PAY QUANTITY NOTES

- (R-1) PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITY ONLY. SEE SECTION 109.01B OF THE STANDARD SPECIFICATIONS.
- (R-4) INCLUDES 25 CU. YDS. FOR DRIVEWAYS, RETURNS, DIKES, AND MISCELLANEOUS FARTHWORK
- (R-5) AN ESTIMATED QUANTITY OF 693 C.Y. TOPSOIL TO BE RESERVED FOR REPLACEMENT OF APPROXIMATELY 5" ON COMPLETED FORESLOPES, DITCHES, AND BACKSLOPES. THIS QUANTITY IS INCLUDED IN THE EARTHWORK BALANCE. ANY ADDITIONAL EXCAVATION REQUIRED IN CUT SECTIONS TO ALLOW FOR PLACEMENT OF TOPSOIL TO FINAL GRADE, SHALL BE INCLUDED IN THE PRICE BID.
- (R-7) FOR <u>SOLID SLAB SODDING</u> PRICE BID TO INCLUDE COST OF <u>10-20-10</u> FERTILIZER, ESTIMATED AT <u>200</u> POUNDS PER <u>1000 SQ. YDS.</u>
 FOR <u>SALVAGED TOPSOIL</u> PRICE BID TO INCLUDE COST OF <u>18-46-0</u> FERTILIZER, ESTIMATED AT <u>150</u> POUNDS PER <u>1000 SQ. YDS.</u>
- (R-8) FOR <u>SOLID SLAB SODDING</u> PRICE BID TO INCLUDE COST OF WATERING, ESTIMATED AT <u>40</u> GALLONS PER S.Y.
- (R-11) THE QUANTITIES ESTIMATED FOR TEMPORARY EROSION AND SEDIMENT CONTROL IS 2 ACRES.
- (R-16) QUANTITY BASED ON TWO APPLICATIONS.
- (R-25) ESTIMATED AT 150 LBS. PER CU. FT.
- (R-32) ESTIMATED AT 112 LBS. PER SQ. YD. PER 1" THICK.
- (R-41) QUANTITY INCLUDES AN ESTIMATED 10 C.Y. TO BE USED AS DIRECTED BY THE ENGINEER.
- (R-48) INCLUDES REMOVAL OF ALL EXISTING ROADWAY DRAINAGE STRUCTURES, HEADWALLS (UNLESS OTHERWISE SPECIFIED), INLETS, FENCES, AND OTHER STRUCTURES WITHIN THE RIGHT OF WAY
- (R-49) TO BECOME THE PROPERTY OF AND BE DISPOSED OF BY THE CONTRACTOR IN A MANNER APPROVED BY THE ENGINEER.
- (R-50) MATERIALS REMOVED SHALL NOT BE MEASURED FOR PAYMENT UNDER SECTION 202.06 UNCLASSIFIED EXCAVATION.
- (R-52) INCLUDES 2% FOR GROUND MEASUREMENT.
- (1) PRICE BID INCLUDES 50 TONS TO BE USED AS DIRECTED BY THE ENGINEER.
- (2) PRICE BID INCLUDES 1,300 TONS TO BE USED ON NS 301 DETOUR AS DIRECTED ON SHEET 14.
- (3) PRICE BID TO INCLUDE 4,620 TONS TO BE USED ON EW 69 DETOUR AS DIRECTED ON SHEET 14.
- $_{\rm (4)}$ $\,$ PRICE BID TO INCLUDE 6,169 GALLONS TO BE USED ON EW 69 DETOUR AS DIRECTED ON SHEET 14.
- (5) PRICE BID TO INCLUDE THE COST TO SHAPE DETOUR TO DRAIN.
- (6) PRICE BID TO INCLUDE THE COST OF TRENCH EXCAVATION AND COVER MATERIAL.
- (7) TO BECOME THE PROPERTY OF LOGAN COUNTY.
- (8) TO INCLUDE A WORKING WI-FI HOTSPOT IN LIEU OF A PHONE AND FAX LINE
- (9) THIS PAY ITEM WILL INCLUDE THE SKT-SP-MSG OR APPROVED SUBSTITUTE. THE ET-PLUS WILL NOT BE ALLOWED.

