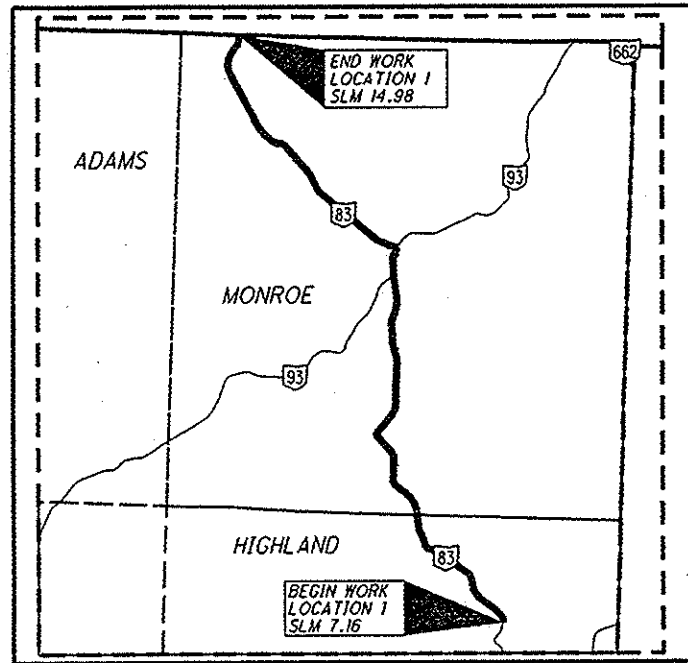


**STATE OF OHIO**  
**DEPARTMENT OF TRANSPORTATION**  
**MUS-83-7.16**  
**HIGHLAND AND**  
**MONROE TOWNSHIPS**  
**MUSKINGUM COUNTY**

PROJECT DESCRIPTION:  
 ASPHALT CONCRETE RESURFACING AND RELATED  
 WORK ON S.R. 83 IN MUSKINGUM COUNTY.

Project Earth Disturbed Area =  
 N/A (Maintenance Project)  
 Estimated Contractor Earth Disturbed Area =  
 N/A (Maintenance Project)  
 Notice of Intent Earth Disturbed Area =  
 N/A (Maintenance Project)



LOCATION MAP

LATITUDE: 40°06'38" LONGITUDE: 81°45'59"

PORTION TO BE IMPROVED \_\_\_\_\_

**DESIGN DESIGNATION**

CURRENT ADT (2013)	1200
DESIGN YEAR ADT (2025)	1300
DESIGN HOURLY VOLUME (2025)	143
DIRECTIONAL DISTRIBUTION	50%
TRUCKS (24 HOUR B&C)	21%
DESIGN SPEED	55mph
LEGAL SPEED	55mph

DESIGN FUNCTIONAL CLASSIFICATION:  
 RURAL MAJOR COLLECTOR

**INDEX OF SHEETS:**

TITLE SHEET	1
GENERAL NOTES	2-5
ASPHALT CONCRETE DATA	6
SHOULDER TREATMENT DATA	7
EXTRA AREA DATA	8
BRIDGE DECK TREATMENT DATA	9-10
PAVEMENT MARKING DATA	11-12
RAISED PAVEMENT MARKER DATA	13
GENERAL SUMMARY	14

LOCATION	COUNTY	ROUTE	BEGIN SLM	END SLM	LENGTH MILES	CITY/VILLAGE
1	MUS	83	7.16	14.98	7.82	

**2010 SPECIFICATIONS**

THE STANDARD 2010 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.

DESIGN EXCEPTIONS: NONE

**UNDERGROUND UTILITIES**  
 CONTACT BOTH SERVICES  
 CALL TWO WORKING DAYS  
 BEFORE YOU DIG

CALL  
 1-800-362-2764  
 (TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE  
 NON-MEMBERS  
 MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS PROTECTIVE  
 SERVICE CALL: 1-800-925-0988

PLAN PREPARED BY:  
 OHIO DEPARTMENT OF TRANSPORTATION  
 DISTRICT 5 PLANNING & ENGINEERING

ENGINEERING SEAL  
 STATE OF OHIO  
**DOUGLAS N. MORGAN**  
 E-63889  
 REGISTERED PROFESSIONAL ENGINEER

SIGNED: *Douglas N. Morgan*  
 DATE: 7-16-2012

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	4-20-12	TC-65.10	4-20-12	800	7-20-12
BP-4.1	7-16-04	TC-65.11	4-20-12	817	4-20-12
		TC-71.10	1-21-11	823	7-15-11
MT-97.10	10-15-10	TC-73.10	4-20-12	832	5-5-09
MT-97.12	10-15-10	TC-82.10	1-21-11		
MT-99.20	1-16-09				
MT-101.90	10-21-11				
MT-105.10	1-16-09				
				SPECIAL PROVISIONS	

APPROVED *[Signature]*  
 DATE 7/16/12 DISTRICT DEPUTY DIRECTOR

APPROVED *[Signature]*  
 DATE 8-24-12 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E120(366)  
 PID NO. 91877  
 CONSTRUCTION PROJECT NO.  
 RAILROAD INVOLVEMENT NONE  
 MUS-83-7.16  
 1/14

MUS - SR-83-7.16  
 120646 PID - 91877  
 Dist 5 11/29/2012  
 Contract Proposal Available @www.contracts.dot.state.oh.us / home

MO83.MTS\_001.dwg 4-30-12

**UTILITIES**

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

**CONTINGENCY QUANTITIES**

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

**NOTIFICATION OF ROAD CLOSURE OR RESTRICTION**

IN ORDER FOR ODOT TO PROPERLY PERMIT OVERSIZE LOADS, PREPARE PROPER SIGNING WHEN REQUIRED AND FURTHER TO NOTIFY THE GENERAL MOTORING PUBLIC, THE CONTRACTOR SHALL NOTIFY (IN WRITING) THE DISTRICT 5 CONSTRUCTION ENGINEER WITH COPIES FOR THE DISTRICT 5 ROADWAY SERVICES MANAGER AND PROJECT ENGINEER NOT LESS THAN 21 DAYS BEFORE SUCH CLOSURE OR LANE RESTRICTIONS.

SEND NOTIFICATION TO:  
DISTRICT 5 CONSTRUCTION ENGINEER  
P.O. BOX 306  
JACKSONSTOWN, OH 43030  
PHONE: (740) 323-4400 EXT. 5241

**ITEM 617 COMPACTED AGGREGATE, AS PER PLAN**

ALL AGGREGATE SHALL BE 100% CRUSHED LIMESTONE. ALL QUALITY REQUIREMENTS EXCEPT SHALE SHALL BE WAIVED. OTHER GRADATION REQUIREMENTS SHALL BE AS SPECIFIED EXCEPT THE PLASTICITY INDEX SHALL BE WAIVED. IF SO PERMITTED, THE CONTRACTOR MAY USE ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 617.02) IN LIEU OF CRUSHED LIMESTONE.

**ITEM 407 TACK COAT**

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

**ITEM 407 TACK COAT FOR INTERMEDIATE COURSE**

THE RATE OF APPLICATION OF THE 407 TACK COAT FOR INTERMEDIATE COURSE SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.05 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

**ITEM 516 2" DEEP JOINT SEALER, AS PER PLAN**

THE CONTRACTOR SHALL PLACE A 1" X 2.0" DEEP BEAD OF JOINT SEALER (AS PER 705.04) AT THE LOCATIONS SHOWN IN PLANS. THE CONTRACTOR SHALL SAW CUT A CHANNEL FOR THE JOINT SEALER. THE COST FOR SAW CUTTING THE CHANNEL FOR THE JOINT SEALER SHALL BE INCLUDED FOR PAYMENT WITH ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN.

**PAVEMENT MARKING**

STOP LINES, CROSSWALK LINES, CHANNELIZING LINES, ETC., SHOWN IN THE PLANS ARE TAKEN FROM EXISTING MARKINGS. THE CONTRACTOR SHALL DOCUMENT ALL OF THE EXISTING PAVEMENT MARKING LOCATIONS THAT WILL BE REMOVED/OBLITERATED DURING THIS PROJECT. THE CONTRACTOR SHALL PLACE NEW PAVEMENT MARKINGS AT THE LOCATION OF THE EXISTING MARKINGS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DOCUMENTATION OF PAVEMENT MARKING SHALL BE SUPPLIED TO THE ENGINEER BEFORE COMMENCEMENT OF ANY OPERATION WHICH WILL REMOVE/OBLITERATE MARKINGS. THE METHOD OF DOCUMENTATION SHALL BE APPROVED BY THE ENGINEER IN ORDER TO PROVIDE AN ACCEPTABLE TOLERANCE BETWEEN THE EXISTING AND PROPOSED PAVEMENT MARKINGS.

