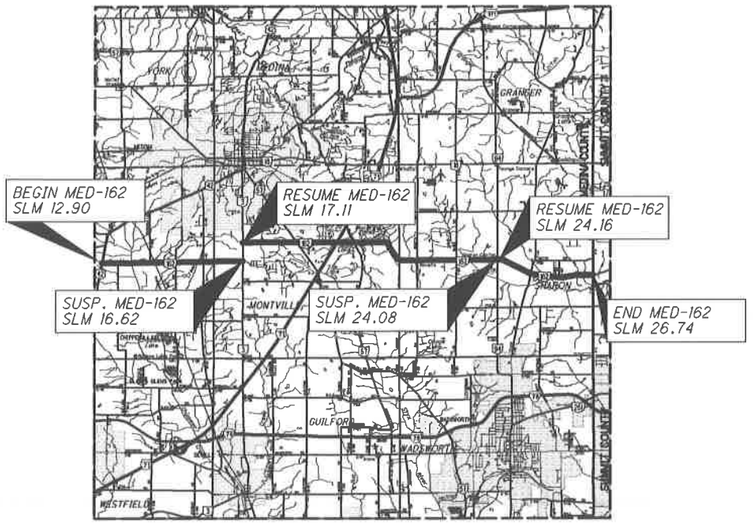


LOCATION MAP

LATITUDE: 41° 6′ 23.92″ LONGITUDE: 81° 51′ 50.76″

SCALE IN MILES

0 2 4 6 8

N

PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

DESIGN DESIGNATION

SEE SHEET TWO FOR DESIGN DESIGNATION

DESIGN EXCEPTIONS

NONE

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

MED-162-(12.90) (17.11)

LAFAYETTE TOWNSHIP
MONTVILLE TOWNSHIP
SHARON TOWNSHIP
MEDINA COUNTY

INDEX OF SHEETS:

PROJECT DESCRIPTION

THIS PROJECT IS 13.27 MILES IN LENGTH AND WILL INCLUDE PAVEMENT REPAIR, PLACING ITEM 424, ITEM 422, AND PAVEMENT MARKINGS.

EARTH DISTURBED AREAS

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)

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

APPROVED _____
DATE 2/18/2016 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

ENGINEERS SEAL:

STATE OF OHIO
KARLA R. BOHMER
E-76834
REGISTERED PROFESSIONAL ENGINEER

SIGNED: Karla R. Bohmer
DATE: 2/5/16

STANDARD CONSTRUCTION DRAWINGS					SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
BP-3.1	7/18/14	TC-41.20	10/18/13		800	1/15/16	
BP-4.1	7/19/13	TC-42.20	10/18/13		830	1/17/14	
		TC-52.10	10/18/13		832	1/17/14	
DM-4.3	1/15/16	TC-52.20	7/18/14		897	1/16/15	
DM-4.4	1/15/16	TC-65.10	1/17/14				
		TC-65.11	7/18/14				
MT-97.10	7/18/14	TC-71.10	1/17/14				
MT-97.12	7/18/14						
MT-99.20	7/19/13						
MT-101.90	7/17/15						
MT-105.10	7/19/13						
RM-1.1	7/18/14						

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

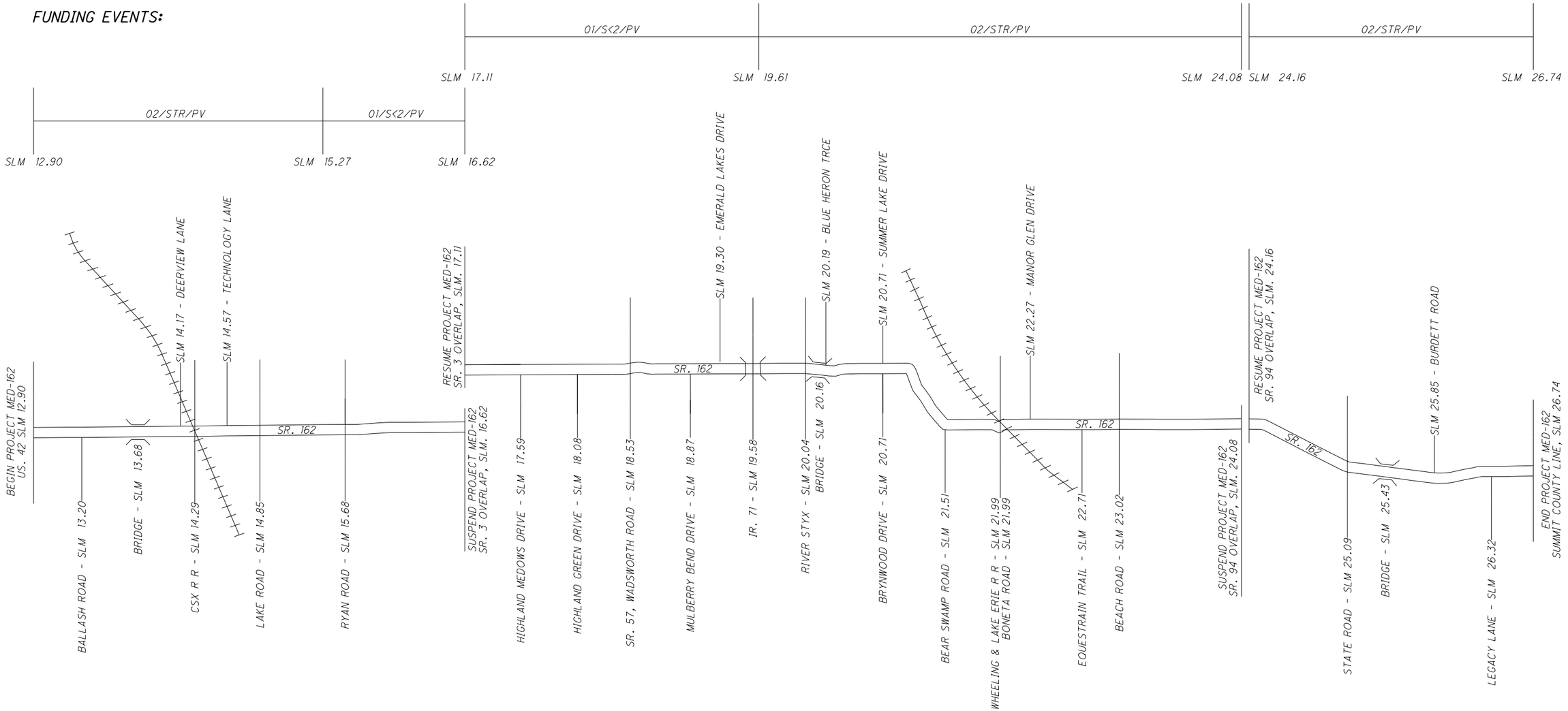
PLANS PREPARED BY:

ODOT DISTRICT THREE PLANNING & ENGINEERING DEPT.

FEDERAL PROJECT NO. E150744
PID NO. 97043
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT CSX WHEELING & LAKE ERIE
MED-162-(12.90) (17.11)
1 / 11

DESIGN FILE:i:\ProjectData\97043\Design\Roadway\Sheets\97043GT001.dgn MODELNAME: Sheet
WORKSTATION:kaley DATE:2/5/2016

FUNDING EVENTS:



DESIGN DESIGNATION
MED SR. 162 12.90-14.85

CURRENT ADT (2016) _____ 2500
DESIGN YEAR ADT (2024) _____ 2500
DESIGN HOURLY VOLUME (2024) _____ 320
DIRECTIONAL DISTRIBUTION _____ 0.55
TRUCKS (24 HOUR B&C) _____ 0.08
DESIGN FUNCTIONAL CLASSIFICATION:
MAJOR COLLECTOR
NHS PROJECT _____ NO

DESIGN EXCEPTIONS

NONE

SPEED LIMIT
MED SR. 162 12.90-14.85

DESIGN SPEED _____ 55MPH
LEGAL SPEED _____ 55MPH

DESIGN DESIGNATION
MED SR. 162 14.85-16.62

CURRENT ADT (2016) _____ 4200
DESIGN YEAR ADT (2024) _____ 4500
DESIGN HOURLY VOLUME (2024) _____ 400
DIRECTIONAL DISTRIBUTION _____ 0.69
TRUCKS (24 HOUR B&C) _____ 0.08
DESIGN FUNCTIONAL CLASSIFICATION:
MAJOR COLLECTOR
NHS PROJECT _____ NO

DESIGN EXCEPTIONS

NONE

SPEED LIMIT
MED SR. 162 14.85-16.62

DESIGN SPEED _____ 50MPH
LEGAL SPEED _____ 50MPH

DESIGN DESIGNATION
MED SR. 162 17.11-18.53

CURRENT ADT (2016) _____ 3500
DESIGN YEAR ADT (2024) _____ 3800
DESIGN HOURLY VOLUME (2024) _____ 460
DIRECTIONAL DISTRIBUTION _____ 0.65
TRUCKS (24 HOUR B&C) _____ 0.02
DESIGN FUNCTIONAL CLASSIFICATION:
MAJOR COLLECTOR
NHS PROJECT _____ NO

DESIGN EXCEPTIONS

NONE

SPEED LIMIT
MED SR. 162 17.11-20.04

DESIGN SPEED _____ 45MPH
LEGAL SPEED _____ 45MPH

DESIGN DESIGNATION
MED SR. 162 18.53-24.08

CURRENT ADT (2016) _____ 3500
DESIGN YEAR ADT (2024) _____ 4300
DESIGN HOURLY VOLUME (2024) _____ 430
DIRECTIONAL DISTRIBUTION _____ 0.52
TRUCKS (24 HOUR B&C) _____ 0.03
DESIGN FUNCTIONAL CLASSIFICATION:
MAJOR COLLECTOR
NHS PROJECT _____ NO

