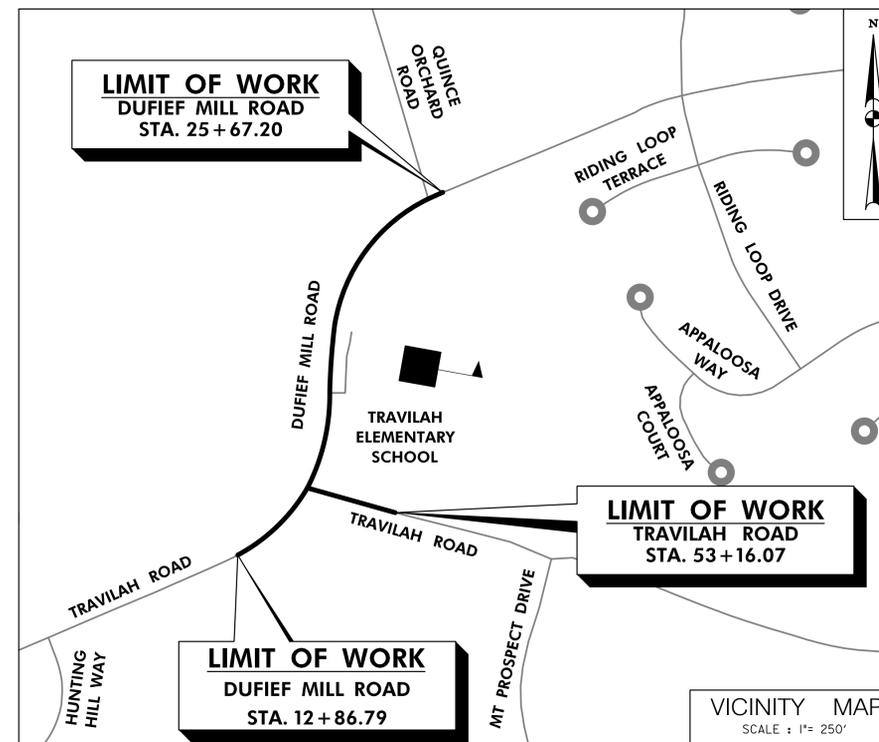


MONTGOMERY COUNTY  
DEPARTMENT OF TRANSPORTATION

DUFIEF MILL ROAD/TRAVILAH ROAD  
FROM ELEMENTARY SCHOOL DRIVEWAY  
TO QUINCE ORCHARD ROAD  
PEDESTRIAN IMPROVEMENTS

INDEX OF SHEETS

SHT. NO.	DWG. NO.	DWG. DESCRIPTION
1	GT-01	TITLE SHEET
2	GN-01	ABBREVIATIONS, CONVENTIONAL SIGNS, & STANDARD SYMBOLS
3	HT-01	TYPICAL SECTIONS
4	DE-01	MISCELLANEOUS DETAILS
5	GS-01	GEOMETRY SHEET
6-9	HD-01-04	ROADWAY PLANS
10	DD-01	DRAINAGE DETAILS
11-12	TTCP-01-02	TEMPORARY TRAFFIC CONTROL PLANS
13	SN-01	GENERAL NOTES AND PROPOSALS
14-17	SN-02-05	SIGNING AND MARKING PLANS



PROJECT LENGTH = 0.30 MILES

DATUM: NAD 83/91 Horizontal  
NAVD 88 Vertical

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE CURRENT C.I.P. WORK ORDER CONTRACT IFB.
2. 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.
3. 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.
4. 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 THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.
5. ALL GRADING SHALL BE DONE IN SUCH A MANNER AS TO PROVIDE POSITIVE DRAINAGE.
6. ALL DISTURBED AREAS TO BE SODDED UNLESS OTHERWISE NOTED.
7. ALL DISTURBED AREAS TO BE STABILIZED PER MDE REQUIREMENTS.
8. HORIZONTAL DATUM: MSHA, NAD 83/91 VERTICAL DATUM: NAVD 88



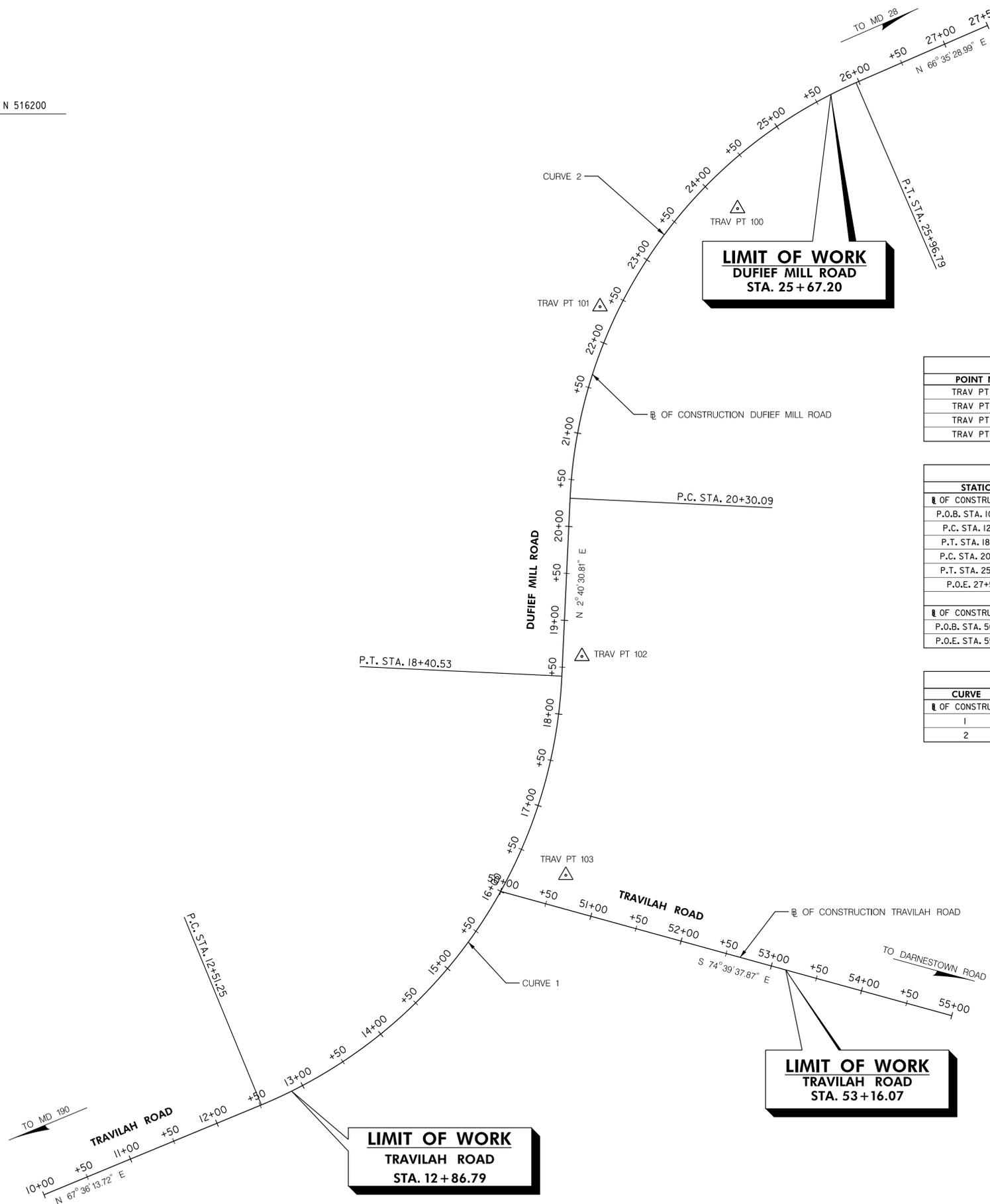






N 516200  
E 1240900

N 516200  
E 1242500



TRAVERSE POINTS			
POINT NO.	NORTH	EAST	ELEVATION
TRAV PT 100	516,099.30	1,241,689.88	380.55
TRAV PT 101	515,994.86	1,241,542.83	376.67
TRAV PT 102	515,622.56	1,241,523.51	368.95
TRAV PT 103	515,389.55	1,241,506.27	365.65

BASELINE COORDINATES		
STATION	NORTH	EAST
DUFIEF MILL ROAD		
P.O.B. STA. 10+00.00	515,049.32	1,240,948.44
P.C. STA. 12+51.25	515,145.05	1,241,180.75
P.T. STA. 18+40.53	515,601.56	1,241,502.06
P.C. STA. 20+30.09	515,790.92	1,241,510.90
P.T. STA. 25+96.79	516,233.39	1,241,816.53
P.O.E. STA. 27+50.00	516,294.26	1,241,957.13
TRAVILAH ROAD		
P.O.B. STA. 50+00.00	515,372.32	1,241,436.64
P.O.E. STA. 55+00.00	515,240.05	1,241,918.83

CURVE DATA							
CURVE	P.I. STATION	DELTA	Dc	RADIUS	TANGENT	LENGTH	EXTERNAL
DUFIEF MILL ROAD							
1	15+82.08	64°55'42.91" LT.	11°01'06.31"	520.00'	330.82'	589.27'	96.31'
2	23+47.01	63°54'58.18" RT.	11°16'43.31"	508.00'	316.92'	566.70'	90.75'

N 515300  
E 1242500

BY: MisnerKA

GS-01

NO.	REVISION	BY	DATE

Designed By KAM Drawn By KAM Checked By MCG

DEPARTMENT OF TRANSPORTATION  
DIVISION OF TRANSPORTATION ENGINEERING  
MONTGOMERY COUNTY, MARYLAND

GEOMETRY SHEET  
DUFIEF MILL ROAD/TRAVILAH ROAD  
FROM ELEMENTARY SCHOOL DRIVEWAY  
TO QUINCE ORCHARD ROAD  
PEDESTRIAN IMPROVEMENTS

SCALE: 1" = 60'

E 1241300  
N 515800

FULL DEPTH SAW CUTS	
168 L.F.	STA. 15+00 TO STA. 16+62, LT.
352 L.F.	STA. 16+24 TO STA. 18+80, RT.
210 L.F.	STA. 19+05 TO STA. 21+00, RT.

TACTILE DELINEATOR SURFACE	
18 S.F.	STA. 16+62, LT.

PRECAST CONCRETE BARRIER CURB	
3 EA.	STA. 16+67 TO STA. 17+26, LT.

REMOVAL OF EXISTING PAVEMENT AND SIDEWALK	
77 C.Y.	STA. 15+00 TO STA. 16+62, LT.
208 C.Y.	STA. 16+24 TO STA. 18+80, RT.
113 C.Y.	STA. 19+05 TO STA. 21+00, RT.
1 C.Y.	STA. 19+87 TO STA. 19+92, RT.

COMBINATION CONCRETE CURB & GUTTER TYPE A (STD. NO. MC-100.01)	
162 L.F.	STA. 15+00 TO STA. 16+62, LT.
348 L.F.	STA. 16+24 TO STA. 18+80, RT.
207 L.F.	STA. 19+05 TO STA. 21+00, RT.

