

**GENERAL NOTES**

**SPECIFICATIONS -**

COMPLY WITH THE REQUIREMENTS OF THE 2009 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EXCEPT AS MODIFIED BY THE PLANS AND SPECIAL PROVISIONS.

**VERIFICATION OF EXISTING CONDITIONS -**

THE CONTRACTOR IS RESPONSIBLE FOR FULLY UNDERSTANDING THE NATURE OF THE WORK AND CONDITIONS UNDER WHICH THE WORK WILL BE PERFORMED.

ALL DIMENSIONS OF THE EXISTING BRIDGE COMPONENTS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS NECESSARY TO CONNECT THE NEW MATERIAL AND SHALL BE SOLELY RESPONSIBLE FOR THE ACCURACY THEREOF.

USE METHODS CONSISTENT WITH GOOD CONSTRUCTION PRACTICE AND TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO THE EXISTING BRIDGE AND ATTACHMENTS. ANY DAMAGE TO THE EXISTING BRIDGE STRUCTURE OR ROADWAY DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED, AT THE CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE ENGINEER.

**EXISTING PLANS -**

THE EXISTING STRUCTURE WAS ORIGINALLY CONSTRUCTED AS PART OF F.A. PROJ. NO. US-7229(123) AND F.A. PROJ. NO. US-7229(125). PLANS OF THIS PROJECT ARE AVAILABLE FROM THE OKLAHOMA DEPARTMENT OF TRANSPORTATION TECHNOLOGY SERVICES PLANS SECTION, 200 N.E. 21ST STREET, OKLAHOMA CITY, OKLAHOMA, 73105.

**DEBRIS REMOVAL -**

REMOVE ALL DEBRIS FROM THE PIER CAPS. INCLUDE ALL COSTS TO REMOVE AND DISPOSE OF THE DEBRIS IN OTHER ITEMS OF WORK.

**PNEUMATICALLY PLACED MORTAR -**

THE CONTRACTOR MAY SUBSTITUTE CAST-IN-PLACE CONCRETE OR FORMED AND PUMPED CONCRETE AND MORTAR FOR THE PATCHING MATERIAL AT NO ADDITIONAL COST TO THE DEPARTMENT. SUBMIT A PROPOSED WORK PLAN FOR THE CHOSEN REPAIR METHOD WHICH INCLUDES SURFACE PREPARATION METHODS, PATCHING MATERIAL, BONDING AGENTS, MATERIAL PLACING METHODS, AND FINISHING METHODS. REPAIR A TEST AREA TO VERIFY THE EFFECTIVENESS OF THE PROPOSED REPAIR METHOD PRIOR TO COMMENCING WORK.

**REMOVAL OF CONCRETE FOR REPAIRS -**

DO NOT USE POWER TOOLS FOR REMOVING LOOSE CONCRETE UNLESS HAND TOOLS PROVE INCAPABLE OF EXCAVATING DETERIORATED CONCRETE TO SOUND CONCRETE AS DETERMINED BY THE ENGINEER. IF POWER TOOLS ARE DEEMED NECESSARY, USE TOOLS OF A SIZE THAT DOES NOT DAMAGE SOUND CONCRETE.

**REPAIR OF EXISTING REINFORCING STEEL -**

REPORT ANY DETERIORATED REINFORCING EXPOSED DURING OPERATIONS WITH A SECTION LOSS GREATER THAN 50% AS DETERMINED BY THE ENGINEER TO THE BRIDGE ENGINEER FOR REMEDIAL ACTION. REPLACE FAULTY REPAIRS AT NO ADDITIONAL COST TO THE DEPARTMENT.

**STRUCTURAL STEEL -**

PROVIDE STRUCTURAL STEEL FOR ANCHOR PLATES AND ANCHOR BOLTS IN ACCORDANCE WITH AASHTO M270 (ASTM A709), GRADE 50W (WEATHERING STEEL, CHARPY V-NOTCH TESTING NOT REQUIRED). FOR ANCHOR BARS, PROVIDE A REINFORCING BAR IN ACCORDANCE WITH AASHTO M31, GRADE 60. USE HEX NUTS CONFORMING TO AASHTO M291 (ASTM A563). PROVIDE ALL NUTS, WASHERS AND WELDING WITH WEATHERING CHARACTERISTICS.

**DECK SLAB -**

SEAL ALL DECK SLAB LONGITUDINAL CONSTRUCTION JOINTS WITH HIGH MOLECULAR WEIGHT METHACRYLATE IN ACCORDANCE WITH SECTION 523 OF THE SPECIFICATIONS. INCLUDE ALL COST OF EQUIPMENT AND LABOR FOR THE INSTALLATION OF THE HIGH MOLECULAR WEIGHT METHACRYLATE SEALER IN THE CONTRACT UNIT PRICE OF "SEALER CRACK PREPARATION". INCLUDE ALL COST OF THE HIGH MOLECULAR WEIGHT METHACRYLATE SEALER IN THE CONTRACT UNIT PRICE OF "SEALER RESIN". THE DEPARTMENT WILL NOT MEASURE THE PREPARATION AND SEALER OF EMERGENCY CONSTRUCTION JOINTS FOR PAYMENT.

