

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

MAH-680-4.68

PART 3

CITY OF YOUNGSTOWN MAHONING COUNTY FOR PART 1, SEE MAH-680-4.06

INDEX OF SHEETS:

TITLE SHEET MAINTENANCE OF TRAFFIC GENERAL SUMMARY STRUCTURES (OVER 20')

PROJECT DESCRIPTION

IMPROVEMENT OF STRUCTURES MAH-680-0468 & MAH-680-0476 BY PATCHING & REPAIRS.

0.02 ACRES PROJECT EARTH DISTURBED AREA: N/A (MAINTENANCE PROJECT) ESTIMATED CONTRACTOR EDA: N/A (MAINTENANCE PROJECT) NOTICE OF INTENT EDA:

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2008 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

LOCATION MAP

LONGITUDE: 80°39'36" LATITUDE: 41°5'58"

0	1/4	1/2	3/4	1
PORTION	TO BE IMPRO	OVED		
INTERSTA	ATE HIGHWAY.			
STATE &	FEDERAL ROU	TES		
COUNTY	& TOWNSHIP F	70ADS		
OTHER R	0405			. —————

DESIGN SPEED. _ LEGAL SPEED_ _ DESIGN FUNCTIONAL CLASSIFICATION: INTERSTATE NHS PROJECT____

DESIGN EXCEPTIONS

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG
CALL
(安三里) 1-800-362-2764 安三 克
(TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS MUST BE CALLED DIRECTLY
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OIL & GAS PRODUCERS PROTECTIVE
SERVICE CALL: 1-800-925-0988

PLAN PREPARED BY:

ODOT - DISTRICT 4 - PRODUCTION 2088 S. ARLINGTON ST. AKRON, OH 44306

	STANDARD CONSTRUCTION DRAWINGS							
		CCC DIOT 1						
ENGINEERS SEAL:		SEE PART 1						
DOUGLAS DOUGLAS	SEE PART 1							
YARD E-58044		SPECIAL PROVISIONS						
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PATE: 11/69								

MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

- 1. A MINIMUM OF ONE ELEVEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING PAVEMENT (COMPLETED PAVEMENT AND TEMPORARY PAVEMENT) DURING CONSTRUCTION OF THE WORK.
- 2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2211, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.
- 3. CONES SHALL NOT BE ACCEPTABLE TRAFFIC CONTROL DEVICES FOR LANE RESTRICTIONS OR LANE REDUCTIONS THAT ARE IN OPERATION ONE-HALF HOUR AFTER SUNSET OR ONE HALF-HOUR BEFORE SUNRISE. ALL NIGHTTIME LANE RESTRICTIONS SHALL REQUIRE DRUMS OR BARRICADES AT A MAXIMUM SPACING OF FIFTY (50) FEET. WEIGHTED CHANNELIZERS MAY BE USED IN ACCORDANCE WITH THE ADDITIONAL NOTE HEREIN.
- 4. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT *MATERIALS.*
- 5. THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE ALL FLAGS, BARRICADES, SIGNS, SIGN SUPPORTS AND FURNISH AND MAINTAIN ALL FLAGGERS, WATCHERS AND INCIDENTALS RELATED THERETO.
- 6. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEEDS TWO (2) MILES RURAL OR ONE [1] MILE URBAN.
- 7. ONLY DURING OFF-PEAK PERIODS (ie ANY PERIOD OTHER THAN 6-8AM AND 3-6PM) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE.
- 8. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULLLANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.
- 9. A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGN HAS BEEN INCLUDED IN THE PLAN. THIS QUANTITY SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING SIGNS: W8-1 [BUMP], W8-H13 [NO EDGE LINES], W8-11 [UNEVEN LANES SYMBOL]. THESE QUANTITIES SHALL BE AS PER 614.04.

THE FOLLOWING QUANTITY SHALL BE USED FOR THE MAIN-TENANCE OF TRAFFIC ON THIS PROJECT:

614, WORK ZONE MARKING SIGN, 10 EACH

10. THE CONTRACTOR SHALL ACCESS STUCTURE MAH-680-0476 ABUTMENTS FROM I-680 TO AVOID DISTURBING MILL CREEK PARK UNDERNEATH. R/W PLANS ARE AVAILABLE AT THE DISTRICT OFFICE.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

LANE CLOSURES ON I-680

DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AS PER THE PERMITTED LANE CLOSURE CHART. THE PERMIT-TED LANE CLOSURE CHART USED FOR THIS PROJECT SHALL BE THE MOST CURRENT CHART AVAILABLE ON THE DATE THIS PROJECT SELLS.

