

UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE OHIO UTILITIES PROTECTION SERVICE (OUPS), THE OHIO & GAS PROCEDURES UNDERGROUND PROTECTION SERVICE (OGPUPS), THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEAD-QUARTERS AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION IN ALL AREAS.

OUPS 1-800-362-2764 (CONTACT LIMITED BASIS PARTICIPANTS DIRECTLY)
 OGPUPS 1-800-925-0988
 ODOT 330-786-2267 MICHELLE CHANEY

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS, BUT CAN BE OBTAINED FROM THE OWNERS OF THE UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PAVEMENT MARKING LANE WIDTHS

THE NORMAL LANE WIDTH FOR THE PAVEMENT MARKINGS ON THIS PROJECT SHALL BE AS FOLLOWS:

ROUTE	S.L.M. TO	S.L.M.	LANE WIDTH
SR 170	0.78	0.88	11'
SR 170	1.36	4.29	11'
SR 170	5.71	10.94	11'

PAVEMENT MARKING DETAILS

THE PAVEMENT MARKING DETAIL SHEETS WILL BE SUPPLIED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING. FOR ANY LOCATIONS THAT PAVEMENT MARKING DETAILS HAVE NOT BEEN MADE AVAILABLE TO THE CONTRACTOR, IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PUT BACK NEW PAVEMENT MARKINGS IN THE ORIGINAL LOCATIONS.

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

DRIVEWAYS

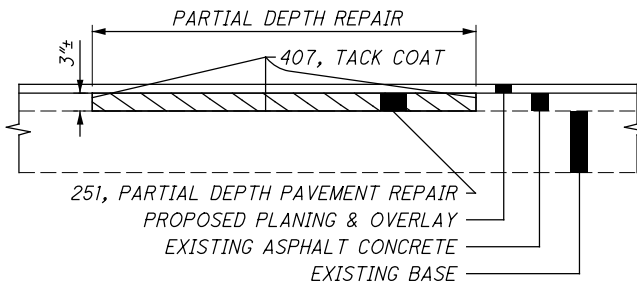
THE CONTRACTOR WILL NOT BE PERMITTED TO LEAVE A DIFFERENCE IN ELEVATION BETWEEN THE MAINLINE ASPHALT SURFACE COURSE AND THE EXISTING DRIVEWAYS. IF APPROVED BY THE ENGINEER, AN ASPHALT WEDGE WITH A MINIMUM WIDTH OF 2' MAY BE PLACED EITHER ON THE ROADWAY SHOULDER OR DRIVEWAY DEPENDENT UPON WHICH SIDE IS HIGH. A QUANTITY OF MAINLINE SURFACE COURSE ASPHALT HAS BEEN PROVIDED IN THE CALCULATIONS AND GENERAL SUMMARY TO PERFORM THIS ITEM OF WORK.

IN THE EVENT THAT THE ENGINEER DETERMINES ADDITIONAL WORK IS NECESSARY TO PROPERLY ADDRESS FIELD CONDITIONS, AN ITEM FOR WEARING COURSE REMOVED HAS BEEN PROVIDED. THE REMOVAL DEPTH IS DEPENDENT UPON THE ELEVATION DIFFERENCE AND ALLOW FOR 1"-2" OF COMPACTED ASPHALT MATERIAL TO BE PLACED.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441)

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE ITEM SHALL CONSIST OF REPAIRING EXISTING LOCATIONS EXHIBITING SURFACE DETERIORATION AND PLACING ITEM 441 ASPHALT CONCRETE, TYPE 2. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A TYPE I PNEUMATIC TIRE ROLLER AND A STEEL WHEEL ROLLER AS PER 401.13. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE WITHIN 7 DAYS OF THE COMPLETION OF MAINLINE PAVEMENT PLANING. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

251, PARTIAL DEPTH PAVEMENT REPAIR (441), 2,500 SY



ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (SLM 10.52-10.94)

THIS ITEM OF WORK SHALL BE PERFORMED IN CONFORMANCE WITH ITEM 254 IN THE CMS EXCEPT THE DEPTH SHALL VARY FROM 2 1/2" TO THE TOP OF THE BRICK WHICHEVER IS FIRST. THIS WORK SHALL BE PERFORMED SO THAT THE BRICK BASE IS NOT DISTURBED. ALL EQUIPMENT, LABOR, TOOLS, AND OTHER INCIDENTALS REQUIRED TO PERFORM THIS WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN.

