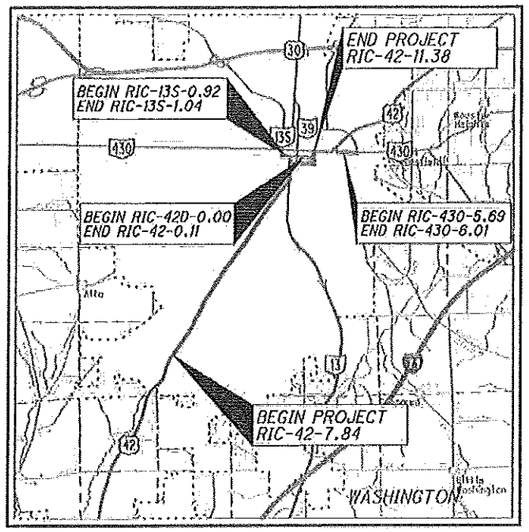


LOCATION MAP

LATITUDE: N40°44'25" LONGITUDE: W82°32'39"

SCALE IN MILES
0 1 2 3 4

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

DESIGN DESIGNATIONS

SEE SHEET 2

DESIGN EXCEPTIONS

NONE

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

RIC-42-7.84
RIC-42D-0.00
RIC-13S-0.92
RIC-430-5.69

CITY OF MANSFIELD

MADISON TOWNSHIP
WASHINGTON TOWNSHIP

RICHLAND COUNTY

INDEX OF SHEETS:

PROJECT DESCRIPTION

URBAN PAVING PROJECT THROUGH THE CITY OF MANSFIELD. PROJECT TO INCLUDE PAVEMENT REPAIR, PAVEMENT PLANING, MARKINGS, AND INSTALLATION OF PEDESTRIAN ISLAND.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: N/A ACRES (MAINTENANCE PROJECT)

ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A ACRES (MAINTENANCE PROJECT)

NOTICE OF INTENT EARTH DISTURBED AREA: N/A ACRES (MAINTENANCE PROJECT)

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2016 SPECIFICATIONS

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

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

APPROVED: _____
DATE: 12/22/17 DISTRICT DEPUTY DIRECTOR

APPROVED: _____
DATE: 12-11-17 DIRECTOR, DEPARTMENT OF TRANSPORTATION

PLANS PREPARED BY:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT THREE ENGINEERING

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

ROADWAY ENGINEERS SEAL:

STATE OF OHIO — Dustin J. Vousden E-69285 — REGISTERED PROFESSIONAL ENGINEER

SIGNED: _____
DATE: 12/22/17

STANDARD CONSTRUCTION DRAWINGS

BP-3.1	7/18/14	MT-95.31	7/21/17	TC-41.20	10/18/13				
BP-5.1	7/19/13	MT-95.32	7/21/17	TC-42.20	10/18/13				
BP-7.1	7/18/14	MT-95.60	7/19/13	TC-52.10	10/18/13				
		MT-95.61	7/19/13	TC-52.20	7/21/17				
CB-2.3	1/15/16	MT-97.12	1/20/17	TC-71.10	1/20/17				
		MT-99.20	7/21/17	TC-82.10	7/17/15				
MH-1.1	1/15/16	MT-101.90	7/21/17						
		MT-105.10	7/19/13						
DM-4.3	1/15/16	MT-110.10	7/19/13						
DM-4.4	1/15/16								
RM-1.1	7/18/14								

SUPPLEMENTAL SPECIFICATIONS

800	1/19/18
821	4/20/12
830	1/17/14
831	10/21/16
832	1/17/14

SPECIAL PROVISIONS

FEDERAL PROJECT NO.	E140(813)
PID NO.	98571
CONSTRUCTION PROJECT NO.	
RAILROAD INVOLVEMENT	NONE
	RIC-42-7.84
	1 / 15

RIC - US 42-07.84
180206 PID - 98571
Dist 3 3/22/2018 Conformed Set

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

2ND STREET
DESIGN DESIGNATION (RIC-13S-0.92 TO 1.04)

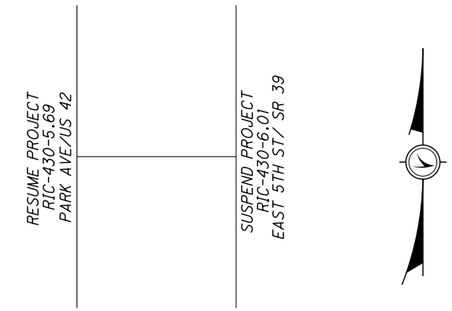
CURRENT ADT (2018)	1800
DESIGN YEAR ADT (2030)	1800
DESIGN HOURLY VOLUME (2030)	220
DIRECTIONAL DISTRIBUTION	0.54
TRUCKS (24 HOUR B&C)	0.04
DESIGN SPEED	25
LEGAL SPEED	30
DESIGN FUNCTIONAL CLASSIFICATION	URBAN PRINCIPAL ARTERIAL
NHS PROJECT	YES

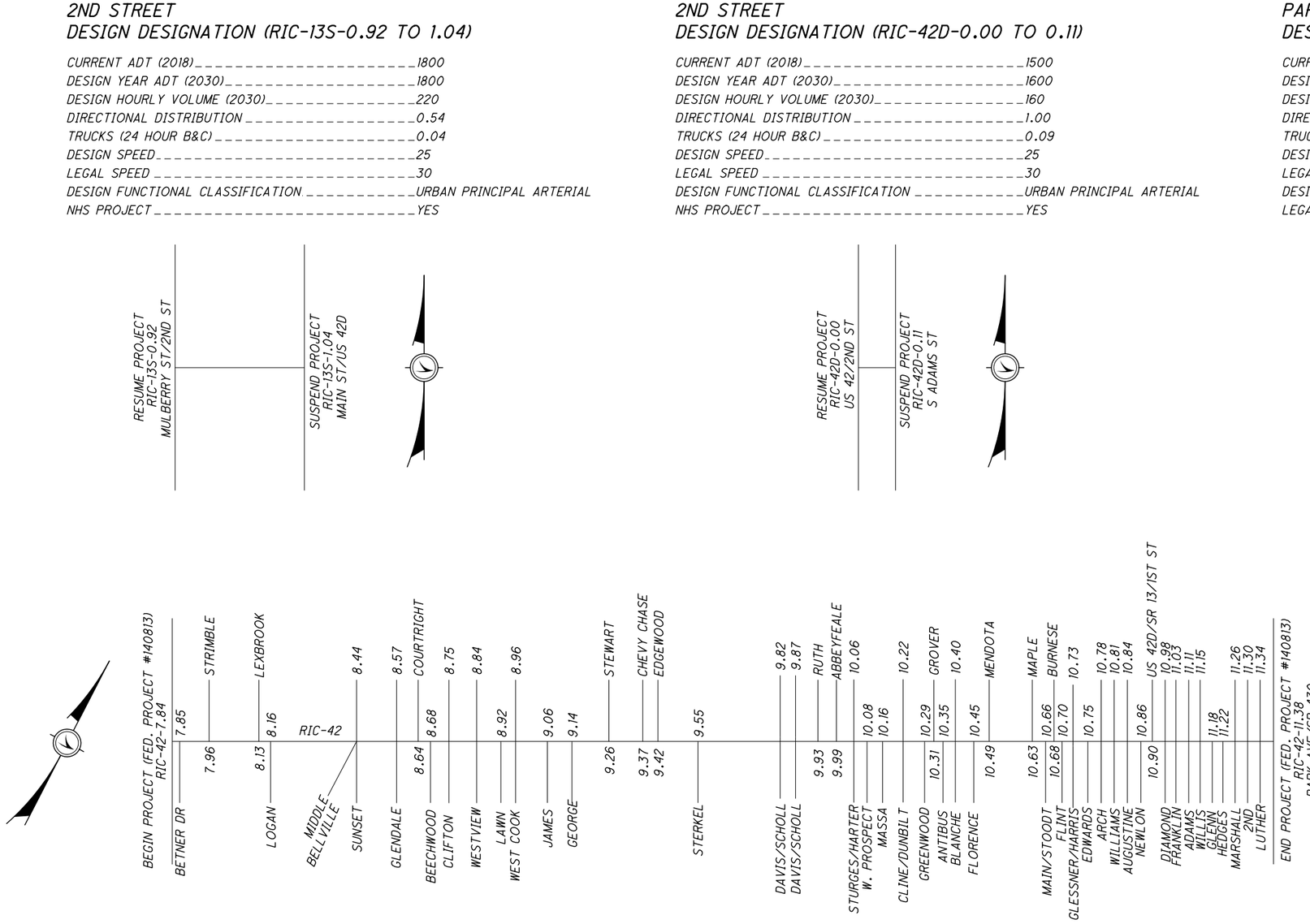
2ND STREET
DESIGN DESIGNATION (RIC-42D-0.00 TO 0.11)

CURRENT ADT (2018)	1500
DESIGN YEAR ADT (2030)	1600
DESIGN HOURLY VOLUME (2030)	160
DIRECTIONAL DISTRIBUTION	1.00
TRUCKS (24 HOUR B&C)	0.09
DESIGN SPEED	25
LEGAL SPEED	30
DESIGN FUNCTIONAL CLASSIFICATION	URBAN PRINCIPAL ARTERIAL
NHS PROJECT	YES

PARK AVENUE EAST
DESIGN DESIGNATION (RIC-430-5.69 TO 6.01)

CURRENT ADT (2018)	4500
DESIGN YEAR ADT (2030)	4500
DESIGN HOURLY VOLUME (2030)	400
DIRECTIONAL DISTRIBUTION	0.61
TRUCKS (24 HOUR B&C)	0.05
DESIGN SPEED	35
LEGAL SPEED	40
DESIGN FUNCTIONAL CLASSIFICATION	URBAN MINOR ARTERIAL
LEGAL SPEED	NO





1ST STREET
DESIGN DESIGNATION (RIC-42-10.90 TO 11.21)

CURRENT ADT (2018)	2800
DESIGN YEAR ADT (2030)	2900
DESIGN HOURLY VOLUME (2030)	260
DIRECTIONAL DISTRIBUTION	1.00
TRUCKS (24 HOUR B&C)	0.13
DESIGN SPEED	35
LEGAL SPEED	40
DESIGN FUNCTIONAL CLASSIFICATION	URBAN PRINCIPAL ARTERIAL
NHS PROJECT	YES

LEXINGTON AVENUE
DESIGN DESIGNATION (RIC-42-7.84 TO 10.06)

CURRENT ADT (2018)	14000
DESIGN YEAR ADT (2030)	14000
DESIGN HOURLY VOLUME (2030)	1400
DIRECTIONAL DISTRIBUTION	0.61
TRUCKS (24 HOUR B&C)	0.05
DESIGN SPEED	35
LEGAL SPEED	40
DESIGN FUNCTIONAL CLASSIFICATION	URBAN PRINCIPAL ARTERIAL
NHS PROJECT	YES

LEXINGTON AVENUE
DESIGN DESIGNATION (RIC-42-10.06 TO 10.65)

CURRENT ADT (2018)	8900
DESIGN YEAR ADT (2030)	9000
DESIGN HOURLY VOLUME (2030)	810
DIRECTIONAL DISTRIBUTION	0.56
TRUCKS (24 HOUR B&C)	0.05
DESIGN SPEED	35
LEGAL SPEED	40
DESIGN FUNCTIONAL CLASSIFICATION	URBAN PRINCIPAL ARTERIAL
NHS PROJECT	YES

MAIN STREET
DESIGN DESIGNATION (RIC-42-10.65 TO 10.90)

CURRENT ADT (2018)	16000
DESIGN YEAR ADT (2030)	16000
DESIGN HOURLY VOLUME (2030)	1400
DIRECTIONAL DISTRIBUTION	0.52
TRUCKS (24 HOUR B&C)	0.05
DESIGN SPEED	35
LEGAL SPEED	40
DESIGN FUNCTIONAL CLASSIFICATION	URBAN PRINCIPAL ARTERIAL
NHS PROJECT	YES

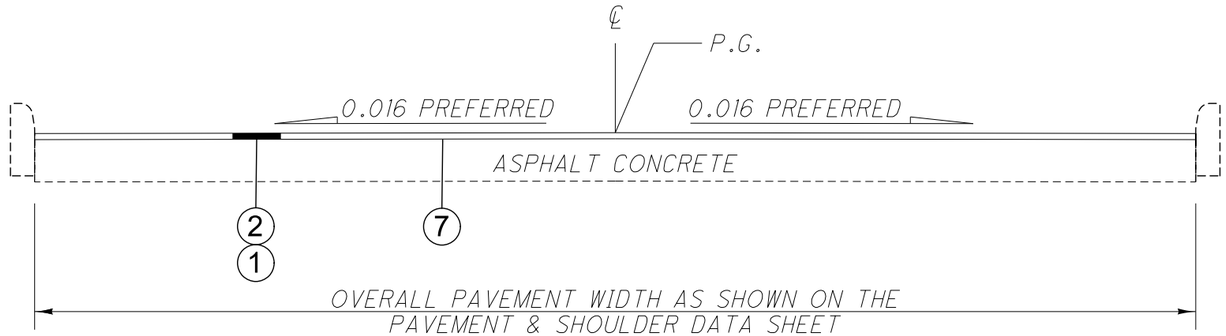
HEDGES
DESIGN DESIGNATION (RIC-42-11.21 TO 11.38)

CURRENT ADT (2018)	2400
DESIGN YEAR ADT (2030)	2400
DESIGN HOURLY VOLUME (2030)	240
DIRECTIONAL DISTRIBUTION	0.54
TRUCKS (24 HOUR B&C)	0.04
DESIGN SPEED	35
LEGAL SPEED	40
DESIGN FUNCTIONAL CLASSIFICATION	URBAN PRINCIPAL ARTERIAL
NHS PROJECT	YES

CALCULATED ERS
CHECKED DJV

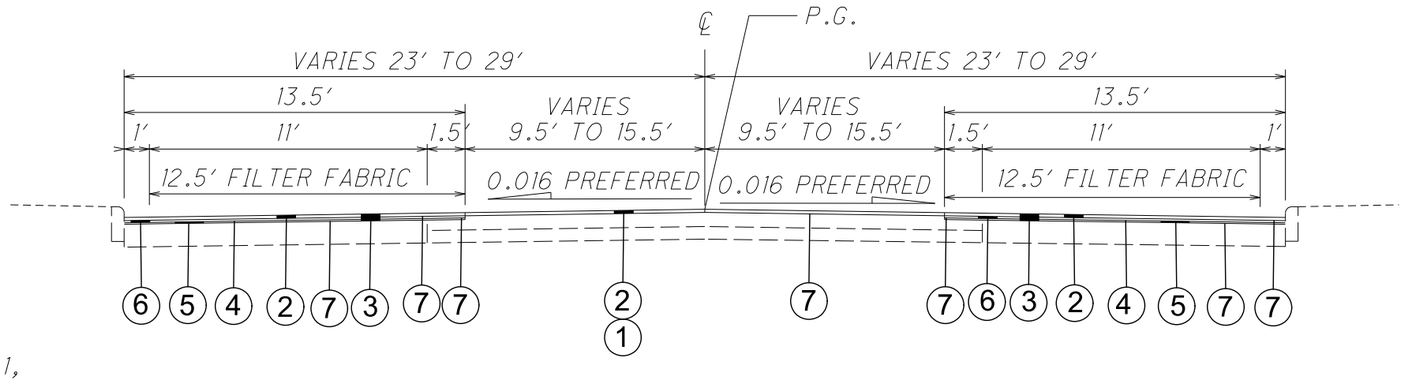
STRAIGHT LINE DIAGRAMS

RIC-42-7.84



TYPICAL 1

US 42 10.66 TO 11.38 = 0.72 MI
US 42D 0.00 TO 0.11 = 0.11 MI
SR 13S 0.92 TO 1.04 = 0.12 MI
SR 430 5.69 TO 6.01 = 0.32 MI
TOTAL = 1.27 MI



TYPICAL 2

US 42 7.84 TO 10.66 = 2.82 MI

PROPOSED LEGEND

1. 254 1.5″ PAVEMENT PLANING, ASPHALT CONCRETE
2. 441 1.5″ ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN, PG70-22M
3. 254 3.25″ PAVEMENT PLANING, ASPHALT CONCRETE
4. 690 SPECIAL - PAVEMENT OVERLAY FABRIC COMPOSITE
5. 441 3/4″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN (PG64-22)
6. 441 1″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN (PG64-22)
7. 407 NON-TRACKING TACK COAT

CALCULATED ERD
CHECKED DJV

TYPICAL SECTIONS

RIC-42-7.84

3
15

I:\ProjectData\98571N\Design\Roadway\Sheets\Lex Ave typ sec.dgn

GENERAL

UTILITIES

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

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

AT&T OF OHIO
SABRENA LAMPLEY-TALBERT
50 WEST BOWERY STREET
AKRON, OHIO 44308
330-384-8057
SL6343@ATT.COM

CENTURYLINK (FORMERLY SPRINT)
TIM BOWSER
175 ASHLAND ROAD
P.O. BOX 3758
MANSFIELD, OHIO 44907
419-755-7956
TIM.BOWSER@CENTURYLINK.COM

CHARTER COMMUNICATIONS
RON FERDINAND
1575 LEXINGTON AVE.
MANSFIELD, OHIO 44907
330-494-9200 EXT.330-555-3003
RONALD.FERDINAND@CHARTER.COM

CITY OF MANSFIELD
BOB BIANCHI
30 NORTH DIAMOND STREET
MANSFIELD, OHIO 44902
419-755-9702 OFFICE
RBIANCHI@CI.MANSFIELD.OH.US

COLUMBIA GAS OF OHIO
JERROD SWINEHART
1021 N. MAIN ST.
MANSFIELD, OHIO 44903
419-528-1137
JSWINEHART@NISOURCE.COM

OHIO EDISON COMPANY
TRAVIS BALLOG
1717 ASHLAND ROAD
MANSFIELD, OHIO 44905
419-521-6213
BALLOGT@FIRSTENERGYCORP.COM

ONECOMMUNITY
JIM BYRNE
800 W. ST. CLAIR AVENUE
CLEVELAND, OH 44113
216-581-7972
JBYRNE@ONECOMMUNITY.ORG

VERIZON BUSINESS (FORMERLY MCI)
ALLAN GUEST
120 RAVINE STREET
AKRON, OHIO 44303
330-253-8267
ALLAN.GUEST@VERIZONBUSINESS.COM

WINDSTREAM
BUD GRABER
100 OWEN BROWN STREET
HUDSON, OHIO 44236
330-650-8434 OFFICE
PAUL.GRABER.JR@WINDSTREAM.COM

ZAYO GROUP
JAMES POHLOD
4199 KINROSS LAKES PKWY, STE 10
RICHFIELD, OH 44286
330.237.6536
JAMES.POHLOD@ZAYO.COM

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.

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 OFFICE (PIO) BY EMAIL AT D03.PIO@DOT.OHIO.GOV

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

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

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.

WORK LIMITS

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

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.

ROADWAY

ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE

ALL WORK RELATED TO ADJUSTING MONUMENT BOXES TO GRADE WILL BE IN ACCORDANCE TO SECTIONS 623.04 AND 623.05 OF THE 2016 ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE MONUMENT BOX TO BE ADJUSTED 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.

03/S<2<PV
ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE 1 EACH

PAVEMENT

INTERSECTIONS AND DRIVES

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

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.

RECLAIMED MATERIALS

A. PROPOSED MATERIALS SHALL BE FROM THE MANSFIELD CITY STREETS AND FREE OF DEBRIS OR OTHER EXTRANEOUS MATERIALS. IF RECLAIMED MATERIAL IS NOT AVAILABLE FROM ABOVE SOURCE, PROCESS AND BLEND THE RECLAIMED MATERIAL TO BE USED INTO A UNIFORM STOCKPILE AND TEST TO LEVEL 3 MIX DESIGN REQUIREMENTS.

B. THE LOCATION OF PROPOSED RECLAIMED MATERIAL SHALL BE PLAINLY IDENTIFIED. APPROVAL OF SAID MATERIAL INSPECTED BY THE ENGINEER AND/OR HIS QUALITY ASSURANCE REPRESENTATIVE IS REQUIRED PRIOR TO PRODUCTION.

C. THE CONTRACTOR SHALL SUBMIT A MINIMUM OF THREE (3) TESTS FOR ASPHALT CEMENT CONTENT AND GRADATIONS AND ONE ABSOLUTE VISCOSITY ALONG WITH THE JOB MIX FORMULA.

D. THE RECLAIMED MATERIAL SHALL BE CRUSHED AND SCREENED PRIOR TO INCORPORATION INTO THE MIX. ANY OVERSIZED MATERIAL MAY BE CAUSE FOR REJECTION.

E. PLANT PRODUCTION RATES SHALL BE AT A TPH (TONS PER HOUR) RATE TO ASSURE ADEQUATE BLENDING OF THE RECYCLED WITH THE VIRGIN MATERIALS.

F. FAILURE TO INCORPORATE THE RECLAIMED MATERIAL INTO THE MIX IN A MANNER SATISFACTORY TO THE ENGINEER AND HIS QUALITY ASSURANCE REPRESENTATIVE MAY RESULT IN LOAD REJECTION UNTIL CORRECTIONS ARE MADE.

QUALITY CONTROL

ON THIS PROJECT, THE CONTRACTOR SHALL PROVIDE AN ASPHALT CONTENT NUCLEAR GAUGE (AC GAUGE) FOR USE IN CONTROLLING THE PRODUCTION OF ALL ASPHALT CONCRETE MIXES. THIS AC GAUGE SHALL BE A TROXLER 3241-C WITH A 100MCI +/- 10 PERCENT AM-241: BE NEUTRON SOURCE OR AN EQUIVALENT GAUGE WITH A 100MCI +/- 10 PERCENT SOURCE AND THE CAPABILITY OF TRANSFERRING ITS CALIBRATION DATA IN ACCORDANCE WITH SUPPLEMENT 1043 TO A TROXLER GAUGE MEETING THE ABOVE REQUIREMENTS. THE AC GAUGE SHALL BE CALIBRATED IN ACCORDANCE WITH SUPPLEMENT 1043 BY AN EMPLOYEE OF THE CONTRACTOR WITH A LEVEL I RATING (SUPPLEMENT 1041). THE QUALITY ASSURANCE REPRESENTATIVE SHALL BE PRESENT WHEN THE AC GAUGE IS CALIBRATED.

THE CONTRACTOR'S U.S. NUCLEAR REGULATORY COMMISSION MATERIALS LICENSE AND RADIATION SAFETY PROGRAM SHALL ALLOW THE USE OF THE CONTRACTOR'S AC GAUGE BY TESTING LABORATORY PERSONNEL AT THE CONTRACTOR'S PLANT SITE.

RECLAIMED MATERIALS

A. USE ONLY STEEL WHEEL AND PNEUMATIC TIRE TYPES OF ROLLERS MEETING THE MINIMUM REQUIREMENTS OF SECTION 401.13 OF THE SPECIFICATIONS.

B. WHEN THE TONNAGE PRODUCTION PER HOUR AND THE AREA OF COVERAGE REQUIRES THE USE OF THREE (3) ROLLERS, THE ROLLERS WILL BE IN A SEQUENCE THAT ASSURES ADEQUATE COMPACTION AND GOOD AESTHETICS. ANY CHANGE IN ROLLERS REQUIRED MUST BE APPROVED BY THE ENGINEER PRIOR TO THE DAYS PRODUCTION. THE TONNAGE REQUIREMENTS AND SQUARE YARD COVERED SHALL GOVERN, REGARDLESS OF FIELD DENSITY REQUIREMENTS UNDER ODOT SUPPLEMENTAL 1055.

C. ROLLERS SHALL BE OPERATIONAL AT ALL TIMES. SHOULD A ROLLER BREAK DOWN, THE PLACEMENT WILL BE SLOWED TO A LESSER TONNAGE FOR THE NUMBER OF ROLLERS REMAINING UNTIL REPAIRS ARE MADE.

D. VIBRATORY ROLLERS WILL NOT BE PERMITTED ON THIS PROJECT, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

ASPHALT JOB MIX FORMULA REQUIREMENTS

THREE (3) COPIES OF THE FOLLOWING SHALL BE SUBMITTED TO THE QUALITY ASSURANCE REPRESENTATIVE A MINIMUM OF TWO (2) WEEKS PRIOR TO PRODUCTION:

1. PROPOSED JOB MIX FORMULAS, INCLUDING EFFECTIVE CEMENT CONTENT AND ABSORPTION.
2. PLANT OPERATIONS QUALITY CONTROL PLAN(POQCP), SUPPLEMENTAL 1056.
3. CURRENT PLANT CALIBRATION.
4. COMPUTER PRINTOUT IN ACCORDANCE WITH 402.07.
5. AGGREGATE PRODUCER'S QUALITY CONTROL PLANT (QCP), SUPPLEMENTAL 1069.
6. AGGREGATE PRODUCER'S CURRENT PRODUCTION TESTING (INCLUDING QUALITY DATA).

SHOULD ANY OF THE ABOVE ITEMS NOT BE APPROVED, NOTIFICATION WILL BE GIVEN TO THE CONTRACTOR AND HE WILL HAVE TWO (2) WEEKS TO RESUBMIT; ALLOWING TWO (2) WEEKS AFTER RESUBMITTING FOR APPROVAL. NO MIX SHALL BE PRODUCED UNTIL APPROVAL HAS BEEN GRANTED.

ITEM 254 - PATCHING PLANED SURFACE

AN ESTIMATED QUANTITY OF ITEM 254 - PATCHING PLANED SURFACE HAS BEEN SET UP TO BE USED AS DIRECTED BY THE ENGINEER AS DESCRIBED IN CMS 254.04. THE LIMIT OF THE PATCHING DEPTH IS 0 TO 2 IN.

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (CURBED SECTION)

THE INTENT OF THE PLANING IS TO MILL THE SPECIFIED DEPTH ALONG THE CURB CONTINGENT ON THE FOLLOWING: THE MAXIMUM CROSS SLOPE SHALL BE 0.02 WHILE THE MINIMUM CROSS SLOPE SHALL BE 0.01. THE PREFERRED CROSS SLOPE IS 0.016. THE CROWN OF THE PAVEMENT SHALL BE LOCATED BETWEEN THE TRAVELED LANES, OR AS DIRECTED BY THE ENGINEER. THE MILLING DEPTH SHALL BE CONTROLLED FROM THE CURB, TO PRODUCE A CROSS SLOPE IN CONFORMANCE WITH THE ABOVE GUIDELINES.

SPECIAL ATTENTION SHALL BE GIVEN TO SUPERELEVATED CURVES. THE SUPERELEVATION SHALL BE MAINTAINED AND/OR RESTORED, IF NECESSARY, AS DIRECTED BY THE ENGINEER. IF THERE IS NO INFORMATION IN THE PLANS TO CHANGE THE SUPERELEVATION, THE INTENT IS TO MAINTAIN THE EXISTING SUPERELEVATION.

THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE TO ALL CATCH BASINS AND INLETS.

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 MORE THAN FOURTEEN (14) CALENDAR DAYS. FOR EACH CALENDAR DAY BEYOND THE 14 DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE FEE OF $1000.

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 254 - PAVEMENT PLANING, ASPHALT CONCRETE.

CALCULATED ERS CHECKED DJV

GENERAL NOTES

RIC-42-7.84

PAVEMENT (CONTINUED)

ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG70-22M, AS PER PLAN

IN DEVELOPING THE JOB MIX FORMULA(S) THE FOLLOWING SPECIAL TECHNICAL PROVISIONS ARE MADE. EXCEPT AS MODIFIED HEREIN, THE MIXES SHALL MEET ALL THE OTHER REQUIREMENTS OF 441.02-1.

1. THE USE OF RECLAIMED MATERIALS IN THIS ITEM IS PROHIBITED.

2. THE MIX SHALL BE A BLEND OF LIMESTONE COARSE AND NATURAL SAND.

3. THE ASPHALT CEMENT CONTENT SHALL BE A MINIMUM OF 6.8% BY TOTAL MIX WEIGHT.

4. A MAXIMUM OF 10% MANUFACTURED SAND MAY BE USED.

5. THE PERCENTAGE PASSING THE NO. 4 SIEVE SHALL BE 60-65.

6. THE PERCENTAGE PASSING THE NO. 8 SIEVE SHALL BE 35-48.

7. THIS ITEM WILL NOT BE ELIGIBLE FOR ASPHALT BINDER PRICE ADJUSTMENT.

ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), PG64-22, AS PER PLAN

1. A MAXIMUM OF 20% RECLAIMED MATERIALS MAY BE USED.

2. THE MIX SHALL BE A BLEND OF CRUSHED GRAVEL OR LIMESTONE COARSE AND NATURAL SAND.

3. THE ASPHALT CEMENT CONTENT SHALL BE A MINIMUM OF 6.5% BY TOTAL MIX WEIGHT.

4. THE PERCENT PASSING THE NO. 4 SIEVE SHALL BE 60-70.

5. THIS ITEM WILL NOT BE ELIGIBLE FOR ASPHALT BINDER PRICE ADJUSTMENT.

APPROVAL AND ACCEPTANCE

1. ALL JOB MIX FORMULAS SHALL BE A F/A RATIO (FINE TO ASPHALT RATIO) OF 1.0 OR LESS BY WASH TEST.

2. THE USE OF MANUFACTURED SAND WITH RECLAIMED MATERIALS IS NOT ALLOWED. A MAXIMUM OF 10% WILL BE ALLOWED IN VIRGIN MIXES.

3. JMF APPROVALS FOR VOIDS SHALL BE 3.0% TO 3.5%.

4. FIELD ACCEPTANCE ON VOIDS SHALL BE 2.0% TO 4.0%.

5. ALL OTHER TESTING ACCEPTED IN ACCORDANCE WITH 448 SPECIFICATIONS.

ITEM 301, ASPHALT CONCRETE BASE, PG64-22, AS PER PLAN

THIS ITEM SHALL BE USED FOR PAVEMENT REPAIRS ONLY.

1. A MAXIMUM OF 30% RECLAIMED MATERIALS MAY BE USED.

2. THE MIX SHALL BE A BLEND OF CRUSHED GRAVEL OR LIMESTONE COARSE AND NATURAL SAND.

3. THE ASPHALT CEMENT CONTENT SHALL BE A MINIMUM OF 5.5% BY TOTAL MIX WEIGHT.

4. THE PERCENT PASSING THE NO. 4 SIEVE SHALL BE 42-52.

5. THIS ITEM WILL NOT BE ELIGIBLE FOR ASPHALT BINDER PRICE ADJUSTMENT.

PROFILE AND ALIGNMENT

PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. (PREVIOUS CONSTRUCTION PLANS SHOWING THE ORIGINAL ALIGNMENT AND PROFILE, ARE AVAILABLE FOR INSPECTION AT THE ODOT DISTRICT 3 OFFICE). PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXTREME CARE SHALL BE TAKEN TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LONGITUDINAL JOINTS SHALL BE LAPPED AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

PAVEMENT CORING INFORMATION

Cour	Route	SLM	Aspha	Concre	Bri	Location	Directi	Year Cor
RIC	13S	1.00	9.0	0.0	3.5	MWP	NB	2017
RIC	42D	0.00	5.0	0.0	4.0	MWP	SB	2017
RIC	42	8.00	4.0	8.5	0.0	LWP	NB	2017
RIC	42	8.10	4.0	7.0	0.0	LWP	NB	2017
RIC	42	8.50	4.0	7.0	0.0	LWP	NB	2017
RIC	42	8.50	5.0	8.0	0.0	LWP	NB	2017
RIC	42	9.00	5.0	7.0	0.0	RWP	NB	2017
RIC	42	9.00	5.0	7.0	0.0	MWP	NB	2017
RIC	42	9.45	10.0	0.0	0.0	Lane Line	NB	2017
RIC	42	10.00	11.0	0.0	0.0	Lane Line	NB	2017
RIC	42	10.00	4.0	8.0	0.0	RWP	NB	2017
RIC	42	10.30	9.0	0.0	4.0	LWP	NB	2017
RIC	42	10.30	10.0	0.0	4.0	MWP	NB	2017
RIC	42	10.80	5.0	9.0	4.0	LWP	NB	2017
RIC	42	10.80	4.5	8.0	0.0	MWP	NB	2017
RIC	42	10.90	5.0	1.0	4.0	MWP	NB	2017
RIC	42	11.00	6.0	0.0	4.0	LWP	NB	2017
RIC	42	11.10	5.0	0.0	4.0	LWP	NB	2017
RIC	42	11.20	5.0	0.0	4.0	LWP	NB	2017
RIC	42	11.30	9.5	0.0	4.0	MWP	NB	2017

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, MISC.: 301
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. ITEM 253 PAVEMENT REPAIR, AS PER PLAN SHALL BE USED FOR TRANSVERSE REPAIRS AND OTHER SMALL AREA FULL DEPTH REPAIRS AS DIRECTED BY THE ENGINEER. ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR SHALL BE USED FOR LONGITUDINAL REPAIRS.

THE ENGINEER SHALL DESIGNATE THE LOCATIONS AND LIMITS OF THE AREAS TO BE REPAIRED. PAVEMENT REPAIR SHALL BE PERFORMED PRIOR TO PAVEMENT PLANING AND BEFORE PLACEMENT OF THE SURFACE COURSE. THE REPAIR AREAS SHALL BE SAW CUT AND EXCAVATED TO PROVIDE STRAIGHT AND VERTICAL SURFACES AROUND THE PERIMETER OF THE REPAIR AREA. PAVEMENT PLANING MAY BE USED AS AN ALTERNATIVE TO SAW CUTTING AND EXCAVATING. THE PAVEMENT SHALL BE REMOVED WITHIN THE DESIGNATED AREAS BY METHODS WHICH WILL NOT DAMAGE ADJACENT PAVEMENT. THE DEPTH OF REMOVAL SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT. THE MATERIALS REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 105.16 AND 105.17.

THE CONTRACTOR SHALL BE CAPABLE OF PERFORMING PAVEMENT REPAIRS 2 FEET WIDE.

REPLACEMENT MATERIAL SHALL BE ITEM 301, AS PER PLAN OR ITEM 441, TYPE 2, AS PER PLAN AND SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE. ITEM 301 ASPHALT CONCRETE, PG64-22, AS PER PLAN 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, 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, AS PER PLAN OR ITEM 441, TYPE 2, AS PER PLAN MATERIAL WHEN THE PAVEMENT REPAIR IS BETWEEN 3" AND 5" DEEP. ITEM 441, TYPE 2, AS PER PLAN MATERIAL SHALL BE PG64-22 FOR MEDIUM MIX DESIGN PAVEMENTS AND PG64-28 FOR HEAVY MIX DESIGN PAVEMENTS. ALL EXISTING PAVEMENT AREAS WHICH WILL BE IN CONTACT WITH THE PAVEMENT REPAIR SHALL BE CLEANED AND COATED PER CMS 401.14, USING AN ASPHALT MATERIAL COMPLYING WITH 407.02. ALL COMPACTION SHALL BE ACHIEVED BY MECHANICAL METHODS TO THE SATISFACTION OF THE ENGINEER.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. FOR PAYMENT PURPOSES ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR, MISC.: 301 IS TO BE A MAXIMUM OF 5" DEEP AND ITEM 253 PAVEMENT REPAIR, AS PER PLAN IS FOR DEPTHS GREATER THAN 5". IF ANY TRANSVERSE REPAIRS ARE LESS THAN 5", THEY SHALL STILL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR, AS PER PLAN. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER CUBIC YARD, (BY TICKET WEIGHT CONVERSION), OF ITEM 253, PAVEMENT REPAIR, AS PER PLAN OR ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR, MISC.: 301. BELOW IS AN ESTIMATE OF THE REPAIRS AND THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

	MILE	LENGTH	WIDTH	VOLUME
42 NB, LT	7.84	106	4	5
	8	1056	4	52
		211	4	10
		686	4	34
		422	4	21
		422	4	21
		370	4	18
	9	1109	4	55
		581	4	29
		898	4	44
	10	264	4	13
		845	4	42
	11	528	8	52
			TOTAL =	396

	MILE	LENGTH	WIDTH	VOLUME
42 NB, RT	7.84	422	4	21
	8	106	4	5
		264	4	13
		106	4	5
		106	4	5
		211	4	10
	9	317	4	16
		106	4	5
	10	158	4	8
		158	4	8
		106	4	5
		106	4	5
	11	264	4	13
		264	4	13
			TOTAL =	132

	MILE	LENGTH	WIDTH	VOLUME
42 SB, LT	11	528	4	26
		106	4	5
		158	4	8
		158	4	8
		106	4	5
		158	4	8
		264	4	13
		475	4	23
	10	792	4	39
		898	4	44
		792	4	39
		264	4	13
		53	4	3
	9	581	4	29
		370	4	18
		106	4	5
		106	4	5
		211	4	10
		211	4	10
		211	4	10
			TOTAL =	321

	MILE	LENGTH	WIDTH	VOLUME
42 SB, RT	11.38	370	6	27
		264	4	13
	11	264	4	13
		211	4	10
		211	4	10
		317	4	16
		106	4	5
		158	4	8
		53	4	3
		264	4	13
		106	4	5
	10	211	6	16
		317	4	16
		106	4	5
		211	4	10
	9	106	4	5
		158	4	8
		106	4	5
			TOTAL =	188

	MILE	LENGTH	WIDTH	VOLUME
430 WB	6	158	4	43
		317	4	16
		211	4	10
			TOTAL =	69
430 EB	5.69	158	4	8
		158	4	8
		370	6	27
		53	4	3
			TOTAL =	46

	MILE	LENGTH	WIDTH	VOLUME
13 SB	0	106	4	5
			TOTAL =	5
42D EB				
	0	106	4	5
		53	4	3
			TOTAL =	8

ITEM 251 1165 CY
CONTINGENCY 35 CY
TOTAL = 1200 CY

ITEM 253 CONTINGENCY 60 CY

02/NHS/PV/MANS
ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, MISC: 301 100 CY
ITEM 253 - PAVEMENT REPAIR 10 CY

04/S<2/PV
ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, MISC: 1100 CY
ITEM 253 - PAVEMENT REPAIR 50 CY

ITEM 623 - CONSTRUCTION LAYOUT STAKES

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL IDENTIFY AND MEASURE ALL EXISTING CASTING LOCATIONS AND PAVEMENT MARKINGS. IN ADDITION, THE CONTRACTOR SHALL IDENTIFY AND MARK ALL LOCATIONS OF EXISTING ASPHALT WEDGES AT DRIVEWAYS AND ALONG ROADWAY.

ALL INFORMATION SHALL BE RECORDED UTILIZING GLOBAL POSITIONING SYSTEM (GPS) EQUIPMENT WITH DECIMETER ACCURACY. THE INFORMATION SHALL BE SUBMITTED IN A HARD COPY (SHOWN WITH AERIAL VIEW PHOTOMETRY PRINTED TO SCALE IN COLOR), A PDF ELECTRONIC FILE AND IN SHP ELECTRONIC FILE FORMAT COMPATIBLE WITH ARCVIEW 10.2.THE AERIAL VIEW PHOTOS MUST HAVE ALL STREETS LABELED AND ALL INFORMATION SHOWN AS IT IS IN THE FIELD SUCH AS COLOR OF CENTERLINES, LANE LINES, AND SHAPES SUCH AS CATCH BASINS AND MANHOLES, ETC

AS STATED IN PARAGRAPH 1 OF THIS SECTION, ALL PAVEMENT MARKINGS ARE TO BE IDENTIFIED AND THIS INFORMATION IS TO BE USED TO LAYOUT PAVEMENT MARKINGS FOR THE PAVEMENT MARKING CONTRACTOR. THE PRIME CONTRACTOR WILL BE RESPONSIBLE FOR LAYOUT OF ALL EXISTING PAVEMENT MARKINGS OR SUPPLY THE PAVEMENT MARKING CONTRACTOR WITH ALL INFORMATION NEEDED TO LAYOUT MARKINGS. ALL STREETS WILL BE STRIPED THE SAME AS EXISTING MARKINGS, UNLESS OTHERWISE SHOWN IN PLAN OR DIRECTED BY THE ENGINEER..

THE CONTRACTOR SHALL SUPPLY THIS INFORMATION TO THE ENGINEER FOR REVIEW A WEEK PRIOR TO CONSTRUCTION.

ALL WORK MENTIONED ABOVE SHALL BE PAID FOR UNDER THE CONTRACT PRICE OF ITEM 623, CONSTRUCTION LAYOUT STAKES, AS PER PLAN.

CALCULATED ERS CHECKED DJV

GENERAL NOTES

RIC-42-7.84

DRAINAGE

ITEM 611 - MANHOLE ADJUSTED TO GRADE, AS PER PLAN

PRIOR TO PERFORMING ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE, THE CONTRACTOR SHALL REMOVE FOR STORAGE THE CASTING FRAME AND COVER AND DISPOSE OF ANY ASSOCIATED MATERIAL. THE FRAME AND COVER SHALL BE MARKED TO IDENTIFY ITS LOCATION. THE OPEN STRUCTURES SHALL BE PLATED AND THE OPEN AREA FILLED WITH ASPHALT MATERIAL, MATCHING THE ADJACENT GRADE. FOLLOWING THE PAVING OPERATION, THE CONTRACTOR SHALL LOCATE AND EXPOSE THE STRUCTURE. THE CONTRACTOR SHALL RE-INSTALL THE FRAME AND COVER AT ITS ORIGINAL LOCATION. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL VERIFY THAT THE FRAME RING AND COVER ARE FLUSH. THE MANHOLE FRAME AND COVER SHALL BE ADJUSTED TO THE NEW GRADE IN ACCORDANCE WITH THE TYPICAL SECTION SHOWN ON CITY STANDARD DRAWING NO. 1405. ADJUSTING THE MANHOLE BY USING PERMANENT ADJUSTING DEVICES IS NOT PERMITTED.

IF THE ORIGINAL FRAME AND/OR COVER IS UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER, THE CONTRACTOR SHALL OBTAIN A SUITABLE FRAME AND/OR COVER FROM THE CITY S SEWER REPAIR DEPARTMENT. THE SUITABLE FRAME AND/OR COVER WILL BE PROVIDED BY THE CITY AT NO COST TO THE CONTRACTOR.

THE ADJACENT PAVEMENT SHALL BE FLUSH WITH THE CASTING AND CASTING APRON WITH A DIFFERENCE IN ELEVATION NOT TO EXCEED 1/8 INCH. THE ENGINEER WILL INSPECT EACH CASTING USING A 10 FOOT HAND LEVEL PROVIDED BY THE CONTRACTOR.

EXTRA CARE SHALL BE EXERCISED TO PREVENT DEBRIS AND CONCRETE FROM ENTERING THE FLOW OF SEWERS. AFTER THE JOB IS COMPLETE, THE CONTRACTOR SHALL OPEN ALL MANHOLES FOR FINAL INSPECTION.THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE CITY SEWER REPAIR DEPARTMENT TO EXCHANGE OUTDATED "DOME SHAPED" MANHOLE CASTINGS DURING THE ADJUSTMENT PHASE.

PAYMENT FOR ITEM 611, MANHOLE ADJUSTED TO GRADE, AS PER PLAN, SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED TO PERFORM THE ITEM OF WORK AS DESCRIBED IN THIS SECTION. BASIS OF PAYMENT WILL BE AT THE CONTRACT BID PRICE FOR EACH.

MANHOLE QUANTITIES:

SUB TOTAL	226 EACH
15% CONTINGENCY	34 EACH
01/NHS/PV	
TOTAL:	25 EACH
03/S<2/PV	
TOTAL:	235 EACH

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

WATERWORKS

ITEM 638 - VALVE BOX ADJUST TO GRADE, AS PER PLAN

PRIOR TO PERFORMING ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE, THE CONTRACTOR SHALL LOWER THE VALVE BOX OR REMOVE THE VALVE BOX FOR STORAGE AND REMOVE AND DISPOSE OF ANY ASSOCIATED MATERIAL. THE OPEN AREA SHALL BE PLATED AND FILLED WITH ASPHALT MATERIAL, MATCHING THE ADJACENT GRADE. FOLLOWING THE PAVING OPERATION, THE CONTRACTOR SHALL LOCATE AND EXPOSE THE VALVE BOX LOCATION. THE CONTRACTOR SHALL RAISE OR INSTALL THE STORED VALVE BOX. IF THE ORIGINAL VALVE BOX IS UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER, THE CONTRACTOR SHALL OBTAIN A SUITABLE VALVE BOX FROM THE CITY S WATER REPAIR DEPARTMENT. THE SUITABLE VALVE BOX WILL BE PROVIDED BY THE CITY AT NO COST TO THE CONTRACTOR. THE VALVE BOX SHALL BE ADJUSTED TO THE NEW GRADE IN ACCORDANCE WITH THE TYPICAL SECTION SHOWN ON CITY STANDARD DRAWING NO. 1405.

THE ADJACENT PAVEMENT SHALL BE FLUSH WITH THE VALVE BOX AND VALVE BOX APRON WITH A DIFFERENCE IN ELEVATION NOT TO EXCEED 1/8 INCH. THE ENGINEER WILL INSPECT EACH VALVE BOX USING A 10 FOOT HAND LEVEL PROVIDED BY THE CONTRACTOR.

PAYMENT FOR ITEM 638, VALVE BOX ADJUST TO GRADE, AS PER PLAN, SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED TO PERFORM THE ITEM OF WORK AS DESCRIBED IN THIS SECTION. BASIS OF PAYMENT WILL BE AT THE CONTRACT BID PRICE FOR EACH.

VALVE BOX QUANTITIES:

SUB TOTAL	91 EACH
15% CONTINGENCY	14 EACH
01/NHS/PV	
TOTAL:	14 EACH
03/S<2/PV	
TOTAL:	91 EACH

MAINTENANCE OF TRAFFIC

ITEM 614 - MAINTAINING TRAFFIC LANE CLOSURE/REDUCTION REQUIRED

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

ITEM 614 - MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF THE WEEK	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF $50 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

ITEM 614 - MAINTAINING TRAFFIC: GENERAL

ONE 11' LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES. ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH ITEM 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, PLAN DETAILS, STANDARD DRAWINGS, AND AS OUTLINED IN THE CONSTRUCTION AND MAINTENANCE SECTION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES CURRENT EDITION WITH THE LATEST REVISIONS. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED ON THIS PLAN.

THE FOLLOWING REQUIREMENTS SHALL ALSO APPLY:
THE CONTRACTOR SHALL SUBMIT, IN WRITING, A SCHEDULE OF OPERATIONS TO THE ENGINEER AND RECEIVE APPROVAL BEFORE WORK IS STARTED ON THE PROJECT. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL COORDINATE THE MAINTENANCE OF TRAFFIC OPERATIONS WITH THE LOCAL STATE HIGHWAY PATROL AND MANSFIELD POLICE.

NIGHT WORK IS PERMITTED. NO JACK HAMMER WORK BETWEEN 7:00 P.M. TO 7:00 A.M.

THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL PAVEMENT THROUGHOUT THE PROJECT UNDER ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC DURING THE PERIOD FROM THE START OF WORK TO THE COMPLETION OF ALL WORK.

ESTIMATED QUANTITIES - MAINTENANCE OF TRAFFIC

THE FOLLOWING ESTIMATED QUANTITY HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR MAINTENANCE OF TRAFFIC.

01/NHS/PV
ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 50 CY

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.

ITEM 614 - MAINTAINING TRAFFIC

ALL ADVANCE WARNING SIGNS FOR ANY CONDITION WHICH RESTRICTS TRAFFIC SHALL BE ERECTED BEFORE ANY SUCH RESTRICTION IS PUT INTO EFFECT. ALL SUCH SIGNS SHALL BE COVERED OR REMOVED FROM THE VIEW OF TRAFFIC WHEN THEY ARE NOT APPLICABLE, WITH THE APPROVAL OF THE ENGINEER.

IF THE CONTRACTOR FAILS TO COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AS SET FORTH IN THESE PLANS OR WITH PROVISIONS OF THE OMUTCD, AND SUCH FAILURE RESULTS IN A CONDITION AT THE WORK SITE WHICH IS UNSAFE FOR TRAFFIC, THE ENGINEER SHALL SUSPEND WORK UNTIL THE CONTRACTOR COMPLIES WITH THE NECESSARY REQUIREMENTS.

ALL MAINTENANCE OF TRAFFIC SIGNS ARE PAID UNDER ITEM 614 - MAINTAINING TRAFFIC.

WORK OPERATIONS

IN ADDITION TO THE REQUIREMENTS OF SECTION 614 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS THE FOLLOWING SHALL APPLY:

THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAVEL WHERE PRACTICAL. A FLAGGER SHALL BE USED WHERE THE CONTRACTOR'S EQUIPMENT MUST MERGE WITH THE TRAFFIC STREAM.

THE CONTRACTOR SHALL ARRANGE CONSTRUCTION OPERATIONS SO AS TO PREVENT ANY INTERFERENCE TO THE CONTINUOUS FLOW OF TRAFFIC. ALL VEHICLES, EQUIPMENT, WORKERS AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO THE CLOSED LANES UNLESS OTHERWISE APPROVED BY THE ENGINEER.

MAINTENANCE OF TRAFFIC SCHEME

THE CONTRACTOR SHALL SCHEDULE THEIR WORK AND METHODS IN ORDER TO MEET THE INTENT OF THE PLANS. THE PAVEMENT SURFACES TO BE USED BY THE TRAVELING PUBLIC SHALL BE ABLE TO DRAIN FREELY. ALL COSTS TO MAINTAIN THE ROADWAY AS PER THE CONSTRUCTION AND MATERIALS SPECIFICATIONS AND THE PLANS SHALL BE INCLUDED IN ITEM 614 LUMP SUM MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED.

CALCULATED ERS CHECKED DJV

GENERAL NOTES

RIC-42-7.84

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, AND REMOVE WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN(S) ON SITE FOR THE DURATION OF THE PROJECT. THE SIGN(S) 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 WEB SITE BY CLICKING ON THE SERVICES MENU, THEN CLICKING 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(S) SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PCMS TRAILERS SHALL BE DELINEATED ON A PERMANENT BASIS BY AFFIXING CONSPICUITY TAPE CONFORMING TO CMS 614.03 IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

THE PROBABLE PCMS LOCATIONS WILL BE DETERMINED BY THE ENGINEER PRIOR TO BEGINNING WORK ON THIS PROJECT. PLACEMENT, OPERATIONS, MAINTENANCE, AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AD 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 TO FACE AWAY FROM TRAFFIC AND SHALL DISPLAY A MINIMUM OF ONE YELLOW RETRO REFLECTIVE SHEETING SURFACE, A MINIMUM OF 9 INCHES BY 15 INCHES IN 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.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PREPROGRAMMED 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 PREPROGRAMMED 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 REVISION TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA LINK 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. THE CONTRACTOR SHALL ONLY BE PAID FOR PCMS UNITS WHEN THEY ARE IN OPERATION ON THE PROJECT AS SPECIFIED IN THE PLANS OR BY THE ENGINEER.

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

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

IN ADDITION TO THE REQUIREMENTS OF CMS 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 MOUNTED EMERGENCY FLASHING LIGHTS) SHALL BE PROVIDED FOR CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS AS DIRECTED BY THE ENGINEER:

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.

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION.

LAW ENFORCEMENT OFFICERS (LEO'S) SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. THE LEO'S ARE CONSIDERED TO BE EMPLOYED BY THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR ACTIONS. ALTHOUGH THEY ARE EMPLOYED BY THE CONTRACTOR, THE PROJECT ENGINEER SHALL HAVE CONTROL OVER THEIR PLACEMENT. THE OFFICIAL PATROL CAR SHALL BE A PUBLIC SAFETY VEHICLE AS REQUIRED BY THE OHIO REVISED CODE. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEO'S 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 CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THESE SERVICES AND PROVIDE 72 HOURS ADVANCE NOTICE AS REQUIRED BY THE HIGHWAY PATROL LISTED BELOW:

STATE HIGHWAY PATROL

2255 SOUTH MAIN ST
MANSFIELD, OHIO 44907
419.756.2222

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 FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
456 HOURS

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

IF THE CONTRACTOR WISHES TO UTILIZE LEO'S FOR FLAGGING AND TRAFFIC CONTROL OTHER THAN FOR THAT REQUIRED IN THESE PLANS, THEY MAY DO SO AT THEIR OWN EXPENSE.

TRAFFIC CONTROL

PAVEMENT MARKING NOTE

ALL EXISTING PAVEMENT MARKINGS SHALL BE LOCATED AND RECORDED PRIOR TO PLANING OPERATIONS. NEW PAVEMENT MARKINGS SHALL BE REPLACED IN THE SAME LOCATION UNLESS DIRECTED BY THE ENGINEER.

CALCULATED ERS
CHECKED DJV

GENERAL NOTES

RIC-42-7.84

ITEM SPECIAL - PAVEMENT OVERLAY FABRIC COMPOSITE

DESCRIPTION. THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING PAVEMENT OVERLAY FABRIC COMPOSITE AS SHOWN ON THE PLANS AND AT LOCATIONS DESIGNATED BY THE ENGINEER.

MATERIALS. PAVEMENT OVERLAY FABRIC COMPOSITE SHALL BE STARGRID G+PF. COMPOSITE SHALL BE CONSTRUCTED OF LONG CHAIN SYNTHETIC POLYMERS COMPOSED OF AT LEAST 85 PERCENT OF POLYOLEPHINES, POLYESTERS, AND POLYAMIDES BY WEIGHT, SHALL BE RESISTANT TO CHEMICAL ATTACK, MILDEW, ROT, AND ATTACHED TO A FIBERGLASS GRID. COMPOSITE SHALL MEET THE FOLLOWING PHYSICAL REQUIREMENTS:

PROPERTY	SPECIFICATION	TEST METHOD
PAVING FABRIC:		
GRAB TENSILE STRENGTH, LBS	90 MIN.	ASTM D 1682
GRAB ELONGATION, PERCENT	50 MIN.	ASTM D 1682
ASPHALT RETENTION GAL/SY	0.20 MIN	AASHTO M-288
COMPOSITE		
ULTIMATE TENSILE STRENGTH LBS/FT	MD 3426 MIN. XD 3426 MIN.	ASTM D 4595
MAXIMUM ELONGATION	LESS THAN 3%	ASTM D 4595
APERTURE GRID SIZE	1.2" X 1.2"	
MELTING POINT (F)	425 OR GREATER	ASTM D 276
TOTAL COMPOSITE WEIGHT	10.3 OZ/SY MIN	ASTM D 5261

THE COMPOSITE FABRIC SHALL NOT BE EXPOSED TO ULTRAVIOLET RADIATION FOR MORE THAN 7 DAYS. THE FABRIC WIDTH SHALL BE INDICATED ON THE TYPICAL CROSS SECTION AND FURNISHED IN ROLLS.

THE ASPHALT SEALANT SHALL BE PG64-22 MEETING THE REQUIREMENTS OF 702.01.

CERTIFICATION SHALL BE FURNISHED IN ACCORDANCE WITH 101.061 BEFORE THE FABRIC IS PLACED. THE ENGINEER MAY REQUIRE SAMPLING FOR TESTING PURPOSES AS DIRECTED BY THE LABORATORY.

EQUIPMENT. THE CONTRACTOR SHALL PROVIDE EQUIPMENT FOR HEATING AND APPLYING BITUMINOUS MATERIAL. HEATING EQUIPMENT AND DISTRIBUTORS SHALL MEET THE REQUIREMENTS OF 407.

THE MECHANICAL LAYDOWN EQUIPMENT SHALL BE MOUNTED ON A FOUR-WHEELED VEHICLE THAT IS CAPABLE OF DRIVING OVER THE FABRIC WHILE IT IS BEING INSTALLED TO CONTROL THE TENSION ON THE MATERIAL. THE LAYDOWN MACHINE SHALL BE EQUIPPED WITH CLUTCHES TO ADJUST THE ROLL TENSION AND BROOMS TO SMOOTH OUT WRINKLES DURING INSTALLATION. MANUAL LAYDOWN MAY ONLY BE USED IN AREAS INACCESSIBLE TO THE LAYDOWN MACHINE.

CONSTRUCTION DETAILS

1. SURFACE PREPARATION. THE CRACKS AND ENTIRE ROAD SURFACE TO BE TREATED, AND AT LEAST ONE ADDITION FOOT ON EACH SIDE, SHALL BE CLEANED BY SWEEPING, BLOWING, OR OTHER METHODS UNTIL ALL DUST, MUD, CLAY LUMPS, VEGETATION, AND FOREIGN MATERIAL ARE REMOVED ENTIRELY FROM THE PAVEMENT BEFORE THE BITUMINOUS MATERIAL IS APPLIED. CARE SHALL BE EXERCISED TO PREVENT MATERIAL SO REMOVED FROM BECOMING MIXED WITH THE NEW SURFACE. LARGE CRACKS AND POTHOLES SHOULD BE FILLED.

2. APPLICATION OF ASPHALT SEALANT. THE APPLICATION OF THE ASPHALT SEALANT SHALL CONFORM TO THE APPLICABLE PORTIONS OF 407. THE ASPHALT SEALANT SHALL BE UNIFORMLY SPRAYED OVER THE AREA TO BE COVERED BY FABRIC AT A RATE OF 0.25 TO 0.30 GALLON PER SQUARE YARD.

THE QUANTITY APPLIED WILL VARY WITH THE SURFACE CONDITION OF THE EXISTING PAVEMENT (DEGREE OF POROSITY, FOR EXAMPLE). THE FABRIC ALONE, UNDER HEAT OF THE OVERLAY, WILL ABSORB AT LEAST 0.20 GALLON PER SQUARE YARD. WITHIN INTERSECTIONS OR OTHER ZONES WHERE VEHICLE BRAKING IS COMMON PLACE, THE APPLICATION SHALL BE REDUCED 20 PERCENT. THE SEALANT SHALL BE APPLIED TO AN AREA TWO TO SIX INCHES WIDER THAN THE WIDTHS OF THE FABRIC BEING PLACED, BUT RESTRICTED TO THE AREA OF IMMEDIATE FABRIC LAYDOWN. APPLICATION SHALL BE BY DISTRIBUTOR WITH HAND SPRAYING ALLOWED ONLY WHERE THE DISTRIBUTOR CANNOT BE USED. ASPHALT SPILLS SHALL BE CLEANED FROM THE ROAD SURFACE TO AVOID FLUSHING AND POSSIBLE MOVEMENT AT THESE ASPHALT RICH AREAS.

THE ASPHALT CEMENT USED AS A SEALANT SHALL HAVE DISTRIBUTOR TANK TEMPERATURE BETWEEN 300 DEGREES AND 350 DEGREES F. APPLICATION TEMPERATURE IS NOT CRITICAL AFTER THE ASPHALT IS SPRAYED ON THE PAVEMENT. IF THE FABRIC IS TO BE OVER-SPRAYED, DISTRIBUTOR TANK TEMPERATURES SHOULD NOT EXCEED 350 DEGREES F TO AVOID DAMAGE TO THE FABRIC.

3. COMPOSITE FABRIC PLACEMENT. THE COMPOSITE FABRIC SHALL BE PLACED ON THE ASPHALT SEALANT AS SOON AS PRACTICAL AND BEFORE THE TACKINESS OF THE SEALANT IS LOST. THE COMPOSITE SHALL BE PLACED AS SMOOTHLY AS POSSIBLE TO AVOID WRINKLES. IT SHALL BE UNROLLED SO THAT THE SOFT SIDE IS UNWOUND INTO THE SEALANT AND THE GRID SIDE UP, THUS PROVIDING OPTIMUM BOND BETWEEN FABRIC AND PAVEMENT DURING THE CONSTRUCTION PROCESS. WRINKLES SEVERE ENOUGH TO CAUSE FOLDS SHALL BE SLIT AND LAID FLAT. SMALL WRINKLES, WHICH FLATTEN UNDER COMPACTION ARE NOT DETRIMENTAL TO PERFORMANCE. THE COMPOSITE SHALL BE BROOMED OR SQUEEGEED TO REMOVE AIR BUBBLES AND MAKE COMPLETE CONTACT WITH THE ROAD SURFACE AS RECOMMENDED BY THE FABRIC MANUFACTURER. THE FABRIC SHALL BE LAID STRAIGHT, WITHIN THE SEALANT AREA. MODERATE CURVES CAN BE NEGOTIATED BY STRETCHING THE FABRIC ON THE OUTSIDE OF THE CURVE BY ADJUSTING THE DRAG ON THE BRAKES OF THE LAYDOWN EQUIPMENT. TRANSVERSE JOINTS SHALL BE SHINGLED IN THE DIRECTION OF PAVING.

LONGITUDINAL JOINTS SHALL BE MADE BY OVERLAPPING THE FABRIC ONE TO TWO INCHES. TRANSVERSE JOINTS SHALL BE MADE BY OVERLAPPING THE FABRIC MINIMUM OF FOUR INCHES. ADDITIONAL SEALANT (ABOUT 0.20 GAL. PER SQ. YD.) SHALL BE ADDED TO THE JOINTS AS REQUIRED. THE ADDITIONAL SEALANT FOR TRANSVERSE JOINTS MAY BE APPLIED BY HAND SPRAYING OR WITH MOP AND BUCKET IF EXTREME CARE IS TAKEN TO NOT EXCEED THE SPECIFIED RATE.

TO ENHANCE THE BOND OF THE FABRIC WITH THE EXISTING PAVEMENT AND TO SMOOTH OUT ANY WRINKLES FOR FOLDS IN THE FABRIC, THE CONTRACTOR MAY BE REQUIRED TO PNEUMATICALLY ROLL THE FABRIC AFTER IT IS PLACED.

4. TREATMENT OF THE APPLIED COMPOSITE PRIOR TO THE ASPHALT CONCRETE. IT IS UNNECESSARY TO TACK COAT THE FABRIC PRIOR TO PLACEMENT OF THE OVERLAY UNLESS THERE ARE CIRCUMSTANCES SUCH AS DELAY OF OVERLAY, DUST ACCUMULATION OR UNDER APPLICATION OF SEALANT WHICH WOULD MAKE TACK COATING DESIRABLE. IF A TACK COAT IS REQUIRED, EMULSIFIED ASPHALT SHALL BE APPLIED AT A RATE OF 0.02 TO 0.05 GALLON PER SQUARE YARD RESIDUAL ASPHALT. PLACEMENT OF THE ASPHALT CONCRETE OVERLAY SHALL CLOSELY FOLLOW FABRIC LAYDOWN. IN THE EVENT THAT THE SEALANT BLEEDS THROUGH THE FABRIC BEFORE THE ASPHALT CONCRETE IS PLACED, IT MAY BE NECESSARY TO BLOT THE SEALANT BY SPREADING SAND OR ASPHALT CONCRETE OVER THE AFFECTED AREAS. THIS WILL PREVENT ANY TENDENCY FOR CONSTRUCTION EQUIPMENT TO PICK UP THE FABRIC WHEN DRIVING OVER IT.

TURNING OF THE PAVER AND OTHER VEHICLES SHALL BE GRADUAL TO AVOID MOVEMENT OR DAMAGE TO THE COMPOSITE. UNESSENTIAL TRAFFIC ON COMPOSITE SHOULD BE ELIMINATED. IF IT IS NECESSARY TO OPEN THE ROAD TO TRAFFIC AFTER FABRIC PLACEMENT, BUT PRIOR TO PAVING, IT IS ADVISABLE TO SPREAD A SMALL AMOUNT OF SAND OVER THE MEMBRANE TO PREVENT TIRES FROM STICKING TO THE SEALANT OR PULLING UP THE COMPOSITE. THIS PRACTICE IS TO BE AVOIDED IF POSSIBLE TO PREVENT DAMAGE TO THE MEMBRANE.
QUICK STOPS AND SHARP TURNS MAY DAMAGE THE MATERIAL.IF RAIN PRIOR TO THE OVERLAY SHOULD CAUSE A BLISTERED APPEARANCE AND SOME BOND LOSS THROUGHOUT THE MEMBRANE, IT SHOULD BE CORRECTED BY PNEUMATIC ROLLING UNTIL ADHESION IS RESTORED.

5. ASPHALT CONCRETE. THE ASPHALT CONCRETE OVERLAY SHALL CONFORM TO 401 SPECIFICATION WITH A MINIMUM THICKNESS OF 1.5.

METHOD OF MEASUREMENT. THE ACCEPTED FABRIC COMPOSITE PLACED IN ACCORDANCE WITH THESE SPECIFICATIONS AND AS DIRECTED WILL BE MEASURED BY THE SQUARE YARD OF ROADWAY, RAMPS, AND TURNOUTS COVERED BY THE COMPOSITE FABRIC. LAPS IN COMPOSITE FABRIC WILL NOT BE MEASURED.

BLOTTING THE SEALANT, SPREADING SAND OR ASPHALT CONCRETE OVER THE MEMBRANE TO PREVENT TIRES FROM STICKING TO THE SEALANT OR PULLING UP THE FABRIC, ROLLING TO RESTORE BOND, OR APPLICATION OF A TACK COAT WILL NOT BE MEASURED FOR DIRECT PAYMENT BUT SHALL BE CONSIDERED A NECESSARY PART OF THE CONSTRUCTION INVOLVED AND THE COST THEREFORE SHALL BE INCLUDED IN OTHER APPROPRIATE CONTRACT UNIT PRICES.

BASIS OF PAYMENT. THE ACCEPTED QUANTITIES OF PAVEMENT OVERLAY FABRIC COMPOSITE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD, WHICH PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR FURNISHING ALL LABOR, MATERIALS (INCLUDING ASPHALT SEALANT AND OVERLAP), TOOLS, EQUIPMENT AND INCIDENTALS FOR DOING ALL THE WORK INVOLVED IN FURNISHING AND PLACING THE COMPOSITE COMPLETE IN PLACE AS SHOWN ON THE PLANS OR AS DIRECTED.

CALCULATED ERS
CHECKED DJV

GENERAL NOTES

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SHEET NUM.									PART.						ALT (X)	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
5	6	7	10	11	12	13	14	15	01/NHS/PV	02/NHS/PV/ MANS	03/S<2/PV	04/S<2/PV	05/MPO/OT	06/MPO/PV							
																				ROADWAY	
						7,060				750		6310				202	30000	7,060	SF	WALK REMOVED	
						2,030				250		1780				202	32000	2,030	FT	CURB REMOVED	
							32						32			608	10000	32	SF	4" CONCRETE WALK	
						7,060	78			750		6310	78			608	52001	7,138	SF	CURB RAMP, AS PER PLAN	13
																				DRAINAGE	
				23						23						611	98635	23	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	11
	260								25		235					611	99655	260	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	6
																				PAVEMENT	
1200										1200						251	98000	1,200	CY	PARTIAL DEPTH REPAIR, MISC.: 301	5
60										60						253	02000	60	CY	PAVEMENT REPAIR	
			44,670						0		44670					254	01000	44,670	SY	PAVEMENT PLANING, ASPHALT CONCRETE (3.25")	
			65,097						7,957		57140					254	01000	65,097	SY	PAVEMENT PLANING, ASPHALT CONCRETE (1.5")	
			1,098						79		1019					254	01600	1,098	SY	PATCHING PLANED SURFACE	
			13,251						636		12615					407	20000	13,251	GAL	NON-TRACKING TACK COAT	
			4,517						274		4243					441	10101	4,517	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN PG 70-22M	5
			2173								2173					441	50201	2,173	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN PG 64-22	5
						2,030	68			250		1780	68			609	26001	2,098	FT	CURB, TYPE 6, AS PER PLAN	13
							11						11			609	54000	11	SY	6" CONCRETE TRAFFIC ISLAND	
			41,360											41,360		SPECIAL	69012060	41,360	SY	PAVEMENT OVERLAY FABRIC COMPOSITE	8
																				WATER WORK	
	105								11		94					638	10801	105	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	6
																				TRAFFIC CONTROL	
							100						100			620	70010	100	FT	DELINEATOR, MISC.:TRAFFIC SEPARATOR	14
							30						30			630	03100	30	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
							22						22			630	80100	22	SF	SIGN, FLAT SHEET	
							0.01						0.01			642	00104	0.01	MILE	EDGE LINE, 6", TYPE 1	
								7.27	0.48		6.79					642	00200	7.27	MILE	LANE LINE, 4", TYPE 1	
								3.22	0.1		3.12					642	00300	3.22	MILE	CENTER LINE, TYPE 1	
							57	1,475			1475		57			642	00400	1,532	FT	CHANNELIZING LINE, 8", TYPE 1	
								610	15		595					642	00500	610	FT	STOP LINE, TYPE 1	
							66	3,424	100		3324		66			642	00600	3,490	FT	CROSSWALK LINE, TYPE 1	
							85	528	132		396		85			642	00700	613	FT	TRANSVERSE/DIAGONAL LINE, TYPE 1	
							2	40	4		36		2			642	01300	42	EACH	LANE ARROW, TYPE 1	
								2	2							642	01390	2	EACH	WORD ON PAVEMENT, 72"	
							0.01						0.01		X	644	00104	0.01	MILE	EDGE LINE, 6"	
								7.27	0.48		6.79				X	644	00200	7.27	MILE	LANE LINE, 4"	
								3.22	0.1		3.12				X	644	00300	3.22	MILE	CENTER LINE	
							57	1,475	160		1315		57		X	644	00400	1,532	FT	CHANNELIZING LINE, 8"	
								610	15		595				X	644	00500	610	FT	STOP LINE	
							66	3,424	100		3324		66		X	644	00600	3,490	FT	CROSSWALK LINE	
							85	528	132		396		85		X	644	00700	613	FT	TRANSVERSE/DIAGONAL LINE	
							2	40	4		36		2		X	644	01300	42	EACH	LANE ARROW	
								2					2		X	644	01400	2	EACH	WORD ON PAVEMENT, 72"	
								3	3							814	00010	3	EACH	INTERSTATE ELONGATED ROUTE SHIELD SYMBOL MARKING, TYPE B125	
								3	3							814	00014	3	EACH	STATE ROUTE SHIELD SYMBOL MARKING, TYPE B125	
																				TRAFFIC SIGNALS	
					17					17						632	26501	17	EACH	DETECTOR LOOP, AS PER PLAN	12
																				MAINTENANCE OF TRAFFIC	
		456							72		384					614	11110	456	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	7
	50								5		45					614	13000	50	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
								14.54	0.96		13.58					614	20550	14.54	MILE	WORK ZONE LANE LINE, CLASS III, 4", 642 PAINT	
								6.44	0.2		6.24					614	21550	6.44	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
								1,475	160		1315					614	23680	1,475	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	
								610	15		595					614	26610	610	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
																				INCIDENTALS	
											LS					614	11000	LS		MAINTAINING TRAFFIC	
											3					619	16010	3	MNTH	FIELD OFFICE, TYPE B	
											LS					623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
											LS					624	10000	LS		MOBILIZATION	

CALCULATED ERS
CHECKED DJV

GENERAL SUMMARY

RIC-42-7.84

COUNTY	ROUTE	LOG POINT TO LOG POINT		LENGTH		WIDTH	*TYPICAL	PAVEMENT	254					690		407	407		441		441		441			
				MILE	FEET	FEET			PAVEMENT PLANING, ASPHALT CONCRETE (3.25")	PAVEMENT PLANING, ASPHALT CONCRETE (1.50")		PATCHING PLANED SURFACE		SPECIAL - PAVEMENT OVERLAY FABRIC COMPOSITE (06/MPO/PV)		NON-TRACKING TACK COAT @ 0.08 GAL/SY	NON-TRACKING TACK COAT FOR INTERM. COURSE @ 0.05 GAL/SY		ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN, PG70-22		ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22		ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22			
		STRAIGHT LINE MILEAGE				AVG.		AREA	SY	SY		SY		SY		GAL	GAL		INCH	CY	INCH	CY	INCH	CY		
RIC	42	7.84	8.00	0.16	845	48.0	2	4,507	2,535	1,972		45		2,347		361	254		1.5	188	1	70	0.75	53		
		8.00	8.20	0.20	1056	48.0	2	5,632	3,168	2,464		56		2,933		451	316		1.5	235	1	88	0.75	66		
		8.20	8.30	0.10	528	58.0	2	3,403	1,584	1,819		34		1,467		272	158		1.5	142	1	44	0.75	33		
		8.30	8.45	0.15	792	48.0	2	4,224	2,376	1,848		42		2,200		338	238		1.5	176	1	66	0.75	50		
		8.45	8.50	0.05	264	58.0	2	1,701	792	909		17		733		136	80		1.5	71	1	22	0.75	17		
		8.50	8.95	0.45	2376	47.0	2	12,408	7,128	5,280		124		6,600		993	712		1.5	517	1	198	0.75	149		
		8.95	9.00	0.05	264	58.0	2	1,701	792	909		17		733		136	80		1.5	71	1	22	0.75	17		
		9.00	9.20	0.20	1056	46.5	2	5,456	3,168	2,288		55		2,933		436	316		1.5	227	1	88	0.75	66		
		9.20	9.36	0.16	845	56.0	2	5,258	2,535	2,723		53		2,347		421	254		1.5	219	1	70	0.75	53		
		9.36	9.50	0.14	739	47.0	2	3,859	2,217	1,642		39		2,053		309	222		1.5	161	1	62	0.75	46		
		9.50	9.78	0.28	1478	47.0	2	7,718	4,434	3,284		77		4,106		617	444		1.5	322	1	123	0.75	92		
		9.78	9.88	0.10	528	56.0	2	3,285	1,584	1,701		33		1,467		263	158		1.5	137	1	44	0.75	33		
		9.88	10.00	0.12	634	47.0	2	3,311	1,902	1,409		33		1,761		265	190		1.5	138	1	53	0.75	40		
		10.00	10.12	0.12	634	58.0	2	4,086	1,902	2,184		41		1,761		327	190		1.5	170	1	53	0.75	40		
		10.12	10.42	0.30	1584	47.0	2	8,272	4,752	3,520		83		4,400		662	476		1.5	345	1	132	0.75	99		
		10.42	10.50	0.08	422	58.0	2	2,720	1,266	1,454		27		1,172		218	126		1.5	113	1	35	0.75	26		
		10.50	10.66	0.16	845	47.0	2	4,413	2,535	1,878		44		2,347		353	254		1.5	184	1	70	0.75	53		
		10.66	10.69	0.03	158	80.0	1	1,404		1,404		14				112			1.5	59						
		10.69	10.73	0.04	211	59.0	1	1,383		1,383		14				111										
		10.73	10.87	0.14	739	48.0	1	3,941		3,941		39				315			1.5	164						
		10.87	10.90	0.03	158	70.0	1	1,229		1,229		12				98			1.5	51						
RIC	42 N	10.90	11.00	0.10	528	39.0	1	2,288		2,288		23				183			1.5	95						
		11.00	11.38	0.38	2006	31.0	1	6,910		6,910		69				553			1.5	288						
RIC	42 D	0.00	0.11	0.11	581	32.0	1	2,066		2,066		21				165			1.5	86						
RIC	13 S	0.92	1.04	0.12	634	34.0	1	2,395		2,395		24				192			1.5	100						
RIC	430	5.69	6.01	0.32	1690	33.0	1	6,197		6,197		62				496			1.5	258						
		EXTRA AREA FOR INTERSECTIONS																								
		EXTRA AREA FOR PAVED DRIVES																								
		EXTRA AREA FOR AGGREGATE DRIVES																								
		EXTRA AREA FOR EX. & PR. MAILBOX APPROACHES																								
TOTALS TO THE GENERAL SUMMARY 01/NHS/PV									0	7,957		79		0		636	0			274		0		0		
TOTALS TO THE GENERAL SUMMARY 03/S<2/PV									44,670	57,140		1,019		41,360		8,147	4,468			4,243		1,240		933		
TOTALS TO THE GENERAL SUMMARY									**44,670**	**65,097**		**1,098**		**41,360**		**8,783**	**4,468**		**4,517**		**1,240**		**933**		

CALCULATED ERS CHECKED DJV

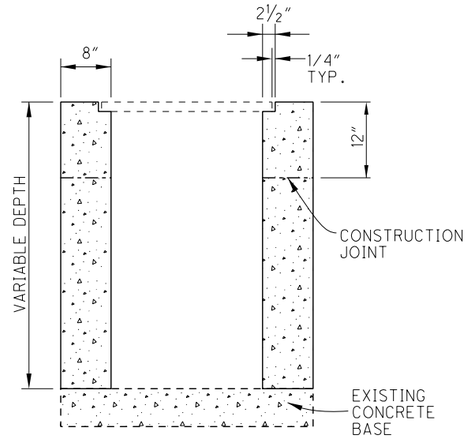
PAVEMENT & SHOULDER DATA

RIC-42-7.84

Catch Basins Reconstructed to Grade
2018 Urban Paving

STREET	LOCATION	SIDE	Depth	No. of GRATES	Pay Qty	COMMENTS
Lexington Ave	1344	W	7.0	1	1	
	Harter	NE	5.0	1	1	
1st Street	Franklin	NW	3.5	1	1	
	Franklin	SW	3.5	1	1	
	Franklin	SE	2.5	1	1	OG
	Franklin	NE	3.5	1	1	OG
	Adams	SE	3.0	2	1	OG
	Hedges	SW	5.5	1	1	OG
	Hedges	NW	4.5	1	1	OG
Hedges St.	2nd	SE	3.0	2	1	
	2nd	NW	2.0	1	1	
	2nd	SW	3.5	2	1	OG
2nd St.	Hedges	NW	3.0	2	1	OG
	Walnut	SW	3.5	4	1	OG
Park Ave East	SE of Universal Motors	S	Unk	1	1	OG
	389	S	3.0	1	1	
	389	N	3.0	1	1	
	100' E of Mansf Structural Steel	N	3.5	1	1	OG
	100' E of Mansf Structural Steel	S	3.0	1	1	
	429 (Driveway)	N	5.5	1	1	OG
	429	N	Unk	1	1	
	429	S	Unk	1	1	
Contigency					3	
				Total Catch Basin Count =	**23**	

OG= Old Grates to be replaced. (City of Mansfield will furnish new grates to Contractor).



CATCH BASIN RECONSTRUCTED TO GRADE,
AS PER PLAN

ITEM 604, CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN

THIS ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTING CATCH BASIN WALLS DOWN TO THE FLOW LINE, AND THE REPLACEMENT OF SAID CATCH BASIN WALLS WITH 8" THICK CLASS C CONCRETE CAST IN PLACE. A CONSTRUCTION JOINT SHALL BE PLACED 12" BELOW TOP OF GRATE ELEVATION. THE GRATE ELEVATION SHALL BE A MINIMUM 1/2" BELOW THE NORMAL PAVEMENT SLOPE MEASURED AT THE MIDDLE OF THE TWO GRATES. IT MAY BE DETERMINED IN THE FIELD, THAT A SUMP DEPTH GREATER THAN 1/2" SHALL BE USED. THE FINAL SUMP DEPTH SHALL BE DETERMINED BY THE ENGINEER.

THE CONCRETE BEARING AREA SHALL BE A MINIMUM OF 2 1/2" IN WIDTH AND SHALL BE SMOBY THE CITY AT NO COST TO THE CONTRACTOR. FRAMES WILL NOT BE USED.

THE NEW APRON SHALL CONFORM AS NEARLY AS PRACTICABLE TO THE EXISTING DIMENSIONS.

ALL DRAINAGE CONDUITS OUT-LETTING INTO THE CATCH BASIN SHALL BE MAINTAINED WITH A CONDUIT OF THE SAME SIZE WITH A CONCRETE COLLAR POURED COMPLETELY AROUND THE JOINT. ANY VOIDS FOUND AROUND THE CATCH BASIN DURING PRE-RECONSTRUCTION SHALL BE FILLED WITH LOW-STRENGTH MORTAR BACKFILL AND SHALL BE INCLUDED IN THIS ITEM.

ALL CATCH BASINS SHALL BE A 2 GRATE NO. 6 CATCH BASIN CONFORMING TO ODOT STANDARD CONSTRUCTION DRAWING NO. CB-2.3.

THIS ITEM SHALL ALSO INCLUDE THE NECESSARY TOPSOIL, SEEDING AND MULCHING FOR THE ASSOCIATED DISTURBED AREAS. THE CONTRACTOR SHALL ENSURE A DENSITY OF AT LEAST 70% GRASS COVER. REPAIR SEEDING AND MULCHING MAY BE NECESSARY. NO SEPARATE PAYMENT WILL BE MADE FOR REPAIR SEEDING AND MULCHING.

PAYMENT FOR THE CURB AT THE CATCH BASIN SHALL BE INCLUDED IN THIS ITEM.

PAYMENT FOR ITEM 604, CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED TO PERFORM THE ITEM OF WORK AS DESCRIBED IN THIS SECTIONS. BASIS OF PAYMENT WILL BE AT THE BID PRICE FOR EACH.

02/NHS/PV/MANS
ITEM 604, CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN - 23 EACHOTH AND EVEN FOR ALL PORTIONS OF THE GRATE TO PREVENT THE GRATE FROM ROCKING DURING LIVE LOAD IMPACT. ALL GRATES SHALL BE REUSED. IF THE EXISTING GRATE IS MISSING OR NOT SUITABLE FOR REUSE, A NEW GRATE WILL BE FURNISHED

CALCULATED DRA
CHECKED ERS

CATCH BASIN RECONSTRUCTION

RIC-42-7.84

ITEM 632, DETECTOR LOOP, AS PER PLAN

AN ESTIMATED QUANTITY OF 632 DETECTOR LOOP, AS PER PLAN HAS BEEN PROVIDED WHEN WIRE IS CUT, BROKEN OR DESTROYED DUE TO PAVEMENT PLANING, PAVEMENT REPAIR OR BUTT JOINT OPERATIONS. IT IS IMPERATIVE THAT REPLACEMENT OF LOOP DETECTORS BE INSTALLED AND FULLY FUNCTIONAL IN THE SHORTEST POSSIBLE TIME. THE CONTRACTOR SHALL HAVE REPLACEMENT LOOP DETECTORS INSTALLED AND FULLY FUNCTIONAL WITHIN 7 CALENDAR DAYS OF DESTRUCTION OF THE ORIGINAL LOOP.

THE CONTRACTOR SHALL NOTIFY PROJECT ENGINEER (OR CITY ENGINEER) 5 WORKING DAYS IN ADVANCE OF ANY PLANING OPERATIONS OR PAVEMENT REPAIR WORK THAT WILL DAMAGE DETECTOR LOOP INSTALLATIONS. THIS NOTIFICATION IS NEEDED FOR THE CITY TO SCHEDULE TEMPORARY SIGNAL TIMING MODIFICATIONS FOR THE TIME PERIOD WHEN THE DETECTOR LOOPS ARE OUT OF OPERATION. THE CONTRACTOR SHALL THEN RENOTIFY THE CITY ENGINEER WITHIN 2 WORKING DAYS AFTER THE DAMAGED DETECTOR LOOPS ARE REPLACED SO THAT HE CAN RESCHEDULE CITY CREWS TO RESTORE SIGNAL TIMINGS TO THE ORIGINAL SETTINGS.

FAILURE TO COMPLY WITH THE ABOVE STATED REQUIREMENTS WILL RESULT IN THE ASSESSMENT OF LIQUIDATED DAMAGES ACCORDING TO SECTION 108.07 OF THE CMS FOR EACH CALENDAR DAY BEYOND THE SPECIFIED LIMIT.

THE NEW LOOP DETECTORS SHALL BE PLACED AFTER THE SURFACE COURSE IS COMPLETED WITHIN THE LOOP DETECTOR AREAS.

NEW LOOP DETECTORS SHALL BE PLACED AT THE SAME LOCATIONS, OR AS DIRECTED BY THE ENGINEER. THE LOOP DETECTOR WIRE SHALL BE REPLACED TO THE PULL BOX OR POLE, WHICHEVER IS APPLICABLE, UNDER ITEM 632 AND TC-82.10.

THIS WORK SHALL INCLUDE THE POURED EPOXY INSULATED SPLICE(S) REQUIRED TO CONNECT THE LOOP DETECTOR WIRE TO EXISTING LEAD-IN CABLE AT THE PULL BOX OR POLE. THE SPLICES SHALL BE IN ACCORDANCE WITH SECTION 725.15 OF THE CMS. PAYMENT SHALL BE MADE PER EACH LOOP DETECTOR CONNECTED TO THE LEAD-IN CABLE.

THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING DETECTOR LOOP LOCATIONS PRIOR TO THE MILLING OPERATIONS. A TABLE SHOWING DIMENSIONS AND LOCATIONS IS PROVIDED FOR THE PURPOSE OF ESTIMATING.

PAYMENT FOR ALL THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH OF ITEM 632 DETECTOR LOOP, AS PER PLAN.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

02/NHS/PV/MANS
ITEM 632 DETECTOR LOOP, AS PER PLAN 1 EACH

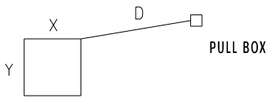
04/S<2/PV
ITEM 632 DETECTOR LOOP, AS PER PLAN 16 EACH

THE INTERSECTIONS INVOLVED ARE AS FOLLOWS:

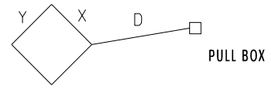
STREET	DIRECTION	CROSS ROAD	TYPE	DIMENSION (FT)			
				D	X	Y	Z
LEXINGTON AVE	WB	LOGAN RD	E	75	6	30	
LEXINGTON AVE	NB	MIDDLE BELLVILLE RD	E	75	6	30	
LEXINGTON AVE	EB	SUNSET BLVD	E	75	8	30	
LEXINGTON AVE	EB	SUNSET BLVD	E	75	8	30	
LEXINGTON AVE	WB	SUNSET BLVD	E	75	8	30	
LEXINGTON AVE	SB	SUNSET BLVD	E	75	6	30	
LEXINGTON AVE	NB	COOK RD	E	75	6	30	
LEXINGTON AVE	NB	COOK RD	E	75	6	30	
LEXINGTON AVE	NB	COOK RD	E	75	6	30	
LEXINGTON AVE	SB	COOK RD	E	75	6	30	
LEXINGTON AVE	SB	COOK RD	E	75	6	30	
LEXINGTON AVE	SB	COOK RD	E	75	6	30	
LEXINGTON AVE	SB	STURGES/HARTER	E	75	6	30	
LEXINGTON AVE	NB	STURGES/HARTER	E	75	6	30	
LEXINGTON AVE	SB	MAIN ST	E	75	8	30	

SUB TOTAL (EACH)	15
CONTINGENCY (EACH)	2
TOTAL (EACH)	17

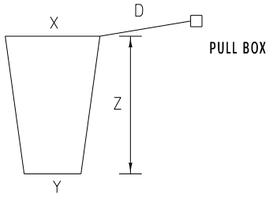
TYPE A



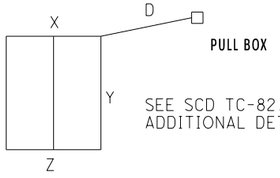
TYPE B



TYPE C

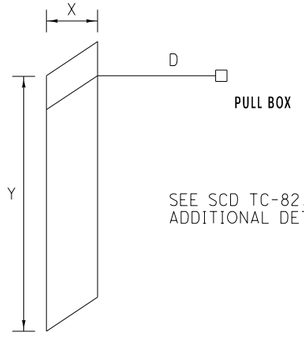


TYPE D
(QUADRUPOLE)



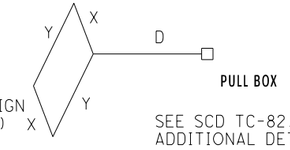
SEE SCD TC-82.10 FOR ADDITIONAL DETAILS

TYPE E
(POWERHEAD)



SEE SCD TC-82.10 FOR ADDITIONAL DETAILS

TYPE F
(ANGULAR DESIGN DETECTION)



SEE SCD TC-82.10 FOR ADDITIONAL DETAILS

CALCULATED DRA
CHECKED ERS

LOOP DETECTOR NOTES & DETAILS

RIC-42-7.84

12
15

I:\ProjectData\98571\Design\Roadway\Sheets\Loop Detectors.dgn

CURB RAMP LOCATIONS AND ESTIMATED QUANTITIES

STREET	INTERSECTING STREET	LOCATION	WARD	DOMES	CURB REMOVED	WALK REMOVED	CURB RAMP	TYPE 6 CURB	COMMENTS
Lex Ave	Trimble Rd	SW Corner	1	1	35	125	125	35	
Lex Ave	Logan Rd	SW Corner	1	1	25	100	100	25	
Lex Ave	Logan Rd	SE Corner	1	1	25	100	100	25	
Lex Ave	Logan Rd	SE Corner2	1	1	25	100	100	25	
Lex Ave	Logan Rd	NE Corner	1	1	25	100	100	25	
Lex Ave	Logan Rd	NE Corner2	1	1	25	100	100	25	
Lex Ave	Logan Rd	NW Corner	1	1	25	100	100	25	
Lex Ave	Sunset Blvd	NE Corner	1	1	25	100	100	25	
Lex Ave	Glendale Blvd	SW Corner	1	1	25	100	100	25	
Lex Ave	Glendale Blvd	NW Corner	2	1	25	100	100	25	
Lex Ave	Westview Blvd	SE Corner	2	1	25	100	100	25	
Lex Ave	Westview Blvd	NE Corner	2	1	25	100	100	25	
Lex Ave	Lawn Ave	SE Corner	2	1	25	75	75	25	
Lex Ave	Lawn Ave	NE Corner	2	1	25	75	75	25	
Lex Ave	Cook Rd	SE Corner	2	2	75	150	150	75	
Lex Ave	Cook Rd	NE Corner	2	2	75	150	150	75	
Lex Ave	Stewart Ln	SW Corner	2	1	25	100	100	25	
Lex Ave	Stewart Ln	NW Corner	2	1	25	100	100	25	
Lex Ave	Chevy Chase Rd	SW Corner	2	1	25	75	75	25	
Lex Ave	Chevy Chase Rd	NW Corner	2	1	25	75	75	25	
Lex Ave	Edgewood Rd	SW Corner	2	1	25	75	75	25	
Lex Ave	Edgewood Rd	NW Corner	2	1	25	75	75	25	
Lex Ave	Scholl Rd	SE Corner	2	1	25	75	75	25	
Lex Ave	Scholl Rd	SE Corner2	2	1	25	75	75	25	
Lex Ave	Scholl Rd	NE Corner	2	1	25	75	75	25	
Lex Ave	Scholl Rd	NE Corner2	2	1	25	75	75	25	
Lex Ave	Harter Ave	SE Corner	2	1	35	100	100	35	
Lex Ave	Harter Ave	Replace Island	2	2	150	1035	1035	150	QTY INCLUDES ISLAND REMOVAL AND REPLACEMENT
Lex Ave	Harter Ave	NE Corner	2	1	35	100	100	35	
Lex Ave	Dunbilt Ct	SE Corner	2	1	35	100	100	35	
Lex Ave	Dunbilt Ct	NE Corner	2	1	35	100	100	35	
Lex Ave	Cline Ave	SW Corner	2	1	35	125	125	35	
Lex Ave	Cline Ave	NW Corner	2	2	35	150	150	35	
Lex Ave	Antibus Pl	SE Corner	2	1	25	75	75	25	
Lex Ave	Antibus Pl	NE Corner	2	1	25	75	75	25	
Lex Ave	Stoodt Ave	SE Corner	2	1	25	75	75	25	
Lex Ave	Flint St	SE Corner	2	1	25	75	75	25	
Lex Ave	Stoodt Ave	NE Corner	2	1	25	75	75	25	
Lex Ave	Arch St	SE Corner	6	1	25	75	75	25	
Lex Ave	Arch St	NE Corner	6	1	25	75	75	25	
Lex Ave	Williams Ave	SE Corner	6	1	25	75	75	25	
Lex Ave	Williams Ave	NE Corner	6	1	25	75	75	25	
Lex Ave	Augustine Ave	SE Corner	6	1	25	75	75	25	
Lex Ave	Augustine Ave	NE Corner	6	1	25	75	75	25	
Lex Ave	Newlon PL	SE Corner	6	1	25	75	75	25	
Lex Ave	Newlon Pl	SW Corner	6	1	25	75	75	25	
Lex Ave	Newlon Pl	NW Corner	6	1	25	75	75	25	
First St	Franklin St	SW Corner	6	2	35	125	125	35	
First St	Franklin St	NW Corner	6	1	25	100	100	25	
First St	Franklin St	NE Corner	6	2	35	125	125	35	
First St	Franklin St	SE Corner	6	2	35	125	125	35	
First St	Willis St	SW Corner	6	1	25	75	75	25	
First St	Willis St	NW Corner	6	1	25	75	75	25	
First St	Willis St	NE Corner	6	1	25	75	75	25	
First St	Willis St	SE Corner	6	1	25	75	75	25	
First St	Glenn Ave	SW Corner	6	1	25	75	75	25	
First St	Glenn Ave	SE Corner	6	1	25	75	75	25	
Hedges St	Marshall Ave	SW Corner	6	1	25	75	75	25	
Hedges St	Marshall Ave	NW Corner	6	1	25	75	75	25	
Hedges St	Marshall Ave	NE Corner	5	1	25	75	75	25	
Hedges St	Marshall Ave	SE Corner	6	1	25	75	75	25	
Hedges St	Second St	SW Corner	6	2	35	125	125	35	
Hedges St	Second St	NW Corner	6	2	35	125	125	35	
Hedges St	Second St	SE Corner	6	2	35	125	125	35	
Second St	Willis St	SW Corner	6	1	25	75	75	25	
Second St	Willis St	NW Corner	6	1	25	75	75	25	
Second St	Willis St	SE Corner	6	1	25	75	75	25	
		TOTALS		77	2030	7060	7060	2030	

CURB RAMPS

A. ALL WORK INVOLVED FOR THE FOLLOWING ITEMS SHALL BE COMPLETED PRIOR TO THE COMMENCEMENT OF THE STREET PAVING OPERATIONS:

202, WALK REMOVED
202, CURB REMOVED
608, CURB RAMPS
609, CURB, TYPE 6

B. THE CURB RAMPS HAVE NOT BEEN INDIVIDUALLY DETAILED IN THE PROJECT PLANS. THIS DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO CONSTRUCT ALL CURB RAMP ITEMS TO ADA STANDARDS. THE PLAN QUANTITIES FOR CURB RAMPS ARE ESTIMATES AND FIELD ADJUSTMENTS MAY BE WARRANTED. PRIOR TO THE COMMENCEMENT OF THIS WORK, THE CONTRACTOR AND ENGINEER SHALL MARK IN THE FIELD THE LIMITS OF CURB REMOVAL AND ALL WALK REMOVAL.

C. ALL CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE OHIO DEPARTMENT OF TRANSPORTATION CURRENT STANDARD CONSTRUCTION DRAWING NO. BP-7.1. ANY CURB RAMP NOT CONSTRUCTED IN ACCORDANCE WITH SAID CONSTRUCTION DRAWING IS DEFECTIVE AND WILL NOT BE ACCEPTED. THE CONTRACTOR SHALL REMOVE AND REPLACE THE DEFECTIVE WORK. PAYMENT FOR ALL ITEMS ASSOCIATED WITH CURB RAMP INSTALLATION WILL ONLY OCCUR AFTER ACCEPTANCE.

D. ANY MANHOLES AND WATER VALVES ENCOUNTERED WITHIN CURB RAMP AREAS WILL BE ADJUSTED AND PAID FOR UNDER ITEM 611, MANHOLE ADJUSTED TO GRADE, AS PER PLAN AND ITEM 611, WATER VALVES ADJUSTED TO GRADE, AS PER PLAN.

E. THIS ITEM SHALL ALSO INCLUDE THE NECESSARY TOPSOIL, SEEDING AND MULCHING FOR THE ASSOCIATED DISTURBED AREAS. THE CONTRACTOR SHALL ENSURE A DENSITY OF AT LEAST 70% GRASS COVER. REPAIR SEEDING AND MULCHING MAY BE NECESSARY. NO SEPARATE PAYMENT WILL BE MADE FOR REPAIR SEEDING AND MULCHING.

F. ITEM 608 - CURB RAMPS, AS PER PLAN

THIS ITEM SHALL CONFORM TO THE 2016 ODOT CMS ITEM 608 AND THE MOST CURRENT SCD BP-7.1 AND SHALL INCLUDE ALL MATERIALS NECESSARY TO CONSTRUCT THE CURB RAMP EXCLUDING THE 6" CONCRETE CURB. ALL WALK AREA NECESSARY TO CONSTRUCT A CURB RAMP TO ADA STANDARDS SHALL BE PAID FOR UNDER THIS ITEM. NO SEPARATE PAYMENT WILL BE MADE FOR ITEM 608, CONCRETE WALK.

BASIS OF PAYMENT FOR THIS ITEM WILL BE AT THE CONTRACT BID PRICE PER SQUARE FOOT.

THE FOLLOWING QUANTIES ARE CARRIED TO THE GENERAL SUMMARY:

02/NHS/PV/MANS

202 WALK REMOVED	*750 SF*
202 CURB REMOVED	*250 FT*
608 CURB RAMP, AS PER PLAN	*750 SF*
609 CURB, TYPE 6, AS PER PLAN	*250 FT*

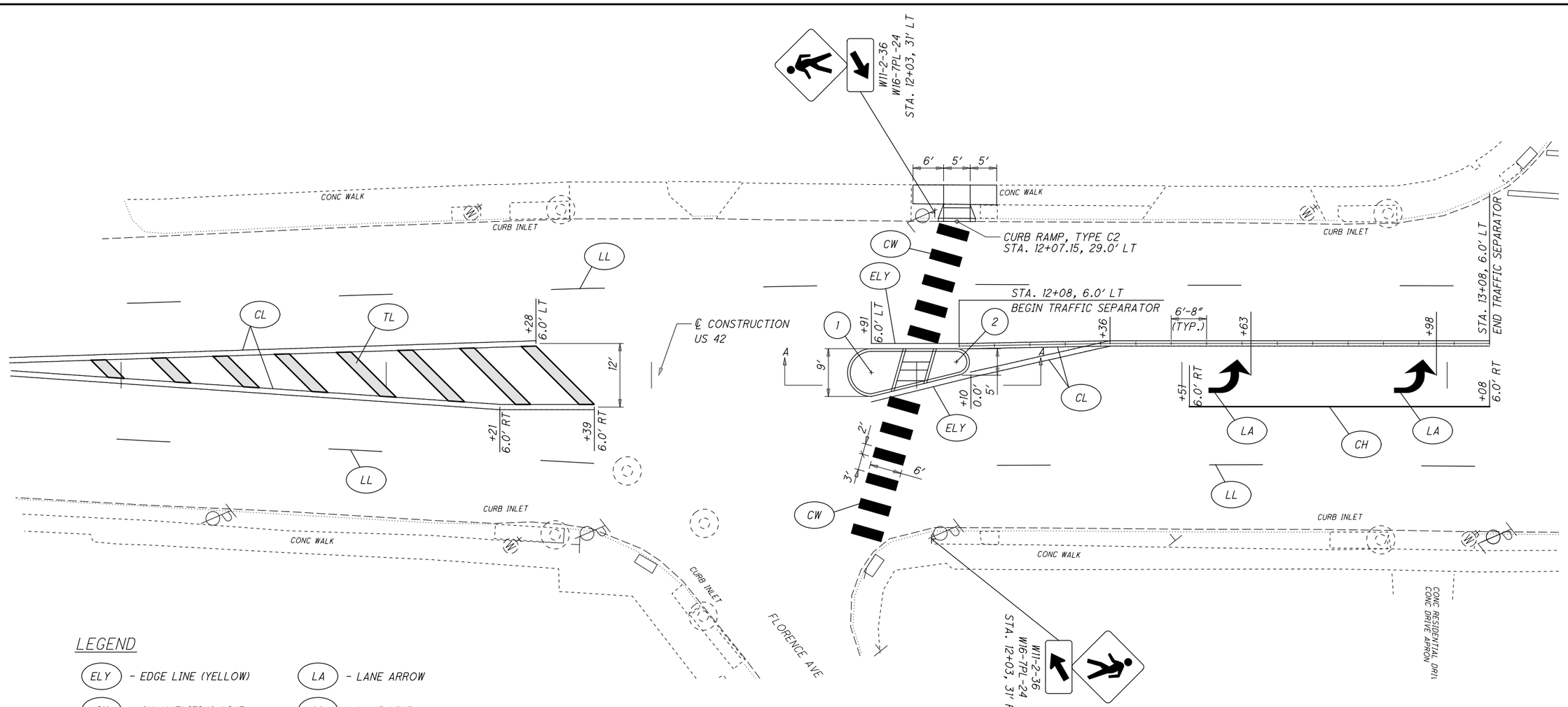
04/SX2/PV

202 WALK REMOVED	*6310 SF*
202 CURB REMOVED	*1780 FT*
608 CURB RAMP, AS PER PLAN	*6310 SF*
609 CURB, TYPE 6, AS PER PLAN	*1780 FT*

CALCULATED DRA
CHECKED ERS

CURB RAMPS

RIC-42-7.84



LEGEND

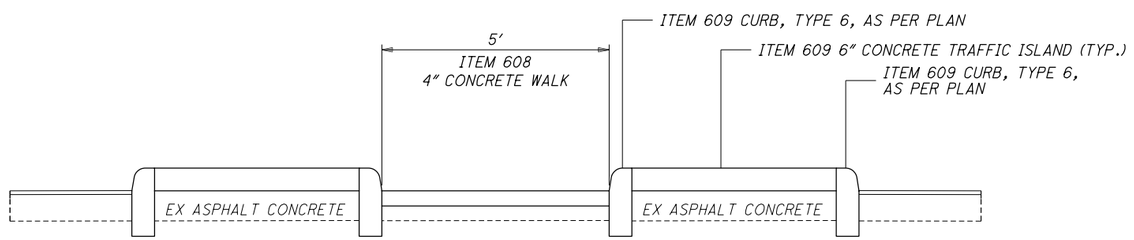
- ELY - EDGE LINE (YELLOW)
- CH - CHANNELIZING LINE
- CL - CENTER LINE
- CW - CROSSWALK LINE
- LA - LANE ARROW
- LL - LANE LINE
- TL - TRANSVERSE/DIAGONAL LINE

Quantity	Unit	Item	Descpription
32	SF	608	4" CONCRETE WALK
78	SF	608	CURB RAMP, AS PER PLAN
68	FT	609	CURB, TYPE 6, AS PER PLAN
11	SY	609	6" CONCRETE TRAFFIC ISLAND
100	FT	620	DELINATOR MISC.: TRAFFIC SEPERATOR
30	FT	630	GROUND MOUNTED SUPPORT, NO. 3 POST
22	SF	630	SIGN, FLAT SHEET
0.01	MI	642	EDGE LINE, 6", TYPE 1
57	FT	644	CHANNELIZING LINE, 8"
2	EACH	644	LANE ARROW
66	FT	644	CROSSWALK LINE
85	FT	644	TRANSVERSE/DIAGONAL LINE

QUANTITIES CARRIED TO THE GENERAL SUMMARY

1. STA. 11+82.06, 1.00' LT
   R=8.00' (TO BACK OF CURB)
2. STA. 12+14.06, 5.00' LT
   R=4.00' (TO BACK OF CURB)

ITEM 620 - DELINEATOR MISC.: TRAFFIC SEPARATOR
TRAFFIC SEPARATOR SHALL BE MANUFACTURED BY QWICK KURB, PEXCO FG300, OR APPROVED EQUAL. PAYMENT FOR ITEM 620 - DELINEATOR MISC.: TRAFFIC SEPARATOR SHALL BE MEASURED PER LINEAR FOOT.



PEDESTRIAN ISLAND SECTION A-A DETAIL

HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED UFD
CHECKED DJV

PEDESTRIAN ISLAND DETAILS

RIC-42-7.84

AUXILIARY & LONG LINE MARKINGS

FUNDING	COUNTY	ROUTE	STATION / SLM FROM	STATION / SLM TO	HIGHWAY MILES	614 WORK ZONE LANE LINE, CLASS III, 642 PAINT	614 WORK ZONE CENTER LINE, CLASS III, 642 PAINT	614 WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT	614 WORK ZONE STOP LINE, CLASS III, 642 PAINT	642, TYPE 1 EDGE LINE TOTAL (PAY QUANTITY) (WHITE)	642, TYPE 1 EDGE LINE TOTAL (PAY QUANTITY) (YELLOW)	642, TYPE 1 CENTER LINE LANE LINE	642, TYPE 1 CENTER LINE SOLID LINE EQUIVALENT	642, TYPE 1 CENTER LINE TOTAL (PAY QUANTITY)	642 AUXILIARY MARKINGS (740.04) CHANNELIZING LINE 8"	STOP LINE 24"	CROSSWALK LINE 12"	TRANSVERSE/ DIAGONAL LINE (WHITE) 24"	TRANSVERSE/ DIAGONAL LINE (YELLOW) 24"	ISLAND MARKING	RAILROAD SYMBOL MARKING	SCHOOL SYMBOL MARKING 72 INCH	SCHOOL SYMBOL MARKING 96 INCH	PARKING LOT STALL MARKING	LANE ARROW LEFT	LANE ARROW RIGHT	LANE ARROW THROUGH	LANE ARROW COMBINATION	WORD ON PAVEMENT "ONLY" 72 INCH	WORD ON PAVEMENT "ONLY" 96 INCH	DOTTED LINE, 4"	814 INTERSTATE ELONGATED ROUTE SHEIDL SYMBOL MARKING, TYPE B125	814 STATE ROUTE SHIELD SYMBOL MARKING, TYPE B125
						MILE	MILE	FT	FT	MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT	FT	SQ FT	EACH	EACH		EACH	FT					EACH		FT	EACH	EACH
	RIC	42	7.84	11.38	3.54	14.16	5.70	1,475	540			7.08	5.70	2.85	1,475	540	3,424	396								25	9		4	2			3	3
	RIC	42D	0.00	0.11	0.11	0.22						0.11																					
	RIC	430	5.69	6.01	0.32	0.04	0.62		38			0.02	0.56	0.31		38			132						2								
	RIC	13S	0.92	1.04	0.12	0.12	0.12		32			0.06	0.12	0.06		32																	
TOTALS TO 01/NHS/PV						0.96	0.20	160	15			0.48		0.10		15	100	132								4		2			3	3
TOTALS TO 03/S<2/PV						13.58	6.24	1,315	595			6.79		3.12		595	3,324	264	132						27	5		4					
TOTALS TO GENERAL SUMMARY						**14.54**	**6.44**	**1,475**	**610**			**7.27**		**3.22**	**1,475**	**610**	**3,424**	**396**	**132**						**27**	**9**		**4**	**2**			**3**	**3**

RAISED PAVEMENT MARKERS

FUNDING	COUNTY	ROUTE	STATION/SLM FROM	STATION/SLM TO	DETAIL	621 RAISED PAVEMENT MARKER REMOVED	621 RPM	PRISMATIC RETRO-REFLECTOR TYPES ONE-WAY WHITE	TWO-WAY YELLOW / YELLOW	TWO-WAY WHITE / RED	TWO-WAY YELLOW / RED	TWO-WAY BLUE / BLUE	REMARKS
						EACH	EACH	EACH					
													NO RPMs ON THIS PROJECT
TOTALS TO GENERAL SUMMARY													

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
10	3 LANE DIVIDED TO 2 LANE TRANSITION
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 AT EXISTING WIDTHS AND ACCORDING TO CMS 641.08A.

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

CALCULATED ERS
CHECKED DJV

PAVEMENT MARKING SUB-SUMMARY

PAVEMENT

RIC-42-7.84