

GENERAL

UTILITIES
(G102A)

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

GAS	TRAFFIC
COLUMBIA GAS OF OHIO	ODOT DISTRICT THREE
3101 NORTH RIDGE RD E	906 CLARK AVENUE
LORAIN, OH 44055	ASHLAND, OH 44805
440.240.6144	419.207.2868
ELECTRIC	COMMUNICATION
OHIO EDISON	WINDSTREAM
2508 WEST PERKINS AVENUE	560 TERNES AVENUE
SANDUSKY, OH 44870	ELYRIA, OH 44035
419.627.6881	440.329.4245

THE AFOREMENTIONED UTILITY COMPANIES AND AGENCIES HAVE VARIOUS FACILITIES IN THE AREA THAT WILL REMAIN IN PLACE DURING CONSTRUCTION.

EXTREME CAUTION SHOULD BE EXERCISED IN AREAS WITH UTILITIES. SECTIONS 105.07 AND 107.16 OF THE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS REQUIRE, AMONG OTHER THINGS, THAT THE CONTRACTOR COOPERATE WITH ALL UTILITIES LOCATED WITHIN THE LIMITS OF THIS CONSTRUCTION PROJECT AND TAKE RESPONSIBILITY FOR THE PROTECTION OF THE UTILITY PROPERTY AND SERVICES.

EXISTING PLANS
(G103)

THE FOLLOWING EXISTING PLANS MAY BE INSPECTED IN THE ODOT DISTRICT THREE OFFICE IN ASHLAND:

PLAN	DATE
LOR-20-12.62	1968
LOR-20-12.59	1997
CRA-30-7.11	2003
LOR-301-0.00	2006
LOR-20-8.56	2011
D03-BH-FY2021A	2020

WORK LIMITS
(G106)

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

ROUTINE MAINTENANCE

BETWEEN THE TIME THAT BIDS ARE TAKEN AND THE START OF CONSTRUCTION, THE MAINTAINING AGENCY MAY ENTER UPON THE PROJECT AND PERFORM ROUTINE MAINTENANCE SUCH AS CRACK SEALING, PATCHING, AND BERM AND SHOULDER REPAIR. THE EFFECTS, IF ANY, OF THE PERFORMANCE OF ROUTINE MAINTENANCE SHALL BE CONSIDERED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE PLAN AND THE RESULTING CONDITIONS SHALL NOT BE CONSIDERED AS DIFFERING MATERIALLY FROM THOSE EXISTING AT THE TIME BIDS WERE TAKEN.

PAVEMENT


ROADWAY WORK

ALL PAVEMENT REPAIRS ARE TO BE COMPLETED BY ODOT DISTRICT 3 LORAIN COUNTY GARAGE PRIOR TO THE BEGINNING OF ANY STRUCTURE REPAIR WORK.

GENERAL NOTES

DESIGN AGENCY

DISTRICT 3



ENGINEERING

DESIGNER	ERC
REVIEWER	JNC
PROJECT ID	09-25-24
	122147
SHEET	TOTAL
P.02	10

STRUCTURE REPAIR

REFERENCES MADE TO STANDARD BRIDGE DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

SUPPLEMENTAL SPECIFICATION	DATE
849	1/18/2013

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02, AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE-BID EXAMINATION OF THE EXISTING STRUCTURE(S). HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

DESIGN SPECIFICATIONS

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO THE 9TH EDITION OF THE “LRFD BRIDGE DESIGN SPECIFICATIONS” ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN DATA

EXISTING DESIGN:
DESIGN LOADING: CF 2000 (57)
STRUCTURAL STEEL: ASTM A36 GRADE 36 – YIELD STRENGTH 36 KSI

NEW STRUCTURAL STEEL:
ASTM A709 GR 36 – YIELD STRENGTH 36 KSI
CVN IS NOT REQUIRED FOR CROSSFRAME MATERIALS

STEEL RESTRAINT OR PRELOAD LIMITS

THE EXISTING STRUCTURAL STEEL IS GRADE ASTM A36. DO NOT SUBJECT ANY PART OF THE STRUCTURE TO A JACKING, PULLING, OR RESTRAINING UNIT STRESS EXCEEDING 18 KSI, OR 50% OF THE YIELD STRESS. THE CONTRACTOR IS RESPONSIBLE FOR MONITORING AND NOT EXCEEDING THESE STRESSES IN THE EXISTING STEEL USING A METHOD APPROVED BY THE ENGINEER.

EXISTING PAINT SYSTEM

THE EXISTING BRIDGE WAS PAINTED IN 1998 WITH A THREE COAT OZEU PAINT SYSTEM. THE FINISH COAT WAS GREEN, ASSUMED TO MEET FEDERAL STANDARD COLOR 14325, BASED FIELD OBSERVATION AND SPECIFICATIONS FROM THE 1995 EDITION OF C&MS 708.18. IF THE CONTRACTOR BELIEVES THE BRIDGE TO BE A DIFFERENT FEDERAL STANDARD COLOR, THE COLOR SHOULD BE SWITCHED TO MATCH AFTER FIELD VERIFYING WITH THE ENGINEER.

ITEM 202 – PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (SECONDARY MEMBERS)

THIS ITEM CONSISTS OF THE REMOVAL OF THE EXISTING SECONDARY MEMBERS TO THE LIMITS SHOWN IN THE PLANS. FLAME OR SAW CUT THE EXISTING SECONDARY MEMBERS ACCORDING TO C&MS 513. PROVIDE SHIELDING AS NECESSARY TO PREVENT DAMAGE TO MAIN OR SECONDARY MATERIALS THAT ARE TO REMAIN. GRIND THE REMAINING SURFACES OF THE EXISTING MEMBERS ADJACENT TO THE REMOVED MEMBER SMOOTH IN PREPARATION FOR COMPLETE PENETRATION OR FILLET WELDING. PROVIDE A SURFACE FINISH ACCORDING TO ANSI B46.1 OF 250 MIL (TO ACCOMMODATE THE PROPOSED REPLACEMENT MATERIALS).

PAYMENT FOR ALL MATERIALS, LABOR, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THE ABOVE WORK WILL BE MADE AT THE CONTRACT BID PRICE PER POUND FOR ITEM 202 – PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (SECONDARY MEMBERS).

ITEM 513 – STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN (CROSSFRAME MEMBERS)

ALL REQUIREMENTS OF 513 APPLY TO SHOP FABRICATED MEMBERS. PERFORM ALL WORK FOR FIELD FABRICATED MEMBERS ACCORDING TO ITEM 513, EXCEPT AS MODIFIED IN THESE PLANS. THE DEPARTMENT WILL NOT REQUIRE THE CONTRACTOR PERFORMING FIELD FABRICATION TO BE PRE-QUALIFIED AS SPECIFIED IN SUPPLEMENT 1078. SUBMIT A WRITTEN LETTER OF MATERIAL ACCEPTANCE, 501.06, TO THE ENGINEER. PROVIDE SHOP DRAWINGS ACCORDING TO 513.06 OR SUPPLY THE ENGINEER WITH “AS-BUILT” DRAWINGS MEETING 513.06 AFTER COMPLETION OF FIELD FABRICATION. THE ENGINEER WILL REVIEW THE SUBMITTED DRAWINGS FOR CONCURRENCE WITH THE FINAL AS-BUILT CONDITION. IF NECESSARY, THE ENGINEER MAY CONTACT THE OFFICE OF STRUCTURAL ENGINEERING FOR TECHNICAL ASSISTANCE. IF THE ENGINEER IS SATISFIED WITH THE AS-BUILT DRAWINGS AND THE DELIVERED MATERIALS, SUPPLY A COPY OF THE DRAWINGS, STAMPED AND DATED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OHIO, TO THE STRUCTURAL, WELDING, AND METALS SECTION OF THE OFFICE OF MATERIAL MANAGEMENT FOR RECORD PURPOSES.

