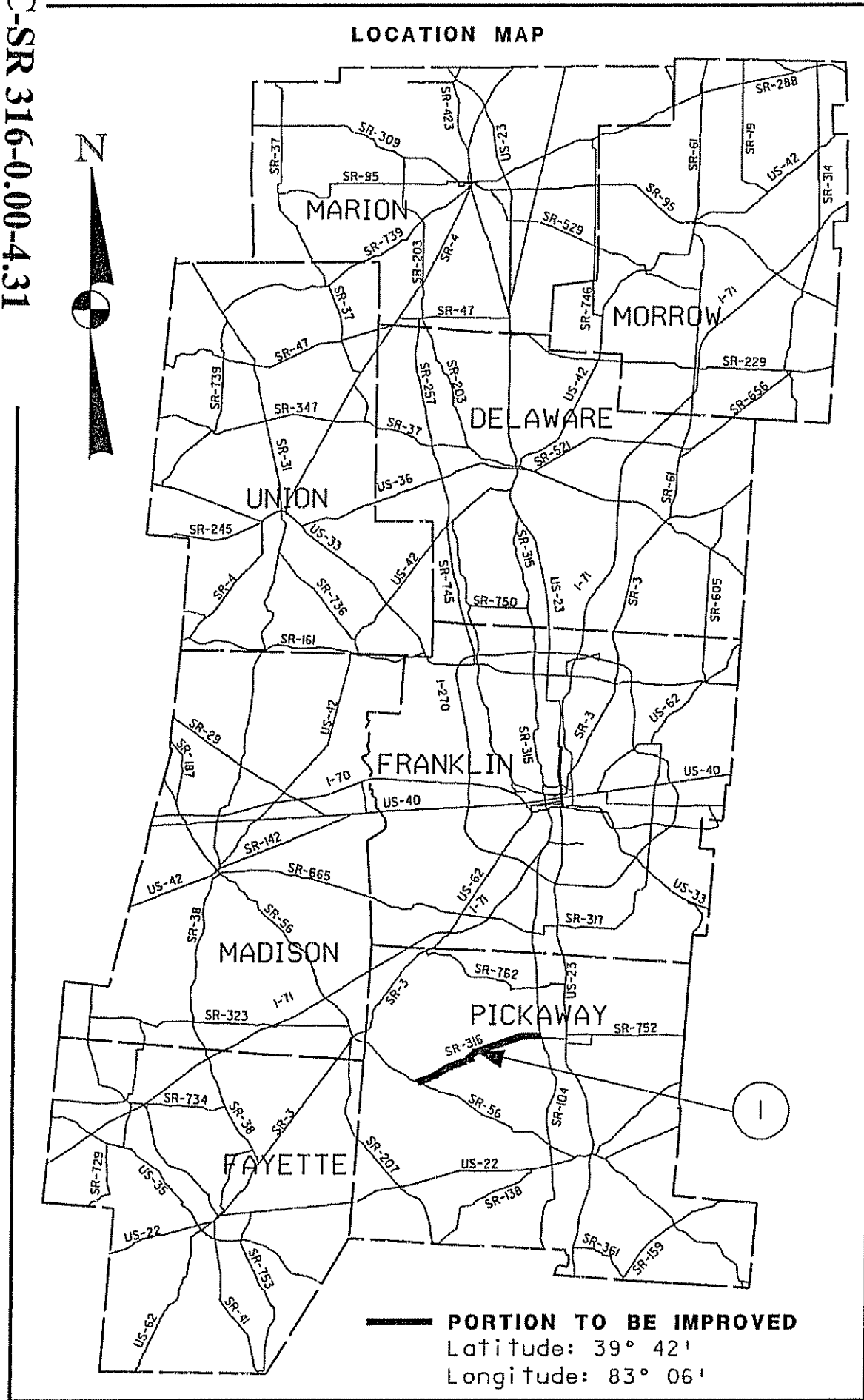


# OHIO DEPARTMENT OF TRANSPORTATION

PLAN NO.

13PGS  
 960134  
 PIC-SR 316-0.00-4.31  
 02-28-96



PART	COUNTY	ROUTE	SECTIONS	PROJECT TERMINII		NET LENGTH MILES	TOWNSHIP	CITY	VILLAGE
				BEGIN	END				
I	PIC	SR-316	( 0.00-4.31 )	0.00	9.48	9.48			Darbyville

## 1995 SPECIFICATIONS

THE STANDARD 1995 SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND THE PROPOSAL SHALL GOVERN THESE IMPROVEMENTS.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THESE IMPROVEMENTS WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY AND PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS INDICATED IN THE PROPOSAL.

### INDEX OF SHEETS:

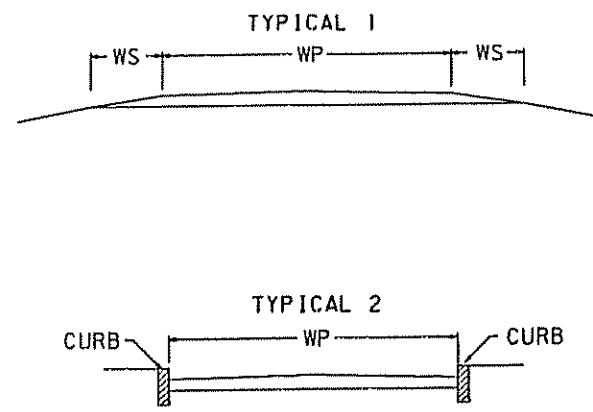
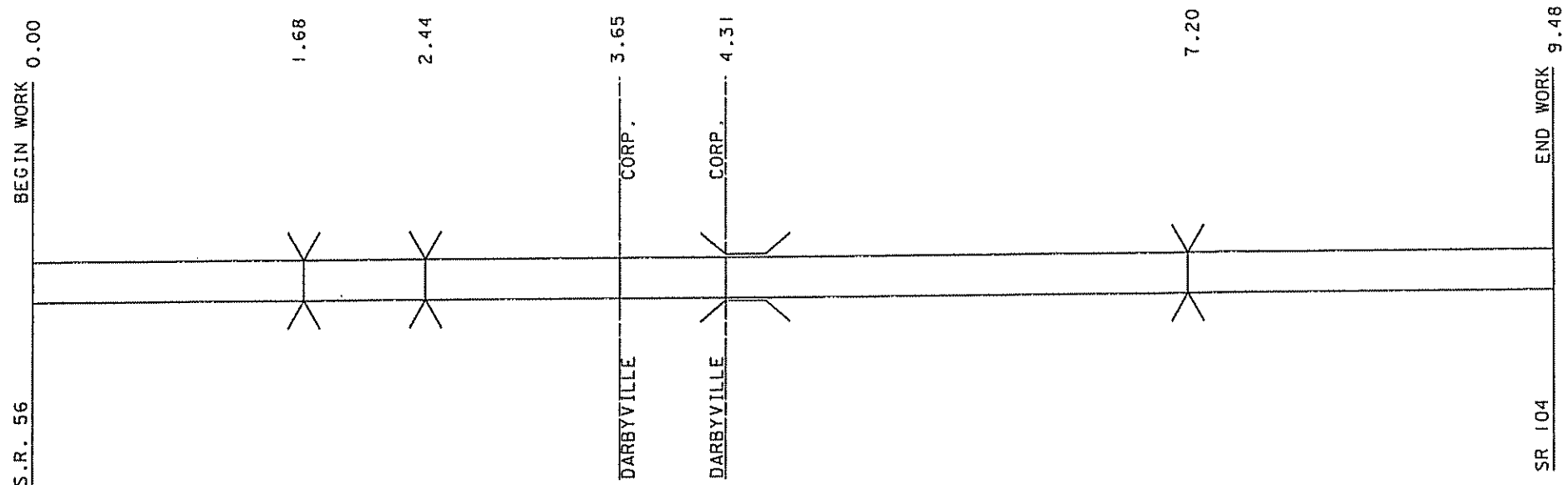
- 1 - TITLE SHEET
- 2 - ASPHALT
- 3 - EXTRA AREA
- 4 - SHOULDER TREATMENT
- 5-6 - PAVEMENT MARKINGS
- 7 - PAVEMENT MARKING TYPICAL DETAILS
- 8 - RAISED PAVEMENT MARKER
- 9-10 - GENERAL NOTES
- 11 - ABUTMENT JOINTS
- 12 - DROP OFF IN WORK ZONE
- 13 - GENERAL SUMMARY

