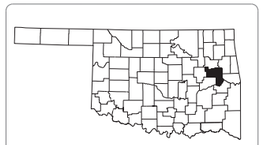
TRAFFIC DESIGN
PROJECT ENGINEER: J. SHORT, PE
SQUAD SUPERVISOR: R. SOLIZ

ROADWAY DESIGN
PROJECT ENGINEER: E. ELDER, PE
SQUAD SUPERVISOR: D. WINN

BRIDGE DESIGN
ENGINEERING MANAGER: P. DeFRANCO, PE
DESIGN ENGINEER: C. OSBORNE, PE
DESIGN ENGINEERS: A. LEBSACK, PE, C. ANGIER, PE,
SQUAD SUPERVISOR: R. L. A. FERNANDES
SQUAD MEMBERS: T. ELDREDGE, P. GAFFORD, B. JONES, M. WEAVER, L. A. FERNANDES
D. SMITH, E.I.T.

P.E. NO. 30416(01)



LOCATION MAP

FOR SURVEY CONTROL DATA,
SEE SURVEY DATA SHEETS

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED

U.S. HIGHWAY

PROJECT NO. NHPP-251N(117)PM ⚠⚠⚠
BRIDGE AND APPROACHES
U.S. HIGHWAY 62 OVER ARKANSAS RIVER

MUSKOGEE COUNTY

CONTROL SECTION NO: 62-51-06
JOB PIECE NO. 30416(04)
BRIDGE "A" LOCATION NO. 5106-0214SX
EXISTING NBI NO. 17609; NEW NBI NO. 32533
BRIDGE "B" LOCATION NO. 5106-0214NX
EXISTING NBI NO. 17610; NEW NBI NO. 32532

⚠⚠ THIS PROJECT IS MANDATORILY TIED TO 33812(04).

OKLAHOMA DEPARTMENT OF TRANSPORTATION

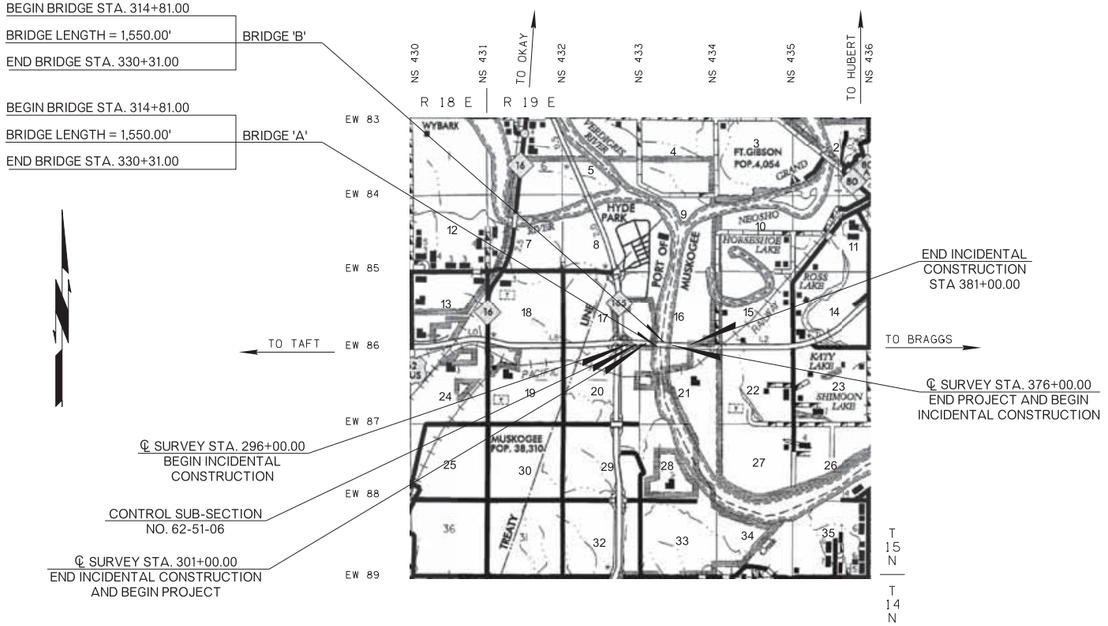
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE
⚠1	REVISED NOTE	4/27/21
⚠2	REVISED NOTE	6/04/21
⚠3	REVISED PROJECT NO.	7/06/21
⚠4	REVISED PROJECT NO.	12/08/21
⚠5	REVISED PROJECT NO.	1/20/22

FOR INDEX OF SHEETS
AND STANDARDS
SEE SHEET 0002

BEGIN BRIDGE STA. 314+81.00
BRIDGE LENGTH = 1,550.00'
END BRIDGE STA. 330+31.00
BRIDGE 'B'

BEGIN BRIDGE STA. 314+81.00
BRIDGE LENGTH = 1,550.00'
END BRIDGE STA. 330+31.00
BRIDGE 'A'



TO TAFT

TO BRAGGS

℄ SURVEY STA. 296+00.00
BEGIN INCIDENTAL
CONSTRUCTION

CONTROL SUB-SECTION
NO. 62-51-06

℄ SURVEY STA. 301+00.00
END INCIDENTAL CONSTRUCTION
AND BEGIN PROJECT

END INCIDENTAL
CONSTRUCTION
STA 381+00.00

℄ SURVEY STA. 376+00.00
END PROJECT AND BEGIN
INCIDENTAL CONSTRUCTION

DESIGN DATA

ADT 2021	= 22,300
ADT 2041	= 31,300
DHV (ONE-WAY)	= 3,710
K (DHV/ADT)	= 11%
D	= 55%
T (% DHV)	= 7%
T (% ADT)	= 10%
T²(% ADT)	= 4%
V	= 55 MPH
20 YR RIGID ESALS	= 27.1M

SCALES 1"
PLAN 1" = 100'
PROFILE HOR. 1" = 100'
VER. 1" = 10'
LAYOUT MAP 1" = 5,280'

CONVENTIONAL SYMBOLS

- PROPOSED ROAD
- RAILROADS
- RANGE & TOWNSHIP
- SECTION LINES
- QUARTER SECTION LINES
- FENCES
- GROUND LINE
- EXISTING ROADS
- BASE LINE
- GRADE LINES
- TELEPHONE & TELEGRAPH
- POWER LINES
- BUILDINGS
- OILWELL
- DRAINAGE STRUCTURES - IN PLACE
- DRAINAGE STRUCTURES - NEW
- PRES. R/W — RIGHT-OF-WAY LINES - EXISTING
- R/W — RIGHT-OF-WAY LINES - NEW
- CONTROLLED ACCESS
- R/W — RIGHT-OF-WAY FENCE

2019 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION GOVERN, APPROVED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, DECEMBER 18, 2019.

NOTE: PROJECT LENGTH BASED ON ℄ STATIONING.

ROADWAY LENGTH	5,950.84	FT.	1.127 MI.
BRIDGE LENGTH	1,550.00	FT.	0.293 MI.
PROJECT LENGTH			1.420 MI.

EQUATIONS : NONE
EXCEPTIONS : NONE

OKLAHOMA Transportation

PREPARED BY:
OKLAHOMA DEPARTMENT OF TRANSPORTATION
DESIGN DIVISION

PATTY F. DEFRANCO, P.E.
OKLA. LIC. NO. 20916
DATE 1/20/2022

LICENSED PROFESSIONAL ENGINEER
PATTY F. DEFRANCO
20916
OKLAHOMA

OKLAHOMA DEPARTMENT OF TRANSPORTATION	DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION
DATE APPROVED	DATE APPROVED
BY	BY
CHIEF ENGINEER	DIVISION ADMINISTRATOR

SWO 5220(1) PROJECT NO. NHPP-251N(117)PM ⚠⚠
COUNTY MUSKOGEE HIGHWAY US-62 SHEET NO. 0001

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE STANDARDS	12/08/21

INDEX OF SHEETS

NO.	TITLE
0001	TITLE
0002	INDEX OF SHEETS AND STANDARDS
0003-0005	TYPICAL SECTION
AB01-AB03	GENERAL NOTES AND SUMMARY OF PAY QUANTITIES (BRIDGE)
AE01	ENVIRONMENTAL NOTES
AR01	SUMMARY OF PAY QUANTITIES AND NOTES (ROADWAY)
AR02-AR03	SUMMARY SHEETS (ROADWAY)
AT01	SUMMARY OF PAY QUANTITIES & NOTES TRAFFIC CONTROL
AT02	SUMMARY OF PAY QUANTITIES & NOTES SIGNING & STRIPING
B001-B005	GENERAL PLAN AND ELEVATION (BRIDGE 'A')
B006-B010	FOUNDATION REPORT (BRIDGE 'A')
B011-B012	SUBSTRUCTURE STAKING DIAGRAM (BRIDGE 'A')
B013-B017	GENERAL PLAN AND ELEVATION (BRIDGE 'B')
B018-B022	FOUNDATION REPORT (BRIDGE 'B')
B023-B024	SUBSTRUCTURE STAKING DIAGRAM (BRIDGE 'B')
B025-B026	SUBSTRUCTURE EXCAVATION AND PIPE UNDERDRAIN DETAILS ABUTMENT NO. 2
B027-B028	ABUTMENT NO. 1 DETAILS
B029-B030	ABUTMENT NO. 2 DETAILS
B031-B032	PIER NO. 1 DETAILS
B033-B035	PIERS NO. 2, 3 AND 4 DETAILS
B036-B038	PIER NO. 5 DETAILS
B039-B041	PIERS NO. 6 AND 7 DETAILS
B042-B047	SUPERSTRUCTURE DETAILS
B048	PARAPET CLOSURE DETAILS AT PIER NO. 5 AND ABUTMENT NO. 2
B049	ROLLED BEAM DETAILS
B050	ROLLED BEAM DIAPHRAGM DETAILS
B051-B053	PLATE GIRDER DETAILS
B054-B056	FRAMING PLAN
B057	LATERAL BRACING DETAILS
B058	CROSSFRAME AND STIFFENERS DETAILS
B059-B061	FIELD SPLICE DETAILS
B062	BEARING ASSEMBLIES ABUTMENT NO. 1 AND PIER NO. 1 THRU PIER NO. 5
B063	BEARING ASSEMBLIES PIER NO. 5 AND ABUTMENT NO. 2
B064	BEARING ASSEMBLIES PIER NO. 6 AND PIER NO. 7
B065	APPROACH SLAB AT ABUTMENT NO. 1 DETAILS
B066	APPROACH SLAB AT ABUTMENT NO. 2 DETAILS
B067	DRAINS AT END OF BRIDGE DETAILS
B068	STEEL BEAM BRACING DETAILS
B069-B070	NAVIGATION LIGHTING DETAILS
B071	SAFETY CABLE SYSTEM DETAILS
B072	SLOPE WALL DETAILS
B073	TANGENT PILE WALL PLAN SHEET
B074-B076	TANGENT PILE WALL DETAILS
E001	SECTION 404 PERMIT COMPLIANCE
R001	DRAINAGE AREA MAP
R002	STORM WATER MANAGEMENT PLAN
R003-R004	EROSION CONTROL DETAIL
R005	CROSSOVER 1 DETAIL
R006	CROSSOVER 2 DETAIL
R007	CROSSOVER 3 DETAIL
R008	PARKING DETAIL
R009	JOINT LAYOUT SHEET
R010	PHASING DETAIL SHEET
R011-R013	MASS DIAGRAM
R014-R021	PLAN & PROFILE SHEETS
S001-S009	SURVEY DATA SHEETS
T001-T007	TRAFFIC CONTROL PHASE 1 & 4
T008	ADVANCE WARNING DETAIL PHASES 2 & 3
T009-T014	TRAFFIC CONTROL DETAIL PHASE 2
T015-T020	TRAFFIC CONTROL DETAIL PHASE 3
T021-T024	SIGNING & STRIPING LAYOUT
T025	TRAFFIC CONTROL DETAIL TRAIL DETOUR
X001-X038	CROSS SECTION SHEETS

THE FOLLOWING STANDARD DRAWINGS WILL BE REQUIRED:

2009 BRIDGE STANDARDS	2019 ROADWAY STANDARDS	2009 TRAFFIC STANDARDS			
B40-C-ABUT-MISC-01E	SSS-2-0	TCS1-1-01	TCS10-1-00	PM4-1-02	CCD1-1-00
EJ-DTL-02E	TSC2-4-0	TCS2-1-00	TCS11-1-01	WSD2-1-00	CCD2-1-00
EJ-SQ-04E	TSD-3-0	TCS3-1-01	TCS14-1-00	SBS1-1-00	GHW1-1-00
FSHP-42-2-00E	⚠ SPB-2-1	TCS4-1-01	TCS18-1-01	SBS2-1-00	GHW2-1-00
HP1-2-01E	PDT-2-0	TCS5-1-00	TCS19-1-01	SBS3-1-00	NCD1-1-00
	LTU-5-0	TCS6-1-02	TCS20-1-00	SBS4-1-00	PBD1-1-00
	PUD-4-0	TCS7-1-02	TCS22-1-00	SBS5-1-00	SCD1-1-00
	⚠ LECS-5-1	TCS8-1-00	TCS24-1-02	GMS1-1-00	SKT-1-00
	DC-4-0	TCS9-1-01	TCS25-1-00	SSP1-1-02	SPD1-1-00
	⚠ SPI-5-1			SSA1-1-00	THRI-1-02

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

INDEX OF SHEETS AND STANDARDS

Design	CJO	6/20
Detail	RAH	6/20
Check	TEE	8/20

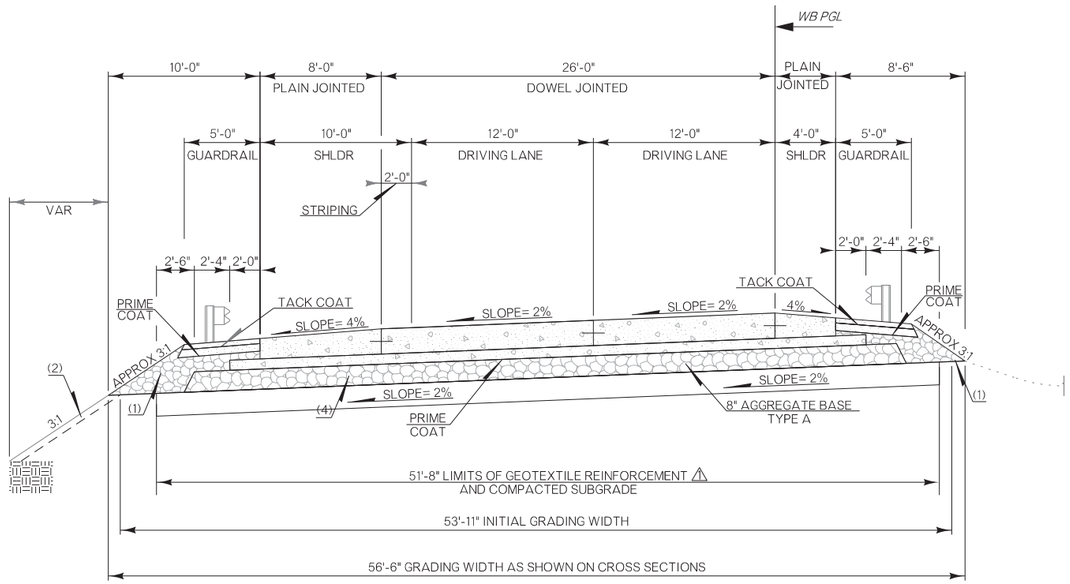
Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. 0002

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

DESCRIPTION	REVISIONS	DATE
⚠	REMOVED NOTE	8/17/2021



FULL DEPTH MAINLINE TYPICAL NO. 1

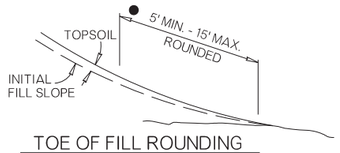
WB PGL STA. 312+69.31 TO STA. 313+90.89

PAVEMENT REQUIREMENT				
14" PAVT. STRUCTURE	12'-0" DRIVING LANES	4'-0" PAVED INSIDE SHOULDER	10'-0" PAVED OUTSIDE SHOULDER	5'-0" GUARDRAIL WIDENING
SURFACE COURSE	10" DOWEL JOINTED CONCRETE	10" PLAIN JOINTED CONCRETE	10" PLAIN JOINTED CONCRETE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	4" CEMENT TREATED BASE	4" CEMENT TREATED BASED	4" CEMENT TREATED BASE	3" SUPERPAVE TYPE S3 (PG 64-22 OK)

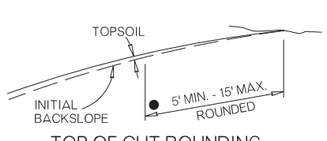
⚠

ROUNDING DETAIL

- INTERSECTION OF CUT AND/OR FILL SLOPES WITH GROUND LINE TO BE ROUNDED AS PART OF FINISHING OPERATIONS. ROUNDING SHALL BE 5' MINIMUM FOR SMALLER CUTS AND FILLS TO 15' MAXIMUM FOR LARGER CUTS AND FILLS OR AS DESIGNATED BY THE ENGINEER. COST OF ROUNDING TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK.



TOE OF FILL ROUNDING



TOP OF CUT ROUNDING

(1) BACKFILL NOTE:
TO BE BACKFILLED AND COMPACTED AS PART OF THE FINISHING OPERATIONS. QUANTITY IS MEASURED IN TBSC TYPE E.

(2) TOPSOIL NOTE:
THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT, AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS AND THE REMAINDER ON COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATIONS SHALL BE INCLUDED IN THE PAY ITEM FOR SALVAGED TOPSOIL, LUMP SUM.

THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.

(4) PRIME COAT ON TOP OF AGGREGATE BASE.

			OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DESIGN			
DRAWN			TYPICAL SECTION
CHECKED			
APPROVED			
SQUAD			

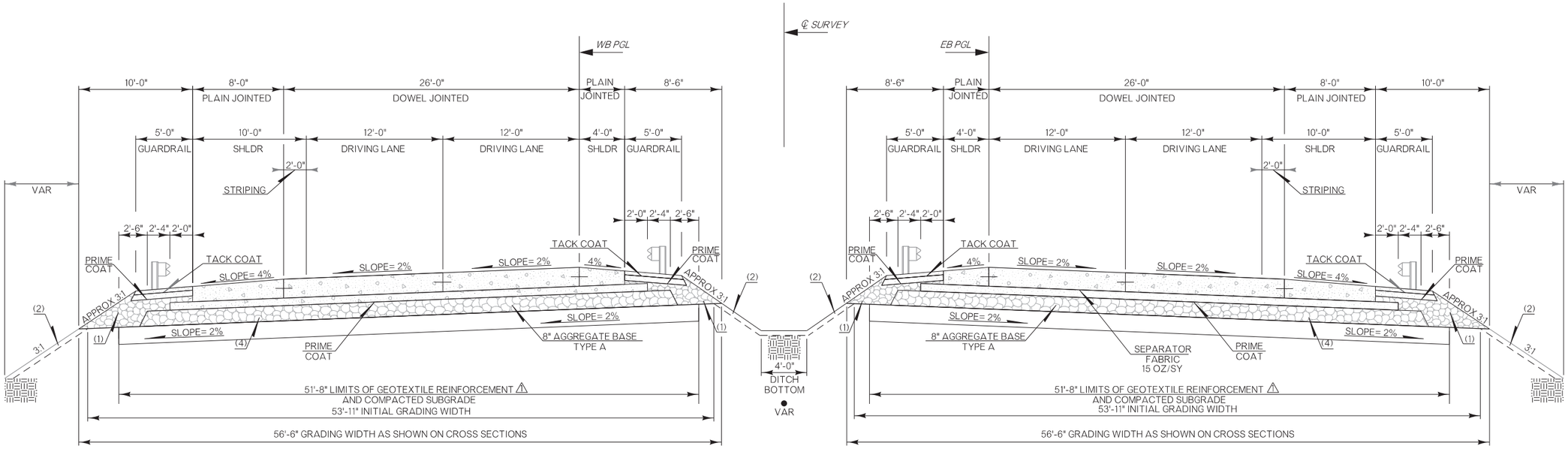
COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. 0003

08-17-21 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - TYPICAL SECTION.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE
⚠	REMOVED NOTE	8/17/2021



WB PGL STA. 313+90.89 TO STA. 314+51.00
WB PGL STA. 330+76.42 TO STA. 331+64.00

FULL DEPTH MAINLINE TYPICAL NO. 2

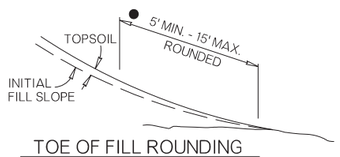
EB PGL STA. 313+90.89 TO STA. 314+51.00
EB PGL STA. 330+76.42 TO STA. 331+64.00

PAVEMENT REQUIREMENT				
14" PAVT. STRUCTURE	12'-0" DRIVING LANES	4'-0" PAVED INSIDE SHOULDER	10'-0" PAVED OUTSIDE SHOULDER	5'-0" GUARDRAIL WIDENING
SURFACE COURSE	10" DOWEL JOINTED CONCRETE	10" PLAIN JOINTED CONCRETE	10" PLAIN JOINTED CONCRETE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	4" CEMENT TREATED BASE	4" CEMENT TREATED BASE	4" CEMENT TREATED BASE	3" SUPERPAVE TYPE S3 (PG 64-22 OK)

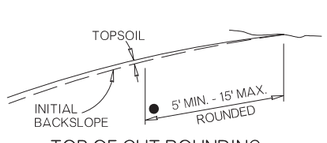
⚠

ROUNDING DETAIL

- INTERSECTION OF CUT AND/OR FILL SLOPES WITH GROUND LINE TO BE ROUNDED AS PART OF FINISHING OPERATIONS. ROUNDING SHALL BE 5' MINIMUM FOR SMALLER CUTS AND FILLS TO 15' MAXIMUM FOR LARGER CUTS AND FILLS OR AS DESIGNATED BY THE ENGINEER. COST OF ROUNDING TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK.



TOE OF FILL ROUNDING



TOP OF CUT ROUNDING

(1) BACKFILL NOTE:
TO BE BACKFILLED AND COMPACTED AS PART OF THE FINISHING OPERATIONS. QUANTITY IS MEASURED IN TBSC TYPE E.

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(4) PRIME COAT ON TOP OF AGGREGATE BASE.

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DRAWN		
CHECKED		TYPICAL SECTION
APPROVED		
SQUAD	STILLWATER	

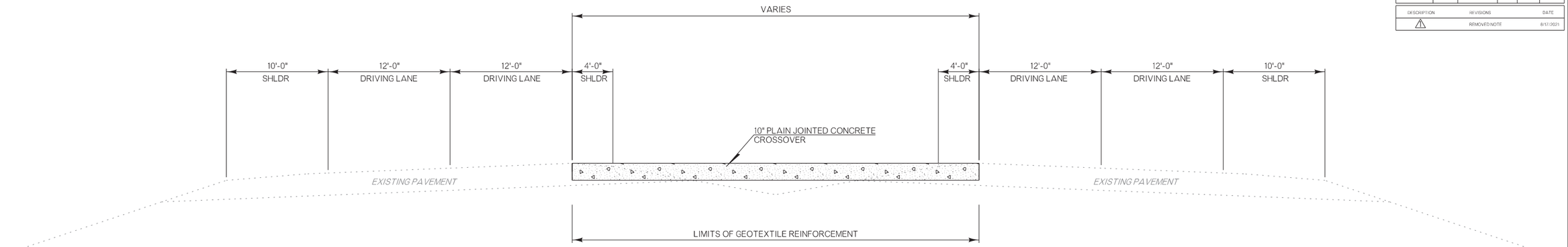
COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. 0004

08-17-21 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - TYPICAL SECTION.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

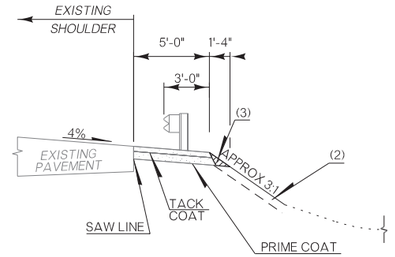
DESCRIPTION	REVISIONS	DATE
1	REMOVED NOTE	8/17/2021



CROSSOVER TYPICAL

℄ STA. 301+50.00 TO ℄ STA. 305+50.00
℄ STA. 307+00.00 TO ℄ STA. 312+50.00
℄ STA. 372+00.00 TO ℄ STA. 376+00.00

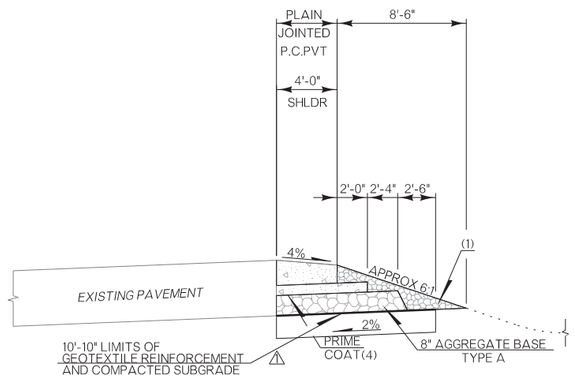
10' PAVEMENT REQUIREMENT	
SURFACE COURSE	10" PLAIN JOINTED CONCRETE



PAVEMENT REQUIREMENT	
5" PAVT. STRUCTURE	5'-0" GUARDRAIL WIDENING
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 64-22 OK)

INSIDE GUARDRAIL WIDENING TYPICAL

EASTBOUND	WESTBOUND
℄ STA. 309+83.68 TO 313+90.89	℄ STA. 331+64.00 TO 335+44.40
℄ STA. 331+64.00 TO 332+95.71	



INSIDE SHOULDER TYPICAL REPLACEMENT

EASTBOUND	WESTBOUND
℄ STA. 301+50.00 TO ℄ STA. 305+50.00	℄ STA. 301+50.00 TO ℄ STA. 305+50.00
℄ STA. 307+00.00 TO ℄ STA. 312+50.00	℄ STA. 307+00.00 TO ℄ STA. 312+50.00
℄ STA. 372+00.00 TO ℄ STA. 376+00.00	℄ STA. 372+00.00 TO ℄ STA. 376+00.00

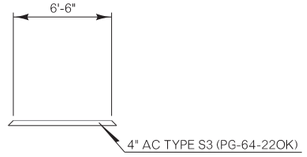
PAVEMENT REQUIREMENT	
14" PAVT. STRUCTURE	4'-0" PAVED INSIDE SHOULDER
SURFACE COURSE	10" PLAIN JOINTED CONCRETE
BASE COURSE	4" CEMENT TREATED BASE

⚠

OUTSIDE GUARDRAIL WIDENING TYPICAL

EASTBOUND	WESTBOUND
℄ STA. 309+83.68 TO 313+90.89	℄ STA. 310+15.35 TO 312+69.31

PAVEMENT REQUIREMENT	
5" PAVT. STRUCTURE	5'-0" GUARDRAIL WIDENING
SURFACE COURSE	2" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 64-22 OK)



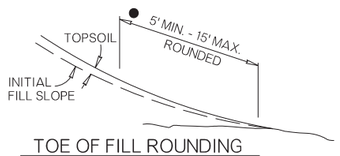
WALKING TRAIL TYPICAL

STA. 00+00.00 TO STA. 3+13.00 *

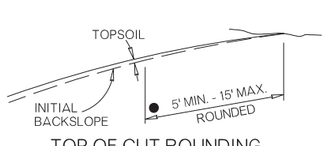
*SEE SHEET R017 FOR LOCATION

ROUNDING DETAIL

● INTERSECTION OF CUT AND/OR FILL SLOPES WITH GROUND LINE TO BE ROUNDED AS PART OF FINISHING OPERATIONS. ROUNDING SHALL BE 5' MINIMUM FOR SMALLER CUTS AND FILLS TO 15' MAXIMUM FOR LARGER CUTS AND FILLS OR AS DESIGNATED BY THE ENGINEER. COST OF ROUNDING TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK.



TOE OF FILL ROUNDING



TOP OF CUT ROUNDING

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(2) TOPSOIL NOTE:
THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT, AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS AND THE REMAINDER ON COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATIONS SHALL BE INCLUDED IN THE PAY ITEM FOR SALVAGED TOPSOIL, LUMP SUM.

THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.

BACKFILL NOTE:
(3) TO BE BACKFILLED AND COMPACTED AS PART OF THE FINISHING OPERATIONS. COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

(4) PRIME COAT ON TOP OF AGGREGATE BASE.

DESIGN		
DRAWN		
CHECKED		
APPROVED		
SQUAD	STILLWATER	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION

TYPICAL SECTION

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. 0005

08-17-21 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - TYPICAL SECTION.dgn

REVISIONS		
REV. NO.	DESCRIPTION	DATE

GENERAL NOTES

SPECIFICATIONS:

COMPLY WITH THE REQUIREMENTS OF THE 2019 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EXCEPT AS MODIFIED BY THE PLANS AND SPECIAL PROVISIONS.

VERIFICATION OF EXISTING CONDITIONS:

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS NECESSARY TO COMPLETE THE WORK AS SHOWN AND SHALL BE SOLELY RESPONSIBLE FOR THE ACCURACY THEREOF.

BIDDERS SHALL FULLY INFORM THEMSELVES OF THE NATURE OF THE WORK AND CONDITION UNDER WHICH IT WILL BE PERFORMED. THE CONTRACTOR SHALL ADOPT METHODS CONSISTENT WITH GOOD CONSTRUCTION PRACTICE AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO THE BRIDGE OR ATTACHMENTS. ANY DAMAGE TO THE BRIDGE STRUCTURE OR ROADWAY DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE ENGINEER.

PLANS:

CONSTRUCTION PLANS FOR THE EXISTING STRUCTURES MAY BE OBTAINED FROM OFFICE SERVICES DIVISION OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION.

OFFICE SERVICES DIVISION
OKLAHOMA DEPARTMENT OF TRANSPORTATION
200 NE 21ST STREET
OKLAHOMA CITY, OKLAHOMA 73105

ASK FOR:
SAP-51(16) BR. 'A' & 'B' IN MUSKOGEE COUNTY US-62 OVER ARKANSAS RIVER.

WORK OVER WATERWAY:

PERFORM ALL WORK IN ACCORDANCE WITH THE APPROPRIATE GOVERNMENTAL AGENCIES HAVING REGULATORY AUTHORITY OVER THE WATERWAY, INCLUDING THE U.S. COAST GUARD AND THE U.S. ARMY CORPS OF ENGINEERS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY AND ALL FINES OR PENALTIES IMPOSED BY ANY GOVERNMENTAL AGENCY AS A RESULT OF THE CONTRACTOR'S ACTIVITIES IN OR ON THE WATERWAY.

MAINTAIN ELECTRICAL SERVICE TO EXISTING NAVIGATION LIGHTING SYSTEM ON PIER PROTECTION CELLS IN ACCORDANCE WITH NAVIGATION LIGHTING DETAILS. TAKE ALL PRECAUTIONS NECESSARY TO PROTECT THE TRAVELING PUBLIC FROM CONSTRUCTION ACTIVITIES. RESTRICT BOAT ACCESS TO AREAS BELOW BRIDGE SECTIONS UNDER CONSTRUCTION. MAINTAIN A SAFE BOATING ROUTE UNDER THE BRIDGE(S) AT ALL TIMES. MARK RESTRICTED AREAS AND THE SAFE BOATING ROUTE WITH SIGN BUOYS AND MARKERS PLACED IN THE WATER IN ACCORDANCE WITH 2009 TRAFFIC LIGHTING STANDARD NCD1-1. INCLUDE ALL COST OF SIGN BUOYS AND MARKERS IN OTHER ITEMS OF WORK.

USE BARGES AND WATERCRAFT CAPABLE OF ANCHORING WITHOUT ASSISTANCE FROM OTHER EQUIPMENT. TETHERING OR TYING OFF BARGES, BOATS, OR ANY OTHER EQUIPMENT TO THE EXISTING BRIDGE STRUCTURE OR NEWLY CONSTRUCTED BRIDGE DRILLED SHAFTS OR COLUMNS WILL NOT BE ALLOWED.

THIS BRIDGE SHALL BE BUILT ADJACENT TO AND OVER A NAVIGABLE WATERWAY WHICH HAS A SPECIFIED NAVIGATION CHANNEL AS SHOWN ON THE PLANS. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPROPRIATE GOVERNMENTAL AGENCIES HAVING REGULATORY AUTHORITY OVER THE WATERWAY, INCLUDING THE U.S. COAST GUARD (USCG) AND THE U.S. ARMY CORPS OF ENGINEERS (COE), ANY RESTRICTIONS IMPOSED UPON RIVER TRAFFIC AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL REQUIRE THAT THE CONTRACTOR OBTAIN ANY AND ALL PERMITS NECESSARY TO ALLOW THE TEMPORARY RESTRICTION PRIOR TO BEGINNING THE WORK.

THE CONTRACTOR SHALL BE RESTRICTED FROM OCCUPYING OR OBSTRUCTING THE NAVIGATION CHANNEL FOR EXTENDED PERIODS. A SINGLE ANNUAL 10-DAY PERIOD IS AVAILABLE, USUALLY AT THE END OF AUGUST, WHEN THE LOCK IS CLOSED FOR MAINTENANCE AND THE CONTRACTOR MAY, WITH THE APPROVAL OF THE COE AND USCG, OCCUPY THE CHANNEL DURING THAT TIME. BRIEF OUTAGES CAN BE ACCOMMODATED WITH ADVANCE APPROVAL OF THE COE AND USCG. SHORTER INCURSIONS MAY OCCUR WHEN RIVER TRAFFIC IS KNOWN TO BE ABSENT BY MONITORING ADJACENT LOCKS, WITH DUE CONSIDERATION FOR PLEASURE CRAFT.

THE CONTRACTOR SHALL BE REQUIRED TO BE FAMILIAR WITH COE OPERATING PRACTICES, WHICH MAY CAUSE RAPID CHANGES IN FLOW AND THE RESULTING RIVER LEVEL. HORNS AND VISIBLE SIGNALS ARE USED TO WARN WATERCRAFT. IN CASES OF EXTREME HIGH WATER, WHICH MAY OCCUR FOLLOWING STORMS, THE CONTRACTOR SHALL BE REQUIRED TO LOCK HIS FLOATING EQUIPMENT UP TO THE RESERVOIR POOL LEVEL. AN EVACUATION PLAN SHALL BE DEVELOPED AND SUBMITTED TO THE BRIDGE ENGINEER FOR APPROVAL. WORK IN THE RIVER SHALL NOT BEGIN UNTIL THE PLAN HAS BEEN APPROVED. THE CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH COE AND THE USCG.

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY AND ALL FINES OR PENALTIES IMPOSED BY ANY GOVERNMENTAL AGENCY AS A RESULT OF HIS ACTIVITIES IN OR ON THE WATERWAY.

SUGGESTED SEQUENCE OF CONSTRUCTION:

A SUGGESTED SEQUENCE OF CONSTRUCTION HAS BEEN INCLUDED IN THE PLANS. THE CONTRACTOR MUST SUBMIT ANY CHANGE IN THIS SEQUENCE TO THE ENGINEER FOR APPROVAL. NO WORK SHALL BEGIN UNTIL APPROVAL FROM THE ENGINEER HAS BEEN RECEIVED.

WATER REPELLENT (VISUALLY INSPECTED):

A PENETRATING WATER REPELLENT SURFACE TREATMENT SHALL BE APPLIED TO THE FOLLOWING CONCRETE SURFACES OF THE BRIDGE:

(A) EDGES AND UNDERSIDE CANTILEVER PORTION OF THE BRIDGE DECK.
(B) THE ROADWAY FACE, TOP, AND INSIDE OF THE POST OPENINGS OF THE PARAPETS.
(C) TOP, SIDES, AND ENDS OF PIER CAPS AND ALL SIDES OF PEDESTALS.
(D) FRONT FACE AND SIDES OF BACKWALL, TOP, SIDES, AND ENDS OF BRIDGE SEAT AND ALL SIDES OF PEDESTALS.

RIPRAP AND FILTER BLANKET:

A 24" THICK LAYER OF TYPE I-A PLAIN RIPRAP WITH A 6" THICK LAYER OF TYPE I-A FILTER BLANKET SHALL BE PLACED AT ABUTMENT NUMBER TWO AS SHOWN IN THE PLANS IN ACCORDANCE WITH SECTION 601 AND OTHER APPLICABLE SECTIONS OF THE 2019 STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION.

THE FILTER BLANKET SHALL BE PLACED IN ONE LAYER. THE RIPRAP AND FILTER BLANKET SHALL BE PLACED IN SUCH A WAY AS TO NOT IMPEDE THE FLOW OF THE CHANNEL AND IN A MANNER APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL TAKE CARE TO INSURE THAT THE RIPRAP AND FILTER BLANKET ARE NOT PLACED OVER THE LOCATION OF ANY EXISTING UTILITY LINES OR BEYOND THE LIMITS OF THE RIGHT-OF-WAY. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PRESERVING THE INTEGRITY OF EXISTING AND NEW UTILITIES AND RIGHT-OF-WAY.

TEMPORARY RETAINING STRUCTURES:

TEMPORARY SLOPES STEEPER THAN 2:1 WILL NOT BE ALLOWED. TEMPORARY RETAINING STRUCTURES MAY BE NECESSARY TO MAINTAIN 2:1 OR FLATTER SLOPES. SHOULD TEMPORARY RETAINING STRUCTURES BE NECESSARY, THE CONTRACTOR WILL HAVE THE TEMPORARY RETAINING STRUCTURES DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF OKLAHOMA.

CALCULATIONS AND DRAWINGS FOR THE TEMPORARY RETAINING STRUCTURES SHALL BE SUBMITTED AND APPROVED BY THE ENGINEER BEFORE STARTING WORK ON THE RETAINING STRUCTURES.

TEMPORARY RETAINING STRUCTURES WILL NOT BE MEASURED FOR PAYMENT. THE COST OF THE WORK, INCLUDING ENGINEERING SERVICES, SHALL BE INCLUDED IN THE PRICE BID FOR RELATED EARTHWORK PAY ITEMS.

UTILITIES:

THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS DURING CONSTRUCTION AND TAKE CARE NOT TO DAMAGE ANY UTILITY LINES THAT MAY BE PRESENT. ANY DAMAGE TO THE UTILITIES WILL BE REPAIRED AT THE CONTRACTORS EXPENSE.

DECK HAUNCHES:

PLAN QUANTITY FOR CLASS AA CONCRETE INCLUDES AN AMOUNT FOR THE HAUNCHES OVER THE BEAMS AND SHALL NOT BE ADJUSTED FOR PAYMENT BASED ON THE ACTUAL HAUNCHES USED. THE CONTRACTOR SHALL TAKE SURVEY SHOTS AND MEASUREMENTS AS NECESSARY TO CALCULATE THE ACTUAL HAUNCH THICKNESSES AT TENTH POINTS ALONG THE LENGTH OF THE HAUNCH ON THE ROLLED BEAM SPANS, AND AT TWENTIETH POINTS ALONG THE LENGTH OF THE HAUNCH ON THE PLATE GIRDER SPANS AND SUBMIT THOSE RESULTS TO THE ENGINEER FOR APPROVAL.

FORM WORK BRACING (STEEL BEAM):

1.) THE CANTILEVER FORMING BRACKETS MUST BE IN LINE WITH THE COMPRESSION BRACING AND TENSION TIE. THE TENSION TIE ROD, COMPRESSION STRUT AND THE CANTILEVER FORMING BRACKET MUST ALL BE AT THE SAME SPACING.

2.) IN NO CASE IS THE CONTRACTOR'S CANTILEVER FORMING BRACKET ALLOWED TO EXTEND BELOW THE BOTTOM FLANGE.

3.) DO NOT SUPPORT ANY BEAMS ON JACKS WHILE THE CANTILEVER FORMING IS IN PLACE.

ABUTMENT PILING: (PILE DRIVING EQUIPMENT)

A) DRIVING EQUIPMENT: USE A PILE DRIVING HAMMER OF THE SIZE AND TYPE CAPABLE OF CONSISTENTLY DELIVERING THE EFFECTIVE DYNAMIC ENERGY SUFFICIENT TO DRIVE THE PILES TO THE REQUIRED TIP ELEVATION AND TO ACHIEVE THE FACTORED PILE CAPACITY WITHOUT EXCEEDING THE LIMITATIONS SET ON THE ALLOWABLE DRIVING STRESSES IN ACCORDANCE WITH SUBSECTION 514.03(A)

B) MATERIAL: ALL DRIVEN 'H' PILES SHALL BE AASHTO M270 GRADE 50.

ABUTMENT PILING CAPACITY:

THE REQUIRED FACTORED PILE REACTION FOR THE HP12 X 53 PILES IS 100.00 TONS/PILE. 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 VALUE 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.

ALL DRIVEN 'H' PILES SHALL BE AASHTO M270 GRADE 50.

STAY-IN-PLACE DECK FORMS:

STAY- IN- PLACE STEEL DECK FORMS MAY BE USED IF THE MINIMUM DECK SLAB THICKNESS SHOWN IN THE PLANS IS OBTAINED BY MEASURING FROM THE TOP OF THE DECK SLAB TO THE TOP PORTION OF THE STEEL CORRUGATION. PREFORMED FILLER SUCH AS POLYSTYRENE, STYROFOAM OR ANY OTHER FILLER MATERIAL USED IN THE STEEL CORRUGATIONS MUST BE BONDED TO THE STAY- IN- PLACE FORMS, AND NO ADDITIONAL CONCRETE WEIGHT OF THE DECK SLAB IS PERMITTED. ADDITIONAL WEIGHT OF THE STEEL DECK FORMS AND FILLER MATERIAL SHALL NOT EXCEED 5 PSF.

NO WELDING TO THE TOP FLANGE OR STUDS WILL BE ALLOWED. FOR AN ACCEPTABLE CONNECTION SEE SLAB REINFORCING DETAILS SHEET. REPORT ANY ARC STRIKE, WELD SPLATTER OR WELDING ON TOP FLANGE TO BRIDGE ENGINEER IMMEDIATELY.

ALL COST ASSOCIATED WITH THE USE OF STAY- IN- PLACE FORMS, INCLUDING ALL MATERIAL, LABOR, EQUIPMENT, INCIDENTALS AND PROFESSIONAL SERVICES SHALL BE AT THE CONTRACTOR'S EXPENSE. FOR ADDITIONAL INFORMATION CONCERNING THE USE OF STAY- IN- PLACE FORMS, SEE SECTION 502 OF THE SPECIFICATIONS.

PAY ITEM NOTES

(1) APPROACH SLAB:

CLASS AA CONCRETE SHALL BE USED IN THE APPROACH SLABS. THE QUANTITY GIVEN IS BASED ON THE ACTUAL SQUARE YARDS OF THE APPROACH SLABS.

ALL COSTS OF CONCRETE, REINFORCING STEEL, RAPID CURE JOINT SEALANT, EXCAVATION, LABOR, EQUIPMENT, AND OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SPECIFIED SHALL BE INCLUDED IN THE PRICE BID PER SQUARE YARD OF "APPROACH SLAB".

(2) STRUCTURAL STEEL:

ITEMS "STRUCTURAL STEEL" AND "STRUCTURAL STEEL M270 GR. HPS 70W" SHALL CONSIST OF THE NEW ROLLED BEAMS, PLATE GIRDERS, STIFFENERS, DIAPHRAGMS AND GUSSET PLATES AS SHOWN IN THE PLANS.

PROVIDE STRUCTURAL STEEL FOR ROLLED BEAMS, PLATE GIRDERS AND ALL STIFFENER PLATES IN ACCORDANCE WITH AASHTO M270 (ASTM A709), GRADE 50W (WEATHERING STEEL, NON- FRACTURE CRITICAL CHARPY V-NOTCH TESTED FOR ZONE 2) OR AASHTO M270 (ASTM A709), GRADE HPS70W (WEATHERING STEEL, NON-FRACTURE CRITICAL CHARPY V-NOTCH TESTED FOR ZONE 2) AS SHOWN IN THE PLANS. USE SHEAR CONNECTORS CONFORMING TO AASHTO M169 (ASTM A108), GRADE 1015, 1018 OR 1020. PROVIDE WELDING WITH WEATHERING CHARACTERISTICS.

PROVIDE STRUCTURAL STEEL FOR LATERAL BRACING MEMBERS, CROSS FRAME SHAPES, AND PLATES IN ACCORDANCE WITH AASHTO M270 (ASTM A709), GRADE 50W (WEATHERING STEEL, CHARPY V-NOTCH TESTING NOT REQUIRED). USE BOLTS CONFORMING TO AASHTO M164 (ASTM A325). PROVIDE ALL BOLTS, NUTS, WASHERS AND WELDING WITH WEATHERING CHARACTERISTICS

PROVIDE STRUCTURAL STEEL FOR ANCHOR PLATES AND BUILT-UP CONTACT ANGLES IN ACCORDANCE WITH ASTM A240 (AUSTENITIC STAINLESS STEEL, TYPE 316, CHARPY V-NOTCH TESTING NOT REQUIRED). FOR ANCHOR RODS, PROVIDE CONTINUOUSLY THREADED BARS IN ACCORDANCE WITH ASTM A320, CLASS 2, GRADE B8M (AUSTENITIC STAINLESS STEEL, TYPE 316, CHARPY V-NOTCH TESTING NOT REQUIRED). USE AUSTENITIC STAINLESS STEEL NUTS AND WASHERS CONFORMING TO ASTM A194, GRADE 8M AND ASTM A320, RESPECTIVELY. PERFORM ALL WELDING CONSISTENT WITH PROCEDURES FOR STAINLESS STEEL.

PROVIDE STRUCTURAL STEEL FOR PARAPET CLOSURE PLATES IN ACCORDANCE WITH AASHTO M260 (ASTM A709), GRADE 50W (WEATHERING STEEL, CHARPY V- NOTCH TESTING NOT REQUIRED). USE WELDED STUDS CONFORMING TO AASHTO M169 (ASTM A108), GRADE 1015, 1018 OR 1020. USE CAP SCREWS CONFORMING TO ASTM F879 AND NUTS CONFORMING TO ASTM F594. PERFORM ALL WELDING CONSISTENT WITH PROCEDURES FOR STAINLESS STEEL. PAINT THE PARAPET CLOSURE PLATES AFTER FABRICATION WITH A CATEGORY "N" PAINT SYSTEM IN ACCORDANCE WITH SECTION 512 OF THE SPECIFICATIONS. PROVIDE A TOPCOAT COLOR MATCHING THE SURFACE FINISH COLOR OF THE PARAPET CONCRETE.

THE GIRDER DETAILS SHEETS ARE DRAWN, AND THE DIMENSIONS SHOWN, AS IF THE TOP FLANGE OF THE GIRDER WERE IN A TRULY HORIZONTAL POSITION. NO ADJUSTMENT IN PLATE LENGTHS HAS BEEN MADE ON THESE SHEETS FOR GRADE, VERTICAL CURVE AND DEAD LOAD CAMBER. GIRDER SHOP DRAWINGS WILL INCLUDE SUCH ADJUSTMENTS AS ARE NECESSARY TO PROVIDE FOR GRADE, VERTICAL CURVE AND DEAD LOAD CAMBER.

ALL WELDING FOR STRUCTURAL STEEL SHALL CONFORM TO THE STRUCTURAL WELDING CODE AWS D1.5 FOR WEATHERING STEEL AND D1.6 FOR STAINLESS STEEL (INCLUDING CURRENT REVISIONS) AND ODOT 2019 STANDARD SPECIFICATIONS SECTION 506. EXTENSION BARS SHALL BE USED IN MATCHING THE BUTT WELDS IN THE FLANGES ACCORDING TO AWS SPECIFICATION SECTION 4.6.

ALL WELDING CONNECTING THE NEW STEEL SHALL HAVE AN ULTRASONIC OR MAGNETIC PARTICLE INSPECTION. AFTER THE NEW STEEL IS WELDED IN PLACE, THE ENGINEER SHALL NOTIFY THE MATERIALS DIVISION OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION SO THIS INSPECTION CAN BE MADE.

DO NOT FIELD WELD ON ANY PART OF THE STRUCTURE WITHOUT PRIOR WRITTEN APPROVAL FROM THE BRIDGE ENGINEER, UNLESS SHOWN ON THE CONTRACT PLANS.

A CHARPY V- NOTCH TEST WILL BE REQUIRED AS PER THE STANDARD SPECIFICATIONS. USE AISC CERTIFICATION IN ACCORDANCE WITH SECTION 506.04 OF THE STANDARD SPECIFICATIONS FOR ALL MAIN MEMBERS.

ALL SPLICE PLATES FOR THE GIRDER FLANGES AND GIRDER WEBS SHALL BE CVN TESTED FOR THE PARTICULAR GRADE OF SPLICE MATERIAL THAT IS USED FOR EACH SPLICE LOCATION. WEB SPLICE PLATES SHALL BE CVN TESTED IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS.

THE COST OF STRUCTURAL STEEL FOR THIS WORK SHALL BE PAID FOR IN THE UNIT PRICE BID FOR POUNDS OF "STRUCTURAL STEEL" OR "STRUCTURAL STEEL M270 GR. HPS 70W".

BRIDGE A & B MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

GENERAL NOTES AND SUMMARY OF PAY QUANTITIES (SHEET 1 OF 3)(BRIDGE)

Design	CJO	6/20
Detail	RAH	1/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) | SHEET NO. AB01

PAY ITEM NOTES CONTINUED

(3) STEEL ERECTION:

BOLTED CONNECTIONS ARE DESIGNED AS SLIP-CRITICAL JOINTS WITH ALL FAYING SURFACES HAVING A CLASS B SLIP COEFFICIENT.

REMOVE ALL LOOSE AND NON-ADHERENT RUST THAT MAY HAVE FORMED ON THE CONNECTION AREAS BY HAND OR POWER WIRE BRUSHING BEFORE ASSEMBLING THE HIGH STRENGTH BOLTED CONNECTIONS.

THE SETTING TEMPERATURE IS ASSUMED TO BE 65 DEGREES FAHRENHEIT.

SET AND WELD GIRDER BOTTOM FLANGES TO BEVELED PLATES ON BEARINGS FOLLOWING A PERIOD OF 24 HOURS IN WHICH THE AMBIENT AIR TEMPERATURE HAS REMAINED BETWEEN 45 AND 75 DEGREES FAHRENHEIT.

IF IT BECOMES NECESSARY TO ERECT BEAMS OUTSIDE OF THE TEMPERATURE RANGE SPECIFIED ABOVE, GIRDER BOTTOM FLANGES WILL NOT BE WELDED TO BEVELED PLATES ON THE BEARINGS. WELD GIRDER BOTTOM FLANGES TO BEVELED PLATES ON BEARINGS AFTER JACKING BEAMS AND RESETTING BEARINGS ASSEMBLIES FOLLOWING A PERIOD OF 24 HOURS IN WHICH THE AMBIENT AIR TEMPERATURE REMAINS BETWEEN 45 AND 75 DEGREES FAHRENHEIT. PRIOR TO WELDING ENSURE PROPER LOCATION AND ALIGNMENT OF GIRDERS. ERECTION PLANS WILL INCLUDE ANY TEMPORARY BRACING REQUIRED. ALL ADDITIONAL COSTS INCURRED DUE TO ERECTING STEEL OUTSIDE AMBIENT AIR TEMPERATURE RANGE OF 45 TO 75 DEGREES FAHRENHEIT, SUCH AS JACKING BEAMS RESETTING BEARINGS, TEMPORARY BRACING AND INCIDENTALS, WILL NOT BE MEASURED FOR PAYMENT.

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THE CONTRACTOR SHALL SUBMIT ERECTION DRAWINGS TO THE BRIDGE ENGINEER FOR APPROVAL. THE DRAWINGS SHALL FULLY ILLUSTRATE THE CONTRACTOR'S PROPOSED METHOD OF ERECTION. THE DRAWINGS SHALL SHOW DETAILS OF ALL FALSE WORK BENTS, GUYS, DEAD-MEN, LIFTING DEVICES, AND ATTACHMENTS TO THE BRIDGE MEMBERS, SEQUENCE OF ERECTION, LOCATION OF CRANES AND BARGES, CRANE CAPACITIES, LOCATION OF LIFTING POINTS ON THE BRIDGE MEMBERS, AND WEIGHTS OF THE MEMBERS. THE PLAN AND DRAWINGS SHALL BE COMPLETE IN DETAIL FOR ALL ANTICIPATED PHASES AND CONDITIONS DURING ERECTION. CALCULATIONS SHALL BE REQUIRED TO DEMONSTRATE THAT FACTORED RESISTANCES ARE NOT EXCEEDED AND THAT MEMBER CAPACITIES AND FINAL GEOMETRY WILL BE CORRECT AND THAT STABILITY WILL BE MAINTAINED THROUGHOUT STEEL ERECTION AND DECK CASTING. DRAWINGS AND CALCULATIONS OF THE PROPOSED ERECTION PLAN SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OKLAHOMA. ERECTION SHALL NOT BEGIN UNTIL THE CONTRACTOR HAS RECEIVED APPROVAL FROM THE BRIDGE ENGINEER.

ALL COSTS FOR ERECTING THE GIRDERS, INCLUDING ALL MATERIAL, LABOR, EQUIPMENT, PROFESSIONAL SERVICES, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE PRICE BID PER POUND OF "STRUCTURAL STEEL" OR "STRUCTURAL STEEL M270 GR. HPS 70W".

(4) STAINLESS STEEL FIXED BEARING ASSEMBLY:

PROVIDE AND INSTALL FIXED BEARING ASSEMBLIES AND BEARING PADS OF THE SIZE AND SHAPE AT ABUTMENT NO. 1, PIER NO. 3 AND PIER NO. 5 AS DETAILED IN THE PLANS.

ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING THE FIXED BEARING ASSEMBLIES AS SHOWN IN THE PLANS INCLUDING ELASTOMERIC PADS, ANCHOR PLATES, ANCHOR BOLTS, NUTS, WASHERS, LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER UNIT EACH OF "STAINLESS STEEL FIXED BEARING ASSEMBLY".

(5) STAINLESS STEEL EXPANSION BEARING ASSEMBLY:

PROVIDE AND INSTALL EXPANSION BEARING ASSEMBLIES AND BEARING PADS OF THE SIZE AND SHAPE AT PIER NO. 1, PIER NO. 2 AND PIER NO. 4 AS DETAILED IN THE PLANS.

ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING THE EXPANSION BEARING ASSEMBLIES AS SHOWN IN THE PLANS INCLUDING ELASTOMERIC PADS, ANCHOR PLATES, ANCHOR BOLTS, NUTS, WASHERS, LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER UNIT EACH OF "STAINLESS STEEL EXPANSION BEARING ASSEMBLY".

(6) DRAINS AT END OF BRIDGE:

THE ASPHALT WIDENING FOR THE BRIDGE GUARDRAILING SHALL BE IN ACCORDANCE WITH STANDARDS THRI-1, GHW1-1, GHW2-1 AND SKT-1 EXCEPT AS SHOWN ON SHEET "DRAINS AT END OF BRIDGE DETAILS". CLASS "C" CONCRETE SHALL BE USED IN THE CONSTRUCTION OF THE DRAINS AT THE ENDS OF THE BRIDGE.

ALL COSTS OF THE SLOPE DRAINS AND SPLASH BASINS INCLUDING MATERIAL, LABOR, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN IN THE PLANS SHALL BE INCLUDED IN THE PRICE BID PER CUBIC YARD OF "CLASS "C" CONCRETE".

(7) SLOPEWALL:

ALL CONCRETE IN THE SLOPE WALLS SHALL BE CLASS A CONCRETE AND SHALL BE POURED IN THE DRY. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 509 OF THE 2019 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. COARSE AGGREGATE FOR THIN SECTION CONCRETE (701.06) MAY BE USED. NO HORIZONTAL CONSTRUCTION JOINTS WILL BE PERMITTED IN THE SLOPE WALL. FINAL NUMBER AND LOCATION OF VERTICAL CONSTRUCTION JOINTS WILL BE DETERMINED BY THE ENGINEER. JOINTS WILL HAVE A MAXIMUM SPACING OF 10'-0" MEASURED ALONG THE TOE OF THE SLOPE WALLS.

THE PAY ITEM "SLOPE WALL (5")" WILL BE MEASURED FROM EDGE TO EDGE AND FROM TOP TO BOTTOM OF THE TOP SURFACE OF THE SLOPE WALL AND FULL FACE OF THE TOE OF THE SLOPE WALL. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE SLOPE WALLS AS DESCRIBED ABOVE, INCLUDING JOINT SEALER AND FILLER, REINFORCING STEEL, CLASS A CONCRETE, EXCAVATION, LABOR, FORMS AND INCIDENTALS, SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD OF "SLOPE WALL (5")".

(8) CLASS B BRIDGE DECK REPAIR:

PAY ITEM "CLASS B BRIDGE DECK REPAIR" CONSISTS OF REMOVING AND REPLACING PORTIONS OF UNSOUND CONCRETE OF BRIDGE 'A' ON THE BRIDGE DECK DOWN TO THE BOTTOM MAT OF REINFORCING STEEL IN ACCORDANCE WITH SUBSECTION 513.04D(2) OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

THE CONTRACTOR SHALL NOT REMOVE CONCRETE BELOW THE LEVEL SPECIFIED. IF SOUND CONCRETE IS NOT REACHED BY THIS LEVEL OF REPAIR, THE CONTRACTOR SHALL IMMEDIATELY REPORT THIS TO THE ENGINEER FOR FURTHER ACTION.

THE ACTUAL LOCATION AND EXTENT OF THE REPAIR SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. PAYMENT SHALL BE FOR THE ACTUAL REPAIRS MADE. NO PAYMENT SHALL BE MADE FOR WORK NOT PERFORMED. THE EXISTING DECK REINFORCING STEEL SHALL BE CLEANED. STRAIGHTENED, AND LEFT IN PLACE.

ALL COSTS OF THE REPAIR INCLUDING LABOR, EQUIPMENT, MATERIAL, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN SHALL BE INCLUDED IN THE PRICE BID PER SQUARE YARD OF "CLASS B BRIDGE DECK REPAIR".

(9) CLASS C BRIDGE DECK REPAIR:

PAY ITEM "CLASS C BRIDGE DECK REPAIR" CONSISTS OF REMOVING AND REPLACING PORTIONS OF UNSOUND CONCRETE OF BRIDGE 'A' ON THE BRIDGE DECK THE FULL DEPTH OF THE DECK IN ACCORDANCE WITH SUBSECTION 513.04D(3) OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

THE CONTRACTOR SHALL USE THE APPROPRIATE FORM WORK FOR THE AREA OF REPAIR AS APPROVED BY THE DIVISION IN ACCORDANCE WITH SECTION 502 OF THE STANDARD SPECIFICATIONS.

THE ACTUAL LOCATION AND EXTENT OF THE REPAIR SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. PAYMENT SHALL BE FOR THE ACTUAL REPAIRS MADE. NO PAYMENT SHALL BE MADE FOR WORK NOT PERFORMED. THE EXISTING DECK REINFORCING STEEL SHALL BE CLEANED. STRAIGHTENED, AND LEFT IN PLACE.

ALL COSTS OF THE REPAIR INCLUDING LABOR, EQUIPMENT, MATERIAL, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN SHALL BE INCLUDED IN THE PRICE BID PER SQUARE YARD OF "CLASS C BRIDGE DECK REPAIR".

(10) DRILLED SHAFTS:

USE A MIX DESIGN FOR ALL DRILLED SHAFTS THAT WILL LIMIT CURING TEMPERATURES TO LOWER THAN 160 DEGREES FAHRENHEIT, WHILE RESULTING IN A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 56 DAYS. USE TYPE I, II OR V CEMENT WITH UP TO 35% CLASS F FLY ASH REPLACEMENT. ALTERNATIVELY, A TYPE IP(XX) CEMENT MAY BE USED PROVIDED CLASS F FLY ASH IS UTILIZED FOR THE POZZOLAN AND AN ADDITIONAL REPLACEMENT OF CLASS F FLY ASH DURING BATCHING UP TO 35-(XX)% IS MADE. USE A MINIMUM OF 25% CLASS F FLY ASH REPLACEMENT. CLASS C FLY ASH AND ADDITIONAL PORTLAND CEMENT WILL NOT BE ALLOWED. OTHER TEMPERATURE CONTROL CONCRETE MIXES MAY BE ALLOWED WITH THE APPROVAL OF THE ENGINEER.

PROVIDE A METHOD FOR MONITORING CONCRETE TEMPERATURE IN DRILLED SHAFTS DURING CURING. BEGIN MONITORING WHEN THE CONCRETE IS PLACED AND MONITOR CONTINUOUSLY FOR SEVEN DAYS. MONITOR TEMPERATURES AT MIDHEIGHT OF THE SHAFT, WITHIN FIVE FEET OF THE TOP OF SHAFT, AND AS DIRECTED BY ENGINEER. IF THE TEMPERATURE EXCEEDS 150 DEGREES FAHRENHEIT, MAKE ADJUSTMENTS TO THE MIX DESIGN PRIOR TO PLACING CONCRETE IN THE NEXT SHAFT. SUBMIT A TEMPERATURE MONITORING PLAN TO THE ENGINEER FOR APPROVAL.

INTERACTION BETWEEN DRILLED SHAFT EXCAVATIONS SHALL BE PREVENTED. THE CONTRACTOR SHALL SEQUENCE DRILLED SHAFT CONSTRUCTION SUCH THAT EXCAVATIONS ARE NOT MADE WITHIN 48- FEET OF ANOTHER SHAFT EXCAVATION IN WHICH THE CONCRETE HAS NOT CURED FOR AT LEAST 48 HOURS. THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF DRILLED SHAFT CONSTRUCTION TO THE ENGINEER.

PERFORM CROSSHOLE SONIC LOGGING TESTING ON EACH DRILLED SHAFT OF EACH PIER. TESTS TO BE CONDUCTED AS INDICATED IN THE PLANS AND IN ACCORDANCE WITH SUBSECTION 516.04C(4) OF THE SPECIFICATIONS. ALL COSTS ASSOCIATED WITH CROSSHOLE SONIC LOGGING AS SHOWN IN THE PLANS SHALL BE INCLUDED IN THE PRICE BID PER UNIT EACH OF "CROSSHOLE SONIC LOGGING".

PERFORM THERMAL INTEGRITY PROFILING (TIP) TESTS ON EACH DRILLED SHAFT OF EACH PIER. TESTS TO BE CONDUCTED AS INDICATED IN THE PLANS AND IN ACCORDANCE WITH SPECIAL PROVISION 516-5(A-X)19. ALL COSTS ASSOCIATED WITH INTEGRITY PROFILING (TIP) TESTS AS SHOWN IN THE PLANS SHALL BE INCLUDED IN THE PRICE BID PER UNIT EACH OF "THERMAL INTEGRITY PROFILING".

(11) SEALED EXPANSION JOINTS:

SEALED EXPANSION JOINTS SHALL BE CONSTRUCTED AT LOCATIONS AS INDICATED IN THE PLANS. ALL COSTS OF THE SEALED EXPANSION JOINTS INCLUDING LABOR, EQUIPMENT, MATERIAL, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF "SEALED EXPANSION JOINT".

(12) MODULAR EXPANSION JOINTS:

MODULAR EXPANSION JOINTS SHALL BE CONSTRUCTED AT LOCATIONS AS INDICATED IN THE PLANS AND AS SPECIFIED BY SUBSECTION 518.04.C.5(E) OF THE SPECIFICATIONS. THE CONTRACTOR SHALL INDICATE THE EXPANSION DEVICE TO BE USED AT PIER 5 AND ABUTMENT 2 WITH THE SUBMISSION OF SHOP DRAWINGS. THE DIMENSIONS OF THE GIRDER END CUTOUTS TO ACCOMMODATE THE EXPANSION DEVICE SHALL CORRESPOND TO THE CHOSEN DEVICE. THE DESIGN PLAN SHEETS ARE ESTIMATES OF THE REQUIRED DIMENSIONS, WHICH MAY VARY DEPENDING ON THE DEVICE AND MANUFACTURER SELECTED.

ALL COSTS INCLUDING LABOR, EQUIPMENT, MATERIAL, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF "MODULAR EXPANSION JOINT".

(13) DECK SLAB:

THE EXTERIOR GIRDERS SHALL BE SECURELY BRACED TO ELIMINATE TWISTING AND PREVENT OVERSTRESSING OF THE GIRDER WEB DUE TO THE WEIGHT OF THE OVERHANGING SLAB AND FINISHING MACHINE. BRACING SHALL CONSIST OF A TENSION MEMBER FROM THE TOP FLANGE OF THE EXTERIOR GIRDER TO THE TOP FLANGE OF THE ADJACENT INTERIOR GIRDER AND A COMPRESSION MEMBER FROM THE BOTTOM FLANGE OF THE EXTERIOR GIRDER TO THE TOP FLANGE OF THE ADJACENT INTERIOR GIRDER.

OVERHANG FORMS SHALL BE SUPPORTED FROM THE BOTTOM FLANGE OF THE EXTERIOR GIRDER UNLESS THE GIRDER WEB IS ADEQUATELY BRACED TO PREVENT BUCKLING FROM WEB BEARING FORM SUPPORT BRACKETS. DO NOT USE FORM SUPPORT SYSTEMS WHICH WILL CAUSE UNACCEPTABLE OVERSTRESS OR DEFORMATION TO PERMANENT BRIDGE MEMBERS.

ALL CANTILEVER FORMING BRACKETS SHALL BE ADJUSTABLE AND CAPABLE OF BEING ADJUSTED DURING THE PLACEMENT OF DECK CONCRETE IN ORDER TO MAINTAIN PROPER GRADES OF OVERHANG. IF THE CONTRACTOR USES SHIMS TO ADJUST THE FORMING BRACKETS, A METHOD TO PREDICT THE CRUSH AND SETTLEMENT OF THE SHIMS MUST BE PROVIDED TO THE ENGINEER.

THE RESULTING FORCE OF THE LEG BRACE OF THE CANTILEVER BRACKETS SHALL BEAR ON THE WEB AND WITHIN 6" OF THE BOTTOM FLANGE OF THE BEAMS.

WEDGE HARDWOOD STRUTS, OR ANOTHER MATERIAL OF AN EQUIVALENT STRENGTH, BETWEEN BEAM WEBS WITHIN 6 INCHES OF THE BOTTOM FLANGE AT EACH TENSION TIE LOCATION.

THE PLANE OF THE BRACING SYSTEM SHALL BE VERTICALLY AND HORIZONTALLY PERPENDICULAR TO THE GIRDERS BRACING. BRACING SHALL BE SPACED TO PROVIDE THE REQUIRED RIGIDITY, BUT IN NO CASE SHALL THE SPACING EXCEED 8 FT. BRACING MEMBERS REMAINING IN CONCRETE SHALL HAVE SUITABLE CLEARANCE AND COVER.

TENSION TIES SHALL BE A MINIMUM OF #4 EPOXY-COATED REINFORCING STEEL BARS WITH THREADED ENDS OR 1/2" GALVANIZED ALL-THREAD, FURNISHED BY THE CONTRACTOR. THE TENSION TIES SHALL BE PLACED PERPENDICULAR TO THE BEAMS AND SHALL HAVE A MINIMUM CLEARANCE FROM THE DECK FORMWORK AS THE BOTTOM MAT OF TRANSVERSE REINFORCING BARS. TENSION TIES SHALL BE ATTACHED TO THE TOP FLANGE OF BEAMS BY MEANS OF TY-BARS CLIPS. WELDING CLIPS SHALL NOT BE PERMITTED.

EPOXY-COAT OR GALVANIZE STEEL ITEMS USED TO FACILITATE CONSTRUCTION, SUCH AS DECK FORM HANGERS, TY-BAR CLIPS, INSERT WELD ANCHORS, OR OTHER APPURTENANCES, THAT WILL REMAIN IN PLACE IN THE DECK SLAB. EPOXY-COAT IN ACCORDANCE WITH ASTM A 775 OR GALVANIZE IN ACCORDANCE WITH AASHTO M111.

SUBMIT DRAWINGS OF THE PROPOSED BRACING SYSTEM TO THE BRIDGE ENGINEER FOR APPROVAL. CALCULATIONS SHALL BE REQUIRED TO DEMONSTRATE STABILITY OF THE BRIDGE DURING CONCRETE CASTING. DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OKLAHOMA. DRAWINGS FOR THE PROPOSED BRACING SYSTEM AND CASTING PROCEDURE SHALL BE APPROVED BY THE BRIDGE ENGINEER BEFORE ANY DECK CONCRETE IS PLACED.

FOR ADDITIONAL INFORMATION CONCERNING FORMWORK BRACING FOR EXTERIOR STEEL GIRDERS, SEE THE OKLAHOMA DEPARTMENT OF TRANSPORTATION 2019 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

THE DEPARTMENT CONSIDERS ALL COST FOR BRACING, INCLUDING PROFESSIONAL SERVICES, TO BE INCLUDED IN OTHER ITEMS OF WORK.

THE TRANSVERSE CONSTRUCTION JOINT AT ABUTMENT NO. 1 ON THE APPROACH SLABS AND THE CONSTRUCTION JOINT AT THE END OF THE BRIDGE SHALL BE SAWED AND SEALED.

IN THE EVENT OF AN EMERGENCY, HALT THE PLACEMENT OF CONCRETE BY FORMING A CONSTRUCTION JOINT MADE PERPENDICULAR TO THE DIRECTION OF TRAFFIC OR AS DIRECTED BY THE ENGINEER. DO NOT PLACE ANY HEAVY EQUIPMENT ON THE FINISHED DECK SLAB WITHIN 5 FEET OF ANY CONSTRUCTION JOINT UNTIL CONCRETE IS IN PLACE ON BOTH SIDES OF THE RESPECTIVE JOINT AND AT LEAST 48 HOURS HAS ELAPSED SINCE CONCRETE PLACEMENT.

SEAL ALL DECK SLAB CONSTRUCTION JOINTS WITH HIGH MOLECULAR WEIGHT METHACRYLATE IN ACCORDANCE WITH SECTION 523 OF THE SPECIFICATIONS. INCLUDE ALL COST OF EQUIPMENT AND LABOR FOR THE INSTALLATION OF THE HIGH MOLECULAR WEIGHT METHACRYLATE SEALER IN THE CONTRACT UNIT PRICE OF "SEALER CRACK PREPARATION". INCLUDE ALL COST OF THE HIGH MOLECULAR WEIGHT METHACRYLATE SEALER IN THE CONTRACT UNIT PRICE OF "SEALER RESIN". THE DEPARTMENT WILL NOT MEASURE THE PREPARATION AND SEALER OF EMERGENCY CONSTRUCTION JOINTS FOR PAYMENT.

REVISIONS		
REV. NO.	DESCRIPTION	DATE
⚠1	REVISED NOTE	9/07/21
⚠2	REVISED NOTE	12/08/21

(14) INSTALLATION OF BRIDGE ITEMS (TYPE A):

PROVIDE AND INSTALL FIXED BEARING ASSEMBLIES AND BEARING PADS OF THE SIZE AND SHAPE AT PIER NO. 6 AND PIER NO. 7 AS DETAILED IN THE PLANS.

ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING THE FIXED BEARING ASSEMBLIES AS SHOWN IN THE PLANS INCLUDING ELASTOMERIC PADS, ANCHOR PLATES, SOLE PLATES, MASONRY PLATES, ANCHOR BOLTS, NUTS, WASHERS, LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER UNIT EACH OF "INSTALLATION OF BRIDGE ITEMS (TYPE A)".

(15) INSTALLATION OF BRIDGE ITEMS (TYPE B):

PROVIDE AND INSTALL EXPANSION BEARING ASSEMBLIES AND BEARING PADS OF THE SIZE AND SHAPE AT PIER NO. 5 AND ABUTMENT NO. 2 AS DETAILED IN THE PLANS.

THE CONTRACTOR SHALL INDICATE THE EXPANSION DEVICE TO BE USED AT PIER NO. 5 AND ABUTMENT NO. 2 WITH THE SUBMISSION OF SHOP DRAWINGS. THE DIMENSIONS OF THE GIRDER END CUTOUTS TO ACCOMODATE THE EXPANSION DEVICE SHALL CORRESPOND TO THE CHOSEN DEVICE. THE DESIGN PLAN SHEETS ARE ESTIMATES OF THE REQUIRED DIMENSIONS, WHICH MAY VARY DEPENDING ON THE DEVICE AND MANUFACTURER SELECTED.

ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING THE EXPANSION BEARING ASSEMBLIES AS SHOWN IN THE PLANS INCLUDING ELASTOMERIC PADS, ANCHOR PLATES, SOLE PLATES, MASONRY PLATES, ANCHOR BOLTS, NUTS, WASHERS, LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER UNIT EACH OF "INSTALLATION OF BRIDGE ITEMS (TYPE B)".

(16) PERFORATED PIPE UNDERDRAIN:

ITEM "6" PERFORATED PIPE UNDERDRAIN ROUND" INCLUDES PERFORATED PIPES AND PIPE UNDERDRAIN COVER MATERIAL. THE INSTALLATION OF THE PERFORATED PIPE AND PIPE UNDERDRAIN COVER MATERIAL SHALL BE AS SHOWN IN THE PLANS AND ON STANDARD PUD-4.

ALL COSTS OF THE PERFORATED PIPE UNDERDRAIN INSTALLATION INCLUDING MATERIAL, LABOR, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF "6" PERFORATED PIPE UNDERDRAIN ROUND".

(17) NON -PERFORATED PIPE UNDERDRAIN:

ITEM "6" NON- PERFORATED PIPE UNDERDRAIN- ROUND" INCLUDES NON- PERFORATED PIPES AND PIPE UNDERDRAIN COVER MATERIAL. THE INSTALLATION OF THE NON-PERFORATED PIPE AND PIPE UNDERDRAIN COVER MATERIAL SHALL BE AS SHOWN IN THE PLANS AND ON STANDARD PUD-4.

ALL COSTS OF THE NON- PERFORATED PIPE UNDERDRAIN INSTALLATION INCLUDING MATERIAL, LABOR, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF "6" NON-PERFORATED PIPE UNDERDRAIN-ROUND".

⚠ (18) REMOVAL OF EXISTING BRIDGE STRUCTURE:

ITEM "REMOVAL OF EXISTING BRIDGE STRUCTURE" CONSISTS OF THE REMOVAL AND DISPOSAL OF TWO BRIDGES. BOTH STRUCTURES ARE 2-(3-100') 206'-334'-206' 2-(72') CONTINUOUS PLATE GIRDER SPANS X 28' CLEAR ROADWAY BRIDGE AT CENTERLINE SURVEY STA. 322+78.41. THE STRUCTURES ARE THE EAST AND WEST BOUND OF CENTERLINE OF US-HIGHWAY 62.

THE REMOVAL OF THE EXISTING STRUCTURES SHALL BE IN ACCORDANCE WITH SUBSECTION 619.04B OF THE 2019 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND AS APPROVED BY THE ENGINEER.

DEMOLITION SHALL BE ACCOMPLISHED BY SAW CUTTING CONCRETE AND WELD CUTTING OF STEEL AND BY THE USE OF CRANES AND BARGES FOR THE REMOVAL OF ALL BRIDGE COMPONENTS. THE CONTRACTOR SHALL SUBMIT A COMPREHENSIVE DEMOLITION PLAN TO THE ENGINEER FOR APPROVAL. DO NOT BEGIN DEMOLITION OPERATIONS UNTIL APPROVAL OF THE PLAN BY THE ENGINEER IS RECEIVED.

AT ABUTMENT NO. 1 OF BRIDGE "B", REMOVE PILES TWO FEET BELOW THE BOTTOM OF THE TANGENT PILE WALL SHAFTS 37 THROUGH 46. ELEVATIONS SHOWN ON "VERTICAL PILE RETAINING WALL DETAILS (SHEET 1 OF 3)".

ALL COSTS NECESSARY TO REMOVE THE EXISTING BRIDGES AS DESCRIBED ABOVE INCLUDING LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER LUMP SUM OF "REMOVAL OF EXISTING BRIDGE STRUCTURE".

(19) PIPE RAILING:

TUBING & ACCESSORIES: AASHTO SPECIFICATIONS M270, GRADE 36 OR ASTM 500-GRADE B.

STEEL RAIL MEMBERS:

STEEL RAIL MEMBERS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO MIII AFTER FABRICATION AND SHALL RECEIVE A POWDER COATING PROCESS AFTER GALVANIZING. GALVANIZING SHALL NOT INTERFERE WITH THE POWDER COATING PROCESS. GALVANIZED SURFACES SHALL BE PREPARED IN ACCORDANCE WITH SUBSECTION 724.06 AND THE POWDER COATING MANUFACTURE'S RECOMMENDATIONS BEFORE APPLICATION OF THE POWDER COATING PROCESS. THE POWDER COATING MANUFACTURE'S RECOMMENDATIONS BEFORE APPLICATION OF THE POWDER COATING PROCESS. THE POWDER COATING PROCESS SHALL BE A TWO COAT SYSTEM APPLIED USING ELECTROSTATIC SPRAY.

THE BASE COAT SHALL BE THERMOSETTING EPOXY POWDER WITH A MINIMUM THICKNESS OF 2 - 4 MILS. THE TOP COAT SHALL BE A TOUGH POLYESTER POWDER COAT WITH A MINIMUM THICKNESS OF 2 - 4 MILS. COLOR CHIP 2038. COATED GALVANIZED FRAMEWORK SHALL HAVE A SALT SPRAY RESISTANCE OF 3,000 HOURS USING ASTM B1117 WITHOUT LOSS OF ADHESION. THE POWDER COATING PROCESS SHALL BE IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS. THE COLOR SHALL BE "BARN-STABLE BROWN".

ALL COST ASSOCIATED WITH THE RAILING INCLUDING THE COST OF STRUCTURAL TUBE POST, RAILS, SLEEVES, MATERIALS, LABOR, INSTALLING, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF "PIPE RAILING".

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

GENERAL NOTES AND SUMMARY OF PAY QUANTITIES (SHEET 2 OF 3)(BRIDGE)

Design	CJO	6/20
Detail	RAH	1/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. AB02

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED NOTE	4/27/21
2	REMOVED NOTE	6/04/21
3	REVISE QUANTITIES	7/06/21
4	REVISE PAY ITEM	9/07/21
5	REVISE QUANTITY	9/14/21

PAY QUANTITIES

0200 BRIDGE 'A' NBI 32533 - US-62 EASTBOUND OVER ARKANSAS RIVER

ITEM		DESCRIPTION			UNIT	QUANTITY	
501(B)	1300	SUBSTRUCTURE EXCAVATION COMMON	(BR-1)		CY.	310.00	
501(G)	1800	CLSM BACKFILL	(BR-1)		CY.	565.60	
504(A)	5200	APPROACH SLAB	(BR-1)	(1)	SY.	343.60	
504(B)	5300	SAW-CUT GROOVING	(BR-1)		SY.	6,054.10	
504(E)	5520	42" F-SHAPED PARAPET	(BR-1)		LF.	3,250.90	
506(A)	7200	STRUCTURAL STEEL	(BR-1)(BR-2)	(2)(3)	L.B.	4,731,810.00	
506(A)	7210	STRUCTURAL STEEL M270 GR. HPS 70W	(BR-1)	(2)(3)	L.B.	784,880.00	
507(A)	8200	STAINLESS STEEL FIXED BEARING ASSEMBLY	(BR-1)	(4)	EA.	20.00	
507(B)	8300	STAINLESS STEEL EXP. BEARING ASSEMBLY	(BR-1)	(5)	EA.	30.00	
509(A)	0210	CLASS AA CONCRETE	(BR-1)(BR-3)		CY.	1,967.30	3
509(B)	0320	CLASS A CONCRETE	(BR-1)		CY.	2,399.40	3
509(D)	0510	CLASS C CONCRETE		(6)	CY.	16.20	
510(C)	1450	SLOPE WALL (5")	(BR-1)	(7)	SY.	104.10	
511(A)	2210	REINFORCING STEEL			LB.	42,240.00	3
511(B)	2310	EPOXY COATED REINFORCING STEEL	(BR-1)		LB.	1,049,340.00	3 5
513(B)	4300	CLASS B BRIDGE DECK REPAIR		(8)	SY.	380.00	
513(C)	4400	CLASS C BRIDGE DECK REPAIR		(9)	SY.	95.00	
514(A)	5210	PILES, FURNISHED (HP 10X42)			LF.	502.00	
514(A)	5220	PILES, FURNISHED (HP 12X53)			LF.	368.00	
514(B)	5310	PILES, DRIVEN (HP 10X42)			LF.	502.00	
514(B)	5320	PILES, DRIVEN (HP 12X53)			LF.	368.00	
514(L)	6300	PILE SPLICE, H-PILE (NON-BIDDABLE)	(BR-1)		EA.	1.00	
515(A)	7200	WATER REPELLENT (VISUALLY INSPECTED)	(BR-1)		SY.	4,932.00	3
516(A)	8240	DRILLED SHAFTS 60" DIAMETER			LF.	440.00	
516(A)	8250	DRILLED SHAFTS 72" DIAMETER			LF.	96.00	
516(A)	8268	DRILLED SHAFTS 120" DIAMETER			LF.	360.00	3
516(A)	8270	DRILLED SHAFTS 144" DIAMETER			LF.	398.00	
516(C)	8400	CROSSHOLE SONIC LOGGING		(10)	EA.	19.00	
516(G)	8800	THERMAL INTEGRITY PROFILER		(10)	EA.	19.00	
518(B)	0300	SEALED EXPANSION JOINT	(BR-1)	(11)	LF.	84.00	
518(I)	0700	MODULAR EXPANSION JOINTS	(BR-1)	(12)	LF.	82.00	
523(A)	3200	SEALER CRACK PREPARATION	(BR-1)	(13)	LF.	304.00	
523(B)	3300	SEALER RESIN	(BR-1)	(13)	GAL.	2.10	
542	9111	(PL) INSTALLATION OF BRIDGE ITEMS (TYPE A)	(BR-1)	(14)	EA.	10.00	
542	9121	(PL) INSTALLATION OF BRIDGE ITEMS (TYPE B)	(BR-1)	(15)	EA.	10.00	
601(B)	1230	TYPE I-A PLAIN RIPRAP			TON	440.00	
601(C)	1310	TYPE I-A FILTER BLANKET			TON	90.00	
613(H)	6205	6" PERFORATED PIPE UNDERDRAIN ROUND	(BR-1)	(16)	LF.	84.00	
613(I)	6310	6" NON-PERF. PIPE UNDERDRAIN ROUND	(BR-4)	(17)	LF.	46.00	
619(D)	6700	REMOVAL OF EXISTING BRIDGE STRUCTURE	(BR-1)	(18)	LSUM	1.00	

PAY QUANTITIES

0201 BRIDGE 'B' NBI 32532 - US-62 WESTBOUND OVER ARKANSAS RIVER

ITEM		DESCRIPTION			UNIT	QUANTITY	
501(B)	1300	SUBSTRUCTURE EXCAVATION COMMON	(BR-1)		CY.	310.00	
501(G)	1800	CLSM BACKFILL	(BR-1)		CY.	565.60	
504(A)	5200	APPROACH SLAB	(BR-1)	(1)	SY.	343.60	
504(B)	5300	SAW-CUT GROOVING	(BR-1)		SY.	6,054.10	
504(E)	5520	42" F-SHAPED PARAPET	(BR-1)		LF.	3,250.90	
506(A)	7200	STRUCTURAL STEEL	(BR-1)(BR-2)	(2)(3)	L.B.	4,731,810.00	
506(A)	7210	STRUCTURAL STEEL M270 GR. HPS 70W	(BR-1)	(2)(3)	L.B.	784,880.00	
507(A)	8200	STAINLESS STEEL FIXED BEARING ASSEMBLY	(BR-1)	(4)	EA.	20.00	
507(B)	8300	STAINLESS STEEL EXP. BEARING ASSEMBLY	(BR-1)	(5)	EA.	30.00	
509(A)	0210	CLASS AA CONCRETE	(BR-1)(BR-3)		CY.	1,967.30	3
509(B)	0320	CLASS A CONCRETE	(BR-1)		CY.	2,399.40	3
509(D)	0510	CLASS C CONCRETE		(6)	CY.	16.20	
510(C)	1450	SLOPE WALL (5")	(BR-1)	(7)	SY.	104.10	
511(A)	2210	REINFORCING STEEL			LB.	42,240.00	3
511(B)	2310	EPOXY COATED REINFORCING STEEL	(BR-1)		LB.	1,049,340.00	3 5
514(A)	5210	PILES, FURNISHED (HP 10X42)			LF.	502.00	
514(A)	5220	PILES, FURNISHED (HP 12X53)			LF.	368.00	
514(B)	5310	PILES, DRIVEN (HP 10X42)			LF.	502.00	
514(B)	5320	PILES, DRIVEN (HP 12X53)			LF.	368.00	
514(L)	6300	PILE SPLICE, H-PILE (NON-BIDDABLE)	(BR-1)		EA.	1.00	
515(A)	7200	WATER REPELLENT (VISUALLY INSPECTED)	(BR-1)		SY.	4,932.00	3
516(A)	8240	DRILLED SHAFTS 60" DIAMETER			LF.	440.00	
516(A)	8250	DRILLED SHAFTS 72" DIAMETER			LF.	96.00	
516(A)	8268	DRILLED SHAFTS 120" DIAMETER			LF.	360.00	3
516(A)	8270	DRILLED SHAFTS 144" DIAMETER			LF.	398.00	
516(C)	8400	CROSSHOLE SONIC LOGGING		(10)	EA.	19.00	
516(G)	8800	THERMAL INTEGRITY PROFILER		(10)	EA.	19.00	
518(B)	0300	SEALED EXPANSION JOINT	(BR-1)	(11)	LF.	84.00	
518(I)	0700	MODULAR EXPANSION JOINTS	(BR-1)	(12)	LF.	82.00	
523(A)	3200	SEALER CRACK PREPARATION	(BR-1)	(13)	LF.	304.00	
523(B)	3300	SEALER RESIN	(BR-1)	(13)	GAL.	2.10	
542	9111	(PL) INSTALLATION OF BRIDGE ITEMS (TYPE A)	(BR-1)	(14)	EA.	10.00	
542	9121	(PL) INSTALLATION OF BRIDGE ITEMS (TYPE B)	(BR-1)	(15)	EA.	10.00	
601(B)	1230	TYPE I-A PLAIN RIPRAP			TON	440.00	
601(C)	1310	TYPE I-A FILTER BLANKET			TON	90.00	
613(H)	6205	6" PERFORATED PIPE UNDERDRAIN ROUND	(BR-1)	(16)	LF.	84.00	
613(I)	6310	6" NON-PERF. PIPE UNDERDRAIN ROUND	(BR-4)	(17)	LF.	46.00	
619(D)	6700	REMOVAL OF EXISTING BRIDGE STRUCTURE	(BR-1)	(18)	LSUM	1.00	
809(G)	7800	(SP) BRIDGE NAVIGATION LIGHTING	(BR-5)		LSUM	1.00	

PAY QUANTITIES

0202 TANGENT PILE RETAINING WALL

ITEM		DESCRIPTION		UNIT	QUANTITY
509(D)	0510	CLASS C CONCRETE		CY.	17.00
510(A)	1260	TANGENT PILE RETAINING WALL		SY.	613.00
510(D)	1500	GRAFFITI TREATMENT		SF.	4,982.00
516(A)	8230	DRILLED SHAFTS 48" DIAMETER		LF.	2,636.00
516(C)	8400	CROSSHOLE SONIC LOGGING		EA.	6.00
622(A)	0200	PIPE RAILING	(BR-1)(BR-6) (19)	LF.	266.00

PAY QUANTITIES

0600 STAKING

ITEM		DESCRIPTION		UNIT	QUANTITY
642(B)	3300	CONSTRUCTION STAKING LEVEL II	(S-1)	L.SUM	1.00

PAY QUANTITIES

0640 CONSTRUCTION

ITEM		DESCRIPTION	UNIT	QUANTITY
220	1100	SWPPP DOCUMENTATION AND MANAGEMENT	L.SUM	1.00
641	2100	MOBILIZATION	L.SUM	1.00

1 2

(BR-1):

PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITIES ONLY. SEE SECTION 109.01B OF THE STANDARD SPECIFICATION.

(BR-2):

THE STRUCTURAL STEEL M270 GR. HPS 50W INCLUDES AN AMOUNT A STEEL AS NECESSARY FOR THE ADDITION OF A CABLE SAFETY SYSTEM AS SHOWN IN THE PLANS.

(BR-3):

THE CLASS AA CONCRETE INCLUDES AN ESTIMATED TOTAL OF 75.30 C.Y. FOR BEAM HAUNCHES.

(BR-4):

THE ENGINEER MAY ADJUST THE EXTENT, LOCATION AND DEPTH OF NON-PERFORATED PIPE UNDERDRAIN DURING CONSTRUCTION. INCLUDE THE COST OF TRENCH EXCAVATION AND STANDARD BEDDING MATERIAL IN THE CONTRACT UNIT PRICE OF "6" NON-PERF. PIPE UNDERDRAIN RND". INSTALL AS SHOWN IN THE PLANS AND ON STD. PUD-4.

(BR-5):

PROVIDE AND INSTALL THE NAVIGATION LIGHTING AND MARKING SYSTEM AS SHOWN IN THE PLANS IN ACCORDANCE WITH THE SPECIAL PROVISION "BRIDGE NAVIGATION LIGHTING". THE REQUIRED SYSTEM INCLUDES FOUR 180-DEGREE RED LIGHTS AND TWO 360-DEGREE GREEN LIGHTS WITH SWING ARM ASSEMBLIES COMPLETE WITH PANEL MOUNTS. ITEM ALSO INCLUDES RETROREFLECTIVE PANELS, CLEARANCE GAUGES, CONDUIT, JUNCTION BOXES, PULL BOXES, TRENCHING, BACKFILLING, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN IN THE PLANS.

(BR-6):

QUANTITY SHOWN IS FOR TOTAL LENGTH OF 2" PIPE RAILING ON TOP OF THE COPING OF THE RETAINING WALL UNDER SPAN NO. 1 OF BRIDGE 'A' AND 'B'. PRICE BID SHALL INCLUDE COST OF PIPE RAIL PAINTED WITH POWDER COAT PAINT, CONCRETE CLASS "C", ALL FABRICATING, LABOR, AND MATERIALS.

(S-1):

ESTABLISHMENT OF HORIZONTAL AND VERTICAL CONTROL INCLUDES STAKING OF PRESENT AND NEW RIGHT-OF-WAY, CENTERLINE OF SURVEY, AND CENTERLINE OF DETOUR, BENCHMARKS, ORIGINAL, AND FINAL CROSS SECTIONS WITH VOLUME REPORTS/COMPUTATIONS FOR THE ROADWAY AND ALL OTHER EARTHWORK CONSTRUCTION FEATURES AS DETERMINED BY THE ENGINEER.

BRIDGE A & B MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

GENERAL NOTES AND SUMMARY OF PAY QUANTITIES (SHEET 3 OF 3)(BRIDGE)

Design	CJO	6/20
Detail	RAH	1/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) SHEET NO. AB03

REVISIONS		
REV'N NO.	DESCRIPTION	DATE
1	REVISE NOTES	8/12/2021
2	REVISE NOTES	1/27/2022

ENVIRONMENTAL MITIGATION NOTES

EARTHWORK NOTE:
THE CONTRACTOR MUST ENSURE THAT ANY MATERIAL INCORPORATED INTO THE PROJECT IS FREE OF ANY HAZARDOUS, INDUSTRIAL OR CONTAMINATED WASTE, REFER TO SUB-SECTIONS 106.01 AND 202.02 OF THE 2009 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

IMPORTED MATERIAL (EG. BORROW) - IF MATERIAL IS IMPORTED TO THE PROJECT AND AT ANY POINT THE MATERIAL IS DETERMINED BY THE ENGINEER TO INCLUDE ANY TYPE OF UNACCEPTABLE CONTAMINATION, THE MATERIAL MAY REQUIRE REMOVAL, IN WHOLE, OR IN PART. IF REMOVAL IS REQUIRED, THEN THE INITIAL PLACEMENT, REMOVAL AND PROPER DISPOSAL OF THIS MATERIAL SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE DISPOSAL OF THE UNACCEPTABLE MATERIAL SHALL BE APPROVED BY THE ENGINEER, REFER TO SUB-SECTION 107.15 OF THE 2009 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

TO ASSIST THE CONTRACTOR, THE "OFF PROJECT FACILITY/ BORROW SITE HAZARDOUS MATERIALS QUESTIONNAIRE" IS PROVIDED ON THE DEPARTMENT'S WEB SITE:

HTTPS://OK.GOV/ODOT/PROGRAMS_AND_PROJECTS/ENVIRONMENTAL/INDEX.HTML

THIS QUESTIONNAIRE IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR SO THAT A CLEARER UNDERSTANDING OF THE CHARACTERISTICS OF THE PROPOSED SITE/ MATERIAL IS ACHIEVED. COMPLETION AND SUBMITTAL OF THIS FORM TO THE ENGINEER DOES NOT EXCUSE THE CONTRACTOR FROM PROVIDING MATERIALS THAT ARE FREE OF HAZARDOUS AND INDUSTRIAL COMPOSITION IN ACCORDANCE WITH SUB-SECTIONS 106.01 AND 202.02 OF THE 2009 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

NON-COMPLIANCE NOTE:
FAILURE TO IMPLEMENT THE COMMITMENTS SPECIFIED IN THE PLAN NOTES CAN RESULT IN NON-COMPLIANCE ISSUES ON THE PROJECT. WORK ACTIVITIES MAY BE SUSPENDED ON THE PROJECT, FOR AN UNDETERMINED DURATION, WHILE WORKING WITH REGULATORS TO BRING THE PROJECT BACK INTO COMPLIANCE. THE CONTRACTOR WILL NOT BE COMPENSATED FOR TIME LOST.

WATER QUALITY CONVSERVATION NOTE:
APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE IMPACTS FROM STORM WATER DISCHARGES AND SEDIMENTATION IN STREAMS, AS ESTABLISHED BY THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY, SHALL BE CONSCIENTIOUSLY IMPLEMENTED THROUGHOUT THE PROPOSED CONSTRUCTION PERIODS, IN ORDER TO MINIMIZE ANY POTENTIAL IMPACTS TO ANY LISTED SPECIES. THE EFFECTIVENESS OF EROSION CONTROLS SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION ACTIVITIES. HAZARDOUS MATERIALS, CHEMICALS, FUELS, LUBRICATING OILS, AND OTHER SUCH SUBSTANCES SHALL BE STORED AT LEAST 100 FEET FROM THE ORDINARY HIGH WATER MARK (OHWM). REFUELING OF CONSTRUCTION EQUIPMENT SHALL ALSO BE CONDUCTED AT LEAST 100 FEET FROM THE OHWMS. SEDIMENT AND EROSION CONTROLS SHALL BE INSTALLED AROUND STAGING AREAS TO PROHIBIT DISCHARGE OF MATERIALS FROM THESE SITES. CONSTRUCTION WASTE MATERIALS AND DEBRIS SHALL BE STOCKPILED AT LEAST 25 FEET OUTSIDE OF THE OHWMS, AND THESE MATERIALS SHALL BE REMOVED AND DISPOSED OF PROPERLY FOLLOWING COMPLETION OF THE PROJECT. PREVENTATIVE MEASURES MUST BE TAKEN TO PROHIBIT THE DISCHARGE OF CONTAMINANTS INTO ANY SURFACE WATERS.

AMERICAN BURYING BEETLE NOTE:
THE AMERICAN BURYING BEETLE IS A LARGE CARRION BURYING BEETLE THAT OCCURS WITHIN THE PROJECT LIMITS. NO ARTIFICIAL LIGHTING SHALL BE USED DURING CONSTRUCTION WITHOUT PRIOR CONSULTATION WITH USFWS THRU ODOT ENVIRONMENTAL PROGRAMS DIVISION. DO NOT PROCEED WITH ANY USE OF ARTIFICIAL LIGHTING WITHOUT WRITTEN CONSENT FROM ODOT ENVIRONEMTNAL PROGRAMS DIVISION. CARCASSES AND ALL FOOD TRASH SHALL BE REMOVED FROM THE PERMANENT AND TEMPORARY RIGHT-OF-WAY THROUGHOUT THE DURATION OF PROJECT ACTIVITIES.

BAT LIGHTING NOTE:
ALL TEMPORARY LIGHTING, IF USED, WILL BE DIRECTED AWAY FROM SUITABLE BAT HABITAT DURING THE ACTIVE SEASON FOR BATS (APRIL 1- NOVEMBER 15). 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.

KARST NOTE:
ALTHOUGH A SURVEY HAS BEEN COMPLETED TO IDENTIFY KARST FEATURES, SUCH AS CAVES, SINKHOLES, LOSING STREAMS AND SPRINGS, PRIOR TO THE PROJECT, THERE IS A POTENTIAL TO UNCOVER KARST FEATURES DURING CONSTRUCTION. KARST FEATURES ARE POTENTIAL HABITAT FOR FEDERALLY THREATENED AND ENDANGERED SPECIES, INCLUDING BATS. UNDISCOVERED KARST FEATURES MAY OCCUR ON OR NEAR PROJECT SITES, EVEN IN PREVIOUSLY DEVELOPED AREAS. IF KARST FEATURES ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL ESTABLISH A BUFFER AREA OF 300 FEET AROUND THE NEWLY DISCOVERED FEATURE, AND THE RESIDENT ENGINEER SHALL CONTACT THE ODOT BIOLOGIST AT 405-521-2515. THE ODOT BIOLOGIST SHALL CONTACT THE US FISH AND WILDLIFE SERVICES (USFWS) TO FURTHER EVALUATE THE KARST FEATURE. NO FILL MATERIAL SHALL BE PLACED INTO THE KARST FEATURE OPENING, AND ALL PARKING, MAINTENANCE, STAGING, FUELING, STORM WATER MANAGEMENT ACTIVITIES, GROUND-DISTURBING, TREE-CLEARING, OR ANY OTHER CONSTRUCTION ACTIVITY SHALL BE ALLOWED WITHIN THE 300-FOOT BUFFER, UNTIL EVALUATION BY USFWS IS COMPLETE. IF KARST FEATURES ARE DETERMINED TO BE HABITAT FOR FEDERALLY-LISTED OR SENSITIVE SPECIES, A FORMAL CONSULTATION WITH USFWS SHALL BE REQUIRED BEFORE THE CONSTRUCTION CAN RESUME. THIS CONSULTATION MAY TAKE UP TO 180 DAYS AFTER THE INITIAL EVALUATION OF THE KARST FEATURES AND THE CONTRACTOR SHALL NOT BE COMPENSATED FOR ANY DELAYS DURING THAT TIME. IN SOME CASES, MODIFICATION TO THE PROJECT MAY BE NECESSARY AND THAT WOULD RESULT IN A CHANGE ORDER.

WHOOPING CRANE NOTE:
IF WHOOPING CRANES ARE SEEN AT OR WITHIN ONE MILE OF THE PROPOSED WORK SITE, THE RESIDENT ENGINEER SHALL IMMEDIATELY CONTACT THE ODOT BIOLOGIST. THE LOCATION AND TIME A WHOOPING CRANE WAS SEEN SHALL BE RECORDED AND PROVIDED TO THE ODOT BIOLOGIST. IF THERE IS A CONFIRMED SIGHTING AND/OR WHOOPING CRANES ARE OBSERVED WITHIN ONE MILE OF THE PROPOSED WORK SITE, ALL CONSTRUCTION ACTIVITIES SHALL CEASE UNTIL IT IS DETERMINED THAT WHOOPING CRANES HAVE LEFT THE PROJECT VICINITY WITHOUT BEING HARASSED. AN 8X10 PHOTOGRAPH OF THE WHOOPING CRANE ALONG WITH A WRITTEN DESCRIPTION OF THE BIRD, AS WELL AS ODOT CONTACT INFORMATION, SHALL BE POSTED AT THE CONSTRUCTION SITE AT ALL TIMES.

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 DECEMBER, 2021. 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, 2022 THE RESIDENT ENGINEER SHALL CONTACT THE ODOT BIOLOGIST. 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, 2022 THEY MAY CONTINUE WHILE ADDITIONAL NEST SEARCH SURVEYS ARE CONDUCTED AFTER LEAF-OFF. IF CONSTRUCTION ACTIVITIES HAVE NOT BEGUN BY OCTOBER 31, 2022 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, UP TO A 660 FOOT NO-WORK BUFFER SHALL BE PLACED AROUND THE NEST. THE EXACT DISTANCE OF THE BUFFER ZONE SHALL BE ESTABLISHED BY THE ODOT BIOLOGIST IN CONSULTATION WITH US FISH AND WILDLIFE SERVICES. IF THE BUFFER CANNOT BE MAINTAINED, ALL CLEARING, EXTERNAL CONSTRUCTION AND LANDSCAPING ACTIVITIES WITHIN THE BUFFER SHALL BE CONDUCTED BETWEEN JUNE 1 AND SEPTEMBER 15 (OUTSIDE THE NESTING SEASON).

MIGRATORY BIRD NOTE:
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 US-62 ARKANSAS RIVER BRIDGES (NBI:17609 AND 17610), US-62 RAILROAD BRIDGES (NBI:19354 AND 19355) WAS OBSERVED. REPAIR, RETROFIT, REHABILITATION OR DEMOLITION OF THE EXISTING BRIDGES AND CULVERTS SHALL BE CONDUCTED BETWEEN SEPTEMBER 1, AND FEBRUARY 28, WHEN MIGRATORY BIRD NESTS ARE NOT OCCUPIED. IF REPAIR, RETROFIT, REHABILITATION OR DEMOLITION CANNOT BE COMPLETED BETWEEN SEPTEMBER 1 AND FEBRUARY 28, THE BRIDGES AND CULVERTS 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 THESE STRUCTURES IS OBSERVED. IF BIRDS ARE OBSERVED THEN REPAIR, RETROFIT, REHABILITATION OR DEMOLITION OF THE EXISTING BRIDGES AND CULVERTS SHALL BE CONDUCTED BETWEEN SEPTEMBER 1, AND FEBRUARY 28 (WHEN MIGRATORY BIRD NESTS ARE NOT OCCUPIED).

Species	Seasonal Restriction Period
Bats	April 1 – November 15
Bald Eagle	September 16 – May 31
Migratory Birds: Swallows and Phoebes (NESTS PRESENT)	March 1 – August 31

CULTURAL RESOURCES NOTE;
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.

T15N R19E

SECTION 15: NW¼ SE¼ NW¼
SECTION 16: E½ SE¼ SW¼
SW¼ SW¼ NW¼
SW¼ SE¼ SW¼
SECTION 17: SW¼ NW¼
SW¼ NW¼ NW¼
SECTION 21: SE¼ NE¼ NE¼
SECTION 22: W½ NE¼ NW¼ [RIDER CEMETERY]
E½ NE¼ NW¼
W½ NW¼ NE¼
SE¼ SE¼ NW¼
SW¼ NW¼ SE¼
NE¼ SE¼
NE¼ SE¼ SW¼ [NEW HOPE CEMETERY]

RECREATIONAL TRAIL NOTES;
1. THE RESIDENT ENGINEER SHALL INVITE THE MUSKOGEE CITY-COUNTY PORT AUTHORITY TO PRE WORK AND NOTIFY THE PORT AUTHORITY OF THE TRAIL CLOSURE AT LEAST TWO WEEKS PRIOR TO THE TRAIL CLOSURE.
2. WHEN POSSIBLE, THE CONTRACTOR WILL NOT BLOCK THE TRAIL HEAD.
3. THE DISTURBED LAND SURROUNDING THE TRAIL HEAD AT APPROXIMATELY STA 328+75 RT TO 329+00 LT WILL BE FULLY RESTORED AND WILL BE GRADED APPROPRIATELY FOR SAFETY AND DRAINAGE. THE TRAIL HEAD WILL BE REPLACED IN KIND AT ITS EXACT LOCATION WITH ASPHALT PAVEMENT.
4. SHOULDERS ON N 55TH E WILL BE IMPROVED TO PROVIDE A BARRIER TO ALLOW A SEPARATION FOR PEDESTRIAN TRAVEL.

ENVIRONMENTAL NOTES

DETAIL
REVIEW
APPROVED
ENVIRONMENTAL DIVISION

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) | SHEET NO. AE01

GENERAL CONSTRUCTION NOTES

THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING THE EXISTING ROAD TO LOCAL AND THROUGH TRAFFIC. SEE STANDARD SPECIFICATIONS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.

THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING THE EXISTING SECTION LINE ROADS TO LOCAL AND THROUGH TRAFFIC. SEE STANDARD SPECIFICATIONS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.

MAINTENANCE OF THROUGH TRAFFIC INCLUDES THE MAINTENANCE OF THE EXISTING ROAD IN CLOSE PROXIMITY TO THE NEW CONSTRUCTION AS SHOWN ON THE PLANS.

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.

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

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.

VEGETATIVE MULCHING: THE VEGETATIVE MULCH SHALL BE ANCHORED IN ACCORDANCE WITH THE "MULCHING TILLER METHOD", AS SPECIFIED IN 233.04B(2) OF THE STANDARD SPECIFICATIONS.

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.

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

THE ENGINEER SHALL CHECK GRADES AT RAMP TERMINALS, AND MAKE ANY ADJUSTMENTS OF THE GRADES AND SUPERELEVATIONS, WHICH ARE REQUIRED TO OBTAIN SMOOTH PROFILES FOR BOTH EDGES OF THE RAMP PAVEMENT. CROSS SLOPE BREAKOVER SHALL NOT EXCEED 5%(FIVE PERCENT).

THE CONTRACTOR SHALL NOT ENTER OR EXIT THE WORK AREA BY CROSSING THE MEDIAN INTO OR OUT OF TRAFFIC.

NO CONSTRUCTION VEHICLE PERMITTED ACCESS INTO LIVE TRAFFIC

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

SUGGESTED SEQUENCE OF CONSTRUCTION

PHASE 1:
- A) SHIFT EB & WB TRAFFIC TO OUTSIDE LANES
- B) EXCAVATE AND INSTALL PIPE UNDER CROSSOVERS STA. 306+00.00 TO 314+00.00

PHASE 2:
- A) CONSTRUCT CROSSOVERS

PHASE 3:
- A) SHIFT WB TRAFFIC TO INSIDE EB LANE
- B) CONSTRUCT WB LANES AND OUTSIDE SHOULDER
- C) CONSTRUCT WB BRIDGE

PHASE 4:
- A) SHIFT TRAFFIC TO WB LANES
- B) CONSTRUCT EB LANES AND OUTSIDE SHOULDER
- C) CONSTRUCT EB BRIDGE

PHASE 5:
- A) SHIFT TRAFFIC TO OUTSIDE LANES
- B) REMOVE CROSSOVERS
- C) CONSTRUCT INSIDE SHOULDERS
- D) SHIFT TRAFFIC TO FINAL CONFIGURATION

PAY ITEM NOTES

(R-1) PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITY ONLY. SEE SECTION 109.01B OF THE STANDARD SPECIFICATIONS.

(R-4) AN ESTIMATED QUANTITY OF 1,784.49 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-6) FOR 230(A) PRICE BID TO INCLUDE COST OF 10-20-10 FERTILIZER, ESTIMATED AT 200 POUNDS PER 1000 SY.

FOR 205(A) PRICE BID TO INCLUDE COST OF 18-46-0 FERTILIZER, ESTIMATED AT 150 POUNDS PER ACRE.

FOR 232(B) PRICE BID TO INCLUDE COST OF 10-20-10 FERTILIZER, ESTIMATED AT 150 POUNDS PER ACRE.

(R-7) FOR 230(A) PRICE BID TO INCLUDE COST OF WATERING, ESTIMATED AT 40 GALLONS PER SQ YD OF SODDING.

FOR 232(B) PRICE BID TO INCLUDE COST OF WATERING, ESTIMATED AT 40 GALLONS PER 50 SY.

(R-8) PRICE BID TO INCLUDE COST OF ALL NECESSARY MAINTENANCE, MAINTAINING DEVICE IN PROPOER UPRIGHT POSITION, REMOVAL OF DEVICE, AND REMOVAL OF SEDIMENT WHEN IT REACHES HALF THE HEIGHT OF THE DEVICE.

(R-11) THE QUANTITIES ESTIMATED FOR TEMPORARY EROSION AND SEDIMENT CONTROL IS 3.29 ACRES.

(R-15) QUANTITY BASED ON TWO APPLICATIONS.

(R-18) ESTIMATED AT 165 LBS. PER CU. FT.

(R-21) 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-24) ESTIMATED AT 0.075 GALLONS PER SQUARE YARD OF ORIGINAL EMULSION OF TACK COAT (BEFORE DILUTION FOR APPLICATION) IN ACCORDANCE WITH SECTION 407 OF THE STANDARD SPECIFICATIONS.

(R-25) ESTIMATED AT 112 LBS. PER SQ. YD. PER 1" THICK.

(R-35) ANY DRAINAGE STRUCTURE DESCRIBED AS TEMPORARY, SHALL AFTER COMPLETION OF THE PROJECT, BE REMOVED BY AND BECOME THE PROPERTY OF THE CONTRACTOR.

(R-38) TO BECOME THE PROPERTY OF AND BE DISPOSED OF BY THE CONTRACTOR IN A MANNER APPROVED BY THE ENGINEER.

(R-39) MATERIALS REMOVED SHALL NOT BE MEASURED FOR PAYMENT UNDER SECTION 202.06 UNCLASSIFIED EXCAVATION.

(2) ESTIMATED QUANTITY TO BE USED IN A MANNER AND LOCATION TO BE DETERMINED BY THE ENGINEER.

(3) USE RS580I OR APPROVED EQUAL (PAY FOR AS GEOSYNTHETIC REINFORCEMENT, #326)

(5) COST OF TRENCH EXCAVATION AND COVER MATERIAL TO BE INCLUDED IN PRICE BID OF PIPE UNDERDRAIN

(10) MEASUREMENT WILL BE BASED ON THE THORETICAL CROSS SECTION SHOWN ON THE TYPICAL SECTION MULTIPLIED BY THE ACTUAL LENGTH.

(13) ALL ASPHALT MIXES SHALL MEET MICRO-DEVAL SPECIFICATIONS

(14) THE GUARDRAIL END TREATMENT SHALL BE ON THE OKLAHOMA DEPARTMENT OF TRANSPORTATIONS LIST OF APPROVED QUALIFIED PRODUCTS. FOR A LIST OF THE APPROVED DEVICES GO TO THE OKLAHOMA DEPARTMENT OF TRANSPORTATION WEBSITE AT: http://www.okladot.state.ok.us/traffic/qpl/index.php

(15) PRICE BID FOR THIS ITEM TO INCLUDE THE COST OF RELAPPING GUARDRAIL (NEW & EXISTING) DURING DIFFERENT PHASES OF THE PROJECT. RELAPPING WILL BE DONE AT THE DIRECTION OF THE ENGINEER.

(16) THE REMOVAL OF THE EXISTING PAVEMENT SHALL BE PERFORMED IN A MANNER THAT WOULD MINIMIZE DAMAGE TO THE ADJACENT PAVEMENT. NO COMPENSATION WILL BE MADE TO THE CONTRACTOR FOR REPAIRING DAMAGE SUSTAINED DURING THE REMOVAL PROCESS. PAYMENT OF THIS ITEM SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND INCIDENTALS TO COMPLETE THE WORK AS SPECIFIED, INCLUDING ANY BASE REPAIR, LEVELING OR BACKFILLING.

(17) PRICE BID FOR THIS ITEM TO INCLUDE THE COST OF GUARDRAIL DELINEATORS.

⚠1 (18) THE 4" CTB BASE LAYER MAY BE SUBSTITUTED WITH A MINIMUM OF 3" OF AC. THE CONTRACTOR WILL PERFORM ALL NECESSARY ADJUSTMENTS TO MAINTAIN THE FINISH GRADES AS SHOWN IN THE PLANS.

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE
⚠1	ADDED PAY ITEM NOTE	8/17/2021
⚠2	CHANGED NAME ON STAMP	8/17/2021

SUMMARY OF PAY QUANTITIES

ROADWAY 0100 — 30416(04)

ITEM		DESCRIPTION	UNITS	QUANTITY
201(A)	1200	CLEARING AND GRUBBING	LSUM	1.00
202(A)	2200	UNCLASSIFIED EXCAVATION (R-1)	CY	4,760.00
202(D)	2500	UNCLASSIFIED BORROW (R-1)	CY	2,278.00
205(A)	6200	TYPE A-SALVAGED TOPSOIL (R-6)(R-4)	LSUM	1.00
221(B)	2300	TEMPORARY SILT FENCE (2)(R-8)	LF	2,097.00
221(C)	2400	TEMPORARY SEDIMENT FILTER (2)(R-8)	EA.	1.00
221(E)	2600	TEMPORARY SILT DIKE (2)(R-8)	LF.	126.00
230(A)	7200	SOLID SLAB SODDING (R-6)(R-7)	SY	12,876.00
232(B)	9300	SEEDING METHOD B (R-6)(R-7)	AC	2.57
233(A)	0200	VEGETATIVE MULCHING (R-11)	AC	2.57
241	3100	MOWING (R-15)	AC	7.34
303(A)	1200	AGGREGATE BASE TYPE A (10)	CY	1,068.00
317	7100	CEMENT TREATED BASE ⚠1 (18)	SY	3,756.00
326(A)	1200	GEOTEXTILE REINFORCEMENT (3)	SY	12,351.00
402(E)	2600	TRAFFIC BOUND SURFACE COURSE TYPE E (R-18)	TON	1099.00
407(B)	7300	TACK COAT (R-24)	GAL.	110.00
408	8100	PRIME COAT (R-21)	GAL.	1,613.00
411(B)	1330	SUPERPAVE, TYPE S3 (PG 64-22 OK) (R-25)(13)	TON	295.00
411(C)	1430	SUPERPAVE, TYPE S4 (PG 64-22 OK) (R-25)(13)	TON	157.00
414(A)	5200	P.C. CONCRETE PAVEMENT (PLACEMENT)	SY	8,455.00
414(B)	5300	DOWEL JOINTED P.C.C. PAVT. (PLACEMENT)	SY	1,210.00
414(G)	5800	P.C. CONCRETE FOR PAVEMENT	CY	2,617.00
613(H)	6215	12" PERFORATED PIPE UNDERDRAIN ROUND (5)	LF	32.00
613(I)	6320	12" NON-PERF. PIPE UNDERDRAIN RND. (5)	LF	11.00
615(A)	1220	8" POLYVINYL CHLORIDE (PVC) PIPE (R-35)	LF	950.00
615(A)	1228	12" POLYVINYL CHLORIDE (PVC) PIPE (R-35)	LF	400.00
619(B)	6360	REMOVAL OF CONCRETE PAVEMENT (16)(R-38)(R-39)	SY	7,923.00
619(B)	6364	REMOVAL OF ASPHALT PAVEMENT (16)(R-38)(R-39)	SY	2,229.00
619(B)	6396	REMOVAL OF GUARDRAIL (R-38)	LF	2,170.00
619(C)	6600	SAWING PAVEMENT	LF	7,402.00
623(A)	1200	BEAM GUARDRAIL W-BEAM SINGLE (15)(17)	LF	1,195.00
623(G)	1820	GUARDRAIL END TREATMENT (31") (14)	EA.	6.00
623(I)	2050	GUARDRAIL BRIDGE CONN-THRIE BEAM (31") (15)	EA.	6.00

⚠2

PREPARED BY:
OKLAHOMA DEPARTMENT OF TRANSPORTATION
DESIGN DIVISION
K. NEFTZGER, P.E.
OKLA. LIC. NO. 32500
DATE 8/17/2021

LICENSED PROFESSIONAL ENGINEER — KORBEN NEFTZGER — 32500 — OKLAHOMA

OKLAHOMA Transportation

DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DRAWN			SUMMARY OF PAY QUANTITIES & NOTES (ROADWAY)
CHECKED			
APPROVED			
SQUAD			

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. AR01

08-17-21 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - SUMMARY OF PAY QUANTITIES AND NOTES (ROADWAY).dgn

SUMMARY OF GUARDRAIL

LOCATION			BEAM GUARDRAIL W-BEAM SINGLE 623(A)	GUARDRAIL END TREATMENT (31") 623(G)	GUARDRAIL BRIDGE CONNECTION THRIE BEAM (31") 623(I)	GUARDRAIL DELINEATORS (TYPE 1, CODE 1) 853	TOTAL PANEL LENGTH INCLUDING ANCHOR UNITS
STATION TO STATION	LANE LT.	LANE RT.					
			LF	EA.	EA.	EA.	LF
WESTBOUND							
STA. 310+85.35 TO 314+51.94	X		287.50	1.00	1.00	6.00	346.59
STA. 312+69.31 TO 314+51.94		X	100.00	1.00	1.00	3.00	162.63
STA. 330+61.10 TO 334+74.40		X	325.00	1.00	1.00	7.00	393.29
EASTBOUND							
STA. 310+36.42 TO 314+51.94	X		337.50	1.00	1.00	7.00	395.52
STA. 310+53.68 TO 314+51.94		X	312.50	1.00	1.00	7.00	378.26
STA. 330+61.10 TO 332+25.71	X		76.00	1.00	1.00	2.00	144.57
BRIDGE GUARDRAIL RETRO FIT							
STA. 330+61.10 TO 331+64.00	X		103.00			3.00	
STA. 330+61.10 TO 331+64.00		X	103.00			3.00	
TOTALS=			1644.50	6.00	6.00	38.00	

SUMMARY OF TEMPORARY DRAINAGE STRUCTURES

STR. NO.	℄ STATION	DESCRIPTION	DESIGN	615(A) POLYVINYL CHLORIDE (PVC) PIPE, ROUND	
				LIN. FT.	LIN. FT.
				8"	12"
T1	303+50.00	CONST 8" X 400.00' LG PVC SD IN MEDIAN	FPI-4, FHTMPP-2, SPB-2	400	
T2	309+75.00	CONST 8" X 550.00' LG PVC SD IN MEDIAN	FPI-4, FHTMPP-2, SPB-2	550	
T2	374+00.00	CONST 12" X 400.00' LG PVC SD IN MEDIAN	FPI-4, FHTMPP-2, SPB-2		400
			TOTALS=	950	400

SUMMARY OF SURFACING

STATION TO STATION	AGGREGATE BASE TYPE A 303(A)	CEMENT TREATED BASE 317	GEOTEXTILE REINFORCEMENT 326(A)	TRAFFIC BOUND SURFACE COURSE TYPE E 402(E)	TACK COAT 407(B)	PRIME COAT 408	SUPERPAVE TYPE S3 (PG 64 -22 OK) 411(B)	SUPERPAVE TYPE S4 (PG 64 -22 OK) 411(C)	P.C. CONCRETE PAVEMENT (PLACEMENT) 414(A)	DOWEL JOINTED P.C.C. PAVT. (PLACEMENT) 414(B)	P.C. CONCRETE FOR PAVEMENT 414(G)	SAWING PAVEMENT 619(C)
	CY	SY	SY	TON	GAL.	GAL.	TON	TON	SY	SY	CY	LF
MAINLINE TYPICAL 1 *												
℄ STA. 312+69.31 TO STA. 313+90.89 *	142.14	567.37	697.87	96.38	10.48	194.32	24.08	15.39	162.11	351.23	137.39	38.00
MAINLINE TYPICAL 2 *												
℄ STA. 313+90.89 TO ℄ STA. 314+51.00 *	142.75	569.80	700.85	101.86	10.53	195.15	24.18	18.36	162.80	352.73	137.97	114.00
℄ STA. 330+76.42 TO ℄ STA. 331+64.00 *	204.79	818.00	1005.42	146.13	15.10	279.95	40.75	26.34	233.55	506.02	197.93	152.00
CROSSOVERS												
℄ STA. 301+50.00 TO STA. 305+50.00			1,766.74						1,766.74		490.76	800.00
℄ STA. 307+00.00 TO STA. 312+50.00			2,423.41						2,423.41		673.17	1,100.00
℄ STA. 372+00.00 TO STA. 376+00.00			2,506.17						2,506.17		696.16	800.00
OUTSIDE GUARDRAIL WIDENING												
EB - ℄ STA. 309+83.68 TO STA. 313+90.89					17.55	78.66	36.85	23.57				407.21
WB - ℄ STA. 310+15.35 TO STA. 312+69.31					10.94	46.27	21.68	13.86				253.96
INSIDE GUARDRAIL WIDENING												
EB - ℄ STA. 309+66.42 TO STA. 313+90.89					18.30	82.30	38.56	24.66				424.47
EB - ℄ STA. 330+64.00 TO STA. 332+95.71					9.99	41.57	19.48	12.46				231.71
WB - ℄ STA. 331+64.00 TO STA. 335+44.40					16.40	72.99	34.17	21.85				380.40
INSIDE SHOULDER												
℄ STA. 301+50.00 TO STA. 305+50.00	171.06	533.34	962.96	197.88		185.18			355.55		83.95	800.00
℄ STA. 307+00.00 TO STA. 312+50.00	235.21	733.34	1,324.07	272.08		254.63			488.88		115.43	1,100.00
℄ STA. 372+00.00 TO STA. 376+00.00	171.06	533.34	962.96	197.88		185.18			355.55		83.95	800.00
WALKING PATH												
PI 00+00.00 TO 3+13.00							54.36					
TEMPORARY PARKING												
PI 00+25.26. TO 02+66.42				86.68								
TOTALS=	1,067.01	3,755.19	12,350.45	1,098.89	109.29	1,612.20	294.11	156.49	8,454.76	1,209.98	2,616.71	7401.75

*GUARDRAIL WIDENING INCLUDED IN MAINLINE IN QUANTITIES

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DRAWN		
CHECKED		SUMMARY SHEET
APPROVED		
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COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. AR02

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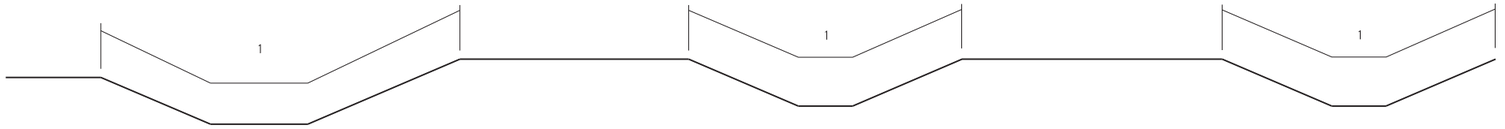
SUMMARY OF TEMPORARY SEDIMENT CONTROLS

LOCATION				TEMPORARY SILT FENCE 221(C)	TEMPORARY SEDIMENT FILTER 221(C)	TEMPORARY SILT DIKE 221(E)
STATION TO STATION	LT.	RT.	DESCRIPTION	LF	EA	LF
STA 301+25.00			ACROSS MEDIAN DITCH			14.00
STA 305+98.40			MEDIAN DITCH		1.00	
STA 305+89.12			ACROSS MEDIAN DITCH			14.00
STA 306+15.75			ACROSS MEDIAN DITCH			14.00
STA 306+75.00			ACROSS MEDIAN DITCH			14.00
STA 309+83.68 TO 314+52.04		X	RIGHT ACROSS TOE OF SLOPE	651.10		
STA 310+15.12 TO 314+51.93	X		LEFT ACROSS TOE OF SLOPE	557.38		
STA 312+75.00			ACROSS MEDIAN DITCH			14.00
STA 333+00.00			ACROSS MEDIAN DITCH			14.00
STA 336+00.00			ACROSS MEDIAN DITCH			14.00
STA 371+75.00			ACROSS MEDIAN DITCH			14.00
STA 376+50.00			ACROSS MEDIAN DITCH			14.00
STA 330+60.10 TO 331+64.10		X	RIGHT ACROSS TOE OF SLOPE	488.66		
STA 330+60.10 TO 331+64.10	X		LEFT ACROSS TOE OF SLOPE	399.66		
			TOTALS=	2,096.80	1.00	126.00

SUMMARY OF EROSION CONTROL

LOCATION				SOLID SLAB SODDING 230(A)	
STATION TO STATION	LT.	MED.	RT.	WORK AREA	SY
301+50.08 TO 305+50.07		X		1	1,769.88
307+00.00 TO 312+50.00		X		1	2,428.50
310+00.00 TO 312+50.00	X			1	304.12
310+00.00 TO 312+50.00			X	1	1512.70
312+50.00 TO 314+50.00	X			1	1587.17
312+50.00 TO 314+50.00			X	1	332.07
312+50.00 TO 314+50.00		X		1	327.7
330+60.16 TO 331+64.00	X			1	1168.67
330+60.12 TO 331+64.00			X	1	487.20
330+60.12 TO 331+64.00		X		1	253.82
330+64.00 TO 335+44.00		X		1	197.91
372+00.03 TO 376+00.18		X		1	2,506.17
				TOTALS=	12,875.91



PERMANENT EROSION CONTROL TYPICAL SECTION

1 - SOLID SLAB SODDING

TEMPORARY SEEDING AND VEGETATIVE MULCH SHALL BE USED FOR TEMPORARY EROSION CONTROL

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OKLAHOMA DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION

SUMMARY SHEET

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. AR03

TRAFFIC GENERAL CONSTRUCTION NOTES

THE CONTRACTOR SHALL PROVIDE A PERSON TO BE ON 24 HOUR CALL AS NEEDED AS DETERMINED BY THE ENGINEER. THIS PERSON SHALL HOLD A CURRENT CERTIFICATION FROM THE AMERICAN TRAFFIC SAFETY SERVICE ASSOCIATION (ATSSA) OR THE OKLAHOMA TRAFFIC ENGINEERING ASSOCIATION (OTEA) AS A TRAFFIC CONTROL TECHNICIAN OR TRAFFIC CONTROL SUPERVISOR.

ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL MEET ODOT'S "QUALITY STANDARDS FOR TEMPORARY TRAFFIC CONTROL DEVICES." CHANNELIZING DEVICES SHALL HAVE A MINIMUM HEIGHT OF 36 INCHES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE TEMPORARY TRAFFIC CONTROL DEVICES,AND SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY DEVICE DURING CONSTRUCTION.

ANY SIGNS AND/OR DELINEATORS WHICH ARE TO BE REMOVED DURING THIS PROJECT WILL BE STORED IN A PROTECTED AREA DESIGNATED BY THE RESIDENT 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.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER BARRICADES, LIGHTS, SIGNING, AND DEVICES WITHIN THE LIMITS OF CONSTRUCTION AND DETOUR ROUTE(S). 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.

ANY DAMAGE CAUSED BY THE CONTRACTOR TO ANY STRUCTURES, ROADWAY SURFACES, STRIPING, RAISED PAVEMENT MARKERS, GUARDRAIL, ATTENUATORS, SLOPES, OR SIGNS SHALL BE REPLACED OR REPAIRED AT CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE ENGINEER.

THE ITEMS TO BE REMOVED AND/OR RESET SHALL BE HANDLED WITH CARE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DURING THESE OPERATIONS.

THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE AREAS UNDER THE BRIDGES FROM FALLING DEBRIS AND BE SOLELY RESPONSIBLE FOR SAFEGUARDING THESE AREAS.

THE CONTRACTOR MUST NOTIFY THE RESIDENT ENGINEER 7 DAYS PRIOR TO ANY LANE CLOSURE.

REMOVED MATERIAL TO BECOME PROPERTY OF CONTRACTOR AND IT SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING TRAFFIC ON CROSS STREETS. A MINIMUM OF ONE LANE IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES. SEE O.D.O.T. STANDARDS AND DETAIL DRAWINGS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.

ALL REGULATORY SIGNS SHALL HAVE HIGH INTENSITY SHEETING. THE HIGH INTENSITY SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) FOR TYPE VIII SHEETING.

ALL WARNING SIGNS SHALL HAVE FLUORESCENT YELLOW SHEETING. THE FLUORESCENT YELLOW SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) REQUIREMENTS FOR TYPE XI SHEETING.

THE MANUFACTURER SHALL FURNISH A TYPE 'A' CERTIFICATION IN ACCORDANCE WITH ODOT STANDARD SPECIFICATIONS, LATEST EDITION, SUBSECTION 106.04. THE CERTIFICATION SHALL INCLUDE TEST RESULTS ON THE MATERIAL SUBMITTED FOR APPROVAL.

ALL GREEN AND BLUE SIGNS ON CONVENTIONAL HIGHWAYS SHALL HAVE TYPE IV HIGH INTENSITY BACKGROUND WITH TYPE XI LEGENDS AND BORDERS. THE TYPE IV BACKGROUND AND THE TYPE VIII LEGENDS AND BORDERS SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION).

TRAFFIC CONSTRUCTION PAY QUANTITY NOTES

(TC-1) THE CONTRACTOR SHALL FURNISH AND INSTALL SUCH LIGHTS, SIGNS, BARRICADES, AND PROVIDE FLAGGERS NECESSARY FOR THE CONTROL, SAFETY, AND MAINTENANCE OF TRAFFIC WHEN INSTALLING, RELOCATING OR DELIVERING PORTABLE LONGITUDINAL BARRIER.

(TC-2) QUANTITY INCLUDES SUFFICIENT LENGTH OF PORTABLE LONGITUDINAL BARRIER TO PROVIDE FOR THE LONGEST SECTION SHOWN ON THE PLANS. THIS SAME BARRIER WILL BE USED ON OTHER DETOUR PHASES.

(TC-13) A PART, OR ALL, OF THIS ITEM IS INTENDED FOR REPLACEMENT OF REMOVED EXISTING CONFLICTING STRIPING.

