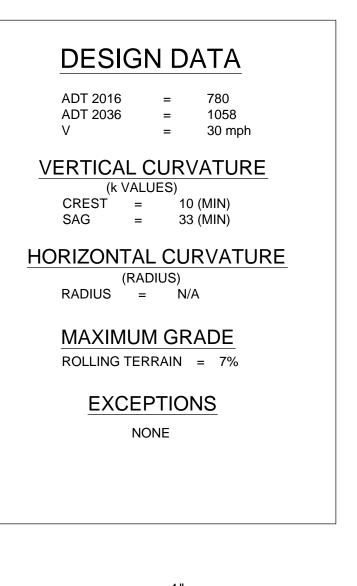
MUSCOGEE (CREEK) NATION

PLANS FOR ASH ROAD BRIDGE

BRIDGE NUMBER 07248
BRIDGE AND DRAINAGE IMPROVEMENTS
OKMULGEE COUNTY



1. HORIZONTAL CONTROL FOR THIS SURVEY IS THE

SYSTEM NAD 83, LAMBERT PROJECTION (SOUTHZONE).

NGS OKLAHOMA STATE PLANE COORDINATE

2. VERTICAL CONTROL IS LEVEL DATUM NAVD 88.

PLAN 1"=50'
PROFILE HOR. 1"=50'
VER. 1"=5'
LAYOUT MAP NTS

SURVEY CONTROL DATA

CONVENTIONAL SYMBOLS

x x	EXISTING FENCE
— DHP — DHP —	OVERHEAD POWER LINE
— w — w —	WATER LINE
	RIGHT OF WAY LINE (EXISTIN
R/W	RIGHT-OF-WAY LINE (NEW)
··_	TOE SLOPE/TOP CUT LINE
ф	POWER POLE
**	POWER POLE W/LIGHT
	TELEPHONE PEDESTAL
$\overset{w\nu}{\oplus}$	WATER VALVE
WM	WATER METER
MB O-	MAILBOX
E	ELECTRICAL BOX
TUG ©	TELEPHONE UNDER GROUND
(B)	TREE
0	SIGN
	UTILITY MARKER

R13E

OKMULGE
POP. 12,321

Ash Road Bridge
Bridge No. 07248

R13E

DESIGN INFORMATION

ROADWAY LENGTH 800 FT. 0.15 MI

PROJECT IS BASED ON G SURVEY



LOCATIONS OF UNDERGROUND UTILITIES WERE OBTAINED FROM THE UTILITY OWNERS. BEFORE DOING ANY WORK WITH HEAVY EQUIPMENT, THE CONTRACTOR SHALL NOTIFY THE UTILITY OWNERS OR "CALL OKIE (OKLAHOMA ONE-CALL)" NOT LESS THAN 48 HOURS IN ADVANCE AND SHALL ESTABLISH THE EXACT LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES.



INDEX OF SHEETS TITLE SHEET

2 TYPICAL SECTIONS
3 SUMMARY OF PAY QUANTITIES

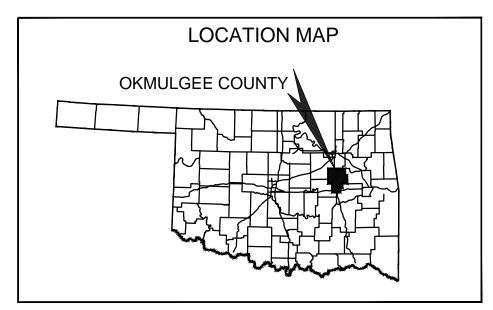
4 SUMMARY OF QUANTITIES 5 STORM WATER POLLUTION PREVENTION PLAN

6 EROSION CONTROL PLAN
7 TEMPORARY TRAFFIC CONTROL PLAN

8 ROADWAY PLAN AND PROFILE 9 GUARDRAIL LAYOUT 10, 11 ROAD CROSS SECTIONS

12, 13 PARALLEL WINGWALL DETAILS
14 DRAINAGE AREA MAP

THE FOLLOWING 2009 OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARDS ARE REQUIRED TO CONSTRUCT THIS PROJECT:



UTILITY CONTACTS

ELECTRIC

MARK TUGGLO

PH: 918-758-2313

PHONE, INTERNET, CABLE

FRANK SKEPIEN PH: 918-596-6815

WATER

CITY OF OKMULGEE PH: 918-756-4159

10

OKLAHOMA NATURAL GAS PH: 918-756-6116

ENGINEERING PROVIDED BY:

CROSS TIMBERS CONSULTING, LLC. P.O. BOX 567 GUTHRIE, OK 73044 CA#6859 EXPIRES JUNE 30, 2018



RANDAL K. OBERLAG, P.E. OKLAHOMA PE # 20798

(ENGLISH UNITS) SHALL GOVERN.

2009 OKLAHOMA STANDARD SPECIFICATIONS AND ROADWAY DESIGN STANDARD DRAWINGS

SURVEY NOTE:

THE CONTRACTOR WILL BE RESPONSIBLE FOR MEASUREMENT OF VOLUMES OF PAY QUANTITIES, SURVEY CONTROL OF PERMANENT FACILITIES, AND FOR STAKING LINE AND GRADE OF ALL CONSTRUCTION FEATURES. ALL RECORDED SURVEY MARKERS AND PROJECT SURVEY CONTROL DISTURBED DURING THE CONSTRUCTION BY THE CONTRACTOR OR HIS/HER SUBCONTRACTORS SHALL BE REESTABLISHED AT NO ADDITIONAL COST TO THE COUNTY, TRIBE OR GOVERNMENT. ALL ITEMS NOTED IN 642.04(A) AS DEPARTMENT RESPONSIBILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR TO BE PROVIDED NATURAL CROSS-SECTIONS BY ELECTRONIC MEDIA. CONTRACTOR SHALL INSURE THE ACCURACY PRIOR TO USE.

ENVIRONMENTAL PROTECTION:

THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY WITH ALL TRIBAL, FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS CONTROLLING POLLUTION OF THE ENVIRONMENT. POLLUTION OF STREAMS, LAKES, PONDS, AND RESERVOIRS WITH FUELS, OILS, BITUMENS, CHEMICALS, OR OTHER HARMFUL MATERIALS AND POLLUTION OF THE ATMOSPHERE FROM PARTICULATE AND GASEOUS MATTER SHALL BE AVOIDED.

ENVIRONMENTAL PRACTICE:

THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL USE PROTECTIVE MEASURES OF AIR, NOISE, AND WATER QUALITY BY THE USE OF PRUDENT CONSTRUCTION PRACTICES SUCH AS DUST CONTROL, OPERATING EQUIPMENT ONLY IN DAYLIGHT HOURS, AND IMPLEMENT STORM WATER MANAGEMENT TO MEET OR EXCEED ALL PERMIT REQUIREMENTS ASSOCIATED WITH THE CONSTRUCTION OF THE PROJECT SITE AND ALL OFF-SITE FACILITIES.

ARCHAEOLOGICAL REQUIREMENT:

WHENEVER ENCOUNTERING ARCHAEOLOGICAL REMAINS DURING THE EXCAVATION OF AN APPROVED OFF-SITE FACILITY OR ON THE PROJECT SITE, THE CONTRACTOR SHALL IMMEDIATELY CEASE THE OPERATION IN THE NOTED AREA OF CONCERN AND NOTIFY THE TRIBAL PROJECT INSPECTOR AND THE ROADS PROGRAM DIRECTOR, WHO WILL CONTACT THE PROPER AUTHORITIES FOR AN EVALUATION.

ITEM 643 CONTRACTOR'S QUALITY CONTROL:

QUALITY CONTROL DURING THE PROGRESS OF CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR MAY PROVIDE QUALITY CONTROL PERSONNEL AND TESTING EQUIPMENT CERTIFIED IN THE APPROPRIATE AREAS BY THE OKLAHOMA HIGHWAY CONSTRUCTION MATERIALS TECHNICIAN CERTIFICATION BOARD OR MAY PROVIDE THE SERVICES OF A CERTIFIED INDEPENDENT TESTING FIRM.

ITEM 880 (J) "CONSTRUCTION TRAFFIC CONTROL":

INCLUDES ALL COST OF FURNISHING, INSTALLATION AND MAINTENANCE OF TRAFFIC CONTROL DEVICES NECESSARY TO CONTROL TRAFFIC DURING CONSTRUCTION. THIS ITEM SHALL BE PAID FOR AS LUMP SUM. TRAFFIC CONTROL SHALL BE IN ACCORDANCE TO STATE STANDARDS AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", CURRENT EDITION.