PLANS CERTIFIED BY:  
 NAME: *[Signature]* DATE: 11-14-95  
 DISTRICT 6  
 OHIO DEPT. OF TRANSPORTATION

STANDARD DRAWINGS		SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	02-21-92		
DS-1-92	04-05-93		
GR-1.1	05-06-91		
GR-1.2	10-30-92		
GR-2.1	05-06-91		
GR-2.2	10-30-92		
GR-3.4	05-06-91		
MC-1	06-13-69		
MT-97.10	04-29-88		
MT-97.11	10-04-89		
MT-99.10	11-14-86		
MT-99.20	04-29-88		
MT-105.10	07-01-92		
MT-105.11	07-01-92		
TC-65.10	02-01-90		
TC-65.12	02-01-90		
TC-65.13	02-01-90		
TC-71.10	09-10-91		

APPROVED *[Signature]*  
 DATE 11-14-95 Director, Department of Transportation  
  
 APPROVED *[Signature]*  
 DATE 11-21-95 Administrator, Office of Structural Engineering  
  
 APPROVED *[Signature]*  
 DATE \_\_\_\_\_ District Deputy Director of Transportation

FEDERAL PROJECT NO. \_\_\_\_\_  
 PID NO. 15476  
 CONSTR. PROJECT NO. \_\_\_\_\_  
 TITLE SHEET  
 PIC-316-0.00  
 1/13



ITEM 254 PAVEMENT PLANING SHALL BE USED IN LIEU OF ITEM 202 WEARING COURSE REMOVED AS CALLED FOR IN STANDARD DRAWING BP-3.1, EXCEPT FOR STRUCTURE PIC-316-07.20.

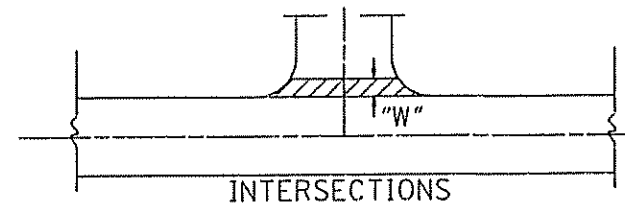
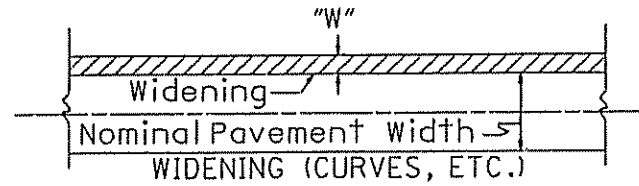
\*\* DEPTH OF PLANING SHALL BE 1 1/2 " OR TO BRICK SURFACE IF LESS THAN 1 1/2 " DEEP.

**\* ITEM 403 - ASPHALT CONCRETE AC-20, SPOT LEVELING:**  
 THIS MATERIAL IS TO BE USED, AS DIRECTED BY THE ENGINEER, TO FILL RUTS AND IMPERFECTIONS AND TO LEVEL AND RE-ESTABLISH THE ORIGINAL ALIGNMENT AND PROFILE OF THE PAVEMENT, PRIOR TO PLACEMENT OF THE SURFACE COURSE. THIS MAY RESULT IN A PORTION OF THE ORIGINAL SURFACE BEING EXPOSED BEFORE THE OVERLAY IS PLACED.

**PAVEMENT DATA**

PART	COUNTY	ROUTE	FROM	TO	LENGTH		AVERAGE WIDTH OF PAVEMENT	TYPICAL	EXISTING PAVEMENT TYPE	PAVEMENT AREA	PROPOSED PAVEMENT				254	814	817	REMARKS					
											407	ASPHALT CONCRETE		PAVEMENT PLANING BITUMINOUS 1 1/2" DEPTH					WORK ZONE MARKING SIGN	COMPACTED AGGREGATE TYPE A			
												TACK COAT AT 0.10 GAL/SQ.YD.	ITEM 403								ITEM 404		
													AVERAGE THICK 0" MIN.								AVERAGE THICK	AVERAGE THICK	
			S.L.M.	S.L.M.	MILES	LIN. FT.	FEET			SQ. YD.	GAL.	INCHES	CU.YD.	INCHES	CU.YD.	SQ. YD.	EACH	CU.YD.					
I	PIC	316	0.00	3.74	3.74	19747	20	1	404	43882	4388	*	609	1.0	1219				**				
			3.74	3.85	0.11	581	26	2	404	1678	168	*	23	1.0	47	1678			**				
			3.85	4.03	0.18	950	32	2	404	3378	338	*	47	1.0	94	3378							
			4.03	9.48	5.45	28776	20	1	404	63947	6395	*	888	1.0	1776								
			0.00	9.48													32						
											11289		1567		3136	5056	32						

CALCULATED  
 CHECKED  
 PLAN NO.  
 ASPHALT CONCRETE  
 PIC-316-0.00  
 2  
 13



\* = FOR NOTE, SEE SHEET 2  
 \*\* = WIDTH INCLUDES SHOULDERS

PART	COUNTY	ROUTE	FROM	TO	SIDE	DESCRIPTION	LENGTH		WIDTH "W"	PAVEMENT AREA	PROPOSED PAVEMENT				617		
											TACK COAT AT 0.10 GAL/SQ.YD.	ASPHALT CONCRETE		COMPACTED AGGREGATE TYPE A 3"			
												ITEM 403			ITEM 404		
												AVERAGE THICK 0" MIN.			AVERAGE THICK		
	INCHES	CU.YD.	INCHES	CU.YD.	CU.YD.												
			S.L.M.	S.L.M.			MILES	LIN. FT.	FEET	SQ. YD.	GAL.	INCHES	CU.YD.	INCHES	CU.YD.	CU.YD.	
I	PIC	316	VARIOUS			INTERSECTION - BITUMINOUS				1600	160	*	22	1	44		
			VARIOUS			DRIVES - BITUMINOUS				580	58	*	8	1	16		
			VARIOUS			DRIVES - AGGREGATE				2260						188	
			0.12		RT	EXTRA AREA		100	13	144	14	*	2	1	4		
			1.68			EXTRA AREA - STRUCTURE		96	11**	117	12	*	2	1	3		
			2.44			EXTRA AREA - STRUCTURE		28	8**	25	3	*	1	1	1		
			3.74		RT	EXTRA AREA		160	5	89	9	*	1	1	2		
			4.31			DEDUCTION - STRUCTURE		446	20	-991	-99	*	-14	1	-28		
			7.20			EXTRA AREA - STRUCTURE		14	20	31	3	*	1	1	1		
TOTALS											160			23		43	188