DESIGN EXCEPTIONS

NONE

SPEED LIMIT
MED SR. 162 20.04-23.79

DESIGN SPEED _____ 55MPH
LEGAL SPEED _____ 55MPH

SPEED LIMIT
MED SR. 162 23.79-24.85

DESIGN SPEED _____ 35MPH
LEGAL SPEED _____ 35MPH

DESIGN DESIGNATION
MED SR. 162 24.16-26.74

CURRENT ADT (2016) _____ 2400
DESIGN YEAR ADT (2024) _____ 2700
DESIGN HOURLY VOLUME (2024) _____ 270
DIRECTIONAL DISTRIBUTION _____ 0.56
TRUCKS (24 HOUR B&C) _____ 0.03
DESIGN FUNCTIONAL CLASSIFICATION:
MAJOR COLLECTOR
NHS PROJECT _____ NO

DESIGN EXCEPTIONS

NONE

SPEED LIMIT
MED SR. 162 24.85-26.74

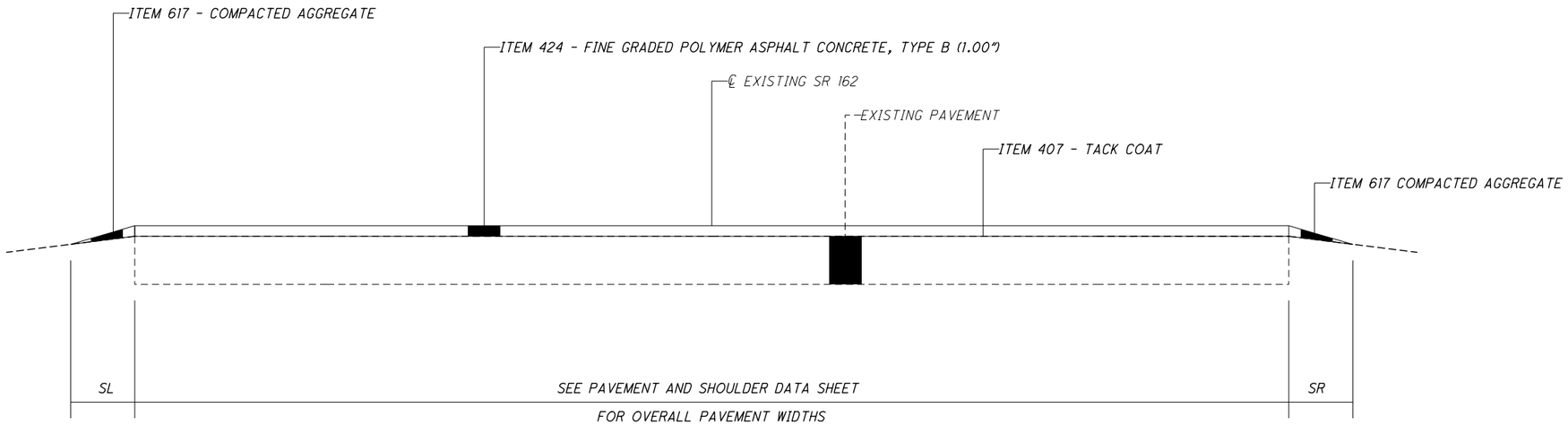
DESIGN SPEED _____ 50MPH
LEGAL SPEED _____ 50MPH

CALCULATED NRF
CHECKED KRB

SCHEMATIC & DESIGN DESIGNATION

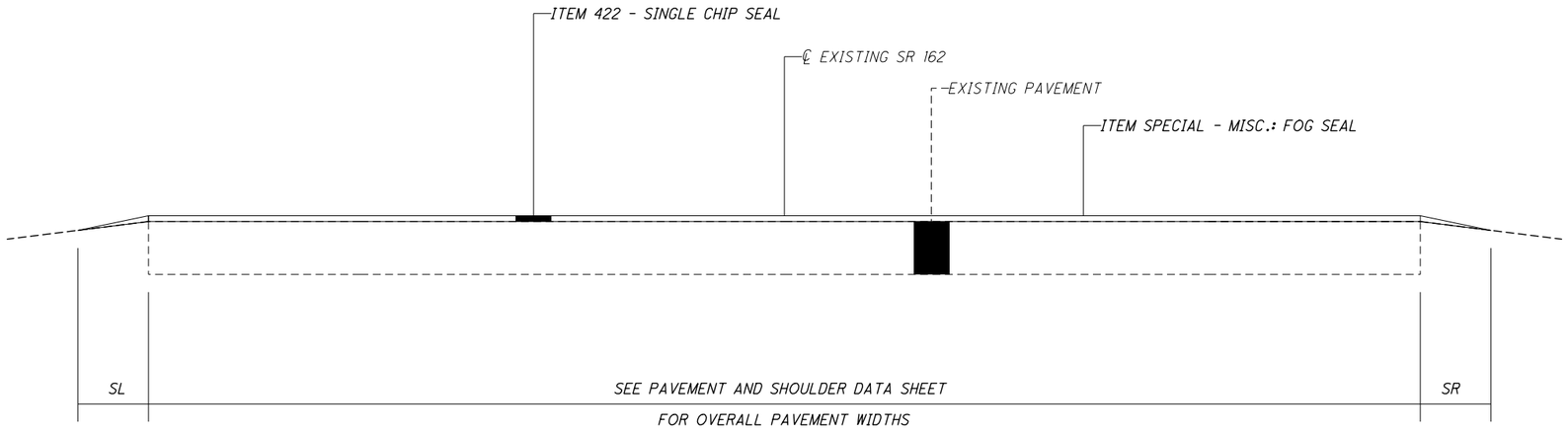
MED-162-(12.90)
(17.11)

DESIGN FILE: i:\ProjectData\97043\Design\Roadway\Sheets\97043GB001.dgn
WORKSTATION: nfoster DATE: 2/8/2016 MODEL NAME: Sheet



TYPICAL 1

SLM. 12.90-16.62 AND 17.11-24.08



TYPICAL 2

SLM. 24.16-26.74

CALCULATED NRF
CHECKED KRB

TYPICAL SECTIONS

MED-162-(12.90)
(17.11)

3
11

DESIGN FILE: i:\ProjectData\97043\Design\Roadway\Sheets\97043GY001.dgn
WORKSTATION nfoster DATE: 2/8/2016 MODEL NAME: Sheet

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS.

ARMSTRONG CABLE 1141 LAFAYETTE RD. MEDINA, OHIO 44256 330-722-3141X245	**ASPIRE ENERGY (GATHERCO, INC.)** 300 TRACY BRIDGE ROAD ORRVILLE, OHIO 44667
CITY OF MEDINA 132 NORTH ELMWOOD STREET MEDINA, OHIO 44256 330-722-9020	**CITY OF WADSWORTH** 120 MAPLE STREET WADSWORTH, OHIO 44281 330-335-2705
CITY OF WADWORTH – ELECTRIC 120 MAPLE STREET WADSWORTH, OHIO 44281 330-335-2827	**CITY OF WADSWORTH, WATER DEPT.** 120 MAPLE STREET WADSWORTH, OHIO 44281 330-335-2830
COLUMBIA GAS OF OHIO 7080 FRY ROAD MIDDLEBURG HEIGHTS, OHIO 44130 440-552-0682	**DOMINION EAST OHIO** 1000 WEST WILBETH ROAD AKRON, OHIO 44134 330-798-7164
FRONTIER COMMUNICATIONS (FORMERLY VERIZON) 6223 NORWALK ROAD MEDINA, OHIO 44256 330-722-9586	**LEVEL 3 COMMUNICATIONS** 1025 ELDORADO BOULEVARD BROOMFIELD, COLORADO 80021 720-888-1702
MEDINA COUNTY ENGINEER 791 WEST SMITH ROAD MEDINA, OHIO 44256-0825 330-723-9561	**MEDINA CO. SANITARY ENGINEER** 791 WEST SMITH ROAD MEDINA, OHIO 44256 330-723-9579
ODOT D03 TRAFFIC 906 CLARK AVE. ASHLAND, OHIO 44805 419-207-7045	**ODOT D04 TRAFFIC** 2088 S. ARLINGTON ROAD AKRON, OHIO 44306 330-786-2226
OHIO EDISON COMPANY 1910 WEST MARKET ST., BLDG #1 AKRON, OHIO 44313 330-384-4954	**ONE COMMUNITY** 800 W. SAINT CLAIR 2ND FLOOR CLEVELAND, OHIO, 44113 216-581-7972
TIME WARNER CABLE 530 S MAIN ST. AKRON, OHIO 44311 330-633-9203	

THE AFOREMENTIONED UTILITY COMPANIES AND AGENCIES HAVE VARIOUS FACILITIES IN THE AREA THAT WILL REMAIN IN PLACE DURING CONSTRUCTION.

EXTREME CAUTION SHOULD BE EXERCISED IN AREAS WITH UTILITIES. SECTIONS 105.07 AND 107.16 OF THE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS REQUIRE, AMONG OTHER THINGS, THAT THE CONTRACTOR COOPERATE WITH ALL UTILITIES LOCATED WITHIN THE LIMITS OF THIS CONSTRUCTION PROJECT AND TAKE RESPONSIBILITY FOR THE PROTECTION OF THE UTILITY PROPERTY AND SERVICES.

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 PLAN AND THE RESULTING CONDITIONS SHALL NOT BE CONSIDERED AS DIFFERING MATERIALLY FROM THOSE EXISTING AT THE TIME BIDS WERE TAKEN.

CONSTRUCTION NOTIFICATION

THE CONTRACTOR SHALL ADVISE THE PROJECT ENGINEER A MINIMUM OF FOURTEEN (14) 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) 887-4305 OR EMAIL AT D03.PIO@DOT.STATE.OH.US

DISTRICT PERMIT SECTION BY FAX AT (614) 887-4318 OR EMAIL AT LOUIS.TUMBLIN@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.

