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 VERSION) 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.

THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY RIGHT-OF WAY FENCE AS REQUIRED. WHEN THE PORTION OF THE PROJECT THAT REQUIRED THIS FENCE IS COMPLETED, THE TEMPORARY FENCE SHALL BE REMOVED, AND PERMANENT RIGHT-OF-WAY FENCING SHALL BE RESTORED OR INSTALLED IN A MANNER APPROVED BY THE ENGINEER. COST OF TEMPORARY FENCING SHALL BE INCLUDED IN OTHER ITEMS OF ALL 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 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.

THE CONTRACTOR SHALL KEEP THE OPEN TRENCH DRAINED. COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

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.

THE CONTRACTOR SHALL REMOVE AND RESET MAILBOXES AS NECESSARY. MAILBOXES ARE TO, BE MAINTAINED IN AN UPRIGHT POSITION AND ACCESSIBLE TO MAIL CARRIERS 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.

EXCESS ASPHALT AT JOINTS AND CRACKS IN EXISTING PAVEMENT SHALL BE REMOVED FLUSH TO TOP OF PAVING 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.

EROSION CONTROL CONSTRUCTION NOTES

SEED: THE FOLLOWING KINDS OF SEED, AT ACRE-RATES INDICATED BELOW SHALL BE PLANTED ON THE AREAS DESIGNATED FOR SEEDING.

TEMPORARY SEEDING MIX SHALL BE AS FOLLOWS:

KIND OF SEED TO BE FURNISHED	QUANTITY PER ACRE
PERENNIAL RYEGRASS (LOLIUM PERENNE)	20 LBS. OF SEED
CRIMSON CLOVER (TRIFOLIUM INCARNATUM)	12 LBS. OF SEED

PERMANENT SEEDING MIX SHALL BE AS FOLLOWS:

KIND OF SEED TO BE FURNISHED	QUANTITY PER ACRE
PERENNIAL RYEGRASS (LOLIUM PERENNE)	15 LBS. OF SEED
TALL FESCUE (FESTUCA ARUNDINACEA)	20 LBS. OF SEED
LITTLE BLUESTEM (ANDROPOGON SCOPARIUS)	8 LBS. OF SEED
COMMON BERMUDA (CYNODON CACTYLON)	4 LBS. OF SEED
CRIMSON CLOVER (TRIFOLIUM INCARNATUM)	12 LBS. OF SEED
WEEPING LOVEGRASS (EROGROSTIS CURVULA)	6 LBS. OF SEED

SEASONAL PLANTING RESTRICTIONS

THE PLANTING OF TEMPORARY OR PERMANENT SEEDS SHALL BE RESTRICTED TO THE PERIOD FROM SEPTEMBER 1ST TO OCTOBER 15TH AND APRIL 1ST TO JUNE 15TH.

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-5) AN ESTIMATED QUANTITY OF 18,408 CY TOPSOIL TO BE RESERVED FOR PLACEMENT OF APPROXIMATELY 5" ON COMPLETED FORESLOPES, DITCHES AND BACKSLOPES. THIS QUANTITY IS INCLUDED IN THE EARTHWORK BALANCE. ANY ADDITIONAL EXCAVATION REQUIRED IN CUT SECTION TO ALLOW FOR PLACEMENT OF TOPSOIL TO FINAL GRADE SHALL BE INCLUDED IN THE PRICE BID.

(R-7) FOR 205(A), 230(A) & 232(A) PRICE BID TO INCLUDE COST OF 10-20-10 FERTILIZER, ESTIMATED AT 200 POUNDS PER 1000 SQ. YD.

(R-8) FOR 230(A) & 232(A) PRICE BID TO INCLUDE COST OF WATERING, ESTIMATED AT 40 GALLONS PER SQ. YD.

(R-11) THE QUANTITIES ESTIMATED FOR TEMPORARY EROSION AND SEDIMENT CONTROL IS 16.0 ACRES.

(R-16) QUANTITY BASED ON TWO APPLICATIONS.