THE CHART CAN BE FOUND AT: http://plcm.dot.state.oh.us

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THE REQUIRE-MENTS IN THE CHART, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN THE AMOUNT OF \$750 PER HOUR OR PORTION THEREOF THAT THE LANE REDUCTION REMAINS BEYOND THE SPECIFIED LIMIT.

CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE

A QUALIFIED FLAGGER SHALL BE EMPLOYED WHERE THE CONTRACTOR'S EQUIPMENT MUST MERGE WITH THE TRAFFIC STREAM. THE CONTRACTOR'S EQUIPMENT SHALL BE EQUIPPED WITH AT LEAST ONE AMBER FLASHING LIGHT. PAVERS, ROLLERS AND OTHER EQUIPMENT MAY BE PARKED IN AREAS ALONG THE HIGHWAY WHEN PAVING OPERATIONS ARE SCHEDULED TO CONTINUE WITHIN THE NEXT WORKDAY. OTHERWISE THE EQUIPMENT SHALL BE STORED AT A STORAGE AREA OUTSIDE THE R/W, THE LOCATION OF WHICH SHALL HAVE PRIOR APPROVAL OF THE ENGINEER. WHEN PARKING ALONG THE HIGHWAY THE EQUIPMENT SHALL BE PLACED AND DELINEATED AS PER 614.03.A. NO EQUIPMENT SHALL BE PARKED IN THE MEDIAN OF THE HIGHWAY. ADEQUATE BARRICADES AND LIGHTS SHALL BE PLACED ON THE PAVEMENT SIDE OF THE EQUIPMENT TO IDENTIFY THE LIMITS OF THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT THE APPROVED CONTRACTOR'S STORAGE AREA. NO EQUIPMENT SHALL BE PARKED ON PRIVATE PROPERTY UNLESS PRIOR APPROVAL OF THE OWNER AND THE PROJECT ENGINEER/ SUPERVISOR HAS BEEN GRANTED.

WINTER TRAFFIC LIMITATIONS

ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC BETWEEN NOVEMBER 15 AND APRIL 1. NOVEMBER 14 SHALL BE CONSIDERED TO CONSTITUTE AN INTERIM COMPLETION DATE AND LIQUIDATED DAMAGES AS SPECIFIED IN 108.07 SHALL BE ASSESSED FOR EACH CALENDAR DAY THAT THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. THE CONTRACTOR MAY CLOSE LANES PRIOR TO APRIL 1 WITH WRITTEN APPROVAL FROM THE DISTRICT CONSTRUCTION ENGINEER.

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR

IN ADDITION TO THE REQUIREMENTS OF 614 AND THE LATEST EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD). A UNIFORMED LAW ENFORCEMENT OFFICER AND OFFICIAL PATROL CAR WITH WORKING TOP MOUNTED EMER-GENCY FLASHING LIGHTS SHALL BE PROVIDED FOR CONTROLLING TRAFFIC AS DIRECTED BY ENGINEER FOR THE FOLLOWING TASKS:

1. 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.

2. DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED. LAW ENFORCEMENT OFFICERS (L.E.O.'S) SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. THE LEO'S ARE CONSIDERED TO BE EMPLOYED BY THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR ACTIONS. ALTHOUGH THEY ARE EMPLOYED BY THE CONTRACTOR, THE PROJECT ENGINEER SHALL HAVE CONTROL OVER THEIR PLACEMENT. THE OFFICIAL PATROL CAR SHALL BE A PUBLIC SAFETY VEHICLE AS REQUIRED BY THE OHIO REVISED CODE.

THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THESE SERVICES WITH:

Canfield Patrol Post 500 South Broad Street Canfield, OH 44406 Phone: (330) 533-6866 Fax: (330) 533-2872

IF AFTER CONTACTING THE OHIO HIGHWAY PATROL, IT IS DE-TERMINED THAT THEY CANNOT SUPPLY THE LEO, THEN AN AUTHORIZED MUNICIPAL OR COUNTY POLICE OFFICER WITH A MARKED AND FLASHER-LIGHT EQUIPPED OFFICIAL POLICE OR PATROL CAR SHALL BE PROVIDED.

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

614, LAW ENFORCEMENT OFFICER WITH PATROL CAR, *80 HOURS*

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

IF THE CONTRACTOR WISHES TO UTILIZE LEO'S FOR FLAGGING AND TRAFFIC CONTROL OTHER THAN FOR THAT REQUIRED IN THESE PLANS, HE MAY DO SO AT THIS OWN EXPENSE. PAYMENT FOR THE EXCESS ABOVE THE CONTRACT REQUIREMENTS WILL BE INCLUDED UNDER ITEM 614 MAINTAINING TRAFFIC.

TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REP-RESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISS-ING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

BRIDGE PAINTING EQUIPMENT ON SHOULDERS

IF BRIDGE PAINTING EQUIPMENT IS TO REMAIN ON THE SHOULDERS WHEN THE CONTRACTOR IS NOT WORKING, IT SHALL BE PLACED BEHIND PORTABLE CONCRETE BARRIER (PCB) AND A WORK ZONE IMPACT ATTENUATOR (WZIA) SHALL PROTECT THE LEADING BLUNT END OF THE PCB (SEE OMUTCD, FIGURE 6H-5 "SHOULDER CLOSURE ON FREEWAY" (TYPICAL APPLICATION 5)). IF THE CONTRACTOR CHOOSES TO PROTECT PAINTING EQUIPMENT WITH PCB AND A WZIA, THE COST SHALL BE CONSIDERED INCIDENTAL TO THE LUMP SUM BID FOR MAINTAINING TRAFFIC.

WEIGHTED CHANNELIZERS

THE WEIGHTED CHANNELIZER SHALL BE PREDOMINATELY ORANGE IN COLOR AND SHALL BE MADE OF A LIGHTWEIGHT, FLEXIBLE, AND DEFORMABLE MATERIAL. THEY SHALL BE AT LEAST 42 INCHES IN HEIGHT WITH A WEIGHTED BASE. THEY MAY HAVE A "HANDLE" OR LIFTING DEVICE WHICH EXTENDS ABOVE THE 42 INCH MINIMUM HEIGHT.

THE MARKINGS ON THE WEIGHTED CHANNELIZER SHALL BE HORIZONTAL, CIRCUMFERENTIAL, ALTERNATING ORANGE AND WHITE RETROREFLECTIVE STRIPES 6 INCHES WIDE. EACH WEIGHTED CHANNELIZER SHALL HAVE A MINIMUM OF TWO ORANGE AND TWO WHITE STRIPES. ANY NON-RETROREFLECTIVE SPACES BETWEEN THE HORIZONTAL ORANGE AND WHITE STRIPES SHALL NOT EXCEED 2 INCHES WIDE. THE WEIGHTED CHAN-NELIZER SHALL HAVE A 4-INCH MINIMUM WIDTH, REGARDLESS OF ORIENTATION.

ON FREEWAYS AND MULTILANE HIGHWAYS:

USE OF WEIGHTED CHANNELIZERS ON FREEWAYS AND MULTILANE HIGHWAYS SHALL BE LIMITED TO SHORT-TERM OPERATION, GENERALLY TWELVE HOURS OR LESS, FOR EITHER DAY OR NIGHT. UPON COMPLETION OF WORK WITHIN THE ABOVE NOTED TIME PERIOD, THE WEIGHTED CHANNELIZERS SHALL BE REMOVED. THE WEIGHTED CHANNELIZERS MAY AGAIN BE PLACED ON THE HIGHWAY WHEN THE WORK IS TO RESUME ON THE FOL-LOWING DAY OR NIGHT. ANY LANE CLOSURE USING CHAN-NELIZATION DEVICES, EXPECTED TO REMAIN FOR MORE THAN TWELVE HOURS, SHALL REQUIRE THE USE OF DRUMS OR BARRIERS.

WHEN USED AT NIGHT, WEIGHTED CHANNELIZERS SHALL ONLY BE PLACED IN THE "TANGENT AREA". THE "TANGENT AREA" IS DEFINED AS THE AREA AFTER THE TRANSITION TAPER WHERE THE WORK TAKES PLACE. DRUMS SHALL BE USED IN THE TRANSITION TAPERS FOR NIGHT OPERATIONS.

ON OTHER HIGHWAYS:

THERE ARE NO DURATIONS OF WORK RESTRICTIONS FOR USE OF WEIGHTED CHANNELIZERS ON ALL OTHER TYPES OF HIGHWAYS, DAY OR NIGHT. ON THESE ROADWAYS THE WEIGHTED CHAN-NELIZER MAY BE USED IN THE TRANSITION TAPERS AS WELL AS IN THE TANGENT AREAS, DAY OR NIGHT.

