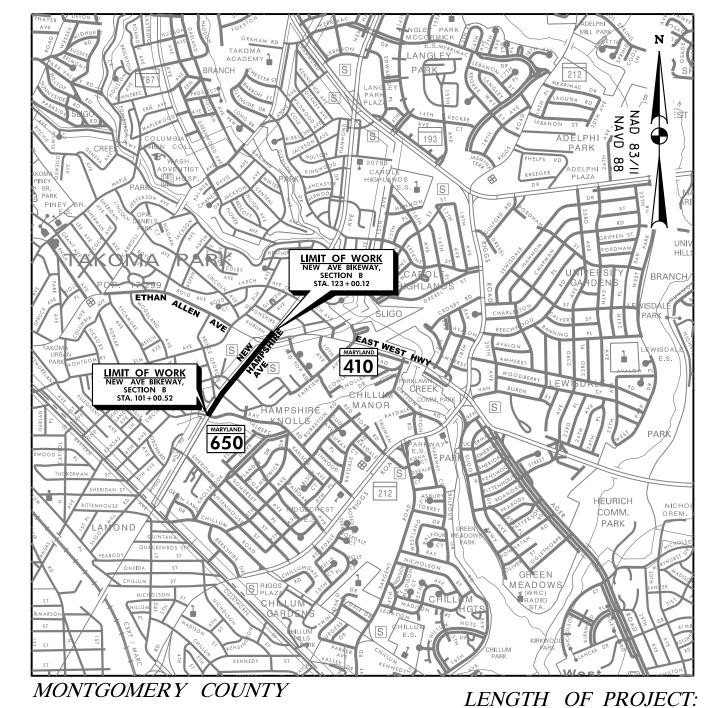
THE CITY OF TAKOMA PARK PLANNING AND COMMUNITY DEVELOPMENT

NEW AVE BIKEWAY, SECTION B MD 650 (NEW HAMPSHIRE AVENUE) POPLAR AVENUE TO AUBURN AVENUE SHA TRACKING NO. 20-AP-MO-20-xx

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NEW HAMPSHIRE AVENUE (MD 650) = 0.40 miles SCALE: 1"=2000'

HORIZONTAL DATUM NAD 83/11 NAVD 88 VERTICAL DATUM WSSC TWO-HUNDRED 208NE01 FOOT SHEET NUMBER:

60% SUBMISSION NOVEMBER 2021

REVISIONS

AASHTO DESIGN CRITERIA

THIS PROJECT WAS DESIGNED IN ACCORDANCE WITH THE 2018 (7TH EDITION) PUBLICATION OF AASHTO'S "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS."

STANDARD SPECIFICATIONS BOOK,

BOOK OF STANDARDS AND MUTCD

ALL WORK ON THIS PROJECT SHALL CONFORM TO: THE LATEST APPROVED MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION (MDOT SHA) "STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS" REVISIONS THEREOF OR ADDITIONS THERETO, AS INDICATED IN THE PROJECT DESCRIPTION OF THE INVITATIONS FOR BIDS BOOK; THE SPECIAL PROVISIONS INCLUDED IN THE INVITATION FOR BIDS BOOK; THE ADMINISTRATION'S "BOOK OF STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES" AND THE LATEST ADOPTED MUTCD.

RIGHT OF WAY

RIGHT OF WAY AND EASEMENT LINES SHOWN ON THESE PLANS ARE FOR ASSISTANCE IN INTERPRETING THE PLANS. THEY ARE NOT OFFICIAL. FOR OFFICIAL FEE RIGHT OF WAY AND EASEMENT INFORMATION, SEE THE APPROPRIATE RIGHT OF WAY PLATS.

UTILITIES

THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATION AND GUIDANCE ONLY. NO GUARANTEE IS MADE OF THE ACCURACY OF SAID LOCATIONS.

COMPLETENESS OF DOCUMENTS

THE CITY OF TAKOMA PARK SHALL ONLY BE RESPONSIBLE FOR THE COMPLETENESS OF DOCUMENTS OBTAINED DIRECTLY FROM THE STATE HIGHWAY ADMINISTRATION'S CASHIER'S OFFICE. FAILURE TO ATTACH ADDENDA MAY CAUSE THE BID TO BE IRREGULAR.

ADA COMPLIANCE

THE DESIGN OF THIS PROJECT HAS INCORPORATED FACILITIES FOR THE ELDERLY AND HANDICAPPED IN COMPLIANCE WITH THE STATE AND FEDERAL LEGISLATION.

ENVIRONMENTAL INFORMATION

ALL STORMWATER MANAGEMENT FACILITIES CONSTRUCTED FOR THIS CONTRACT SHALL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE CITY OF TAKOMA PARK MUNICIPAL CODE TITLE 16 (SECTIONS 16.04.210 THROUGH 16.04.260)

SEDIMENT AND EROSION CONTROL REGULATIONS WILL BE STRICTLY ENFORCED DURING CONSTRUCTION.

FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN THREE (3) CALENDER DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1), AND SEVEN DAYS (7) AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

OWNERS / DEVELOPERS CERTIFICATION

I / WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I HEREBY AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY STATE OF MARYLAND, DEPARTMENT OF THE ENVIRONMENT COMPLIANCE INSPECTORS.

DATE Signature

Community Development Manager Rosalind Grigsby (301) 891–7205 City of Takoma Park Printed Name and Title

RKSK

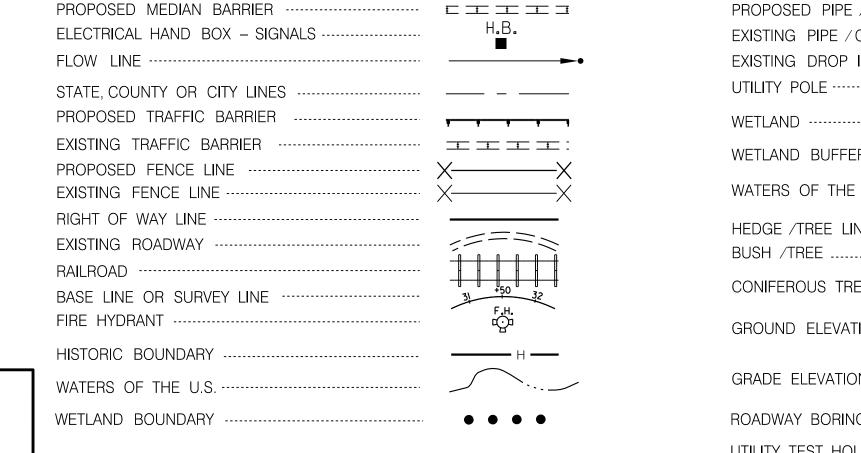
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ABBREVIATIONS

AASHTOAmerican Association of State Highway		Headwall		VRight of Way
Transportation Officials	HERCP	Horizontal Ellipitical Reinforced		Reinforced Concrete Pipe
ADTAbaad	LID	Concrete Pipe		Reinforced Concrete Pressure Pip
ARDROY Approximate		High Point		Rock Quality Designation
APPROX Approximate	IN			Rootmat
By Or B/L Baseline	1.5.1 INV	Inlet Sediment Trap	S	
BKBack /Book		Junction Box		Sanitary Sewer
BIT Bituminous B.C Bituminous Concrete	J.Б К			Southbound Storm Drain
				Stofff Drain Surface Drain Ditch
B.MBench Mark BOT Bottom	L	Lengur Linear Feet		Super Elevation
C.C Center of Curve		Liquid Limit		Super Elevation Silt Fence
CAP Corrugated Aluminum Pipe		Liquid Littiit Low Point		Square Feet
CAPA Corrugated Aluminum Pipe Arch		Low Tollit Light Pole	SHT	
CATV Cable Television	LT	_		Structural Steel Plate Pipe
C.B.R Cable Television C.B.R		Macadam		Structural Steel Plate Pipe Arch
© or C/L Centerline		Moisture Content		Standard Penetration Testing
CL Class		Maximum		Standard Terretration Testing Steel Spiral Rib Pipe –
CLF Chainlink Fence		Maximum Dry Content	OI 11	Aluminized Type 2
CMP Corrugated Metal Pipe		Modified	SRPA	Steel Spiral Rib Pipe Arch -
C.O Cleanout		Minimum	OH A	Aluminized Type 2
COMBCombination	N		SSD	Stopping Sight Distance
CONC Concrete		North		Super Silt Fence
CONSTR Construction		Northeast		Standard
COR Corner		Non–Plastic	STA	
CORR Correction		On Center		Single Opening
CPP-S Corrugated Polyethylene Pipe - Type 'S'		Overhead Electric		Square Yards
CSP Corrugated Steel Pipe – Aluminized Type 2		Optimum Moisture		Stormwater Management
CSPA Corrugated Steel Pipe Arch –		Pavement		Tangent
Aluminized Type 2		Point of Curvature		Telephone
DCDegree of Curve		Point of Compound Curvature		Top of Cover
D.H.V. Design Hourly Volume		Point of Crown		Top of Grate
D.I. Drop Inlet		Profile Grade Elevation		Traverse Line
DIA Diameter		Profile Ground Elevation		Top of Manhole
D.ODouble Opening		Profile Grade Line		Traverse
EEast		Profile Ground Line		Temporary Swale
E Electric		Point of Rotation		Top of Slab
E External Distance		Plasticity Index	T.S	
EAEach		Point of Intersection	TYP	
EB Eastbound		Point On Curve		Under Drain
ELEV Elevation	POT	Point On Tangent		Underground
ES End Section		Polyvinyl Chloride Profile Wall Pipe	U.P	Utility Pole
EX or EXIST Existing		Proposed	USDA	United States Department
FTFeet	PRC	Point of Reverse Curve	-	of Agriculture
F or FL Flowline	PT	Point	VCL	Vertical Clearance
F.B.D Flat Bottom Ditch		Point of Tangency		Vertical Curve Length
F.H Fire Hydrant	PVC	Point of Vertical Curve	W	Water
FWD Forward	PVC	Polyvinyl Chloride	W	West
GGas		Point of Vertical Intersection		Westbound
G.V Gas Valve		Point of Vertical Reverse Curve		Wetland Buffer
H.B Handbox	PVT	Point of Vertical Tangency	W.M	Water Meter
HDPEHigh Density Polyetheylene	R	Radius		Wrapped Steel
		Rock Fragments	WUS	Waters of the United States
	RT	Right	W.V	Water Valve

CONVENTIONAL SIGNS (SAMPLES)



PROPOSED PIPE / CULVERT EXISTING PIPE / CULVERT EXISTING DROP INLET UTILITY POLE WETLAND WETLAND WETLAND BUFFER WUS WATERS OF THE U.S. HEDGE / TREE LINE CONIFEROUS TREE GROUND ELEVATION GRADE ELEVATION DATUM LINE C-1 UTILITY TEST HOLE LOCATION TP-1

GENERAL NOTES

- 1. THE EXISTING UTILITIES AND OBSTRUCTIONS SHOWN ON THESE PLANS ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS CONCERNED AND MISS UTILITY PRIOR TO CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL CALL "MISS UTILITY" AT LEAST 48 HOURS IN ADVANCE OF ANY EXCAVATION WORK AT 1–800–257–7777.
- 2. THE CONTRACTOR SHALL PROTECT AND NOT INTERRUPT EXISTING UTILITY SERVICES UNLESS OTHERWISE NOTED ON THE PLANS OR AUTHORIZED BY THE ENGINEER. SEE UTILITY STATEMENT.
- 3. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THE SAFETY OF THE PUBLIC AND ALL WORKERS IS MAINTAINED AT ALL TIMES THROUGHOUT THE TERM OF THE CONTRACT.
 MOTORISTS SHALL BE GUIDED IN A CLEAR AND POSITIVE MANNER WHILE APPROACHING AND PASSING THROUGH CONSTRUCTION WORK AND EQUIPMENT AREAS.
- 4. HORIZONTAL CONTROL: THE LOCATION AND ELEVATION OF BENCH MARKS ARE SHOWN ON THE PLANS. ALL ELEVATIONS ARE IN FEET AND ARE BASED ON THE NAVD 88.
- 5. WHERE REFERENCE IS MADE TO MDOT SHA STANDARD PLATES IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE IN HIS POSSESSION THE LATEST UP-TO-DATE STANDARD PLATES AS OF THE DATE OF ADVERTISEMENT OF THESE PLANS. STANDARD PLATES ARE AVAILABLE AT WWW.MARYLANDROADS.COM.
- 6. THE CONTRACTOR SHALL GRADE FOR POSITIVE DRAINAGE AT ALL ROADWAY INTERSECTIONS, ENTRANCES AND YARDS.
- 7. REPAIRS TO UTILITIES OR PROPERTY DAMAGE AS A RESULT OF CONTRACTOR'S NEGLIGENCE OR METHOD OF OPERATION SHALL BE MADE AT NO ADDITIONAL COST TO THE CITY, THE ADMINISTRATION OR THE OWNER.
- 8. PROVIDE 4-INCH FURNISHED TOPSOIL AND TURFGRASS SOD ESTABLISHMENT ON SLOPES UNLESS OTHERWISE NOTED ON THE PLANS.
- 9. MATERIAL REMOVED DURING CONSTRUCTION SHALL BECOME THE CONTRACTOR'S PROPERTY UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIAL PROVISIONS.
- 10. THE CONTRACTOR SHALL RESET ANY SIGN POSTS OR MAIL BOXES TO FACILITATE THE WORK, EXCEPT WHERE SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 1. FINAL DETERMINATION AS TO THE LOCATION OF EROSION AND SEDIMENT CONTROLS WILL BE AT THE DIRECTION OF THE ENGINEER WHO RESERVES THE RIGHT TO ORDER ADDITIONAL E&S DEVICES.
- 12. 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.
- 13. SEVERAL PROPOSED DRAINAGE STRUCTURES AND PIPES WILL CONNECT TO EXISTING STORM DRAIN STRUCTURES AND PIPES. THE CONTRACTOR SHALL FIELD VERIFY INVERTS PRIOR TO ORDERING, FABRICATING OR CONSTRUCTING PROPOSED STORM DRAIN STRUCTURES.
- 14. SAW CUTS WILL NOT BE MEASURED BUT WILL BE INCIDENTAL TO OTHER RELATED ITEMS AS SPECIFIED IN THE CONTRACT DOCUMENTS.
- 15. VERTICAL ADJUSTMENT OF EXISTING UTILITIES SHALL BE INCIDENTAL TO THE 5 INCH CONCRETE SIDEWALK, SPECIALTY PAVERS TYPE 2 OR ASPHALT SHARED USE PATH PAY ITEMS. SEE SP 603 SIDEWALKS.

AB-01

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION B

MD 650 (NEW HAMPSHIRE AVENUE)

POPLAR AVE TO AUBURN AVE

SHA TRACKING NO. 20-AP-MO-020-XX

		DATE NOVEMBER 2021 (CONTRACT NO. T.B.D.	
			·	
60% PLANS NOVEMBER 2021	DESIGNED BY SAB DRAWN BY KBJ CHECKED BY RJG F.A.P. NO. T.B.D.	COUNTY	Y MONTGOMERY	
	DRAWING NO. AB-01	1 OF 1	SHEET NO. 2 C	DF 44

PLOTTED: 11/2/2021
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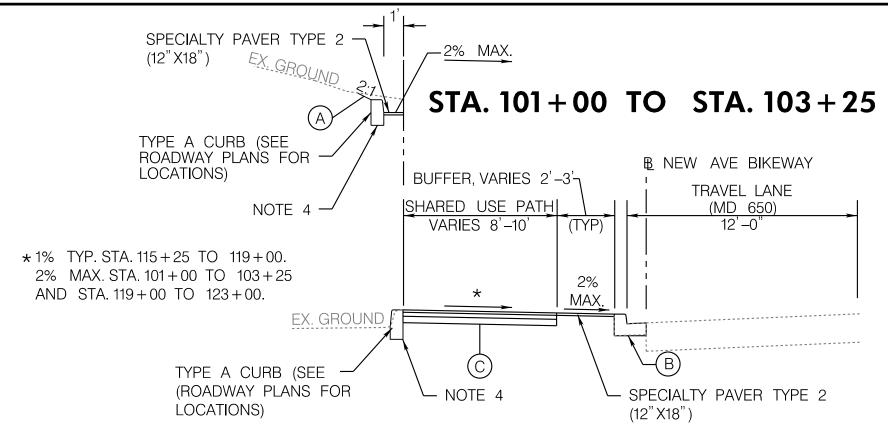
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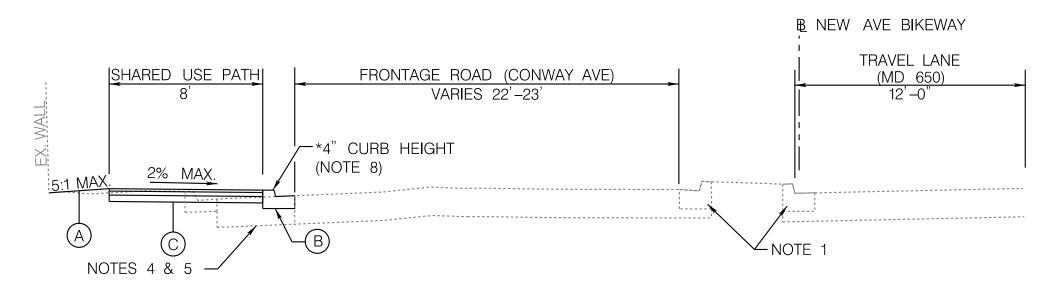
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NEW AVENUE BIKEWAY

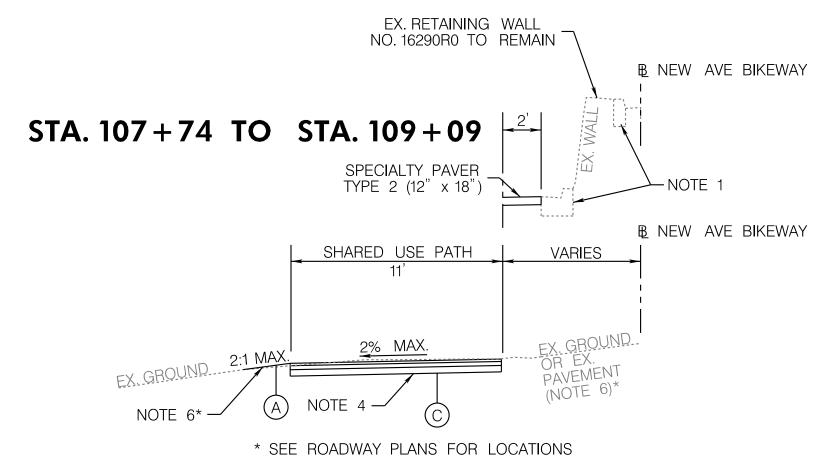
STA. 101+00 TO STA. 103+25

STA. 115+25 TO STA. 123+00



NEW AVENUE BIKEWAY

STA. 103 + 25 TO STA. 105 + 25

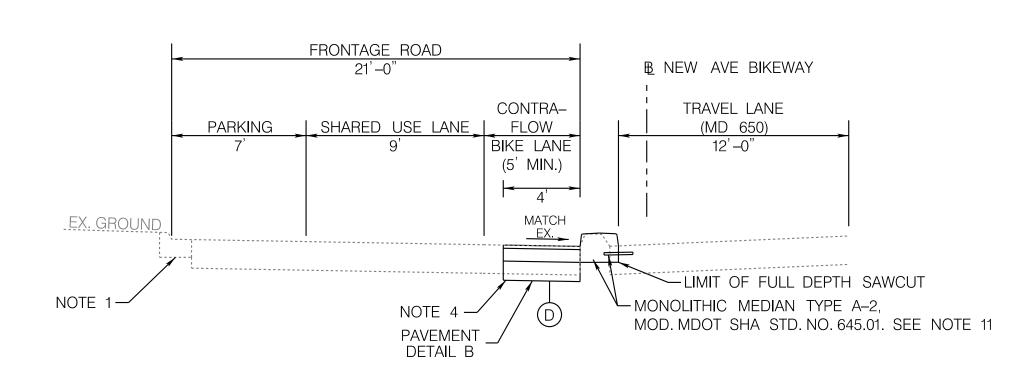


NEW AVENUE BIKEWAY

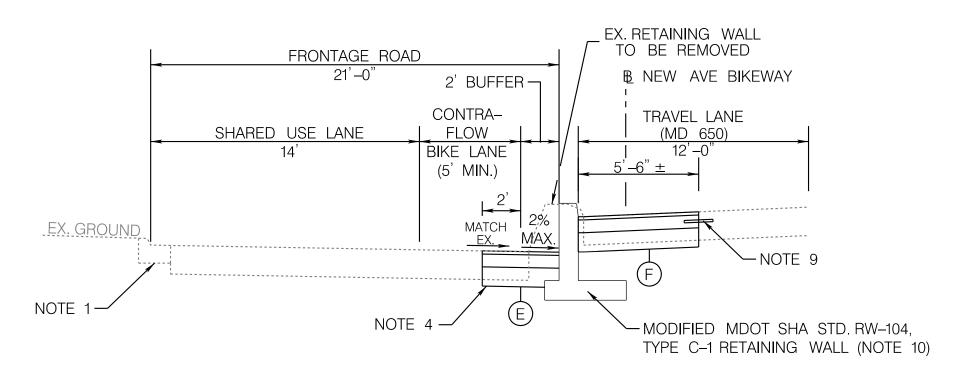
STA. 105 + 25 TO STA. 109 + 50

TYPICAL SECTION LEGEND

- (A) 4" FURNISHED TOPSOIL & TURFGRASS SOD ESTABLISHMENT
- B) MDOT SHA STANDARD TYPE A COMBINATION CURB AND GUTTER, ANY HEIGHT OR DEPTH, PAVEMENT DETAIL NOTE 6, SHEET DT-01
- (C) MDOT SHA STD. NO. 580.08: BIKE PATHS FLEXIBLE PAVEMENT SECTION
- (D) SEE PAVEMENT DETAIL B, SHEET DT-01
- E SEE PAVEMENT DETAIL C, SHEET DT-01
- (F) SEE PAVEMENT DETAIL E, SHEET DT-01



NEW AVENUE BIKEWAY STA. 109 + 50 TO STA. 113 + 25



STA. 113 + 35 TO STA. 115 + 20

NEW AVENUE BIKEWAY STA. 113 + 25 TO STA. 115 + 25

NOTES:

- 1. EXISTING CURB AND GUTTER TO REMAIN.
- 2. SAW CUTS ARE INCIDENTAL TO THE EXCAVATION OR PAVING ITEMS.
- 3. ALL ROADWAY EXCAVATION SHALL BE DEFINED AS CLASS 1 REGARDLESS OF THE WIDTH OF THE EXCAVATION.
- 4. LIMIT OF CLASS 1 EXCAVATION AND TOP OF SUBGRADE.
- 5. EXCAVATE TO THE TOP OF EXISTING SUBGRADE. BACKFILL WITH COMMON BORROW TO BOTTOM OF SIDEWALK OR ASPHALT SHARED USE PATH.
- 6. EXCAVATE TO THE TOP OF EXISTING SUBGRADE. BACKFILL WITH FURNISHED SUBSOIL TO 4" BELOW PROPOSED GRADE. PLACE 4" FURNISHED TOPSOIL TO PROPOSED GRADE. PROVIDE TURFGRASS SOD ESTABLISHMENT.
- 7. SEE SIGNING AND PAVEMENT MARKING PLANS FOR BIKE PAVEMENT STRIPING.
- 8. ALL CONCRETE CURB AND GUTTER WILL BE PAID FOR AS STANDARD TYPE A COMBINATION CURB & GUTTER, ANY HEIGHT OR DEPTH.
- 9. PROVIDE STEEL DOWELS 1.5" X 18", 1' ON CENTER, SIMILAR TO MDOT SHA TYPE 1 REPAIRS. PLACE DOWELS ALONG THE PERIMETER OF THE NEW CONSTRUCTION AND ALONG ANY EXISTING TRANSVERSE PAVEMENT JOINT.
- 10. RETAINING WALL SHALL BE MODIFIED FROM STD. RW-104, TYPE C-1 AS FOLLOWS:

WALL REVEAL ADJACENT TO SOUTHBOUND MD 650 TRAVEL LANES SHALL NOT EXCEED 9 INCHES.

- NOTE 10 WALL REVEAL ADJACENT TO FRONTAGE ROAD SHALL NOT EXCEED 3 FEET. CONT'D.
 - NO SUBGRADE DRAINAGE SYSTEM SHALL BE PROVIDED AS THE FINISHED GROUND LINE ON BOTH SIDES OF THE RETAINING WALL SHALL BE PAVED.
 - 11. LONGITUDINAL TIE DEVICES SHALL BE PROVIDED ON THE SOUTHBOUND MD 650 SIDE ONLY, FOLLOWING MDOT SHA STD. NO. 572.61-01. TIE DEVICES SHALL BE STEEL DOWELS 1.5" X 18", 1' ON CENTER. PLACE DOWELS ALONG THE PERIMETER OF THE NEW CONSTRUCTION AND ALONG ANY EXISTING TRANSVERSE PAVEMENT JOINT.

TS-01

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION B

MD 650 (NEW HAMPSHIRE AVENUE)

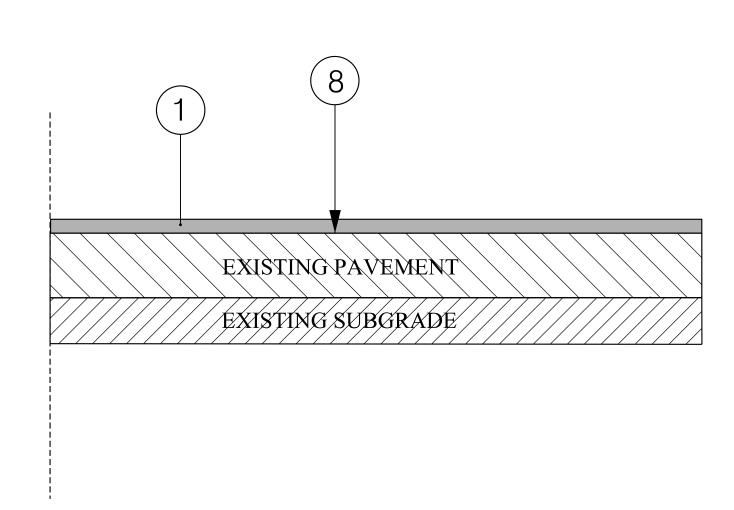
POPLAR AVE TO AUBURN AVE

SHA TRACKING NO. 20-AP-MO-020-XX

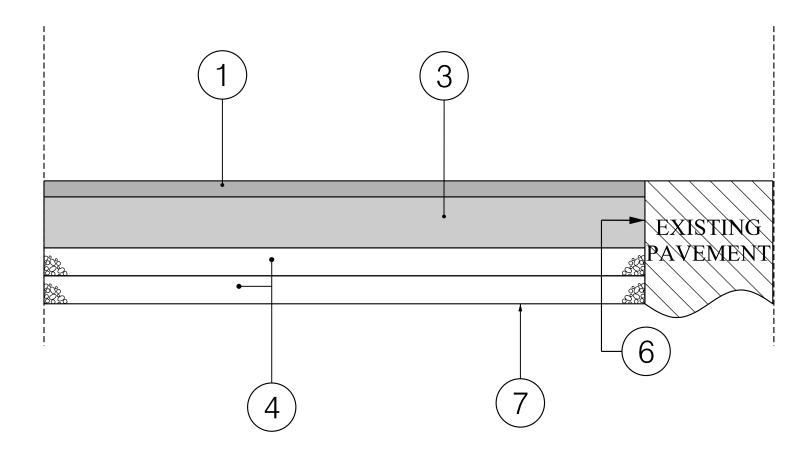
REVISIONS	TYPICAL SECTIONS					
	SCALE1"=20' DATE_NOVEMBER 2021_ CONTRACT NOT.B.D					
60% PLANS NOVEMBER 2021	DESIGNED BY SAB COUNTY MONTGOMERY DRAWN BY SAB LOGMILE MD 650 0.040- 0.830 CHECKED BY RJG F.A.P. NO. T.B.D.					
	DRAWING NO. TS-01 1 OF 1 SHEET NO. 3 OF 44					

PLOTTED: 11/2/2021
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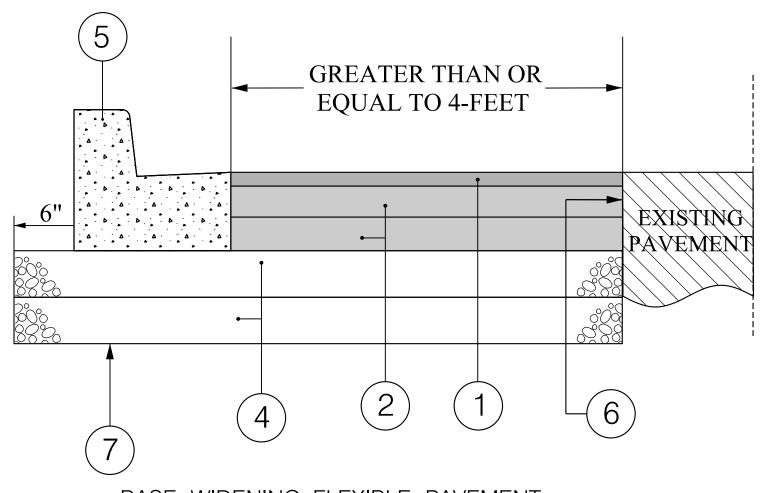




FINE MILLING AND RESURFACING PAVEMENT DETAIL A

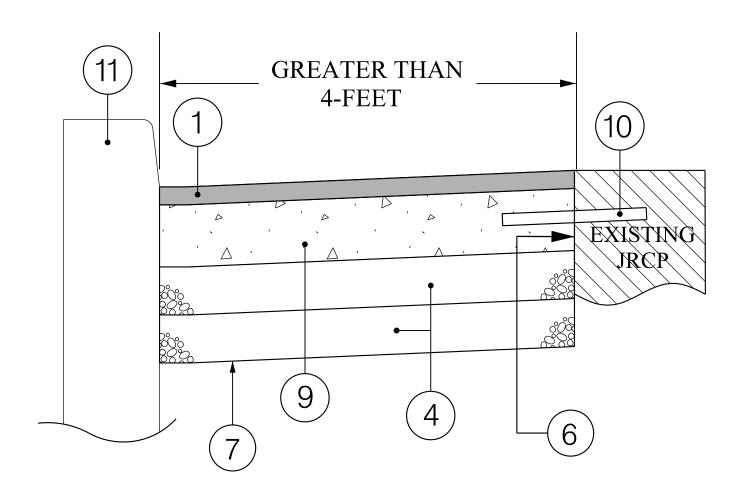


ASPHALT SECTION FOR FRONTAGE ROAD PAVEMENT DETAIL B



BASE WIDENING, FLEXIBLE PAVEMENT HEAVY DUTY PAVEMENT SECTION

PAVEMENT DETAIL C



BASE WIDENING, CONCRETE PAVEMENT HEAVY DUTY PAVEMENT SECTION

PAVEMENT DETAIL E

PAVEMENT LEGEND

- 1 2" SUPERPAVE ASPHALT MIX 12.5 mm FOR SURFACE, HDFV, PG64S-22, LEVEL 2
- 2 4" SUPERPAVE ASPHALT MIX 19.0 mm FOR BASE, PG 64S-22, LEVEL 2
- 3 3 SUPERPAVE ASPHALT MIX 19.0 mm FOR BASE, PG 64S-22, LEVEL 2
- 4 6" GRADED AGGREGATE BASE COURSE
- MDOT SHA STANDARD TYPE A COMBINATION CURB AND GUTTER, MONOLITHIC MEDIAN TYPE A-2, OR CAST-IN-PLACE RETAINING WALL (SEE PLANS)
- 6 FULL-DEPTH SAW CUT INCIDENTAL TO FULL-DEPTH PAVING, CURB AND GUTTER AND EXCAVATION ITEMS
- (7) TOP OF SUBGRADE AND LIMIT OF EXCAVATION (SEE NOTE 2)
- (8) TOP OF EXISTING PAVEMENT AFTER 2" FINE MILLING
- 9 9" PLAIN PORTLAND CEMENT CONCRETE MIX NO. 7
- (10) LONGITUDINAL TIE DEVICE. SEE NOTE 9
- (11) CAST-IN-PLACE RETAINING WALL, MONOLITHIC MEDIAN, OR MOOT SHA STANDARD TYPE B CURB (SEE PLANS)

PAVEMENT DETAIL NOTES

- 1. REMOVE AND DISPOSE OF ALL SOFT AND UNSTABLE MATERIAL PER SECTION 208 OF THE MDOT SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.
- 1A. BASED ON AS-BUILT PLANS, MD 650 HAS THE FOLLOWING APPROXIMATE PAVEMENT SECTION:
- 3" ASPHALT OVER 9" JOINTED REINFORCED CONCRETE PAVEMENT OVER 6" SUB-BASE.

