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CONTRACT: C204117 TIP PROJECT: I-5825

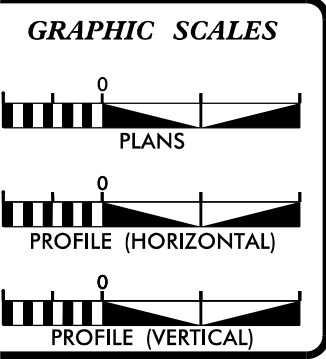
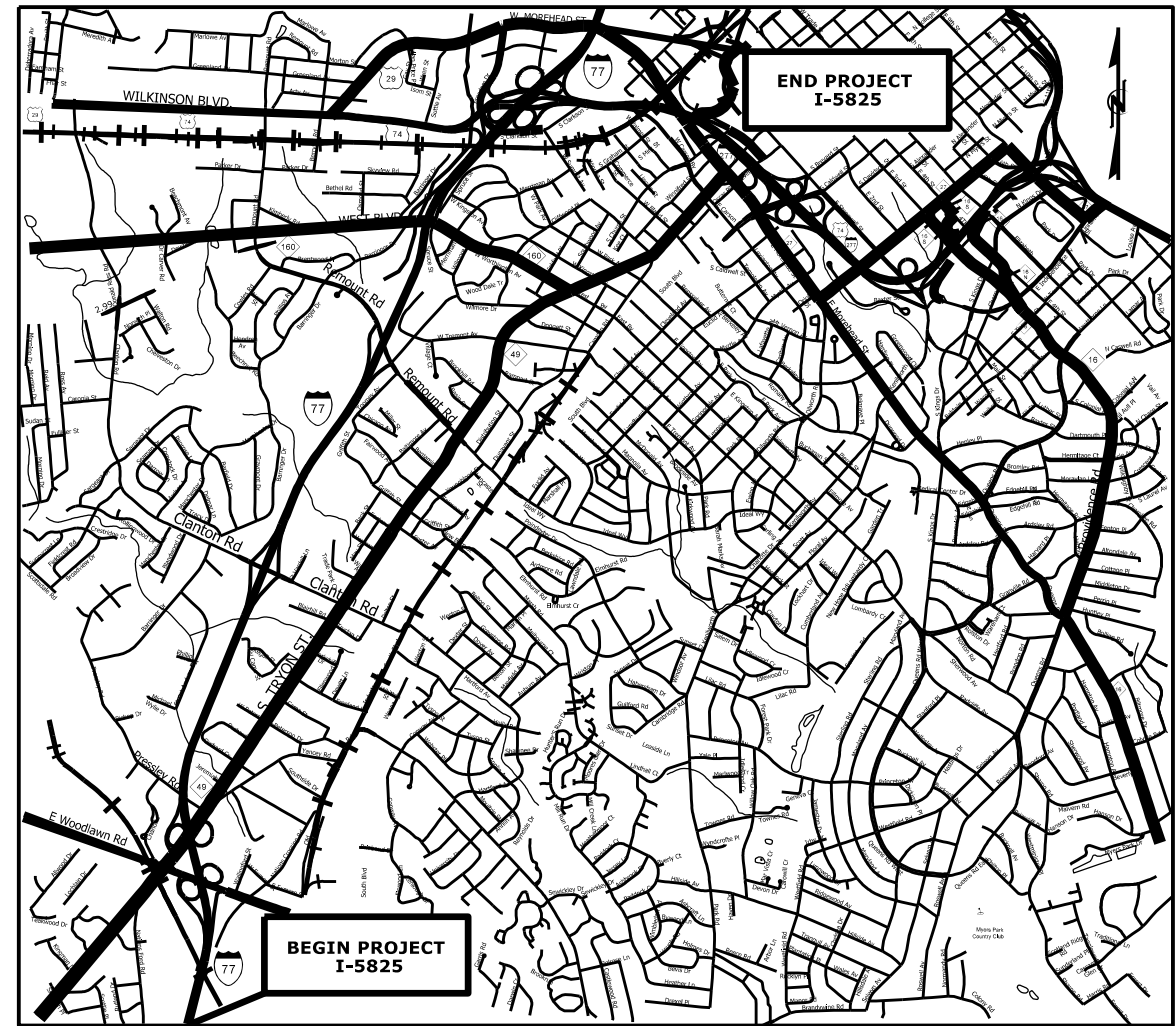
STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

MECKLENBURG COUNTY

LOCATION: I-77 FROM PAVEMENT JOINT JUST NORTH OF TYVOLA ROAD BRIDGE DECK OVER W. MOREHEAD STREET
 MM 5.3 TO MM 9.8

TYPE OF WORK: MILLING AND PAVING WITH HOT MIX ASPHALT
 CONCRETE PAVEMENT REPAIR PAVEMENT MARKINGS
 SNOWPLOWABLE PAVEMENT MARKERS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5825	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
50468.3.1	NHPIM-0077(013)		



DESIGN DATA

ADT 2016	=	160,000
ADT	=	
K	=	%
D	=	%
T	=	% *
V	=	55 MPH
* TTST	=	DUAL

PROJECT LENGTH

LENGHT OF ROADWAY PROJECT 50468.3.1 = 4.7 MILES
 TOTAL LENGHT OF STATE PROJECT 50468.3.1 = 4.7 MILES

Prepared in the Office of:
DIVISION OF HIGHWAYS
 DIVISION 10

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: N/A	JOHN EDMONDS PROJECT ENGINEER
LETTING DATE: MAY 15, 2018	JOHN EDMONDS PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

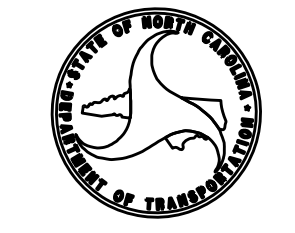
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ROADWAY DESIGN ENGINEER

P.E.

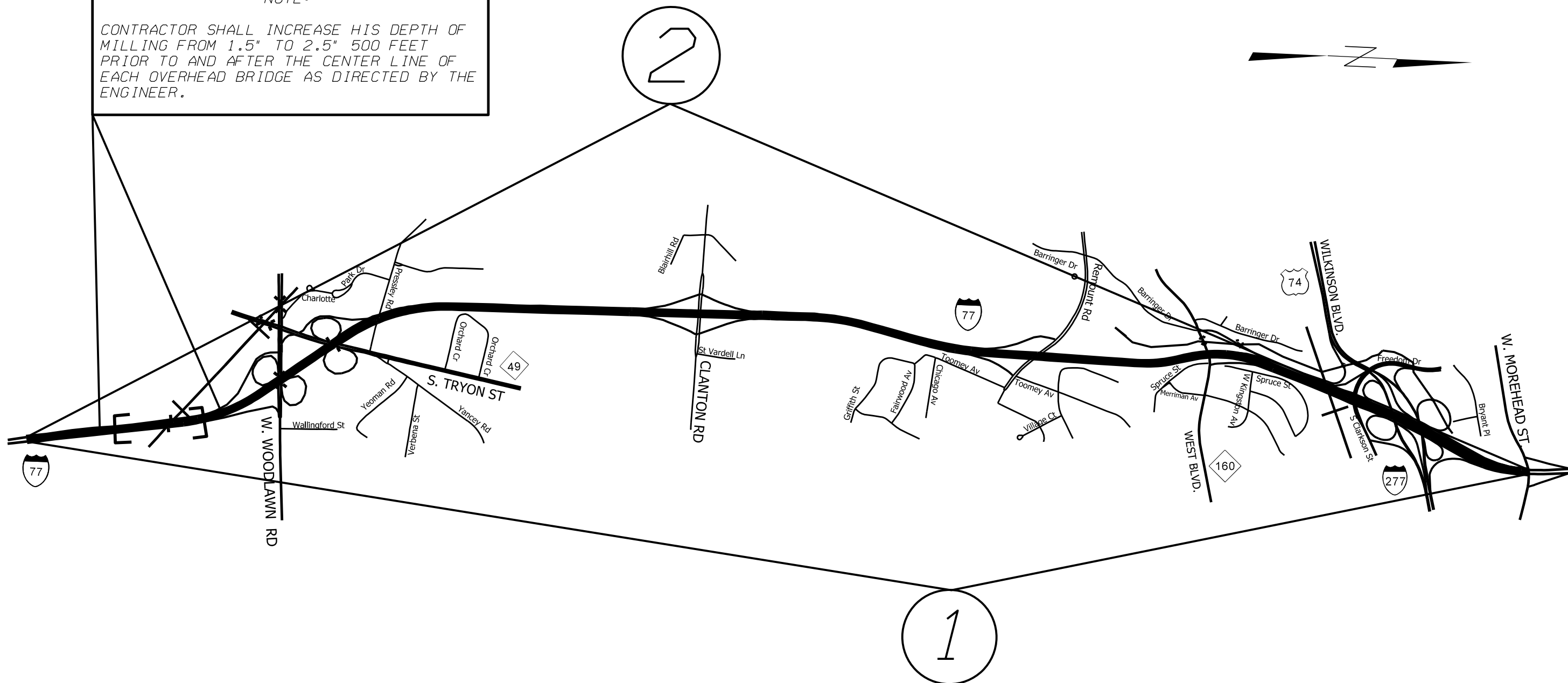
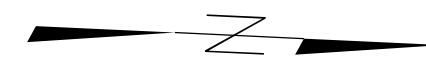
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STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5825		
WBS NO. 50468.3.1			

NOTE:

CONTRACTOR SHALL INCREASE HIS DEPTH OF MILLING FROM 1.5" TO 2.5" 500 FEET PRIOR TO AND AFTER THE CENTER LINE OF EACH OVERHEAD BRIDGE AS DIRECTED BY THE ENGINEER.



WORK AREA

DESCRIPTION

1 I-77 NORTH BOUND

FROM PAVEMENT JOINT NORTH OF TYVOLA RD. (MM 5.3) NB TO OVERPASS BRIDGE AT W. MOREHEAD ST. (MM 9.8), (SEE TYPICAL 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11)

2 I-77 SOUTH BOUND

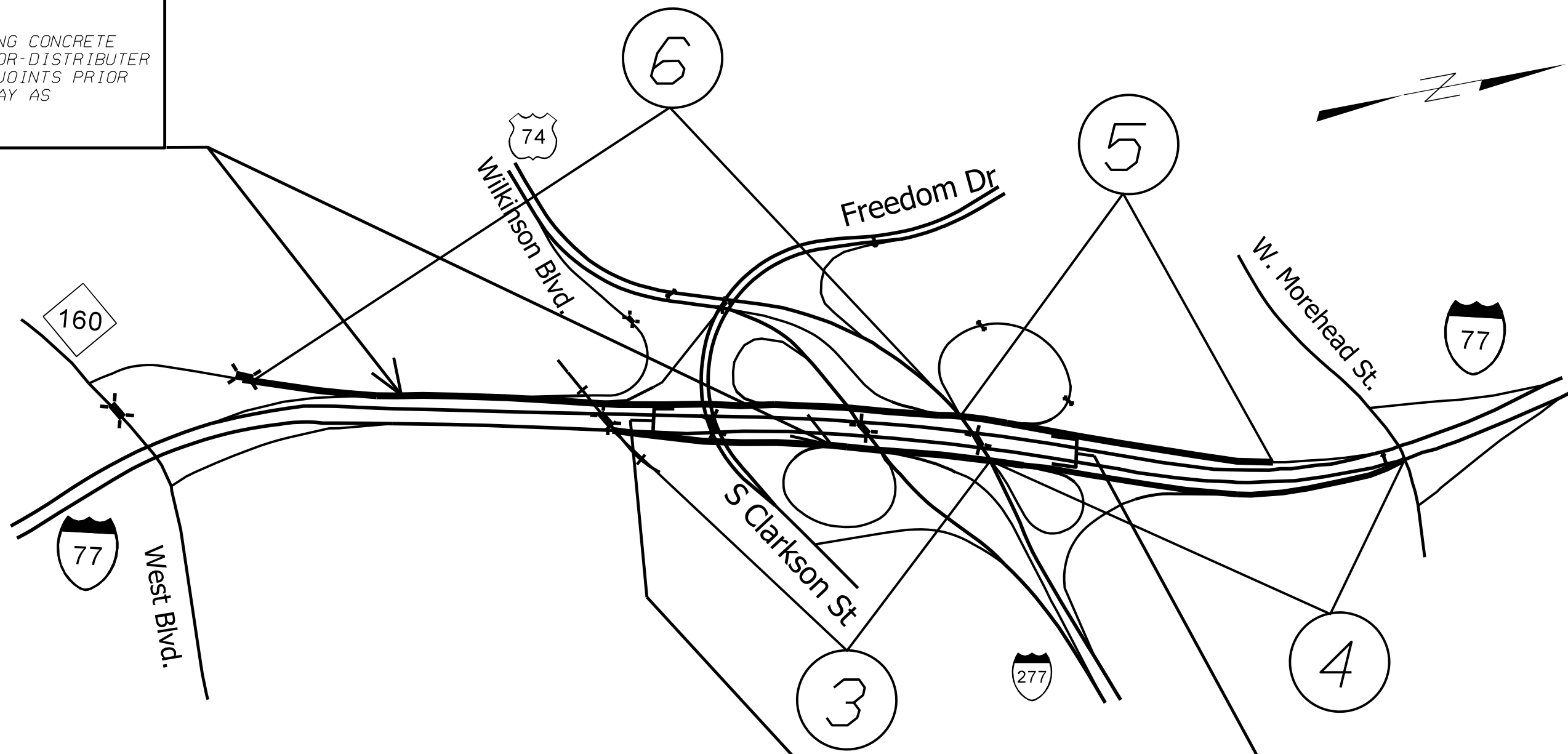
FROM OVERPASS BRIDGE AT W. MOREHEAD ST. (MM 20.47) SB TO PAVEMENT JOINT NORTH OF TYVOLA RD. (MM 24.96), (SEE TYPICAL 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11)

