BENCHING OF FOUNDATION SLOPES

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS). NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF SECTION 203.05.

ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING.

ITEM 204 - PROOF ROLLING

71 HOUR

ROADWAY

CEMENT STABILIZATION

THIS PROJECT REQUIRES SUBGRADE IMPROVEMENTS USING CEMENT STABILIZATION PRIOR TO PAVEMENT CONSTRUCTION. CEMENT STABILIZATION SHALL BE PERFORMED TO A DEPTH OF 12 INCHES EXCEPT AREAS FOUND TO CONTAIN UNSUITABLE SOILS SHALL BE STABILIZED TO A DEPTH OF 14 INCHES PER THE TABLE BELOW.

STAT	TON RANGES OF	UNSUITABLE S	OILS
ALIGNMENT	BEGIN STATION	END STATION	LENGTH (FT)
IR 90	742+00.00	746+00.00	400.00
RAMP 117-11	35+50.00	42+52.49	702.49
RAMP 117-12	33+63.90	43+76.68	1,012.78

CHEMICALLY STABILIZE SUBGRADES TO 18 INCHES BEYOND THE EDGE OF THE SURFACE OF PAVEMENT. PAVED SHOULDERS. PAVED MEDIANS AND 18 INCHES FROM THE FACE OF NEW CURBS. WHERE CEMENT STABILIZATION IS PERFORMED, ITEM 204 - SUBGRADE COMPACTION SHALL NOT BE PERFORMED.

THE CONTRACTOR SHALL PERFORM THE MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS ACCORDING TO 206 OF THE C&MS AND SUPPLEMENT 1120. PAYMENT FOR THE MIX DESIGN SHALL BE PER:

ITEM 206 - MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS, LUMP

IN ACCORDANCE WITH SECTIONS 107.10 AND 107.16 OF THE C&MS. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN PERFORMING CEMENT STABILIZATION IN THE VICINITY OF ALL EXISTING AND PROPOSED UTILITY CROSSINGS. THE UTILITY DEPTHS ARE NEAR THE MINIMUM COVER REQUIREMENTS. THE CONTRACTOR SHALL AVOID USING POWER DRIVEN ROTARY MIXERS DIRECTLY ON TOP OF THE UTILITY CROSSINGS.

SUBGRADE EXCAVATION

IN AREAS WHERE SHALLOW ROCK IS ENCOUNTERED IN THE PROPOSED SUBGRADE WITHIN 12 INCHES BELOW THE BOTTOM OF THE PROPOSED PAVEMENT BUILDUP, CEMENT STABILIZATION SHALL NOT BE PERFORMED. THE CONTRACTOR SHALL EXCAVATE TO A DEPTH 6 INCHES BELOW THE FINAL SUBGRADE ELEVATION. THE WIDTH OF THE UPPER 6 INCHES OF AGGREGATE BASE SHALL EXTEND 18 INCHES BEYOND PAVED SHOULDERS. THE ADDITIONAL 6 INCHES BELOW THE BOTTOM OF THE 6 INCH AGGREGATE BASE SHALL BE REPLACED WITH ITEM 304 AGGREGATE BASE AND SHALL EXTEND A MINIMUM OF 12 INCHES BEYOND PAVED SHOULDERS.

THE FOLLOWING LOCATIONS REPRESENT AREAS WHERE SHALLOW ROCK EXISTS BASED ON THE SUBSURFACE INVESTIGATION.

204 - EXCA	VATION OF S	UBGRADE, AS	S PER PLAN - SI	HALLOW ROCK
ALIGNMENT	BEGIN STA	END STA	LENGTH (FT)	VOLUME (CUYD)
IR 90	563+00.00	659+00.00	9,801.82*	25,969
IR 90	674+00.00	682+00.00	800.00	2,075
IR 90	726+00.00	738+00.00	1,200.00	3,728
RAMP W1	36+39.23	42+13.75	574.52	341
RAMP W2	29+40.99	37+80.90	839.91	438
RAMP 117-5	27+06.36	31+00.00	393.64	197
RAMP 117-8	24+03.19	33+64.10	960.91	569
RAMP 117-9	30+57.77	39+69.36	911.59	431

*STATION EQUATION: STA. 617+61.82 BK R1 = STA. 615+60.00 AH R2

ADDITIONAL LOCATIONS WHERE EXCAVATION AND REPLACEMENT IS REQUIRED AS DESCRIBED ABOVE ARE AS FOLLOWS:

- WB MEDIAN SHOULDER FROM STA 539+50 TO STA 546+10 FOR THE AREA WITHIN THE MAINTENANCE OF TRAFFIC CROSSOVER.
- FULL WIDTH OF THE EASTBOUND AND WESTBOUND PAVEMENT AND SHOULDERS FROM STA 696+30 TO STA 708+00.

204 - EXCAVA	ATION OF SUE	BGRADE, AS F	PER PLAN - ADD	DITIONAL AREAS
ALIGNMENT	BEGIN STA	END STA	LENGTH (FT)	VOLUME (CU YD)
IR 90	539+50.00	546+10.00	660.00	417
IR 90	696+30.00	708+00.00	1,170.00	3,001

A VOLUME OF ITEM 204 EXCAVATION OF SUBGRADE, AS PER PLAN HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK DESCRIBED ABOVE.

ITEM 304 AGGREGATE BASE IS NOT INCLUDED IN THE COST OF ITEM 204 ABOVE AND WILL BE PAID FOR SEPARATELY AS ITEMIZED IN THE GENERAL SUMMARY.

TEST HOLES

WHERE PLANS PROVIDE FOR PROPOSED SUBGRADE STABILIZATION, UNDERCUTTING, UNDERDRAIN, LIGHTING CONDUIT OR ITS CONDUIT TO CROSS OVER OR UNDER AN EXISTING UNDERGROUND UTILITY AND THE UTILITY DEPTH IS NOT SHOWN ON THE PLAN, THE CONTRACTOR WILL BE PERFORM TEST HOLES TO DETERMINE THE DEPTH OF THE UTILITY AT THE DIRECTION OF THE ENGINEER.

THE CONTRACTOR SHALL HAVE THE UTILITY MARKED USING OHIO 811 AND/OR BY USE OF RADIO FREQUENCY LOCATORS OR OTHER APPROVED METHOD. ONCE LOCATED, THE CONTRACTOR SHALL CAREFULLY HAND AND/OR VACUUM EXCAVATE TO DETERMINE THE DEPTH OF THE EXISTING UTILITY AND PROVIDE THE SURVEYED COORDINATE AND ELEVATION INFORMATION TO THE ENGINEER.

TEST HOLES (CONTINUED)

IF IT IS DETERMINED THAT THE PROPOSED SUBGRADE STABILIZATION. LIGHTING CONDUIT OR ITS CONDUIT WILL BE IN CONFLICT WITH AN EXISTING UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, NOTIFY THE ENGINEER BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED WORK WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

THE FOLLOWING QUANTITY IS INCLUDED FOR USE AS DIRECTED BY THE ENGINEER FOR THE UTILITY LOCATION BY USE OF TEST HOLES AS DESCRIBED ABOVE:

ITEM 203 - ROADWAY, MISC.: TEST HOLE

24 EACH

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

ITEM 606 - GUARDRAIL, TYPE MGS, AS PER PLAN GUARDRAIL, TYPE MGS HALF POST SPACING, AS PER PLAN GUARDRAIL, TYPE MGS QUARTER POST SPACING, AS PER PLAN

THE POSTS FOR THESE ITEMS SHALL BE STEEL PER 710.15. ALL OTHER PROVISIONS OF 606 SHALL APPLY.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E

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 A SHEET OF TYPE G REFLECTIVE SHEETING, PER C&MS 730.19.

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.

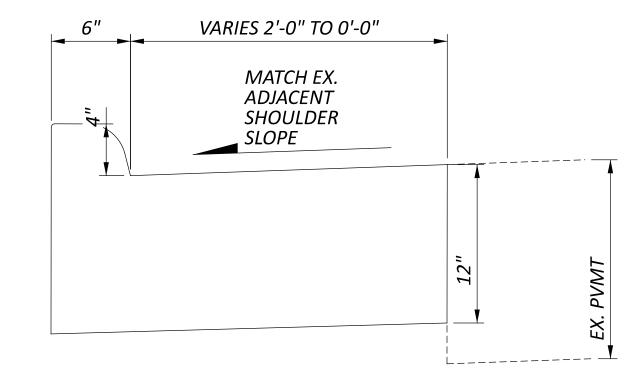
ITEM 622 - CONCRETE BARRIER END SECTION, TYPE D, AS PER PLAN

CONSTRUCT REFERENCE CB-106 PER STANDARD CONSTRUCTION RM-4.5M DATED 6/30/95. IT IS NOT NECESSARY TO TRANSITION THE BACK SIDE OF THE BARRIER TO MATCH THE EXISTING TYPE B NEW JERSEY SHAPE.

ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 4, AS PER PLAN

THE FOLLOWING VARIABLE WIDTH GUTTER DETAIL BELOW IS PROVIDED FOR THE LONG-TERM TEMPORARY TRANSITION FROM THE PROPOSED 12 FOOT INSIDE SHOULDER TO THE EXISTING 10 FOOT SHOULDER AT THE FOLLOWING LOCATION:

-STA. 768+85.00 TO STA. 769+18.60 EASTBOUND



THE CURB HEIGHT SHALL BE A UNIFORM 4 INCHES.

PAYMENT FOR ALL MATERIALS, TOOLS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THE WORK DESRIBED ABOVE SHALL BE MADE AT THE UNIT PRICE BID PER FOOT FOR:

ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 4, AS PER PLAN

ITEM 622 - BARRIER, MISC.: PORTABLE BARRIER REMOVED AND RESET

THE CONTRACTOR SHALL REMOVE THE EXISTING PORTABLE CONCRETE BARRIER ON THE EAST SIDE OF W. 140TH ST. NORTH OF RAMP 140-3 TO ALLOW FOR THE RECONSTRUCTION OF THE CURB, CURB RAMP AND SIDEWALK. THE CONTRACTOR MAY STORE THE BARRIER EAST OF THE EXISTING SIDEWALK OR OTHER LOCATION APPROVED BY THE ENGINEER THAT DOES NOT ADVERSELY AFFECT THE SAFETY OF THE PUBLIC. AFTER WORK HAS BEEN COMPLETED IN THIS AREA INCLUDING NECESSARY CONCRETE CURING TIMES, THE CONTRACTOR SHALL RESET THE BARRIER IN ITS ORIGINAL LOCATION AND ORIENTATION.

ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE (B1, C1, D), AS PER PLAN

AT LOCATIONS WHERE THE ENTIRE 15 FOOT LENGTH OF END ANCHORAGES CANNOT BE ACHIEVED OR WHERE THERE IS INSUFFICIENT SPACE FOR TWO BACK-TO-BACK END ANCHORAGES REQUIRED PER THE STANDARD CONSTRUCTION DRAWINGS, THE FOLLOWING WILL BE REQUIRED. THE 6-INCH SPACING OF THE Y401 STEEL REINFORCING BARS SHALL BE MAINTAINED UNIFORMELY FOR THE ENTIRE LENGTH OF THE ANCHORAGE(S) EXCEPT AT EACH END WHERE THE FIRST AND LAST Y401 BAR SHALL BE 4 INCHES FROM THE END OF THE END ANCHORAGE OR EXPANSION JOINT.

THE UNIT PRICE BID FOR EACH AS PER PLAN END ANCHORAGE SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK DESCRIBED ABOVE AND WILL BE PAID FOR PER EACH FOR THE APPLICABLE ITEM LISTED BELOW:

ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN

ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C1, AS PER PLAN

ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D, AS PER PLAN

ESIGN AGENCY

STRUCTUREP ESIGNER BER

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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 CITY OF ROCKY RIVER, LAKEWOOD AND CLEVELAND 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 CITY OF ROCKY RIVER, LAKEWOOD AND CLEVELAND 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 NONINTRUSIVE 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.

PROTECTION OF TRAFFIC MONITORING EQUIPMENT

ATR SITE 571 IS LOCATED WITHIN THE PROJECT LIMITS.

PRIOR TO BEGINNING ANY PAVEMENT ACTIVITIES OR ANY EXCAVATION ACTIVITIES BETWEEN STA 566+00 AND STA 568+00 THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE FROM THE OWNER WILL COORDINATE A TIME FOR THE OWNER/MAINTAINING AGENCY TO DISCONNECT THE EQUIPMENT. FOLLOWING THE DISCONNECTION BY THE OWNER, THE CONTRACTOR WILL BE ALLOWED TO PERFORM THEIR PAVEMENT ACTIVITIES, INCLUDING PAVEMENT REMOVAL. THE REMOVED LOOPS AND SENSORS BECOME THE PROPERTY OF THE CONTRACTOR.

DURING THE MEETING, THE OWNER/MAINTAINING AGENCY WILL IDENTIFY EQUIPMENT LOCATIONS. DO NOT DISTURB PULL BOXES, CONTROLLERS, CABINETS, POLES AND CONDUITS. ANY DAMAGE WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND REPAIRS MUST BE ACCEPTED BY THE OWNER.

ITEM 632 DETECTOR LOOP, AS PER PLAN

ALL STOP LINE INDUCTANCE DETECTOR LOOPS SHOWN IN THE PLANS SHALL BE THE POWERHEAD CONFIGURATION SHOWN ON TC-82.10. THE WIDTH SHALL BE AS SPECIFIED ON TC-82.10 AND THE LENGTH SHALL MATCH THE EXISTING DETECTOR LOOP LENGTH, WITH A MAXIMUM LENGTH OF 35'. THE STOP LINE DETECTOR LOOPS SHALL NOT BE WIRED TO ANY OTHER LOOPS AND SHALL HAVE THEIR OWN DETECTOR CHANNEL. THE LOCATION OF THESE LOOPS SHALL BE SUCH THAT THE POWERHEAD IS LOCATED AT THE STOP LINE, NOT PAST IT.

ALL DILEMMA ZONE INDUCTANCE DETECTOR LOOPS CALLED FOR IN THE PLANS SHALL BE THE ANGULAR DESIGN DETECTION (A.D.D.) LOOP AS SHOWN ON TC-82.10. DIMENSIONS SHALL BE AS SPECIFIED ON TC-*82.10.*

SYSTEM LOOPS SHALL BE AS DEPICTED IN THE PLANS.