BASED ON PAVEMENT CORES TAKEN ON JANUARY 22, 2021, THE FRONTAGE ROADS HAVE THE FOLLOWING PAVEMENT SECTIONS:

CORE C-1, PRINCE GEORGES AVE.: 4.5" ASPHALT OVER 12" GRAVEL BASE

CORE C-2, NEW HAMPSHIRE AVE. SHOPPING CENTER: 4" ASPHALT OVER 5.6" GRAVEL

- 2. IN AREAS WHERE EXISTING PAVEMENT IS BEING REMOVED, THE LIMIT OF EXCAVATION SHALL BE AT THE BOTTOM OF THE BOUND MATERIALS IN THE EXISTING PAVEMENT OR AT THE TOP OF SUBGRADE, WHICHEVER IS LOWER.
- 3. FOR ASPHALT SHARED USE PATH, REFER TO MDOT SHA STD. NO. 580.08 FOR BIKE PATHS - FLEXIBLE PAVEMENT SECTION.
- 4. REFER TO MDOT SHA STD. NO. 578.01 FOR REPAIRING PAVEMENT OPENINGS WITHIN UTILITY/STORM DRAIN TRENCHES. PAVEMENT REPAIR FOR PIPE INSTALLATION IS INCIDENTAL TO PIPE INSTALLATION.
- 5. REFER TO MDOT SHA STD, NO. 578.03 FOR PERMANENT PATCHING FOR FLEXIBLE PAVEMENT USING APPROVED ASPHALT MIX.
- 6. REFER TO MDOT SHA STD. NO. 580.03 FOR NEW CURB AND GUTTER PLACEMENT ALONG EXISTING PAVEMENT.
- 7. REFER TO MDOT SHA STD. NO. 645.01 FOR STANDARD MONOLITHIC CONCRETE MEDIAN TYPE 'A'.
- 8. THE SUBGRADE SHALL BE TEST ROLLED AS SPECIFIED IN SECTION 204 OF THE LATEST STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.
- 9. PROVIDE STEEL DOWELS 1.5" X 18", 1' ON CENTER, SIMILAR TO MDOT SHA TYPE 1 REPAIRS. PLACE DOWELS ALONG THE PERIMETER OF THE NEW CONSTRUCTION AND ALONG ANY EXISTING TRANSVERSE PAVEMENT JOINT.

DT-01

CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION B

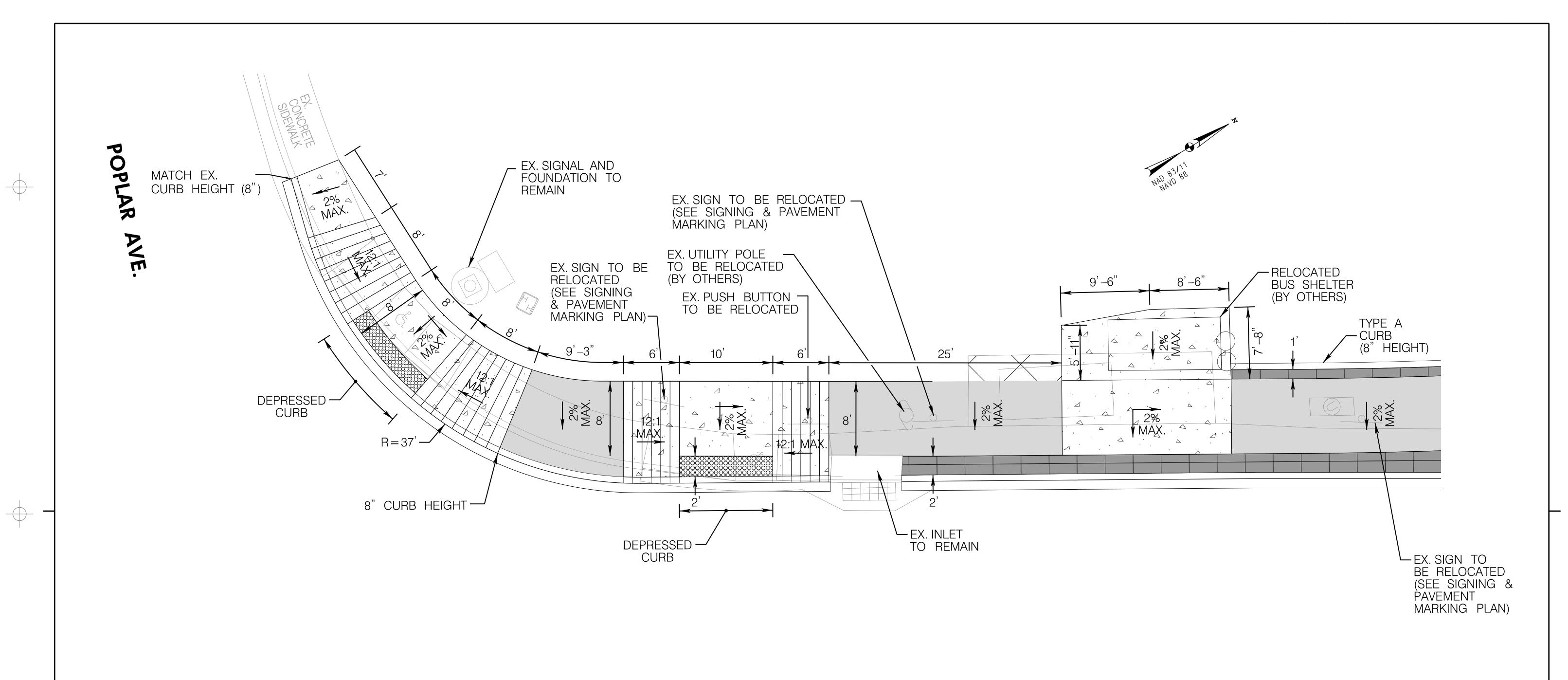
MD 650 (NEW HAMPSHIRE AVENUE) POPLAR AVE TO AUBURN AVE SHA TRACKING NO. 20-AP-MO-020-XX

REVISIONS	PAVEMENT DETAILS						
	SCALE_N.T.S DATE_I	NOVEMBER 2021	CONTRACT NOT.	B.D.			
60% PLANS NOVEMBER 2021	DESIGNED BY SAB DRAWN BY BB CHECKED BY RJG F.A.P. NO. T.B.D.		MONTGOMERY E				
	DRAWING NO. DT-01	1 OF 9	SHEET NO.	4	OF 44		

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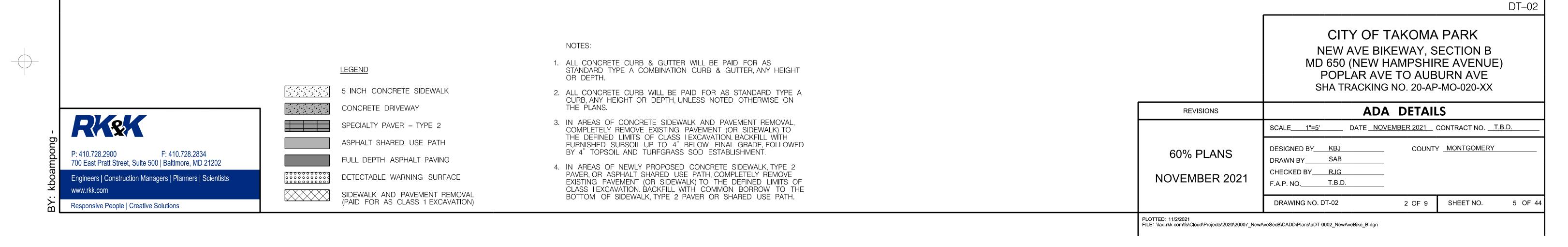
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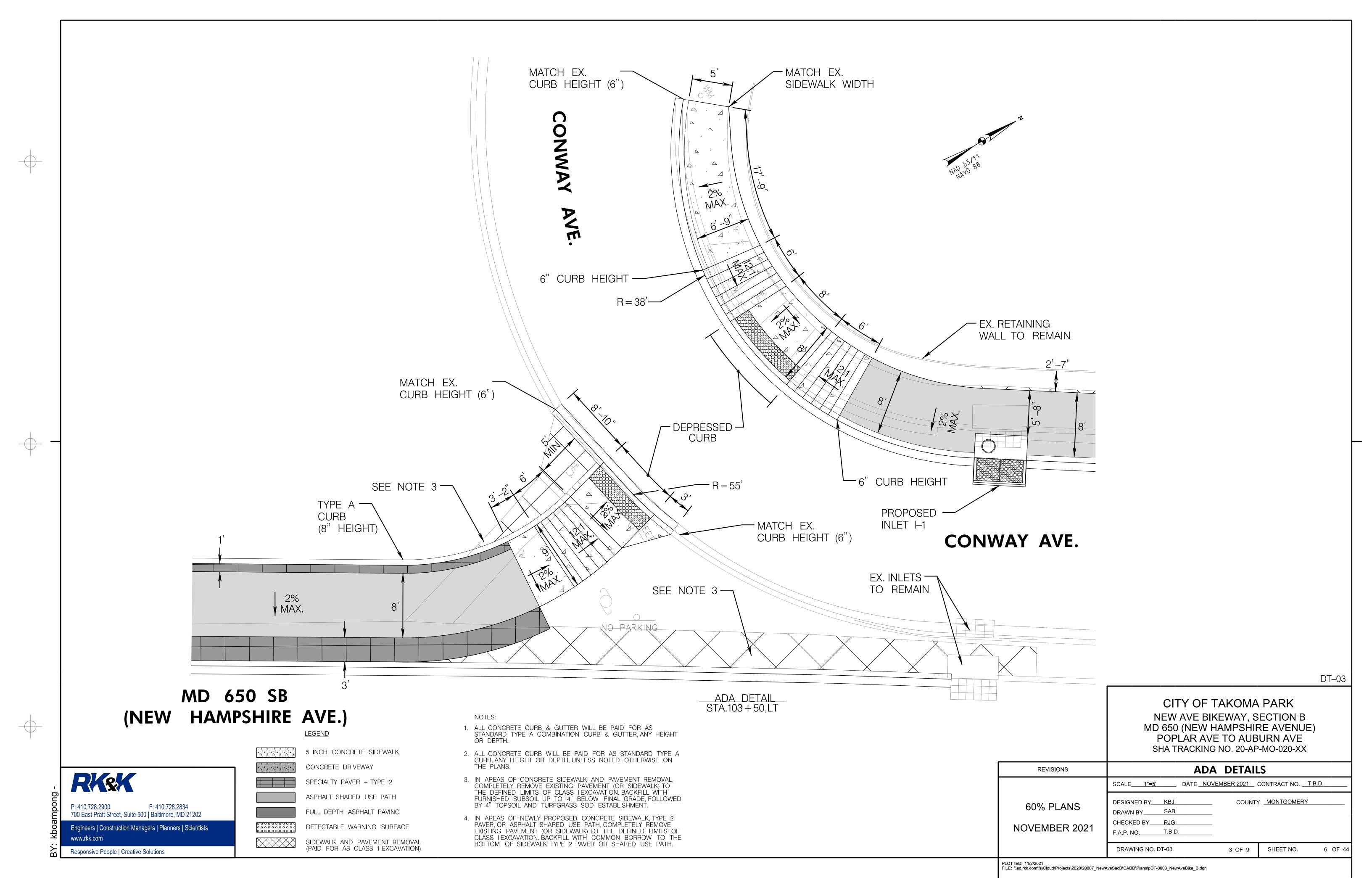
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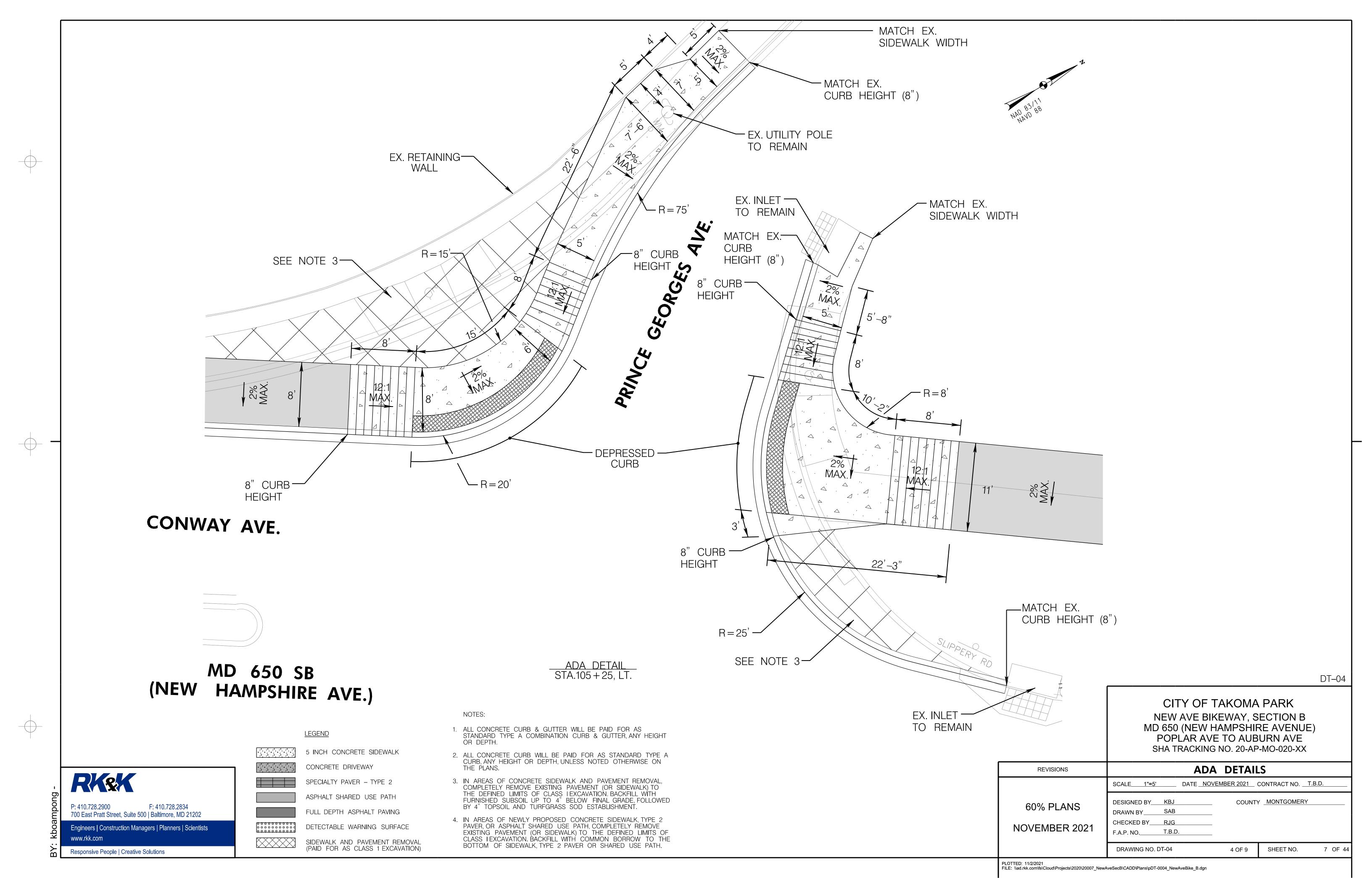


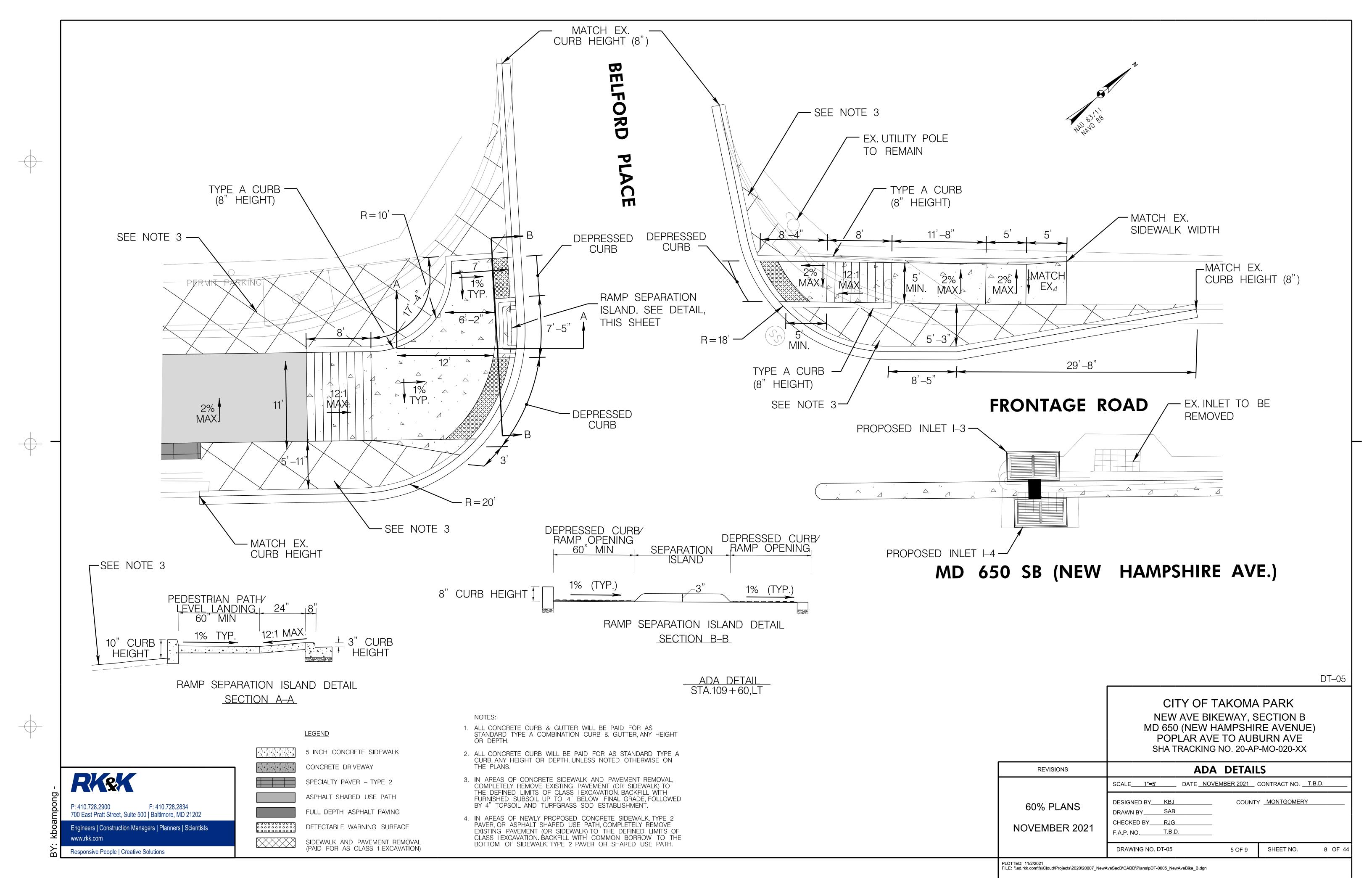
MD 650 SB (NEW HAMPSHIRE AVE.)

ADA AND BUS STOP DETAIL STA.101 + 50,LT

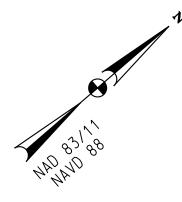


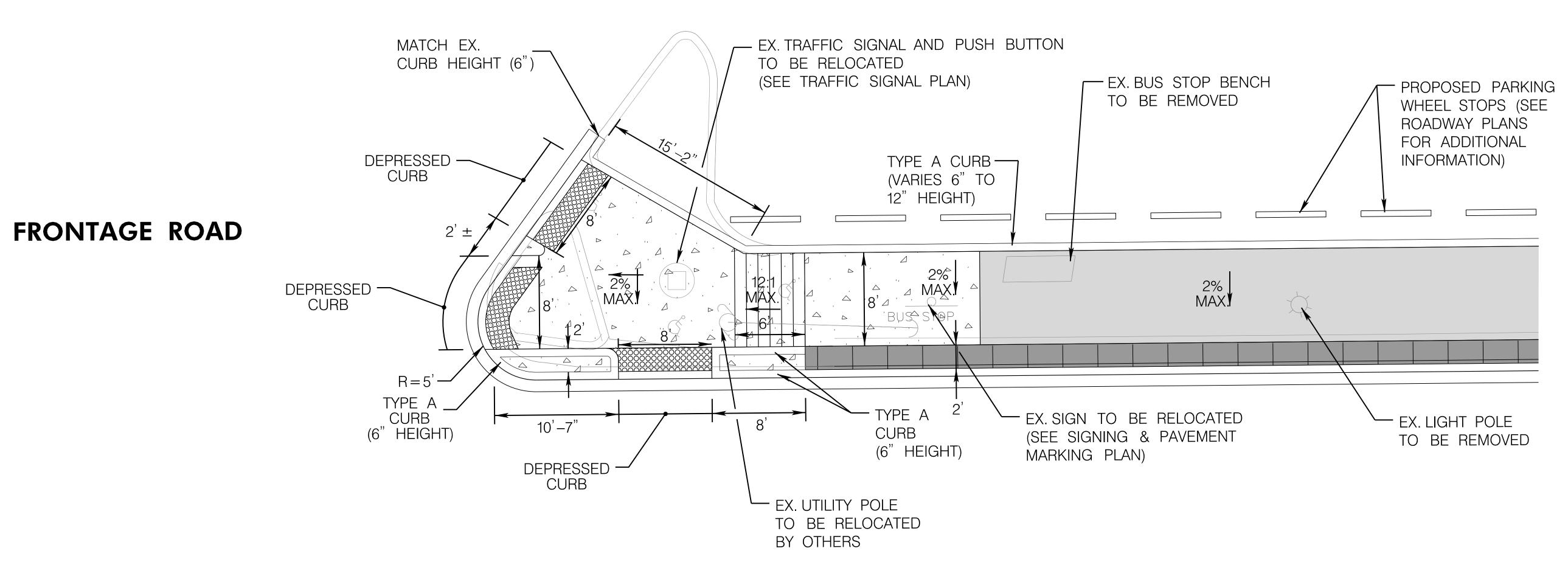






NEW HAMPSHIRE AVE. SHOPPING CENTER





MD 650 SB (NEW HAMPSHIRE AVE.)

ADA DETAIL STA.115 + 50,LT

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NOTES:

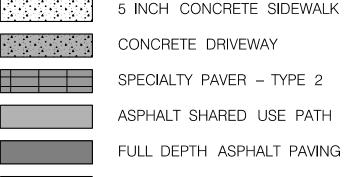
- 1. ALL CONCRETE CURB & GUTTER WILL BE PAID FOR AS STANDARD TYPE A COMBINATION CURB & GUTTER, ANY HEIGHT
- 2. ALL CONCRETE CURB WILL BE PAID FOR AS STANDARD TYPE A CURB, ANY HEIGHT OR DEPTH, UNLESS NOTED OTHERWISE ON
- 3. IN AREAS OF CONCRETE SIDEWALK AND PAVEMENT REMOVAL, COMPLETELY REMOVE EXISTING PAVEMENT (OR SIDEWALK) TO THE DEFINED LIMITS OF CLASS LEXCAVATION. BACKFILL WITH FURNISHED SUBSOIL UP TO 4" BELOW FINAL GRADE, FOLLOWED BY 4" TOPSOIL AND TURFGRASS SOD ESTABLISHMENT.
- 4. IN AREAS OF NEWLY PROPOSED CONCRETE SIDEWALK, TYPE 2 PAVER, OR ASPHALT SHARED USE PATH, COMPLETELY REMOVE EXISTING PAVEMENT (OR SIDEWALK) TO THE DEFINED LIMITS OF CLASS LEXCAVATION. BACKFILL WITH COMMON BORROW TO THE BOTTOM OF SIDEWALK, TYPE 2 PAVER OR SHARED USE PATH.

CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION B MD 650 (NEW HAMPSHIRE AVENUE) POPLAR AVE TO AUBURN AVE SHA TRACKING NO. 20-AP-MO-020-XX

DT-06

ADA DETAILS REVISIONS DATE NOVEMBER 2021 CONTRACT NO. T.B.D. SCALE____1"=5' DESIGNED BY KBJ COUNTY MONTGOMERY 60% PLANS DRAWN BY____ CHECKED BY RJG **NOVEMBER 2021** T.B.D. F.A.P. NO.___ DRAWING NO. DT-06 SHEET NO. 9 OF 44 6 OF 9

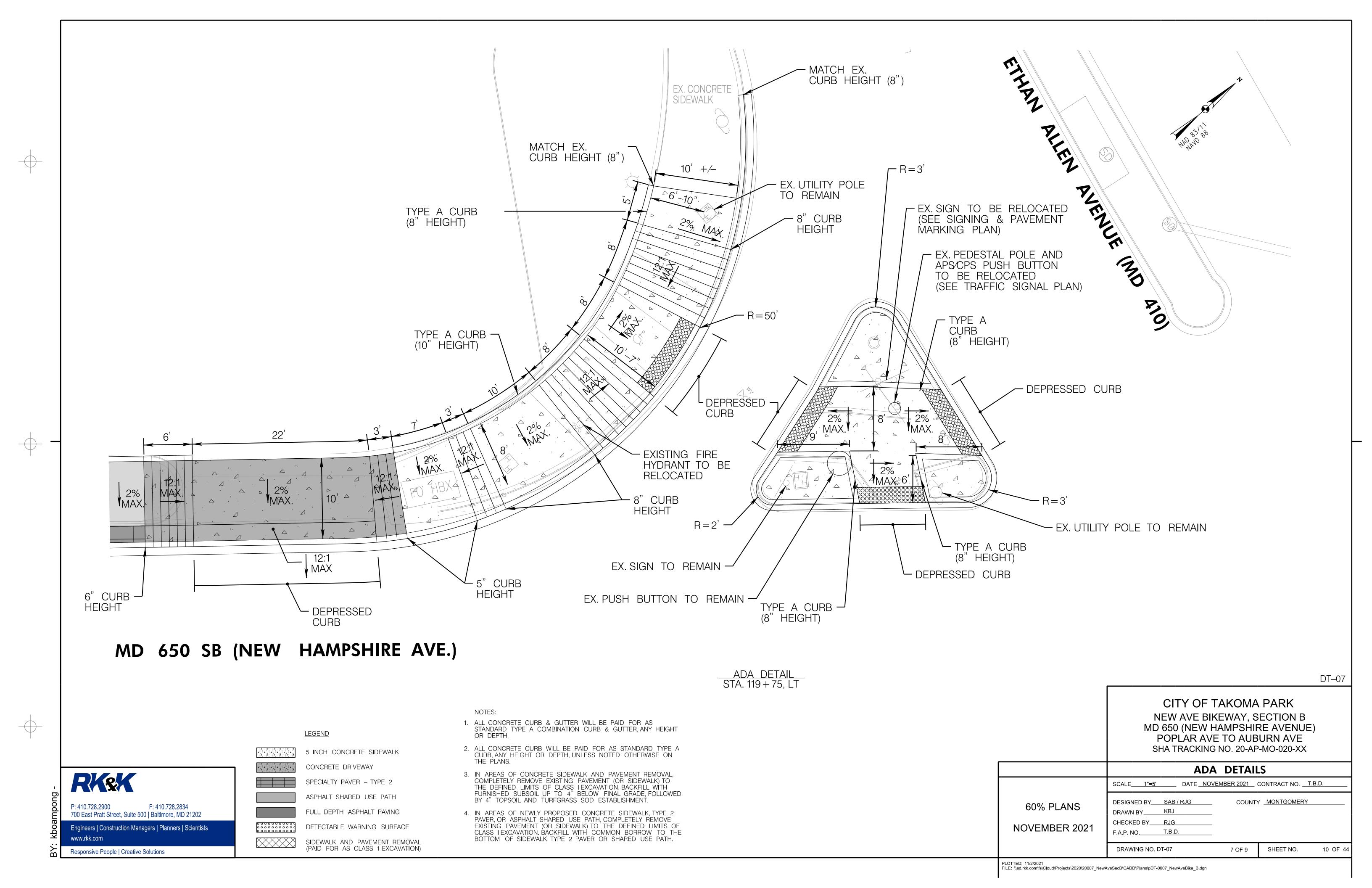
FILE: \\ad.rkk.com\fs\Cloud\Projects\2020\20007_NewAveSecB\CADD\Plans\pDT-0006_NewAveBike_B.dgn