ITEM 408 - PRIME COAT, AS PER PLAN

APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER.

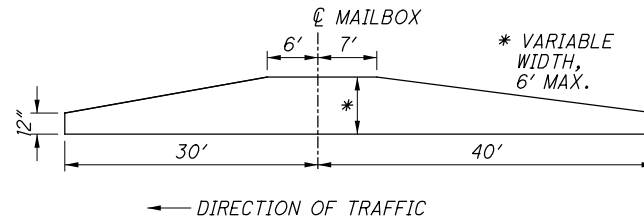
ITEM 424 - FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN

703.05 DO NOT USE ANY AGGREGATE FROM A SOURCE DESIGNATED "SR" OR "SRH" ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

PAVED MAILBOX APPROACHES

ALL EXISTING MAIL BOX APPROACHES WILL BE PAVED WITH ASPHALT CONCRETE AS PER TYPICAL SHOWN OR AS NEAR AS PRACTICAL. AGGREGATE APPROACHES SHALL HAVE A 2 IN. MIN. THICKNESS; IMPROVED APPROACHES SHALL HAVE A 2 IN. MIN. THICKNESS. THE CONTRACTOR SHALL PAVE THE MAILBOX APPROACHES WITH THE PAVING OF THE MAINLINE AND SHOULDERS. PAYMENT SHALL BE AS FOLLOWS:

ALL GRADING, TACK, TOOLS, EQUIPMENT, MATERIAL AND INCIDENTALS REQUIRED TO LAYOUT AND CONSTRUCT THE MAILBOX APPROACHES SHALL BE INCLUDED IN THE UNIT BID FOR ITEM 424, FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN.



**ITEM 611 - CATCH BASIN ADJUSTED TO GRADE
 ITEM 611 - CATCH BASIN RECONSTRUCTED TO GRADE**

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY AND IS TO BE USED AS DIRECTED BY THE ENGINEER TO ADJUST EXISTING CATCH BASINS TO GRADE.

611, CATCH BASIN ADJUSTED TO GRADE, 6 EACH
 611, CATCH BASIN RECONSTRUCTED TO GRADE, 2 EACH

**ITEM 611 - MANHOLE ADJUSTED TO GRADE, AS PER PLAN
 ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN
 ITEM 638 - VALVE BOX ADJUSTED TO GRADE, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF CMS 611.10.D FOR MANHOLES, 623.05 FOR MONUMENT BOXES, OR 638.18 FOR VALVE BOXES, THE CONTRACTOR WILL MAKE A CLEAN CIRCULAR CUT AROUND THE CASTING (A MINIMUM OF 1'-0" OUTSIDE THE CASTING) AND REMOVE AND DISCARD THE EXISTING CASTING. INSTALL A NEW CASTING TO GRADE (ACCORDING TO TOLERANCES AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1) AFTER THE PAVEMENT SURFACE COURSE HAS BEEN REPLACED.

CMS 499 CLASS QCMS CONCRETE (DYE THE CONCRETE SUCH THAT ITS COLOR CLOSELY MATCHES THE COLOR OF THE SURROUNDING PAVEMENT) WILL BE USED FOR BACKFILLING THE FULL PAVEMENT SECTION AND THE JOINT BETWEEN THE ASPHALT AND CONCRETE WILL BE SEALED WITH CMS 702.01 PG BINDER. EPOXY COATED REBAR SHALL BE PLACED IN THE CONCRETE AT 6" MAXIMUM ON CENTER AND A MINIMUM OF 3.5" CLEARANCE FROM THE TOP, BOTTOM AND SIDES. THE CONCRETE WILL BE VIBRATED SUFFICIENTLY TO ELIMINATE AIR POCKETS UNDER THE FRAME.

PAYMENT WILL INCLUDE REMOVAL OF THE EXISTING MATERIAL, INSTALLATION AND FURNISHING OF A NEW CASTING, AND ALL LABOR AND MATERIALS REQUIRED TO COMPLETE THIS ITEM OF WORK AS DESCRIBED.