(R-25) ESTIMATED AT 120 LBS. PER CU. FT.

(R-28) PRIME COAT SHALL BE APPLIED AT AN ESTIMATED RATE OF 0.35 GAL. PER SQ. YD. WHEN APPLIED TO SUBGRADE, AND 0.25 GAL. PER SQ. YD. WHEN APPLIED TO AGGREGATE BASE. THE ACTUAL CUTBACK PRIME COAT REQUIRED FOR PLACEMENT OPERATIONS WILL BE DETERMINED BY THE CONTRACTOR, AND SHALL CONSIDER THE RESIDUE FROM DISTILLATION PERCENTAGE SHOWN IN SECTION 708.03 OF THE STANDARD SPECIFICATIONS.

(R-32) ESTIMATED AT 112 LBS. PER SQ. YD. PER 1" THICK.

(R-41) QUANTITY INCLUDES AN ESTIMATED 90 C.Y. TO BE USED AS DIRECTED BY THE ENGINEER.

(R-46) ANY DRAINAGE STRUCTURE DESCRIBED AS TEMPORARY, SHALL AFTER COMPLETION OF THE PROJECT, BE REMOVED BY AND BECOME THE PROPERTY OF THE CONTRACTOR.

(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 DISPOSED OF BY THE CONTRACTOR IN A MANNER APPROVED BY THE ENGINEER.

(R-50) MATERIALS REMOVED SHALL NOT BE MEASURED FOR PAYMENT UNDER SEC. 202.06 UNCLASSIFIED EXCAVATION.

(R-52) INCLUDES 2% FOR GROUND MEASUREMENT.

(R-53) ALL GATES AND GATE END POSTS FOR STRANDED WIRE FENCE(SWF) SHALL BE CONSTRUCTED AT THE SAME WIDTH AS THE EXISTING, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

(1) ESTIMATED AT 0.075 GAL. PER SQ. YD. PRIOR TO DILUTION.

(2) SEE TYPICAL SECTION, SHEET 2, NOTE 4.

(3) CLEAN OUT EXISTING CULVERTS AND STRUCTURES WITHIN THE PROJECT LIMITS THAT ARE TO REMAIN IN PLACE. NO ADDITIONAL PAYMENT SHALL BE MADE, COST TO BE INCLUDED IN PRICE BID FOR REMOVAL OF STRUCTURES AND OBSTRUCTIONS.

(4) PROVIDE THE FOLLOWING GATES: PAINTED 2" TUBE GATE, GAUGE 16. COST TO INCLUDE MATERIALS TO MOUNT TO STRETCHER POST.

(5) PRICE BID SHALL INCLUDE THE COST OF ANY NUMBERING OR LETTERING TO BE INSTALLED ON NEW MAILBOX IN SAME MANNER AS ON THE EXISTING MAILBOX.

(6) PRICE BID TO INCLUDE COST OF TEMPORARY SEDIMENT REMOVAL.

