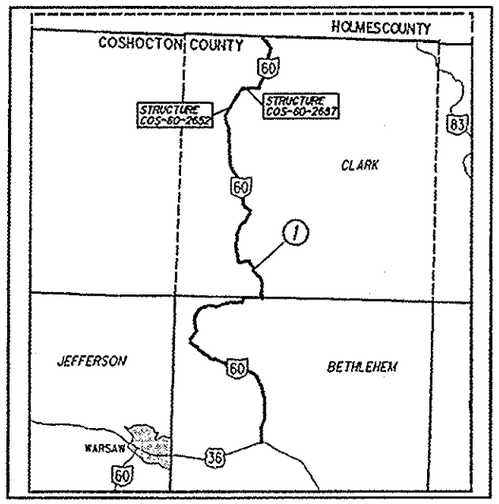

LOCATION MAP

LATITUDE: 40° 23' 07" LONGITUDE: 81° 57' 48"

PORTION TO BE IMPROVED

DESIGN DESIGNATION	S.R. 60
FUNCTIONAL CLASSIFICATION	RMC
OPENING YEAR ADT (2016)	1,700
DESIGN YEAR ADT (2028)	1,700
DESIGN HOURLY VOLUME (2028)	220
DIRECTIONAL DISTRIBUTION	56%
TRUCKS (24 HOUR B&C)	5%
DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH

RMC = RURAL MAJOR COLLECTOR

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.

OHIO Utilities Protection Service — Call Before You Dig 1-800-362-2764

(Non-members must be called directly)

OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE 1-800-925-0988

PLAN PREPARED BY:

OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 5 PLANNING & ENGINEERING

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

COS-60-17.12

BETHLEHEM AND CLARK TOWNSHIPS

COSHOCTON COUNTY

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PROJECT DESCRIPTION

ASPHALT CONCRETE RESURFACING ON S.R. 60 IN COSHOCTON COUNTY AND RELATED WORK WITH MINOR BRIDGE WORK ON STRUCTURES COS-60-2652 AND COS-60-2687

PROJECT EARTH DISTURBED AREA = N/A (MAINT.)
ESTIMATED CONTRACTOR EARTH DISTURBED AREA = N/A (MAINT.)
NOTICE OF INTENT EARTH DISTURBED AREA = N/A (MAINT.)

LOCATION	PLAN SPLIT	COUNTY	ROUTE	BEGIN SLM	END SLM	LENGTH MILES	CITY/VILLAGE
1	1	COS	60	17.12	28.10	10.98	

2013 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

ENGINEER'S SEAL

STATE OF OHIO — JASON SCOTT LUTZ E-77397 REGISTERED PROFESSIONAL ENGINEER

SIGNED: Jason A. Lutz

DATE: 3/4/16

STANDARD CONSTRUCTION DRAWINGS

BP-3.1	7/18/14	TC-65.10	1/17/14			800	4/15/16
BP-4.1	7/19/13	TC-65.11	7/18/14			832	1/17/14
		TC-71.10	1/17/14				
MT-97.10	7/18/14						
MT-97.12	7/18/14						
MT-101.90	7/17/15						
MT-105.10	7/19/13						

SUPPLEMENTAL SPECIFICATIONS

SPECIAL PROVISIONS

APPROVED Dave Ray, P.E., P.S. for

DATE 3/4/16 DISTRICT DEPUTY DIRECTOR

APPROVED Jerry Wray

DATE 3-11-16 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E140(873)

PID NO. 93039

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT NONE

COS-60-17.12

1/15

COS - SR 60-17.12
160449 PID - 93039
Dist 5 7/28/2016

Contract Proposal Available @ www.Contracts.dot.state.oh.us/home

I:\ProjectData\COS\93039\Design\Roadway\Sheets\93039_GT001.dgn 14-MAR-2...

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

THE CONTRACTOR WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF TWENTY ONE (21) DAYS PRIOR TO THE FOLLOWING: THE START OF CONSTRUCTION ACTIVITIES, LANE RESTRICTIONS, LANE CLOSURES, AND OR ROAD CLOSURES. THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (614) 887-4510 OR EMAIL AT D05.PIO@DOT.STATE.OH.US

DISTRICT PERMIT SECTION BY FAX AT (614) 887-4525 OR EMAIL AT BRIAN.BOSCH@DOT.STATE.OH.US

CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY FAX AT (614) 728-4099 OR EMAIL AT HAULING.PERMITS@DOT.STATE.OH.US

THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF ANY OF THE ABOVE MENTIONED ITEMS, VIA MEDIA SOURCES.

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 PAVMENT MARKINGS.

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 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 ANY PLANING OPERATIONS. 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 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 IN TWO LIFTS).

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

ITEM 253, PAVEMENT REPAIR
LOCATION 1: 1,750 CU.YD.

ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE

DEPTH OF PLANING ON S.R. 60 SHALL BE 1.0" AS SHOWN ON THE ASPHALT CONCRETE DATA SHEET. PLANING SHALL BE FULL WIDTH OF PAVEMENT, INCLUDING PAVED SHOULDERS.

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.

ITEM 407, TACK COAT & TACK COAT FOR INTERMEDIATE COURSE

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 AND 0.05 GALLONS PER SQUARE YARD FOR TACK COAT AND TACK COAT FOR INTERMEDIATE COURSE, RESPECTIVELY, FOR ESTIMATING PURPOSES ONLY.

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.

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.

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 RECYCLED ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 617.02) IN LIEU OF CRUSHED LIMESTONE.

ITEM 617, SHOULDER PREPARATION SHALL BE PERFORMED ON ALL AREAS BEFORE PLACING COMPACTED AGGREGATE. AGGREGATE SHOULDERS SHALL BE SLOPED TO PROVIDE POSITIVE DRAINAGE FROM ROADWAY.

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.

IN ADDITION TO PREPARING THE SHOULDER FOR PAVING, THE CONTRACTOR SHALL 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 PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN.

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 BEYOND THE 10 INCH WIDE STRIP FOR THE SAFETY EDGE, SHALL BE DONE BEFORE PLACING THE ASPHALT SURFACE COURSE.