ALL STOP LINE DETECTION SHALL BE TESTED FOR A BICYCLE TARGET AND ALL DILEMMA DETECTION ZONES SHALL BE TESTED FOR A MOTORCYCLE TARGET.

WHEN REPLACING THE LOOP DETECTORS, THE LOOP DETECTOR WIRE SHALL BE REPLACED TO THE PULL BOX OR POLE, WHICHEVER IS APPLICABLE, UNDER ITEM 632 AND TC-82.10. THE NEW CABLE SPLICE KITS SHALL BE INCLUDED IN THIS PAY ITEM.

THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER AND THE CITY OF ROCKY RIVER, LAKEWOOD AND CLEVELAND ENGINEER, SEVEN (7) DAYS PRIOR TO REMOVAL OF EXISTING LOOP DETECTORS TO ADJUST SIGNAL OPERATION AS NEEDED.

THE CITY OF ROCKY RIVER, LAKEWOOD AND CLEVELAND ENGINEER SHALL CONCUR WITH THE LOCATION OF THE REPLACEMENT LOOPS.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DESCRIBED ABOVE:

ITEM 632 DETECTOR LOOP, AS PER PLAN...... 10 EACH

INCIDENTALS

ITEM SPECIAL (69091000) - AS-BUILT CONSTRUCTION PLANS

PRIOR TO THE FINAL ACCEPTANCE OF THE PROJECT, PROVIDE AS-BUILT PLANS OF THE ENTIRE PROJECT TO THE ENGINEER IN THE FOLLOWING FORMATS: DGN FILES AND PDF FILE.

THE AS-BUILT PLANS SHALL INCLUDE ALL ROADWAY, EROSION CONTROL, DRAINAGE, PAVEMENT, TRAFFIC CONTROL, LIGHTING AND STRUCTURAL ITEMS THAT WERE BUILT TO LOCATIONS THAT ARE OUTSIDE CUSTOMARY CONSTRUCTION TOLERANCES AND ITEMS THAT WERE NON-PERFORMED. ALSO INCLUDE LOCATIONS OF ALL UTILITIES THAT WERE FOUND TO BE IN CONFLICT WITH THE PLANS AND WERE SUBSEQUENTLY RELOCATED DURING CONSTRUCTION.

THIS WORK WILL BE PAID UNDER THE LUMP SUM PRICE BID FOR ITEM SPECIAL (69091000) - AS-BUILT CONSTRUCTION PLANS AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THIS ITEM.

ITEM 619 FIELD OFFICE, TYPE C, AS PER PLAN

ALL REQUIREMENTS OF C&MS 619 SHALL APPLY EXCEPT AS MODIFIED **HEREIN:**

THE FIELD OFFICE SHALL BE A SUITE TYPE OFFICE (NO TRAILER OR MODULAR OFFICE) WITH A MINIMUM OF 4,000 SQUARE FEET AND AT GROUND LEVEL WITH A MINIMUM CEILING HEIGHT OF EIGHT (8) FEET. PROVIDE TWO (2) OUTSIDE DOORS, LOCKABLE VANDAL PROOF CYLINDER TYPE DEAD BOLTS AND LOCKABLE WINDOWS. THE FLOOR SPACE WILL BE DIVIDED INTO TWO RESTROOMS, ONE GENERAL OFFICE AREA (MINIMUM 400 SQUARE FEET), NOT LESS THAN SEVEN INDIVIDUAL OFFICES (MINIMUM 300 SQUARE FEET EACH) AS SEPARATE ENCLOSED ROOMS (NO CUBICLE DIVIDERS WILL BE ACCEPTED), ONE KITCHEN SPACE INCLUDING SINK, REFRIDGERATOR, AND MICROWAVE, AND ONE CONFERENCE ROOM (MINIMUM 1000 SQUARE FEET).

FURNISH NEAT, SANITARY, ENCLOSED TOILET ACCOMMODATIONS CONNECTED TO AN EXISTING SANITARY SEWER LINE FOR THE USE OF THE OCCUPANTS OF THE FIELD OFFICE, MEETING APPLICABLE STATE AND LOCAL CODES AND ORDINANCES. FURNISH ASSOCIATED LAVATORY AND SANITARY SUPPLIES. POTABLE HOT AND COLD RUNNING WATER WILL BE PROVIDED IN THE RESTROOM FOR SANITARY PURPOSES.

FURNISH TRASH COLLECTION SERVICE / DUMPSTER.

FURNISH PROFESSIONAL, BONDED, AND INSURED JANITORIAL SERVICE WITH A WEEKLY CLEANING OF THE ENTIRE OFFICE TO INCLUDE THE RESTROOM FACILITIES FOR THE DURATION OF THE PROJECT.

FURNISH BOTTLED DRINKING WATER SERVICE WITH A HOT AND COLD DISPENSER AND ASSOCIATED SUPPLIES.

FURNISH A BOX FOR STORING A NUCLEAR DENSITY GAUGE WITH REQUIREMENTS AS SET FORTH IN C&MS 619.02.

FURNISH AND MAINTAIN A BROADBAND INTERNET CONNECTION CAPABLE OF MINIMUM DOWNLOAD SPEEDS OF 1.0 Gb/S. PROVIDE A WIRELESS ROUTER THAT SUPPORTS WI-FI STANDARD 802.11Ax (WIFI 6) AND A MINIMUM WIRELESS DATA TRANSFER RATE OF 4000 Mb/S. PROVIDE PRE-WIRED ETHERNET ACCESS FOR ALL INDIVIDUAL OFFICES AND THE CONFERENCE ROOM.

FURNISH TEN (10) DESK AND CHAIR SETS, THIRTY (30) STACKABLE CHAIRS, TWENTY (20) WORK TABLES (30" X 72"), AND TWELVE (12) 24-QUART WASTE BASKETS WITH APPROPRIATE SIZED TRASH BAGS.

FURNISH AND INSTALL TWO (2) WALL-MOUNTED 8' X 4' GLASS, MAGNETIC DRY ERASE BOARDS.

FURNISH ONE NEW TELEVISION WITH THE FOLLOWING SPECIFICATIONS:

- a) DIAGONAL SCREEN SIZE 70" MINIMUM
- b) NATIVE RESOLUTION 4K
- c) HDMI PORTS: 3
- d) VIDEO INTERFACES: HDMI, USB
- e) ALL ACCESSORIES NECESSARY TO OPERATE
- f) ALL HARDWARE AND INSTALLATION NECESSARY TO HANG THE TELEVISION ON THE WALL IN THE CONFERENCE ROOM

THE FIELD OFFICE WILL BE APPROVED IN ADVANCE BY THE ENGINEER AND FULLY OPERATIONAL WITHIN 30 DAYS AFTER THE SIGNING AND EXECUTION OF THE CONTRACT OR PRIOR TO THE START OF ANY CONSTRUCTION WORK, WHICHEVER COMES FIRST.

THE DEPARTMENT WILL MEASURE FIELD OFFICE, TYPE C, AS PER PLAN BY THE NUMBER OF MONTHS THE OFFICE IS MAINTAINED. A PARTIAL MONTH AT THE END OF THE PROJECT WILL BE PAID AS A FULL MONTH.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE IN MONTHS AS FOLLOWS: ITEM 619 - FIELD OFFICE, TYPE C, AS PER PLAN 38 MNTH ESIGN AGENCY

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ITEM 616, WATER 353 M. GAL.

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 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.

NO WORK SHALL BE PERFORMED AND LANES IN THE THEN CURRENT MAINTENANCE OF TRAFFIC SCHEME SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

NEW YEAR'S DAY (OBSERVED) MEMORIAL DAY

TOTAL SOLAR ECLIPSE (4/8/24) FOURTH OF JULY (OBSERVED)

CHRISTMAS (OBSERVED)

LABOR DAY

GENERAL/REGULAR ELECTION DAY (NOVEMBER)

THANKSGIVING

ITEM 614, MAINTAINING TRAFFIC

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

DAY OF HOLIDAY OR SPECIAL	TIME ALL LANES MUST BE OPEN FOR TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
MONDAY (TOTAL SOLAR ECLIPSE)	12:00N FRIDAY THROUGH 6:00 AM WEDNESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
TUESDAY (GEN./REG. ELECTION)	5:00 AM TUESDAY THROUGH 12:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
·	

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT FOUND IN THESE MOT NOTES.

ALL EXISTING RAMPS LANES SHALL BE OPEN AND AVAILABLE TO TRAFFIC IN THE ORIGINAL OR PROPOSED FINAL ALIGNMENT AT ALL TIMES EXCEPT FOR SINGLE LANE RAMPS MAYBE BE CLOSED FOR A PERIOD NOT TO EXCEED 45 CALENDAR DAYS, WHEN TRAFFIC MAY BE DETOURED AS SHOWN ON SHEETS P.0084 TO P.0102. SHOULD THE CONTRACTOR FAIL TO MEET THESE REQUIREMENTS, A DISINCENTIVE SHALL BE ASSESSED ACCORDING TO THE TABLE IN THE WINDOW CONTRACT NOTE.

EXCEPT AS DESCRIBED IN THE APPROVED MAINTENANCE OF TRAFFIC POLICY EXCEPTION, A MINIMUM OF 4 LANES OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES EAST OF THE HILLARD BLVD. INTERCHANGE BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 502 STRUCTURE FOR MAINTAINING TRAFFIC, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, AND TEMPORARY SURFACES USING ITEMS 410 AND 614, EXCEPT 3 LANES SHALL BE IN EACH DIRECTION WEST OF THE HILLIARD BLVD. INTERCHANGE.

ITEM 614, MAINTAINING TRAFFIC (CONTINUED)

ALL EXISTING LANES. INCLUDING RAMPS. SHALL BE OPEN AND AVAILABLE TO TRAFFIC IN THE ORIGINAL OR PROPOSED FINAL ALIGNMENT DURING WINTER MONTHS DEFINED TO BE FROM OCTOBER 15 THROUGH MARCH 31. SHOULD THE CONTRACTOR FAIL TO MEET THESE REQUIREMENTS, A DISINCENTIVE SHALL BE ASSESSED ACCORDING TO THE TABLE IN THE INCENTIVE/DISINCENTIVE CONTRACT NOTE.

SCHEDULE OF THROUGH LANES TO BE MAINTAINED

ALL LANE CLOSURES MAY ONLY BE IMPLEMENTED AT THE TIMES PERMITTED BY THE "DISTRICT 12 PERMITTED LANE CLOSURE TIMES" LIST, WHICH IS LOCATED ON THE ODOT WEBSITE:

http://www.dot.state.oh.us/districts/D12/HighwayManagement/ <u>Pages/PermittedLaneClosures.aspx</u>

THE LATEST REVISION, AT 14 DAYS PRIOR TO THE BID DATE, SHALL BE IN EFFECT FOR THIS PROJECT.

NO LANE OR SHOULDER CLOSURES SHALL BE IN PLACE WHEN NO WORK IS BEING PERFORMED, UNLESS DIRECTED BY THE ENGINEER. SHOULDER CLOSURES SHALL ONLY BE ALLOWED AT THE TIMES SPECIFIED FOR LANE CLOSURES.

ANY ROADWAY NOT LISTED SHALL NOT HAVE ANY LANE CLOSURES ON WEEKDAYS FROM 6:30AM TO 9:00AM AND 3:00PM TO 6:00PM. CONTACT TROY ONESTI, DISTRICT 12 WORK ZONE TRAFFIC MANAGER, AT (216) 584-2204 IF THERE ARE ANY QUESTIONS.

APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION

PORTIONS OF THE MOT PLANS AS DESCRIBED BELOW HAVE AN APPROVED MOT EXCEPTION PER TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)).

THE APPROVED MOT EXCEPTION INCLUDES A LONG-TERM SINGLE LANE CLOSURE FOR TWO CONSTRUCTION SEASONS EXCLUDING WINTER MONTHS ON I-90 EB FROM STA 540+44 TO STA 662+88. THIS LANE CLOSURE PERMITS THE TOTAL NUMBER OF OPEN EASTBOUND LANES TO BE REDUCED FROM FOUR TO THREE.

A MAINTENANCE OF TRAFFIC MEETING SHALL BE HELD A MINIMUM OF 30 CALENDAR DAYS PRIOR TO IMPLEMENTATION OF EACH APPROVED MOT EXCEPTION. THIS MEETING SHALL INCLUDE THE DISTRICT WORK ZONE TRAFFIC MANAGER, AS WELL AS THE CONTRACTOR, WORKSITE TRAFFIC SUPERVISOR (WTS) AND ANY SUBCONTRACTORS INVOLVED WITH TEMPORARY TRAFFIC CONTROL.

IN ADDITION TO ANY NOTIFICATIONS REQUIRED IN OTHER NOTES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AT LEAST 3 BUSINESS DAYS IN ADVANCE OF IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE SO THAT THE PROJECT ENGINEER CAN SEND E-MAIL NOTIFICATION TO THE OFFICE OF ROADWAY ENGINEERING, STATEWIDE TMC, DWZTM AND SPECIAL HAULING PERMITS AT LEAST 2 BUSINESS DAYS IN ADVANCE OF THE IMPLEMENTATION OF THE APPROVED MOT EXCEPTION(S) REFERENCED ABOVE. REFERENCE "EXCEPTION REQUEST APPROVAL DATED 10/18/2022 FOR PID 76779" IN THE NOTIFICATION AND OTHER CORRESPONDENCE.

ANY CHANGES TO THE MOT THAT IMPACT THE PREVIOUSLY APPROVED MOT EXCEPTION(S) LISTED ABOVE SHALL BE APPROVED IN WRITING BY THE MOT EXCEPTION COMMITTEE (MOTEC). IN THE EVENT THAT SUCH CHANGES ARE PROPOSED, THE REQUEST SHALL BE COORDINATED THROUGH THE DISTRICT WORK ZONE TRAFFIC MANAGER (DWZTM) A MINIMUM OF 30 CALENDAR DAYS PRIOR TO THE DESIRED IMPLEMENTATION DATE. IF THE DISTRICT AGREES WITH THE PROPOSED CHANGES THE DWZTM SHALL SEEK APPROVAL FROM THE MOTEC. IN THE EVENT THE PROPOSED CHANGES ARE APPROVED IN WRITING, THE CLOSURES ARE STILL SUBJECT TO NOTIFICATION REQUIREMENTS WITHIN THIS NOTE PRIOR TO IMPLEMENTATION.