OFF-SITE FACILITIES:

CONTRACTOR SHALL OBEY ALL LAWS AND REGULATIONS WHEN ESTABLISHING OFF-SITE FACILITIES, INCLUDING PLANT SITES, BORROW PITS, WASTE AREAS, HAUL ROADS, STORAGE SITES, PARKING AREAS, AND SIMILAR AREAS ASSOCIATED WITH THE ACQUISITION, PRODUCTION, AND DELIVERY OF BORROW MATERIAL AND RELATED ROAD BUILDING MATERIALS.

STA: 16+01.44 TO STA: 19+44.98

SUBGRADE IN ROCK

IN AREAS OF ROCK CUT THE TOP 6" OF SUBGRADE SHALL MEET THE REQUIREMENTS OF SELECT BORROW, SECTION 705.01, COST SHALL BE INCLUDED IN PAY ITEM SUBGRADE METHOD B.

GENERAL NOTES

- (1) ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION, UNLESS OTHERWISE NOTED IN THE CONTRACT DOCUMENTS.
- (2) THE CONTRACTOR SHALL GIVE NOTICE TO THE MUSCOGEE (CREEK) NATION IN WRITING FOURTEEN (14) DAYS BEFORE WORK BEGINS ON PROJECT.
- (3) TIME CHARGES SHALL BEGIN WHEN THE CONTRACTOR BEGINS WORK OR ON THE EFFECTIVE DATE OF THE NOTICE TO PROCEED WHICHEVER HAPPENS FIRST, AND SHALL END WHEN SUBSTANTIAL COMPLETION IS APPROVED BY THE MUSCOGEE (CREEK) NATION.
- (4) THE CONTRACTOR SHALL CONFINE HIS WORK WITHIN THE LIMITS OF RIGHT-OF-WAY. ANY DAMAGE CAUSED BY THE CONTRACTOR OUTSIDE OF THE LIMITS OF THE RIGHT-OF-WAY WILL BE REPAIRED OR RESTORED TO THE ORIGINAL CONDITION OR BETTER AT THE CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE MUSCOGEE (CREEK) NATION.
- (5) SUBSTANTIAL COMPLETION IS DEFINED AS WHEN ALL PAVING OPERATIONS, STRIPING OPERATIONS, AND BACKFILL OPERATIONS HAVE BEEN COMPLETED TO THE SATISFACTION OF THE MUSCOGEE (CREEK) NATION.
- (6) GEOGRID SHALL BE TENSAR TRIAX TX 130S OR 140S (OR APPROVED EQUAL).

GENERAL ROADWAY NOTES

- T.B.S.C. SURFACES SHALL BE SPRINKLED WITH WATER AND ROLLED WITH A PNEUMATIC ROLLER IN A MANNER APPROVED BY THE ENGINEER.
- G-48) 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

TOPSOIL NOTES

THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL WITHIN THE LIMITS OF CONSTRUCTION. STOCKPILE THE MATERIAL AND REPLACE THE TOPSOIL ON THE FINISHED SLOPES OF THE GRADING SECTION. ALL ADDITION COSTS NOT COVERED IN OTHER ITEMS SHALL BE INCLUDED IN THE LUMP SUM TOPSOIL ITEMS AS FOLLOWS:

EXCAVATION SECTION:

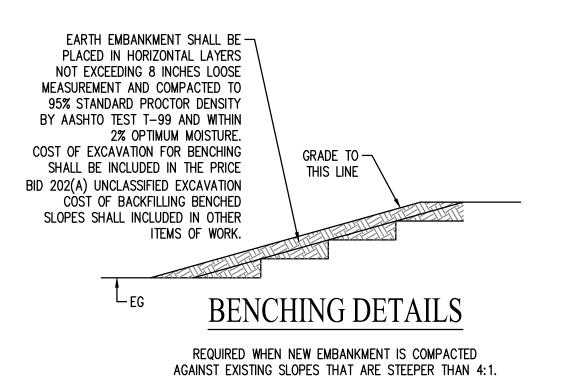
THE VOLUME OF TOPSOIL IS INCLUDED IN THE UNCLASSIFIED EXCAVATION QUANTITIES. CONTRACTORS ARE TO INCLUDE ANY ADDITIONAL COST TO REMOVE, STOCKPILE AND REPLACE THE MATERIAL ON THE FINISHED GRADE SLOPES IN THE LUMP SUM TOPSOIL ITEM.

EMBANKMENT SECTION:

DETERMINE THE AMOUNT OF TOPSOIL IN THESE AREAS AND INCLUDE ALL COSTS TO REMOVE, STOCKPILE AND REPLACE MATERIAL ON THE FINISHED GRADE SLOPES IN THE LUMP SUM TOPSOIL ITEM.

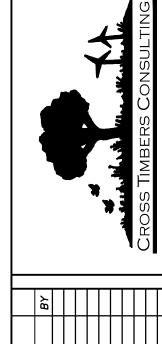
GENERAL TRAFFIC NOTES

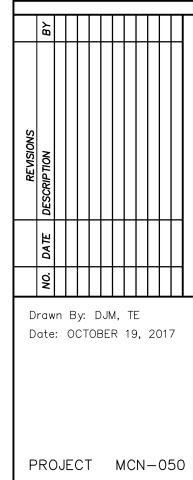
(C-1) ANY SIGNS AND/OR DELINEATORS WHICH ARE TO BE REMOVED DURING THIS PROJECT WILL BE STORED IN A PROTECTED AREA DESIGNATED BY THE ENGINEER, UNTIL SUCH A TIME THAT THEY ARE TO BE RESET BY THE CONTRACTOR. COST OF THIS WORK TO BE INCLUDED IN OTHER ITEMS OF WORK.



VPICAL ROAD SECTION & ISECTION SECTION SECTION R-13-R

CROSS TIMBERS
CONSULTING, LLC





GENERAL CONSTRUCTION NOTES

Grading and Site work

- (G-4) 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 TRAFFIC CONTROL DROP-OFF STANDARD TCS29-1 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.
- (G-6) 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.
- (G-7) 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. ALL COST TEMPORARY FENCING SHALL BE INCLUDED IN OTHER ITEMS OF WORK.
- (G-8) 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.
- (G-9) 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.
- (G-11) 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.
- (G-13) THE CONTRACTOR SHALL KEEP THE OPEN TRENCH DRAINED. COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

Erosion Control

(G-30) 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.

Mailboxes

(G-32) 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.

Surfacing

- (G-36) SURFACING OF RETURNS, UNLESS OTHERWISE SHOWN ON THE PLANS, SHALL BE OF THE SAME MATERIAL (BASE AND SURFACE) AS THAT OF THE ABUTTING SHOULDER OF THE MAINLINE. BASE AND SURFACE THICKNESS SHALL BE THE THICKNESS SHOWN ON PLANS.
- (G-37) T.B.S.C. SURFACES SHALL BE SPRINKLED WITH WATER AND ROLLED WITH A PNEUMATIC ROLLER IN A MANNER APPROVED BY THE ENGINEER.

Final clean up

- (G-46) PRIOR TO FINAL ACCEPTANCE, ALL EXPOSED CURB SURFACES OR WINGWALL SURFACES SHALL BE CLEANED OF ALL DISCOLORATION SUCH AS ASPHALT STAIN, TIRE MARKS, OR OTHER DISFIGUREMENT.
- (G-47) EXCESS ASPHALT AT JOINTS AND CRACKS IN EXISTING PAVEMENT SHALL BE REMOVED FLUSH TO TOP OF PAVING IN A MANNER APPROVED BY THE ENGINEER.

PAY QUANTITY NOTES

- (R-7) PRICE BID TO INCLUDE COST OF 10-20-10 FERTILIZER, ESTIMATED AT 200 POUNDS PER 1000 SQ. YDS.
- PRICE BID TO INCLUDE COST OF WATERING, ESTIMATED AT 40 GALLONS PER SQ. YD.
- (R-25) ESTIMATED AT 120 LBS. PER CU. FT.
- (R-32) ESTIMATED AT 112 LBS. PER SQ. YD. PER 1" THICK.
- 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.
- (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.

TRAFFIC PAY ITEM NOTES

C-25) ALL CONSTRUCTION TRAFFIC CONTROL WILL BE IMPLEMENTED ACCORDING TO CONSTRUCTION PLANS, AND INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (CURRENT EDITION), AND COMPLIANT WITH APPLICABLE O.D.O.T. STANDARD DRAWINGS. PRICE BID FOR THIS ITEM SHALL BE PAYMENT IN FULL FOR THE INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF ALL NECESSARY CONSTRUCTION TRAFFIC CONTROL DEVICES AND PAVEMENT MARKINGS REQUIRED FOR COMPLETION OF THE PROJECT.

