706 (83)

PLAN NO. 168

and provisions for the maintenance and safety of traffic

The Standard 19 83 Specifications of the State of Ohio, Department of Transportation, including changes and Supplemental Specifications listed in the plans and proposal shall govern these

I hereby approve these plans and declare that the making of these improvements will require the

will be provided by State forces. The closing to traffic of the highways will not be required on Parts

improvements.

closing of the highways to traffic on Parts No.

No. 1, 2, 3, 4, 5 and 6

OHIO DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

DADT	COUNTY	COUTE	SECTIONS	PROJECT TE	RMINII	NET	TOWNSHIP	CITY	VILLAGE
PARI		ROUTE	SECTIONS	BEGIN	END	LENGTH MILES	TOWNSHIP	Cit !	VICEAGE
1	ASD	95	(10.26-12.68)	10.26	14.07	3.81			
2	WAY	95	(0.00-7.17)	0.00	8.78	8.78			
3	WAY	226	(0.88)-(1.71)	0.88	1.86	0.87			
4	WAY	226	(1,60)-(1,86-2,96)	1.60	2.98	1.23			Shreve
5	WAY	302	(1.78B-1.88B)	1.7 8B	2.73B	0.95		Wooster	
6	WAY	302	2.73B	2.73B	3.12B	0.39			

LOCATION MAP Approved Assistant Deputy Director, Program Development Chief Engineer, Construction Chief Engineer, Design -

	NDARD WINGS	SUPPLEMENTAL SPECIFICATIONS					
BP-5	7-16-81	SS-843	10-23-75				
		SS-845	03-02-81				
		SS-953	08-21-80				
		55-803	5-27-83				

REY. 6.2-83 JOP

BN

	I project	Loke Avon Loke	•
7A T	SANDISKYM	Sheffield (2) (20)	\dot{F}
N		Avon	
	Cos- tolic Huron		
	1000	N.Ridgeville To	
Å	Amhers () Berlin E () Berlin E () Berlin E ()	LYRIA AND TO THE	•.
- 1	E R Berlin E 60/50 South 1 30 P	51,5	f
- 11	SATE TO AMPIEST	A 10 (02)	•
		A DI N N P	
4	Bellevue Wokeman Wokeman Wokeman	Graftont Brunswick	P
+	Monroevine	Graftort Brunswick C. S. See Property Connection Control of the Co	
•		range	
			·
			İ
	He U R O N Wellingto		
	North North Line Line	Spencer Lake 199 143	
		Spencer Brigrwood Chippewa Beach on-the-Lake	_
	Artico Willord 😡	M E D N A	
		Glens Park Wadsworth	[™] Nort on
	Plymouth Greenwich S A S H L A N D	Spencer Brigmood Chippewo Beach on the Loke N A Beach on the Loke	
		West Burbank (Creston	
	Sayannan Say		yes-
	(B)		··· \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	Shelby _ Shelby _ Shelby _	Congress	short-
		5 Smithville	
		W A Smithville	
*		Orrville	15
	BUCYRUS NRobinson Crestling Ontario	omesville Dalto	
	Ontoriol Sold Moyesville		
		Apple	
١	Galion MANSFIELD Gazage	Creek	
		Shreve Shreve Fredericksburg	
		Fredericksburg	Wilmot
	Companyies Description		Te .
	Pelivile Core		
		(2)(3)(4)	
	PORTION TO BE IMPROVED		
	DETOUR	/	*
- 		· ·	
\$			•

BRIDGE DECK TREATMENT

404 ASPHALT CONCRETE -7

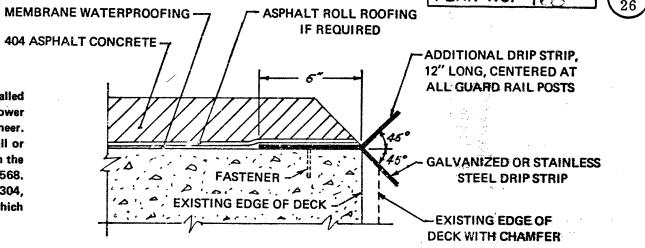
PLAN NO.

PROTECTIVE COURSE FOR MEMBRANE WATERPROOFING

MEMBRANE WATERPROOFING, Sheet Type 1: A minimum of 1-1/2 inches of 404 Asphalt Concrete shall be placed over the membrane.

