

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

BOYDS TRANSIT IMPROVEMENTS

C. I. P. PROJECT 509337

DEVELOPER'S/BUILDER'S CERTIFICATION

I 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 OF A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

DATE

TIMOTHY H. CUPPLES, P.E., CHIEF
DIVISION OF TRANSPORTATION ENGINEERING

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 JUNE, 2014.

DATE

PAMELA H. DESTINO, P.E.
MD REGISTRATION NO. 42708

CERTIFICATION OF QUANTITIES

I FURTHER CERTIFY THAT THE TOTAL AMOUNTS OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAVE BEEN COMPUTED TO BE 2,820 CUBIC YARDS OF EXCAVATION AND 570 CUBIC YARDS OF FILL AND THAT THE TOTAL AREA TO BE DISTURBED AS SHOWN ON THESE PLANS HAS BEEN DETERMINED TO BE A MAXIMUM OF 51,378 SQUARE FEET OR 1.18 ACRES.

TREE CANOPY REQUIREMENTS TABLE

To be completed by the consultant and placed on the first sheet of the Sediment Control / Stormwater Management plan set for all projects.

Exempt: Yes ☐ No ☐ If exempt under Section 55-5 of the Code, please check the applicable exemption category below.

Total Property Area	Total Disturbed Area
square feet	square feet
Shade Trees Required	Shade Trees Proposed to be Planted

Fee in Lieu (Trees Required - Trees Planted) x \$250	\$

Required Number of Shade Trees

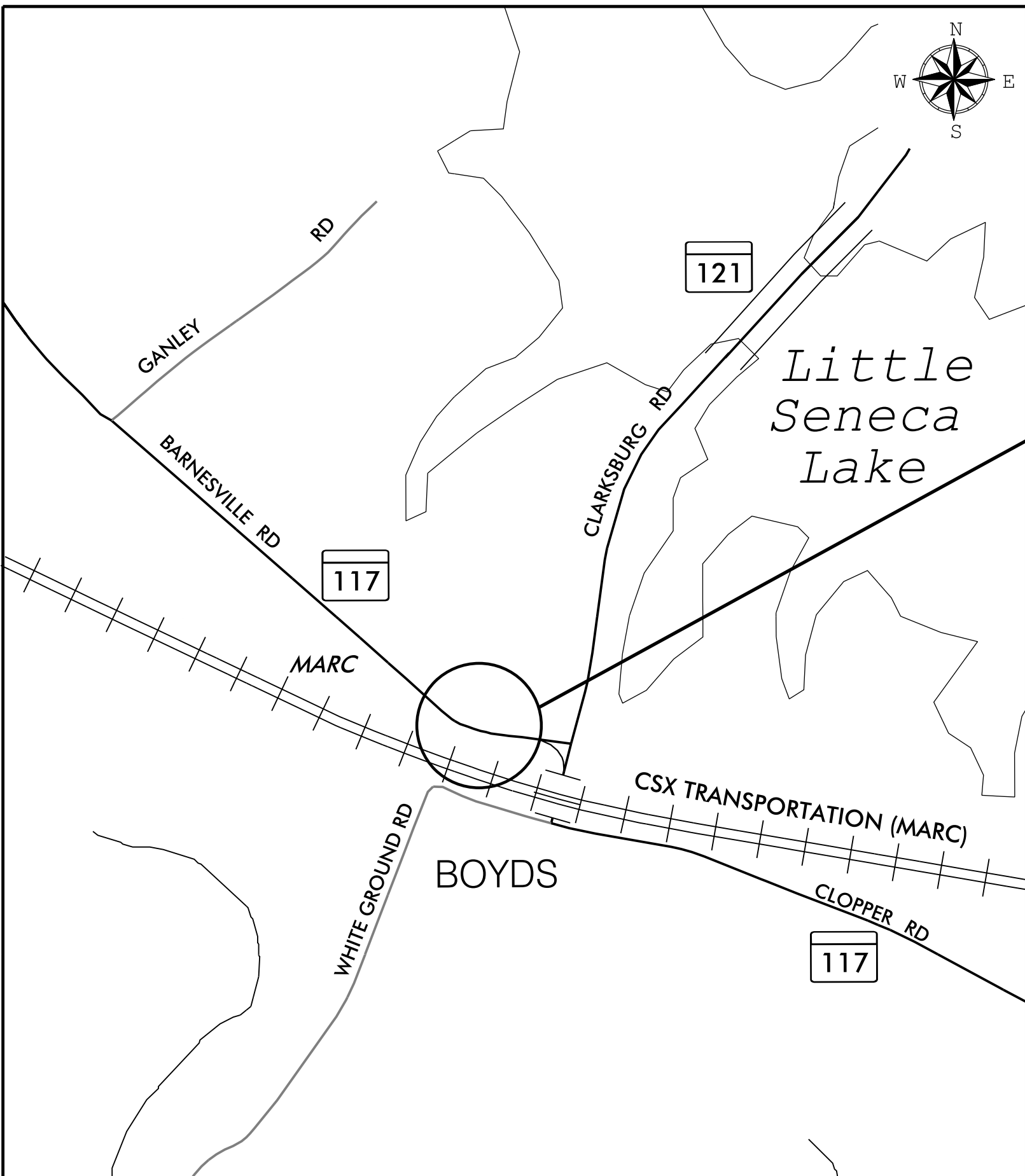
Area (sq. ft.) of the Limits of Disturbance		Number of Shade Trees Required
FROM	TO	
1	6,000	3
6,001	8,000	6
8,001	12,000	9
12,001	14,000	12
14,001	40,000	15

If the square footage of the limits of disturbance is more than 40,000, then the number of shade trees required must be calculated using the following formula:

$$(\text{Number of Square Feet in Limits of Disturbance} \div 40,000) \times 15$$

EXEMPTION CATEGORIES:

<input type="checkbox"/> 55-5(a) any activity that is subject to Article II of Chapter 22A;	<input type="checkbox"/> maintenance has obtained all required permits;
<input type="checkbox"/> 55-5(b) any commercial logging or timber harvesting operation with an approved exemption from Article II of Chapter 22A;	<input type="checkbox"/> 55-5(h) any stream restoration project if the person performing the work has obtained all necessary permits;
<input type="checkbox"/> 55-5(i) any activity conducted by the County Parks Department;	<input type="checkbox"/> 55-5(i) cutting or clearing any tree to comply with applicable provisions of any federal, state, or local law governing safety of dams;
<input type="checkbox"/> 55-5(j) routine or emergency maintenance of an existing stormwater management facility, including an existing access road, if the person performing the	<input type="checkbox"/> OTHER: Specify per Section 55-5 of the Code.



PROJECT LENGTH = 0.00 MILES

MONTGOMERY COUNTY

VICINITY MAP
SCALE : 1"= 500'

OWNER/ADDRESS:
MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
100 EDISON PARK DRIVE, 4TH FLOOR
GAITHERSBURG, MD 20878

CONTACT
REBECCA PARK, P.E.
240-777-7263

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



Whitman, Requardt & Associates, LLP
801 South Caroline Street, Baltimore, Maryland 21231

IT IS THE RESPONSIBILITY OF PERMITTEE/OWNER OF THIS SHEET TO OBTAIN ALL REQUIRED PERMITS PRIOR TO ISSUANCE OF APPROVED SEDIMENT CONTROL PERMIT.					
TYPE OF PERMIT	REQD	NOT REQD	PERMIT NO.	EXPIRATION DATE	WORK RESTRICTION DATES
M.C.D.E.P. Floodplain District		X			
WATERWAY/WETLANDS					
a. Corps of Engineers		X			
b. M.D.E.		X			
c. M.D.E. Water Quality Certification		X			
M.D.E. Dam Safety		X			
DNR Roadside Tree Core Permit	X				
DPS Roadside Tree Protection Plan	X				
N.P.D.E.S. NOTICE OF INTENT	X				
M.C.D.P.S. STORMWATER MANAGEMENT	X				
M.C.D.P.S. SEDIMENT CONTROL	X				

