MISS UTILITY

THE CONTRACTOR SHALL CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL UNDERGROUND UTILITIES IN THE AREA OF PROPOSED WORK ARE LOCATED PRIOR TO COMMENCING CONSTRUCTION WORK. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

ALL UTILITIES SHOWN ON THE PLANS ARE PROVIDED FOR INFORMATION ONLY AND SHALL BE CONSIDERED APPROXIMATE. ANY UTILITIES OR OTHER UNDERGROUND FACILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED/REPLACED AT THE CONTRACTOR'S SOLE EXPENSE,

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

BURTONSVILLE ACCESS ROAD

SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD

C.I.P. CONTRACT NO. 0500500

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR: MCDPS ACCESS PERMIT STORMWATER MANAGEMENT SEDIMENT CONTROL TECHNICAL REQUIREMENTS: ADMINISTRATIVE REQUIREMENTS: DATE REVIEWED REVIEWED DATE REVIEWED DATE SEDIMENT CONTROL PERMIT NO. APPROVED DATE MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL. IF THE PROJECT HAS NOT STARTED, UNLESS APPROVED DATE

DPS approval of a sediment control or stormwater management plan is for demonstrated compliance with minimum environmental runoff treatment standards and does not create or imply any right to divert or concentrate runoff onto any adjacent property without that propert owner's permission. It does not relieve the design engineer or other responsible person of professional liability or ethical responsibility for the adequacy of the drainage design as it affects uphill or downhill properties.

> LIMIT OF WORK **BURTONSVILLE ELEMENTARY** SCHOOL ACCESS ROAD

LIMIT OF WORK

STA. 1000 + 12.89

BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD

STA. 1002 + 48.27

BELLE COTE DR WINING RED TO TY ACRES	NAD 8391 NGVD 29 BURTONSVILLE ELEMENTARY SCHOOL	BURTONSVILLE TOWN SQUARE NATIONAL OF THE CONTROL O	29 VANOT
N ERY SOENCEAU	FIEWEY CESS & COLOUR BURE OF SAUTHER BURE OF SECOOL	OLO OLIMBER PARE BURTONSVILLE	VALLEY 200 STREAM
DEN BRIDGE MAYOR FOR FM	LOMA LINDA CT PL ARDSLEY CT AGGORG	BLACKBURN CHILLIAN CH	RED CEDAR OR
COLUMBIA COMMUNITY CENTER PARK	DR CT	BENEICH COTTON	PINE

VICINITY MAP SCALE: 1" = 1000'

DESIGN DESIGNATION									
ROADWAY	BURTON ACCESS	SVILLE ROAD	BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD						
ROADWAY LENGTH (MILES)	0.	26	0.	05					
CONTROLS YEARS	-	-	-	-					
AVERAGE DAILY TRAFFIC (A.D.T.)	-	-	-	-					
DESIGN HOURLY VOLUME (D.H.V.)	-	-	-	-					
DIRECTIONAL DISTRIBUTION	-	-	-	-					
% TRUCKS (A.D.T.)	-	-	-	-					
% TRUCKS (D.H.V.)	-	-	-	-					
FUNCTIONAL CLASSIFICATION	LOCAL		LOCAL						
CONTROL OF ACCESS	NONE		NONE						
INTENSITY OF DEVELOPMENT	URBAN		URBAN						
TERRAIN	ROL	ROLLING		ROLLING					
DESIGN SPEED (M. P. H.)	25	MPH	25	MPH					

95% DESIGN REVIEW NOVEMBER 23, 2022 NOT FOR CONSTRUCTION

LIMIT OF WORK BURTONSVILLE ACCESS ROAD STA. 114 + 00.70

SHEET

NO.

3-4

10-13

14-16

17-23

24-26

27-30

31-33

34

35-39

40-42

43-45

46

47

51-52

57-59

DRAWING

TI-OI

AB-01

TS-01

PD-0I

GS-01

PS-01 - PS-03

PR-01 - PR-03

PV-0I - PV-03

DE-01 - DE-07

DP-01 - DP-03

DD-01 - DD-04

SW-01 - SW-03

SWD-01

RW-01 - RW-05

SN-01 - SN-03

TC-01 - TC-03

SC-01

SC-02

SC-03 - SC-05

SC-06 - SC-07

NR-01 - NR-04

LT-01 - LT-03

LD-01 - LD-04

TITLE SHEET

TYPICAL SECTIONS

PAVEMENT DETAILS

GEOMETRY SHEET

ROADWAY PLANS

ROADWAY PROFILES

STAKEOUT PLANS

DRAINAGE DETAILS

LIGHTING PLANS

LANDSCAPE PLANS

ADA DETAILS AND STAKEOUT

SIGNING AND MARKING PLANS

NRI / FSD & TREE SAVE PLANS

DRIVEWAY I CROSS SECTIONS

DRIVEWAY 2 CROSS SECTIONS

TRAFFIC CONTROL PLANS

STORMWATER MANAGEMENT PLANS

STORMWATER MANAGEMENT DETAILS

RETAINING WALL PLANS, NOTES AND DETAILS

EROSION AND SEDIMENT SEQUENCE OF CONSTRUCTION

BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD CROSS SECTIONS

EROSION AND SEDIMENT CONTROL NOTES

EROSION AND SEDIMENT CONTROL PLANS

EROSION AND SEDIMENT CONTROL DETAILS

BURTONSVILLE ACCESS ROAD CROSS SECTIONS

STORM DRAIN PROFILES

RELATED REQUIRED PERMITS To be completed by the consultant and placed on the first sheet of the Sediment

Control/Stormwater Management plan set for all projects

INDEX OF SHEETS

GENERAL NOTES, ABREVIATIONS AND LEGEND

SHEET NAME

DPS FILE NO.

SC0001

SC0002

SC0003

SC0004-SC0006

SC0007-SC0008

IT IS THE RESPONSIBLITY OF PERMITTEE/OWNER OF THIS SITE TO OBTAIN ALL REQUIRED PERMITS PRIOR TO ISSUANCE OF THE APPROVED SEDIMENT CONTROL PERMIT:

TYPE OF PERMIT	REQ'D	NOT REQ'D	PERMIT NO.	EXPIRATION DATE	WORK RESTRICTION DATES
MCDPS Floodplain district		X			
WATERWAYS/WETLAND(S) a. Corps of Engineers	Х				
b. MDE	Χ				
c. MDE Water Quality Certification	X				
MDE Dam Safety		Х			
Montgomery County/DNR Roadside Tree Care Blanket Permit	X				
Montgomery County Roadside Tree Protection Law Approval	X				
NPDES NOTICE OF INTENT	X				
OTHERS (Please List):					
WSSC		Х			
Montgomery County Tree Canopy Construction Law Approval	Χ				
Historic Area Work Permit		Χ			

RKSK

700 East Pratt Street, Suite 500 | Baltimore, MD 21202

ANTICIPATED POSTED SPEED (M.P.H.)

Engineers | Construction Managers | Planners | Scientists www.rkk.com

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PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. EXPIRATION DATE:

25 MPH

OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND

CONTACT: DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION 240-777-7221

		MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND			
		RECOMMENDED FOR APPROVAL		1	
		Chief, Transportation Planning and Design Section APPROVED	Date		
		Chief, Division of Transportation Engineering	 Date		

DESIGNED BY KBJ

DRAWN BY KBJ CHECKED BY TMB

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD

TITLE SHEET

SCALE ___ AS SHOWN DATE NOVEMBER 23, 2022 DRAWING NO. TI - O1OF

SHEET NO. 1 OF 63 01

GENERAL NOTES

- 1. RIGHT OF WAY LINES ARE SHOWN FOR ASSISTANCE IN INTERPRETING PLANS. THESE LINES DO NOT REPRESENT THE OFFICIAL PROPERTY ACQUISITION LINES. FOR OFFICIAL RIGHT OF WAY AND EASEMENT INFORMATION, SEE THE APPROPRIATE RIGHT OF WAY PLAT.
- 2. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATIONS OF THE MAINS BY DIGGING TEST HOLES BY HAND AT ALL UTILITY CROSSINGS, WELL IN ADVANCE OF TRENCHING. IF CLEARANCE IS LESS THAN TWELVE (12) INCHES, THEN CONTACT THE MONTGOMERY COUNTY DOT PROJECT MANAGER AND THE APPROPRIATE UTILITY BEFORE PROCEEDING WITH CONSTRUCTION.
- 3. REPAIRS TO UTILITIES OR PROPERTY DAMAGED AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE OR METHOD OF OPERATION MUST BE MADE AT THE CONTRACTOR'S EXPENSE BEFORE PROCEEDING WITH CONSTRUCTION.
- 4. THE EXACT LOCATION AND TYPE OF SEDIMENT CONTROL DEVICES WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER, WHO RESERVES THE RIGHT TO ORDER ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES.

- 5. CONSTRUCTION EQUIPMENT SHALL HAVE TREADS /TIRES CLEANED PRIOR TO LEAVING THE LOD. ALL MATERIAL REMOVAL /LOAD OUT SHALL BE LIFTED FROM THE LOD. ALL SEDIMENT SPILLED, DROPPED OR TRACKED ONTO THE ROAD MUST BE REMOVED IMMEDIATELY BY VACUUMING, SCRAPING OR SWEEPING.
- 6. SAW CUTS WILL NOT BE MEASURED BUT WILL BE INCIDENTAL TO OTHER RELATED ITEMS AS SPECIFIED IN THE CONTRACT DOCUMENTS.
- 7. REFER TO THE CONTRACT DOCUMENTS FOR ROADWAY BORING, AND SOIL BORING DATA SHEETS.
- 8. ALL WORK ON THIS PROJECT SHALL CONFORM TO THE LATEST MDSHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, REVISIONS THEREOF OR ADDITIONS THERETO, THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS, AND THE LATEST VERSION OF THE MARYLAND MUTCD.
- 9. PAVEMENT RESURFACING SHALL BE COMPLETED WITHIN FOURTEEN (14) CALENDAR DAYS AFTER GRINDING. PAVEMENT GRINDING OPERATIONS SHALL NOT BEGIN UNLESS THERE IS A SUFFICIENT TIME TO RESURFACE THE ROADWAY BEFORE COLD WEATHER.
- 10. EXISTING INFORMATION SHOWN IN THE PLANS IS BASED ON TOPOGRAPHIC SURVEY PERFORMED BY RK&K ON DECEMBER 1, 2021 WITH HORIZONTAL DATUM NAD 83/91 AND VERTICAL DATUM NGVD 29.

LEGEND



CONCRETE SIDEWALK

PAVEMENT GRINDING &



ASPHALT SHARED USE PATH

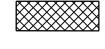


FULL DEPTH ASPHALT PAVEMENT



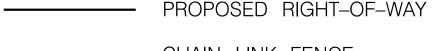
RESURFACING

PAVEMENT OR SIDEWALK REMOVAL

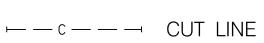


GRAVEL

BASELINE OF CONSTRUCTION



×——×—— CHAIN LINK FENCE



F F F FILL LINE

— LOD — LIMIT OF DISTURBANCE

•—• WOOD FENCE

STORM DRAIN

-- FO -- -- FIBER OPTIC LINE

- — G — — — · GAS LINE



DRAINAGE STRUCTURE IDENTIFICATION

FIRE HYDRANT LIGHT POLE

W-1

ROADWAY /SOIL BORING

TH-01

UTILITY TEST HOLE LOCATION

----- EXISITING RIGHT OF WAY LINE --san---- EXISTING SEWER MAIN

___G_4"G____ EXISTING GAS MAIN

--w---- EXISTING WATER MAIN

== EXISTING STORM DRAIN PIPE

--FO----- EXISTING FIBER OPTIC

EXISTING GAS MANHOLE

EXISTING LIGHT

EXISTING SIGN

EXISTING INLET



STORM DRAIN MANHOLE



SANITARY SEWER MANHOLE

TELEPHONE MANHOLE



WATER VALVE



WATER METER



TREES



TREE LINE

UTILITY POLE

WETLAND BOUNDARY

WETLAND AREA

ABBREVIATIONS

A.A.S.H.T.O	American Association of State Highway	IN
ADAND	Transportation Officials	I.S.T
ABAND		INV
	Average Daily Traffic	J.B
APPROX		K
APPROX		L
AUX		L.F
₽ or B/L		L.L
	Burtonsville Access Road	LOD
	Burtonsville Elementary School Access Road	L.P
BK		LT
BIT		M-NCF
	Bituminous Concrete	
B.M		MAC
BOT		M.C
	Center of Curve	MAX
	Utility Cabinet	M.D.D.
	Cable Television	MOD
	California Bearing Ratio	MIN
Q	Centerline	N
CL	Class	NB
CLF	Chainlink Fence	N.E
CMP	Corrugated Metal Pipe	N.P
CMPA	Corrugated Metal Pipe Arch	O.C
C.O	. Cleanout	OHE
COMB	Combination	O.M
CONC.	Concrete	PAV'T.
CONSTR	Construction	P.C
COR	. Corner	P.C.C.
CORR	Correction	P/C
DC	Degree of Curve	R
	Design Hourly Volume	PED
D.I		P/GE
DIA	·	PGL
D.O	Double Opening	P/GL
DPS	Department of Permitting Services	P/R
E		P.I
E		P.I
	External Distance	P.O.C
EA		P.O.T
EB		PROP.
ELEV.		P.R.C.
	Elliptical Reinforced Cement	PT
	Concrete Pipe	P.T
ES		P.V.C
EX. or EXIST.		PVC
FT	•	PVI
F or FL		PVRC
	Flat Bottom Ditch	PVT
F.H		R
FWD.		RELOC
G		R.F
G.V		RT
H.B.		RW or
	High Density Polyetheylene Pipe	or R.C
HDWL.		
	Horizontal Ellipitical Reinforced	
	Concrete Pipe	
H.P		

IN	Inch
	Inlet Sediment Trap
INV	
	Junction Box
K	
L	
L.F	
L.L	
	Limit of Disturbance
L.P	
LT.	
IVI—INCPPC	Maryland–National Capital Park
N 4 A CO	and Planning Commission
MAC	
	Moisture Content
MAX	
	Maximum Dry Content
MOD	
MIN	
N	
NB	Northbound
N.E	Northeast
N.P	Non-Plastic
O.C	On Center
OHE	Overhead Electric
O.M	Optimum Moisture
PAV'T	
P.C	Point of Curvature
	Point of Compound Curvature
	Point of Crown
R	
_	Utility Pedestal
	Profile Grade Elevation
	Profile Grade Line
	Profile Ground Line
	Point of Rotation
	Plasticity Index
	Point of Intersection
	Point On Curve
	Point On Tangent
PROP	·
	Point of Reverse Curve
PT	
	Point of Tangency
	Point of Vertical Curve
	Polyvinyl Chloride
	Point of Vertical Intersection
	Point of Vertical Reverse Curve
	Point of Vertical Tangency
R	
RELOC	Relocated
R.F	Rock Fragments
RT	
RW or R/W	
or R.O.W	Right of Way

R.C.P	Reinforced Cement Pipe
R.C.C.P	Reinforced Cement Concrete Pipe
R.Q.D	Rock Quality Desgnation
R.M	
S	South
	Sanitary Sewer
	Southbound
	Storm Drain
	Surface Drain Ditch
	Super Elevation
SF	
	Square Feet
SHLD	
SHT	
	Structural Plate Pipe
S.P.T	Standard Penetration Testing
SSD	Stopping Sight Distance
SSF	Super Silt Fence
STD	Standard
STA	Station
SO	Single Opening
	Square Yards
	Stormwater Management
T	
	Telephone
	Top of Cover
	Top of Grate
	Traverse Line
	Top of Manhole
TRAV	
	Temporary Swale
	Top of Slab
T.S	Topsoil
TYP	Typical
U.D	Under Drain
U.G	Underground
U.P	Utility Pole
	United States Department
	of Agriculture
VCI	Vertical Clearance
	Vertical Curve Length
W	
W	
	Westbound
	Wetland Buffer
	Water Meter
W.S	Wrapped Steel
W.S.S.C	Washington Suburban Sanitation Commissi
W.V	Water Valve
	Cross Slope

RKSK P: 410.728.2900 700 East Pratt Street, Suite 500 | Baltimore, MD 21202 Engineers | Construction Managers | Planners | Scientists PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. EXPIRATION DATE:

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND CONTACT: DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION

OWNER/ADDRESS:

240-777-7221

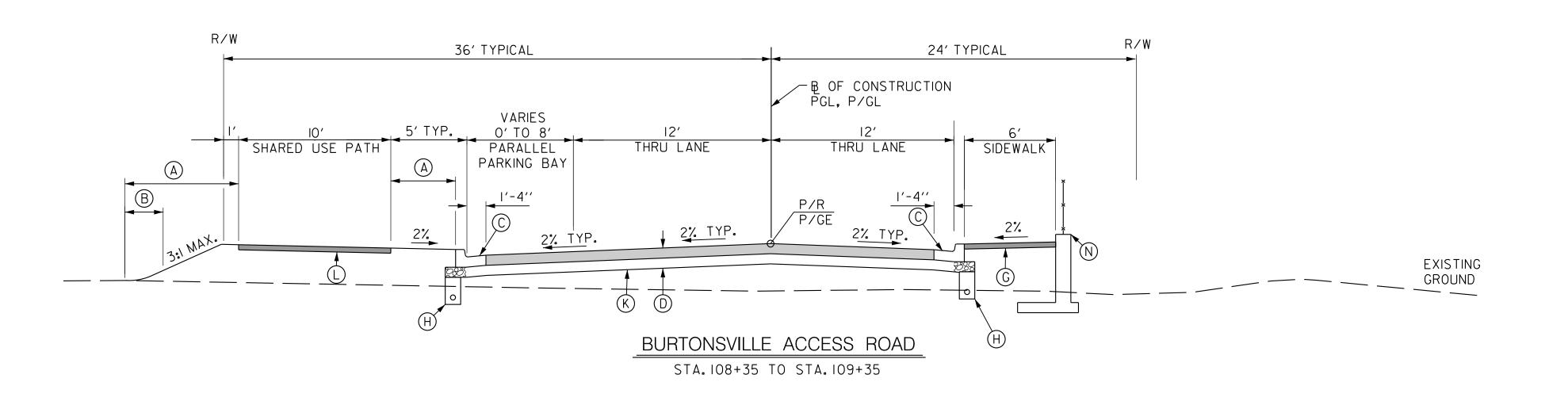
				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND			
				RECOMMENDED FOR APPROVAL			
				Chief, Transportation Planning and Design Section Date APPROVED			
				Chief, Division of Transportation Engineering Date			
NO.	REVISION	DATE	BY	DESIGNED BY MCK DRAWN BY SJS CHECKED BY TMB			

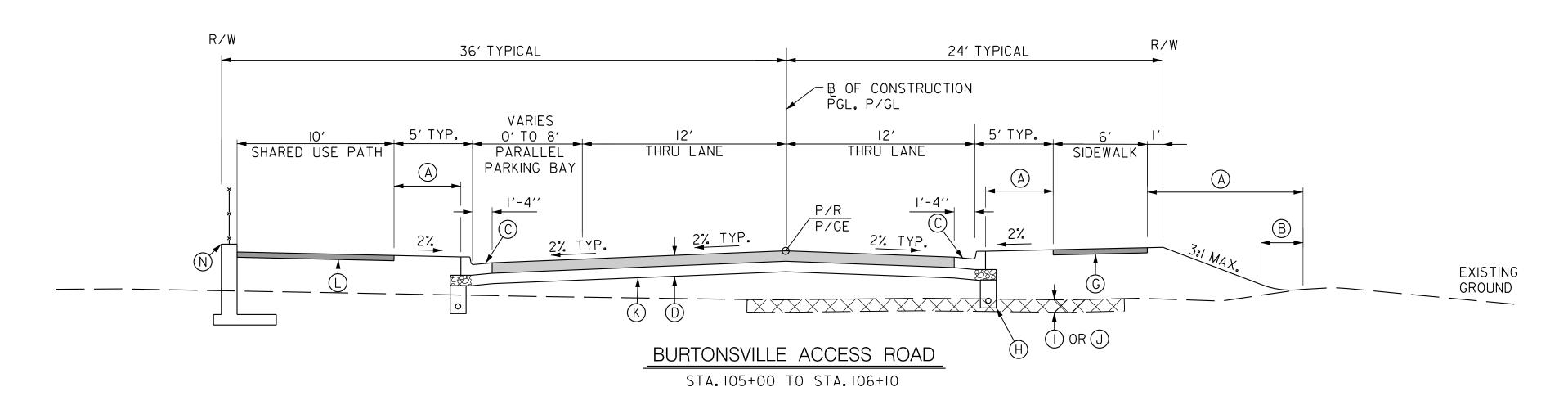
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD

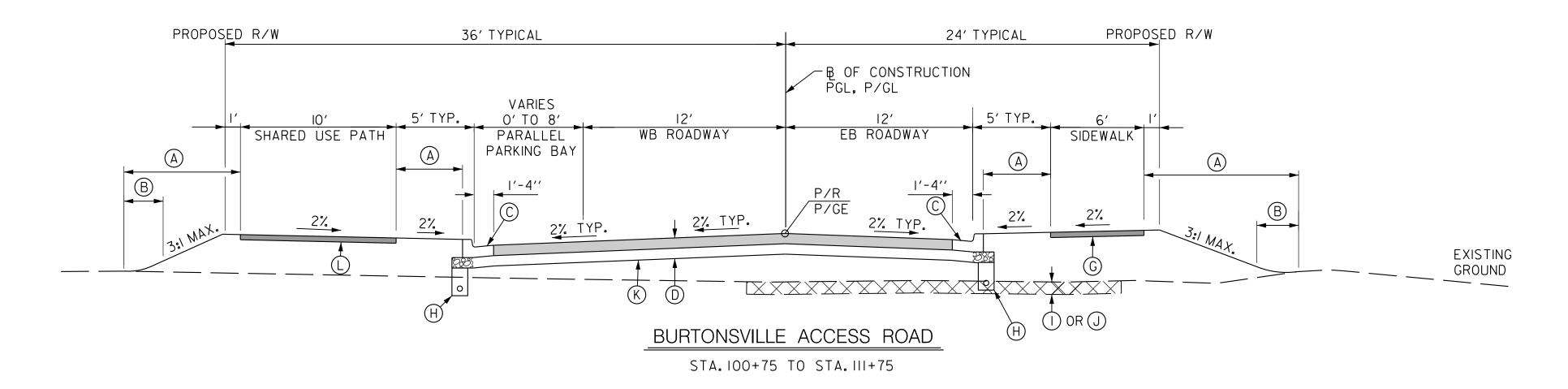
GENERAL NOTES, ABBREVIATIONS AND LEGEND

DATE NOVEMBER 23, 2022 SCALE _ AB-01 **OF** 01 SHEET NO. 2 OF 63 DRAWING NO.

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TYPICAL SECTION LEGEND

- A PLACE 4" TOPSOIL AND SOD EXCEPT WHERE DITCH LININGS ARE TO BE BIOFILTRATION SEED MIX, RIPRAP OR CONCRETE.
- SLOPE ROUNDING (STD. NO. MC-811.01)
- COMBINATION CONCRETE CURB & GUTTER -TYPE A (STD NO. MC-100.01)
- D FULL DEPTH PAVEMENT (SEE DETAIL SHEET NO.PD-01)
- 5 INCH CONCRETE SIDEWALK (STD. NO. MC-III.OI)
- UNDERDRAIN LOCATION AS NOTED ON PLANS (SHA STD. MD-387.II-0I)
- WHEN THE TOP OF PROPOSED SUBGRADE IS LESS THAN ONE FOOT ABOVE THE EXISTING PAVEMENT SURFACE, REMOVE THE EXISTING PAVEMENT AND BACKFILL WITH CRUSHER RUN CR-6.
- (J) WHEN THE TOP OF PROPOSED SUBGRADE IS GREATER THAN OR EQUAL TO ONE FOOT ABOVE THE EXISTING PAVEMENT SURFACE, REMOVE THE EXISTING PAVEMENT AND BACKFILL WITH COMMON BORROW.
- TOP OF SUBGRADE
- ASPHALT SHARED USE PATH (SHA STD. MD-580.08)
- RETAINING WALL WITH ORNAMENTAL FENCE (SEE RETAINING WALL PLANS & DETAILS - SHEETS 35-39)

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PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. EXPIRATION DATE:

DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND CONTACT: DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220

REVISION

OWNER/ADDRESS:

DESIGN SECTION

240-777-7221

MONTGOMERY COUNTY

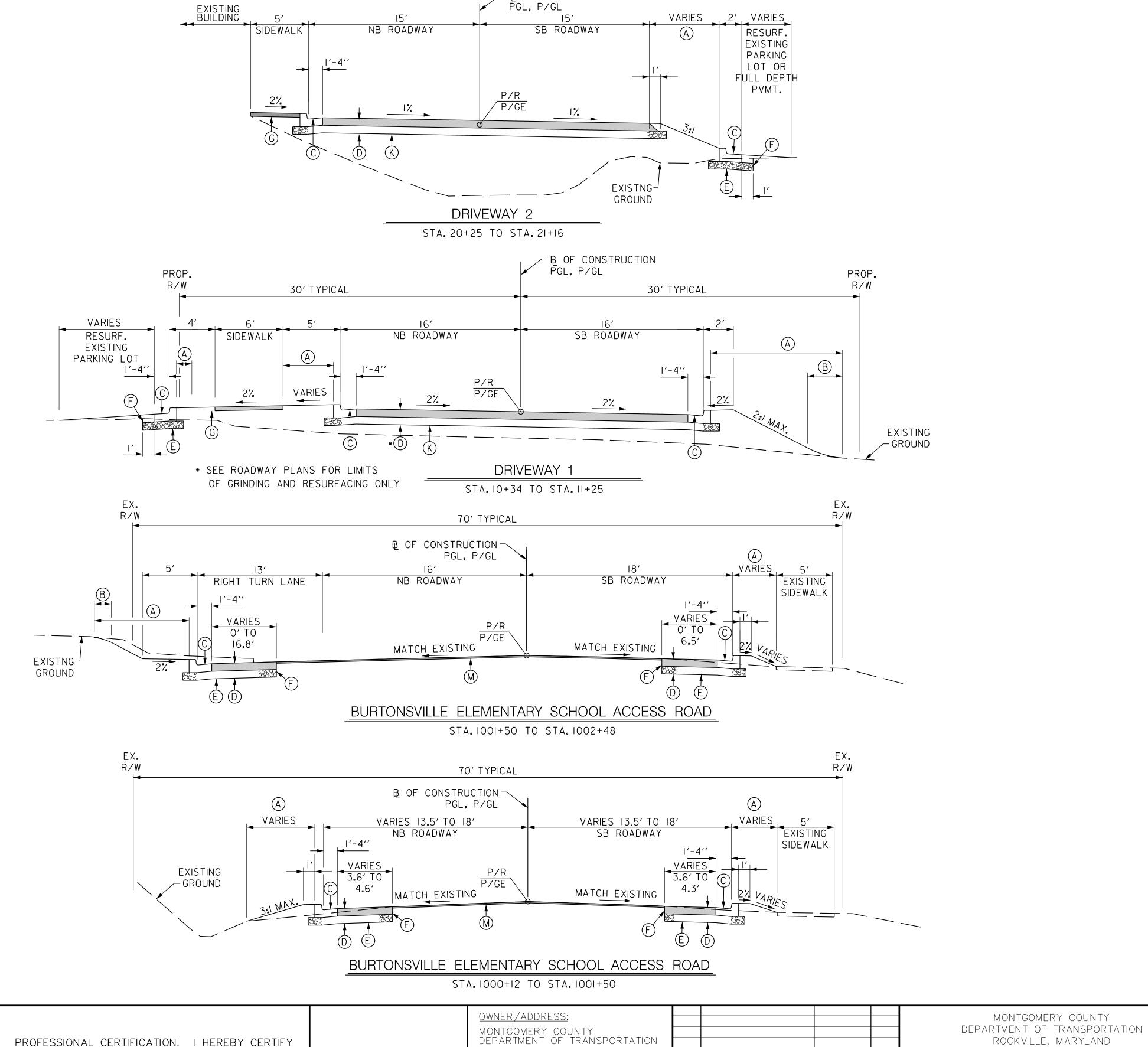
DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND RECOMMENDED FOR APPROVAL Chief, Transportation Planning and Design Section Date APPROVED Date Chief, Division of Transportation Engineering DRAWN BY SJS CHECKED BY TMB DESIGNED BY MCK

MONTGOMERY COUNTY

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD

TYPICAL SECTIONS

DATE NOVEMBER 23, 2022 SCALE _ SHEET NO. 3 OF 63 OF DRAWING NO.



-B OF CONSTRUCTION

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD

TYPICAL SECTIONS

DATE NOVEMBER 23, 2022 SCALE _

RKSK

P: 410.728.2900

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THAT THESE DOCUMENTS WERE APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF EXPIRATION DATE:

MARYLAND.

LICENSE NO.

100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND CONTACT: DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION

240-777-7221

RECOMMENDED FOR APPROVAL Chief, Transportation Planning and Design Section APPROVED Chief, Division of Transportation Engineering

DESIGNED BY MCK

MONTGOMERY COUNTY

ROCKVILLE, MARYLAND

Date DRAWN BY SJS CHECKED BY TMB

TS-02 **OF** DRAWING NO.

TYPICAL SECTION LEGEND

COMBINATION CONCRETE CURB & GUTTER -

5 INCH CONCRETE SIDEWALK (STD. NO. MC-III.OI)

UNDERDRAIN - LOCATION AS NOTED ON PLANS

SLOPE ROUNDING (STD. NO. MC-811.01)

TYPE A (STD NO. MC-100.01)

LIMIT OF CLASS I EXCAVATION

FULL DEPTH SAW CUT

(SHA STD. MD-387.II-OI)

TOP OF SUBGRADE

GRIND AND RESURFACE

(A) PLACE 4" TOPSOIL AND SOD EXCEPT WHERE DITCH LININGS

FULL DEPTH PAVEMENT (SEE DETAIL SHEET NO. PD-01)

ARE TO BE BIOFILTRATION SEED MIX, RIPRAP OR CONCRETE.

SHEET NO. 4 OF 63

FULL DEPTH PAVEMENT DETAIL - CLOSED SECTION NOT TO SCALE

SAW CUT EDGE —

 $1\frac{1}{2}$ INCH MIN. -

LIMIT OF

RESURFACING

MEET EXIST. GRADE

MILLING

LENGTH PER SHA SPEC. 504.03.09 OR

AS DIRECTED BY ENGINEER

EXIST. SURFACE TO BE REMOVED

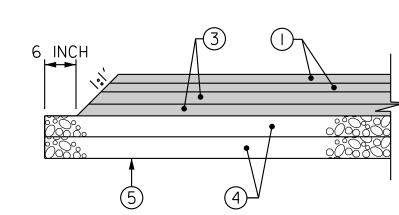
SURFACE COURSE TO A MIN. OF $1\frac{1}{2}$ " ---

GRIDING AND RESURFACING DETAIL

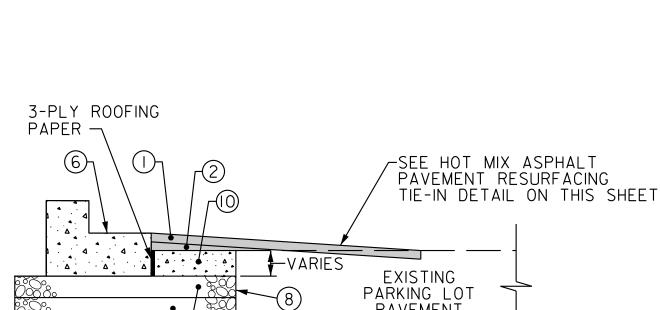
NOT TO SCALE

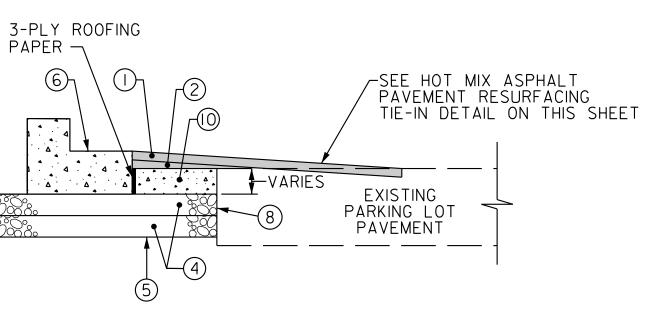
TO ALLOW PLACEMENT OF NEW

EXIST. BIT. CONC. PAVEMENT-

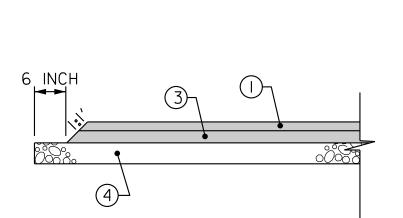


FULL DEPTH PAVEMENT DETAIL - OPEN SECTION NOT TO SCALE

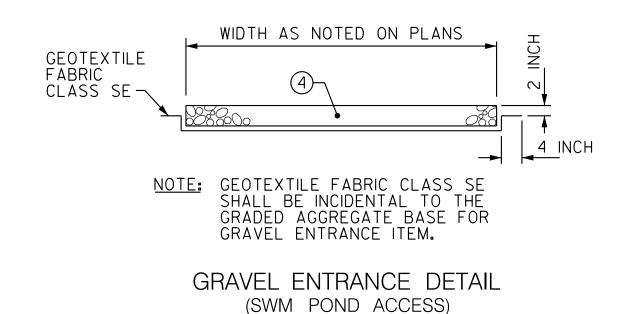








ASPHALT SHARED USE PATH (SHA STD. MD-580.08)



PLAIN PORTLAND CEMENT CONCRETE PAVEMENT - MIX NO. 3

<u>LEGEND</u>

(3) $2\frac{1}{2}$ INCH HOT MIX ASPHALT SUPERPAVE BASE, 19.0 MM, PG 64-22, LEVEL-2

COMBINATION CONCRETE CURB & GUTTER - TYPE A (STD NO. MC-100.01)

4 INCH CONCRETE SIDEWALK (GRADED AGGREGATE BASE INCIDENTAL TO SIDEWALK PAY ITEM)

HOT MIX ASPHALT SUPERPAVE, 9.5 MM FOR WEDGE / LEVEL,

TOP OF SUBGRADE AND LIMIT OF CLASS I EXCAVATION

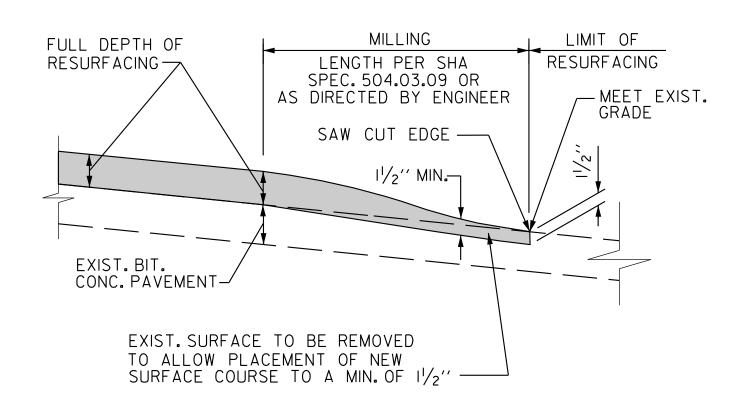
5 INCH GRADED AGGREGATE BASE COURSE

PG 64-22, LEVEL-2

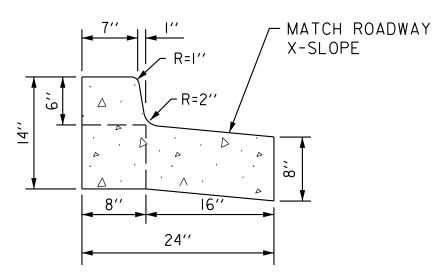
8

SAW CUT

 $1\frac{1}{2}$ INCH HOT MIX ASPHALT SUPERPAVE SURFACE, 12.5 MM, PG 64-22, LEVEL-2



HOT MIX ASPHALT PAVEMENT RESURFACING TIE - IN DETAIL NOT TO SCALE



(MODIFIED TYPE "A" MONT. CO. STD. NO. MC-100.01)

MODIFIED COMBINATION CONCRETE CURB AND GUTTER

NOT TO SCALE NOT TO SCALE NOT TO SCALE

RKSK P: 410.728.2900

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PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. EXPIRATION DATE:

OWNER/ADDRESS:	
MONTGOMERY COUNTY	
DEPARTMENT OF TRANSPORTATION	
100 EDISON PARK DRIVE	_
GAITHERSBURG, MARYLAND	

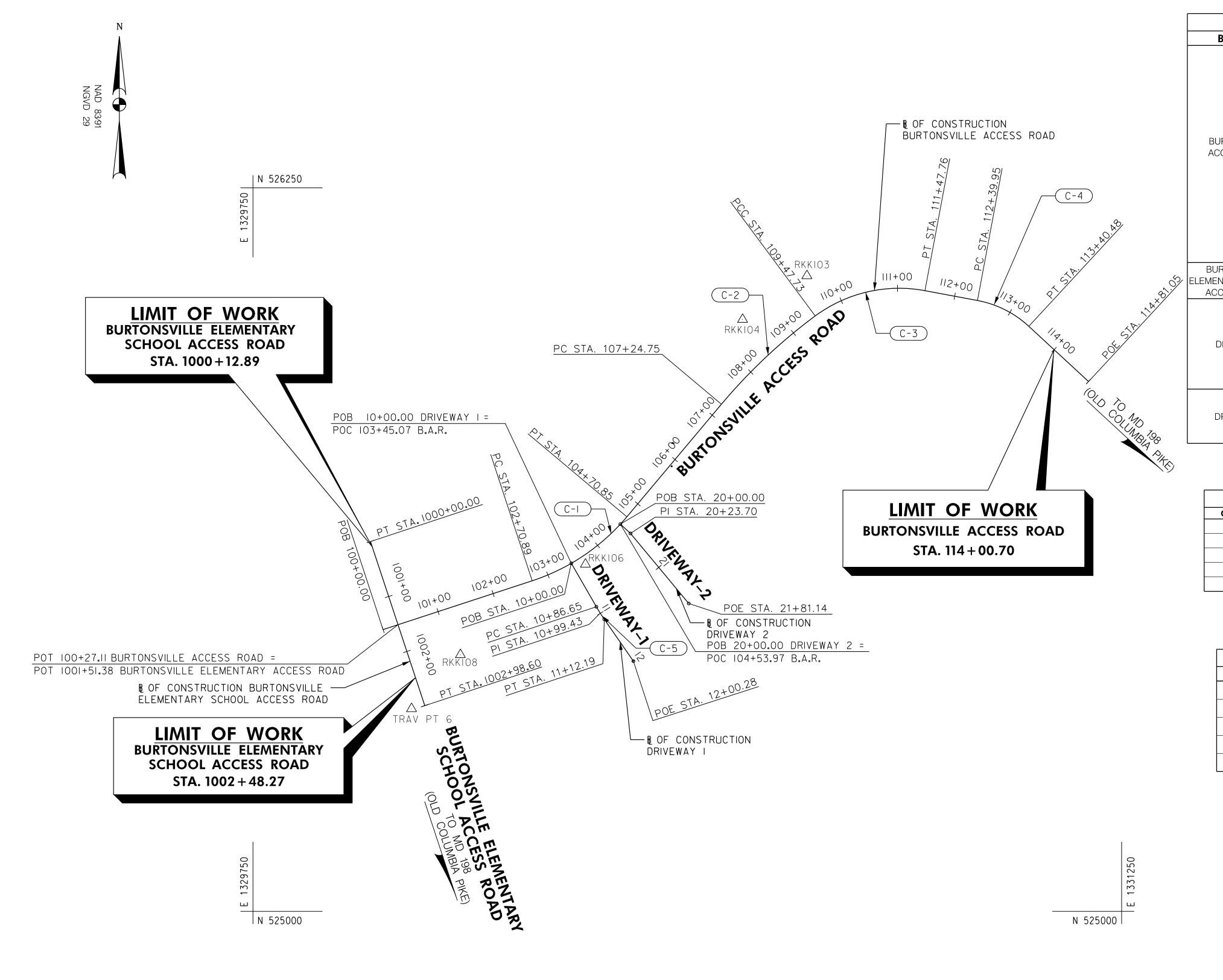
GALIMERSBURG, MARTLAND	
CONTACT:	
DIVISION OF TRANSPORTATIO	N
ENGINEERING	
240-777-7220	
DESIGN SECTION	
240-777-7221	

				MONTGOMERY COUI DEPARTMENT OF TRANSP ROCKVILLE, MARYLA	ORTATION	
				RECOMMENDED FOR APPROVAL		
				Chief, Transportation Planning and Design Section APPROVED	Date	
				Chief, Division of Transportation Engineering	Date	
NO	REVISION	DATE	RY	DESIGNED BY MCK DRAWN BY SJS	CHECKED BY_TMB_	DR

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD

PAVEMENT DETAILS

DATE NOVEMBER 23, 2022 SCALE __ SHEET NO. 5 OF PD-01 **OF** DRAWING NO.



	BASELINE CONTROL COORDINATES								
BASELINE	POINT NO.	STATION	NORTH	EAST	BEARING				
	РОВ	100 + 00.00	525,486.7516	1,329,974.6714	N 71 [°] 51′00.00" E				
	PC	102 + 70.89	525,571.1366	1,330,232.0867	N /1 31 00.00 E				
	PI	103 + 73.52	525,603.1070	1,330,329.6119					
	PT	104 + 70.85	525,681.6980	1,330,395.6174	N 40°01'32.00" E				
	PC	107 + 24.75	525,876.1214	1,330,558.9058	N 40 01 32.00 E				
BURTONSVILLE ACCESS ROAD	PCC	109 + 47.73	526,028.6173	1,330,720.8922					
ACCECC FICAD	PI	110 + 53.80	526,091.8130	1,330,806.0834					
	PT	111 + 47.76	526,072.3100	1,330,910.3469	S 79°24'17.82" E				
	PC	112 + 39.95	526,055.3594	1,331,000.9646	3 /9 24 I/.82 E				
	PI	112 + 91.58	526,045.8660	1,331,051.7163					
	PT	113 + 40.48	526,010.8016	1,331,089.6154	S 47°13'29.62" E				
	POE	114 + 81.05	525,915.3373	1,331,192.7974	3 47 13 29.02 E				
BURTONSVILLE ELEMENTARY SCHOOL	PT	1000 + 00.00	525,638.9325	1,329,952.9208	S 18°17'33.23" E				
ACCESS ROAD	PT	1002 + 98.60	525,355.4183	1,330,046.6433	3 10 17 33.23 E				
	POB	10 + 00.00	525,601.3188	1,330,299.7032	S 29°57'26.08" E				
	PC	10 + 86.65	525,526.2463	1,330,342.9716	3 29 37 20.00 E				
DRIVEWAY-1	PI	10 + 99.43	525,515.1753	1,330,349.3525					
	PT	11 + 12.19	525,504.6870	1,330,356.6516	S 34°50'06.75" E				
	POE	12+00.28	525,432.3792	1,330,406.9727	3 34 30 00.73 E				
	POB	20+00.00	525,669.0340	1,330,384.4617	S 47°17′19.96" E				
DRIVEWAY-2	PI	20 + 23.70	525,652.9587	1,330,401.8755					
	POE	21 + 81.14	525,531.9086	1,330,502.5398	S 39° 44′ 47.88" E				

CURVE DATA								
CURVE	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL		
C-1	31° 49' 28.00" LT.	15° 54' 55.78"	360.00	102.63	199.96'	14.34		
C-2	13° 24' 21.65" RT.	6°00'43.74"	953.00	112.00'	222.98'	6.56'		
C-3	47 [°] 09' 48.53" RT.	23° 34′ 42.64"	243.00	106.07	200.03	22.14		
C-4	32°10′48.20″ RT.	32° 00' 31.74"	179.00	51.63'	100.54	7.30'		
C–5	4° 52' 40.67" LT.	19° 05' 54.94"	300.00	12.78	25.54	0.27		

TRAVERSE CONTROL							
TRAV PT.	NORTHING	EASTING	ELEVATION	DESCRIPTION			
6	525,350.1638	1,330,023.8409	479.62	REBAR & CAP			
RKK103	526,098.0629	1,330,706.4649	487.82	REBAR & CAP			
RKK104	526,022.5951	1,330,595.4332	486.59	REBAR & CAP			
RKK106	525,599.7952	1,330,324.1285	481.22	MAG NAIL			
RKK108	525,443.3125	1,330,108.2644	481.78	MAG NAIL			

SCALE _

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OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND

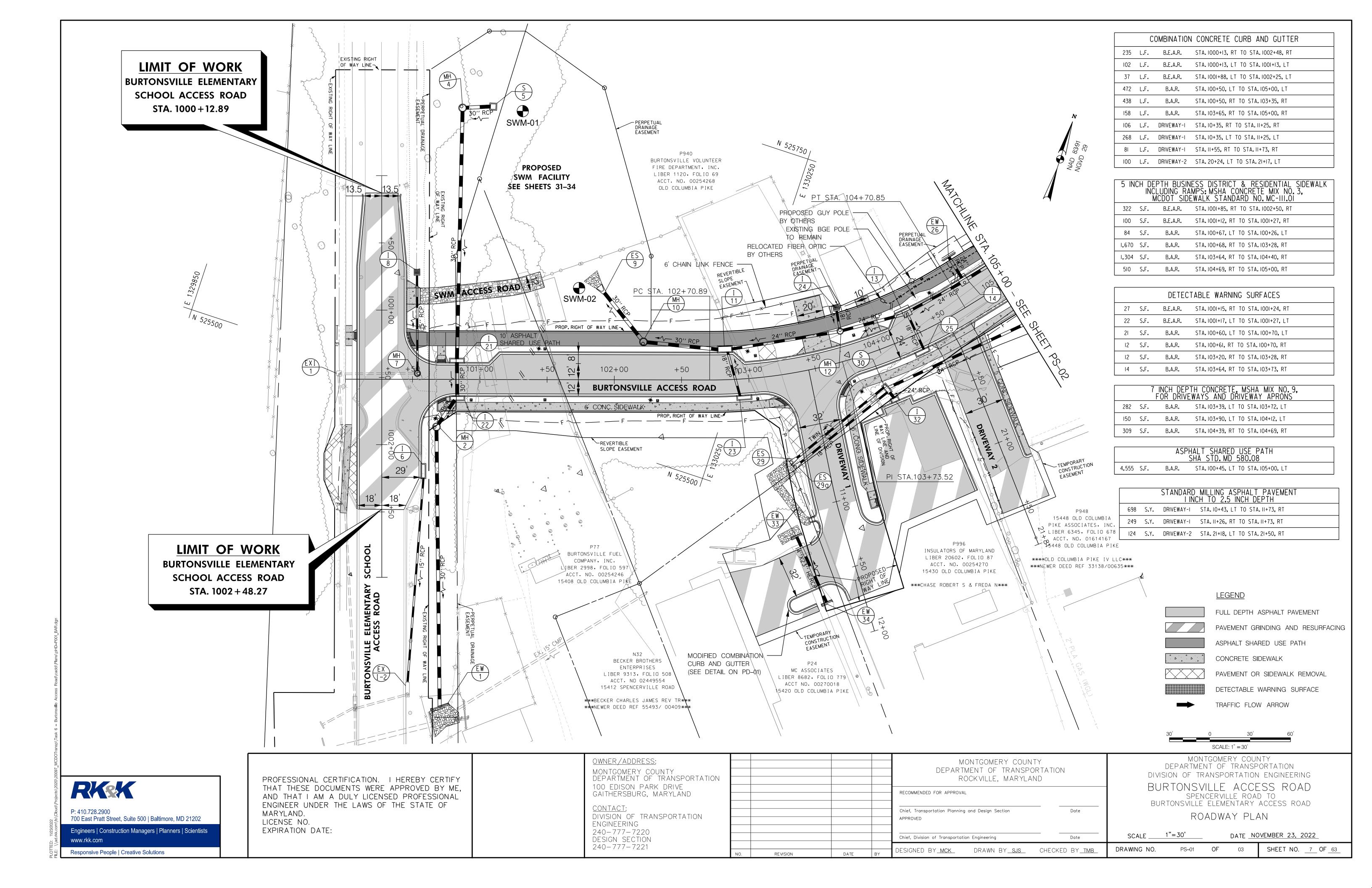
<u>CONTACT:</u> DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION

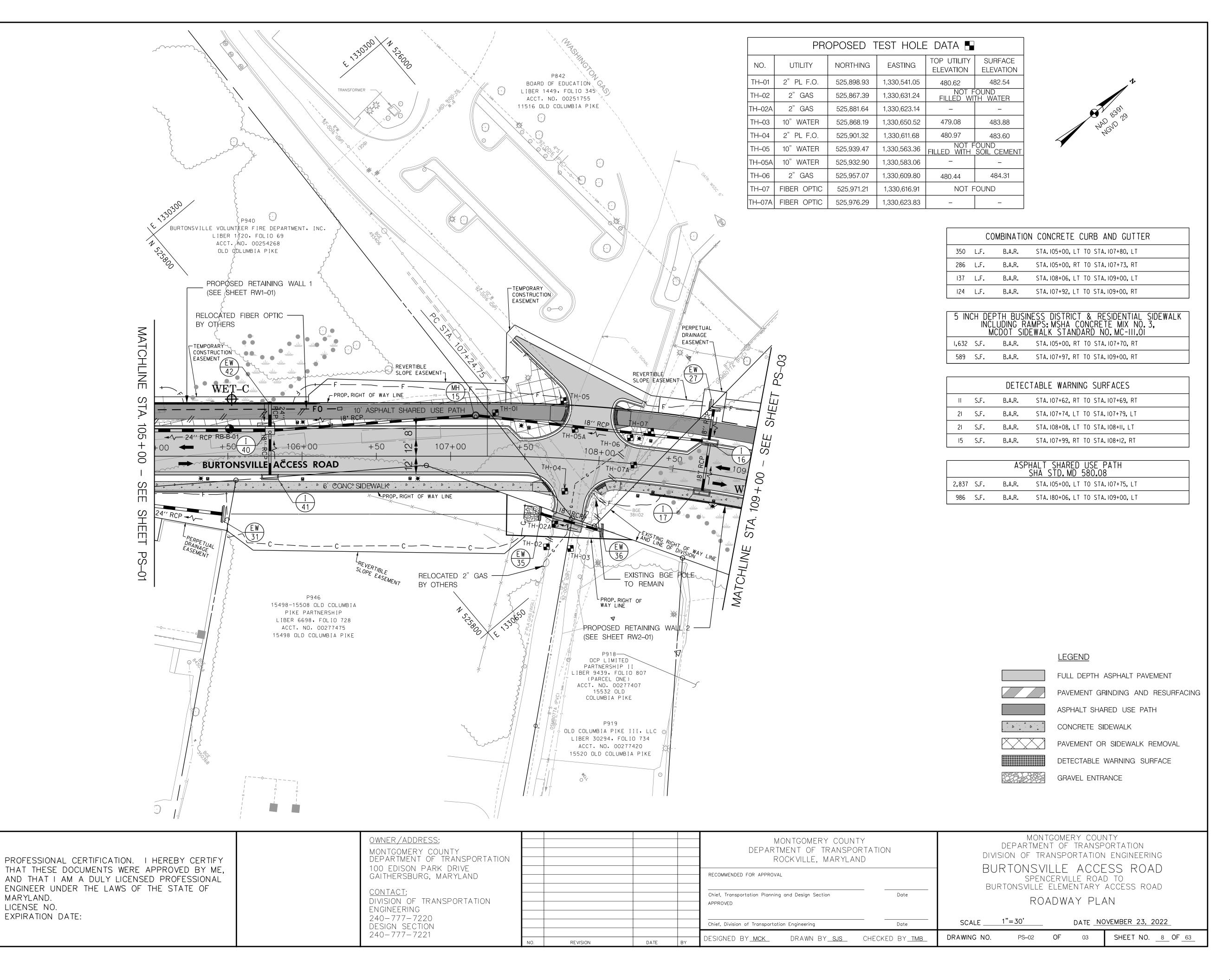
240-777-7221

			MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND
			RECOMMENDED FOR APPROVAL
			Chief, Transportation Planning and Design Section Date APPROVED
			Chief, Division of Transportation Engineering Date
REVISION	DATE	BY	DESIGNED BY KBJ DRAWN BY KBJ CHECKED BY TMB

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD

GEOMETRY SHEET DATE NOVEMBER 23, 2022 SHEET NO. 6 OF 63 GS-01 OF DRAWING NO.