MEMBRANE WATERPROOFING: A minimum of 2-1/2 inches of 404 Asphalt Concrete shall be placed over the membrane.

DRIP STRIP: Prior to applying deck membrane waterproofing, a bent drip strip shall be installed along the edges of the deck as shown. The strips shall be fastened at 1'-6" c/c maximum with power driven pins or no. 10 galvanized screws and expansion anchors, subject to the approval of the Engineer. The strips shall be placed the full length of the deck, ending at the face of the abutment wingwall or steel end dam angle. Where splices are required a 3" (Min.) lap shall be used with a fastener through the lap. Steel for galvanized strips shall be 8" X 0.105" and shall meet the requirements of ASTM A568. Galvanizing shall be in accordance with 711.02. Stainless steel shall be 20 gauge ASTM A167, Type 304, mill finish. Payment shall be at the contract price bid for item Special Sq. Ft. Steel Drip Strip, which shall include all materials, labor, tools and incidentals necessary to complete item.



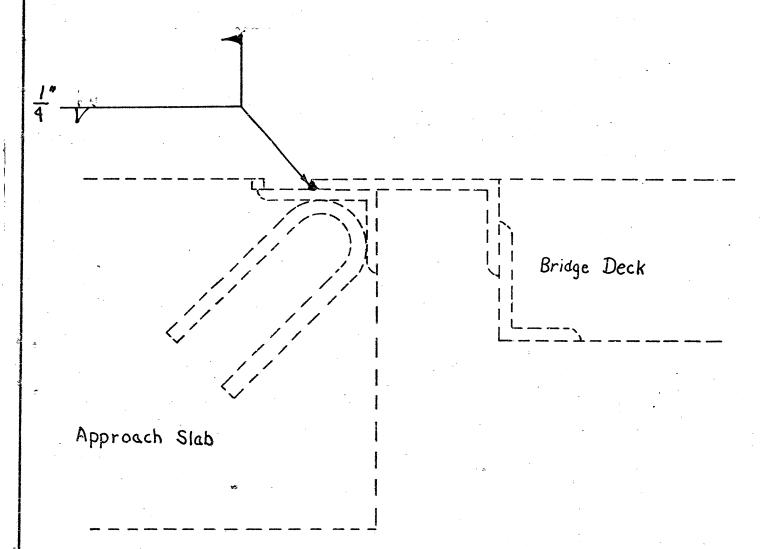
TYP. SEC. DRIP STRIP

	BRIDGE DECK DATA																								
					202	BR	IDGE DECK REPA	MR .				SPECIAL		516		CONCRETE	Spec.								
	COUNTY, ROUTE, BRIDGE NO.				WEARING	C 95, 850 DENGE CONCRETE			PATCHING		DECK WATERPROOFING					Pavement	Time of the	D							
PART		LENGTH (BRIDGE LIMITS)		1	REMOVED					STEEL		MEMBRANE] WATERPROOFING	Rubberized Seal	VERT. EXT. OF STR.	Edge Condition	404	Bit.	Existing Wearing	Pavement Width						
				AREA	AREA	AREA	AREA	AREA	AREA	AREA	AREA	AREA	REA DEPTH	$\frac{1\frac{1}{4}}{\text{OVERLAY}}$ " THICK	VARIABLE THICKNESS OVERLAY	FULL-DEPTH REPAIR	/		STRIP	SHEET TYPE 1		EXP. JOINTS		,,	Without Heat
<u> </u>		L.F.	L.F.	S.Y.	S.Y.	S.Y.	C.Y.	C.Y.	TYPE	S.Y.	S.F.	S.Y.	S.Y.	L.F.		C.Y.	S.Y.		Ft.						
2	Way-95-0082	66.0	24.0	176									180				398*	Asphalt	20						
-											<u> </u>														
2	Way-95-0698	34.8	36.0	139		139	6	2					Windows distance of the second		Slab		Annual Control of the	Concrete	20						
						400											· · · · · · · · · · · · · · · · · · ·		,						
	Total Part 2					139	. 6	2					180				398								
				·			, , , , , , , , , , , , , , , , , , ,																		
a		-													·		,								
													·												
\$													elitation and self-real and devices a contract course may experience and experience of the plane of				0								
						·		-																	
											41														
ę.													a terkénne a mar mendeka telepara a telebola telepara telebola telebola telebola telebola a telebola a telebola												
<u></u>																									

^{*} Plane all asphalt to surface of wood deck, allow to dry, cover with rubberized seal and pave the same day. Plane 50' on each approach. All dirt and loose material shall be removed prior to resurfacing the bridge full width. Payment for the above shall be included in the cost of Pavement Planing, Bituminous Without Heat.

