STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

PROJECT DESCRIPTION:

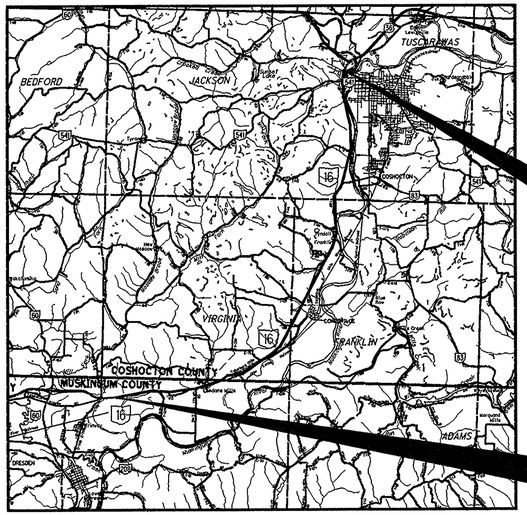
2 LANE AND 4 LANE DIVIDED ASPHALT CONCRETE RESURFACING, AND RELATED WORK ON S.R. 16 IN MUSKINGUM & COSHOCTON COUNTIES

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)

MUS-16-11.70
COS-16-0.00

CASS, VIRGINIA & JACKSON TOWNSHIPS

MUSKINGUM & COSHOCTON COUNTY



LOCATION MAP

LATITUDE: 40° 16′ 53″ / LONGITUDE: 81° 52′ 30″

SCALE IN MILES 0 1 2 3 4

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

INDEX OF SHEETS:

DESIGN DESIGNATION	S.R. 16
Functional Classification	PRINCIPAL ARTERIAL RURAL
Opening Year ADT (2009)	10,500
Design Year ADT (2021)	18,100
Design Hourly Volume (2021)	1,810
Directional Distribution	50%
Trucks (24 Hour B&C)	20%
Design Speed	55 MPH
Legal Speed	55 MPH

DESIGN EXCEPTIONS: NONE

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG
CALL
1-800-362-2764
(TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY
OIL & GAS PRODUCERS PROTECTIVE SERVICE CALL: 1-800-925-0988

PLAN PREPARED BY:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 5 PRODUCTION OFFICE

ENGINEERS SEAL: ROADWAY

STATE OF OHIO Heather Ann Gilbert E-66843 REGISTERED PROFESSIONAL ENGINEER

SIGNED: Heather A. Gilbert
DATE: 03/09/2009

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	10/19/07	TC-65.10	1/21/05	800	4/17/09
		TC-65.11	1/21/05	832	5/05/09
		TC-71.10	1/16/09		
MT-35.10	4/20/01	TC-72.20	1/21/05		
MT-95.30	9/5/06	TC-73.10	1/19/01		
MT-97.10	9/5/06				
MT-97.12	9/5/06				
MT-98.10	10/19/07			SPECIAL PROVISIONS	
MT-98.11	10/19/07				
MT-98.20	10/19/07				
MT-98.22	10/19/07				
MT-98.28	10/19/07				
MT-98.29	10/19/07				
MT-99.20	1/16/09				
MT-101.90	1/16/09				
MT-105.10	1/16/09				

2008 SPECIFICATIONS

THE STANDARD 2008 SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND THE PROPOSAL SHALL GOVERN THESE IMPROVEMENTS.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THESE IMPROVEMENTS WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY AND PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS INDICATED IN THE PROPOSAL.

APPROVED William H. Fleckenstein

DATE 03/06/2009 DISTRICT DEPUTY DIRECTOR

APPROVED Deborah M. Mahurin

DATE 5/7/09 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E050 (443)
PID NO. 25049
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
MUS-16-11.70
COS-16-0.00
1 / 16

MUS - SR-16-11.70; COS-16-0.00
091027 PID - 25049
Dist 5 6/10/2009
L016_MTS_001.dgn 2/19/09

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.

NOTIFICATION OF ROAD CLOSURE OR RESTRICTION

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

SEND NOTIFICATION TO:

DISTRICT 5 HIGHWAY MANAGEMENT ADMINISTRATOR
P.O. BOX 306
JACKSONSTOWN, OH 43030
PHONE: (740) 323-4400 EXT. 5241

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.

FEATHERING

FEATHERING OF THE ASPHALT CONCRETE SHALL BE DONE IN ACCORDANCE WITH SCD DRAWING BP-3.1, 10-19-07.

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 DIRECTED, THE CONTRACTOR MAY USE RECYCLED ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 617.02) IN LIEU OF CRUSHED LIMESTONE.

PROFILE AND ALIGNMENT

THE PROPOSED PAVEMENT RESURFACING SHALL FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT.

TACK COAT

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

TACK COAT FOR INTERMEDIATE COURSE

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

PAVEMENT MARKING

STOP LINES, CROSSWALK LINES, CHANNELIZING LINES, ETC., SHOWN IN THE PLANS ARE TAKEN FROM EXISTING MARKINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT EXISTING MARKING LOCATIONS (i.e. BY USE OF VIDEO, PICTURES) AND PLACE NEW PAVEMENT MARKINGS AS NEAR AS POSSIBLE TO THE EXISTING LOCATIONS 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. ALL NEW DIAGONAL/TRANSVERSE LINES SHALL FOLLOW THE CURRENT SPACING REQUIREMENTS AS DESCRIBED IN SECTION 301-14 OF ODOT'S TRAFFIC ENGINEERING MANUAL (INCLUDING THE MOST CURRENT REVISIONS).

COOPERATION BETWEEN CONTRACTORS

AT ANY TIME, THE DEPARTMENT MAY CONTRACT FOR OTHER WORK ON OR NEAR THIS PROJECT. SEPARATE CONTRACTORS WORKING WITHIN THE LIMITS OF THIS PROJECT SHALL CONDUCT THEIR WORK WITHOUT INTERFERING WITH OR HINDERING THE PROGRESS OR COMPLETION OF THE WORK BEING PERFORMED BY OTHER CONTRACTORS AND SHALL COOPERATE WITH EACH OTHER AS DIRECTED BY THE ENGINEER.

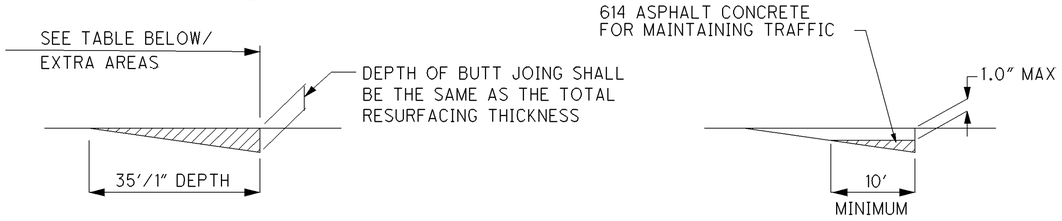
CALCULATED | CHECKED

GENERAL NOTES

MUS-16-11.70
COS-16-0.00

BUTT JOINT

A BUTT JOINT WILL BE REQUIRED AT LOCATIONS SPECIFIED BELOW AND AT EXTRA AREAS WITH WEARING COURSE REMOVED. AFTER THE JOINT IS CONSTRUCTED, THE DROP OFF CREATED SHALL BE ELIMINATED BY IMMEDIATELY PLACING THE PROPOSED INTERMEDIATE COURSE TO WITHIN 1.0" OF EXISTING PAVEMENT ELEVATION AFTER PLANING OPERATION OR BY PLACING AN ASPHALT CONCRETE WEDGE. BUTT JOINTS SHALL BE AS PER SCD BP-3.1, 10-19-07. GRINDING FOR BUTT JOINTS SHALL BE INCLUDED WITH PAVEMENT PLANING QUANTITIES.