PAYMENT FOR THE REPLACEMENT OF DAMAGED CROSS FRAMES SHALL BE AT THE UNIT BID PRICE PER POUND FOR THE ABOVE ITEM, WHICH INCLUDES ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THIS WORK.

THE FOLLOWING MEMBERS ARE INCLUDED IN THIS ITEM: CROSS FRAMES: 3” X 3” X 5/16” ANGLE

ITEM 849 – DAMAGE ASSESSMENT
ITEM 849 – SURFACE PREPARATION
ITEM 849 – REPAIRING DAMAGED MEMBERS BY GRINDING
ITEM 849 – STRAIGHTENING DAMAGED MEMBERS

THESE ITEMS SHALL BE IN ACCORDANCE WITH THE SUPPLEMENTAL SPECIFICATION FOR HEAT STRAIGHTENING OF DAMAGED STRUCTURAL STEEL.

PAYMENT FOR ALL OF THE ABOVE WORK ITEMS SHALL BE AT THE UNIT BID PRICE FOR EACH OF THE ABOVE ITEMS WHICH INCLUDES ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NEEDED TO COMPLETE THE RESPECTIVE WORK.

ITEM 514 – FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN (THREE COAT)

DESCRIPTION
THIS ITEM CONSISTS OF CLEANING AND FIELD PAINTING EXISTING STRUCTURAL STEEL AND NEW REPLACEMENT STEEL. THIS WORK CONSISTS OF PERFORMING SURFACE PREPARATION AND APPLYING A THREE-COAT PAINT SYSTEM TO THE PREPARED STEEL AND FEATHERED REMOVAL AREAS OF EXISTING PAINT.

GENERAL
C&MS 514.05 THROUGH 514.10 AND 514.13 APPLY, UNLESS MODIFIED BY THESE NOTES.

WASHING EXISTING OZEU PAINTED SURFACES
CLEAN SURFACES TO BE COATED WITH LOW PRESSURE WATER CLEANING TO REMOVE ALL DIRT, DEBRIS, ANIMAL EXCREMENT, SALT CONTAMINANTS, AND OTHER ACCUMULATED FOREIGN MATERIAL IN ACCORDANCE WITH SSPC-SP12 (LP WC), LOW PRESSURE WATER CLEANING. USE A PRESSURE WASHER CAPABLE OF ACHIEVING AT LEAST 2000 PSI OF WATER PRESSURE AT THE NOZZLE. WHEN USING THE POWER WASHING EQUIPMENT, MAINTAIN THE NOZZLE NO MORE THAN 10 INCHES FROM THE SURFACE BEING CLEANED. SUPPLY AND USE POTABLE WATER. PROVIDE TO THE ENGINEER A LETTER OF WRITTEN ACCEPTANCE FOR ANY BIODEGRADABLE DETERGENTS OR CLEANERS USED IN CONJUNCTION WITH THIS METHOD.

CONTAIN AND COLLECT ALL WATER AND DEBRIS REMOVED DURING WASHING OPERATIONS ABOVE WATER FEATURES IN CONFORMANCE WITH C&MS 514.08 AND 514.13D. CREATE SETTLEMENT COLLECTION BASINS AND STRAIN ALL WASH WATER ABOVE LAND FEATURES AS NECESSARY TO PRODUCE VISIBLY CLEAR WATER AND COMPLY WITH C&MS 514.05 AND 514.13.D

SURFACE PREPARATION
AFTER THE PRESSURE WASHED SURFACE HAS DRIED, REMOVE EXISTING PAINT COATING TO CONTRACT LIMITS OR AS DIRECTED BY THE ENGINEER, WHICHEVER IS GREATER, ACCORDING TO SSPC-SP 10, AS SHOWN ON THE PICTORIAL SURFACE PREPARATION STANDARDS FOR PAINTING STEEL SURFACES SHOWN IN SSPC-VIS 1. THE ENGINEER WILL USE THE SSPC-VIS 1 TO DETERMINE THE ACCEPTANCE OF THE SURFACE PREPARATION. FEATHER THE EXISTING PAINT TO EXPOSE A MINIMUM OF 1/2 INCH OF EACH COAT. CONTAIN AND DISPOSE OF WASTE GENERATED BY THIS REMOVAL ACCORDING TO C&MS 514.13.D. DO NOT REMOVE THE SHOP APPLIED PRIME COAT ON THE EXPOSED SURFACES OF THE REPLACEMENT MAIN AND SECONDARY MEMBER SECTIONS EXCEPT TO THE LIMITS WHERE SUCH COATING WAS DAMAGED BY THE INSTALLATION AND WELDING OPERATIONS AS DIRECTED BY THE ENGINEER.

ROUND ALL EXPOSED CORNERS OF MAIN BEAM MATERIAL TO BE PAINTED AS NECESSARY TO ACHIEVE A 1/16 INCH RADIUS OR EQUIVALENT FLAT SURFACE AT A 45 DEGREE ANGLE TO THE SURROUNDING MAIN MATERIAL FLAT SURFACES.

FIELD PAINTING
APPLY THE PRIME, INTERMEDIATE, AND FINISH COATS OF THE THREE-COAT PAINT SYSTEM SPECIFIED IN C&MS 708.02, ACCORDING TO C&MS 514.15, 514.16, 514.17, 514.19, AND 514.20 TO CONTRACT LIMITS, OR AS DIRECTED BY THE ENGINEER, WHICHEVER IS GREATER. DO NOT APPLY PRIME COAT TO THE AREAS OF THE SHOP APPLIED PRIME COAT ON THE REPLACEMENT MAIN AND SECONDARY MEMBERS THAT WAS NOT REMOVED DURING SURFACE PREPARATION AS DESCRIBED ABOVE. TINT THE FINISH COAT TO MATCH THE EXISTING GREEN COLOR MEETING FEDERAL COLOR 14325 AND TO THE ENGINEER’S SATISFACTION. THE ENGINEER WILL DETERMINE THE PRIME AND INTERMEDIATE COAT THICKNESS USING A TYPE 2 MAGNETIC GAUGE AT SPOT LOCATIONS. THE PRIME, INTERMEDIATE, AND FINISH COAT OF PAINT SHALL MEET THE MINIMUM DRY FILM THICKNESS REQUIREMENTS OF C&MS 514.20. APPLY PAINT AS FOLLOWS:

1. APPLY THE PRIME COAT ONLY TO THE PREPARED SURFACE OF THE BARE STEEL AND THE EXISTING PRIME COAT EXPOSED BY FEATHERING.
2. APPLY CAULK AFTER PRIMING, IF APPLICABLE
3. APPLY THE INTERMEDIATE COAT TO THE NEW PRIME COAT AND TO THE EXISTING INTERMEDIATE COATS THAT ARE EXPOSED BY FEATHERING.
4. APPLY THE FINISH COAT TO THE NEW INTERMEDIATE COAT AND TO THE EXISTING FINISH COATS THAT ARE EXPOSED BY FEATHERING

AT THE PERIMETER OF THE REPAIR AREA, APPLY THE PRIME, INTERMEDIATE, AND FINISH COATS WITH A BRUSH. IN LIEU OF BRUSHING, THE CONTRACTOR MAY DOUBLE MASK AREAS NOT TO BE COATED AND SPRAY TO FEATHERED REMOVAL LINES.