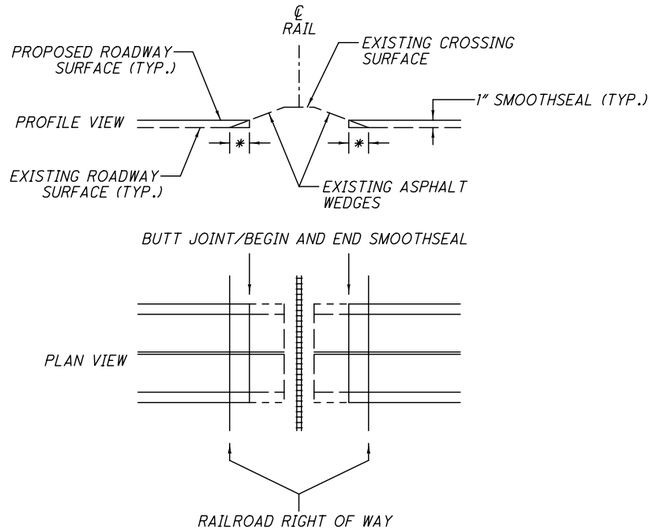
PROFILE ALIGNMENT

THE PROPOSED PAVEMENT RESURFACING SHALL FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. THE PROPOSED ASPHALT CONCRETE OVERLAY SHALL HAVE AN AVERAGE THICKNESS OF 1 IN.

SMOOTHSEAL AT RAISED AT-GRADE RAILROAD CROSSINGS

PRIOR TO ANY WORK AT RAILROAD CROSSINGS THE CONTRACTOR SHALL CONTACT THE AFFECTED RAILROAD AUTHORITY SO AS TO MAKE THEM AWARE OF THE PROGRESS AND SCHEDULE OF WORK. THE CONTRACTOR SHALL COOPERATE WITH THE RAILROAD SO AS TO ELIMINATE ANY SAFETY CONCERNS. FLAGGING WILL BE REQUIRED BY THE RAILROAD. ODOT WILL BE RESPONSIBLE FOR PAYING THE RAILROAD FOR ALL FLAGGING COSTS. REFER TO THE RAILROAD SPECIAL CLAUSES IN THE PROPOSAL.

RAILROAD CROSSING DETAIL



NOTE:
1.) ENGINEER SHALL MAKE FIELD ADJUSTMENTS, AS NECESSARY, TO MAXIMIZE THE SMOOTHNESS OF THE ROADWAY APPROACHES TO THE AT-GRADE RAIL-HIGHWAY CROSSING.

2.) DO NOT DISTURB RAILROAD GATES.

3.) RE-INSTALL PAVEMENT MARKINGS.

4.) "*" INDICATES LENGTH OF PAVEMENT PLANING REQUIRED TO ESTABLISH A 1" BUTT JOINT IN THE EXISTING ASPHALT WEDGES.

BUTT JOINTS

BUTT JOINTS SHALL NOT BE CUT AND LEFT OPEN TO TRAFFIC. THEY SHALL BE FILLED IN WITH A TEMPORARY ASPHALT CONCRETE WEDGE USING ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

CONSTRUCTION "BUMP" (W8-1-36) AND "ADVISORY SPEED" (W13-1-24) SIGNS SHALL BE ERECTED AND MAINTAINED DURING THE PERIOD THE BUTT JOINT IS LEFT OPEN. THESE SIGNS SHALL BE PAID FOR UNDER THE LUMP SUM ITEM FOR ITEM 614 MAINTAINING TRAFFIC.

PLACEMENT OF ASPHALT CONCRETE

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.

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT, AT MAXIMUM OPERATING HEIGHT, SHALL EXCEED A HEIGHT OF 25 FEET. IF ANY TEMPORARY STRUCTURE OR CONSTRCUTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA) AND ODOT OFFICE OF AVIATION WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO FILE A NEW FAA FORM 7460-1 ADVISING THE FAA THAT AERONAUTICAL STUDY NUMBER(S) [SEE BELOW LIST] IS (ARE) BEING RESUBMITTED AND THAT AN ALTERATION TO THE ORIGINAL SUBMISSION(S) IS (ARE) REQUESTED.

NOTIFY THE ODOT OFFICE OF AVIATION WHEN RESUBMITTING AN FAA FORM 7460-1. NO TEMPORARY STRUCTURES OF CONSTRCUTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT UNTIL A COPY OF THE FAA APPORVAL AND THE OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

FAA APROVAL MAY TAKEUP TO 45 DAYS. ALL SUBMISSIONS SHALL BE DIRECTED TO THESE OFFICES:

EXPRESS PROCESSING CENTER
THE FEDERAL AVIATION ADMINISTRATION
SOUTHWEST REGIONAL OFFICE
AIR TRAFFIC AIRSPACE BRANCH ASW-520
2601 MEACHAN BLVD.
FORT WORTH, TX 76137-4298
PREFERRED METHOD:
WEBSITE: oeaaa.faa.gov

OHIO DEPARTMENT OF TRANSPORTATION
OFFICE OF AVIATION
2829 WEST DUBLIN-GRANVILLE ROAD
COLUMBUS, OH 43235
614.387.2346

ASN	LAT	LONG
2016 - AGL -17704- OE	41° 5' 57.05	-81° 44' 42.07"
2016 - AGL -17705- OE	41° 5' 57"	-81° 44' 9.88"
2016 - AGL -17706- OE	41° 5' 49.96"	-81° 43' 39.71"
2016 - AGL -17707- OE	41° 5' 38.16"	-81° 43' 9.82"

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR
ITEM 253 - PAVEMENT REPAIR

THESE ITEMS OF WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING PAVEMENT OR PAVED BERM WHICH MAY BE ASPHALT, BRICK, CONCRETE, OR A COMBINATION OF EACH, IN AREAS OF EXISTING PAVEMENT FAILURE.

PAVEMENT REPAIR SHALL BE PERFORMED BEFORE THE SMOOTHSEAL AND/ OR CHIP SEAL. THE DEPTH OF REMOVAL SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT WITH A MAXIMUM DEPTH OF 8" AND AN AVERAGE DEPTH OF 3" AND AN AVERAGE WIDTH OF 4 FT FOR ESTIMATING PURPOSES. THE MATERIALS REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 105.16 AND 105.17.

REPLACEMENT MATERIAL SHALL BE ITEM 301, ITEM 441 TYPE 2, OR ITEM 442 19MM, AS PER PLAN MATERIAL AND SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE. ITEM 301 ASPHALT CONCRETE CAN BE USED WHEN THE DEPTH OF THE REPAIR IS BETWEEN 3" AND 12" WITH A MAXIMUM PAVEMENT LIFT OF 6". ITEM 441 TYPE 2 OR ITEM 442 19MM, AS PER PLAN CAN BE USED WHEN THE DEPTH OF THE REPAIR IS BETWEEN 1.5" AND 5" WITH A MAXIMUM PAVEMENT LIFT OF 3". THE CONTRACTOR HAS THE OPTION OF USING EITHER ITEM 301, ITEM 441 TYPE 2, OR ITEM 442 19MM, AS PER PLAN MATERIAL WHEN THE PAVEMENT REPAIR IS BETWEEN 3" AND 5" DEEP. PG 64-22 ASPHALT BINDER SHALL BE USED FOR ALL OF THE ASPHALT CONRETE MATERIALS FOR THESE REPAIRS.

FOR THE ITEM 442 19 MM, AS PER PLAN MATERIAL, REQUIREMENTS OF 442 APPLY EXCEPT AS FOLLOWS:
MIX DESIGN: FOR Ndes USE 50 GYRATIONS, FOR Nmax USE 75 GYRATIONS.
USE A PG 64-22 BINDER.
MAXIMUM RECLAIMED ASPHALT CONCRETE PAVEMENT IS 30 PERCENT.
APPLY 703.05 FOR COARSE AND FINE AGGREGATE EXCEPT GRADATION FOR FINE AGGREGATE DOES NOT APPLY.
QUALITY CONTROL: DO NOT PERFORM Nmax IN QUALITY CONTROL TESTING. DO NOT TAKE EXTRA ASPHALT BINDER SAMPLES AS OUTLINED IN CMS 442.05.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. FOR PAYMENT PURPOSES ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR IS TO BE A MAXIMUM OF 4" DEEP AND ITEM 253 PAVEMENT REPAIR IS FOR DEPTHS GREATER THAN 4". PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER CUBIC YARD, (BY TICKET WEIGHT CONVERSION), OF ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR OR ITEM 253 - PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. THE MAJORITY (APPROX. 90%) OF PARTIAL DEPTH REPAIRS WILL BE MADE LONGITUDINALLY.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR	855 CY
02/STR/PV: SLM 12.90-15.27	213 CY
02/STR/PV: SLM 19.61-24.08	402 CY
02/STR/PV: SLM 24.16-26.74	240 CY
ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR	345 CY
01/S<2/PV: SLM 15.27-16.62	121 CY
01/S<2/PV: SLM 17.11-19.61	224 CY
ITEM 253 - PAVEMENT REPAIR	63 CY
02/STR/PV:	45 CY
01/S<2/PV:	18 CY

CALCULATED NRF CHECKED KRB

GENERAL NOTES

MED-162-(12.90)
(17.11)

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ITEM SPECIAL - MISC.: FOG SEAL

DESCRIPTION: THIS WORK CONSISTS OF PREPARING AND FOG SEALING A CHIP SEALED SURFACE WITH A DILUTED NTSS-1HM TRACKLESS TACK PRODUCED BY BLACKLIDGE EMULSIONS, INC. MEET ALL REQUIREMENTS OF CONSTRUCTION AND MATERIAL SPECIFICATIONS ITEM 407 TACK COAT EXCEPT AS NOTED BELOW.