OUTSIDE OF WINTER MONTHS AND THE APPROVED MOT POLICY EXCEPTION, THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES AS DESIGNATED IN THE LANE VALUE CONTRACT TABLE FOR EACH UNIT OF TIME THE DESCRIBED CRITICAL LANE/RAMP IS RESTRICTED FROM FULL USE BY THE TRAVELING PUBLIC WITHIN THE RESTRICTED TIME PERIOD. THE LANE VALUE CONTRACT TABLE IS LOCATED BELOW. THE DISINCENTIVES WILL BE ASSESSED FOR ALL RESTRICTIONS OF THE CRITICAL WORK.

LANE VALUE CONTRACT TABLE

CRITICAL WORK IS SHOWN IN THE LANE VALUE CONTRACT TABLE.

CRITICIAL WORK IS DEFINED AS HAVING THE DESIGNATED SECTIONS OPEN TO UNRESTRICTED TRAFFIC AS SHOWN IN THE TABLE, OR THE ENTIRE PROJECT IF NOT OTHERWISE LISTED.

UNRESTRICTED TRAFFIC IS DEFINED AS ALL TRAFFIC LANES BEING AVAILABLE FOR USE WITH SPECIFIED STRIPING AND SAFETY FEATURES IN PLACE. DISINCENTIVES SHALL APPLY TO EACH LANE RESTRICTED BEYOND THOSE ALLOWED IN THE D12 PREMITTED LANE TIMES.

DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED	RESTRICTION TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME UNIT PER LANE
I.R. 90 FROM LAKEVIEW AVE TO WOOSTER RD	AS PER THE D12 PERMITTED LANE TIMES	EACH MINUTE	\$275
I.R. 90 FROM WOOSTER RD TO WEST BLVD	AS PER THE D12 PERMITTED LANE TIMES	EACH MINUTE	\$265
RAMPS HA, HB, 117-12	ONE LANE OPEN AT ALL TIMES	EACH MINUTE	\$265

INCENTIVE/DISINCENTIVE CONTRACT

THE CONTRACTOR SHALL COMPLETE ALL CRITICAL WORK AND SAFETY ITEMS ACCORDING TO THE DISINCENTIVE CONTRACT TABLES. THE INCENTIVE/DISINCENTIVE CONTRACT TABLE ARE LOCATED BELOW. IN THE EVENT THE CONTRACTOR IMPEDES THE FLOW OF TRAFFIC SUBSEQUENT TO THE OPENING TO UNRESTRICTED TRAFFIC, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE ACCORDING TO THE INCENTIVE/DISINCENTIVE CONTRACT TABLE.

CRITICAL WORK IS SHOWN IN THE INCENTIVE/DISINCENTIVE CONTRACT TABLE.

CRITICAL WORK IS DEFINED AS HAVING THE DESIGNATED SECTION OF WORK OPEN TO UNRESTRICTED TRAFFIC AS SHOWN IN THE TABLES. OR THE ENTIRE PROJECT IF NOT OTHERWISE LISTED.

UNRESTRICTED TRAFFIC IS DEFINED AS ALL TRAFFIC LANES BEING AVAILABLE FOR USE AT THEIR FINAL DESIGN WIDTH WITH ALL MARKINGS. RPM'S. AND SAFETY FEATURES INSTALLED. ALONG WITH NO DESTRICTIONS WITHIN 2 FEET OF THE FDCF LINE ON THE SHOULDERS

RESTRICTIONS WITH	IIN Z FEET OF TH	E EDGE LI	INE ON THE SHOP	OLDERS.
DESCRIPTION OR LOCATION OF CRITICAL WORK	COMPLETION DATE	TIME PERIOD	DISINCENTIVE \$ PER TIME PERIOD	INCENTIVE \$ PER TIME PERIOD
PHASE 1 COMPLETE; START WINTER PHASE 1	10/15/2024	DAY	\$10,000	<i>\$0</i>
PHASE 3 COMPLETE; START WINTER PHASE 2	10/15/2025	DAY	\$10,000	\$0
PHASE 5 COMPLETE; START WINTER PHASE 3	10/15/2026	DAY	\$10,000	\$0

DETOUR SIGNING SHALL BE AS DETAILED IN THE PLANS. THE FOLLOWING ITEM HAS BEEN INCLUDED IN THE GENERAL SUMMARY.

QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 614, DETOUR SIGNING **LUMP SUM**

ESIGN AGENCY

ESIGNER BER

REVIEWER VDK 08/09/23 ROJECT ID 76779

P.0056 P.1587

9--90

UY-90-6.69

FLEXIBLE START WINDOW CONTRACT

THE FOLLOWING TABLE SHALL BE USED IN CONJUCTION WITH THE FLEXIBLE START WINDOW CONTRACT PROPOSAL NOTE.

DESCRIPTION OF CRITICAL WORK	CALENDAR DAYS TO	DISINCENTIVE \$ PER DAY	WORK V	VINDOW
	COMPLETE		START	END
WB RT TURN ONTO RAMP HA	45 DAYS	\$1,500	START OF PHASE 3	END OF PHASE 3
RAMP MC	45 DAYS	\$1,500	START OF PHASE 5	END OF PHASE 5
RAMP MD	45 DAYS)	\$1,500	START OF PHASE 3	END OF PHASE 3
RAMP ME	(45 DAYS)	\$1,500	START OF PHASE 3	END OF PHASE 3
RAMP MF	45 DAYS	\$1,500	START OF PHASE 5	END OF PHASE 5
RAMP W1	<i>45 DAYS</i> ≺	\$1,500	START OF PHASE 5	END OF PHASE 5
RAMP W2	> 45 DAYS	\$1,500	START OF PHASE 3	END OF PHASE 3
RAMP W1A	45 DAYS	\$1,500	START OF PHASE 5	END OF PHASE 5
RAMP W2A	45 DAYS	\$1,500	START OF PHASE 3	END OF PHASE 3
RAMP 140-3	(45 DAYS)	\$1,500	START OF PHASE 5	END OF PHASE 5
RAMP 140-4	45 DAYS	\$1,500	START OF PHASE 3	END OF PHASE 3
RAMP 117-5	<i>45 DAYS</i> ≺	\$5,000	START OF PHASE 5	END OF PHASE 5
RAMP 117-7	> 45 DAYS	\$5,000	START OF PHASE 3	END OF PHASE 3
RAMP 117-8	45 DAYS	\$5,000	START OF PHASE 3	END OF PHASE 3
RAMP 117-9	45 DAYS	\$5,000	START OF PHASE 3	END OF PHASE 3
RAMP 117-11	(45 DAYS)	\$5,000	START OF PHASE 5	END OF PHASE 5
RAMP W13	45 DAYS	\$1,500	START OF PHASE 5	END OF PHASE 5
RAMP W14	45 DAYS	\$1,500	START OF PHASE 3	END OF PHASE 3

NOTICE OF CLOSURE SIGNS

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW.

THE PCMS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

	NOTICE OF	CLOSURE SIGN TIME TABLE
ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
RAMP & ROAD CLOSURE	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
OLOGORL	<=12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE PCMS SHALL DISPLAY THE NAME OF THE ROAD OR RAMP AND THE DATE OF THE CLOSURE IN MMM-DD FORMAT.

ROAD CLOSED SIGN

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 SHOWN ON MAINTENANCE OF TRAFFIC PLANS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

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.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

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 MATERIAL 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 TO APPROVAL OF THE ENGINEER.

STRUCTUREPOINT NO.

DESIGNER
BER

REVIEWER
VDK 08/09/23
PROJECT ID

76779
SHEET TOTAL
P.0056A P.1587

1:48 PM USER: jsim (202000062\76779\4

																ESTIMA	ATED QUA	ANTITIES						
heet P.006	Sheet P.0067A	Sheet P.0067B	Sheet P.0068	Sheet P.0069	Sheet P.0070	Sheet P.0071	Sheet P.0072	Sheet P.0073	Sheet P.0074	Sheet P.0075	Sheet P.0076	Sheet P.0077	Sheet P.0078	Sheet P.0079	Sheet P.0080	Sheet P.0081	Sheet P.0082	Sheet P.0083	ITEM	EXTENSION	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
799																			441	50101	799	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22	P.0061
1332																			611	97010	1,332	FT	SLOTTED DRAIN, TYPE 2, 15"	
	3 1831 61 61	6 1647 280 280	5 1945 2678 16952	429	356 356	40	9 390 389 389	4 127 333 333	1 169 169	113 113	3 1421 1747 503	364	12 12	9 598 355 355	3 78 619 97	1 88 188 188	2 27 88 88	76 76	614 614 614 614	12380 12801 13310 13350	52 8,945 7,504 20,012	EACH EACH EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN BARRIER REFLECTOR, TYPE 1, ONE WAY	P.0060
		200	10332	6289	6337	70	303	2474	103	113	303	4183	12	333	1528	100		70	614	18030	20,811	FT	,	P.0063
20	0315	26.97 0.53 24.08	16032	3.08		0.82 0.91 100 835	1.93 10.26 6100 5408		843	24.08		7287 1053	760	4.94 10.88 7603		1.68	26.97 26.97 24.56 24.08 20677 20147 16317		614 614 614 614 614 614	20056 20110 22056 22110 23110 23210 24102	121.54 80.91 146.63 72.24 139,163 60,441 102,440	FT	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT WORK ZONE CHANNELIZING LINE, CLASS I, 6", 642 PAINT	
20082		16317	212 2073 31030	2374			2			16317	31090	3860	}	1	1	1	16317		614 614 615 622	24202 25000 20000 41011	48,951 212 28,389 62,120	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A PORTABLE BARRIER, 50", AS PER PLAN	P.0057
2	2929	13923	54660 17200			1021 960	19457	3764	8432	5635	20866 4300		605	17733	4830	9420	4380	3820	622 622 622	41060 41100 41111	171,475	EACH FT FT	PORTABLE BARRIER, UNANCHORED	P.0064 P.0057
		757.4 2389								311.4 983									617 617	10100	1,069 3,372	CY SY	COMPACTED AGGREGATE	

	DESIGN AGE DESIGN	DESIGNER BE REVIE VDK 08 PROJECT ID 767
구 ANCHORED, AS PER PLAN		
구 UNANCHORED		
DUAL PORTABLE BARRIER TRANSISTION/ TERMINATION		
과 PORTABLE BARRIER, 50", AS PER PLAN		
MAINTAINING TRAFFIC, CLASS A	1625 1672 563	703
WORK ZONE 그 TRANSVERSE/DIAGONAL LINE, CLASS I		
과 WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT		
WORK ZONE 그 CHANNELIZING LINE, CLASS I, 12", 807 PAINT	3567 3575	
WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (YELLOW)		
WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT (WHITE)		
WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT		
न MAINTAINING TRAFFIC, MISC.: TROUGH	91 13 36 35 10 72 51 21 17 34 65 87 76 75 109 128 55 34 62 57 101 145 248 32 122 53 64 64 64 439 56 512 212 130 115 109 43 57 84 233 66 170	
OBJECT MARKER, ONE WAY		
BARRIER REFLECTOR, TYPE		
WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	7 178 179	
WORK ZONE IMPACT ATTENUATOR, 24" WIDE A HAZARDS, (UNIDIRECTIONAL)		
과 SLOTTED DRAIN, TYPE 2		
STEP	A A A A A A A A A A A A A A A A A A A	A
PHASE	4 4 4 4 4 4 4 4 4 4 4 4	
SIDE	RT LT LT LT LT LT	
TION	602+61.00 604+11.00 630+24.00 632+77.00 634+56.00 636+25.00 640+82.00 640+82.00 643+86.00 644+60.00 645+85.00 647+65.00 649+99.00 653+03.00 657+54.00 672+15.00 675+41.00 675+41.00 701+03.00 701+03.00 701+03.00 701+03.00 714+00.00 717+00.00 719+70.00 719+70.00 719+70.00 719+75.00 753+59.00 753+59.00 757+26.00 757+26.00	//U+10.0U
STA?	583+29.00 585+15.00 587+00.00 591+06.00 600+04.00 602+44.00 603+77.00 629+59.00 631+90.00 635+50.00 635+50.00 637+15.00 639+54.00 643+31.00 644+26.00 645+23.00 647+08.00 648+98.00 651+58.00 655+06.00 660+60.00 677+13.00 671+61.00 674+75.00 676+74.00 703+34.00 704+12.00 711+88.00 715+70.00 711+88.00 715+70.00 711+88.00 715+70.00 711+88.00 715+70.00 711+88.00 715+70.00 711+88.00 715+70.00 711+88.00 715+70.00 711+88.00 715+70.00 711+88.00 715+70.00 711+88.00 715+70.00 711+88.00 715+70.00 711+88.00 715+70.00 711+88.00 715+70.00 711+88.00 715+70.00 711+88.00 715+70.00 711+88.00 715+70.00 711+88.00 715+70.00 711+88.00 715+70.00	7.337.00
LOCATION	IR 90	1K 9U
REFERENCE NO.	WCH-15 WDL-1 WCH-16 WCH-17 TD-65 TD-66 TD-67 TD-68 TD-70 TD-71 TD-72 TD-73 TD-74 TD-75 TD-76 TD-76 TD-78 TD-78 TD-80 TD-81 TD-82 TD-83 TD-84 TD-85 TD-85 TD-86 TD-87 TD-88 TD-90 TD-91 TD-92 TD-93 TD-94 TD-97 TD-98 TD-97 TD-98 TD-99 TD-100 TD-101 TD-102 TD-101 TD-102 TD-103 TD-104 TD-105 TP-1 TP-2 TP-2 TP-3	
SHEET NO.		