BLEND REPAIR AREAS WITH THE ADJACENT COATING TO PROVIDE A FINISHED SURFACE IN THE PATCHED AREAS THAT IS SMOOTH AND HAS AN EVEN PROFILE WITH THE ADJACENT SURFACE.

MEASUREMENT
THE DEPARTMENT WILL MEASURE FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN (THREE COAT) BY THE NUMBER OF SQUARE FEET OF STRUCTURAL STEEL PAINTED AND ACCEPTED. THE DEPARTMENT WILL DETERMINE THE SURFACE AREA BY TAKING EXACT FIELD MEASUREMENTS OF ALL PAINTED SURFACES AND CALCULATIONS. THE CALCULATED QUANTITY WILL BE DOUBLED FOR THE GENERAL SUMMARY TO ACCOUNT FOR ANY ADDITIONAL AREAS THAT WILL NEED TO BE PAINTED AS A RESULT OF HEAT STRAIGHTENING OPERATIONS.


BASIS OF PAYMENT
THE DEPARTMENT WILL NOT PAY FOR: RESTORATION OF PUBLIC OR PRIVATE PROPERTY TO ITS ORIGINAL CONDITION REQUIRED DUE TO DAMAGE CAUSED BY THE CONTRACTOR; REPAIRING ADJACENT COATINGS DAMAGED DURING THE WASHING, POWER CLEANING, OR BLAST CLEANING OPERATION; REMOVING AND REPLACING AN AREA OF COATING BECAUSE A SPOT OR MAXIMUM AVERAGE THICKNESS EXCEEDS THE MAXIMUM SPOT THICKNESS; ADDITIONAL TESTING REQUIRED BY ANY HAULER, TREATMENT FACILITY, DISPOSAL FACILITY, OR LANDFILL; ACCESSING, INSPECTING, AND REPAIRING AREAS THAT ARE NOT FOUND TO BE IN CONFORMANCE WITH THE SPECIFICATIONS AND PERTINENT CONTRACT DOCUMENTS.

ALL OTHER REQUIREMENTS OF THE FIELD PAINTING SPECIFICATION ARE CONSIDERED INCIDENTAL TO THIS WORK.

THE QUANTITY OF ITEM 514 – FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN (THREE COAT) CARRIED TO THE GENERAL SUMMARY INCLUDES ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THE WORK.

DESIGN AGENCY

DISTRICT 3



ENGINEERING

DESIGNER

ERC

REVIEWER

JNC 09-25-24

PROJECT ID

122147

SHEET

P.03

TOTAL

10

MAINTENANCE OF TRAFFIC

ROAD/LANE CLOSURE RESTRICTIONS
THE CLOSURE OF BOTH EASTBOUND LANES OF US 20 SHALL ONLY OCCUR BETWEEN THE HOURS OF 8:00 PM AND 6:00 AM. THE CONTRACTOR IS LIMITED TO THREE (3) NIGHTS FOR THE COMPLETE CLOSURE OF BOTH EASTBOUND LANES OF US 20. THESE NIGHTS DO NOT NEED TO BE CONSECUTIVE. THE INCLUDED MAINTENANCE OF TRAFFIC PLAN SHOULD BE USED FOR THE CLOSURE OF BOTH EASTBOUND LANES OF US 20.

THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE FEE IN THE AMOUNT OF \$1,750 PER DAY IF BOTH EASTBOUND LANES ARE CLOSED OUTSIDE THE ALLOWED HOURS OR IF CLOSED FOR MORE THAN THREE (3) NIGHTS. THIS DISINCENTIVE FEE ALSO APPLIES TO SINGLE LANE CLOSURES THAT DO NOT CONFORM TO THE PLCS.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN ACCORDANCE WITH THE BELOW LANE VALUE CONTRACT TABLE.

DESCRIPTION OF LOCATION/SEGMENT	DISINCENTIVE PER TIME UNIT	DISINCENTIVE TIME UNIT
US 20, SR 301	\$1,750	DAY

ITEM 614 – MAINTAINING TRAFFIC (TEM 642-12)

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

CONTRACTOR EQUIPMENT ACCESS AND WORK OPERATIONS

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

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

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

ITEM 614 – MAINTAINING TRAFFIC (PREFABRICATED COMPONENTS)

DO NOT CLOSE THE ROADWAY TO TRAFFIC FOR THE REMOVAL OR MODIFICATION OF THE EXISTING STRUCTURE OR CONDUIT UNTIL ALL NEW PREFABRICATED MATERIALS, *i.e.* PRECAST BEAMS, PRECAST HEADWALLS, GIRDERS, STEEL BEAMS, ETC. NECESSARY TO PLACE THE ROADWAY BACK IN SERVICE HAVE BEEN TESTED, APPROVED, AND ARE READY FOR DELIVERY TO THE SITE.

ITEM 614 – MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS) (TEM 642-6)

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

NEW YEAR’S (OBSERVED)	GENERAL ELECTION DAY (NOVEMBER)
MEMORIAL DAY	THANKSGIVING
FOURTH OF JULY (OBSERVED)	CHRISTMAS (OBSERVED)
LABOR DAY	

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

DAY OF HOLIDAY OR EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
TUESDAY (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
THANKSGIVING	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

DURING THE SAME PERIODS, MAINTAIN PEDESTRIAN ACCESS IF PEDESTRIAN ACCESS WAS PRESENT PRIOR TO CONSTRUCTION.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

ITEM 614 – MAINTAINING TRAFFIC (LANE CLOSURE/REDUCTION REQUIRED) (TEM 642-7)

THE CONTRACTOR MAY CLOSE AN ALLOWABLE LANE FOR A MAXIMUM OF 1/2 MILE FOR A DURATION OF 10 HOURS UNLESS APPROVED BY 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 FIVE (5) CALENDER DAYS, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ITEM 614 – MAINTAINING TRAFFIC (ROAD CLOSED SIGN) (TEM 642-10)

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 ON THE PROPOSED TYPE III BARRICADES, AS SHOWN ON SHEET 6, DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

SEE MAINTENANCE OF TRAFFIC PLAN FOR MORE DETAILS.