See Sheet No. 20 and 21 for Traffic Control on Way-95-0698.

Note: Joint also to be welded thru curb section.

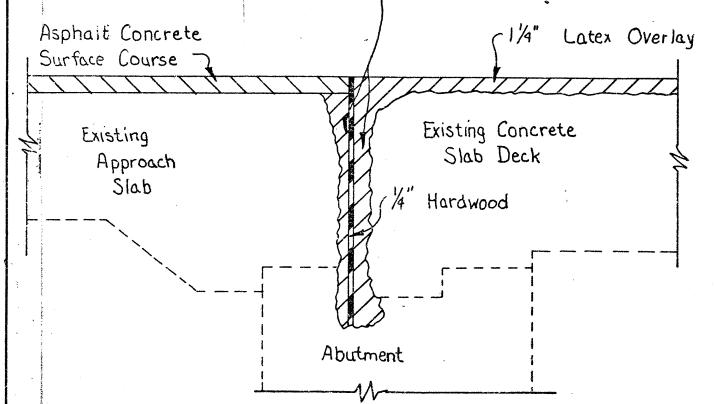


Joint Detail with Joint Steel

ASD-95-1367

Vertical Extension of Structural Expansion Joints

Remove deteriorated concrete in joint area and repair with Latex Modified Concrete Overlay (Variable Thickness)



Typical Joint Repair Detail
For Concrete Slab Deck

WAY -95-0698



ITEM SPECIAL, PAVEMENT PLANING, BITUMINOUS WITHOUT HEAT:

Planing is to be performed as directed and in areas designated by the Engineer.

Removal of existing pavement surface may be required to eliminate adverse surface distortion which in the judgement of the Engineer cannot be satisfactorily corrected in the paving courses.

These areas may include material displaced by rutting or shoving, asphalt surface patches, concrete patches and transverse bumps at joints or joints with structures, adjoining pavements or railroads, etc.

ITEM 604, CASTINGS ADJUSTED TO GRADE:

Any unit of this item may be nonperformed if so directed by the Engineer and the surface shall be feathered to meet the existing casting or inlet in a manner acceptable to the Engineer. All adjusting rings shall have prior approval from the Engineer before using.

Under Item 604.03, Adjustment to Grade, paragraph (a), the casting to be adjusted may or may not have an existing frame. The work shall consist of adjusting the casting or whatever is existing to the satisfaction of the Engineer. The Contractor is reminded to field check all adjustment to grade items prior to bidding, as no additional compensation will be granted in adjusting to grade in the absence of a frame or whatever is existing.

ITEM 403, PRE-LEVEL NOTE:

403 Pre-level shall be placed prior to any excavation along the existing pavement.

TRENCH FOR WIDENING:

Trench excavation for base and berm widening shall be performed only on one side of the pavement at a time. The open trench shall be adequately maintained and protected at all times with drums or barricades, with Type "C" steady burn lights attached.

Placement of proposed base material shall follow as closely as possible behind the excavation operation. The length of widening trench which is open at any one time shall be held to a minimum and shall at all times be subject to approval by the Engineer.

TACK MATERIAL:

The amount of tack material required to coat the existing pavement edges prior to 301 or 402 operation shall be included in the Unit Price Bid for Item 402, Asphalt Concrete or Item 301, Bituminous Aggregate Base.

ITEM 516, VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINTS:

A certified welder is required for all welding under this item.



TIEM - 845 EPINGE DECK REPAIR AND OVERLAY WITH LATEN MODIFIED CONCRETE PREPARATION:

NO CONCRETE DECK PREPARATIONS SHALL BE STARTED AFTER OCTOBER 15.

ANY CONCRETE DECK OVERLAYS STARTED BEFORE OCTOBER 15 SHALL BE COMPLETED BEFORE OCTOBER 20. NO CONCRETE DECK OVERLAYS SHALL BE PLACED BEFORE APRIL 15.

SURFACE PREPARATION SHALL INCLUDE THE REMOVAL OF THE EXISTING
ASPHALT WEARING SURFACE. THE CONCRETE DECK SHALL BE SCARIFIED WITH
A SEPARATE PASS AFTER THE ASPHALT HAS BEEN COMPLETELY REMOVED.

partial depth
ALL EXISTING, PATCHES SHALL BE REMOVED COMPLETELY.

