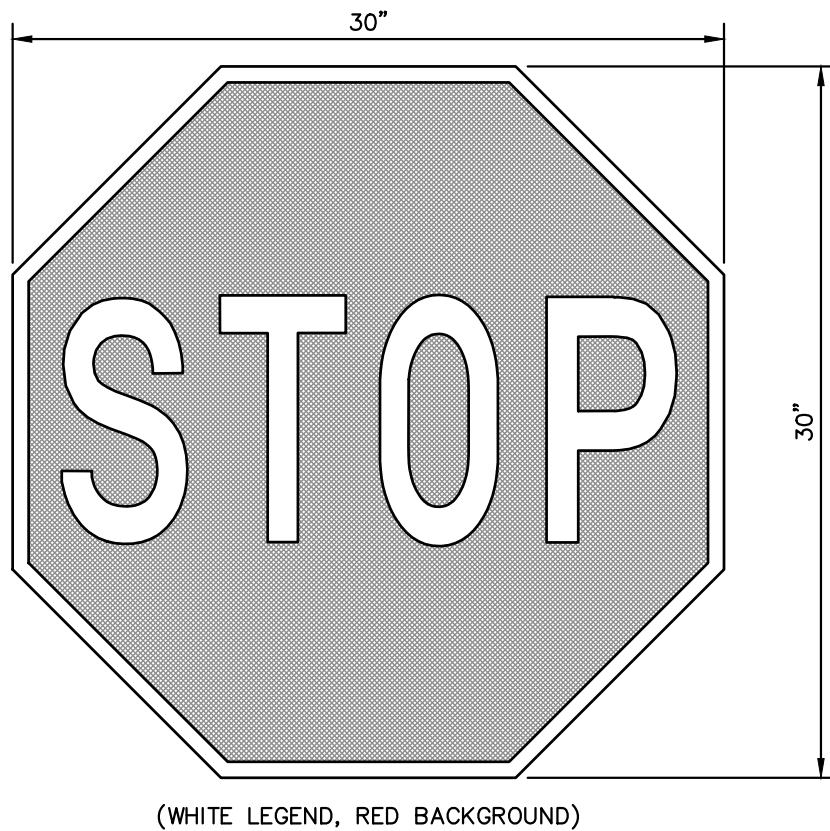
PARKING LOT STRIPING



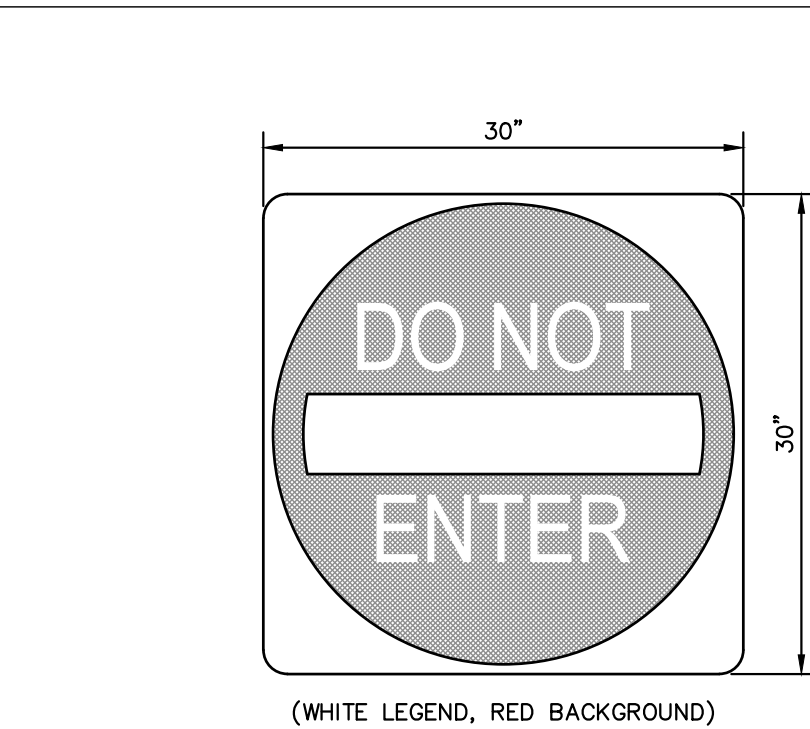
STOP BAR STRIPING



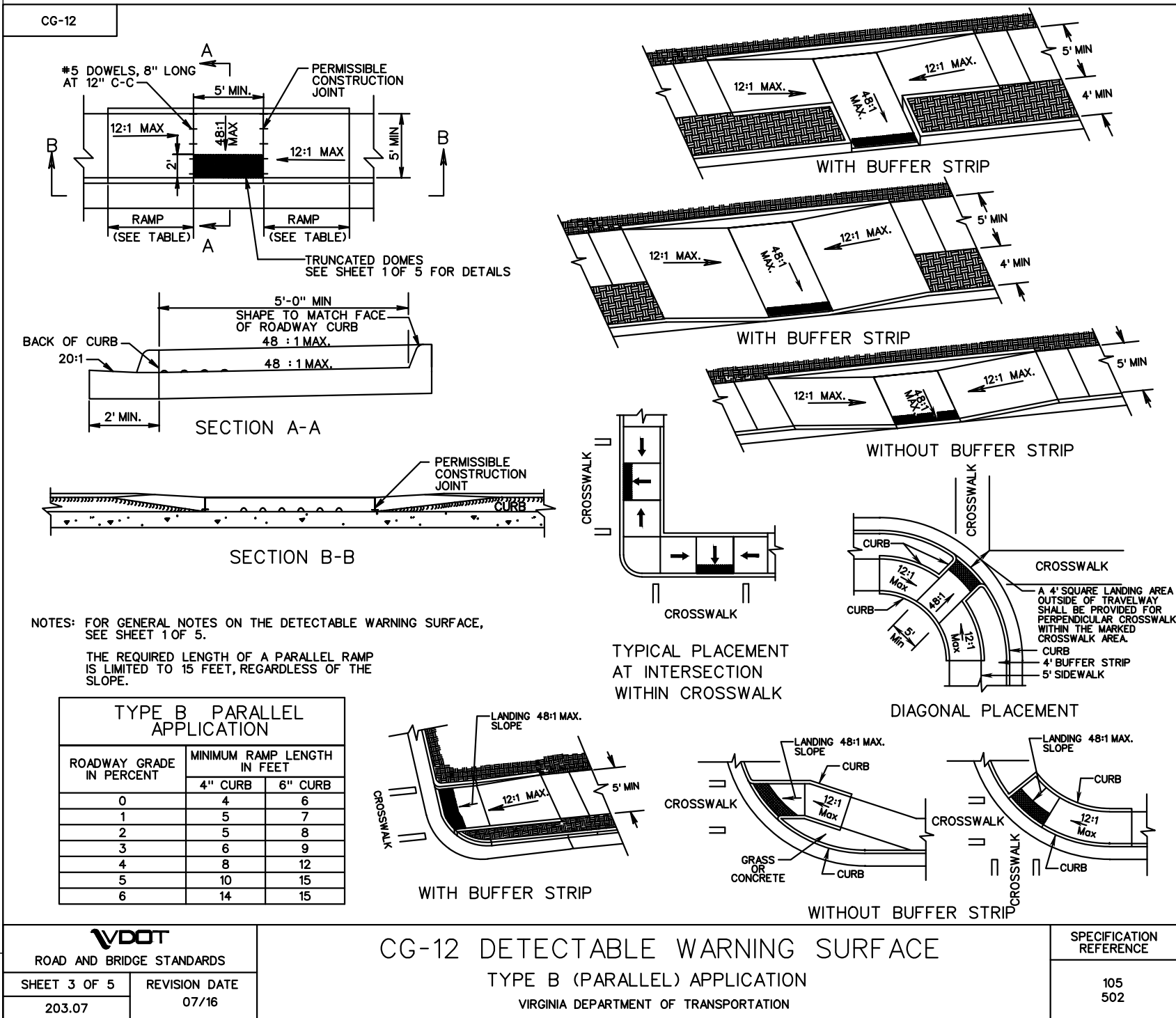
SIGN POST



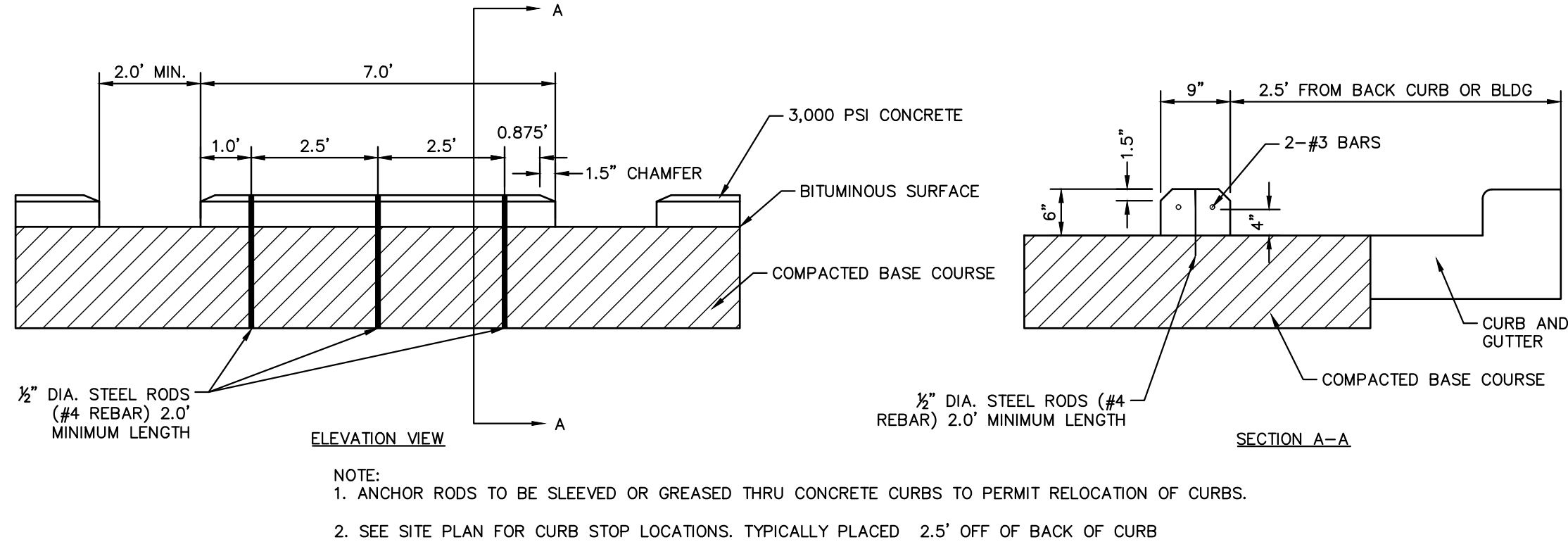
STOP SIGN (R1-1)



