

**GENERAL:**

THE CONTRACTOR SHALL SUBMIT IN WRITING A SCHEDULE OF OPERATIONS TO THE ENGINEER (SEE 108.02) AND RECEIVE APPROVAL IN WRITING BEFORE WORK IS STARTED ON THIS PROJECT. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

**CONTRACTORS EQUIPMENT - OPERATION AND STORAGE:**

THE CONTRACTORS EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC WHERE PRACTICAL. EQUIPMENT SHALL HAVE AT LEAST ONE AMBER FLASHING LIGHT. WHEN PARKED ALONG THE HIGHWAY, THE EQUIPMENT SHALL BE LOCATED EITHER A MINIMUM OF THIRTY FEET FROM THE EDGE OF PAVEMENT OR SIX FEET BEHIND GUARDRAIL WITH A MINIMUM OF 125 FEET OF GUARDRAIL PRECEDING THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT AN APPROVED CONTRACTORS STORAGE AREA.

**CONTINGENCY QUANTITIES:**

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT,

**REMOVAL ITEMS:**

UNLESS OTHERWISE INSTRUCTED, ASPHALT AND ANY OTHER MISCELLANEOUS ITEMS (SUCH AS GUARDRAIL) DESIGNATED FOR REMOVAL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE REMOVED ITEM.

**PROFILE AND ALIGNMENT:**

THIS PROJECT INVOLVES A COMBINATION OF MAINTAINING THE EXISTING PAVEMENT ELEVATIONS AS WELL AS RAISING THE EXISTING PAVEMENT ELEVATIONS (AVG. 6.75") WHILE MAINTAINING THE EXISTING ALIGNMENT(S). PLACEMENT OF THE PROPOSED PAVEMENT SHALL BE AS SHOWN ON THE TYPICAL SECTIONS AND PROPOSED PROFILE SHEETS.

PREVIOUS CONSTRUCTION PLANS "UNI-739-0.02 (1989)" AND "UNI-739-2.01 (1993)" ARE AVAILABLE FOR INSPECTION AT THE ODOT DISTRICT 6 OFFICE AND WILL BE PROVIDED AS A DIGITAL SUBMITTAL AS PART OF THE PLAN PACKAGE .

**DRIVEWAYS, SIDE ROADS, AND MAILBOX APPROACHES:**

QUANTITIES AND DETAILS HAVE BEEN PROVIDED FOR THE TREATMENT OF DRIVEWAYS, INTERSECTIONS, AND MAILBOX APPROACHES.

**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.

THE SUSPEND/RESUME PORTION OF THIS PLAN (SLM 1.21 - SLM 1.88) CONSTITUTES THE SUSPENSION OF REHABILITATION WORK. ITEMS AND QUANTITIES HAVE BEEN PROVIDED WITHIN THE SUSPEND/RESUME TO PERFORM CENTER AND EDGE LINE RUMBLE STRIPES AND PAVEMENT MARKING.

**ROUNDING:**

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

**UTILITIES:**

NO UTILITY IMPACT IS ANTICIPATED DUE TO THE SCOPE OF WORK. THE ODOT CONTRACTOR IS REQUIRED TO CONTACT OHIO811 A MINIMUM OF 48 HOURS EXCLUDING WEEKENDS AND HOLIDAYS TO PERMIT ALL UNDERGROUND UTILITIES AN OPPORTUNITY TO MARK THEIR LINES AND TO ENSURE ALL UTILITIES ARE MARKED PRIOR TO BEGINNING WORK. IT IS ALSO THE ODOT CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL NON-MEMBERS OF OHIO811 DIRECTLY A MINIMUM OF 48 HOURS NOTICE EXCLUDING WEEKENDS AND HOLIDAYS PRIOR TO EXCAVATION OCCURRING AT ANY LOCATIONS TO PROVIDE THEM WITH THE SAME OPPORTUNITY.

BELOW IS A LIST OF UTILITIES LOCATED WITHIN THE PROJECT AREA TOGETHER WITH THEIR RESPECTIVE OWNERS.

BUCKEYE PIPELINE	FIBER FARMERS
P.O. BOX 90	484 E MIAMI ST
LIMA, OH 45802	DEGRAFF, OH 43318
MICHAEL VENTRESCA	JAKE MINNICH
614.582.9994	937.407.4985
<a href="mailto:MVentresca@buckeye.com">MVentresca@buckeye.com</a>	<a href="mailto:jacob.minnich@fiberfarmers.com">jacob.minnich@fiberfarmers.com</a>

CENTURY LINK	ODOT TRAFFIC (DIST 6)
441 WEST BROAD ST	400 EAST WILLIAM ST
PATASKALA, OH 43062	DELAWARE, OH 43015
RICK KROGMAN	DAVE CARLIN
937.498.5105	740.833.8267
<a href="mailto:Rick.A.Krogman@centurylink.com">Rick.A.Krogman@centurylink.com</a>	<a href="mailto:david.carlin@dot.ohio.gov">david.carlin@dot.ohio.gov</a>

COLUMBIA GAS OF OHIO	SPECTRUM
1600 DUBLIN RD	3760 INTERCHANGE DR
COLUMBUS, OH 43215	COLUMBUS, OH 43204
ROB CALDWELL	SAM LUTZ
614.818.2104	614.481.5047
<a href="mailto:rcaldwell@nisource.com">rcaldwell@nisource.com</a>	<a href="mailto:samuel.lutz@charter.com">samuel.lutz@charter.com</a>
	DAVID HOLSTEIN
COLUMBIA GAS TRANSMISSION	614.481.5262
3550 JOHNNY APPLESEED COURT	<a href="mailto:david.holstein@charter.com">david.holstein@charter.com</a>
COLUMBUS, OH 43231	

ROB CALDWELL	UNION COUNTY ENGINEERS
614.818.2104	233 W 6TH ST
<a href="mailto:rcaldwell@nisource.com">rcaldwell@nisource.com</a>	MARYSVILLE, OH 43040
	JEFF STAUCH
DAYTON POWER & LIGHT	937.645.3116
1900 DRYDEN RD	<a href="mailto:jstauch@co.union.oh.us">jstauch@co.union.oh.us</a>
DAYTON, OH 45439	

BILL GOURLEY	UNION RURAL ELECTRIC
937.331.4521	15461 US ROUTE 36
<a href="mailto:william.gourley@aes.com">william.gourley@aes.com</a>	MARYSVILLE, OH 43040
	MATT ZARNOSKY
ENERGY TRANSFER/	937.355.6188
SUNOCO PIPELINE LP	<a href="mailto:mzarnosky@ure.com">mzarnosky@ure.com</a>
8111 WESTCHESTER DR	

DALLAS, TX 75225	ZAYO FIBER SOLUTIONS
BILL STUMP	4199 KINROSS LAKES PKWY, SUITE 10
614.202.4176	RICHFIELD, OH 44286
<a href="mailto:william.strump@energytransfer.com">william.strump@energytransfer.com</a>	SCOTT HEINLEN
	918.295.7156
	<a href="mailto:scott.heinlen@zayo.com">scott.heinlen@zayo.com</a>

**UTILITIES (CONT.):**

IT IS ODOT'S EXPECTATION THAT ALL GUARDRAIL POSTS WILL BE INSTALLED IN THE SAME LOCATIONS AND THERE WILL BE NO DISRUPTION TO UNDERGROUND UTILITIES. IF THERE IS A UTILITY MARKING WITHIN THE TOLERANCE ZONE OF A UTILITY LOCATE FROM THE PROPOSED GUARDRAIL PLACEMENT IT IS THE ODOT CONTRACTORS RESPONSIBILITY TO DIRECTLY CONTACT THE IMPACTED UTILITY AND WORK WITH THEM TO FIND A SOLUTION THAT DOES NOT CHANGE THE GUARDRAIL PLACEMENT OR DAMAGE THE EXISTING UTILITY. NO UTILITY RELOCATION WILL BE REIMBURSED NOR WILL DELAY CLAIMS BE PERMISSIBLE BASED ON LACK OF COORDINATION BETWEEN THE ODOT CONTRACTOR AND THE IMPACTED UTILITY.