COUNTY	ROUTE	DESCRIPTION		ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC CU.YD.
MUS	S.R. 16	BEGIN WORK		1
		END WORK		1
COS	S.R. 16	BEGIN WORK		1
		S.R. 16 @ S.R. 83		2
		S.R. 16 RAMPS @ S.R. 541		4
		END WORK		2
TOTAL				**11**

ITEM 621 RPM 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.
THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 621 RPM REMOVED 1,206 EACH

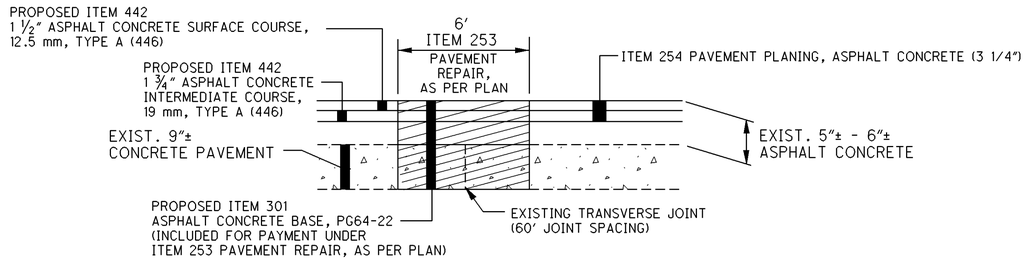
ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

DEPTH OF PLANING SHALL BE 3.25" FULL WIDTH OF PAVEMENT AND PAVED SHOULDERS, UNLESS OTHERWISE SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
RAMPS SHALL BE PLANED 2" IN DEPTH. THE ROADWAY SHALL BE PLANED SUCH THAT POSITIVE DRAINAGE IS CREATED FROM THE LANE LINE TO THE EDGE OF PAVEMENT IN TANGENT SECTIONS AND SHALL FOLLOW EXISTING SUPERELEVATIONS WHERE APPLICABLE.
THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THE PAVEMENT IS PLANED TO A DEPTH THAT DOES NOT LEAVE A "SLIVER" OF THIN ASPHALT (LESS THAN OR EQUAL TO ONE HALF INCH). IF SUCH "SLIVERS" ARE OBVIOUS AFTER THE PAVEMENT IS MILLED AND BROOMED, ADDITIONAL MILLING SHALL BE PERFORMED TO REMOVE SAID "SLIVERS" AT THE CONTRACTOR'S OWN EXPENSE. ALL REQUIREMENTS OF ITEM 254 SHALL APPLY.

ITEM 253 PAVEMENT REPAIR, AS PER PLAN

S.R. 16 - COSHOCTON COUNTY - S.L.M. 0.00 TO SL.M. 5.00 (2-LANES)
S.R. 16 - COSHOCTON COUNTY - S.L.M. 7.36 TO S.L.M. 9.84 (4-LANES)

THIS ITEM SHALL CONSIST OF REMOVING THE EXISTING CONCRETE PAVEMENT AND EXISTING ASPHALT AT THE TRANSVERSE JOINTS ON S.R. 16 IN THE WESTBOUND AND EASTBOUND LANES, AS DETAILED BELOW.
THE INTENT IS TO REPLACE THE DAMAGED CONCRETE AND TO CREATE A SMOOTH SURFACE BEFORE PLACING THE PROPOSED ASPHALT COURSES. THE REPLACEMENT MATERIAL WILL BE ITEM 301 ASPHALT CONCRETE BASE, PG64-22 AND SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 253 PAVEMENT REPAIR, AS PER PLAN, AT THE DIRECTION OF THE PROJECT ENGINEER.
THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL REMOVED MATERIALS AS PER ITEM 202 AND WILL BE INCLUDED FOR PAYMENT UNDER ITEM 253 PAVEMENT REPAIR, AS PER PLAN.
ITEM 253 PAVEMENT REPAIR, AS PER PLAN SHALL BE PERFORMED BEFORE THE PAVEMENT PLANING AND RESURFACING OPERATIONS ARE PERFORMED.



ITEM 253
PAVEMENT REPAIR, AS PER PLAN

CALCULATIONS:
(2-LANE)- 24' x 6' / 9 = 16 SY/JOINT & (4-LANE) - 48' x 6' / 9 = 32 SY/JOINT
(2-LANES SECTION) = 440 JOINTS x 16 S.Y./JOINT = 7,040 S.Y.
(4-LANE SECTION) = 220 JOINTS x 32 S.Y./JOINT X 2 E.B. & W.B. LANES = 14,080 S.Y.
TOTAL 21,120 S.Y.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO PERFORM THE WORK AS DESCRIBED AND DETAILED ABOVE.

ITEM 253 PAVEMENT REPAIR, AS PER PLAN 21,120 SQ. YD.

ITEM 632 DETECTOR LOOP, AS PER PLAN

ALL DETECTOR LOOPS SHALL BE CUT INTO THE PLANED SURFACE OR THE PROPOSED INTERMEDIATE COURSE AT A DEPTH OF 4" FROM THE PROPOSED SURFACE ELEVATION.
IF THE CONTRACTOR SO CHOOSES, THEY MAY CUT THE DETECTOR LOOPS INTO THE EXISTING ASPHALT SURFACE COURSE BEFORE PLANING BUT SHALL MAKE SURE THE MATERIAL USED TO FILL THE SAW CUT IS LEFT FAR ENOUGH BELOW THE SURFACE COURSE THAT IT WILL NOT BE DISTURBED DURING THE PLANING OPERATION. THE CONTRACTOR SHALL TEST ALL LEAD-IN CABLES PRIOR TO MAKING FINAL SPLICE.
PLACEMENT SHALL BE AS PER SPECIFICATION 632.10. FINAL LOCATIONS, SIZE AND ORIENTATION WILL BE VERIFIED IN THE FIELD AT THE TIME OF CONSTRUCTION.
ALL MATERIALS, LABOR, TOOLS, EQUIPMENT, TRAFFIC CONTROL AND INCIDENTALS NECESSARY TO PERFORM THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 632 DETECTOR LOOP, AS PER PLAN.

ITEM 632 DETECTOR LOOP, AS PER PLAN 6 EACH

LOCATIONS:
S.R. 16 AT EXISTING AUTOMATED TRAFFIC RECORDER 4 EACH
S.R. 16 @ S.R. 83 2 EACH

CALCULATED | CHECKED

GENERAL NOTES

MUS-16-11.70
COS-16-0.00

3
16

C016_MGN_002.dgn 2/19/09

ITEM 407, TACK COAT, MISC.: FOR LONGITUDINAL JOINT

IN ORDER TO ASSURE A GOOD BOND AT THE LONGITUDINAL JOINT, A RUBBERIZED ASPHALT EMULSION (ITEM 407 TACK COAT AS PER 702.13) SHALL BE APPLIED TO THE FACE OF THE SURFACE COURSE OF ASPHALT PAVEMENT IMMEDIATELY BEFORE PLACING THE ADJACENT PAVEMENT. RUBBERIZED TACK SHALL HAVE 100% COVERAGE ON THE FACE OF THE TOP COURSE AND BE APPLIED AT THE RATE OF 0.25 GALLONS PER SQUARE YARD, AS DIRECTED BY THE ENGINEER. CARE SHALL BE TAKEN (AS PER SECTION 407.07) IN THE APPLICATION OF THE TACK SO AS TO AVOID PLACING EMULSION ON THE TOP SURFACE OF THE PAVEMENT. THE FOLLOWING QUANTITY OF ITEM 407 TACK COAT, MISC.: FOR LONGITUDINAL JOINT SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIAL TO PERFORM THE ABOVE WORK.

ITEM 407 TACK COAT, MISC.: FOR LONGITUDINAL JOINT

S.R. 16 – 80,630 FT.
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ITEM 614, PORTABLE CHANGEABLE MESSEGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN, ON SITE, FOR THE DURATION OF THE PROJECT. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR (OFFICE OF MATERIALS MANAGEMENT). THE APPROVED LIST OF PORTABLE CHANGEABLE MESSAGE SIGNS CAN BE FOUND ON THE ODOT WEBSITE BY CLICKING ON THE SERVICES MENU, THEN LICKING ON MATERIALS MANAGEMENT. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 650 FT. AND 475 FT., RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PCMS TRAILERS SHOULD BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETROREFLECTIVE MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) OF THE PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED,

FACING AWAY FROM ALL TRAFFIC, AND SHALL DISPLAY ONE OR MORE TYPE G YELLOW RETROREFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ITEM 614, PORTABLE CHANGEABLE MESSEGE SIGNS, AS PER PLAN(cont'd)

(THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 2 HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.)