**STAY-IN-PLACE DECK FORMS -**

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

**WATER REPELLENT TREATMENT -**

APPLY WATER REPELLENT TREATMENT TO THE BRIDGE IN MANNER CONSISTENT WITH THE DETAILS SHOWN IN THE PLANS.

**CAST-IN-PLACE CONCRETE DECK AND APPROACH SLABS CURING AND TRAFFIC LOAD -**

THE NEXT PARAGRAPH WILL REPLACE ARTICLE 504.04H(3) OF STANDARD SPECIFICATIONS: THE DEPARTMENT WILL NOT ALLOW TRAFFIC LOADS ON CONCRETE DECKS OR APPROACH SLABS UNTIL 10 DAYS AFTER THE COMPLETION OF CONCRETE PLACEMENT AND AFTER THE CONCRETE ATTAINS 100% OF CONTRACT REQUIRED COMPRESSIVE STRENGTH.

THIS IS A REDUCTION FROM THE 14 DAY MINIMUM REQUIREMENT OF STANDARD SPECIFICATIONS AND IS BASED ON A 7-DAY WET CURE AND A 3-DAY CURING PERIOD AFTER APPLICATION OF CURING COMPOUND.

**UTILITIES -**

UTILITIES ARE TO REMAIN IN SERVICE DURING CONSTRUCTION. HANGERS AND CLAMPS MAY BE REMOVED AND REPLACED TO FACILITATE CONSTRUCTION. ALL COSTS ARE TO BE INCLUDED IN OTHER ITEMS OF WORK.

LIGHT POLES IF NECESSARY SHALL BE REMOVED, STORED IN A LOCATION APPROVED BY THE ENGINEER AND REINSTALLED AS SOON AS WORK IS COMPLETED IN THAT AREA. ALL COSTS OF REMOVING, STORING AND REINSTALLING LIGHT POLES TO BE INCLUDED IN OTHER ITEMS OF WORK. ANY DAMAGE DURING REMOVAL, STORAGE OR INSTALLATION SHALL BE AT THE CONTRACTORS EXPENSE.

**SOFTWARE -**

THE FOLLOWING COMPUTER SOFTWARE WAS USED IN THE ANALYSIS AND DESIGN OF THE STRUCTURE(S) DETAILED IN THE PLANS:

- (1) WHITE ENGINEERING ASSOCIATES, INC. ELASTOMERIC BEARING PAD DESIGN (VERSION 3.00, 12-30-09)

**DESCRIPTION OF WORK**

THE WORK TO BE PERFORMED CONSISTS OF:

**BRIDGE:**

**SUPERSTRUCTURE -**  
REPLACING EXISTING ARMORED JOINTS AND BEARINGS, CONSTRUCTING APPROACH SLABS AND REPAIRING EXISTING P.C. BEAMS WITH CARBON-FIBER REINFORCED POLYMER AND END DIAPHRAGMS IN 2 PHASES; APPLYING FLOODCOATS AND WATER REPELLENT.

**SUBSTRUCTURE -**

REPAIRING THE ABUTMENTS, PIERS AND APPLYING SPECIAL CONCRETE FINISH.

**ROADWAY:**

TRANSITION SECTIONS BETWEEN THE NEW BRIDGE APPROACH SLABS AND THE EXISTING ROADWAY WHICH WILL INCLUDE ROADWAY, SHOULDER AND GUARDRAIL MODIFICATIONS AS SHOWN. THE BRIDGE WILL BE OPEN TO AT LEAST ONE LANE OF TRAFFIC DURING THE COURSE OF THIS PROJECT AS DETAILED ON THE BRIDGE CONSTRUCTION SEQUENCE, ROADWAY TRANSITION AND TRAFFIC CONTROL SHEETS.

**ENVIRONMENTAL NOTES**

**SWALLOW NOTE -**

"CLIFF SWALLOWS AND BARN SWALLOWS ARE SMALL COLONIAL NESTING BIRDS PROTECTED BY THE FEDERAL MIGRATORY BIRD TREATY ACT. THESE SPECIES COMMONLY USE BRIDGES AND CULVERTS FOR NESTING. THE NESTING SEASON FOR THE SWALLOWS RUNS FROM APRIL 1 TO AUGUST 31. SWALLOW USE OF THE NORTHBOUND S.H. 51 BRIDGE (NBI NO. 19511) OVER THE ARKANSAS RIVER HAS BEEN OBSERVED DURING THE INITIAL SURVEYS CONDUCTED AS PART OF THE BIOLOGICAL STUDIES IN 2015. ANY ACTIVITIES WHICH WOULD DESTROY ACTIVE NESTS OR HARM EGGS OR BIRDS WOULD VIOLATE THE MIGRATORY BIRD TREATY ACT.

