

## GENERAL NOTES

### PENETRATING WATER REPELLENT SURFACE TREATMENT:

A PENETRATING WATER REPELLENT SURFACE TREATMENT SHALL BE APPLIED TO THE FOLLOWING CONCRETE SURFACES OF THE BRIDGE "A" AND "B":

1. EDGES AND UNDERSIDE OF THE OVERHANG PORTION OF THE BRIDGE DECK.
2. THE ROADWAY FACE, TOP, BACK FACE, AND OPENINGS OF THE F-SHAPED PARAPETS, TR4 TRAFFIC RAIL AND BRIDGE SIDEWALK PARAPETS.
3. SIDEWALK SURFACE ON BRIDGE DECK OF BRIDGE "A".
4. TOP, SIDES, AND ENDS OF PIER CAPS AND EXPOSED AREAS OF ALL COLUMNS.
5. FRONT FACE OF BACKWALL, TOP AND EXPOSED FRONT FACE OF BRIDGE SEAT INCLUDING ALL SURFACES OF PEDESTALS.

ALL COSTS ASSOCIATED WITH THE USE OF PENETRATING WATER REPELLENT SURFACE TREATMENT INCLUDING THE COST OF MATERIALS, LABOR AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD OF "WATER REPELLENT (VISUALLY INSPECTED)".

### SEALED EXPANSION JOINT:

SEALED EXPANSION JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS. UNLESS OTHERWISE SHOWN ON THE SHOP DRAWINGS, REFER TO THE EXPANSION JOINT SETTING TABLES ON THE SHEETS 40 AND 70 FOR SETTING THE WIDTH OF THE JOINTS. PARAPET OPENINGS AT EACH EXPANSION JOINT LOCATION SHALL HAVE THE SAME OPENING DIMENSION AS THE EXPANSION DEVICE.

ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED OR AS SHOWN ON THE PLANS INCLUDING THE COST OF MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT OF "SEALED EXPANSION JOINT".

### WEATHERING STEEL FIXED BEARING ASSEMBLIES:

PROVIDE AND INSTALL FIXED BEARING ASSEMBLIES OF THE SIZE, SHAPE, AND LOCATION AS DETAILED IN THE PLANS. THERE IS AN ESTIMATED TOTAL OF 3770 POUNDS AT BRIDGE "A" AND 1575 POUNDS AT BRIDGE "B" OF WEATHERING STEEL FOR FIXED BEARING ASSEMBLIES. STRUCTURAL STEEL FOR ANCHOR PLATES AND ANCHOR BOLTS SHALL CONFORM TO AASHTO M270 (ASTM A709), GRADE 50W (WEATHERING STEEL, CHARPY V-NOTCH TESTING NOT REQUIRED). NUTS, WASHERS AND WELDING SHALL HAVE WEATHERING CHARACTERISTICS.

ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING THE FIXED BEARING ASSEMBLIES AS SHOWN IN THE PLANS INCLUDING ELASTOMERIC PADS, ANCHOR PLATES, ANCHOR BOLTS, DRILLING AND EMBEDDING ANCHOR BOLTS, NUTS, WASHERS, LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER EACH "WEATHERING STEEL FIXED BEARING ASSEMBLY".

### WEATHERING STEEL EXPANSION BEARING ASSEMBLIES:

PROVIDE AND INSTALL EXPANSION BEARING ASSEMBLIES OF THE SIZE, SHAPE, AND LOCATION AS DETAILED IN THE PLANS. THERE IS AN ESTIMATED TOTAL OF 3846 POUNDS AT BRIDGE "A" AND 1628 POUNDS AT BRIDGE "B" OF WEATHERING STEEL FOR EXPANSION BEARING ASSEMBLIES. STRUCTURAL STEEL FOR ANCHOR PLATES AND ANCHOR BOLTS SHALL CONFORM TO AASHTO M270 (ASTM A709), GRADE 50W (WEATHERING STEEL, CHARPY V-NOTCH TESTING NOT REQUIRED). NUTS, WASHERS AND WELDING SHALL HAVE WEATHERING CHARACTERISTICS.

ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING THE EXPANSION BEARING ASSEMBLIES AS SHOWN IN THE PLANS INCLUDING ELASTOMERIC PADS, ANCHOR PLATES, ANCHOR BOLTS, DRILLING AND EMBEDDING ANCHOR BOLTS, NUTS, WASHERS, LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER EACH "WEATHERING STEEL EXPANSION BEARING ASSEMBLY".

### STRUCTURAL STEEL:

ITEM "STRUCTURAL STEEL" CONSISTS OF THE FOLLOWING:

- BRIDGE "A": 491 LBS FOR NEW DRAIN RECEPTACLE AND DRAIN PIPE AT ABUTMENT NO. 1  
 900 LBS FOR NEW BEARING STIFFENERS AT ABUTMENT NO. 2  
 1000 LBS FOR MISCELLANEOUS STEEL REPAIRS
- BRIDGE "B": 1000 LBS FOR MISCELLANEOUS STEEL REPAIRS

ALL NEW STEEL USED FOR THE NEW BEARING STIFFENERS AND MISCELLANEOUS STEEL REPAIRS SHALL BE AASHTO M270 GRADE 36 OR HIGHER IN ACCORDANCE WITH SECTION 508 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. MISCELLANEOUS STEEL REPAIRS INCLUDES REPLACING DETERIORATED SECTIONS OF THE STEEL BEAMS AND DIAPHRAGMS AND/OR DIAPHRAGMS IN THEIR ENTIRETY AT THE DISCRETION OF THE ENGINEER. ALL MEANS AND METHODS FOR REPLACING THE DETERIORATED STEEL SECTIONS SHALL BE APPROVED BY THE ENGINEER. REPLACEMENT STEEL SHALL BE THE SAME SIZE AND DIMENSIONS AS THE EXISTING AS SHOWN ON THE PLANS. ALL NEW STRUCTURAL STEEL SHALL BE GIVEN ONE SHOP COAT OF INORGANIC ZINC PRIMER AND ONE FIELD COAT OF INORGANIC ZINC PRIMER. REPAIRED AREAS SHALL BE GIVEN ONE FRESH COAT OF PAINT TO CLOSELY MATCH THE EXISTING BEAMS. NEW BOLTS SHALL CONFORM TO AASHTO M184 (ASTM A325). PROVIDE ALL BOLTS, NUTS, WASHERS AND WELDING WITH WEATHERING CHARACTERISTICS. ALL REMOVED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF OFF SITE. ANY DAMAGE DONE TO EXISTING STRUCTURE AS A RESULT OF THE STEEL REPAIRS AND/OR REMOVAL AND REPLACEMENT OF DIAPHRAGMS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE ENGINEER.

ALL COSTS OF THE NEW BEARING STIFFENERS AND STEEL REPAIRS INCLUDING CUTTING AND REMOVING EXISTING STEEL BEAM SECTIONS, REMOVING OF EXISTING DIAPHRAGMS, STRUCTURAL STEEL, BOLTS, NUTS, WASHERS, WELDING, MATERIAL, LABOR, PAINT, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN AND NOTED SHALL BE INCLUDED IN THE PRICE BID PER POUND OF "STRUCTURAL STEEL".

ALL COSTS OF THE NEW DRAIN RECEPTACLE AT ABUTMENT NO. 1 OF BRIDGE "A", AS SHOWN ON THE PLANS, INCLUDING ALL MATERIALS AND LABOR TO INSTALL THE DRAIN SYSTEM, THE DRAIN RECEPTACLE, GROUT PAD, PIPE, FITTINGS AND CLAMPS AND ALL INCIDENTAL ITEMS SHALL BE INCLUDED IN THE PRICE BID PER POUND OF "STRUCTURAL STEEL".

### APPROACH SLABS:

CLASS AA CONCRETE SHALL BE USED IN THE APPROACH SLABS OF THE BRIDGES. THE QUANTITIES GIVEN ARE BASED ON THE ACTUAL SQUARE YARDS OF THE APPROACH SLABS.