MAXIMUM SPACING OF THE WEIGHTED CHANNELIZER SHALL BE *40 FEET.*

STEPS SHOULD BE TAKEN TO ENSURE THAT THE WEIGHTED CHANNELIZERS WILL NOT BE BLOWN OVER OR DISPLACED BY WIND OR MOVING TRAFFIC. BALLASTS SHOULD NOT PRESENT A HAZARD IF THE WEIGHTED CHANNELIZERS ARE INADVERTENTLY STRUCK, NOR SHOULD THEY AFFECT THE VISIBILITY OF THE WEIGHTED CHANNELIZERS. ALL BALLASTS USED SHOULD BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

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EXJ-4-87 DATED/REVISED 7/19/02

GSD-1-96 DATED/REVISED 7/19/02

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

843 DATED 4/18/03

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17TH EDITION, INCLUDING THE 2002 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING

MAH-680-0468 - CF 2000 ADEQUATE FOR AASHO ALTERNATE LOADING

MAH-680-0476 - CF 2000 ADEQUATE FOR AASHO ALTERNATE LOADING

DECK PROTECTION METHOD

MAH-680-0468 - SEAL DECK AND APPROACH SLABS WITH SRS CONCRETE TREATMENT

MAH-680-0476 - SEAL DECK WITH SRS CONCRETE TREATEMENT

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 PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

PROPOSED WORK

MAH-680-0468 (MAHONING AVE. OVER IR680)

-PATCH EXISTING CONCRETE DECK, TOP OF BACKWALL, AND APPROACH SLABS WITH ITEM SPECIAL, PATCHING CONCRETE BRIDGE DECK - TYPE C

-SEAL EXISTING CONCRETE DECK AND APPROACH SLABS WITH SRS CONCRETE TREATEMENT

-REPAIR EXISTING OZEU PAINT SYSTEM OVER IR680 (IST FOUR SPANS)

-REPLACE STRIP SEAL AT FORWARD END OF STRUCTURE
-PATCH ALL UNSOUND CONCRETE OF SUBSTRUCTURE WITH ITEM
519, PATCHING CONCRETE STRUCTURES, AS PER PLAN AND
ITEM 843, PATCHING CONCRETE STRUCTURES WITH TROWELABLE
MORTAR

-REPAIR DAMAGED CURB

-REPAIR EROSION AT THE 4TH PIER FROM THE REAR ABUTMENT
-CLEARING AND GRUBBING 15' AROUND REAR ABUTMENT AND
UNDER THE 4TH SPAN FROM THE REAR ABUTMENT
-PROVIDE NEW STRUCTURE IDENDIFICATION SIGNS

MAH-680-0476 (IR680 OVER PRICE RD & MILL CREEK)
-PATCH EXISTING CONCRETE DECK, TOP OF BACKWALL, AND
APPROACH SLABS WITH ITEM SPECIAL, PATCHING CONCRETE
BRIDGE DECK - TYPE C

-SEAL EXISTING CONCRETE DECK WITH SRS CONCRETE
TREATEMENT

-APPROACH SLABS WILL BE OVERLAYED WITH ROADWAY SECTION
-PATCH ALL UNSOUND CONCRETE OF ABUTMENTS, PARAPETS,

AND MEDIAN WITH ITEM 519, PATCHING CONCRETE STRUCTURES, AS PER PLAN AND ITEM 843, PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR

-REPAIR DAMAGED CURB

-REPLACE END CROSSFRAMES WHERE NEEDED

-REHABILITATE AND RESET EXISTING BEARINGS

-OZEU PAINTING FOR NEW END CROSSFRAMES -EPOXY URETHANE ALL CONCRETE SURFACES OF PARAPETS,

SIDEWALK, ABUTMENTS, AND WINGWALLS -CLEARING AND GRUBBING TO REMOVE ALL VEGETATION WITHIN

-CLEARING AND GRUBBING TO REMOVE ALL VEGETATION WITHIN 15' OF THE ABUTMENTS

-PROVIDE NEW STRUCTURE IDENTIFICATION SIGNS AND OBJECT

CLEARING AND GRUBBING

MARKERS

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY
MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A
LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR
ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET
FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED
IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND
GRUBBING.