MATERIAL: CONFORM TO THE FOLLOWING TYPICAL PHYSICAL PROPERTIES BEFORE DILUTION:

PARAMETER	TEST METHOD	MIN.	MAX.
SAYBOLT FUROL VISCOSITY, SFS @ 25°C	ASTM D88	15	100
STORAGE STABILITY, 24 HRS, %	ASTM D244	--	1
STORAGE STABILITY, 5 DAYS, %	ASTM D244	--	5
RESIDUE BY DISTILLATION, %	ASTM D244	50	--
OIL DISTILLATE, %	ASTM D244	--	1
SIEVE TEST, %	ASTM D244	--	0.3
TEST ON RESIDUE			
PENETRATION, @ 25°C,	ASTM D5	--	20
SOFTENING POINT RANGE DEG C	ASTM D36	65	--
SOLUBILITY, %	ASTM D2042	97.5	--
ORIGINAL BINDER DSR @ 82°C G*/SIN Δ,10 RAD/SEC	AASHTO T111	1	--

NOTE: PRODUCT SHOULD NOT CONTAIN FILLER SUCH AS CLAY, ETC. KEEP FROM FREEZING.
SUPPLY CERTIFIED TEST DATA TO THE ENGINEER SHOWING THE MATERIAL SUPPLIED WAS TESTED FOR AND MEETS THE ABOVE PROPERTIES.

EQUIPMENT: ALL REQUIREMENTS OF 407.03 SHALL APPLY. SEE MANUFACTURER'S REPRESENTATIVE FOR CORRECT DISTRIBUTOR SETTINGS. THOROUGHLY CLEAN ALL EQUIPMENT IF CATIONIC EMULSION WAS PREVIOUSLY USED.

WEATHER LIMITATIONS: ALL REQUIREMENTS OF 407.04 APPLY.

PREPARATION OF SURFACE: ENSURE THAT THE SURFACE HAS BEEN SWEPT JUST BEFORE APPLICATION AND IS THOROUGHLY CLEAN, DRY AND FREE OF LOOSE CHIPS. REMOVE DIRT, DUST AND LOOSE CHIPS CLEANED FROM THE SURFACE AND DISPOSE OF IT AS THE ENGINEER DIRECTS. FOG SEAL MATERIAL SHALL NOT BE APPLIED TO A NEW CHIP SEALED SURFACE FOR A PERIOD OF TWO WEEKS AFTER CHIP SEAL INSTALLATION.

APPLICATION OF ASPHALT MATERIAL: UNIFORMLY APPLY THE ASPHALT MATERIAL WITH A DISTRIBUTOR PER THE REQUIREMENTS OF 407.06 EXCEPT AS NOTED.

IF PRODUCT IS STORED FOR AN EXTENDED PERIOD OF TIME, PRIOR TO APPLICATION, AGITATE OR GENTLY CIRCULATE THE MATERIAL.

ALL NOZZLES AND SPRAY PATTERNS SHALL BE IDENTICAL TO ONE ANOTHER ALONG THE DISTRIBUTOR SPRAY BAR. THE ANGLE OF THE NOZZLE SHOULD BE PLACED AT A 15 TO 30 DEGREE ANGLE TO THE SPRAY BAR AXIS TO MAXIMIZE OVERLAP OR AS RECOMMENDED BY THE NOZZLE MANUFACTURER. CONTACT THE MANUFACTURER'S REPRESENTATIVE FOR REQUIRED SPRAY NOZZLE SIZE, AND DISTRIBUTOR AND NOZZLE SETTINGS.

THE POLYMER FOG SEAL SHOULD BE APPLIED AT A RATE OF 0.15 GALLONS PER SQUARE YARD. RECOMMENDED APPLICATION TEMPERATURE IS 160°F TO 180°F. DO NOT EXCEED 180°F.

THE CONTRACTOR SHALL DILUTE THE TRACKLESS TACK COAT PER THE MANUFACTURER'S RECOMMENDATION AT A MAXIMUM RATE OF 2 PARTS TRACKLESS TACK COAT TO 1 PART WATER.

THE ENGINEER AND MANUFACTURER'S REPRESENTATIVE WILL APPROVE RATE OF APPLICATION, TEMPERATURE, DISTRIBUTOR SETTINGS, AND AREAS TO BE TREATED BEFORE APPLICATION OF THE POLYMER FOG SEAL. THE ENGINEER WILL DETERMINE THE ACTUAL APPLICATION RATE IN GALLONS PER SQUARE YARD BY A CHECK ON THE PROJECT.

THE APPLICATION IS CONSIDERED SATISFACTORY WHEN THE MATERIAL IS APPLIED UNIFORMLY WITH NO VISIBLE EVIDENCE OF STREAKING OR RIDGING AND THE APPLICATION RATE IS ±10% OF THE SPECIFIED RATE.

THE FOG SEAL MATERIAL SHALL BE OVERLAPPED BY 2" TO 6" AT ALL ADJACENT SPRAY PASSES.

TRAFFIC SHALL BE ALLOWED ON THE FOG SEAL MATERIAL AFTER ONE HOUR OR LONGER AS DIRECTED BY THE PROJECT ENGINEER'S ON-SITE REPRESENTATIVE AFTER THE MATERIAL HAS BEEN DETERMINED TO BE TACK FREE AND SET REASONABLY FIRMLY.

APPLY WORK ZONE PAVEMENT MARKINGS AFTER CURE. PERMANENT PAVEMENT MARKINGS MAY BE APPLIED ON THE MATERIAL AFTER 24 HOURS. THERMOPLASTIC OR NON-WATER BASED FINAL PAVEMENT MARKINGS SHALL BE APPLIED NOT SOONER THAN TWO WEEKS AFTER FOG SEAL MATERIAL APPLICATION.

METHOD OF MEASUREMENT: THE DEPARTMENT WILL MEASURE FOG SEAL BY THE NUMBER OF GALLONS OF DILUTED TRACKLESS TACK COAT APPLIED.

BASIS OF PAYMENT: THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT UNIT PRICE AS FOLLOWS:

ITEM	UNIT	DESCRIPTION
SPECIAL	GALLON	MISC.: FOG SEAL

ITEM 209 - LINEAR GRADING

THE CONTRACTOR IS REQUIRED TO PERFORM LINEAR GRADING ON THE GRADED SHOULDER. IT IS ANTICIPATED THAT THERE ARE AREAS WHERE THE GRADED SHOULDER IS AT A HIGHER ELEVATION THAN THE ADJACENT PROPOSED PAVEMENT. A 10:1 SLOPE SHALL BE ESTABLISHED, OR AS DIRECTED BY THE ENGINEER, WHEN PERFORMING ITEM 209 LINEAR GRADING. THE INTENT IS TO PROVIDE AN UNOBSTRUCTED AND POSITIVE FLOW OF STORM WATER FROM THE PAVEMENT TO THE DITCH. THE LINEAR GRADING SHALL BE PERFORMED AFTER THE INTERMEDIATE COURSE HAS BEEN COMPLETED AND BEFORE THE SURFACE COURSE IS PLACED. ALL LABOR AND EQUIPMENT NECESSARY TO PERFORM THE ABOVE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID PER MILE FOR ITEM 209 - LINEAR GRADING.

ITEM 611 - CATCH BASIN ADJUSTED TO GRADE

THE CATCH BASIN TO BE ADJUSTED TO GRADE MAY OR MAY NOT HAVE AN EXISTING FRAME. THE WORK SHALL CONSIST OF ADJUSTING THE EXISTING CATCH BASIN TO THE SATISFACTION OF THE ENGINEER. IT IS NOT INTENDED TO PLACE NEW FRAMES WHERE NONE CURRENTLY EXIST. THE CONTRACTOR IS REMINDED TO FIELD CHECK ALL ADJUSTMENT TO GRADE ITEMS PRIOR TO BIDDING, AS NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR LABOR AND MATERIALS REQUIRED TO SATISFACTORILY ADJUST CASINGS WITHOUT FRAMES.

APPROXIMATE LOCATION OF KNOWN CATCH BASINS ARE:

MED-162 SLM 24.02 MED-162 SLM 24.06

TOTAL CARRIED TO GENERAL SUMMARY: 2 CATCH BASINS ADJUSTED TO GRADE (02/STR/PV)

ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE

THE MONUMENT BOX TO BE ADJUSTED TO GRADE MAY OR MAY NOT HAVE AN EXISTING ADJUSTABLE FRAME. THE WORK SHALL CONSIST OF ADJUSTING THE EXISTING MONUMENT BOX 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 FOR LABOR AND MATERIALS REQUIRED TO SATISFACTORILY ADJUST CASTINGS WITHOUT ADJUSTABLE FRAMES.

APPROXIMATE LOCATIONS OF KNOWN MONUMENT BOXES ARE:

MED-162 SLM 13.78	MED-162 SLM 18.62	MED-162 SLM 18.65	MED-162 SLM 18.70
MED-162 SLM 18.74	MED-162 SLM 18.80	MED-162 SLM 18.85	MED-162 SLM 18.89
MED-162 SLM 19.02	MED-162 SLM 19.16	MED-162 SLM 19.32	MED-162 SLM 20.82
MED-162 SLM 20.91	MED-162 SLM 20.96	MED-162 SLM 21.04	MED-162 SLM 21.91
MED-162 SLM 22.05	MED-162 SLM 23.32	MED-162 SLM 23.35	MED-162 SLM 26.54
MED-162 SLM 26.62	MED-162 SLM 26.68		

TOTAL CARRIED TO GENERAL SUMMARY: 10 MONUMENT BOXES (01/S<2/PV)
TOTAL CARRIED TO GENERAL SUMMARY: 12 MONUMENT BOXES (02/STR/PV)

ITEM 642 - FINAL PAVEMENT MARKINGS

IN ADDITION TO THE PAVEMENT MARKINGS PLACED ON THE FOG SEAL IMMEDIATELY AFTER COMPLETING THE FOG SEAL WORK, AN ADDITIONAL APPLICATION OF THE FINAL PAVEMENT MARKINGS HAS BEEN PROVIDED AND SHALL BE PLACED NO SOONER THAN 30 CALENDAR DAYS AND NO MORE THAN 45 CALENDAR DAYS AFTER THE FOG SEAL WORK HAS BEEN COMPLETED.