ANY CONSTRUCTION EQUIPMENT ON THE DECK SURFACE AFTER THE DECK SURFACE HAS BEEN SANDBLASTED SHALL BE DRIVEN ON A FOUR (4) MIL. POLYETHYLENE SHEET TO PREVENT CONTAMINATION OF THE CLEAN SURFACE.

WATER BLAST CLEANING SHALL NOT BE USED.

SCREED RAIL SUPPORTS SHALL NOT BE SET ON THE DECK SURFACE TO BE OVERLAID.

THE CONTRACTOR SHALL USE THE CURBS, PARAPETS, OR RAILING TO REFERENCE THE EXISTING DECK SURFACE PRIOR TO SCARIFICATION. FINISHING

SUPPORT

MACHINE RAILS SHALL BE SET WITH REFERENCE TO THESE REFERENCE POINTS.

Top surface of the contract of the contrac

AFTER THE SCREED RAILS HAVE BEEN SET TO PROPER PROFILE AND PRIOR TO PLACING THE OVERLAY, THE FINISHING MACHINE WITH 1-. 1/8" THICK FILLER BLOCKS ATTACHED TO THE BOTTOM OF THE SCREED SHALL BE PASSED OVER THE ENTIRE AREA OF THE DECK TO BE OVERLAID.

THE FILLER BLOCKS SHOULD GENERALLY CLEAR THE SCARIFIED

DECK SURFACE BY NOT MORE THAN 1/8". CONCRETE WHICH DOES NOT CLEAR

THE FILLER BLOCKS SHALL BE REMOVED.

ESSARY TO ACCOMODATE THE WIDTH OF THE FINISHING MACHINE, TO FACILITATE CHANGES IN ROADWAY CROWN, AND TO PERMIT MAINTENANCE OF VEHI
Except as approved by the Construction Engineer

CULAR TRAFFIC, EXCEPT AS APPROVED BY THE DISTRICT. JOINTS SHALL

those required of faces of

NOT BE USED in close proximity to a Curbs, Barriers, nor at edges of decks.

FINAL SOUNDING OF THE DECK SHALL NOT BE PERFORMED WITHIN TWENTY FOUR (24) HOURS AFTER A RAIN, WHICH SHALL INCLUDE EIGHT (8) HOURS OF GOOD DRYING WEATHER. IN NO CASE SHALL THE FINAL SOUNDING BE MADE WHEN THE DECK IS DAMP. FINAL SOUNDING MAY INCLUDE ONE (1) OR MORE ATTEMPTS TO ASSURE ALL DETERIORATED CONCRETE HAS PEEN REMOVED.

* CONSTRUCTION ENGINEER.

PLACEMENT:

PLACEMENT OF THE OVERLAY SHALL BE COMPLETED DURING THE NIGHT
BETWEEN OFFICIAL SUNSET AND SUNRISE. THE CONTRACTOR SHALL SUBMIT
A PLAN FOR PROVIDING ADEQUATE LIGHTING FOR THE WORK AREA AT LEAST
FIFTEEN (15) CALENDAR DAYS IN ADVANCE, AND RECEIVE WRITTEN APPROVAL
DISTRICT CONSTRUCTION
FROM THE ENGINEER, BEFORE PLACING THE CONCRETE. THE LIGHTS SHALL
BE SO DIRECTED THAT THEY DO NOT AFFECT OR DISTRACT APPROACHING
TRAFFIC. IN EARLY SPRING OR LATE FALL THE OVERLAYS MAY PE PLACED
DURING DAYLIGHT HOURS BY PERMISSION OF THE ENGINEER, IF ALL OF THE
FOLLOWING CONDITIONS ARE MET AND DOCUMENTED:



PLAN NO.

PLACEMENT CEETER

ALL REQUIRED CHARACTERISTICS (AIR, SLUMP, ETC.) OF THE MIX SHALL BE ADJUSTED OFF THE DECK BEFORE PLACEMENT ON THE DECK STARTS.

THE CEMENT TEMPERATURE SHALL NOT EXCEED 90° F. AT THE TIME OF MIXING.

A BONDING GROUT CONSISTING OF EQUAL PARTS BY VOLUME OF PORTLAND CEMENT AND SAND MIXED WITH 50% WATER AND LATEX MIXTURE TO PRODUCE. A PAINT CONSISTENCY SHALL BE USED FOR SEALING VERTICAL JOINTS AROUND FULL-DEPTH REPAIRS, BETWEEN ADJACENT POURS AND RAISED CURBS AND BARRIERS.