**DROPOFFS IN WORK ZONES**

DROPOFFS THAT DEVELOP DURING CONSTRUCTION OPERATIONS AND THAT ARE NOT OTHERWISE PROVIDED FOR IN THE PLANS SHALL BE TREATED AS SHOWN ON STANDARD DRAWING MT-101.90. WHERE THE PLANS DO NOT PROVIDE SPECIFIC ITEMS FOR LABOR, EQUIPMENT, OR MATERIALS TO IMPLEMENT THE DROP-OFF TREATMENTS SPECIFIED, THEY SHALL BE INCLUDED FOR PAYMENT IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

**ITEM 621 RAISED PAVEMENT MARKER REMOVED**

RPM REMOVAL SHALL NOT OCCUR SOONER THAN 10 DAYS PRIOR TO RESURFACING OF THE ROADWAY. ALL RPM'S REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

**ITEM 408 PRIME COAT, AS PER PLAN**

THE CONTRACTOR SHALL APPLY ONE COAT OF MC-70 (AS PER SECTION 702) AT A RATE OF 0.40 GALLON PER SQUARE YARD TO THE COMPLETED AGGREGATE SHOULDER (ITEM 617) AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID BITUMINOUS MATERIAL ONTO THE EDGE OF PAVEMENT OR EDGE LINE. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS.

THE FOLLOWING QUANTITY OF PRIME COAT, AS PER PLAN HAS BEEN CARRIED TO THE GENERAL SUMMARY AND SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT TO PERFORM THE ABOVE MENTIONED WORK.

**ITEM 408 PRIME COAT, AS PER PLAN**  
**LOCATION 1 - 18,085 SQ.YD. X 0.40 GAL./SQ YD = 7,234 GAL**

**ITEM 617 SHOULDER PREPARATION**

SHOULDER PREPARATION SHALL BE PERFORMED PRIOR TO PLACING ITEM 617 AGGREGATE BASE AS PER CMS 617.04.

THIS WORK MAY BE INTERMITTENT AND SPREAD THROUGHOUT THE PROJECT LIMITS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL ONLY BE PAID FOR INTERSECTIONS AND GAPS IF THEY ARE WITHIN THE LIMITS OF A SECTION MARKED BY THE ENGINEER FOR SHOULDER PREPARATION.

**THE QUANTITY OF ITEM 617 SHOULDER PREPARATION TO PERFORM THE WORK DESCRIBED ABOVE IS SHOWN ON THE SHOULDER DATA SHEET.**

**ITEM 209 LINEAR GRADING**

IN ORDER TO PROVIDE POSITIVE DRAINAGE FROM THE ROADWAY SURFACE TO THE SHOULDER BREAK, THE EXISTING ROADWAY SHOULDERS SHALL BE GRADED AND SHAPED USING A GRADER OF ADEQUATE SIZE TO PERFORM THE WORK TO THE SATISFACTION OF THE ENGINEER.

ALL EXCESS MATERIAL REMAINING AROUND GUARDRAIL AND OTHER AREAS AFTER THE GRADER WORK IS COMPLETED AND NOT DISPOSED OF ON THE SITE, SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. ALL EQUIPMENT, LABOR, OR INCIDENTALS REQUIRED TO COMPLETE THIS ITEM SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM 209 LINEAR GRADING.

THIS WORK MAY BE INTERMITTENT AND SPREAD THROUGHOUT THE PROJECT LIMITS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL ONLY BE PAID FOR INTERSECTIONS AND GAPS IF THEY ARE WITHIN THE LIMITS OF A SECTION MARKED BY THE ENGINEER FOR GRADING.

**ALL LINEAR GRADING WORK SHALL BE DONE BEFORE PLACING THE ASPHALT SURFACE COURSE**

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE PURPOSES.

**ITEM 209 LINEAR GRADING**  
**LOCATION 1 - 15.53 MILE**

**ITEM 253 PAVEMENT REPAIR**

AN ESTIMATED QUANTITY FOR PAVEMENT REPAIR HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER. REPAIRS SHALL TAKE PLACE PRIOR TO THE PLANING OPERATION. THE INTENT OF THIS OPERATION IS TO REPAIR THOSE AREAS OF PAVEMENT WHICH HAVE COMPLETELY FAILED (PUMPING OF SUB-BASE MATERIAL) AND NOT TO CORRECT SURFACE IRREGULARITIES. DEPTH OF EXCAVATION SHALL BE APPROXIMATELY 7". THE MINIMUM WIDTH SHALL BE 4 FT. AFTER EXCAVATION HAS BEEN COMPLETED, THE FACE OF THE REPAIR SHALL BE COATED WITH 407 TACK COAT. REPLACEMENT MATERIAL WILL BE 7" OF ITEM 301 ASPHALT CONCRETE BASE, PG64-22 (PLACED AND COMPACTED AS DIRECTED). REPAIR QUANTITIES MAY BE USED ON THE MAINLINE PAVEMENT OR ON PAVED SHOULDERS. ALL EXCAVATION, MATERIALS, LABOR, EQUIPMENT, TOOLS, TRAFFIC CONTROL AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE DESCRIBED PURPOSE.

**ITEM 253 PAVEMENT REPAIR**  
**LOCATION 1 - 1,000 CU.YD.**

**ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE**

DEPTH OF PLANING SHALL BE 1.5" FULL WIDTH OF PAVEMENT, INCLUDING PAVED SHOULDERS, FOR THE LENGTH OF THE PROJECT. THE ROADWAY SHALL BE PLANED SUCH THAT POSITIVE DRAINAGE IS CREATED FROM THE CENTER LINE TO THE EDGE OF PAVEMENT IN TANGENT SECTIONS AND SHALL FOLLOW EXISTING SUPERELEVATIONS WHERE APPLICABLE. ALL REQUIREMENTS OF ITEM 254 SHALL APPLY.

CALCULATED  
LIVE  
CHECKED  
DNM

GENERAL NOTES

MUS - 83 - 7.16



**RESIDENTIAL AND COMMERCIAL DRIVES**

AN ESTIMATED QUANTITY OF ITEM 448 ASPHALT CONCRETE, HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO PAVE APPROACH AREAS TO EXISTING DRIVEWAYS. PAVING SHALL TYPICALLY EXTEND 4' INTO THE DRIVEWAY (MEASURED FROM THE EDGE OF PAVEMENT OR PAVED SHOULDER IF PRESENT). THERE ARE 5 TYPES OF DRIVES: CONCRETE, ASPHALT, GRAVEL, GRAVEL WITH ASPHALT APRON AND FIELD/OIL WELL DRIVES. FIELD DRIVES AND OIL WELL DRIVES SHALL NOT BE PAVED. GRAVEL DRIVES SHALL BE PAVED BACK 4' INTO THE DRIVEWAY UNLESS OTHERWISE DIRECTED BY THE ENGINEER. CONCRETE AND ASPHALT DRIVES SHALL HAVE BUTT JOINTS OR AS SHORT AN ASPHALT TAPER AS POSSIBLE (PREFERRED 4') AS DIRECTED BY THE ENGINEER SO AS TO PROVIDE A SMOOTH TRANSITION. GRAVEL DRIVES WITH ASPHALT APRONS SHALL ALSO HAVE BUTT JOINTS OR AS SHORT AN ASPHALT TAPER AS POSSIBLE (PREFERRED 4') BUT ONLY IF THE EXISTING ASPHALT APRON IS IN AN ACCEPTABLE CONDITION TO BE PAVED OVER AS DIRECTED BY THE ENGINEER. IF THE ASPHALT APRON CANNOT BE PAVED OVER (FOR EXAMPLE, BROKEN INTO SMALL PIECES) AS DETERMINED BY THE ENGINEER, IT SHALL BE REMOVED BEFORE BEING PAVED BACK 4' INTO THE DRIVEWAY. ALL GRADING, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE DRIVES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEMS LISTED BELOW.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE DESCRIBED PURPOSE.

**ITEM 448 ASPHALT CONCRETE INTERM. COURSE, TYPE 2, PG 64-22  
LOCATION 1 - 20 CU.YD.**

**ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M  
LOCATION 1 - 15 CU.YD.**

**ITEM 202 WEARING COURSE REMOVED  
LOCATION 1 - 410 SQ.YD.**

**MAIL BOX TURN OUTS**

A QUANTITY OF ASPHALT CONCRETE HAS BEEN PROVIDED IN THE PLAN TO COVER MAIL BOX TURN-OUTS. TURN-OUTS SHALL BE PAVED AS SHOWN IN THE DETAIL IN DRAWING BP-4.1. ANY EXTRA GRADING OF THE SHOULDERS, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE MAIL BOX TURN OUTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEMS LISTED BELOW.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE PURPOSES.