ALL SIGNS AND BARRICADES, WHICH ARE SHOWN WITH TYPE 'A' LIGHTS IN THE STANDARD DRAWINGS SHALL HAVE THE CORRESPONDING LIGHT ATTACHED DURING NON-DAYLIGHT HOURS.

(TS-19) QUANTITY SHOWN INCLUDES 1600 L.F. TRAFFIC STRIPE
(PLASTIC)(WHITE) AND 1600 L.F. TRAFFIC STRIPE
(PLASTIC)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF
FOUR INCH (4") WIDE TRAFFIC STRIPE.

PAY ITEM NOTES

(1) LUMP SUM EARTHWORK:

INCLUDES ALL EXCAVATION, BORROW, AND EMBANKMENT TO COMPLETE THE ROADWAY PORTION OF THE PROJECT AS INTENDED BY THE PLANS AND SPECIFICATIONS. TRENCHING FOR PIPE INSTALLATIONS AND REINFORCED CONCRETE BOX IS ALSO INCLUDED IN THIS QUANTITY. A 10% COMPACTION FACTOR WAS ADDED TO THE EMBANKMENT QUANTITY. THE ESTIMATED QUANTITY OF EXCAVATION AND EMBANKMENT IS: (EXCAVATION ESTIMATE INCLUDES EXISTING ROADWAY)

EXCAVATION:	WASTE:	EMBANKMEN	
(CU. YDS.)	(CU. YDS.)	(CU. YDS.)	
732	268	464	

- (2) PRIOR TO PAVEMENT REMOVAL, ALL PAVEMENT SHALL BE SAW CUT, FULL DEPTH.
- (3) THE PRICE BID FOR REMOVAL OF ASPHALT WILL INCLUDE THE ENTIRE EXISTING ROADWAY SHOWN ON THE PLANS, TO WHATEVER DEPTH IS ENCOUNTERED.
- (4) ESTIMATED AT 100 LBS PER S.F. (18" THICK).
- (5) THE CONTRACTOR IS RESTRICTED FROM INCORPORATING ANY BORROW SOIL CONTAINING GYPSUM INTO THE SUBGRADE. RESTRICT BORROW SOILS W/SULFATE CONCENTRATION GREATER THAN 1000 PARTS PER MILLION (PPM).
- (6) MIXING WATER USED IN SUBGRADE STABILIZATION TO BE TESTED FOR SULFATES.
- (7) DOES NOT INCLUDE REMOVAL OF ASPHALT PAVEMENT QUANTITY INCLUDED IN ITEM 619(B) 4728 PER NOTE R-50.
- (8) CONTRACTOR SHALL REMOVE ALL SEDIMENTATION DEVICES FROM THE PROJECT LIMITS AFTER CONSTRUCTION IS ACCEPTED AS COMPLETE.
- (9) MEASURE FOR AGGREGATE BASE IS BASE ON THEORETICAL DIMENSIONS.
- (10) ESTIMATED AT 0.05 GAL. PER SQ. YD. PRIOR TO DILUTION.
- (11) PRIOR TO PAVEMENT REMOVAL ALL PAVEMENT SHALL BE SAW CUT TO FULL DEPTH.
 THE PRICE BID FOR REMOVAL OF ASPHALT WILL INCLUDE THE ENTIRE EXISTING
 ROADWAY AS SHOWN ON THE PLANS. TO WHATEVER DEPTH IS ENCOUNTERED.
- (12) CONTRACTOR SHALL INSTALL GUARDRAIL (31" SYSTEM) FOR ROADWAY SECTIONS PER ODOT DETAILS GHW1-1, GHW2-1, SKT-1. GUARDRAIL SHALL BE PLACED ON TOP OF RCB WINGWALL, SPECIAL STEEL POSTS SHALL BE MANUFACTURED TO ACCOMMODATE GUARDRAIL ON RCB WINGWALL. COST OF MANUFACTURING STEEL POSTS SHALL BE CONSIDERED SUBSIDIARY TO PRICE OF GUARDRAIL.
- (13) INCLUDES WINGWALLS AND BARREL SECTIONS.
- (14) INCLUDES 267 CY AGGREGATE AND 534 SY GEOSYNTHETIC FABRIC (TENSAR RS-580i) UNDER THE RCB.

		SUMMARY OF ESTIMATED QUAN	ITITIES		
PAY NO.	ITEM NO.	ITEM DESCRIPTION	NOTES	UNIT	QUANTITY
0102	201 (A)	CLEARING AND GRUBBING	7	L.SUM	1
0105	202 (B)	MUCK EXCAVATION		CY	267
0185	202 (H)	EARTHWORK		L.SUM	1
2800	220	SWPP DOCUMENTATION & MANAGEMENT		L.SUM	1
2801	221 (C)	TEMPORARY SILT FENCE	8	LF	1688
0100	221 (F)	TEMPORARY SILT DIKE	8	LF	40
2806	230 (A)	SOLID SLAB SODDING	(R-7)(R-8)	SY	711
2100	303 (A)	AGGREGATE BASE (TYPE A)	9, 14	CY	742
0149	310 (B)	SUBGRADE METHOD "B"		SY	2,852
0100	326 (B)	GEOSYNTHETIC FABRIC (TENSAR RS-580i)	14	SY	3,386
0225	403 (E)	T.B.S.C. TYPE E	(R-25)	TON	179
0250	407 (B)	TACK COAT	10	GAL	138.2
5945	411 (A)	SUPERPAVE TYPE S3 (PG 64-22 OK)	(R-32)	TON	619.0
5955	411 (B)	SUPERPAVE TYPE S4 (PG 64-22 OK)	(R-32)	TON	304.5
1326	509 (A)	CLASS AA CONCRETE	13	СҮ	438.14
1332	511 (A)	REINFORCING STEEL	13	LBS	77,806
1351	601 (A)	TYPE I PLAIN RIPRAP	4	TON	343
0920	619 (A)	REMOVAL OF STRUCTURES & OBSTRUCTIONS	(R-48)(R-49)	L.SUM	1
4725	619 (B)	REMOVAL OF FENCE		LF	57
4228	619 (B)	REMOVAL OF ASPHALT PAVEMENT	3,11(R-49)(R-50)	SY	1524
0924	619 (C)	SAWING PAVEMENT	2	LF	38
0932	623 (A)	BEAM GUARDRAIL W-BEAM SINGLE	12	LF	425
8590	623 (G)	GUARDRAIL END TREATMENT 31"		EA	4
4459	624 (C)	FENCE-STYLE SWF (5 BARRED WIRE)	(R-52)(R-53)	LF	57
1399	641	MOBILIZATION		LSUM	1
0096	642 (B)	CONSTRUCTION STAKING LEVEL II		LSUM	1
0087	643	CONTRACTOR QUALITY CONTROL	(SP)	LSUM	1
9033	853	DELINEATORS (TYPE 2 CODE 1)		EA	8
8812	855 (A)	TRAFFIC STRIPE (PLASTIC) 4" WIDE	(TS-19)	LF	3200

(TC-25)

LSUM

1

880 (J) | CONSTRUCTION TRAFFIC CONTROL

PROJECT MCN-050

EXISTING STRUCTURE REMOVAL					
STATION LOCATIONS	DESCRIPTIONS				
17+54.00 CL	BRIDGE ABUTMENT				
17+86.26 CL	BRIDGE SUPPORT				
18+19.34 CL	BRIDGE ABUTMENT				

EXISTING PAVEMENT REMOVAL						
BEGIN STATION	END STATION	APPROX. WIDTH (FT)	SAWING PAVEMENT 619 (C) (LF)	AREA (SY)	DESCRIPTION	
13+82.14	17+52.33	14 - 19	18.5	748	Base on Survey pavement area.	
18+19.54	21+82.19	14 - 20	19.5	776	Base on Survey pavement area.	
	TOTAL		38	1524		

RIGHT-OF-WAY FENCING						
BEGIN STATION		END STATION		STYLE SWF 624 (C) (LF)	GALVANIZED STEEL GATE	
17+17	LT	17+57	LT	40		
18+10	RT	18+27	RT	17		
	TO	57	0			

SUMMARY OF SURFACING

METHOD "B" | REINFORCEMENT

SUBBASE

310 (B)

607.80

1577.07

667.50

2852.4

GEOGRID

326 (B)

SY

607.80

1577.07

667.50

2852.4

AGG. BASE

TYPE A

303 (A)

CY

101.30

262.85

111.25

475.4

ASPHALT

TYPE S3

(PG 64-22 OK)

411 (A)

TON

131.61

342.87

144.54

619.0

STATION TO STATION (CRL)

13+82.14 TO 15+64.48

15+64.48 TO 19+81.94

19+81.94 TO 21+82.19

TOTAL

ASPHALT

TYPE S4

(PG 64-22 OK)

411 (B)

TON

64.67

168.84

71.02

304.5

	SUMMARY OF EARTHWORK							
STATION BEGIN	STATION END	UNCLASSIFIED EXCAVATION 202.04	EMBANKMENT 202.4	UNCLASSIFIED BORROW 202.14	WASTE			
		CU. YD.	CU. YD.	CU. YD.	CU. YD.			
13+82	21+82	732	464.00	0.00	268.00			
ТО	TAL	732	464	0	268			
		NOTE: QUANTITY DOES NOT INCLUDE TRENCH EXCAVATION.						