GENERAL NOTES

- THE SPECIFICATIONS FOR THIS CONTRACT WILL BE THOSE OF THE MARYLAND STATE HIGHWAY ADMINISTRATION DATED JULY 2008, ALL ERRATA AND ADDENDA THERETO. THE MARYLAND STATE HIGHWAY ADMINISTRATION BOOK OF STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES, WASHINGTON SUBURBAN SANITARY COMMISSION (W.S.S.C.) STANDARDS, MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION STANDARDS, AND SOIL CONSERVATION SERVICE POND CONSTRUCTION SPECIFICATIONS FOR MARYLAND.
- HORIZONTAL DATUM: NAD 83(1991) VERTICAL DATUM: NAVD 88.
- TYPES OF STORM DRAIN STRUCTURES REFER TO THE "DESIGN STANDARDS" OF MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION, UNLESS OTHERWISE NOTED.
- WHEN THE DROP ON THE MAIN LINE THROUGH A STORM DRAIN STRUCTURE CAN BE ACCOMMODATED BY AN INVERT SLOPE OF 1:5:1 OR FLATTER, A ROUNDED CHANNEL LINED WITH SEWER BRICK ON EDGE SHALL BE BUILT TO THE CROWN OF THE PIPES. WHEN THE INVERT SLOPES WOULD BE GREATER THAN 1:5:1 A SPECIAL INVERT SHALL BE CONSTRUCTED AS NOTED.
- ALL STORM DRAIN PIPE SHALL BE INSTALLED WITH CLASS "C" BEDDING UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS TO STORM DRAIN STRUCTURES, WHEN NECESSARY, TO MEET EXISTING CONDITIONS, AS APPROVED BY MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION'S PROJECT INSPECTOR.
- INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATIONS AND ELEVATIONS OF THE LINES BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS, WELL IN ADVANCE OF TRENCHING. IF CLEARANCES ARE LESS THAN SHOWN OR SIX (6) INCHES, WHICHEVER IS LESS, CONTACT MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION'S PROJECT INSPECTOR AND THE APPROPRIATE UTILITY OWNER BEFORE PROCEEDING WITH CONSTRUCTION.
- REPAIRS TO UTILITIES OR PROPERTY DAMAGE AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE OR METHOD OF OPERATION MUST BE MADE AT THE CONTRACTOR'S EXPENSE BEFORE PROCEEDING WITH CONSTRUCTION.
- CLEARING IS TO BE LIMITED TO THE "LIMIT OF GRADING" AS SHOWN ON THE PLANS.
- ALL GRADING SHALL BE DONE IN SUCH A MANNER AS TO PROVIDE POSITIVE DRAINAGE.
- DISTURBED AREAS ADJACENT TO ESTABLISHED LAWNS SHALL BE SODDED. OTHER DISTURBED AREAS SHALL BE SEEDED AND MULCHED.
- THE CONTRACTOR SHALL OBTAIN A ROADSIDE TREE PERMIT FOR ANY MAINTENANCE, TREATMENT, PLANTING, REMOVAL, OR ROOT CUTTING ON TREES WITHIN THE PUBLIC RIGHT OF WAY. PERMIT REQUIREMENTS MAY BE OBTAINED FROM THE DEPARTMENT OF NATURAL RESOURCES, MARYLAND FOREST, PARK AND WILDLIFE SERVICE, TELEPHONE 301-854-6060.
- CONTACT THE WASHINGTON SUBURBAN SANITARY COMMISSION SYSTEM MAINTENANCE ENGINEER BEFORE EXCAVATING BENEATH OR IN THE VICINITY OF EXISTING WATER OR SEWER LINES. BACKFILL TO BE DONE UNDER SUPERVISION OF CALL 301-206-9772
- ALL UTILITY POLES NOTED FOR RELOCATION SHALL BE PERFORMED BY OTHERS.
- PRIOR TO VEGETATIVE STABILIZATION, ALL DISTURBED AREAS MUST BE TOPSOILED PER THE MONTGOMERY COUNTY "STANDARDS AND SPECIFICATIONS FOR TOPSOIL".
- CALL "MISS UTILITY" AT 1-800-257-7777 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

MCDPS-SC/SWM SHEET NO. 1 OF 9

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:		NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDPS ACCESS PERMIT.
STORMWATER MANAGEMENT	SEDIMENT CONTROL TECHNICAL REQUIREMENTS	ADMINISTRATIVE REQUIREMENTS
Reviewed _____ Date _____	Reviewed _____ Date _____	Reviewed _____ Date _____
Approved _____ Date _____	Approved _____ Date _____	Approved _____ Date _____
S.W. FILE NO. _____		

MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED UNLESS THE PERMIT HAS BEEN EXTENDED

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
GAITHERSBURG, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Transportation Planning and Design Section _____ Date _____

Chief, Division of Transportation Engineering _____ Date _____

Designed by: PHD Drawn by: KHL Checked by: JAG

TI-01 TITLE SHEET

BOYDS TRANSIT
IMPROVEMENTS

SCALE : NTS

OCTOBER 2019

Project No. : 509337

SHEET 1 of 17

INDEX OF SHEETS

SHEET NO.	SC/SWM NO.	DRAWING DESCRIPTION
1	1	TITLE SHEET
2	2	INDEX OF SHEETS, LEGEND, AND ABBREVIATIONS
3		GS-01 – GEOMETRIC LAYOUT SHEET
4	3	HT-01 – TYPICAL SECTIONS
5	4	HT-02 – TYPICAL SECTIONS
6	5	HT-03 – TYPICAL SECTIONS
7		PD-01 – PAVEMENT DETAILS
8	6	HD-01 – ROADWAY PLAN
9		HP-01 – ROADWAY PROFILE
10		HP-02 – ROADWAY PROFILE
11	7	GR-01 – SITE GRADING PLAN
12		TCP-A – TRAFFIC CONTROL PLAN GENERAL NOTES
13		TCP-01 – TRAFFIC CONTROL PLAN
14		SN-2.01 – SIGNING AND MARKING PLAN
15	8	FI-01 – FOREST IMPACT PLAN
16	9	LD-01 – LANDSCAPE PLANS
17	10	LD-02 – LANDSCAPE DETAILS

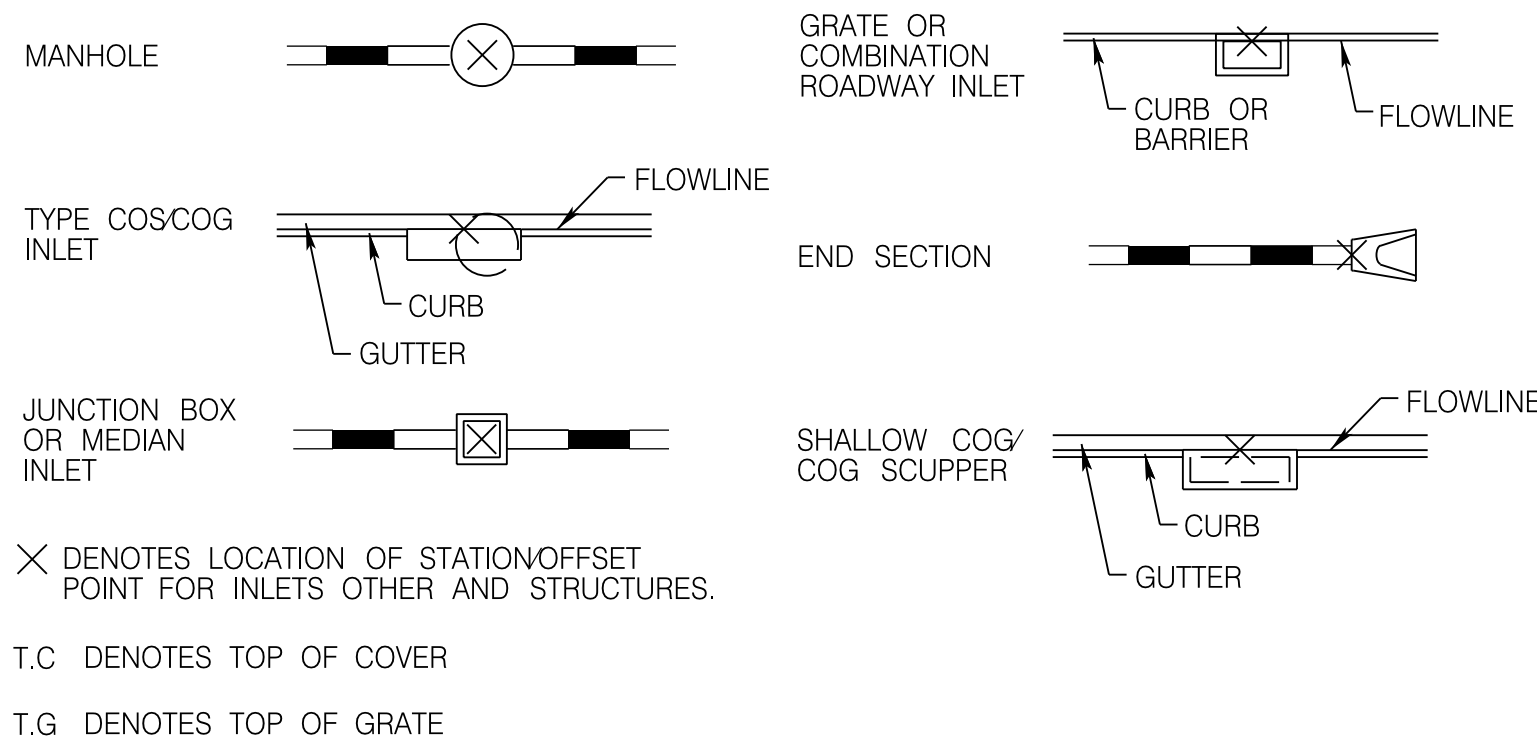
LEGEND

(T)	TELEPHONE MANHOLE		EXISTING W-BEAM
(WM)	WATER METER		PROPOSED W-BEAM
⋈	WATER VALVE		WETLAND BUFFER
(SS)	SEWER MANHOLE		WETLAND
(D)	STORM DRAIN MANHOLE		PROPOSED FENCE
	GAS VALVE		EXISTING CHAINLINK FENCE
○	SIGN		INDEX CONTOUR
	LIGHT POLE		INTERVAL CONTOUR
	UTILITY POLE		TOP OF CUT
	FIRE HYDRANT		TOE OF FILL
●	PARKING METER		EXISTING RIGHT OF WAY LINE
	TREE		LIMIT OF DISTURBANCE
	BORING		TEMPORARY CONSTRUCTION EASEMENT
	INLET		PERPETUAL EASEMENT
(MH)	MANHOLE		