5 INCH DEPTH BUSINESS DISTRICT SIDEWALK/RAMP (STD. NO. MC-111.01)	
1018 S.F.	STA. 15+00 TO STA. 16+62, LT.
1906 S.F.	STA. 16+24 TO STA. 18+80, RT.
1200 S.F.	STA. 19+05 TO STA. 21+00, RT.

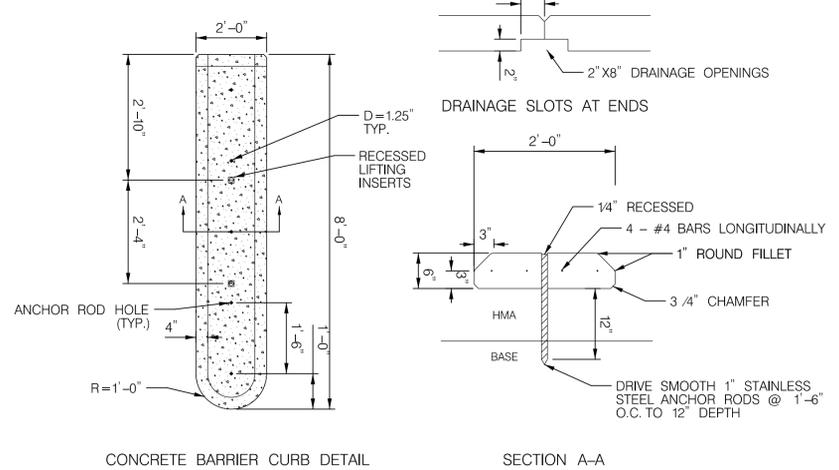
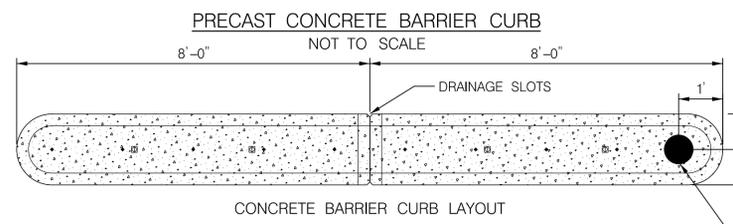
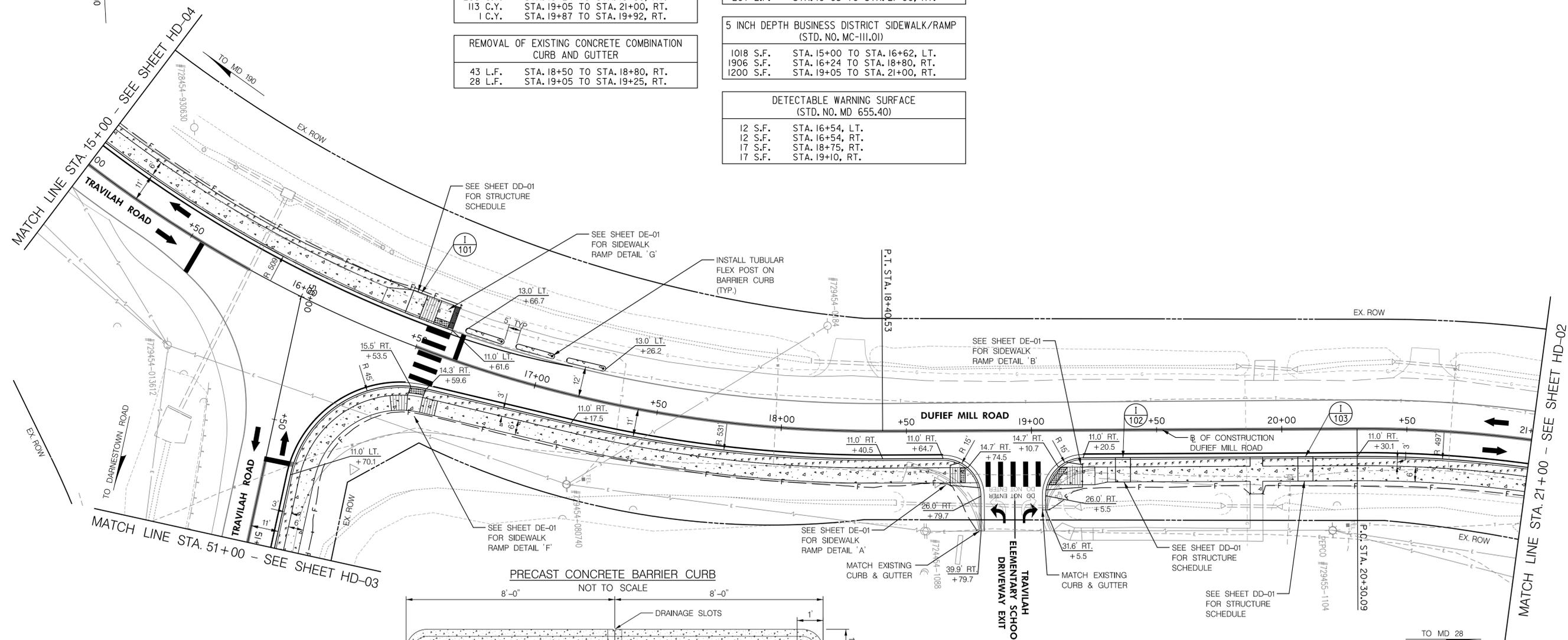
DETECTABLE WARNING SURFACE (STD. NO. MD 655.40)	
12 S.F.	STA. 16+54, LT.
12 S.F.	STA. 16+54, RT.
17 S.F.	STA. 18+75, RT.
17 S.F.	STA. 19+10, RT.

REMOVAL OF EXISTING CONCRETE COMBINATION CURB AND GUTTER	
43 L.F.	STA. 18+50 TO STA. 18+80, RT.
28 L.F.	STA. 19+05 TO STA. 19+25, RT.



E 1241300  
N 515300

E 1241600  
N 515300



WHITE TUBULAR FLEX POST (INSTALLED AS SHOWN ON SHEETS HD-01 THRU HD-03)

- NOTE:
- SPACING BETWEEN BARRIER CURBS SHALL BE FIELD ADJUSTED TO AVOID UTILITY VALVES AND/OR MANHOLES.
  - THREADED INSERTS SHALL BE LEFT OPEN FOR FUTURE MOVING.

LEGEND	
	CONCRETE SIDEWALK
	DETECTABLE WARNING SURFACE
	EXISTING PAVEMENT REMOVAL & PROPOSED TURFGRASS SOD
	TRAFFIC FLOW ARROW

NO.	REVISION	BY	DATE

Designed By KAM Drawn By KAM Checked By MCG

DEPARTMENT OF TRANSPORTATION  
DIVISION OF TRANSPORTATION ENGINEERING  
MONTGOMERY COUNTY, MARYLAND

ROADWAY PLAN  
DUFFIE MILL ROAD/TRAVILAH ROAD  
FROM ELEMENTARY SCHOOL DRIVEWAY  
TO QUINCE ORCHARD ROAD  
PEDESTRIAN IMPROVEMENTS

SCALE: 1" = 20'

BY: MisnerKA

FULL DEPTH SAW CUTS	
459 L.F.	STA. 21+00 TO STA. 25+38, RT.

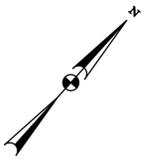
REMOVAL OF EXISTING PAVEMENT AND SIDEWALK	
209 C.Y.	STA. 21+00 TO STA. 25+38, RT.

TACTILE DELINEATOR SURFACE	
10 S.F.	STA. 25+37, RT.

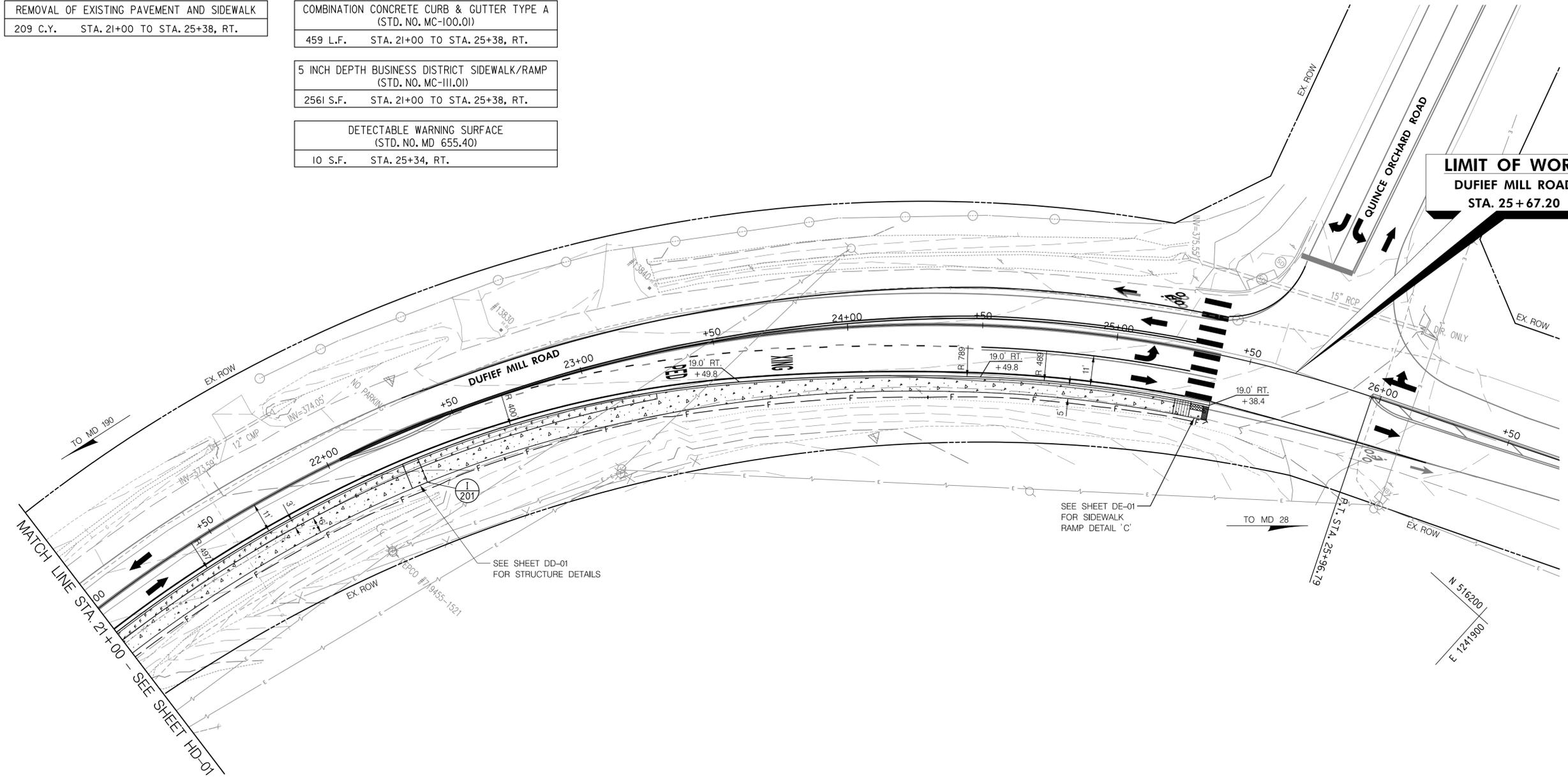
COMBINATION CONCRETE CURB & GUTTER TYPE A (STD. NO. MC-100.01)	
459 L.F.	STA. 21+00 TO STA. 25+38, RT.