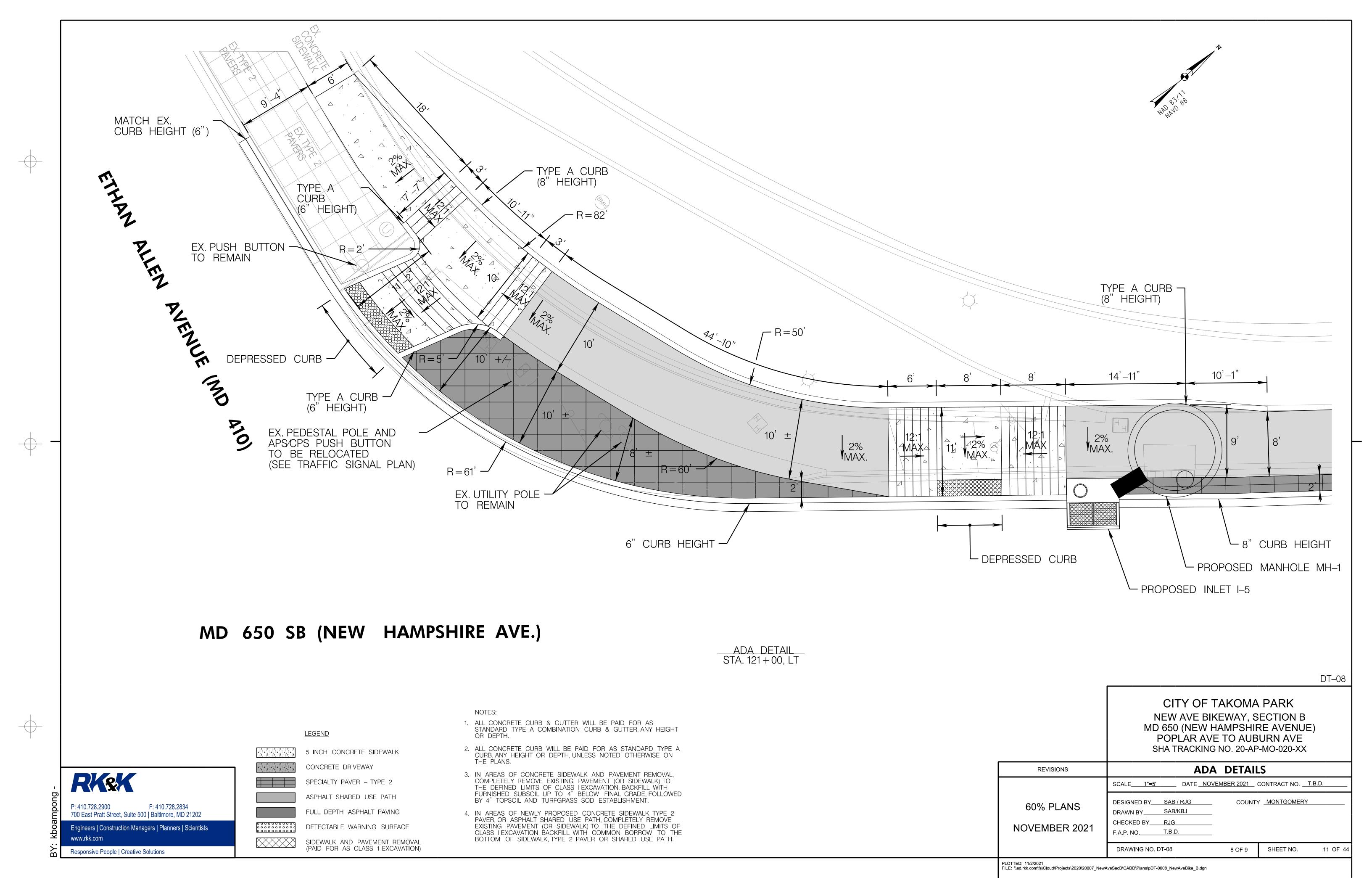


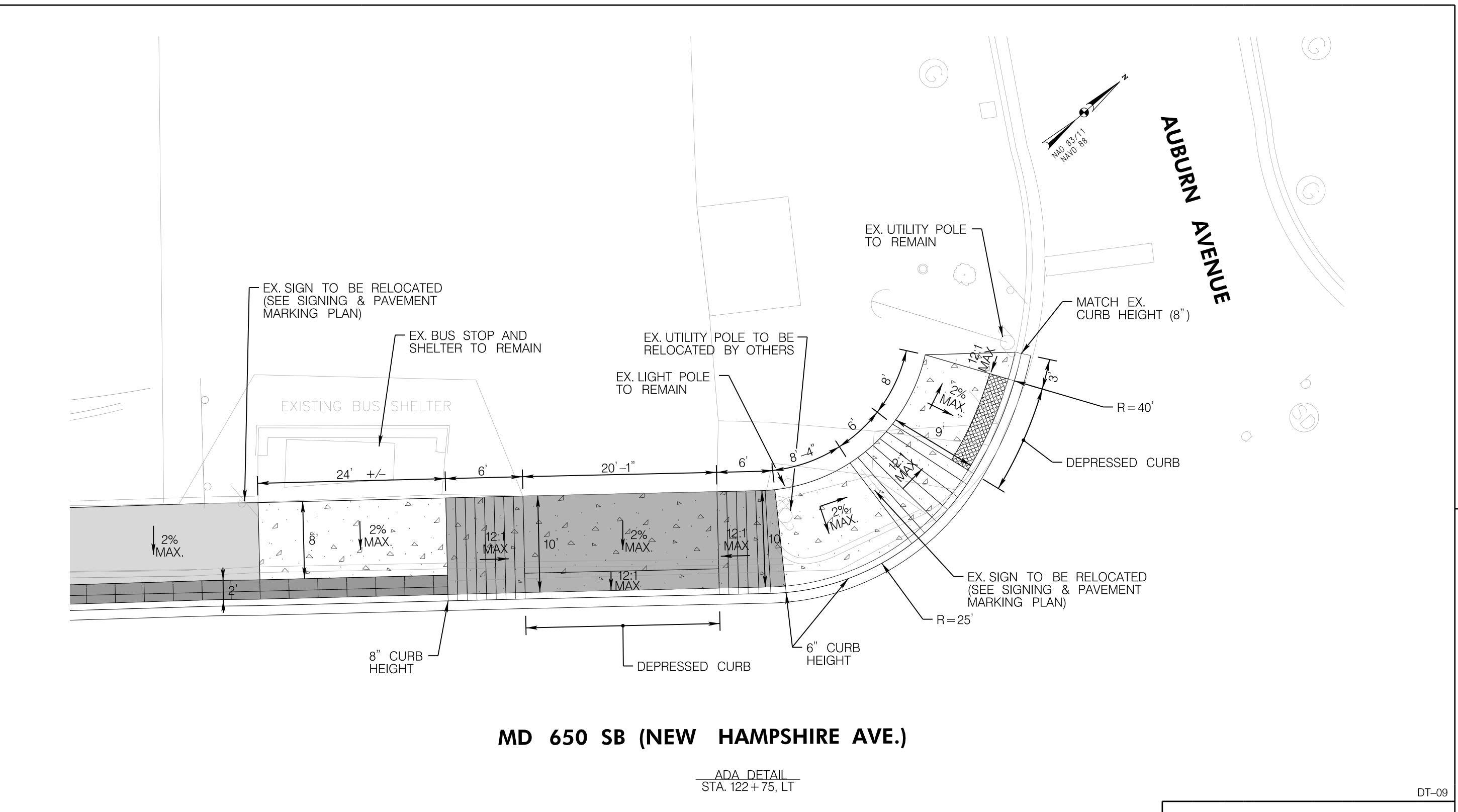
<u>LEGEND</u>

FULL DEPTH ASPHALT PAVING DETECTABLE WARNING SURFACE

SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)









<u>LEGEND</u>

00000000000

5 INCH CONCRETE SIDEWALK

SPECIALTY PAVER - TYPE 2

ASPHALT SHARED USE PATH

FULL DEPTH ASPHALT PAVING

DETECTABLE WARNING SURFACE

SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

CONCRETE DRIVEWAY

NOTES:

1. ALL CONCRETE CURB & GUTTER WILL BE PAID FOR AS STANDARD TYPE A COMBINATION CURB & GUTTER, ANY HEIGHT OR DEPTH.

2. ALL CONCRETE CURB WILL BE PAID FOR AS STANDARD TYPE A CURB, ANY HEIGHT OR DEPTH, UNLESS NOTED OTHERWISE ON THE PLANS

3. IN AREAS OF CONCRETE SIDEWALK AND PAVEMENT REMOVAL, COMPLETELY REMOVE EXISTING PAVEMENT (OR SIDEWALK) TO THE DEFINED LIMITS OF CLASS LEXCAVATION. BACKFILL WITH FURNISHED SUBSOIL UP TO 4" BELOW FINAL GRADE, FOLLOWED BY 4" TOPSOIL AND TURFGRASS SOD ESTABLISHMENT.

4. IN AREAS OF NEWLY PROPOSED CONCRETE SIDEWALK, TYPE 2 PAVER, OR ASPHALT SHARED USE PATH, COMPLETELY REMOVE EXISTING PAVEMENT (OR SIDEWALK) TO THE DEFINED LIMITS OF CLASS I EXCAVATION. BACKFILL WITH COMMON BORROW TO THE BOTTOM OF SIDEWALK, TYPE 2 PAVER OR SHARED USE PATH.

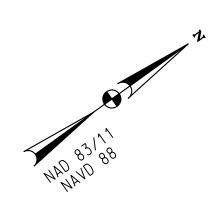
CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION B MD 650 (NEW HAMPSHIRE AVENUE) POPLAR AVE TO AUBURN AVE SHA TRACKING NO. 20-AP-MO-020-XX

PLOTTED: 11/2/2021
FILE: \\ad.rkk.com\fs\Cloud\Projects\2020\20007_NewAveSecB\CADD\Plans\pDT-0009_NewAveBike_B.dgn

	CURVE DATA						
CURVE NO. \triangle Dc R T L E							
I	9° 30′20.16′′	2°12′13 . 26′′	2,600.00′	216.17′	431.35′	8 . 97′	

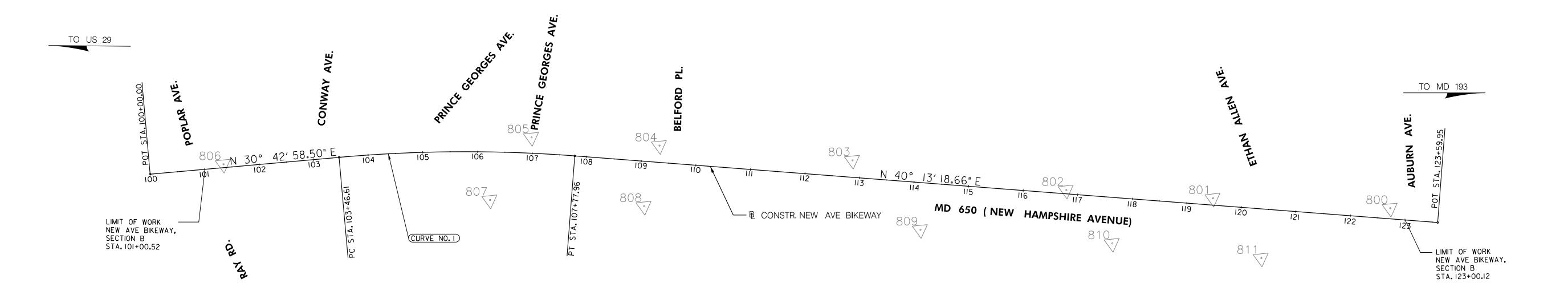
BASELINE CONTROL COORDINATES © CONSTR. MD 650						
	NORTH	EAST				
POT STA.100+00.00	474,968.1366	1,312,668.4796				
PC STA.103+46.61	475,266.1227	1,312,845.5252				
PI STA. 105+62.78	475,451.9668	1,312,955.9426				
PT STA.107+77.96	475,617.0243	1,313,095.5350				
POT STA. 123+59.95	476,824.9497	1,314,117.1010				

	TRAVERSE POINTS							
POINT NO.	NORTH	EAST	ELEVATION	PLAN SHEET NO.				
659	477,089.7324	1,314,330.8027	178.33	-				
800	476,770.0060	1,314,045.2907	189.90	PS-04				
801	476,517.8914	1,313,841.0045	201.77	PS-04				
802	476,309.1096	1,313,672.0181	211.04	PS-03				
803	476,024.1202	1,313,399.3005	205.68	PS-03				
804	475,753.7070	1,313,170.9315	176.51	PS-02				
805	475,572.8268	1,313,021.9856	152.47	PS-02				
806	475,087.4455	1,312,732.2320	136.99	PS-0I				
807	475,444.3321	1,313,070.1947	153.56	PS-02				
808	475,666.1119	1,313,244.3769	176.67	PS-02				
809	476,050.6859	1,313,574.5269	210.01	PS-03				
810	476,320.3597	1,313,800.1156	208.26	PS-04				
811	476,525.4742	1,313,981.2735	198.00	PS-04				



NOTES:

I. TOPOGRAPHIC SURVEY AND BOUNDARY LINE ESTABLISHMENT WAS PREPARED BY CAPITOL DEVELOPMENT DESIGN, INC. IN MAY 2020.



GS-01

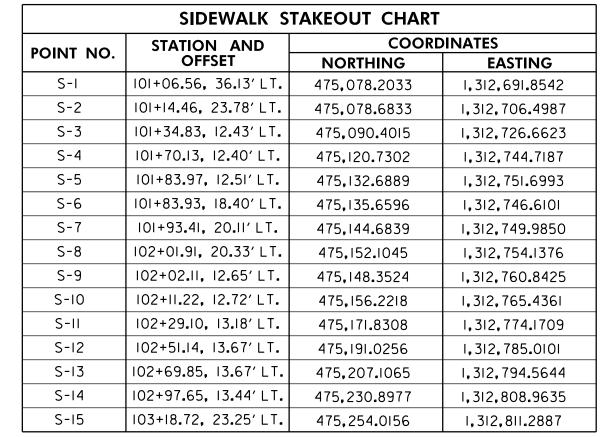
CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION B
MD 650 (NEW HAMPSHIRE AVENUE)
POPLAR AVE TO AUBURN AVE
SHA TRACKING NO. 20-AP-MO-020-XX

P: 410.728.2900 F: 410.728.2834
700 East Pratt Street, Suite 500 | Baltimore, MD 21202

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PLOTTED: 11/2/2021
FILE: \\ad.rkk.com\fs\Cloud\Projects\2020\20007_NewAveSecB\CADD\Plans\pGS-0001_NewAveBike_B.dgn



	SIDEWALK STAKEOUT CHART (CONT'D)						
POINT NO.	STATION AND	COORDINATES					
POINT NO.	OFFSET	NORTHING	EASTING				
S-15A	103+14.56, 9.29' LT.	475,243.3142	1,312,821.1700				
S-15B	103+15.88, 6.59' LT.	475,243.0681	1,312,824.1599				
S-15C	102+97.57, 2.44' LT.	475,225.2021	1,312,818.3741				
S-16	103+38.03, 71.23' LT.	475,295.1262	1,312,779.8999				
S-17	103+38.27, 67.28' LT.	475,293.3174	1,312,783.4215				
S-18	103+69.38, 36.45'LT.	475,304.5375	1,312,826.0701				
S-19	104+91.65, 34.79'LT.	475,408.0881	1,312,894.1778				
S-20	105+05.56, 45.32'LT.	475,425.6957	1,312,893.3631				
S-2I	105+07.56, 51.12' LT.	475,430.6388	1,312,889.7122				
S-2IA	105+14.70, 69.77' LT.	475,447.1865	1,312,878.4383				
S-2IB	105+18.01, 73.43' LT.	475,452.0657	1,312,877.3457				
S-2IC	105+22.II, 75.01'LT.	475,456.4357	1,312,878.4306				
S-22	105+25.32, 78.77' LT.	475,461.2866	1,312,877.2178				
S-23	105+41.78, 49.38' LT.	475,458.3464	1,312,910.9767				
S-23A	105+45.71, 54.46' LT.	475,464.5520	1,312,909.1174				
S-23B	105+43.65, 48.37' LT.	475,459.3313	1,312,912.8920				
S-24	105+42.16, 39.73' LT.	475,453.1286	1,312,919.0956				

SHARED USE PATH

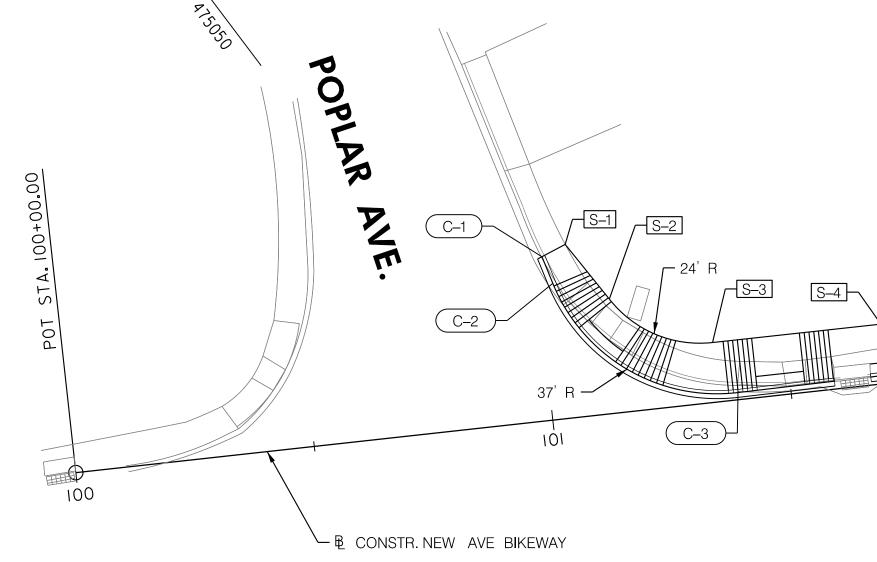
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ES	
EASTING	
12,821.1700	
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12,894.1778	5
2,893.3631	S
12,889.7122	5
2,878.4383	
2,877.3457	
2,878.4306	
12,877.2178	
2,910.9767	
12,909.1174	
2,912.8920	
2,919.0956	\\\

C-10

 $\left(\begin{array}{c} C-6 \end{array}\right)$



SHARED USE PATH



MD 650 (NEW HAMPSHIRE AVENUE)

		CURB STA	KEOUT CH	ART		
POINT NO	STATION AND	EDGE OF	воттом	COORDINATES		
POINT NO.	OFFSET	ROAD	OF CURB	NORTHING	EASTING	
C-I	101+01.46, 34.09' LT.	136.25	136 . 21	475,072.7794	1,312,690.9947	
C-2	101+03.10, 28.35' LT.	136.71	136.67	475,071.2533	1,312,696.7641	
C-3	101+38.97, 1.49' LT.	136.34	136.30	475,088.3704	1,312,738.1805	
C-4	102+04.72, 2.00' LT.	136.54	136.50	475,145.1553	1,312,771.3272	
C-5	102+69.80, 2.00' LT.	137.38	137.34	475,201.1064	1,312,804.5700	
C-6	103+12.82, 1.65' LT.	137.97	137.93	475,237.9117	1,312,826.8456	
C-7	103+65.59, 0.39' LT.	139.07	139.03	475,282.6000	1,312,854.9426	
C-8	103+31.20, 18.79' LT.	140.41	140.37	475,262.4654	1,312,821.4983	
C-9	103+25.62, 23.84' LT.	140.64	140.60	475,260.2507	1,312,814.3078	
C-10	103+22.55, 27.20' LT.	140.88	140.84	475 , 259 . 3257	1,312,809.8498	
C-II	103+16.57, 33.74' LT.	141.33	141.29	475,257.5256	1,312,801.1745	
C-12	103+32.41, 72.18' LT.	MATCH EX.	MATCH EX.	475,290.7772	1,312,776.2172	
C-13	103+67.89, 27.83' LT.	139.21	139.17	475,298.7805	1,312,832.6568	
C-14	104+91.20, 26.11' LT.	143.83	143.79	475,402.8714	1,312,901.1199	
	C-2 C-3 C-4 C-5 C-6 C-7 C-8 C-9 C-10 C-11 C-12 C-13	C-I I0I+0I.46, 34.09' LT. C-2 I0I+03.I0, 28.35' LT. C-3 I0I+38.97, I.49' LT. C-4 I02+04.72, 2.00' LT. C-5 I02+69.80, 2.00' LT. C-6 I03+I2.82, I.65' LT. C-7 I03+65.59, 0.39' LT. C-8 I03+3I.20, I8.79' LT. C-9 I03+25.62, 23.84' LT. C-10 I03+22.55, 27.20' LT. C-II I03+I6.57, 33.74' LT. C-I2 I03+32.4I, 72.I8' LT. C-I3 I03+67.89, 27.83' LT.	POINT NO. STATION AND OFFSET EDGE OF ROAD C-I 10I+0I.46, 34.09' LT. 136.25 C-2 10I+03.10, 28.35' LT. 136.7I C-3 10I+38.97, 1.49' LT. 136.34 C-4 102+04.72, 2.00' LT. 136.54 C-5 102+69.80, 2.00' LT. 137.38 C-6 103+12.82, 1.65' LT. 137.97 C-7 103+65.59, 0.39' LT. 139.07 C-8 103+31.20, 18.79' LT. 140.4I C-9 103+25.62, 23.84' LT. 140.64 C-10 103+22.55, 27.20' LT. 140.88 C-II 103+16.57, 33.74' LT. 141.33 C-12 103+32.4I, 72.18' LT. MATCH EX. C-13 103+67.89, 27.83' LT. 139.2I	POINT NO. STATION AND OFFSET EDGE OF ROAD BOTTOM OF CURB C-I 101+01.46, 34.09' LT. 136.25 136.21 C-2 101+03.10, 28.35' LT. 136.71 136.67 C-3 101+38.97, 1.49' LT. 136.34 136.30 C-4 102+04.72, 2.00' LT. 136.54 136.50 C-5 102+69.80, 2.00' LT. 137.38 137.34 C-6 103+12.82, 1.65' LT. 137.97 137.93 C-7 103+65.59, 0.39' LT. 139.07 139.03 C-8 103+31.20, 18.79' LT. 140.41 140.37 C-9 103+25.62, 23.84' LT. 140.64 140.60 C-10 103+22.55, 27.20' LT. 140.88 140.84 C-II 103+16.57, 33.74' LT. 141.33 141.29 C-12 103+32.41, 72.18' LT. MATCH EX. MATCH EX. C-13 103+67.89, 27.83' LT. 139.21 139.17	POINT NO. OFFSET ROAD OF CURB NORTHING C-1 101+01.46, 34.09' LT. 136.25 136.21 475,072.7794 C-2 101+03.10, 28.35' LT. 136.71 136.67 475,071.2533 C-3 101+38.97, 1.49' LT. 136.34 136.30 475,088.3704 C-4 102+04.72, 2.00' LT. 136.54 136.50 475,145.1553 C-5 102+69.80, 2.00' LT. 137.38 137.34 475,201.1064 C-6 103+12.82, 1.65' LT. 137.97 137.93 475,237.9117 C-7 103+65.59, 0.39' LT. 139.07 139.03 475,282.6000 C-8 103+31.20, 18.79' LT. 140.41 140.37 475,262.4654 C-9 103+25.62, 23.84' LT. 140.64 140.60 475,260.2507 C-10 103+22.55, 27.20' LT. 140.88 140.84 475,259.3257 C-11 103+16.57, 33.74' LT. 141.33 141.29 475,257.5256 C-12 103+32.41, 72.18' LT. MATCH EX. MATCH EX. 475,298.7805	

144.28

144.32

NOTES:

	CURB STAKEOUT CHART (CONT'D)							
POINT NO.	STATION AND	EDGE OF	воттом	COORDINATES				
POINT NO.	OFFSET	ROAD	OF CURB	NORTHING	EASTING			
C-16	105+11.14, 44.48' LT.	144.30	144.26	475,429.9135	1,312,897.2527			
C-17	105+18.92, 61.62' LT.	144.21	144.17	475,446.1445	1,312,887.6009			
C-18	105+26.02, 71.33' LT.	MATCH EX.	MATCH EX.	475,457.6519	1,312,883.7433			
C-19	105+29.29, 75.II'LT.	MATCH EX.	MATCH EX.	475,462.5696	1,312,882.5573			
C-20	105+38.71, 50.92' LT.	143.87	143.83	475,456.6679	1,312,907.9232			
C-2I	105+34.70, 32.46'LT.	145.04	145.00	475,442.7600	1,312,920.7265			

CITY OF TAKOMA PARK

GS-02

NEW AVE BIKEWAY, SECTION B MD 650 (NEW HAMPSHIRE AVENUE) POPLAR AVE TO AUBURN AVE SHA TRACKING NO. 20-AP-MO-020-XX

TO MD 193

RKSK P: 410.728.2900 F: 410.728.2834 700 East Pratt Street, Suite 500 | Baltimore, MD 21202 Engineers | Construction Managers | Planners | Scientists

Responsive People | Creative Solutions

C-I5 | 105+09.72, 39.96' LT.

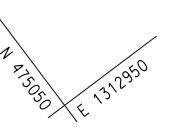
1. STAKEOUT POINT NUMBERS REFERENCE THE FACE OF PROPOSED CURB OR THE BACK OF PROPOSED SIDEWALK.

475,426.1668

1,312,900.1768

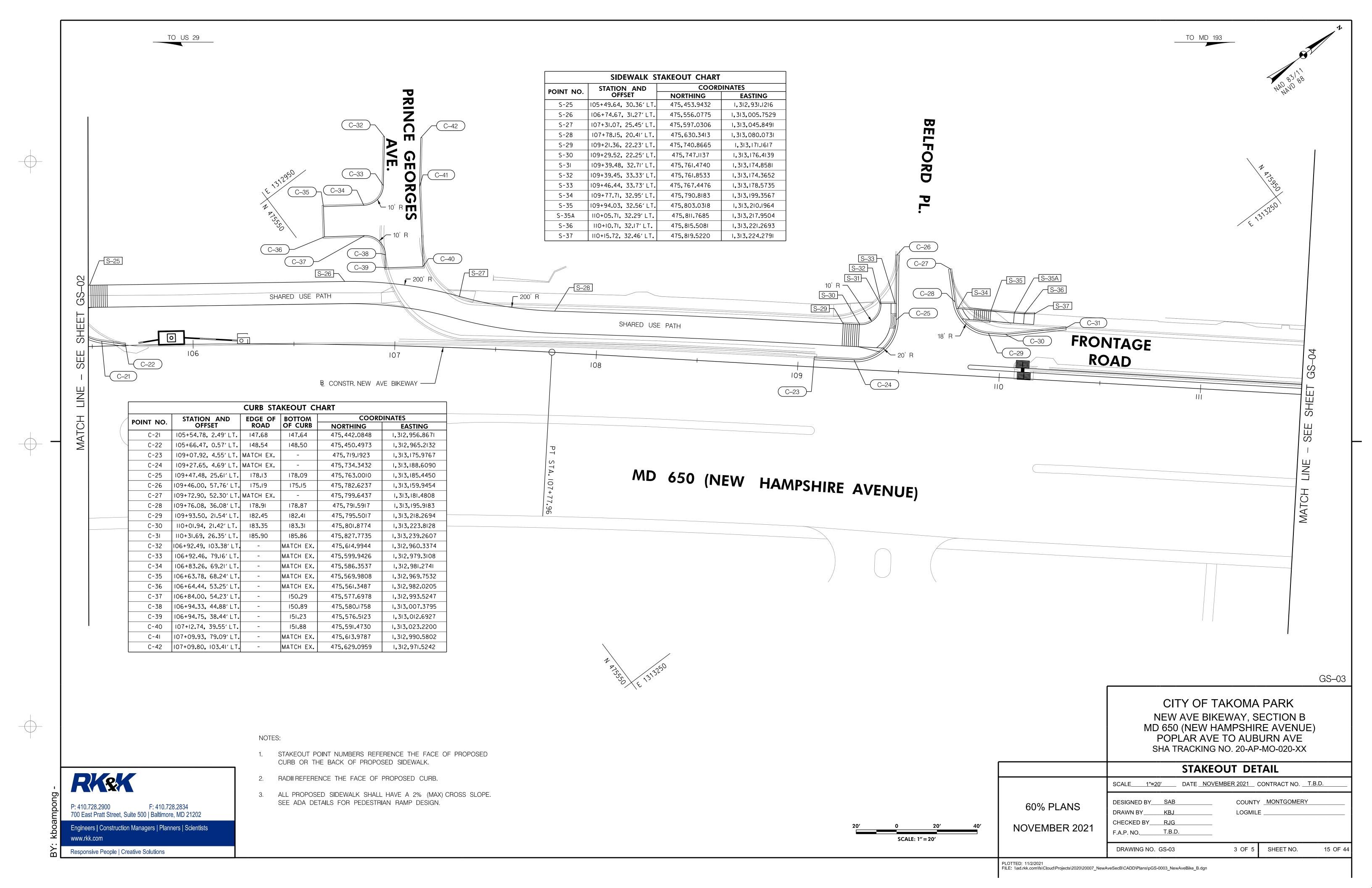
2. RADII REFERENCE THE FACE OF PROPOSED CURB.

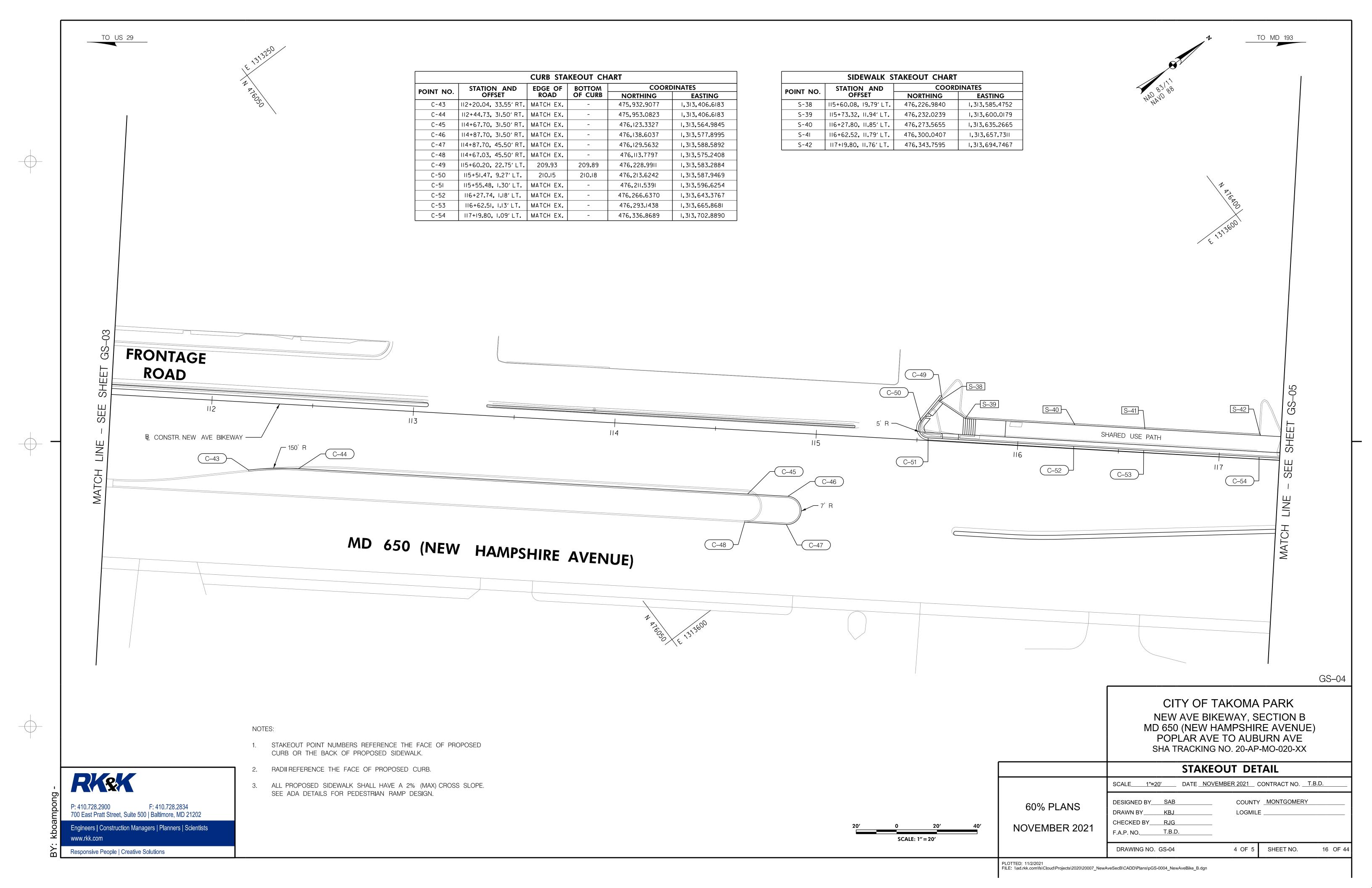
3. ALL PROPOSED SIDEWALK SHALL HAVE A 2% (MAX) CROSS SLOPE. SEE ADA DETAILS FOR PEDESTRIAN RAMP DESIGN.