CALCULATED LME CHECKED JSL

GENERAL NOTES

COS-60-17.12

RESIDENTIAL AND COMMERCIAL DRIVES

AN ESTIMATED QUANTITY OF ITEM 441 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 EXTEND AN AVERAGE OF 4' INTO THE DRIVEWAY (MEASURED FROM THE EDGE OF PAVEMENT OR PAVED SHOULDER IF PRESENT). THE ENGINEER MAY EXTEND PAVING DISTANCE FOR ASPHALT DRIVEWAYS IN ORDER TO PROVIDE A SMOOTH TRANSITION AND/OR ELIMINATE SHORT DISTANCES OF UNDESIRABLE PROFILE. ABRUPT CHANGES IN DRIVEWAY PROFILE ARE NOT PERMITTED, THEREFORE, A QUANTITY OF ITEM 304 AGGREGATE BASE HAS BEEN PROVIDED TO BE USED AS DIRECTED BY THE ENGINEER TO PROVIDE A SMOOTH TRANSITION FOR AGGREGATE DRIVES.

FIELD DRIVES AND OIL WELL DRIVES SHALL NOT BE PAVED. GRAVEL DRIVES SHALL BE PAVED BACK AN AVERAGE OF 4' WITHOUT CREATING A BUTT JOINT, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. CREATE A BUTT JOINT FOR EXISTING ASPHALT/CONCRETE DRIVES/APRONS. GRAVEL DRIVES WITH ASPHALT APRONS SHALL NOT HAVE BUTT JOINTS, BUT ONLY IF THE EXISTING ASPHALT APRON IS IN AN ACCEPTABLE CONDITION TO BE PAVED OVER. 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.

BUTT JOINT AT THE END OF ALL DRIVEWAYS SHALL BE 1.25" IN DEPTH TO ACCOMMODATE 1.25" SURFACE COURSE. NO WORK SHALL BE PERFORMED ON DRIVEWAYS LOCATED IN CURB SECTIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

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

ITEM 202, WEARING COURSE REMOVED
LOCATION 1: 490 SQ.YD.

ITEM 304, AGGREGATE BASE
LOCATION 1: 3 CU.YD.

ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M
LOCATION 1: 17 CU.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 202, WEARING COURSE REMOVED
LOCATION 1: 260 SQ.YD.

ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)
LOCATION 1: 8 CU.YD.

ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M
LOCATION 1: 9 CU.YD.

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 CAMPACTED 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

Advant-Edge Paving Equipment, LLC.
P.O. Box 9163
Niskayuna, NY 12309-0163
518-280-6090
www.advantaedgepaving.com

Carlson Safety Edge End Gate
18425 50th 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

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 QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO PROVIDE EXTRA ASPHALT FOR CONSTRUCTION OF THE SAFETY EDGE:

ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M
LOCATION 1: 155 CU.YD.

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

TO EXPEDITE WORK, CLASS QC2 CONCRETE WITH AN ACCELERATING ADMIXTURE SIKA RAPID-1 OR ANY APPROVED EQUIVALENT ADMIXTURE SHALL BE USED TO ACHIEVE 3,000 PSI COMPRESSIVE STRENGTH IN 12 HRS. USE A NON-CHLORIDE ACCELERATING ADMIXTURE AND PROVIDE DOCUMENTATION THAT THE MIX WILL PROVIDE THE STRENGTH IN THE SPECIFIED TIME.

THIS ITEM SHALL CONFORM TO C&MS 519 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

PROVIDE PATCHES AT LEAST 4 INCHES DEEP ON TOP HORIZONTAL SURFACES.

AT LEAST 5 DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A SCHEDULE OF REPAIR WORK ITEM TO BE COMPLETED. THE SCHEDULE SHALL INCLUDE A BREAKDOWN OF ALL MAJOR WORK ACTIVITIES ON AN HOURLY BASIS. REPAIR WORK SHALL NOT BEGIN UNTIL THE SCHEDULE IS APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL CONTINUE THE WET CURE FOR THE MAXIMUM NUMBER OF HOURS POSSIBLE DURING THE PERMITTED LANE CLOSURE. THE CLOCK STARTS FOR THE WET CURE WHEN THE CONCRETE PLACEMENT IS COMPLETE.

TRAFFIC SHALL BE MAINTAINED UNTIL AFTER COMPLETION OF A 12 HOUR MINIMUM WET CURE AND AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF 400 PSI.
PAYMENT FOR ALL THE ABOVE WORK DESCRIBED LABOR, EQUIPMENT, AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN.

CALCULATED LME CHECKED JSL

GENERAL NOTES

COS-60-17.12

ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF 1 LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON S.R. 60 BY USE OF THE EXISTING PAVEMENT AND STANDARD DRAWING MT-97.10 OR 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 INCLUDING REPAIRS.

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. THIS RULE DOES NOT APPLY TO PLANING AT BRIDGES OR ACROSS BRIDGES UNLESS THE BRIDGE IS BEING TREATED THE SAME AS THE ADJACENT ROADWAY.

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.

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 614, WORK ZONE MARKING SIGN

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

W8-H12a (NO EDGE LINES):
LOCATION 1: 24 EACH

R4-1 (DO NOT PASS):
LOCATION 1: 28 EACH

R4-2 (PASS WITH CARE):
LOCATION 1: 9 EACH

ITEM 614, WORK ZONE MARKING SIGN
LOCATION 1: 61 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. "GROOVED PAVEMENT" SIGNS SHALL BE INCLUDED FOR PAYMENT WITH THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC AS PER CMS SECTION 614.055.

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'.

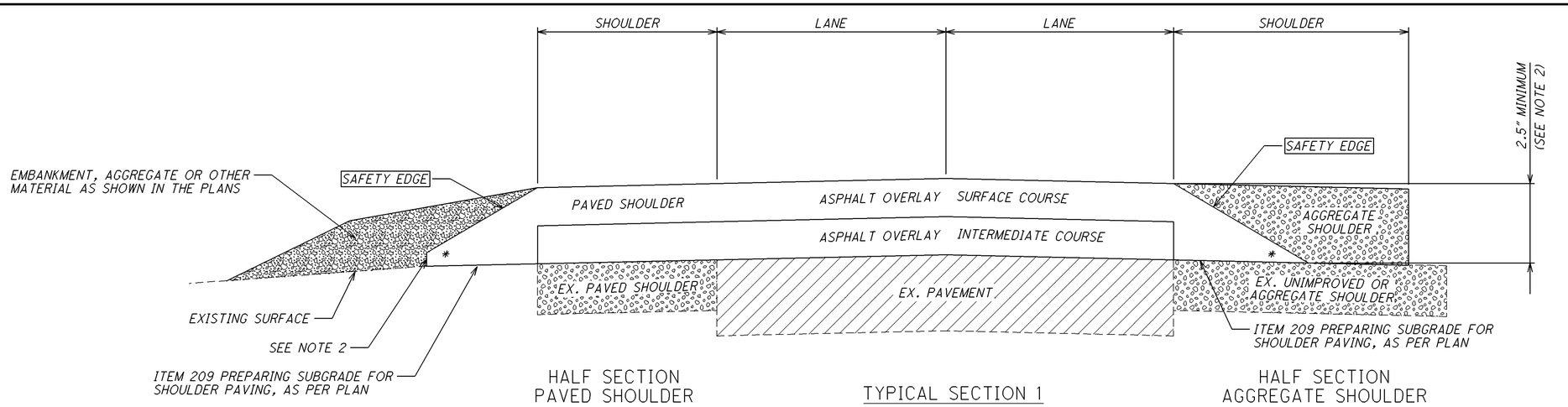
LOCATION	ROUTE	DESCRIPTION	S.L.M.	ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC CU. YD.
1	S.R. 60	BEGIN WORK @ U.S. 36	17.12	0.8
1	S.R. 60	BRIDGE: COS-60-2007	20.07	1.6
1	S.R. 60	BRIDGE: COS-60-2417	24.17	1.6
1	S.R. 60	BRIDGE: COS-60-2687	26.87	1.6
1	S.R. 60	END WORK	28.10	0.8
		TOTAL		**6.4**

