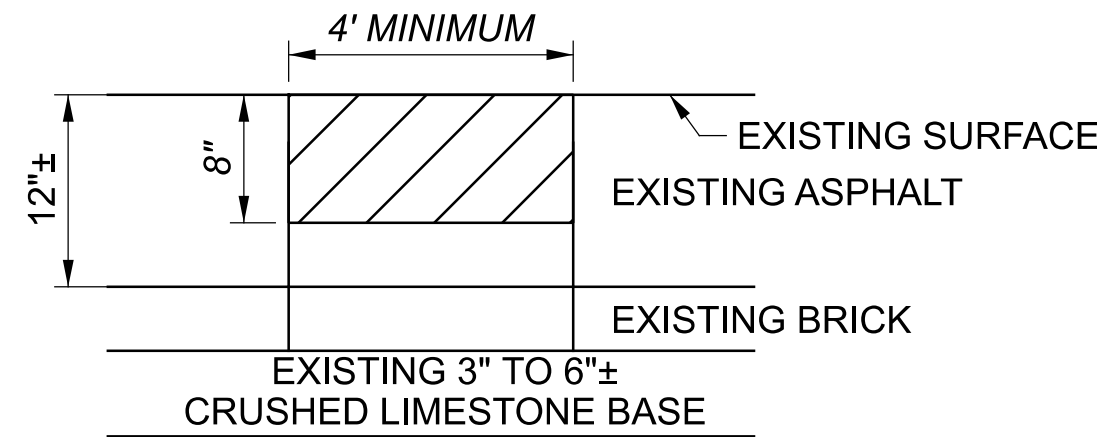


MAINTAINING ITS DURING CONSTRUCTION

THE CONTRACTOR SHALL MAINTAIN ALL PREEXISTING OR NEWLY INSTALLED PERMANENT ITS/TRAFFIC DEVICES AND INFRASTRUCTURE DURING CONSTRUCTION ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATION 809.

ITEM 253 - PAVEMENT REPAIR (A)

THIS OPERATION SHALL BE PERFORMED BEFORE PAVEMENT PLANING OF ROADWAY.



EXISTING DETERIORATED ASPHALT SHALL BE REMOVED TO A MAXIMUM DEPTH OF 8" OR AS DIRECTED BY THE ENGINEER. THIS WORK CONSISTS OF REMOVAL OF THE EXISTING PAVEMENT IN AREAS EXHIBITING DETERIORATION AT THE SURFACE, APPLYING TACK COAT, AND PLACING AND COMPACTING ITEM 301 - ASPHALT CONCRETE BASE. THE 301 SHALL BE COMPACTED PER CMS 401.15 AND IN APPROXIMATELY EQUAL LAYERS. THE LOCATION AND SIZE OF THE REPAIR SHALL BE DETERMINED BY THE ENGINEER.

IF BRICK IS ENCOUNTERED, DO NOT DISTURB. THE PROJECT ENGINEER SHALL ADVISE ON REPAIR AND MATERIALS.

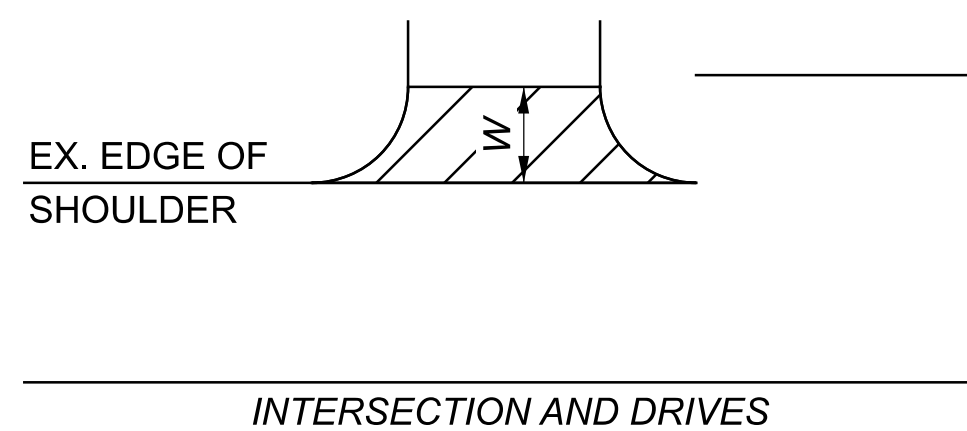
THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

253, PAVEMENT REPAIR (A) 200 CY

ITEM 254 - PAVEMENT PLANING

THE PAVEMENT PLANING SHALL BE SCHEDULED SO AS TO BE COVERED BY THE INTERMEDIATE COURSE PRIOR TO REOPENING THE LANE TO TRAFFIC. THE COST OF THE ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE RESPECTIVE ITEM. A DISINCENTIVE IN THE AMOUNT OF \$8,700 SHALL BE ASSESSED FOR EACH DAY, OR PORTION THEREOF, A PLANED SURFACE IS OPEN TO TRAFFIC.