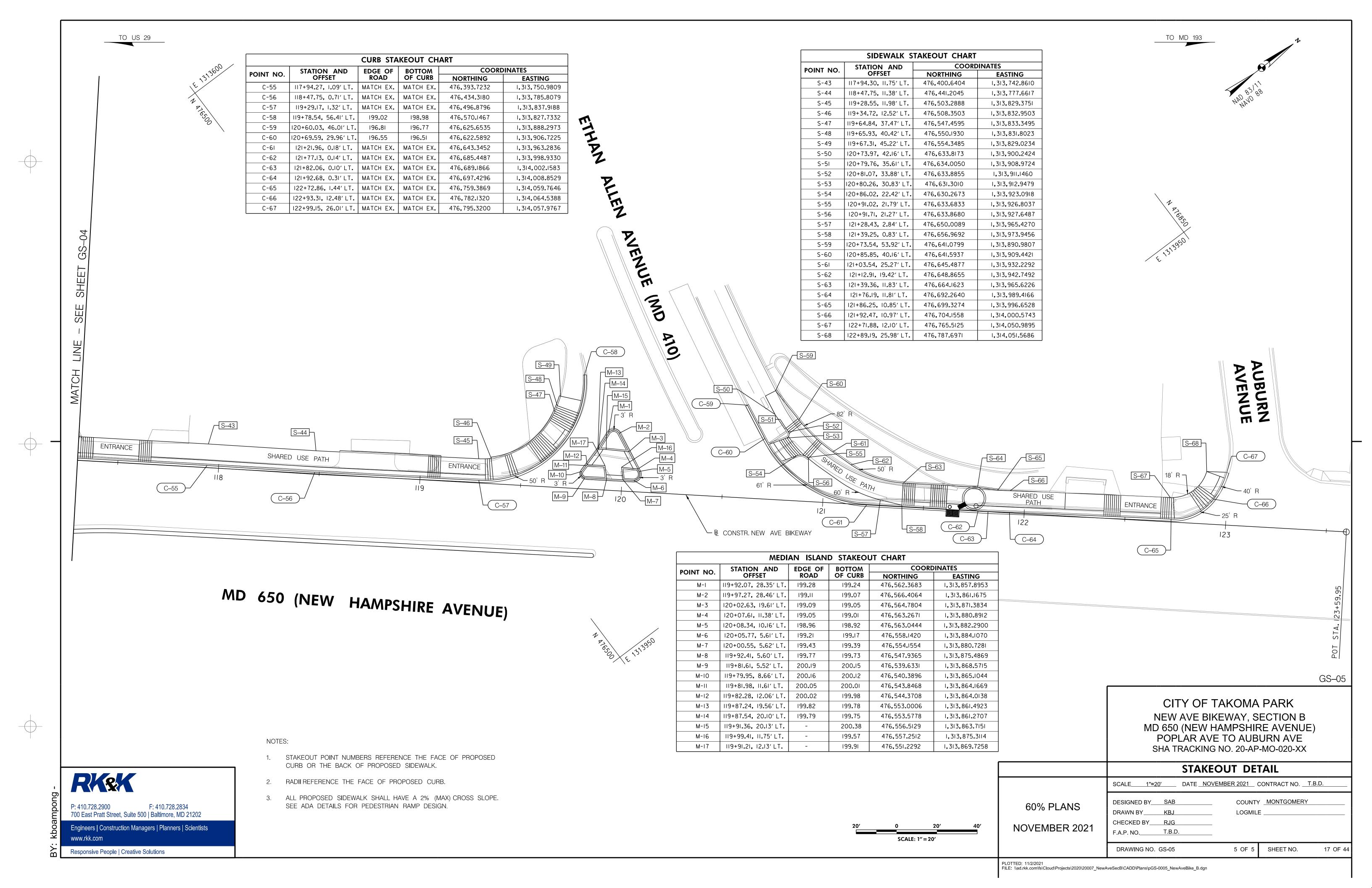


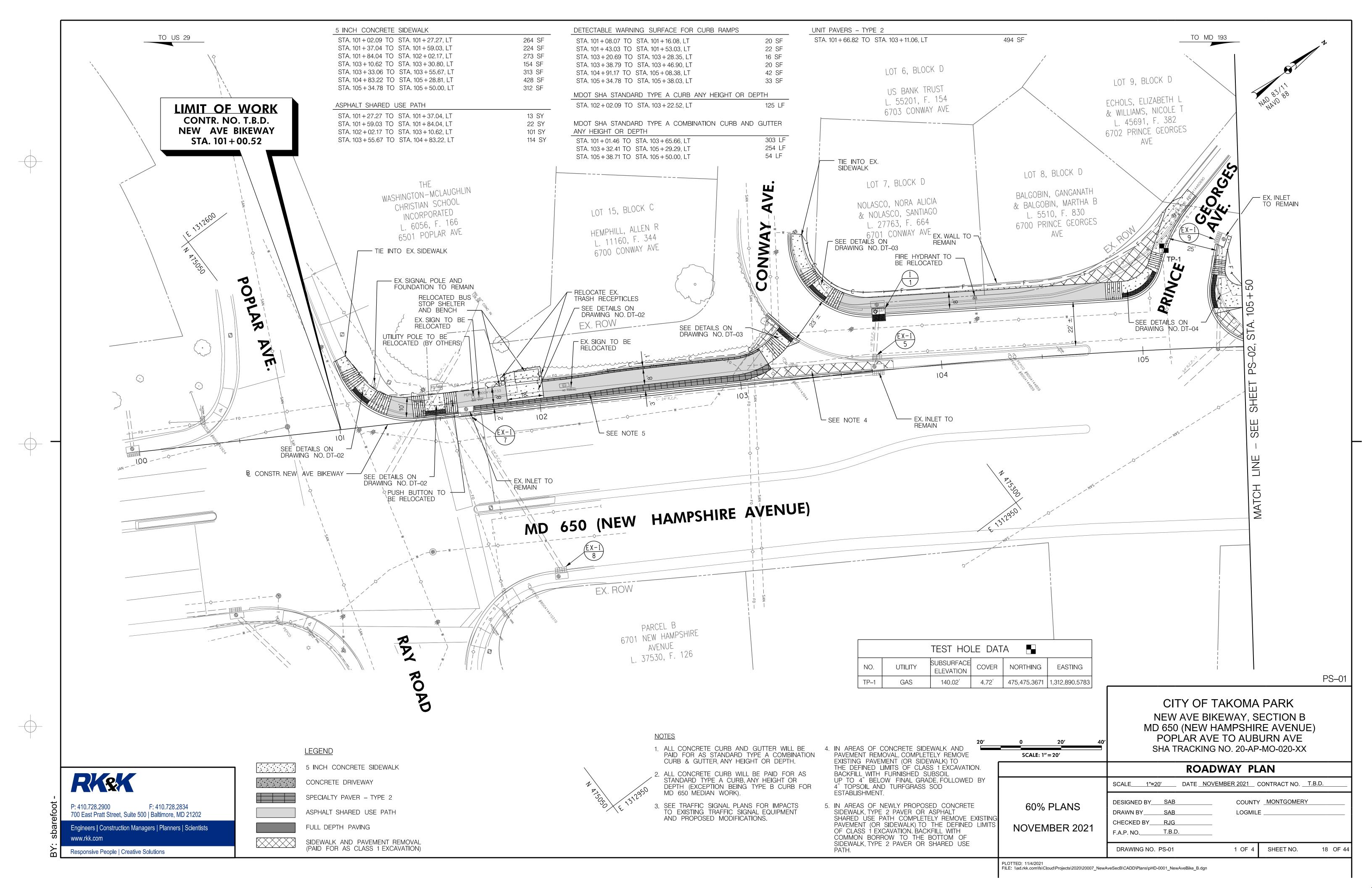
_		
		STAKEOUT DETAIL
		SCALE 1"=20' DATE NOVEMBER 2021 CONTRACT NO. T.B.D.
0 20' 40' SCALE: 1" = 20'	60% PLANS NOVEMBER 2021	DESIGNED BY SAB COUNTY MONTGOMERY DRAWN BY KBJ LOGMILE CHECKED BY RJG F.A.P. NO. T.B.D.
		DRAWING NO. GS-02 2 OF 5 SHEET NO. 14 OF 44
	PLOTTED: 11/2/2021	

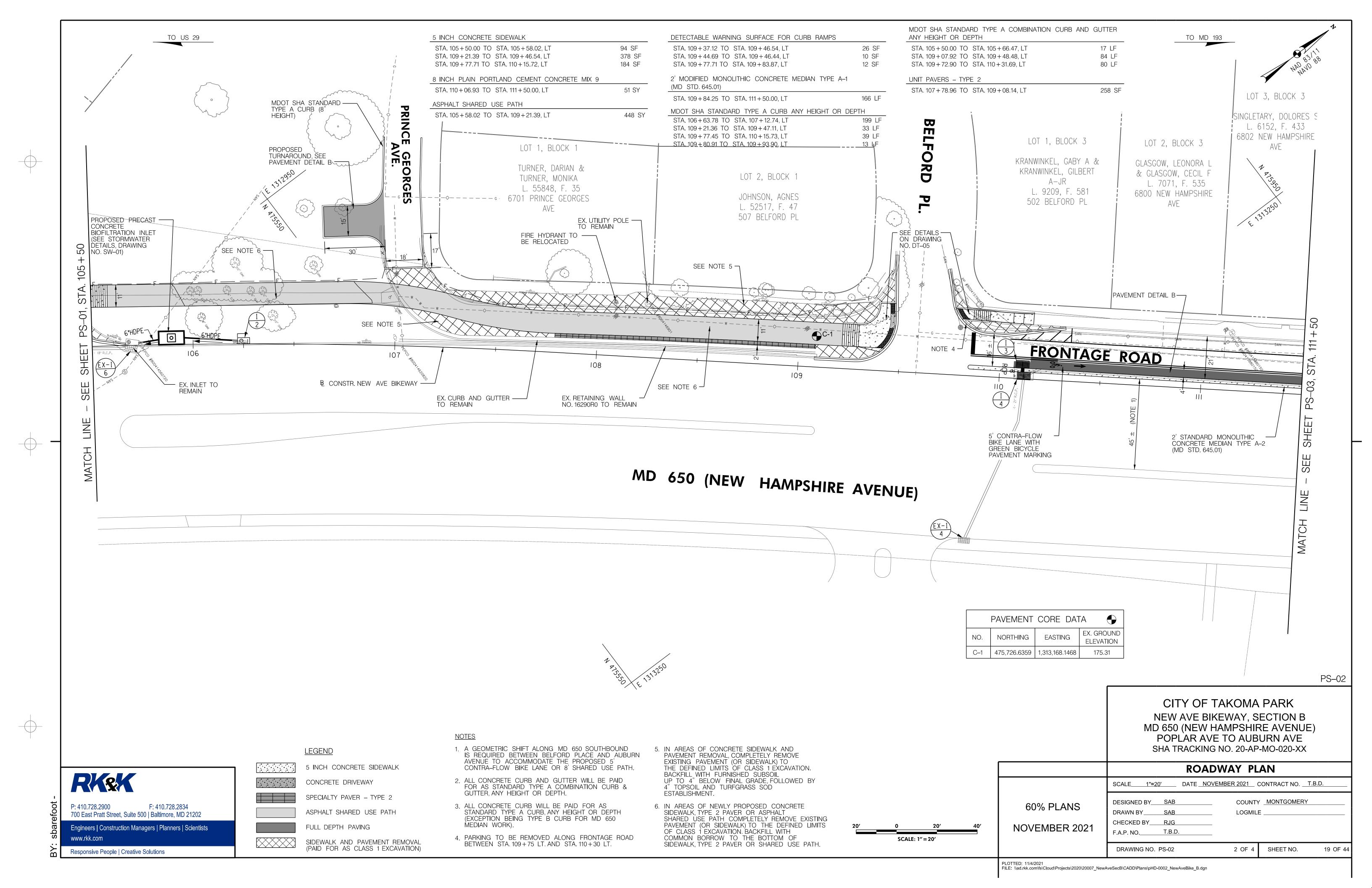
FILE: \\ad.rkk.com\fs\Cloud\Projects\2020\20007_NewAveSecB\CADD\Plans\pGS-0002_NewAveBike_B.dgn

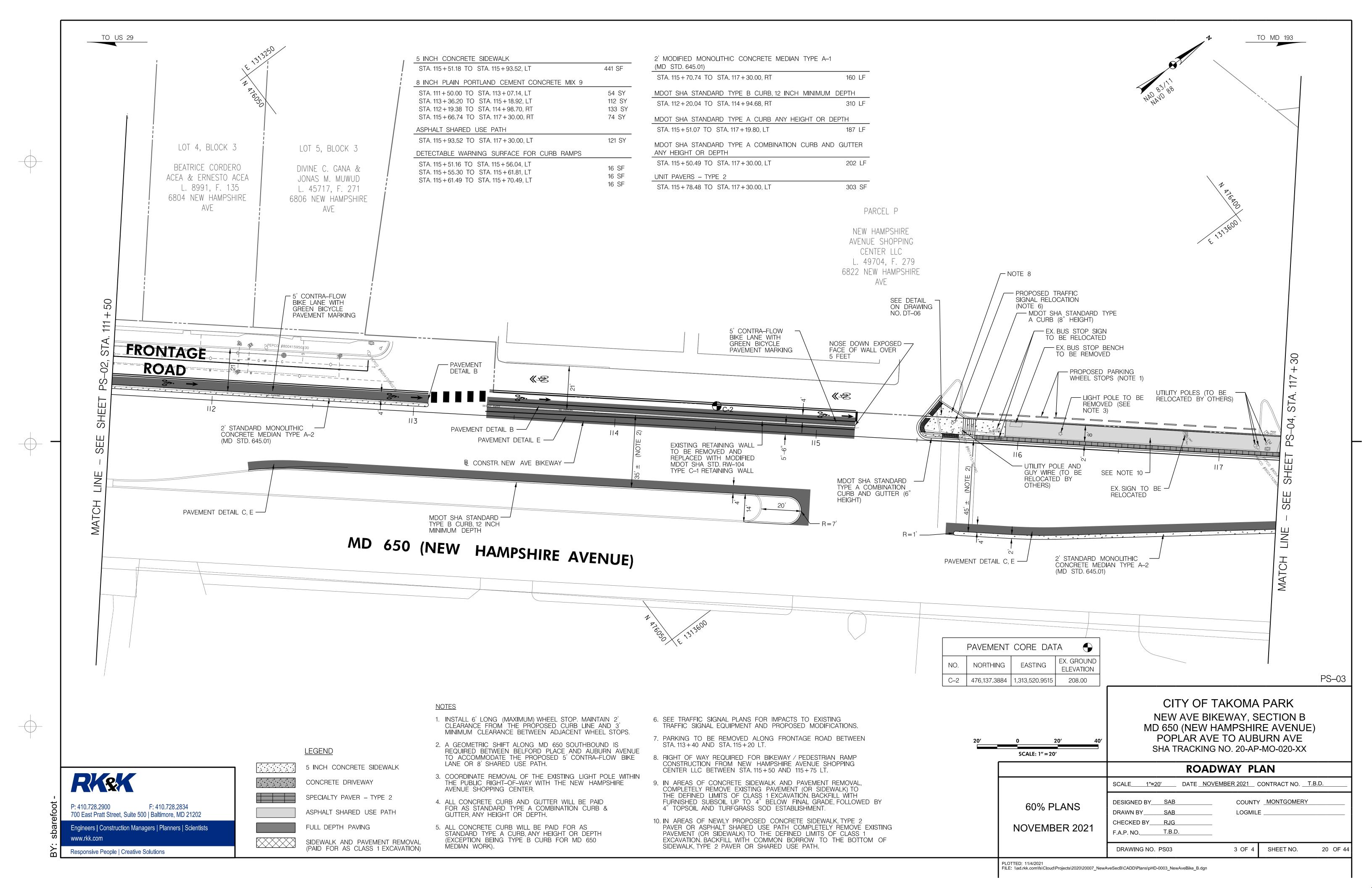


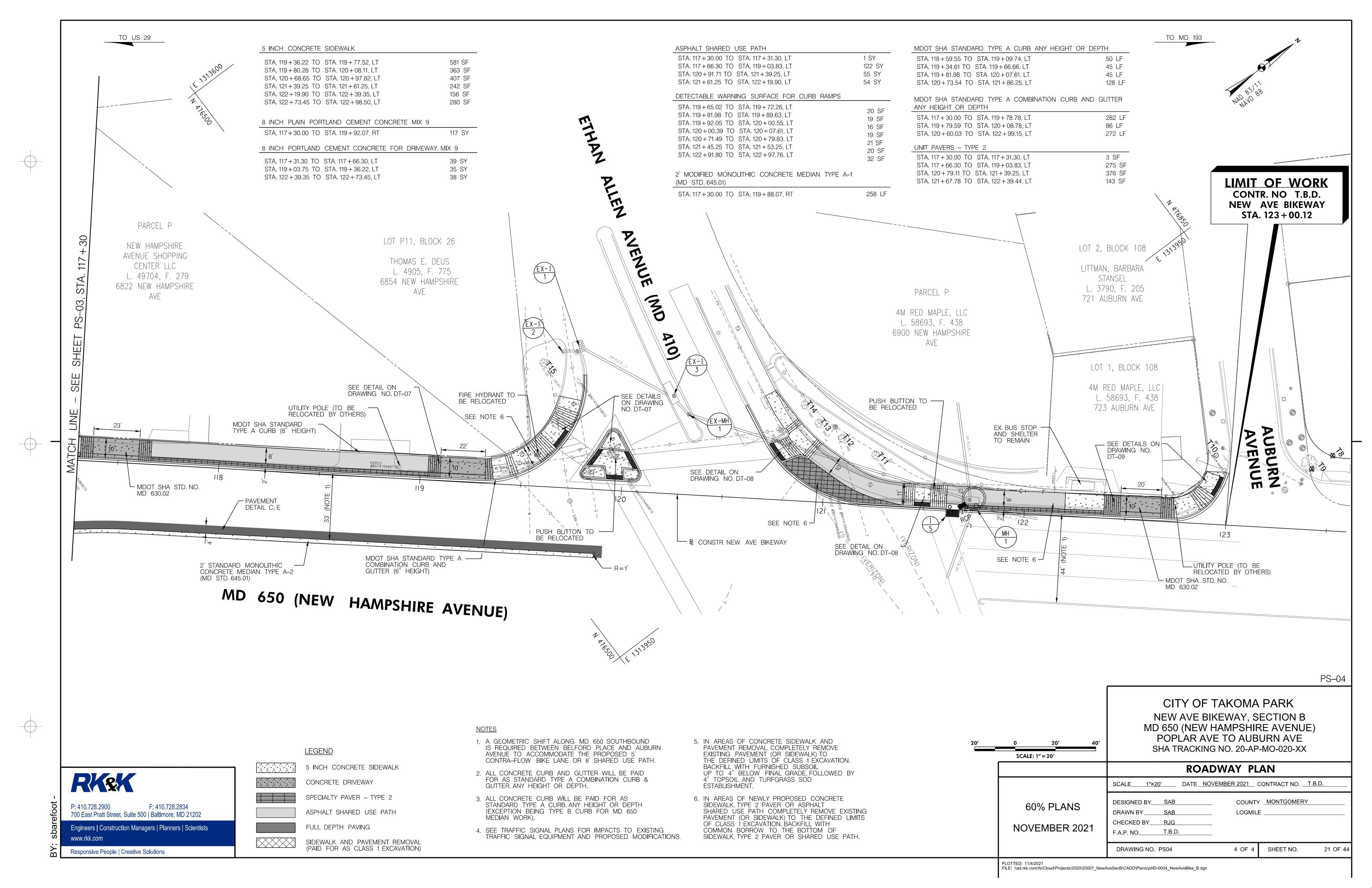


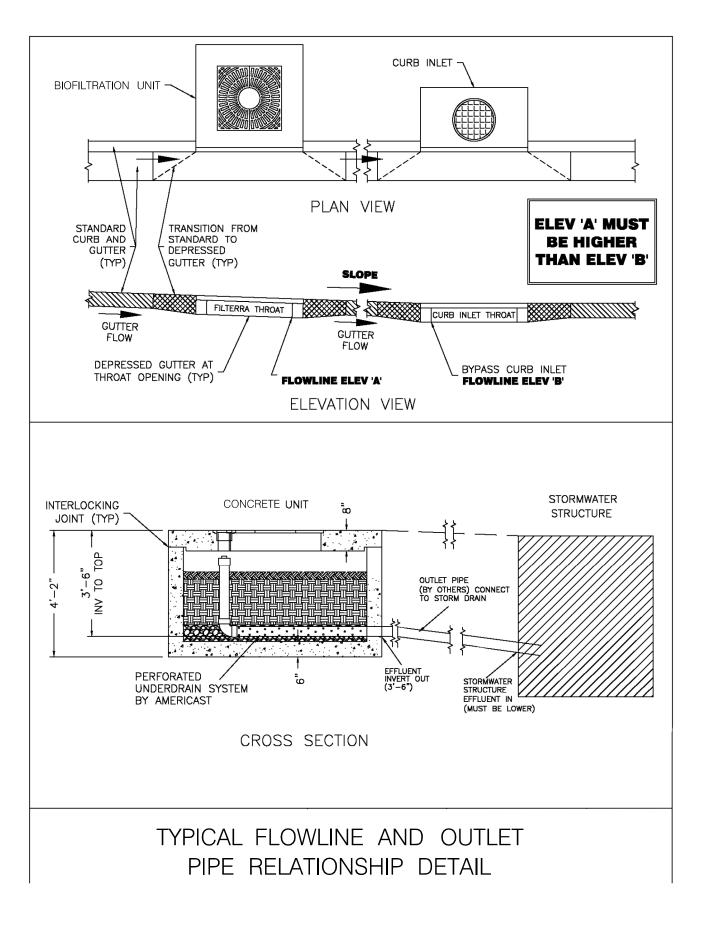












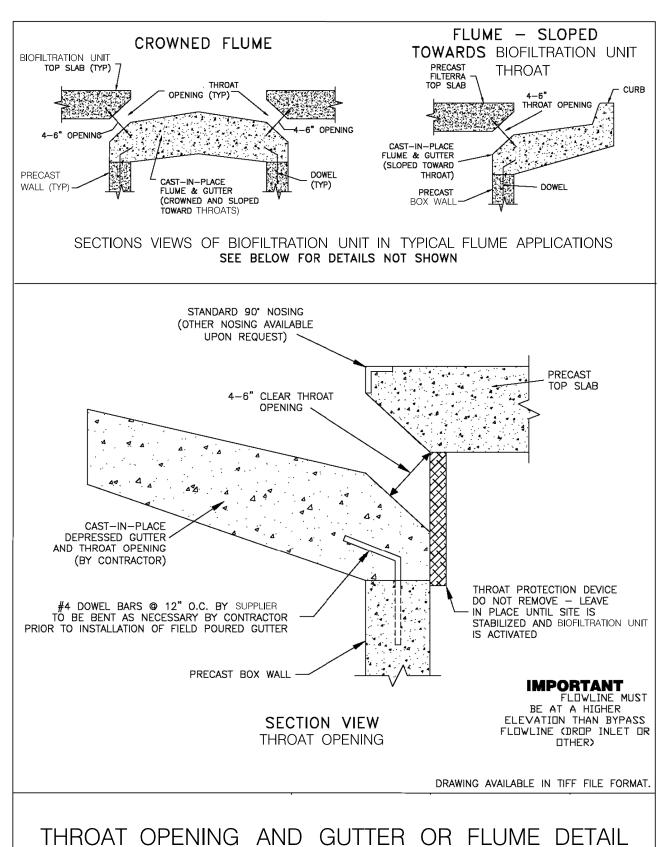
Standard Plan Notes

Construction & Installation

- A. Each unit shall be constructed at the locations and elevations according to the sizes shown on the approved drawings. Any modifications to the elevation or location shall be at the direction of and approved by the Engineer.
- B. If the Pre-cast Concrete Biofiltration Unit is stored before installation, the top slab must be placed on the box using 2x4 wood provided, to prevent any contamination from the site. All internal fittings supplied (if any), must be left in pace as per the delivery.
- C. The unit shall be placed on a compacted sub-grade with a minimum 6-inch gravel base matching the final grade of the curb line in the area of the unit. The unit to be placed such that the unit and top slab match the grade of the curb in the area of the unit. Compact undisturbed sub-grade materials to 95% of maximum density at +1-2% of optimum moisture. Unsuitable material below sub-grade shall be replaced to the site engineer's approval.
- D. Outlet connections shall be aligned and sealed to meet the approved drawings with modifications necessary to meet site conditions and local regulations.
- E. Once the unit is set, the internal wooden forms and protective mesh cover must be left intact. Remove only the temporary wooden shipping blocks between the box and top slab. The top lid should be sealed onto the box section before backfilling, using a non-shrink grout, butyl rubber or similar waterproof seal. The boards on top of the lid and boards sealed in the unit's throat must **NOT** be removed. The Supplier/Manufacturer will remove these sections at the time of activation. Backfilling should be performed in a careful manner, bringing the appropriate fill material up in 6" lifts on all sides. Precast sections shall be set in a manner that will result in a watertight joint. In all instances, installation of Pre-cast Concrete Biofiltration Unit shall conform to ASTM specification C891 "Standard Practice for Installation of Underground Precast Utility Structures", unless directed otherwise in contract documents.
- F. Curb and gutter construction (where present) shall ensure that the flow-line of the Pre-cast Concrete Biofiltration Units is at a greater elevation than the flow-line of the bypass structure or relief (drop inlet, curb cut or similar). Failure to comply with this guideline may cause failure and/or damage to the Pre-cast Concrete Biofiltration Unit environmental device.
- G. Each Pre-cast Concrete Biofiltration Unit must receive adequate irrigation to ensure survival of the living system during periods of drier weather. This may be achieved through gutter flow or through the tree grate.

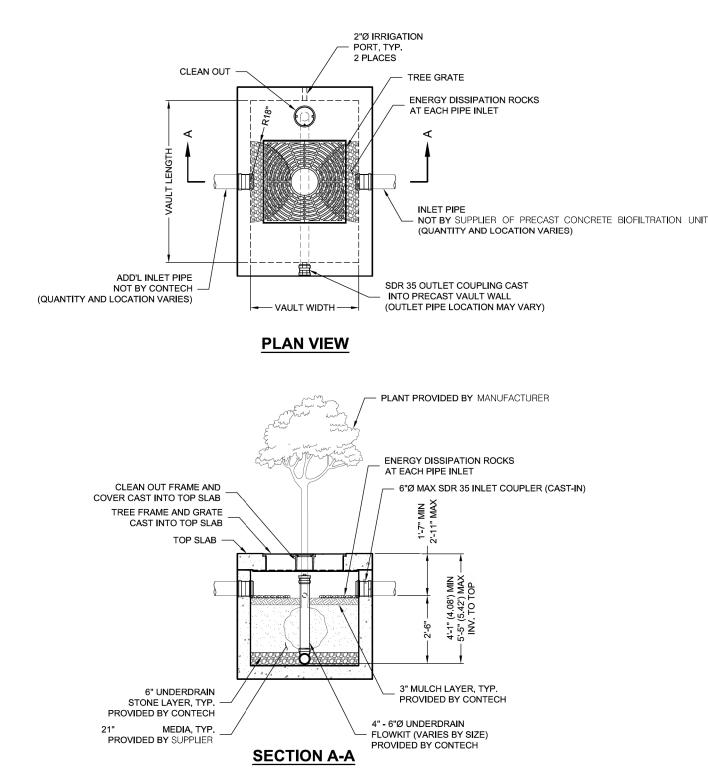
Activation

- A. Activation of the Pre-cast Concrete Biofiltration Unit is performed ONLY by the Supplier. Purchaser is responsible for Pre-cast Concrete Biofiltration Unit inlet protection and subsequent clean out cost. This process cannot commence until the project site is fully stabilized and cleaned (full landscaping, grass cover, final paving and street sweeping completed), negating the chance of construction materials contaminating the Pre-cast Concrete Biofiltration Unit system. Care shall be taken during construction not to damage the protective throat and top plates
- B. Activation includes installation of plant(s) and mulch layers as necessary.

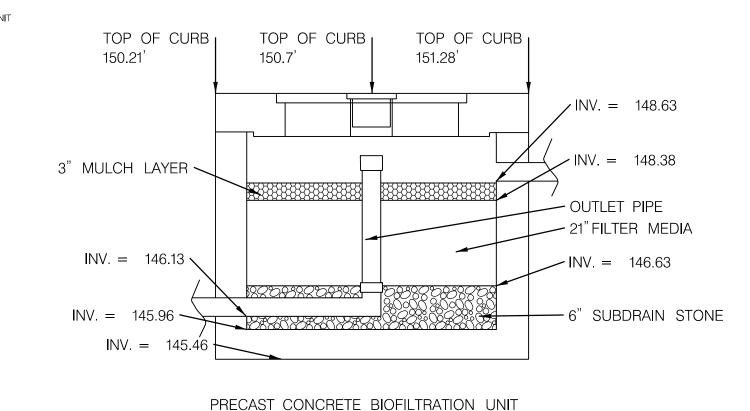


Maintenance

- A. Each correctly installed Pre-cast Concrete Biofiltration Unit is to be maintained by the Supplier, or a Supplier approved contractor for a minimum period of 1 year. The cost of this service is to be included in the price of each Pre-cast Concrete Biofiltration Unit. Extended maintenance contracts are available at extra cost upon request.
- B. Annual maintenance consists of a maximum of (2) scheduled visits. The visits are scheduled seasonally; the spring visit aims to clean up after winter loads including salts and sands. The fall visit helps the system by removing excessive leaf litter.
- C. Each maintenance visit consists of the following tasks:
 - Pre-cast Concrete Biofiltration Unit inspection
 Foreign debris, silt, mulch & trash removal
 - 3. Filter media evaluation and recharge as necessary
 - 4. Plant health evaluation and pruning or replacement as necessary
 - 5. Replacement of mulch
 6. Disposal of all maintenance
 - 6. Disposal of all maintenance refuse items7. Maintenance records updated and stored (reports available upon request)
- D. The beginning and ending date of Supplier's obligation to maintain the installed system shall be determined by the Supplier at the time the system is activated. Owners must promptly notify the Supplier of any damage to the plant(s), which constitute(s) an integral part of the bioretention technology.