ALL COSTS TO CONSTRUCT THE APPROACH SLABS INCLUDING THE COST OF CONCRETE, EPOXY COATED REINFORCING STEEL, RAPID CURE JOINT SEALER, BACKER ROD, PREFORMED EXPANSION JOINT FILLER, POLYETHYLENE SHEETING, SAWING, GRINDING, MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD OF "APPROACH SLAB".

### CONCRETE PARAPET:

PAY ITEM "CONCRETE PARAPET" CONSISTS OF CONSTRUCTING A PARAPET AT THE SIDEWALK ALONG THE SOUTH SIDE OF BRIDGE "A" AS SHOWN ON THE PLANS. THE CONCRETE PARAPET SHALL BE CONSTRUCTED TO MEET THE REQUIREMENTS OF SECTION 504 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AS WELL AS THE REQUIREMENTS AS SHOWN ON THE PLANS. CLASS AA CONCRETE SHALL BE USED IN THE PARAPET.

ALL COSTS TO CONSTRUCT THE PARAPET AS SHOWN ON THE PLANS INCLUDING THE COST OF CONCRETE, EPOXY COATED REINFORCING STEEL, PREFORMED EXPANSION MATERIAL, MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT OF "CONCRETE PARAPET".

### SPECIAL CONCRETE FINISH:

PAY ITEM "SPECIAL CONCRETE FINISH" CONSISTS OF PROVIDING A CLASS 6 MORTAR FINISH TO ALL EXPOSED AREAS ON THE EXISTING ABUTMENTS, WINGWALLS AND RETAINING WALLS. THE CONCRETE SURFACES SHALL BE FINISHED IN ACCORDANCE WITH SUBSECTION 509.04G OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

ALL COSTS OF MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS NEEDED TO COMPLETE THE WORK SHALL BE INCLUDED IN THE PRICE PER SQUARE YARD OF "SPECIAL CONCRETE FINISH".

### REPAIR BRIDGE ITEM (TYPE A):

ITEM "REPAIR BRIDGE ITEM (TYPE A)" CONSISTS OF REPAIRING THE BACKWALL OF ABUTMENT NO. 2 OF BRIDGE "A" AS SHOWN ON THE PLANS. ALL COSTS TO REMOVE AND REPLACE THE PORTION OF BACKWALL AS DETAILED ON THE PLANS INCLUDING THE COST OF CLASS AA CONCRETE, EPOXY COATED REINFORCING STEEL, SAWCUTTING, DRILLING AND ANCHORING REINFORCING BARS INTO EXISTING CONCRETE, MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER LUMP SUM OF "REPAIR BRIDGE ITEM (TYPE A)".

### REMOVAL OF BRIDGE ITEM (TYPE A):

ITEM "REMOVAL OF BRIDGE ITEM (TYPE A)" SHALL INCLUDE THE REMOVAL AND DISPOSAL OF THE FOLLOWING ITEMS TO BE REMOVED FROM THE EXISTING BRIDGES AS SPECIFIED OR SHOWN ON THE PLANS INCLUDING THE FOLLOWING:

#### BRIDGE "A":

1. DECK SLAB WITH ANY EXPANSION JOINT MATERIAL OR HARDWARE.
2. CONCRETE CURBS, SIDEWALK AND PARAPETS ON THE BRIDGE.
3. APPROACH SLABS AT ABUTMENTS NO. 1 AND 2 INCLUDING CONCRETE CURBS AND SIDEWALK ADJACENT TO THE EXISTING APPROACH SLABS.
4. TOP PORTIONS OF WING WALLS AND ABUTMENT BACKWALLS AS SHOWN ON THE PLANS
5. IMPACT ATTENUATOR LOCATED ON THE BRIDGE DECK

#### BRIDGE "B":

1. DECK SLAB WITH ANY EXPANSION JOINT MATERIAL OR HARDWARE.
2. CONCRETE CURBS AND PARAPETS ON THE BRIDGE.
3. APPROACH SLAB AT ABUTMENT NO. 3.
4. TOP PORTIONS OF WING WALLS AS SHOWN ON THE PLANS