THE SIGNS SHALL BE INSTALLED BY THE ODOT CONTRACTOR SO NO EXISTING UTILITIES ARE DISTURBED. SLIGHT ADJUSTMENTS TO ACCOMMODATE EXISTING UTILITIES ARE PERMITTED, BUT MUST BE APPROVED BY THE ODOT ENGINEER PRIOR TO PLACEMENT. IT IS THE RESPONSIBILITY OF THE ODOT CONTRACTOR TO COORDINATE CALLS TO OUPS AND NON-MEMBERS OF OUPS FOR LOCATES TO BE COMPLETED PRIOR TO WORKING IN EACH LOCATION SO THERE ARE NO DELAYS WITH SIGN INSTALLATION.

SUNOCO PIPELINE LP (SPLP) HAS A MAJOR PIPELINE RUNNING THROUGH THE PROJECT AREA INSIDE A PIPELINE UTILITY EASEMENT AT STA. 120+10.49, AS SHOWN ON SHEET 60. THE LINE IS TO REMAIN AND SHALL NOT BE DISTURBED DURING CONSTRUCTION.

A SPLP REPRESENTATIVE MUST BE NOTIFIED OF AND ON SITE DURING ANY CONSTRUCTION OPERATIONS THAT OCCUR OVER THEIR LINE OR WITHIN 25 FEET OF EITHER SIDE OF THE LINE. NO CONSTRUCTION SHALL BE PERFORMED IN THE PIPELINE EASEMENT WITHOUT A SUNOCO INSPECTOR BEING PRESENT. PROPOSED MATERIAL STOCKPILES AND EQUIPMENT STAGING AREA SHOULD BE LOCATED AWAY FROM SPLP EASEMENT UNLESS PROVIDED WITH WRITTEN PRIOR APPROVAL. NO VIBRATORY ROLLERS SHALL BE UTILIZED OVER THE PIPELINE, UNLESS A MINIMUM OF (4) FOUR FEET OF COVER IS ACHIEVED. AT THIS POINT, THE ROLLER SHALL BE USED IN STATIC MODE ONLY. HAND EQUIPMENT SHALL BE USED UP TO THAT POINT.

EXTRA PRECAUTIONS SUCH AS TIMBER MATS SHALL BE USED TO CROSS OVER THE PIPELINE WHEN THERE IS LESS THAN 3 FEET OF TOTAL COVER OVER THE PIPELINE WITH CONSTRUCTION VEHICLES AND EQUIPMENT.

FINALLY, IN ADDITION TO WHAT HAS BEEN LISTED ABOVE, THE CONTRACTOR MUST FOLLOW ALL PARAMETERS SET BY THE GENERAL NOTES IN THE PLANS AND FOLLOW THE SPLP "GENERAL GUIDELINES FOR THIRD-PARTY CONSTRUCTION OR MAINTENANCE ACTIVITIES" DOCUMENT FOR WORKING NEAR SPLP FACILITIES. THIS DOCUMENT HAS BEEN PROVIDED AS A SPECIAL PROVISION.

CONTRACTOR SHALL FIELD VERIFY ALL PIPELINE LOCATIONS WHERE PROJECT EXCAVATIONS CROSS THE SUNOCO PIPELINE. PLEASE CONTACT JOHN FREIBERGER AT 567-371-2274 TO MAKE ARRANGEMENTS FOR OBTAINING THE PIPELINE DEPTH(S) AND VERIFYING THE PIPELINE LOCATIONS.

SPLP'S INSPECTOR WILL VERIFY THE DEPTH OF THE PIPELINE AT ANY PROPOSED UTILITY CROSSING, BOTH SIDES OF A PROPOSED ROAD CROSSING, LOCATIONS OF PROPOSED GRADE CUTS AND FILLS, AND ANY OTHER CRITICAL LOCATION. THE LOCATION OF THE PIPELINE, TEST PITS, AND RELATED PIPELINE DEPTHS SHALL BE SURVEYED AND ACCURATELY DEPICTED ON THE PROJECT PLANS.

PLEASE INCLUDE THE NAME OF THE SUNOCO REPRESENTATIVE THAT WAS ON SITE WHEN THE PIPELINE WAS LOCATED AND

THE DATE THE DEPTH(S) WERE OBTAINED ON THE PLANS.

LEASE BE ADVISED, IF DEPTH(S) ARE UNABLE TO BE OBTAINED BY LINE LOCATOR, POTHOLING MAY BE REQUIRED AT THE CONTRACTOR'S EXPENSE.

PAYMENT FOR ALL COORDINATION AND/OR ASSOCIATED WORK, MATERIALS, OR EQUIPMENT REQUIRED FOR WHAT HAS BEEN DESCRIBED ABOVE SHALL BE INCIDENTAL TO THE ITEM(S) THAT IS (ARE) CROSSING THE SUNOCO PIPELINE.

BUCKEYE PIPELINE HAS A MAJOR PIPELINE RUNNING THROUGH THE PROJECT AREA INSIDE A PIPELINE UTILITY EASEMENT AT STA. 214+35.85, AS SHOWN ON SHEET 78. THE APPROXIMATE DEPTH WAS PROVIDED BY BUCKEYE AND HAS BEEN INCLUDED IN THE PLANS. THE LINE IS TO REMAIN AND SHALL NOT BE DISTURBED DURING CONSTRUCTION.

A BUCKEYE PIPELINE REPRESENTATIVE MUST BE NOTIFIED OF AND ON SITE DURING ANY CONSTRUCTION OPERATIONS THAT OCCUR OVER THEIR LINE OR WITHIN 25 FEET OF EITHER SIDE OF THE LINE. NO CONSTRUCTION SHALL BE PERFORMED IN THE PIPELINE EASEMENT WITHOUT A BUCKEYE PIPELINE INSPECTOR BEING PRESENT. PROPOSED MATERIAL STOCKPILES AND EQUIPMENT STAGING AREA SHOULD BE LOCATED AWAY FROM BUCKEYE PIPELINE EASEMENT UNLESS PROVIDED WITH WRITTEN PRIOR APPROVAL. NO VIBRATORY ROLLERS SHALL BE UTILIZED OVER THE PIPELINE, UNLESS A MINIMUM OF (4) FOUR FEET OF COVER IS ACHIEVED. AT THIS POINT, THE ROLLER SHALL BE USED IN STATIC MODE ONLY. HAND EQUIPMENT SHALL BE USED UP TO THAT POINT.