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

(THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.)

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF CMS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR_S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

A TOTAL OF 2 PCMS SHALL BE REQUIRED FOR THIS PROJECT.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO GENERAL SUMMARY.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 10 SIGN-MONTH

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR

IN ADDITION TO THE REQUIREMENTS OF 614 AND THE LATEST EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), A UNIFORMED LAW ENFORCEMENT OFFICER AND OFFICIAL PATROL CAR WITH WORKING TOP MOUNTED EMERGENCY FLASHING LIGHTS WILL BE PROVIDED FOR CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS:

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED IN THIS NOTE WILL NOT GENERALLY BE PERMITTED AT PROJECT COST UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE ENGINEER. LEOS SHOULD NOT BE USED WHERE THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD) INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS:

- FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED. IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A LIST OF THE APPROPRIATE LAW ENFORCEMENT AGENCY(S), INCLUDING ADDRESS AND TELEPHONE NUMBER.

THE LEO SHOULD REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING THE SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF THE SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHOULD NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF THE SHIFT.

LAW ENFORCEMENT OFFICERS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR). THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR 200 HOURS

THE HOURS PAID SHALL INCLUDE MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR.

CALCULATED | CHECKED

GENERAL NOTES

MUS-16-11.70
COS-16-0.00

ITEM 614, MAINTAINING TRAFFIC

ONE LANE OF TRAFFIC IN EACH DIRECTION WILL BE MAINTAINED ON S.R. 16 AT ALL TIMES, EXCEPT AS NOTED BELOW:

LANE CLOSURES FOR THE PURPOSE OF PLACING DRUMS IN ORDER FOR THE CONTRACTOR TO COMPLETE THE WORK AS DESCRIBED IN THE PLANS WILL BE PERMIITED AS FOLLOWS:

LANE CLOSURES WILL ONLY BE IMPLEMENTED AT THE TIMES LISTED ON THE OHIO DEPARTMENT OF TRANSPORTATION'S WEB SITE, "PERMITTED LANE CLOSURE TIMES" SECTION, LOCATED AT THE ADDRESS SHOWN BELOW:

http://plcm.dot.state.oh.us//plcm/plcm_web.jsp

THE PERMITTED CLOSURE TIMES LISTED ON THE WEBSITE, 14 CALENDAR DAYS PRIOR TO THE BID LETTING DATE WILL BE IN EFFECT FOR THIS PROJECT.

NO WORK WITHIN ACTIVE TRAVEL LANES OR WHICH WILL SLOW TRAFFIC IS PERMITTED AT ANY OTHER TIMES.

WHEN NECESSARY, LANE CLOSURES WILL BE ACCOMPLISHED IN ACCORDANCE WITH THE STANDARD DRAWINGS.

IT IS THE INTENT TO RESTRICT LANE CLOSURES TO THE MINIMUM AMOUNT OF TIME NECESSARY TO PERFORM THE WORK AS DESCRIBED IN THE PLANS. THE CONTRACTOR WILL NOT COMMENCE ANY LANE CLOSURE BEFORE THE HOURS AS SPECIFIED OR COMMENCE ANY CLOSURE AT A TIME WHICH WILL NOT ALLOW COMPLETION OF THE WORK PRIOR TO THE HOURS SPECIFIED.

SHOULD THE CONTRACTOR CLOSE THE LANES BEFORE THE ALLOWABLE TIME AND/OR FAIL TO RE-OPEN ALL LANES TO TRAFFIC, BY THE ALLOWABLE TIME A DISINCENTIVE AS DESIGNATED IN THE LANE VALUE CONTRACT TABLE AND PROPOSAL NOTE 127 WILL BE ASSESSED.

LANE VALUE CONTRACT TABLE – S.R.16

DESCRIPTION OF CRITICAL LANE TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE $ PER TIME UNIT
S.R.16	ODOT WEB SITE: PERMITTED LANE CLOSURE TIMES	HOUR	$ 5,000.00

THE CONTRACTOR WILL HAVE ON SITE AND IN WORKING AND OR SUITABLE CONDITION; ALL EQUIPMENT, TOOLS, LABORERS, LEO'S, TRAFFIC CONTROL DEVICES AND INCIDENTALS NECESSARY TO EFFICIENTLY PERFORM THE CLOSURE BEFORE INITIALIZING THE LANE CLOSURE.

THERE SHALL BE NO LANE CLOSURES ON HOLIDAYS OR HOLIDAY WEEKENDS. THE FOLLOWING ARE CONSIDERED HOLIDAYS. MEMORIAL DAY, FOURTH OF JULY, LABOR DAY, THANKSGIVING, CHRISTMAS , NEW YEARS, EASTER. NO LANE CLOSURES ARE ALLOWED AFTER 12 NOON ON THE DAY PRECEDING A HOLIDAY. FOR HOLIDAY WEEKENDS NO LANE CLOSURES ARE ALLOWED AFTER 12 NOON ON THE DAY PRECEDING THE HOLIDAY WEEKEND UNTIL 12 PM THE DAY AFTER THE HOLIDAY WEEKEND. EX. HOLIDAY FALLS ON A MONDAY THEN NO LANE CLOSURES FROM 12 NOON ON FRIDAY UNTIL 12 PM TUESDAY

AREAS THAT ARE PLANED SHALL NOT BE OPENED TO TRAFFIC. ALL PLANED AREAS MUST BE INLAID WITH PROPOSED COURSE OF ITEM 442 ASPHALT CONCRETE PRIOR TO BEING OPENED TO TRAFFIC. OVERNIGHT CLOSURES MUST MEET SPECIFICATIONS AS OUTLINED IN THE CONSTRUCTION AND MAINTENANCE OPERATIONS SECTION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS. ROADWAY SHALL NOT BE OPENED TO TRAFFIC WITHOUT EITHER THE PERMANENT OR WORK ZONE MARKINGS IN PLACE.

ITEM 614, MAINTAINING TRAFFIC (con't.)

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE. SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH CMS 108.07.

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.

ITEM 614, WORK ZONE MARKING SIGNS

A QUANTITY OF WORK ZONE MARKING SIGNS HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 614 WORK ZONE MARKING SIGNS 120 EACH

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ITEM 614, WORK ZONE PAVEMENT MARKINGS

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED TO BE USED AS DIRECTED BY THE ENGINEER TO MAINTAIN TRAFFIC DURING CONSTRUCTION. (QUANTITIES ARE FOR TWO (2) APPLICATIONS).

ITEM 614 WORK ZONE STOP LINE, CLASS III, 642 PAINT

1,808 FT.

ITEM 614 WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT

4,042 FT.

ITEM 614 WORK ZONE LANE LINE, CLASS III, 642 PAINT

9.02 MILE

ITEM 614 WORK ZONE CENTER LINE, CLASS III, 642 PAINT

21.84 MILE

ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL
BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF 20 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

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 MODIFIED AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) SIGN, FREEWAY/EXPRESSWAY

THIS ITEM SHALL CONSIST OF THE FURNISHING AND INSTALLING, AND SUBSEQUENT REMOVAL, OF MODIFIED AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) SIGNS ON YIELDING POST SUPPORTS.

INSTALL ONE ARRA SIGN NEAR THE BEGINNING OF THE PROJECT IN EACH ROUTE DIRECTION IN A LOCATION AS APPROVED BY THE ENGINEER. THE ARRA SIGN CONSISTS OF ONE 120" X 84" WHITE ON GREEN EXTRUSHEET SIGN WITH PICTOGRAPHS, ONE 120" X 24" BLACK ON ORANGE EXTRUSHEET SIGN, AND ONE 24" X 24" DIAMOND FLAT SHEET SIGN. THE SIGN FABRICATION DETAILS ARE FOUND AT:

HTTP://WWW.DOT.STATE.OH.US/DIVISIONS/HIGHWAYOPS/TRAFFIC/PAGES/OTEHOMEPAGE.ASPX

INSTALL THE SIGN ON THREE NO. 3 YIELDING POSTS AS PER STANDARD DRAWING TC-41.20, WITH ONE POST ON SIGN CENTERLINE AND ONE POST 12" FROM EACH END. SIGNS IN PROTECTED LOCATIONS MAY BE INSTALLED ON OTHER SUPPORTS AS APPROVED BY THE ENGINEER. USED SIGNS ARE ALLOWED PROVIDED THEY ARE IN A CONDITION ACCEPTABLE TO THE ENGINEER. REMOVE THE ARRA SIGNS AND SUPPORTS AT THE END OF THE PROJECT. REMOVED ARRA SIGNS AND SUPPORTS ARE THE PROPERTY OF THE CONTRACTOR.

PAYMENT SHALL BE INCLUDED IN THE CONTRACT LUMP SUM BID PRICE FOR ITEM 614 MAINTAINING TRAFFIC AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS (INCLUDING SUPPORTS), TOOLS AND OTHER INCIDENTALS TO PROVIDE FOR A COMPLETE AND ACCEPTED ITEM OF WORK.

CALCULATED | CHECKED

GENERAL NOTES

MUS-16-11.70
COS-16-0.00

L016_MGN_004.dgn 2/19/09

SEQUENCE OF OPERATIONS: (2-LANE SECTION)

PHASE 1: (2-LANE SECTION) W.B. LANE

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE W.B. LANE AND MAINTAIN TRAFFIC BY USE OF THE FLAGGERS, AS PER STANDARD CONSTRUCTION DRAWING MT-97.10.
(2) PERFORMED JOINT REPAIR, AS DETAILED

PHASE 2: (2-LANE SECTION) E.B. LANE

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE E.B. LANE AND MAINTAIN TRAFFIC BY USE OF THE FLAGGERS, AS PER STANDARD CONSTRUCTION DRAWING MT-97.10.
(2) PERFORMED JOINT REPAIR, AS DETAILED

PHASE 3: (2-LANE SECTION) W.B. LANE

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE W.B. LANE AND MAINTAIN TRAFFIC BY USE OF THE FLAGGERS, AS PER STANDARD CONSTRUCTION DRAWING MT-97.12
(2) PLANE W.B. LANE AND SHOULDER, 3 1/4" DEEP AS DETAILED.
(3) IMMEDIATELY PLACE 1.75" OF ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE FOR W.B. LANE AND SHOULDER.
(4) INSTALL TEMPORARY PAVEMENT MARKINGS
(5) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING W.B. LANE.

PHASE 4: (2-LANE SECTION) E.B. LANE

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE E.B. LANE AND MAINTAIN TRAFFIC BY USE OF THE FLAGGERS, AS PER STANDARD CONSTRUCTION DRAWING MT-97.12
(2) PLANE E.B. LANE AND SHOULDER, 3 1/4" DEEP AS DETAILED.
(3) IMMEDIATELY PLACE 1.75" OF ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE FOR E.B. LANE AND SHOULDER.
(4) INSTALL TEMPORARY PAVEMENT MARKINGS
(5) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING E.B. LANE.

PHASE 5: (2-LANE SECTION) W.B. LANE

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE W.B. LANE, AND MAINTAIN TRAFFIC BY USE OF FLAGGERS, AS PER STANDARD DRAWING MT-97.12
(2) PLACE 1.5" OF ITEM 442 ASPHALT CONCRETE SURFACE COURSE ON W.B. LANE AND PAVED SHOULDER, AS PER TYPICAL SECTION.
(3) INSTALL TEMPORARY PAVEMENT MARKINGS
(4) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING W.B. LANE.

PHASE 6: (2-LANE SECTION) E.B. LANE

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE E.B. LANE, AND MAINTAIN TRAFFIC BY USE OF FLAGGERS, AS PER STANDARD DRAWING MT-97.12
(2) PLACE 1.5" OF ITEM 442 ASPHALT CONCRETE SURFACE COURSE ON E.B. LANE AND PAVED SHOULDER, AS PER TYPICAL SECTION.
(3) INSTALL TEMPORARY PAVEMENT MARKINGS
(4) REMOVE TRAFFIC CONTROL DEVICES FOR E.B. CLOSING LANE.

PHASE 7: (2-LANE SECTION) E.B. & W.B. LANES

(1) PLACE ALL PERMANENT PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS. OPEN ROADWAY TO UNRESTRICTED TRAFFIC.

GENERAL:

IT IS THE INTENT OF THIS SEQUENCE OF OPERATIONS TO PROVIDE A WORK AREA FOR THE CONTRACTOR WHILE ALSO MAINTAINING TRAFFIC IN A MANNER WHICH IS SAFE FOR THE TRAVELING PUBLIC (SEE WORK RESTRICTIONS AND LANE CLOSURES SHEET 5).

IF THE CONTRACTOR SO ELECTS, HE/SHE MAY SUBMIT ALTERNATE METHOD FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE ABOVE PROVISIONS ARE FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THEREFROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE ENGINEER.

ALL TEMPORARY OR PERMANENT PAVEMENT MARKINGS SHALL BE IN PLACE BEFORE ANY PAVEMENT IS OPENED TO TRAFFIC.

SEQUENCE OF OPERATIONS: (4-LANE DIVIDED SECTION)

PHASE 1: (4-LANE DIVIDED SECTION)

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE INSIDE LANE AND MAINTAIN TRAFFIC BY USE OF THE OUTSIDE LANE AND PAVED SHOULDER, AS PER STANDARD CONSTRUCTION DRAWING MT-95.30.
(2) PERFORMED JOINT REPAIR, AS DETAILED
(3) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING INSIDE LANE.

PHASE 2: (4-LANE DIVIDED SECTION)

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE OUTSIDE LANE, AND MAINTAIN TRAFFIC BY USE OF THE INSIDE LANE AND PAVED SHOULDER, AS PER STANDARD CONSTRUCTION DRAWING MT-95.30.
(2) PERFORM JOINT REPAIR, AS DETAILED
(3) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING OUTSIDE LANE.

PHASE 3: (4-LANE DIVIDED SECTION)

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE INSIDE LANE AND MAINTAIN TRAFFIC BY USE OF THE OUTSIDE LANE AND PAVED SHOULDER, AS PER STANDARD CONSTRUCTION DRAWING MT-95.30.
(2) PLANE INSIDE LANE AND SHOULDER, 3 1/4" DEEP AS DETAILED.
(3) IMMEDIATELY PLACE 1.75" OF ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE FOR INSIDE LANE AND SHOULDER.
(4) INSTALL TEMPORARY PAVEMENT MARKINGS
(5) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING INSIDE LANE.

PHASE 4: (4-LANE DIVIDED SECTION)

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE OUTSIDE LANE, AND MAINTAIN TRAFFIC BY USE OF THE INSIDE LANE AND PAVED SHOULDER, AS PER STANDARD CONSTRUCTION DRAWING MT-95.30
(2) PLANE OUTSIDE LANES AND SHOULDER, RAMP AREAS, 3 1/4" DEEP, AS DETAILED.
(3) IMMEDIATELY PLACE 1.75" OF ITEM 442 INTERMEDIATE COURSE FOR OUTSIDE LANE, SHOULDER AND FOR RAMP AREAS WHERE APPLICABLE, COMPLETE ALL OTHER RELATED WORK AS PER TYPICAL SECTION.
(4) INSTALL TEMPORARY PAVEMENT MARKINGS
(5) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING OUTSIDE LANE.

PHASE 5: (4-LANE DIVIDED SECTION)

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE INSIDE LANE, AND MAINTAIN TRAFFIC BY USE OF THE OUTSIDE LANE AND PAVED SHOULDER, AS PER STANDARD CONSTRUCTION DRAWING MT-95.30.
(2) PLACE 1.5" OF ITEM 442 ASPHALT CONCRETE SURFACE COURSE ON INSIDE LANE AND SHOULDER
(3) INSTALL TEMPORARY PAVEMENT MARKINGS
(4) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING INSIDE LANE.

PHASE 6: (4-LANE DIVIDED SECTION)

(1) INSTALL NECESSARY TRAFFIC CONTROL DEVICES, CLOSE OUTSIDE LANE, AND MAINTAIN TRAFFIC BY USE OF THE INSIDE LANE AND PAVED SHOULDER, AS PER STANDARD CONSTRUCTION DRAWING MT-95.30
(2) PLACE 1.5" OF ITEM 442 ASPHALT CONCRETE SURFACE COURSE ON OUTSIDE LANES, PAVED SHOULDER AND RAMP AREAS WHERE APPLICABLE.
(3) INSTALL TEMPORARY PAVEMENT MARKINGS
(4) REMOVE TRAFFIC CONTROL DEVICES FOR CLOSING OUTSIDE LANE.

PHASE 7: (4-LANE DIVIDED SECTION) E.B. & W.B. LANES

(1) PLACE ALL PERMANENT PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS. OPEN ROADWAY TO UNRESTRICTED TRAFFIC.

GENERAL:

IT IS THE INTENT OF THIS SEQUENCE OF OPERATIONS TO PROVIDE A WORK AREA FOR THE CONTRACTOR WHILE ALSO MAINTAINING TRAFFIC IN A MANNER WHICH IS SAFE FOR THE TRAVELING PUBLIC (SEE WORK RESTRICTIONS AND LANE CLOSURES SHEET 5).

IF THE CONTRACTOR SO ELECTS, HE/SHE MAY SUBMIT ALTERNATE METHOD FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE ABOVE PROVISIONS ARE FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THEREFROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE ENGINEER.

ALL TEMPORARY OR PERMANENT PAVEMENT MARKINGS SHALL BE IN PLACE BEFORE ANY PAVEMENT IS OPENED TO TRAFFIC.

CALCULATED | CHECKED

GENERAL NOTES

MUS-16-11.70
COS-16-0.00

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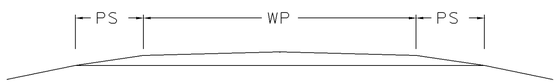
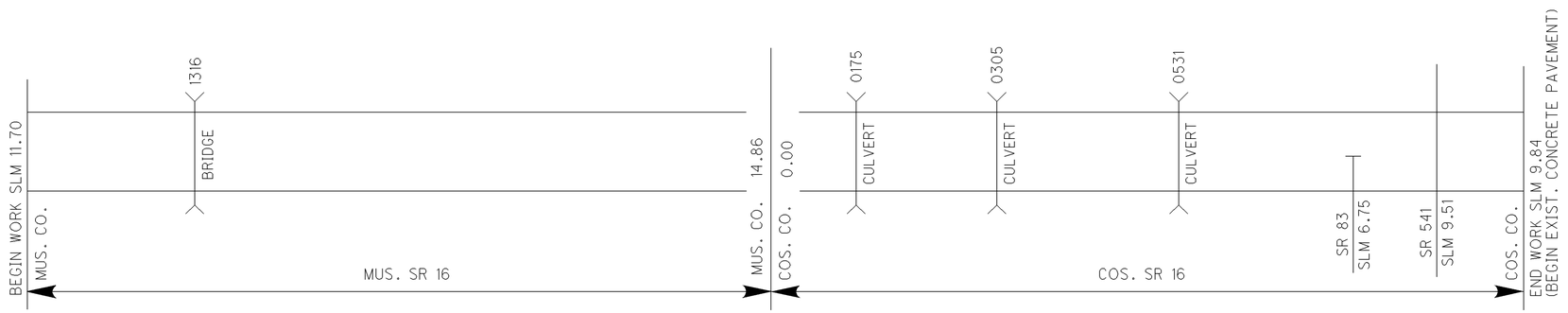
ASPHALT CONCRETE

TYPICAL 1



TYPICAL 2



PAVEMENT DATA

	ROUTE	CO.	LOG POINT TO LOG POINT	LENGTH MILES	LENGTH FT.	WP FEET	TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YD.	PROPOSED PAVEMENT 407 TACK COAT @ 0.075 gal./s.y. GALS.	407 TACK COAT FOR INTERMEDIATE COURSE @ 0.050 gal./s.y. GALS.	ASPHALT CONCRETE THICK INCHES	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446) CU.YD.	ASPHALT CONCRETE THICK INCHES	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446) CU.YD.	254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (3 1/4") SQ. YD.
	SR 16	MUS	11.70 - 14.86	3.16	16685	24	1	446	44494	3337	2225	1.75	2163	1.50	1854	44494
	SR 16	COS	0.00-7.36	7.36	38861	24	1	446	103630	7772	5182	1.75	5038	1.50	4318	103630
	SR 16	COS	7.36 - 7.57	0.21	1109	36	1	446	4436	333	222	1.75	216	1.50	185	4436
	SR 16	COS	7.57 - 8.93	1.36	7181	48	2	446	38299	2873	1915	1.75	1862	1.50	1596	38299
	SR 16	COS	8.93 - 9.84	0.91	4805	48	2	446	25627	1922	1282	1.75	1246	1.50	1068	25627
			TURN LANES													
	SR 16	COS	3.40-3.72&4.41-4.78		3695	0'- 12'	1	446	3170	238	159	1.75	155	1.50	133	3170
	TOTALS									**16,475**	**10,985**		**10,680**		**9,154**	**219,656**

TOTALS CARRIED TO THE GENERAL SUMMARY

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CALCULATED | CHECKED

ASPHALT CONCRETE

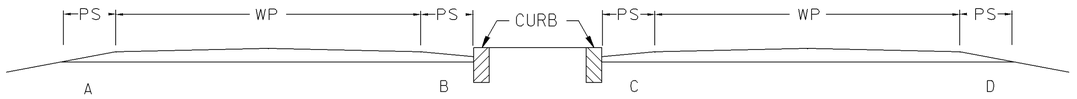
MUS-16-11.70
COS-16-0.00

7
16

PAVED SHOULDERS

TYPICAL 1

TYPICAL 2



PAVED SHOULDER DATA

COUNTY	ROUTE	LOG POINT TO LOG POINT	LENGTH MILES	LENGTH FT.	TYPICAL	"W" PROPOSED WIDTH (FT.) A	B	C	D	SHOULDER AREA SQ.YDS.	407 TACK COAT FOR INTERMEDIATE COURSE 0.05 gal./s.y. GALLON	407 TACK COAT 0.075 gal./s.y. GALLON	442 ASPHALT CONCRETE THICK INCHES	INTERMEDIATE COURSE, 19 MM, TYPE A (446) CU.YD.	THICK INCHES	SURFACE COURSE 12.5 MM, TYPE A (446) CU.YD.		254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (3 1/4") SQ.YD.	617 COMPACTED AGGREGATE, AS PER PLAN 2' X 2.0" AVER. THICKNESS TO BACK UP PAVED SHOULDERS CU.YD					
MUS	SR 16	11.70 - 14.86	3.16	16685	1	3	3			11124	557	835	1.75	541	1.50	464		11124	412					
COS	SR 16	0.00-6.57	6.57	34690	1	3	3			23127	1157	1735	1.75	1125	1.50	964		23127	857					
COS	SR 16	6.57-6.67	0.10	528	1	4	4			469	24	35	1.75	23	1.50	20		469	13					
COS	SR 16	6.67-6.75	0.08	422	1	4	4			375	19	28	1.75	19	1.50	16		375	10					
COS	SR 16	6.75-7.36	0.61	3221	1	3	3			2147	108	161	1.75	105	1.50	90		2147	80					
COS	SR 16	7.36-7.57	0.21	1109	1	4	4			986	50	74	1.75	48	1.50	41		986	28					
COS	SR 16	7.57-9.84	2.27	11986	2	4	1.5	1.5	4	14650	733	1099	1.75	713	1.50	611		14650	296					
		TOTALS									2,648	3,967		2,574		2,206		52,878	1,696					