ACCESS OR WORK AREA SHALL BE PROVIDED AROUND BOTH SIDES OF THE FINISHING MACHINE ON STRUCTURES LONGER THAN 20'. IF NECESSARY, THE CONTACTOR SHALL CONSTRUCT A MINIMUM TWO (2) FOOT WIDE WALKWAY ALONG THE EDGE OF THE STRUCTURE TO FACILITATE FINISHING AND INSPECTION.

CURING:

INSTEAD OF COVERING THE SINGLE LAYER OF BURLAP WITH A LAYER OF FOUR (4) MIL. POLYETHYLENE OR A WET BURLAP - POLYETHYLENE SHEET, THE BURLAP SHALL BE KEPT CONTINUOUSLY WET BY MEANS OF AN AUTOMATIC WETTING SYSTEM FOR THE FIRST TWENTY-FOUR (24) HOUR PERIOD. In addition, a second layer of burlap shall be placed one (1) hour after placement of the first layer.

QUANTITIES:

A CONTINGENT QUANTITY OF <u>2</u> CUBIC YARDS FULL DEPTH
REPAIR IS PROVIDED FOR EACH STRUCTURE. IF THIS ITEM IS NOT RECUIRED
IT SHALL BE NONPERFORMED.

SPALLED TOPS OF BACKWALLS SHALL BE REPAIRED WITH ITEM 845.

LATEX MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS).

Supplement Specification 845 and
ALL PROVISIONS OF ITEM 511 OF 1983 CONSTRUCTION AND MATERIALS

SPECIFICATIONS SHALL APPLY EXCEPT WHEN IN CONFLICT WITH THESE

NOTES.

ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE ABOVE WORK SHALL BE INCLUDED IN ITEM 845 - LATEX MODIFIED CONCRETE OVERLAY (1-1/4" THICK), AS PER PLAN.

DETOUR LIMITATIONS:

THE CONTRACTOR SHALL SCHEDULE AND PROSECUTE THE WORK SO THE DETOUR WILL NOT BE IN EFFECT LONGER THAN * CONSECUTIVE CALENDAR DAY AND DAYS. FOR EACH ADDITIONAL CALENDAR DAY THE DETOUR REMAINS IN EFFECT BEYOND THE ABOVE STATED DETOUR PERIOD, OR ANY OTHER AGREED UPON PERIOD DUE TO CONDITIONS BEYOND THE CONTRACTORS CONTROL, THE CONTRACTOR SHALL BE ASSESSED \$150.00 IN LIQUIDATED DAMAGES. TABLE FOR LIQUIDATED DAMAGES AS PER SECTION 108.07 IS WAIVED ONLY FOR DETOUR LIMITATIONS DUE TO BRIDGE REPAIR.

* Asd-95-1029 - 2 Days Asd-95-1367 - 21 Days

* the preumatically placed mortar



TEMPORARY WEDGE:

AFTER THE CONCRETE OVERLAY HAS BEEN PLACED AND BEFORE THE BRIDGE IS OPEN TO TRAFFIC A TEMPORARY WEDGE WILL BE INSTALLED TO MAINTAIN TRAFFIC IF THE PERMANENT ASPHALT IS NOT IN PLACE. THE TEMPORARY WEDGE WILL BE 404 ASPHALT CONCRETE BUILT AS PER STANDARD DRAWING BP-5, EXCEPT NO TACK COAT WILL BE REQUIRED. THE TEMPORARY WEDGE WILL BE FEATHERED AT ONE INCH IN TWENTY-FIVE FEET OR AS DIRECTED BY THE ENGINEER. THE TEMPORARY WEDGE WILL BE COMPLETELY REMOVED BEFORE ANY NEW ROADWAY ASPHALT IS INSTALLED.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

PLACING ASPHALT CONCRETE FEATHERING ON APPROACHES TO BRIDGES:

SPECIAL CARE SHALL BE TAKEN, WHEN PLACING THE ASPHALT CONCRETE

FEATHERING, TO EFFECT A SMOOTH TRANSITION FROM THE EXISTING APPROACH

PAVEMENT TO THE BRIDGE DECK. THE CONTRACTOR'S ATTENTION IS CALLED

TO SECTION 404.16 OF THE CMS AND TO STANDARD DRAWING BP-5 DATED 7-16-81

FOR REQUIRED TOLERANCES.