INTERSECTIONS AND DRIVES



INTERSECTION AND DRIVES QUANTITIES ARE INCLUDED IN THE ASPHALT CONCRETE QUANTITIES. INTERSECTION QUANTITIES HAVE BEEN ESTIMATED AT 15' MEASURED FROM EDGE OF PAVED SHOULDER. DRIVE QUANTITIES HAVE BEEN ESTIMATED AT 3' MEASURED FROM EDGE OF PAVED SHOULDER.

PERFORM WORK PER SPECIFIED OFFSET LIMITS UNLESS THERE IS A JOINT PRESENT CLOSER TO THE EDGE OF PAVED SHOULDER, IN WHICH CASE END WORK AT SAID JOINT.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E, MASH 2016

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH REBOUNDABLE RETROREFLECTIVE SHEETING, PER CMS 730.191.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN

PRIOR TO THE START OF ROADWAY OPERATIONS, THE CONTRACTOR SHALL REFERENCE THE LENGTH OF THE PROJECT ON BOTH SIDES OF THE ROADWAY, IN A MANNER SATISFACTORY TO THE ENGINEER. THE PAVEMENT SHALL BE REFERENCED IN 1000 FEET INCREMENTS, OR IN INCREMENTS ACCEPTABLE TO THE ENGINEER, IN A SEMIPERMANENT CONDITION.

ITEM 611 - CATCH BASIN ADJUSTED TO GRADE

THIS ITEM SHALL CONSIST OF ADJUSTING CATCH BASINS TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

611, CATCH BASIN ADJUSTED TO GRADE 56 EACH

ITEM 611 - MANHOLE ADJUSTED TO GRADE

THIS ITEM SHALL CONSIST OF ADJUSTING MANHOLES TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

611, MANHOLE ADJUSTED TO GRADE 19 EACH

MANHOLES AND VALVES ADJUSTED TO GRADE (PRIVATELY OWNED)

ALL MANHOLES AND VALVES ENCOUNTERED IN AREAS THAT REQUIRE GRADE ADJUSTMENT WILL BE ADJUSTED PRIOR TO THE APPLICATION OF THE SURFACE COURSE BY THE UTILITY OWNER. CONTACT THE UTILITY OWNER 2 WEEKS PRIOR TO WHEN THE ADJUSTMENTS ARE TO BE COMPLETED.

ITEM 623 - MONUMENT ASSEMBLY ADJUSTED TO GRADE

THIS ITEM SHALL CONSIST OF ADJUSTING MONUMENT ASSEMBLY TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

623, MONUMENT ASSEMBLY ADJUSTED TO GRADE 10 EACH

ITEM 638 - VALVE BOX ADJUSTED TO GRADE

THIS ITEM SHALL CONSIST OF ADJUSTING VALVE BOXES TO GRADE PRIOR TO THE APPLICATION OF THE SURFACE COURSE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

638, VALVE BOX ADJUSTED TO GRADE 13 EACH

DETECTION MAINTENANCE

IF VEHICLE DETECTION BECOMES UNEXPECTEDLY DISABLED, REQUIRES MODIFICATION, OR IS SCHEDULED TO BE TEMPORARILY REMOVED DURING THE CONSTRUCTION PROJECT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER AND DISTRICT TRAFFIC ENGINEER.

IF THE LOSS OF VEHICLE DETECTION IS KNOWN PRIOR TO THE START OF CONSTRUCTION, IT SHALL BE DISCUSSED AT THE PRECONSTRUCTION MEETING. AT SUCH TIME, THE DISTRICT TRAFFIC ENGINEER SHALL ADVISE THE PROJECT ENGINEER AND CONTRACTOR ON THE APPROPRIATE ACTION TO RECTIFY ANY LOSS OF VEHICLE DETECTION. THIS MAY INCLUDE PLACING THE TRAFFIC SIGNAL ON MINIMUM OR MAXIMUM RECALL, MODIFYING THE MINIMUM GREEN TIMES, AND REMOVING THE MALFUNCTIONING DETECTION FROM SERVICE. WHERE NON-INTRUSIVE DETECTION (I.E. VIDEO, RADAR) ALREADY EXISTS, THE CONTRACTOR SHALL INSURE THAT DETECTION IS OPERATING AND MAINTAINED BY RECONFIGURING THE DETECTION UNITS ACCORDINGLY DURING ALL CONSTRUCTION PHASES. THIS IS TO AVOID THE SIGNAL FROM MAXING OUT THE EFFECTED SIGNAL PHASE AND CREATING UNNECESSARY DELAYS.