					SH	IEET NU	JM.					PART.		TTEN4	ITEM	GRAND		D.E.C.CD.ID.T.C.N.	SEE	
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					204				9	9,654	204 9,654			202	32800 35100	204 9,654	SY FT	CONCRETE SLOPE PROTECTION REMOVED PIPE REMOVED, 24" AND UNDER		1
										10,617	10,617			202	35200	10,617	FT	PIPE REMOVED, OVER 24"		1
					12,141					uiuu)		202	38000	12,141	FT	GUARDRAIL REMOVED		
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					25						75			202	42040	25	EACH	ANCHOD ACCEMBLY DEMOVED TYPET		4
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					2						2			202	47800	2	EACH	IMPACT ATTENUATOR REMOVED		1
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										2,021	2,021				20270000		FT	FILL AND PLUG EXISTING CONDUIT, 54"	P.0048	
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				500 500						145 190	645 690				20270110		FT FT	PIPE CLEANOUT, 24" AND UNDER PIPE CLEANOUT, 27" TO 48"	P.0047 P.0047	
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5779_								40,911			40,911			202	75000	40,911	FT/\	FENCE REMOVED	5 10 00	_
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eder 9/400-	37,166	-	71								71	<i>)</i>	\wedge	204	45000	37,166 / 71	HOUR	PROOF ROLLING	P.0046	1
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13:54	204,209		/								204,209	l /		206	15010	204,209	SY	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP		4
:: 10:′ Proje	16,870		LS								16,870 LS)		206 206	15020 30000	16,870 LS	SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS		4
TIME rents\			LS								LS			200	30000	LS		WILKTURE DESIGN FOR CHEIVIICALLY STABILIZED SOILS		_
2024 Jocun	0.25										0.25			209	15051	0.25	MILE	RESHAPING UNDER GUARDRAIL, AS PER PLAN	P.0049	DESIGN AGENC
4/26/2																				
ATE:						20,246					20,246			606	15051	20,246	FT	GUARDRAIL, TYPE MGS, AS PER PLAN	P.0046	
.) D.						125					125			606	15151	125	FT	GUARDRAIL, TYPE MGS HALF POST SPACING, AS PER PLAN	P.0046	_
22 (in.						62.5 57					62.5 57			606 606	15251 26150	62.5 57	EACH	GUARDRAIL, TYPE MGS QUARTER POST SPACING, AS PER PLAN ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	P.0046	ॏ
34x2 com:s						35					35			606	26550	35	EACH	ANCHOR ASSEMBLY, MGS TYPE T		SIS
69 SSIZE:																				DESIGNER
-6. APER				_		42					42			606	35002	42	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1		BER REVIEWER
90-						20					20			606	35102	20	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2		VDK 08/0
								40,911			40,911			607	23000	40,911	ГT	FENCE, TYPE CLT		PROJECT ID 76779
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			- l	\sim	49~~~	~~~~		. 40	m	~611~	98840	49	EACH	HULET, NO. 2-A-6	\sim	
		(1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	- 	X		1		611	98841	1	EACH	INLET, NO. 2-A-6, AS PER PLAN	P.0063	
					24			24		611	98850 98860	35 24	EACH	IINLE I, NO. 2-A-8		
					12			12		611	98870	12	EACH	INLET, NO. 2-A-10 INLET, NO. 2-A-12		
					9			9		611	98880	9 /	EACH			
		/			4				_	644	00000	R4	FACIL			
	R4		· · · · · · · · · · · · · · · · · · ·		1			1 1	P4	611 611	98890 99000	1	EACH EACH	INLET, NO. 2-A-16 INLET, NO. 2-A-18		_
			3		73			73)	Z	611	99574	73	EACH			
					33			33		611	99575	33	EACH	MANHOLE, NO. 3, AS PER PLAN	P.0048	<u>, </u>
		7	<u>, </u>	~~~	1			1	mmm	611	99575	m-1	EACH, EACH,	\rightarrow MANHOLE, NO. 3, AS PER PLAN (2)	2.0048 2.0063	
			wermen	A CAR	2 * * * * * * * * * * * * * * * * * * *	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	> 	****	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	611	99575	+++ 5 +++	ĘĄCH	MANHOLE, NO. 3, AS PER PLAN (3) MANHOLE RECONSTRUCTED TO GRADE	.,,005	
				\wedge	1					611	99690		EACH	MANHOLE, MISC.: MH-3 MODIFIED	P.0048	, ,
			/ R	R5 \										DAY (53.453.15		
756		2,000						2,756		251	01020	2,756	SY	PARTIAL DEPTH PAVEMENT REPAIR (442)		_
750		2,000						2,730		231	01020	2,730	<u> </u>	TARTIAL DEL TITTAVENTENT RETAIN (442)		
16,229								16,229		254	01000	16,229	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"		
89,922								89,922		302	56001	89,922	CY	ASPHALT CONCRETE BASE, (449), AS PER PLAN, PG 64-22	P.0049	<u>_</u>
										302	30001	03,322	Ci	ASPITALI CONCRETE DASE, (449), AS PER PLAN, PG 04-22	2.0043	_
111,594								111,594	2	304	20000	111,594	CY	AGGREGATE BASE		
										407	10000	62.607		TA CIV CO AT		
63,607								63,607		407	10000	63,607	GAL	TACK COAT		
677				\sim				677		441	10101	677	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), AS PER PLAN, PG 70-22M P	P.0049	\overrightarrow{f}
			7	724)				677 724		441	70801	677 724	CY		P.0049	
10.267							DE			4.42	(10000)		RZ	ACDITALE CONCRETE INTERNAEDIATE COLUDER 12 F ANA TYPE A (446)		4
18,367 15,775		R5						18,367 15,775		442 442	10080	18,367 15,775	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446) ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447), AS PER PLAN, PG 76-22M P	P.0050	\exists
79								79		442	22101	79	CY	· · · · · · · · · · · · · · · · · · ·	P.0050	
												,				
49,422								49,422		452	14122	49,422	R5 SY	11.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P WITH QC/QA		_
159								159		609	14000	159 /	FT	CURB, TYPE 2-A		_
34 18,454								34		609	23001	34	FT	· · · · · · · · · · · · · · · · · · ·	P.0046	,
18,454								18,454)		609	24000	18,454	FT	CURB, TYPE 4-A		
31,848 637								31,848 637		609 609	24510 50000	31,848 637	FT SY	CURB, TYPE 4-C 4" CONCRETE TRAFFIC ISLAND		_
057								037		009	30000	057	31	4 CONCRETE TRAFFIC ISLAND		-
1	13.79							13.79		618	40601	13.79	MILE	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN	P.0050	
																_
														LIGHTING		-
					423			423		625	00450	423	EACH	CONNECTION, FUSED PULL APART		
					207			207		625	00480	207	EACH	CONNECTION, UNFUSED PERMANENT		_
					58 142			58 142		625 625	10494 10494	58 142	EACH EACH	, , ,		_
					40			40		625	10494	40	EACH			
																_
					1			1		625	14000	1	EACH	LIGHT POLE FOUNDATION, 24" X 6' DEEP		_
					142 48			142 48		625 625	14200 14306	142 48	EACH EACH	LIGHT POLE FOUNDATION, 24" X 10' DEEP MEDIAN LIGHT POLE FOUNDATION, 10' DEEP		-
					75,82	5		75,825		625	23200	75,825	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE		<u>L</u>
					30,150			30,150		625	23400	30,150	FT	NO. 10 AWG POLE AND BRACKET CABLE		DESI
					40.05	2		42.050		635	24222	42.650		1 1/2" DUCT CARLE MUTUTURES NO. 4 AMAGE 2400 MOUT CARLES		4
					43,650 749	J		43,650 749		625 625	24320 25300	43,650 749	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES CONDUIT, 1-1/2", 725.04		-
					950			950		625	25304	950	FT	CONDUIT, 1-1/2", 725.051		1
					3,729			3,729		625	25408	3,729	FT	CONDUIT, 2", 725.051		
					9,855	5		9,855		625	25604	9,855	FT	CONDUIT, 4", 725.051		DES
					3,746	<u> </u>		3,746		625	25902	3,746	FT	CONDUIT, JACKED OR DRILLED, 725.04, 3"		
					200			200		625	26273	200	EACH	LUMINAIRE, LOW MAST, SOLID STATE (LED), AS PER PLAN, 480V	P.1310	
					11			11		625	27503	11	EACH	LUIVIINAIRE, UNDERPASS, SULID STATE (LED), AS PER PLAN, 480V	,.131U	PRO.
										605	27502		EACH	LUMAINAIDE LINDEDDACC COUD CTATE (LED) AC DED DIANI CDD EIVTLIDE	P.1310	
					32,370			32,376		625 625	27503 29000	32,376	LACII	LUMINAIRE, UNDERPASS, SOLID STATE (LED), AS PER PLAN, CPP FIXTURE P	.1310) SHEI

				SH	IEET NUM			PART.		ITEM	GRAND			EE
	OFFICE CALCS	335	337	1166 1184	1290 1268	270		01/IMS/0 02/IMS/1 03/IMS/1	ITEM	EXT	TOTAL	UNIT	DESCRIPTION SH	EET IO.
	CALCS				(uu)			T 3 3						
					14			14	625	20000	1.4	FACII.	LIGHTING CONT.	
					8			8	625 625	29900 29930	14	EACH EACH	JUNCTION BOX MEDIAN JUNCTION BOX	
					56			56	625	30700	56		PULL BOX, 725.08, 18"	
					16			16	625	30706	16		PULL BOX, 725.08, 24"	
					3			3	625	30731	3	EACH	PULL BOX, 725.08, 48", TYPE 1, AS PER PLAN P.1	1310
					1			1	625	31510	1	EACH	PULL BOX REMOVED	
					191			191	625	32000	191		GROUND ROD	
					3			3 7	625 625	33001 34001	3		,	.310 .309
					2			2	625	34450	2		POWER SERVICE, AS PER PLAN CONTROL CENTER CABINET, COMPLETE	1309
											_			
					1 22 276			1 22 276	625	35010	1 22 276	EACH	REMOVE AND REERECT EXISTING LIGHT POLE	
					32,376			32,376	625 625	36010 37100	32,376	EACH	UNDERGROUND WARNING/MARKING TAPE SERVICE TO UNDERPASS LIGHTING	
					1			1	625	37101	1			1309
					9			9	625	39520	9	EACH	PULL BOX CLEANED	
					LS			LS	SPECIAL	62540000) LS		MAINTAIN EXISTING LIGHTING P.1	.310
					59			59	625	75350	59		LIGHT TOWER REMOVED	<u> </u>
					110			110	625	75400	110		LIGHT POLE REMOVED	₹
					65			65	625 625	75500	65		LIGHT POLE FOUNDATION REMOVED	_ {
					11				023	75540	11	ЕАСП	LIGHT TOWER FOUNDATION REMOVED	
					31			31	625	75800	31	EACH	DISCONNECT CIRCUIT	S
					14			14	625	98000	14		'	1310 4
					13			13	625 625	98000 98000	13			1310 1310 <u>—</u>
					7			7	625	98000	7			310
														GE GE
													TRAFFIC SURVEILLANCE	
						160		160	625	25102	160	FT	CONDUIT, 1", 725.05	
						40		40	625	25402	40	FT	CONDUIT, 2", 725.05	
_						108 ,050		1,050	625 625	25600 25908	108 1,050		CONDUIT, 4", 725.04 CONDUIT, JACKED OR DRILLED, 725.052, 2"	
01.dgr					-	222		222	625	25908	222		CONDUIT, JACKED OR DRILLED, 725.052, 2	
099											1.00			
62.29						108 40		108	625 625	29002 29010	108	FT FT	TRENCH, 24" DEEP TRENCH, 30" DEEP	
neets\ ⁷						21		21	625	29931	21			.268
/ay\Sh						2		2	625	30700	2	EACH	PULL BOX, 725.08, 18"	
Roadv						6		6	625	30711	6	EACH	PULL BOX, 725.08, 32", AS PER PLAN P.1	1268
ering\						148		148	625	36010	148	FT	UNDERGROUND WARNING/MARKING TAPE	
Ingine														
der \400-E					<u> </u>	5,384	~~~~	45,384 LS	809 809	20000 70000	45,384 LS		MAINTAINING ITS DURING CONSTRUCTION	
R: bried					LS	y	June 1	www.	809	70050	L3		AS-BUILT CONSTRUCTION PLANS	
USEF 00062\														
6 AM 20200				11				11	620	60000	11	EACH	TRAFFIC CONTROL	
1:44:5				11					620	60000	11	EACH	DELINEATOR, POST SURFACE MOUNTED	
ME: 11				2,318				2,318	621	00100	2,318		RPM	
24 TII	2,312							2,312	621	54000	2,312	EACH	RAISED PAVEMENT MARKER REMOVED	DESIGN AGENCY
25/20;				35				35	625	32000	35	EACH	GROUND ROD	 5
TE: 4/.									023	32000				EPO E
) DA		387	207					387	626	00102	387		BARRIER REFLECTOR, TYPE 1, ONE WAY	
22 (in.)			395					395	626	00116	395	EACH	BARRIER REFLECTOR, TYPE 5, ONE WAY	REGAR
9 [E: 34x2 y.com:s				528.6				528.6	630	02100	528.6	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
.65 RSIZE				2,605.4				2,605.4	630	03100	2,605.4	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	DESIGNER BER
-6.				1,150 246.7				1,150 246.7	630 630	04100	1,150 246.7		GROUND MOUNTED SUPPORT, NO. 4 POST GROUND MOUNTED STRUCTURAL BEAM SUPPORT, S4X7.7	REVIEWER
90 eet 5 F				351.3				351.3	630	06500	351.3		GROUND MOUNTED STRUCTURAL BEAM SUPPORT, W6X9	VDK 08/09/23 PROJECT ID
Sh cuctur														76779
														SHEET TOTAL P.0320 P.1587
			1	1	1 1 1		1	1 1 1	1	1				