611, MANHOLE ADJUSTED TO GRADE, AS PER PLAN, 7 EACH
 623, MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN, 27 EACH
 638, VALVE BOX ADJUSTED TO GRADE, AS PER PLAN, 15 EACH

VALVE BOX COORDINATION

THE CONTRACTOR SHALL NOTIFY AQUA OHIO (ANDY HIPPLEY: 330-397-0776) AT LEAST 5 DAYS PRIOR TO ANY PAVEMENT OPERATIONS TO HAVE THE EXISTING WATER VALVE BOXES LOCATED AND MARKED. THIS COORDINATION SHALL BE INCIDENTAL TO ITEM 638 - VALVE BOX ADJUSTED TO GRADE, AS PER PLAN.

INTERSECTIONS

INTERSECTIONS WILL BE RESURFACED 10 FT. BEYOND THE EDGE LINE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR INDICATED IN THE PLAN. INTERSECTIONS SHALL BE PAVED AFTER COMPLETION OF THE SURFACE COURSE. A BUTT JOINT, AS PER STANDARD CONSTRUCTION DRAWING BP-3.1, SHALL BE USED TO PROVIDE A SMOOTH TRANSITION TO THE EXISTING PAVEMENT. USE THE SAME ASPHALT CONCRETE AS THE MAINLINE PAVEMENT UNLESS SHOWN OTHERWISE ON THE ASPHALT CONCRETE CALCULATIONS SHEET. ANY GRADING OR PRIME NECESSARY TO ACCOMPLISH THIS WORK SHALL BE INCLUDED IN THE COST OF THE PERTINENT BID ITEM.

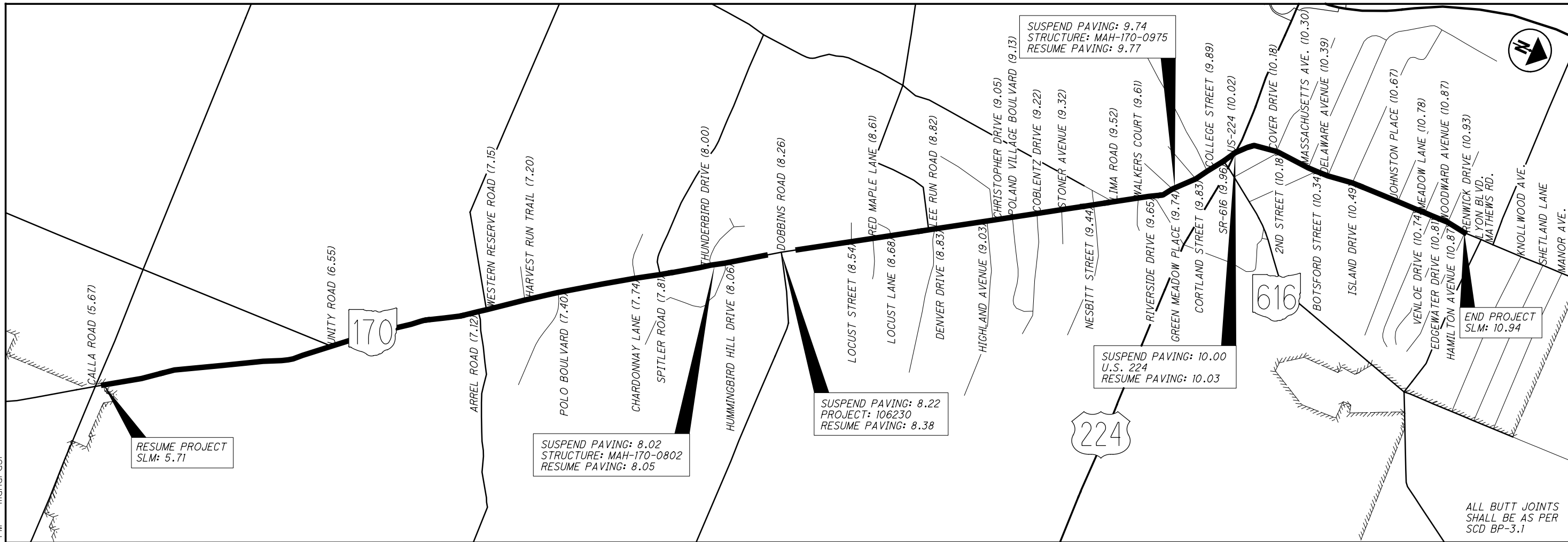
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Table with columns: SHEET NUM., PART., ITEM, ITEM EXT, GRAND TOTAL, UNIT, DESCRIPTION, SEE SHEET NO., CALCULATED, CMR, CHECKED, MAC. Rows include categories like ROADWAY, EROSION CONTROL, DRAINAGE, PAVEMENT, WATER WORK, TRAFFIC CONTROL, and TRAFFIC SIGNALS.