GRINDING FOR BUTT JOINTS SHALL BE INCLUDED FOR PAYMENT WITH ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE WHERE APPLICABLE.

CALCULATED LME CHECKED JSL

MAINTENANCE OF TRAFFIC NOTES

COS-60-17.12

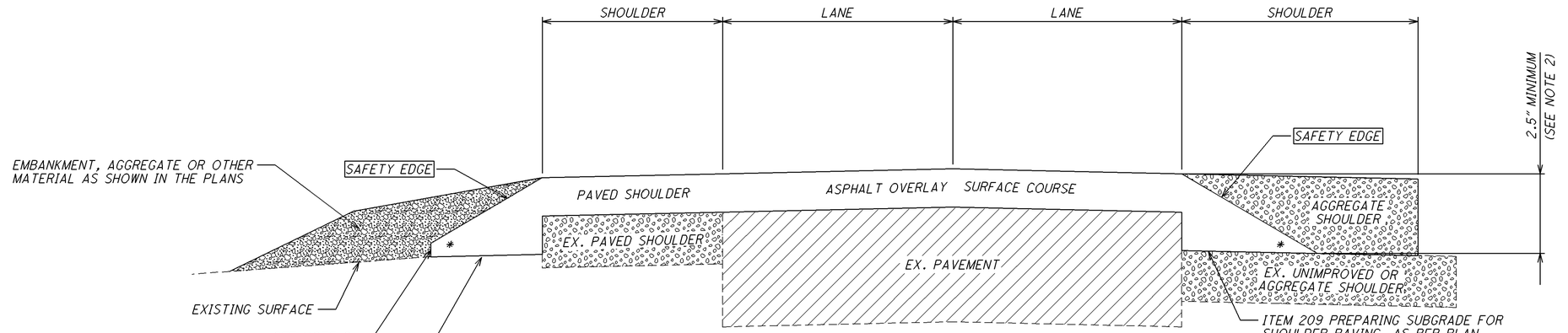


HALF SECTION
PAVED SHOULDER

TYPICAL SECTION 1

N.T.S.

HALF SECTION
AGGREGATE SHOULDER

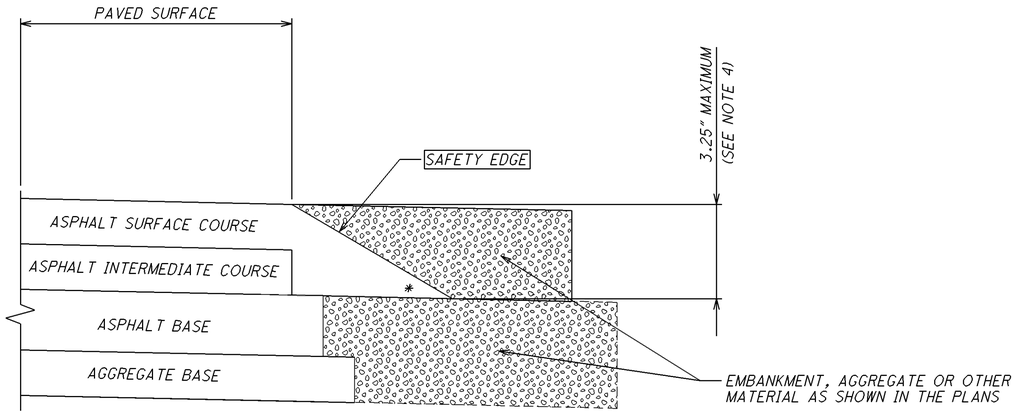


HALF SECTION
PAVED SHOULDER

TYPICAL SECTION 2

N.T.S.

HALF SECTION
AGGREGATE SHOULDER



HALF SECTION
NEW CONSTRUCTION

TYPICAL SECTION 3

N.T.S.

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

CALCULATED LME
CHECKED JSL

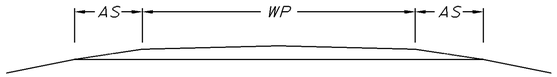
SAFETY EDGE DETAIL

COS-60-17.12

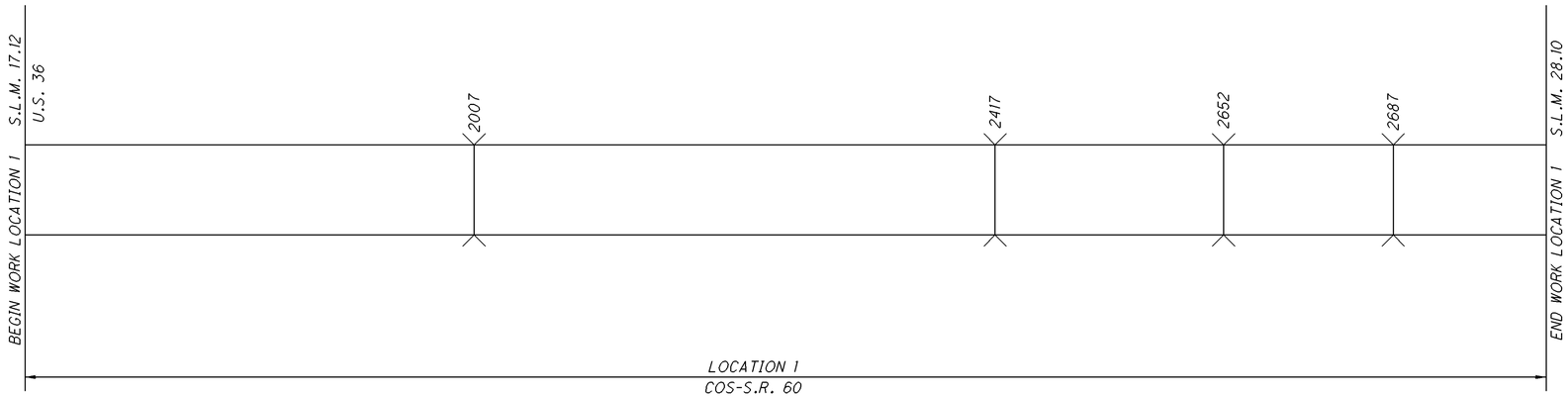
NOTE:

THE PAVEMENT WIDTHS SHOWN IN THE "ASPHALT CONCRETE DATA" TABLE ARE THE WIDTHS WHICH HAVE BEEN DETERMINED TO HAVE SUFFICIENT ROADWAY BASE FOR PAVING. IF THE ACTUAL ROADWAY WIDTH IS GREATER THAN WHAT THE PAVEMENT DATA SHEET SHOWS, THE CONTRACTOR SHALL PAVE ONLY THE WIDTH SHOWN IN THE AFOREMENTIONED TABLE, UNLESS THE WIDER PAVEMENT IS IN A CURVED ROADWAY SECTION. DO NOT REDUCE THE WIDTH OF WIDENED PAVEMENT IN CURVED ROADWAY SECTIONS. PAVING SHALL BE CENTERED ABOUT THE FULL WIDTH OF THE ROADWAY AND ANY EXCESS EXISTING PAVEMENT ON THE EDGES SHALL BE REMOVED WITH SHOULDER PREPARATION BEFORE PLACING ITEM 617, COMPACTED AGGREGATE. PAVING IN CURBED ROADWAY SECTIONS SHALL BE FROM CURB TO CURB.

TYPICAL 1



WP = WIDTH OF PAVEMENT
AS = AGGREGATE SHOULDER



ASPHALT CONCRETE DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT (SLM)	END LOG POINT (SLM)	LENGTH		PAVEMENT WIDTH (FT)	TYPICAL	PAVEMENT AREA (SQ.YD.)	254		407		441				614	
					MILES	LIN.FT.				THICKNESS	PAVEMENT PLANING, ASPHALT CONCRETE	TACK COAT (@ 0.075 GAL/SY)	TACK COAT FOR INTERMEDIATE COURSE (@ 0.05 GAL/SY)	THICKNESS	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	THICKNESS	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M	WORK ZONE CENTER LINE, CLASS II	WORK ZONE CENTER LINE, CLASS III, 642 PAINT
										INCHES	SQ.YD.	GAL	GAL	INCHES	CU.YD.	INCHES	CU.YD.	MILE	MILE
1	COS	S.R. 60	17.12	28.10	10.98	57974.4	20	1	128832.0	1.00	128832	9662.4	6441.6	1.00	3578.7	1.25	4473.4	10.98	10.98
	BRIDGE DEDUCTIONS (BRIDGE LENGTH X PAVEMENT WIDTH)								(1,976.4)		(1976.4)	(148.2)	(98.8)	1.00	(54.9)	1.25	(68.6)	(0.13)	(0.13)
	LOCATION 1 TOTALS (CARRIED TO GENERAL SUMMARY)										**126,856.0**	**9,515.0**	**6,343.0**		**3,524.0**		**4,405.0**	**10.85**	**10.85**

CALCULATED LME CHECKED JSL

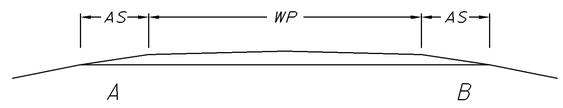
ASPHALT CONCRETE DATA

COS-60-17.12

CALCULATED LME
CHECKED JSL

SHOULDER DATA

TYPICAL 1

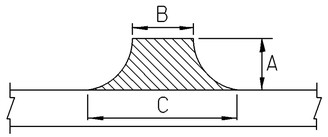


WP = WIDTH OF PAVEMENT
AS = AGGREGATE SHOULDER

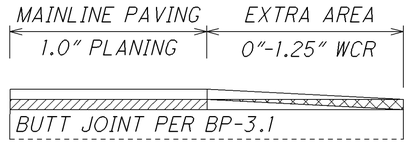
SHOULDER DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT (SLM)	END LOG POINT (SLM)	LENGTH		TYPICAL	AGGREGATE SHOULDER WIDTHS (FT.) (WIDTHS ARE AVERAGE THROUGHOUT SECTION)				SHOULDER AREA (SQ.YD.)	209	408	617		
					MILES	LIN.FT.		A	B	C	D		PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	PRIME COAT, AS PER PLAN (@ 0.4 GAL/SY)	THICKNESS	COMPACTED AGGREGATE, AS PER PLAN (2' WIDTH)	SHOULDER PREPARATION
													MILE	GAL	INCHES	CU.YD.	SQ.YD.
1	COS	S.R. 60	17.12	28.10	10.98	57,974.4	1	2	2			25,766.4	21.96	10,306.6	2.0 AVG.	1,431.5	25,766.4
BRIDGE DEDUCTIONS (BRIDGE LENGTH X SHOULDER WIDTH)												(395.3)	(0.34)	(158.12)		(21.96)	(395.30)
LOCATION 1 TOTALS (CARRIED TO GENERAL SUMMARY)													**21.62**	**10,149.0**		**1,410.0**	**25,372.0**