CALCULATED  
 CHECKED  
 PLAN NO.  
 EXTRA AREA AND DEDUCTIONS  
 PIC-316-0.00  
 3  
 13



**ITEM 643 - CENTER LINE QUANTITIES**

PART	ROUTE	S.L.M.	FROM	S.L.M.	TO	DASHED	SOLID	TOTAL	REMARKS
						MILES	MILES	MILES	
I	PIC-316	0.00	SR-56	9.48	SR-104	8.13	4.91	9.48	
<b>CENTER LINE TOTAL</b>								9.48	

**ITEM 643 - LANE LINE QUANTITIES**

PART	ROUTE	S.L.M.	FROM	S.L.M.	TO	DASHED	SOLID	TOTAL	REMARKS
						MILES	MILES	MILES	
<b>LANE LINE TOTAL</b>									

**ITEM 643 - EDGE LINE QUANTITIES**

PART	ROUTE	S.L.M.	FROM	S.L.M.	TO	WHITE			YELLOW			REMARKS
						HIGHWAY MILES	RAMP MILES	TOTAL MILES	HIGHWAY MILES	RAMP MILES	TOTAL MILES	
I	PIC-316	0.00	SR-56	3.74	CURB SECTION	3.74		7.48				
		3.74	CURB SECTION	3.84	LONDON RD	(R) 0.10		0.10				
		4.03		9.48	SR-104	5.45		10.90				
<b>EDGE LINE TOTAL</b>								18.48				

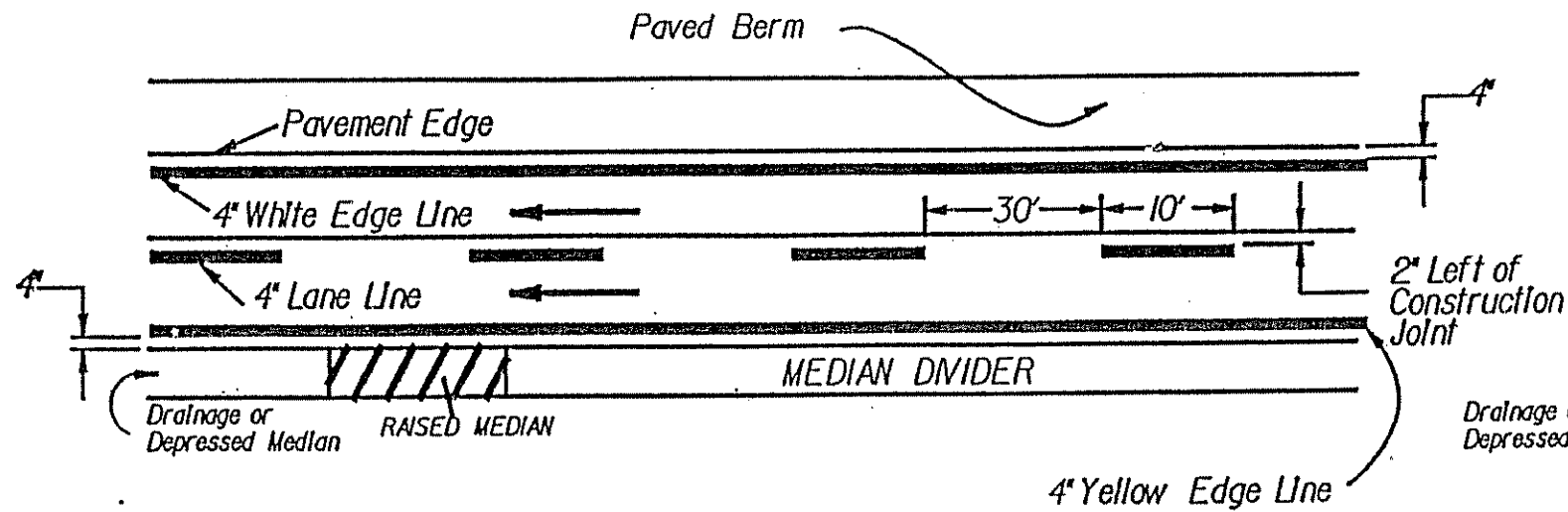
CALCULATED  
 CHECKED  
 PLAN NO.  
 PAVEMENT MARKING  
 PIC-316-0.00  
 5  
 13



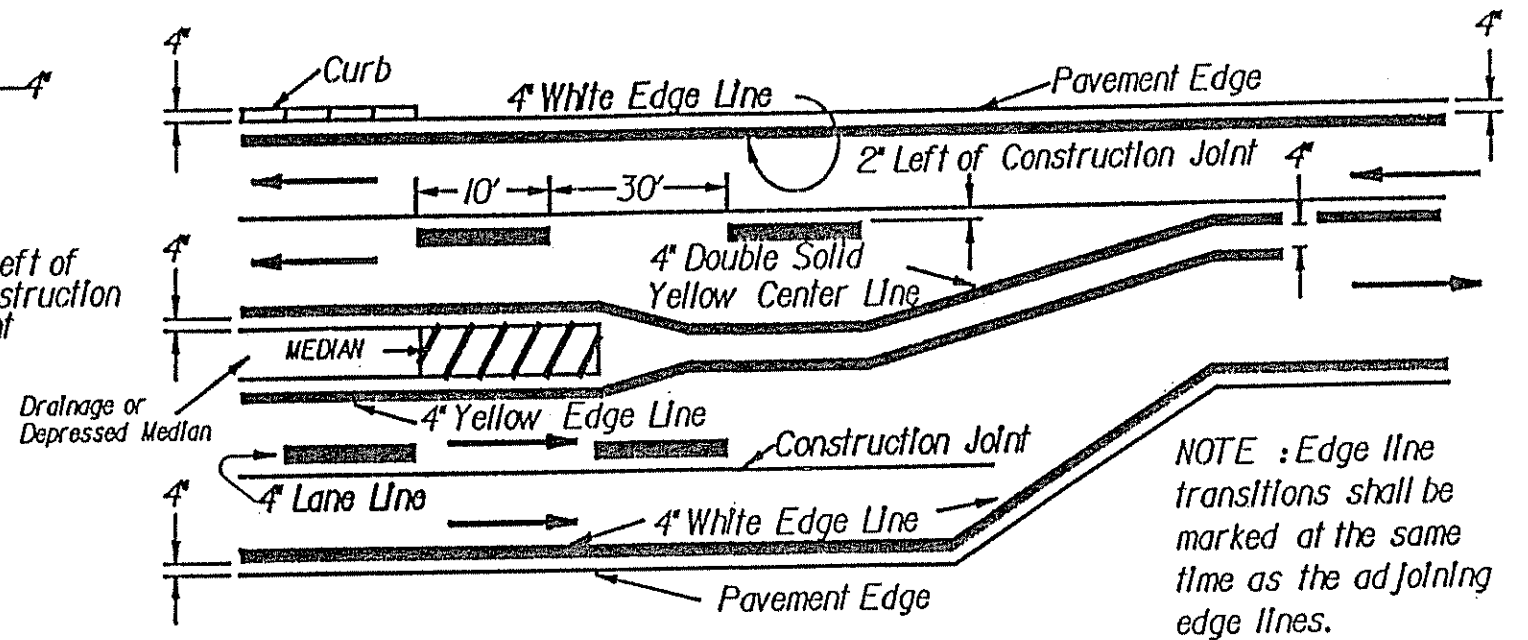


PLAN NO.