**ITEM 448 ASPHALT CONCRETE INTERM. COURSE, TYPE 2, PG 64-22  
LOCATION 1 - 15 CU.YD.**

**ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M  
LOCATION 1 - 11 CU.YD.**

**ITEM 202 WEARING COURSE REMOVED  
LOCATION 1 - 300 SQ.YD.**

**ITEM 614 WORK ZONE MARKING SIGN**

IN ACCORDANCE WITH CMS SECTION 614.04, THE QUANTITY OF WORK ZONE MARKING SIGNS HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

W8-H12a (NO EDGE LINES): LOCATION 1 - 8 EACH  
R4-1 (DO NOT PASS): LOCATION 1 - 27 EACH  
R4-2 (PASS WITH CARE): LOCATION 1 - 16 EACH

**ITEM 614, WORK ZONE MARKING SIGN  
LOCATION 1 - 51 EACH**

IN ADDITION, THE CONTRACTOR SHALL ERECT A "GROOVED PAVEMENT" SIGN 250 FEET IN ADVANCE OF ANY SECTION OF ROADWAY WHERE TRAFFIC MUST TRAVEL ON A PLANED SURFACE. ENSURE THESE SIGNS ARE IN PLACE BEFORE OPENING THE ROADWAY TO TRAFFIC. ERECT THESE SIGNS AT INTERSECTIONS OF THROUGH ROUTES TO WARN TRAFFIC OF THIS SURFACE CONDITION. "GROOVED PAVEMENT" SIGNS SHALL BE INCLUDED FOR PAYMENT WITH THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC AS PER CMS SECTION 614.055.

**ITEM 614 MAINTAINING TRAFFIC**

A MINIMUM OF 1 LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT AND STANDARD DRAWING MT-97.12.

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

AT NO TIME SHALL TRAFFIC BE MAINTAINED ON THE PLANED SURFACE, AT LEAST ONE COURSE OF ASPHALT CONCRETE SHALL BE IN PLACE BEFORE OPENING TO TRAFFIC. BUTT JOINTS AND TAPERS AT BRIDGES ARE EXCLUDED FROM THIS REQUIREMENT.

ONLY ITEM 614 WORK ZONE CENTER LINE, CLASS II HAS BEEN ITEMIZED IN THE PLAN. ALL OTHER WORK ZONE PAVEMENT MARKINGS NECESSARY SHALL BE INCLUDED IN THE LUMP SUM BID FOR MAINTAINING TRAFFIC.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT, IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

**BUTT JOINT**

A BUTT JOINT WILL BE REQUIRED AT LOCATIONS SPECIFIED BELOW AND AT THE EXTRA AREAS WITH WEARING COURSE REMOVED.

**BUTT JOINTS SHALL BE AS PER STANDARD CONSTRUCTION DRAWING BP-3.1 UNLESS OTHERWISE SHOWN IN THE PLANS.**

MINIMUM LENGTH FOR ASPHALT WEDGE AT BUTT JOINTS SHALL BE 10'.

LOCATION	ROUTE	DESCRIPTION	S.L.M.	ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC CU. YD.
1	S.R. 83	BEGIN WORK BRIDGE: MUS-83-0716	7.16	1.2
1	S.R. 83	BRIDGE: MUS-83-0922	14.66	2.4
1	S.R. 83	BRIDGE: MUS-83-1134	14.73	2.4
1	S.R. 83	BRIDGE: MUS-83-1167	19.22	2.4
1	S.R. 83	END WORK	14.58	1.2
1	S.R. 83	<b>TOTAL</b>		<b>9.6</b>

THE GRINDING FOR BUTT JOINTS AT THE BEGINNING AND ENDING OF THE PROJECT AND AT BRIDGES WILL BE INCLUDED WITH ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE.

SEE BRIDGE DECK TREATMENT DATA SHEET (10 OF 14) FOR BRIDGES THAT REQUIRE BUTT JOINTS.

**ITEM 209 PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN**

PREPARE THE SHOULDER FOR PAVING A CONSISTENT SAFETY EDGE IN BOTH THICKNESS AND WIDTH.

PRIOR TO PAVING THE SAFETY EDGE, GRADE AN AREA 10 INCHES WIDE, BEGINNING AT THE EDGE OF THE PAVED ROADWAY, TO PROVIDE A LEVEL SURFACE FREE OF VEGETATION FOR CONSTRUCTION OF THE SAFETY EDGE. IF NECESSARY, EXCAVATE THE GRADED AREA TO THE DEPTH NECESSARY TO CONSTRUCT THE SAFETY EDGE. COMPACT THE GRADED SHOULDER ACCORDING TO 617.05, OR AS DIRECTED BY THE ENGINEER.

CALCULATED  
LIVE  
CHECKED  
DNM

GENERAL NOTES

MUS - 83 - 7 . 16

**SAFETY EDGE PLAN NOTE**

IN ADDITION TO THE REQUIREMENTS OF 401.12, ATTACH A DEVICE TO THE SCREED OF THE PAVER THAT CONFINES THE MATERIAL AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A COMPACTED WEDGE SHAPE PAVEMENT EDGE OF APPROXIMATELY 30 DEGREES (NOT STEEPER THAN 40 DEGREES). ENSURE THE DEVICE MAINTAINS CONTACT WITH THE EXISTING SURFACE, AND ALLOW FOR AUTOMATIC TRANSITION TO CROSS ROADS, DRIVEWAYS AND OBSTRUCTIONS. DO NOT USE CONVENTIONAL SINGLE PLATE STRIKE OFF.

CONSTRUCTION OF SAFETY EDGE CAN BE OMITTED AT LOCATIONS WHERE EXISTING WIDTH OF GRADED SHOULDER OR BERM IS LESS THAN 12". PROJECTS WITH VARYING CONDITIONS SHOULD USE SAFETY EDGE WHERE POSSIBLE. PLAN PREPARATION HAS MADE EVERY REASONABLE ATTEMPT TO IDENTIFY POSSIBLE SAFETY EDGE LOCATIONS.

USE THE TRANS TECH SHOULDER WEDGE MAKER, THE CARLSON SAFETY EDGE END GATE, THE ADVANT-EDGER, THE TROXLER SAFETSLOPE OR A SIMILAR APPROVED-EQUAL DEVICE THAT PRODUCES THE SAME WEDGE CONSOLIDATION RESULTS. CONTACT INFORMATION FOR THESE WEDGE SHAPE COMPACTION DEVICES IS THE FOLLOWING:

TransTech Systems, Inc.  
1594 State Street  
Schenectady, NY 12304  
1-800-724-6306  
[www.transtechsys.com](http://www.transtechsys.com)

Advant-Edge Paving Equipment, LLC.  
P.O. Box 9163  
Niskayuna, NY 12309-0163  
518-280-6090  
[www.advantaedgepaving.com](http://www.advantaedgepaving.com)

Carlson Safety Edge End Gate  
18425 50<sup>th</sup> Avenue East  
Tacoma, WA 98446  
253-875-8000

Troxler Electronics Laboratories, Inc.  
3008 E. Cornwallis Rd.  
Research Triangle Park, NC 27709  
1-877-TROXLER  
[www.troxlerlabs.com](http://www.troxlerlabs.com)

IF ELECTING TO USE A SIMILAR DEVICE, PROVIDE PROOF THAT THE DEVICE HAS BEEN USED ON PREVIOUS PROJECTS WITH ACCEPTABLE RESULTS OR CONSTRUCT A TEST SECTION PRIOR TO THE BEGINNING OF WORK AND DEMONSTRATE WEDGE COMPACTION TO THE SATISFACTION OF THE ENGINEER. SHORT SECTIONS OF HANDWORK WILL BE ALLOWED WHEN NECESSARY FOR TRANSITIONS AND TURNOUTS OR OTHERWISE AUTHORIZED BY THE ENGINEER.

IN ADDITION TO THE REQUIREMENTS OF 401.16, MAKE THE FIRST ROLLER PASS 8 TO 12 INCHES (200 TO 300 mm) AWAY FROM TAPERED EDGE. DO NOT ROLL THE TAPER.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO PROVIDE EXTRA ASPHALT FOR CONSTRUCTION OF THE SAFETY EDGE:

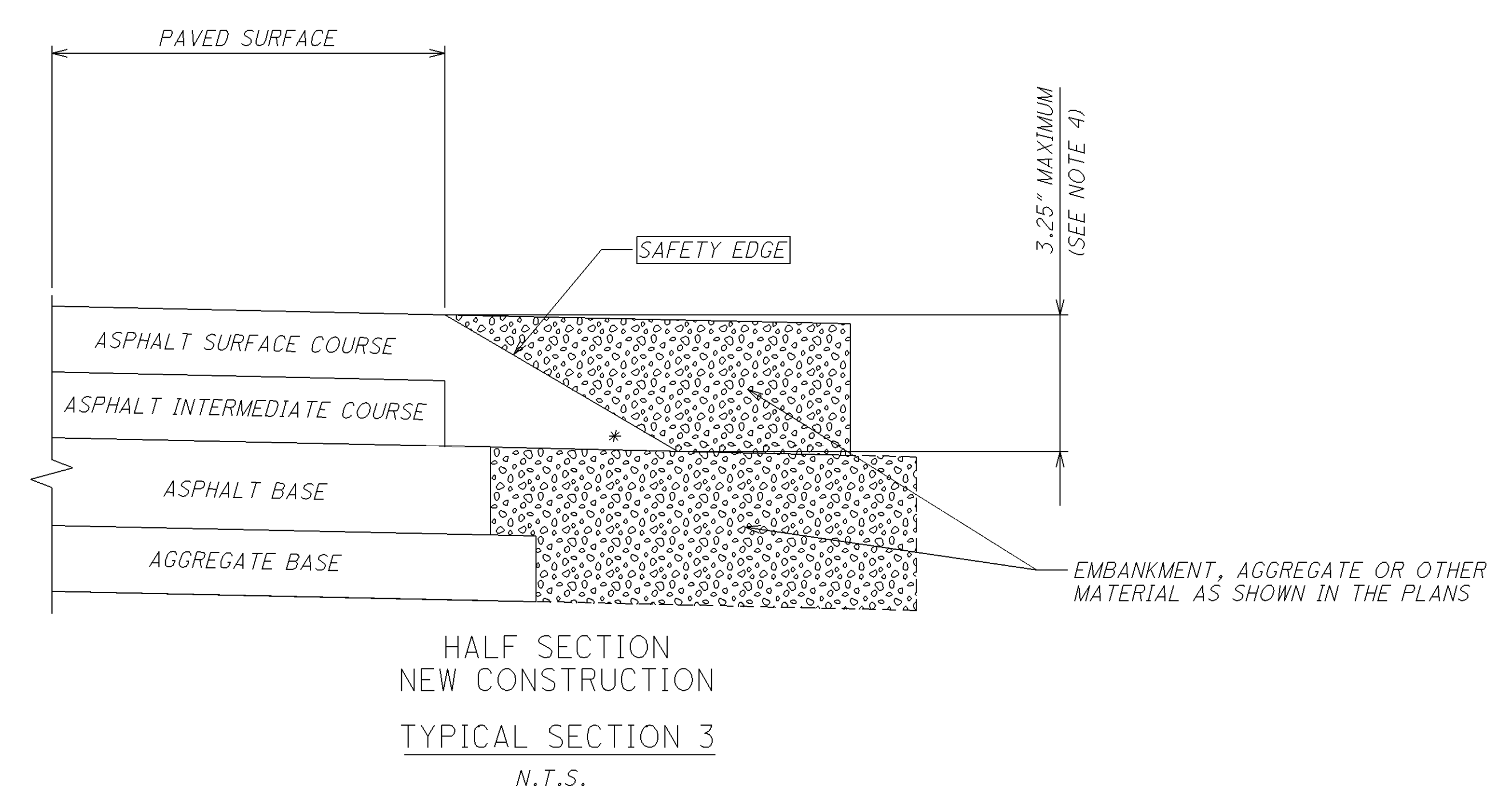
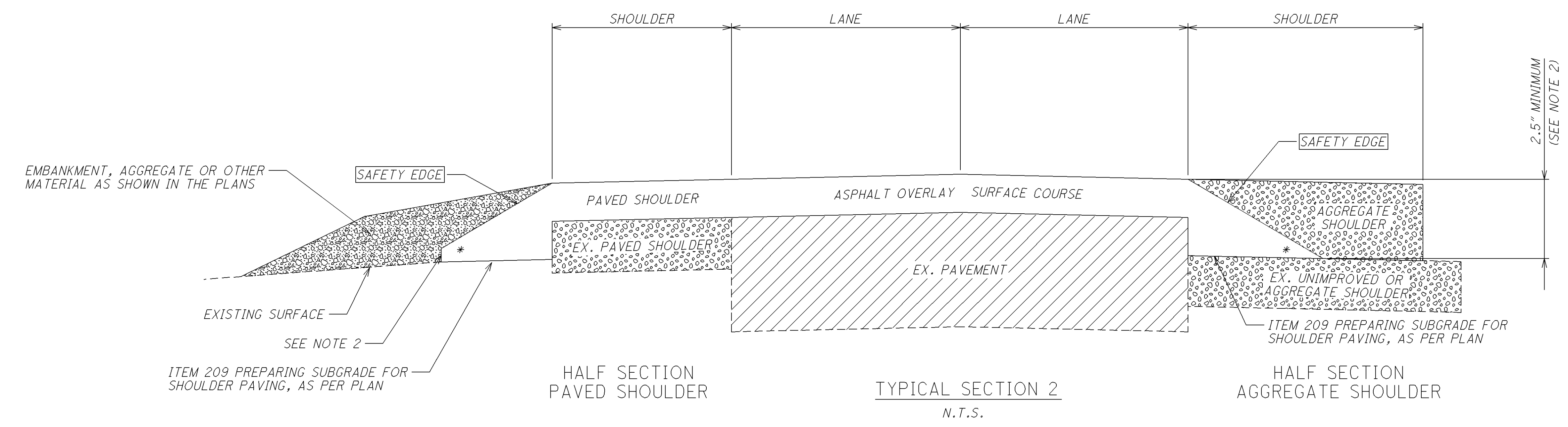
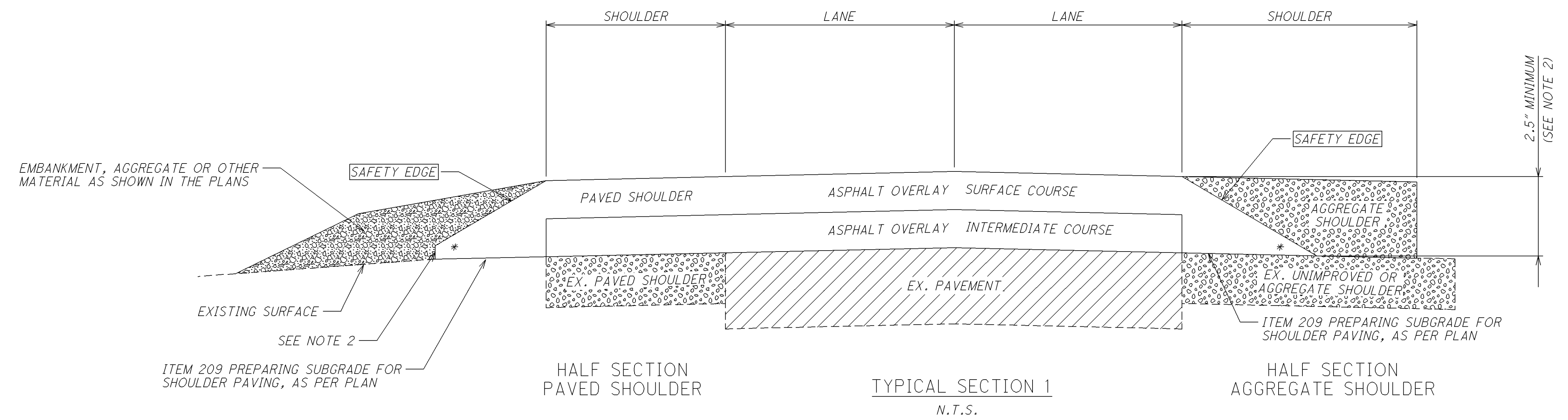
**ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M  
LOCATION 1 – 163 CU.YD.**

CALCULATED  
LME  
CHECKED  
DNM

**GENERAL NOTES**

**MUS - 83 - 7 . 16**

4  
14



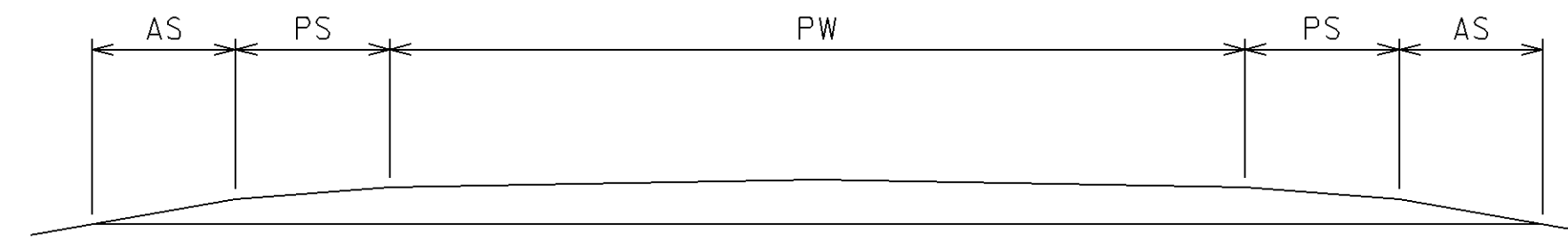
**NOTES:**

- 1.) SAFETY EDGES ARE REQUIRED AT THE OUTSIDE EDGES OF THE PAVED ROADWAY (EDGE OF TRAVEL LANE OR EDGE OF PAVED SHOULDER).
  - 2.) CONSTRUCT THE SAFETY EDGE THE FULL ASPHALT CONCRETE OVERLAY THICKNESS OR 2.5" (63MM) WHICHEVER IS GREATER, NOT TO EXCEED THE MAXIMUM SAFETY EDGE THICKNESS OF 6" (150MM). CONSTRUCT A NEAR-VERTICAL FACE BELOW THE SAFETY EDGE FOR THICKNESS GREATER THAN 6" (150 MM).
  - 3.) BLADE AND SHAPE EXISTING SHOULDER MATERIAL TO FORM A UNIFORM SURFACE UNDER THE SAFETY EDGE PRIOR TO PLACEMENT OF THE ASPHALT CONCRETE OVERLAY.
  - 4.) FOR NEW PAVEMENT CONSTRUCT THE SAFETY EDGE THE FULL THICKNESS OF THE SURFACE AND INTERMEDIATE COURSES, NOT TO EXCEED 3.25" (82 MM).
- \* 40° MAX

