

REV. NO.	DESCRIPTION	DATE
1	Modified Pay Quantities	10-13-17
2	Modified Envir. Notes	10-18-17

**GENERAL NOTES - BRIDGE**

EXISTING ROAD WILL BE CLOSED TO THROUGH TRAFFIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BARRICADES, CONSTRUCTION SIGNS, LIGHTS, ETC. 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. CONTRACTOR TO PLACE "ROAD CLOSED TO THRU TRAFFIC" SIGNS AT 70TH WEST AVENUE AND BRADY, AND AT CAMERON AND 72ND WEST AVENUE IN A MANNER APPROVED BY THE ENGINEER.

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

**CONSTRUCTION TRAFFIC CONTROL**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONSTRUCTION SIGNS, BARRICADES, LIGHTS, ETC. ACCORDING TO THE STANDARDS SET FORTH IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", CURRENT EDITION, AND AS SHOWN ON THE TCS STANDARD DRAWINGS. CONTRACTOR TO PLACE "ROAD CLOSED TO THRU TRAFFIC" SIGNS AT 70TH WEST AVENUE AND BRADY, AND AT CAMERON AND 72ND WEST AVENUE IN A MANNER APPROVED BY THE ENGINEER.

**GENERAL CONSTRUCTION NOTES**

ALL EROSION AND SEDIMENT CONTROL MEASURES (I.E., VEGETATIVE PLANTINGS) WILL BE CONSENTUOUSLY IMPLEMENTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION OF THIS PROJECT.

AREAS FOR PARKING EQUIPMENT AND STORAGE OF POTENTIALLY TOXIC MATERIALS SHALL BE ABOVE THE 10 YEAR FLOOD ELEVATION.

ALL CLEARING OF VEGETATION SHALL BE HELD TO A MINIMUM. USE OF RIPRAP ALONG THE CREEK BANK SHALL BE MINIMIZED TO ALLOW WOODY VEGETATION TO BECOME REESTABLISHED.

MINIMIZE ALL FILL ENCROACHMENT TO THAT WHICH IS NECESSARY FOR COMPLETION OF THE JOB.

THE CONTRACTOR SHALL GIVE NOTICE TO THE COUNTY AND ODOT DIVISION 8, IN WRITING, FOURTEEN (14) CALENDAR DAYS BEFORE WORK BEGINS ON THE PROJECT.

**PAY QUANTITY NOTES**

(R-3) SOLID SLAB SODDING QUANTITY INCLUDES AN ADDITIONAL 300 SQUARE YARDS TO BE USED IN A MANNER APPROVED BY THE ENGINEER. INCLUDES THE COST OF WATERING AND FERTILIZING. THE CONTRACTOR SHALL APPLY THESE ITEMS AS NECESSARY IN ORDER TO ESTABLISH SUBSTANTIAL GROWTH OF SOD IN A MANNER APPROVED BY THE ENGINEER.

(F-50) INCLUDES COST OF 4 TYPE 1, CODE 3 DELINEATORS (AMBER COLOR).

(F-66) EST. AT 112 LB. PER SQ. YD. PER 1" THICKNESS.

(1) PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITIES. SEE THE 2009 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, "PLAN QUANTITIES", SECTION 109.01(6).

(2) INCLUDES ALL EARTHWORK REQUIRED TO CONSTRUCT THIS PROJECT IN A MANNER APPROVED BY THE ENGINEER. SEE SUMMARY OF GRADING SHEET NO. 4. COMPACTON SHALL BE IN ACCORDANCE WITH SEC. 202.04 OF THE 2009 STANDARD SPECIFICATIONS. ALSO INCLUDES CLEARING & GRUBBING, TOPSOIL, AND WIDENING FOR GUARD RAIL.

(3) ALL ASPHALT SHALL BE REMOVED FROM STA. 10+15 TO 14+75 APPROX. 14' WIDE TO BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER. PRICE BID TO INCLUDE COST OF PAYMENT SAWING.

(4) PRICE BID TO INCLUDE COST OF SALVAGED TOPSOIL AND 18-46-0 FERTILIZER EST. AT 150 LB. PER ACRE.