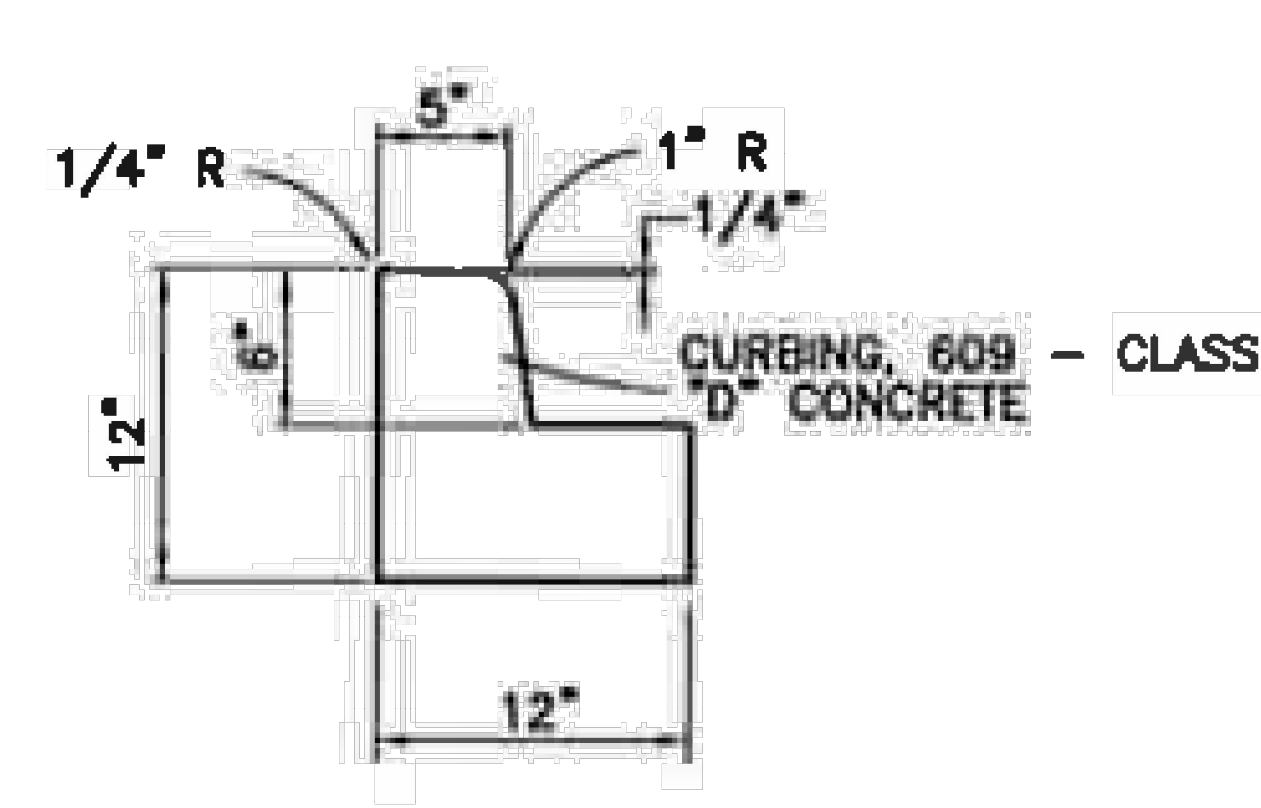
DO NOT ENTER SIGN (R5-1)



CG-12 DETECTABLE WARNING SURFACE
TYPE B (PARALLEL) APPLICATION
VIRGINIA DEPARTMENT OF TRANSPORTATION



CONCRETE WHEEL STOP



INTERIOR SITE CURB/GUTTER
NTS

02/10/20

BID SET

1

No.

REVISIONS

DATE

BY

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COMMONWEALTH OF VIRGINIA

RYAN R. PERKINS
Lic. No. 046565
10/23/2010

PROFESSIONAL ENGINEER

KHA PROJECT
113414010

DATE
10/23/2020

SCALE
AS SHOWN

DESIGNED BY
CBE

DRAWN BY
STM

CHECKED BY
RRP

GREEN CLEAN
3290 WORTH XING
PREPARED FOR
GREEN CLEAN
ALBEMARLE COUNTY

SITE DETAILS

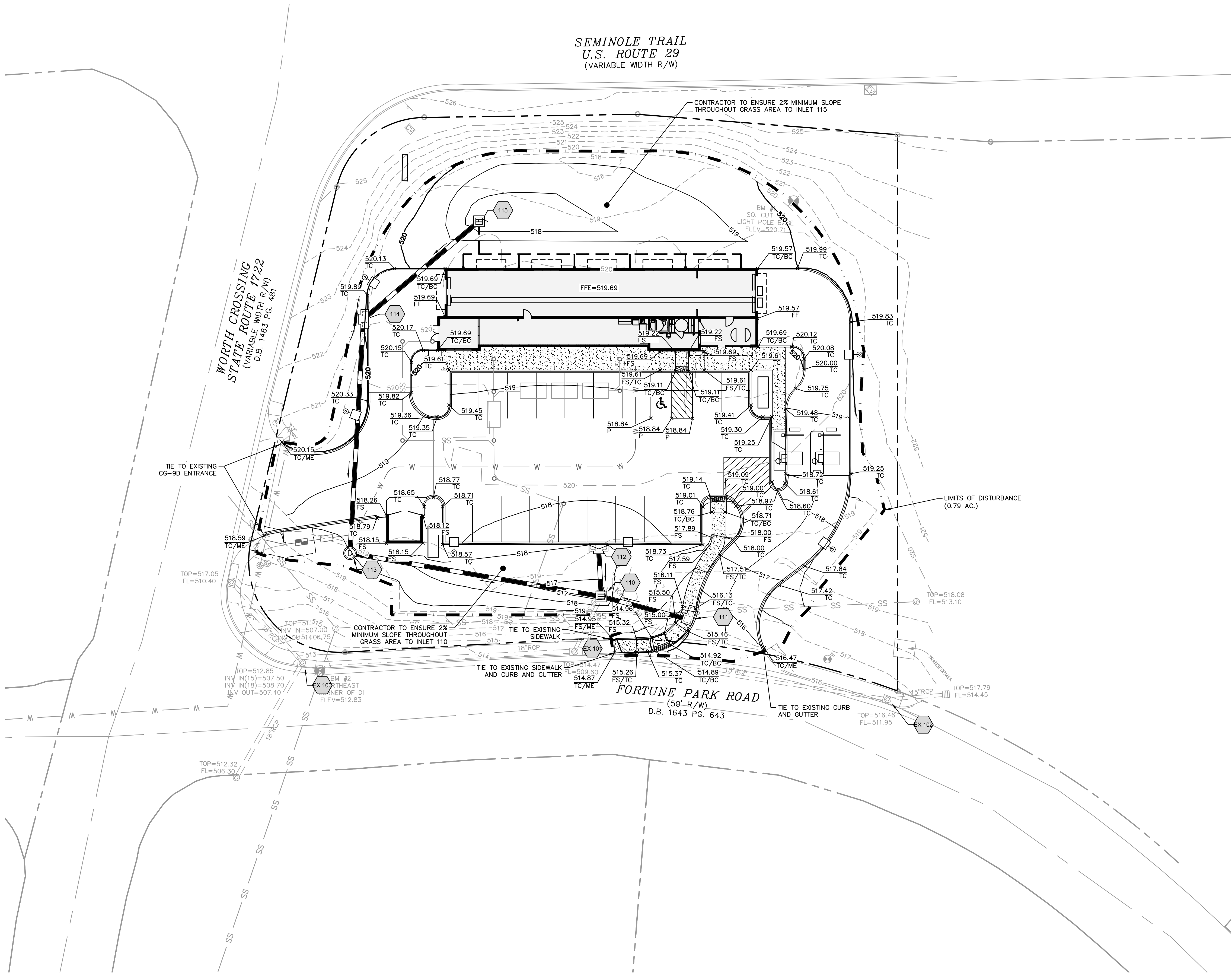
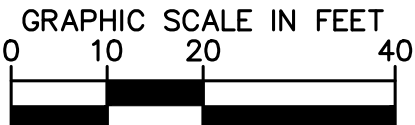
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CS-501

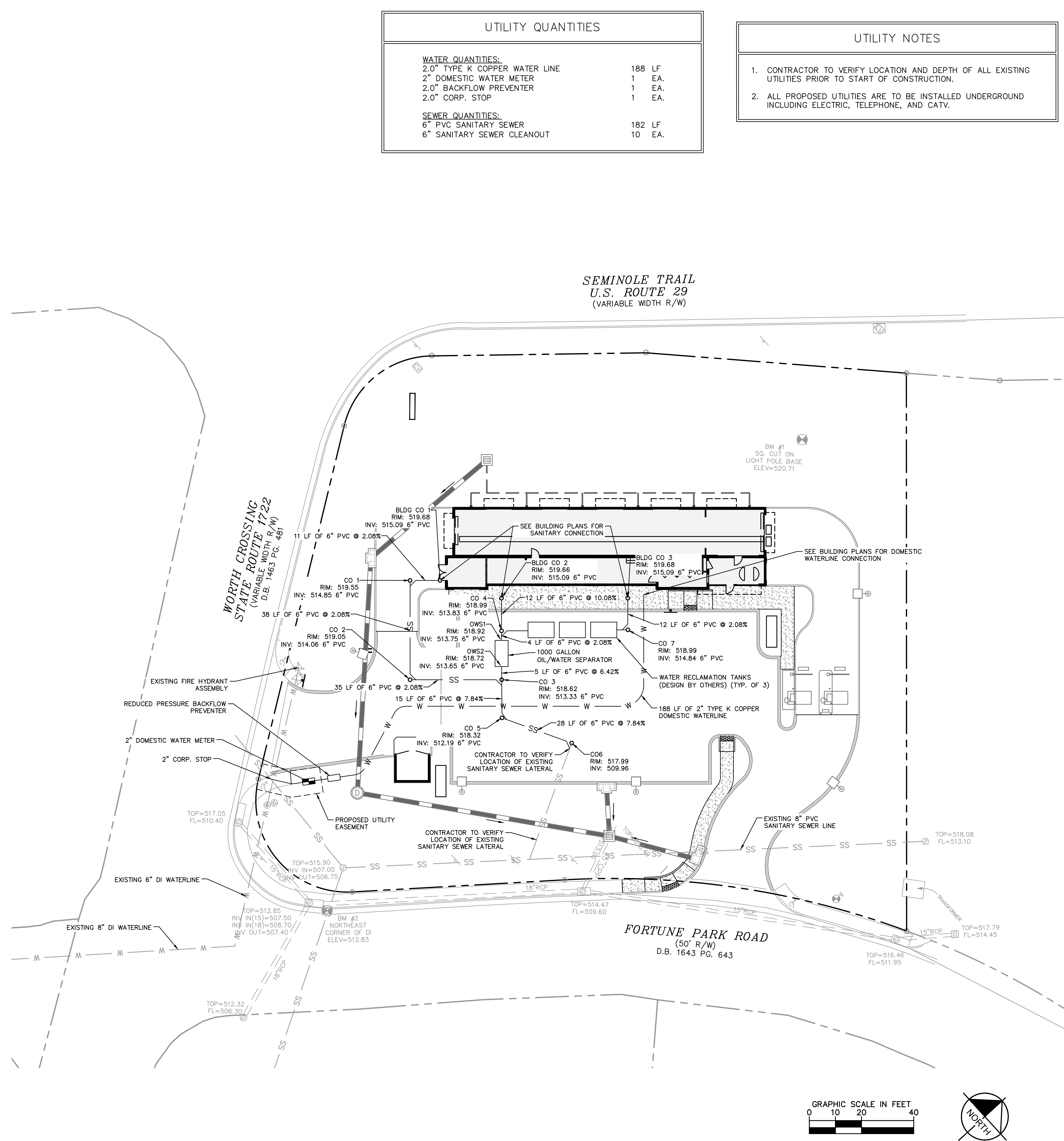
STRUCTURE TABLE			
STRUCTURE NAME	DESCRIPTION	RIM	HEIGHT
STR. 110	VDOT STD. DI-1	516.43	3.43
STR. 111	VDOT STD. DI-3B (L=6')	515.69	2.92
STR. 112	VDOT STD. DI-3C (L=6')	518.01	4.81
STR. 113	VDOT STD. MH-1	519.03	5.04
STR. 114	VDOT STD. DI-3C (L=6')	520.17	6.43
STR. 115	VDOT STD. DI-1	516.93	2.40
STR. EX 100	EXISTING STRUCTURE	512.85	4.00
STR. EX 101	EXISTING STRUCTURE	514.47	4.87
STR. EX 102	EXISTING STRUCTURE	516.46	4.51