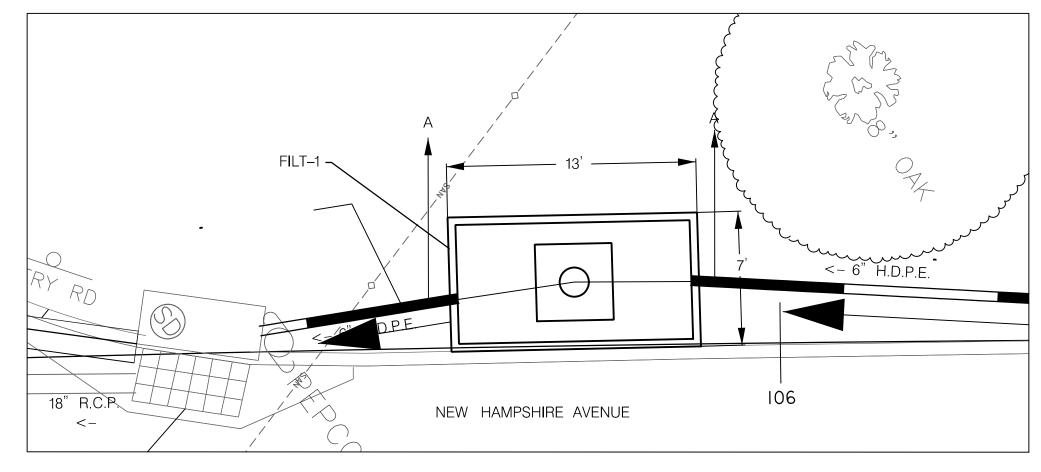
OFFLINE PIPE CONFIGURATION DETAIL



NOTE 1: BOTTOM OF PRECAST CONCRETE BIOFILTRATION UNIT INTERNAL MEDIA TO BE AT FLAT, CONSISTENT GRADE. TOP SLAB TO BE SLOPED IN ORDER TO MATCH ROADWAY GRADE. DETAILS SHOWN COMBINE 7'x13' MODIFIED PRECAST UNIT WITH STANDARD DETAIL FOR OFFLINE INFLOW. STRUCTURE SHALL BE PLACED ACCORDING TO ELEVATIONS AS SHOWN ON PLANS. DETAILS SHOWN ARE PRELIMINARY AS COORDINATION WITH SUPPLIER IS FORTHCOMING. SEE DRAINAGE PROFILES FOR FURTHER DETAILS.

SECTION A-A

NOTE 2: SEE SPECIAL PROVISION SP-SECTION 300 - PRECAST CONCRETE BIOFILTRATION UNIT FOR MORE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT THE UNIT BE INSTALLED WILL MEET ALL THE SWM REGULATIONS AND PERMIT REQUIREMENTS FOR WATER QUALITY CONTROL AS SET FORTH BY THE CITY OF TAKOMA PARK.



FILT-1, PLAN VIEW

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION B
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STANDARD EROSION AND SEDIMENT CONTROL NOTES

2.1. AT THE REQUIRED PRE-CONSTRUCTION MEETING.

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

2.2. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES AND PRIOR TO ANY OTHER LAND DISTURBING

- AUTHORIZED REPRESENTATIVE OF THE DEPARTMENT.

 2. THE PERMITTEE MUST OBTAIN INSPECTION AND APPROVAL BY DPS AT THE FOLLOWING POINTS:
 - ACTIVITY.

 2.3. 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.
- 2.4. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE(S). 2.5. 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:
- 6.1. 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 6.2. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.
- ALL OTHER DISTURBED AREA 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 PERMITEE 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 THREE (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 OF FILL SLOPE WITH A GRADIENT STEEPER THAN 3:1 WILL BE PERMITTED IN LAWN MAINTENANCE AREAS OR ON RESIDENTIAL LOTS. A SLOPE GRADIENT OF 2:1 WILL BE PERMITTED IN NON-MAINTENANCE 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 SPLASHBLOCK 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 THEN 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 ESTABLISHMENT.
- 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 100-YEAR 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 THAN 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.
- 26. SEDIMENT TRAP/BASIN DEWATERING FOR CLEANOUT 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:
- 26.1. 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 SEDIMENTS: OR
- 26.2. THE PUMP INTAKE MAY UTILIZE A REMOVABLE PUMPING STATION AND MUST DISCHARGE INTO AN UNDISTURBED AREA THROUGH A NON-EROSIVE OUTLET; OR
- 26.3. 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 AREA WITHIN THE LIMITS OF DISTURBANCE PRIOR TO PERMANENT STABILIZATION IN ACCORDANCE WITH MDE "STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS."

OWNER'S/DEVELOPER'S CERTIFICATION

I/WE HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION, AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

SIGNATURE PLANNER DATE
MS. ROSALIND GRIGSBY CITY OF
(301) 891-7205 TAKOMA PARK

DESIGN CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES EXECUTIVE REGULATIONS 5-90, 7-02AM AND 36-90, AND MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION "STORM DRAIN DESIGN CRITERIA" DATED AUGUST 1988.

SIGNATURE
STEVEN PHILLIPS, P.E.

PRINTED NAME AND TITLE

SENIOR MANAGER
WATER RESOURCES

PRINTED NAME AND TITLE

I HEREBY CERTIFY THAT THE ESTIMATED TOTAL AMOUNT OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAS BEEN COMPUTED TO 128 CUBIC YARDS OF EXCAVATION, 117 CUBIC YARDS OF FILL AND THE TOTAL AREA TO BE DISTURBED AS SHOWN ON THE PLANS HAS BEEN DETERMINED TO BE 43,535 SQUARE FEET.

CERTIFICATION OF THE QUANTITIES

SIGNATURE
STEVEN PHILLIPS, P.E.

PRINTED NAME AND TITLE

SENIOR MANAGER
WATER RESOURCES

PRINTED NAME AND TITLE

DATE

LIST OF PREDOMINANT SOIL TYPES

SYMBOLS	DESCRIPTION	HS
GfB	GLENELG-WHEATON-URBAN LAND COMPLEX, 0-8% SLOPES	В
GfC	GLENELG-WHEATON-URBAN LAND COMPLEX, 8-15% SLOPES	В
SgC	SASSAFRAS-URBAN LAND COMPLEX. 8-15% SLOPES	В
Un	URBAN LAND	D
WpB	WOODSTOWN-URBAN LAND COMPLEX, 0-8% SLOPES	С

EN-01

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION B

MD 650 (NEW HAMPSHIRE AVENUE)

POPLAR AVE TO AUBURN AVE

SHA TRACKING NO. 20-AP-MO-020-XX

EROSION AND SEDIMENT CONTROL NOTES

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				DRAWN BYNSR		LOGMILI	E			
				CHECKED BY AGB F.A.P. NO. T.B.D.			WSSC 208NEC TAX MAPS JN5			
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P: 410.728.2900

SEQUENCE OF CONSTRUCTION:

- 1. 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 SERVICE (MCDPS) SEDIMENT CONTOL INSPECTOR (240) 777-0311 (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 AND APPROVED ROADSIDE TREE PROTECTION PLAN TO THE 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. LIMIT OF DISTURBANCE MUST BE FIELD MARKED PRIOR TO CLEARING OF TREES, INSTALLATION OF SEDIMENT CONTROL MEASURES, CONSTRUCTION, OR OTHER LAND DISTURBING ACTIVITIES.
- 3. NO WORK SHALL BE COMPLETED DURING A RAIN EVENT. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT UNLESS THE RUNOFF IS DIRECTED TO AN APPROVED SEDIMENT CONTROL DEVICE. ALL AREAS DESIGNATED AS SAME DAY SHALL BE STABILIZED AT THE END OF EACH WORK DAY.
- 4. ROOT PRUNE ALONG LOD AT DIRECTION OF MD LTE PRIOR TO ANY WORK BEING PERFORMED.
- 5. THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR, CERTIFYING THAT THE LIMITS OF DISTURBANCE IS CORRECTLY MARKED AND INSTALLED PRIOR TO COMMENCING ANY CLEARING.
- 6. WITH THE APPROVAL OF THE PROJECT ENGINEER AND THE MCDPS SEDIMENT CONTROL INSPECTOR, STEPS IN EACH STAGE MAY BE ADJUSTED AND/OR BE PERFORMED CONCURRENTLY.
- 7. WHERE INLET PROTECTION IS USED IN CONJUNCTION WITH SAME-DAY STABILIZATION AND DRAINAGE AREAS EXCEED THE LIMITS REQUIRED, MEASURES SHALL BE TAKEN TO PREVENT THE PROTECTIONS FROM BEING OVERWHELMED WITH SEDIMENT.
- 8. THE NEED FOR AND LOCATION OF STABILIZED CONSTRUCTION ENTRANCES SHALL BE DISCUSSED AT THE PRECONSTRUCTION MEETING FOR ALL STAGES.
- 9. UNLESS NEW, ALL CONSTRUCTION MATS SHALL BE POWER WASHED PRIOR TO BEING BROUGHT ON SITE.

10.RELOCATE UTILITIES AS NEEDED PRIOR TO COMMENCING WORK.

PHASE 1A: POPLAR AVE TO CONWAY AVE (MD 650 STA. 101+00 TO 103+25)

- CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES AND INSTALL THOSE DEVICES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS. DURING THIS AND SUBSEQUENT STEPS, SAFE PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES.
- 2. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
- 3. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE. AS SHOWN ON THE PLANS.
- 4. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION. MOVING ON TO NEXT WORK ZONE.

PHASE 1B: CONWAY AVE TO PRINCE GEORGES AVE (STA. 103+25 TO 105+50)

- 1. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES AND INSTALL THOSE DEVICES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS. DURING THIS AND SUBSEQUENT STEPS, SAFE PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES.
- 2. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
- 3. DURING A NOAA 3-DAY DRY PERIOD, INSTALL INLET I-1 USING SAME DAY STABILIZATION, CONNECTING TO EXISTING PIPE.
- 4. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE, AS SHOWN ON THE PLANS.
- 5. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION. MOVING ON TO NEXT WORK ZONE.

PHASE 2: PRINCE GEORGES AVE TO BELFORD PL (STA. 105+50 TO 109+50)

- 1. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES AND INSTALL THOSE DEVICES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS. INSTALL SILT FENCE FROM STA. 105+58 LT TO 106+96 LT. DURING THIS AND SUBSEQUENT STEPS, SAFE PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES.
- 2. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
- 3. DURING A NOAA 3-DAY DRY PERIOD, INSTALL INLET I-2 AND PRECAST CONCRETE BIOFILTRATION UNIT USING SAME DAY STABILIZATION, CONNECTING INLET I-2 TO THE BIOFILTRATION UNIT AND THE BIOFILTRATION UNIT TO EXISTING PIPE.
- 4. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE, AS SHOWN ON THE PLANS.
- 5. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION, MOVING ON TO NEXT WORK ZONE.

PHASE 3: BELFORD PL TO ETHAN ALLEN AVE (STA. 109+50 TO 120+50)

- 1. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES AND INSTALL THOSE DEVICES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS. DURING THIS AND SUBSEQUENT STEPS, SAFE PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES.
- 2. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
- 3. DURING A NOAA 3-DAY DRY PERIOD, INSTALL INLETS I-3 AND I-4 AND 18" RCP CONNECTING INLETS I-3 AND I-4 USING SAME DAY STABILIZATION. CONNECT INLET I-4 TO EXISTING PIPE.
- 4. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE, AS SHOWN ON THE PLANS.
- 5. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION, MOVING ON TO NEXT WORK ZONE.

PHASE 4: ETHAN ALLEN AVE TO AUBURN AVE (STA. 120+50 TO 123+25)

- 1. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES AND INSTALL THOSE DEVICES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS. DURING THIS AND SUBSEQUENT STEPS, SAFE PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES.
- 2. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
- 3. DURING A NOAA 3-DAY DRY PERIOD, INSTALL INLET I-5 AND MH-1 USING SAME DAY STABILIZATION, CONNECTING I-5 TO MH-1 AND EXISTING PIPES TO MH-1 REMOVING SEGMENTS OF EXISTING PIPE AS NECESSARY.
- 4. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE, AS SHOWN ON THE PLANS.
- 5. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION, MOVING ON TO NEXT WORK ZONE.

EN-02

CITY OF TAKOMA PARK

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POPLAR AVE TO AUBURN AVE

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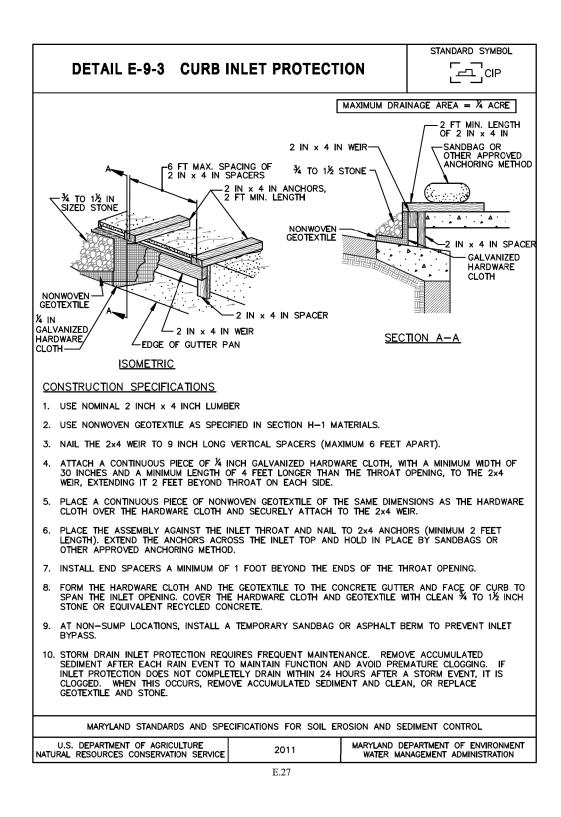
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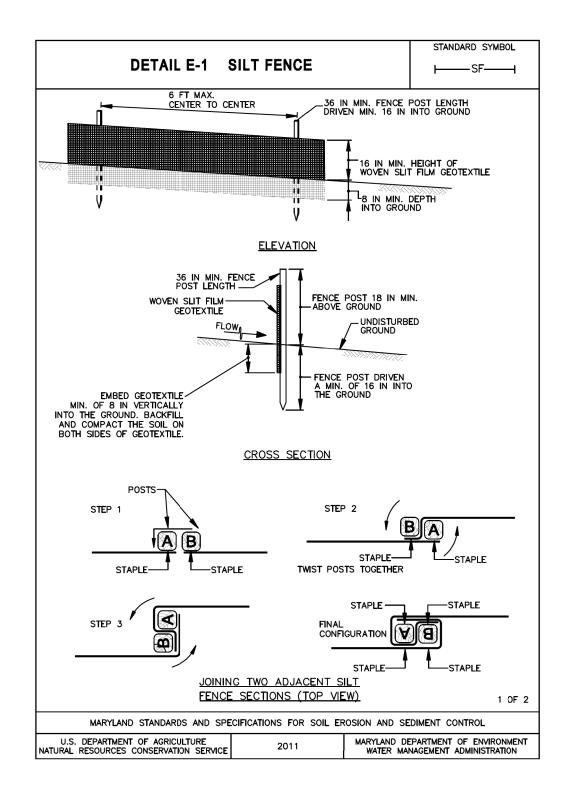
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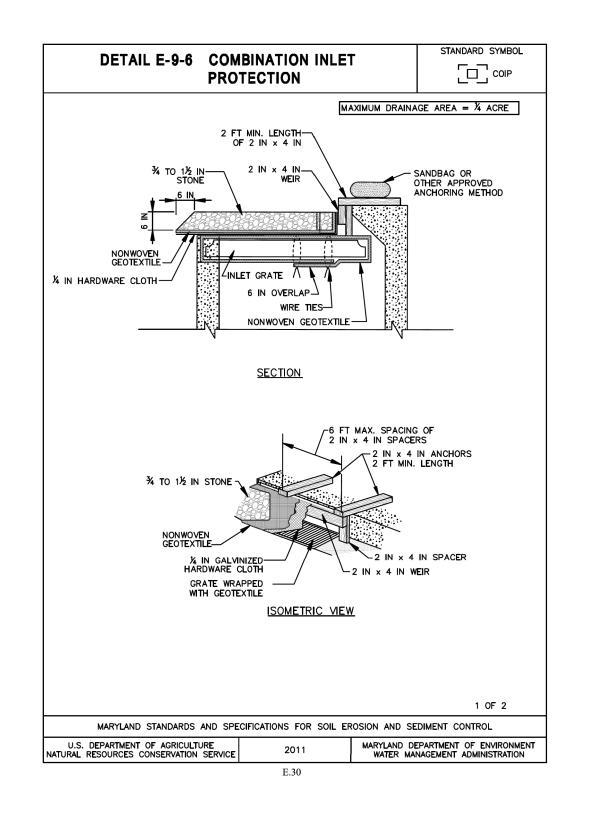
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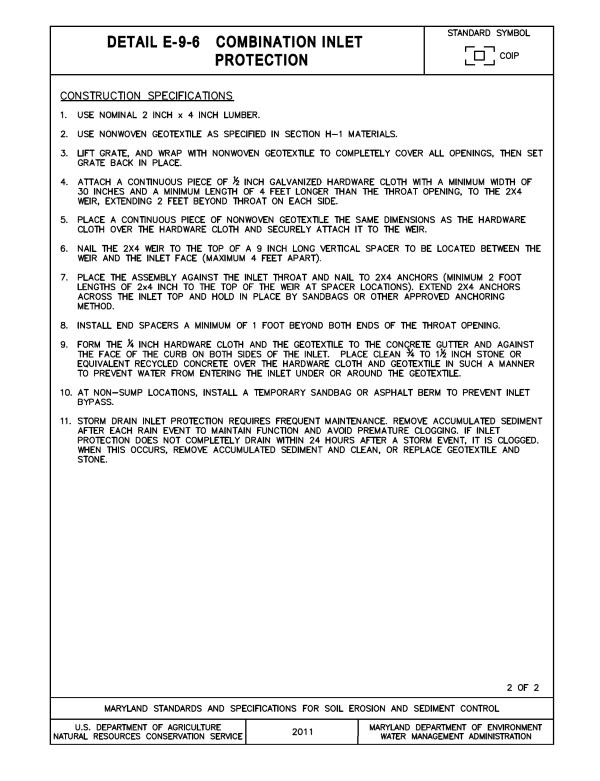
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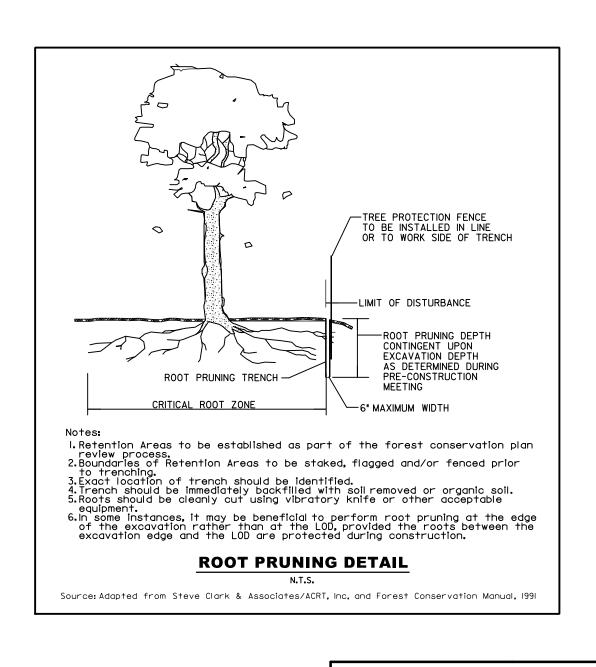






	I
	ONSTRUCTION SPECIFICATIONS
1.	USE WOOD POSTS $1\frac{1}{4}$ X $1\frac{1}{4}$ \pm $\frac{1}{16}$ INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NO LESS THAN 1 POUND PER LINEAR FOOT.
2.	USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APA
3.	USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXT SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION.
4.	PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
5.	EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPARTHE SOIL ON BOTH SIDES OF FABRIC.
6.	WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.
7.	EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.
8.	REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS REINSTALL FENCE.
	2
	MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL





EN-03

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION B MD 650 (NEW HAMPSHIRE AVENUE) POPLAR AVE TO AUBURN AVE SHA TRACKING NO. 20-AP-MO-020-XX

EROSION AND SEDIMENT CONTROL DETAILS

				SCALE NO SCALE	DATE_NOV	'EMBER 2021 (CONTRACT NO. T.B.D.
				DRAWN BY N CHECKED BY A	SR SR GB B.D.		WSSC 208NE01 TAX MAPS JN561
NO.	REVISION	DATE	BY	DRAWING NO.	EN – 03	OF 3	SHEET NO. 25 OF 44

PLOTTED: 10/28/2021
FILE: \\ad.rkk.com\fs\Cloud\Projects\2020\20007_NewAveSecB\CADD\Plans\pES-N003_NewAveBike_B.dgn

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F: 410.728.2834

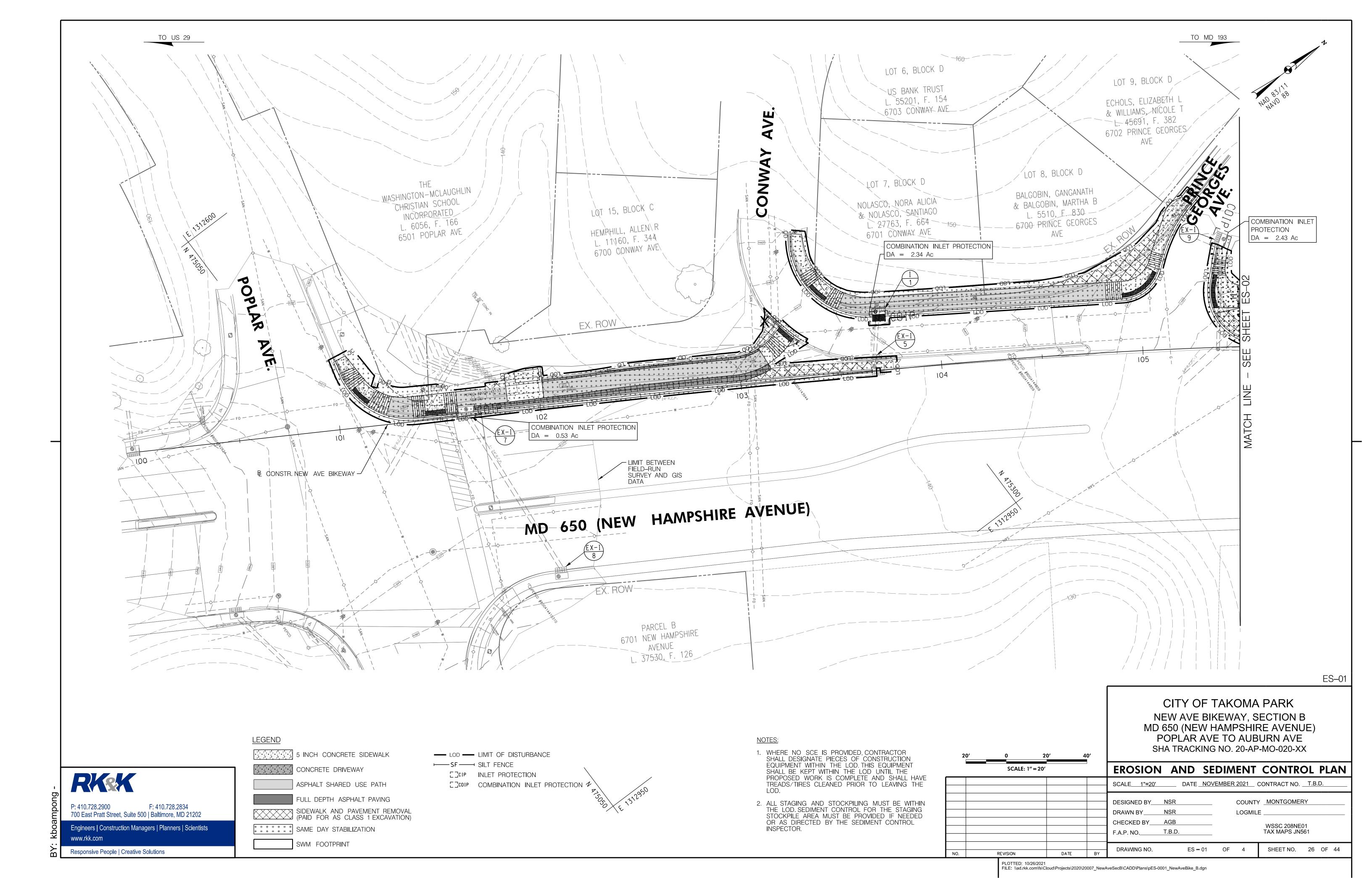
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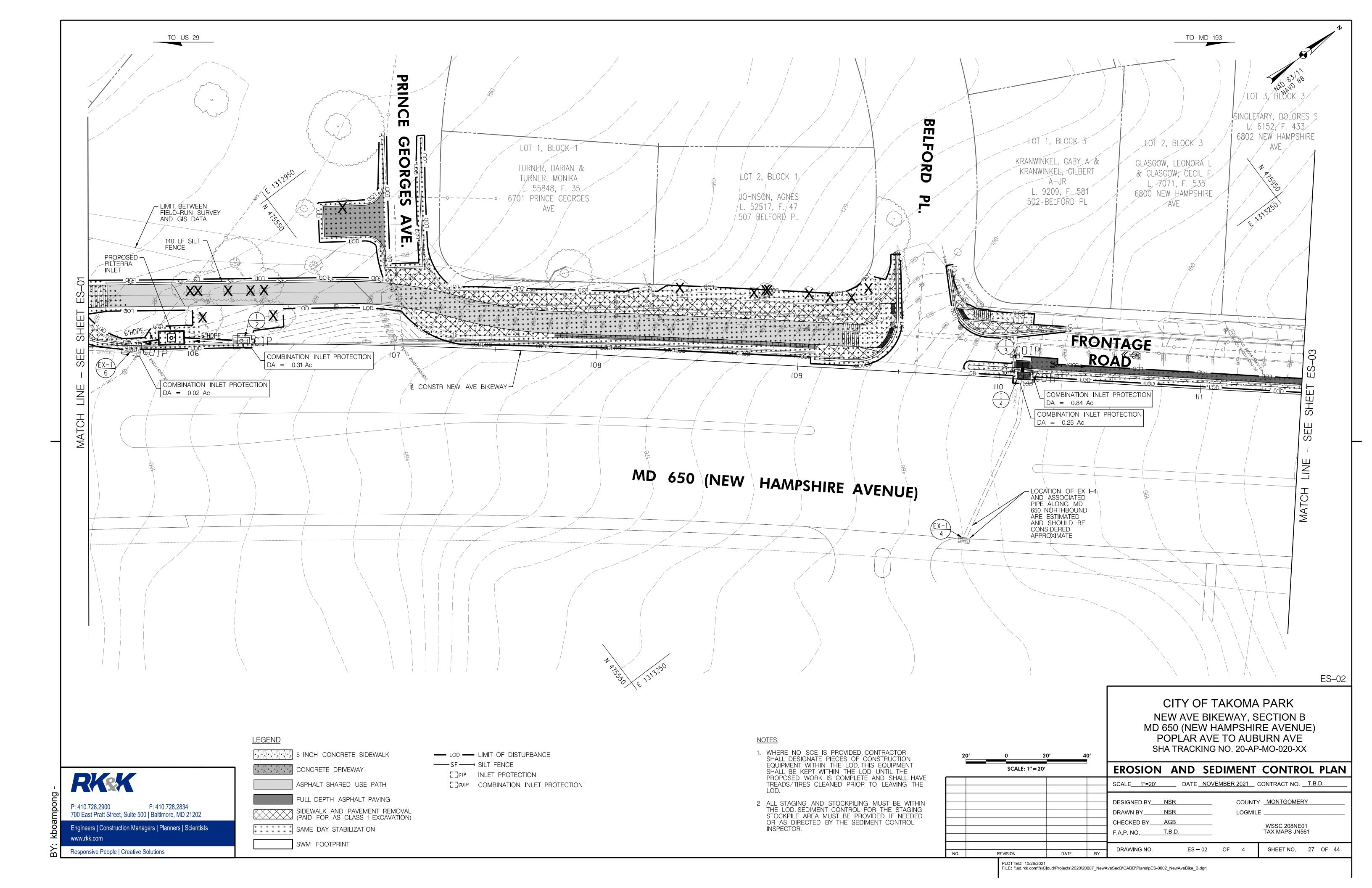
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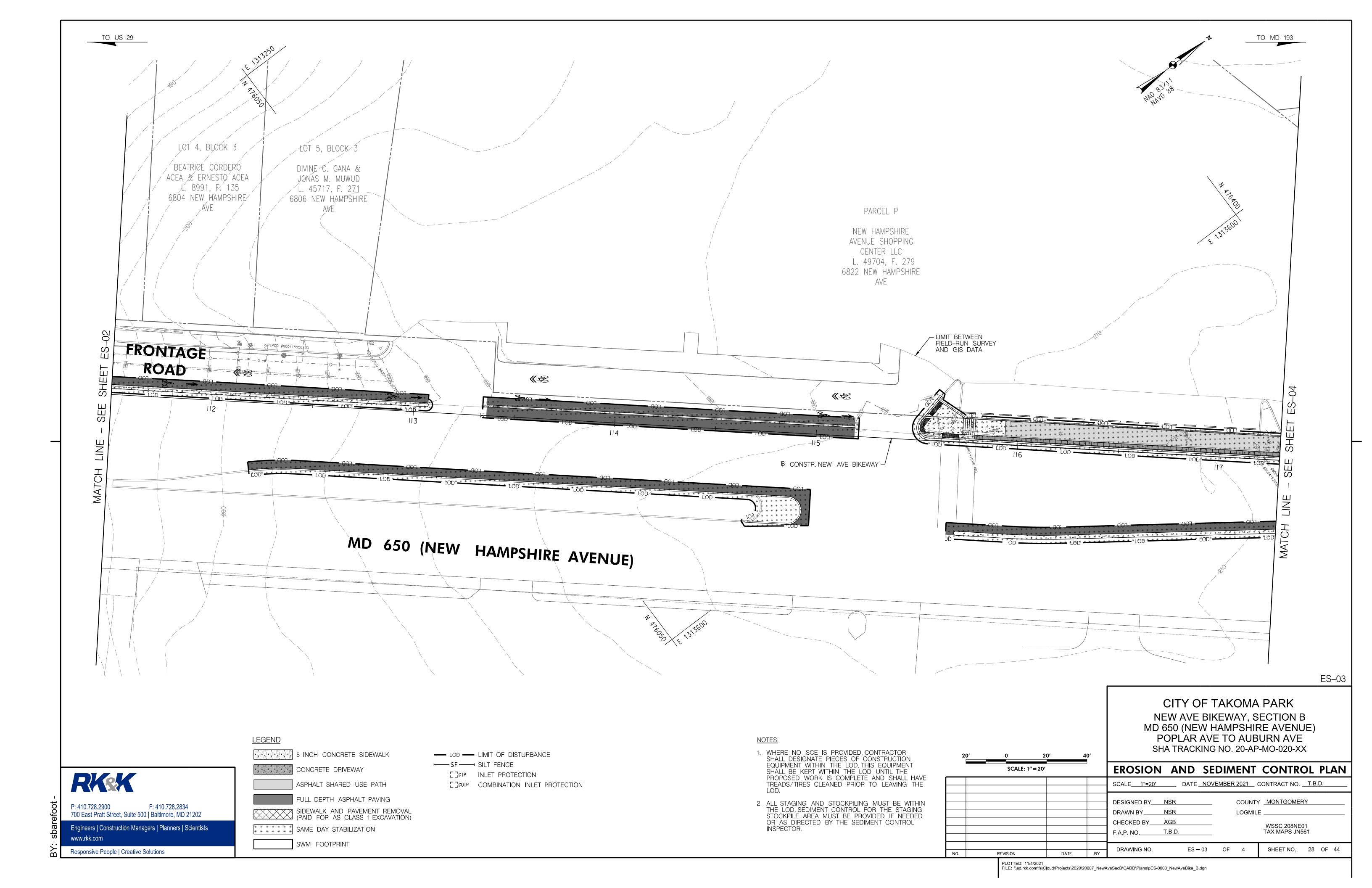
Engineers | Construction Managers | Planners | Scientists