ITEM 897 - PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A

TAPER THE PLANING AT BUTT JOINT LOCATIONS AT STRUCTURES AND INTERSECTIONS AS SHOWN ON THE PAVEMENT AND SHOULDER DATA SHEET. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE TO ALL CATCH BASINS AND INLETS AT ALL TIMES.

THE PROGRESSION OF THE PLANING SHALL PROCEED IN SUCH A MANNER THAT NORMAL TRAFFIC WILL NOT BE REQUIRED TO RUN OVER THE PLANED ROADWAY SURFACE FOR MORE THAN FOURTEEN (14) CONSECUTIVE CALENDAR DAYS. FOR EACH CALENDAR DAY BEYOND THE 14 DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, A DISINCENTIVE FEE OF $1500 PER DAY WILL BE ASSESSED TO THE CONTRACTOR.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT PLANING, ASPHALT CONCRETE. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER SQUARE YARD OF ITEM 897 - PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A.

ITEM 897 - PATCHING PLANED SURFACE

AN ESTIMATED QUANTITY OF ITEM 897 - PATCHING PLANED SURFACE HAS BEEN SET UP TO BE USED AS DIRECTED BY THE ENGINEER AS DESCRIBED IN CMS 897.04. THE LIMIT OF THE PATCHING DEPTH IS 0 TO 2 IN.

INTERSECTIONS AND DRIVES

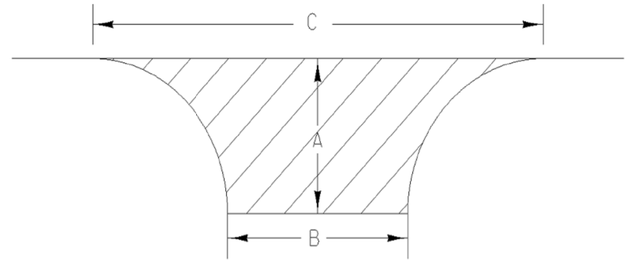
RURAL-INTERSECTIONS SHALL BE PLANED AND PAVED TO THE END OF THE RADII OR AS DIRECTED BY THE ENGINEER. (TO PROVIDE A SMOOTH TRANSITION BETWEEN THE TWO HIGHWAYS, AND TO ELIMINATE WATER POCKETS).

EXISTING PAVED DRIVES SHALL BE PAVED SO AS TO PROVIDE A SMOOTH TRANSITION BETWEEN THE HIGHWAY AND THE DRIVE, (DISTANCE FROM EDGE OF ROADWAY MAY VARY AT EACH DRIVE) AS DIRECTED BY THE ENGINEER. AN ADDITIONAL QUANTITY OF ITEM 424 FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B HAS BEEN ESTIMATED TO COMPLETE THIS WORK AND IS SHOWN AS AN EXTRA AREA ON THE PAVEMENT & SHOULDER DATA SHEET.

EXISTING AGGREGATE DRIVES SHALL BE TREATED THE SAME AS THE MAINLINE WITH ITEM 617 COMPACTED AGGRETAGE SHOULDER TO THE SATISFACTION AND AS DIRECTED BY THE ENGINEER. NO EXTRA QUANTITY IS NEEDED.

ANY HAZARD OR UNSAFE CONDITION RESULTING FROM THE ABOVE WORK MUST BE CORRECTED IMMEDIATELY. THE CONTRACTOR IS REMINDED OF SECTIONS 105.01, 107.07 & 614.02A OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE PAVING DIMENSIONS FOR THE INTERSECTIONS ARE SHOWN IN THE CHART IN THE ADJACENT COLUMN.



INTERSECTION NAME	A FEET	B FEET	C FEET	AREA SY	COMMENTS
US 42	30	32	85	165	MAINLINE TAPER
BALLASH ROAD	16	24	60	64	RIGHT
DEERVIEW LANE	20	22	78	90	LEFT
TECHNOLOGY LANE	8	162	212	159	LEFT
LAKE ROAD	5	105	130	63	LEFT
LAKE ROAD	18	25	64	76	RIGHT
RYAN ROAD	5	90	115	55	LEFT
RYAN ROAD	22	22	60	85	RIGHT
SR 3	40	44	150	352	MAINLINE TAPER
SR 3	26	26	66	114	MAINLINE TAPER
HIGHLAND MEADOWS DRIVE	4	80	110	40	RIGHT
HIGHLAND GREEN DRIVE	8	50	88	56	RIGHT
SR 57	40	44	160	367	MAINLINE TAPER
SR 57	22	46	150	197	MAINLINE TAPER
MULBERRY BEND DRIVE	4	100	120	47	RIGHT
EMERALD LAKES DRIVE	4	100	115	47	LEFT
RIVER STYX ROAD	34	22	96	176	LEFT
RIVER STYX ROAD	18	30	72	88	RIGHT
BLUE HERON TRCE	2	94	102	21	LEFT
SUMMER LAKE DRIVE	4	118	134	55	LEFT
BRYWOOD DRIVE	12	44	76	73	RIGHT
BEAR SWAMPS ROAD	10	28	60	43	RIGHT
BONETA ROAD	8	26	40	27	LEFT
BONETA ROAD	8	24	30	23	RIGHT
MANOR GLEN DRIVE	10	40	98	66	LEFT
EQUESTRIAN TRAIL	10	46	74	61	RIGHT
BEACH ROAD	12	24	72	53	LEFT
BEACH ROAD	10	26	56	40	RIGHT
SR 94	18	26	48	67	MAINLINE TAPER
01/S<2/PV TOTAL:				1360	
02/STR/PV TOTAL:				1410	
TOTAL INTERSECTION AREAS				2770	

CALCULATED NRF CHECKED KRB

GENERAL NOTES

MED-162-(12.90) (17.11)

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PROJECT WORK RESTRICTION

NO WORK SHALL BE PERFORMED AND ALL LANES SHALL BE OPEN TO TRAFFIC JULY 9TH THROUGH JULY 24TH, 2016.

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO CONSTRUCT A TEMPORARY ASPHALT WEDGE FROM THE EXISTING PAVEMENT TO THE PLANED SURFACE AT BUTT JOINTS AND OTHER LOCATIONS THAT RESULT IN A DROP-OFF. BEFORE RESURFACING OF THE PAVEMENT, THE TEMPORARY WEDGE SHALL BE REMOVED AND THE COST SHALL BE CONSIDERED INCIDENTAL TO ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 25 CY
01/S<2/PV: 15 CY
02/STR/PV: 10 CY

ITEM 614 - WORK ZONE MARKING SIGN

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR TEMPORARY WORK ZONE MARKING SIGNS PER THE REQUIREMENTS OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS, 614.04.

01/S<2/PV:
WORK ZONE MARKING SIGN: (W8-H12A-36) NO EDGE LINE = 8 EACH
WORK ZONE MARKING SIGN: (R4-1-24) DO NOT PASS = 12 EACH
WORK ZONE MARKING SIGN: (R4-2-24) PASS WITH CARE = 7 EACH

TOTAL = 27 EACH

02/STR/PV:
WORK ZONE MARKING SIGN: (W8-H12A-36) NO EDGE LINE = 19 EACH
WORK ZONE MARKING SIGN: (R4-1-24) DO NOT PASS = 24 EACH
WORK ZONE MARKING SIGN: (R4-2-24) PASS WITH CARE = 19 EACH

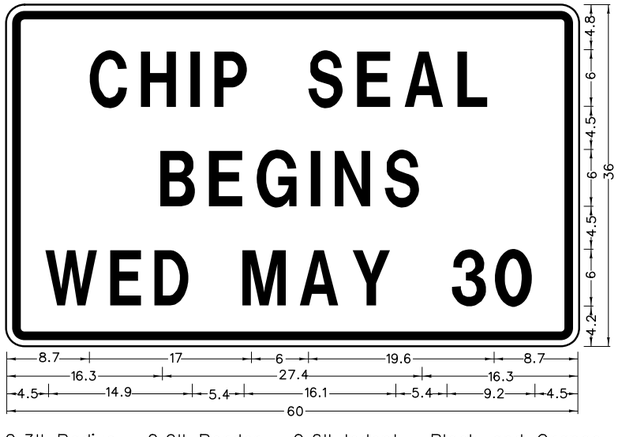
TOTAL = 62 EACH

ITEM 614 - WORK ZONE MARKING SIGN, AS PER PLAN, ADVANCE NOTICE

THE CHIP SEAL BEGINS SIGNS, AS DETAILED IN THESE PLANS, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED START OF THE CHIP SEAL OPERATIONS. THE SIGNS SHALL BE ERECTED ON THE RIGHT HAND SIDE OF THE ROADWAY AT THE PROJECT LIMITS OF EACH ROADWAY BEING CHIP SEALED. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. THE SIGN DETAILS FOR THIS BLACK ON ORANGE SIGN WILL BE PROVIDED AT THE PRECONSTRUCTION MEETING. BELOW IS AN EXAMPLE OF THE LAYOUT OF THE SIGN. START DATE TO BE PROVIDED BY THE CONTRACTOR.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THIS ADVANCE NOTIFICATION:

ITEM 614 - WORK ZONE MARKING SIGN, APP, ADVANCE NOTICE
2 EACH (02/STR/PV)



2.3" Radius, 0.9" Border, 0.6" Indent, Black and Orange "CHIP SEAL" D; "BEGINS" D, "WED MAY 30" D 90% spacing;

CALCULATED NRF
CHECKED KRB

GENERAL NOTES

MED-162-(12.90)
(17.11)

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ITEM SPECIAL, MAILBOX SUPPORT SYSTEM

THIS ITEM OF WORK SHALL CONSIST OF THE REMOVAL OF EXISTING NON-STANDARD MAILBOX SUPPORTS AND FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED HARDWARE IN ACCORDANCE WITH THE DETAILS SHOWN, AND ATTACHING AN OWNER SUPPLIED MAILBOX, AT LOCATIONS DETERMINED BY THE ENGINEER.