	SHEET NUM.		PART.		ITEM	ITEM	GRAND	UN	VITT.	DESCRIPTION	SEE	
	1361 1385 1389 1393	01/IMS/0 4	02/IMS/1 3	03/IMS/1 3	1 □ *	EXT	TOTAL	UIV	111	DESCRIPTION	SHEET NO.	
	586 586 2,239 2,239			586 586 2,239 2,239	514 514 514 514 514	00050 00056 00060 00066 27800	586 586 2,239 2,239	S S	SF SF	STRUCTURE OVER 20 FOOT SPAN (CUY-00090-07.580) CONT. SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT FIELD PAINTING STRUCTURAL STEEL, FINISH COAT FIELD PAINTING, MISC.: COATING SYSTEM REPAIR		- - - -
	288			288 87 388 2 LS	516 516 516 516 516	11210 13600 13900 46201 47000	288 87 388 2 LS	S S	SF SF ACH	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL 1" PREFORMED EXPANSION JOINT FILLER 2" PREFORMED EXPANSION JOINT FILLER BEARING DEVICE, ROCKER, AS PER PLAN JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE	P.1370	- - - -
	8 39 144 92			8 39 144 92	518 518 518 518	12500 21200 40000 40010	8 39 144 92	C F	CY FT	SCUPPER, MISC.: PLUG AND FILL EXISTING SCUPPER POROUS BACKFILL WITH GEOTEXTILE FABRIC 6" PERFORATED CORRUGATED PLASTIC PIPE 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	P.1349	
	623 280			623 280	526 526	15010 90010	623 280	S	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=13") TYPE A INSTALLATION		₩
	52			52	601	20010	52	C	CY	CRUSHED AGGREGATE SLOPE PROTECTION		NAF
	96			96	SPECIAL	60740300	96	F ⁻	-T '	VANDAL PROTECTION FENCE REMOVED AND REBUILT		Σ
	92			92	611 611	96600 99710	92 4	+		CONDUIT, BORED OR JACKED, 6" 707.45 PRECAST REINFORCED CONCRETE OUTLET		AL SU
	60			60	613	41200	60	C	CY	LOW STRENGTH MORTAR BACKFILL		Z H H H
	104			104	838	20700	104	C	CY	GABIONS		GEI
dgn	12,239 12,239 123 123 1241 LS			12,239 12,239 123 241 LS	848 848 848 848	10201 20000 30200 50000 50100	12,239 12,239 123 241 LS	S'	SY SY S	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN 1 1/2" INCH THICK SURFACE PREPARATION USING HYDRODEMOLITION SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY HAND CHIPPING TEST SLAB	P.1350	-
GG001.	12,239			12,239	848	50320	12,239	S'	SY	EXISTING CONCRETE OVERLAY REMOVED, 1.25" NOMINAL THICKNESS		
Sheets\76779_	100		10	100	848	50340	100			REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY STRUCTURE OVER 20 FOOT SPAN (CUY-00090-07.850)		- - -
.oadway\	10		10		512	10100	10	5		SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)		_
eering\R	LS LS		LS		518	63300	LS			STRUCTURE DRAINAGE, MISC.: CLEAN OUT EXISTING DRAINAGE SYSTEM	P.1349	
00-Engir	81		81		519	11101	81	S	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	P.1350	-
USER: jsima 300062\76779\4\	12 8		12 8		512 512	10100 10600	12 8	+		STRUCTURE OVER 20 FOOT SPAN (CUY-00090-08.100) SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) CONCRETE REPAIR BY EPOXY INJECTION		
:8:57 PM	LS		LS		518	63300	LS			STRUCTURE DRAINAGE, MISC.: CLEAN OUT EXISTING SCUPPERS	P.1350	
IME: 4:2	95		95		519	11101	95	S	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	P.1350	1
/2024 T .Docume			1		625	33001	1	EA	ACH :	STRUCTURE GROUNDING SYSTEM, AS PER PLAN	P.1350	DESIGN AGENCY
9 :E: 34x22 (in.) DATE: 4/23. y.com:structurepoint-pw-01\	5 8 67		5 8 67			10100 10600 51271500	5 8 67	F ⁻	FT (STRUCTURE OVER 20 FOOT SPAN (CUY-00090-08.340) SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) CONCRETE REPAIR BY EPOXY INJECTION URETHANE TOP COAT SEALER	P.1349	S
-6.69	LS		LS		518	63300	LS			STRUCTURE DRAINAGE, MISC.: CLEAN OUT EXISTING SCUPPERS	P.1350	BEK
CUY-90-(602 142		602 142		SPECIAL 519	51900100 11101	602 142			COMPOSITE FIBER WRAP SYSTEM PATCHING CONCRETE STRUCTURE, AS PER PLAN	P.1330	REVIEWER VDK 08/09/23 PROJECT ID 76779 SHEET TOTAL P.0323 P.1587

				SH	IEET NU	JM.						PART.		ITEM	ITEM	GRAND	UNIT	DESCRIPTION SHE	
OFFICE CALCS	51	52	56	57	58	60	61	66			01/IMS/0 4	02/IMS/1 3	03/IMS/1 3	11 [14]	EXT	TOTAL	OINTI	DESCRIPTION SHE NO	
																		MAINTENANCE OF TRAFFIC	
							200	799			999			441	50101	999	СҮ	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22 P.00	61
								1,332			1,332			611	97010	1,332	FT	SLOTTED DRAIN, TYPE 2, 15"	
							2,000	,			2,000			614		,	UOLID.		
						321,300	,				321,300			614	11110 11630	2,000 321,300	HOUR FT	INCREASED BARRIER DELINEATION	
			LS					52			52 LS			614 614	12380 12420	52 LS	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL) DETOUR SIGNING	
			LJ		49						49			614	18601	49	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN P.00	58
				17							17			614	12484	17	EACH	WORK ZONE INCREASED PENALTIES SIGN	
				Τ,	50						50			614	12500	50	EACH	REPLACEMENT SIGN	
3								8,945			3 8,945			614 614	12756 12801	3 8,945	EACH EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN P.00	50
								7,504			7,504			614	13310	7,504	EACH	BARRIER REFLECTOR, TYPE 1, ONE WAY	
								20,012			20,012			614	13350	20,012	EACH	OBJECT MARKER, ONE WAY	
								20,012			20,012			614	18030	20,811	FT	MAINTAINING TRAFFIC, MISC.: TROUGH P.00	53
					2.2			,			2.2			614	20560	2.2	MILE	WORK ZONE LANE LINÉ, CLASS III, 6", 642 PAINT	
								72.24			72.24			614	22110	72.24	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	AR AR
					1.7			72.21			1.7			614	22360	1.7	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	Σ
								121.54			121.54			614	20056	121.54		WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
								80.91			80.91 146.63			614 614	20110 22056	80.91 146.63		WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT	- Sr
																			A L
								139,163 60,441			139,163 60,441			614 614	23110 23210	139,163 60,441	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT	ER.
								102,440			102,440			614	24102	102,440	FT	WORK ZONE CHANNELIZING LINE, CLASS 1, 12 , 042 PAINT WORK ZONE DOTTED LINE, CLASS 1, 6", 807 PAINT	
								48,951			48,951			614	24202	48,951	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT	GEN
								212			212			614	25000	212	<u> </u>	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I	
LS								20,200	~~~~	~~~~	~LS~			615	10000	~LS~		ROADS FOR MAINTAINING TRAFFIC	
							4,000	28,389			32,389	3		615	20000	32,389	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	
			353								353			616	10000	353	MGAL	WATER	
) 								1.000			1.000				11100	1.000			
5								1,069 3,372			1,069 3,372			617 617	11100 20000	1,069 3,372	SY	COMPACTED AGGREGATE SHOULDER PREPARATION	
70/8											,			017	20000	·	<u> </u>		
Onee								62,120			62,120			622 622	41011 41060	62,120	FT EACH	PORTABLE BARRIER, 50", AS PER PLAN DUAL PORTABLE BARRIER TRANSITION/TERMINATION	57
adway								171,475			171,475			622	41100	171,475	FT	PORTABLE BARRIER, UNANCHORED	
ng/ko								22,460			22,460			622	41111	22,460	FT	PORTABLE BARRIER, ANCHORED, AS PER PLAN P.00	57
Lieeuri de la ligita della ligita de la ligita de la ligita della ligi				180							180			808	18700	180	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
000							20												
							38				38			829	00100	38	SNMT	WORK ZONE EGRESS WARNING SYSTEM	
00008							480				480			896	00010	480	SNMT	PORTABLE NON-INTRUSIVE TRAFFIC SENSOR, CLASS I	
0202/8							120				120			896	00021	120	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN P.00	01
540,000												540,000		900	00100	540,000	EACH	RAILROAD FLAGGING SERVICES	
16											1.0			100	10000	1.0		INCIDENTALS	DESIGN AGENCY
LS											LS			108	10000	LS		CPM PROGRESS SCHEDULE	
			LS								LS			614	11000	LS		MAINTAINING TRAFFIC	
structu	38										38			619	16021	38	MNTH	FIELD OFFICE, TYPE C, AS PER PLAN P.00	1 1 1 1 1 1 1 1 1 1
eò.cou		LS									LS			623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN P.00	S
v.peur		LJ																	BER REVIEWER
>											LS			624	10000	LS		MOBILIZATION	VDK 08/09
LS					1				-		ıc			SPECIAL	69091000	LS		AS DIVIT CONSTRUCTION DI ANS	PROJECT ID
LS	LS										LS				69091000			AS-BUILT CONSTRUCTION PLANS P.00	76779

		ANTITIES	MATED QUA	WAY ESTII	ROAD			AFGIGNI AGENOV	STRUCTUREPOINT INC. CANADA NDISEC	BER REVIEWER /DK 08/09/23 ROJECT ID 76779 HEET TOTAL	P.0336 P.1587
									D	V	
BARRIER REFLECTOR, TYPE 5, ONE WAY	3 3 3 3 4	5 3 3 3 3 3 5	5 2 4 3 4	3 3 3 3 3	3 6 6	3 7 4 3 3	13 4 10 2 2	4 4 3 4 10	2 3 3 3 3	3 3 4 3 4	205
MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	EACH	1 1 1 1	1		1 1	1	1 1 1	1		1	14
MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 90	1 1 1 1 1	1 1 1 1	1 1 1 1	1 1		1 1 1 1	1	1 1 1	1	1 1 1 1	27
ANCHOR ASSEMBLY, MGS 99 TYPE T	EACH	1	1	1 1 1	1 1 1 1 1	1	1 1 1	1 1 1	1 1 1 1	1	24
	1 1 1 1 1	1	1 1 1 1	1 1 1 1 1	1 1 1	1 1 1 1	1	1	1 1 1 1 1	1 1 1 1	33
		6									6
GUARDRAIL, TYPE MGS HALF POST SPACING, AS PER PLAN	FT	25 25 25	25	25							125.00
GUARDRAIL, TYPE MGS, AS 99 PER PLAN 99	75.00 75.00 75.00 200.00	150.00 175.00 50.00 135.26 102.42 300.36	225.00 87.50 137.50 112.50 112.50	137.50 112.50 100.00 75.00 125.00	150.00 675.00 100.00 425.00 412.50	175.00 100.00 487.50 125.00 112.50	1113.90 125.00 875.00 75.00	200.00 237.50 100.00 125.00 837.50	12.50 87.50 100.00 112.50 87.50	112.50 25.00 250.00 59.00 125.00	10060.94
ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN, 3"	6.98 6.56 6.56 6.13	9.90 4.11 3.39 3.55 3.38 7.17	6.68 2.19 4.76 4.21 4.76	4.76 4.21 3.63 3.63 4.17	4.72 33.36 3.63 19.71 18.80	5.58 7.69 25.14 9.23 2.74	49.69 8.81 39.41 2.53 3.94	10.36 12.47 5.07 9.23 18.61	2.03 6.90 3.63 3.90 6.90	6.30 4.73 11.82 5.84 6.54	450.04
SIDE	LT RT LT RT	RT RT RT LT RT	LT LT LT RT LT	RT LT RT LT RT	RT LT LT LT LT	RT RT LT LT RT	LT RT RT LT RT	LT RT LT LT RT	LT LT LT RT RT	RT RT LT LT	
TION	<i>TO</i> 354+21.85 534+37.50 538+63.50 546+00.00	549+41.10 548+31.00 572+23.50 574+30.16 574+29.82 587+45.26	587+26.50 589+21.50 92+88.00 601+79.50 604+31.00	14+46.50 16+84.00 620+42.50 624+03.10 626+22.60	37+96.50 646+43.60 45+78.60 672+16.57 672+04.51	72+22.22 72+10.65 679+59.73 676+11.99 75+38.31	84+47.67 684+40.86 684+35.96 684+43.46 692+33.39	693+87.66 695+10.11 695+02.45 698+51.63 708+71.35	705+49.53 713+16.60 713+29.10 22+69.50 722+67.50	732+80.70 732+85.50 736+60.50 735+44.50 36+15.41	,
	FROM 352+66.85 532+82.50 537+08.50 543+20.00	546+38.00 546+43.50 570+68.50 572+68.00 572+75.50 584+18.00	584+21.50 588+21.50 90+70.50 599+87.00 602+13.50	12+29.00 14+91.50 618+76.90 622+37.50 624+32.00	35+80.90 639+03.00 44+13.00 667+79.07 667+79.51	69+67.22 70+30.65 673+92.23 674+06.99 74+13.31	73+21.27 682+35.86 75+60.96 683+55.96 691+45.89	691+48.26 692+33.21 693+89.95 696+46.63 700+21.35	704+57.03 711+63.50 711+63.50 20+91.40 721+14.40	30+88.20 731+80.50 733+98.00 734+05.50 734+10.41	JOHEET 337
LOCATION	IR 90 WB IR 90 EB IR 90 WB IR 90 EB	IR 90 WB IR 90 EB IR 90 EB IR 90 EB IR 90 WB IR 90 EB	IR 90 WB IR 90 WB RAMP MC IR 90 EB IR 90 WB	RAMP ME RAMP MF IR 90 EB IR 90 WB IR 90 EB	IR 90 EB IR 90 WB IR 90 WB IR 90 WB IR 90 WB	IR 90 EB IR 90 EB IR 90 WB IR 90 WB IR 90 EB	RAMP 140-3 IR 90 EB RAMP 140-4 IR 90 WB IR 90 EB	IR 90 WB IR 90 EB IR 90 WB IR 90 WB IR 90 EB	IR 90 WB IR 90 WB IR 90 WB RAMP 117-8 IR 90 EB	RAMP 117-7/IR 90 EB IR 90 EB IR 90 WB IR 90 WB IR 90 WB/RAMP 117-11	TOTALS CARRIED TO
REFERENCE NO.	GR-1 GR-2 GR-3 GR-4	GR-5 GR-6 GR-7 GR-8 GR-9 GR-10	GR-11 GR-12 GR-13 GR-14 GR-15	GR-16 GR-17 GR-18 GR-19 GR-20	GR-21 GR-22 GR-23 GR-24 GR-25	GR-26 GR-27 GR-28 GR-29 GR-30	GR-31 GR-32 GR-33 GR-34 GR-35	GR-36 GR-37 GR-38 GR-39 GR-40	GR-41 GR-42 GR-43 GR-44 GR-45	GR-46 GR-47 GR-48 GR-49 GR-50	
SHEET NO.	386 386 387 387	389 389 392 392 392 393	393 393 393 395 395	395 395 398 398 398	399 399 402 407 407	407 407 407 407 407	407 409 409 409 411	411 411 411 411 413	413 413 413 415 415	417 417 417 417 417 417	2
							R: jsima	1 TIME: 3:03:13 PM USE	34x22 (in.) DATE: 4/19/2024	CUY-90-6.69	O §