(7) AT THE LOCATION OF BRIDGE B NEAR STA 1034+50 AND AT THE NORTH BANK OF BIRCH CREEK NEAR STA 1070+00, MONITOR SETTLEMENT OF THE NEW EMBANKMENT CONTINUOUSLY ON A WEEKLY BASIS DURING CONSTRUCTION AND FOR A PERIOD OF 75 DAYS AFTER CONSTRUCTION OF THE EMBANKMENT. THE SETTLEMENT OF THE EMBANKMENT CAN BE MONITORED THROUGH THE INSTALLATION OF SETTLEMENT PLATES. SUBMIT THE DATA FROM THE SETTLEMENT MEASUREMENTS TO ODOT TO DETERMINE IF THE ESTIMATED SETTLEMENT HAS OCCURRED AND THE POST CONSTRUCTION PRIMARY SETTLEMENT IS LIMITED TO LESS THAN 1 INCH. CONSTRUCT SPECIAL EMBANKMENT AREA 1 FROM STA 1029+00 TO STA 1037+50 AND SPECIAL EMBANKMENT AREA 2 FROM STA 1068+00 TO STA 1073+00 IN TWO PHASES AND ALLOW A PERIOD OF 60 DAYS FOR SETTLEMENT OF THE FOUNDATION SOILS AFTER COMPLETION OF EACH PHASE BEFORE BEGINNING ANY SUBSEQUENT PAVING OR EMBANKMENT WORK. SEE PROFILES AND CROSS SECTION SHEETS FOR THE APPROXIMATE TOP OF GRADING LINE FOR PHASE 1. MATERIALS TO BE USED FOR THE NEW EMBANKMENTS MUST HAVE SHEAR STRENGTH PROPERTIES EQUAL TO OR GREATER THAN THE ESTIMATED VALUES USED IN THE GEOTECHNICAL REPORT TUL13R0868 BY KLEINFELDER DATED NOVEMBER 11, 2013 AND THE ADDENDUM TO THE GEOTECHNICAL REPORT 20143417/TUL14R0242 BY KLEINFELDER DATED MARCH 7, 2014. COPIES OF THESE REPORTS ARE AVAILABLE THROUGH ODOT.

(8) A SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION WAS CONDUCTED FOR THE PROPOSED CUT SECTIONS FROM STA 1014+00 TO STA 1028+00 AND FROM STA 1073+00 TO STA 1085+00. THE PROPOSED BEDROCK SLOPE WILL BE POTENTIALLY EASY TO VERY HARD RIPPING IN THE SANDSTONE BEDROCK AND EASY RIPPING IN THE SHALE BEDROCK. PNEUMATIC BREAKERS MAY BE REQUIRED FOR THE EXCAVATION IN THE SANDSTONE BEDROCK. RECOMMENDATIONS REGARDING GEOTECHNICAL ASPECTS OF THE PROJECT CONSTRUCTION ARE PRESENTED IN THE GEOTECHNICAL REPORT TUL13R0871 DATED NOVEMBER 12, 2013. A COPY OF THAT REPORT MAY BE OBTAINED THROUGH ODOT. FILL REQUIRED TO ACHIEVE DESIGN GRADES FOR THE UPPER TWO FEET BELOW THE PAVEMENT SUBGRADE SHOULD CONSIST OF APPROVED MATERIALS FREE OF ORGANIC MATTER AND DEBRIS AND HAVE A MAXIMUM PARTICLE SIZE OF 3 INCHES. THE GEOTECH REPORT STATES THAT ONSITE SOILS ABOVE THE BEDROCK ARE LIMITED FOR USE AS STRUCTURAL FILL. THE SANDSTONE BEDROCK AND SHALE MATERIAL ARE EXPECTED TO BE SUITABLE TO BE USED FOR ROCK FILL MATERIALS. REFERENCE THE GEOTECHNICAL REPORT FOR RESTRICTIONS AND RECOMMENDATIONS FOR THE USE OF THESE MATERIALS.

(9) REMOVAL OF EXISTING PAVEMENT SHALL BE DONE BY COLD MILLING. MILLED PAVEMENT TO BECOME PROPERTY OF ODOT AND STOCKPILED IN A LOCATION DETERMINED BY THE ENGINEER.

ENVIRONMENTAL MITIGATION NOTES

LOCATIONS OUTSIDE THE PROJECT AREA IN THE FOLLOWING AREA MUST NOT BE UTILIZED FOR BORROW, EQUIPMENT STAGING, HAUL ROADS, SPOIL DUMPS OR ANY OTHER OFF-SITE PROJECT-RELATED ACTIVITY.
T24N, R9E, SECTION 11: NW 1/4 OF THE SW 1/4 OF THE SW 1/4 .