### FREEWAY & EXPRESSWAY MAINLINE MARKINGS

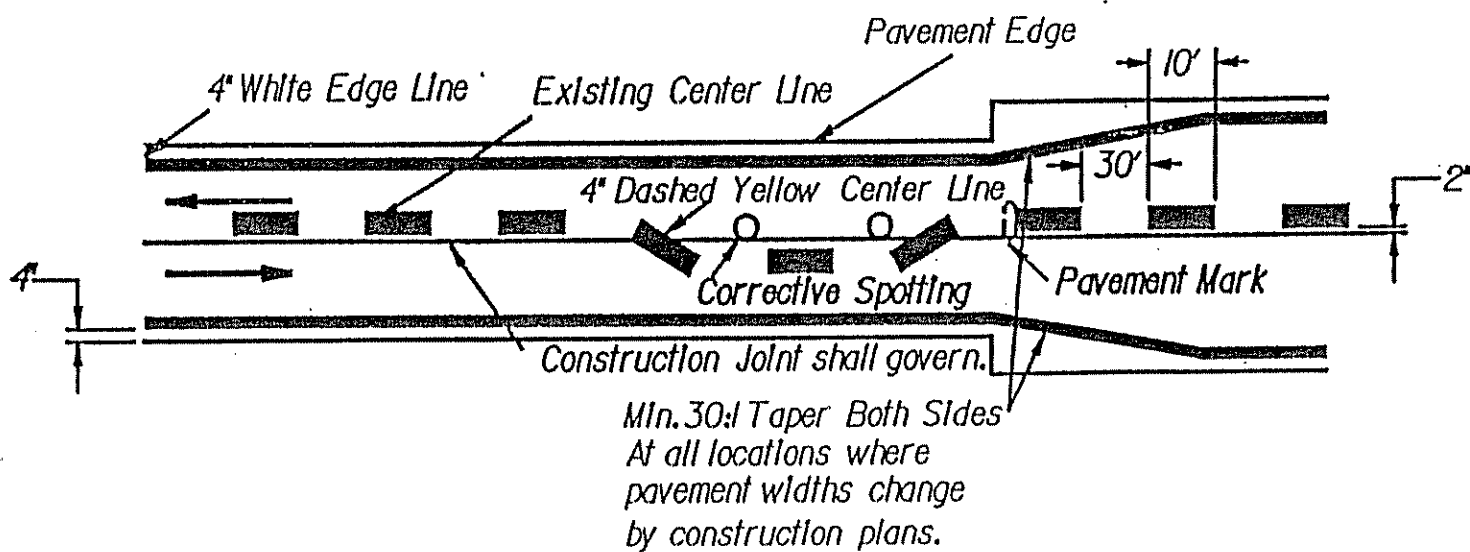


### MULTILANE DIVIDED & UNDIVIDED HIGHWAY MARKINGS



NOTE: Edge line transitions shall be marked at the same time as the adjoining edge lines.

### TWO LANE MARKINGS



Min. 30:1 Taper Both Sides  
At all locations where pavement widths change by construction plans.

#### NOTES:

1. The distance from the pavement edge to the nearside edge of the edgeline may be increased with the approval of the engineer in order to maintain uniform lane width.
2. See TC-72.20 for entrance and exit ramp markings.
3. The cycle length for dashed lines shall be 40 feet plus or minus 6 inches. The minimum length of dash shall be sufficiently long to maintain a 3:1 ratio between length of gap and length of dash.

PAVEMENT MARKING TYPICAL DETAILS

PIC-316-0.00

7  
13

# LOCATION SUB-SUMMARY

DETAIL	
1	MAINLINE UNDIVIDED TYPICAL SPACING
2	TAPERED ACCELERATION LANE
3	DECELERATION LANE
4	PARALLEL ACCELERATION LANE
5	MULTILANE DIVIDED/EXPRESSWAY
6	STOP APPROACH

DETAIL	
7	1 LANE APPROACH W/ LT. TURN LANE
8	THRU APPROACH
9	2 LANE APPROACH W/ LT. TURN LANE
10	4 LANE DIVIDED TO 2 LANE TRANSITION
11	4 LANE UNDIVIDED TO 2 LANE TRANS.
12	TWO LANE NARROW BRIDGE
13	TWO WAY LEFT TURN LANE

DETAIL	
14	ONE LANE BRIDGE
15	HORIZONTAL CURVE
16	HORIZONTAL CURVE ALTERNATE
17	STOP APPROACH ALTERNATE
GAP	CENTERLINE AT 80' TYP.

\* - SEE NOTE SHEET 10

PART	LOCATION				D E T A I L	PRISMATIC RETRO-REFLECTOR COLORS					202	621	621	REMARKS
	COUNTY	ROUTE	S.L.M. SECTION			ONE-WAY		TWO-WAY			RAISED PAVEMENT MARKER REMOVED FOR STORAGE AS PER PLAN* EACH	RAISED PAVEMENT MARKER INSTALL ONLY EACH	RAISED PAVEMENT MARKER EACH	
			FROM	TO		WHITE	YELLOW	WHITE/ WHITE	YELLOW/ YELLOW	WHITE/ RED				
I	PIC	316	0.00	0.20	6	39				27		27	39	SR-56 TO -----
			0.20	0.82	GAP					41		41		
			0.82	1.02	16					29		29		PC=0.91, PT= 0.93
			1.02	4.54	GAP					232		232		
			4.54	4.76	16					35		35		PC=4.64, PT=4.67
			4.76	8.02	GAP					215		215		
			8.02	8.22	16					29		29		PC=8.11, PT=8.13
			8.22	8.80	GAP					38		38		
			8.80	9.00	16					29		29		PC=8.89, PT=8.91
			9.00	9.01	15					2		2		
			9.01	9.22	16					32		32		PC=9.10, PT=9.13
			9.22	9.28	GAP					4		4		
			9.28	9.48	6	39				27		27	39	-----SR-104
			0.00	9.48						784				
TOTAL											784	740	78	

CALCULATED  
 CHECKED  
 PLAN NO.  
**RAISED PAVEMENT MARKER**  
 PIC-316-0.00  
 8  
 13



GENERAL

The Department of Communication, located at 400 East William Street, Delaware, Ohio 43015, (614-363-1251) shall be notified at least seven days in advance before starting the work. The Contractor shall submit in writing a schedule of operations to the Engineer (see 101.18) and receive approval in writing before work is started on this project. All traffic control devices shall be furnished, erected, maintained, and removed by the Contractor in accordance with the Ohio Manual of Uniform Traffic Control Devices. The Contractor shall not order materials or perform work listed in the General Summary for items designated by plan note to be used "as directed by the Engineer" unless authorized by the Engineer.

TRAFFIC

Traffic shall be maintained at all times. The length of restricted traffic zones shall be kept to a minimum consistent with the specification requirements for protection of completed courses. Night closures are permissible, contractors attention is directed to Standard Drawing 97.10 for night time closure requirements.

ALIGNMENT AND PROFILE

The work proposed by this project is for the resurfacing of the existing pavement. The alignment of the existing pavement will not be changed, and the profile of the proposed surface will be similar to that of the existing pavement except that it may be raised an amount equal to the thickness of the resurfacing course or courses specified in these plans.

TACK COAT

The tack coat operation shall be as determined at a pre-construction conference as per 407.05 and application rates shall not exceed 0.1 gal. per sq. yd.

ITEM 202 GUARDRAIL REMOVED FOR REUSE

The following quantity has been provided for guardrail removed for reuse: Bridge No. PIC-316-07.20 (25'/side) 50 LIN FT

ITEM 202 GUARDRAIL POST REMOVED

Once the guardrail posts have been removed they shall become the property of the state or county. The contractor shall notify the project engineer after the removal is complete. Reuse of guardrail posts shall be as directed by the project engineer.