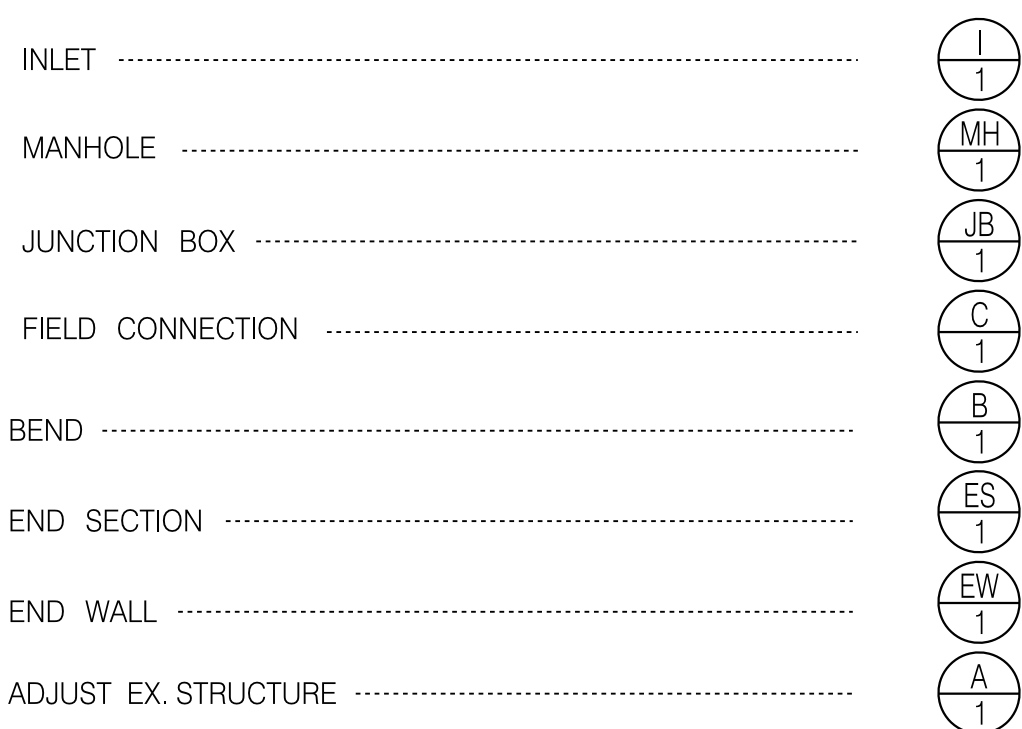
ABBREVIATIONS

A.A.S.H.T.O.....	American Association of State Highway Transportation Officials	LP.....	Low Point	STA.....	Station
APPROX.....	Approximate	LT.....	Left	SO.....	Single Opening
B or B/L.....	Baseline	MAX.....	Maximum.	S.Y.....	Square Yards
C.C.....	Center of Curve	MOD.....	Modified	SWM.....	Storm Water Management
C or C/L.....	Centerline	MIN.....	Minimum	SW.....	Sidewalk
C.I.P.....	Cast Iron Pipe	N.....	North	T.....	Tangent
C.M.P.....	Corrugated Metal Pipe	NB.....	Northbound	T.....	Telephone
C.O.....	Cleanout	NE.....	Northeast	T.C.P.....	Terra Cotta Pipe
COMB.....	Combination	NTS.....	Not To Scale	TYP.....	Typical
CONC.....	Concrete	O.C.....	On Center	U.P.....	Utility Pole
CONSTR.....	Construction	P.C.....	Point of Curvature	VAR.....	Varies
C.P.P.....	Corrugated Polyethylene Pipe	P.C.C.....	Point of Compound Curve	V.C.L.....	Vertical Curve Length
D.B.H.....	Diameter Breast Height	P/C.....	Point of Crown	W.....	Water
D.C.....	Degree of Curve	P/GE.....	Profile Grade Elevation	W.....	West
D.C.H.V.....	Design Hourly Volume	P.G.E.....	Profile Ground Elevation	WB.....	Westbound
D.I.....	Drop Inlet	P.G.L.....	Profile Grade Line		
DIA.....	Diameter	P/GL.....	Profile Ground Line		
D.O.....	Double Opening	P/R.....	Point of Rotation		
E.....	East	P.I.....	Point of Intersection		
E.....	Electric	P.O.C.....	Point on Curve		
E.....	External Distance	P.O.T.....	Point on Tangent.		
EA.....	Each	PROP.....	Proposed		
E.B.....	Eastbound.	PT.....	Point		
ELEV.....	Elevation	P.T.....	Point of Tangency		
E.R.C.C.P.....	Elliptical Reinforced Cement Concrete Pipe	P.V.C.....	Point of Vertical Curve		
ES.....	End Section	PVC.....	Polyvinyl Chloride		
EX. or EXIST.....	Existing	PVI.....	Point of Intersection		
FT.....	Feet	R.....	Radius		
F or FL.....	Flowline	RET. WALL.....	Retaining Wall		
FWD.....	Forward	RT.....	Right		
G.....	Gas	RW or R/W.....	Right of Way		
H.E.R.C.P.....	Horizontal Elliptical Reinforced Concrete Pipe	R.C.P.....	Reinforced Cement Pipe		
HP.....	High Point	R.C.C.P.....	Reinforced Cement Concrete Pipe		
HMA.....	Hot Mix Asphalt	S.....	South		
HT.....	Height	SAM.....	Superpave Asphalt Mix		
IN.....	Inch	SB.....	Southbound		
INV.....	Invert	S.D.....	Storm Drain		
L.....	Length	S.E.....	Superelevation		
LANDSC.....	Landscaped	SF.....	Silt Fence		
L.F.....	Linear Feet	S.F.....	Square Feet		
		SS.....	Sanitary Sewer		
		SSD.....	Stopping Sight Distance		
		SSF.....	Super Silt Fence		
		STD.....	Standard		

DRAINAGE STRUCTURE STAKEOUT LOCATION



DRAINAGE BUBBLES (SAMPLES)



MCDPS-SC/SWM SHEET NO. 2 OF 9


MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:		NOTE: MCDCPS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDCPS ACCESS PERMIT.
STORMWATER MANAGEMENT <u>ESDS AND WAIVERS</u> Reviewed _____ Date _____ Approved _____ Date _____ Approved _____ Date _____ <u>XXXXXX</u> S.M. FILE NO.	SEDIMENT CONTROL TECHNICAL REQUIREMENTS Reviewed _____ Date _____ Approved _____ Date _____	ADMINISTRATIVE REQUIREMENTS Reviewed _____ Date _____ <u>XXXXXX</u> SEDIMENT CONTROL PERMIT NO. _____ MCDCPS APPROVAL OF THIS PLAN WILL EXPIRE TWO YEAR FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED UNLESS THE PERMIT HAS BEEN EXTENDED

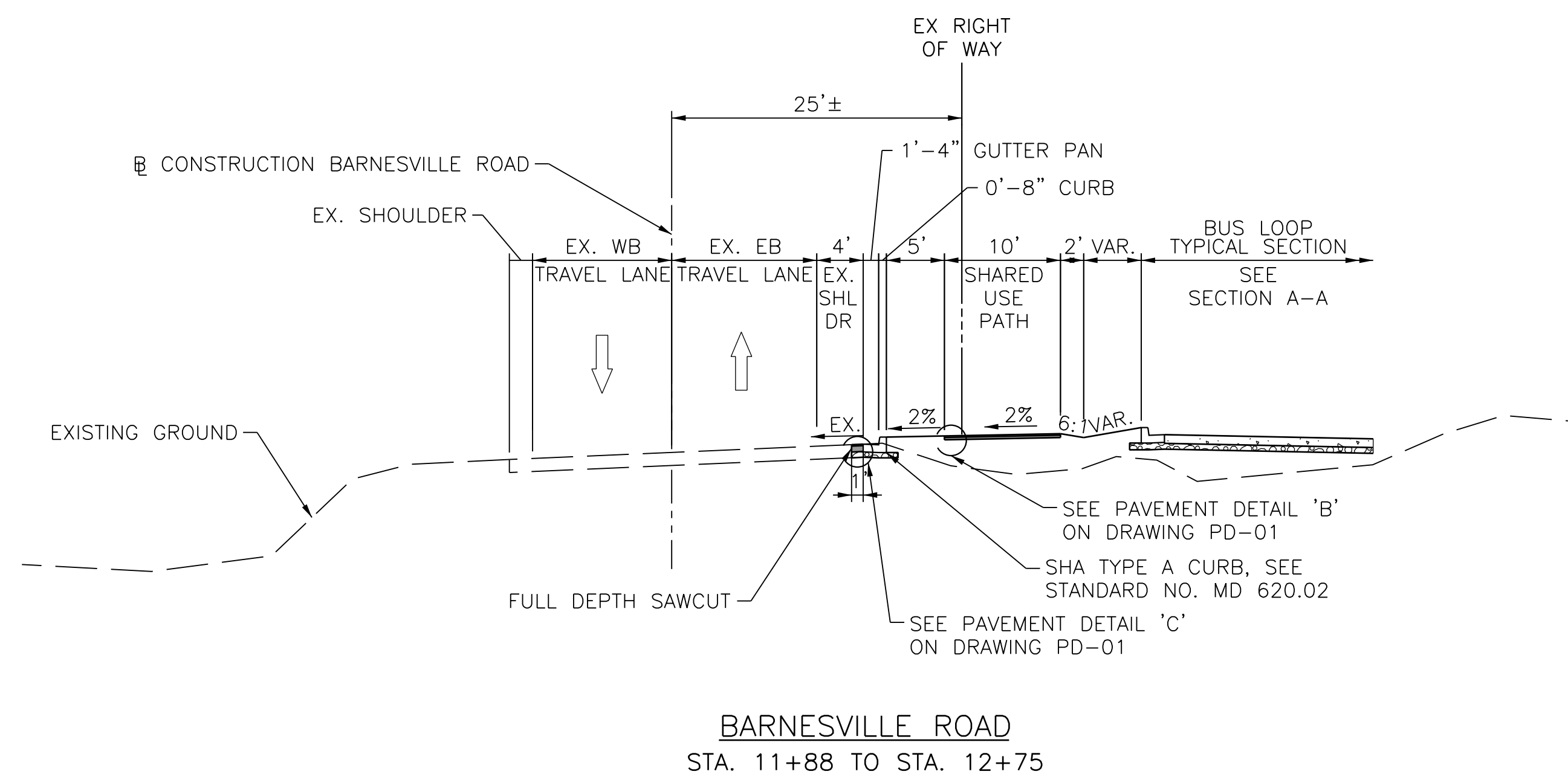
DPS APPROVAL OF A SEDIMENT CONTROL STORMWATER MANAGEMENT PLAN IS FOR DEMONSTRATED COMPLIANCE WITH MINIMUM ENVIRONMENTAL RUNOFF TREATMENT STANDARDS AND DOES NOT CREATE OR IMPLY ANY RIGHT TO DIVERT OR CONCENTRATE RUNOFF ONTO ANY ADJACENT PROPERTY WITHOUT THAT PROPERTY OWNER'S PERMISSION. IT DOES NOT RELIEVE THE DESIGN ENGINEER OR OTHER RESPONSIBLE PERSON OF PROFESSIONAL LIABILITY OR ETHICAL RESPONSIBILITY FOR THE ADEQUACY OF THE DRAINAGE DESIGN AS IT AFFECTS UPHILL OR DOWNHILL PROPERTIES