(TC-14) SEE STANDARD DRAWING PM1-1, PM2-1, PM3-1, PM4-1, PM5-1, PM6-1, PM7-1, PM8-1 (LATEST REVISION). A PART, OR ALL, OF THE QUANTITY SHOWN IS TO BE USED AS FINAL PAVEMENT MARKING.

(TC-15) PAY QUANTITY SHALL MEET THE REQUIREMENTS OF ODOT SPECIFICATION SECTION 711.10 TRAFFIC STRIPE PAINT ACRYLIC WATERBORNE WITH THE EXCEPTION OF THE ACRYLIC EMULSION POLYMER SHALL BE ROHM AND HASS HD-21A OR DOW CHEMICAL DT-400.

△2

(TC-21) INCLUDED IN THE COST OF THIS ITEM SHALL BE INSTALLATION, MAINTENANCE, AND REMOVAL. THIS ITEM SHALL BE BID ACCORDINGLY.

(TC-26) 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 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.

(TC-30) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 16.0 S.F. AND 32.99 S.F. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.

(TC-33) ALL CONSTRUCTION WORK ZONE SIGNS SHALL HAVE FLUORESCENT SHEETING. THE FLUORESCENT SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956 (LATEST REVISION) THE MANUFACTURER SHALL FURNISH A TYPE 'D' CERTIFICATION IN ACCORDANCE WITH O.D.O.T. STANDARD SPECIFICATIONS (CURRENT EDITION) SUBSECTION 106.04. THE CERTIFICATION SHALL INCLUDE TEST RESULTS ON MATERIAL SUBMITTED FOR APPROVAL.

(TC-52) ANY USED CHANGEABLE MESSAGE SIGN, TRUCK MOUNTED ATTENUATOR, OR CONSTRUCTION ZONE IMPACT ATTENUATOR TO BE PLACED ON THIS PROJECT SHALL BE SUBJECT TO INSPECTION AND APPROVAL, BY THE OKLAHOMA DEPARTMENT OF TRANSPORTATION, TO ASSURE THAT THEY ARE IN GOOD WORKING CONDITION, PRIOR TO PLACEMENT ON THE PROJECT.

TRAFFIC CONSTRUCTION PAY QUANTITY NOTES (CONTINUED)

(TC-70) THIS ITEM IS AN ESTIMATED QUANTITY TO BE USED AS DEEMED NECESSARY BY THE ENGINEER.

(TC-75) TEMPORARY PAVEMENT MARKINGS SHALL BE IN PLACE THE SAME DAY THAT EXISTING PAVEMENT MARKINGS ARE REMOVED FROM ANY ROADWAY OPEN TO TRAFFIC. ALSO, ALL TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED PRIOR TO THE INSTALLATION OF FINAL STRIPING.

(TC-80) INCLUDED IN THIS ITEM SHALL BE ONE (1) ADDITIONAL UNIT TO BE USED AS A STAND-BY OR REPLACEMENT. THIS STAND-BY UNIT SHALL BE IMMEDIATELY ACCESSIBLE TO REPLACE A DAMAGED, STOLEN OR MALFUNCTIONING UNIT. THE AMOUNT OF TIME BETWEEN THE REMOVAL OF THE DAMAGED UNIT AND THE INSTALLATION OF THE STAND-BY UNIT SHALL BE NO MORE THAN TWENTY-FOUR (24) HOURS.

△2△1(TC-84) 870 CONSTRUCTION CALENDAR DAYS WERE USED TO COMPUTE THE SIGN DAY PAY ITEMS. THE AMOUNT OF CALENDAR DAYS USED TO COMPUTE THE SIGN DAY PAY ITEMS IS AN ESTIMATED QUANTITY ONLY, BASED ON THE CURRENT O.D.O.T. STANDARDS AND SUGGESTED CONSTRUCTION SEQUENCE FOR THIS PROJECT. THESE ESTIMATED SIGN DAY QUANTITIES MAY CHANGE AS THE PROJECT'S CONSTRUCTION TRAFFIC CONTROL IS MODIFIED DURING CONSTRUCTION.

(TC-85) THESE SIGNS MUST BE ON THE OKLAHOMA DEPARTMENT OF TRANSPORTATION LIST OF APPROVED CHANGEABLE MESSAGE SIGNS. FOR A LIST OF THE APPROVED SIGNS GO TO THE OKLAHOMA DEPARTMENT OF TRANSPORTATION WEBSITE AT: http://www.okladot.state.ok.us/traffic/qpl/index.php

TRAFFIC SIGNING PAY QUANTITY NOTES

△2(TS-15) QUANTITY SHOWN INCLUDES 9,400 L.F. TRAFFIC STRIPE (PAINT)(WHITE) AND 9,400 L.F. TRAFFIC STRIPE (PAINT) (YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF FOUR INCH (4") WIDE TRAFFIC STRIPE.

SPECIAL NOTES

(SP-1) PORTABLE CHANGEABLE MESSAGE SIGN(S) TO BE PLACED WHERE DEEMED NECESSARY BY THE ENGINEER.

(SP-2) PORTABLE CHANGEABLE MESSAGE SIGN(S) SHALL BE IN PLACE 14 DAYS PRIOR TO CONSTRUCTION.

(SP-3) TYPE "C" WARNING LIGHTS ARE NOT REQUIRED.

△2△1(SP-4) INCLUDED IN THIS PAY ITEM IS 550 L.F. FOR THE WEST CROSSOVER (PHASE 2 AT 375 CD), 650 L.F. FOR THE EAST CROSSOVER (PHASE 2 AT 375 CD), AND 1,100 L.F. FOR THE WEST CROSSOVER (PHASE 3 AT 375 CD).

△2 (SP-5) QUANTITY SHOWN INCLUDES 1255 EA. CLASS A TYPE 2-C (CRYSTAL/RED) AND 1285 EA. CLASS A TYPE 2-D (AMBER/AMBER) CONSTRUCTION ZONE PAVEMENT MARKERS (RPM). THESE CONSTRUCTION ZONE PAVEMENT MARKERS SHALL BE ON THE ODOT QUALIFIED PRODEUCT LIST (QPL). PRICE BID FOR THIS ITEM SHALL INCLUDE THE INITIAL PLACEMENT, SUBSEQUENT REPLACEMENT AND REMOVAL. THE CONSTRUCTION ZONE RAISED PAVEMENT MARKERS (RPM) SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. IF 20% OR MORE BECOME DAMAGED OR REMOVED THE CONTRACTOR SHALL REPLACE THE DAMAGED OR MISSING RPMS.

REVISIONS

REV. NO.	DESCRIPTION	DATE
△1	REV. PAY ITEM & NOTE	4/27/21
△2	REVISED CALENDAR DAYS, PAY QUANTITIES & NOTES; DELETED NOTE, ADDED NOTE	6/1/21
△3	REVISED CALENDAR DAYS, PAY QUANTITIES & NOTES	12/2/21

PAY QUANTITY SCHEDULE

0300 TRAFFIC CONTROL

PAY ITEM	CODE NO.	DESCRIPTION	UNIT	QUANTITY	
854(A)	6200	TRAFFIC STRIPE(PAINT)(4" WIDE) (TC-14,15)(TS-15)	LF	18,800.00	△2
857(F)	9700	PAVEMENT MARKING REMOVAL(TRAFFIC STRIPE) (TC-70,75)	LF	21,195.00	△2
858(A)	0224	PAVEMENT MARKERS CLASS A TYPE 2-C (SP-5)	EA	1,255.00	△2
858(A)	0228	PAVEMENT MARKERS CLASS A TYPE 2-D (SP-5)	EA	1,285.00	△2
871(B)	2300	CONST.ZONE IMPACT ATTEN. (TC-52,80,84)	SD	3,480.00	△2△3
877(B)	4300	DELIVER PORTABLE LONGITUDINAL BARRIER (TC-1,2)	LF	4,000.00	
877(C)	4400	RELOCATION OF PORTABLE LONGITUDINAL BARRIER (TC-1)	LF	4,400.00	
878(B)	5300	MODULAR GLARE SCREEN (TEMPORARY) (SP-4)(TC-70)	SD	69,000.00	△2△1
880(A)	6220	ARROW DISPLAY(TYPE C) (TC-84)	SD	1,740.00	△2△1
880(B)	6300	CONSTRUCTION SIGNS 0 TO 6.25 SF (TC-26,33,84)	SD	43,500.00	△2△1
880(B)	6310	CONSTRUCTION SIGNS 6.26 SF TO 15.99 SF (TC-26,33,84)	SD	59,160.00	△2△1
880(B)	6320	CONSTRUCTION SIGNS 16.0 SF TO 32.99 SF (TC-26,30,33,84)	SD	30,450.00	△2△1
880(C)	6410	CONSTRUCTION BARRICADES(TYPE III) (TC-26,84)	SD	41,760.00	△2△1
880(C)	6420	WING BARRICADES (TC-26,84)	SD	6,960.00	△2△1
880(D)	6500	VERTICAL PANELS (TC-26,84)	SD	113,100.00	△2△1
880(E)	6600	WARNING LIGHTS(TYPE A) (TC-26,84)	SD	107,880.00	△2△1
880(F)	6700	DRUMS (SP-3)(TC-26,84)	SD	87,870.00	△2△1
880(G)	6800	TUBE CHANNELIZERS (TC-26,84)	SD	101,790.00	△2△1
880(G)	6805	CHANNELIZER CONES (TC-26,84)	SD	100,050.00	△2△1
882(A)	8210	PORT.CHANGEABLE MESSAGE SIGN (SP-1,2)(TC-52,84,85)	SD	2,652.00	△2△1

△1

△2 △1

OKLAHOMA Transportation

PREPARED BY:
OKLAHOMA DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING DIVISION
Kenneth C. Dedering
KENNETH CHARLES DEDERING, P.E.
OKLA. REG. NO. 21077
DATE 12-02-21

LICENSED PROFESSIONAL ENGINEER — KENNETH CHARLES DEDERING 21077 — OKLAHOMA

DIVISION 1 — MUSKOGEE COUNTY
US-62

SUMMARY OF PAY QUANTITIES & NOTES
TRAFFIC CONTROL

DETAIL:	DYW	4/20
CHECK:		
ENGINEER:	JLS	4/20
GROUP:	SOLIZ	
EM:	PARRISH	

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. AT01

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED PAY QUANTITES AND NOTES AND SIGN SUMMARY; REMOVED SIGNS; DELETED NOTE	6/3/21

TRAFFIC GENERAL CONSTRUCTION NOTES

ANY SIGNS AND/OR DELINEATORS WHICH ARE TO BE REMOVED DURING THIS PROJECT WILL BE STORED IN A PROTECTED AREA DESIGNATED BY THE RESIDENT 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.

THE ITEMS TO BE REMOVED AND/OR RESET SHALL BE HANDLED WITH CARE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DURING THESE OPERATIONS.

REMOVED MATERIAL TO BECOME PROPERTY OF CONTRACTOR AND IT SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

ANY DAMAGE CAUSED BY THE CONTRACTOR TO ANY STRUCTURES, ROADWAY SURFACES, STRIPING, RAISED PAVEMENT MARKERS, GUARDRAIL, SLOPES, AND SIGNS SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER.

ALL BROKEN CONCRETE INCLUDING OLD SIGN FOOTINGS WITH STUBS, WASTE MATERIAL AND DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT AND DISPOSED OF IN AN AREA APPROVED BY THE ENGINEER. NO PAYMENT SHALL BE MADE FOR THE DISPOSAL OF THIS MATERIAL. ANY PIPE POST OR WIDE FLANGE POST ABOVE THE OLD SIGN FOOTINGS SHALL BE CUT AND HANDLED AS PROPERTY OF THE STATE AND SHALL BE NEATLY STACKED ON THE JOB SITE, AS DESIGNATED BY THE ENGINEER UNTIL SUCH TIME AS DIVISION PERSONNEL CAN REMOVE THE MATERIAL FROM THE JOB SITE.

THE STATIONS AND LOCATIONS OF THE SIGN PLACEMENT, AS SHOWN ON THE PLAN SHEETS, ARE APPROXIMATE. EXACT STATIONS AND LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR SO THAT THE SIGN IS INSTALLED IN ACCORDANCE WITH DEPARTMENT STANDARDS AND THE MUTCD IN ORDER TO PROVIDE OPTIMUM VISIBILITY TO THE ONCOMING/APPROACHING MOTORIST. IF A PROPOSED LOCATION CONFLICTS WITH OTHER SIGNS, UTILITIES OR OTHER ROADWAY FEATURES, THE ENGINEER SHALL BE NOTIFIED.

POST LENGTHS SHOWN ON SIGN SUMMARY ARE APPROXIMATE, EXACT LENGTH SHALL BE DETERMINED BY FIELD SURVEY BY THE CONTRACTOR.

THE COST OF REPLACEMENT OF MISSING OR DAMAGED EDGE STRIP ON EXISTING SIGNS SHAL BE INCLUDED IN OTHER ITEMS OF WORK.

AFTER REMOVAL OF ANY SIGN FOOTINGS, THE HOLES SHALL BE FILLED WITH SOIL AND TAMPED AND SHAPED IN A MANNER APPROVED BY THE ENGINEER.

FOR NEW OR EXISTING GROUND MOUNTED SIGNS, MAXIMUM STUB POST PROJECTION ABOVE FOOTING/GROUND LINE SHALL BE 1-3/4" + /- 1/4". MAXIMUM FOOTING PROJECTION ABOVE GROUND LINE SHALL BE NO MORE THAN 2". SHOULD ADDITIONAL SOIL BE REQUIRED, THE ENGINEER WILL DESIGNATE AN AREA TO OBTAIN ADDITIONAL SOIL. ALL ASSOCIATED COSTS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

NO SPLICES SHALL BE PERMITTED IN ANY PIPE OR WIDE FLANGE SIGN POSTS.

ALL ANCHOR BOLTS SHALL BE GRADE A-36 STEEL.

ALL EXISTING AND NEW BREAKAWAY SIGN POSTS, PIPES AND WIDE FLANGE BEAMS SHALL HAVE SHEET METAL BOLT RETAINER PLATES AS SPECIFIED IN O.D.O.T. STD. FGS1-1-(LATEST REVISION). REPLACEMENT COST OF MISSING OR DAMAGED BOLT RETAINER PLATES AND ALL ASSOCIATED HARDWARE AND LABOR SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

ALL REMOVED SIGNS, SIGN POSTS, BOLTS, MISCELLANEOUS HARDWARE, AND DELINEATORS SHALL REMAIN THE PROPERTY OF THE STATE. THE CONTRACTOR SHALL NEATLY STACK SUCH REMOVED MATERIAL AT A LOCATION ON THE JOB SITE AS DESIGNATED BY THE ENGINEER UNTIL SUCH TIME AS DIVISION PERSONNEL CAN REMOVE THE MATERIAL FROM THE JOB SITE.

TRAFFIC SIGNING PAY QUANTITY NOTES

⚠ (TS-26) QUANTITY SHOWN INCLUDES 1,100 L.F. TRAFFIC STRIPE (MULTI-POLYMER)(WHITE) AND 0 L.F. TRAFFIC STRIPE (MULTI-POLYMER)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF EIGHT INCH (8") WIDE TRAFFIC STRIPE.

(TS-27) QUANTITY SHOWN INCLUDES 500 L.F. TRAFFIC STRIPE (MULTI-POLYMER)(WHITE) AND 0 L.F. TRAFFIC STRIPE (MULTI-POLYMER)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF TWELVE INCH (12") WIDE TRAFFIC STRIPE.

(TS-33) INCLUDED IN THIS PAY ITEM IS ALL HARDWARE ASSOCIATED WITH PROPERLY ANCHORING AND MOUNTING THE HIGHWAY SIGN IN ACCORDANCE WITH O.D.O.T. PLANS AND STANDARD DRAWINGS SSA1-1 AND SSP1-1-(LATEST REVISION).

(TS-34) INCLUDED IN THIS PAY ITEM IS THE REMOVAL OF ANY EXISTING SIGNS TO BE REPLACED BY NEW ASSEMBLIES AND THE REMOVAL OF ANY EXISTING SIGNS THAT WILL BE IN CONFLICT WITH THE NEW ROADWAY OR NEW SIGNAGE.

(TS-41) "REMOVAL OF EXISTING SIGNS" SHALL INCLUDE THE REMOVAL OF A COMPLETE SIGN ASSEMBLY WHICH MAY INCLUDE MULTIPLE SIGNS, POSTS, FOOTINGS, AND ANY FOOTINGS ADJACENT TO THE SIGN ASSEMBLY. WHEN APPROVED BY THE ENGINEER, FOOTINGS MAY BE OBLITERATED TO A POINT BELOW GROUND LEVEL IN LIEU OF BEING COMPLETELY REMOVED. SEE GENERAL CONSTRUCTION NOTES FOR DISPOSAL OF OLD CONCRETE FOOTING MATERIAL.

TRAFFIC CONSTRUCTION PAY QUANTITY NOTES

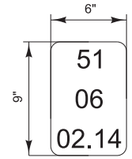
(TC-14) SEE STANDARD DRAWING PM1-1, PM2-1, PM3-1, PM4-1, PM5-1, PM6-1, PM7-1, PM8-1 (LATEST REVISION). A PART, OR ALL, OF THE QUANTITY SHOWN IS TO BE USED AS FINAL PAVEMENT MARKING.

SPECIAL NOTES

⚠ (SP-1) QUANTITY SHOWN INCLUDES 22,480 L.F. TRAFFIC STRIPE (MULTI-POLYMER)(WHITE), 12,700 L.F. TRAFFIC STRIPE (MULTI-POLYMER)(YELLOW) AND 3,200 L.F. TRAFFIC STRIPE (MULTI-POLYMER)(BLACK) AND WILL BE MEASURED BY THE LINEAR FOOT OF SIX INCH (6") WIDE TRAFFIC STRIPE.

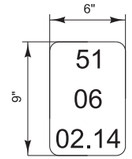
(SP-2) SEE SIGN SUMMARY ON THIS SHEET AND SIGNING & STRIPING LAYOUTS ON SHEET NOS. T021-T024.

⚠



EB ARKANSAS RIVER BRIDGE MARKER (RPM-1)

⚠



WB ARKANSAS RIVER BRIDGE MARKER (RPM-1)

PAY QUANTITY

0301 TRAFFIC SIGNING & STRIPING

ITEM NO.	CODE NO.	DESCRIPTION	UNIT	QUANTITY
805(A)	3252	(PL)REMOVAL OF EXISTING SIGNS (TS-41)	EA	13.00
805(D)	3528	(PL)REMOVE & RESET EXISTING SIGNS (SP-2)	EA	9.00
850(A)	1200	SHEET ALUMINUM SIGNS (TS-34)	SF	115.01 ⚠
851(C)	2415	2" SQUARE TUBE POST (TS-33)	LF	196.00 ⚠
856(A)	8204	TRAFFIC STRIPE(MULTI-POLY.)(6" WIDE) (TC-14)(SP-1)	LF	38,380.00 ⚠
856(A)	8208	TRAFFIC STRIPE(MULTI-POLY.)(8" WIDE) (TC-14)(TS-26)	LF	1,100.00
856(A)	8212	TRAFFIC STRIPE(MULTI-POLY)(12" WIDE) (TC-14)(TS-27)	LF	500.00

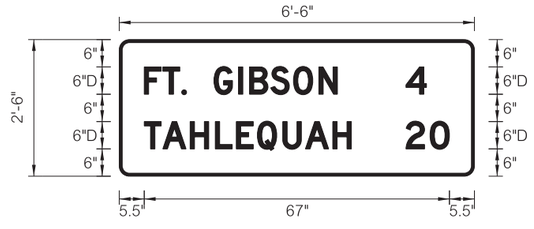
⚠

SUMMARY OF SIGN QUANTITIES ON US-62

ITEM NO.	APPROXIMATE LOCATION	SHEET #	SIGN DESCRIPTION	SQUARE TUBE POST 2" A	SQUARE TUBE POST 2" B	POST SPACING F.T.	SIGN AREA SHEET 850(A) S.F.	REMOVAL OF EXISTING SIGNS 805(A) EA	REMOVE & RESET EXIST. SIGNS 805(D) EA	REMARKS
1	300+20 LT	T018	W8-13E	14.00			9.00	1.00		REMOVE & REPLACE
2	300+20 RT	T021	W8-13E	14.00			9.00	1.00		REMOVE & REPLACE
3	308+38 LT	T021	W8-13E	14.00			9.00	1.00		REMOVE & REPLACE
4	308+38 RT	T021	W8-13E	14.00			9.00	1.00		REMOVE & REPLACE
5	311+05 RT	T021	D6-4						1.00	REMOVE & RESET
6	313+05 RT	T021	SPECIAL SIGN 1						1.00	REMOVE & RESET
	313+05 RT	T021	RPM-1				0.38			INSTALL NEW ON BACK OF SS1
7	315+05 RT	T021	SPECIAL SIGN 2						1.00	REMOVE & RESET
8	330+50 LT	T022	SPECIAL SIGN 2						1.00	REMOVE & RESET
9	331+60 LT	T022	CARDINAL DIRECTIONS SIGN 1						1.00	REMOVE & RESET
10	333+10 LT	T022	SPECIAL SIGN 1						1.00	REMOVE & RESET
	333+10 LT	T022	RPM-1				0.38			INSTALL NEW ON BACK OF SS1
11	334+00 RT	T022	D2-2	14.00	14.00	2.33	16.25	1.00		REMOVE & REPLACE
12	334+95 LT	T022	D6-4						1.00	REMOVE & RESET
13	338+00 LT	T022	W8-13E	14.00			9.00	1.00		REMOVE & REPLACE
14	338+00 RT	T022	W8-13E	14.00			9.00	1.00		REMOVE & REPLACE
15	340+00 LT	T022	CARDINAL DIRECTIONS SIGN 2						1.00	REMOVE & RESET
16	342+00 RT	T022	R3-4	14.00			4.00	1.00		REMOVE & REPLACE
17	343+00 LT	T022	R3-4	14.00			4.00	1.00		REMOVE & REPLACE
18	355+15 LT	T023	W8-13E	14.00			9.00	1.00		REMOVE & REPLACE
19	355+15 RT	T023	W8-13E	14.00			9.00	1.00		REMOVE & REPLACE
20	358+20 RT	T023	D3-2						1.00	REMOVE & RESET
21	373+00 LT	T024	W8-13E	14.00			9.00	1.00		REMOVE & REPLACE
22	373+00 RT	T024	W8-13E	14.00			9.00	1.00		REMOVE & REPLACE
				196.00		2.33	115.01	13.00	9.00	

SIGN DETAIL

1:25



SIGN NUMBER	D2-2/Item #11
WIDTH x HGHT.	6'-6" x 2'-6"
BORDER WIDTH	0.75"
CORNER RADIUS	2.25"
MOUNTING	Overhead
SIGN AREA	16.3 Sq.Ft.
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White

SYMBOL	X	Y	WID	HT

Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)																						LENGTH	SERIES/SIZE
F	T	.		G	I	B	S	O	N	4													D 2000
5.5	9.6	13.7	14.8	20.8	26.2	28.6	33.3	38.3	43.8	63												62	
T	A	H	L	E	Q	U	A	H	2	0													D 2000
5.5	9.6	15.6	21.1	25.7	30.3	35.9	40.9	46.9	63	68.3												67	

⚠

PREPARED BY:
OKLAHOMA DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING DIVISION
Kenneth C. Dedering
KENNETH CHARLES DEDERING, P.E.
OKLA. REG. NO. 21077
DATE 06-04-21

LICENSED PROFESSIONAL ENGINEER — KENNETH CHARLES DEDERING 21077 — OKLAHOMA

OKLAHOMA Transportation

DIVISION 1
US-62

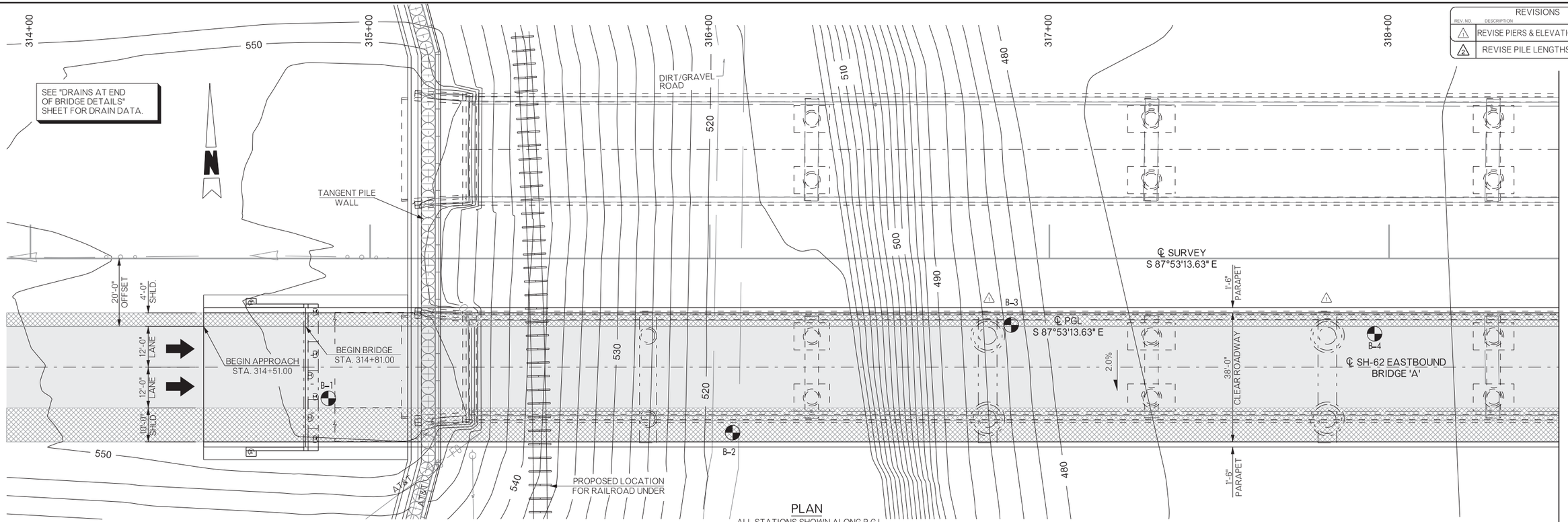
MUSKOGEE COUNTY

SUMMARY OF PAY QUANTITIES & NOTES SIGNING & STRIPING

DETAIL:	DYW	4/20
CHECK:		
ENGINEER:	JLS	4/20
GROUP:	SOLIZ	
EM:	PARRISH	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416 (04) | SHEET NO. AT02

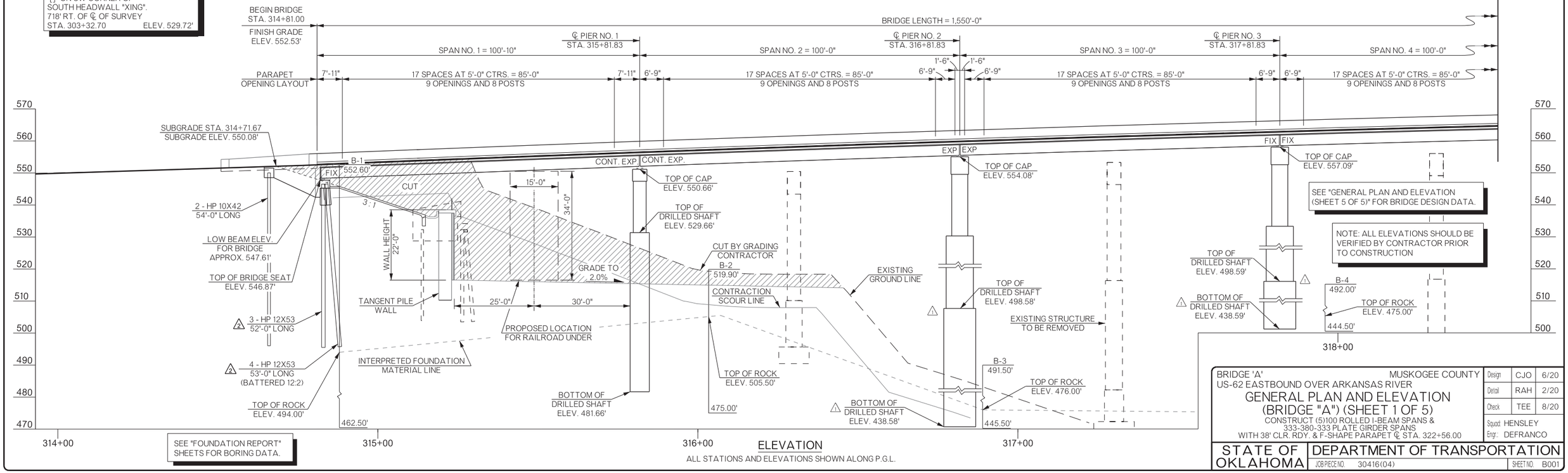
REVISIONS			
REV. NO.	DESCRIPTION	DATE
1	REVISE PIERS & ELEVATIONS	7/06/21
2	REVISE PILE LENGTHS	9/07/21



PLAN

ALL STATIONS SHOWN ALONG P.G.L.
DRAINS AT END OF BRIDGE NOT SHOWN FOR CLARITY.

BENCH MARK 101:
"[]" ON SW CORNER OF
SOUTH HEADWALL "XING".
718' RT. OF ℄ OF SURVEY
STA. 303+32.70 ELEV. 529.72'



ELEVATION

ALL STATIONS AND ELEVATIONS SHOWN ALONG P.G.L.

SEE "FOUNDATION REPORT" SHEETS FOR BORING DATA.

BRIDGE 'A' MUSKOGEE COUNTY
US-62 EASTBOUND OVER ARKANSAS RIVER

GENERAL PLAN AND ELEVATION (BRIDGE "A") (SHEET 1 OF 5)

CONSTRUCT (5)100 ROLLED I-BEAM SPANS &
333-380-333 PLATE GIRDER SPANS
WITH 38' CLR. RDY. & F-SHAPE PARAPET ℄ STA. 322+56.00

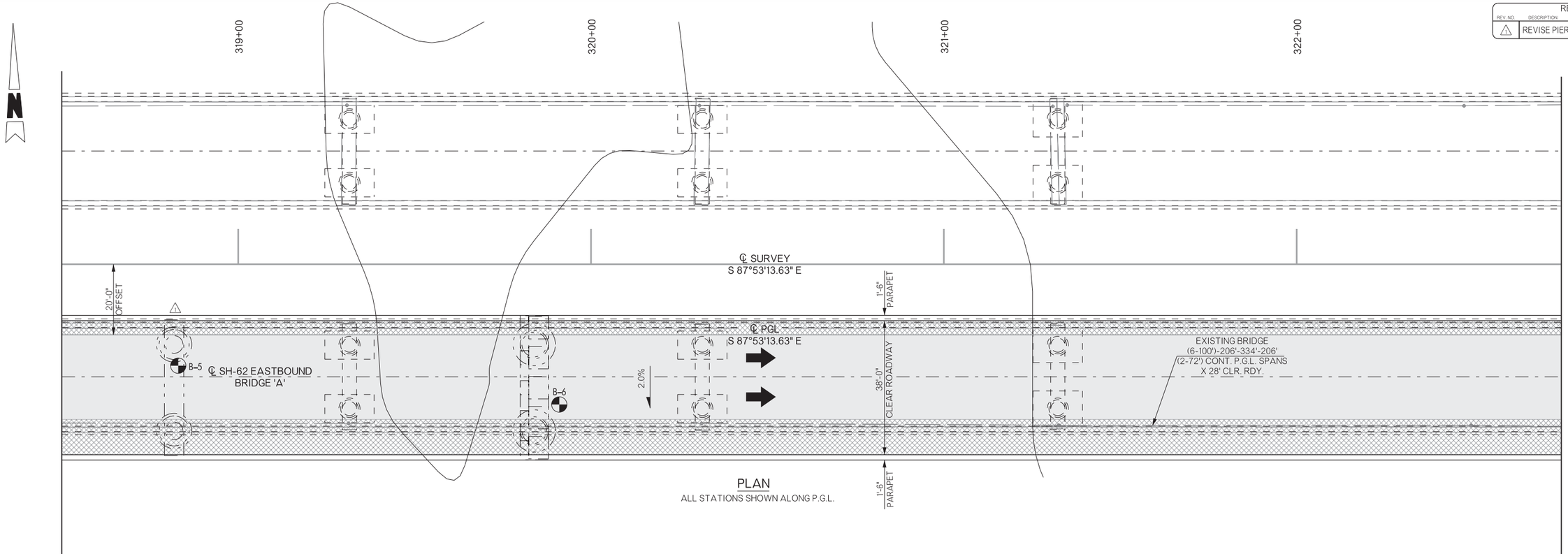
Design	CJO	6/20
Detail	RAH	2/20
Check	TEE	8/20

Squad HENSLEY
Engr. DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

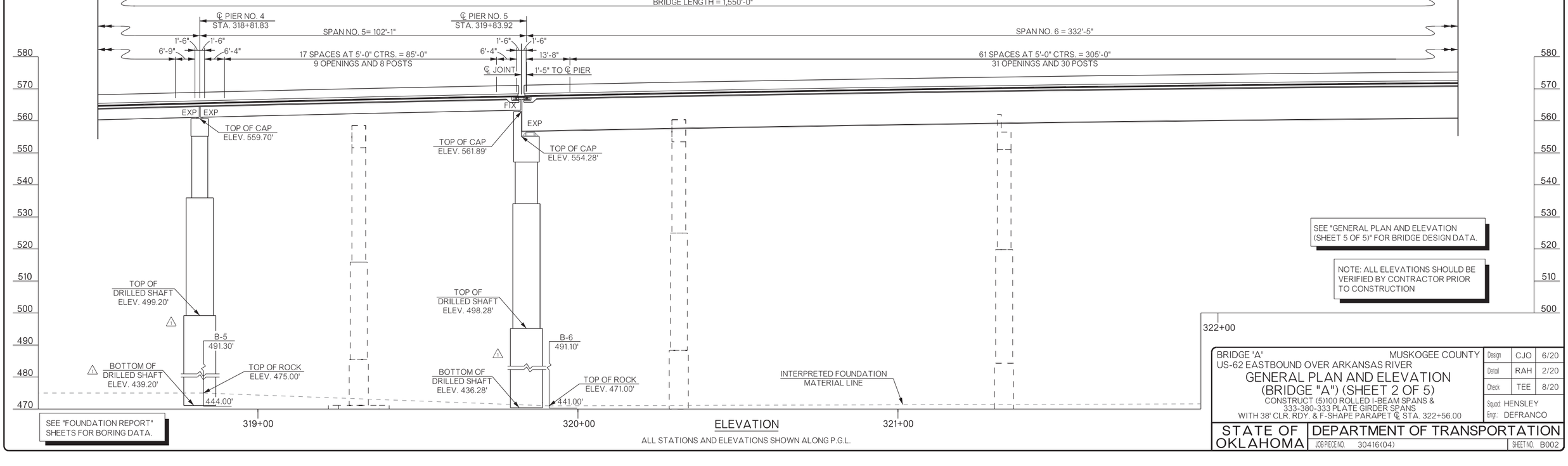
JOB PIECE NO. 30416(04) SHEET NO. B001

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE PIERS & ELEVATIONS	7/06/21



PLAN

ALL STATIONS SHOWN ALONG P.G.L.



ELEVATION

ALL STATIONS AND ELEVATIONS SHOWN ALONG P.G.L.

SEE "FOUNDATION REPORT" SHEETS FOR BORING DATA.

SEE "GENERAL PLAN AND ELEVATION (SHEET 5 OF 5)" FOR BRIDGE DESIGN DATA.

NOTE: ALL ELEVATIONS SHOULD BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION

BRIDGE 'A' MUSKOGEE COUNTY
US-62 EASTBOUND OVER ARKANSAS RIVER

GENERAL PLAN AND ELEVATION (BRIDGE "A") (SHEET 2 OF 5)

CONSTRUCT (5)100 ROLLED I-BEAM SPANS &
333-380-333 PLATE GIRDER SPANS
WITH 38' CLR. RDY. & F-SHAPE PARAPET ℄ STA. 322+56.00

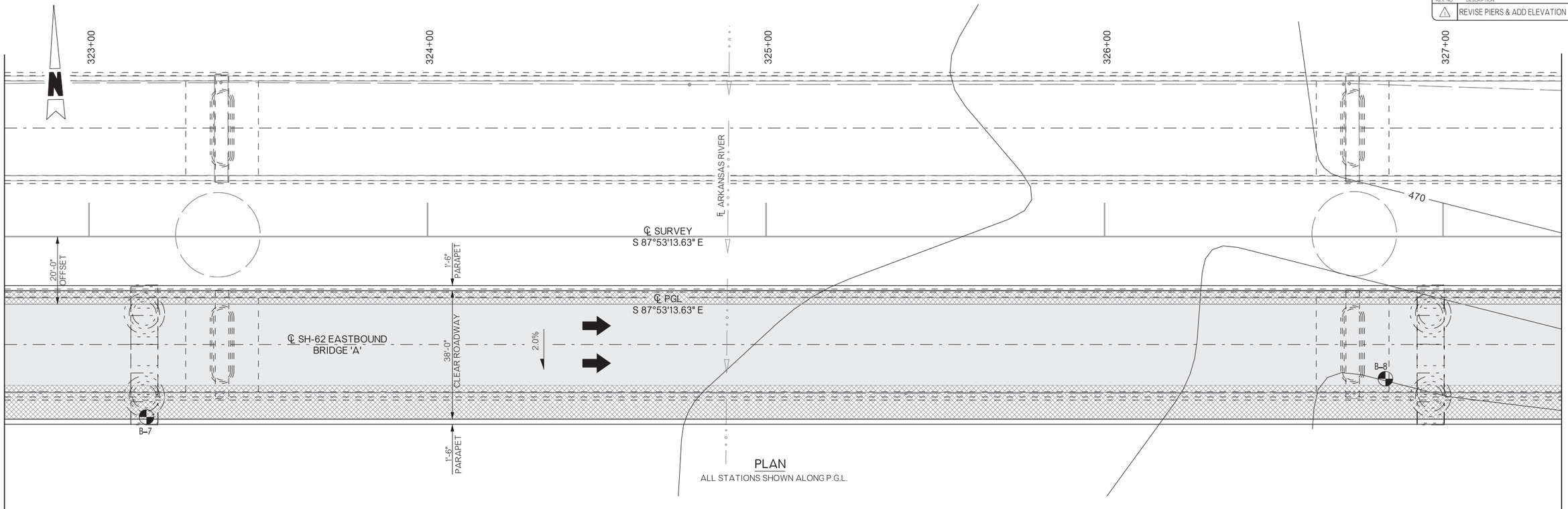
Design	CJO	6/20
Detail	RAH	2/20
Check	TEE	8/20

Squad HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

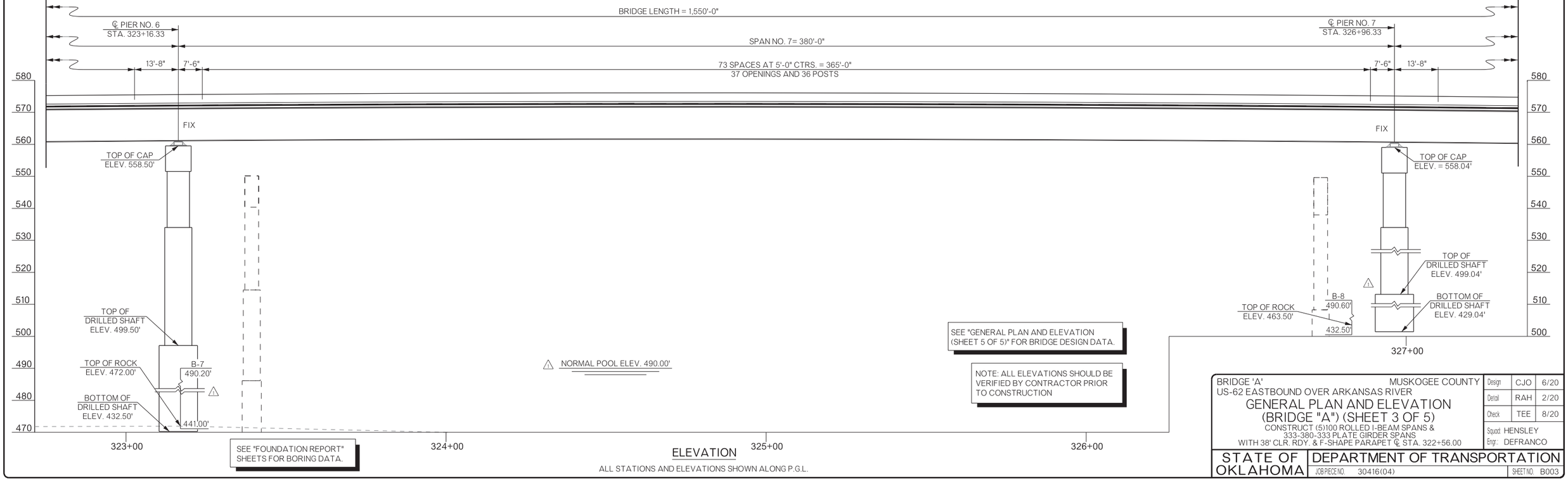
JOB PIECE NO. 30416(04) SHEET NO. B002

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE PIERS & ADD ELEVATION	7/06/21



PLAN

ALL STATIONS SHOWN ALONG P.G.L.



⚠ NORMAL POOL ELEV. 490.00'

SEE "FOUNDATION REPORT" SHEETS FOR BORING DATA.

SEE "GENERAL PLAN AND ELEVATION (SHEET 5 OF 5)" FOR BRIDGE DESIGN DATA.

NOTE: ALL ELEVATIONS SHOULD BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION

ELEVATION

ALL STATIONS AND ELEVATIONS SHOWN ALONG P.G.L.

BRIDGE 'A' MUSKOGEE COUNTY
US-62 EASTBOUND OVER ARKANSAS RIVER

GENERAL PLAN AND ELEVATION (BRIDGE "A") (SHEET 3 OF 5)

CONSTRUCT (5)100 ROLLED I-BEAM SPANS & 333-380-333 PLATE GIRDER SPANS WITH 38' CLR. RDY. & F-SHAPE PARAPET ℄ STA. 322+56.00

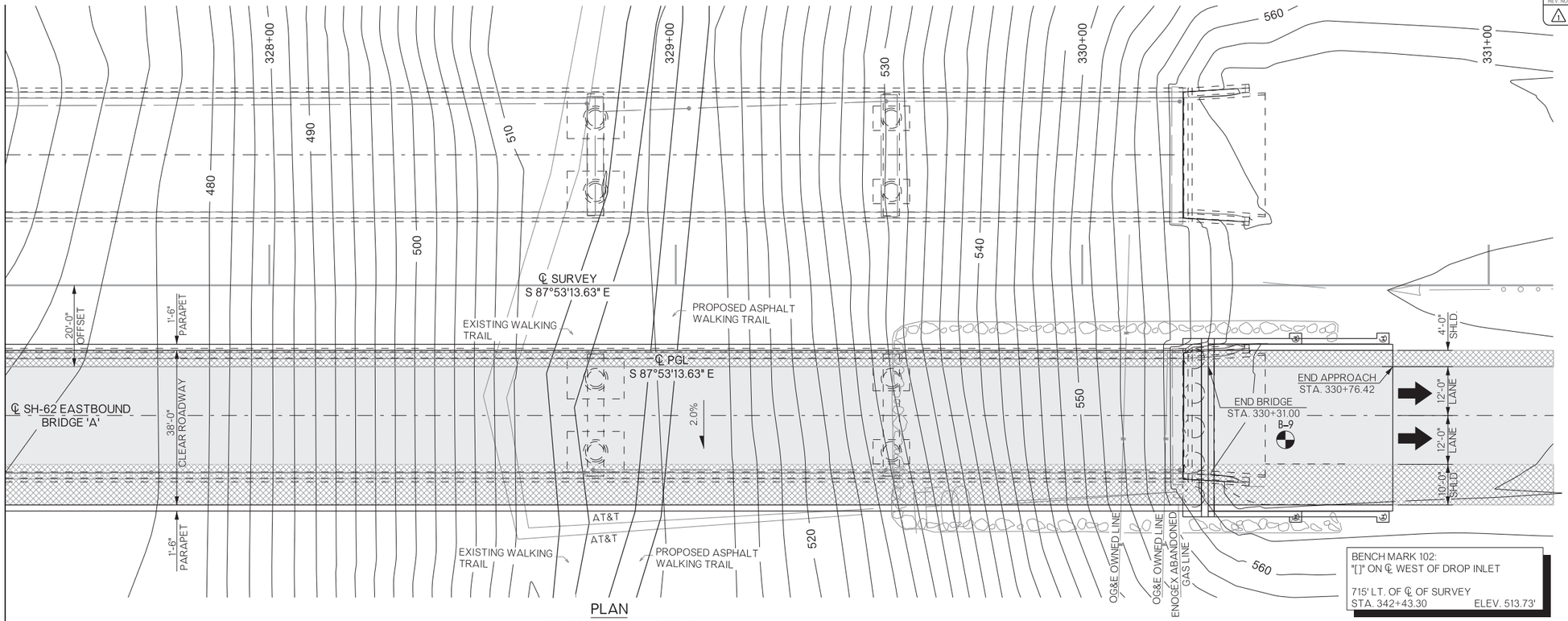
Design	CJO	6/20
Detail	RAH	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

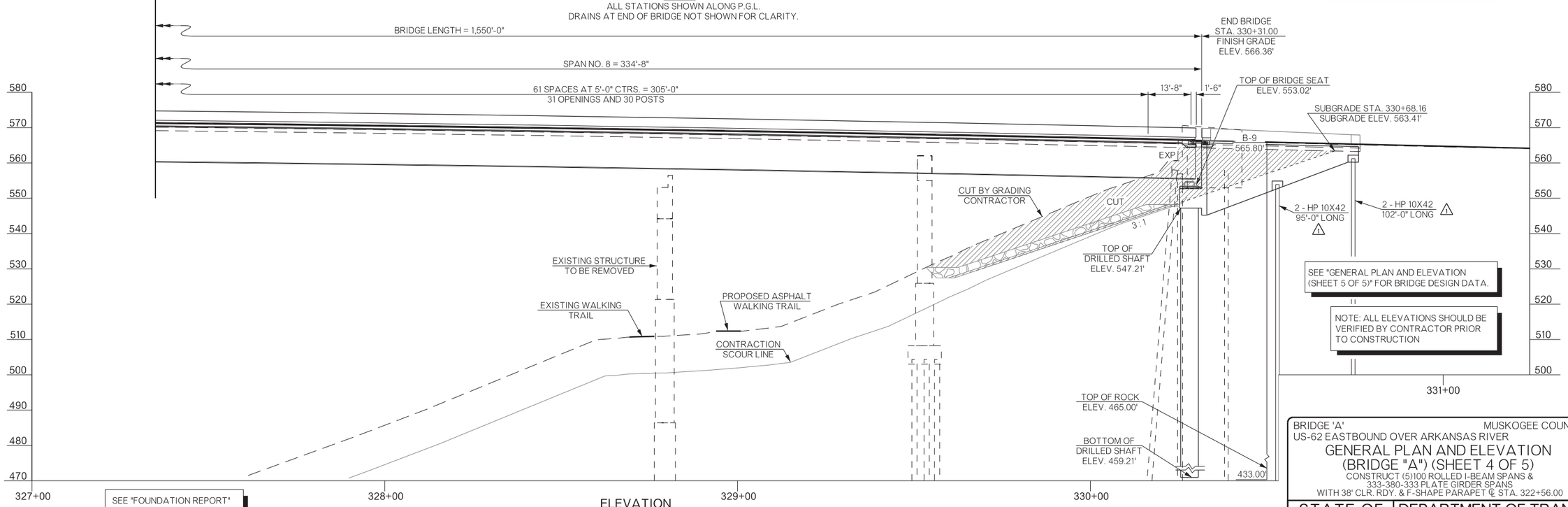
JOB PIECE NO. 30416(04) SHEET NO. B003

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE PILE LENGTHS	9/07/21



PLAN

ALL STATIONS SHOWN ALONG P.G.L.
DRAINS AT END OF BRIDGE NOT SHOWN FOR CLARITY.



SEE "GENERAL PLAN AND ELEVATION (SHEET 5 OF 5)" FOR BRIDGE DESIGN DATA.

NOTE: ALL ELEVATIONS SHOULD BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION

SEE "FOUNDATION REPORT" SHEETS FOR BORING DATA.

ELEVATION

ALL STATIONS AND ELEVATIONS SHOWN ALONG P.G.L.

BRIDGE 'A' MUSKOGEE COUNTY
US-62 EASTBOUND OVER ARKANSAS RIVER

GENERAL PLAN AND ELEVATION (BRIDGE "A") (SHEET 4 OF 5)

CONSTRUCT (5)100 ROLLED I-BEAM SPANS &
333-380-333 PLATE GIRDER SPANS
WITH 38' CLR. RDY. & F-SHAPE PARAPET ℄ STA. 322+56.00

Design	CJO	6/20
Detail	RAH	2/20
Check	TEE	8/20
Squad	HENSLEY	
Engr.	DEFRANCO	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) SHEET NO. B004

2009 BRIDGE STANDARDS

B40-C-ABUT-MISC-01E
EJ-DTL-02E
EJ-SQ-04E
FSHP-42-2-00E
HP1-2-01E

2019 ROADWAY STANDARDS

DC-4-0
1 LECS-5-1
PUD-4-0
1 SPI-5-1

2009 TRAFFIC STANDARDS

CCD1-1-00
CCD2-1-00
GHW1-1-00
GHW2-1-00
NCD1-1-00
PBD1-1-00
SCD1-1-00
SKT-1-00
SPD1-1-00
THRI-1-02

ITEMIZED QUANTITIES

ITEM	UNIT	ABUTMENT	PIER	SUPER-STRUCTURE	APPROACH SLAB	TOTAL	
SUBSTRUCTURE EXCAVATION COMMON	CY	310.00	———	———	———	310.00	
CLSM BACKFILL	CY	565.60	———	———	———	565.60	
APPROACH SLABS	SY	———	———	———	343.60	343.60	
SAW-CUT GROOVING	SY	———	———	5,793.70	260.40	6,054.10	
42" F-SHAPE PARAPET	LF	———	———	3,100.00	150.90	3,250.90	
STRUCTURAL STEEL	LB	———	———	4,731,810.00	———	4,731,810.00	
STRUCTURAL STEEL M270 GR. HPS 70W	LB	———	———	784,880.00	———	784,880.00	
STAINLESS STEEL FIXED BEARING ASSEMBLY	EA	———	———	20.00	———	20.00	
STAINLESS STEEL EXP. BEARING ASSEMBLY	EA	———	———	30.00	———	30.00	
CLASS AA CONCRETE	CY	———	———	1,967.30	———	1,967.30	1
CLASS A CONCRETE	CY	199.60	2,199.80	———	———	2,399.40	1
CLASS C CONCRETE	CY	———	———	———	16.20	16.20	
SLOPE WALL (5")	SY	———	———	———	104.10	104.10	
REINFORCING STEEL	LB	———	42,240.00	———	———	42,240.00	1
EPOXY COATED REINFORCING STEEL	LB	24,240.00	537,150.00	487,950.00	———	1,049,340.00	1 3
CLASS B BRIDGE DECK REPAIR	SY	———	———	———	———	380.00	
CLASS C BRIDGE DECK REPAIR	SY	———	———	———	———	95.00	
PILES, FURNISHED (HP 10X42)	LF	502.00	———	———	———	502.00	
PILES, FURNISHED (HP 12X53)	LF	368.00	———	———	———	368.00	
PILES, DRIVEN (HP 10X42)	LF	502.00	———	———	———	502.00	
PILES, DRIVEN (HP 12X53)	LF	368.00	———	———	———	368.00	
PILE SPLICE, H-PILE (NON-BIDDABLE)	EA	———	———	———	———	1.00	
WATER REPELLENT (VISUALLY INSPECTED)	SY	170.00	1,589.00	3,098.00	75.00	4,932.00	1
DRILLED SHAFT 60" DIAMETER	LF	440.00	———	———	———	440.00	
DRILLED SHAFT 72" DIAMETER	LF	———	96.00	———	———	96.00	
DRILLED SHAFT 120" DIAMETER	LF	———	360.00	———	———	360.00	1
DRILLED SHAFT 144" DIAMETER	LF	———	398.00	———	———	398.00	
CROSSHOLE SONIC LOGGING	EA	5.00	14.00	———	———	19.00	
THERMAL INTEGRITY PROFILER	EA	5.00	14.00	———	———	19.00	
SEALED EXPANSION JOINT	LF	———	———	84.00	———	84.00	
MODULAR EXPANSION JOINTS	LF	———	———	82.00	———	82.00	
SEALER CRACK PREPARATION	LF	———	———	266.00	38.00	304.00	
SEALER RESIN	GAL	———	———	1.80	0.30	2.10	
(PL) INSTALLATION OF BRIDGE ITEMS (TYPE A)	EA	———	———	10.00	———	10.00	
(PL) INSTALLATION OF BRIDGE ITEMS (TYPE B)	EA	———	———	10.00	———	10.00	
TYPE I-A PLAIN RIP RAP	TON	———	———	———	440.00	440.00	
TYPE I-A FILTER BLANKET	TON	———	———	———	90.00	90.00	
6" PERFORATED PIPE UNDERDRAIN ROUND	LF	84.00	———	———	———	84.00	
6" NON-PERF. PIPE UNDERDRAIN ROUND	LF	46.00	———	———	———	46.00	
REMOVAL OF EXISTING BRIDGE STRUCTURE	LSUM	———	———	———	———	1.00	

DESIGN DATA
(LOAD AND RESISTANCE FACTOR DESIGN)

CLASS AA CONCRETE	F'C = 4,000 P.S.I
CLASS A CONCRETE	F'C = 3,000 P.S.I
REINFORCING STEEL (GRADE 60)	FY = 60,000 P.S.I
STRUCTURAL STEEL M270 (GRADE 50W)	FY = 50,000 P.S.I
STRUCTURAL STEEL M270 (GRADE 70W)	FY = 70,000 P.S.I
STAINLESS STEEL A240(TYPE 316)	FY = 30,000 P.S.I

LOADING: HL-93 OR OKLAHOMA OVERLOAD TRUCK AND 20 P.S.F. FUTURE WEARING SURFACE AND 5 PSF STAY-IN-PLACE FORMS

DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION WITH INTERIM REVISIONS

ANSI/AASHTO/AWSD 1.5 BRIDGE WELDING CODE
ANSI/AWS D1.6 STRUCTURAL WELDING CODE FOR STAINLESS STEEL

LRFR INVENTORY RATING: 1.140
LRFR OPERATING RATING: 1.478

FOUNDATION DATA
ABUTMENTS (HP 12 X 53 PILING)

ABUT. NO. 1

FACTORED PILE REACTION (TON/PILE) = 100.00

ALL ABUTMENT PILING SHALL BE DRIVEN THROUGH THE COMPACTED FILL. PILING SHALL BE DRIVEN TO A POINT BEARING ON SOLID FOUNDATION MATERIAL AT THE APPROXIMATE ELEVATION SHOWN ON THE PLANS.
IF THE AXIAL LOAD RESISTANCE IS NOT OBTAINED AT THIS ELEVATION, DRIVING SHALL CONTINUE UNTIL THE AXIAL LOAD RESISTANCE IS OBTAINED. THE LENGTH OF STEEL PILING SHOWN ON THE PLANS IS FOR ESTIMATING PURPOSES ONLY.

FOUNDATION DATA - DRILLED SHAFTS

	PIER NO. 1 72" DIAMETER	PIER NO. 2 108" DIAMETER	PIER NO. 3 108" DIAMETER	PIER NO. 4 108" DIAMETER	PIER NO. 5 144" DIAMETER	PIER NO. 6 144" DIAMETER	PIER NO. 7 144" DIAMETER	ABUT. NO. 2 60" DIAMETER
DEPTHS (FT)								
SOCKET	22.5	28.5	28.5	28.5	34.5	34.5	34.5	5
NEGLECT FOR FRICTION	5	5	5	5	5	5	5	1
FACTORED REACTION (TONS)	675.0	1,057.1	1,063.2	1,078.7	2,029.0	3,108.3	3,141.6	236.1
BEARING RESISTANCE								
RESISTANCE FACTOR	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NOMINAL UNIT RESISTANCE (TSF)	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
FACTORED END BEARING (TONS)	73.8	166.0	166.0	166.0	295.2	295.2	356.3	61.9
SIDE RESISTANCE								
RESISTANCE FACTOR	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
NOMINAL UNIT RESISTANCE (TSF)	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09
FACTORED SIDE (TONS)	1,105.6	2,227.1	2,227.1	2,227.1	3,727.6	3,727.6	3,727.6	210.6
TOTAL RESISTANCE (TONS)	1,179.4	2,393.1	2,393.1	2,393.1	4,022.8	4,022.8	4,083.8	272.4

HYDRAULIC DATA

TOTAL DRAINAGE AREA =	104,603 SQ. MI.
CONTROLLED DRAINAGE AREA =	19,785 SQ. MI.
EFFECTIVE DRAINAGE AREA =	84,818 SQ. MI.

FREQ.	Q (CFS)	CHW (FT)	V (FPS)
2	168,000	497.52	8.38
5	265,000	504.22	10.00
10	317,000	507.31	10.73
25	394,000	511.59	11.54
50	452,000	514.26	12.20
100	509,000	516.53	12.84
OT OR 500=YR FREQ 75	480,626	515.40	12.52

	Q100	Q500
CONTRACTION SCOUR (FT)	10.43	9.86
PIER SCOUR (FT)	21.39	21.08
TOTAL SCOUR (FT)	31.82	30.94

UTILITIES

WATER - WATER - CITY OF MUSKOGEE
MUSKOGEE, OK
LOCATED BY; AUTHER LECH
1.918.616.5849

WATER - CITY OF FT. GIBSON
FT. GIBSON, OK
LOCATED BY; RUBEN KISSNER
1.918.360.3962

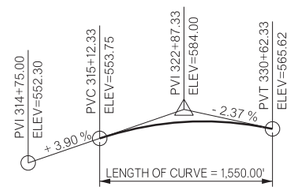
SANITARY - SAN. SEWER - CITY OF FT. GIBSON
FT. GIBSON, OK
LOCATED BY; RUBEN KISSNER
1.918.360.3962

GAS - GAS - ONG
MUSKOGEE, OK
LOCATED BY; DALTON MCTERA
USIC/SMP
1.918.577.7565

TELEPHONE - TELEPHONE- AT&T
MUSKOGEE, OK
LOCATED BY; DALTON MCTERA
USIC/SMP
1.918.577.7565

ELECTRIC - ELECTRICITY - OG&E
MUSKOGEE, OK
LOCATED BY; DALTON MCTERA
USIC/SMP
1.918.577.7565

INDEX OF SHEETS



VERTICAL CURVE DATA

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE QUANTITIES	7/06/21
2	REVISE PAY ITEM	9/07/21
3	REVISE QUANTITY	9/14/21
4	REVISE STANDARDS	12/08/21

BRIDGE 'A' MUSKOGEE COUNTY
US-62 EASTBOUND OVER ARKANSAS RIVER
GENERAL PLAN AND ELEVATION
(BRIDGE "A") (SHEET 5 OF 5)
CONSTRUCT (5)100 ROLLED I-BEAM SPANS &
333-380-333 PLATE GIRDER SPANS
WITH 38' CLR. RDY. & F-SHAPE PARAPET ℄ STA. 322+56.00

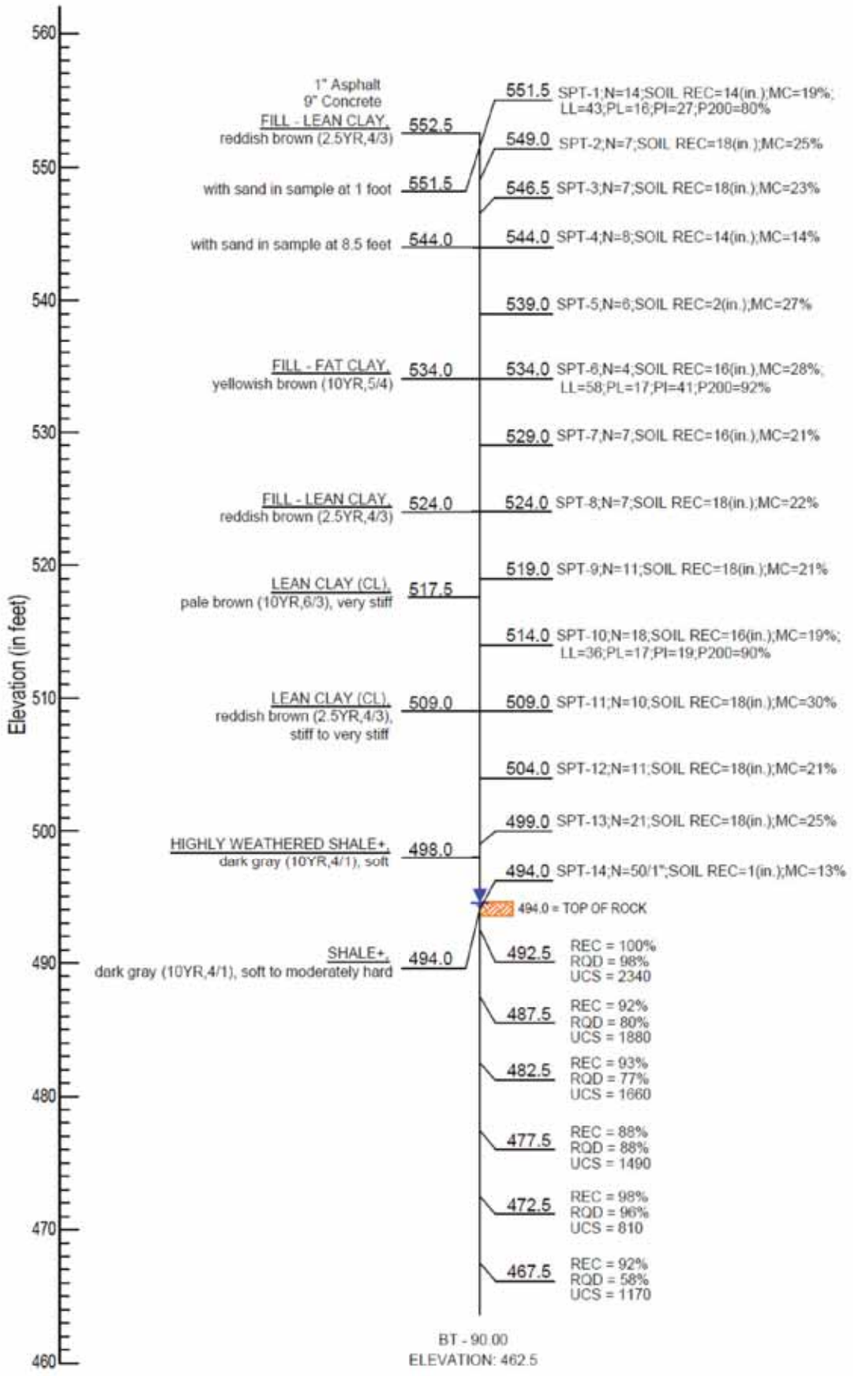
Design	CJO	6/20
Detail	RAH	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416(04) | SHEET NO. B005

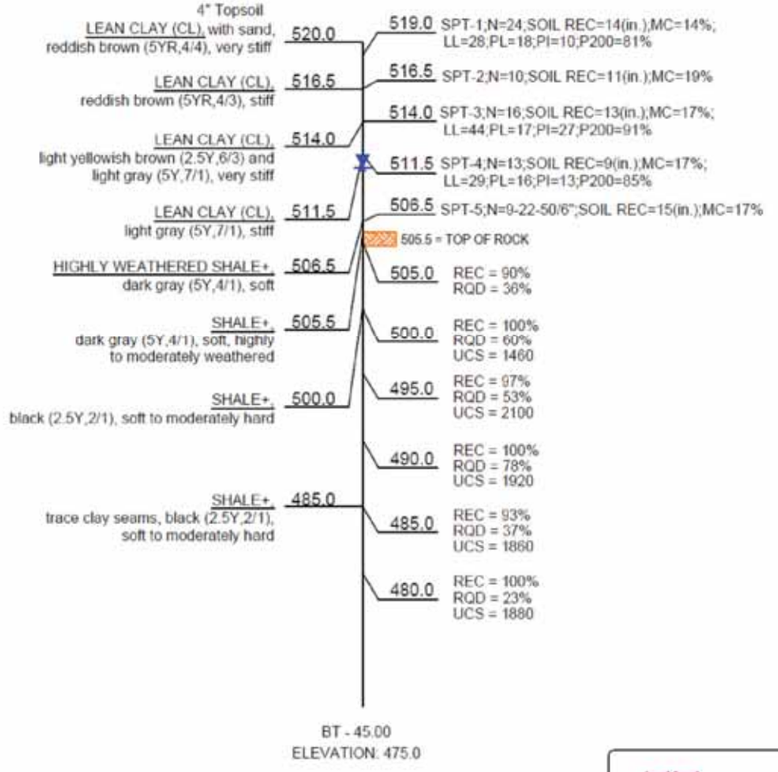
Boring No. B-1

Surface Elev. (Ft.): 552.6
Station: 314+88, Offset: 41.3' RT



Boring No. B-2

Surface Elev. (Ft.): 519.9
Station: 316+07, Offset: 51.4' RT



REVISIONS

REV. NO.	DESCRIPTION	DATE

LEGEND

DCD = DIAMOND CORE DRILLING, ASTM D2113-83
SPT = STANDARD PENETRATION TEST, ASTM D1586
SS = SPLIT SPOON SAMPLER
N = NUMBER OF BLOWS PER 12 INCHES
SOIL REC = SOIL RECOVERY
MC = MOISTURE CONTENT
LL = LIQUID LIMIT (NV=NO VALUE)
PI = PLASTICITY INDEX (NP=NO PLASTICITY)
PL = PLASTICITY LIMIT
P200 = PERCENT PASSING #200 SIEVE
REC = ROCK RECOVERY
RQD = ROCK QUALITY DESIGNATION
UCS = UNCONFINED COMPRESSIVE STRENGTH (psi)
TCP = TEXAS CONE PENETROMETER
WCI = WET CAVE IN
= WATER LEVEL WHILE DRILLING OR SAMPLING
= WATER LEVEL AFTER DRILLING
= WATER LEVEL 24 HOURS AFTER DRILLING
= TOP OF ROCK

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NOTE: "SS" DENOTES STANDARD PENETRATION TEST, AASHTO D1586-84. "TCP" DENOTES TEXAS CONE PENETRATION TEST.

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SITE GEOLOGY

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GEOTECHNICAL REPORT

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Terracon
Consulting Engineers and Scientists
9522 EAST 47TH PLACE, UNIT D TULSA, OKLAHOMA 74146
PH. (918) 250-0461 FAX. (918) 250-4570

BRIDGE 'A' MUSKOGEE COUNTY
US-62 EASTBOUND OVER ARKANSAS RIVER

FOUNDATION REPORT
(SHEET 1 OF 5)(BRIDGE 'A')

Design	CJO	6/20
Detail	TEE	2/20
Check	RAH	8/20

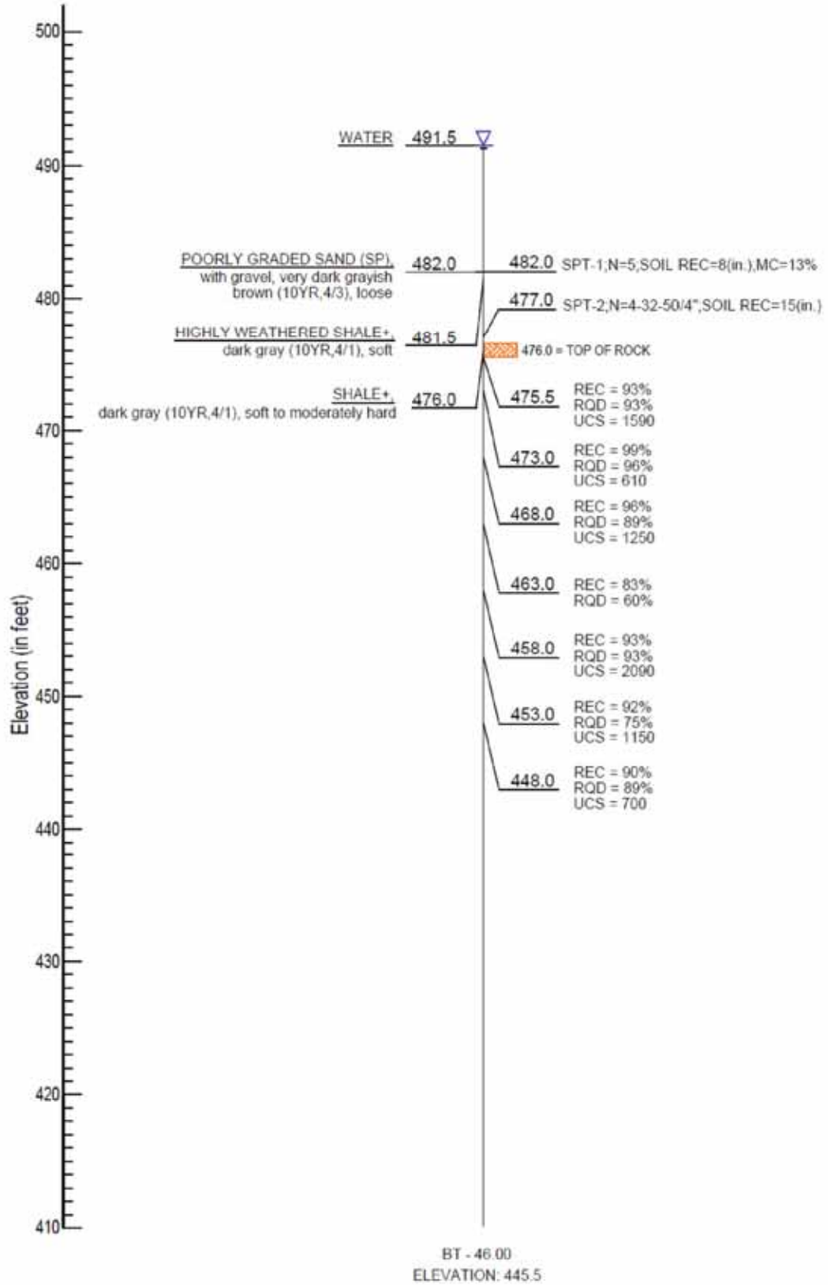
Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416(04) SHEET NO. B006

REVISIONS		
REV. NO.	DESCRIPTION	DATE

Boring No. B-3

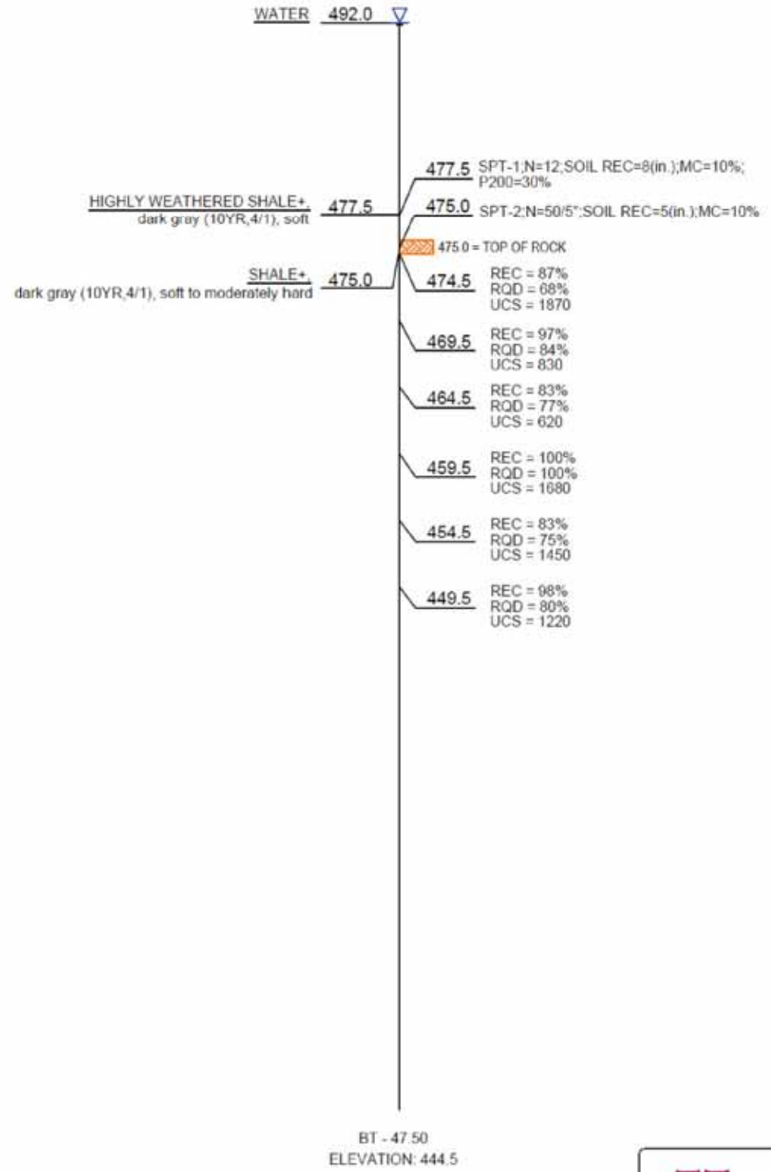
Surface Elev. (Ft.): 491.5
Station: 316+89, Offset: 19.7' RT



BT - 46.00
ELEVATION: 445.5

Boring No. B-4

Surface Elev. (Ft.): 492.0
Station: 317+96, Offset: 22.3' RT



BT - 47.50
ELEVATION: 444.5

LEGEND

DCD = DIAMOND CORE DRILLING, ASTM D2113-83
SPT = STANDARD PENETRATION TEST, ASTM D1586
SS = SPLIT SPOON SAMPLER
N = NUMBER OF BLOWS PER 12 INCHES
SOIL REC = SOIL RECOVERY
MC = MOISTURE CONTENT
LL = LIQUID LIMIT (NV=NO VALUE)
PI = PLASTICITY INDEX (NP=NO PLASTICITY)
PL = PLASTICITY LIMIT
P200 = PERCENT PASSING #200 SIEVE
REC = ROCK RECOVERY
RQD = ROCK QUALITY DESIGNATION
UCS = UNCONFINED COMPRESSIVE STRENGTH (psi)
TCP = TEXAS CONE PENETROMETER
WCI = WET CAVE IN
= WATER LEVEL WHILE DRILLING OR SAMPLING
= WATER LEVEL AFTER DRILLING
= WATER LEVEL 24 HOURS AFTER DRILLING
= TOP OF ROCK

NOTE: WATER LEVEL ELEVATIONS SHOWN WERE OBTAINED AT THE TIME THE BORINGS WERE DRILLED AND MAY FLUCTUATE THROUGHTOUT THE YEAR.

NOTE: "SS" DENOTES STANDARD PENETRATION TEST. AASHTO D1586-84. "TCP" DENOTES TEXAS CONE PENETRATION TEST.

* NOTE: TOP OF ROCK LINE SHOWN FOR ESTIMATING PURPOSED ONLY

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BRIDGE 'A' MUSKOGEE COUNTY
US-62 EASTBOUND OVER ARKANSAS RIVER

FOUNDATION REPORT
(SHEET 2 OF 5)(BRIDGE 'A')

Design	CJO	6/20
Detail	TEE	2/20
Check	RAH	8/20

Squad: HENSLEY
Engr.: DEFRANCO

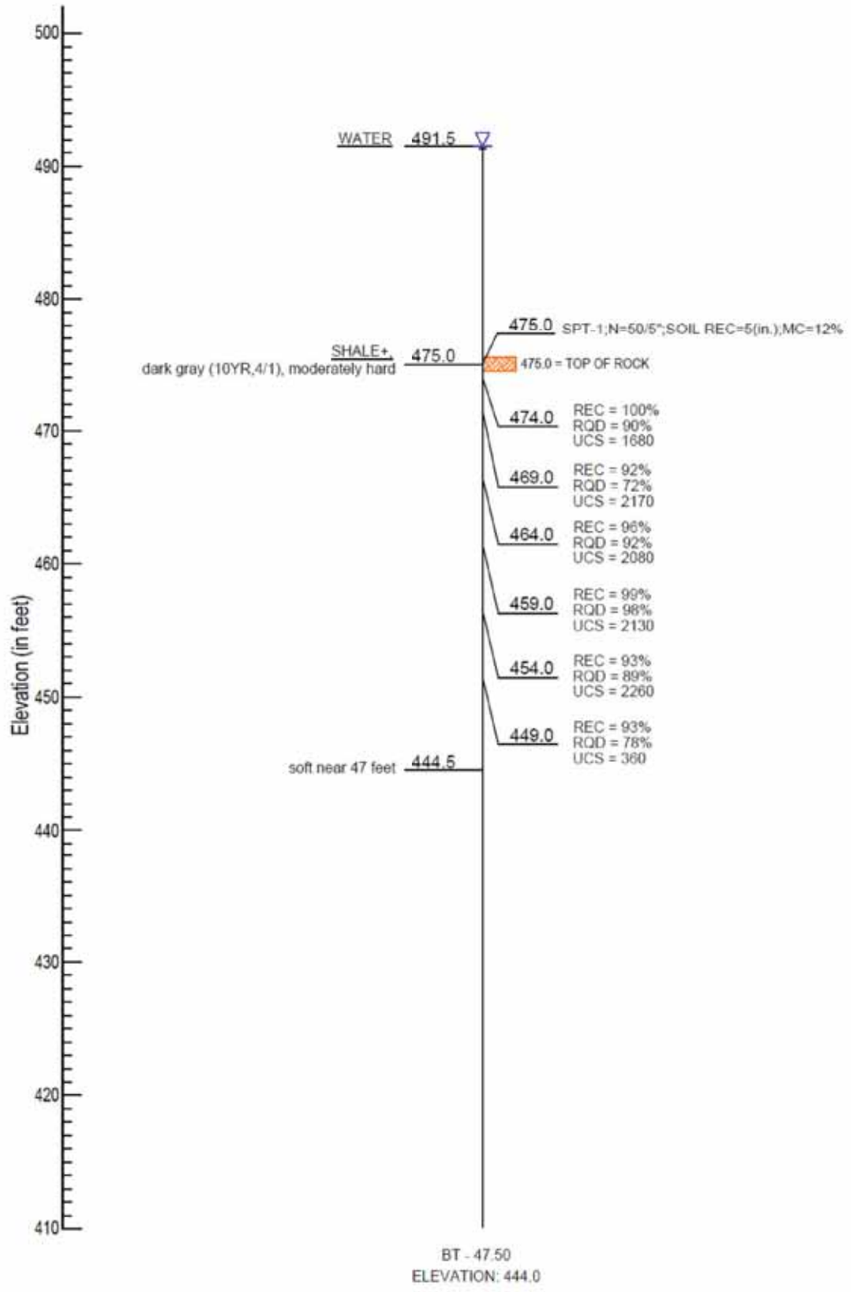
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) SHEET NO. B007

REVISIONS		
REV. NO.	DESCRIPTION	DATE

Boring No. B-5

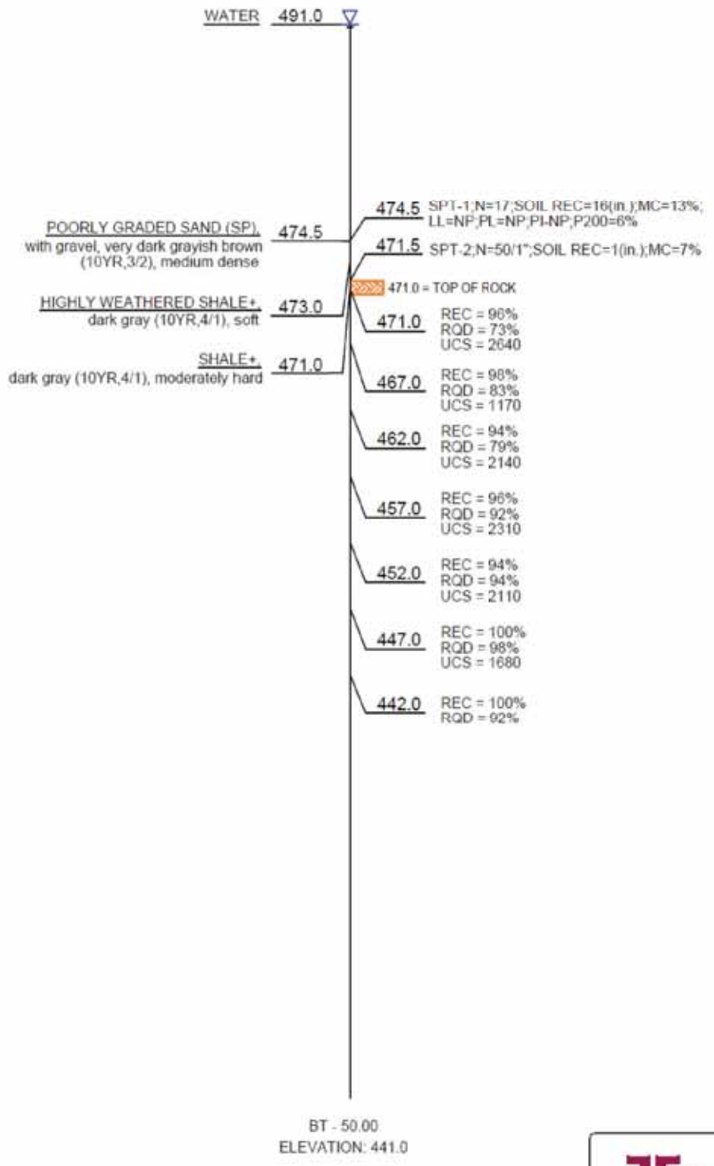
Surface Elev. (Ft.): 491.3
Station: 318+83, Offset: 28.8' RT



BT - 47.50
ELEVATION: 444.0

Boring No. B-6

Surface Elev. (Ft.): 491.1
Station: 319+91, Offset: 39.8' RT



BT - 50.00
ELEVATION: 441.0

LEGEND

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= WATER LEVEL 24 HOURS AFTER DRILLING
= TOP OF ROCK

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BRIDGE 'A' MUSKOGEE COUNTY
US-62 EASTBOUND OVER ARKANSAS RIVER

FOUNDATION REPORT
(SHEET 3 OF 5)(BRIDGE 'A')

Design	CJO	6/20
Detail	TEE	2/20
Check	RAH	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

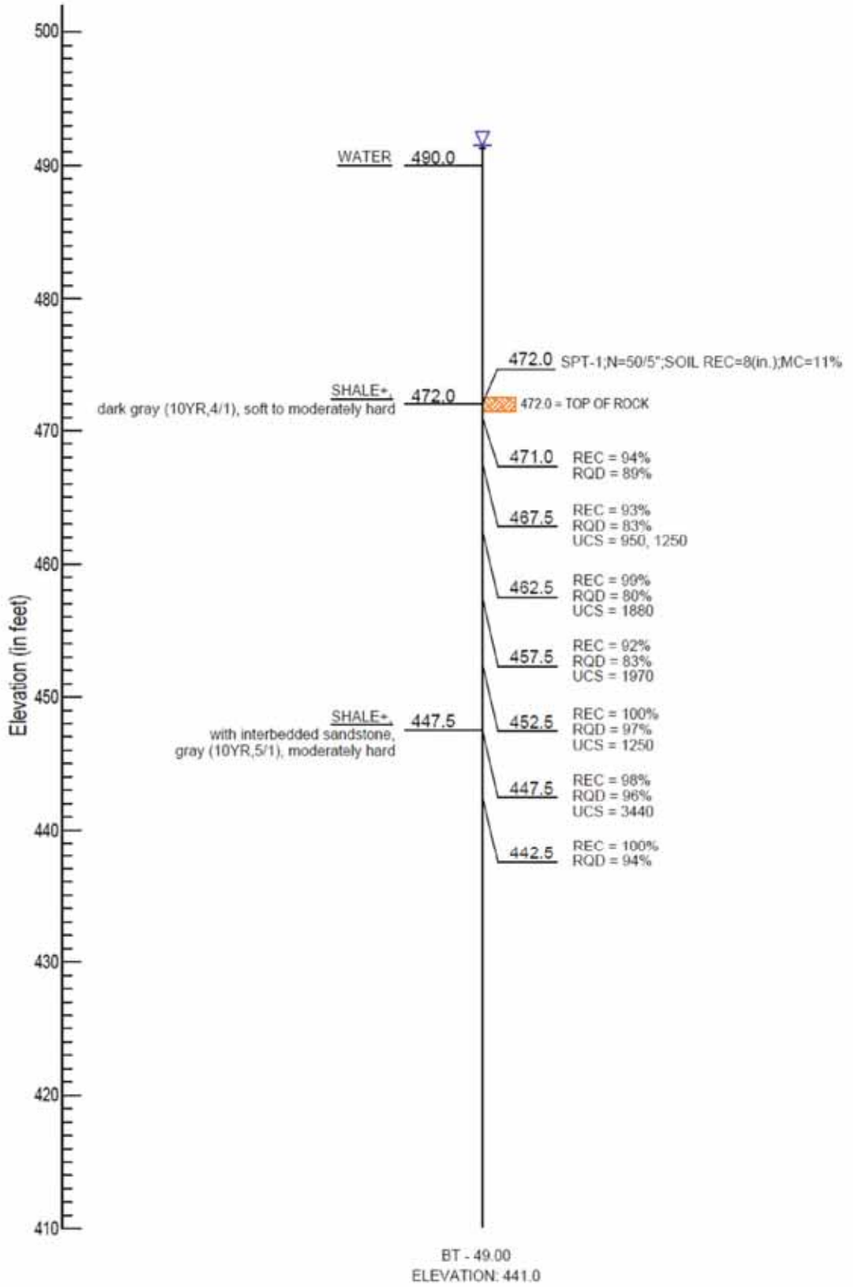
JOB PIECE NO. 30416(04) SHEET NO. B008

REVISIONS

REV. NO.	DESCRIPTION	DATE

Boring No. B-7

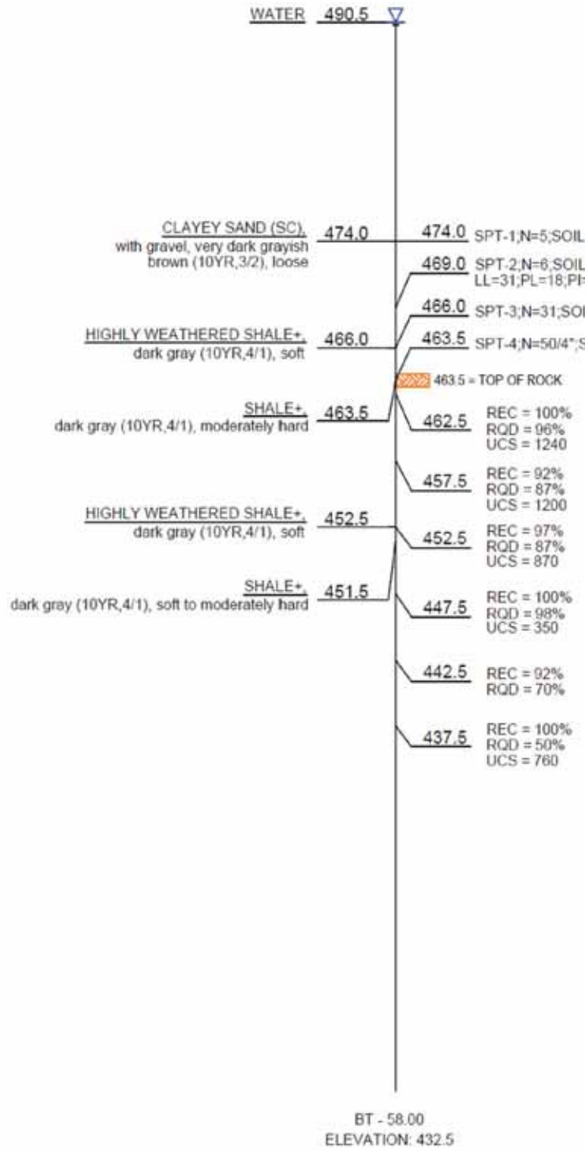
Surface Elev. (Ft.): 490.2
Station: 323+17, Offset: 54.7' RT



BT - 49.00
ELEVATION: 441.0

Boring No. B-8

Surface Elev. (Ft.): 490.6
Station: 326+83, Offset: 43.4' RT



BT - 58.00
ELEVATION: 432.5

LEGEND

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SITE GEOLOGY

Based on information published in the Oklahoma Department of Transportation (ODOT) manual, *"Engineering Classification of Geologic Materials: Division 1"* and the 2003 USGS Geologic Map of Oklahoma, the project alignment is mapped as underlain by a combination of Alluvium, the Savanna Unit, and the Atoka Unit. Alluvium consists of sand, silt, clay, gravel, and/or combinations of these materials that have been deposited along flood plains by streams or rivers. The Savanna Unit is likely present west of the Arkansas River and consists mainly of gray to black shale with some lenses of sandstone. The shale of the Savanna Unit is fissile and locally clayey. The Atoka Unit is likely present east of the Arkansas River underlying the alluvium. The Atoka Unit consists of mainly sandstone and shale. The shales of the Atoka Unit are fissile, locally clayey, and brown to black in color.

GEOTECHNICAL REPORT

ALL GEOTECHNICAL INFORMATION CONTAINED ON THIS SHEET IS COVERED BY THE ENGINEERING SEAL AFFIXED TO AN ORIGINAL GEOTECHNICAL ENGINEERING REPORT THAT HAS BEEN STAMPED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN OKLAHOMA. TO OBTAIN A COPY OF THE COMPLETE REPORT, CONTACT THE ODOT OFFICE ENGINEER AT (405) 521-2625. THE CONTRACTOR SHOULD BE FULLY AWARE OF THE SITE CONDITIONS PRIOR TO BEGINNING WORK. ANY ADDITIONAL GEOTECHNICAL INFORMATION WHICH MAY BE DESIRED IS THE RESPONSIBILITY OF THE CONTRACTOR.

Terracon
Consulting Engineers and Scientists
9522 EAST 47TH PLACE, UNIT D TULSA, OKLAHOMA 74146
PH. (918) 250-9461 FAX. (918) 250-4570

BRIDGE 'A' MUSKOGEE COUNTY
US-62 EASTBOUND OVER ARKANSAS RIVER

FOUNDATION REPORT
(SHEET 4 OF 5)(BRIDGE 'A')

Design	CJO	6/20
Detail	TEE	2/20
Check	RAH	8/20

Squad: HENSLEY
Engr.: DEFRANCO

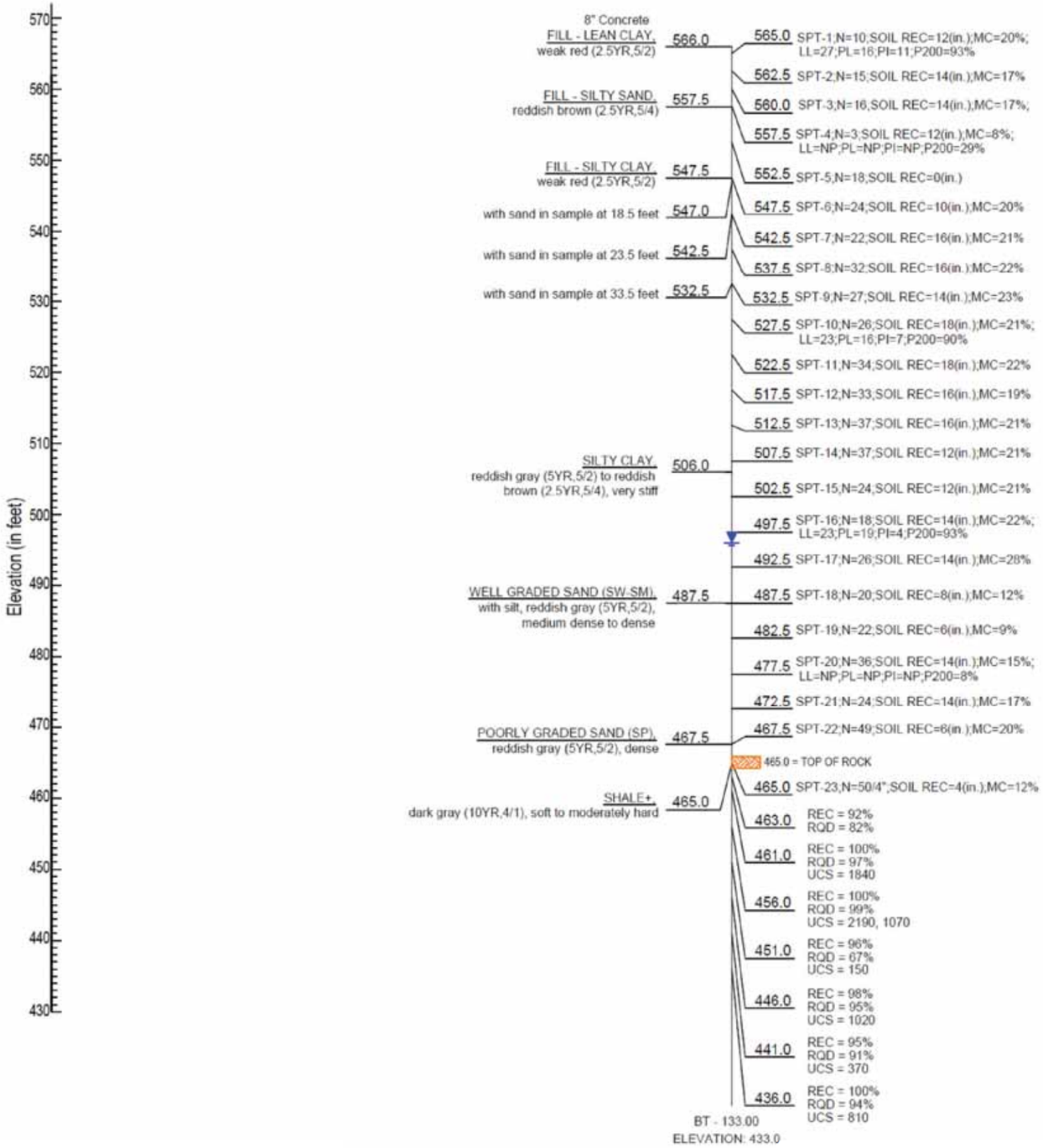
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) SHEET NO. B009

REVISIONS		
REV. NO.	DESCRIPTION	DATE

Boring No. B-9

Surface Elev. (Ft.): 565.8
Station: 330+50, Offset: 39.5' RT



LEGEND

DCD = DIAMOND CORE DRILLING, ASTM D2113-83
SPT = STANDARD PENETRATION TEST, ASTM D1586
SS = SPLIT SPOON SAMPLER
N = NUMBER OF BLOWS PER 12 INCHES
SOIL REC = SOIL RECOVERY
MC = MOISTURE CONTENT
LL = LIQUID LIMIT (NV=NO VALUE)
PI = PLASTICITY INDEX (NP=NO PLASTICITY)
PL = PLASTICITY LIMIT
P200 = PERCENT PASSING #200 SIEVE
REC = ROCK RECOVERY
RQD = ROCK QUALITY DESIGNATION
UCS = UNCONFINED COMPRESSIVE STRENGTH (psi)
TCP = TEXAS CONE PENETROMETER
WCI = WET CAVE IN
= WATER LEVEL WHILE DRILLING OR SAMPLING
= WATER LEVEL AFTER DRILLING
= WATER LEVEL 24 HOURS AFTER DRILLING
= TOP OF ROCK

NOTE: WATER LEVEL ELEVATIONS SHOWN WERE OBTAINED AT THE TIME THE BORINGS WERE DRILLED AND MAY FLUCTUATE THROUGHTOUT THE YEAR.

NOTE: "SS" DENOTES STANDARD PENETRATION TEST. AASHTO D1586-84. "TCP" DENOTES TEXAS CONE PENETRATION TEST.

* NOTE: TOP OF ROCK LINE SHOWN FOR ESTIMATING PURPOSED ONLY

** NOTE: WATER LEVEL ELEVATION SHOWN WERE OBTAINED AT THE TIME THE BORINGS WERE DRILLED AND MAY FLUCTUATE THROUGHOUT THE YEAR.

*** NOTE: ROCK CLASSIFICATION IS BASED ON DRILLING CHARACTERISTICS AND VISUAL OBSERVATION OF ROCK CORE SAMPLES. PETROGRAPHIC ANALYSIS OF THIN SECTION OF THE ROCK CORE SAMPLES MAY REVEAL OTHER TYPES.

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Terracon
Consulting Engineers and Scientists
9522 EAST 47TH PLACE, UNIT D TULSA, OKLAHOMA 74146
PH. (918) 250-0461 FAX. (918) 250-4570

BRIDGE 'A' MUSKOGEE COUNTY
US-62 EASTBOUND OVER ARKANSAS RIVER

FOUNDATION REPORT
(SHEET 5 OF 5)(BRIDGE 'A')

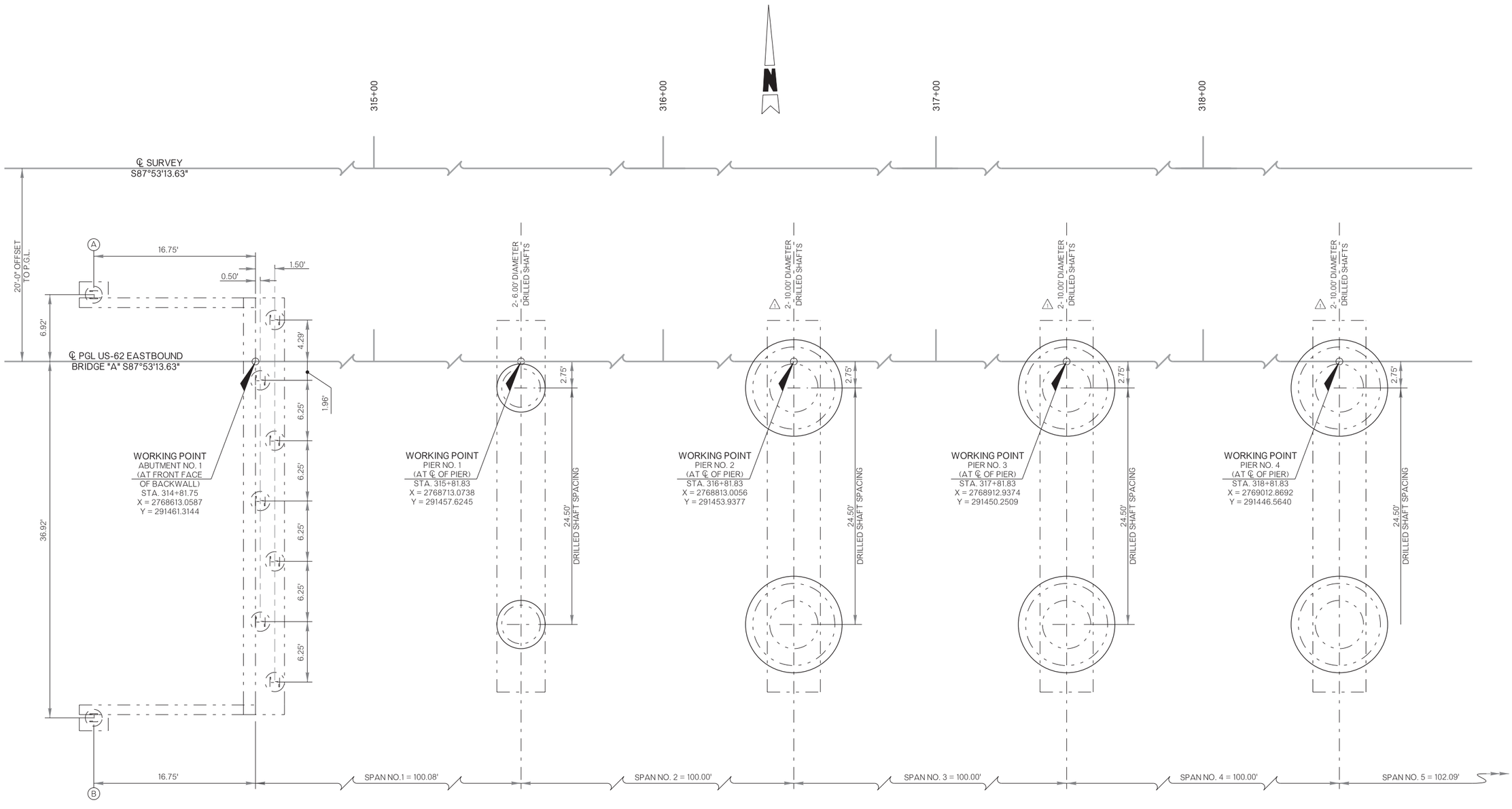
Design	CJO	6/20
Detail	TEE	2/20
Check	RAH	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) SHEET NO. B010

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE PIERS	7/06/21



TOP OF PILE ELEVATION ABUTMENT NO. 1	
PILE	ELEVATION
BRIDGE SEAT	543.22'
(A)	547.89'
(B)	547.89'

SUBSTRUCTURE STAKING DIAGRAM

ALL STATIONS SHOWN ALONG P.G.L.

FACE OF PILE WEB SHALL BE PERPENDICULAR TO FACE OF BRIDGE SEAT

BRIDGE 'A' MUSKOGEE COUNTY
US-62 EASTBOUND OVER ARKANSAS RIVER

SUBSTRUCTURE STAKING DIAGRAM
(SHEET 1 OF 2)(BRIDGE 'A')

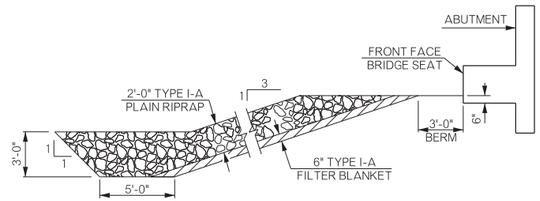
Design	CJO	6/20
Detail	RAH	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

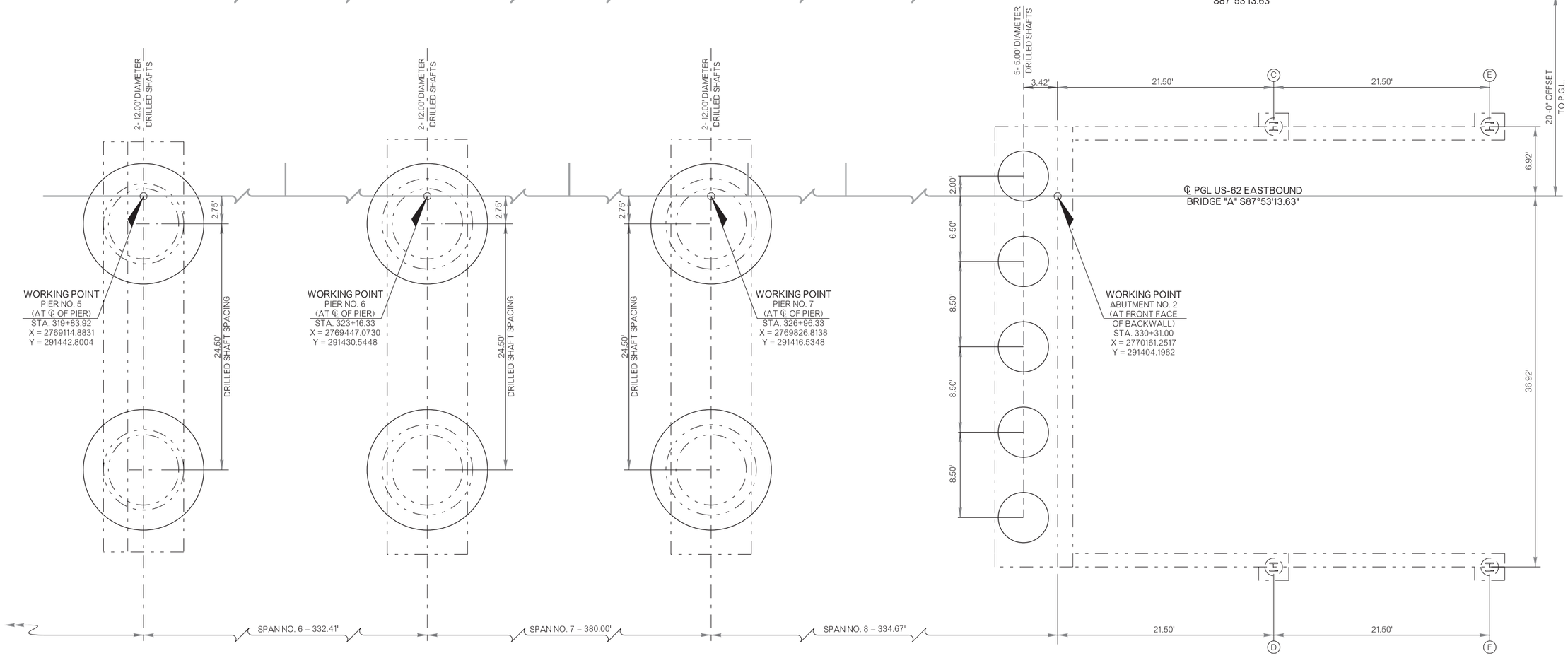
JOB PIECE NO. 30416(04) SHEET NO. B011

REVISIONS		
REV. NO.	DESCRIPTION	DATE



SECTION THRU RIPRAP AT BRIDGE SEAT (ABUTMENT NO. 2)

(DIMENSIONS ARE NORMAL TO BRIDGE SEAT)



SUBSTRUCTURE STAKING DIAGRAM

ALL STATIONS SHOWN ALONG P.G.L.

FACE OF PILE WEB SHALL BE PERPENDICULAR TO FACE OF BRIDGE SEAT

TOP OF PILE ELEVATION ABUTMENT NO. 2	
PILE	ELEVATION
C	553.87'
D	553.87'
E	561.21'
F	561.21'

BRIDGE 'A' MUSKOGEE COUNTY
US-62 EASTBOUND OVER ARKANSAS RIVER

SUBSTRUCTURE STAKING DIAGRAM
(SHEET 2 OF 2)(BRIDGE 'A')

Design	CJO	6/20
Detail	RAH	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

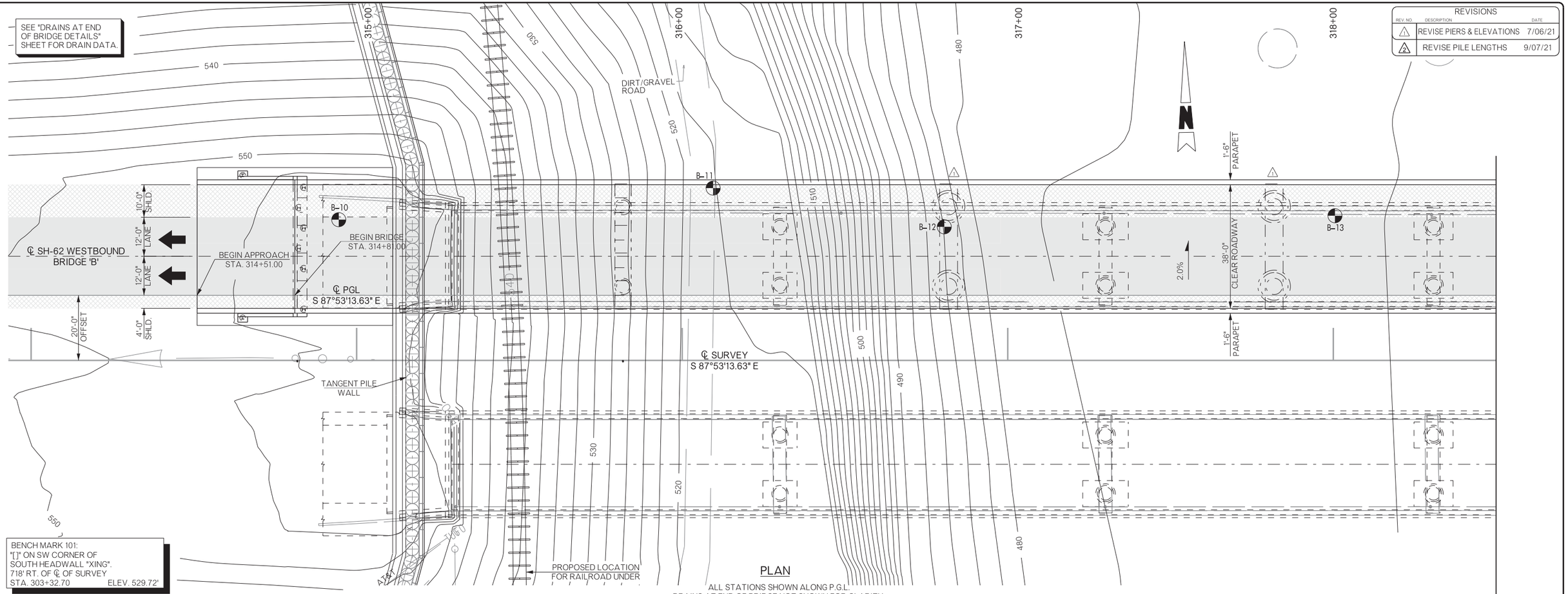
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) SHEET NO. B012

SEE "DRAINS AT END OF BRIDGE DETAILS" SHEET FOR DRAIN DATA.

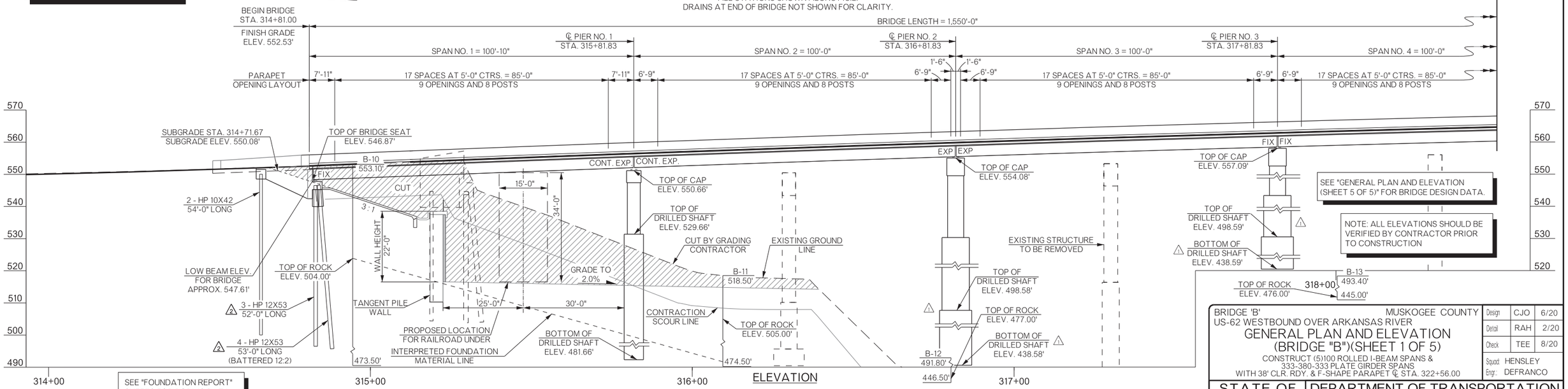
BENCH MARK 101:
"[]" ON SW CORNER OF SOUTH HEADWALL "XING".
718' RT. OF ℄ OF SURVEY
STA. 303+32.70 ELEV. 529.72'

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE PIERS & ELEVATIONS	7/06/21
2	REVISE PILE LENGTHS	9/07/21



PLAN

ALL STATIONS SHOWN ALONG P.G.L.
DRAINS AT END OF BRIDGE NOT SHOWN FOR CLARITY.



SEE "FOUNDATION REPORT" SHEETS FOR BORING DATA.

SEE "GENERAL PLAN AND ELEVATION (SHEET 5 OF 5)" FOR BRIDGE DESIGN DATA.

NOTE: ALL ELEVATIONS SHOULD BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION

ELEVATION

ALL STATIONS AND ELEVATIONS SHOWN ALONG P.G.L.

BRIDGE 'B' MUSKOGEE COUNTY
US-62 WESTBOUND OVER ARKANSAS RIVER

GENERAL PLAN AND ELEVATION (BRIDGE "B")(SHEET 1 OF 5)

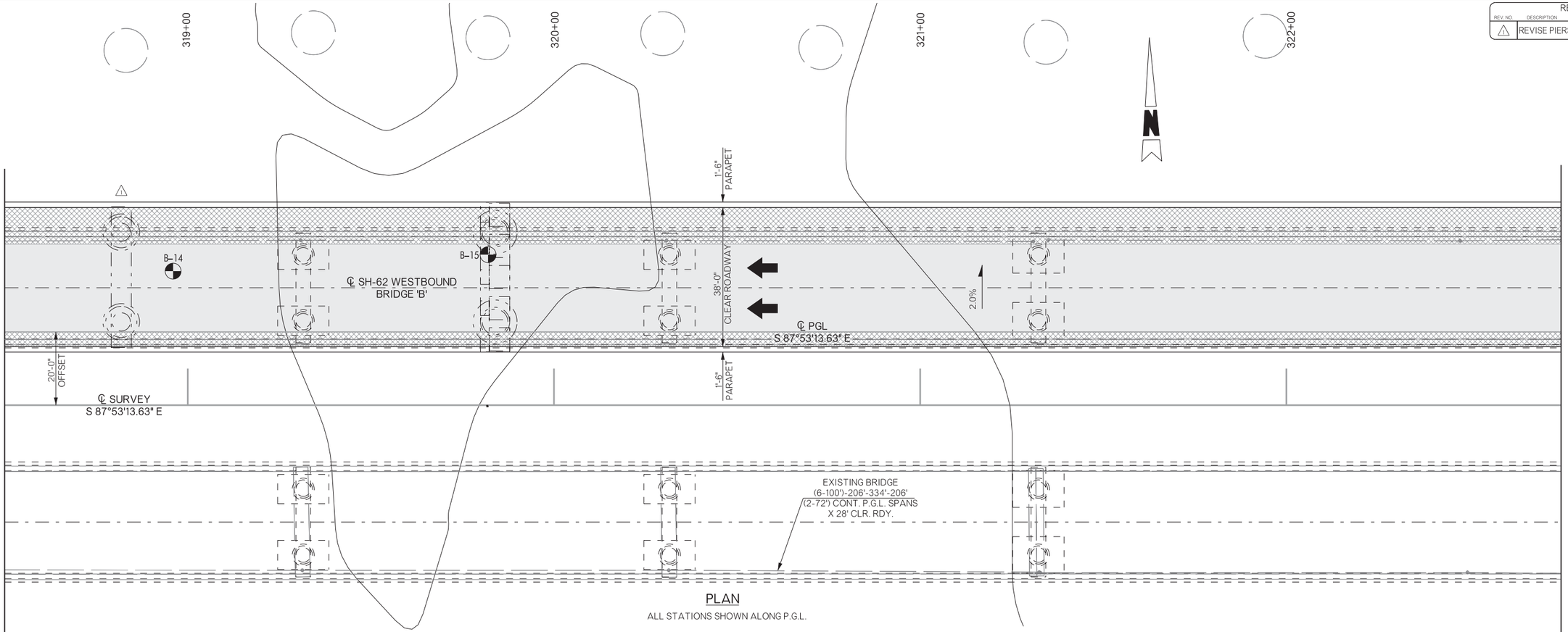
CONSTRUCT (5)100 ROLLED I-BEAM SPANS &
333-380-333 PLATE GIRDER SPANS
WITH 38' CLR. RDY. & F-SHAPE PARAPET ℄ STA. 322+56.00

Design	CJO	6/20
Detail	RAH	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

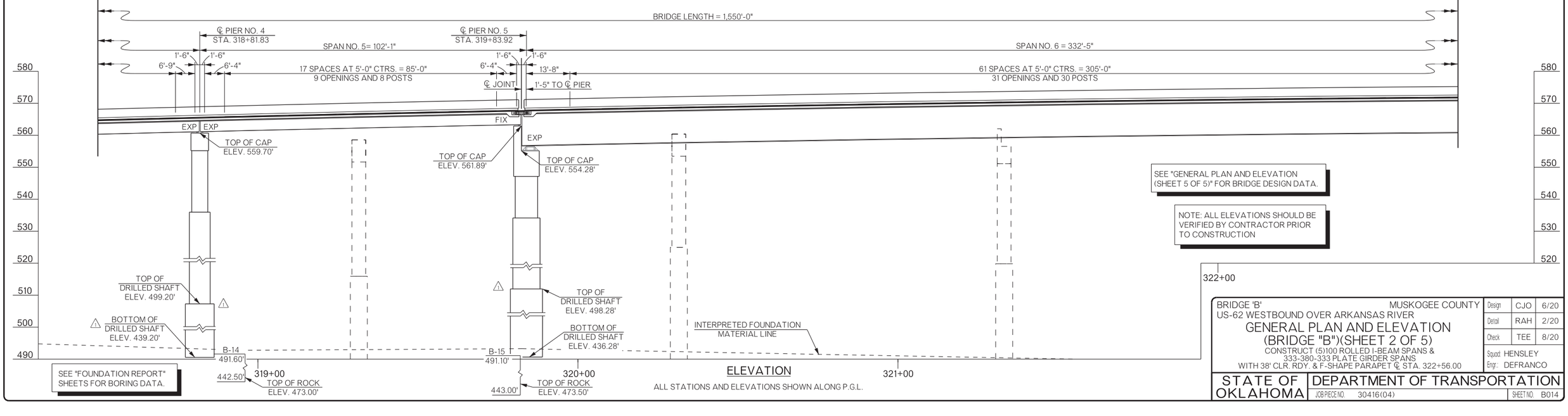
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416(04) | SHEET NO. B013

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE PIERS & ELEVATIONS	7/06/21



PLAN

ALL STATIONS SHOWN ALONG P.G.L.



ELEVATION

ALL STATIONS AND ELEVATIONS SHOWN ALONG P.G.L.

SEE "FOUNDATION REPORT" SHEETS FOR BORING DATA.

SEE "GENERAL PLAN AND ELEVATION (SHEET 5 OF 5)" FOR BRIDGE DESIGN DATA.

NOTE: ALL ELEVATIONS SHOULD BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION

BRIDGE 'B' MUSKOGEE COUNTY
US-62 WESTBOUND OVER ARKANSAS RIVER

GENERAL PLAN AND ELEVATION (BRIDGE "B")(SHEET 2 OF 5)

CONSTRUCT (5)100 ROLLED I-BEAM SPANS &
333-380-333 PLATE GIRDER SPANS
WITH 38' CLR. RDY. & F-SHAPE PARAPET ℄ STA. 322+56.00

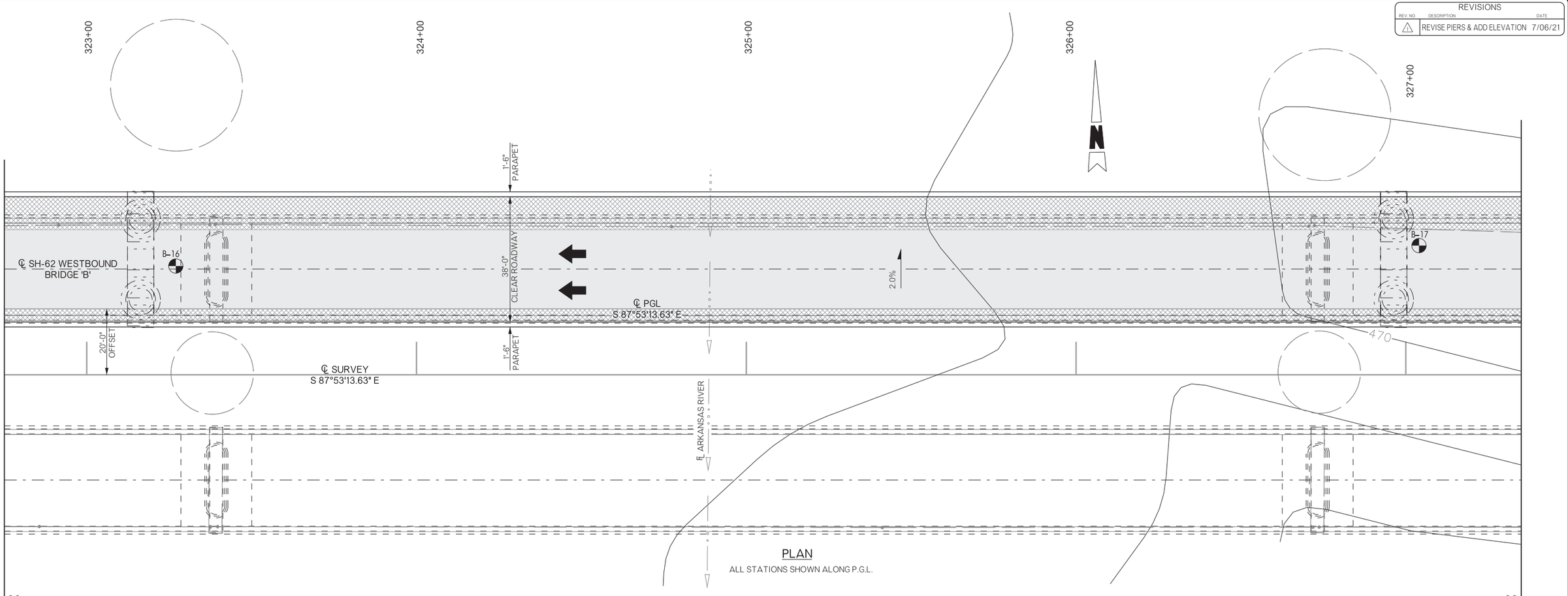
Design	CJO	6/20
Detail	RAH	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

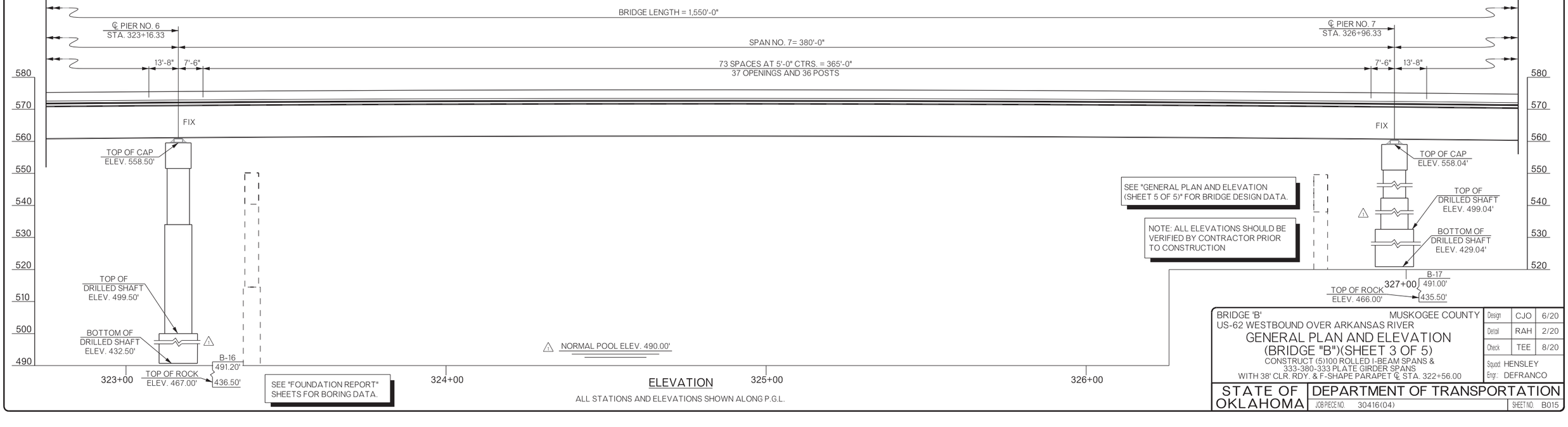
JOB PIECE NO. 30416(04) | SHEET NO. B014

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE PIERS & ADD ELEVATION	7/06/21



PLAN

ALL STATIONS SHOWN ALONG P.G.L.



ELEVATION

ALL STATIONS AND ELEVATIONS SHOWN ALONG P.G.L.

BRIDGE 'B' MUSKOGEE COUNTY
US-62 WESTBOUND OVER ARKANSAS RIVER

GENERAL PLAN AND ELEVATION (BRIDGE "B")(SHEET 3 OF 5)

CONSTRUCT (5)100 ROLLED I-BEAM SPANS &
333-380-333 PLATE GIRDER SPANS
WITH 38' CLR. RDY. & F-SHAPE PARAPET ℄ STA. 322+56.00

Design	CJO	6/20
Detail	RAH	2/20
Check	TEE	8/20
Squad	HENSLEY	
Engr:	DEFRANCO	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) SHEET NO. B015

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE PILE LENGTHS	9/07/21

N

328+00 329+00 330+00 331+00

EXISTING WALKING TRAIL

PROPOSED ASPHALT WALKING TRAIL

1'-6" PARAPET

38'-0" CLEAR ROADWAY

20'-0" OFFSET

℄ SH-62 WESTBOUND BRIDGE 'B'

℄ PGL S 87°53'13.63" E

℄ SURVEY S 87°53'13.63" E

2.0%

B-18A B-18B

END BRIDGE STA. 330+31.00

END APPROACH STA. 330+76.42

10'-0" SHLD

12'-0" LANE

12'-0" LANE

4'-0" SHLD

AT&T

OG&E OWNED LINE

OG&E OWNED LINE

ENOGEX ABANDONED GAS LINE

BENCH MARK 102:
"[ ]" ON ℄ WEST OF DROP INLET
715' LT. OF ℄ OF SURVEY
STA. 342+43.30 ELEV. 513.73'

SEE "GENERAL PLAN AND ELEVATION (SHEET 5 OF 5)" FOR BRIDGE DESIGN DATA.

NOTE: ALL ELEVATIONS SHOULD BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION

PLAN

ALL STATIONS SHOWN ALONG P.G.L.
DRAINS AT END OF BRIDGE NOT SHOWN FOR CLARITY.

BRIDGE LENGTH = 1,550'-0"

SPAN NO. 8 = 334'-8"

61 SPACES AT 5'-0" CTRS. = 305'-0"
31 OPENINGS AND 30 POSTS

END BRIDGE STA. 330+31.00
FINISH GRADE ELEV. 566.36'

13'-8" 1'-6"

TOP OF BRIDGE SEAT ELEV. = 553.02'

SUBGRADE STA. 330+68.16
SUBGRADE ELEV. 563.41'

B-18A 565.90'

B-18B 565.50'

EXP

CUT BY GRADING CONTRACTOR

CUT

3 : 1

2 - HP 10X42 95'-0" LONG ⚠

2 - HP 10X42 102'-0" LONG ⚠

TOP OF ROCK ELEV. 463.00'

433.00'

TOP OF DRILLED SHAFT ELEV. 547.21'

TOP OF ROCK ELEV. 465.00'

BOTTOM OF DRILLED SHAFT ELEV. 459.21'

464.50'

EXISTING STRUCTURE TO BE REMOVED

EXISTING WALKING TRAIL

PROPOSED ASPHALT WALKING TRAIL

CONTRACTION SCOUR LINE

580 570 560 550 540 530 520 510 500

327+00 328+00 329+00 330+00 331+00

SEE "FOUNDATION REPORT" SHEETS FOR BORING DATA.

ELEVATION

ALL STATIONS AND ELEVATIONS SHOWN ALONG P.G.L.