I-5825
I-77 PAVEMENT PRESERVATION

SCALE	-NA-		REVISIONS
DATE	9/17		2/13/18
DWG. BY	JHE		
DESIGN BY	JHE		
APPROVED			

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	1-5825		
WBS NO. 50468.3.1			

NOTE:
MILLING DOWN TO THE EXISTING CONCRETE ROADWAY WITHIN THE COLLECTOR-DISTRIBUTER AREA, REPAIR ALL CONCRETE JOINTS PRIOR TO RESTORING ASPHALT OVERLAY AS DIRECTED BY THE ENGINEER.




WORK AREA

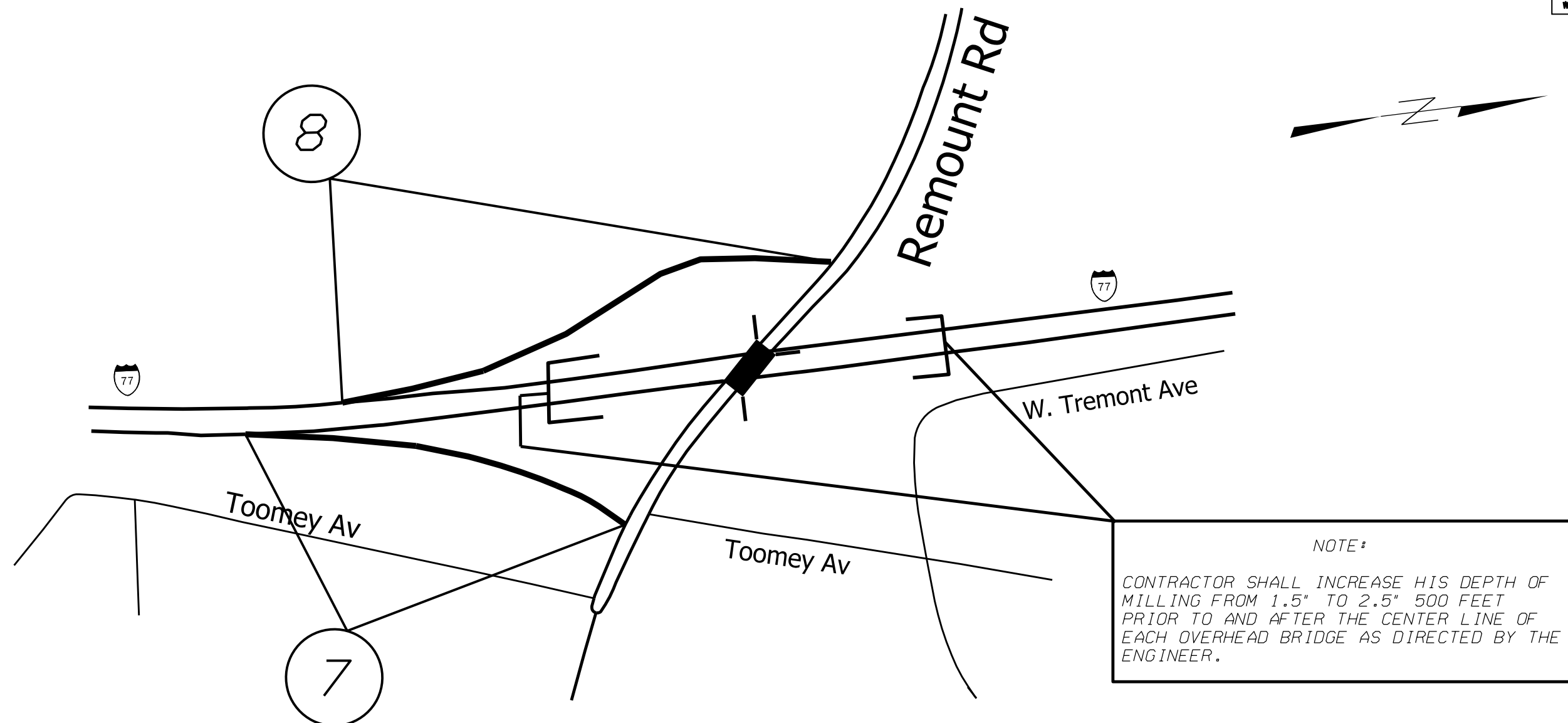
- #3 NORTH BOUND COLLECTOR ROAD FROM PHYSICAL GORE TO WEST BOUND WILKINSON BLVD BRIDGE APPROXIMATELY 1065 FT MILL & FILL 1.5" S9.5D (SEE TYPICAL #7)
- #4 NORTH BOUND COLLECTOR ROAD FROM WEST BOUND WILKINSON BLVD BRIDGE TO W. MOREHEAD ST. BRIDGE APPROXIMATELY 1717 FT MILL 4" AND FILL WITH 2.5" OF I19.0C AND 1.5" OF S9.5D, (SEE TYPICAL #6)
- #5 SOUTH BOUND COLLECTOR ROAD FROM PHYSICAL GORE 720 FEET SOUTH TO WEST BOUND WILKINSON BLVD OVERHEAD SIGN MILL 4" AND FILL WITH 2.5" OF I19.0C AND 1.5" OF S9.5D, (SEE TYPICALS #6, #10)
- #6 SOUTH BOUND COLLECTOR RD FROM WEST BOUND WILKINSON BLVD OVERHEAD SIGN TO PHYSICAL GORE AREA FOR MAINLINE AND WEST BLVD RAMPS. MILL 1.5" AND FILL WITH 1.5" OF S9.5D, (SEE TYPICAL #7)

NOTE:
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1-5825
1-77 PAVEMENT PRESERVATION

SCALE	-MA-		REVISIONS
DATE	9/17		2/13/18
DWG. BY	JHE		
DESIGN BY	JHE		
APPROVED			

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NOTE:
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WORK AREA

DESCRIPTION


#7 I-77 NB OFF RAMP

FROM PHYSICAL GORE TO REMOUNT RD. APPROX. 557 FEET REMOVE ASPHALT OVERLAY AND REPAIR CONCRETE PAVEMENT AND ASPHALT SHOULDER. (SEE TYPICAL # 12, # 13, # 14)

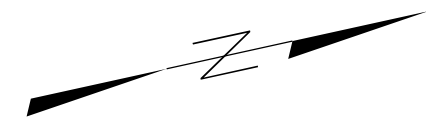
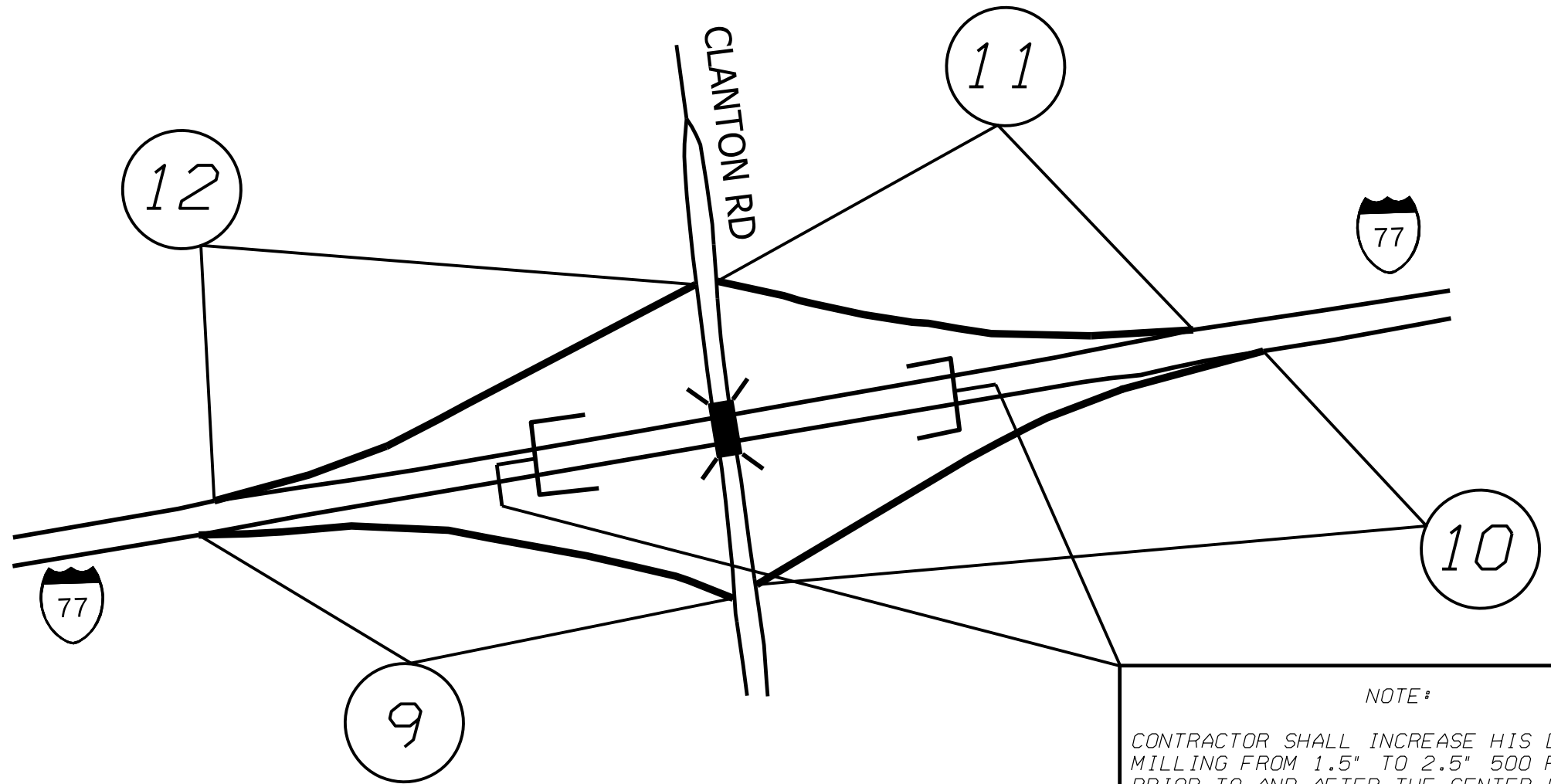
#8 I-77 SB ON RAMP

FROM REMOUNT RD. TO PHYSICAL GORE APPROX. 990 FEET REPAIR CONCRETE PAVEMENT AND ASPHALT SHOULDERS. (SEE TYPICAL # 13, # 14)

