

#### STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS AND SUPPLEMENTAL SPECS: SS 843 DATED: 01-19-24

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#### **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, (2020), AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

#### **DESIGN LOADING**

HL-93 WITH FUTURE WEARING SURFACE (FWS) OF 60 LBS./SQ. FT.

### **DESIGN DATA**

CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE) REINFORCING STEEL - ASTM A615 OR A996, GRADE 60, MINIMUM YIELD STRENGTH 60 KSI

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### **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 OBSER-VATIONS 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 DEPART-MENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

### ITEM 511 - CONCRETE, MISC.: CLASS QC2 WITH ACCELERATING ADMIXTURE, APPROACH SLAB AND BACKWALL REPAIR

THIS ITEM SHALL INCLUDE REMOVAL OF CONCRETE FROM THE EXISTING APPROACH SLAB AND BACKWALL TO A **DEPTH OF 6".** CONCRETE SHALL BE REMOVED BY HAND TOOLS. AFTER REMOVAL, CONCRETE SHALL BE BLASTED CLEAN TO REMOVE REMANING LOOSE CONCRETE.

TO EXPEDITE WORK, CLASS QC2 CONCRETE WITH ACCELERATING ADMIXTURE SIKA RAPID-1 OR ANY APPROVED EQUIVALENT ADMIXTURE SHALL BE USED TO ACHIEVE 3,000 PSI COMPRESSIVE STRENGTH IN 12 HOURS. USE A NON-CHLORIDE ACCELERATING ADMIXTURE AND PROVIDE DOCUMENTATION THAT THE MIX WILL ACHIEVE THE REQUIRED STRENGTH IN THE SPECIFIED TIME.

THIS ITEM SHALL CONFORM TO CMS 511 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

AT LEAST 5 DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A SCHEDULE OF REPAIR WORK ITEMS TO BE COMPLETED. THE SCHEDULE SHALL INCLUDE A BREAKDOWN OF ALL MAJOR WORK ACTIVITIES ON AN HOURLY BASIS. REPAIR WORK SHALL NOT BEGIN UNTIL THE SCHEDULE IS APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL CONTINUE THE WET CURE FOR THE MAXIMUM NUMBER OF HOURS POSSIBLE DURING THE PERMITTED LANE CLOSURE. TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED CONCRETE SURFACE UNTIL AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF **400 PSI**. ONE HOUR BEFORE THE PERMITTED LANE CLOSURE PERIOD ENDS. CONTRACTOR SHALL DRY THE NEW CONCRETE SURFACE AND APPLY A MEMBRANE CURING COMPOUND. DRYING METHODS INTRODUCING EXTERNAL HEAT (I.E. WEED BURNERS, TORCHES) WILL NOT BE PERMITTED.

SEAL ALL EXPOSED CONSTRUCTION JOINTS WITH HMWM SEALER AS PER CMS 511.19.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR, EQUIPMENT, AND MATERIALS WILL BE MADE AT THE CUBIC FOOT CONTRACT PRICE BID FOR ITEM 511 - CONCRETE, MISC.: QC2 WITH ACCELERATING ADMIXTURE, APPROACH SLAB AND BACKWALL REPAIR.

### ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

REMOVAL OF UNSOUND CONCRETE SHALL BE PERFORMED AS SPECIFIED IN CMS 519.03. CONCRETE SHALL BE REMOVED AND REPLACED **AT A DEPTH OF 6"**. PATCHING LOCATIONS ON THE ABUTMENTS, PIERS, DIAPHRAGMS AND PARAPETS SHALL BE VERIFIED AND PERFORMED AS DIRECTED BY THE ENGINEER.

THE DEPARTMENT WILL MEASURE THE QUANTITY OF WORK ON A SQUARE FOOT BASIS AND INCLUDE ALL MATERIALS, TOOLS, LABOR, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK FOR PAYMENT WITH ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN.

## ITEM 519 - PATCHING BRIDGE DECKS, TYPE B

THIS ITEM SHALL CONFORM TO PROPOSAL NOTE 512 ALONG WITH THE FOLLOWING REQUIREMENTS.

ALL BRIDGE DECK PATCHING SHALL USE COMMERCIAL GRADE QUIKCRETE FAST SET DOT MIX EXTENDED OR APPROVED EQUAL. THE MATERIAL SHALL BE PLACED AT A MINIMUM DEPTH OF FOUR (4) INCHES AND CURED PER MANUFACTURES RECOMMENDATIONS.