COS-60-17.12



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



EXTRA AREA DATA

LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	INTERSECTION DIMENSIONS (FT)			AREA (SQ.YD.)	202	407		441			
					A	B	C		WEARING COURSE REMOVED	TACK COAT (@ 0.075 Gal/SY)	TACK COAT FOR INTERMEDIATE COURSE (@ 0.05 Gal/SY)	THICKNESS	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	THICKNESS	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 64-22
									SQ.YD.	GAL	GAL	INCHES	CU.YD.	INCHES	CU.YD.
1	COS	S.R. 60	AT U.S. 36	CL	65	25	135	577.8	577.8	43.4				1.25	20.1
			TWP. RD. 1153	LT.	27	16	45	91.5	91.5	6.9				1.25	3.2
			TWP. RD. 1153	LT.	20	16	36	57.8	57.8	4.4				1.25	2.1
			TWP. RD. 1192	LT.	30	19	29	80.0	80.0	6.0				1.25	2.8
			TWP. RD. 31	LT.	27	30	66	144.0	144.0	10.8				1.25	5.0
			CO. RD. 49	LT.	51	31	114	410.9	410.9	30.9				1.25	14.3
			CO. RD. 24	RT.	58	20	105	402.8	402.8	30.3				1.25	14.0
			TWP. RD. 26	RT.	44	19	68	212.7	212.7	16.0				1.25	7.4
			CO. RD. 318	LT.	32	22	84	188.5	188.5	14.2				1.25	6.6
			CO. RD. 343	RT.	48	21	90	296.0	296.0	22.2				1.25	10.3
			CO. RD. 49	LT.	29	25	70	153.1	153.1	11.5				1.25	5.4
			TWP. RD. 25	RT.	27	27	70	145.5	145.5	11.0				1.25	5.1
			TWP. RD. 49	LT.	27	22	86	162.0	162.0	12.2				1.25	5.7
			CO. RD. 19	LT.	45	22	74	240.0	240.0	18.0				1.25	8.4
			CO. RD. 19	RT.	43	18	48	157.7	157.7	11.9				1.25	5.5
LOCATION 1 TOTALS (CARRIED TO GENERAL SUMMARY)									3,321.0	250.0					116.0

CALCULATED LME
CHECKED JSL

EXTRA AREA DATA

COS-60-17.12

CALCULATED LME CHECKED JSL

BRIDGE TREATMENT

COS-60-2007: REMOVE AND REPLACE 1.25" ASPHALT CONCRETE ON APPROACH SLABS, BUTT JOINT AT BRIDGE DECK

COS-60-2417: REMOVE AND REPLACE 1.25" ASPHALT CONCRETE ON APPROACH SLABS, BUTT JOINT AT BRIDGE DECK

COS-60-2652: REMOVE 3.0"± ASPHALT CONCRETE, PLACE WATERPROOFING AND 3.0" OF ASPHALT CONCRETE

COS-60-2687: REMOVE AND REPLACE 1.25" ASPHALT CONCRETE ON APPROACH SLABS, PATCH BRIDGE DECK, BUTT JOINT AT BRIDGE DECK

SEE SHEET 10 FOR BRIDGE DECK DETAILS

BRIDGE DEDUCTIONS = BRIDGE LENGTH X PAVEMENT/SHOULDER WIDTH

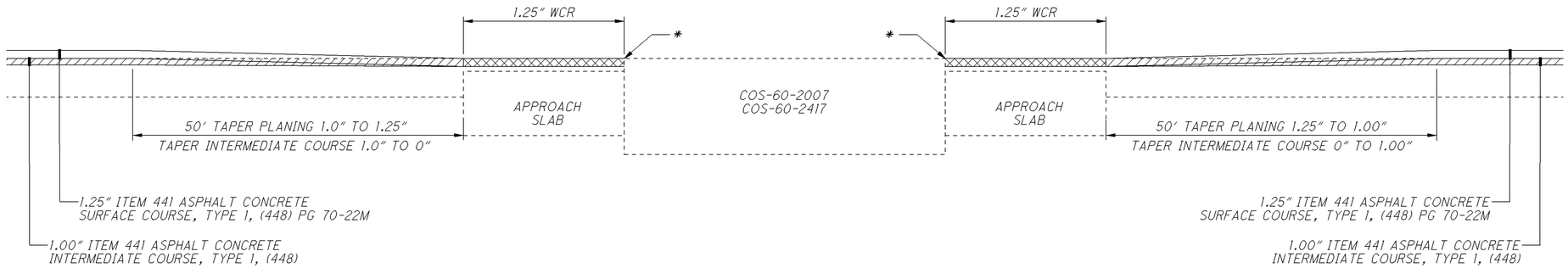
BRIDGE TREATMENT DATA

LOCATION	BRIDGE NO.	BRIDGE LENGTH (FT)	BRIDGE WIDTH (FT)	BRIDGE AREA (SQ.YD.)	APPROACH SLAB LENGTH (FT)	APPROACH SLAB WIDTH (FT)	APPROACH SLAB AREA (SQ.YD.) (Includes both Approach Slabs)	DETAIL	MAINLINE DEDUCTIONS (SQ.YD.) (CARRIED TO SHEET 6)	SHOULDER DEDUCTIONS (SQ.YD.) (CARRIED TO SHEET 7)	202		407		441				512	516	519
											THICKNESS	WEARING COURSE REMOVED	TACK COAT (@ 0.075 Gal/SY)	TACK COAT FOR INTERMEDIATE COURSE (@ 0.05 Gal/SY)	THICKNESS	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	THICKNESS	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M	TYPE 3 WATERPROOFING	2" DEEP JOINT SEALER, AS PER PLAN	PATCHING CONCRETE STRUCTURE, AS PER PLAN
											INCHES	SQ.YD.	GAL	GAL	INCHES	CU.YD.	INCHES	CU.YD.	SQ.YD.	FT	SQ.FT.
1	COS-60-2007	251.9	36	1,007.6	25	36.0	200.0	1	670.9	134.2	1.25	200.0	15.0				1.25	7.0		40.0	
	COS-60-2417	239.9	28	746.4	25	28.0	155.6	1	644.2	128.8	1.25	155.6	11.7				1.25	5.5		40.0	
	COS-60-2652	46.0	34	173.8	15	34.0	113.4	2	168.9	33.8	1.25	287.2	21.6	14.4	1.50	7.1	1.50	12.0	174		
	COS-60-2687	191.6	32	681.3	15	32.0	106.7	3	492.4	98.5	1.25	106.7	8.1				1.25	3.8		40.0	124.0
BRIDGE DEDUCTIONS (BRIDGE LENGTH X PAVEMENT/SHOULDER WIDTH)									(1976.4)	(395.3)											
LOCATION 1 TOTALS (CARRIED TO GENERAL SUMMARY)												**750.0**	**57.0**	**15.0**		**8.0**		**29.0**	**174.0**	**120.0**	**124.0**

