

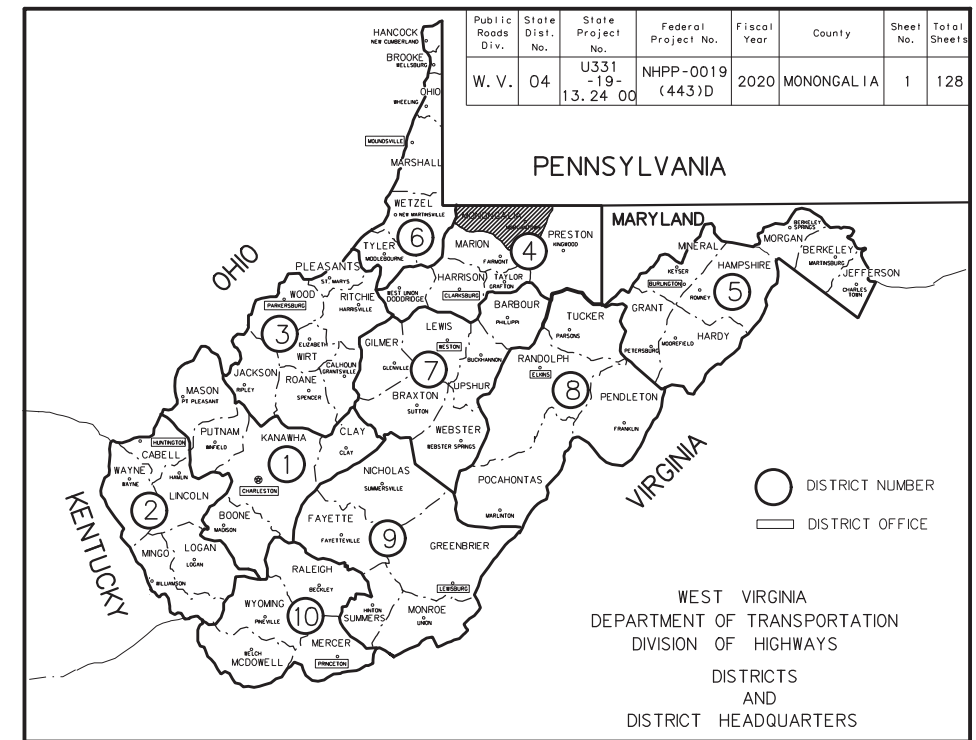
# WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANS FOR CONSTRUCTION

## OF STATE HIGHWAY

FEDERAL PROJECT NO. NHPP-0019(443)D  
STATE PROJECT NO. U331-19-13.24 00  
U.S. ROUTE NO. 19  
THIRD, FOURTH & FIFTH WARD DISTRICT  
MONONGALIA COUNTY

# BEECHURST AVENUE AT 6TH STREET

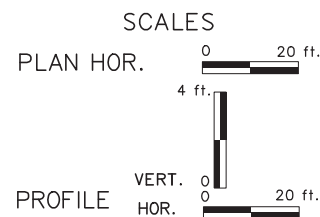
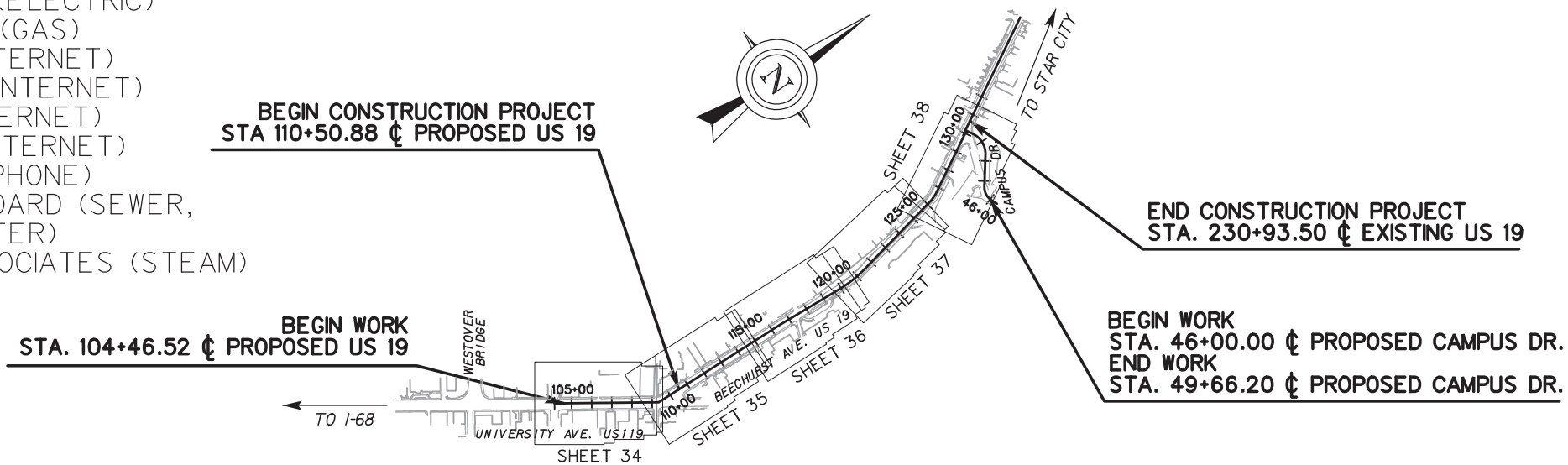
Station	Station	f.t.	mile(s)
ROADWAY 104+46.52	to 230+93.50	= 2,646.98	= 0.501
Total Project Length		= 2,646.98	= 0.501



TYPE OF CONSTRUCTION  
FINAL FIELD REVIEW PLANS

### UTILITIES

- COMCAST (CABLE)
- FIRSTENERGY CORP. (ELECTRIC)
- DOMINION HOPE (GAS)
- CITYNET, LLC (INTERNET)
- LUMOS NETWORKS (INTERNET)
- WINDSTREAM (INTERNET)
- ZAYO BANDWIDTH (INTERNET)
- FRONTIER (TELEPHONE)
- MORGANTOWN UTILITY BOARD (SEWER, STORM, & WATER)
- MORGANTOWN ENERGY ASSOCIATES (STEAM)



DESIGN DESIGNATION	
A . D . T (2018 -) 23,000 VPD	---
A . D . T (2038 -) 26,500 VPD	---
D . H . V (K+XX)	---
D	= XX / XX
T . (DHV)	= XX
V	= 25 mph

CONVENTIONAL SIGNS	
	STATE LINE
	COUNTY LINE
	CORPORATION LINE
	PROPOSED R/W & EASEMENT LINE
	EXISTING R/W LINE
	PROPERTY LINE
	EXISTING FENCE
	PROPOSED FENCE
	EDGE OF STREAM
	PROPOSED GUARD RAIL
	EXISTING GUARD RAIL
	RAILROAD
	GAS LINE
	WATER LINE
	TELEPHONE LINE
	ELECTRIC LINE
	TELEPHONE POLE
	POWER POLE
	COMBINED POWER AND TELEPHONE POLE
	TREE
	SHRUB
	RIGHT OF WAY MARKER

INDEX TO SHEETS	
NO.	DESCRIPTION
1	TITLE SHEET
2-4	TYPICAL SECTIONS
5-7	SUMMARY OF ESTIMATED QUANTITIES
8-11	QUANTITY TABLES
12	GENERAL NOTES
13	SURVEY REFERENCE POINTS
14	GEOMETRIC LAYOUT
15-16	INTERSECTION DETAILS
17-33	TEMPORARY TRAFFIC CONTROL PLANS
34-39	PLAN SHEETS
40-45	PROFILE SHEETS
46-48	DRAINAGE DETAIL SHEETS
49-53	UTILITY RELOCATION PLANS
54-63	EROSION AND SEDIMENT CONTROL PLANS
64-65	TRAFFIC SKETCH PLANS
66-75	SIGNING AND PAVEMENT MARKING PLANS
76-82	TRAFFIC SIGNAL PLANS
83-85	OWNERSHIP INDEX AND UTILITY INDEX
86-91	PROPERTY MAPS
92-128	CROSS SECTIONS