5 INCH DEPTH BUSINESS DISTRICT SIDEWALK/RAMP (STD. NO. MC-111.01)	
2561 S.F.	STA. 21+00 TO STA. 25+38, RT.

DETECTABLE WARNING SURFACE (STD. NO. MD 655.40)	
10 S.F.	STA. 25+34, RT.



E 1241500 / N 516200



**LIMIT OF WORK**  
**DUFIEF MILL ROAD**  
**STA. 25 + 67.20**

E 1241500 / N 515800

E 1241900 / N 516200

MATCH LINE STA. 21+00 - SEE SHEET HD-01

SEE SHEET DD-01 FOR STRUCTURE DETAILS

SEE SHEET DE-01 FOR SIDEWALK RAMP DETAIL 'C'

**LEGEND**

	CONCRETE SIDEWALK
	DETECTABLE WARNING SURFACE
	EXISTING PAVEMENT REMOVAL & PROPOSED TURFGRASS SOD
	TRAFFIC FLOW ARROW

NO.	REVISION	BY	DATE

Designed By KAM Drawn By KAM Checked By MCG

DEPARTMENT OF TRANSPORTATION  
 DIVISION OF TRANSPORTATION ENGINEERING  
 MONTGOMERY COUNTY, MARYLAND

ROADWAY PLAN  
 DUFIEF MILL ROAD/TRAVILAH ROAD  
 FROM ELEMENTARY SCHOOL DRIVEWAY  
 TO QUINCE ORCHARD ROAD  
 PEDESTRIAN IMPROVEMENTS  
 SCALE: 1" = 20'

HD-02

BY: MisnerKA

FULL DEPTH SAW CUTS	
174 L.F.	STA. 51+00 TO STA. 52+53, LT.
62 L.F.	STA. 52+76 TO STA. 53+16, LT.

COMBINATION CONCRETE CURB & GUTTER TYPE A (STD. NO. MC-100.01)	
174 L.F.	STA. 51+00 TO STA. 52+53, LT.
62 L.F.	STA. 52+76 TO STA. 53+16, LT.

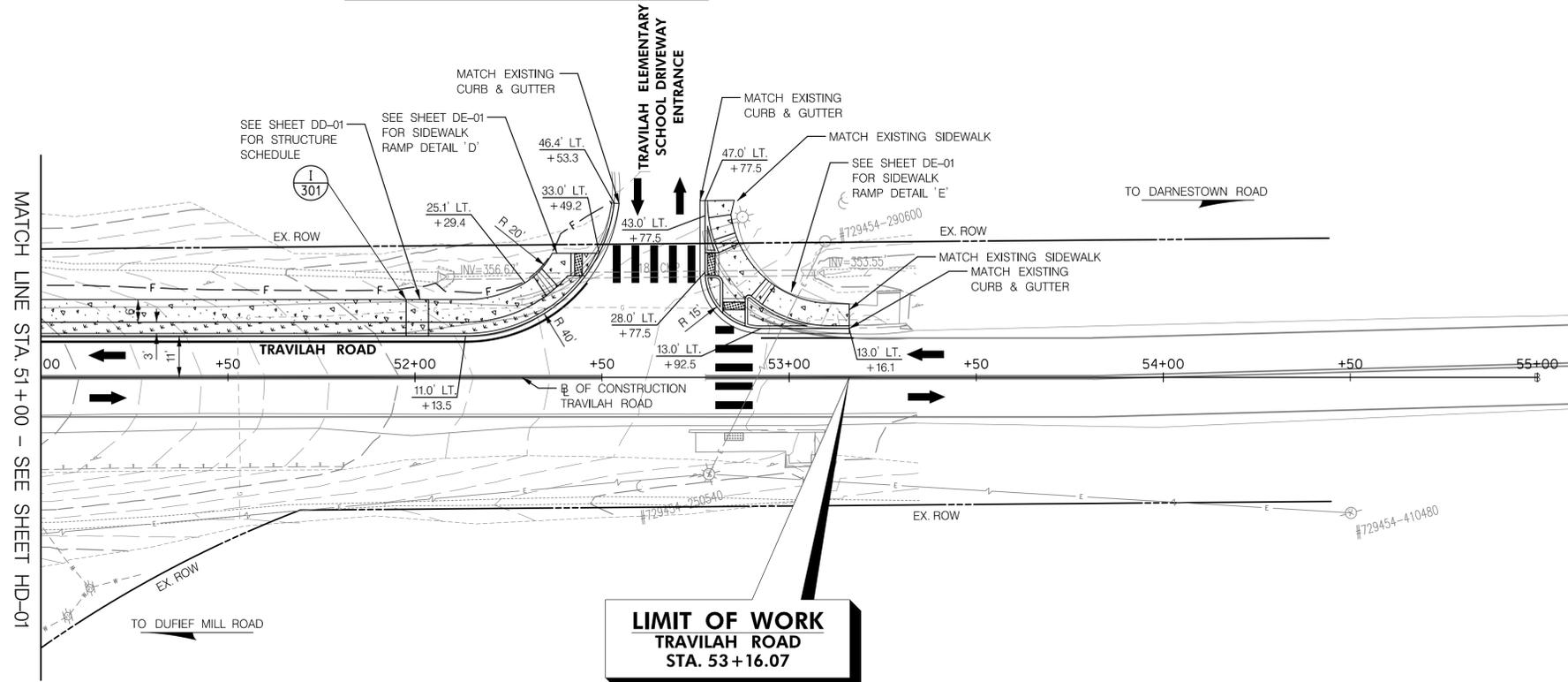
REMOVAL OF EXISTING PAVEMENT AND SIDEWALK	
66 C.Y.	STA. 51+00 TO STA. 52+53, LT.
21 C.Y.	STA. 52+76 TO STA. 53+16, LT.

5 INCH DEPTH BUSINESS DISTRICT SIDEWALK/RAMP (STD. NO. MC-III.01)	
903 S.F.	STA. 51+00 TO STA. 52+53, LT.
407 S.F.	STA. 52+76 TO STA. 53+16, LT.

REMOVAL OF EXISTING CONCRETE COMBINATION CURB AND GUTTER	
41 L.F.	STA. 52+26 TO STA. 52+53, LT.
60 L.F.	STA. 52+76 TO STA. 53+16, LT.

DETECTABLE WARNING SURFACE (STD. NO. MD 655.40)	
15 S.F.	STA. 52+46, LT.
12 S.F.	STA. 52+78, LT.
12 S.F.	STA. 52+85, LT.

N 515400  
E 1242000



**LIMIT OF WORK**  
TRAVILAH ROAD  
STA. 53+16.07

N 515100  
E 1242000

N 515100  
E 1241500

HD-03

LEGEND	
	CONCRETE SIDEWALK
	DETECTABLE WARNING SURFACE
	EXISTING PAVEMENT REMOVAL & PROPOSED TURFGRASS SOD
	TRAFFIC FLOW ARROW

NO.	REVISION	BY	DATE

Designed By KAM Drawn By KAM Checked By MCG

DEPARTMENT OF TRANSPORTATION  
DIVISION OF TRANSPORTATION ENGINEERING  
MONTGOMERY COUNTY, MARYLAND

ROADWAY PLAN  
DUFIEF MILL ROAD/TRAVILAH ROAD  
FROM ELEMENTARY SCHOOL DRIVEWAY  
TO QUINCE ORCHARD ROAD  
PEDESTRIAN IMPROVEMENTS

SCALE: 1" = 20'

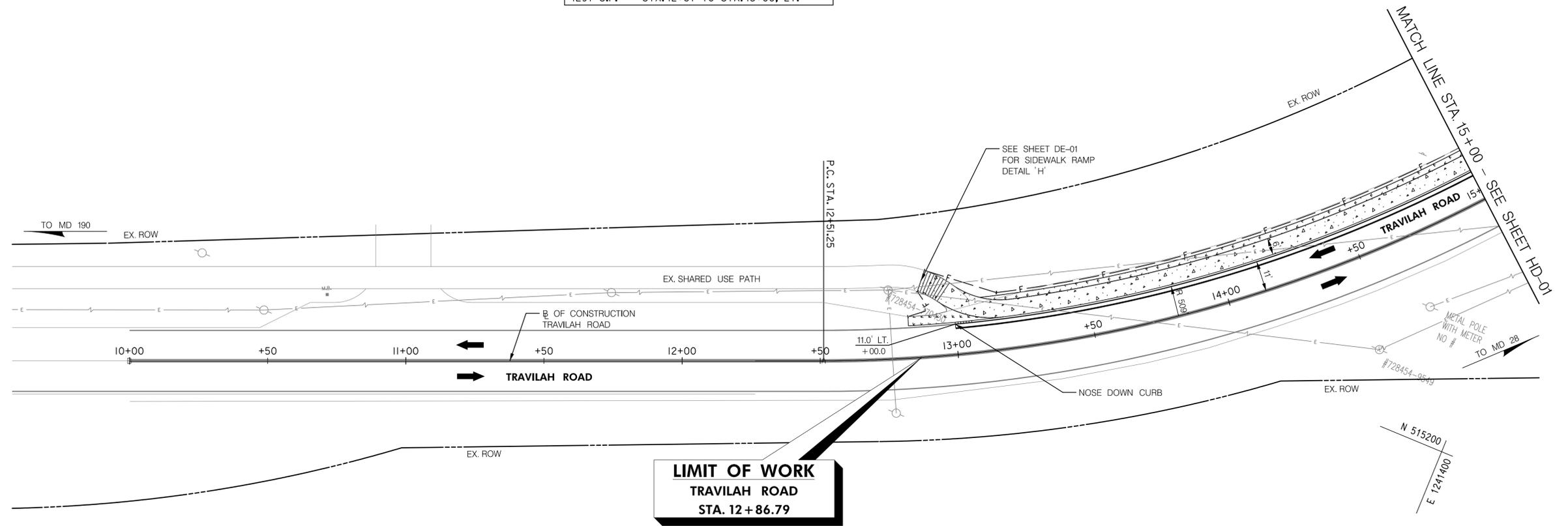
BY: MisnerKA

FULL DEPTH SAW CUTS	
210 L.F.	STA. 13+00 TO STA. 15+00, LT.

COMBINATION CONCRETE CURB & GUTTER TYPE A (STD. NO. MC-100.01)	
208 L.F.	STA. 13+00 TO STA. 15+00, LT.

REMOVAL OF EXISTING PAVEMENT AND SIDEWALK	
100 C.Y.	STA. 13+00 TO STA. 15+00, LT.