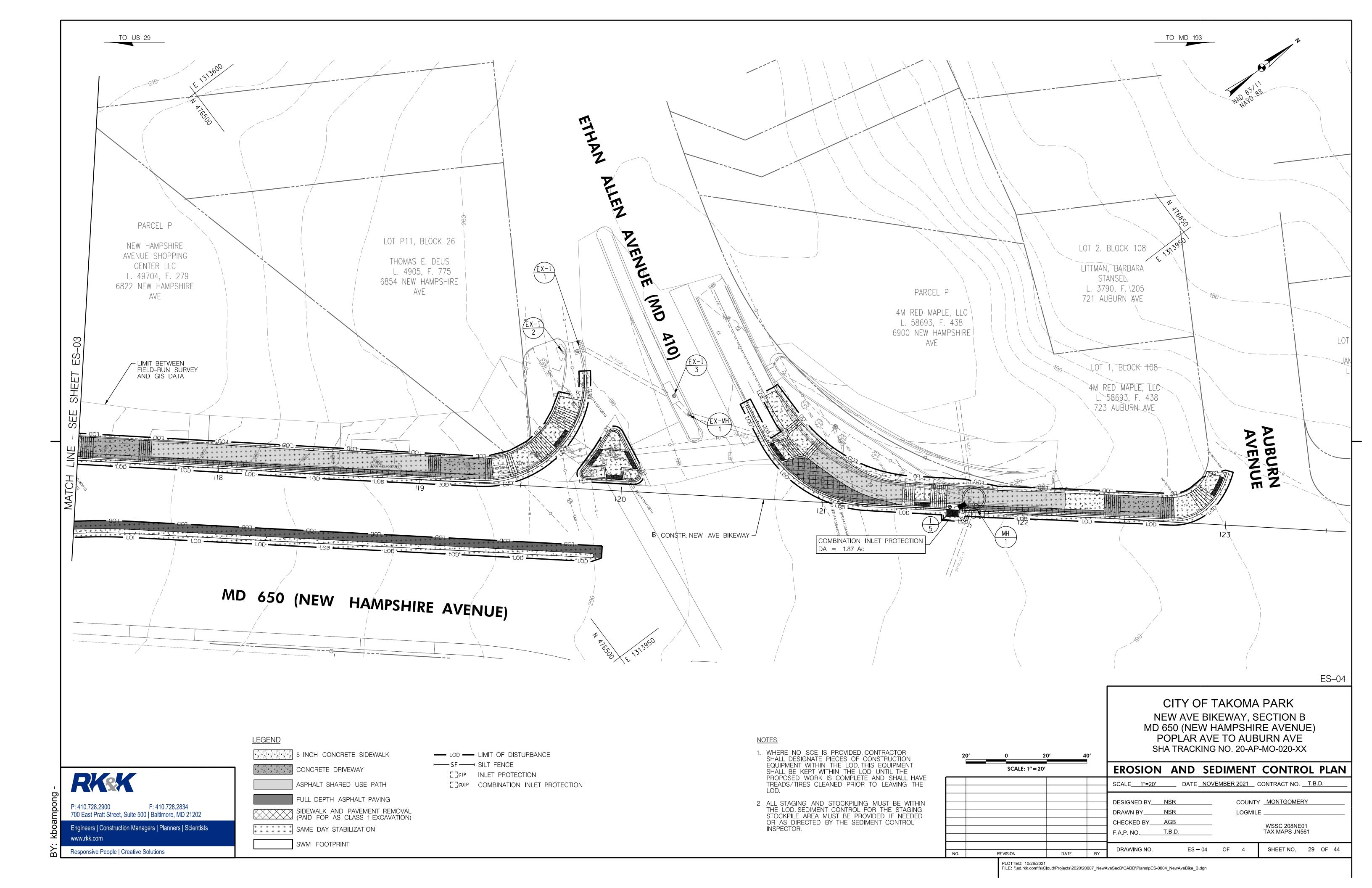
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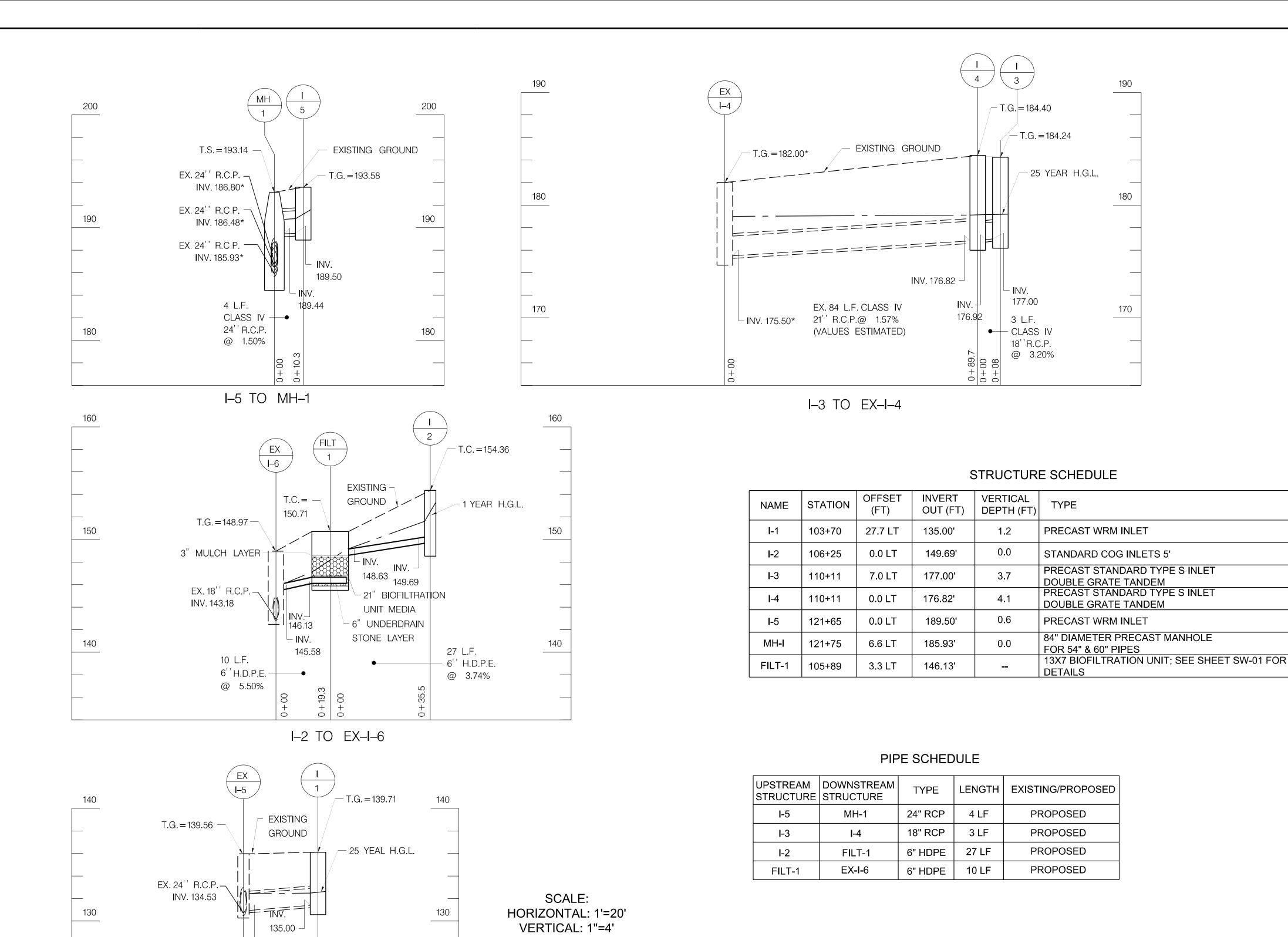
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* ELEVATIONS ESTIMATE BASED ON AERIAL IMAGERY/GIS INFORMATION/STANDARD MINIMUM DEPTHS. CONTRACTOR IS TO VERIFY ALL ELEVATIONS BEFORE ORDERING STRUCTURES.

190

170

INFLOW/OUTFLOW PIPES TO FILT-1 DESIGNED TO CONTAIN 1-YR DESIGN STORM AND PROVIDE WQV ONLY WITHIN FACILITY. LARGER STORM FLOWS WILL BYPASS FACILITY TO EX-I-6.

CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION B MD 650 (NEW HAMPSHIRE AVENUE) POPLAR AVE TO AUBURN AVE

SHA TRACKING NO. 20-AP-MO-020-XX

DP-01

	DRAINAGE PROFILES						
	SCALE_SEE_SHEET DATE_NOVEMBER 2021_ CONTRACT NOT.B.D.						
60% PLANS NOVEMBER 2021	DESIGNED BY AGB COUNTY MONTGOMERY DRAWN BY AGB LOGMILE CHECKED BY SBP F.A.P. NO. T.B.D.						
	DRAWING NO. DP-01 OF 01 SHEET NO. 30 OF 4						

FILE: \\ad.rkk.com\fs\Cloud\Projects\2020\20007_NewAveSecB\CADD\Plans\pDP-D001_NewAveBike_B.dgn

STANDARD

MD-374.22

MD-374.31

MD-374.70

MD-374.70

MD-374.22

MD-384.07

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120

INV.

EX. 22 L.F.

CLASS IV

18'' R.C.P. @ 2.12% 134.54

I–1 TO EX–I–5

120

GENERAL NOTES

- 1. MAINTAIN ACCESS TO ALL ROADWAYS, FRONTAGE ROADS, DRIVEWAY ENTRANCES AND ON-STREET PARKING AT ALL TIMES UNLESS DIRECTED OTHERWISE BY THE ENGINEER. CLOSURE OF DRIVEWAY ENTRANCES, FRONTAGE ROADS AND ON-STREET PARKING MUST BE COORDINATED WITH THE PROPERTY OWNERS THROUGH THE CITY OF TAKOMA PARK AND THE ENGINEER.
- 2. ALL STANDARD REGULATORY AND WARNING SIGNS USED FOR MAINTENANCE OF TRAFFIC SHALL CONFORM TO THE LATEST VERSION OF FHWA'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", AS WELL AS MDOT SHA'S "BOOK OF STANDARDS" AND "SUPPLEMENT TO MUTCD".
- 3. CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE STORED OFF THE TRAVEL LANES AND PEDESTRIAN FACILITIES AT ALL TIMES.
- 4. EXISTING REGULATORY SIGNS IN THE WORK ZONE SHALL BE MAINTAINED AT ALL TIMES AS DIRECTED BY THE ENGINEER. SIGNS THAT ARE NOT APPLICABLE SHALL BE REMOVED OR COMPLETELY COVERED WITH NONTRANSPARENT MATERIAL.
- 5. REFER TO SP 104 FOR WORK RESTRICTIONS AND TEMPORARY LANE CLOSURE SCHEDULE. WORK IS NOT PERMITTED ON SATURDAYS OR SUNDAYS, WITHOUT ADVANCE NOTICE AND WRITTEN PERMISSION FROM THE CITY OF TAKOMA PARK.
- 6. WHERE TRAVEL LANES ARE ADJACENT TO THE WORKZONE: MAINTAIN A MINIMUM LANE WIDTH OF 10' ALONG MD 650 (NEW HAMPSHIRE AVE) AND A MINIMUM LANE WIDTH OF 9' ALONG ONE-WAY FRONTAGE ROADS. PARKING LANES SHALL BE MAINTAINED AT A MINIMUM OF 7' WIDE.
- 7. NOTIFY THE WASHINGTON METROPOLITAN TRANSIT AUTHORITY (WMATA) AND THE PASSENGER FACILITIES MANAGER WITH MONTGOMERY COUNTY RIDE-ON, TWO WEEKS IN ADVANCE OF ANY IMPACTS TO EXISTING BUS STOPS WITHIN THE PROJECT LIMITS.
- 8. MAINTAIN POSITIVE DRAINAGE ALONG THE ROADWAY SURFACE THROUGHOUT CONSTRUCTION.
- 9. MISS UTILITY SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.
- 10. THE SEQUENCE OF CONSTRUCTION IS PROVIDED FOR THE CONTRACTOR'S USE AND CONSIDERATION. THE SEQUENCE OF CONSTRUCTION MAY BE MODIFIED BY THE CONTRACTOR WITH PRIOR APPROVAL BY THE CITY OF TAKOMA PARK.
- . COORDINATE CONSTRUCTION ACTIVITIES WITH PEPCO, WHO WILL PERFORM UTILITY POLE RELOCATIONS PRIOR TO CONSTRUCTION.

TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATIONS (TTCTA)

THE FOLLOWING TTCTA FROM THE SHA BOOK OF STANDARDS ARE TO BE FOLLOWED AS APPROPRIATE:

MD 104.03-10

-INTER. FAR-LEFT LANE CLOSURE / MULTILANE UNDIV. EQL / LESS THAN 40 MPH

-INTER. FAR-RIGHT LANE CLOSURE / MULTILANE UNDIV. EQL / LESS THAN 40 MPH

MD 104.04-04 -LEFT LANE CLOSURE /DIVIDED UNCON. EQL /LESS THAN 40 MPH

MD 104.04-06 -RIGHT LANE CLOSURE /DIVIDED UNCON. EQL /LESS THAN 40 MPH

MD 104.04-16 -INTER. (LEFT LANE, TURN BAY) CLOSURE /DIVIDED UNCON. EQL /LESS THAN 40 MPH

MD 104.06-01 TO MD 104.06-04 -INSTALLING AND REMOVING CLOSURE SETUPS

MD 104.06-09A AND MD 104.06-09C -PEDESTRIAN AND CURB LANE CONTROL

SEQUENCE OF CONSTRUCTION

GENERAL

- PRIOR TO CONSTRUCTION, FIELD MARK THE LIMITS OF DISTURBANCE AND OBTAIN WRITTEN APPROVAL FROM THE CITY OF TAKOMA PARK INSPECTOR.
- 2. SET TEMPORARY TRAFFIC CONTROL DEVICES AS INDICATED IN THE BELOW SEQUENCE.
- 3. INSTALL EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS.
- 4. WORK SHALL NOT PROCEED AHEAD TO THE NEXT PHASE UNTIL ALL DISTURBED AREAS ARE STABILIZED. ALL WORK SHALL BE COMPLETED FOR A PHASE BEFORE PROCEEDING TO THE NEXT PHASE.

PHASE 1A - POPLAR AVE. TO CONWAY AVE. (MD 650 STA. 101+00 TO 103+25):

- SET TEMPORARY TRAFFIC CONTROL DEVICES ALONG SOUTHBOUND MD 650 FOLLOWING MD 104.04-06.
- 2. REMOVE EXISTING PEDESTAL POLE AND TRANSFORMER BASE. INSTALL PEDESTAL POLE WITH RELOCATED APS/CPS. RELOCATE EXISTING PUSH BUTTON. COORDINATE RELOCATION OF EXISTING BUS STOP SHELTER, BENCH, AND BUS STOP SIGN WITH WMATA AND MONTGOMERY COUNTY RIDE-ON. CONSTRUCT CURB & GUTTER, BACKING CURB, ASPHALT SHARED USE PATH, TYPE 2 PAVERS, CONCRETE SIDEWALK, CONCRETE PEDESTRIAN RAMPS, AND DETECTABLE WARNING SURFACES.
 - PUSH BUTTON SIGNALS SHALL BE REACTIVATED PRIOR TO ADVANCING TO THE NEXT PHASE OF WORK.
- 3. INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS.

PHASE 1B - CONWAY AVE. TO PRINCE GEORGES AVE. (MD 650 STA. 103 + 25 TO 105 + 25):

- 1. REMOVE PHASE 1A TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED.
- 2. CLOSE FRONTAGE ROAD.
- 3. REMOVE EXISTING INLET AND REPLACE WITH INLET I-1. RELOCATE EXISTING FIRE HYDRANT. CONSTRUCT CURB & GUTTER, ASPHALT SHARED USE PATH, CONCRETE PEDESTRIAN RAMPS, AND DETECTABLE WARNING SURFACES.
- . INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS.

PHASE 2 - PRINCE GEORGES AVE. TO BELFORD PL. (MD 650 STA. 105 + 25 TO 109 + 50):

- REMOVE PHASE 1B TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED.
- 2. SET TEMPORARY TRAFFIC CONTROL DEVICES ALONG SOUTHBOUND MD 650 FOLLOWING MD 104.04-06.
- INSTALL PRECAST CONCRETE BIOFILTRATION UNIT AND INLET I-2 AS INDICATED ON THE PLANS. CONSTRUCT CURB & GUTTER.
- CLOSE FRONTAGE ROAD.
- 5. REMOVE EXISTING PAVING. RELOCATE EXISTING FIRE HYDRANT. CONSTRUCT CURB & GUTTER, BACKING CURB, ASPHALT SHARED USE PATH, CONCRETE PEDESTRIAN RAMPS, AND DETECTABLE WARNING SURFACES. PERFORM FULL DEPTH PAVING AND CONSTRUCT CURB FOR PROPOSED TURNAROUND.
- 6. INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS.

PHASE 3A - BELFORD PL. TO NEW HAMPSHIRE AVE. SHOPPING CENTER (MD 650 STA. 109 + 50 TO 115 + 40):

- 1. REMOVE PHASE 2 TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED.
- 2. CLOSE FRONTAGE ROAD. SET TEMPORARY TRAFFIC CONTROL DEVICES ALONG SOUTHBOUND MD 650 FOLLOWING MD 104.04–06,
- 3. INSTALL INLETS I-3 AND I-4. REMOVE EXISTING FRONTAGE ROAD MEDIAN AND RECONSTRUCT. PERFORM FULL DEPTH PATCHING. CONSTRUCT CURB & GUTTER FOR CURB LINE BUMPOUT, CONCRETE SIDEWALK AND PEDESTRIAN RAMP, AND DETECTABLE WARNING SURFACE. INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS.
- 4. REMOVE EXISTING RETAINING WALL ALONG FRONTAGE ROAD. INSTALL 1' WIDE CAST-IN-PLACE RETAINING WALL AS INDICATED ON THE PLANS. PERFORM FULL DEPTH PATCHING. INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS.
- 5. REMOVE TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED.
- 6. SET TEMPORARY TRAFFIC CONTROL DEVICES ALONG SOUTHBOUND MD 650 FOLLOWING MD 104.03-10.
- 7. RECONSTRUCT MEDIAN ALONG MD 650 AS INDICATED ON THE PLANS. PERFORM FULL DEPTH PATCHING AND CONSTRUCT CURB AND GUTTER. REMOVE EXISTING MAST ARM POLE AND ASSOCIATED EQUIPMENT. INSTALL MAST ARM POLE WITH MAST ARMS, LED SIGNAL HEADS, AND SIGNS AS SHOWN ON THE PLANS.
- 8. INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS.

SEQUENCE OF CONSTRUCTION (CONTINUED)

PHASE 3B - NEW HAMPSHIRE AVE. SHOPPING CENTER TO ETHAN ALLEN AVE. (MD 650 STA. 115 + 40 TO 120 + 50):

- 1. REMOVE PHASE 3A TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED.
- 2. SET TEMPORARY TRAFFIC CONTROL DEVICES ALONG SOUTHBOUND MD 650 FOLLOWING MD 104.03-12.
- 3. REMOVE EXISTING MAST ARM POLE AND ASSOCIATED EQUIPMENT. INSTALL PEDESTAL POLE WITH LED SIGNAL HEADS AND APS/CPS. REMOVE EXISTING BUS STOP BENCH. COORDINATE RELOCATION OF BUS STOP SIGN WITH WMATA AND MONTGOMERY COUNTY RIDE-ON. COORDINATE REMOVAL OF THE EXISTING LIGHT POLE WITHIN THE PUBLIC RIGHT-OF-WAY WITH THE NEW HAMPSHIRE AVENUE SHOPPING CENTER. RELOCATE FIRE HYDRANT. CONSTRUCT CURB & GUTTER, BACKING CURB, ASPHALT SHARED USE PATH, TYPE 2 PAVERS, CONCRETE SIDEWALK AND PEDESTRIAN RAMPS, DETECTABLE WARNING SURFACES, AND CONCRETE DRIVEWAYS.
- 4. RELOCATE EXISTING PUSH BUTTON IN THE CHANNELIZATION TRAFFIC ISLAND. RECONSTRUCT CURB & GUTTER, CONCRETE SIDEWALK AND PEDESTRIAN RAMPS. AND DETECTABLE WARNING SURFACES FOR THE ISLAND.
- PUSH BUTTON SIGNALS SHALL BE REACTIVATED PRIOR TO ADVANCING TO THE NEXT PHASE OF WORK.
- 5. REMOVE TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED.
- 6. SET TEMPORARY TRAFFIC CONTROL DEVICES ALONG THE SOUTHBOUND MD 650 MEDIAN FOLLOWING MD 104.03-10 AND MD 104.04-04.
- RECONSTRUCT MEDIAN ALONG MD 650 AS INDICATED ON THE PLANS. PERFORM FULL DEPTH PATCHING.
- . REMOVE TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED
- 9. INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS.

PHASE 4 - ETHAN ALLEN AVE. TO AUBURN AVE. (MD 650 STA. 120+50 TO 123+25):

- 1. REMOVE PHASE 3B TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED.
- 2. SET TEMPORARY TRAFFIC CONTROL DEVICES ALONG WESTBOUND ETHAN ALLEN AVENUE FOLLOWING MD 104.03–12. SET TEMPORARY TRAFFIC CONTROL DEVICES ALONG SOUTHBOUND MD 650 FOLLOWING MD 104.04–06.
- 3. RELOCATE EXISTING PEDESTAL POLE AND APS/CPS TO NEW FOUNDATION. INSTALL INLET I-5 AND MANHOLE MH-1. PERFORM CURB LINE BUMPOUT, CONSTRUCT ASPHALT SHARED USE PATH, TYPE 2 PAVERS, CONCRETE SIDEWALK AND PEDESTRIAN RAMPS, DETECTABLE WARNING SURFACES, AND CONCRETE DRIVEWAY.
 - PUSH BUTTON SIGNALS SHALL BE REACTIVATED PRIOR TO ADVANCING TO THE NEXT PHASE OF WORK.
- 4. REMOVE TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED
- 5. INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS.

MT-01

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION B

MD 650 (NEW HAMPSHIRE AVENUE)

POPLAR AVE TO AUBURN AVE

SHA TRACKING NO. 20-AP-MO-020-XX

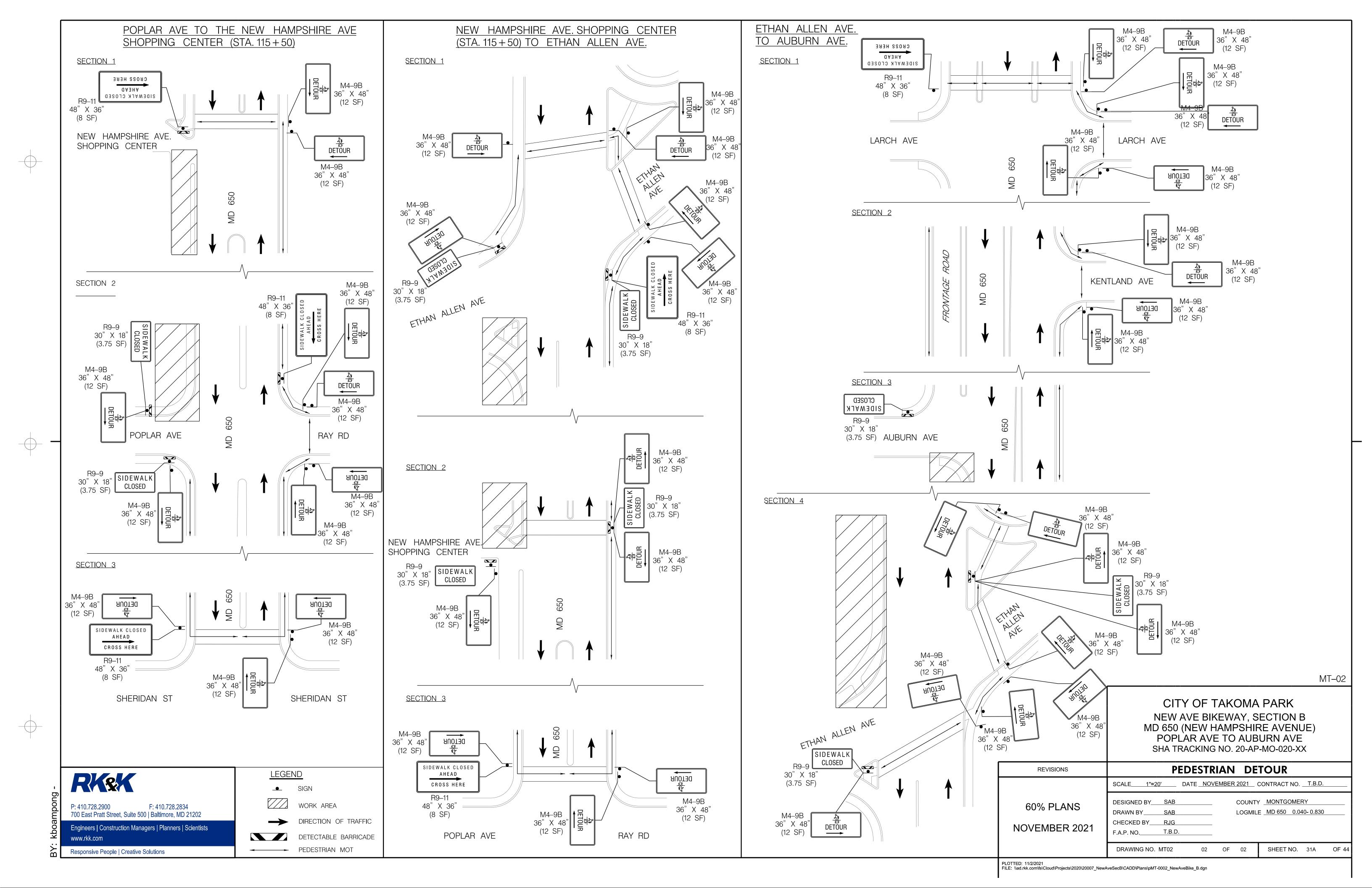
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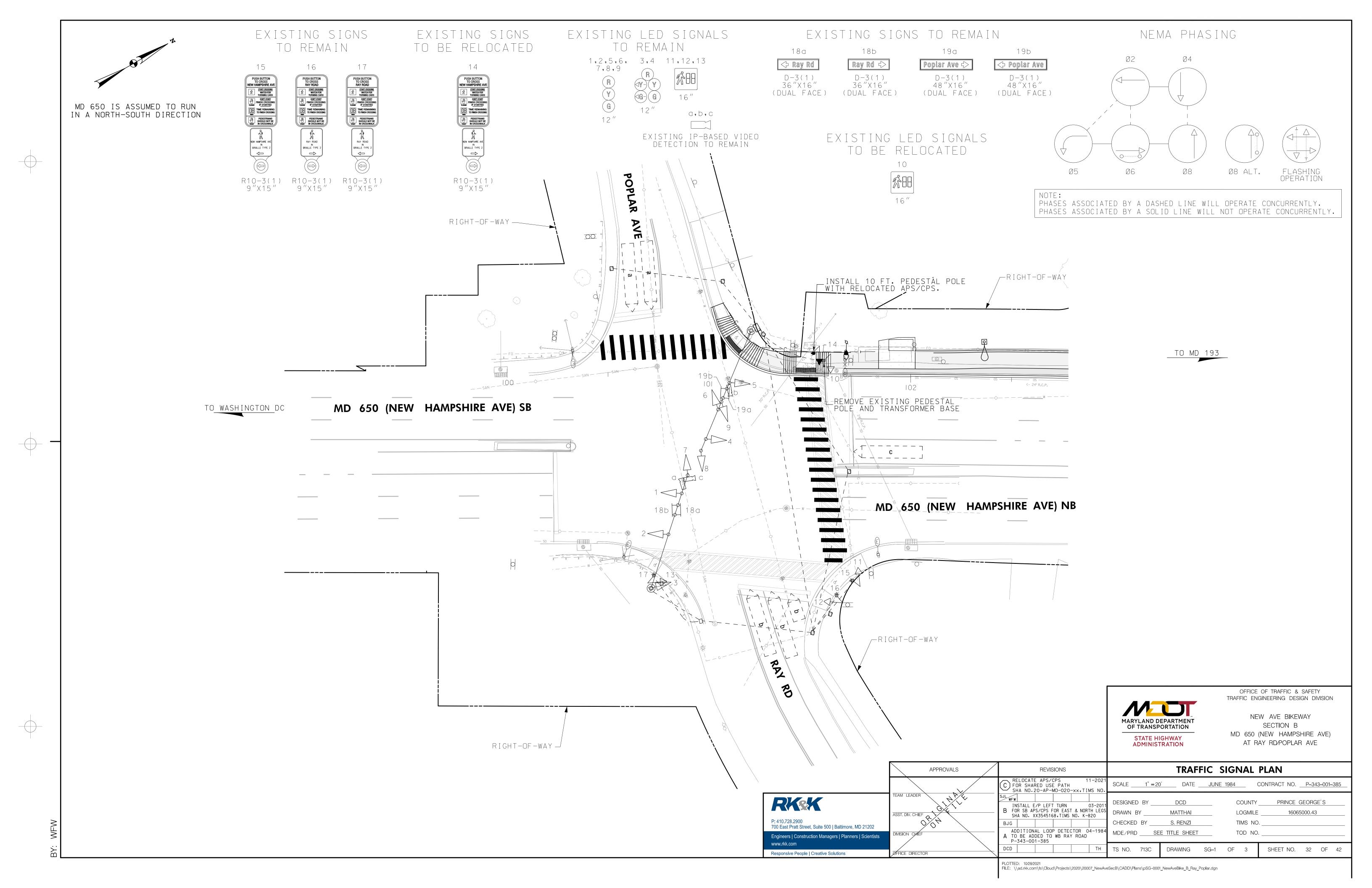
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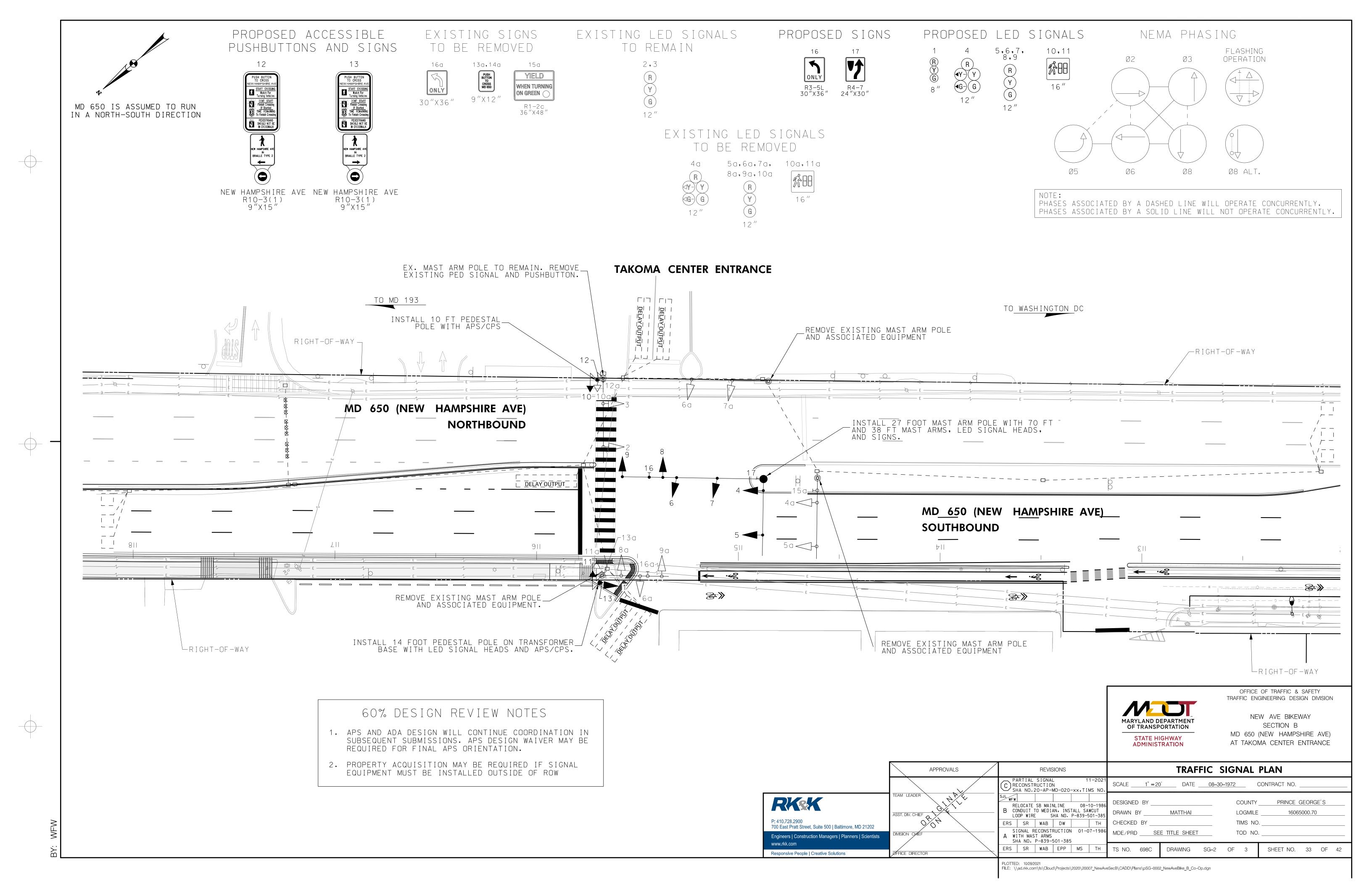
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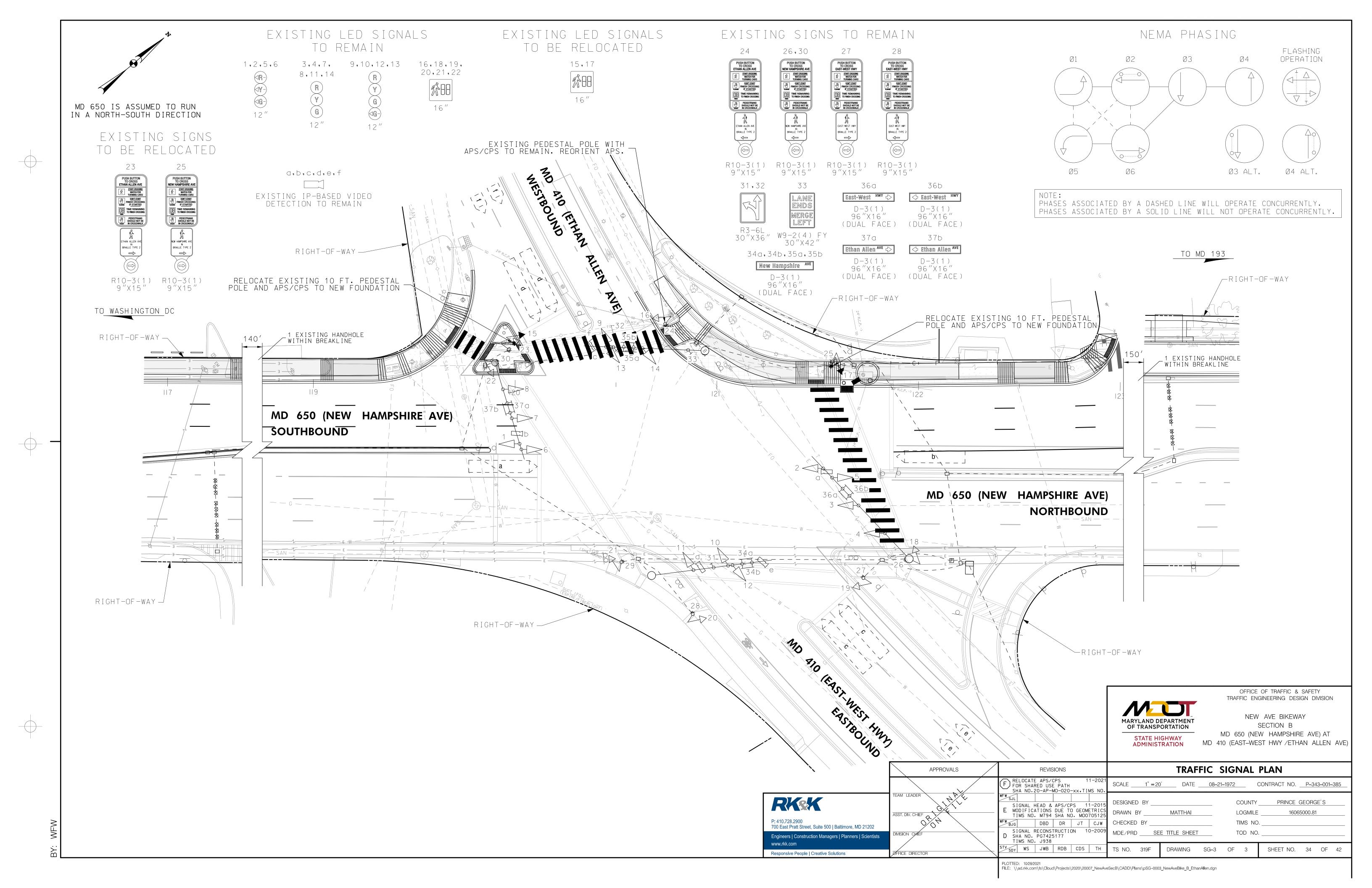
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DESIGN