GRADING NOTES

1. THE ROOF/LANDSCAPE DRAINAGE SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH THE CURRENT EDITION OF THE INTERNATIONAL PLUMBING CODE.
2. PIPE LENGTHS ARE MEASURED FROM CENTER OF CHAMBER TO CENTER OF CHAMBER.
3. VDOT STANDARD ST-1 STEPS ARE REQUIRED ON ALL STRUCTURES WITH HEIGHT GREATER THAN 4 FEET.
4. ADA ACCESSIBLE PARKING SPACES ARE SHOWN AND DESIGNED WITH A MAXIMUM 1.5% SLOPE IN ALL DIRECTIONS. CONTRACTOR TO ENSURE SLOPE DOES NOT EXCEED 2.0% IN ANY DIRECTION.
5. PROPOSED SIDEWALK/ADA ACCESSIBLE ROUTES ARE DESIGNED WITH A MAXIMUM 1.75% CROSS SLOPE AND A 4.75% LONGITUDINAL SLOPE. CONTRACTOR TO ENSURE CROSS SLOPE DOES NOT EXCEED 2.0% AND LONGITUDINAL SLOPE DOES NOT EXCEED 5.0%.
6. CONTRACTOR TO MATCH EXISTING GRADES AT LIMITS OF DISTURBANCE AND ENSURE POSITIVE DRAINAGE.

STORMWATER MANAGEMENT SUMMARY				
Pre-Development				
Runoff Curve Number (CN)	93			
Drainage Area	0.79 acres	Storm Event	Runoff Volume V	Peak Flow q (cfs)
Impervious Area	0.69 acres			
Managed Turf	0.10 acres	1 - year	6,011	2.88
Forest/Open Space	0.00 acres	10 - year		5.69
Time of Concentration (Tc)	6.0 min			
Post-Development (Prior to Routing)				
Runoff Curve Number (CN)	84	Storm Event	Runoff Volume V	Peak Flow q (cfs)
Drainage Area	0.79 acres	1 - year	3,964	1.80
Impervious Area	0.49 acres	10 - year		4.30
Managed Turf	0.30 acres			
Forest/Open Space	0.00 acres			
Time of Concentration (Tc)	10.0 min			
Channel Protection Compliance				
Energy Balance Equation, 1-year Storm				
Improvement Factor	0.9			
Q_post	I.F. x Q_pre	RV_pre/RV_post		
<	0.9	x 2.88 x 6011 / 3,964		
1.80	3.93			
PASS				
Flood Protection Compliance				
10-year storm				
Q_post	<	Q_pre		
4.30	<	5.69		
PASS				





UTILITY QUANTITIES		
<u>WATER QUANTITIES:</u>		
2.0" TYPE K COPPER WATER LINE	188	LF
2" DOMESTIC WATER METER	1	EA.
2.0" BACKFLOW PREVENTER	1	EA.
2.0" CORP. STOP	1	EA.
<u>SEWER QUANTITIES:</u>		
6" PVC SANITARY SEWER	182	LF
6" SANITARY SEWER CLEANOUT	10	EA.

UTILITY NOTES
1. CONTRACTOR TO VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION.
2. ALL PROPOSED UTILITIES ARE TO BE INSTALLED UNDERGROUND INCLUDING ELECTRIC, TELEPHONE, AND CATV.

1	BID SET	02/10/20
No.	REVISIONS	DATE BY

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COMMONWEALTH OF VIRGINIA
 RYAN R. PERKINS
 Lic. No. 046565
 10/23/2020
 PROFESSIONAL ENGINEER

KHA PROJECT 113414010	DATE 10/23/2020	SCALE AS SHOWN	DESIGNED BY CBB	DRAWN BY STM	CHECKED BY RRP
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UTILITY PLAN

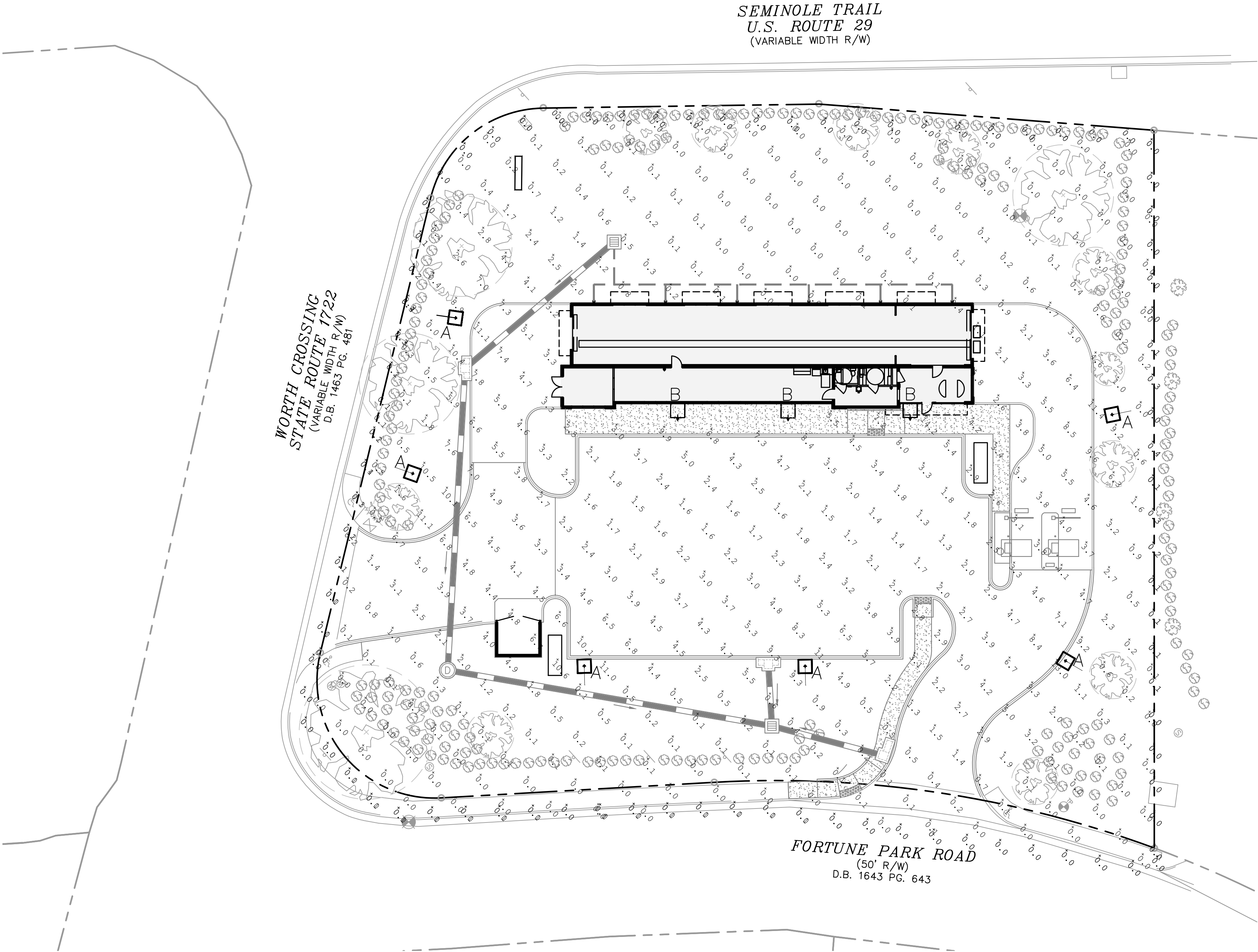
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GREEN CLEAN
ALBEMARLE COUNTY VIRGINIA

Plotted By: Baum, Corrier Sheet Set: kha Layout: CL-101 LIGHTING PLAN October 23, 2020 09:40:52am K:\VIC-CIV\113414 - Green Clean\010 - Seminole Trail - Ablemarle County\CAD\PlanSheets\CL-101 LIGHTING PLAN.dwg

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LIGHTING CALCULATIONS					
AREA	ILLUMINANCE-AVG.	MAX (FC.)	MIN (FC.)	AVG/MIN	MAX/MIN
PARKING AREA	3.9	14.2	0.2	36.0	71.0
PROPERTY LINE	0.05	0.4	0.0	N.A	N.A

LUMINAIRE SCHEDULE									
SYMBOL	LABEL	QUANTITY	ARRANGEMENT	DESCRIPTION	MANUFACTURER	HEIGHT	LAMP	WATTS	LIGHTING LOSS FACTOR
	A	6	SINGLE	ECF-S-48L-1A-NW-G2-4-HIS	GARDCO	14'-0"	LED	160W	0.9
	B	3	SINGLE	LPW-32-70-NW-G3-4	STONCO	9'-0"	LED	65W	0.9



- GENERAL NOTES:**
1. PHOTOMETRIC PLANS ARE PROVIDED FOR INFORMATION PURPOSES ONLY.
 2. MEP/CONTRACTOR TO PROVIDE LIGHTING SYSTEM DESIGN, INCLUDING JUNCTION BOXES, CONDUITS AND CONDUCTOR SIZE.
 3. SOURCE OF POWER FOR LIGHTING TO BE CONFIRMED BY MEP.
 - CONTRACTOR TO COORDINATE WITH LOCAL POWER COMPANY FOR SERVICE
- LIGHTING NOTES:**
1. SEE SHEET CL-501 FOR FIXTURE AND LIGHT DETAILS.
 2. NEW POLES AND FIXTURES TO BE INSTALLED AS SHOWN.