WHEN REMOVING THE EXISTING BRIDGE DECK SLABS, THE CONTRACTOR SHALL TAKE EVERY PRECAUTION NECESSARY TO PREVENT DAMAGING THE REMAINING COMPONENTS. EXTREME CARE MUST BE EXERCISED TO PROTECT ALL STRUCTURAL STEEL GIRDERS AND ATTACHED COMPONENTS, INCLUDING SHEAR CONNECTORS. ANY SHEAR CONNECTORS DAMAGED CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER. THE REMOVAL AND DISPOSAL SHALL BE IN ACCORDANCE WITH SECTION 619 OF THE STANDARD SPECIFICATIONS AND IN A MANNER APPROVED BY THE ENGINEER.

### REMOVAL OF BRIDGE ITEM (TYPE B):

ITEM "REMOVAL OF BRIDGE ITEM (TYPE B)" SHALL INCLUDE THE REMOVAL AND DISPOSAL OF THE FOLLOWING ITEMS TO BE REMOVED FROM THE EXISTING BRIDGES AS SPECIFIED OR SHOWN ON THE PLANS INCLUDING THE FOLLOWING:

BRIDGE "A": PIERS NO. 1 AND 2 PIER CAPS AND PIER COLUMNS INCLUDING PEDESTALS, BEARING ASSEMBLIES AND EXCAVATION OF EXISTING GROUND TO TOPS OF THE PIER FOOTINGS.

BRIDGE "B": PIERS NO. 3 THRU 5 PIER CAPS AND PIER COLUMNS INCLUDING PEDESTALS, BEARING ASSEMBLIES AND EXCAVATION OF EXISTING GROUND TO THE TOPS OF THE PIER FOOTINGS.

THE PIER CAPS AND PIER COLUMNS SHALL BE REMOVED IN THEIR ENTIRETY TO THE TOP OF THE EXISTING FOOTINGS. EXISTING REINFORCING BARS EXTENDING FROM THE TOP OF THE FOOTINGS INTO THE COLUMNS SHALL REMAIN. ANY REINFORCING BARS EXTENDING FROM THE TOP OF THE FOOTINGS DAMAGED AS A RESULT FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER.

ALL COSTS OF EXCAVATION OF EXISTING GROUND TO THE TOPS OF THE EXISTING FOOTINGS INCLUDING MATERIALS, LABOR, EQUIPMENT, TEMPORARY SHORING AS NECESSARY, AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT BID PRICE OF "REMOVAL OF BRIDGE ITEM (TYPE B)".

COST TO REMOVE THE EXISTING SLOPE WALL AT THE BASE OF PIER NO. 1 OF BRIDGE "A" IS INCLUDED IN THE COST PER SY OF "SLOPE WALL (4)".

### REMOVAL OF BRIDGE ITEM (TYPE C):

ITEM "REMOVAL OF BRIDGE ITEM (TYPE C)" SHALL INCLUDE THE REMOVAL AND DISPOSAL OF THE EXISTING BEARING ASSEMBLIES ON THE EXISTING ABUTMENTS. THE BEARING ASSEMBLIES TO BE REMOVED INCLUDE STEEL BEARING PLATES, ROLLERS, RAIL SECTIONS, KEEPER PLATES AND SOLE PLATES IN THEIR ENTIRETY.

### REMOVAL OF BRIDGE ITEM (TYPE D):

ITEM "REMOVAL OF BRIDGE ITEM (TYPE D)" SHALL INCLUDE THE REMOVAL OF ANY EXISTING DIAPHRAGMS AS DETERMINED BY THE ENGINEER. AN EXTRA ITEM HAS BEEN INCLUDED ON BRIDGE "A" FOR THE REMOVAL OF THE EXISTING DIAPHRAGM AS SHOWN ON SHEET 29.

NEW STEEL FOR THE DIAPHRAGM REPLACEMENTS SHALL BE INCLUDED IN THE PRICE BID PER POUND OF "STRUCTURAL STEEL".