The following quantity has been provided for guardrail post removed: Bridge No. PIC-316-07.20 4 EACH

ITEM 202 WEARING COURSE REMOVED PIC-316-07.20

The wearing course shall be removed to the top of the box beams. This includes the removal of any existing waterproofing on the top of the structure. The structure must be free of any dirt and debris prior to the installation of the membrane waterproofing. The following quantity has been provided for wearing course removal: Bridge No. PIC-316-07.20 (Depth=3 in.) 14x56+9 = 87 SQ.YD.

ITEM 203 EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION

The following quantity has been provided for the installation of the type 3, membrane waterproofing. The excavation shall be 1.5' in depth and 1.0' in width and approximately 56' in length (See Detail 1). The culvert sides shall be free of dirt and debris prior to the installation of the membrane waterproofing.

The following quantity has been provided for excavation not including embankment construction. Bridge No. PIC-316-07.20 2[(1x1.5x56)+27] = 6 CU.YD.

ITEM 617 COMPACTED AGGREGATE, TYPE A

The following quantity has been provided for backfilling the excavated area along the length of the culvert. Bridge No. PIC-316-07.20 2[(1x1.5x56)+27] = 6 CU.YD.

ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR

This item shall be used where directed. The depth of repairs shall be approximately 3". The following quantities have been provided: PART 1 20 CU. YD.

ITEM 253 PAVEMENT REPAIR

This item shall be used where directed. The edge of the pavement removal shall be sawed full depth with a diamond saw prior to removal. The 301 Item shall be placed in two equal lifts. The following quantities have been provided: PART 1 20 CU. YD.

ITEM 254 PAVEMENT PLANING, BITUMINOUS

The existing wearing course shall be removed to a depth equal to the depth of the proposed new pavement. The pavement shall be planed to a depth of 3" at structure PIC-316-07.20. The Contractor shall be totally responsible for any and all damage that may result from the planing operation, including castings. The depth of planing close to the castings shall be as directed, to achieve a smooth riding finished pavement. The planed area shall not be exposed to traffic for more than five days prior to resurfacing.

PLANING QUANTITIES:

PART 1			
0.00	BEGIN PART 1 - BUTT JOINT	75x35+9 =	292 SQ.YD.
3.74	BEGIN PLANED SECTION	75x26+9 =	217 SQ.YD.
4.03	END PLANED SECTION	75x32+9 =	267 SQ.YD.
4.31	STRUCTURE - BUTT JOINTS	2X75X20+9 =	333 SQ.YD.
7.20	STRUCTURE - BUTT JOINTS	2X150X20+9 =	667 SQ.YD.
9.48	END PART 1 - BUTT JOINT	75x30+9 =	250 SQ.YD.

PART 1 TOTAL CARRIED TO GENERAL SUMMARY = 2026 SQ.YD.

ITEM 254 PATCHING PLANED SURFACE

The quantity of 200 square yards to repair brick surface damaged by planing has been provided and carried to the general summary.

ITEM SPECIAL MEMBRANE WATERPROOFING

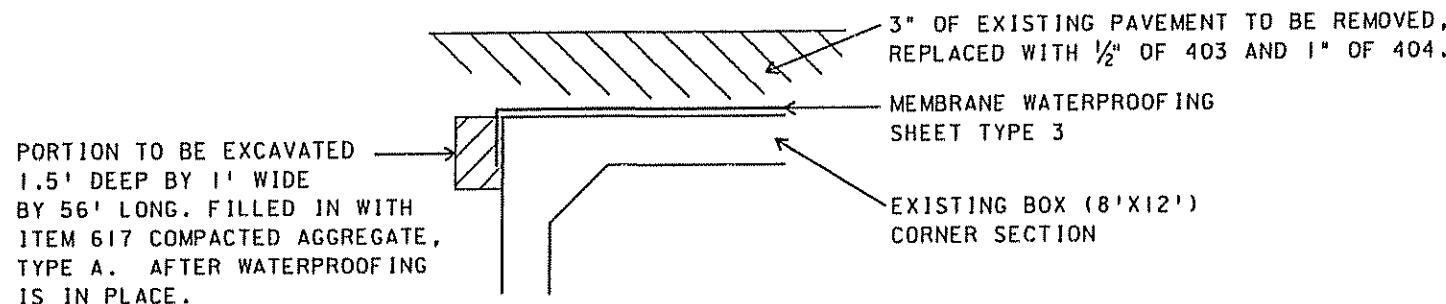
Membrane waterproofing (sheet type 3) shall be applied to the top surface of the precast culvert sections and shall extend 1 FT. down all sides for the portions of the culvert which shall be in contact with the pavement. The concrete surfaces shall be free of any dirt and debris prior to the installation of the waterproofing.

The following quantity has been provided for membrane waterproofing: Bridge No. PIC-316-07.20 (16x56+9=100 sq.yd.) 100 SQ.YD.

ITEM 606 GUARDRAIL REBUILT

The guardrail shall be placed in the same location prior to construction once the resurfacing over the structure is complete.

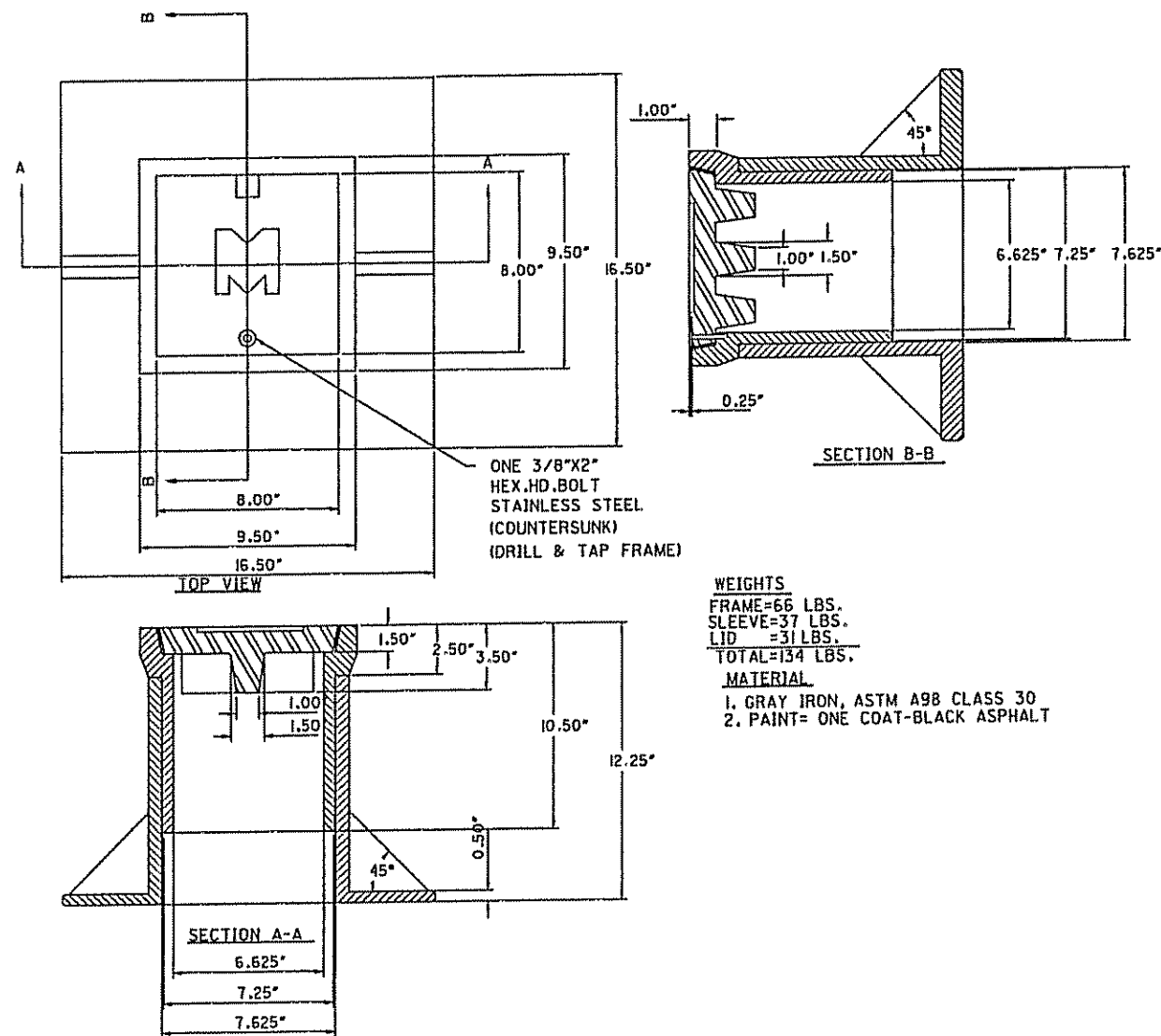
The following quantity has been provided for guardrail rebuilt: Bridge No. PIC-316-07.20 (25'/side) 50 LIN FT



