GENERAL CONSTRUCTION NOTES (BRIDGE)

ALL CONSTRUCTION AND MATERIALS SHALL COMPLY WITH THE 2009 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION ENGLISH VERSION, EXCEPT AS MODIFIED BY THE PLANS AND SPECIAL PROVISIONS.

THE BRIDGE SITE WILL BE CLOSED TO ALL PUBLIC TRAFFIC DURING CONSTRUCTION, ACCESS WILL BE OPEN TO LOCAL TRAFFIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION TRAFFIC CONTROL. ALL SIGNS, BARRICADES, LIGHTS, AND OTHER TRAFFIC CONTROL DEVICES AND MEASURES, ETC. SHALL BE PROVIDED IN ACCORDANCE WITH THE STANDARDS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION AS REVISED, AS SHOWN ON THE TCS STANDARDS AND ON DETAIL SHEETS. ALL CONSTRUCTION SIGNS WITH (10) SQUARE FEET OR MORE WILL BE DOUBLE POSTED.

ABUTMENT PILING CAPACITY:

THE MAXIMUM FACTORED PILE LOAD FOR EACH HP 12X53 PILE IS 71.6 TONS. ALL PILE SHALL BE AASHTO M270 GRADE 50.

THE FOLLOWING FORMULA (GATES EQUATION) SHALL BE USED TO DETERMINE THE AXIAL LOAD RESISTANCE OF THE DRIVEN FOUNDATION PILES:

AXIAL LOAD RESISTANCE = ϕ [(0.875$\sqrt{E}$ LOG$_{10}$ (10N))−50] (TONS)

WHERE:

ϕ = RESISTANCE FACTOR OF 0.4

E = ENERGY PRODUCED BY THE HAMMER PER BLOW IN FOOT−POUNDS. FOR GRAVITY AND SINGLE ACTING DIESEL HAMMERS, THE VALVE IS BASED ON THE ACTUAL RAM STROKE OBSERVED IN THE FIELD AND MEASURED IN FEET MULTIPLIED BY THE RAM WEIGHT IN POUNDS.

N = AVERAGE NUMBER OF HAMMER BLOWS PER INCH OF PILE PENETRATION FOR THE LAST 10 TO 20 BLOWS DELIVERED TO THE PILE HEAD.

THE ABOVE FORMULA IS ONLY APPLICABLE WHEN:

- THE PILE DRIVING HAMMER HAS A FREE FALL (GRAVITY & SINGLE ACTING HAMMERS ONLY).
- THE HEAD OF THE PILE IS NOT BROOMED, CRUSHED OR OTHERWISE DAMAGED.
- THE PENETRATION IS QUICK AND UNIFORM.
- THERE IS NO APPRECIABLE REBOUND OF THE HAMMER, AND
- A FOLLOWER IS NOT USED.

THE NUMBER OF BLOWS PER INCH OF PILE PENETRATION MAY BE MEASURED EITHER DURING INITIAL DRIVING OR BY RE−DRIVING WITH A WARM HAMMER OPERATED AT FULL ENERGY AFTER A PILE SET PERIOD, AS DETERMINED BY THE ENGINEER.

IF WATER JETS ARE USED IN CONNECTION WITH THE DRIVING, DETERMINE THE AXIAL LOAD RESISTANCE BY THE FORMULA SHOWN ONLY AFTER THE JETS HAVE BEEN WITHDRAWN.

THE CONTRACTOR SHALL GIVE WRITTEN NOTICE TO THE COUNTY, CED #8, AND ODOT DIV 6 FOURTEEN (14) CALENDAR DAYS BEFORE ANY CONSTRUCTION OR DEMOLITION BEGINS ON THIS PROJECT.

PAY ITEM NOTES

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

(9) PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITY. SEE 2009 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, "PLAN QUANTITIES" SECTION 109.01(B).

(10) ITEM "REMOVAL OF EXISTING BRIDGE STRUCTURE" CONSIST OF REMOVAL OF THE EXISTING 2− 30' LONG X 20' I−BEAM SPANS BRIDGE. THE REMOVAL SHALL BE IN ACCORDANCE WITH SPECIFICATION 619.04(b)1 OF STANDARD SPECIFICATION AND IN A MANNER APPROVED BY THE ENGINEER. THE BEAMS ARE TO BE STACKED ON R/W TO BECOME PROPERTY OF THE COUNTY.

(11) SHALL INCLUDE ALL TRAFFIC CONTROL DEVICES NECESSARY TO REGULATE TRAFFIC DURING CONSTRUCTION. THIS ITEM SHALL BE PAID FOR AS LUMP SUM DUE TO THE MINOR EXTENT OF CONSTRUCTION FOR THIS PROJECT. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH TCS STANDARDS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.