EXTRA PRECAUTIONS SUCH AS TIMBER MATS SHALL BE USED TO CROSS OVER THE PIPELINE WHEN THERE IS LESS THAN 3 FEET OF TOTAL COVER OVER THE PIPELINE WITH CONSTRUCTION VEHICLES AND EQUIPMENT.

FINALLY, IN ADDITION TO WHAT HAS BEEN LISTED ABOVE, THE CONTRACTOR MUST FOLLOW ALL PARAMETERS SET BY THE GENERAL NOTES IN THE PLANS AND FOLLOW THE BUCKEYE PARTNERS, L.P. AND AFFILIATES "RIGHT-OF-WAY USE RESTRICTIONS SPECIFICATION, REVISION 6" DOCUMENT FOR WORKING NEAR BUCKEYE PIPELINE FACILITIES. THIS DOCUMENT HAS BEEN PROVIDED AS A SPECIAL PROVISION.

CONTRACTOR SHALL FIELD VERIFY ALL PIPELINE LOCATIONS WHERE PROJECT EXCAVATIONS CROSS THE BUCKEYE PIPELINE. PLEASE CONTACT THE LIMA FIELD OFFICE AT 419-993-8025 TO MAKE ARRANGEMENTS FOR OBTAINING THE PIPELINE DEPTH(S) AND VERIFYING THE PIPELINE LOCATIONS.

BUCKEYE'S INSPECTOR WILL VERIFY THE DEPTH OF THE PIPELINE AT ANY PROPOSED UTILITY CROSSING, BOTH SIDES OF A PROPOSED ROAD CROSSING, LOCATIONS OF PROPOSED GRADE CUTS AND FILLS, AND ANY OTHER CRITICAL LOCATION. THE LOCATION OF THE PIPELINE, TEST PITS, AND RELATED PIPELINE DEPTHS SHALL BE SURVEYED AND ACCURATELY DEPICTED ON THE PROJECT PLANS.

PLEASE INCLUDE THE NAME OF THE BUCKEYE REPRESENTATIVE THAT WAS ON SITE WHEN THE PIPELINE WAS LOCATED AND THE DATE THE DEPTH(S) WERE OBTAINED ON THE PLANS.

PLEASE BE ADVISED, IF DEPTH(S) ARE UNABLE TO BE OBTAINED BY LINE LOCATOR, POTHOLING MAY BE REQUIRED AT THE CONTRACTOR'S EXPENSE.

PAYMENT FOR ALL COORDINATION AND/OR ASSOCIATED WORK, MATERIALS, OR EQUIPMENT REQUIRED FOR WHAT HAS BEEN DESCRIBED ABOVE SHALL BE INCIDENTAL TO THE ITEM(S) THAT IS (ARE) CROSSING THE BUCKEYE PIPELINE.



**ITEM 606 BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN:**  
BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN SHALL BE CONSTRUCTED AS PER THE GUARDRAIL DETAILS ON SHEET 17. PAYMENT FOR THIS ITEM SHALL BE MADE AT THE UNIT PRICE BID OF EACH AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, MATERIALS, AND ALL TYPE 5 GUARDRAIL COMPONENTS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL BRIDGE TERMINAL ASSEMBLY, TYPE 4.

**ITEM 608 - 4" CONCRETE WALK:**  
THIS ITEM IS A QUANTITY TO BE USED AS DIRECTED BY THE PROJECT ENGINEER AT SPECIFIED LOCATIONS TO PROVIDE ADEQUATE TRANSITIONS BETWEEN THE EXISTING SIDEWALK AND THE PROPOSED CURB RAMP. THIS ITEM SHALL INCLUDE THE COST OF FURNISHING ALL MATERIALS, GRADING, FORMING AND FINISHING OF THE SIDEWALK AT VARIOUS LOCATIONS AS SPECIFIED IN THE PLANS.

**ITEM 690 - MAILBOX REMOVED AND RESET:**  
THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE NECESSARY TO REMOVE AND RESET EXISTING MAILBOXES. IT IS EXPECTED THAT THE CONTRACTOR WILL PROVIDE A NEW SUPPORT.

WOOD POSTS SHALL BE NOMINAL 4 INCHES BY 4 INCHES SQUARE OR 4.5 INCHES DIAMETER ROUND, AND CONFORM TO 710.14. STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2 INCHES I.D., AND CONFORM TO AASHTO M 181. ALL HARDWARE INCLUDING BUT NOT LIMITED TO PLATES, SCREWS, BOLTS, AND ETC. SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL. POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE. SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

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

THIS ITEM IS NOT INTENDED FOR MAILBOX OR MAILBOX POSTS WHICH BECOME DAMAGED BY THE CONTRACTOR. GREAT CARE SHALL BE TAKEN TO PREVENT DAMAGE TO ANY OF THE EXISTING MAILBOXES OR MAILBOX POSTS DURING THE PAVING OPERATIONS. ANY MAILBOX OR MAILBOX POST WHICH BECOMES DAMAGED BY THE CONTRACTOR'S PAVING OPERATIONS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

SEE TYPICAL DETAIL SHEET 18 FOR MORE INFORMATION REGARDING THIS ITEM.

**POST CONSTRUCTION STORM WATER TREATMENT:**  
THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

**VEGETATED FILTER STRIP:**  
THIS PLAN UTILIZES VEGETATED FILTER STRIP(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670, SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS.

**ITEM 611 - 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS, AS PER PLAN:**  
PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE.

IN ADDITION TO THE REQUIREMENTS OF ITEM 611, THIS ITEM SHALL INCLUDE THE REMOVAL OF EXISTING UNDERDRAIN OUTLET CONDUIT TO A DISTANCE SUFFICIENT TO TIE-IN THE NEW CONDUIT TO THE NEW PRECAST CONCRETE OUTLET.

SEE TYPICAL DETAIL SHEET 18 FOR MORE INFORMATION REGARDING THIS ITEM.

**FARM DRAINS:**  
ALL FARM DRAINS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY, SHALL BE REPLACED WITHIN THE (RIGHT OF WAY) (CONSTRUCTION) LIMITS BY ITEM 611 CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY DITCHES, SHALL BE OUTLETTED INTO THE ROADWAY DITCH BY 611 TYPE F CONDUIT. THE OPTIMUM OUTLET ELEVATION SHALL BE ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL FIELD TILES WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY 611, TYPE E CONDUIT, AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING. THE LOCATION, TYPE, SIZE AND GRADE OF REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS.

EROSION CONTROL PADS SHALL BE PROVIDED AT THE OUTLET END OF ALL FARM DRAINS AS PER STANDARD CONSTRUCTION DRAWING DM-1.1, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE. PAYMENT FOR THE EROSION CONTROL PADS AND ANY NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEMS.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

- ITEM 611 - 6" CONDUIT, TYPE F = 50 FT
- ITEM 611 - 8" CONDUIT, TYPE F = 50 FT
- ITEM 611 - 10" CONDUIT, TYPE F = 50 FT
- ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C WITH FILTER = 2 CY

**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 CONTRACTORS 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.