BRIDGE 'B' MUSKOGEE COUNTY
US-62 WESTBOUND OVER ARKANSAS RIVER

GENERAL PLAN AND ELEVATION (BRIDGE "B")(SHEET 4 OF 5)

CONSTRUCT (5)100 ROLLED I-BEAM SPANS &
333-380-333 PLATE GIRDER SPANS
WITH 38' CLR. RDY. & F-SHAPE PARAPET ℄ STA. 322+56.00

Design	CJO	6/20
Detail	RAH	2/20
Check	TEE	8/20
Squad	HENSLEY	
Engr:	DEFRANCO	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) SHEET NO. B016

2009 BRIDGE STANDARDS

B40-C-ABUT-MISC-01E
EJ-DTL-02E
EJ-SQ-04E
FSHP-42-2-00E
HP1-2-01E

2019 ROADWAY STANDARDS

DC-4-0
1 LECS-5-1
PUD-4-0
1 SPI-5-1

2009 TRAFFIC STANDARDS

CCD1-1-00
CCD2-1-00
GHW1-1-00
GHW2-1-00
NCD1-1-00
PBD1-1-00
SCD1-1-00
SKT-1-00
SPD1-1-00
THRI-1-02

ITEMIZED QUANTITIES

ITEM	UNIT	ABUTMENT	PIER	SUPER-STRUCTURE	APPROACH SLAB	TOTAL	
SUBSTRUCTURE EXCAVATION COMMON	CY	310.00				310.00	
CLSM BACKFILL	CY	565.60				565.60	
APPROACH SLABS	SY				343.60	343.60	
SAW-CUT GROOVING	SY			5,793.70	260.40	6,054.10	
42" F-SHAPE PARAPET	LF			3,100.00	150.90	3,250.90	
STRUCTURAL STEEL	LB			4,731,810.00		4,731,810.00	
STRUCTURAL STEEL M270 GR. HPS 70W	LB			784,880.00		784,880.00	
STAINLESS STEEL FIXED BEARING ASSEMBLY	EA			20.00		20.00	
STAINLESS STEEL EXP. BEARING ASSEMBLY	EA			30.00		30.00	
CLASS AA CONCRETE	CY			1,967.30		1,967.30	1
CLASS A CONCRETE	CY	199.60	2,199.80			2,399.40	1
CLASS C CONCRETE	CY				16.20	16.20	
SLOPE WALL (5")	SY				104.10	104.10	
REINFORCING STEEL	LB		42,240.00			42,240.00	1
EPOXY COATED REINFORCING STEEL	LB	24,240.00	537,150.00	487,950.00		1,049,340.00	1 3
PILES, FURNISHED (HP 10X42)	LF	502.00				502.00	
PILES, FURNISHED (HP 12X53)	LF	368.00				368.00	
PILES, DRIVEN (HP 10X42)	LF	502.00				502.00	
PILES, DRIVEN (HP 12X53)	LF	368.00				368.00	
PILE SPLICE, H-PILE (NON-BIDDABLE)	EA					1.00	
WATER REPELLENT (VISUALLY INSPECTED)	SY	170.00	1,589.00	3,098.00	75.00	4,932.00	1
DRILLED SHAFT 60" DIAMETER	LF	440.00				440.00	
DRILLED SHAFT 72" DIAMETER	LF		96.00			96.00	
DRILLED SHAFT 120" DIAMETER	LF		360.00			360.00	1
DRILLED SHAFT 144" DIAMETER	LF		398.00			398.00	
CROSSHOLE SONIC LOGGING	EA	5.00	14.00			19.00	
THERMAL INTEGRITY PROFILER	EA	5.00	14.00			19.00	
SEALED EXPANSION JOINT	LF			84.00		84.00	
MODULAR EXPANSION JOINTS	LF			82.00		82.00	
SEALER CRACK PREPARATION	LF			266.00	38.00	304.00	
SEALER RESIN	GAL			1.80	0.30	2.10	
(PL) INSTALLATION OF BRIDGE ITEMS (TYPE A)	EA			10.00		10.00	
(PL) INSTALLATION OF BRIDGE ITEMS (TYPE B)	EA			10.00		10.00	
TYPE I-A PLAIN RIP RAP	TON				440.00	440.00	
TYPE I-A FILTER BLANKET	TON				90.00	90.00	
6" PERFORATED PIPE UNDERDRAIN ROUND	LF	84.00				84.00	
6" NON-PERF. PIPE UNDERDRAIN ROUND	LF	46.00				46.00	
REMOVAL OF EXISTING BRIDGE STRUCTURE	LSUM					1.00	
(SP) BRIDGE NAVIGATION LIGHTING	LSUM					1.00	

DESIGN DATA
(LOAD AND RESISTANCE FACTOR DESIGN)

CLASS AA CONCRETE	F'C = 4,000 P.S.I
CLASS A CONCRETE	F'C = 3,000 P.S.I
REINFORCING STEEL (GRADE 60)	FY = 60,000 P.S.I
STRUCTURAL STEEL M270 (GRADE 50W)	FY = 50,000 P.S.I
STRUCTURAL STEEL M270 (GRADE 70W)	FY = 70,000 P.S.I
STAINLESS STEEL A240(TYPE 316)	FY = 30,000 P.S.I

LOADING: HL-93 OR OKLAHOMA OVERLOAD TRUCK AND 20 P.S.F. FUTURE WEARING SURFACE AND 5 PSF STAY-IN-PLACE FORMS

DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION WITH INTERIM REVISIONS

ANSI/AASHTO/AWSD 1.5 BRIDGE WELDING CODE
ANSI/AWS D1.6 STRUCTURAL WELDING CODE FOR STAINLESS STEEL

LRFR INVENTORY RATING: 1.140
LRFR OPERATING RATING: 1.478

FOUNDATION DATA
ABUTMENTS (HP 12 X 53 PILING)

ABUT. NO. 1

FACTORED PILE REACTION (TON/PILE) = 100.00

ALL ABUTMENT PILING SHALL BE DRIVEN THROUGH THE COMPACTED FILL. PILING SHALL BE DRIVEN TO A POINT BEARING ON SOLID FOUNDATION MATERIAL AT THE APPROXIMATE ELEVATION SHOWN ON THE PLANS.
IF THE AXIAL LOAD RESISTANCE IS NOT OBTAINED AT THIS ELEVATION, DRIVING SHALL CONTINUE UNTIL THE AXIAL LOAD RESISTANCE IS OBTAINED. THE LENGTH OF STEEL PILING SHOWN ON THE PLANS IS FOR ESTIMATING PURPOSES ONLY.

FOUNDATION DATA - DRILLED SHAFTS

	PIER NO. 1 72" DIAMETER	PIER NO. 2 108" DIAMETER	PIER NO. 3 108" DIAMETER	PIER NO. 4 108" DIAMETER	PIER NO. 5 144" DIAMETER	PIER NO. 6 144" DIAMETER	PIER NO. 7 144" DIAMETER	ABUT. NO. 2 60" DIAMETER
DEPTHS (FT)								
SOCKET	22.5	28.5	28.5	28.5	34.5	34.5	34.5	5
NEGLECT FOR FRICTION	5	5	5	5	5	5	5	1
FACTORED REACTION (TONS)	675.0	1,057.1	1,063.2	1,078.7	2,029.0	3,108.3	3,141.6	236.1
BEARING RESISTANCE								
RESISTANCE FACTOR	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NOMINAL UNIT RESISTANCE (TSF)	5.2	5.2	5.2	5.2	5.2	5.2	6.3	6.3
FACTORED END BEARING (TONS)	73.8	166.0	166.0	166.0	295.2	295.2	356.3	61.9
SIDE RESISTANCE								
RESISTANCE FACTOR	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
NOMINAL UNIT RESISTANCE (TSF)	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09
FACTORED SIDE (TONS)	1,105.6	2,227.1	2,227.1	2,227.1	3,727.6	3,727.6	3,727.6	210.6
TOTAL RESISTANCE (TONS)	1,179.4	2,393.1	2,393.1	2,393.1	4,022.8	4,022.8	4,083.8	272.4

HYDRAULIC DATA

TOTAL DRAINAGE AREA =	104,603 SQ. MI.
CONTROLLED DRAINAGE AREA =	19,785 SQ. MI.
EFFECTIVE DRAINAGE AREA =	84,818 SQ. MI.

FREQ.	Q (CFS)	CHW (FT)	V (FPS)
2	168,000	497.52	8.38
5	265,000	504.22	10.00
10	317,000	507.31	10.73
25	394,000	511.59	11.54
50	452,000	514.26	12.20
100	509,000	516.53	12.84
OT OR 500=YR FREQ 75	480,626	515.40	12.52

	Q100	Q500
CONTRACTION SCOUR (FT)	10.43	9.86
PIER SCOUR (FT)	21.39	21.08
TOTAL SCOUR (FT)	31.82	30.94

UTILITIES

WATER - WATER - CITY OF MUSKOGEE
MUSKOGEE, OK
LOCATED BY; AUTHER LECH
1.918.616.5849

WATER - CITY OF FT. GIBSON
FT. GIBSON, OK
LOCATED BY; RUBEN KISSNER
1.918.360.3962

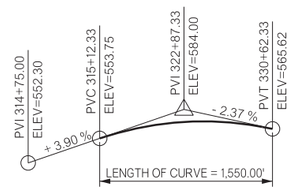
SANITARY - SAN. SEWER - CITY OF FT. GIBSON
FT. GIBSON, OK
LOCATED BY; RUBEN KISSNER
1.918.360.3962

GAS - GAS - ONG
MUSKOGEE, OK
LOCATED BY; DALTON MCTERA
USIC/SMP
1.918.577.7565

TELEPHONE - TELEPHONE- AT&T
MUSKOGEE, OK
LOCATED BY; DALTON MCTERA
USIC/SMP
1.918.577.7565

ELECTRIC - ELECTRICITY - OG&E
MUSKOGEE, OK
LOCATED BY; DALTON MCTERA
USIC/SMP
1.918.577.7565

INDEX OF SHEETS



VERTICAL CURVE DATA

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE QUANTITIES	7/06/21
2	REVISE PAY ITEM	9/07/21
3	REVISE QUANTITY	9/14/21
4	REVISE STANDARDS	12/08/21

BRIDGE 'B' MUSKOGEE COUNTY
US-62 WESTBOUND OVER ARKANSAS RIVER
GENERAL PLAN AND ELEVATION
(BRIDGE "B")(SHEET 5 OF 5)
CONSTRUCT (5)100 ROLLED I-BEAM SPANS &
333-380-333 PLATE GIRDER SPANS
WITH 38' CLR. RDY. & F-SHAPE PARAPET ℄ STA. 322+56.00

Design	CJO	6/20
Detail	RAH	2/20
Check	TEE	8/20

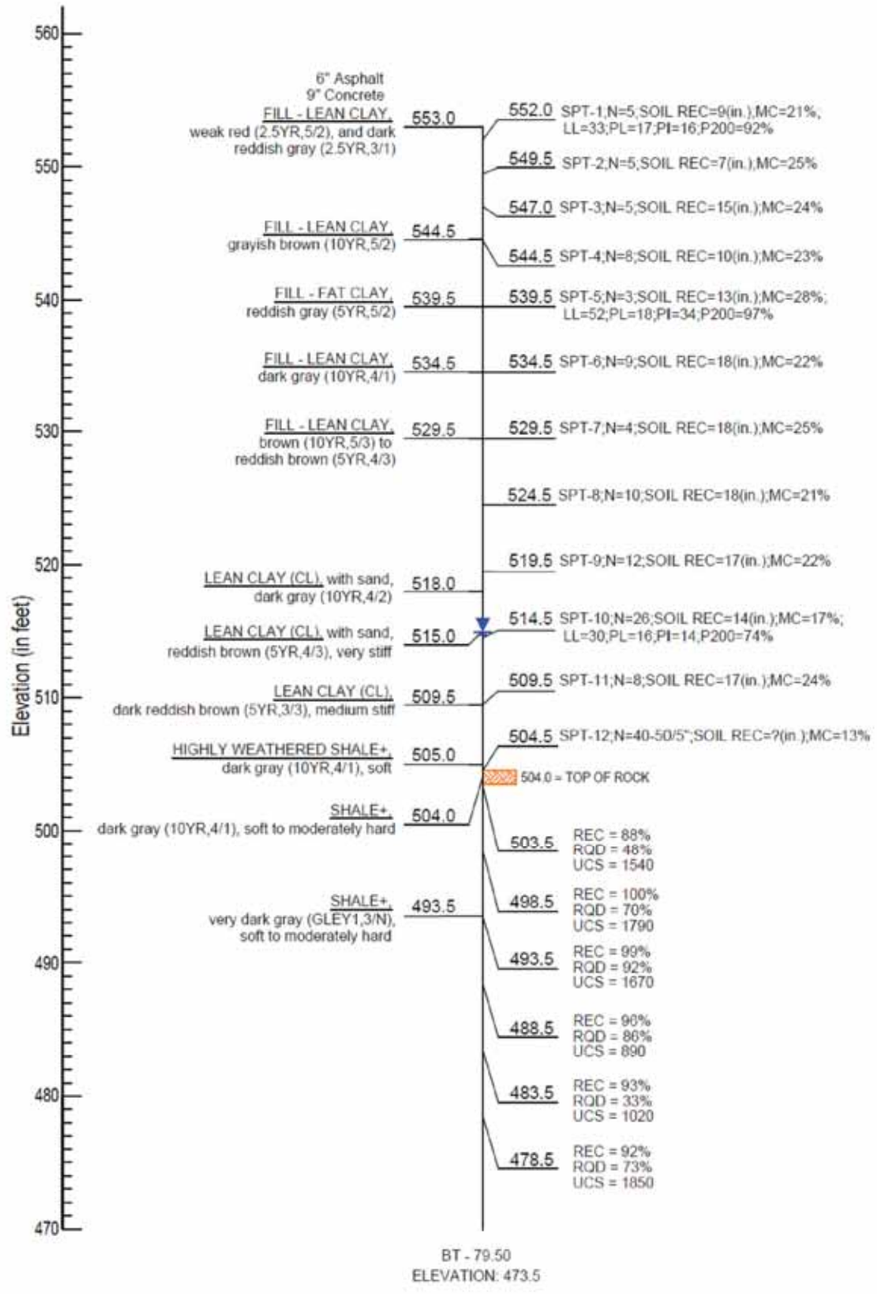
Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416(04) | SHEET NO. B017

REVISIONS		
REV. NO.	DESCRIPTION	DATE

Boring No. B-10

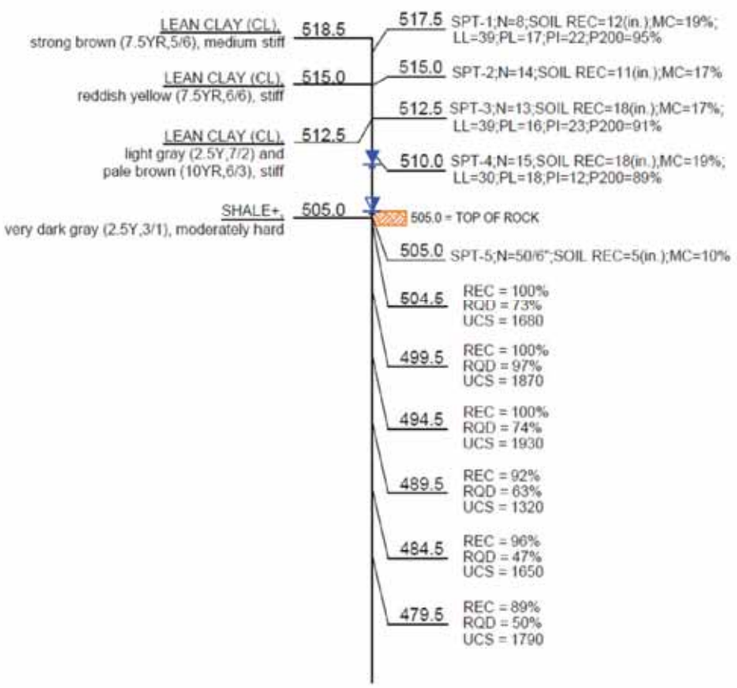
Surface Elev. (Ft.): 553.1
Station: 314+94, Offset: 43.7' LT



BT - 79.50
ELEVATION: 473.5

Boring No. B-11

Surface Elev. (Ft.): 518.5
Station: 316+09, Offset: 53.4' LT



BT - 44.00
ELEVATION: 474.5

LEGEND

DCD = DIAMOND CORE DRILLING, ASTM D2113-83
SPT = STANDARD PENETRATION TEST, ASTM D1586
SS = SPLIT SPOON SAMPLER
N = NUMBER OF BLOWS PER 12 INCHES
SOIL REC = SOIL RECOVERY
MC = MOISTURE CONTENT
LL = LIQUID LIMIT (NV=NO VALUE)
PI = PLASTICITY INDEX (NP=NO PLASTICITY)
PL = PLASTICITY LIMIT
P200 = PERCENT PASSING #200 SIEVE
REC = ROCK RECOVERY
RQD = ROCK QUALITY DESIGNATION
UCS = UNCONFINED COMPRESSIVE STRENGTH (psi)
TCP = TEXAS CONE PENETROMETER
WCI = WET CAVE IN
= WATER LEVEL WHILE DRILLING OR SAMPLING
= WATER LEVEL AFTER DRILLING
= WATER LEVEL 24 HOURS AFTER DRILLING
= TOP OF ROCK

NOTE: WATER LEVEL ELEVATIONS SHOWN WERE OBTAINED AT THE TIME THE BORINGS WERE DRILLED AND MAY FLUCTUATE THROUGHTOUT THE YEAR.

NOTE: "SS" DENOTES STANDARD PENETRATION TEST. AASHTO D1586-84. "TCP" DENOTES TEXAS CONE PENETRATION TEST.

* NOTE: TOP OF ROCK LINE SHOWN FOR ESTIMATING PURPOSED ONLY

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GEOTECHNICAL REPORT

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Consulting Engineers and Scientists
9522 EAST 47TH PLACE, UNIT D TULSA, OKLAHOMA 74145
PH. (918) 250-0461 FAX. (918) 250-4570

BRIDGE 'B' MUSKOGEE COUNTY
US-62 WESTBOUND OVER ARKANSAS RIVER

FOUNDATION REPORT
(SHEET 1 OF 5)(BRIDGE 'B')

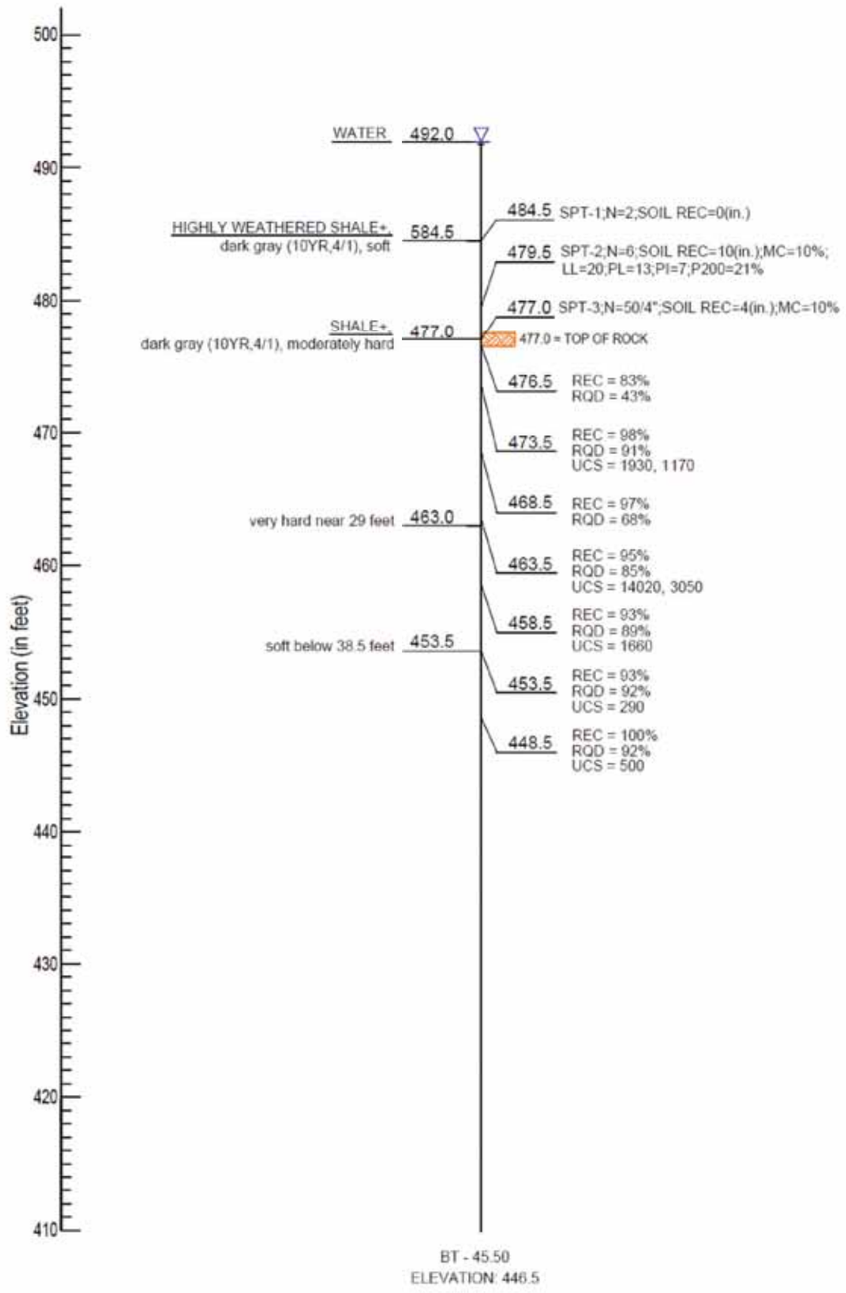
Design	CJO	6/20
Detail	TEE	2/20
Check	RAH	8/20
Squad.	HENSLEY	
Engr.:	DEFRANCO	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416(04) SHEET NO. B018

REVISIONS		
REV. NO.	DESCRIPTION	DATE

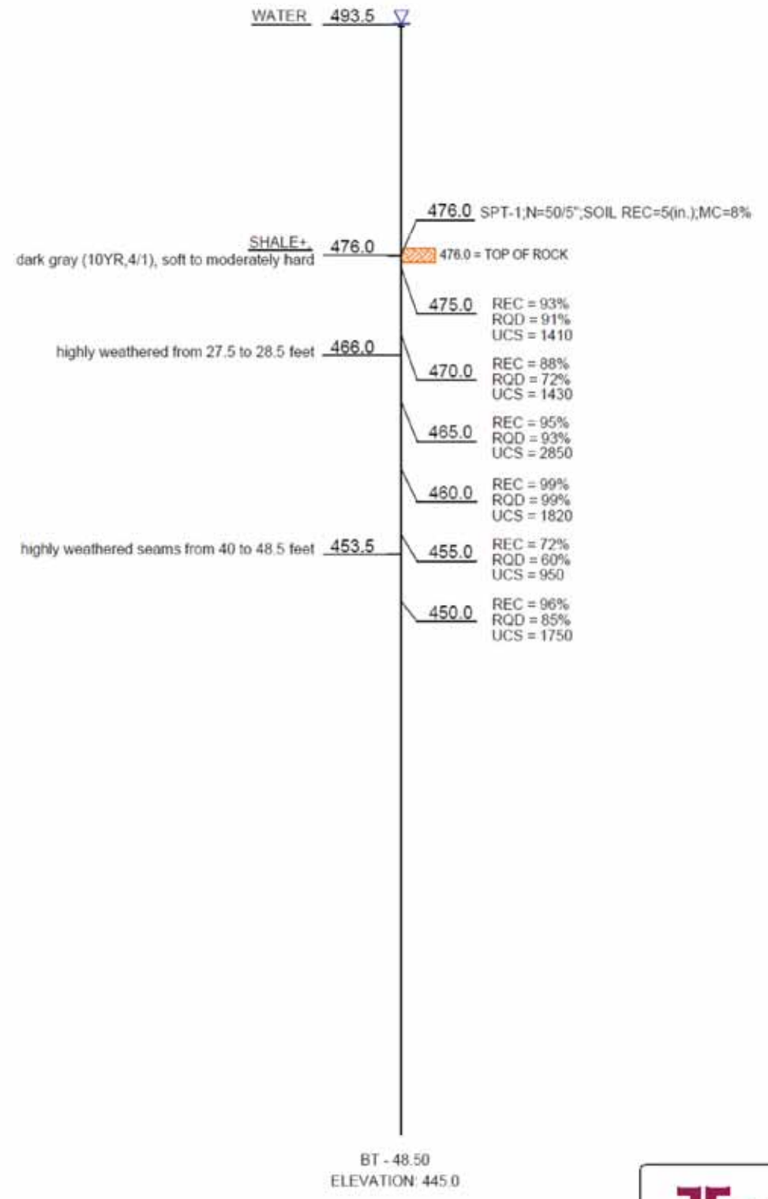
Boring No. B-12

Surface Elev. (Ft.): 491.8
Station: 316+80, Offset: 41.5' LT



Boring No. B-13

Surface Elev. (Ft.): 493.4
Station: 318+00, Offset: 44.9' LT



LEGEND

DCD = DIAMOND CORE DRILLING, ASTM D2113-83
SPT = STANDARD PENETRATION TEST, ASTM D1586
SS = SPLIT SPOON SAMPLER
N = NUMBER OF BLOWS PER 12 INCHES
SOIL REC = SOIL RECOVERY
MC = MOISTURE CONTENT
LL = LIQUID LIMIT (NV=NO VALUE)
PI = PLASTICITY INDEX (NP=NO PLASTICITY)
PL = PLASTICITY LIMIT
P200 = PERCENT PASSING #200 SIEVE
REC = ROCK RECOVERY
RQD = ROCK QUALITY DESIGNATION
UCS = UNCONFINED COMPRESSIVE STRENGTH (psi)
TCP = TEXAS CONE PENETROMETER
WCI = WET CAVE IN
▽ = WATER LEVEL WHILE DRILLING OR SAMPLING
▼ = WATER LEVEL AFTER DRILLING
▼ = WATER LEVEL 24 HOURS AFTER DRILLING
▨ = TOP OF ROCK

NOTE: WATER LEVEL ELEVATIONS SHOWN WERE OBTAINED AT THE TIME THE BORINGS WERE DRILLED AND MAY FLUCTUATE THROUGHTOUT THE YEAR.

NOTE: "SS" DENOTES STANDARD PENETRATION TEST. AASHTO D1586-84. "TCP" DENOTES TEXAS CONE PENETRATION TEST.

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BRIDGE 'B' MUSKOGEE COUNTY
US-62 WESTBOUND OVER ARKANSAS RIVER

FOUNDATION REPORT
(SHEET 2 OF 5)(BRIDGE 'B')

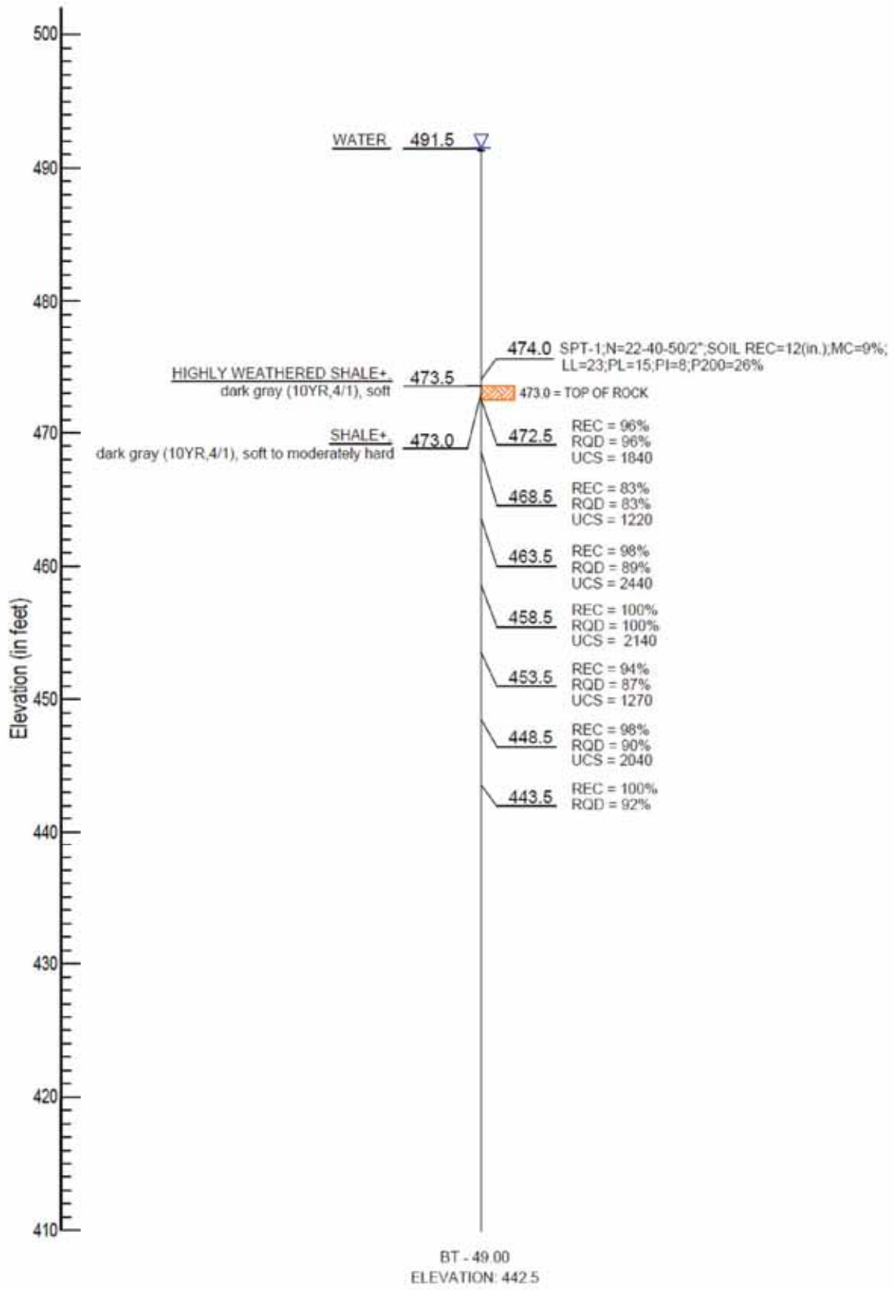
Design	CJO	6/20
Detail	TEE	2/20
Check	RAH	8/20
Squad	HENSLEY	
Engr.	DEFRANCO	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416(04) SHEET NO. B019

REVISIONS		
REV. NO.	DESCRIPTION	DATE

Boring No. B-14

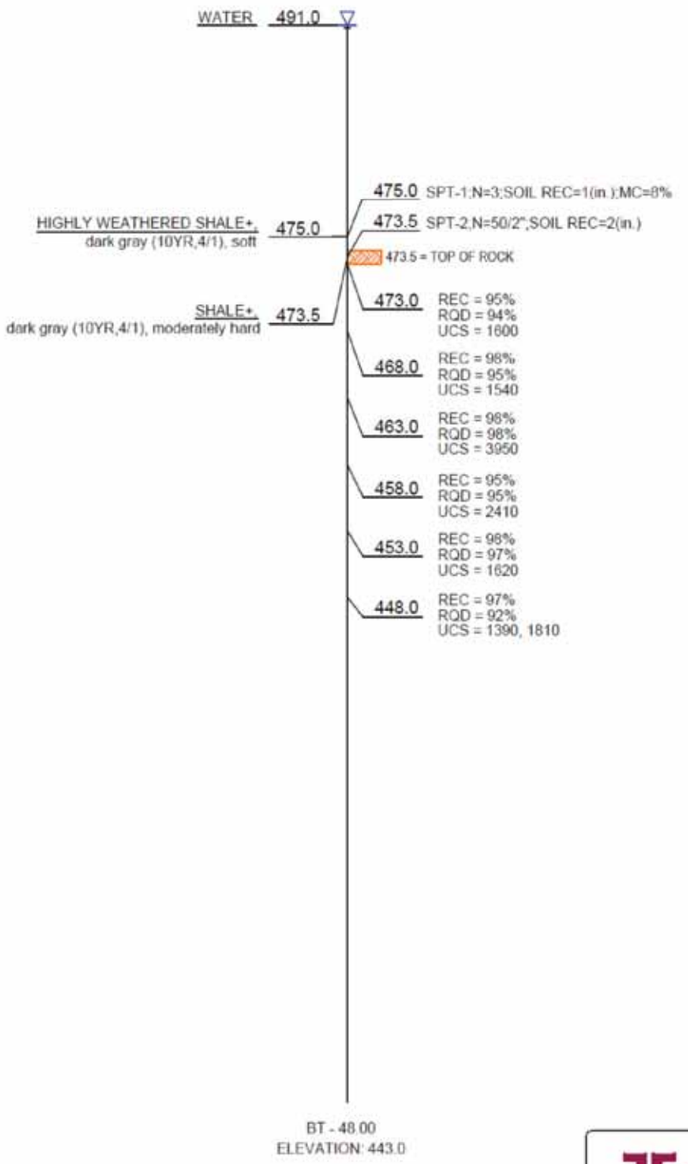
Surface Elev. (Ft.): 491.6
Station: 318+96, Offset: 36.5' LT



BT - 49.00
ELEVATION: 442.5

Boring No. B-15

Surface Elev. (Ft.): 491.1
Station: 319+82, Offset: 41.0' LT



BT - 48.00
ELEVATION: 443.0

LEGEND

DCD = DIAMOND CORE DRILLING, ASTM D2113-83
SPT = STANDARD PENETRATION TEST, ASTM D1586
SS = SPLIT SPOON SAMPLER
N = NUMBER OF BLOWS PER 12 INCHES
SOIL REC = SOIL RECOVERY
MC = MOISTURE CONTENT
LL = LIQUID LIMIT (NV=NO VALUE)
PI = PLASTICITY INDEX (NP=NO PLASTICITY)
PL = PLASTICITY LIMIT
P200 = PERCENT PASSING #200 SIEVE
REC = ROCK RECOVERY
RQD = ROCK QUALITY DESIGNATION
UCS = UNCONFINED COMPRESSIVE STRENGTH (psi)
TCP = TEXAS CONE PENETROMETER
WCI = WET CAVE IN
▽ = WATER LEVEL WHILE DRILLING OR SAMPLING
▼ = WATER LEVEL AFTER DRILLING
▼ = WATER LEVEL 24 HOURS AFTER DRILLING
▨ = TOP OF ROCK

NOTE: WATER LEVEL ELEVATIONS SHOWN WERE OBTAINED AT THE TIME THE BORINGS WERE DRILLED AND MAY FLUCTUATE THROUGHTOUT THE YEAR.

NOTE: "SS" DENOTES STANDARD PENETRATION TEST. AASHTO D1586-84. "TCP" DENOTES TEXAS CONE PENETRATION TEST.

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PH. (918) 250-8461 FAX. (918) 250-4570

BRIDGE 'B' MUSKOGEE COUNTY
US-62 WESTBOUND OVER ARKANSAS RIVER

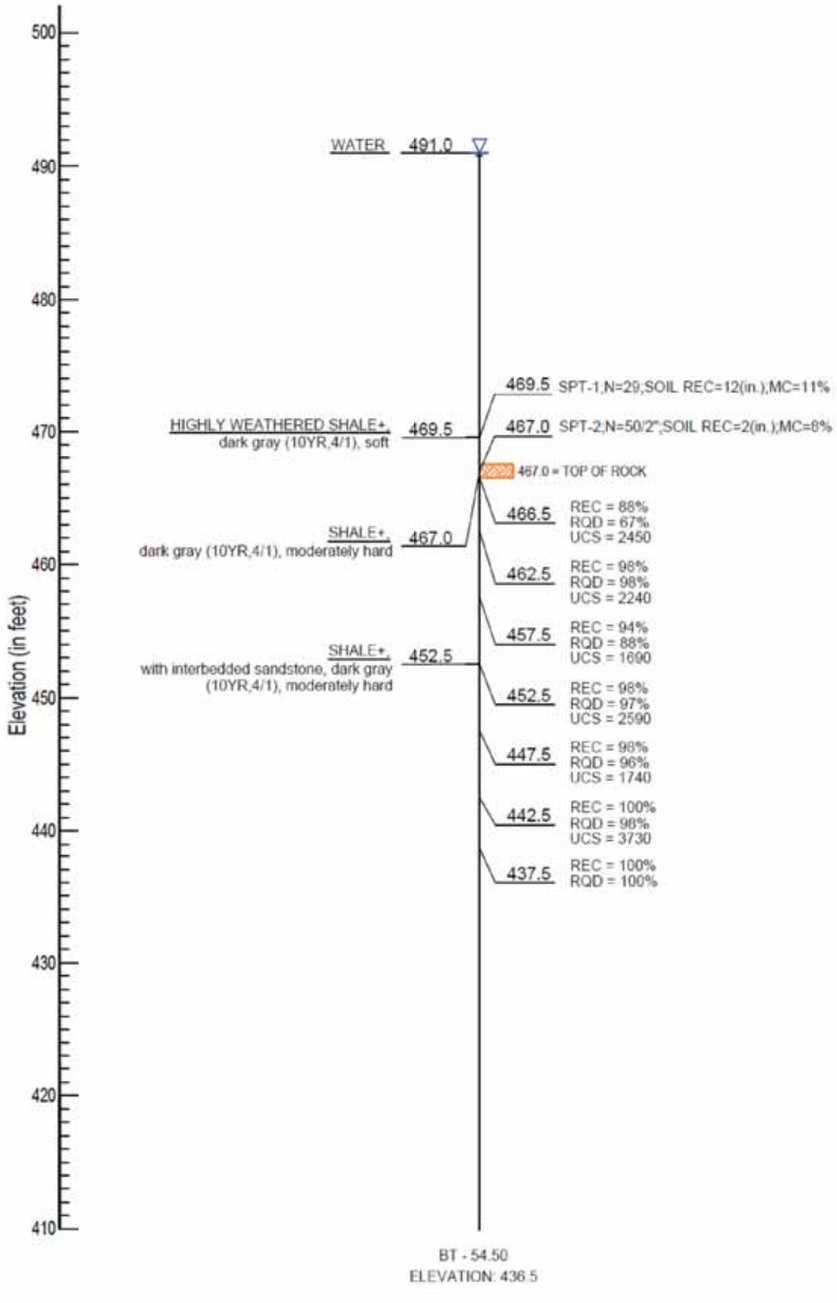
FOUNDATION REPORT
(SHEET 3 OF 5)(BRIDGE 'B')

Design	CJO	6/20
Detail	TEE	2/20
Check	RAH	8/20
Squad	HENSLEY	
Engr:	DEFRANCO	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416(04) | SHEET NO. B020

Boring No. B-16

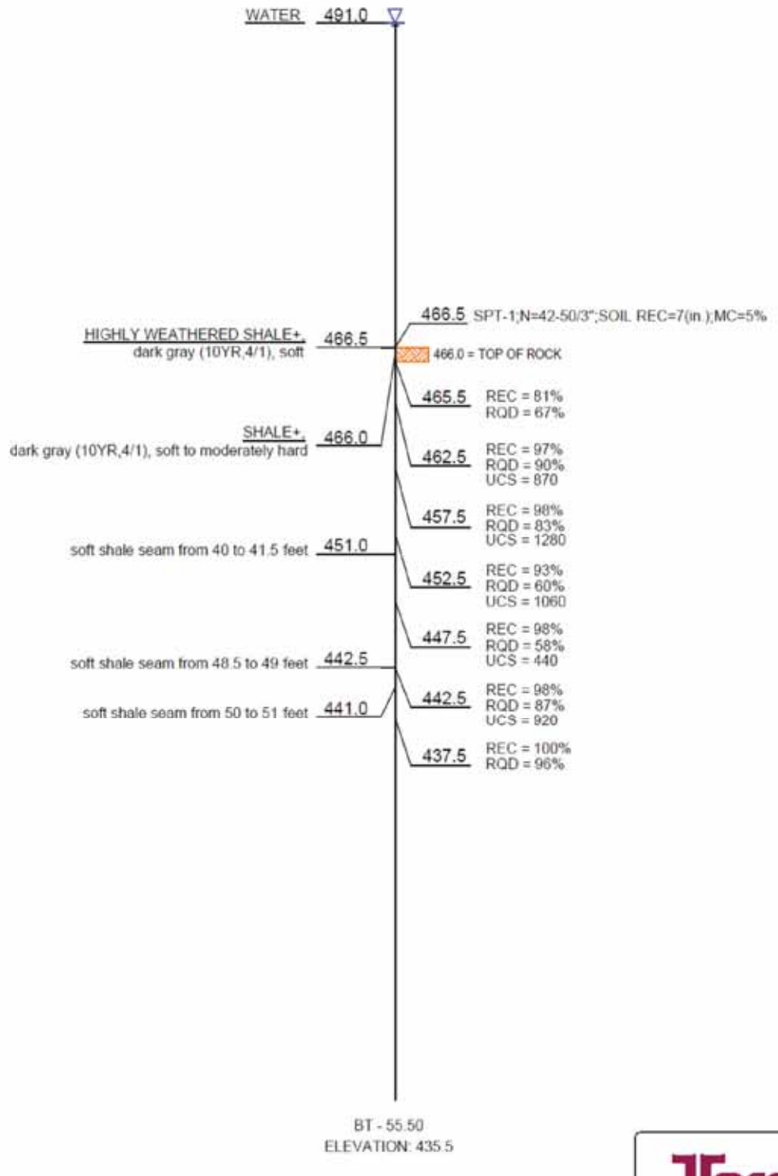
Surface Elev. (Ft.): 491.2
Station: 323+27, Offset: 31.7' LT



BT - 54.50
ELEVATION: 436.5

Boring No. B-17

Surface Elev. (Ft.): 491.0
Station: 327+04, Offset: 37.9' LT



BT - 55.50
ELEVATION: 435.5

REVISIONS

REV. NO.	DESCRIPTION	DATE

LEGEND

DCD = DIAMOND CORE DRILLING, ASTM D2113-83
SPT = STANDARD PENETRATION TEST, ASTM D1586
SS = SPLIT SPOON SAMPLER
N = NUMBER OF BLOWS PER 12 INCHES
SOIL REC = SOIL RECOVERY
MC = MOISTURE CONTENT
LL = LIQUID LIMIT (NV=NO VALUE)
PI = PLASTICITY INDEX (NP=NO PLASTICITY)
PL = PLASTICITY LIMIT
P200 = PERCENT PASSING #200 SIEVE
REC = ROCK RECOVERY
RQD = ROCK QUALITY DESIGNATION
UCS = UNCONFINED COMPRESSIVE STRENGTH (psi)
TCP = TEXAS CONE PENETROMETER
WCI = WET CAVE IN
▽ = WATER LEVEL WHILE DRILLING OR SAMPLING
▼ = WATER LEVEL AFTER DRILLING
▼ = WATER LEVEL 24 HOURS AFTER DRILLING
▨ = TOP OF ROCK

NOTE: WATER LEVEL ELEVATIONS SHOWN WERE OBTAINED AT THE TIME THE BORINGS WERE DRILLED AND MAY FLUCTUATE THROUGHTOUT THE YEAR.

NOTE: "SS" DENOTES STANDARD PENETRATION TEST. AASHTO D1586-84. "TCP" DENOTES TEXAS CONE PENETRATION TEST.

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BRIDGE 'B' MUSKOGEE COUNTY
US-62 WESTBOUND OVER ARKANSAS RIVER

FOUNDATION REPORT
(SHEET 4 OF 5)(BRIDGE 'B')

Design	CJO	6/20
Detail	TEE	2/20
Check	RAH	8/20

Squad HENSLEY
Engr.: DEFRANCO

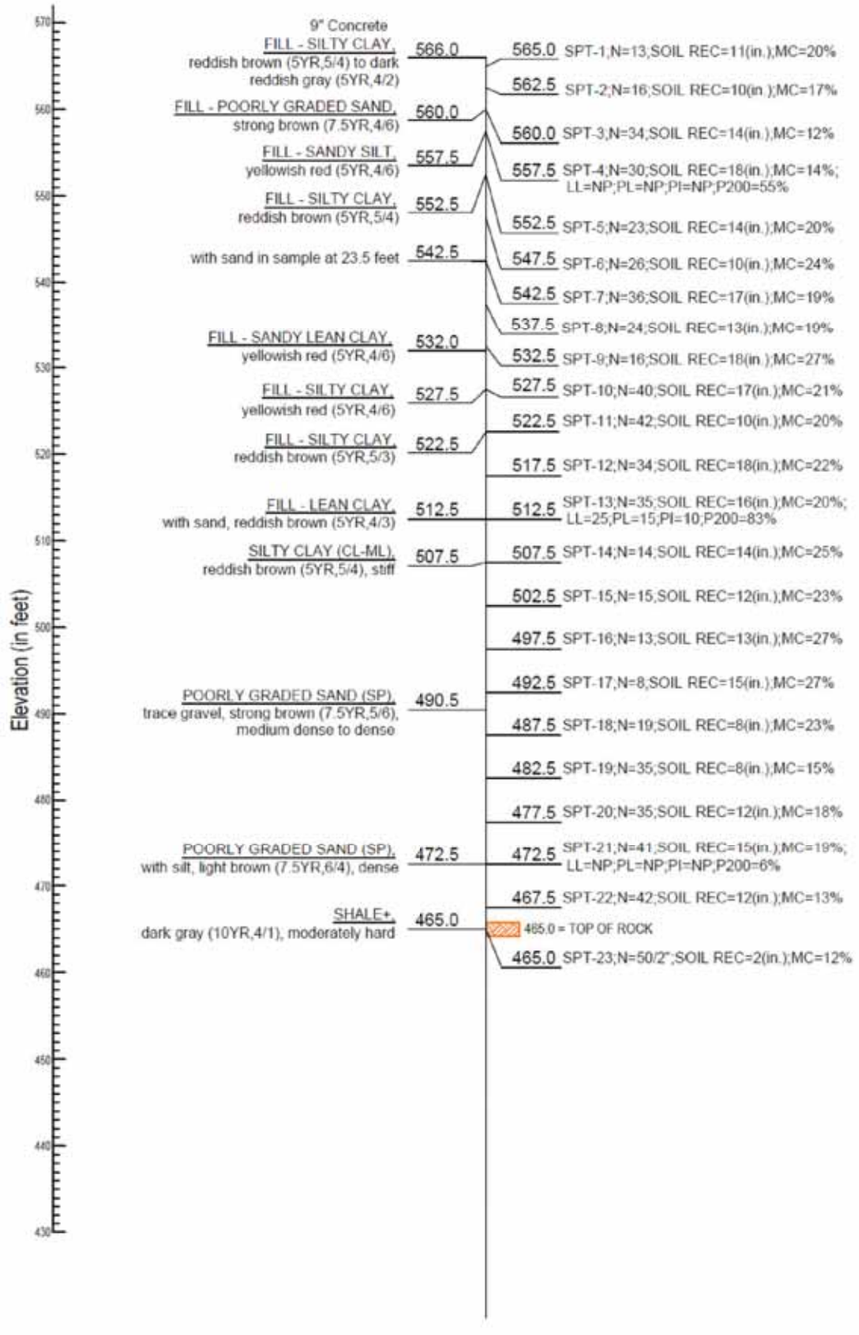
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) SHEET NO. B021

REVISIONS		
REV. NO.	DESCRIPTION	DATE

Boring No. B-18A

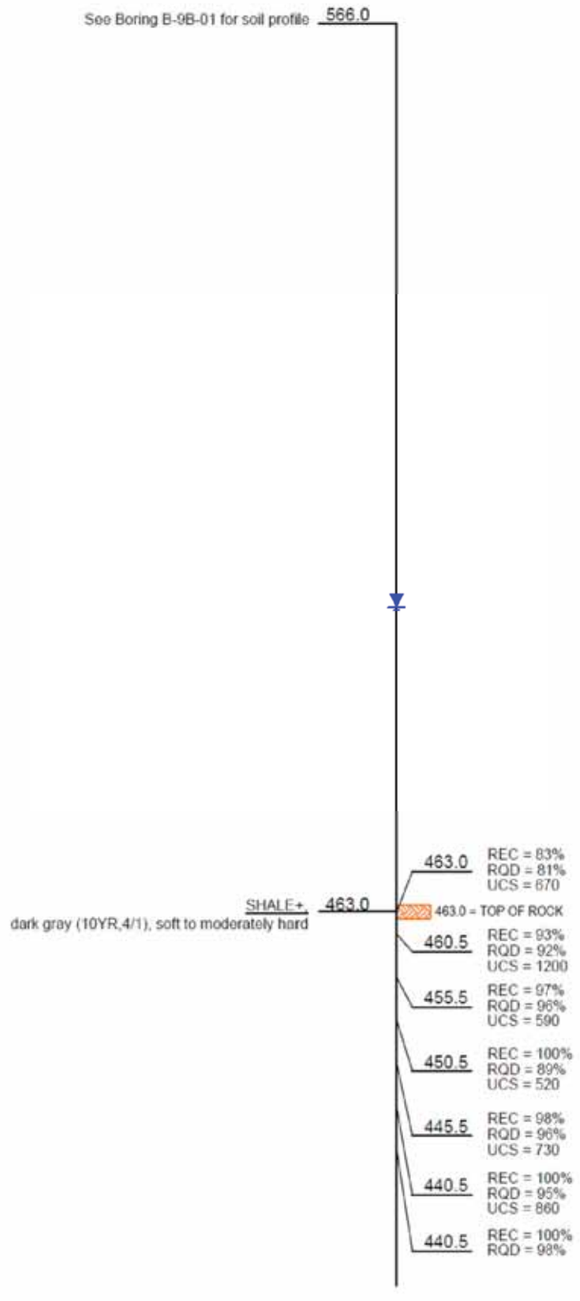
Surface Elev. (Ft.): 565.9
Station: 330+47, Offset: 39.7' LT



BT - 101.20
ELEVATION: 464.5

Boring No. B-18B

Surface Elev. (Ft.): 565.5
Station: 330+57, Offset: 41.0' LT



BT - 132.50
ELEVATION: 433.0

LEGEND

DCD = DIAMOND CORE DRILLING, ASTM D2113-83
SPT = STANDARD PENETRATION TEST, ASTM D1586
SS = SPLIT SPOON SAMPLER
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SOIL REC = SOIL RECOVERY
MC = MOISTURE CONTENT
LL = LIQUID LIMIT (NV=NO VALUE)
PI = PLASTICITY INDEX (NP=NO PLASTICITY)
PL = PLASTICITY LIMIT
P200 = PERCENT PASSING #200 SIEVE
REC = ROCK RECOVERY
RQD = ROCK QUALITY DESIGNATION
UCS = UNCONFINED COMPRESSIVE STRENGTH (psi)
TCP = TEXAS CONE PENETROMETER
WCI = WET CAVE IN
= WATER LEVEL WHILE DRILLING OR SAMPLING
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Based on information published in the Oklahoma Department of Transportation (ODOT) manual, *"Engineering Classification of Geologic Materials: Division 1"* and the 2003 USGS Geologic Map of Oklahoma, the project alignment is mapped as underlain by a combination of Alluvium, the Savanna Unit, and the Atoka Unit. Alluvium consists of sand, silt, clay, gravel, and/or combinations of these materials that have been deposited along flood plains by streams or rivers. The Savanna Unit is likely present west of the Arkansas River and consists mainly of gray to black shale with some lenses of sandstone. The shale of the Savanna Unit is fissile and locally clayey. The Atoka Unit is likely present east of the Arkansas River underlying the alluvium. The Atoka Unit consists of mainly sandstone and shale. The shales of the Atoka Unit are fissile, locally clayey, and brown to black in color.

GEOTECHNICAL REPORT

ALL GEOTECHNICAL INFORMATION CONTAINED ON THIS SHEET IS COVERED BY THE ENGINEERING SEAL AFFIXED TO AN ORIGINAL GEOTECHNICAL ENGINEERING REPORT THAT HAS BEEN STAMPED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN OKLAHOMA. TO OBTAIN A COPY OF THE COMPLETE REPORT, CONTACT THE ODOT OFFICE ENGINEER AT (405) 521-2625. THE CONTRACTOR SHOULD BE FULLY AWARE OF THE SITE CONDITIONS PRIOR TO BEGINNING WORK. ANY ADDITIONAL GEOTECHNICAL INFORMATION WHICH MAY BE DESIRED IS THE RESPONSIBILITY OF THE CONTRACTOR.

Terracon
Consulting Engineers and Scientists
9522 EAST 47TH PLACE, UNIT D TULSA, OKLAHOMA 74146
PH. (918) 250-0461 FAX. (918) 250-4570

BRIDGE 'B' MUSKOGEE COUNTY
US-62 WESTBOUND OVER ARKANSAS RIVER

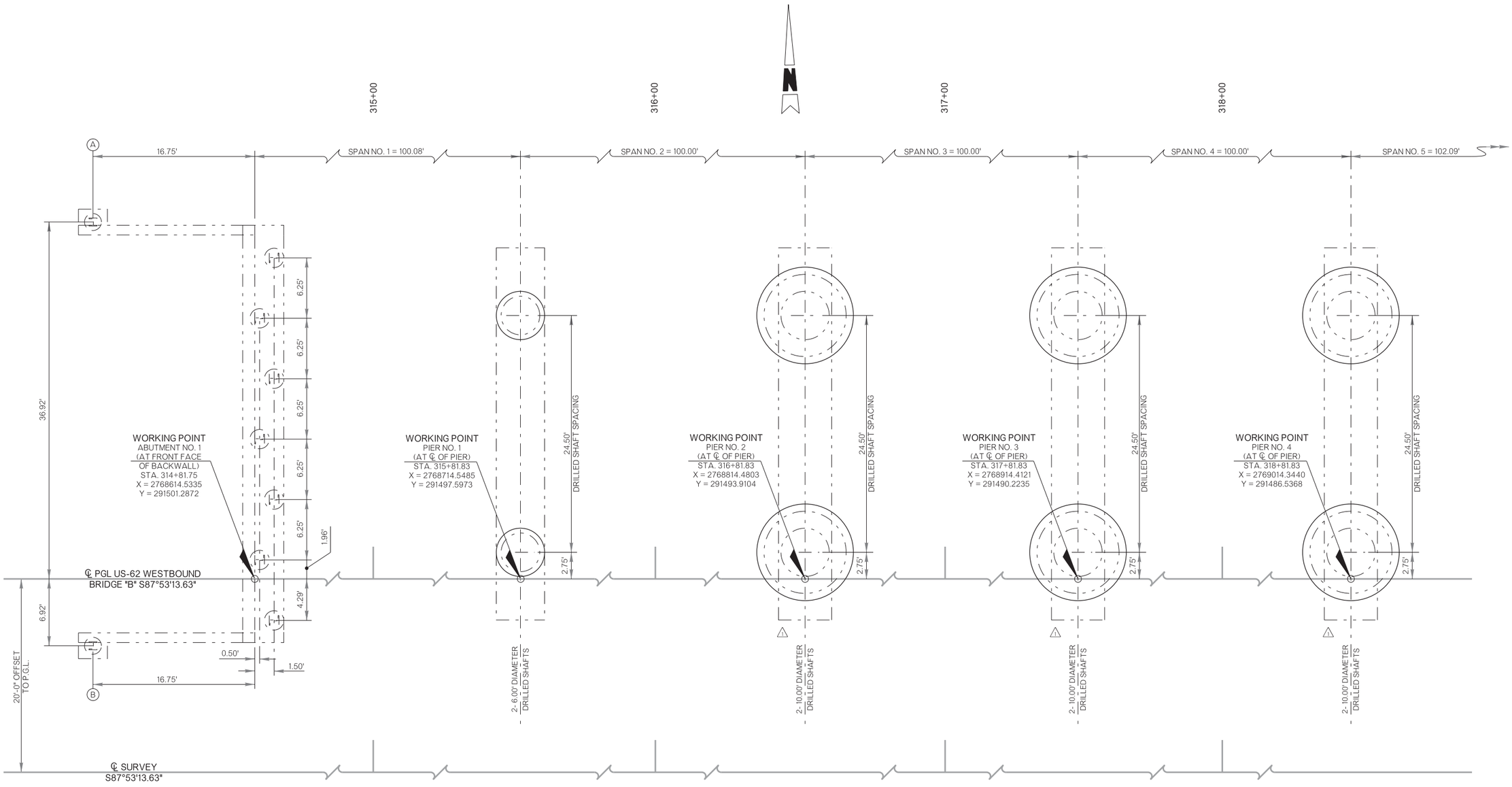
FOUNDATION REPORT
(SHEET 5 OF 5)(BRIDGE 'B')

Design	CJO	6/20
Detail	TEE	2/20
Check	RAH	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416(04) | SHEET NO. B022

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE PIERS	7/06/21



TOP OF PILE ELEVATION ABUTMENT NO. 1	
PILE	ELEVATION
BRIDGE SEAT	543.22'
(A)	547.89'
(B)	547.89'

SUBSTRUCTURE STAKING DIAGRAM

ALL STATIONS SHOWN ALONG P.G.L.

FACE OF PILE WEB SHALL BE PERPENDICULAR TO FACE OF BRIDGE SEAT

BRIDGE 'B' MUSKOGEE COUNTY
US-62 WESTBOUND OVER ARKANSAS RIVER

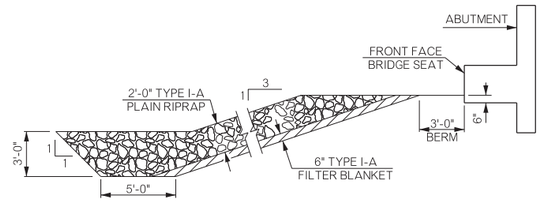
SUBSTRUCTURE STAKING DIAGRAM
(SHEET 1 OF 2)(BRIDGE 'B')

Design	CJO	6/20
Detail	RAH	2/20
Check	TEE	8/20
Squad	HENSLEY	
Engr.:	DEFRANCO	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

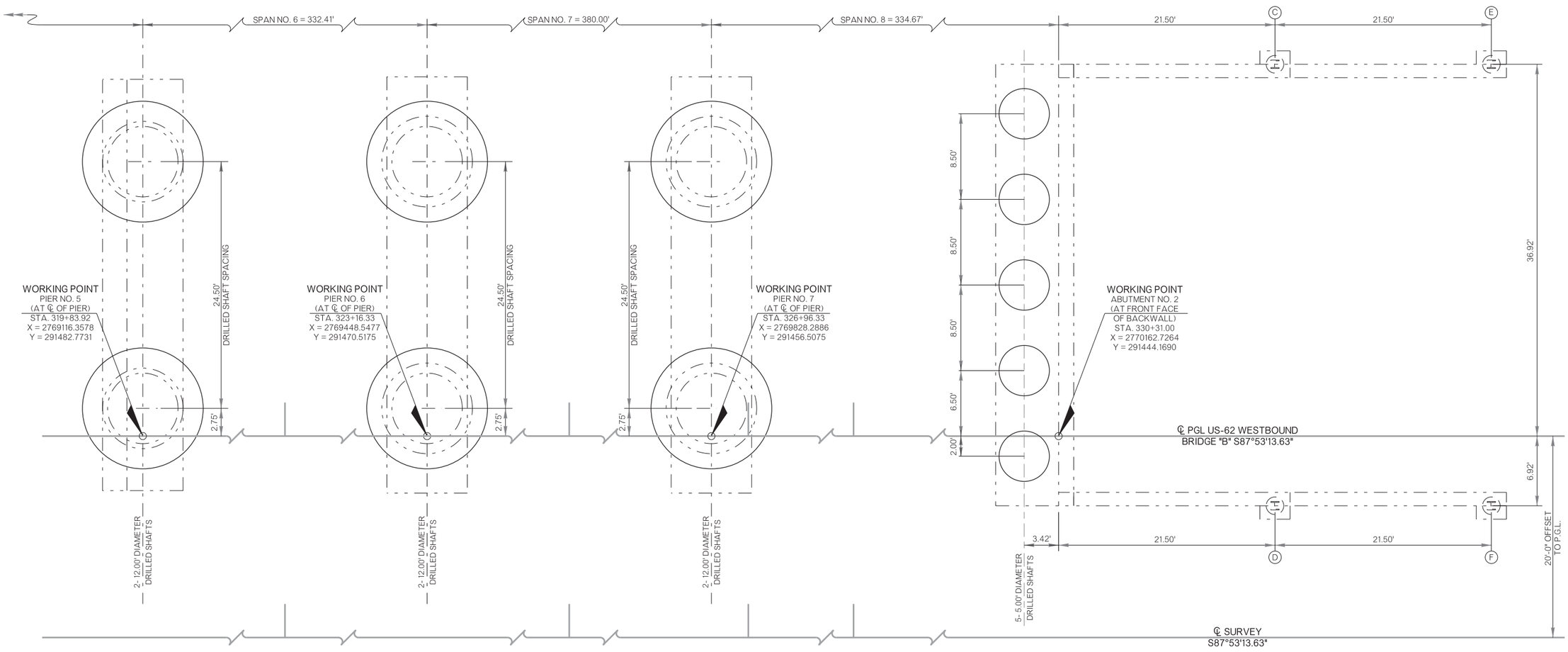
JOB PIECE NO. 30416(04) SHEET NO. B023

REVISIONS		
REV. NO.	DESCRIPTION	DATE



SECTION THRU RIPRAP AT BRIDGE SEAT (ABUTMENT NO. 2)

(DIMENSIONS ARE NORMAL TO BRIDGE SEAT)



SUBSTRUCTURE STAKING DIAGRAM

ALL STATIONS SHOWN ALONG P.G.L.

FACE OF PILE WEB SHALL BE PERPENDICULAR TO FACE OF BRIDGE SEAT

TOP OF PILE ELEVATION ABUTMENT NO. 2	
PILE	ELEVATION
C	553.87'
D	553.87'
E	561.21'
F	561.21'

BRIDGE 'B' MUSKOGEE COUNTY
US-62 WESTBOUND OVER ARKANSAS RIVER

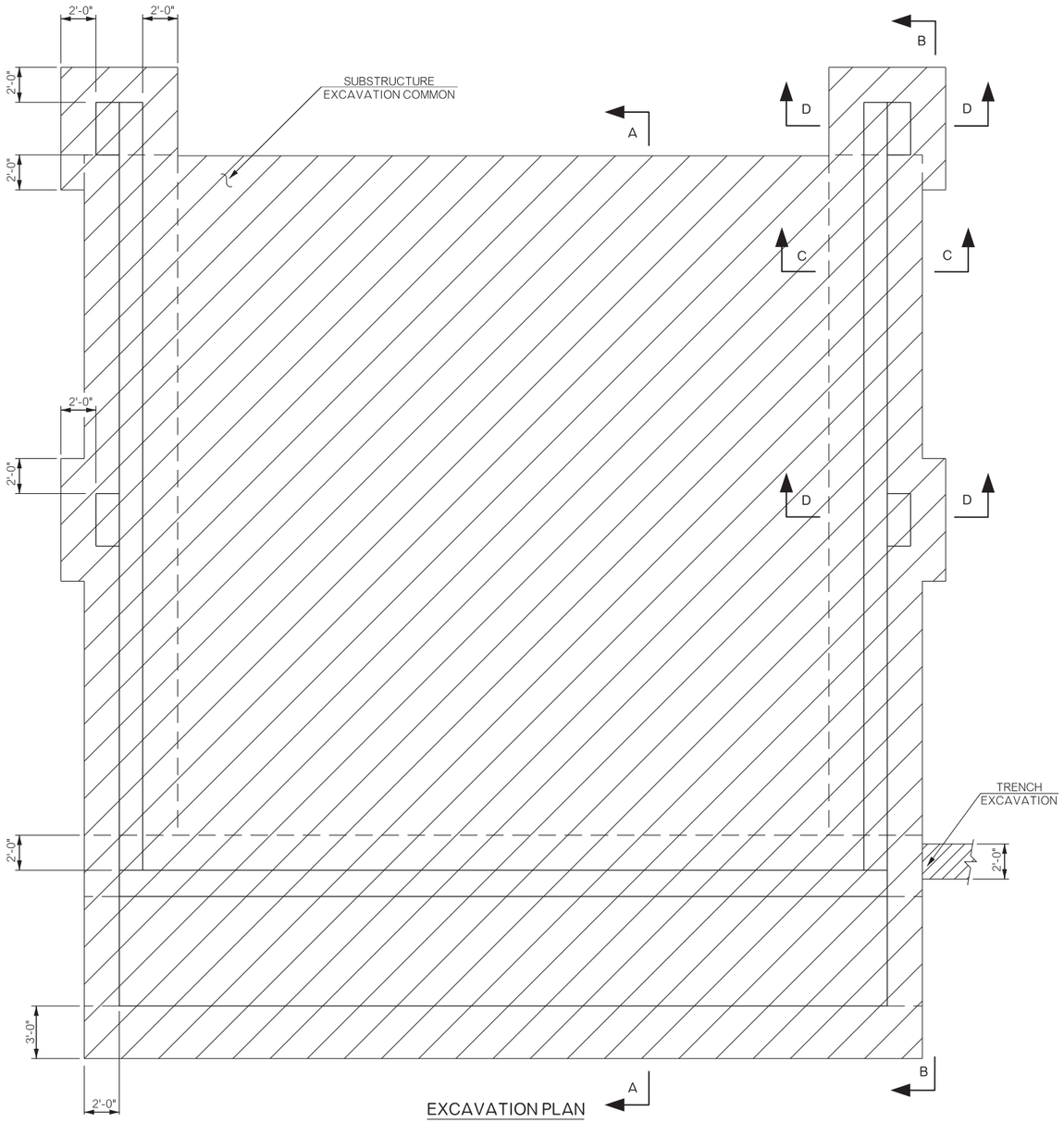
SUBSTRUCTURE STAKING DIAGRAM
(SHEET 2 OF 2)(BRIDGE 'B')

Design	CJO	6/20
Detail	RAH	2/20
Check	TEE	8/20
Squad	HENSLEY	
Engr.:	DEFRANCO	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

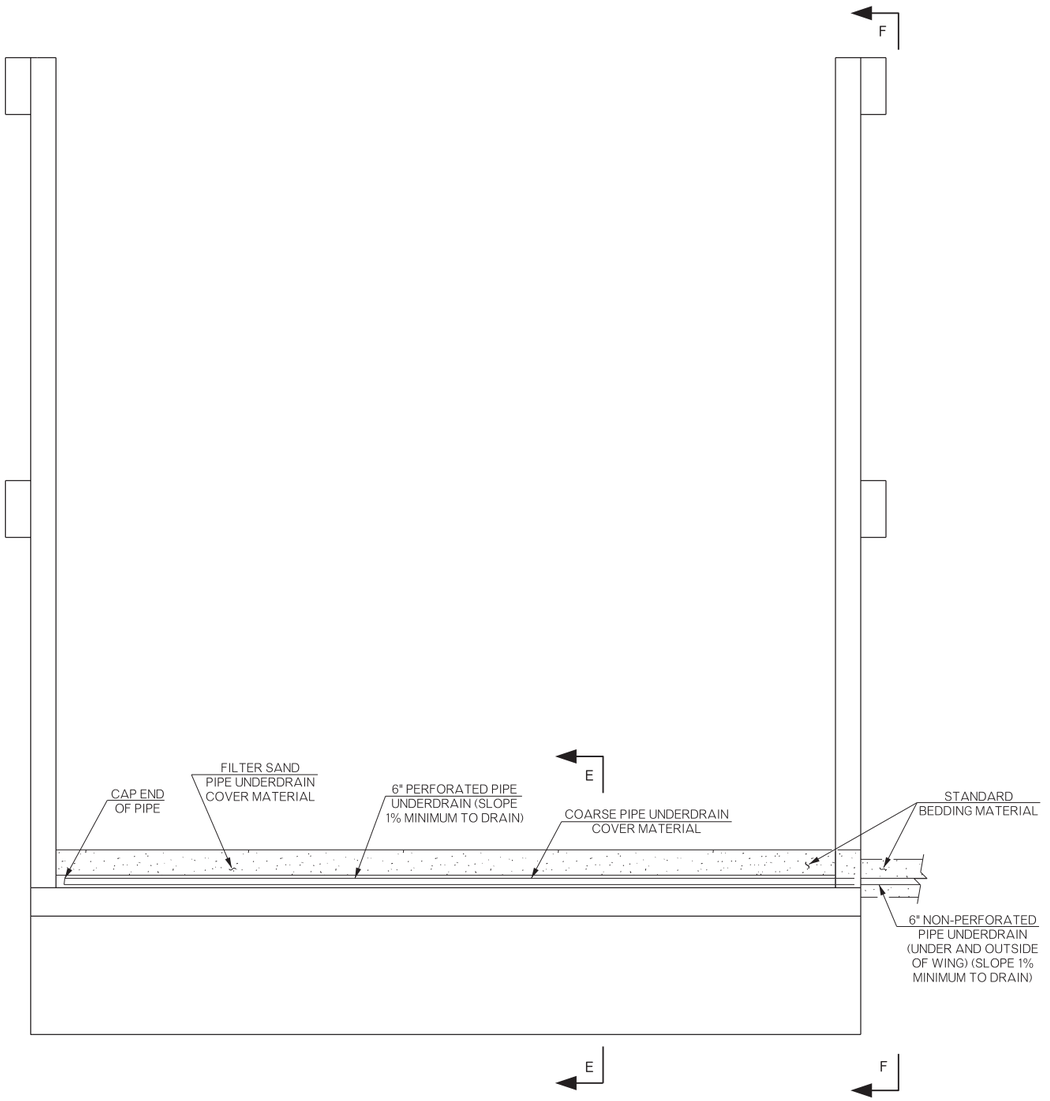
JOB PIECE NO. 30416(04) | SHEET NO. B024

REVISIONS		
REV. NO.	DESCRIPTION	DATE



EXCAVATION PLAN

NOTE: THE CONTRACTOR MAY PLACE CONCRETE AGAINST THE LIMITS OF EXCAVATION IF THE MATERIAL IS EXCAVATED TO THE NEAT LINES OF THE ABUTMENT AND APPROVED BY THE ENGINEER. IF NECESSARY, USE FORMS ON THE BACK VERTICAL FACE OF THE ABUTMENT AND REMOVE FORMS AFTER CONCRETE HARDENS. IF THE CONTRACTOR CHOOSES TO PLACE CONCRETE AGAINST THE SOIL, THE DEPARTMENT WILL PAY FOR SUBSTRUCTURE EXCAVATION COMMON IN ACCORDANCE WITH THE DIAGRAM SHOWN ON THE PLANS.



PIPE UNDERDRAIN PLAN

NOTE: THE ENGINEER MAY ADJUST THE EXTENT, LOCATION AND DEPTH OF 6" NON-PERFORATED PIPE UNDERDRAIN DURING CONSTRUCTION. INCLUDE THE COST OF PIPE UNDERDRAIN COVER MATERIAL (BOTH FINE SAND AND COARSE), FILTER FABRIC, TRENCH EXCAVATION, STANDARD BEDDING MATERIAL, AND EQUIPMENT AND LABOR FOR THEIR INSTALLATION IN THE CONTRACT UNIT PRICE OF 6" PERFORATED PIPE UNDERDRAIN ROUND AND 6" NON-PERF. PIPE UNDERDRAIN RND. INSTALL AS SHOWN ON THE PLANS AND ON STD. PUD-4.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

SUBSTRUCTURE EXCAVATION AND PIPE UNDERDRAIN DETAILS ABUTMENT NO. 2 (SHEET 1 OF 2)

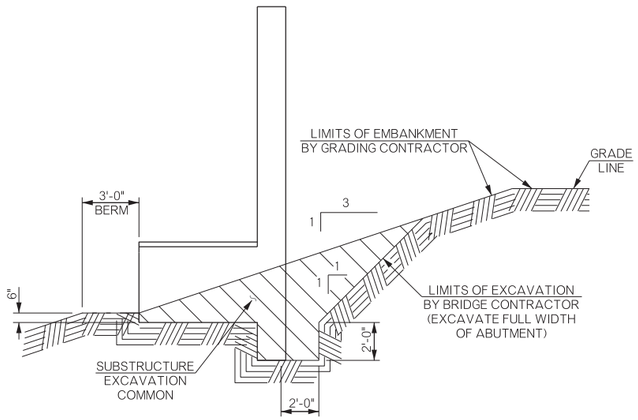
Design	CJO	6/20
Detail	MSW	7/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

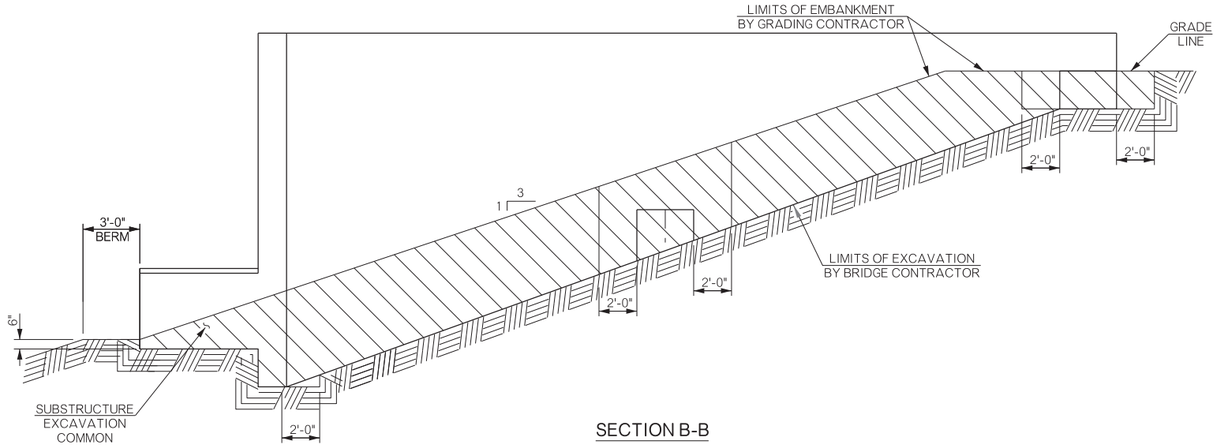
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B025

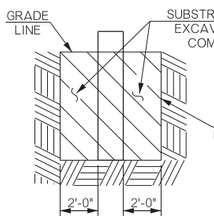
REVISIONS		
REV. NO.	DESCRIPTION	DATE



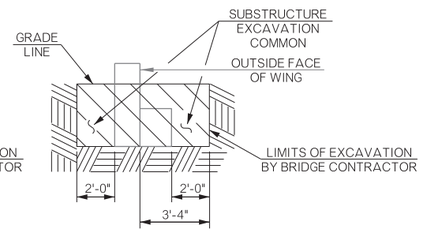
SECTION A-A



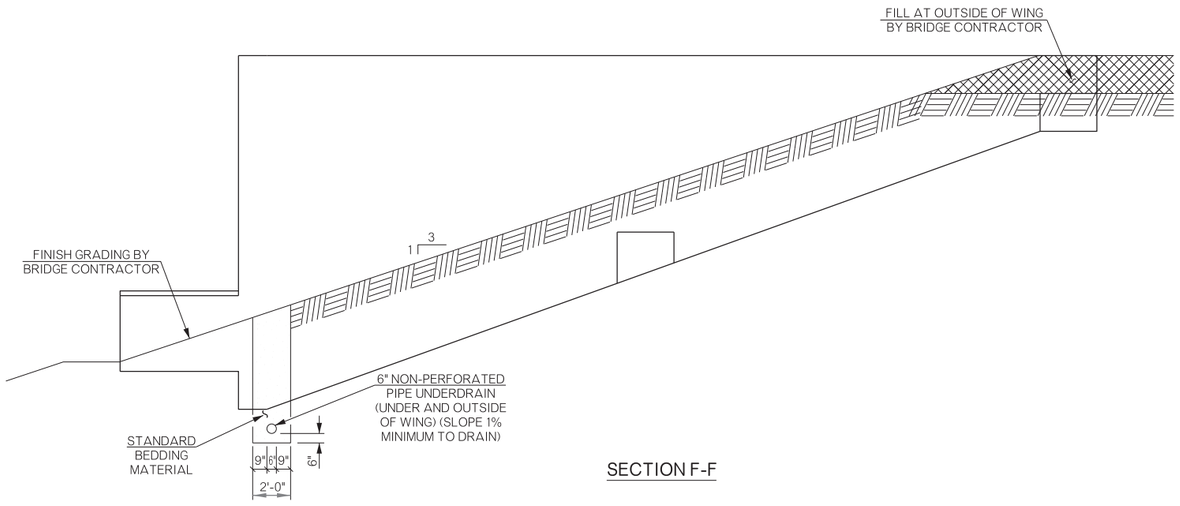
SECTION B-B



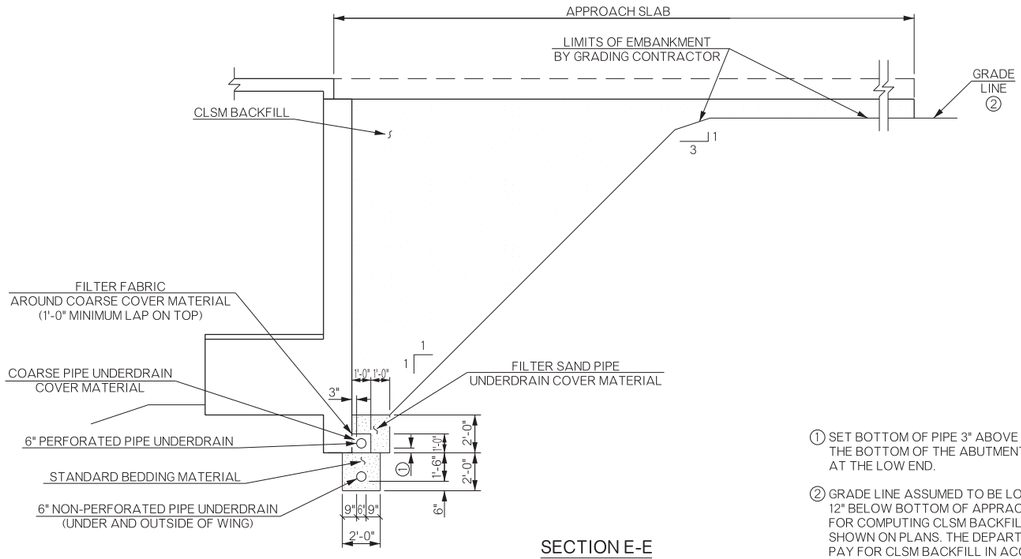
SECTION C-C



SECTION D-D



SECTION F-F



SECTION E-E

① SET BOTTOM OF PIPE 3" ABOVE THE BOTTOM OF THE ABUTMENT AT THE LOW END.

② GRADE LINE ASSUMED TO BE LOCATED 12" BELOW BOTTOM OF APPRACH SLAB FOR COMPUTING CLSM BACKFILL QUANTITY SHOWN ON PLANS. THE DEPARTMENT WILL PAY FOR CLSM BACKFILL IN ACCORDANCE WITH THE PLAN QUANTITY AND NO ADJUSTMENT WILL BE MADE FOR ACTUAL LOCATION OF GRADE LINE.

DO NOT PLACE CLSM BACKFILL UNTIL SUPERSTRUCTURE IS IN PLACE AND THE ABUTMENT WING CONCRETE HAS ATTAINED A STRENGTH OF 3000 P.S.I.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

SUBSTRUCTURE EXCAVATION AND PIPE UNDERDRAIN DETAILS ABUTMENT NO. 2 (SHEET 2 OF 2)

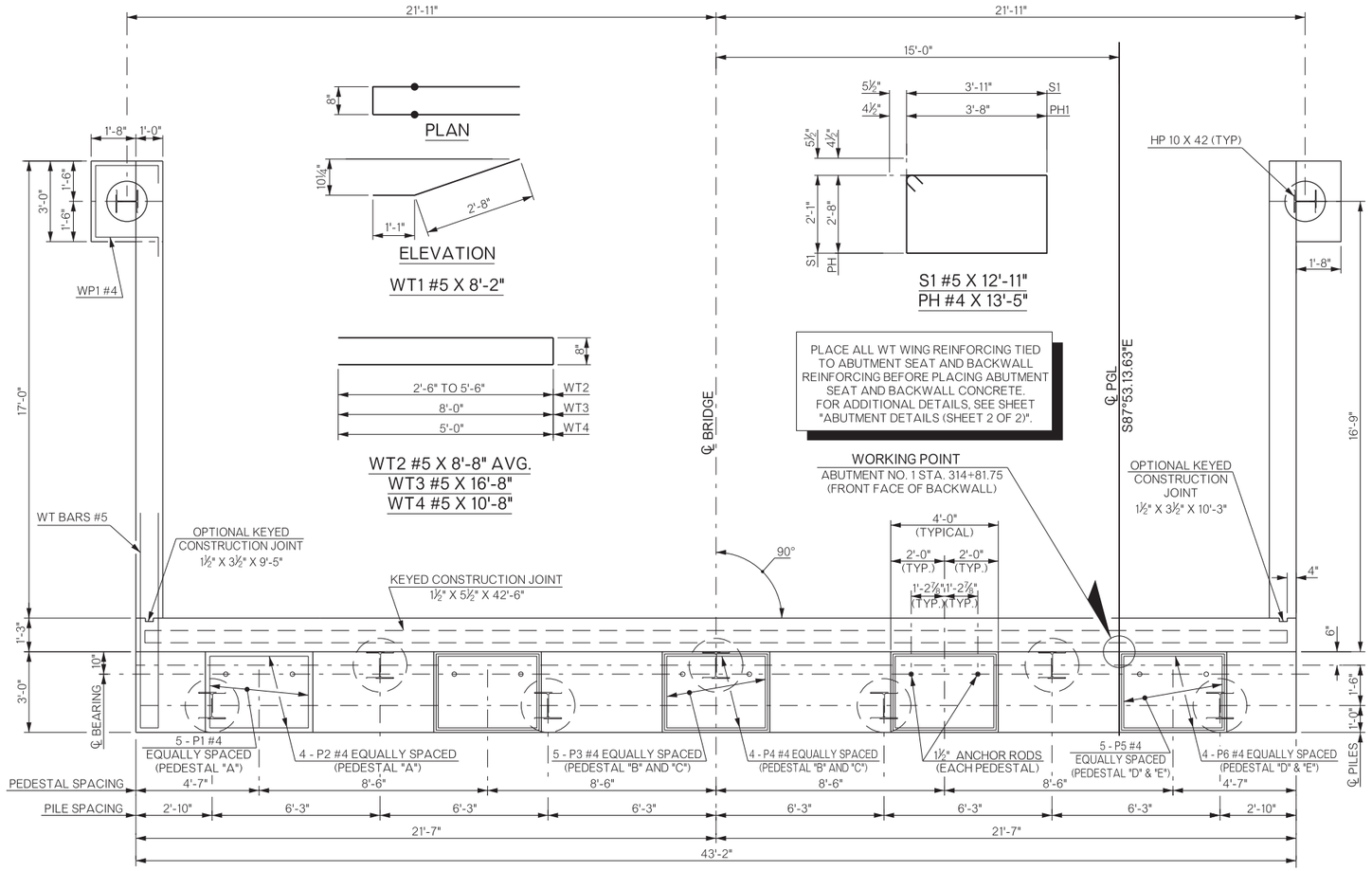
Design	CJO	6/20
Detail	MSW	7/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

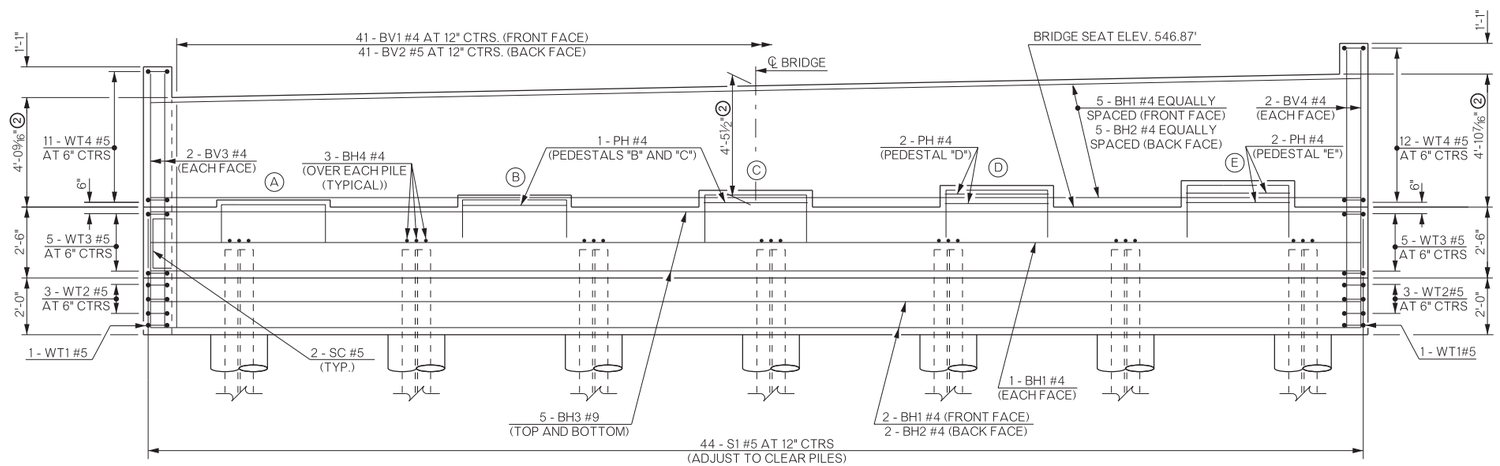
STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B026

REVISIONS		
REV. NO.	DESCRIPTION	DATE

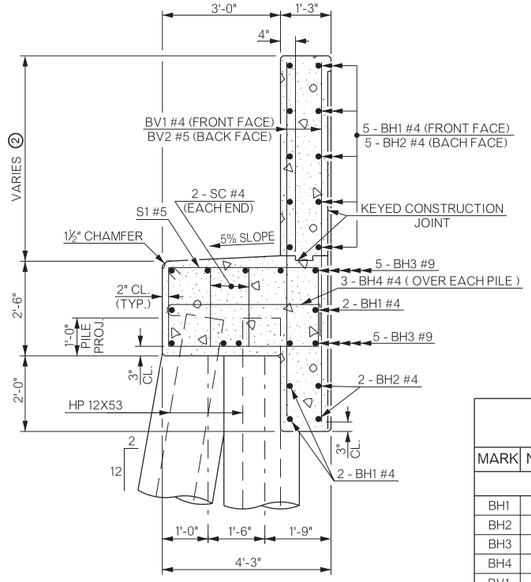


PLAN

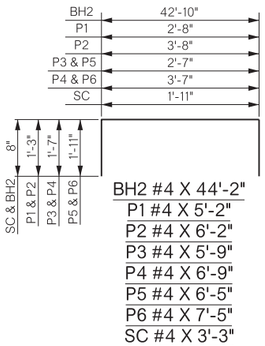


ELEVATION

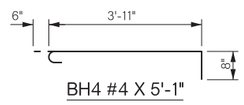
② DIMENSION IS FROM FRONT OF BRIDGE SEAT.



TYPICAL SECTION THRU SEAT



BH2 #4 X 44'-2"
P1 #4 X 5'-2"
P2 #4 X 6'-2"
P3 #4 X 5'-9"
P4 #4 X 6'-9"
P5 #4 X 6'-5"
P6 #4 X 7'-5"
SC #4 X 3'-3"



BH4 #4 X 5'-1"

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

ABUTMENT NO.1 PEDESTAL ELEVATIONS	
PEDESTAL	ELEVATION
Ⓐ	547.12'
Ⓑ	547.29'
Ⓒ	547.46'
Ⓓ	547.63'
Ⓔ	547.80'

BAR LIST - ABUTMENT NO. 1

MARK	NO.	SIZE	FORM	LENGTH	VARIANCE
EPOXY COATED					
BH1	9	#4	STR.	42'-10"	———
BH2	7	#4	BNT.	44'-2"	———
BH3	10	#9	STR.	42'-10"	———
BH4	21	#4	BNT.	5'-1"	———
BV1	41	#4	STR.	8'-6" AVG.	8'-1" TO 8'-11"
BV2	41	#5	STR.	8'-6" AVG.	8'-1" TO 8'-11"
BV3	4	#4	STR.	9'-2"	———
BV4	4	#4	STR.	10'-0"	———
P1	5	#4	BNT.	5'-2"	———
P2	4	#4	BNT.	6'-2"	———
P3	10	#4	BNT.	5'-9"	———
P4	8	#4	BNT.	6'-9"	———
P5	10	#4	BNT.	6'-5"	———
P6	8	#4	BNT.	7'-5"	———
PH	6	#4	BNT.	13'-5"	———
S1	44	#5	BNT.	12'-11"	———
SC	4	#4	BNT.	3'-3"	———
WT1	2	#5	BNT.	8'-2"	———
① WT2	6	#5	BNT.	8'-8" AVG.	5'-8" TO 11'-8"
WT3	10	#5	BNT.	16'-8"	———
WT4	23	#5	BNT.	10'-8"	———

① INCLUDES TWO SETS OF 3.

QUANTITIES - ABUTMENT NO. 1		
ITEM	UNIT	TOTAL
SUBSTRUCTURE EXCAVATION COMMON	C.Y.	115.00
CLSM BACKFILL	C.Y.	93.80
CLASS A CONCRETE	C.Y.	41.50
EPOXY COATED REINFORCING STEEL	LB.	5,390.00
PILES, FURNISHED (HP 10X42)	L.F.	108.00
PILES, FURNISHED (HP 12X53)	L.F.	368.00
PILES, DRIVEN (HP 10X42)	L.F.	108.00
PILES, DRIVEN (HP 12X53)	L.F.	368.00
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	45.00
6" PERFORATED PIPE UNDERDRAIN ROUND	L.F.	42.00
6" NON-PERF. UNDERDRAIN ROUND	L.F.	21.00

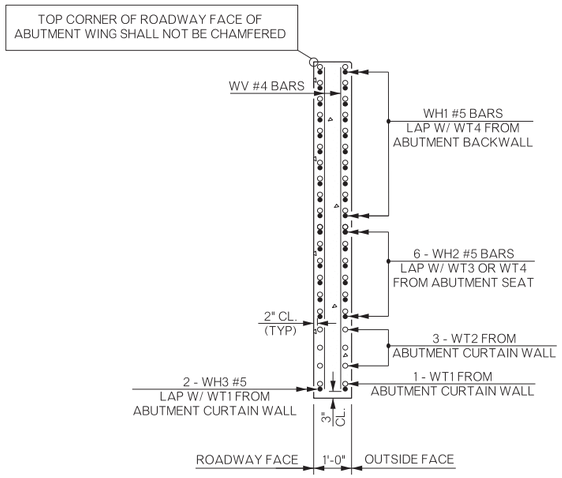
BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

ABUTMENT NO. 1 DETAILS
(SHEET 1 OF 2)

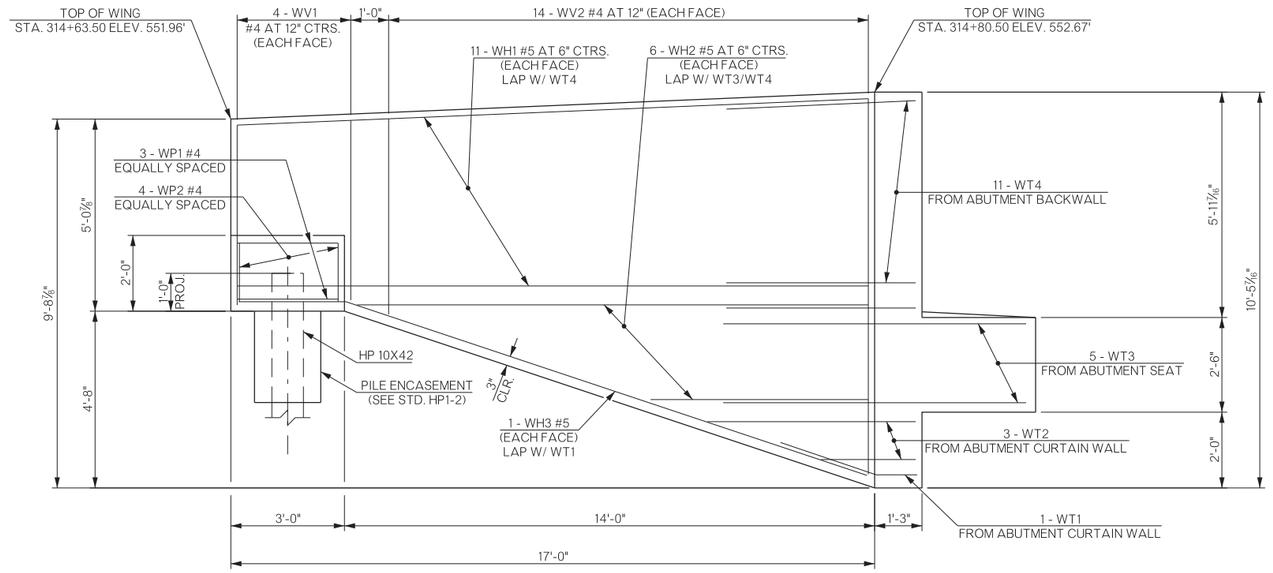
Design	CJO	8/19
Detail	DPG	2/20
Check	TEE	8/20
Squad	HENSLEY	
Engr:	DEFRANCO	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416(04) | SHEET NO. B027

REVISIONS		
REV. NO.	DESCRIPTION	DATE



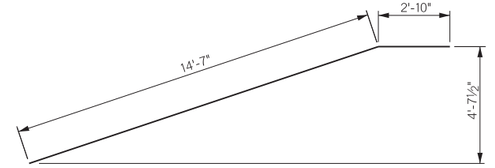
SECTION THRU WING AT
BACK FACE OF ABUTMENT SEAT



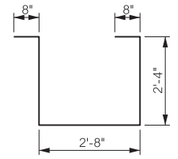
NORTH WING ELEVATION

BAR LIST - ABUTMENT NO. 1 (NORTH WING)					
MARK	NO.	SIZE	FORM	LENGTH	VARIANCE
EPOXY COATED					
WH1	22	#5	STR.	16'-8"	———
① WH2	12	#5	STR.	9'-7½" AVG.	5'-9" TO 13'-6"
WH3	2	#5	BNT.	17'-4"	———
WP1	3	#4	BNT.	8'-8"	———
WP2	4	#4	STR.	1'-7"	———
WV1	8	#4	STR.	4'-9"	———
② WV2	28	#4	STR.	7'-6½" AVG.	5'-2" TO 9'-11"

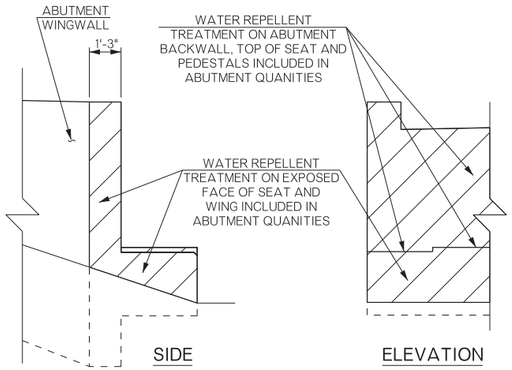
① 2 SETS OF 6 ② 2 SETS OF 14



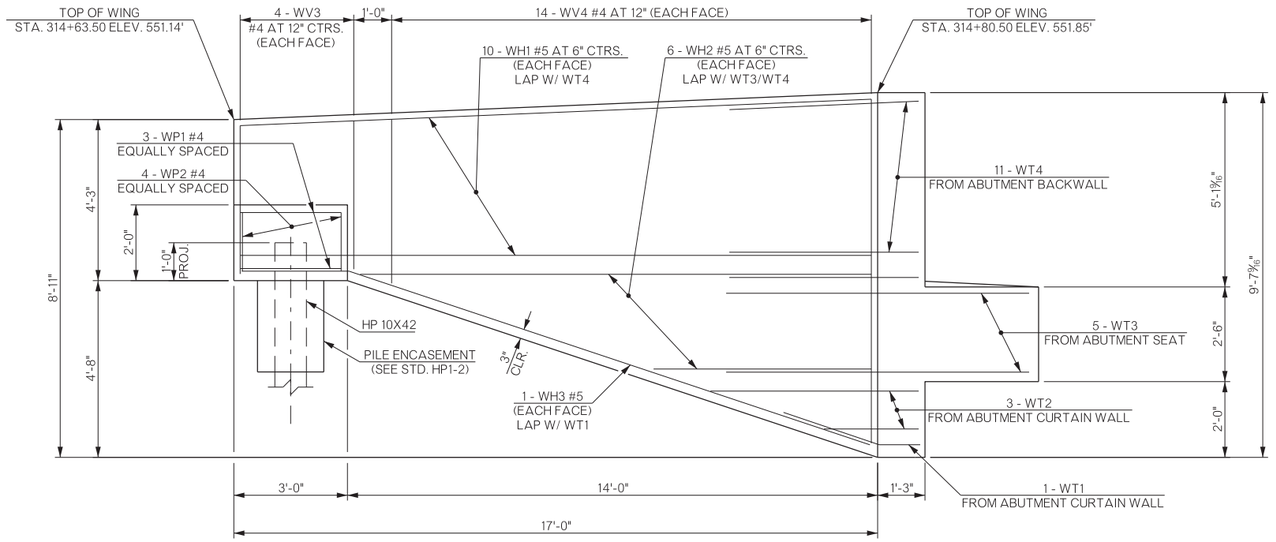
WH3 #5 X 17'-5"



WP1 #4 X 8'-8"



WATER REPELLENT TREATMENT DETAILS



SOUTH WING ELEVATION

BAR LIST - ABUTMENT NO. 1 (SOUTH WING)					
MARK	NO.	SIZE	FORM	LENGTH	VARIANCE
EPOXY COATED					
WH1	20	#5	STR.	16'-8"	———
① WH2	12	#5	STR.	9'-7½" AVG.	5'-9" TO 13'-6"
WH3	2	#5	BNT.	17'-4"	———
WP1	3	#4	BNT.	8'-8"	———
WP2	4	#4	STR.	1'-7"	———
WV3	8	#4	STR.	3'-11"	———
② WV4	28	#4	STR.	6'-8½" AVG.	4'-4" TO 9'-1"

① 2 SETS OF 6 ② 2 SETS OF 14

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

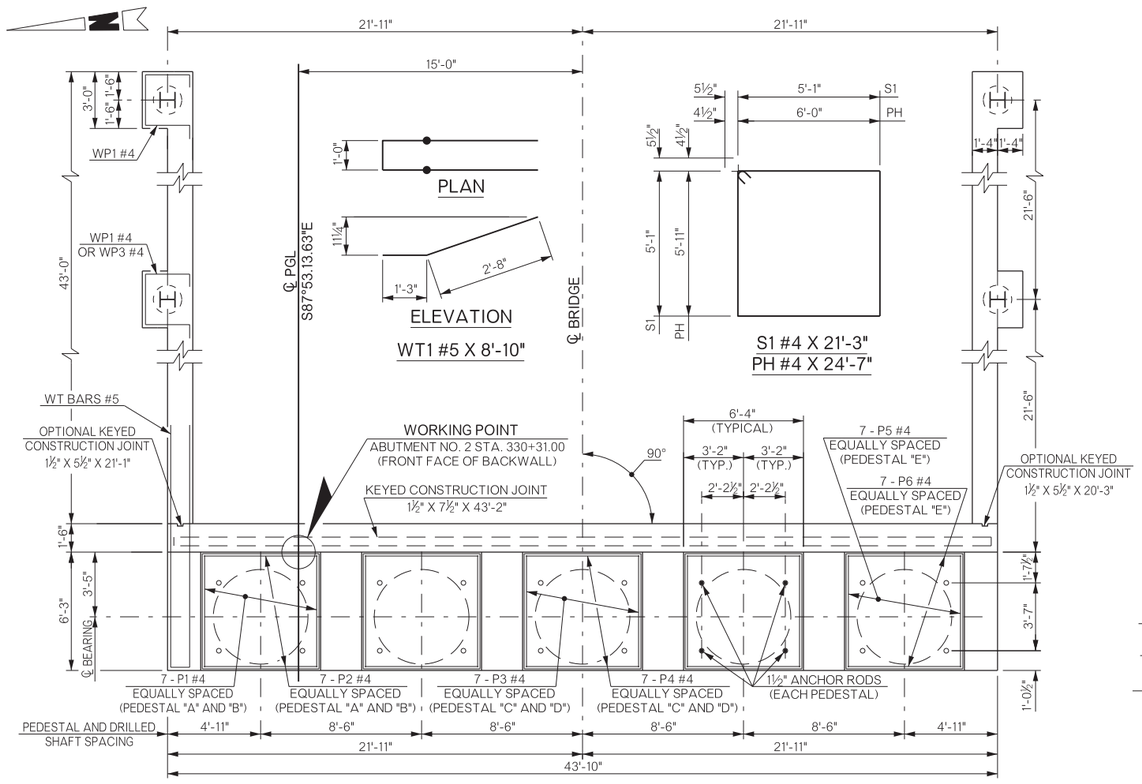
ABUTMENT NO. 1 DETAILS
(SHEET 2 OF 2)

Design	CJO	8/19
Detail	DPG	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

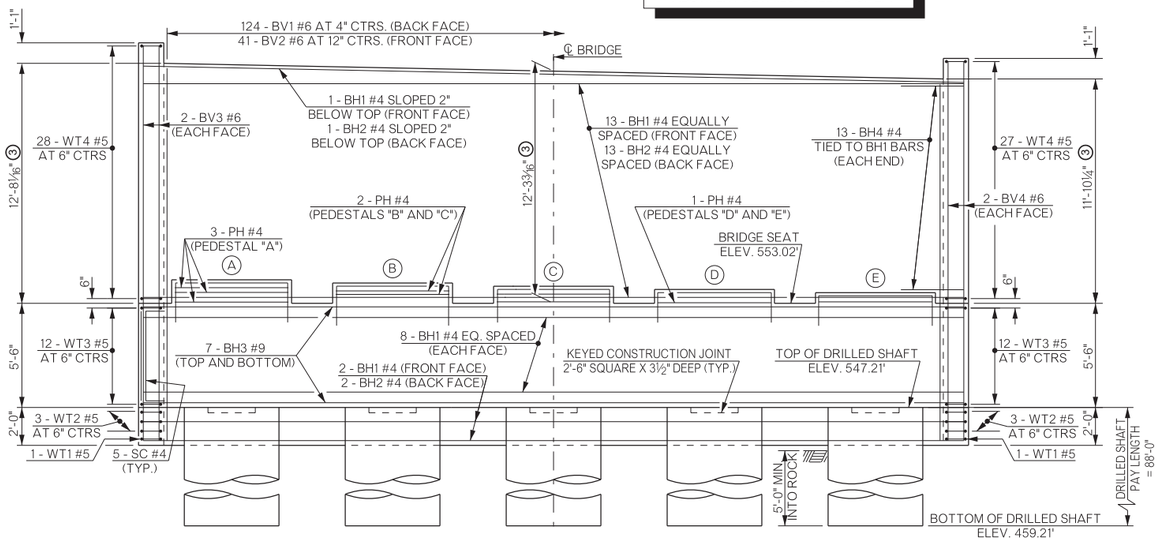
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) | SHEET NO. B028



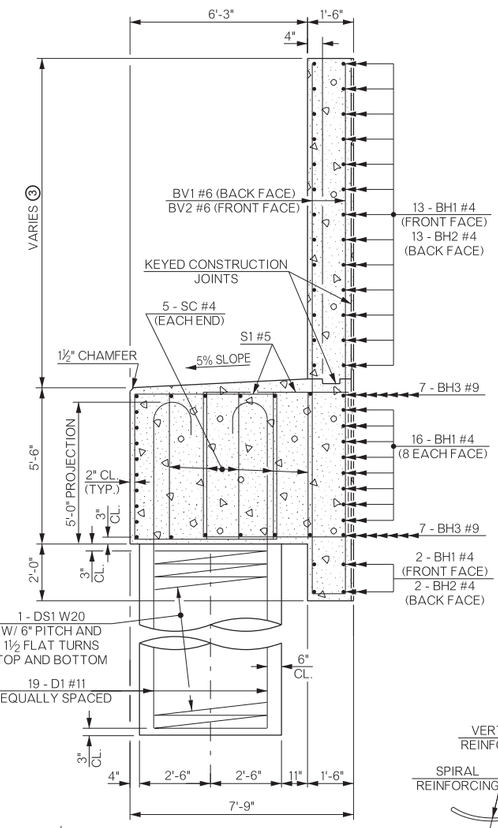
PLAN

PLACE ALL WT WING REINFORCING TIED TO ABUTMENT SEAT AND BACKWALL REINFORCING BEFORE PLACING ABUTMENT SEAT AND BACKWALL CONCRETE. FOR ADDITIONAL DETAILS, SEE SHEET "ABUTMENT DETAILS (SHEET 2 OF 2)".

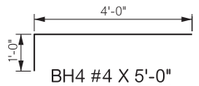


ELEVATION

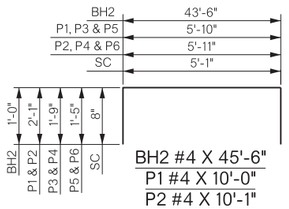
③ DIMENSION IS FROM FRONT OF BRIDGE SEAT.



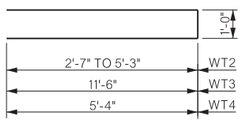
TYPICAL SECTION
THRU SEAT



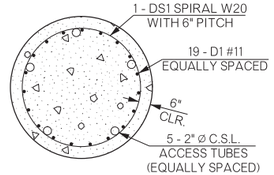
BH4 #4 X 5'-0"



BH2 #4 X 45'-6"
P1 #4 X 10'-0"
P2 #4 X 10'-1"
P3 #4 X 9'-4"
P4 #4 X 9'-5"
P5 #4 X 8'-8"
P6 #4 X 8'-9"
SC #4 X 6'-5"

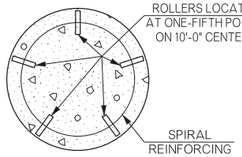


WT2 #5 X 8'-10" AVG.
WT3 #5 X 24'-0"
WT4 #5 X 11'-8"

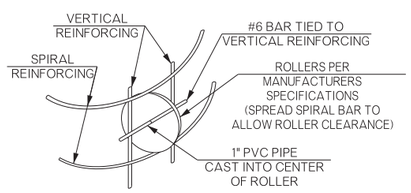


60" DRILLED SHAFT SECTION

D1 BAR LAP SPLICE LENGTH = 9'-0".
AVOID SPLICES WITHIN 35'-0" OF TOP OF SHAFT



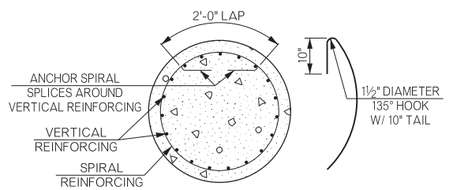
⚠ ROLLER PLACEMENT



⚠ ROLLER INSTALLATION

⚠ ROLLER DETAIL

NOTE: REINFORCING CAGE CENTERING DEVICES SHALL CONSIST OF ROLLERS PLACED AT SPACING AS SHOWN AND HAVE THE CHARACTERISTICS AS INDICATED IN THE MANUFACTURERS SPECIFICATIONS. SLAB BOLSTERS AND HIGH CHAIRS WILL BE ALLOWED BY THE DEPARTMENT.



⚠ SPIRAL REINFORCING SPLICE DETAIL

NOTE: SPIRAL BARS SHALL CONFORM TO AASHTO M32. SPIRAL BAR LENGTH DOES NOT INCLUDE LAP. IF A LAP IS REQUIRED, THE LENGTH OF THE LAP SHALL BE AS SHOWN.

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE DETAILS	7/06/21
2	ADD NOTE	9/14/21

ABUTMENT NO.2 PEDESTAL ELEVATIONS

PEDESTAL	ELEVATION
A	553.95'
B	553.78'
C	553.61'
D	553.44'
E	553.27'

BAR LIST - ABUTMENT NO. 2

MARK	NO.	SIZE	FORM	LENGTH	VARIANCE
EPOXY COATED					
BH1	31	#4	STR.	43'-6"	———
BH2	15	#4	BNT.	45'-6"	———
BH3	14	#9	STR.	43'-6"	———
BH4	26	#4	BNT.	5'-0"	———
BV1	124	#6	STR.	19'-4" AVG.	18'-11" TO 19'-9"
BV2	41	#6	STR.	19'-3½" AVG.	18'-11" TO 19'-8"
BV3	4	#6	STR.	20'-10"	———
BV4	4	#6	STR.	20'-0"	———
P1	14	#4	BNT.	10'-0"	———
P2	14	#4	BNT.	10'-1"	———
P3	14	#4	BNT.	9'-4"	———
P4	14	#4	BNT.	9'-5"	———
P5	7	#4	BNT.	8'-8"	———
P6	7	#4	BNT.	8'-9"	———
PH	9	#4	BNT.	24'-7"	———
S1	90	#5	BNT.	21'-3"	———
SC	10	#4	BNT.	6'-5"	———
WT1	2	#5	BNT.	8'-10"	———
② WT2	6	#5	BNT.	8'-10" AVG.	6'-2" TO 11'-6"
WT3	24	#5	BNT.	24'-0"	———
WT4	55	#5	BNT.	11'-8"	———
① FIVE 60" DRILLED SHAFTS					
EPOXY COATED					
⚠③ D1	95	#11	STR.	94'-4"	———
NON-EPOXY COATED					
DS1	5	W20	SPIRAL	2,238'-7"	———

① INCLUDED IN PRICE BID PER LINEAR FOOT OF DRILLED SHAFT.
② INCLUDES TWO SETS OF 3.
⚠③ INCLUDES 9'-0" LAP LENGTH. LAPS SHALL BE STAGGERED.

QUANTITIES - ABUTMENT NO. 2

ITEM	UNIT	TOTAL
SUBSTRUCTURE EXCAVATION COMMON	C.Y.	195.00
CLSM BACKFILL	C.Y.	471.80
CLASS A CONCRETE	C.Y.	158.10
EPOXY COATED REINFORCING STEEL	LB.	18,850.00
PILES, FURNISHED (HP 10X42)	L.F.	394.00
PILES, DRIVEN (HP 10X42)	L.F.	394.00
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	125.00
DRILLED SHAFTS 60" DIAMETER	L.F.	440.00
6" PERFORATED PIPE UNDERDRAIN ROUND	L.F.	42.00
6" NON-PERF. UNDERDRAIN ROUND	L.F.	25.00

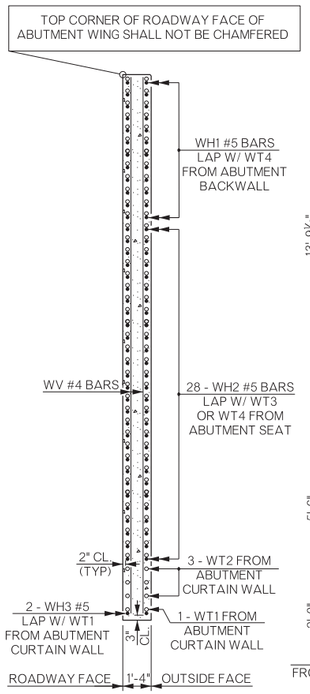
BRIDGE A & B MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

ABUTMENT NO. 2 DETAILS (SHEET 1 OF 2)

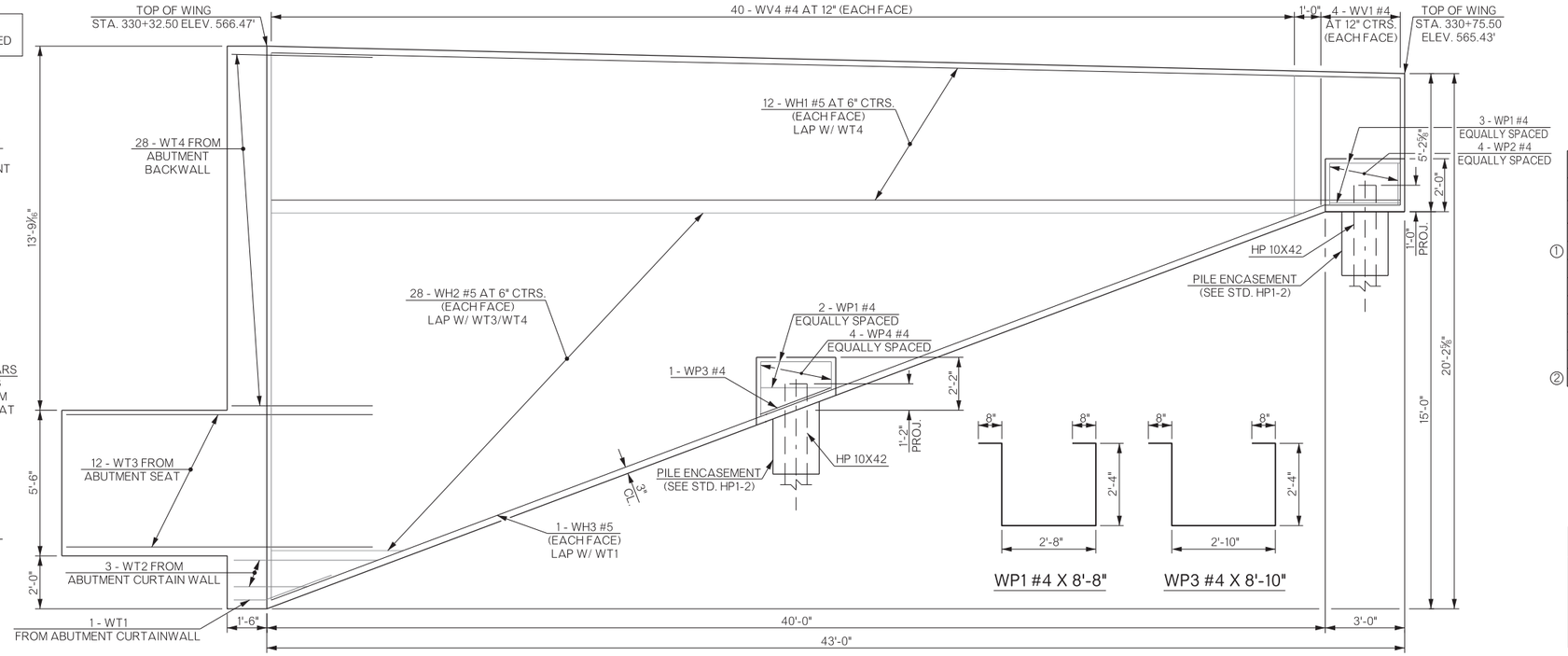
Design	CJO	6/20
Detail	DPG	2/20
Check	TEE	8/20
Squad: HENSLEY		
Engr.: DEFRANCO		

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416(04) | SHEET NO. B029

REVISIONS		
REV. NO.	DESCRIPTION	DATE



SECTION THRU WING AT BACK FACE OF ABUTMENT SEAT

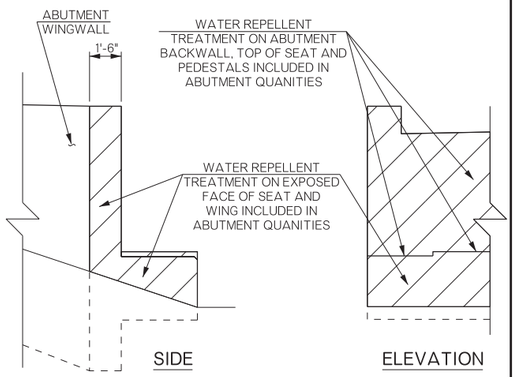


NORTH WING ELEVATION

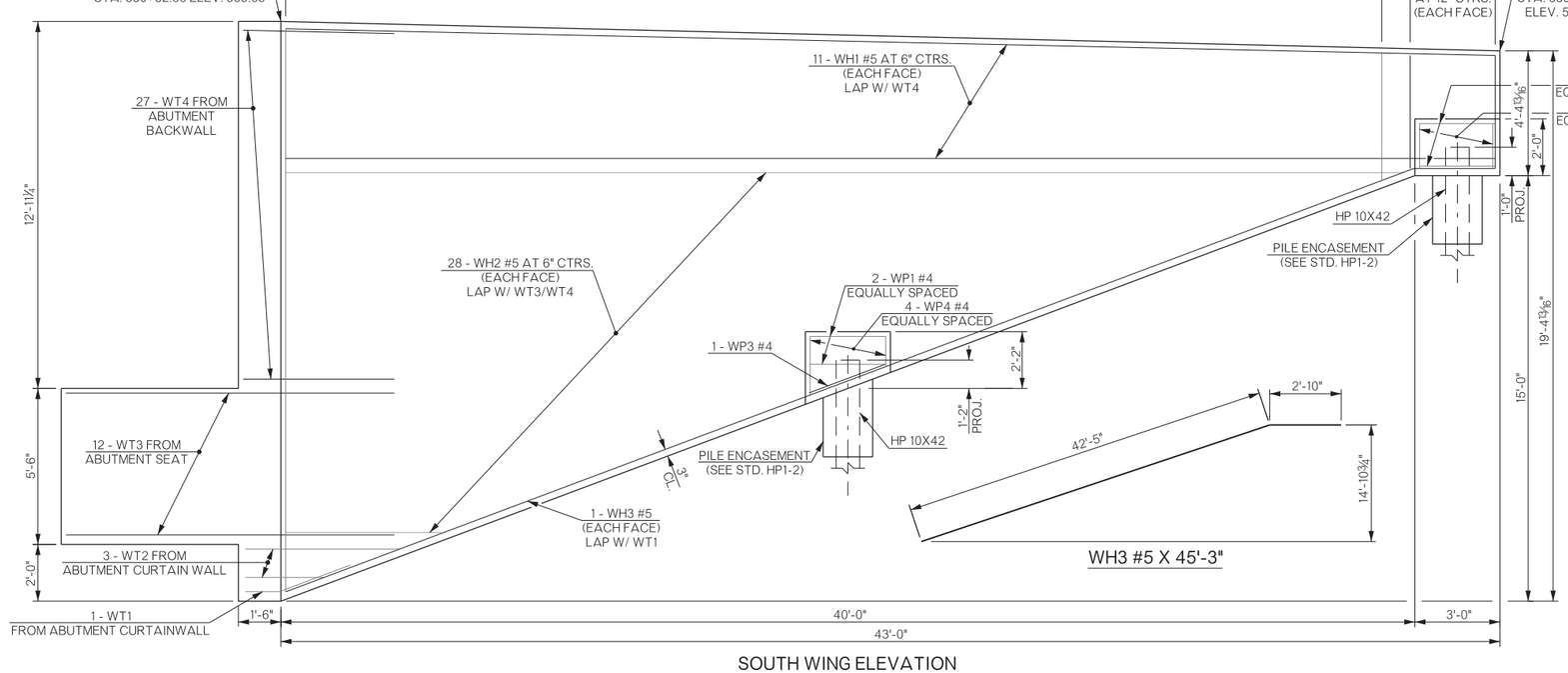
BAR LIST - ABUTMENT NO. 2 (NORTH WING)					
MARK	NO.	SIZE	FORM	LENGTH	VARIANCE
EPOXY COATED					
WH1	24	#5	STR.	42'-8"	———
① WH2	56	#5	STR.	22'-4" AVG.	5'-1" TO 39'-7"
WH3	2	#5	BNT.	45'-3"	———
WP1	5	#4	BNT.	8'-8"	———
WP2	4	#4	STR.	1'-7"	———
WP3	1	#4	BNT.	8'-10"	———
WP4	4	#4	STR.	1'-8" AVG.	1'-2" TO 2'-2"
WV1	8	#4	STR.	4'-10"	———
② WV2	80	#4	STR.	13'-0" AVG.	5'-3" TO 20'-9"

① TWO SETS OF 28

② TWO SETS OF 40



WATER REPELLENT TREATMENT DETAILS



SOUTH WING ELEVATION

BAR LIST - ABUTMENT NO. 2 (SOUTH WING)					
MARK	NO.	SIZE	FORM	LENGTH	VARIANCE
EPOXY COATED					
WH1	22	#5	STR.	42'-8"	———
① WH2	56	#5	STR.	22'-4" AVG.	5'-1" TO 39'-7"
WH3	2	#5	BNT.	45'-3"	———
WP1	5	#4	BNT.	8'-8"	———
WP2	4	#4	STR.	1'-7"	———
WP3	1	#4	BNT.	8'-10"	———
WP4	4	#4	STR.	1'-8" AVG.	1'-2" TO 2'-2"
WV3	8	#4	STR.	4'-0"	———
② WV4	80	#4	STR.	12'-2½" AVG.	4'-6" TO 19'-11"

① TWO SETS OF 28

② TWO SETS OF 40

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

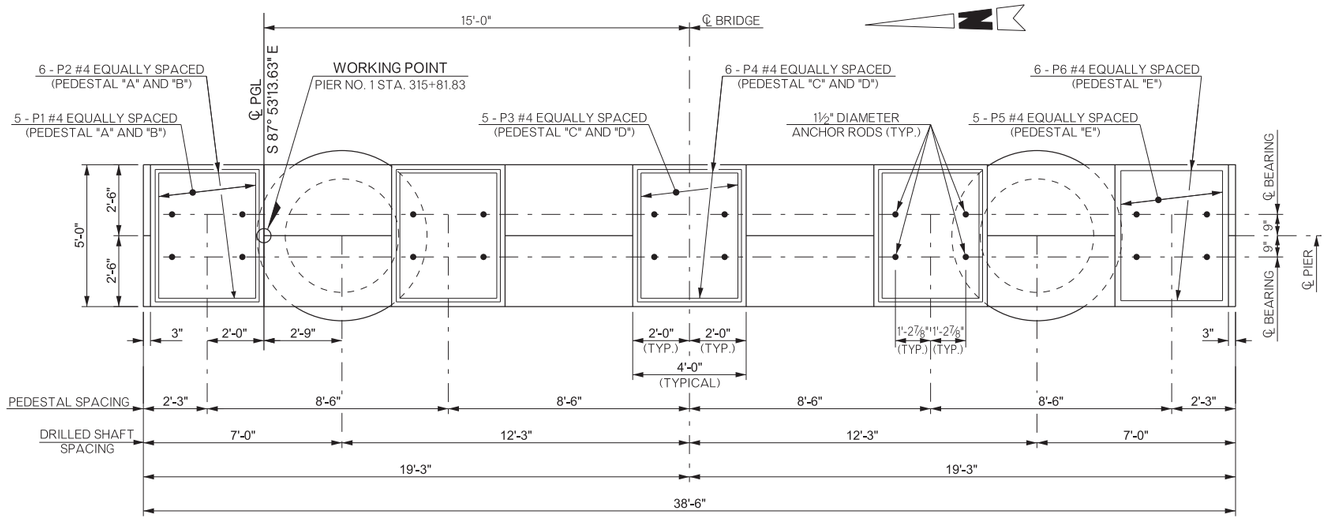
ABUTMENT NO. 2 DETAILS
(SHEET 2 OF 2)

Design	CJO	6/20
Detail	DPG	4/20
Check	TEE	8/20
Squad: HENSLEY		
Engr.: DEFRANCO		

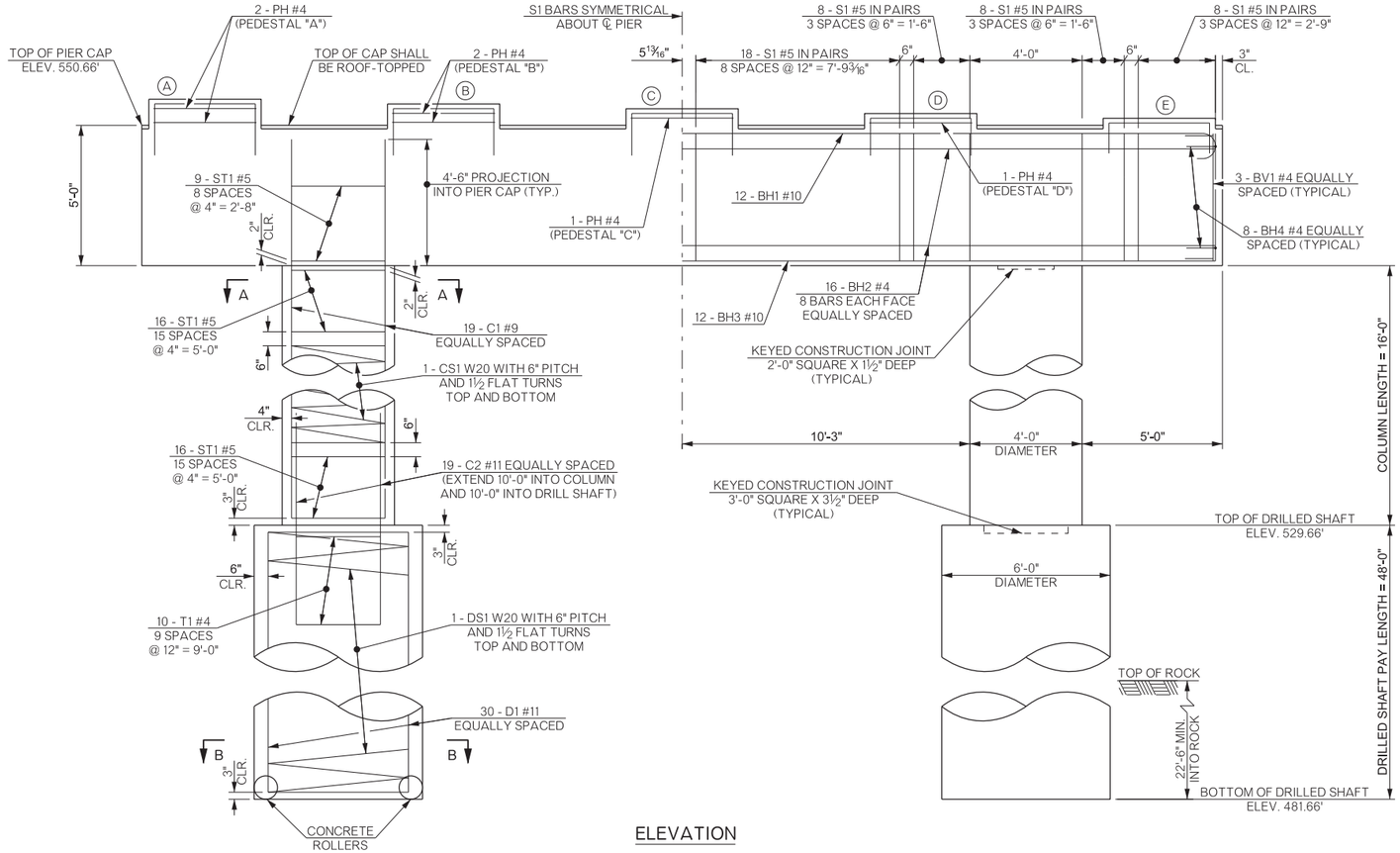
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) | SHEET NO. B030

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED BAR LIST	7/06/21



PLAN



ELEVATION

PIER NO. 1 PEDESTAL ELEVATIONS	
PEDESTAL	ELEVATION
A	551.59'
B	551.42'
C	551.25'
D	551.08'
E	550.91'

BAR LIST - PIER NO. 1

MARK	NO.	SIZE	FORM	LENGTH
EPOXY COATED				
BH1	12	#10	BNT.	41'-0"
BH2	16	#4	STR.	38'-2"
BH3	12	#10	STR.	38'-2"
BH4	16	#4	BNT.	6'-8"
BV1	6	#4	BNT.	6'-6"
C1	38	#9	STR.	20'-3"
C2	38	#11	STR.	20'-0"
P1	10	#4	BNT.	8'-5"
P2	12	#4	BNT.	7'-5"
P3	10	#4	BNT.	7'-9"
P4	12	#4	BNT.	6'-9"
P5	5	#4	BNT.	7'-2"
P6	6	#4	BNT.	6'-2"
PH	6	#4	BNT.	17'-5"
S1	84	#5	BNT.	16'-1"
NON-EPOXY COATED				
CS1	2	W20	SPIRAL	127'-7"
ST1	82	#5	BNT.	13'-6"
①TWO 72" DRILLED SHAFTS				
NON-EPOXY COATED				
D1	60	#11	STR.	47'-6"
DS1	2	W20	SPIRAL	1,540'-2"
T1	20	#5	BNT.	12'-6"

① INCLUDED IN PRICE BID PER LINEAR FOOT OF DRILLED SHAFT.

QUANTITIES - PIER NO. 1		
ITEM	UNIT	TOTAL
CLASS A CONCRETE	C.Y.	52.70
REINFORCING STEEL	LB.	1,250.00
EPOXY-COATED REINFORCING STEEL	LB.	13,000.00
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	76.00
DRILLED SHAFTS 72" DIAMETER	L.F.	96.00

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

ALL EDGES OF PIER CAP SHALL HAVE A 1½" CHAMFER, EXCEPT FOR PEDESTAL EDGES, WHICH SHALL HAVE A ¾" CHAMFER.

PENETRATING WATER REPELLENT TREATMENT SHALL BE APPLIED TO THE TOP OF THE PIER CAP, INCLUDING ALL SURFACES OF THE PEDESTALS, AND ALL VERTICAL FACES OF THE PIER CAP.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

PIER NO. 1 DETAILS
(SHEET 1 OF 2)

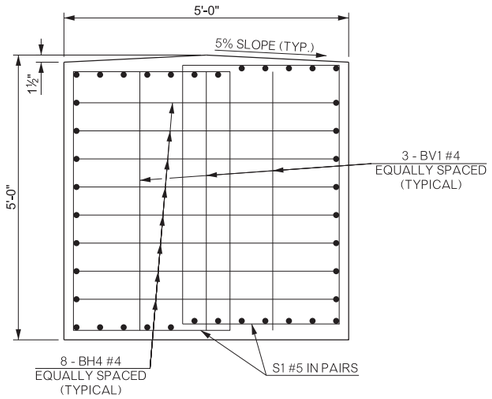
Design	CJO	6/20
Detail	BRJ	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

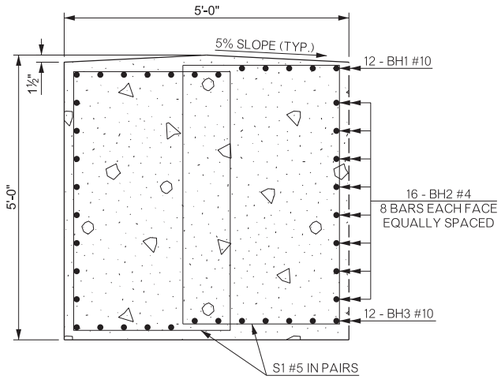
JOB PIECE NO. 30416(04) | SHEET NO. B031

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE DETAILS	7/06/21



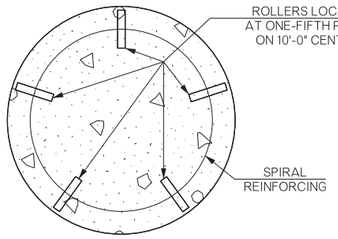
END OF PIER CAP REINFORCING

NOTE: TOP OF PIER CAPS ARE TO BE "ROOF-TOPPED" IN SHAPE AND SHALL SLOPE TO EDGES AT A RATE OF 5%

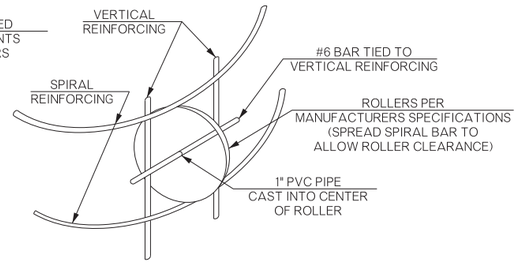


TYPICAL SECTION THROUGH PIER CAP BETWEEN PEDESTALS

NOTE: TOP OF PIER CAPS ARE TO BE "ROOF-TOPPED" IN SHAPE AND SHALL SLOPE TO EDGES AT A RATE OF 5%



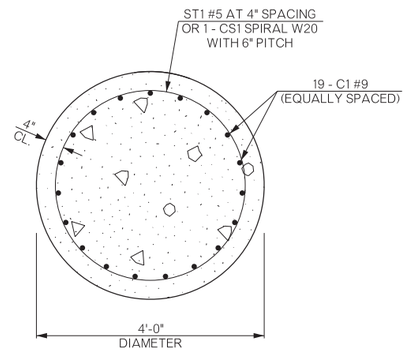
⚠ ROLLER PLACEMENT



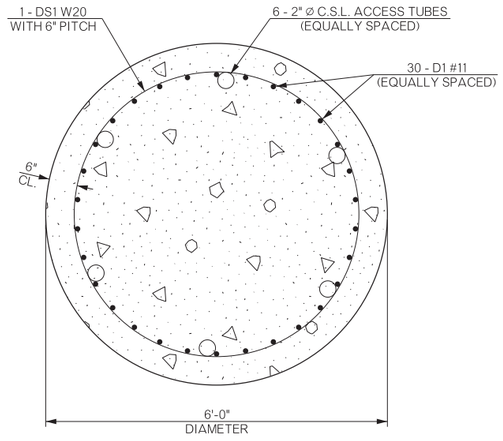
⚠ ROLLER INSTALLATION

⚠ ROLLER DETAILS

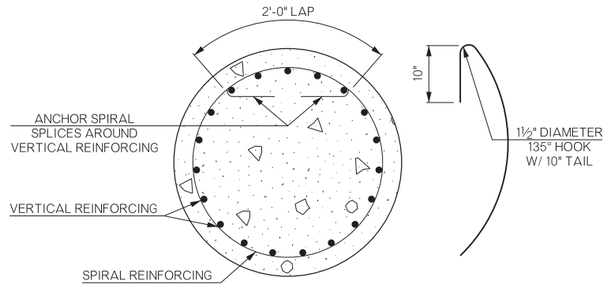
NOTE: REINFORCING CAGE CENTERING DEVICES SHALL CONSIST OF ROLLERS PLACED AT SPACING AS SHOWN AND HAVE THE CHARACTERISTICS AS INDICATED IN THE MANUFACTURERS SPECIFICATIONS. SLAB BOLSTERS AND HIGH CHAIRS WILL BE ALLOWED BY THE DEPARTMENT.