1-5825 I-77 PAVEMENT PRESERVATION		
SCALE	-NA-	REVISIONS
DATE	9/17	2/13/18
DWG. BY	JME	
DESIGN BY	JME	
APPROVED		



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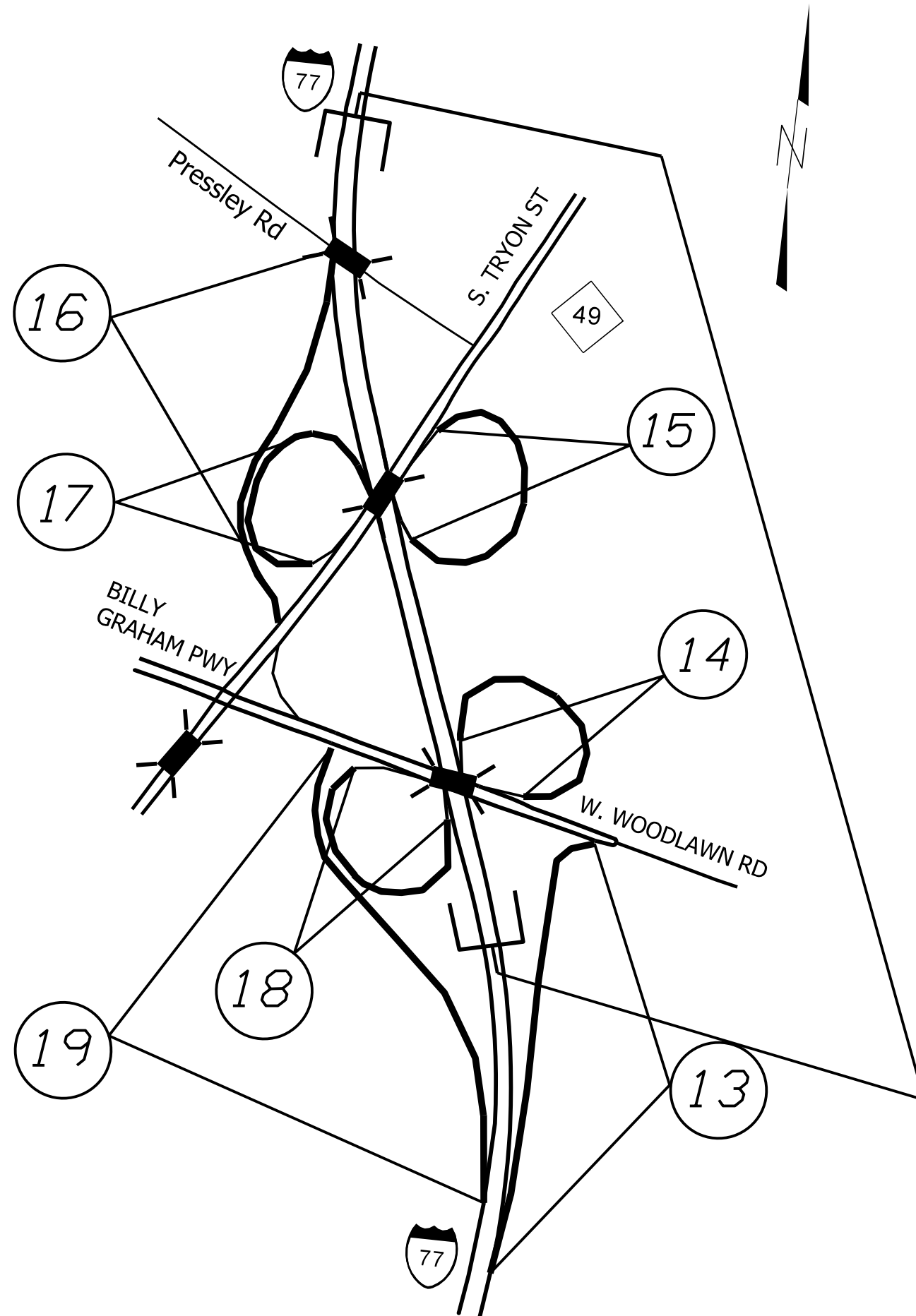
NOTE:
 CONTRACTOR SHALL INCREASE HIS DEPTH OF MILLING FROM 1.5" TO 2.5" 500 FEET PRIOR TO AND AFTER THE CENTER LINE OF EACH OVERHEAD BRIDGE AS DIRECTED BY THE ENGINEER.

WORK AREA	DESCRIPTION
# 9 I-77 NB OFF RAMP	FROM PHYSICAL GORE TO CLANTON RD. (SEE TYPICAL # 16)
# 10 I-77 NB ON RAMP	FROM CLANTON RD. TO PHYSICAL GORE REPAIR CONCRETE PAVEMENT AND ASPHALT SHOULDER. SEE (TYPICAL # 14)
# 11 I-77 SB OFF RAMP	FROM PHYSICAL GORE TO CLANTON RD. (SEE (TYPICAL # 16)
# 12 I-77 SB ON RAMP	FROM CLANTON ROAD TO PHYSICAL GORE SEE (TYPICAL # 16)

I-5825
I-77 PAVEMENT PRESERVATION

SCALE	-NA-		REVISIONS
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DWG. BY	JHE		
DESIGN BY	JHE		
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WORK AREA

DESCRIPTION

- # 13 I-77 OFF RAMP
FROM PHYSICAL GORE APPROX. 815 FEET TO WOODLAWN RD. REPAIR CONCRETE PAVEMENT AND ASPHALT SHOULDER SEE (TYPICAL # 13, # 14, FOR RADIUS RELOCATION, TYPICAL # 18)
- # 14 I-77 LOOP OFF RAMP
FROM PHYSICAL GORE APPROX. 818 FEET TO WOODLAWN RD. REPAIR CONCRETE PAVEMENT AND ASPHALT SHOULDER. (SEE TYPICAL # 23)
- # 15 I-77 LOOP ON RAMP
FROM WOODLAWN RD APPROX. 1005 FEET TO PHYSICAL GORE REPAIR CONCRETE PAVEMENT AND ASPHALT SHOULDER. (SEE TYPICAL # 23)
- # 16 I-77 OFF RAMP
FROM PHYSICAL GORE APPROX. 1060 FEET TO SOUTH TRYON ST. REPAIR CONCRETE PAVEMENT AND ASPHALT SHOULDER. (SEE TYPICAL # 13, # 15, # 22)
- # 17 I-77 LOOP ON RAMP
FROM SOUTH TRYON ST. PAVEMENT JOINT APPROX. 615 FEET TO PHYSICAL GORE CONCRETE PAVEMENT REPAIR AND ASPHALT SHOULDER REPAIR. (SEE TYPICAL # 22, # 23)
- # 18 I-77 LOOP OFF RAMP
FROM BEYOND PHYSICAL GORE TO TOP OF RAMP APPROX. 875 FEET (SEE TYPICAL # 17, # 19, # 20, # 22)
- # 19 I-77 ON RAMP
OVERLAY ENTIRE LENGTH OF RAMP APPROX. 1353 FEET FROM WOODLAWN TO PHYSICAL GORE (SEE TYPICAL # 20, # 21)

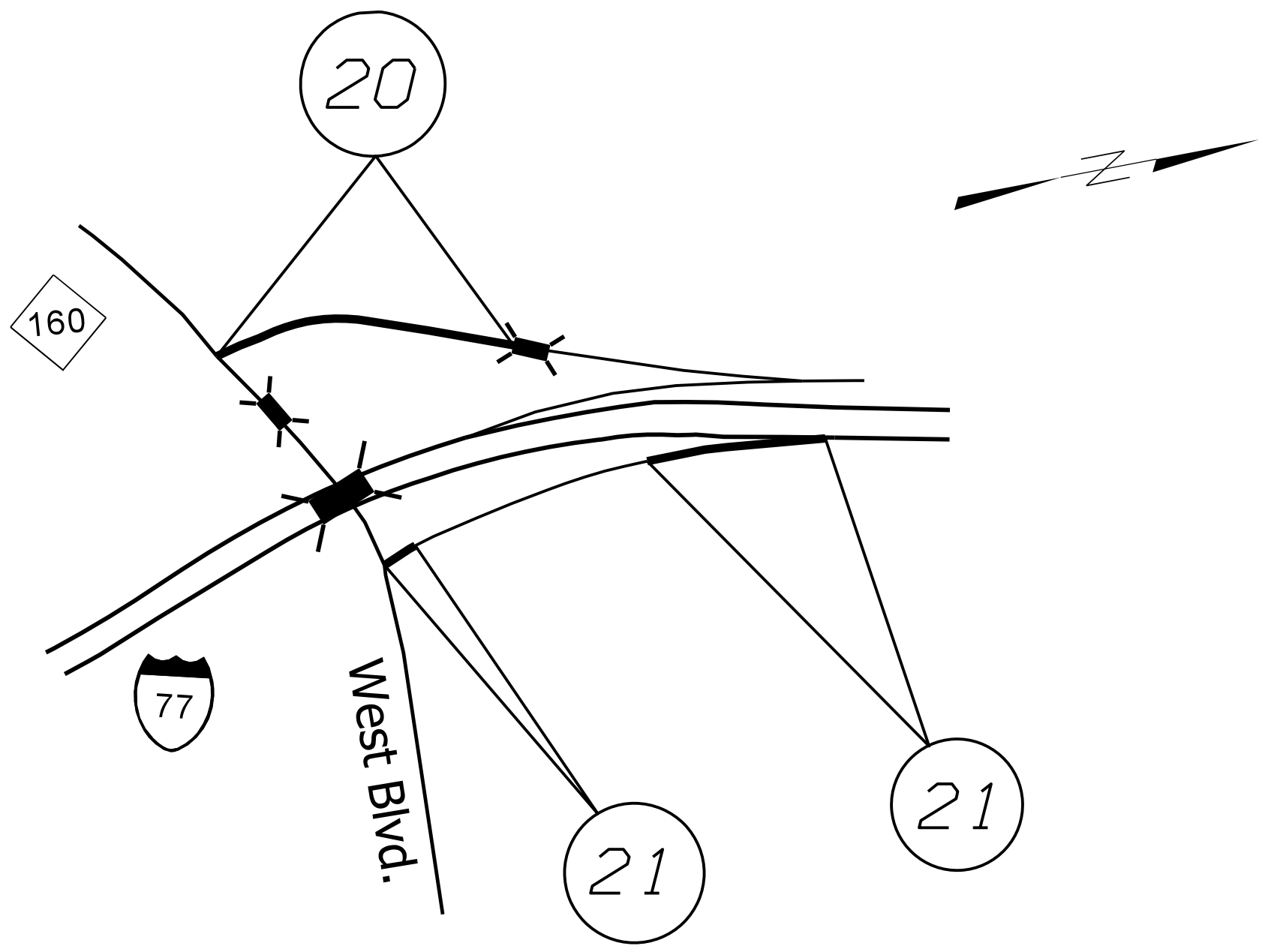
NOTE:

CONTRACTOR SHALL INCREASE HIS DEPTH OF MILLING FROM 1.5" TO 2.5" 500 FEET PRIOR TO AND AFTER THE CENTER LINE OF EACH OVERHEAD BRIDGE AS DIRECTED BY THE ENGINEER.

1-5825
I-77 PAVEMENT PRESERVATION

SCALE	-NA-		REVISIONS
DATE	9/17		2/13/18
DWG. BY	JHE		
DESIGN BY	JHE		
APPROVED			

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WORK AREA

DESCRIPTION

20 OFF RAMP TO WEST BLVD

FROM BRIDGE DECK TO WEST BLVD. REPAIR CONCRETE PAVEMENT AND ASPHALT SHOULDER SEE (TYPICAL # 13, # 14)

21 ON RAMP TO NB I-77

REPAIR CONCRETE PAVEMENT FROM ASPHALT JOINT FOR APPROX. 30 FEET UP RAMP (SEE TYPICAL # 24)

21 ON RAMP TO NB I-77

PAVE 80 FEET PRIOR TO PHYSICAL GORE, BUILD UP PAVEMENT TO MATCH MAINLINE GRADE AND SUPER, (SEE TYPICAL # 20)

I-5825
I-77 PAVEMENT PRESERVATION

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GENERAL NOTES:

MAINLINE TYPICALS INCLUDE ACCELERATION AND DECELERATION LANES FOR THE RAMPS UP TO THE PHYSICAL GORE. THESE TYPICALS GENERALLY DEPICT MILLING 1.5" AND THEN PAVING ASPHALT CONCRETE SURFACE COURSE S9.5D AT A DEPTH OF 2.0" FOR THE FULL WIDTH OF THE ROADWAY TO INCLUDE SHOULDERS.