LAYOUT SCALE

REVISION NUMBER	SHEET NUMBER	REVISIONS	DATE	BY

I HEREBY CERTIFY THAT THIS IS A CORRECT COPY OF THE PLANS OF PROJECT U331-19-13.24.00, NHPP-0019.(443)D

EXECUTIVE SECRETARY  
DAY OF \_\_\_\_\_, 20\_\_\_\_\_

PLANS PREPARED BY  
**Stantec** STANTEC CONSULTING SERVICES INC.  
FAIRMONT, WV CHARLESTON, WV

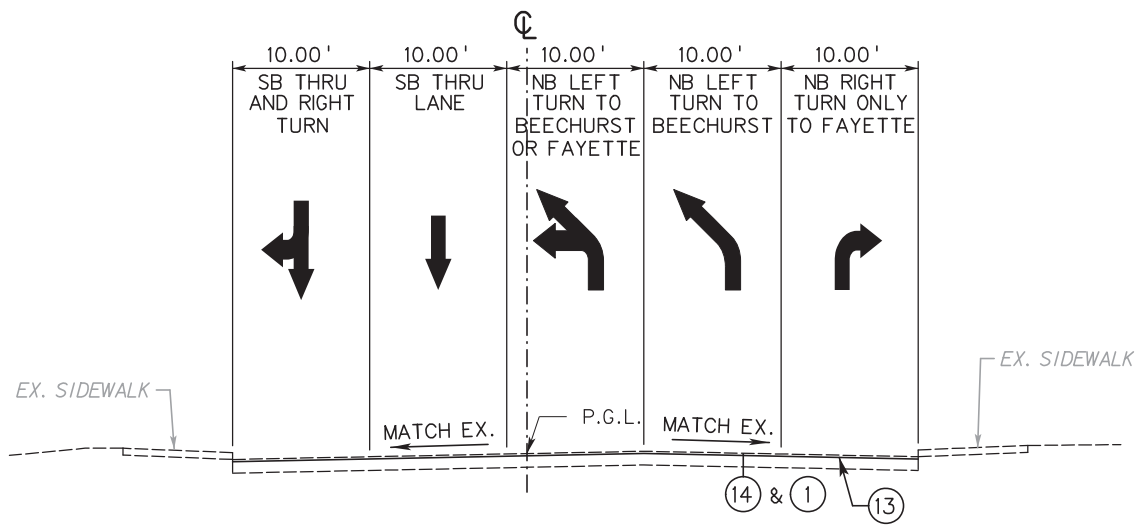
PROJECT ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

RECOMMENDED \_\_\_\_\_ PROJECT MANAGER \_\_\_\_\_

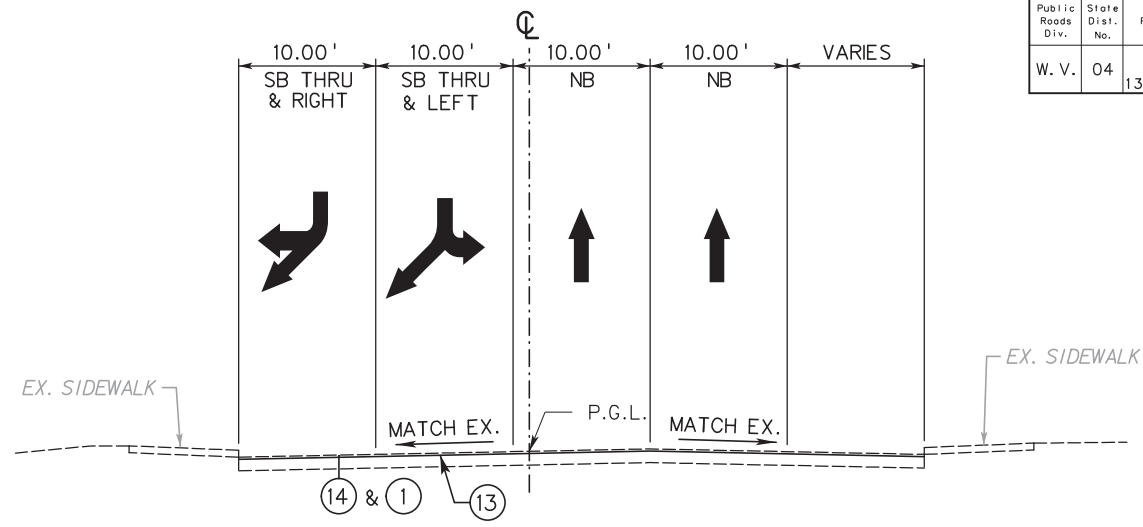
RECOMMENDED FOR APPROVAL \_\_\_\_\_ STATE HIGHWAY ENGINEER \_\_\_\_\_

APPROVED \_\_\_\_\_ COMMISSIONER OF HIGHWAYS \_\_\_\_\_

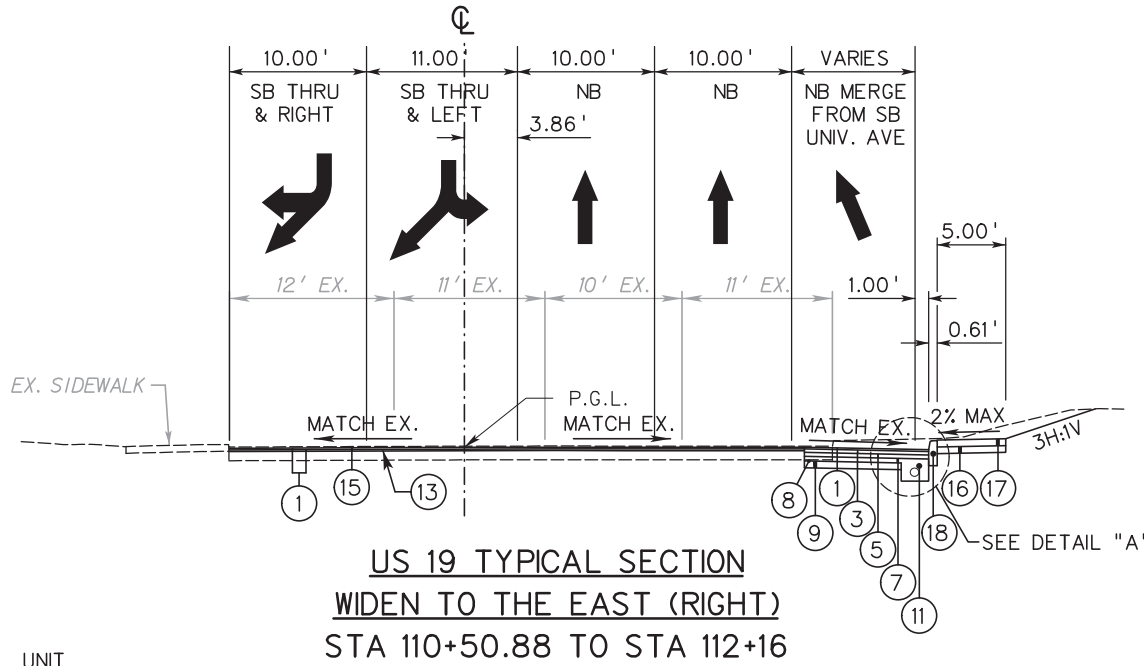
Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	2	128



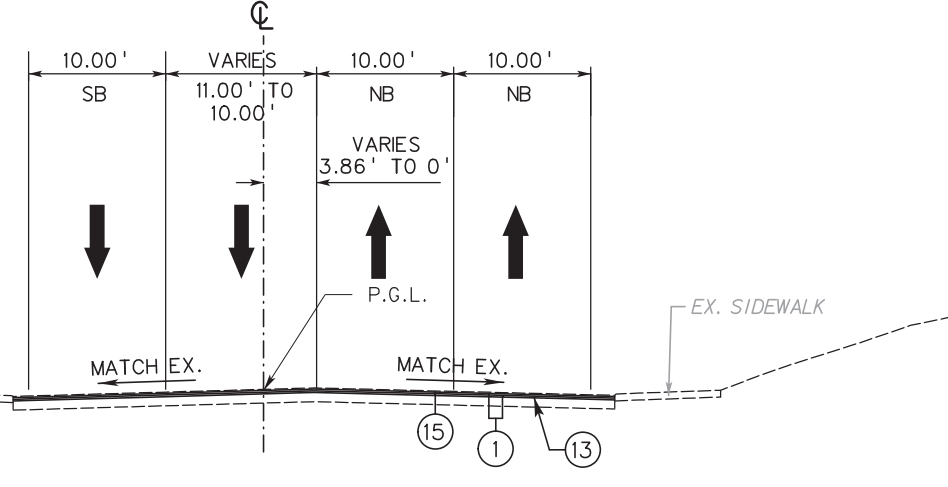
**US 19 (UNIVERSITY AVE) TYPICAL SECTION  
RESURFACING AND RESTRIPING  
STA 104+46.52 TO STA 109+00**