5 INCH DEPTH BUSINESS DISTRICT SIDEWALK/RAMP (STD. NO. MC-III.01)	
1297 S.F.	STA. 12+87 TO STA. 15+00, LT.



**LIMIT OF WORK**  
**TRAVILAH ROAD**  
**STA. 12 + 86.79**

**LEGEND**

	CONCRETE SIDEWALK
	DETECTABLE WARNING SURFACE
	EXISTING PAVEMENT REMOVAL & PROPOSED TURFGRASS SOD
	TRAFFIC FLOW ARROW

NO.	REVISION	BY	DATE

DEPARTMENT OF TRANSPORTATION  
 DIVISION OF TRANSPORTATION ENGINEERING  
 MONTGOMERY COUNTY, MARYLAND

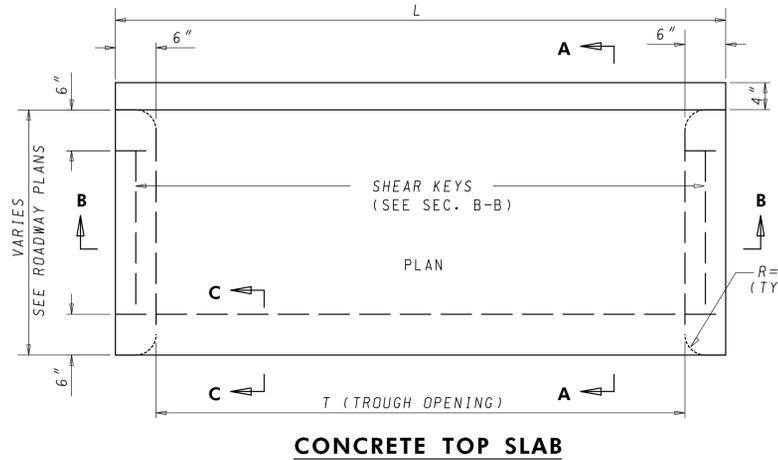
ROADWAY PLAN  
 DUFIEF MILL ROAD/TRAVILAH ROAD  
 FROM ELEMENTARY SCHOOL DRIVEWAY  
 TO QUINCE ORCHARD ROAD  
 PEDESTRIAN IMPROVEMENTS

Designed By KAM Drawn By KAM Checked By MCG

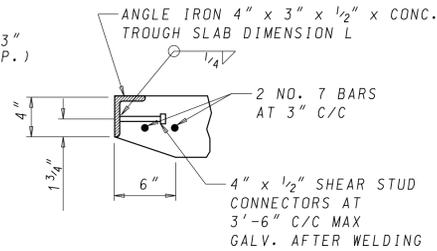
SCALE: 1" = 20'

BY: MisnerKA

HD-04

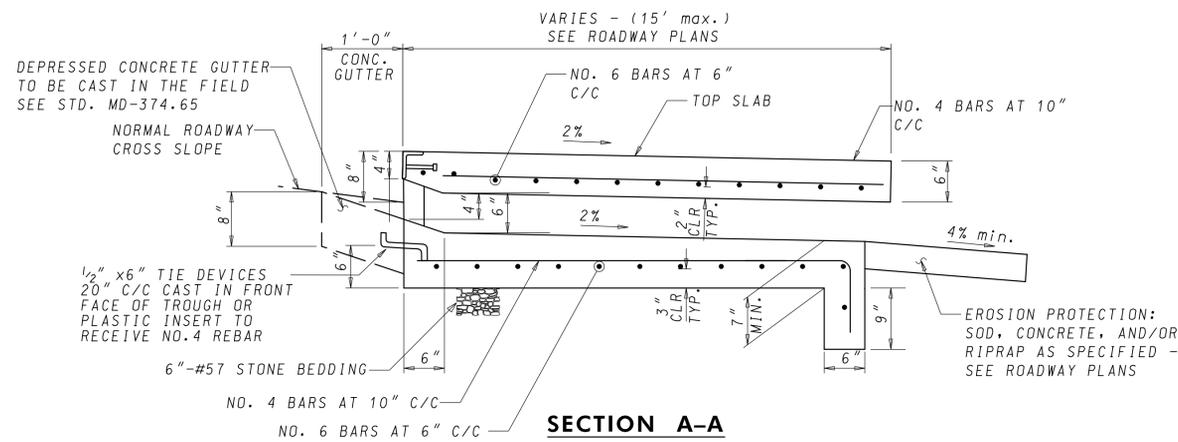


SLAB TYPE	L	T
I	6'-0"	5'-0"
II	11'-0"	10'-0"

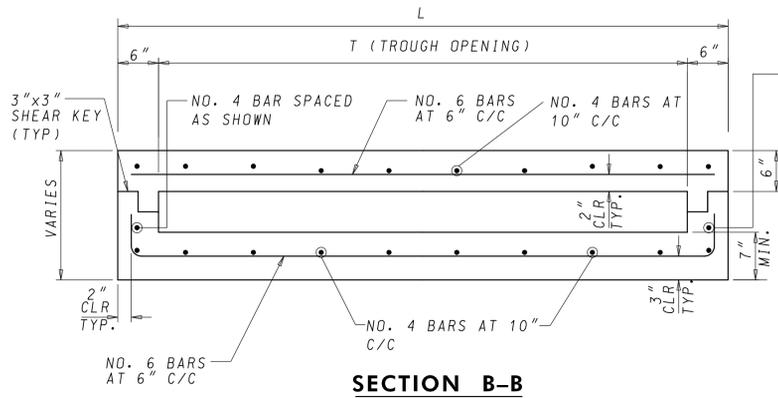


NOTE: FOR 6" CURB, SEE NOTE 4 BELOW.

**SECTION C-C**



**SECTION A-A**



CAST-IN-PLACE COGCOS OPENING  
MODIFIED SHA STANDARD NO. MD 374.68

**NOTES:**

1. CONCRETE SHALL BE MIX # 6 (4500 PSI).
2. REINFORCEMENT STEEL SHALL MEET THE REQUIREMENTS OF ASTM A615, GRADE 60.
3. ANGLE IRON AND SHEAR STUD CONNECTORS SHALL BE GALVANIZED AFTER WELDING IN ACCORDANCE WITH ASTM A 123.
4. FOR 6" CURB, REFER TO MD 374.55-01, SECTIONS C-C AND D-D.
5. EROSION PROTECTION TO BE PAID FOR SEPARATELY.

**STRUCTURE SCHEDULE**

NO.	DETAIL	REMARKS	BASELINE	STATION	OFFSET
I-101	MODIFIED MD-374.68	SLAB TYPE I, EROSION PROTECTION SHALL BE SOD	DUFIEF MILL ROAD	16+44.07	11.00 LT
I-102	MODIFIED MD-374.68	SLAB TYPE I, EROSION PROTECTION SHALL BE SOD	DUFIEF MILL ROAD	19+36.48	11.00 RT
I-103	MODIFIED MD-374.68	SLAB TYPE I, EROSION PROTECTION SHALL BE SOD	DUFIEF MILL ROAD	20+9.38	11.00 RT
I-201	MODIFIED MD-374.68	SLAB TYPE I, EROSION PROTECTION SHALL BE SOD	DUFIEF MILL ROAD	22+28.53	11.00 RT
I-301	MODIFIED MD-374.68	SLAB TYPE I, EROSION PROTECTION SHALL BE SOD	TRAVILAH ROAD	52+0.61	11.00 LT

DD-01

NO.	REVISION	BY	DATE

DEPARTMENT OF TRANSPORTATION  
DIVISION OF TRANSPORTATION ENGINEERING  
MONTGOMERY COUNTY, MARYLAND

DRAINAGE DETAILS  
DUFIEF MILL ROAD/TRAVILAH ROAD  
FROM ELEMENTARY SCHOOL DRIVEWAY  
TO QUINCE ORCHARD ROAD  
PEDESTRIAN IMPROVEMENTS

SCALE: AS SHOWN

Designed By KAM Drawn By KAM Checked By MCG

BY: MisnerKA

SEQUENCE OF CONSTRUCTION

PHASE 1: CONSTRUCT SIDEWALK (EAST SIDE)

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS.
2. SAW CUT AND EXCAVATE WHERE NECESSARY TO REMOVE EXISTING PAVEMENT, COMBINATION CURB & GUTTER, AND SIDEWALK. CONSTRUCT PROPOSED SIDEWALK, ADA PEDESTRIAN RAMP, AND CURB AND GUTTER AS SHOWN ON THE DESIGN PLANS. TRAFFIC SHALL BE MAINTAINED UTILIZING MCDOT TEMPORARY TRAFFIC CONTROL STANDARDS TCP-102.02, TCP-105.03, AND TCP-105.05.

PHASE 2: CONSTRUCT SIDEWALK (WEST SIDE)

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS.
2. SAW CUT AND EXCAVATE WHERE NECESSARY TO REMOVE EXISTING PAVEMENT, CONSTRUCT PROPOSED SIDEWALK, ADA PEDESTRIAN RAMP, AND CURB AND GUTTER AS SHOWN ON THE DESIGN PLANS. TRAFFIC SHALL BE MAINTAINED UTILIZING MCDOT TEMPORARY TRAFFIC CONTROL STANDARDS TCP-102.02 AND TCP-105.07.

PHASE 3: INSTALLATION OF SIGNING AND PAVEMENT MARKINGS

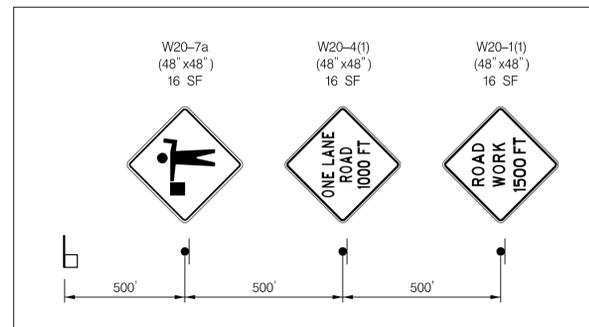
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS.
2. INSTALL PAVEMENT MARKINGS AND SIGNS AS SHOWN ON THE DESIGN PLANS. TRAFFIC SHALL BE MAINTAINED UTILIZING MCDOT TEMPORARY TRAFFIC CONTROL STANDARD TCP-102.06.

GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY THE MONTGOMERY COUNTY TMC AT 240-777-2100 SEVENTY-TWO (72) HOURS IN ADVANCE OF ANY PLANNED LANE CLOSURES VIA FLAGGING OPERATION.
2. THE CONTRACTOR SHALL SUB-STAGE CONSTRUCTION TO MAINTAIN EXISTING PEDESTRIAN ACCESS THROUGHOUT THE WORK ZONE. PEDESTRIAN ACCESS SHALL ALSO BE MAINTAINED AT THE END OF EACH WORK DAY.
3. THE CONTRACTOR SHALL UTILIZE 8 FT. x 12 FT. x 1 IN. THICK STEEL PLATES TO COVER AREAS OF UNFILLED EXCAVATION WITHIN THE ROADWAY AND PEDESTRIAN FACILITIES AT THE END OF EACH WORK DAY AS NECESSARY.
4. THE CONTRACTOR SHALL COORDINATE WITH ANY ADJACENT CONSTRUCTION PROJECTS TO COORDINATE LANE CLOSURES.
5. THE CONTRACTOR SHALL MAINTAIN A MINIMUM 10 FT. TRAVEL LANE DURING CONSTRUCTION.
6. PRIOR TO BEGINNING ANY CONSTRUCTION WORK, THE CONTRACTOR SHALL MEET ALL REQUIREMENTS FOR EROSION AND SEDIMENT CONTROL.
7. CONSTRUCTION ON THIS PROJECT SHALL CONFORM TO APPLICABLE SECTIONS OF THE IFB.
8. THE CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ALL EXISTING TRAFFIC SIGNS. IF IN THE OPINION OF THE ENGINEER, ANY SIGNS ARE DAMAGED BY THE CONTRACTOR'S OPERATION THEY SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
9. THE CONTRACTOR SHALL COVER ANY ADVANCE WARNING SIGNS THAT ARE NOT APPLICABLE DURING A PARTICULAR PHASE OR NON-WORKING HOURS.
10. PERMANENT SIGNS SHALL BE ERECTED PRIOR TO OPENING ANY PERMANENT CONSTRUCTION TO TRAFFIC.
11. THE CONTRACTOR SHALL MAINTAIN VEHICLE ACCESS TO ALL DRIVEWAY ENTRANCES WITHIN THE PROJECT AREA. THE CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS TO MAINTAIN INGRESS/EGRESS DURING ALL PHASES OF CONSTRUCTION.
12. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPLY, INSTALL AND MAINTAIN ALL TEMPORARY TRAFFIC CONTROL EQUIPMENT FOR THE DURATION OF THE CONTRACT.
13. ALL TRAFFIC CONTROL DEVICES, SHOULDER CLOSURES, LANE SHIFTS AND LANE CLOSURES SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MD-MUTCD), AND MCDOT TEMPORARY TRAFFIC CONTROL STANDARDS.
14. ALL TRAFFIC CONTROL FLAGGERS SHALL BE CERTIFIED.
15. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN AND BUS ACCESS TO ALL BUS STOPS WITHIN THE PROJECT LIMITS.
16. THE CONTRACTOR SHALL ASSUME A PREVAILING SPEED OF 40 MPH FOR VARIOUS WORK ZONE ELEMENTS. THE BUFFER SHALL BE 170 FEET IN LENGTH. CHANNELIZING DEVICES SHALL BE SPACED 30 FEET APART IN TAPERS AND ADJACENT TO THE WORK ZONE AS PER MCDOT TEMPORARY TRAFFIC CONTROL STANDARD TCP-100.01.
17. NO WORK SHALL BE DONE DURING SCHOOL ARRIVAL AND DISMISSAL TIMES.

PHASE 1

DETAIL A



MOT LEGEND	
	WORK ZONE PHASE 1
	WORK ZONE PHASE 2
	TEMPORARY TRAFFIC SIGN
	SIGN FACE
	DIRECTION OF TRAFFIC
	CHANNELIZING DEVICES

NO.	REVISION	BY	DATE
Designed By <u>KAM</u>		Drawn By <u>KAM</u>	Checked By <u>MCG</u>

DEPARTMENT OF TRANSPORTATION  
 DIVISION OF TRAFFIC ENGINEERING & OPERATIONS  
 MONTGOMERY COUNTY, MARYLAND

TEMPORARY TRAFFIC CONTROL PLAN  
 DUFIEF MILL ROAD/TRAVILAH ROAD  
 FROM ELEMENTARY SCHOOL DRIVEWAY  
 TO QUINCE ORCHARD ROAD  
 PEDESTRIAN IMPROVEMENTS

SCALE: 1" = 40'

BY: MisnerKA

TTCP-01

SEQUENCE OF CONSTRUCTION

PHASE 1: CONSTRUCT SIDEWALK (EAST SIDE)

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS.
2. SAW CUT AND EXCAVATE WHERE NECESSARY TO REMOVE EXISTING PAVEMENT, COMBINATION CURB & GUTTER, AND SIDEWALK. CONSTRUCT PROPOSED SIDEWALK, ADA PEDESTRIAN RAMP, AND CURB AND GUTTER AS SHOWN ON THE DESIGN PLANS. TRAFFIC SHALL BE MAINTAINED UTILIZING MCDOT TEMPORARY TRAFFIC CONTROL STANDARDS TCP-102.02, TCP-105.03, AND TCP-105.05.

PHASE 2: CONSTRUCT SIDEWALK (WEST SIDE)

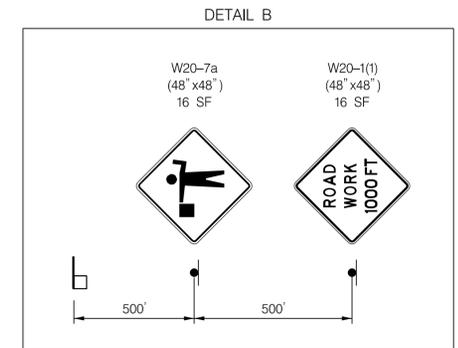
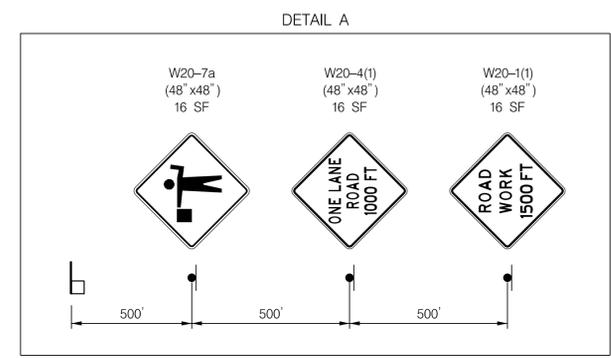
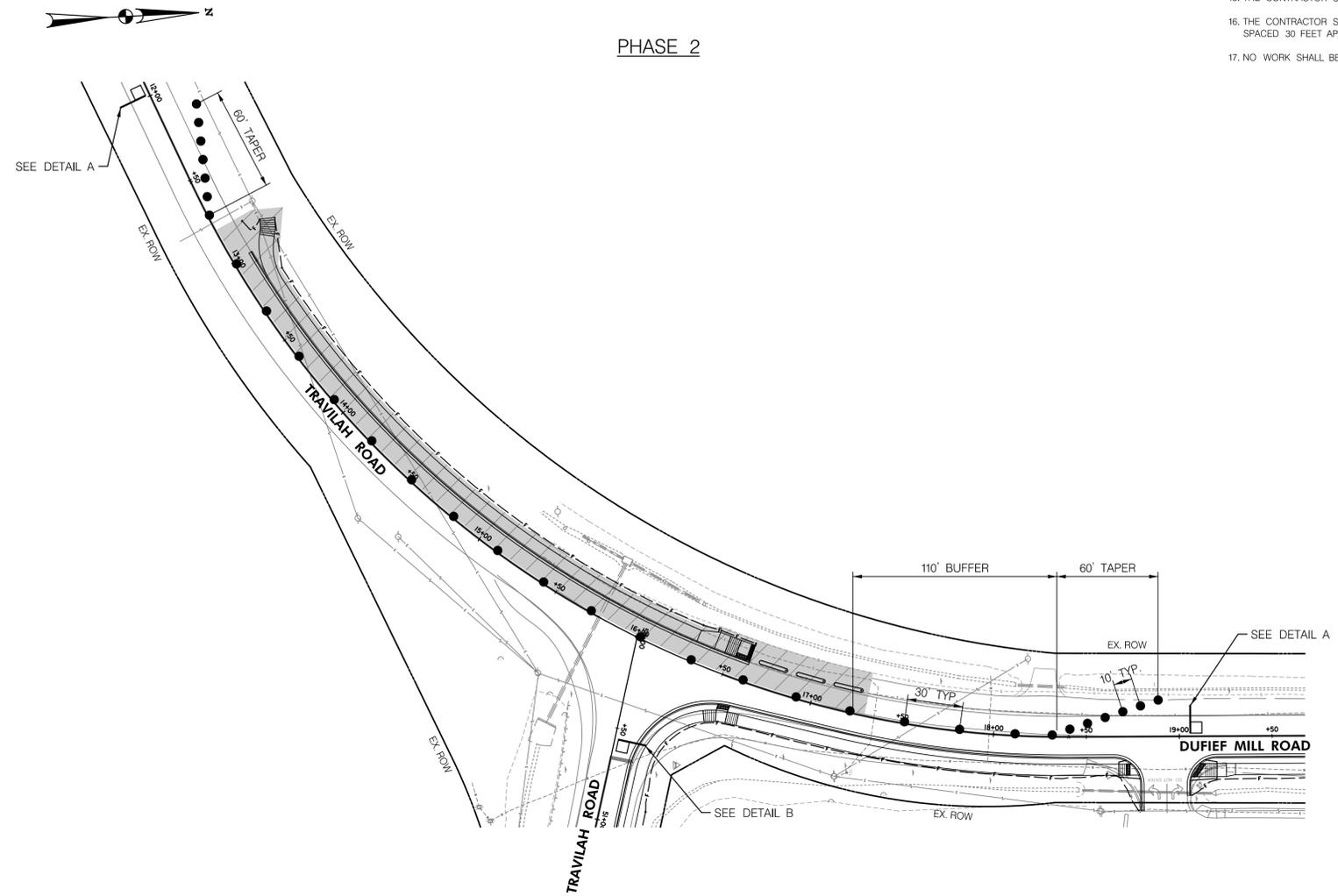
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS.
2. SAW CUT AND EXCAVATE WHERE NECESSARY TO REMOVE EXISTING PAVEMENT. CONSTRUCT PROPOSED SIDEWALK, ADA PEDESTRIAN RAMP, AND CURB AND GUTTER AS SHOWN ON THE DESIGN PLANS. TRAFFIC SHALL BE MAINTAINED UTILIZING MCDOT TEMPORARY TRAFFIC CONTROL STANDARDS TCP-102.02 AND TCP-105.07.

PHASE 3: INSTALLATION OF SIGNING AND PAVEMENT MARKINGS

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS.
2. INSTALL PAVEMENT MARKINGS AND SIGNS AS SHOWN ON THE DESIGN PLANS. TRAFFIC SHALL BE MAINTAINED UTILIZING MCDOT TEMPORARY TRAFFIC CONTROL STANDARD TCP-102.06.

GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY THE MONTGOMERY COUNTY TMC AT 240-777-2100 SEVENTY-TWO (72) HOURS IN ADVANCE OF ANY PLANNED LANE CLOSURES VIA FLAGGING OPERATION.
2. THE CONTRACTOR SHALL SUB-STAGE CONSTRUCTION TO MAINTAIN EXISTING PEDESTRIAN ACCESS THROUGHOUT THE WORK ZONE. PEDESTRIAN ACCESS SHALL ALSO BE MAINTAINED AT THE END OF EACH WORK DAY.
3. THE CONTRACTOR SHALL UTILIZE 8 FT. x 12 FT. x 1 IN. THICK STEEL PLATES TO COVER AREAS OF UNFILLED EXCAVATION WITHIN THE ROADWAY AND PEDESTRIAN FACILITIES AT THE END OF EACH WORK DAY AS NECESSARY.
4. THE CONTRACTOR SHALL COORDINATE WITH ANY ADJACENT CONSTRUCTION PROJECTS TO COORDINATE LANE CLOSURES.
5. THE CONTRACTOR SHALL MAINTAIN A MINIMUM 10 FT. TRAVEL LANE DURING CONSTRUCTION.
6. PRIOR TO BEGINNING ANY CONSTRUCTION WORK, THE CONTRACTOR SHALL MEET ALL REQUIREMENTS FOR EROSION AND SEDIMENT CONTROL.
7. CONSTRUCTION ON THIS PROJECT SHALL CONFORM TO APPLICABLE SECTIONS OF THE IFB.
8. THE CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ALL EXISTING TRAFFIC SIGNS IF IN THE OPINION OF THE ENGINEER, ANY SIGNS ARE DAMAGED BY THE CONTRACTOR'S OPERATION THEY SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
9. THE CONTRACTOR SHALL COVER ANY ADVANCE WARNING SIGNS THAT ARE NOT APPLICABLE DURING A PARTICULAR PHASE OR NON-WORKING HOURS.
10. PERMANENT SIGNS SHALL BE ERECTED PRIOR TO OPENING ANY PERMANENT CONSTRUCTION TO TRAFFIC.
11. THE CONTRACTOR SHALL MAINTAIN VEHICLE ACCESS TO ALL DRIVEWAY ENTRANCES WITHIN THE PROJECT AREA. THE CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS TO MAINTAIN INGRESS/EGRESS DURING ALL PHASES OF CONSTRUCTION.
12. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPLY, INSTALL AND MAINTAIN ALL TEMPORARY TRAFFIC CONTROL EQUIPMENT FOR THE DURATION OF THE CONTRACT.
13. ALL TRAFFIC CONTROL DEVICES, SHOULDER CLOSURES, LANE SHIFTS AND LANE CLOSURES SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MD-MUTCD), AND MCDOT TEMPORARY TRAFFIC CONTROL STANDARDS.
14. ALL TRAFFIC CONTROL FLAGGERS SHALL BE CERTIFIED.
15. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN AND BUS ACCESS TO ALL BUS STOPS WITHIN THE PROJECT LIMITS.
16. THE CONTRACTOR SHALL ASSUME A PREVAILING SPEED OF 40 MPH FOR VARIOUS WORK ZONE ELEMENTS. THE BUFFER SHALL BE 170 FEET IN LENGTH. CHANNELIZING DEVICES SHALL BE SPACED 30 FEET APART IN TAPERS AND ADJACENT TO THE WORK ZONE AS PER MCDOT TEMPORARY TRAFFIC CONTROL STANDARD TCP-100.01.
17. NO WORK SHALL BE DONE DURING SCHOOL ARRIVAL AND DISMISSAL TIMES.



MOT LEGEND	
	WORK ZONE PHASE 1
	WORK ZONE PHASE 2
	TEMPORARY TRAFFIC SIGN
	SIGN FACE
	DIRECTION OF TRAFFIC
	CHANNELIZING DEVICES

BY: MisnerKA

TTCP-02

NO.	REVISION	BY	DATE
Designed By <u>KAM</u>		Drawn By <u>KAM</u>	Checked By <u>MCG</u>

DEPARTMENT OF TRANSPORTATION  
 DIVISION OF TRAFFIC ENGINEERING & OPERATIONS  
 MONTGOMERY COUNTY, MARYLAND

TEMPORARY TRAFFIC CONTROL PLAN  
 DUFIEF MILL ROAD/TRAVILAH ROAD  
 FROM ELEMENTARY SCHOOL DRIVEWAY  
 TO QUINCE ORCHARD ROAD  
 PEDESTRIAN IMPROVEMENTS

SCALE: 1" = 40'

**CRITERIA**

THE CONTRACTOR SHALL BE GOVERNED BY THE STANDARDS AND REQUIREMENTS OF THE FOLLOWING PUBLICATIONS, EXCEPT AS MODIFIED BY THE SPECIAL PROVISIONS OF THIS CONTRACT:

**DESIGN**

MDSHA - "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**

MDSHA - "STANDARD SPECIFICATIONS FOR CONSTRUCTION & MATERIALS", 2008 EDITION AND SUBSEQUENT SUPPLEMENTS.

**DESIGN WIND**

- 100 MPH - WOOD SUPPORTS  
10 YEAR RECURRENCE INTERVAL
  - 100 MPH - GROUND MOUNT SIGN STEEL SUPPORTS  
10 YEAR RECURRENCE INTERVAL
  - 100 MPH - OVERHEAD AND CANTILEVER STRUCTURES  
50 YEAR RECURRENCE INTERVAL
- } ALL DISTRICTS

**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.

**1. GUIDE SIGNS**

**A) STRUCTURAL TYPES**

- OH - OVERHEAD
- C - CANTILEVER
- GM - GROUND MOUNT, BREAKAWAY  
OR NON-BREAKWAY
- BM - BRIDGE MOUNTED

**B) PANELS**

MATERIAL - EXTRUDED ALUMINUM  
COPY - DIRECT APPLIED

I) HIGH INTENSITY (NEW SIGNS AND REVISIONS TO EXISTING SIGNS)

**2. STANDARD SIGNS (REGULATORY, WARNING, ETC.)**

**A) STRUCTURAL TYPES**

- WOOD SUPPORTS
- SQUARE TUBE

**B) PANELS**

MATERIAL - SHEET ALUMINUM  
COPY - DIRECT APPLIED

**IDENTIFICATION OF SIGNS AND PANELS**

**GUIDE SIGNS**

EACH GUIDE SIGN IS IDENTIFIED BY A SIGN NUMBER ON THE PLANS AND IN THE TABULATIONS. (GM-1, GM-2, GM-3, etc)  
SIGNS ON STRUCTURES ARE IDENTIFIED WITH A NUMBER AND WHERE VARIATIONS OCCUR, A LOWER CASE LETTER. (OH-1a, OH-1b, OH-1c)

**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.

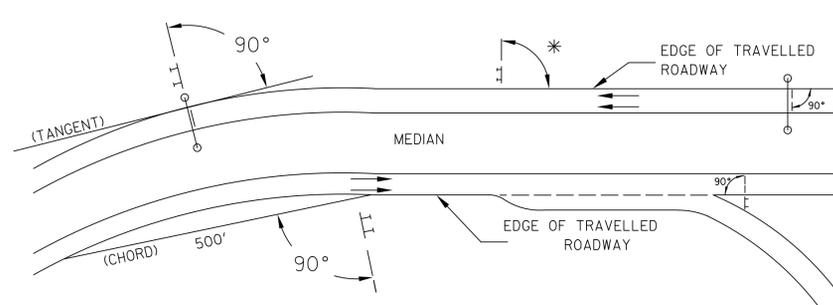
**PANEL LAYOUT AND ALPHABETS**

1. 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 @ [https://www.marylandroads.com/businesswithsha/bizstdsSpecs/desManualStdPub/publicationsonline/oofs/internet\\_signbook.asp](https://www.marylandroads.com/businesswithsha/bizstdsSpecs/desManualStdPub/publicationsonline/oofs/internet_signbook.asp)

**REFLECTORIZATION**

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

**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°

**SIGN LOCATIONS**

1. 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**

1. 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**

1. 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 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:

1. SHEETING SHALL MEET THE REQUIREMENTS OF SECTIONS 813 AND 950.03 OF MDSHA'S STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS (JULY 2008) AND SUBSEQUENT REVISIONS
2. LISTED ON MDSHA OFFICE OF TRAFFIC AND SAFETY'S QUALIFIED PRODUCTS LIST (OPL)

**PROJECT REQUIREMENTS CONT'D**

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

- A) **GUIDE, EXIT GORE, AND GENERAL INFORMATION SIGNS**- RETROREFLECTIVE SHEETING FOR GUIDE SIGNS, EXIT GORE, AND GENERAL INFORMATION (INCLUDES WHITE ON GREEN, WHITE ON BLUE, WHITE ON BROWN AND THE REVERSE OF THESE COLORS) SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX LEGEND ON ASTM TYPE IX BACKGROUND. REGULATORY AND WARNING MESSAGES WITHIN GUIDE SIGNS SHALL BE NON-REFLECTIVE BLACK LEGEND ON BACKGROUND SHEETING WHICH MEETS OR EXCEEDS THE REQUIREMENTS FOR ASTM TYPE IX SHEETING.
- B) **WARNING SIGNS** - RETROREFLECTIVE SHEETING FOR BLACK ON FLUORESCENT YELLOW WARNING SIGNS SHALL BE NON-REFLECTIVE BLACK LEGEND ON BACKGROUND SHEETING WHICH MEETS OR EXCEEDS THE REQUIREMENTS FOR ASTM TYPE IX SHEETING. REGULATORY MESSAGES WITHIN WARNING SIGNS SHALL FOLLOW THE GUIDELINES FOR REGULATORY SIGNS.
- C) **SCHOOL SIGNS** - RETROREFLECTIVE SHEETING FOR SCHOOL SIGNS (BLACK ON FLUORESCENT YELLOW AND BLACK ON FLUORESCENT YELLOW GREEN) SHALL BE NON-REFLECTIVE BLACK LEGEND ON BACKGROUND SHEETING WHICH MEETS OR EXCEEDS THE REQUIREMENTS FOR ASTM TYPE IX SHEETING. REGULATORY MESSAGES WITHIN SCHOOL SIGNS SHALL FOLLOW THE REQUIREMENTS FOR REGULATORY SIGNS.
- D) **REGULATORY SIGNS** - FALL INTO THREE SUBCATEGORIES:
  - i. "RED" REGULATORY SIGNS (STOP, YIELD, DO NOT ENTER AND WRONG WAY) RETROREFLECTIVE SHEETING FOR THESE SIGNS AND THEIR SUPPLEMENTAL PANELS (INCLUDES WHITE ON RED AND RED ON WHITE) SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX SHEETING.
  - ii. ALL R7 AND R8 SERIES PARKING RELATED SIGNS AND THEIR SUPPLEMENTAL PANELS, NO TRESPASSING SIGNS, AND SIGNS DIRECTED AT PEDESTRIANS AND BICYCLISTS ONLY (INCLUDES RED ON WHITE, GREEN ON WHITE, BLUE ON WHITE, BLACK ON WHITE AND THE REVERSE OF THESE COLORS) SHALL BE ASTM TYPE I LEGEND ON ASTM TYPE I BACKGROUND.
  - iii. ALL OTHER REGULATORY SIGNS - RETROREFLECTIVE SHEETING FOR THESE SIGNS AND THEIR SUPPLEMENTAL PANELS (INCLUDES BLACK ON WHITE) SHALL BE NON-REFLECTIVE BLACK LEGEND ON ASTM TYPE IV BACKGROUND. WHERE RED IS SPECIFIED, OR WHERE THE COLOR OF THE SIGN IS WHITE ON BLACK, THE LEGEND SHALL BE ASTM TYPE IV RETROREFLECTIVE SHEETING ON NON-REFLECTIVE BLACK BACKGROUND. WARNING MESSAGES WITHIN REGULATORY SIGNS SHALL FOLLOW THE GUIDELINES FOR WARNING SIGNS.
- E) **ROUTE MARKERS** - RETROREFLECTIVE SHEETING FOR ROUTE MARKERS (INCLUDES BLACK ON WHITE, GREEN ON WHITE, WHITE ON GREEN, WHITE ON RED/BLUE) SHALL MEET THE REQUIREMENTS OF GUIDE SIGNS ABOVE WHEN SPECIFIED AS THE LEGEND OF A GUIDE SIGN. RETROREFLECTIVE SHEETING FOR ALL INDEPENDENT ROUTE MARKERS AND THEIR AUXILIARY PANELS SHALL BE ASTM TYPE IV AND/OR NON-REFLECTIVE BLACK LEGEND ON ASTM TYPE IV BACKGROUND.
- F) **LOGOS AND/OR GRAPHICS** - WITHIN SIGNS SHALL FOLLOW THE GUIDELINES FOR THE RESPECTIVE SIGN CLASSIFICATION UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, OR AS DIRECTED BY THE ENGINEER.
- G) **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 DIMENSION	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"	0.100"
OVER 48"	0.125"

SN-01

NO.	REVISION	BY	DATE
Designed By <u>KAM</u> Drawn By <u>KAM</u> Checked By <u>MCG</u>			

DEPARTMENT OF TRANSPORTATION  
DIVISION OF TRANSPORTATION ENGINEERING  
MONTGOMERY COUNTY, MARYLAND

GENERAL NOTES AND PROPOSALS  
DUFIEF MILL ROAD/TRAVILAH ROAD  
FROM ELEMENTARY SCHOOL DRIVEWAY  
TO QUINCE ORCHARD ROAD  
PEDESTRIAN IMPROVEMENTS

SCALE: N.T.S.