GREEN CLEAN

3290 WORTH XING

PREPARED FOR

GREEN CLEAN

ALBEMARLE COUNTY

VIRGINIA

SHEET NUMBER

CL-101

LIGHTING PLAN

KHA PROJECT	113414010
DATE	10/23/2020
SCALE	AS SHOWN
DESIGNED BY	CBB
DRAWN BY	STM
CHECKED BY	RRP

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1	BID SET	02/10/20
No.	REVISIONS	DATE
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STRUCTURES

D3300

Fatigue Resistant Soft Square Pole Post

Job Name:	Client Name:
Job Location - City:	Created By:
Product: D3300	Customer Approval:
State:	Date:
Quote:	Date:

SPECIFICATIONS

Pole Shaft: The pole shaft is fabricated from hot rolled welded steel tubing or one-piece construction with a minimum yield strength of 55 KSI.

Pole Top: A removable pole cap is provided for poles requiring drilling patterns for side-mount luminaire arm assemblies. For poles with top mounted anchor bracket consult the factory. Consult the luminaire manufacturer for correct torque size or drill pattern. The pole top options include pole cap only (PC) or stain top (PL) which is typical when the pole top diameter matches the necessary sign fit dimensions.

Handhole: A reinforced handhole with grinding provision is provided and 1.5" from the base end of the pole assembly. Each handhole includes an easy to install, self-contained Spring Latch hardware according to U.S. Patent 5,798, 548 which is fabricated from durable polycarbonate/ABS blend plastic. All pole assemblies are provided with a 2.0" x 5.00" rectangular handhole. Handhole dimensions are nominal.

Base Cover: A two-piece flat base cover fabricated from ABS plastic is provided with each pole assembly. Additional base cover options, including the dart square (2T) cast aluminum cover, are available upon request.

Anchor Bolts: Anchor bolts conform to ASTM F1554 Grade 55 and are provided with two hex nuts and two flat washers. Bolts have an 1" bend over one end and are galvanized a minimum of 12" on the threaded end.

Hardware: All structural fasteners are galvanized high strength carbon steel or stainless steel.

Finish: Standard finishes are either Galvalume (GV) or Finish Painted (FP). Additional finish options including Finish Paint over Galvalume (FP/GV) or any of the VSP® Finish Coating Systems are available upon request. See the product ordering code for other options.

Design Criteria: Please reference Design Criteria Specification for appropriate design conditions.

VALMONT INDUSTRIES, INC.	28500 40 STREET PO BOX 355 - VALLEY, NE 68044 USA	800.822.8668	VALMONTSTRUCTURES.COM
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[illegible]

DS330 - Fatigue Resistant Square Non-Tapered Steel Pole

POLE DETAIL (STANDARD)

P2 TENON DETAIL (OPTIONAL)

FULL BASE COVER (STANDARD)

POLE BASE AND HANDHOLE DETAIL

DS330 POLE DETAIL

VALMONT INDUSTRIES, INC. 28600 4th STREET, PO BOX 338 • VALLEY, NE 68664 USA

800.825.6668

VALMONTSTRUCTURES.CO

Stonco

by @lignify

Wall mount

LytePro

LPW32 - large wall sconce



Stonco LytePro LED large wall sconce LPW32 features outstanding value in a compact, architectural design. This powerful and flexible combination offers outstanding energy savings with excellent photometric performance. LPW32 is ideal for building perimeter and corridors in addition to wall lighting applications requiring strong lateral spacing and forward pattern light.

Ordering guide

Profile	Wattage	LED Color/Tem	Distribution	Emergency	Voltage
LPW32					
LPW32-Lytech3 LITE Large Wall Sconce	70-100W 60-90W 90-100W	NW-G3 Warm White AWKOW 35°C CR AWKOW 35°C CR NW-G3 Warm White COCOK 35°C CR COCOK 35°C CR	3 Type 4 3 Type 4	BIP Emergency Only BIP only available with TDR version	100-120V 208-240V 240-240V 247-277V 347V 480V 120-277V (50/60Hz) ULN ULN-480V (50-60Hz)

Example: LPW32-70-NW-G3-3-120-PCB-BZ

Options				
Armoring controls	Motion sensing	Photocontrol	Finish	
☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐		
FANS Field Adjustible Wattage Selection*	MRS3 Motion sensor #3 Load*	PCB Photocontrol Button**	Finished	
			Black Black WH White GR Grey BK Black DK Dark Grey BR Bronze RD Red CU Copper	
BL Select functionality *			CUSTOMER SPECIFIED	
			RAL - Specify color code or RAL, Inc. US-COL or US-RAL-ROSE Other custom color upon request or for required features contact	

Stocked luminaires – Ordering guide

Catalog Number	Description	Master Pack Qty	UPC Code
LPW32-60-W-DIV	LPW32, 70W, 60WNA, 4000K, Type 3, 120-277V, bank gray textured paint	3	6022528103889
LPW32-60-B-E-BZ	LPW32, 70W, 60WNA, 4000K, Type 3, 120-277V, bronze textured paint	3	6022528103896

Stocked accessories – Ordering guide (Must be ordered separately)

Catalog Number	Description	Master Pack Qty	UPC Code
LPW32PLCSLT-BZ	LPW universal wall mount, plate, bronze textured paint (1 each)		1903506144880

- * LSC configuration available with emergency battery backup only (BTRP)
- * Not available in 3x4' or 480V
- * Not available in West or PCB
- * Not available with other than standard options

- * Available only with BL wiring option
- * Must specify voltage
- * Other colors available upon request as made-to-order

LPW32_Lytech3_omn_en 08/16 page 1 of 3




[illegible]

EcoF-S EcoForm small

Area luminaire

EcoForm Accessories (ordered separately, field installed)

Ordering Accessories

House Size Information

House Size: 10' x 10' x 8' (3.0m x 3.0m x 2.4m)

HS-20-17 Internal House Size (Should be 17.125m x 17.125m x 4.26m)

HS-20-18 Internal House Size (Should be 18.25m x 18.25m x 4.26m)

HS-20-19 Internal House Size (Should be 19.42m x 19.42m x 4.26m)

HS-20-20 Internal House Size (Should be 20.58m x 20.58m x 4.26m)

HS-20-21 Internal House Size (Should be 21.75m x 21.75m x 4.26m)

HS-20-22 Internal House Size (Should be 22.92m x 22.92m x 4.26m)

HS-20-23 Internal House Size (Should be 24.08m x 24.08m x 4.26m)

HS-20-24 Internal House Size (Should be 25.25m x 25.25m x 4.26m)

HS-20-25 Internal House Size (Should be 26.42m x 26.42m x 4.26m)

HS-20-26 Internal House Size (Should be 27.58m x 27.58m x 4.26m)

HS-20-27 Internal House Size (Should be 28.75m x 28.75m x 4.26m)

HS-20-28 Internal House Size (Should be 29.92m x 29.92m x 4.26m)

HS-20-29 Internal House Size (Should be 31.08m x 31.08m x 4.26m)

HS-20-30 Internal House Size (Should be 32.25m x 32.25m x 4.26m)

HS-20-31 Internal House Size (Should be 33.42m x 33.42m x 4.26m)

HS-20-32 Internal House Size (Should be 34.58m x 34.58m x 4.26m)

HS-20-33 Internal House Size (Should be 35.75m x 35.75m x 4.26m)

HS-20-34 Internal House Size (Should be 36.92m x 36.92m x 4.26m)

HS-20-35 Internal House Size (Should be 38.08m x 38.08m x 4.26m)

HS-20-36 Internal House Size (Should be 39.25m x 39.25m x 4.26m)

HS-20-37 Internal House Size (Should be 40.42m x 40.42m x 4.26m)

HS-20-38 Internal House Size (Should be 41.58m x 41.58m x 4.26m)

HS-20-39 Internal House Size (Should be 42.75m x 42.75m x 4.26m)

HS-20-40 Internal House Size (Should be 43.92m x 43.92m x 4.26m)

HS-20-41 Internal House Size (Should be 45.08m x 45.08m x 4.26m)

HS-20-42 Internal House Size (Should be 46.25m x 46.25m x 4.26m)

HS-20-43 Internal House Size (Should be 47.42m x 47.42m x 4.26m)

HS-20-44 Internal House Size (Should be 48.58m x 48.58m x 4.26m)

HS-20-45 Internal House Size (Should be 49.75m x 49.75m x 4.26m)

HS-20-46 Internal House Size (Should be 50.92m x 50.92m x 4.26m)

HS-20-47 Internal House Size (Should be 52.08m x 52.08m x 4.26m)

HS-20-48 Internal House Size (Should be 53.25m x 53.25m x 4.26m)

HS-20-49 Internal House Size (Should be 54.42m x 54.42m x 4.26m)

HS-20-50 Internal House Size (Should be 55.58m x 55.58m x 4.26m)

HS-20-51 Internal House Size (Should be 56.75m x 56.75m x 4.26m)

HS-20-52 Internal House Size (Should be 57.92m x 57.92m x 4.26m)

HS-20-53 Internal House Size (Should be 59.08m x 59.08m x 4.26m)

HS-20-54 Internal House Size (Should be 60.25m x 60.25m x 4.26m)

HS-20-55 Internal House Size (Should be 61.42m x 61.42m x 4.26m)

HS-20-56 Internal House Size (Should be 62.58m x 62.58m x 4.26m)

HS-20-57 Internal House Size (Should be 63.75m x 63.75m x 4.26m)

HS-20-58 Internal House Size (Should be 64.92m x 64.92m x 4.26m)

HS-20-59 Internal House Size (Should be 66.08m x 66.08m x 4.26m)

HS-20-60 Internal House Size (Should be 67.25m x 67.25m x 4.26m)

HS-20-61 Internal House Size (Should be 68.42m x 68.42m x 4.26m)

HS-20-62 Internal House Size (Should be 69.58m x 69.58m x 4.26m)

HS-20-63 Internal House Size (Should be 70.75m x 70.75m x 4.26m)

HS-20-64 Internal House Size (Should be 71.92m x 71.92m x 4.26m)

HS-20-65 Internal House Size (Should be 73.08m x 73.08m x 4.26m)

HS-20-66 Internal House Size (Should be 74.25m x 74.25m x 4.26m)

HS-20-67 Internal House Size (Should be 75.42m x 75.42m x 4.26m)

HS-20-68 Internal House Size (Should be 76.58m x 76.58m x 4.26m)

HS-20-69 Internal House Size (Should be 77.75m x 77.75m x 4.26m)