**US 19 (UNIVERSITY & BEECHURST INTERSEC) TYPICAL SECTION  
RESURFACING AND RESTRIPING  
STA 109+00 TO STA 110+50.88**



**US 19 TYPICAL SECTION  
WIDEN TO THE EAST (RIGHT)  
STA 110+50.88 TO STA 112+16**



**US 19 TYPICAL SECTION  
RESURFACING AND RESTRIPING  
STA 112+16 TO STA 117+80**

ITEM*	LEGEND DESCRIPTION	DEPTH	UNIT
1	402001-045 SUPERPAVE ASPHALT SKID PVT, SG, TY 12.5	1.5"	TN
2	402001-045 SUPERPAVE ASPHALT SKID PVT, SG, TY 12.5	1.75"	TN
3	401001-040 SUPERPAVE ASPHALT BASE COURSE, SG, TY 19	3"	TN
4	401001-040 SUPERPAVE ASPHALT BASE COURSE, SG, TY 19	2.25"	TN
5	401001-042 SUPERPAVE ASPHALT BASE COURSE, SG, TY 25	3.5"	TN
6	401001-042 SUPERPAVE ASPHALT BASE COURSE, SG, TY 25	3"	TN
7	311006-001 OPEN GRADED FREE DRAINING BASE COURSE	4"	CY
8	207034-000 FABRIC FOR SEPARATION	—	SY
9	207002-000 SUBGRADE	6"	CY
10	307001-000 AGGREGATE BASE COURSE, CLASS 1	4"	CY
11	606029-001 FREE DRAINING BASE TRENCH	—	LF
12	606030-001 OUTLET PIPE, 6 INCH	—	LF
13	408002-001 ASPHALT MATERIAL	—	GA
14	415005-001 STANDARD MILLING	1.5"	SY
15	415005-001 STANDARD MILLING	4"	SY
16	609002-001 BED COURSE MATERIAL	4"	CY
17	609001-001 CONCRETE SIDEWALK	4"	SY
18	610001-001 PLAIN CONCRETE CURBING, TYPE I	—	LF
19	610001-004 PLAIN CONCRETE CURBING, TYPE IV	—	LF