LOCATIONS WHERE NON-INTRUSIVE DETECTION IS PROPOSED AND THE EXISTING VEHICLE DETECTION IS TO BE ABANDON, THE NON-INTRUSIVE VEHICLE DETECTION SHALL BE INSTALLED, CONFIGURED AND MADE FULLY FUNCTIONAL PRIOR TO THE EXISTING DETECTION BEING DISABLED. THE CONTRACTOR SHALL CONTINUE TO MAINTAIN AND MODIFY THE DETECTION UNTIL FINAL ACCEPTANCE OF THE TRAFFIC SIGNAL. THIS IS TO ENSURE VEHICLE DETECTION REMAINS FULLY FUNCTIONAL THROUGHOUT CONSTRUCTION.

ITEM 619 - FIELD OFFICE, TYPE C, AS PER PLAN

THE FIELD OFFICE NEEDS TO START ON 1/11/2025 WITH A DURATION OF 18 MONTHS. THE FIELD OFFICE SHOULD HAVE A MINIMUM OF 1800 SF. IN ADDITION TO THE REQUIREMENTS OF ITEM 619, THE CONTRACTOR SHALL PROVIDE INTERNET SERVICE WITH MINIMUM SPEED OF 200 MBPS, BI-WEEKLY CLEANING SERVICE, AND DUMPSTER WITH NECESSARY SERVICE.

ITEM 809 - STOP-LINE RADAR DETECTION, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING A WAVETRONIX SMARTSENSOR MATRIX DETECTION UNIT TO REPLACE EXISTING STOP LINE INDUCTANCE LOOPS ON AN APPROACH AT AN EXISTING SIGNALIZED INTERSECTION. THIS PAY ITEM SHALL INCLUDE THE FOLLOWING:

ITEM 809 - STOP-LINE RADAR DETECTION, AS PER PLAN (CONTINUED)

POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET.

ALL REQUIRED INPUTS CARDS SHALL BE INCLUDED IN THE TRAFFIC CABINET AND SHALL BE COMPATIBLE WITH CALTRANS, NEMA TS1 AND NEMA TS2 DETECTOR RACKS. THE CARDS SHALL PROVIDE TRUE PRESENCE DETECTOR CALLS OR CONTACT CLOSURE TO THE TRAFFIC CONTROLLER.

THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM, AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER. SIGNAL PLANS WILL BE PROVIDED AT THE PRECONSTRUCTION MEETING.

SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.

THE MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING INSTALLATION AND TESTING AND SHALL PROVIDE ONSITE TRAINING ON THE SETUP, OPERATION AND MAINTENANCE OF THE UNIT.

A SERIAL TO ETHERNET COMMUNICATIONS MODULE AND ETHERNET CABLE (MINIMUM 7 FEET).

THE POWER SUPPLY AND COMMUNICATION MODULES SHALL BE SECURED TO A SINGLE PANEL THAT CAN BE MOUNTED INTERIOR TO THE TRAFFIC CABINET. THE PANEL SHALL INCLUDE MODULAR-PLUG STYLE CONNECTIONS FOR UP TO FOUR (4) SENSOR CABLES. ADDITIONAL SENSORS MAY BE HARD-WIRED TO THE COMMUNICATION MODULES, AS NECESSARY.

THE INSTALLATION AND SETUP OF THE RADAR DETECTOR UNIT PRIOR TO MILLING OPERATION SO THAT THERE IS NO LOSS OF DETECTION DURING CONSTRUCTION.

UNLASHING AND RELASHING OF THE SIGNAL SPAN TO INSTALL THE NECESSARY CABLING.

DISCONNECT ALL LOOP LEAD-IN CABLE AND REMOVE AND DISPOSE OF IT FROM ALL PULL BOXES, CONDUITS, AND THE CABINET AFTER IT IS CONFIRMED THAT THE RADAR UNITS ARE WORKING. EXISTING PULL BOXES AND CONDUITS SHALL REMAIN IN PLACE.