IN ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE BOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL SUPPLY ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION. SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO MAILBOXES MAY BE MOUNTED ON A SINGLE POST. [HARDWARE SHALL BE COMMERCIAL GRADE GALVANIZED STEEL.]

WOOD POSTS SHALL BE NOMINAL 4 IN. x 4 IN. (S4S) OR 4½ IN. DIAMETER ROUND, AND CONFORM TO 710.14. STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2 IN. I.D., AND CONFORM TO AASHTO M 181.

POSTS SHALL BE SET AS PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WORK WITH THE LOCAL POST MASTER AND NOTIFYING THE PROPERTY OWNERS PRIOR TO WORK.

GROUP MAILBOX SUPPORTS SHALL BE PLACED ON 3 FT. CENTERS.

WHERE GUARDRAIL EXISTS, MAILBOXES AND THEIR SUPPORTS SHALL BE PLACED BEHIND THE GUARDRAIL. SUPPORTS MUST STILL MEET THE BREAKAWAY REQUIREMENTS LISTED ABOVE.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DESCRIBED ABOVE.

ITEM SPECIAL-MAILBOX SUPPORT SYSTEM, SINGLE (01/S<2/PV): 1 EACH

MAILBOX APPROACHES

THE EXISTING MAILBOX APPROACHES SHALL BE PAVED WITH 1.00" ITEM 424 FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B. NO PROPOSED MAILBOX APPROACHES ARE TO BE INCLUDED IN THIS PROJECT.

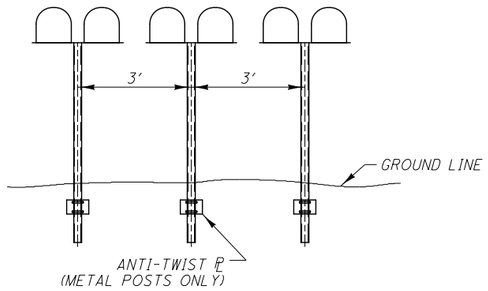
LOCATIONS OF MAILBOX SUPPORT SYSTEM TO BE REPLACED

ADDRESSES AND/OR LOCATIONS OF MAILBOX SUPPORT SYSTEM TO BE REPLACED:

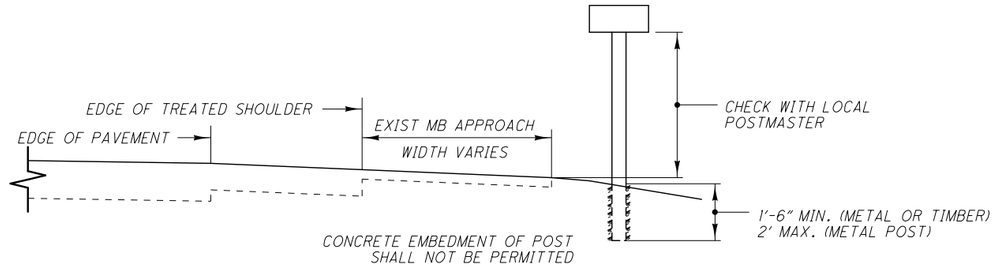
01/S<2/PV:

HOUSE NO. 44549 MED-162-17.90

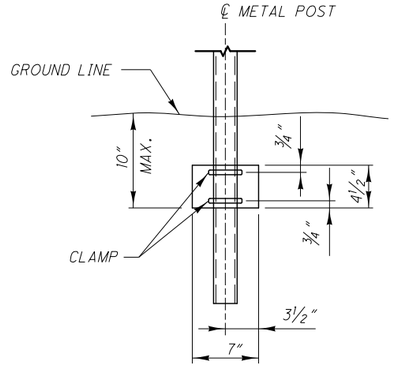
FOR DETAILS NOT SHOWN SEE STANDARD DRAWING BP-4.1



GROUP MAILBOX INSTALLATION



CROSS SECTION / ELEVATION VIEW



ANTI-TWIST PLATE

CALCULATED NRF CHECKED KRB

MAILBOX FACILITIES

MED-162-(12.90)
(17.11)

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SHEET NUM.												PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
4		5		6		7		9		10		01/S<2/ PV	02/STR/ PV						
																		ROADWAY	
								21.32				7.68	13.64	209	60500	21.32	MILE	LINEAR GRADING	
		22										10	12	623	39500	22	EACH	MONUMENT BOX ADJUSTED TO GRADE	
						1						1		SPECIAL	69050100	1	EACH	MAILBOX SUPPORT SYSTEM, SINGLE	7
																		DRAINAGE	
		2											2	611	98630	2	EACH	CATCH BASIN ADJUSTED TO GRADE	
																		PAVEMENT	
750												216	534	251	01010	750	CY	PARTIAL DEPTH PAVEMENT REPAIR	
63												18	45	253	02000	63	CY	PAVEMENT REPAIR	
								12,784				4,789	7,995	407	10000	12,784	GAL	TACK COAT	
								36,185					36,185	422	10000	36,185	SY	SINGLE CHIP SEAL	
								4,439				1,663	2,776	424	12000	4,439	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B	
								1,042				375	667	617	10100	1,042	CY	COMPACTED AGGREGATE	
								25,015				9,011	16,004	617	20000	25,015	SY	SHOULDER PREPARATION	
								5,428					5,428	SPECIAL	69098900	5,428	GAL	MISC.:FOG SEAL	5
								7,890				3,160	4,730	897	01010	7,890	SY	PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A	
								80				31	49	897	02000	80	SY	PATCHING PLANED SURFACE	
																		TRAFFIC CONTROL	
										1,181		310	871	621	00100	1,181	EACH	RPM	
										1,181		310	871	621	54000	1,181	EACH	RAISED PAVEMENT MARKER REMOVED	
										31.7		7.7	24	642	00104	31.7	MILE	EDGE LINE, 6", TYPE 1	
										15.85		3.85	12	642	00300	15.85	MILE	CENTER LINE, TYPE 1	
										66			66	642	00500	66	FT	STOP LINE, TYPE 1	
										762		290	472	644	00400	762	FT	CHANNELIZING LINE, 8"	
										325		96	229	644	00500	325	FT	STOP LINE	
										120			120	644	00600	120	FT	CROSSWALK LINE	
										408		128	280	644	00700	408	FT	TRANSVERSE/DIAGONAL LINE	
										4			4	644	01000	4	EACH	RAILROAD SYMBOL MARKING	
										9		3	6	644	01300	9	EACH	LANE ARROW	
										4			4	644	01620	4	EACH	BIKE CROSSING SYMBOL	
																		MAINTENANCE OF TRAFFIC	
				89								27	62	614	12460	89	EACH	WORK ZONE MARKING SIGN	
				2									2	614	12461	2	EACH	WORK ZONE MARKING SIGN, AS PER PLAN, ADVANCE NOTICE	6
				25								15	10	614	13000	25	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
										10.69		3.85	6.84	614	21500	10.69	MILE	WORK ZONE CENTER LINE, CLASS II, 642 PAINT	
										5.16			5.16	614	21550	5.16	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
										762		290	472	614	23200	762	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT	
										241		76	165	614	26200	241	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
																		INCIDENTALS	
												LS	LS	614	11000	LS		MAINTAINING TRAFFIC	
												1	2	619	16010	3	MNTH	FIELD OFFICE, TYPE B	
												LS	LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
												LS	LS	624	10000	LS		MOBILIZATION	

CALCULATED NRF
CHECKED KRB

GENERAL SUMMARY

MED-162-12.90

DESIGN FILE: ii:\ProjectData\97043\Design\Roadway\Sheets\97043GG001.dgn
WORKSTATION: nfoster
DATE: 2/8/2016
MODELNAME: Sheet