SCALE : NONE

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

DESIGNED	DATE
ALT	09/2020
DRAWN	
LNR	09/2020
CHECKED	
JDV	09/2020
CHECKED	

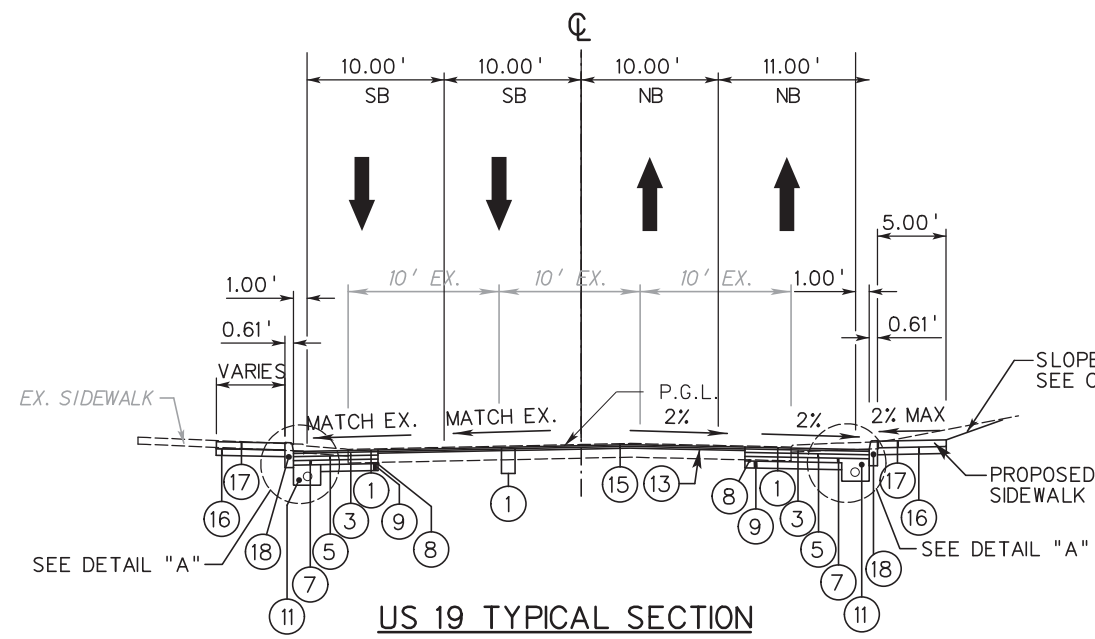


THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

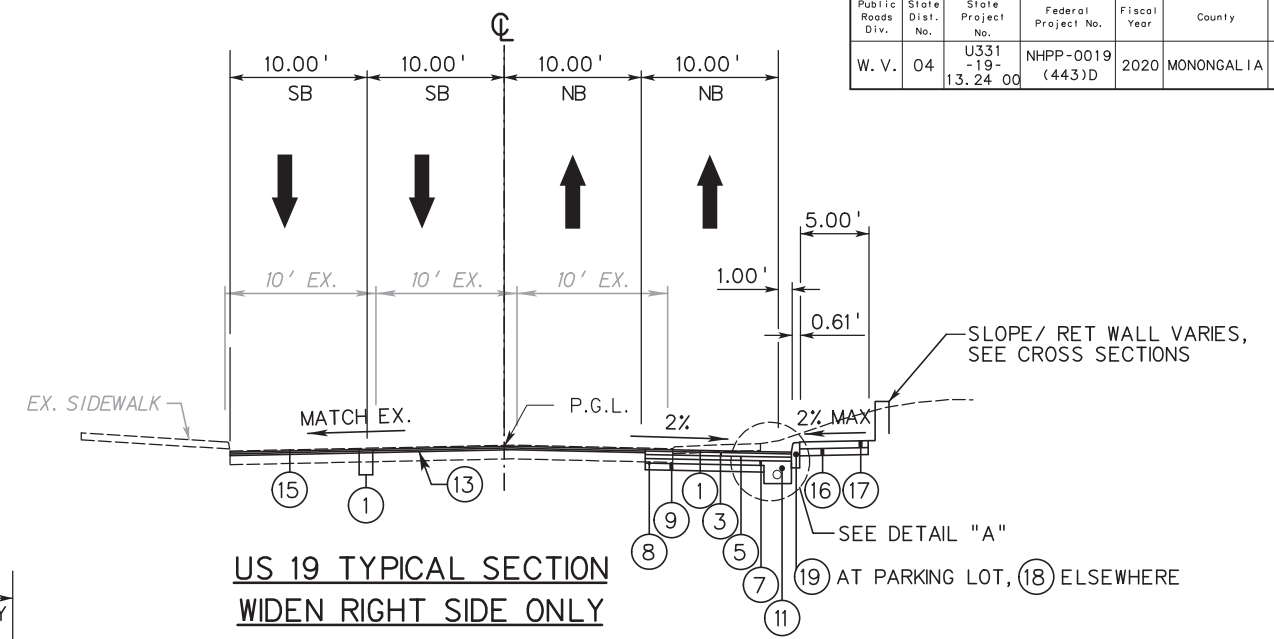
**TYPICAL SECTIONS**

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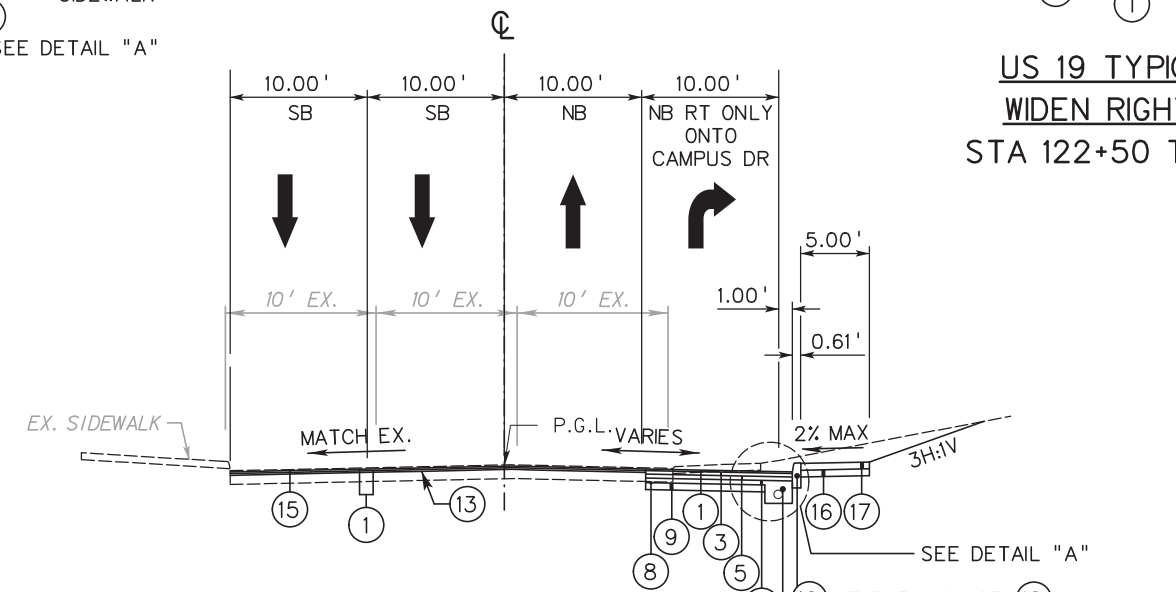
Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	3	128



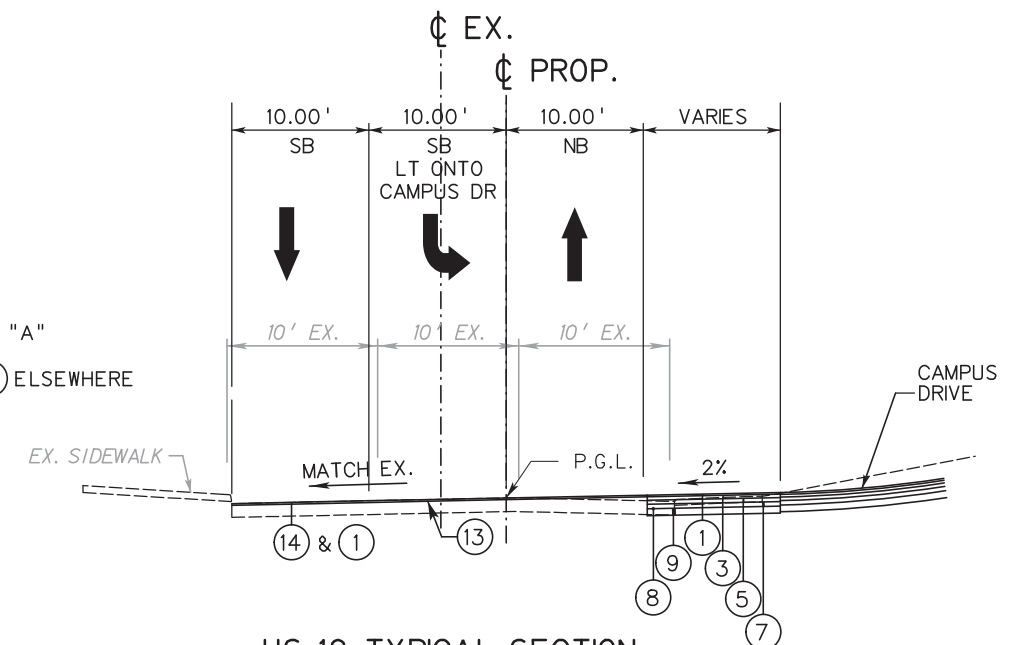
**US 19 TYPICAL SECTION**  
**WIDEN BOTH SIDES**  
**STA 117+80 TO STA 122+50**



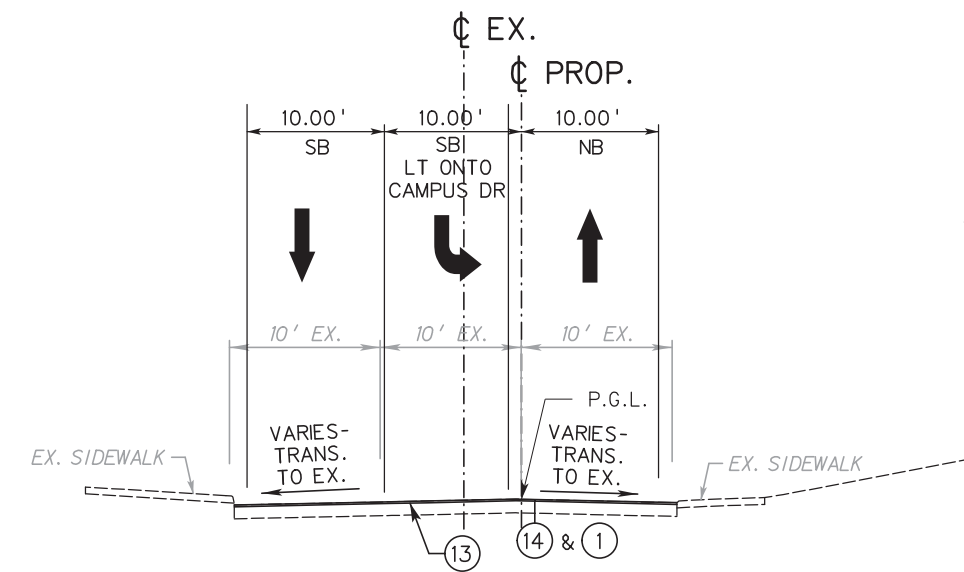
**US 19 TYPICAL SECTION**  
**WIDEN RIGHT SIDE ONLY**  
**STA 122+50 TO STA 128+60**



**US 19 TYPICAL SECTION**  
**WIDEN RIGHT SIDE ONLY**  
**STA 128+60 TO STA 129+50.75**



**US 19 TYPICAL SECTION**  
**WIDEN RIGHT SIDE ONLY**  
**STA 129+50.75 TO STA 230+50**



**US 19 TYPICAL SECTION**  
**RESURFACING AND RESTRIPIING**  
**STA 230+50 TO STA 230+93.50**

SCALE : NONE

ITEM*	DESCRIPTION	DEPTH	UNIT
1	SUPERPAVE ASPHALT SKID PVT, SG, TY 12.5	1.5"	TN
2	SUPERPAVE ASPHALT SKID PVT, SG, TY 12.5	1.75"	TN
3	SUPERPAVE ASPHALT BASE COURSE, SG, TY 19	3"	TN
4	SUPERPAVE ASPHALT BASE COURSE, SG, TY 19	2.25"	TN
5	SUPERPAVE ASPHALT BASE COURSE, SG, TY 25	3.5"	TN
6	SUPERPAVE ASPHALT BASE COURSE, SG, TY 25	3"	TN
7	OPEN GRADED FREE DRAINING BASE COURSE	4"	CY
8	FABRIC FOR SEPARATION	—	SY
9	SUBGRADE	6"	CY
10	AGGREGATE BASE COURSE, CLASS 1	4"	CY
11	FREE DRAINING BASE TRENCH	—	LF
12	OUTLET PIPE, 6 INCH	—	LF
13	ASPHALT MATERIAL	—	GA
14	STANDARD MILLING	1.5"	SY
15	STANDARD MILLING	4"	SY
16	BED COURSE MATERIAL	4"	CY
17	CONCRETE SIDEWALK	4"	SY
18	PLAIN CONCRETE CURBING, TYPE I	—	LF
19	PLAIN CONCRETE CURBING, TYPE IV	—	LF