GENERAL CONSTRUCTION NOTES

FOR PROJECTS THAT INCLUDE WIDENING AND/OR RESURFACING, THE CONTRACTOR SHALL SCHEDULE OPERATIONS TO MINIMIZE POTENTIAL DROP-OFF HAZARDS AND SHALL SUBMIT A SEQUENCE OF CONSTRUCTION OPERATIONS TO THE RESIDENT ENGINEER FOR APPROVAL BEFORE OPERATIONS BEGIN. ANY PORTION OF THE CONSTRUCTION OPERATIONS, SUCH AS SUPERPAVE LAYING OPERATIONS, EXCAVATION FOR PAVEMENT WIDENING, OR EXTENSION OF ROADWAY STRUCTURES, SHALL BE LIMITED TO ONE SIDE AT A TIME, AND THE PROCEDURES OUTLINED IN THE PAVEMENT DROP OFF TREATMENT STANDARD PDT-1 (LATEST REVISION) SHALL BE IMPLEMENTED. ONLY THAT AMOUNT OF OPEN TRENCH WILL BE ALLOWED THAT CAN BE SURFACED IN 1 (ONE) DAY'S TIME WITHOUT APPROVAL BY THE ENGINEER. LIGHTS SIGNS AND BARRICADES SHALL BE MOVED AS WORK PROGRESSES.

ALL TREES, BRUSH, AND OTHER DEBRIS THAT MIGHT INTERFERE WITH THE FLOW OF WATER SHALL BE CLEANED OUT TO THE RIGHT-OF-WAY LINE, AT EACH STRUCTURE AND BRIDGE, IN A MANNER APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK. ALL FLOWLINES THAT ARE TO BE FILLED SHALL BE THOROUGHLY TAMPED BEFORE CONSTRUCTION OR EXTENSION OF DRAINAGE STRUCTURES. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

IN ORDER TO ALLEVIATE DUST CONDITIONS DURING GRADING OPERATIONS AND BEFORE PAVEMENT WORK IS COMPLETED, THE CONTRACTOR SHALL SPRINKLE GRADING AT INTERVALS APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

THE CONTRACTOR SHALL NOT WASTE ANY EXCESS EXCAVATION UNTIL ALL PLANNED EMBANKMENTS AND BACKFILLS ARE COMPLETED. EXCESS UNCLASSIFIED EXCAVATION MATERIAL DETERMINED BY THE ENGINEER TO BE SUITABLE FOR BACKFILL SHALL BE USED TO REDUCE ANY UNCLASSIFIED BORROW NEEDED. COST OF SECOND HANDLING SHALL BE INCLUDED IN OTHER ITEMS OF WORK. ANY REMAINING EXCESS EXCAVATION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

VEGETATIVE MULCHING: THE VEGETATIVE MULCH SHALL BE ANCHORED IN ACCORDANCE WITH THE "ADHESIVE SPRAY METHOD", AS SPECIFIED IN 233.04B(1) OF THE STANDARD SPECIFICATIONS.

GENERAL CONSTRUCTION NOTES (CONT.)

AREAS ON WHICH SALVAGED TOPSOIL IS TO BE REPLACED SHALL HAVE 18-46-0 FERTILIZER APPLIED, AT THE RATE OF 150 POUNDS PER ACRE, JUST PRIOR TO THE REPLACEMENT OF SALVAGED TOPSOIL.

AT THE BEGINNING OF TURFING OPERATIONS, ANY AREAS INCLUDED IN PLANNED QUANTITIES THAT HAVE GROWN A SATISFACTORY VOLUNTEER TURF OF PERENNIAL GRASS, AS DETERMINED BY THE ENGINEER, SHALL BE FERTILIZED AND WATERED AS CALLED FOR ON THE PLANS. BUT SHALL NOT BE SEEDED. SODDED. OR SPRIGGED.

PIPE UNDERDRAIN QUANTITIES ESTIMATED ONLY. LOCATION, IF AND WHERE REQUIRED, TO BE DETERMINED BY THE ENGINEER.

THE CONTRACTOR SHALL REMOVE AND RESET MAILBOXES AS NECESSARY. MAILBOXES ARE TO BE MAINTAINED IN AN UPRIGHT POSITION AND ACCESSIBLE TO MAIL CARRIER'S CAR DURING CONSTRUCTION. ANY DAMAGE TO BOXES OR SUPPORTS SHALL BE REPAIRED BY THE CONTRACTOR. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

T.B.S.C. SURFACES SHALL BE SPRINKLED WITH WATER AND ROLLED WITH A PNEUMATIC ROLLER IN A MANNER APPROVED BY THE ENGINEER.

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.