		NTITIES	IATED OUA	MAY FSTIM	ROADA				DESIGN AGE	DESIGNER REVI VDK C	PROJECT ID 76
									DE	V	
BARRIER REFLECTOR, TYPE 5, ONE WAY	2 7 6 4 3	3 3 3 4 4	3 3 11 2 1	5 3 5 4 5	4 7 4 7 7 2	12 9 3 7 25	24 5	190.00			
MGS BRIDGE TERMINAL S ASSEMBLY, TYPE 2			1	1		1 1	1	6.00			
MGS BRIDGE TERMINAL S ASSEMBLY, TYPE 1	1 1 1 1 1	1 1 1 1	1	1 1		1	1	15.00 27.00			
ANCHOR ASSEMBLY, MGS TYPE T			1 1 1 1	1	1	1	1	11.00 24.00			
ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	1 1 1 1 1	1 1 1 1 1	1 1 1	1 1 1	1 1 1 1	1 1 1	1	24.00 33.00			
GUARDRAIL, TYPE MGS コ QUARTER POST SPACING, AS PER PLAN								62.50			
GUARDRAIL, TYPE MGS 나 HALF POST SPACING, AS PER PLAN								125.00			
는 GUARDRAIL, TYPE MGS, AS PER PLAN	12.50 437.50 375.00 137.50 25.00	37.50 25.00 25.00 162.50 162.50	125.00 62.50 452.83 37.5 74.4	250 71.9 400.66 386.62 378.1	299.31 628.12 278.1 604.71 176	1098 810.36 12.50 212.50 1173.10	1118.10 134.40	10184.71			20,246.00
ASPHALI CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN, 3"	3.75 11.33 20.07 4.76 4.31	4.87 4.31 4.31 5.31 9.71	3.01 5.64 4.77 0.93 0.80	1.74 1.38 4.42 3.70 3.96	3.23 6.28 3.15 6.06 1.75	10.28 7.97 3.52 13.17 54.05	51.57 9.01	~~~			
SIDE	RT LT LT RT RT	LT RT LT LT RT	LT RT LT RT LT	RT LT RT RT LT	LT RT RT LT LT	LT RT RT LT RT	LT RT				
TO	743+10.50 749+06.60 748+55.50 749+53.50 750+03.50	751+89.00 758+29.50 760+03.50 761+70.87 768+85.00	768+85.00 769+18.56 39+14.60 36+00.00 33+15.40	33+55.77 38+73.80 42+61.56 100+23.52 97+75.29	8+80.00 12+00.02 43+35.00 38+00.90 60+62.50	84+45.67 84+21.77 31+54.50 39+52.60 819+50.00	819+50.00 729+52.50				
STAT FROM	742+18.00 43+89.10 744+00.50 747+36.00 748+98.50	750+71.50 757+24.50 758+98.50 759+28.37 766+69.40	767+47.50 767+76.06 33+99.27 35+00.00 32+28.50	31+68.32 37+25.00 37+84.00 96+24.40 93+47.19	5+30.69 5+21.90 39+94.40 31+46.19 58+74.00	73+35.17 75+61.41 30+76.40 36+60.10 807+50.00	808+05.00 727+52.50				
LOCATION	IR 90 EB RAMP 117-12/IR 90 WB IR 90 WB IR 90 EB IR 90 EB	IR 90 WB IR 90 EB IR 90 WB IR 90 WB IR 90 EB	IR 90 WB IR 90 EB Ramp HA Ramp HA Ramp HB	Ramp HB Ramp HB Ramp HB Ramp MC Ramp MD	Ramp ME Ramp MF Ramp W1 Ramp W2 Ramp W2A	Ramp 140-3 Ramp 140-4 RAMP 117-8 RAMP 117-12 IR 90 EB	IR 90 WB IR 90 EB	TOTALS THIS SH TOTALS CARRIED FROM			
REFERENCE NO.	GR-51 GR-52 GR-53 GR-54 GR-55	GR-56 GR-57 GR-58 GR-59 GR-60	GR-61 GR-62 GR-63 GR-64 GR-65	GR-66 GR-67 GR-68 GR-69 GR-70	GR-71 GR-72 GR-73 GR-74 GR-75	GR-76 GR-77 GR-78 GR-79 GR-80	GR-81 GR-82				
SHEET NO.	419 419 419 419 421	421 421 421 421 423	423 423 425 425 427	427 428 428 430 432	435 436 438 441 447	448 450 457 463	8 415				

										ESTIMATI	ED QUANTITIE	TS			
Sheet 351	Sheet 352	Sheet 353	Sheet 354	Sheet 355	Sheet 356	Sheet 357	Sheet 358	Sheet 359	Sheet 370	ITEM	EXTENSION	J GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
	45	221	424	3382	350 469 163	276 13 R4	965	59 48		611 611 611 611 611	97400 97400 97400 97400 97400	26 8,520 1,933 85 1,739	FT FT FT FT	CONDUIT, MISC.: 12" CONDUIT, TYPE C, ROCK CUT CONDUIT, MISC.: 15" CONDUIT, TYPE B, ROCK CUT CONDUIT, MISC.: 15" CONDUIT, TYPE C, ROCK CUT CONDUIT, MISC.: 15" CONDUIT, TYPE F, ROCK CUT CONDUIT, MISC.: 18" CONDUIT, TYPE B, ROCK CUT	P.0047 P.0047 P.0047 P.0047 P.0047
	16 252 76	566 20 186	15	C1	376		270			611 611 611	97400 97400 97400 97400	1,019 501 469 76	FT FT FT	CONDUIT, MISC.: 18" CONDUIT, TYPE C, ROCK CUT CONDUIT, MISC.: 24" CONDUIT, TYPE B, ROCK CUT CONDUIT, MISC.: 24" CONDUIT, TYPE C, ROCK CUT CONDUIT, MISC.: 27" CONDUIT, TYPE C, ROCK CUT	P.0047 P.0047 P.0047 P.0047
		512 196 377	248		882 332 66 803	R4				611 611 611 611 611	97400 97400 97400 97400 97400 97400	1,394 248 332 262 1,180	FT FT FT FT	CONDUIT, MISC.: 30" CONDUIT, TYPE B, ROCK CUT CONDUIT, MISC.: 36" CONDUIT, TYPE B, ROCK CUT CONDUIT, MISC.: 36" CONDUIT, TYPE B, ROCK CUT CONDUIT, MISC.: 36" CONDUIT, TYPE C, ROCK CUT CONDUIT, MISC.: 42" CONDUIT, TYPE B, ROCK CUT CONDUIT, MISC.: 42" CONDUIT, TYPE C, ROCK CUT	P.0047 P.0047 P.0047 P.0047 P.0047 P.0047
	2115 368 546 2085	352			289	319 9				611 611 611 611	97400 97400 97400 97400 97400	2,467 368 608 555 2,085	FT FT FT FT	CONDUIT, MISC.: 48" CONDUIT, TYPE B, ROCK CUT CONDUIT, MISC.: 54" CONDUIT, TYPE B, ROCK CUT CONDUIT, MISC.: 54" CONDUIT, TYPE C, ROCK CUT CONDUIT, MISC.: 60" CONDUIT, TYPE B, ROCK CUT CONDUIT, MISC.: 66" CONDUIT, TYPE B, ROCK CUT	P.0047 P.0047 P.0047 P.0047 P.0047
5	182 6 2	6 2	2	3	2	4	6 1	2 1		611 611 611	97400 98150 98151 98180	182 38 1 15	EACH EACH EACH	CONDUIT, MISC.: 66" CONDUIT, TYPE C, ROCK CUT CATCH BASIN, NO. 3 CATCH BASIN, NO. 3, AS PER PLAN CATCH BASIN, NO. 3A	P.0047 P.0048
5	10	3	1	1 1 2	1 1	2	2	1 1		611 611 611 611 611	98300 98301 98370 98510 98690 98800	63 1 7 1 1 1 15	EACH EACH EACH EACH EACH	CATCH BASIN, NO. 5, AS PER PLAN CATCH BASIN, NO. 6 CATCH BASIN, NO. 2-3 CATCH BASIN, MISC.:CITY OF CLEVELAND CB-1 CATCH BASIN INLET, NO. 3B	P.0048 P.0048
1 2 1		3 2 4 2 1	4 1 20 7 1	15 9 1	1 1 2 1	1 2 6 10	2 4 4 7	2 3 2		611 611 611 611	98810 98820 98840 98850 98860	7 7 49 35 24	EACH EACH EACH	INLET, NO. 3C INLET, NO. 3D INLET, NO. 2-A-6 INLET, NO. 2-A-8 INLET, NO. 2-A-10	
9	1 6	1 9	1	1 4 1 3	24	1 1 15	2 1 5	3 2 1		611 611 611 611 611	98870 98880 98890 99000 99574	12 9 1 1 73	EACH EACH EACH EACH	INLET, NO. 2-A-12 INLET, NO. 2-A-14 INLET, NO. 2-A-16 INLET, NO. 2-A-18 MANHOLE, NO. 3	
9 R5	20									611 611 633	99575 99575 99660 99690	33 1 2 1	EACH EACH EACH	MANHOLE, NO. 3, AS PER PLAN (2) MANHOLE RECONSTRUCTED TO GRADE MANHOLE, MISC.: MH-3 MODIFIED	
									1608 14216 11691	659 670 670	00300 00500 00720	1,608 14,216 11,691	SY SY	TOPSOIL SLOPE EROSION PROTECTION DITCH EROSION PROTECTION MAT, TYPE B	
									444	836	10000	444	SY	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1	