HS-20-70 Internal House Size (Should be 78.92m x 78.92m x 4.26m)

HS-20-71 Internal House Size (Should be 80.08m x 80.08m x 4.26m)

HS-20-72 Internal House Size (Should be 81.25m x 81.25m x 4.26m)

HS-20-73 Internal House Size (Should be 82.42m x 82.42m x 4.26m)

HS-20-74 Internal House Size (Should be 83.58m x 83.58m x 4.26m)

HS-20-75 Internal House Size (Should be 84.75m x 84.75m x 4.26m)

HS-20-76 Internal House Size (Should be 85.92m x 85.92m x 4.26m)

HS-20-77 Internal House Size (Should be 87.08m x 87.08m x 4.26m)

HS-20-78 Internal House Size (Should be 88.25m x 88.25m x 4.26m)

HS-20-79 Internal House Size (Should be 89.42m x 89.42m x 4.26m)

HS-20-80 Internal House Size (Should be 90.58m x 90.58m x 4.26m)

HS-20-81 Internal House Size (Should be 91.75m x 91.75m x 4.26m)

HS-20-82 Internal House Size (Should be 92.92m x 92.92m x 4.26m)

HS-20-83 Internal House Size (Should be 94.08m x 94.08m x 4.26m)

HS-20-84 Internal House Size (Should be 95.25m x 95.25m x 4.26m)

HS-20-85 Internal House Size (Should be 96.42m x 96.42m x 4.26m)

HS-20-86 Internal House Size (Should be 97.58m x 97.58m x 4.26m)

HS-20-87 Internal House Size (Should be 98.75m x 98.75m x 4.26m)

HS-20-88 Internal House Size (Should be 99.92m x 99.92m x 4.26m)

HS-20-89 Internal House Size (Should be 101.08m x 101.08m x 4.26m)

HS-20-90 Internal House Size (Should be 102.25m x 102.25m x 4.26m)

HS-20-91 Internal House Size (Should be 103.42m x 103.42m x 4.26m)

HS-20-92 Internal House Size (Should be 104.58m x 104.58m x 4.26m)

HS-20-93 Internal House Size (Should be 105.75m x 105.75m x 4.26m)

HS-20-94 Internal House Size (Should be 106.92m x 106.92m x 4.26m)

HS-20-95 Internal House Size (Should be 108.08m x 108.08m x 4.26m)

HS-20-96 Internal House Size (Should be 109.25m x 109.25m x 4.26m)

HS-20-97 Internal House Size (Should be 110.42m x 110.42m x 4.26m)

HS-20-98 Internal House Size (Should be 111.58m x 111.58m x 4.26m)

HS-20-99 Internal House Size (Should be 112.75m x 112.75m x 4.26m)

HS-20-100 Internal House Size (Should be 113.92m x 113.92m x 4.26m)

HS-20-101 Internal House Size (Should be 115.08m x 115.08m x 4.26m)

HS-20-102 Internal House Size (Should be 116.25m x 116.25m x 4.26m)

HS-20-103 Internal House Size (Should be 117.42m x 117.42m x 4.26m)

HS-20-104 Internal House Size (Should be 118.58m x 118.58m x 4.26m)

HS-20-105 Internal House Size (Should be 119.75m x 119.75m x 4.26m)

HS-20-106 Internal House Size (Should be 120.92m x 120.92m x 4.26m)

HS-20-107 Internal House Size (Should be 122.08m x 122.08m x 4.26m)

HS-20-108 Internal House Size (Should be 123.25m x 123.25m x 4.26m)

HS-20-109 Internal House Size (Should be 124.42m x 124.42m x 4.26m)

HS-20-110 Internal House Size (Should be 125.58m x 125.58m x 4.26m)

HS-20-111 Internal House Size (Should be 126.75m x 126.75m x 4.26m)

HS-20-112 Internal House Size (Should be 127.92m x 127.92m x 4.2

ECF+ EcoForm small													
Area luminaire													
3000K LED Wastage and Lumen Values													
Ordering Code	Total Length (mm)	LED Lumen Value	Cuts Time (min)	Average Lumen Value	Type 1			Type 2			Type 3		
					Lumen Value	Ratio (%)	Efficiency (lm/W)	Lumen Value	Ratio (%)	Efficiency (lm/W)	Lumen Value	Ratio (%)	Efficiency (lm/W)
ECF-3-300-3000-LED-1	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-2	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-3	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-4	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-5	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-6	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-7	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-8	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-9	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-10	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-11	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-12	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-13	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-14	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-15	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-16	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-17	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-18	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-19	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-20	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED-21	12	3333	3008	33	4,058	102.00-101	35	6,374	102.00-101	39	5,522	101.00-102	34
ECF-3-300-3000-LED													

ECF-S EcoForm smart

Area luminaires

ECF-S LED Wastage and Lumen Values

Cooling class	Total Lumens	LED Current Rating (mA)	Power Consumption (Watt)	Type 1		Type 2		Type 3		Type 4		
				Lumen Output (lm)	Efficiency (lm/W)	Lumen Output (lm)	Efficiency (lm/W)	Lumen Output (lm)	Efficiency (lm/W)	Lumen Output (lm)	Efficiency (lm/W)	
ECF-S 500-000 CW-024	32	1000	5000	35	6,000	107-01-02	35	7,135	107-01-02	37	6,885	107-01-02
ECF-S 500-000 CW-024	32	1000	5000	35	6,000	107-01-02	35	8,475	107-01-02	35	8,760	107-01-02
ECF-S 500-000 CW-024	32	1000	5000	35	6,000	107-01-02	35	7,135	107-01-02	32	6,750	107-01-02
ECF-S 500-000 CW-024	32	1000	5000	35	6,000	107-01-02	35	7,135	107-01-02	35	7,020	107-01-02
ECF-S 500-000 CW-024	48	3000	15000	45	18,000	107-01-02	45	20,565	107-01-02	35	16,368	107-01-02
ECF-S 500-000 CW-024	48	3000	15000	45	18,000	107-01-02	45	18,000	107-01-02	35	16,368	107-01-02
ECF-S 500-000 CW-024	48	3000	15000	45	18,000	107-01-02	45	18,000	107-01-02	35	16,368	107-01-02
ECF-S 500-000 CW-024	48	3000	15000	45	18,000	107-01-02	45	20,565	107-01-02	35	16,368	107-01-02
ECF-S 500-000 CW-024	64	4000	20000	60	24,000	107-01-02	60	27,420	107-01-02	35	22,512	107-01-02
ECF-S 500-000 CW-024	64	4000	20000	60	24,000	107-01-02	60	27,420	107-01-02	35	22,512	107-01-02

Cooling class	Total Lumens	LED Current Rating (mA)	Power Consumption (Watt)	Type 5		Type 6		Type 7		Type 8		
				Lumen Output (lm)	Efficiency (lm/W)	Lumen Output (lm)	Efficiency (lm/W)	Lumen Output (lm)	Efficiency (lm/W)	Lumen Output (lm)	Efficiency (lm/W)	
ECF-S 500-000 CW-024	32	1000	5000	35	6,000	107-01-02	32	6,276	107-01-02	32	6,378	107-01-02
ECF-S 500-000 CW-024	32	1000	5000	35	6,000	107-01-02	32	6,276	107-01-02	32	6,378	107-01-02
ECF-S 500-000 CW-024	32	1000	5000	32	5,880	107-01-02	34	6,402	107-01-02	39	6,633	107-01-02
ECF-S 500-000 CW-024	48	3000	15000	45	18,000	107-01-02	42	18,996	107-01-02	39	16,848	107-01-02
ECF-S 500-000 CW-024	48	3000	15000	45	18,000	107-01-02	45	18,000	107-01-02	35	16,368	107-01-02
ECF-S 500-000 CW-024	48	3000	15000	45	18,000	107-01-02	45	20,565	107-01-02	35	16,368	107-01-02
ECF-S 500-000 CW-024	64	4000	20000	60	24,000	107-01-02	60	27,420	107-01-02	39	22,608	107-01-02
ECF-S 500-000 CW-024	64	4000	20000	60	24,000	107-01-02	60	27,420	107-01-02	39	22,608	107-01-02

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ECF-S EcoForm small

Area lumineuse

Dimensions

Standard Arm (AR)

Weight: 22.15x (9.9 Kg) EPA: 0.21m² (0.08m²)

Weight: 27.15x (12.2 Kg) EPA: 0.27m² (0.10m²)

Retrofits Arm (RAM)

Weight: 34.15x (15.5 Kg) EPA: 0.34m² (0.12m²)

Silo floor (SF)

Weight: 21.15x (9.5 Kg) EPA: 0.21m² (0.08m²)

Standard Arm (AR) drill pattern

Retrofits Arm (RAM) drill pattern

Outdoor (IMR-HVI) sensor

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ECF-S EcoForm small

area luminaire

Optical Orientation Information

Standard Optic Position

Luminaires with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:

Note: The hand hole will normally be located on the pole at the 0° point.

Rotated Left (90°) Optic Position

Luminaires with asymmetric optical systems in the Rotated Left (90°) optic position will have the optical system oriented as shown below (Type S and E luminaire are not available with factory-set rotatable optics):

Note: The hand hole will normally be located on the pole at the 0° point.

Rotated Right (270°) Optic Position

Luminaires with asymmetric optical systems in the Rotated Right (270°) optic position will have the optical system oriented as shown below (Type S and E luminaire are not available with factory-set rotatable optics):

Note: The hand hole will normally be located on the pole at the 0° point.

Teas Luminaire Assemblies with Type-90/Type-230 Rotatable Optic System

Teas luminaire assemblies installed with rotatable optical systems are an essential step to direct light toward the exterior of the side (Street Side) without additional support. It is important, however, that customers be assured that luminaires are installed in the proper location.

Note: The hand hole location will depend on the stringing configuration of the pole.