[illegible]

N:\31951-019\CADD\pGN-N0001_Boyd's.dgn
DATE 10/2/00



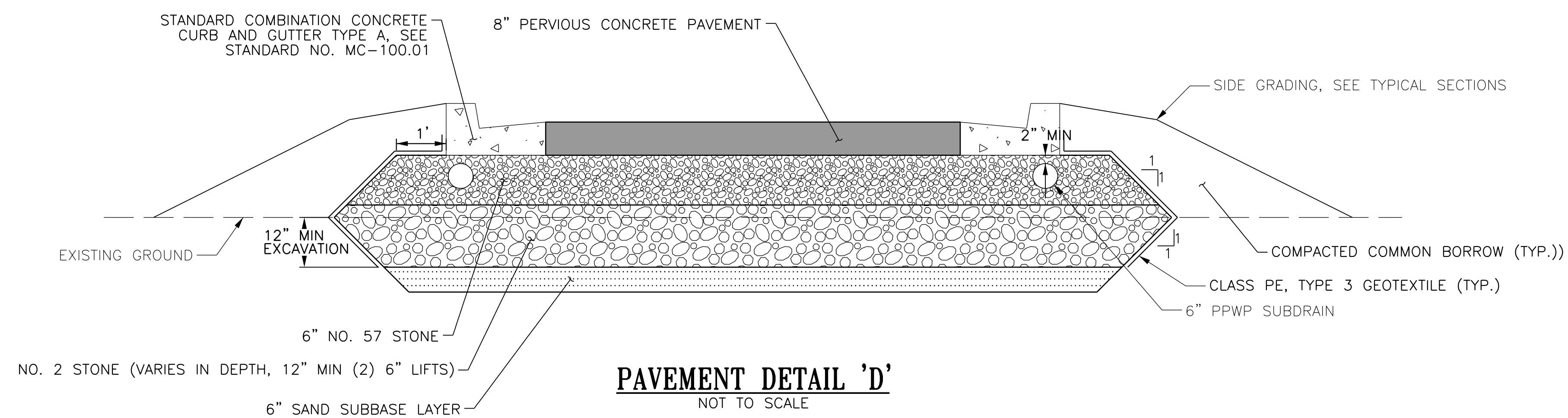
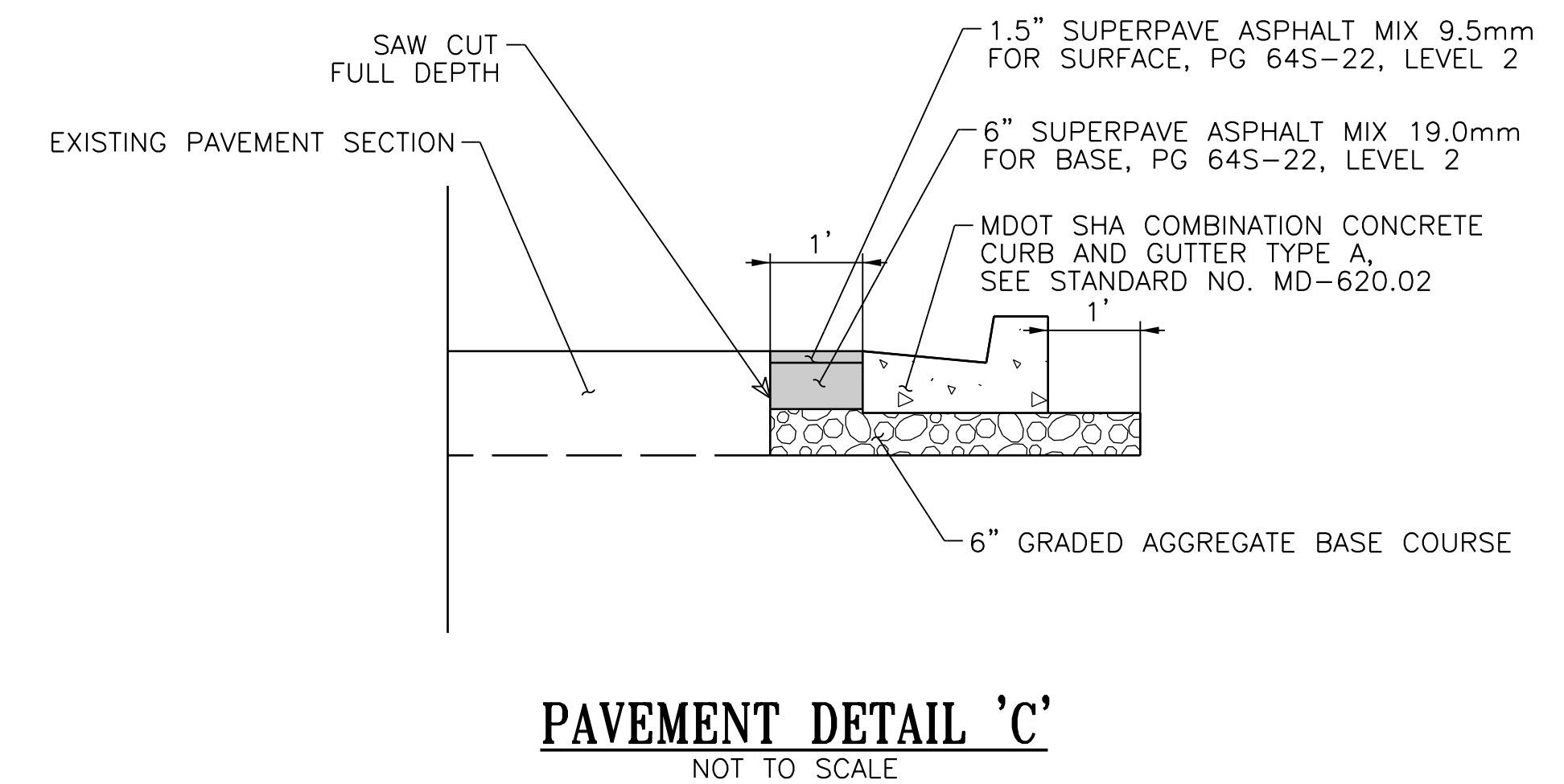
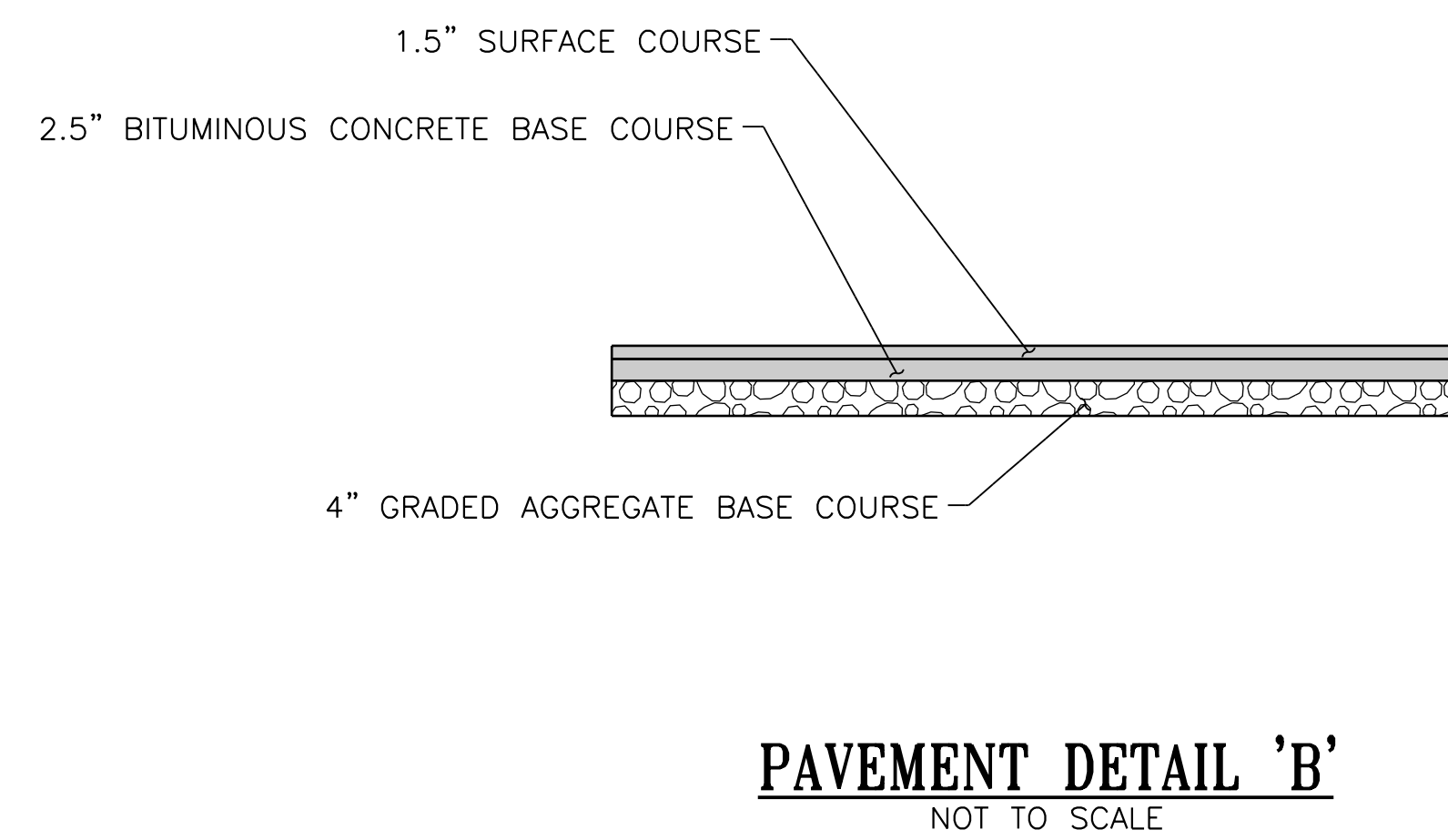
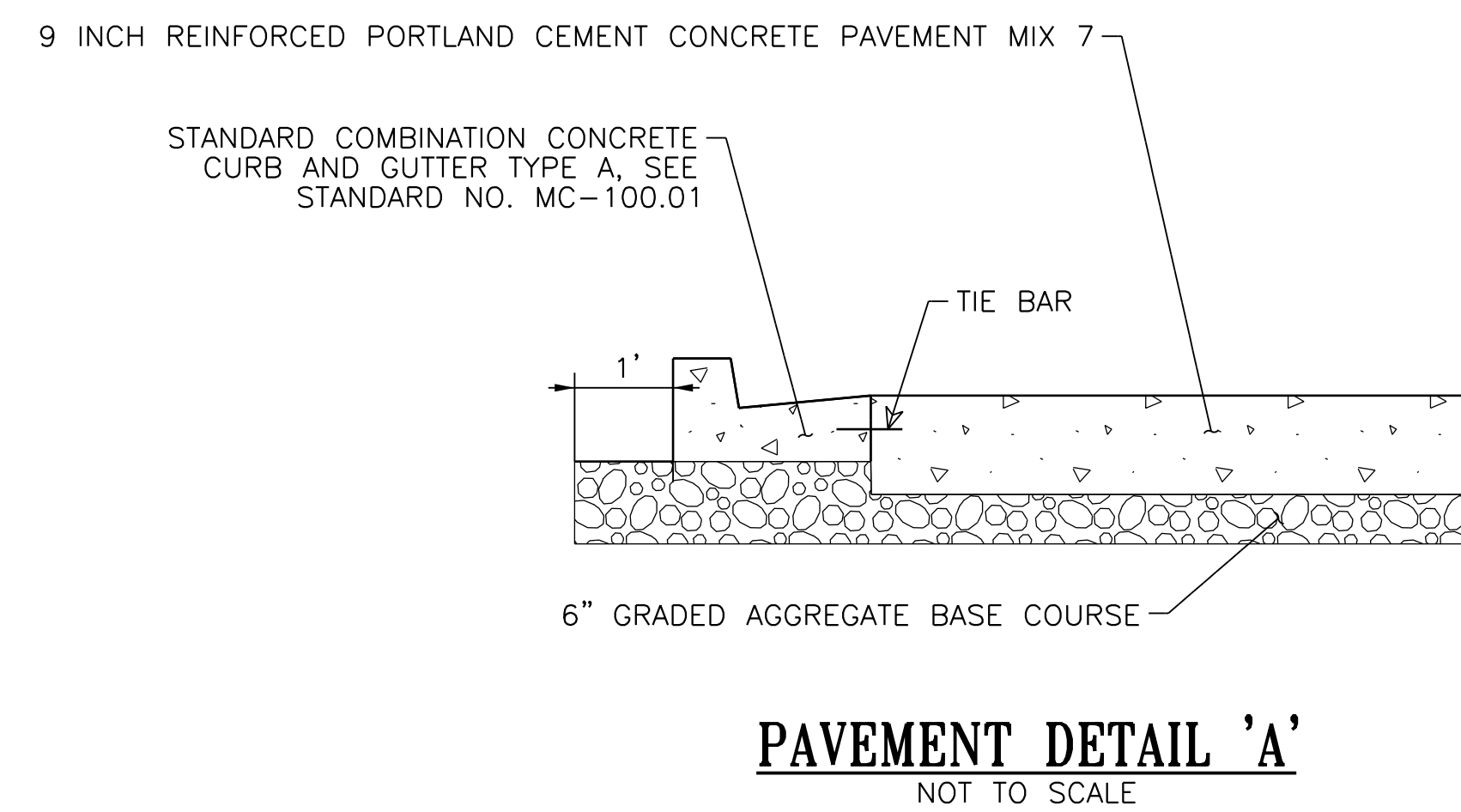
	PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. _____ EXPIRATION DATE: _____	 Whitman, Requardt & Associates, LLP 801 South Caroline Street, Baltimore, Maryland 21231							MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND	HT-02 TYPICAL SECTIONS
									RECOMMENDED FOR APPROVAL	
									Chief, Transportation Planning and Design Section Date	BOYDS TRANSIT IMPROVEMENTS
									APPROVED	
									Chief, Division of Transportation Engineering Date	
									Designed by: PHH Drawn by: KHL Checked by: JAG	
										SCALE : 1" = 10'
										OCTOBER 2019
										Project No.: 509337 SHEET 5 of 17