**ITEM 611 - 12" CONDUIT, TYPE D:**  
THIS ITEM SHALL BE USED AT AGGREGATE DRIVE LOCATIONS WHERE DRIVE PIPES ARE INADEQUATE OR FAILED AS DETERMINED BY THE ENGINEER.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 611 - 12" CONDUIT, TYPE D = 50 FT

**ITEM 611 - 12" CONDUIT, TYPE D, AS PER PLAN, CONCRETE ENCASED:**  
IN ADDITION TO THE REQUIREMENTS OF ITEM 611, THIS ITEM SHALL INCLUDE THE ENCASEMENT OF DRIVE PIPES WITH 4000 PSI COMPRESSIVE STRENGTH CONCRETE. THIS ITEM SHALL BE USED IN LOCATIONS WHERE ADEQUATE COVER CANNOT BE ACHIEVED.

SEE TYPICAL DETAIL SHEET 18 FOR MORE INFORMATION REGARDING THIS ITEM.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 611 - 12" CONDUIT, TYPE D, AS PER PLAN, CONCRETE ENCASED = 50 FT

**ITEM 611 - CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN, NO. 3:**  
IN ADDITION TO THE REQUIREMENTS OF ITEM 611, REBUILD THE CURB AND GUTTER BLOCKOUT AND REUSE THE EXISTING FRAME, GRATE, AND CURB CASTING. THE EXISTING PIPE(S) SHALL NOT BE DISTURBED.

SEE TYPICAL DETAIL SHEET 19 FOR MORE INFORMATION REGARDING THIS ITEM.

**ITEM 611 - CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN, NO. 3A:**  
IN ADDITION TO THE REQUIREMENTS OF ITEM 611, REBUILD THE CURB AND GUTTER BLOCKOUT AND REUSE THE EXISTING FRAME, GRATE, AND CURB CASTING. THE EXISTING PIPE(S) SHALL NOT BE DISTURBED.

SEE TYPICAL DETAIL SHEET 20 FOR MORE INFORMATION REGARDING THIS ITEM.

**ITEM 611 - MANHOLE ADJUSTED TO GRADE, AS PER PLAN:**  
THE EX. CENTURYLINK MANHOLE WITHIN THE PROPOSED SIDEWALK ADJACENT TO THE PROPOSED CURB RAMP (CONST. SR-739, STA. 281+17.57), AS SHOWN ON SHEET 90, NEEDS TO BE ADJUSTED TO GRADE BY THE PRIVATE OWNER.

THE ODOT CONTRACTOR SHALL NOTIFY RICK KROGMAN AT THE CONTACT INFORMATION LISTED IN THE UTILITY SECTION A MINIMUM OF 7 CALENDAR DAYS IN ADVANCE OF WORK OPERATIONS SO THE WORK MAY BE PROPERLY SCHEDULED.

IF ADJUSTMENTS HAVE NOT BEEN COMPLETED 14 CALENDAR DAYS AFTER NOTIFICATION, THE ODOT CONTRACTOR WILL NOTIFY THE ODOT PROJECT ENGINEER AND PROVIDE SPECIFIC STATION LOCATIONS AND OWNER INFORMATION. THE ODOT PROJECT ENGINEER WILL WORK WITH THE DISTRICT UTILITY COORDINATOR TO ISSUE AN OBSTRUCTION REMOVAL NOTICE WITHIN 5 DAYS OF RECEIPT WHICH WILL INFORM THE PRIVATE UTILITY TO ADJUST THE STRUCTURES AS NECESSARY OR ODOT WILL AUTHORIZE THE ODOT CONTRACTOR TO ADJUST AS NEEDED AND BILL THE OWNER OF THE FACILITY FOR THE ADJUSTMENT TO THE STRUCTURE.

THE FINISH TOP CASTING SHALL BE FLUSH WITH THE ADJOINING SIDEWALK SURFACE AND MEET THE SATISFACTION OF THE ENGINEER.

THE QUANTITY FOR ITEM 611, MANHOLE ADJUSTED TO GRADE, AS PER PLAN, PROVIDED IN THE DRAINAGE SUBSUMMARY ON SHEET 38 SHALL COVER THE CONTRACTOR'S COST TO ADJUST THE MANHOLE TO GRADE TO THE SATISFACTION OF THE ENGINEER SHOULD THE PRIVATE UTILITY FAIL TO MAKE THE ADJUSTMENT IN THE TIMEFRAMES GIVEN ABOVE.

**ITEM 611 - PRECAST REINFORCED CONCRETE OUTLET, AS PER PLAN:**  
IN ADDITION TO REQUIREMENTS OF ITEM 611, THIS ITEM SHALL ALSO INCLUDE THE REMOVAL AND DISPOSAL OF THE EXISTING UNDERDRAIN OUTLETS. CONNECTION OF THE NEW OUTLET TO THE EXISTING UNDERDRAIN IS INCIDENTAL TO THIS ITEM.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 611, PRECAST REINFORCED CONCRETE OUTLET, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL UNDERDRAIN OUTLET.

SEE TYPICAL DETAIL SHEET 18 FOR MORE INFORMATION REGARDING THIS ITEM.





**PERMITTED LANE CLOSURES:**

AT LEAST ONE LANE OF TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES UNLESS STATED OTHERWISE IN THE PLAN BY USE OF THE EXISTING AND COMPLETED PAVEMENT OR DURING PERMITTED ROUTE CLOSURES. WORK ZONES SHALL BE LIMITED IN LENGTH TO THE AMOUNT OF WORK THAT CAN BE PERFORMED THAT DAY. TRAFFIC SHALL BE MAINTAINED BY FLAGGERS FOR CLOSING 1 LANE OF THE 2 LANE HIGHWAY FOR PAVING OPERATION AS PER STANDARD DRAWING MT-97.12. LANE CLOSURES ON SR-739 FROM HONDA PKWY TO JOHNSON RD ARE NOT PERMITTED WEEKDAYS FROM 6AM-9AM AND 3PM-6PM.

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.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

**PERMITTED ROAD (SECTIONS) CLOSURES:**

WORK ON SR-739 HAS BEEN DIVIDED INTO MULTIPLE PHASES TO MINIMIZE TRAFFIC IMPACTS. THESE PHASES ARE FULL CLOSURES (MAINTAINING LOCAL PROPERTY ACCESS) AND SHALL BE LIMITED IN TIME AND LENGTH. DAYS REFERENCED BELOW SHALL INCLUDE THE WEEKENDS. A LONG WEEKEND SHALL BE DEFINED AS A 72 HOUR PERIOD STARTING MIDNIGHT (12AM) FRIDAY AND ENDING MIDNIGHT (12AM) MONDAY. THE SIGNED STATE DETOUR ROUTE AND UNSIGNED LOCAL DETOUR ROUTES ARE SHOWN ON SHEETS 29 - 30 . NO PHASE CLOSURES SHALL BE UTILIZED AT THE SAME TIME EXCEPT PHASES 1B AND PHASE 2A, WHICH CAN OCCUR CONCURRENTLY.