SIZES NO. TREES STRUCTURE LOCATION

18" 2 MAH-680-0468 BETWEEN 3RD & 4TH PIER
FROM REAR ABUTMENT

ITEM 513 - STRUCTUREAL STEEL. MISC.: REPLACEMENT OF DAMAGED OR MISSING CROSSFRAMES

THIS WORK CONSISTS OF REPLACING DAMAGED OR MISSING CROSSFRAMES, INCLUDING END CROSSFRAMES THAT ARE HEAVILY RUSTED. THIS ITEM WILL INCLUDE SUPPLYING NEW CROSSFRAMES AND WELDING THEM BACK TO THE ORIGINAL POSITIONS OF THE CROSSFRAMES THAT ARE BEING REPLACED. AFTER REMOVAL, ALL WELDS WILL BE GROUND SMOOTH IN PREPARATION OF WELDING THE NEW CROSSFRAMES IN PLACE. ALL CROSSFRAMES TO BE REPLACED WILL BE FIELD MEASURED TO VERIFY SIZE AND LENGTHS PRIOR TO ORDERING MATERIAL. THE NEW CROSSFRAMES WILL BE WELDED TO THE GIRDERS OR BEAMS ON BOTH SIDES OF THE VERTICAL LEG AND ON THE TOP SIDE OF THE HORIZONTAL LEG. THE ANGLE WILL BE WELDED USING A 1/4" CONTINUOUS FILLET WELD. STEEL MEMBERS TO BE FABRICATED UNDER THIS ITEM WILL NOT REQUIRE SHOP DRAWINGS PRIOR TO FABRICATION. AISC CERTIFICATION IS NOT REQUIRED. THE CONTRACTOR WILL TAKE THE NECESSARY FIELD MEASUREMENTS TO VERIFY MEASUREMENTS BEFORE ORDERING MATERIALS.

ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY
TO COMPLETE THIS ITEM EXCEPT FOR PAINT WILL BE INCLUDED FOR
PAYMENT UNDER ITEM 513 - STRUCTURAL STEEL MISC.: REPLACEMENT
OF DAMAGED OR MISSING CROSSFRAMES.

MAH-680-0476:

10 EACH (RUSTED END CROSSFRAMES)

ITEM 514 - FIELD PAINTING, MISC.; REPAIR PAINTING

ALL PAINTED AREAS THAT ARE DAMAGED OR RUSTED SHALL BE CLEANED AND PAINTED AS FOLLOWS.

CMS 514.07 THROUGH 514.09 APPLY. REMOVE EXISTING PAINT COATING FROM THE AREA OF THE DAMAGED PAINT ACCORDING TO SSPC-SP3, POWER AND HAND TOOL CLEANING, AS SHOWN ON THE PICTORAL SURFACE PREPARATION STANDARDS FOR PAINTING STEEL SURFACES SHOWN IN SSPC-VIS 3. THE ENGINEER WILL USE THE SSPC-VIS 3 TO DETERMINE THE ACCEPTANCE FOR THE POWER TOOL CLEANING. CONTAIN AND DISPOSE OF WASTE GENERATED BY THE CLEANING ACCORDING TO CMS 514.13D.

APPLY THE THREE-COAT PAINT SYSTEM, CMS 708.02, ACCORDING TO CMS 514.14 THROUGH 514.17. TINT THE FINISH COAT TO APPROXIMATELY THE SAME COLOR AS THE EXISTING FINISH COLOR. THE ENGINEER WILL DETERMINE THE PRIME COAT THICKNESS; PRIME AND INTERMEDIATE COAT THICKNESS; AND PRIME, INTERMEDIATE, AND FINISH COAT THICKNESS USING A TYPE 2 MAGNETIC GAGE AT SPOT LOCATIONS. EACH COAT OF PAINT SHALL MEET THE MINIMUM DRY FILM THICKNESS REQUIREMENTS OF CMS 514.20.

THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH ALL NECESSARY EQUIPMENT TO INSPECT THIS WORK.

ITEM 516 - ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS, AS PER PLAN

ALL EXISTING JOINT SEALER AND/OR ASPHALT, OR WHATEVER
MATERIAL THAT IS ENCOUNTERED WILL BE REMOVED FROM
THE EXISTING STEEL END DAM AND/OR STEEL STRIP SEAL
ARMOR. REMOVE AND REPLACE THE ELASTOMERIC STRIP SEAL
IN ONE CONTINUOUS PIECE. REFER TO STANDARD CONSTRUCTION
DRAWING EXJ-4-87. PAYMENT FOR ALL OF THE ABOVE DESCRIBED
WORK WILL BE AT THE CONTRACT PRICE FOR ITEM 516 ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS, AS PER
PLAN. ALL DIMENSIONS OF EXISTING EXPANSION DEVICES WILL
BE FIELD VERIFIED PRIOR TO ORDERING ANY MATERIAL. ALL
STRIP SEALS REQUIRE 3" GLANDS.

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

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

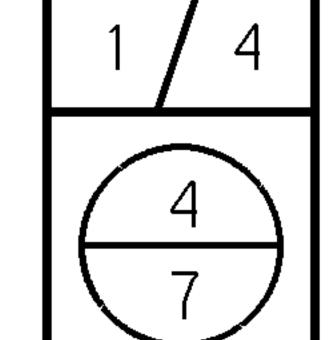
IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH CMS 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 AT 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.