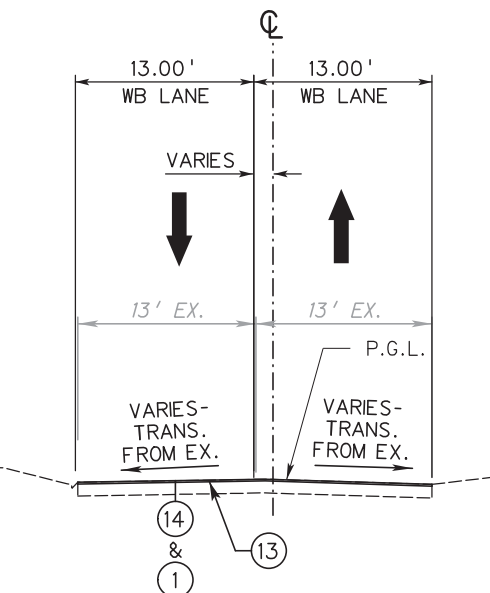
DESIGNED	ALT	DATE
09/2020		
DRAWN	LNR	09/2020
CHECKED	JDV	09/2020
CHECKED		



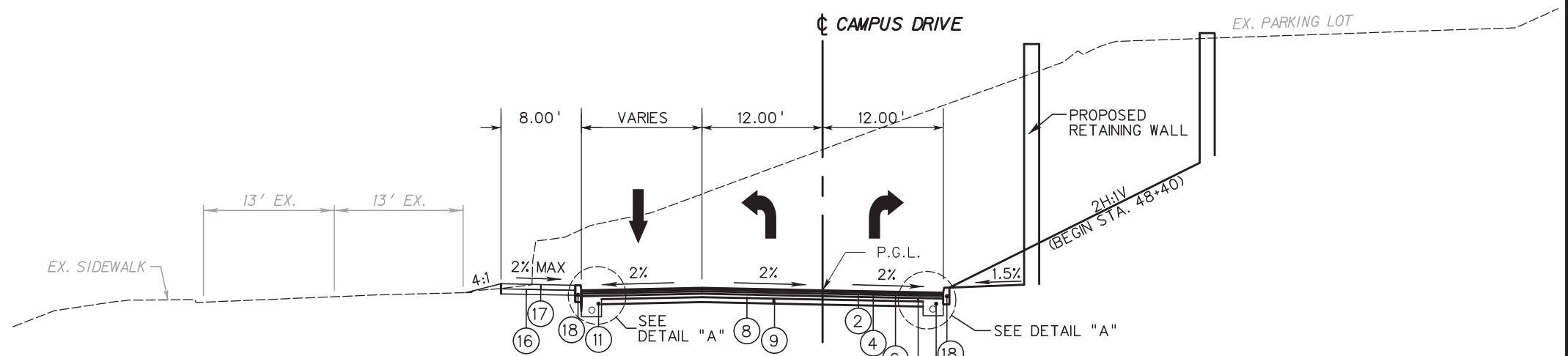
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

**TYPICAL SECTIONS**

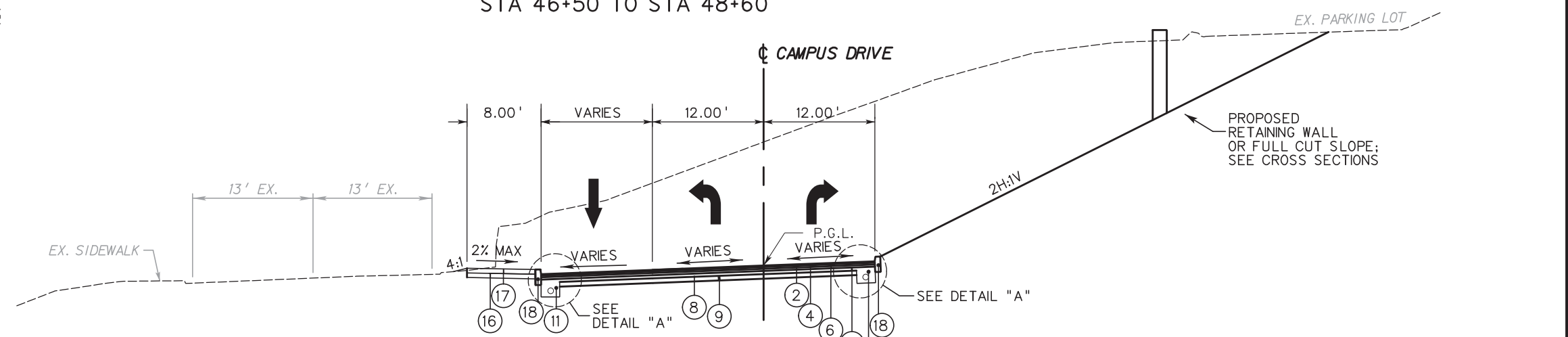
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



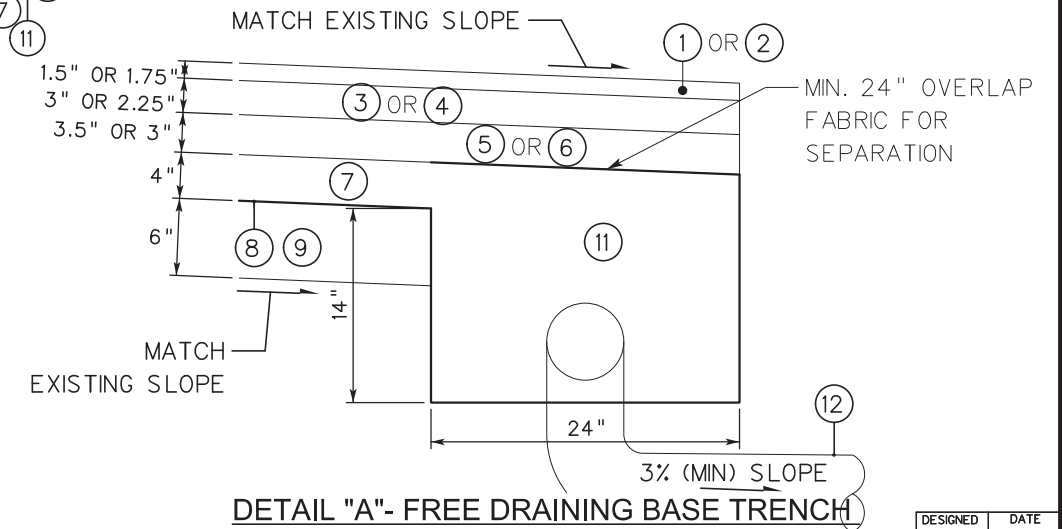
**CAMPUS DR. TYPICAL SECTION  
RESURFACING AND RESTRIPING  
STA 46+00 TO STA 46+50**