**PHASE 1A**  
A FULL CLOSURE FROM STA 01+24.17 TO STA 10+50.00 (BEGIN PROJECT TO SOUTH OF NORTHERN MOST DRIVE OF HONDA SUPPORT OFFICE, 19900 OH-739). THE PHASE 1A ROAD CLOSURE SHALL BE PERMITTED OVER A LONG WEEKEND AS DEFINED ABOVE.

**PHASE 1B**  
A FULL CLOSURE FROM STA 10+50.00 TO STA 32+15.78 (SOUTH OF NORTHERN MOST DRIVE OF HONDA SUPPORT OFFICE, 19900 OH-739 TO CONCRETE JOINT).

**PHASE 2A**  
A FULL CLOSURE FROM STA 67+76.51 TO STA 73+30.00 (CONCRETE JOINT TO CONCRETE ISLAND AT HONDA RESEARCH AND DEVELOPMENT FACILITY ENTRANCE).

**PHASE 2B**  
A FULL CLOSURE FROM STA 73+30.00 TO STA 104+62.25 (CONCRETE ISLAND AT HONDA RESEARCH AND DEVELOPMENT FACILITY ENTRANCE TO SOUTH OF JOHNSON RD, INCLUDING JOHNSON RD SLIP).

**PHASE 3**

A FULL CLOSURE FROM STA 104+62.25 TO STA 107+41.40 (INTERSECTION OF SR-739 & JOHNSON RD). THE PHASE 3 ROAD CLOSURE SHALL BE PERMITTED OVER A LONG WEEKEND AS DEFINED ABOVE.

**PHASE 4A**

A FULL CLOSURE FROM STA 107+41.40 TO STA 178+55.00 (NORTH OF JOHNSON RD TO NORTH OF HERD-MCLLOY RD).

**PHASE 4B**

A FULL CLOSURE FROM STA 178+55.00 TO STA 237+15.00 (NORTH OF HERD-MCLLOY RD TO NORTH OF RAPP-DEAN RD).

**PHASE 4C**

A FULL CLOSURE FROM STA 237+15.00 TO STA 261+12.44 (NORTH OF RAPP-DEAN RD TO SOUTH OF BEAR SWAMP RD).

**PHASE 5**

A FULL CLOSURE FROM STA 261+12.44 (SOUTH OF BEAR SWAMP RD TO STATE ROUTE 347). THE PHASE 5 ROAD CLOSURE SHALL BE PERMITTED FOR 30 DAYS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 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 614, MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED IN THE PLAN.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$8,000/DAY FOR PHASES 1A & 3 AND \$3,000/DAY FOR PHASE 5 FOR EACH DAY THE ABOVE DESCRIBED CLOSURE RESTRICTIONS ARE VIOLATED.

**COMPLETION OF PHASES:**

ALL PAVEMENT WORK SHALL BE COMPLETED UP TO AND INCLUDING THE INTERMEDIATE PAVEMENT COURSE WHILE UNDER EACH CLOSURE PHASE. THE CONTRACTOR SHALL COMPLETE THE WORK BEFORE MOVING ONTO THE NEXT CLOSURE PHASE. AT NO TIME SHALL TWO CLOSURE PHASES BE ACTIVE AT THE SAME TIME EXCEPT PHASES 1B AND PHASE 2A, WHICH CAN BE ACTIVE CONCURRENTLY.

**PERMITTED DURATION OF DETOUR**

THE STATE DETOUR, AS SHOWN ON SHEET 29, SHALL NOT EXCEED A TOTAL OF 160 CONSECUTIVE DAYS. IF THE DETOUR EXCEEDS THE ALLOTTED DAYS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$8,000 FOR EACH DAY THE CLOSURE IS IN PLACE FROM HONDA PKWY TO, AND INCLUDING, JOHNSON RD & \$3,000 FOR EACH DAY THE CLOSURE IS IN PLACE FROM NORTH OF JOHNSON RD TO STATE ROUTE 347.

**TRUCK MOUNTED ATTENUATOR (TMA) – TWO LANE ROADS:**

WHEN WORKING IN A CLOSED LANE OR SHOULDER ON A TWO LANE HIGHWAY WITHOUT TEMPORARY OR PERMANENT TRAFFIC BARRIERS SEPARATING THE WORK AREA FROM THE TRAVELED LANE, A TRUCK MOUNTED ATTENUATOR (TMA) SHALL BE PROVIDED TO PROTECT EACH WORK AREA IN ACCORDANCE WITH OMUTCD TYPICAL APPLICATION (TA) 4, TA-6 AND TA-17, ALONG WITH STANDARD CONSTRUCTION DRAWING (SCD) MT-97.10. THE TMA SHALL BE PLACED IN SUCH A WAY TO ADEQUATELY PROTECT THE WORKERS INSIDE THE WORK ZONE. THE TMA IS NOT INTENDED TO BE USED AS OR SUBSTITUTED FOR THE FLAGGERS AND/OR WARNING SIGNS AND DEVICES. THE TMA SHALL MEET NCHRP 350 TEST LEVEL 3 CRITERIA FOR STANDARD AND OPTIONAL TESTS AT 100 KM/H (62 MPH) FOR DESIGN IMPACTS. THE COST FOR PROVIDING THE TMA SHALL INCLUDE ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE REPLACEMENT AND IS TO BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 – MAINTAINING TRAFFIC.

**DETOUR SIGNING :**

SIZE AND PLACEMENT OF DETOUR SIGNS (M4-9) SHOULD FOLLOW THE REQUIREMENTS OF THE OMUTCD SECTION 6F.03, SECTION 2A.11 AND TABLE 6F.01.

DETOUR SIGNING SHALL PROVIDE DRIVERS ADEQUATE TIME TO CLEARLY READ THE SIGNS AND MAKE THE PROPER DECISIONS AT EACH REQUIRED TURNING MOVEMENT. THE DESIGNATED DETOUR ROUTE SHALL BE SIGNED IN ACCORDANCE WITH THE REQUIREMENTS BELOW:

- APPROXIMATELY 1500 FEET PRIOR TO TIP OF THE PAINTED GORE AT AN INTERCHANGE WHEN EXITING A HIGH SPEED (45 MPH OR HIGHER) FACILITY.
- AT OR NEAR THE EXISTING SIGN IN THE GORE OF AN INTERCHANGE RAMP.
- AT OR NEAR THE FIRST EXISTING LANE ASSIGNMENT SIGN ON AN INTERCHANGE EXIT RAMP.
- AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT THE END OF AN EXIT RAMP.
- APPROXIMATELY 500 FEET PRIOR TO A REQUIRED TURN AT AN INTERSECTION NOT CONTROLLED BY A STOP SIGN (FOR 45 MPH OR HIGHER ONLY).
- AT OR NEAR THE EXISTING LANE ASSIGNMENT SIGN OR EXISTING ROUTE MARKER AT AN INTERSECTION.
- EVERY TWO MILES ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS OUTSIDE A CITY.
- EVERY TWO BLOCKS ALONG A TANGENT SECTION BETWEEN TURNING MOVEMENTS WITHIN A CITY.
- AT ANY OTHER INTERSECTION OR DECISION POINT WHERE THE DETOUR ROUTE IS CONTRARY TO THE NORMAL, EXPECTED TURNING MANEUVER OR OTHERWISE UNCLEAR.