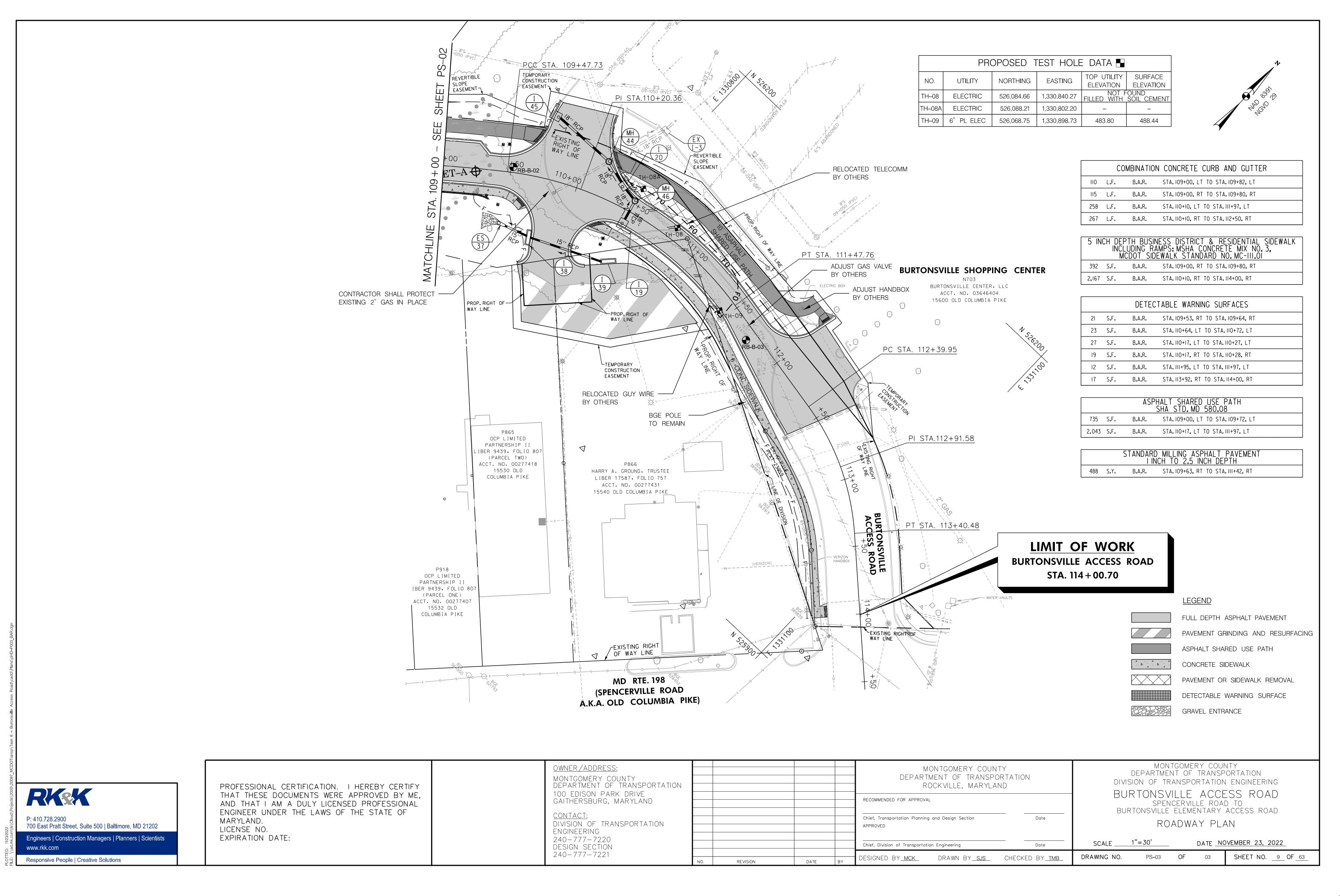
RKSK

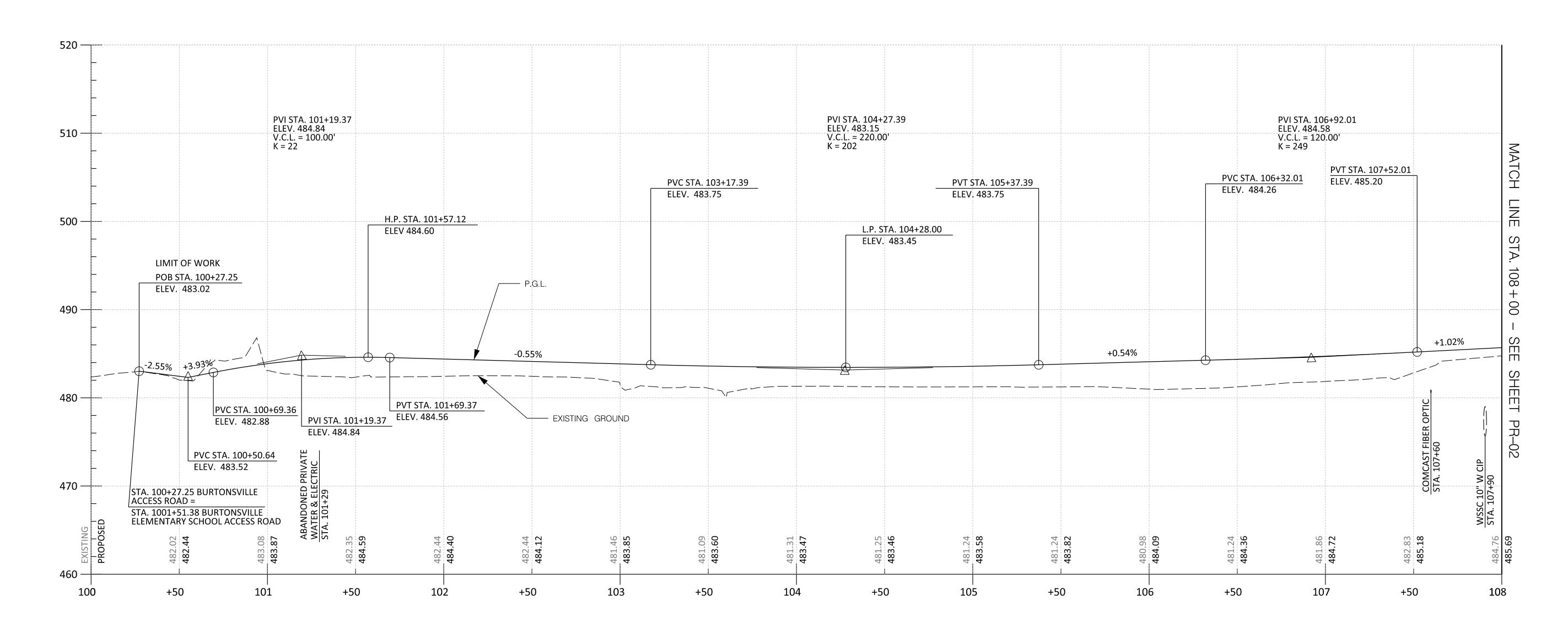
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BURTONSVILLE ACCESS ROAD

STA. 100 + 00.00 TO STA. 108 + 00.00

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OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND

<u>CONTACT:</u> DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION 240-777-7221

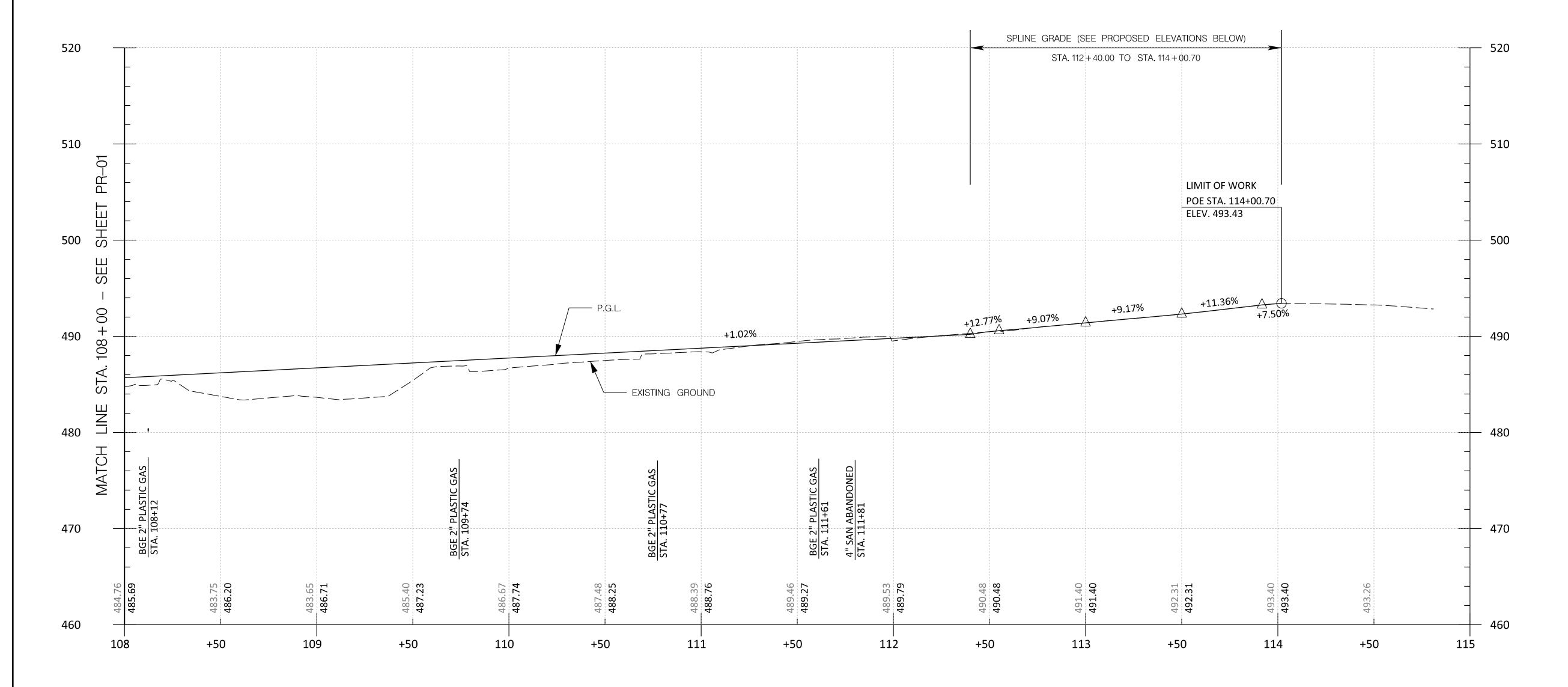
				DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND			
				RECOMMENDED FOR APPROVAL			
				Chief, Transportation Planning and Design Section Date APPROVED			
				Chief, Division of Transportation Engineering Date			
10.	REVISION	DATE	BY	DESIGNED BY KBJ DRAWN BY KBJ CHECKED BY TMB			

MONTGOMERY COUNTY

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD ROADWAY PROFILE

HORIZONTAL: 1"=30' SCALE <u>VERTICAL: 1"=5'</u>

DATE NOVEMBER 23, 2022 SHEET NO. 10 OF 63 PR**–**01 **OF** DRAWING NO.



BURTONSVILLE ACCESS ROAD

STA. 108 + 00.00 TO STA. 114 + 01.94

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PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. EXPIRATION DATE:

OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND

<u>CONTACT:</u> DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND	
RECOMMENDED FOR APPROVAL	
Chief, Transportation Planning and Design Section Date APPROVED	
Chief, Division of Transportation Engineering Date	
DECIONED BY KELL DRAWN BY KELL OUTOKED BY	T. 45

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD ROADWAY PROFILE

HORIZONTAL: 1"=30'
SCALE <u>VERTICAL: 1"=5'</u> DATE NOVEMBER 23, 2022

SHEET NO. <u>11</u> OF <u>63</u> DRAWING NO. PR-02 **OF**

240-777-7221 DATE BY DESIGNED BY KBJ DRAWN BY KBJ CHECKED BY TMB Responsive People | Creative Solutions REVISION

BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD

STA. 1000 + 00.00 TO STA. 1003 + 00.00

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PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. EXPIRATION DATE:

OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND

<u>CONTACT:</u> DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION

240-777-7221

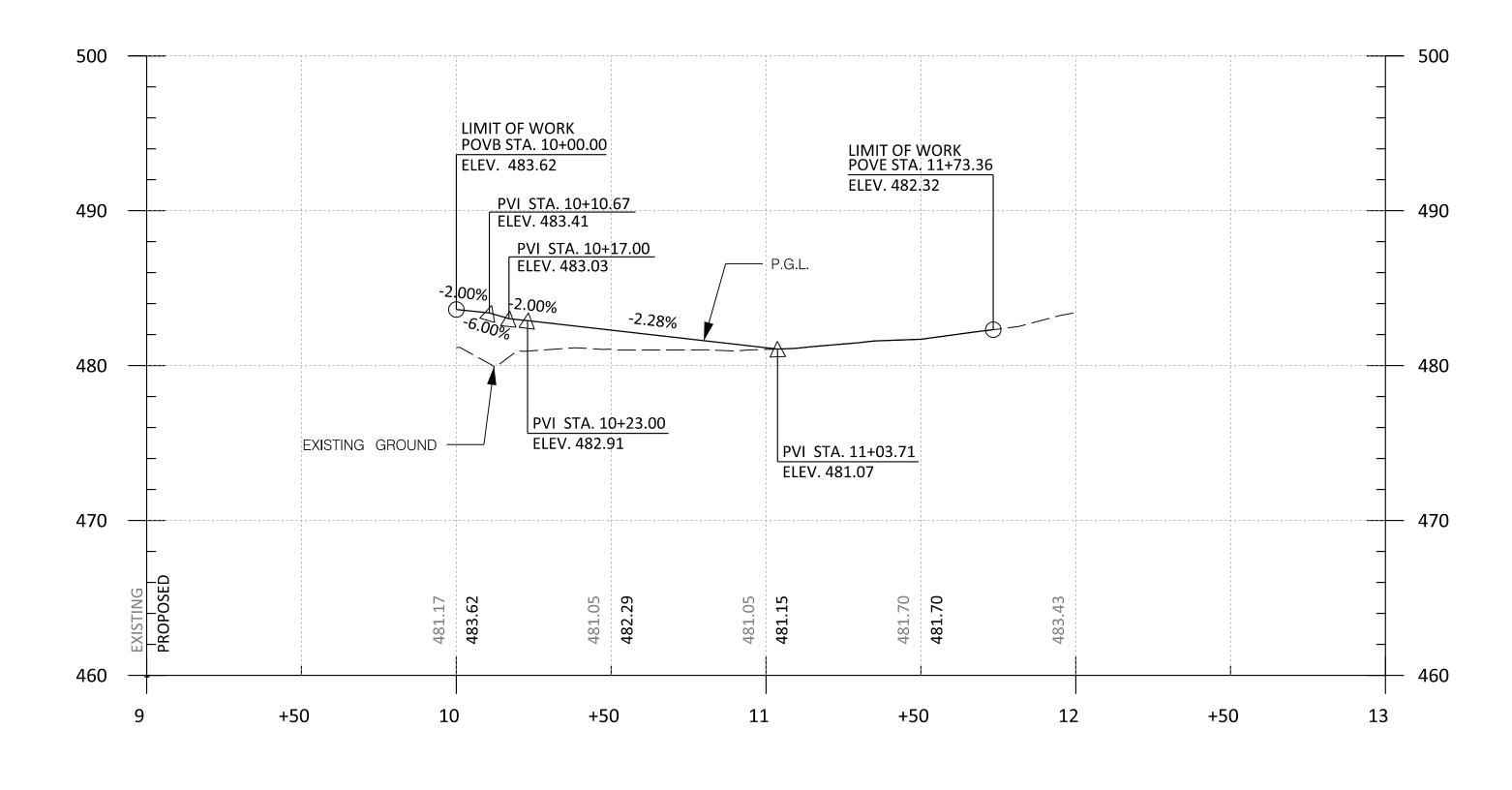
				ROCKVILLE, MARYLAND			
				RECOMMENDED FOR APPROVAL			
				Chief, Transportation Planning and Design Section APPROVED		Date	
				Chief, Division of Transportation Engineerin	ng	Date	
10.	REVISION	DATE	BY	DESIGNED BY <u>kbj</u> DRAWN	N BY <u>KBJ</u>	CHECKED BY TMB	

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD ROADWAY PROFILE

HORIZONTAL: 1"=30' SCALE <u>VERTICAL: 1"=5'</u>

DATE NOVEMBER 23, 2022 SHEET NO. <u>12</u> OF <u>63</u> DRAWING NO. PR-03 **OF**



500 - 500 LIMIT OF WORK POVB STA. 20+00.00 ELEV. 483.47 PVI STA. 20+12.67 ELEV. 483.25 PVI STA. 20+17.00 ELEV. 483.34 LIMIT OF WORK PVI STA. 21+50.22 490 - 490 PVI STA. 20+23.00 ELEV. 483.87 ELEV. 483.40 +0.37% 480 480 PVI STA. 20+10.67 | PVI STA. 20+12.00 ELEV. 483.25 ELEV. 483.13 EXISTING GROUND 470 - 470 483. 460 +50 20 19 +50 +50 22

DRIVEWAY-1 STA. 10 + 00.00 TO STA. 12 + 00.28

STA. 20 + 00.00 TO STA. 21 + 81.14

DRIVEWAY-2

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OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND

<u>CONTACT:</u> DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION

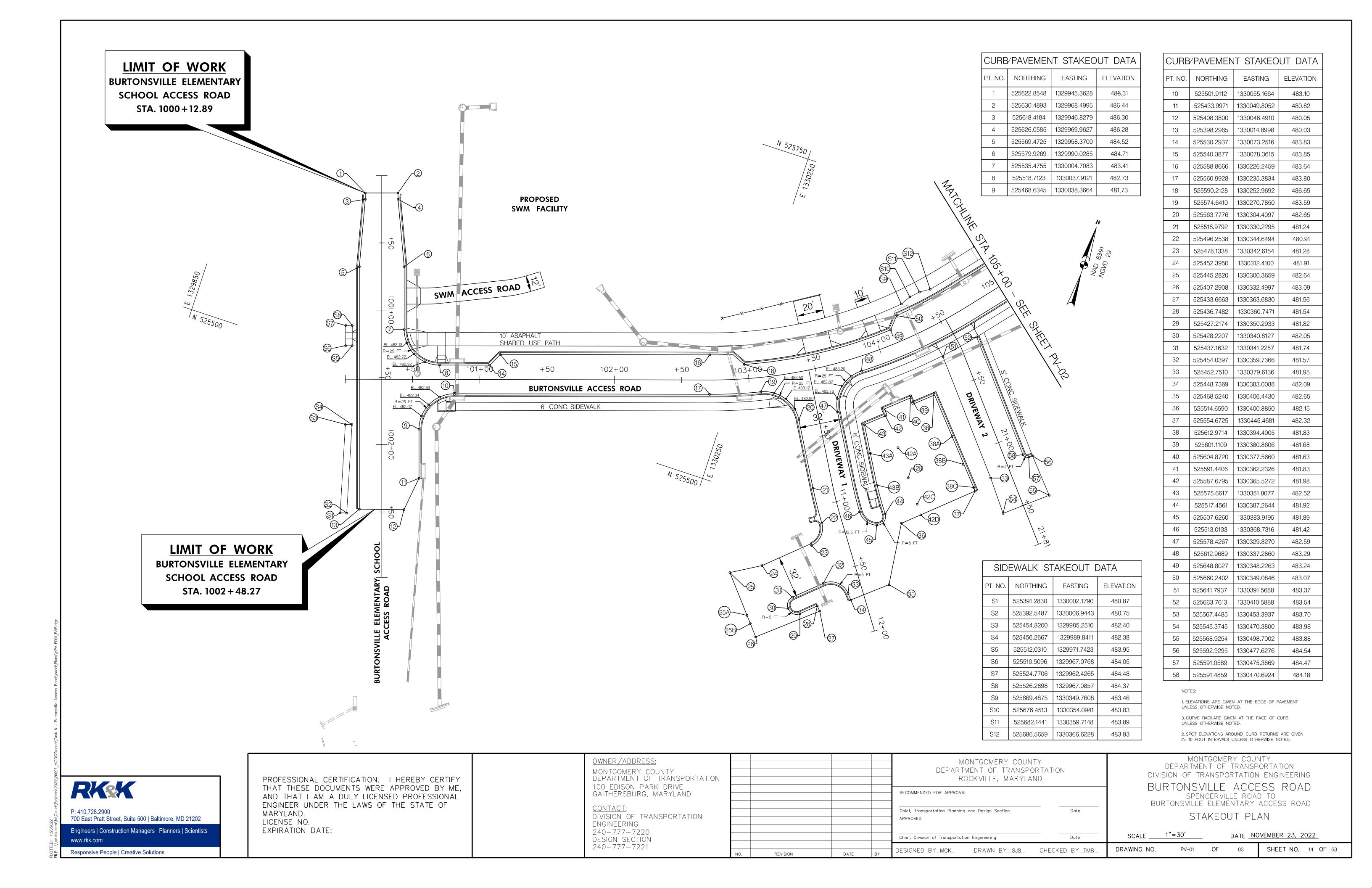
240-777-7221

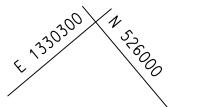
		Chief, Division of Transportation Engineering Date	
		Chief, Transportation Planning and Design Section Date APPROVED	
		RECOMMENDED FOR APPROVAL	
		DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND	
		MONTGOMERY COUNTY	

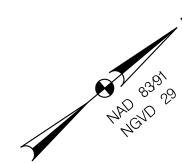
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD ROADWAY PROFILES

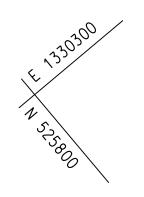
HORIZONTAL: 1"=30' SCALE <u>VERTICAL: 1"=5'</u>

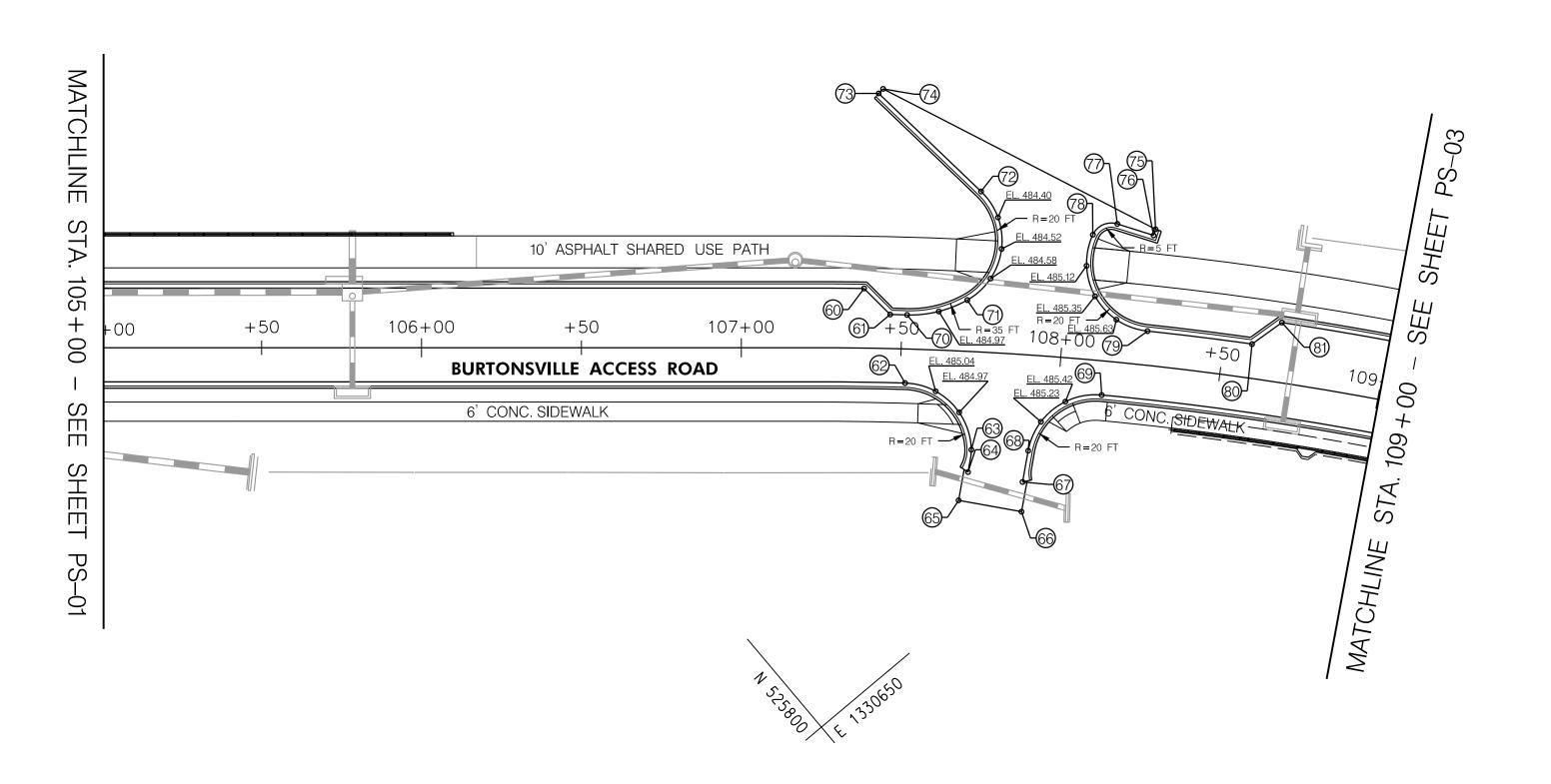
DATE NOVEMBER 23, 2022 SHEET NO. <u>13</u> OF <u>63</u> DRAWING NO.











CURB/PAVEMENT STAKEOUT DATA							
PT. NO.	NORTHING	EASTING	ELEVATION				
60	525898.5199	1330553.4661	484.68				
61	525899.5194	1330564.9496	484.93				
62	525889.2872	1330584.3780	484.98				
63	525891.7460	1330613.6823	484.78				
64	525886.4406	1330618.3833	484.62				
65	525878.5028	1330623.2516	484.43				
66	525891.2869	1330638.6323	484.80				
67	525897.5212	1330631.7167	484.90				
68	525905.1545	1330625.3764	485.05				
69	525933.9715	1330626.7981	485.66				
70	525903.4912	1330568.4611	484.98				
71	525920.8992	1330577.0109	484.67				
72	525946.0604	1330553.7408	484.08				
73	525941.2685	1330509.6714	483.34				
74	525943.2567	1330509.4552	483.42				
75	525980.2394	1330597.9152	485.29				
76	525978.5420	1330598.9730	485.30				
77	525972.1570	1330588.9386	485.09				
78	525960.2569	1330587.6068	485.00				
79	525957.8177	1330620.7010	485.80				
80	525980.2376	1330644.8264	486.16				
81	525991.7251	1330645.6982	486.08				

NOTES:

1. ELEVATIONS ARE GIVEN AT THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

3. CURVE RADII ARE GIVEN AT THE FACE OF CURB UNLESS OTHERWISE NOTED.

2. SPOT ELEVATIONS AROUND CURB RETURNS ARE GIVEN IN 10 FOOT INTERVALS UNLESS OTHERWISE NOTED.

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EXPIRATION DATE: Engineers | Construction Managers | Planners | Scientists

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO.

OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND

<u>CONTACT:</u> DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION 240-777-7221

				DEPARTMENT OF TRANSPO ROCKVILLE, MARYLA	DIVISIO	
				RECOMMENDED FOR APPROVAL		BUR ⁻
				Chief, Transportation Planning and Design Section APPROVED	Date	BURTO
				Chief, Division of Transportation Engineering	Date	SCALE1"
NO.	REVISION	DATE	BY	DESIGNED BY <u>MCK</u> DRAWN BY <u>SJS</u>	CHECKED BY <u>TMB</u>	DRAWING NO.

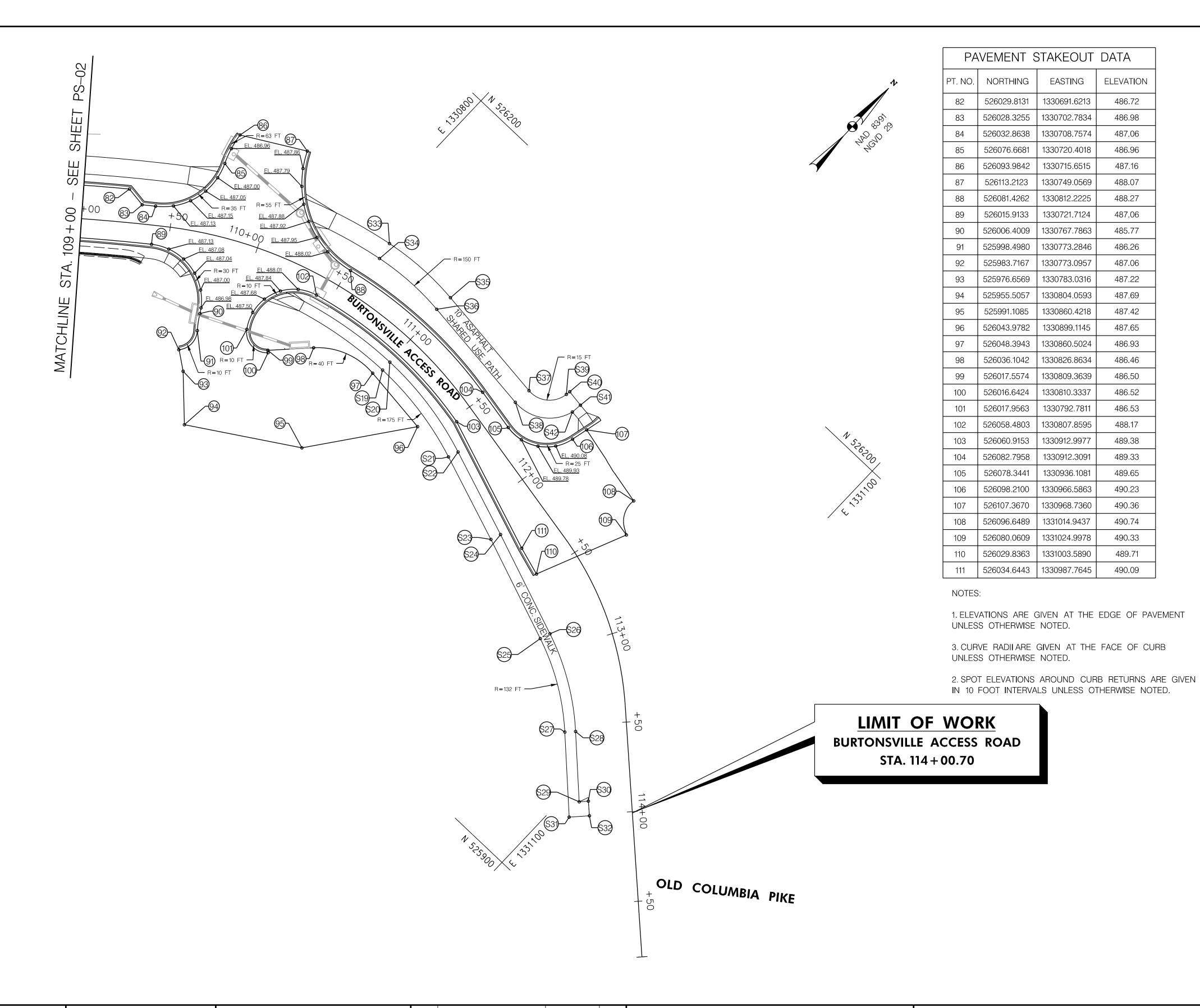
MONTGOMERY COUNTY

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD STAKEOUT PLAN

SCALE	1"=30'	DATE	NOVEMBER	23,	2022

PV-02 OF 03 SHEET NO. <u>15</u> OF <u>63</u>

SIDEWALK STAKEOUT DATA								
PT. NO.	NORTHING	EASTING	ELEVATION					
S19	526053.4408	1330863.2749	489.68					
S20	526059.4404	1330863.2096	489.56					
S21	526043.5556	1330923.1919	490.68					
S22	526049.2163	1330925.1809	490.26					
S23	526026.4295	1330971.9327	490.66					
S24	526032.0769	1330973.9596	490.56					
S25	526005.2006	1331029.8563	491.91					
S26	526010.8341	1331031.9210	491.79					
S27	525976.7765	1331075.5430	492.88					
S28	525981.1181	1331079.6844	492.76					
S29	525954.0522	1331108.0586	492.97					
S30	525957.8348	1331111.5168	492.86					
S31	525944.0283	1331109.8743	493.23					
S32	525952.3216	1331117.5472	493.03					
S33	526107.2736	1330817.6398	489.49					
S34	526097.4240	1330819.3675	489.29					
S35	526108.6907	1330863.0424	489.87					
S36	526098.7525	1330861.9324	489.67					
S37	526101.1654	1330930.4182	490.55					
S38	526091.2272	1330929.3082	490.37					
S39	526113.9407	1330946.9309	490.90					
S40	526116.3454	1330947.2762	490.95					
S41	526114.9711	1330956.7592	490.85					
S42	526109.1278	1330956.0992	490.74					



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OWNER/ADDRESS:	
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTA	TION
100 EDISON PARK DRIVE	. 11011
GAITHERSBURG, MARYLAND	

,
CONTACT:
DIVISION OF TRANSPORTATION
ENGINEERING
240-777-7220
DESIGN SECTION
240-777-7221

				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTAT ROCKVILLE, MARYLAND	TION	DIVIS
				RECOMMENDED FOR APPROVAL		BU BUF
				Chief, Transportation Planning and Design Section APPROVED	Date	DUI
				Chief, Division of Transportation Engineering	 Date	SCALE
NO.	REVISION	DATE	BY	DESIGNED BY <u>mck</u> Drawn by <u>sjs</u> Che	CKED BY <u>TMB</u>	DRAWING NO.

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD STAKEOUT PLAN

SCALE _____1"=30'

DATE NOVEMBER 23, 2022 SHEET NO. <u>16</u> OF <u>63</u> PV-03 **OF**

486.72

486.98

487.06

487.16

488.07

488.27

487.06

487.06

487.22

487.42

487.65

486.93

486.46

486.50

486.53

488.17

489.38

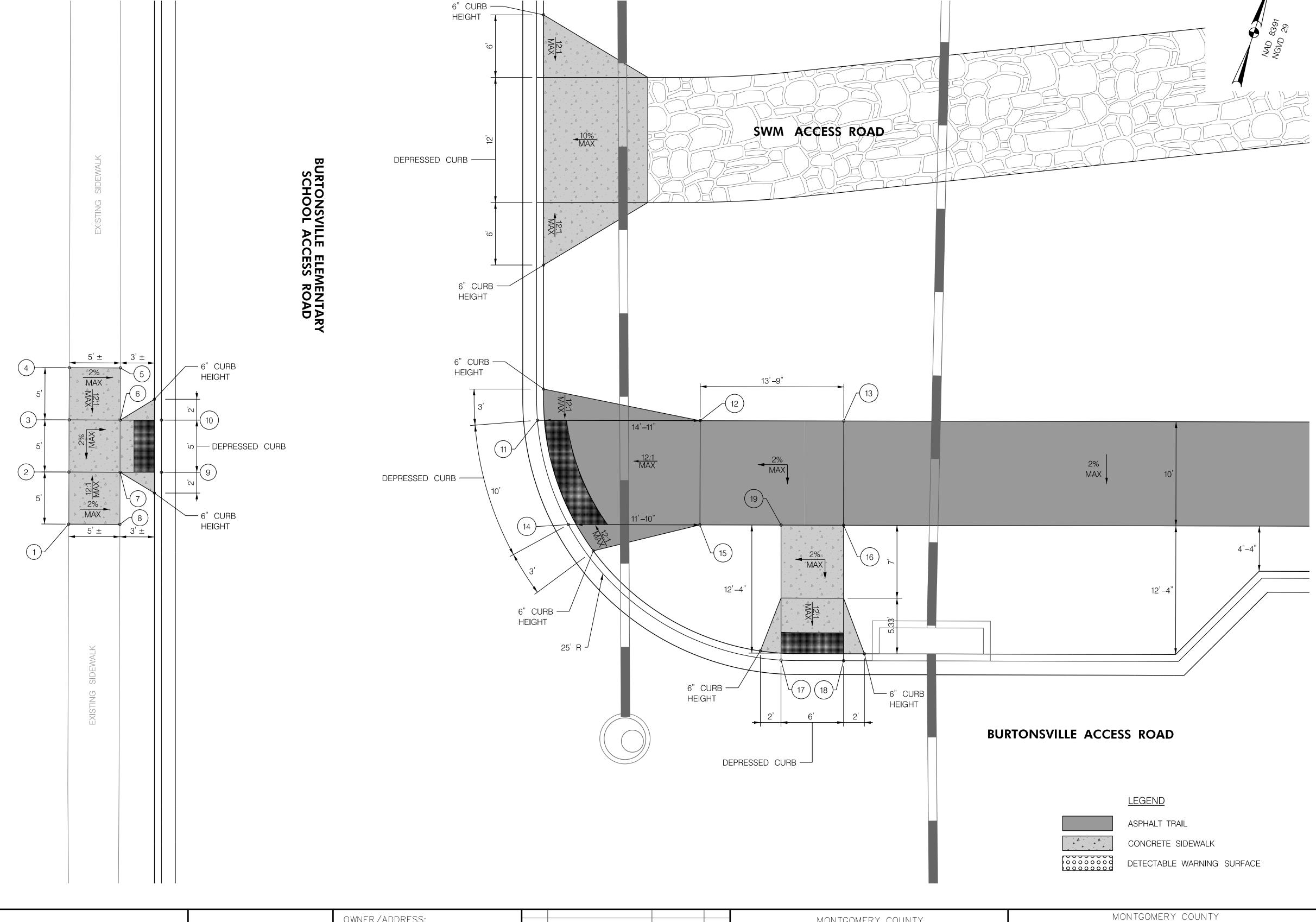
489.65

490.23

490.36

490.74

STAKEOUT DATA								
	STAINLOUT	DATA	Т					
POINT NO.	NORTHING	EASTING	ELEVATION					
1	525,510.5086	1,329,967.0758	484.05					
2	525,515.2623	1,329,965.5257	484.19					
3	525,520.0159	1,329,963.9756	484.34					
4	525,524.7696	1,329,962.4255	484.47					
5	525,526.2888	1,329,967.0847	484.38					
6	525,521.5338	1,329,968.6305	484.24					
7	525,516.7850	1,329,970.1955	484.09					
8	525,512.0300	1,329,971.7413	483.95					
9	525,518.0255	1,329,973.9580	483.78					
10	525,522.7733	1,329,972.3901	483.92					
11	525,534.0681	1,330,006.6522	483.25					
12	525,538.9326	1,330,021.4913	483.76					
13	525,543.2256	1,330,034.5870	484.04					
14	525,525.4965	1,330,012.6068	482.93					
15	525,529.4301	1,330,024.6063	483.56					
16	525,533.7231	1,330,037.7020	483.84					
17	525,519.5522	1,330,036.0632	482.55					
18	525,521.3788	1,330,041.7787	482.76					
19	525,531.8541	1,330,032.0006	483.72					



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OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND

<u>CONTACT:</u> DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION 240-777-7221

	DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND	V
	RECOMMENDED FOR APPROVAL	
	Chief, Transportation Planning and Design Section APPROVED	Date

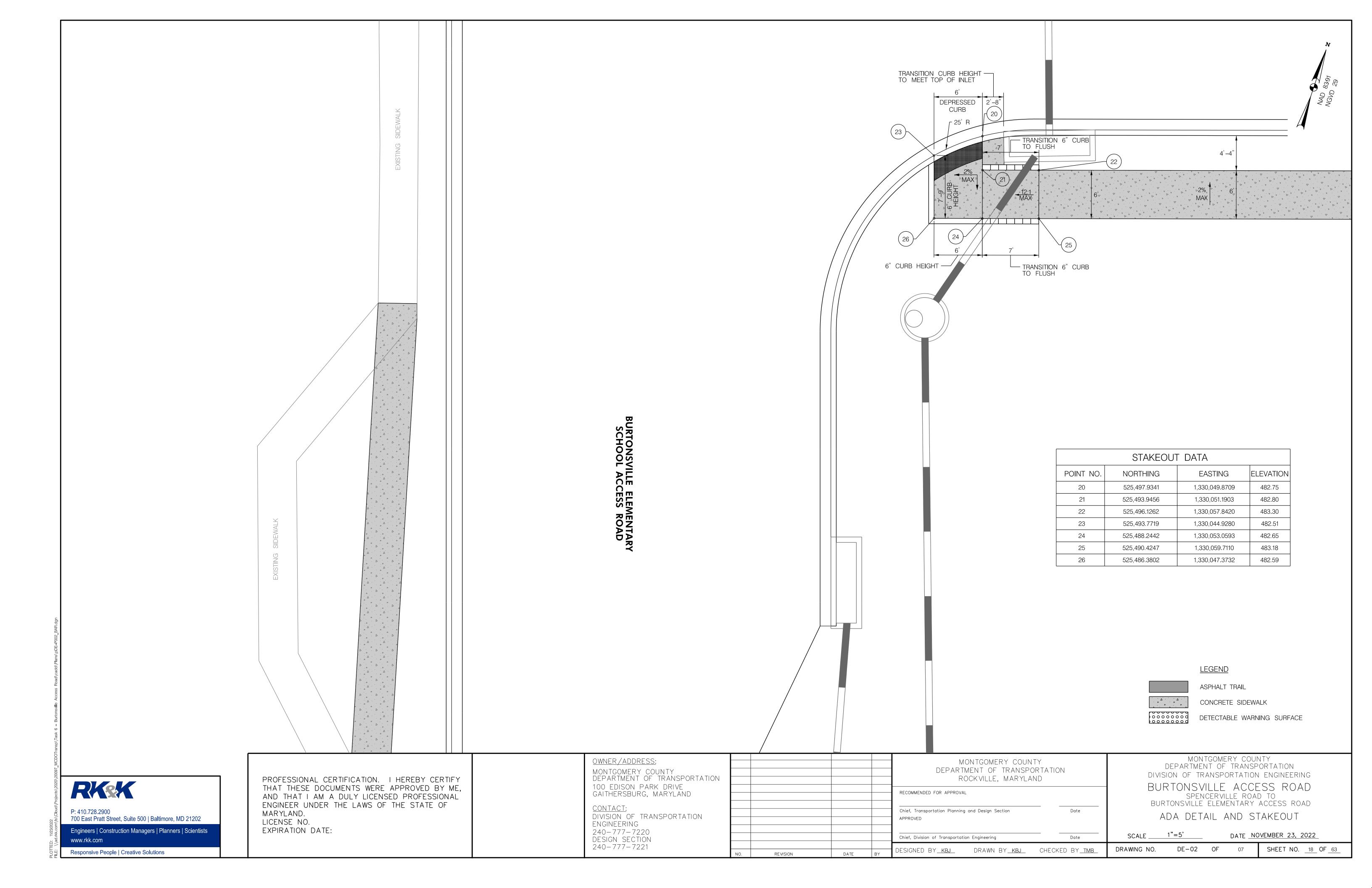
Chief, Division of Transportation Engineering

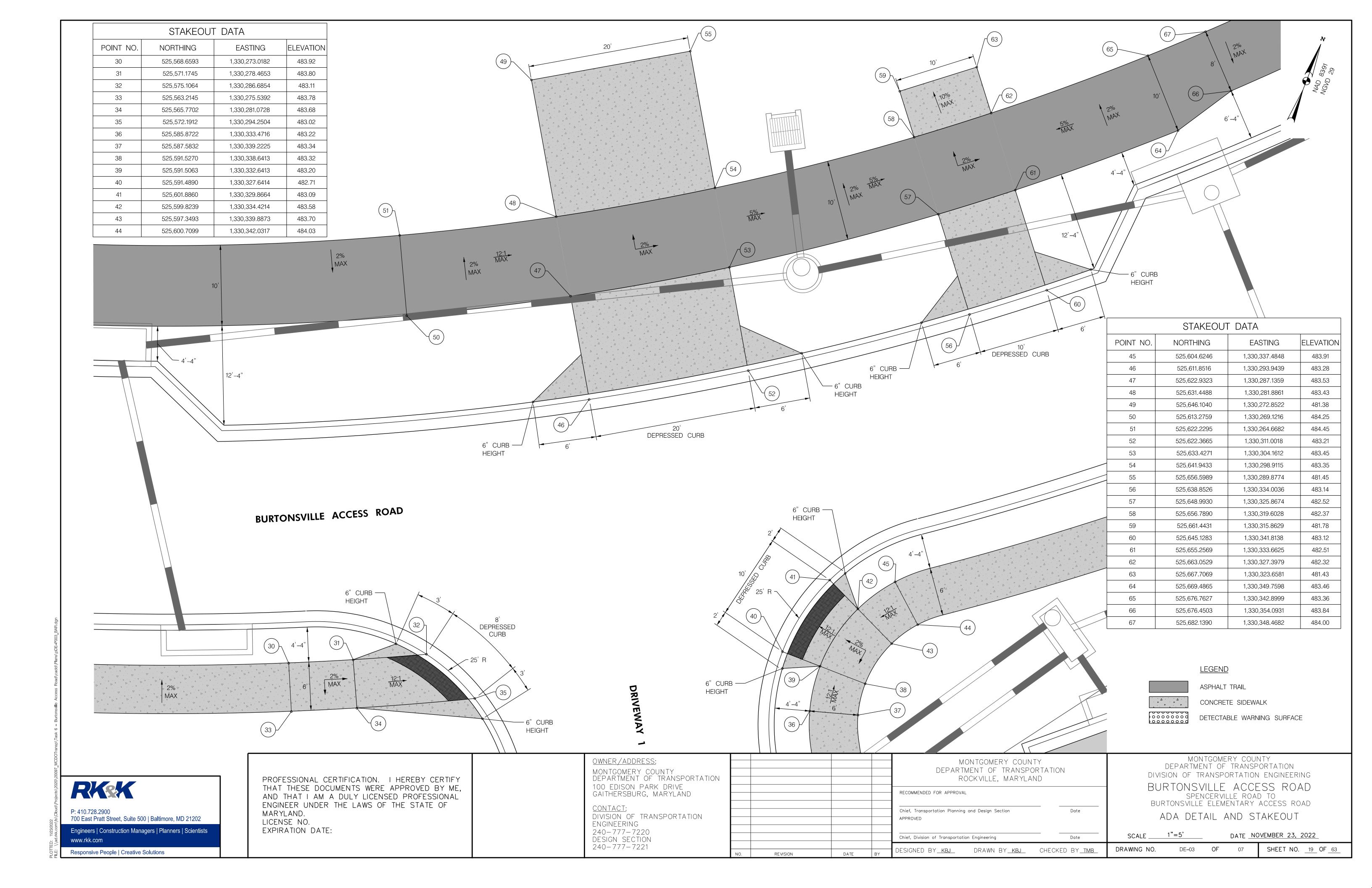
DESIGNED BY<u>kbj</u> DRAWN BY<u>kbj</u> CHECKED BY<u>TMB</u>

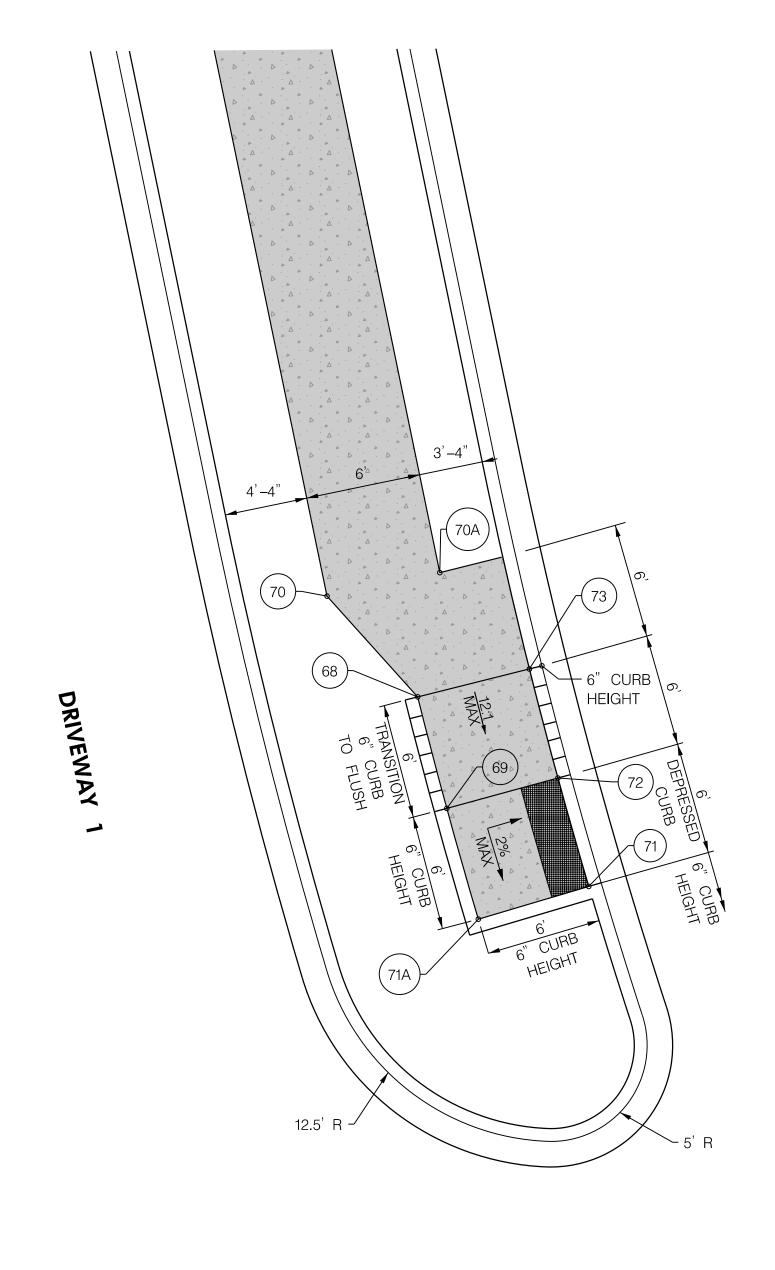
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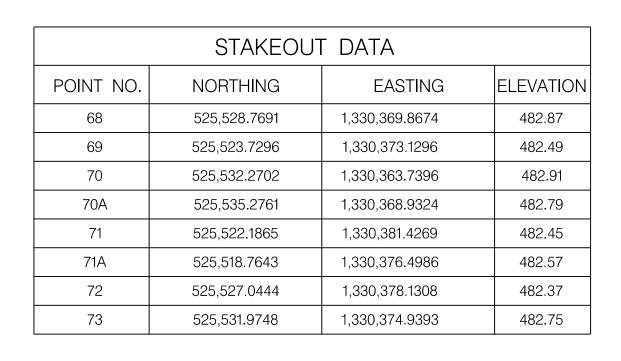
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD ADA DETAIL AND STAKEOUT

DATE NOVEMBER 23, 2022 1"=5' SCALE _ SHEET NO. <u>17</u> OF <u>63</u> DE-01 **OF** 07 DRAWING NO.