**CAMPUS DR. TYPICAL SECTION  
REALIGN TO THE NORTH (RIGHT)  
STA 46+50 TO STA 48+60**

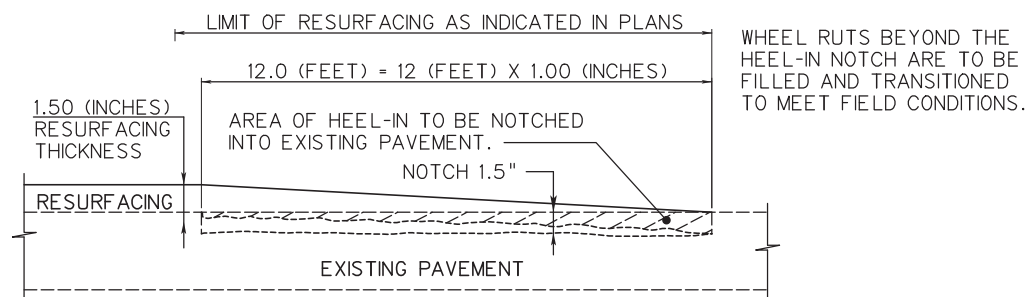


**CAMPUS DR. TYPICAL SECTION  
REALIGN TO THE NORTH (RIGHT)  
STA 48+60 TO STA 49+66.20**



**DETAIL "A"- FREE DRAINING BASE TRENCH**

ITEM*	LEGEND DESCRIPTION	DEPTH	UNIT
①	402001-045 SUPERPAVE ASPHALT SKID PVT, SG, TY 12.5	1.5"	TN
②	402001-045 SUPERPAVE ASPHALT SKID PVT, SG, TY 12.5	1.75"	TN
③	401001-040 SUPERPAVE ASPHALT BASE COURSE, SG, TY 19	3"	TN
④	401001-040 SUPERPAVE ASPHALT BASE COURSE, SG, TY 19	2.25"	TN
⑤	401001-042 SUPERPAVE ASPHALT BASE COURSE, SG, TY 25	3.5"	TN
⑥	401001-042 SUPERPAVE ASPHALT BASE COURSE, SG, TY 25	3"	TN
⑦	311006-001 OPEN GRADED FREE DRAINING BASE COURSE	4"	CY
⑧	207034-000 FABRIC FOR SEPARATION	—	SY
⑨	207002-000 SUBGRADE	6"	CY
⑩	307001-000 AGGREGATE BASE COURSE, CLASS 1	4"	CY
⑪	606029-001 FREE DRAINING BASE TRENCH	—	LF
⑫	606030-001 OUTLET PIPE, 6 INCH	—	LF
⑬	408002-001 ASPHALT MATERIAL	—	GA
⑭	415005-001 STANDARD MILLING	1.5"	SY
⑮	415005-001 STANDARD MILLING	4"	SY
⑯	609002-001 BED COURSE MATERIAL	4"	CY
⑰	609001-001 CONCRETE SIDEWALK	4"	SY
⑱	610001-001 PLAIN CONCRETE CURBING, TYPE I	—	LF
⑲	610001-004 PLAIN CONCRETE CURBING, TYPE IV	—	LF



**RE-SURFACING HEEL-IN DETAIL**

PAYMENT FOR HEEL-IN TO BE INCLUDED IN VARIOUS PAY ITEMS OF THIS PROJECT.

THIS DETAIL TO BE USED AT THE FOLLOWING LOCATIONS:

- STA. 104+46.52 TO STA. 104+58.52
- STA. 230+81.50 TO STA. 230+93.50
- STA. 46+00.00 TO STA. 46+12.00

SCALE : NONE

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**TYPICAL SECTIONS**

DESIGNED	DATE
ALT	09/2020
DRAWN	DATE
LNR	09/2020
CHECKED	DATE
JDV	09/2020
CHECKED	

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**PROPOSED US 19**

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	14	128



**BEGIN WORK STA. 104+46.52**  $\zeta$  PROPOSED US 19

**NO-CURVE P.I. #1**

PI = STA. 109+32.76  
 $\Delta$  = 31° 49' 21.10" (LT)

**CURVE #1 DATA**

PI = STA. 116+48.51  
 $\Delta$  = 1° 37' 02.50" (RT)  
 D = 5° 43' 46.48"  
 T = 14.12  
 L = 28.23  
 R = 1000.00  
 E = 0.10

**CURVE #2 DATA**

PI = STA. 120+67.37  
 $\Delta$  = 14° 53' 30.87" (LT)  
 D = 9° 49' 39.90"  
 T = 76.19  
 L = 151.53  
 R = 583.00  
 E = 4.96

**CURVE #3 DATA**

PI = STA. 126+46.02  
 $\Delta$  = 18° 14' 32.00" (LT)  
 D = 28° 30' 19.31"  
 T = 32.27  
 L = 64.00  
 R = 201.00  
 E = 2.57

COORDINATES		
LOCATION	NORTHING	EASTING
US 19		
POB 104+15.00	412135.67	1839599.45
BEGIN WORK 104+46.52	412161.86	1839616.98
NO-CURVE P.I. #1 109+32.76	412565.89	1839887.52
BEGIN CONSTR. PROJECT 110+50.88	412683.94	1839891.61
PC#1 116+34.40	413267.11	1839911.80
PI#1 116+48.51	413281.22	1839912.29
PT#1 116+62.62	413295.30	1839913.18
PC#2 119+91.18	413623.21	1839933.81
PI#2 120+67.37	413699.25	1839938.6
PT#2 121+42.71	413773.97	1839923.68
PC#3 126+13.75	414235.90	1839831.46
PI#3 126+46.02	414267.54	1839825.14
PT#3 126+77.74	414295.62	1839809.23
POE 130+14.65/ $\zeta$ PROP CAMPUS DR	414588.75	1839643.16

CONTROL POINTS			
NO.	ELEV.	DESCRIPTION	LOCATION
CP-10000	862.13	IRON PIN	24.83' LT STA. 231+51.24 $\zeta$ EX. US 19
CP-20000	862.95	IRON PIN	38.95' RT STA. 117+08.83 $\zeta$ PROP. US 19
CP-30000	858.73	IRON PIN	27.66' LT STA. 111+65.80 $\zeta$ PROP. US 19

**EXISTING US 19**

COORDINATES		
LOCATION	NORTHING	EASTING
US 19		
POB 230+14.65/ $\zeta$ PROP CAMPUS DR	414585.71	1839637.78
END CONSTR. PROJECT 230+93.50	414654.30	1839598.91

**BEGIN CONSTRUCTION PROJECT STA 110+50.88**  $\zeta$  PROPOSED US 19

**PROPOSED CAMPUS DRIVE**

**CURVE #4 DATA**

PI = STA. 46+35.53  
 $\Delta$  = 58° 52' 34.01" (RT)  
 D = 76° 23' 39.74"  
 T = 42.33'  
 L = 77.07'  
 R = 75.00'  
 E = 11.12'

**CURVE #5 DATA**

PI = STA. 49+02.94  
 $\Delta$  = 65° 42' 33.70" (LT)  
 D = 52° 05' 13.46"  
 T = 71.04'  
 L = 126.15'  
 R = 110.00'  
 E = 20.94'

COORDINATES		
LOCATION	NORTHING	EASTING
CAMPUS DRIVE		
POB 45+60.00	414508.22	1840027.74
PC#4 45+93.20	414495.41	1839997.11
BEGIN WORK 46+00.00	414493.07	1839990.73
PI#4 46+35.53	414479.08	1839958.06
PT#4 46+70.27	414504.06	1839923.89
PC#5 48+31.90	414599.47	1839793.42
PI#5 49+02.94	414641.40	1839736.08
PT#5 49+58.06	414606.38	1839674.27
END WORK 49+66.20	414602.36	1839667.18
49+93.82 ( $\zeta$ PROP. US 19)	414588.75	1839643.16
POE 50+00.00/ $\zeta$ EX. US 19	414585.71	1839637.78