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



					MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND	HT-03 TYPICAL SECTIONS
					RECOMMENDED FOR APPROVAL	
					_____ Chief, Transportation Planning and Design Section APPROVED	_____ Date
					_____ Chief, Division of Transportation Engineering	_____ Date
					SCALE : 1" = 10'	OCTOBER 2019
P	NO.	REVISION	DATE	BY	Designed by: PHD Drawn by: KHL Checked by: JAG	Project No.: 509337 SHEET 6 of 17



N: \31951-019\CADD\CADD-001_Boyd's.dgn
\$DATEAB\$

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



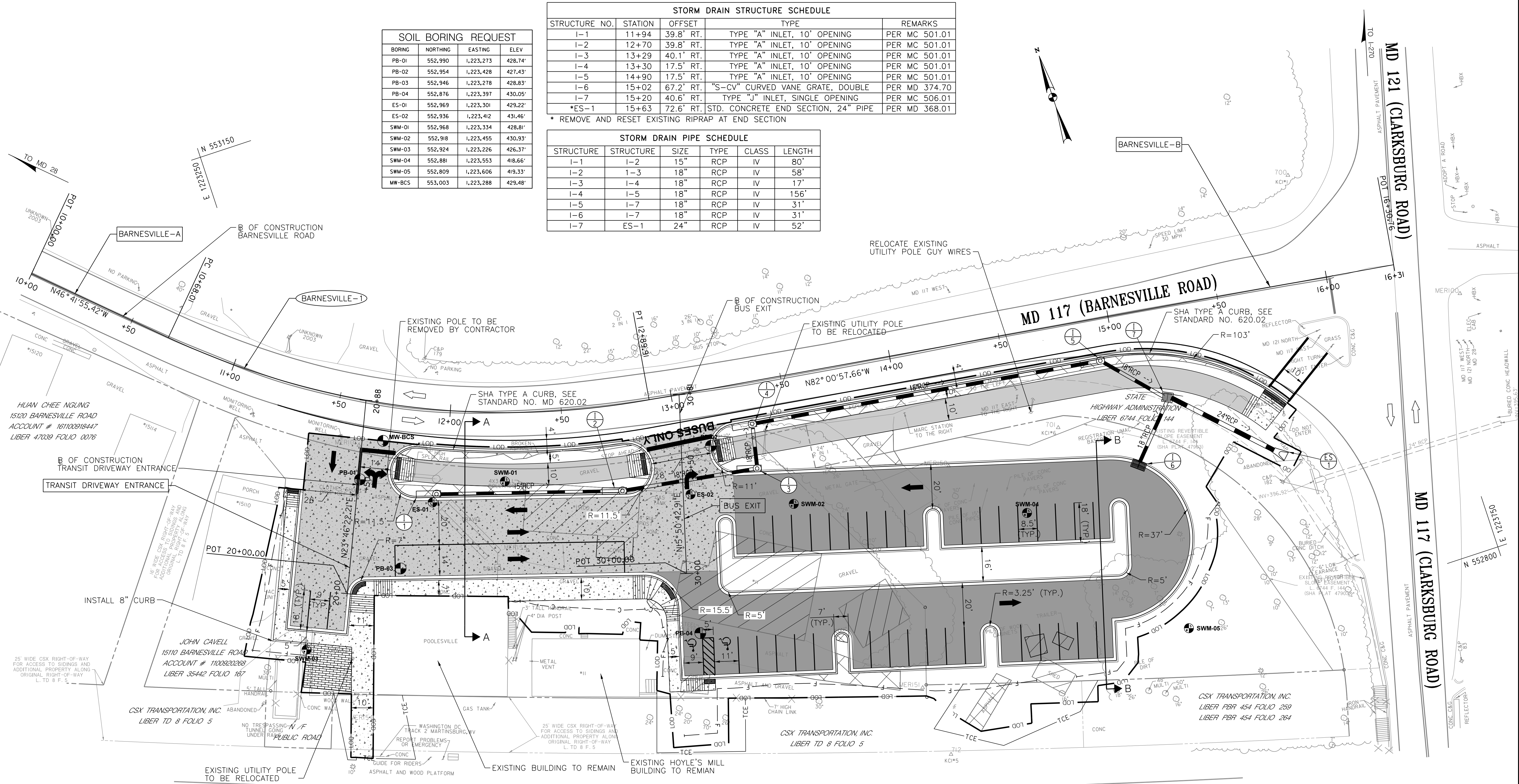
Whitman, Requardt & Associates, LLP
801 South Caroline Street, Baltimore, Maryland 21231

					MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND	PD-01 PAVEMENT DETAILS					
					RECOMMENDED FOR APPROVAL						
					_____ Chief, Transportation Planning and Design Section APPROVED	Date _____					
					_____ Chief, Division of Transportation Engineering	Date _____					
						SCALE : 1" = 10' OCTOBER 2019					
NO.	REVISION	DATE	BY		Designed by: PHD Drawn by: KHL Checked by: JAG	Project No.: S09337 SHEET 7 of 17					

SOIL BORING REQUEST			
BORING	NORTHING	EASTING	ELEV
PB-01	552,990	1,223,273	428.74'
PB-02	552,954	1,223,428	427.43'
PB-03	552,946	1,223,278	428.83'
PB-04	552,876	1,223,397	430.05'
ES-01	552,969	1,223,301	429.22'
ES-02	552,936	1,223,412	431.46'
SWM-01	552,968	1,223,334	428.81'
SWM-02	552,918	1,223,455	430.93'
SWM-03	552,924	1,223,226	426.37'
SWM-04	552,881	1,223,553	418.66'
SWM-05	552,809	1,223,606	419.33'
MW-BCS	553,003	1,223,288	429.48'

STORM DRAIN STRUCTURE SCHEDULE				
STRUCTURE NO.	STATION	OFFSET	TYPE	REMARKS
I-1	11+94	39.8' RT.	TYPE "A" INLET, 10' OPENING	PER MC 501.01
I-2	12+70	39.8' RT.	TYPE "A" INLET, 10' OPENING	PER MC 501.01
I-3	13+29	40.1' RT.	TYPE "A" INLET, 10' OPENING	PER MC 501.01
I-4	13+30	17.5' RT.	TYPE "A" INLET, 10' OPENING	PER MC 501.01
I-5	14+90	17.5' RT.	TYPE "A" INLET, 10' OPENING	PER MC 501.01
I-6	15+02	67.2' RT.	"S-CV" CURVED VANE GRATE, DOUBLE	PER MD 374.70
I-7	15+20	40.6' RT.	TYPE "J" INLET, SINGLE OPENING	PER MC 506.01
*ES-1	15+63	72.6' RT.	STD. CONCRETE END SECTION, 24" PIPE	PER MD 368.01

STORM DRAIN PIPE SCHEDULE					
STRUCTURE	STRUCTURE	SIZE	TYPE	CLASS	LENGTH
I-1	I-2	15"	RCP	IV	80'
I-2	I-3	18"	RCP	IV	58'
I-3	I-4	18"	RCP	IV	17'
I-4	I-5	18"	RCP	IV	156'
I-5	I-7	18"	RCP	IV	31'
I-6	I-7	18"	RCP	IV	31'
I-7	ES-1	24"	RCP	IV	52'



CURVE DATA								
CURVE	DELTA	Dc	R	L	T	E	PI NORTH	PI EAST
BARNESVILLE-1	35°19' 02.24" LT	15°54' 55.78"	360.00'	221.91'	114.60'	17.80'	552.998.74	1.223.294.21

LINE DATA		
LINE	LENGTH	BEARING
BARNESVILLE--A	68.00'	N 46° 41' 55.42" V
BARNESVILLE--B	340.85'	N 82° 00' 57.66" V
TRANSIT CENTER DRIVEWAY	87.62'	N 23° 46' 22.21" E
BUS EXIT	80.77'	N 15° 50' 42.91" E

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



Whitman, Requardt & Associates, LLC
801 South Caroline Street, Baltimore, Maryland 21233

[illegible]

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
GAITHERSBURG, MARYLAND

	RECOMMENDED FOR APPROVAL
--	--------------------------

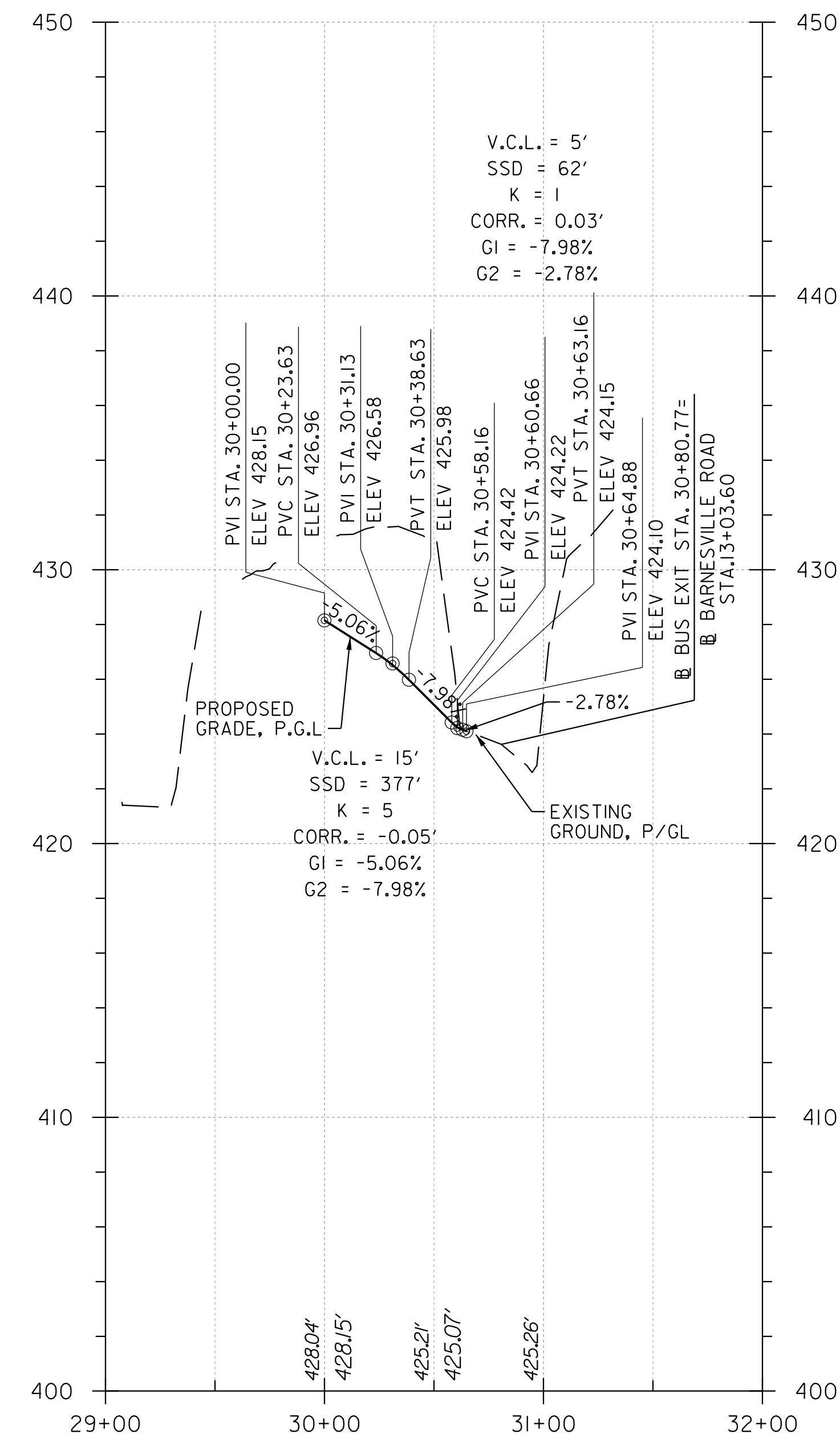
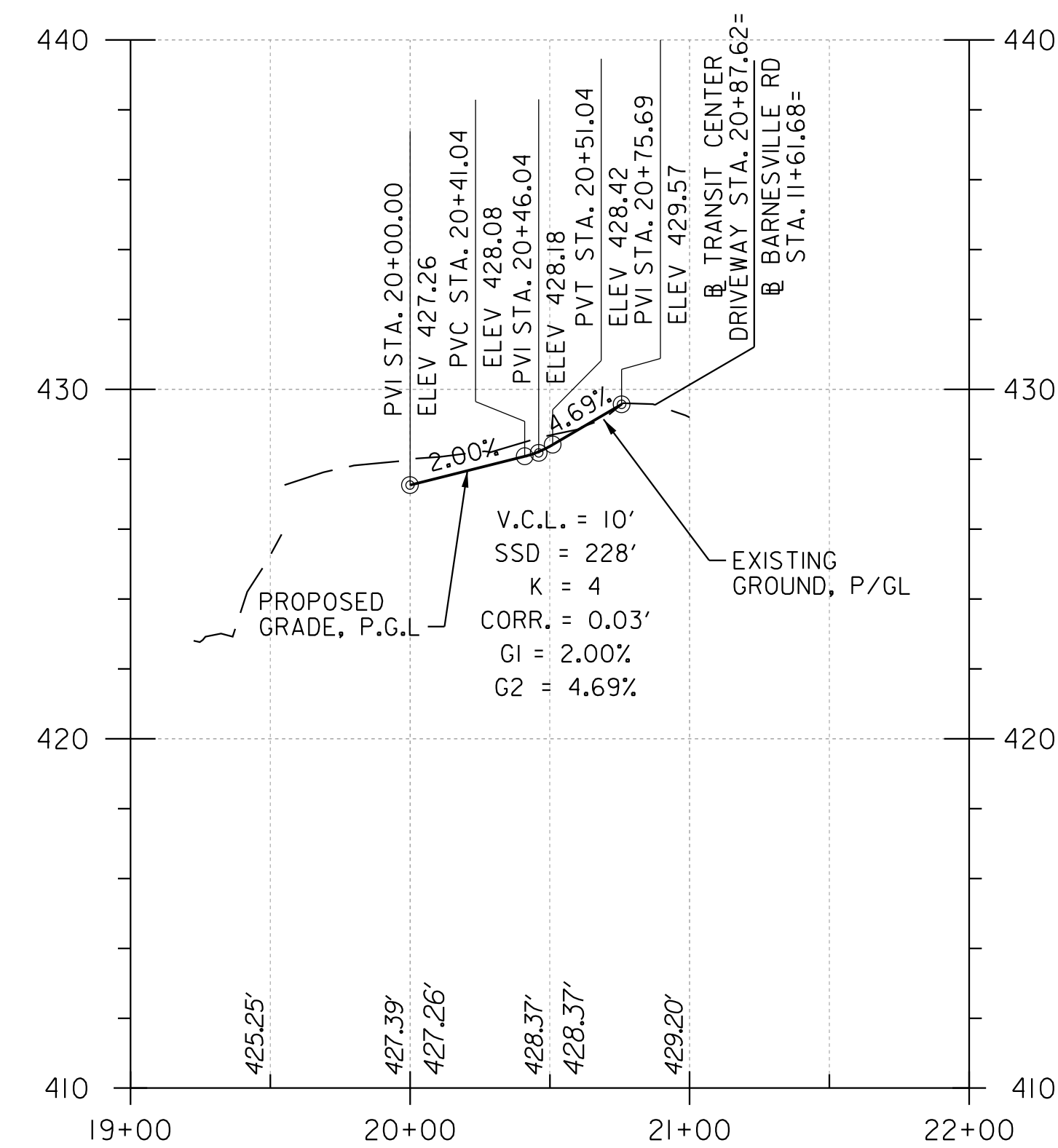
Chief, Transportation Planning and Design Section