MAH-680-0468 AND MAH-680-0476
UNDER MAHONING AVE AND OVER PRICE RD & MILL CRE

| AH-680-4.6 |D No. 84198



MAH-680-0476: 24 EACH (ABUTMENTS)

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

SPECIAL - PATCHING CONCRETE STRUCTURE, MISC .: CURB REPAIR

THIS ITEM SHALL BE USED TO REPAIR THE DETERIORATED FACE OF THE CURB ON THE BRIDGE DECK AND/OR APPROACH SLABS.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH ITEM 519 - PATCHING CONCRETE STRUCTURES AND AS MODIFIED HEREIN.

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

PAYMENT FOR ALL OF THE ABOVE DESRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR SPECIAL - PATCHING CONCRETE STRUCTURE, MISC.: CURB REPAIR AND WILL BE PAID FOR PER FOOT.

SLOPE REPAIR

THIS WORK WILL CONSIST OF REPAIRING THE SLOPE FROM THE 3RD PIER FROM THE REAR ABUTMENT TO THE EROSION AROUND THE 4TH PIER OF STRUCTURE MAH-680-0468 AS DIRECTED BY THE PROJECT ENGINEER. ALL GRADING PRIOR TO BORROW AND ROCK PLACEMENT WILL BE INCIDENTAL TO THIS WORK. BORROW WILL BE PLACED TO BRING THE SLOPE UP TO GRADE AND WILL BE COMPACTED INPLACE PRIOR TO ROCK PLACEMENT. ROCK WILL BE PLACED AT 18" THICK AND PROVIDE A WIDE FLAT BOTTOM DITCH. THE CONTRACTOR WILL USE DUMP ROCK FILL, TYPE C. THE ITEMS LISTED BELOW HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

203, BORROW 601, DUMP ROCK FILL, TYPE C 150 CU.YD. 650 CU.YD.

STRUCTURE IDENTIFICATION SIGNS

STRUCTURE IDENTIFICATION SIGNS (I-H25a) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL BE HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR THE FOLLOWING STRUCTURES: MAH-680-0468 (2 APPROACHES)

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:

ITEM 630 - SIGN, FLAT SHEET, 730.20, 1 SQ FT

ITEM 630 - GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT

ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL,

EACH

ITEM 630 - REMOVAL OF GROUND MOUNTED POST SUPPORT
AND DISPOSAL, 1 EACH

OBJECT MARKERS AND STRUCTURE IDENTIFICATION SIGNS

OBJECT MARKERS WILL BE PLACED ON EACH APPROACH OFF THE LEFT AND RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. ONE OM-3L AND ONE OM-3R WILL BE INSTALLED AT EACH APPROACH. THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND SHALL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 10.5 FT IN LENGTH.

STRUCTURE IDENTIFICATION SIGNS (I-H25a) WILL BE INSTALLED ON THE SAME POST AND DIRECTLY BELOW THE OBJECT MARKER OFF THE RIGHT SHOULDER ON EACH APPROACH. A QUANTITY OF ONE SIGN WILL BE INSTALLED AT EACH APPROACH. THE SIGNS WILL BE HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

INSTALL SIGNS FOR THE FOLLOWING STRUCTURES: MAH-680-0476 (2 APPROACHES)

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:

ITEM 630 - SIGN, FLAT SHEET, 730.20, 1 SQ FT

ITEM 630 - SIGN, FLAT SHEET, 6 SQ FT

ITEM 630 - GROUND MOUNTED SUPPORT, NO. 2 POST, 21 FT ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL,

3 EACH

ITEM 630 - REMOVAL OF GROUND MOUNTED POST SUPPORT
AND DISPOSAL, 2 EACH

CULTURAL RESOURCE PROPERTY AVOIDANCE

THE MILL CREEK PARK IS LISTED ON THE NATIONAL REGISTER
OF HISTORIC PLACES AS A HISTORIC DISTRICT. THE
MAH-680-0475 BRIDGE STRUCTURE IS LOCATED WITHIN AN
AERIAL EASEMENT WHICH SPANS PRICE ROAD AND THE MILL
CREEK PARK PROPERTY. THE MAH-680-0468 BRIDGE STRUCTURE
IS LOCATED IMMEDIATELY ADJACENT TO THE MILL CREEK PARK
PROPERTY. THE CONTRACTOR WILL NOT BE PERMITTED TO USE
THE MILL CREEK PARK PROPERTY TO ACCESS THE PROJECT.
UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR PLACE
EQUIPMENT AND/OR MATERIALS WITHIN THE BOUNDARIES OF THE
MILL CREEK PARK OR OTHERWISE IMPACT THE MILL CREEK PARK
PROPERTY.

THE CONTRACTOR SHALL ACCESS THE MAH-680-0475 BRIDGE STRUCTURE FROM IR-680. LAND UNDER THE MAH-680-0475 BRIDGE STRUCTURE IS MILL CREEK PARK PROPERTY AND ACCESS THROUGH THE MILL CREEK PARK PROPERTY IS NOT PERMITTED. ACCESS TO THE MAH-680-0468 BRIDGE STRUCTURE IS AVAILABLE FROM IR-680, MAHONING AVENUE AND PRICE ROAD RIGHTS-OF-WAY. RIGHT-OF-WAY PLAN INFORMATION IS AVAILABLE FOR INSPECTION AT THE ODOT DISTRICT 4 OFFICE, 2088 SOUTH ARLINGTON, AKRON, OHIO 44306.

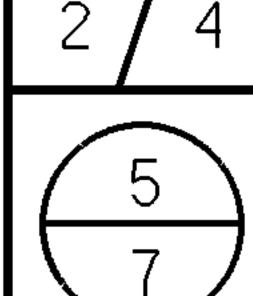
DATE
DESIGN AGENCY
ODOT --- DISTRICT 4
FRODUCTION
PRODUCTION

LMS LMS STRUCTURE FILE NUME 5006

STRUCTURE GENERAL NOTES

MAH-680-0468 AND MAH-680-0476

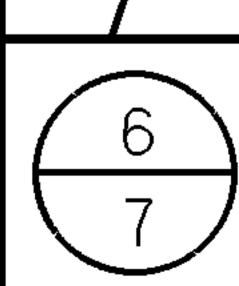
AHONING AVE AND OVER PRICE RD & MILL CF

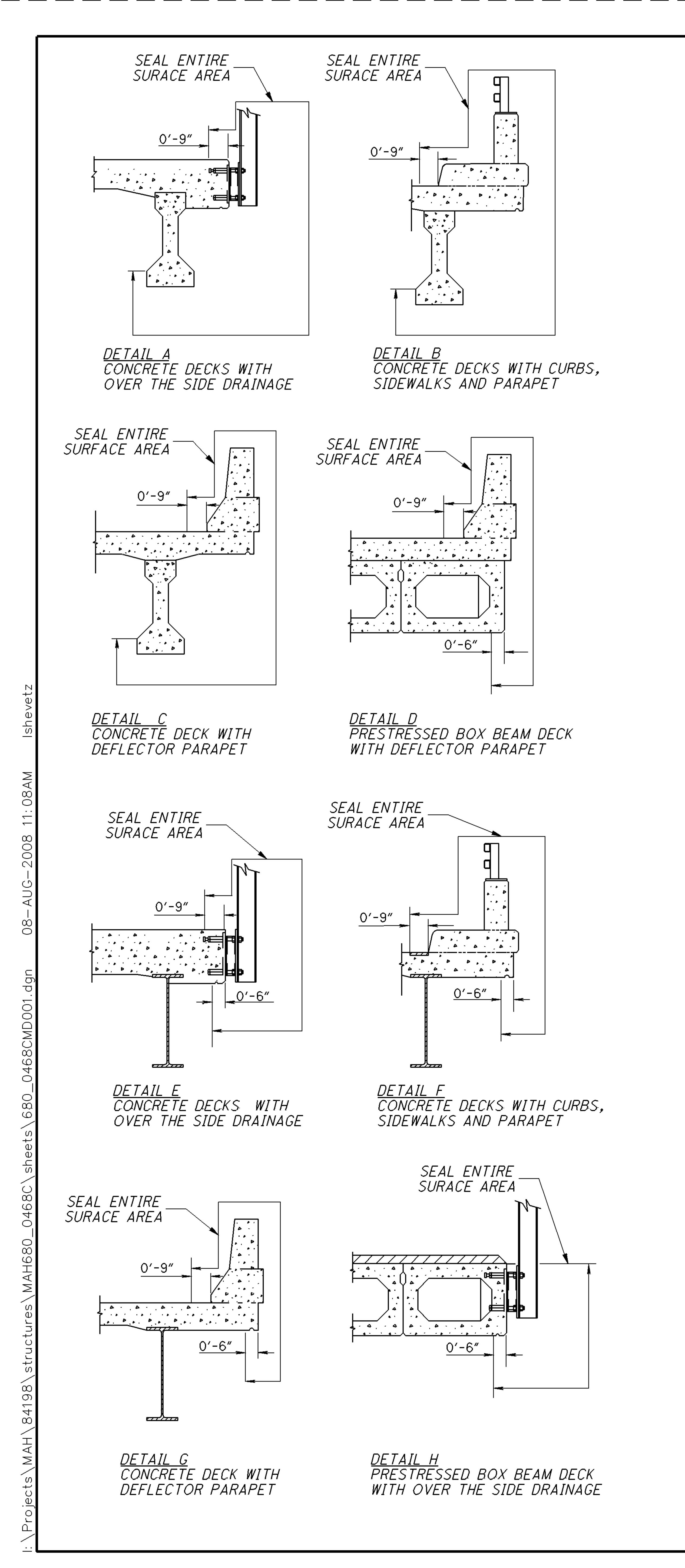


						CHECKED:	DATE:				
ESTIMATED QUANTITIES											
	RRIDGE	NO. / STRUCTURE FILE NO.									
	MAH-680-0468 SFN 5006864	MAH-680-0476 SFN 5006872	ITEM	EXTENSION	UNIT	DESCRIPTION		SEE SHEET			
	LUMP	LUMP	201	11000		CLEARING AND GRUBBING					
	150		203	40000	CU Y D	BORROW					
		2483	512	10100	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)					
	3525	6054	512	10400	SQ YD	TREATING OF CONCRETE BRIDGE DECK WITH SRS					
		10	513	95030	EACH	STRUCTURAL STEEL, MISC.: REPLACEMENT OF DAMAGED OR MISSING CROSSFRAMES		1/4			
		270		ΛΛΛΕΛ	ca et	CUDEACE DDEDADATION OF EVICTING CTDUCTUDAL CTEEL					
		370	514 514	00050	SQFT	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT					
		370 370	514 514	00056 00060		FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT					
		370	51 4 514	00066	SQ FT SQ FT	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT					
		37U	514			RIGRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL					
			JIH	VV3U4		CIGNINDING FINS, TEARS, SEIVERS ON ENSTING STRUCTURAL STEEL					
		<u> </u>	514	10000	EACH	FINAL INSPECTION REPAIR					
	100		514	27700	SQ FT	FIELD PAINTING, MISC.: REPAIR PAINTING		1/4			
	100			21100		TILLED I ANTONO, MIGO INEL ANTI ANTINO		17-			