DETOUR SIGNS SHALL BE PLACED, WHEN POSSIBLE, NEXT TO BUT NOT BLOCKING EXISTING ROUTE MARKERS OR LANE ASSIGNMENT SIGNS. DETOUR SIGNS SHALL NOT OBSCURE OR BE OBSCURED BY OTHER EXISTING OR TEMPORARY SIGNS.

DETOUR SIGNS SHALL BE ERECTED AND/OR UNCOVERED PRIOR TO THE ROAD OR RAMP BEING CLOSED TO TRAFFIC BUT NO EARLIER THAN FOUR HOURS PRIOR TO THE CLOSURE. DETOUR SIGNS SHALL BE COVERED AND/OR REMOVED NO LATER THAN FOUR HOURS FOLLOWING THE ROAD OR RAMP RE-OPENING TO TRAFFIC.

PAYMENT FOR ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, PROPER SIGN PLACEMENT AND SIZING, TIMELY ERECTING AND/OR UNCOVERING OF SIGNS, MAINTAINING SIGNS, AND TIMELY COVERING AND/OR REMOVING SIGNS AND SUPPORTS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.  
ITEM 614 - DETOUR SIGNING = LUMP SUM

**RAILROAD FLAGGER**

IF VEHICLES ARE DIRECTED INTO OPPOSING TRAFFIC LANES TO CROSS THE RAILROAD, A RAILROAD FLAGGER MUST BE IN PLACE TO SUPPLEMENT THE VEHICULAR TRAFFIC MOT PLAN. THE CONTRACTOR SHALL COORDINATE WITH THE RAILROAD REPRESENTATIVE IN ADVANCE OF ACTIVITY.

**DESIGNATED LOCAL DETOUR ROUTE**

IN ADDITION TO THE OFFICIAL, SIGNED DETOUR ROUTE, A LOCAL ROUTE HAS BEEN DETERMINED TO BE THE SECONDARY, UNSIGNED DETOUR ROUTE OR "DESIGNATED LOCAL DETOUR ROUTE." THIS ROUTE IS SHOWN ON SHEET 30. DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DETERMINED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USE AS DETERMINED BY THE ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE THE DESIGNATED LOCAL DETOUR ROUTE.

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	=	250 CY
ITEM 616 - WATER	=	5 MGAL





SHEET NUMBER													PARTICIPATION			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
													01/STR/PV	02/SAF/PV	03/STR/BR						
22-25	26-28	34	35	36	37	38	39	40	219	220	225										
<b>TRAFFIC CONTROL CONTINUED:</b>																					
												4	4	644	01300	4	EACH	LANE ARROW			
												190	190	644	50200	190	SF	PAVEMENT MARKING, MISC.: CROSSWALK LADDER STYLE STRIPING	218		
												0.02	0.02	646	10010	0.02	MILE	EDGE LINE, 6"			
												2.52	2.52	646	10011	2.52	MILE	EDGE LINE, 6", AS PER PLAN	218		
												0.04	0.04	646	10200	0.04	MILE	CENTER LINE			
												1.90	1.90	646	10201	1.90	MILE	CENTER LINE, AS PER PLAN	218		
												500	500	646	10311	500	FT	CHANNELIZING LINE, 12", AS PER PLAN	218		
												724	724	646	10203	724	FT	TRANSVERSE/DIAGONAL LINE			
												5	5	646	10204	5	EACH	LANE ARROW			
												161	161	646	50101	161	FT	REMOVAL OF PAVEMENT MARKING, AS PER PLAN	218		
												1.34	1.34	646	50301	1.34	MILE	REMOVAL OF PAVEMENT MARKING, AS PER PLAN, CENTER LINE	218		
												2.24	2.24	646	50301	2.24	MILE	REMOVAL OF PAVEMENT MARKING, AS PER PLAN, EDGE LINE	218		
												696	696	SPECIAL	69098100	696	FT	PAVEMENT GROOVING FOR 12 INCH RECESSED MARKINGS	218		
												2.49	2.49	SPECIAL	69098500	2.49	MILE	PAVEMENT GROOVING FOR 4 INCH RECESSED MARKINGS	218		
												3.70	3.70	SPECIAL	69098500	3.70	MILE	PAVEMENT GROOVING FOR 6 INCH RECESSED MARKINGS	218		
<b>STRUCTURES OVER 20 FOOT SPAN (UNI-739-0.63, SFN: 8003270)</b>																					
												2		202	98100	2	EACH	REMOVAL MISC.: PRESSURE RELIEF JOINT AND SLEEPER SLAB	226		
												84		516	10000	84	FT	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL			
												84		516	31001	84	FT	JOINT SEALER, AS PER PLAN	226		
												150		517	75600	150	FT	DEEP BEAM BRIDGE RETROFIT RAILING			
												167		SPECIAL	51822300	167	FT	STEEL DRIP STRIP			
												200		848	10200	200	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, 1 3/4" THICKNESS (APPROACH SLABS)			
												267		848	10200	267	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, 2 1/4" THICKNESS (DECK)			
												267		848	20000	267	SY	SURFACE PREPARATION USING HYDRODEMOLITION, DEPTH 0.50" (DECK)			
												200		848	20000	200	SY	SURFACE PREPARATION USING HYDRODEMOLITION, DEPTH 1.75" (APPROACH SLABS)			
												3		848	30200	3	CY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY			
												6		848	50000	6	SY	HAND CHIPPING			
												LS		848	50100	LS		TEST SLAB			
												267		848	50320	267	SY	EXISTING CONCRETE OVERLAY REMOVED, 1 3/4" THICKNESS			
<b>MAINTENANCE OF TRAFFIC</b>																					
	130											130		410	10001	130	CY	TRAFFIC COMPACTED SURFACE, TYPE A, AS PER PLAN	26		
	120											120		614	11110	120	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE			
	LS											LS		614	12420	LS		DETOUR SIGNING			
	25											25		614	12461	25	EACH	WORK ZONE MARKING SIGN, AS PER PLAN	28		
	250											250		614	13000	250	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC			
	2											2		614	18601	2	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	28		
	9.64											9.64		614	21550	9.64	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT			
	2014											2014		614	23690	2014	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT			
	238											238		614	20610	238	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT			
	8											8		616	10000	8	MGAL	WATER			
	12											12		616	10001	12	MGAL	WATER, AS PER PLAN	28		
<b>INCIDENTALS</b>																					
												LS		108	30000	LS		CPM PROGRESS SCHEDULE FOR SHORT DURATION PROJECTS			
												LS		614	11000	LS		MAINTAINING TRAFFIC			
												7		619	16010	7	MNTH	FIELD OFFICE, TYPE B			
												LS		623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	25		
												LS		624	10000	LS		MOBILIZATION			

UNI-739-0.63  
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DESIGN AGENCY



DESIGNER

DKR KLM

REVIEWER

DKR

PROJECT ID

109069

SHEET TOTAL

P.33 227



UNI-739-0.63

MODEL: 09069.GC002 PAPER SIZE: ITX(11.0") DATE: 1/2/2020 TIME: 3:52:55 PM USER: kboman  
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DRIVEWAY CALCULATIONS

Table with columns: LOCATION (SHEET, ROUTE, MARK, STA), DESIGN (DRIVE, TYPE, SURFACE AREA, APRON, DRIVE), QUANTITIES (SY, SF, CY, GAL, CY, CY, CY, CY, SY), LOCATION (SHEET, ROUTE, MARK, STA), DESIGN (DRIVE, TYPE, SURFACE AREA, APRON, DRIVE), QUANTITIES (SY, SF, CY, CY, GAL, CY, CY, CY, SY). Includes rows 192-205 and summary rows.