FUNDING	COUNTY	ROUTE	LOGPOINT TO LOGPOINT SLM FROM	SLM TO	SECTION LENGTH MILES	FEET	AVERAGE PAVED WIDTH FEET			TYPICAL SECTION	PAVEMENT AREA SY	897 PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (0"-1" TAPER) SY	897 PATCHING PLANED SURFACE SY	407 TACK COAT @ 0.08 GALLONS PER SQ YD GAL	422 SINGLE CHIP SEAL SY	424 FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B INCH	CY	SPECIAL MISC.: FOG SEAL @ 0.15 GAL/SY GAL				209 LINEAR GRADING MILE	AGGREGATE SHOULDER PROPOSED WIDTH FEET LEFT	RIGHT	617 SHOULDER PREPARATION SQ YD LEFT	RIGHT	AGGREGATE SHOULDER AREA SQ YDS LEFT	RIGHT	617 COMPACTED AGGREGATE AVG. THICK 1.5 INCH CU YDS LEFT	RIGHT
02/STR/PV	MED	162	12.90	13.68	0.78	4118	24.0			1	10982	760	8	879		1.00	305					1.56	2.00	2.00	915	915	915	915	38.1	38.1
02/STR/PV	MED	162	13.68	13.69	SUSPEND & RESUME FOR STR. MED-162-1368																									
02/STR/PV	MED	162	13.69	14.29	0.60	3168	24.0			1	8448	760	8	676		1.00	235					1.2	2.00	2.00	704	704	704	704	29.3	29.3
02/STR/PV	MED	162	14.29	14.29	SUSPEND & RESUME FOR CSX RR																									
02/STR/PV	MED	162	14.29	14.42	0.13	686	24.0			1	1830	93	1	146		1.00	51					0.26	2.00	2.00	153	153	153	153	6.4	6.4
02/STR/PV	MED	162	14.42	14.72	0.30	1584	30.0			1	5280			422		1.00	147					0.6	2.00	2.00	352	352	352	352	14.7	14.7
02/STR/PV	MED	162	14.72	15.27	0.55	2904	24.0			1	7744			620		1.00	215					1.1	2.00	2.00	645	645	645	645	26.9	26.9
01/SC2/PV	MED	162	15.27	16.45	1.18	6230	24.0			1	16614			1329		1.00	462					2.36	2.00	2.00	1385	1385	1385	1385	57.7	57.7
01/SC2/PV	MED	162	16.45	16.62	0.17	898	32.0			1	3191	124	1	255		1.00	89					0.34	2.00	2.00	199	199	199	199	8.3	8.3
	MED	162	16.62	17.11	SUSPEND & RESUME FOR SR 3 OVERLAP																									
01/SC2/PV	MED	162	17.11	18.38	1.27	6706	24.0			1	17882	93	1	1431		1.00	497					2.54	2.00	2.00	1490	1490	1490	1490	62.1	62.1
01/SC2/PV	MED	162	18.38	18.53	0.15	792	32.0				2816	124	1	225		1.00	78					0.3	2.00	2.00	176	176	176	176	7.3	7.3
01/SC2/PV	MED	162	18.53	18.54	SUSPEND & RESUME FOR SR 57																									
01/SC2/PV	MED	162	18.54	18.80	0.26	1373	32.0			1	4881	124	1	390		1.00	136					0.52	2.00	2.00	305	305	305	305	12.7	12.7
01/SC2/PV	MED	162	18.80	19.61	0.81	4277	24.0			1	11405	1333 *	13	912		1.00	317					1.62	2.00	2.00	950	950	950	950	39.6	39.6
02/STR/PV	MED	162	19.61	20.16	0.55	2904	24.0			1	7744	760	8	620		1.00	215					1.1	2.00	2.00	645	645	645	645	26.9	26.9
02/STR/PV	MED	162	20.16	20.17	SUSPEND & RESUME FOR STR. MED-162-2016																									
02/STR/PV	MED	162	20.17	21.99	1.82	9610	24.0			1	25626	760	8	2050		1.00	712					3.64	2.00	2.00	2135	2135	2135	2135	89.0	89.0
02/STR/PV	MED	162	21.99	21.99	SUSPEND & RESUME FOR WHEELING & LAKE ERIE RR																									
02/STR/PV	MED	162	21.99	24.08	2.09	11035	24.0			1	29427	187	2	2354		1.00	817					4.18	2.00	2.00	2452	2452	2452	2452	102.2	102.2
	MED	162	24.08	24.16	SUSPEND & RESUME FOR SR 94 OVERLAP																									
02/STR/PV	MED	162	24.16	25.43	1.27	6706	24.0			2	17882				17882			2682												
02/STR/PV	MED	162	25.43	25.44	SUSPEND & RESUME FOR STR. MED-162-2543																									
02/STR/PV	MED	162	25.44	26.74	1.30	6864	24.0			2	18304				18304			2746												
01/SC2/PV	MAINLINE SUB-TOTAL				3.84	20,275					56,789	1,800	17	4,543	0		1,577	0				7.68			4,506	4,506	4,506	4,506	188	188
02/STR/PV	MAINLINE SUB-TOTAL				9.39	49,579					133,267	3,320	35	7,767	36,186		2,697	5,428				13.64			8,002	8,002	8,002	8,002	333	333
	AREA ADJUSTMENTS																													
01/SC2/PV	EXTRA AREA FOR EX PAVED MAILBOX APP'S										660			53		1.00	18													
01/SC2/PV	EXTRA AREA FOR EXISTING PAVED DRIVES:										1058			85		1.00	29													
01/SC2/PV	EXTRA AREA FOR INTERSECTIONS										1360	1360	14	109		1.00	38													
01/SC2/PV	AREA ADJUSTMENT SUB-TOTAL										3,078	1,360	14	246			86													
	AREA ADJUSTMENTS																													
02/STR/PV	EXTRA AREA FOR EX PAVED MAILBOX APP'S										450			36		1.00	13													
02/STR/PV	EXTRA AREA FOR EXISTING PAVED DRIVES:										996			80		1.00	28													
02/STR/PV	EXTRA AREA FOR INTERSECTIONS										1410	1410	14	113		1.00	39													
02/STR/PV	AREA ADJUSTMENT SUB-TOTAL										2,856	1,410	14	228			79													
01/STR/PV	SHEET SUB-TOTAL				3.84	20,275					59,867	3,160	31	4,789	0		1,663	0				7.68			9,011		9,011		375	
02/SC2/PV	SHEET SUB-TOTAL				9.39	49,579					136,123	4,730	49	7,995	36,185		2,776	5,428				13.64			16,004		16,004		667	
TOTALS					13.23	69,854					195,990	7,890	80	12,784	36,185		4,439	5,428				21.32			25,015		25,015		1,042	

* NOTE: MAINTAIN VERTICAL CLEARANCE (1" PLANING) AT IR-71 OVERHEAD STRUCTURES, APPROX. SLM 19.58.

CALCULATED NRF
CHECKED KRB

PAVEMENT AND SHOULDER DATA SHEET

MED-162-(12.90)
(17.11)

DESIGN FILE: i:\ProjectData\97043\Design\Roadway\Sheets\97043GQ001.dgn
WORKSTATION: hfoster
DATE: 2/8/2016
MODELNAME: Sheet

AUXILIARY & LONG LINE MARKINGS

FUNDING SPLITS	ROUTE	COUNTY	STATION / SLM FROM	STATION / SLM TO	HIGHWAY MILES	614 WORK ZONE CENTER LINE, CLASS III, 642 PAINT	614 WORK ZONE CENTER LINE, CLASS II, 642 PAINT	614 WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT	614 WORK ZONE STOP LINE, CLASS 1, 642 PAINT	642, TYPE 1 EDGE LINE, 6" TOTAL (PAY QUANTITY) (WHITE)	642, TYPE 1 EDGE LINE, 6" TOTAL (PAY QUANTITY) (YELLOW)	642, TYPE 1 LANE LINE, 6"	642, TYPE 1 CENTER LINE SOLID LINE EQUIVALENT	642, TYPE 1 CENTER LINE TOTAL (PAY QUANTITY)	644 AUXILIARY MARKINGS (740.04) CHANNELIZING LINE 8"	STOP LINE 24"	CROSSWALK LINE 12"	CHEVERON MARKING (WHITE) 24"	TRANSVERSE/ DIAGONAL LINE (YELLOW) 24"	BIKE CROSSING SYMBOL	RAILROAD SYMBOL MARKING	SCHOOL SYMBOL MARKING 72 INCH	SCHOOL SYMBOL MARKING 96 INCH		LANE ARROW LEFT	LANE ARROW RIGHT	LANE ARROW THROUGH	LANE ARROW MERGE RIGHT	642, TYPE 1 AUXILIARY MARKINGS (740.02) STOP LINE 24"
			FROM	TO	MILE	MILE	MILE	FT	FT	MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT	FT	EACH	EACH	EACH		FT	EACH					EACH
02/STR/PV	162	MED	12.90	15.27	2.37		2.37	472	44	4.74			3.85	2.37	472	110	120		280	4	2				3	3				
02/STR/PV	162	MED	19.61	24.08	4.47		4.47		55	8.94			8.72	4.47		119					2								
02/STR/PV	162	MED	24.16	26.74	2.58	5.16			66	10.32			4.22	5.16															66
SUBTOTAL 02/STR/PV:					*9.42*	*5.16*	*6.84*	*472*	*165*	*24.00*			*16.79*	*12.00*	*472*	*229*	*120*		*280*	*4*	*4*				*3*	*3*			*66*
01/S<2/PV	162	MED	15.27	16.62	1.35		1.35	290	26	2.70			2.64	1.35	290	46			128						3				
01/S<2/PV	162	MED	17.11	19.61	2.50		2.50		50	5.00			4.25	2.50		50													
SUBTOTAL 01/S<2/PV:					*3.85*		*3.85*	*290*	*76*	*7.70*			*6.89*	*3.85*	*290*	*96*			*128*						*3*				
TOTALS TO GENERAL SUMMARY:					**13.27**	**5.16**	**10.69**	**762**	**241**	**31.70**			**23.68**	**15.85**	**762**	**325**	**120**		**408**	**4**	**4**				**6**	**3**			**66**