DETAIL 1  
PIC-316-07.20

# GENERAL NOTES

## 604 MONUMENT ASSEMBLY, AS PER PLAN (ADJUSTABLE)



SEE STANDARD DRAWING MC-1 FOR ADDITIONAL DETAILS

### ITEM 604 MONUMENT ASSEMBLY, AS PER PLAN:

This work shall consist of furnishing and placing centerline monuments at the following intersections:

- S.R. 316 AND T.R. 194 (DENNIS RD. NORTH)
- S.R. 316 AND C.R. 33 (COLUMBUS-DARBYVILLE RD.)
- S.R. 316 AND C.R. 4 (COMMERCIAL POINT RD.)
- S.R. 316 AND T.R. 136 (GIBSON RD.)

A registered surveyor from District Six Survey Department shall be responsible for referencing and verifying the locations of the centerline monuments. The Contractor shall notify the Survey Department (614-363-1251) 48 hours prior to start of monument work. Payment for this item shall include all necessary labor, miscellaneous hardware, and equipment required for placement. Payment will be at contract bid price per each.

Part I Total Carried to General Summary = 4 Each

ITEM 614 TEMPORARY CENTER LINE, CLASS II: The following quantities have been provided:

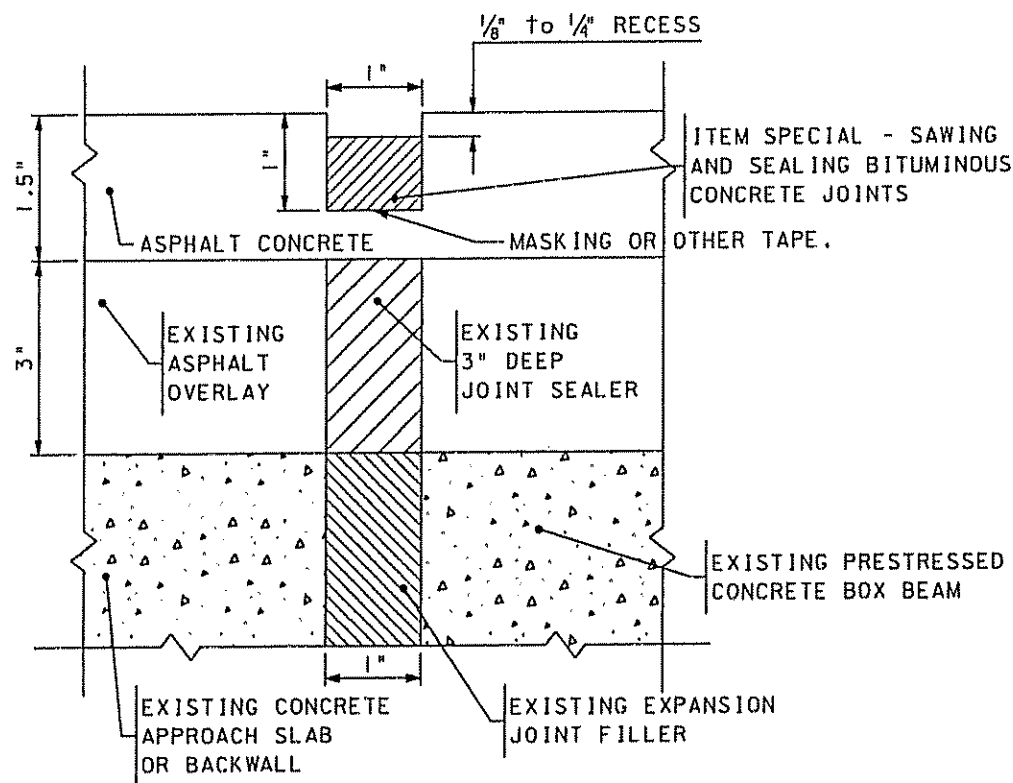
Total Carried to General Summary  
Part I S.L.M. 0.00 - S.L.M. 9.48 9.48 mi x 1 line x 2 app. = 18.96 mi

### ITEM 623 - CONSTRUCTION LAYOUT STAKES, AS PER PLAN

This item shall consist of stationing using 36" lath stakes. The stakes shall be spaced at 200' intervals and shall extend throughout the length of the project and throughout the length of all ramps. Placement of the stakes shall be as directed by the Engineer. The contractor is responsible for replacing any damaged or missing stakes. Construction Layout Stakes, as per plan will be paid for at the contract lump sum bid, which price shall be full compensation for all services, materials, labor, equipment, tools, and incidentals including the removal necessary to complete this item.

### ITEM 202 Raised Pavement Markers Removed, As Per Plan

In addition to Item 202.071 in the Specifications handbook the markers to be removed shall be taken by the contractor to the Pickaway County Garage for storage.



**SEALING OF JOINTS AT ABUTMENTS  
FOR BRIDGE NO. PIC-316-01.68 AND PIC-316-02.44**

**1) Description:**

This work shall consist of cutting and sealing transverse joints on the new bituminous concrete overlay of box beam. Bituminous concrete joints shall be constructed directly over, and in line with, the existing underlying transverse abutment joint of the box beams.

**2) Materials:**

The joint sealant shall meet the requirements of ASTM Specification D3405, Joint sealants, Hot-poured, for Concrete and Asphalt Pavements. Acceptable alternate materials are:

Roof-Flex 176, polyurethane, as produced by the Carboline Company, 350 Hanley Industrial Court, St. Louis, Missouri 63144 (Roger Zubal, 614-877-3406); a silicone sealant meeting Federal Specifications TT-S-001543A Class A (one-part silicone sealants) and TT-S-00230C Class A (one-component sealants), such as those manufactured by General Electric, Silicone Products Division, 6155 Rockside Rd., Rockside Square 1, Independence, Ohio 44131 (John Fromholtz, 216-447-1750) or Dow Corning, 3737 Park East, Beachwood, Ohio 44122 (Robert Ruppel, 216-464-2330); or Sof-Seal, a cold-applied, low-modulus, two-component polymeric compound horizontal sealant as manufactured by W. R. Meadows, Inc., P.O. Box 543, Elgin, Illinois 60121 (Robert Cameron, 312-683-4500). Sealant will be accepted on the basis of the manufacturer's

certification that it conforms to the requirements of these specifications.