SEE SHEETS 13 - 14 FOR TYPICAL DRIVE DETAILS.

Summary table with columns: COLUMN 1, COLUMN 2, and various quantity values (SY, SF, CY, GAL, CY, CY, CY, SY).

PAVEMENT CALCULATIONS DRIVEWAYS

DESIGN AGENCY logo, DESIGNER: DKR KLM, REVIEWER: LLW, PROJECT ID: 109069, SUBSET: 2/3, SHEET: P.35/227

**ITEM 644 - PAVEMENT MARKING:**

**ITEM 646 - PAVEMENT MARKING:**

WITH THE EXCEPTION OF THE PROPOSED PASSING ZONES, IT IS THE INTENT OF THE PROPOSED PAVEMENT MARKINGS TO BE THE SAME AS EXISTING. ANY DEVIATION FROM EXISTING WILL BE IDENTIFIED WITHIN THIS PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE AND SHAPE OF THESE EXISTING PAVEMENT MARKINGS BEFORE THE RESURFACING WORK OBLITERATES THEM. ANY PAVEMENT MARKING WHICH IS PLACED AT THE WRONG LOCATION SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

**PROPOSED NO PASSING ZONES:**

THE PROPER PLACEMENT OF THE PASSING AND NO PASSING ZONES AS SHOWN ON PLAN SHEETS 222 - 224 SHALL BE CONFIRMED BY THE CONTRACTOR AND PLACED BY USING THE CONTROL POINTS SHOWN ON THE PLAN SHEETS.

SLM'S ON THE PASSING ZONE SHEETS COULD BE DIFFERENT THAN THE SLM'S SHOWN ON THE PAVING PLAN. ALL START AND STOP SLM LOCATIONS SHALL BE WITHIN 0.005 MILES OF THE LOCATIONS SHOWN ON THE PLAN SHEETS LISTED ABOVE. A LETTER OF VERIFICATION OF ALL PASSING AND NO PASSING ZONES SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR PLACEMENT IN THE PROJECT RECORDS. ANY IMPROPERLY PLACED PASSING OR NO PASSING ZONES SHALL BE IMMEDIATELY CORRECTED.

**ITEM 644 - THERMOPLASTIC PAVEMENT MARKING, AS PER PLAN:**

THIS WORK CONSISTS OF FURNISHING AND APPLYING WET REFLECTIVE (WR) OPTICS (BEADS OR ELEMENTS), GLASS BEADS, AND THERMOPLASTIC PAVEMENT MARKING ACCORDING TO 640, 740, AND THE ADDITIONAL REQUIREMENTS SPECIFIED BELOW.

**FURNISH MATERIALS CONFORMING TO:**

THERMOPLASTIC PAVEMENT MARKING	740.04
GLASS BEADS	740.09

FURNISH ONE OF THE FOLLOWING WET REFLECTIVE OPTICS: 3M CONNECTED ROADS ALL WEATHER ELEMENTS SERIES 50/51, POTTERS INDUSTRIES VISI-ULTRA, SWARCO DURALUX, OR APPROVED EQUAL.

IN ADDITION TO THE REQUIREMENTS OF 644.03, FURNISH EQUIPMENT CAPABLE OF APPLYING WR OPTICS AT THE TIME OF LINE PLACEMENT. THE DLS REPORT IS NOT REQUIRED TO PROVIDE A LINE ENTRY FOR WR OPTICS.

THE PAVEMENT SURFACE SHALL BE FREE OF LOOSE MATERIAL AND COMPLETELY DRY PRIOR TO THE APPLICATION OF THE PAVEMENT MARKINGS.

PLACE THE BINDER, BEADS, AND WR OPTICS IN ACCORDANCE WITH THE WR OPTICS MANUFACTURERS' RECOMMENDATIONS AND ACCORDING TO 640 AND 740.

THE DEPARTMENT WILL MEASURE PAVEMENT MARKINGS COMPLETE IN PLACE IN THE UNITS DESIGNATED. THE DEPARTMENT WILL MEASURE LINE QUANTITIES AS THE LENGTH OF THE COMPLETED MARKING, INCLUDING GAPS, INTERSECTIONS, AND OTHER SECTIONS OF PAVEMENT NOT NORMALLY MARKED.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICES, OR PRICES ADJUSTED ACCORDING TO 641.11, MEASURED ACCORDING TO 641.12, WITH THE PROVISIONS SPECIFIED IN 641.13, AND AS FOLLOWS:

- ITEM 644 - EDGE LINE, 6", AS PER PLAN
- ITEM 644 - CENTER LINE, AS PER PLAN
- ITEM 644 - CHANNELIZING LINE, 12", AS PER PLAN

**ITEM 644 - PAVEMENT MARKING, MISC.: CROSSWALK LADDER STYLE STRIPING:**

THE CROSSWALK ON SR 347 AT SR 739 SHALL BE PERFORMED WITH LADDER STYLE MARKINGS. THIS ITEM WILL BE PAID IN ADDITION TO THE STANDARD CROSSWALK MARKINGS.

SEE TYPICAL DETAIL SHEET 21 AND TRAFFIC CONTROL PLAN SHEET 221 FOR MORE INFORMATION REGARDING THIS ITEM.

**ITEM 646 - EPOXY PAVEMENT MARKING, AS PER PLAN:**

THIS WORK CONSISTS OF FURNISHING AND APPLYING WET REFLECTIVE (WR) OPTICS (BEADS OR ELEMENTS), GLASS BEADS, AND EPOXY PAVEMENT MARKING ACCORDING TO 640, 740, AND THE ADDITIONAL REQUIREMENTS SPECIFIED BELOW.

**FURNISH MATERIALS CONFORMING TO:**

EPOXY PAVEMENT MARKING	740.04
GLASS BEADS	740.09

FURNISH ONE OF THE FOLLOWING WET REFLECTIVE OPTICS: 3M CONNECTED ROADS ALL WEATHER ELEMENTS SERIES 50/51, POTTERS INDUSTRIES VISI-ULTRA, SWARCO DURALUX, OR APPROVED EQUAL.

IN ADDITION TO THE REQUIREMENTS OF 646.03, FURNISH EQUIPMENT CAPABLE OF APPLYING WR OPTICS AT THE TIME OF LINE PLACEMENT. THE DLS REPORT IS NOT REQUIRED TO PROVIDE A LINE ENTRY FOR WR OPTICS.

THE PAVEMENT SURFACE SHALL BE FREE OF LOOSE MATERIAL AND COMPLETELY DRY PRIOR TO THE APPLICATION OF THE PAVEMENT MARKINGS.