THE ULTRATHIN BONDED WEARING COURSE ARE INTENDED TO BE PLACED IN THE TRAVEL LANES AND GORE AREAS BUT NOT ON THE SHOULDERS.

RAMP TYPICALS ARE APPLICABLE BETWEEN PHYSICAL GORE AND INTERSECTING Y-LINE EDGE OF TRAVEL. ULTRATHIN BONDED WEARING COURSE IS NOT INTENDED TO BE PLACED ON THE RAMPS BETWEEN THE PHYSICAL GORE AND THE INTERSECTING Y-LINE.

MAINLINE TYPICALS ON I-77 NORTHBOUND AND SOUTHBOUND DIRECTION INCLUDE THE BRIDGES AT WILKINSON BLVD INTERCHANGE, REMOUNT RD, CLANTON RD, PRESSLEY RD, SOUTH TRYON ST, WOODLAWN RD, AND TWO RAILROAD BRIDGES. THE COMBINATION OF MILLING AND REPLACING ASPHALT PAVEMENT TO THE EXISTING GRADE IS NECESSARY TO MAINTAIN THE EXISTING BRIDGE CLEARANCE.

THE CONTRACTOR SHALL INCREASE HIS MILLING DEPTH FROM 1.5" TO 2.5" 500 FEET PRIOR TO AND AFTER THE CENTER LINE OF EACH OVERHEAD BRIDGE, IN ORDER TO MAINTAIN THE EXISTING BRIDGE CLEARANCE.

THE MILLING AND PAVEMENT STRUCTURE OF THE MAINLINE TRAVEL LANES SHALL BE THE CONTROLLING GRADE. ALL OTHER MILLING AND PAVING SHALL TIE-IN ACCORDINGLY.

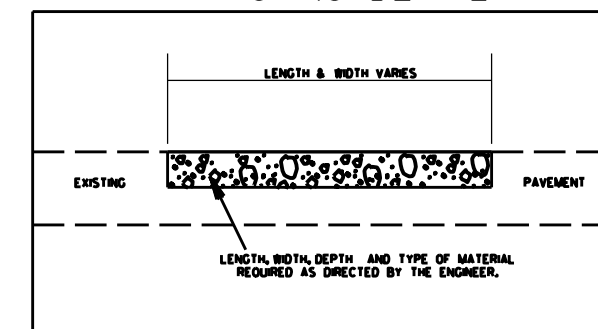
THE MAINLINE CROSS SECTION OF S9.5D SHALL BE PLACED IN SUCH A MANNER THAT THE MAT, AND EACH INDIVIDUAL PULL, WILL BE FLUSH WITH EACH OTHER ACROSS THE ENTIRE WIDTH OF THE ROADWAY TO INCLUDE SHOULDERS. THE TRAVEL LANES WEARING SURFACE OF ULTRATHIN BONDED WEARING COURSE SHALL BE PLACED IN SUCH A MANNER THAT IT WILL EXIST AT AN ELEVATION APPROXIMATELY 5/8" HIGHER THAN THE SURROUNDING SHOULDER PAVEMENT.

THE EXISTING PAVEMENT STRUCTURE CONSISTS OF AN OPEN GRADED FRICTION COURSE OVER ASPHALT CONCRETE PAVEMENT OVER CONCRETE PAVEMENT.

SHOULDER RECONSTRUCTION ON THE MAINLINE WILL BE PLACED AS DIRECTED BY THE ENGINEER.

FOR ALL CONCRETE ON RAMPS WITH ASPHALT OVERLAYS, BUILD UP THICKNESS TO MATCH MAINLINE GRADE AND SUPER. FOR OFF RAMPS TAPER DOWN PAVEMENT THICKNESS FOR SMOOTH TRANSITION.

PATCHING DETAIL

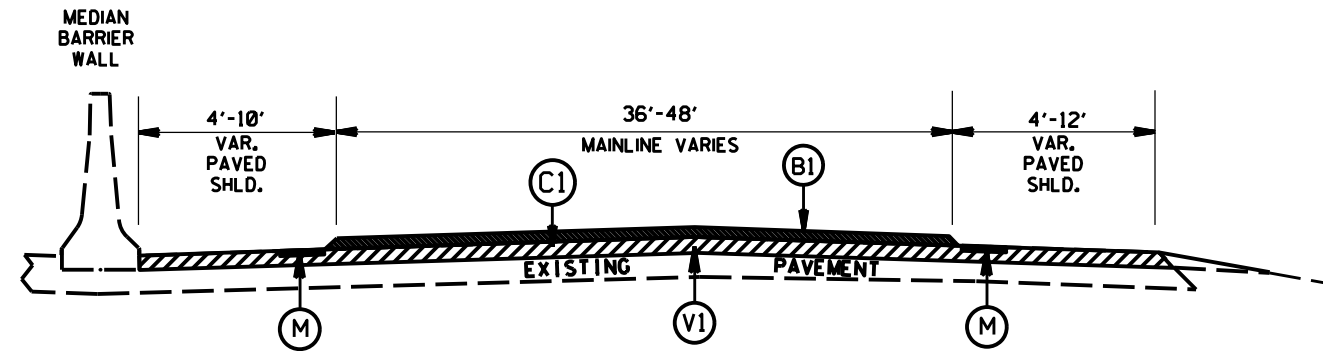


I-5825 I-77 PAVEMENT PRESERVATION		
SCALE	-NA-	REVISIONS
DATE	9/17	2/13/18
DWG. BY	JHE	
DESIGN BY	JHE	
APPROVED		

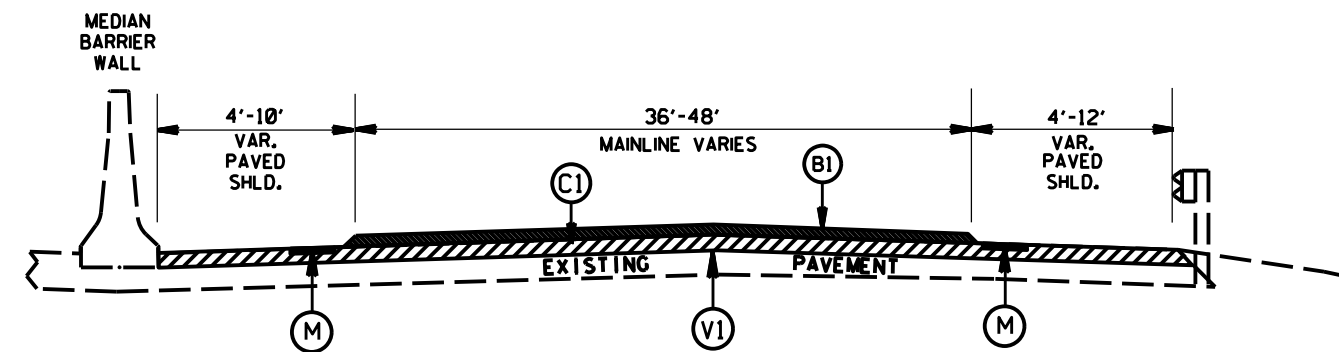


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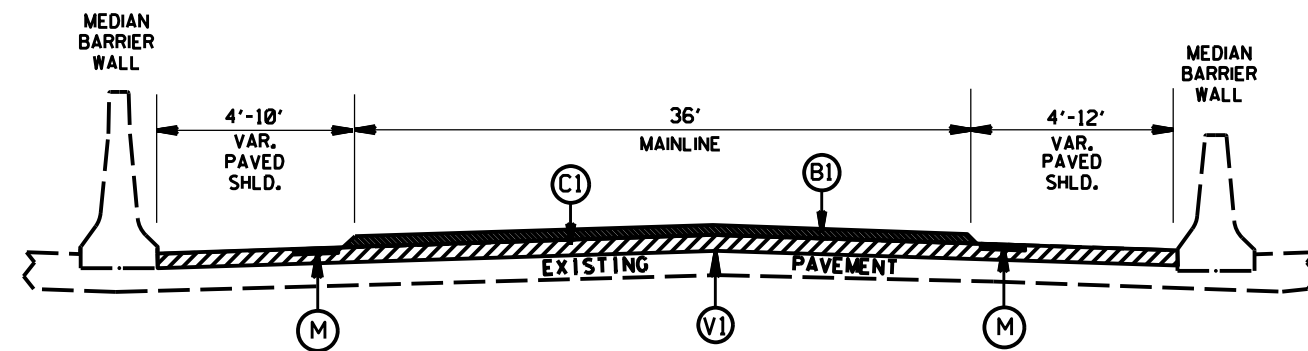
PAVEMENT SCHEDULE	
A1	APPROX. 10" PCC SLAB REPAIR
B1	PROP. APPROX. 5/8" ULTRATHIN HOT MIX ASPHALT COURSE, AT AN AVERAGE RATE OF 70 LBS. PER SQ. YD.
C1	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
C4	PROP. APPROX. 3.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
C5	PROP. APPROX. 4.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
M	MILLED RUMBLE STRIPS
T	SHOULDER RECONSTRUCTION
V1	MILLING 1.5" DEPTH
V2	MILLING, 2.0" DEPTH
V3	MILLING, 4.0" DEPTH
V4	MILLING, 2.5" DEPTH, BELOW ALL OVERHEAD BRIDGES
Z	REMOVE AND REPLACE 2'-6" CONCRETE CURB & GUTTER




TYPICAL SECTION NO.1



TYPICAL SECTION NO.2

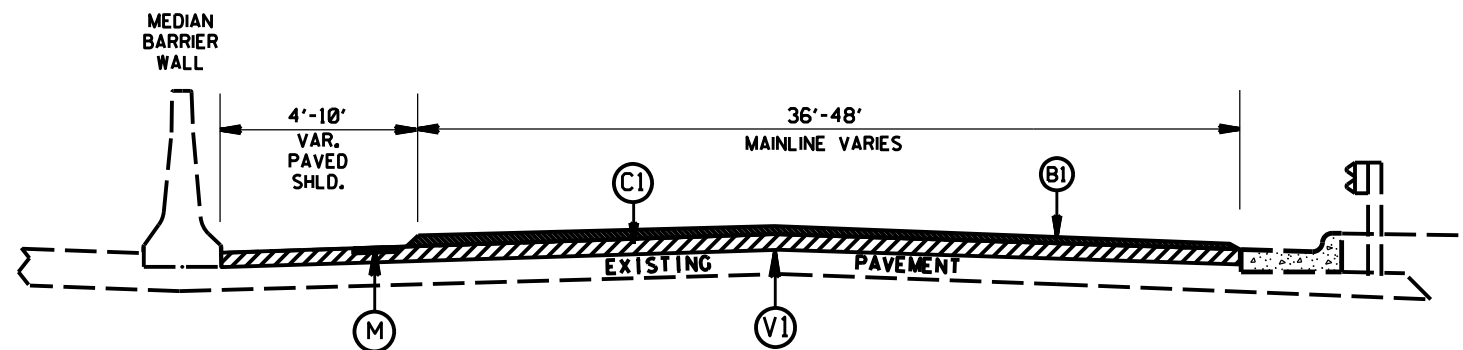


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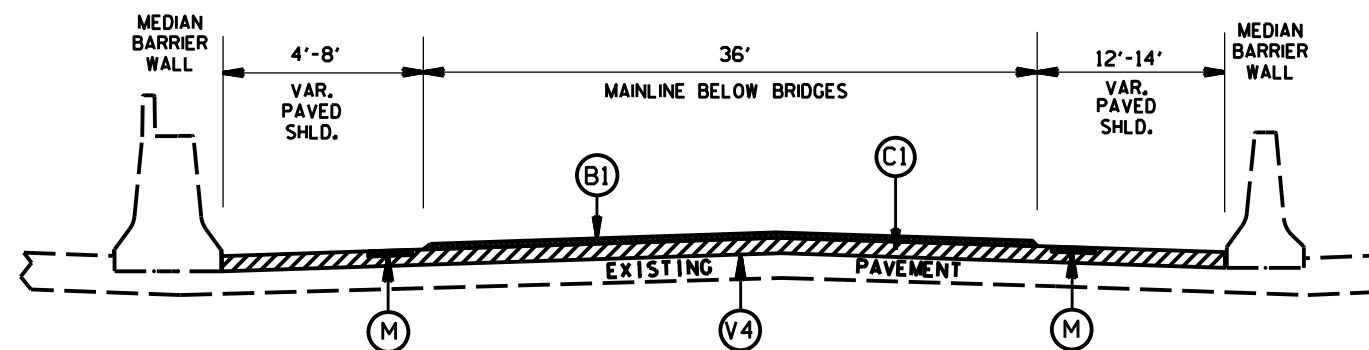
I-5825 I-77 PAVEMENT PRESERVATION	
SCALE	-HA-
DATE	9/17
DWG. BY	JHE
DESIGN BY	JHE
APPROVED	
	