PERMITTED LANE CLOSURE SCHEDULE (PLCS) (TEM 642-18)

LANE CLOSURE(S) SHALL CONFORM TO THE PLCS.
[HTTPS://ODOT.MS2SOFT.COM/TDMS.UI/PLCS/ADMINSCHEduLES?LOC=ODOT](https://odot.ms2soft.com/TDMS.UI/PLCS/ADMINSCHEduLES?LOC=ODOT)

THE MONTHLY PUBLISHED SCHEDULES REQUIRED TO BE USED, FOR EACH **PLCS** SEGMENT WITHIN THE PROJECT AREA, ARE THOSE THAT COMPRISE THE CONSECUTIVE 12-MONTH PERIOD BEGINNING 15 MONTHS PRIOR TO THE MONTH AND YEAR OF SALE AND ENDING 4 MONTHS PRIOR TO THE MONTH AND YEAR OF SALE. THESE SAME 12 MONTHS APPLY FOR THE LIFE OF THE PROJECT AND SHALL BE APPLIED TO EACH RESPECTIVE MONTH OF CONSTRUCTION (MONTH OF LANE CLOSURE(S) SHALL MATCH MONTH OF **PLCS** USED). LANE CLOSURE(S) IN PLACE FOR MULTIPLE MONTHS SHALL ALWAYS COMPLY WITH THE CURRENT RESPECTIVE MONTH.

(FOR EXAMPLE: IF THE SALE DATE FOR THE PROJECT WAS MARCH OF 2021, THE MONTHLY PUBLISHED SCHEDULES FOR EACH APPLICABLE **PLCS** SEGMENT WOULD BE DECEMBER 2019 TO NOVEMBER 2020. IF THIS WAS A THREE-YEAR PROJECT, YEAR THREE WOULD STILL BE USING THE DECEMBER 2019 TO NOVEMBER 2020 MONTHLY SCHEDULES. IF THE PROJECT DESIRED TO CLOSE TWO LANES IN JUNE 2021, REFERENCE WOULD BE MADE TO THE JUNE 2020 SCHEDULE(S) FOR THE RESPECTIVE **PLCS** SEGMENT(S). IF THE SAME TWO LANES WERE DESIRED TO BE CLOSED AGAIN IN JULY 2021, REFERENCE WOULD BE MADE TO THE JULY 2020 SCHEDULE(S) FOR THE RESPECTIVE **PLCS** SEGMENT(S).)

MORE RESTRICTIVE CHANGES TO THE ALLOWABLE LANE CLOSURE HOURS ARE AT THE DISCRETION OF THE ENGINEER IN ORDER TO COMPLY WITH THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)).

LESS RESTRICTIVE CHANGES TO THE ALLOWABLE LANE CLOSURE HOURS ARE SUBJECT TO THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)) AND SHALL NOT BE IMPLEMENTED UNTIL, AND UNLESS, APPROVED BY THE PROPER **ODOT** AUTHORITY. [EXISTING MOT EXCEPTIONS THAT HAVE ALREADY BEEN APPROVED IN ACCORDANCE TO THE TRAFFIC MANAGEMENT IN WORK ZONES POLICY AND STANDARD PROCEDURE ARE DETAILED IN THE APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S) PLAN NOTE.]

ALLOWABLE LANE CLOSURE HOURS FOR FACILITIES NOT COVERED BY THE PLCS, IF ANY, SHALL BE AS SPECIFIED ELSEWHERE IN THE PLANS.

FLOODLIGHTING (TEM 642-29)

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

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

APPROVED MAINTENANCE OF TRAFFIC (MOT) POLICY EXCEPTION(S) (TEM 642-32)

PORTIONS OF THE MOT PLANS AS DESCRIBED BELOW HAVE BEEN APPROVED BY THE MOT EXCEPTION COMMITTEE (MOTEC) OR THE PROJECT IMPACT ADVISORY COUNCIL (PIAC) PER TRAFFIC MANAGEMENT IN WORK ZONES POLICY (21-008(P)) AND STANDARD PROCEDURE (123-001(SP)).

APPROVED MOT EXCEPTION(S) INCLUDE:
CLOSE BOTH LANES OF EASTBOUND US 20 AND MAINTAIN TRAFFIC USING THE EASTBOUND RAMPS. CCTV WILL BE PROVIDED BY ODOT FOR DEPARTMENT REVIEW OF MAINLINE CLOSURE TRAFFIC OPERATIONS.

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, 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 EMAIL 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 8/24/2024 FOR PID 112147” 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.

ITEM 614 – PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN (TEM 642-41)

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) OF THE PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.


THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614 – PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
2 SIGN MONTH
ASSUMING 2 PCMS SIGN(S) FOR 1 MONTH

DESIGN AGENCY

DISTRICT 3



ENGINEERING

DESIGNER

ERC

REVIEWER

JNC 09-25-24

PROJECT ID

122147

SHEET

P.04

TOTAL

10

MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATION
(TEM 642-42)

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL/FLASHER INSTALLATIONS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITIONS:

1. EXISTING SIGNAL/FLASHER INSTALLATIONS WHICH THE PLANS REQUIRE THE CONTRACTOR TO ADJUST, MODIFY, ADD ONTO OR REMOVE, OR WHICH THE CONTRACTOR ACTUALLY ADJUSTS, MODIFIES OR OTHERWISE DISTURBS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE INSTALLATION (AT AN INTERSECTION) FROM THE TIME HIS OPERATIONS FIRST DISTURB THE INSTALLATION UNTIL THE INSTALLATION HAS BEEN SUBSEQUENTLY REMOVED OR MODIFIED AND THE WORK IS ACCEPTED.

2. NEW OR REUSED SIGNAL/FLASHER INSTALLATIONS OR DEVICES, INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE FROM THE TIME OF INSTALLATION UNTIL THE WORK IS ACCEPTED.

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE MAINTAINING AGENCY AND THE ENGINEER SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK TO SERVICE WITHIN FOUR HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN 8 HOURS AFTER THE CONTRACTOR'S NOTIFICATION OF THE OUTAGE. THE CONTRACTOR SHALL ARRANGE FOR FULL TRAFFIC CONTROL UNTIL THE SIGNAL IS BACK IN OPERATION. IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED 8-HOUR PERIOD AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON THEREAFTER AS POSSIBLE.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE ACCIDENT THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE. WHERE THE CONTRACTOR HAS FAILED TO, OR CANNOT RESPOND TO, AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, AT THESE LOCATIONS WITHIN HIS RESPONSIBILITY, WITHIN PERIODS AS SPECIFIED ABOVE, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS TO THE STATE OR THE LOCAL CITY FOR POLICE SERVICES AND MAINTENANCE SERVICES BY CITY FORCES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES OR HE MAY CHOOSE TO ENTER INTO A COOPERATIVE UNDERSTANDING WITH THE LOCAL MAINTAINING AGENCY TO PROVIDE THE MAINTENANCE. THE CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF THE MAINTENANCE METHOD SELECTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM. WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONSTRUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED 10 HOURS AND SHALL NOT INCLUDE THE HOURS OF 6:00AM TO 8:00PM. ANY SIGNALIZED INTERSECTION, WHERE THE SIGNAL IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES, OR DUE TO AN OUTAGE OR MALFUNCTION OF EQUIPMENT AS DESCRIBED ABOVE, SHALL BE PROTECTED, BY THE CONTRACTOR, BY THE INSTALLATION OF TEMPORARY "STOP" SIGNS,

ANY VEHICULAR TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING WHICH WILL BE OUT OF OPERATION SHALL BE COVERED IN THE MANNER DESCRIBED IN 632.25.