M083\_SED\_001.DGN Dated 6/20/2012

NOTE:  
 THE PAVEMENT WIDTHS SHOWN IN THE "PAVEMENT DATA" TABLE BELOW ARE THE WIDTHS WHICH HAVE BEEN DETERMINED TO HAVE SUFFICIENT ROADWAY BASE FOR PAVING. IF ACTUAL ROADWAY WIDTHS DIFFER, THE ROADWAY SHALL BE PAVED ONLY THE WIDTH SHOWN IN THE AFOREMENTIONED TABLE. IF THE EXISTING ROADWAY IS WIDER THAN THAT WHICH IS SHOWN IN THE TABLE, PAVING SHALL BE CENTERED ABOUT THE FULL WIDTH OF THE ROADWAY AND ANY EXCESS EXISTING PAVEMENT ON THE EDGES SHALL BE COVERED WITH ITEM 617 COMPACTED AGGREGATE. PAVING IN CURBED ROADWAY SECTIONS SHALL BE FROM CURB TO CURB.

TYPICAL 1



PW = PAVEMENT WIDTH  
 PS = PAVED SHOULDER  
 AS = AGGREGATE SHOULDER



PAVEMENT DATA

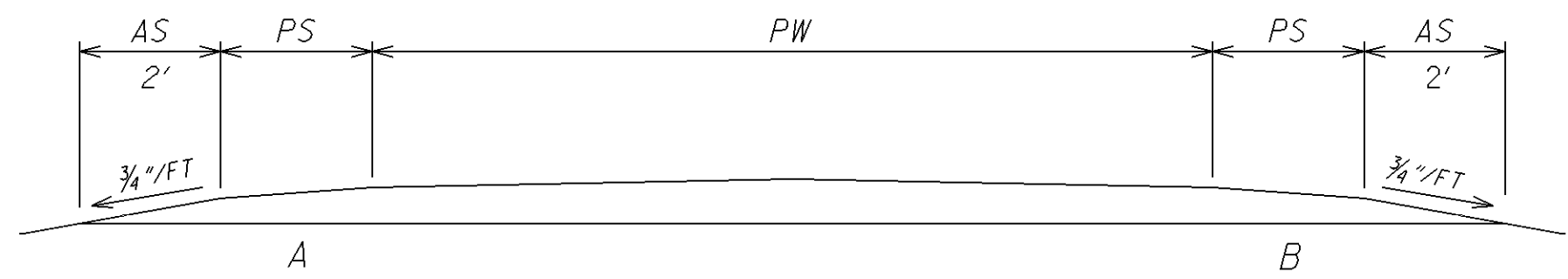
LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		PAVEMENT WIDTH (FEET)	TYPICAL	EXISTING PAVEMENT TYPE	PAVEMENT AREA	254		407		448 ASPHALT CONCRETE				614
					SQ. YD.	SQ. YD.					GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.	MILE		
																		MILES	LIN. FT.
1	MUS	S.R. 83	7.16	14.98	7.82	41,289.6	20.0	1	448	91,754.7	91,754.7	6,881.7	4,587.8	1.75	4,460.3	1.25	3,186.0	15.64	
DEDUCT FOR BRIDGES (FROM SHEET 10)										(1,246.6)	(1,246.6)	(93.4)	(62.3)	1.75	(60.5)	1.25	(43.2)	(0.04)	
<b>LOCATION 1 TOTALS</b>											<b>90,508.1</b>	<b>6,788.3</b>	<b>4,525.5</b>		<b>4,399.8</b>		<b>3,142.8</b>	<b>15.60</b>	

ASPHALT CONCRETE DATA

MUS - 83 - 7.16

PW = PAVEMENT WIDTH  
 PS = PAVED SHOULDER  
 AS = AGGREGATE SHOULDER

TYPICAL 1



SHOULDER DATA

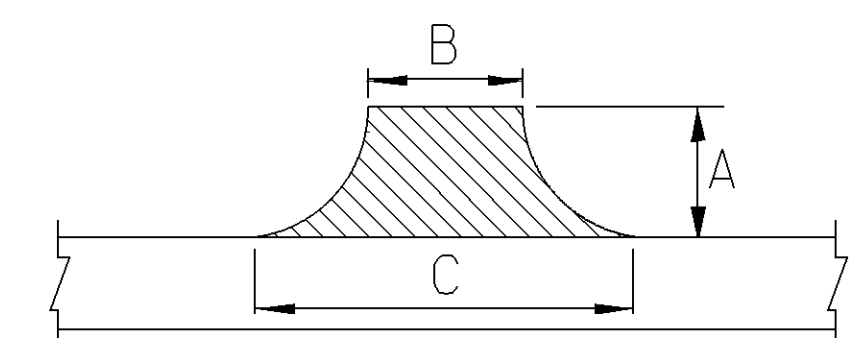
LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		TYPICAL	PROPOSED WIDTH (FT.)		SHOULDER AREA SQ. YD.	209	254	407		448 ASPHALT CONCRETE				617		
					MILES	LIN. FT.		PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	PAVEMENT PLANING, ASPHALT CONCRETE		TACK COAT @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICKNESS INCHES	INTERMEDIATE COURSE, TYPE 2, PG 64-22 CU. YD.	THICKNESS INCHES	SURFACE COURSE, TYPE 1, PG 70-22M CU. YD.	THICKNESS INCHES	COMPACTED AGGREGATE, AS PER PLAN (2' WIDTH) CU. YD.	SHOULDER PREPARATION (2' WIDTH) SQ. YD.		
																				A	B
1	MUS	S.R. 83	7.16	14.98	7.82	41,289.6	1	2	2	18,350.9	15.64	18,350.9	1,376.3	917.5	1.75	892.1	1.25	637.2	2.00	1,019.5	18,350.9
DEDUCT FOR BRIDGES (FROM SHEET 10)										(249.4)	(0.11)	(249.4)	(18.7)	(12.5)	1.75	(12.1)	1.25	(8.7)	2.00	(14.5)	(259.4)
LOCATION 1 TOTALS											15.53	18,101.5	1,357.6	905.0		880.0		628.5		1,005.0	18,091.5