<u>LEGEND</u>

ASPHALT TRAIL

CONCRETE SIDEWALK

00000000

DETECTABLE WARNING SURFACE

RKSK

P: 410.728.2900 700 East Pratt Street, Suite 500 | Baltimore, MD 21202 Engineers | Construction Managers | Planners | Scientists

Responsive People | Creative Solutions

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. EXPIRATION DATE:

OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND

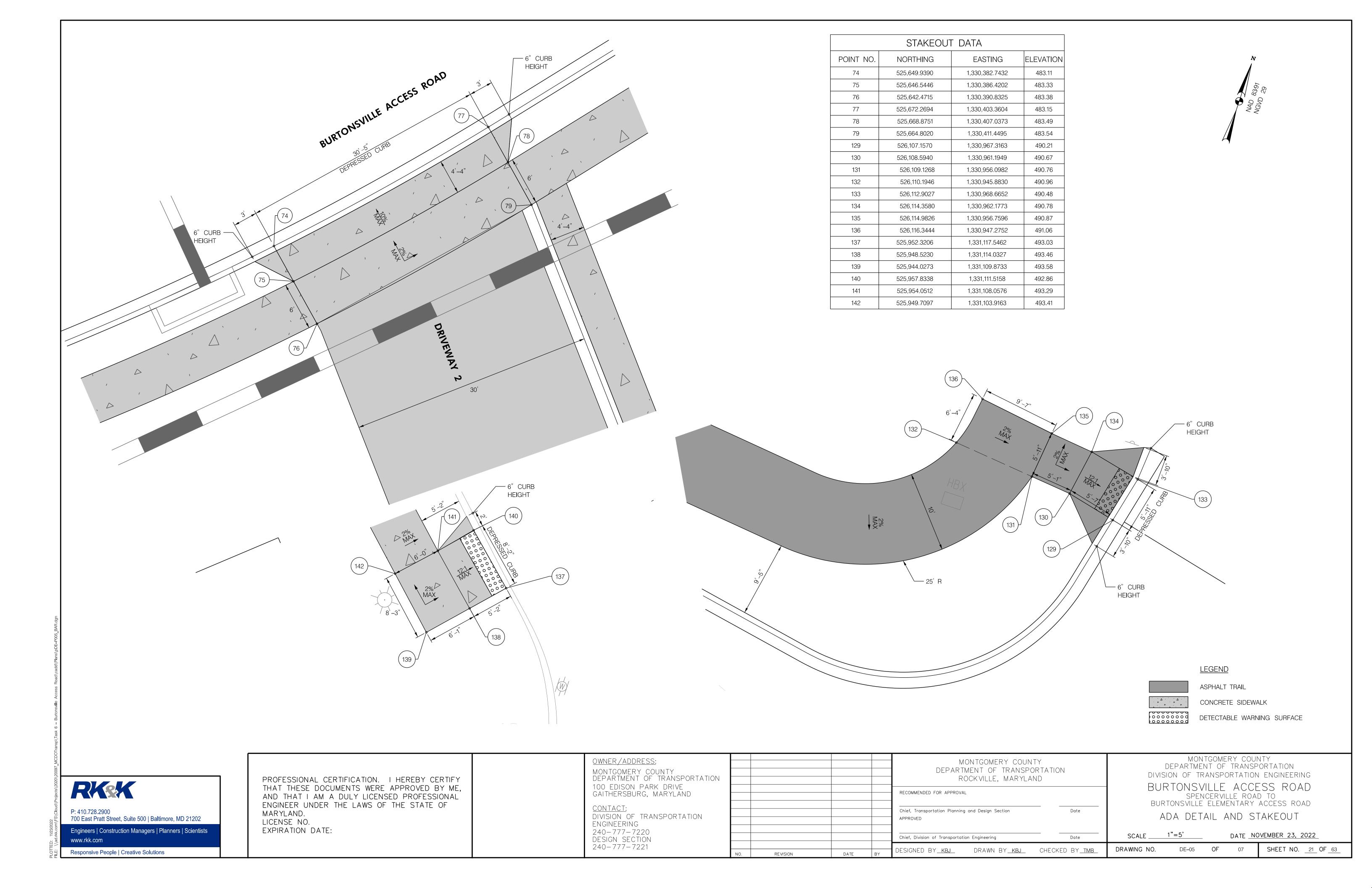
<u>CONTACT:</u> DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION 240-777-7221

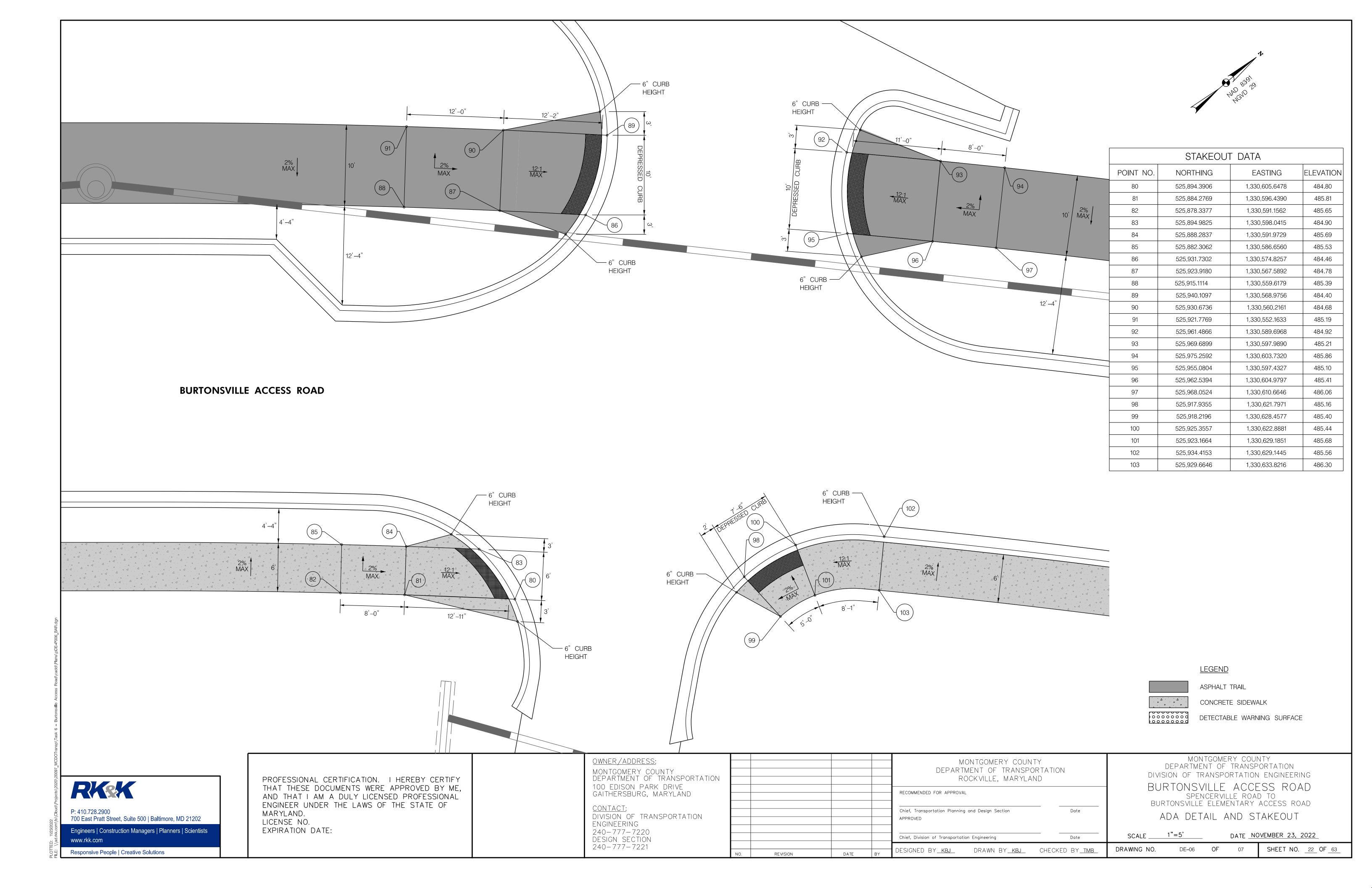
				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND				
				RECOMMENDED FOR APPROVAL				
				Chief, Transportation Planning and Design Section Date APPROVED				
				Chief, Division of Transportation Engineering Date				
NO.	REVISION	DATE	BY	DESIGNED BY <u>kbj</u> DRAWN BY <u>kbj</u> CHECKED BY <u>TMB</u>				

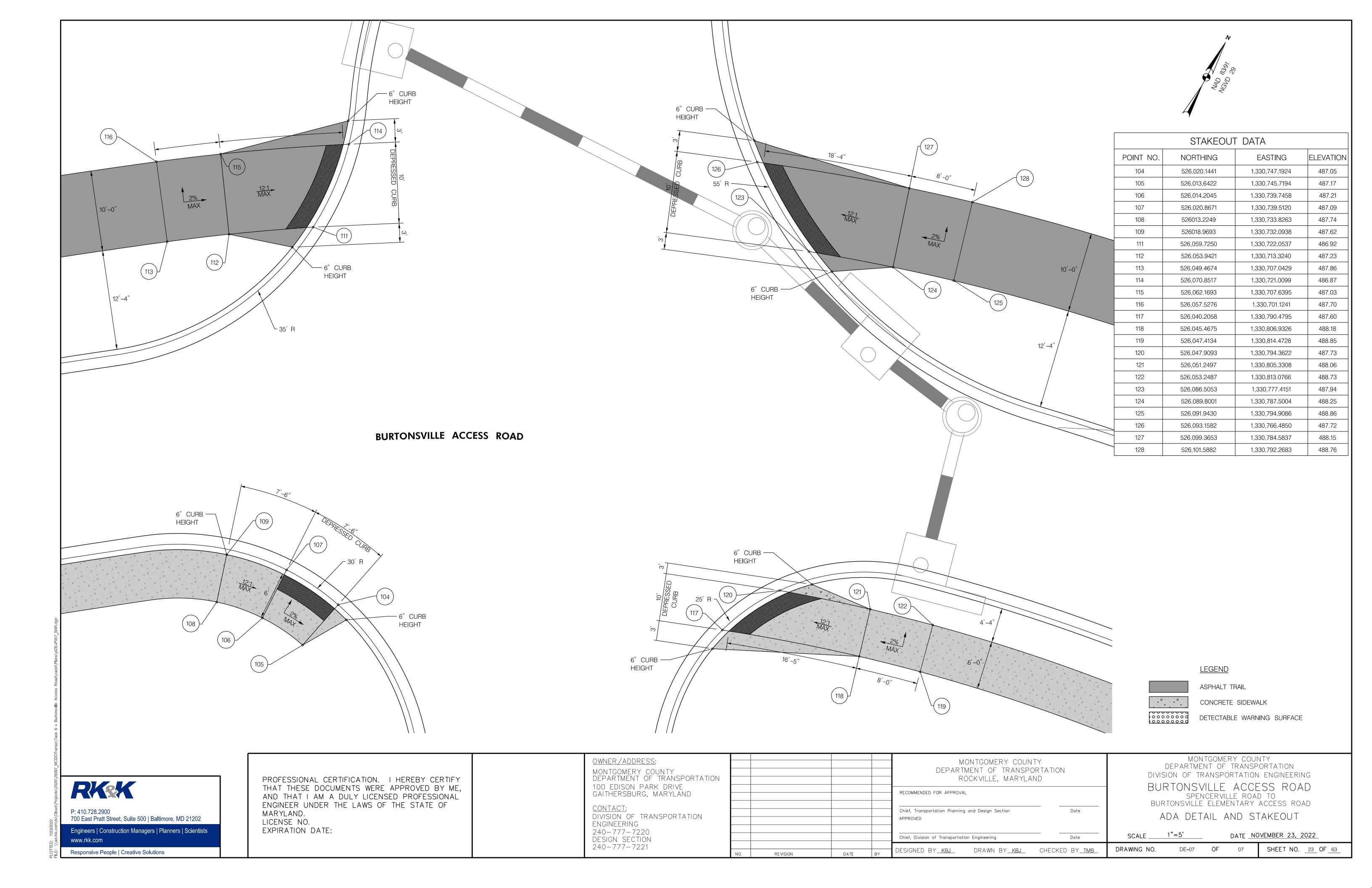
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD ADA DETAIL AND STAKEOUT

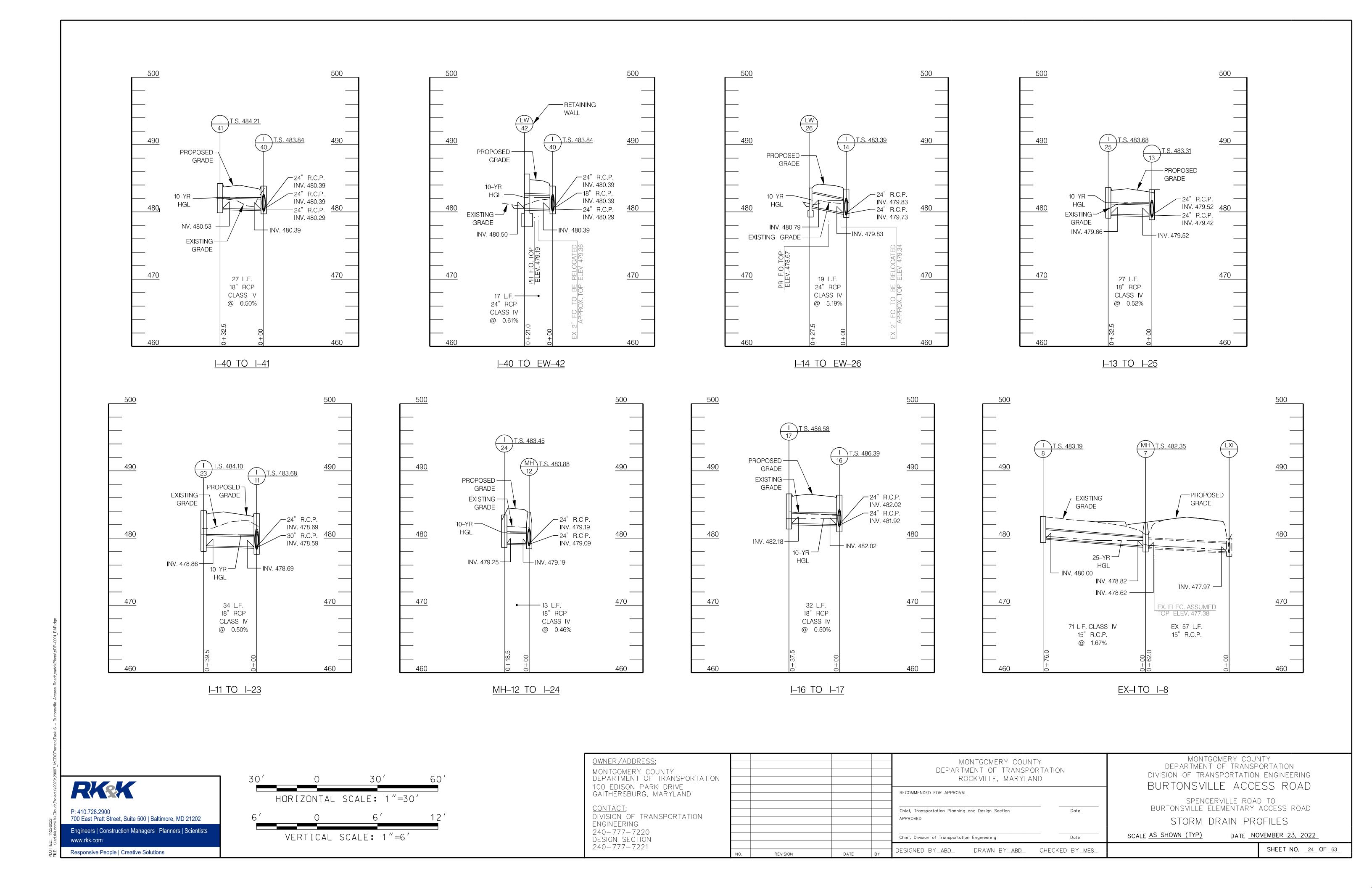
SCALE _____1"=5' DATE NOVEMBER 23, 2022 DRAWING NO. SHEET NO. 20 OF 63 DE**–**04 **OF** 07

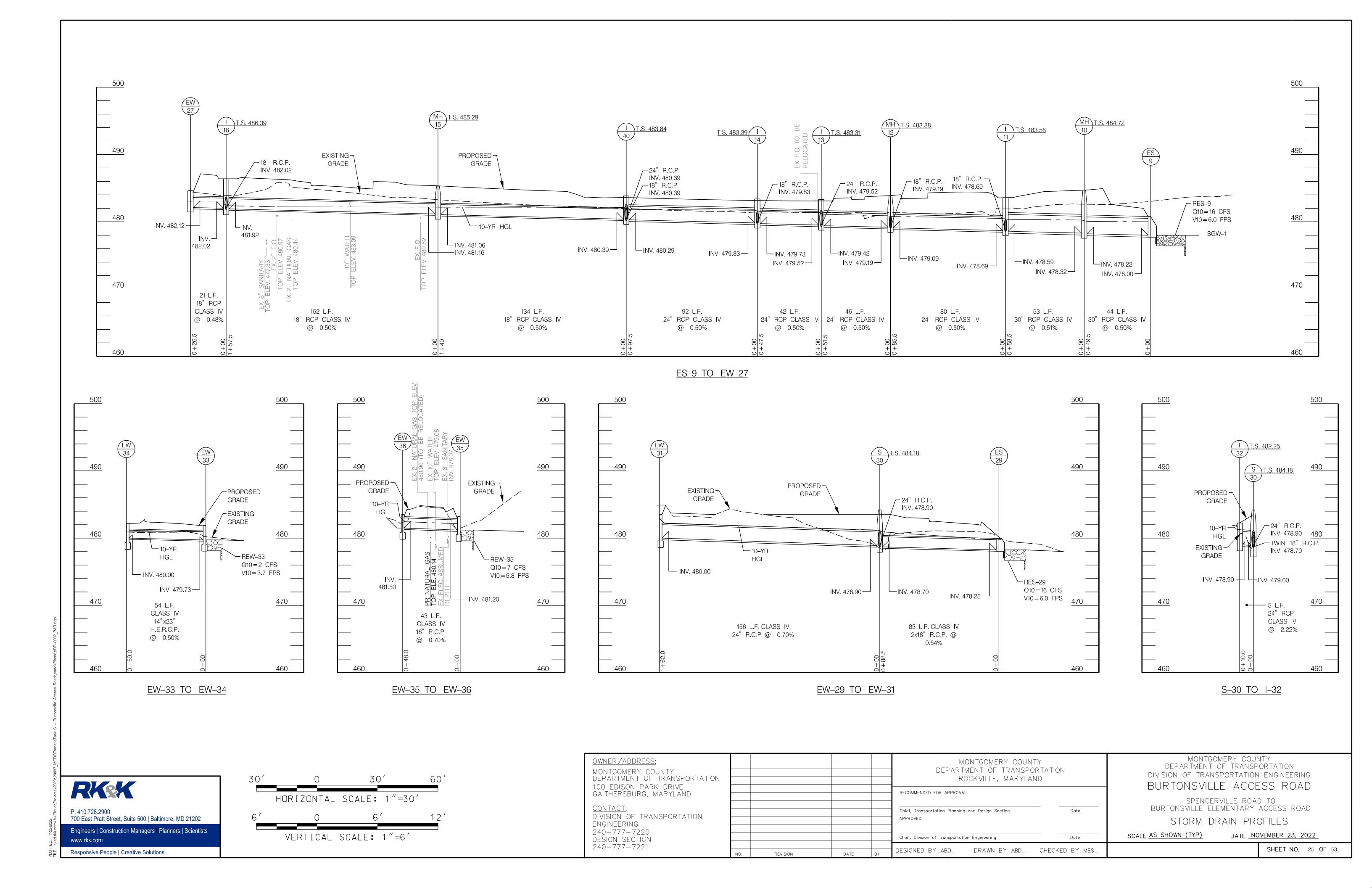
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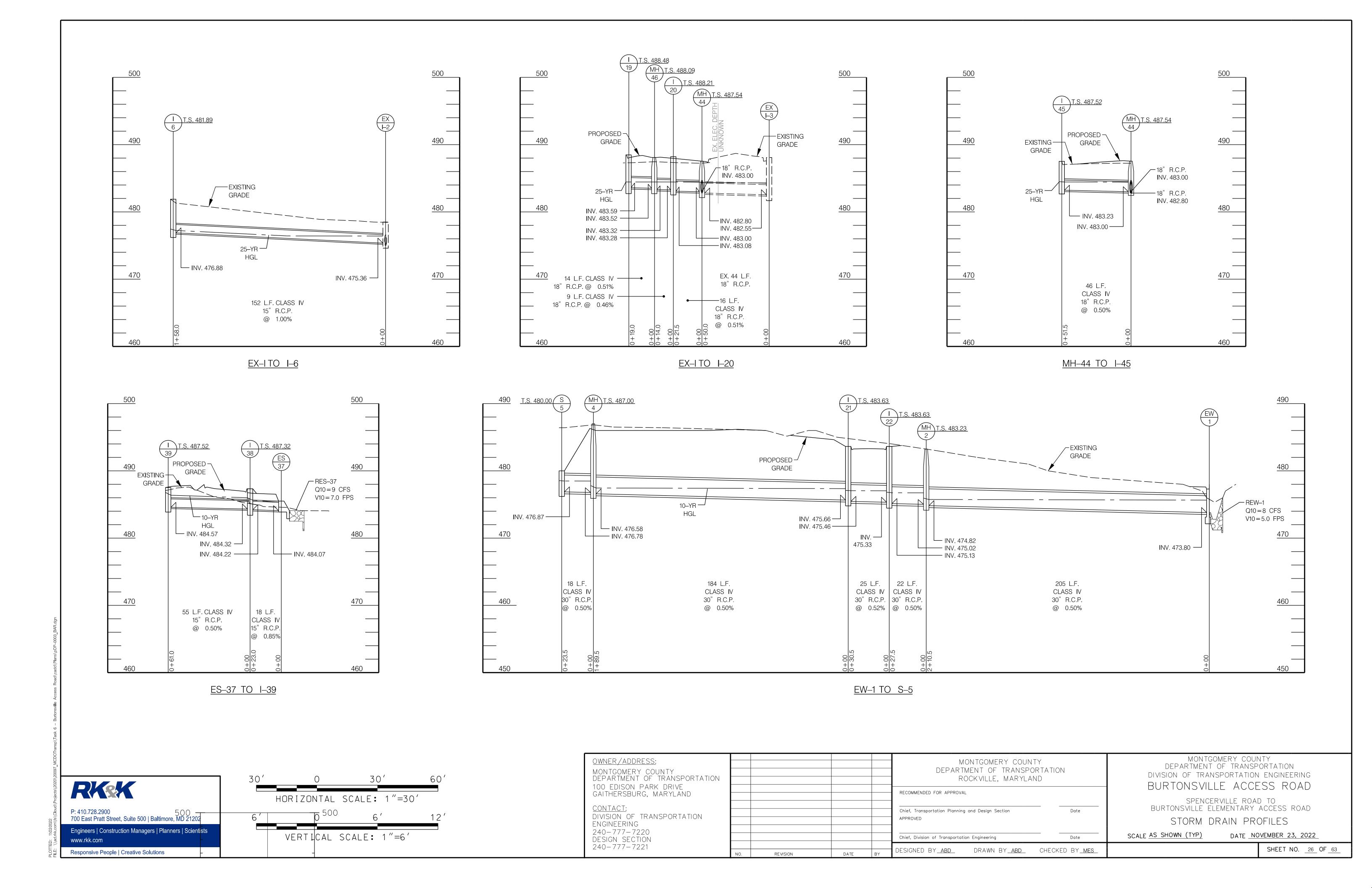


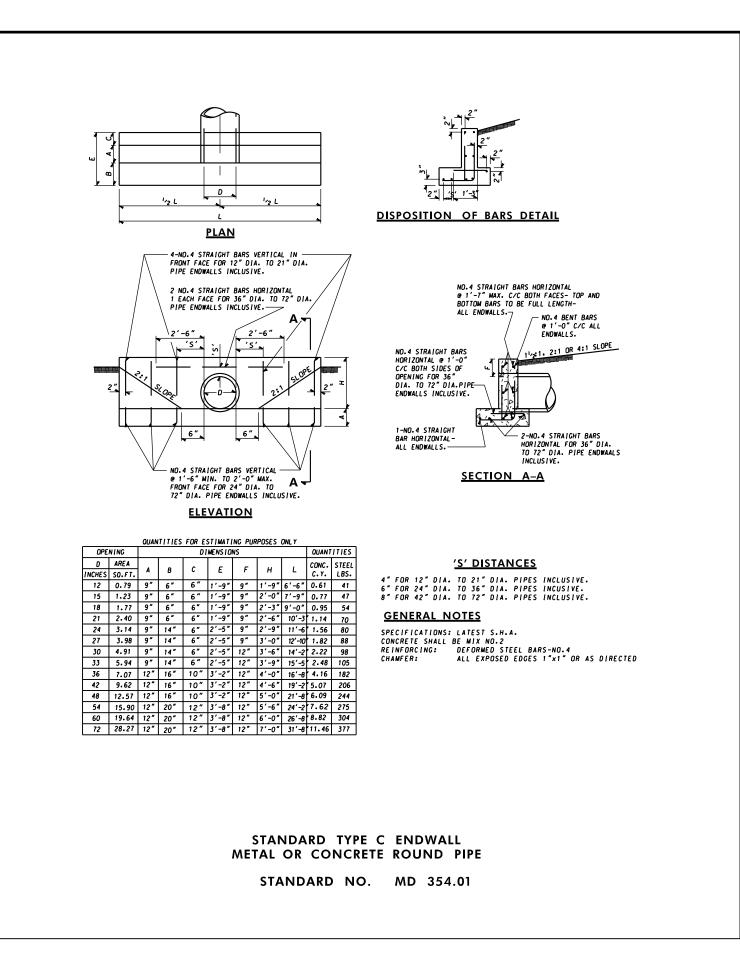


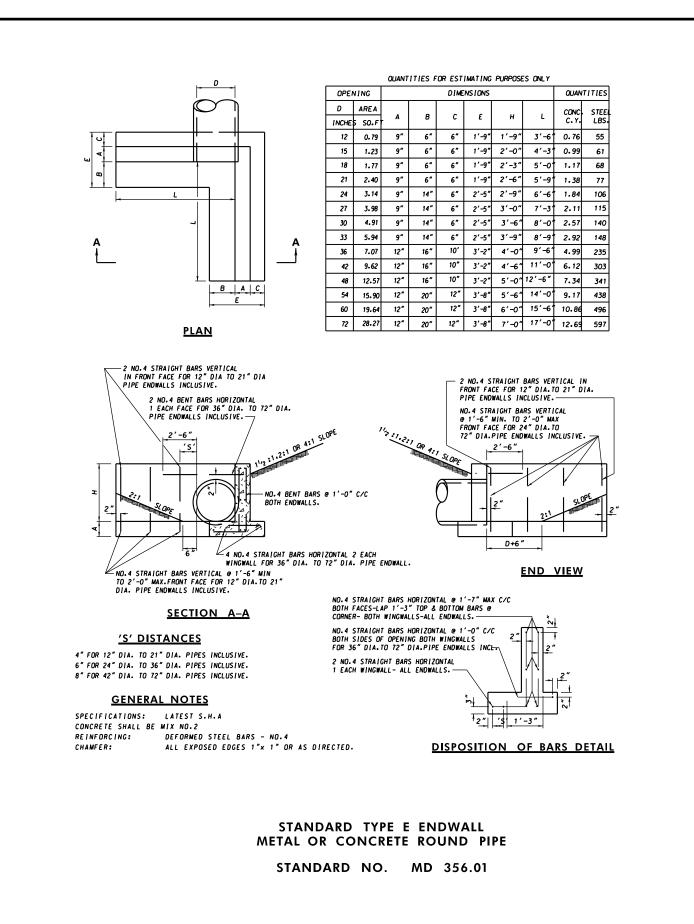


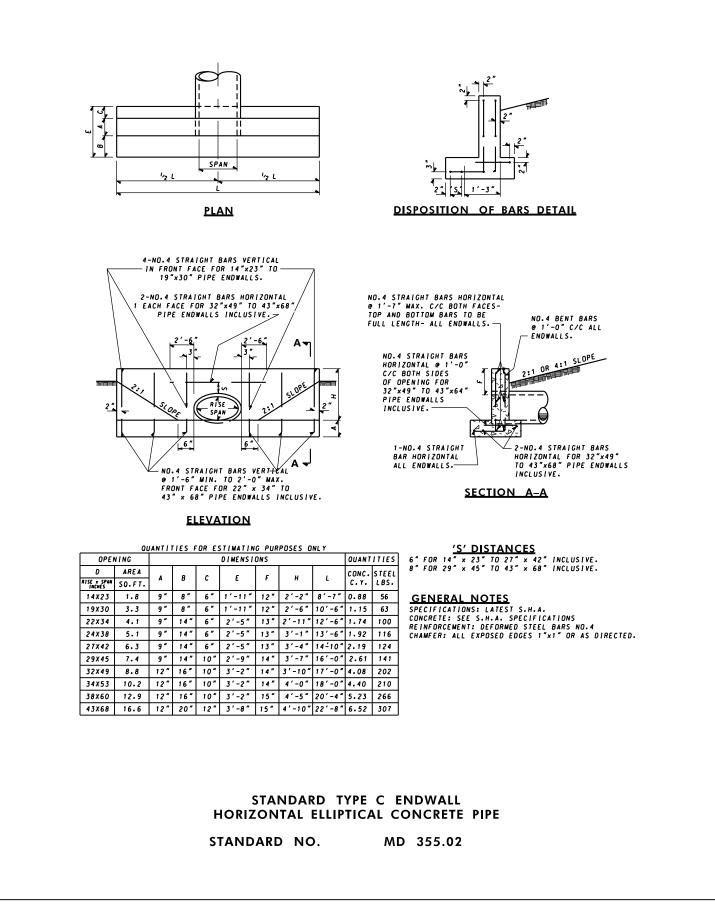


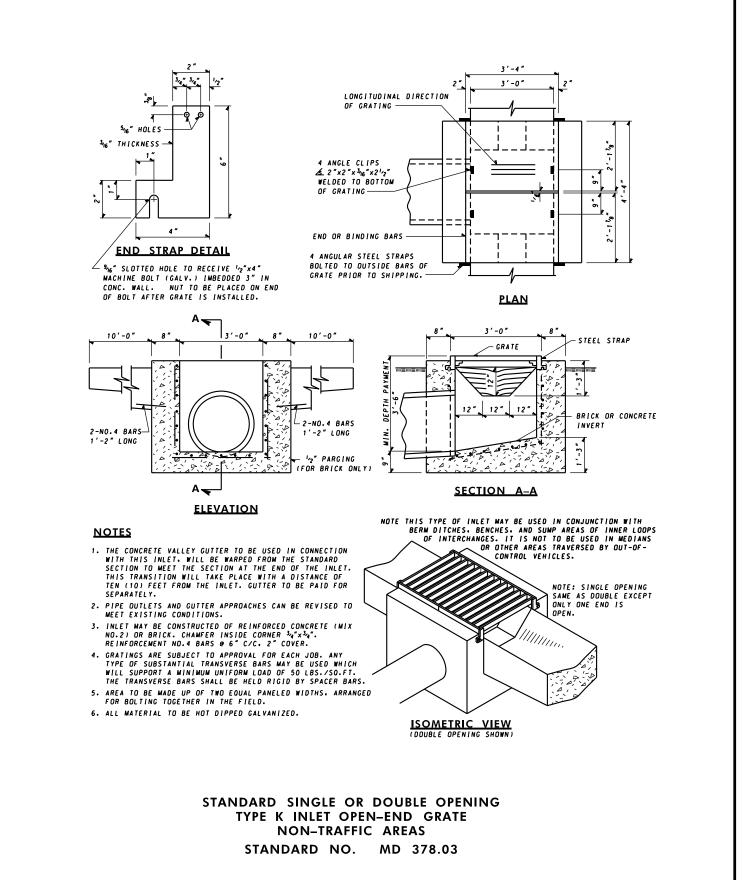


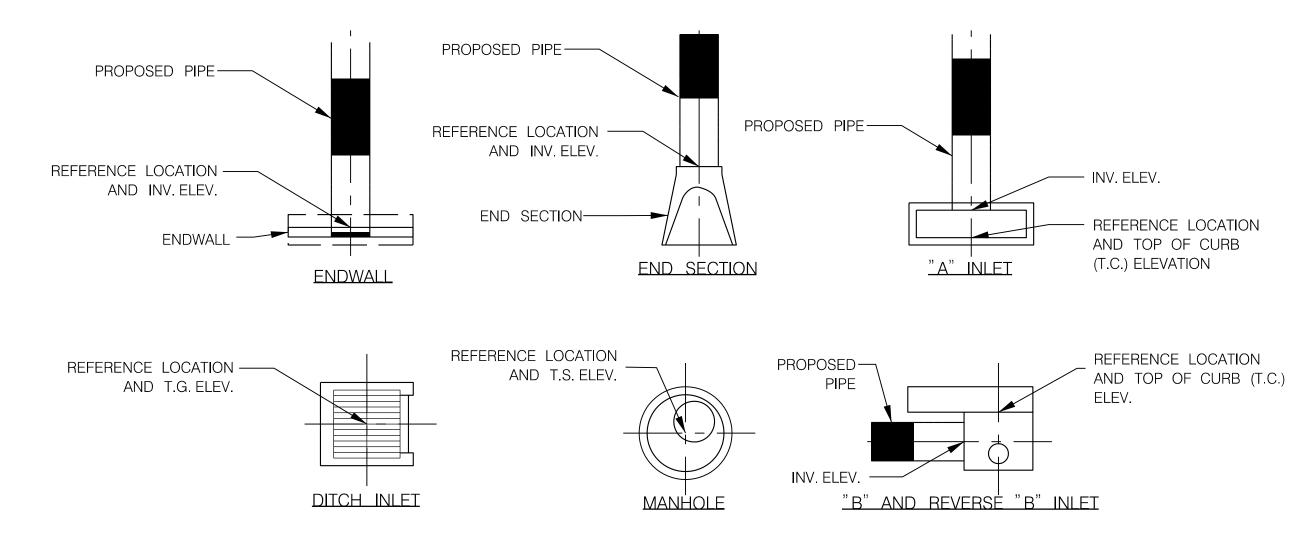












DRAINAGE STRUCTURE LOCATION REFERENCES

P: 410.728.2900
700 East Pratt Street, Suite 500 | Baltimore, MD 21202
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
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OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION					MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTAT ROCKVILLE, MARYLAND	TON			
100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND					RECOMMENDED FOR APPROVAL				
CONTACT: DIVISION OF TRANSPORTATION ENGINEERING					Chief, Transportation Planning and Design Section APPROVED	Date			
240-777-7220 Design section					Chief, Division of Transportation Engineering	Date			
240-777-7221	NO.	REVISION	DATE	BY	DESIGNED BY <u>ABD</u> DRAWN BY <u>ABD</u> CHE	CKED BY <u>Mes</u>			

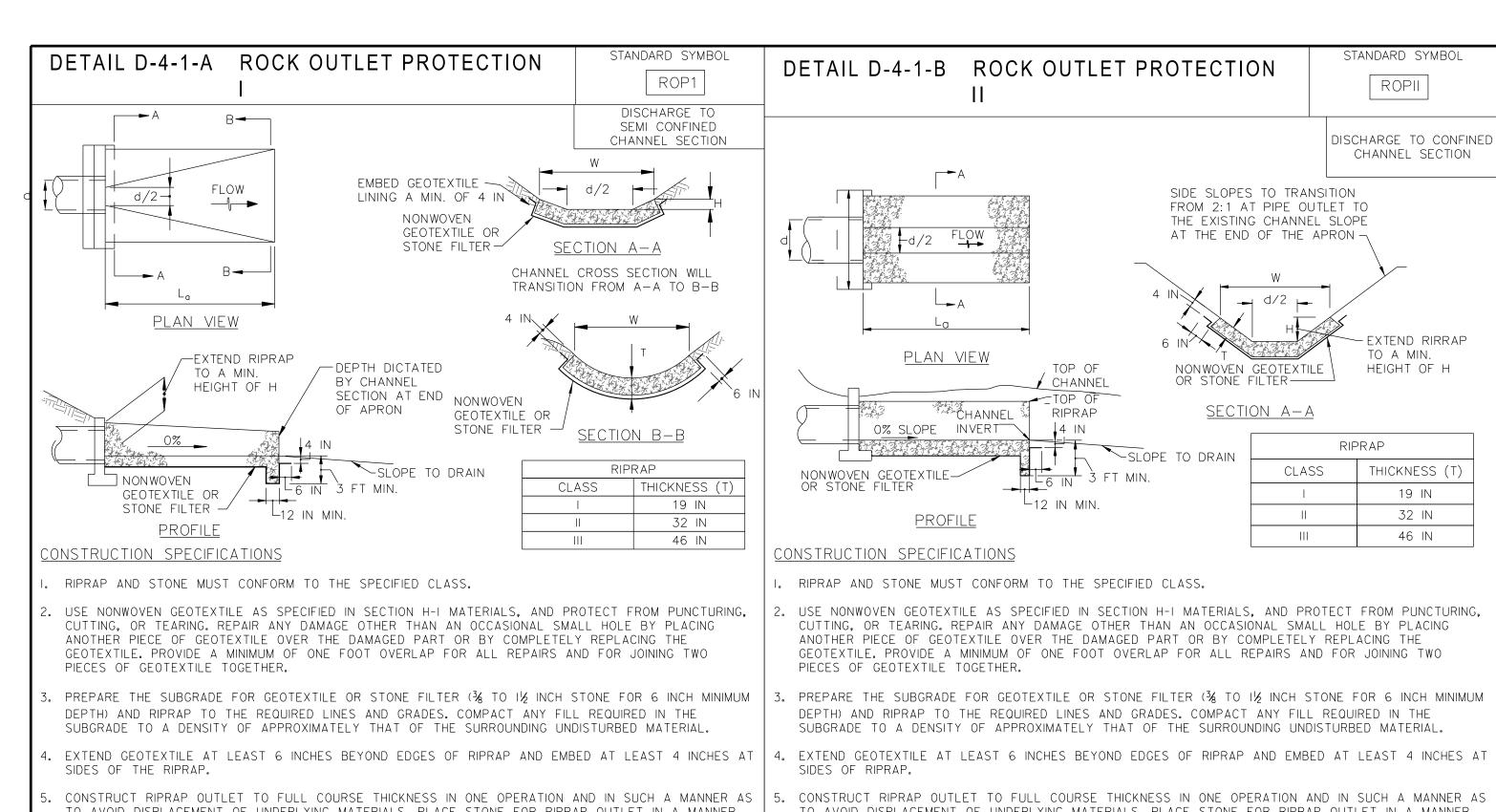
MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
DIVISION OF TRANSPORTATION ENGINEERING
BURTONSVILLE ACCESS ROAD

SPENCERVILLE ROAD TO
BURTONSVILLE ELEMENTARY ACCESS ROAD

DRAINAGE DETAILS

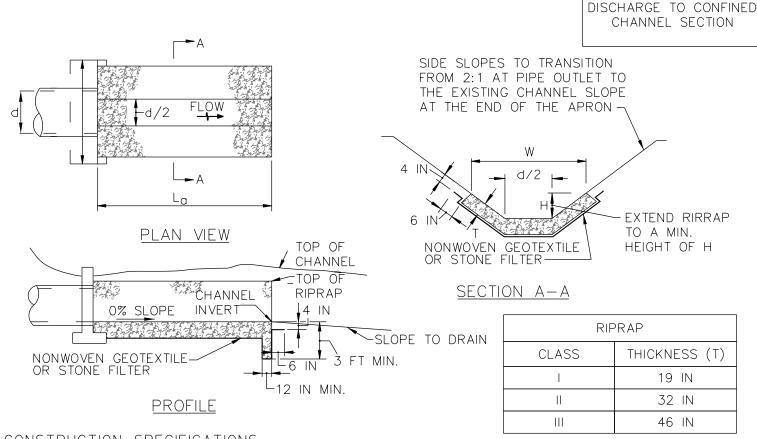
SCALE N.T.S. DATE NOVEMBER 23, 2022

SHEET NO. 27 OF 63



- TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE STONE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
- WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH IS TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A MINIMUM OF 18 INCHES.
- CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.
- MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

MARYLAND STANDARDS AND SPE	CIFICATIONS FOR SOIL ER	ROSION AND SEDIMENT CONTROL	MARYLAND STANDARDS AND SPEC
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE



STANDARD SYMBOL

ROPII

CONSTRUCTION SPECIFICATIONS

- . RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.
- 2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-I MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE, PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER.
- PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (¾ TO 1½ INCH STONE FOR 6 INCH MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
- SIDES OF RIPRAP.
- CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE STONE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
- WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH IS TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A MINIMUM OF 18 INCHES.
- CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.

2011

B. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND DISLODGED RIPRAP. MAKE

NECESSARY REPAIRS IMMEDIATELY. STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

DISCHARGE TO AN UNCONFINED CHANNEL OR FLAT AREA d/2EXTEND RIRR TO A MIN. GEOTEXTILE HEIGHT OF H OR STONE FILTER <u>Plan view</u> EXISTING STABILIZED AREA 4 IN¬ $\psi \psi \psi$ -NONWOVEN GEOTEXTILE OR ⊢3 FT MIN. STONE FILTER 6 IN NONWOVEN — GEOTEXTILE RIPRAP ^L12 IN MIN. OR STONE FILTER THICKNESS (T) 19 IN 32 IN CONSTRUCTION SPECIFICATIONS 46 IN

STANDARD SYMBOL

ROPIII

I. RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.

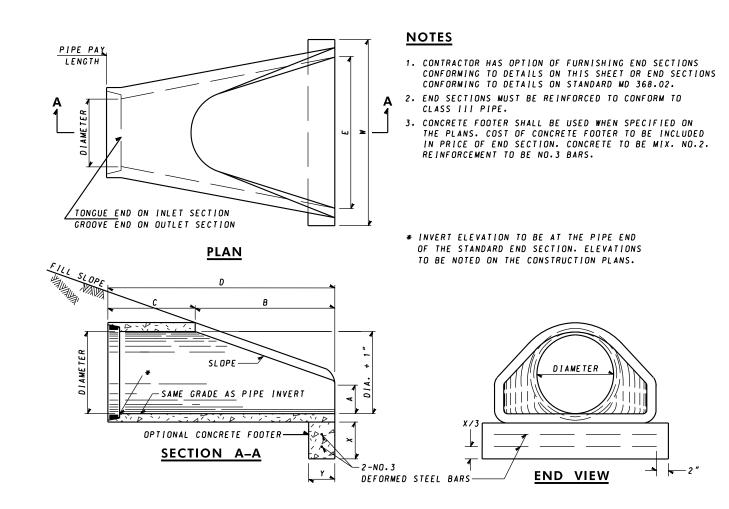
NATURAL RESOURCES CONSERVATION SERVICE

DETAIL D-4-1-C ROCK OUTLET PROTECTION

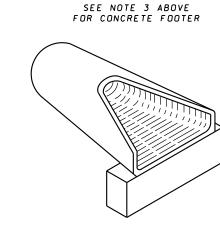
- 2. USE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-I MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING, REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER.
- 3. PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (3/4 TO 1/2 INCH MINIMUM STONE FOR 6 INCH MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED
- 4. EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF RIPRAP.
- 5. CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
- 6. WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH IS TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A MINIMUM OF 18 INCHES.
- 7. CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.
- 8. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND RIPRAP DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE

WATER MANAGEMENT ADMINISTRATION



	QUANTITIES FOR ESTIMATING PURPOSES ONLY											
	DIMENSIONS QUANTITIES											
	ЕТЕ	FOOTE	R									
DIA.	SLOPE	A	В	С	D	Ε	W	x	Y	CONC.	STEEL LBS.	
12"	3:1	4 "	2'-0"	4'-078"	6'-078"	2'-0"	3′-0″	12"	9 "	0.08	24.00	
15 "	3:1	61/2"	2'-4"	3'-10"	6'-2"	2'-6"	3′-6″	12"	9 "	0.10	28.50	
18"	3:1	101/4"	2'-2"	4'-0"	6'-2"	3′-0″	4'-0"	12"	9 "	0.11	33.00	
21"	3:1	9 "	3′-0″	3'-11/2"	6'-11/2"	3′-6″	4'-6"	12"	9 "	0.13	37.50	
24"	3:1	11"	3'-7"	2'-8"	6'-3"	4'-0"	5′-0″	15"	9 "	0.17	42.00	
27"	3:1	101/2"	4'-11/2"	2'-0"	6'-11/2"	4'-6"	5′-6″	15"	9 "	0.19	46.50	
30"	3:1	1'-1"	4'-5"	1'-10"	6'-3"	5′-0″	6'-0"	15"	9 "	0.21	51.00	
33 "	3:1	1'-2"	4'-7"	2'-2"	6'-9"	5′-6″	6'-6"	15"	9 "	0.23	55.50	
36 "	3:1	1'-31/2"	5′-3″	3′-1″	8'-11/2"	6'-0"	7′-3″	15"	9 "	0.25	62.25	
42"	3:1	1'-91/4"	5′-5″	2'-10"	8'-3"	6'-6"	7′-9″	15"	9 "	0.27	66.75	
48"	3:1	2'-1"	6'-0"	2'-2"	8'-2"	7′-0″	8'-6"	18"	12"	0.47	73.50	
54"	2.4:1	2'-5"	5′-2″	2'-10"	8'-0"	7′-6″	9'-0"	18"	12"	0.50	78.00	
60"	2:1	2'-7"	4'-11"	3'-812"	8'-71/2"	8'-0"	9'-6"	18"	12"	0.53	82.50	
66"	2:1	2'-4"	6'-6"	1'-9"	8'-3"	8′-6″	10'-0"	18"	12"	0.56	87.00	
72"	2:1	2'-10"	6′-6″	1'-9"	8'-3"	9′-0″	10'-9"	18"	12"	0.60	93.75	



ISOMETRIC VIEW

STANDARD CONCRETE END SECTION ROUND CONCRETE PIPE

STANDARD NO. MD 368.01

4" TOPSOIL AND PERMANENT ---SEEDING OUTSIDE OF — 4" TOPSOIL AND TYPE A SOIL STABILIZATION MATTING STABILIZATION MATTING WITHIN 10-YR WSEL 6" MIN. FREEBOARD (AS PROPOSED GRADE -REQUIRED FROM EDGE OF PAVEMENT FOR 10-YR. STORM) SHARED USE 10-YEAR WSEL I BOTTOM WIDTH (W) DRAINAGE DITCH TYP. DETAIL

> NOTE: FOR DRAINAGE DITCH SCHEDULE AND STABILIZATION MATTING SCHEDULE, SEE TABLES ON DD-03.

OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND CONTACT:

MARYLAND DEPARTMENT OF ENVIRONMENT

WATER MANAGEMENT ADMINISTRATION

DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION 240-777-7221

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND RECOMMENDED FOR APPROVAL Chief, Transportation Planning and Design Section APPROVED Chief, Division of Transportation Engineering Date DRAWN BY<u>abd</u> CHECKED BY<u>mes</u> DESIGNED BY<u>ABD</u>

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD

DRAINAGE DETAILS

SHEET NO. 28 OF 63

SCALE N.T.S. DATE NOVEMBER 23, 2022

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	STRUCTURE SCHEDULE - ENDWALLS AND END SECTIONS										
STRUCTURE NO.	STATION	OFFSET	VERTICAL DEPTH	ТҮРЕ	STD. REF.	T.C./T.G. OR T.S.	INV. OUT	NOTES			
ES-37	109+51	39.74 RT	N/A	STD CONCRETE END SECTION	MD-368.01	485.78	484.07	DIAMETER = 15"			
ES-9	101+93	64.57 LT	N/A	STD CONCRETE END SECTION	MD-368.01	480.79	478.00	DIAMETER = 30"			
EW-1	100+71	243.09 RT	N/A	STD TYPE C ENDWALL	MD-354.01	477.30	473.80	DIAMETER = 30"			
EW-26	104+80	37.78 LT	N/A	STD TYPE C ENDWALL	MD-354.01	483.54	480.79	DIAMETER = 24"			
EW-27	108+71	43.28 LT	N/A	STD TYPE E ENDWALL	MD-356.01	484.62	482.12	DIAMETER = 18"			
ES-29a	103+28	66.70 RT	N/A	STD CONCRETE END SECTION	MD-368.01	480.50	478.25	DIAMETER = 18"			
ES-29	103+27	62.79 RT	N/A	STD CONCRETE END SECTION	MD-368.01	480.50	478.25	DIAMETER = 18"			
EW-31	105+46	38.91 RT	N/A	STD TYPE C ENDWALL	MD-354.01	482.75	480.00	DIAMETER = 24"			
EW-33	103+20	120.88 RT	N/A	STD 14"x23" HERCP TYPE C ENDWALL	MD-355.02	481.90	479.73	14"X23" ELLIPTICAL			
				STD 14"x23" HERCP TYPE C							
EW-34	103+30	172.44 RT	N/A	ENDWALL	MD-355.02	482.17	480.00	14"X23" ELLIPTICAL			
EW-35	107+62	38.04 RT	N/A	STD TYPE C ENDWALL	MD-354.01	483.45	481.20	DIAMETER = 18"			
EW-36	108+06	46.94 RT	N/A	STD TYPE C ENDWALL	MD-354.01	483.75	481.50	DIAMETER = 18"			
EW-42	105+78	37.75 LT	N/A	SEE RETAINING WALL DETAILS	CUSTOM	N/A	480.50				

	STRUCTURE SCHEDULE - MANHOLES									
STRUCTURE NO.	STATION	OFFSET	VERTICAL DEPTH	ТҮРЕ	STD. REF.	T.C./T.G. OR T.S.	INV. OUT	NOTES		
MH-2	1001+87	40.63 LT	8.41	"A" MANHOLE	MC-510.01	483.23	474.82	DIAMETER = 60"		
MH-4	100+87	201.84 LT	10.42	"A" MANHOLE	MC-510.01	487.00	476.58	DIAMETER = 72"		
MH-7	100+54	4.47 LT	3.73	"A" MANHOLE	MC-510.01	482.35	478.62	DIAMETER = 48"		
MH-10	102+22	28.20 LT	6.50	"A" MANHOLE	MC-510.01	484.72	478.22	DIAMETER = 60"		
MH-12	103+76	22.28 LT	4.79	"A" MANHOLE	MC-510.01	483.88	479.09	DIAMETER = 60"		
MH-15	107+17	27.51 LT	4.23	"A" MANHOLE	MC-510.01	485.29	481.06	DIAMETER = 48"		
MH-44	110+15	26.55 LT	4.74	"A" MANHOLE	MC-510.01	487.54	482.80	DIAMETER = 48"		
MH-46	110+43	8.90 LT	4.77	"A" MANHOLE	MC-510.01	488.09	483.32	DIAMETER = 48"		
S-30	103+96	29.00 RT	5.48	JUNCTION BOX	CUSTOM	484.18	478.70			

				STRUCTURE SCHEDULE - INL	ETS			
STRUCTURE NO.	STATION	OFFSET	VERTICAL DEPTH	ТҮРЕ	STD. REF.	T.C./T.G. OR T.S.	INV. OUT	NOTES
I-6	1002+20	29.67 LT	5.01	"A" INLET	MC-501.01	481.89	476.88	TOP WIDTH = 10'
I-8	1000+72	26.22 LT	3.19	"E" INLET	MC-504.01	483.19	480.00	
I-11	102+83	20.70 LT	5.09	"A" INLET	MC-501.01	483.68	478.59	TOP WIDTH = 10'
I-13	104+30	20.67 LT	3.89	REVERSE "B" INLET	MC-502.02	483.31	479.42	TOP WIDTH = 10'
I-14	104+80	20.00 LT	3.66	REVERSE "B" INLET	MC-502.02	483.39	479.73	TOP WIDTH = 10'
I-16	108+72	19.99 LT	4.47	"A" INLET	MC-501.01	486.39	481.92	TOP WIDTH = 10'
I-17	108+72	12.00 RT	4.40	"A" INLET	MC-501.01	486.58	482.18	TOP WIDTH = 10'
I-19	110+43	12.00 RT	4.89	REVERSE "B" INLET	MC-502.02	488.48	483.59	TOP WIDTH = 10'
I-20	110+32	17.13 LT	5.13	REVERSE "B" INLET	MC-502.02	488.21	483.08	TOP WIDTH = 10'
I-21	100+83	12.67 LT	8.17	"A" INLET	MC-501.01	483.63	475.46	TOP WIDTH = 10'
I-22	100+83	12.76 RT	8.50	"A" INLET	MC-501.01	483.63	475.13	TOP WIDTH = 10'
I-23	102+96	12.63 RT	5.24	"A" INLET	MC-501.01	484.10	478.86	TOP WIDTH = 10'
I-24	103+78	39.00 LT	4.20	"E" INLET	MC-504.01	483.45	479.25	
I-25	104+28	12.63 RT	4.02	"A" INLET	MC-501.01	483.68	479.66	TOP WIDTH = 10'
I-32	103+98	40.19 RT	3.35	"A" INLET	MC-501.01	482.25	478.90	TOP WIDTH = 5'
I-38	109+75	44.99 RT	3.10	"A" INLET	MC-501.01	487.32	484.22	TOP WIDTH = 10'
I-39	110+49	40.57 RT	2.95	"A" INLET	MC-501.01	487.52	484.57	TOP WIDTH = 10'
I-40	105+78	20.67 LT	3.31	REVERSE "B" INLET	MC-502.02	483.84	480.53	TOP WIDTH = 10'
I-41	105+78	12.67 RT	3.68	"A" INLET	MC-501.01	484.21	480.53	TOP WIDTH = 10'
I-45	109+71	47.63 LT	4.29	REVERSE "B" INLET	MC-502.02	487.52	483.23	TOP WIDTH = 10'
S-5	101+10	202.87 LT	3.13	STD. SINGLE OPENING TYPE K NON-TRAFFIC	MD 378.03	480.00	476.87	

	ST	ORM DRA	IN PIPE SCH	EDULE	
FROM	ТО	SIZE	MATERIAL	CLASS	LENGTH (L.F)
MH-44	I-45	18"	RCP	CLASS IV	46
MH-44	I-20	18"	RCP	CLASS IV	15.8
I-20	MH-46	18"	RCP	CLASS IV	8.7
MH-46	I-19	18"	RCP	CLASS IV	13.6
ES-9	MH-10	30"	RCP	CLASS IV	44.1
MH-10	I-11	30"	RCP	CLASS IV	53.3
I-11	I-23	18"	RCP	CLASS IV	34.3
I-11	MH-12	24"	RCP	CLASS IV	79.9
MH-12	I-24	18"	RCP	CLASS IV	13.3
MH-12	I-13	24"	RCP	CLASS IV	46.4
I-13	I-25	24"	RCP	CLASS IV	27.4
I-13	I-14	24"	RCP	CLASS IV	42
I-14	EW-26	24"	RCP	CLASS IV	18.5
I-14	I-40	24"	RCP	CLASS IV	91.6
I-40	EW-42	24"	RCP	CLASS IV	16.7
I-40	I-41	18"	RCP	CLASS IV	27.3
I-40	MH-15	18"	RCP	CLASS IV	133.7
MH-15	I-16	18"	RCP	CLASS IV	151.7
I-16	EW-27	18"	RCP	CLASS IV	20.9
I-16	I-17	18"	RCP	CLASS IV	32
I-38	I-39	15"	RCP	CLASS IV	55.4
ES-37	I-38	15"	RCP	CLASS IV	17.7
EW-35	EW-36	18"	RCP	CLASS IV	42.6
ES-29a	S-30	18"	RCP	CLASS IV	83.1
ES-29	S-30	18"	RCP	CLASS IV	83.1
S-30	I-32	24"	RCP	CLASS IV	5
S-30	EW-31	24"	RCP	CLASS IV	156.4
EW-33	EW-34	14"X23"	HERCP	CLASS IV	53.6
EW-1	MH-2	30"	RCP	CLASS IV	205.3
MH-2	I-22	30"	RCP	CLASS IV	21.7
I-22	I-21	30"	RCP	CLASS IV	24.5
I-21	MH-4	30"	RCP	CLASS IV	184.2
MH-4	S-5	30"	RCP	CLASS IV	18.3
MH-7	I-8	15"	RCP	CLASS IV	70.7
EX-I-2	I-6	15"	RCP	CLASS IV	152.4

RIPRAP OUTFALL PROTECTION SCHEDULE								
LOCATION	RIPRAP ID	STATION	OFFSET	CLASS	TYPE	LEFT SIDE SLOPE	RIGHT SIDE SLOPE	DIMENSIONS
ES-9	RES-9	101+93	64.57 LT	I	III	0	0	10' (L) X 12.5' (W) X 19" (D)
ES-29	RES-29	103+27	62.79 RT	I	II	3:1	3:1	20' (L) X 12.5' (W) X 19" (D)
EW-33	REW-33	103+20	120.88 RT	I	II	3:1	3:1	13.5' (L) X 8' (W) X 19" (D)
EW-1	REW-1	100+71	243.09 RT	I	II	2:1	2:1	15' (L) X 21' (W) X 19" (D)
EW-35	REW-35	107+62	38.04 RT	I	II	3:1	3:1	10' (L) X 12' (W) X 19" (D)
ES-37	RES-37	109+51	39.74 RT	I	I	0	0	12' (L)X 12' (W) X 19" (D)
CURB CUT	CURB	103+20	97.66 RT	I	II	2:01	2:01	34' (L) X 6'(W) X 19" (D)

*ALL RIPRAP OUTFALL PROTECTION TO BE UNDERLAID WITH NON-WOVEN GEOTEXTILE SE

DITCH LINING SCHEDULE								
SS1 SS2 QUA					QUANTITY			
FROM	TO	(H:1V)	(H:1V)	d	W	TYPE	(S.Y.)	
STA. 108+67, 44' LT	STA. 109+16, 52' LT	2.0	2.0	0.15	2.0	Type 'A' Matting	301	
STA. 105+50, 38' RT	STA. 107+60, 39' RT	3.0	3.0	1.29	2.0	Type 'A' Matting	195	

BURTONSVILLE ACCESS ROAD DITCH SCHEDU							
STATION	DITCH INV. (FT)	OFFSET (FT)	LT OR RT	BOTTOM WIDTH (FT)			
108+75	482.12	45	LT	2			
109+25	483.06	45	LT	2			
105+50	480.04	40	RT				
106+00	480.34	40	RT				
106+50	480.64	40	RT	2			
107+00	480.94	40	RT				
107+50	481.20	40	RT				

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100 EDISON PARK DRIVE		
GAITHERSBURG, MARYLAND		
CONTACT:		
DIVISION OF TRANSPORTATION		
ENGINEERING		
240-777-7220		
DESIGN SECTION		
240-777-7221		
	NO	ĺ

		DEPARTMI	NTGOMERY COUN ENT OF TRANSPO CKVILLE, MARYLAN	RTATION	
		RECOMMENDED FOR APPROVAL			
		Chief, Transportation Planning a APPROVED	nd Design Section		Date
		Chief, Division of Transportation	Engineering		Date
 	 	DESIGNED BY_ABD_	DRAWN BY_ABD_	CHECKED	BY MES

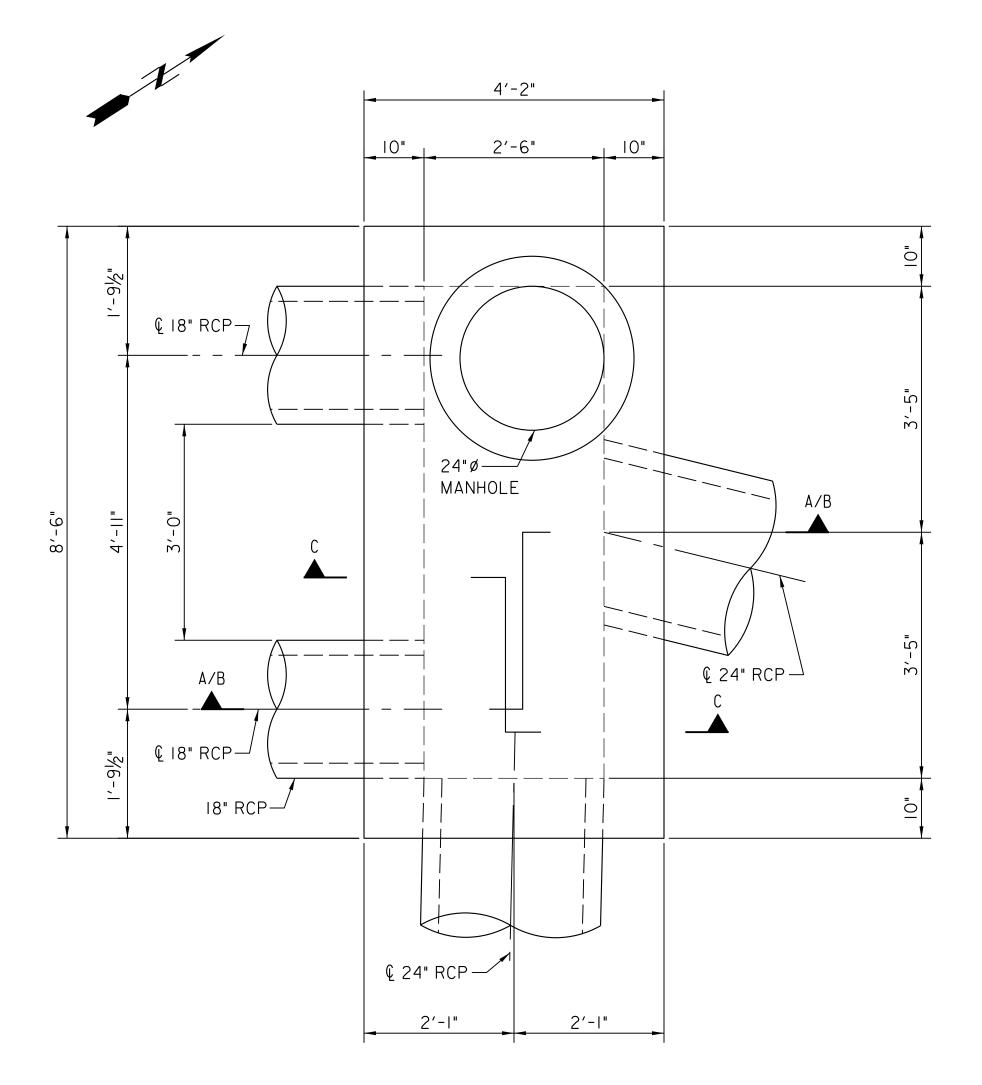
MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
DIVISION OF TRANSPORTATION ENGINEERING
BURTONSVILLE ACCESS ROAD

SPENCERVILLE ROAD TO
BURTONSVILLE ELEMENTARY ACCESS ROAD

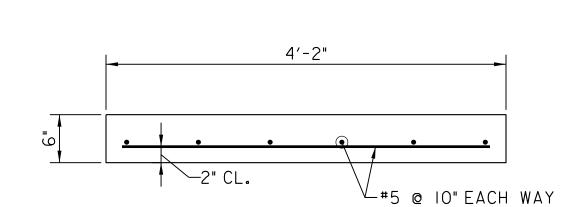
DRAINAGE DETAILS

SCALE N.T.S. DATE NOVEMBER 23, 2022

DATE BY DESIGNED BY ABD DRAWN BY ABD CHECKED BY MES 03 SHEET NO. 29 OF 63

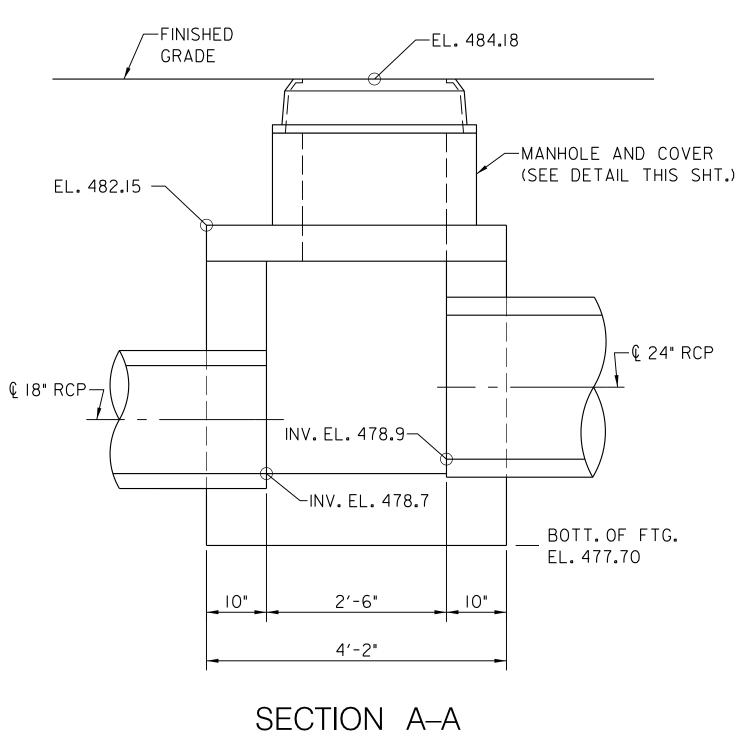


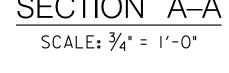


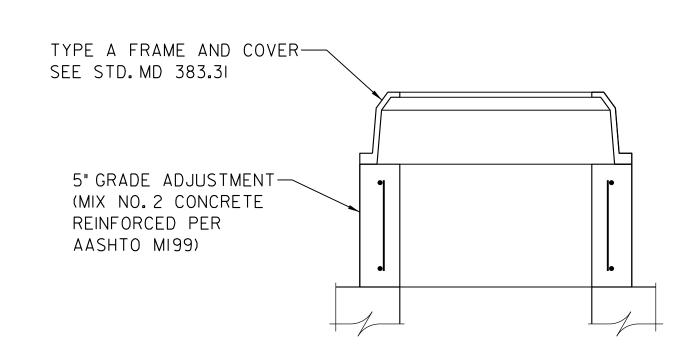


TOP SLAB SECTION

SCALE: |" = | 1'-0|"

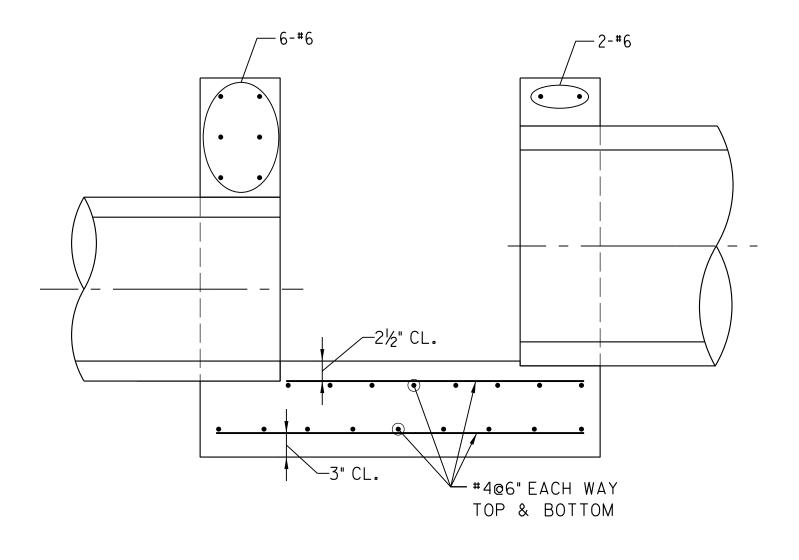






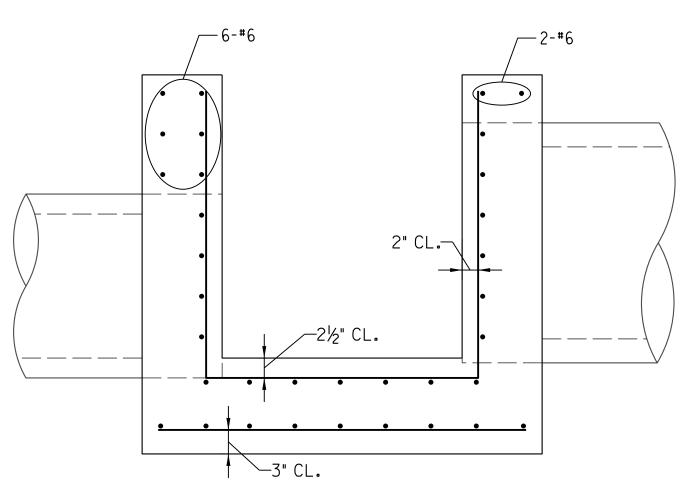
MANHOLE DETAILS

SCALE: I" = I'-0"



SECTION B-B

SCALE: I" = I'-0"



NOTE: ALL REINFORCING #4@6"U.N.O.

SECTION C-C SCALE: |" = |'-0|"

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PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. EXPIRATION DATE:

OWNER/ADDRESS:

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION

100 EDISON PARK DRIVE
GAITHERSBURG, MARYLAND

CONTACT:
DIVISION OF TRANSPORTATION
ENGINEERING
240-777-7220
DESIGN SECTION
240-777-7221

				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND				
				RECOMMENDED FOR APPROVAL				
				Chief, Transportation Planning and Design Section APPROVED	Date			
				Chief, Division of Transportation Engineering	 Date			
NO.	REVISION	DATE	BY	DESIGNED BY POB DRAWN BY MHB	CHECKED BY_J9W_			

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
DIVISION OF TRANSPORTATION ENGINEERING
BURTONSVILLE ACCESS ROAD
SPENCERVILLE ROAD TO
BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD

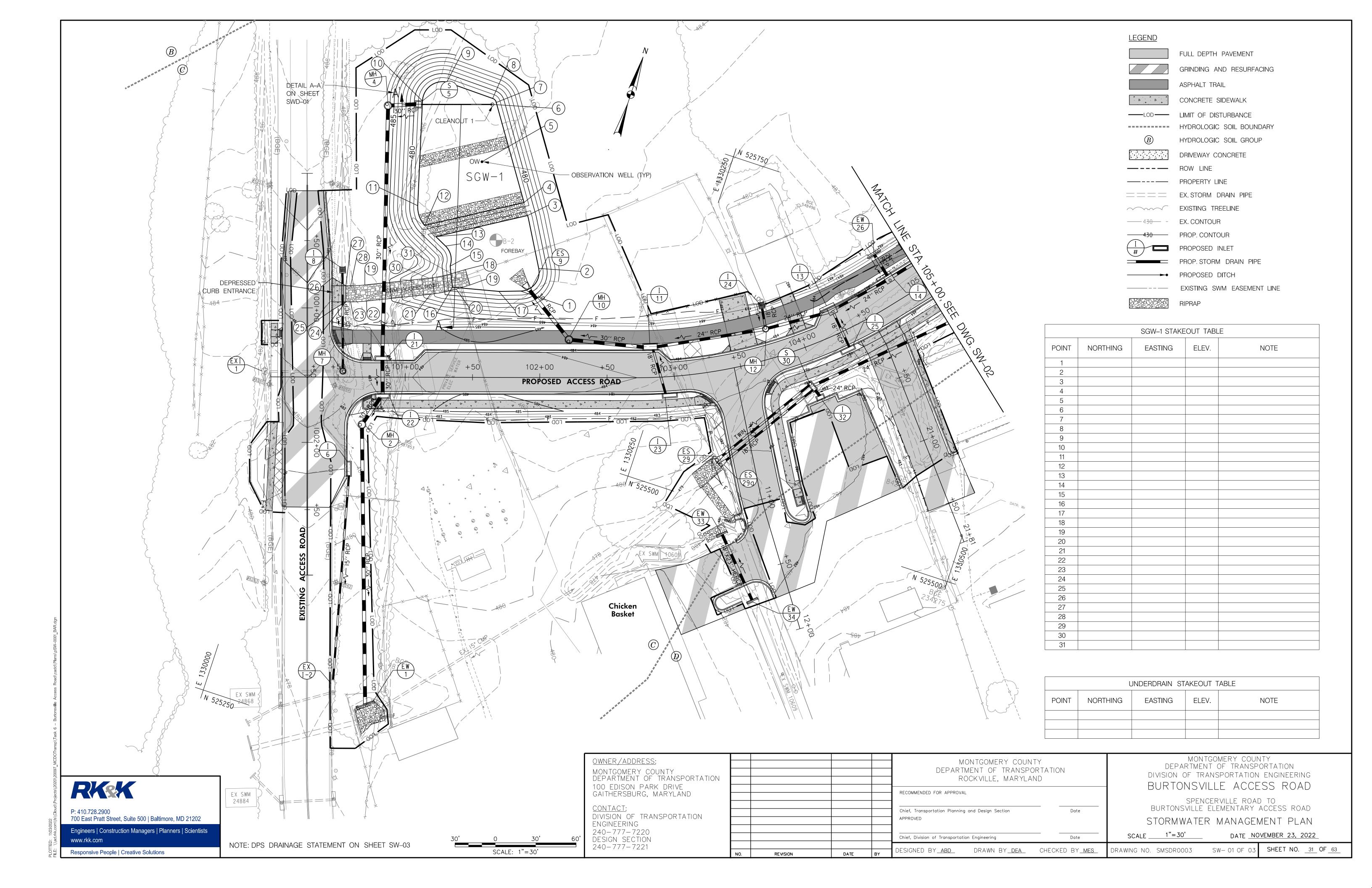
DR-01

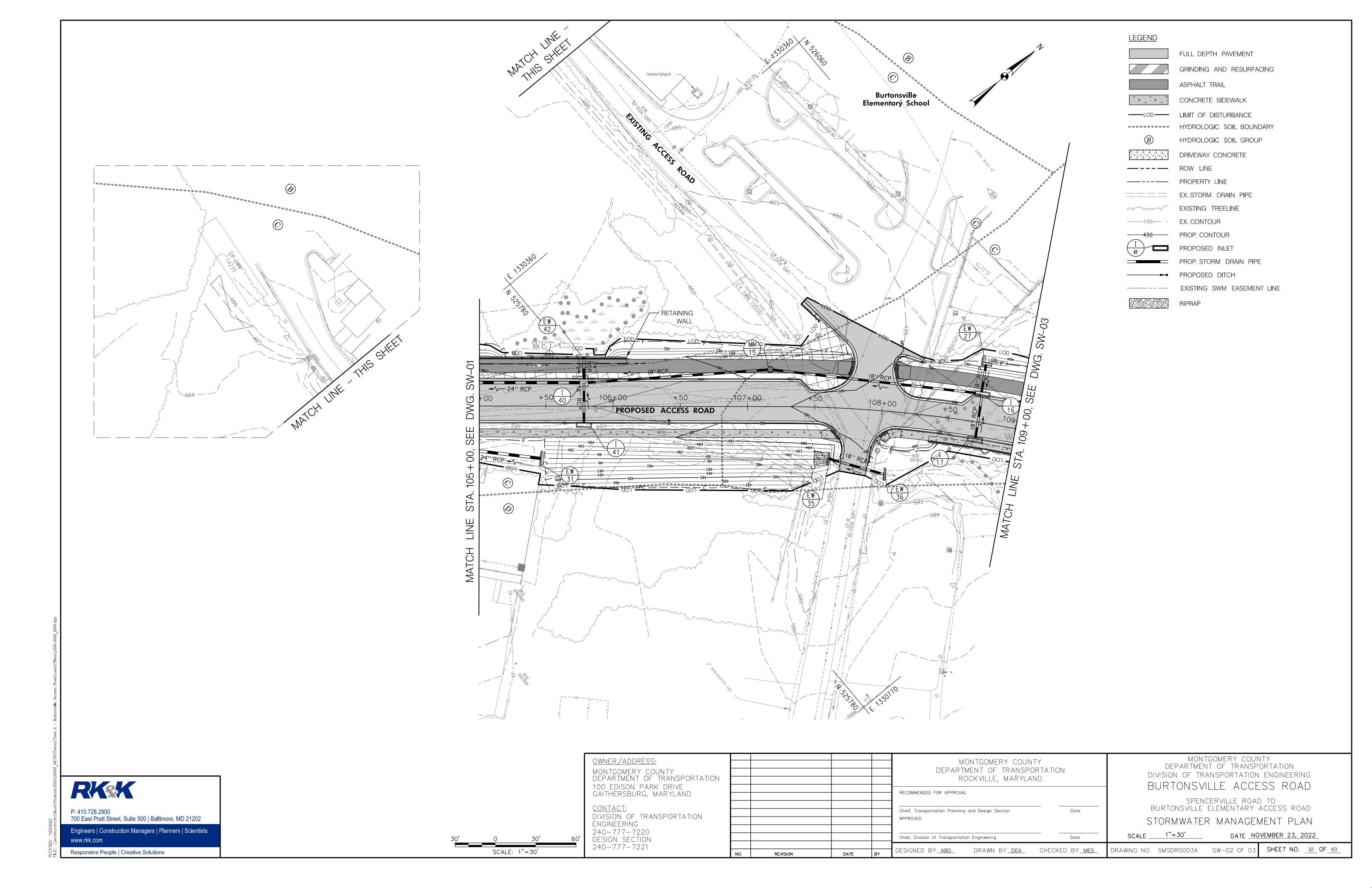
 JUNCTION BOX S-30 - DETAILS

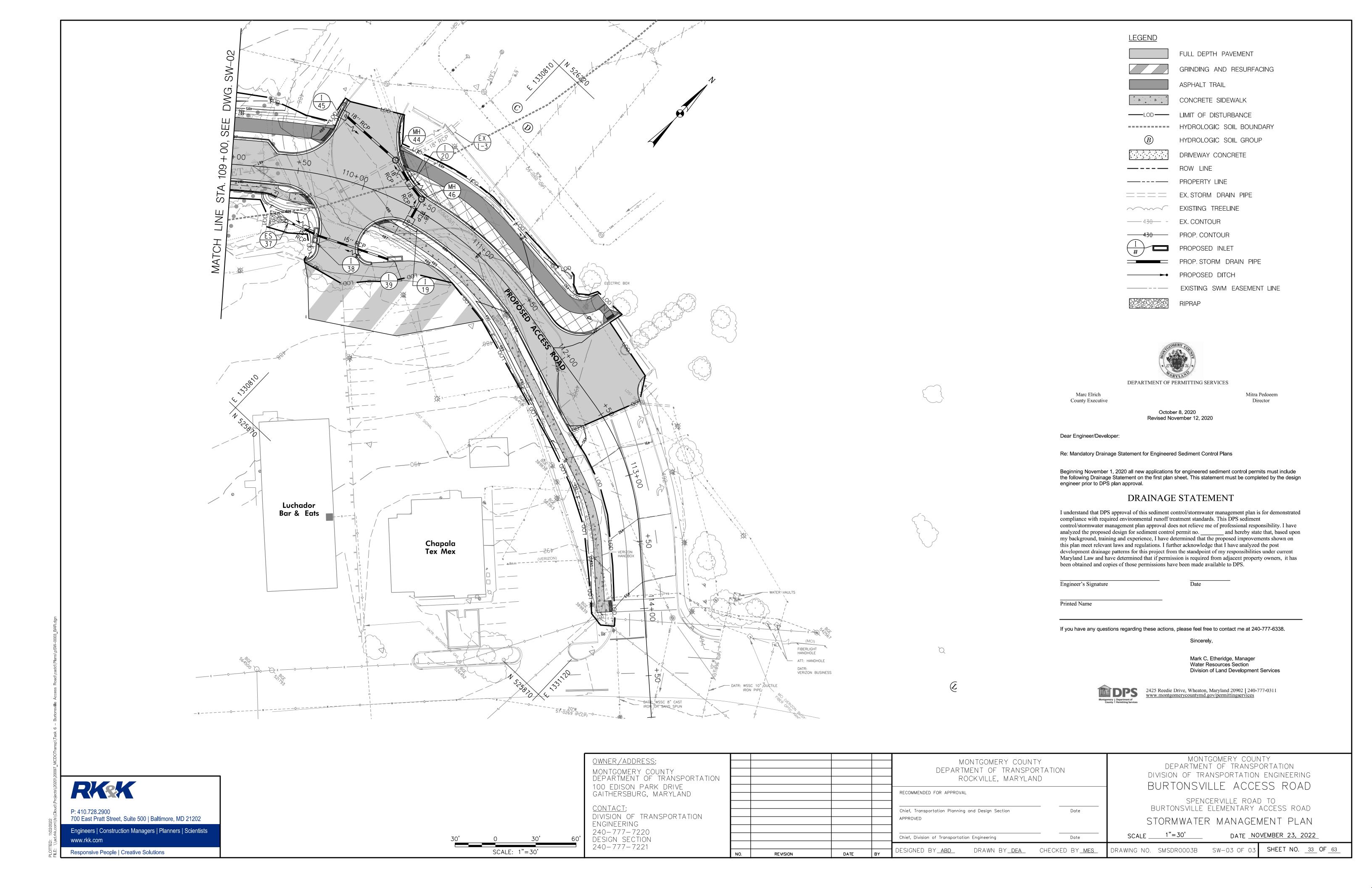
 SCALE AS NOTED DATE NOVEMBER 23, 2022

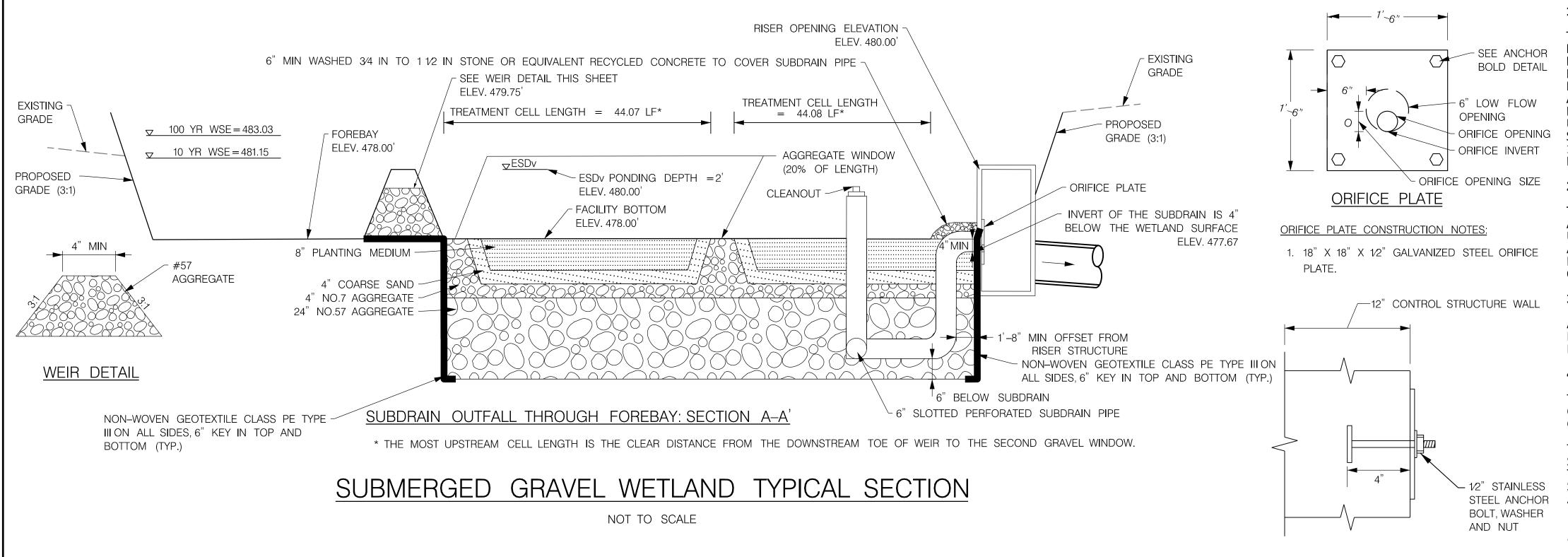
 DRAWING NO.
 DD-04
 OF
 04
 SHEET NO.
 30 OF 63

PLOTTED: 1123/2022 FILE: \\ad.rkk.com\fs\Cloud\Projec







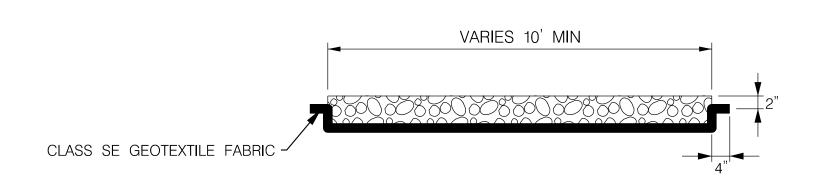


ANCHOR BOLT NOT TO SCALE

SAND SPECIFICATIONS:

Washed ASTM C33 Fine Aggregate Concrete Sand is utilized for stormwater management applications in Montgomery County. In addition to the ASTM C33 specification, sand must meet ALL of the following conditions:

- 1. Sand must meet gradation requirements for ASTM C-33 Fine Aggregate Concrete Sand. AASHTO M-6 gradation is also acceptable.
- 2. Sand must be silica based ... no limestone based products may be used. If the material is white or gray in color, it is probably not acceptable.
- 3. Sand must be clean. Natural, unwashed sand deposits may not be used. Likewise, sand that has become contaminated by improper storage or installation practices will be rejected.
- 4. Manufactured sand or stone dust is not acceptable under any circumstance.



REVISION

GRAVEL ACCESS ROAD CROSS-SECTION

NOT TO SCALE

1. UNDERDRAIN PIPE

THE UNDERDRAIN PIPE CONSISTS OF 6-INCH DIAMETER SCHEDULE 40 OR STRONGER PERFORATED PVC PIPE AT 0.00% SLOPE. THE UNDERDRAIN PIPE WILL BE PLACED WITHIN THE GRAVEL LAYER. A MINIMUM OF THREE INCHES OF GRAVEL MUST BE PLACED UNDER THE PIPE, WITH A MINIMUM OF 6 INCHES OF GRAVEL OVER THE PIPE. PERFORATIONS MUST BE 3/8 INCH IN DIAMETER AND MUST BE LOCATED 4 INCHES ON CENTER, EVERY 90 DEGREES AROUND THE PIPE. PERFORATED PIPE MUST BEGIN AT LEAST 12" INSIDE THE FILTER MEDIA. IF THIS CANNOT BE ACHIEVED, THEN SIDES OF THE FILTER MEDIA MUST BE LINED WITH FILTER FABRIC. FILTER FABRIC MUST NOT BE WRAPPED AROUND THE UNDERDRAIN PIPE. AN ACCEPTABLE ALTERNATIVE TO PERFORATED PIPE IS 6"DIAMETER SCHEDULE 40 SLOTTED PVC PIPE WITH 0.125 INCH SLOTS. SLOTS SHALL BE 0.125 INCHES WIDE AND A MINIMUM OF 1.9 INCHES IN LENGTH, WITH A MINIMUM OF 4 SLOTS PER ROW AND 4 ROWS PER LINEAR FOOT OF

2. GRAVEL BED

THE GRAVEL LAYER SURROUNDING THE UNDERDRAIN PIPE(S) MUST MEET MSHA SIZE #7 (TABLE 901A) AND MUST PROVIDE A MINIMUM OF 6 INCHES COVER OVER THE PIPE(S), AND MINIMUM 3 INCHES UNDER THE PIPE. NO GEOTEXTILE OR FILTER FABRIC IS ALLOWED TO BE PLACED HORIZONTALLY ANYWHERE WITHIN THE FILTER MEDIA. THE GRAVEL MUST BE CLEAN AND MUST BE STORED AND INSTALLED IN SUCH A MANNER THAT IT DOES NOT BECOME CONTAMINATED WITH SEDIMENT BEFORE OR AFTER INSTALLATION.

3. SAND BED

A MINIMUM 6-INCH FINE AGGREGATE SAND LAYER SHALL BE PROVIDED BELOW THE PLANTING MEDIUM. ASTM C33 OR AASHTO M6 FINE AGGREGATE CONCRETE SAND IS REQUIRED PER MONTGOMERY COUNTY SAND SPECIFICATIONS.

4. PLANTING MEDIUM

THE PLANTING MEDIUM SHALL BE 24"-48"THICK AND SHALL CONSIST OF 1/3 PERLITE OR SOLITE, 1/3 COMPOST AND 1/3 TOPSOIL. THE PERLITE SHALL BE COARSE GRADE HORTICULTURAL PERLITE. THE COMPOST SHALL BE HIGH GRADE COMPOST FREE OF STONES AND PARTIALLY COMPOSTED WOODY MATERIAL. THE TOPSOIL COMPONENT SHALL MEET THE FOLLOWING CRITERIA: CONTAIN NO MORE THAN 10% CLAY, 10-25% SILT AND 60-75% SAND AND BE FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN 2 INCHES.

THE FIRST LAYER OF THE PLANTING MEDIUM SHALL BE LIGHTLY TILLED TO MIX IT INTO THE 6-INCH SAND LAYER, SO AS NOT TO CREATE A DEFINITIVE BOUNDARY. THE PLANTING BED SHALL BE FLOODED AFTER PLACEMENT. ANY SETTLEMENT THAT OCCURS SHALL BE FILLED BACK TO THE DESIGN ELEVATION.

5. PLANT MATERIALS

PLANTS. THROUGH THEIR POLLUTANT UPTAKE AND EVAPO-TRANSPIRATION OF STORMWATER RUNOFF, PLAY A KEY ROLE IN THE OVERALL EFFECTIVENESS OF THE SUBMERGED GRAVEL WETLAND DEVICE. BOTH THE NUMBER AND TYPE OF TREE AND SHRUB PLANTINGS FOR THE SYSTEM MAY VARY ESPECIALLY WHERE AESTHETICS OR OTHER CONSIDERATIONS ARE CRITICAL TO SITE DEVELOPMENT WHILE NATIVE PLANTS ARE ENCOURAGED, THEY ARE NOT ALWAYS APPROPRIATE IN ALL SITUATIONS WHILE NO HARD PLANTING RULE EXISTS, THE PLANTS SHOULD BE A MIX OF TREES, SHRUBS AND HERBACEOUS MATERIALS. HOWEVER, THERE SHOULD BE 2 TO 3 SHRUBS PLANTED PER TREE AND HERBACEOUS PLANTINGS SHALL MAKE UP 40% OF THE TOTAL NUMBER OF PLANTS. TREES SHALL BE A MINIMUM OF 1 ½IN. CALIPER, SHRUBS SHALL BE MINIMUM 2 GAL. SIZE AND HERBACEOUS PLANTS SHALL BE A MINIMUM OF 1 GAL SIZE. MATURE PLANT CANOPY SHOULD COVER 85% OF THE SUBMERGED GRAVEL WETLAND DEVICE. ALTERNATIVE PLANTING SCHEMES, INCLUDING USE OF GRASSES. MAY BE CONSIDERED IN SOME SITUATIONS, SO LONG AS THE PLANTING PLAN IS DESIGNED BY A REGISTERED LANDSCAPE ARCHITECT REGISTERED IN THE STATE OF MARYLAND, HOWEVER LAWN GRASSES ARE NOT APPROPRIATE FOR THESE FACILITIES. ALL PLANTINGS SHALL BE IN ACCORDANCE WITH THE MONTGOMERY COUNTY LANDSCAPE GUIDELINES. ALL LANDSCAPE PLANS MUST BE SEALED BY A REGISTERED LANDSCAPE ARCHITECT.

SINCE THE PLANTS ARE AN INTEGRAL PART OF THE SUBMERGED GRAVEL WETLAND SYSTEM, NO CHANGES TO THE APPROVED LANDSCAPE PLAN WILL BE ALLOWED UNLESS AN ALTERNATE PLANT LIST. PREPARED BY A REGISTERED LANDSCAPE ARCHITECT. HAS BEEN APPROVED BY DPS PRIOR TO INSTALLATION. SINCE PLANT AVAILABILITY CAN CHANGE, DPS SUGGESTS INCLUDING AN ALTERNATE PLANT LIST ON

CONSTRUCTION INSPECTION CHECK-OFF LIST FOR SUBMERGED GRAVEL WETLANDS STAGE MCDPS OWNER/ INSPECTOR DEVELOPER INITIALS/DATE INITIALS/DATE MANDATORY NOTIFICATION: Inspection and approval of each practice is required at these points prior to proceeding with construction. The permittee is required to give the MCDPS Inspector twenty-four (24) hours notice (DPS telephone 240-777-0311). The DPS inspector may waive an inspection, and allow the owner/developer to make the required inspection per a prior scheduled arrangement which has been confirmed with the DPS inspector in writing. Work completed without MCDPS approval may result in the permittee having to remove and reconstruct the unapproved work. The permittee must maintain a "record set" of approved SC/SM plans on-site at all times. Upon completion of the project, a formal Stormwater Management As-Built must be submitted to MCDPS unless a Record Drawing Certification has been allowed instead. Each of the steps listed below must be verified by either MCDPS Inspector OR the Owner/Developer. Excavation for Submerged Gravel Wetland facility conforms to approved Placement of stone backfill and underdrain system conforms to approved Connection pipes, observation wells, and/or grading conveyance to the facility constructer per the approved plans Placement of filter media conforms to approved plans Final grading and permanent stabilization conforms to approved plans

MONTGOMERY COUNTY MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING ROCKVILLE, MARYLAND BURTONSVILLE ACCESS ROAD RECOMMENDED FOR APPROVAL SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD Chief, Transportation Planning and Design Section

STORMWATER MANAGEMENT DETAILS 1"=30'

DATE NOVEMBER 23, 2022 SCALE _

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TOP OF PIPE 12" ABOVE -

ON CAP.

SOLID

MEDIA

SECTION

AGGREGATE

SECTION

- BOTTOM OF THE

SWM FACILITY

TYPICAL OBSERVATION WELL DETAIL

NOT TO SCALE

1.SEE MDSHA SECTION 316 OF SPECIFICATIONS FOR MATERIALS AND INSTALLATION.

TOP OF FACILITY -

SUBDRAIN PIPE

TRANSITION FROM -

PERFORATED TO

SOLID PIPE

SLOTTED PERFORATED

WITH GEOTEXTILE SOCK

CONCRETE -

IN PLACE)

AROUND

SUBDRAIN WRAPPED

FOOTER (POURED

SHALL PROVIDE A

MIN. 6" THICKNESS

NOTES:

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SUBDRAIN PIPE

STABILIZATION

(FLUSH WITH

GROUND)

GROUND SURFACE. PERMANENTLY

MARK FIELD MEASURED INVERT

OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND **CONTACT**: DIVISION OF TRANSPORTATION

ENGINEERING 240-777-7220 DESIGN SECTION 240-777-7221

Chief, Division of Transportation Engineering DESIGNED BY_ABD_

APPROVED

Date DRAWN BY<u>DEA</u> CHECKED BY<u>MES</u>

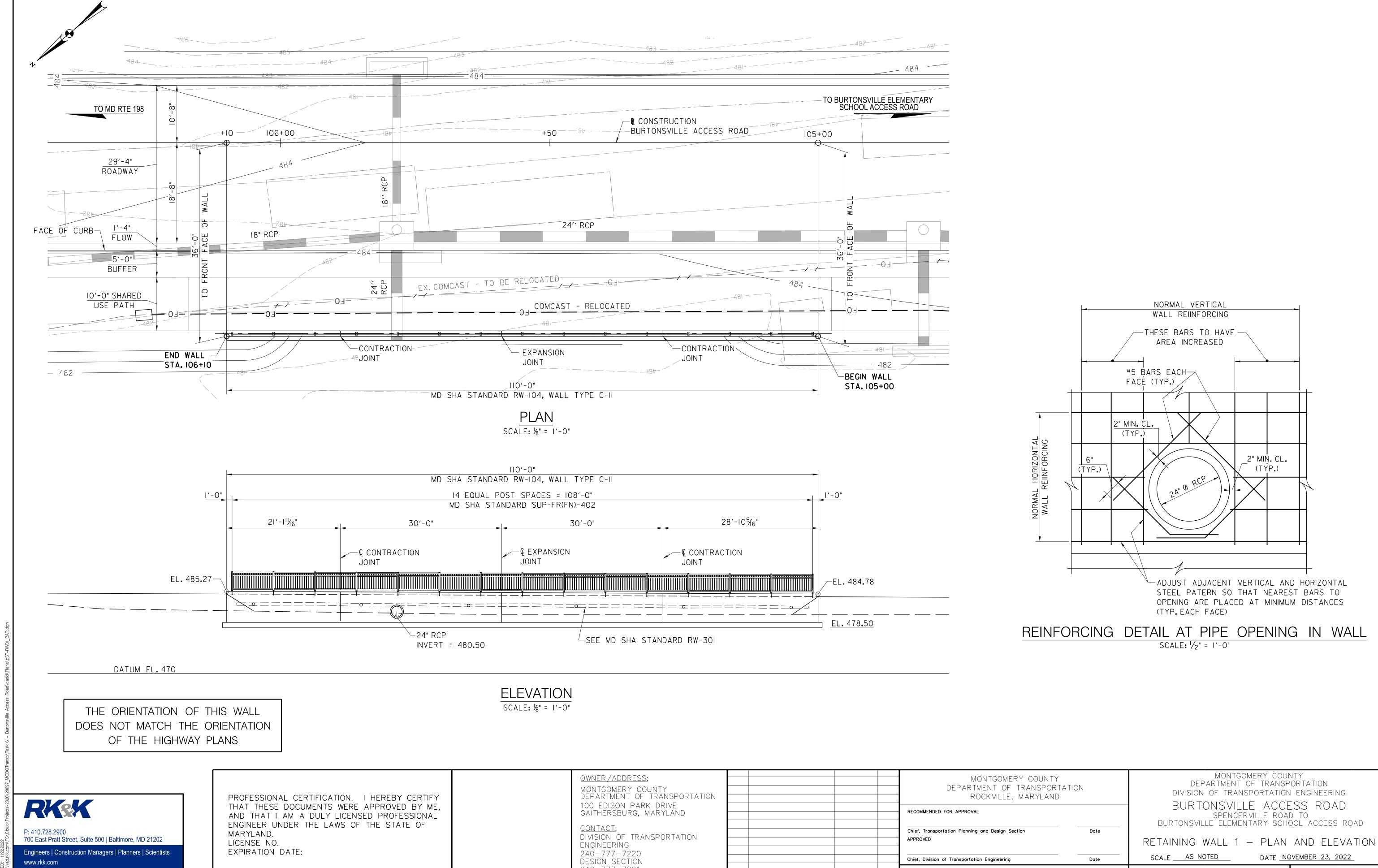
APPROVED

TOTAL NUMBER OF SUBMERGED GRAVEL WETLAND FACILITIES INSTALLED PER THIS PERMIT:

CONSTRUCTED

DRAWING NO. SMSDR0004 SWD-01 OF 01

SHEET NO. 34 OF 63



240-777-7221

SHEET NO. 35 OF 63

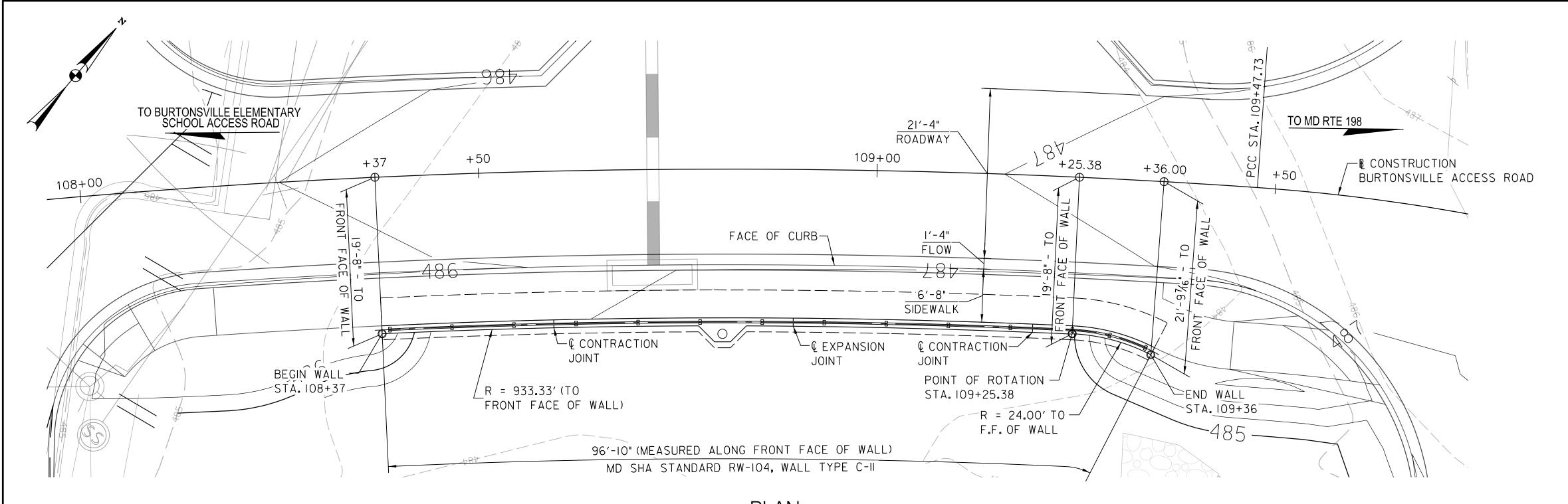
RW-01 **OF** RW-XX

DRAWING NO.