THE CONTRACTOR SHALL CONTINUE THE WET CURE FOR THE MAXIMUM NUMBER OF HOURS POSSIBLE DURING THE PERMITTED LANE CLOSURE. TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED CONCRETE SURFACE UNTIL AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF **400 PSI**. ONE HOUR BEFORE THE PERMITTED LANE CLOSURE PERIOD ENDS. CONTRACTOR SHALL DRY THE NEW CONCRETE SURFACE AND APPLY A MEMBRANE CURING COMPOUND. DRYING METHODS INTRODUCING EXTERNAL HEAT (I.E. WEED BURNERS, TORCHES) WILL NOT BE PERMITTED.

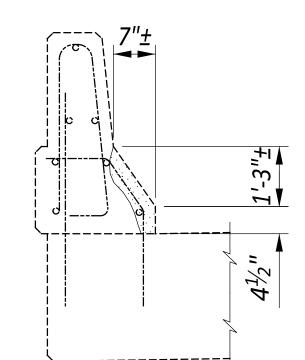
ALL LOCATIONS AND DIMENSIONS WILL BE DETERMINED BY THE ENGINEER. THE INTENT OF THE WORK IS TO CORRECT HEAVILY DETERIORATED SURFACE ZONES (I.E. FAILED CONCRETE/ASPHALT PATCHES, MAP-CRACKED DETERIORATED AREAS, SPALLED/OPEN POTHHOLES, ETC.) AND NOT TO CORRECT ALL UNSOUND AREAS OF THE BRIDGE DECK/OVERLAY AND APPROACH SLABS.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR, EQUIPMENT AND MATERIAL WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 519, PATCHING CONCRETE BRIDGE DECKS, TYPE B.

# ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR

THE CONTRACTOR SHALL REPAIR DETERIORATED AREAS, WHERE THE DEPTH OF PATCH IS  $1rac{1}{2}$ " TO 3 ", AS LOCATED BY AND TO THE SATISFACTION OF THE ENGINEER ACCORDING TO ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR AND THE DETAILS SHOWN IN THESES PLANS. AN ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY SHEET FOR BIDDING PURPOSES. THE FINAL PAYMENT SHALL BE FOR THE ACTUAL AMOUNT PERFORMED AS DIRECTED BY THE ENGINEER.

PAYMENT FOR THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQ. FT. FOR ITEM 843 - PATCHING CONCRETE STRUCTURE WITH TROWELABLE MORTAR, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.



ITEM 843 PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR

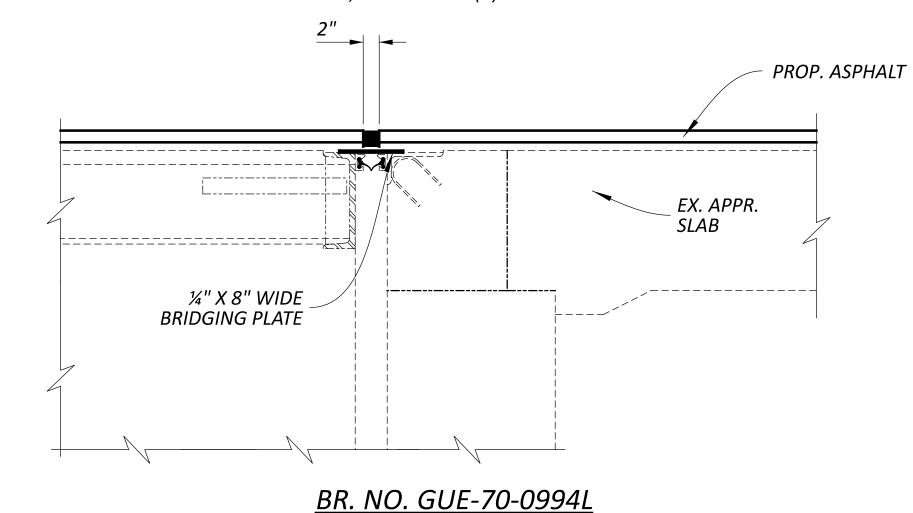
#### **(5**) ITEM 512 - SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN SEE CMS 512.04

# ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN (B)

PERFORM THE FOLLOWING WORK AFTER ALL SEALING HAS BEEN PERFORMED ON THE BRIDGE DECK. FOR THE LOCATIONS PROVIDED REMOVE ANY COMPRESSION SEAL, FOREIGN MATERIAL, AND DEBRIS FROM THE EXISTING JOINT BETWEEN THE APPROACH SLAB AND ABUTMENT BACKWALL. IF ONLY A SAWCUT EXISTS AT THIS LOCATION, PERFORM A NEW SAWCUT TO ESTABLISH A 1/2" WIDE BY 2 1/4" DEEP JOINT ALONG THIS INTERFACE. ONCE THE JOINT HAS BEEN OPENED OR CREATED. AIRBLAST THOROUGHLY PRIOR TO PLACEMENT OF HOT APPLIED JOINT SEALER AS PER 705.04 AS DIRECTED BY THE ENGINEER. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN (B).

# ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN (C)

PERFORM THE FOLLOWING WORK AFTER ALL SEALING AND PAVING HAS BEEN PERFORMED ON THE BRIDGE DECK. PERFORM A NEW SAWCUT TO ESTABLISH A 2" WIDE BY 2" DEEP JOINT ALONG THIS INTERFACE. ONCE THE JOINT HAS BEEN CREATED, AIRBLAST THOROUGHLY PRIOR TO PLACEMENT OF HOT APPLIED JOINT SEALER AS PER 705.04 AS DIRECTED BY THE ENGINEER. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN (C).



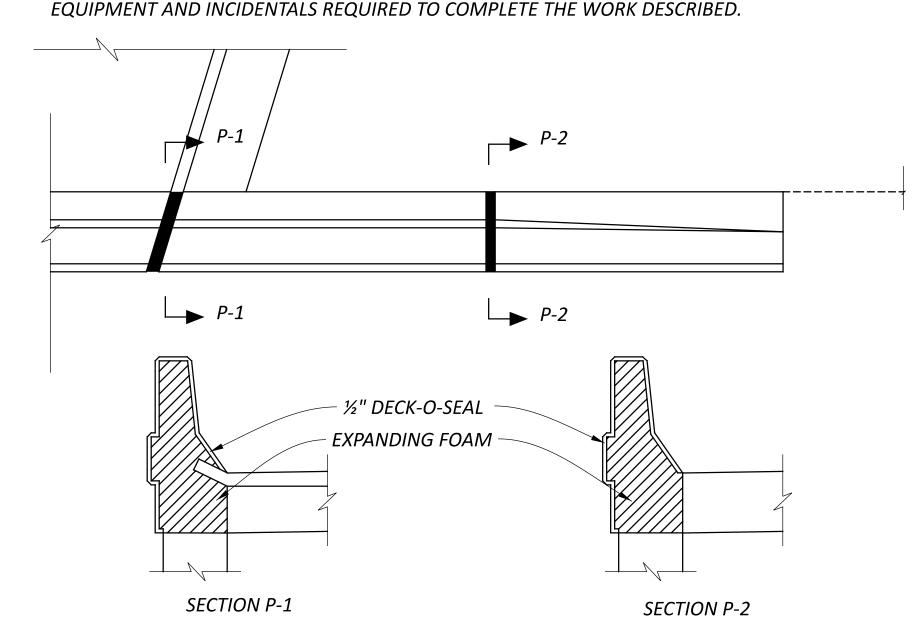
(EXISTING TYP. ABUTMENT SECTION IN LANES)

# ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC. (EXPANDING FOAM)

THE CONTRACTOR SHALL CLEAN THE JOINTS SHOWN IN THE DETAIL BELOW AS DESCRIBED IN CMS 516.06 PRIOR TO PLACEMENT OF THE JOINT SEALER. THE JOINT/VOID SHALL BE FILLED WITH EXPANDING FOAM AND CURED FOR 24 HOURS. AFTER CURING THE CONTRACTOR SHALL CUT OUT EXCESS FOAM TO A DEPTH OF 1/2" MEASURED FROM THE EXISTING CONCRETE SURFACE. AFTER THE FOAM HAS BEEN REMOVED THE JOINTS SHALL BE SEALED WITH DECK-O-SEAL GUN GRADE JOINT SEALANT OR AN APPROVED EQUAL. THE COLOR SHALL BE STONE GRAY. APPROVED MANUFACTURE'S APPLICATION METHODS SHALL BE FOLLOWED DURING SURFACE PREPARATION AND APPLICATION FOR MAXIMUM EFFECTIVENESS.