THE CONTRACTOR SHALL MAINTAIN COMPLETE RECORDS OF MALFUNCTIONS INCLUDING:

1. TIME OF NOTIFICATION OF MALFUNCTION;
2. TIME OF WORK CREWS' ARRIVAL TO CORRECT THE MALFUNCTION;
3. ACTIONS TAKEN TO CORRECT THE MALFUNCTION, INCLUDING A LIST OF PARTS REPAIRED OR REPLACED;
4. A DIAGNOSIS OF REASON FOR THE MALFUNCTION AND PROBABILITY OF REOCCURRENCE;
5. TIME OF COMPLETION OF THE REPAIR AND SYSTEM RESTORED TO FULL SERVICE.

A COPY OF THESE RECORDS SHALL BE PROVIDED TO THE ENGINEER WITHIN THREE (3) WORKING DAYS FOLLOWING COMPLETION OF EACH REPAIR.

ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 614 – LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS
(TEM 642-55)

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

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

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

FOR OPERATIONS WITHOUT POSITIVE PROTECTION OCCURRING WITHIN 10 FEET OF AN OPEN TRAVELED LANE THAT MEET ALL OF THE FOLLOWING CRITERIA:

ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND

AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND,

AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)

“WITHOUT POSITIVE PROTECTION” MEANS USE OF DRUMS, CONES, SHADOW VEHICLE, ETC, WITHOUT PROTECTION FROM PORTABLE BARRIER OR OTHER RIGID BARRIER ALONG THE WORK AREA. THIS PHRASE DOES NOT APPLY TO CASES WHERE POSITIVE PROTECTION IS REQUIRED. MOBILE OPERATIONS ARE REGARDED AS “WITHOUT POSITIVE PROTECTION”. FOR WORK ZONES USING A COMBINATION OF BARRIER AND TEMPORARY TRAFFIC CONTROL DEVICES (CONES, DRUMS, ETC), THE DESIGNATION SHALL BE BASED UPON THE TYPE OF DEVICES USED IN THE AREA THAT WORKERS ARE LOCATED.

IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND OFFICIAL PATROL CAR IN ADVANCE OF:

THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER; OR

THE ACTIVE WORK AREA Laterally CLOSEST TO THE OPEN TRAVELED LANE; OR

OTHER LOCATION AS APPROVED BY THE ENGINEER.

THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION (OR AT THE POINT OF ROAD CLOSURE), AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST’S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS’ DUTIES AND PLACEMENT AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
30 HOURS

ITEM 614 – LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS (CONTINUED)
(TEM 642-55)

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

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

NOTIFICATION OF TRAFFIC RESTRICTIONS
(TEM 642-58)

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV), THE DISTRICT PUBLIC INFORMATION OFFICE (PIO), THE DISTRICT DETOUR NOTIFICATION EMAIL LIST (D03.DETOUR.NOTIFICATION@DOT.OHIO.GOV), AND THE DISTRICT LANE CLOSURE NOTIFICATION EMAIL LIST (D03.LANECLOSURE@DOT.OHIO.GOV). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE		
ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS AND PIO*
RAMP AND/OR ROAD CLOSURES	2 WEEKS OR GREATER	21 CALENDAR DAYS
	12 HOURS TO 2 WEEKS	14 CALENDAR DAYS
	12 HOURS OR LESS	4 BUSINESS DAYS

LANE CLOSURES AND RESTRICTIONS	2 WEEKS OR GREATER LESS THAN 2 WEEKS	14 CALENDAR DAYS 5 BUSINESS DAYS
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START OF CONSTRUCTION AND TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS
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* - PRIOR TO CLOSURE DATE, UNLESS NOTED OTHERWISE

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

• • •

A diagram of a horizontal beam supported by a central vertical support. Two vertical reaction forces, represented by upward-pointing arrows, are shown at the ends of the beam.

The diagram illustrates a road construction layout with the following components:

- Dimensions:** Distances are marked along the top: C , C , $C/2$, $C/2$, B , and A .
- Lane Configuration:** A three-lane road with a center dashed line and two side dashed lines. The left lane is closed for work.
- Signage:**
 - W20-1-48:** "ROAD WORK AHEAD" diamond sign.
 - W16-30P-30:** "1 MILES" rectangular sign.
 - PCMS:** "SCREEN 1" and "SCREEN 2" rectangular signs.
 - W4-2L-48:** "LEFT LANE CLOSED AHEAD" diamond sign.
 - W20-5-48:** "EXIT AND RE-ENTER" rectangular sign.
 - W16-30P-30:** "1 MILES" rectangular sign.
 - PCMS:** "SCREEN 1" and "SCREEN 2" rectangular signs.
 - W4-2L-48:** "LEFT LANE CLOSED AHEAD" diamond sign.
 - W20-5-48:** "EXIT AND RE-ENTER" rectangular sign.
- Traffic Flow:** Arrows indicate traffic moving from left to right. A "MATCH LINE" is shown on the right side.
- Construction Area:** A "ROAD WORK AHEAD" sign is placed at the start of the work zone. A "LEFT LANE CLOSED AHEAD" sign is placed further ahead. A "1 MILES" sign is placed before the work zone. A "ROAD WORK AHEAD" sign is placed at the end of the work zone.
- Signage Details:**
 - SCREEN 1:** "ALL TRAFFIC" and "EXIT AND RE-ENTER".
 - SCREEN 2:** "EXIT AND RE-ENTER".
 - W4-2L-48:** "LEFT LANE CLOSED AHEAD".
 - W20-5-48:** "EXIT AND RE-ENTER".
 - W16-30P-30:** "1 MILES".
 - PCMS:** "SCREEN 1" and "SCREEN 2".
- Other Features:**
 - SHOULDER TAPER:** A taper leading to the work zone.
 - MERGING TAPER:** A taper leading back to the main road.
 - ARROW BOARD:** A board with arrows indicating traffic flow.

**NOTE: ERECT FIRST SIGN ADJACENT OT BEGINNING OF SHIFT, THEN EVERY 100'
ALONG THE SHIFT TAPER. LOCATE SIGN AT 12' FROM EDGE OF MAINTAINED LANE.**

COVER EXIT GORE SIGN

- LAW ENFORCEMENT OFFICER AT INTERSECTION AT ALL TIMES DURING CLOSURE. SEE NOTE 3 ON SHEET 7 FOR MORE DETAILS.

**NOTE: PROPOSED (TEMPORARY)
AND ORIGINAL SIGNAL TIMING
TABLES SHOWN ON SHEET 7,
TABLES III AND IV**

US 20 & SR 301 MOT PLAN MAINTAINING MAINLINE TRAFFIC USING RAMP

TABLE I (SIGN SPACING)

ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
FREEWAY & EXPRESSWAY	1000	1500	2640

TABLE II

SPEED LIMIT (MPH)	MERGING OR SHIFTING TAPER RATE MINIMUM	TANGENT (FT)	SHOULDER TAPER RATE MINIMUM	PB FLARE RATE MINIMUM	MAXIMUM DRUM SPACING (FT)		BUFFER (D) (FT) MINIMUM	CLEAR ZONE WIDTH (FT)
					TAPER SEC.	TANGENT SEC.		
25	11:1	-----	4:1	8:1	25	40	155	15
30	15:1	-----	5:1	8:1	30	40	200	15
35	21:1	-----	7:1	9:1	35	40	250	15
40	27:1	-----	9:1	10:1	40	80	305	15
45	45:1	270	15:1	12:1	45	80	360	19
50	50:1	300	17:1	14:1	50	80	425	19
55	55:1	330	19:1	16:1	55	80	495	23
60	60:1	360	20:1	18:1	60	120	570	30
65	65:1	390	22:1	19:1	65	120	645	30
70	70:1	420	24:1	20:1	70	120	730	30