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ECF-5 EcoForm universal

Area luminaires

Specifications

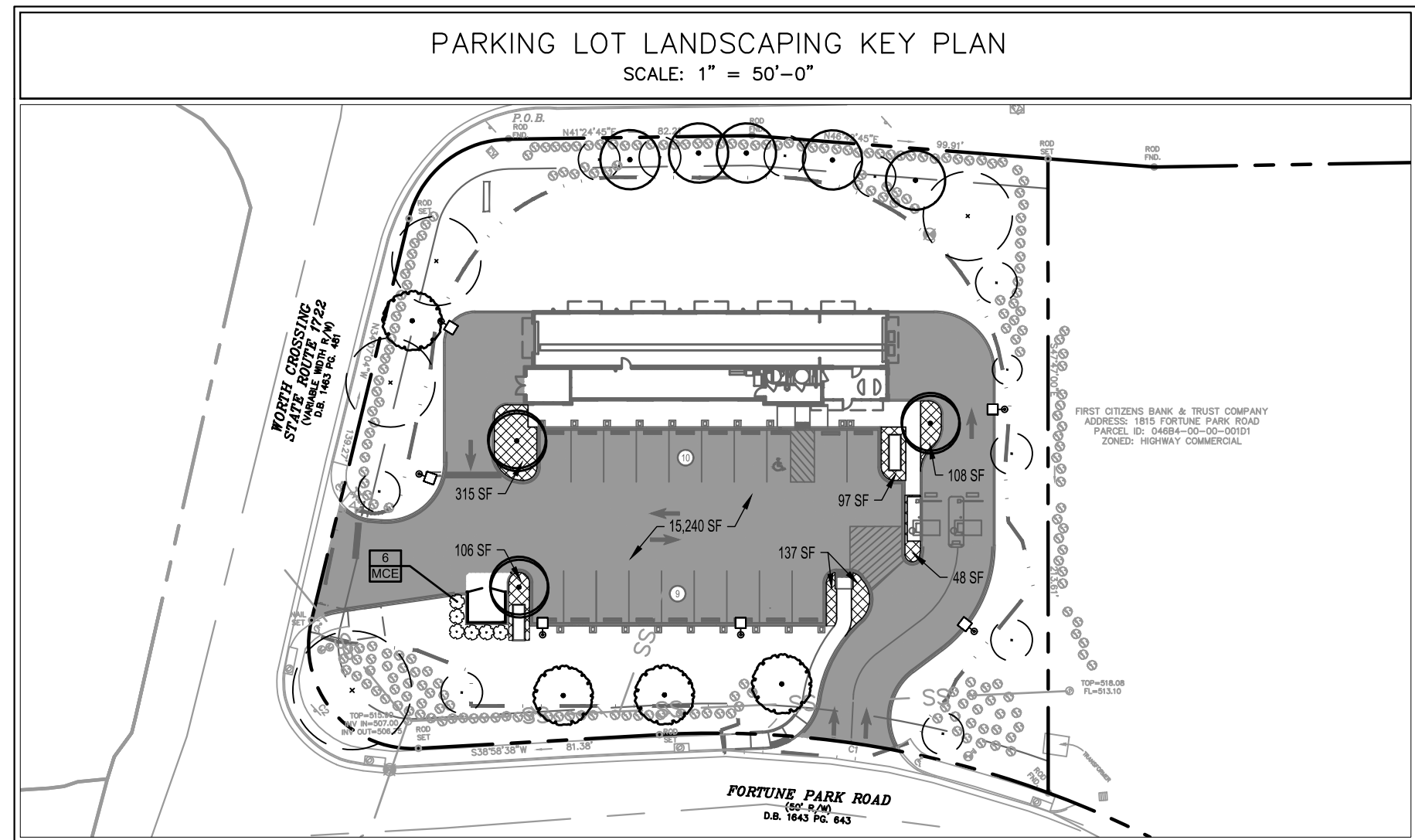
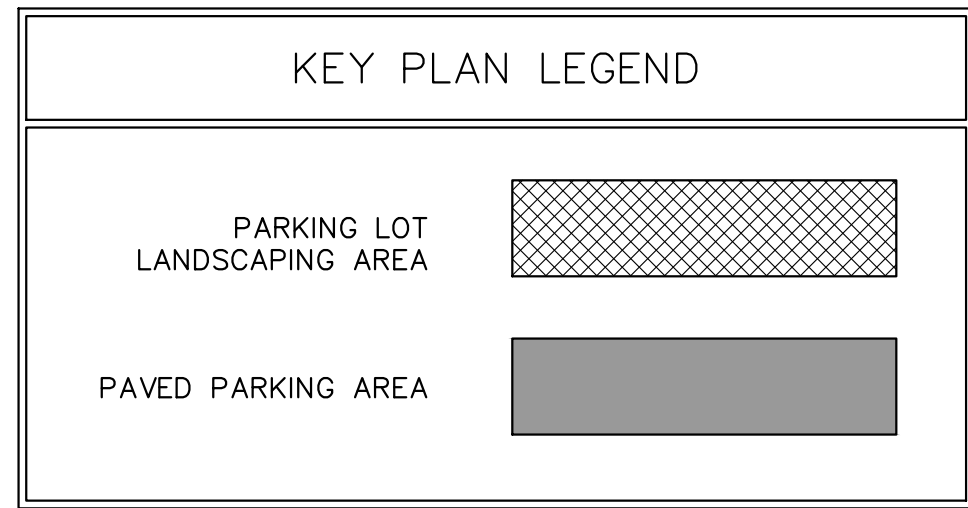
One-piece die cast aluminum housing with integral air and water-sealed, weather-resistant and fire-rated gaskets. 2.5 m and 3 m versions are available. IP68, tested in accordance to Section 03 05 05-1.

Luminaires is tested and rated 300 over 5000 hours cycling conforming to IEC 60529, 60598-2-1, 60598-2-2, 60598-2-3, 60598-2-13, 60598-2-15, 60598-2-16, 60598-2-17, 60598-2-18, 60598-2-19, 60598-2-20, 60598-2-21, 60598-2-22, 60598-2-23, 60598-2-24, 60598-2-25, 60598-2-26, 60598-2-27, 60598-2-28, 60598-2-29, 60598-2-30, 60598-2-31, 60598-2-32, 60598-2-33, 60598-2-34, 60598-2-35, 60598-2-36, 60598-2-37, 60598-2-38, 60598-2-39, 60598-2-40, 60598-2-41, 60598-2-42, 60598-2-43, 60598-2-44, 60598-2-45, 60598-2-46, 60598-2-47, 60598-2-48, 60598-2-49, 60598-2-50, 60598-2-51, 60598-2-52, 60598-2-53, 60598-2-54, 60598-2-55, 60598-2-56, 60598-2-57, 60598-2-58, 60598-2-59, 60598-2-60, 60598-2-61, 60598-2-62, 60598-2-63, 60598-2-64, 60598-2-65, 60598-2-66, 60598-2-67, 60598-2-68, 60598-2-69, 60598-2-70, 60598-2-71, 60598-2-72, 60598-2-73, 60598-2-74, 60598-2-75, 60598-2-76, 60598-2-77, 60598-2-78, 60598-2-79, 60598-2-80, 60598-2-81, 60598-2-82, 60598-2-83, 60598-2-84, 60598-2-85, 60598-2-86, 60598-2-87, 60598-2-88, 60598-2-89, 60598-2-90, 60598-2-91, 60598-2-92, 60598-2-93, 60598-2-94, 60598-2-95, 60598-2-96, 60598-2-97, 60598-2-98, 60598-2-99, 60598-3, 60598-3-1, 60598-3-2, 60598-3-3, 60598-3-4, 60598-3-5, 60598-3-6, 60598-3-7, 60598-3-8, 60598-3-9, 60598-3-10, 60598-3-11, 60598-3-12, 60598-3-13, 60598-3-14, 60598-3-15, 60598-3-16, 60598-3-17, 60598-3-18, 60598-3-19, 60598-3-20, 60598-3-21, 60598-3-22, 60598-3-23, 60598-3-24, 60598-3-25, 60598-3-26, 60598-3-27, 60598-3-28, 60598-3-29, 60598-3-30, 60598-3-31, 60598-3-32, 60598-3-33, 60598-3-34, 60598-3-35, 60598-3-36, 60598-3-37, 60598-3-38, 60598-3-39, 60598-3-40, 60598-3-41, 60598-3-42, 60598-3-43, 60598-3-44, 60598-3-45, 60598-3-46, 60598-3-47, 60598-3-48, 60598-3-49, 60598-3-50, 60598-3-51, 60598-3-52, 60598-3-53, 60598-3-54, 60598-3-55, 60598-3-56, 60598-3-57, 60598-3-58, 60598-3-59, 60598-3-60, 60598-3-61, 60598-3-62, 60598-3-63, 60598-3-64, 60598-3-65, 60598-3-66, 60598-3-67, 60598-3-68, 60598-3-69, 60598-3-70, 60598-3-71, 60598-3-72, 60598-3-73, 60598-3-74, 60598-3-75, 60598-3-76, 60598-3-77, 60598-3-78, 60598-3-79, 60598-3-80, 60598-3-81, 60598-3-82, 60598-3-83, 60598-3-84, 60598-3-85, 60598-3-86, 60598-3-87, 60598-3-88, 60598-3-89, 60598-3-90, 60598-3-91, 60598-3-92, 60598-3-93, 60598-3-94, 60598-3-95, 60598-3-96, 60598-3-97, 60598-3-98, 60598-3-99, 60598-4, 60598-4-1, 60598-4-2, 60598-4-3, 60598-4-4, 60598-4-5, 60598-4-6, 60598-4-7, 60598-4-8, 60598-4-9, 60598-4-10, 60598-4-11, 60598-4-12, 60598-4-13, 60598-4-14, 60598-4-15, 60598-4-16, 60598-4-17, 60598-4-18, 60598-4-19, 60598-4-20, 60598-4-21, 60598-4-22, 60598-4-23, 60598-4-24, 60598-4-25, 60598-4-26, 60598-4-27, 60598-4-28, 60598-4-29, 60598-4-30, 60598-4-31, 60598-4-32, 60598-4-33, 60598-4-34, 60598-4-35, 60598-4-36, 60598-4-37, 60598-4-38, 60598-4-39, 60598-4-40, 60598-4-41, 60598-4-42, 60598-4-43, 60598-4-44, 60598-4-45, 60598-4-46, 60598-4-47, 60598-4-48, 60598-4-49, 60598-4-50, 60598-4-51, 60598-4-52, 60598-4-53, 60598-4-54, 60598-4-55, 60598-4-56, 60598-4-57, 60598-4-58, 60598-4-59, 60598-4-60, 60598-4-61, 60598-4-62, 60598-4-63, 60598-4-64, 60598-4-65, 60598-4-66, 60598-4-67, 60598-4-68, 60598-4-69, 60598-4-70, 60598-4-71, 60598-4-72, 60598-4-73, 60598-4-74, 60598-4-75, 60598-4-76, 60598-4-77, 60598-4-78, 60598-4-79, 60598-4-80, 60598-4-81, 60598-4-82, 60598-4-83, 60598-4-84, 60598-4-85, 60598-4-86, 60598-4-87, 60598-4-88, 60598-4-89, 60598-4-90, 60598-4-91, 60598-4-92, 60598-4-93, 60598-4-94, 60598-4-95, 60598-4-96, 60598-4-97, 60598-4-98, 60598-4-99, 60598-5, 60598-5-1, 60598-5-2, 60598-5-3, 60598-5-4, 60598-5-5, 60598-5-6, 60598-5-7, 60598-5-8, 60598-5-9, 60598-5-10, 60598-5-11, 60598-5-12, 60598-5-13, 60598-5-14, 60598-5-15, 60598-5-16, 60598-5-17, 60598-5-18, 60598-5-19, 60598-5-20, 60598-5-21, 60598-5-22, 60598-5-23, 60598-5-24, 60598-5-25, 60598-5-26, 60598-5-27, 60598-5-28, 60598-5-29, 60598-5-30, 60598-5-31, 60598-5-32, 60598-5-33, 60598-5-34, 60598-5-35, 60598-5-36, 60598-5-37, 60598-5-38, 60598-5-39, 60598-5-40, 60598-5-41, 60598-5-42, 60598-5-43, 60598-5-44

[illegible][illegible]

PLANT SCHEDULE

<u>LARGE SHADE TREE</u>	<u>QTY</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>CONT</u>	<u>CAL / HT</u>
AR	3	Acer rubrum 'Red Sunset' Strong central leader	Red Sunset Maple	B & B	2.5"Cal
GS	5	Gleditsia triacanthos inermis 'Shademaster' TM 12' HT MIN, Strong central leader	Shademaster Locust	B & B	3.5"Cal
UA	4	Ulmus americana 'Princeton' Strong central leader	American Elm	B & B	2.5"Cal
<u>EVERGREEN SHRUBS</u>	<u>QTY</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>CONT</u>	<u>HEIGHT</u>
MCE	6	Myrica cerifera Uniform; Dense; Full to the ground	Wax Myrtle	Cont.	24" HT MIN.