SECTION "A-A"

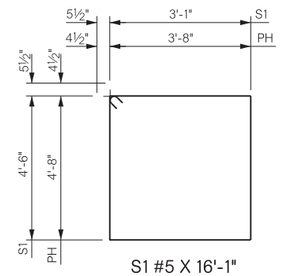


SECTION "B-B"

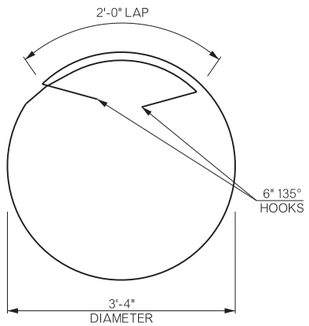


⚠ SPIRAL REINFORCING SPLICE DETAIL

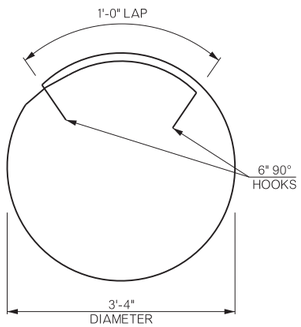
NOTE: SPIRAL BARS SHALL CONFORM TO AASHTO M32. SPIRAL BAR LENGTH DOES NOT INCLUDE LAP. IF A LAP IS REQUIRED, THE LENGTH OF THE LAP SHALL BE AS SHOWN.



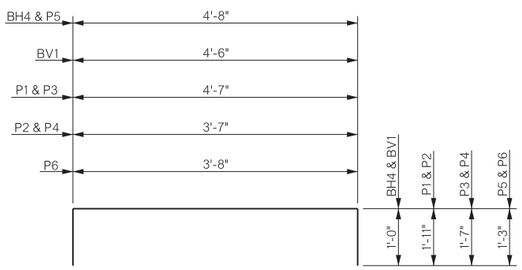
S1 #5 X 16'-1"
PH #4 X 17'-5"



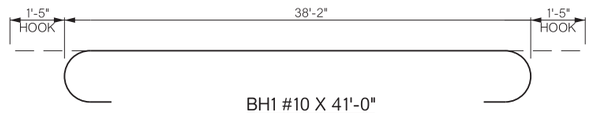
ST1 #5 X 13-6"



T1 #5 X 12'-6"



BH4 #4 X 6'-8"
BV1 #4 X 6'-6"
P1 #4 X 8'-5"
P2 #4 X 7'-5"
P3 #4 X 7'-9"
P4 #4 X 6'-9"
P5 #4 X 7'-2"
P6 #4 X 6'-2"



BH1 #10 X 41'-0"

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

PIER NO. 1 DETAILS (SHEET 2 OF 2)

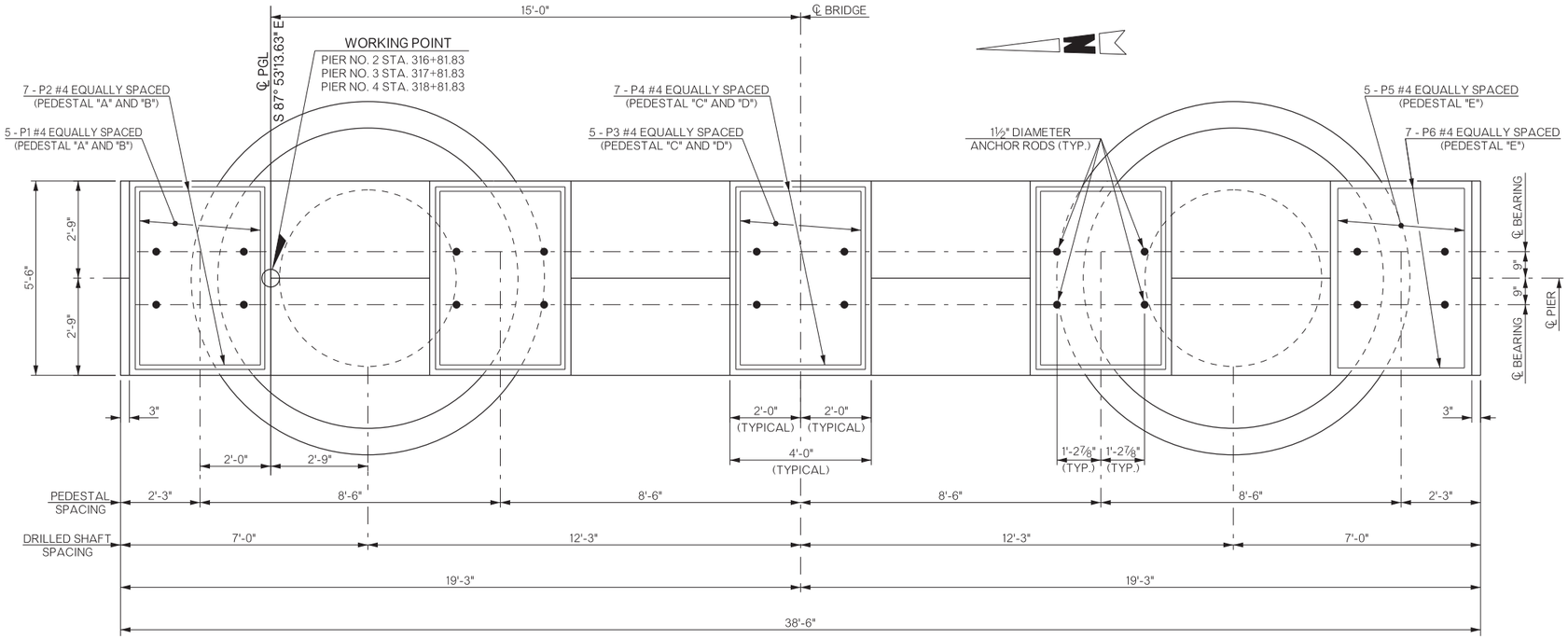
Design	CJO	6/20
Detail	BRJ	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

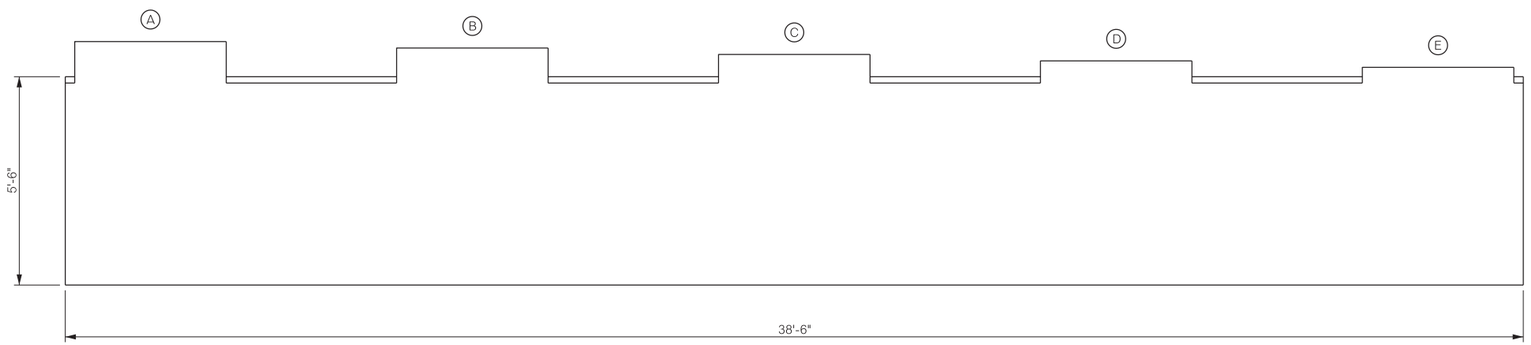
JOB PIECE NO. 30416(04) — SHEET NO. B032

REVISIONS			
REV. NO.	DESCRIPTION	DATE
1	REVISE DETAILS & QUANTITIES	7/06/21
2	REVISE PAY ITEM	9/07/21

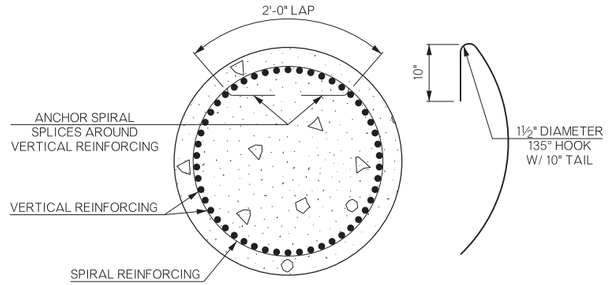


△ PLAN OF PIER CAP

PEDESTAL ELEVATIONS			
PEDESTAL	ELEVATION		
	PIER NO. 2	PIER NO. 3	PIER NO. 4
Ⓐ	555.01'	558.02'	560.63'
Ⓑ	554.84'	557.85'	560.46'
Ⓒ	554.67'	557.68'	560.29'
Ⓓ	554.50'	557.51'	560.12'
Ⓔ	554.33'	557.34'	559.95'

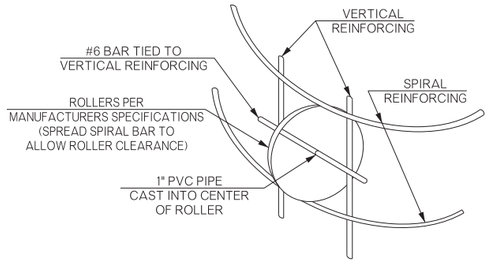


△ ELEVATION OF PIER CAP

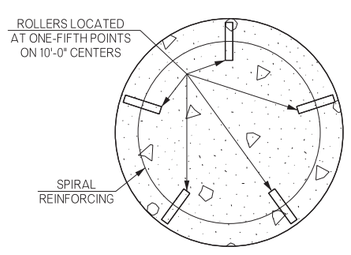


△ SPIRAL REINFORCING SPLICE DETAIL

NOTE: SPIRAL BARS SHALL CONFORM TO AASHTO M32. SPIRAL BAR LENGTH DOES NOT INCLUDE LAP. IF A LAP IS REQUIRED, THE LENGTH OF THE LAP SHALL BE AS SHOWN.



△ ROLLER INSTALLATION



△ ROLLER PLACEMENT

△ ROLLER DETAILS

NOTE: REINFORCING CAGE CENTERING DEVICES SHALL CONSIST OF ROLLERS PLACED AT SPACING AS SHOWN AND HAVE THE CHARACTERISTICS AS INDICATED IN THE MANUFACTURERS SPECIFICATIONS. SLAB BOLSTERS AND HIGH CHAIRS WILL BE ALLOWED BY THE DEPARTMENT.

QUANTITIES - PIER NO. 2, 3, AND 4					
ITEM	UNIT	PIER NO. 2	PIER NO. 3	PIER NO. 4	
CLASS A CONCRETE	C.Y.	309.80	314.10	317.10	△
REINFORCING STEEL	LB.	5,600.00	5,660.00	5,700.00	△
EPOXY-COATED REINFORCING STEEL	LB.	64,140.00	64,870.00	65,360.00	△
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	214.00	214.00	214.00	△
△2 DRILLED SHAFTS 120" DIAMETER	L.F.	120.00	120.00	120.00	△

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

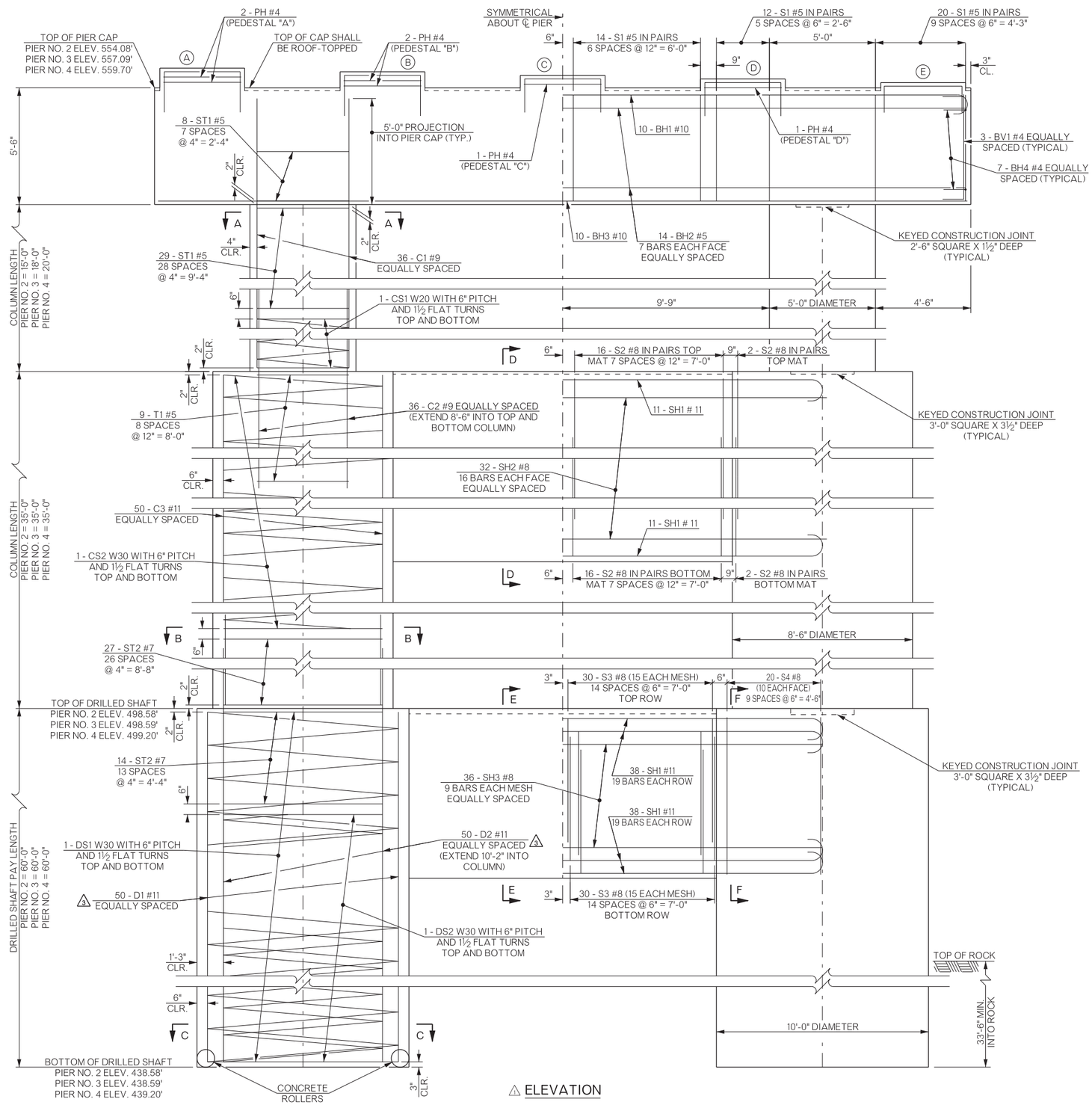
BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

PIERS NO. 2, 3 AND 4 DETAILS (SHEET 1 OF 3)

Design	CJO	6/20
Detail	BRJ	2/20
Check	TEE	8/20
Squad	HENSLEY	
Engr.	DEFRANCO	

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B033



△ ELEVATION

REVISIONS		
REV. NO.	DESCRIPTION	DATE
△1	REVISE DETAILS & BAR LISTS	7/06/21
△2	DRILLED SHAFT DIAMETER	9/07/21
△3	REVISE DETAILS & BAR LISTS	3/09/22

BAR LIST - PIER NO. 2

MARK	NO.	SIZE	FORM	LENGTH	
EPOXY COATED					
BH1	10	#10	BNT.	41'-0"	
BH2	14	#5	STR.	38'-2"	
BH3	10	#10	STR.	38'-2"	
BH4	14	#4	BNT.	7'-2"	
BV1	6	#4	BNT.	7'-0"	
C1	72	#9	STR.	19'-10"	
C2	72	#9	STR.	17'-0"	
C3	100	#11	STR.	34'-8"	△1
P1	10	#4	BNT.	8'-11"	
P2	14	#4	BNT.	7'-5"	
P3	10	#4	BNT.	8'-3"	
P4	14	#4	BNT.	6'-9"	
P5	5	#4	BNT.	7'-8"	
P6	7	#4	BNT.	6'-2"	
PH	6	#4	BNT.	18'-5"	
S1	92	#5	BNT.	17'-11"	
S2	72	#8	BNT.	22'-10"	△1
S3	120	#8	BNT.	18'-2"	△1
S4	40	#8	BNT.	10'-9"	△1
SH1	98	#11	BNT.	27'-8"	△1
SH2	32	#8	STR.	24'-11"	△1
SH3	36	#8	STR.	24'-6"	△1
T1	18	#5	BNT.	15'-8"	
NON-EPOXY COATED					
CS1	2	W20	SPIRAL	172'-7"	
CS2	2	W30	SPIRAL	1,272'-8"	△1
ST1	74	#5	BNT.	16'-2"	
ST2	54	#7	BNT.	26'-7"	△1
△2 ①TWO 120" DRILLED SHAFTS					
NON-EPOXY COATED					
D1	100	#11	STR.	59'-7"	△2 △3
D2	100	#11	STR.	69'-11"	△2 △3
DS1	2	W30	SPIRAL	3,454'-9"	△1
DS2	2	W30	SPIRAL	2,651'-4"	△1
ST2	28	#7	BNT.	26'-7"	△1

BAR LIST - PIER NO. 3

MARK	NO.	SIZE	FORM	LENGTH	
EPOXY COATED					
BH1	10	#10	BNT.	41'-0"	
BH2	14	#5	STR.	38'-2"	
BH3	10	#10	STR.	38'-2"	
BH4	14	#4	BNT.	7'-2"	
BV1	6	#4	BNT.	7'-0"	
C1	72	#9	STR.	22'-10"	
C2	72	#9	STR.	17'-0"	
C3	100	#11	STR.	34'-8"	△1
P1	10	#4	BNT.	8'-11"	
P2	14	#4	BNT.	7'-5"	
P3	10	#4	BNT.	8'-3"	
P4	14	#4	BNT.	6'-9"	
P5	5	#4	BNT.	7'-8"	
P6	7	#4	BNT.	6'-2"	
PH	6	#4	BNT.	18'-5"	
S1	92	#5	BNT.	17'-11"	
S2	72	#8	BNT.	22'-10"	△1
S3	120	#8	BNT.	18'-2"	△1
S4	40	#8	BNT.	10'-9"	△1
SH1	98	#11	BNT.	27'-8"	△1
SH2	32	#8	STR.	24'-11"	△1
SH3	36	#8	STR.	24'-6"	△1
T1	18	#5	BNT.	15'-8"	
NON-EPOXY COATED					
CS1	2	W20	SPIRAL	254'-4"	
CS2	2	W30	SPIRAL	1,272'-8"	△1
ST1	74	#5	BNT.	16'-2"	
ST2	54	#7	BNT.	26'-7"	△1
△2 ①TWO 120" DRILLED SHAFTS					
NON-EPOXY COATED					
D1	100	#11	STR.	59'-7"	△2 △3
D2	100	#11	STR.	69'-11"	△2 △3
DS1	2	W30	SPIRAL	3,454'-9"	△1
DS2	2	W30	SPIRAL	2,651'-4"	△1
ST2	28	#7	BNT.	26'-7"	△1

BAR LIST - PIER NO. 4

MARK	NO.	SIZE	FORM	LENGTH	
EPOXY COATED					
BH1	10	#10	BNT.	41'-0"	
BH2	14	#5	STR.	38'-2"	
BH3	10	#10	STR.	38'-2"	
BH4	14	#4	BNT.	7'-2"	
BV1	6	#4	BNT.	7'-0"	
C1	72	#9	STR.	24'-10"	
C2	72	#9	STR.	17'-0"	
C3	100	#11	STR.	34'-8"	△1
P1	10	#4	BNT.	8'-11"	
P2	14	#4	BNT.	7'-5"	
P3	10	#4	BNT.	8'-3"	
P4	14	#4	BNT.	6'-9"	
P5	5	#4	BNT.	7'-8"	
P6	7	#4	BNT.	6'-2"	
PH	6	#4	BNT.	18'-5"	
S1	92	#5	BNT.	17'-11"	
S2	72	#8	BNT.	22'-10"	△1
S3	120	#8	BNT.	18'-2"	△1
S4	40	#8	BNT.	10'-9"	△1
SH1	98	#11	BNT.	27'-8"	△1
SH2	32	#8	STR.	24'-11"	△1
SH3	36	#8	STR.	24'-6"	△1
T1	18	#5	BNT.	15'-8"	
NON-EPOXY COATED					
CS1	2	W20	SPIRAL	308'-10"	
CS2	2	W30	SPIRAL	1,272'-8"	△1
ST1	74	#5	BNT.	16'-2"	
ST2	54	#7	BNT.	26'-7"	△1
△2 ①TWO 120" DRILLED SHAFTS					
NON-EPOXY COATED					
D1	100	#11	STR.	59'-7"	△2 △3
D2	100	#11	STR.	69'-11"	△2 △3
DS1	2	W30	SPIRAL	3,454'-9"	△1
DS2	2	W30	SPIRAL	2,651'-4"	△1
ST2	28	#7	BNT.	26'-7"	△1

① INCLUDED IN PRICE BID PER LINEAR FOOT OF DRILLED SHAFT.

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

ALL EDGES OF PIER CAP SHALL HAVE A 1½" CHAMFER, EXCEPT FOR PEDESTAL EDGES, WHICH SHALL HAVE A ¾" CHAMFER.

PENETRATING WATER REPELLENT TREATMENT SHALL BE APPLIED TO THE TOP OF THE PIER CAP, INCLUDING ALL SURFACES OF THE PEDESTALS, AND ALL VERTICAL FACES OF THE PIER CAP.

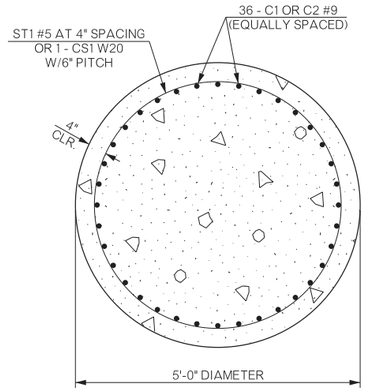
BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

PIERS NO. 2, 3 AND 4 DETAILS
(SHEET 2 OF 3)

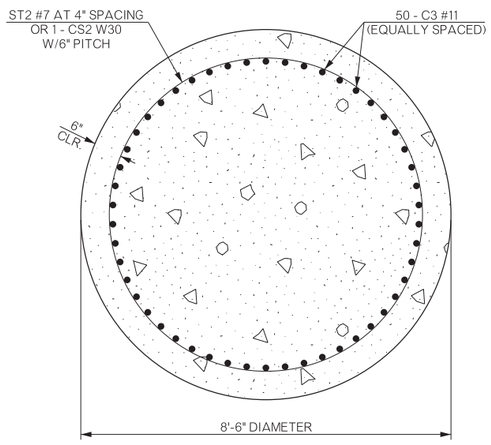
Design	CJO	6/20
Detail	BRJ	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

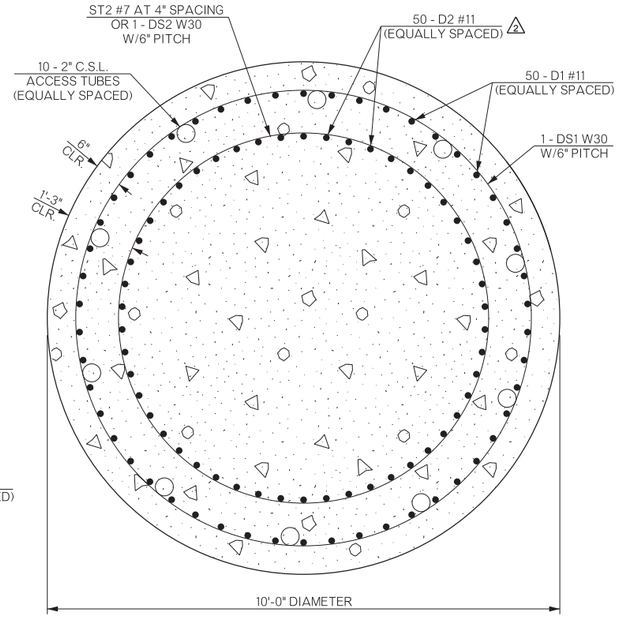
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416(04) | SHEET NO. B034



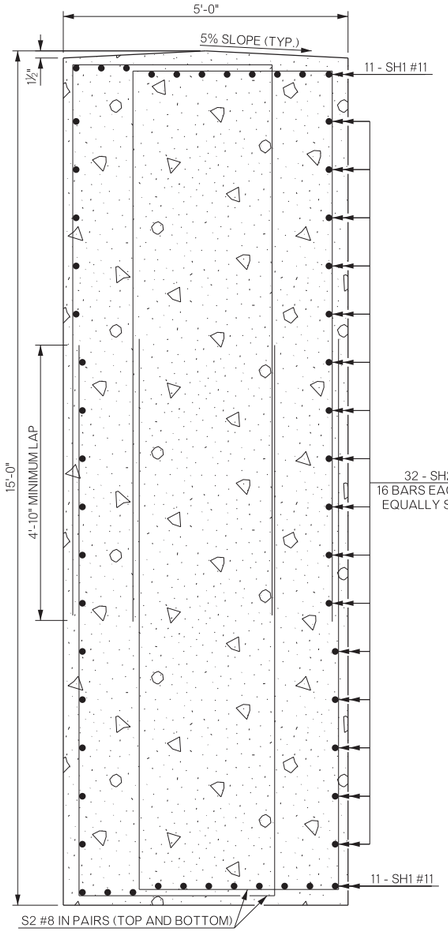
SECTION "A-A"



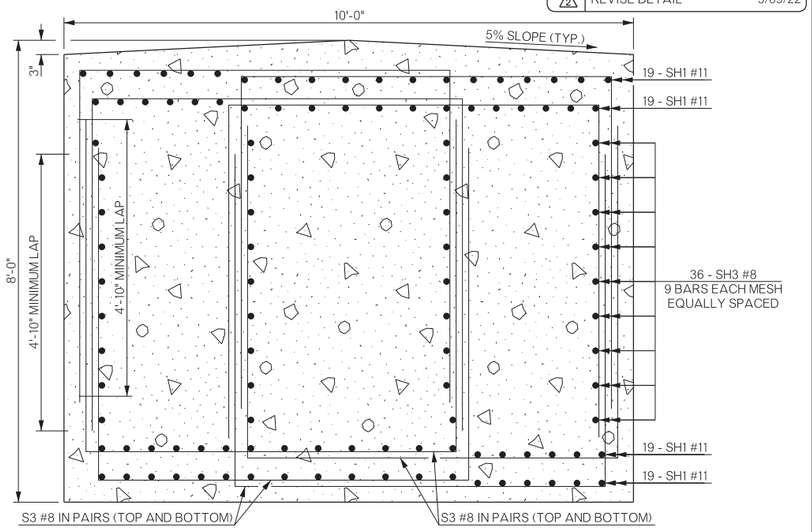
△ SECTION "B-B"



△ SECTION "C-C"

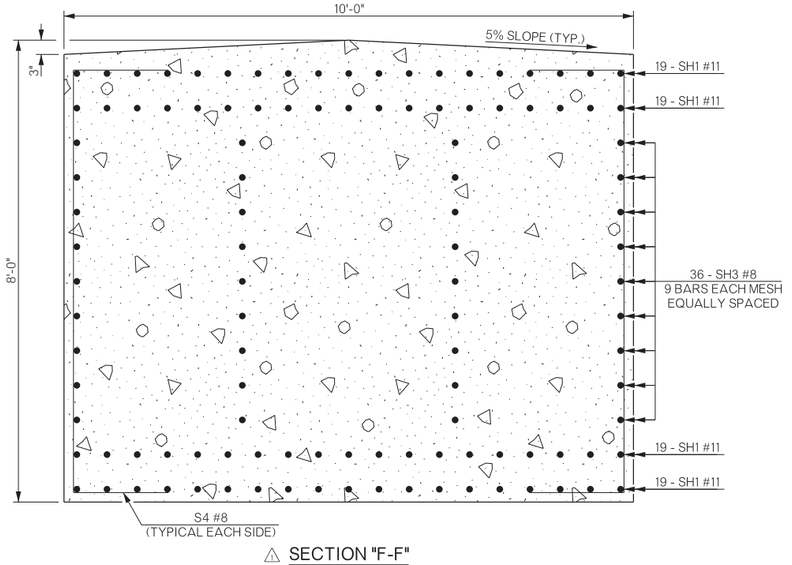


△ SECTION "D-D"

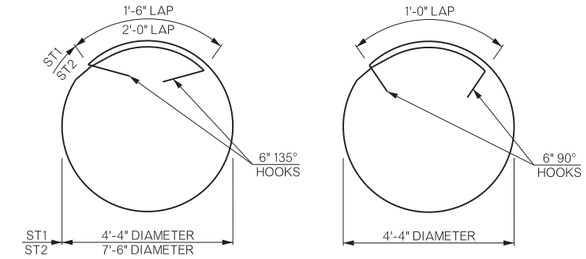


△ SECTION "E-E"

NOTE: S3 BARS WILL ALTERNATE HIGHER AND LOWER PAIRS EVERY 6" TO ENSURE ENGAGEMENT OF ALL LONGITUDINAL BARS.

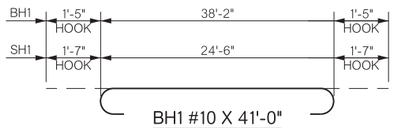


△ SECTION "F-F"

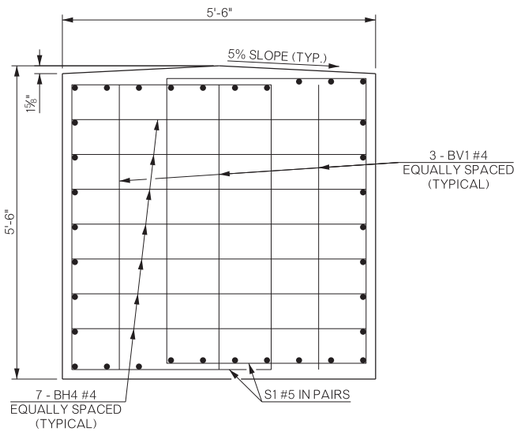


ST1 #5 X 16'-2"
△ ST2 #7 X 26'-7"

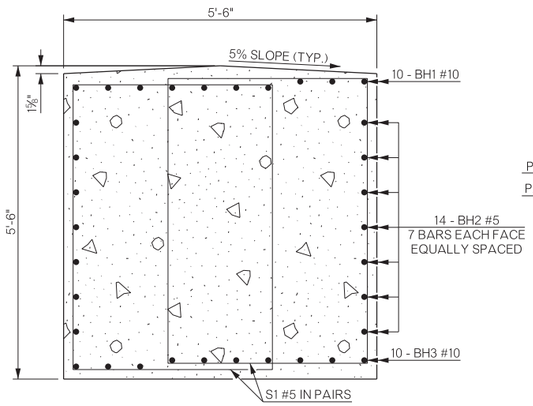
△ T1 #5 X 15'-8"
△



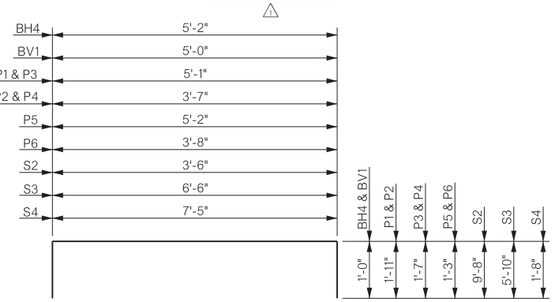
BH1 #10 X 41'-0"
△ SH1 #11 X 27'-8"
△



END OF PIER CAP REINFORCING



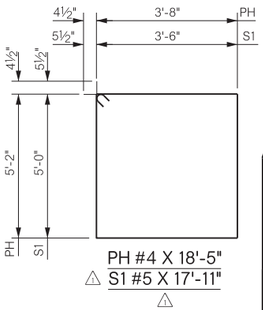
TYPICAL SECTION THROUGH PIER
CAP BETWEEN PEDESTALS



BH4 #4 X 7'-2"
BV1 #4 X 7'-0"
P1 #4 X 8'-11"
P2 #4 X 7'-5"

P3 #4 X 8'-3"
P4 #4 X 6'-9"
P5 #4 X 7'-8"
P6 #4 X 6'-2"

S2 #8 X 22'-10" △
S3 #8 X 18'-2" △
S4 #8 X 10'-9" △



PH #4 X 18'-5"
△ S1 #5 X 17'-11"
△

REVISIONS

REV. NO.	DESCRIPTION	DATE
△1	REVISE DETAILS & REINFORCING	7/06/21
△2	REVISE DETAIL	3/09/22

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

PIERS NO. 2, 3 AND 4 DETAILS
(SHEET 3 OF 3)

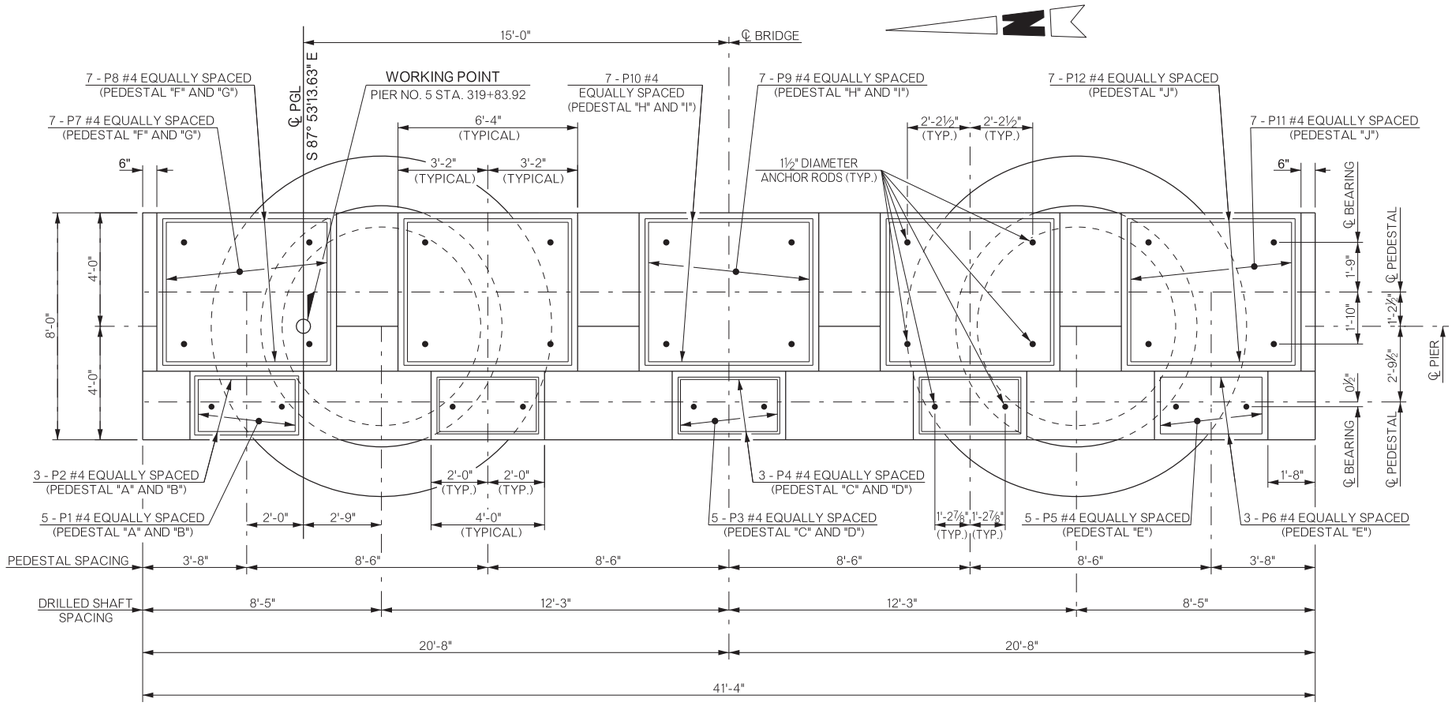
Design	CJO	6/20
Detail	BRJ	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

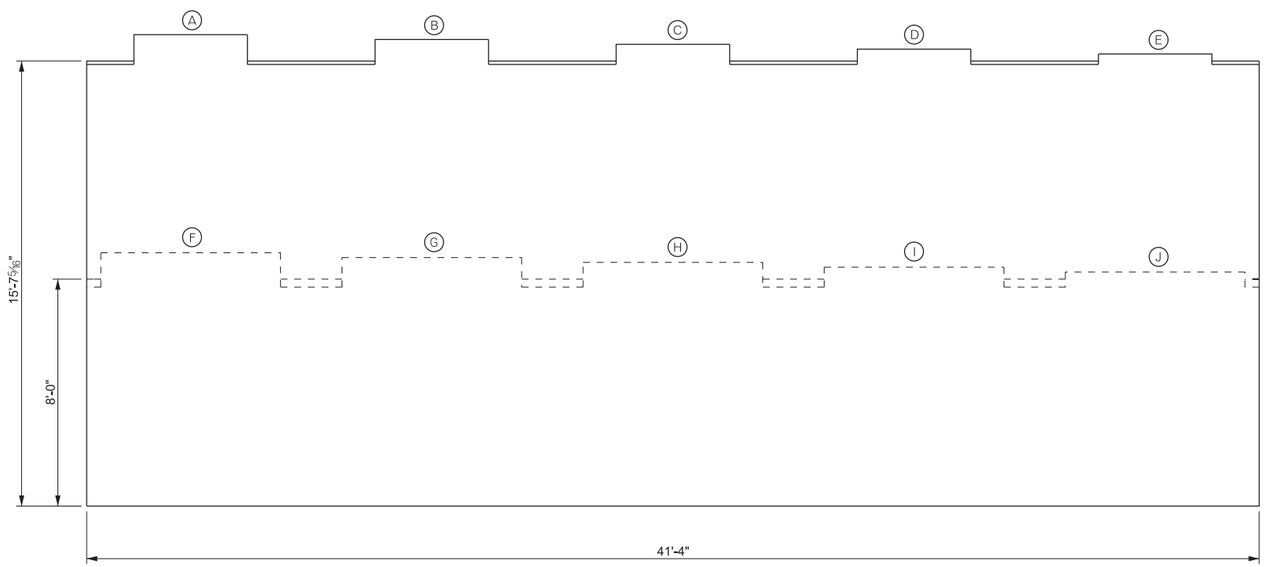
STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B035

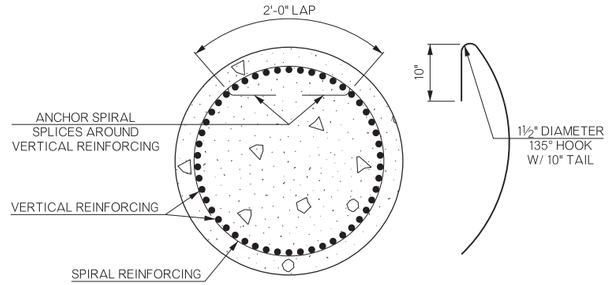
REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE DETAILS & QUANTITIES	7/06/21



PLAN

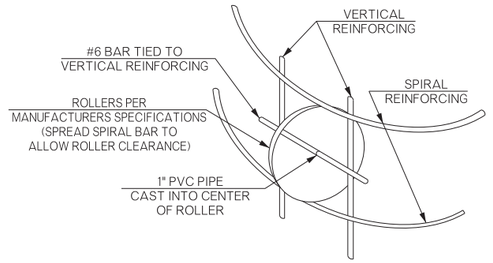


ELEVATION

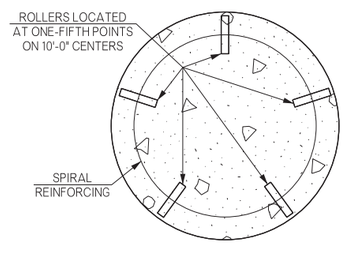


⚠ SPIRAL REINFORCING SPLICE DETAIL

NOTE: SPIRAL BARS SHALL CONFORM TO AASHTO M32. SPIRAL BAR LENGTH DOES NOT INCLUDE LAP. IF A LAP IS REQUIRED, THE LENGTH OF THE LAP SHALL BE AS SHOWN.



⚠ ROLLER INSTALLATION



⚠ ROLLER PLACEMENT

⚠ ROLLER DETAILS

NOTE: REINFORCING CAGE CENTERING DEVICES SHALL CONSIST OF ROLLERS PLACED AT SPACING AS SHOWN AND HAVE THE CHARACTERISTICS AS INDICATED IN THE MANUFACTURERS SPECIFICATIONS. SLAB BOLSTERS AND HIGH CHAIRS WILL BE ALLOWED BY THE DEPARTMENT.

PIER NO. 5 PEDESTAL ELEVATIONS	
PEDESTAL	ELEVATION
A	562.82'
B	562.65'
C	562.48'
D	562.31'
E	562.14'
F	555.21'
G	555.04'
H	554.87'
I	554.70'
J	554.53'

QUANTITIES - PIER NO. 5			
ITEM	UNIT	TOTAL	
CLASS A CONCRETE	C.Y.	414.70	⚠
REINFORCING STEEL	LB.	7,930.00	
EPOXY-COATED REINFORCING STEEL	LB.	111,840.00	⚠
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	339.00	⚠
DRILLED SHAFTS 144" DIAMETER	L.F.	124.00	

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

BRIDGE A & B MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

PIER NO. 5 DETAILS
(SHEET 1 OF 3)

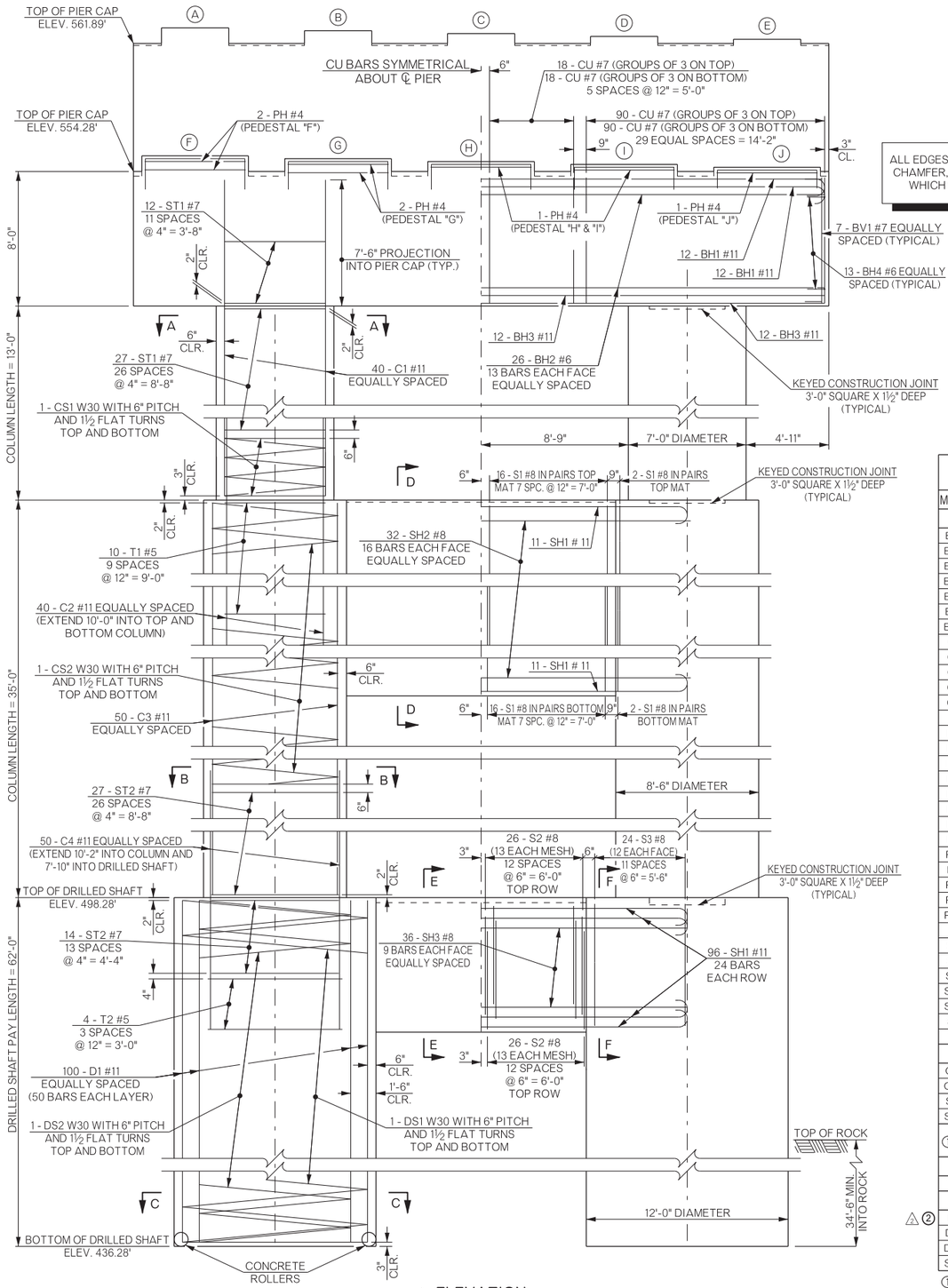
Design	CJO	6/20
Detail	BRJ	3/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) SHEET NO. B036

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE DETAILS & BAR LIST	7/06/21
2	ADD NOTE	9/14/21



△ ELEVATION

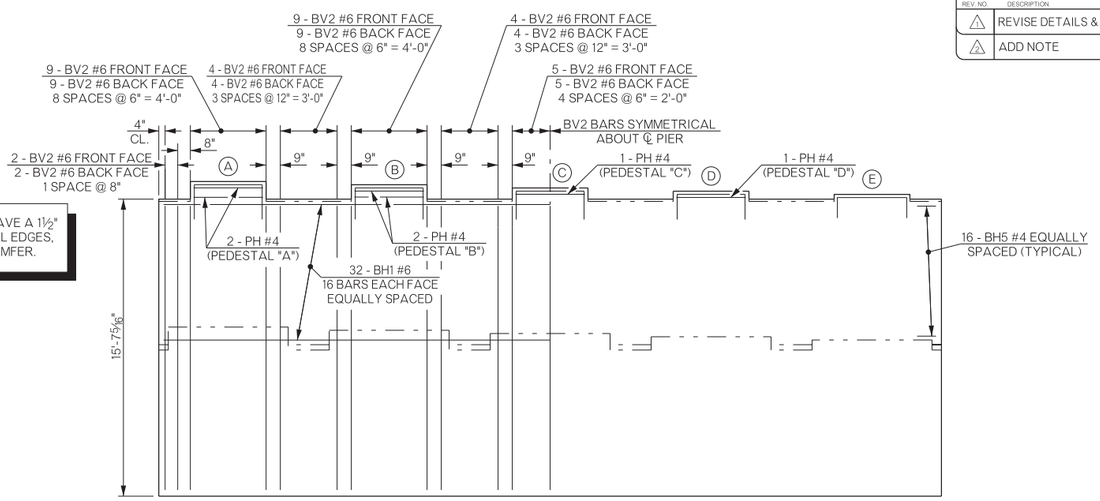
ALL EDGES OF PIER CAP SHALL HAVE A 1½" CHAMFER, EXCEPT FOR PEDESTAL EDGES, WHICH SHALL HAVE A ¾" CHAMFER.

BAR LIST - PIER NO. 5

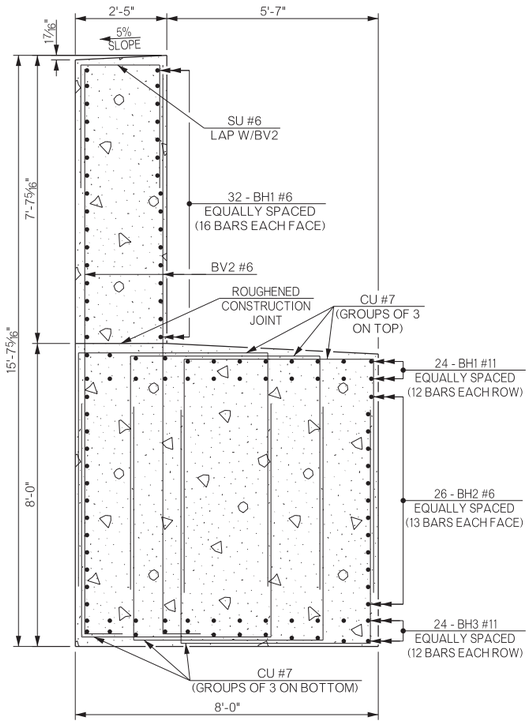
MARK	NO.	SIZE	FORM	LENGTH
EPOXY COATED				
BH1	24	#11	BNT.	44'-2"
BH2	26	#6	STR.	41'-0"
BH3	24	#11	STR.	41'-0"
BH4	26	#6	BNT.	9'-8"
BH5	32	#4	BNT.	4'-1"
BV1	14	#7	BNT.	9'-5"
BV2	130	#6	BNT.	16'-0"
C1	80	#11	STR.	20'-3"
C2	80	#11	STR.	20'-0"
C3	100	#11	STR.	34'-8" △
C4	100	#11	STR.	18'-0" △
CU	432	#7	BNT.	17'-4"
P1	10	#4	BNT.	5'-10"
P2	6	#4	BNT.	7'-5"
P3	10	#4	BNT.	5'-2"
P4	6	#4	BNT.	6'-9"
P5	5	#4	BNT.	4'-7"
P6	4	#4	BNT.	6'-2"
P7	14	#4	BNT.	9'-4"
P8	14	#4	BNT.	10'-1"
P9	14	#4	BNT.	8'-8"
P10	14	#4	BNT.	9'-5"
P11	7	#4	BNT.	8'-0"
P12	7	#4	BNT.	8'-9"
PH1	6	#4	BNT.	12'-3"
PH2	7	#4	BNT.	23'-3"
S1	72	#8	BNT.	22'-10" △
S2	104	#8	BNT.	19'-10" △
S3	48	#8	BNT.	10'-8" △
SH1	118	#11	BNT.	27'-8" △
SH2	32	#8	STR.	24'-11" △
SH3	36	#8	STR.	24'-6" △
SU	65	#6	BNT.	8'-7"
T1	20	#5	BNT.	20'-11"
NON-EPOXY COATED				
CS1	2	W30	SPIRAL	195'-9"
CS2	2	W30	SPIRAL	1,272'-8"
ST1	78	#7	BNT.	21'-11"
ST2	54	#7	BNT.	26'-7"
①TWO 144" DRILLED SHAFTS				
EPOXY COATED				
T2	10	#5	BNT.	25'-7"
NON-EPOXY COATED				
△② D1	200	#11	STR.	61'-7"
DS1	2	W30	SPIRAL	4,360'-6"
DS2	2	W30	SPIRAL	3,567'-10"
ST2	28	#7	BNT.	26'-7"

① INCLUDED IN PRICE BID PER LINEAR FOOT OF DRILLED SHAFT.

△② INCLUDES 7'-0" LAP LENGTH. LAPS SHALL BE STAGGERED.



△ ELEVATION OF HIGH STEP CAP

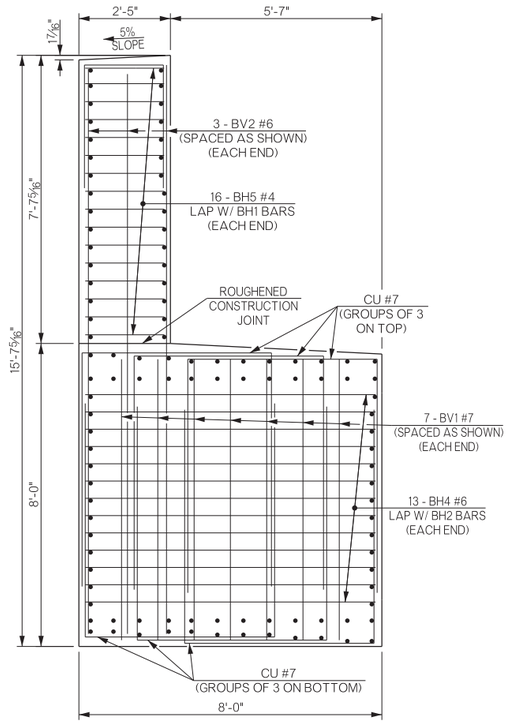


TYPICAL SECTION THROUGH PIER CAP BETWEEN PEDESTALS

NOTE: TOP OF PIER CAP SHALL SLOPE TO EDGE AT A RATE OF 5%

PENETRATING WATER REPELLENT TREATMENT SHALL BE APPLIED TO THE TOP OF THE PIER CAP, INCLUDING ALL SURFACES OF THE PEDESTALS, AND ALL VERTICAL FACES OF THE PIER CAP.

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND



END OF PIER CAP REINFORCING

NOTE: TOP OF PIER CAP SHALL SLOPE TO EDGE AT A RATE OF 5%

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

PIER NO. 5 DETAILS
(SHEET 2 OF 3)

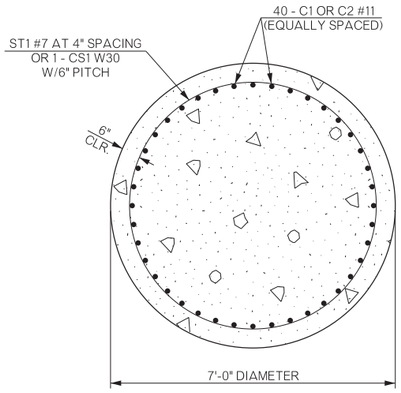
Design	CJO	6/20
Detail	BRJ	3/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

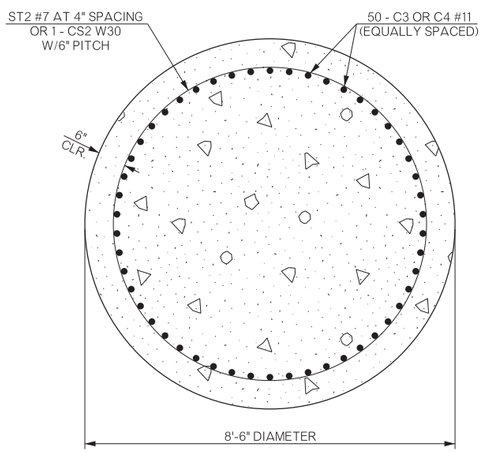
STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B037

REVISIONS			
REV. NO.	DESCRIPTION	DATE	
1	REVISE DETAILS & REINFORCING	7/06/21	

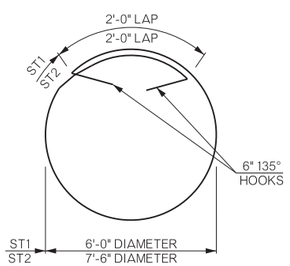


SECTION "A-A"

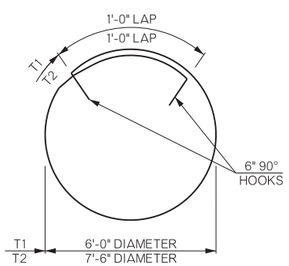


SECTION "B-B"

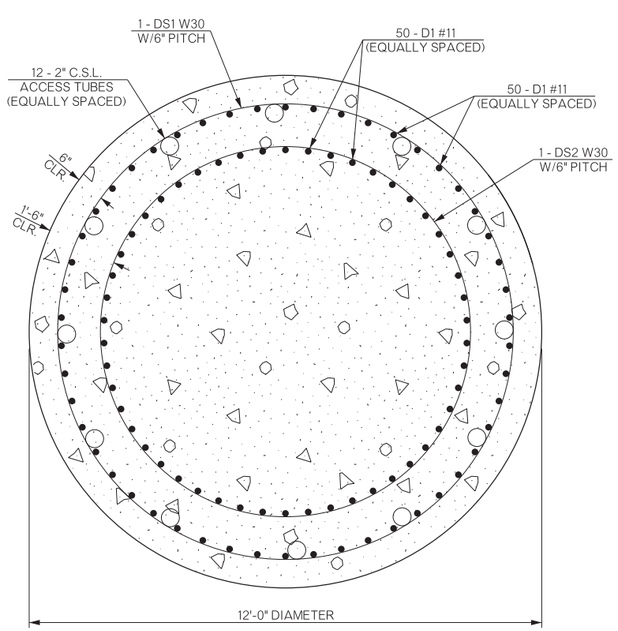
BH1 #11 X 44'-2"
⚠ SH1 #11 X 27'-8"
⚠



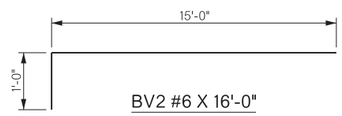
⚠ ST1 #7 X 21'-11"
⚠ ST2 #7 X 26'-7"



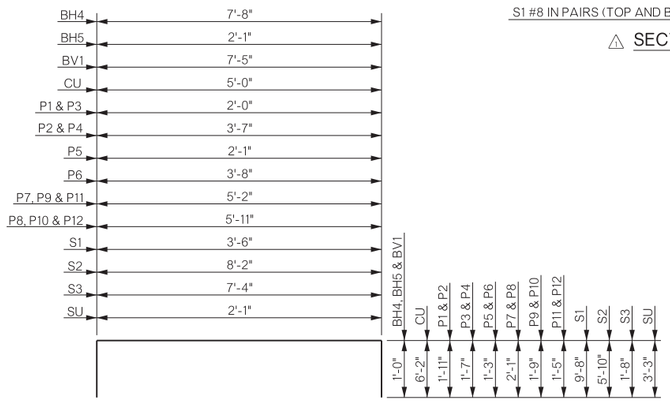
⚠ T1 #5 X 20'-11"
⚠ T2 #5 X 25'-7"



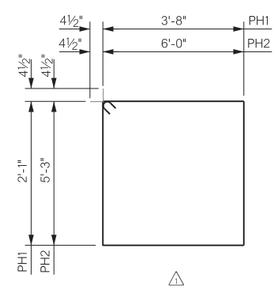
SECTION "C-C"



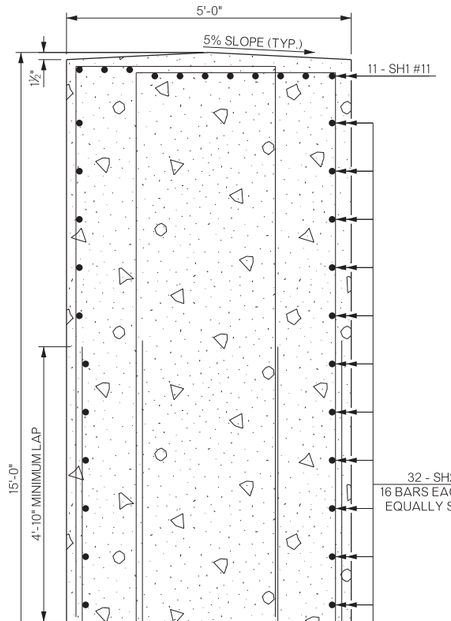
BV2 #6 X 16'-0"



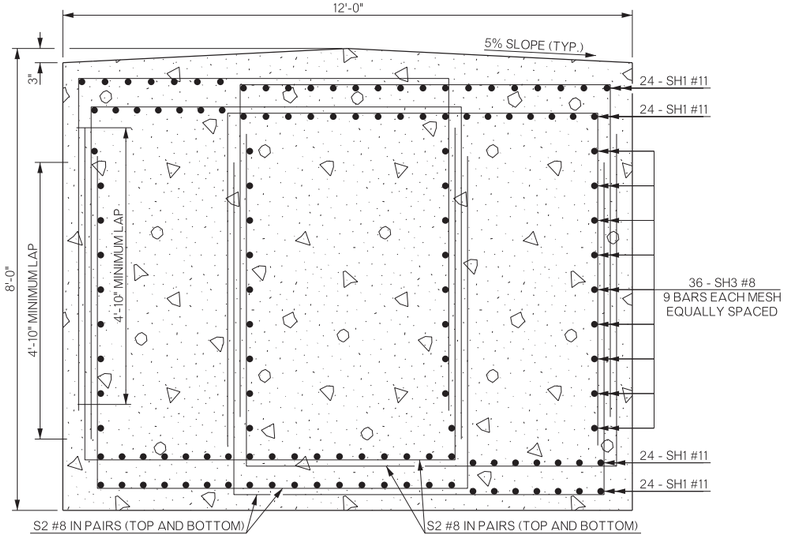
BH4 #6 X 9'-8"	P4 #4 X 6'-9"	P11 #4 X 8'-0"
BH5 #4 X 4'-1"	P5 #4 X 4'-7"	P12 #4 X 8'-9"
BV1 #7 X 9'-5"	P6 #4 X 6'-2"	S1 #8 X 22'-10" ⚠
CU #7 X 17'-4"	P7 #4 X 9'-4"	S2 #8 X 19'-10" ⚠
P1 #4 X 5'-10"	P8 #4 X 10'-1"	S3 #8 X 10'-8" ⚠
P2 #4 X 7'-5"	P9 #4 X 8'-8"	SU #6 X 8'-7"
P3 #4 X 5'-3"	P10 #4 X 9'-5"	



⚠ PH1 #4 X 12'-3"
PH2 #4 X 23'-3"

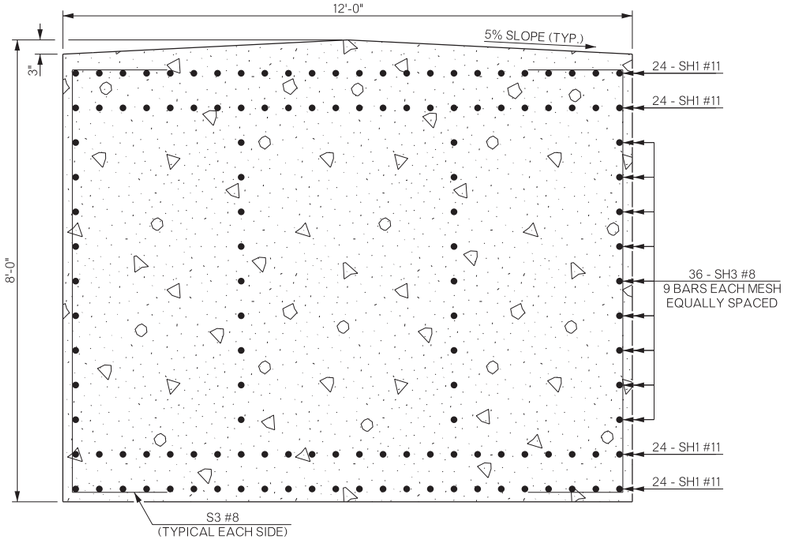


⚠ SECTION "D-D"



⚠ SECTION "E-E"

NOTE: S2 BARS WILL ALTERNATE HIGHER AND LOWER PAIRS EVERY 6" TO ENSURE ENGAGEMENT OF ALL LONGITUDINAL BARS.



⚠ SECTION "F-F"

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

PIER NO. 5 DETAILS
(SHEET 3 OF 3)

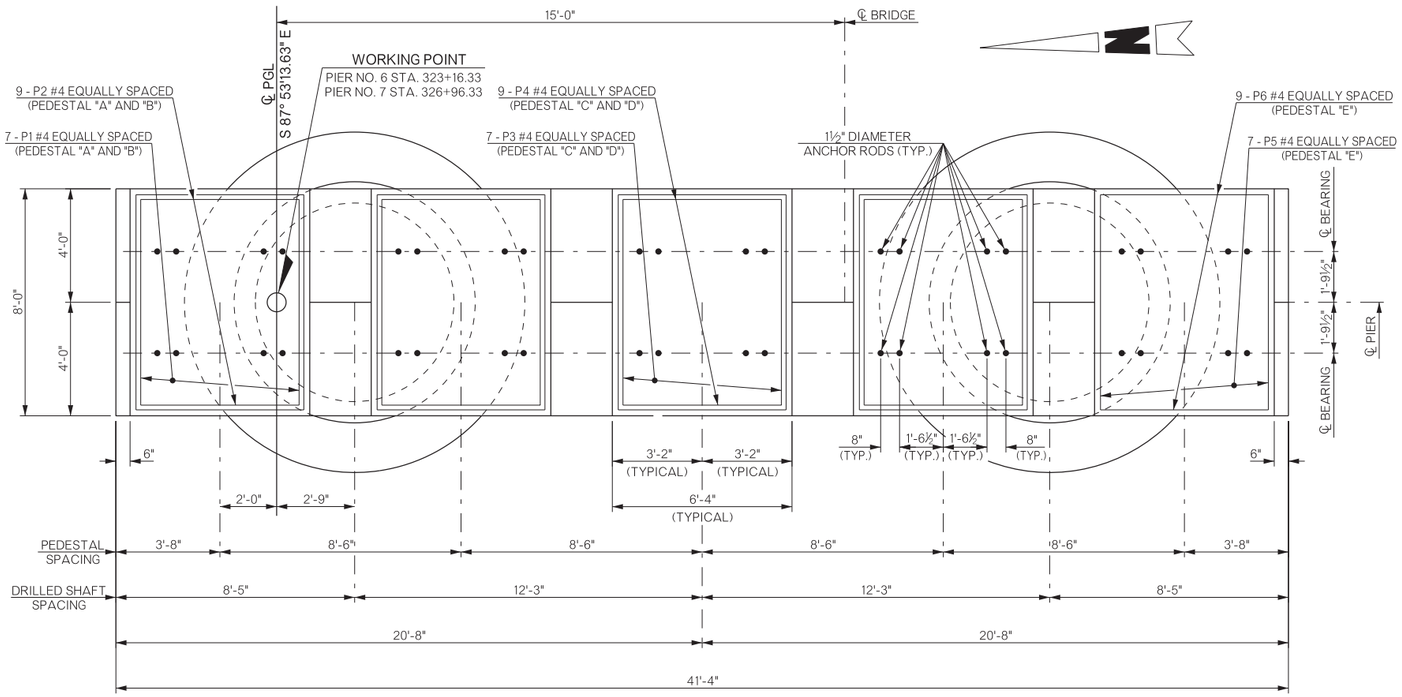
Design	CJO	6/20
Detail	BRJ	3/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

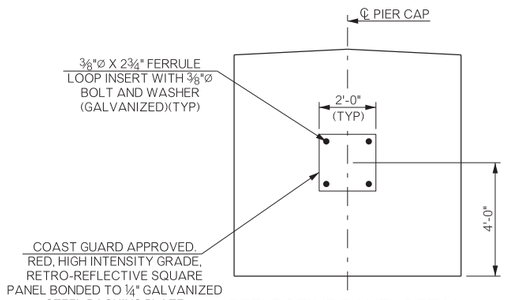
JOB PIECE NO. 30416(04) | SHEET NO. B038

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE DETAILS & QUANTITIES	7/06/21

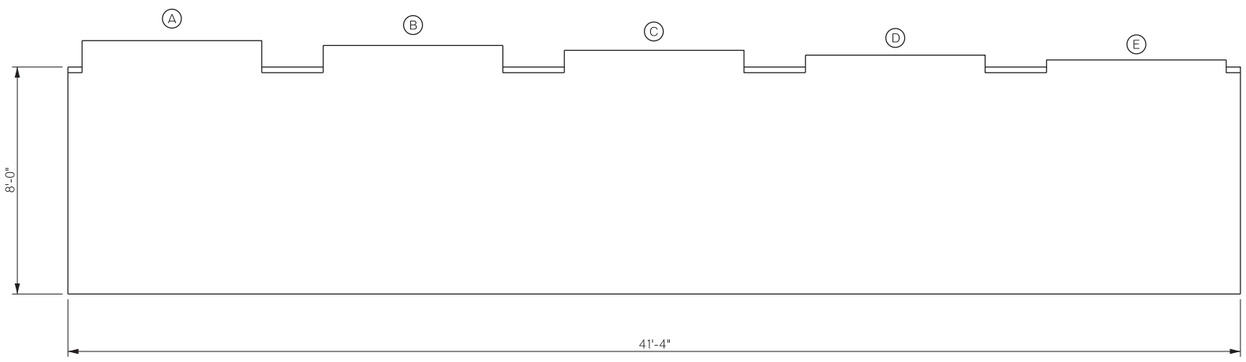


PLAN

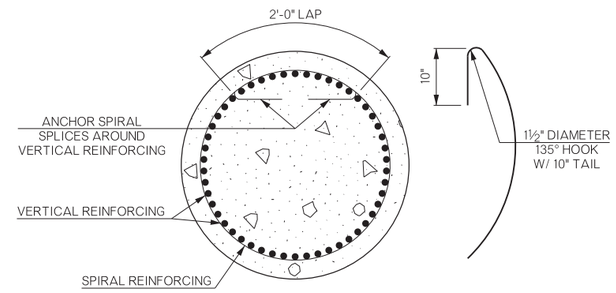
PEDESTAL ELEVATIONS		
PEDESTAL	ELEVATION	
	PIER NO. 6	PIER NO. 7
Ⓐ	559.43'	558.97'
Ⓑ	559.26'	558.80'
Ⓒ	559.09'	558.63'
Ⓓ	558.92'	558.46'
Ⓔ	558.75'	558.29'



REFLECTIVE PANEL DETAIL
(UPSTREAM FACE, PIERS 6 & 7 ONLY)

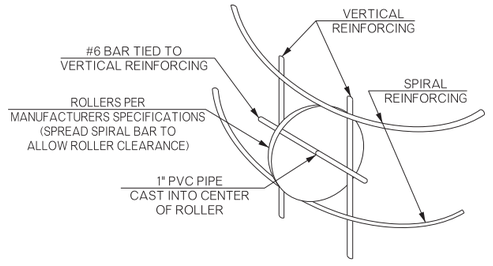


ELEVATION

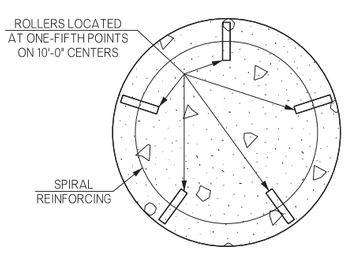


⚠ SPIRAL REINFORCING SPLICE DETAIL

NOTE: SPIRAL BARS SHALL CONFORM TO AASHTO M32. SPIRAL BAR LENGTH DOES NOT INCLUDE LAP. IF A LAP IS REQUIRED, THE LENGTH OF THE LAP SHALL BE AS SHOWN.



⚠ ROLLER INSTALLATION



⚠ ROLLER PLACEMENT

⚠ ROLLER DETAILS

NOTE: REINFORCING CAGE CENTERING DEVICES SHALL CONSIST OF ROLLERS PLACED AT SPACING AS SHOWN AND HAVE THE CHARACTERISTICS AS INDICATED IN THE MANUFACTURERS SPECIFICATIONS. SLAB BOLSTERS AND HIGH CHAIRS WILL BE ALLOWED BY THE DEPARTMENT.

QUANTITIES - PIER NO. 6 AND 7				
ITEM	UNIT	PIER NO. 6	PIER NO. 7	
CLASS A CONCRETE	C.Y.	395.70	395.70	⚠
REINFORCING STEEL	LB.	8,050.00	8,050.00	⚠
EPOXY-COATED REINFORCING STEEL	LB.	108,970.00	108,970.00	⚠
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	266.00	266.00	⚠
DRILLED SHAFTS 144" DIAMETER	L.F.	134.00	140.00	

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

PIERS NO. 6 AND 7 DETAILS
(SHEET 1 OF 3)

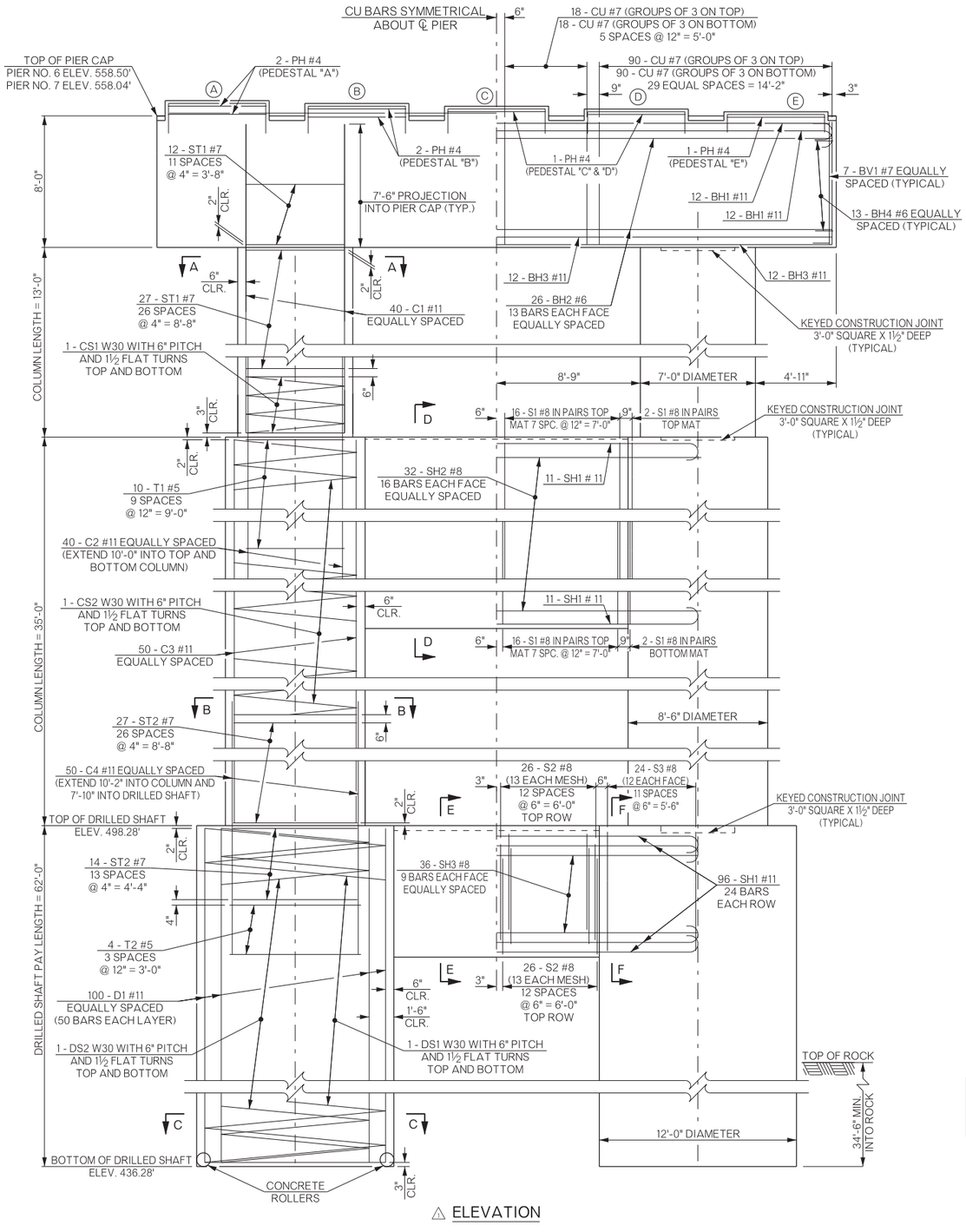
Design	CJO	6/20
Detail	BRJ	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B039

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE DETAILS & BAR LIST	7/06/21
2	ADD NOTE	9/14/21



△ ELEVATION

BAR LIST - PIER NO. 6				
MARK	NO.	SIZE	FORM	LENGTH
EPOXY COATED				
BH1	24	#11	BNT.	44'-2"
BH2	26	#6	STR.	41'-0"
BH3	24	#11	STR.	41'-0"
BH4	26	#6	BNT.	9'-8"
BV1	14	#7	BNT.	9'-5"
C1	80	#11	STR.	23'-3"
C2	80	#11	STR.	20'-0"
C3	100	#11	STR.	34'-8" △1
C4	100	#11	STR.	18'-0" △1
CU	432	#7	BNT.	17'-4"
P1	14	#4	BNT.	11'-7"
P2	18	#4	BNT.	9'-11"
P3	14	#4	BNT.	10'-11"
P4	18	#4	BNT.	9'-3"
P5	7	#4	BNT.	10'-4"
P6	9	#4	BNT.	8'-8"
PH	6	#4	BNT.	28'-1"
S1	72	#8	BNT.	22'-10" △1
S2	104	#8	BNT.	19'-10" △1
S3	48	#8	BNT.	10'-8" △1
SH1	118	#11	BNT.	27'-8" △1
SH2	32	#8	STR.	24'-11" △1
SH3	36	#8	STR.	24'-6" △1
T1	20	#5	BNT.	20'-11"
NON-EPOXY COATED				
CS1	2	W30	SPIRAL	315'-2"
CS2	2	W30	SPIRAL	1,272'-8" △1
ST1	78	#7	BNT.	21'-11"
ST2	54	#7	BNT.	26'-7"
①TWO 144" DRILLED SHAFTS				
EPOXY COATED				
T2	10	#5	BNT.	25'-7"
NON-EPOXY COATED				
△② D1	200	#11	STR.	66'-7"
DS1	2	W30	SPIRAL	4,706'-1"
DS2	2	W30	SPIRAL	3,850'-8"
ST2	28	#7	BNT.	26'-7"

BAR LIST - PIER NO. 7				
MARK	NO.	SIZE	FORM	LENGTH
EPOXY COATED				
BH1	24	#11	BNT.	44'-2"
BH2	26	#6	STR.	41'-0"
BH3	24	#11	STR.	41'-0"
BH4	26	#6	BNT.	9'-8"
BV1	14	#7	BNT.	9'-5"
C1	80	#11	STR.	23'-3"
C2	80	#11	STR.	20'-0"
C3	100	#11	STR.	34'-8" △1
C4	100	#11	STR.	18'-0" △1
CU	432	#7	BNT.	17'-4"
P1	14	#4	BNT.	11'-7"
P2	18	#4	BNT.	9'-11"
P3	14	#4	BNT.	10'-11"
P4	18	#4	BNT.	9'-3"
P5	7	#4	BNT.	10'-4"
P6	9	#4	BNT.	8'-8"
PH	6	#4	BNT.	28'-1"
S1	72	#8	BNT.	22'-10" △1
S2	104	#8	BNT.	19'-10" △1
S3	48	#8	BNT.	10'-8" △1
SH1	118	#11	BNT.	27'-8" △1
SH2	32	#8	STR.	24'-11" △1
SH3	36	#8	STR.	24'-6" △1
T1	20	#5	BNT.	20'-11"
NON-EPOXY COATED				
CS1	2	W30	SPIRAL	315'-2"
CS2	2	W30	SPIRAL	1,272'-8" △1
ST1	78	#7	BNT.	21'-11"
ST2	54	#7	BNT.	26'-7"
①TWO 144" DRILLED SHAFTS				
EPOXY COATED				
T2	10	#5	BNT.	25'-7"
NON-EPOXY COATED				
△② D1	200	#11	STR.	69'-7"
DS1	2	W30	SPIRAL	4,913'-6"
DS2	2	W30	SPIRAL	4,020'-4"
ST2	28	#7	BNT.	26'-7"

① INCLUDED IN PRICE BID PER LINEAR FOOT OF DRILLED SHAFT.

△② INCLUDES 7'-0" LAP LENGTH. LAPS SHALL BE STAGGERED.

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

ALL EDGES OF PIER CAP SHALL HAVE A 1½" CHAMFER, EXCEPT FOR PEDESTAL EDGES, WHICH SHALL HAVE A ¾" CHAMFER.

PENETRATING WATER REPELLENT TREATMENT SHALL BE APPLIED TO THE TOP OF THE PIER CAP, INCLUDING ALL SURFACES OF THE PEDESTALS, AND ALL VERTICAL FACES OF THE PIER CAP.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

PIERS NO. 6 AND 7 DETAILS (SHEET 2 OF 3)

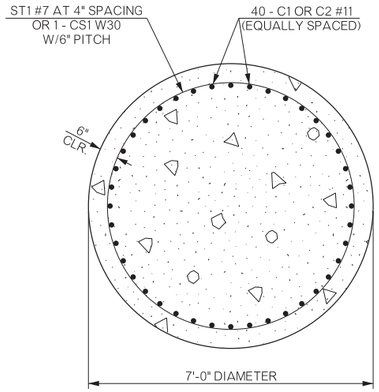
Design	CJO	6/20
Detail	BRJ	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

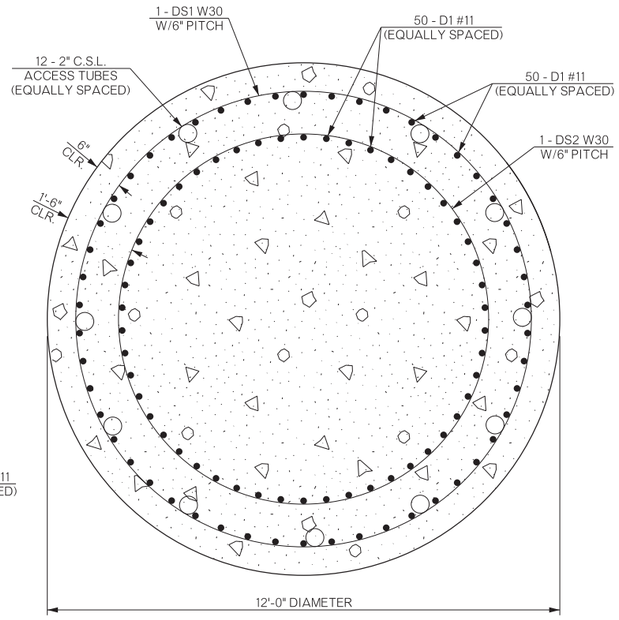
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) | SHEET NO. B040

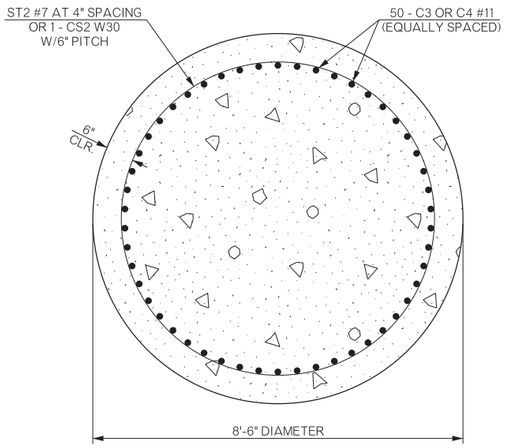
REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE DETAILS & REINFORCING	7/06/21



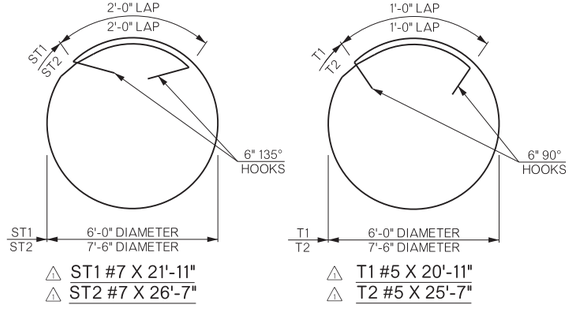
SECTION "A-A"



SECTION "C-C"

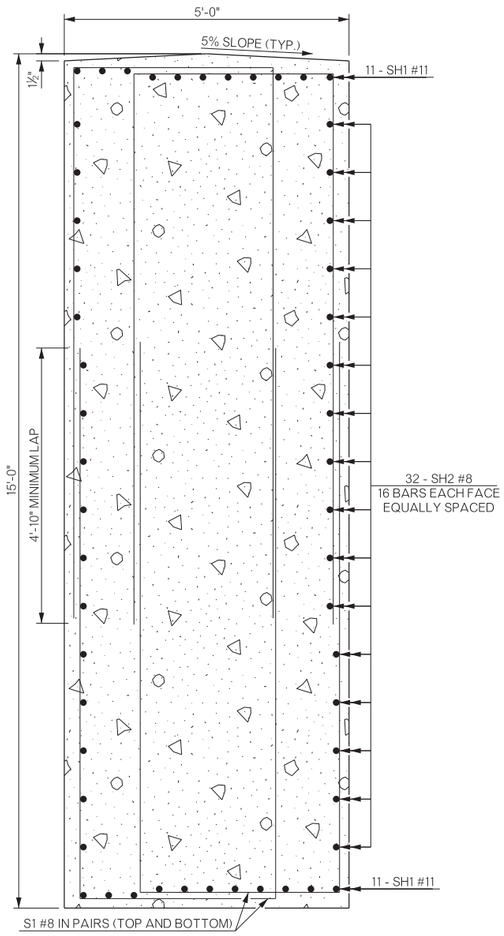


SECTION "B-B"

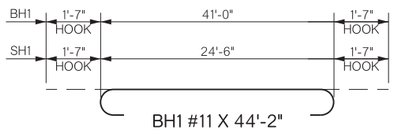


△ ST1 #7 X 21'-11"
△ ST2 #7 X 26'-7"

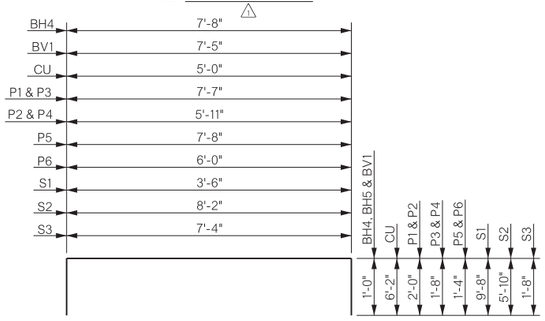
△ T1 #5 X 20'-11"
△ T2 #5 X 25'-7"



△ SECTION "D-D"



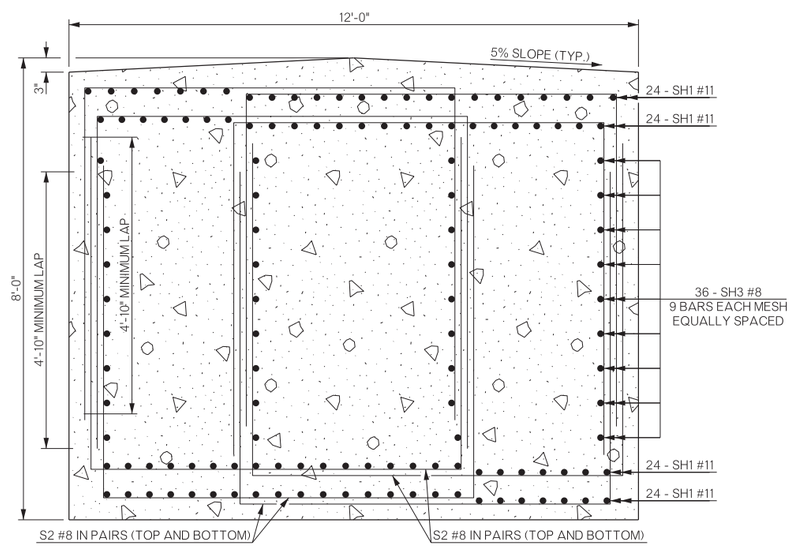
BH1 #11 X 44'-2"
△ SH1 #11 X 27'-8"



BH4 #6 X 9'-8"
BV1 #7 X 9'-5"
CU #7 X 17'-4"
P1 #4 X 11'-7"

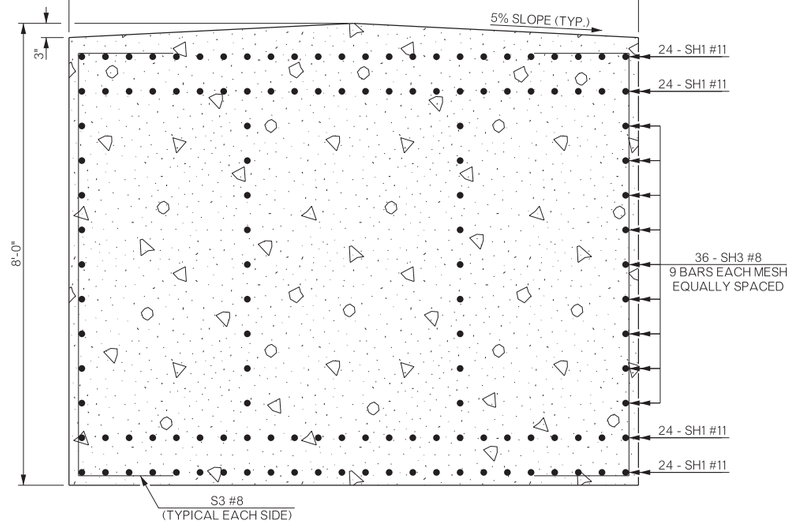
P2 #4 X 9'-11"
P3 #4 X 10'-11"
P4 #4 X 9'-3"
P5 #4 X 10'-4"

P6 #4 X 8'-8"
S1 #8 X 22'-10" △
S2 #8 X 19'-10" △
S3 #8 X 10'-8" △

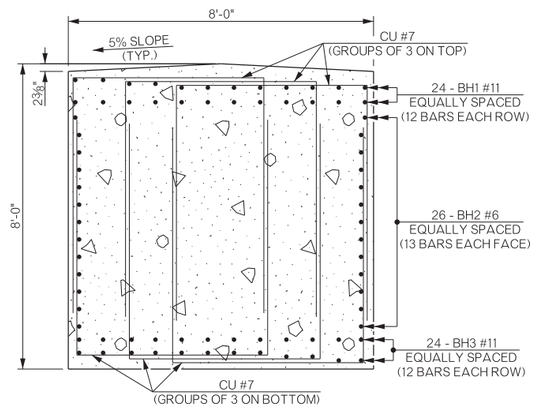


△ SECTION "E-E"

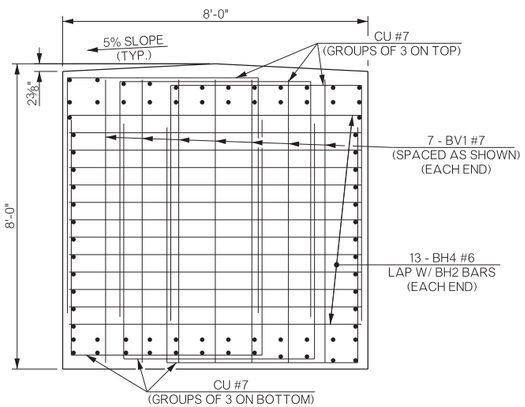
NOTE: S2 BARS WILL ALTERNATE HIGHER AND LOWER PAIRS EVERY 6" TO ENSURE ENGAGEMENT OF ALL LONGITUDINAL BARS.



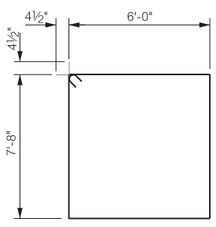
△ SECTION "F-F"



TYPICAL SECTION THROUGH PIER CAP BETWEEN PEDESTALS



END OF PIER CAP REINFORCING



△ PH #4 X 28'-1" △

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

PIERS NO. 6 AND 7 DETAILS
(SHEET 3 OF 3)

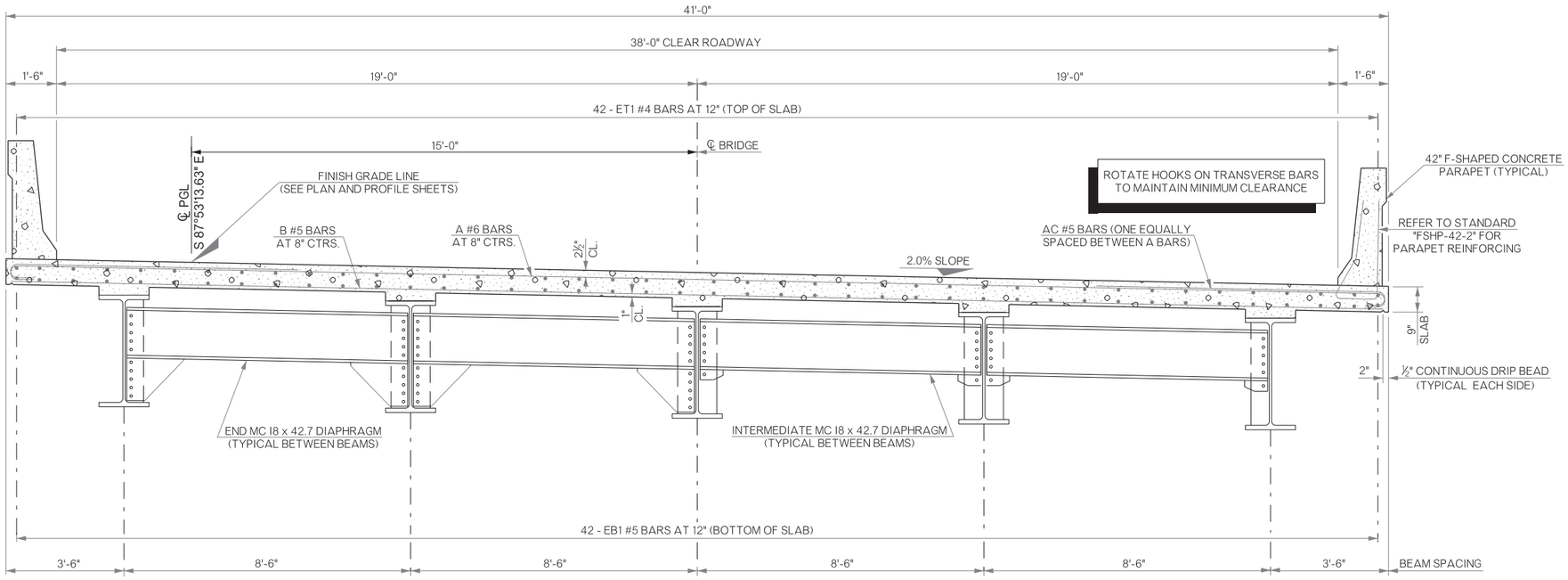
Design	CJO	6/20
Detail	BRJ	4/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) | SHEET NO. B041

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE QUANTITY	7/06/21
2	REVISE QUANTITY & ADD DETAIL	9/14/21



HALF SECTION AT END DIAPHRAGM

TYPICAL SECTION OF SPAN NO. 1 THRU NO. 5

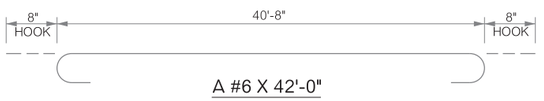
NOTE: ALL DIMENSIONS ARE ALONG THE ℄ BEAM.

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

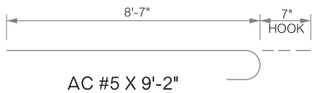
HALF SECTION AT INTERMEDIATE DIAPHRAGM

QUANTITIES - SUPERSTRUCTURE

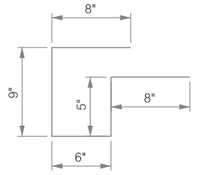
ITEM	UNIT	TOTAL
SAW-CUT GROOVING	S.Y.	5,793.70
42" F-SHAPED PARAPET	L.F.	3,100.00
STRUCTURAL STEEL M270 GRADE 50W	LB.	4,731,810.00
STRUCTURAL STEEL M270 GRADE 70W	LB.	784,880.00
STAINLESS STEEL FIXED BEARING ASSEMBLY	E.A.	20.00
STAINLESS STEEL EXP. BEARING ASSEMBLY	E.A.	30.00
CLASS AA CONCRETE	C.Y.	1,967.30 1
EPOXY COATED REINFORCING STEEL	LB.	487,950.00 2
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	3,098.00
SEALED EXPANSION JOINT	L.F.	84.00
MODULAR EXPANSION JOINT	L.F.	82.00
SEALER CRACK PREPARATION	L.F.	266.00
SEALER RESIN	GAL.	1.80
(PL) INSTALLATION OF BRIDGE ITEMS (TYPE A)	E.A.	10.00
(PL) INSTALLATION OF BRIDGE ITEMS (TYPE B)	E.A.	10.00



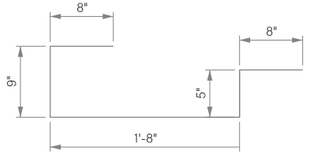
A #6 X 42'-0"



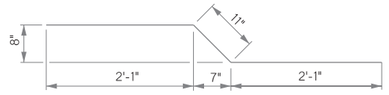
AC #5 X 9'-2"



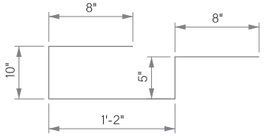
AH10 #4 X 3'-0"



AH11 #4 X 4'-2"

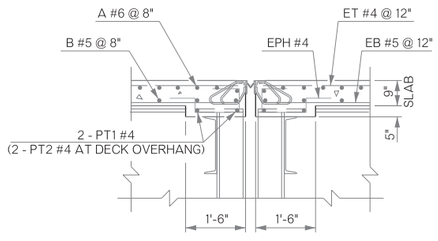


AS #4 X 5'-1"

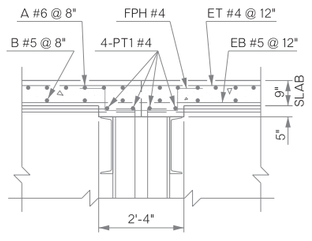


EPH #4 X 3'-9"

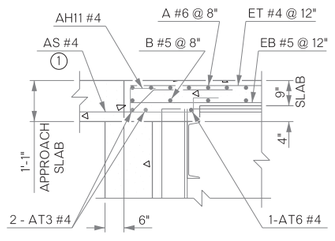
FPH #4 X 4'-10"



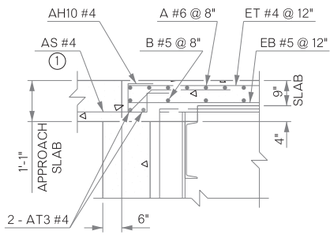
PIER NO. 2 AND PIER NO. 4
EXPANSION JOINT DETAIL



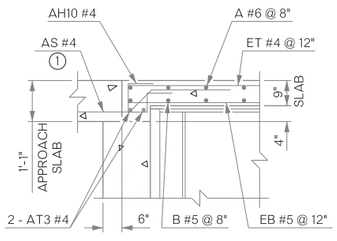
PIER NO. 1 AND PIER NO. 3
FIXED JOINT DETAIL



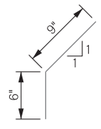
ABUTMENT NO. 1
BETWEEN BEAMS DETAIL



ABUTMENT NO. 1
OVER BEAMS DETAIL



ABUTMENT NO. 1
OUTSIDE OF BEAMS DETAIL



L #4 X 1'-3"
2

1 TIE TO TOP REINFORCING OF DECK SLAB AND BOTTOM REINFORCING OF THE APPROACH SLAB (PLACE BOTTOM LEG OF AS THRU JOINT)

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

SUPERSTRUCTURE DETAILS
(SHEET 1 OF 6)

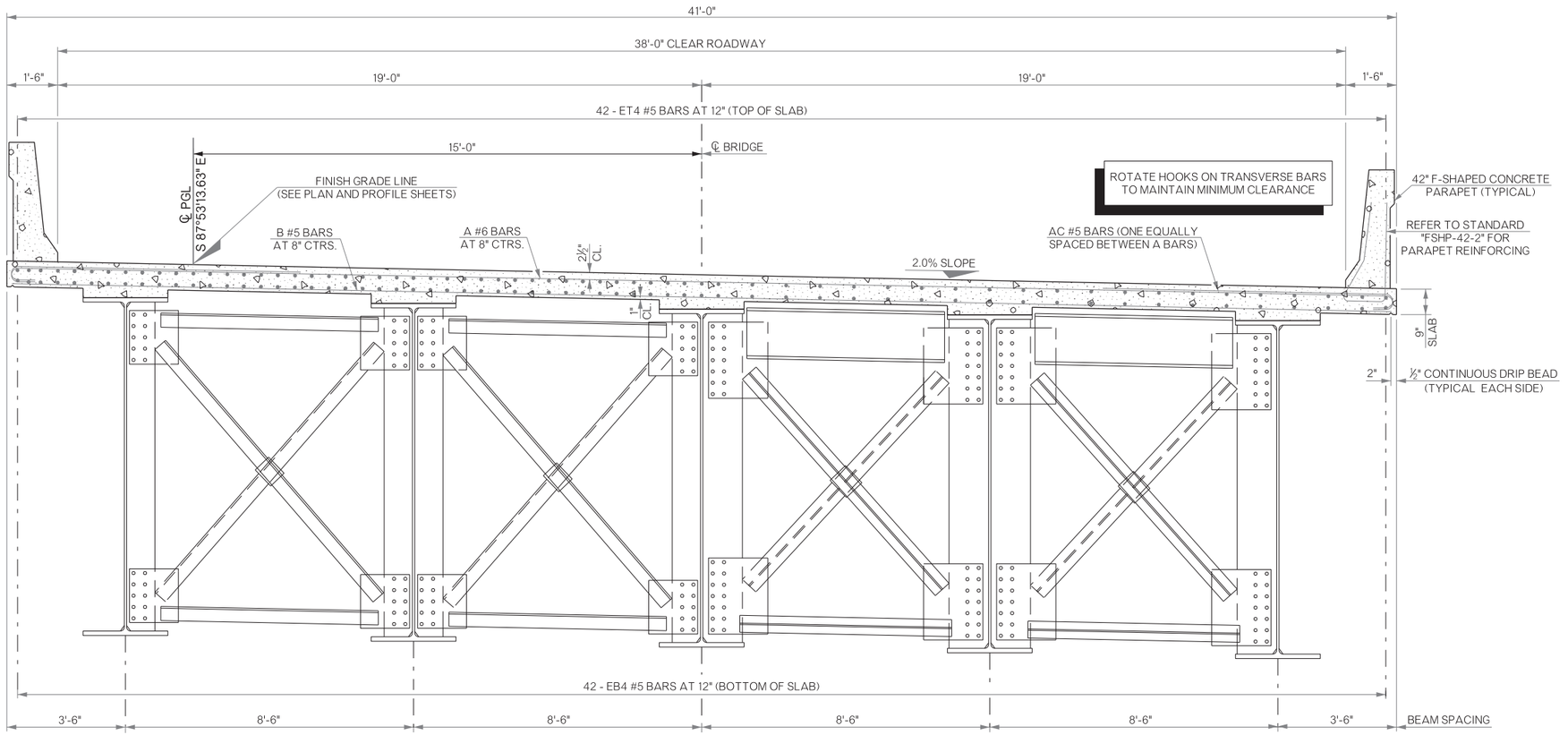
Design	CJO	8/18
Detail	DPG	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB/PIECE NO. 30416(04) — SHEET NO. B042

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE BAR LIST	9/14/21

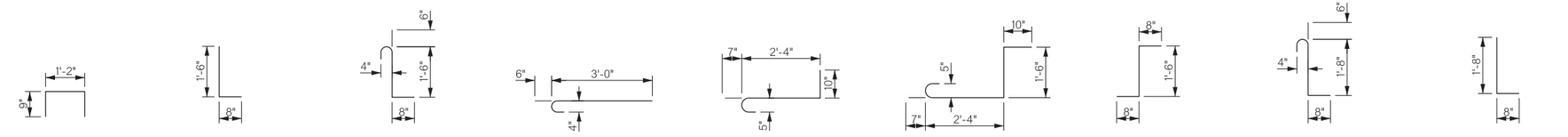


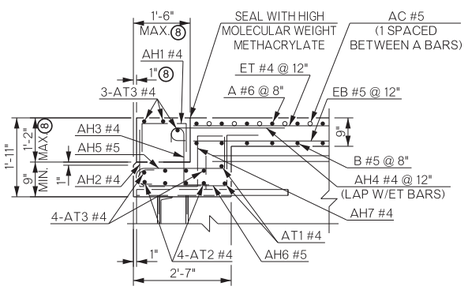
HALF SECTION AT INTERMEDIATE DIAPHRAGM

HALF SECTION AT END DIAPHRAGM OVER PIER NO. 5 AND ABUTMENT NO. 2

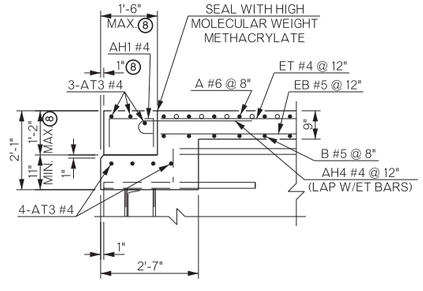
TYPICAL SECTION OVER SPAN NO. 6, 7 & 8

NOTE: ALL DIMENSIONS ARE ALONG THE ℄ BEAM.



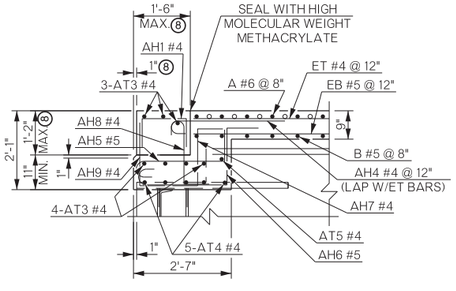


PIER NO. 5 AND ABUTMENT NO. 2
MODULAR EXPANSION JOINT
OUTSIDE OF BEAMS DETAIL



PIER NO. 5 AND ABUTMENT NO. 2
MODULAR EXPANSION JOINT
OVER BEAMS DETAIL

⑧ ADJUST AS NECESSARY TO ACCOMODATE CHOSEN MODULAR EXPANSION JOINT SYSTEM.



PIER NO. 5 AND ABUTMENT NO. 2
MODULAR EXPANSION JOINT
BETWEEN BEAMS DETAIL

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

BAR LIST - SUPERSTRUCTURE

	MARK	NO.	SIZE	FORM	LENGTH
	EPOXY COATED				
	A	2,317	#6	BNT.	42'-0"
	AC	4,626	#5	BNT.	9'-2"
	AH1	126	#4	BNT.	2'-8"
	AH2	24	#4	BNT.	2'-2"
	AH3	24	#4	BNT.	2'-8"
	AH4	126	#4	BNT.	3'-6"
	AH5	108	#5	BNT.	3'-9"
	AH6	108	#5	BNT.	5'-3"
	AH7	108	#4	BNT.	2'-10"
	AH8	84	#4	BNT.	2'-10"
	AH9	84	#4	BNT.	2'-4"
	AH10	14	#4	BNT.	3'-0"
	AH11	28	#4	BNT.	4'-2"
	AS	42	#4	BNT.	5'-1"
	AT1	12	#4	STR.	3'-2"
	AT2	24	#4	STR.	1'-11"
	AT3	21	#4	STR.	40'-8"
	AT4	60	#4	STR.	5'-8"
	AT5	12	#4	STR.	8'-1"
	AT6	4	#4	STR.	7'-0"
	B	2,317	#5	STR.	40'-8"
①	EB1	42	#5	STR.	208'-1"
①	EB2	42	#5	STR.	207'-2"
②	EB3	42	#5	STR.	100'-8"
③	EB4	42	#5	STR.	1,085'-6"
④	EB5	82	#4	STR.	262'-8"
	EPH	168	#4	BNT.	3'-9"
⑤	ET1	42	#4	STR.	205'-7"
⑤	ET2	42	#4	STR.	204'-8"
⑥	ET3	42	#4	STR.	99'-10"
③	ET4	42	#5	STR.	1,085'-6"
⑦	ET5	82	#6	STR.	266'-0"
	FPH	64	#4	BNT.	4'-10"
	FS2	1,948	#5	BNT.	7'-4"
△	L	1,152	#4	BNT.	1'-3"
	PT1	64	#4	STR.	7'-0"
	PT2	16	#4	STR.	2'-7"

① LENGTH INCLUDES THREE 2'-6" LAPS. LAPS SHALL BE STAGGERED.
② LENGTH INCLUDES ONE 2'-6" LAP. LAP SHALL BE STAGGERED.
③ LENGTH INCLUDES SEVENTEEN 2'-6" LAPS. LAPS SHALL BE STAGGERED.
④ LENGTH INCLUDES FOUR 1'-8" LAPS. LAPS SHALL BE STAGGERED.
⑤ LENGTH INCLUDES THREE 1'-8" LAPS. LAPS SHALL BE STAGGERED.
⑥ LENGTH INCLUDES ONE 1'-8" LAP. LAP SHALL BE STAGGERED.
⑦ LENGTH INCLUDES FOUR 2'-6" LAPS. LAPS SHALL BE STAGGERED.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

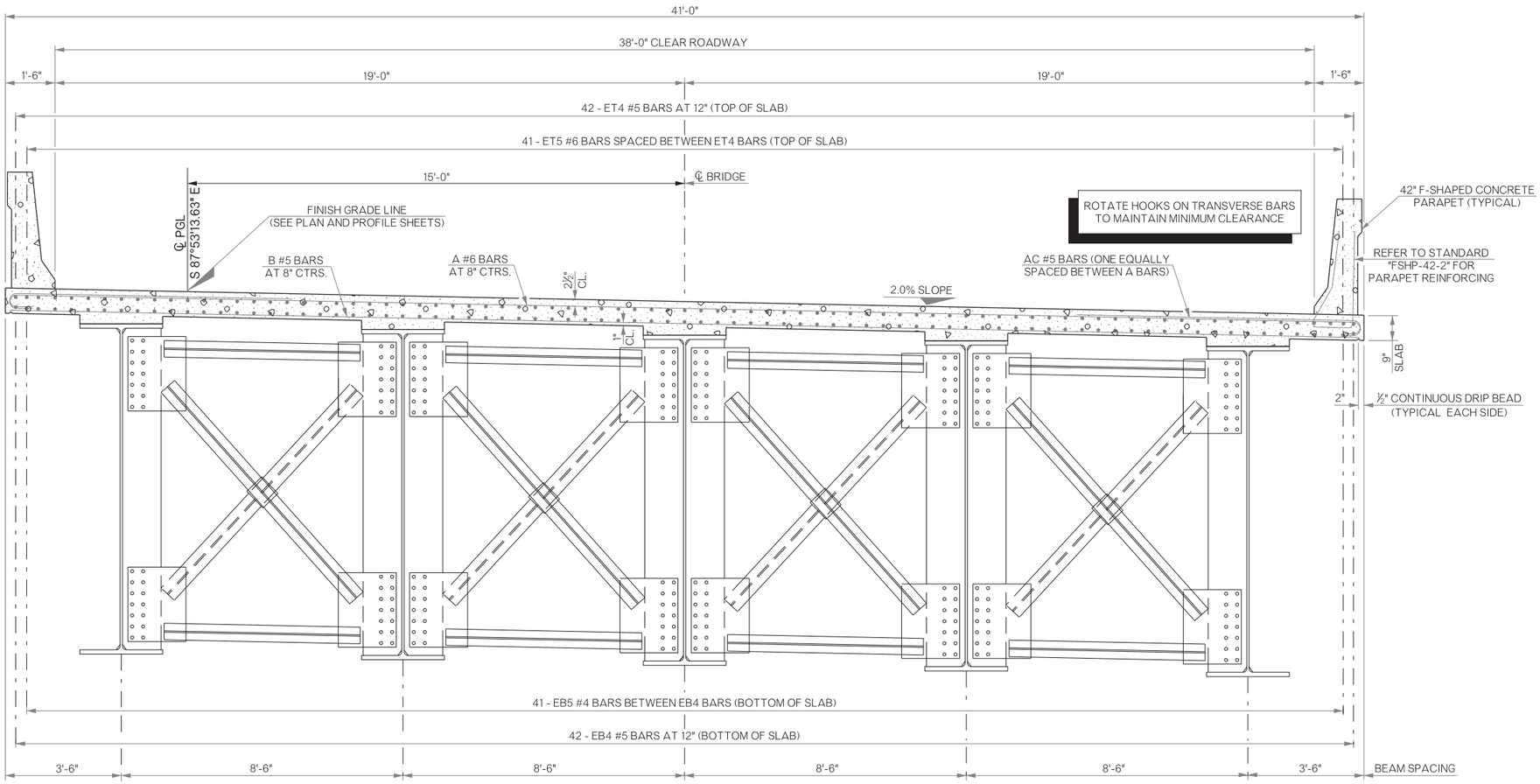
SUPERSTRUCTURE DETAILS
(SHEET 2 OF 6)

Design	CJO	6/20
Detail	DPG	2/20
Check	TEE	8/20

Squad HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416(04) | SHEET NO. B043

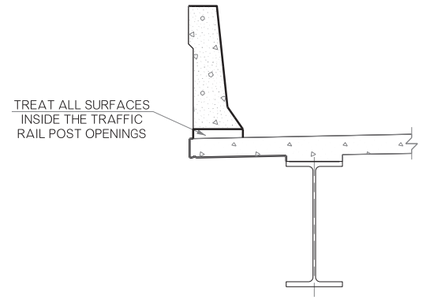
REVISIONS		
REV. NO.	DESCRIPTION	DATE



TYPICAL SECTION AT DIAPHRAGM OVER PIER NO. 6 & NO. 7

NOTE: ALL DIMENSIONS ARE ALONG THE ℄ BEAM.

ET5 AND EB5 BARS ARE NOT EQUALLY SPACED IN LENGTH OVER PIERS. SEE "SUPERSTRUCTURE DETAILS (SHEET 6 OF 6)" FOR DETAILS.



PENETRATING WATER REPELLANT TREATMENT

NOTE: SURFACES INDICATED WITH HEAVY LINES SHALL BE TREATED WITH A PENETRATING WATER REPELLANT SURFACE TREATMENT

PIER NO. 2 EXPANSION TABLE	
TEMP. (°F)	DIMENSION
33°	2 5/8"
38°	2 ½"
43°	2 3/8"
49°	2 ¼"
54°	2 ⅛"
60°	2"
65°	1 7/8"
70°	1 ¾"
76°	1 5/8"
81°	1 ½"
86°	1 3/8"
92°	1 ¼"
97°	1 ⅛"
102°	1"

PIER NO. 4 EXPANSION TABLE	
TEMP. (°F)	DIMENSION
35°	2 3/8"
43°	2 ¼"
51°	2 ⅛"
60°	2"
68°	1 7/8"
76°	1 ¾"
84°	1 5/8"
92°	1 ½"
100°	1 3/8"
108°	1 ¼"

PIER NO. 5 & ABUT. NO. 2 EXPANSION TABLE	
TEMP. (°F)	DIMENSION
38°	21 ¼"
41°	21 ⅛"
44°	21"
47°	20 7/8"
50°	20 ¾"
53°	20 5/8"
56°	20 ½"
60°	20 3/8"
63°	20 ¼"
66°	20 ⅛"
69°	20"
72°	19 7/8"
75°	19 ¾"
78°	19 5/8"
81°	19 ½"
84°	19 3/8"
87°	19 ¼"
90°	19 ⅛"
93°	19"
96°	18 7/8"

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

SUPERSTRUCTURE DETAILS
(SHEET 3 OF 6)

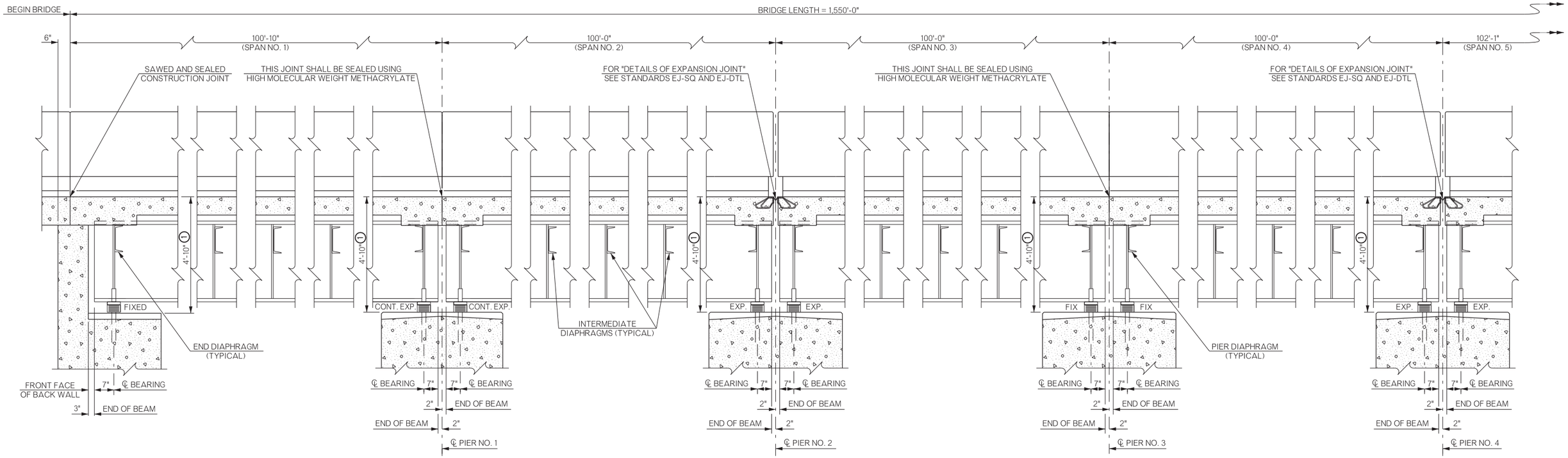
Design	CJO	6/20
Detail	DPG	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B044

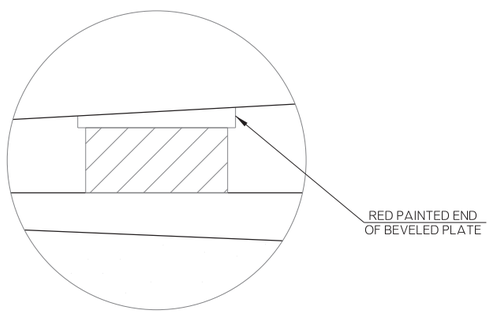
REVISIONS		
REV. NO.	DESCRIPTION	DATE



LONGITUDINAL SECTION - SPAN NO. 1 THRU 4

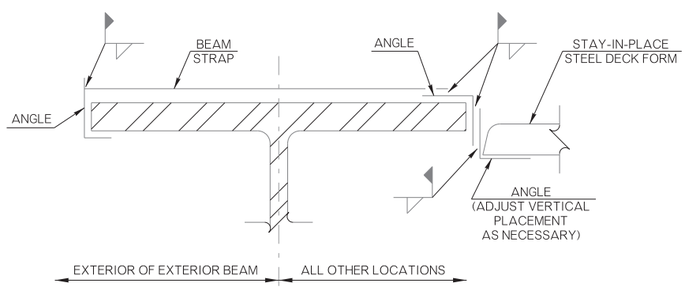
① DIMENSION IS FROM TOP OF DECK SLAB TO BOTTOM OF BEARING ASSEMBLY AT ℄ BEARING.

INSTALL ALL DIAPHRAGMS AND TIGHTEN ALL BOLTS BEFORE PLACING CONCRETE FOR THE DECK SLAB OR APPLYING OTHER MASSIVE LOADS TO THE BEAMS



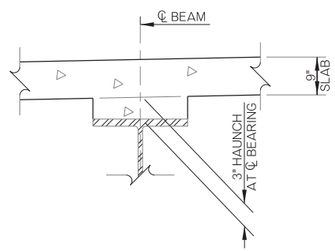
PLACEMENT OF BEVELED ANCHOR PLATES

NOTE: ALL BEVELED ANCHOR PLATES THICK EDGE WILL BE LOCATED ON THE EAST SIDE OF BEARING AT ABUTMENT NO. 1 AND PIERS 1 THRU 4. SEE BEARING SHEETS FOR MORE INFORMATION.



STAY-IN-PLACE STEEL DECK FORM FLANGE CONNECTION DETAIL

NOTE: DO NOT WELD TO THE TOP FLANGE OR STUDS. REPORT ANY ARC STRIKE, WELD SPLATTER OR WELDING ON TOP FLANGE TO BRIDGE ENGINEER IMMEDIATELY.



HAUNCH AT ℄ BEARING DETAIL - SPAN NO. 1 THRU 5

NOTE: PLAN QUANTITIES FOR CLASS AA CONCRETE INCLUDE BEAM HAUNCHES. THE HAUNCH HEIGHT SHOWN IS THE THEORETICAL HAUNCH HEIGHT AT THE CENTERLINE BEARING ONLY, MEASURED FROM BOTTOM OF DECK SLAB TO THE TOP OF BEAM, AND VARIES ACROSS THE SPAN. DETERMINE THE ACTUAL HAUNCH HEIGHT (ACCOUNTING FOR BEAM CAMBER, DEAD LOAD DEFLECTION AND ROADWAY GRADE) AFTER ERECTION OF THE BEAMS AND SUBMIT TO THE ENGINEER FOR APPROVAL. THE ENGINEER WILL NOT MEASURE DIFFERENCES BETWEEN THE THEORETICAL AND THE ACTUAL HAUNCH HEIGHTS FOR PAYMENT.

DECK SLAB NOTES

EPOXY-COAT OR GALVANIZE STEEL ITEMS USED TO FACILITATE CONSTRUCTION, SUCH AS DECK FORM HANGER ASSEMBLIES, TY-BAR CLIPS, INSERT WELD ANCHORS, OR OTHER APPURTENANCES, THAT WILL REMAIN IN PLACE IN THE DECK SLAB. EPOXY-COAT IN ACCORDANCE WITH AASHTO M284 OR GALVANIZE IN ACCORDANCE WITH AASHTO M111.

IN THE EVENT OF AN EMERGENCY, HALT THE PLACEMENT OF CONCRETE BY FORMING A CONSTRUCTION JOINT MADE PERPENDICULAR TO THE DIRECTION OF TRAFFIC OR AS DIRECTED BY THE ENGINEER. DO NOT PLACE ANY HEAVY EQUIPMENT ON THE FINISHED DECK SLAB WITHIN 5' OF ANY CONSTRUCTION JOINT UNTIL CONCRETE IS IN PLACE ON BOTH SIDES OF THE RESPECTIVE JOINT AND AT LEAST 48 HOURS HAS ELAPSED SINCE CONCRETE PLACEMENT.

SEAL ALL DECK SLAB CONSTRUCTION JOINTS WITH HIGH MOLECULAR WEIGHT METHACRYLATE IN ACCORDANCE WITH SECTION 523 OF THE SPECIFICATIONS. INCLUDE ALL COST OF EQUIPMENT AND LABOR FOR THE INSTALLATION OF THE HIGH MOLECULAR WEIGHT METHACRYLATE SEALER IN THE CONTRACT UNIT PRICE OF "SEALER CRACK PREPARATION". INCLUDE ALL COST OF THE HIGH MOLECULAR WEIGHT METHACRYLATE SEALER IN THE CONTRACT UNIT PRICE OF "SEALER RESIN". THE DEPARTMENT WILL NOT MEASURE THE PREPARATION AND SEALER OF EMERGENCY CONSTRUCTION JOINTS FOR PAYMENT.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

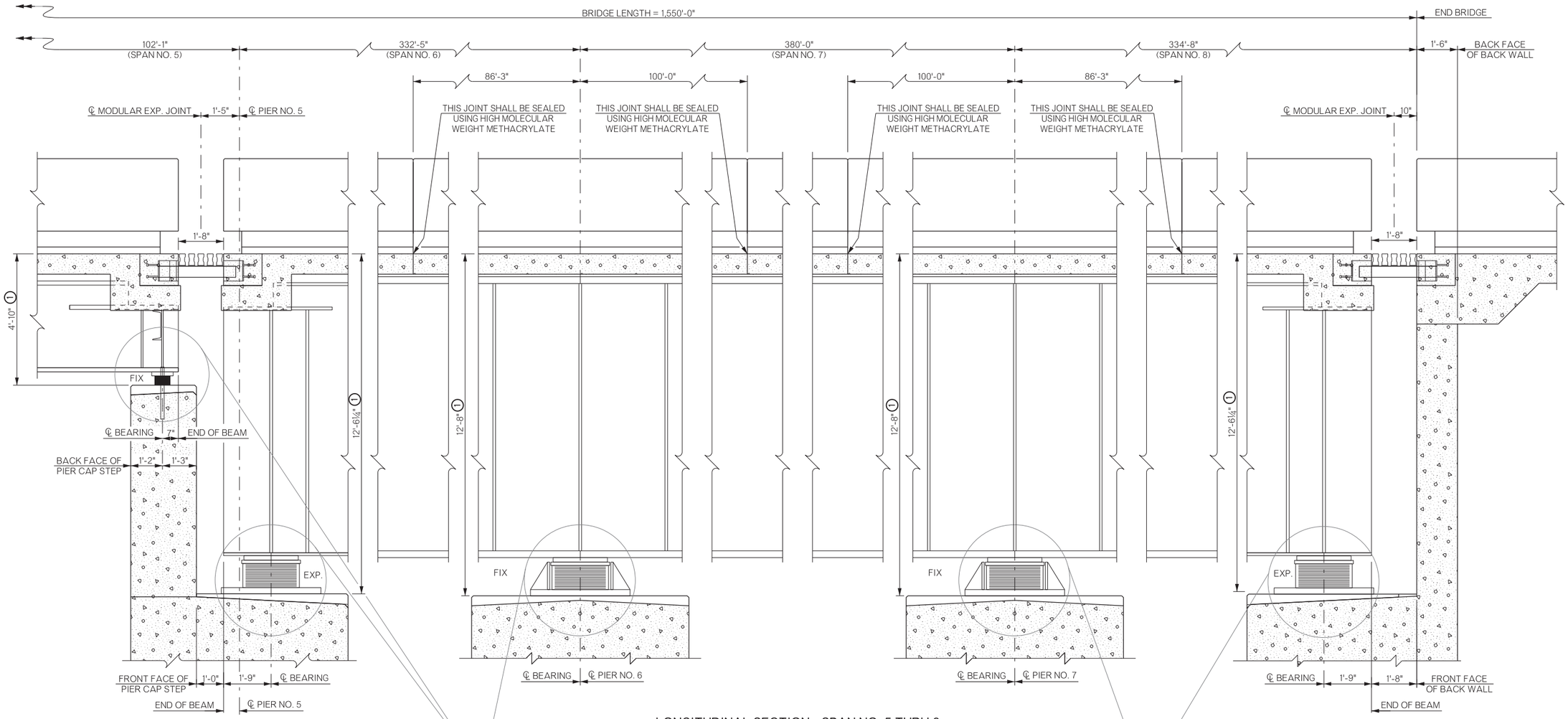
SUPERSTRUCTURE DETAILS
(SHEET 4 OF 6)

Design	CJO	6/20
Detail	TEE	2/20
Check	RAH	8/20
Squad	HENSLEY	
Engr.	DEFRANCO	

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORATION

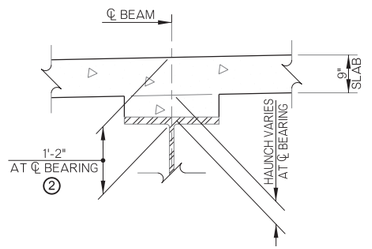
JOB PIECE NO. 30416(04) — SHEET NO. B045

REVISIONS		
REV. NO.	DESCRIPTION	DATE



LONGITUDINAL SECTION - SPAN NO. 5 THRU 8

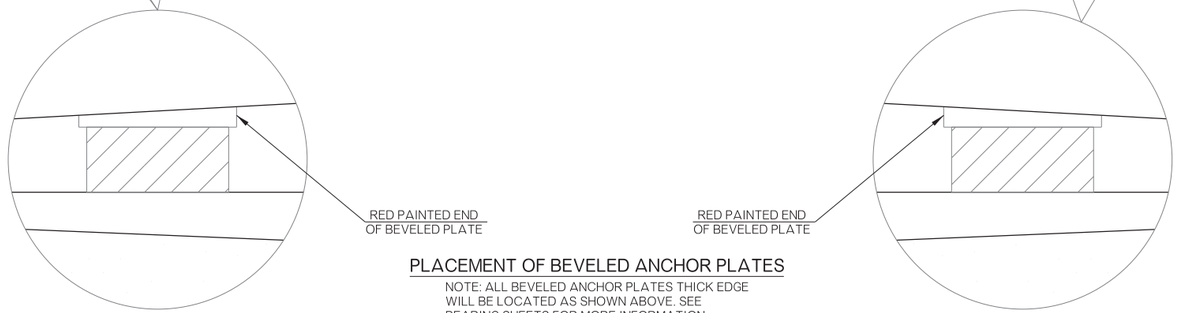
① DIMENSION IS FROM TOP OF DECK SLAB TO BOTTOM OF BEARING ASSEMBLY AT ℄ BEARING.