ITEM 520, PNEUMATICALLY PLACED MORTAR, AS PER PLAN:

THIS ITEM SHALL BE USED TO REPAIR DECK EDGES.WITHIN TWENTY-FOUR

(24) HOURS BEFORE PLACING **CRUTE, THE EXISTING SURFACE AGAINST

WHICH THE **CRUTE WILL BE PLACED AND EXISTING REINFORCING STEEL

SHALL BE THOROUGHLY CLEANED BY SANDBLASTING. SANDBLASTING SHALL

BE AT LEAST EQUAL TO SA2 "THOROUGH BLAST CLEANING" AS OUTLINED IN

ASTM D-2200 OR SSPC-SP6. ALL LOOSE AND DETERIORATED CONCRETE AND

CALCIUM CARBONATE DEPOSITS SHALL BE REMOVED WITH HAND TOOLS BE
FORE SANDBLASTING. CONCRETE GUARTITIES SHALL PE ADJUSTED TO IN
CLUDE ADDITIONAL VOLUMES REQUIRED.

THE FOLLOWING ESTIMATED QUANTITY IS TO BE USED AS DIRECTED BY THE ENGINEER TO PATCH THE U STRUCTURES:

520 PNEUMATICALLY PLACED MORTAR, AS PER PLAN <u>50</u> SO.FT.

PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID

FOR ITEM 520 PNEUMATICALLY PLACED MORTAR, AS PER PLAN, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

M&R 695

ITEM SPECIAL, RUBBERIZED SEAL:

THE RUBBERIZED SEAL SHALL EXTEND ONE FOOT BEYOND THE BRIDGE LIMITS, APPLIED AT 0.75 GAL./SQ.YD.

THE RUBBERIZED SEAL SHALL BE BITUMINOUS MATERIAL AS PER 702.01

(AC-5 OR AC-10) WITH THE ADDITION OF GRANULATED CRUMB RUBBER. THE

GRANULATED CRUMB RUBBER SHALL BE 100 PERCENT VULCANIZED AND MEET

THE FOLLOWING GRANDATION REQUIREMENTS:

SIEVE SIZE	PERCENT PASSING
No. 8	100
No. 10	95-100
No. 30	0-10
No. 40	0-4

THE SIEVES SHALL COMPLY WITH THE REQUIREMENTS OF AASHTO M92 (ASTM E11).

THE GRANULATED RUBBER, IRRESPECTIVE OF DIAMETER, SHALL NOT BE GREATER THAN 1/2 INCH IN LENGTH AND CONTAIN NO MORE THAN 2 PERCENT MOISTURE.

THE SPECIFIC GRAVITY OF THE RUBBER MATERIAL SHALL BE 1.15 0.02

AND SHALL BE FREE OF EXCESS FABRIC (0.5 PERCENT BY WEIGHT), WIRE OR

OTHER CONTAMINATING MATERIALS, EXCEPT THAT UP TO 4 PERCENT CAL
CIUM CARBONATE MAY BE INCLUDED TO PREVENT THE RUBBER PARTICLES

FROM STICKING TOGETHER.

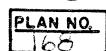
GRANULATED CRUMB RUBBER SHALL BE ACCEPTED BY CERTIFICATION FROM THE RUBBER SUPPLIER IN ACCORDANCE WITH THE REQUIREMENTS OF 101.061.

BEFORE ADDITION OF THE CRUMB VULCANIZED RUBBER. THE MATERIALS

ASPHALT-RUBBER MATERIAL MIXING: THE PERCENTAGE OF CRUMB VUL-CANIZED RUBBER SHALL BE 30[±]4 PERCENT BY WEIGHT OF THE ASPHALT CEMENT. THE TEMPERATURE OF THE ASPHALT SHALL BE BETWEEN 350 F. AND 425 F.



SHALL BE CAREFULLY COMBINED AND MIXED AND REACTED FOR A
PERIOD OF TIME. THE TEMPERATURE OF THE ASPHALT-RUBBER
MIXTURE SHALL BE ABOVE 325 F. DURING THE REACTION PERIOD.