PLACE THE BINDER, BEADS, AND WR OPTICS IN ACCORDANCE WITH THE WR OPTICS MANUFACTURERS' RECOMMENDATIONS AND ACCORDING TO 640 AND 740.

THE DEPARTMENT WILL MEASURE PAVEMENT MARKINGS COMPLETE IN PLACE IN THE UNITS DESIGNATED. THE DEPARTMENT WILL MEASURE LINE QUANTITIES AS THE LENGTH OF THE COMPLETED MARKING, INCLUDING GAPS, INTERSECTIONS, AND OTHER SECTIONS OF PAVEMENT NOT NORMALLY MARKED.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICES, OR PRICES ADJUSTED ACCORDING TO 641.11, MEASURED ACCORDING TO 641.12, WITH THE PROVISIONS SPECIFIED IN 641.13, AND AS FOLLOWS:

- ITEM 646 - EDGE LINE, 6", AS PER PLAN
- ITEM 646 - CENTER LINE, AS PER PLAN
- ITEM 646 - CHANNELIZING LINE, 12", AS PER PLAN

**ITEM 646 - REMOVAL OF PAVEMENT MARKING, AS PER PLAN:**

THESE ITEMS INCLUDE THE REMOVAL OF PAINT PAVEMENT MARKINGS IN ADDITION TO EPOXY PAVEMENT MARKINGS.

**ITEM 690 - SPECIAL - PAVEMENT GROOVING FOR RECESSED MARKING:**

THIS WORK CONSISTS OF GROOVING ASPHALT AND CONCRETE PAVEMENT SURFACES IN PREPARATION FOR THE APPLICATION OF RECESSED PAVEMENT MARKINGS.

BEFORE ANY GROOVING WORK BEGINS, SUBMIT A SCHEDULE OF OPERATIONS AND OBTAIN THE ENGINEERS APPROVAL. WHEN THE WORK IS CONDUCTED UNDER TRAFFIC, SUPPLY ALL NECESSARY FLAGS, MARKERS, SIGNS, AND OTHER DEVICES TO MAINTAIN AND PROTECT TRAFFIC IN ACCORDANCE WITH ITEM 614 AND APPLICABLE STANDARD CONSTRUCTION DRAWINGS.

ENSURE THE FINISHED PAVEMENT SURFACE IS NOT DAMAGED AND IS NOT LEFT IN A PATTERN THAT WILL MISLEAD OR MISDIRECT THE MOTORIST.

EQUIP GROOVING EQUIPMENT WITH A FREE-FLOATING, CUTTING OR GROOVING HEAD TO PROVIDE A CONSISTENT GROOVE DEPTH OVER IRREGULAR PAVEMENT SURFACES. EQUIP THE GROOVING OR CUTTING HEAD WITH DIAMOND SAW BLADES, STEEL STAR CUTTERS, OR CARBIDE TIPPED STAR CUTTERS. ENSURE THE GROOVING EQUIPMENT IS CAPABLE OF PRODUCING A FINISHED GROOVE SURFACE AS DESCRIBED BELOW.

WET SAW BLADE OPERATION: WHEN WATER IS REQUIRED OR USED TO COOL THE SAW BLADES, FLUSH THE GROOVE WITH HIGH PRESSURE WATER IMMEDIATELY FOLLOWING THE CUT TO AVOID BUILD-UP AND HARDENING OF SLURRY IN THE GROOVE.

DRY SAW BLADE OPERATION: IF THE GROOVING IS DONE WITH DRY SAW BLADES, CLEAN AND REMOVE DEBRIS AND DUST BY MEANS OF VACUUM RECOVERY DURING GRINDING.

INSTALL GROOVES IN A SINGLE PASS PRIOR TO THE PLACEMENT OF LONGITUDINAL PAVEMENT MARKINGS. IF THERE ARE NO MARKINGS ON THE PAVEMENT, LAY OUT THE LOCATIONS OF ALL GROOVES FOR RECESSED MARKINGS IN ACCORDANCE WITH 641.06. ENSURE THE GROOVE IS AT LEAST 1 INCH AND NO MORE THAN 2 INCHES WIDER THAN THE PAVEMENT MARKING TO BE PLACED. ENSURE THE DEPTH OF THE GROOVE IS IN ACCORDANCE WITH THE PAVEMENT MARKING MANUFACTURER'S RECOMMENDATIONS AND A MINIMUM 5 MILS GREATER THAN THE THICKNESS OF THE MARKING MATERIAL, INCLUDING EXPOSED GLASS BEADS AND WET REFLECTIVE OPTICS, UP TO MAXIMUM ALLOWABLE DEPTH OF 165 MILS. EXTEND THE GROOVE A MAXIMUM OF 3 IN AT EITHER END OF THE RECESSED PAVEMENT MARKING. ENSURE THE FINISHED GROOVED SURFACE HAS A FINE CORDUROY-LIKE APPEARANCE WITH A MAXIMUM VARIATION IN DEPTH OF 10 MILS. DO NOT INSTALL THE GROOVES MORE THAN 24 HOURS PRIOR TO APPLICATION OF THE PAVEMENT MARKINGS. LOCATE THE GROOVE SO THE ENTIRE RECESSED PAVEMENT MARKING CAN BE PLACED IN ACCORDANCE WITH 641.08 AND WITHIN THE GROOVE.

AFTER GROOVING, BUT BEFORE PLACEMENT OF ANY PAVEMENT MARKING MATERIAL, THOROUGHLY CLEAN THE RECESSED SURFACE AREA OF ALL LOOSE MATERIAL USING VACUUMING EQUIPMENT. IMMEDIATELY REMOVE DEBRIS NOT PICKED UP BY VACUUM RECOVERY AND DISPOSE OF IN ACCORDANCE WITH 105.17.

THE DEPARTMENT WILL MEASURE PAVEMENT GROOVING FOR RECESSED MARKINGS COMPLETED AND ACCEPTED IN PLACE. THE DEPARTMENT WILL MEASURE THE LENGTH OF COMPLETED GROOVES, INCLUDING THE GAPS, INTERSECTIONS, AND OTHER SECTIONS OF PAVEMENT NOT GROOVED.

INCLUDE THE COST OF MAINTAINING AND PROTECTING TRAFFIC DURING THE GROOVING WORK IN THE CONTRACT UNIT PRICE.

THE DEPARTMENT WILL NOT PAY FOR COSTS ASSOCIATED WITH CORRECTING IMPROPERLY LOCATED OR IMPROPERLY INSTALLED GROOVES.

PERMANENT PAVEMENT MARKING MATERIALS AND REMOVAL OF EXISTING PERMANENT PAVEMENT MARKINGS WILL BE PAID FOR SEPARATELY USING THE APPROPRIATE PAY ITEMS.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICES AS FOLLOWS:

- ITEM 690 - SPECIAL - PAVEMENT GROOVING FOR 4 INCH RECESSED MARKINGS
- ITEM 690 - SPECIAL - PAVEMENT GROOVING FOR 6 INCH RECESSED MARKINGS
- ITEM 690 - SPECIAL - PAVEMENT GROOVING FOR 12 INCH RECESSED MARKINGS

DESIGN AGENCY



DESIGNER

KLM

REVIEWER

DKR

PROJECT ID

109069

SHEET TOTAL

P.218 227