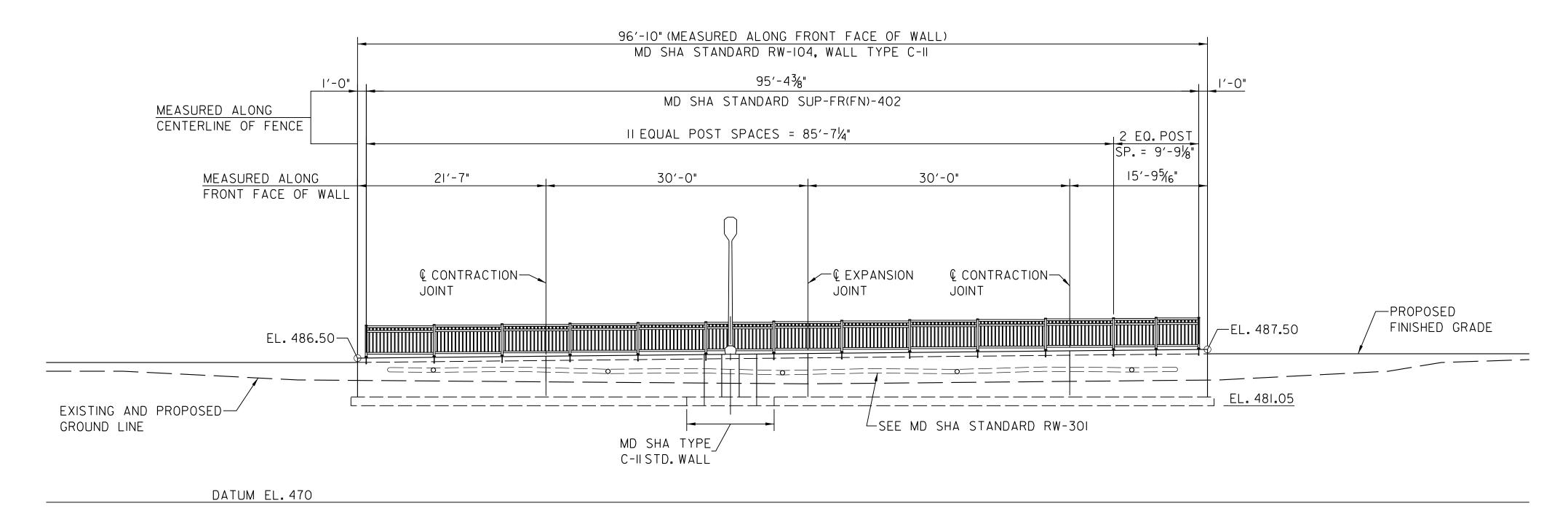
DRAWN BY SJS CHECKED BY TMB

DESIGNED BY MOK

PLOTTED: 11/22/2022



PLAN



DEVELOPED ELEVATION

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MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
100 EDISON PARK DRIVE
GAITHERSBURG, MARYLAND

CONTACT:
DIVISION OF TRANSPORTATION
ENGINEERING
240-777-7220
DESIGN SECTION

OWNER/ADDRESS:

240-777-7221

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
ROCKVILLE, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Transportation Planning and Design Section
APPROVED

Chief, Division of Transportation Engineering
Date

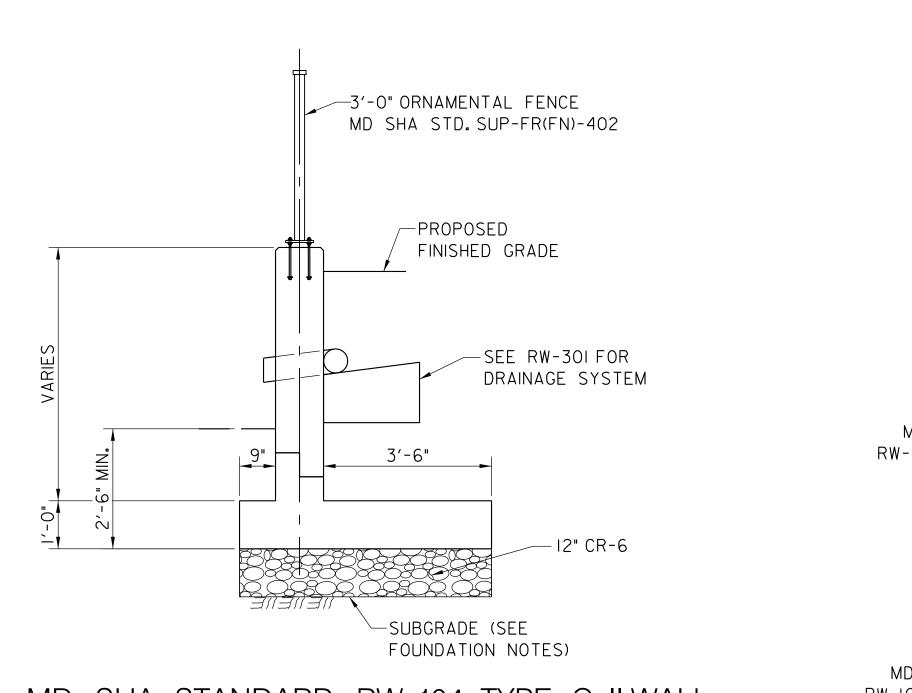
DESIGNED BY PCB DRAWN BY MHB CHECKED BY JSW

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DIVISION OF TRANSPORTATION ENGINEERING
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SPENCERVILLE ROAD TO
BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD

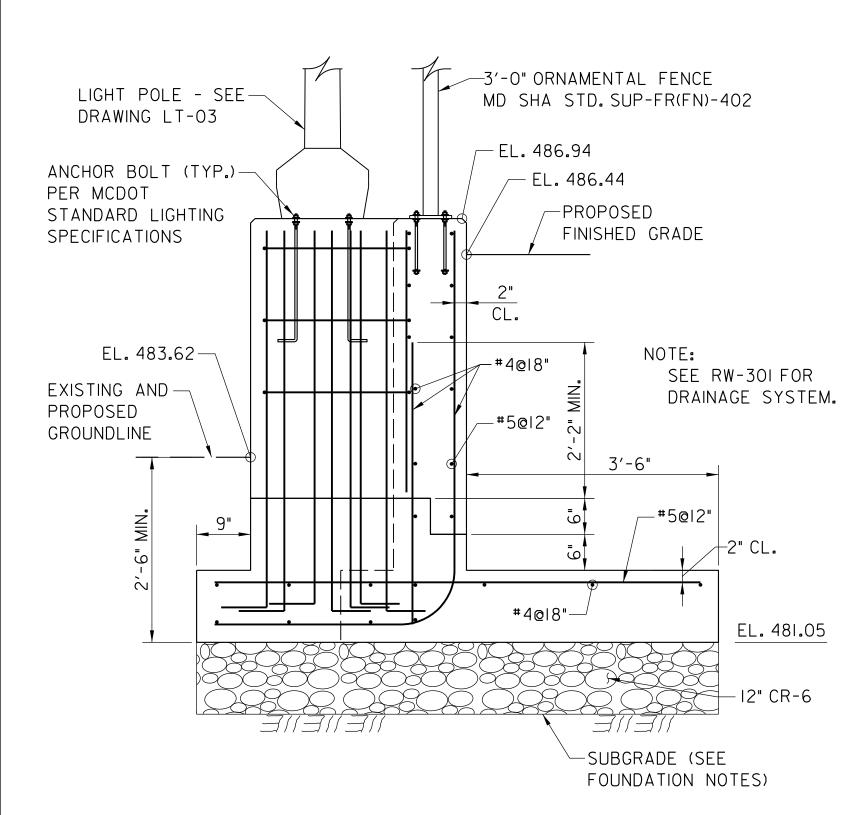
RETAINING WALL 2 - PLAN AND ELEVATION

SCALE 1/8" = ·1'-0" DATE NOVEMBER 23, 2022

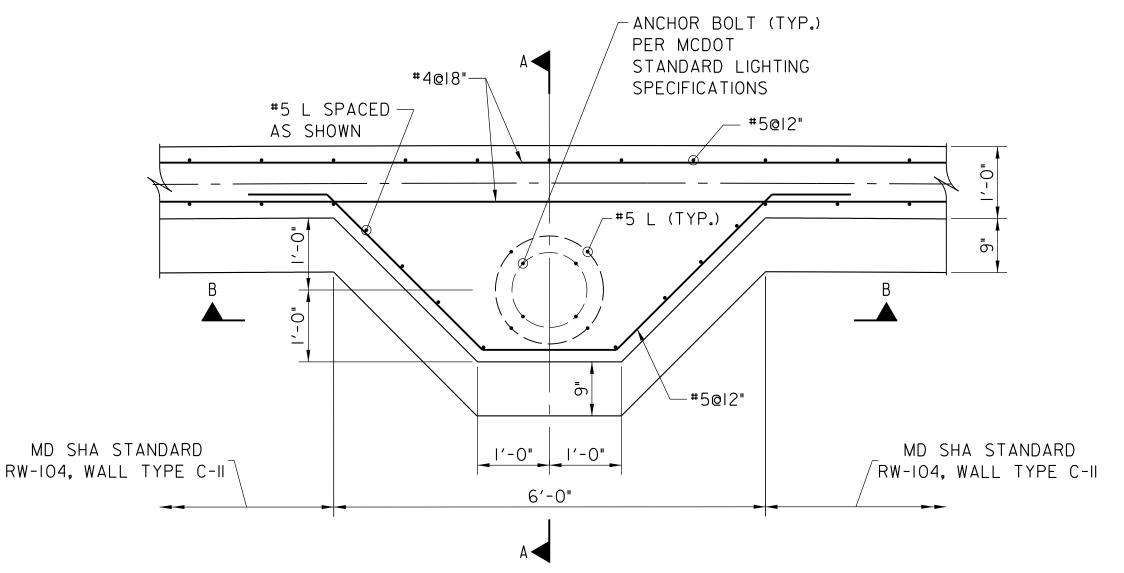
DRAWING NO. RW-02 OF SHEET NO. 36 OF 63



MD SHA STANDARD RW-104 TYPE C-II WALL SCALE: $\frac{1}{2}$ " = 1'-0"

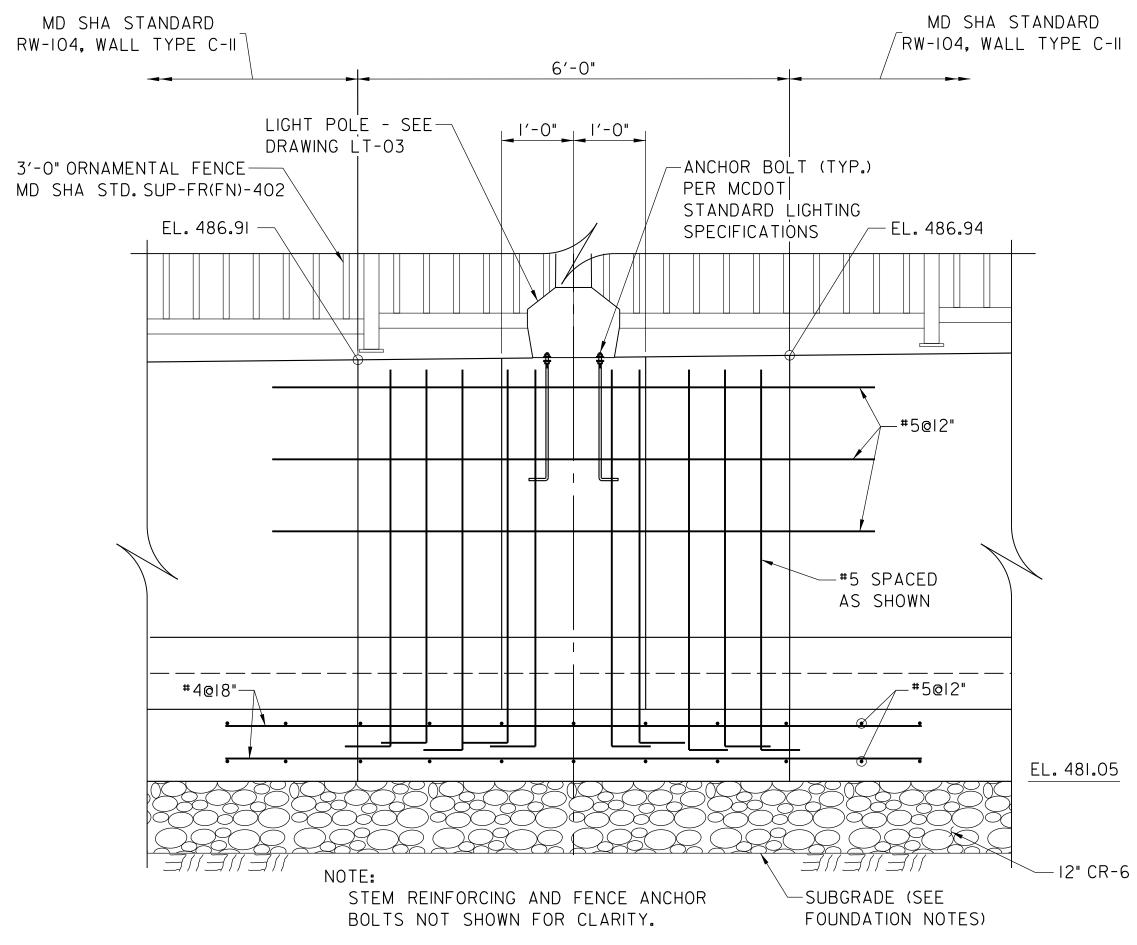


SECTION A-A SCALE: $\frac{3}{4}$ " = 1'-0"



PLAN VIEW AT LIGHTPOLE

SCALE: $\frac{3}{4}$ " = 1'-0"



SECTION B-B

SCALE: 3/4" = 1'-0"

GENERAL NOTES:

SPECIFICATIONS: MDOT SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.

DATED JULY 2022.

DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, DATED 2017.

CONCRETE: ALL CONCRETE SHALL BE MIX NO. 3 (3500 PSI).

REINFORCING STEEL: REINFORCING STEEL SHALL CONFORM TO ASTM A 615 GRADE 60. WITH A

YIELD STRENGTH FOR DESIGN OF fy = 60000 PSI.

ALL SPLICES NOT SHOWN SHALL BE LAPPED AS PER BAR LAP CHARTS.

FOUNDATION: I. SPREAD FOOTINGS SHALL BEAR ON FIRM NATURAL SOILS OR CONTROLLED COMPACTED STRUCTURAL FILL CAPABLE OF SUPPORTING A FACTORED BEARING

PRESSURE OF AT LEAST 2000 PSF.

2. THE CONTRACTOR SHALL RETAIN AN INDEPENDENT TESTING AGENCY TO TEST AND VERIFY THAT THE FOUNDATION SUBGRADE IS IN ACCORDANCE WITH

THE CONTRACT DOCUMENTS.

3. AFTER EXCAVATION TO THE BEARING LEVEL, THE SOIL AT THE BEARING LEVEL SHALL BE DENSIFIED IN SITU. IF SOIL CANNOT BE DENSIFIED TO MEET THE BEARING REQUIREMENTS. THE SUBGRADE SHALL BE UNDERCUT TO THE DEPTH REQUIRED BY THE INDEPENDENT TESTING AGENCY AND SHALL BE BACKFILLED USING COMPACTED CR-6. THE FOUNDATION UNDERCUTTING SHALL EXTEND A MINIMUM OF 9-INCHES LATERALLY BEYOND THE FOOTING PERIMETER FOR EACH 12-INCHES BELOW THE FOOTING.

4. THE INDEPENDENT TESTING AGENCY SHALL SUBMIT A REPORT SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MARYLAND, STATING THAT THE FOUNDATION SUBGRADE COMPLIES WITH THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS.

5. NO FOUNDATION SHALL BE PLACED ONTO OR AGAINST SUBGRADES CONTAINING FREE WATER, FROST, ICE, OR OTHER DELETERIOUS MATERIAL.

A GEOTECHNICAL REPORT HAS BEEN PREPARED FOR THIS PROJECT BY RUMMEL, KLEPPER & KAHL, LLP. THIS REPORT IS FOR INFORMATIONAL PURPOSES ONLY AND SHALL NOT BE CONSIDERED TO BE PART OF THE CONTRACT DOCUMENTS. THE OPINIONS AND CONCLUSIONS OF RK&K REPRESENT RK&K'S INTERPRETATION OF THE SUBSURFACE CONDITIONS AND THE PLANNED CONSTRUCTION AT THE TIME THAT SUCH REPORT WAS PREPARED. IN ADDITION, THE DATA IN SUCH REPORT MAY NOT BE ADEQUATE FOR ANY ESTIMATING PURPOSES OF ANY CONTRACTOR. SUBCONTRACTOR, CONSULTANT, OR SUBCONSULTANT. FURTHERMORE, ANY CONTRACTOR, SUBCONTRACTOR, CONSULTANT, OR SUBCONSULTANT THAT MAKES USE OF THIS GEOTECHNICAL REPORT OR ANY INFORMATION SET FORTH THEREIN SHALL BE DEEMED TO RELEASE, DISCHARGE, AND RELINQUISH ANY CLAIMS OF ANY KIND THAT IT MAY HAVE NOW OR IN THE FUTURE AGAINST RK&K ARISING OUT OF OR OWING TO SUCH USE BY CONTRACTOR, SUBCONTRACTOR, CONSULTANT, OR SUBCONSULTANT.

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PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. EXPIRATION DATE:

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND CONTACT: DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220

				MONTGOMERY COU DEPARTMENT OF TRANSF ROCKVILLE, MARYL	PORTATION
				RECOMMENDED FOR APPROVAL	
				Chief, Transportation Planning and Design Section APPROVED	Date
				Chief, Division of Transportation Engineering	Date
NO	DEMOION	DATE	D)/	DESIGNED BY POB DRAWN BY MHB	CHECKED BY_J <u>9W</u> _

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD

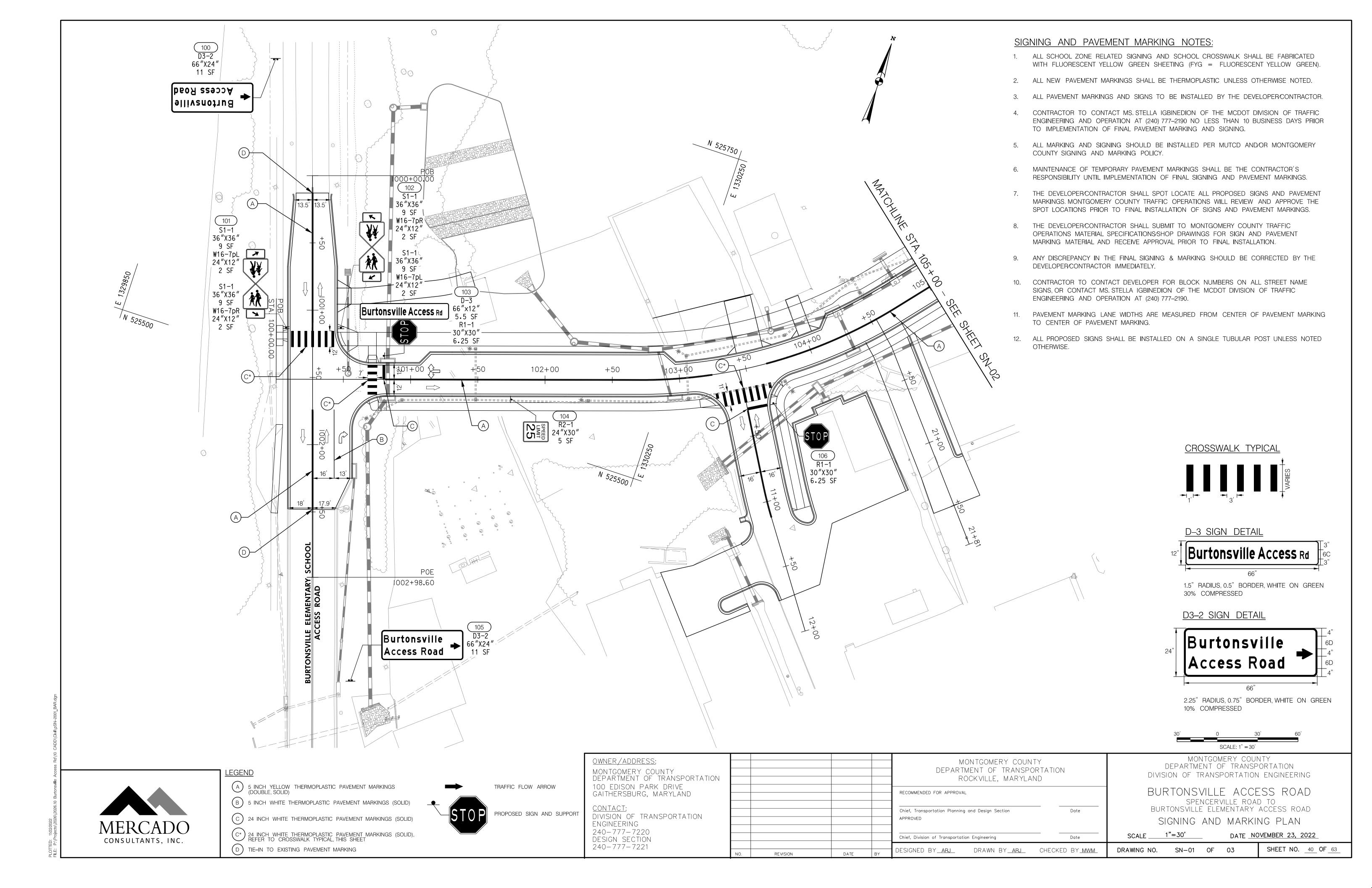
GENERAL NOTES, TYPICAL SECTIONS & DETAILS SCALE ___ AS NOTED DATE NOVEMBER 23, 2022

SHEET NO. 37 OF

RW-03 **OF** RW-XX

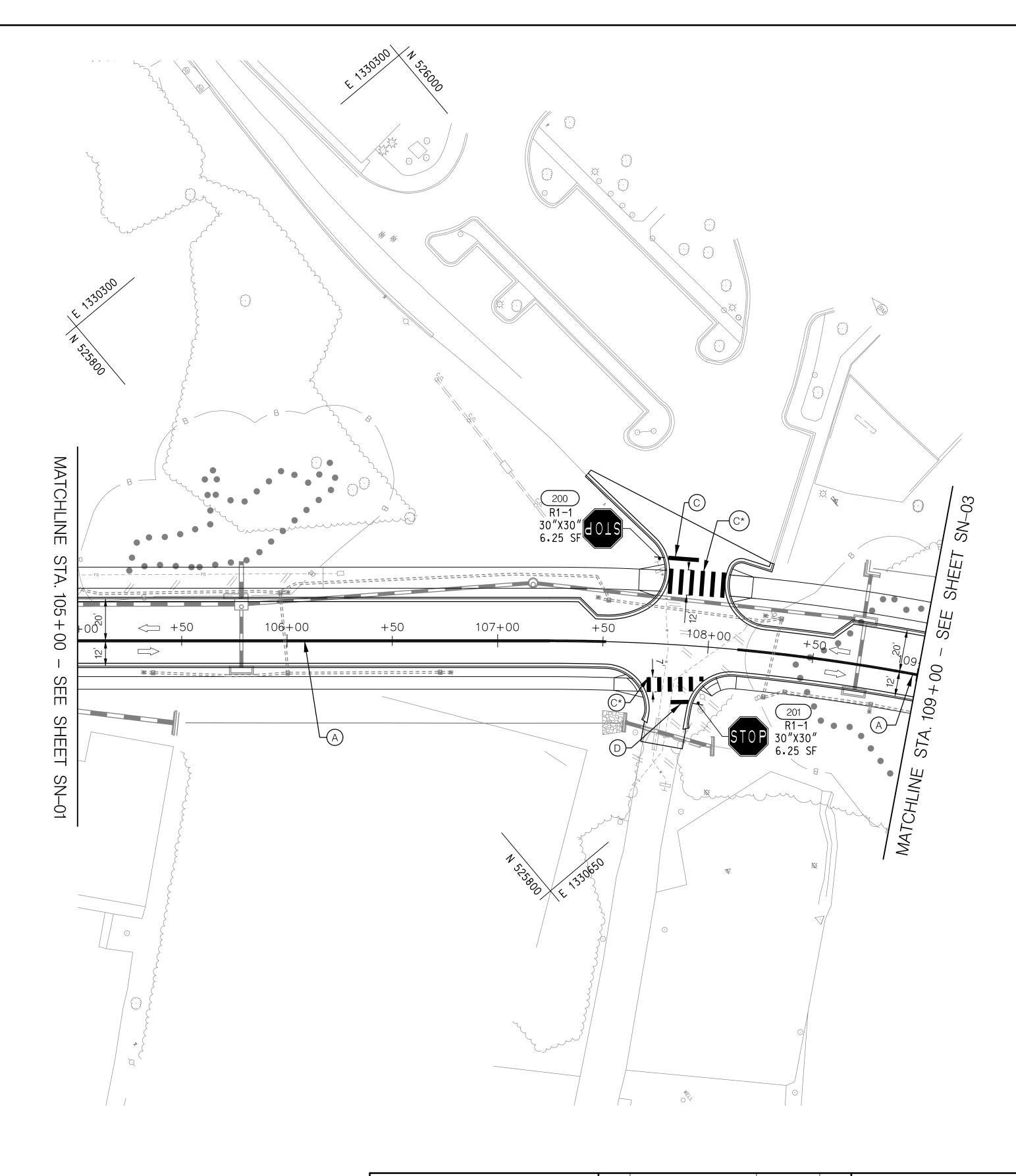
DESIGN SECTION 240-777-7221 DRAWING NO. Responsive People | Creative Solutions DATE

OWNER/ADDRESS:

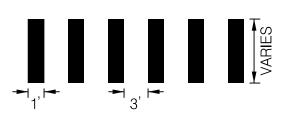


SIGNING AND PAVEMENT MARKING NOTES:

- 1. ALL SCHOOL ZONE RELATED SIGNING AND SCHOOL CROSSWALK SHALL BE FABRICATED WITH FLUORESCENT YELLOW GREEN SHEETING (FYG = FLUORESCENT YELLOW GREEN).
- 2. ALL NEW PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED.
- 3. ALL PAVEMENT MARKINGS AND SIGNS TO BE INSTALLED BY THE DEVELOPER/CONTRACTOR.
- 4. CONTRACTOR TO CONTACT MS. STELLA IGBINEDION OF THE MCDOT DIVISION OF TRAFFIC ENGINEERING AND OPERATION AT (240) 777-2190 NO LESS THAN 10 BUSINESS DAYS PRIOR TO IMPLEMENTATION OF FINAL PAVEMENT MARKING AND SIGNING.
- 5. ALL MARKING AND SIGNING SHOULD BE INSTALLED PER MUTCD AND/OR MONTGOMERY COUNTY SIGNING AND MARKING POLICY.
- 6. MAINTENANCE OF TEMPORARY PAVEMENT MARKINGS SHALL BE THE CONTRACTOR'S RESPONSIBILITY UNTIL IMPLEMENTATION OF FINAL SIGNING AND PAVEMENT MARKINGS.
- 7. THE DEVELOPER/CONTRACTOR SHALL SPOT LOCATE ALL PROPOSED SIGNS AND PAVEMENT MARKINGS. MONTGOMERY COUNTY TRAFFIC OPERATIONS WILL REVIEW AND APPROVE THE SPOT LOCATIONS PRIOR TO FINAL INSTALLATION OF SIGNS AND PAVEMENT MARKINGS.
- THE DEVELOPER/CONTRACTOR SHALL SUBMIT TO MONTGOMERY COUNTY TRAFFIC OPERATIONS MATERIAL SPECIFICATIONS/SHOP DRAWINGS FOR SIGN AND PAVEMENT MARKING MATERIAL AND RECEIVE APPROVAL PRIOR TO FINAL INSTALLATION.
- 9. ANY DISCREPANCY IN THE FINAL SIGNING & MARKING SHOULD BE CORRECTED BY THE DEVELOPER/CONTRACTOR IMMEDIATELY.
- 10. CONTRACTOR TO CONTACT DEVELOPER FOR BLOCK NUMBERS ON ALL STREET NAME SIGNS, OR CONTACT MS. STELLA IGBINEDION OF THE MCDOT DIVISION OF TRAFFIC ENGINEERING AND OPERATION AT (240) 777-2190.
- 11. PAVEMENT MARKING LANE WIDTHS ARE MEASURED FROM CENTER OF PAVEMENT MARKING TO CENTER OF PAVEMENT MARKING.
- 12. ALL PROPOSED SIGNS SHALL BE INSTALLED ON A SINGLE TUBULAR POST UNLESS NOTED OTHERWISE.









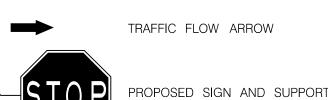
A 5 INCH YELLOW THERMOPLASTIC PAVEMENT MARKINGS (DOUBLE, SOLID)

B 5 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS (SOLID)

C 24 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS (SOLID)

C* 24 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS (SOLID), REFER TO CROSSWALK TYPICAL, THIS SHEET

D TIE-IN TO EXISTING PAVEMENT MARKING



OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE Gaithersburg, maryland

> DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION 240-777-7221

				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORT ROCKVILLE, MARYLAND	TATION	
				RECOMMENDED FOR APPROVAL		
				Chief, Transportation Planning and Design Section APPROVED	Date	
				Chief, Division of Transportation Engineering	 Date	Ş
NO	REVISION	DATE	BY	DESIGNED BY <u>arj</u> Drawn by <u>arj</u> (CHECKED BY <u>mwm</u>	DRA



MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING

BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD

SIGNING AND MARKING PLAN

DATE NOVEMBER 23, 2022 1"=30'

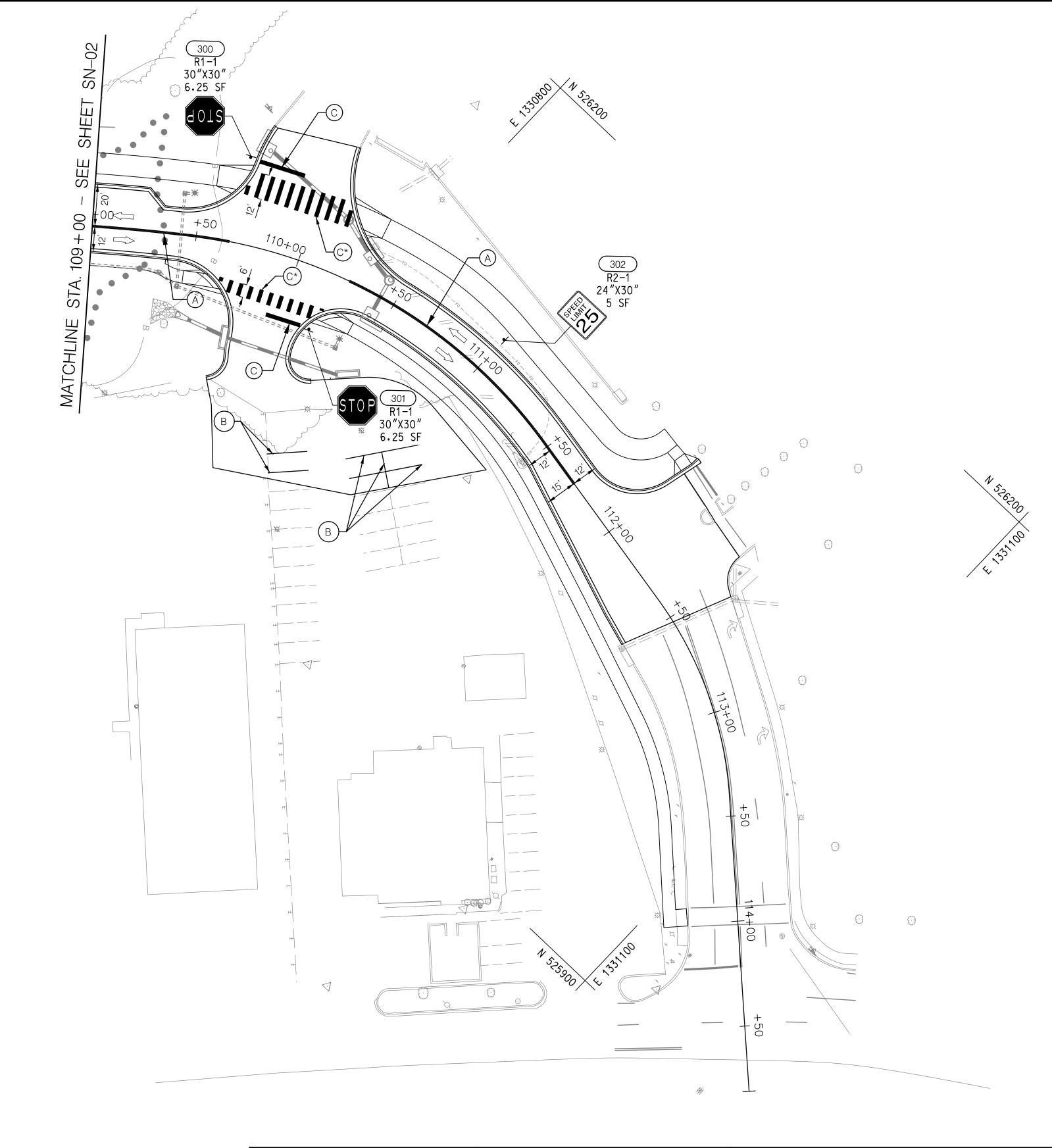


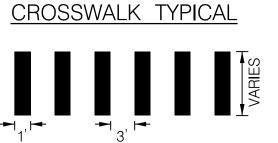
RAWING NO. SN-02 OF 03

SHEET NO. _41_ OF _63_

SIGNING AND PAVEMENT MARKING NOTES:

- 1. ALL SCHOOL ZONE RELATED SIGNING AND SCHOOL CROSSWALK SHALL BE FABRICATED WITH FLUORESCENT YELLOW GREEN SHEETING (FYG = FLUORESCENT YELLOW GREEN).
- 2. ALL NEW PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED.
- 3. ALL PAVEMENT MARKINGS AND SIGNS TO BE INSTALLED BY THE DEVELOPER/CONTRACTOR.
- 4. CONTRACTOR TO CONTACT MS. STELLA IGBINEDION OF THE MCDOT DIVISION OF TRAFFIC ENGINEERING AND OPERATION AT (240) 777–2190 NO LESS THAN 10 BUSINESS DAYS PRIOR TO IMPLEMENTATION OF FINAL PAVEMENT MARKING AND SIGNING.
- 5. ALL MARKING AND SIGNING SHOULD BE INSTALLED PER MUTCD AND/OR MONTGOMERY COUNTY SIGNING AND MARKING POLICY.
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- 11. PAVEMENT MARKING LANE WIDTHS ARE MEASURED FROM CENTER OF PAVEMENT MARKING TO CENTER OF PAVEMENT MARKING.
- 12. ALL PROPOSED SIGNS SHALL BE INSTALLED ON A SINGLE TUBULAR POST UNLESS NOTED OTHERWISE.







<u>LEGEND</u>

- A 5 INCH YELLOW THERMOPLASTIC PAVEMENT MARKINGS (DOUBLE, SOLID)
- B 5 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS (SOLID)
- C 24 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS (SOLID)
- C* 24 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS (SOLID), REFER TO CROSSWALK TYPICAL, THIS SHEET

($\langle D \rangle$	TIF_IN	TO	EXISTING	PAVEMENT	MARKING	
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	TRAFFIC	FLOW	ARROW	

PROPOSED SIGN AND SUPPORT

	OWNER/ADDRESS:
	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
W	100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND

CONTACT:
DIVISION OF TRANSPORTATION
ENGINEERING
240-777-7220
DESIGN SECTION
240-777-7221

				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATIO ROCKVILLE, MARYLAND	N	
				RECOMMENDED FOR APPROVAL		
				Chief, Transportation Planning and Design Section APPROVED	Date	
				Chief, Division of Transportation Engineering	Date Date	
NO.	REVISION	DATE	BY	DESIGNED BY <u>arj</u> DRAWN BY <u>arj</u> CHECKI	ED BY <u>mwm</u>	DI

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
DIVISION OF TRANSPORTATION ENGINEERING

BURTONSVILLE ACCESS ROAD

SPENCERVILLE ROAD TO
BURTONSVILLE ELEMENTARY ACCESS ROAD

SIGNING AND MARKING PLAN

	SIGNING	AND	MAR	KING	PLAN	1
l	1" 70'			NOVEN	DED 07	00

SCALE _____1"=30' DATE NOVEMBER 23, 2022

PLOTTED: 1122/2022

DRAWING NO. SN-03 OF 03

SHEET NO. <u>42</u> OF <u>63</u>

I. GENERAL REQUIREMENTS

- A. A PRIME REQUIREMENT OF THIS CONTRACT IS THAT TWO (2) WAY TRAFFIC BE MAINTAINED AT ALL TIMES ALONG BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD, IN AN ORDERLY, EXPEDITIOUS AND SAFE MANNER UNLESS OTHERWISE NOTED IN THE PLANS. FLAGGER CONTROL CAN BE UTILIZED AS A METHOD OF MAINTAINING TWO WAY TRAFFIC. THE WIDTH OF ANY LANE SHALL REMAIN AT LEAST A MINIMUM OF TEN (10) FEET WIDE DURING ALL PHASES OF CONSTRUCTION.
- B. UNLESS OTHERWISE APPROVED BY THE TRAFFIC ENGINEERING AND OPERATIONS SECTION, THE NUMBER OF LANES OF TRAFFIC ON BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD SHOWN ON THE T.C.P. SHALL BE MAINTAINED AT ALL
- C. THE PROJECT IS TO BE CONSTRUCTED UNDER TWO (2) MAJOR PHASES. THE SEQUENCE OF OPERATIONS FOR EACH OF THE VARIOUS CONSTRUCTION PHASES THEREUNDER REFERS SPECIFICALLY TO THE CRITICAL ITEMS OF WORK WHICH MUST BE COMPLETED DURING THAT CONSTRUCTION PHASE BEFORE THE NEXT SEQUENCE OF THE PHASE OF WORK MAY BE COMMENCED. THE LISTED ITEMS UNDER EACH PHASE ARE A SUGGESTED SEQUENCE OF WORK TO BE FOLLOWED TO PROVIDE FOR ORDERLY COMPLETION OF WORK. THE MANY OTHER ITEMS OF WORK WHICH ARE NOT LISTED AND WHICH MAY BE PERFORMED DURING ANY OF THE PHASES WITHOUT INTERRUPTING TRAFFIC OR AFFECTING THE CONSTRUCTION SCHEDULING AND DO NOT CONTROL THE OVERALL SCHEDULE FOR COMPLETING THE PROJECT ARE NOT LISTED.
- D. A ROAD CLOSURE OF ANY DURATION SHALL REQUIRE THE SUBMITTAL OF A WRITTEN REQUEST TO THE DIVISION OF TRAFFIC ENGINEERING AND OPERATIONS WITH THE JUSTIFICATION AS TO WHY WORK ACTIVITY CANNOT OCCUR WHILE TRAFFIC IS BEING MAINTAINED. ANY ROAD CLOSURES SHALL REQUIRE ADDITIONAL TRAFFIC CONTROLS INCLUDING ADVANCE NOTIFICATION, APPROACH, AND DETOUR SIGNAGE, AS APPROVED BY THE DIVISION OF TRAFFIC ENGINEERING AND OPERATIONS.
- E. ALL SIDEWALK CLOSURES SHALL REQUIRE THE APPROVAL OF DIVISION OF TRAFFIC ENGINEERING AND OPERATIONS. ANY SIDEWALK CLOSURE GREATER THAN TWO (2) WEEKS SHALL REQUIRE THE SUBMITTAL OF A WRITTEN REQUEST TO THE DIVISION OF TRAFFIC ENGINEERING AND OPERATIONS AND MAY REQUIRE ADDITIONAL TRAFFIC CONTROLS. SIDEWALK CLOSURES SHALL BE LIMITED TO OCCUR ONLY DURING THE ACTUAL WORK ACTIVITY. DURING CLOSURE, SIDEWALKS SHALL BE BARRICADED TO PHYSICALLY PREVENT PEDESTRIAN PASSAGE AND APPROPRIATE DETOURS SHALL BE POSTED. DURING ALL OTHER TIMES, PROVISIONS FOR SAFE PEDESTRIAN ACCESS THROUGH THE WORK AREA, VIA A TEMPORARY WALKWAY SHALL BE PROVIDED.
- F. ANY WORK WITHIN THE TRAVELED PORTION OF THE ROADWAY WILL BE RESTRICTED TO THE HOURS OF 9:00 A.M. TO 3:30 P.M., MONDAY THRU FRIDAY. NO WORK ON HOLIDAYS OR WEEKENDS UNLESS WRITTEN EXCEPTION IS GRANTED IN WRITING BY THE COUNTY'S DPS INSPECTOR
- G. CONSTRUCTION ACTIVITY, LOADING OR UNLOADING OF EQUIPMENT SHALL NOT BLOCK ANY TRAFFIC LANE OTHER THAN THOSE DELINEATED WITHIN THE WORK
- H. EXCLUSIVE OF EMERGENCY WORK, THE CONTRACTOR SHALL CONTACT OCCUPANTS OF ALL ADJOINING PROPERTIES AND INFORM THEM OF THE SCOPE AND THE TIMING OF CONSTRUCTION. A MINIMUM OF 24 HOURS NOTIFICATION SHALL BE REQUIRED PRIOR TO THE COMMENCEMENT OF ANY ACTIVITY ON THE SITE.
- ACCESS SHALL BE MAINTAINED TO ALL DRIVEWAYS UNLESS PERMISSION FOR CLOSURE IS GRANTED BY THE PROPERTY OWNER/MANAGER. HOWEVER. ACCESSIBILITY FOR EMERGENCY VEHICLES SHALL BE MAINTAINED AT ALL TIMES.
- J. PAVEMENT EXCAVATION SHALL BE LIMITED TO A MAXIMUM OF ONE TRAVEL LANE AT ANY TIME UNLESS OTHERWISE SPECIFIED ON THE TCP.
- K. IF ANY TRAFFIC CONTROL SIGNS ARE TO BE PLACED ALONG A MDOT SHA ROADWAY, OR WITHIN THE LIMITS OF AN INCORPORATED AREAS, THE PERMITTEE SHALL NOTIFY THE APPROPRIATE AGENCY OF SIGNAGE TO BE INSTALLED.
- L. NO HAZARDOUS MATERIALS SHALL BE STORED WITHIN PUBLIC RIGHT-OF-WAY. NO MATERIALS OR EQUIPMENT SHALL BE STORED ON THE ROADWAY SURFACE OR SIDEWALK DURING NON-WORK PERIODS. ALL STORED MATERIALS AND EQUIPMENT SHALL BE SET BACK AT LEAST SIX (6) FEET BEHIND THE CURB ALONG A CLOSED SECTION ROADWAY AND AT LEAST TWELVE (12) FEET FROM EDGE OF OPEN SECTION ROADWAY.
- M. ANY EXCAVATION(S) IN THE ROADWAY SHALL BE PAVED TO LEVEL GRADE OR PLATED AND THE ROADWAY REOPENED TO ITS FULL CROSS-SECTION PRIOR TO THE END OF EACH WORK DAY." STEEL PLATES AHEAD" (W21-9) SIGNS SHALL BE PLACED APPROXIMATELY 250 FEET IN ADVANCE OF ANY STEEL PLATE. ANY EXCAVATIONS IN THE SIDEWALK SHALL BE BACKFILLED OR PLATED PRIOR TO THE END OF EACH WORKDAY AND SIDEWALK REOPENED TO ITS FULL CROSS SECTION.

- A. TRAFFIC SHALL NOT BE PERMITTED WITHIN TEN (10) FEET OF ANY EXCAVATION THAT RESULTS IN A VERTICAL DROP-OFF OF MORE THAN FIVE (5) INCHES IN THE LEVEL OF PAVEMENT DURING NON-WORKING HOURS UNLESS PROTECTED BY TEMPORARY CONCRETE BARRIERS OR RAMPED WITH AGGREGATE MATERIAL AT A 3:1 OR FLATTER SLOPE FROM THE EDGE OF PAVEMENT. WHEN RAMPING IS UTILIZED, TTC DRUMS SHALL BE POSITIONED ADJACENT TO THE EDGE OF THE WORK AREA ON THE TRAFFIC SIDE OF THE SLOPE. REFER TO MCDOT STD NO. TCP-108.01 FOR DETAILS.
- O. TRAFFIC SHALL NOT BE PERMITTED WITHIN TWO (2) FEET OF ANY EXCAVATION THAT RESULTS IN A VERTICAL DROP-OFF OF MORE THAN TWO (2) INCHES BUT NO MORE THAN FIVE (5) INCHES IN THE LEVEL OF PAVEMENT DURING NON-WORKING HOURS UNLESS EITHER RAMPED WITH AGGREGATE MATERIAL AT 3:1 OR FLATTER SLOPE, PROVIDED WITH AN ABUTTING WEDGE OF BITUMINOUS MATERIAL AT 3:1 OR FLATTER SLOPE OR PROTECTED BY TRAFFIC DRUMS.
- P. IN AREAS WHERE A DROP-OFF IN THE LEVEL OF PAVEMENT IS TWO (2) INCHES OR LESS, TRAFFIC MAY BE ALLOWED TO FREELY CROSS UNDER THE FOLLOWING CONDITIONS:
- 1. WHERE LONGITUDINAL PAVING JOINTS OF TWO (2) INCHES OR LESS ARE EXPOSED TO TRAFFIC, WARNING SIGNS SHALL BE POSTED INDICATING "UNEVEN PAVEMENT" (W8-II MOD.). THESE SIGNS SHOULD BE PLACED 250 FEET IN ADVANCE OF THE UNEVEN JOINT AND BE SPACED AT APPROPRIATE INTERVALS THROUGHOUT THE AREA OF THE UNEVEN JOINT.
- 2. WHERE LATERAL PAVING JOINTS OF TWO (2) INCHES OR LESS ARE EXPOSED TO TRAFFIC, A *BUMP* (W8-1) SIGN SHALL BE POSTED 100 FEET IN ADVANCE OF THE JOINT.
- 3. WHEN MILLED PAVEMENT IS LEFT EXPOSED TO TRAFFIC, A *ROUGH ROAD (W8-8) OR *GROOVED PAVEMENT* (W8-8A) SIGN SHALL BE PLACED 250 FEET IN ADVANCE OF THE MILLED AREA.
- Q. TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE FLUORESCENT ORANGE HIGH PERFORMANCE WIDE ANGLE RETROREFLECTIVE SHEETING. PLACEMENT OF ALL SIGNS SHALL NOT INTERFERE WITH TRAVELED WAYS OR SIGHT DISTANCES OF ANY ROADWAY, STREET OR DRIVEWAY AS PER AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, LATEST EDITION.
- R. ALL EXISTING TRAFFIC CONTROL DEVICES THAT MUST BE REMOVED SHALL BE REPLACED IN THEIR PROPER LOCATION PRIOR TO THE COMPLETION OF THE PROJECT. COST FOR THE REPLACEMENT AND/OR REPAIR OF DEVICES DAMAGED AS A RESULT OF THE PROJECT SHALL BE ASSESSED TO THE CONTRACTOR.
- S. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- T. THE IMPLEMENTATION DATE AND CONTINUANCE OF THIS PROJECT MAY BE ALTERED AT THE DISCRETION OF THE COUNTY'S INSPECTOR IN THE EVENT OF CONFLICTS WITH PREVIOUSLY APPROVED OR EMERGENCY ACTIVITIES.
- U. AT THE COMPLETION OF THE PERMITTED WORK ACTIVITY. CONDITIONS WITHIN THE PUBLIC SPACE SHALL BE FULLY RESTORED TO THOSE WHICH EXISTED PRIOR TO THE WORK ACTIVITY.
- V. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY TRAFFIC CONTROL DEVICES AT THE SITE.
- W. ANY CHANGES TO TEMPORARY TRAFFIC CONTROL PLANS SHALL BE MADE IN WRITING AND APPROVED BY THE MONTGOMERY COUNTY TRAFFIC ENGINEERING AND OPERATIONS DIVISION.
- X. ALL TTC DEVICES SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER NEEDED. WHEN WORK IS SUSPENDED FOR SHORT PERIODS OF TIME, TTC DEVICES THAT ARE NO LONGER APPROPRIATE SHALL BE REMOVED OR COVERED.
- II. SPECIFIC TRAFFIC CONTROL REQUIREMENTS
- A. MAINTENANCE OF TRAFFIC
- 1. FLAGGERS SHALL BE USED AT THE DIRECTION OF THE COUNTY INSPECTOR.
- 2. FLAGGERS SHALL USE STOP/SLOW PADDLES TO DIRECT TRAFFIC.
- 3. FLAGGERS SHALL BE MARYLAND STATE HIGHWAY ADMINISTRATION OR AATSA APPROVED FLAGGERS.
- 4. RADIO COMMUNICATION SHALL BE REQUIRED BETWEEN FLAGGERS AT THE DISCRETION OF THE COUNTY INSPECTOR OR UNDER THE FOLLOWING CONDITIONS:
- a. IF THE FLAGGERS CANNOT SEE EACH OTHER.
- b. IF THE LANE CLOSURE EXCEEDS 200 FEET.

APPROVAL OF THE COUNTY'S DPS INSPECTOR.

6. PROVISION SHALL BE MADE FOR SAFE MAINTENANCE OF

PEDESTRIAN AND BICYCLE TRAFFIC, SUBJECT TO THE

- 5. AT LEAST ONE 10 FOOT TRAVEL LANE SHALL BE AVAILABLE FOR TRAFFIC AT ALL TIMES.
 - OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND

CONTACT: DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION

240-777-7221

ROCKVILLE, MARYLAND RECOMMENDED FOR APPROVAL Chief, Transportation Planning and Design Section APPROVED Chief, Division of Transportation Engineering

ESIGNED BY ARJ

PHASE 1 SEQUENCE OF CONSTRUCTION

B. <u>INSTALLATION OF TRAFFIC CONTROL DEVICES</u>

AND AS LISTED ON THE TRAFFIC CONTROL PLANS.

HIGH INTENSITY, REFLECTIVE SHEETING AS PER THE MUTCD.

1. SIGNAGE, TRAFFIC DRUMS, TRAFFIC CONES, AND ARROW PANELS SHALL BE

PLACED IN ACCORDANCE WITH THE APPROPRIATE TYPICAL SPACING CHART

2. ALL SIGNS, TRAFFIC DRUMS AND CONES SHALL BE FULLY REFLECTORIZED WITH

3. ALL WARNING SIGNS, UNLESS OTHERWISE SPECIFIED, SHALL BE A MINIMUM OF

48 " X 48", BLACK SYMBOL OR LEGEND ON ORANGE BACKGROUND AND

DIAMOND SHAPED. PLACEMENT OF ALL SIGNS SHALL NOT INTERFERE WITH

LATEST EDITION. ALL WARNING SIGNS NOT APPLICABLE TO THE ACTUAL

SITUATION SHALL BE REMOVED OR COVERED DURING NON-APPLICABLE

CLOSURE ON A MULTI-LANE ROADWAY. VARIABLE MESSAGE SIGNS (IF

OF EACH WORK DAY WHEN TEMPORARY AGGREGATE RAMPING IS

IMPLEMENTED.

DESIRABLE.

OPERATION.

4. FLASHING ARROW PANELS SHALL BE USED AT THE BEGINNING OF ANY LANE

REQUIRED) SHALL BE PROVIDED TWO WEEKS BEFORE/AFTER AND DURING

CONSTRUCTION. LOCATION AND MESSAGE TO BE DETERMINED BY ENGINEER.

5. WORK AREA AHEAD (W20-1 MODIFIED) SIGNS MUST BE INSTALLED AT THE END

6. DURING NIGHTTIME OPERATIONS, REFLECTORIZED TRAFFIC DRUMS SHOULD BE

USED, HOWEVER, FOR EMERGENCY WORK ACTIVITIES, WHERE TRAFFIC DRUMS

ARE NOT READILY AVAILABLE, REFLECTORIZED TRAFFIC CONES THAT ARE A

AND FOUR (4) INCH REFLECTIVE COLLARS WITHIN THE TOP SIXTEEN (16)

7. CONTRACTOR SHALL EXCAVATE ONLY AS MUCH AS IS TO BE WORKED IN A

NIGHT SHALL BE DELINEATED WITH REFLECTORIZED TRAFFIC DRUMS.

DAY, IN CASE ANY EXCAVATED AREA IS LEFT OVERNIGHT, TEMPORARY

CONCRETE BARRIERS SHALL BE PLACED SURROUNDING THAT AREA.

8. ALL PORTABLE SIGNS SHALL BE MOUNTED A MINIMUM OF ONE (I) FOOT

ABOVE THE LEVEL OF THE ROADWAY, WITH HIGHER MOUNTING HEIGHTS

9. WHEN PAVEMENT MARKINGS HAVE BEEN OBLITERATED BY THE WORK ACTIVITY,

THE PERMITTEE SHALL INSTALL ANY CRITICAL INTERIM PAVEMENT MARKINGS

a. ON ROAD SECTIONS THAT ARE NOT SCHEDULED TO BE OVERLAID, ALL

MARKING TAPE. ANY CONFLICTING MARKINGS WHICH NEED TO BE TEMPORARILY REMOVED ARE TO BE MASKED USING "3M REMOVABLE

b. ON ROAD SECTIONS THAT ARE TO BE OVERLAID, TEMPORARY MARKINGS CAN BE EITHER TAPE OR PAINT. ANY CONFLICTING MARKINGS SHOULD BE

A. CONTACT THE MCDOT TRANSPORTATION MANAGEMENT CENTER 240-777-2100

B. CONTACT TRAFFIC ENGINEERING DESIGN AND OPERATIONS SECTION AT

IN ADVANCE OF THE PROJECT. THE PERMITTEE SHALL CONTACT THE

BETWEEN 5:00 AM AND 11:00 PM TO INFORM THEM OF TEMPORARY LANE

240-777-2190 (A MINIMUM OF ONE WEEK PRIOR) TO COORDINATE ANY MINOR

SIGNAL RELOCATIONS SHALL BE COORDINATED A MINIMUM OF THIRTY (30) DAYS

MONTGOMERY COUNTY TECHNICAL CENTER AT 301-279-1291 A MINIMUM OF 48

HOURS PRIOR TO BEGINNING WORK TO HAVE TRAFFIC SIGNAL EQUIPMENT

C. CONTACT TRAFFIC ENGINEERING STUDIED SECTION AT 240-777-2190 AT LEAST

D. CONTACT MS. STELLA O. IGBINEDION AT 240-777-2190 TO REQUEST ANY FIELD

ASSISTANCE BY THE MCDOT DIVISION OF TRAFFIC ENGINEERING AND

REVISION

TEN (10) WORKING DAYS IN ADVANCE OF THE FINAL PAVING OPERATION TO

SCHEDULE THE INSTALLATION OF PERMANENT PAVEMENT MARKINGS AND SIGNS.

TRAFFIC SIGNAL RELOCATIONS TO FACILITATE THIS WORK ACTIVITY. MAJOR

BLACK LANE MASK" OR AN APPROVED EQUAL.

CLOSURES IN THE VICINITY OF ANY TRAFFIC SIGNALS.

REMOVED WITH A PAVEMENT GRINDER.

III. CONTACT INFORMATION

PRIOR TO THE END OF THE WORK DAY AS SPECIFIED BY THE COUNTY'S DPS

INSPECTOR AND/OR THE DIVISION OF TRAFFIC ENGINEERING AND OPERATIONS.

TEMPORARY PAVEMENT MARKINGS SHALL BE (REMOVABLE) DETOUR GRADE

MINIMUM OF TWENTY EIGHT (28) INCHES IN HEIGHT AND HAVING SIX (6) INCH

INCHES OF THE CONE MAY BE USED. ALL WORK AREAS LEFT UNATTENDED AT

TRAVELED WAYS OR SIGHT DISTANCES OF ANY ROADWAY, STREET OR DRIVEWAY

AS PER AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS,

DURING PHASE 1, TRAFFIC SHALL BE MAINTAINED ON THE EXISTING ROADWAYS. THE CONSTRUCTION EFFORT SHALL BE DIRECTED TO COMPLETING THE PORTION OF THE BURTONSVILLE ACCESS ROAD AS DESCRIBED BELOW, STORM WATER MANAGEMENT FACILITY AND STORM DRAIN SYSTEM.

PRIOR TO THE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY THE PROPERTY OWNERS AS TO THE DURATION OF THE PROPOSED WORK AS SPECIFIED IN THE SPECIAL PROVISIONS. THE CONTRACTOR CAN ALSO INFORM THE OWNER OF ANY EQUIPMENT THAT NEEDS TO BE RELOCATED.

THE FINAL 17 ASPHALT SUPERPAVE FOR SURFACE COURSE FOR THE BURTONSVILLE ACCESS ROAD SHALL NOT BE PLACED UNTIL THE COMPLETION OF PHASE 2 WORK.

2. SEQUENCE OF CONSTRUCTION

- A. INSTALL ALL TEMPORARY SIGNING AND MARKING REQUIRED FOR THE INITIAL CONSTRUCTION WORK TO BE PERFORMED UNDER PHASE 1. IF NECESSARY, COVER TEMPORARY SIGNS UNTIL SUCH TIME THAT THEIR MESSAGE ARE APPLICABLE.
- B. PRIOR TO COMMENCING ANY WORK AT ANY GIVEN LOCATION, THE INSTALLATION OF ALL NECESSARY SEDIMENT CONTROL FACILITIES REQUIRED FOR PHASE I CONSTRUCTION MUST BE COMPLETED AND HAVE THE APPROVAL OF THE EROSION AND SEDIMENT CONTROL INSPECTOR.
- C. CONSTRUCT BURTONSVILLE ACCESS ROAD, ENTRANCES, AND SIDEWALK FROM STA. 100 + 00 TO 109 + 86, STORMWATER MANAGEMENT AND STORM DRAIN SYSTEM AS SHOWN ON THE TCP PLANS. ALL CONSTRUCTION ACTIVITY THAT IMPACTS SCHOOL PROPERTY MUST BE COORDINATED WITH THE SCHOOL ADMINISTRATION PRIOR TO THE START OF WORK, AND DONE IN ACCORDANCE WITH DIRECTIVES INCLUDED ELSEWHERE IN THE CONTRACT DOCUMENTS.
- D. INSTALL ALL PERMANENT SIGNS AND MARKING (PAVEMENT MARKING TAPE) AS SHOWN ON THE SIGNING AND MARKING PLANS ALONG THE CONSTRUCTED PORTION OF THE BURTONSVILLE ACCESS ROAD.