DECK-O-SEAL P.O. BOX 397 HAPSHIRE, IL 60140 PHONE: 800-542-7665

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC. (EXPANDING FOAM), SQUARE FEET AND SHALL INCLUDE ALL LABOR,



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

AN ESTIMATED QUANTITY FOR EACH LOCATION IS PROVIDED IN TABLE 1, FOR REMOVAL OF SECONDARY MEMBERS AS DETERMINED BY FIELD INSPECTION BY THE ENGINEER. FLAME OR SAW CUT THE EXISTING MEMBERS TO WITHIN 1/8 INCH OF THE EXISTING MAIN MATERIAL USING A MECHANICAL GUIDE ACCORDING TO C&MS 513.12 PROVIDE SHIELDING AS NECESSARY TO PREVENT DAMAGE TO MAIN OR SECONDARY MATERIALS THAT REMAIN. GRIND THE EXISTING MAIN OR SECONDARY 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). DETERMINE FINAL QUANTITIES BY FIELD MEASUREMENTS. THE DEPARTMENT WILL INCLUDE ALL MATERIALS, TOOLS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK FOR PAYMENT WITH ITEM 202 - PORTIONS OF SECONDARY MEMBERS REMOVED, AS PER PLAN: POUND.

### ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN

ALL REQUIREMENTS OF 513 APPLY TO SHOP FABRICATED MEMBERS. PERFORM WORK FOR FIELD FABRICATED MEMBERS ACCORDING TO ITEM 513, EXCEPT AS MODIFIED HEREIN. 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. 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. SEALED AND DATED, ACCORDING TO S1002, TO THE STRUCTURAL, WELDING AND METALS SECTION OF THE OFFICE OF MATERIAL MANAGEMENT FOR RECORD PURPOSES. THE MEMBERS INCLUDED IN THIS ITEM ARE PROVIDED IN TABLE 1. THE DEPARTMENT WILL INCLUDE ALL MATERIALS, TOOLS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK FOR PAYMENT WITH ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN: POUND.

### ITEM 513 - STRUCTURAL STEEL, MISC.: REPAIR OF DAMAGED SECONDARY MEMBERS, FILLET WELDING

PERFORM 5/16 INCH FILLET WELDS ACCORDING TO ITEM 513 USING APPROVED ELECTRODES, PROCEDURES AND WELDERS. WELD EACH APPROPRIATE SECONDARY MEMBER ACCORDING TO PLAN DETAILS. MAGNETIC PARTICLE INSPECT ALL FILLET WELDS ACCORDING TO C&MS 513.25B. THE ENGINEER MAY OBTAIN TECHNICAL ASSISTANCE FROM THE OFFICE OF MATERIALS MANAGEMENT. THE DEPARTMENT WILL INCLUDE ALL MATERIALS; TOOLS; LABOR; EQUIPMENT; AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK FOR PAYMENT WITH ITEM 513 STRUCTURAL STEEL MISC., REPAIR OF DAMAGED SECONDARY MEMBERS: FILLET WELDING: FOOT.

### ITEM 514 - FIELD PAINTING, MISC.: SECONDARY MEMBERS

THIS ITEM SHALL INCLUDE PAINTING AS WELL AS THE SURFACE PREPARATION OF THE SECONDARY MEMBERS IN THE FIELD WITH PRIME, INTERMEDIATE AND SURFACE COATS AS DIRECTED BY THE ENGINEER. THE PAINT MAY BE APPLIED BY BRUSH ACCORDING TO 514.17.E. SOLVENT CLEAN THE APPROPRIATE SECONDARY MEMBERS AS PER SSPC-SP 1 AND SSPC-SP 2, RESPECTIVELY, PRIOR TO PAINTING ACCORDING TO ITEM 514. CONTRACTOR SHALL PROVIDE CONTAINMENT TO MAINTAIN PROPER CURING TEMPERATURES. THE CONTRACTOR WILL PAINT THE NEW STIFFENERS, AN ESTIMATED 6" AREA AROUND THE NEW STIFFENER ON THE WEB OF BEAM, AN ESTIMATED 6" AROUND THE WELD REPAIR AREA, AND ANY LOCATIONS WHERE GRINDING WAS REQUIRED.

THE FINISH COAT COLOR SHALL BE LIGHT BLUE AMS-STD-15526.