BRIDGE TREATMENT DATA

COS-60-17.12

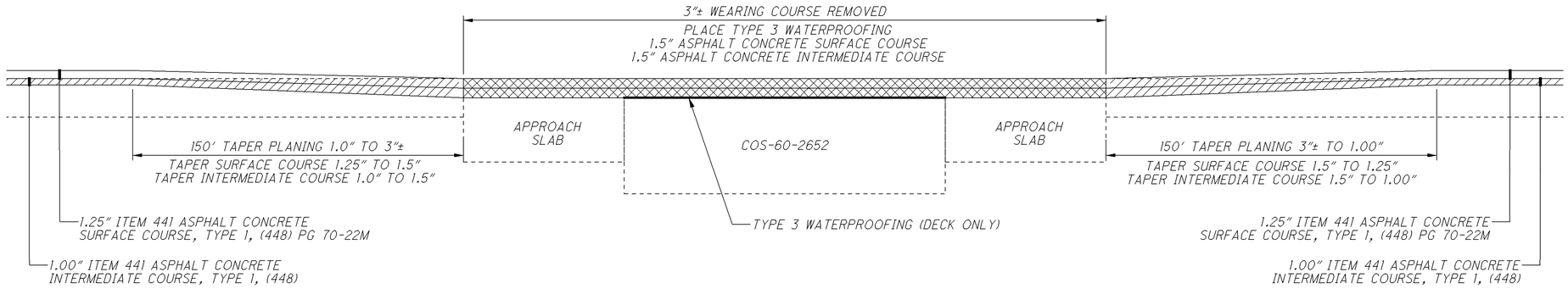
DETAIL 1



BUTT JOINT AT BRIDGE DECK

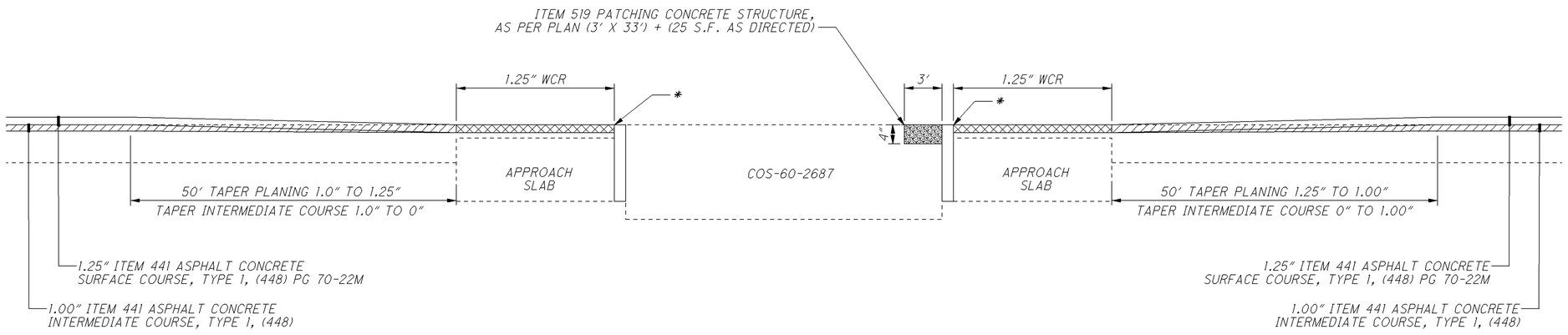
DETAIL 2

NOTE: CARE SHALL BE TAKEN NOT TO DAMAGE BOX BEAMS, STEEL DRIP STRIP OR OTHER BRIDGE COMPONENTS WHILE REMOVING ASPHALT CONCRETE



REMOVE 3"± ASPHALT CONCRETE, PLACE WATERPROOFING AND 3" ASPHALT CONCRETE

DETAIL 3



BUTT JOINT AT BRIDGE DECK

ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE

ITEM 202 WEARING COURSE REMOVED

* 2" DEEP JOINT SEALER, AS PER PLAN

CALCULATED LME CHECKED JSL

BRIDGE TREATMENT DETAILS

COS-60-17.12

10
15

EDGE LINE DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT (SLM)	END LOG POINT (SLM)	LENGTH (MILES)	Information Only: WHITE EDGE LINE (Quantities)			Information Only: YELLOW EDGE LINE (Quantities)			648: EDGE LINE, 6"	REMARKS
						Total Miles	Highway Miles	Ramp Miles	Total Miles	Highway Miles	Ramp Miles	MILE	
1	COS	S.R. 60	17.12	28.10	10.98	21.96	21.96					21.96	
LOCATION 1 TOTALS (CARRIED TO GENERAL SUMMARY)												21.96	

CENTER LINE DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT (SLM)	END LOG POINT (SLM)	LENGTH (MILES)	Information Only: CENTER LINE (Quantities)		648: CENTER LINE	Remarks
						Total Miles	Equivalent Solid Line	MILE	
1	COS	S.R. 60	17.12	28.10	10.98	10.98	20.455	10.98	
LOCATION 1 TOTALS (CARRIED TO GENERAL SUMMARY)								10.98	

CALCULATED LME
CHECKED JSL

PAVEMENT MARKING DATA (LONG LINE)

COS-60-17.12

11
15

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AUXILARY PAVEMENT MARKING DATA

Location	County	Route	Description	Side	644												Remarks
					CHANNELIZING LINE, 8"	STOP LINE (24")	CROSSWALK LINE (12")	TRANSEVERSE/ DIANGONAL LINES (24")		SCHOOL SYMBOL MARKING		LANE ARROW		WORD ON PAVEMENT			
														"Only"			
								White	Yellow	72"	96"	LT.	RT.	72"	96"		
					FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH		
1	COS	S.R. 60	S.R. 60 @ U.S. 36	CL		19											REPLACE @ EXISTING LOCATION
			ON S.R. 60 @ S.L.M. 17.25								1						REPLACE @ EXISTING LOCATION
			TWP. RD. 1153	LT.		10											REPLACE @ EXISTING LOCATION
			TWP. RD. 1153	LT.		9											REPLACE @ EXISTING LOCATION
			ON S.R. 60 @ S.L.M. 17.60								1						REPLACE @ EXISTING LOCATION
			TWP. RD. 1192	LT.		11											REPLACE @ EXISTING LOCATION
			TWP. RD. 31	LT.		18											REPLACE @ EXISTING LOCATION
			CO. RD. 49	LT.		25											REPLACE @ EXISTING LOCATION
			CO. RD. 24	RT.		17											REPLACE @ EXISTING LOCATION
			TWP. RD. 26	RT.		15											REPLACE @ EXISTING LOCATION
			CO. RD. 318	LT.		23											REPLACE @ EXISTING LOCATION
			CO. RD. 343	RT.		32											REPLACE @ EXISTING LOCATION
			CO. RD. 49	LT.		17											REPLACE @ EXISTING LOCATION
			TWP. RD. 25	RT.		18											REPLACE @ EXISTING LOCATION
			TWP. RD. 49	LT.		14											REPLACE @ EXISTING LOCATION
			CO. RD. 19	LT.		17											REPLACE @ EXISTING LOCATION
			CO. RD. 19	RT.		8											REPLACE @ EXISTING LOCATION
LOCATION 1 TOTALS (CARRIED TO GENERAL SUMMARY)						253					2						