IF A JOB DELAY RESULTS AFTER THE FULL REACTION HAS OCCURED, THE ASPHALT-RUBBER MATERIAL MAY BE ALLOWED TO COOL AND BE SLOWLY RE-HEATED TO AN ACCEPTABLE SPRAYING TEMPERATURE JUST PRIOR TO APPLICATION. HOWEVER, BECAUSE OF THE POLYMER REVERSION THAT CAN OCCUR WHEN CRUMB RUBBER IS HELD AT PROLONGED HIGH TEMPERATURES, THE ASPHALT-RUBBER MATERIAL SHALL NOT BE REHEATED TO TEMPERATURES ABOVE 325 F.

THE ASPHALT-RUBBER MIXING EQUIPMENT SHALL BE A HOT OIL, DOUBLE BOILER TAR KETTLE TYPE WITH MECHANICAL AGITATION CAPABLE OF COMBINING THE ASPHALT AND RUBBER INTO A HOMOGENIZED MIX.

IMMEDIATELY AFTER THE ASPHALT-RUBBER HAS BEEN SPRAYED ON THE LIMESTONE (703,05 quality)
BRIDGE, THE SHALL BE APPLIED. THE TEMPERATURE OF THE STONE
SHALL BE ABOVE 275 F. AT THE TIME OF PLACEMENT, AND MEET THE FOLLOWING GRERADATION REQUIREMENTS: APPLICATION RATE APPROX. 30 LBS./S.Y.

SIEVE SIZE PERCENT PASSING PERCENT RETAINED
1/2"
100 No. 4 95

ROLLERS SHALL BE AS PER 409.05 AND SURFACE PREPARATION AS PER RELATIVELY 409.06. THE AGGREGATE SHALL BE DUST FREE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD FOR ITEM SPECIAL, RUBBERIZED SEAL, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 512, TYPE "D" WATERPROOFING, AS PER PLAN:

ITEM 512.07 SHALL BE MODIFIED SO THAT THE THREE COATS OF BITUMINOUS MATERIAL, 702.06 AND THE AC-20, 702.01FOR FILLING JOINTS AND IRREGULARITIES IN THE SURFACE SHALL MEET THE FOLLOWING SPECIFICATIONS. THE BITUMINOUS MATERIAL SHALL MEET 702.01 (AC-20) WITH THE ADDITION OF GRANULATED CRUMB RUBBER. THE GRANULATED CRUMB RUBBER SHALL BE 100 PERCENT VULCANIZED AND MEET THE FOLLOWING GREADATION REQUIREMENTS:

SIEVE SIZE	PERCENT PASSING
No. 8	100
No. 10	98-100
No. 30	0-10
No. 40	0-4

THE SIEVES SHALL COMPLY WITH THE REQUIREMENTS OF AASHTO M92 (ASTM E11).

THE GRANULATED RUBBER, IRRESPECTIVE OF DIAMETER, SHALL NOT BE GREATER THAN 1/2 INCH IN LENGTH AND CONTAIN NO MORE THAN TWO PERCENT MOISTURE.

THE SPECIFIC GRAVITY OF THE RUBBER MATERIAL SHALL BE 1.15± 0.02

AND SHALL BE FREE OF EXCESS FABRIC (0.5 PERCENT BY WEIGHT), WIRE

OR OTHER CONTAMINATING MATERIALS, EXCEPT THAT UP TO FOUR PER
CENT CALCIUM CARBONATE MAY BE INCLUDED TO PREVENT THE RUBBER

PARTICLES FROM STICKING TOGETHER.

GRANULATED CRUMB RUBBER SHALL BE ACCEPTED BY CERTIFICATION FROM THE RUBBER SUPPLIER IN ACCORDANCE WITH THE REQUIREMENTS OF 101,061.

THE PERCENTAGE OF CRUMB VULCANIZED RUBBER SHALL BE 30+4
PERCENT BY WEIGHT OF THE ASPHALT CEMENT.



THE TEMPERATURE OF THE ASPHALT SHALL FE BETWEEN 350F. AND 168

425F. BEFORE ADDITION OF THE CRUMB VULCANIZED RUBBER. THE MATERIALS SHALL BE CAREFULLY COMBINED AND MIXED AND REACTED FOR A PERIOD OF TIME. THE TEMPERATURE OF THE ASPHALT-RUBBER MIXTURE SHALL PE APOVE 325F. DURING THE REACTION PERIOD.