PHASE 2 SEQUENCE OF CONSTRUCTION

GENERAL

DURING PHASE 2, TRAFFIC SHALL BE MAINTAINED ON THE EXISTING ROADWAYS AND PORTIONS OF ROADWAY CONSTRUCTED DURING PHASE 1. THE CONSTRUCTION EFFORT SHALL BE DIRECTED TO COMPLETING THE PORTION OF THE BURTONSVILLE ACCESS ROAD AS DESCRIBED BELOW AND STORM DRAIN SYSTEM.

PRIOR TO THE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY THE PROPERTY OWNERS AS TO THE DURATION OF THE PROPOSED WORK AS SPECIFIED IN THE SPECIAL PROVISIONS. THE CONTRACTOR CAN ALSO INFORM THE OWNER OF ANY EQUIPMENT THAT NEEDS TO BE RELOCATED.

THE FINAL 17 ASPHALT SUPERPAVE FOR SURFACE COURSE FOR THE BURTONSVILLE ACCESS ROAD SHALL NOT BE PLACED UNTIL THE COMPLETION OF PHASE 2 WORK.

2. SEQUENCE OF CONSTRUCTION

DRAWN BY<u>arj</u> CHECKED BY<u>mwm</u>

- A. INSTALL ALL TEMPORARY SIGNING AND MARKING REQUIRED FOR THE INITIAL CONSTRUCTION WORK TO BE PERFORMED UNDER PHASE 2. IF NECESSARY, COVER TEMPORARY SIGNS UNTIL SUCH TIME THAT THEIR MESSAGE ARE APPLICABLE.
- B. PRIOR TO COMMENCING ANY WORK AT ANY GIVEN LOCATION, THE INSTALLATION OF ALL NECESSARY SEDIMENT CONTROL FACILITIES REQUIRED FOR PHASE I CONSTRUCTION MUST BE COMPLETED AND HAVE THE APPROVAL OF THE EROSION AND SEDIMENT CONTROL INSPECTOR.
- C. CONSTRUCTION BURTONSVILLE ACCESS ROAD, ENTRANCES, AND SIDEWALK FROM STA. 109 + 86 TO 112 + 50 AND STORM DRAIN SYSTEM AS SHOWN ON THE TCP PLANS. REDIRECT THE BURTONSVILLE SHOPPING CENTER ENTRANCE AROUND THE PROPOSED ROADWAY IMPROVEMENTS THAT ARE TO BE CONSTRUCTED DURING THIS PHASE OF CONSTRUCTION. ACCESS TO THE REAR OF THE SHOPPING CENTER WILL BE MAINTAINED VIA THE PORTION OF THE BURTONSVILLE ACCESS ROAD CONSTRUCTION DURING PHASE 1.
- D. AFTER COMPLETING THE PROPOSED ROADWAY, COMPLETE THE FOLLOWING AS A LAST ORDER OF WORK:

MILL, WEDGE AND/OR LEVEL EXISTING ROADWAY AS NECESSARY IN PREPARATION FOR THE FINAL SURFACE COURSE.

PLACE FINAL SURFACE COURSE AND COMPLETE THE FINAL PAVEMENT MARKING AND REMAINING PERMANENT SIGNING. MAINTAIN TRAFFIC DURING THE FINAL PAVING OPERATION USING MCDOT STD. TCP-102.02 AND TCP-105.01-07, MAINTAIN TRAFFIC DURING THE FINAL PAVEMENT OPERATION USING MCDOT STD. TCP-102.06.

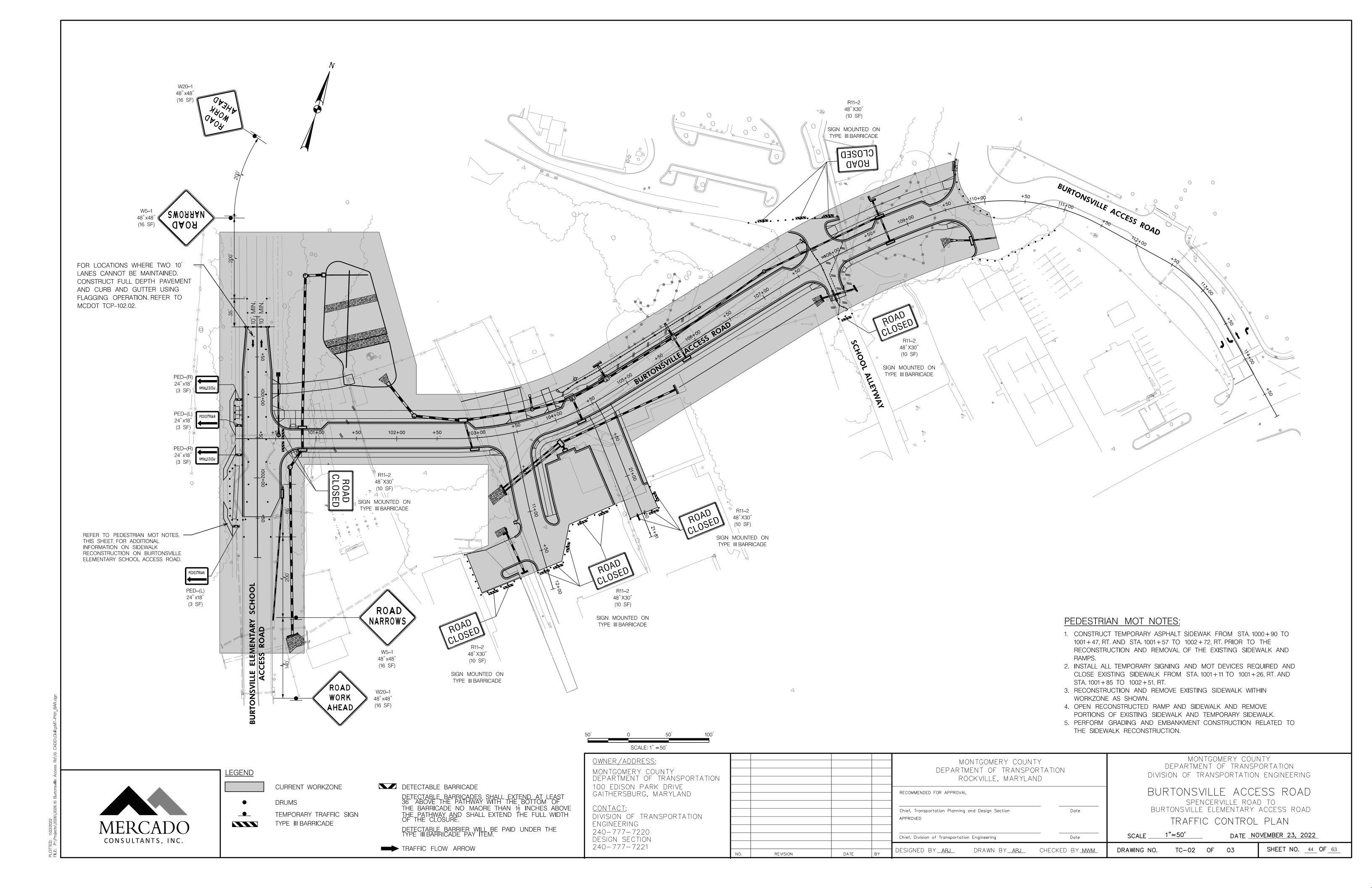
CONSULTANTS, INC.

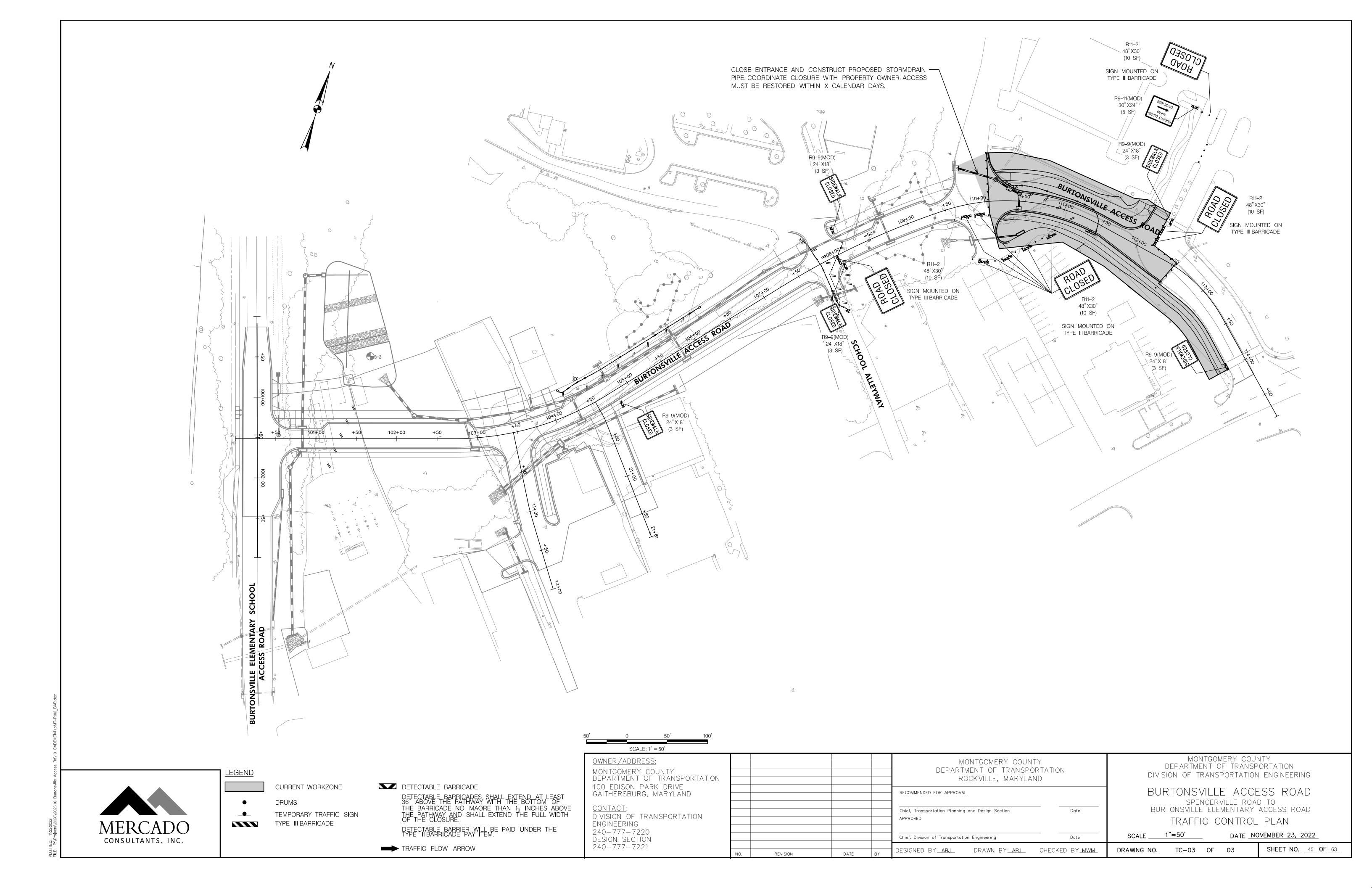
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING

BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD TRAFFIC CONTROL PLAN

1"=50' DATE NOVEMBER 23, 2022 SCALE _

SHEET NO. 43 **OF** 63 DRAWING NO. TC-01 OF 03





EROSION AND SEDIMENT CONTROL - GENERAL NOTES

STANDARD EROSION AND SEDIMENT CONTROL NOTES

- 1. THE PERMITTEE SHALL NOTIFY THE DEPARTMENT OF PERMITTING SERVICES (DPS) FORTY-EIGHT (48) HOURS BEFORE COMMENCING ANY LAND DISTURBING ACTIVITY AND, UNLESS WAIVED BY THE DEPARTMENT, SHALL BE REQUIRED TO HOLD A PRE-CONSTRUCTION MEETING BETWEEN THEM OR THEIR REPRESENTATIVE, THEIR ENGINEER AND AN AUTHORIZED REPRESENTATIVE OF THE DEPARTMENT.
- 2. THE PERMITTEE MUST OBTAIN INSPECTION AND APPROVAL BY DPS AT THE FOLLOWING POINTS: A. AT THE REQUIRED PRE-CONSTRUCTION MEETING.
- B. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES AND PRIOR TO ANY OTHER LAND DISTURBING
- C. DURING THE INSTALLATION OF A SEDIMENT BASIN OR STORMWATER MANAGEMENT STRUCTURE AT THE REQUIRED INSPECTION POINTS (SEE INSPECTION CHECKLIST ON PLAN). NOTIFICATION PRIOR TO COMMENCING CONSTRUCTION IS MANDATORY.
- D. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE(S).
- E. PRIOR TO FINAL ACCEPTANCE.
- 3. THE PERMITTEE SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE, SHALL HAVE THEM INSPECTED AND APPROVED BY THE DEPARTMENT PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES, SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES, AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURE WITHOUT PRIOR PERMISSION FROM THE DEPARTMENT.
- 4. THE PERMITTEE SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVERSED PUBLIC THOROUGHFARE(S). ALL MATERIALS DEPOSITED ONTO PUBLIC THOROUGHFARE(S) SHALL BE REMOVED IMMEDIATELY.
- 5. THE PERMITTEE SHALL INSPECT PERIODICALLY AND MAINTAIN CONTINUOUSLY IN EFFECTIVE OPERATING CONDITION, ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS THEY ARE REMOVED WITH PRIOR PERMISSION FROM THE DEPARTMENT. THE PERMITTEE IS RESPONSIBLE FOR IMMEDIATELY REPAIRING OR REPLACING ANY SEDIMENT CONTROL MEASURES WHICH HAVE BEEN DAMAGED OR REMOVED BY THE PERMITTEE OR ANY OTHER PERSON.
- 6. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

A) THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND

B) SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

ALL AREAS DISTURBED OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST BE MINIMIZED AND STABILIZED IMMEDIATELY. MAINTENANCE MUST BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION.

- 7. THE PERMITTEE SHALL APPLY SOD, SEED, AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS WITHIN SEVEN (7) CALENDAR DAYS AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED ON THAT AREA. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. ACTIVE CONSTRUCTION AREAS SUCH AS BORROW OR STOCKPILE AREAS, ROADWAY IMPROVEMENTS, AND AREAS WITHIN FIFTY (50) FEET OF A BUILDING UNDER CONSTRUCTION MAY BE EXEMPT FROM THIS REQUIREMENT, PROVIDED THAT EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED AND MAINTAINED TO PROTECT THOSE AREAS.
- 8. PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES, THE PERMITTEE SHALL STABILIZE ALL CONTRIBUTORY DISTURBED AREAS WITH REQUIRED SOIL AMENDMENTS AND TOPSOIL, USING SOD OR AN APPROVED PERMANENT SEED MIXTURE AND AN APPROVED ANCHORED MULCH. WOOD FIBER MULCH MAY ONLY BE USED IN SEEDING SEASON WHEN THE SLOPE DOES NOT EXCEED 10% AND GRADING HAS BEEN DONE TO PROMOTE SHEET FLOW DRAINAGE. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON SHALL BE PERMANENTLY STABILIZED WITHIN SEVEN (7) CALENDAR DAYS OF ESTABLISHMENT. WHEN PROPERTY IS BROUGHT TO FINISHED GRADE DURING THE MONTHS OF NOVEMBER THROUGH FEBRUARY, AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, AN APPROVED TEMPORARY SEED AND STRAW ANCHORED MULCH SHALL BE APPLIED TO DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE COMPLETED PRIOR TO THE FOLLOWING APRIL 15.
- 9. THE SITE PERMIT, WORK, MATERIALS, APPROVED SC/SM PLANS, AND TEST REPORTS SHALL BE AVAILABLE AT THE SITE FOR INSPECTION BY DULY AUTHORIZED OFFICIALS OF MONTGOMERY COUNTY.
- 10. SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER PREVENTING DRAINAGE FLOWS FROM TRAVERSING THE SLOPES OR BY INSTALLING MECHANICAL DEVICES TO LOWER THE WATER DOWN SLOPE WITHOUT CAUSING EROSION. DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF CUT OR FILL SLOPES UNTIL THE SLOPE AND DRAINAGE AREA TO IT ARE FULLY STABILIZED, AT WHICH TIME THEY MUST BE REMOVED AND FINAL GRADING DONE TO PROMOTE SHEET FLOW DRAINAGE. MECHANICAL DEVICES MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE EROSION IS LIKELY TO OCCUR.
- 11. PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITHIN 3 CALENDAR DAYS OF ESTABLISHMENT WITH SOD OR SEED WITH AN APPROVED EROSION CONTROL MATTING OR BY OTHER APPROVED STABILIZATION MEASURES.

- 12. SEDIMENT CONTROL DEVICES SHALL BE REMOVED, WITH PERMISSION OF THE DEPARTMENT, WITHIN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS. STORMWATER MANAGEMENT STRUCTURES USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CONVERTED TO THE PERMANENT CONFIGURATION WITHIN THIS TIME PERIOD AS WELL.
- 13. NO PERMANENT CUT OR FILL SLOPE WITH A GRADIENT STEEPER THAN 3:1 WILL BE PERMITTED IN LAWN MAINTENANCE AREAS OR ON RESIDENTIAL LOTS. A SLOPE GRADIENT OF UP TO 2:1 WILL BE PERMITTED IN NONMAINTENANCE AREAS PROVIDED THAT THOSE AREAS ARE INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN WITH A LOW-MAINTENANCE GROUND COVER SPECIFIED FOR PERMANENT STABILIZATION. SLOPE GRADIENT STEEPER THAN 2:1 WILL NOT BE PERMITTED WITH VEGETATIVE STABILIZATION.
- 14. THE PERMITTEE SHALL INSTALL A SPLASH BLOCK AT THE BOTTOM OF EACH DOWNSPOUT UNLESS THE DOWNSPOUT IS CONNECTED BY A DRAIN LINE TO AN ACCEPTABLE OUTLET.
- 15. FOR FINISHED GRADING, THE PERMITTEE SHALL PROVIDE ADEQUATE GRADIENTS SO AS TO PREVENT WATER FROM STANDING ON THE SURFACE OF LAWNS MORE THAN TWENTY-FOUR (24) HOURS AFTER THE END OF A RAINFALL, EXCEPT IN DESIGNATED DRAINAGE COURSES AND SWALE FLOW AREAS, WHICH MAY DRAIN AS LONG AS FORTY-EIGHT (48) HOURS AFTER THE END OF A RAINFALL.
- 16. SEDIMENT TRAPS OR BASINS ARE NOT PERMITTED WITHIN 20 FEET OF A BUILDING WHICH IS EXISTING OR UNDER CONSTRUCTION. NO BUILDING MAY BE CONSTRUCTED WITHIN 20 FEET OF A SEDIMENT TRAP OR BASIN.
- 17. ALL INLETS IN NON-SUMP AREAS SHALL HAVE ASPHALT BERMS INSTALLED AT THE TIME OF BASE PAVING
- 18. THE SEDIMENT CONTROL INSPECTOR HAS THE OPTION OF REQUIRING ADDITIONAL SEDIMENT CONTROL MEASURES, AS DEEMED NECESSARY.
- 19. ALL TRAP ELEVATIONS ARE RELATIVE TO THE OUTLET ELEVATION, WHICH MUST BE ON EXISTING UNDISTURBED GROUND.
- 20. VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 21. SEDIMENT TRAP(S)/BASIN(S) SHALL BE CLEANED OUT AND RESTORED TO THE ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO THE POINT OF ONE-HALF (1/2) THE WET STORAGE DEPTH OF THE TRAP/BASIN (1/4 THE WET STORAGE DEPTH FOR ST-III) OR WHEN REQUIRED BY THE SEDIMENT CONTROL INSPECTOR.
- 22. SEDIMENT REMOVED FROM TRAPS/BASINS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN.
- 23. ALL SEDIMENT BASINS AND TRAPS MUST BE SURROUNDED WITH A WELDED WIRE SAFETY FENCE. THE FENCE MUST BE AT LEAST 42 INCHES HIGH, HAVE POSTS SPACED NO FARTHER APART THAN 8 FEET, HAVE MESH OPENINGS NO GREATER THE TWO INCHES IN WIDTH AND FOUR INCHES IN HEIGHT, WITH A MINIMUM OF 14 GAUGE WIRE. SAFETY FENCE MUST BE MAINTAINED IN GOOD CONDITION AT ALL TIMES.
- 24. NO EXCAVATION IN THE AREAS OF EXISTING UTILITIES IS PERMITTED UNLESS THEIR LOCATION HAS BEEN DETERMINED. CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK.
- 25. OFF-SITE SPOIL OR BORROW AREAS MUST HAVE PRIOR APPROVAL BY DPS.

240-777-7221

- 26. SEDIMENT TRAP/BASIN DEWATERING FOR CLEANOUT OR REPAIR MAY ONLY BE DONE WITH THE DPS INSPECTOR'S PERMISSION. THE INSPECTOR MUST APPROVE THE DEWATERING METHOD FOR EACH APPLICATION. THE FOLLOWING METHODS MAY BE CONSIDERED:
- A. PUMP DISCHARGE MAY BE DIRECTED TO ANOTHER ON-SITE SEDIMENT TRAP OR BASIN, PROVIDED IT IS OF SUFFICIENT VOLUME AND THE PUMP INTAKE IS FLOATED TO PREVENT AGITATION OR SUCTION OF DEPOSITED
- B. THE PUMP INTAKE MAY UTILIZE A REMOVABLE PUMPING STATION AND MUST DISCHARGE INTO AN UNDISTURBED AREA THROUGH A NON-EROSIVE OUTLET; OR
- C. THE PUMP INTAKE MAY BE FLOATED AND DISCHARGE INTO A DIRT BAG (12 OZ. NON-WOVEN FABRIC), OR APPROVED EQUIVALENT, LOCATED IN AN UNDISTURBED BUFFER AREA.

REMEMBER: DEWATERING OPERATION AND METHOD MUST HAVE PRIOR APPROVAL BY THE DPS INSPECTOR.

- 27. THE PERMITTEE MUST NOTIFY THE DEPARTMENT OF ALL UTILITY CONSTRUCTION ACTIVITIES WITHIN THE PERMITTED LIMITS OF DISTURBANCE PRIOR TO THE COMMENCEMENT OF THOSE ACTIVITIES.
- 28. TOPSOIL MUST BE APPLIED TO ALL PERVIOUS AREAS WITHIN THE LIMITS OF DISTURBANCE PRIOR TO PERMANENT STABILIZATION IN ACCORDANCE WITH MDE "STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS".

VEGETATIVE STABILIZATION PERMANENT AND TEMPORARY SEEDING, SODDING AND MULCHING

I. SITE PREPARATION

PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN (A.) SEVEN CALENDAR DAYS AS TO THE SURFACE OF ALL SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, DIKES, GRASSED WATERWAYS, SEDIMENT BASINS, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO I VERTICAL (3:1) AND (B.) FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

II. SEEDBED PREPARATION AND SEEDING APPLICATION

THE TOP LAYER OF SOIL SHALL BE LOOSENED, LIMED AND FERTILIZED BY RAKING, DISCING OR HARROWING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, FLAT AREAS AND SLOPES UP TO 3 TO I GRADE SHALL BE LOOSE AND FRIABLE TO A DEPTH OF AT LEAST 3 INCHES. SLOPES STEEPER THAN 3 TO I SHALL HAVE THE TOP I-3 INCHES OF SOIL LOOSE AND FRIABLE BEFORE SEEDING.

APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL CULTIPACKER, SEEDER OR HYDROSEEDER ON A FIRM MOIST SEEDBED.

III. SOIL AMENDMENTS

LIME AND FERTILIZE ACCORDING TO SOIL TESTS IN LIEU OF SOIL TEST APPLY THE FOLLOWING:

DOLOMITIC: 2 TONS PER ACRE OR 92 LBS./1000 (PERMANENT AND SODDING) SQ. FT. LIMESTONE: I TON PER ACRE OR 46 LB./1000 SQ. FT. (TEMPORARY) FERTILIZER: 10-10-10 OR EQUIVALENT AT 1000 LBS. PER ACRE OR 23 LBS. PER 1000 SQ. FT. (PERMANENT AND SODDING) 10-10-10 OR EQUIVALENT AT 600 LBS. PER ACRE OR 15 LBS./1000 SQ. FT. (TEMPORARY)

IV. SEDIMENT CONTROL PRACTICE SEEDING

SEED: ANNUAL RYEGRASS 40 LBS./ACRE OR I.O LBS./IOOO SQ. FT. DATE: 3/I TO 5/I5 AND 8/I TO IO/I5 SEED: FOXTAIL MILLET 30 LBS./ACRE OR 0.7 LBS./1000 SQ. FT. DATE: 5/16 TO 7/31

V. TEMPORARY SEEDING: PER GROWING SEASON

SEED: ANNUAL RYEGRASS 40 LBS./ACRE OR I.O LBS./IOOO SQ. FT. DATE: 3/I TO 5/I5 AND 8/I TO IO/I5 SEED: FOXTAIL MILLET 30 LBS./ACRE OR 0.7 LBS./1000 SQ. FT. DATE: 5/16 TO 7/31

VI. PERMANENT SEEDING

SEED: TALL FESCUE 60 LBS./ACRE OR 1.38 LBS./1000 SQ. FT. AND KENTUCKY BLUEGRASS 40 LBS./ ACRE OR 0.92 LBS./1000 SQ. FT. DATE: 3/I TO 10/I5 IRRIGATION REQUIRED

ALL SEEDINGS REQUIRE MULCHING. USE MULCH ONLY DURING NON-SEEDING DATES UNTIL SEEDING CAN BE DONE.

MULCH SHALL BE UNROTTED, UNCHOPPED SMALL GRAIN STRAW APPLIED AT A RATE OF $1\frac{1}{2}$ TO 2 TONS/ACRE OR 70-90 LBS./1000 SQ. FT. (2 BALES). MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDBEDS AND SHALL BE FREE OF PROHIBITED NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY MECHANICALLY OR BY HAND. MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER MULCH PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY MULCH NETTINGS, MULCH ANCHORING TOLL, PEG AND TWINE, OR LIQUID MULCH BINDERS.

LIQUID MULCH BINDER SHALL BE RAPID CURING APPLIED AT A RATE OF 200 GAL./ACRE OR 5 GAL./1000 SQ. FT. SLOPES 8 FT. OR MORE HIGH USE 348 GAL/ACRE OR 8 GAL./1000 SQ. FT.

VIII. SODDING

CLASS OF TURFGRASS SOD SHALL BE MARYLAND OR VIRGINIA STATE CERTIFIED, OR MARYLAND OR VIRGINIA STATE APPROVED SOD, SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS, SOD IS TO BE LAID WITH THE LONG EDGES PARALLEL TO THE CONTOUR WITH STAGGERED JOINTS WITH ALL ENDS TIGHTLY ABUTTING AND NOT OVER LAPPING. SOD SHALL BE ROLLED AND THOROUGHLY WATERED WITHIN 8 HOURS OF INSTALLATION, DAILY WATERING TO MAINTAIN 4 INCH DEPTH OF MOISTURE FOR THE FIRST WEEK IS REQUIRED IN THE ABSENCE OF RAINFALL. SOD IS NOT TO BE APPLIED ON FROZEN GROUND.

IX. MAINTENANCE

DESIGNED BY <u>EL</u>

A. IRRIGATION: WHEN SOIL MOISTURE BECOMES DEFICIENT, IRRIGATE TO PREVENT LOSS OF STAND OF

PROTECTIVE VEGETATION. B. REPAIRS: IF STAND IS INADEQUATE FOR EROSION CONTROL, OVERSEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY APPLIED. IF STAND IS OVER 60% DAMAGED, REESTABLISH FOLLOWING ORIGINAL RATES AND PROCEDURES.

NOTES: USE OF THIS INFORMATION DOES NOT PRECLUDE MEETING ALL THE REQUIREMENTS OF THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL VEGETATIVE PRACTICES.

CONSULTANTS, INC.

OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND		MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND RECOMMENDED FOR APPROVAL
CONTACT: DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION		Chief, Transportation Planning and Design Section APPROVED Chief, Division of Transportation Engineering

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD EROSION AND SEDIMENT CONTROL PLAN NOTES

DATE NOVEMBER 23, 2022

SCALE _ DRAWING NO. ES-01 OF 07

DRAWN BY<u>el</u> Checked by <u>mwm</u>

SHEET NO. 46 **OF** 63

SC0002

EROSION AND SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION:

- I. PRIOR TO CLEARING TREES, INSTALLING SEDIMENT CONTROL MEASURES, OR GRADING, A PRECONSTRUCTION MEETING MUST BE CONDUCTED ON-SITE WITH THE MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES (MCDPS) SEDIMENT CONTROL INSPECTOR (240) 777-0311 (48 HOURS NOTICE) AND THE MNCPPC, PLANNING DEPARTMENT, PLANS ENFORCEMENT INSPECTOR (301) 495-4550 (48 HOURS NOTICE), THE OWNERS REPRESENTATIVE, AND THE SITE ENGINEER. IN ORDER FOR THE MEETING TO OCCUR, THE APPLICANT MUST PROVIDE ONE PAPER SET OF APPROVED SEDIMENT CONTROL PLANS TO MCDPS SEDIMENT CONTROL INSPECTOR AT THE PRECONSTRUCTION MEETING. IF NO PLANS ARE PROVIDED, THE MEETING SHALL NOT OCCUR AND WILL NEED TO BE RESCHEDULED PRIOR TO COMMENCING ANY WORK.
- 2. THE LIMITS OF DISTURBANCE MUST BE FIELD MARKED PRIOR TO CLEARING OF TREES, INSTALLATION OF SEDIMENT CONTROL MEASURES, CONSTRUCTION, OR OTHER LAND DISTURBING ACTIVITIES.
- 3. THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MNCPPC INSPECTOR, CERTIFYING THAT THE LIMITS OF DISTURBANCE AND TREE PROTECTION MEASURES ARE CORRECTLY MARKED AND INSTALLED PRIOR TO COMMENCING ANY CLEARING.
- 4. CLEAR AND GRADE FOR INSTALLATION OF SEDIMENT CONTROL DEVICES.
- 5. INSTALL ALL SEDIMENT CONTROL DEVICES AS SHOWN ON PLANS. ONCE THE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING OR GRADING.
- 6. INSTALL STORM DRAIN S-5 TO EW-I, AT S-5 INSTALL TEMPORARY RCP END SECTION INSTEAD OF RISER. INSTALL EW-I UNDER A THREE DAY DRY PERIOD. INSTALL INLET PROTECTION ON NEWLY INSTALLED INLETS.
- 7. INSTALL SEDIMENT TRAP ST I.I.
- 8. INSTALL STORM DRAIN SYSTEM ALONG PROPOSED BURTONSVILLE ACCESS ROAD. INSTALL INLET PROTECTION ON NEWLY INSTALLED INLETS.
- 9. PLACE FILL TO BOTTOM OF PROPOSED SIDEWALK ON NORTH SIDE OF BURTONSVILLE ACCESS ROAD FROM 100+50 TO 109+75.
- 10. CONSTRUCT STORM DRAIN FROM S-30 TO EW-29. PROVIDE POSTIVE GRADING TO ENSURE STORM WATER CAN ENTER S-30 AT UPSTREAM END FROM EXISTING DRAINAGE DITCH.
- II. INSTALL DITCH BETWEEN STA. 107+00, RT AND EW-31 WITH TSSMC-1.
- 12. INSTALL EW-31 TO S-30 AND CONSTRUCT REMAINDER OF DITCH FROM 107+00, RT TO EW-35 WITH TSSMC-I UNDER A THREE DAY DRY PERIOD.
- 13. INSTALL I-6 TO EX-I-2 AND I-8 TO MH-3. INSTALL INLET PROTECTION ON NEWLY INSTALLED INLETS.
- 14. PLACE FILL FOR PROPOSED ROADWAY AND SOUTH SIDEWALK FOR BURTONSVILLE ACCESS ROAD FROM 100+50 TO 109+75.
- 15. INSTALL STORM DRAIN I-19 TO I-45. INSTALL INLET PROTECTION ON NEWLY INSTALLED INLETS.
- 16. CONSTRUCT BURTONSVILLE ACCESS ROAD FROM APPROX 109+75 TO 100+00 AS WELL AS ADJACENT SIDEWALK AND PEDESTRIAN PATH.
- 17. INSTALL EW-36 TO EW-35 UNDER A THREE DAY DRY PERIOD.
- 18. INSTALL STORM DRAIN 1-39 TO ES-37 UNDER THREE DAY DRY PERIOD. INSTALL INLET PROTECTION ON NEWLY INSTALLED INLETS.
- 19. CONSTRUCT REMAINING PORTION OF BURTONSVILLE ACCESS ROAD AND ADJACENT PATHS.
- 20.STABILIZE ALL DISTURBED AREAS.
- 21. REMOVE SEDIMENT CONTROL DEVICES AFTER WRITTEN APPROVAL OF ENGINEER AND MCDPS INSPECTOR.
- 22. FLUSH ALL STORM DRAINS LEADING TO SEDIMENT TRAP.
- 23. ONCE ALL AREAS CONTRIBUTING TO SEDIMENT TRAP ARE STABILIZED. AND WITH WRITTEN APPROVAL FROM MCDPS INSPECTOR, CONVERT SEDIMENT TRAP USED DURING CONSTRUCTION TO ITS PERMANENT STORMWATER MANAGEMENT FACILITY AND CONFIGURATION, REMOVAL OF SEDIMENT AND SEDIMENT LADEN WATER AND PERMANENT STABILIATION OF POND SLOPES SHALL BE DONE IN ACCORDANCE WITH DPS GUIDELINES.

LIMIT OF DISTURBANCE COORDINATES:

	LIMIT OF DIST	URBANCE
NO	NORTHING	EASTING
1	525622.7303	1329942.1321
2	525568.4868	1329955.4826
3	525528.9465	1329968.5236
4	525524.4639	1329954.9322
5	525507.3637	1329960.5721
6	525511.9199	1329974.3867
7	525481.7261	1329984.3450
8	525474.7160	1329984.2726
9	525457.1394	1329990.7981
10	525451.1334	1329982.3222
11		1329975.4683
	525433.6829 525407.8415	
12 13		1329984.2058
	525390.2357	1330001.7338
14	525394.2170	1330016.2457
15	525447.6311	1329998.6060
16	525457.6319	1330001.9633
17	525576.4935	1329960.4803
18	525624.3299	1329949.8353
19	525240.3471	1330102.5788
20	525287.2837	1330086.8540
21	525441.1774	1330036.7614
22	525463.8100	1330022.1790
23	525467.9510	1330020.3710
24	525506.8682	1330008.9878
25	525587.1415	1329982.8826
26	525629.2006	1329964.5961
27	525639.0240	1329991.4987
28	525724.8434	1329962.7807
29	525765.2599	1329995.4044
30	525773.7486	1330020.9967
31	525752.9791	1330088.6444
32	525663.1161	1330148.9490
33	525679.9093	1330175.1049
34	525620.0567	1330228.4809
35	525658.0450	1330291.3170
36	525652.9243	1330307.3592
37	525674.9860	1330333.0644
38	525686.2689	1330339.9516
39	525727.1475	1330372.2780
40	525676.7615	1330446.1455
41	525656.1915	1330425.1147
42	525592.9494	1330477.6503
43	525590.1384	1330474.2815
44	525589.5868	1330471.3796
45	525567.3445	1330453.4719
46	525555.9893	1330446.9715
47	525554.6715	1330445.4671
48	525574.4391	1330428.1514
49	525556.2280	1330405.2240
50	525594.1030	1330374.7770

	LIMIT OF DIST	URBANCE
NO	NORTHING	EASTING
51	525575.6043	1330351.8393
52	525534.8225	1330375.5134
53	525513.9765	1330392.2312
54	525506.8413	1330386.2678
55	525504.6374	1330372.7210
56	525520.1169	1330363.9422
57	525504.0839	1330339.3703
58	525448.7790	1330382.9714
59	525433.6653	1330363.6820
60	525436.7472	1330360.7461
61	525422.7397	1330345.3821
62	525433.1362	1330336.8088
63	525447.2939	1330352.3376
64	525470.0560	1330331.7815
65	525465.2272	1330326.4850
66	525476.6845	1330312.8903
67	525484.1690	1330319.2402
68	525488.7050	1330281.7860
69	525516.1464	1330288.3676
70	525536.5003	1330302.8818
71	525559.1127	1330290.3306
72	525546.6928	1330261.2331
73	525504.3600	1330136.4911
74	525487.5624	1330076.0191
75	525483.5950	1330058.6484
76	525470.9039	1330055.6833
77	525289.6827	1330120.5820
78	525279.1435	1330134.1884
79	525269.1584	1330138.5843
80	525247.0453	1330122.8613
81	525739.3259	1330385,2019
82	525742.9823	1330395.1551
83	525781.9424	1330429.5347
84	525786.4080	1330427.4158
85	525796.8216	1330436.4627
86	525794.3755	1330440.5044
87	525800.8083	1330445.6630
88	525807.1591	1330442.9623
89	525816.8916	1330443.4109
90	525916.7884	1330533.9089
91	525938.9149	1330528.3405
92	525936.5591	1330510.2242
93	525943.2010	1330509.3231
94	525979.9776 525986.9841	1330597.2904
95 96	526001.9995	1330607.4856 1330618.9951
96	526001.9995	1330622.3180
98	526035.0875	1330622.3180
99	525950.0759	1330663.9338
100	525897.7718	1330653.6401
100	525051•1110	1 1000000.0401

	LIMIT OF DIST	URBANCF
NO	NORTHING	EASTING
101	525891,2859	1330638.6313
102	525878,5018	1330623.2506
103	525841.8521	1330623.2300
104	525747.7550	1330571.0351
105	525714.5628	1330500.4196
106	525700.6504	1330487.8246
107		
	525707.0420	1330482.4540
108	526053.7808	1330668.5161
109	526064.1021	1330699.0300
110	526072.9821	1330714.6514
111	526093.3190	1330711.1942
112	526093.9832	1330715.6505
113	526114.3724	1330751.4951
114	526097.8237	1330765.3255
115	526109.7119	1330803.1338
116	526113.6620	1330820.9237
117	526115.4772	1330841.7291
118	526110.7065	1330914.8681
119	526115.5675	1330918.5215
120	526114.5710	1330925.1375
121	526109.2044	1330929.9823
122	526106.3244	1330936.4841
123	526111.3531	1330943.0101
124	526117.7796	1330946.3260
125	526117.8516	1330971.1966
126	526107.3660	1330968.7350
127	526096.6479	1331014.9427
128	526080.0599	1331024.9968
129	526028.6067	1331003.0643
130	526023.0382	1331023.9705
131	526015.2919	1331044.4015
132	526002.2619	1331065.7000
133	525977.6805	1331094.2456
134	525949.0680	1331123.4532
135	525945.5406	1331126.1983
136	525939.1474	1331118.1837
137	525940.7363	1331107.5246
138	525954.9928	1331092.0526
139	525983.3906	1331059.3247
140	526000.1117	1331028.8376
141	526012.8480	1330994.9500
142	526043.0439	1330898.4304
143	526043.0433	1330863.1496
144	526035.3702	1330841.1621
145	526016.2642	1330828.3065
145	526006.5897	1330826.3063
146		1330804.0284
148	525991.1960 525983.8115	1330773.1783
148		
	525985.1398	1330771.3494
150	525989.1233	1330770.6542
151	525993.3312	1330769.0186
152	526000.2765	1330760.1717
153	525991.1497	1330749.0528
154	525982.7783	1330732.7351
155	525991.4853	1330726.0099
156	525995.0319	1330717.1364

CONSULTANTS, INC.

OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND

CONTACT: DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION 240-777-7221

NO.	REVISION	DATE	BY	DESIGNED BY <u>el</u> DRAWN BY <u>el</u> CHECK	KED BY <u>mwm</u>	DRA				
				 Chief, Division of Transportation Engineering	Date	9				
				APPROVED						
				Chief, Transportation Planning and Design Section	Date					
				RECOMMENDED FOR APPROVAL						
				ROCKVILLE, MARYLAND						
				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION						

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD

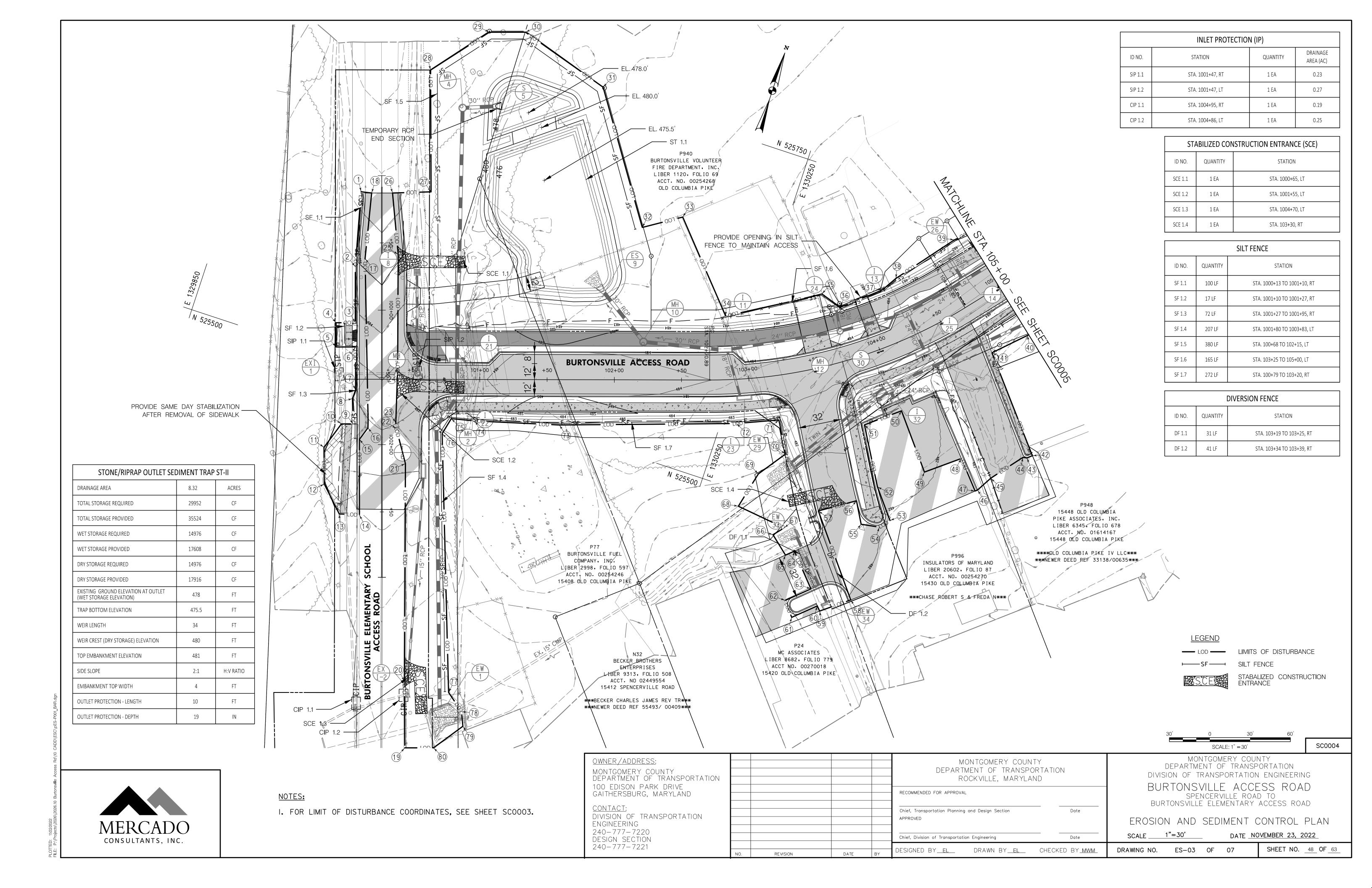
EROSION AND SEDIMENT SEQUENCE OF CONSTRUCTION SCALE _____N/A

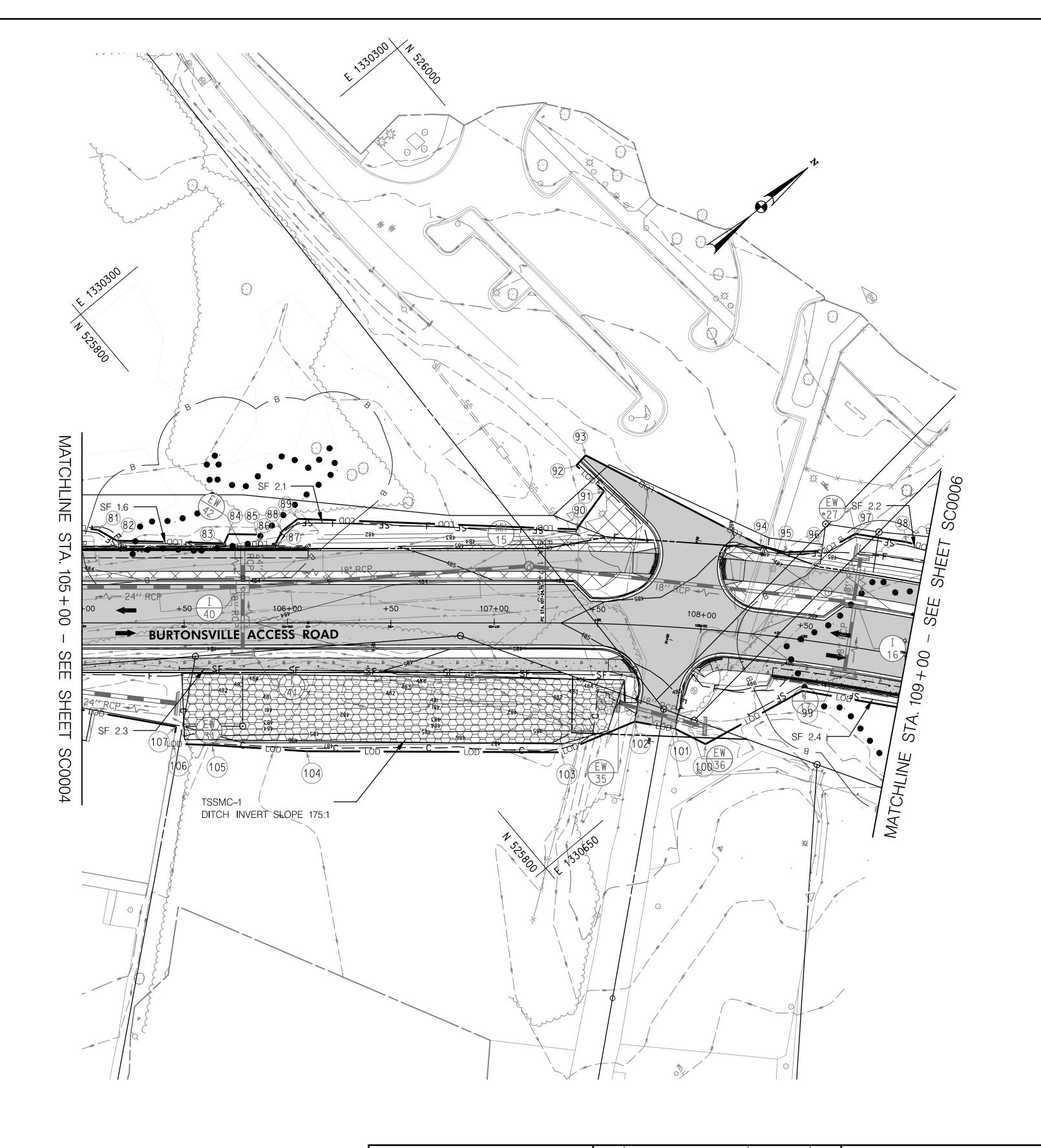
DATE NOVEMBER 23, 2022

RAWING NO. ES-02 OF 07

SHEET NO. 47 **OF** 63

SC0003





	SILT FENCE								
ID NO.	QUANTITY	STATION							
SF 1.6	71 LF	STA. 105+00 TO 105+70, LT							
SF 2.1	159 LF	STA. 105+86 TO 107+39, LT							
SF 2.2	75 LF	STA. 108+33 TO 109+00,LT							
SF 2.3	214 LF	STA. 105+48 TO 107+63, RT							
SF 2.4	76 LF	STA. 108+27 TO 109+00, RT							

NOTES:

- I. SF 2.3 SHALL NOT BE INSTALLED UNTIL AFTER INSTALLATION OF DITCH WITH TSSMC-I AND BEFORE PLACING FILL FOR ROADWAY AND SOUTH SIDEWALK.
- 2. FOR LIMIT OF DISTURBANCE COORDINATES, SEE SHEET SCOOO3.

30' 0 30' 60' SCALE: 1" = 30'

SC0005

MERCADO

CONSULTANTS, INC.