MDOT SHA - "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", 2011 EDITION AND SUBSEQUENT REVISIONS. (MDMUTCD)

A A S H T O - "HIGHWAY SAFETY DESIGN AND OPERATIONS GUIDE" -1997

A A S H T O - "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS LUMINAIRES AND TRAFFIC SIGNALS", 2001 EDITION (CATEGORY II FOR ALL OVERHEAD AND CANTILEVER SIGN STRUCTURES).

MATERIALS AND CONSTRUCTION

MDOT SHA - "STANDARD SPECIFICATIONS FOR CONSTRUCTION & MATERIALS", MOST CURRENT EDITION AND SUBSEQUENT REVISIONS AND SUPPLEMENTS.

MDOT SHA - "BOOK OF STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES", MOST CURRENT EDITION AND SUBSEQUENT REVISIONS AND SUPPLEMENTS.

ALL DISTRICTS

B) PANELS

MATERIAL - EXTRUDED ALUMINUM

I) HIGH INTENSITY (NEW SIGNS AND

REVISIONS TO EXISTING SIGNS)

COPY - DIRECT APPLIED

DESIGN WIND

100 MPH - WOOD SUPPORTS IO YEAR RECURRENCE INTERVAL

100 MPH - GROUND MOUNT SIGN STEEL SUPPORTS IO YEAR RECURRENCE INTERVAL

100 MPH - OVERHEAD AND CANTILEVER STRUCTURES 50 YEAR RECURRENCE INTERVAL

DESIGN STRESS

SOIL BEARING PRESSURE - S = 3,000 P.S.F. (ASSUMED) SEE MATERIAL & CONSTRUCTION ABOVE AND SPECIAL PROVISIONS FOR DESIGN STRESSES FOR STRUCTURAL STEEL, ALUMINUM, REINFORCING STEEL AND CONCRETE.

CHAMFER

ALL EXPOSED EDGES OF CONCRETE SHALL HAVE A 3/4" X 3/4" CHAMFER.

CLASSIFICATION OF SIGNS

SIGNS ARE DIVIDED INTO TWO (2) GENERAL CATEGORIES. B) PANELS

I. GUIDE SIGNS A) STRUCTURAL TYPES

OH - OVERHEAD

C - CANTILEVER GM - GROUND MOUNT, BREAKAWAY

OR NON-BREAKWAY

BM - BRIDGE MOUNTED

2. STANDARD SIGNS (REGULATORY, WARNING, ETC.) A) STRUCTURAL TYPES

MATERIAL - SHEET ALUMINUM COPY - DIRECT APPLIED WOOD SUPPORTS

IDENTIFICATION OF SIGNS AND PANELS

SQUARE TUBE

EACH GUIDE SIGN IS IDENTIFIED BY A SIGN NUMBER ON THE PLANS AND IN THE TABULATIONS. (GM-I, GM-2, GM-3, etc)

SIGNS ON STRUCTURES ARE IDENTIFIED WITH A NUMBER AND WHERE VARIATIONS OCCUR. A LOWER CASE LETTER. (OH-Ia. OH-Ib. OH-Ic)

STANDARD SIGNS

STANDARD SIGNS ARE IDENTIFIED BY PANEL NUMBERS AND ARE CLASSIFIED AS FOLLOWS

R - REGULATORY W - WARNING

M - ROUTE MARKERS AND ACCESSORIES

D - DESTINATION AND MILEAGE PANELS

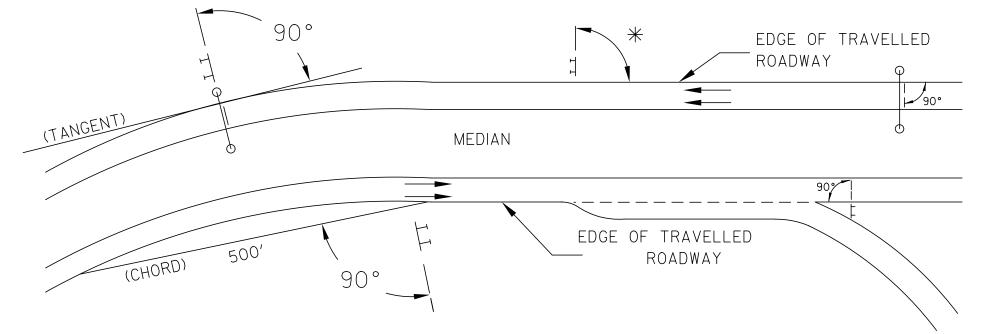
S - SCHOOL

PANELS SHALL BE DESIGNATED TO AGREE WITH MARYLAND STANDARD SIGN BOOK. EACH STANDARD SIGN IS IDENTIFIED FIRST BY THE SHEET NUMBER, THEN BY THE NUMERICAL ORDER OF THE SIGN AS IT APPEARS ON THE PLAN. FOR EXAMPLE SHEET SN 2.1-101,102,103, ETC. SHEET SN 2.2-201,202,203,ETC.

PANEL LAYOUT AND ALPHABETS

I. GUIDE SIGN PANEL LAYOUTS ARE BASED ON THE A.A.S.H.T.O. MANUALS NOTED ABOVE. 2. STANDARD SIGN PANEL LAYOUTS ARE BASED ON THE MDMUTCD WITH SPECIFICATIONS DETAILED IN THE MARYLAND STATE HIGHWAY ADMINISTRATION PUBLICATION, "STANDARD SIGN BOOK", AVAILABLE ONLINE AT http://apps.roads.maryland.gov/businesswithsha/ bizstdsspecs/desmanualstdpub/publicationsonline/oots/internet_signbook.asp

ORIENTATION OF SIGN FACES



* UNDER 30 FEET FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - 93° AWAY FROM THE ROAD TO AVOID SPECULAR REFLECTION AS INDICATED IN 813.03 OF THE MARYLAND STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.

OVER 30 FEET FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - 90°

REFLECTORIZATION

BACKGROUNDS, BORDERS, TEXTS AND ALL OTHER ELEMENTS OF SIGN PANELS SHALL BE REFLECTORIZED EXCEPT WHERE NOTED. REFER TO PROJECT REQUIREMENTS FOR MORE DETAIL.

SIGN LOCATIONS

I. GUIDE SIGNS ARE LOCATED ON THE PLANS BY DIMENSION TO SURVEY STATIONS. OR WHEN NECESSARY, TO IDENTIFIABLE PHYSICAL FEATURES.

2. ALL CHANGES IN THE LOCATIONS OF SIGNS AS SHOWN ON THE PLAN SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

EXISTING UTILITIES

THE ENGINEER DOES NOT WARRANT OR GUARANTEE THE ACCURACY OR COMPLETENESS OF UTILITY INFORMATION SHOWN ON THE PLAN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PROTECT ALL EXISTING FACILITIES WHICH MIGHT BE AFFECTED BY THIS WORK OR HIS OPERATION.

ROADSIDE SIGNS

I. VERTICAL ALIGNMENT

POSITION PANEL SO FACE IS PLUMB.

2. HORIZONTAL ALIGNMENT (SEE DIAGRAM ABOVE)

A) ON STRAIGHT ROADWAY SECTIONS, ANGLE OF SIGN FACE TO ROADWAY VARIES WITH DISTANCE FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - SEE DIAGRAM. B) ON THE INSIDE OF HORIZONTAL CURVES, POSITION SIGN SO FACE OF PANEL MAKES AN ANGLE OF 90° WITH A CHORD BETWEEN A POINT ON NEAR EDGE OF PAVEMENT

AT SIGN LOCATION AND A POINT ON EDGE OF PAVEMENT 500' IN ADVANCE OF SIGN. C) ON THE OUTSIDE OF HORIZONTAL CURVES, POSITION SIGN SO FACE OF PANEL IS

AT RIGHT ANGLES TO THE TANGENT OF THE CURVE AT THE SIGN LOCATION. D) POSITIONING OF SIGNS AT GORES AND RAMP SEPARATIONS IS REFERRED TO THE NORMAL EDGE OF THE MAINLINE ROADWAY.

OVERHEAD SIGNS

I. VERTICAL ALIGNMENT

POSITION PANELS FOR ALL OVERHEAD STRUCTURES SO THAT PANEL FACE IS PLUMB. 2. OVERHEAD SIGN STRUCTURES SHALL NOT BE ERECTED WITHOUT ATTACHING LUMINAIRES. SUPPORTS. AND/OR SIGNS.

3. HORIZONTAL ALIGNMENT

A) POSITION ALL OVERHEAD SIGNS SO THAT THE FACE OF THE PANEL IS AT RIGHT ANGLES TO THE NORMAL EDGE OF ROADWAY, IF ON A STRAIGHT ROADWAY SECTION.

B) POSITION ALL OVERHEAD SIGNS SO THAT THE FACE OF THE PANEL IS AT RIGHT ANGLES TO THE TANGENT OF THE CURVE AT SIGN LOCATION, IF ON A HORIZONTAL CURVE,

C) POSITIONING OF SIGNS AT GORES AND RAMP SEPARATIONS IS REFERRED TO THE NORMAL EDGE OF THE MAINLINE ROADWAY.

4. VERTICAL CLEARANCE

A) OVERHEAD SIGNS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 17'-9" FROM ROADWAY TO THE BOTTOM OF LIGHT FIXTURES. ALL LIGHT FIXTURES ARE TO BE AT THE SAME ELEVATION. B) IF THE CONTRACTOR CANNOT OBTAIN 17'-9" (SEE 3A) CLEARANCE, HE IS TO CEASE WORK

AND CONTACT THE PROJECT ENGINEER FOR FURTHER INSTRUCTIONS. THE PROJECT ENGINEER MAY CONTACT THE TRAFFIC ENGINEERING DESIGN DIVISION FOR ASSISTANCE. C) ON ALL OVERHEAD SIGNS, THE MINIMUM CLEARANCE TO BOTTOM OF DESIGN SIGN: 20'-9".

PROJECT REQUIREMENTS

ALL NEW SIGNS ON THIS PROJECT SHALL BE FABRICATED FROM SHEETING WHICH MEETS ALL OF THE FOLLOWING REQUIREMENTS, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, OR AS DIRECTED BY THE ENGINEER:

I. SHEETING SHALL MEET THE REQUIREMENTS OF SECTIONS 813 AND 950.03 OF MDOT SHA'S STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS 2017 EDITION AND SUBSEQUENT REVISIONS AND SUPPLEMENTS.

2. LISTED ON MDOT SHA OFFICE OF TRAFFIC AND SAFETY'S QUALIFIED PRODUCTS LIST (QPL).

PROJECT REQUIREMENTS CONT'D

3. THE FOLLOWING TYPES OF SHEETING SHALL BE USED FOR THE SPECIFIED SIGN CLASSIFICATIONS:

GENERAL NOTE: ALL COLORS SHALL BE RETROREFLECTIVE EXCEPT BLACK. BLACK TEXT, BORDERS, SYMBOLS OR ANY BLACK ELEMENTS OF ANY SIGN SHALL BE NON-REFLECTIVE. THIS APPLIES TO ALL MDOT SHA SIGNS AS SHOWN BELOW.

A) GUIDE, EXIT GORE, GENERAL INFORMATION, AND SERVICE SIGNS - FALL INTO TWO SUB CATEGORIES:

(I). GROUND MOUNTED:

ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX (9).

(II). OVERHEAD STRUCTURE SIGNS AND OVERHEAD CANTILEVER SIGNS:

ALL RETROREFLECTIVE SHEETING FLEMENTS OF ALL OVERHEAD SIGNS SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE XI(II). (THIS SECTION DOES NOT APPLY TO OVERHEAD SIGNALIZED INTERSECTION SIGNING; MAST ARM OR SPAN WIRE. FOLLOW THE REQUIREMENTS FOR THE RESPECTIVE SIGN CLASSIFICATION FOR SIGNAL SIGNING.)

B) WARNING SIGNS - RETROREFLECTIVE SHEETING FOR WARNING SIGNS (FLUORESCENT YELLOW AND FLUORESCENT ORANGE) SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX (9). REGULATORY MESSAGES WITHIN WARNING SIGNS SHALL FOLLOW THE REQUIREMENTS FOR REGULATORY SIGNS.

C) SCHOOL SIGNS - RETROREFLECTIVE SHEETING FOR SCHOOL SIGNS (FLUORESCENT YELLOW AND FLUORESCENT YELLOW-GREEN) SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX (9), REGULATORY MESSAGES WITHIN SCHOOL SIGNS SHALL FOLLOW THE REQUIREMENTS FOR REGULATORY SIGNS.

D) REGULATORY SIGNS - FALL INTO THREE SUBCATEGORIES:

(I). "RED" REGULATORY SIGNS; (SPECIFICALLY - STOP, YIELD, DO NOT ENTER AND WRONG WAY). ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX (9).

(II). ALL R7 AND R8 SERIES PARKING RELATED SIGNS AND THEIR SUPPLEMENTAL PANELS, NO TRESPASSING SIGNS, AND SIGNS DIRECTED AT PEDESTRIANS AND BICYCLISTS ONLY. ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET THE REQUIREMENTS FOR ASTM TYPE IV (4).

(III). ALL OTHER REGULATORY SIGNS - ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET ASTM TYPE IV (4) INCLUDING RED ELEMENTS. WARNING MESSAGES WITHIN REGULATORY SIGNS SHALL FOLLOW THE REQUIREMENTS FOR WARNING SIGNS.

E) ROUTE MARKERS (INDEPENDENT USE AND GUIDE SIGN USE)

INDEPENDENT USE: ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET BUT NOT TO EXCEED THE REQUIREMENTS FOR ASTM TYPE IV (4).

GUIDE SIGN USE: WHEN INCORPORATED IN THE BODY OF A GUIDE SIGN, ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET THE SHEETING REQUIREMENTS OF THE GUIDE SIGNS FOR WHICH THEY ARE TO BE APPLIED; GROUND MOUNT ASTM TYPE IX (9) OR OVERHEAD ASTM TYPE XI(II).

F) LOGOS AND / OR GRAPHICS - WITHIN SIGNS SHALL FOLLOW THE REQUIREMENTS FOR THE RESPECTIVE SIGN CLASSIFICATION UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, OR AS DIRECTED BY THE ENGINEER.

G) SPECIFIC SERVICE (LOGO) SIGNING - ALL COPY, DIVIDER BORDERS, LOGOS AND ARROWS SHALL BE DEMOUNTABLE ALUMINUM OVERLAYS. .032 MINIMUM TO .063 MAXIMUM. ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX (9). DISTANCES ON DIRECTIONAL ARROWS WHEN SPECIFIED SHALL BE BLACK. THE OVERLAYS ARE TO BE APPLIED WITH .125 ALUMINUM POP RIVETS TO THE BODY OF THE MAIN SIGN.

H) CIVIL DEFENSE SIGNS AND OTHER SIGNS - NOT SPECIFICALLY FALLING INTO ONE OF THE CATEGORIES ABOVE. SHALL FOLLOW THE GUIDELINES FOR THE SIGN CLASSIFICATION THAT MOST CLOSELY MATCHES THE COLOR(S) OF THE PROPOSED SIGN.

4. THE FOLLOWING MINIMUM THICKNESS SHALL BE USED FOR THE APPROPRIATE

WIDTH OF SHEET ALUMINUM BLANKS:

LONGEST DIMEN	<u>NSION</u>	MINIMUM THICKNESS
UP TO 12"		0.040"
GREATER THAN	12" TO 24"	0 . 063"
GREATER THAN	24" TO 36"	0.080"
GREATER THAN	36" TO 48"	O. 00"
OVER 48"		0 . 125"



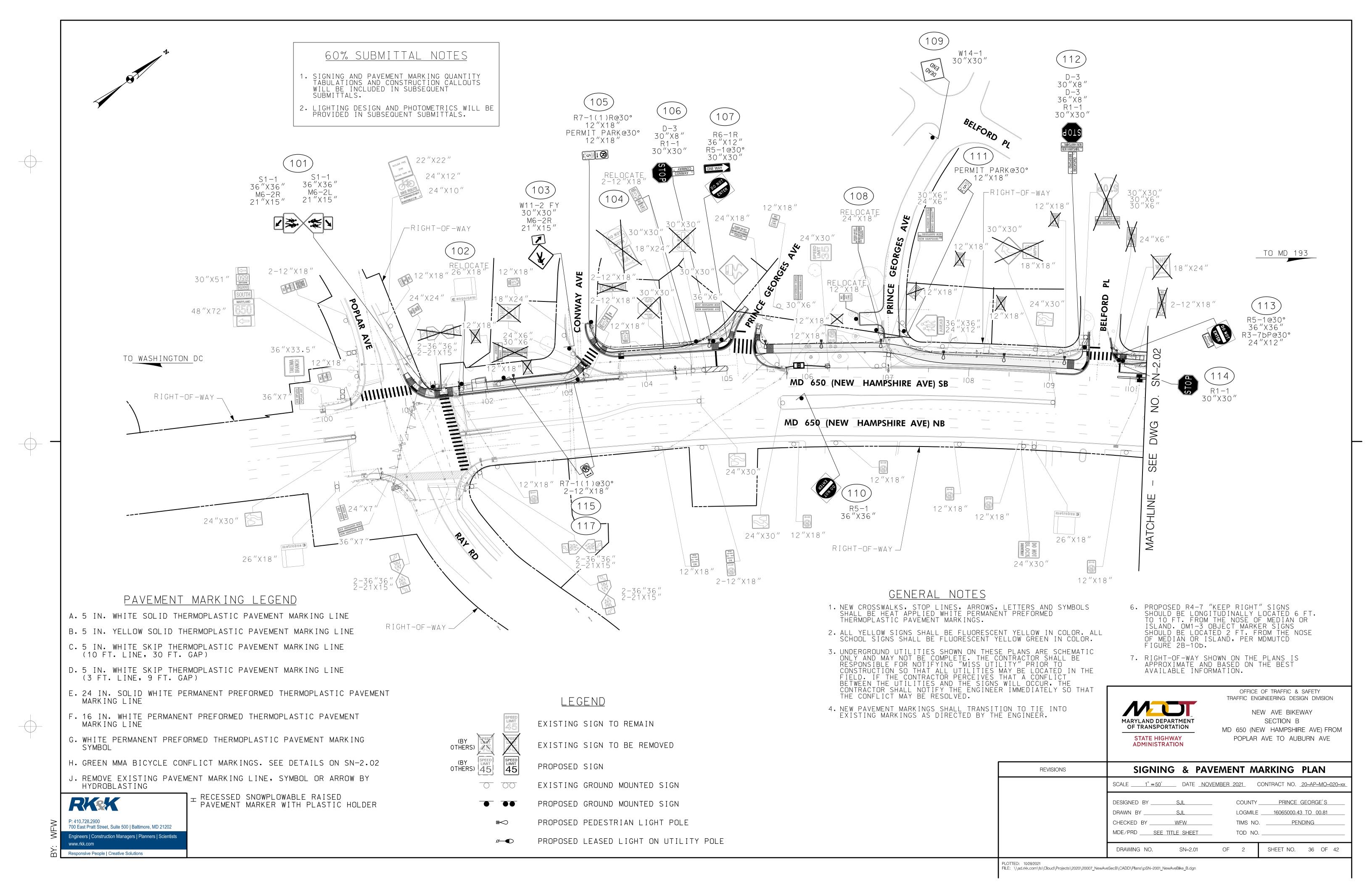
OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

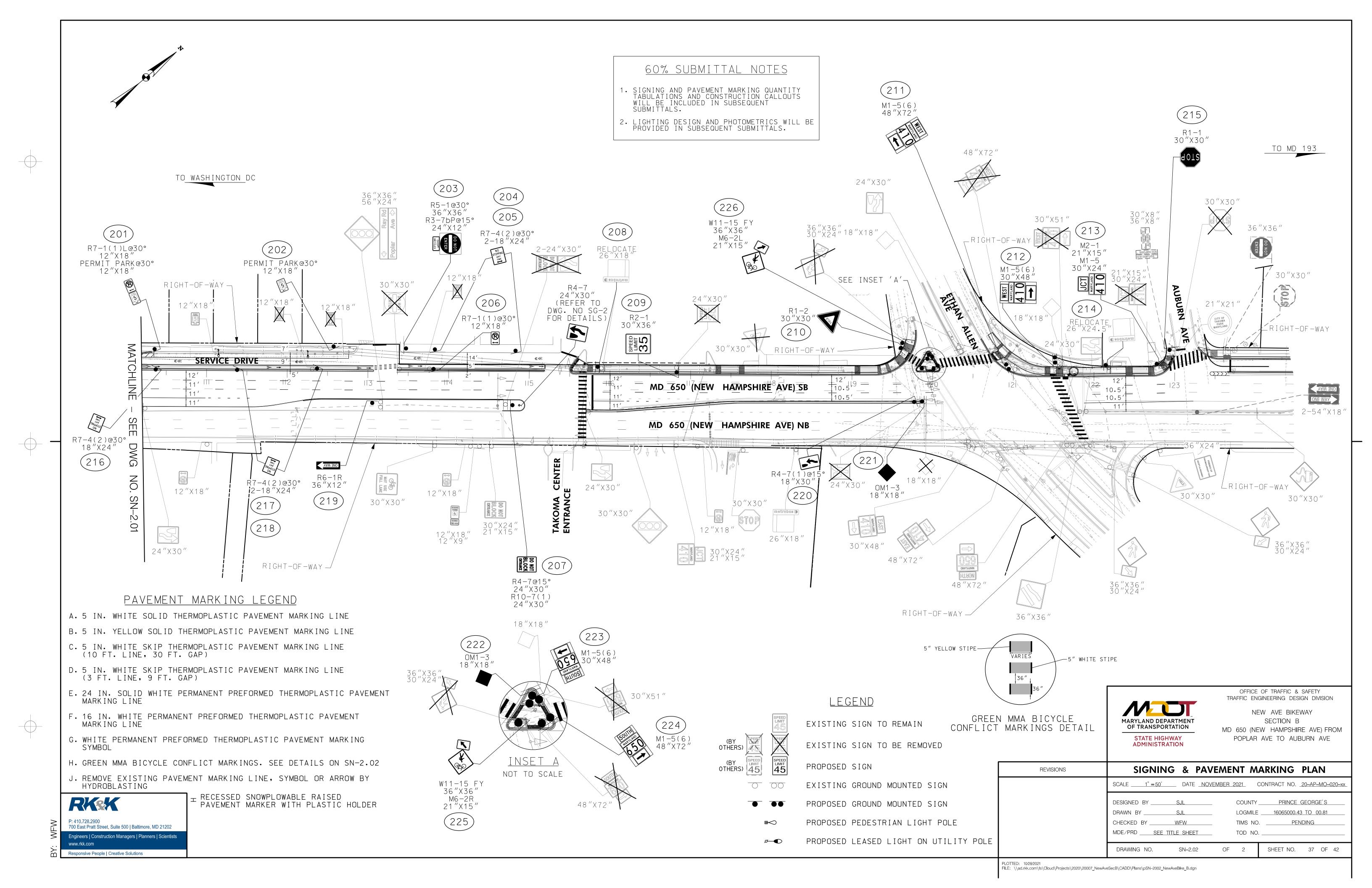
NEW AVE BIKEWAY SECTION B MD 650 (NEW HAMPSHIRE AVE) FROM POPLAR AVE TO AUBURN AVE