IF A JOB DELAY RESULTS AFTER THE FULL REACTION HAS OCCURED, THE ASPHALT-RUBBER MATERIAL MAY BE ALLOWED TO COOL AND BE SLOWLY RE-HEATED TO AN ACCEPTABLE SPRAYING TEMPERATURE JUST PRIOR TO APPLICATION. HOWEVER, BECAUSE OF THE POLYMER REVERSION THAT CAN OCCUR WHEN CRUMB RUBBER IS HELD AT PROLONGED HIGH TEMPERATURES, THE ASPHALT-RUBBER MATERIAL SHALL NOT BE REHEATED TO TEMPERATURES ABOVE 325F.

THE ASPHALT-RUBBER MIXING EQUIPMENT SHALL BE A HOT OIL, DOUBLE BOILER TAR KETTLE TYPE WITH MECHANICAL AGITATION CAPABLE OF COMBINING THE ASPHALT AND RUBBER INTO A HOMOGENIZED MIX

M & R 693 REV. 9-1-81

ROUTINE MAINTENANCE: Between the time that bids are taken and the start of construction, the maintaining agency may enter upon the project and perform routine maintenance such as crack sealing, patching, and berm and shoulder repair. The effects, if any, of the performance of routine maintenance shall be considered as inherent in work of the character provided for in the contract and the resulting conditions shall not be considered as differing materially from those existing at the time bids were taken.

PLAN NO. 168

25 26

					GENERAL	_ SUMMA	ARY		
ITEM	PART 1	PART 2	PART 3	PART 4	PART 5	PART 6	GRAND TOTAL A's 1,2,3,4,5&6	UNIT	DESCRIPTION
407	4500	10600	1400	2200	1500	600	20800	Gals.	Tack Coat, qs per plan
407	158	371	49	77	52	21	728	Tons	Cover Aggregate
403	625	1472	194	306	183	64	2844	Cu. Yds.	Asphalt Concrete AC-I 0
404	1250	2983	389	611	575	338	6146	Cu. Yds.	Asphalt Concrete AC-10, as per plan
Specia		498	959	6/124	762	1361	10/182	Sq.Yds.	Pavement Planing, Bituminous Without Heat
604				28			28	Each	Manholes Adjusted to Grade
604		·	·	19			19	Each	Catch Basins Adjusted to Grade
604				1			1	Each	Monument Boxes Adjusted to Grade
845	388	139				<i>.</i>	527	Sq.Yds.	Latex Modified Concrete Overlay, (14" Thickness) as per plan
845	12	6					18	Cu.Yds.	Latex Modified Concrete Overlay (Variable Thickness) as per plan
3 845	2	2				·	4	Cu.Yds.	Full Depth Repair, as per plan
Specia							67	Sq.Ft.	Steel Drip Strip
512	139						139	Sq. Ft.	Type "D" Waterproofing, as per plan
614	7.62	17.56	1.74	2.68	1.90	0.78	32.28	Miles	Temporary Center Lines
624	Lump	Lump	Lump	Lump	Lump	Lump	Lump	Lump	Mobilization
617	13411	30905	2042	891	1432	\$ \$ #7 \$ 4 0 7 \$	48681	Sq. Yds.	Shoulder Preparation
617	559	1288	85	37	160	1.7	2029	Cu. Yds.	Compacted Aggregate
614	Lump	Lump	Lump	Lump	Lump	Lump	Lump	Lump	Maintaining Traffic
	1302116		<u> </u>			ICAL MATE			

GENERAL NOTES

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.

RAILROAD CROSSINGS:

The new surface course shall be feathered or butt jointed to meet the rail grades as specified.

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 will be raised an amount equal to the thickness of the resurfacing course or arses specified in these plans.

INTERMEDIATE COURSE, SPOT LEVELING AND PATCHING:

This material shall be placed in a separate operation where and as directed by the engineer.

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 0.10 gal. per sq. yd.

<u>COMP AUGUS DE VOI :</u> Ques aggrege à shoit tensformi de 19000

INTERSECTIONS:

Rural - Intersections shall be paved to end of radii or as directed by the Engineer. Urban - Intersections shall be paved to back of crosswalks or as directed by the Engineer. Drives - Paved drives shall be resurfaced as directed by the Engineer. Care shall be taken to eliminate water pockets in curbed sections.

ITEM 404:

In addition to Item 404.12, the top of each end of all feathered areas shall be uniformly coated with a 6" wide band of A.C., to be included within the cost of Item 404.

Under Item 401.15 (all cold joints on surface courses) shall be sealed by coating the vertical face. The coating of the finished surface with A.C., 6" wide will not be allowed.