CALCULATED LME
CHECKED JSL

PAVEMENT MARKING DATA (AUXILARY)

COS-60-17.12

12
15

DETAIL	SEE STD. DWG. TC-65.11
1	ENTRANCE RAMP
2	EXIT RAMP
3	MULTI-LANE DIVIDED HIGHWAY

DETAIL	SEE STD. DWG. TC-65.11
4	4 LANE DIVIDED TO 2 LANE TRANSITION
5	4 LANE UNDIVIDED TO 2 LANE TRANSITION
6	ONE-LANE BRIDGE
7	STOP APPROACH
8	THROUGH APPROACH
9	TWO-WAY LEFT TURN LANE

DETAIL	SEE STD. DWG. TC-65.11
10	APPROACH WTH LEFT-TURN LANE
11	HORIZONTAL CURVE 40'
12	HORIZONTAL CURVE ALT.
GAP	CENTERLINE AT 80' TYP.

RAISED PAVEMENT MARKER DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT (SLM)	END LOG POINT (SLM)	LENGTH		DETAIL	621		Prismatic Retro-Reflector Colors					REMARKS
										Information Only					
										One-Way		Two-Way			
					MILES	LIN.FT.		RAISED PAVEMENT MARKER REMOVED	RPM	White	Yellow	Yellow/ Yellow	White/ Red	Yellow/ Red	
								EACH	EACH						
1	COS	S.R. 60	17.12	17.61	0.49	2,587.2	7 / GAP	49	49	16		33			STOP APPROACH @ U.S. 36
			17.61	17.67	0.06	316.8	11	8	8			8			P.C. 17.61, P.T. 17.67, L=317', 7 DEG.
			17.67	17.92	0.25	1,320.0	GAP	17	17			17			
			17.92	18.04	0.12	633.6	12	19	19			19			P.C. 18.01, P.T. 18.03, L=106', 24 DEG.
			18.04	18.06	0.02	105.6	11	3	3			3			P.C. 18.04, P.T. 18.06, L=106', 9 DEG.
			18.06	18.14	0.08	422.4	GAP	6	6			6			
			18.14	18.34	0.20	1,056.0	12	20	20			20			P.C. 18.23, P.T. 18.25, L=106', 11 DEG.
			18.34	18.38	0.04	211.2	GAP	3	3			3			
			18.38	18.61	0.23	1,214.4	12	37	37			37			P.C. 18.47, P.T. 18.52, L=264', 11 DEG.
			18.61	18.76	0.15	792.0	GAP	10	10			10			
			18.76	18.79	0.03	158.4	11	4	4			4			P.C. 18.76, P.T. 18.79, L=159', 9 DEG.
			18.79	18.92	0.13	686.4	12	20	20			20			P.C. 18.84, P.T. 18.86, L=106', 17 DEG.
			18.92	19.06	0.14	739.2	12	25	25			25			P.C. 18.92, P.T. 18.97, L=264', 14 DEG.
			19.06	19.09	0.03	158.4	GAP	2	2			2			
			19.09	19.29	0.20	1,056.0	12	30	30			30			P.C. 19.18, P.T. 19.20, L=106', 24 DEG.
			19.29	19.39	0.10	528.0	GAP	7	7			7			
			19.39	19.41	0.02	105.6	11	3	3			3			P.C. 19.39, P.T. 19.41, L=106', 9 DEG.
			19.41	19.59	0.18	950.4	12	29	29			29			P.C. 19.46, P.T. 19.50, L=212' 17 DEG.
			19.59	19.73	0.14	739.2	GAP	10	10			10			
			19.73	19.88	0.15	792.0	12	25	25			25			P.C. 19.82, P.T. 19.86, L=212', 10 DEG.
			19.88	20.18	0.30	1,584.0	12	68	68			68			P.C. 19.88, P.T. 20.09, L=1,109', 13 DEG.
			20.18	20.52	0.34	1,795.2	GAP	23	23			23			
			20.52	20.58	0.06	316.8	11	8	8			8			P.C. 20.52, P.T. 20.58, L=317', 9 DEG.
			20.58	20.79	0.21	1,108.8	12	33	33			33			P.C. 20.66, P.T. 20.70, L=212', 13 DEG.
			20.79	20.99	0.20	1,056.0	12	29	29			29			P.C. 20.89, P.T. 20.91, L=106', 14 DEG.
			20.99	21.13	0.14	739.2	12	23	23			23			P.C. 21.01, P.T. 21.04, L=159', 15 DEG.
			21.13	21.45	0.32	1,689.6	GAP	22	22			22			
			21.45	21.62	0.17	897.6	12	32	32			32			P.C. 21.54, P.T. 21.61, L=370', 27 DEG.
			21.62	21.65	0.03	158.4	11	4	4			4			P.C. 21.62, P.T. 21.65, L=159', 6 DEG.
			21.65	21.96	0.31	1,636.8	GAP	21	21			21			
			21.96	22.15	0.19	1,003.2	12	27	27			27			P.C. 22.05, P.T. 22.06, L=53', 23 DEG.
			22.15	22.28	0.13	686.4	GAP	9	9			9			
			22.28	22.34	0.06	316.8	11	8	8			8			P.C. 22.28, P.T. 22.34, L=317', 9 DEG.
			22.34	22.46	0.12	633.6	12	21	21			21			P.C. 22.39, P.T. 22.43, L=212', 12 DEG.
			22.46	22.58	0.12	633.6	12	21	21			21			P.C. 22.46, P.T. 22.50, L=212', 11 DEG.
			22.58	22.63	0.05	264.0	12	11	11			11			P.C. 22.58, P.T. 22.61, L=159', 20 DEG.
			22.63	22.76	0.13	686.4	12	23	23			23			P.C. 22.63, P.T. 22.67, L=212', 14 DEG.
SUB-TOTALS										16		694			
LOCATION 1 TOTALS (CARRIED TO NEXT SHEET)								**710**	**710**						

CALCULATED LME CHECKED JSL

RAISED PAVEMENT MARKER DATA

COS-60-17.12

13
15

DETAIL	SEE STD. DWG. TC-65.11
1	ENTRANCE RAMP
2	EXIT RAMP
3	MULTI-LANE DIVIDED HIGHWAY

DETAIL	SEE STD. DWG. TC-65.11
4	4 LANE DIVIDED TO 2 LANE TRANSITION
5	4 LANE UNDIVIDED TO 2 LANE TRANSITION
6	ONE-LANE BRIDGE
7	STOP APPROACH
8	THROUGH APPROACH
9	TWO-WAY LEFT TURN LANE

DETAIL	SEE STD. DWG. TC-65.11
10	APPROACH WTH LEFT-TURN LANE
11	HORIZONTAL CURVE 40'
12	HORIZONTAL CURVE ALT.
GAP	CENTERLINE AT 80' TYP.