BY: MisenrKA

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N 515800

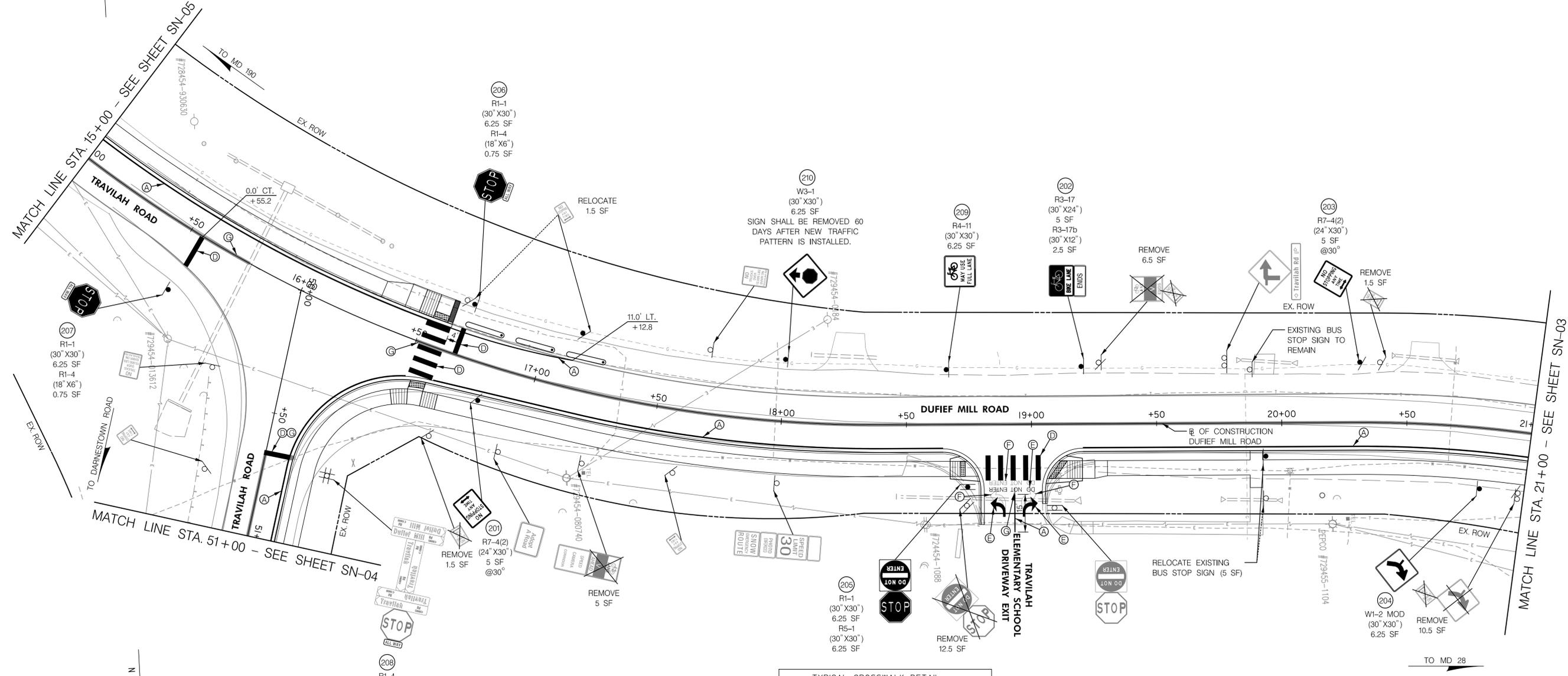
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N 515300  
E 1241600

MATCH LINE STA. 21+00 - SEE SHEET SN-03

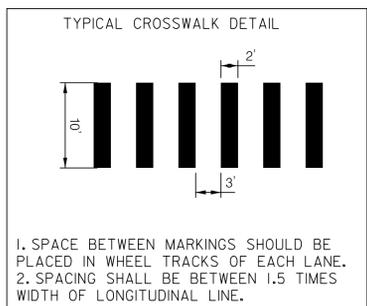
MATCH LINE STA. 15+00 - SEE SHEET SN-05

MATCH LINE STA. 51+00 - SEE SHEET SN-04



- PAVEMENT MARKING LEGEND**
- (A) 5 INCH SOLID WHITE THERMOPLASTIC PAVEMENT MARKING
  - (B) 5 INCH WHITE THERMOPLASTIC PAVEMENT MARKING (3' STRIPE, 9' GAP, 3' STRIPE)
  - (C) 5 INCH SOLID DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING
  - (D) 24 INCH SOLID WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING
  - (E) PERMANENT WHITE PREFORMED PAVEMENT MARKING LETTERS, SYMBOLS, ARROWS, AND NUMBERS
  - (F) REMOVAL OF EXISTING PAVEMENT MARKING LETTERS, SYMBOLS, ARROWS, AND NUMBERS
  - (G) REMOVE EXISTING PAVEMENT MARKING, ANY WIDTH

- GENERAL NOTES**
1. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH SHA STANDARDS.
  2. ALL EXISTING SIGNS SHALL REMAIN UNLESS NOTED ON THE PLAN.
  3. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH MCDOT STANDARDS.
  4. THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. IF ANY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
  5. ALL PROPOSED SIGNS SHALL BE INSTALLED ON SQUARE PERFORATED TUBULAR STEEL SIGN POST(S).
  6. ALL PAVEMENT MARKINGS LINE WIDTH DIMENSIONS ARE FROM CENTER OF MARKING TO FACE OF CURB/EDGE OF ROAD FOR INSIDE/OUTSIDE LANES AND FROM CENTER OF MARKING TO CENTER OF MARKING FOR ALL OTHERS.
  7. THE CONTRACTOR SHALL INSTALL NEW RAISED PAVEMENT MARKERS (RPM'S) IN ACCORDANCE WITH FIGURE 3B-7b OF THE MD MUTCD.
  8. THE CONTRACTOR SHALL REMOVE ALL EXISTING RAISED PAVEMENT MARKERS THAT CONFLICT WITH NEW PAVEMENT MARKINGS PER THE SPECIAL PROVISIONS IN THE I.F.B.



**SIGNING LEGEND**

SYMBOL	DESCRIPTION
	EXISTING GROUND MOUNTED SIGN AND SUPPORTS
	PROPOSED GROUND MOUNTED SIGN AND SUPPORTS
	EXISTING SIGN TO REMAIN
	EXISTING SIGN TO BE REMOVED
	PROPOSED SIGN TO BE INSTALLED

NO.	REVISION	BY	DATE

Designed By KAM Drawn By KAM Checked By MCG

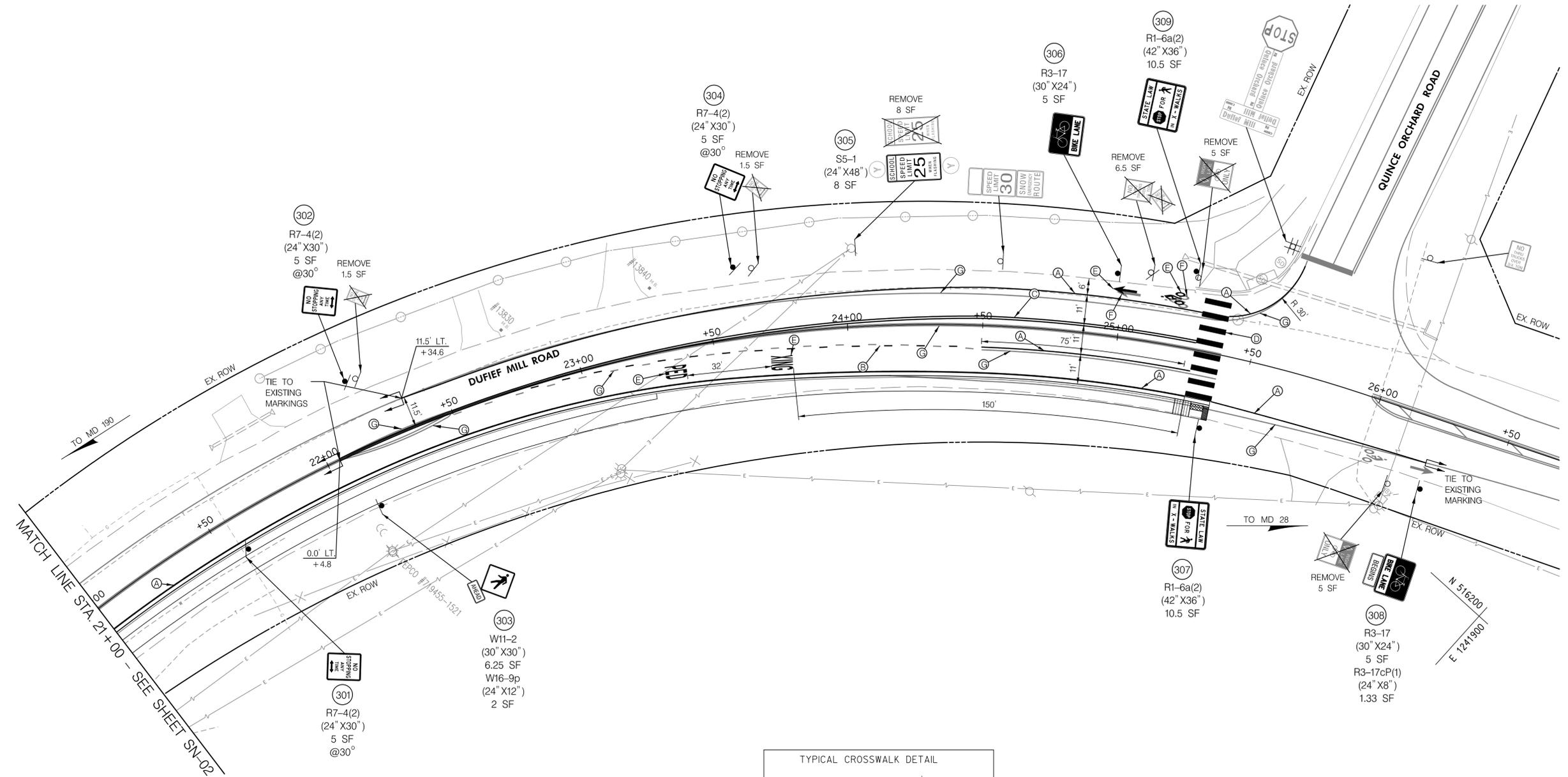
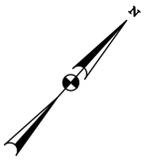
DEPARTMENT OF TRANSPORTATION  
DIVISION OF TRANSPORTATION ENGINEERING  
MONTGOMERY COUNTY, MARYLAND