LEGEND

LIMITS OF DISTURBANCE

SF SILT FENCE

WETLAND

SCE

WETLAND
WETLAND BUFFER
STABALIZED CONSTRUCTION
ENTRANCE

OWNER/ADDRESS:	
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION	
100 EDISON PARK DRIVE	
GAITHERSBURG, MARYLAND	
<u>CONTACT:</u>	

<u>CONTACT:</u>
DIVISION OF TRANSPORTATION
ENGINEERING
240-777-7220
DESIGN SECTION
240-777-7221

				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND
				RECOMMENDED FOR APPROVAL
				Chief, Transportation Planning and Design Section Date APPROVED
				Chief, Division of Transportation Engineering Date
NO.	REVISION	DATE	BY	DESIGNED BY <u>el</u> DRAWN BY <u>el</u> CHECKED BY <u>MWM</u>

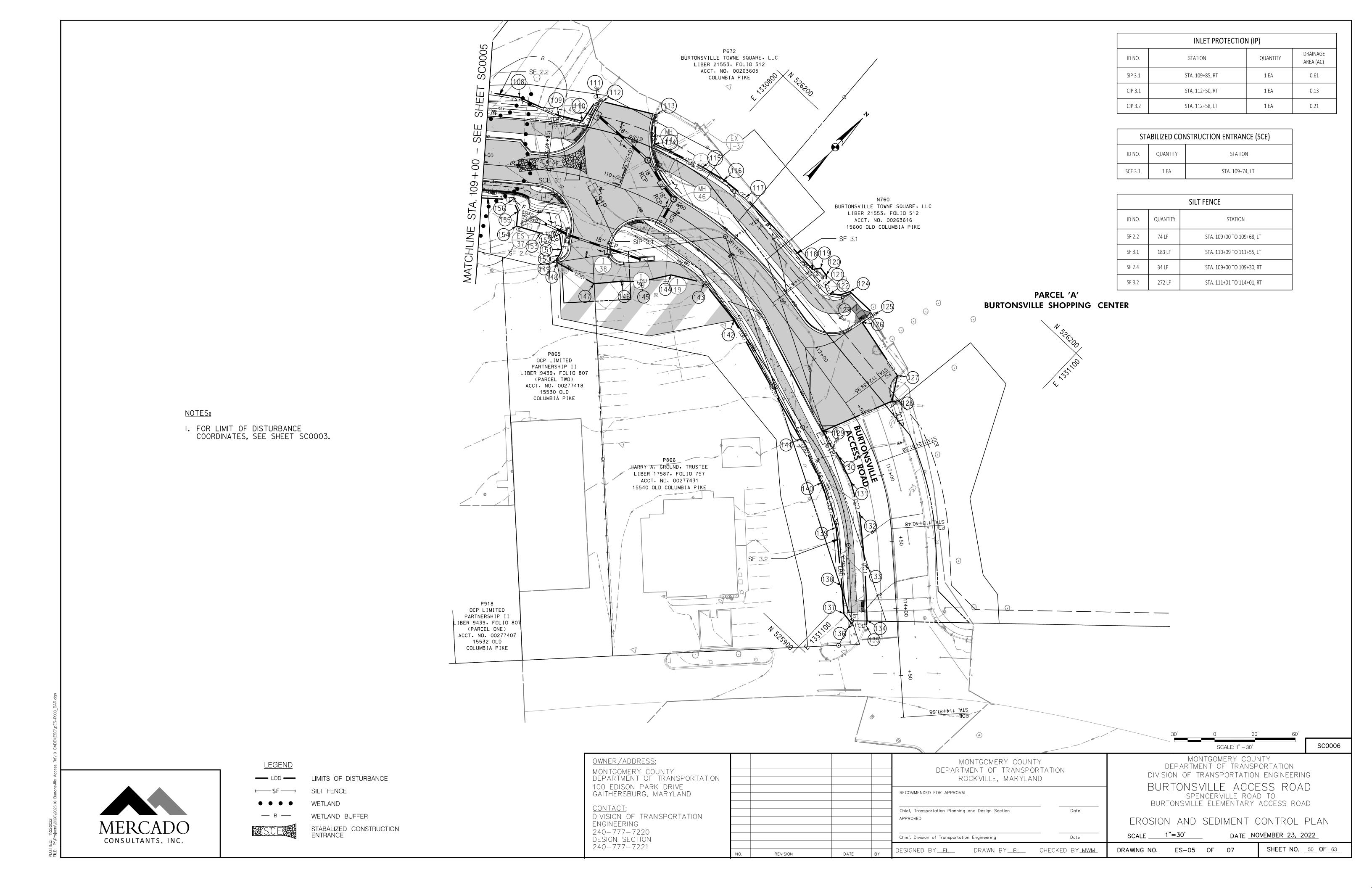
MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
DIVISION OF TRANSPORTATION ENGINEERING
BURTONSVILLE ACCESS ROAD
SPENCERVILLE ROAD TO
BURTONSVILLE ELEMENTARY ACCESS ROAD

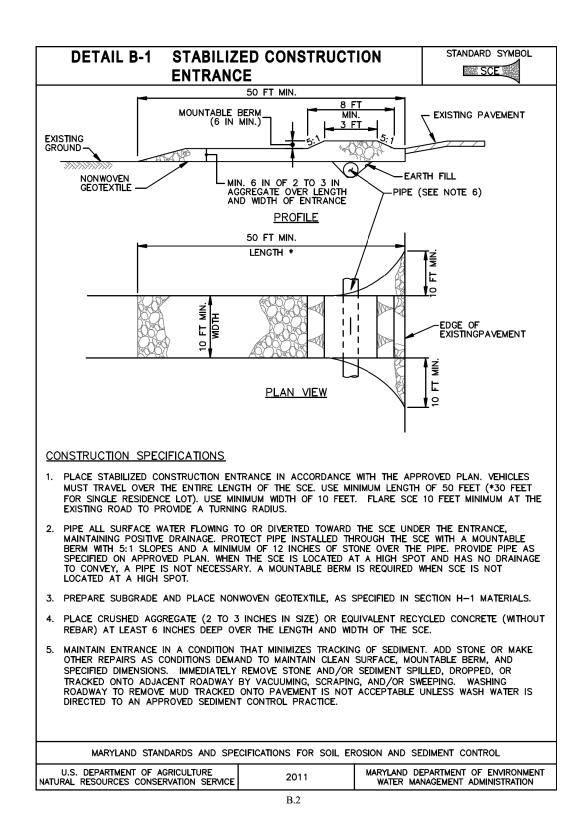
EROSION AND SEDIMENT CONTROL PLAN

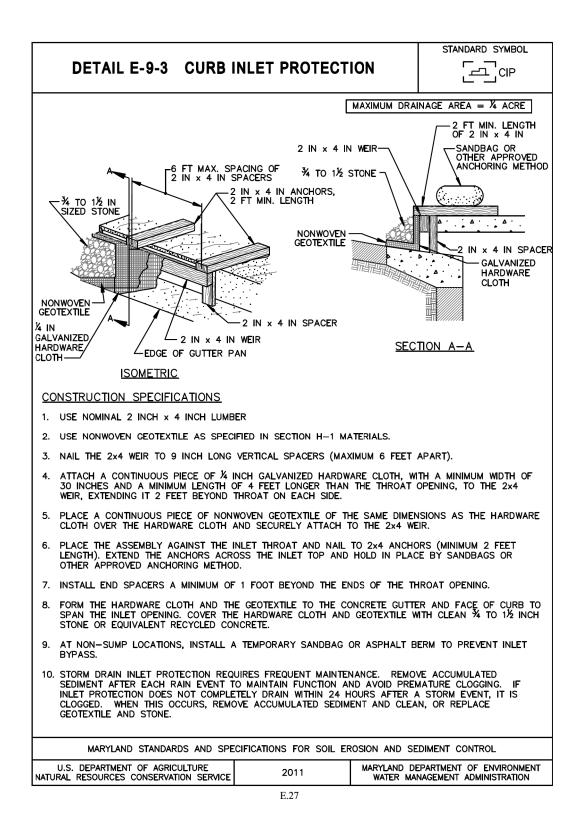
 SCALE
 1"=30'
 DATE
 NOVEMBER 23, 2022

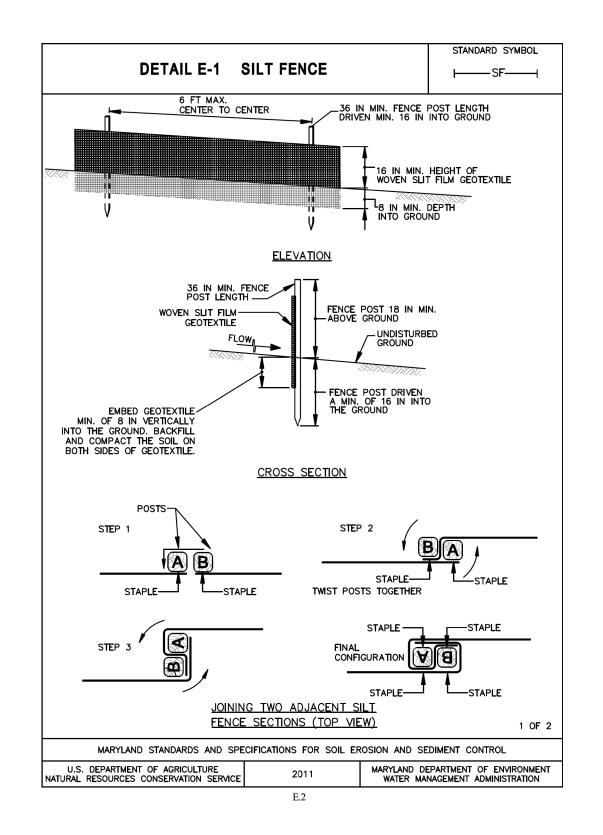
 DRAWING NO.
 ES-04
 OF
 07
 SHEET NO.
 49
 OF
 63

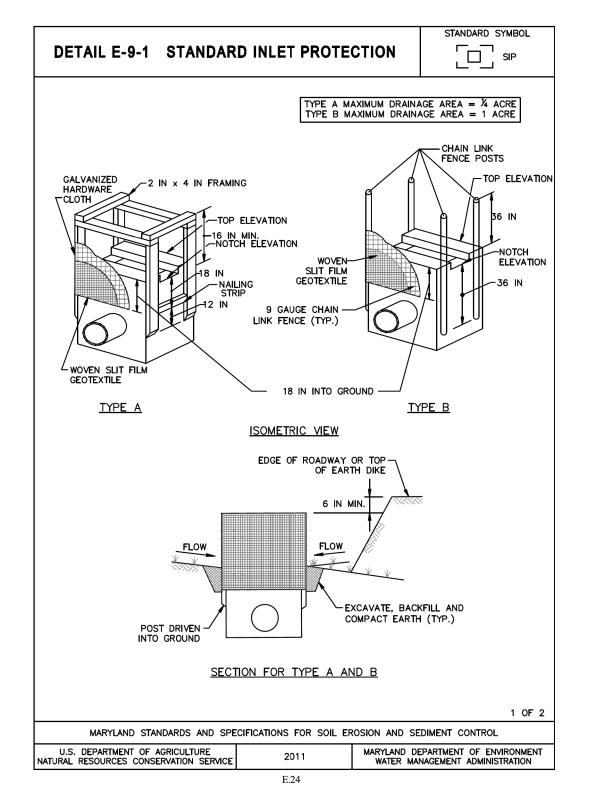
PLOTTED: 11/22/2022

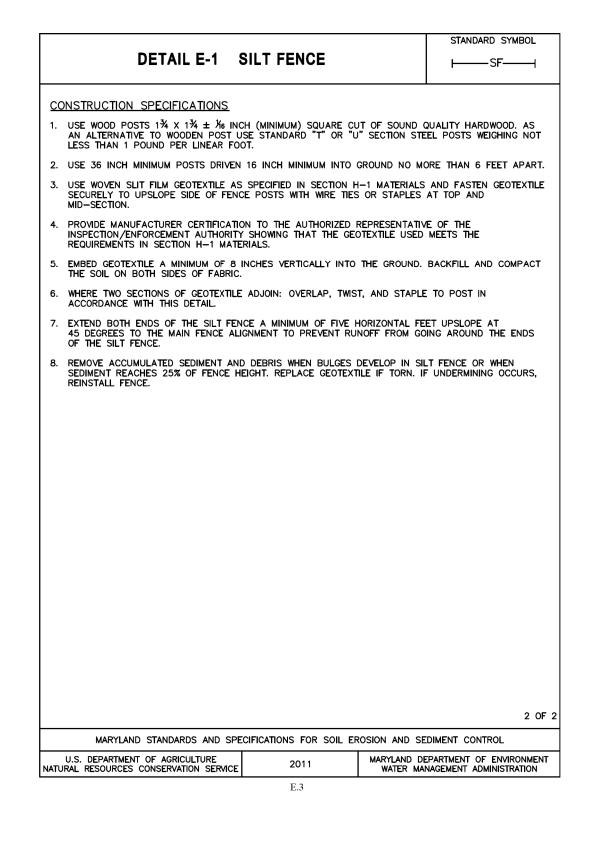


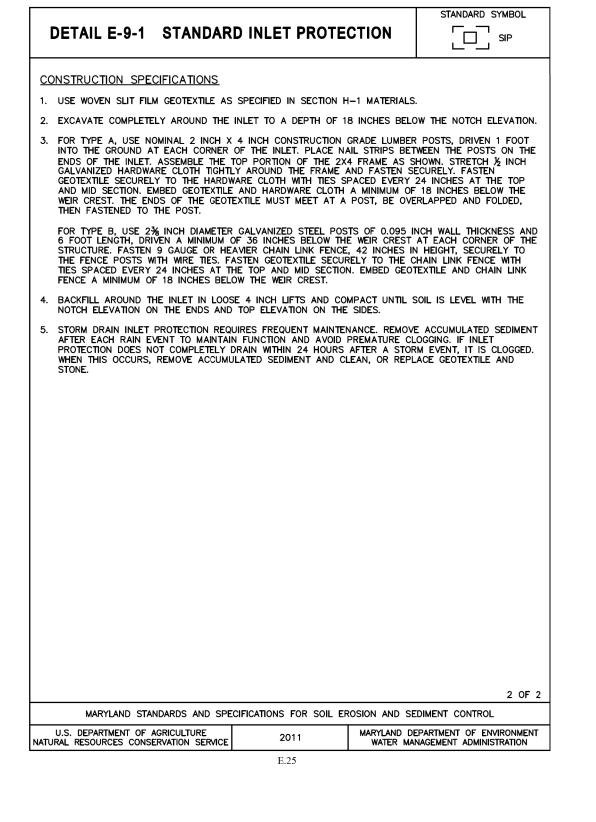


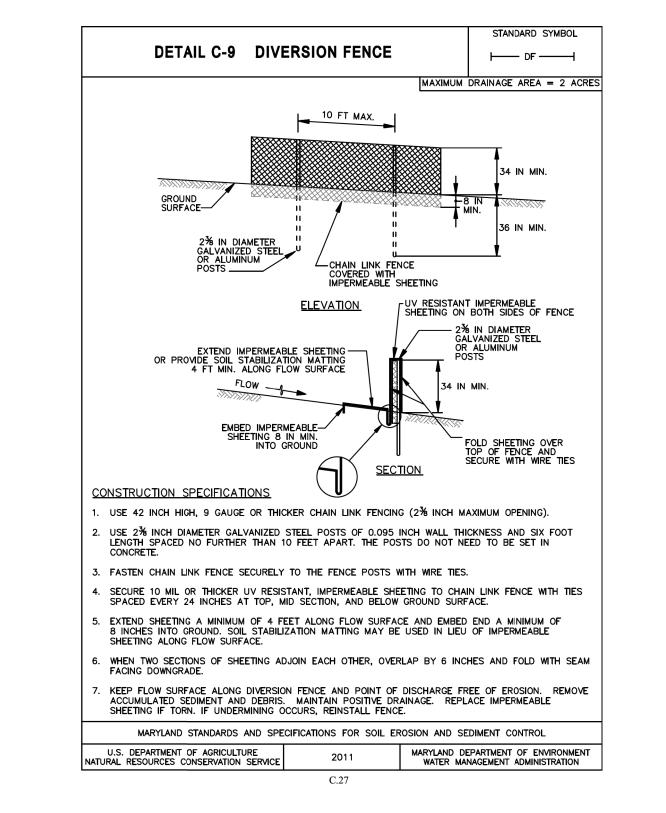












CONSULTANTS, INC.

OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND

CONTACT: DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION 240-777-7221

				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTA ROCKVILLE, MARYLAND	TION
				RECOMMENDED FOR APPROVAL	
				Chief, Transportation Planning and Design Section APPROVED	Date
				Chief, Division of Transportation Engineering	Date
NO.	REVISION	DATE	BY	DESIGNED BY <u>el</u> DRAWN BY <u>el</u> CHE	ECKED BY_MWM_

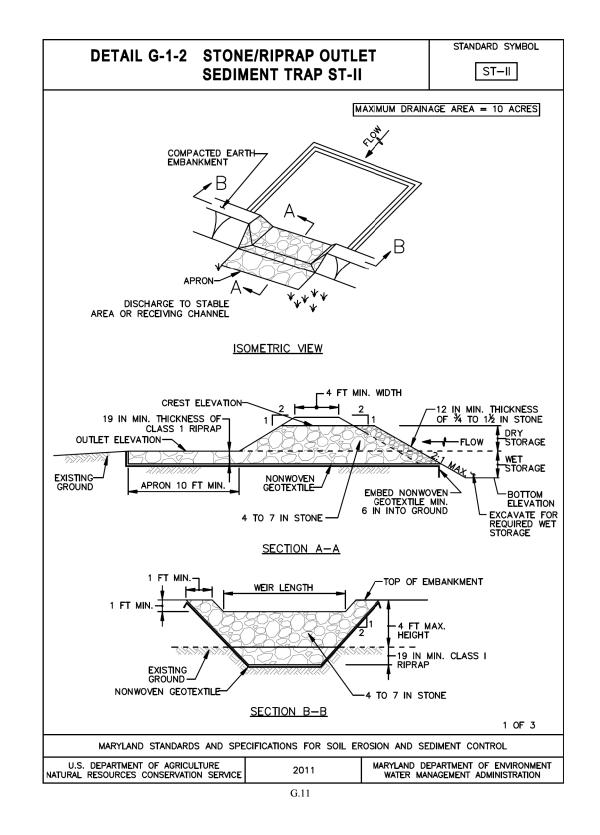
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD

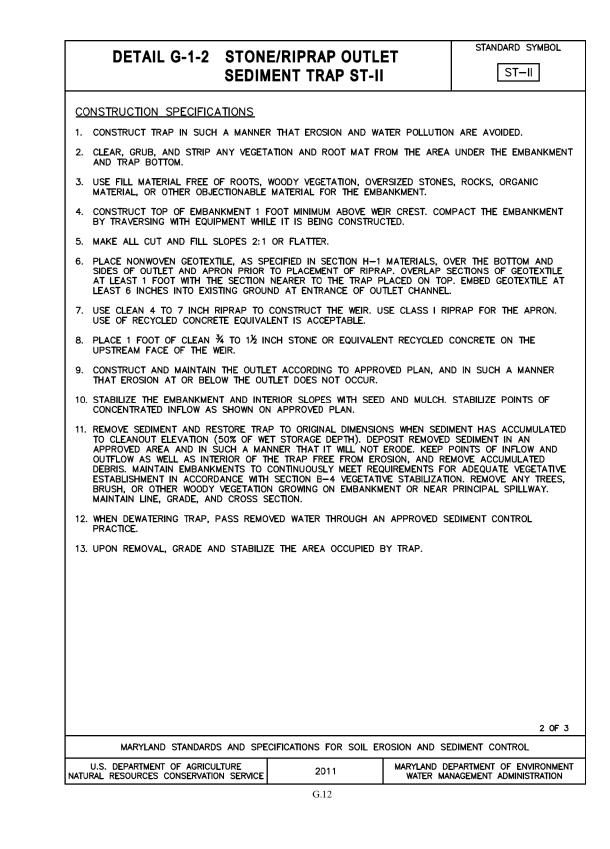
SC0007

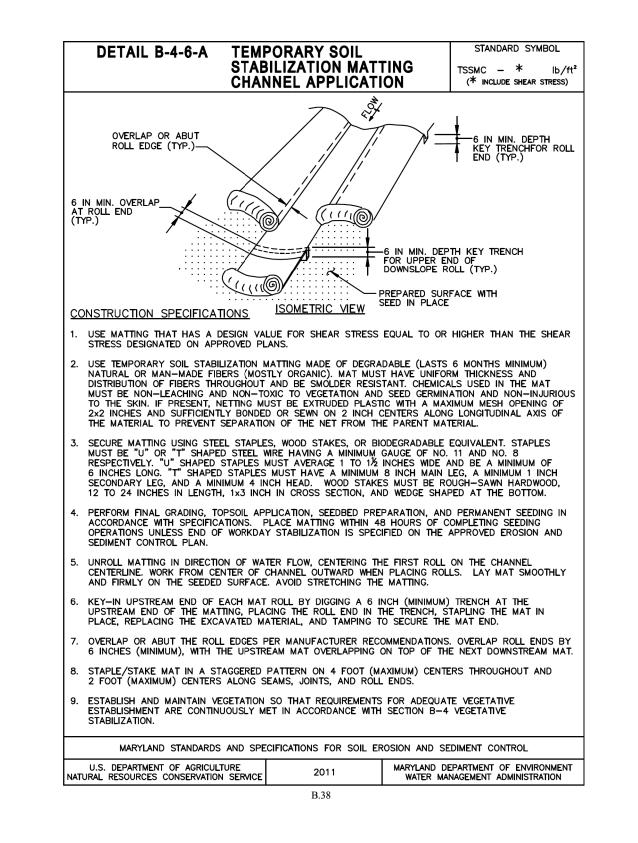
EROSION AND SEDIMENT DETAILS

DATE NOVEMBER 23, 2022 SCALE _

DRAWING NO. ES-06 OF 07 **SHEET NO.** 51 **OF** 63







MERCADO CONSULTANTS, INC.

OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND

<u>CONTACT:</u> DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION 240-777-7221

				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND					
				RECOMMENDED FOR APPROVAL					
				Chief, Transportation Planning and Design Section Date APPROVED					
				Chief, Division of Transportation Engineering Date					
NO.	REVISION	DATE	BY	DESIGNED BY <u>el</u> Drawn by <u>el</u> Checked by <u>mwm</u>	DF				

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD

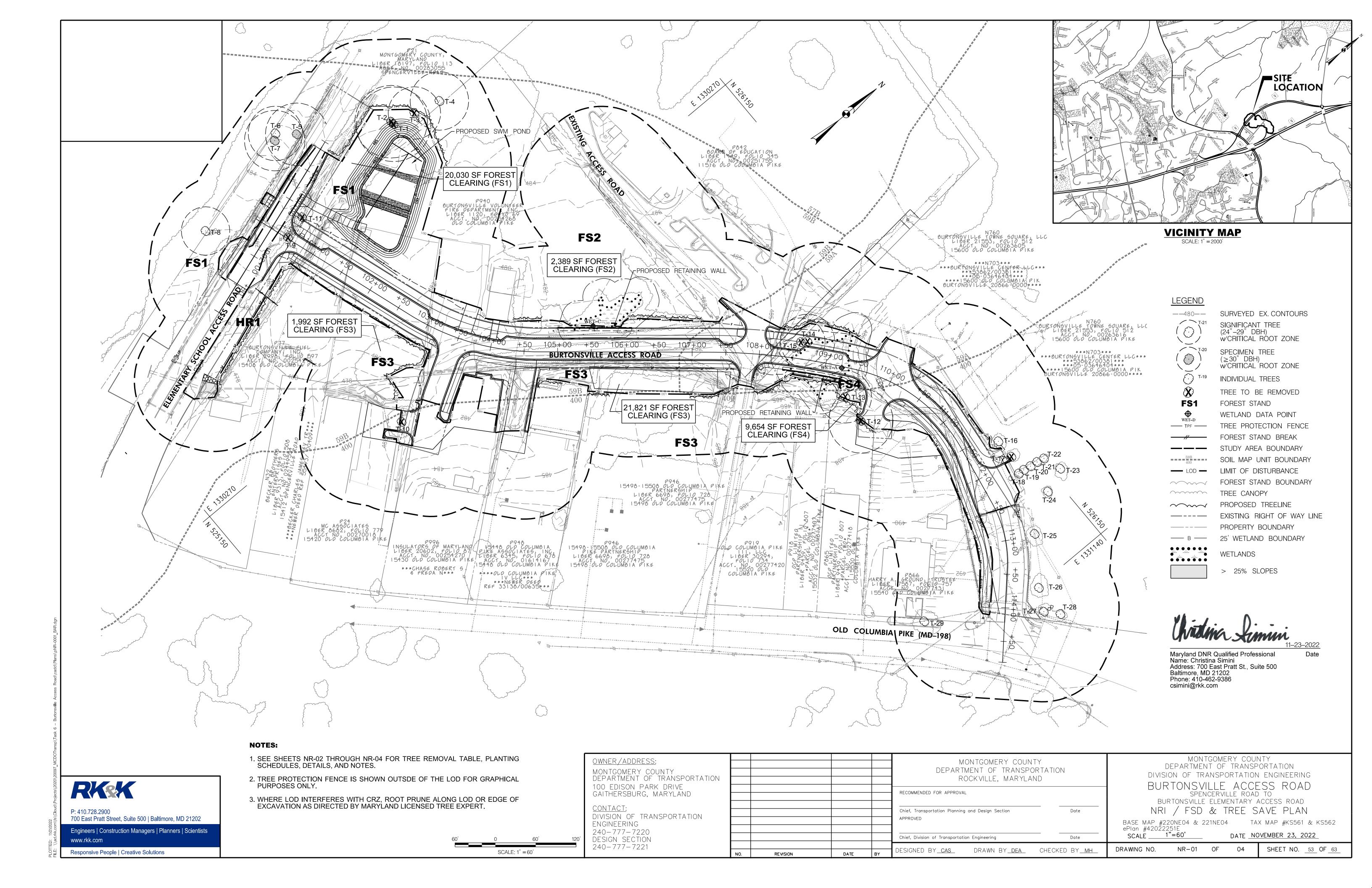
SC0008

SHEET NO. _52_ OF _63_

EROSION AND SEDIMENT DETAILS

SCALE N/A DATE NOVEMBER 23, 2022

DRAWING NO. ES-07 OF 07



RESOURCE DATA TABLE									
FEATURE	SQUARE FEET	ACRES							
TOTAL FORESTED AREA	54,147	1.24							
WETLANDS	4,606	0.11							
FORESTED WETLANDS	1,739	0.04							
100-YEAR FLOODPLAIN	0	0							
FORESTED FLOODPLAIN AREA	0	0							
STREAM BUFFER AREA	0	0							
FORESTED STREAM BUFFER AREA	0	0							

NOTE: ALL SQUARE FOOTAGE AND ACREAGE REFERS TO IMPACTS WITHIN LOD. FORESTED AREA DOES NOT INCLUDE FOREST IN WETLANDS.

TREE CONDITION ASESSMENT GUIDELINES:

EXCELLENT – healthy tree with exceptional growth form; no visible defects; well-formed crown; few minor dead branches acceptable; this tree condition is rare.

GOOD - healthy tree; very minor defects/decay acceptable with callous forming/complete; well-formed crown; minor lean and/or few minor/major dead branches acceptable; vines may be growing along trunk but not present within crown.

FAIR- health questionable/stress evident; structurally sound tree; defects present that do not affect structural integrity; moderate lean; minor/major dead branches may be present; crown not broken out but not necessarily well formed or even; vines may be growing along trunk and within crown.

Ex. Fair tree could be experiencing insect damage or exhibit a growth form that makes it very susceptible to wind damage in an open setting.

POOR - significant health problems; may be structurally unsound; may be dead or dying; may contain significant decay; may have broken or missing top/crown; may have heavy lean; vines may be significantly affecting tree health.

Note: These guidelines were developed in-house based on the professional judgment of our Certified Arborists and other senior environmental staff.

SOILS TABLE										
Map Unit Symbol	Map Unit Name	K-Factor*	Hydric Rating**	Highly Erodible	Drainage Class	Serpentine Soil	Prime Agricultural			
400	Urban land	-	0	No	-	No	No			
57B	Chillum silt loam, 3 to 8 percent slopes	0.49	0	No	Well drained	No	Yes			
59A	Belstville silt loam, 0 to 3 percent slopes	0.37	0	No	Moderately well drained	No	No			
59B	Belstville silt loam, 3 to 8 percent slopes	0.49	0	No	Moderately well drained	No	No			

*Erodibility Coefficient - Value assigned to soil types by NRCS. K > 0.35 are considered to be highly erodible soils outside of Montgomery County.

**Hydric Rating - Value is based on the percentage of hydric soils within the soil type. Non-hydric soils have a value of 0, predominatly non-hydric soils have a value between 0 and 33, partially hydric soils have a value between 33 and 66, predominantly hydric soils have a value between 66 and 99, and hydric soils have a value of 100.

	1				TREE INVE	NTORY TABLE
Tree Number	Scientific Name	Common Name	DBH	Condition	Removed	Comment
T-1^	Quercus palustris	Pin oak	37	Fair	Yes	Broken branches and dieback in crown, large branch removed, and unbalanced crown.
T-2^	Quercus coccinea	Scarlet oak	36	Good	Yes	Minor broken branches in the lower canopy.
T-3*	Nyssa sylvatica	Black gum	26	Fair	Yes	Broken branches in the crown, thin crown.
T-4*	Carya glabra	Pignut hickory	29	Good	No	Twin trunks splits above DBH and some broken branches in crown.
T-5^	Quercus velutina	Black oak	31	Fair	No	Twin trunks splits above DBH, branch dieback and broken branches in crown, and thin crown.
T-6*	Quercus coccinea	Scarlet oak	27	Fair	No	Leaning, unbalanced crown, and interfering branches from adjacent trees.
T-7^	Quercus coccinea	Scarlet oak	30	Fair	No	Twin trunks 27" stem, irregular branching structure, and included bark.
T-8*	Carya tomentosa	Mockernut hickory	24	Good	No	Slightly unbalanced crown.
T-9	Ailanthus altissima	Tree of heaven	5	Fair	Yes	Trunk wound, cracked and rotting bark on trunk, branch dieback in crown, and thin crown.
T-10	Quercus palustris	Pin oak	20	Fair	Yes	Minor deadwood in the lower canopy, dead branches, and dieback in the crown.
T-11	Pinus virginiana	Virginia pine	6	Fair	Yes	Twin trunks, one additional 5 inch, unbalanced crown, needle dieback, and located on slope along road.
T-12^	Acer saccharinum	Silver maple	32	Fair	Yes	Triple trunk above dbh, water sprouts, trunk damage, and large branch removed in lower canopy.
T-13*	Acer rubrum	Red maple	26	Fair	Yes	Bend in leader, exposed roots, and vines into crown.
T-14*	Acer rubrum	Red maple	27	Fair	Yes	Twin trunks splits above DBH, dead branches in crown, included bark, and exposed roots.
T-15*	Juniperus virginiana	Eastern red cedar	24	Fair	Yes	Needle and branch dieback in crown, vines entering crown from adjacent shrubs.
T-16	Gleditsia triacanthos	Thornless honey locust	3	Good	No	Four stems, three additional, 2 inches each.
T-17	Zelkova serrata	Japanese zelkova	9	Fair	Yes	Peeling and rotting bark, old guy wire never removed and now growing into trunk.
T-18	Lagerstroemia sp.	Crape myrtle	3	Good	No	Twin trunks, one additional 2 inch stem, minor pruning wounds healed.
T-19	Lagerstroemia sp.	Crape myrtle	2	Good	No	Triple trunks, two additional 2 inch stems, minor pruning wounds healed.
T - 20	Lagerstroemia sp.	Crape myrtle	3	Good	No	Triple trunks two additional 3 inch stems, minor pruning wounds healed.
T-21	Lagerstroemia sp.	Crape myrtle	3	Good	No	Triple trunks two additional 3 inch stems, minor pruning wounds healed.
T-22	Lagerstroemia sp.	Crape myrtle	3	Good	No	Triple trunks, one 3 inch and one 2 inch, minor pruning wounds healed.
T-23	Zelkova serrata	Japanese zelkova	7	Poor	No	10 inch trunk wound rotting, trunk damage, old guy wire never removed trunk growing around it.
T - 24	Zelkova serrata	Japanese zelkova	7	Good	No	Minor included bark.
T-25	Zelkova serrata	Japanese zelkova	5	Fair	No	Bark damage and rotting trunk wounds observed, dead branches in crown.
T-26	Zelkova serrata	Japanese zelkova	7	Good	No	Minor included bark, old guy wire never removed trunk growing around it.
T-27	Zelkova serrata	Japanese zelkova	7	Good	No	Minor included bark, old guy wire never removed trunk growing around it.
T-28	Zelkova serrata	Japanese zelkova	6	Good	No	Minor included bark, old guy wire never removed trunk growing around it.
T-29	Pyrus calleryana	Bradford pear	14	Fair	No	Slight lean, trunk wounds partially healed and partially rotting, topped, and utility pruning.

NOTE: Significant trees denoted with *. Specimen trees denoted with ^.

FOREST STAND DELINEATION - Methods

The investigation methods employed for this forest stand delineation were based on the Montgomery County Code Chapter 22A using methodology described in the Environmental Guidelines, Guidelines for Environmental Management of Development in Montgomery County (Maryland-National Capitol Park and Planning Commission (M-NCPPC), 2000); and Trees, Approved Technical Manual ((MNCPPC), 1992). The Trees, Approved Technical Manual defines a forest as "a biological community dominated by trees and other woody plants covering a land area of 10,000 square feet or greater. Forest includes (1) areas that have at least 100 trees per acre with at least 50% of those having a two-inch or greater diameter at 4.5 feet above the ground and larger; and (2) forest areas that have been cut but not cleared. Forest does not include orchards."

Topographic maps, soil surveys, and digital aerial photographs were reviewed to identify on-site soils and probable forest stand boundaries prior to field investigations. Forest stands were delineated based on community type, successional stage, and overall forest condition. An inventory of all individual and roadside trees outside of forest stands at diameter at breast height (4.5 feet, DBH), significant trees (≥ 24 inches and < 30 inches DBH), and specimen trees (\geq 30 inches DBH or 75% of the size of the state champion), if applicable, was completed within the study area. Species, DBH, and condition were recorded for each of the inventoried trees. The condition of each tree was assessed by an ocular estimation of growth form, visible signs of decay, live crown ratio, and indications of disease or insect infestation. Each inventoried tree was numbered consecutively and flagged with blue flagging. Data obtained from the field reconnaissance were collected with an iPad, and trees were located using GPS followed by traditional survey.

FOREST STAND DELINEATION – Results

RK&K environmental scientists conducted a walkthrough forest stand delineation within the project study area in October 2021. The field investigation identified four forest stands, designated as FS1, FS2, FS3, and FS4; one hedgerow, designated as H1; and 29 individual, roadside, significant, or specimen trees within the project study area.

FS1: Late-successional White Oak Association Forest

Forest stand 1 (FS1) is a late-successional White Oak Association forest located on the southwest side of the project study area, north of the intersection of Spencerville Road and Old Columbia Pike. Canopy closure is approximately 90 percent and the stand contains inclusions of significant and specimen trees. Dominant canopy species in FS1 are within the 12 to 20 inch and 20 to 30 inch DBH size and include southern red oak (Quercus falcata), pin oak (Quercus palustris), blackgum (Nyssa sylvatica), and white oak (Quercus alba). The understory is dominated by blackgum, pignut hickory (Carya glabra), sweet cherry (Prunus avium), and American holly (Ilex opaca). The herbaceous layer is dominated by greenbrier (Smilax rotundifolia), Amur honeysuckle (Lonicera maackii), wintercreeper (Euonymus fortuneii), and low-bush blueberry (Vaccinium pallidum). Downed woody debris is approximately 40 percent and invasive species cover is approximately 10 percent. Invasive species present include bush honeysuckle and wintercreeper. Overall, the forest stand is in good condition with a high retention value due to inclusion of significant and specimen trees and successional stage.

FS2: Mid-successional Silver Maple-American Elm Association Forest

Forest stand 2 (FS2) is a mid-successional Silver Maple-American Elm Association forest located south of and adjacent to Burtonsville Elementary School and surrounds Wetland C. Canopy closure is approximately 70 percent. Dominant canopy species in FS2 are within the 6 to 11 inch and 12 to 20 inch DBH size class and include red maple (Acer rubrum) and American elm (Ulmus americana). Dead green ash (Fraxinus pennsylvanica) was observed throughout the stand and inclusions of silver maple (Acer saccharinum) and eastern cottonwood (Populus deltoides) were observed. The understory is dominated by Amur honeysuckle, green ash, Bradford pear (Pyrus calleryana), common persimmon (Diospyros virginiana), willow species (Salix sp.), and poison ivy (Toxicodendron radicans). Dominant species in the herbaceous layer include multiflora rose (Rosa multiflora), Japanese stilt grass (Microstegium vimineum), deer-tongue grass (Dichanthelium clandestinum), and poison ivy. Downed woody debris is approximately 30 percent and invasive species cover is approximately 45 percent. Invasive species present include Bradford pear, Japanese stilt grass, and multiflora rose. Overall, the stand is in fair condition with a high retention value due to its location within nontidal wetland buffers.

FS3: Early-successional Red Maple Association Forest

Forest stand 3 (FS3) is an early-successional Red Maple Association forest located south of Wetlands B and C and surrounds several businesses. Canopy closure is approximately 40 percent. Dominant canopy species in FS3 are within the 6 to 11 inch DBH size class with inclusions of trees greater than 12 inches DBH and include red maple, willow species, eastern cottonwood, and black locust (Robinia pseudoacacia). The understory is dominated by Amur honeysuckle, willow species, silk tree (Albizia julibrissin), and green ash. Dominant species in the herbaceous layer include Virginia creeper (Parthenocissus quinquefolia), grape species (Vitis sp.), and Japanese honeysuckle (Lonicera japonica). Downed woody debris is approximately 35 percent and invasive species cover is approximately 75 percent. Invasive species present include silk tree and Japanese honeysuckle. Overall, the stand is in fair condition with a low retention value due to high invasive species cover, trash throughout the stand, and the absence of wetland features, waterway features, or significant/specimen trees.

FS4: Mid-successional Silver Maple-American Elm Association Forest

Forest stand 4 (FS4) is a mid-successional Silver Maple-American Elm Association Forest located between Burtonsville Elementary School and the Burtonsville Town Shopping Center and includes Wetland A. Three significant trees and dead ash trees in the center of the stand were observed within FS4. Canopy closure is approximately 40 percent. Dominant canopy species in FS4 are within the 6 to 11 inch and 12 to 20 inch DBH size class and include red maple and silver maple. The understory is dominated by green ash, common persimmon, multiflora rose, pin oak, grape species, and amur honeysuckle. Some willow species and eastern red cedar (Juniperus virginiana) were also observed in the understory. Dominant species in the herbaceous layer include Virginia creeper, greenbrier, poison ivy, Japanese stilt grass, English ivy (Hedera helix), aster species, and deer-tongue grass. Downed woody debris is approximately 80 percent and invasive species cover is approximately 50 percent. Invasive species present include Japanese stilt grass and English ivy. Overall, the stand is in fair condition with a high retention value due to its function as a buffer for a forested wetland and inclusion of several significant and one specimen tree.

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240-777-7221	NO.	REVISION	DATE	BY	DESIGNED BY <u>cas</u> Drawn by <u>dea</u> C	HECKED BY <u>MH</u>	DRAW
240-777-7220 DESIGN SECTION					——————————————————————————————————————	 Date	SC
CONTACT: DIVISION OF TRANSPORTATION ENGINEERING					Chief, Transportation Planning and Design Section APPROVED	Date	BAS ePlo
DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND					ROCKVILLE, MARYLAND RECOMMENDED FOR APPROVAL		
OWNER/ADDRESS: MONTGOMERY COUNTY					MONTGOMERY COUNTY Department of transport	ATION	

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD NRI / FSD NOTES AND TABLES BASE MAP #220NE04 & 221NE04 TAX MAP #KS561 & KS562 Plan #42022251E DATE NOVEMBER 23, 2022

SCALE _ NR-02 OF SHEET NO. 54 OF 63 WING NO. 04

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TREE SAVE NOTES:

- 1. TREE SAVE PLAN WAS PREPARED BY CHRISTINA SIMINI, QP, CA, LTE. FIELD DATA COLLECTED BY STACEY YOUNG, QP, AND ANITA ALEXANDER, QP, ON OCTOBER 11 AND 13, 2021.
- 2. SEE FOREST STAND DELINEATION RESULTS ON SHEET NR-02 FOR DESCRIPTION OF FOREST STANDS.
- 3. THE PROPOSED LIMITS OF DISTURBANCE ARE 175,970 SF, WHICH INCLUDES 55,886 SF OF FOREST REMOVAL (1,739 SF WITHIN WETLANDS). THE PROPOSED WORK ALSO INCLUDES THE REMOVAL OF 11 INDIVIDUAL TREES -FOUR SIGNIFICANT TREES, THREE SPECIMEN TREES, AND FOUR ROADSIDE
- 4. THREE SPECIMEN TREES (TOTAL DBH OF 105") WILL BE REMOVED AS A RESULT OF THE PROJECT. SPECIMEN TREE IMPACTS WILL BE MITIGATED ON-SITE WITH 1" OF REPLACEMENT FOR EVERY 4" OF CALIPER REMOVED. SEE LANDSCAPE PLANS ON SHEETS 60 THROUGH 63 FOR MITIGATION REQUIREMENTS.
- 5. FOREST IMPACTS WILL BE MITIGATED BY REFORESTATION AT A 1:1 RATIO. SEE LANDSCAPE PLANS ON SHEETS 60 THROUGH 63 FOR MITIGATION REQUIREMENTS.

		FOREST STAND DESCRIPTION TABLE		
CATEGORY	FS1	FS2	FS3	FS4
ACREAGE*	0.48	0.07	0.56	0.27
DOMINANT/CO-DOMINANT SPECIES	Southern red oak, pin oak, black gum, white oak	Red maple, American elm	Red maple, willow species, eastern cottonwood, black locust Red maple and silver ma	
SIZE CLASS	12-20" and 20-30"	6-11" and 12-20"	6-11"	6-11" and 12-20"
PERCENT CANOPY CLOSURE	90	70	40	40
NUMBER OF CANOPY LAYERS	3	3	3	3
% OF FOREST FLOOR COVERED BY HERBACEOUS PLANTS	25	80	85	90
% DOWNED WOODY MATERIAL	40	30	35	80
INVASIVE SPECIES	Bush honeysuckle and wintercreeper	Bradford pear, Japanese stilt grass, multiflora rose	Silk tree and Japanese honeysuckle	Japanese stilt grass and English ivy
CONDITION	Good	Fair	Fair	Fair
FUNCTION	High habitat value	Moderate habitat value	Low habitat value	Moderate habitat value
RETENTION POTENTIAL	Priority Area 1 - High - inclusion of multiple significant and specimen trees	Priority Area 1 - High - inclusion of wetland	Priority Area 3 - Low - no wetlands or waterways, no significant/specimen trees, early successional stage	Priority Area 1 - High - inclusion of wetland, multiple significant, and one specimen trees
TRANSPLANT AND REGENERATION POTENTIAL	Moderate	Moderate	Moderate	Moderate
FIELD OBSERVATIONS	Specimen and significant trees within forest stand, mature successional stage, low invasive cover, sparse herbaceous layer.	Emergent wetlands on edge of forest stand, inclusion of Bradford pear stand, may have previously had different hydrology.	Dead ash trees, sparse herbaceous layer, trash throughout, ditch running through stand, steep slopes	Forested wetland within center of forest stand, some significant and one specimen tree, dead green ash in center of forested wetland.

*Within LOD

NRI/FSD NOTES:

- 1. THE PROJECT STUDY AREA IS LOCATED ON THE BELOW PRIVATE
 - a. TAX ID NO. 05-00251755, OWNED BY BOARD OF EDUCATION, 15516
- OLD COLUMBIA PIKE, BURTONSVILLE, MD, 6.81 AC; b. TAX ID NO. 05-03646404, OWNED BY BURTONSVILLE CENTER LLC,
- OLD COLUMBIA PIKE, BURTONSVILLE, MD, 26.25 AC; c. TAX ID NO. 05-00277431, OWNED BY ARBAIZA INVESTMENTS OF
- BURTONSVILLE, 15540 OLD COLUMBIA PIKE, BURTONSVILLE, MD, 1.05
- d. TAX ID NO.S 05-00277418 & 05-00277407, OWNED BY OCP LIMITED PARTNERSHIP 2, 15530 & 15532 OLD COLUMBIA PIKE, BURTONSVILLE, MD, 0.47 & 0.36 AC;
- e. TAX ID NO. 05-00277420, OWNED BY OLD COLUMBIA PIKE 3RD LLC, 15520 OLD COLUMBIA PIKE, BURTONSVILLE, MD, 0.74 AC;
- f. TAX ID NO. 05-00277475, OWNED BY 15498-15508 OCP PTNSHP, 15498 OLD COLUMBIA PIKE, BURTONSVILLE, MD, 1.93 AC;
- g. TAX ID NO.S 05-01614167 & 05-01614156, OWNED BY OLD COLUMBIA PIKE IV LLC, 15448 & 15440 OLD COLUMBIA PIKE, BURTONSVILLE, MD, 0.59 & 0.27 AC;
- h. TAX ID NO. 05-00254270, OWNED BY ROBERT S & FREDA N CHASE, 15430 OLD COLUMBIA PIKE, BURTONSVILLE, MD, 1.00 AC;
- TAX ID NO. 05-00270018, OWNED BY MC ASSOCIATES, 15420 OLD COLUMBIA PIKE, BURTONSVILLE, MD, 0.95 AC;
- TAX ID NO. 05-00254246, OWNED BY BURTONSVILLE FUEL COMPANY INC, 15408 OLD COLUMBIA PIKE, BURTONSVILLE, MD, 1.44 AC;
- k. TAX ID NO. 05-00249945, OWNED BY M-NCPPC, 15501 ATHEY RD, BURTONSVILLE, MD, 15.42 AC;
- I. TAX ID NO. 05-00254268, OWNED BY BURTONSVILLE VOLUNTEER FIRE DEPARTMENT, OLD COLUMBIA PIKE, BURTONSVILLE, MD, 3.78
- m. TAX ID NO. 05-00283055, OWNED BY MONTGOMERY COUNTY MARYLAND, SPENCERVILLE RD, BURTONSVILLE, MD, 3.06 AC;
- n. TAX ID NO. 05-02449554, OWNED BY JAMES CHARLES BECKER, REV TR, 15412 SPENCERVILLE CT, SPENCERVILLE, MD, 0.41 AC;
- o. AND STATE OF MARYLAND RIGHT-OF-WAY (NO TAX ID NO. OR PARCEL INFORMATION). THE TOTAL PROJECT STUDY AREA IS 16.40 ACRES. THE PROJECT LOD IS 4.19 ACRES.
- 2. PROPERTY BOUNDARIES WERE OBTAINED FROM PUBLICLY AVAILABLE MONTGOMERY COUNTY GIS DATA. SOILS DATA WERE OBTAINED FROM THE MONTGOMERY COUNTY SOIL SURVEY.

- 3. DIAMETERS OF INDIVIDUAL, SIGNIFICANT, OR SPECIMEN TREES WERE MEASURED AT DBH USING A FORESTRY DIAMETER TAPE. THE TREE INVENTORY IDENTIFIED 29 INDIVIDUAL TREES OUTSIDE OF FOREST STANDS, AND 7 SIGNIFICANT (24"-29" DBH) TREES AND 5 SPECIMEN TREES (>30" DBH) WITHIN FOREST STANDS IN THE PROJECT STUDY AREA. NO NATIONAL, STATE, OR COUNTY CHAMPION TREES OR TREES AT 75% OF THE CURRENT STATE CHAMPION WERE OBSERVED WITHIN THE PROJECT STUDY AREA.
- 4. NRI/FSD PLANS WERE PREPARED BY CHRISTINA SIMINI, QP, CA. FIELD DATA COLLECTED BY STACEY YOUNG, QP, AND ANITA ALEXANDER, QP, ON OCTOBER 11 AND 13, 2021.
- 5. A WETLAND AND WATERWAY DELINEATION WAS CONDUCTED WITHIN THE PROJECT STUDY AREA AND FEATURE BOUNDARIES WERE COLLECTED USING TRADITIONAL SURVEY AND GPS. ONE INTERMITTENT WATERWAY WAS IDENTIFIED AND ONE PALUSTRINE FORESTED WETLAND AND ONE PALUSTRINE EMERGENT WETLAND WAS IDENTIFIED WITHIN THE PROJECT STUDY AREA DURING FIELD INVESTIGATIONS.
- 6. 100-YEAR FLOODPLAIN DATA ARE FROM FEDERAL FEMA GIS DATA. PANEL NO.S 24031C0380D AND 24031C0385D (EFFECTIVE DATE 9/29/2006) ZONE X ARE OF MINIMAL FLOOD HAZARD WITHIN THE PROJECT STUDY AREA. FEMA FLOODPLAIN MAPPING INDICATES THAT NO 100-YEAR FLOODPLAIN IS LOCATED WITHIN THE PROJECT STUDY AREA.
- 7. AREAS OF STEEP SLOPES (25% OR GREATER) OCCUR ALONG THE EDGE OF BURTONSVILLE ACCESS ROAD BETWEEN THE TWO AREAS OF FOREST STAND 1 AND WITHIN THE EASTERN PORTION OF FOREST STAND 1; ALONG THE NORTHERN EDGE OF FOREST STAND 2; THE CENTER LENGTH OF FOREST STAND 3: AND SMALL AREAS OF FOREST
- 8. AN RTE INFORMATION REQUEST LETTER WAS SUBMITTED TO DNR-WH ON NOVEMBER 17, 2021. A LETTER RESPONSE FROM DNR-WH DATED JANUARY 4, 2022, INDICATES THAT THERE ARE NO STATE RTE RECORDS WITHIN THE BOUNDARIES OF THE PROJECT STUDY AREA. THE MDNR-ERP ONLINE AQUATIC RESOURCES PRE-SCREENING TOOL DID NOT INDICATE THE PRESENCE OF ANY SENSITIVE SPECIES PROJECT REVIEW AREAS OR TROUT POPULATIONS WITHIN THE BURTONSVILLE ACCESS ROAD PROJECT STUDY AREA. THE MAJORITY OF THE PROJECT STUDY AREA IS WITHIN A TIER II CATCHMENT WITH ASSIMILATIVE CAPACITY. A USFWS IPAC ONLINE DATABASE SEARCH CONDUCTED ON OCTOBER 21, 2021, INDICATES THAT ONE FEDERAL THREATENED SPECIES, THE NORTHERN LONG-EARED BAT (NLEB) (MYOTIS SEPTENTRIONALIS) MAY OCCUR, AND NO CRITICAL HABITATS OCCUR

WITHIN THE PROJECT STUDY AREA. SINCE THE BURTONSVILLE ACCESS ROAD PROJECT PROPOSES TO CLEAR LESS THAN 15 ACRES OF FOREST AND DOES NOT CONTAIN WATERWAYS, THE PROJECT WILL NOT HAVE AN ADVERSE EFFECT ON NLEB HABITAT.

- 9. NO RTE SPECIES WERE OBSERVED ON SITE.
- 10. A CULTURAL RESOURCE INFORMATION REQUEST SENT ON NOVEMBER 18, 2021. A RESPONSE RECEIVED FROM MONTGOMERY COUNTY PLANNING ON DECEMBER 15, 2021, INDICATED THAT NO HISTORIC AND CULTURAL RESOURCES WOULD BE AFFECTED WITHIN THE PROJECT STUDY AREA.
- 11. THE PROJECT AREA IS LOCATED WITHIN THE ANACOSTIA RIVER WATERSHED (MDE 8-DIGIT 02140205) AND THE ROCKY GORGE DAM WATERSHED (MDE 8-DIGIT 02131107), BOTH WITH THE DESIGNATED STREAM USE CLASS I-P, WATER CONTACT RECREATION, PROTECTION OF AQUATIC LIFE, AND PUBLIC WATER SUPPLY.
- 12. THE PROJECT IS LOCATED OUTSIDE OF SPECIAL PROTECTION AND PRIMARY MANAGEMENT AREAS.
- 13. FIELD SURVEY WAS CONDUCTED FOR THE MAJORITY OF THE PROJECT STUDY AREA AND SUPPLEMENTED WITH 2-FOOT GIS CONTOURS.
- 14. THE PURPOSE OF THE PROJECT IS TO EXTEND BURTONSVILLE ACCESS ROAD FROM THE INTERSECTION OF BURTONSVILLE TOWN SQUARE SHOPPING CENTER AT OLD COLUMBIA PIKE/MD-198 TO THE BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD, LOCATED IN SILVER SPRING, MONTGOMERY COUNTY, MARYLAND, THE PROJECT INCLUDES THE CONSTRUCTION OF THE BURTONSVILLE ACCESS ROAD (DISTANCE OF APPROXIMATELY 1,300 LINEAR FEET), A 10-FOOT-WIDE SHARED USE PATH ON THE NORTH SIDE OF THE BURTONSVILLE ACCESS ROAD, MODIFICATIONS TO EXISTING DRIVEWAYS AND PARKING LOTS, AND ADJUSTMENTS TO EXISTING CURB LINES AND SIDEWALKS WHERE THE BURTONSVILLE ACCESS ROAD CONNECTS TO OLD COLUMBIA PIKE/MD-198 AND THE BURTONSVILLE ELEMENTARY SCHOOL ACCESS ROAD.
- 15. THIS PROJECT QUALIFIES FOR AN FCP EXEMPTION UNDER SECTIONS 22A-5(E) AND 22A-9. SEE TREE SAVE NOTES FOR DETAILS ON FOREST CLEARING AND TREE REMOVALS.
- 16. THE COMMERICAL PROPERTIES ARE ZONED AS COMMERCIAL RESIDENTIAL TOWN AND THE SCHOOL PROPERTY IS ZONED AS RURAL. ALL PROPERTIES ARE WITHIN THE DISTRICT 5 ELECTION DISTRICT.

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240-777-7221			DESIGNED BY CAS DRAWN
DESIGN SECTION	-		
DESIGN SECTION			Chief, Division of Transportation Engineering
240-777-7220			
ENGINEERING			APPROVED
DIVISION OF TRANSPORTATION			Chief, Transportation Planning and Design S
CONTACT:			<u> </u>
GAITHERSBURG, MARYLAND			NECOMMENDED FOR ALL NOVAL
100 EDISON PARK DRIVE			RECOMMENDED FOR APPROVAL
DEPARTMENT OF TRANSPORTATION			ROCK VILLE,
MONTGOMERY COUNTY			DEPARTMENT OF
OWNER/ADDRESS:			MONTGOME

REVISION

DATE

BY

MONTGOMERY COUNTY MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING ROCKVILLE, MARYLAND BURTONSVILLE ACCESS ROAD COMMENDED FOR APPROVAL SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD NRI / FSD NOTES AND TABLES lief, Transportation Planning and Design Section Date BASE MAP #220NE04 & 221NE04 TAX MAP #KS561 & KS562 ePlan #42022251E Date

DRAWING NO.

DRAWN BY<u>DEA</u> CHECKED BY<u>MH</u>

DATE NOVEMBER 23, 2022 SCALE

NR-03 OF SHEET NO. 55 OF 63 04

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INSPECTIONS

All field inspections must be requested by the applicant.