GENERAL SUMMARY

MAH-170-0.78 / VAR



ALL BUTT JOINTS SHALL BE AS PER SCD BP-3.1

SLM RANGE	TYPICAL SECTION	SIDE	DISTANCE (D) FT	AVERAGE WIDTH (W) FT	SURFACE AREA (A) A=DxW/9 SY	CADD GENERATED AREA SY	209	254	407	407	408	424	424	441	617	897	202								
							PREPARING SUBGRADE FOR SHOULDER PAVING STA	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=2 1/2") SY	TACK COAT, 702.13 @ 0.08 GAL/SY GAL	NON-TRACKING TACK COAT @ 0.09 GAL/SY GAL	PRIME COAT, AS PER PLAN @ 0.40 GAL/SY GAL	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN (T=1") CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN (T=1 1/4") CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448) (T=1 1/4") CY	COMPACTED AGGREGATE, AS PER PLAN (T = 2") CY	PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T = 1") SY	WEARING COURSE REMOVED SY								
SR-170																									
5.71	TO	6.93	3	6441.60	26.00	18609.07	128.83		1488.73		1145.17	516.92			159.05	18609.07									
6.93	TO	7.16	3	1214.40	30.00	4048.00	24.29			364.32	215.89	112.44		29.99	4048.00										
7.16	TO	7.62	3	2428.80	28.00	7556.27	48.58			680.06	431.79	209.90		59.97	7556.27										
7.62	TO	7.70	3	422.40	26.00	1220.27	8.45			109.82	75.09	33.90		10.43	1220.27										
7.70	TO	8.00	3	1584.00	30.00	5280.00	31.68			475.20	281.60	146.67		39.11	5280.00										
8.00	TO	8.02	3	105.60	32.00	375.47	2.11			33.79	18.77	10.43		2.61	375.47										
8.05	TO	8.22	3	897.60	32.00	3191.47	17.95			287.23	159.57	88.65		22.16	3191.47										
8.38	TO	8.79	3	2164.80	32.00	7697.07	43.30			692.74	384.85	213.81		53.45	7697.07										
8.79	TO	9.22	3	2270.40	26.00	6558.93	45.41			590.30	403.63	182.19		56.06	6558.93										
9.22	TO	9.40	3	950.40	32.00	3379.20	19.01			304.13	168.96	93.87		23.47	3379.20										
9.40	TO	9.74	4	1795.20	32.00	6382.93			510.63			177.30			6382.93										
9.77	TO	10.00	4	1214.40	40.00	5397.33			431.79			149.93			5397.33										
10.03	TO	10.08	4	264.00	40.00	1173.33			93.87			32.59			1173.33										
10.08	TO	10.52	3	2323.20	30.00	7744.00	46.46			696.96	413.01	215.11		57.36	7744.00										
10.52	TO	10.94	5	2217.60	34.00	8377.60	44.35	8377.60	670.21	394.24		290.89	290.89	54.76											
INTERSECTIONS				10.00	VARIABLES		2917.78		194.44	233.42	262.60	81.05	6.75	6.75		2723.33									
DRIVEWAYS				2.00	VARIABLES		781.33					30.00				10.00									
MAILBOX APPROACHES				VARIABLES	VARIABLES		2528.33					70.23				2528.33									
SUBTOTALS							460.42	8572.04	3428.64	4497.16	4092.59	2364.98	297.64	297.64	568.41	83865.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTALS CARRIED TO GENERAL SUMMARY							461	8573	3429	4498	4093	2365	298	298	569	83865	10	0	0	0	0	0	0	0	0

CALCULATED
CMR
CHECKED
MAC

PAVEMENT CALCULATIONS

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