**BEGIN WORK STA. 46+00.00**  $\zeta$  PROPOSED CAMPUS DR

**STA 130+14.65**  $\zeta$  PROPOSED US 19 -  
**STA 49+93.82**  $\zeta$  PROPOSED CAMPUS DR

**STA 50+00.00**  $\zeta$  PROPOSED CAMPUS DR -  
**STA 230+14.65**  $\zeta$  EXISTING US 19

**END CONSTRUCTION PROJECT STA. 230+93.50**  $\zeta$  EXISTING US 19

**END WORK STA. 49+66.20**  $\zeta$  PROPOSED CAMPUS DR

DESIGNED	ALT	DATE
DRAWN	LNR	09/2020
CHECKED	JDV	09/2020
CHECKED		



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

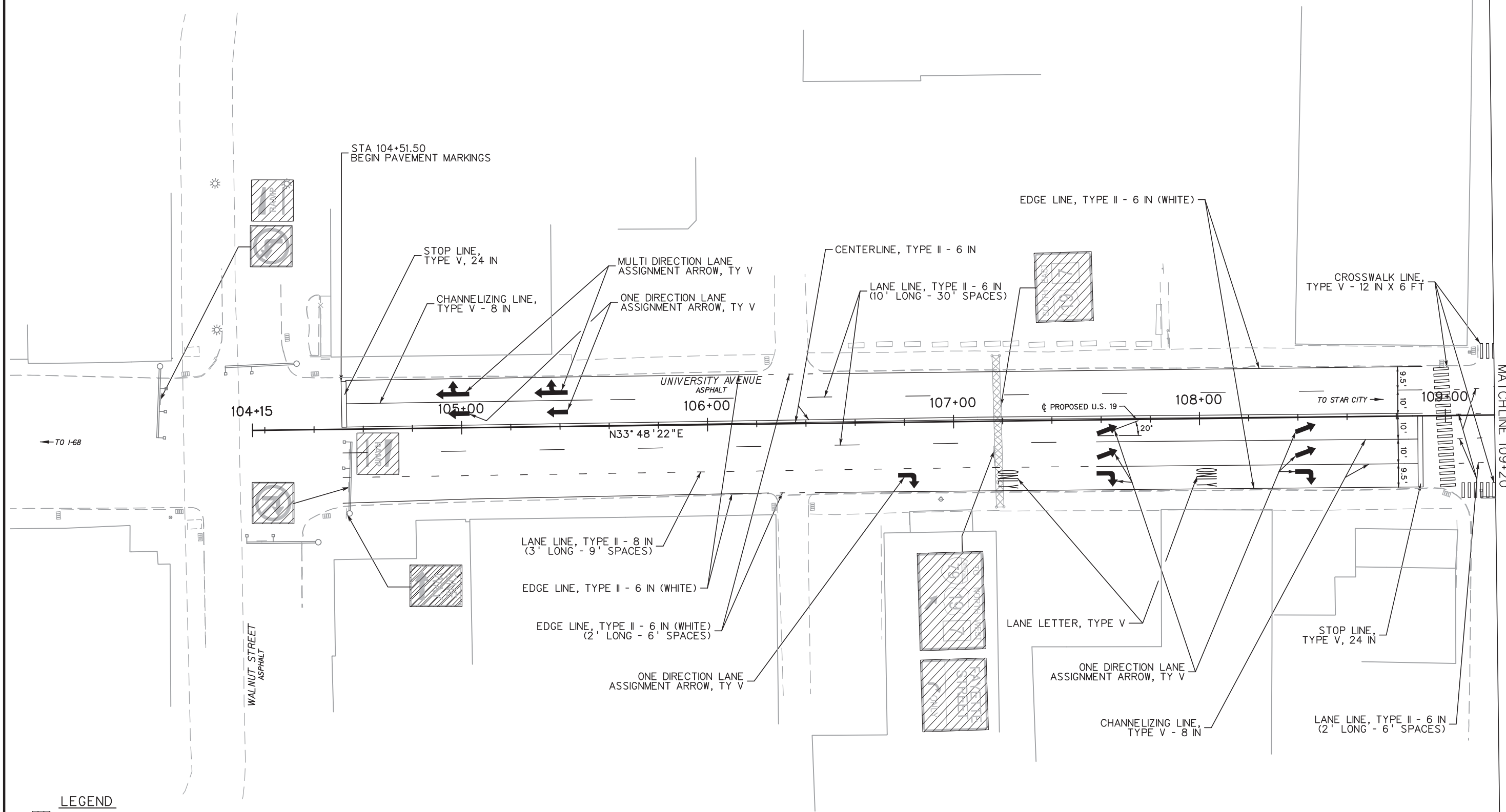
**GEOMETRIC LAYOUT**

SCALE : 0 100 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

09/10/2020

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24 00	NHPP-0019 (443)D	2020	MONONGALIA	69	128



- LEGEND**
- EXISTING SIGN TO REMAIN (STR)
  - REMOVE AND SAVE (REUSE)
  - NEW SUPPORTS
  - EXISTING SUPPORTS
  - EXISTING SUPPORTS TO BE REMOVED OR DISCARDED
  - ASSEMBLY NUMBER

**S-4**

DESIGNED	ALT	DATE
		09/2020
DRAWN	LNR	DATE
		09/2020
CHECKED	JDV	DATE
		09/2020
CHECKED		



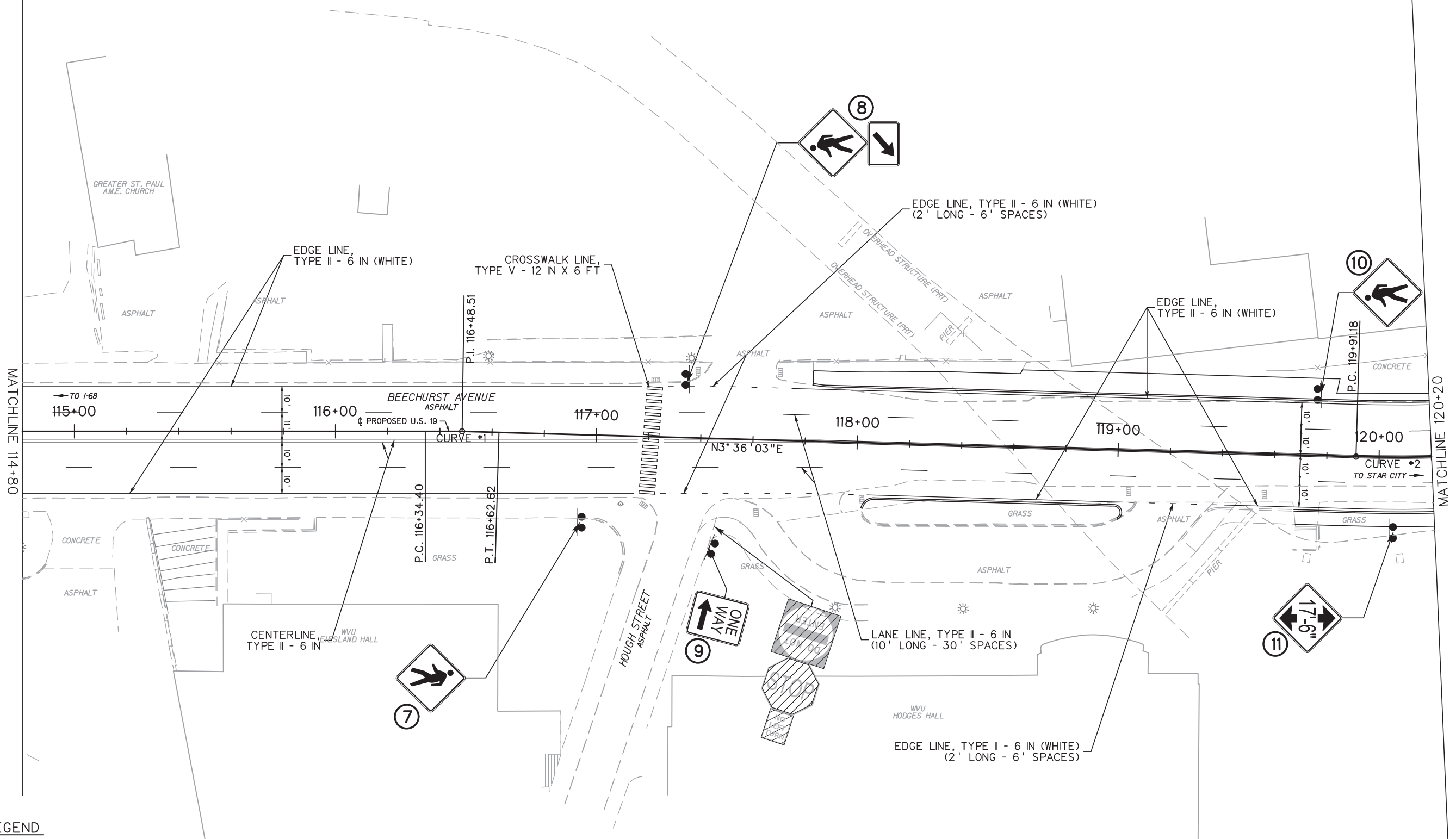
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**SIGNING & PAVEMENT MARKING PLAN**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	71	128



- LEGEND**
- EXISTING SIGN TO REMAIN (STR)
  - REMOVE AND SAVE (REUSE)
  - NEW SUPPORTS
  - EXISTING SUPPORTS
  - EXISTING SUPPORTS TO BE REMOVED OR DISCARDED
  - ASSEMBLY NUMBER

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**SIGNING & PAVEMENT MARKING PLAN**