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND CONTAINMENT FOR CURING SHALL BE INCLUDED IN THE SQUARE FOOT CONTRACT BID FOR ITEM 514 FIELD PAINTING, MISC.: SECONDARY MEMBERS.

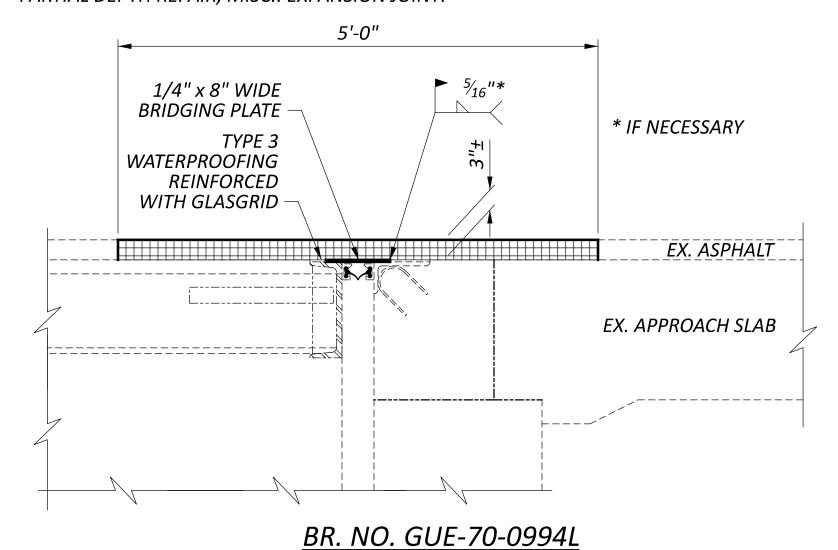
### ITEM 251 - PARTIAL DEPTH REPAIR, MISC.: EXPANSION JOINT

AN ESTIMATED QUANTITY FOR PARTIAL DEPTH PAVEMENT REPAIR HAS BEEN INCLUDED IN THE PLAN TO BE USED ALONG THE CENTER LINE OF THE EXPANSION JOINT.

THE ROADWAY SHALL BE PLANED 3"± DEEP AND 5 FEET WIDE CENTERED ABOUT THE CENTER LINE OF THE EXPANSION JOINT. AFTER PLANING THE REPAIR AREA, IF THE EXISTING STEEL PLATE IS NOT FULLY INTACT AND SECURELY WELDED, PLACE A 1/4" THICK BY 8" WIDE STEEL PLATE THE ENTIRE LENGTH OF THE EXPANSION JOINT. THE STEEL PLATE SHALL BE WELDED TO THE EXISTING END DAM ON THE ABUTMENT. PRIOR TO PLACING AND COMPACTION OF 3.0" OF ITEM 301 ASPHALT CONCRETE BASE, PG64-22, (449), THE TOP FACE OF THE REPAIR SHALL BE COATED WITH ITEM 407, NON-TRACKING TACK COAT ALONG WITH THE TOP OF THE STEEL BRIDGING PLATE AND ITEM 512 -TYPE 3 WATERPROOFING OVER TOP OF THE STEEL BRIDGING PLATE. WATERPROOFING SHALL BE REINFORCED WITH GLASGRID CG200 OR EQUIVALENT, PLACED ACCORDING TO THIS NOTE AND MANUFACTURERS SPECIFICATIONS.

THE PERIMETER OF ALL REPAIR AREAS SHALL BE SEALED IN ACCORDANCE WITH CMS 401.17.

ALL PLANING, MATERIALS (INCLUDING GLASGRID), LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 251 PARTIAL DEPTH REPAIR, MISC.: EXPANSION JOINT.



(EXISTING TYP. ABUTMENT SECTION IN LANES)

# ITEM 519 - SPECIAL - PATCHING CONCRETE STRUCTURE (FULL DEPTH BRIDGE DECK)

THIS ITEM SHALL INCLUDE REMOVAL OF CONCRETE AND ASPHALT FOR THE FULL THICKNESS OF THE EXISTING DECK AND ASPHALT WEARING SURFACE (APPROXIMATELY 13" ±). ASPHALT AND CONCRETE SHALL BE REMOVED BY HAND TOOLS. AFTER REMOVAL, CONCRETE AND EXPOSED STEEL SHALL BE BLASTED CLEAN TO REMOVE REMANING LOOSE CONCRETE. NECESSARY FALSEWORK FOR CONCRETE REMOVAL AND REPLACEMENT SHALL ALSO BE INCLUDED FOR PAYMENT IN THIS ITEM.