RAISED PAVEMENT MARKER DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT (SLM)	END LOG POINT (SLM)	LENGTH		DETAIL	621		Prismatic Retro-Reflector Colors					REMARKS
										Information Only					
										One-Way		Two-Way			
					MILES	LIN.FT.		RAISED PAVEMENT MARKER REMOVED	RPM	White	Yellow	Yellow/ Yellow	White/ Red	Yellow/ Red	
								EACH	EACH						
LOCATION 1 TOTALS (CARRIED FROM PREVIOUS SHEET)								710	710	16		694			
1	COS	S.R. 60	22.76	22.85	0.09	475.2	GAP	6	6			6			
			22.85	23.10	0.25	1,320.0	12	43	43			43			P.C. 22.94, P.T. 23.01, L=370', 24 DEG.
			23.10	23.43	0.33	1,742.4	GAP	22	22			22			
			23.43	23.64	0.21	1,108.8	12	32	32			32			P.C. 23.52, P.T. 23.55, L=159', 13 DEG.
			23.64	23.87	0.23	1,214.4	12	37	37			37			P.C. 23.73, P.T. 23.78, L=264', 13 DEG.
			23.87	23.93	0.06	316.8	GAP	4	4			4			
			23.93	24.13	0.20	1,056.0	12	29	29			29			P.C. 24.02, P.T. 24.04, L=106', 27 DEG.
			24.13	24.39	0.26	1,372.8	12	48	48			48			P.C. 24.20, P.T. 24.30, L=528, 12 DEG.
			24.39	26.01	1.62	8,553.6	GAP	107	107			107			
			26.01	26.11	0.10	528.0	11	14	14			14			P.C. 26.01, P.T. 26.11, L=528', 9 DEG.
			26.11	26.58	0.47	2,481.6	GAP	32	32			32			
			26.58	26.83	0.25	1,320.0	12	43	43			43			P.C. 26.67, P.T. 26.74, L=370', 14 DEG.
			26.83	27.08	0.25	1,320.0	GAP	17	17			17			
			27.08	27.11	0.03	158.4	11	4	4			4			P.C. 27.08, P.T. 27.11, L=159', 9 DEG.
			27.11	27.70	0.59	3,115.2	GAP	39	39			39			
			27.70	27.96	0.26	1,372.8	12	45	45			45			P.C. 27.79, P.T. 27.87, L=423', 12 DEG.
			27.96	28.10	0.14	739.2	GAP	10	10			10			
SUB-TOTALS										16		1,226			
LOCATION 1 TOTALS (CARRIED TO GENERAL SUMMARY)								1,242	1,242						

CALCULATED LME CHECKED JSL

RAISED PAVEMENT MARKER DATA

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SHEET TOTALS										FUNDING PARTICIPATION		ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION	SEE SHEET
2	3	4	6	7	8	9	11	12	14	01/STR/PV	02/STR/BR						
																ROADWAY	
	750				3,321	750				4,821		202	23500	4,821	SY	WEARING COURSE REMOVED	
				21.62						21.62		209	72051	21.62	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	3
																PAVEMENT	
1,750										1,750		253	02000	1,750	CY	PAVEMENT REPAIR	
			126,856							126,856		254	01000	126,856	SY	PAVEMENT PLANING, ASPHALT CONCRETE	
	3									3		304	20000	3	CY	AGGREGATE BASE	
			9,515		250	57				9,822		407	10000	9,822	GAL	TACK COAT	
			6,343			15				6,358		407	14000	6,358	GAL	TACK COAT FOR INTERMEDIATE COURSE	
				10,149						10,149		408	10001	10,149	GAL	PRIME COAT, AS PER PLAN	2
					116					116		441	50000	116	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
	181		4,405			29				4,615		441	50100	4,615	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M	
	8		3,524			8				3,540		441	50200	3,540	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	
						120				120		516	31011	120	FT	2" DEEP JOINT SEALER, AS PER PLAN	2
				1,410						1,410		617	10101	1,410	CY	COMPACTED AGGREGATE, AS PER PLAN	2
				25,372						25,372		617	20000	25,372	SY	SHOULDER PREPARATION	
																TRAFFIC CONTROL	
									1,242	1,242		621	00100	1,242	EACH	RPM	
									1,242	1,242		621	54000	1,242	EACH	RAISED PAVEMENT MARKER REMOVED	
								253		253		644	00500	253	FT	STOP LINE	
								2		2		644	01110	2	EACH	SCHOOL SYMBOL MARKING, 96"	
							21.96			21.96		648	00104	21.96	MILE	EDGE LINE, 6"	
							10.98			10.98		648	00300	10.98	MILE	CENTER LINE	
																STRUCTURE REPAIR (COS-60-2652)	
						174					174	512	33010	174	SY	TYPE 3 WATERPROOFING	
																STRUCTURE REPAIR (COS-60-2687)	
						124					124	519	11101	124	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	3
																MAINTENANCE OF TRAFFIC	
		61								61		614	12460	61	EACH	WORK ZONE MARKING SIGN	
		7								7		614	13000	7	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
			10.85							10.85		614	21400	10.85	MILE	WORK ZONE CENTER LINE, CLASS II	
			10.85							10.85		614	21550	10.85	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
																INCIDENTALS	
										LUMP	LUMP	103	05000	LUMP		PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND	
										LUMP	LUMP	614	11000	LUMP		MAINTAINING TRAFFIC	
										1		619	16000	1	MNTH	FIELD OFFICE, TYPE A	
										LUMP	LUMP	623	10000	LUMP		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
										LUMP	LUMP	624	10000	LUMP		MOBILIZATION	

CALCULATED LME CHECKED JSL

GENERAL SUMMARY

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