	SUMMARY	OF EROSION CONTROL	
STATION BEGIN	STATION END	LOCATION AND DESCRIPTION	SOLID SLAB SODDING 230(A)
			S.Y.
13+82	21+82	LT & RT SIDE SLOPE	711.1
13.02	21.02	ET CHT SIDE SEOTE	, , , , , ,
	<u>I </u>	Δ1	711
	101	AL .	'11

	SUMMARY OF SILT FENCE AND SILT DIKES					
STATION TO STATION	LOCATION	SILT FENCE	STATION	LOCATION	SILT DIKES	
STATION TO STATION	LUCATION	L.F.	STATION	LOCATION	L.F.	
13+14 TO 17+18	LT	404	13+82 TO	EVERY 50' (LT & RT)	8	
13+14 TO 17+33	RT	419	16+00	LVERT 50 (ET & RT)		
18+09 TO 22+50	LT	441	16+00 TO	EVERY 20' (LT & RT)	12	
18+26 TO 22+50	RT	424	17+27	LVERT 20 (ET & RT)		
			18+17 TO	I FVFRY /U`U I & R I I		
			19+25	,	12	
			19+65 TO 21+35 EVERY 50' (LT & RT)		8	
TOTAL		1688.0			40	

SUMMARY OF GUARDRAILS (31" SYSTEM)						
STATION TO STATION	W-BEAM (SINGLE) 623 (A)	G.R. END TREATMENT 623 (G)	G.R. DELINEATORS 853			
	L.F.	EA.	EA.			
16+21 - 19+33, 14' RT	212.5	2	4			
16+12 - 19+25, 14' LT	212.5	2	4			
TOTAL	425	4	8			

TRAFFIC STRIPE

(PASTIC) (4" Wide) 855 (A)

LF

660

1920

620

3200

T.B.S.C.

TYPE E 403

TON

NA

179.21

NA

179.2

TACK COAT

407 (B)

GAL

29.38

76.53

32.26

138.2

IMBERS

Drawn By: DJM, TE Date: OCTOBER 19, 2017

PROJECT MCN-050

PROJECT MCN-050

PROJECTS LIMITS: B.O.P. STARTING FROM APPROXIMATELY 382' EAST OF THE SW **SOIL STABILIZATION PRACTICES:** CORNER, OF THE SOUTHEAST QUARTER OF SECTION 16, T13N, R13E. TEMPORARY SEEDING PROCEEDING EAST 800' TO E.O.P. PERMANENT SODDING. SPRIGGING OR SEEDING _VEGETATIVE MULCHING SOIL RETENTION BLANKET PRESERVATION OF EXISTING VEGETATION PROJECT DESCRIPTION: GRADING, DRAINAGE, BRIDGE REPLACEMENT AND SURFACING OF AN EXISTING COUNTY ROAD; 22' WIDE ASPHALT ROADWAY WITH 3' ASPHALT PLANS OR AS DIRECTED BY THE ENGINEER. SHOULDERS (28' TOTAL ROADWAY WIDTH) STRUCTURAL PRACTICES: SUGGESTED SEQUENCE OF CONSTRUCTION: 1. INSTALL TRAFFIC CONTROL TEMPORARY BRUSH SEDIMENT BARRIERS 2. INSTALL SEDIMENTATION CONTROLS AS AREAS BECOME DISTURBED. TEMPORARY SILT FENCE 3. REMOVE EXISTING BRIDGE. TEMPORARY SILT DIKES 4. INSTALL RCB. TEMPORARY BALE BARRIERS _DIVERSION, INTERCEPTOR OR PERIMETER DIKES 5. CLEAR, GRUB AND STOCKPILE TOPSOIL. DIVERSION, INTERCEPTOR OR PERIMETER SWALES 6. BEGIN FENCING, INSTALLATION OF STRUCTURES AND GRADING. SANDBAG BERMS 7. COMPLETE ROADWAY GRADING. ROCK FILTER DAMS 8. INSTALL VEGETATIVE MULCHING. TEMPORARY SLOPE DRAINS CONSTRUCT ROADWAY BASE AND PAVING. PAVED DITCH W/ DITCH LINER PROTECTION TEMPORARY DIVERSION CHANNELS 10. COMPLETE FINE GRADING AND INSTALL PERMANENT EROSION CONTROL. RIP RAP TEMPORARY STREAM CROSSING TEMPORARY SEDIMENT BASINS TEMPORARY SEDIMENT TRAPS TEMPORARY SEDIMENT FILTERS TEMPORARY SEDIMENT REMOVAL INLET SEDIMENT FILTERS STABILIZED CONSTRUCTION EXIT SPECIAL INSTRUCTIONS: NONE OFFSITE VEHICLE TRACKING: TOTAL AREA TO BE DISTURBED: APPROXIMATELY 1.3 ACRES HAUL ROADS DAMPENED FOR DUST CONTROL NOTE: THIS AREA IS TO BE CALCULATED AS "R/W TO R/W" FOR EXTENDS OF THE PROJECT. INCLUDING ANY INCIDENTAL CONSTRUCTION. X EXCESS DIRT ON ROAD REMOVED DAILY WEIGHTED RUNOFF COEFFICIENT: 0.38 NOTE: THIS SHOULD BE DETERMINED BY THE HYDRAULIC DESIGNER FOR THE PROJECT. THIS VALUE SHOULD BE THE AVERAGE "C" FACTOR USED ON THE PROJECT. IT SHOULD BE BASED ON THE ANTICIPATED FUTURE LAND USE.

SITE DESCRIPTION

NAME OF RECEIVED WATERS: DEEP FORK CREEK

WHICH IS RECEIVING STORM WATER RUNOFF.

NOTE: THIS SHOULD DESCRIBE EACH NAMED CREEK, RIVER OR BODY OF WATER

EROSION AND SEDIMENT CONTROLS

NOTE: TEMPORARY EROSION CONTROL METHODS ARE TO BE USED ON ALL DISTURBED AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR OVER 21 DAYS. METHODS USED WILL BE AS SHOWN ON

X LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN

NOTES:

CONTRACTOR SHALL REMOVE ALL SEDIMENT CONTROL DEVICES FROM PROJECT LIMITS AFTER CONSTRUCTION IS APPROVED AND COMPLETED.

REVISIONS WERE MADE TO THE MAINTENANCE AND INSPECTION PORTION OF THE CONTRACTORS RESPONSIBILITIES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING

MAINTENANCE AND INSPECTION:

All erosion and sediment controls will be maintained in good working order from the beginning of construction until an acceptable vegetative cover is established. Inspection by the Contractor and any necessary repairs shall be performed once every seven (7) calendar days and within fourty-eight (48) hours after any storm event greater than one-half (1/2) inches of rain within a twenty-four (24) hour period (as recorded by a non-freezing rain gauge to be located on site). Potentially erodible areas, drainageways, material storage, structural devices, construction entrances and exits along with erosion and sediment control location are examples of sites that need to be inspected.

WASTE MATERIALS:

Proper management and disposal of construction waste material is required by the Contractors. Materials include stockpiles, surplus, debris and other by-products from the construction process. Practices include disposal, proper materials handling spill prevention and cleanup measures. Controls and practices shall meet the requirements of all Federal, State and Local agencies.

HAZARDOUS MATERIALS:

Proper management and disposal of hazardous waste materials is required. The Contractor is responsible for following manufacturer's recommendations, State and Federal regulations to ensure correct handling, disposal spill prevention and cleanup measures. Examples include but are not limited to: paints, acids, cleaning solvents, chemical additives, concrete curing compounds and contaminated soils.

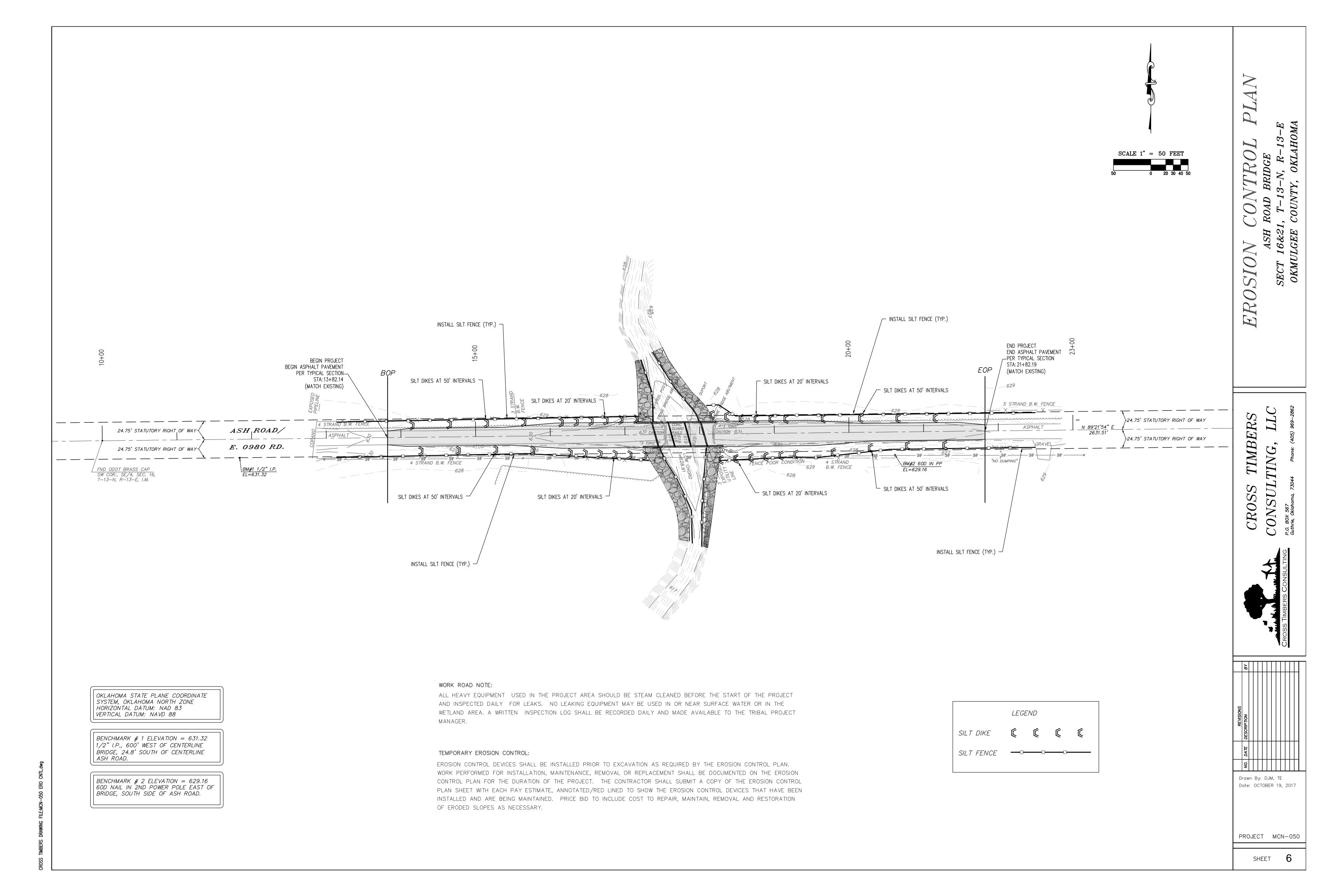
GENERAL NOTES:

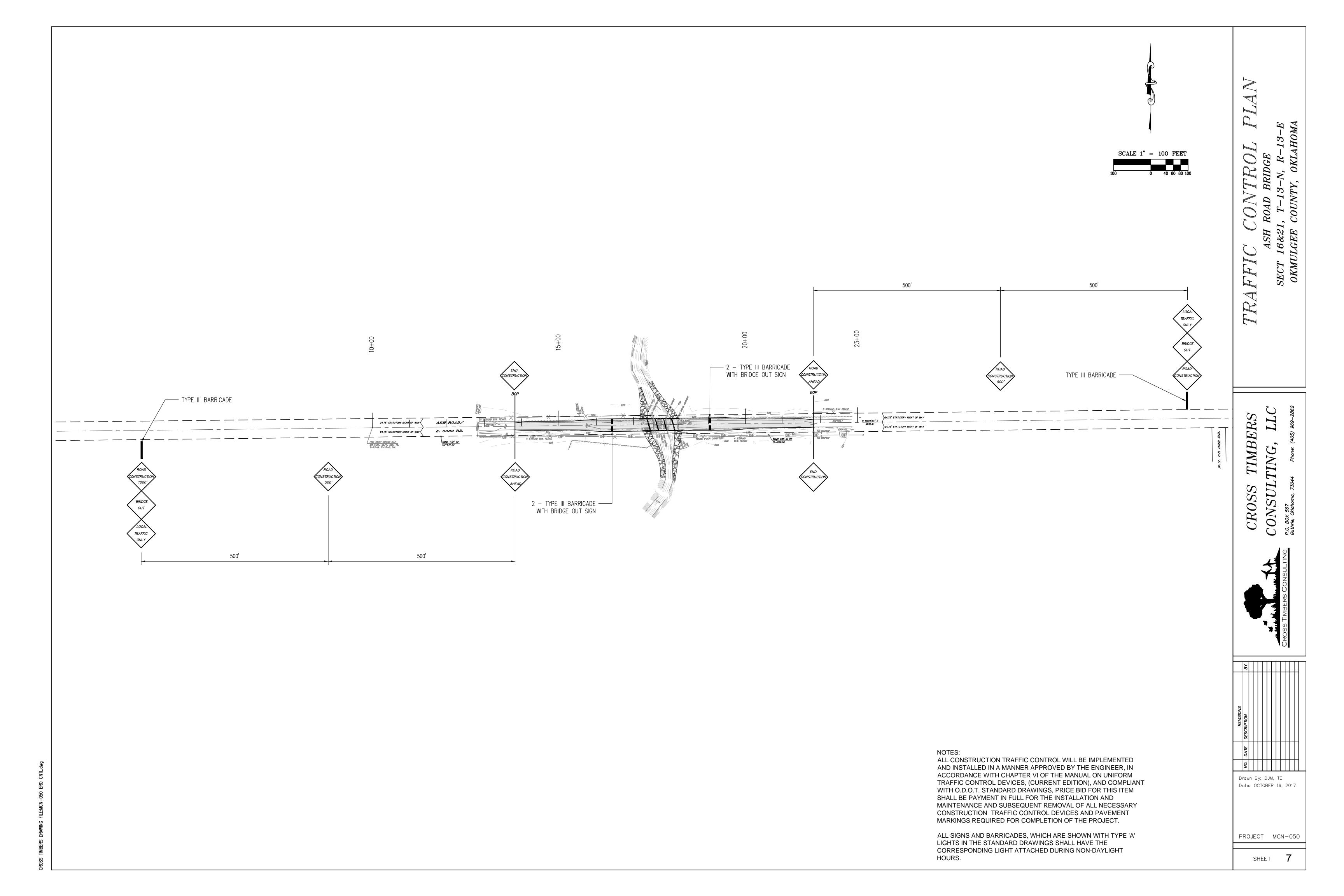
A Storm Water Pollution Prevention Plan (SWPPP) is required to comply with the Oklahoma Pollution Discharge Elimination System (OPDES) regulations. This plan is developed during the design phase, confirmed in the pre-work meeting and available on the job site, along with copies of the Notice of Intent (NOI) forms that have been filed with the Environmental Protection Agency (EPA). This basic goal of stormwater management management is to improve water quality by reducing pollutants in storm water discharges. Runoff from sites has a potential for pollution due to exposed soils and presence of hazardous materials used in the construction process. The prevention of soil erosion, containment of hazardous materials and/or the interception of these pollutants before they leave the construction site are the best practices for controlling storm water pollution.