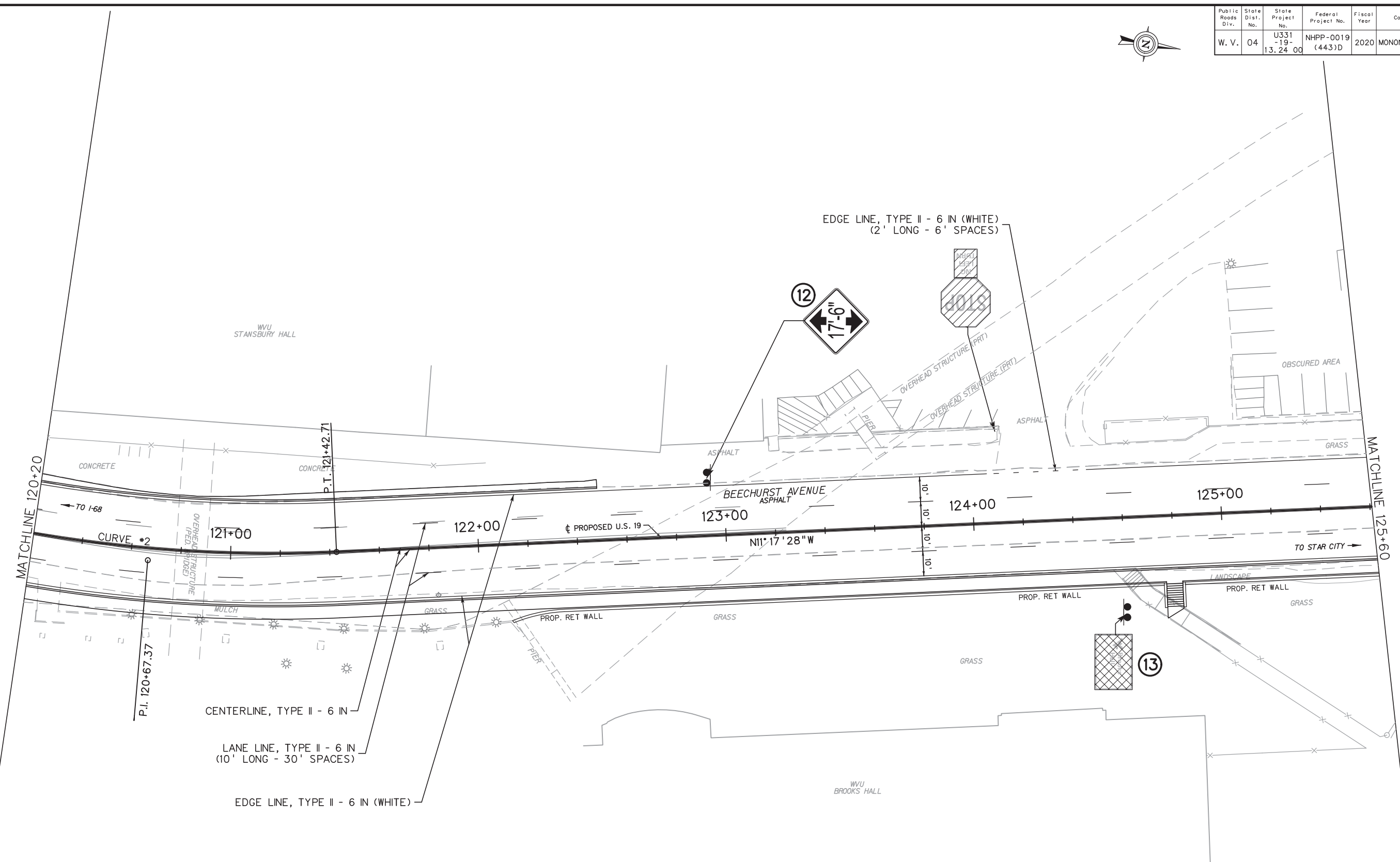
DESIGNED	DATE
ALT	09/2020
DRAWN	LNR
CHECKED	JDV
CHECKED	

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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	72	128



- LEGEND**
- EXISTING SIGN TO REMAIN (STR)
  - REMOVE AND SAVE (REUSE)
  - NEW SUPPORTS
  - EXISTING SUPPORTS
  - EXISTING SUPPORTS TO BE REMOVED OR DISCARDED
  - ASSEMBLY NUMBER

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



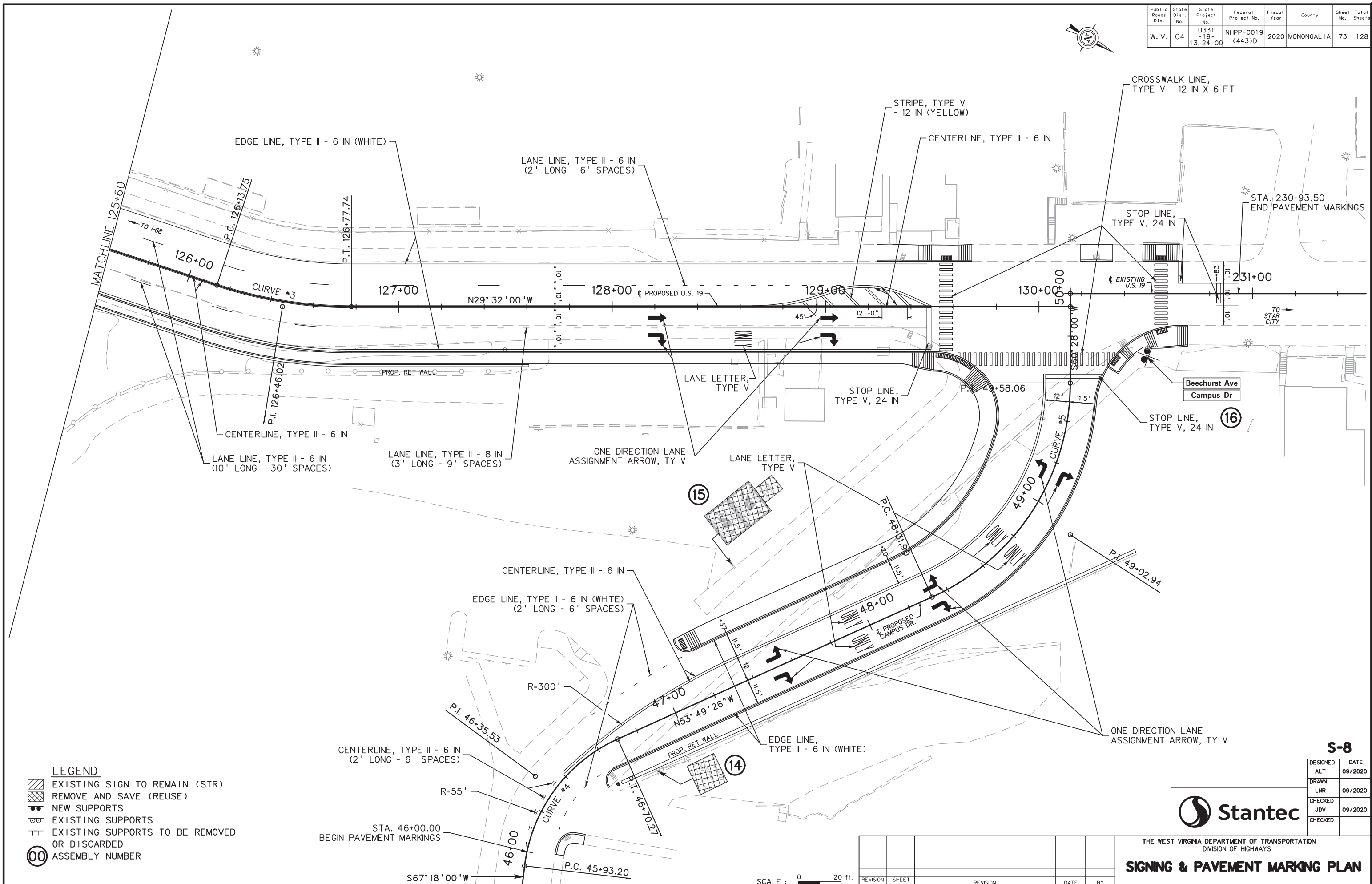
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**SIGNING & PAVEMENT MARKING PLAN**

DESIGNED	DATE
ALT	09/2020
DRAWN	LNR
CHECKED	JDV
CHECKED	

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Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	04	U331-19-13.24.00	NHPP-0019(443)D	2020	MONONGALIA	73	128



**LEGEND**

	EXISTING SIGN TO REMAIN (STR)
	REMOVE AND SAVE (REUSE)
	NEW SUPPORTS
	EXISTING SUPPORTS
	EXISTING SUPPORTS TO BE REMOVED OR DISCARDED
	ASSEMBLY NUMBER

**S-8**

DESIGNED	ALT	DATE	09/2020
DRAWN	LNR	DATE	09/2020
CHECKED	JDV	DATE	09/2020
CHECKED			



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**SIGNING & PAVEMENT MARKING PLAN**

SCALE : 0 20 ft.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY