

CA

TYP

# FIELD ENTS E. SPRINGFIMPROVEME

### EXISTING PAVEMENT COMPOSITION

			Layer Thickness (in.)										
Boring	Station	Offset	Asphalt Surface	Concrete	Aggregate Subbase	Total							
			Course	Base Course	Course	Pavement							
B - 001 - 1 - 17	304+29	RT	12.00			12.0							
X - 001 - 2 - 17	304+29	RT	13.00			13.0							
B - 002 - 1 - 17	307+32	LT	11.00			11.0							
X - 002 - 2 - 17	307+32	LT	6.00	6.0+		12.0+							
B - 003 - 1 - 17	310+29	RT	12.00			12.0							
X - 003 - 2 - 17	310+29	Rt	5.50	9.0		14.5							
B - 004 - 1 - 17	313+22	LT	5.00			5.0							
X - 004 - 2 - 17	313+22	LT	4.50	8.5		13.0							
B - 005 - 1 - 17	316+14	RT	5.00	8.0		13.0							
X - 005 - 2 - 17	316+14	RT	4.50	8.8		13.3							
B - 006 - 1 - 17	318+99	LT	3.00	7.0		10.0							
X - 006 - 2 - 17	318+99	LT	3.50	8.0		11.5							
B - 007 - 1 - 17	322+06	RT	4.50	8.5		13.0							
X - 007 - 2 - 17	322+06	RT	4.00	8.5		12.5							
B - 008 - 1 - 17	324+96	LT	3.00	9.0		12.0							
X - 008 - 2 - 17	324+96	LT	4.00	8.0		12.0							
B - 009 - 1 - 17	328+05	RT	5.50	8.5		14.0							
X - 009 - 2 - 17	328+05	RT	6.00	6.5		12.5							
X - 009 - 3 - 17	328+05	RT	4.50		8.5	13.0							
B - 010 - 1 - 17	331+04	LT	7.00	9.0		16.0							
X - 010 - 2 - 17	331+04	LT	6.25	7.8		14.0							
B - 011 - 1 - 17	334+05	RT	6.50	8.8		15.3							
X - 011 - 2 - 17	334+05	RT	5.50	8.8		14.3							
B - 012 - 1 - 17	336+98	LT	7.00	8.0		15.0							
X - 012 - 2 - 17	336+98	LT	7.00	9.0		16.0							
B - 013 - 1 - 17	339+96	RT	6.00	7.0		13.0							
X - 013 - 2 - 17	396+96	RT	5.75	9.3		15.0							
B - 014 - 1 - 17	342+96	LT LT	6.00	8.0 8.0		14.0 14.0							
X - 014 - 2 - 17 B - 015 - 1 - 17	342+96 346+00	RT	6.00 5.00	8.0		13.0							
X - 015 - 2 - 17	346+00	RT	4.50	9.5		14.0							
B - 016 - 1 - 17	348+94	LT	5.00	8.0		13.0							
X - 016 - 2 - 17	348+94	LT	6.00	7.0		13.0							
B - 017 - 1 - 17	351+95	RT	6.00	7.0		13.0							
X - 017 - 2 - 17	351+95	RT	5.50	6.5		12.0							
X - 017 - 2 - 17 X - 017 - 3 - 17	351+95	RT	4.50		10.5	15.0							
X - 017 - 4 - 17	351+95	RT	4.00		10.0	14.0							
B - 018 - 1 - 17	354+95	LT	6.00	9.0		15.0							
X - 018 - 2 - 17	354+95	LT	6.00	9.0		15.0							
X - 018 - 3 - 17	354+95	LT	6.00	15.0		21.0							
B - 019 - 1 - 17	357+99	RT	6.00	8.0		14.0							
X - 019 - 2 - 17	357+99	RT	5.00	8.0		13.0							
B - 020 - 1 - 17	360+99	LT	6.00	8.0		14.0							
X - 020 - 2 - 17	360+99	LT	6.00	7.0		13.0							
B - 021 - 1 - 17	363+99	RT	6.00	6.0		12.0							
X - 021 - 2 - 17	363+99	RT	6.00	7.0		13.0							
B - 022 - 1 - 17	366+99	LT	6.00	8.0		14.0							
X - 022 - 2 - 17	366+99	LT	8.00	9.0		17.0							
B - 023 - 1 - 17	370+22	RT	6.00	8.0		14.0							
Average			5.98	8.2	9.7	13.5							
Minimum			3.00	6.0	8.5	5.0							
Maximum			13.00	15.0	10.5	21.0							

### HATCH SYMBOLS FOR PLANS



CONCRETE DRIVE AND DRIVE APRONS: FOR COMMERCIAL/ALLEYS TTEM 452, 9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1, AS PER PLAN ON ITEM 304, 6" AGGREGATE BASE ON ITEM 204, SUBGRADE COMPACTION



FULL DEPTH REPLACEMENT ITEM 301, 5-1/2"± ASPHALT CONCRETE BASE PG 64-22 (TO MATCH EXISTING ASPHALT RAVEMENT THICKNESS) ON ITEM 255, FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC FS (8"± TO MATCH EXISTING CONCRETE PAVEMENT) ON ITEM 204, SUBGRADE COMPACTION



FULL DEPTH PAVEMENT SEE TYPICAL SECTION COMPOSITION



REMOVAL OF EXISTING PAVEMENT REMOVE Ex. PVMT. AND REPLACE WITH 6" MIN. TOPSOIL AND SEED PER ITEM 659 SEEDING AND MULCHING.



ITEM 608, CURB RAMP, AS PER PLAN ON ITEM 304, 3" AGGREGATE BASE



CONCRETE BUS STOP ITEM 452, 10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1, AS PER PLAN ON ITEM 304, 3-1/2" AGGREGATE BASE ON ITEM 204, SUBGRADE COMPACTION



BIKE PATH REPAIR ITEM 826, 1-1/2" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1 (448), PG 64-22 FIBER TYPE C, AS PER PLAN ON ITEM 441, 2-1/2" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, (448) (IN 1 LIFT) ON ITEM 304, 10" AGGREGATE BASE (IN 2 LIFTS) ON ITEM 204, SUBGRADE COMPACTION



CONCRETE TRAFFIC ISLAND ITEM 609, 9" CONCRETE TRAFFIC ISLAND, AS PER PLAN ON ITEM 304, 3" AGGREGATE BASE ON ITEM 204. SUBGRADE COMPACTION



ITEM 608, 4" CONCRETE SIDEWALK, AS PER PLAN ON ITEM 304, 3" AGGREGATE BASE

(TBA) 

DO NOT DISTURB TO BE REMOVED TO BE ABANDONED MANHOLE ADJUSTED TO GRADE

VALVE ADJUSTED TO GRADE

(DND)

**ENVIRONMENTAL COMMITMENT NOTES** INDIANA BAT AND NORTHERN LONG-EARED BAT PROTECTION

THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY-LISTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVALS MUST OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVING, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE GROUND SURFACE AND WITH A MINIMUM HEIGHT OF 13 FEET.

# PROTECTION OF MAD RIVER BIKEWAY

WHENEVER POSSIBLE, THE CONTRACTOR SHALL MAINTAIN TRAIL TRAFFIC ON MAD RIVER BIKEWAY. SIGNED DETOURS TO LOCAL ROADWAY SHALL BE PROVIDED FOR ANY TRAIL CLOSURES LONGER THAN 15 MINUTES.

THE CONTRACTOR SHALL NOTIFY FIVE RIVERS METROPARKS JOE ZIMMERMAN, 937-277-4825, JOSEPH.ZIMMERMAN@METROPARKS.ORG AT LEAST TWO WEEKS PRIOR TO THE START OF THE CONSTRUCTION ACTIVITIES THAT AFFECT THE MAD RIVER TRAIL. FIVE RIVERS METROPARKS SHALL BE PROVIDED AN OPPORTUNITY TO INSPECT AFFECTED SEGMENTS OF THE MAD RIVER TRAIL PRIOR TO PROJECT FINALIZATION. IDENTIFIED ISSUES CAUSED BY CONSTRUCTION SHALL BE ADDRESSED TO THE SATISFACTION OF FIVE RIVERS

THE CONTRACTOR SHALL NOT STAGE EQUIPMENT OR MATERIALS ON THE MAD RIVER TRAIL OUTSIDE OF THE ESTABLISHED CONSTRUCTION LIMITS.

# MONITORING FOR EXPLOSIVE GASES

THE CONTRACTOR SHALL ENSURE THAT AT LEAST ONE ON-SITE STAFF PERSON UTILIZES A LOWER EXPLOSIVE LIMIT (LEL) MONITOR. IF LEVELS EXCEED 10% OF THE LEL, WORK SHALL STOP AND RESUME WHEN LEVELS RETURN TO BELOW 1% OF THE LEL.

# PROTECTION OF DRINKING WATER RESOURCES

THE CONTRACTOR SHALL BE AWARE THAT THE PROJECT IS LOCATED WITHIN THE SOURCE WATER PROTECTION AREA. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO MINIMIZE USE OF CHEMICALS AND OTHER SUBSTANCES IN THESE AREAS THAT COULD INFILTRATE AND/OR CAUSE HARM TO THE GROUNDWATER. THE CONTRACTOR SHALL BE LIABLE AND RESPONSIBLE FOR ANY SPILLS OCCURRING AS PART OF THE WORK IN THESE AREAS, INCLUDING ALL ACTIONS AND COSTS TO STOP AND/OR TO FULLY REMEDIATE ANY SUCH RELEASE, WHETHER SUCH COSTS ARE INCURRED BY THE CITY OF RIVERSIDE, OR OTHERS, TO THE SATISFACTION OF THE CITY OF RIVERSIDE. CLEANUP SHALL BE IN ACCORDANCE WITH LOCAL GOVERNING AGENCIES AT THE CONTRACTOR'S EXPENSE. IF THERE IS A SPILL OF ANY QUANTITY, THE CONTRACTOR IS TO IMMEDIATELY REPORT IT TO THE CITY OF RIVERSIDE FIRE DEPARTMENT (937–233–2080) OR IN AN EMERGENCY, CALL 911; SPILLS OF REPORTABLE QUANTITIES MUST BE REPORTED WITHIN 30 MINUTES BY THE RESPONSIBLE PARTY TO THE LOCAL EMERGENCY COORDINATOR (937–901–5112) AND THE OEPA (1-800-282-9378).

# RESTRICTED STAGING/STORING OF EQUIPMENT & MATERIALS AREA

NO STAGING OR STORING OF EQUIPMENT OR MATERIALS IS PERMITTED ON PUBLIC OR PRIVATE PROPERTY FROM STA. 343+43 TO STA. 353+00 AND STA. 363+28 TO STA.

### MANAGEMENT OF LANDFILL WASTE

LANDFILL WASTES (INCLUDING SOLID WASTE, HAZARDOUS WASTE, AND ASSOCIATED SOILS) EXCAVATED DURING CONSTRUCTION SHALL BE MANAGED IN ACCORDANCE WITH ALL APPLICABLE STATE AND FEDERAL LAWS AND REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION, INCLUDING ORC 3734. THE POTENTIAL LOCATION FOR THE POSSIBILITY OF ENCOUNTERING LANDFILL WASTE IS BETWEEN STA. 303+01.50R AND STA. 307+27.00R.

SOLID WASTE EXCAVATED BETWEEN STA. 303+01.50R AND STA. 307+27.00R SHALL BE STORED IN A LEAKPROOF COVERED CONTAINER. LANDFILL WASTES (INCLUDING SOLID WASTE, HAZARDOUS WASTE, AND ASSOCIATED SOILS) EXPOSED DURING CONSTRUCTION BUT NOT EXCAVATED SHALL BE COVERED WITH IMPERMEABLE MATERIAL DURING RAIN EVENTS, TO PROTECT GROUNDWATER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER TESTING, TRANSPORTATION, AND DISPOSAL OF THE LANDFILL WASTES AT A LICENSED (BY THE LOCAL HEALTH DEPARTMENT) AND PERMITTED (BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY)

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS AND TO TRANSPORT THE MATERIAL TO A LICENSED AND PERMITTED TREATMENT OR DISPOSAL FACILITY.

COPIES OF ALL WASTE MANIFESTS ARE TO BE PROVIDED TO THE PROJECT ENGINEER. PRIOR TO REMOVAL OF ANY LANDFILL WASTES (INCLUDING SOLID WASTE, HAZARDOUS WASTE, AND ASSOCIATED SOILS), COPIES OF SAMPLE ANALYSIS RESULTS AND THE SELECTION OF THE APPROPRIATE TREATMENT OR DISPOSAL METHOD, ALONG WITH A COPY OF THE LETTER OF ACCEPTANCE FROM THE TREATMENT/DISPOSAL FACILITY, MUST BE SUBMITTED TO AND ACCEPTED BY OEPA.

IN ADDITION TO THE ABOVE NOTIFICATION REQUIREMENTS, THE CONTRACTOR SHALL CONTACT THE WPAFB OFFICE OF ENVIRONMENTAL RESTORATION (TREVA BASHORE, RPM, AT 937-257-6391) WITHIN 24 HOURS IF LANDFILL WASTE/DEBRIS IS ENCOUNTERED BETWEEN STA. 303+01.50R AND STA. 307+27.00R.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE POTENTIAL WORK NOTED ABOVE AND SHALL BE PAID FOR IN THE APPROPRIATE CONTRACT BID PRICE LISTED BELOW:

690E70030 SPECIAL - ENVIRONMENTAL, LANDFILL WASTE....3 CY

# MANAGEMENT OF LANDFILL LEACHATE

IF EXCAVATIONS WITHIN THE 300' OF THE LANDFILL LIMITS ENCOUNTERS LEACHATE, THE CONTRACTOR SHALL ENSURE THAT THE LEACHATE IS COLLECTED AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE STATE AND FEDERAL LAWS AND REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION, INCLUDING ORC 3734. THE POTENTIAL LOCATION FOR THE POSSIBILITY OF ENCOUNTERING LANDFILL WASTE IS BETWEEN STA. STA. 303+01.50R AND STA. 307+27.00R.

THE CONTRACTOR SHALL ARRANGE FOR THE PROPER TESTING, TRANSPORTATION, AND DISPOSAL OF THE WATER AT A LICENSED (BY THE LOCAL HEALTH DEPARTMENT) AND PERMITTED (BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY) FACILITY.

COPIES OF ALL WASTE MANIFESTS ARE TO BE PROVIDED TO THE PROJECT ENGINEER. PRIOR TO REMOVAL OF ANY LANDFILL WASTES (INCLUDING SOLID WASTE, HAZARDOUS WASTE, AND ASSOCIATED SOILS), COPIES OF SAMPLE ANALYSIS RESULTS AND THE SELECTION OF THE APPROPRIATE TREATMENT OR DISPOSAL METHOD, ALONG WITH A COPY OF THE LETTER OF ACCEPTANCE FROM THE TREATMENT/DISPOSAL FACILITY, MUST BE SUBMITTED TO AND ACCEPTED BY OFPA.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE POTENTIAL WORK NOTED ABOVE AND SHALL BE PAID FOR IN THE APPROPRIATE CONTRACT BID PRICE LISTED BELOW:

690E70030 SPECIAL-ENVIRONMENTAL, LANDFILL LEACHATE ...1 CY

# **BASE CIVIL ENGINEERING WORK CLEARANCE REQUEST (AF FORM 103)**

THE CONTRACTOR SHALL SUBMIT A BASE CIVIL ENGINEERING WORK CLEARANCE REQUEST (AF FORM 103) TO WRIGHT PATTERSON AIR FORCE BASE (WPAFB) TWO (2) WEEKS PRIOR TO COMMENCEMENT OF ON-SITE WORK. THE AF FORM 103 IS IN ADDITION TO THE OUPS LOCATE TICKET. THE AF FORM 103 ALLOWS WPAFB TO LOCATE AND MARK THEIR PRIVATELY OWNED UTILITIES AND PROVIDE COMMENTS DIRECTLY TO THE CONTRACTOR, ALONG WITH ENVIRONMENTAL, SAFETY, AND EMERGENCY RESPONSE. THE CONTRACTOR SHALL CONTACT WPAFB REPRESENTATIVE T.J. BERNARD, P.E. AT EITHER (937) 656-3578 (OFFICE) OR (937) 207-1065 (CELL) FOR ASSISTANCE COMPLETING THIS FORM.



# METHOD OF MEASUREMENT:

THE DEPARTMENT WILL MEASURE ASPHALT REJUVENATING AGENT BY THE NUMBER OF GALLONS OF UNDILUTED MATERIAL APPLIED.

### BASIS OF PAYMENT:

REJUVENATING AGENT IS INCIDENTAL TO ITEM SPECIAL - ASPHALT REJUVENATING AGENT.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE

1865 GAL. LUMP

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF WRIGHT PATTERSON AIR FORCE BASE, NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 50 FEET. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. NOTIFY THE ODOT OFFICE OF AVIATION WHEN SUBMITTING FAA FORM 7460-1.

NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND THE ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER

APPLICATIONS SHALL BE SENT TO THE FOLLOWING LOCATIONS:

EXPRESS PROCESSING CENTER THE FEDERAL AVIATION ADMINISTRATION SOUTHWEST REGIONAL OFFICE AIR TRAFFIC AIRSPACE BRANCH ASW-520 2601 MEACHAM BLVD FORTH WORTH, TEXAS 76137-4298

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OHIO DEPARTMENT OF TRANSPORTATION OFFICE OF AVIATION 2829 WEST DUBLIN-GRANVILLE ROAD COLUMBUS, OHIO 43235 PH: 614-387-2346



ITEM 202, REMOVAL MISC.: CONCRETE **BASE REMOVED** 

THIS PAY ITEM INCLUDES THE REMOVAL OF THE EXISTING CONCRETE BASE, AS WELL AS THE REMOVAL OF ANY EXISTING AGGREGATE BASE AND/OR SUBGRADE BELOW THE CONCRETE BASE THAT IS NECESSARY TO BE REMOVED IN ORDER TO MATCH THE PROPOSED TYPICAL 

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

THE PLANING SHALL BE SCHEDULED SO AS TO BE COVERED BY THE SURFACE COURSE WITHIN FIVE (5) CALENDAR DAYS. THE PLANING MAY HAVE TO BE DONE IN MORE THAN ONE OPERATION TO COMPLY WITH THE INTENT OF THIS NOTE.

THE COST OF THE ABOVE SHALL BE INCLUDED IN THE UNIT BID FOR THE RESPECTIVE ITEMS.

FAILURE TO COMPLY WITH THE ABOVE REQUIREMENTS SHALL RESULT IN DISINCENTIVES BASED ON THE AMOUNTS LISTED IN ODOT CMS TABLE 108.07-1 OF SPECIFICATIONS.

# ITEM 690 - SPECIAL - PAVEMENT CRACK AND JOINT REINFORCING FABRIC

A POLYPROPYLENE, STAPLE FIBER, NEEDLE PUNCHED, NONWOVEN GEOTEXTILE SHALL BE PROVIDED. ACCEPTABLE FABRIC MATERIAL SHALL INCLUDE THE FOLLOWING OR APPROVED EQUAL: GLASGRID CG200 FROM TENSAR INTERNATIONAL, TRUPAVE ENGINEERED PAVING MAT FROM OWENS CORNING, OR PAVEPREP SA FROM CRAFCO

THE MATERIAL SHALL BE 20" WIDE AND INSTALLED ALONG THE LONGITUDINAL SAWCUT JOINTS RUNNING PARALLEL WITH THE CURB AND ALONG ALL SAWCUTS OF THE FULL DEPTH REPLACEMENT AREAS. THE MATERIAL SHALL NOT BE INSTALLED UNTIL AFTER THE ADJACENT PAVEMENT HAS BEEN PLANED.

THE ENGINEER MAY DETERMINE IN THE FIELD TO COVER ADDITIONAL CRACKS IN THE FIELD. THE FOLLOWING ADDITIONAL ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY:

ITEM 690 SPECIAL - PAVEMENT CRACK AND JOINT REINFORCING FABRIC......100 S.Y.

PAYMENT FOR ITEM 690 SPECIAL - PAVEMENT CRACK AND JOINT REINFORCING FABRIC FOR ALL OPERATIONS DESCRIBED ABOVE SHALL
BE AT THE CONTRACT SQUARE YARD BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS

# ITEM 608 CURB RAMP, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 608 WALKS, CURB RAMPS, AND STEPS, EXCEPT AS HEREIN MODIFIED.

TRUNCATED DOME SPECIFICATIONS:

INSTALL DETECTABLE WARNINGS (TRUNCATED DOMES) FOR A DISTANCE OF 24" FROM THE BACK OF CURB FOR THE ENTIRE WIDTH OF THE RAMP OPENING WHERE IT IS FLUSH WITH THE PAVEMENT.

THE PANELS SHALL BE CAST IRON MATERIAL. THE PANELS SHALL BE ORDERED TO FIT RADIUS TIGHT. COLOR OF THE PANEL SHALL BE APPROVED BY THE ENGINEER PRIOR TO ORDERING.

PAYMENT FOR ITEM 608 CURB RAMP AS PER PLAN, FOR ALL OPERATIONS DESCRIBED ABOVE, SHALL BE AT THE CONTRACT SQUARE FOOT BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK PER RAMP.

# **ITEM 826 ASPHALT CONCRETE SURFACE** COURSE, TYPE 1 (448), PG64-22 FIBER TYPE C. AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 441 ASPHALT CONCRETE - MIX DESIGN AND QUALITY CONTROL AND SUPPLEMENTAL SPECIFICATION 826 ASPHALT CONCRETE WITH FIBERS, EXCEPT AS HEREIN MODIFIED.

FURNISH ALL MATERIALS, EQUIPMENT, LABOR, AND INCIDENTALS FOR MIXING ARAMID FIBER INTO HOT MIX ASPHALT (HMA) OR WARM MIX ASPHALT (WMA) PER THIS SPECIFICATION ARAMID FIBERS MUST BE COATED TO PREVENT THEM FROM BECOMING AIRBORNE DURING THE MIXING PROCESS, AND THE COATING MUST BECOME SOLUBLE IN THE ASPHALT. COATED ARAMID FIBER SHALL BE CONTINUOUSLY FED AND MIXED INTO HMA OR WMA PER DOSAGE AND MIXING REQUIREMENTS OF THIS SPECIFICATION. A CERTIFIED QA/QC MIXING TECHNICIAN SHALL PERFORM CONTINUOUS FEEDING OF THE COATED ARAMID FIBERS INTO THE ASPHALT DURING PLANT MIXING OPERATIONS FOR ALL OF THE FIBER REINFORCED HMA/WMA QUANTITIES REQUIRED FOR THE PROJECT, AND A P.E. STAMPED CERTIFICATION REPORT MUST BE SUBMITTED UPON PROJECT COMPLETION.

ACCEPTANCE OF THE REINFORCED HMA/WMA WILL INCLUDE THE FOLLOWING FACTORS:

- 1. THE OWNER/SPECIFIER SHALL RECEIVE FROM THE CONTRACTOR A PROFESSIONAL ENGINEER STAMPED QA/QC REPORT WHICH CERTIFIES THAT THE METERING AND CONTINUOUS FEEDING WAS PERFORMED PER THE DOSAGE RATE AND ALL OTHER REQUIREMENTS OF THIS SPECIFICATION BY A CERTIFIED TECHNICIAN, AND THAT VISUAL INSPECTION WAS PERFORMED DURING THE MIXING PROCESS TO CERTIFY THAT NO CLUMPING OF ARAMID FIBER OR COATING PRODUCT OCCURRED.
- 2. ALL OTHER CONSTRUCTION, MIXTURE AND DENSITY REQUIREMENTS OF THE ASPHALT AS DETAILED IN THE STANDARD SPECIFICATIONS

PAYMENT FOR ITEM 826 ASPHALT CONCRETE SURFACE COURSE. TYPE 1 (448), PG64-22 FIBER TYPE C, AS PER PLAN FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT CUBIC YARD BID PRICE AND SHALL INCLUDE ALL MATERIAL, LABOR, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

### THE ASPHALT REJUVENATING AGENT SHALL BE COMPOSED OF A PETROLEUM RESIN OIL BASE UNIFORMLY EMULSIFIED WITH WATER. THE MATERIAL SHALL HAVE A SATISFACTORY RECORD OF SERVICE AS AN ASPHALT REJUVENATING AGENT AND IN-DEPTH SEALER: SUCH SATISFACTORY SERVICE BEING BASED ON THE CAPABILITY OF THE MATERIAL TO INCREASE DUCTILITY AND PENETRATION VALUE OF THE ASPHALT BINDER IN THE PAVEMENT SURFACE AND TO SEAL THE

PAVEMENT IN DEPTH TO THE INTRUSION OF AIR AND WATER.

**ITEM SPECIAL - ASPHALT REJUVENATING** 

THE CONTRACTOR SHALL FURNISH THE MANUFACTURER'S CERTIFICATION THAT THE MATERIAL PROPOSED FOR USE IS IN COMPLIANCE WITH THE SPECIFICATION REQUIREMENTS AND INCLUDE COPIES OF SUPPORTING TESTS AND PREVIOUS USE DOCUMENTATION. THE PRODUCT "RECLAMITE", AS APPLIED BY PAVEMENT TECHNOLOGY, INC., 11260 BEREA ROAD, CLEVELAND, OHIO 44102 OR AN APPROVED EQUAL, IS ACCEPTABLE FOR THESE REQUIREMENTS

THE ASPHALT REJUVENATING AGENT SHALL BE APPLIED BY DISTRIBUTOR AT THE TEMPERATURE RECOMMENDED BY THE MANUFACTURER AND AT THE PRESSURE REQUIRED FOR PROPER DISTRIBUTION. BEFORE SPREADING, THE ASPHALT REJUVENATING AGENT SHALL BE BLENDED WITH WATER AT THE STANDARD DILUTION RATIO OF 2:1. THE COMBINED MIXTURE OF ASPHALT REJUVENATING AGENT AND WATER SHALL BE SPREAD AT THE MAXIMUM RATE OF 0.08 GALLONS PER SQUARE YARD, AS APPROVED BY THE ENGINEER

WHEN APPLICATION IS MADE UNDER TRAFFIC, A LIGHT COAT OF DRY, GRITTY SAND SHALL BE APPLIED TO THE SURFACE IN SUFFICIENT AMOUNT TO PROTECT THE TRAVELING PUBLIC. NO TREATED AREA SHOULD BE CONSIDERED COMPLETED UNTIL THAT AREA IS DETERMINED BY THE PROJET ENGINEER TO BE SAFE FOR TRAVEL.

### TESTING:

**AGENT** 

PRIOR TO APPLICATION OF THE ASPHALT REJUVENATING AGENT TO THE ENTIRE PROJECT, THE CONTRACTOR SHALL APPLY TEST STRIPS OF SAID AGENT AS SPECIFIED ABOVE. THE CONTRACTOR SHALL APPLY THREE (D) TEST STRIPS ON AREAS OF PAVEMENT WHICH ARE REPRESENTATIVE SAMPLES OF THE PAVEMENT TO BE TREATED AS DIRECTED BY THE ENGINEER. THE TEST STRIPS SHALL BE TEN FEET (10') IN WIDTH AND APPROXIMATELY FIFTY FEET (50') IN LENGTH. THE APPLICATION RATE SHALL BE 0.05 GALLONS PER SQUARE YARD; 0.065 GALLONS PER SQUARE YARD; AND 0.08 GALLONS PER SQUARE YARD, RESPECTIVELY, THE ENGINEER MAY VARY THE APPLICATION RATES AS FIELD CONDITIONS MAY REQUIRE. NO WORK SHALL BE PERMITTED UNTIL THE ENGINEER AND THE PRODUCE TECHNICAL REPRESENTATIVE HAVE EVALUATED THE TEST AREAS AND DETERMINED THE REQUIRED RATE OF APPLICATION FOR THE PROJECT.

LOCATION:

MOT-E. SPRINGFIELD STREET RECON.

2797 GALLONS (DILUTED AMOUNT)

ESTIMATED APPLICATION RATE, 0.065 GALLONS PER SQUARE YARD. TOTAL SQ. YD. = 43021

THE REJUVENATING AGENT SHOULD BE ATTEMPTED TO BE PLACED, IF POSSIBLE, PRIOR TO THE PLACEMENT OF THE FINAL PAVEMENT

APPLICATION OF COVER AGGREGATE:

COVER AGGREGATE SHALL ONLY BE USED AS DIRECTED BY THE ENGINEER IN THE EVENT THE ASPHALT REJUVENATING AGENT DOES NOT CURE IN A REASONABLE AMOUNT OF TIME (PER THE MANUFACTURER'S RECOMMENDATION), IF ADEQUATE PENETRATION DOES NOT OCCUR LEAVING EXCESS MATERIAL ON THE SURFACE OF THE PAVEMENT, OR IF APPLICATION IS REQUIRED TO FACILITATE THE OPENING OF LANES TO TRAFFIC. IF SAND IS APPLIED, ANY ADDITIONAL COSTS FOR CLEAN UP INCLUDING BROOMING OR SWEEPING OF EXCESS AGGREGATE OFF THE PAVEMENT WILL BE INCIDENTAL TO THIS ITEM OF

THE COST OF COVER AGGREGATE AND WATER TO DILUTE AN ASPHALT

CONTRACT PRICES AS FOLLOWS:

ITEM SPECIAL - ASPHALT REJUVENATING AGENT ITEM SPECIAL - TESTING

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## **ITEM 614 - MAINTAINING TRAFFIC**

IT IS THE INTENTION TO PERFORM THE REQUIRED WORK WITHIN THESE PLANS WITH THE LEAST INCONVENIENCE TO, AND THE MAXIMUM SAFETY OF, THE CONTRACTOR, LOCAL MERCHANTS, PEDESTRIAN TRAFFIC, AND THE TRAVELING PUBLIC.

REQUIREMENTS FOR MAINTAINING TRAFFIC AS SPECIFIED IN THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (CURRENT EDITION, LATEST REVISION), PERTINENT PROVISIONS OF THE "OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS" (INCLUDING SUPPLEMENTAL SPECIFICATIONS) AND APPLICABLE STANDARD CONSTRUCTION DRAWINGS SHALL APPLY TO THIS PROJECT IN ADDITION TO THE FOLLOWING NOTES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFE AND EFFECTIVE VEHICULAR TRAFFIC CONTROL 24 HOURS A DAY FOR THE DURATION OF THIS PROJECT. THIS WILL INCLUDE PROVIDING, PLACING, MAINTAINING, AND SUBSEQUENTLY REMOVING ALL NECESSARY TRAFFIC CONTROL MEASURES FOR ALL PROPOSED CONSTRUCTION OPERATIONS.

BEFORE THE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE NAME(S) AND TELEPHONE NUMBER(S) OF A PERSON OR PERSONS WHO CAN BE CONTACTED TWENTY—FOUR (24) HOURS A DAY BY THE ENGINEER, OR ANY OTHER INTERESTED POLICE AGENCY.

THIS PERSON OR PERSONS SHALL BE RESPONSIBLE FOR REPAIRING AND/OR REPLACING ALL TRAFFIC CONTROL DEVICES NEEDED TO MAINTAIN THE SAFETY OF THE TRAVELED PAVEMENT FOR THE DURATION OF THIS PROJECT. THIS PERSON SHALL HAVE AVAILABLE ALL MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO PERFORM THE REQUIRED REPAIRS WITHIN A REASONABLE PERIOD OF TIME AS PER C.M.S. 614.14.

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A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT AND THE COMPLETED PAVEMENT, EXCEPT IN PHASE 1 FULL DEPTH PAVEMENT REPAIRS IN WHICH NIGHT TIME FLAGGING OPERATIONS WILL BE PERMITTED.

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.

ACCESS TO AND FROM ALL LOCAL RESIDENTIAL AND BUSINESS DRIVES WITHIN THE LIMITS OF THIS PROJECT SHALL BE MAINTAINED AT ALL TIMES (24 HOURS A DAY) BY USING THE EXISTING PAVEMENT, TEMPORARY PAVEMENT, AND THE PROPOSED PAVEMENT UNLESS OTHERWISE DIRECTED BY THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEQUENCE THE WORK TO HELP MINIMIZE THE NEED FOR TEMPORARY AGGREGATE PAVEMENT. TEMPORARY AGGREGATE PAVEMENT CAN BE ASPHALT GRINDINGS OR OTHER AGGREGATE APPROVED BY THE ENGINEER. THE COST OF INSTALLATION, MATERIAL, AND REMOVAL OF THE TEMPORARY AGGREGATE PAVEMENT IS TO BE PART OF THE ITEM 614 MAINTAINING TRAFFIC LUMP SUM.

THE CONTRACTOR WILL BE REQUIRED TO PROVIDE, ERECT, MAINTAIN (IN PROPER POSITION, CLEAN AND LEGIBLE, AND IN GOOD WORKING CONDITION), AND SUBSEQUENTLY REMOVE ALL LIGHTS, SIGNS, CONES, BARRICADES, EXISTING PAVEMENT MARKINGS, AND ANY OTHER TRAFFIC CONTROL DEVICES NECESSARY FOR THE MAINTENANCE OF TRAFFIC.

THE CONTRACTOR SHALL ADJUST THE LOCATION AND/OR SPACING OF ALL TRAFFIC CONTROL CHANNELING DEVICES AS DICTATED BY THE PROGRESS OF THE REQUIRED WORK TO ALLOW CONSTRUCTION ACCESS TO WORK AREAS WHILE MAINTAINING SAFE AND EFFECTIVE TRAFFIC CONTROL DURING ALL CONSTRUCTION OPERATIONS. THE ORIGINAL LOCATION, PLACEMENT, SPACING AND SUBSEQUENT RELOCATION OR REMOVAL OF ALL TRAFFIC CONTROL DEVICES SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL.

IT IS INTENDED THAT THE TRAFFIC NOT BE SUBJECTED TO ANY LANE CLOSURES UNLESS ACTIVE WORK IS BEING PERFORMED IN OR IMMEDIATELY ADJACENT TO THE CLOSED LANE. THE ROADWAY SHALL NOT BE RESTRICTED TO ANY LANE CLOSURE DURING PERIODS OF INTERMITTENT OR IRREGULAR WORK, NOR CLOSED SOLELY FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER SHALL MAKE THE FINAL DETERMINATION AS TO WHAT CONSTITUTES ACTIVE WORK AND WHETHER OR NOT THE LANE CLOSURE IS JUSTIFIED.

IF, IN THE OPINION OF THE ENGINEER, THE LANE CLOSURE IS NOT JUSTIFIED, THEY MAY ORDER ALL OR PART OF THE LANE CLOSURE REOPENED TO TRAFFIC (UNTIL SUCH TIME THIS CONDITION IS CORRECTED.)

THE CONTRACTOR SHALL MAINTAIN TWO WAY TRAFFIC ALONG E. SPRINGFIELD STREET AT ALL TIMES UNLESS OTHERWISE SHOWN IN THE MOT PLANS. WHEN THE CLOSURE OF A THRU LANE IS REQUIRED, THE CONTRACTOR SHALL FOLLOW THE APPROPRIATE ODOT MAINTAINING TRAFFIC STANDARD CONSTRUCTION DRAWING.

# ITEM 614 - MAINTAINING TRAFFIC (CONT.)

THE CONTRACTOR SHALL FURNISH AND INSTALL ADVANCE WARNING "ROAD WORK AHEAD" (W20-1) SIGNS AND "END ROAD WORK" (G20-2) SIGNS, ON ALL PUBLIC ROADS ENTERING OR EXITING THE PROJECT LIMITS, AS WELL AS OTHER NECESSARY MAINTENANCE OF TRAFFIC SIGNS.

THE FLASHING ARROW PANELS SHOWN IN THE MOT PLAN SHALL BE INCLUDED IN THIS PAY ITEM.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 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.

### **CONSTRUCTION SEQUENCE**

PHASE 1 THE INTENT OF THIS PHASE OF CONSTRUCTION IS TO CONSTRUCT THE FULL DEPTH PAVEMENT REPAIRS AS SHOWN IN THE PLAN SHEETS BY REMOVING THE EXISTING ASPHALT PAVEMENT, EXISTING CONCRETE BASE COURSE, IF APPLICABLE, AND REPLACING WITH THE REQUIRED DEPTH OF ITEM 255 CONCRETE REPAIR AND ITEM 301 ASPHALT CONCRETE BASE COURSE SUCH THAT THE PAVEMENT IS FLUSH WITH THE EXISTING CONGRUENT ASPHALT SURFACE. THE PAVEMENT REPAIR SURFACE WILL BE MILLED AND RESURFACED IN A FUTURE CONSTRUCTION PHASE.

MOREOVER, THE EXISTING DRAINAGE STRUCTURE LOCATED IN THE PAVEMENT AT STA. 347+44 (19.5' RT) AND THE EXISTING CURB INLETS ALONG THE MEDIAN AT STA. 367+93 AND 369+70 SHALL BE REPLACED DURING THIS PHASE OF CONSTRUCTION.

DUE TO THE EXISTING CONCRETE BASE JOINTS ENCOMPASSING BOTH LANES OF TRAFFIC IN ONE DIRECTION, IT IS EXPECTED THE CONTRACTOR WILL NEED TO CLOSE BOTH LANES OF TRAFFIC TO CONSTRUCT THE REPAIRS AS NECESSARY. AT NO TIME WILL EAST SPRINGFIELD STREET BE COMPLETELY CLOSED IN EITHER DIRECTION. THUS, ONE LANE OF TRAFFIC MAY BE MAINTAINED FOR TWO-WAY TRAFFIC AT CERTAIN LOCATIONS BY THE USE OF FLAGGING OPERATIONS BETWEEN THE HOURS OF 6:00PM AND 6:300M. THE NIGHT TIME FLAGGING OPERATIONS SHALL BE FLOODLIGHTED.

PHASE 2 THE INTENT OF THIS PHASE OF CONSTRUCTION IS TO REMOVE THE EXISTING CURB ALONG THE SOUTHERN EDGE OF EAST SPRINGFIELD STREET, CONSTRUCT THE PROPOSED CURB, REPLACE THE REQUIRED STORM INLETS, AND INSTALL STREET LIGHTING ALONG THE SAME SOUTHERN EDGE OF EAST SPRINGFIELD STREET. THE 2' WIDE FULL DEPTH PAVEMENT REPLACEMENTS ALONG THE FACE OF THE PROPOSED CURB SHALL BE REPLACED WITH 6" OF ITEM 304 AGGREGATE BASE, 7.25" OF ITEM 613 LOW STRENGTH MORTAR BACKFILL, AND 3.25" OF ITEM 441 ASPHALT CONCRETE, INTERMEDIATE COURSE. W8-9 "LOW SHOULDER" SIGNS SHALL BE PROVIDED ACCORDING TO PLAN TO FOREWARN DRIVERS. THIS SECTION OF PAVEMENT WILL BE RESURFACED IN A FUTURE CONSTRUCTION PHASE.

IN ADDITION, PORTIONS OF THE TRAFFIC SIGNAL AT BONG STREET (SIGNAL POLES ON THE SOUTHERN SIDE) ALONG WITH THE ADJACENT CURB RAMP CAN BE INSTALLED DURING THIS PHASE. NEW TRAFFIC SIGNAL HEADS SHALL BE COVERED UNTIL PROPOSED SIGNAL IS READY TO BE ACTIVATED.

LIKEWISE, PROPOSED CURB RAMP ON THE SOUTHERN RIGHT TURN LANE OF CENTENNAL BOULEVARD CAN BE CONSTRUCTED IN THIS PHASE

TRAFFIC ISLANDS AT BOTH BONG STREET AND CENTENNAL BOULEVARD SHALL BE INSTALLED DURING A LATER PHASE.

AT NO TIME WILL EAST SPRINGFIELD STREET BE CLOSED IN EITHER DIRECTION AND AT LEAST ONE LANE OF TRAFFIC IN BOTH DIRECTIONS MUST REMAIN OPEN AT ALL TIMES. FURTHERMORE, ACCESS TO/FROM THE EXIT RAMP OF HARSHMAN ROAD, BONG STREET, AND CENTENNAL BOULEVARD SHALL BE MAINTAINED AT ALL TIMES. SEE MAINTENANCE OF TRAFFIC PLAN SHEETS.

# **CONSTRUCTION SEQUENCE (CONT.)**

PHASE 3. THE INTENT OF THIS PHASE OF CONSTRUCTION IS TO REMOVE THE EXISTING CURB ALONG THE NORTHERN EDGE OF EAST SPRINGFIELD STREET, CONSTRUCT THE PROPOSED CURB, REPLACE THE REQUIRED STORM INLETS, AND INSTALL STREET LIGHTING ALONG THE SAME NORTHERN EDGE OF EAST SPRINGFIELD STREET. THE 2' WIDE FULL DEPTH PAVEMENT REPLACEMENTS ALONG THE FACE OF THE PROPOSED CURB SHALL BE REPLACED WITH 6" OF ITEM 304 AGGREGATE BASE, 7.25" OF ITEM 613 LOW STRENGTH MORTAR BACKFILL, AND 3.25" OF ITEM 441 ASPHALT CONCRETE, INTERMEDIATE COURSE. W8-9 "LOW SHOULDER" SIGNS SHALL BE PROVIDED ACCORDING TO PLAN TO FOREWARN DRIVERS. THIS SECTION OF PAVEMENT WILL BE RESURFACED IN A FUTURE CONSTRUCTION PHASE.

IN ADDITION, PORTIONS OF THE TRAFFIC SIGNAL AT BONG STREET (SIGNAL POLES ON THE NORTHERN SIDE) ALONG WITH THE ADJACENT CURB RAMPS CAN BE INSTALLED DURING THIS PHASE. NEW TRAFFIC SIGNAL HEADS SHALL BE COVERED UNTIL PROPOSED SIGNAL IS READY TO BE ACTIVATED.

OTHER AREAS OF THE PROJECT TO BE COMPLETED IN THIS PHASE SHALL BE THE REMOVAL OF THE EXISTING BIKE TURN OFF LANE (306+25) PRIOR TO THE PRIVATE ROUNDABOUT DRIVE, INSTALLATION OF A CURB RAMP AT WAKE AVENUE, CLOSURE OF THE PARKING LOT ENTRANCE AT CENTENNAL BOULEVARD ALONG WITH CURB RAMP CONSTRUCTION, BUS STOP CONSTRUCTION, AND MISCELLANEOUS TRAFFIC SIGNAL INSTALLATION.

TRAFFIC ISLANDS AT BOTH BONG STREET AND CENTENNAL BOULEVARD SHALL BE INSTALLED AT A LATER PHASE.

AT NO TIME WILL EAST SPRINGFIELD STREET BE CLOSED IN EITHER DIRECTION AND AT LEAST ONE LANE OF TRAFFIC IN BOTH DIRECTIONS MUST REMAIN OPEN AT ALL TIMES. FURTHERMORE, ACCESS TO AND FROM THE ENTRANCE RAMP OF HARSHMAN ROAD, PRIVATE DRIVE, WAKE AVENUE, EDNA AVENUE, AND CENTENNAL BOULEVARD PARKING LOT SHALL BE MAINTAINED AT ALL TIMES. SEE PLAN SHEETS 22 TO 33 ALONG WITH ODOT STD. DWG. MT-95.31.

PHASE 4 THE INTENT OF THIS PHASE OF CONSTRUCTION IS TO CONSTRUCT THE COMPLETE INSTALLATION OF THE TRAFFIC SIGNAL AT THE INTERSECTION OF EAST SPRINGFIELD STREET AND BONG STREET ALONG WITH THE PROPOSED TRAFFIC ISLAND AND ISLAND CURB RAMPS.

ALSO, THIS PHASE OF CONSTRUCTION IS TO REMOVE THE EXISTING TRAFFIC ISLAND AT THE INTERSECTION OF EAST SPRINGFIELD STREET AND CENTENNAL BOULEVARD, RECONSTRUCT THE TRAFFIC ISLAND AT A SIMILAR LOCATION WITH COMPLIANT CURB RAMPS, AND COMPLETE THE INSTALLATION OF THE TRAFFIC SIGNAL ITEMS.

ALL FULL DEPTH PAVEMENT REPLACEMENTS ALONG CURB LINES SHALL BE REPLACED WITH 6" OF ITEM 304 AGGREGATE BASE, 7.25" OF ITEM 613 LOW STRENGTH MORTAR BACKFILL, AND 3.25" OF ITEM 441 ASPHALT CONCRETE, INTERMEDIATE COURSE. THIS SECTION OF PAVEMENT WILL BE RESURFACED IN A FUTURE CONSTRUCTION PHASE.

AT NO TIME WILL EAST SPRINGFIELD STREET BE CLOSED IN EITHER DIRECTION AND AT LEAST ONE LANE OF TRAFFIC IN BOTH DIRECTIONS MUST REMAIN OPEN AT ALL TIMES. FURTHERMORE, ACCESS TO AND FROM BONG STREET, EDNA AVENUE, AND CENTENNAL BOULEVARD SHALL BE MAINTAINED AT ALL TIMES. SEE PLAN SHEETS 34 TO 39 ALONG WITH ODOT STD. DWG. MT—95.31.

PHASE 5 THE INTENT OF THIS PHASE OF CONSTRUCTION IS TO PERFORM THE 1.75" OF PAVEMENT PLANING (MILLING) AND 0.25" OF PAVEMENT PLANING (MILLING) ALONG THE PROPOSED CURB, PAVING THE FINAL 1.75" OF ITEM 826 ASPHALT CONCRETE SURFACE COURSE, APPLYING THE FINAL PAVEMENT MARKINGS, CONSTRUCTING FINAL SIGNAGE, SEEDING AND MULCHING, AND ANY OTHER MISCELLANEOUS WORK TO COMPLETE THE CONSTRUCTION PROJECT.

AT NO TIME WILL EAST SPRINGFIELD STREET BE CLOSED IN EITHER DIRECTION AND AT LEAST ONE LANE OF TRAFFIC IN EACH DIRECTION MUST REMAIN OPEN AT ALL TIMES. ACCESS TO AND FROM ALL PRIVATE DRIVES AND ROADWAYS SHALL BE MAINTAINED AT ALL TIMES. PLAN SHEETS FOR THIS PHASE OF CONSTRUCTION IS NOT PROVIDED. MAINTENANCE OF TRAFFIC SHALL FOLLOW ALL STANDARDS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL ALONG WITH ODOT STD. DWG. MT-95.31, MT-95.32, AND MT-99.20,

GENERAL. THE SEQUENCE OF CONSTRUCTION NEEDS TO PROVIDE A WORK AREA FOR THE CONTRACTOR WHILE ALSO MAINTAINING TRAFFIC IN A MANNER WHICH IS SAFE FOR THE TRAVELING AND PEDESTRIAN PUBLIC. THE CONTRACTOR MAY SUBMIT ALTERATIONS TO THE MAINTENANCE OF TRAFFIC PLAN WITH WRITTEN APPROVAL FROM THE ENGINEER.

# **CONSTRUCTION SEQUENCE (CONT.)**

FOR MAINTENANCE OF LOCAL, BUSINESS, AND EMERGENCY VEHICLE TRAFFIC PURPOSES, LOCAL TRAFFIC MUST BE MAINTAINED AT ALL TIMES. MINIMUM LANE WIDTHS OF 10 FEET SHALL BE PROVIDED AT ALL TIMES, ALONG WITH ADEQUATE RADII AT INTERSECTIONS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIAL NEEDED FOR MAINTAINING TRAFFIC THROUGH ALL STAGES OF CONSTRUCTION IN ACCORDANCE WITH ITEM 614, INCLUDING STIPULATIONS STATED ELSEWHERE ON THESE PLANS, SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE BID FOR ITEM 614 — MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED IN THE PLAN.

### TRENCH FOR WIDENING

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIALS SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT APPROVAL OF THE ENGINEER.

## **OVERNIGHT TRENCH CLOSING**

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY, UNLESS THE BASE WIDENING IS SEPARATED FROM TRAFFIC BY DRUMS OR PORTABLE CONCRETE BARRIER AS SHOWN IN THE MOT PLAN DETAILS FOR PHASES 2 AND 3. IN MOT PHASE 2 AND 3, THE OUTER-MOST LANE OF TRAVEL WILL BE CLOSED TO TRAFFIC. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

THE CONTRACTOR WILL NOT BE COMPENSATED FOR ANY BACKFILL MATERIAL USED IN THE CLOSING OF THE OPEN TRENCH.

# DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITFM 616 - WATER

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### ITEM 614 - REPLACEMENT SIGN

FLATSHEET SIGNS 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 SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614 — REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF 5 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

### 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 15 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

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				186	32							218	202	32500	218	FT	CURB AND GUTTER REMOVED		
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		50				105 40 50 10	25 18 2 12					50 177 130 40 50 10 18 2 33	611 611 611 611 611 611 611 611	02000 04400 05900 07400 08900 10400 13400 98370 98690	50 177 130 40 50 10 18 2 33	FT FT FT FT FT FT EACH	8" CONDUIT, TYPE B 8" CONDUIT, TYPE C 12" CONDUIT, TYPE B 15" CONDUIT, TYPE B 18" CONDUIT, TYPE B 21" CONDUIT, TYPE B 24" CONDUIT, TYPE B 30" CONDUIT, TYPE B	85	
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		50				105 40 50 10	25 18 2 12					50 177 130 40 50 10 18 2 33	611 611 611 611 611 611 611 611	02000 04400 05900 07400 08900 10400 13400 98370 98690	50 177 130 40 50 10 18 2 33	FT FT FT FT FT FT EACH	8" CONDUIT, TYPE B 8" CONDUIT, TYPE C 12" CONDUIT, TYPE B 15" CONDUIT, TYPE B 18" CONDUIT, TYPE B 21" CONDUIT, TYPE B 24" CONDUIT, TYPE B 30" CONDUIT, TYPE B	85	
		50				105 40 50 10	25 18 2 12					50 177 130 40 50 10 18 2 33	611 611 611 611 611 611 611 611	02000 04400 05900 07400 08900 10400 13400 98370 98690	50 177 130 40 50 10 18 2 33	FT FT FT FT FT FT EACH	8" CONDUIT, TYPE B 8" CONDUIT, TYPE C 12" CONDUIT, TYPE B 15" CONDUIT, TYPE B 18" CONDUIT, TYPE B 21" CONDUIT, TYPE B 24" CONDUIT, TYPE B 30" CONDUIT, TYPE B	85	

			SH	IEET NU	JM.						PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET
3	6	43	44	45	46		55	56		CALC	01/S<2/P V		EXT	TOTAL		223.4	NO.
	+															PAVEMENT	
		2,236	854								3,090	254	01001	3,090	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1/4")	6
										39,969	39,969	254	01001	39,969		PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1-3/4)	6
,140											2,140	254	01600	2,140	SY	PATCHING PLANED SURFACE	
,244		1,466	128								2,838	255	10110	2,838	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS OC FS	
,244		1,400	120								2,030	233	10110	7 2,000	01	TOLE BET TITT AVEINENT REMOVAE AND RIGID RET EAGENENT, GEAGG &CTO	
190		225	20								435	301	46000	435	CY	ASPHALT CONCRETE BASE, PG64-22	
	-	555	241	12	12						820	304	20000	820	CY	AGGREGATE BASE	
		133	52								185	407	10000	185	GAL	TACK COAT	
		100	- 52							3,872	3,872	407	20000	3,872		NON-TRACKING TACK COAT	
										,				,			
		202	77								279	441	50300	279	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
				27							27	452	13011	27	SY	9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN	5
			217	21							217	452	14011	217		10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN	5
	1										<u> </u>					,, ,	
		139	35								174	609	12001	174		COMBINATION CURB AND GUTTER, TYPE 2, AS PER PLAN	5, 86
		9,290	3,662								12,952	609	26001	12,952		CURB, TYPE 6, AS PER PLAN	5, 86
	-	23	49								72	609	58001	72	SY	9" CONCRETE TRAFFIC ISLAND, AS PER PLAN	5
		444	171								615	613	41300	615	CY	LOW STRENGTH MORTAR BACKFILL (TYPE 2)	
	100	1,779	702								2,581	SPECIAL	69012050	2,581	SY	REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS	6
	LS 1,865										LS 1,865	SPECIAL SPECIAL	69098400 69098900	LS 1,865	GAL	TESTING ASPHALT REJUVENATING AGENT	6
	1,000										1,005	SPECIAL	09090900	1,000	GAL	ASPHALI REJOVENATING AGENT	+ •
		2	1							2,092	2,095	826	10041	2,095	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), FIBER TYPE C, AS PER PLAN	6
							- 50				400	005	00450	400	E 4 OL I	LIGHTING	
							56 6	50			106 6	625 625	00450 00470	106 6		CONNECTION, FUSED PULL APART CONNECTION, UNFUSED BOLTED	
							28	4			32	625	10481	32		LIGHT POLE, DECORATIVE, AS PER PLAN	108
								21			21	625	10500	21	EACH	LIGHT POLE, MISC.:MONOARM RISE LIGHT POLE (AT12B32.5)	108
							26	2			28	625	14000	28	EACH	LIGHT POLE FOUNDATION, 24" X 6' DEEP	
	+				-		2	2			4	625	14001	4	EACH	LIGHT POLE FOUNDATION, 24" X 6' DEEP, AS PER PLAN	108
								21			21	625	14100	21		LIGHT POLE FOUNDATION, 24" X 8' DEEP	100
							9,864	24,345			34,209	625	23302	34,209	FT	NO. 6 AWG 2400 VOLT DISTRIBUTION CABLE	
							2,016	4,068			6,084	625	23400	6,084		NO. 10 AWG POLE AND BRACKET CABLE	
							2,056	6,804			8,860	625	25408	8,860	FT	CONDUIT, 2", 725.051	_
							103				103	625	25604	103	FT	CONDUIT, 4", 725.051	
							701	370			1,071	625	25909	1,071		CONDUIT, JACKED OR DRILLED, 725.052, AS PER PLAN, 2"	88
							62	143			205	625	25909	205		CONDUIT, JACKED OR DRILLED, 725.052, AS PER PLAN, 3"	88
								283 21			283 21	625 625	25909 26253	283 21		CONDUIT, JACKED OR DRILLED, 725.052, AS PER PLAN, 4"  LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAN	88 108
								21			21	025	20255	21	EACH	LOWINAIRE, CONVENTIONAL, SOLID STATE (LED), AS PER PLAIN	100
							28	4			32	625	27551	32	EACH	LUMINAIRE, DECORATIVE, AS PER PLAN (PHILLIPS HADCO RL32 LED OR APPROVED EQUAL)	108
							2,246	6,804			9,050	625	29000	9,050	FT	TRENCH	
	1	1			ļ		2	3			5	625	30510	5 56		PULL BOX, 725.06, SIZE 4	
	+	+		-			29	27 3			56 3	625 625	32000 34001	56 3		GROUND ROD POWER SERVICE, AS PER PLAN	108
	+ +										Ť	323	3,001		_/,(0)1	,	1.00
								473			473	632	69800	473	FT	SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG	
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SHEET NO. REFERENCE NO.	s	TATION I	RANGE	TYPICAL SECTION	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA	PAVEMENT REMOVED	CURB REMOVED	AND GUTTER REMOVED 702	MOVAL MISC.:CONCRETE  BASE REMOVED	3GRADE COMPACTION PO	EXCAVATION OF SUBGRADE PO	GRANULAR MATERIAL, TYPE B &	GEOTEXTILE FABRIC PO	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER \$5 PLAN (1/4")	FULL DEPTH PAVEMENT REMOVAL AND RIGID EPLACEMENT, CLASS & FS	ASPHALT CONCRETE BASE, 60 PG64-22	AGGREGATE BASE 60	TACK COAT	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE \$\frac{1}{2}\$. (448)	B RAMP, AS PER PLAN 89	COMBINATION CURB AND GUTTER, TYPE 2, AS PER 69 PLAN	, TYPE 6, AS PER PLAN 69	CONCRETE TRAFFIC ISLAND 8	LOW STRENGTH MORTAR 9 BACKFILL (TYPE 2)	REINFORCED MESH FOR STRANSVERSE AND/OR TRANSVERSE AND/OR TO LONGITUDINAL JOINTS AND STRANSVERSE CRACKS	
						FT	FT	SY	SY	SY	FT	FT COR	SY	SY	CY	Q GRAN	SY	ASP!	S.A.	C.A.	CY	GAL	CA	CURB SF	S 8	CURB	SY	CY	SY SY	SUR (448)
59         P1           59-60         P2           59-64         P3           59         P4           60         P5           50-62         P6           60         P7           60         P8           61         P9           61         P10           61         P11           61         P12           62         P13           62         P14           62         P16           62         P16           63         P18           63         P20           63         P21           63         P23           63         P24           63         P25           63         P25           64         P27           64         P28           64         P29           64         P30           64         P31           34-69         P31           65         P35           65         P35           66         P37           66         P37           66         P37	303+90.9 305+52.5 306+36.5 309+41.4 309+98.3 310+27.8 312+24.6 313+31.1 314+87.2 315+15.8 316+36.6 317+65.0 318+24.3 318+84.0 320+42.7 321+04.5 321+95.2 322+46.0 322+46.0 323+15.6 323+75.1 324+05.5 325+99.5 327+18.3 327+87.4 328+33.4 328+90.0 329+50.9 329+70.2 330+76.7 330+76.7 330+76.7 330+76.7 330+76.7 333+33.2 335+02.5 336+55.1	4 9 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	302+73.73 308+70.11 329+04.39 305+58.00 306+43.30 310+02.60 310+33.50 312+31.30 313+37.40 315+25.90 316+46.70 317+72.90 318+61.50 320+81.50 320+81.50 321+11.10 321+71.90 322+03.30 323+28.69 329+13.46 323+23.10 323+28.69 329+13.46 323+23.10 323+28.69 329+13.46 323+23.10 323+28.69 329+13.46 323+23.10 323+83.80 324+20.56 324+15.70 326+24.90 327+27.70 327+97.00 328+39.40 329+18.68 352+94.59 332+8.60 330+83.60 330+83.60 330+83.60 333+51.00 335+11.40		LT LT RT RT LT LT RT LT	19.23 522.17 2513.40 5.50 6.80 951.28 4.30 5.70 6.70 6.30 7.20 10.10 10.10 7.90 37.20 9.50 38.80 6.70 7.40 8.10 82.65 667.42 7.50 8.70 14.76 10.20 25.40 9.40 9.60 6.00 28.65 2343.68 2296.71 6.90 6.90 17.80 8.90 6.80 7.30	33.41 27.89 2.00 21.13 12.23 21.87 38.24 38.00 38.00 37.97 38.00 17.83 18.51 23.54 41.10 18.19 2.00 2.00 2.00 2.00 2.05 29.58 29.71 46.16 18.83 48.00 11.59 2.00	7.75 16.28 26.77 30.40 42.64 42.64 42.64 43.33 157.07 18.82 79.80 17.52 33.79 16.37 18.37 148.32 15.83 33.52 83.85 48.21 20.09 32.00 36.89 520.82 510.38 14.09 13.54 14.77 37.58 28.71	5.10 118.76 571.81 20.79 20.75 233.39 10.14 7.73 17.03 26.37 42.35 33.21 156.90 18.87 75.51 18.85 33.49 16.32 17.83 152.89 15.63 18.73 3.23 33.84 48.71 19.98 32.38 19.36 48.71 19.98 32.38 19.36 49.37 40.36 40.37	17.83 152.89 3.23	4 380 2467 937 937 669	18 50 12	5.10 118.75 571.81 233.39 152.89 55.61 536.42 577.12	8.77 205.76 984.98 20.79 20.75 391.56 10.14 7.73 17.03 26.37 30.55 42.37 42.35 33.21 156.90 18.85 33.49 16.32 17.83 264.39 15.63 18.73 3.23 33.84 76.36 48.71 19.98 32.38 32.86 914.75 960.12 14.20 12.59 14.78 37.40 28.87	4.38 102.88 465.14 10.40 10.38 184.91 5.68 8.79 10.18 28.25 28.23 11.07 52.30 6.29 25.17 6.28 11.16 5.44 5.94 88.13 5.21 6.24 1.08 11.28 25.45 16.24 6.66 10.79 10.95 431.98 453.40 4.73 4.20 9.85 24.93 9.62 10.23	4.38 102.88 465.14 10.40 10.38 184.91 5.68 8.79 10.18 28.25 28.23 11.07 52.30 6.29 25.17 6.28 11.16 5.44 5.94 88.13 5.21 6.24 1.08 11.28 25.45 16.24 6.66 10.79 10.95 431.98 453.40 4.73 4.20 9.85 24.93 9.62 10.23	8.77 205.76 984.98 20.79 20.75 391.56 10.14 7.73 17.03 26.37 30.55 42.37 42.35 33.21 156.90 18.87 75.51 18.85 33.49 16.32 17.83 264.39 15.63 18.73 3.23 33.84 76.36 48.71 19.98 32.38 32.86 914.75 960.12 14.20 12.59 14.78 37.40 28.87	233.39 17.83 152.89 3.23	20.79 20.75 10.14 7.73 17.03 26.37 30.55 42.37 42.37 33.21 156.90 18.85 33.49 16.32 15.63 18.73 33.84 76.36 48.71 19.98 32.38	3.18 3.17 1.55 1.18 2.61 4.03 4.68 6.50 5.07 24.06 2.89 11.58 2.89 5.14 2.50 2.87 5.17 11.67 7.44 3.05 4.95 4.95	1.26 29.46 143.02 56.47 56.47 4.95 37.87 0.90	9.17 1.16 32.19 34.63	0.46 10.69 51.46 21.01 21.01 1.60 13.76 0.29 1.74 48.28 51.94	83.90	99	22 522 2479 949 949 669 81 2270 2298	22.51	1.02 23.75 114.36 46.68 46.68 30.58	100.55 477.04 176.09 176.09 124.14 124.14 17.40 447.40 436.10	0.25 0.74 0.74
66 P39 66 P40 66 P41 66 P42 67 P43 67 P44 68 P45 68 P46 68 P49 68 P49 68 P50 68 P51 68 P52 68 P53 68 P54 68 P55 68 P55 68 P55 68 P55	339+26.8 340+19.4 340+50.7 342+90.9 343+18.5 346+29.2 346+59.4 346+63.8 346+91.5 347+21.8 347+39.9 347+94.9 347+95.8 349+65.8 349+65.8 349+94.0 350+81.3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	338+76.00 339+35.80 340+24.70 340+98.40 342+98.70 343+24.20 346+36.10 346+92.30 346+92.30 347+27.00 347+58.80 348+98.70 348+04.80 349+73.40 350+00.80 351+24.40		LT/RT LT/RT RT LT/RT RT LT/RT RT LT/RT LT/RT LT/RT LT RT RT LT LT RT LT LT LT LT LT LT LT/RT LT LT/RT LT LT LT/RT LT LT/RT LT LT LT/RT	8.30 9.00 5.30 47.70 7.80 5.70 6.90 7.70 28.50 7.10 5.20 18.81 103.80 6.90 7.60 6.80 43.10 8.20	38.00 19.17 20.32 20.37 8.26 10.28 11.61 12.40 8.01 22.06 20.52 30.85 8.87 21.29	38.00 10.81 69.70 32.93 12.14 15.58 17.43 26.16 8.11 6.71 25.92 92.38 16.91 17.33 23.31 42.48 19.40		2272.16	9017	186 186	2251.09	35.32 38.04 9.91 69.75 32.73 12.16 15.69 17.58 26.44 8.11 25.35 92.32 17.18 17.46 22.99 42.82 19.40 5249.63 5250	11.77 12.68 3.30 23.25 10.91 4.05 5.23 5.86 8.81 2.70 2.25 8.45 30.77 5.73 5.82 7.66 14.27 6.47 2283.85	11.77 12.68 3.30 23.25 10.91 4.05 5.23 5.86 8.81 2.70 2.25 8.45 30.77 5.73 5.82 7.66 14.27 6.47 2283.85	35.32 38.04 9.91 69.75 32.73 12.16 15.69 17.58 26.44 8.11 6.74 25.35 92.32 17.18 17.46 22.99 42.82 19.40 5249.63 5250	2235.91 2236	35.32 38.04 9.91 69.75 32.73 12.16 15.69 17.58 26.44 8.11 6.74 25.35 92.32 17.18 17.46 22.99 42.82 19.40 1465.41 1466	5.40 5.81 1.51 10.66 5.00 1.86 2.40 2.69 4.05 1.24 1.03 3.87 14.16 2.62 2.67 3.51 6.57 2.96 224.26 225	554.99 555	132.90 133	201.23	83.90	139 139	9290 9290	22.51	443.71	1778.72 1779	1.13