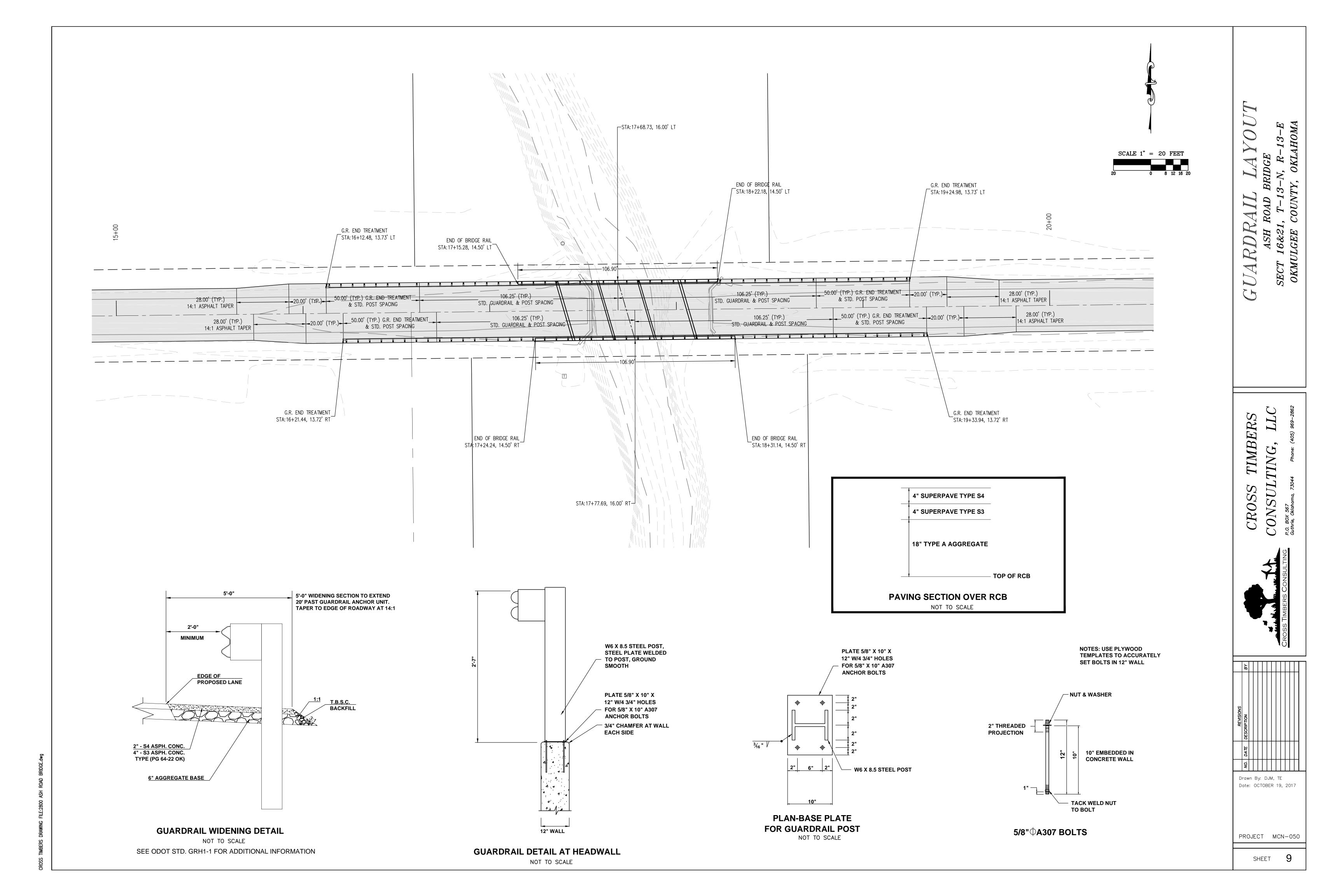
The following Subsections of ODOT's Standard Specification book should be noted:

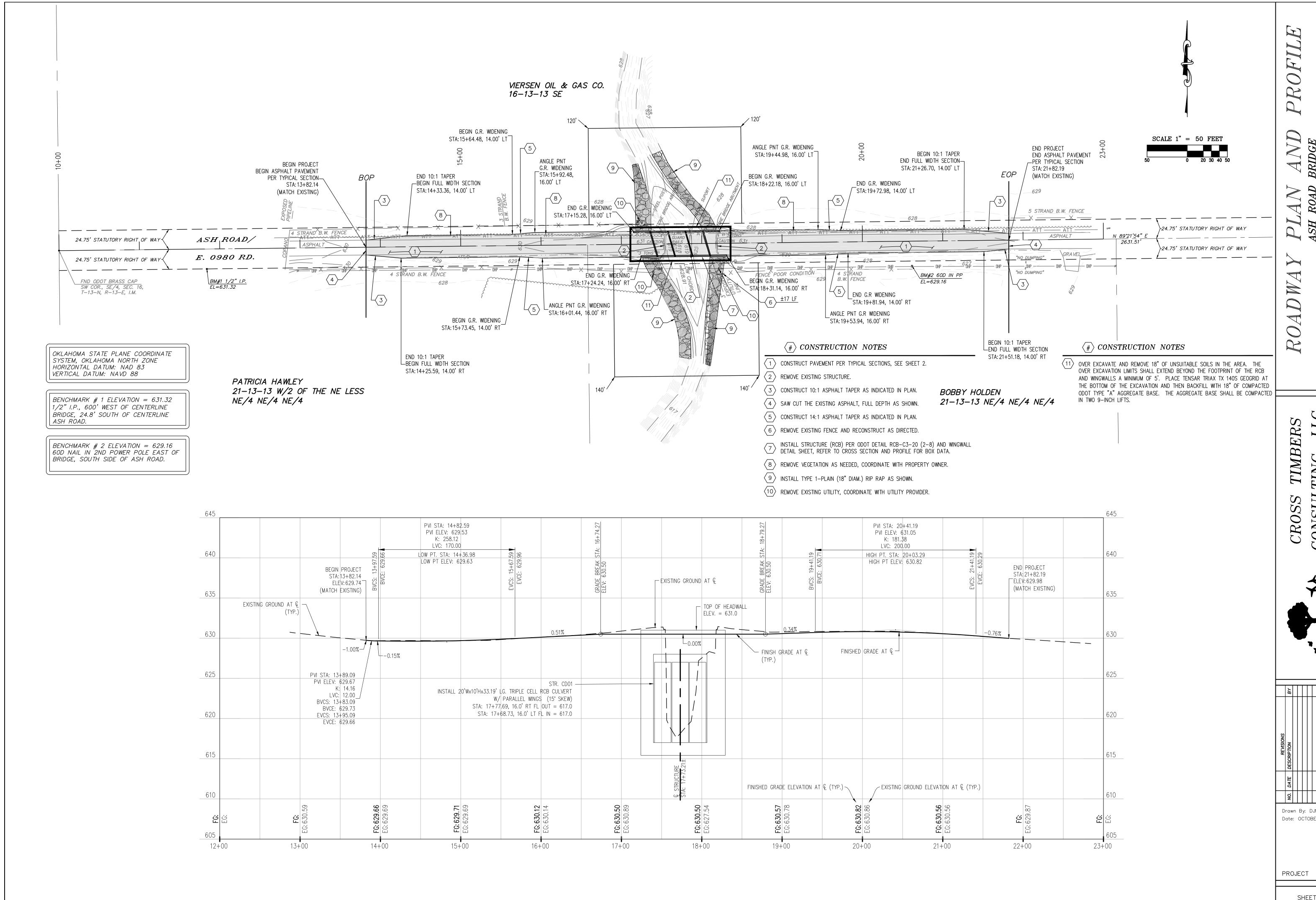
Bonding Requirements 104.08 Final Cleaning Up Storage of Materials 106.06 107.01 Laws To Be Observed 107.15 Contractor's Responsibility for Work 220.01 & 220.04 Temporary Erosion and Sediment Control

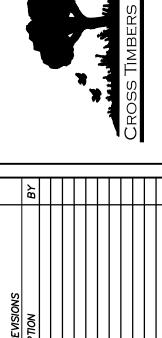
NOTE: NOTICE OF INTENT (NOI) SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN A GENERAL STORMWATER PERMIT FROM THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY. THE CONTRACTOR SHALL NOT PROCEED WITH PROJECT WORK UNTIL THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY HAS NOTIFIED THE MUSCOGEE (CREEK) NATION OF APPROVAL. THE CONTRACTOR SHALL GIVE A COPY OF THE NOI TO THE MUSCOGEE (CREEK) NATION ROADS MANAGER AND A COPY SHALL BE POSTED ON THE PROJECT AT ALL TIMES.