						611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611	611
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6.	\sim					YPE	YPE	YPE	YPE) 1 Q:	YPE	YPE	YPE	YPE	YPE	D 0.	D OR	ED OR YPE B	70.	0.3	10.	4-6	4-8	1-10	B	2.3	AS I
NO	CE					7,7	7, 7	7, 7	T, 7	CTE	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	7, 7	7,7	7, 7	7, 7	ORE ", TY) 78 73	JRE , TY	>`	N /	^	2-4	2-4	Z-A	7.3	N N	7.3,
—	\geq	LOCATION	STA	TION	SIDE			5		NAC AD	3 5					. BC 15"	, BC	, BC 24",	45//	SIN	4 <i>211</i>	VO.	VO.	0.	N	 	NO. LAN
75/	RE					NO	NC	ND	JND	AAN IST GR) NO	ND ND	ND ND	ND	ND), D,), D	18/	ВА	18/	'L'	7,1	7, N	ET,) 	LE, Pl
SHEE	FE					$\mathcal{O}_{\mathcal{O}}}}}}}}}}$	$\mathcal{O}_{\mathcal{O}}$	$\mathcal{O}_{\mathcal{O}}$		200	3	22	$ \mathcal{S} $	$\begin{vmatrix} 0 \\ 0 \end{vmatrix}$	$\mathcal{O}_{\mathcal{O}}$	ND CXE	ND	CONDUI. JACKED,	121	H2.	<i>121</i>	77/	N/E	ILE.	N	141	ОН
•	RE					12"	15"	15"	24"	REC	36"	36"	42"	42"	,09	/00 /A6	CO /	CO. JA($\mid \mathcal{Z} \mid$	CA7	CA		1			>	ΛΑ
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			FROM	TO		FT	FT	FT	FT	EACH	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
<u>'</u>	<u>'</u>	OUTFALL A								>	3																
047/1069	D2	WESTWAY DR	49+48.00	49+52.51	LT	6			(2								1								
		 OUTFALL AF								> >	\frac{1}{2}	R4															
048/1068	D3A	HILLIARD BLVD	82+10.38	82+13.00	LT	7				>	3		<u> </u>													1	
048/1068		HILLIARD BLVD	82+13.00	82+32.00	LT	19				<u> </u>	3									1							
		OUTEALL							(7	R5 \															
047/1070	D88	OUTFALL B IR 90	530+69.00	530+69.00	LT/RT					> >	 						73				1						
047/1070	D83	IR 90	530+69.00	530+69.00	RT					>	B							67							1		
047/1070	D79	IR 90	530+69.00	533+50.00	RT			^	311)	>	3	271									1						
048/1070	D75	IR 90	533+50.00	535+20.00	RT						3	170														1	
048/1070 047/1075	D79A	1R 90	````````````` 353+ <u>-</u>	-37+53.40 -30.00	RT			R4		> > 1	3	228															
		IR 90		50.00	wiir d		R5			<u> </u>	3		R4														
048/1070	D62	RAMP HA	<i>37+53.40</i>	37+60.00	LT/RT				(58															1	
048/1070		RAMP HA	37+60.00	40+16.00	RT						7 00	254		272 221												1	
048/1071 048/1071	D30 D21	RAMP HA IR 90	<i>40+16.00</i> <i>542+89.00</i>	<i>542+89.00</i> <i>545+10.00</i>	RT RT					<u>></u>	3	fuu		2/2)											1	
049/1072	D19	IR 90	545+10.00	545+54.00	RT						3		72													1	
									(}	2																_
049/1072	D18	IR 90	545+54.00	547+00.00	RT RT						1		146														1
049/1072 049/1072	D17	IR 90 IR 90	547+00.00 547+09.00	<i>547+09.00 547+65.00</i>	RT					>	3		29		56												1
049/1072	D11	IR 90	547+65.00	551+91.86	RT						3				416												1
047/1075	D86	IR 90	529+87.00	530+69.00	RT		82		(2														1		
047/1075	DOE	IR 90	530+69.00	F21, F1, 00	RT		82			<u> </u>	3														1		
<i>047/1075</i> <i>048/1075</i>	D83 D77	RAMP HB	32+51.00	531+51.00 533+50.00	LT		02	86			3										1						
048/1075	D78	IR 90	533+50.00	533+50.00	RT			16			1										1						
048/1075 048/1075	D67	IR 90	535+40.00	535+20.00	RT			27			3										1						
048/1075	D72	RAMP HA	35+43.00	535+20.00	LT			15		>	}										1						
048/1075	D73	RAMP HA	35+43.00	35+70.00	LT/RT		82				3									1							
048/1075		RAMP HA	35+70.00	35+75.00	RT			11			2									_	1						
		IR 90	536+65.00	537+48.00	RT		83				\mathcal{L}										_				1		
048/1076		IR 90	537+47.00	537+50.00	LT		9				 					C1			1		1						
048/1076	<i>D</i> 03	IR 90	537+50.00	537+48.00	LT/RT						3					64											
048/1076	D64	IR 90	537+48.00	37+53.40	RT						\downarrow					79											1
048/1076	D54	RAMP HA	39+68.00	40+16.00	RT			46			3												1		_		
		RAMP HA	40+16.00	540+58.00	RT			40			 								1					1			
048/1076 048/1076		RAMP HA RAMP HA	40+16.00 40+16.00	40+16.00 40+16.00	RT RT			10 10			1										1						
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,		IR 90	542+00.00	542+75.00	RT		75	_			3							_					_		1		
,		RAMP HB	38+16.00	39+18.00	RT		98 66				3								1								
	D48 D47	RAMP HB RAMP HB	<i>39+18.00</i> <i>39+85.00</i>	<i>39+85.00</i> <i>42+81.00</i>	RT		298				$\frac{1}{2}$																1
048/1077	D28	RAMP HB	42+81.00	542+75.00	RT		230				3							75				1					-
											3																
048/1077	D26	IR 90	542+75.00 542+01.00	542+91.00	RT				0	}	2							93					1				1
048/1077 048/1077	D23	IR 90 IR 90	<i>542+91.00</i> <i>542+89.00</i>	542+89.00 542+89.00	RT RT				13												1		1				
048/1077	D30	RAMP HB	42+73.50	42+73.50	LT	7					B									1							
		RAMP HB	42+73.50	543+25.25	LT		51				3															1	
040/1077	D22	10.00	F/2:25 25	F42.75.00	17		- FO	\wedge		{	Ľ																1
048/1077 048/1077		IR 90 IR 90	543+25.25 543+75.00	543+75.00 543+75.25	LT LT	7	50	R4			1		R4							1							1
048/1078		IR 90	543+25.25	42+81.00	LT						B						53										1
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	TO	TALS CARRIED TO SH	EETS 346 &	347		46	976	261	332	1	58	923	247	493	472	143	126	235	5	4	10	1 1	2	1 1	5	9	9
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	9					OUT,	IOUT,	EB	E B	EC	E B	EC	OR B	OR B	OR FB	OR B	OR B	.5" OCK	70	T& ROCK	ROCK	. 24 " ROCK	ÓCK 1	OCK	ROCK	OCK F B	: 66" ROCK	<i>w</i>	3A	70		7	~	. PER	1H-3	
9	E N					EAN DER	EAN 3"	TYP	TYP	TYP	TYPI	TYPI	SED (RED C TYPE	RED OR TYPE B	ORED OR TYPE B	JRED OR	C.: 1 C, R	E .		•	• •	C, RO			B, R.	76 C.:.6	<i>NO.</i>	VO.	NO.	38	.A-1.	VO. 3	3, AS	S:: N	
>	NC!	LOCATION	STA	ITION	CIDE	ECLEA	E CL	117,	117,	JIT,	117,	JIT,	BOR 5", T	ВО 8", 1	BOR 4", 1		80k 6", 7	MIS	YOF UCJ	MIS YPE IT	YPEB, IT	MISC. YPE C, IT) Li 19	YPE 17	WISC. YPEB, IT	YPE	MIS VPF	7.7 XX	, N	SIN,	VO.	7. 2-		0.5	VIISC	
E	3E/	LOCATION		177071	SIDE	PIPE	- PIPE CLE/	NDC	NDC	NDC	NDC	NDL	//T, I	117, I D, 18	//T, I	7, 7	20/	, L)	STR			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, , , , , , , , , , , , , , , , , , ,)	CC	BAS	BAS	 ET, I	, NC	 -	E, NO. PLAN	OLE, MISC.: MODIFIED	
SHE	REFERENCE					IAL - 24" 4	44 -	00,	00,	00,	02,	, co	NDL	<i>NDL</i> CKEI	CONDL	CONDL	CONDUI JACKED,	CONDU	∑ 0,	TINDNO	TINONO						RO RO CONDUI	5 51	H2		7 <i>N</i> /		AN	10H	HO	
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GENERAL ITS SCOPE

CONTRACTOR SHALL INSTALL 2"ITS CONDUIT IN CONCRETE MEDIAN BARRIER PER ODOT STANDARD CONSTRUCTION DRAWING ITS-14.50. LATERAL CONDUITS SHALL BE INSTALLED FROM MEDIAN JUNCTION BOXES IN THE MEDIAN BARRIER TO 32" PULL BOXES ON ONLY ONE-SIDE OF I-90 WHERE THE WALL IS NOT CONTINUED. THE MAXIMUM SPACING BETWEEN MEDIAN BARRIER JUNCTION BOXES SHALL BE 1,000 FEET PER TRAFFIC ENGINEERING MANUAL.

THE ITS CONDUIT INSIDE THE MEDIAN BARRIER SHALL BE 2-INCH HDPE CONDUIT PER 725.052, WITH THE FOLLOWING EXCEPTIONS: THE CONDUIT SHALL BE MICRO-RIBBED ON THE INSIDE AND HAVE A COEXTRUDED PERMANENT FRICTION REDUCING LINING.

CONDUIT INSIDE MEDIAN BARRIER SHALL BE PAID FOR AS PART OF ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, [BY TYPE] PER STANDARD CONSTRUCTION DRAWING RM-4.3.

A TOTAL OF (4) 14MM/10MM (OD/ID) MICRO-DUCTS SHALL BE INSTALLED THROUGH EACH 2"HDPE CONDUIT. THE MICRO-DUCTS SHALL CONFORM TO SUPPLEMENTAL SPECIFICATION 909.14C. THE MICRO-DUCTS SHALL BE INSTALLED IN CONTINUOUS LENGTHS BETWEEN 32" PULL BOXES BY CONTINUING AND SWEEPING THE MICRO-DUCTS THROUGH THE MEDIAN BARRIER WALL, LATERALS, AND MIDDLE OF EVERY JUNCTION BOX IN THE BARRIER WALL.

EACH LATERAL CONDUIT CROSSING FROM THE MEDIAN BARRIER WALL TO THE 32"PULL BOX SHALL CONSIST OF (2) 2" HDPE CONDUITS WITH THE 4 MICRO-DUCTS IN EACH (8 MICRO-DUCTS TOTAL). EACH LATERAL CROSSING SHALL HAVE 4 MICRO-DUCTS ENTERING AND EXITING THE 32"PULL BOXES AND CONTINUING EACH DIRECTION ALONG THE INTERSTATE.

THE ITS CONDUIT SHALL CONNECT TO ANY EXISTING CCTV/DMS SITES THROUGHOUT THE PROJECT WHEN THEY ARE IN AREAS WHERE CONCRETE BARRIER WALL IS BEING INSTALLED. THE ITS CONDUIT SHALL CONNECT INTO THE NEAREST "TRAFFIC" PULL BOX NEXT TO THE EXISTING CCTV AND DMS SITES.

ITEM 625 MEDIAN JUNCTION BOX, AS PER PLAN (ITS JUNCTION BOX)

THE CONTRACTOR SHALL SUPPLY BARRIER WALL JUNCTION PULL BOXES THAT MEET THE FOLLOWING SPECIFICATIONS:

- SHALL BE OF TYPE POLYMER-CONCRETE
- SIZE: 17 INCHES (HEIGHT) X 30 INCHCES (LENGTH) X 12 INCHES (DEPTH)
- MINIMUM WALL THICKNESS: 0.5 INCH
- MINIMUM LID THICKNESS: 2 INCHES
- ANSI TIER 22 RATING
- LID SHALL BE MARKED "TRAFFIC" - BOXES SHALL HAVE A SOLID BOTTOM.

USE HORIZONTAL REINFORCING STEEL MEMBERS UNDERNEATH AND ABOVE THE JUNCTION BOXES TO SECURE IN PLACE AND TIE IN TO THE REST OF THE WALL REINFORCING STEEL. THE JUNCTION BOX SHALL BE ATTACHED TO THE FORM WORK TO SECURE IT IN THE APPROPRIATE POSITION IN THE WALL DURING CONCRETE PLACEMENT. SLIP FORMING IS NOT PERMITTED IN SECTIONS OF CONCRETE WALL CONTAINING JUNCTION BOXES.

MEDIAN JUNCTION BOXES FOR THE ATR:

THE CONTRACTOR SHALL INSTALL MEDIAN JUNCTION BOXES AND THE ASSOICATED PROPOSED 4" CONDUIT AND 1" RACEPIPES AS DETAILED ON SHEETS P.1284 AND P.1285.

PAYMENT FOR EACH ITS JUNCTION BOX COMPLETE, INSTALLED, AND ACCPETED SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM MEDIAN JUNCTION BOX, AS PER PLAN.

ITEM 625 PULL BOX, 725.08, 32" AS PER PLAN

THE CONTRACTOR SHALL FURNISH AND INSTALL 32" ROUND PULL BOX WITH CONCRETE PAD PER STANDARD CONSTRUCTION DRAWING ITS-14.11.

PROTECTION OF TRAFFIC MONITORING EQUIPMENT

PRIOR TO BEGINNING ANY PAVEMENT/MEDIAN ACTIVITIES BETWEEN STA. 566+00 AND STA 568+00 THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE FROM THE OWNER WILL COORDINATE A TIME FOR THE OWNER/MAINTAINING AGENCY TO DISCONNECT THE EQUIPMENT. FOLLOWING THE DSCONNECTING BY THE OWNER, THE CONTRACTOR WILL BE ALLOWED TO REMOVE THE EXISTING MEDIAN PULL BOXES, WIRING, CONDUIT, AND LOOPS. THE EXISTING PULL BOXES ALONG THE OUTSIDE SHALL NOT BE DISTURBED. ALL ITEMS REMOVED SHALL BECOME PROPERTY OF THE CONTRACTOR.

DURING THE MEEETING, THE OWNER/MAINTAINING AGENCY WILL IDENTIFY EQUIPMENT LOCATIONS. DO NOT DISTURB PULL BOXES, CONTROLLERS, CABINETS, POLES, AND CONDUITS. ANY DAMAGE WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND REPAIRS MUST BE ACCEPTED BY THE OWNER.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN ITEM 202 REMOVAL MISC.: TRAFFIC MONITORING EQUIPMENT.

MAINTAINING ITS DURING CONSTRUCTION

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

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DESCRIBED ABOVE:

ITEM 809 MAINTAINING ITS DURING CONSTRUCTION

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ITEM 512 - SPECIAL - URETHANE TOP COAT SEALER

THIS WORK SHALL BE AS PER C&MS 512, EXCEPT AS MODIFIED BELOW. A FINAL URETHANE COATING IS REQUIRED TO PROTECT THE COMPOSITE FIBER WRAP SYSTEM FROM THE ELEMENTS, SPECIFICALLY UV RADIATION, AND TO GIVE THE FINAL AESTHETIC EFFECT.

INSTALL THE URETHANE TOP COAT SEALER AFTER THE COMPOSITE FIBER WRAP SYSTEM HAS FULLY CURED, AND WITHIN 4 CALENDAR DAYS OF INSTALLATION. CLEAN AND ROUGHEN THE COMPOSITE FIBER WRAP SYSTEM IN A MANNER THAT WILL NOT DAMAGE THE SYSTEM. IF THE COMPOSITE FIBER WRAP SYSTEM IS DAMAGED, REPAIR IT AS PER THE MANUFACTURER'S RECOMMENDATIONS AT NO COST TO THE STATE. ALLOW THE CLEANED AND ROUGHENED SURFACES TO DRY COMPLETELY BEFORE INSTALLING THE URETHANE TOP COAT SEALER.

THE TOP COAT SEALER SHOULD BE FEDERAL COLOR NUMBER 595b-27722 (BUFF, SEMI-GLOSS) AND SHALL BE APPLIED TO THE FOLLOWING STRUCTURES:

CUY-00090-08.490

CUY-00090-09.090

CUY-00090-10.620

CUY-00090-10.820 CUY-00090-10.940

CUY-00090-11.110

THE TOP COAT SEALER SHOULD BE FEDERAL COLOR NUMBER 595B-26492 (GREY, SEMI-GLOSS) AND SHALL BE APPLIED TO THE FOLLOWING STRUCTURES:

CUY-00020-08.470

CUY-00090-07.540

CUY-00090-08.340

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQUARE YARD FOR ITEM 512, SPECIAL - URETHANE TOP COAT SEALER, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 513 - TRIMMING OF BEAM END, AS PER PLAN

 $\sim\sim\sim$ THIS ITEM IS SPECIFIC TO CUY-00090-08.920.

THIS ITEM OF WORK SHALL INCLUDE THE TRIMMING OF THE BEAM ENDS. ALL DIMENSIONS SHOWN IN THE PLANS SHALL BE FIELD VERIFIED. THE TRIMMING METHOD SHALL BE APPROVED BY THE ENGINEER PRIOR TO ANY REMOVAL OF BEAM ENDS.