TOTALS CARRIED TO THE GENERAL SUMMARY

CALCULATED

CHECKED

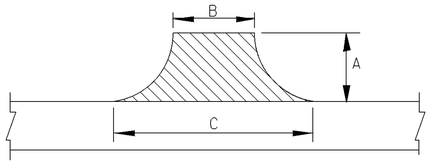
PAVED SHOULDERS

MUS-16-11.70
COS-16-0.00

8
16

c0160001.mps 2/27/09

EXTRA AREAS



INTERSECTIONS

* (NOTE: AREAS FOR RAMP @ S.R. 541 INCLUDES AREA FOR DECELERATION/ACCELERATION LANES)

	ROUTE	COUNTY		SIDE	DESCRIPTION	INTERSECTIONS A IN FEET	INTERSECTIONS B IN FEET	INTERSECTIONS C IN FEET	AREA IN SQ.YD.	407 TACK COAT @ 0.075 gal./s.y. GAL.	407 TACK COAT FOR INTERMEDIATE COURSE @ 0.05 gal./s.y. GAL.	442 ASPHALT CONCRETE THICK INCH	442 INTERMEDIATE COURSE, 19 MM, TYPE A (446) CU.YD.	442 THICK INCH	442 SURFACE COURSE, 12.5 MM, TYPE A (446) CU.YD.	EXISTING SURFACE	254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (2") SQ.YD.				
	SR 16	MUS		RT	BASIN RD	75	19	150	704	53	36	1.75	34.2	1.50	29.3	ASPHALT	704				
				RT	BASIN RD	90	17	125	710	54	36	1.75	34.5	1.50	29.6	ASPHALT	710				
				LT	COOK LANE	18	15	41	56	5	3	1.75	2.7	1.50	2.3	ASPHALT	56				
				RT	STILWELL RD	25	25	50	104	8	6	1.75	5.1	1.50	4.3	ASPHALT	104				
				RT	OAK ST	15	18	46	53	4	3	1.75	2.6	1.50	2.2	ASPHALT	53				
				RT	STREET IN ADAMS MILLS	15	14	25	33	3	2	1.75	1.6	1.50	1.4	ASPHALT	33				
				LT	BRIDGE STREET	45	22	94	290	22	15	1.75	14.1	1.50	12.1	ASPHALT	290				
				RT	BRIDGE STREET	30	20	60	133	10	7	1.75	6.5	1.50	5.5	ASPHALT	133				
				RT	STREET IN ADAMS MILLS	15	10	30	33	3	2	1.75	1.6	1.50	1.4	ASPHALT	33				
				RT	STREET IN ADAMS MILLS	20	14	41	61	5	4	1.75	3.0	1.50	2.5	ASPHALT	61				
				RT	STREET IN ADAMS MILLS	15	13	27	33	3	2	1.75	1.6	1.50	1.4	ASPHALT	33				
				RT	STREET IN ADAMS MILLS	15	15	42	48	4	3	1.75	2.3	1.50	2.0	ASPHALT	48				
				RT	ROAD	20	14	45	66	5	4	1.75	3.2	1.50	2.8	ASPHALT	66				
	SR 16	COS		LT	CO RD 75	45	27	100	318	24	16	1.75	15.5	1.50	13.3	ASPHALT	318				
				RT	TWP 483C	50	20	84	289	22	15	1.75	14.0	1.50	12.0	ASPHALT	289				
				LT	TWP 288	25	25	87	156	12	8	1.75	7.6	1.50	6.5	ASPHALT	156				
				RT	TWP 288	50	21	100	336	26	17	1.75	16.3	1.50	14.0	ASPHALT	336				
				LT	TWP 1162	30	31	85	193	15	10	1.75	9.4	1.50	8.0	ASPHALT	193				
				LT	TWP 287	45	21	87	270	21	14	1.75	13.1	1.50	11.3	ASPHALT	270				
				RT	TWP 287	45	26	97	308	24	15	1.75	15.0	1.50	12.8	ASPHALT	308				
				RT	TWP 480	80	28	114	473	36	24	1.75	23.0	1.50	19.7	ASPHALT	473				
				LT	TWP 483	50	21	87	300	23	15	1.75	14.6	1.50	12.5	ASPHALT	300				
				LT	TWP 285	45	23	91	285	22	14	1.75	13.9	1.50	11.9	ASPHALT	285				
				RT	CYCLOPS RD	40	30	148	396	30	20	1.75	19.3	1.50	16.5	ASPHALT	396				
				LT	TWP 347	134	32		238	18	12	1.75	11.6	1.50	9.9	ASPHALT	238				
				RT	TWP 279	25	21	53	103	8	5	1.75	5.0	1.50	4.3	ASPHALT	103				
				LT	TWP 347	55	21	81	312	24	16	1.75	15.2	1.50	13.0	ASPHALT	312				
				LT	TWP 347	150	30		250	19	13	1.75	12.2	1.50	10.4	ASPHALT	250				
					SR 83	80	40	210	1111	84	56	1.75	54.0	1.50	46.3	ASPHALT	1111				
	SR 16	COS			S.R. 16 @ S.R. 541 - RAMPS																
				RT	* S.E. RAMP				* 2670	200	134	1.75	129.8	1.50	111.3	ASPHALT	2670				
				RT	* N.E. RAMP				* 3190	240	160	1.75	155.1	1.50	132.9	ASPHALT	3190				
				LT	* S.W. RAMP				* 2800	210	140	1.75	136.1	1.50	116.7	ASPHALT	2800				
				LT	*N.W. RAMP				* 1430	108	72	1.75	69.5	1.50	59.6	ASPHALT	1430				
			TOTALS							1,345	899		863.2		739.7		17,752				