PAVED SHOULDER DATA

MUS - 83 - 7.16

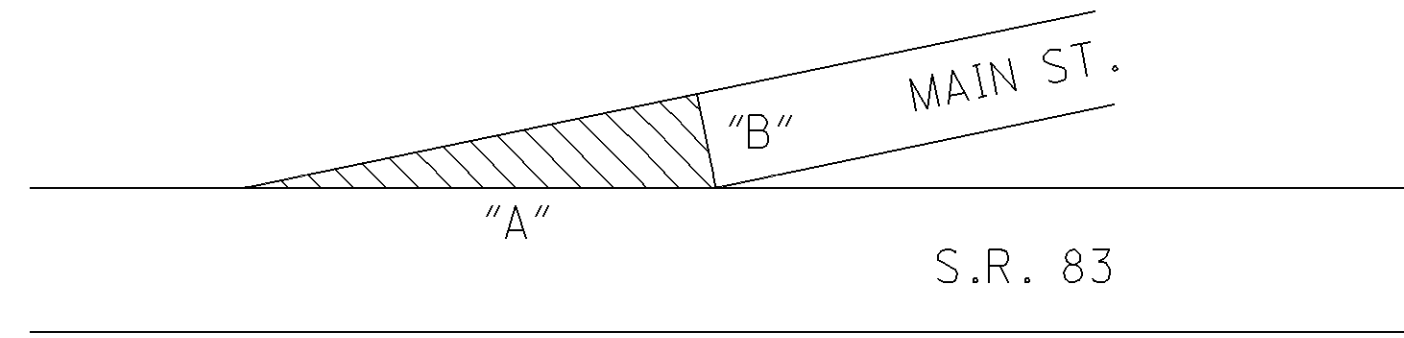
CALCULATED  
 LME  
 CHECKED  
 DNM



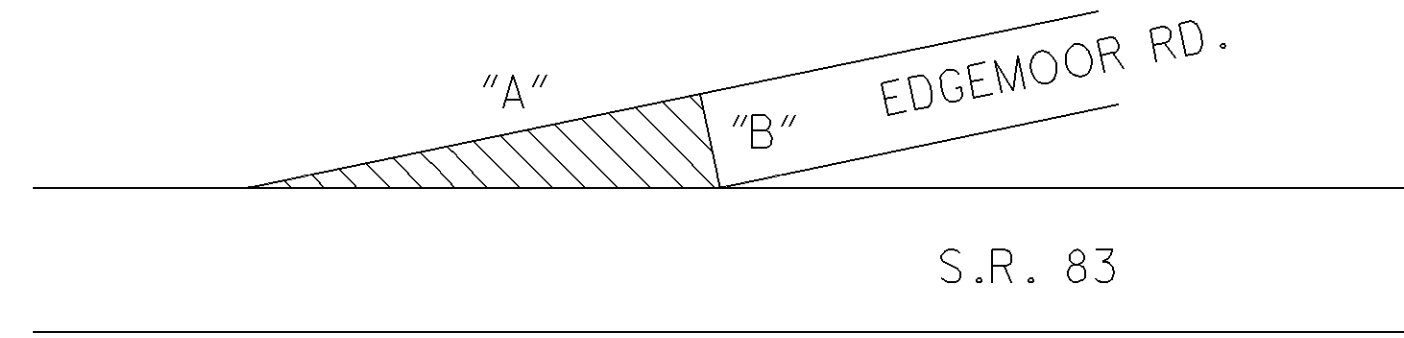


$$AREA = \left[ A \frac{(B + C)}{2} \right] / 9$$

INTERSECTIONS



DETAIL 1



DETAIL 2

EXTRA AREAS

LOCATION	COUNTY	ROUTE	SIDE	DESCRIPTION	INTERSECTIONS			AREA SQ. YD.	202 WEARING COURSE REMOVED SQ. YD.	407		448 ASPHALT CONCRETE			
					DETAIL DIMENSION					TACK COAT @ 0.075 GAL./SQ. YD. GAL.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./SQ. YD. GAL.	THICKNESS IN.	INTERMEDIATE COURSE, TYPE 2, PG 64-22 CU. YD.	THICKNESS IN.	SURFACE COURSE, TYPE 1, PG 64-22 CU. YD.
					A	B	C								
					FT.	FT.	FT.								
1	MUS	S.R. 83	RT	STONY POINT RD.	70	19	150	657.3	657.3	49.3			1.25	22.9	
1	MUS	S.R. 83	RT	HANSEL RD. (T.R. 176)	40	14	50	142.3	142.3	10.7			1.25	5.0	
1	MUS	S.R. 83	LT	WINDY RIDGE RD.	45	15	100	287.5	287.5	21.6			1.25	10.0	
1	MUS	S.R. 83	LT	BARR RD. (C.R. 19)	75	19	155	725.0	725.0	54.4			1.25	25.2	
1	MUS	S.R. 83	RT	LOOKOUT RD. (C.R. 101)	35	29	96	243.1	243.1	18.3			1.25	8.5	
1	MUS	S.R. 83	LT	DENT RD. (T.R. 177)	45	22	98	300.0	300.0	22.5			1.25	10.5	
1	MUS	S.R. 83	RT	GRANNYS KNOB RD. (C.R. 17)	45	22	115	342.5	342.5	25.7			1.25	11.9	
1	MUS	S.R. 83	LT	S.R. 93	50	25	110	375.0	375.0	28.2	18.8	1.75	18.3	1.25	13.1
1	MUS	S.R. 83	LT	SOUTH ST	20	13	30	47.8	47.8	3.6			1.25	1.7	
1	MUS	S.R. 83	LT	MAIN ST DETAIL ①	54	25		75.0	75.0	5.7			1.25	2.7	
1	MUS	S.R. 83	LT	NORTH ST	20	27	84	123.4	123.4	9.3			1.25	4.3	
1	MUS	S.R. 83	RT	S.R. 93	40	25	58	184.5	184.5	13.9	9.3	1.75	9.0	1.25	6.5
1	MUS	S.R. 83	LT	MAIN ST	25	18	40	80.6	80.6	6.1			1.25	2.8	
1	MUS	S.R. 83	LT	WELKER ST.	20	18	35	58.9	58.9	4.5			1.25	2.1	
1	MUS	S.R. 83	LT	WOLF LANE (T.R. 100)	25	13	30	59.8	59.8	4.5			1.25	2.1	
1	MUS	S.R. 83	LT	ACCESS ROAD TO WOLF LANE (T.R. 100)	35	18	55	142.0	142.0	10.7			1.25	5.0	
1	MUS	S.R. 83	LT	EDGEMOOR RD. (C.R. 12) DETAIL ②	200	49		544.5	544.5	40.9			1.25	19.0	
1	MUS	S.R. 83	RT	TYSON RD. (C.R. 175)	50	20	90	305.6	305.6	23.0			1.25	10.7	
1	MUS	S.R. 83	LT	WILLS CREEK RD.	75	20	115	562.5	562.5	42.2			1.25	19.6	
1	MUS	S.R. 83	RT	PARK ROAD	25	18	65	115.3	115.3	8.7			1.25	4.1	
LOCATION 1 TOTALS									5,372.6	403.8	28.1		27.3		187.7

EXTRA AREA DATA

MUS - 83 - 7.16



BRIDGE TREATMENT

LOCATION 1

- DETAIL ① MUS-83-0716: BUTT JOINT AT FORWARD APPROACH, BEGIN WORK
- DETAIL ② MUS-83-0785: MILL AND FILL SAME AS ROADWAY
- DETAIL ③ MUS-83-0861: MILL 1.25" AND PLACE 1.25" SURFACE COURSE ONLY
- DETAIL ④ MUS-83-0922: BUTT JOINT AT BACKWALLS
- DETAIL ① MUS-83-1134: BUTT JOINT AT APPROACH SLABS
- DETAIL ④ MUS-83-1167: BUTT JOINT AT BACKWALLS
- DETAIL ⑤ MUS-83-1434: REMOVE ASPHALT AND WATERPROOFING, WATERPROOF AND PLACE 3.0" ASPHALT CONCRETE.

NOTES:

1. BRIDGE MUS-83-0716 DEDUCTIONS ARE BASED ON THE SLM 7.16 BEING POSITIONED AT BEGINNING OF STRUCTURE (END OF REAR APPROACH SLAB), THEREFORE, REAR APPROACH SLAB IS NOT INCLUDED IN DEDUCTIONS.
2. THERE ARE NO DEDUCTIONS FOR BRIDGE MUS-83-0785 BECAUSE WE ARE MILLING AND FILLING THE SAME AS THE ROADWAY. THE ADDITIONAL WIDTH OF 1.7 FEET OVER THE STRUCTURE IS INCLUDED IN THE BRIDGE DATA BELOW.

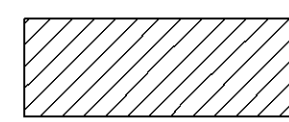
DEDUCTIONS = PAVEMENT/SHOULDER WIDTHS X (BRIDGE LENGTH + APPROACH SLABS)

BRIDGE DATA																				
LOCATION	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS)	WIDTH	AREA	APPROACH SLAB LENGTH	APPROACH SLAB WIDTH	APPROACH SLAB AREA (INCLUDES BOTH APPROACH SLABS)	DETAILS (SHEET 10)	MAINLINE DEDUCTIONS (CARRIED TO SHEET 6)	SHOULDER DEDUCTIONS (CARRIED TO SHEET 7)	202		407		448 ASPHALT CONCRETE				512	516
											WEARING COURSE REMOVED	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	TACK COAT @ 0.075 GAL./S.Y.	INCHES	INTERMEDIATE COURSE, TYPE 2, PG 64-22	INCHES	SURFACE COURSE, TYPE 1, PG 70-22M	TYPE 3 WATERPROOFING	2" DEEP JOINT SEALER, AS PER PLAN	
																				SQ. YD.
1	MUS-83-0716	22.5	34	85.0	15.0	34.0	113.3	1	83.3	16.7										24.0
1	MUS-83-0785	22.5	25.7	64.3				2			14.3	0.7	1.1	1.75	0.7	1.25	0.5			
1	MUS-83-0861	57	30	190.0	20.0	30.0	133.3	3	215.6	43.1	323.3		24.2			1.25	11.2			
1	MUS-83-0922	12.5	30	41.7				4	27.8	5.6										48.0
1	MUS-83-1134	92	33	337.4	20.0	32.0	142.2	1	293.3	58.7										48.0
1	MUS-83-1167	15.5	30	51.7				4	34.4	6.9										48.0
1	MUS-83-1434	266.5	25	740.3				5	592.2	118.4	740.3	37.0	55.5	1.75	36.0	1.25	25.7	740.3		
SUB-TOTALS		488.5			55.0				1,246.6	249.4									740.3	
LOCATION 1 TOTALS											1,077.9	37.7	80.8		36.7		37.4	740.3		168.0