**3) Construction Details:**

**A) General:** The contractor shall conduct his operation so that the cutting, cleaning and sealing of transverse joints is a continuous operation that will be performed as soon as practical after the paving, but no later than four (4) days after placement of the asphalt concrete surface course. Traffic shall not be allowed to knead together or damage the joint cut prior to sealing.

**B) Cutting of Transverse Joints:** The contractor shall saw or rout transverse joints to the dimensions shown in the details on this sheet. The cut joints shall lie directly above each existing abutment joint. The joint location shall be marked on the new asphalt surface with a chalk line, or by some other acceptable method, before cutting. Details of the method for locating and accurately marking the proposed cuts shall be subject to the approval of the Engineer prior to starting any surfacing or paving operations.

The blade or blades shall be of such size that the full width and depth of the cut can be made with one pass. Dry or wet cutting will be allowed. Joints shall extend the full width of the bridge.

**C) Cleaning Joints:** Dry sawed joints shall be thoroughly cleaned with a sufficient amount of compressed air to remove any dirt,

dust, or deleterious matter. Wet sawed joints shall be washed clean of all cuttings by flushing with a jet of water and with other tools as necessary. After flushing, the joint shall be blown out with compressed air. When the surfaces are thoroughly clean and dry, and just prior to placing the joint sealer, compressed air having a pressure of at least 90 p.s.i. shall be used to blow out the joint and remove all traces of dust.

In the event freshly cut joints become contaminated before they are sealed, they shall be recleaned of all foreign material by high pressure water jet.

**D) Sealing Joints:** The joint shall be thoroughly dried before the sealant is placed. After cleaning and drying, a bond-breaker (tape) shall be applied to the bottom of the groove.

Hot-poured joint sealant material shall be heated in a kettle or melter constructed as a double boiler, with the space between the inner and outer shells filled with oil or other heat transfer medium. Positive temperature control and mechanical agitation shall be provided. Heating must be in strict accordance with the manufacturer's recommendation. Joint sealer material shall never be kept heated at the pouring temperature for more than four (4) hours and shall never be reheated. Sealer left in the applicator at the end of a day's work shall be removed and discarded.

Hot-poured sealant shall be applied immediately through a nozzle, which must project into the sawed joint, filling from the bottom up. The seal shall completely fill the joint in such a manner that, after cooling, the level of the sealer will not be higher than 1/8" below the pavement surface. Any depression in the cooled seal greater than 3/16" shall be brought up to the specified limit for further addition of hot-poured sealant. Care shall be taken in the sealing of the joints so that the final appearance will present a neat fine line.

The cold applied sealant materials (polyurethane, silicone, and polymeric compounds) shall be installed as per manufacturers' recommendations, or as directed by the Engineer. The sealant shall be installed when the ambient temperature is 40 degrees F or higher. Traffic shall not be allowed on the joint for one hour after application of the sealant.

**4) Method of Measurement:**

The quantity to be paid for under this item will be the number of linear feet of joints sawed and sealed as per the above requirements.

**5) Basis of Payment:**

The unit price per linear foot for Item Special - "Sawing and sealing bituminous concrete joints" shall include the cost of all labor, materials, and equipment necessary to complete the work, including the furnishing and placing of the joint sealer material.

**ITEM SPECIAL 516E31200 SAWING AND SEALING BITUMINOUS CONCRETE JOINTS:**

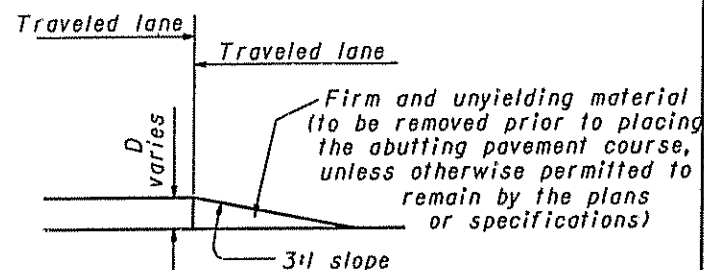
The following quantity has been provided for Bridge No. PIC-316-01.68:	62 LIN FT
<b>Total to General Summary</b>	<b>62 LIN FT</b>

### GENERAL NOTES

- It is intended that this drawing be used for treatment of drop-offs that develop during construction operations, and that are not otherwise provided for in the construction plans. Where the plans do not provide specific items for labor, equipment, or materials to implement the drop-off treatments specified hereon, they shall be included for payment in the lump sum bid for Item 614 - Maintaining Traffic.
- While the need for certain advisory signing is noted hereon, it is not intended that this be indicative of all signing that may be required to advise or warn motorists, and all requirements of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) must be fulfilled.
- In urban or otherwise heavily developed areas where pedestrians and/or bicyclists may be present in significant numbers, additional signing and protective measures other than those shown hereon may be required.
- The drop-off treatment selected for use at any given location shall be as appropriate for the prevailing conditions at the site.
- Where concrete barrier is specified, it shall be in accordance with Standard Construction Drawing MC-9.2 and Item 622.
- When drums are specified for a dropoff condition, a minimum number of four drums shall be used. Spacing shall be as indicated in the plans or as specified in the OMUTCD.
- When OW-151 (Low Shoulder) signs or OW-171 (Uneven Lanes) and OWP-171 signs are required, they shall be placed 750' in advance of the condition, on all intersecting entrance ramps within the limits of the condition and immediately beyond all intersecting roadways within the limits of the condition. When the dropoff condition extends more than one-half mile, additional signs should be erected at intervals of one mile or less.
- For locations, such as at ramps, lane shifts, lane closures, etc., where traffic is required to negotiate any difference in elevation between pavements, a 3:1 slope treatment similar to the Optional Wedge Treatment shall be provided.
- Portable concrete barrier shall be placed on the same level as the traffic surface and shall not encroach on lane width(s) designated as the minimum required for traffic use. Where drums are used, and their presence would reduce traveled lane widths to less than 10', drums may be placed on the opposite level from that of traffic provided the dropoff depth does not exceed 5" and approval is granted by the Project Engineer.
- Pavement Repairs (or similar work):
  - Lengths greater than 60 feet - utilize appropriate treatment from Condition I.
  - Lengths of 60 feet or less - repairs shall be effected in accordance with 255.08. Drums may be used as a separator adjacent to the traveled lane.

### OPTIONAL WEDGE TREATMENT (MILLING OR RESURFACING)

- This treatment may be used when permitted for Condition I only.
- OW-171 and OWP-171 signs required.

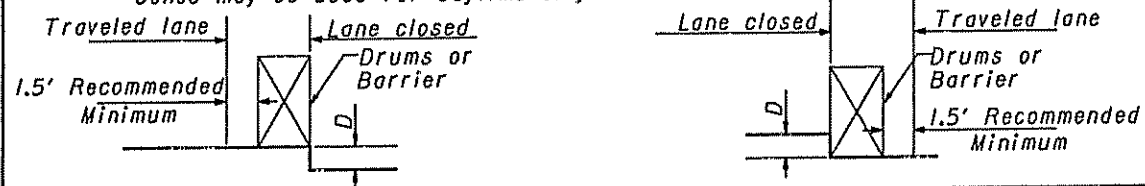


### CONDITION I DROPOFFS BETWEEN TRAVELED LANES

- These treatments are to be used for resurfacing, pavement planing, excavation, etc. between or within traveled lanes.

D (In.)	Treatment
≤ 1/2	Erect OW-171 and OWP-171 signs.
> 1/2 - 3	1) Lane closure utilizing drums* as shown below OR 2) Optional Wedge Treatment
> 3 - 5	Lane closure utilizing drums as shown below.
> 5	Lane closure utilizing portable concrete barrier as shown below.

\*Cones may be used for daytime only conditions.