THE RESIDENT ENGINEER WILL EVALUATE THE CONTRACTOR'S PROPOSED WORK METHODS AND CONCLUDE WHETHER THE PROPOSED WORK WOULD HARM THE NESTING BIRDS BEFORE WORK NEAR THE STRUCTURE IS AUTHORIZED. IF THE PROPOSED WORK WILL HARM THE 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 PREAPPROVED BY THE ODOT BIOLOGIST."

**DEQ PERMIT REQUIREMENT FOR WORK ROADS -**

IF THE CONTRACTOR ELECTS TO BUILD A ROAD(S) WITHIN THE LIMITS OF THE CHANNEL IN ORDER TO PERFORM WORK, THE CONTRACTOR WILL BE RESPONSIBLE FOR EFFECTIVE EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH THE CORPS OF ENGINEERS 404 PERMIT WHICH IS INCLUDED IN THE CONTRACT.

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.

ALL TEMPORARY WORK ROADS MUST BE REMOVED IN THEIR ENTIRETY AND THE AFFECTED AREAS RETURNED TO PRECONSTRUCTION CONDITIONS. IN ADDITION, THE CONTRACTOR WILL BE RESPONSIBLE FOR PERMANENT STABILIZATION MEASURES AFTER REMOVAL OF THE WORK ROAD(S). ALL COSTS ASSOCIATED WITH THE CONTRACTORS' WORK ROAD INCLUDING A DEQ PERMIT, EROSION AND SEDIMENT CONTROLS AND PERMANENT STABILIZATION, ETC. WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

**TRAFFIC OPERATIONS AND GENERAL CONSTRUCTION NOTES**

ANY SIGNS AND/OR DELINEATORS WHICH ARE TO BE REMOVED DURING THIS PROJECT WILL BE STORED IN A PROTECTED AREA DESIGNATED BY THE RESIDENT ENGINEER, UNTIL SUCH A TIME THAT THEY ARE TO BE RESET BY THE CONTRACTOR. COST OF THIS WORK TO BE INCLUDED IN OTHER ITEMS OF WORK.

ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL MEET OKLAHOMA DEPARTMENT OF TRANSPORTATION'S "QUALITY STANDARDS FOR TEMPORARY TRAFFIC CONTROL DEVICES."

EXISTING ROADWAY SHALL REMAIN OPEN DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER BARRICADES, LIGHTS, AND SIGNING WITHIN THE LIMITS OF CONSTRUCTION. ALL CONSTRUCTION SIGNING WILL BE DONE ACCORDING TO STANDARDS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (CURRENT EDITION), AND AS SHOWN ON TCS STANDARD DRAWINGS.

ANY DAMAGE CAUSED BY THE CONTRACTOR TO ANY STRUCTURES, ROADWAY SURFACES, STRIPING, RAISED PAVEMENT MARKERS, GUARDRAIL, SLOPES, AND SIGNS SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER.

(G-3) THE CONTRACTOR IS RESPONSIBLE FOR THE PROMPT REPLACEMENT AND/OR REPAIR OF ALL TRAFFIC CONTROL DEVICES AND APPURTENANCES DAMAGED OR DISTURBED DUE TO CONSTRUCTION.

(G-4B) IN ACCORDANCE WITH THE OKLAHOMA UNDERGROUND FACILITIES DAMAGE PREVENTION ACT THE CONTRACTOR SHALL NOTIFY THE OKLAHOMA ONE-CALL SYSTEM, INC. 48 HOURS PRIOR TO BEGINNING EXCAVATION. OKLAHOMA ONE-CALL SYSTEM, INC. "CALL OKIE" 1-800-522-6543 OR 811.

UTILITY OWNER CONTACT INFORMATION			
OWNER	UTILITY TYPE	ADDRESS	PHONE
OKLAHOMA NATURAL GAS CO.	8" GAS LINE	5848 EAST 15TH ST. TULSA, OK 74112	918-881-8215
COX COMMUNICATIONS	4.5"Ø TV WIRE CONDUIT	11811 EAST 51ST ST. TULSA, OK 74146	918-286-4666
AT&T	4"Ø FIBER OPTICS CONDUIT	5303 EAST 71ST ST. TULSA, OK 74136	918-596-4237
AT&T	6"Ø FIBER OPTICS FIBERGLASS	5303 EAST 71ST ST. TULSA, OK 74136	918-596-4237

SH 51 NB OVER ARKANSAS RIVER		TULSA COUNTY	
Design	ADT	Detail	FEZ
Check	JLC	WHITE ENGINEERING ASSOCIATES	
<b>STATE OF OKLAHOMA</b>		DEPARTMENT OF TRANSPORTATION	
JOB PIECE NO. 31358(04)		SHEET NO. 2	

**GENERAL NOTES**