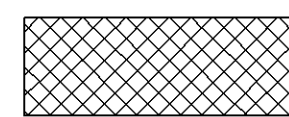
BRIDGE DECK TREATMENT DATA

MUS-83-7.16

CALCULATED  
LME  
CHECKED  
DNM



ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE

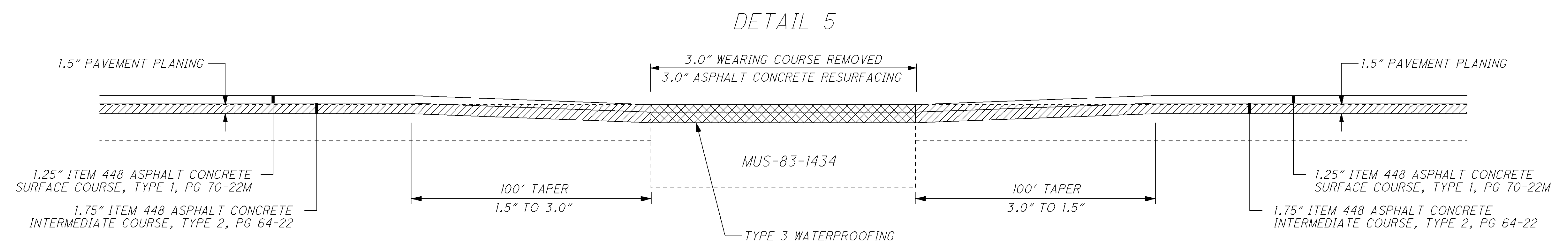
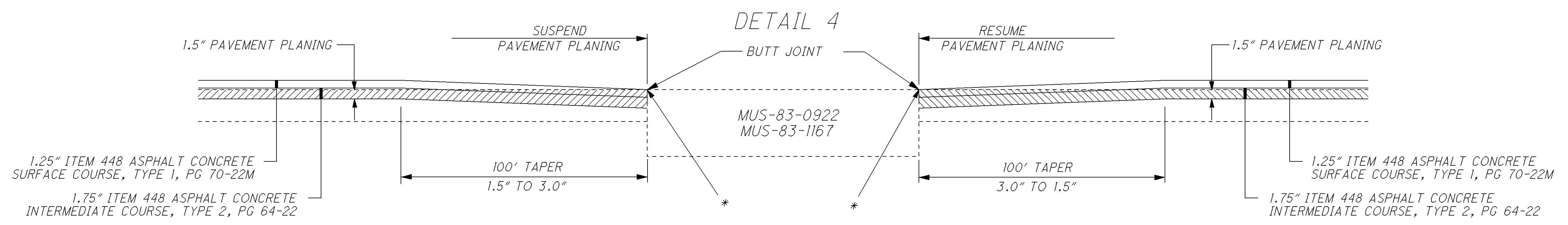
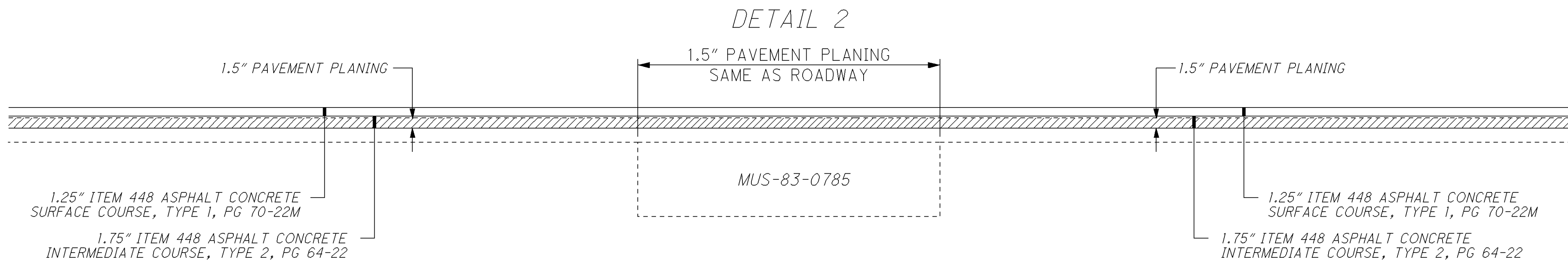
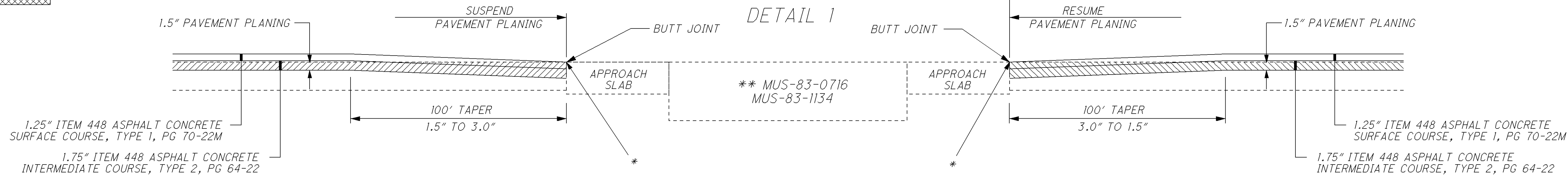


ITEM 202 WEARING COURSE REMOVED

\* 2.0" DEEP JOINT SEALER, AS PER PLAN

DETAILS NOT TO SCALE

CALCULATED  
LME  
CHECKED  
DNM



M083\_MBT\_002.dgn 4-4-12

BRIDGE DECK TREATMENT DATA

MUS-83-7.16

10  
14

ITEM 817 EDGE LINE										
LOCATION	COUNTY	ROUTE	S.L.M.		TOTAL LENGTH (MILES)	INFORMATION ONLY			TOTAL EDGE LINE MILES	REMARKS
						WHITE EDGE LINE QUANTITIES				
			FROM	TO		TOTAL MILES	HIGHWAY MILES	RAMP MILES		
1	MUS	S.R. 83	7.16	14.98	7.82	15.64	15.64		15.64	
LOCATION 1 TOTALS									15.64	

ITEM 817 CENTER LINE										
LOCATION	COUNTY	ROUTE	S.L.M.		TOTAL LENGTH (MILES)	INFORMATION ONLY		TOTAL CENTER LINE MILES	REMARKS	
						CENTER LINE QUANTITIES				
			FROM	TO		TOTAL MILES	EQUIVALENT SOLID LINE			
1	MUS	S.R. 83	7.16	14.98	7.82	7.82	13.064	7.82		
LOCATION 1 TOTALS									7.82	

644 THERMOPLASTIC AUXILIARY MARKING

LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	SLM	TRANVERSE/DIAGONAL LINES (24")		STOP LINE (24")	12" CROSSWALK LINE	WORD ON PAVEMENT		LANE ARROWS				RAILROAD SYMBOL MARKING	REMARKS
						WHITE	YELLOW			ONLY		COMBINATION		TURN			
										72"	96"	LT./TH.	RT./TH.	LT.	RT.		
										FT.	FT.	EACH	EACH	EACH	EACH		
1	MUS	S.R. 83	STONY POINT RD.	RT				25								PLACE 18' FROM SR 83 CL	
1	MUS	S.R. 83	HANSEL RD. (T.R. 176)	RT				20								PLACE 16' FROM SR 83 CL	
1	MUS	S.R. 83	WINDY RIDGE RD.	LT				35								PLACE 16' FROM SR 83 CL	
1	MUS	S.R. 83	BARR RD. (C.R. 19)	LT				50								PLACE 18' FROM SR 83 CL	
1	MUS	S.R. 83	LOOKOUT RD. (C.R. 101)	RT				30								PLACE 20' FROM SR 83 CL	
1	MUS	S.R. 83	DENT RD. (T.R. 177)	LT				30								PLACE 20' FROM SR 83 CL	
1	MUS	S.R. 83	GRANNYS KNOB RD. (C.R. 17)	RT				35								PLACE 20' FROM SR 83 CL	
1	MUS	S.R. 83	S.R. 93	LT				26								PLACE 21' FROM SR 83 CL	
1	MUS	S.R. 83	SOUTH ST	LT				10								PLACE 19' FROM SR 83 CL	
1	MUS	S.R. 83	MAIN ST	LT				13								PLACE 19' FROM SR 83 CL	
1	MUS	S.R. 83	NORTH ST	LT				15								PLACE 18' FROM SR 83 CL	
1	MUS	S.R. 83	S.R. 93	RT				20								PLACE 20' FROM SR 83 CL	
1	MUS	S.R. 83	MAIN ST	LT				12								PLACE 20' FROM SR 83 CL	
1	MUS	S.R. 83	WELKER ST.	LT				15								PLACE 13' FROM SR 83 CL	
1	MUS	S.R. 83	WOLF LANE (T.R. 100)	LT				18								PLACE 17' FROM SR 83 CL	
1	MUS	S.R. 83	ACCESS ROAD TO WOLF LANE (T.R. 100)	LT				15								PLACE 17' FROM SR 83 CL	
1	MUS	S.R. 83	EDGEMOOR RD. (C.R. 12)	LT				40								PLACE 20' FROM SR 83 CL	
1	MUS	S.R. 83	TYSON RD. (C.R. 175)	RT				25								PLACE 19' FROM SR 83 CL	
1	MUS	S.R. 83	WILLS CREEK RD.	LT				25								PLACE 19' FROM SR 83 CL	
1	MUS	S.R. 83	PARK ROAD	RT				19								PLACE 18' FROM SR 83 CL	
<b>LOCATION 1 TOTALS</b>								<b>478</b>									