PAYMENT FOR ITEM 809, STOP-LINE RADAR DETECTION, AS PER PLAN SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH UNIT, COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT AND CONNECTIONS TESTED AND ACCEPTED.

ADA WAIVER

AN APPROVED ADA DESIGN WAIVER IS REQUIRED ON THIS PROJECT. THE FOLLOWING FEATURES LISTED BELOW CANNOT FEASIBLY BE CONSTRUCTED TO MEET ADA GUIDELINES.

ADA FEATURE	APPROVAL DATE	SHEET NUMBERS
RMP0014384	03/02/2023	85
RMP0014385	03/02/2023	85
RMP0014386	03/06/2023	85
RMP0014387	03/02/2023	85

GENERAL NOTES

BUT-4-9.28

MODEL: Sheet 2 PAPER SIZE: 34x22 (in.) DATE: 12/11/2023 TIME: 3:42:38 PM USER: Zara G:\DE\Clients\ODOT\1081747_BUT-004-9.28\107695\400-Engineering\Roadway\Sheets\107695_GN001.dgn

DESIGN AGENCY



DESIGNER
MWZ

REVIEWER
PJP 07/17/23

PROJECT ID
107695

SHEET TOTAL
14 169

WORK ZONE SPEED ZONES (WZSZs) (CONTINUED)

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRE-CONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WITHOUT POSITIVE PROTECTION IS GENERALLY REGARDED AS USING DRUMS, CONES, SHADOW VEHICLE, ETC., ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WORKERS ARE CONSIDERED AS BEING PRESENT WHEN ON-SITE, WORKING WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS REMOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE ORIGINAL POSTED SPEED LIMIT.

TABLE 1: WARRANTED WORK ZONE SPEED LIMITS (MPH) FOR WORK ZONES ON HIGH-SPEED (55 MPH OR GREATER) MULTI-LANE HIGHWAYS

ORIGINAL POSTED SPEED LIMIT	WITH POSITIVE PROTECTION		WITHOUT POSITIVE PROTECTION	
	WORKERS PRESENT	WORKERS NOT PRESENT	WORKERS PRESENT	WORKERS NOT PRESENT
70	60	65	55	65
65	55	60	50	60
60	55	60	50	60
55	50	55	45	55

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

- ITEM 808 - DIGITAL SPEED LIMIT (DSL) SIGN 108 SIGN MONTHS ASSEMBLY, ASSUMING:
- 5 DSL ASSEMBLIES FOR 12 MONTHS (PHASE 1)
 - 2 DSL ASSEMBLIES FOR 3 MONTHS (PHASE 2)
 - 2 DSL ASSEMBLIES FOR 3 MONTHS (PHASE 3)
 - 6 DSL ASSEMBLIES FOR 6 MONTHS (RESURFACING)

PATCHING RUMBLE STRIPES

THE CONTRACTOR SHALL MILL 2 INCHES BY 2 FEET WIDE OF THE EXISTING ASPHALT SHOULDER IN ORDER TO REMOVE THE EXISTING RUMBLE STRIPES ALONG SR-4 IN THE AREA WHERE TRAFFIC IS SHIFTED. THE CONTRACTOR SHALL THEN COAT ALL MILLED SURFACES HORIZONTAL AND VERTICAL WITH APPROVED AC LIQUID.

1. NEXT, THE CONTRACTOR SHALL PLACE 2 INCHES OF ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22.

NEXT, THE CONTRACTOR SHALL PLACE ITEM 614 - WORK ZONE EDGE LINE PAVEMENT MARKINGS.

THIS WORK IS TO BE PERFORMED AT THE FOLLOWING LOCATIONS:

- SR-4 SB OUTSIDE SHOULDER - 382+51 TO 431+08
- SR-4 SB MEDIAN SHOULDER - 385+60 TO 427+40

PAYMENT FOR THE ABOVE DESCRIBED WORK SHALL BE AT THE CONTRACT UNIT PRICE OF ITEM 614 - MAINTAINING TRAFFIC, MISC.: RUMBLE STRIPE MILLED/FILLED. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT TO REMOVE EXISTING PAVEMENT, PLACE SURFACE COURSE, PLACE WORK ZONE PAVEMENT MARKINGS AND INCIDENTALS TO PERFORM THE ABOVE WORK.

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

ITEM 614 - MAINTAINING TRAFFIC, MISC.: RUMBLE STRIPE MILLED/FILLED 9,037 FT

DESIGN AGENCY



DESIGNER

MWZ

REVIEWER

PJP 07/17/23

PROJECT ID

107695

SHEET TOTAL

20 | 169