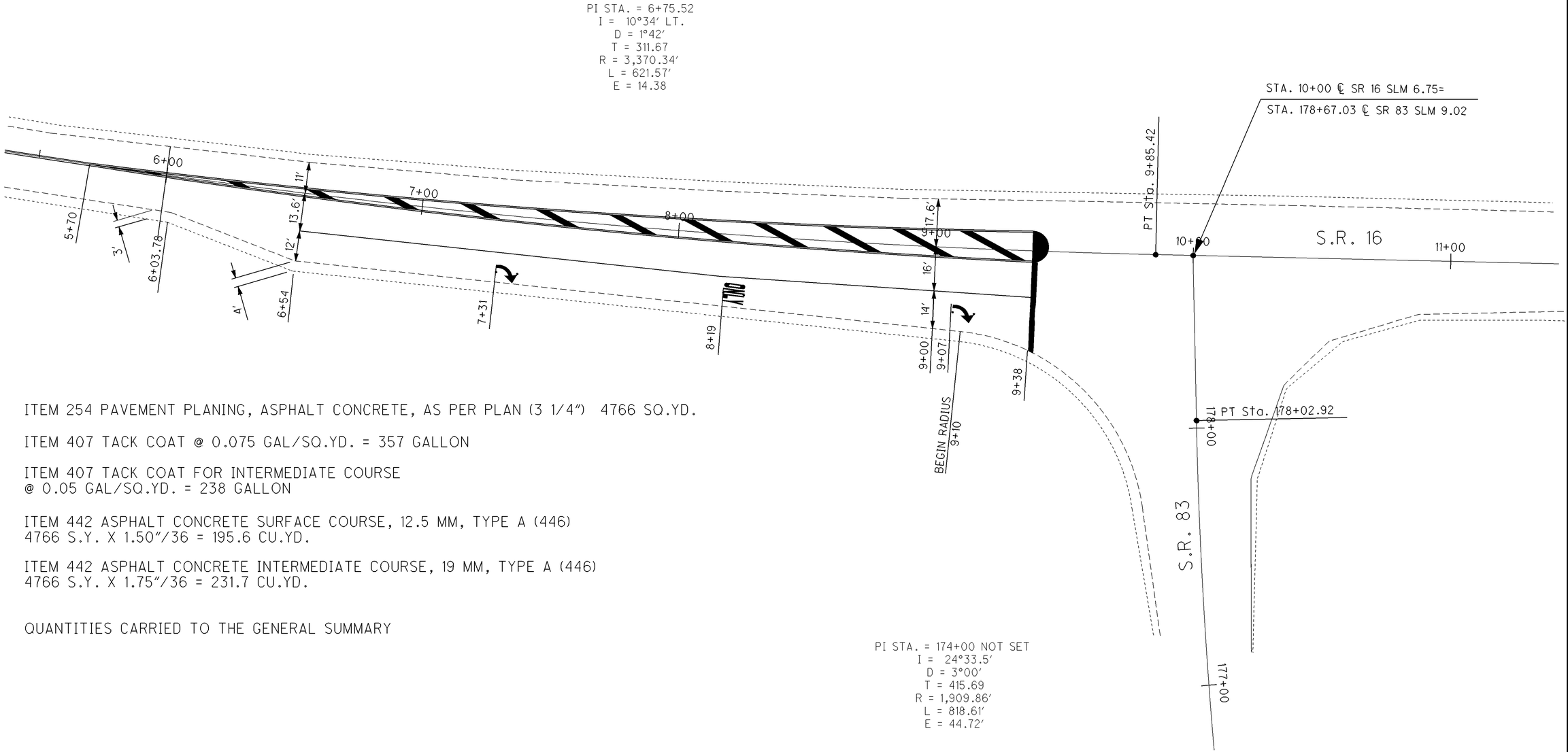
TOTALS CARRIED TO THE GENERAL SUMMARY

CALCULATED | CHECKED

EXTRA AREAS

MUS-16-11.70
COS-16-0.00

C0160001.MEA 01-06-00



ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (3 1/4") 4766 SQ.YD.

ITEM 407 TACK COAT @ 0.075 GAL/SQ.YD. = 357 GALLON

ITEM 407 TACK COAT FOR INTERMEDIATE COURSE
@ 0.05 GAL/SQ.YD. = 238 GALLON

ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)
4766 S.Y. X 1.50"/36 = 195.6 CU.YD.

ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446)
4766 S.Y. X 1.75"/36 = 231.7 CU.YD.

QUANTITIES CARRIED TO THE GENERAL SUMMARY

HORIZONTAL
SCALE IN FEET

CALCULATED | CHECKED

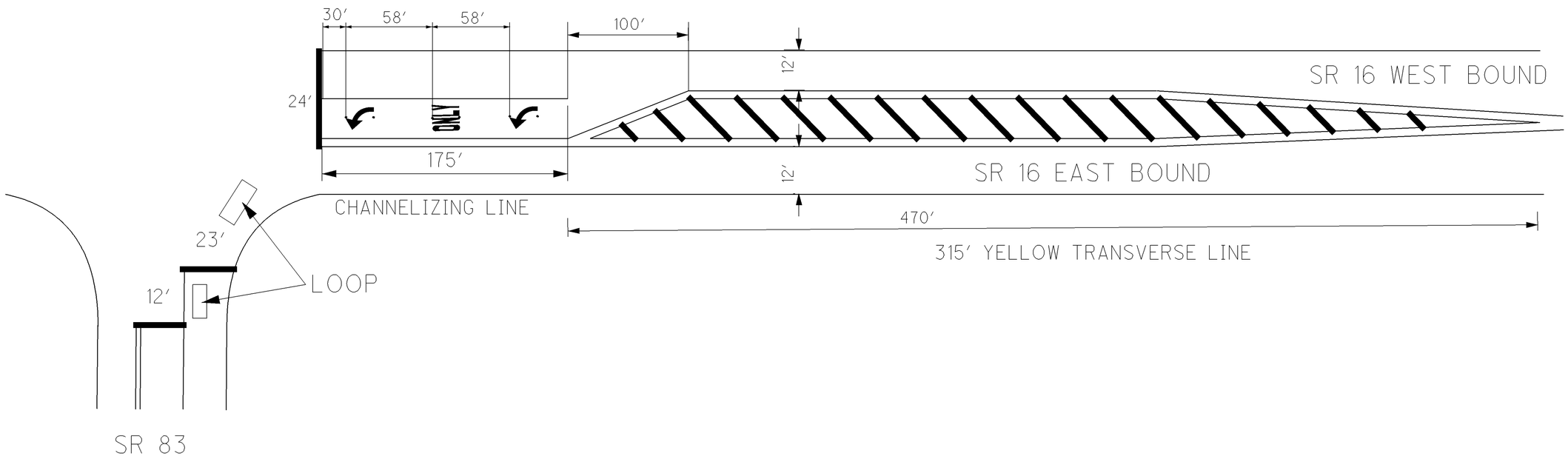
PLAN SHEET- TURN LANE @ SR16 & SR83

MUS-16-11.70
COS-16-0.00

10
16

C0160001.MPL 01-22-00

SR 16 & SR 83 INTERSECTION



AUXILIARY MARKING DETAIL
S.R. 16 * S.R. 83 INTERSECTION

MUS-16-11.70
COS-16-0.00

11
16

CALCULATED

CHECKED

C016000I.DGN 2/3/09
P:\MUS\25849\Design\Roadway\Plan_Sheets\c016000I.dgn 12-MAR-2009 9:13AM rgossett

CENTER LINE SUB-SUMMARY

	CO.	ROUTE	S.L.M. FROM	S.L.M. TO	CENTER LINES QUANTITIES TOTAL MILES	CENTER LINES QUANTITIES EQUIVALENT SOLID LINE					TOTAL CENTER LINE MILES	REMARKS
	MUS	SR16	11.700	14.860	3.160	1.583						
	COS	SR16	0.000	7.370	7.53	5.353						
			7.370	7.590	0.23	0.570						
		TOTAL			10.920							

TOTAL CARRIED TO THE GENERAL SUMMARY

EDGE LINE SUB-SUMMARY

	CO.	ROUTE	S.L.M. FROM	S.L.M. TO	WHITE EDGE LINE QU. TOTAL MILES	WHITE EDGE LINE QU. HIGHWAY	WHITE EDGE LINE QU. RAMP	YELLOW EDGE LINE QU. TOTAL MILES	YELLOW EDGE LINE QU. HIGHWAY	YELLOW EDGE LINE QU. RAMP					EDGE LINE TOTAL MILES	REMARKS
	MUS	SR16	11.70	14.86	6.32	6.32									6.32	
	COS	SR16	0.00	7.36	14.72	14.72									14.72	
		SR16-E.B. & W.B.	7.36	9.84	2.84	2.84		2.84	2.84						9.92	QUANT. E.B. & W.B. LANES
		RAMPS			0.61		0.61	0.61		0.61					1.22	
		TOTAL													32.180	

TOTAL CARRIED TO THE GENERAL SUMMARY

CALCULATED | CHECKED

CENTER/EDGE LINE SUB-SUMMARY

MUS-16-11.70
COS-16-0.00

C0160001.TCL 3/2/09

LANE LINE SUB-SUMMARY

	CO.	ROUTE	SLM FROM	SLM TO	QUANTITIES TOTAL MILES	QUANTITIES DASHED	
	COS	SR 16 (E.B.)	7.60	9.84	2.24	2.24	
		SR 16 (W.B.)	7.57	9.84	2.27	2.27	
		TOTAL			4.51		