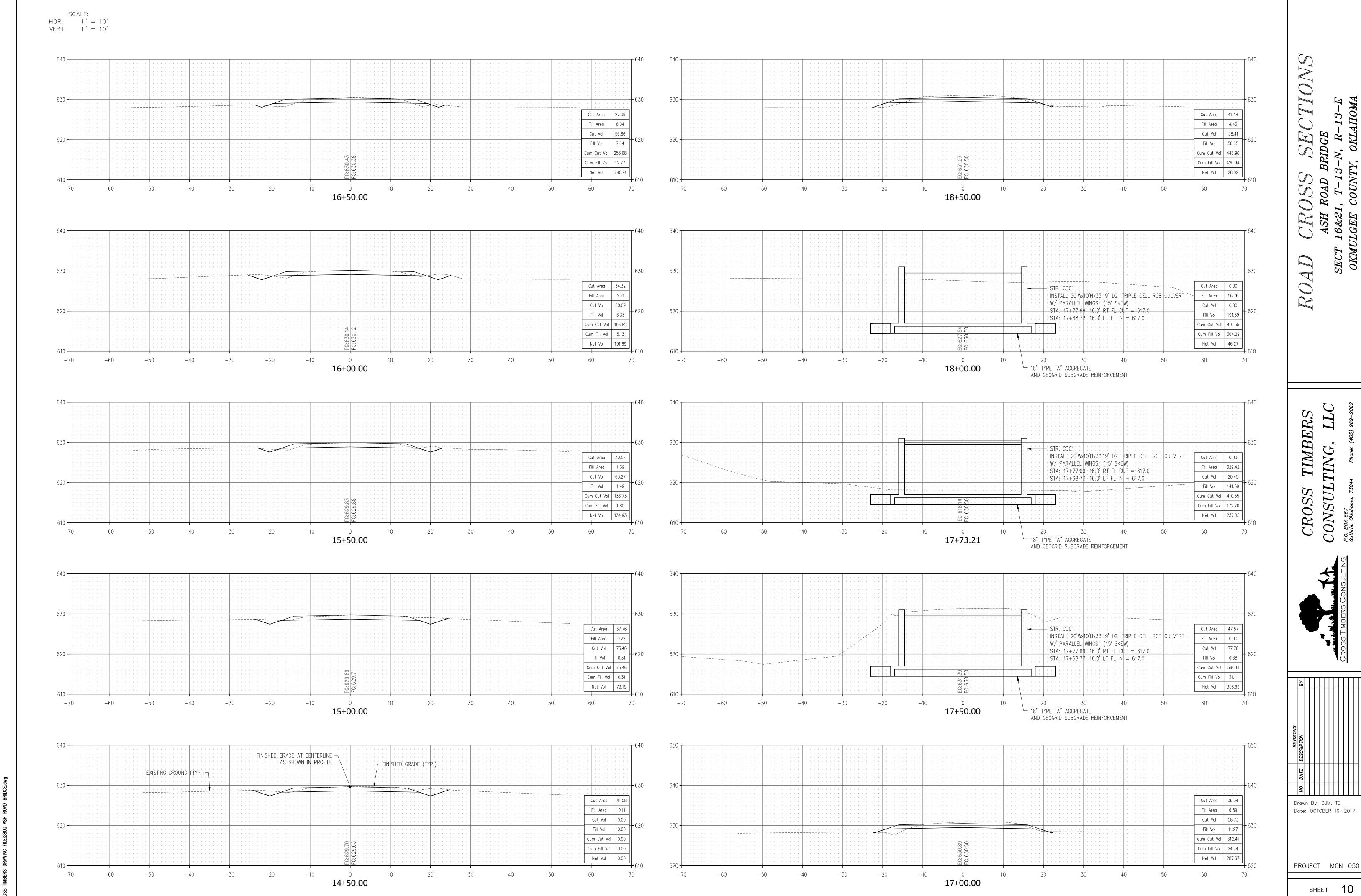


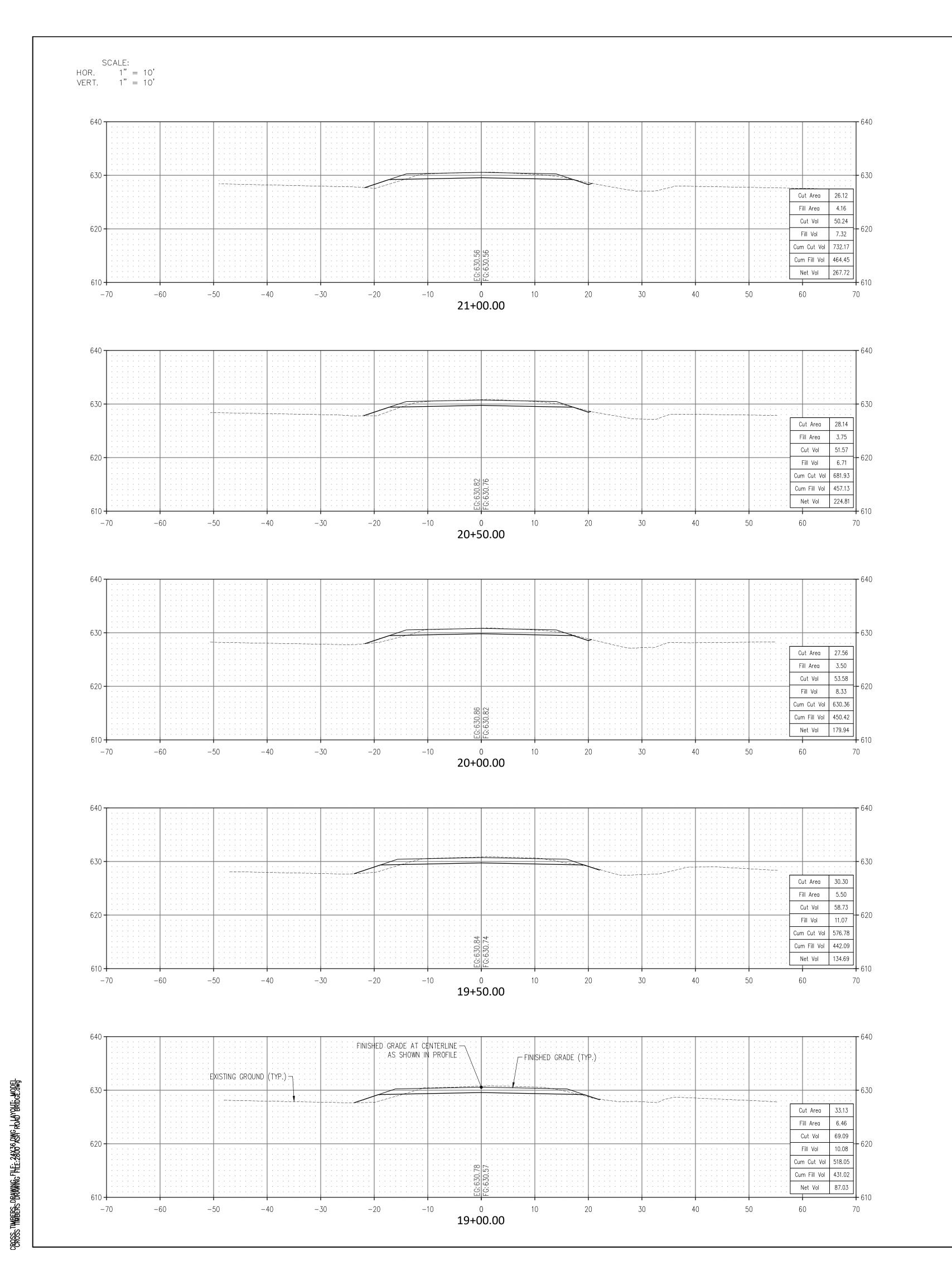




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PROJECT MCN-050





ROAD

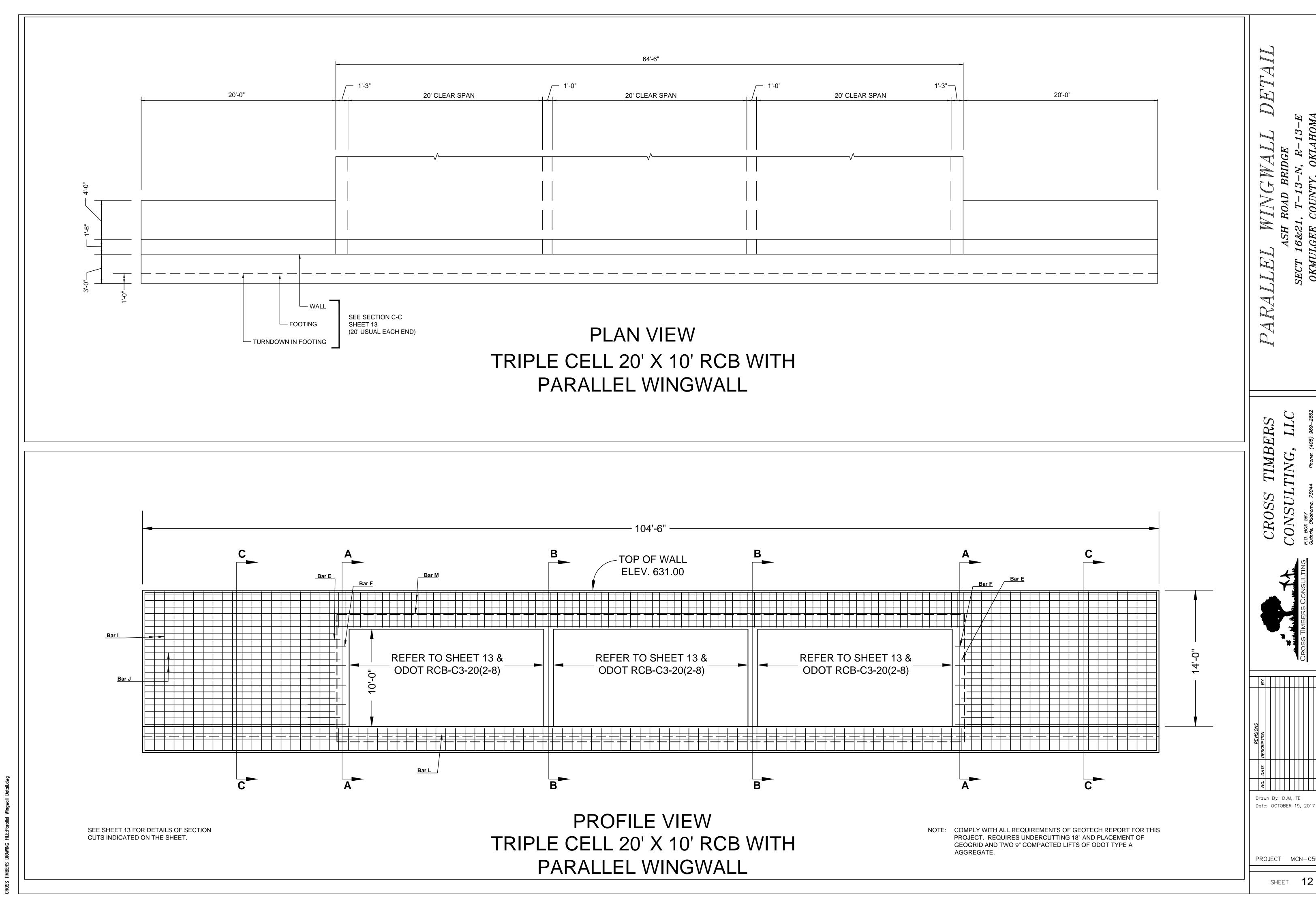
IMBERS

CROSS TIMB
CONSULTING,
P.O. BOX 567
Guthrie, Oklahoma, 73044 Phone: (4)

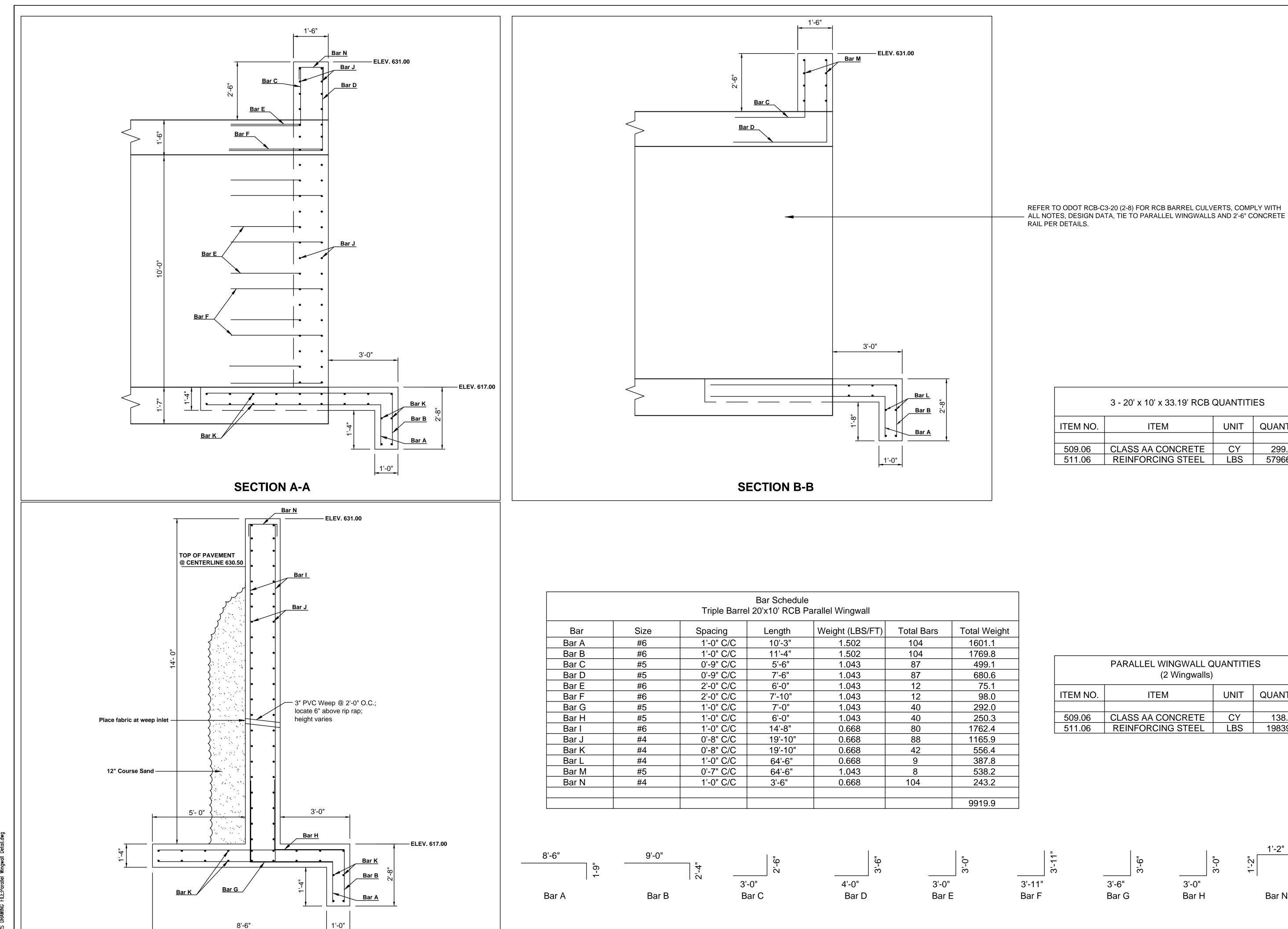
Drawn By: DJM, TE

Date: OCTOBER 19, 2017

PROJECT MCN-050



PROJECT MCN-050



DE

IMBERS CROSS

UNIT

CY

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UNIT

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QUANTITY

138.44

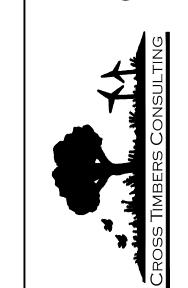
19839.8

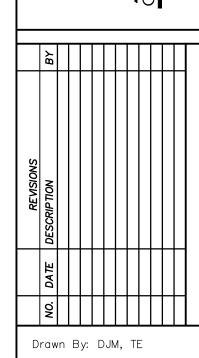
Bar N

QUANTITY

299.7

57966.0





Date: OCTOBER 19, 2017

PROJECT MCN-050

SHEET 13

SECTION C-C

Detail.dwg	
Wingwall	
FILE:Parallel	
DRAWING	
IIMBERS	
CROSS 7	

TABLE 1 - HYDROLOGIC ANALYSIS BRIDGE "A"

26.64

Discharge (cubic feet/sec) Area (square miles)

5,324

7,689

9,751

12,048

Storm Frequency

(year)

10

50

100

Precipitation (inches per year)

40

Slope (feet/mile)

9.91

The Control of the Co		Twin Hills
Gerhart Representation of the second	16 Control of the con	16 Bald Hill
Okmulgee Creek		Coal Creek
	John Sandy Sandy	Cane Creek Gano Creek
Okmulgee Regional	Lone Branch	Cime Creek
Okmulgee Greek Okmulgee Greek		62 Ashley
Okmulgee)	N HUGHES A	
75) B Midway Mobile Willage Mobile	52	iorris 62
Ash Road Bridge Cussetal Crest		
Deep Fork NWR		
		52
Data use subject to license. © DeLorme. Topo North America™ 10. www.delorme.com	TN MN (2.8°E)	Scale 1 : 100,000 1

Topo North America™ 10

TIMBERS CONSULTIIP.O. BOX 567
Guthrie, Oklahoma, 73044 CROSS

Drawn By: DJM, TE Date: OCTOBER 19, 2017

PROJECT MCN-050

SHEET 14

DRAINAGE AR ASH ROAD BRI SECT 16&21, T-13-N OKMULGEE COUNTY,

MAP