② THIS DIMENSION IS FROM TOP OF SLAB TO THE BOTTOM OF THE TOP FLANGE AND DOES NOT VARY.

HAUNCH AT ℄ BEARING DETAIL - SPAN NO. 6 THRU 8

NOTE: PLAN QUANTITIES FOR CLASS AA CONCRETE INCLUDE BEAM HAUNCHES. THE HAUNCH HEIGHT SHOWN IS THE THEORETICAL HAUNCH HEIGHT AT THE CENTERLINE BEARING ONLY, MEASURED FROM BOTTOM OF DECK SLAB TO THE TOP OF BEAM, AND VARIES ACROSS THE SPAN. DETERMINE THE ACTUAL HAUNCH HEIGHT (ACCOUNTING FOR BEAM CAMBER, DEAD LOAD DEFLECTION AND ROADWAY GRADE) AFTER ERECTION OF THE BEAMS AND SUBMIT TO THE ENGINEER FOR APPROVAL. THE ENGINEER WILL NOT MEASURE DIFFERENCES BETWEEN THE THEORETICAL AND THE ACTUAL HAUNCH HEIGHTS FOR PAYMENT. SEE "PLATE GIRDER DETAILS (SHEET 2 OF 3)" SHEET FOR DEAD LOAD DEFLECTION SCHEDULE AND DIAGRAM DETAILS.



PLACEMENT OF BEVELED ANCHOR PLATES

NOTE: ALL BEVELED ANCHOR PLATES THICK EDGE WILL BE LOCATED AS SHOWN ABOVE. SEE BEARING SHEETS FOR MORE INFORMATION.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

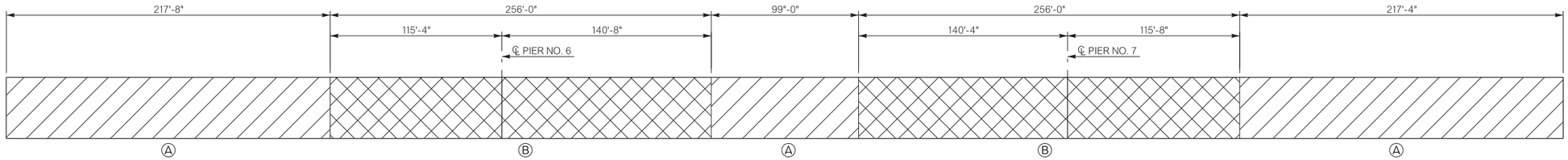
SUPERSTRUCTURE DETAILS
(SHEET 5 OF 6)

Design	CJO	6/20
Detail	TEE	2/20
Check	RAH	8/20
Squad: HENSLEY		
Engr.: DEFRANCO		

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORATION

JOB PIECE NO. 30416(04) — SHEET NO. B046

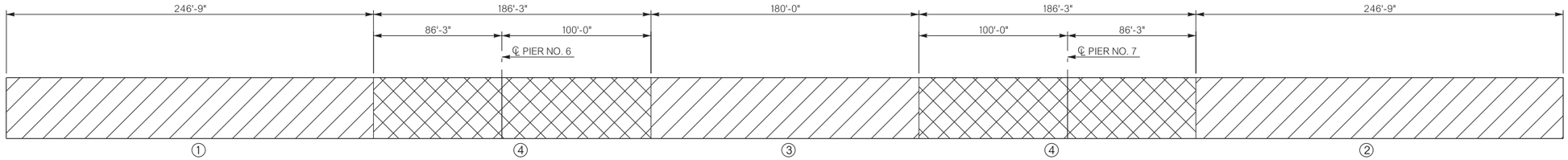
REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE NOTE	12/08/21



Ⓐ THIS SECTION OF SLAB IS WITHOUT ET5 NOR EB5 REINFORCING.
Ⓑ THIS SECTION OF SLAB HAS ET5 AND EB5 REINFORCING.

SPAN NO. 6, 7, AND 8 LONGITUDINAL REINFORCING DIAGRAM

NOTE: ALL DIMENSIONS ARE ALONG THE ℄ BEAM.



① THIS SLAB SECTION IS TO BE POURED FIRST.
② THIS SLAB SECTION IS TO BE POURED SECOND.
③ THIS SLAB SECTION IS TO BE POURED THIRD.
④ THESE SLAB SECTIONS ARE TO BE POURED FOURTH.

SPAN NO. 6, 7, AND 8 CLOSURE POUR SEQUENCE

NOTE: ALL DIMENSIONS ARE ALONG THE ℄ BEAM.

POURING SEQUENCE:

THE DECK POURING SHALL BE IN THE NUMERICAL SEQUENCE INDICATED. SECTIONS OF THE DECK SLAB WITH THE SAME NUMBER MAY BE PLACED IN ANY ORDER. DO NOT PLACE CONCRETE FOR HIGHER NUMBERED SECTIONS UNTIL ALL LOWER NUMBERED SECTIONS HAVE BEEN PLACED.

THERE SHALL BE A LAPSE OF AT LEAST 48 HOURS BETWEEN POUR PHASES. EACH PHASE SHALL BE MADE IN ONE POUR. IN THE EVENT OF AN EMERGENCY SITUATION, A CONSTRUCTION JOINT SHALL BE MADE PERPENDICULAR TO THE DIRECTION OF TRAFFIC, AS DIRECTED BY THE ENGINEER.

UNTIL THE SLAB IS IN PLACE ON BOTH SIDES OF A CONSTRUCTION JOINT, THE SLAB IS UNSUPPORTED AND NO HEAVY EQUIPMENT WILL BE PERMITTED ON THE FINISHED SLAB WITHIN 5 FT. OF THE CONSTRUCTION JOINT.

⚠ THE CONTRACTOR MAY SUBMIT AN ALTERNATE POURING SEQUENCE WITH THE ERECTION PLAN FOR APPROVAL. THE PROPOSED POURING SEQUENCE SHALL BE STAMPED AND SIGNED BY AN OKLAHOMA REGISTERED PROFESSIONAL ENGINEER. THE PROPOSAL SHALL INCLUDE REVISED DEFLECTIONS ACCORDING TO THE SUBMITTED POURING SEQUENCE AND DECK PLACEMENT SHALL NOT PROCEED WITHOUT APPROVAL BY THE RESIDENT ENGINEER. IN ALL CASES THE CONTRACTOR SHALL BE RESPONSIBLE TO ACHIEVE FINAL GRADE AND IN NO CASE SHALL SLAB SECTION 3 (SPAN 7) BE POURED FIRST.

BRACING:

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL DRAWINGS OF THE BRACING SYSTEM TO BE USED. THE BRACING SYSTEM SHALL BE DESIGNED AND STAMPED BY AN OKLAHOMA REGISTERED PROFESSIONAL ENGINEER. THE BRACING SYSTEM SHALL BE APPROVED BY THE BRIDGE ENGINEER BEFORE ANY DECK CONCRETE IS PLACED.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

SUPERSTRUCTURE DETAILS
(SHEET 6 OF 6)

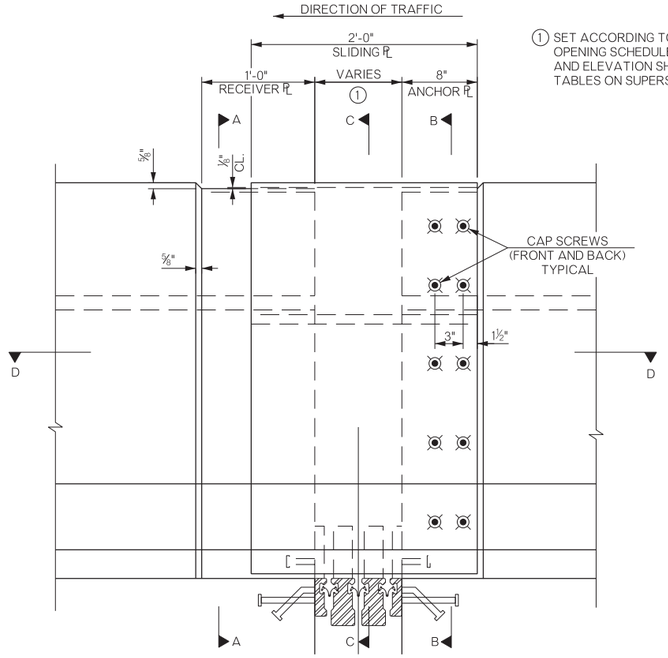
Design	CJO	6/20
Detail	DPG	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

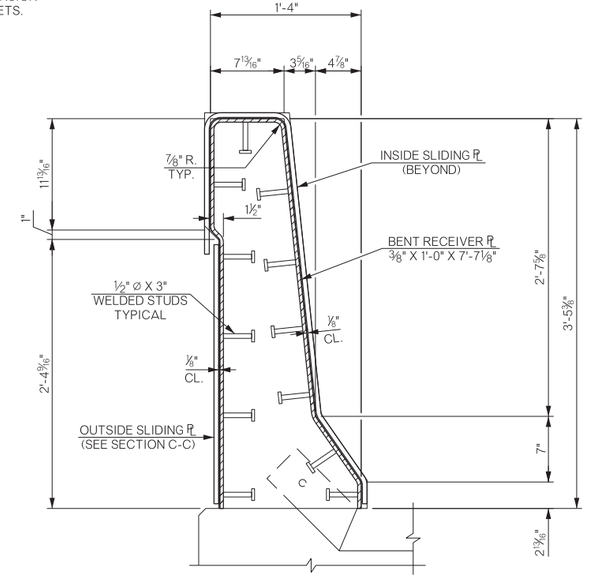
JOB PIECE NO. 30416(04) | SHEET NO. B047

REVISIONS		
REV. NO.	DESCRIPTION	DATE

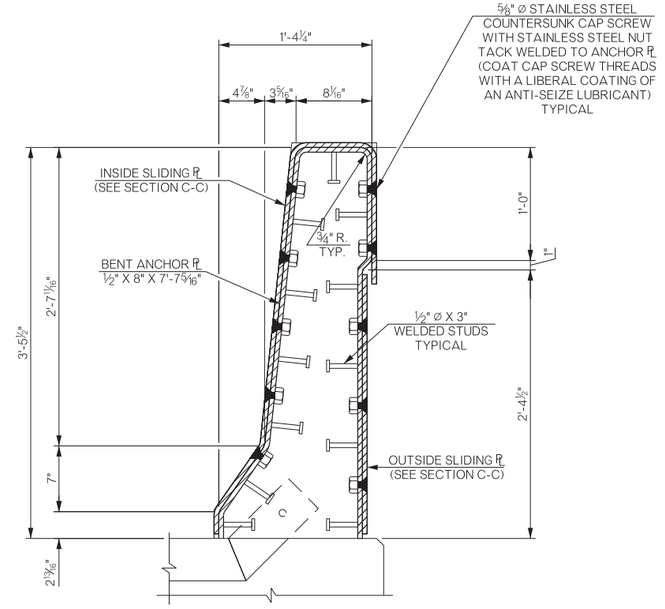


1 SET ACCORDING TO EXPANSION JOINT OPENING SCHEDULE ON GENERAL PLAN AND ELEVATION SHEETS AND EXPANSION TABLES ON SUPERSTRUCTURE SHEETS.

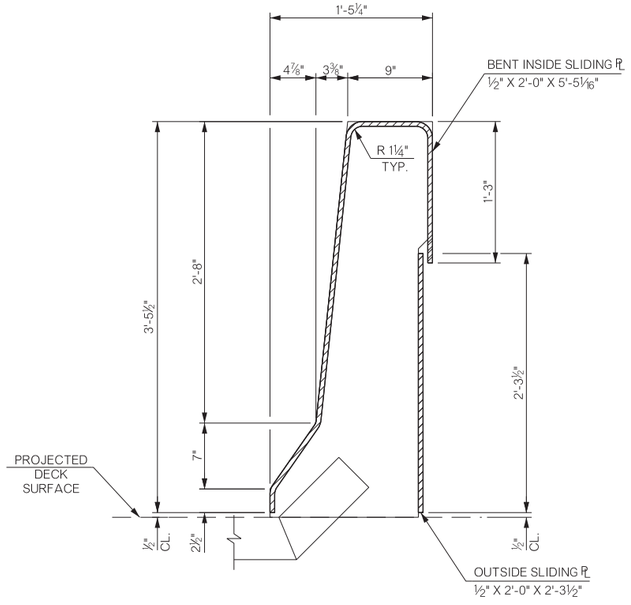
PARAPET ELEVATION AT INSIDE FACE



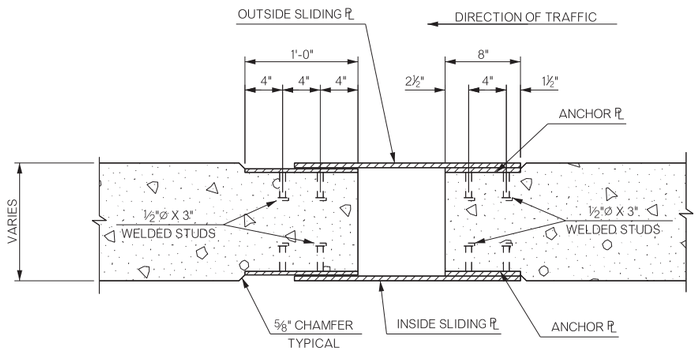
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

NOTE:
INCLUDE ALL COSTS FOR PARAPET CLOSURE, INCLUDING MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY FOR INSTALLATION IN THE CONTRACT UNIT PRICE OF 42" F-SHAPED PARAPET.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

PARAPET CLOSURE DETAILS AT PIER NO. 5 AND ABUTMENT NO. 2

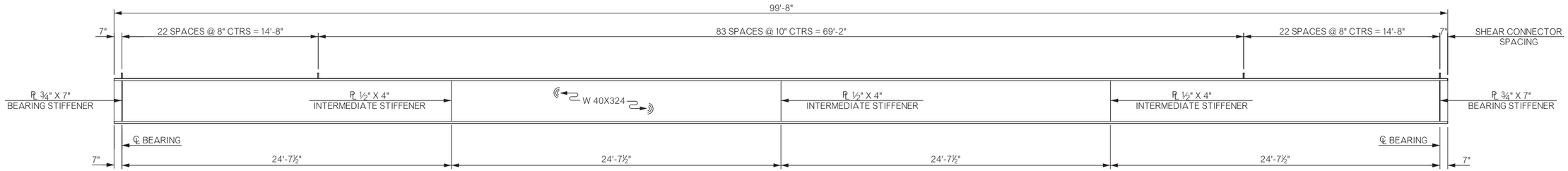
Design	CJO	6/20
Detail	MSW	2/20
Check	TEE	8/20

Squad HENSLEY
Engr: DEFRANCO

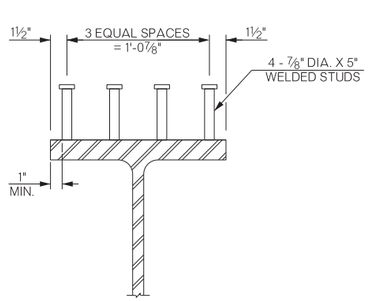
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) | SHEET NO. B048

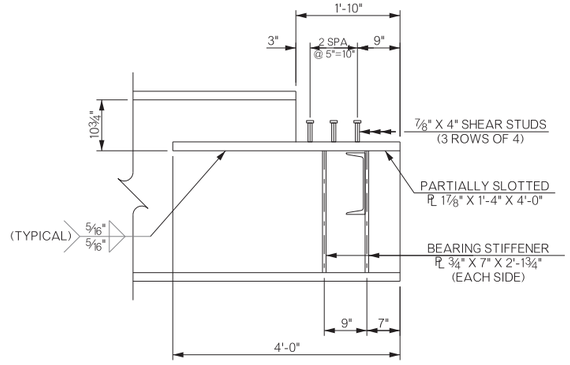
REVISIONS		
REV. NO.	DESCRIPTION	DATE



BEAM ELEVATION



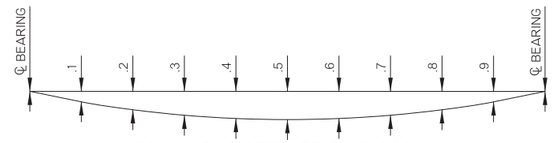
SHEAR CONNECTOR DETAIL



BLOCKOUT DETAIL

MODULAR EXPANSION JOINT FOR PIER NO. 5 ONLY.

FOR ADDITIONAL DETAILS, SEE DIAPHRAGM DETAILS SHEET.



DEAD LOAD DEFLECTION DIAGRAM

DEFLECTION SCHEDULE												
SPAN	BEAM AND DIAPHRAGM DEFLECTION						DECK SLAB, HAUNCH, S.I.P. STEEL DECK FORMS AND TRAFFIC RAIL DEFLECTION (1)					
	℄ BRG.	.1 & .9	.2 & .8	.3 & .7	.4 & .6	.5	℄ BRG.	.1 & .9	.2 & .8	.3 & .7	.4 & .6	.5
100'	0"	0.300"	0.568"	0.776"	0.911"	0.956"	0"	1.133"	2.144"	2.930"	3.438"	3.610"

(1) THE DEAD LOAD DEFLECTION SHOWN AT THE TENTH POINTS ARE THE DEFLECTIONS DUE TO DECK SLAB + HAUNCH + S.I.P. STEEL DECK FORM ALLOWANCE + TRAFFIC RAIL. IT DOES NOT INCLUDE THE BEAM WEIGHT, DIAPHRAGMS OR FUTURE WEARING SURFACE.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

ROLLED BEAM DETAILS

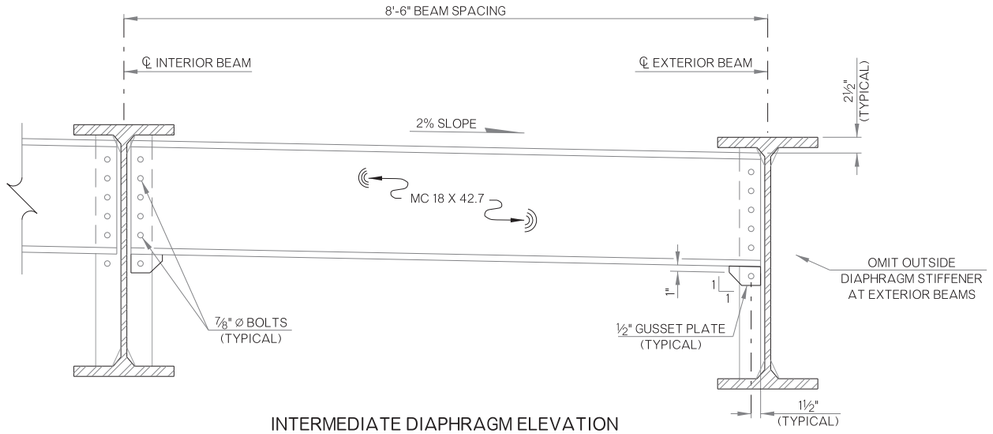
Design	CJO	6/20
Detail	LAF	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

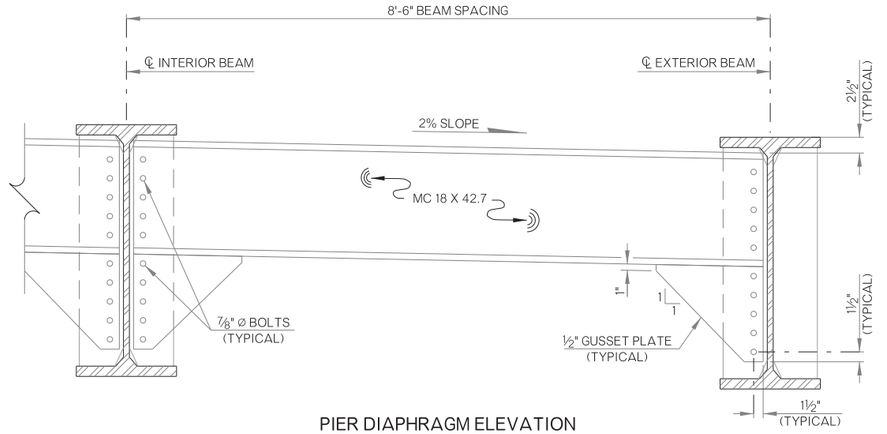
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) | SHEET NO. B049

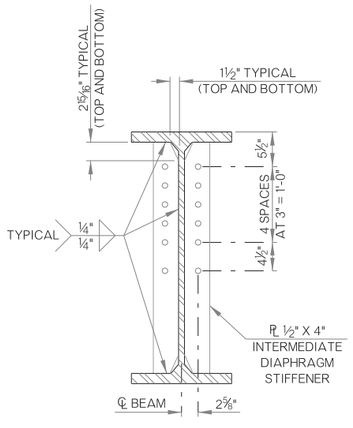
REVISIONS		
REV. NO.	DESCRIPTION	DATE



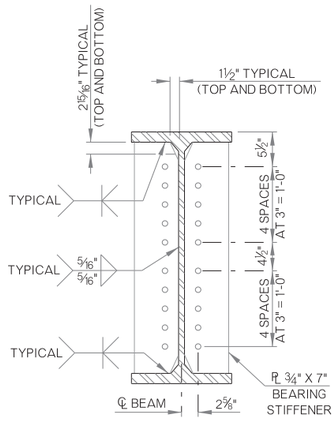
INTERMEDIATE DIAPHRAGM ELEVATION



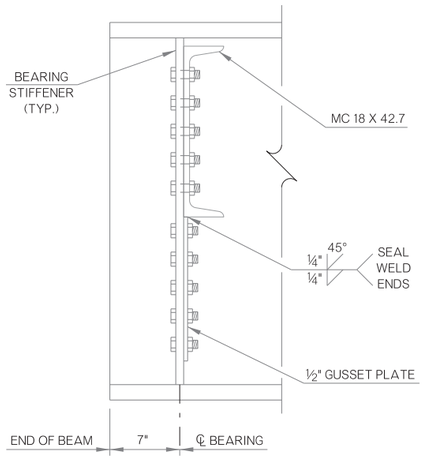
PIER DIAPHRAGM ELEVATION



INTERMEDIATE DIAPHRAGM STIFFENER DETAILS



BEARING STIFFENER DETAILS



END DIAPHRAGM SECTION

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

THE CONTRACTOR MAY SUBSITUTE A BENT PLATE DIAPHRAGM IN LIEU OF CHANNEL AND GUSSET PLATE SHOWN AT NO ADDITIONAL COST TO THE DEPARTMENT. PROVIDE ½" MINUMUM PLATE THICKNESS FORMED IN THE SHAPE OF THE CHANNEL WITH 4" MINIMUM FLANGES. FABRICATE BENT PLATE DIAPHRAGM TO A DEPTH EQUAL OR GREATER THAN THAT SHOWN FOR THE COMBINED CHANNEL AND GUSSET PLATE.

TERMINATE FILLET WELDS ⅜" FROM THE EDGE OF CLIPPED CORNERS OF ALL STIFFENER PLATES AND NON-CLIPPED CORNERS OF INTERMEDIATE DIAPHRAGM STIFFENERS.

PROVIDE STRUCTURAL STEEL FOR CHANNEL DIAPHRAGMS AND GUSSET PLATES IN ACCORDANCE WITH AASHTO M270 (ASTM A709), GRADE 50W (WEATHERING STEEL, CHARPY V-NOTCH TESTING NOT REQUIRED). USE BOLTS CONFORMING TO AASHTO M164 (ASTM A325). PROVIDE ALL BOLTS, NUTS, WASHERS AND WELDING WITH WEATHERING CHARACTERISTICS.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

ROLLED BEAM DIAPHRAGM DETAILS

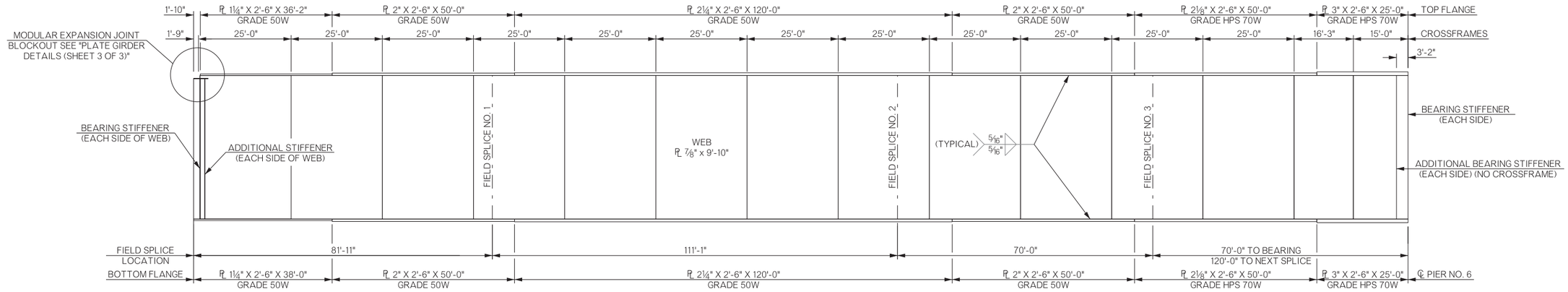
Design	CJO	6/20
Detail	TEE	2/20
Check	RAH	8/20

Squad: HENSLEY
Engr.: DEFRANCO

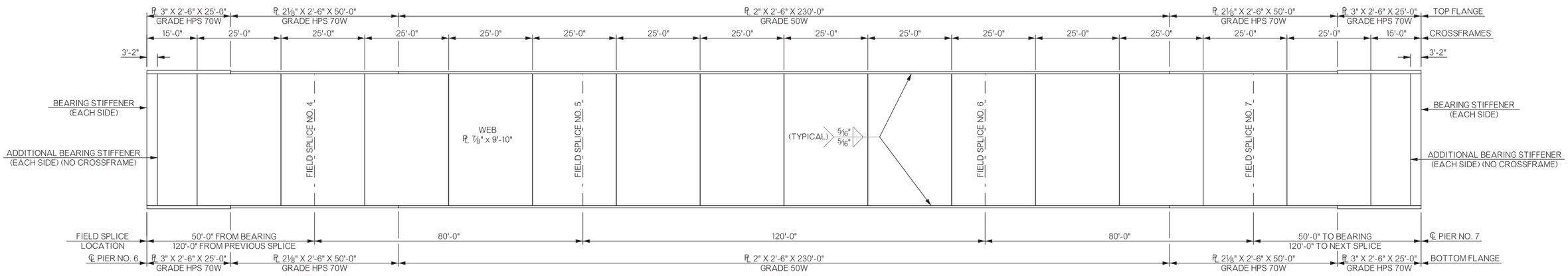
STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B050

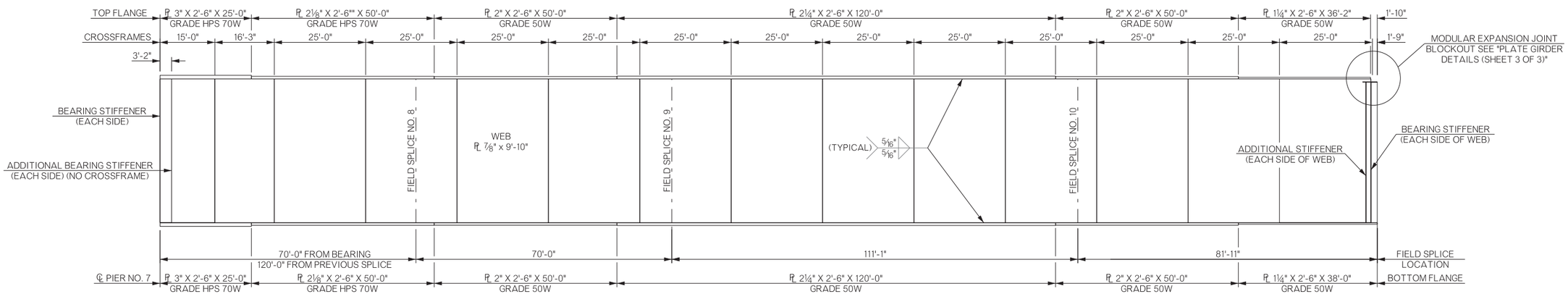
REVISIONS		
REV. NO.	DESCRIPTION	DATE



SPAN NO. 6 ELEVATION



SPAN NO. 7 ELEVATION



SPAN NO. 8 ELEVATION

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

PLATE GIRDER DETAILS (SHEET 1 OF 3)

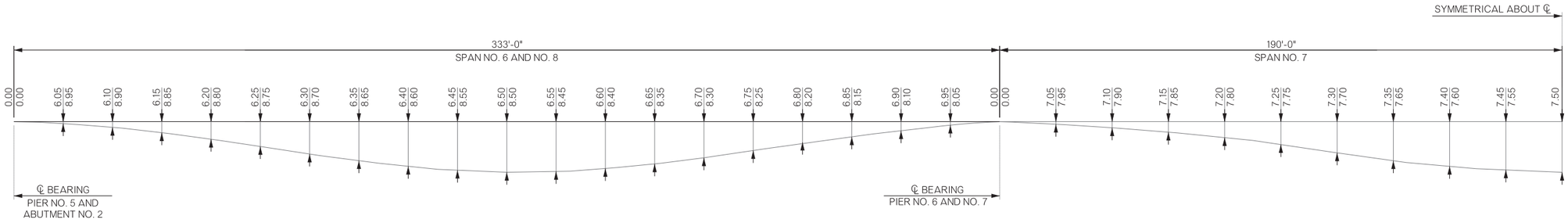
Design	CJO	6/20
Detail	LAF	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) | SHEET NO. B051

REVISIONS		
REV. NO.	DESCRIPTION	DATE



DEAD LOAD DEFLECTION DIAGRAM

DEAD LOAD DEFLECTION SCHEDULE

SPAN NO. 6

SPAN LOCATION	℄ BEARING PIER 5	6.05	6.10	6.15	6.20	6.25	6.30	6.35	6.40	6.45	6.50	6.55	6.60	6.65	6.70	6.75	6.80	6.85	6.90	6.95	℄ BEARING PIER 6
STEEL ①	0.000	1.184	2.292	3.308	4.163	4.884	5.454	5.816	6.016	6.034	5.875	5.552	5.082	4.486	3.788	3.028	2.252	1.511	0.860	0.358	0.000
DECK POUR 1	0.000	1.752	3.401	4.928	6.236	7.367	8.301	8.943	9.370	9.545	9.471	9.155	8.614	7.869	6.936	5.856	4.679	3.459	2.246	1.087	0.000
DECK POUR 2	0.000	0.132	0.261	0.387	0.502	0.613	0.717	0.802	0.879	0.941	0.987	1.015	1.023	1.008	0.969	0.900	0.797	0.655	0.475	0.254	0.000
DECK POUR 3	0.000	-0.432	-0.855	-1.269	-1.649	-2.010	-2.352	-2.634	-2.887	-3.092	-3.243	-3.335	-3.361	-3.314	-3.184	-2.960	-2.620	-2.156	-1.561	-0.833	0.000
DECK POUR 4	0.000	-0.006	-0.012	-0.018	-0.024	-0.030	-0.036	-0.043	-0.049	-0.056	-0.064	-0.071	-0.079	-0.087	-0.096	-0.105	-0.116	-0.124	-0.116	-0.075	0.000
PARAPETS	0.000	0.226	0.437	0.630	0.793	0.930	1.038	1.106	1.143	1.145	1.114	1.052	0.961	0.847	0.714	0.569	0.422	0.281	0.159	0.065	0.000
CONCRETE TOTAL ②	0.000	1.671	3.232	4.659	5.859	6.869	7.667	8.175	8.456	8.484	8.266	7.816	7.159	6.323	5.339	4.260	3.162	2.117	1.202	0.498	0.000

SPAN NO. 7

SPAN LOCATION	℄ BEARING PIER 6	7.05	7.10	7.15	7.20	7.25	7.30	7.35	7.40	7.45	7.50	7.55	7.60	7.65	7.70	7.75	7.80	7.85	7.90	7.95	℄ BEARING PIER 7
STEEL ①	0.000	-0.037	0.129	0.492	0.973	1.503	2.022	2.478	2.832	3.056	3.133	3.056	2.832	2.478	2.022	1.503	0.973	0.492	0.129	-0.037	0.000
DECK POUR 1	0.000	-1.065	-1.985	-2.726	-3.300	-3.715	-3.982	-4.115	-4.128	-4.035	-3.851	-3.588	-3.261	-2.884	-2.472	-2.037	-1.594	-1.157	-0.738	-0.352	0.000
DECK POUR 2	0.000	-0.340	-0.717	-1.127	-1.558	-1.997	-2.429	2.840	-3.217	-3.545	-3.810	-3.998	-4.094	-4.085	-3.956	-3.694	-3.284	-2.714	-1.978	-1.062	0.000
DECK POUR 3	0.000	1.127	2.354	3.653	4.961	6.214	7.344	8.287	8.995	9.434	9.583	9.434	8.995	8.286	7.343	6.213	4.960	3.652	2.353	1.127	0.000
DECK POUR 4	0.000	0.224	0.485	0.765	1.029	1.254	1.431	1.568	1.665	1.724	1.744	1.724	1.666	1.568	1.432	1.255	1.030	0.765	0.485	0.224	0.000
PARAPETS	0.000	0.003	0.046	0.127	0.230	0.341	0.448	0.542	0.614	0.660	0.676	0.660	0.614	0.542	0.448	0.341	0.230	0.127	0.046	0.003	0.000
CONCRETE TOTAL ②	0.000	-0.052	0.183	0.691	1.362	2.097	2.812	3.441	3.930	4.238	4.341	4.232	3.919	3.427	2.795	2.078	1.342	0.673	0.169	-0.061	0.000

SPAN NO. 8

SPAN LOCATION	℄ BEARING PIER 7	8.05	8.10	8.15	8.20	8.25	8.30	8.35	8.40	8.45	8.50	8.55	8.60	8.65	8.70	8.75	8.80	8.85	8.90	8.95	℄ BEARING ABUT. NO. 2
STEEL ①	0.000	0.358	0.861	1.511	2.252	2.955	3.789	4.486	5.082	5.552	5.876	6.034	6.016	5.816	5.454	4.884	4.163	3.308	2.292	1.184	0.000
DECK POUR 1	0.000	0.265	0.499	0.695	0.852	0.963	1.059	1.112	1.135	1.131	1.104	1.056	0.989	0.904	0.809	0.693	0.569	0.439	0.296	0.150	0.000
DECK POUR 2	0.000	1.084	2.242	3.453	4.672	5.740	6.928	7.860	8.605	9.146	9.461	9.536	9.362	8.936	8.295	7.361	6.231	4.925	3.398	1.750	0.000
DECK POUR 3	0.000	-0.832	-1.561	-2.154	-2.618	-2.931	-3.181	-3.311	-3.357	-3.331	-3.239	-3.088	-2.883	-2.631	-2.349	-2.007	-1.646	-1.267	-0.853	-0.431	0.000
DECK POUR 4	0.000	-0.075	-0.116	-0.124	-0.117	-0.108	-0.098	-0.089	-0.081	-0.073	-0.066	-0.058	-0.051	-0.044	-0.038	-0.031	-0.025	-0.019	-0.012	-0.006	0.000
PARAPETS	0.000	0.065	0.159	0.281	0.422	0.556	0.714	0.847	0.961	1.052	1.114	1.145	1.143	1.106	1.038	0.930	0.793	0.630	0.437	0.226	0.000
CONCRETE TOTAL ②	0.000	0.507	1.223	2.150	3.211	4.221	5.422	6.419	7.263	7.925	8.376	8.592	8.559	8.271	7.755	6.945	5.922	4.708	3.265	1.688	0.000

① STEEL DEFLECTIONS INCLUDE DEADWEIGHT OF GIRDERS, CROSS-FRAMES, LATERAL BRACING AND CONNECTION / STIFFENER PLATES.

② CONCRETE DEFLECTIONS INCLUDE THE WEIGHT OF HAUNCHES, SLABS, S.I.P. FORM ALLOWANCE AND CONCRETE TRAFFIC BARRIER.
CONCRETE DEFLECTIONS DO NOT INCLUDE THE WEIGHT OF STEEL OR FUTURE WEARING SURFACE.

NOTE: NEGATIVE VALUES INDICATE UPWARD DEFLECTION, WHILE POSITIVE INDICATES DOWNWARD DEFLECTION.
DEFLECTIONS ARE PROVIDED AT 20TH POINTS ALONG EACH SPAN.
DEFLECTION VALUES ARE SHOWN IN INCHES.

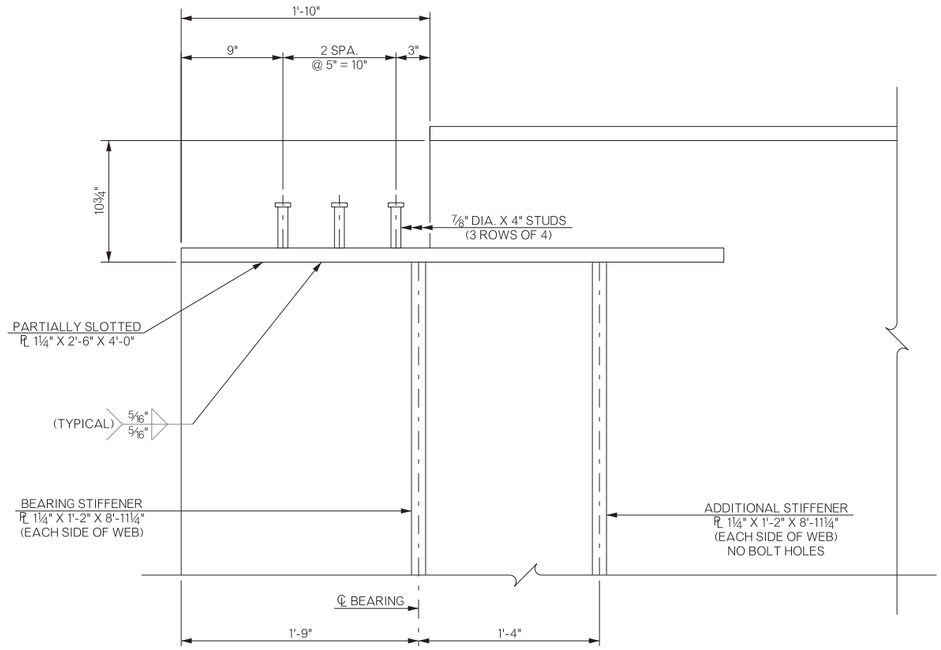
BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

PLATE GIRDER DETAILS
(SHEET 2 OF 3)

Design	CJO	6/20
Detail	LAF	3/20
Check	TEE	8/20
Squad	HENSLEY	
Engr.:	DEFRANCO	

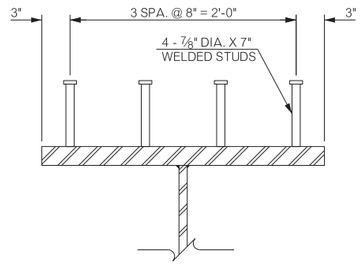
STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416(04) — SHEET NO. B052

REVISIONS		
REV. NO.	DESCRIPTION	DATE



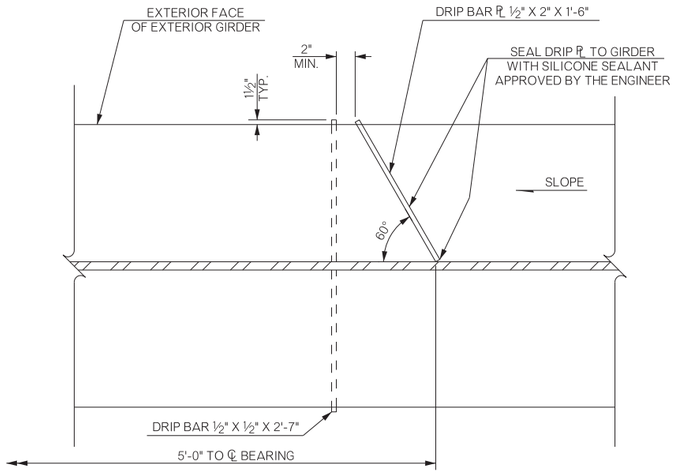
BLOCKOUT DETAIL

MODULAR EXPANSION JOINT

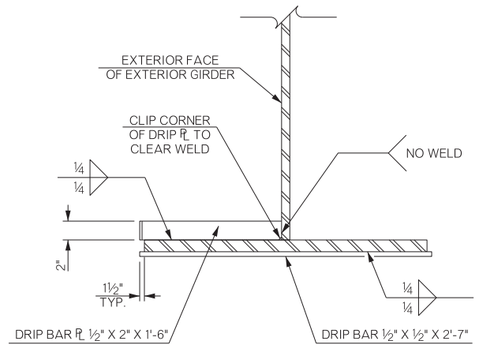


SHEAR CONNECTOR DETAIL

SPACING: 2'-0" ENTIRE LENGTH OF
CONTINUOUS GIRDER. ADJUST TO MISS
FIELD SPLICES AND SECTION CHANGES.



PLAN



ELEVATION

DRIP PLATE/ DRIP BAR DETAILS

NOTE: INCLUDE ALL COSTS OF SILICONE
SEALER IN OTHER ITEMS OF WORK.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

PLATE GIRDER DETAILS
(SHEET 3 OF 3)

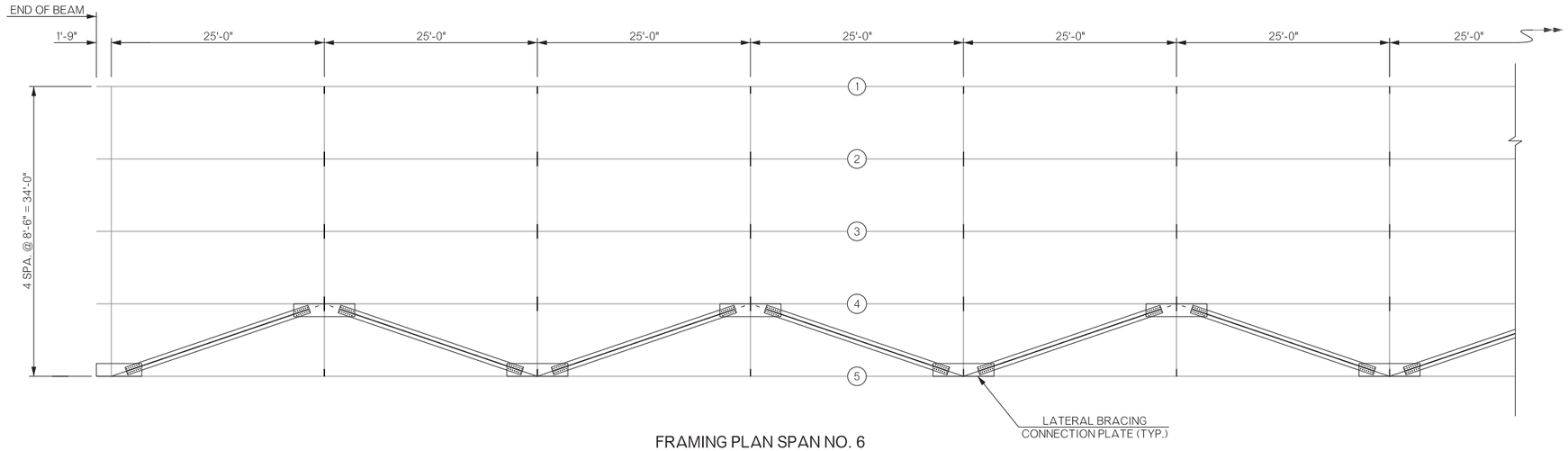
Design	CJO	6/20
Detail	LAF	3/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

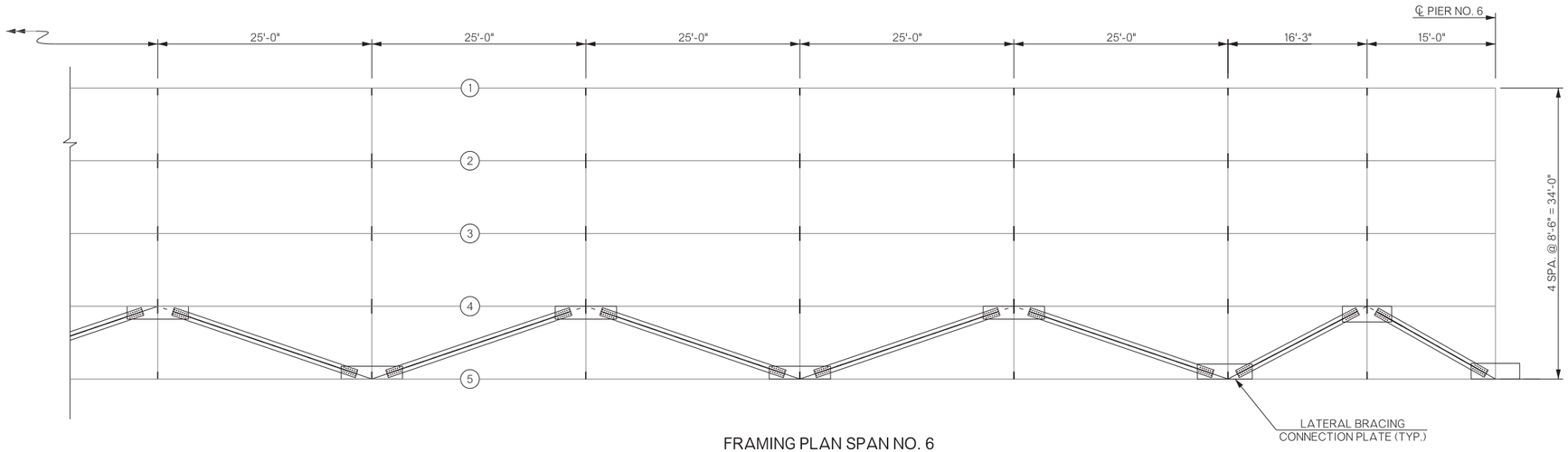
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) | SHEET NO. B053

REVISIONS		
REV. NO.	DESCRIPTION	DATE



FRAMING PLAN SPAN NO. 6



FRAMING PLAN SPAN NO. 6

NOTES

LATERAL BRACING SHALL BE PLACED BETWEEN THE FIRST AND NEXT ADJACENT GIRDER ERECTED.
THE LOCATION SHOWN IN THE FRAMING PLAN IS FOR LONGITUDINAL CONFIGURATION ONLY.
TRANSVERSE PLACEMENT MAY VARY DEPENDENT ON THE CONTRACTOR'S ERECTION SEQUENCE.
SEE LATERAL BRACING DETAILS FOR CONNECTION TYPE.

(1) DENOTES GIRDER NUMBER.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

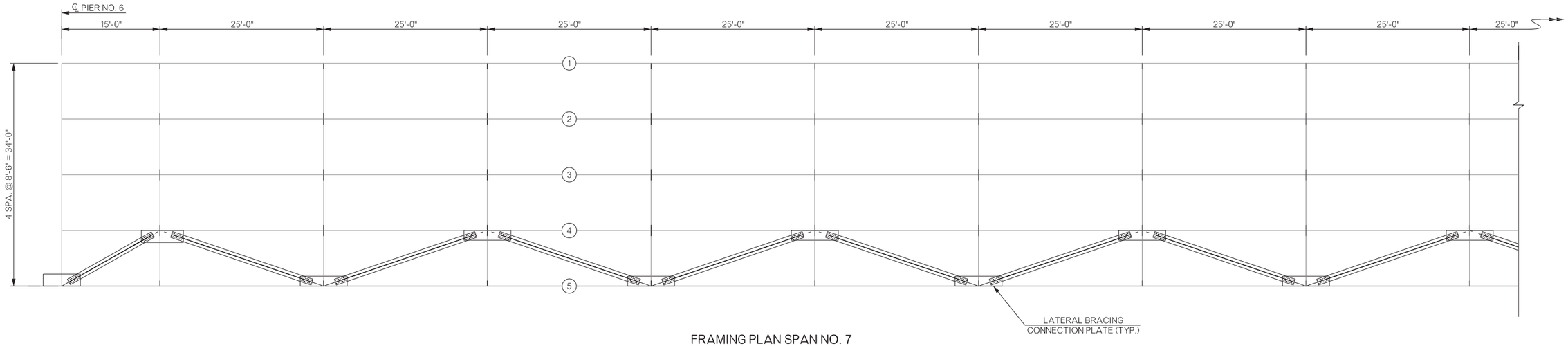
FRAMING PLAN
(SHEET 1 OF 3)

Design	CJO	9/19
Detail	LAF	2/20
Check	TEE	8/20
Squad	HENSLEY	
Engr.	DEFRANCO	

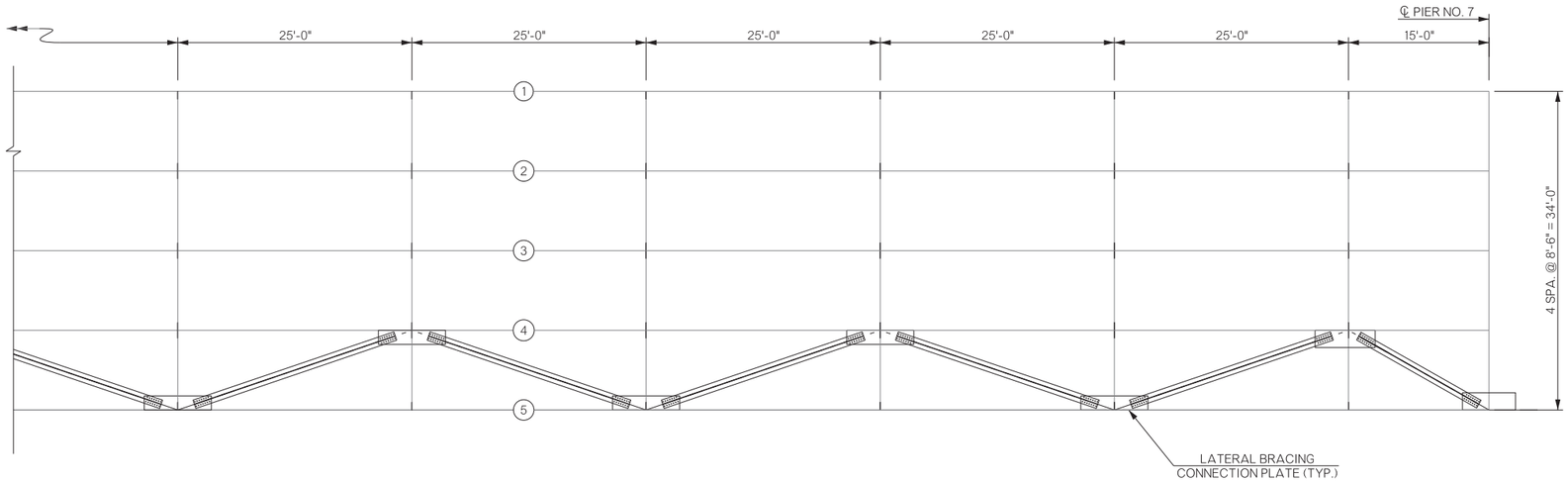
STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B054

REVISIONS		
REV. NO.	DESCRIPTION	DATE



FRAMING PLAN SPAN NO. 7



FRAMING PLAN SPAN NO. 7

NOTES
LATERAL BRACING SHALL BE PLACED BETWEEN THE FIRST AND NEXT ADJACENT GIRDER ERECTED.
THE LOCATION SHOWN IN THE FRAMING PLAN IS FOR LONGITUDINAL CONFIGURATION ONLY.
TRANSVERSE PLACEMENT MAY VARY DEPENDENT ON THE CONTRACTOR'S ERECTION SEQUENCE.
SEE LATERAL BRACING DETAILS FOR CONNECTION TYPE.

(1) DENOTES GIRDER NUMBER.

BRIDGE A & B MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

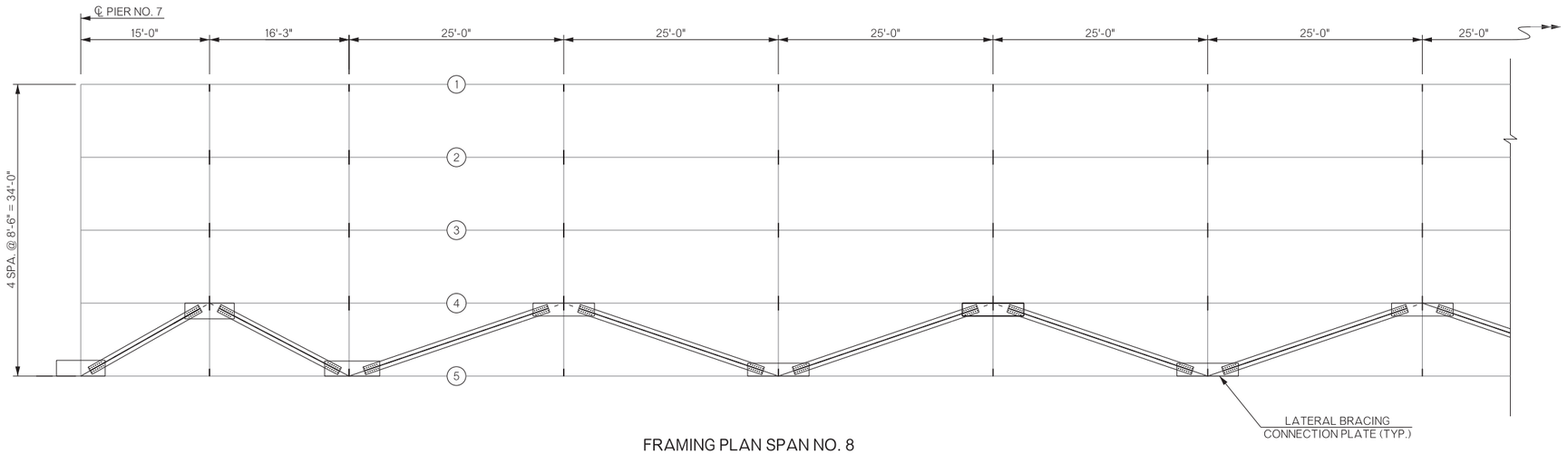
FRAMING PLAN
(SHEET 2 OF 3)

Design	CJO	9/19
Detail	LAF	2/20
Check	TEE	8/20
Squad	HENSLEY	
Engr.	DEFRANCO	

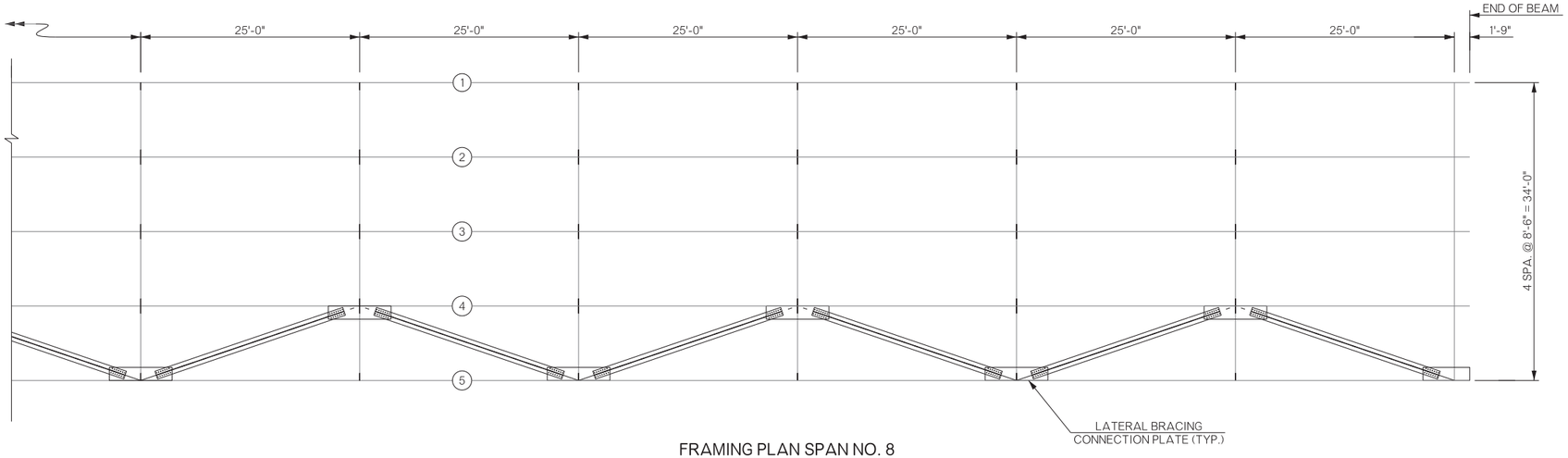
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) SHEET NO. B055

REVISIONS		
REV. NO.	DESCRIPTION	DATE



FRAMING PLAN SPAN NO. 8



FRAMING PLAN SPAN NO. 8

NOTES
LATERAL BRACING SHALL BE PLACED BETWEEN THE FIRST AND NEXT ADJACENT GIRDER ERECTED.
THE LOCATION SHOWN IN THE FRAMING PLAN IS FOR LONGITUDINAL CONFIGURATION ONLY.
TRANSVERSE PLACEMENT MAY VARY DEPENDENT ON THE CONTRACTOR'S ERECTION SEQUENCE.
SEE LATERAL BRACING DETAILS FOR CONNECTION TYPE.

(1) DENOTES GIRDER NUMBER.

BRIDGE A & B MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

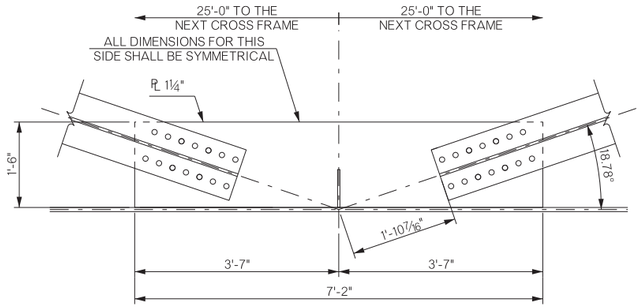
FRAMING PLAN
(SHEET 3 OF 3)

Design	CJO	9/19
Detail	LAF	2/20
Check	TEE	8/20
Squad	HENSLEY	
Engr.	DEFRANCO	

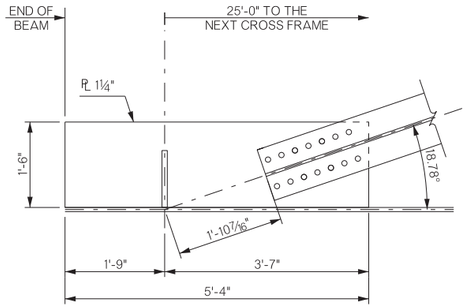
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) SHEET NO. B056

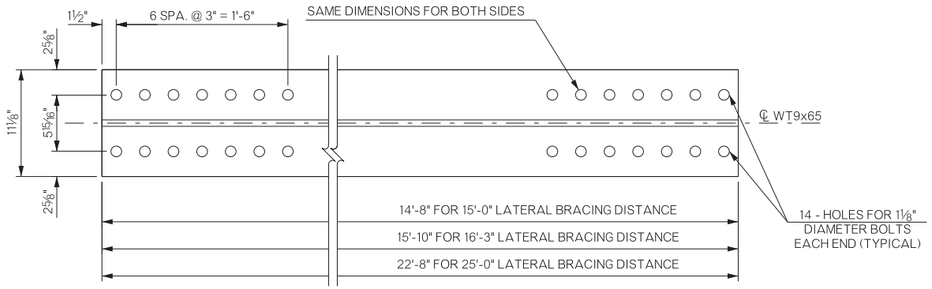
REVISIONS		
REV. NO.	DESCRIPTION	DATE



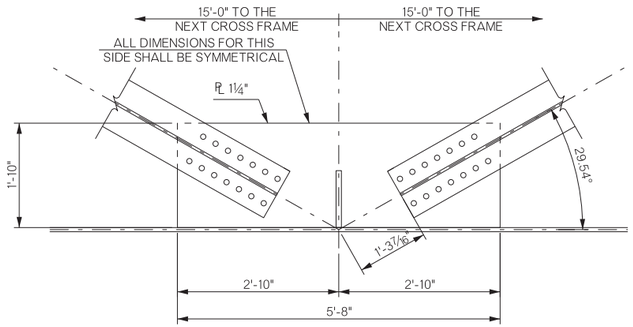
TYPICAL LATERAL BRACING CONNECTION



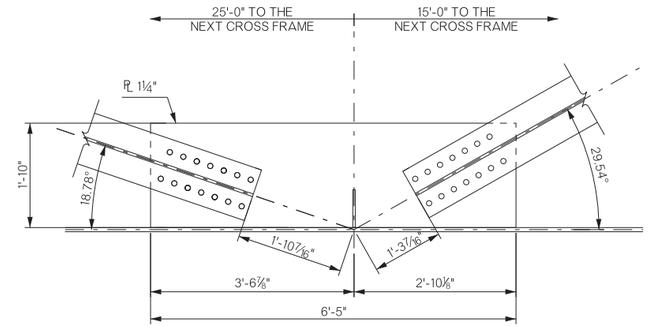
END OF SPAN LATERAL BRACING CONNECTION



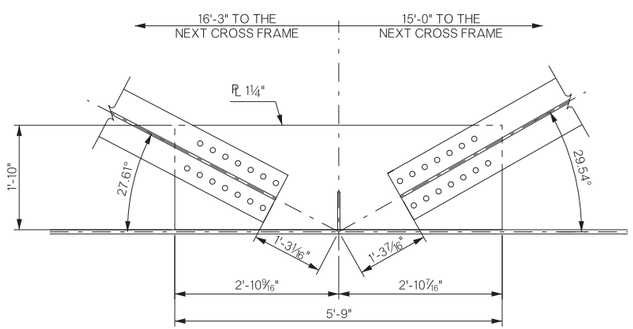
TYPICAL WT9X65 DETAILS FOR LATERAL BRACING CONNECTIONS



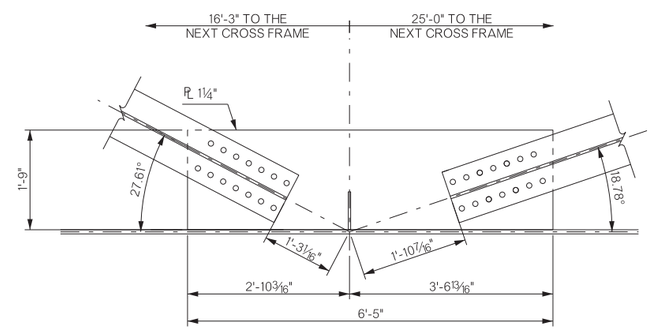
LATERAL BRACING CONNECTION BETWEEN 15'-0" AND 15'-0" BAYS



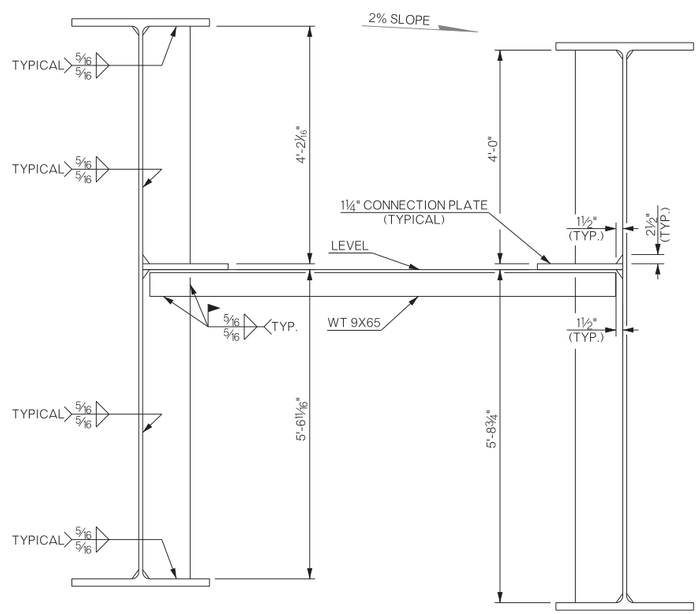
LATERAL BRACING CONNECTION BETWEEN 25'-0" AND 15'-0" BAYS



LATERAL BRACING CONNECTION BETWEEN 16'-3" AND 15'-0" BAYS



LATERAL BRACING CONNECTION BETWEEN 25'-0" AND 16'-3" BAYS



LATERAL BRACING CONNECTION SECTION THROUGH GIRDER

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

LATERAL BRACING DETAILS

Design	CJO	6/20
Detail	LAF	2/20
Check	TEE	8/20

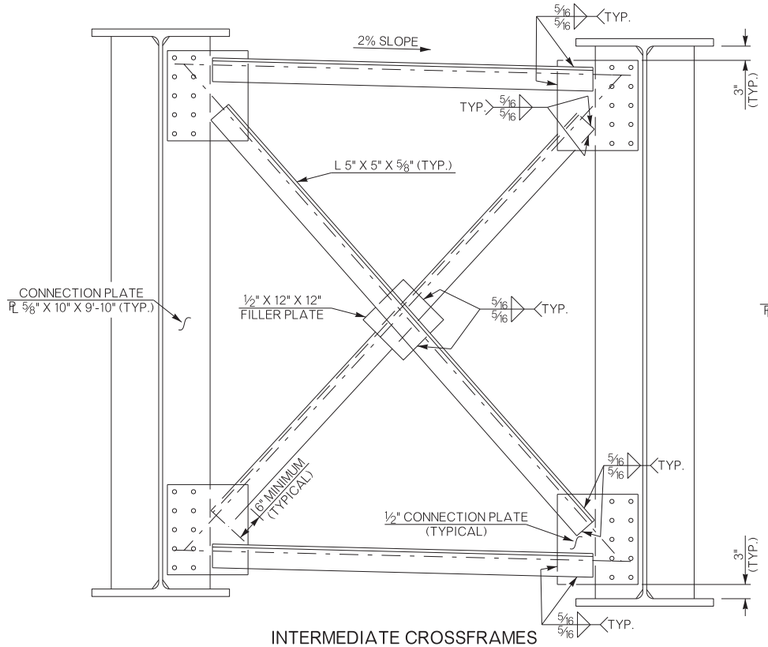
Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

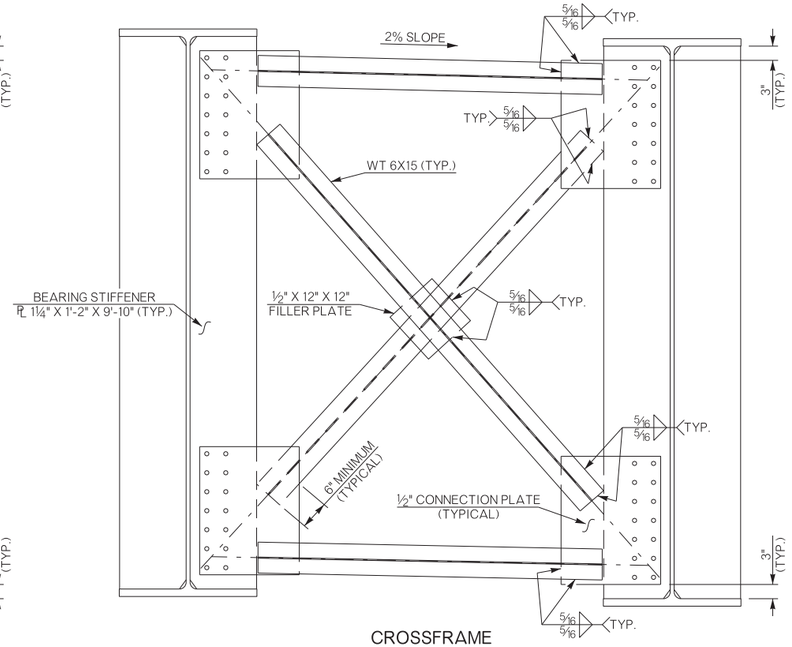
JOB PIECE NO. 30416(04) | SHEET NO. B057

REVISIONS

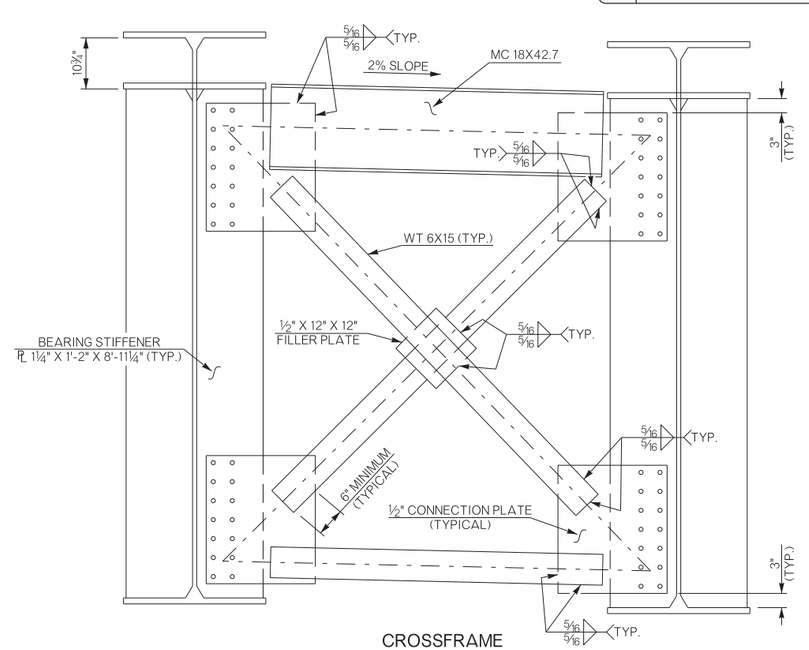
REV. NO.	DESCRIPTION	DATE



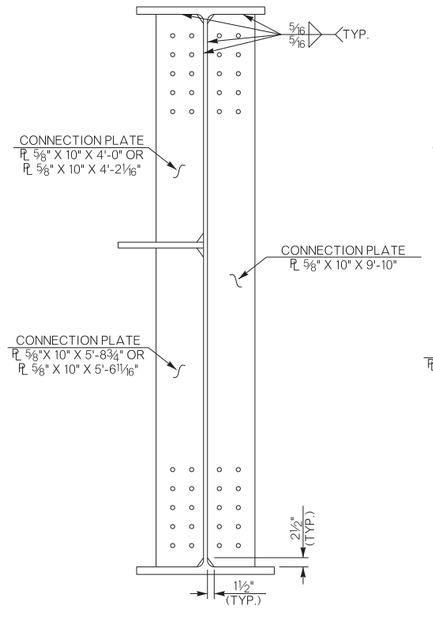
INTERMEDIATE CROSSFRAMES
SPANS NO. 6 THRU NO. 8



CROSSFRAME
PIERS NO. 6 & NO. 7

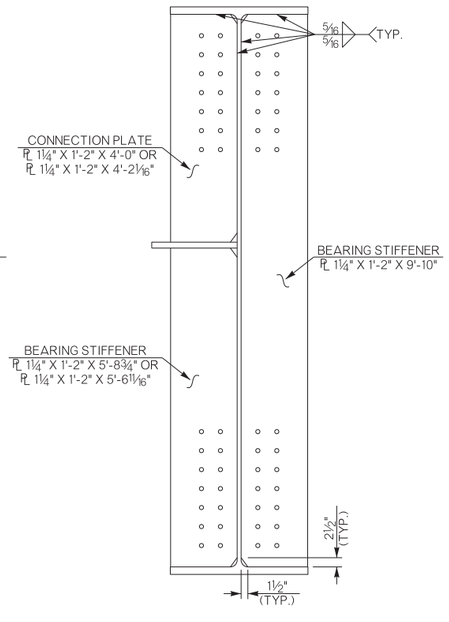


CROSSFRAME
PIER NO. 5 & ABUTMENT NO. 2



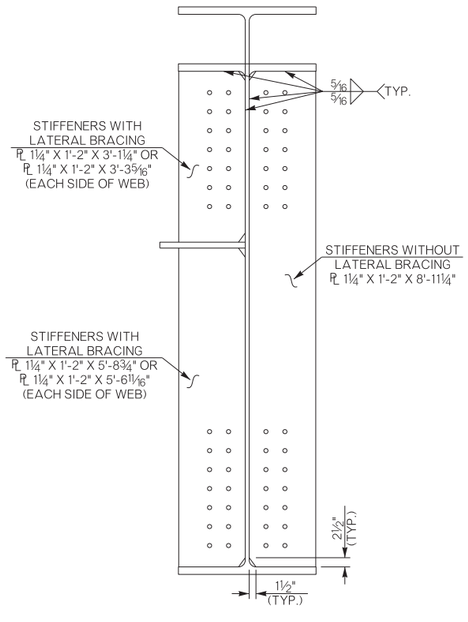
WITH LATERAL BRACING CONNECTION WITHOUT LATERAL BRACING CONNECTION

TYPICAL CROSSFRAME
CONNECTION DETAIL



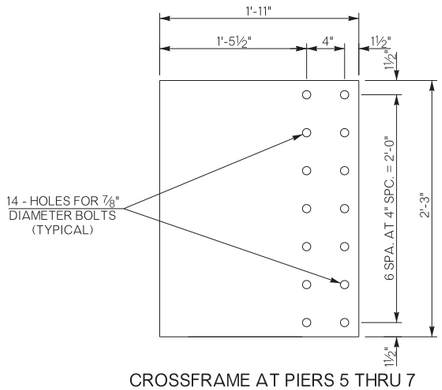
WITH LATERAL BRACING CONNECTION WITHOUT LATERAL BRACING CONNECTION

TYPICAL BEARING STIFFENER DETAIL
AT PIER NO. 6 AND PIER NO. 7

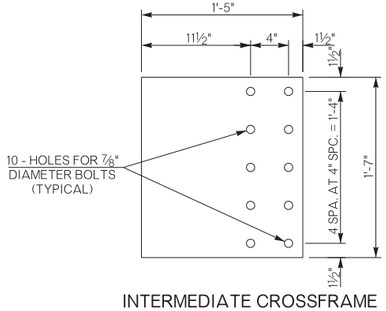


WITH LATERAL BRACING CONNECTION WITHOUT LATERAL BRACING CONNECTION

TYPICAL BEARING STIFFENER DETAIL
AT PIER NO. 5 AND ABUTMENT NO. 2



CROSSFRAME AT PIERS 5 THRU 7
AND ABUTMENT 2 - CONECTION PLATE



INTERMEDIATE CROSSFRAME
SPANS 6 THRU 8 - CONNECTION PLATE

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

BRIDGE A & B MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

CROSSFRAME AND STIFFENERS
DETAILS

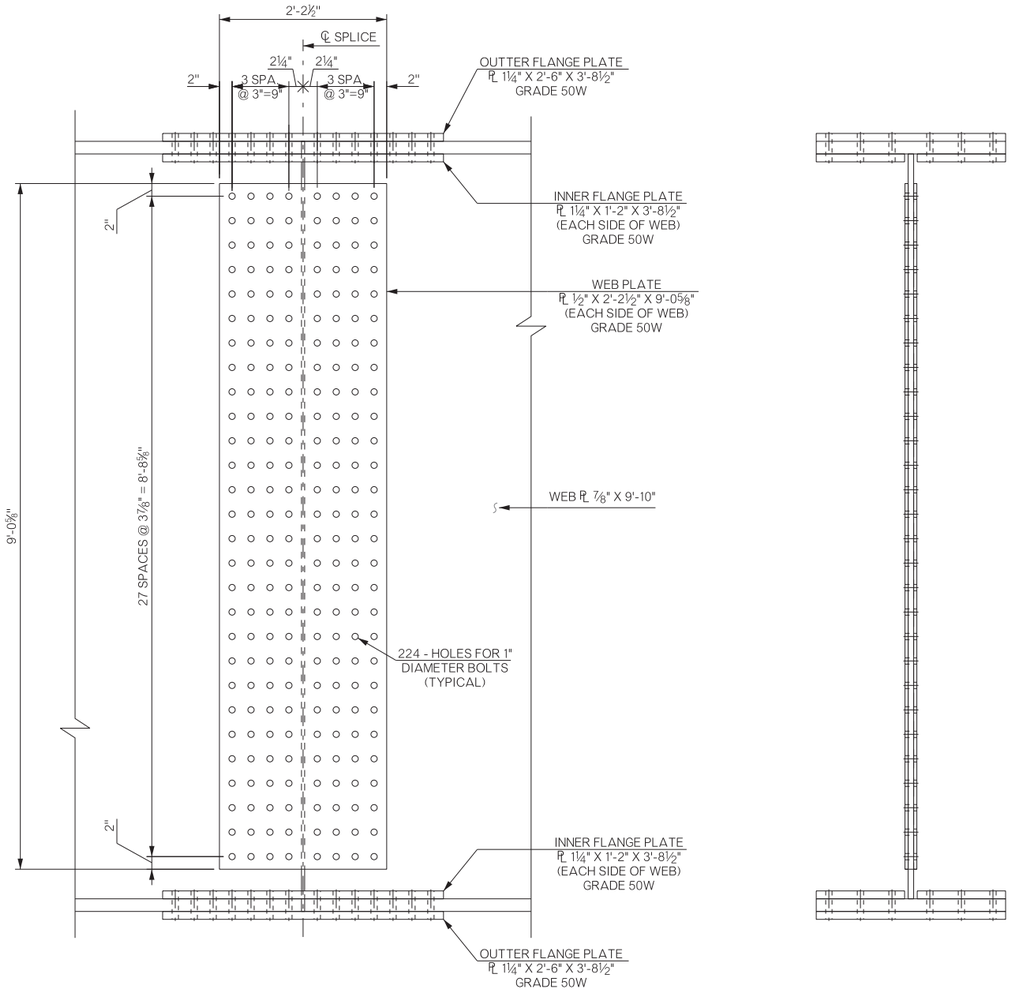
Design	CJO	6/20
Detail	DPG	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) SHEET NO. B058

REVISIONS		
REV. NO.	DESCRIPTION	DATE

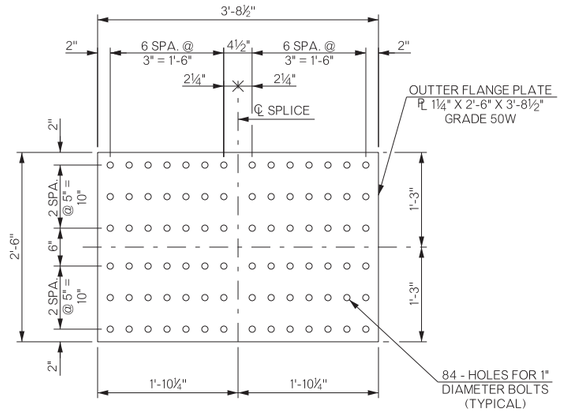


ELEVATION

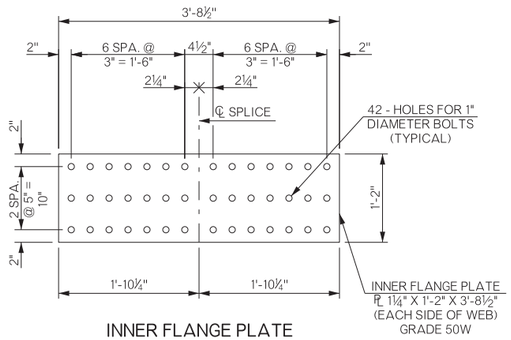
CROSS SECTION

FIELD SPLICE NO. 1, 5, 6, AND 10

NOTE: FOR LOCATIONS SEE "PLATE GIRDER DETAILS (SHEET 1 OF 3)".



OUTER FLANGE PLATE



INNER FLANGE PLATE

NOTES:

ALL BOLTED CONNECTIONS SHALL USE 1" DIAMETER HIGH STRENGTH BOLTS (A325) TYPE 3 WITH DIRECT TENSION INDICATORS AS SPECIFIED IN SECTION 506 OF THE STANDARD SPECIFICATIONS.

ALLOW ½" GAP BETWEEN GIRDERS CONNECTED.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

FIELD SPLICE DETAILS (SHEET 1 OF 3)

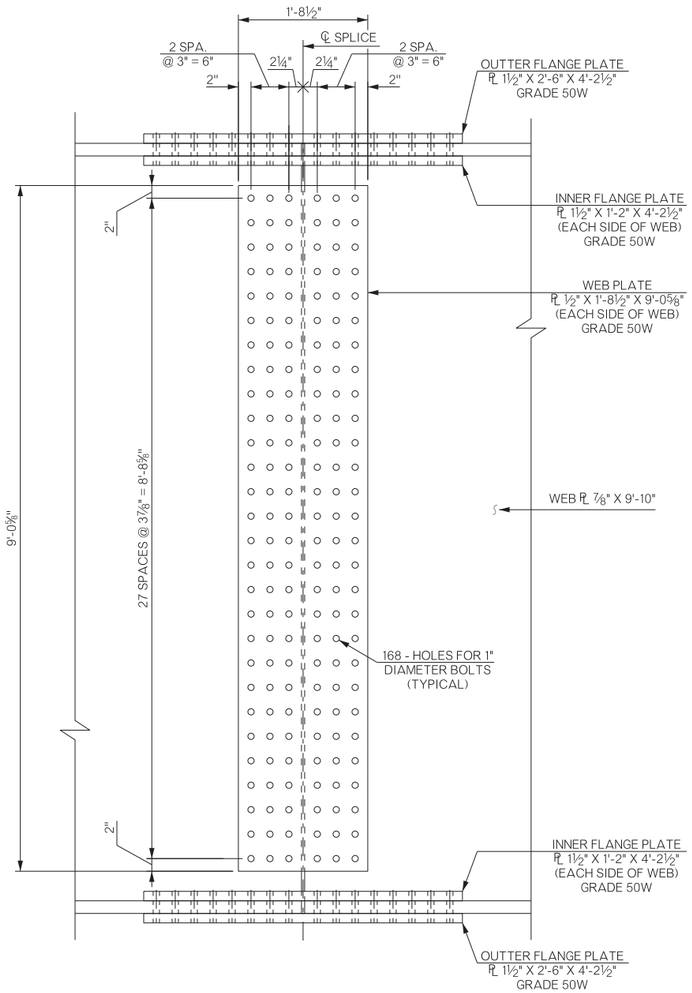
Design	CJO	6/20
Detail	LAF	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

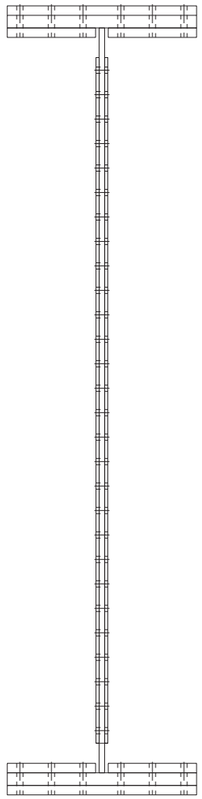
STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B059

REVISIONS		
REV. NO.	DESCRIPTION	DATE



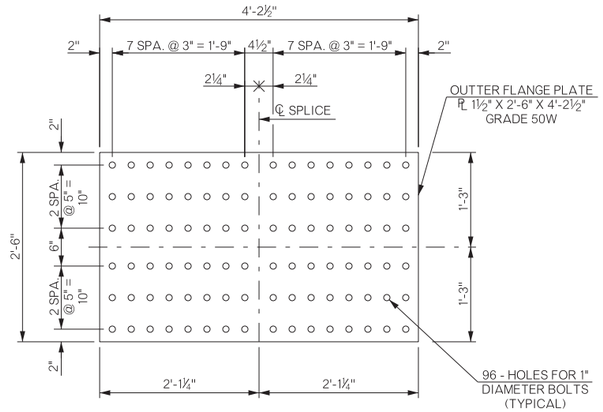
ELEVATION



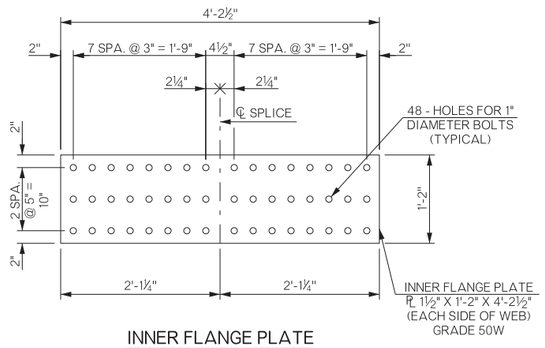
CROSS SECTION

FIELD SPLICE NO. 2 AND 9

NOTE: FOR LOCATIONS SEE "PLATE GIRDER DETAILS (SHEET 1 OF 3)".



OUTER FLANGE PLATE



INNER FLANGE PLATE

NOTES:

ALL BOLTED CONNECTIONS SHALL USE 1" DIAMETER HIGH STRENGTH BOLTS (A325) TYPE 3 WITH DIRECT TENSION INDICATORS AS SPECIFIED IN SECTION 506 OF THE STANDARD SPECIFICATIONS.

ALLOW ½" GAP BETWEEN GIRDERS CONNECTED.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

FIELD SPLICE DETAILS
(SHEET 2 OF 3)

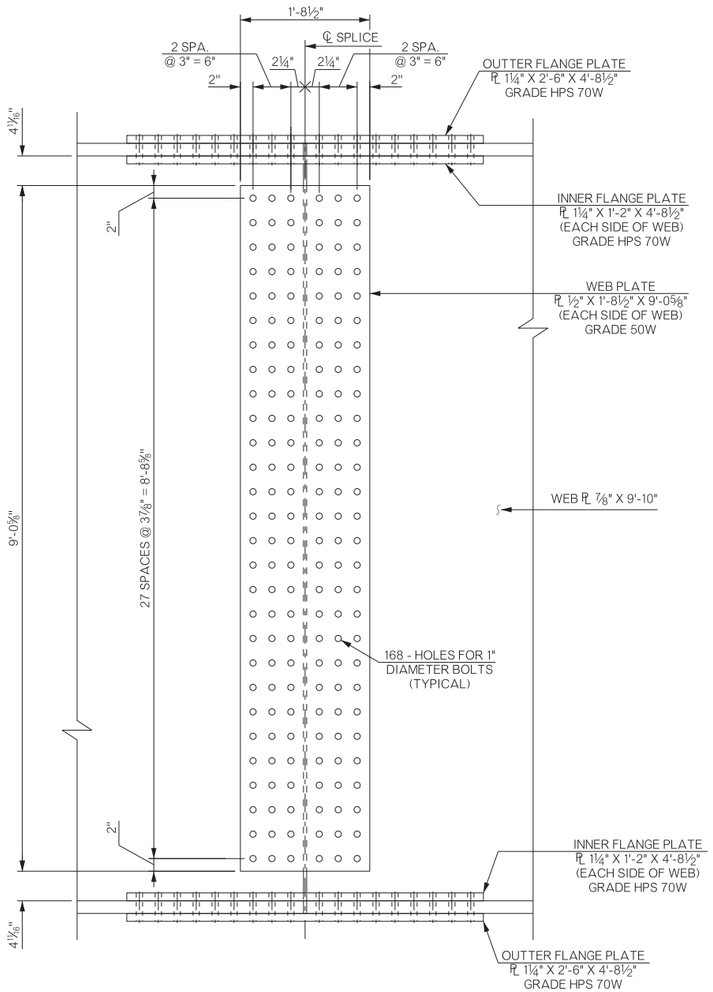
Design	CJO	6/20
Detail	LAF	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

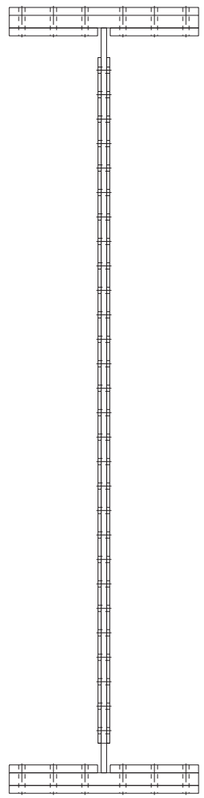
STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B060

REVISIONS		
REV. NO.	DESCRIPTION	DATE



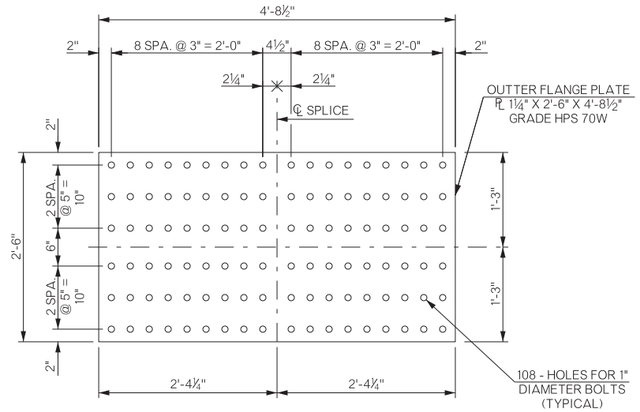
ELEVATION



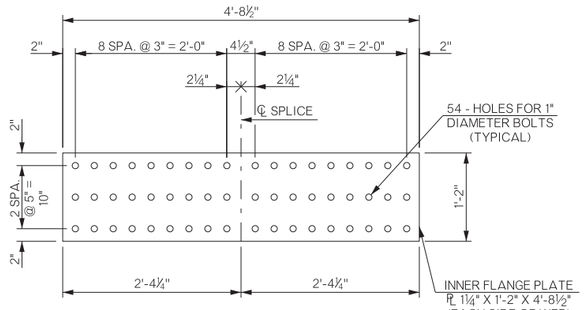
CROSS SECTION

FIELD SPLICE NO. 3, 4, 7, AND 8

NOTE: FOR LOCATIONS SEE "PLATE GIRDER DETAILS (SHEET 1 OF 3)".



OUTER FLANGE PLATE



INNER FLANGE PLATE

NOTES:

ALL BOLTED CONNECTIONS SHALL USE 1" DIAMETER HIGH STRENGTH BOLTS (A325) TYPE 3 WITH DIRECT TENSION INDICATORS AS SPECIFIED IN SECTION 506 OF THE STANDARD SPECIFICATIONS.

ALLOW ½" GAP BETWEEN GIRDERS CONNECTED.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

FIELD SPLICE DETAILS
(SHEET 3 OF 3)

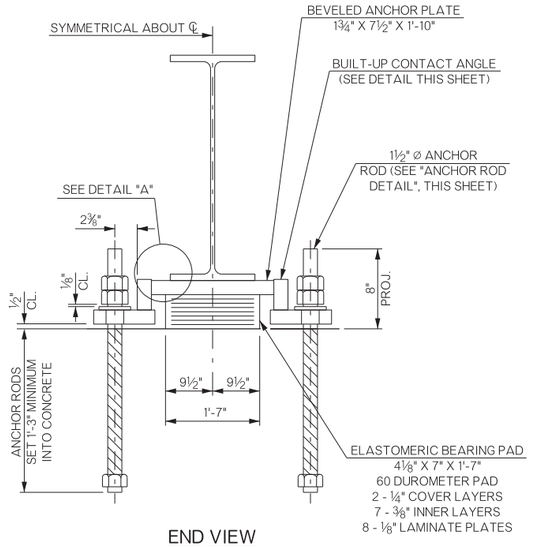
Design	CJO	6/20
Detail	LAF	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

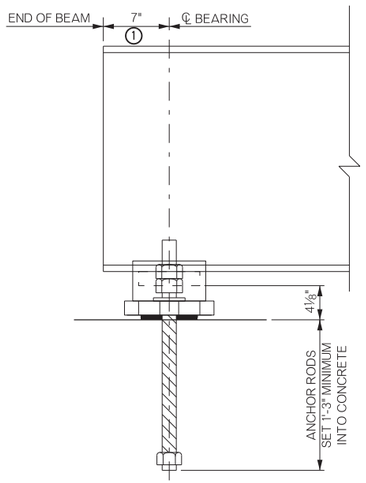
STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B061

REVISIONS		
REV. NO.	DESCRIPTION	DATE

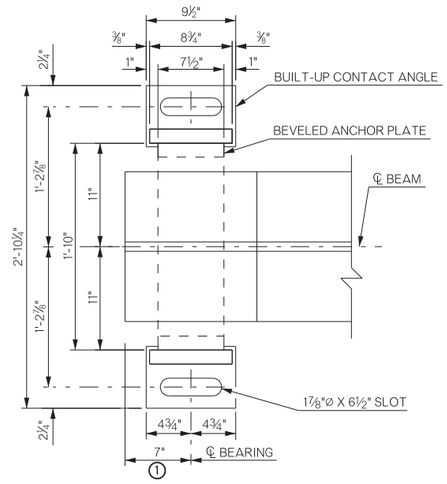


END VIEW

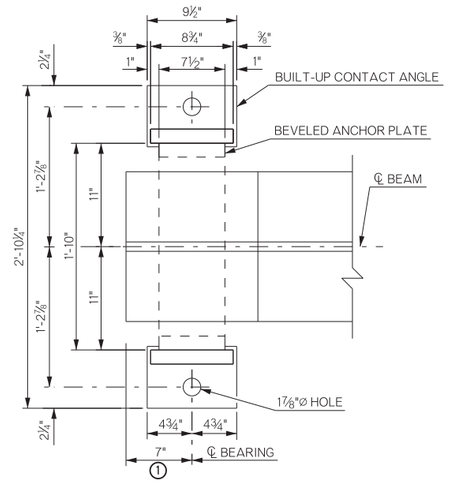


SIDE VIEW

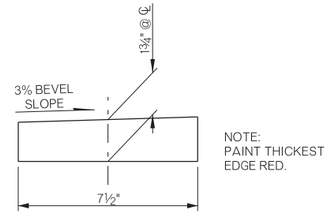
BEARING DETAILS



EXPANSION BEARING PLAN



FIXED BEARING PLAN



BEVELED ANCHOR PLATE DETAIL

NOTE: BEVEL SLOPE TO MATCH ANGLE BETWEEN BEAM SUPPORTS AND HORIZONTAL.

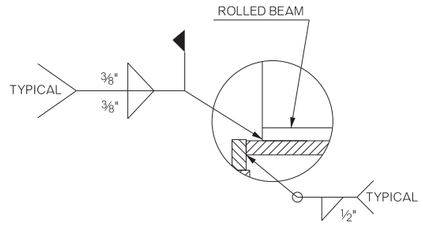
① CENTER ANCHOR RODS IN SLOTS DURING SETTING OF BEAMS. DIMENSION MAY VARY DEPENDING ON TEMPERATURE AT THE TIME OF BEAM SETTING.

BEARING ASSEMBLIES NOTES:

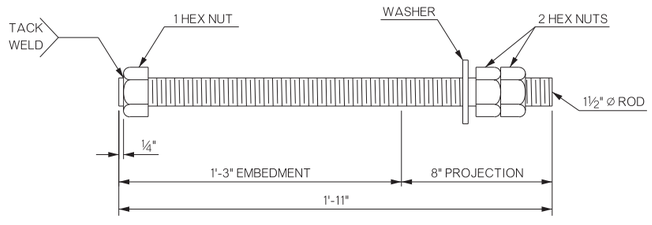
PROVIDE STRUCTURAL STEEL FOR ANCHOR PLATES AND BUILT- UP CONTACT ANGLES IN ACCORDANCE WITH ASTM A240 (AUSTENITIC STAINLESS STEEL, TYPE 316, CHARPY V- NOTCH TESTING NOT REQUIRED). FOR ANCHOR RODS, PROVIDE CONTINUOUSLY THREADED BARS IN ACCORDANCE WITH ASTM A320, CLASS 2, GRADE B8M (AUSTENITIC STAINLESS STEEL, TYPE 316, CHARPY V- NOTCH TESTING NOT REQUIRED). USE AUSTENITIC STAINLESS STEEL NUTS AND WASHERS CONFORMING TO ASTM A194, GRADE 8M AND ASTM A320, RESPECTIVELY. PERFORM ALL WELDING CONSISTENT WITH PROCEDURES FOR STAINLESS STEEL.

PAINT THICKEST EDGE RED. CONTRACTOR SHALL TAKE CARE TO ORIENT THE BEVELED PLATES IN THE FIELD WITH THE PAINTED EDGE FACING THE PROPER DIRECTION.

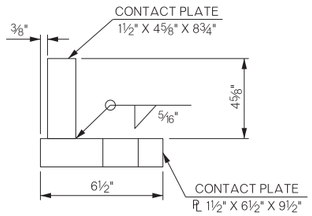
ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE, AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER THE BEARING IS INSTALLED.



DETAIL "A"



ANCHOR ROD DETAIL



BUILT-UP CONTACT ANGLE DETAIL

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

BEARING ASSEMBLIES ABUTMENT NO. 1 AND PIER NO. 1 THRU PIER NO. 5

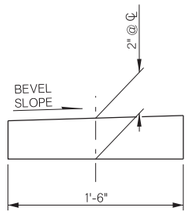
Design	CJO	6/20
Detail	LAF	6/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B062

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	ADD PLATE DIMENSIONS	7/06/21
2	ADD NOTE	9/07/21
3	REMOVE NOTE	9/14/21

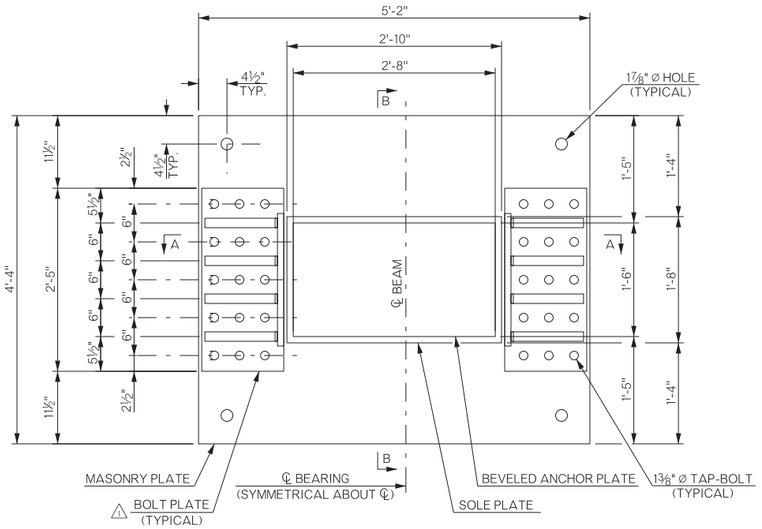


NOTE:
PAINT THICKEST EDGE RED.

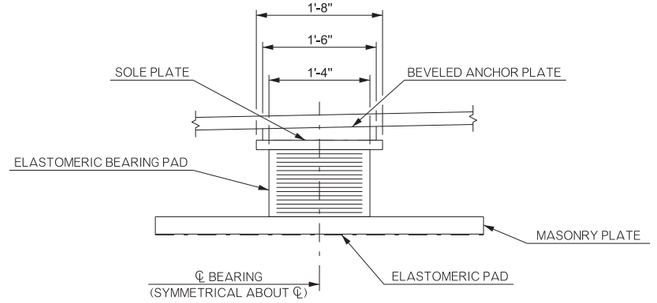
BEVELED ANCHOR PLATE DETAIL

NOTE: BEVEL SLOPE TO MATCH ANGLE BETWEEN BEAM SUPPORTS AND HORIZONTAL.

BEVEL PLATE DIMENSIONS	
STRUCTURE	BEVEL GRADE
PIER NO. 5	2.00%
ABUTMENT NO. 2	-2.24%

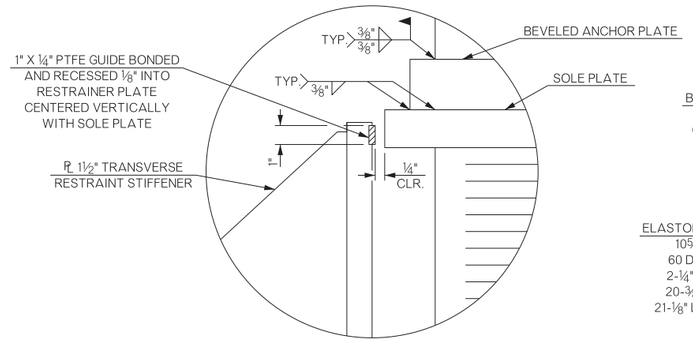


EXPANSION BEARING PLAN

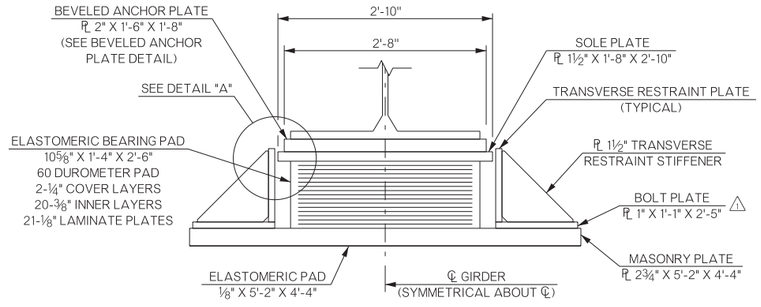


SECTION B-B

NOTE: ANCHOR RODS NOT SHOWN FOR CLARITY.

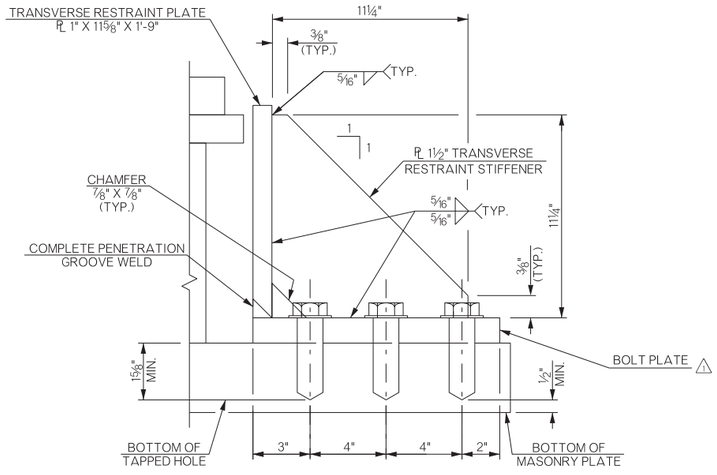


DETAIL "A"

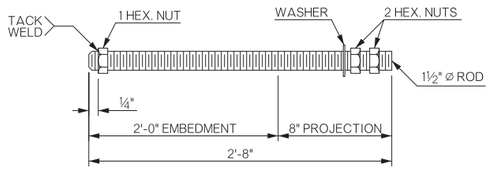


SECTION A-A

NOTE: ANCHOR RODS NOT SHOWN FOR CLARITY.



REMOVABLE TRANSVERSE RESTRAINT ASSEMBLY



ANCHOR ROD DETAIL

BEARING ASSEMBLY NOTES:

PAINT THICKEST EDGE RED. CONTRACTOR SHALL TAKE CARE TO ORIENT THE BEVELED PLATES IN THE FIELD WITH THE PAINTED EDGE FACING THE PROPER DIRECTION.

ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE, AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER THE BEARING IS INSTALLED.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

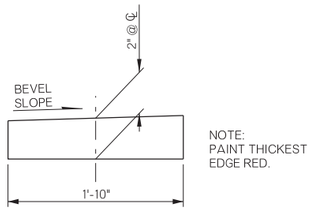
BEARING ASSEMBLIES
PIER NO. 5 AND ABUTMENT NO. 2

Design	CJO	6/20
Detail	LAF	3/20
Check	TEE	8/20
Squad	HENSLEY	
Engr.	DEFRANCO	

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B063

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	ADD PLATE DIMENSIONS	7/06/21
2	ADD NOTE	9/07/21
3	REMOVE NOTE	9/14/21

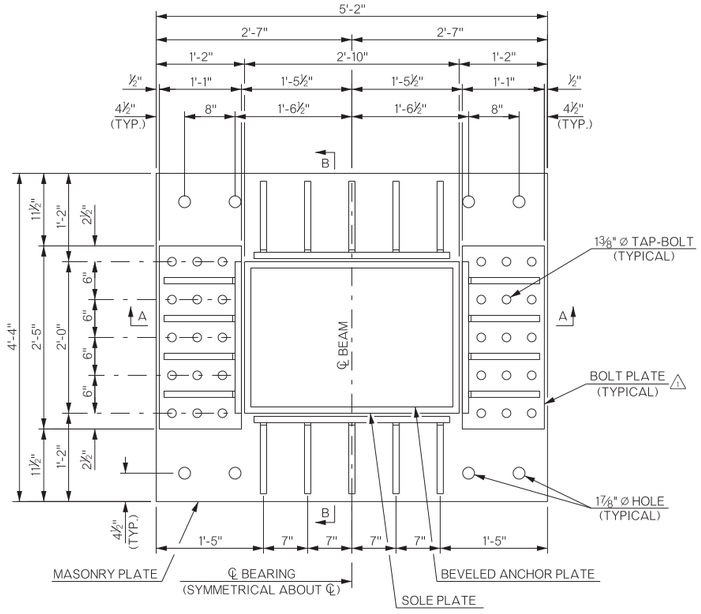


NOTE:
PAINT THICKEST EDGE RED.

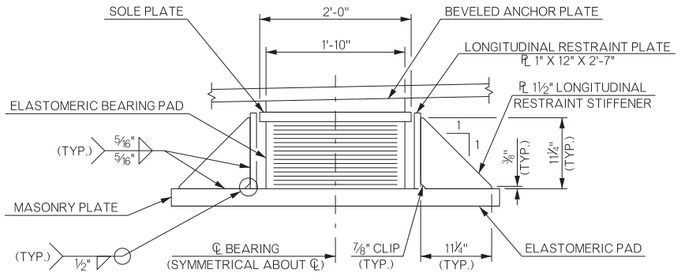
BEVELED ANCHOR PLATE DETAIL

NOTE: BEVEL SLOPE TO MATCH ANGLE BETWEEN BEAM SUPPORTS AND HORIZONTAL.

BEVEL PLATE DIMENSIONS	
STRUCTURE	BEVEL GRADE
PIER NO. 6	0.65%
PIER NO. 7	-0.89%

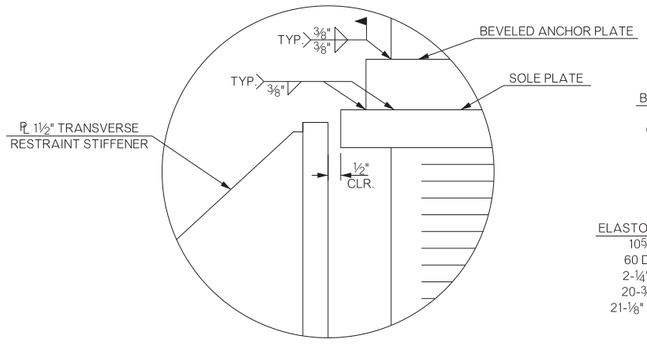


FIXED BEARING PLAN

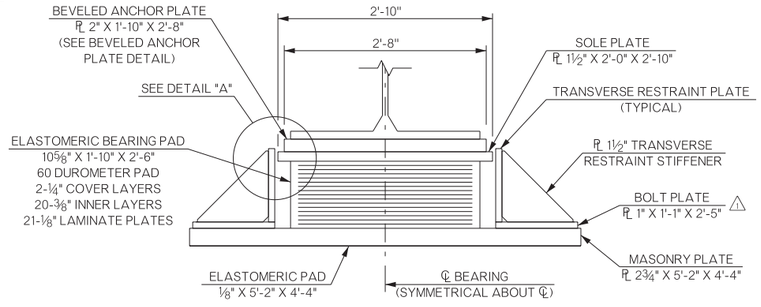


SECTION B-B

NOTE: ANCHOR RODS NOT SHOWN FOR CLARITY.

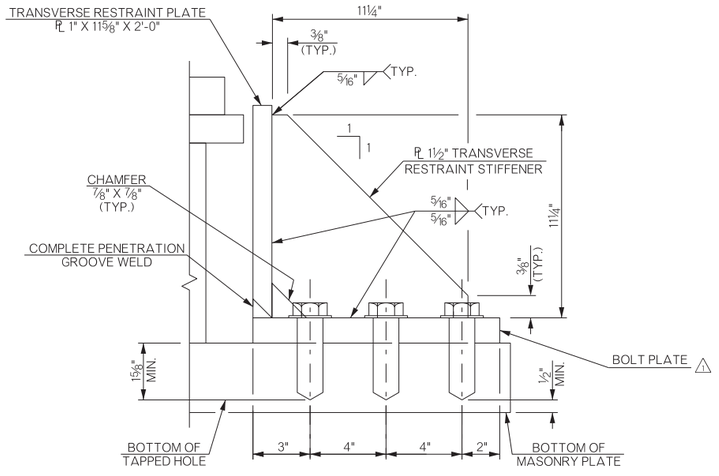


DETAIL "A"

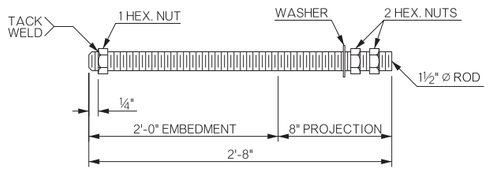


SECTION A-A

NOTE: ANCHOR RODS NOT SHOWN FOR CLARITY.



REMOVABLE TRANSVERSE RESTRAINT ASSEMBLY



ANCHOR ROD DETAIL

⚠⚠

BEARING ASSEMBLY NOTES:

PAINT THICKEST EDGE RED. CONTRACTOR SHALL TAKE CARE TO ORIENT THE BEVELED PLATES IN THE FIELD WITH THE PAINTED EDGE FACING THE PROPER DIRECTION.

ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE, AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER THE BEARING IS INSTALLED.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

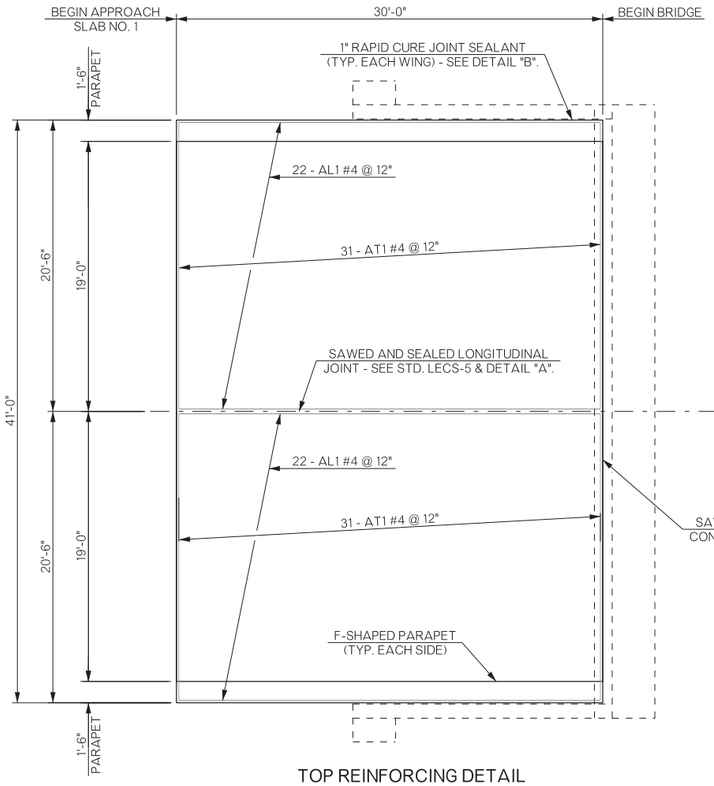
BEARING ASSEMBLIES
PIER NO. 6 AND PIER NO. 7

Design	CJO	6/20
Detail	MSW	2/20
Check	TEE	8/20
Squad	HENSLEY	
Engr.:	DEFRANCO	

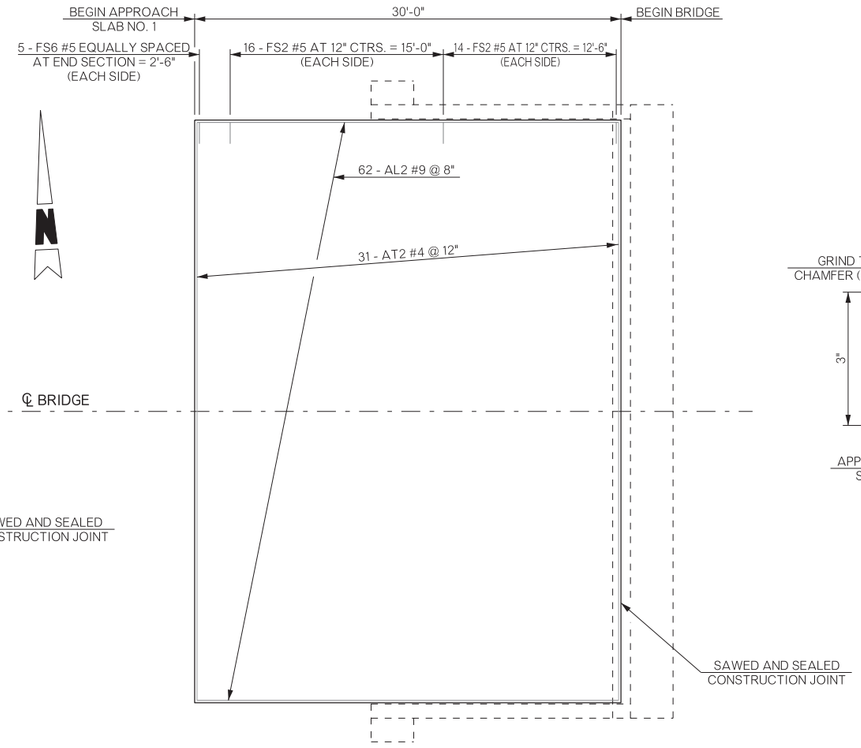
STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B064

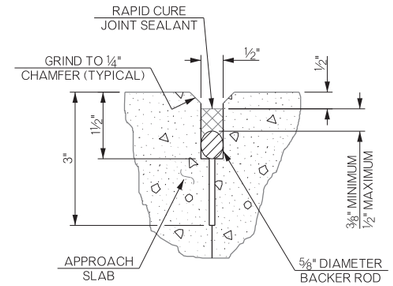
REVISIONS		
REV. NO.	DESCRIPTION	DATE



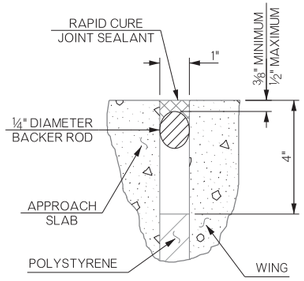
TOP REINFORCING DETAIL
APPROACH SLAB NO. 1



BOTTOM REINFORCING DETAIL
APPROACH SLAB NO. 1

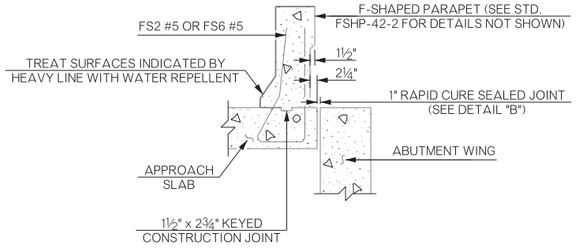


DETAIL "A"

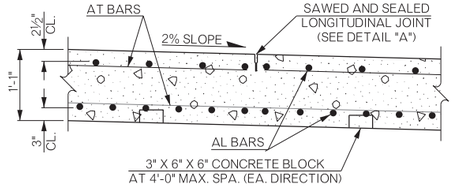


DETAIL "B"

BAR LIST - APPROACH SLAB NO. 1				
MARK	NO.	SIZE	FORM	LENGTH
EPOXY COATED				
AL1	44	#4	STR.	29'-10"
AL2	62	#9	STR.	29'-10"
AT1	62	#4	STR.	20'-2"
AT2	31	#4	STR.	40'-8"
FS2	60	#5	BNT.	7'-4"
FS6	10	#5	BNT.	7'-6½"



APPROACH SLAB AT ABUTMENT WING DETAIL



SECTION THRU APPROACH SLAB

NOTE: PLACE REINFORCING IN THE TOP OF THE APPROACH SLAB 2" FROM EITHER SIDE OF THE SAWED AND SEALED LONGITUDINAL JOINT. FOR ADDITIONAL DETAILS OF LONGITUDINAL JOINT SEE STD. LECS-5.

QUANTITIES - APPROACH SLAB NO. 1		
ITEM	UNIT	TOTAL
① APPROACH SLABS	S.Y.	136.70
SAW-CUT GROOVING	S.Y.	106.40
42" F-SHAPED PARAPET	L.F.	60.00
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	30.00

① THE DEPARTMENT CONSIDERS THE COST OF CONCRETE, REINFORCING STEEL (INCLUDING FS BARS), BACKER ROD, RAPID CURE JOINT SEALANT, POLYSTYRENE AND POLYETHYLENE SHEETING TO BE INCLUDED IN THE CONTRACT UNIT PRICE OFAPPROACH SLAB. THERE IS AN ESTIMATED 49.40 C.Y. OF CLASS AA CONCRETE AND AN ESTIMATED 9,390.00 LB. OF EPOXY COATED REINFORCING STEEL IN APPROACH SLAB NO. 1.

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

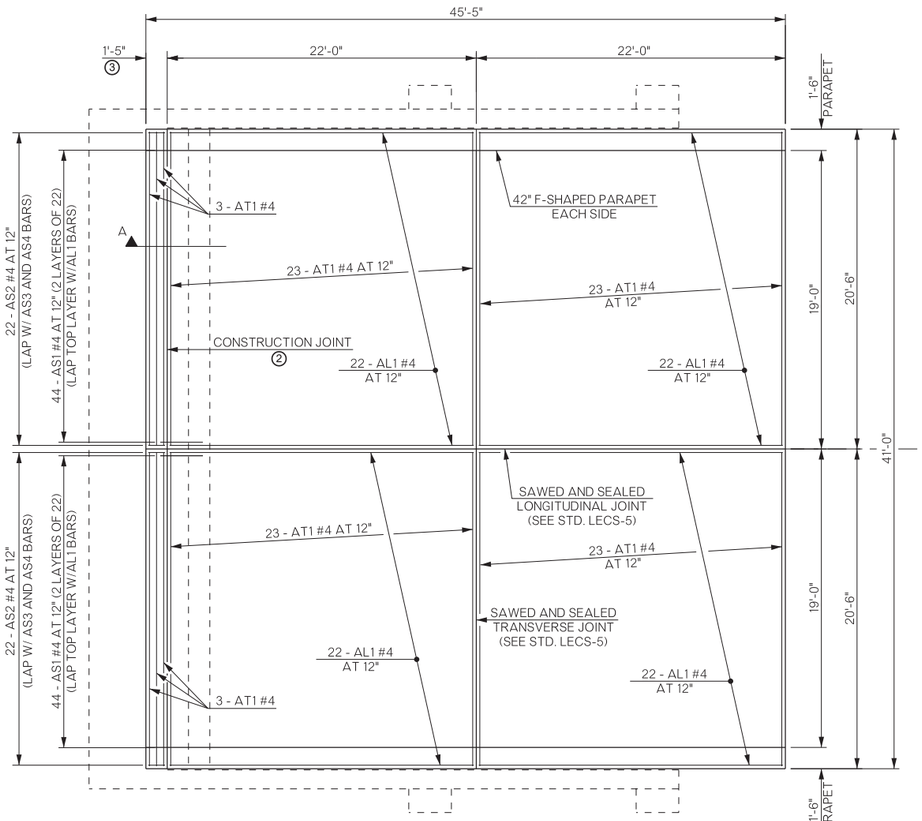
APPROACH SLAB AT ABUTMENT NO. 1 DETAILS

Design	CJO	6/20
Detail	LAF	2/20
Check	TEE	8/20
Squad: HENSLEY		
Engr.: DEFRANCO		

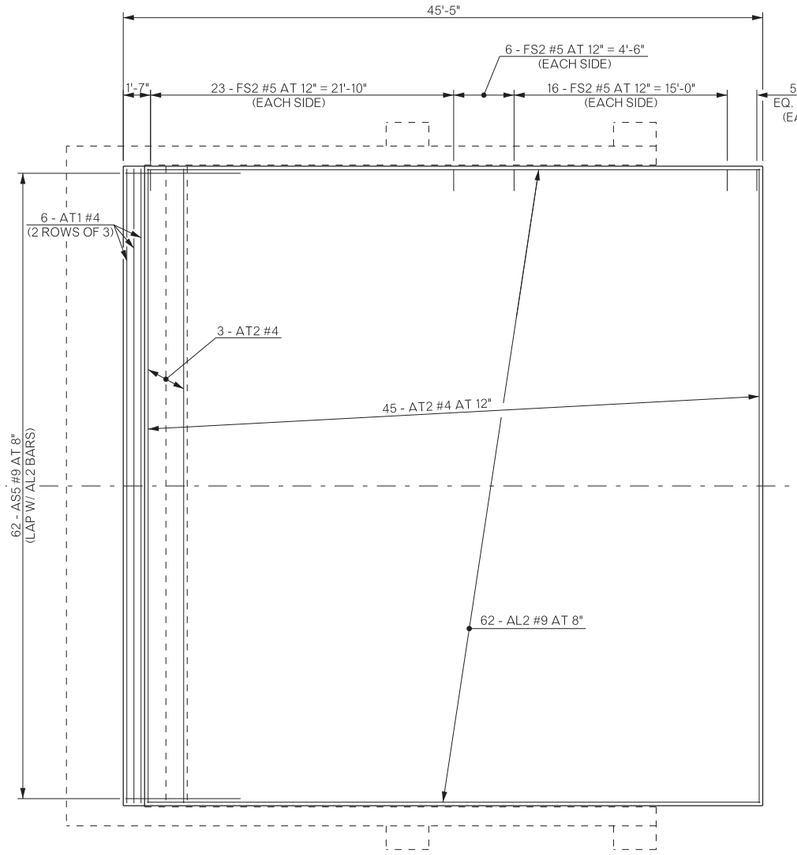
STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB/PIECE NO. 30416(04) — SHEET NO. B065

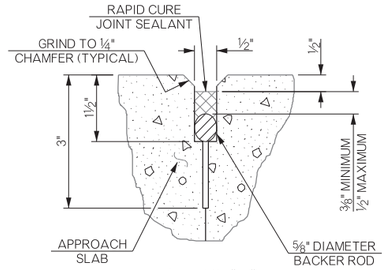
REVISIONS		
REV. NO.	DESCRIPTION	DATE



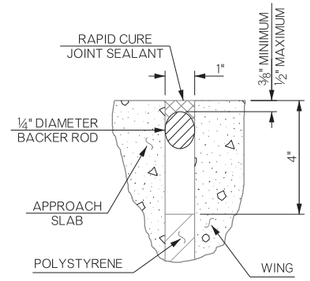
TOP REINFORCING MAT DETAIL
APPROACH SLAB NO. 2



BOTTOM REINFORCING MAT DETAIL
APPROACH SLAB NO. 2

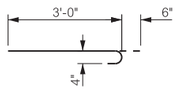


DETAIL "A"

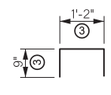


DETAIL "B"

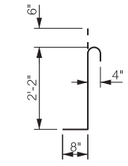
BAR LIST - APPROACH SLAB NO. 2				
MARK	NO.	SIZE	FORM	LENGTH
EPOXY COATED				
AL1	88	#4	STR.	21'-10"
AL2	62	#9	STR.	43'-10"
AS1	88	#4	BNT.	3'-6"
AS2	44	#4	BNT.	2'-8"
AS3	44	#4	BNT.	3'-4"
AS4	44	#4	BNT.	2'-10"
AS5	62	#9	BNT.	12'-1"
AT1	98	#4	STR.	20'-2"
AT2	54	#4	STR.	40'-8"
FS2	90	#5	BNT.	7'-4"
FS6	10	#5	BNT.	7'-6½"



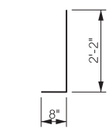
AS1 #4 x 3'-6"



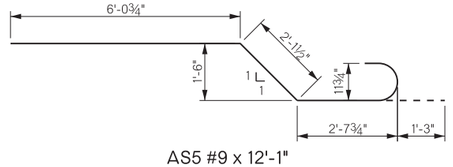
AS2 #4 x 2'-8"



AS3 #4 x 3'-4"



AS4 #4 x 2'-10"



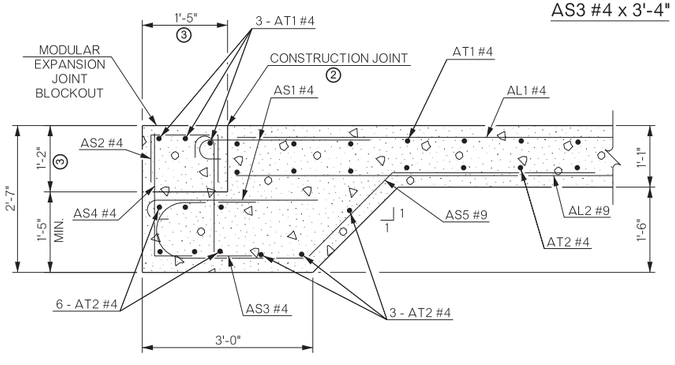
AS5 #9 x 12'-1"

① THE DEPARTMENT CONSIDERS THE COST OF CONCRETE, REINFORCING STEEL (INCLUDING FS BARS), BACKER ROD, RAPID CURE JOINT SEALANT, POLYSTYRENE AND POLYETHYLENE SHEETING TO BE INCLUDED IN THE CONTRACT UNIT PRICE OF APPROACH SLAB. THERE IS AN ESTIMATED 83.40 C.Y. OF CLASS AA CONCRETE AND AN ESTIMATED 17,100.00 LB. OF EPOXY COATED REINFORCING STEEL IN APPROACH SLAB NO. 2.

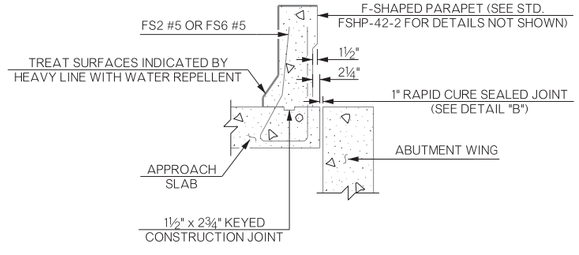
② SEAL WITH HIGH MOLECULAR WEIGHT METHACRYLATE.

③ ADJUST AS NECESSARY TO ACCOMODATE CHOSEN MODULAR EXPANSION SYSTEM.

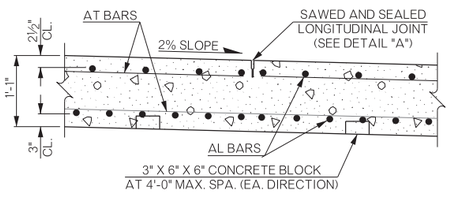
BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND



SECTION A



APPROACH SLAB AT ABUTMENT WING DETAIL



SECTION THRU APPROACH SLAB

NOTE: PLACE REINFORCING IN THE TOP OF THE APPROACH SLAB 2" FROM EITHER SIDE OF THE SAWED AND SEALED LONGITUDINAL JOINT. FOR ADDITIONAL DETAILS OF LONGITUDINAL JOINT SEE STD. LECS-5.