NOTE TO CONTRACTOR

THE CONTRACTOR MUST COMPLY WITH SPECIAL PROVISION 202-2(A-D) 09; OSAGE NATION MINERAL RESERVATION SANDY SOIL MINING PERMIT. APPROVAL TO EXCAVATE MATERIAL FROM OSAGE COUNTY BORROW PITS MUST BE ACQUIRED FROM THE BIA. THE APPROVAL PROCESS TYPICALLY REQUIRES THAT AN ENVIRONMENTAL ASSESSMENT BE PERFORMED FOR THE DESIGNATED BORROW AREA AND SUBMITTED TO THE BIA. THIS PROCESS HAS HISTORICALLY TAKEN 4-6 MONTHS TO COMPLETE. ACQUISITION OF THIS APPROVAL IS THE RESPONSIBILITY OF THE CONTRACTOR. IT IS THE INTENT OF THIS PROJECT TO OBTAIN ALL EMBANKMENT MATERIAL FROM LOCATIONS INSIDE THE PROJECT LIMITS.

ITEMS TO BE REMOVED MAY OR MAY NOT BE PRESENT IN ANY SPECIFIED CONDITION.

PARCEL	STATION No.	IMPROVEMENT
4	1043+90 to 1044+00 LT 80'-90' CLS SH-99	REMNANTS FROM OLD 18" CONCRETE DRAIN

SUMMARY OF PAY QUANTITIES

0100 ROADWAY — JP NO. 24261(04)

ITEM NO.	CODE NO.	DESCRIPTION		UNIT	QUANTITY
201(A)	0102	CLEARING AND GRUBBING		LSUM	1.00
202(A)	0183	UNCLASSIFIED EXCAVATION	(7)(R-1)	CY	109617.00
202(C)	0182	ROCK EXCAVATION	(8)(R-1)	CY	68002.00
202(L)	6100	(SP) VIBRATING WIRE PIEZOMETERS	(10)	EA	3.00
202(L)	6105	(SP) VIBRATING WIRE TERMINAL BOXES	(10)	EA	3.00
202(L)	6110	(SP) VIBRATING WIRE READOUT AND DATA COLLECTOR	(10)	EA	3.00
202(L)	6115	(SP) SUPERVISING AND MAINTAINING INSTRUMENTS	(10)	LSUM	1.00
202(L)	6120	(SP) SETTLEMENT PLATE	(10)	EA	11.00
205(A)	4229	TYPE A - SALVAGED TOPSOIL	(R-5)(R-7)(2)	LSUM	1.00
221(C)	2801	TEMPORARY SILT FENCE	(6)	LF	5059.00
221(D)	2803	TEMPORARY SEDIMENT FILTER	(6)	EA	14.00
221(F)	0100	TEMPORARY SILT DIKE	(6)	LF	2933.00
221(G)	0152	TEMPORARY ROCK FILTER DAM TYPE 3	(6)	CY	56.00
230(A)	2806	SOLID SLAB SODDING	(R-7)(R-8)	SY	129306.00
232(A)	2813	SEEDING METHOD A	(R-7)(R-8)	AC	29.00
233(A)	2817	VEGETATIVE MULCHING	(R-11)	AC	29.00
241	2832	MOWING	(R-16)	AC	58.00
303(A)	2100	AGGREGATE BASE TYPE A		CY	11078.00
307(B)	4210	CEMENT KILN DUST		TON	2669.00
307(E)	4240	CEMENTITIOUS STABILIZED SUBGRADE		SY	61725.00
325	5271	SEPARATOR FABRIC		SY	57096.00
402(E)	0225	TRAFFIC BOUND SURFACE COURSE TYPE E	(R-25)	TON	4633.00
407(B)	0250	TACK COAT	(1)	GAL	7548.00
408	5774	PRIME COAT	(R-28)	GAL	34845.00
411(B)	5940	SUPERPAVE, TYPE S3(PG 70-28 OK)	(R-32)	TON	7936.00
411(B)	5945	SUPERPAVE, TYPE S3(PG 64-22 OK)	(R-32)	TON	8961.00
411(C)	5955	SUPERPAVE, TYPE S4(PG 70-28 OK)	(R-32)	TON	6073.00