[illegible]

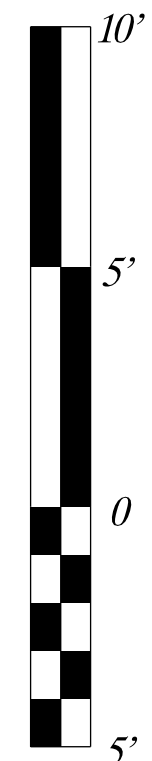
HD-01 ROADWAY PLAN

BOYDS TRANSIT
IMPROVEMENTS

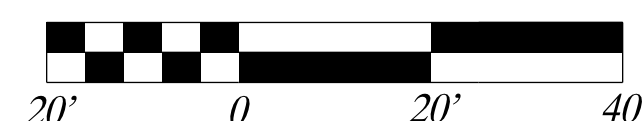
SCALE : 1" = 20'		OCTOBER 2019	
Project No. :	509337	SHEET	8 of 17



VERTICAL SCALE: 1"=5'



HORIZONTAL SCALE: 1"=20'



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



Whitman, Requardt & Associates, LLP
801 South Caroline Street, Baltimore, Maryland 21231

[illegible]

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
GAITHERSBURG, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Transportation Planning and Design Section

APPROVED

Date

 Chief, Division of Transportation Engineering _____
 Date

Designed by: PHD Drawn by: KHL Checked by: JAG

HP-01 ROADWAY PROFILE

BOYDS TRANSIT
IMPROVEMENTS

SCALE : $1'' = 20' \text{ H}$
 $1'' = 5' \text{ V}$

OCTOBER 2019

Project No. : 509337 SHEET 9 of 17

TEMPORARY TRAFFIC CONTROL REQUIREMENTS

- ## FLAGGING OPERATIONS

- PAVEMENT DROP-OFF

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



PARKING RESTRICTIONS

- INSPECTOR AUTHORITY

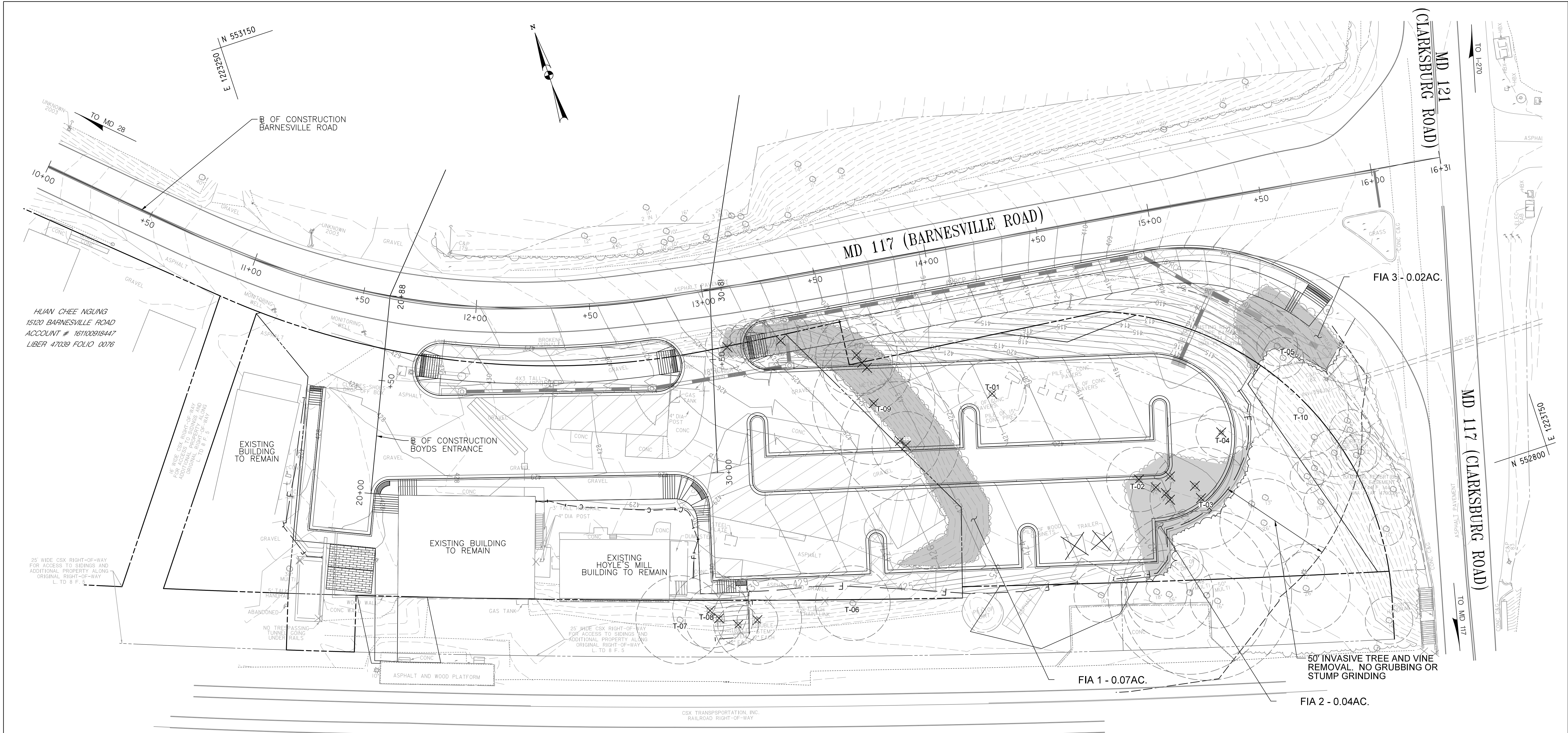
- MISCELLANEOUS

- CONTACT INFORMATION

- ### MAINTENANCE OF TRAFFIC SEQUENCE OF CONSTRUCTION

I. CONSTRUCT ALL COMPONENTS OF TRANSIT FACILITY, AND NEW CURB, NEW DRAINAGE DEVICES, AND NEW SIDEPATH ALONG BARNESVILLE ROAD.