	28		516	01301	FT	ELASTOMERIC STRIP SEAL WITHOUT STEEL EXTRUSIONS, AS PER PLAN		1/4			
	20	LUMP	516	47001		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN		1/4			
		24	516	45305	EACH	REFURBISH BEARING DEVICE, AS PER PLAN		2/4			
				TOOOO		INCLORDIOLIDEARNO DE VIOL, AO L'ENTEAN		<i>Z.i</i> ¬			
	175	150	519	11101	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN		2/4			
	50	100	SPEC	51911720	FT	PATCHING CONCRETE STRUCTURE, MISC.: CURB REPAIR		2/4			
	175	300	SPEC	51912304	SQ YD	PATCHING CONCRETE BRIDGE DECK - TYPE C		T 1-2			
	1 # 0			♥ 1♥ 1 <u>►</u> ♥♥⊤	~_~ ~_~ I L*						
	650		601	27000	CU Y D	DUMPED ROCK FILL, TYPE C					
			THE THEFT								
	15	42	630	02100	FT	GROUND MOUNTED SUPPORT, NO. 2 POST					
		12	630	80100	SQ FT	SIGN, FLAT SHEET					
	2	2	630	80100		SIGN, FLAT SHEET, 730.20					
	2	6	630	84900		REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL					
	2	4	630	86002		REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL					
					•						
	150	100	843	50000	SQ FT	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR					

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	STRUCTURE		FEDERAL	ABUT	ABUT PIER SUPER GEN TOTAL					
BRIDGE NO.	TYPE	PROPOSED SEALING	COLOR NUMBER	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD		
MAH-680-0476	6 SPAN CONTINUOUS	SEAL PARAPETS PER DETAIL F SEAL ALL EXPOSED CONCRETE AT ABUTMENTS	PER CMS	586		1897		2483		
	STEEL BEAM	SEAL ALL EXPOSED CONCRETE AT WINGWALLS								

NOTES:

- EPOXY-URETHANE SEALER SHALL BE USED UNLESS SHOWN OTHERWISE
- DETAILS E, F, G AND H ALSO APPLY TO CONCRETE SLAB BRIDGES

SEALING OF BEAM SEATS

SEALING OF BEAM SEATS: IF THE BEAMS SEATS ARE SEALED
WITH AN EPOXY OR NON-EPOXY SEALER PRIOR TO SETTING THE
BEARINGS, DO NOT APPLY SEALER TO THE CONCRETE SURFACES
UNDER THE PROPOSED BEARING LOCATIONS. IF THESE LOCATIONS
ARE SEALED, REMOVE THE SEALER TO THE SATISFACTION OF THE
ENGINEER PRIOR TO SETTING THE BEARINGS. THE DEPARTMENT
WILL NOT PAY FOR THIS REMOVAL.

ESTIMATED QUANTITIES