SIGNING AND MARKING PLAN  
DUFFIE MILL ROAD/TRAVILAH ROAD  
FROM ELEMENTARY SCHOOL DRIVEWAY  
TO QUINCE ORCHARD ROAD  
PEDESTRIAN IMPROVEMENTS

SCALE: 1"= 20'

BY: MisnerKA

E 1241500 / N 516200

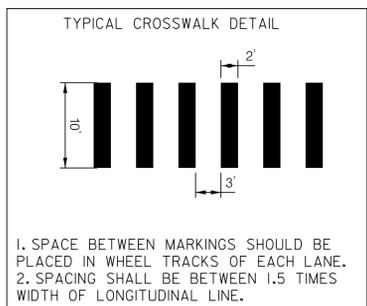


PAVEMENT MARKING LEGEND

- (A) 5 INCH SOLID WHITE THERMOPLASTIC PAVEMENT MARKING
- (B) 5 INCH WHITE THERMOPLASTIC PAVEMENT MARKING (3' STRIPE, 9' GAP, 3' STRIPE)
- (C) 5 INCH SOLID DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING
- (D) 24 INCH SOLID WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING
- (E) PERMANENT WHITE PREFORMED PAVEMENT MARKING LETTERS, SYMBOLS, ARROWS, AND NUMBERS
- (F) REMOVAL OF EXISTING PAVEMENT MARKING LETTERS, SYMBOLS, ARROWS, AND NUMBERS
- (G) REMOVE EXISTING PAVEMENT MARKING, ANY WIDTH

GENERAL NOTES

1. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH SHA STANDARDS.
2. ALL EXISTING SIGNS SHALL REMAIN UNLESS NOTED ON THE PLAN.
3. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH MCDOT STANDARDS.
4. THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. IF ANY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
5. ALL PROPOSED SIGNS SHALL BE INSTALLED ON SQUARE PERFORATED TUBULAR STEEL SIGN POST(S).
6. ALL PAVEMENT MARKINGS LINE WIDTH DIMENSIONS ARE FROM CENTER OF MARKING TO FACE OF CURB/EDGE OF ROAD FOR INSIDE/OUTSIDE LANES AND FROM CENTER OF MARKING TO CENTER OF MARKING FOR ALL OTHERS.
7. THE CONTRACTOR SHALL INSTALL NEW RAISED PAVEMENT MARKERS (RPM'S) IN ACCORDANCE WITH FIGURE 3B-7b OF THE MD MUTCD.
8. THE CONTRACTOR SHALL REMOVE ALL EXISTING RAISED PAVEMENT MARKERS THAT CONFLICT WITH NEW PAVEMENT MARKINGS PER THE SPECIAL PROVISIONS IN THE I.F.B.



SIGNING LEGEND

SYMBOL	DESCRIPTION
	EXISTING GROUND MOUNTED SIGN AND SUPPORTS
	PROPOSED GROUND MOUNTED SIGN AND SUPPORTS
	EXISTING SIGN TO REMAIN
	EXISTING SIGN TO BE REMOVED
	PROPOSED SIGN TO BE INSTALLED

NO.	REVISION	BY	DATE

Designed By KAM Drawn By KAM Checked By MCG

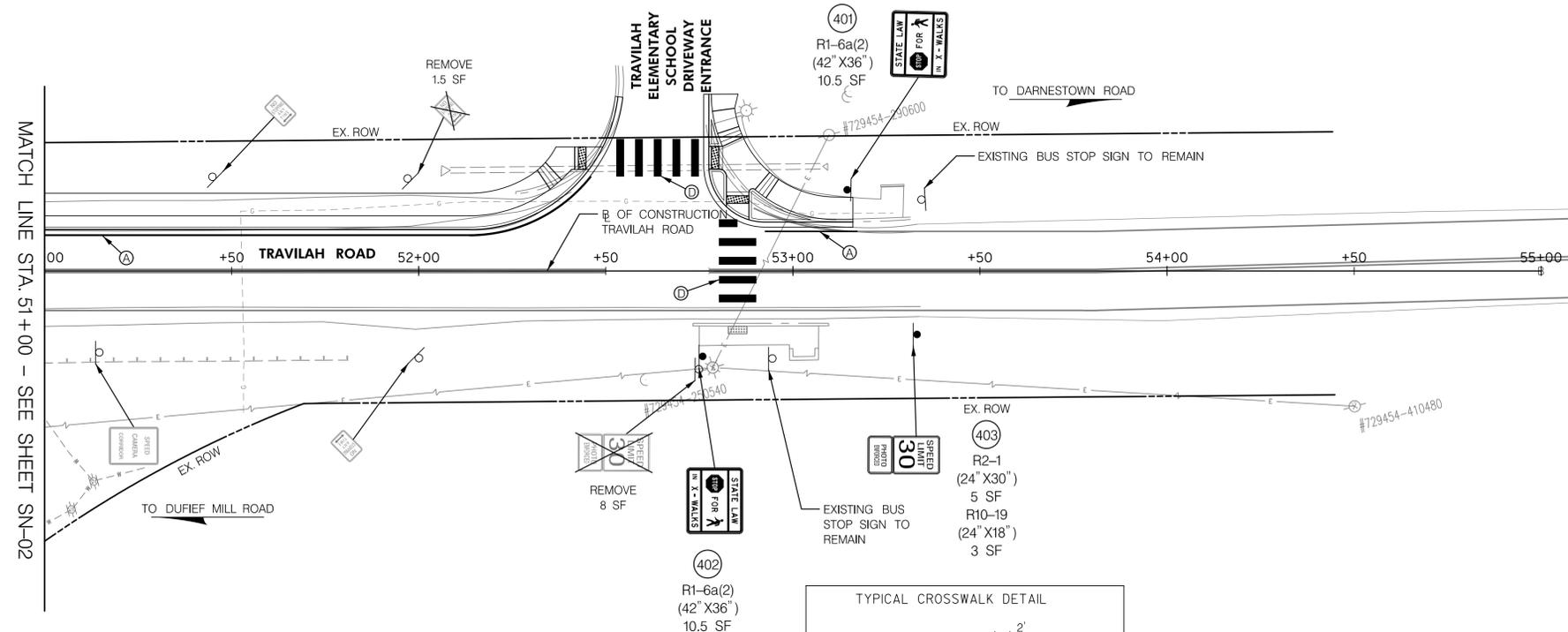
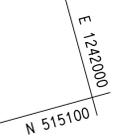
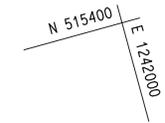
DEPARTMENT OF TRANSPORTATION  
DIVISION OF TRANSPORTATION ENGINEERING  
MONTGOMERY COUNTY, MARYLAND

SIGNING AND MARKING PLAN  
DUFIEF MILL ROAD/TRAVILAH ROAD  
FROM ELEMENTARY SCHOOL DRIVEWAY  
TO QUINCE ORCHARD ROAD  
PEDESTRIAN IMPROVEMENTS

SCALE: 1" = 20'

SN-03

BY: MisnerKA



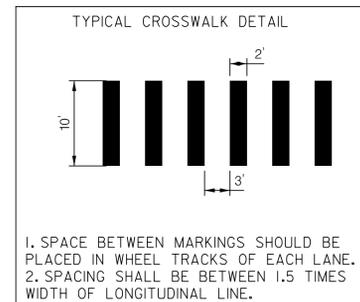
MATCH LINE STA. 51+00 - SEE SHEET SN-02

**PAVEMENT MARKING LEGEND**

- Ⓐ 5 INCH SOLID WHITE THERMOPLASTIC PAVEMENT MARKING
- Ⓑ 5 INCH WHITE THERMOPLASTIC PAVEMENT MARKING (3' STRIPE, 9' GAP, 3' STRIPE)
- Ⓒ 5 INCH SOLID DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKING
- Ⓓ 24 INCH SOLID WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING
- Ⓔ PERMANENT WHITE PREFORMED PAVEMENT MARKING LETTERS, SYMBOLS, ARROWS, AND NUMBERS
- Ⓕ REMOVAL OF EXISTING PAVEMENT MARKING LETTERS, SYMBOLS, ARROWS, AND NUMBERS
- Ⓖ REMOVE EXISTING PAVEMENT MARKING, ANY WIDTH

**GENERAL NOTES**

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3. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH MCDOT STANDARDS.
4. THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. IF ANY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
5. ALL PROPOSED SIGNS SHALL BE INSTALLED ON SQUARE PERFORATED TUBULAR STEEL SIGN POST(S).
6. ALL PAVEMENT MARKINGS LINE WIDTH DIMENSIONS ARE FROM CENTER OF MARKING TO FACE OF CURB/EDGE OF ROAD FOR INSIDE/OUTSIDE LANES AND FROM CENTER OF MARKING TO CENTER OF MARKING FOR ALL OTHERS.
7. THE CONTRACTOR SHALL INSTALL NEW RAISED PAVEMENT MARKERS (RPM'S) IN ACCORDANCE WITH FIGURE 3B-7b OF THE MD MUTCD.
8. THE CONTRACTOR SHALL REMOVE ALL EXISTING RAISED PAVEMENT MARKERS THAT CONFLICT WITH NEW PAVEMENT MARKINGS PER THE SPECIAL PROVISIONS IN THE I.F.B.



SIGNING LEGEND	
SYMBOL	
[Symbol: Ground mounted sign on post]	EXISTING GROUND MOUNTED SIGN AND SUPPORTS
[Symbol: Dashed ground mounted sign on post]	PROPOSED GROUND MOUNTED SIGN AND SUPPORTS
[Symbol: Solid rectangle]	EXISTING SIGN TO REMAIN
[Symbol: Dashed rectangle]	EXISTING SIGN TO BE REMOVED
[Symbol: Solid rectangle with border]	PROPOSED SIGN TO BE INSTALLED

NO.	REVISION	BY	DATE

Designed By KAM Drawn By KAM Checked By MCG

**SN-04**

**DEPARTMENT OF TRANSPORTATION  
DIVISION OF TRANSPORTATION ENGINEERING  
MONTGOMERY COUNTY, MARYLAND**

**SIGNING AND MARKING PLAN  
DUFIEF MILL ROAD/TRAVILAH ROAD  
FROM ELEMENTARY SCHOOL DRIVEWAY  
TO QUINCE ORCHARD ROAD  
PEDESTRIAN IMPROVEMENTS**

SCALE: 1"= 20'

BY: MisnerKA