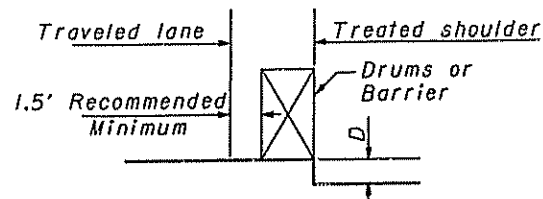


### CONDITION II DROPOFFS WITHIN GRADED SHOULDER AREA

- The treatments indicated below are for use in conjunction with resurfacing, planing, or excavations within the graded shoulder area.
- The graded shoulder area is that flat or gradually sloping area between the edge of a normally traveled lane and the more steeply sloping ditch foreslope or embankment slope. Its surface may be soil or turf, and/or it may be inclusive of a "treated" area (improved with aggregates, asphaltic materials, or concrete). For the purposes herein, its maximum width shall be considered to be twelve (12) feet.

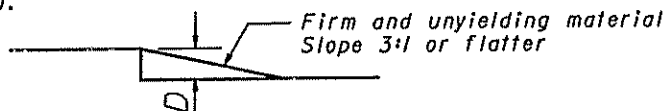
D (In.)	Treatment
≤ 1/2	1) If edgelines are present, no treatment necessary OR 2) Erect OW-171 and OWP-171 signs.
> 1/2 - 5	1) If min. lane width* requirements can be met, maintain lanes utilizing drums as shown below OR 2) If min. lane width* requirements cannot be met, close adjacent lane utilizing drums OR 3) Optional Shoulder Treatment.
> 5 - 12 Daylight only	If min. lane width* requirements can be met, maintain lanes utilizing drums as shown below.
> 5 - 24	1) If min. lane width* requirements can be met, maintain lanes utilizing portable concrete barrier as shown below. OR 2) If min. lane width* requirements cannot be met, close adjacent lane utilizing drums.
> 24	Lane closure utilizing portable concrete barrier as shown below.

\*Minimum lane widths shall be 10' unless otherwise specified in the plans.



### OPTIONAL SHOULDER TREATMENT

- This treatment may not be used within a bituminous shoulder where a hot longitudinal joint per 401.15 is required.
- OW-151 signs required.



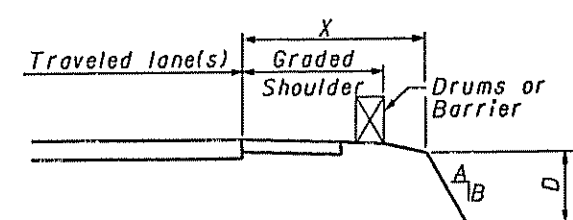
### CONDITION III

#### DROPOFFS BEYOND GRADED SHOULDER OR BACK OF CURB

- See Note 2 under Condition II.
- Use Chart A or B below, as applicable.

### CHART A

- USE FOR:
- Uncurbed Facilities.
  - Curbed Facilities, where:
    - Curbs are less than 6" in height.
    - Curbs are 6" or greater in height and the legal speed is greater than 40 mph.

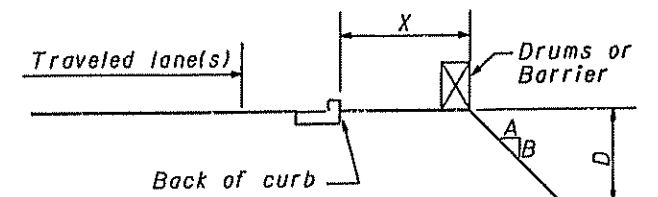


X (Ft.)	D (In.)	A/B	Treatment Required	
			Day	Night
0-4	Any	Any	(a)	(a)
4-30	Any	3:1 or Flatter	None	None
4-12	< 3	Steeper than 3:1	None	None
4-12	> 3 - < 12	Steeper than 3:1	Drums	Drums
4-12	> 12	Steeper than 3:1	Drums	Barrier
> 12 - 20	< 12	Steeper than 3:1	None	None
> 12 - 20	> 12 - < 24	Steeper than 3:1	Drums	Drums
> 12 - 20	> 24	Steeper than 3:1	Drums	Barrier
> 20 - 30	< 24	Steeper than 3:1	None	Drums
> 20 - 30	> 24	Steeper than 3:1	Drums	Barrier
> 30	Any	Any	None	None

(a) Use treatment specified under Condition II.

### CHART B

- USE FOR: Curbed facilities, where the curb is 6" or greater in height and the legal speed is 40 mph or less.



X (Ft.)	D (In.)	A/B	Treatment Required	
			Day	Night
0-10	< 12	Any	None	Drums
0-10	> 12	Any	Drums	Drums
> 10	Any	Any	None	None

CHECKED  
CREATED

DROPOFFS IN WORK ZONES

PIC-316-0.00

SHEET NUMBER										ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	CALCULATED	CHECKED
2	3	4	5	6	8	9	10	11								
						50				202	38200	50	LIN. FT.	GUARDRAIL REMOVED FOR REUSE		
						4				202	38700	4	EACH	GUARDRAIL POST REMOVED		
					784					202	54101	784	EACH	RAISED PAVEMENT MARKER REMOVED FOR STORAGE, AS PER PLAN		
						87				202	23500	87	SO.YD.	WEARING COURSE REMOVED		
						6				203	12000	6	CU YD	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION		
						20				251	01002	20	CU YD	PARTIAL DEPTH PAVEMENT REPAIR		
						20				253	02000	20	CU YD	PAVEMENT REPAIR		
5056						2026				254	01000	7082	SO YD	PAVEMENT PLANING, BITUMINOUS		
						200				254	01600	200	SO YD	PATCHING PLANED SURFACE		
1567	23									403	25000	1590	CU YD	ASPHALT CONCRETE AC-20 (SPOT LEVELING)		
										404	20000	3179	CU YD	ASPHALT CONCRETE, AC-20		
3136	43									407	10000	11449	GALLON	TACK COAT		
11289	160									SPECIAL	512E67030	100	SO YD	MEMBRANE WATERPROOFING (SHEET TYPE 3)		
						100		62		SPECIAL	516E31200	62	LIN FT	SAWING AND SEALING BITUMINOUS CONCRETE JOINTS		
							4			604	38501	4	EACH	MONUMENT ASSEMBLY, AS PER PLAN		
						50				606	16000	50	LIN FT	GUARDRAIL REBUILT		
										614	11000	LUMP		MAINTAINING TRAFFIC		
32										614	12460	32	EACH	WORK ZONE MARKING SIGN		
							18.96			614	21400	18.96	MILE	TEMPORARY CENTER LINE, CLASS II		
										617	10100	1991	CU YD	COMPACTED AGGREGATE, TYPE A		
	188	1797				6				617	25000	4	M GAL	WATER		
										619	15000	LUMP		FIELD OFFICE, TYPE A		
										SPECIAL	61925000	LUMP		COMPUTER EQUIPMENT FOR TYPE A OFFICE		
						78				621	00100	78	EACH	RAISED PAVEMENT MARKER		
						740				621	00200	740	EACH	RAISED PAVEMENT MARKER, INSTALLATION ONLY		
							LUMP			623	10001	LUMP		CONSTRUCTION LAYOUT STAKES, AS PER PLAN		
										624	10000	LUMP		MOBILIZATION		
										643	00100	18.48	MILE	EDGE LINE		
			18.48							643	00300	9.48	MILE	CENTER LINE		
			9.48							644	00500	26	LIN FT	STOP LINE		
				26												

PLAN NO.

GENERAL SUMMARY

PIC-316-0.00