### FENCE-STYLE CLF:

ITEM "FENCE-STYLE CLF (6' HIGH, CLASS A)" CONSISTS OF ATTACHING A 6'-0" THROW FENCE TO THE TOP OF THE NEW SIDEWALK PARAPET, 206'-0" LONG, ON THE SOUTH SIDE OF BRIDGE "A" AS DETAILED IN THE PLANS. ALL MATERIALS, LABOR AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE PAID FOR PER LINEAR FEET OF "FENCE-STYLE CLF (6' HIGH, CLASS A)".

THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF CHAIN LINK FENCE DETAILS TO THE ENGINEER FOR REVIEW AND ACCEPTANCE.

### STAY-IN-PLACE FORMS:

STAY-IN-PLACE STEEL DECK FORMS WILL NOT BE ALLOWED ON THIS PROJECT.

### ENVIRONMENTAL MITIGATION NOTES:

#### SWALLOW NOTE:

MIGRATORY BIRDS ARE PROTECTED BY THE FEDERAL MIGRATORY BIRD TREATY ACT. THESE BIRDS COMMONLY USE BRIDGES AND CULVERTS FOR NESTING. THE NESTING SEASON FOR THE BIRDS RUNS FROM APRIL 1 TO AUGUST 31. ANY ACTIVITIES WHICH WOULD DESTROY ACTIVE NESTS OR HARM EGGS OR BIRDS WOULD VIOLATE THE MIGRATORY BIRD TREATY ACT. MIGRATORY BIRD USE OF BRIDGE NBI NO. 29155 & 18097 WAS NOT OBSERVED DURING THE INITIAL SURVEY CONDUCTED AS PART OF THE BIOLOGICAL STUDIES IN 2016. MIGRATORY BIRDS MAY OCCUPY THESE STRUCTURES IN THE FUTURE NESTING SEASONS. THE RESIDENT ENGINEER WILL EVALUATE THE CONTRACTOR'S PROPOSED WORK METHODS AND CONCLUDE WHETHER THE PROPOSED WORK WOULD POSE DISRUPTION TO ANY NESTING BIRDS BEFORE WORK NEAR THE STRUCTURE IS AUTHORIZED. IF THE PROPOSED WORK WILL HARM ANY NESTING BIRDS, THE BRIDGE MAY BE NETTED PRIOR TO APRIL 1 OR THE WORK DELAYED UNTIL THE NESTING SEASON IS COMPLETE. METHODS OTHER THAN NETTING MUST BE PRE-APPROVED BY THE ODOT BIOLOGIST.

#### DEQ NOTE:

IF THE CONTRACTOR ELECTS TO BUILD A WORK ROAD(S) TO PERFORM WORK, THE CONTRACTOR WILL BE RESPONSIBLE FOR EFFECTIVE EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH THE DEQ OKR10 GENERAL CONSTRUCTION REGULATIONS. IF THE AREA OF DISTURBANCE IS ONE (1) OR MORE ACRES AND IS NOT ALREADY COVERED BY A DEQ PERMIT, THE CONTRACTOR WILL BE REQUIRED TO OBTAIN A DEQ STORM WATER CONSTRUCTION PERMIT WHICH WILL INCLUDE AN APPLICATION (NOTICE OF INTENT) TO DEQ PRIOR TO EARTH DISTURBING ACTIVITIES, A STORM WATER POLLUTION PREVENTION PLAN AND THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROLS. IN ADDITION, THE CONTRACTOR WILL BE RESPONSIBLE FOR PERMANENT STABILIZATION MEASURES AFTER REMOVAL OF THE WORK ROAD(S). ALL COSTS ASSOCIATED WITH THE CONTRACTOR'S WORK ROAD INCLUDING A DEQ PERMIT, EROSION AND SEDIMENT CONTROLS AND PERMANENT STABILIZATION, ETC. WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.



2ND STREET AND RAMP OVER I-444

DESIGN	JSH	11-15	<b>OKLAHOMA DEPARTMENT OF TRANSPORTATION</b> GENERAL NOTES AND SUMMARY OF PAY QUANTITIES (BRIDGE) SHEET 2 OF 3 STATE JOB NO. 28865(04) SHEET NO. 6
DRAWN	MRM	11-15	
CHECKED	LWN	3-16	
APPROVED			
SQUAD	TT		