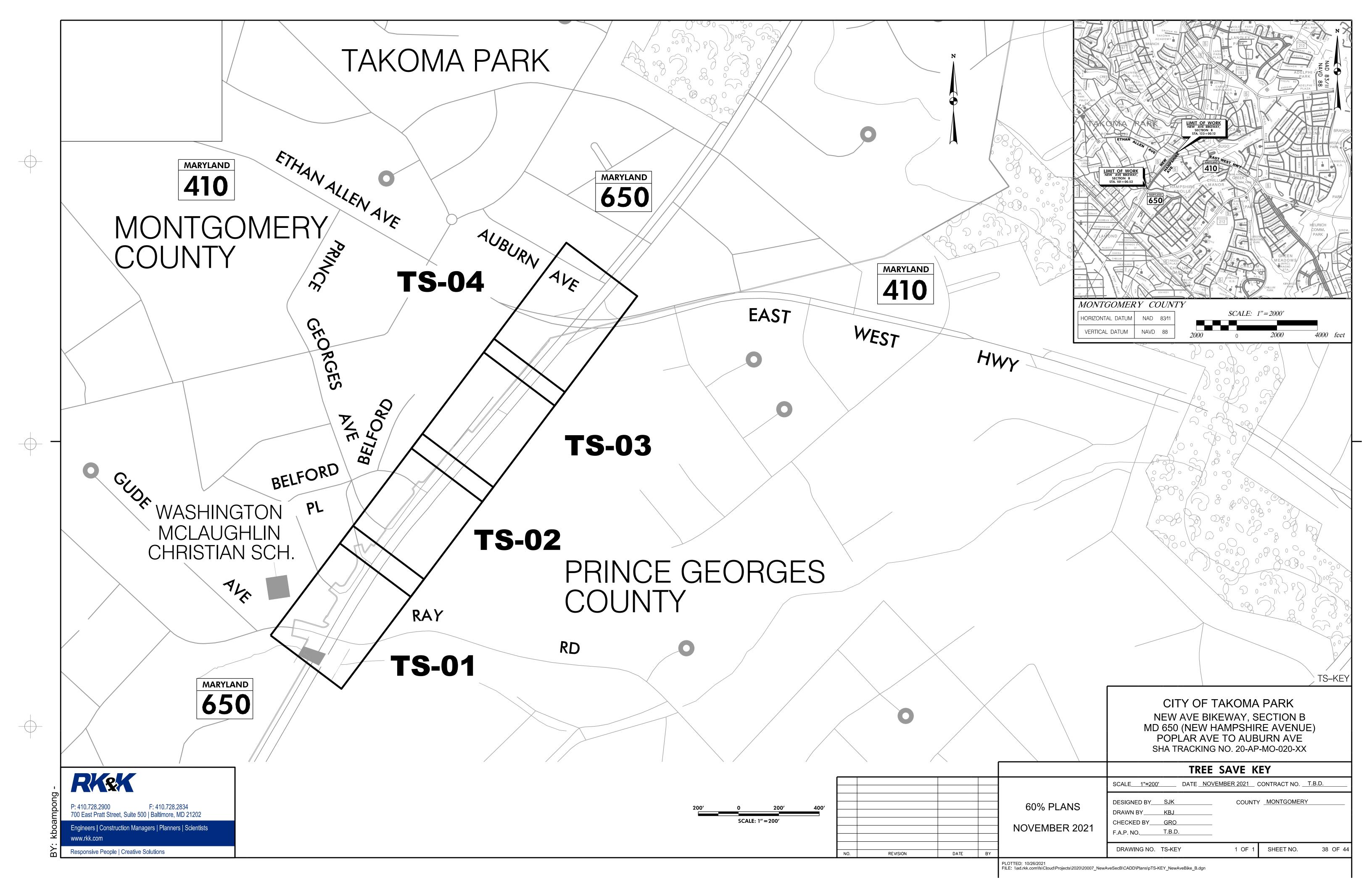
APPROVALS	REVISIONS	GENERAL NOTES AND PROPOSALS
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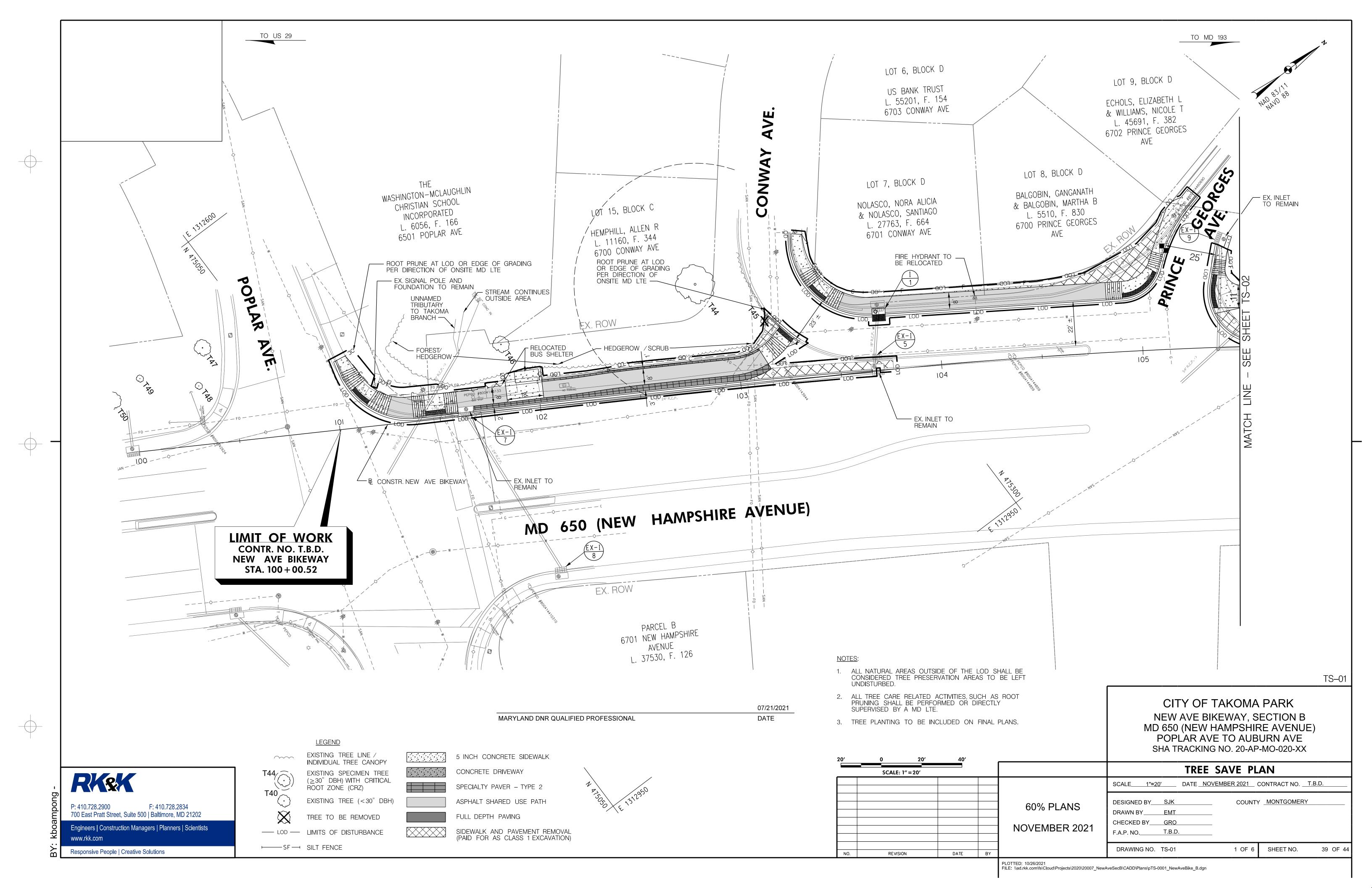
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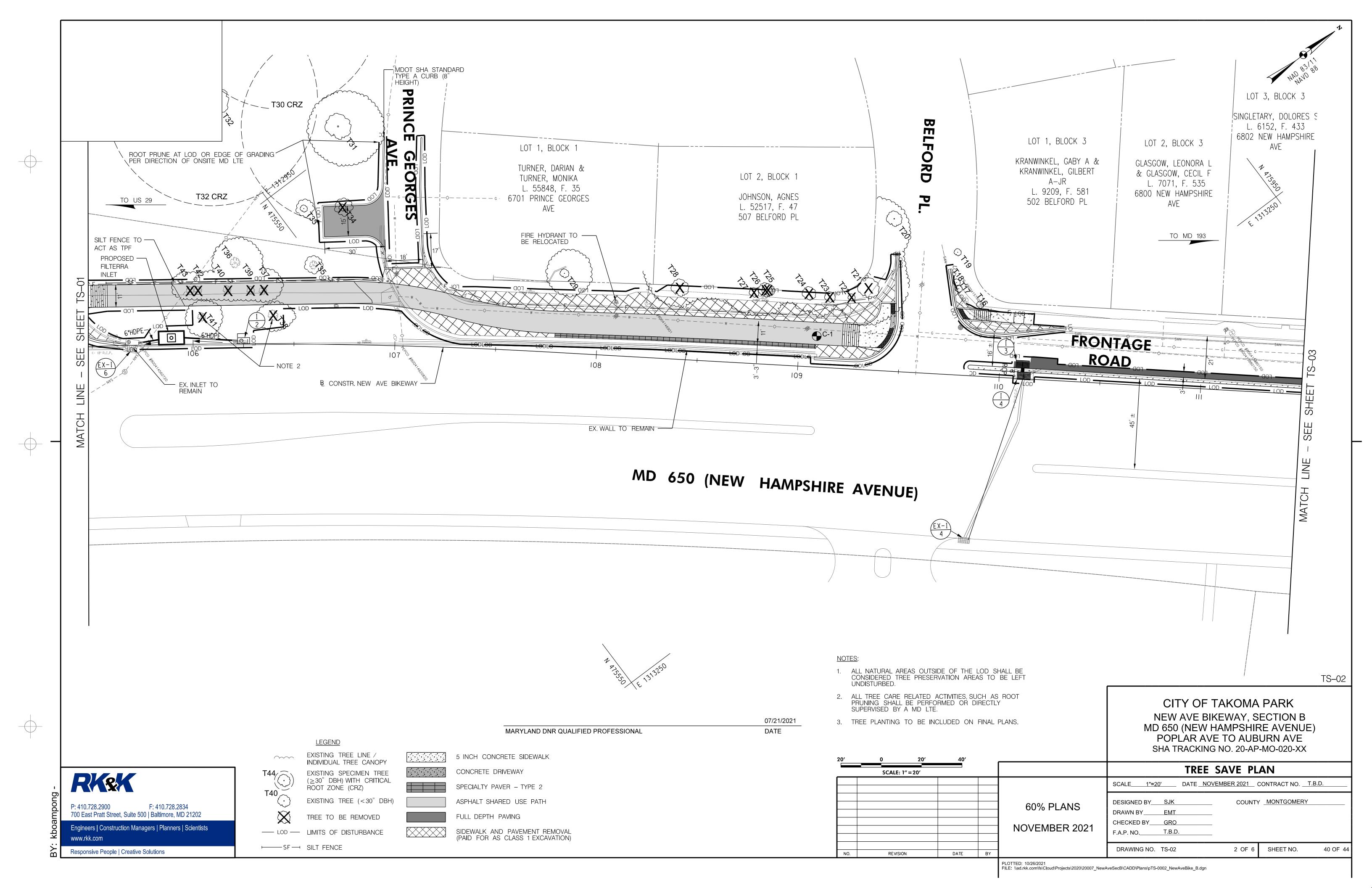


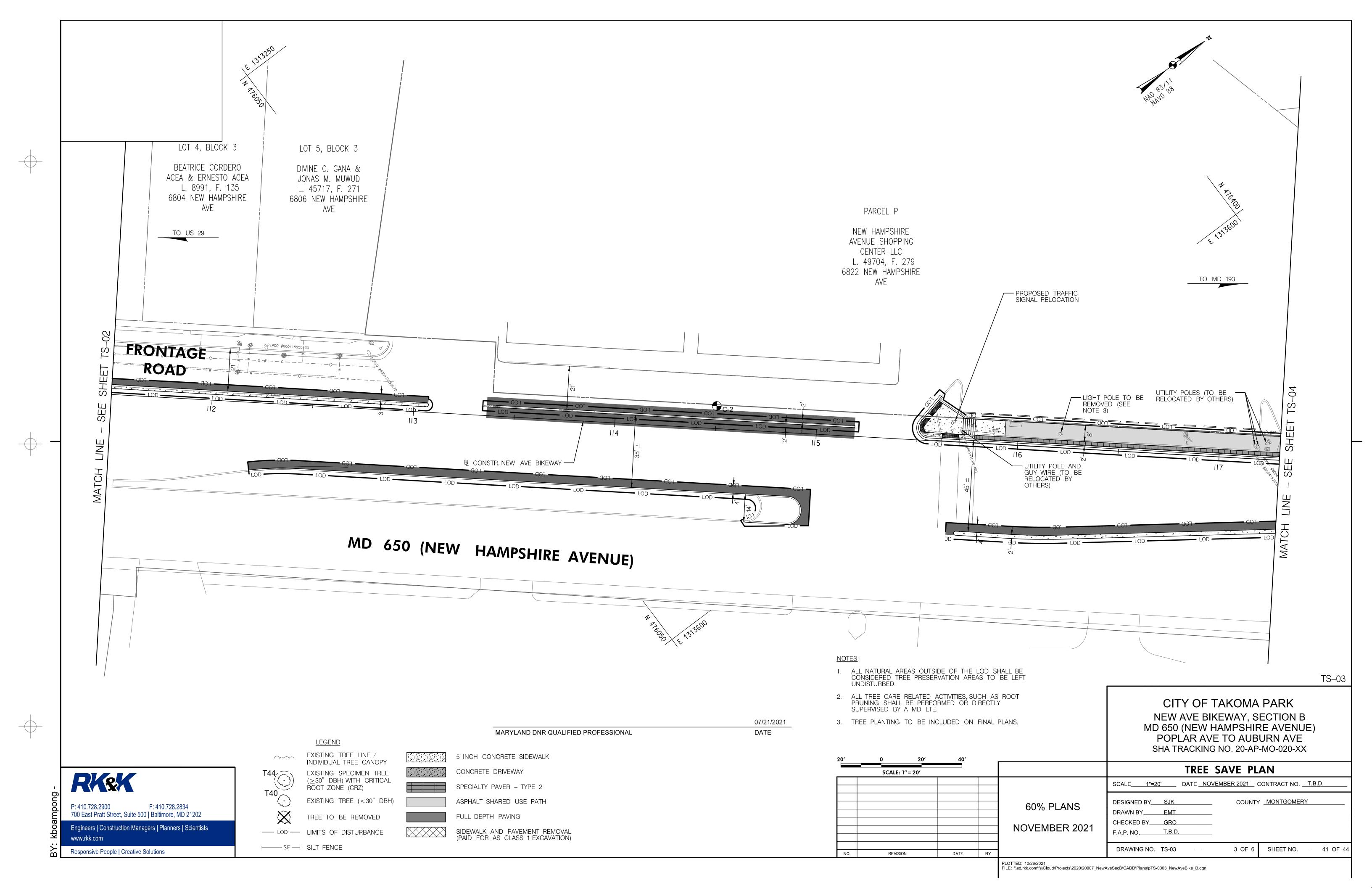


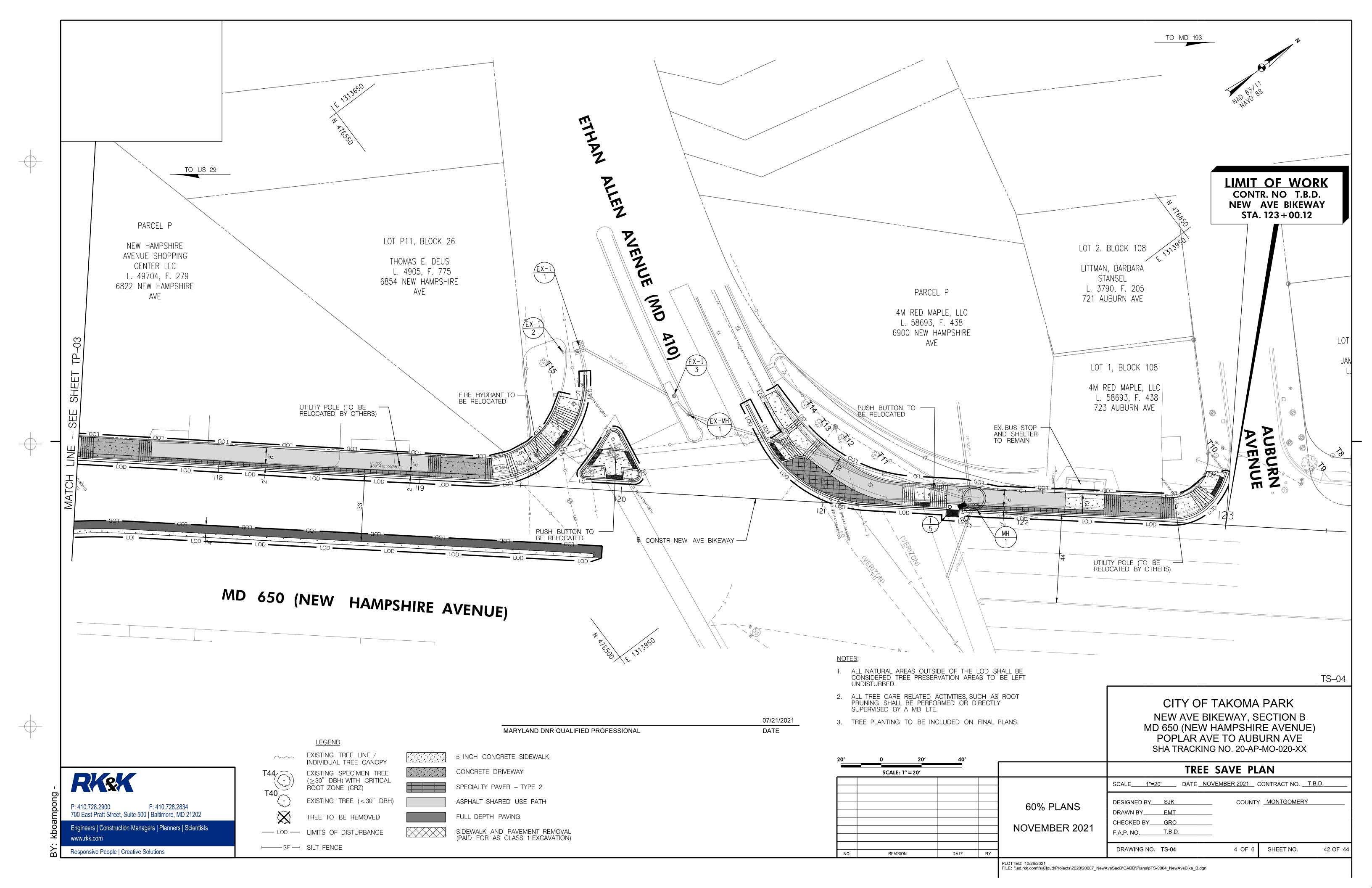


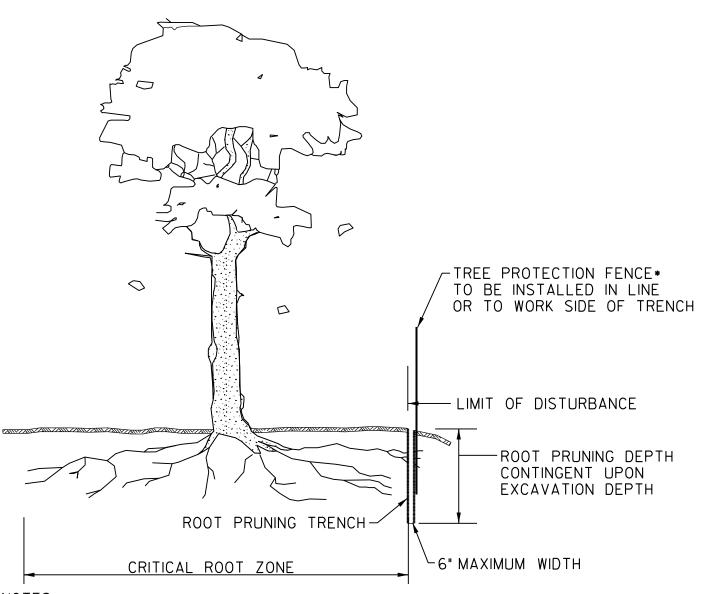












NOTES:

- EXACT LOCATION OF TRENCH SHOULD BE IDENTIFIED ALONG LOD OR EDGE OF EXCAVATION PER THE DIRECTION OF THE ONSITE MD LTE (LICENSED TREE
- 2. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH SOIL REMOVED OR ORGANIC SOIL.
- ROOTS SHOULD BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE EQUIPMENT THAT CONFORMS TO ACCEPTED ARBORICULTURAL PRACTICES.
- 4. IN SOME INSTANCES, IT MAY BE BENEFICIAL TO PERFORM ROOT PRUNING AT THE EDGE OF EXCAVATION RATHER THAN AT THE LOD, PROVIDED THE ROOTS BETWEEN THE EXCAVATON AND THE LOD ARE PROTECTED DURING CONSTRUCTION.
- * TPF WILL NOT BE INSTALLED SINCE THE PROJECT IS SAME DAY STABILIZATION EXCEPT FOR THE SHORT STRETCH WHERE SF WILL ACT AS TPF. TPF DETAIL IS INCLUDED IN CASE THE PROJECT IS NOT CONSTRUCTED SAME DAY AND/OR THE FOREST CONSERVATION INSPECTOR OR CITY ARBORIST CALL FOR TPF AT THE PRE-CONSTRUCTION MEETING.

ROOT PRUNING DETAIL

NOT TO SCALE

Source: Adapted from Steve Clark & Associates/ACRT, Inc., and Forest Conservation Manual, 1991

	TREE TABLE							
Tree No.	Common Name	Scientific Name	Remove	DBH	Condition	Roadside Tree	Comments	
T1	Common hibiscus	Hibiscus syriacus	N	0.5	Good/Fair	**	Shrub, to be removed for New Ave-Sec. A construction	
T2	American holly	llex opaca	N	10	Good	**		
T3	American holly	llex opaca	N	13	Fair	**	Lean, dead branches	
T4	American holly	llex opaca	N	14	Fair	**	Tip of leader is dead	
T 5	Northern red oak	Quercus rubra	N	37	Fair	**	Minor vines, slight lean, moderate dead branches	
T6	Northern red oak	Quercus rubra	N	14	Fair	**	Slight lean, one sided, to be removed for New Ave-A construction	
T7	Loblolly pine	Pinus taeda	N	13	Fair	**	Bark damage one sided, in power lines, to be removed for New Ave-A construction	
Т8	Southern red oak	Quercus falcata	N	5	Good	N	to be removed for New Ave-A construction	
Т9	Virginia pine	Pinus virginiana	N	13	Fair	N	Lean, growing into powerline, to be removed for New Ave-A construction	
T10	Privet	Ligustrum sp.	N	5	Good	*		
T11	Honey locust	Robinia pseudoacacia	N	3	Good	Υ		
T12	Crape myrtle	Lagerstroemia indica	N	1	Good	*	8 small spirea bushes in between. Multistem. 8–10 ft	
T13	Crape myrtle	Lagerstroemia indica	N	1	Good	*	Multistem. 8 ft tall	
T14	Crape myrtle	Lagerstroemia indica	N	1	Good	*	Multistem. 9 ft tall	
T15	Honey locust	Robinia pseudoacacia	N	3	Good	Υ		
T16	Red Tip Photinia	Photinia x fraseri	N	2	Good	*	Multistem Bush. First one in front of utility pole. Hedge going back	
T16a	Red Tip Photinia	Photinia x fraseri	N	3	Good	*	Multistem Bush. One in between T16 and T17	
T17	Red Tip Photinia	Photinia x fraseri	N	2	Good	*	Multistem Bush.	
T18	Crape myrtle	Lagerstroemia indica	N	1	Good	*	Multistem. 3**tall	
T18a	Crape myrtle	Lagerstroemia indica	Ν	1	Good	*	Multistem. 2**tall. One in between T18 and T19	
T19	Crape myrtle	Lagerstroemia indica	Ν	1	Good	*	Multistem. 2**tall.	
T20	White pine	Pinus strobus	Ν	16	Fair/Poor	Υ	Several large dead branches, one sided	
T21	Willow oak	Quercus phellos	Υ	22	Fair	Υ	Moderate dead branches. In powerline. Inside fence	
T22	Crape myrtle	Lagerstroemia indica	Υ	4	Poor	Υ	Lost most stems, outside fence	
T23	White pine	Pinus strobus	Υ	11	Poor	Υ	Wisteria into canopy, half dead, power lines in tree	
T24	White pine	Pinus strobus	Υ	14	Poor	Υ	Wisteria into canopy, half dead, power lines in tree, behind fence	
T25	White pine	Pinus strobus	Υ	13	Poor	Υ	Wisteria into canopy, half dead, power lines in tree, behind fence	
T26	White pine	Pinus strobus	Υ	15	Poor	Υ	Wisteria into canopy, half dead, power lines in tree, behind fence, English ivy	
T27	Black walnut	Juglans nigra	Υ	10	Poor	Υ	Behind fence, English ivy & wisteria into canopy, 1-sided, half dead	
T28	White Mulberry	Morus alba	Υ	18	Poor	Υ	Split below BH (4.5'), 16**, inside fence, half dead, English ivy	
T29	Honey locust	Robinia pseudoacacia	N	9	Good	N		
T30	Silver maple	Acer saccharinum	N	33	Good	Y**	minor Lawn mower root damage	
T31	Silver maple	Acer saccharinum	N	32	Good/Fair	Y	Slight lean, minor girdling roots, minor dead branches	
T32	Silver maple	Acer saccharinum	N	35	Good	Y	minor Lawn mower root damage, lost leader but regrowth of new one	
T33	Japanese cedar	Cryptomeria japonica	N	4	Good	Υ	Multistem with 2-3**stems, minor dead branches	
T34	Japanese cedar	Cryptomeria japonica	Υ	5	Fair/Poor	Υ	Multistem with 2**stems, scant, dead branches	
T35	Northern red oak	Quercus rubra	N	2	Good	Υ		
T36	White oak	Quercus alba	N	11	Good	Υ	Minor dead branches	
T37	Swamp white oak	Quercus bicolor	Υ	8	Good	Υ	Multistem, 8**, right by sidewalk	
T38	Swamp white oak	Quercus bicolor	Υ	11	Good	Y	Right by sidewalk	
T39	Swamp white oak	Quercus bicolor	Υ	7	Good	Y	Right by sidewalk, multistem, 3*	
T40	Swamp white oak	Quercus bicolor	Υ	4	Good	Υ	Right by sidewalk, multistem, 3*	
T41	Swamp white oak	Quercus bicolor	Υ	9	Good	Y	Right by sidewalk	
T42	Swamp white oak	Quercus bicolor	Υ	6	Good	Υ	Right by sidewalk, 6**and 3**, split below DBH	
T43	Swamp white oak	Quercus bicolor	Υ	5	Good	Υ	Right by sidewalk, split below DBH, multistem, 5*	
T44	Southern red oak	Quercus falcata	N	40	Fair	N	English & poison ivy, broken br., outside ROW, huge ripped off branch (5x3' scar), rot in tree, powerline	
T45	American elm	Ulmus americana	Υ	3	Good/Fair	Υ	Vines in canopy	
T46	Northern red oak	Quercus rubra	N	17	Fair	Υ	Vines up trunk, skinny canopy	
T47	Boxelder	Acer negundo	N	17	Poor	Υ	Splits below DBH, split trunk, vines in crown	
T48	Pignut hickory	Carya glabra	N	7	Fair	Υ	Irregular crown, vines	
I T40	Catalpa	Catalpa sp.	N	6	Fair	Υ	Vines in the crown	
T49 T50	Black walnut	2 2.22.1/2 21 2 12 3	N	18	Fair	Υ	Lean, undercut roots	

Bold = Specimen Trees (≥30" DBH)

THERE ARE NO SIGNIFICANT TREES (>24" DBH) THAT ARE NOT ALSO SPECIMEN TREES (>30" DBH).

MARYLAND DNR QUALIFIED PROFESSIONAL

* Shrub in road ROW

** Outside area shown on plans

REVISION

DATE

REMOVAL & MITIGATION TABLE Removals Mitigation Required Roadside Trees: 17

IMPACT NOTE:

NO FOREST WILL BE CLEARED, AND NO SIGNIFICANT OR SPECIMEN TREES WILL BE REMOVED.

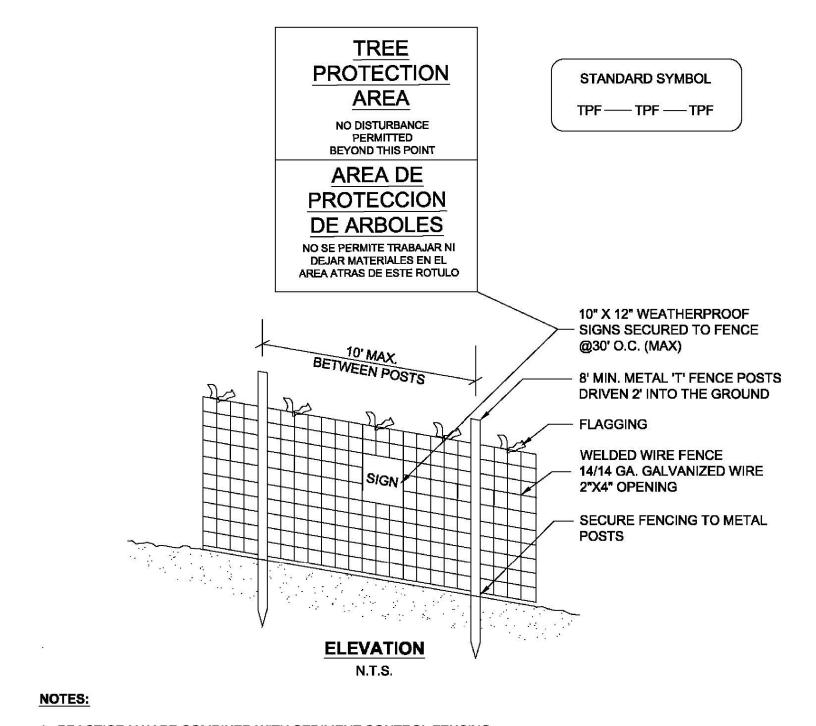
TS-05

CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION B MD 650 (NEW HAMPSHIRE AVENUE) POPLAR AVE TO AUBURN AVE SHA TRACKING NO. 20-AP-MO-020-XX

TREE SAVE NOTES AND DETAILS SCALE <u>1"=20'</u> DATE <u>NOVEMBER 2021</u> CONTRACT NO. <u>T.B.D.</u> DESIGNED BY___SJK_ COUNTY MONTGOMERY 60% PLANS DRAWN BY_____EMT_ CHECKED BY GRO **NOVEMBER 2021** F.A.P. NO.______T.B.D. 07/21/2021 DATE SHEET NO. DRAWING NO. TS-05 5 OF 6 43 OF 44

RKSK F: 410.728.2834 P: 410.728.2900 700 East Pratt Street, Suite 500 | Baltimore, MD 21202 Engineers | Construction Managers | Planners | Scientists Responsive People | Creative Solutions

PLOTTED: 10/26/2021 FILE: \\ad.rkk.com\fs\Cloud\Projects\2020\20007_NewAveSecB\CADD\Plans\pTS-0005_NewAveBike_B.dgn



- 1. PRACTICE MAY BE COMBINED WITH SEDIMENT CONTROL FENCING.
- 2. LOCATION AND LIMITS OF FENCING SHALL BE COORDINATED IN FIELD WITH ARBORIST.
- 3. BOUNDARIES OF PROTECTION AREA SHOULD BE STAKED PRIOR TO INSTALLING PROTECTIVE DEVICE.
- 4. ROOT DAMAGE SHOULD BE AVOIDED.
- 5. PROTECTIVE SIGNAGE IS REQUIRED.
- 6. FENCING SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

TREE PROTECTION FENCE

NOT TO SCALE

- 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 final forest conservation plan or 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, The Montgomery County Department of Permitting Services (DPS) Sediment Control Inspector, and The City of Takoma Park Abrorist. 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:
 - . 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 Tree Save 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 Forest Conservation Plan, Exemption Plan, or 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 Spanish. 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 Inspector.
- 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

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 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.

TS-06

CITY OF TAKOMA PARK NEW AVE BIKEWAY, SECTION B MD 650 (NEW HAMPSHIRE AVENUE) POPLAR AVE TO AUBURN AVE SHA TRACKING NO. 20-AP-MO-020-XX

TREE SAVE NOTES AND DETAILS SCALE 1"=20' DATE NOVEMBER 2021 CONTRACT NO. T.B.D. COUNTY MONTGOMERY DESIGNED BY____SJK 60% PLANS DRAWN BY_____EMT CHECKED BY GRO **NOVEMBER 2021** F.A.P. NO.__ DRAWING NO. TS-06 6 OF 6 SHEET NO. 44 OF 44 REVISION DATE

RKSK F: 410.728.2834 700 East Pratt Street, Suite 500 | Baltimore, MD 21202 Engineers | Construction Managers | Planners | Scientists Responsive People | Creative Solutions

MARYLAND DNR QUALIFIED PROFESSIONAL

07/21/2021

DATE

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