501(A)	0313	STRUCTURAL EXCAVATION UNCLASSIFIED		CY	10.00
501(G)	6315	CLSM BACKFILL		CY	11.00
509(A)	0319	CLASS AA CONCRETE		CY	29.00
509(D)	0325	CLASS C CONCRETE	(R-41)	CY	973.00
511(A)	0332	REINFORCING STEEL		LB	4065.00
601(B)	0536	TYPE I-A PLAIN RIPRAP		TON	84.00
601(C)	0538	TYPE I-A FILTER BLANKET		TON	28.00
611(A)	2657	MANHOLE (4' DIAMETER)		EA	1.00
611(B)	2680	ADD'L. DEPTH IN MANHOLE (4' DIAMETER)		VF	1.75
613(A)	0493	30" R.C.PIPE CLASS III		LF	286.00
613(A)	0494	36" R.C.PIPE CLASS III		LF	66.00
613(B)	0689	18" CORR. GALV. STEEL PIPE	(R-46)	LF	40.00
613(B)	0690	24" CORR. GALV. STEEL PIPE	(R-46)	LF	60.00
613(B)	0691	30" CORR. GALV. STEEL PIPE	(R-46)	LF	84.00
613(B)	4530	42" X 29" CORR. GALV. STEEL PIPE ARCH	(R-46)	LF	24.00
613(L)	5732	30" PREFAB. CULVERT END SECTION, ROUND		EA	6.00
613(L)	5734	36" PREFAB. CULVERT END SECTION, ROUND		EA	2.00
613(P)	0760	18" GALV. STEEL CULVERT END SECTION ROUND		EA	4.00
613(P)	0761	24" GALV. STEEL CULVERT END SECTION ROUND		EA	4.00
613(P)	0762	30" GALV. STEEL CULVERT END SECTION ROUND		EA	4.00
613(P)	4573	42" X 29" GALV. STEEL CULVERT END SECTION ARCH		EA	2.00
613(W)	4498	18" JACKED CONDUIT		LF	58.00
613(W)	4502	30" JACKED CONDUIT		LF	84.00
613(W)	4504	36" JACKED CONDUIT		LF	38.00
619(A)	0920	REMOVAL OF STRUCTURES & OBSTRUCTIONS	(R-48)(R-49)(R-50)(3)	LSUM	1.00
619(B)	4728	REMOVAL OF ASPHALT PAVEMENT	(R-50)(9)	SY	30902.00
619(B)	4780	REMOVAL OF GUARDRAIL	(R-49)(R-50)	LF	2524.00
623(A)	0932	BEAM GUARDRAIL W-BEAM SINGLE		LF	525.00
623(G)	8590	GUARDRAIL END TREATMENT (31")		EA	4.00
623(I)	8700	GUARDRAIL BRIDGE CONN-THRIE BEAM (31")		EA	4.00
624(A)	4281	FENCE-STYLE WWF		LF	401.00
624(B)	4464	GATES-STYLE WWF (4.5'HIGH X 14'LONG)	(4)	EA	4.00
624(B)	4466	GATES-STYLE WWF (4.5'HIGH X 16'LONG)	(4)	EA	2.00
624(C)	4459	FENCE-STYLE SWF (5 BARBED WIRE)	(R-52)(R-53)	LF	10068.00
629(A)	4958	MAILBOX INSTALLATION-SINGLE	(5)	EA	5.00
629(C)	4960	MAILBOX	(5)	EA	5.00
629(D)	4961	REMOVAL OF MAILBOX INSTALLATION		EA	5.00

(10) PLACEMENT AND MONITORING DETAILS ARE DESCRIBED ON THE 'SETTLEMENT PLATE DETAIL' SHEET NO. 68

OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	OKLA.				

DESCRIPTION	REVISIONS	DATE

DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION DESIGN DIVISION
DRAWN			SH-99 OVER BIRCH CREEK — OSAGE COUNTY
CHECKED			SUMMARY OF PAY QUANTITIES (ROADWAY)
APPROVED			
SQUAD			STATE JOB NO. 24261(04) SHEET NO. 6