GENERAL LANDSCAPING NOTES

1. ALL LANDSCAPING SHALL BE INSTALLED BY THE FIRST PLANTING SEASON FOLLOWING THE ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY WITHIN THE DEVELOPMENT.
2. ALL LANDSCAPING AND SCREENING SHALL BE MAINTAINED IN A HEALTHY CONDITION BY THE CURRENT OWNER OR A PROPERTY OWNERS' ASSOCIATION. REPLACEMENT MATERIAL SHALL COMPLY WITH THE APPROVED LANDSCAPE PLAN.
3. ALL SITE PLANTINGS OF TREES AND SHRUBS SHALL BE ALLOWED TO REACH, AND BE MAINTAINED AT, MATURE HEIGHT, THE TOPPING OF TREES IS PROHIBITED. SHRUBS AND TREES SHALL BE PRUNED MINIMALLY AND ONLY TO SUPPORT THE OVERALL HEALTH OF THE PLANT.

LANDSCAPE REQUIREMENTS AND CALCULATIONS PER ALBEMARLE
COUNTY CODE AND ARCHITECTURAL REVIEW BOARD DESIGN GUIDELINES:

REQUIRED LANDSCAPING:

SITE REQUIREMENT (32.7.9.8): 10% CANOPY REQUIRED
 SITE AREA: 47,057 SF X 10% = 4,708 SF
 CANOPY REQUIRED: 4,708 SF
 EXISTING CANOPY: 4,840 SF
CANOPY PROVIDED: 3,768 SF
 TOTAL CANOPY PROVIDED: 8,608 SF

PARKING LANDSCAPE (32.7.9.6): 5% OF PARKING PAVED AREA.
 15,240 SF X .05 = 762 SF
REQUIRED: 762 SF OF LANDSCAPED AREA
PROVIDED: 811 SF OF LANDSCAPED AREA

LARGE SHADE TREES (2.5" CAL.)
19 PARKING SPACES (19 / 10 = 1.9)
REQUIRED: 2 LARGE SHADE TREES
PROVIDED: 3 LARGE SHADE TREES

LARGE STREET TREE (2.5" CAL.) - 50' O.C. & SHRUBS 5' O.C.
WORTH CROSSING
 150 LF OF FRONTAGE/50 = 3 TREES
 150 LF OF FRONTAGE/5 = 30 SHRUBS
REQUIRED: 3 LARGE SHADE TREES & 30 SHRUBS
EXISTING: 2 LARGE SHADE TREES & 41 SHRUBS
PROVIDED: 1 LARGE SHADE TREE

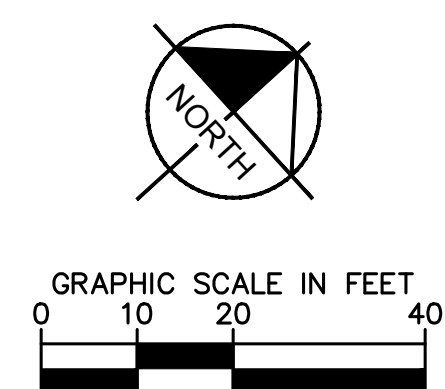
FORTUNE PARK ROAD
210 LF OF FRONTAGE/50 = 4.2 TREES
210 LF OF FRONTAGE/5 = 42 SHRUBS
REQUIRED: 5 LARGE SHADE TREES & 42 SHRUBS
EXISTING: 2 LARGE SHADE TREES & 73 SHRUBS
PROVIDED: 3 LARGE SHADE TREES

DUMPSTER ENCLOSURE TO BE SCREENED WITH 6 EVERGREEN SHRUBS.

ENTRY CORRIDOR OVERLAY:

LARGE SHADE STREET TREE (3.5" CAL.) - 35' O.C. W/ INTERSPERSED ORNAMENTALS (6' HT.) & SHRUBS 5' O.C.

SEMINOLE TRAIL
205 LF OF FRONTAGE/35 = 5.86 TREES
205 LF OF FRONTAGE/5 = 41 SHRUBS
REQUIRED: 6 LARGE SHADE TREES W/ VARIABLE ORNAMENTALS & 41 SHRUBS
EXISTING: 1 LARGE SHADE TREE W/ 4 ORNAMENTALS & 65 SHRUBS
PROVIDED: 5 LARGE SHADE TREES



GREEN CLEAN 3290 WORTH XING PREPARED FOR GREEN CLEAN ALBEMARLE COUNTY VIRGINIA		PLANTING PLAN		KHA PROJECT 113414010 DATE 10/23/2020 SCALE AS SHOWN DESIGNED BY CBB DRAWN BY STM CHECKED BY RRP		 Kimley»Horn © 2020 KIMLEY-HORN AND ASSOCIATES, INC. 1700 WILLOW LAWN DR, SUITE 200, RICHMOND, VA 23230 PHONE: 804.771.2222 WWW.KIMLEY-HORN.COM		1 BID SET 02/10/20	
						No. REVISIONS DATE BY			

Plotted By: Baum, Carter Sheet Set: kha Layout: CP-501 PLANTING NOTES AND DETAILS October 23, 2020 09:41:28am K:\RVC-CIV\13414 - Green Clean\010 - Seminole Trail - Abnerrie County\CAD\PlantShets\CP-501 PLANTING NOTES AND DETAILS.dwg

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and depletion by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

GENERAL NOTES

- A. CONTRACTOR SHALL REVIEW ALL DRAWINGS, SPECIFICATIONS, PERMITS, AND REGULATORY REQUIREMENTS PRIOR TO COMMENCEMENT OF WORK.

B. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED LANDSCAPING AND IRRIGATION PERMITS.

C. CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED SITE ELEMENTS AND NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES. SURVEY DATA OF EXISTING CONDITIONS WAS PROVIDED BY OTHERS.

D. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. AT LEAST 48 HOURS PRIOR TO ANY DEMOLITION, GRADING, OR CONSTRUCTION ACTIVITY THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" OF VIRGINIA @ 1-800-552-7001 FOR PROPER IDENTIFICATION OF EXISTING UTILITIES WITHIN THE PROJECT SITE.

E. FINAL LOCATION OF ALL PLANTINGS SHALL BE DETERMINED IN THE FIELD BY THE OWNER'S CHOSEN REPRESENTATIVE.

F. SUBSTITUTIONS AND/OR MODIFICATIONS TO PLANTING LAYOUT, PLANT MATERIALS, ETC. SHALL NOT BE MADE WITHOUT THE WRITTEN CONSENT OF THE LANDSCAPE ARCHITECT.

G. CONTRACTOR SHALL INSTALL ALL PLANT MATERIALS AS SHOWN IN THE DETAILS, AND AS INDICATED IN THE LANDSCAPE SPECIFICATIONS.

H. THE PLANTING OF TREES SHALL BE DONE IN ACCORDANCE WITH THE STANDARDIZED LANDSCAPE SPECIFICATIONS JOINTLY ADOPTED BY THE VIRGINIA NURSERYMEN'S ASSOCIATION, THE VIRGINIA SOCIETY OF LANDSCAPE DESIGNERS AND THE VIRGINIA CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS.

I. SIZE AND GRADING STANDARDS OF PLANT MATERIALS SHALL CONFORM TO THE LATEST ADDITION OF ANSI Z60.1, AMERICAN STANDARD FOR NURSERY STOCK, BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.

J. ALL PLANT MATERIALS SHALL BE NURSERY GROWN STOCK AND SHALL BE FREE OF ANY DEFORMITIES, DISEASES, OR INSECT DAMAGE. ANY MATERIALS WITH DAMAGED OR DISFIGURED/ CROOKED LEADERS, BARK ABRASIONS, SUNSCALD, INSECT DAMAGE, ETC., ARE NOT ACCEPTABLE AND WILL BE REJECTED.

K. TREES NOT EXHIBITING A CENTRAL LEADER WILL BE REJECTED UNLESS CALLED OUT IN THE PLANT LIST AS MULTI-STEM.

L. ALL PLANTING BEDS AND LAWN AREAS SHALL BE SEPARATED BY SHOVEL EDGING. NO EDGE SHALL BE INSTALLED ADJACENT TO SIDEWALKS OR CURBS.

M. PLANTING BEDS SHALL RECEIVE 3" OF DARK, SHREDDED HARDWOOD MULCH THROUGHOUT. ORANGE AND/ OR RED MULCH IS NOT ACCEPTABLE.

N. ALL AREAS ON PLANS NOT INDICATED TO RECEIVE SOD PLANTING, PAVEMENT, OR HARDSCAPE WHICH ARE DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE SEEDED WITH FESCUE, UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT. SEE SEEDING NOTES THIS SHEET.

O. PLANT MATERIALS SHOWN ON PLANS ARE A GRAPHIC REPRESENTATION ONLY. CONTRACTOR SHALL PERFORM ALL LANDSCAPE INSTALLATION ON THE SUBJECT PROPERTY, AND NOT ON ADJACENT PROPERTIES, UNLESS OTHERWISE DIRECTED BY THE OWNER OR THE OWNER'S REPRESENTATIVE. ROOTBALLS OF SHRUBS AND TREES SHALL BE PLANTED, IN THEIR ENTIRETY, WITHIN THE BOUNDARIES OF THE SUBJECT PROPERTY.

P. CONTRACTOR SHALL PROVIDE A MINIMUM 2% SLOPE AWAY FROM ALL STRUCTURES, UNLESS OTHERWISE DIRECTED BY THE CIVIL ENGINEER.

Q. QUANTITY TAKE-OFFS INDICATED ON THE PLANTING SCHEDULE ARE FOR CONVENIENCE ONLY. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLANS AND THE SCHEDULE, THE GRAPHIC REPRESENTATION IN THE PLANS SHALL DICTATE.