TABLE III (EXISTING SIGNAL TIMING INFORMATION)

TRAFFIC SIGNAL TIMING (In Seconds)								
LOCATION:	USR20 EB / SR301							
DATE:	10/6/2017							
PERSONNEL:	KC							
INTERVAL	PHASE NUMBER							
	1	2	3	4	5	6	7	8
	NOT USED	SR 301 NB	NOT USED	USR 20 EB RAMP	NOT USED	SR 301 SB	NOT USED	NOT USED
MINIMUM GREEN		24		12		24		
PASSAGE TIME		3.0		3.0		3.0		
YELLOW CLEARANCE		5.0		4.0		5.0		
RED CLEARANCE		1		1.5		1		
MAX GREEN 1		50		40		50		
MAX GREEN 2		50		40		50		
MAX GREEN 3		0		0		0		
WALK		0		0		0		
DON'T WALK		0		0		0		
MINIMUM RECALL		+		-		+		
MAXIMUM RECALL		-		-		-		
NON-LOCK		-		+		-		
ADDED INITIAL (Sec./act.)		0.0		0.0		0.0		
MAXIMUM INITIAL		0		0		0		
TIME TO REDUCE		0		0		0		
TIME BEFORE REDUCTION		0		0		0		
MINIMUM GAP		0.0		0.0		0.0		

TABLE IV (EXISTING VERSUS PROPOSED SIGNAL TIME DURING FULL CLOSURE OF EB US 20)

	MIN GREEN EX.	MIN GREEN PROP.	MAX GREEN EX.	MAX GREEN PROP.	PHASE RECALL EX.	PHASE RECALL PROP.
2	24	10	50	20	MIN	NONE
4	12	20	40	30	NONE	MIN
6	24	10	50	20	MIN	NONE

NOTES:

GENERAL

TAPERS

1. THE MINIMUM ACCEPTABLE LENGTH OF THE SHIFT TAPER SHALL BE DETERMINED BY MULTIPLYING THE WIDTH OF OFFSET BY THE SHIFT TAPER. THE SHIFT TAPER RATE IS PROVIDED IN TABLE II.

SIGNING AND SIGNALS

2A. THE ADVISORY SPEED (W13-1P) PLAQUE SHALL BE USED WHEN SPECIFIED IN THE PLANS

2B. THE ROAD WORK AHEAD (W20-1-48) SIGN SHOULD BE PROVIDED AS SHOWN, IF NOT ALREADY WITHIN THE WORK ZONE.

2C. ADDITIONAL INFORMATION SHALL BE PROVIDED IN THE FORM OF FIXED SIGNS AND/OR CHANGEABLE MESSAGE SIGNS AS CALLED FOR IN THE PLANS.

2D. THE SPACING BETWEEN WORK ZONE SIGNS, AS SHOWN IN TABLE I, ARE MINIMUMS. MAXIMUMS SPACING SHOULD NOT BE GREATER THAT 1.5 TIMES THE DISTANCES SHOWN IN TABLE I.

2E. SIGN SPACING SHOULD BE ADJUSTED TO AVOID CONFLICTS WITH EXISTING SIGNS. MINIMUM SPACING TO EXISTING SIGNS SHOULD BE 200' FOR SPEEDS OF 45 MPH OR LESS AND A MINIMUM OF 400' FOR SPEEDS 50 MPH OR GREATER.

2F. SIGN LOCATIONS SHOULD BE ADJUSTED TO PROVIDE ADEQUATE SIGHT DISTANCE FOR THE EXISTING VERTICAL AND HORIZONTAL ROADWAY ALIGNMENT.

LAW ENFORCEMENT OFFICER (LEO)

3. LEO SHOULD BE ON THE RAMP AND SHOULD REMAIN NEAR THE BACK OF THE QUEUE FOR EASTBOUND TRAFFIC ALONG THE RAMP.




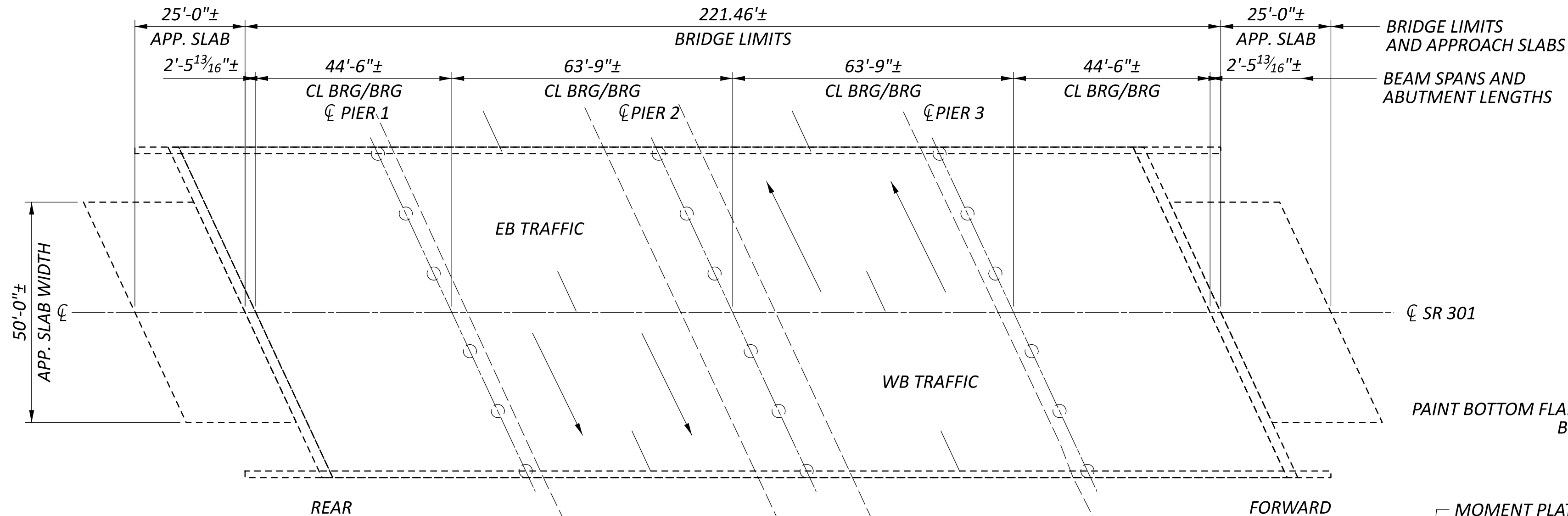
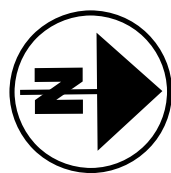
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MODEL: Sheet PAPER SIZE: 34x22 (in.) DATE: 11/25/2024 TIME: 10:02:10 AM USER: ecaudill
 pw:\vhidod-pw.bentley.com:rhidod-pw-02\Documents\01 Active Projects\District 03\Lorain\122147\400-Engineering\Roadway\Sheets\122147_GG001.dgn