IMPROVEMENTS

10 10 10 10 10 10 10 10 10 10 10 10 10 1																															
FT   FT   SY   SY   SY   FT   FT   SY   SY   SY   SY   SY   SY   SY   S			STATION	I RANGE	TYPICAL SECTION	DISTANCE (D)	AVERAGE WIDTH (W)	<u>u</u> ]		REMOVED	REMOVED		AND GUTTER REMOVED	RETE	COMPACTION	SUBGRADE	ТҮРЕ В			ULL DEPTH PAVEMENT REMOVAL AND RIGD LACEMENT, CLASS OC FS	CONCRETE BASE, PG64-22			'PE	SS		RB AND AS PER	AN	(ND)	LOW STRENGTH MORTAR 9. BACKFILL (TYPE 2)	REINFORCED MESH FOR 10 TRANSVERSE AND/OR LONGITUDINAL JOINTS AND 10 CRACKS ASPHALT CONCRETE SURFACE COURSE, TYPE 1, 18
70-72         P64         359+42.90         370+80.69         LT         1137.79         2.00         252.84         261.14         261.14         452.47         213.67         213.67         261.14         452.47 <td>69 P58 69 P59 69 T12 69-73 P60 69-70 P61 70 P62</td> <td>8 9 2 0 1</td> <td>352+65.70 352+67.40 352+95.20 352+95.80 353+94.51 354+29.50 357+87.70</td> <td>352+80.00 354+29.50 353+68.30 353+28.08 371+18.19 359+10.87 357+96.90</td> <td>  L1   L1   R   R   R   R   R   R   R   R   R  </td> <td>RT 14.30 1 162.10 1 73.10 1 32.28 1 1723.68 1 481.37 1 9.20</td> <td>16.95 14.00 2.00 2.00 2.00 3 2.00 2.00 25.50 32.48</td> <td>26.93 252.16 16.24 7.17 383.04 106.97 26.07</td> <td>26.73 36.00 16.26 22.49 406.02 111.38 26.08</td> <td>252.19 16.26 22.49 406.02</td> <td>SY</td> <td>94</td> <td>FT</td> <td>252.19 22.49 406.02</td> <td>26.73 63.00 28.43 38.32 688.69 192.71 26.08</td> <td>8.91 21.00 9.48 12.77 325.22 192.71 13.04 15.52</td> <td>8.91 21.00 9.48 12.77 325.22 192.71 13.04 15.52</td> <td>26.73 63.00 28.43 38.32 688.69 192.71 26.08 31.03</td> <td>36.00 16.26 22.49 406.02</td> <td>26.73 26.08</td> <td>3.98</td> <td>33.02 4.06 9.58 100.70</td> <td>2.16 0.98 1.35 24.36</td> <td>3.24 1.46 2.02 36.54</td> <td>51</td> <td>SF</td> <td>FT</td> <td>162.00 73.00 95.00 1696.00</td> <td></td> <td>7.20 3.25 4.50 81.20</td> <td>30.06 0.7 19.90 330.00</td>	69 P58 69 P59 69 T12 69-73 P60 69-70 P61 70 P62	8 9 2 0 1	352+65.70 352+67.40 352+95.20 352+95.80 353+94.51 354+29.50 357+87.70	352+80.00 354+29.50 353+68.30 353+28.08 371+18.19 359+10.87 357+96.90	L1   L1   R   R   R   R   R   R   R   R   R	RT 14.30 1 162.10 1 73.10 1 32.28 1 1723.68 1 481.37 1 9.20	16.95 14.00 2.00 2.00 2.00 3 2.00 2.00 25.50 32.48	26.93 252.16 16.24 7.17 383.04 106.97 26.07	26.73 36.00 16.26 22.49 406.02 111.38 26.08	252.19 16.26 22.49 406.02	SY	94	FT	252.19 22.49 406.02	26.73 63.00 28.43 38.32 688.69 192.71 26.08	8.91 21.00 9.48 12.77 325.22 192.71 13.04 15.52	8.91 21.00 9.48 12.77 325.22 192.71 13.04 15.52	26.73 63.00 28.43 38.32 688.69 192.71 26.08 31.03	36.00 16.26 22.49 406.02	26.73 26.08	3.98	33.02 4.06 9.58 100.70	2.16 0.98 1.35 24.36	3.24 1.46 2.02 36.54	51	SF	FT	162.00 73.00 95.00 1696.00		7.20 3.25 4.50 81.20	30.06 0.7 19.90 330.00
	70-72 P64 72 P65 72 P66 72 P67	4 5 6 7	359+42.90 366+65.10 367+88.10 368+45.30	370+80.69 366+73.80 367+97.90 368+52.00	RT RT	Γ 1137.79 Γ 8.70 Γ 9.80 Γ 6.70	2.00 12.47 6.80 25.25	252.84 12.05 7.40 18.80	261.14 12.04 7.53 19.23	261.14		1148		261.14	452.47 12.04 7.53 19.23	213.67 6.02 3.77 9.62	213.67 6.02 3.77 9.62	452.47 12.04 7.53 19.23	261.14	12.04 7.53 19.23	1.84 1.15 2.94	0.39	15.67	23.50				1148.00		52.23	5.37