REVISIONS	
	2/13/18
	3/14/18

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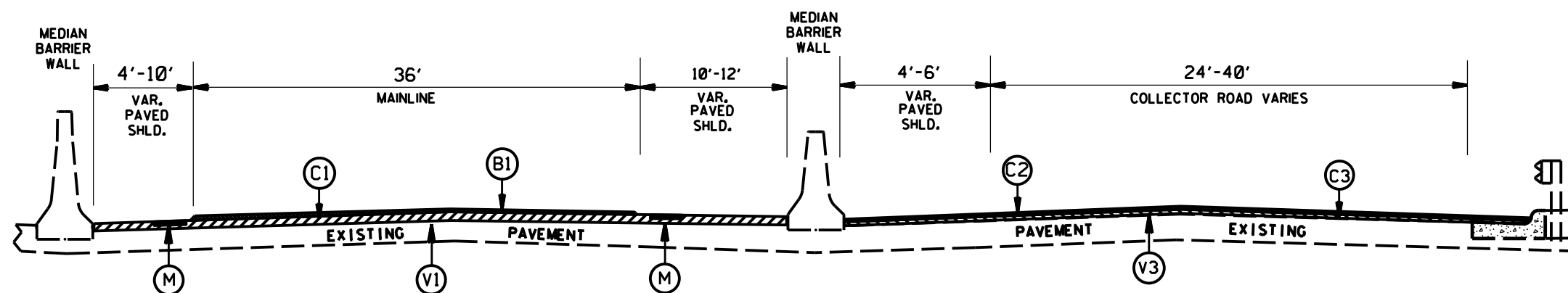
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Z	REMOVE AND REPLACE 2'-6" CONCRETE CURB & GUTTER



TYPICAL SECTION NO.4



TYPICAL SECTION NO.5

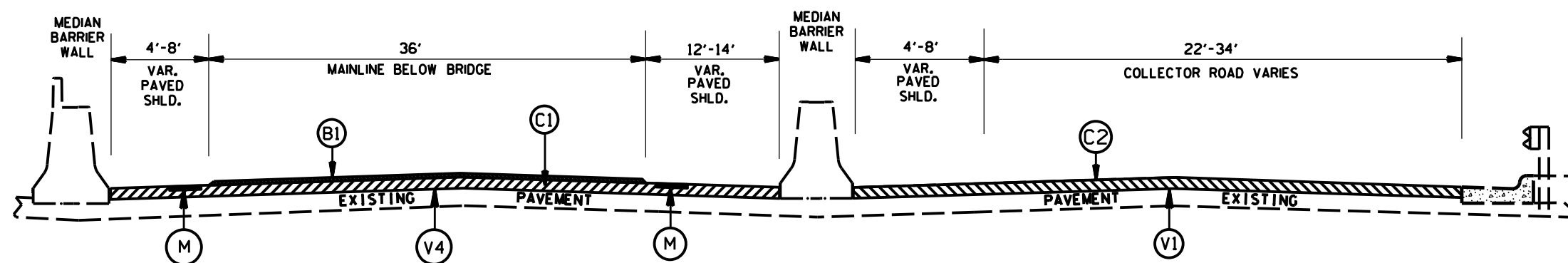


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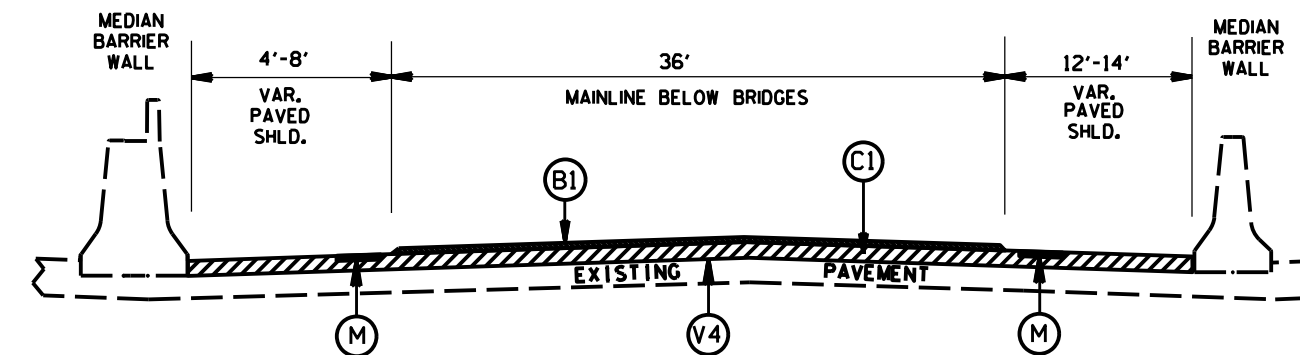
I-5825 I-77 PAVEMENT PRESERVATION		
SCALE	-NA-	REVISIONS
DATE	9/17	2/13/18
DWG. BY	JHE	3/14/18
DESIGN BY	JHE	
APPROVED		



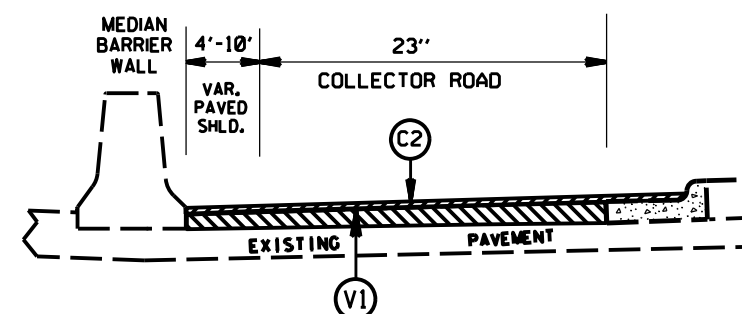
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TYPICAL SECTION NO.7
BELOW BRIDGE



TYPICAL SECTION NO.8



TYPICAL SECTION NO.9

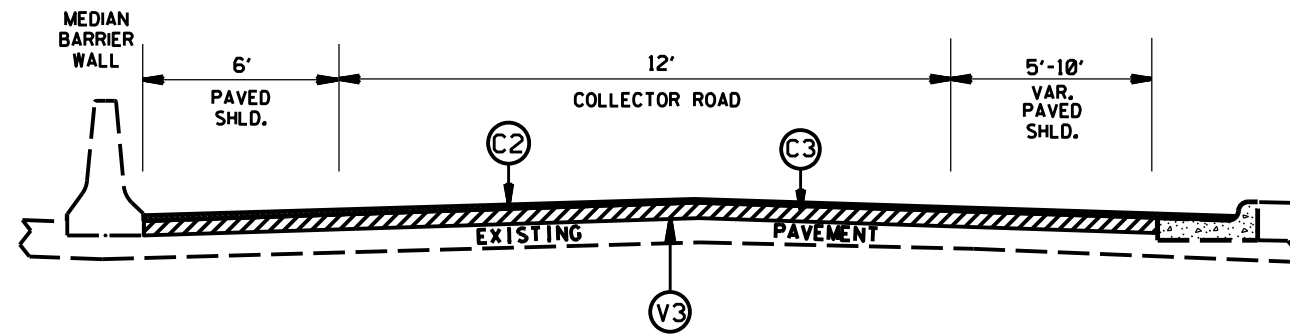
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T	SHOULDER RECONSTRUCTION
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V4	MILLING, 2.5" DEPTH, BELOW ALL OVERHEAD BRIDGES
Z	REMOVE AND REPLACE 2'-6" CONCRETE CURB & GUTTER

I-5825
I-77 PAVEMENT PRESERVATION

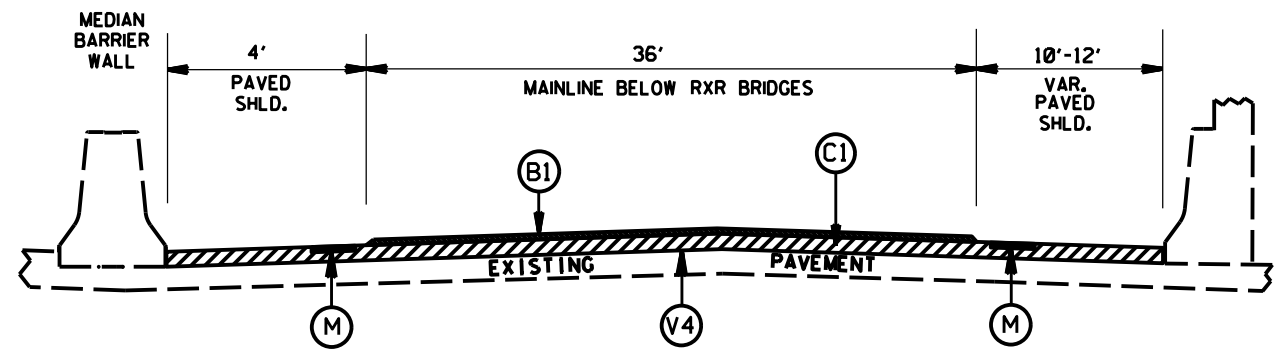
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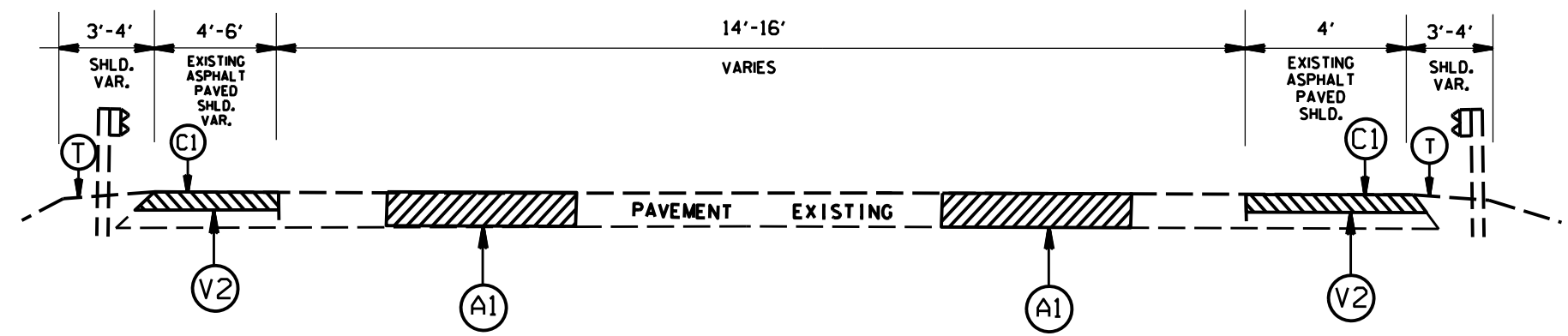
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M	MILLED RUMBLE STRIPS
T	SHOULDER RECONSTRUCTION
V1	MILLING 1.5" DEPTH
V2	MILLING, 2.0" DEPTH
V3	MILLING, 4.0" DEPTH
V4	MILLING, 2.5" DEPTH, BELOW ALL OVERHEAD BRIDGES
Z	REMOVE AND REPLACE 2'-6" CONCRETE CURB & GUTTER