(5) PRICE BID TO INCLUDE COST OF REMOVAL OF TRASH AND DEBRIS ON BOTH SIDES OF BRIDGE.

(6) ESTIMATED QUANTITY TO BE USED FOR TEMPORARY EROSION AND POLLUTION CONTROL IN A MANNER APPROVED BY THE ENGINEER. PRICE BID TO INCLUDE COST OF SILT REMOVAL AND RESTORATION ON ERODED SLOPES.

(7) INCLUDES COST OF 130.0 GAL. TACK COAT, ESTIMATED AT 0.05 GAL. PER SQ. YD. PRIOR TO DILUTION.

(8) INCLUDES 430 L.F. OF WHITE AND 430 L.F. OF YELLOW PLASTIC TRAFFIC STRIPE, TO BE APPLIED TO FULL WIDTH SECTION ONLY.

(9) TO BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF IN A MANNER ACCEPTABLE TO THE ENGINEER.

(10) INCLUDES STAKING OF CENTERLINE, BENCH MARKS, AND RIGHT OF WAY.

(11) PAYMENT FOR THIS ITEM BASED ON THE THEORETICAL CROSS SECTION.

**COUNTY RESPONSIBILITIES**

TULSA COUNTY SHALL BE RESPONSIBLE FOR DETOUR SIGNING OUTSIDE THE LIMITS OF CONSTRUCTION.

TULSA COUNTY SHALL BE RESPONSIBLE FOR REGULATORY SIGNING AT THE COMPLETION OF THE PROJECT.

TULSA COUNTY SHALL BE RESPONSIBLE FOR RIGHT-OF-WAY ACQUISITION, RELOCATION OF FENCES, AND UTILITIES.

**ENVIRONMENTAL MITIGATION NOTES**

**Migratory Bird:**

Migratory birds are protected by the federal Migratory Bird Treaty Act. Many birds commonly use bridges and culverts for nesting. The nesting season for most migratory bird species extends from March 1 to August 31. Migratory bird nesting use of the Brady St. Bighart Creek Bridge (NBI: 00958) involved with this project was observed. Painting, repair, retrofit, rehabilitation or demolition of the existing bridge/structures shall be completed between September 1, and February 28, when migratory bird nests are not occupied. If painting, repair, retrofit, rehabilitation or demolition cannot be completed between September 1 and February 28, the bridge shall be protected from new nest establishment prior to March 1, by means that do not result in bird death or injury. Options include the exclusion of adult birds from the bridge/structure on or after the occurrence of the placement of weather-resistant pipe/steel sheet piling with 0.25" mesh or other approved methods. Methods other than netting must be pre-approved by the ODOT Biologist.

Locations outside the project area in the following area must not be utilized for borrow, equipment staging, haul roads, spoil dumps or any off-site project-related activity.

T20N R11 E, Section 36: NE/4 SE/4 NE/4

This project is in close proximity to areas that have historically been used for the extraction and extraction of crude oil. As a result, there is a potential to encounter crude oil product and related wastes. If such materials are found, the Resident Engineer should be notified immediately.

In addition, there is a potential to encounter gathering lines and other piping, and abandoned oil, gas or saltwater disposal wells. Any wells encountered during construction activities must be plugged, by properly licensed personnel, in accordance with all applicable Oklahoma Corporation Commission rules and regulations.

**American Burying Beetle Note:**

The American burying beetle is a large carrion burying beetle that occurs within the action area. No artificial lighting shall be used during construction. Crossovers and all dead trees shall be removed from the permit area and temporary right-of-way through the project. Existing structures, including construction, shall be placed on top of all areas of ground disturbance, prior to re-vegetation.

**Bat Time Removal Limits Note:**

The northern long-eared bat is a listed bat species that occurs within the project's action area. The northern long-eared bat is a listed bat species that occurs within the project's action area. No artificial lighting shall be used during construction. Crossovers and all dead trees shall be removed from the permit area and temporary right-of-way through the project. Existing structures, including construction, shall be placed on top of all areas of ground disturbance, prior to re-vegetation.

**Bat Light Note:**

The northern long-eared bat is a listed bat species that occurs within the project's action area. In order to avoid and minimize adverse impacts to listed bat species, if any permanent lighting is installed or replaced, downward-facing full cut-off lens lights shall be installed and directed away from wooded areas and streams.