- SCALE : NONE



HUAN CHEE NGUNG
15120 BARNESVILLE ROAD
ACCOUNT # 161100918447
LIBER 47039 FOLIO 0076

EXISTING BUILDING
TO REMAIN

EXISTING BUILDING
TO REMAIN

EXISTING
HOYLE'S MILL
BUILDING TO REMAIN

OF CONSTRUCTION
BOYDS ENTRANCE

MD 117 (BARNESVILLE ROAD)

MD 121
(CLARKSBURG ROAD)

MD 117 (CLARKSBURG ROAD)

FIA 3 - 0.02AC.

FIA 1 - 0.07AC.

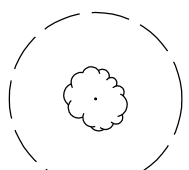
FIA 2 - 0.04AC.

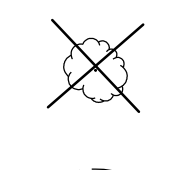
50' INVASIVE TREE AND VINE
REMOVAL. NO GRUBBING OR
STUMP GRINDING

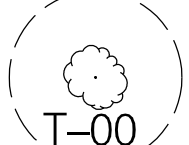
SPECIMEN TREE KEY


ID	SIZE	COMMON NAME	CONDITION	CANOPY	REMARKS
T-01	20"	ELM	DEAD	26.5'	IVY GROWING ON TRUNK
T-02	19"	BOXELDER	FAIR/POOR	26'	ONE SIDED
T-03	30"	CATALPA	FAIR	28'	
T-04	15"	BOXELDER	POOR	22'	TRIPLE STEM
T-05	12"	BOXELDER	POOR	18'	ONE SIDED, TRIPLE STEM
T-06	22"	BOXELDER	POOR	20'	
T-07	26"	CATALPA	FAIR/GOOD	22'	
T-08	22"	CATALPA	POOR	18'	SEVERE
T-09	36"	CATAPLA	POOR	20'	DOUBLE STEM
T-10	28"	TREE OF HEAVEN	POOR	35'	


LEGEND


- 

EXISTING TREE TO
REMAIN WITH CRZ
- 

EXISTING TREE TO
BE REMOVED
- 

SPECIMEN /SIGNIFICANT
TREE
- 

FOREST IMPACT AREA
(FIA) - 0.13AC. TOTAL
- 

PROPOSED WOODED EDGE
- 

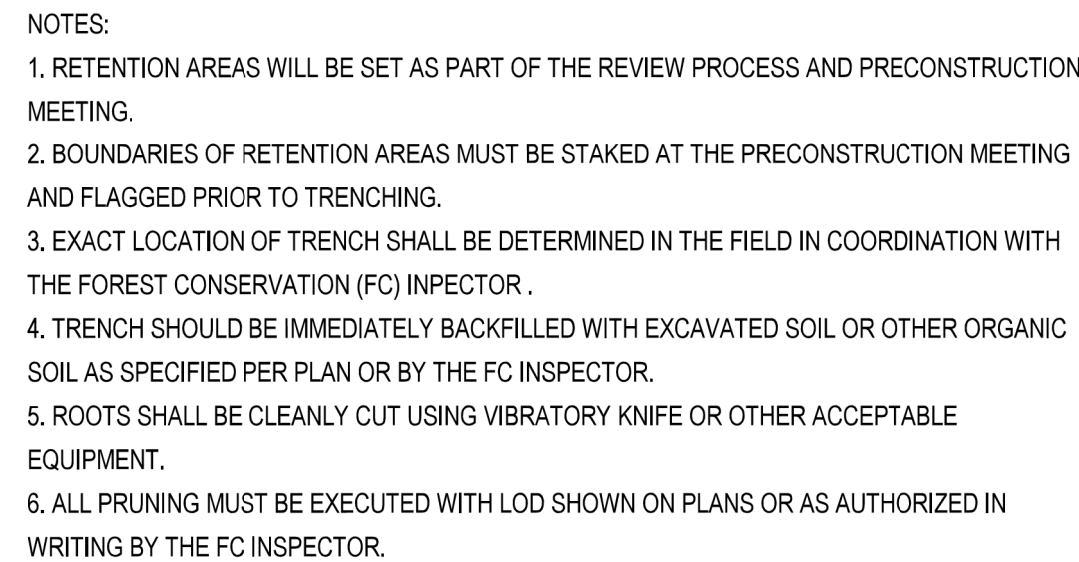
TPF
TREE PROTECTION FENCE/
ORANGE CONSTRUCTION FENCE

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

MAHAN RYKIEL
LANDSCAPE ARCHITECTURE
URBAN DESIGN & PLANNING

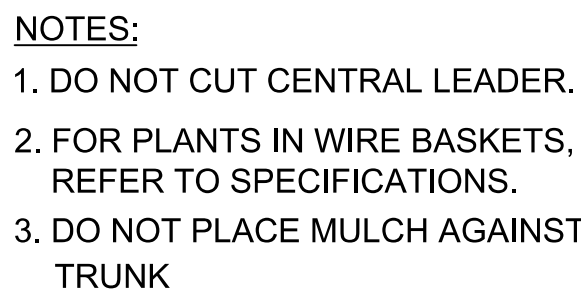


				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND		FOREST IMPACT PLAN AND TREE PRESERVATION MEASURES	
				RECOMMENDED FOR APPROVAL		BOYDS TRANSIT IMPROVEMENTS	
				Chief, Transportation Planning and Design Section		Date	
				APPROVED			
				Chief, Division of Transportation Engineering		Date	
				Designed by: M.F.		Drawn by: M.A.B.	
				Checked by: J.K.S.		SCALE : 1" = 20'	
						Project No. : 509337	
						OCTOBER 2019	
						SHEET 15 of 17	



ROOT PRUNING DETAIL

NTS



INSPECTIONS

All field inspections must be requested by the applicant.

Field Inspections must be conducted as follows

Plans without Planting Requirements

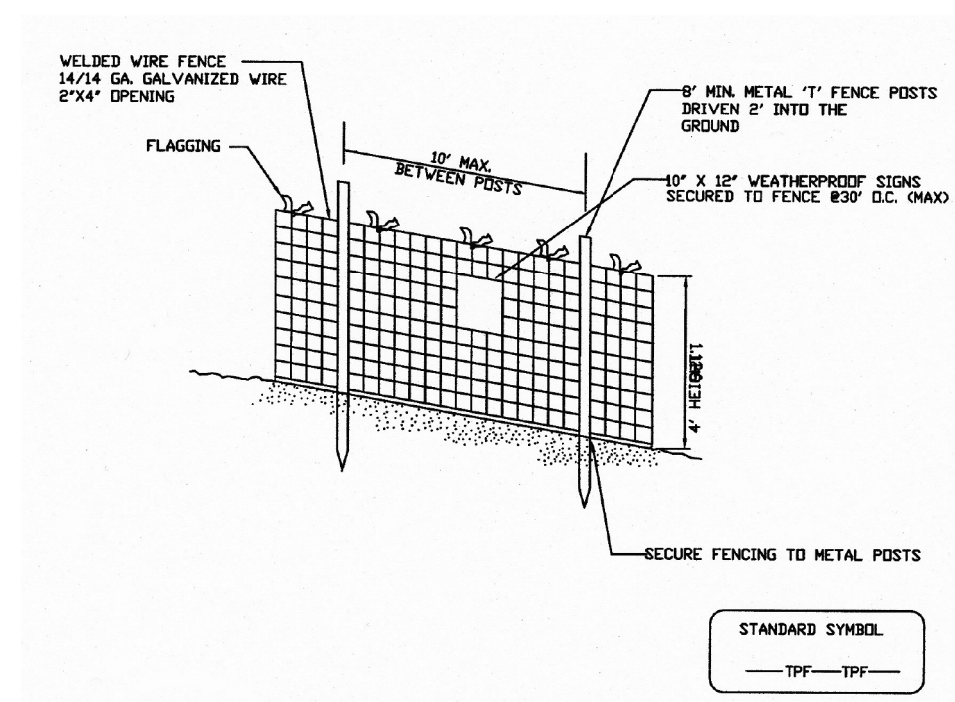
1. After the limits of disturbance have been staked and flagged, but before any clearing or grading begins.
2. After necessary stress reduction measures have been completed and protection measures have been installed, but before any clearing and grading begin and before release of the building permit.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

Additional Requirements for Plans with Planting Requirements

4. Before the start of any required reforestation and afforestation planting.
5. After the required reforestation and afforestation planting has been completed to verify that the planting is acceptable and prior to the start the maintenance period.
6. At the end of the maintenance period to determine the level of compliance with the provisions of the planting plan, and if appropriate, release of the performance bond.

Tree Protection Fence Detail

Not to scale



NOTES

1. Practice may be combined with sediment control fencing.
2. Location and limits of fencing should 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. Protection signage is required.
6. Fencing shall be maintained throughout construction.

Montgomery County Planning Department • M-NCPPC
MontgomeryPlanning.org

DETAILS AND NOTES

BOYDS TRANSIT
IMPROVEMENTS

SCALE : 1" = 20

OCTOBER 2019

Project No. : 509337

SHEET 17 of 17

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

MAHAN RYKIEL
LANDSCAPE ARCHITECTURE
URBAN DESIGN & PLANNING

				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND	DETAILS AND NOTES
				RECOMMENDED FOR APPROVAL	
				Chief, Transportation Planning and Design Section _____ Date _____ APPROVED	
				Chief, Division of Transportation Engineering _____ Date _____	
				Designed by: <u>M.F.</u> Drawn by: <u>M.A.B.</u> Checked by: J.K.S.	
				Project No.: <u>509337</u> SHEET <u>17</u> of 17	
NO.	REVISION	DATE	BY		

\$\$\$DGN\$SPEC\$\$\$\$\$\$
DATE APR\$