CALCULATED  
LME  
CHECKED  
DNM

AUXILIARY MARKING DATA

MUS - 83 - 7.16

12  
14



DETAIL	SEE STD. DWG. TC-65.II
1	TAPERED ACCELERATION LANE
2	DECELERATION LANE
3	MULTILANE DIVIDED/ CONTROLLED ACCESS

DETAIL	SEE STD. DWG. TC-65.II
4	4 LANE DIVIDED TO 2 LANE TRANSITION
5	4 LANE UNDIVIDED TO 2 LANE TRANSITION
6	ONE LANE BRIDGE
7	STOP APPROACH
8	THRU APPROACH
9	TWO WAY LEFT TURN LANE

DETAIL	SEE STD. DWG. TC-65.II
10	APPROACH W/LT. TURN LANE
11	HORIZONTAL CURVE 40'
12	HORIZONTAL CURVE ALT.
GAP	CENTERLINE AT 80' TYP.

**ITEM 621 RPM SUB-SUMMARY**

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		DETAIL	621	621	PRISMATIC RETRO-REFLECTOR COLORS					REMARKS
								RAISED PAVEMENT MARKER REMOVED	RPM	INFORMATION ONLY					
										ONE-WAY	TWO-WAY				
EACH	EACH	WHITE	YELLOW	YELLOW / YELLOW	WHITE / RED	YELLOW / RED									
1	MUS	S.R. 83	7.16	7.30	0.14	739	12	31	31			31			PC 7.14 PT 7.21 L=370' DEG 12
1	MUS	S.R. 83	7.30	7.71	0.41	2,165	GAP	28	28			28			
1	MUS	S.R. 83	7.71	7.79	0.08	422	11	11	11			11			PC 7.71 PT 7.79 L=422' DEG 9
1	MUS	S.R. 83	7.79	8.25	0.46	2,429	GAP	31	31			31			
1	MUS	S.R. 83	8.25	8.47	0.22	1,162	12	35	35			35			PC 8.34 PT 8.38 L=211' DEG 21
1	MUS	S.R. 83	8.47	8.65	0.18	950	12	30	30			30			PC 8.52 PT 8.56 L=211' DEG 20
1	MUS	S.R. 83	8.65	9.02	0.37	1,954	GAP	25	25			25			
1	MUS	S.R. 83	9.02	9.26	0.24	1,267	12	37	37			37			PC 9.12 PT 9.17 L=264' DEG 19
1	MUS	S.R. 83	9.26	9.31	0.05	264	GAP	4	4			4			
1	MUS	S.R. 83	9.31	9.56	0.25	1,320	12	43	43			43			PC 9.40 PT 9.47 L=370' DEG 12
1	MUS	S.R. 83	9.56	9.60	0.04	211	GAP	3	3			3			
1	MUS	S.R. 83	9.60	9.84	0.24	1,267	12	40	40			40			PC 9.69 PT 9.75 L=317' DEG 18
1	MUS	S.R. 83	9.84	10.06	0.22	1,162	GAP	15	15			15			
1	MUS	S.R. 83	10.06	10.11	0.05	264	11	7	7			7			PC 10.06 PT 10.11 L=264' DEG 9
1	MUS	S.R. 83	10.11	10.77	0.66	3,485	GAP	44	44			44			
1	MUS	S.R. 83	10.77	10.79	0.02	106	11	3	3			3			PC 10.77 PT 10.79 L=106' DEG 9
1	MUS	S.R. 83	10.79	10.91	0.12	634	GAP	8	8			8			
1	MUS	S.R. 83	10.91	11.12	0.21	1,109	12	32	32			32			PC 11.00 PT 11.03 L=158' DEG 28
1	MUS	S.R. 83	11.12	11.36	0.24	1,267	12	41	41			41			PC 11.19 PT 11.27 L=422' DEG 11
1	MUS	S.R. 83	11.36	11.84	0.48	2,534	GAP	32	32			32			
1	MUS	S.R. 83	11.84	12.00	0.16	845	7	27	27	16		11			STOP AT SR 93
1	MUS	S.R. 83	12.00	12.02	0.02	106	GAP	2	2			2			
1	MUS	S.R. 83	12.02	12.05	0.03	158	11	4	4			4			PC 12.02 PT 12.05 L=158' DEG 9
1	MUS	S.R. 83	12.05	12.84	0.79	4,171	GAP	53	53			53			
1	MUS	S.R. 83	12.84	12.89	0.05	264	11	7	7			7			PC 12.84 PT 12.89 L=264' DEG 9
1	MUS	S.R. 83	12.89	13.41	0.52	2,746	GAP	35	35			35			
1	MUS	S.R. 83	13.41	13.58	0.17	898	12	31	31			31			PC 13.50 PT 13.56 L=317' DEG 14
1	MUS	S.R. 83	13.58	13.65	0.07	370	11	9	9			9			PC 13.58 PT 13.65 L=370' DEG 9
1	MUS	S.R. 83	13.65	14.87	1.22	6,442	GAP	81	81			81			
1	MUS	S.R. 83	14.87	14.95	0.08	422	11	11	11			11			PC 14.87 PT 14.95 L=422' DEG 9
1	MUS	S.R. 83	14.95	14.98	0.03	158	GAP	2	2			2			END COS. CO.
SUB-TOTALS										16		746			
LOCATION 1 TOTALS								762	762						

CALCULATED  
LME  
CHECKED  
DNM

**RAISED PAVEMENT MARKER DATA**

**MUS - 83 - 7.16**

SHEET TOTALS										ITEM	ITEM EXT.	TOTALS 01/STR/PV/	UNIT	DESCRIPTION	SEE SHEET
Sht. 2	Sht. 3	Sht. 4	Sht. 6	Sht. 7	Sht. 8	Sht. 9	Sht. 11	Sht. 12	Sht. 13						
	710				5,373	1,078				202	23500	7,161	SQ YD	WEARING COURSE REMOVED	
15.53				15.53						209	60500	15.53	MILE	LINEAR GRADING	
										209	72051	15.53	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	3
1,000										253	02000	1,000	CU YD	PAVEMENT REPAIR	
			90,509	18,102						254	01000	108,611	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
			6,789	1,358	404	81				407	10000	8,632	GALLON	TACK COAT	
			4,526	905	29	38				407	14000	5,498	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
7,234										408	10001	7,234	GALLON	PRIME COAT, AS PER PLAN	2
	35		4,400	880	28	37				448	46050	5,380	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	
	26	163	3,143	629		38				448	46904	3,999	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M	
					188					448	47020	188	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	
						741				512	33010	741	SQ YD	TYPE 3 WATERPROOFING	
						168				516	31011	168	FT	2" DEEP JOINT SEALER, AS PER PLAN	2
	51									614	12460	51	EACH	WORK ZONE MARKING SIGN	
	10									614	13000	10	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
			15.60							614	21400	15.60	MILE	WORK ZONE CENTER LINE, CLASS II	
				1,005						617	10101	1,005	CU YD	COMPACTED AGGREGATE, AS PER PLAN	2
				18,092						617	20000	18,092	SQ YD	SHOULDER PREPARATION	
								762		621	00100	762	EACH	RPM	
								762		621	54000	762	EACH	RAISED PAVEMENT MARKER REMOVED	
								478		644	00500	478	FT	STOP LINE	
							15.64			817	00100	15.64	MILE	EDGE LINE, 4"	
							7.82			817	00300	10.70	MILE	CENTER LINE	
										103	05000	LUMP		PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND	
										614	11000	LUMP		MAINTAINING TRAFFIC	
										619	16000	2	MONTH	FIELD OFFICE, TYPE A	
										624	10000	LUMP		MOBILIZATION	
										823	10000	LUMP		CONSTRUCTION LAYOUT STAKES	

CALCULATED LME CHECKED DNM	GENERAL SUMMARY	MUS - 83 - 7.16		
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