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REMOVE FINS, TEARS, SLIVERS, AND BURIED OR SHARP EDGES FROM STEEL MEMBERS BY GRINDING. CLEAN AND PAINT AREAS OF COATING SYSTEM DAMAGED BY THIS WORK PER ITEM 514 - FIELD PAINTING, MISC.: COATING SYSTEM REPAIR. THE COATING SYSTEM REPAIR IS INCIDENTAL TO THIS PAY ITEM.

ALL EQUIPMENT, LABOR, MATERIALS, AND ACCESS REQUIRED TO TRIM THE BEAM ENDS SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 513 -TRIMMING OF BEAM END, AS PER PLAN.

ITEM 513 - REPLACEMENT OF DETERIORATED END CROSSFRAMES, AS

EXISTING DAMAGED OR DETERIORATED CHANNELS AND ANGLES ARE TO BE REMOVED AND REPLACED AS PER THE PLANS OR AS DIRECTED BY THE ENGINEER. THE EXISTING END CROSSFRAME MEMBERS SHALL BE REMOVED FLUSH WITH THE BEAM WEB, WHEN APPLICABLE. ALL END CROSSFRAME MEMBERS DESIGNATED FOR REPLACEMENT IN ONE BAY SHALL BE REMOVED AND REPLACED PRIOR TO REMOVING ANY END CROSSFRAME MEMBERS IN ANOTHER BAY.

CONTINUED ITEM 513 - REPLACEMENT OF DETERIORATED END CROSSFRAMES, AS PER PLAN

EXISTING GUSSET PLATES ARE TO BE REUSED AS WELD CONNECTING POINTS FOR THE NEW STEEL CROSSFRAME MEMBERS. CUT OR GRIND EXISTING GUSSET PLATES TO HAVE A 1" +/- TAB REMAINING FOR WELDING PURPOSES.

CLEAN AND PAINT AREAS OF COATING SYSTEM DAMAGED BY THIS WORK PER ITEM 514 - FIELD PAINTING, MISC.: COATING SYSTEM REPAIR.

ALL EQUIPMENT, LABOR, AND MATERIALS REQUIRED TO REMOVE AND INSTALL THE END CROSSFRAMES AND REPAIR THE COATING SYSTEM SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 513 - REPLACEMENT OF DETERIORATED END CROSSFRAME, AS PER PLAN.

ITEM 514- FIELD PAINTING, MISC.: COATING OF BEAM ENDS

THIS ITEM IS SPECIFIC TO CUY-00090-09.910.

PRIOR TO ENCASING THE BEAM ENDS, PREPARE THE ENDS PER SSPC SP10 OR SSPC SP11 TO BARE METAL ACHIEVING A 1.5 TO 3.5 MIL PROFILE. PAINT THE BEAM ENDS WITH ORGANIC ZINC PRIME COAT PER C&MS 514. PROVIDE THE PRIME COAT THICKNESS AS PER C&MS 514.20. EXTEND THE LIMITS OF THE BEAM PREPARATION AND PAINTING 1-FT BEYOND THE LIMITS OF THE END DIAPHRAGM CONCRETE.

AFTER THE DIAPHRAGM CONCRETE IS SET, SEAL THE INTERFACE BETWEEN THE BEAM AND CONCRETE WALL WITH CAULK.

THE DEPARTMENT WILL PAY FOR ALL ABOVE LABOR AND AT THE CONTRACT BID PRICE FOR ITEM 514 - FIELD PAINTING, MISC: COATING OF BEAM ENDS.

ITEM 514 - FIELD PAINTING, MISC.: COATING SYSTEM REPAIR

THIS ITEM IS SPECIFIC TO CUY-00090-07.580, CUY-00090-09.700, CUY-00090-10.620, AND CUY-00090-10.940.

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AFTER ALL RETROFITS ARE PERFORMED, REPAIR ALL DAMAGED AREAS OF PAINT WHICH WERE DAMAGED FROM THE INSTALLATION OR RETROFITTING PROCESS ON ALL NEW AND EXISTING STEEL WHICH IS NOT GOING TO BE PAINTED PER CMS 514.

THESE DAMAGED PAINT AREAS SHALL BE REPAIRED IN ACCORDANCE WITH SECTION 514 OF THE ODOT CMS WITH THE FOLLOWING MODIFICATIONS:

FOR EXISTING STEEL ON EXTERIOR GIRDERS, APPLY A THREE-COAT SYSTEM CONSISTING OF AN ORGANIC ZINC PRIME COAT, AN EPOXY INTERMEDIATE COAT, AND A URETHANE FINISH COAT. FOR ALL OTHER EXISTING STEEL, APPLY A TWO-COAT PAINT SYSTEM CONSISTING OF ZINC PRIME COAT AND AN EPOXY TOP COAT. (SECTION 514.02)

EXISTING STEEL MAY BE CLEANED ACCORDING TO COMMERCIAL BLAST SPECIFICATION SSPC-SP6. (SECTION 514.13), NO DESTRUCTIVE TESTING IS TO BE PERFORMED ON EXISTING STEEL. (SECTION 514.21), PAINT FEATHERING IS NOT REQUIRED. MINIMAL OVERSPRAY IS PERMISSIBLE, AS DETERMINED BY THE ENGINEER. (SECTION 514.22)

THE FINISHED COAT SHALL CLOSELY MATCH THE EXISTING BRIDGE COLOR AS APPROVED BY THE ENGINEER.

THIS ITEM SHALL BE INCLUDED FOR PAYMENT AT THE LUMP SUM CONTRACT PRICE FOR ITEM 514 - FIELD PAINTING, MISC.: COATING SYSTEM REPAIR.

ITEM 516 - RESET BEARING, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN BRIDGE BEARINGS AS WELL AS THEIR CLEANING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PADS (711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60-DEGREES F [15-DEGREES C], LUBRICATING SLIDING SURFACES. AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING".

ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE-DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - RESET BEARINGS, AS PER PLAN.

ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC.: COMPRESSED **EXPANSION JOINT SEAL**

THIS ITEM CONSISTS OF INSTALLING A COMPRESSED FOAM EXPANSION JOINT SEAL AT THE LOCATIONS DETAILED IN THE PLANS. FURNISH A COMPRESSED FOAM EXPANSION JOINT SEAL SIZED FOR THE NOMINAL JOINT OPENING SHOWN IN THE PLANS, SUCH AS METAZEAL BY CHASE CORPORATION, EMSEAL 25V BY EMSEAL JOINT SYSTEMS, LTD., OR EQUAL AS APPROVED BY THE ENGINEER.

INSTALL THE COMPRESSED FOAM EXPANSION JOINT SEAL IN ONE PIECE FOR THE FULL HEIGHT OF VERTICAL EXPANSION JOINTS. FOR BRIDGE RAILING EXPANSION JOINTS WHERE THE SEAL TURNS HORIZONTAL AT THE TOP OF THE RAILING, FURNISH A SEAL THAT HAS BEEN FABRICATED TO THE REQUIRED SHAPE OR MITER AND BOND THE TOP CORNERS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

PAYMENT FOR ALL EQUIPMENT, LABOR, MATERIALS AND OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK AS DETAILED IN THE PLANS WILL BE MADE UNDER ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC.: COMPRESSED FOAM EXPANSION JOINT SEAL.

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING THE BEREA ROAD SUPERSTRUCTURE TO FACILITATE BEARING REPLACEMENT TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS. SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH C&MS 501.05. IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR A DISTANCE OF THE SEPARATION IN ACCORDANCE WITH C&MS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS. THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

ITEM 518 - STRUCTURE DRAINAGE, MISC.: CLEAN OUT EXISTING DRAINAGE SYSTEM

THIS ITEM SHALL CONSIST OF REMOVING ALL DIRT AND DEBRIS FROM THE SCUPPER DRAINAGE SYSTEMS AT LOCATIONS SHOWN IN THE PLANS. THE LIMIT OF CLEANUP SHALL EXTEND TO INCLUDE THE DRAINAGE SYSTEM CATCH BASIN.

AFTER ALL DIRT AND DEBRIS ARE REMOVED, THE SYSTEM SHALL BE FLUSHED WITH CLEAN WATER MAKING CERTAIN THE WATER FLOWS SMOOTHLY THROUGH THE ENTIRE DRAINAGE SYSTEM WITH NO OVERFLOW CAUSED BLOCKAGES. THIS ITEM ALSO INCLUDES ALL EQUIPMENT AND MAN POWER NECESSARY TO PROVIDE ACCESS FOR THE ENGINEER TO INSPECT ENTIRE DRAINAGE SYSTEM BEFORE AND AFTER CLEANING.

ALL EQUIPMENT, LABOR, MATERIALS AND INCIDENTALS NECESSARY TO PERFORM THE ABOVE WORK SHALL BE INCLUDED FOR PAYMENT ON A LUMP SUM BASIS UNDER ITEM 518 - STRUCTURE DRAINAGE, MISC.: CLEAN OUT EXISTING DRAINAGE SYSTEM.

ITEM 518 - SCUPPER MISC.: REPLACE PORTIONS OF DRAINAGE SYSTEM

THIS ITEM SHALL CONSIST OF REPAIRS TO THE STRUCTURE DOWNSPOUTS AND/OR ANCHORING SYSTEM. THE EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER. THE CONTRACTOR IS ADVISED THAT SPECIAL EQUIPMENT MAY BE NECESSARY TO PERFORM THIS OPERATION. ANY REPAIRS SHALL ADHERE TO ALL REQUIREMENTS OF CMS ITEM 518.

ALL EQUIPMENT, LABOR, MATERIALS AND INCIDENTALS NECESSARY TO PERFORM THE ABOVE WORK SHALL BE INCLUDED FOR PAYMENT ON A LUMP SUM BASIS UNDER ITEM 518 - SCUPPER MISC.: REPLACE PORTIONS OF DRAINAGE SYSTEM

ITEM 518 - SCUPPER MISC.: PLUG AND FILL EXISTING SCUPPERS

THIS ITEM SHALL CONSIST OF PLUGGING, FILLING AND ABANDONING THE SCUPPER DRAINAGE SYSTEMS AT LOCATIONS SHOWN IN THE PLANS. THE CONTRACTOR IS ADVISED THAT SPECIAL EQUIPMENT MAY BE NECESSARY TO PERFORM THIS OPERATION.

FOR STRUCTURE CUY-00090-07.580, PERFORM THIS WORK UPON COMPLETION OF PROPOSED STRIP SEAL EXPANSION JOINT INSTALLATION AND MOT PHASING THAT PLACES TRAFFIC ON THE SHOULDERS. REMOVE SCUPPER GRATES, PLUG THE DOWNSPOUTS, AND FILL THE SCUPPER BOXES WITH OVERLAY CONCRETE FINISHED FLUSH WITH THE DECK SURFACE.

ALL EQUIPMENT, LABOR, MATERIALS AND INCIDENTALS NECESSARY TO PERFORM THE ABOVE WORK SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 518 - SCUPPER MISC.: PLUG AND FILL EXISTING SCUPPERS.

DESIGN AGENCY

Michael Bake INTERNATIONA

DESIGNER

MKB REVIEWER CDC 04/07/23 PROJECT ID

76779 P 1349 P 1587

PER PLAN

ESTIMATED QUANTITIES PARTICIPATION *FORWARD* REAR PIERS SUPER. GENERAL SHEET REF. **ABUTMENT ABUTMENT** 02/IMS/13 | 03/IMS/13 ITEM **EXTENSION** UNIT DESCRIPTION QUANTITY PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN 3, 1348 / 1587 LS LS APPROACH SLAB REMOVED COFFERDAMS AND EXCAVATION BRACING LS UNCLASSIFIED EXCAVATION LB EPOXY COATED STEEL REINFORCEMENT EACH DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET) CLASS QC2 CONCRETE, MISC.: ABUTMENT SLABS SY SEALING OF CONCRETE SURFACES (NON-EPOXY) SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN STRUCTURAL STEEL MEMBERS, LEVEL UF 10, 11 REPLACEMENT OF DETERIORATED END CROSSFRAMES, AS PER PLAN LS LS STRUCTURAL STEEL, MISC.: GIRDER SPLICE REPAIR SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT FIELD PAINTING OF STRUCTURAL STEEL, INTERMEDIATE COAT FIELD PAINTING OF STRUCTURAL STEEL, FINISH COAT FIELD PAINTING, MISC.: COATING SYSTEM REPAIR LS STRUCTURAL STEEL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL 1" PREFORMED EXPANSION JOINT FILLER 2" PREFORMED EXPANSION JOINT FILLER BEARING DEVICE, ROCKER, AS PER PLAN LS JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE EACH | SCUPPER, MISC: PLUG AND FILL EXISTING SCUPPER 1349 / 1587 POROUS BACKFILL WITH GEOTEXTILE FABRIC 6" PERFORATED CORRUGATED PLASTIC PIPE 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS SY REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=13") TYPE A INSTALLATION CRUSHED AGGREGATE SLOPE PROTECTION SPECIAL FT VANDAL PROTECTION FENCE REMOVED AND REBUILT CONDUIT, BORED OR JACKED, 6", 707.45 EACH | PRECAST REINFORCED CONCRETE OUTLET LOW STRENGTH MORTAR BACKFILL CY GABIONS SY SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION 1 $\frac{1}{2}$ " INCH THICK, AS PER PLAN 1350 / 1587 SURFACE PREPARATION USING HYDRODEMOLITION CY SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY HAND CHIPPING TEST SLAB LS LS LS SY EXISTING CONCRETE OVERLAY REMOVED,1 $\frac{1}{4}$ " NOMINAL THICKNESS

Y-90-06.690

CALCULATED BY: SSW DATE:
CHECKED BY: CDC DATE:

04/05/23

ESTIMATED QUANTITIES
BRIDGE NO.: CUY-00090-07
IR 90 OVER ROCKY RIVER VA

ESIGN AGENCY

Michael Baker

DESIGNER CHECKER
SSW MKB
REVIEWER
CDC 04/07/23

PROJECT ID

76779

SUBSET TOTAL

2 24

2 24
SHEET TOTAL
P.1361 P.1587