TO EXPEDITE WORK, CLASS QC2 CONCRETE WITH ACCELERATING ADMIXTURE SIKA RAPID-1 OR ANY APPROVED EQUIVALENT ADMIXTURE SHALL BE USED TO ACHIEVE 3,000 PSI COMPRESSIVE STRENGTH IN 12 HOURS. USE A NON-CHLORIDE ACCELERATING ADMIXTURE AND PROVIDE DOCUMENTATION THAT THE MIX WILL ACHIEVE THE REQUIRED STRENGTH IN THE SPECIFIED TIME.

PERFORM THIS WORK PRIOR TO ASPHALT RESURFACING. POUR NEW CONCRETE ALL THE WAY TO THE SURFACE OF THE EXISTING ASPHALT AND MILL THROUGH AT THE SAME DEPTH AS THE SURROUNDING ASPHALT PAVEMENT WHEN RESURFACING.

THIS ITEM SHALL CONFORM TO PN 512 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

AT LEAST 5 DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A SCHEDULE OF REPAIR WORK ITEMS TO BE COMPLETED. THE SCHEDULE SHALL INCLUDE A BREAKDOWN OF ALL MAJOR WORK ACTIVITIES ON AN HOURLY BASIS. REPAIR WORK SHALL NOT BEGIN UNTIL THE SCHEDULE IS APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL CONTINUE THE WET CURE FOR THE MAXIMUM NUMBER OF HOURS POSSIBLE DURING THE PERMITTED LANE CLOSURE. TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED CONCRETE SURFACE UNTIL AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF **400 PSI**. ONE HOUR BEFORE THE PERMITTED LANE CLOSURE PERIOD ENDS, CONTRACTOR SHALL DRY THE NEW CONCRETE SURFACE AND APPLY A MEMBRANE CURING COMPOUND. DRYING METHODS INTRODUCING EXTERNAL HEAT (I.E. WEED BURNERS, TORCHES) WILL NOT BE PERMITTED.

SEAL ALL EXPOSED CONSTRUCTION JOINTS WITH HMWM SEALER.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR, EQUIPMENT, FALSEWORK, AND MATERIALS WILL BE MADE AT THE CUBIC YARD CONTRACT PRICE BID FOR ITEM 519 - SPECIAL - PATCHING CONCRETE STRUCTURE (FULL DEPTH BRIDGE DECK).

# ITEM SPECIAL - SEALING - LIQUID FLEXIBLE SEALANT

THIS ITEM SHALL INCLUDE SURFACE PREPARATION AND SEALING OF CONCRETE SURFACES WITH A LIQUID FLEXIBLE SEALANT AS SHOWN ON BRIDGE DETAIL SHEETS. SEALANT SHALL BE FLEX SEAL LIQUID (OR APPROVED EQUAL) APPLIED IN TWO COATS. THE FIRST COAT SHALL BE CLEAR AND THE SECOND COAT SHALL BE GRAY OR WHITE. PERFORM SURFACE PREP AND SEALANT APPLICATION ACCORDING TO MANUFACTURERS' RECOMMENDATIONS AND UNDER THE OBSERVATION OF THE ENGINEER.

#### A. PREPARATION:

REMOVE DUST, DIRT, OIL, WAX, CURING COMPOUNDS, EFFLORESCENCE, LAITANCE, LOOSE OR PEELING COATINGS AND OTHER FOREIGN MATERIALS FROM SURFACES TO BE SEALED. EXISTING COATINGS DO NOT NEED TO BE FULLY REMOVED, ONLY LOOSE OR PEELING COATINGS. ENSURE THAT ALL WASTE GENERATED BY THE SURFACE PREPARATION OPERATION IS MANAGED IN ACCORDANCE WITH 107.19.

#### **B. COVERAGE:**

APPLY SEALER ON HORIZONTAL AND VERTICAL SURFACES BY ROLLING OR BRUSH OPERATION AT A RATE OF A MINIMUM, ONE GALLON FOR EACH 100 SQUARE FEET. COAT ENTIRE SUFACE UNTIL ALL CRACKS AND HOLES ARE COMPLETELY FILLED.

### C. PAYMENT:

PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE SQUARE FOOT CONTRACT BID FOR ITEM SPECIAL - SEALING - LIQUID FLEXIBLE SEALANT.

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