QUANTITIES - APPROACH SLAB NO. 2		
ITEM	UNIT	TOTAL
① APPROACH SLAB	S.Y.	206.90
SAW-CUT GROOVING	S.Y.	154.00
42" F-SHAPED PARAPET	L.F.	90.90
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	45.00
SEALER CRACK PREPARATION	L.F.	38.00
SEALER RESIN	GAL.	0.30

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

APPROACH SLAB AT ABUTMENT NO. 2 DETAILS

Design	CJO	6/20
Detail	MSW	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

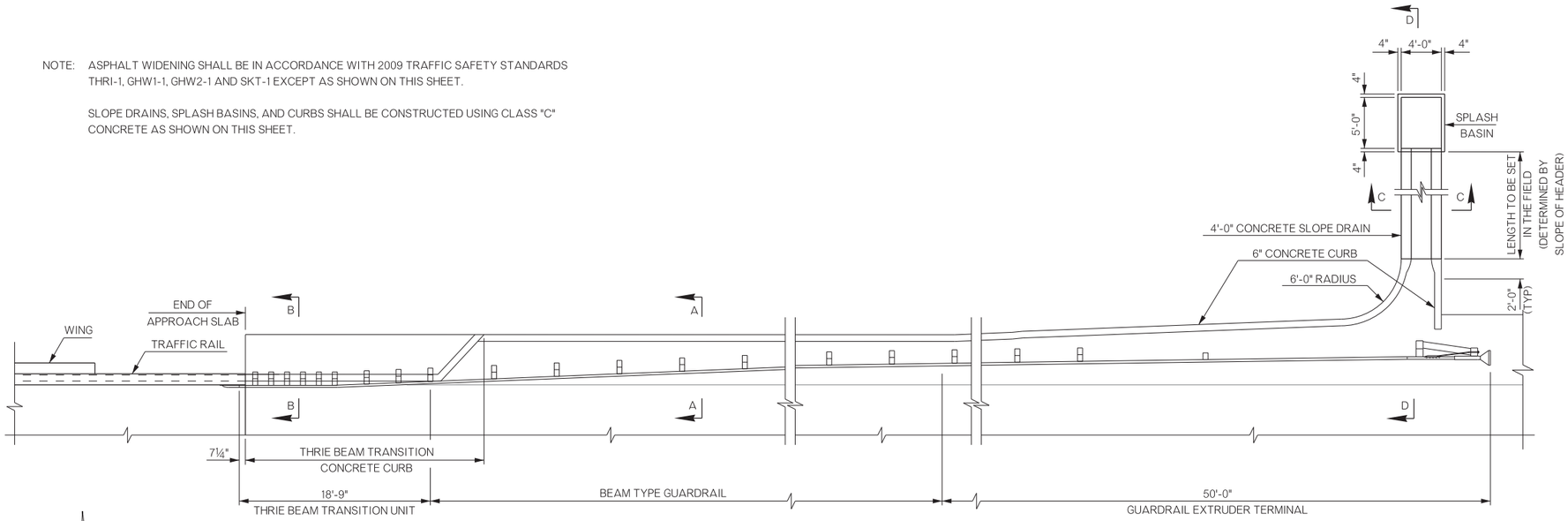
STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B066

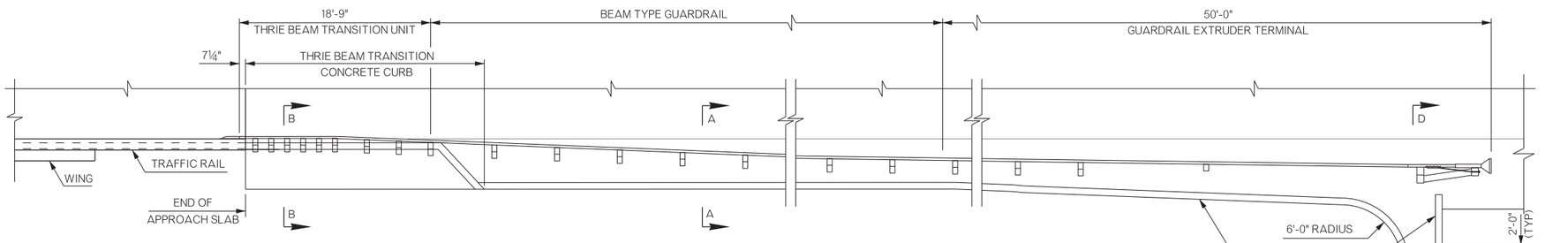
REVISIONS		
REV. NO.	DESCRIPTION	DATE

NOTE: ASPHALT WIDENING SHALL BE IN ACCORDANCE WITH 2009 TRAFFIC SAFETY STANDARDS THRI-1, GHW1-1, GHW2-1 AND SKT-1 EXCEPT AS SHOWN ON THIS SHEET.

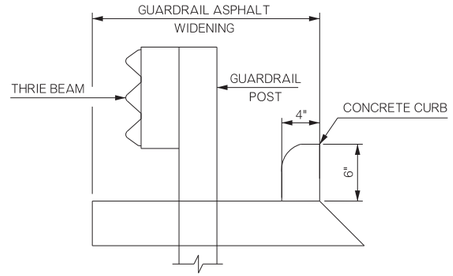
SLOPE DRAINS, SPLASH BASINS, AND CURBS SHALL BE CONSTRUCTED USING CLASS "C" CONCRETE AS SHOWN ON THIS SHEET.



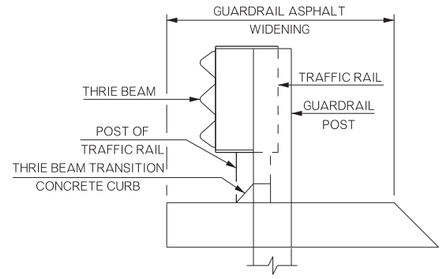
END OF BRIDGE OF WESTBOUND BRIDGE 'B'
TYPICAL AT NORTH SIDE OF ROADWAY AT BOTH ENDS OF BRIDGE



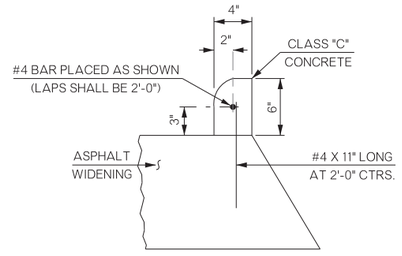
END OF BRIDGE OF EASTBOUND BRIDGE 'A'
TYPICAL AT SOUTH SIDE OF ROADWAY AT BOTH ENDS OF BRIDGE



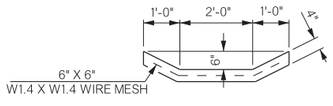
SECTION A-A



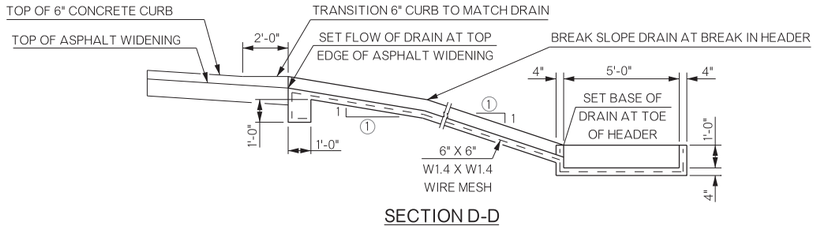
SECTION B-B



DETAIL OF CONCRETE CURB



SECTION C-C



SECTION D-D

① SLOPE TO MATCH SLOPE OF HEADER

BRIDGE A & B MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

DRAINS AT END OF BRIDGE DETAILS

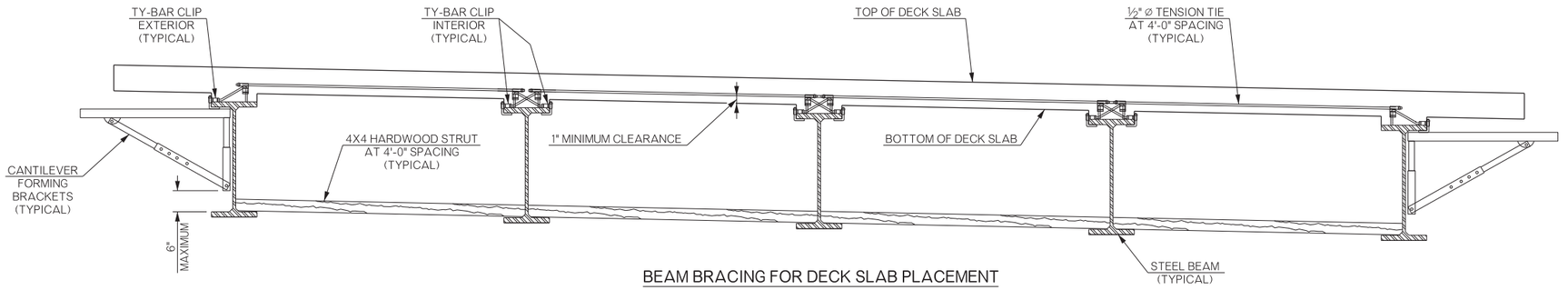
Design	CJO	6/20
Detail	MSW	2/20
Check	TEE	8/20

Squad HENSLEY
Engr.: DEFRANCO

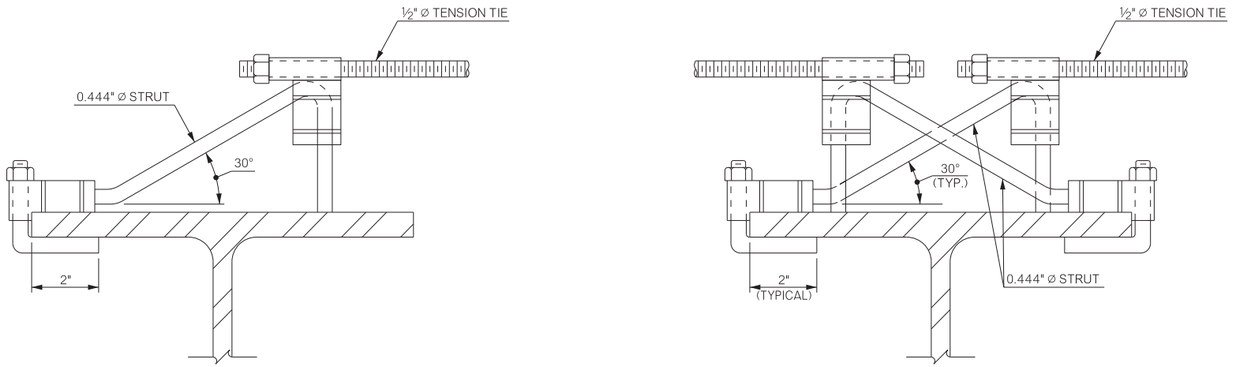
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) SHEET NO. B067

REVISIONS		
REV. NO.	DESCRIPTION	DATE

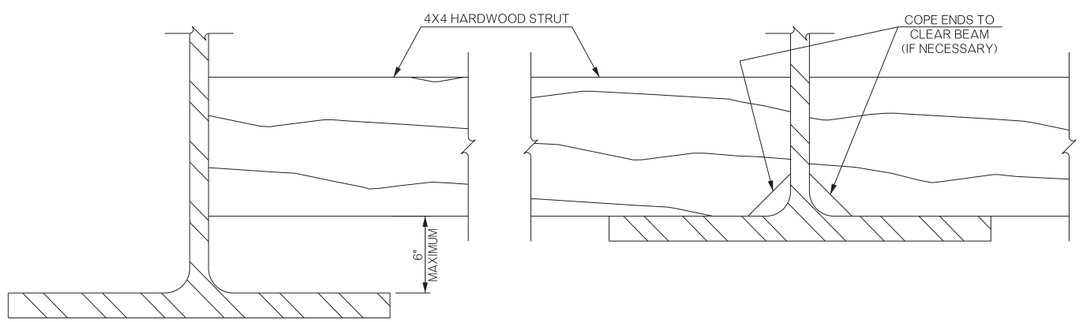


BEAM BRACING FOR DECK SLAB PLACEMENT



EXTERIOR INTERIOR

TY-BAR CLIP DETAIL
(EPOXY COATED)



EXTERIOR INTERIOR

HARDWOOD STRUT DETAIL

BRACING NOTES

SUBMIT DRAWINGS OF THE BRACING SYSTEM TO THE BRIDGE ENGINEER FOR APPROVAL. BRACING SYSTEMS OTHER THAN THAT SHOWN MAY BE USED IF DESIGN CALCULATIONS AND DRAWINGS OF THE PROPOSED BRACING SYSTEM ARE SUBMITTED TO AND APPROVED BY THE BRIDGE ENGINEER. DRAWINGS AND CALCULATIONS OF THE PROPOSED SYSTEM SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OKLAHOMA. DO NOT PLACE DECK SLAB CONCRETE UNTIL BRACING SYSTEM IS APPROVED. THE DEPARTMENT CONSIDERS ALL COST FOR BRACING TO BE INCLUDED IN OTHER ITEMS OF WORK.

USE ADJUSTABLE CANTILEVER FORMING BRACKETS AT EXTERIOR BEAMS CAPABLE OF BEING ADJUSTED DURING THE PLACEMENT OF DECK SLAB CONCRETE IN ORDER TO MAINTAIN PROPER GRADES AT THE DECK SLAB OVERHANG. IF SHIMS ARE TO BE USED TO ADJUST THE FORMING BRACKETS, PROVIDE THE BRIDGE ENGINEER A METHOD TO PREDICT CRUSH AND SETTLEMENT OF SHIMS. BEAR THE LEG BRACE OF THE BRACKETS ON THE BEAM WEB WITHIN 6 INCHES OF THE BOTTOM FLANGE.

USE #4 EPOXY COATED REINFORCING STEEL WITH THREADED ENDS OR GALVANIZED ALL THREAD FOR TENSION TIES. PLACE TENSION TIES PERPENDICULAR TO THE BEAMS. ATTACH TENSION TIES TO THE TOP FLANGE OF THE BEAMS WITH TY-BAR CLIPS AS SHOWN. DO NOT WELD TY-BAR CLIPS TO THE TOP FLANGE OF THE BEAMS.

WEDGE HARDWOOD STRUTS, OR ANOTHER MATERIAL OF AN EQUIVALENT STRENGTH, BETWEEN BEAM WEBS WITHIN 6" OF THE BOTTOM FLANGE AT EACH TENSION TIE LOCATION.

BRIDGE 'A' SHOWN
BRIDGE 'B' OPPOSITE HAND

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

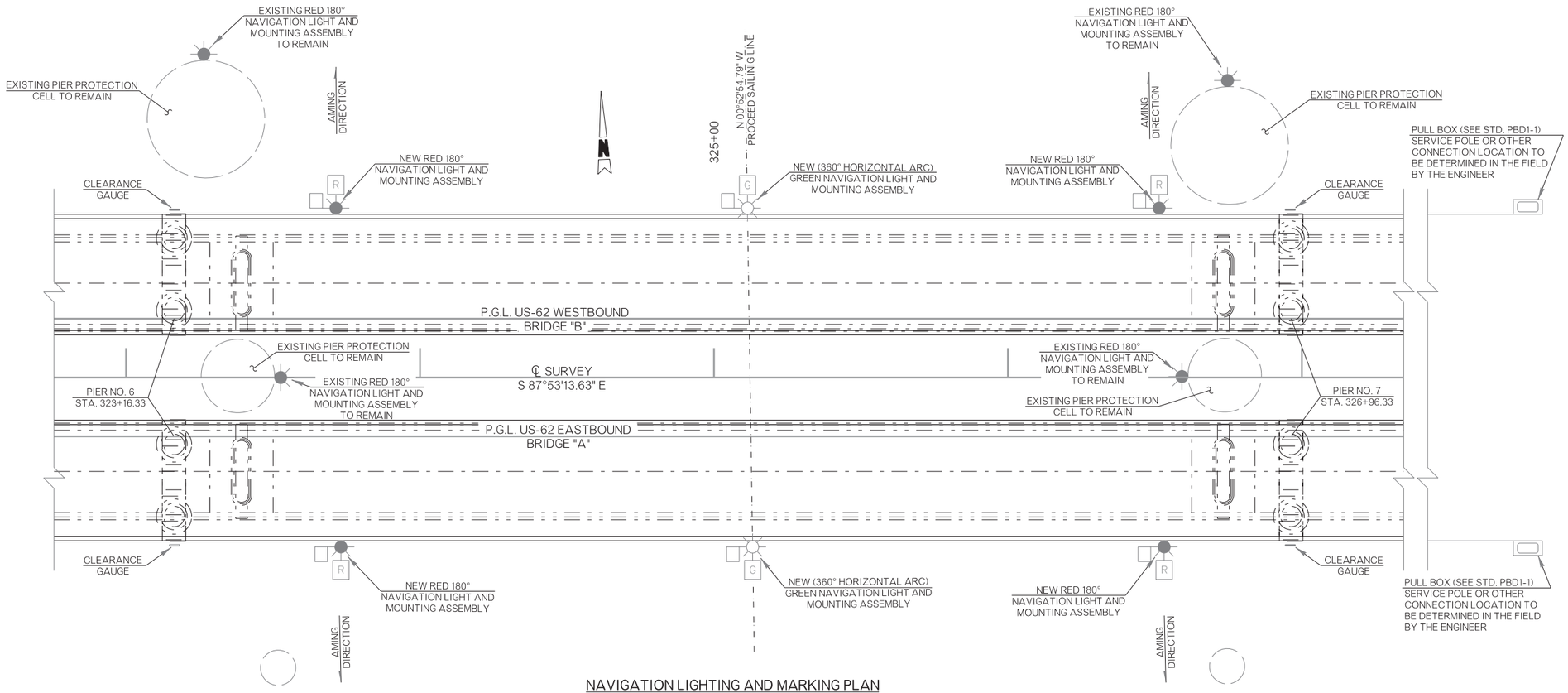
STEEL BEAM BRACING DETAILS

Design	CJO	6/20
Detail	TEE	9/20
Check	RAH	9/20
Squad	HENSLEY	
Engr.:	DEFRANCO	

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B068

REVISIONS		
REV. NO.	DESCRIPTION	DATE



NAVIGATION LIGHTING AND MARKING PLAN

NAVIGATION LIGHTING AND MARKING NOTES

PERFORM ALL ELECTRICAL WORK IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE AND THE SPECIAL PROVISION "BRIDGE NAVIGATION LIGHTING". COOPERATE WITH THE ENGINEER AND THE LOCAL ELECTRIC COMPANY TO KEEP THE EXISTING NAVIGATIONAL LIGHTING SYSTEM AT PIER PROTECTION IN SERVICE WHILE PERFORMING THE WORK SPECIFIED IN THIS CONTRACT. FOR TYPICAL ELECTRICAL DETAILS, REFERENCE 2009 TRAFFIC LIGHTING STANDARDS:

CCD1-1
CCD2-1
PBD1-1
SCD1-1
SPD1-1

FURNISH NAVIGATIONAL LIGHTS, RETROREFLECTIVE PANELS, AND CLEARANCE GAUGES COMPLYING WITH THE U.S. DEPARTMENT OF TRANSPORTATION, U.S. COAST GUARD, BRIDGE ADMINISTRATION DIVISION REQUIREMENTS AS SPECIFIED IN 33 CFR 118 - BRIDGE LIGHTING AND OTHER SIGNALS, LATEST EDITION.

PROVIDE 120 VOLT AC INPUT "TIDELAND SIGNAL" MODEL ML-140 SIGNAL LANTERNS, OR APPROVED EQUAL, WITH EITHER A GREEN 360° OR RED 180° ACRYLIC FRESNEL LENS FOR INVERTED USE.

FURNISH THE NAVIGATIONAL LIGHT ASSEMBLY WITH THE PROPER NAVIGATIONAL LIGHT AND SWING ARM ASSEMBLY OF THE PROPER LENGTH AND WITH REQUIRED SPECIAL MOUNTING BRACKETS AND HARDWARE INCLUDED AT NO ADDITIONAL COST TO THE DEPARTMENT. FABRICATE THE SWING ARM ASSEMBLY AS SHOWN ON THE PLANS. THE SUPPLIER OF THE SWING ARM ASSEMBLY SHALL FURNISH THE ANCHOR PLATE COMPLETE WITH THE SWING ARM OR PROVIDE CONNECTION DESIGN AND/OR DETAILS. INCLUDE ALL COSTS OF INSTALLATION SUPERVISION BY THE NAVIGATIONAL LIGHT ASSEMBLY SUPPLIER(S) IN OTHER ITEMS OF WORK, IF UTILIZED. A POSSIBLE SUPPLIER OF THIS ASSEMBLY IS:

HALLSTEN CORPORATION OF SACRAMENTO, CA 95841
TELEPHONE: (916)331-7211
FAX: (916)331-7223

MATERIAL REQUIREMENTS FOR THE NAVIGATOINAL LIGHT ASSEMBLY ARE AS FOLLOWS:

1) PROVIDE SWING ARM ANCHOR PLATE CONFORMING TO AASHTO M270 (ASTM A709), GRADE 50W (WEATHERING STEEL, CHARPY V-NOTCH TESTING NOT REQUIRED). GALVANIZE ANCHOR PLATE AFTER FABRICATION.
2) PROVIDE CONCRETE ANCHORS HAVING A MINIMUM TENSILE CAPACITY OF 5,000 LBS. AND A MINIMUM SHEAR CAPACITY OF 10,000 LBS.
3) PROVIDE RETROREFLECTIVE PANELS AND CLEARANCE GAUGE PANELS COMPOSED OF 0.063" THICK ALUMINUM ALLOY FLAT SHEET CONFORMING TO ASTM B209, ALLOY 6061-T6 OR 5052-H38.
4) PROVIDE RETROREFLECTIVE PANEL MOUNT PLATE CONFORMING TO ASTM B209, ALLOY 6061 OR 6063-T6, OR AASHTO M270 (ASTM A709), GRADE 36 (GALVANIZED).
5) PROVIDE BOLTS CONFORMING TO ASTM A193, GRADE B8M, CLASS 2 (TYPE 316 STAINLESS STEEL).
6) PROVIDE LOCK NUTS CONFORMING TO ASTM A194, GRADE 8M (TYPE 316 STAINLESS STEEL).
7) PROVIDE WASHERS COMPOSED OF TYPE 316 STAINLESS STEEL.
8) FURNISH MISCELLANEOUS HARDWARE COMPOSED OF NON-CORROSIVE MATERIALS.
9) ISOLATE ALUMINUM COMPONENTS FROM DISSIMILAR MATERIALS THROUGH THE USE OF NEOPRENE OR BITUMINOUS COATINGS.

PROVIDE CLEARANCE GAUGES AT LOCATIONS SHOWN USING 36 SERIES E NUMERALS. ATTACH GAUGE PANELS TO CONCRETE COLUMN SURFACES WITH STAINLESS STEEL EXPANSION ANCHORS.

NAVIGATION SYSTEM TO BE PROPERTY OF THE CONTRACTOR.

LEGEND

- 3/4" GALVANIZED STEEL CONDUIT (EXPOSED) WITH TWO NO. 10 AWG CONDUCTORS
- JUNCTION BOX (6"x6"x4" GALVANIZED)
- PULL BOX (SEE STD. PBD1-1)
- RED NAVIGATIONAL LIGHT (180 DEGREE HORIZONTAL ARC)
- GREEN NAVIGATIONAL LIGHT (360 DEGREE HORIZONTAL ARC)
- R — RED SQUARE RETROREFLECTIVE PANEL
- G — GREEN SQUARE RETROREFLECTIVE PANEL
- CLEARANCE GAUGE

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

NAVIGATION LIGHTING DETAILS (SHEET 1 OF 2)

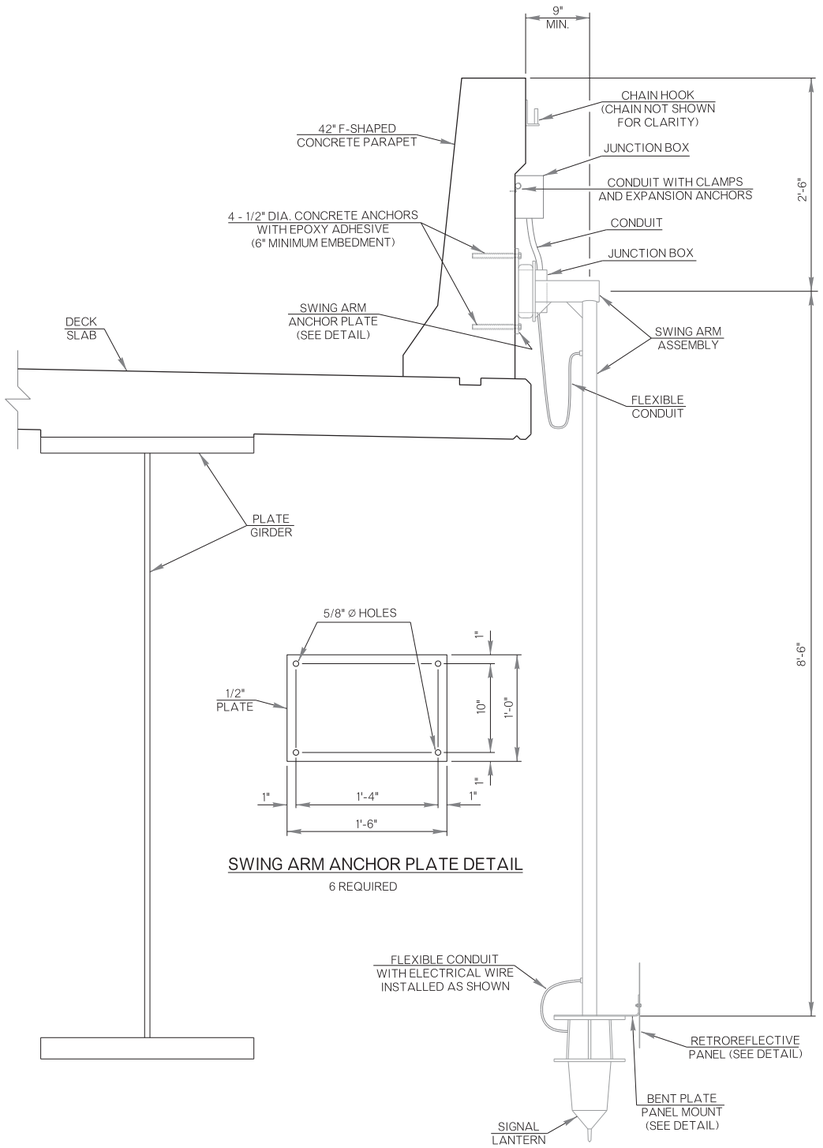
Design	CJO	6/20
Detail	RAH	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B069

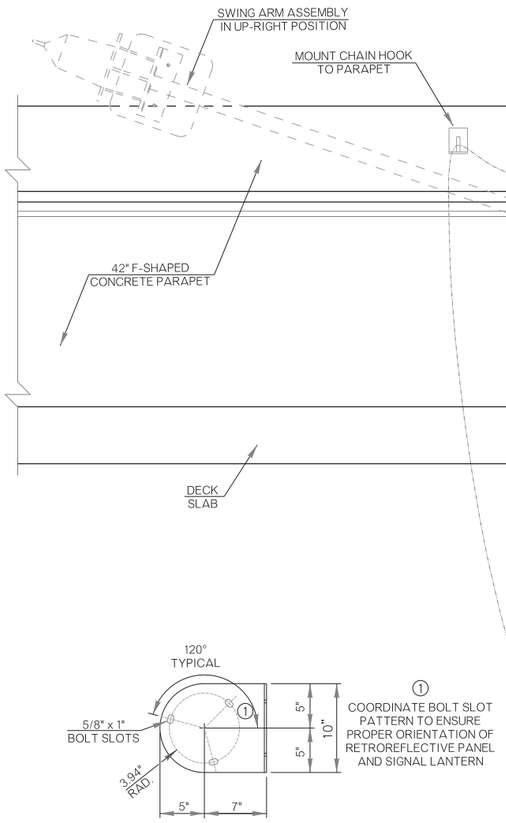
REVISIONS		
REV. NO.	DESCRIPTION	DATE



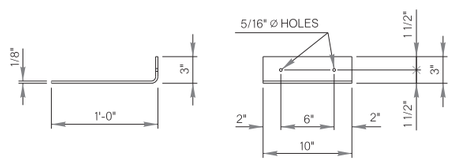
SWING ARM ANCHOR PLATE DETAIL

6 REQUIRED

SIDE



PLAN



SIDE FRONT

BENT PLATE PANEL MOUNT DETAILS

6 REQUIRED

ELEVATION

RETROREFLECTIVE PANEL DETAIL

4 RED AND 2 GREEN PANELS REQUIRED
(6 TOTAL)

NAVIGATIONAL LIGHT AND SWING ARM ASSEMBLY DETAILS

6 REQUIRED

BRIDGE A & B MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

NAVIGATION LIGHTING DETAILS
(SHEET 2 OF 2)

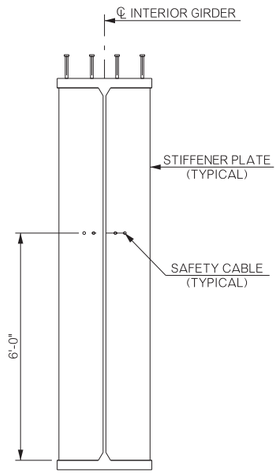
Design	CJO	6/20
Detail	RAH	2/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

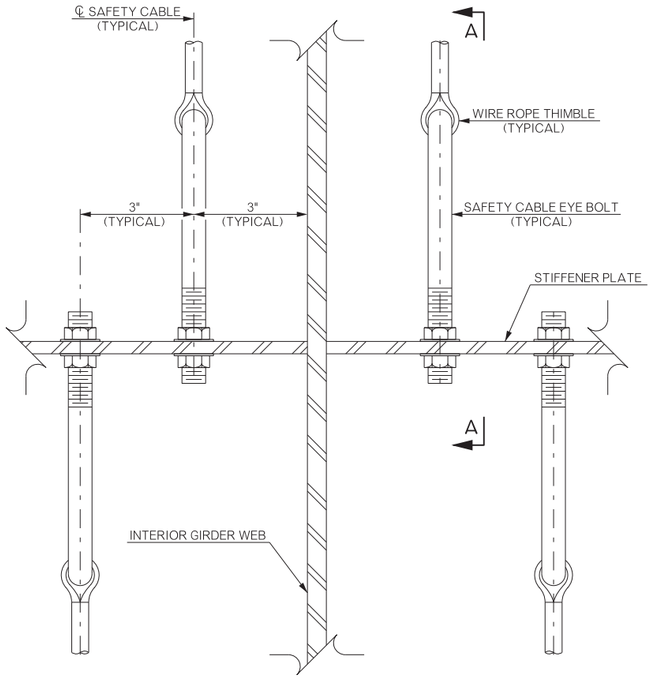
JOB PIECE NO. 30416(04) SHEET NO. B070

REVISIONS		
REV. NO.	DESCRIPTION	DATE

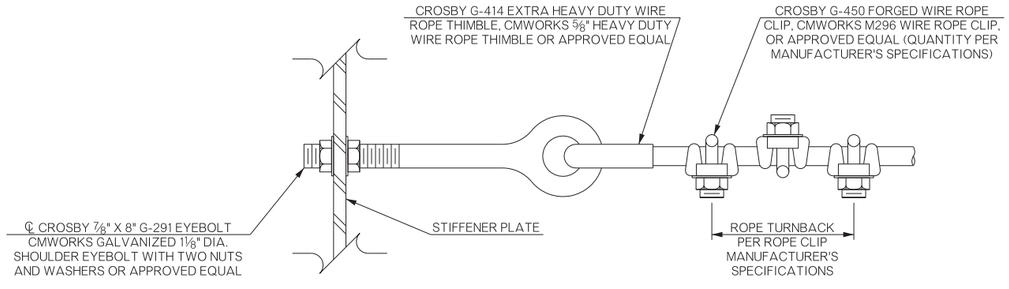


TYPICAL SAFETY CABLE LOCATION

TYPICAL GIRDER ELEVATION



SAFETY CABLE TERMINATION PLAN



SECTION A-A

NOTES:

1. ALL STEEL IS ASTM A709, GRADE 50W UNLESS NOTED OTHERWISE.
2. SAFETY CABLE SHALL BE PLACED ON EACH SIDE OF THE INTERIOR GIRDERS AND ON INSIDE FACE OF THE FASCIA GIRDERS. DETAILS SHOWN DEPICT THE INTERIOR SAFETY CABLE; EXTERIOR GIRDER.
3. INSPECTION SAFETY CABLE SHALL BE 9/16" DIAMETER ASTM A603 CLASS A COATING.
4. SAFETY CABLE SHALL BE TAUT. ADJUST TENSION BY EYEBOLT THREADS.
5. ALL BOLTS SHALL BE 7/8" DIAMETER A325 TYPE III (WEATHERING). ALL HOLES SHALL BE 15/16" DIAMETER UNLESS NOTED OTHERWISE. ALL HARDWARE SHALL BE HOT DIP GALVANIZED.
6. BRACKETS WILL NEED TO BE RAISED 6" WHEN IN CONFLICT WITH LATERAL BRACING.
7. PAYMENT FOR THE SAFETY CABLE SYSTEM SHALL BE INCLUDED IN THE PRICE BID PER LB OF "STRUCTURAL STEEL".

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

SAFETY CABLE SYSTEM DETAILS

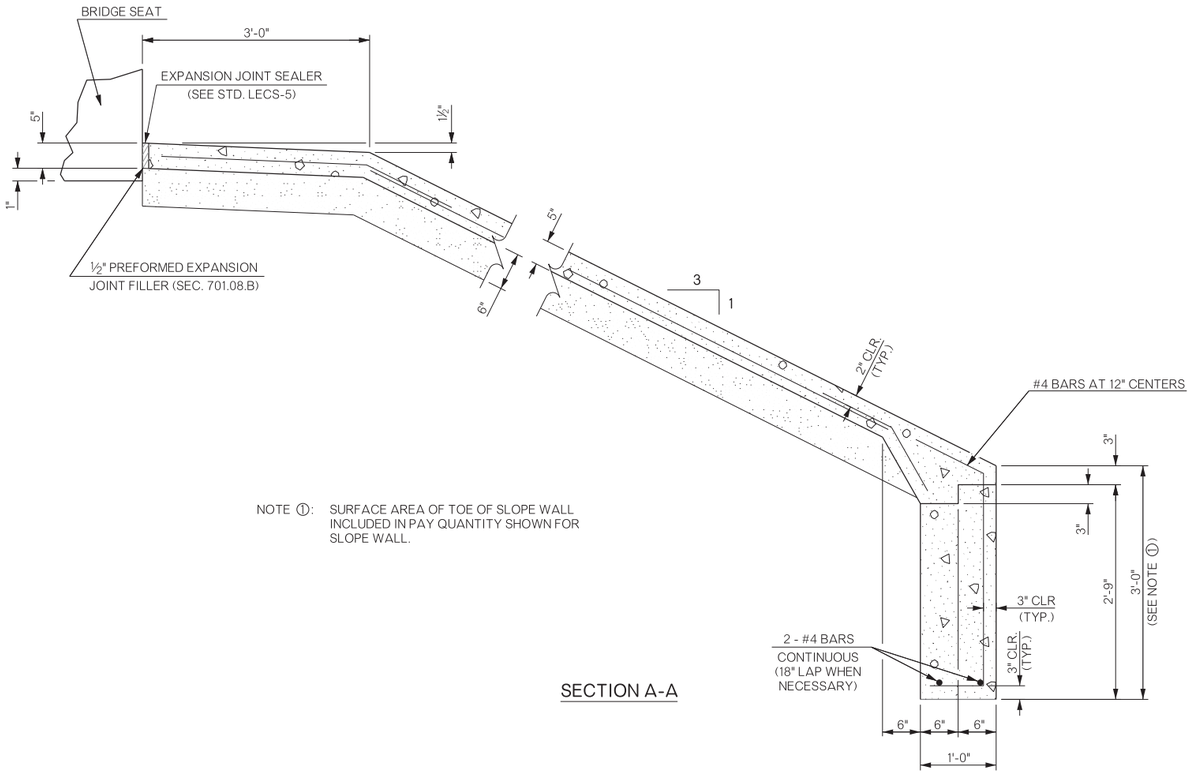
Design	CJO	6/20
Detail	TEE	6/20
Check	RAH	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

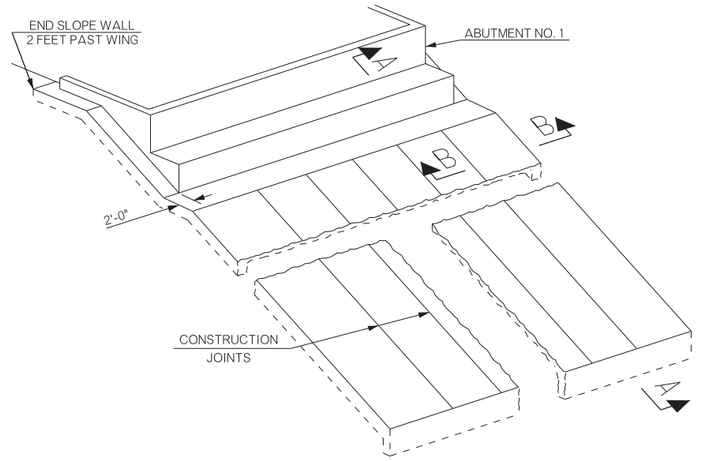
JOB PIECE NO. 30416(04) — SHEET NO. B071

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISE QUANTITY	7/06/21

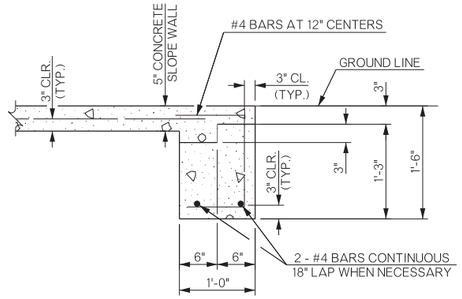


NOTE ①: SURFACE AREA OF TOE OF SLOPE WALL INCLUDED IN PAY QUANTITY SHOWN FOR SLOPE WALL.

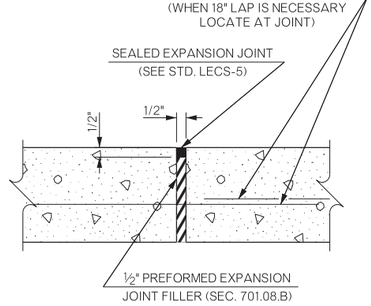
SECTION A-A



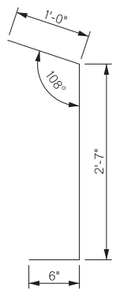
PICTORIAL VIEW WITH SECTIONS REMOVED FOR CLARIFICATION



SECTION B-B

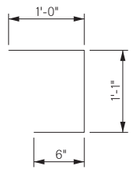


DETAIL OF VERTICAL CONSTRUCTION JOINT



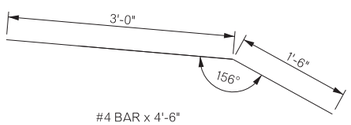
#4 BAR x 4'-1"

BAR BEND IN TOE FOOTING



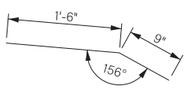
#4 BAR x 2'-7"

BAR BEND IN EDGE FOOTING



#4 BAR x 4'-6"

BAR BEND IN TOP OF SLOPE WALL



#4 BAR x 2'-3"

BAR BEND IN BOTTOM OF SLOPE WALL

CLASS A CONCRETE:

ALL CONCRETE IN THE SLOPE WALL SHALL BE CLASS A CONCRETE AND SHALL BE POURED IN THE DRY. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 509 AND 610 OF THE STANDARD SPECIFICATIONS. COARSE AGGREGATE FOR THIN SECTION CONCRETE (701.06) MAY BE USED.

CONSTRUCTION JOINTS:

NO HORIZONTAL CONSTRUCTION JOINTS WILL BE PERMITTED IN THE SLOPE WALL. FINAL NUMBER AND LOCATION OF VERTICAL CONSTRUCTION JOINTS WILL BE DETERMINED BY THE ENGINEER. JOINTS WILL HAVE A MAXIMUM SPACING OF 10'-0" MEASURED ALONG THE TOE OF THE SLOPE WALL.

BASIS OF PAYMENT:

CONCRETE SLOPE WALL WILL BE MEASURED FROM EDGE TO EGE AND FROM TOP TO BOTTOM OF THE TOP SURFACE OF THE SLOPE WALL AND FULL FACE OF THE TOE OF THE SLOPE WALL. PAYMENT WILL BE MADE AT THE CONTRACT PRICE BID FOR:

510(C) 1450 SLOPE WALL (5") S.Y.

WHICH SHALL INCLUDE ALL COSTS OF JOINT SEALER AND FILLER, REINFORCING STEEL, CONCRETE, EXCAVATION, LABOR, FORMS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SHOWN AS SPECIFIED.

QUANTITIES - SLOPE WALL AT ABUTMENT NO. 1		
ITEM	UNIT	TOTAL
5" CONCRETE SLOPE WALL	SY	104.10 △1

BRIDGES A & B MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

SLOPE WALL DETAILS

Design	CJO	6/20
Detail	RAH	6/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) SHEET NO. B072

REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAINS AT END OF BRIDGE AND RETAINING WALL DRAINAGE NOT SHOWN FOR CLARITY

BEGIN TANGENT PILE WALL
STA. = 315+01.52
OFFSET = 130.40' RT.

GOES AERIAL

AT&T FO

36" WOVEN S WB

ONG HIGH PRESSURE LINE

TANGENT PILE WALL
BEARING = S17°6'46"W

WALL ELBOW JOINT
STA. = 315+20.27
OFFSET = 60.43' RT.

HANGS ON
EXISTING BRIDGE

B-1

B-10

TANGENT PILE WALL
WORKING POINT @
℄ SURVEY STA.
= 315+20.27

TANGENT PILE WALL
BEARING = N2°6'46"E

WALL ELBOW JOINT
STA. = 315+20.27
OFFSET = 60.43' LT.

TANGENT PILE WALL
BEARING = N12°53'14"W

END TANGENT PILE WALL
STA. = 315+01.52
OFFSET = 130.40' LT.

PROPOSED FUTURE
RAILROAD TRACK

315+00

316+00

DIRT/GRAVEL
ROAD

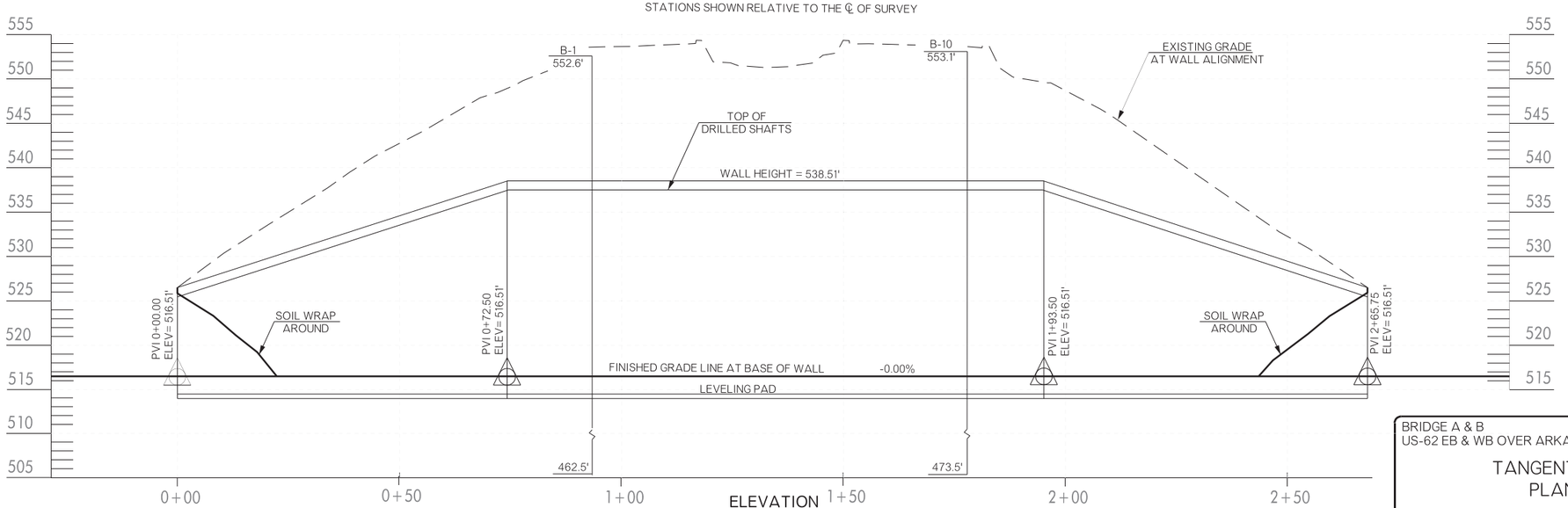
DIRT/GRAVEL
ROAD

GRADE TO
2.0%

GRADE TO
2.0%

PLAN

STATIONS SHOWN RELATIVE TO THE ℄ OF SURVEY



ELEVATION

STATIONS SHOWN ARE ALONG ℄ OF RETAINING WALL ALIGNMENT
NOTE: GRID RATIO IS EXAGERATION AT A SCALE OF 2:1 IN THE VERTICAL.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

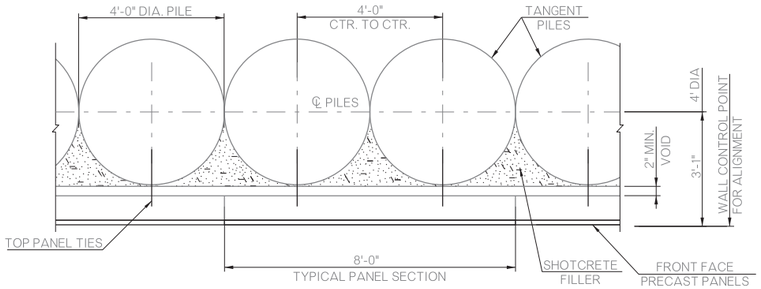
TANGENT PILE WALL
PLAN SHEET

Design	CJO	6/20
Detail	RAH	6/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

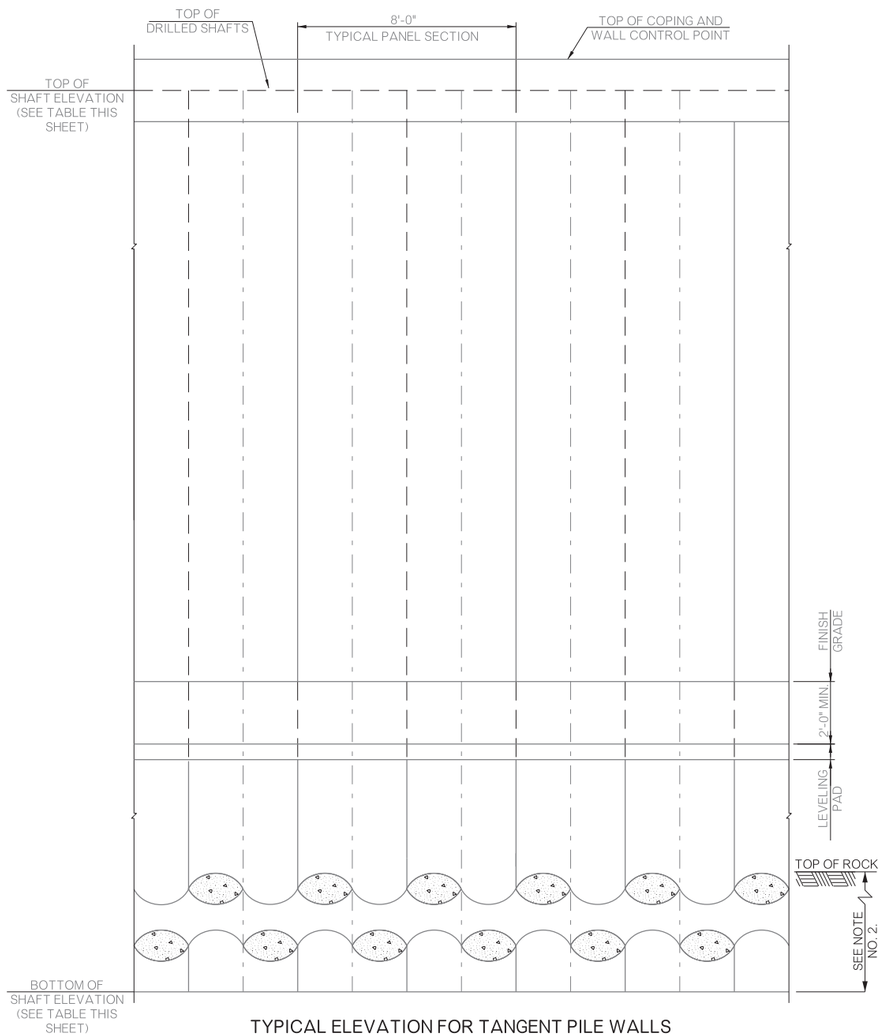
STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B073

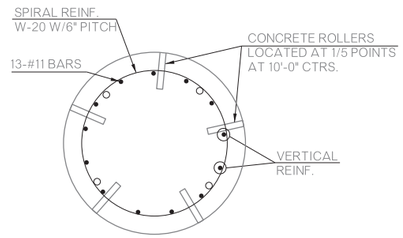


TYPICAL PLAN FOR TANGENT PILE WALLS

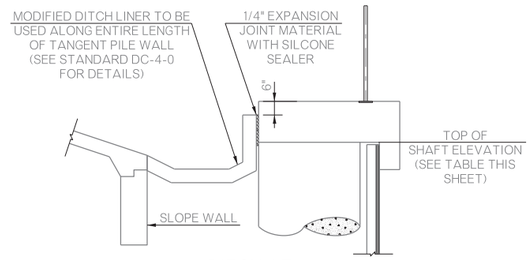
NOTE: CONTRACTOR SHALL SUBMIT TANGENT PILE CONCRETE MIX DESIGN TO THE ENGINEER FOR APPROVAL PRIOR TO DRILLING.



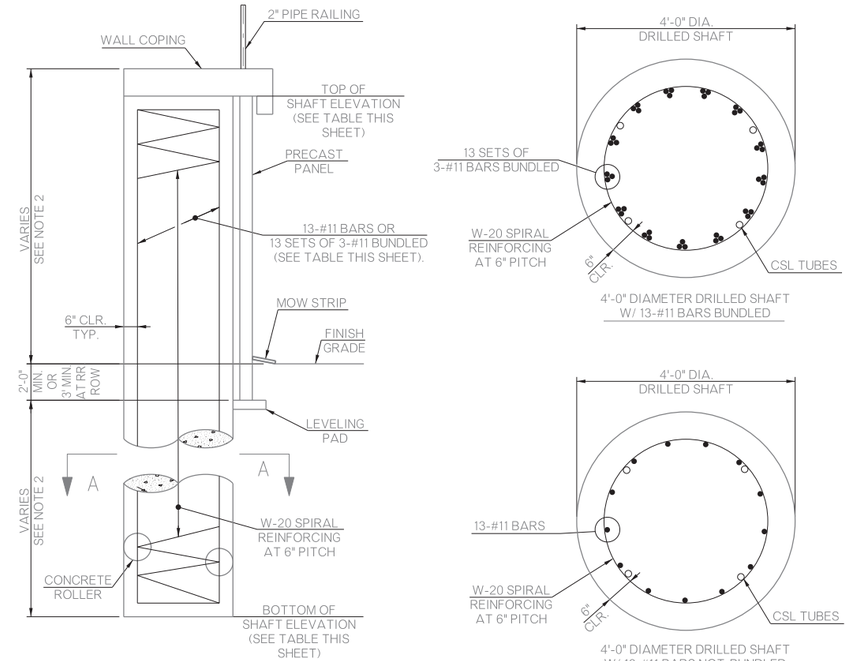
TYPICAL ELEVATION FOR TANGENT PILE WALLS



DETAIL OF DRILL SHAFT ROLLER PLACEMENT

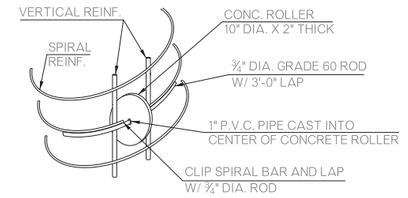


DITCH AT TANGENT PILE WALL

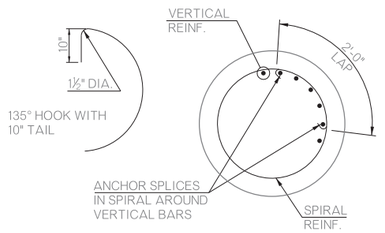


TANGENT PILE WALL SECTION

NOTES:
1. TIP ELEVATIONS VARY LINEARLY BETWEEN ALL DRILLED SHAFTS AS GIVEN IN THE PILE TIP TABLE.
2. THE PILE TIP ELEVATIONS INDICATE THE MINIMUM REQUIRED DRILLED SHAFT LENGTHS. IF THESE DEPTHS DO NOT CAUSE THE DRILLED SHAFTS TO EXTEND A MINIMUM OF 6' INTO SHALE BEDROCK, INDIVIDUAL DRILLED SHAFTS SHALL BE EXTENDED BEYOND THE PLAN LENGTHS AS NECESSARY TO EMBED A MINIMUM 6' INTO THE SHALE BEDROCK. IN NO CASE SHALL DRILLED SHAFT DEPTHS BE SHORTENED FROM THE TABLE. (THIS EMBEDMENT APPLIES ONLY TO DRILLED SHAFTS NUMBER 19 THROUGH 55.)
3. CONTRACTOR SHALL PROVIDE DESIGNS FOR THE PRECAST PANELS TO THE ENGINEER FOR APPROVAL.
4. PANEL TIES SHALL BE INSTALLED AS INDICATED ON THE PLANS OR AS RECOMMENDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
5. PANELS SHALL BE ADJUSTABLE TO PROVIDE UNIFORM VERTICAL AND HORIZONTAL LINES ALONG THE FRONT FACE OF THE WALLS.



DETAIL OF DRILL SHAFT ROLLER INSTALLATION



SPIRAL SPLICE

NOTE:
SPIRAL BARS SHALL CONFORM TO AASHTO M32. SPIRAL BAR LENGTH DOES NOT INCLUDE LAP. IF LAP IS REQUIRED, THE LENGTH OF THE LAP SHALL BE AS SHOWN.

4'-0" DIAMETER DRILLED SHAFT W/ 13-#11 BARS BUNDLED

4'-0" DIAMETER DRILLED SHAFT W/ 13-#11 BARS NOT-BUNDLED

SECTION A-A

NOTE:
CONCRETE USED IN CONCRETE ROLLERS SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 P.S.I..THE CONTRACTOR MAY USE PLASTIC ROLLERS IF APPROVED BY THE ENGINEER AND MEET THE REQUIREMENTS OF THE DESIGN SPECIFICATIONS.

DRILLED SHAFT PILE TIP ELEVATION AND DESIGN DATA

Shaft #	Top of Shaft Elevation (ft)	Bottom of Shaft Elevation (ft)	Shaft Plan Length (ft)	Retained Height (ft)	Number of Bars per Bundle	Number of Bundles
1	526.5	505.5	21.0	10.0	1	13
2	527.2	504.2	23.0	10.7	1	13
3	527.8	502.8	25.0	11.3	1	13
4	528.5	502.5	26.0	12.0	1	13
5	529.2	501.2	28.0	12.7	1	13
6	529.8	500.8	29.0	13.3	1	13
7	530.5	499.5	31.0	14.0	1	13
8	531.2	498.2	33.0	14.7	1	13
9	531.8	497.8	34.0	15.3	1	13
10	532.5	496.5	36.0	16.0	1	13
11	533.2	496.2	37.0	16.7	3	13
12	533.8	494.8	39.0	17.3	3	13
13	534.5	494.5	40.0	18.0	3	13
14	535.2	493.2	42.0	18.7	3	13
15	535.8	491.8	44.0	19.3	3	13
16	536.5	491.5	45.0	20.0	3	13
17	537.2	490.2	47.0	20.7	3	13
18	537.8	489.8	48.0	21.3	3	13
19	538.5	488.5	50.0	22.0	3	13
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21	538.5	488.5	50.0	22.0	3	13
22	538.5	488.5	50.0	22.0	3	13
23	538.5	488.5	50.0	22.0	3	13
24	538.5	488.5	50.0	22.0	3	13
25	538.5	488.5	50.0	22.0	3	13
26	538.5	488.5	50.0	22.0	3	13
27	538.5	488.5	50.0	22.0	3	13
28	538.5	488.5	50.0	22.0	3	13
29	538.5	488.5	50.0	22.0	3	13
30	538.5	488.5	50.0	22.0	3	13
31	538.5	488.5	50.0	22.0	3	13
32	538.5	488.5	50.0	22.0	3	13
33	538.5	488.5	50.0	22.0	3	13
34	538.5	488.5	50.0	22.0	3	13
35	538.5	488.5	50.0	22.0	3	13
36	538.5	488.5	50.0	22.0	3	13
37	538.5	488.5	50.0	22.0	3	13
38	538.5	488.5	50.0	22.0	3	13
39	538.5	488.5	50.0	22.0	3	13
40	538.5	488.5	50.0	22.0	3	13
41	538.5	488.5	50.0	22.0	3	13
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43	538.5	488.5	50.0	22.0	3	13
44	538.5	488.5	50.0	22.0	3	13
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49	537.8	498.8	39.0	21.3	3	13
50	537.2	499.2	38.0	20.7	3	13
51	536.5	499.5	37.0	20.0	3	13
52	535.8	499.8	36.0	19.3	3	13
53	535.2	500.2	35.0	18.7	3	13
54	534.5	500.5	34.0	18.0	3	13
55	533.8	500.8	33.0	17.3	3	13
56	533.2	501.2	32.0	16.7	3	13
57	532.5	501.5	31.0	16.0	1	13
58	531.8	501.8	30.0	15.3	1	13
59	531.2	502.2	29.0	14.7	1	13
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61	529.8	502.8	27.0	13.3	1	13
62	529.2	503.2	26.0	12.7	1	13
63	528.5	503.5	25.0	12.0	1	13
64	527.8	503.8	24.0	11.3	1	13
65	527.2	504.2	23.0	10.7	1	13
66	526.5	505.5	21.0	10.0	1	13

DESIGN DATA

CONCRETE: CLASS AA f'c = 4,000 PSI
REINFORCING STEEL: Fy = 60,000 PSI

REVISIONS

REV. NO.	DESCRIPTION	DATE

BRIDGE A & B MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

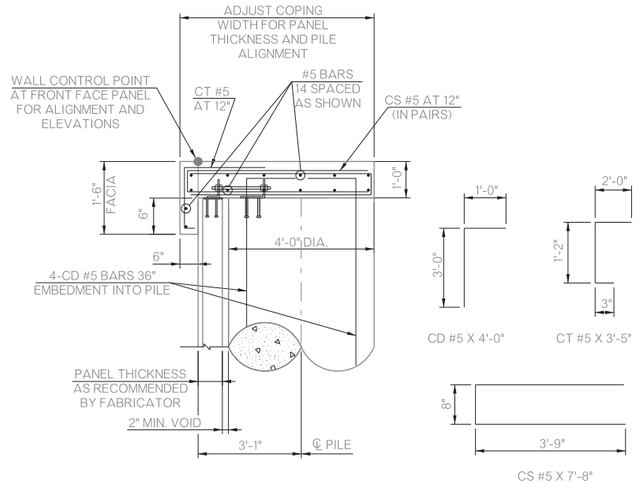
TANGENT PILE WALL DETAILS (SHEET 1 OF 3)

Design	CJO	6/20
Detail	RAH	6/20
Check	TEE	8/20

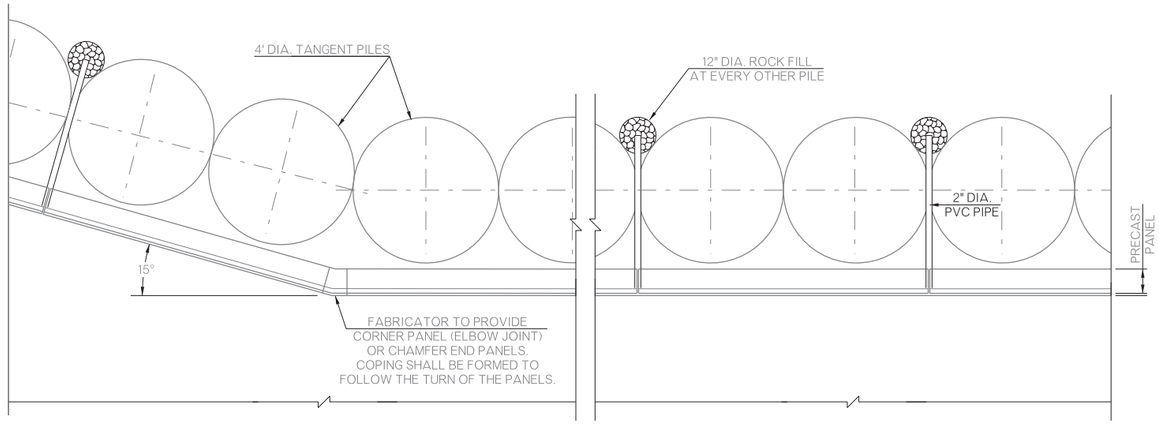
Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416(04) | SHEET NO. B074

REVISIONS		
REV. NO.	DESCRIPTION	DATE

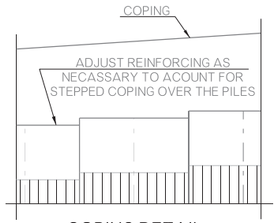


COPING DETAIL AT TANGENT PILE WALL



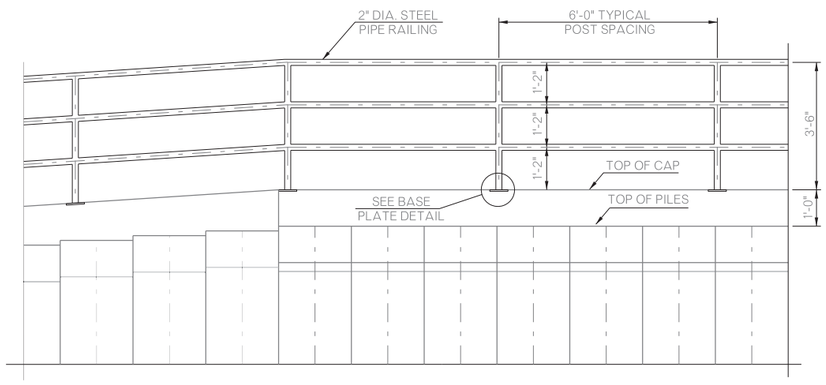
PARTIAL PLAN VIEW

NOTE: A ONE PIECE CORNER PANEL FOR THE WALL ELBOW JOINT IS TO BE PROVIDED. SUBMIT CORNER PANEL DETAILS AND CONNECTIONS WITH THE WALL DETAILS AND CALCULATIONS FOR ACCEPTANCE. BUTTING OF CHAMFERED PANELS OR OTHER DETAILS ARE ALLOWED IF FULLY DETAILED AND SUBMITTED FOR REVIEW AND ACCEPTANCE WITH THE DESIGN.

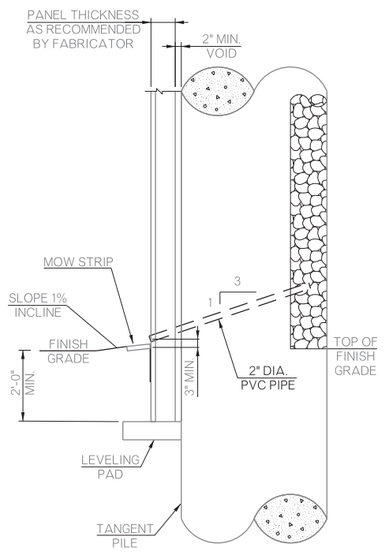


COPING DETAIL SLOPE OVER PILES

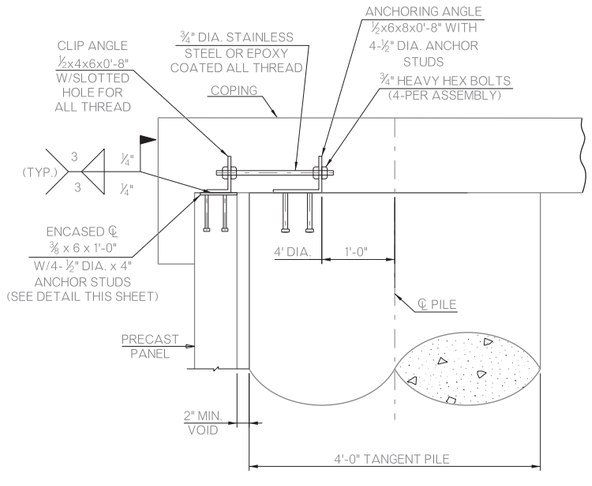
NOTE: CONTRACTOR SHALL ACCOUNT FOR THE STEP FORM OF THE COPING OVER THE PILES TO ALLOW FOR A SMOOTH SLOPE AND THE PROPER MOUNTING OF THE HANDRAILS.



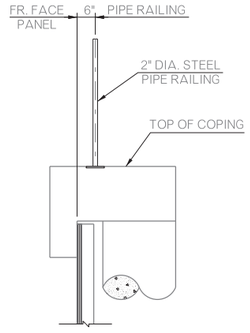
ELEVATION OF PIPE RAILING AT TANGENT PILE WALLS



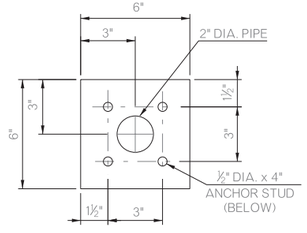
4'-0" PILE DRAINAGE SECTION



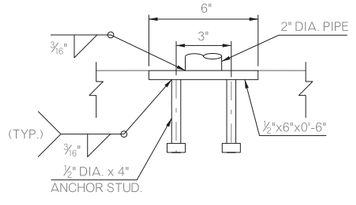
ELEVATION - TOP PANEL CONNECTION ASSEMBLY



PIPE RAILING AT TANGENT PILE WALL



PLAN AT PIPE RAILING BASE PLATE



SECTION AT PIPE RAILING BASE PLATE

QUANTITIES - TANGENT PILE WALL		
ITEM	UNIT	TOTAL
CLASS C CONCRETE	C.Y.	17.00
TANGENT PILE RETAINING WALL	S.Y.	613.00
(SP) GRAFFITI TREATMENT	S.F.	4982.00
DRILLED SHAFTS 48" DIAMETER	LF.	2636.00
CROSSHOLE SONIC LOGGING	EA.	6.00
PIPE RAILING	LF.	266.00

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

TANGENT PILE WALL DETAILS (SHEET 2 OF 3)

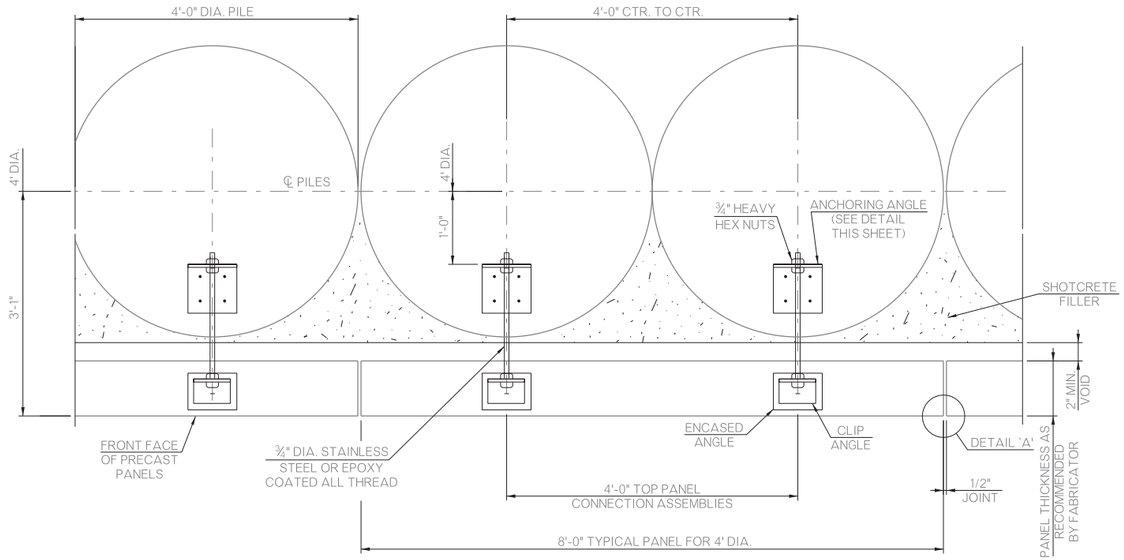
Design	CJO	6/20
Detail	RAH	6/20
Check	TEE	8/20

Squad HENSLEY
Engr.: DEFRANCO

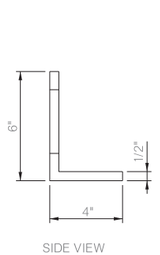
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) — SHEET NO. B075

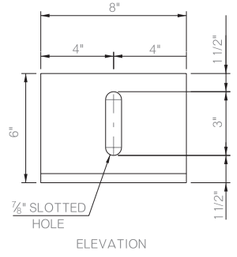
REVISIONS		
REV. NO.	DESCRIPTION	DATE



PLAN - TOP PANEL CONNECTION

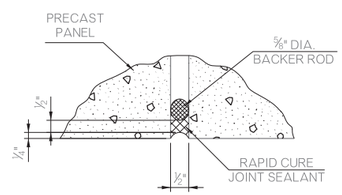


SIDE VIEW

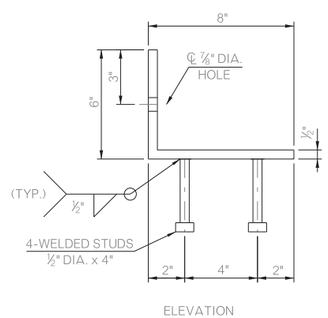


ELEVATION

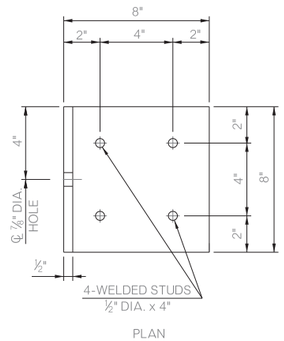
CLIP ANGLE



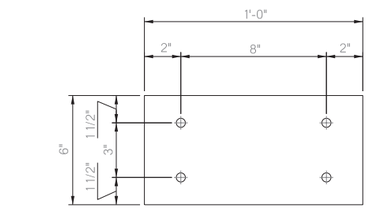
DETAIL `A'



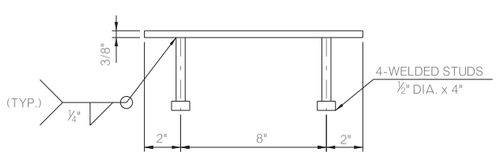
ELEVATION



PLAN



PLAN



ELEVATION

ENCASED PLATE DETAIL

ANCHORING ANGLE

NOTE: THE PANEL CONNECTION SYSTEM SHOWN IS THE MINIMUM REQUIRED. THE CONTRACTOR SHALL SUBMIT WORKING DRAWINGS AND CALCULATIONS OF THE PROPOSED CONNECTION SYSTEM TO THE ENGINEER FOR APPROVAL. DRAWINGS AND CALCULATIONS OF THE PROPOSED PANEL CONNECTION SYSTEM SHALL BE SIGNED AND SEALED BY REGISTERED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF OKLAHOMA.

BRIDGE A & B — MUSKOGEE COUNTY
US-62 EB & WB OVER ARKANSAS RIVER

TANGENT PILE WALL
DETAILS (SHEET 3 OF 3)

Design	CJO	6/20
Detail	RAH	6/20
Check	TEE	8/20

Squad: HENSLEY
Engr.: DEFRANCO

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) | SHEET NO. B076

REVISIONS		
REV. NO.	DESCRIPTION	DATE

U.S. ARMY CORPS OF ENGINEERS SECTION 404 PERMIT CONDITIONS

404 PERMIT INFORMATION

NATIONWIDE PERMIT NO. 14

☐ TO BE PROVIDED AT A LATER DATE

SECTION 404 OF THE CLEAN WATER ACT REQUIRES PRIOR AUTHORIZATION FROM SECRETARY OF THE ARMY (CORPS) FOR THE DISCHARGE OF DREDGED OR FILL MATERIAL INTO WATERS OF THE UNITED STATES.

☐ NO PRE-CONSTRUCTION NOTIFICATION REQUIRED: PROJECT DOES NOT REQUIRE NOTIFICATION TO THE US ARMY CORPS OF ENGINEERS (USACE) IN ORDER TO COMMENCE.

☑ PRE-CONSTRUCTION NOTIFICATION REQUIRED: RESIDENT ENGINEER MUST NOTIFY THE USACE WITHIN 30 DAYS OF THE START OF CONSTRUCTION AND 30 DAYS PRIOR TO COMPLETION OF CONSTRUCTION, FORMS LOCATED IN THE CONTRACT.

☐ INDIVIDUAL PERMIT: WILL BE MONITORED CLOSELY BY THE USACE.

☐ GENERAL PERMIT: PROJECT WITHIN A DESIGNATED CRITICAL RESOURCE WATER AND WILL REQUIRE PRE-CONSTRUCTION NOTIFICATION SEE ABOVE FOR EXPLANATION OF PRE-CONSTRUCTION NOTIFICATION.

☐ NO PERMIT REQUIRED

SWT TRACKING NO. SWT20200017[illegible]

SPECIAL CONDITIONS

☐ NAVIGABLE WATER OF THE U.S.

☐ ON-SITE MITIGATION

☐ ENDANGERED SPECIES PRESENT

☐ HISTORIC PROPERTIES PRESENT

☐ DESIGNATED CRITICAL RESOURCE WATERS

PERMIT GENERAL CONDITIONS

THE CONTRACTOR SHALL BE RESPONSIBLE BUT NOT LIMITED TO THE FOLLOWING HIGHLIGHTS OF THE 404 PERMIT (SEE CONTRACT FOR COMPLETE LIST):

TEMPORARY FILLS:

APPROPRIATE MEASURES MUST BE TAKEN TO MAINTAIN NORMAL DOWNSTREAM FLOWS AND MINIMIZE FLOODING TO THE MAXIMUM EXTENT PRACTICABLE, WHEN TEMPORARY STRUCTURES (WORK ROADS, WORK PADS, ETC..) WORK, AND DISCHARGES, INCLUDING COFFERDAMS, ARE NECESSARY FOR CONSTRUCTION ACTIVITIES, ACCESS FILLS, OR DE WATERING OF CONSTRUCTION SITES. TEMPORARY FILLS MUST CONSIST OF MATERIALS, AND BE PLACED IN A MANNER, THAT WILL NOT BE ERODED BY EXPECTED HIGH FLOWS. TEMPORARY FILLS MUST BE REMOVED IN THEIR ENTIRETY AND THE AFFECTED AREAS RETURNED TO PRE-CONSTRUCTION ELEVATIONS. THE AREAS AFFECTED BY TEMPORARY FILLS MUST BE RE VEGETATED, AS APPROPRIATE.

NAVIGATION:

NO ACTIVITY MAY CAUSE MORE THAN A MINIMAL ADVERSE EFFECT ON NAVIGATION WITHIN A NAVIGABLE WATER OF THE U.S. IF THIS PROJECT IS LOCATED WITHIN A NAVIGABLE WATER OF THE U.S., IT WILL BE IDENTIFIED IN THE SPECIAL CONDITIONS.

AQUATIC LIFE MOVEMENTS & ADVERSE EFFECTS FROM IMPOUNDMENTS:

NO ACTIVITY MAY LARGELY DISRUPT THE NECESSARY LIFE CYCLE MOVEMENTS OF THOSE SPECIES INDIGENOUS TO THE BODY OF WATER, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA. CULVERTS WILL BE DESIGNED TO PROVIDE SUFFICIENT PASSAGE FOR AQUATIC LIFE AND INSTALLED TO MAINTAIN LOW FLOW. RATE OF FLOW CANNOT BE MADE HIGHER THAN WHAT WAS PRIOR TO THE START OF CONSTRUCTION. EROSION CONTROL MEASURES SHOULD BE UTILIZED AROUND THE PERIMETER OF NEW STRUCTURES TO AVOID SILT BUILD UP. CAUTION SHOULD BE TAKEN TO MINIMIZE HARM IF CONSTRUCTION ACTIVITIES TAKE PLACE WITHIN A STREAM OR RIVER CHANNEL AND CREATE A CONFINED BODY OF WATER, CAUSE ADVERSE EFFECTS TO THE AQUATIC SYSTEM IN ANY WAY, AND/OR RESTRICTING ITS FLOW.

MANAGEMENT OF WATER FLOWS:

CONSTRUCTION ACTIVITIES MAY NOT IMPEDE THE PASSAGE OF NORMAL OR HIGH FLOWS. TO THE GREATEST EXTENT POSSIBLE, THE PRE- CONSTRUCTION COURSE, CONDITIONS,CAPACITY AND LOCATION OF OPEN WATERS MUST BE MAINTAINED. THIS INCLUDES STREAM CANALIZATION AND STORM WATER MANAGEMENT.

SUITABLE MATERIAL:

NO ACTIVITY MAY USE UNSUITABLE MATERIAL (E.G., TRASH, DEBRIS, CAR BODIES, ASPHALT, ETC.). MATERIALS USED FOR CONSTRUCTION OR DISCHARGED MUST BE FREE FROM TOXIC POLLUTANTS IN TOXIC AMOUNTS (SEE SECTION 307 OF CLEAN WATER ACT).

PROPER MAINTENANCE:

ANY AUTHORIZED STRUCTURE OR FILL SHALL BE PROPERLY MAINTAINED, INCLUDING MAINTENANCE TO ENSURE PUBLIC SAFETY AND COMPLIANCE WITH APPLICABLE NATION WIDE PERMIT GENERAL CONDITIONS, AS WELL AS ANY ACTIVITY- SPECIFIC CONDITIONS ADDED BY THE DISTRICT ENGINEER TO AN NATIONWIDE PERMIT AUTHORIZATION

HAZARDOUS MATERIALS:

HAZARDOUS MATERIALS, CHEMICALS, FUELS, LUBRICATING OILS AND OTHER SUCH SUBSTANCES SHOULD BE STORED AWAY FROM ANY STREAM OR RIVERCHANNEL (SEE SECTION 307 OF CLEAN WATER ACT)

EQUIPMENT:

HEAVY EQUIPMENT WORKING IN WETLANDS OR MUDFLATS MUST BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE; FOR EXAMPLE IF WETLANDS ARE PRESENT WITHIN THE CONSTRUCTION, THE FOOTPRINT WILL BE SHOWN ON THE PLANS. MEASURES SHOULD BE TAKEN TO PREVENT DISCHARGE INTO ANY WATERS OF THE STATE (e.g. CONCRETE WASHOUT).

SOIL EROSION AND SEDIMENT CONTROLS:

APPROPRIATE SOIL EROSION AND SEDIMENT CONTROLS MUST BE USED AND MAINTAINED IN EFFECTIVE OPERATING CONDITION DURING CONSTRUCTION, AND ALL EXPOSED SOILS AND OTHER FILLS, AS WELL AS ANY WORK WITHIN STREAM OR RIVER CHANNELS OR BANKS, MUST BE PERMANENTLY STABILIZED AS SOON AS POSSIBLE.

404 COMPLIANCE:

IN ORDER TO REMAIN COMPLIANT WITH THE 404 PERMIT, THE PROJECT MUST COMPLY WITH ALL FEDERAL ENVIRONMENTAL PROTECTION LAWS ASSOCIATED AND, THE ENVIRONMENTAL COMMITMENTS AS SHOWN ON THE PLANS. THIS INCLUDES BUT IS NOT LIMITED TO COMPLIANCE WITH ALL ENVIRONMENTAL NOTES IN THE PLANS, INCLUDING CULTURAL RESOURCES, HAZARDOUS WASTE, BIOLOGICAL FOR PROTECTED SPECIES, AND DEQ STORM WATER REGULATIONS AS THEY PERTAIN TO THE SWMP SHEET WITHIN THE PLANS. ALL OF THE 404 PERMIT GENERAL AND SPECIFIC CONDITIONS MUST BE ADHERED TO. A COPY OF THESE CONDITIONS CAN BE FOUND IN THE CONTRACT WITH THE 404 PERMIT.

PERMIT GENERAL CONDITIONS

FUELING:

ALL FUELING AND SERVICING OF VEHICLES AND EQUIPMENT SHALL BE DONE ABOVE THE ORDINARY HIGH WATER MARK (OHWM).

MATERIAL STORAGE:

STORE MATERIAL AND FUEL OUTSIDE OF THE ORDINARY HIGH WATER MARK OR ANY AREA LIKELY TO FLOOD.

DEBRIS STORAGE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY MATERIALS, DEBRIS, OR REFUSE WHICH HAS FALLEN INTO ANY STREAM OR RIVER CHANNELS RESULTING FROM THE EXECUTION OF THE PROJECT AS SOON AS POSSIBLE

SEE NATIONWIDE PERMIT 14 IN THE CONTRACT

401 CERTIFICATION CONDITIONS

THE CONTRACTOR SHALL BE RESPONSIBLE BUT NOT LIMITED TO THE FOLLOWING HIGHLIGHTS OF THE 401 CERTIFICATION (SEE CONTRACT FOR COMPLETE LIST):

☑ ALL SPILLS OF FUEL OR POLLUTANTS IN EXCESS OF FIVE GALLONS SHALL BE REPORTED TO ODEQ WITHIN 24 HRS AND REPORTED TO POLLUTION PREVENTION HOTLINE (1-800-522-0206)

☑ ALL FUELING AND SERVICING OF VEHICLES AND EQUIPMENT SHALL BE DONE OUTSIDE THE ORDINARY HIGH WATER MARK

☑ THE PERMITTEE SHALL PROVIDE ACCESS TO THE PROPERTY TO ODEQ FOR INSPECTIONS.

☑ ANY STOCKPILE SHALL BE ABOVE ORDINARY HIGH WATER MARK AND REMOVED FROM LIKELY FLOOD ZONE

☑ BEST MANAGEMENT PRACTICES SHOULD BE USED TO CONTROL SOIL EROSION AND MAINTAIN COMPLIANCE WITH WATER QUALITY STANDARDS.

☑ FOR ANY PROJECT THAT INVOLVES BANK STABILIZATION, THE PERMITTEE SHALL CONSIDER INSTALLING BIOENGINEERING PRACTICES IN PLACE OF STRUCTURAL PRACTICES (RIPRAP) TO MINIMIZE IMPACTS TO AQUATIC RESOURCES

SECTION 404 PERMIT COMPLIANCE

DETAIL		
REVIEW		
APPROVED		

ENVIRONMENTAL DIVISION

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416(04) | SHEET NO. E001

Revised 2/14/2017

RECEIVING WATERS: ARKANSAS RIVER
NEOSHO RIVER

DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DRAWN			
CHECKED			DRAINAGE AREA MAP
APPROVED			
SQUAD			

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R001

10-28-20 PW:\APP-PWS\05-345.AGENCY.OK.LOCAL.ODOT\PROJECTS\DOCUMENTS\PROJECTS\DIVISION 1\JP30416-04\ROADWAY\PLAN SHEETS\30416(04)-DRAINAGE AREA MAP.DGN

STORM WATER MANAGEMENT PLAN

REVISIONS

DESCRIPTION	DATE

SITE DESCRIPTION

PROJECT LIMITS: US-62: BRIDGES OVER ARKANSAS RIVER, 2.4 MILES EAST OF SH-16 JCT (EB&WB)

PROJECT DESCRIPTION: BRIDGE & APPROACHES

SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES:

CONSTRUCT TEMPORARY MEDIAN CROSSOVERS ON EAST SIDE AND WEST SIDE OF THE PROJECT. INSURE THAT ALL TEMPORARY SILK DIKES ARE PLACED IN THE MEDIAN. CONSTRUCT THE EASTBOUND BRIDGES, UTILIZING SILT FENCES. SOD THE FINSHED LEFT SIDE OF PROJECT. CONSTRUCT THE WESTBOUND BRIDGES, UTILIZING SILT FENCES. SOD THE FINISHED RIGHT SIDE OF THE PROJECT.

SOIL TYPE: SILT/SAND LOAM

TOTAL AREA OF THE CONSTRUCTION SITE: 3.23 ACRES

ESTIMATED AREA TO BE DISTURBED: 3.23 ACRES

OFFSITE AREA TO BE DISTURBED: (FOR CONTRACTOR USE)

TOTAL IMPERVIOUS AREA PRE-CONSTRUCTION: 0.46 ACRES

TOTAL IMPERVIOUS AREA POST-CONSTRUCTION: 0.66 ACRES

POST-CONSTRUCTION RUNOFF COEFFICIENT OF THE SITE: 0.25

LATITUDE & LONGITUDE OF CENTER OF PROJECT: 35.7700° & 95.3004°

PROJECT WILL DISCHARGE TO:

NAME OF RECEIVING WATERS: ARKANSAS RIVER

SENSITIVE WATERS OR WATERSHEDS:	YES [ ]	NO [X]
303(d) IMPAIRED WATERS:	YES [ ]	NO [X]
IF YES, LIST IMPAIRMENT:		
LOCATED IN A TMDL:	YES [ ]	NO [X]
LAKE THUNDERBIRD TMDL:	YES [ ]	NO [X]
MS4 ENTITY	YES [X]	NO [ ]

IF YES, LOCATION: MUSKOGEE

NOTE:
THIS SHEET SHOULD BE USED IN CONJUNCTION WITH A DRAINAGE MAP THAT ILLUSTRATES THE DRAINAGE PATTERNS/PATHWAYS AND RECEIVING WATERS FOR THIS PROJECT. THIS SHEET SHOULD ALSO BE USED WITH THE EROSION CONTROL SUMMARIES, PAY ITEMS, & NOTES.

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:

- [X] TEMPORARY SEEDING
- [X] PERMANENT SODDING, SPRIGGING OR SEEDING
- [X] VEGETATIVE MULCHING
- [ ] SOIL RETENTION BLANKET
- [X] PRESERVATION OF EXISTING VEGETATION

NOTE: TEMPORARY EROSION CONTROL METHODS MUST BE USED ON ALL DISTURBED AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR OVER 14 DAYS. METHODS USED WILL BE AS SHOWN ON PLANS, OR AS DIRECTED BY THE ENGINEER.

STRUCTURAL PRACTICES:

- [ ] STABILIZED CONSTRUCTION EXIT
- [X] TEMPORARY SILT FENCE
- [X] TEMPORARY SILT DIKES
- [ ] TEMPORARY FIBER LOG
- [ ] DIVERSION, INTERCEPTOR OR PERIMETER DIKES
- [ ] DIVERSION, INTERCEPTOR OR PERIMETER SWALES
- [ ] ROCK FILTER DAMS
- [ ] TEMPORARY SLOPE DRAIN
- [ ] PAVED DITCH W/ DITCH LINER PROTECTION
- [ ] TEMPORARY DIVERSION CHANNELS
- [ ] TEMPORARY SEDIMENT BASINS
- [ ] TEMPORARY SEDIMENT TRAPS
- [X] TEMPORARY SEDIMENT FILTERS
- [X] TEMPORARY SEDIMENT REMOVAL
- [ ] RIP RAP
- [ ] INLET SEDIMENT FILTER
- [ ] TEMPORARY BRUSH SEDIMENT BARRIERS
- [ ] SANDBAG BERMS
- [ ] TEMPORARY STREAM CROSSINGS

OFFSITE VEHICLE TRACKING:

- [X] HAUL ROADS DAMPENED FOR DUST CONTROL
- [X] LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
- [X] EXCESS DIRT ON ROAD REMOVED DAILY

NOTES:

NO SINGLE DISTURBED AREA TO A COMMON OUTFALL SHALL EXCEED 10 ACRES.

THE CONTRACTOR SHALL ALSO 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 7 CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCH 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 LOCATIONS ARE EXAMPLES OF SITES THAT NEED TO BE INSPECTED.

WASTE MATERIALS:

PROPER MANAGEMENT AND DISPOSAL OF CONSTRUCTION WASTE MATERIAL IS REQUIRED BY THE CONTRACTOR. MATERIALS INCLUDE STOCKPILES, SURPLUS, DEBRIS AND ALL 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 INITIATED DURING THE DESIGN PHASE, CONFIRMED IN THE PRE-WORK MEETINGS AND AVAILABLE ON THE JOB SITE ALONG WITH COPIES OF THE NOTICE OF INTENT (NOI) FORM AND PERMIT CERTIFICATE THAT HAVE BEEN FILED WITH THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ). THE PLAN MUST BE KEPT CURRENT WITH UP-TO-DATE AMENDMENTS DURING THE PROGRESSION OF THE PROJECT. ALL CONTRACTOR OFF-SITE OPERATIONS ASSOCIATED WITH THE PROJECT MUST BE DOCUMENTED IN THE SWPPP, I.E., BORROW PITS, WORK ROADS, DISPOSAL SITES, ASPHALT/CONCRETE PLANTS, ETC. THE BASIC GOAL OF STORM WATER MANAGEMENT IS TO IMPROVE WATER QUALITY BY REDUCING POLLUTANTS IN STORM WATER DISCHARGES. RUNOFF FROM CONSTRUCTION SITES HAS A POTENTIAL FOR POLLUTION DUE TO EXPOSED SOILS AND THE 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 LEAVING THE CONSTRUCTION SITE ARE THE BEST PRACTICES FOR CONTROLLING STORM WATER POLLUTION.

THE FOLLOWING SECTIONS OF THE 2009 ODOT STANDARD SPECIFICATIONS SHOULD BE NOTED:

103.05	BONDING REQUIREMENTS
104.10	FINAL CLEANING UP
104.12	CONTRACTOR'S RESPONSIBILITY FOR WORK
104.13	ENVIRONMENTAL PROTECTION
106.08	STORAGE AND HANDLING OF MATERIAL
107.01	LAWS, RULES AND REGULATIONS TO BE OBSERVED
107.20	STORM WATER MANAGEMENT
220	MANAGEMENT OF EROSION, SEDIMENTATION AND STORM WATER POLLUTION PREVENTION AND CONTROL
221	TEMPORARY SEDIMENT CONTROL

IN ADDITION:

"ODEQ GENERAL PERMIT (OKR10) FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES WITHIN THE STATE OF OKLAHOMA." ODEQ, WATER QUALITY DIVISION, SEPTEMBER 13, 2017.

DESIGN		
DRAWN		
CHECKED		
APPROVED		
SQUAD	STILLWATER	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION

STORM WATER MANAGEMENT PLAN

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R002

pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - SWMP.dgn

06-24-21

REVISED 08 / 18 / 2017

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

Ramp "D"

PI 268+42.91

305+00

260+00

PI STA. 268+75.96

272+59

310+00

315+00

PI STA. 315+09.71

NOTE: 24RCP

D1

D2

D3

D4

D5

D6

D7

TOC/TOS

Ramp "C"

270+00

PI 270+11.88

268+76

PT STA. 272+58.65

PT STA. 307+72.80

S 84°50'05.35" E

1322.28'

330+00

335+00

340+00

345+00

D8

D10

D11

D12

GUARDRAIL RETROFIT

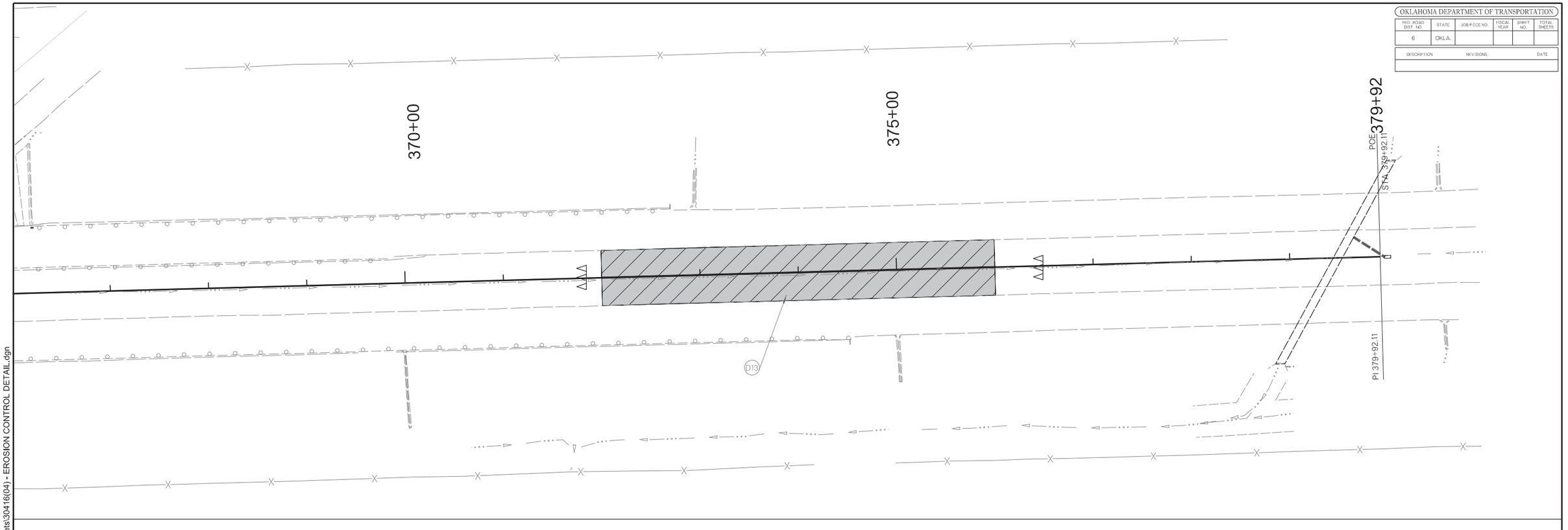
PC STA. 337+38.77

N 84°37'13.58" E

			OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DESIGN			EROSION CONTROL DETAIL
DRAWN			
CHECKED			
APPROVED			
SQUAD			

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R003

10-28-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - EROSION CONTROL DETAIL.dgn



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

DESCRIPTION	REVISIONS	DATE

KEY

TEMPORARY SILT FENCE

TEMPORARY SILT DIKE

TSF # — TEMPORARY SEDIMENT FILTER

SEE EROSION CONTROL DETAIL SHEET FOR SITE SPECIFIC LOCATION

SUMMARY OF DISTURBED AREAS

DRAINAGE AREA NUMBER	OUTFALL STATION	AREA		OUTFALL TREATMENT
		CHANNEL FLOW	SHEET FLOW	
		AC		
D1	US-62 306+00.00	0.37		SILT DIKE, TEMPORARY SEDIMENT FILTER
D2	US-62 306+00.00	0.50		SILT DIKE, TEMPORARY SEDIMENT FILTER
D3	US-62 306+00.00	0.04		SILT DIKE, TEMPORARY SEDIMENT FILTER
D4	US-62 314+25.12		0.58	SILT FENCE
D5	US-62 312+75.04		0.50	SILT FENCE
D6	US-62 306+00.00	0.06		SILT DIKE
D7	US-62 330+60.10	.057		SILT DIKE
D8	US-62 330+61.00		0.09	SILT FENCE
D9	US-62 348+44.40		0.21	SILT FENCE
D10	US-62 330+60.10		0.01	SILT DIKE
D11	US-62 348+44.40		0.33	SILT FENCE
D12	US-62 330+60.10	0.02		SILT DIKE
D13	US-62 379+49.30	0.52		SILT DIKE
	TOTALS	1.57	1.72	

DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DRAWN			
CHECKED			EROSION CONTROL DETAIL
APPROVED			
SQUAD			

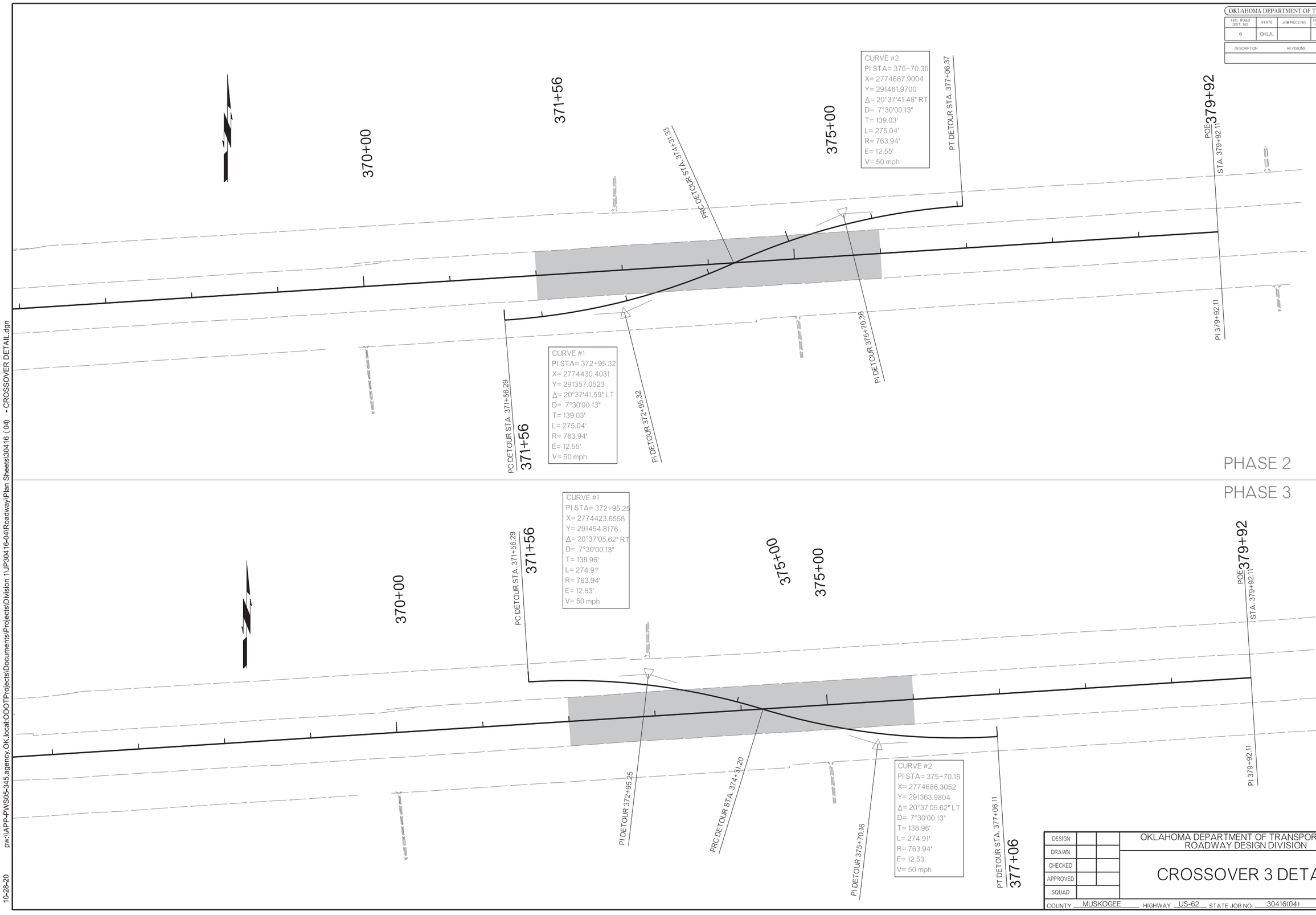
COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R004

10-28-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - EROSION CONTROL DETAIL.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE



DESIGN		
DRAWN		
CHECKED		
APPROVED		
SQUAD		

OKLAHOMA DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION

CROSSOVER 3 DETAIL

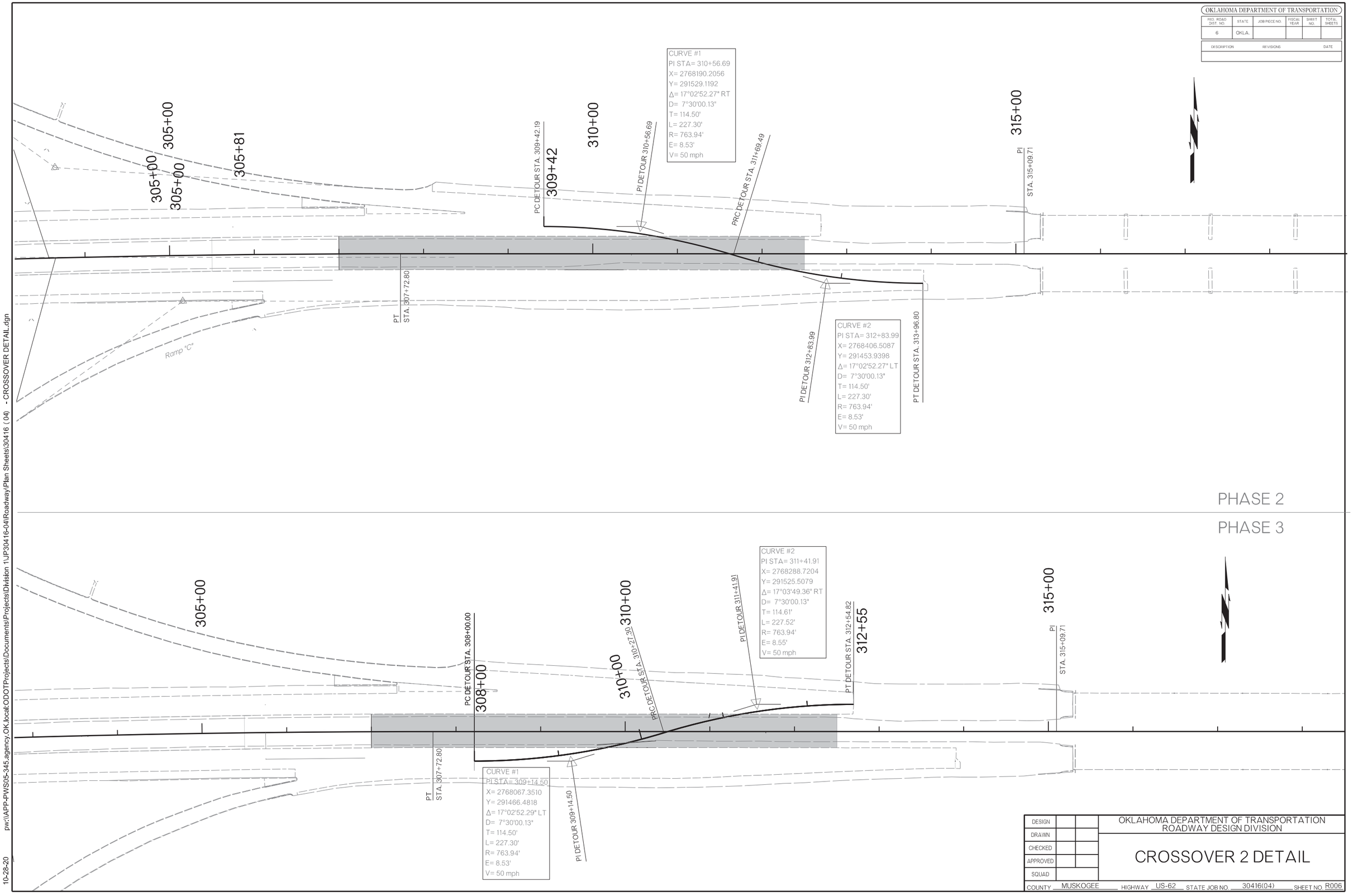
COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R007

10-28-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416 (04) - CROSSOVER DETAIL.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE



DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DRAWN			
CHECKED			CROSSOVER 2 DETAIL
APPROVED			
SQUAD			

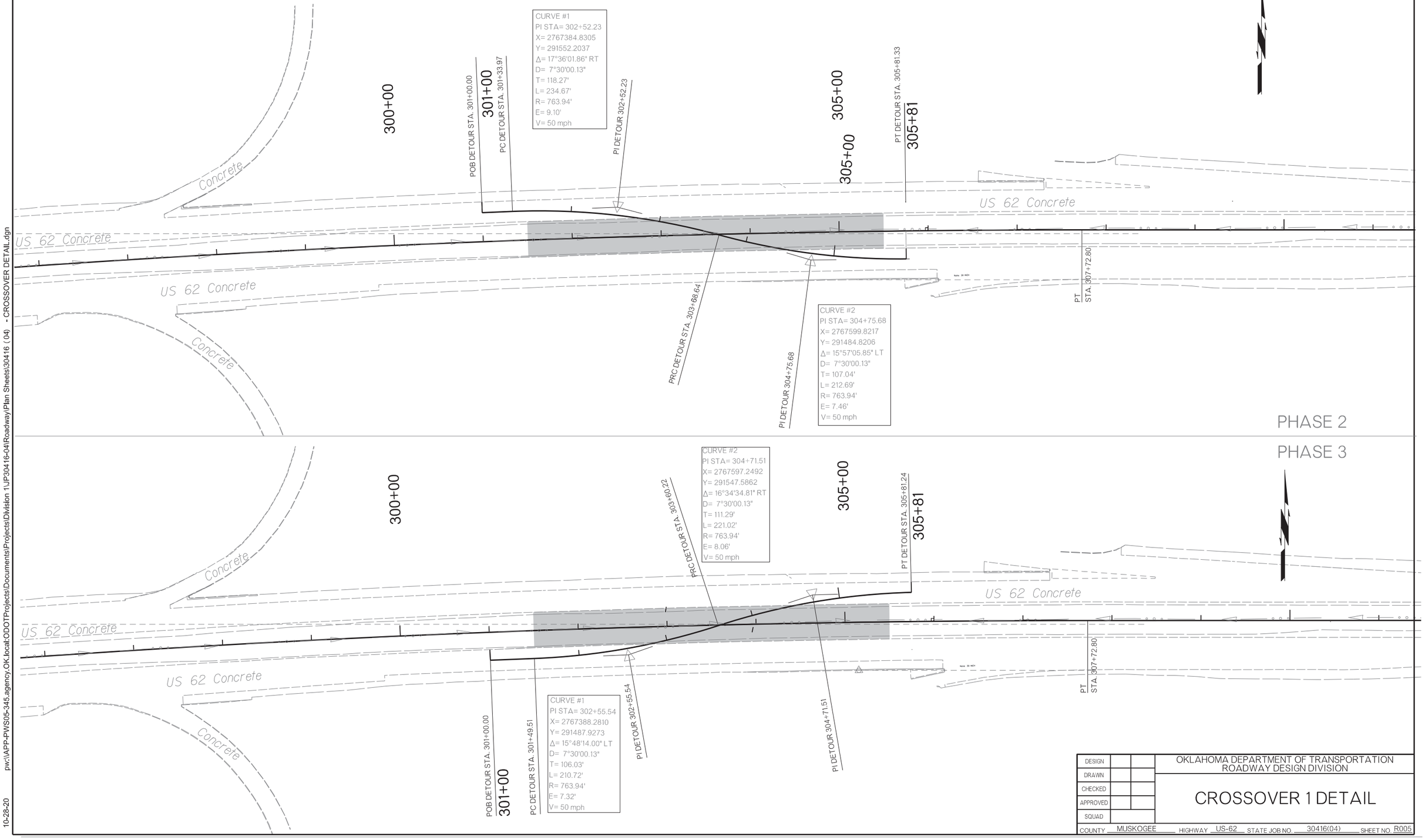
COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R006

10-28-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416 (04) - CROSSOVER DETAIL.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE



DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DRAWN		
CHECKED		CROSSOVER 1 DETAIL
APPROVED		
SQUAD		

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R005

10-28-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416 (04) - CROSSOVER DETAIL.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

DIRT/GRAVEL DRIVEWAY

PRES. R/W

GRAVEL ROAD

NOTE: CL 3 #1MB

AT&T

FT. GIBSON UTILITY AUTHORTY

ASPHALT

10 - 24'X10'
PARKING SPACES
4" TBSC TYPE E

TEMP. PARKING
STA. 336+83.67 TO STA. 339+26.11

S 84°50'05.35" E

1322.28'

PRES. R/W

ASPHALT

24" WOVEN 3 WB

335+00

340+00

CONCRETE DITCH LINER

PC
STA. 337+38.77

CONCRETE DITCH LINER

US 62 CONCRETE

3MP HIGH TENSION

US 62 CONCRETE

DESIGN		
DRAWN		
CHECKED		
APPROVED		
SQUAD	STILLWATER	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION

PARKING DETAIL

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R008

10-28-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416 (04) - PARKING DETAIL

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

310+00

315+00

PI
STA. 315+09.71

PT
STA. 307+72.80

15' 15' 15' 15' 15' 15'
8' 8' 8' 8' 8' 8'
14' 14' 14' 14' 14' 14'
12' 12' 12' 12' 12' 12'
4' 4' 4' 4' 4' 4'

4' 4'
12' 12'
14' 14'
8' 8'
15' 15'

330+00

335+00

340+00

345+00

PI
STA. 330+50.17

PC
STA. 337+38.77

15' 15' 15' 15' 15'
8' 8' 8' 8' 8'
14' 14' 14' 14'
12' 12' 12' 12'
4' 4' 4' 4'

4' 4' 4'
12' 12' 12'
14' 14' 14'
8' 8' 8'
15' 15' 15'

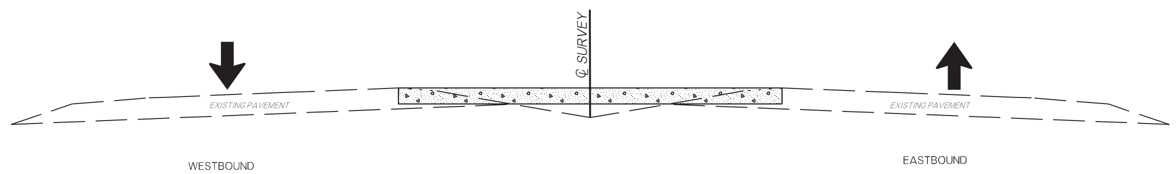
DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DRAWN			
CHECKED			JOINT LAYOUT SHEET
APPROVED			
SQUAD			

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R009

10-28-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - R005 JOINT LAYOUT SHEET.dgn

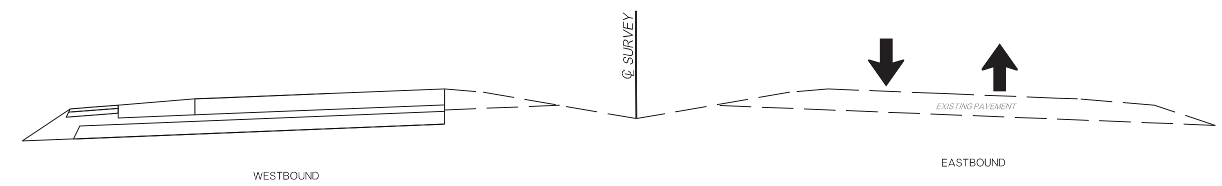
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

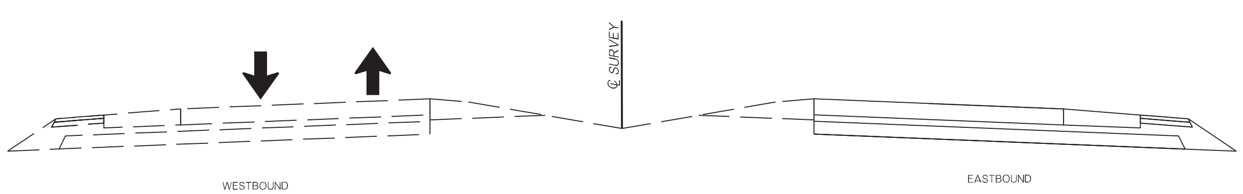


PHASE 1:
ALL SAFETY DEVICES MUST BE IN PLACE PRIOR TO TRAFFIC SHIFTING
A) SHIFT EASTBOUND AND WESTBOUND TRAFFIC TO OUTSIDE LANES
B) EXCAVATE AND INSTALL PIPE UNDER CROSSOVERS

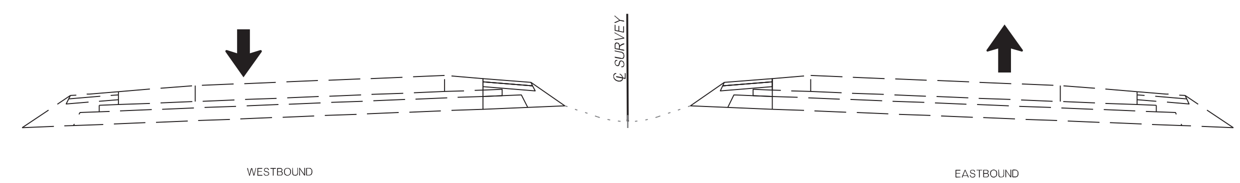
PHASE 2:
A) CONSTRUCT CROSSOVERS



PHASE 3:
ALL SAFETY DEVICES MUST BE IN PLACE PRIOR TO TRAFFIC SHIFTING
A) SHIFT WESTBOUND TRAFFIC TO INSIDE EASTBOUND LANE
B) CONSTRUCT WESTBOUND DRIVING LANES AND OUTSIDE SHOULDER
C) CONSTRUCT WESTBOUND BRIDGE



PHASE 4:
ALL SAFETY DEVICES MUST BE IN PLACE PRIOR TO TRAFFIC SHIFTING
A) SHIFT TRAFFIC TO WESTBOUND LANES
B) CONSTRUCT EASTBOUND DRIVING LANES AND OUTSIDE SHOULDER
C) CONSTRUCT EASTBOUND BRIDGE



PHASE 5:
ALL SAFETY DEVICES MUST BE IN PLACE PRIOR TO TRAFFIC SHIFTING
A) SHIFT TRAFFIC TO FINAL CONFIGURATION
B) REMOVE CROSSOVERS
C) CONSTRUCT INSIDE SHOULDERS

D) SHIFT TRAFFIC TO FINAL CONFIGURATOION

DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DRAWN	NIL		PHASING DETAIL SHEET
CHECKED			
APPROVED			
SQUAD	STILLWATER		

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R010

10/28/20

OKLAHOMA DEPARTMENT OF TRANSPORTATION

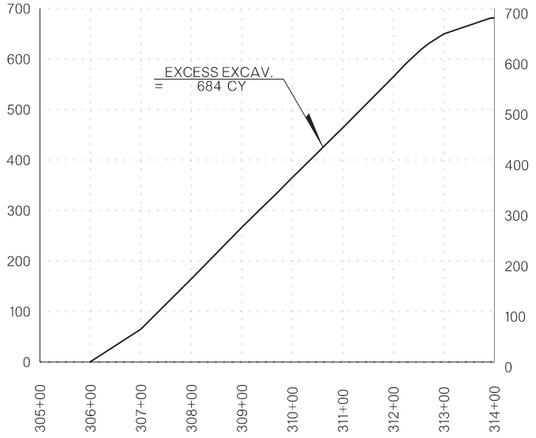
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

EARTHWORK PHASE 1 - INSTALL PIPES

STA. 306+00.00 TO 314+00.00

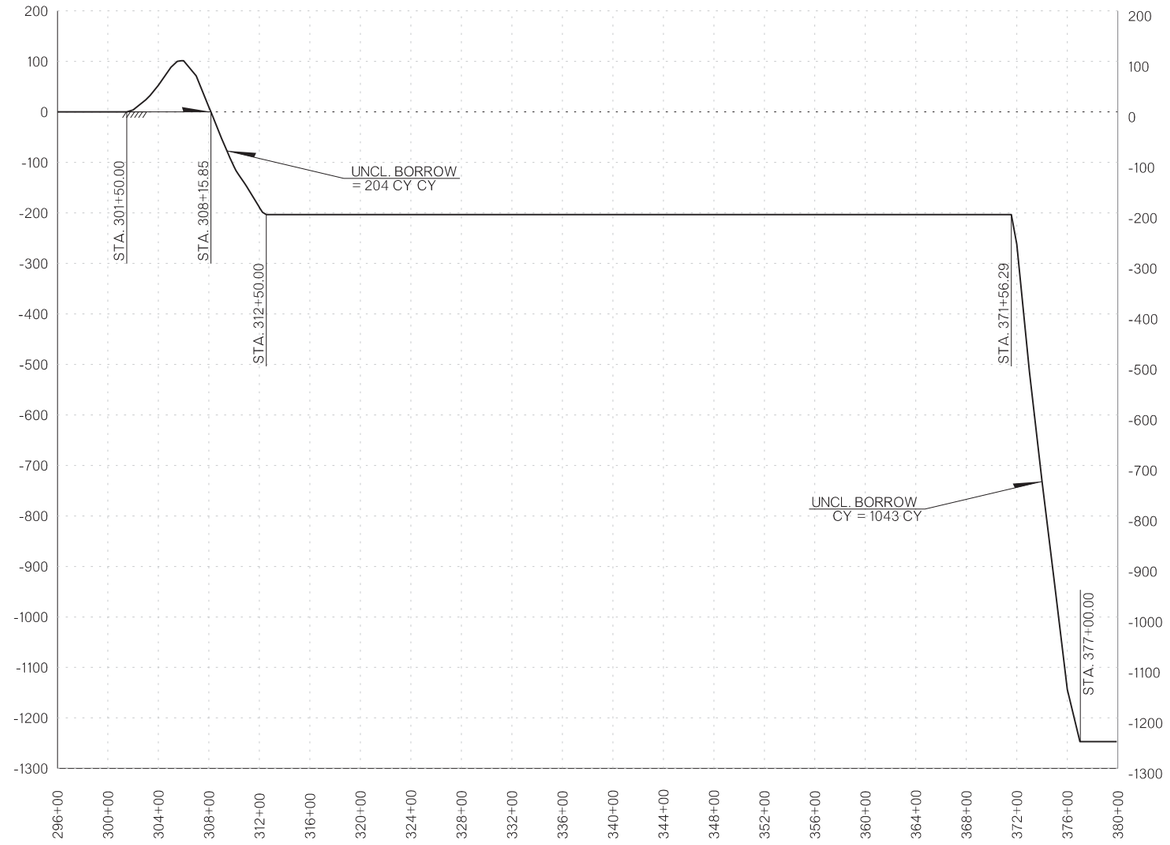
UNCL. EXCAV. = 686 CY
EMB. + 15% = 2 CY
EXCESS EXCAV. = 684 CY



EARTHWORK PHASE 2 - CONSTRUCT CROSS OVERS

STA. 295+50.00 TO 377+00.00

UNCL. EXCAV. = 553 CY
EMB. + 15% = 1,800 CY
UNCL. BORROW = 1,247 CY



MASS DIAGRAM PROVIDED FOR BIDDING PURPOSES ONLY. ACTUAL BALANCE POINTS TO BE DETERMINED BY CONTRACTOR AND VOLUME OF MATERIAL ENCOUNTERED DURING GRADING OPERATIONS. WHENEVER POSSIBLE, THE CONTRACTOR SHALL SEQUENCE EARTHWORK OPERATIONS IN ORDER TO OBTAIN THE MATERIAL FROM THE CUT SECTION FOR USE AS FILL RATHER THAN OBTAINING UNCLASSIFIED BORROW. MATERIAL DEPICTED AS WASTE SHALL ONLY BE CONSIDERED WASTE ONCE ALL EARTHWORK OPERATIONS HAVE BEEN COMPLETED. THIS MATERIAL SHALL BE USED TO REDUCE THE NEED FOR UNCLASSIFIED BORROW AT ANY LOCATION AND TIME THROUGH THE DURATION OF THE PROJECT.

MASS LINE DIRECTION

EXCAVATION CUT

EMBANKMENT FILL

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DRAWN		
CHECKED		MASS DIAGRAM
APPROVED		
SQUAD		

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R011

10-28-20 pw:\\LAPP-PWS05-345.agency.OK.local:ODOTProjects\\Documents\\Projects\\Division 1\\JP30416-04\\Roadway\\Plan Sheets\\30416(04) - MASS DIAGRAM.dgn

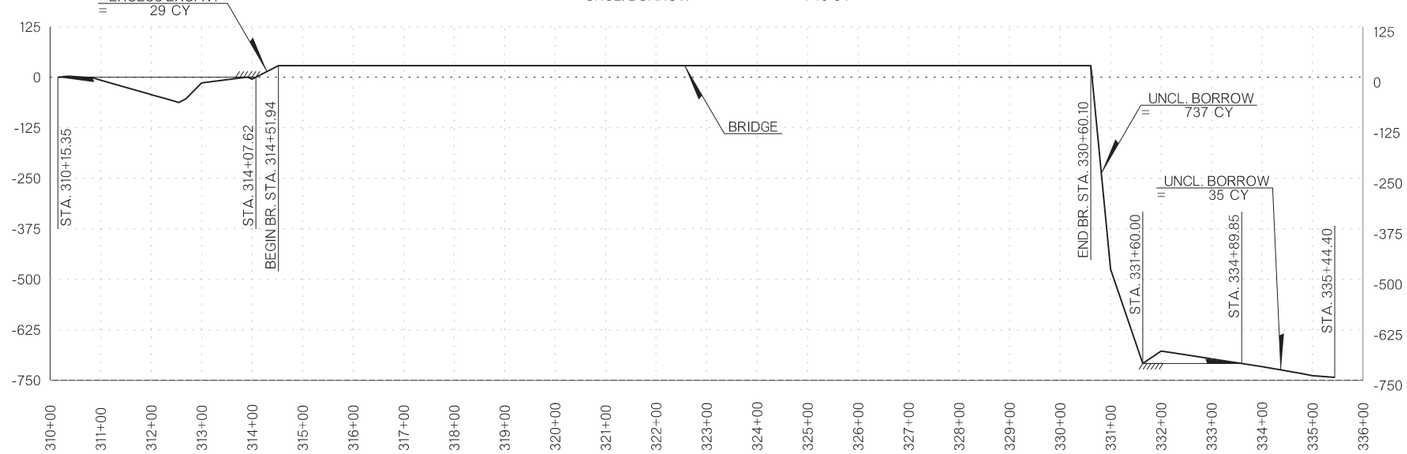
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

EARTHWORK PHASE 3 - CONSTRUCT WB LANES

STA. 310+15.35 TO 335+44.40

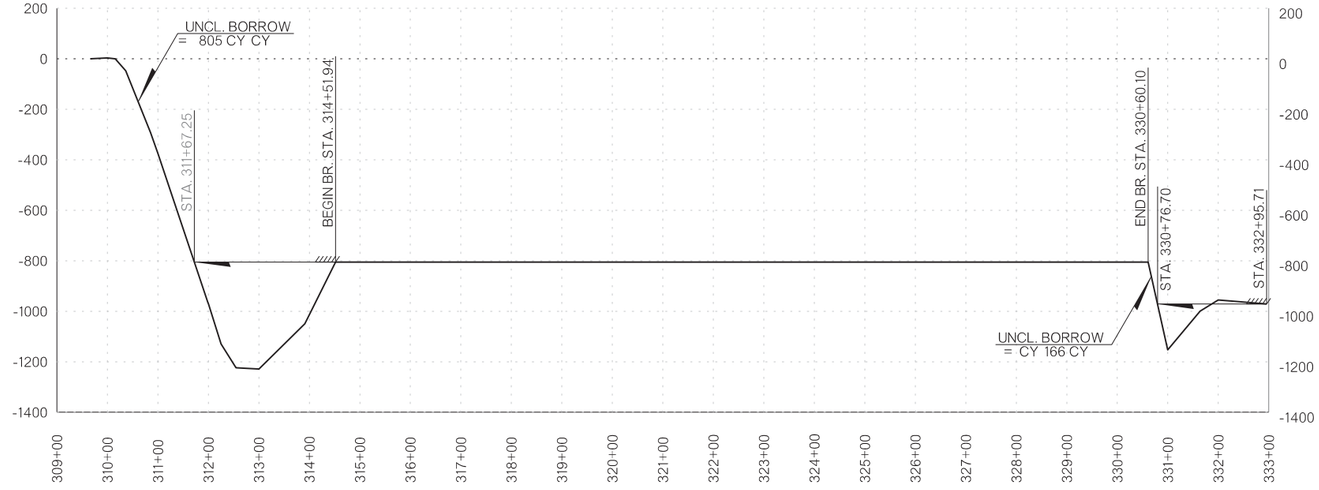
UNCL. EXCAV. = 602 CY
EMB. + 15% = 1,345 CY
UNCL. BORROW = 743 CY



EARTHWORK PHASE 4 - CONSTRUCT EB LANES

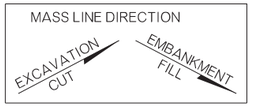
STA. 309+66.42 TO 332+95.71

UNCL. EXCAV. = 783 CY
EMB. + 15% = 1,755 CY
UNCL. BORROW = 972 CY



MASS DIAGRAM PROVIDED FOR BIDDING PURPOSES ONLY. ACTUAL BALANCE POINTS TO BE DETERMINED BY CONTRACTOR AND VOLUME OF MATERIAL ENCOUNTERED DURING GRADING OPERATIONS. WHENEVER POSSIBLE, THE CONTRACTOR SHALL SEQUENCE EARTHWORK OPERATIONS IN ORDER TO OBTAIN THE MATERIAL FROM THE CUT SECTION FOR USE AS FILL RATHER THAN OBTAINING UNCLASSIFIED BORROW. MATERIAL DEPICTED AS WASTE SHALL ONLY BE CONSIDERED WASTE ONCE ALL EARTHWORK OPERATIONS HAVE BEEN COMPLETED. THIS MATERIAL SHALL BE USED TO REDUCE THE NEED FOR UNCLASSIFIED BORROW AT ANY LOCATION AND TIME THROUGH THE DURATION OF THE PROJECT.

MASS LINE DIRECTION



DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DRAWN			
CHECKED			MASS DIAGRAM
APPROVED			
SQUAD			

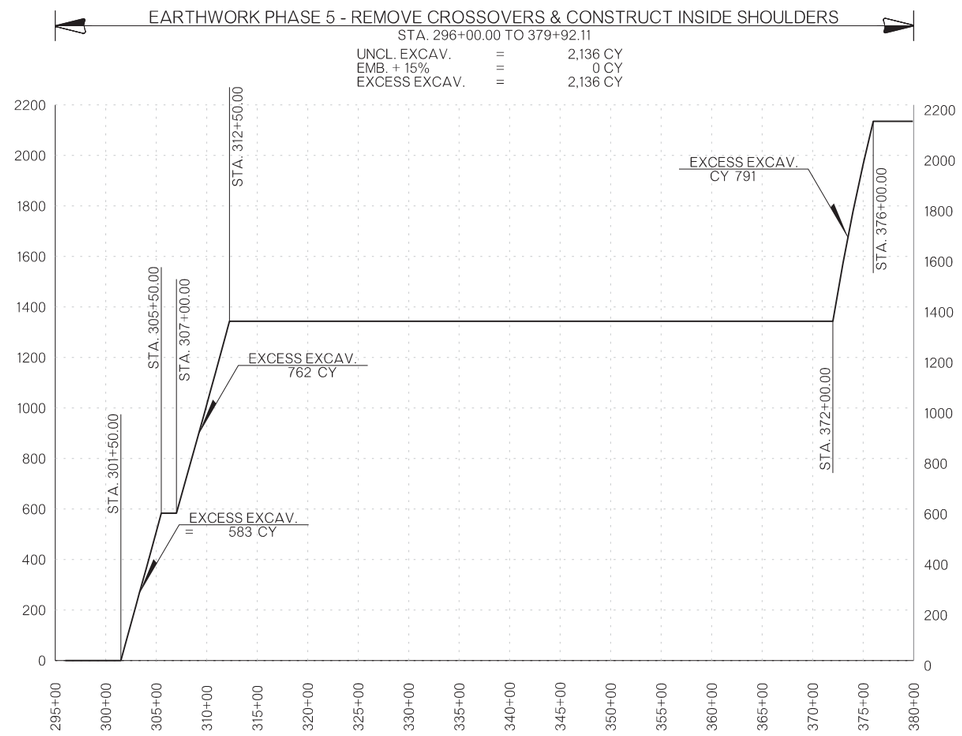
COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R012

10-28-20 pw:fl_APP-PWS05-345.agency.OK.local:ODOTProjects:fl_Documents:fl_Projects:fl_Division 1:fl_JP30416-04:fl_Roadway:fl_Plan Sheets:fl_30416(04) - MASS DIAGRAM.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE



SUMMARY OF EARTHWORK

STATION TO STATION	UNCLASSIFIED EXCAVATION 202(A)	EMBANKMENT +15%	EXCESS EXCAVATION	UNCLASSIFIED BORROW 202(D)	WASTE
	CY	CY	CY	CY	CY
PHASE 1 - EXCAVATE AND INSTALL PIPE					
STA. 306+00.00 TO 314+00.00	686	2	0 ●		
PHASE 2 - CROSS OVERS					
STA. 301+50.00 TO 377+00.00	553	1,800		563 ●	
PHASE 3 - WB CONST.					
STA. 310+15.35 TO 335+44.40	602	1,345		743	
PHASE 4 - EB CONST.					
STA. 309+66.42 TO 332+95.71	783	1,755		972	
PHASE 5 - INSIDE SHOULDERS					
STA. 301+50.00 TO 376+00.00	2,136	0			2,136
TOTALS	4,760	4,902	0	2,278	2,136

● 684 CY OF EXCESS EXCAVATION FROM STA. 306+00 TO 314+00 SHALL BE USED TO REDUCE UCLASSIFIED BORROW FOR PHASE 2

MASS DIAGRAM PROVIDED FOR BIDDING PURPOSES ONLY. ACTUAL BALANCE POINTS TO BE DETERMINED BY CONTRACTOR AND VOLUME OF MATERIAL ENCOUNTERED DURING GRADING OPERATIONS. WHENEVER POSSIBLE, THE CONTRACTOR SHALL SEQUENCE EARTHWORK OPERATIONS IN ORDER TO OBTAIN THE MATERIAL FROM THE CUT SECTION FOR USE AS FILL RATHER THAN OBTAINING UNCLASSIFIED BORROW. MATERIAL DEPICTED AS WASTE SHALL ONLY BE CONSIDERED WASTE ONCE ALL EARTHWORK OPERATIONS HAVE BEEN COMPLETED. THIS MATERIAL SHALL BE USED TO REDUCE THE NEED FOR UNCLASSIFIED BORROW AT ANY LOCATION AND TIME THROUGH THE DURATION OF THE PROJECT.