TYPICAL SECTION NO.10




TYPICAL SECTION NO.11



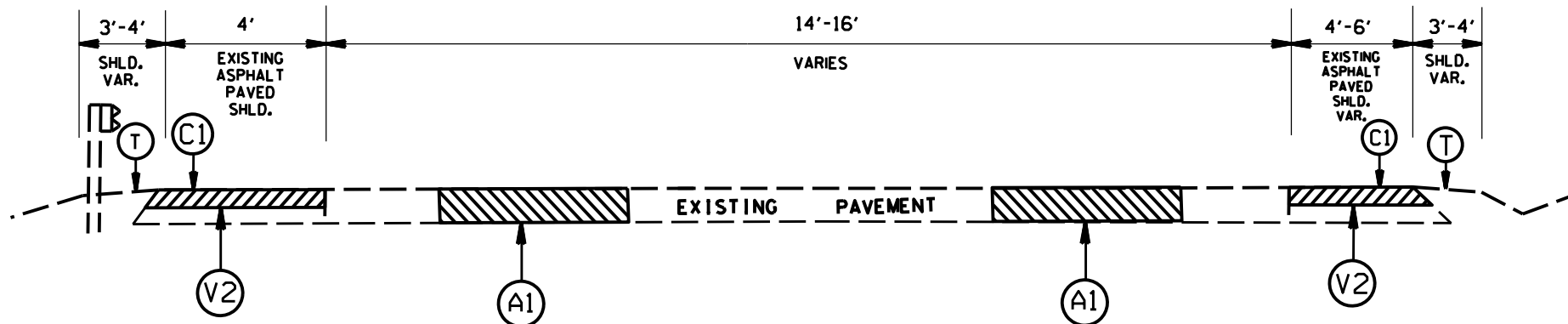
TYPICAL SECTION NO.12
RAMP

I-5825
I-77 PAVEMENT PRESERVATION

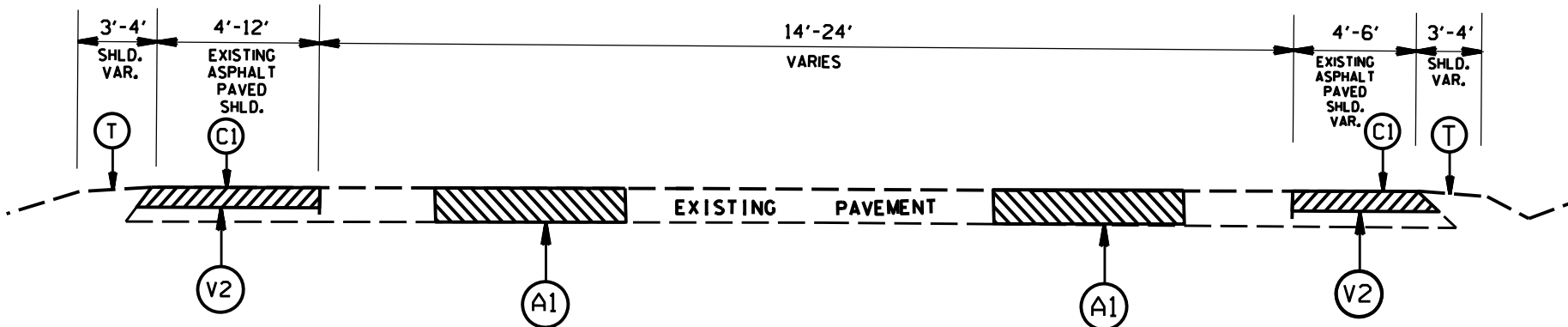
SCALE	-NA-		REVISIONS	
DATE	9/17		2/13/18	
DWG. BY	JHE		3/14/18	
DESIGN BY	JHE			
APPROVED				

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5825		
WBS NO.	50468.3.I		

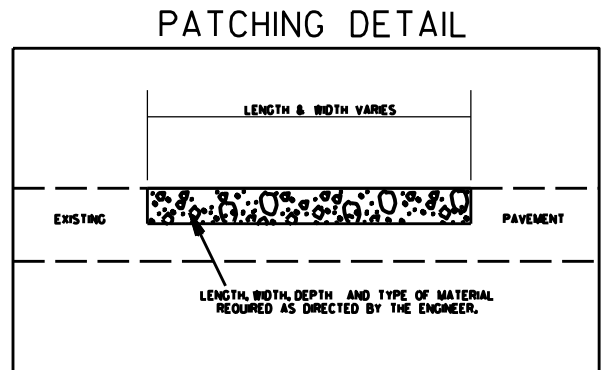
PAVEMENT SCHEDULE	
A1	APPROX. 10" PCC SLAB REPAIR
B1	PROP. APPROX. 5/8" ULTRATHIN HOT MIX ASPHALT COURSE, AT AN AVERAGE RATE OF 70 LBS. PER SQ. YD.
C1	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
C4	PROP. APPROX. 3.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
C5	PROP. APPROX. 4.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
M	MILLED RUMBLE STRIPS
T	SHOULDER RECONSTRUCTION
V1	MILLING 1.5" DEPTH
V2	MILLING, 2.0" DEPTH
V3	MILLING, 4.0" DEPTH
V4	MILLING, 2.5" DEPTH, BELOW ALL OVERHEAD BRIDGES
Z	REMOVE AND REPLACE 2'-6" CONCRETE CURB & GUTTER



TYPICAL SECTION NO.13
RAMP



TYPICAL SECTION NO.14
RAMP

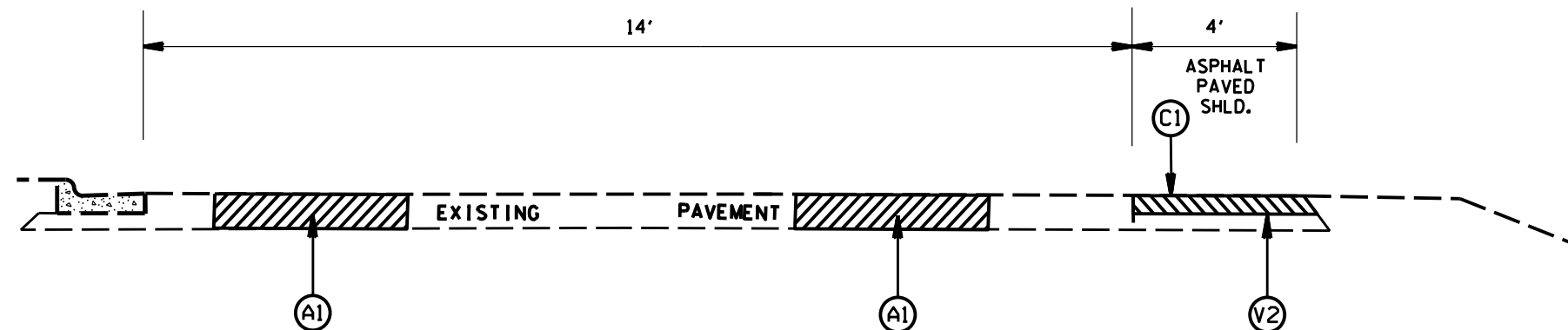


I-5825
I-77 PAVEMENT PRESERVATION

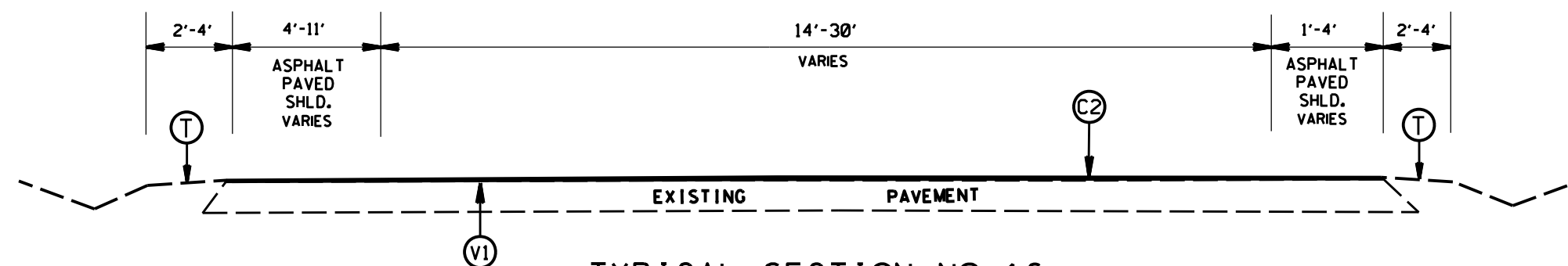
SCALE	-NA-		REVISIONS	
DATE	9/17		2/13/18	
DWG. BY	JHE		3/14/18	
DESIGN BY	JHE			
APPROVED				

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5825		
WBS NO. 50468.3J			

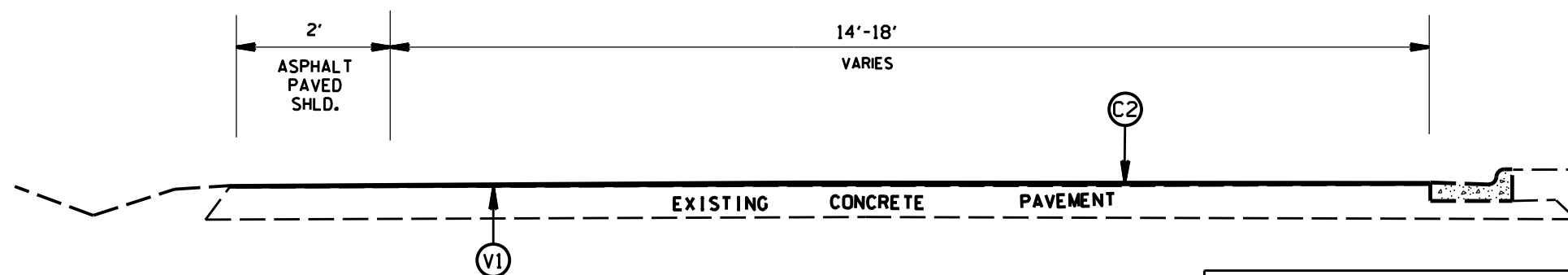
PAVEMENT SCHEDULE	
A1	APPROX. 10" PCC SLAB REPAIR
B1	PROP. APPROX. 5/8" ULTRATHIN HOT MIX ASPHALT COURSE, AT AN AVERAGE RATE OF 70 LBS. PER SQ. YD.
C1	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
C4	PROP. APPROX. 3.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
C5	PROP. APPROX. 4.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
M	MILLED RUMBLE STRIPS
T	SHOULDER RECONSTRUCTION
V1	MILLING 1.5" DEPTH
V2	MILLING, 2.0" DEPTH
V3	MILLING, 4.0" DEPTH
V4	MILLING, 2.5" DEPTH, BELOW ALL OVERHEAD BRIDGES
Z	REMOVE AND REPLACE 2'-6" CONCRETE CURB & GUTTER




TYPICAL SECTION NO.15
RAMP



TYPICAL SECTION NO.16
RAMP



TYPICAL SECTION NO.17
RAMP

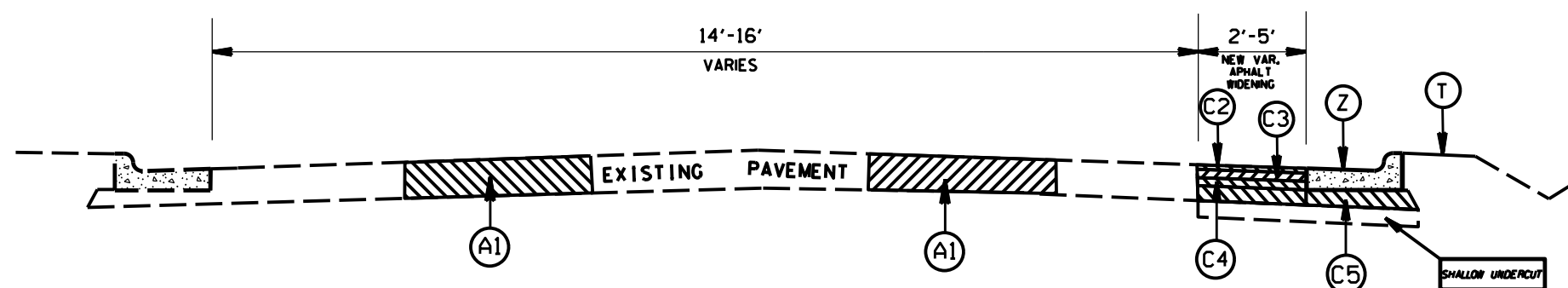
I-5825 I-77 PAVEMENT PRESERVATION	
SCALE	-NA-
DATE	9/17
DWG. BY	JHE
DESIGN BY	JHE
APPROVED	
	