R. ALL LANDSCAPED AND LAWN AREAS ARE TO BE IRRIGATED. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING A TURNKEY DESIGN BUILD IRRIGATION SYSTEM AS PART OF THE BASE BID FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE AN IRRIGATION PLAN AND PRODUCT CUT SHEETS FOR REVIEW AND APPROVAL BY THE OWNER PRIOR TO BEGINNING WORK. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR INSTALLING IRRIGATION SLEEVING AS SHOWN ON THE LANDSCAPE PLAN PRIOR TO INSTALLATION OF PAVING MATERIALS.

S. ALL MULCHED BEDS SHALL HAVE AN APPROVED GEO-TEXTILE WEED BARRIER INSTALLED PER THE PLANTING DETAILS. PRODUCT SPECIFICATION SHEETS SHALL BE SUBMITTED TO THE OWNER OR OWNERS REPRESENTATIVE PRIOR TO ORDERING MATERIAL.

PERFORMANCE SPECIFICATION

- I. PLANTS

A. General

1. Live healthy plants free of dead branches and parts

2. Free of disease, insect, injury and damage

3. Unbroken, intact, dense and solid rootballs and containers, without cracks, flat sides or previously repaired damage.

4. Free of girdling roots or rootbound/circling container conditions

5. Plants of consistent in growth habit and healthy character

6. Free of compromising growth conditions such as weak crotch connections, crossed branches, snags and scars

7. Point of origin growing location within 100 miles of project site

8. Graded, standards, caliper, sizes and stock consistent with *ANSI Z60.1, American Standard for Nursery Stock* most current edition

9. Species identified consistent with *Hortus Third: Concise Dictionary of Plants Cultivated in the United States and Canada*, most current edition and *Manual of Woody Plants: Their Identification, Ornamental Characteristics, Culture, Propagation and Uses*, most current edition

10. All disturbed areas shall be grass seed unless otherwise identified on landscape plans

B. Trees:

1. Deciduous Single Trunk

a. Full, straight and upright with consistent symmetrical natural branching pattern throughout

b. Branching Height-seven (7) feet to lowest branch in two years unless otherwise required by local jurisdiction

2. Deciduous Multi-Trunk

a. Full and upright with straight consistent symmetrical natural branching pattern throughout

b. Canes evenly spaced and of similar growth habit

c. Free of suckers and extraneous branching

3. Evergreen Single-Trunk

a. Full and upright with continuous symmetrical dense natural habit

b. Clear branching height twelve (12) inches above top of rootball

c. Free of suckers and extraneous branching

d. Do not shear or otherwise prune to shape plantings

C. Evergreen and Deciduous Shrubs

1. Full, dense and naturally symmetrical.

2. Consistent with container and/or balled and burlapped size

3. Free of suckers and extraneous branching

4. Do not shear or otherwise prune or shape plantings

- D. Evergreen and Deciduous Groundcover

1. Full and dense in pots or flats

- E. Perennials and Seasonal Color

1. Full and dense in pots or flats

- F. Turf Grass

1. Subgrade

a. Soil Mix-10% Compost, 90% topsoil by volume

b. Preparation-loosen subgrade to a minimum depth of four (4) inches. Remove all non-natural materials including litter, stones, sticks and all items greater than ¾ inch in any dimension

c. Preparation-spread soil mix at a depth of four (4) inches continuously to meet grade elevations shown on drawings. Allow for thickness of sod when applicable

2. Grass Sod

a. Install not longer than twenty-four (24) hours from harvest

b. Grass bed not less than two (2) inches in continuous thickness

c. 100% continuous live sod coverage after first growing season and at end of warranty period.

d. Of uniform non-varying density and continuous texture quality capable of growth and development immediately upon installation. Weed and noxious plant free

e. Stagger installation rows and place aligned parallel to contours

f. Fill joints solidly with planting bed preparation soil

g. Provide anchor pins at twenty-four (24) inches on center for slopes greater than 4:1

3. Grass Seed

a. Mix approved by the Landscape Architect

b. Provide first and new of year seed crops in mix free of weed seeds and deleterious matter

c. Provide seed mix not greater than 15% annual or perennial rye

d. Coverage 85% continuous coverage live stand after first growing season and at end of warranty

e. Replacement or overseeding mixes consistent with original application/installation

f. Provide erosion blankets or other slope retention methods as noted on drawings
- II. Materials and Appurtenances
- A. Testing

1. Materials testing information/certificates/dated labels shall be current to the project and performed/certified not greater than 120 calendar previous days from current date of submittal for review
- B. Top Soil

1. Neutral Ph balance 5.5 -7.5. Friable and containing 2.0-5.0% organic matter by dry weight. Continuously free of non-soil items such as stones, debris, sticks, trash, and deleterious matter greater than ¾ inch in any direction. Clay content shall not exceed 25%.Gravel content shall not exceed 10%. Silt shall not exceed 25%

C. Use of Existing Topsoil

1. Existing topsoil on-site may be repurposed with prior Owner approval. Contractor shall provide soil testing and additive program that demonstrates consistent performance and characteristics and composition as identified herein. Owner shall approve soil testing and soil amendment/additive methods and procedures
- D. Shredded Hardwood Mulch

1. 100% organic shredded first year hardwood free of deleterious matter, rock, gravel and weed seed. Neutral Ph balance 5.5-7.5
- E. Composted Pine Bark Fines

1. 100% organic ground pine bark with no particle dimension greater than ¾-inch and no greater than 10% wood content
- F. Compost Ph

1. Balanced 5.0-8.5 mature, stable and weed free produced by natural aerobic decomposition. Free of visible contaminants and toxic substances. Not greater than 5% sand, silt, clay or rock by dry weight. Consistent with US-EPA CFR Title 40 Part 503 Standards for Class A biosolids
- G. Compost Testing

1. Prior to delivery on-site, the following items are required for approval by Owner: Feedstock percentage in final compost product; statement that the products meets federal, state and local health safety requirements

2. Provide copy of lab analysis less than 120 calendar days old verifying that the product meets described physical requirements: chemical contaminants, Ph, physical contaminants, biological contaminants (including a statement that fecal coliform and salmonella testing and results comply with requirements of the US Composting Council Seal of Testing approval programs
- H. Planting Mix

1. 85% topsoil and 15% Compost

I. Fertilizer

1. Granular 10% nitrogen, 6% Phosphorous, 4% Potassium granular form with 50% Nitrogen in organic form. Product and Material Safety Data as approved by Owner
- J. Herbicide

1. Product and Material Safety Data as approved by Owner
- K. Water

1. Potable only unless otherwise approved by Owner
- L. Hardwood Stakes

1. 2 x 2 x 48 inch square of sound hardwood, painted flat black on all sides
- M. Tree Ties

1. Villa Non-Abrasive Rubber Tree Ties or approved equal
- N. Filter Fabric

1. Mirafi 140-N or approved equal
- III. Execution

A. Site Conditions

1. Inspect site and notify Owner in writing of acceptance with indication that project conditions are acceptable are suitable to proceed with work. Notify Owner of any existing damage and/or other conflicting conditions.

2. Do not proceed with work until unsatisfactory conditions have been satisfactorily remedied. Notify Owner of acceptance prior to commencement of work.

3. Notify Owner in writing of any conditions that may preclude successful completion of work including items such as coordination with other trades, incomplete work, drainage, soil temperature and/or composition, access to storage/work areas, damage to conditions, etc.

4. Notify Owner in writing immediately of any items that may influence work schedule, timing of tasks, materials delivery and/or installation and warranty responsibilities.

5. Coordinate and cooperate with other trades working in and adjacent to work areas. Examine drawings of other trades which show development of the entire project and become familiar with the scope of required work by others.
- B. Planting Seasons

Recommended seasons are a general guide based on historical climatic data and typical performance of plantings, and which vary dependent on project-specific environmental conditions. Due to construction schedules, recommended planting seasons may/may not coincide with request(s) for certificate of occupancy for projects. Coordination of planting installation and seasons shall be reviewed with Owner on an individual project basis.
1. Deciduous and Evergreen Shrubs

a. Install/plant between March 15 and June 15 and/or September 15 and November 30

3. Perennials

a. Install/plant between March 15 and June 15 and/or September 15 and November 30

4. Spring Flowering Bulbs

a. Install/plant between September 15 and December 15

5. Seasonal Annuals

a. Install/plant in season per approved schedule

6. Turf Grass

a. Install/plant between March 15 and May 15 and/or September 15 and November 30

b. Do not install/plant seed or sod turf grass areas when ambient air temperature is below forty (40) degrees Fahrenheit, or forecast for a twelve (12) hour period after completion of work

7. No Plant Installation

a. Do not install plantings or turf grass between June 15 and September 15, without approval by Owner
- C. Positioning & Location of Plantings

1. Position plants to show the most-prominent and well-formed face to most-public view

2. Field locate plants and location/spacing/dimension of planting beds on project site prior to beginning installation

3. Verify location of individual plants and plant beds prior to beginning installation. Do not proceed without Owner approval
- D. Implementation

1. Pursue work continuously without delay or interruption until completion unless notified otherwise by Owner

2. Provide project submittals ahead of commencement of work. Landscape Architect requires a minimum of ten (10) working days from date of receipt for review of submittals and response to Owner and Contractor. Plan accordingly for procurement of materials

3. Continuously update implementation schedule and notify Owner of progress. Delays related to material availability are not cause for non-completion of scheduled delivery of work

4. Report delays due to weather or site conditions immediately upon finding. Provide recommendation for remedy of schedule delays. Do not work, place or modify frozen soil

5. Report delays due to extraordinary natural or other conditions beyond control of Contractor
- E. Clean Up

1. Remove trash, debris and work materials from site prior to request for substantial completion. Thoroughly clean surfaces impacted by work including building, parking areas, roadways, sidewalks, signs, lights, site furnishings, etc.

2. Repair any damage to existing conditions that occurred during execution of work.

3. All clean-up and demobilization procedures shall be performed to satisfaction of the Owner and Landscape Architect.
-
-
- GREEN CLEAN

3290 WORTH XING

PREPARED FOR

GREEN CLEAN

ALBEMARLE COUNTY

PLANTING NOTES

AND DETAILS

© 2020 KIMLEY-HORN AND ASSOCIATES, INC.

1700 WILLOW LAWN DR., SUITE 200, RICHMOND, VA 23230

PHONE: 804-673-3882

WWW.KIMLEY-HORN.COM

COMMONWEALTH OF VIRGINIA

ROBBIE D. ROACH

Lic. No. 1870

10/16/2020

LANDSCAPE ARCHITECT

KHA PROJECT

113414010

DATE

10/23/2020

SCALE

AS SHOWN

DESIGNED BY

CBE

DRAWN BY

STM

CHECKED BY

RRP

02/10/20

BID SET

1

REVISIONS

DATE

BY