MASS LINE DIRECTION

EXCAVATION CUT

EMBANKMENT FILL

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DRAWN		
CHECKED		MASS DIAGRAM
APPROVED		
SQUAD		

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R013

10-28-20 pw:fl_LAPP-PWS05-345.agency.OK.local:ODOTProjects\fL Documents\fL Projects\fL Division 1\fL_JP30416-04\fL Roadway\fL Plan Sheets\fL30416(04) - MASS DIAGRAM.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

295+00
300+00
305+00
308+00
265+00
260+00
272+59
268+76
270+00

PI 294+47.94

US 62 CONCRETE
CONCRETE
Ramp "D"
Ramp "C"

STA. 303+34.1 ℄ 24"X137.4'X135.44' RDY. RCP
"WING" 72.1'RT. & 65.2'LT.
℄ ELEV. = 526.54'RT. & 531.04'LT.
LEAVE

STA. 303+68.1 ℄ 24"X57.0' LONG RCP
S.D. 128.3' LT.
NORTH PIPE ℄ ELEV. = 523.16'
SOUTH PIPE ℄ ELEV. = 525.87'
LEAVE

NOTE: 21RCP
NOTE: 24RCP
NOTE: 30 INCH

STA. 303+92 ℄ GAS LINE "X"ING
ONG HIGH PRESSURE LINE

STA. 305+98.4 ℄ 8.75'X2.75' DROP INLET 2.0'LT.
TOP OF GRATE ELEV. = 529.98'
INLET ℄ ELEV. = 527.47'
SOUTH PIPE ℄ ELEV. = 527.47'
LEAVE
STA. 305+99 EXIT END 18" RCP 88.5'RT.
℄ ELEV. = 524.76'
LEAVE

STA. 306+26 ℄ WATER LINE "X"ING
CITY OF MUSKOGEE

PC STA. 259+83.96
PT STA. 272+58.65
PT STA. 307+72.80

AT&T
CONCRETE

T1
T2

BM 100 "[ ]" ON NE CORNER OF PARAPET STA. 294+83.5
WALL ON SOUTH BRIDGE ELEV. 546.25

BM 101 "[ ]" ON SW CORNER OF SOUTH STA. 303+32.7
HDWL X-ING 718' RT ELEV. 546.25

-UTILITY OWNERS-

WATER - CITY OF MUSKOGEE
MUSKOGEE, OK
LOCATED BY; AUTHER LECH
1.918.616.5849

WATER - CITY OF FT. GIBSON
FT. GIBSON, OK
LOCATED BY; RUBEN KISSNER
1.918.360.3962

SAN. SEWER - CITY OF FT. GIBSON
FT. GIBSON, OK
LOCATED BY; RUBEN KISSNER
1.918.360.3962

GAS - ONG
MUSKOGEE, OK
LOCATED BY; DALTON MCTERA
USIC/SMP
1.918.577.7565

TELEPHONE- AT&T
MUSKOGEE, OK
LOCATED BY; DALTON MCTERA
USIC/SMP
1.918.577.7565

ELECTRICITY - OG&E
MUSKOGEE, OK
LOCATED BY; DALTON MCTERA
USIC/SMP
1.918.577.7565

MEDIAN DITCH ℄

STR T1
℄ SURVEY STA 303+50.00
CONST 8" X 400.00' LG
PVC SD IN MEDIAN

LEAVE
℄ ELEV. = 526.54'RT.
℄ ELEV. = 531.04'LT.

LEAVE
TOP OF GRATE ELEV.= 529.98'
INLET ℄ ELEV.= 527.47'
OUTLET ℄ ELEV.= 526.76'

℄ SURVEY STA. 296+00.00 BEGIN INCIDIENTAL CONST.

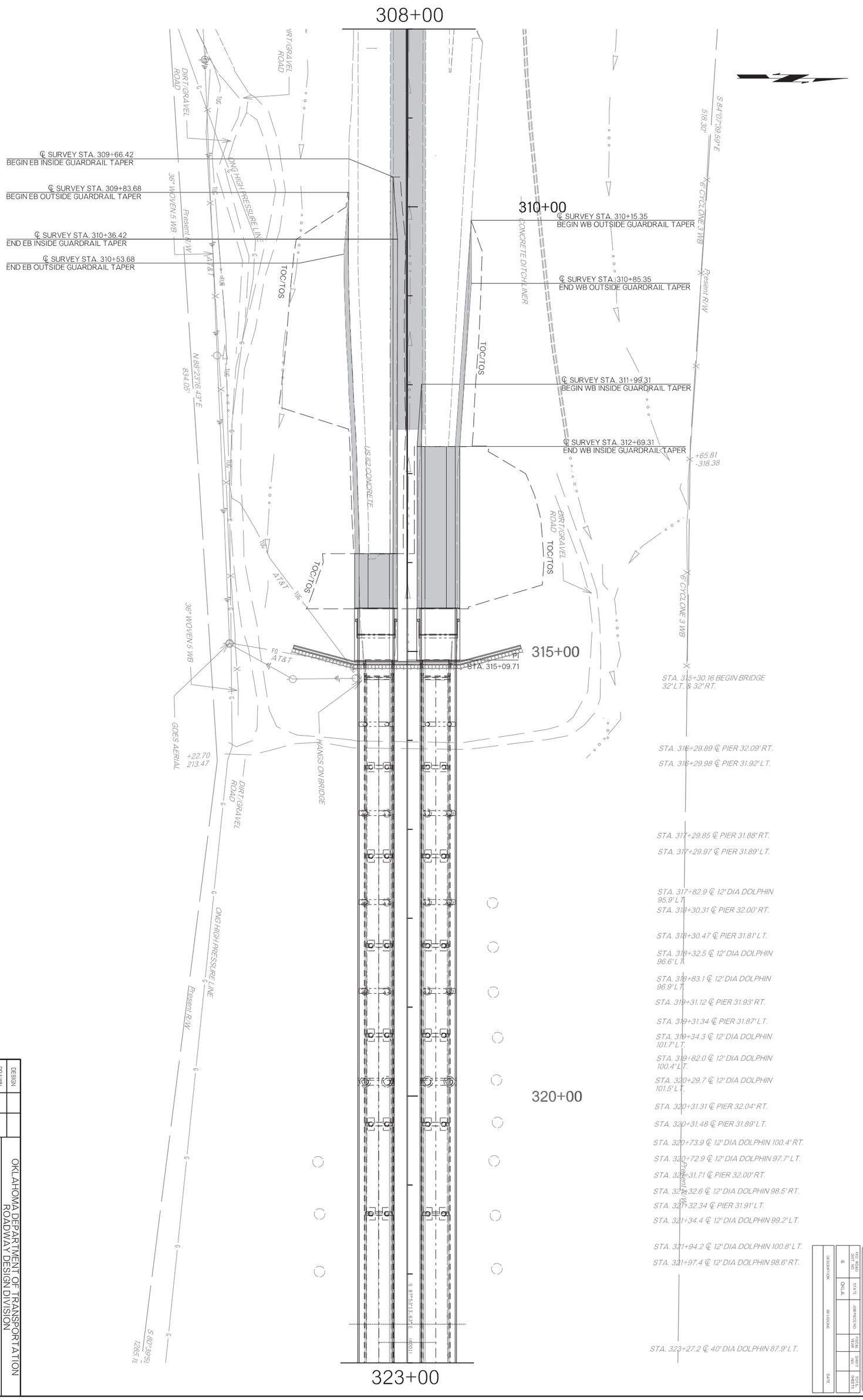
℄ SURVEY STA. 301+00.00 END INCIDENTAL
CONST. & BEGIN PROJECT

550 545 540 535 530 525 520 515 510 505

293+00 294+00 295+00 296+00 297+00 298+00 299+00 300+00 301+00 302+00 303+00 304+00 305+00 306+00 307+00 308+00

10-28-20

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R014



OKLAHOMA DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION

PLAN SHEET

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. B015

DESIGN		
DRAWN		
CHECKED		
APPROVED		
SQUAD	STILLWATER	

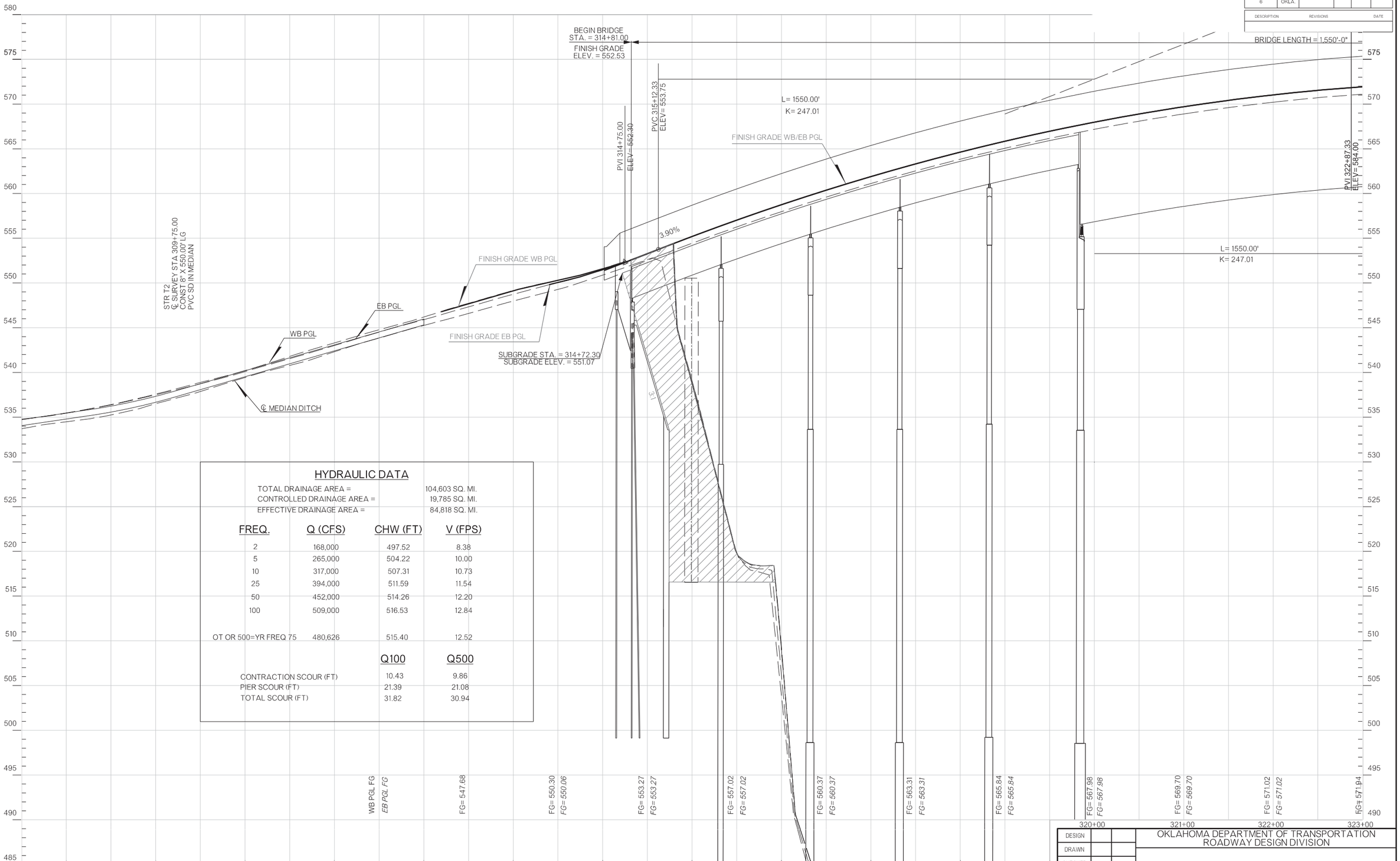
DESCRIPTION	FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	PSE&A DIV. NO.	SHEET NO.	TOTAL SHEETS
REVISIONS	6	OKLA.				
DATE						

OKLAHOMA DEPARTMENT OF TRANSPORTATION

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE



HYDRAULIC DATA

TOTAL DRAINAGE AREA =	104,603 SQ. MI.
CONTROLLED DRAINAGE AREA =	19,785 SQ. MI.
EFFECTIVE DRAINAGE AREA =	84,818 SQ. MI.

FREQ.	Q (CFS)	CHW (FT)	V (FPS)
2	168,000	497.52	8.38
5	265,000	504.22	10.00
10	317,000	507.31	10.73
25	394,000	511.59	11.54
50	452,000	514.26	12.20
100	509,000	516.53	12.84
OT OR 500=YR FREQ 75	480,626	515.40	12.52

	Q100	Q500
CONTRACTION SCOUR (FT)	10.43	9.86
PIER SCOUR (FT)	21.39	21.08
TOTAL SCOUR (FT)	31.82	30.94

DESIGN		OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DRAWN		
CHECKED		PROFILE SHEET
APPROVED		
SQUAD	STILLWATER	

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R016

10-30-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416 (04) - PROFILE SHEET 2.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

T-15-N, R-19-E

STA. 323+38.0 ℄ 25' DIA DOLPHIN ON ℄
STA. 323+39.0 ℄ PIER 31.95' LT.
STA. 323+39.1 ℄ PIER 32.08' RT.
STA. 323+51.7 ℄ 12' DIA DOLPHIN 98.7' RT.

S 87°06'17.79" E

2118.21'

STA. 326+74.6 ℄ 12' DIA DOLPHIN 98.2' RT.

STA. 326+73.2 ℄ PIER 31.91' RT.

STA. 326+73.8 ℄ 25' DIA DOLPHIN ON ℄

STA. 326+73.20 ℄ PIER 31.87' LT.

STA. 326+75.4 ℄ 40' DIA DOLPHIN ON 78.9' LT.

STA. 328+80.01 ℄ PIER 31.89' RT.

STA. 328+80.17 ℄ PIER 31.81' LT.

STA. 329+22.0 ℄ 84"X102.0" LONG CGMP
S.D. 279.4' RT.
WEST PIPE I.E. = 493.10'
EAST PIPE I.E. = 494.02'
LEAVE

STA. 329+52.46 ℄ PIER 31.91' RT.

STA. 329+52.51 ℄ PIER 31.85' LT.

STA. 330+24.8 END BRIDGE
32' L.T. & 32' RT.

STA. 333+20.1 ℄ 24"X102.0" LONG RCP
S.D. 267.5' RT.
NORTH PIPE I.E. = 497.29'
SOUTH PIPE I.E. = 505.13'
LEAVE

+83.83
-289.46

DIRT FIELD ENTRANCE

Present R/W

DIRT/GRAVEL DRIVEWAY

GRAVEL ROAD

AT&T

NOTE: CL 3 #1MB

FO

ASPHALT

325+00

330+00

335+00

338+00

GRAVEL WALKING TRAIL

24" WOVEN 3 WB

TOC/TOS

DIRT/GRAVEL DRIVEWAY

℄ SURVEY STA. 334+74.40
BEGIN WB INSIDE GUARDRAIL TAPER

℄ SURVEY STA. 335+44.40
END WB INSIDE GUARDRAIL TAPER

CONCRETE DITCH LINER

PC
STA. 337+38.77

STA. 3+13.44
POE 3+13

GRAVEL WALKING TRAIL

STA. 2+24.99
PI

PI
STA. 330+50.17

NORTH LOW BEAM

GUARDRAIL TO OVERLAP EXISTING GUARDRAIL

US 62 CONCRETE

HANGER ON BRIDGE

SOUTH LOW BEAM

ASPHALT WALKING TRAIL

PI 0+51.03

STA. 0+33.92
PC

STA. 0+00.00
POB 0+00

STA. 1+03.33
PI

STA. 0+67.79
PT

GUARDRAIL TO OVERLAP EXISTING GUARDRAIL

℄ SURVEY STA. 332+25.71
BEGIN EB INSIDE GUARDRAIL TAPER

℄ SURVEY STA. 332+95.71
END EB INSIDE GUARDRAIL TAPER

TOC/TOS

PROPOSED ASPHALT WALKING TRAIL

OG&E OWNED LINE

ENOGEX ABANDONED GAS LINE

CLEARA

NOTE: 24RCP

AT&T

TUG

ONG HIGH PRESSURE LINE

Present R/W

ASPHALT

NOTE: WATER BOX

PORT OF MUSKOGEE OWNED LINE

ENOGEX ABANDONED GAS LINE

+97.70
375.00

CONCRETE PAD

ASPHALT WALKING TRAIL

CONCRETE PAD

STA. 330+10 ℄ WATER LINE "X"ING

STA. 330+14 ℄ WATER LINE "X"ING

STA. 330+21 ℄ FIBER OPTICS "X"ING

DESIGN			OKLAHOMA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION
DRAWN			
CHECKED			PLAN SHEET
APPROVED			
SQUAD	STILLWATER		

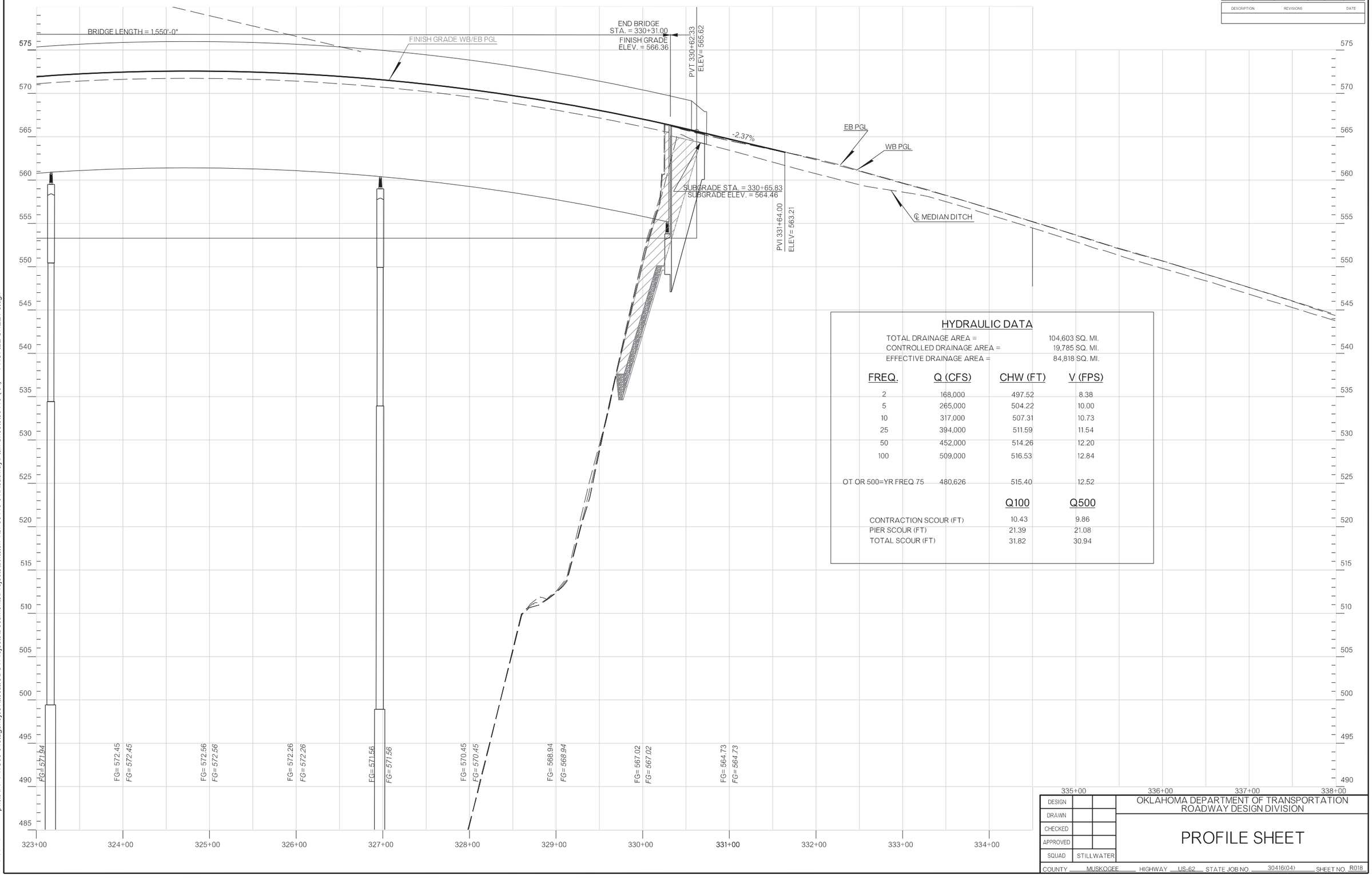
COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R017

10-28-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416 (04) - PLAN SHEET 3.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE



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CONTROLLED DRAINAGE AREA =	19,785 SQ. MI.
EFFECTIVE DRAINAGE AREA =	84,818 SQ. MI.

FREQ.	Q (CFS)	CHW (FT)	V (FPS)
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5	265,000	504.22	10.00
10	317,000	507.31	10.73
25	394,000	511.59	11.54
50	452,000	514.26	12.20
100	509,000	516.53	12.84
OT OR 500=YR FREQ 75	480,626	515.40	12.52

	Q100	Q500
CONTRACTION SCOUR (FT)	10.43	9.86
PIER SCOUR (FT)	21.39	21.08
TOTAL SCOUR (FT)	31.82	30.94

DESIGN		
DRAWN		
CHECKED		
APPROVED		
SQUAD	STILLWATER	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION

PROFILE SHEET

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R018

10-30-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416 (04) - PROFILE SHEET 3.dgn

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

S 84°50'05.35"E
1822.28'
FT. GIBSON UTILITY AUTHORTY
ASPHALT
24" WOVEN 3 WB
CONCRETE DITCH LINER
STA. 343+76.5 ℄ 8'X4'X2-0° RDY. RCB
"XING" 125.92' RT. & 116.1' LT.
℄ ELEV. = 498.76' RT. & 499.52' LT.
LEAVE
STA. 346+76.7 ℄ 8'X4'X38.6' LONG RCB
S.D. 158.2' LT.
SOUTH PIPE ℄ = 499.70'
NORTH PIPE ℄ = 499.81'
LEAVE
STA. 346+03.6 ℄ 30"X51.2" LONG RCP
S.D. 155.5' RT.
SOUTH PIPE ℄ = 500.04'
NORTH PIPE ℄ = 499.81'
LEAVE
STA. 347+54.9 ℄ 30"X 51.2" LONG RCP
S.D. 210.3' RT.
WEST PIPE ℄ = 499.82"
EAST PIPE ℄ = 499.63'
LEAVE
Present R/W
AT&T
STA. 348 44.4 EXIT END 24" RCP 125.4' RT.
℄ ELEV. = 503.03'
LEAVE
STA. 348+46.7 ℄ 6.5X3 DROP INLET 8.1' RT.
TOP OF GRATE ELEV. = 513.63'
INLET ℄ ELEV. = 508.44'
SOUTH PIPE ℄ ELEV. = 508.58'
LEAVE
CONCRETE DITCH LINER
24" WOVEN 3 WB
340+00
345+00
350+00
338+00
353+00
5W HIGH TENSION
US 62 CONCRETE
US 62 ASPHALT
STA. 341+21 ℄ 5WP HIGH TENSION "XING"
ICE TO LOW WIRE 43.79'
N 84°37'13.58"E
1763.97'
TUG
STA. 347+39 ℄ 2 WP OVERHEAD "XING"
NOTE: 24 CGMP
+43.44
154.51'
CLEARANCE TO LOW WIRE IS 43.8'
PI 351+15.91

BM 102 "[ ]" ON WEST EDGE OF DROP INLET STA. 342+43.3
ELEV. 563.73

EB PGL
WB PGL
℄ MEDIAN DITCH

℄ ELEV. = 499.52' LT.
℄ ELEV. = 498.76' RT.
LEAVE

TOP OF GRATE ELEV.= 513.63'
INLET ℄ ELEV. = 508.44'
OUTLET ℄ ELEV.= 503.03'
LEAVE

550 545 540 535 530 525 520 515 510 505

338+00 339+00 340+00 341+00 342+00 343+00 344+00 345+00 346+00 347+00 348+00 349+00 350+00 351+00 352+00 353+00

10-28-20

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R019

OKLAHOMA DEPARTMENT OF TRANSPORTATION

FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

ASPH.

ASPHALT

24" WOVEN 3 WB

CONCRETE DITCH LINER

355+00

360+00

365+00

353+00

368+00

AT&T

FO

STA. 360+33.5 ℄ 18"X 39.0' LONG RCP
S.D. 305.3'LT.
WEST PIPE IE = 506.29'
EAST PIPE IE = 506.28'
LEAVE

STA. 361+50.3 BEGIN BRIDGE
EAST BOUND LANE

STA. 362+63.7 BEGIN BRIDGE
WEST BOUND LANE

STA. 362+84 ℄ WATER LINE
"X"ING

FT. GIBSON UTILITY AUTHORITY

FT. GIBSON UTILITY

US 62 ASPHALT

US 62 ASPHALT

STA. 360+37 ℄ FIBER OPTICS
"X"ING

STA. 360+57 ℄ FIBER OPTICS
"X"ING

AT&T

FT. GIBSON UTILITY AUTHORITY

PUG

OSAGE

NOTE: 24

FT. GIBSON UTILITY AUTHORITY

STA.364+50.4 END BRIDGE
EAST BOUND LANE

STA. 365+66.8 END BRIDGE
WEST BOUND LANE

BM 103 "X" ON NW CORNER PARAPET WALL ON
SOUTH BRIDGE AT STA. 361+43.2 2.75' RT.
ELEV. 542.65

℄ MEDIAN DITCH

℄ SURVEY STA. 361+21.00 BEGIN TIED PROJECT

℄ SURVEY STA. 365+34.00 END TIED PROJECT

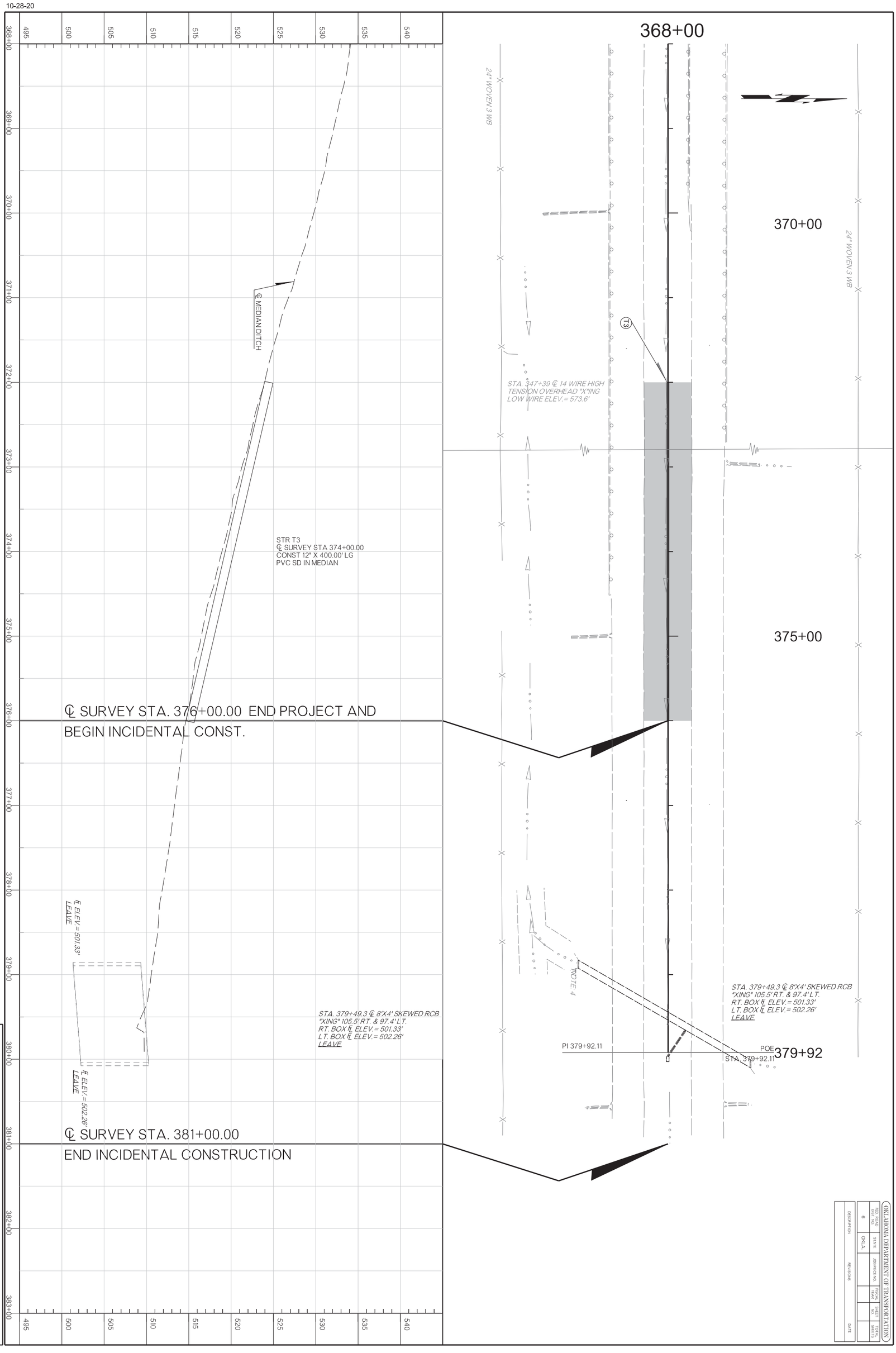
550 545 540 535 530 525 520 515 510 505

353+00 354+00 355+00 356+00 357+00 358+00 359+00 360+00 361+00 362+00 363+00 364+00 365+00 366+00 367+00 368+00

10-28-20

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R020

10-28-20



COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. R021

OKLAHOMA DEPARTMENT OF TRANSPORTATION

NO.	DESCRIPTION	DATE
	REVISIONS	

DIST. NO. 6 STATE OKLA. JOB PIECE NO. FED. AID PROJ. NO. YEAR SHEET NO. TOTAL SHEETS

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

REVISIONS	
DESCRIPTION	DATE

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

SURVEY OF

US 62

SWO 5220(1)
30416(04)

Muskogee

Bridges over Arkansas River, 2.4 miles
East of SH 16. (Bridge Replacement)

INDEX OF SHEETS

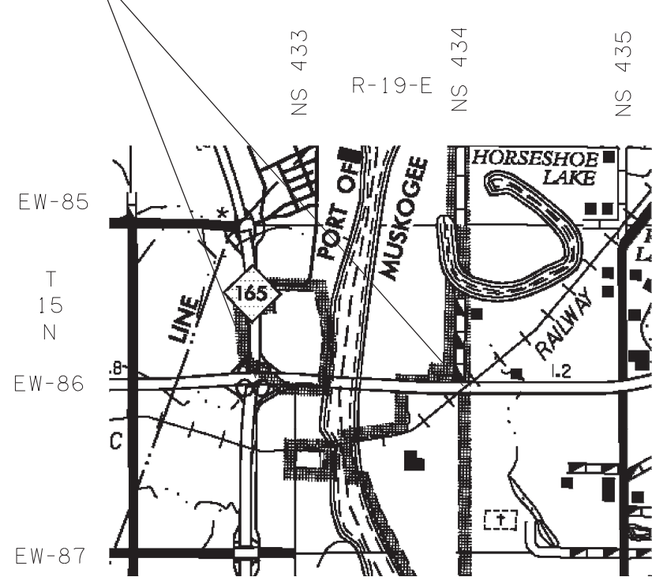
SURVEY BEGAN: May 28, 2016
SURVEY COMPLETED: March 26, 2016

PERSONNEL:	TITLE:
D.K. STRATTON, PLS	PROF. LAND SURVEYOR
S.D. HARRIS	TRANS. SPEC. V
D.W. BUCKMASTER	TRANS. SPEC. V
C.J. ABBOTT	TRANS. SPEC. IV

EQUIPMENT:
LEICA TCRA1203 TOTAL STATION
LEICA DNA10 DIGITAL LEVEL
LEICA VIVA GNSS - GS15
LEICA GPS1200

SURVEY EXTENTS

PROJECT LOCATION



PROJECT LENGTH 8374.31 Ft. 1.58 MI.

BEGINNING SATTION : 281+17.80
ENDING STATION : 364+92.11

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

SWO 5220(1) Job # 30416(04) Engr. Contract No. _____

LAND SURVEYOR'S CERTIFICATION

I hereby certify that all land and property sub-division distances, angles, corners, and monumentation made or used in conjunction with this survey and depicted or recorded herein or hereon were recovered, established or re-established in substantial conformity with:

- Applicable instructions contained in the U.S. Government Bureau of Land Management publication **"Manual of Survey Instruction"**.
- Its supplement, **"Restoration of Lost or Obliterated Corners and Sub-division of Sections"**;
- **"Oklahoma Minimum Standards for the Practice of Land Surveying"** as adopted by the State Board of Licensure for Professional Engineers and Land Surveyors; **and**
- Sound land surveying practices;

including a thorough search, study, analysis and consideration of all existing records and field evidence.

I further certify that all survey monuments depicted exist and that all land survey work was done by me or under my direct supervision.

Dated this 24 day of May , 2016

Land Surveyor (Seal) Dorin K. Stratton
Signature

Dorin K. Stratton
Printed Name

Oklahoma Licensed Land Surveyor No. 1504

Certificate of Authorization No. _____

THIS SURVEY MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS, JUNE 11, 2001.

SPECIFICATIONS FOR SURVEYS FOR PRIMARY AND SECONDARY HIGHWAYS DATED SEPTEMBER 11, 2001 GOVERN.

SDS 1 OF 8

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BEFORE YOU DIG MUSKOGEE CALL OKIE

			OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
PLS	DKS		
DRAWN	SDH		SURVEY DATA SHEET
CHECKED	DKS		
APPROVED	GAK		
CREW	MUSKOGEE		SWO 5220(1) STATE JOB NO. 30416(04) SHEET NO. S001

OKLAHOMA DEPARTMENT OF TRANSPORTATION

SURVEY DIVISION Phone (405)521-2621 FAX (405)522-0364

May 26, 2016

To: Mr. William Tackett, Chief of Surveys

From: Darin K. Stratton, Professional Land Surveyor

Subject: SWO 5220(1) - J/P Number 30416(04) – US 62 – Muskogee County.
Bridges over Arkansas River, 2.4 miles East of SH 16. (Bridge Replacement)

HISTORICAL LETTER AND WRITTEN REPORT

1. General:

Method of Survey: Field Conventional

Units of measurements: U.S. Survey Foot

Survey Began: March 28, 2016
Survey Completed: May 26, 2016

Personal:
Delbert W. Buckmaster - Transportation Specialist V
Shannon D. Harris - Transportation Specialist V
Cody J. Abbott - Transportation Specialist IV

Previous surveys and plans pertinent to this project:

Swo2641(1) 2005 Survey
Swo4889(1) 2012 Survey.
SAF No. 51(16) Plans
SAF No. 20304(05) Plans

2. Survey Assignment:
This survey was assigned to my Muskogee based survey crew by email on March 10, 2016 from Mr. Jeff King, Survey Branch Manager.

3. Purpose of Survey:

The purpose of this survey was to obtain adequate information for the design and construction of Bridges across the Arkansas River.

4. **Survey Limits:**

This survey began at the East approach slab of bridges over SH 351 (Muskogee Turnpike) and extends east to the approach slab of Bridges over the railroad. Widths are within the present Right of Way.

5. Alignment:

(A091) US 62
The alignment for this survey is along the existing Median, established under swo2641(1) and SAF 51(16) Plans.

6. Stationing:

(A001) US 62
Station of this Survey was taken from swo2641(1) Pear Protection Survey in 2005.

7. Horizontal Control:

1. Horizontal Control for this survey is NAD83(CORS) Oklahoma State Plane, North Zone. Established under swo2641(1) 2005 Survey.

2. Secondary Control for this survey was established by GPS Real Time Kinematics methods, following ODOT Survey Division methods and techniques.

A. The primary control network, the secondary control network and the section boundaries for this survey are in general compliance with NGS Second Order, Class II Standards for horizontal control (1"20,000). It is assumed that the GPS positional accuracies obtained meets or exceeded this standard.

8. Vertical Control:

A. Datum: Level Datum for this Survey is NAVD88.

B. Source: swo4889(1) 2012 Survey

C. Method:

We ran two sets of direct differential levels, using a digital level, between established control points establishing intermediate benchmarks as needed.

A "BENCHMARK & CHECK LEVEL" list has been placed in the Microstation Design file and a PDF file has been submitted with this survey showing the benchmark numbers, the differences of each run between benchmarks, and the elevation and full description of each benchmark.

9. Topography:

The topography for this project was obtained by field conventional methods within the present Right of Way.

10. Digital Terrain Model:

The Digital terrain model for this project was obtained by field conventional methods within the present Right of Way.

11. Underground Storage Tanks and Environmental Concerns:

During the course of this survey we did not encounter any Environmental concerns within the survey limits.

12. Environmental:

There were not any WPA Structures encountered during the course of this Survey.

13. Utilities

"OKIE" was contacted requesting the location of underground utilities within the survey extents. The location of the utilities was located as described below:

PLS	DKS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	SDH		SURVEY DATA SHEET
CHECKED	DKS		
APPROVED	GAK		SWO 5155 ( ) PROJECT NO. 30553(04) SHEET NO. S002
CREW	MUSKOGEE		

Telephone owned by AT&T, Muskogee, Oklahoma were obtained by conventional methods as located by USIC/SMP locator Dalton Mctera.

Water lines owned by City of Muskogee were obtained by conventional methods as located by locator Auther Lech.

Water lines owned by City of Ft. Gibson were obtained by conventional methods as located by locator Ruben Kissner.

Gas lines owned by ONG, Muskogee Oklahoma were obtained by conventional methods as located by Dalton Mctera.

Sanitary Sewer owned by City of Ft. Gibson were obtained by conventional methods as located by locator Ruben Kissner.

Electric owned by OG&E, Muskogee Oklahoma.

14. Property Ties:

Property lines were not computed for this project.

15. Existing Right of Way:

Right of Way shown on this survey was computed from SAP 51(16) Plans.

16. Drainage Information:

Drainage areas were not shown on this project.

17. Historical Sites or Monuments:

During the course of this survey there were not any Historical Sites or Monuments encountered.

18. Paving:

Paving is Concrete from Station 281+17 to Station 342+60 and is Asphalt from Station 342+60 to Station 364+92.

19. Land Ties:

Land Tie were not computed for this project

20. Submission of Survey Data:

All digital survey data has been placed in the appropriate project folder of the ODOT Intranet Storage System following the guidelines as outlined in the Policy Directive dated April 15, 2002.

A complete listing of all computer files created and used in conjunction with this survey has been placed in the project folder as "index.txt"

Upon completion of this survey, a digital PDF file of the following was submitted in an e-mail to Mr. Jeff King, Survey Branch Manager, in addition to the digital survey data:

1. Historical Letter & Written Report
2. Form SD-1- Transmittal Letter with Index attached
3. Form SD-7-Public and Privately Owned Utilities List
4. Form SD-9-Final Cost Report of Survey
5. Form SD-20-Survey Control Data Statement

6. Form SD-41-Survey's Certification
7. Cogo Data and Alignment Reports
8. Benchmarks & Check Levels List

Darin K. Stratton,
Professional Land Surveyor

SDS 3 OF 8

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

REVISIONS	
DESCRIPTION	DATE

PLS	DKS		OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	SDH		**SURVEY DATA SHEET**
CHECKED	DKS		
APPROVED	GAK		
CREW	MUSKOGEE		SWO 5155 ( ) PROJECT NO. 30553(04) SHEET NO. S003

8-87

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

REVISIONS	
DESCRIPTION	DATE

swo5220(1) J/P#30416(04) - US 62 - Muskogee County
Bridges over Arkansas River, 2.4 miles East of SH 16.
(Bridge Replacement)

POINT NAME	EASTING	NORTHING
300	2768641.7360	291480.2700
301	2770181.1525	291423.4756
302	2770533.0997	291410.4911
303	2772245.4847	291347.3152
304	2767879.9205	290631.2674
305	2780461.9278	291569.0104
306	2766576.0813	291556.4791
307	2765255.1204	291400.4342
308	2767271.6020	274330.3911
309	2767905.3228	291507.4388
310	2770869.2810	291398.0882
311	2772459.0699	334489.4380
312	2773622.1237	291384.4596
314	2767866.0791	291586.8883
315	2767501.0485	291624.3708
316	2767211.9592	291850.3789
317	2767996.1311	292853.4215
318	2767910.0977	291451.2246
319	2767646.2572	291460.9586
320	2767426.4575	291314.6894
321	2766918.0248	292080.1749
322	2766798.5107	290896.8125
7600	2767913.0624	291239.3197
7601	2768746.7826	291262.7839
7602	2770014.9602	291054.3519
7603	2771771.1637	291219.7299
7604	2768409.7448	291807.4219
7605	2770525.2550	291700.4376
7606	2768664.1416	291532.8997
7607	2768660.2026	291426.1324
7608	2770159.1983	291477.7419
7609	2770155.2593	291370.9745
7610	2769943.0920	291312.9592
7611	2769901.5857	291072.9822
7612	2768743.1572	291263.3743
7613	2768745.5618	291279.2532
7614	2768740.9501	291677.0665
7615	2768746.8717	291790.3719
7616	2770020.5641	291725.9608
7617	2767029.7174	292119.7874
7618	2767894.1694	291860.4498
7619	2767381.3308	292067.0313
7620	2767297.6123	290988.7105
7621	2767485.9744	291114.0589
7622	2767712.1694	291119.3814
7623	2767709.4584	291233.4197
7624	2771854.3546	291150.8584
7626	2771856.9255	291034.7958
7627	2773014.4170	291067.4650
7628	2767730.5527	290338.1278
7630	2773153.8016	291696.6451
7631	2771842.1662	291581.3962
7632	2772497.1939	291678.1137
7633	2773774.6239	291714.1666
9000	2773161.1990	291403.7385
9001	2770535.2875	291329.6259
9002	2768047.8366	285962.0246
9003	2767975.5053	288612.6214
9004	2767835.0287	293893.1776
9005	2767912.6702	291255.8152
9006	2767731.1897	296552.1968
9007	2767757.3871	296530.5409
9008	2773027.7331	296679.3295
9009	2773094.6202	294039.9974
9010	2770614.8686	288680.3113
9011	2770392.5622	296604.9353
9012	2770463.9443	293966.5629
M-51-463	2768641.7249	291480.3380 552.80
M-51-464	2770181.0459	291423.4808 565.25

****
****

Project Name: swo5220
Description:
Horizontal Alignment Name: A001
Description:
Style: Centerline

	STATION	EASTING
NORTHING		
Element: Circular		
PC (307)	281+17.80	2765255.1204
291400.4342		
PI ( )	294+47.94	2766576.0813
291556.4791		
CC (308)		2767271.6020
274330.3911		
PT (309)	307+72.80	2767905.3228
291507.4388		
Radius:	17188.73	
Delta:	8^51'00.00"	Right
Degree of Curvature(Arc):	0^20'00.00"	
Length:	2655.00	
Tangent:	1330.15	
Chord:	2652.36	
Middle Ordinate:	51.24	
External:	51.39	
Tangent Direction:	N 83^15'46.37"	E
Radial Direction:	S 6^44'13.63"	E
Chord Direction:	N 87^41'16.37"	E
Radial Direction:	S 2^06'46.37"	W
Tangent Direction:	S 87^53'13.63"	E
Element: Linear		
PT (309)	307+72.80	2767905.3228
291507.4388		
PI (300)	315+09.71	2768641.7360
291480.2700		
Tangent Direction:	S 87^53'13.63"	E
Tangent Length:	736.91	
Element: Linear		
PI (300)	315+09.71	2768641.7360
291480.2700		
PI (301)	330+50.17	2770181.1525
291423.4756		
Tangent Direction:	S 87^53'13.63"	E
Tangent Length:	1540.46	
Element: Linear		
PI (301)	330+50.17	2770181.1525
291423.4756		
PC (310)	337+38.77	2770869.2810
291398.0882		
Tangent Direction:	S 87^53'13.63"	E
Tangent Length:	688.60	
Element: Circular		
PC (310)	337+38.77	2770869.2810
291398.0882		
PI ( )	351+15.91	2772245.4847
291347.3152		
CC (311)		2772459.0699
334489.4380		
PT (312)	364+92.11	2773622.1237
291384.4596		
Radius:	43120.67	
Delta:	3^39'30.44"	Left
Degree of Curvature(Arc):	0^07'58.34"	
Length:	2753.34	
Tangent:	1377.14	
Chord:	2752.88	
Middle Ordinate:	21.97	
External:	21.99	
Tangent Direction:	S 87^53'13.63"	E
Radial Direction:	S 2^06'46.37"	W
Chord Direction:	S 89^42'58.85"	E
Radial Direction:	S 1^32'44.06"	E
Tangent Direction:	N 88^27'15.94"	E

****
***

Project Name: swo5220
Description:
Horizontal Alignment Name: A002_Ramp D
Description:
Style: Centerline

	STATION	EASTING
NORTHING		
Element: Circular		
PC (314)	258+75.96	2767866.0791
291586.8883		
PI ( )	262+42.91	2767501.0485
291624.3708		
CC (317)		2767996.1311
292853.4215		
PT (316)	265+90.50	2767211.9592
291850.3789		
Radius:	1273.19	
Delta:	32^09'19.00"	Right
Degree of Curvature(Arc):	4^30'00.59"	
Length:	714.54	
Tangent:	366.95	
Chord:	705.20	
Middle Ordinate:	49.80	
External:	51.83	
Tangent Direction:	N 84^08'14.00"	W
Radial Direction:	N 5^51'46.00"	E
Chord Direction:	N 68^03'34.50"	W
Radial Direction:	N 38^01'05.00"	E
Tangent Direction:	N 51^58'55.00"	W
Element: Linear		
PT (316)	265+90.50	2767211.9592
291850.3789		
POE (321)	269+63.60	2766918.0248
292080.1749		
Tangent Direction:	N 51^58'55.00"	W
Tangent Length:	373.10	

****
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Project Name: swo5220
Description:
Horizontal Alignment Name: A003_Ramp C
Description:
Style: Centerline

	STATION	EASTING
NORTHING		
Element: Linear		
POB (322)	259+93.58	2766798.5107
290896.8125		
PC (320)	267+47.86	2767426.4575
291314.6894		
Tangent Direction:	N 56^21'27.37"	E
Tangent Length:	754.28	
Element: Circular		

			OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
PLS	DKS		
DRAWN	SDH		SURVEY DATA SHEET
CHECKED	DKS		
APPROVED	GAK		
CREW	MUSKOGEE		SWO 5155 ( ) PROJECT NO. 30553(04) SHEET NO. S004

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

REVISIONS	
DESCRIPTION	DATE

Additional Information
Cogo Point 09/13/18

291314.6894 PC (320)	267+47.86	2767426.4575	
291460.9586 PI ( )	270+11.88	2767646.2572	
290633.2674 CC (304)		2767879.9205	
291451.2246 PT (318)	272+58.65	2767910.0977	

Radius:	818.51
Delta:	35^45'19.00" Right
Degree of Curvature(Arc):	6^59'59.92"
Length:	510.79
Tangent:	264.02
Chord:	502.54
Middle Ordinate:	39.52
External:	41.53
Tangent Direction:	N 56^21'27.37" E
Radial Direction:	S 33^38'32.63" E
Chord Direction:	N 74^14'06.87" E
Radial Direction:	S 2^06'46.37" W
Tangent Direction:	S 87^53'13.63" E

314	2767866.0791	291586.8883
7525	2773934.2517	291718.6718
7529	2773174.0450	291071.9703
7534	2775107.7845	291751.7924
7535	2775073.2887	291125.5749

swo5220(1) J/P 30416(04) - US 62 - Muskogee County
Bridges over Arkansas River, 2.4 miles East of SH 16. (Bridge Replacement)

Page 1 of 1	CHECK LEVELS SWO 5220(1)					BENCH MARK LIST NAVD 88 DATUM	
BM NO.	RUN 1	RUN 2	RUN 3	MEAN	ADJ. DIFF.	ELEV.	BM DESCRIPTION
BM 100						BM 100	"□" on NE Corner of Parapet Wall on South Bridge Sta. 296+83.5 15.0' Rt.
TO	-16.530	-16.530		-16.53	-16.53	546.25	
BM 101						BM 101	"□" on SW Corner of South HDRL "Y" ing Sta. 303+32.7 71.8' Rt.
TO	+23.070	+23.070		+23.08	+23.08	529.72	
HM 51-463						HM 51-463	2" ODOT Brass Monument set for Bridge Shift Detection Control Sta. 315+05.76 on ℄ (SOURCE)
TO	+12.45	+12.45		+12.45	+12.45	552.80	
HM 51-464						HM 51-464	2" Brass Monument set in a 1 ton spike with poly back set for Bridge Shift Detection Control Sta. 330+50.07 on ℄ (SOURCE)
TO	-51.52	-51.59		-51.545	-51.52	565.25	
BM 102						BM 102	"□" at ℄ West edge drop inlet at Sta. 348+43.3 7.8' Rt.
TO	+28.920	+28.520		+28.924	+28.92	513.73	
BM 103						BM 103	"X" on NW Corner Parapet Wall on South Bridge at Sta. 361+45.2 27.5' Rt.
						542.65	

-1-

PLS	DKS	OKLAHOMA DEPARTMENT OF TRANSPORTATION SURVEY DIVISION
DRAWN	SDH	**SURVEY DATA SHEET**
CHECKED	DKS	
APPROVED	GAK	
CREW	MUSKOGEE	SWO 5155 ( ) PROJECT NO. 30553(04) SHEET NO. S005

8-87

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

REVISIONS	
DESCRIPTION	DATE

285+00
290+00
295+00
300+00
305+00
310+00
270+00
265+00
260+00
280+00

EOP Sta. 269+63.60
Calculated Only

PT Sta. 265+90.50
Calculated Only

Ramp "D"
PI Sta. 262+42.91
(Calculated Only)
Delta 329°09'19.00"
Dc 4°30'00.59"
T 366.95'
L 714.54'
R 1273.19'
E 51.83'

PC Sta. 258+75.96
Calculated Only

+05.23
-602.31
321
7617
S 81°28'01.14" E
355.55'
+45.27
-548.25
7619
Present R/W
R 998.19'
L 560.27'
+49.12
-352.38
7618
S 84°07'39.59" E
518.30'

N 51°58'55.00" W
(A002)
316
Ramp "D"
N 51°58'55.00" W
315
N 84°08'14.00" W
314

PI Sta. 294+47.94
(Calculated Only)
Delta 8°51'00.00"
Dc 0°20'00.00"
T 1330.15'
L 2655.00'
R 17188.73'
E 51.39'

306
N 83°15'46.37" E
S 87°53'13.63" E
307
319
S 87°53'13.63" E 91.99'
309
318
N 56°21'27.37" E
Ramp "C"
ALL R.P.'S
#4 REBAR
FLUSH
64.27'
82.09'
S35°W
320
N 56°21'27.37" E
(A003)
322
7623
N 88°20'24.52" E
203.69'
7600
Present R/W
+84.09
280.04
7622
R 781.47'
L 440.47'
7620
+89.89
393.96
+65.77
530.39

PC Sta. 281+17.80
Calculated Only

BOP Sta. 259+93.58
Calculated Only

PC Sta. 267+47.98
Calculated Only

PT Sta. 272+58.65
(A003)
Calculated Only

PT Sta. 307+72.80
1/2" Iron Pin

Ramp "C"
PI Sta. 270+11.88
(Calculated Only)
Delta 35°45'19.00"
Dc 6°59'59.92"
T 264.02'
L 510.79'
R 818.51'
E 41.53'

PLS	DKS	
DRAWN	SDH	
CHECKED	DKS	
APPROVED	GAK	
CREW	MUSKOGEE	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

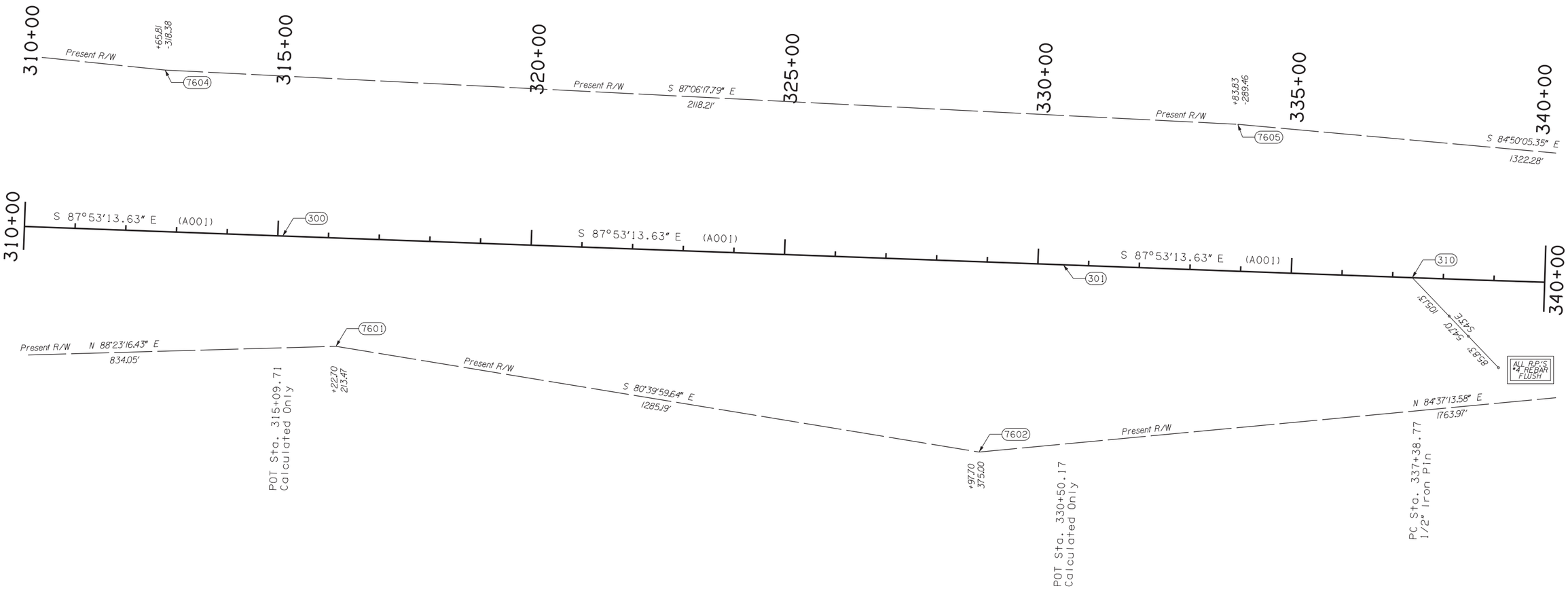
SWO 5220 (1) PROJECT NO. 30416(04) SHEET NO. S006

SDS 6 OF 8

8-87

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

REVISIONS	
DESCRIPTION	DATE



PLS	DKS	
DRAWN	SDH	
CHECKED	DKS	
APPROVED	GAK	
CREW	MUSKOGEE	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

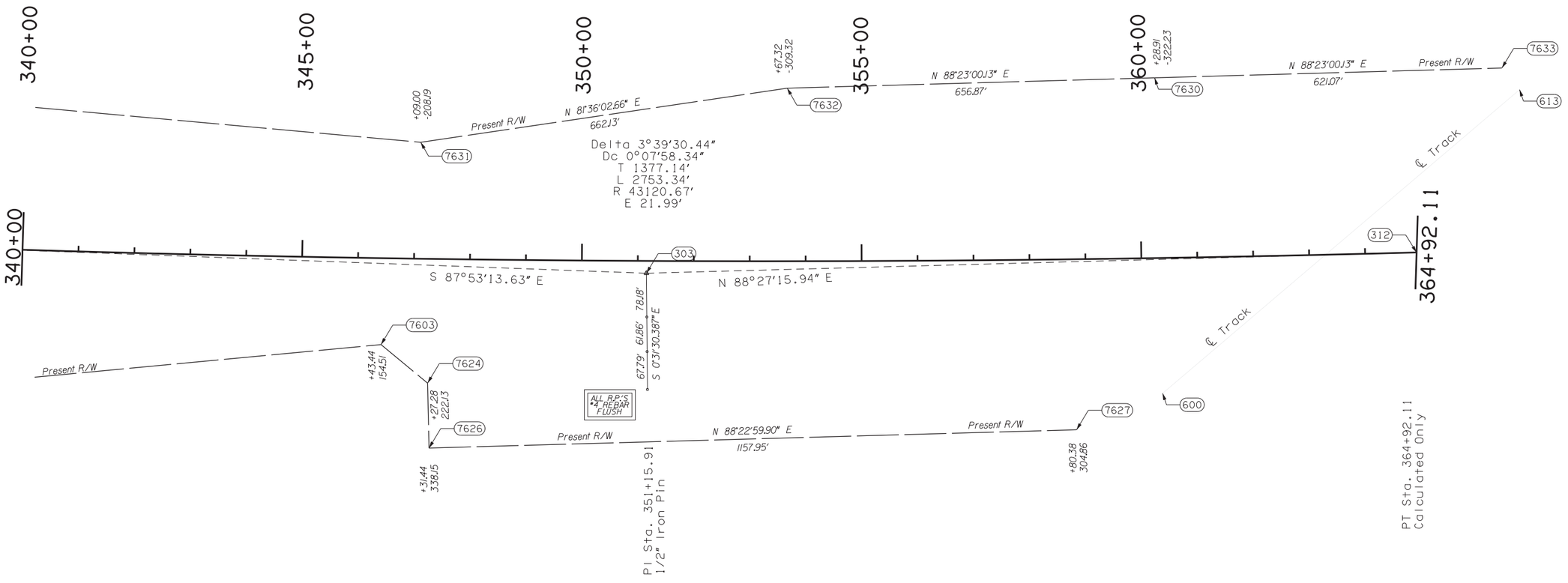
SWO 5220 (1) PROJECT NO. 30416(04) SHEET NO. S007

SDS 7 OF 8

8-87

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

REVISIONS	
DESCRIPTION	DATE



PLS	DKS	
DRAWN	SDH	
CHECKED	DKS	
APPROVED	GAK	
CREW	MUSKOGEE	

OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

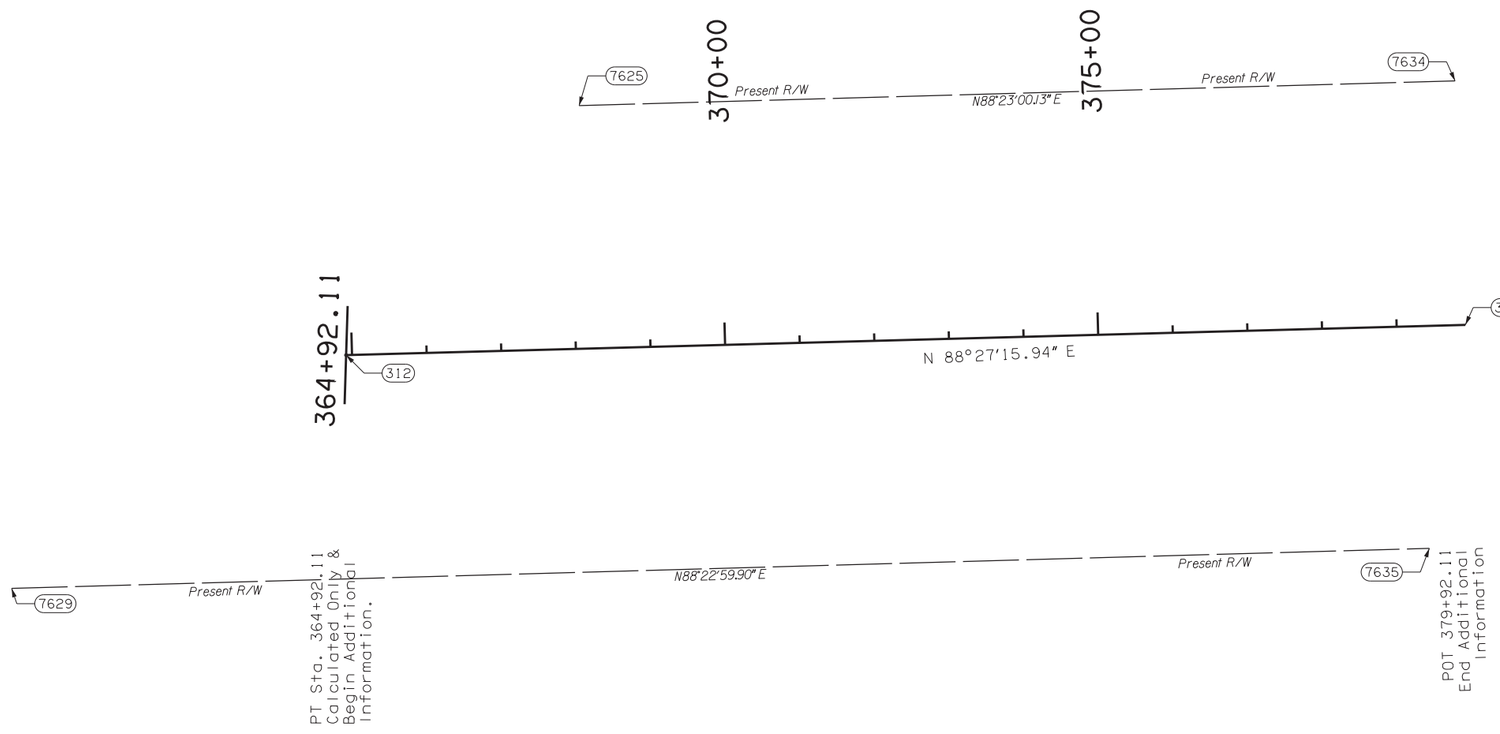
SWO 5220 (1) PROJECT NO. 30416(04) SHEET NO. S008

SDS 8 OF 8

8-87

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

REVISIONS	
DESCRIPTION	DATE



SDS 8A OF 8A

PLS	DKS	
DRAWN	SDH	
CHECKED	DKS	
APPROVED	GAK	
CREW	MUSKOGEE	

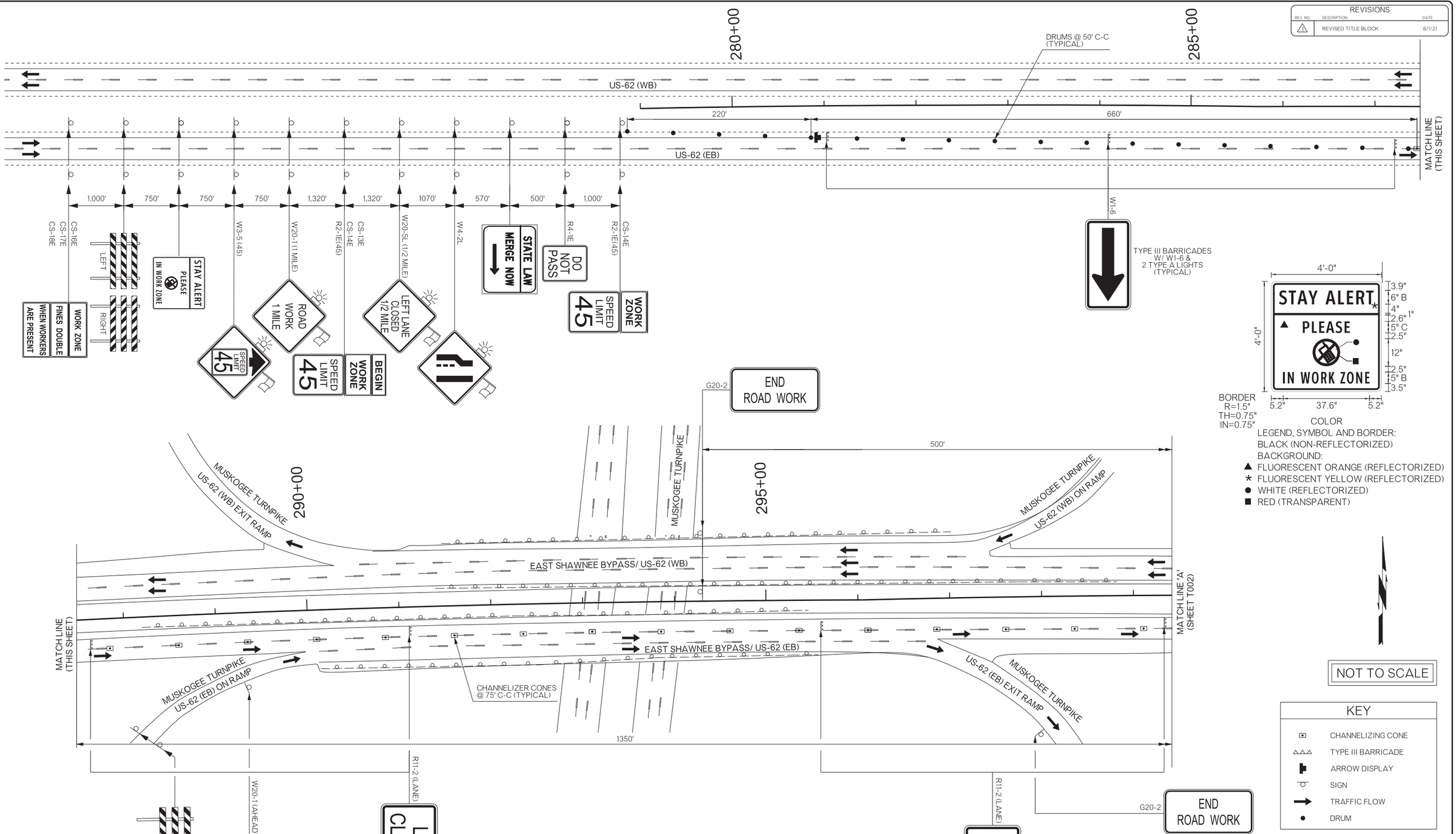
OKLAHOMA DEPARTMENT OF TRANSPORTATION
SURVEY DIVISION

SURVEY DATA SHEET

SWO 5220 (1) PROJECT NO. 30416(04) SHEET NO. S009

8-87

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED TITLE BLOCK	6/1/21



COLOR
LEGEND, SYMBOL AND BORDER:
BLACK (NON-REFLECTORIZED)
BACKGROUND:
▲ FLUORESCENT ORANGE (REFLECTORIZED)
★ FLUORESCENT YELLOW (REFLECTORIZED)
● WHITE (REFLECTORIZED)
■ RED (TRANSPARENT)

NOT TO SCALE

KEY

- CHANNELIZING CONE
- TYPE III BARRICADE
- ARROW DISPLAY
- SIGN
- TRAFFIC FLOW
- DRUM

DIVISION 1
US-62

MUSKOGEE COUNTY

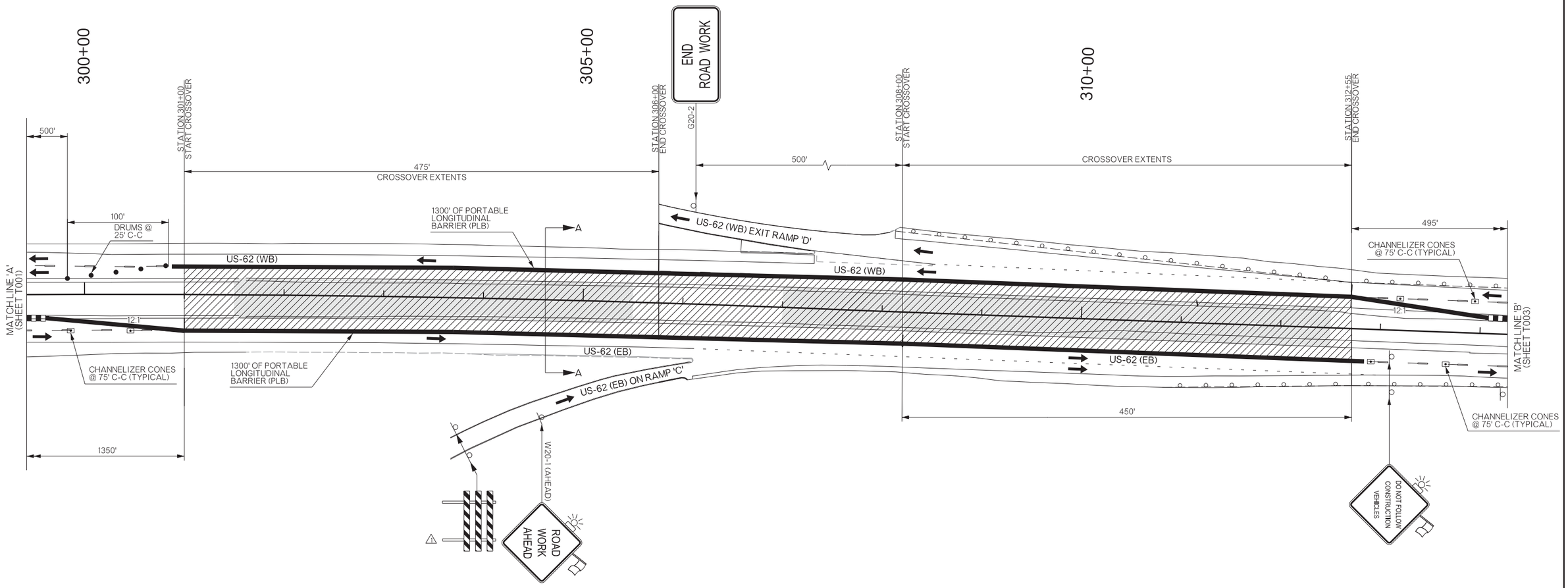
TRAFFIC CONTROL DETAIL PHASES 1 & 4
⚠ STA.296+00 TO 300+41.86 (1 OF 7)
CROSSOVER CONST./REMOVAL

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP: SOLIZ		
EM: PARRISH ⚠		

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) | SHEET NO. T001

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED TITLE BLOCK AND ADDED WING BARRICADES	6/1/21



US-62 WESTBOUND

TRAFFIC TYPICAL A-A
PHASES 1 & 4

US-62 EASTBOUND

NOT TO SCALE

KEY

- CONSTRUCTION ZONE IMPACT ATTENUATOR
- PORTABLE LONGITUDINAL BARRIER
- WORK AREA
- CHANNELIZING CONE
- SIGN
- TRAFFIC FLOW
- DRUM

DIVISION 1
US-62

MUSKOGEE COUNTY

TRAFFIC CONTROL DETAIL PHASES 1 & 4
STA.300+41.86 TO 314+27.60 (2 OF 7)
CROSSOVER CONST./REMOVAL

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP:	SOLIZ	
EM:	PARRISH	

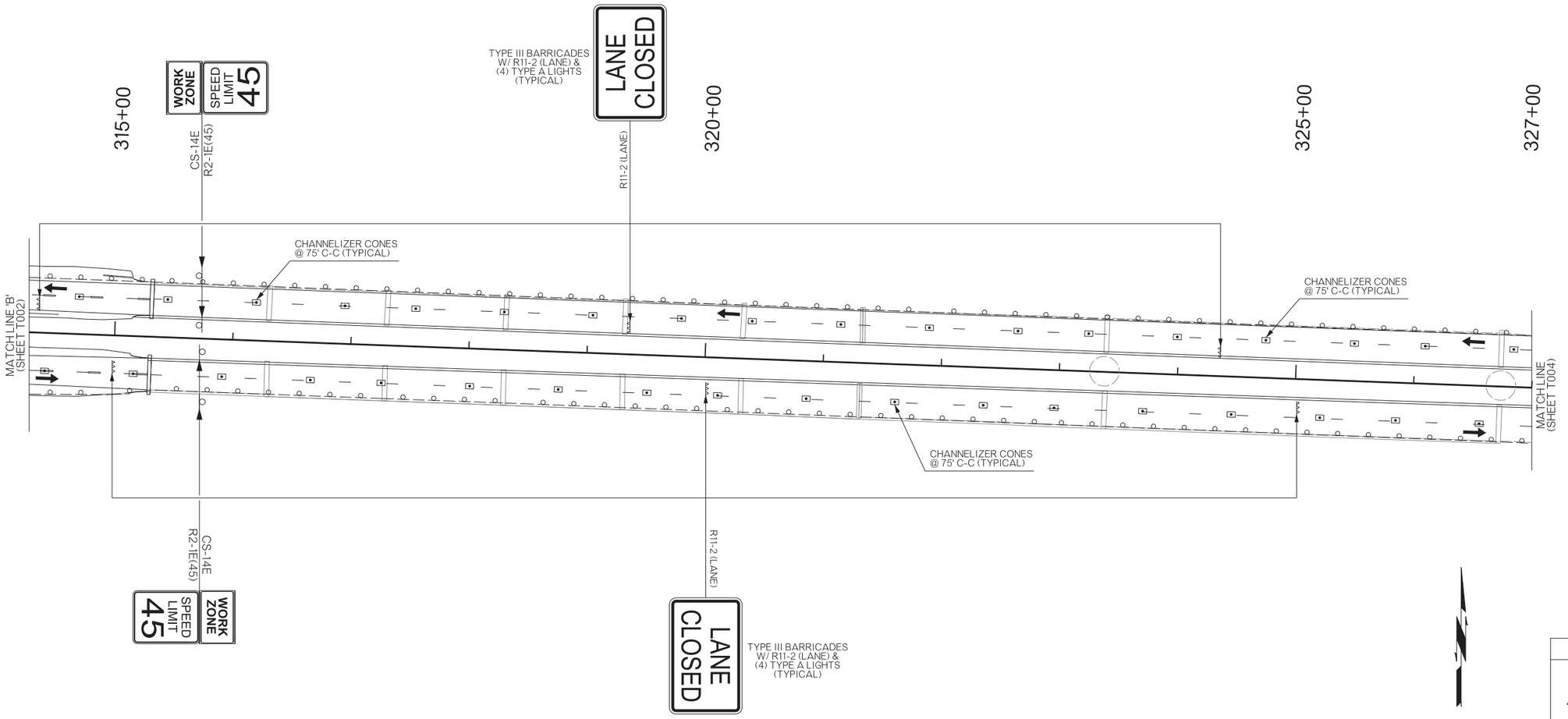
STATE OF OKLAHOMA

DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04)

SHEET NO. T002

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED TITLE BLOCK	6/1/21



NOT TO SCALE

KEY	
	SIGN
	TYPE III BARRICADE
	TRAFFIC FLOW
	CHANNELIZING CONE

DIVISION 1 — MUSKOGEE COUNTY
US-62

TRAFFIC CONTROL DETAIL PHASES 1 & 4
STA.314+27.60 TO 327+00 (3 OF 7)
CROSSOVER CONST./REMOVAL

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP:	SOLIZ	
EM:	PARRISH	

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) — SHEET NO. T003

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED TITLE BLOCK	6/1/21

NOT TO SCALE

KEY

- SIGN
- TYPE III BARRICADE
- TRAFFIC FLOW
- CHANNELIZING CONE

DIVISION 1 — MUSKOGEE COUNTY
US-62

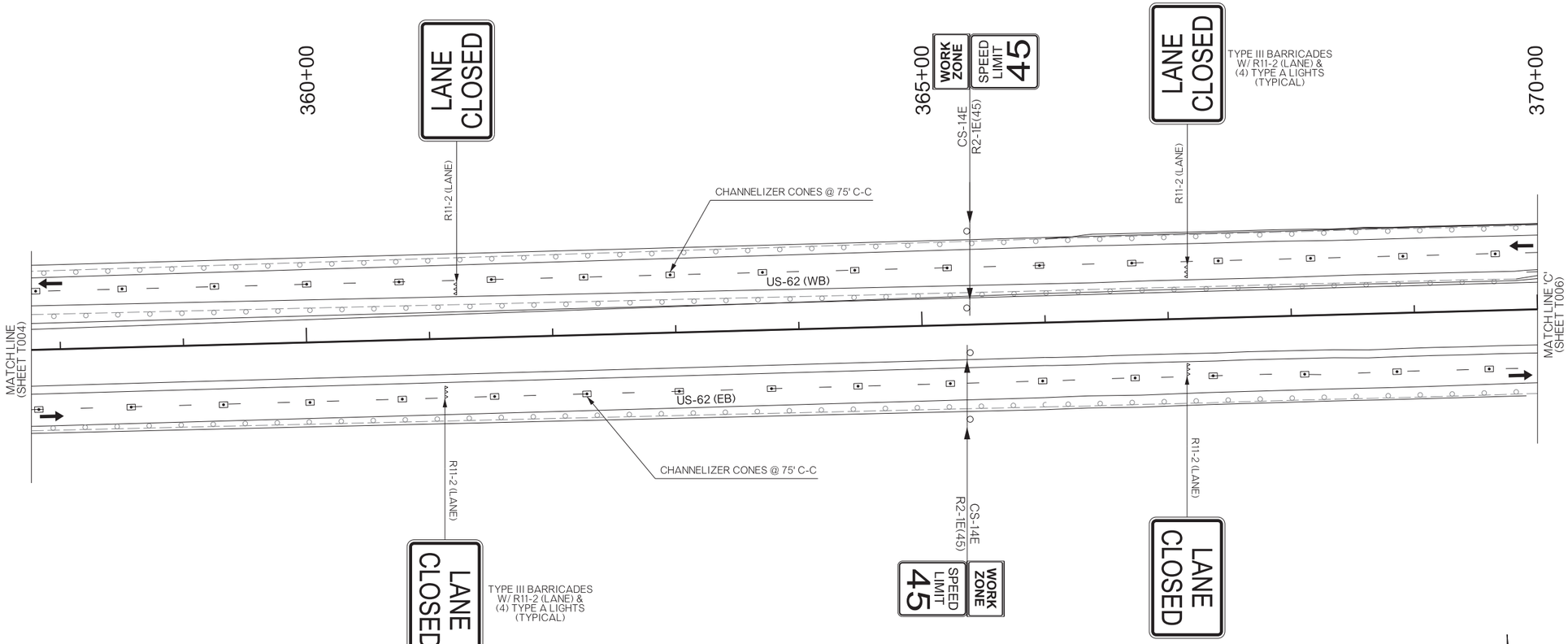
TRAFFIC CONTROL DETAIL PHASES 1 & 4
⚠ STA.327+00 TO 358+00 (4 OF 7)
CROSSOVER CONST./REMOVAL

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP: SOLIZ		
EM: PARRISH ⚠		

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) — SHEET NO. T004

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED TITLE BLOCK	6/1/21



NOT TO SCALE

KEY	
	SIGN
	TYPE III BARRICADE
	TRAFFIC FLOW
	CHANNELIZING CONE

DIVISION 1 MUSKOGEE COUNTY
US-62

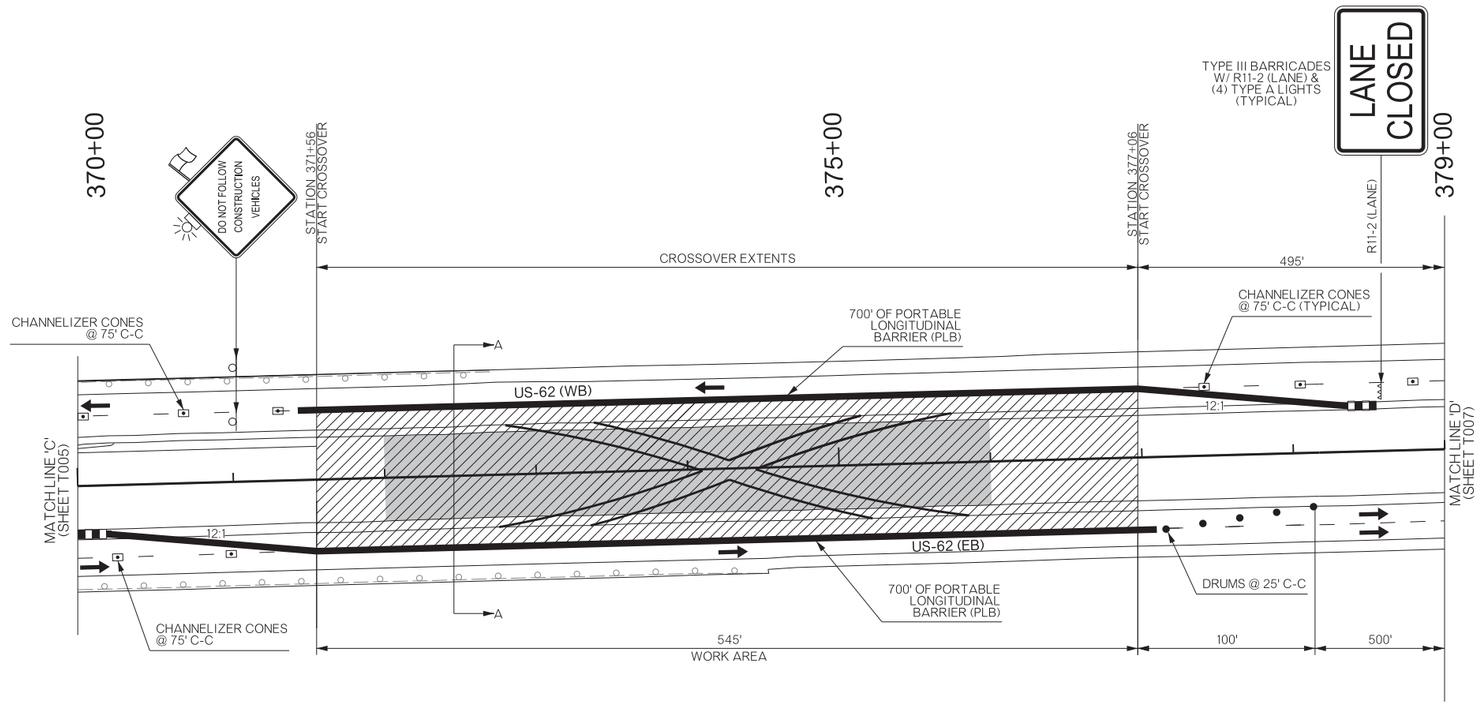
TRAFFIC CONTROL DETAIL PHASES 1 & 4
⚠ STA.358+00 TO 370+00 (5 OF 7)
CROSSOVER CONST./REMOVAL

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP: SOLIZ		
EM: PARRISH ⚠		

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) SHEET NO. T005

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED TITLE BLOCK	6/1/21



TRAFFIC TYPICAL A-A
PHASES 1 & 4

NOT TO SCALE

KEY

- CONSTRUCTION ZONE IMPACT ATTENUATOR
- PORTABLE LONGITUDINAL BARRIER
- WORK AREA
- TYPE III BARRICADE
- CHANNELIZING CONE
- TRAFFIC FLOW
- DRUM

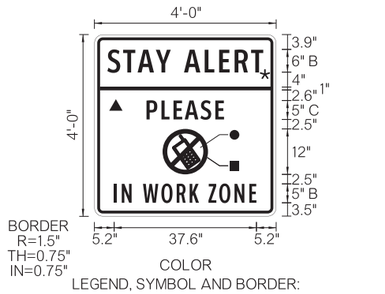
DIVISION 1 MUSKOGEE COUNTY
US-62

TRAFFIC CONTROL DETAIL PHASES 1 & 4
⚠ STA.370+00 TO 379+00 (6 OF 7)
CROSSOVER CONST./REMOVAL

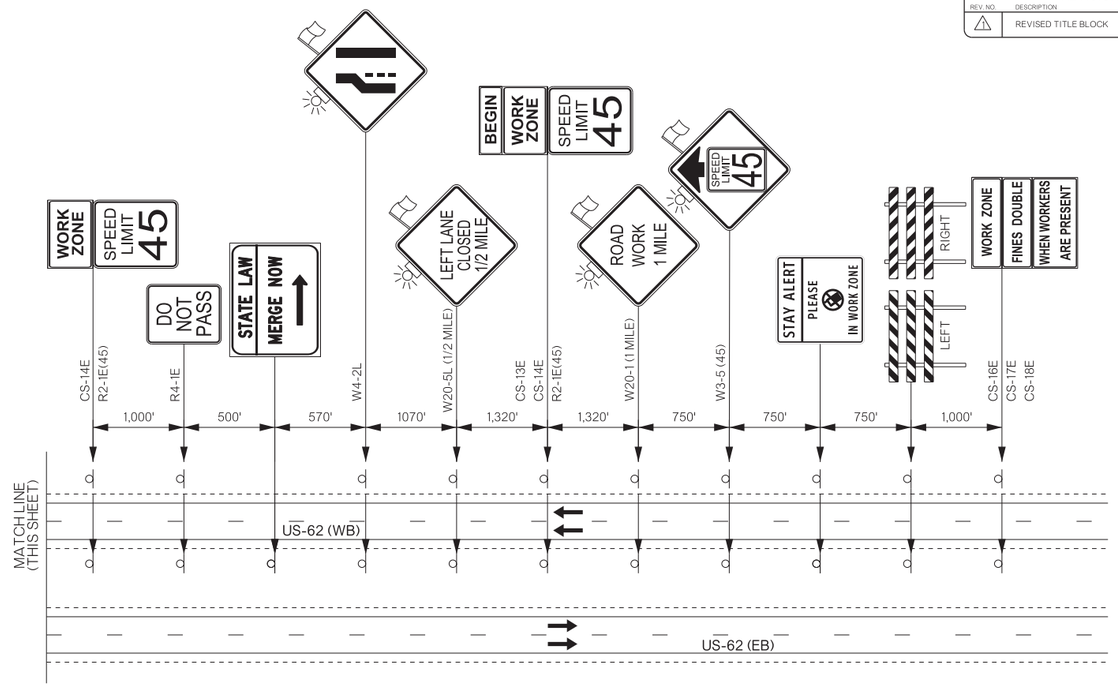
DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP: SOLIZ		
EM: PARRISH ⚠		

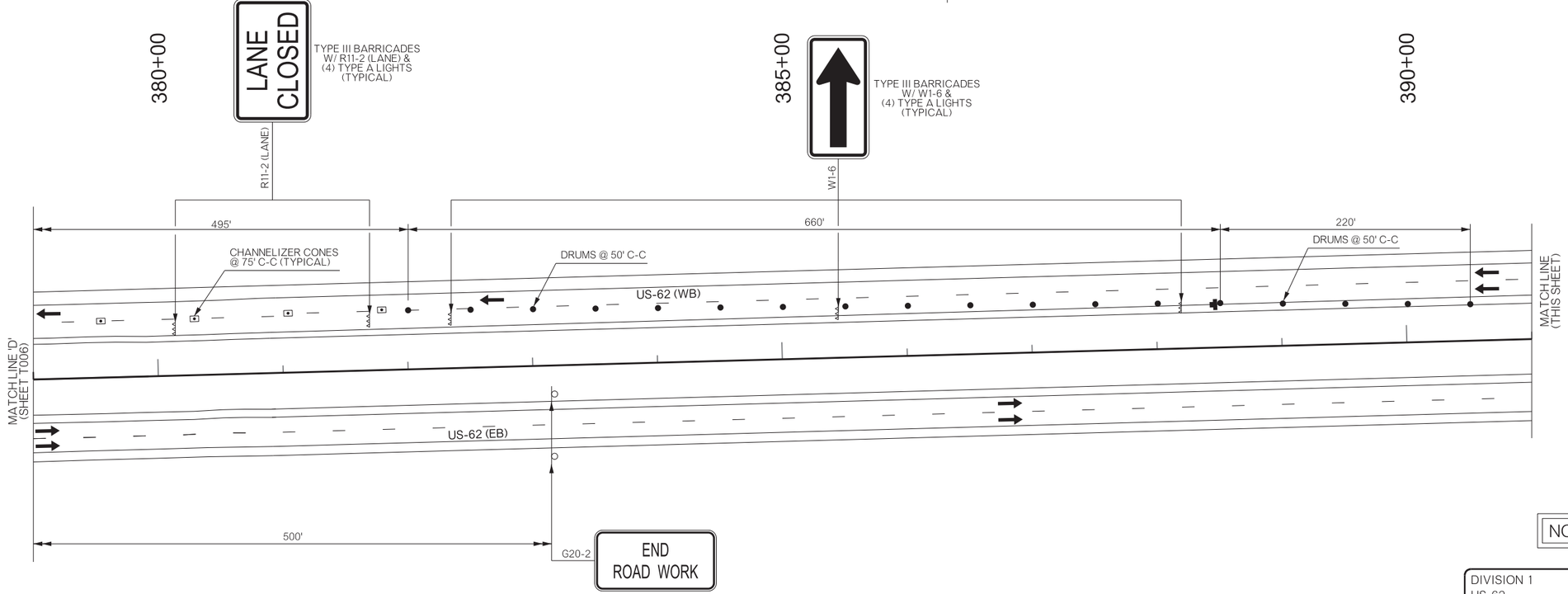
STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) SHEET NO. T006



COLOR
LEGEND, SYMBOL AND BORDER:
BLACK (NON-REFLECTORIZED)
BACKGROUND:
▲ FLUORESCENT ORANGE (REFLECTORIZED)
★ FLUORESCENT YELLOW (REFLECTORIZED)
● WHITE (REFLECTORIZED)
■ RED (TRANSPARENT)





NOT TO SCALE

KEY
- SIGN
- TYPE III BARRICADE
- CHANNELIZING CONE
- TRAFFIC FLOW
- DRUM

REVISIONS

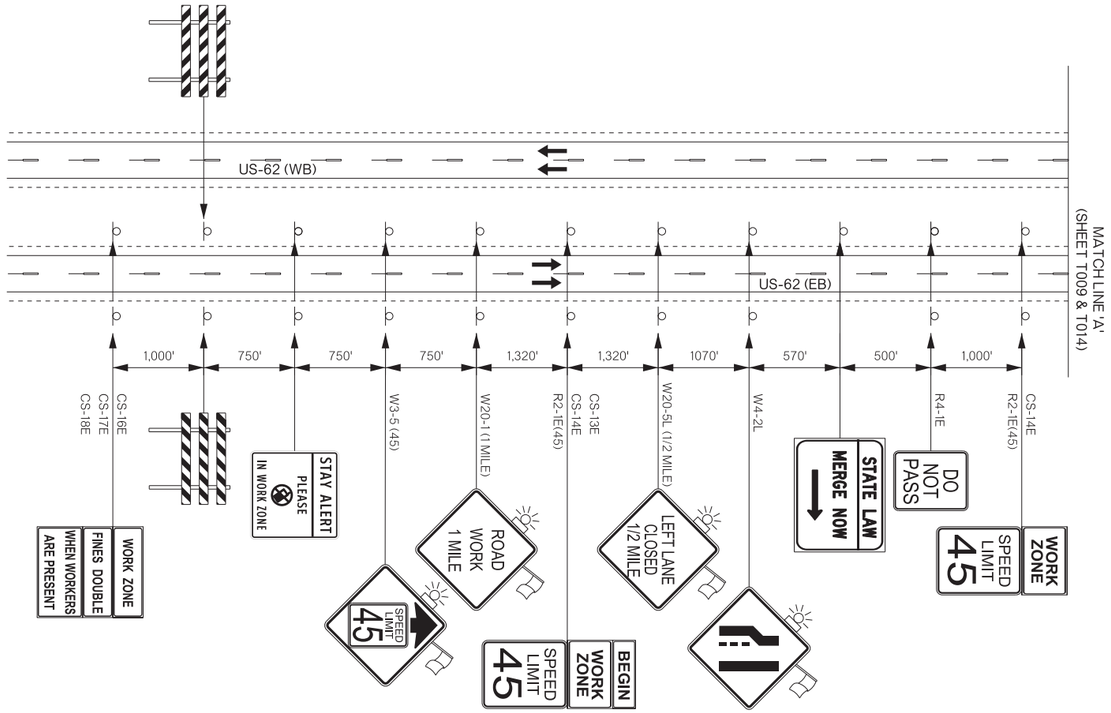
REV. NO.	DESCRIPTION	DATE
1	REVISED TITLE BLOCK	6/1/21

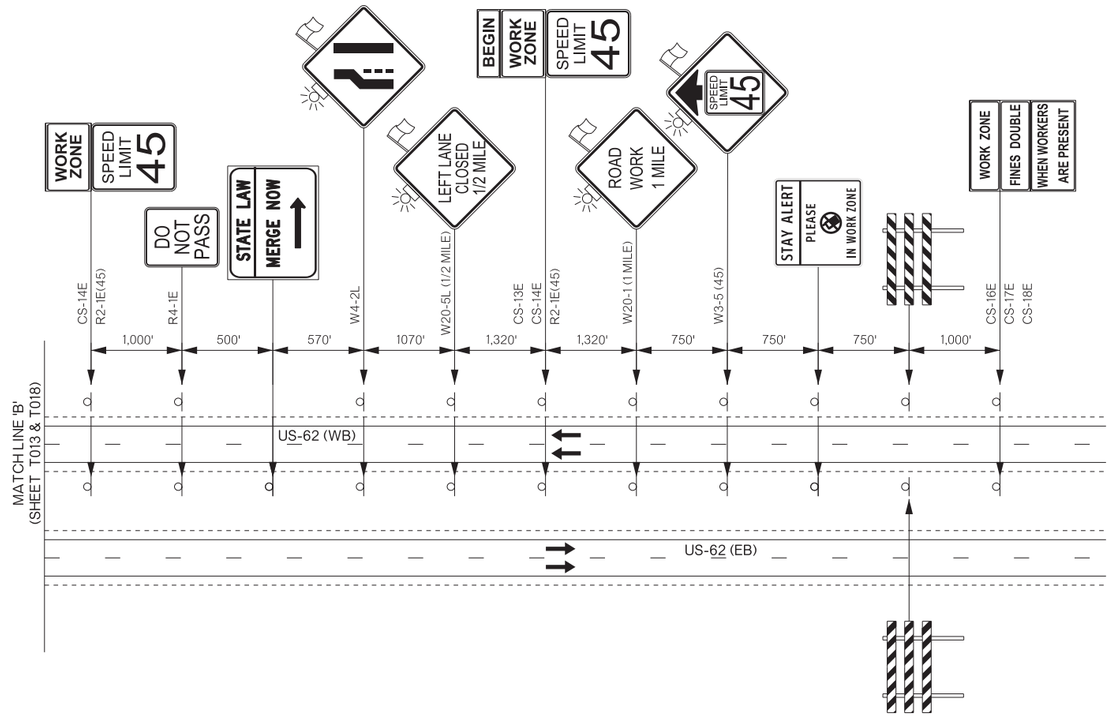
DIVISION 1 MUSKOGEE COUNTY
US-62
TRAFFIC CONTROL DETAIL PHASES 1 & 4
1 STA.379+00 TO 381+00 (7 OF 7)
CROSSOVER CONST./REMOVAL

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP:	SOLIZ	
EM:	PARRISH 1	

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416 (04)
SHEET NO. T007

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED TITLE BLOCK	6/1/21





COLOR
LEGEND, SYMBOL AND BORDER:
BLACK (NON-REFLECTORIZED)
BACKGROUND:
▲ FLUORESCENT ORANGE (REFLECTORIZED)
★ FLUORESCENT YELLOW (REFLECTORIZED)
● WHITE (REFLECTORIZED)
■ RED (TRANSPARENT)

NOT TO SCALE

KEY
SIGN
TRAFFIC FLOW ARROW

ALL CONFLICTING PAVEMENT MARKINGS AND RAISED PAVEMENT MARKER REFLECTORS SHALL BE REMOVED. AFTER COMPLETION OF THE WORK, THE TEMPORARY INAPPLICABLE PAVEMENT MARKINGS SHALL BE REMOVED.

CONSTRUCTION SPEED LIMIT TO BE APPROVED BY THE DIVISION ENGINEER.

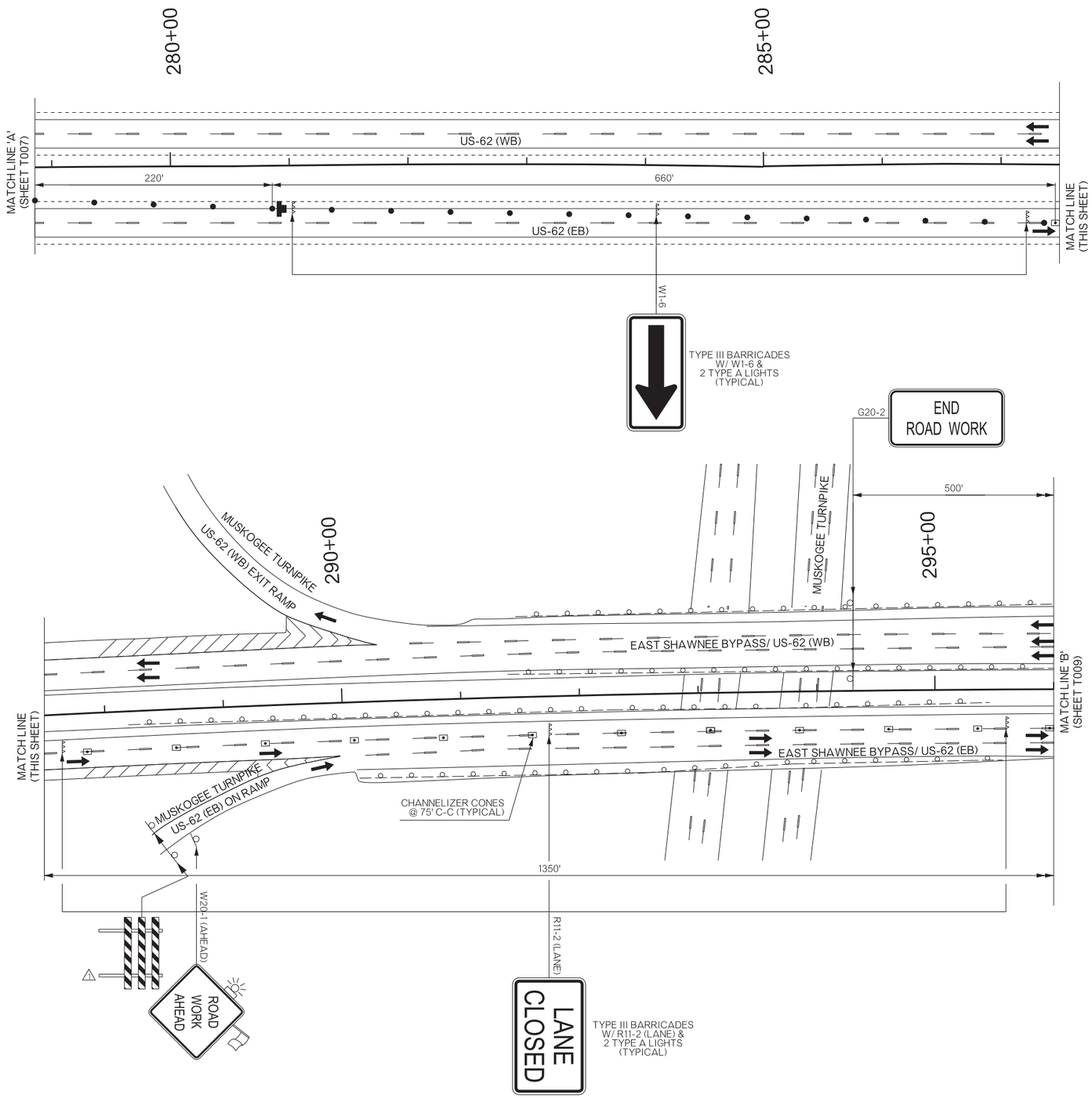
DIVISION 1 MUSKOGEE COUNTY
US-62

ADVANCE WARNING DETAIL
PHASES 2 & 3

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP:	SOLIZ	
EM:	PARRISH	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416 (04) | SHEET NO. T008

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	ADDED WING BARRICADES AND REVISED TITLE BLOCK	6/1/21



NOT TO SCALE

KEY	
	CHANNELIZING CONE
	ARROW DISPLAY
	SIGN
	TRAFFIC FLOW
	TYPE III BARRICADE
	DRUM

DIVISION 1 MUSKOGEE COUNTY
US-62

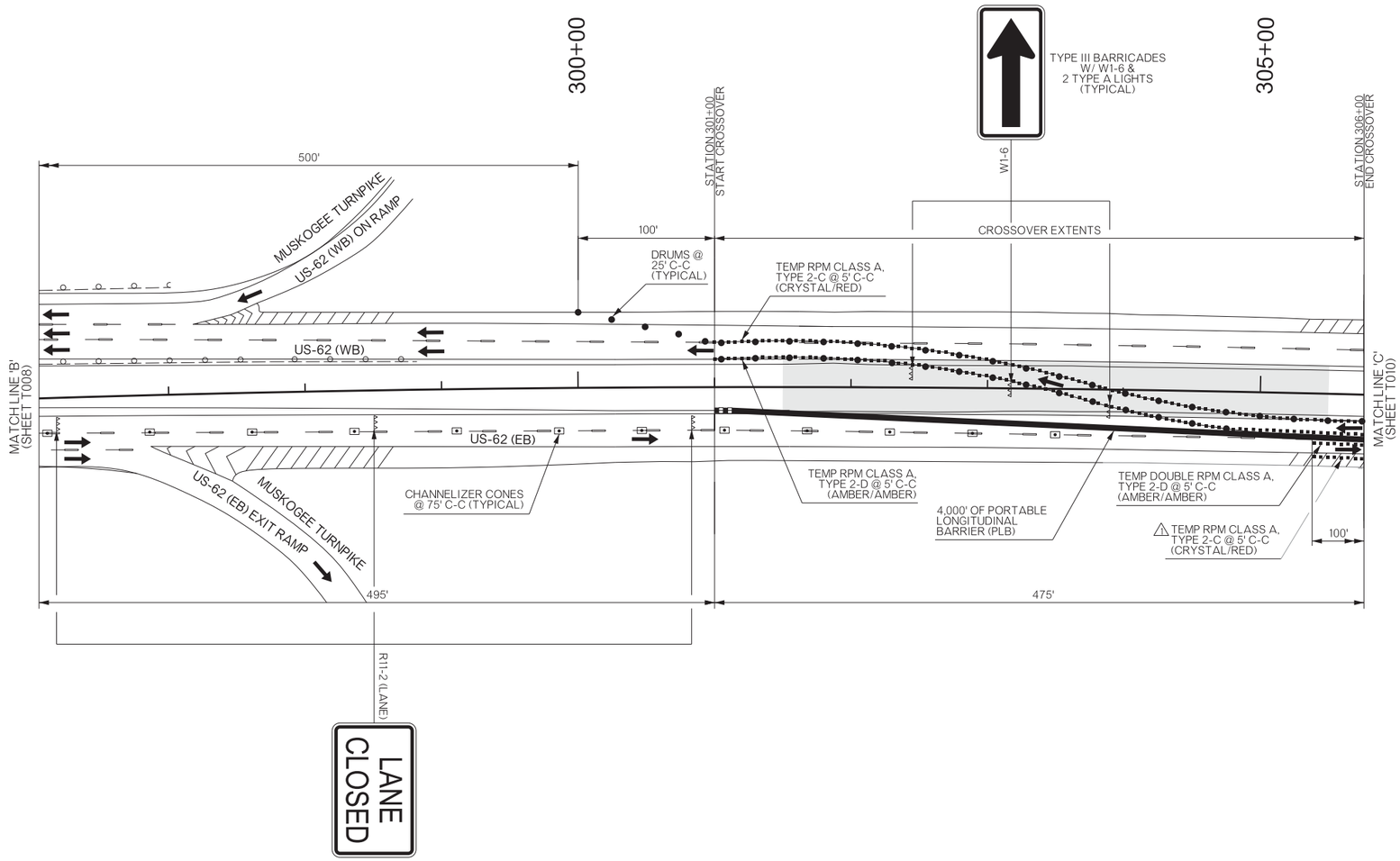
TRAFFIC CONTROL DETAIL
PHASE 2 (1 OF 6)
SHIFT TRAFFIC TO EB LANES

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP:	SOLIZ	
EM:	PARRISH	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO: 30416 (04) SHEET NO. T009

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	ADDED RPM'S CLASS A TYPE 2-C AND REVISED TITLE BLOCK	6/1/21



NOT TO SCALE

KEY	
	CHANNELIZING CONE
	DRUM
	PORTABLE LONGITUDINAL BARRIER (PLB)
	RAISED PAVEMENT MARKER (RPM)
	TRAFFIC FLOW
	TYPE III BARRICADE
	CONSTRUCTION ZONE IMPACT ATTENUATOR

DIVISION 1 MUSKOGEE COUNTY
US-62

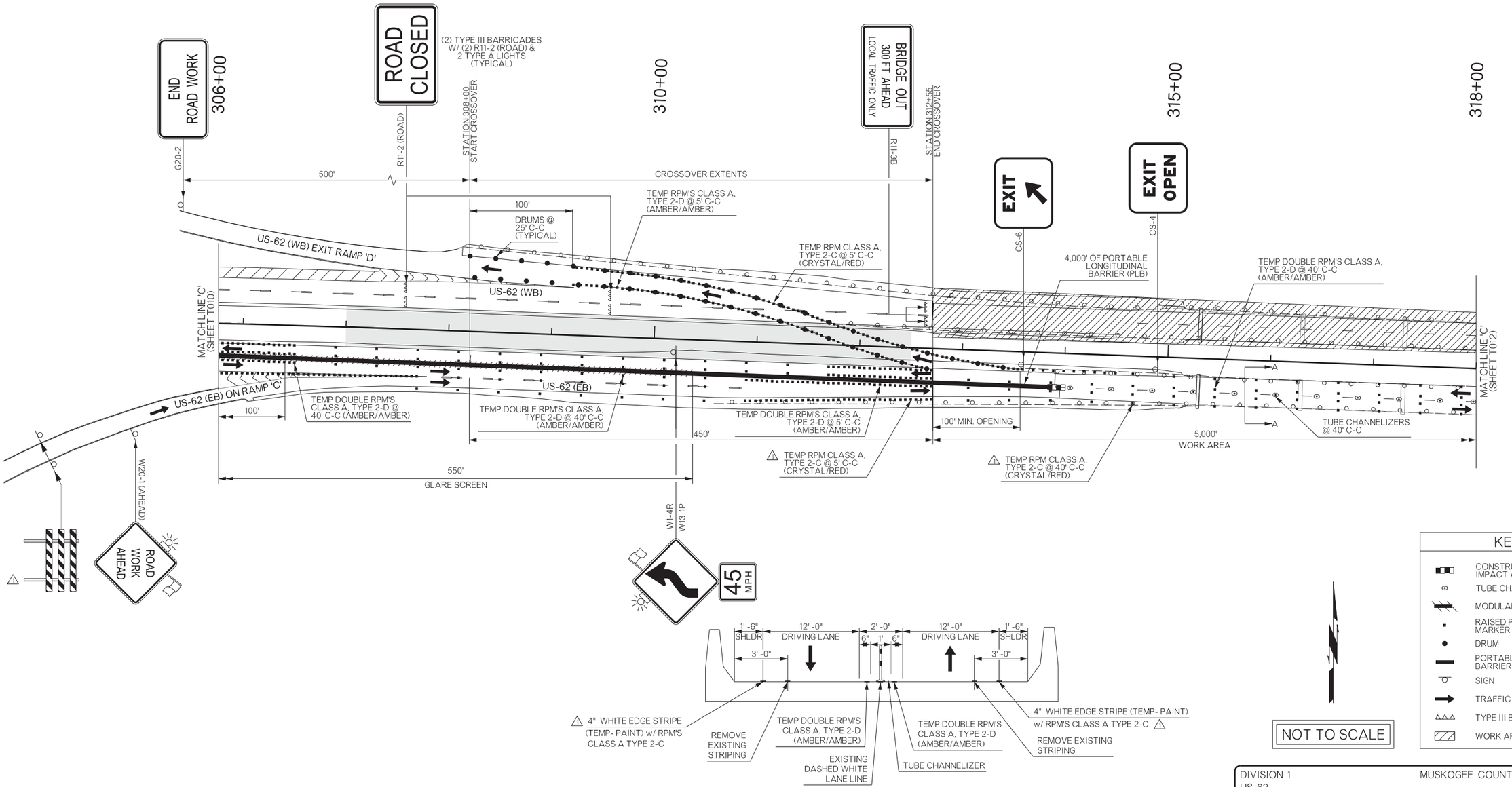
TRAFFIC CONTROL DETAIL
PHASE 2 (2 OF 6)
SHIFT TRAFFIC TO EB LANES

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP:	SOLIZ	
EM:	PARRISH ⚠	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) | SHEET NO. T010

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	ADDED WING BARRICADES, RPM'S CLASS A TYPE 2-C AND TYPE 2-D AND REVISED TITLE BLOCK	6/1/21



US-62 WB TO EB

PHASE 2

TYPICAL SECTION A-A

KEY

- CONSTRUCTION ZONE IMPACT ATTENUATOR
- TUBE CHANNELIZER
- MODULAR GLARE SCREEN
- RAISED PAVEMENT MARKER (RPM)
- DRUM
- PORTABLE LONGITUDINAL BARRIER (PLB)
- SIGN
- TRAFFIC FLOW
- TYPE III BARRICADE
- WORK AREA

NOT TO SCALE

DIVISION 1
US-62

MUSKOGEE COUNTY

TRAFFIC CONTROL DETAIL
PHASE 2 (3 OF 6)
SHIFT TRAFFIC TO EB LANES

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP:	SOLIZ	
EM:	PARRISH	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) | SHEET NO. T011

REVISIONS		
REV. NO.	DESCRIPTION	DATE
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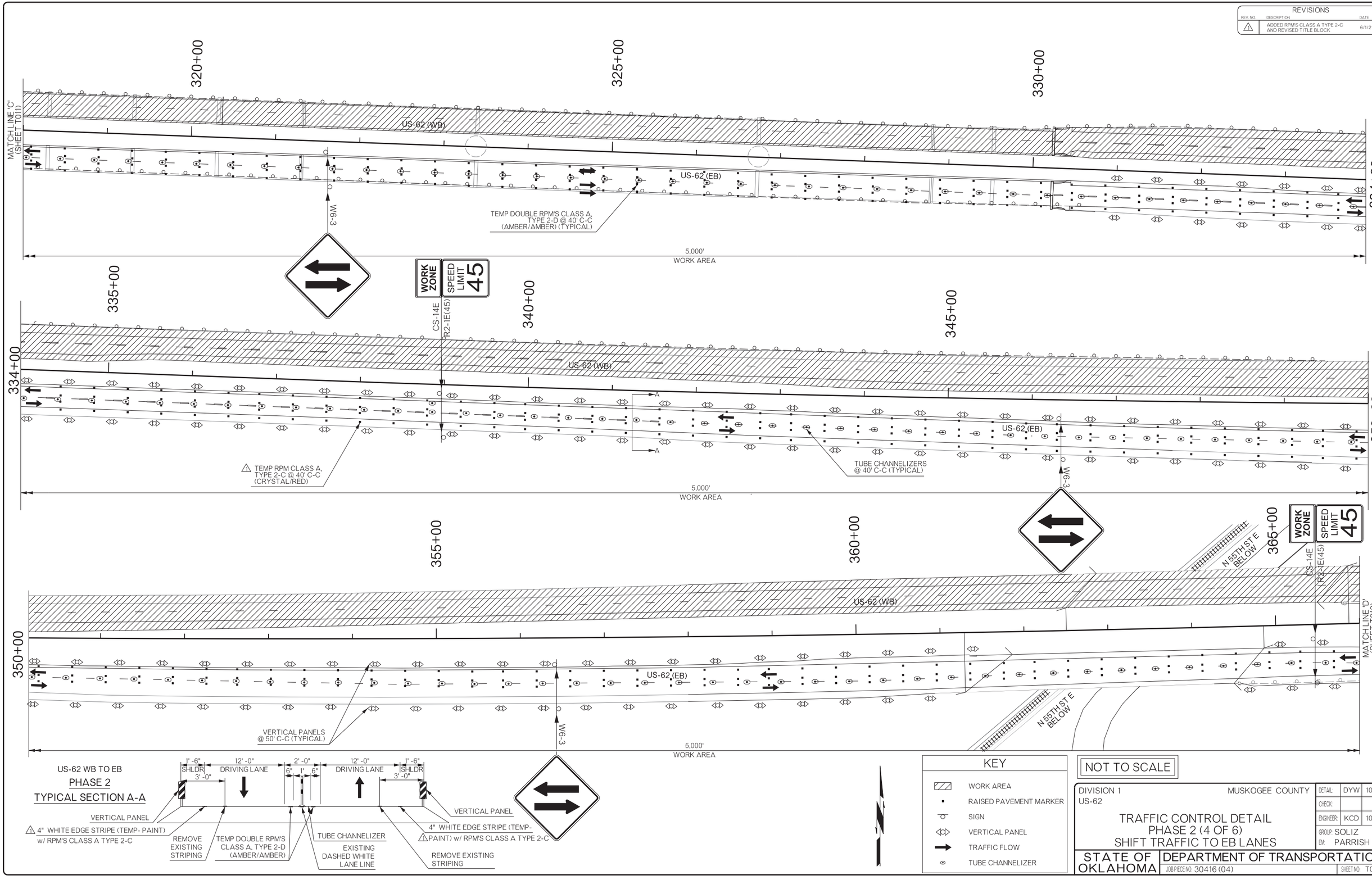


US-62 WB TO EB
PHASE 2
TYPICAL SECTION A-A

KEY

- WORK AREA
- RAISED PAVEMENT MARKER
- SIGN
- VERTICAL PANEL
- TRAFFIC FLOW
- TUBE CHANNELIZER

NOT TO SCALE

DIVISION 1 — MUSKOGEE COUNTY
US-62

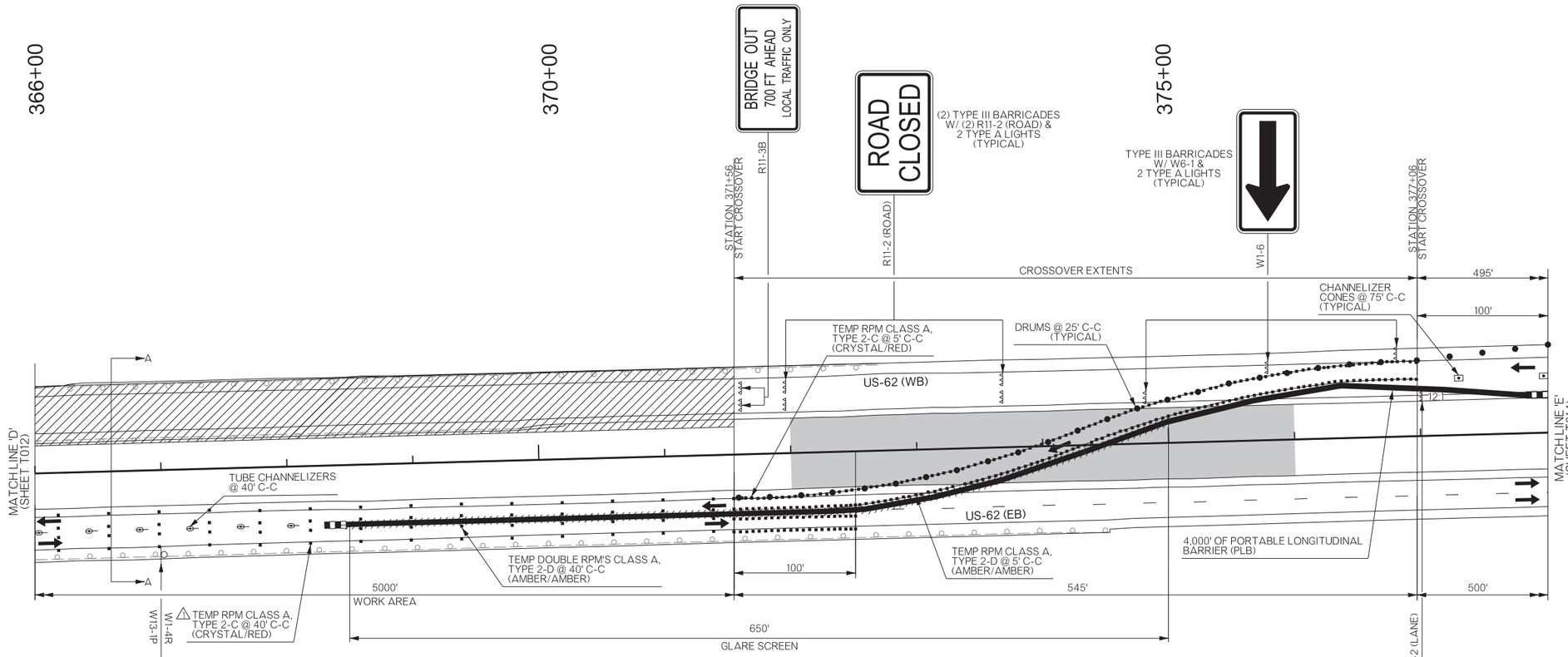
TRAFFIC CONTROL DETAIL PHASE 2 (4 OF 6) SHIFT TRAFFIC TO EB LANES

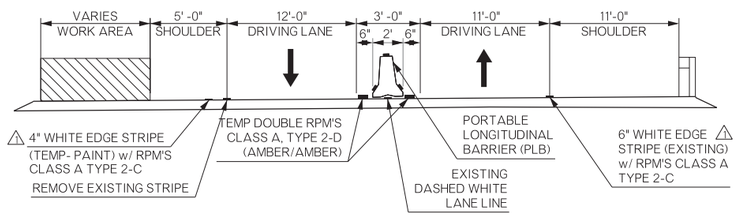
DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP:	SOLIZ	
EM:	PARRISH	

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) — SHEET NO. T012

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	ADDED RPM'S CLASS A TYPE 2-C AND REVISED TITLE BLOCK	6/1/21





US-62 WB TO EB

PHASE 2

TYPICAL SECTION A-A

KEY

- SIGN
- TUBE CHANNELIZER
- MODULAR GLARE SCREEN
- VERTICAL PANEL
- RAISED PAVEMENT MARKER (RPM)
- CHANNELIZING CONE
- DRUM
- PORTABLE LONGITUDINAL BARRIER (PLB)
- CONSTRUCTION ZONE IMPACT ATTENUATOR
- TRAFFIC FLOW
- TYPE III BARRICADE
- WORK AREA

NOT TO SCALE

DIVISION 1
US-62

MUSKOGEE COUNTY

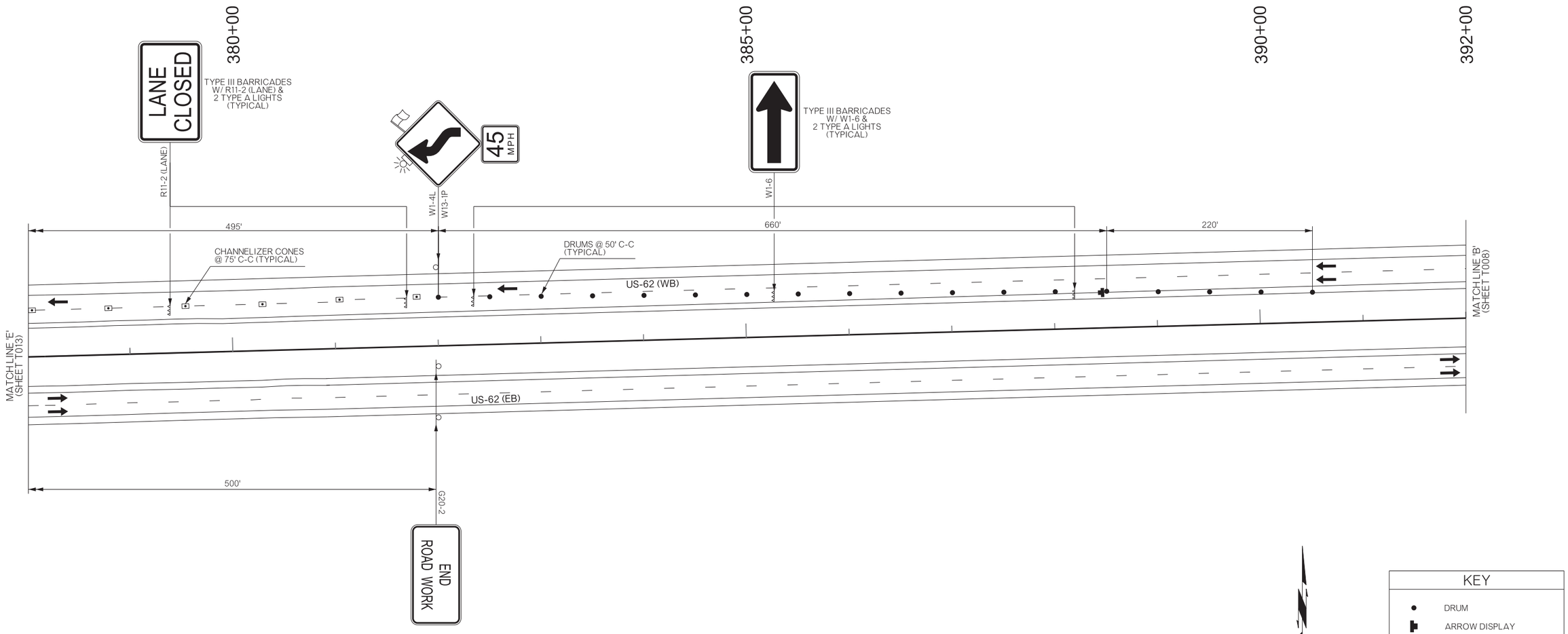
TRAFFIC CONTROL DETAIL
PHASE 2 (5 OF 6)
SHIFT TRAFFIC TO EB LANES

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP:	SOLIZ	
EM:	PARRISH	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) | SHEET NO. T013

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED TITLE BLOCK	6/1/21



NOT TO SCALE

KEY	
●	DRUM
▙	ARROW DISPLAY
⊖	SIGN
→	TRAFFIC FLOW
△△△	TYPE III BARRICADE
▣	CHANNELIZING CONE

DIVISION 1
US-62

MUSKOGEE COUNTY

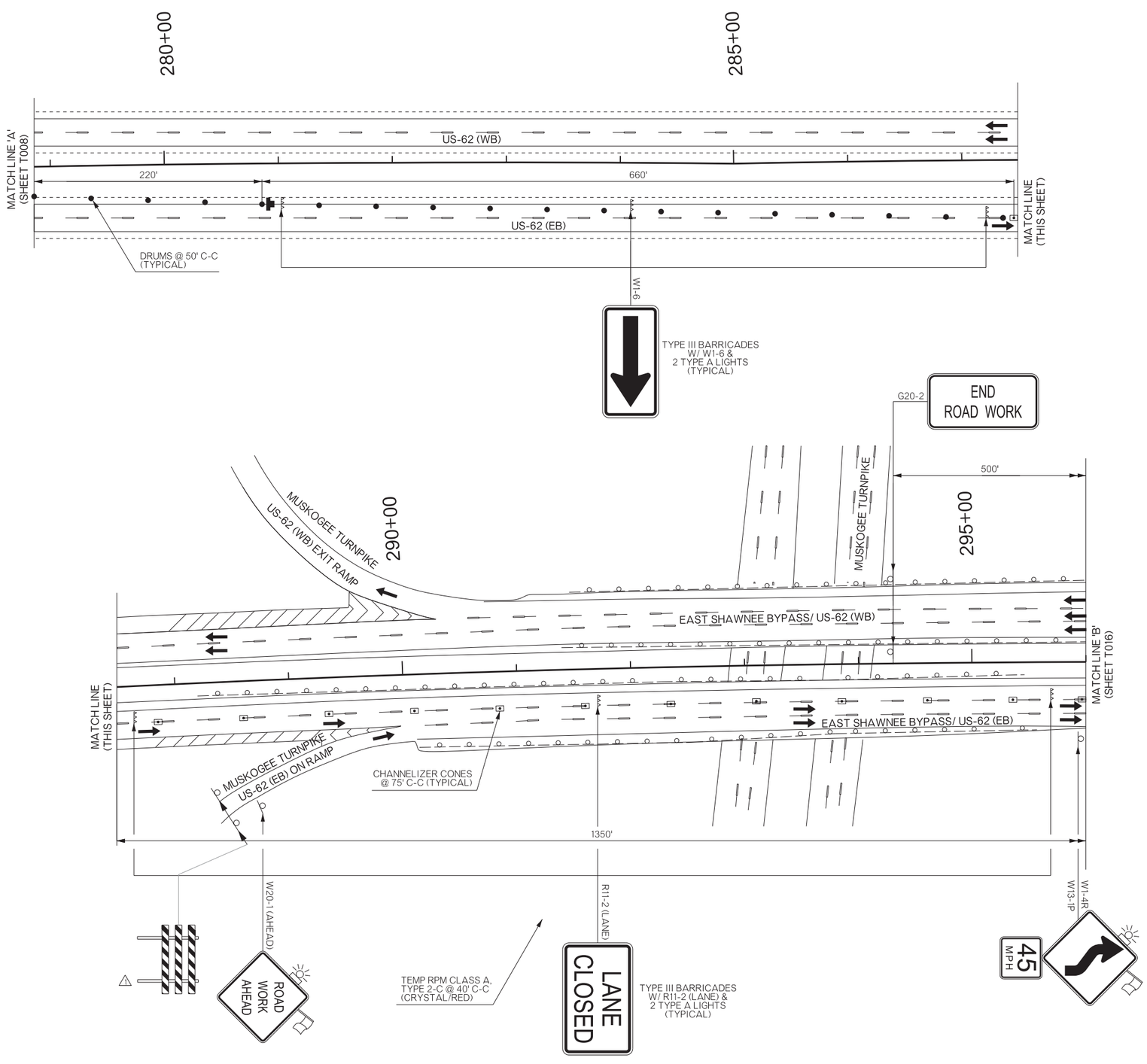
TRAFFIC CONTROL DETAIL
PHASE 2 (6 OF 6)
SHIFT TRAFFIC TO EB LANES

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP: SOLIZ		
EM: PARRISH ⚠		

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) | SHEET NO. T014

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	ADDED WING BARRICADES AND REVISED TITLE BLOCK	6/1/21



NOT TO SCALE

KEY	
	CHANNELIZING CONE
	ARROW DISPLAY
	SIGN
	TRAFFIC FLOW
	TYPE III BARRICADE
	DRUM

DIVISION 1
US-62

MUSKOGEE COUNTY

TRAFFIC CONTROL DETAIL
PHASE 3 (1 OF 6)
SHIFT TRAFFIC TO WB LANES

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP:	SOLIZ	
EM:	PARRISH	

STATE OF OKLAHOMA

DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04)

SHEET NO. T015

REVISIONS		
REV. NO.	DESCRIPTION	DATE
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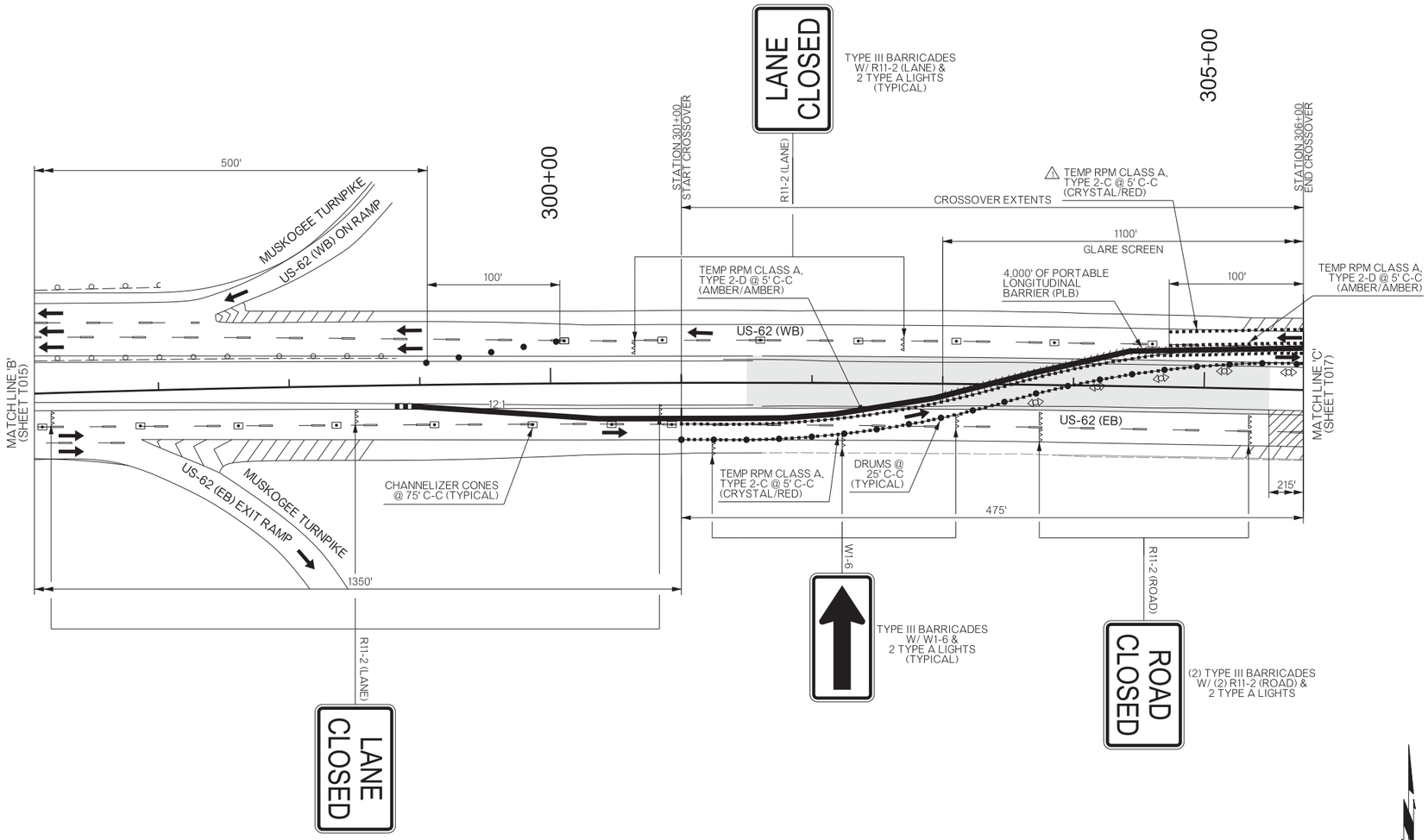


NOT TO SCALE

KEY

- MODULAR GLARE SCREEN
- RAISED PAVEMENT MARKER (RPM)
- CHANNELIZING CONE
- DRUM
- PORTABLE LONGITUDINAL BARRIER (PLB)
- CONSTRUCTION ZONE IMPACT ATTENUATOR
- TRAFFIC FLOW
- TYPE III BARRICADE
- WORK AREA