REVISIONS	
	2/13/18
	3/14/18

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5825		
WBS NO. 50468.3J			

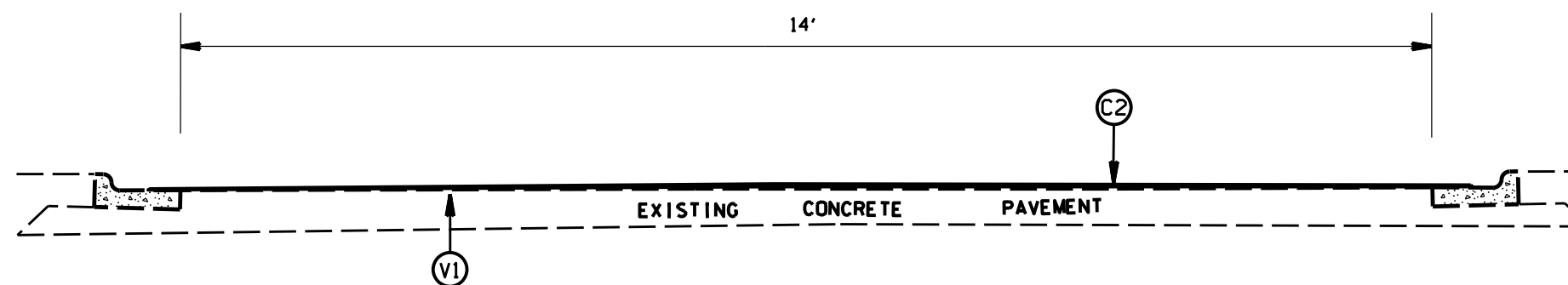
PAVEMENT SCHEDULE	
A1	APPROX. 10" PCC SLAB REPAIR
B1	PROP. APPROX. 5/8" ULTRATHIN HOT MIX ASPHALT COURSE, AT AN AVERAGE RATE OF 70 LBS. PER SQ. YD.
C1	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
C4	PROP. APPROX. 3.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
C5	PROP. APPROX. 4.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
M	MILLED RUMBLE STRIPS
T	SHOULDER RECONSTRUCTION
V1	MILLING 1.5" DEPTH
V2	MILLING, 2.0" DEPTH
V3	MILLING, 4.0" DEPTH
V4	MILLING, 2.5" DEPTH, BELOW ALL OVERHEAD BRIDGES
Z	REMOVE AND REPLACE 2'-6" CONCRETE CURB & GUTTER

SPECIAL NOTES:

- (1) REMOVE APPROXIMATELY 140 FEET OF EXISTING BROKEN CURB & GUTTER.
- (2) UNDERCUT APPROXIMATELY 11.0" INCHES OF EXISTING SUBGRADE MATERIAL FROM 2'-5" WIDTH AS DIRECTED BY THE ENGINEER.
- (3) SET NEW CURB & GUTTER TO MATCH EXISTING GRADE AND SUPER AS SHOWN ON (TYPICAL #18).
- (4) PAVE BETWEEN EXISTING SLAB AND NEW CURB & GUTTER AS SHOWN ON (TYPICAL #18).
- (5) BACKFILL MATERIAL BEHIND NEW CURB & GUTTER AS DIRECTED BY THE ENGINEER.
- (6) TIE NEW CURB & GUTTER INTO EXISTING CURB & GUTTER ALONG WOODLAWN AVE FOR SMOOTH TRANSITION.
- (7) PRIOR TO BEGINNING CONSTRUCTION CONTACT MR. DONALD GRIFFITH WITH DDC AT (704-983-4400) TO SCHEDULE OFFSET STAKES FOR NEW CURB & GUTTER ALIGNMENT.



TYPICAL SECTION NO.18
NB OFF RAMP TO WOODLAWN RD



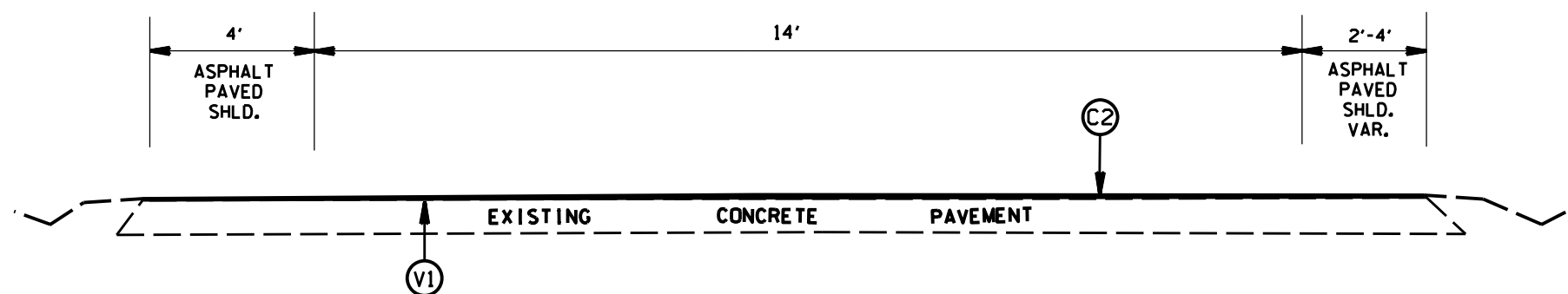
TYPICAL SECTION NO.19
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I-5825
I-77 PAVEMENT PRESERVATION

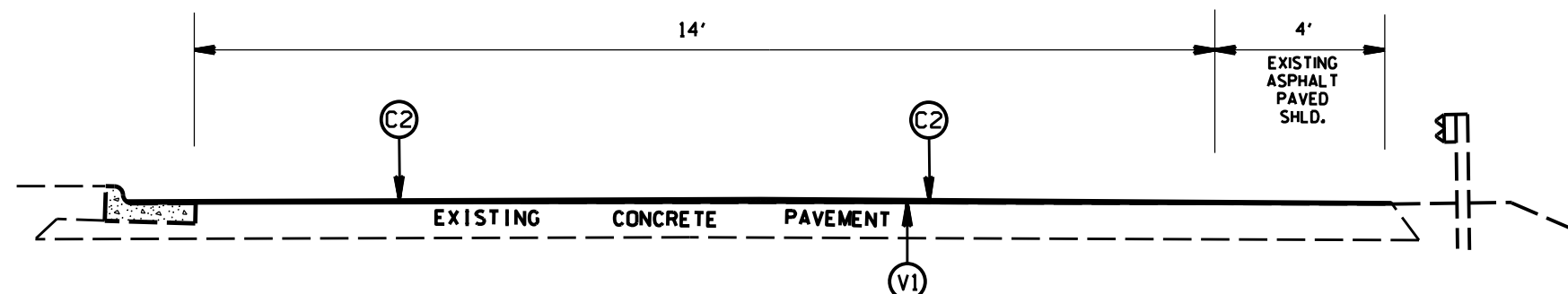
SCALE	-NA-		REVISIONS	
DATE	9/17		2/13/18	
DWG. BY	JHE		3/14/18	
DESIGN BY	JHE			
APPROVED				

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5825		
WBS NO. 50468.3J			

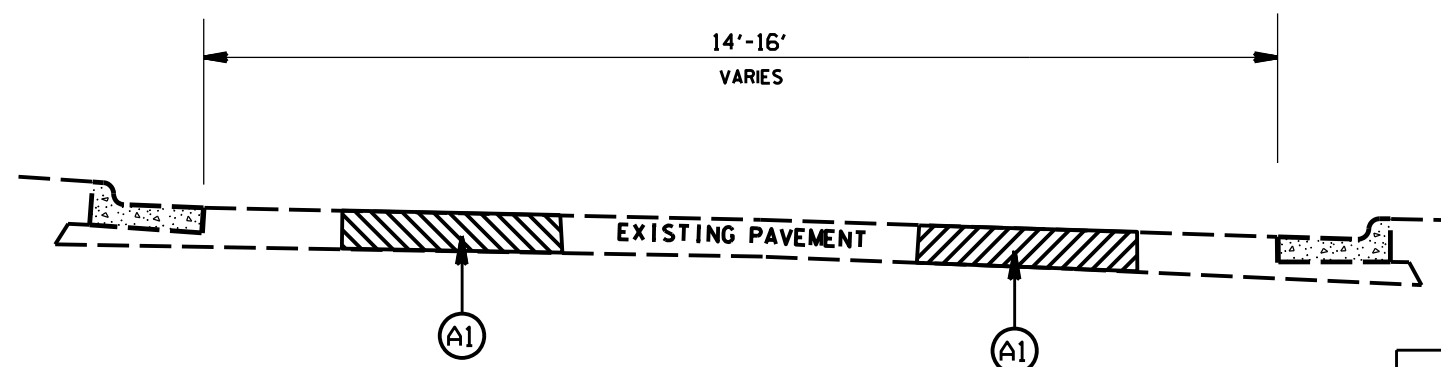
PAVEMENT SCHEDULE	
A1	APPROX. 10" PCC SLAB REPAIR
B1	PROP. APPROX. 5/8" ULTRATHIN HOT MIX ASPHALT COURSE, AT AN AVERAGE RATE OF 70 LBS. PER SQ. YD.
C1	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
C4	PROP. APPROX. 3.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
C5	PROP. APPROX. 4.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
M	MILLED RUMBLE STRIPS
T	SHOULDER RECONSTRUCTION
V1	MILLING 1.5" DEPTH
V2	MILLING, 2.0" DEPTH
V3	MILLING, 4.0" DEPTH
V4	MILLING, 2.5" DEPTH, BELOW ALL OVERHEAD BRIDGES
Z	REMOVE AND REPLACE 2'-6" CONCRETE CURB & GUTTER



TYPICAL SECTION NO. 20
RAMP



TYPICAL SECTION NO. 21
RAMP



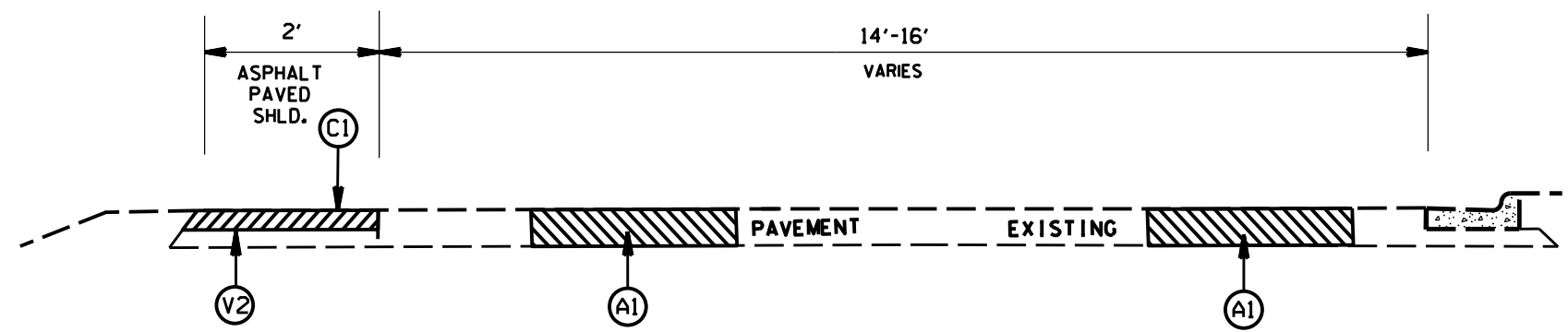
TYPICAL SECTION NO. 22
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I-5825
I-77 PAVEMENT PRESERVATION