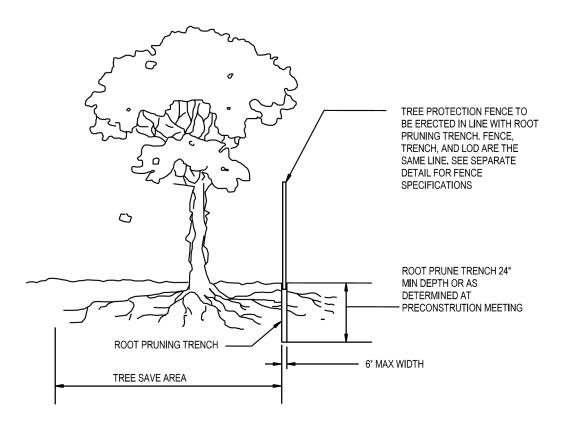
Field Inspections must be conducted as follows:

Plans without Planting Requirements

- 1. After the limits of disturbance have been staked and flagged, but before any clearing or
- 2. After necessary stress reduction measures have been completed and protection measures have been installed, but before any clearing and grading begin and before release of the
- 3. After completion of all construction activities, but before removal of tree protection fencing, to determine the level of compliance with the provision of the forest

Additional Requirements for Plans with Planting Requirements

- 4. Before the start of any required reforestation and afforestation planting.
- 5. After the required reforestation and afforestation planting has been completed to verify that the planting is acceptable and prior to the start the maintenance period.
- 6. 2 years after reforestation and afforestation have been completed, to determine survival and assess necessary maintenance activities for the remaining duration of the maintenance and management period.
- 7. At the end of the maintenance period to determine the level of compliance with the provisions of the planting plan, and if appropriate, release of the performance bond.



1. RETENTION AREAS WILL BE SET AS PART OF THE REVIEW PROCESS AND PRECONSTRUCTION

2. BOUNDARIES OF RETENTION AREAS MUST BE STAKED AT THE PRECONSTRUCTION MEETING AND FLAGGED PRIOR TO TRENCHING.

3. EXACT LOCATION OF TRENCH SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FOREST CONSERVATION (FC) INPECTOR.

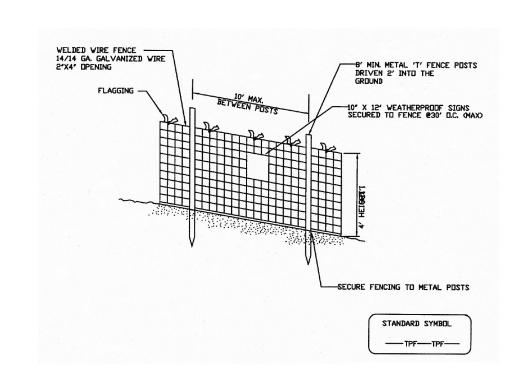
4. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH EXCAVATED SOIL OR OTHER ORGANIC SOIL AS SPECIFIED PER PLAN OR BY THE FC INSPECTOR.

5. ROOTS SHALL BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE

6. ALL PRUNING MUST BE EXECUTED WITH LOD SHOWN ON PLANS OR AS AUTHORIZED IN WRITING BY THE FC INSPECTOR.

ROOT PRUNING DETAIL

Tree Protection Fence Detail Not to scale



NOTES

- 1. Practice may be combined with sediment control
- 2. Location and limits of fencing should be coordinated in field with arborist.
- Boundaries of protection area should be staked
- prior to installing protective device.
- Root damage should be avoided.
- Protection signage is required.
- Fencing shall be maintained throughout construction.

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Sequence of Events for Properties Required to Comply With Forest Conservation Plans, Exemptions from Submitting Forest Conservation Plans, and Tree Save Plans

The property owner is responsible for ensuring all tree protection measures are performed in accordance with the approved tree save plan, and as modified in the field by a Planning Department Forest Conservation Inspector. The measures must meet or exceed the most recent standards published by the American National Standards Institute (ANSI A300).

Pre-Construction

- 1. An on-site pre-construction meeting is required after the limits of disturbance have been staked and flagged and before any land disturbance.
- 2. The property owner must arrange for the meeting and following people must participate at the pre-construction meeting: the property owner or their representative, construction superintendent, International Society of Arboriculture (ISA) certified arborist/Maryland Licensed Tree Expert (representing owner) that will implement the tree protection measures, The Planning Department Forest Conservation Inspector, and Montgomery County Department of Permitting Services (DPS) Sediment Control Inspector. The purpose of this meeting is to verify the limits of disturbance and discuss specific tree protection and tree care measures shown on the approved plan. No land disturbance shall begin before tree protection and stress-reduction measures have been implemented and approved by the Planning Department's Forest Conservation Inspector.
 - a. Typical tree protection devices include:
 - i. Chain link fence (four feet high) ii. Super silt fence with wire strung between the support poles (minimum 4
 - feet high) with high visibility flagging. iii. 14 gauge, 2 inch x 4 inch welded wire fencing supported by steel T-bar posts (minimum 4 feet high) with high visibility flagging.
 - b. Typical stress reduction measures may include, but are not limited to: i. Root pruning with a root cutter or vibratory plow designed for that purpose. Trenchers are not allowed, unless approved by the Forest
 - Conservation Inspector ii. Crown Reduction or pruning
 - iii. Watering
 - iv. Fertilizing
 - v. Vertical mulching vi. Root aeration systems
- Measures not specified on the Forest Conservation Plan may be required as determined by the Forest Conservation Inspector in coordination with the property owner's arborist.
- 3. A Maryland Licensed Tree expert must perform, or directly supervise, the implementation of all stress reduction measures. Documentation of the process (including photographs) may be required by the Forest Conservation Inspector, and will be determined at the pre-construction meeting.

- 4. Temporary tree protection devices must be installed per the approved Tree Save Plan and prior to any land disturbance. The Forest Conservation Inspector, in coordination with the DPS Sediment Control Inspector, may make field adjustments to increase the survivability of trees and forest shown as saved on the approved plan.
- 5. Tree protection fencing must be installed and maintained by the property owner for the duration of construction project and must not be altered without prior approval from the Forest Conservation Inspector. All construction activity within protected tree and forest areas is prohibited. This includes the following activities:
- a. Parking or driving of equipment, machinery or vehicles of any type.
- b. Storage of any construction materials, equipment, stockpiling, fill, debris, etc. c. Dumping of any chemicals (i.e., paint thinner), mortar or concrete remainder,
- trash, garbage, or debris of any kind. d. Felling of trees into a protected area.
- e. Trenching or grading for utilities, irrigation, drainage, etc.
- 6. Forest and tree protection signs must be installed as required by the Forest Conservation Inspector. The signs must be waterproof and wording provided in both English and

During Construction

- 7. Periodic inspections will be made by the Forest Conservation Inspector. Corrections and repairs to tree protection devices must be completed within the timeframe given by the
- 8. The property owner must immediately notify the Forest Conservation Inspector of any damage to trees, forests, understory, ground cover, and any other undisturbed areas shown on the approved plan. Remedial actions, and the relative timeframes to restore these areas, will be determined by the Forest Conservation Inspector.

Post-Construction

- 9. After construction is completed, but before tree protection devices have been removed, the property owner must request a final inspection with the Forest Conservation Inspector. At the final inspection, the Forest Conservation Inspector may require additional corrective measures, which may include:
 - a. Removal, and possible replacement, of dead, dying, or hazardous trees b. Pruning of dead or declining limbs
 - c. Soil aeration d. Fertilization
 - e. Watering f. Wound repair
- g. Clean up of retention areas, including trash removal
- 10. After the final inspection and completion of all corrective measures the Forest

REVISION

Conservation Inspector will request all temporary tree and forest protection devices be removed from the site. Removal of tree protection devices that also operate for erosion and sediment control must be coordinated with both DPS and the Forest Conservation Inspector and cannot be removed without permission of the Forest Conservation Inspector. No additional grading, sodding, or burial may take place after the tree protection fencing is removed.

11. Long-term protection measures, including permanent signage, must be installed per the approved plan. Installation will occur at the appropriate time during the construction project. Refer to the approved plan drawing for the long-term protection measures to be installed.

OWNER/ADDRESS: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND

CONTACT: DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220 DESIGN SECTION

240-777-7221

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND RECOMMENDED FOR APPROVAL Chief, Transportation Planning and Design Section APPROVED Chief, Division of Transportation Engineering Date DRAWN BY<u>DEA</u> CHECKED BY<u>MH</u> DESIGNED BY <u>CAS</u>

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD NRI / FSD TREE SAVE DETAILS

BASE MAP #220NE04 & 221NE04 TAX MAP #KS561 & KS562 ePlan #42022251E DATE NOVEMBER 23, 2022

SCALE NR-04 OF SHEET NO. 56 OF 63 DRAWING NO.

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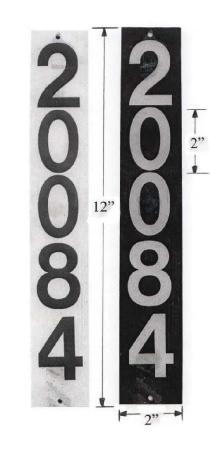
RKSK

P: 410.728.2900

GENERAL NOTES

- 1. THE PROPOSED ROADWAY LIGHTING SHALL BE SINGLE PHASE 120/240V WITH AN OPERATING VOLTAGE OF 240V.
- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THIS PLAN ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE PROPOSED EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- 3. THE CONTRACTOR SHALL ARRANGE A MEETING WITH BGE, THE PROJECT ENGINEER, AND THE MCDOT TO ENSURE THAT POWER IS AVAILABLE WHEN REQUIRED.
- THE PROPOSED LIGHT FIXTURES SHALL BE WASHINGTON GLOBE 70 WATT LED LUMINAIRES WITH TYPE III DISTRIBUTION. ALL LED FIXTURE CHOICES MUST BE APPROVED BY MCDOT AND BGE.
- BGE SHALL INSTALL THREE RUNS OF NO. 10 AWG CABLE BETWEEN THE POST-TOP LUMINAIRE AND THE ADJACENT BGE SPLICE BOX. ONE RUN SHALL INCLUDE GREEN INSULATION AND SHALL BE CONNECTED TO THE GROUNDING LUG OR GROUND ROD TO PROVIDE FOR GROUNDING OF THE LUMINAIRE, 3 FT OF EACH CABLE SHALL BE COILED IN THE SPLICE BOX FOR CONNECTION BY
- 6. ALL PROPOSED CABLE ENERGIZING PROPOSED LIGHTING STRUCTURES SHALL BE NEW.
- THE LIGHT POLES, FOUNDATIONS, CONDUITS, CABLES AND ANCILLARY LIGHTING EQUIPMENT ALONG BURTONSVILLE ACCESS ROAD WILL BE WIRED, ENERGIZED, AND MAINTAINED BY BGE FOR
- THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IN CASE OF DAMAGE TO AN EXISTING FACILITY.
- 9. LIGHTING STRUCTURES SHALL HAVE A MINIMUM LATERAL OFFSET OF 2 FEET FROM THE SHARED USE PATH.
- 10. ALL CONNECTIONS BETWEEN GROUND RODS AND GROUND CABLE SHALL BE BY EXOTHERMIC WELD.
- 11. ALL PROPOSED LIGHT STRUCTURE LOCATIONS SHALL BE MARKED IN THE FIELD AND TEST PITS COMPLETED PRIOR TO INSTALLATION. THE CONTRACTOR MUST VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND FINAL GRADE ELEVATIONS PRIOR TO INSTALLATION OF THE LIGHTING EQUIPMENT. THE CONTRACTOR SHALL COORDINATE THE STAKE OUT OF THE LIGHT POLE WITH BGE AND MCDOT. THE CONTRACTOR SHALL MAINTAIN APPROPRIATE CLEARANCES FROM ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES.
- 12. ALL HANDBOXES, CONDUITS UNDER PAVEMENT AND LIGHTING STRUCTURES SHALL BE STAKED OUT AND EVERY LOCATION APPROVED BY THE ENGINEER BEFORE ANY WORK IS PERFORMED.
- 13. THE CONTRACTOR SHALL CAP AND ABANDON ALL EXISTING CONDUITS AND REMOVE ALL EXISTING CABLES THAT ARE NO LONGER IN USE.
- 14. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF LIGHT POLES, SPLICE BOXES AND CONDUITS WITH THE INSTALLATION OF PROPOSED DRAINAGE STRUCTURES AND STORM WATER MANAGEMENT FACILITIES. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- 15. RIGHT OF WAY SHOWN ON THE PLANS IS APPROXIMATE AND BASED ON THE BEST AVAILABLE INFORMATION.
- 16. CLEARING AND GRUBBING REQUIRED FOR INSTALLATION OF LIGHTING STRUCTURES, SPLICE BOXES CONDUITS, ETC. WILL NOT BE MEASURED AND THE COST WILL BE TO THE PERTINENT
- 17. ALL TRENCHING MUST BE BACKFILLED AND RESTORED TO ITS ORIGINAL CONDITION ON THE SAME WORKING DAY ON WHICH IT WAS OPENED. AREAS WHICH ARE NOT RESEEDED, MULCHED OR SODDED MUST BE COVERED TO PREVENT EROSION.
- 18. ALL SOIL REMOVED FOR HANDBOXES, LIGHT POLES, ETC. MUST BE COVERED TO PREVENT EROSION. SOIL NOT USED FOR BACKFILL MUST BE DISPOSED OF TO THE ENGINEER'S SATISFACTION ON THE SAME WORKING DAY THE BACKFILL IS COMPLETED.
- 19. WITHIN 36 IN. OF UNDERGROUND UTILITY LOCATIONS, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE FOR POLES, CONDUITS, ETC. BY HAND. HAND DIGGING FOR INSTALLATION OR REMOVAL OF EQUIPMENT SHALL BE INCIDENTAL TO THE PERTINENT ITEMS IN THE EQUIPMENT LIST. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR HAND DIGGING.
- 20. ALL LIGHTING EQUIPMENT AND MATERIALS SHALL BE SUBMITTED TO MCDOT FOR APPROVAL PRIOR TO BEING INSTALLED. SEE SPECIAL PROVISIONS FOR LIGHT SPECIFICATIONS.
- 21. ALL POLES SHALL BE INSTALLED WITH POLE ID TAGS, AS DETAILED ON THIS SHEET,
- 22. BGE SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING ALL CONDUITS, SPLICE BOXES, AND GROUND RODS. EMPTY CONDUITS SHALL BE INSTALLED WITH PULL STRINGS.
- 23. THE CONTRACTOR SHALL COORDINATE THE WIRING AND ENERGIZING OF THE PROPOSED LIGHTING SYSTEM WITH BGE, UTILITY COORDINATION SHALL BE INCIDENTAL TO INSTALLATION OF THE LIGHT POLES AND LUMINAIRES.

- 24. CONTACT MR. GEORGE DOWNIE (301-549-4347 OR GFDOWNIE@PEPCO.COM) TO OBTAIN WRITTEN APPROVAL OF THE LIGHTING FACILITIES PRIOR TO THE INSTALLATION.
- 25. SPLICE BOXES SHALL BE PLACED SUCH THAT THE LONG EDGE IS PARALLEL TO THE SHARED USE PATH.
- 26. ALL SWEEP BENDS ARE TO BE A MINIMUM OF 2 FT. IN RADIUS.
- 27. 1/4 IN. NYLON PULL- LINE IS TO BE INSTALLED IN EACH CONDUIT DUCT.
- 28. BGE SHALL INSTALL TRACEABLE MARKING TAPE 12 IN. ABOVE EACH CONDUIT RUN.
- 29. MAXIMUM BENDS PER CONDUIT RUN SHALL BE 180 DEGREES.
- 30. INSTALLATION OF ALL UNDERGROUND LIGHTING FACILITIES ARE ALSO SUBJECT TO BGE INSPECTION AND WRITTEN APPROVAL BEFORE CONCEALMENT, FAILURE TO OBTAIN SUCH INSPECTION WILL RESULT IN THE COVERING OF FACILITIES AT THE CONTRACTOR'S EXPENSE, CALL 301-670-8808 OR 301-670-8828 BETWEEN 7:00 AM AND 9:00 AM OR 3:00 PM AND 4:00 PM, TWO (2) WORKING DAYS IN ADVANCE TO ARRANGE INSPECTION.
- 31. THE CONTRACTOR SHALL CONTACT BGE SIX (6) WEEKS PRIOR TO STARTING LIGHTING WORK TO COORDINATE POWER SOURCE LOCATIONS.
- 32. LIGHTING EQUIPMENT TO BE MOUNTED OR EMBEDDED IN RETAINING WALLS WILL BE COORDINATED WITH DTEO AND DETAILED IN SUBSEQUENT SUBMISSIONS.

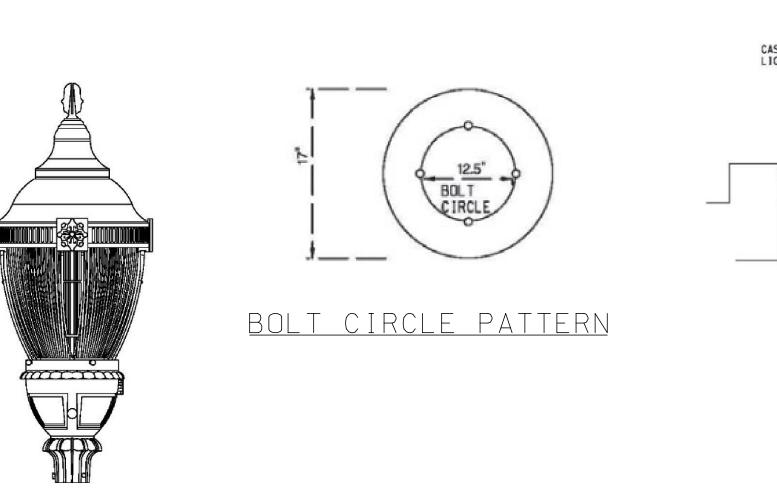


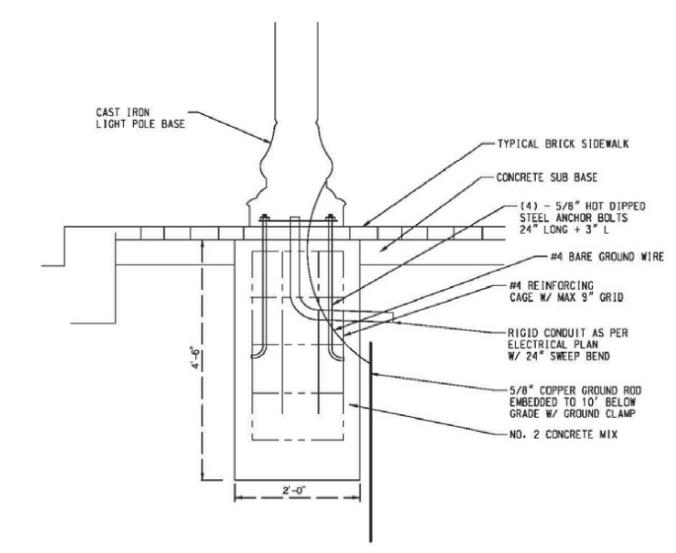
POLE TAG DETAIL

LIGHTING ITEM LIST

ITEM NO.	DESCRIPTION	UNIT	LT-02	LT-03	QUANTITY
8000	1-CONDUCTOR ELECTRICAL CABLE (NO. 10 A.W.G.) THWN — COPPER	LF	565	255	820
8000	FURNISH AND INSTALL LUMINAIRE	EA	9	5	14
8000	2" POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SCHEDULE 80) (TRENCHED)	LF	80	25	105
8000	4" POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SCHEDULE 80) (TRENCHED)	LF	950	415	1365
8000	4" POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SCHEDULE 80) (2ND CONDUIT WITHIN ONE SLOT OR TRENCH)	LF	950	415	1365
8000	GROUND ROD, 3/4" DIAMETER X 10' LENGTH WITH CLAMP	EA	13	9	22
8000	FURNISH AND INSTALL SPLICE BOX (BGE)	EA	13	9	22
8000	FURNISH AND INSTALL 12' CAST IRON LIGHT POLE	EA	9	5	14
8000	CONCRETE FOUNDATION	CY	4.8	2.7	7.4

NOTE: LIGHTING ITEMS ARE LISTED FOR REFERENCE ONLY, BGE SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING ALL EQUIPMENT RELATED TO STREET LIGHTING.





WASHINGTON GLOBE FIXTURE

FOUNDATION DETAIL

RKSK P: 410.728.2900 700 East Pratt Street, Suite 500 | Baltimore, MD 21202 Engineers | Construction Managers | Planners | Scientists PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. EXPIRATION DATE:

OWNER/ADDRESS:
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
100 EDISON PARK DRIVE Gaithersburg, maryland
<u>CONTACT:</u>

GALITIENSDUNG, WAN ILAND
CONTACT:
DIVISION OF TRANSPORTATION
ENGINEERING
240-777-7220
DESIGN SECTION
240-777-7221

				MONTGOMERY COUN ^T DEPARTMENT OF TRANSPO ROCKVILLE, MARYLAN	RTATION	DIVISI
				RECOMMENDED FOR APPROVAL Chief, Transportation Planning and Design Section	Date	BUF BUR
				APPROVED Chief, Division of Transportation Engineering	 Date	SCALE
NO	PEVISION	DATE	BY	DESIGNED BY <u>SJC</u> DRAWN BY <u>SJC</u>	CHECKED BY <u>wfw</u>	DRAWING NO.

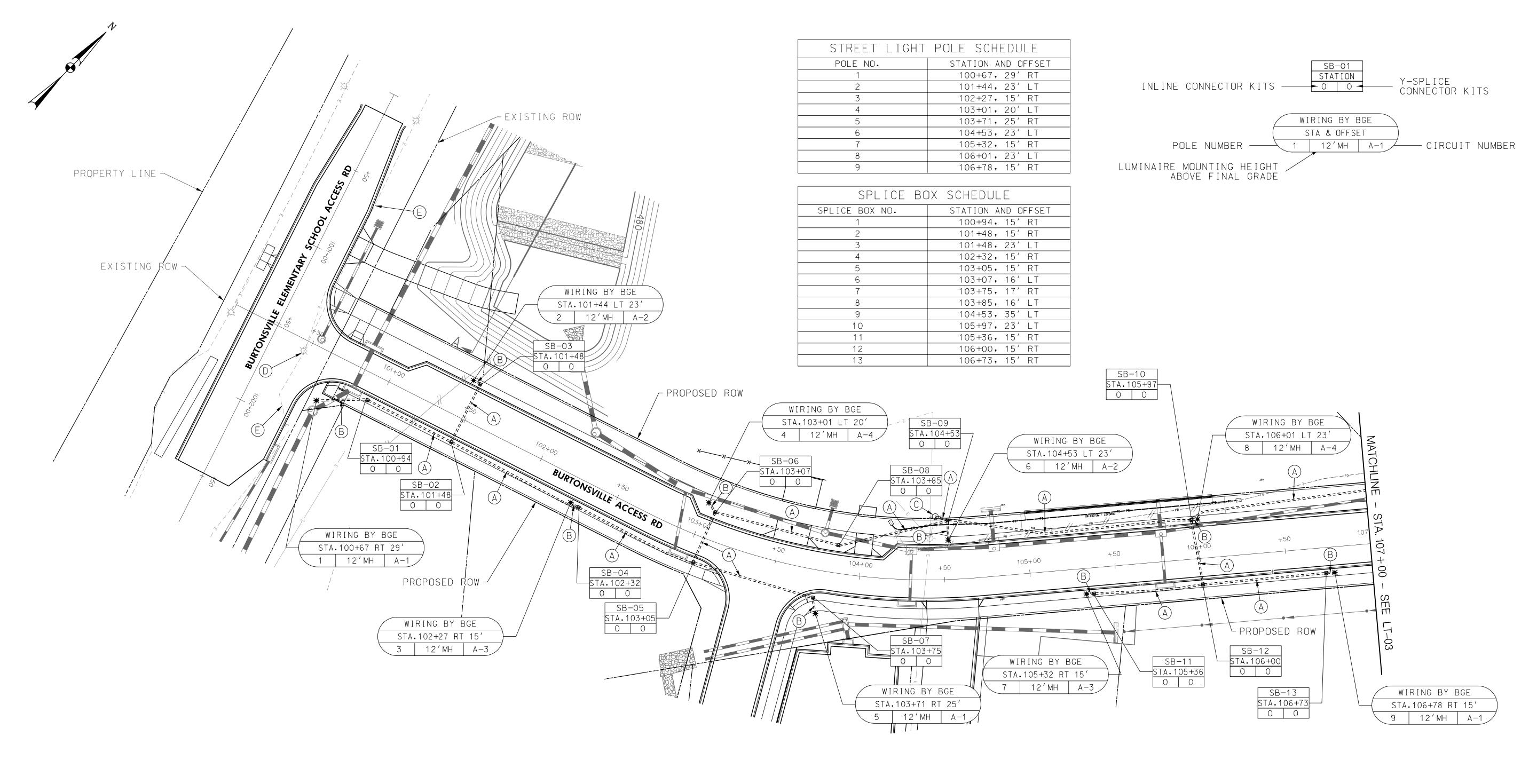
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD LIGHTING GENERAL NOTES

NONE DATE NOVEMBER 23, 2022 SCALE _

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www.rkk.com

LT-01 OF 03 SHEET NO. 57 OF 63



CONSTRUCTION DETAILS

- 12' CAST IRON POLE WITH 70W LED Washington globe luminaire
- M BGE SPLICE BOX

- A. INSTALL 2-4 IN. SCHEDULE 40, PVC CONDUITS TRENCHED WITH PULL STRING AND TRACER TAPE.
- B. INSTALL 1-2 IN. SCHEDULE 40 PVC CONDUIT TRENCHED WITH PULL STRING AND TRACER TAPE.
- C. STUB CONDUITS AT UTILITY POLE FOR POWER SERVICE.
- D. EXISTING STREETLIGHT POLE TO BE REMOVED. FOUNDATION TO BE REMOVED 12 IN. BELOW GRADE AND BACKFILLED. CIRCUIT(S) SHALL BE DISCONNECTED AND MADE SAFE.
- E. EXISTING STREETLIGHT CONDUIT TO BE CAPPED AND ABANDONED OR REMOVED AS NEEDED. CIRCUIT(S) SHALL BE DISCONNECTED AND MADE SAFE.

RKSK 700 East Pratt Street, Suite 500 | Baltimore, MD 21202 Engineers | Construction Managers | Planners | Scientists

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. EXPIRATION DATE:

<u>owner/address:</u>
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
100 EDISON PARK DRIVE
GAITHERSBURG, MARYLAND

GAITHERSBURG, MARYLAND
CONTACT: DIVISION OF TRANSPORTATION ENGINEERING 240-777-7220
DESIGN SECTION 240-777-7221

NO.	REVISION	DATE	BY	DESIGNED BY <u>SJC</u> DRAWN BY <u>SJC</u>	CHECKED BY <u>wfw</u>	DRAWING NO.
				DECIONED DV 010 DDAHAL DV 010		
				Chief, Division of Transportation Engineering	Date	SCALE
				APPROVED		
				Chief, Transportation Planning and Design Section	Date	
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				RECOMMENDED FOR APPROVAL		
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				ROCKVILLE, MARYLAN	ID	
				DEPARTMENT OF TRANSPO	RTATION	DIVIS
				MONTGOMERY COUNT		

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BURTONSVILLE ELEMENTARY ACCESS ROAD

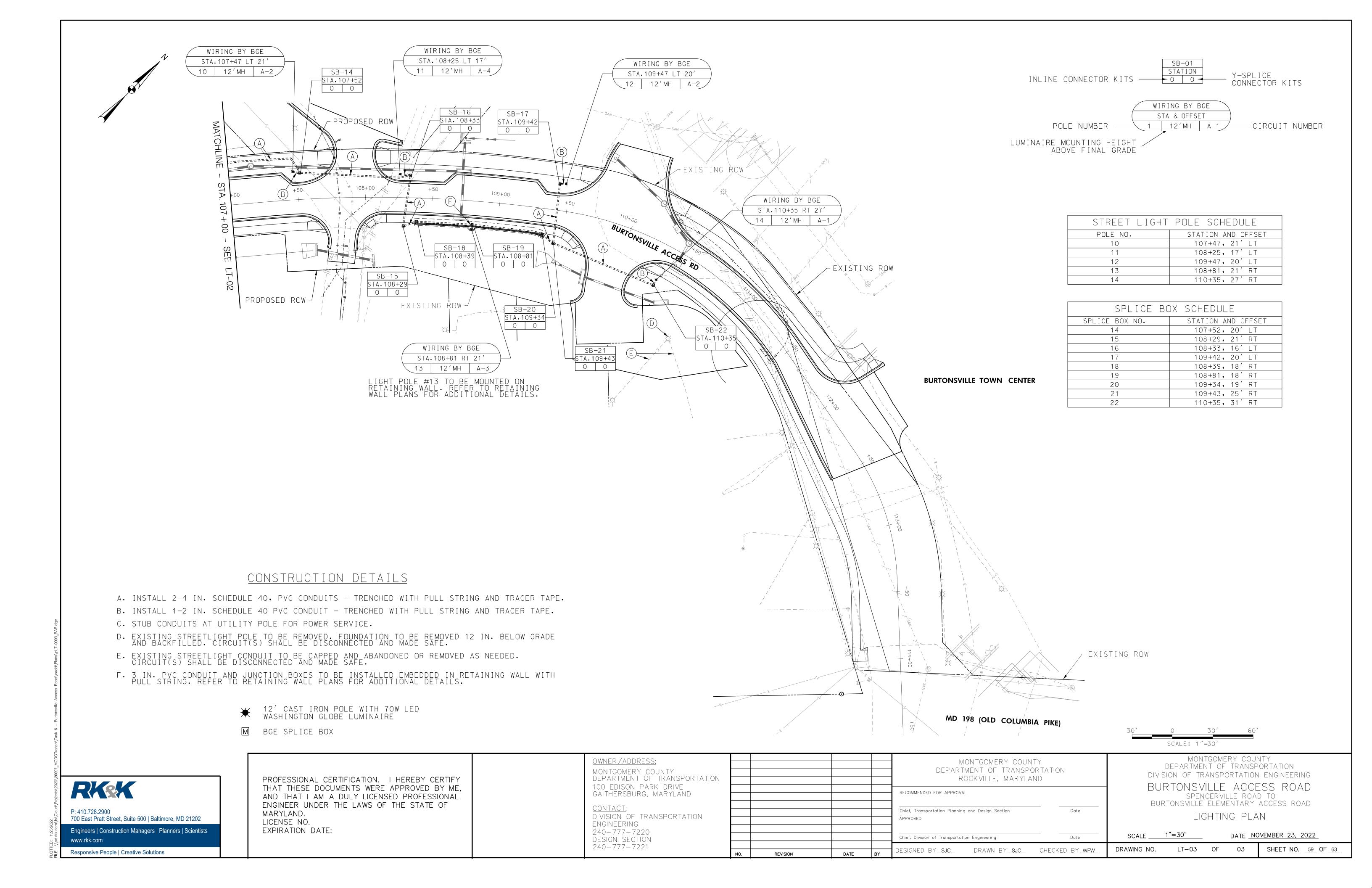
SCALE: 1"=30'

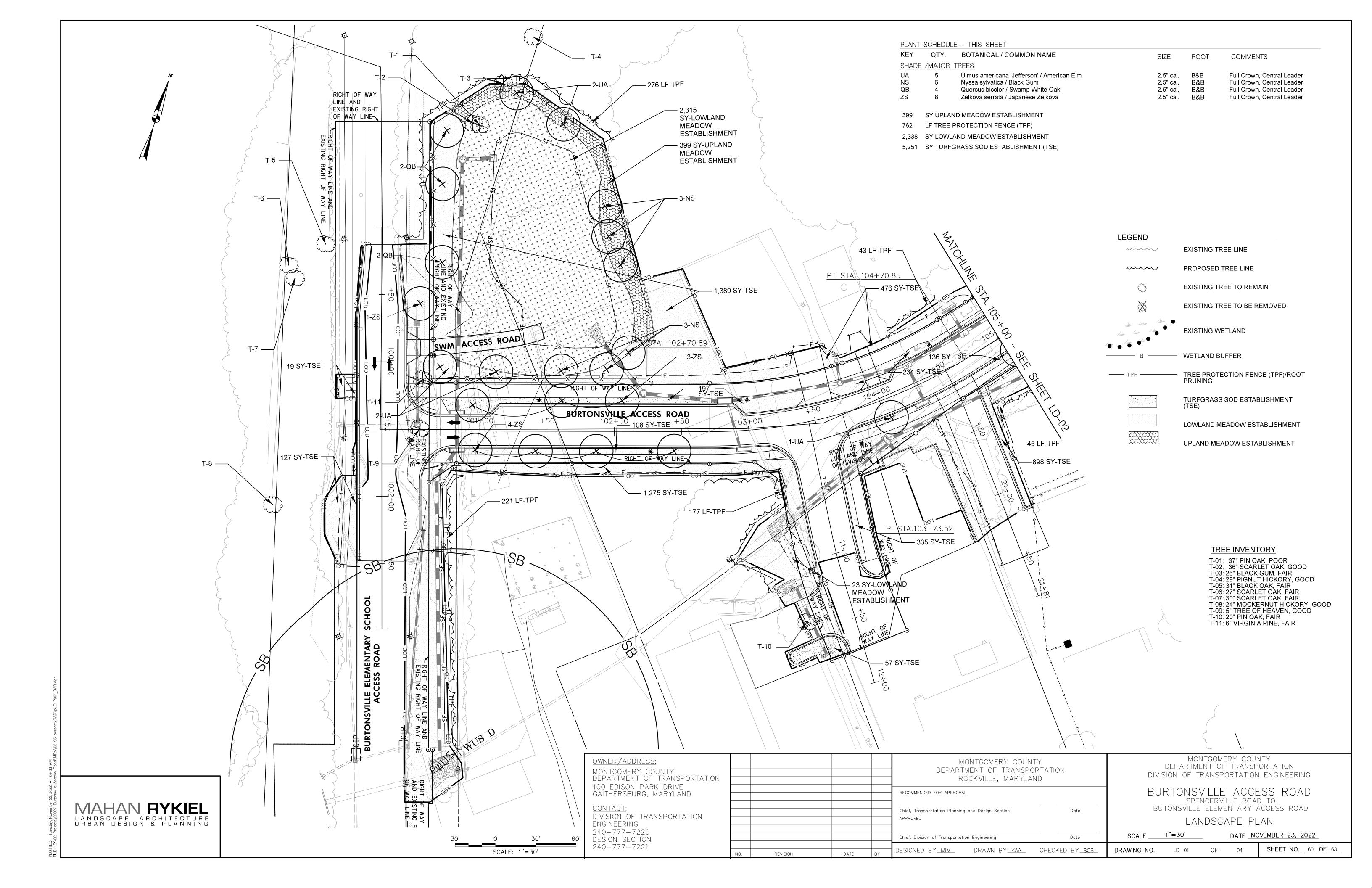
LT-02 OF

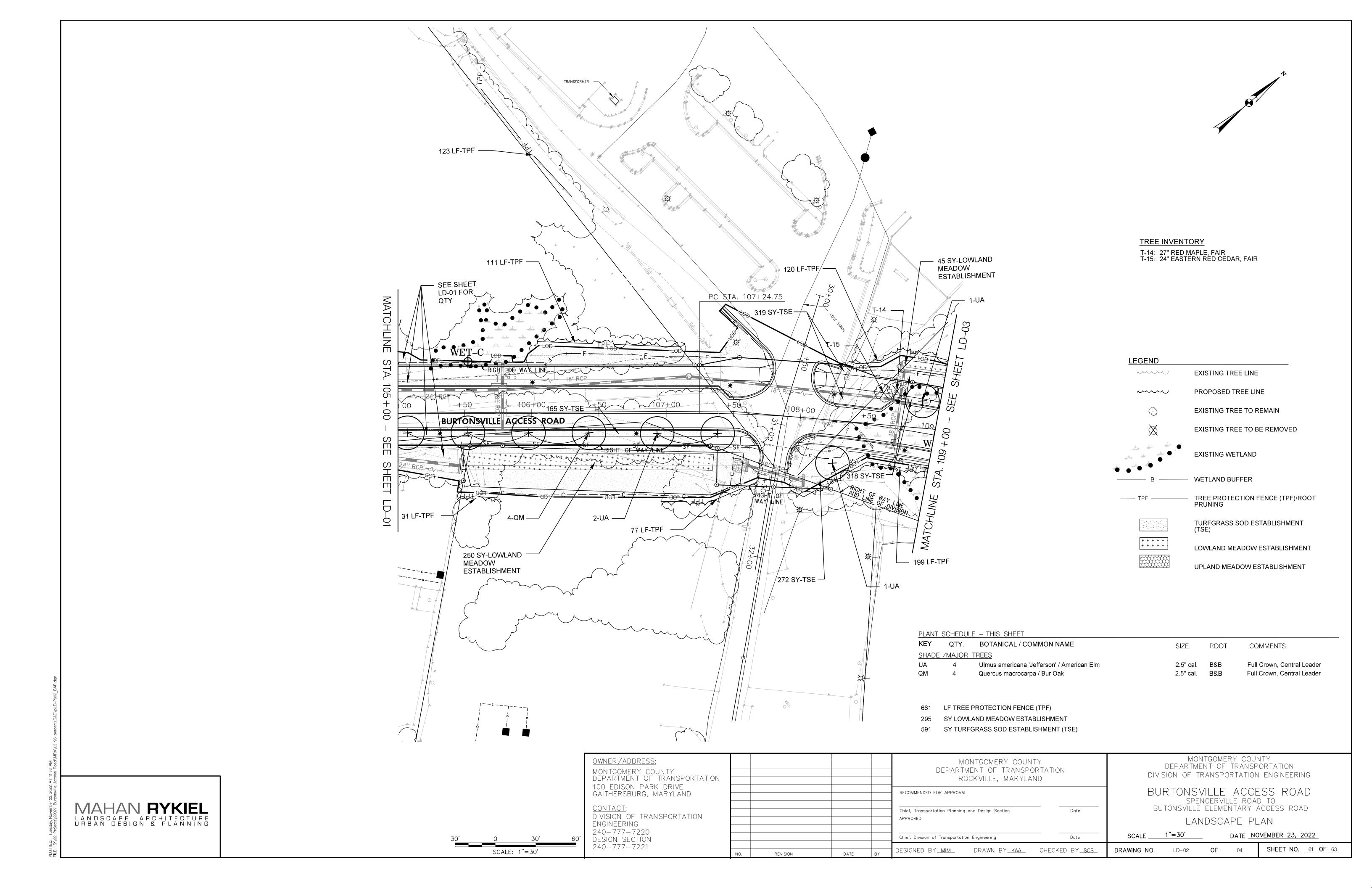
LIGHTING PLAN

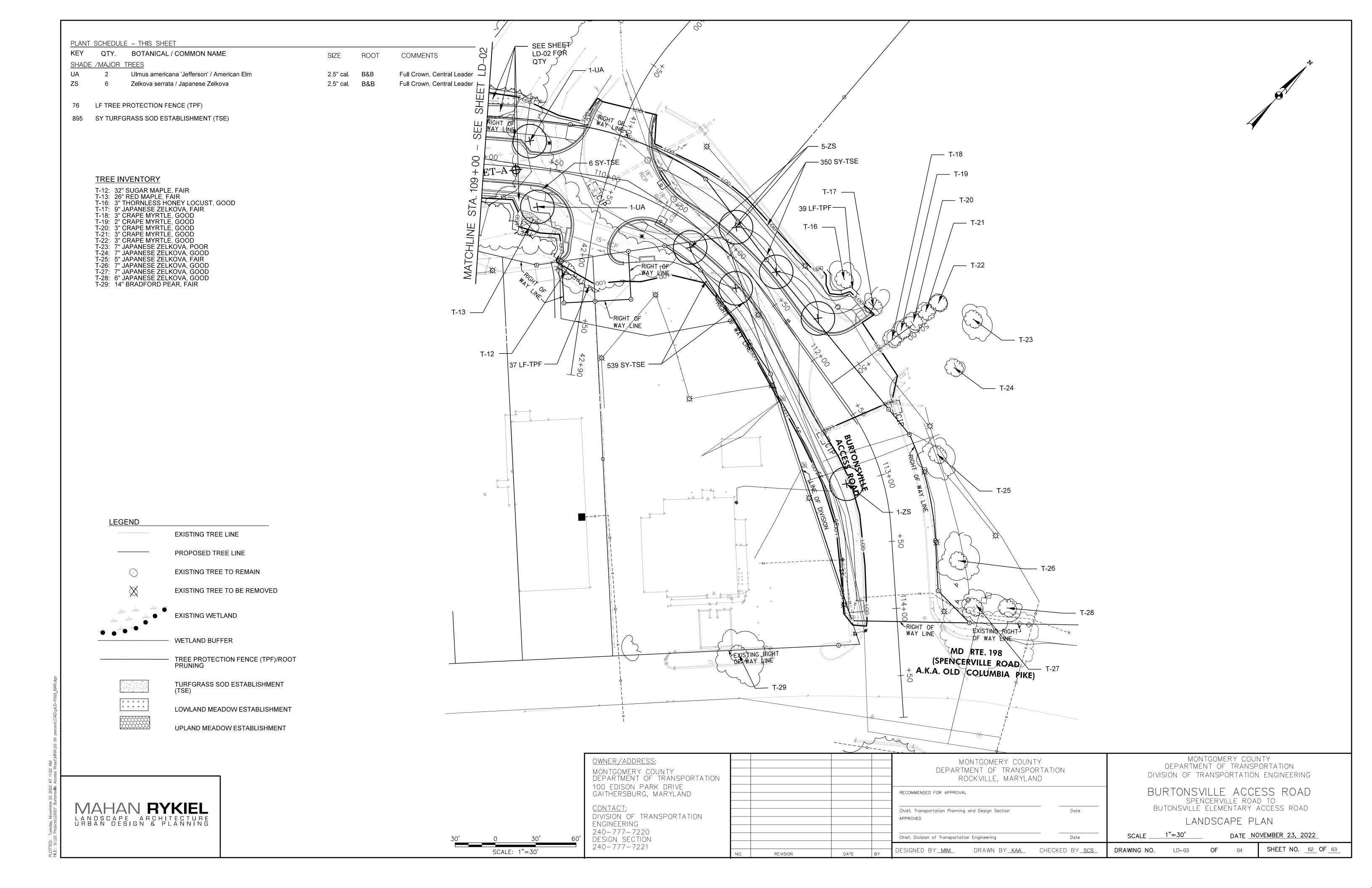
SCALE ____1"=30' DATE NOVEMBER 23, 2022 SHEET NO. <u>58</u> OF <u>63</u>

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			TREE INVENTORY TABLE							
Tree Number	Common Name	Scientific Name	To Be Removed	DBH	Condition	Comment				
T1 [†]	Pin oak	Quercus palustris	X	37	Fair	Broken branches and dieback in crown, large branch removed, and unbalanced crown.				
T2 [†]	Scarlet oak	Quercus coccinea	X	36	Good	Minor broken branches in the lower canopy.				
T3*	Black gum	Nyssa sylvatica	X	26	Fair	Broken branches in the crown, thin crown.				
T4*	Pignut hickory	Carya glabra		29	Good	Twin trunks splits above DBH and some broken branches in crown.				
T5 [†]	Black oak	Quercus velutina		31	Fair	Twin trunks splits above DBH, branch dieback and broken branches in crown, and thin crown.				
T6*	Scarlet oak	Quercus coccinea		27	Fair	Leaning, unbalanced crown, and interfering branches from adjacent trees.				
T7 [†]	Scarlet oak	Quercus coccinea		30	Fair	Twin trunks 27" stem, irregular branching structure, and included bark.				
T8*	Mockernut hickory	Carya tomentosa		24	Good	Slightly unbalanced crown.				
Т9	Tree of heaven	Ailanthus altissima	X	5	Fair	Trunk wound, cracked and rotting bark on trunk, branch dieback in crown, and thin crown.				
T10	Pin oak	Quercus palustris	X	20	Fair	Minor deadwood in the lower canopy, dead branches, and dieback in the crown.				
T11	Virginia pine	Pinus virginiana	X	6	Fair	Twin trunks, one additional 5 inch, unbalanced crown, needle dieback, and located on slope along road.				
T12 [†]	Silver maple	Acer saccharinum	X	32	Fair	Triple trunk above dbh, water sprouts, trunk damage, and large branch removed in lower canopy.				
T13*	Red maple	Acer rubrum	X	26	Fair	Bend in leader, exposed roots, and vines into crown.				
T14*	Red maple	Acer rubrum	X	27	Fair	Twin trunks splits above DBH, dead branches in crown, included bark, and exposed roots.				
T15*	Eastern red cedar	Juniperus virginiana	X	24	Fair	Needle and branch dieback in crown, vines entering crown from adjacent shrubs.				
T16	Thornless honey locust	Gleditsia triacanthos		3	Good	Four stems, three additional, 2 inches each.				
T17	Japanese zelkova	Zelkova serrata	X	9	Fair	Peeling and rotting bark, old guy wire never removed and now growing into trunk.				
T18	Crape myrtle	Lagerstroemia sp.		3	Good	Twin trunks, one additional 2 inch stem, minor pruning wounds healed.				
T19	Crape myrtle	Lagerstroemia sp.		2	Good	Triple trunks, two additional 2 inch stems, minor pruning wounds healed.				
T20	Crape myrtle	Lagerstroemia sp.		3	Good	Triple trunks two additional 3 inch stems, minor pruning wounds healed.				
T21	Crape myrtle	Lagerstroemia sp.		3	Good	Triple trunks two additional 3 inch stems, minor pruning wounds healed.				
T22	Crape myrtle	Lagerstroemia sp.		3	Good	Triple trunks, one 3 inch and one 2 inch, minor pruning wounds healed.				
T23	Japanese zelkova	Zelkova serrata		7	Poor	10 inch trunk wound rotting, trunk damage, old guy wire never removed trunk growing around it.				
T24	Japanese zelkova	Zelkova serrata		7	Good	Minor included bark.				
T25	Japanese zelkova	Zelkova serrata		5	Fair	Bark damage and rotting trunk wounds observed, dead branches in crown.				
T26	Japanese zelkova	Zelkova serrata		7	Good	Minor included bark, old guy wire never removed trunk growing around it.				
T27	Japanese zelkova	Zelkova serrata		7	Good	Minor included bark, old guy wire never removed trunk growing around it.				
T28	Japanese zelkova	Zelkova serrata		6	Good	Minor included bark, old guy wire never removed trunk growing around it.				
T29	Bradford pear	Pyrus calleryana		14	Fair	Slight lean, trunk wounds partially healed and partially rotting, topped, and utility pruning.				

NOTE: Significant trees denoted with *. Specimen trees denoted with *

MITIGATION NOTES

THREE SPECIMEN TREES (TOTAL DBH OF 105") WILL BE MITIGATED FOR AT A RATE OF 1" REPLACEMENT FOR EVERY 4" REMOVED. REPLACEMENT TREES TO BE OF LIKE CHARACTER TO THOSE REMOVED. =26.25" TOTAL DBH (11 TREES)

ROADSIDE STREET TREE MITIGATION:
SIX ROADSIDE TREES WITHIN THE ROW WILL BE MITIGATED FOR AT A RATE OF 3 TREES REPLACED FOR EVERY 1 TREE REMOVED.

FOREST MITIGATION:

THE 54,147 SF OF FOREST IMPACTS WILL BE MITIGATED AT A RATIO OF 1:1, WITH "FOREST" DEFINED AS A DENSITY OF 100 STEMS (2" DBH OR GREATER) PER ACRE. È54,147 SF (124 TREEŚ)

TOTAL MITIGATION REQUIRED: 153 TREES

PROPOSED MITIGATION (ON-SITE): 47 TREES

1. WETLAND IMPACTS ARE LESS THAN 5,000 SF, AND DO NOT REQUIRE MITIGATION.

2. MITIGATION REQUIREMENTS NOT MET BY THE PROPOSED PLANTINGS WILL BE ADDRESSED AS FEE-IN-LIEU, AT A RATE OF \$1.30 /SF OF IMPACT. SEE SECTION 22A-12(g) OF THE MONTGOMERY COUNTY CODE.

MASTER PLANT SCHEDULE

KEY	QTY.	BOTANICAL / COMMON NAME	SIZE	ROOT	COMMENTS
<u>SHADE</u>	/MAJOR	TREES			
UA	11	Ulmus americana 'Jefferson' / American Elm	2.5" cal.	B&B	Full Crown, Central Leader
NS	6	Nyssa sylvatica / Black Gum	2.5" cal.	B&B	Full Crown, Central Leader
QB	4	Quercus bicolor / Swamp White Oak	2.5" cal.	B&B	Full Crown, Central Leader
QM	4	Quercus macrocarpa / Bur Oak	2.5" cal.	B&B	Full Crown, Central Leader
ZS	14	Zelkova serrata "Green Vase" / Japanese Zelkova	2.5" cal.	B&B	Full Crown, Central Leader

399 SY UPLAND MEADOW ESTABLISHMENT

1,499 TREE PROTECTION FENCE (TPF) & ROOT PRUNING

2,633 SY LOWLAND MEADOW ESTABLISHMENT

6,737 SY TURFGRASS SOD ESTABLISHMENT (TSE)

GENERAL NOTES

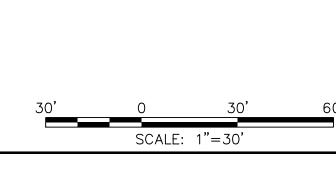
1. SWALES: OFFSET THE EDGE OF MULCHED BEDS OR INDIVIDUAL PLANTING PITS AT LEAST 7' FROM THE CENTERLINE OF DRAINAGE SWALES, EXCEPT WHERE OTHERWISE DIRECTED BY THE ENGINEER. LARGER SETBACKS MAY BE REQUIRED FOR HIGH VOLUME OR HIGH VELOCITY SWALES WITH CHECK DAMS OR OTHER DEVICES. DO NOT INSTALL SHRUBS BETWEEN THE ROADWAY SHOULDER AND ROADSIDE DRAINAGE SWALES WITHOUT PRIOR PLANTING LAYOUT APPROVAL OF THE LANDSCAPE ARCHITECT OR POJECT ENGINEER.

TREE PLANTING SETBACKS:

- a. NO TREES SHALL BE LOCATED IN CLEAR ZONES ADJACENT TO TRAVEL LANES OR IN INTERSECTION SIGHT TRIANGLES.
- b. MAINTAIN OFFSETS FROM OVERHEAD ELECTRIC LINES AS PER THE FOLLOWING BASED ON SIZE AT MATURITY:
- i. OFFSET SMALL STREES (UNDER 20' HT AT MATURITY) 20' FROM UTILITY POLES. ii. OFFSET MEDIUM TREES (20-50' HT AT MATURITY) AND MEDIUM AND LARGE COLUMNAR TREES 20' WIDE AT MATURITY) 30' FROM WIRES AND POLES.
- iii. OFFSET LARGE TREES (OVER 50' HT AT MATURITY) 50' FROM WIRES AND POLES.
 INSTALL TREES AT LEAST 10' FROM THE CENTERLINE OF WATER, GAS, AND SANITARY SEWER LINES. ADDITIONAL SETBACKS MAY
- BE REQUIRED BY THE OWNER OF THE UTILITY. INSTALL TREES AT LEAST 10' PLUS HALF THE DIAMETER OF UNDERGROUND STORM DRAIN PIPES. INSTALL TREES AT LEAST 7' FROM BACK OF TRAFFIC BARRIER POSTS.
- INSTALL SHADE TREES AND UPRIGHT/COLUMNAR ORNAMENTAL TREES AT LEAST 6' BACK FROM THE BACK OF CURB IN
- CLOSED-SECTION MEDIAN PLANTINGS. INCREASE SETBACKS FROM ROADS, SIDEWALKS, TRAFFIC CONTROL DEVICES AND STRUCTURES FOR MULTI-STEMMED AND/OR

BROAD-SPREADING ORNAMENTAL TREES TO MAINTAIN NECESSARY BRANCH CLEARANCE.

MAHAN RYKIEL LANDSCAPE ARCHITECTURE URBAN DESIGN & PLANNING



OWNER/ADDRESS:
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION
100 EDISON PARK DRIVE GAITHERSBURG, MARYLAND
CONTACT:

CONTACT:
DIVISION OF TRANSPORTATION
ENGINEERING
240-777-7220
DESIGN SECTION
240-777-7221

				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND		
				RECOMMENDED FOR APPROVAL		
				Chief, Transportation Planning and Design Section APPROVED	Date	
				Chief, Division of Transportation Engineering	Date	S
NO	DEVICION	DATE	DV	DESIGNED BY MIM DRAWN BY KAA	CHECKED BY <u>SCS</u>	DRAW

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION ENGINEERING

BURTONSVILLE ACCESS ROAD SPENCERVILLE ROAD TO BUTONSVILLE ELEMENTARY ACCESS ROAD

LANDSCAPE PLAN

1"<u>=30'</u> DATE NOVEMBER 23, 2022

SHEET NO. <u>63</u> OF <u>63</u> OF WING NO. LD-04