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GENERAL SUMMARY

DESIGN AGENCY	
DISTRICT 3	
	
ENGINEERING	
DESIGNER	
ERC	
REVIEWER	
JNC	09-25-24
PROJECT ID	
122147	
SHEET	TOTAL
P.08	10

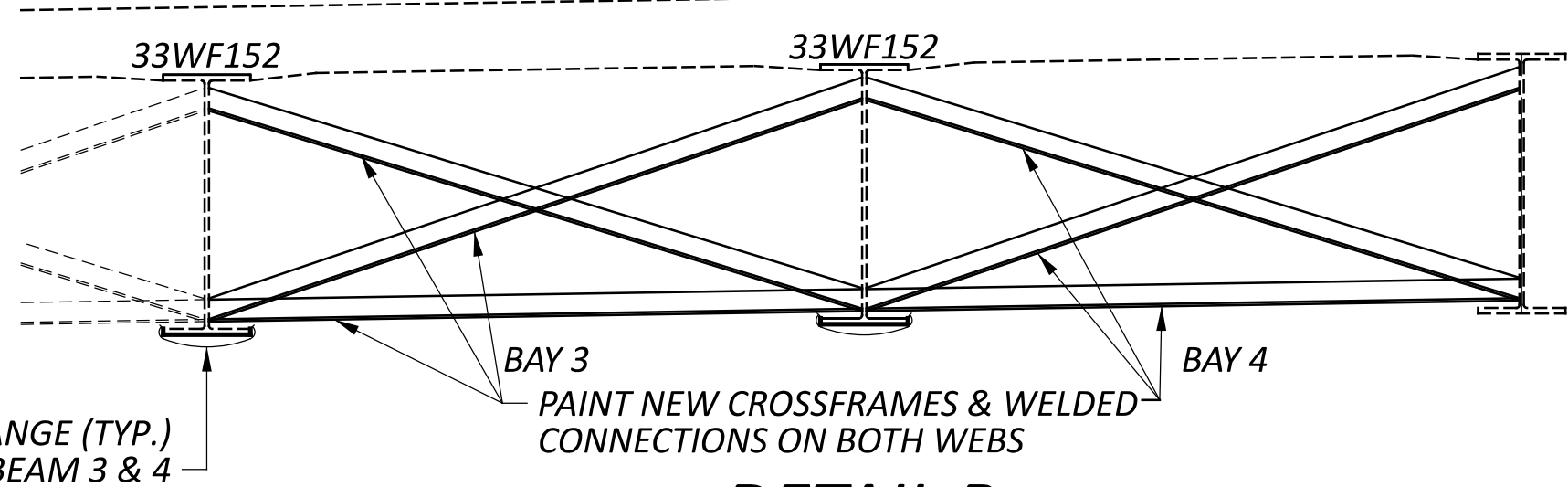


PLAN VIEW

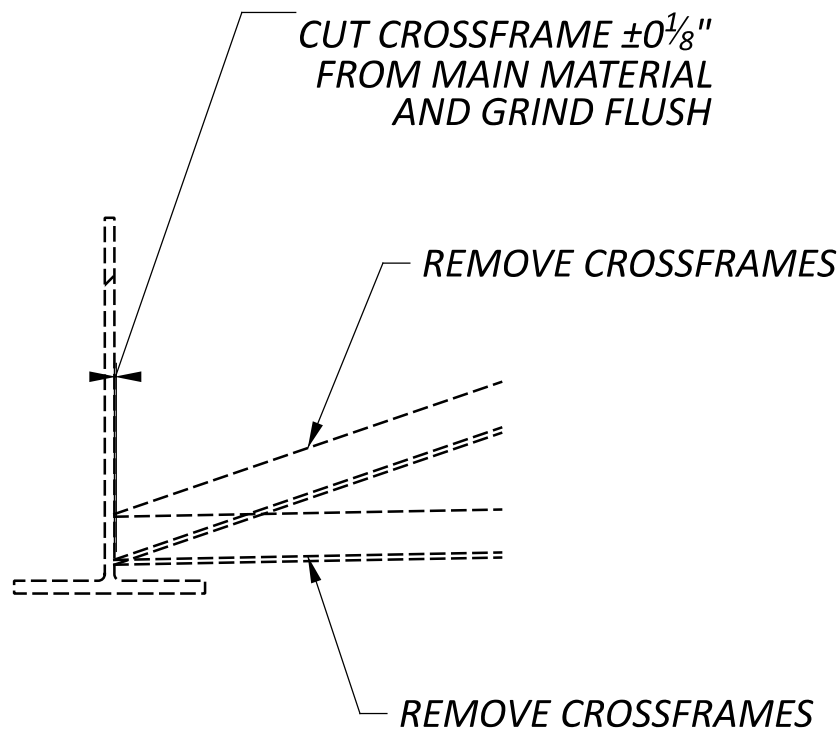
NOTE: REPAIR SMALL GOUGES AND SHARP EDGES IN BEAM FLANGE AT POINT OF IMPACT IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 849.14.

NOTE: BEAM 3 WILL REQUIRE MINOR GRINDING ON THE BOTTOM FLANGE AT THE POINT OF IMPACT. FIELD PAINTING SHALL BE DONE WHERE THE PROTECTIVE COATING WAS DAMAGED AS SEEN IN DETAIL B. BEAM 4 WILL ALSO REQUIRE SOME GRINDING AND THE DAMAGED PAINT IS TO BE RESTORED. LENGTH ALONG BEAM TO BE PAINTED WILL BE APPROXIMATELY 11'. FINAL GRINDING AND PAINTING AREAS TO BE FIELD VERIFIED BY ENGINEER.