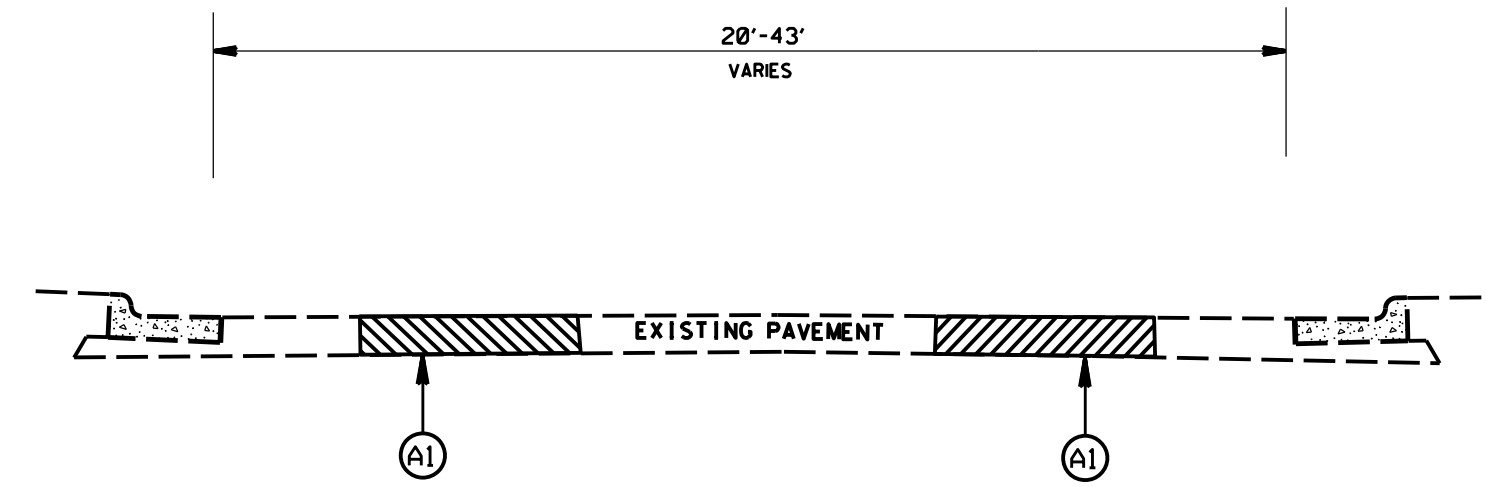
SCALE	-NA-		REVISIONS
DATE	9/17		2/13/18
DWG. BY	JHE		3/14/18
DESIGN BY	JHE		
APPROVED			

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5825		
WBS NO. 50468.3J			

PAVEMENT SCHEDULE	
A1	APPROX. 10" PCC SLAB REPAIR
B1	PROP. APPROX. 5/8" ULTRATHIN HOT MIX ASPHALT COURSE, AT AN AVERAGE RATE OF 70 LBS. PER SQ. YD.
C1	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
C4	PROP. APPROX. 3.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
C5	PROP. APPROX. 4.0" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
M	MILLED RUMBLE STRIPS
T	SHOULDER RECONSTRUCTION
V1	MILLING 1.5" DEPTH
V2	MILLING, 2.0" DEPTH
V3	MILLING, 4.0" DEPTH
V4	MILLING, 2.5" DEPTH, BELOW ALL OVERHEAD BRIDGES
Z	REMOVE AND REPLACE 2'-6" CONCRETE CURB & GUTTER



TYPICAL SECTION NO.23
RAMP

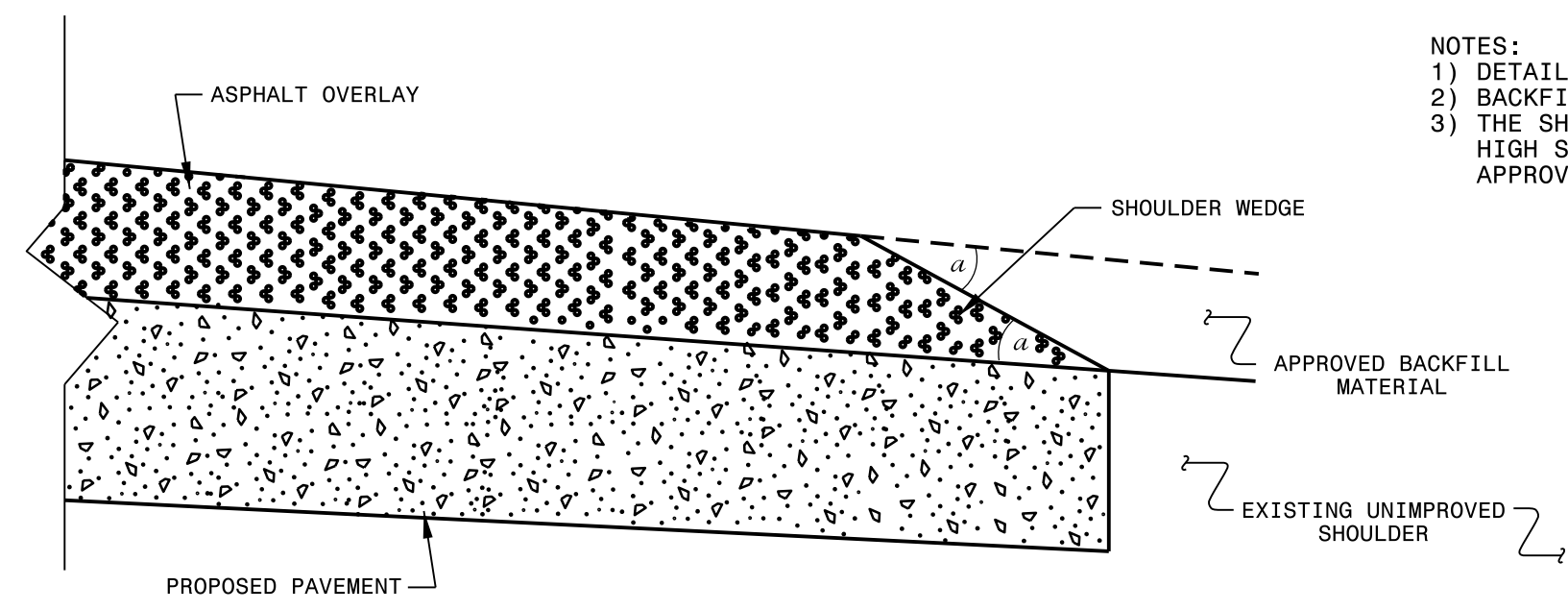


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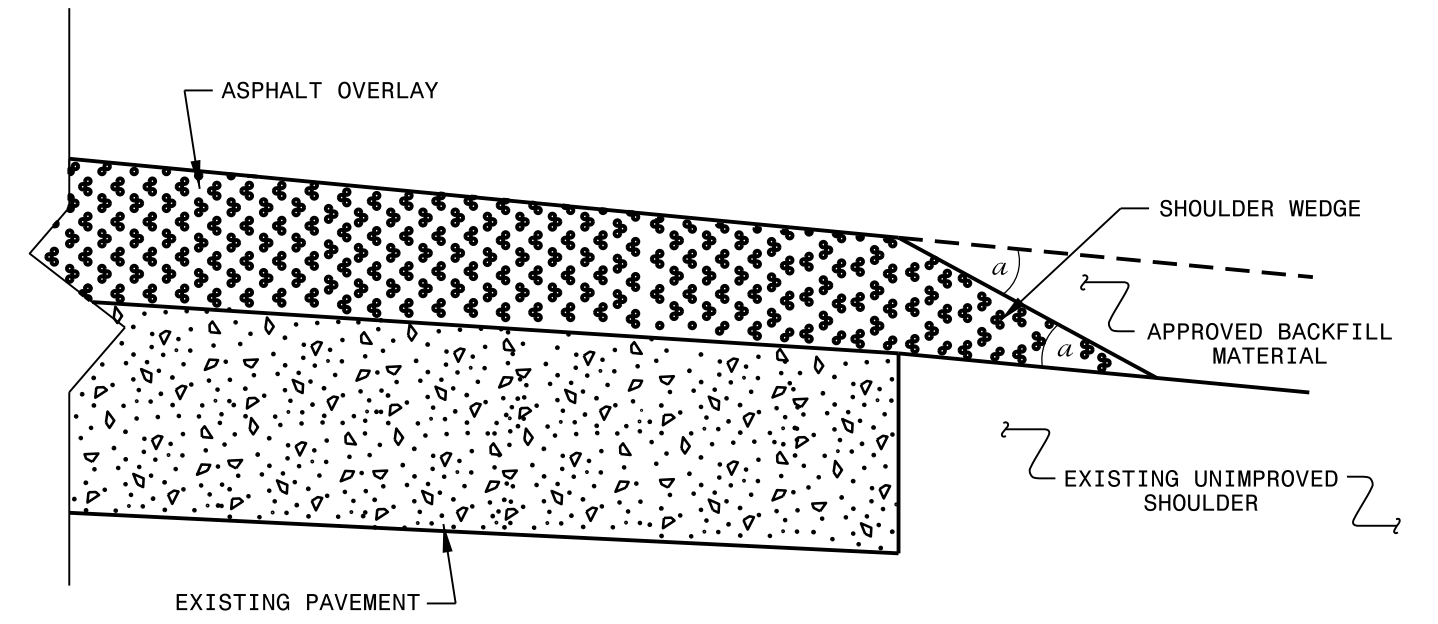
I-5825
I-77 PAVEMENT PRESERVATION

SCALE	-NA-		REVISIONS
DATE	9/17		2/13/18
DWG. BY	JHE		3/14/18
DESIGN BY	JHE		
APPROVED			

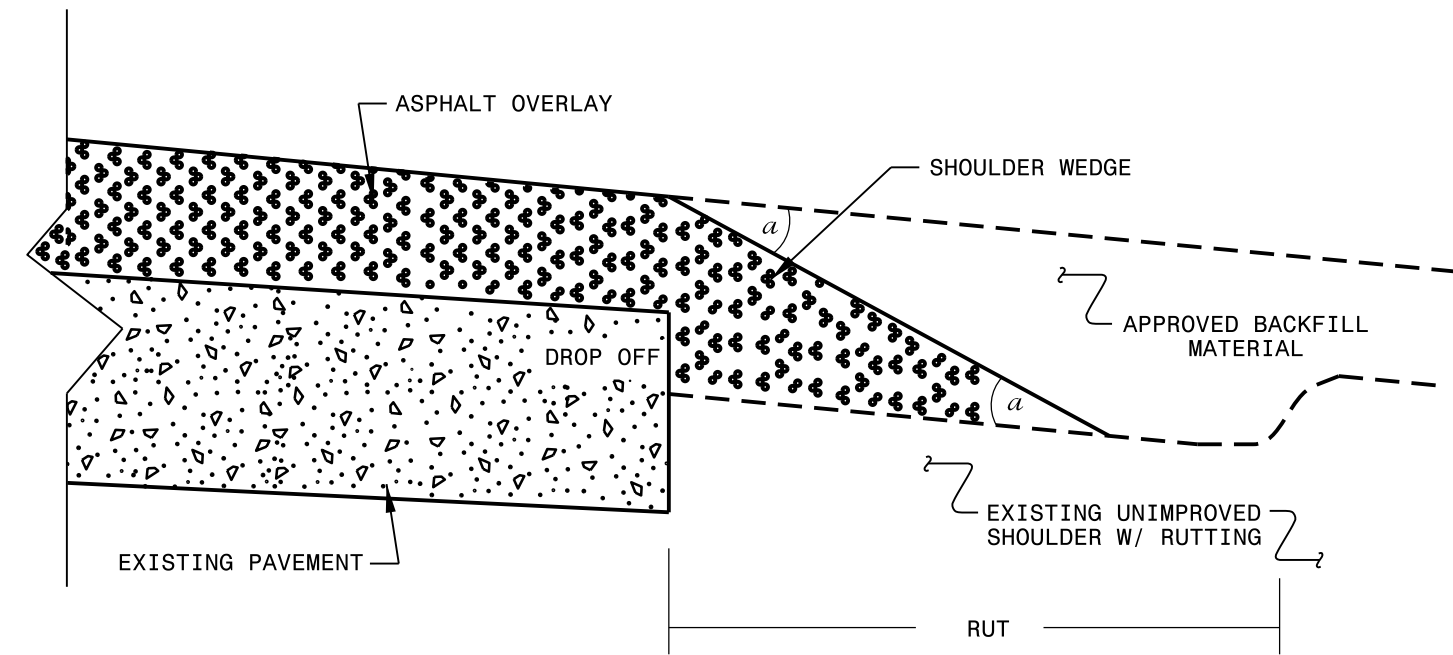
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAF C AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ Widening or
 with Existing Paved Shoulder having no dropoffs)



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ NO Widening)



SHOULDER WEDGE DETAIL
 (Resurfacing Adjacent to
 Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

**CONTRACT STANDARDS
 AND DEVELOPMENT UNIT**
 Office 919-707-6950 FAX 919-250-4119

**SHOULDER WEDGE
 DETAILS**

ORIGINAL BY: T.SPELL DATE: 7-19-11
 MODIFIED BY: DATE: 2/2/16
 CHECKED BY: DATE:
 FILE SPEC.: s:usr/details/stand/shoulderwedgedetail.dgn

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

\$\$\$\$\$SYTIME\$\$\$\$\$
 \$\$\$DONOR\$\$\$\$\$
 \$\$\$CUSTNAME\$\$\$\$\$
 \$\$\$\$\$\$\$\$