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 SH-74D ROCK CREEK BRIDGE (NBI#: 11098; ST.#: 67+50.00); CR NS-301 STRUCTURES AT (97.6398W, 36.0450N), (NBI#: 25319: 97.6399W, 36.0301N), AND (97.6399W, 36.0288N); AS WELL AS CR EW-69 STRUCTURES AT (97.6340W, 36.0147N), (97.6222W, 36.0147N), (97.6214W, 36.0146N), (97.6185W, 36.0146N), (97.6074W, 36.0147N), AND (97.6009W, 36.0146N) HAVE BEEN OBSERVED. PAINTING, REPAIR, RETROFIT, REHABILITATION OR DEMOLITION OF THE EXISTING BRIDGE/STRUCTURES SHALL BE CONDUCTED 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 SUITABLE NEST SITES ON OR WITHIN A STRUCTURE BY THE PLACEMENT OF WEATHER-RESISTANT POLYPROPYLENE NETTING WITH 0.25-INCH OR SMALLER OPENINGS, PRIOR TO MARCH 1. METHODS OTHER THAN NETTING MUST BE PRE-APPROVED BY THE ODOT BIOLOGIST. ALTHOUGH NO NESTS WERE OBSERVED ON ALL OTHER STRUCTURES, THE BIRDS MAY OCCUPY THE STRUCTURES IN THE FUTURE. THE RESIDENT ENGINEER SHALL CONTACT THE ODOT BIOLOGIST AT 405-521-2515 IF ANY BIRD USE OF THE EXISTING STRUCTURES IS OBSERVED. IF BIRDS ARE OBSERVED THEN PAINTING, REPAIR, RETROFIT, REHABILITATION OR DEMOLITION OF THE EXISTING BRIDGE/STRUCTURES SHALL BE CONDUCTED BETWEEN SEPTEMBER 1, AND FEBRUARY 28, WHEN MIGRATORY BIRD NESTS ARE NOT OCCUPIED.

BALD EAGLE NOTE: THE BALD EAGLE NESTING SEASON IN OKLAHOMA EXTENDS FROM SEPTEMBER 16, THROUGH MAY 31. A BALD EAGLE SURVEY WAS COMPLETED FOR THIS PROJECT IN JANUARY 2017. NO NESTS WERE OBSERVED WITHIN THE EXPECTED IMPACT AREA. SURVEY RESULTS ARE VALID ONLY FOR THE NESTING SEASON IN WHICH THE SURVEY WAS PERFORMED. IF CONSTRUCTION ACTIVITIES HAVE BEGUN, BUT ARE NOT COMPLETED BY SEPTEMBER 16, 2017 THE RESIDENT ENGINEER SHALL CONTACT THE ODOT BIOLOGIST AT 405-521-2515. THE ODOT BIOLOGIST SHALL SCHEDULE ANY ADDITIONAL SURVEYS THAT MAY BE REQUIRED AS SOON AS LEAVES FALL OFF THE TREES (APPROXIMATELY NOVEMBER 1). BECAUSE NO NESTS WERE OBSERVED DURING THE INITIAL SURVEY, AND IT CAN TAKE A PAIR OF EAGLES ONE TO THREE MONTHS TO CONSTRUCT A NEW NEST, IF CONSTRUCTION ACTIVITIES HAVE BEGUN BEFORE OCTOBER 31, 2017 THEY MAY CONTINUE WHILE ADDITIONAL NEST SEARCH SURVEYS ARE CONDUCTED AFTER LEAF-OFF. IF CONSTRUCTION ACTIVITIES HAVE NOT BEGUN BY OCTOBER 31, 2017 A NEW NEST SURVEY SHALL BE COMPLETED BY THE ODOT BIOLOGIST BEFORE CONSTRUCTION ACTIVITIES CAN BEGIN. NEST SEARCH SURVEYS CAN ONLY BE CONDUCTED WHEN LEAVES ARE NOT ON THE TREES TYPICALLY BETWEEN DECEMBER 1ST AND FEBRUARY 28TH. IF NESTS ARE OBSERVED, A 1000 FOOT NO-WORK BUFFER SHALL BE PLACED AROUND THE NEST. IF THE BUFFER CANNOT BE MAINTAINED. PROJECT ACTIVITIES WITHIN 1000 FEET OF THE NEST, SHALL BE CONDUCTED BETWEEN JUNE 1 AND SEPTEMBER 15 (OUTSIDE THE NESTING

THIS PROJECT IS IN CLOSE PROXIMITY TO AREAS THAT HAVE HISTORICALLY BEEN USED FOR THE EXPLORATION AND EXTRACTION OF CRUDE OIL. AS A RESULT, THERE IS A POTENTIAL TO ENCOUNTER CRUDE OIL PRODUCTS 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.

SUGGESTED SEQUENCE OF CONSTRUCTION

PHASE 1: CLOSE EW 69

SH 74D TRAFFIC ON EXISTING PAVEMENT, EW 69 TRAFFIC DETOURS TO EW 68

- A CLOSE EW 69 TO THROUGH TRAFFIC FROM SH 74 TO STA. 313+02.
- B DETOUR LOCAL TRAFFIC ONTO SH 74, EW 68, AND NS 303.
- C REMOVE THE EXISTING BRIDGE.
- D BUILD THE PROPOSED BRIDGE AND APPROACHES
- E END DETOUR OPERATIONS AND OPEN TRAFFIC TO EW 69.
- F CONSTRUCT OVERLAY ALONG EW 69 FROM SH 74 TO NS 301 UTILIZING TWO FLAGMEN AS NECESSARY.
- G LAY TBSC TYPE E AS DIRECTED BY THE ENGINEER ALONG NS 301 UTILIZING TWO FLAGMEN AS NECESSARY.