TOTAL CARRIED TO THE GENERAL SUMMARY

CALCULATED | CHECKED

LANE LINE SUB-SUMMARY

MUS-16-11.70
COS-16-0.00

13
16

C0160002.LLS 3/2/09

PAVEMENT MARKING SUB-SUMMARY

644 THERMOPLASTIC

ROUTE	SIDE	24" TRANSVERSE LINES		STOP LINE	12" CROSSWALK LINES	8" CROSSWALK LINES	WORD ON PAVEMENT				LANE ARROWS					8" CHANNEL LINE	REMARKS
							ONLY		SCHOOL		TURN		THRU				
		WHITE	YELLOW	24"	WHITE	WHITE	72"	96"	72"	96"	LEFT	RIGHT					
SR 16 MUSKINGUM COUNTY																	
BASIN RD	RT			60													PLACE 23' FROM SR 16 CL
BASIN RD	RT			30													PLACE 27' FROM SR 16 CL
COOK LANE	LT			13													PLACE 21' FROM SR 16 CL
STILWELL RD	RT			25													PLACE 21' FROM SR 16 CL
OAK ST	RT			13													PLACE 19' FROM SR 16 CL
STREET IN ADAMS MILLS	RT			12													PLACE 19' FROM SR 16 CL
BRIDGE STREET	LT			37													PLACE 22' FROM SR 16 CL
BRIDGE STREET	RT			20													PLACE 22' FROM SR 16 CL
STREET IN ADAMS MILLS	RT			10													PLACE 22' FROM SR 16 CL
STREET IN ADAMS MILLS	RT			9													PLACE 22' FROM SR 16 CL
STREET IN ADAMS MILLS	RT			11													PLACE 22' FROM SR 16 CL
STREET IN ADAMS MILLS	RT			14													PLACE 22' FROM SR 16 CL
ROAD	RT			16													PLACE 22' FROM SR 16 CL
SUB-TOTAL				**270**													
SR 16 COSHOCTON COUNTY																	
CO RD 75	LT			36													PLACE 26' FROM SR 16 CL
TWP 483C	RT			30													PLACE 22' FROM SR 16 CL
TWP 288	LT			38													PLACE 25' FROM SR 16 CL
TWP 288	RT			50													PLACE 24' FROM SR 16 CL
TWP 1162	LT			29													PLACE 21' FROM SR 16 CL
TWP 287	LT			30													PLACE 20' FROM SR 16 CL
TWP 287	RT			26													PLACE 24' FROM SR 16 CL
TWP 480	RT			24													PLACE 22' FROM SR 16 CL
TWP 483	LT			29													PLACE 24' FROM SR 16 CL
TWP 285	LT			36													PLACE 22' FROM SR 16 CL
CYCLOPS RD	RT			42													PLACE 24' FROM SR 16 CL
TWP 347	LT			14													PLACE AS DIRECTED
TWP 279	RT			17													PLACE 24' FROM SR 16 CL
TWP 347	LT			26													PLACE 22 ' FROM SR 16 CL
TWP 347	LT			30													PLACE AS DIRECTED
ON SR 16 AT SR 83			170	35			1					2				284	SEE DETAIL SHEET
SR 83				35												75	SEE DETAIL SHEET
ON SR 16 AT SR 83 SLM			315	24			1				2					175	SEE DETAIL SHEET
TURN LANES ON SR 16 @ (3.40-3.72&4.41-4.78)			1400				3				6					690	REPLACE AT SAME LOCATION AS EXIST.
SUB-TOTALS			**1885**	**551**			**5**				**8**	**2**				**1224**	
SR 16 RAMPS @ S.R. 541		170		88	335								1			797	PLACE AS DIRECTED
TOTALS		**170**	**1,885**	**909**	**335**		**5**				**8**	**2**	**1**			**2,021**	

TOTALS CARRIED TO THE GENERAL SUMMARY

CALCULATED | CHECKED

PAVEMENT MARKING

MUS-16-11.70
COS-16-0.00

14
16

C0160001.TAS 3/2/09

RPM LOCATION SUB-SUMMARY

LOCATION				RPM	ITEM QUANTITIES				PRISMATIC RETRO-REFLECTOR COLORS					REMARKS
									ONE-WAY		TWO-WAY			
COUNTY	ROUTE	S.L.M. MILES FROM	S.L.M. MILES TO	RPM	RPM				WHITE	YELLOW	YELLOW/ YELLOW	WHITE/ RED	YELLOW/ RED	
MUS	SR 16	11.70	14.86		210						210			
COS	SR 16	0.00	0.13		9						9			
COS	SR 16	0.13	0.20		9						9			PC 0.13 PT 0.20 L=370' DEG 7
COS	SR 16	0.20	6.67		427						427			
COS	SR 16	6.67	6.75		35				16		11	8		APPROACH AT SR 83
COS	SR 16	6.75	6.87		35				16		15	4		APPROACH AT SR 83
COS	SR 16	6.87	7.36		32						32			
COS	SR 16	7.36	7.61		131				66	56	6	3		
COS	SR 16	7.61	8.94		176							176		
COS	SR 16	TURN LANES			142						120	22		
					1,206				**98**	**56**	**839**	**213**		
		TOTAL			**1,206**									

TOTAL CARRIED TO THE GENERAL SUMMARY

C0160001.TRM 3/2/09

RPM LOCATION SUB-SUMMARY

MUS-16-11.70
COS-16-0.00

SHEET NUMBER															ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
3	4	5	7	8	9	10	12	13	14	15										
																			PAVEMENT	
21,120															253	01001	21,120	SQ. YD.	PAVEMENT REPAIR, AS PER PLAN	3
			219,656	52,878	17,752	4,766									254	01001	295,052	SQ. YD.	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	3
			9,154	2,206	740	196									442	10000	12,296	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)	
			10,680	2,574	864	232									442	10100	14,350	CU.YD.	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446)	
			16,475	3,967	1,345	357									407	10000	22,144	GALLON	TACK COAT	
			10,985	2,648	899	238									407	14000	14,770	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
	80,630														407	98000	80,630	FT.	TACK COAT, MISC.: FOR LONGITUDINAL JOINT	4
				1,696											617	10101	1,696	CU.YD.	COMPACTED AGGREGATE, AS PER PLAN	2
										1,206									TRAFFIC CONTROL	
1,206															621	00100	1,206	EACH	RPM	
6															621	54000	1,206	EACH	RAISED PAVEMENT MARKER REMOVED	
							32.180								632	26501	6	EACH	DETECTOR LOOP, AS PER PLAN	3
								4.510							644	00100	32.180	MILE	EDGE LINE	
							10.920								644	00200	4.510	MILE	LANE LINE	
									2,021						644	00300	10.920	MILE	CENTER LINE	
									909						644	00400	2,021	FT.	CHANNELIZING LINE	
									335						644	00500	909	FT.	STOP LINE	
									2,055						644	00600	335	FT.	CROSSWALK LINE	
									11						644	00700	2,055	FT.	TRANSVERSE/DIAGONAL LINE	
									5						644	01300	11	EACH	LANE ARROW	
															644	01410	5	EACH	WORD ON PAVEMENT, 96"	
																			MAINTENANCE OF TRAFFIC	
	200														614	11100	200	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR	
		120													614	12460	120	EACH	WORK ZONE MARKING SIGN	
		20													614	12600	20	EACH	REPLACEMENT DRUM	
11															614	13000	11	CU.YD.	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
	10														614	18601	10	SIGN MNTH	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	4
		9.02													614	20550	9.02	MILE	WORK ZONE LANE LINE, CLASS III, 642 PAINT	
		21.84													614	21550	21.84	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
		4,042													614	23680	4,042	FT.	WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT	
		1,808													614	26610	1,808	FT.	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
		LUMP													614	11000	LUMP		MAINTAINING TRAFFIC	
															619	16000	5	MONTH	FIELD OFFICE, TYPE A	
															623	10000	LUMP		CONSTRUCTION LAYOUT STAKES	
															624	10000	LUMP		MOBILIZATION	

CALCULATED J.C.

DRAWN R.G.

GENERAL SUMMARY

MUS-16-11.70
COS-16-0.00

C016_GGS_001.DGN