**SCHEDULE OF GUARD RAIL**

LOCATION	LANE	ANCHOR UNITS	TOTAL LENGTH BETWEEN ANCHOR UNITS		NOTES
			L.F.	L.F.	
STATION TO STATION	L.T. RT.	L	EA.	L.F.	
			11+40.00 to 12+15.00	X	
			11+25.00 to 12+00.00	X	
			12+68.00 to 13+43.00	X	
			12+53.00 to 13+28.00	X	
			TOTAL	4	300.00

SEE STD. BEGR1-2-00E, BEGR2-2-00E, GRH1-1-0 & GRH2-1-0

ITEM	DESCRIPTION	UNIT	QUANTITY
27822(0+)	P A Y Q U A N T I T I E S		
0100	ROADWAY ITEMS		
202(H)	(PL) EARTHWORK	LSUM	1.00
221(C)	TEMPORARY SILT FENCE	LF	800.00
221(F)	TEMPORARY SILT DIKE	LF	80.00
230(A)	SOLID SLAB SODDING	SY	1,400.00
232(A)	SEEDING METHOD A	AC	0.10
233(A)	VEGETATIVE MULCHING	AC	0.10
303(A)	AGGREGATE BASE TYPE A	CY	220.00
325	SEPARATOR FABRIC	SY	1,300.00
411(B)	SUPERPAVE, TYPE S3 (PG 64-22 OK)	TON	345.00
411(C)	SUPERPAVE, TYPE S4 (PG 64-22 OK)	TON	155.00
613(A)	18" R.C. PIPE CLASS III	LF	24.00
613(A)	0492 24" R.C. PIPE CLASS III	LF	30.00
613(O)	SPECIAL END SECTION OF 18" RCP ROUND	EA	2.00
613(O)	4375 SPECIAL END SECTION OF 24" RCP ROUND	EA	2.00
619(B)	REMOVAL OF ASPHALT PAVEMENT	SY	704.00
629(A)	4998 MALEBOX INSTALLATION - SINGLE	EA	1.00
856(A)	8812 TRAFFIC STRIPE (PLASTIC)(4" WIDE)	LF	880.00

ITEM	DESCRIPTION	UNIT	QUANTITY
27822(0+)	P A Y Q U A N T I T I E S		
0200	BRIDGE ITEMS		
202(A)	UNCLASSIFIED EXCAVATION	CY	2,293.00
501(A)	STRUCTURAL EXCAVATION UNCLASSIFIED	CY	110.00
501(G)	CLSM BACKFILL	CY	28.00
504(D)	CONCRETE RAIL (TR3)	LF	109.70
509(B)	CLASS A CONCRETE	CY	326.50
511(A)	REINFORCING STEEL	LB	48,614.00
601(B)	TYPE 1-A PLAIN RIPRAP	TON	96.00
601(C)	TYPE 1-A FILTER BLANKET	TON	17.00
601(I)	FILTER FABRIC (RIPRAP)	SY	52.00
619(D)	REMOVAL OF EXISTING BRIDGE STRUCTURE	LSUM	1.00
623(F)	GUARDRAIL ANCHOR UNIT (TYPE III)	EA	4.00
880(J)	CONSTRUCTION TRAFFIC CONTROL	LSUM	1.00

ITEM	DESCRIPTION	UNIT	QUANTITY
27822(0+)	P A Y Q U A N T I T I E S		
0600	STAKING		
642(B)	CONSTRUCTION STAKING LEVEL II	LSUM	1.00

ITEM	DESCRIPTION	UNIT	QUANTITY
27822(0+)	P A Y Q U A N T I T I E S		
0640	CONSTRUCTION		
220	2800 (SP) SWPPP DOCUMENTATION AND MANAGEMENT	LSUM	1.00
641	1399 MOBILIZATION	LSUM	1.00

Tulsa County Engineering	
Design	TR 11/13
Drawn	TR 11/13
Checked	TR 8/15
Revised	TR 10/17
Scale	None
STATE JOB NO. 27822(04)	

SUMMARY OF PAY QUANTITIES  
BRADY STREET OVER BIGHEART CREEK