REVISION	DA
ENVIRONMENTAL NOTES	10-1

PAY QUANTITIES - ROADWAY ROADWAY 100					
ITEM	PES NO.	DESCRIPTION		UNIT	QUANTITY
201(A)	0102	CLEARING AND GRUBBING	-	LSUM	1
202(A)	0183	UNCLASSIFIED EXCAVATION	(R-1)	CY	504
202(D)	0184	UNCLASSIFIED BORROW	(R-1,4)	CY	2,517
205(A)	4229	TYPE A-SALVAGED TOPSOIL	(R-5,7)	LSUM	1
221(C)	2801	TEMPORARY SILT FENCE		LF	1,123
221(K)	0600	TEMPORARY FIBER LOG		LF	1,499
230(A)	2806	SOLID SLAB SODDING	(R-7,8)	SY	3,133
233(A)	2817	VEGETATIVE MULCHING	(R-11)	AC	2
241	2832	MOWING	(R-16)	AC	4
307(K)	4300	STABILIZED SUBGRADE		SY	1,603
402(E)	0225	TRAFFIC BOUND SURFACE COURSE TYPE E	(1,2,5)(R-25)	TON	1,365
407(B)	0250	TACK COAT	(4)	GAL	7,065
411(B)	5945	SUPERPAVE, TYPE S3 (PG 64-22 OK)	(R-32)	TON	726
411(C)	5960	SUPERPAVE, TYPE S4 (PG 64-22 OK)	(3)(R-32)	TON	4,929
509(D)	0325	CLASS C CONCRETE	(R-41)	CY	10
613(H)	0450	6" PERFORATED PIPE UNDERDRAIN ROUND	(6)	LF	34
613(I)	1096	6" NON-PERF.PIPE UNDERDRAIN RND.	(6)	LF	12
613(Q)	5946	OUTLET LATERAL HEADWALL		EA	2
619(A)	0920	REMOVAL OF STRUCTURES & OBSTRUCTIONS	(R-48,49)	LSUM	1
619(B)	4728	REMOVAL OF ASPHALT PAVEMENT	(R-49,50)	SY	1,394
619(B)	4780	REMOVAL OF GUARDRAIL	(7)(R-50)	LF	211
619(C)	0924	SAWING PAVEMENT		LF	83
623	0100	(PL)GUARDRAIL CURBING		EA	8
623(A)	0932	BEAM GUARDRAIL W-BEAM SINGLE		LF	213
623(F)	5686	GUARDRAIL ANCHOR UNIT (TYPE D-BF)		EA	8
623(G)	8590	GUARDRAIL END TREATMENT (31")	(9)	EA	8
624(C)	4458	FENCE-STYLE SWF (4 BARBED WIRE)	(R-52)	LF	171
624(C)	4459	FENCE-STYLE SWF (5 BARBED WIRE)	(R-52)	LF	124
853	9069	GUARDRAIL DELINEATORS(TYPE 2, CODE 1)		EA	27

	PAY QUANTITIES - STAKING							
STAKING	600							
ITEM	PES. NO	DESCRIPTION	UNIT	QUANTITY				
642(B)	0096	CONSTRUCTION STAKING LEVEL II	LSUM	1				

	PAY QUANTITIES - CONSTRUCTION							
CONSTR	UCTION	N 640						
ITEM	PES. NO	DESCRIPTION	UNIT	QUANTITY				
220	2800	(SP) SWPPP DOCUMENTATION AND MANAGEMENT	LSUM	1				
640(A)	1426	FIELD OFFICE (8)	EA.	1				
641	1552	MOBILIZATION	LSUM	1				
		I		<u> </u>				

PHASE 2: CLOSE SH 74D DETOUR SH 74D TRAFFIC TO EW 69 AND NS 301

- A CLOSE SH 74D FROM STA. 59+50 TO STA. 76+00 TO THROUGH TRAFFIC, UTILIZING SH 74, EW 69, AND NS 301 AS A DETOUR ROUTE.
- B REMOVE THE EXISTING BRIDGE.
- C BUILD THE PROPOSED BRIDGE AND APPROACHES.
- D END DETOUR OPERATIONS AND OPEN TRAFFIC TO SH 74D.
- E COMPLETE FINISHING OPERATIONS.

PAY QUANTITIES AND NOTES (ROADWAY)

State Job No. <u>28312(04)</u> Sheet No.___

LOGAN COUNTY