RAISED PAVEMENT MARKERS

FUNIDING SPLITS	ROUTE	COUNTY	STATION/SLM FROM	STATION/SLM TO	DETAIL	621 RAISED PAVEMENT MARKER REMOVED EACH	621 RPM EACH	PRISMATIC RETRO-REFLECTOR TYPES ONE-WAY WHITE EACH	TWO-WAY YELLOW / YELLOW	TWO-WAY WHITE / RED	TWO-WAY YELLOW / RED	TWO-WAY BLUE / BLUE	REMARKS
			FROM	TO		EACH	EACH	EACH					
02/STR/PV	162	MED	13.01	13.21	6	27	27	16	11				STOP APPROACH AT US 42 (EAST JUNCTION)
02/STR/PV	162	MED	13.21	14.82	GAP	117	117		107	10			CONTINUOUS ROUTE TREATMENT
02/STR/PV	162	MED	14.82	15.14	6	54	54	32	22				STOP APPROACH AT LAKE ROAD (CR 19)
02/STR/PV	162	MED	15.14	15.27	GAP	9	9		9				CONTINUOUS ROUTE TREATMENT
02/STR/PV	162	MED	19.61	20.05	GAP	29	29		29				CONTINUOUS ROUTE TREATMENT
02/STR/PV	162	MED	20.05	20.39	8	54	54	32	22				STOP APPROACHES AT RIVER STYX RD. (C.R. 49)
02/STR/PV	162	MED	20.39	20.59	16	29	29		29				ONE CURVE AT 20 FT. SPACING
02/STR/PV	162	MED	20.59	21.01	GAP	26	26		26				CONTINUOUS ROUTE TREATMENT
02/STR/PV	162	MED	21.01	21.23	16	33	33		33				CURVE AT 20 FT. SPACING
02/STR/PV	162	MED	21.23	21.58	GAP	24	24		24				CONTINUOUS ROUTE TREATMENT
02/STR/PV	162	MED	21.58	21.80	16	42	42		42				CURVE AT 20 FT. SPACING
02/STR/PV	162	MED	21.80	22.00	GAP	11	11		11				CONTINUOUS ROUTE TREATMENT
02/STR/PV	162	MED	22.00	22.31	16	55	55		55				REVERSE CURVE AT 20 FT. SPACING
02/STR/PV	162	MED	22.31	24.16	GAP	117	117		117				CONTINUOUS ROUTE TREATMENT
02/STR/PV	162	MED	24.16	24.28	6	27	27	16	11				STOP APPROACH AT SR 94 (EAST APPR. IN SHARON CNTR)
02/STR/PV	162	MED	24.36	24.56	6	27	27	16	11				STOP APPROACH AT SR 94 (EAST APPR. IN SHARON CNTR)
02/STR/PV	162	MED	24.56	25.17	GAP	40	40		40				CONTINUOUS ROUTE TREATMENT
02/STR/PV	162	MED	25.17	25.41	15	32	32		32				CURVE
02/STR/PV	162	MED	25.41	26.03	GAP	41	41		41				CONTINUOUS ROUTE TREATMENT
02/STR/PV	162	MED	26.03	26.26	15	30	30		30				CURVE
02/STR/PV	162	MED	26.26	26.74	GAP	47	47		47				CONTINUOUS ROUTE TREATMENT
SUBTOTAL 02/STR/PV:						*871*	*871*						
01/S<2/PV	162	MED	15.27	16.62	GAP	89	89		89				CONTINUOUS ROUTE TREATMENT
01/S<2/PV	162	MED	16.62	16.75	6	27	27	16	11				STOP APPROACH AT SR 3 (WEST APPROACH)
01/S<2/PV	162	MED	17.24	17.44	6	27	27	16	11				STOP APPROACH AT SR 3 (EAST APPROACH)
01/S<2/PV	162	MED	17.44	18.50	GAP	66	66		66				CONTINUOUS ROUTE TREATMENT
01/S<2/PV	162	MED	18.50	18.90	6	54	54	32	22				STOP APPROACHES AT SR 57
01/S<2/PV	162	MED	18.90	19.61	GAP	47	47		47				CONTINUOUS ROUTE TREATMENT
SUBTOTAL 01/S<2/PV:						*310*	*310*						
TOTALS TO GENERAL SUMMARY:						**1,181**	**1,181**						

DETAIL	DESCRIPTION
1	MULTILANE UNDIVIDED TYPICAL SPACING
2	TAPERED ACCEL. LANE
3	DECELERATION LANE
4	PARALLEL ACCEL LANE
5	MULTILANE DIVIDED/EXPRESSWAY
6	STOP APPROACH
7	2 LANE APPR. WITH TURN LANE
8	THROUGH APPROACH
9	3 LANE APPR. WITH TURN LANE
11	3 LANE UNDIVIDED TO 2 LANE TRANSITION
12	TWO LNAE NARROW BRIDGE
13	TWO WAY LEFT TURN LANE
14	ONE LANE BRIDGE
15	HORIZONTAL CURVE
16	HORIZONTAL CURVE ALT.
17	STOP APPROACH ALT.
18	FIRE HYDRANT
GAP	CENTER LINE AT 80 FT. TYP.

NOTES

1) THRU LANES SHALL BE STRIPED TO MATCH EXISTING LANE WIDTHS ACCORDING TO CMS 641.08A.

2) FOR ALL WORK ZONE MARKINGS, THE 642 PAINT USED SHALL BE TYPE 1.

3) WORK ZONE STOP LINES SHALL BE PLACED AT THE FOLLOWING LOCATIONS:

SR 162 AND US 42
SR 162 AND CSX RR CROSSING
SR 162 AND LAKE ROAD
SR 162 AND SR 3 OVERLAP (BOTH APP.)
SR 162 AND SR 57
SR 162 AND RIVER STYX ROAD
SR 162 AND WHEELING & LAKE ERIE RR
SR 162 AND SR 94
SR 162 AND MEDINA LINE ROAD

CALCULATED NRF CHECKED KRB

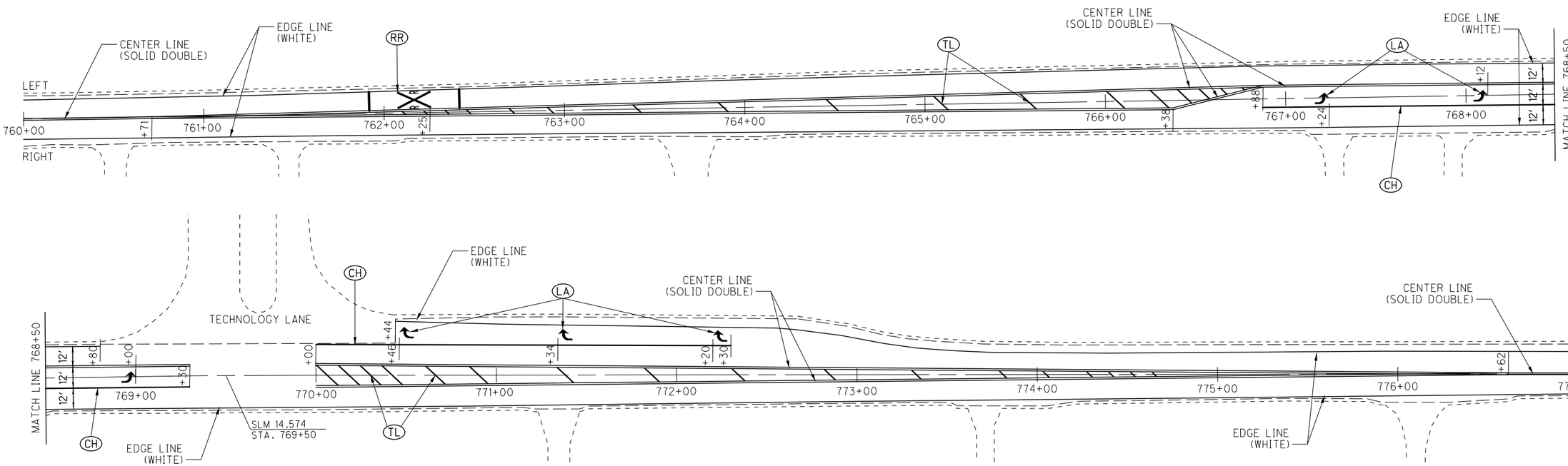
PAVEMENT MARKING/ RPM SUBSUMMARY

MED-162-(12.90) (17.11)

10 11

DESIGN FILE: i:\ProjectData\97043\Design\Roadway\Sheets\97043TS001.dgn MODELNAME: Sheet
WORKSTATION: nfoster DATE: 2/8/2016

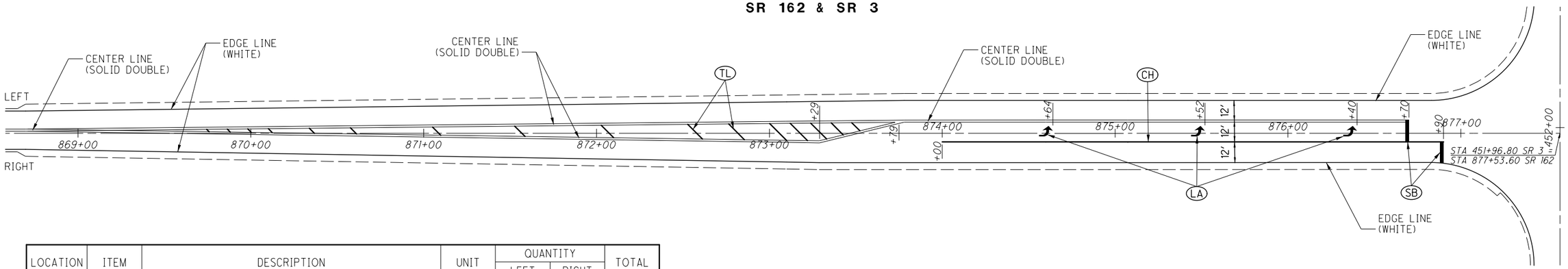
SR 162 & TECHNOLOGY LANE



LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY		TOTAL
				LEFT	RIGHT	
(CH)	644	CHANNELIZING LINE, 8"	FT	230	242	472
(LA)	644	LANE ARROW (LEFT)	EA		3	3
(LA)	644	LANE ARROW (RIGHT)	EA	3		3
(TL)	644	TRANSVERSE/ DIAGONAL LINE	FT	280		280
(RR)	644	RAIL ROAD SYMBOL	EA	1		1

NOTE: ALL PAVEMENT MARKING QUANTITIES HAVE BEEN CARRIED TO THE PAVEMENT MARKING/RPM SUBSUMMARY SHEET.

SR 162 & SR 3



LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY		TOTAL
				LEFT	RIGHT	
(CH)	644	CHANNELIZING LINE, 8"	FT		290	290
(SB)	644	STOP LINE	FT		26	26
(TL)	644	TRANSVERSE/ DIAGONAL LINE (YELLOW)	FT	128		128
(LA)	644	LANE ARROW (LEFT)	EACH		3	3

NOTE: ALL PAVEMENT MARKING QUANTITIES HAVE BEEN CARRIED TO THE PAVEMENT MARKING/ RPM SUBSUMMARY SHEET.

HORIZONTAL SCALE IN FEET
0 15 30 60

CALCULATED NRF
CHECKED KRB

STATE ROUTE 162
PAVEMENT MARKING DETAILS

MED-162-(12.90)
(17.11)

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11

DESIGN FILE: i:\ProjectData\97043\Design\Roadway\Sheets\97043TS002.dgn
MODELNAME: Design
WORKSTATION nfoster
DATE: 2/8/2016