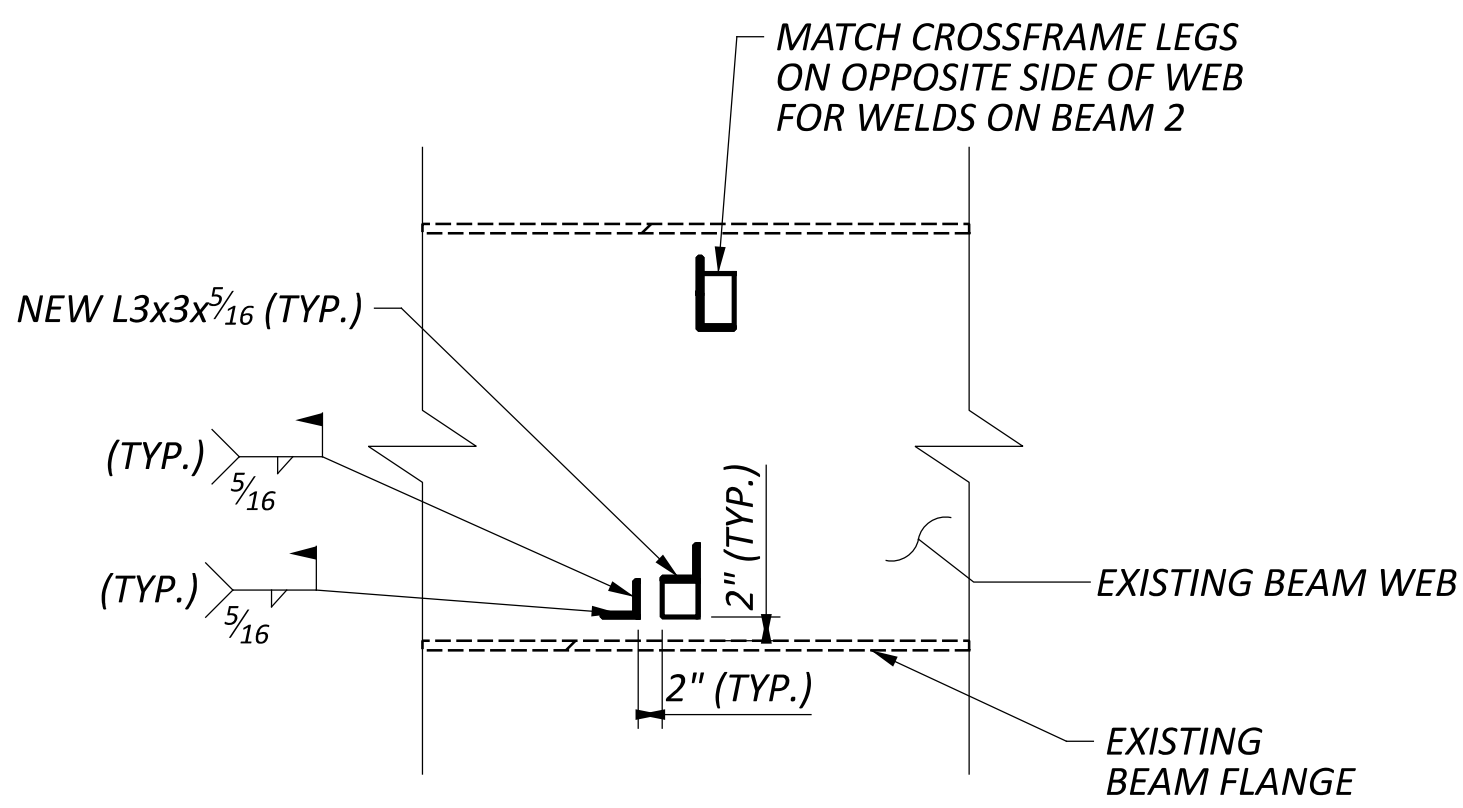
NOTE: THE CROSSFRAMES IN BAY 3 HAVE ALREADY BEEN CUT OFF WITH ONLY 3-4" STUBS REMAINING AT THE BEAM WEBS



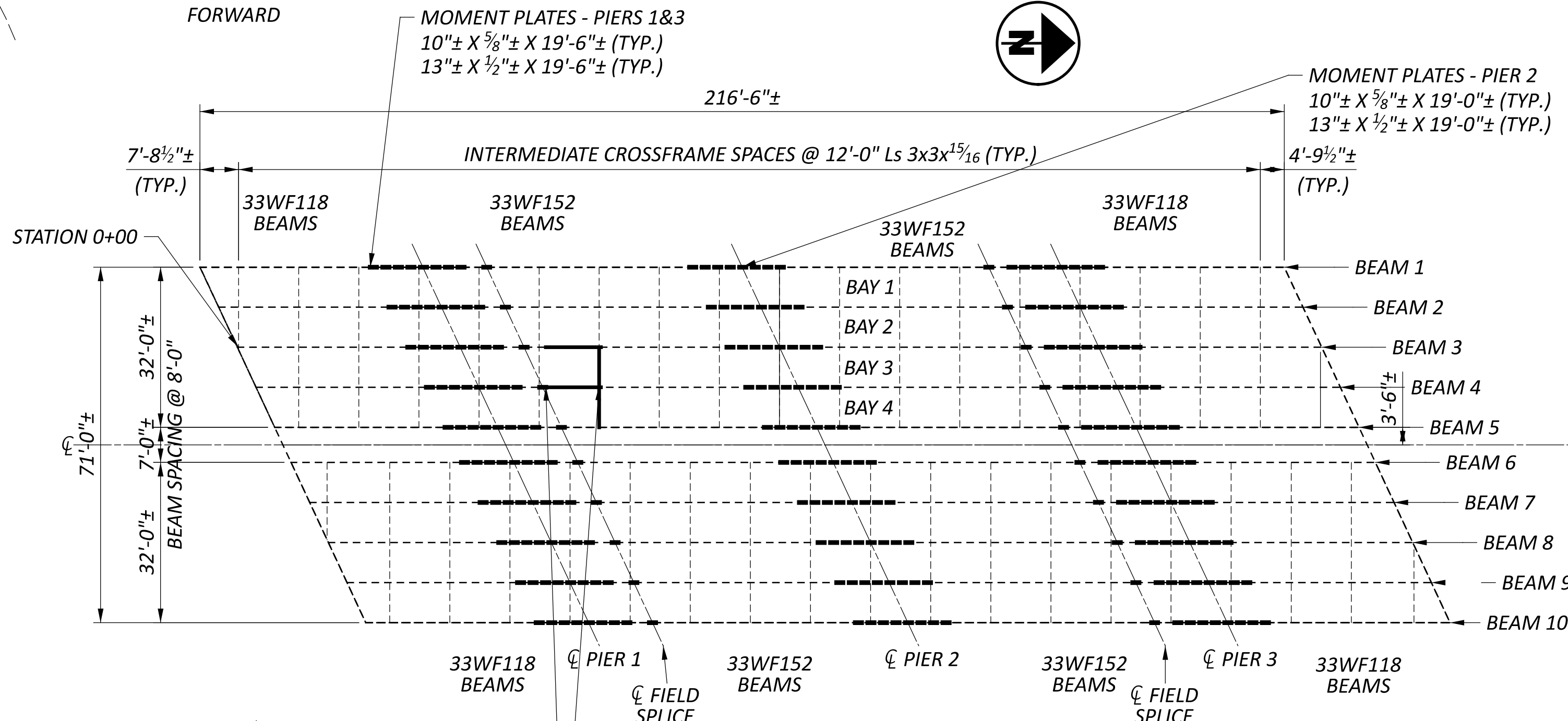
DETAIL B



DETAIL A



SECTION B-B (TYP.)



FRAMING DETAIL

CROSSFRAMES TO BE WORKED ON IN BAYS 3 AND 4 BOTH BEAM 3 & 4 TO HAVE GRINDING AND PAINTING BEAM 3 STATIONING TO BE STRAIGHTENED: 00+61.6 - 00+72.6

STRUCTURE ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
202E11401	151	LB	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (SECONDARY MEMBER)
513E10201	301	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN (CROSSFRAME MEMBERS)
514E20001	104	SF	FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN (THREE COATS)
849E10000	LS		DAMAGE ASSESSMENT
849E10500	LS		SURFACE PREPARATION
849E10600	2	HOUR	REPAIRING DAMAGED MEMBERS BY GRINDING
849E10700	LS		STRAIGHTENING DAMAGED MEMBERS

SEE GENERAL NOTES FOR EXPLANATION OF CONTINGENCY QUANTITY FOR ITEM 514 - FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN (THREE COATS)
ALL QUANTITIES CARRIED TO GENERAL SUMMARY



NOTE: STATION 0+00 IS THE BEGINNING OF THE SOUTH END OF THE BEAM (WITH STATION)

MEASUREMENTS WERE OBTAINED FROM AN ODOT DISTRICT 3 SURVEYING DEPARTMENT SCAN OF THE BEAM