ENVIRONMENTAL MITIGATION NOTES

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. ANY ACTIVITIES WHICH WOULD DESTROY ACTIVE NESTS OR HARM EGGS OR BIRDS WOULD VIOLATE THE MIGRATORY BIRD TREATY ACT. SWALLOW USE OF BRIDGE NBI NO. 04935 WAS NOT OBSERVED DURING THE INITIAL SURVEYS CONDUCTED AS PART OF THE BIOLOGICAL STUDIES IN 2015. SWALLOWS MAY OCCUPY THE BRIDGE 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.

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.

T26N R14W:
SECTION 3: NW¼ SW¼ NW¼
SECTION 4: NE¼

T27N R14W:
SECTION 33: NW¼ SW¼

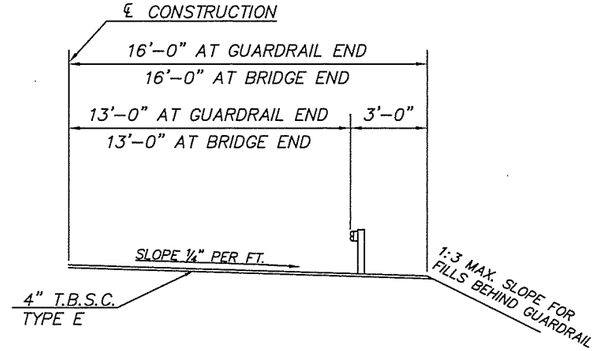
PAY QUANTITIES

200 BRIDGE PCB 100.00 FT. SINGLE SPAN TYPE IV, 26'−0" CL. RDY, TR3 RAILS

ITEM		DESCRIPTION		UNIT	QUANTITY
501(B)	1307	SUBSTRUCTURE EXCAVATION COMMON	(9)	C.Y.	190.00
501(F)	6352	GRANULAR BACKFILL	(9)	C.Y.	88.00
503(A)	1313	PRESTRESSED CONCRETE BEAMS (TYPE IV)	(9)	L.F.	299.00
504(D)	6239	CONCRETE RAIL (TR3)	(9)	L.F.	266.40
506(A)	1322	STRUCTURAL STEEL	(9)	LB.	510.00
507(A)	6172	WEATHERING STEEL FIXED BEARING ASSEMBLY		EA.	3.00
507(B)	6176	WEATHERING STEEL EXP. BEARING ASSEMBLY		EA.	3.00
509(A)	1326	CLASS AA CONCRETE	(9)	C.Y.	79.00
509(B)	1328	CLASS A CONCRETE	(9)	C.Y.	69.80
511(A)	1332	REINFORCING STEEL	(9)	LB.	28,300.00
514(A)	6010	PILES, FURNISHED (HP10X42)		L.F.	130.00
514(A)	6011	PILES, FURNISHED (HP12X53)		L.F.	385.00
514(B)	6292	PILES, DRIVEN (HP10X42)		L.F.	130.00
514(B)	6294	PILES, DRIVEN (HP12X53)		L.F.	385.00
514(L)	6220	PILE SPLICE, H−PILE (NON−BIDDABLE)		EA.	1.00
601(B)	1353	TYPE I−A PLAIN RIPRAP		TON	541.00
601(C)	1355	TYPE I−A FILTER BLANKET		TON	181.00
613(H)	6204	6" PERFORATED PIPE UNDERDRAIN ROUND		L.F.	52.00
613(I)	6207	6" NON−PERFORATED PIPE UNDERDRAIN ROUND		L.F.	30.00
619(D)	1397	REMOVAL OF EXISTING BRIDGE STRUCTURE	(10)	L. SUM	1.00
623(F)	5686	GUARDRAIL ANCHOR UNIT (TYPE D−BF)		EA.	4.00
623(F)	6029	GUARDRAIL ANCHOR UNIT (TYPE A)	(F−50)	EA.	4.00
880(J)	8905	CONSTRUCTION TRAFFIC CONTROL	(11)	L. SUM	1.00

GUARDRAIL SCHEDULE

SHEET	STATION TO STATION	ANCHOR UNITS		LENGTH OF RAIL
		TYPE A	TYPE D−BF	
		EA.	EA.	L.F.
7	94+66.92 TO 95+66.92 RT.	1.00	1.00	100.00
7	94+66.92 TO 95+66.92 LT.	1.00	1.00	100.00
7	96+98.08 TO 97+98.08 RT.	1.00	1.00	100.00
7	96+98.08 TO 97+98.08 LT.	1.00	1.00	100.00
SHEET TOTALS		4.00	4.00	400.00



SHOULDER WIDENING FOR GUARDRAIL

WOODS COUNTY LITTLE EAGLE CHIEF CR.

SUMMARY OF PAY QUANTITIES & GENERAL NOTES (BRIDGE)

J/P NO. 28347(04) SHEET NO. 3