DIVISION 1 MUSKOGEE COUNTY
US-62

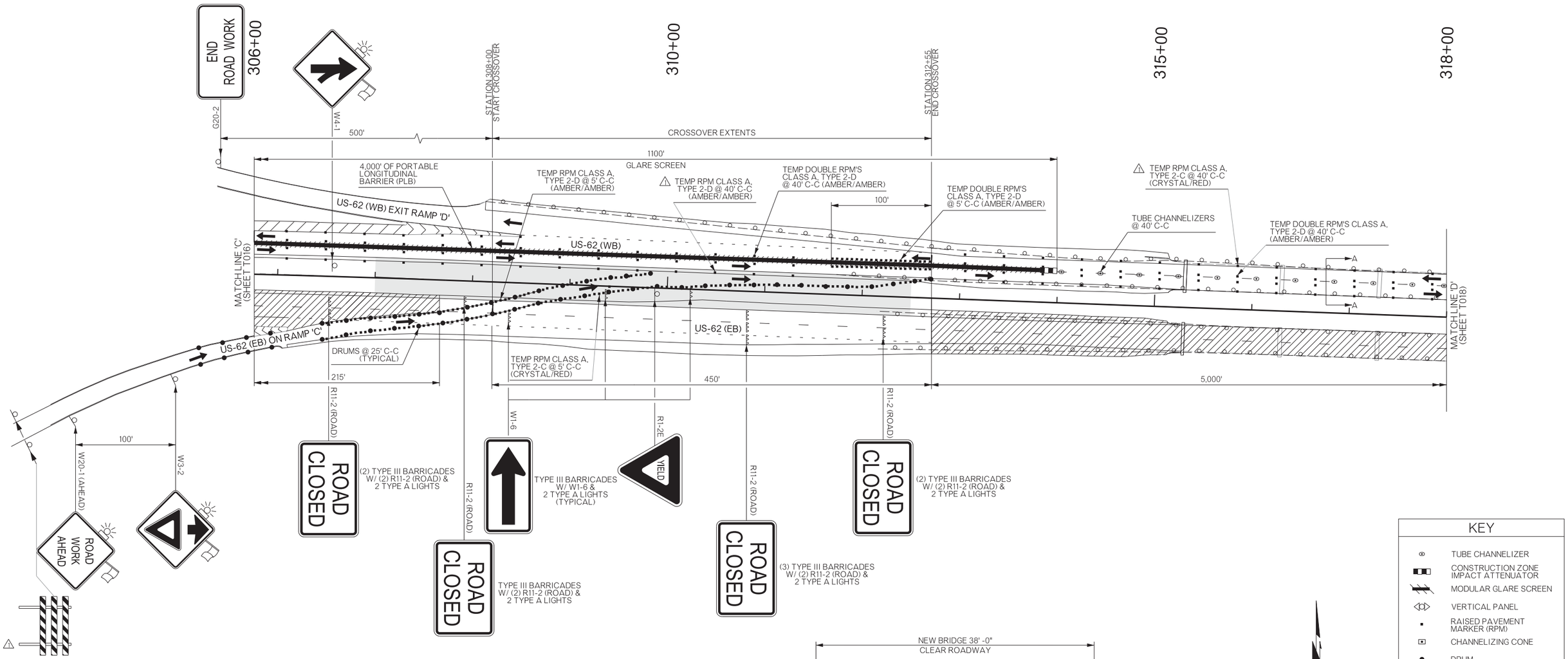
TRAFFIC CONTROL DETAIL
PHASE 3 (2 OF 6)
SHIFT TRAFFIC TO WB LANES

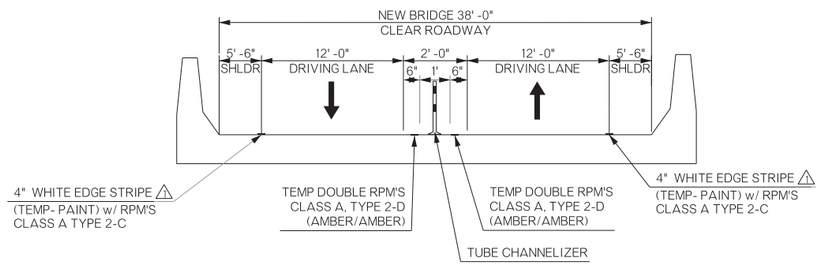
DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP: SOLIZ		
EM: PARRISH		

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) SHEET NO. T016

REVISIONS		
REV. NO.	DESCRIPTION	DATE
⚠	ADDED WING BARRICADES AND RPM'S CLASS A TYPE 2-C AND TYPE 2-D AND REVISED TITLE BLOCK	6/1/21





US-62 EB TO WB

PHASE3

TYPICAL SECTION A-A

NOT TO SCALE

KEY

- TUBE CHANNELIZER
- CONSTRUCTION ZONE IMPACT ATTENUATOR
- MODULAR GLARE SCREEN
- VERTICAL PANEL
- RAISED PAVEMENT MARKER (RPM)
- CHANNELIZING CONE
- DRUM
- PORTABLE LONGITUDINAL BARRIER (PLB)
- SIGN
- TRAFFIC FLOW
- TYPE III BARRICADE
- WORK AREA

DIVISION 1
US-62

MUSKOGEE COUNTY

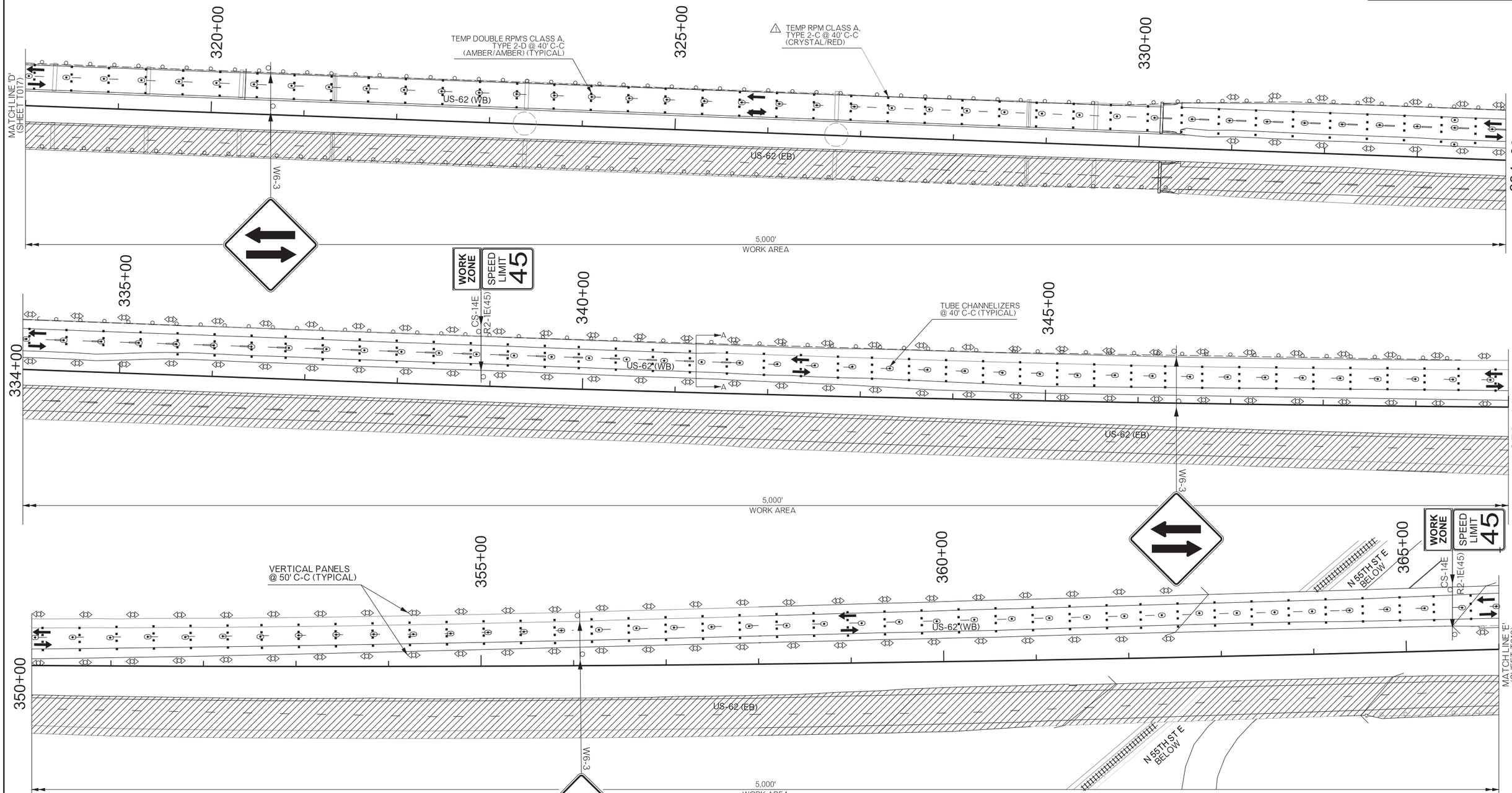
TRAFFIC CONTROL DETAIL
PHASE 3 (3 OF 6)
SHIFT TRAFFIC TO WB LANES

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP:	SOLIZ	
EM:	PARRISH ⚠	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) | SHEET NO. T017

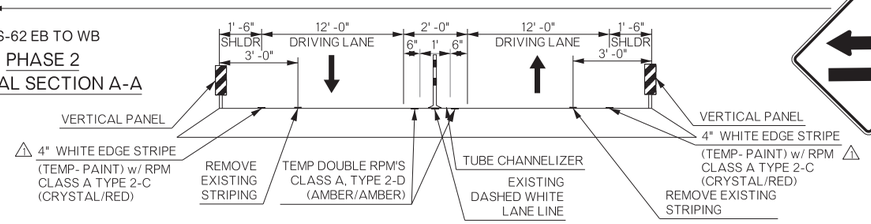
REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	ADDED RPM'S CLASS A TYPE 2-C AND REVISED TITLE BLOCK	6/1/21



US-62 EB TO WB

PHASE 2

TYPICAL SECTION A-A



KEY

- WORK AREA
- RAISED PAVEMENT MARKER
- SIGN
- VERTICAL PANEL
- TRAFFIC FLOW
- TUBE CHANNELIZER

NOT TO SCALE

DIVISION 1 MUSKOGEE COUNTY
US-62

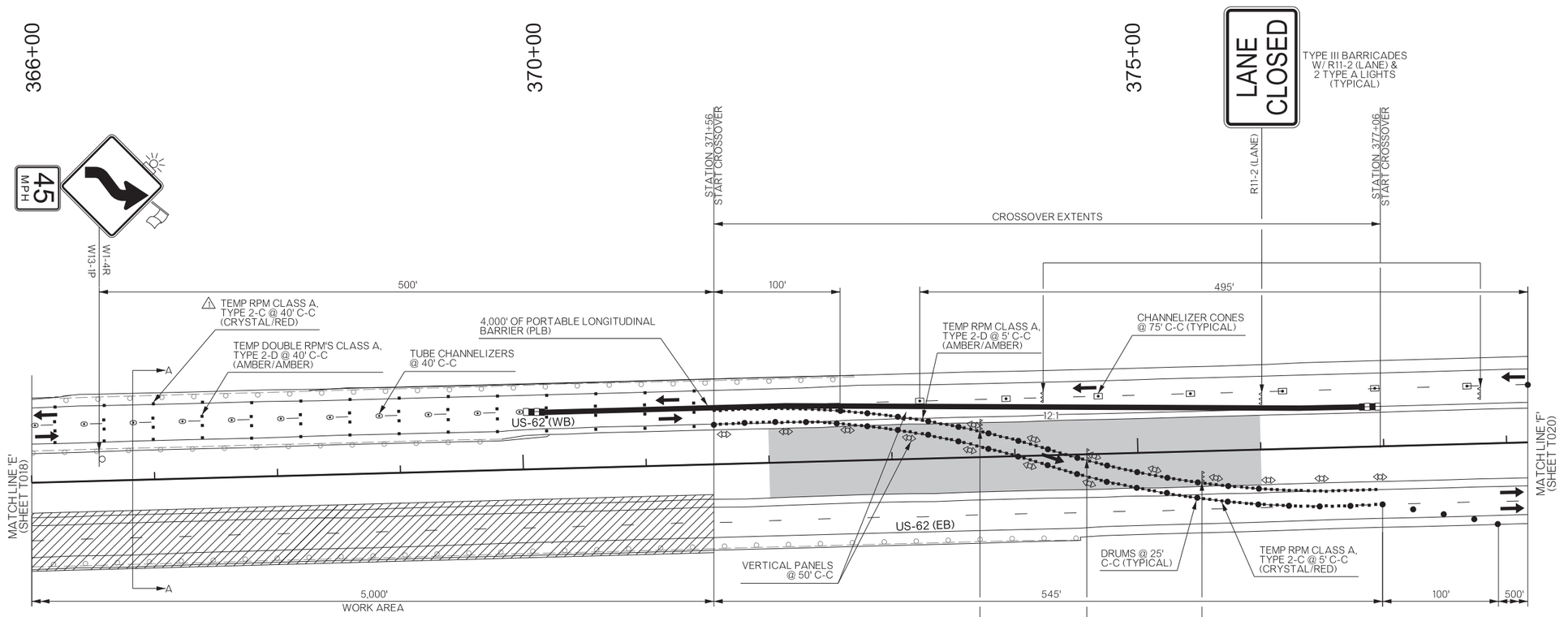
TRAFFIC CONTROL DETAIL
PHASE 3 (4 OF 6)
SHIFT TRAFFIC TO WB LANES

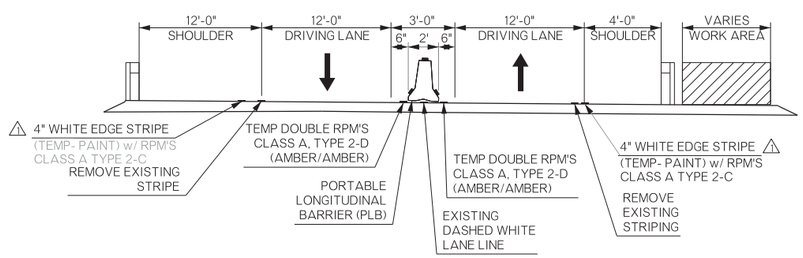
DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP:	SOLIZ	
EM:	PARRISH	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) SHEET NO. T018

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	ADDED RPM'S CLASS A TYPE 2-C AND REVISED TITL BLOCK	6/1/21





US-62 EB TO WB

PHASE 3

TYPICAL SECTION A-A

NOT TO SCALE

KEY

- TUBE CHANNELIZER
- VERTICAL PANEL
- CONSTRUCTION ZONE IMPACT ATTENUATOR
- RAISED PAVEMENT MARKER (RPM)
- CHANNELIZING CONE
- DRUM
- PORTABLE LONGITUDINAL BARRIER (PLB)
- SIGN
- TRAFFIC FLOW
- TYPE III BARRICADE
- WORK AREA

DIVISION 1 MUSKOGEE COUNTY
US-62

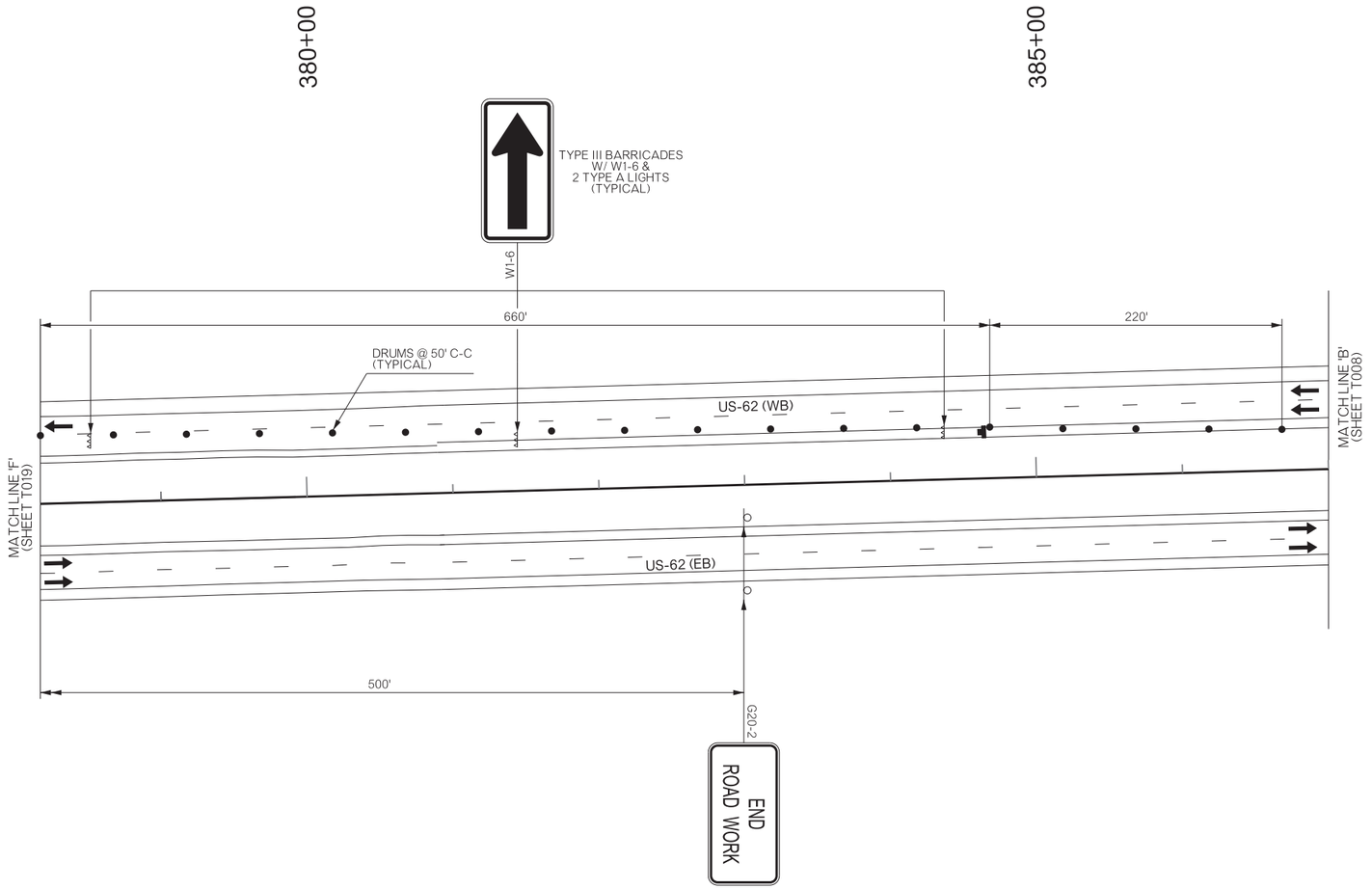
TRAFFIC CONTROL DETAIL
PHASE 3 (5 OF 6)
SHIFT TRAFFIC TO WB LANES

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP:	SOLIZ	
EM:	PARRISH	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) SHEET NO. T019

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED TITLE BLOCK	6/1/21



NOT TO SCALE

KEY

- DRUM
- SIGN
- TRAFFIC FLOW
- TYPE III BARRICADE
- ARROW DISPLAY

DIVISION 1 MUSKOGEE COUNTY
US-62

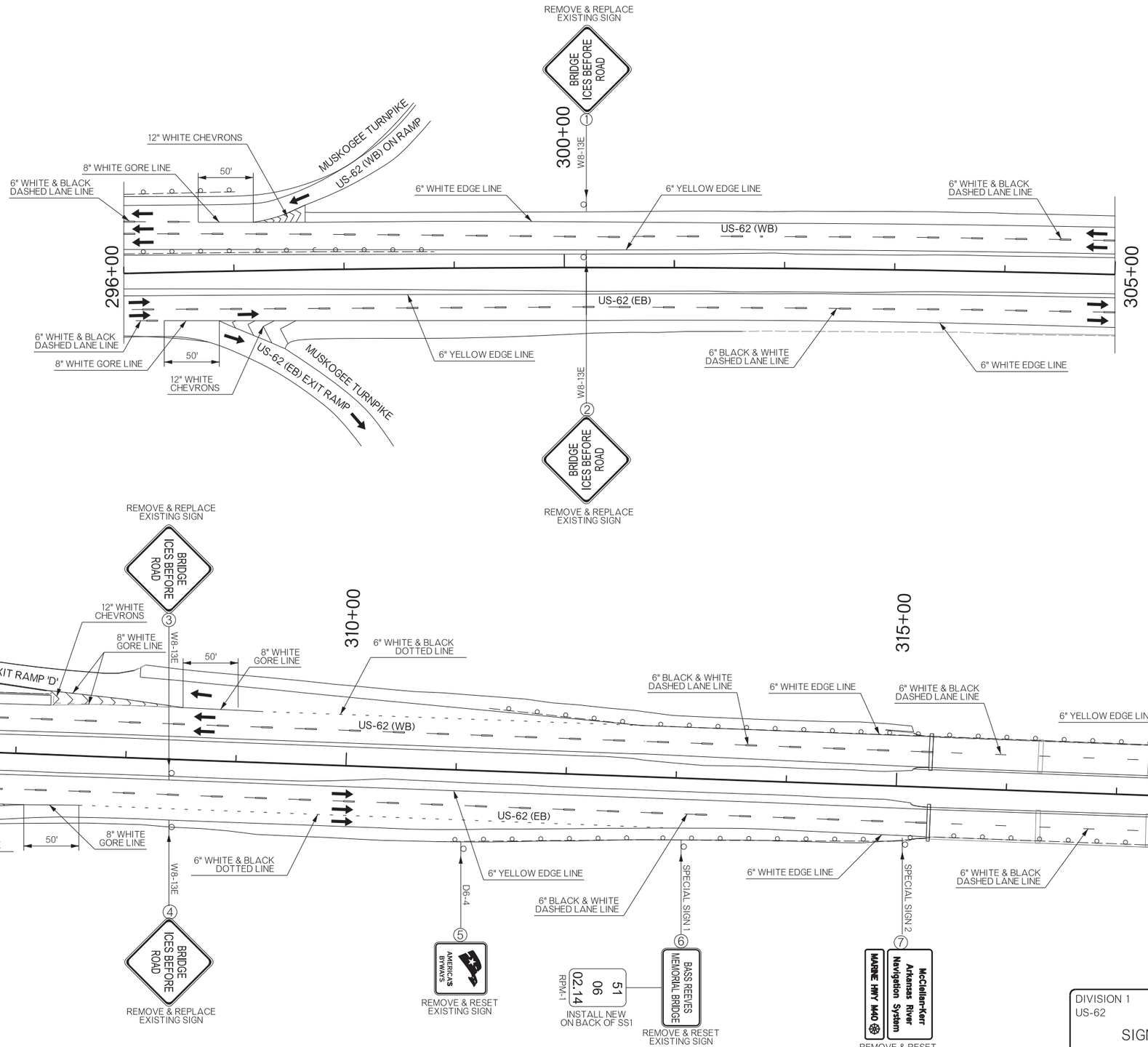
TRAFFIC CONTROL DETAIL
PHASE 3 (6 OF 6)
SHIFT TRAFFIC TO WB LANES

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP:	SOLIZ	
EM:	PARRISH	

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) SHEET NO. T020

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED TITLE BLOCK	6/1/21



NOT TO SCALE

KEY

SIGN

TRAFFIC FLOW

DIVISION 1 MUSKOGEE COUNTY
US-62

SIGNING & STRIPING LAYOUT
(1 OF 4)

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP: SOLIZ		
EM: PARRISH		

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) SHEET NO. T021

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED TITLE BLOCK	6/1/21

318+00 320+00 325+00 330+00 334+00

6" WHITE EDGE LINE
6" YELLOW EDGE LINE
6" WHITE DASHED LANE LINE
6" WHITE DASHED LANE LINE
6" YELLOW EDGE LINE
6" WHITE EDGE LINE
US-62 (EB)
6" WHITE & BLACK DASHED LANE LINE
6" WHITE & BLACK DASHED LANE LINE

REMOVE & RESET EXISTING SIGN
McClellan-Kerr Arkansas River Navigation System
MARINE HWY M40
⑧ SPECIAL SIGN 2

REMOVE & RESET EXISTING SIGN
NORTH
165
Port of Muskogee
Tulsa
NEXT RIGHT
⑨ CARDINAL DIRECTIONS SIGN 1

REMOVE & RESET EXISTING SIGN
BASS REEVES MEMORIAL BRIDGE
⑩ SPECIAL SIGN 1

51 06 02.14 RPM-1
INSTALL NEW ON BACK OF SS1

334+00 335+00 340+00 345+00 350+00

REMOVE & RESET EXISTING SIGN
AMERICA'S BYWAYS
⑫ D6-4

REMOVE & REPLACE EXISTING SIGN
BRIDGE ICES BEFORE ROAD
⑬ W8-13E

REMOVE & RESET EXISTING SIGN
MUSKOGEE TURNPIKE
166
Tulsa
Ft Smith
EXITS 1 MILE
⑮ CARDINAL DIRECTIONS SIGN 2

REMOVE & REPLACE EXISTING SIGN
⑰ R3-4

6" WHITE EDGE LINE
6" WHITE & BLACK DASHED LANE LINE
6" WHITE EDGE LINE
6" YELLOW EDGE LINE
6" YELLOW EDGE LINE
6" WHITE DASHED LANE LINE
US-62 (WB)
US-62 (EB)
6" WHITE & BLACK DASHED LANE LINE
6" WHITE DASHED LANE LINE

REMOVE & REPLACE EXISTING SIGN
BRIDGE ICES BEFORE ROAD
⑭ W8-13E

REMOVE & REPLACE EXISTING SIGN
⑯ R3-4

REMOVE & REPLACE EXISTING SIGN
FT GIBSON 4
TAHLEQUAH 20
⑪ D22-2

NOT TO SCALE

KEY
SIGN
TRAFFIC FLOW

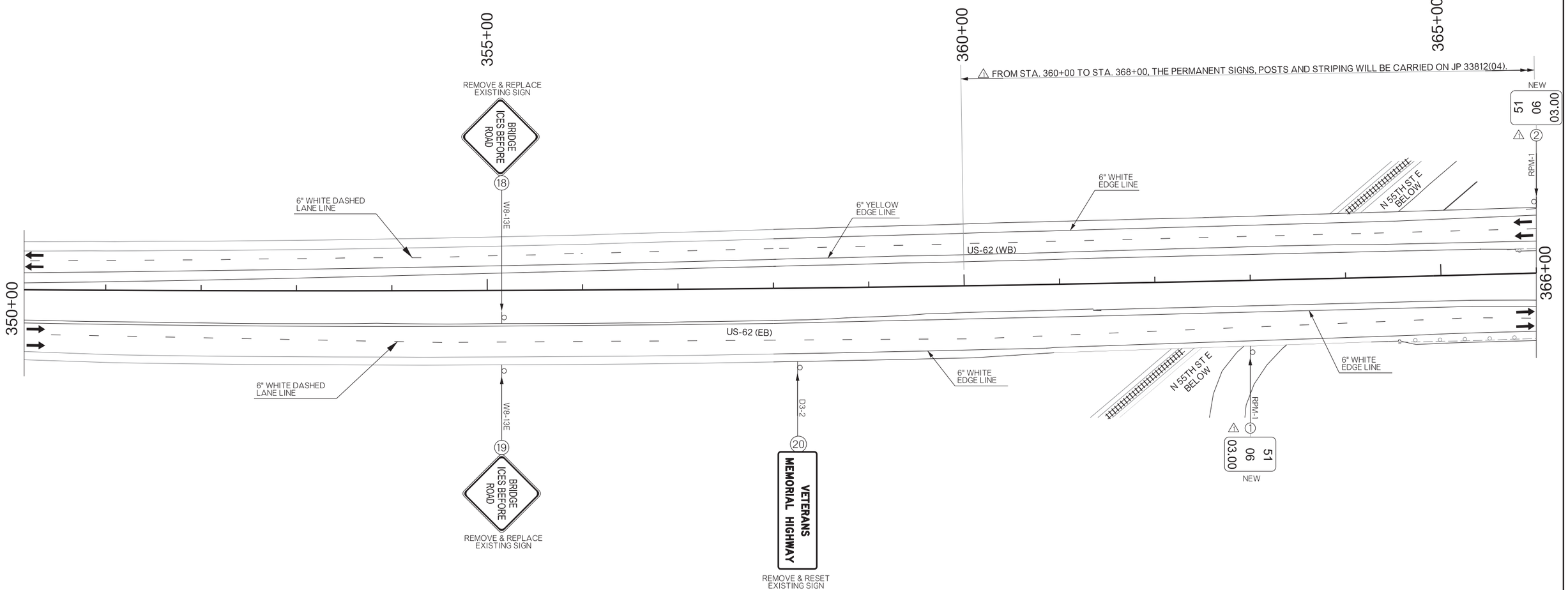
DIVISION 1 MUSKOGEE COUNTY
US-62

SIGNING & STRIPING LAYOUT
(2 OF 4)

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP: SOLIZ		
EM: PARRISH		

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416 (04) | SHEET NO. T022

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED TITLE BLOCK AND SIGN NOS. & ADDED NOTE	6/1/21



NOT TO SCALE

KEY	
	SIGN
	TRAFFIC FLOW

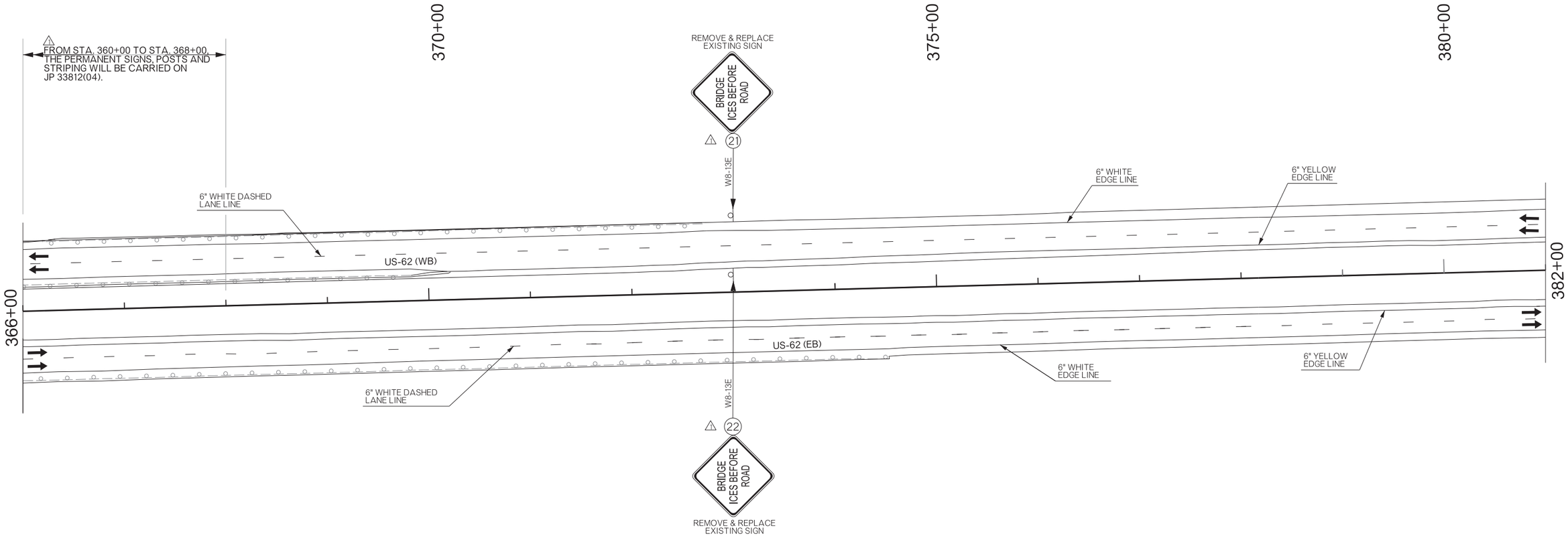
DIVISION 1
US-62
MUSKOGEE COUNTY

SIGNING & STRIPING LAYOUT
(3 OF 4)

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP:	SOLIZ	
EM:	PARRISH	

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION
JOB PIECE NO. 30416 (04)
SHEET NO. T023

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED TITLE BLOCK AND SIGN NOS. & ADDED NOTE	6/1/21



KEY	
	SIGN
	TRAFFIC FLOW

NOT TO SCALE

DIVISION 1 — MUSKOGEE COUNTY
US-62

SIGNING & STRIPING LAYOUT
(4 OF 4)

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20
GROUP:	SOLIZ	
EM:	PARRISH 1	

STATE OF OKLAHOMA — DEPARTMENT OF TRANSPORTATION

JOB PIECE NO. 30416 (04) — SHEET NO. T024

REVISIONS		
REV. NO.	DESCRIPTION	DATE
1	REVISED TITLE BLOCK	6/1/21

NOT TO SCALE

KEY	
⊙	SIGN
△△	TYPE II BARRICADE

DIVISION 1 MUSKOGEE COUNTY
US-62

TRAFFIC CONTROL DETAIL TRAIL DETOUR

DETAIL:	DYW	10/20
CHECK:		
ENGINEER:	KCD	10/20

GROUP: SOLIZ
EM: PARRISH

STATE OF OKLAHOMA | DEPARTMENT OF TRANSPORTATION

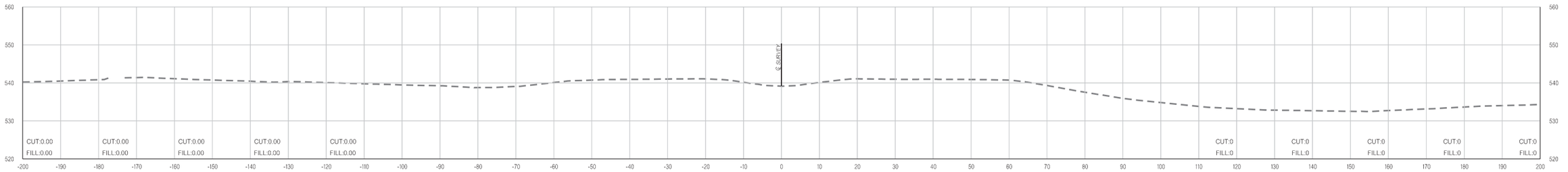
JOB PIECE NO. 30416 (04) | SHEET NO. T025

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

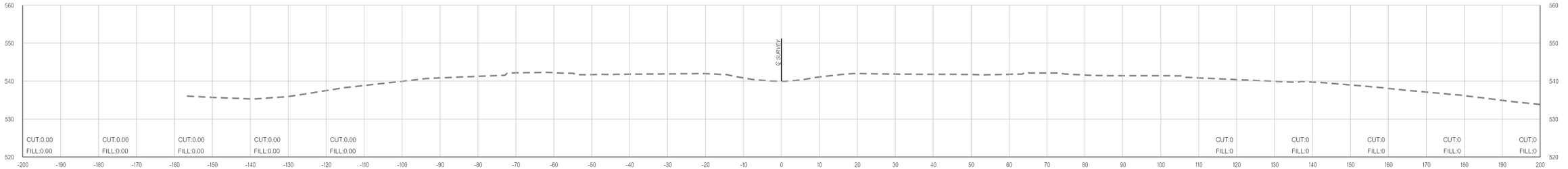
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

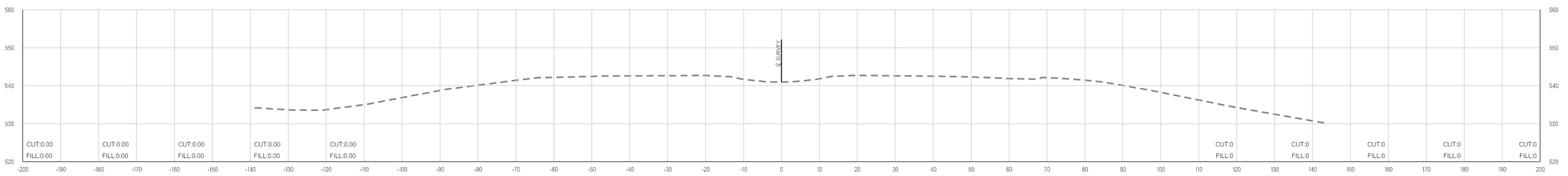
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



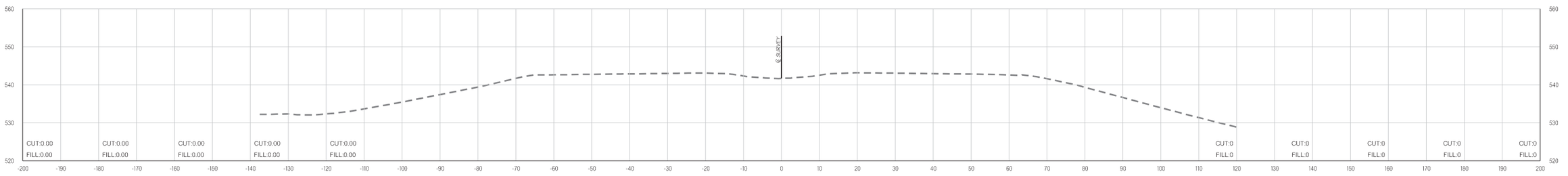
299+00.00



298+00.00



297+00.00



296+00.00
BEGIN INCIDENTAL CONSTRUCTION

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X001

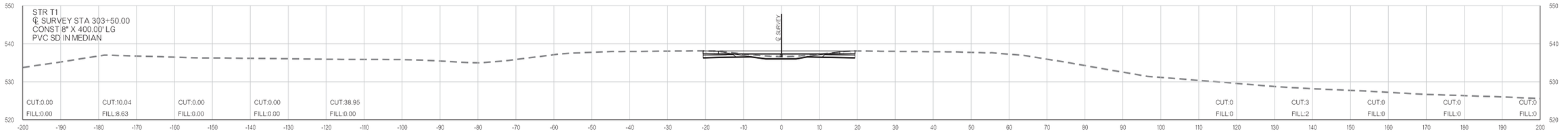
10-29-20 pw:\APP-PWS05-345.agency.OK.local\ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

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

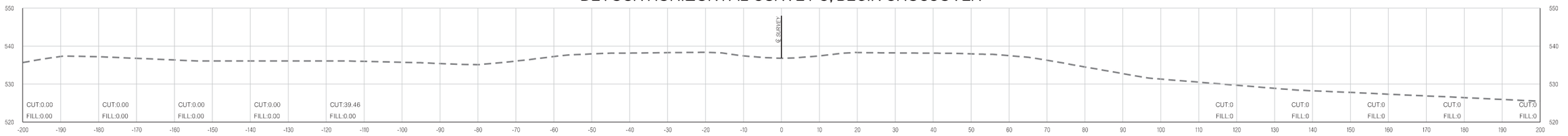
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

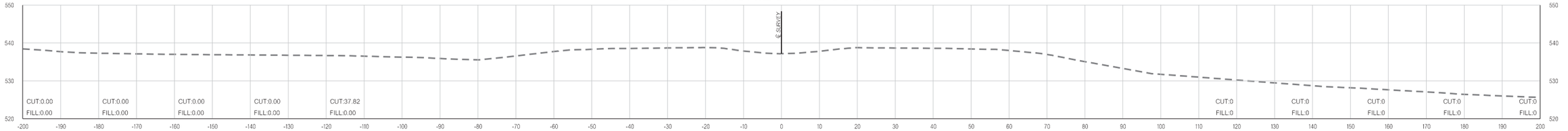
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



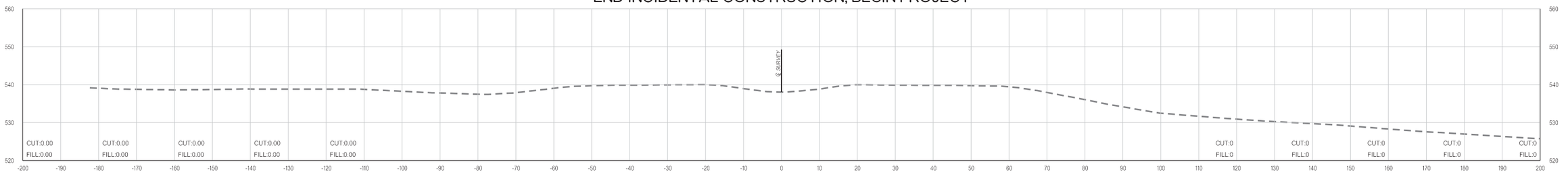
301+50.00
DETOUR HORIZONTAL CURVE PC, BEGIN CROSSOVER



301+33.97
DETOUR HORIZONTAL CURVE PC



301+00.00
END INCIDENTAL CONSTRUCTION, BEGIN PROJECT



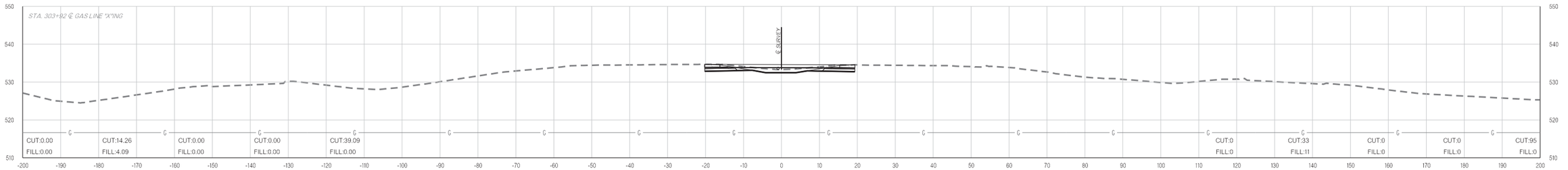
300+00.00

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

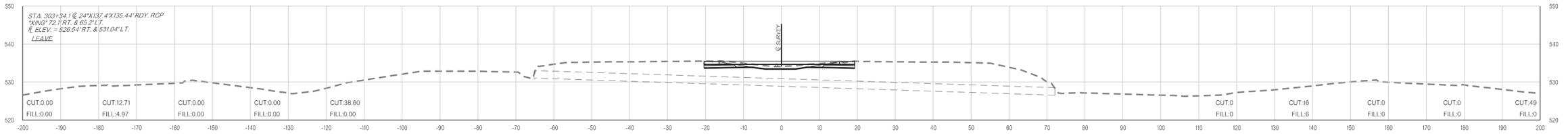
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

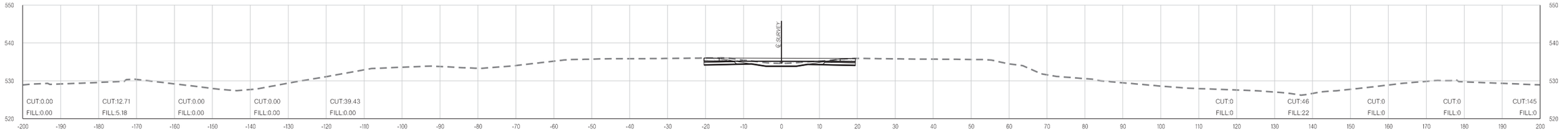
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



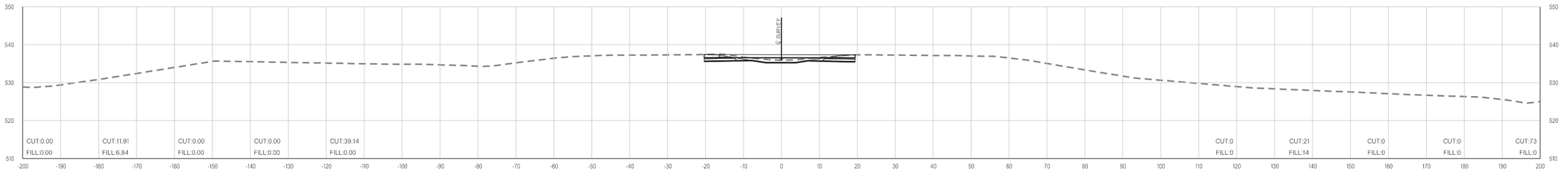
304+00.00



303+34.10



303+00.00



302+00.00

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X003

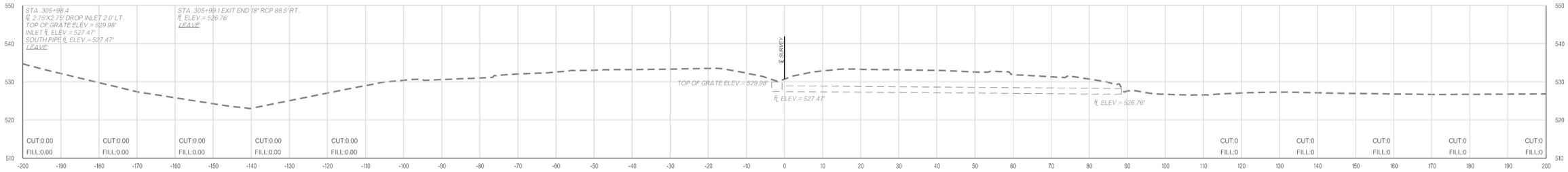
10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

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

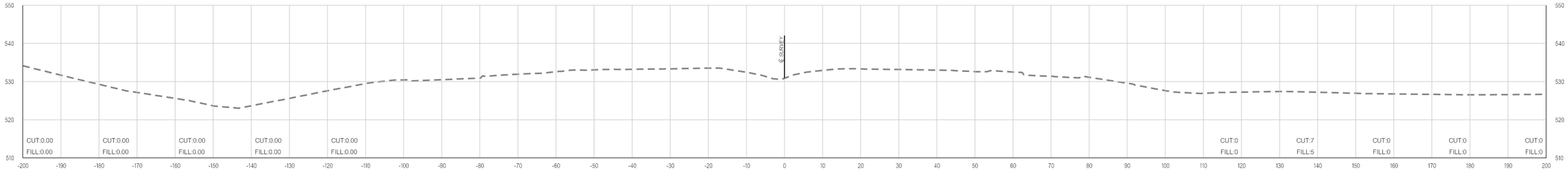
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

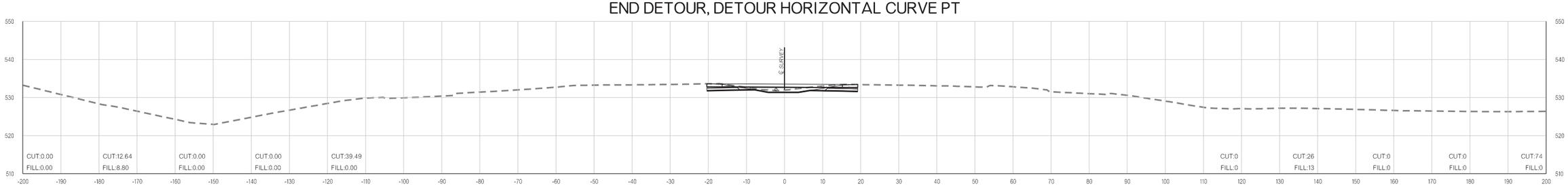
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



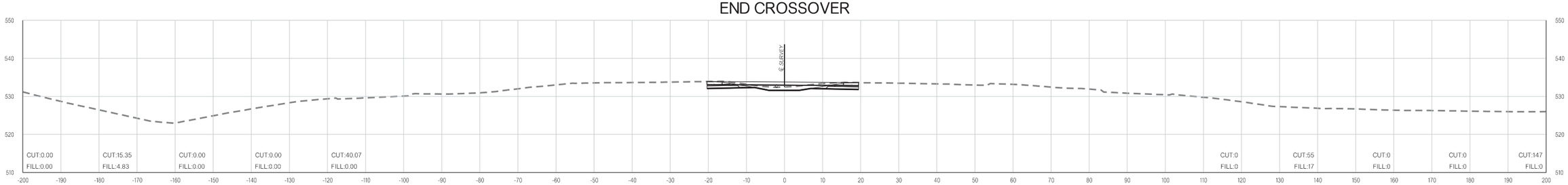
305+98.40



305+81.33
END DETOUR, DETOUR HORIZONTAL CURVE PT



305+50.00
END CROSSOVER



305+00.00

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X004

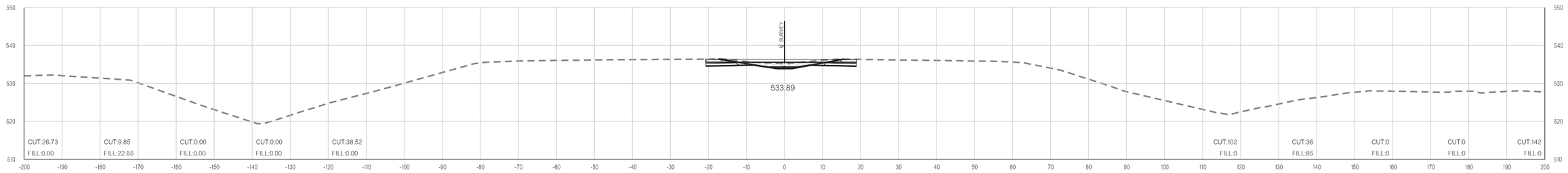
10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

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

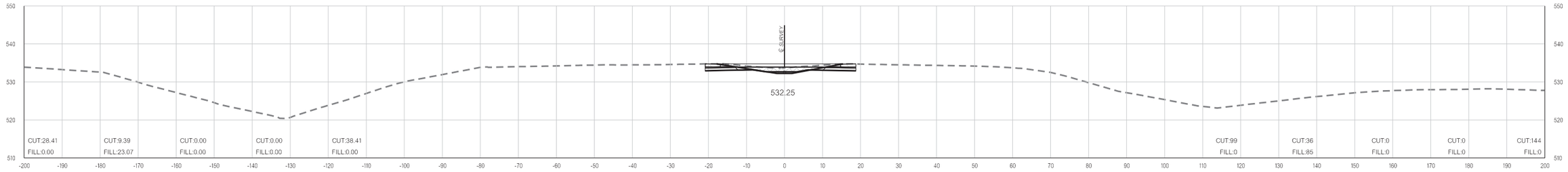
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

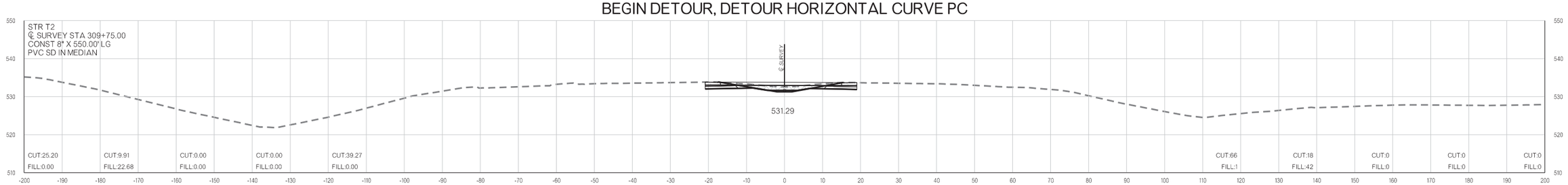
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



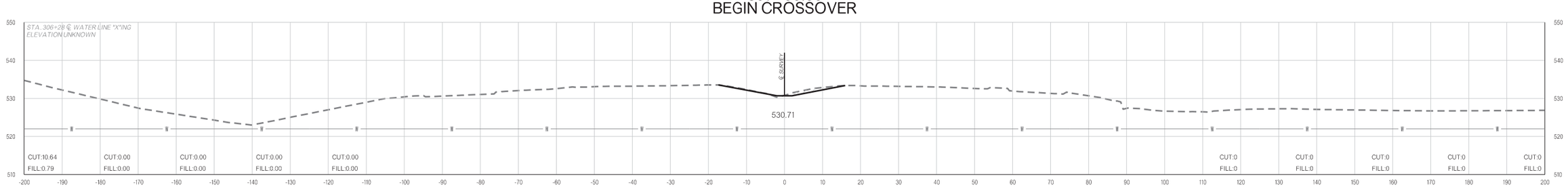
309+00.00



308+00.00
BEGIN DETOUR, DETOUR HORIZONTAL CURVE PC



307+00.00
BEGIN CROSSOVER



306+00.00

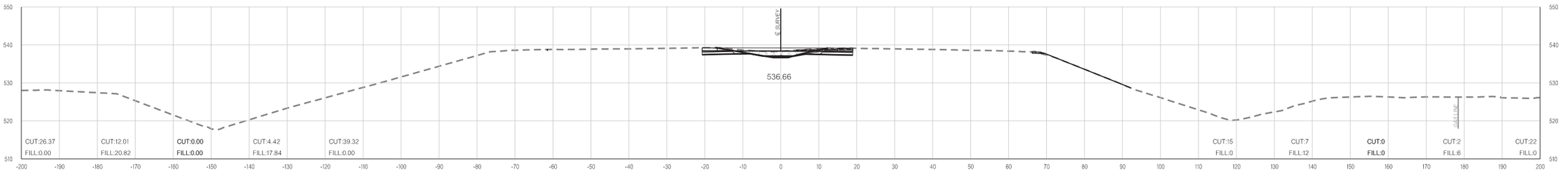
10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X005

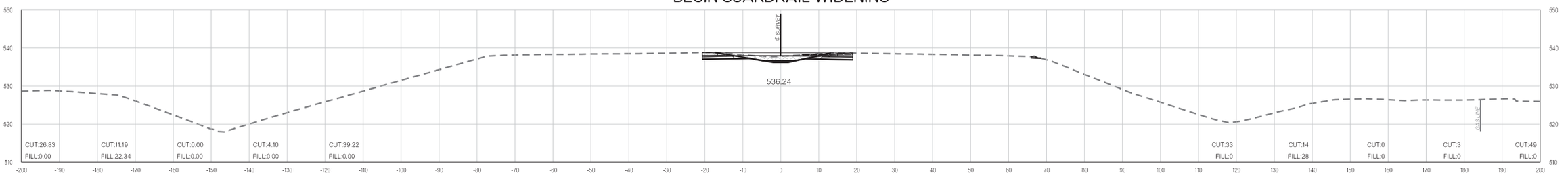
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

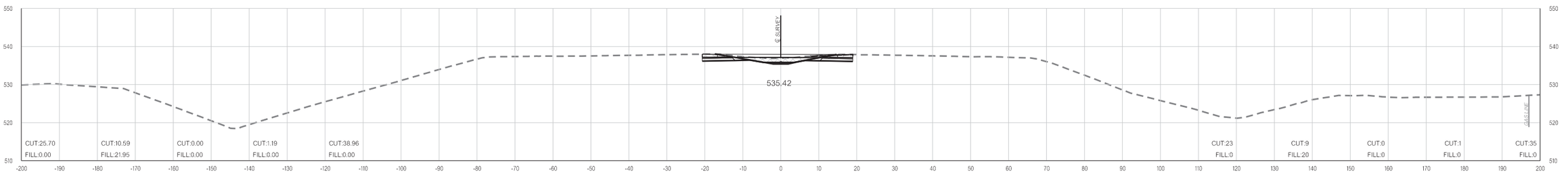
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



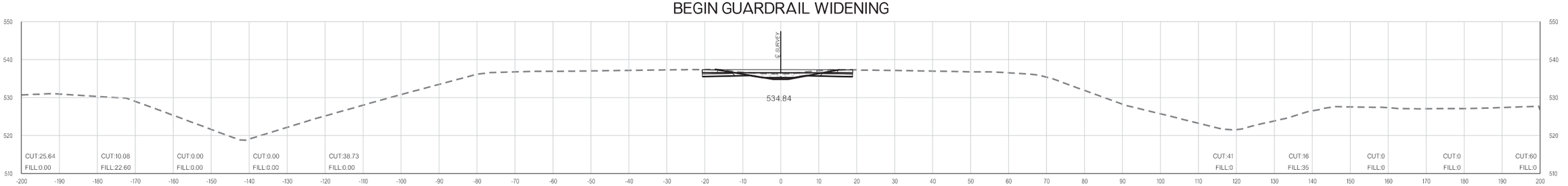
310+15.35
BEGIN GUARDRAIL WIDENING



310+00.00



309+66.42
BEGIN GUARDRAIL WIDENING



309+42.19
BEGIN DETOUR, DETOUR HORIZONTAL CURVE PC

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X006

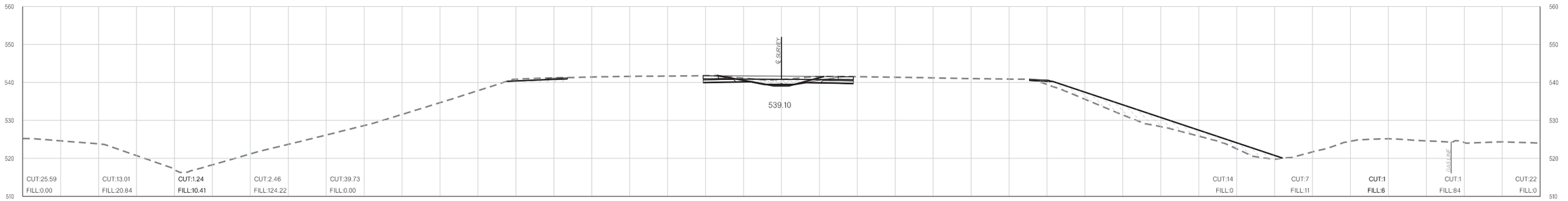
10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

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

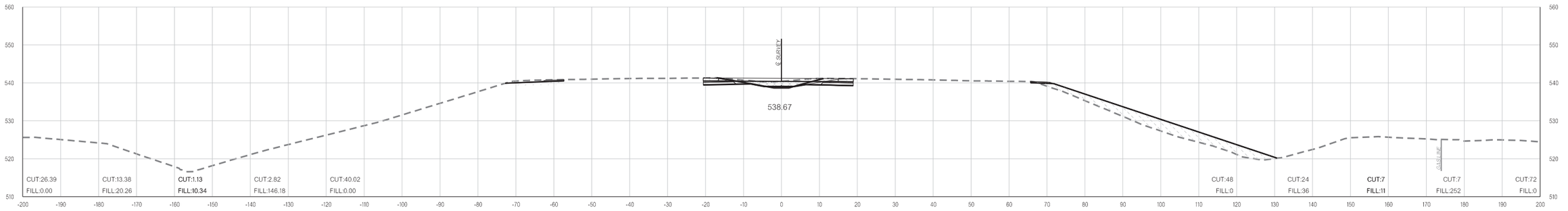
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

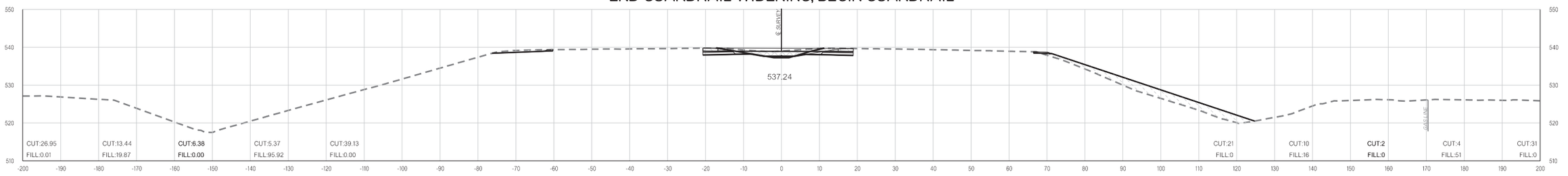
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



311+00.00



310+85.35
END GUARDRAIL WIDENING, BEGIN GUARDRAIL



310+36.42
END GUARDRAIL WIDENING, BEGIN GUARDRAIL

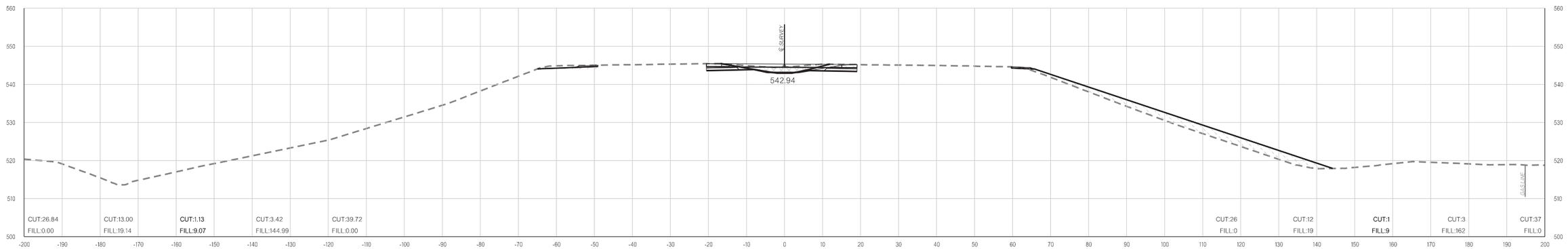
COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X007

10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

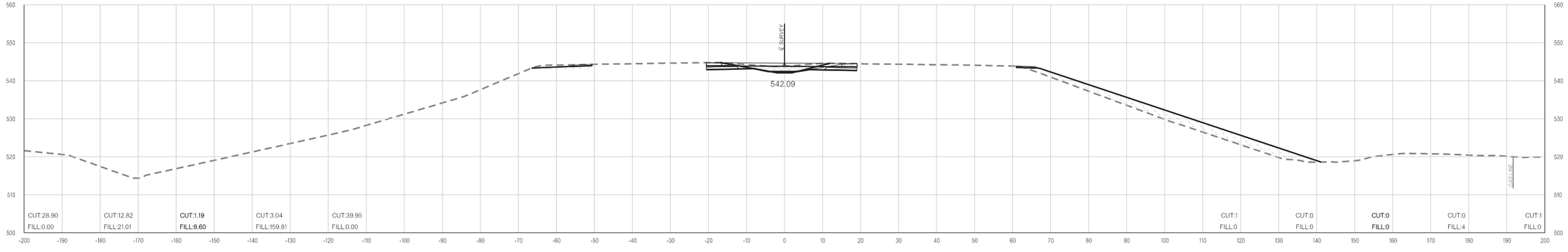
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

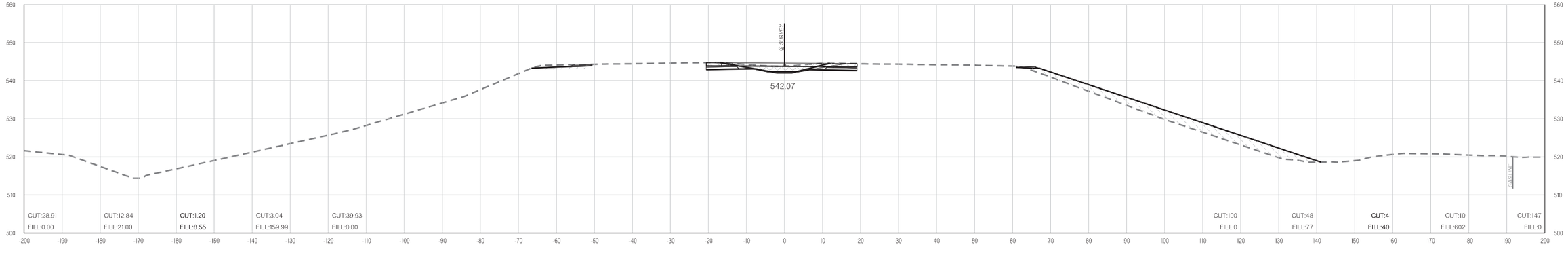
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



312+25.00



312+00.00



311+99.41
BEGIN GUARDRAIL TAPER

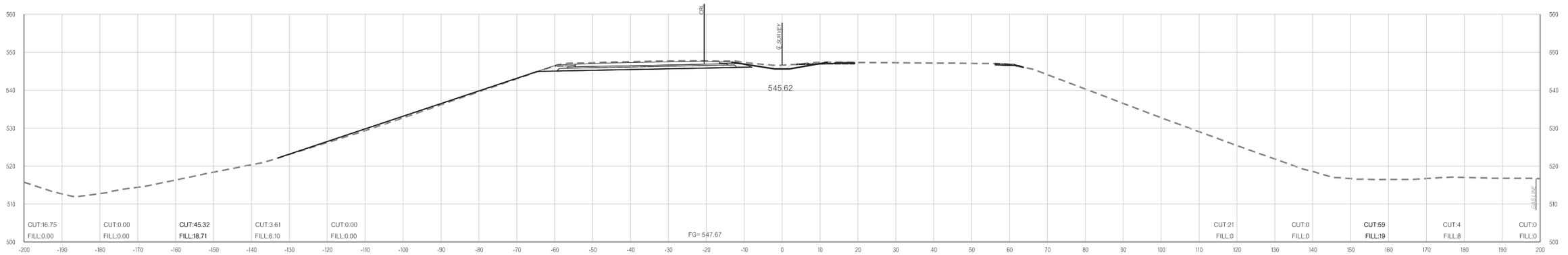
COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X008

10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

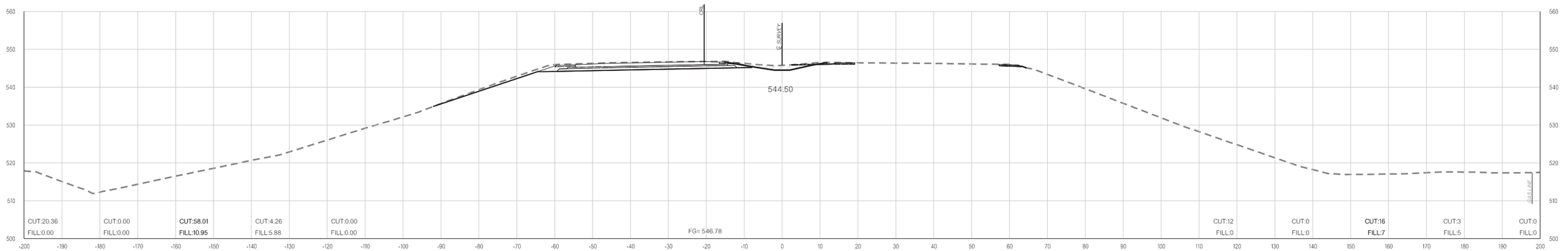
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

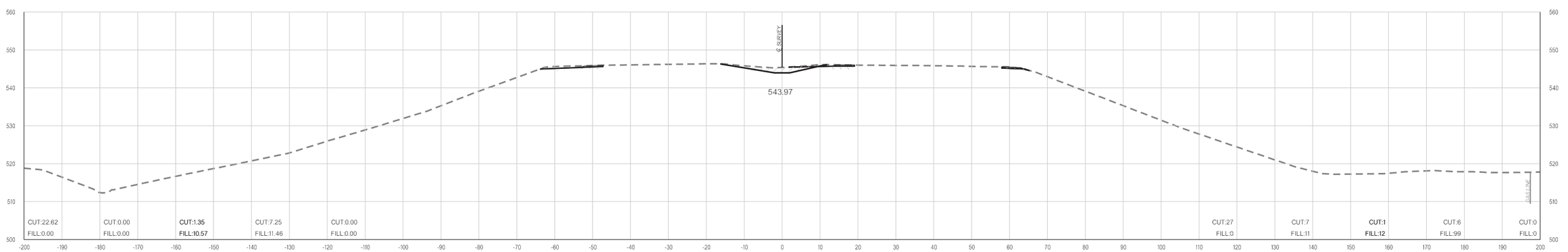
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



313+00.00



312+69.31



312+54.82

DETOUR HORIZONTAL CURVE PT, END DETOUR

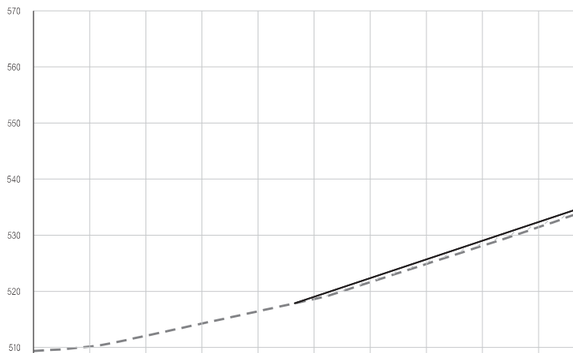
COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X009

10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

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

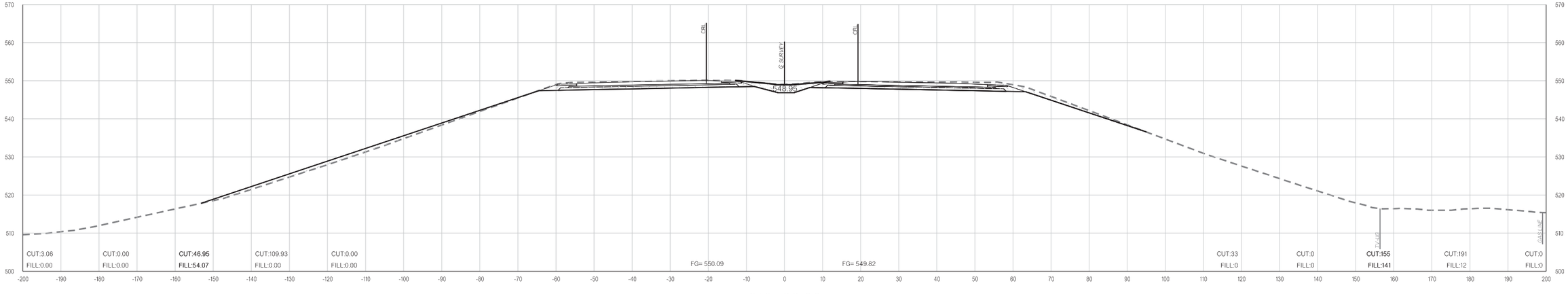
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

313+96.80
DETOUR HORIZTONAL CURVE PT, END DETOUR



313+90.89

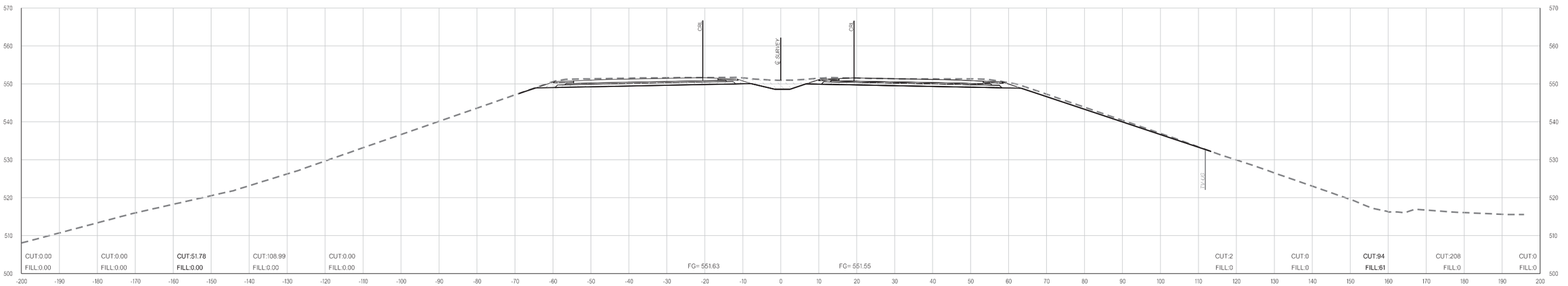
10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X010

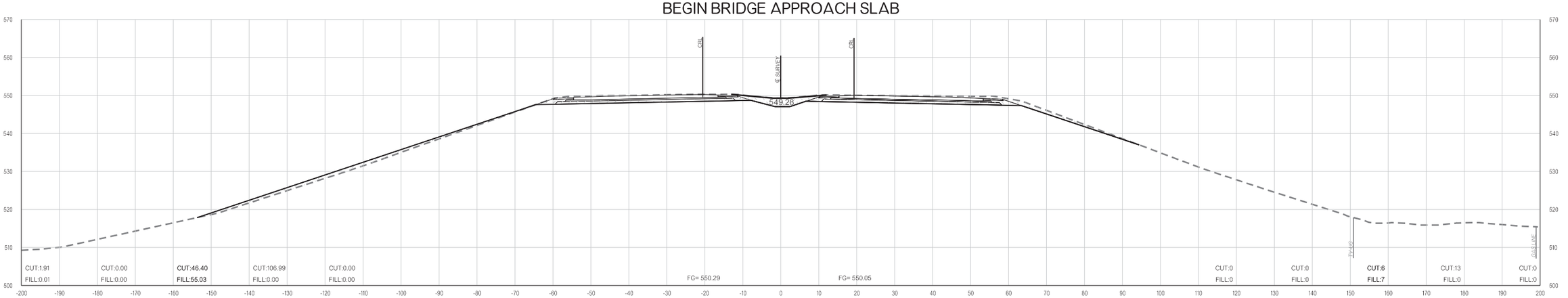
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



314+51.00
BEGIN BRIDGE APPROACH SLAB



314+00.00

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X011

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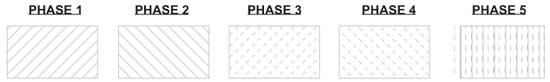
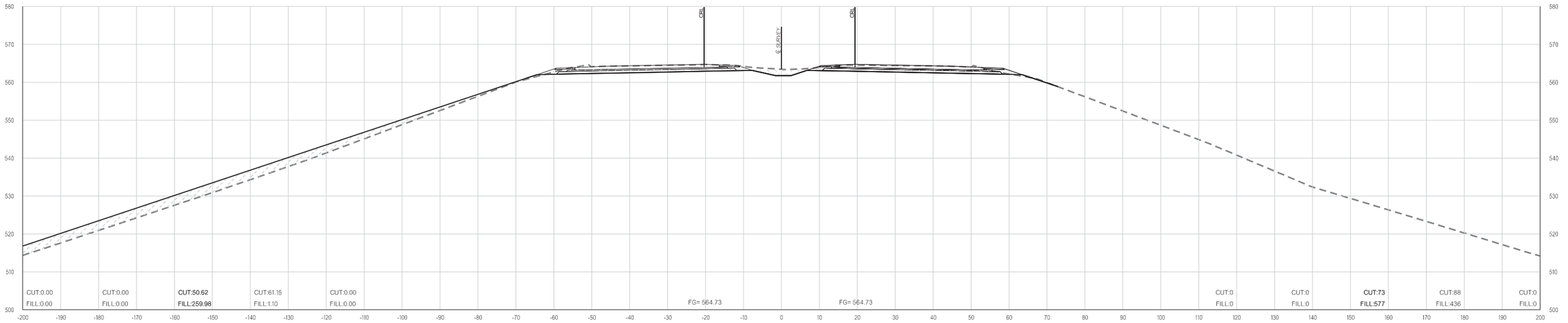
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

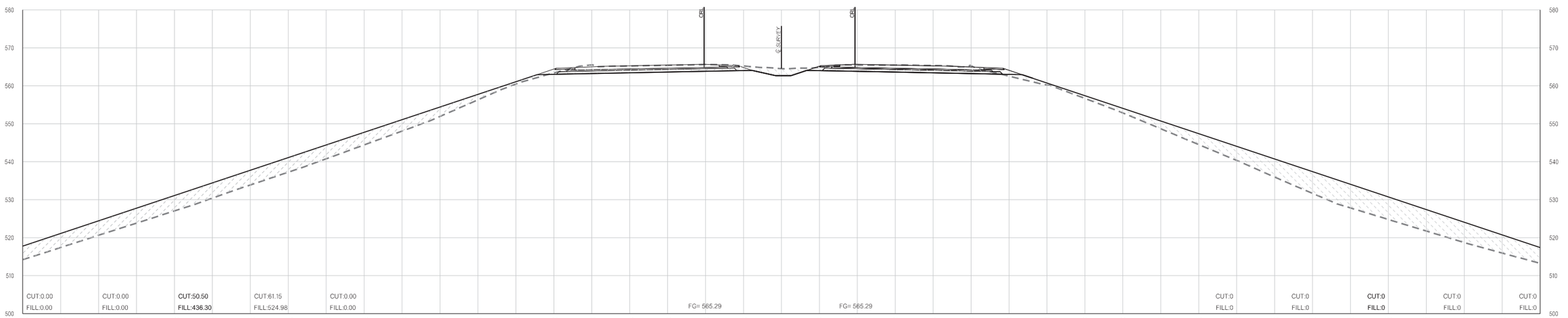
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



331+00.00



330+76.42
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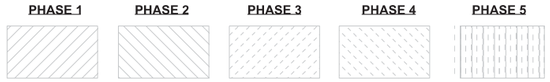
COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X012

10-29-20 pw:\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

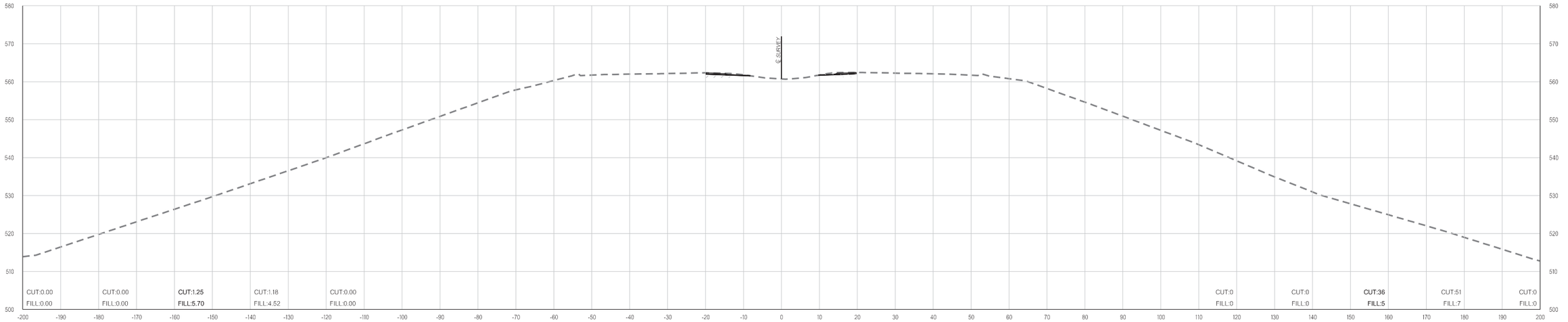
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

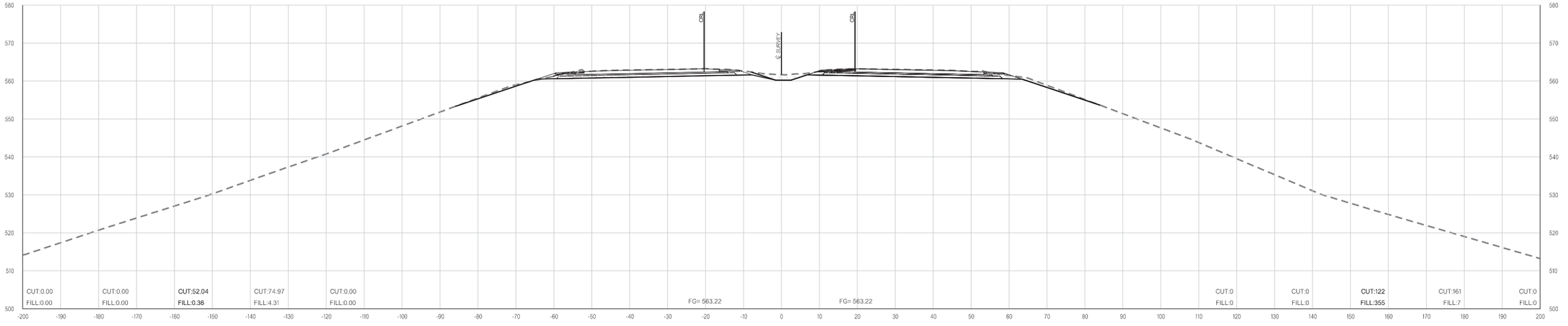
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



332+00.00



331+64.00

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X013

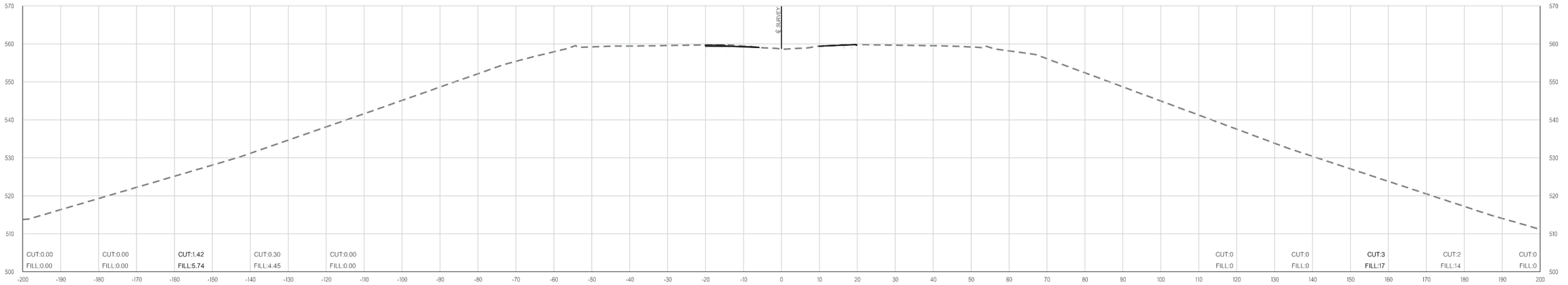
10-29-20 pw:\APP-PWS05-345.agency.OK.local\ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

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

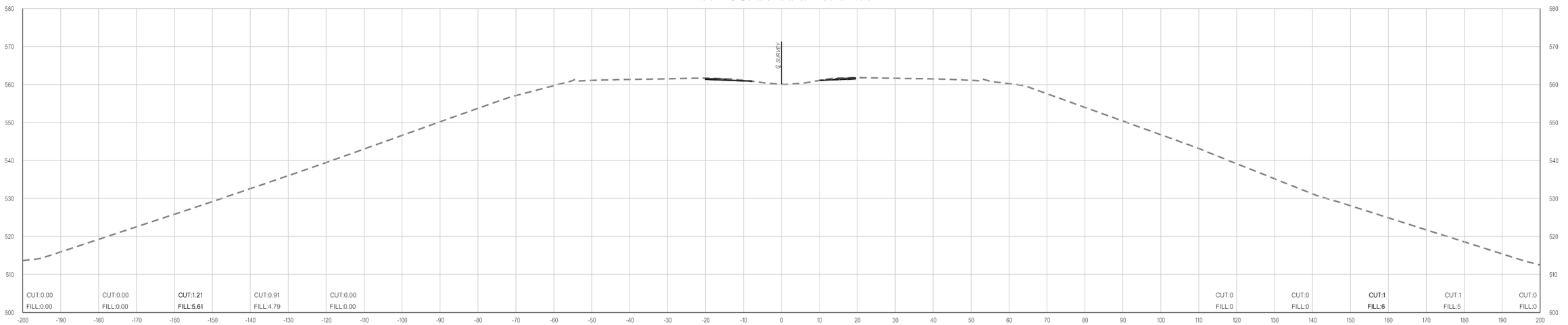
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



332+95.71
END GUARDRAIL TAPER



332+25.71
END GUARDRAIL, BEGIN GUARDRAIL TAPER

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X014

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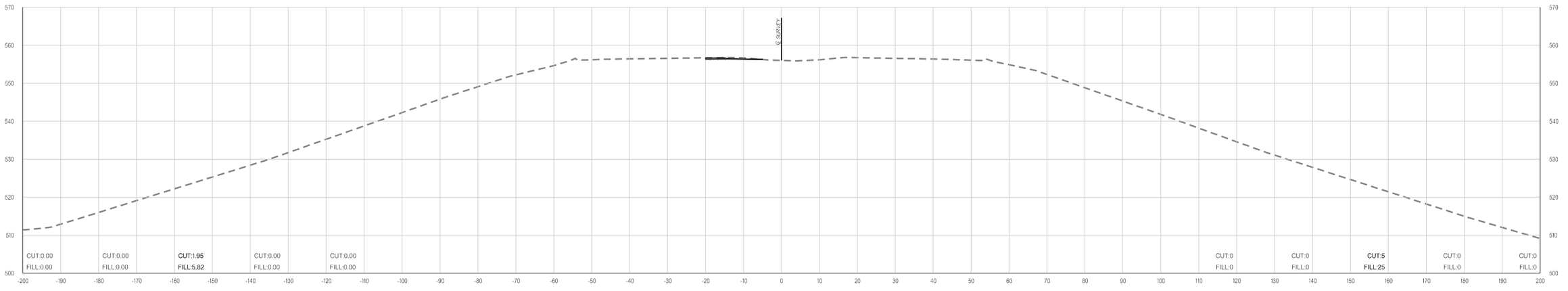
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

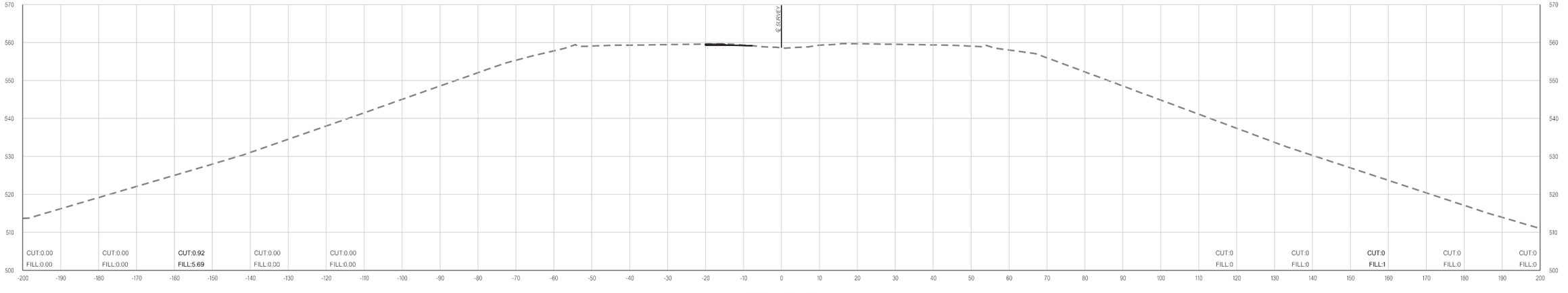
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



334+00.00



333+00.00

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X015

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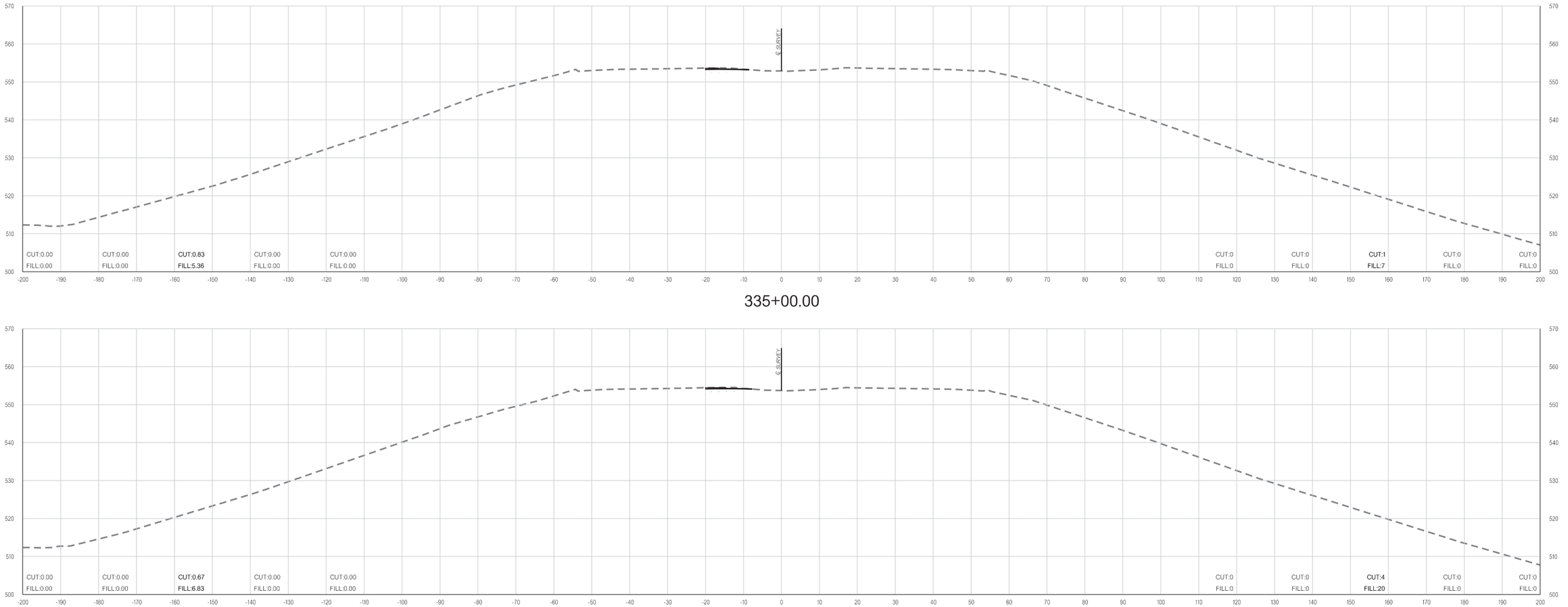
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



335+00.00

334+74.40
END GUARDRAIL. BEGIN GUARDRAIL TAPER

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X016

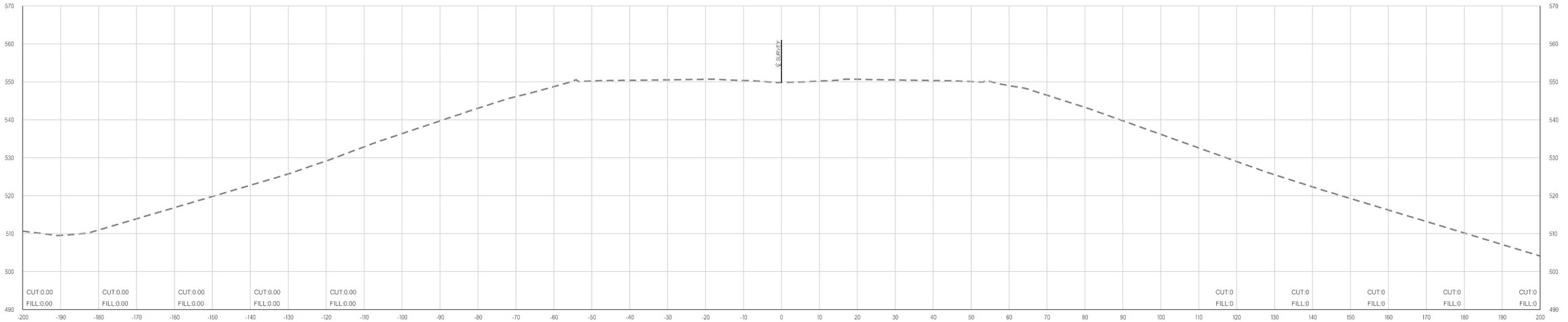
10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

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

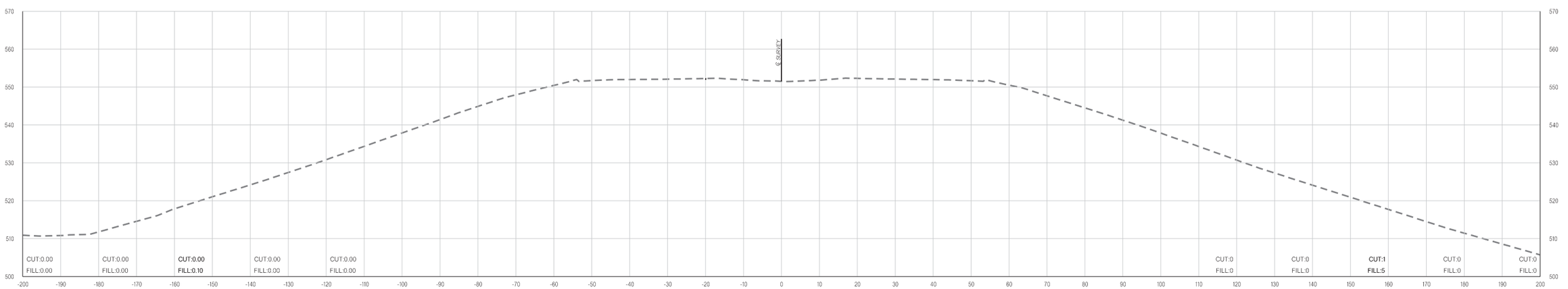
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



336+00.00



335+44.00
END GUARDRAIL TAPER

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X017

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

DESCRIPTION	REVISIONS	DATE

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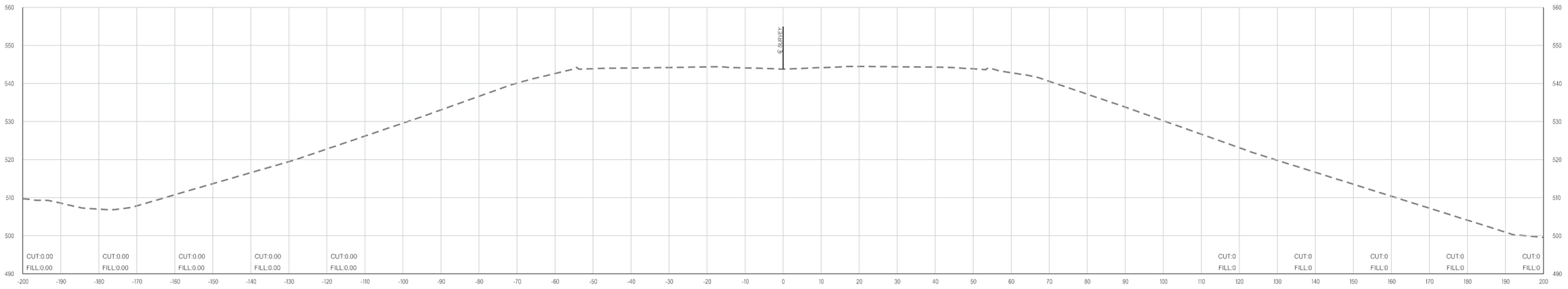
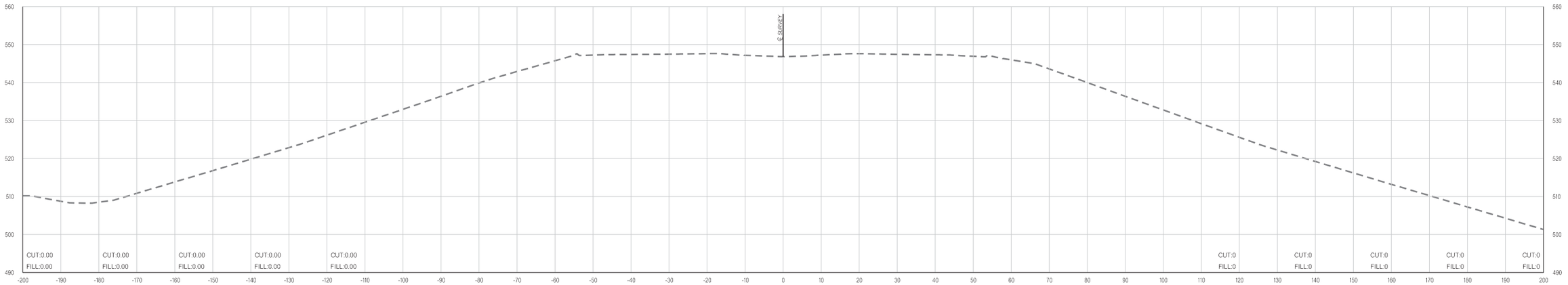
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



338+00.00



337+00.00

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X018

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

DESCRIPTION	REVISIONS	DATE

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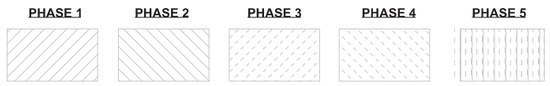
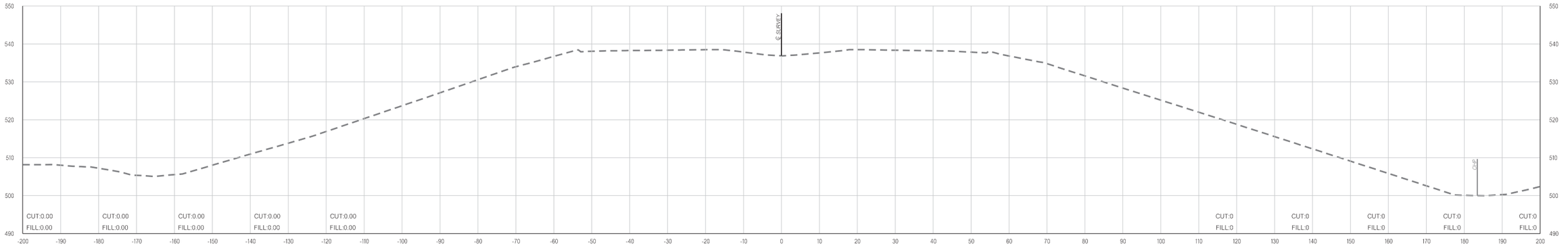
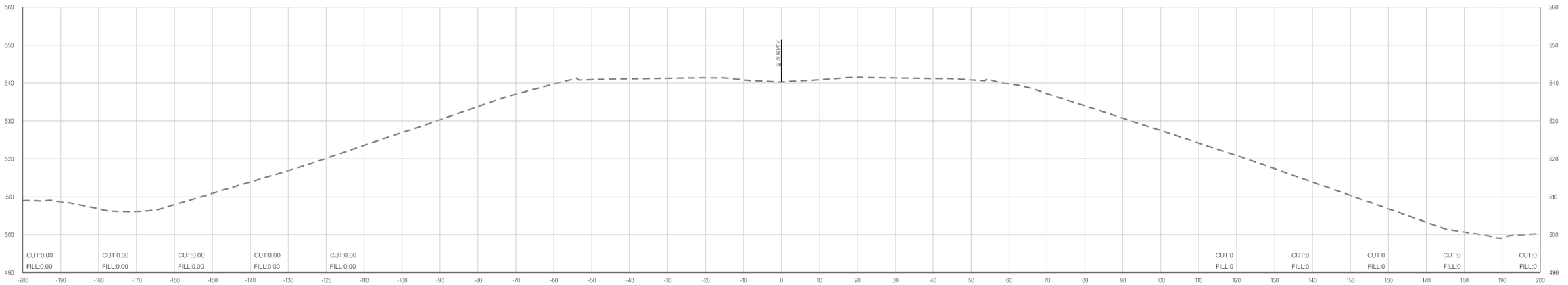


PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



340+00.00



339+00.00

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X019

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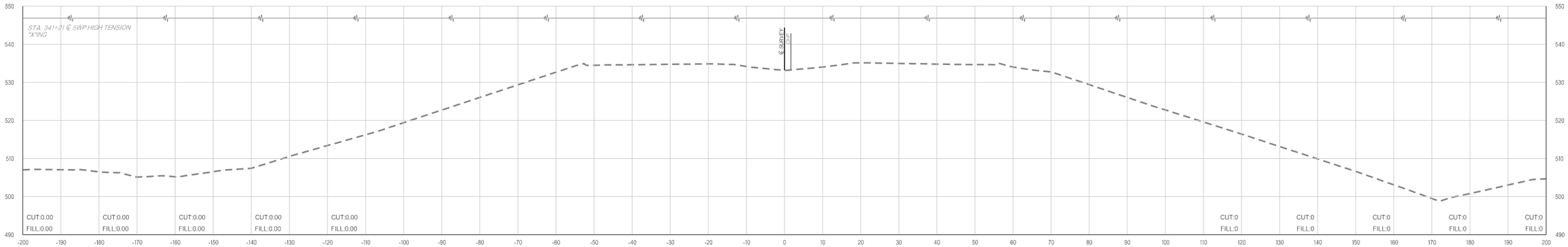
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



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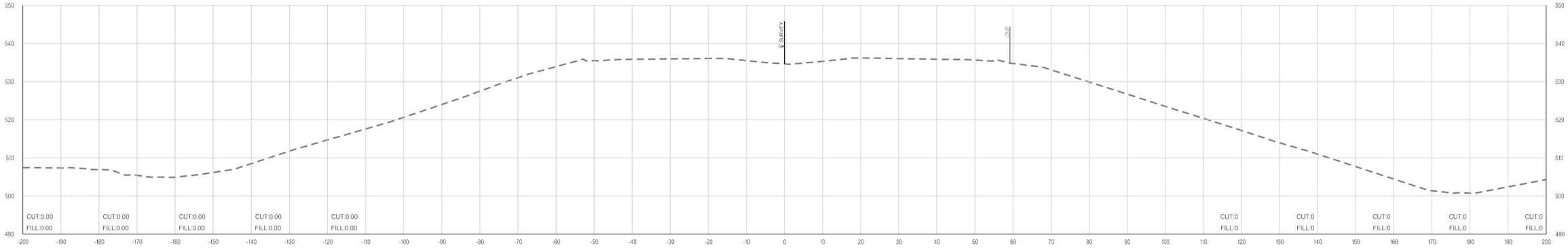
341+00.00



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COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X020

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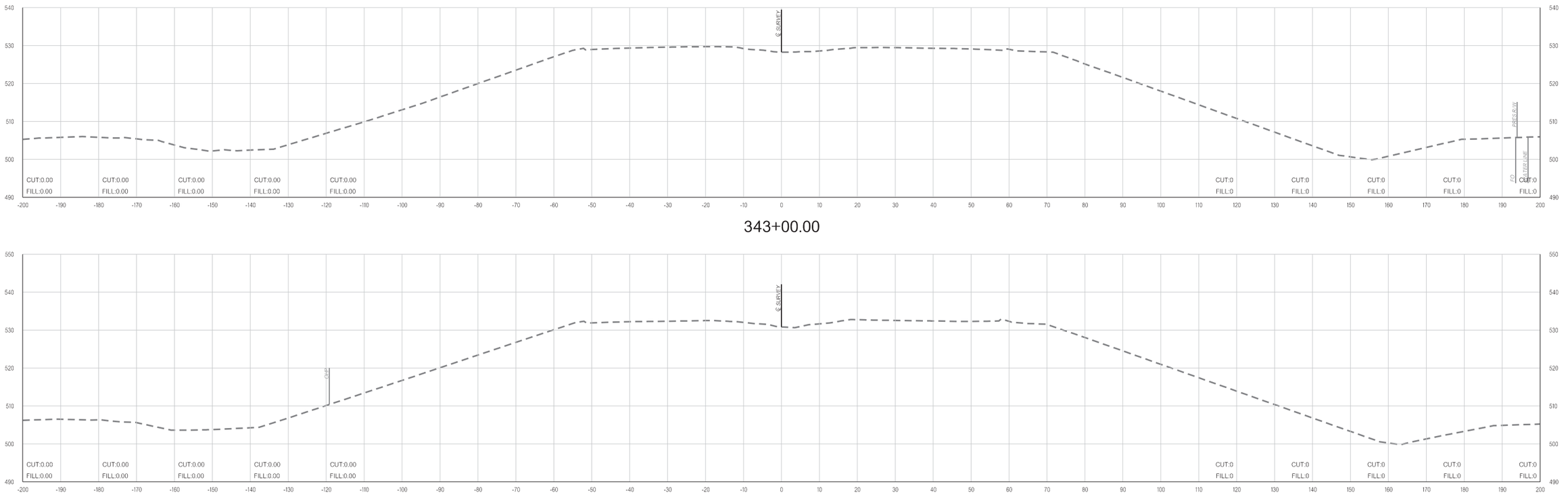
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

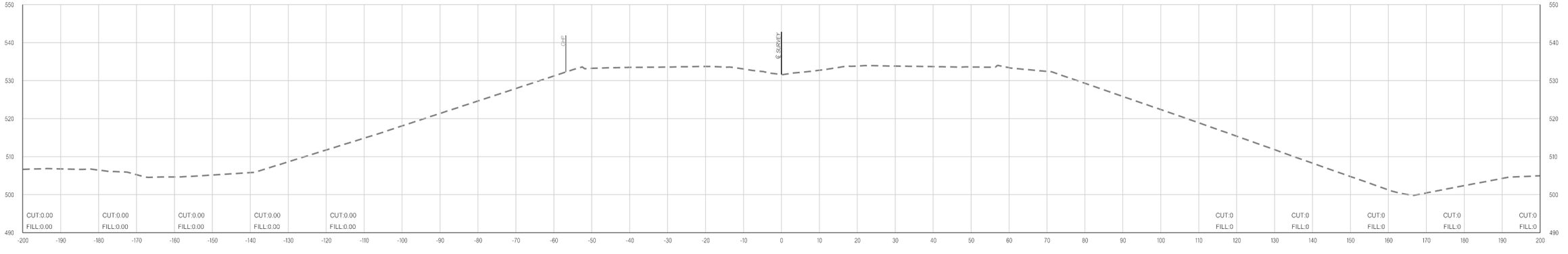
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



343+00.00

342+00.00



341+58.51

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X021

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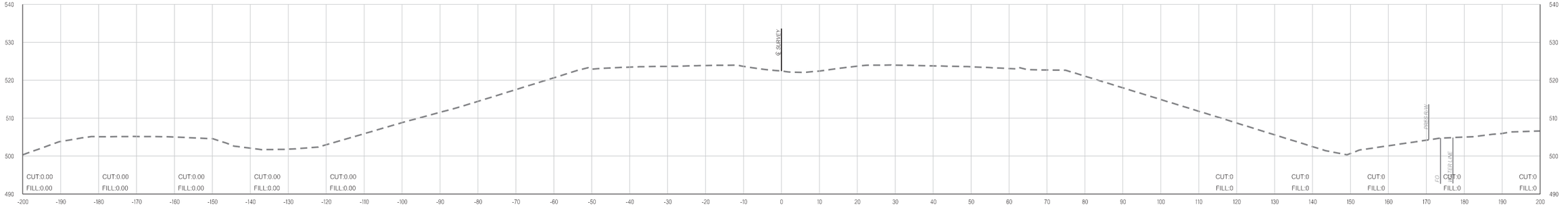
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

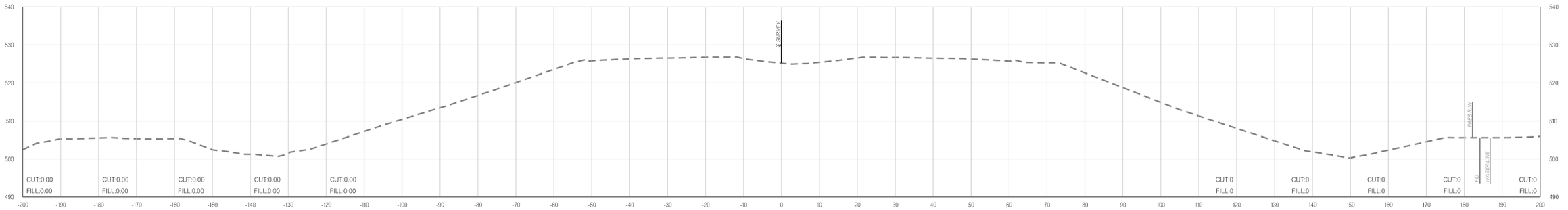
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

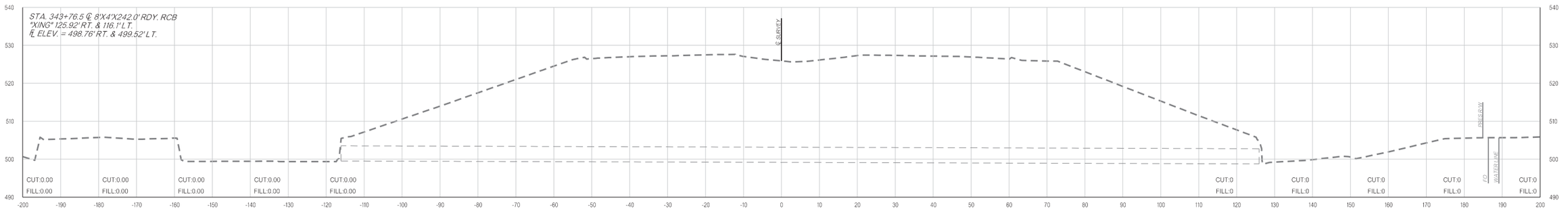
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



345+00.00



344+00.00



343+76.50

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X022

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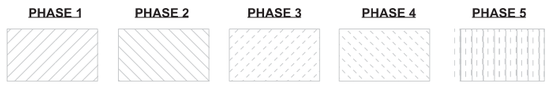
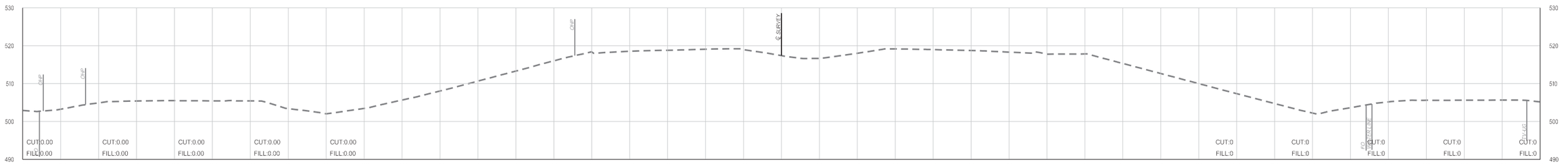
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



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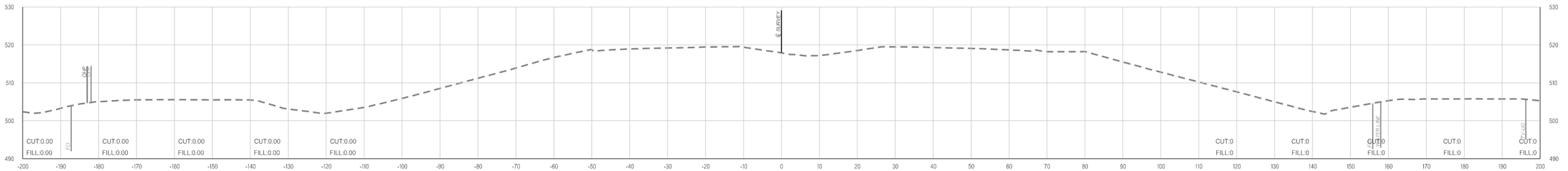
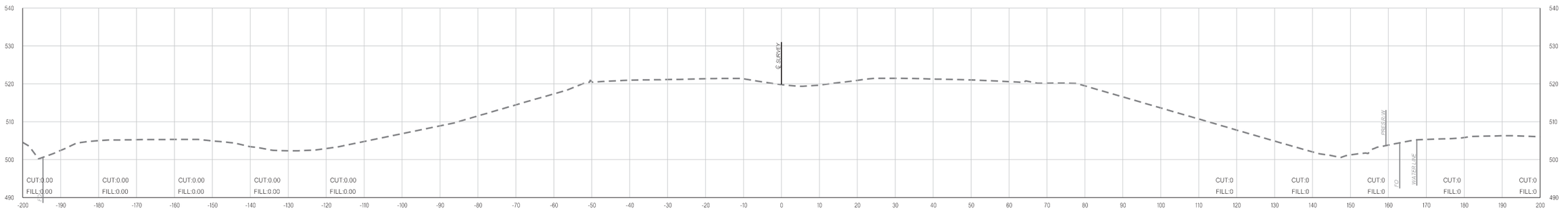


347+00.00



346+00.00

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X023

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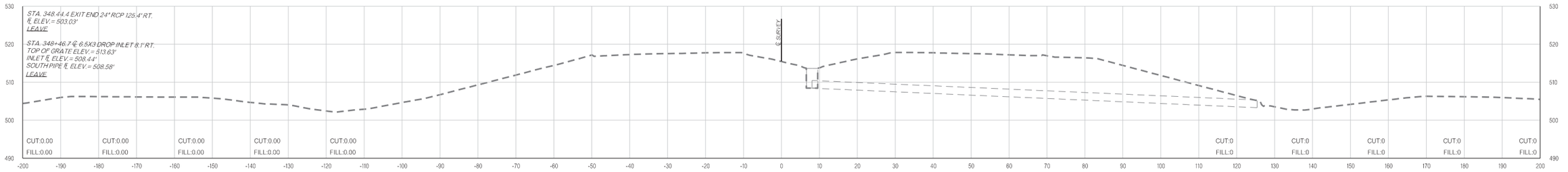
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



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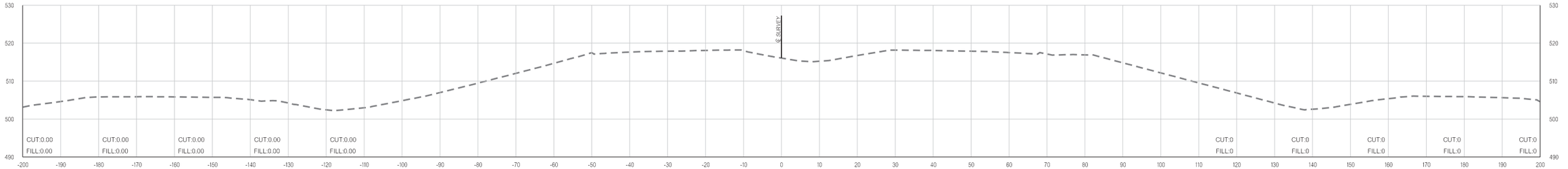
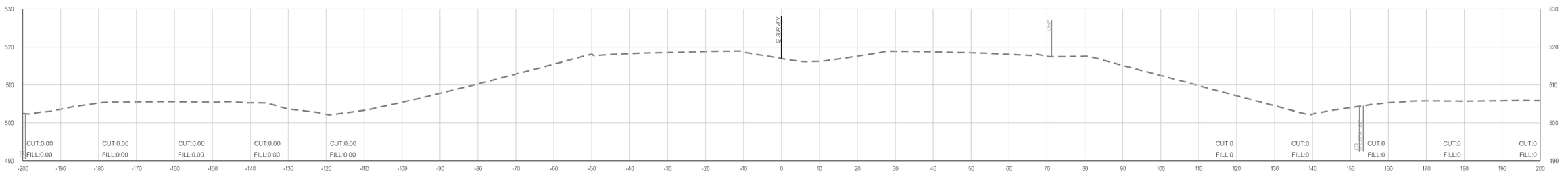


348+00.00



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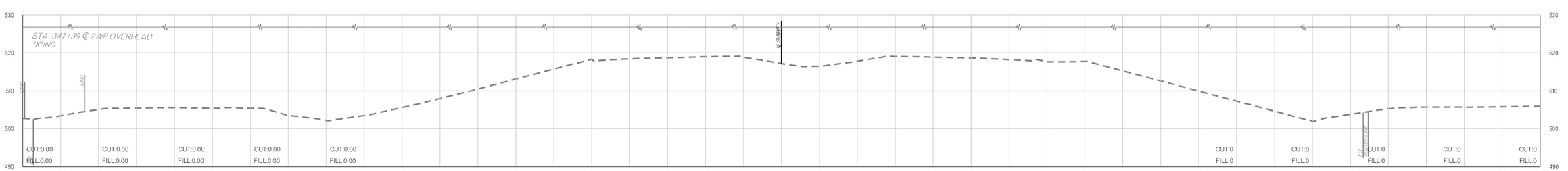


347+34.91

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X024

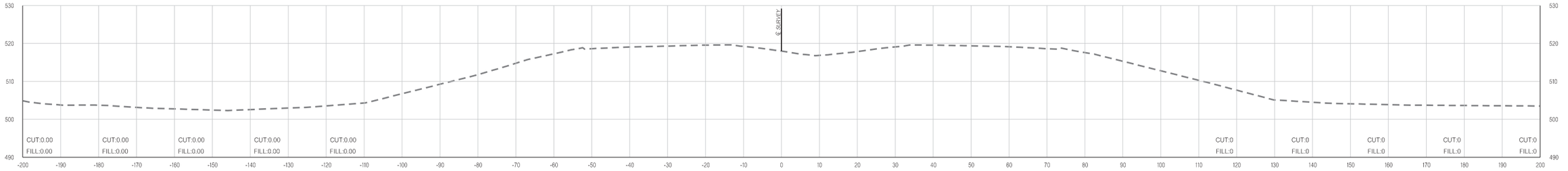
10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

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

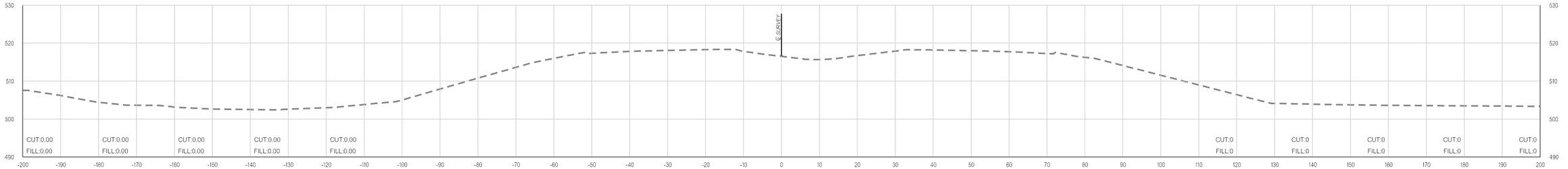
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

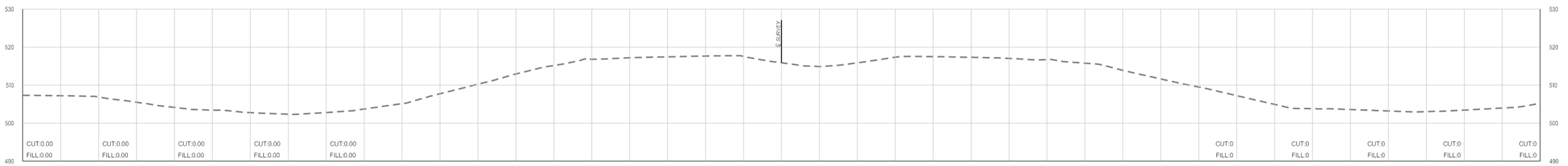
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



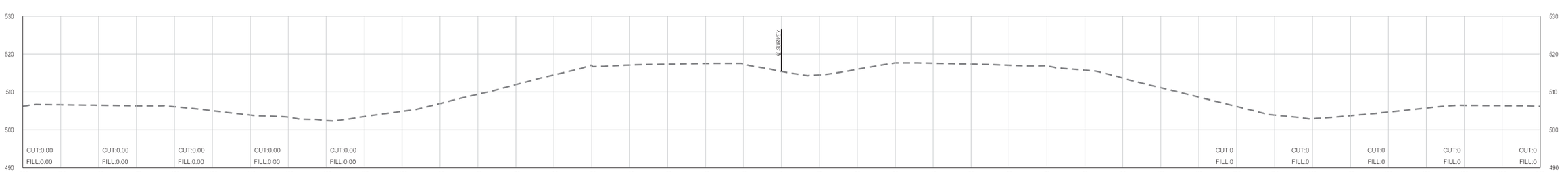
352+00.00



351+00.00



350+00.00



349+00.00

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X025

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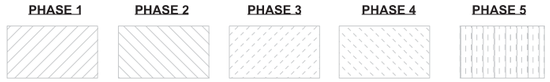
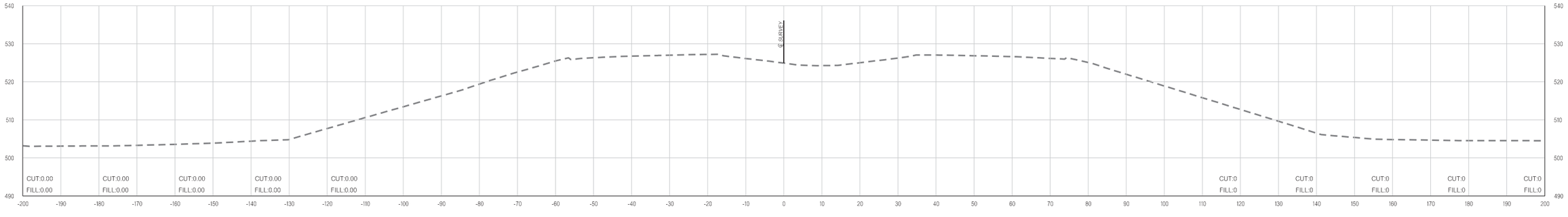
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

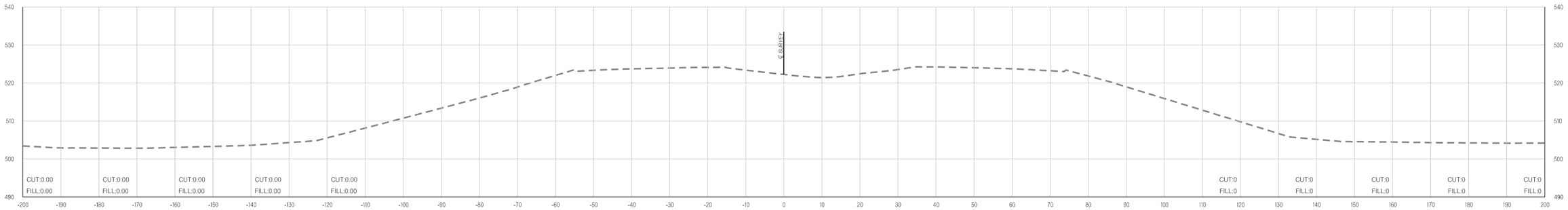
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

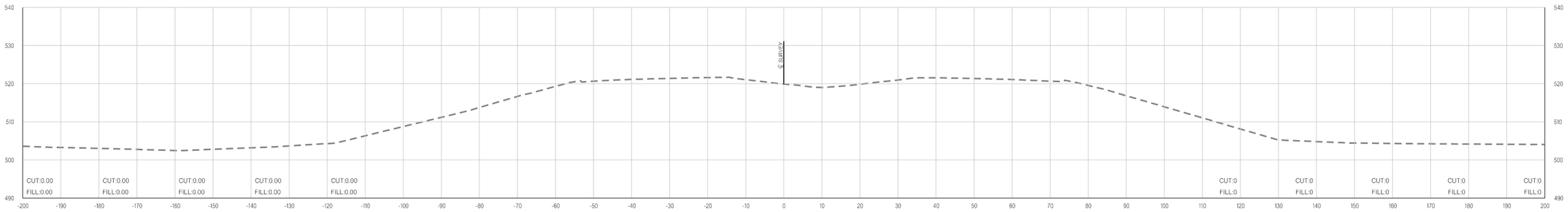




355+00.00



354+00.00



353+00.00

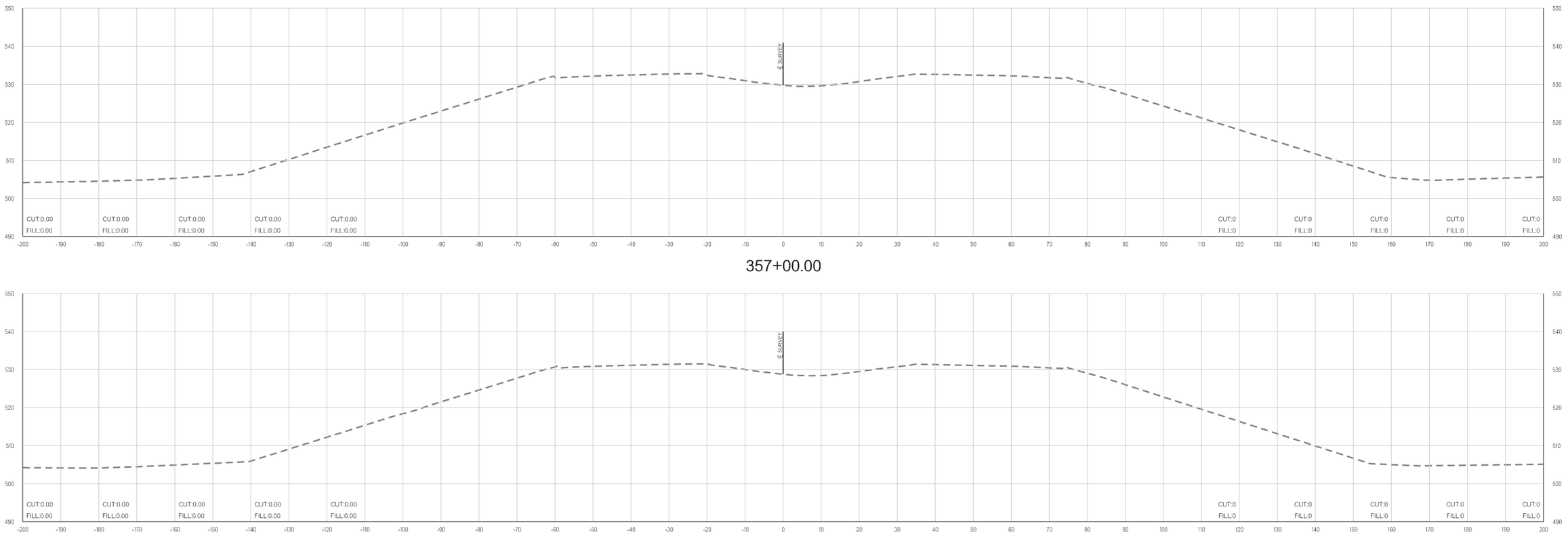
10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X026

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

DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



357+00.00

356+51.58
BEGIN GUARDRAIL WIDENING

356+00.00

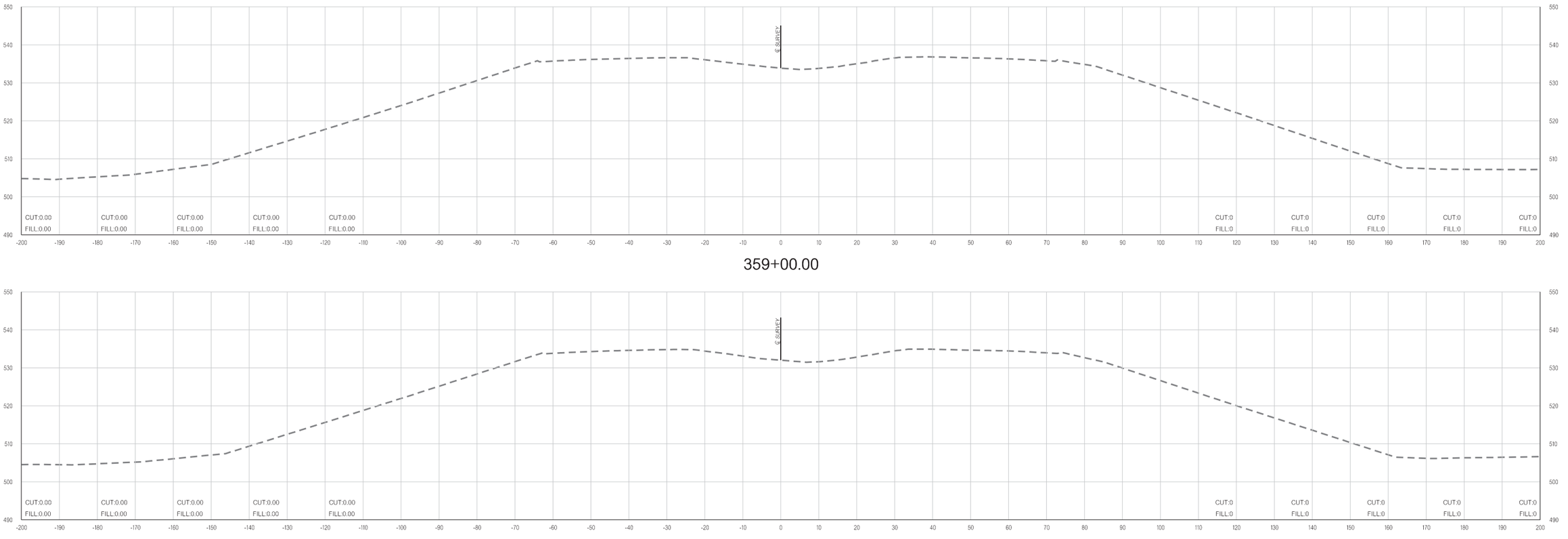
10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X027

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

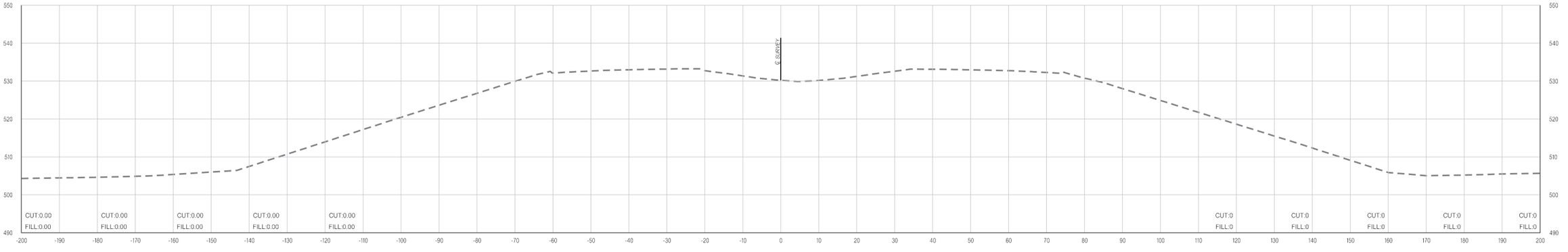
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



359+00.00

358+00.00



357+21.58
END GUARDRAIL WIDENING, BEGIN GUARDRAIL

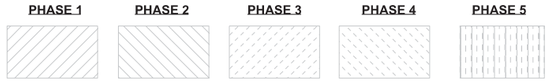
10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

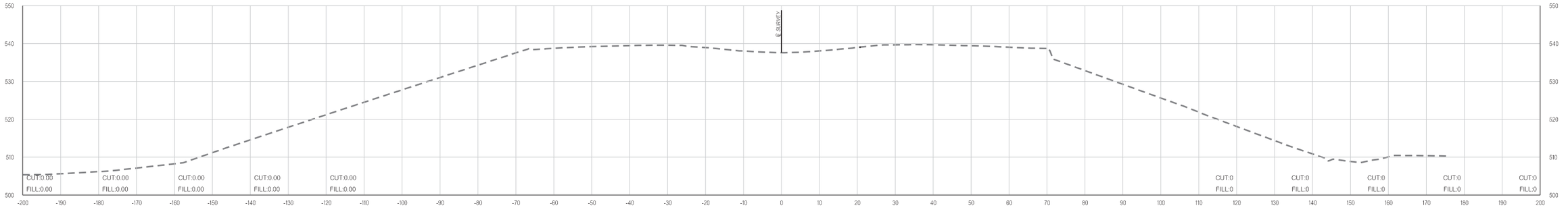
COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X028

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

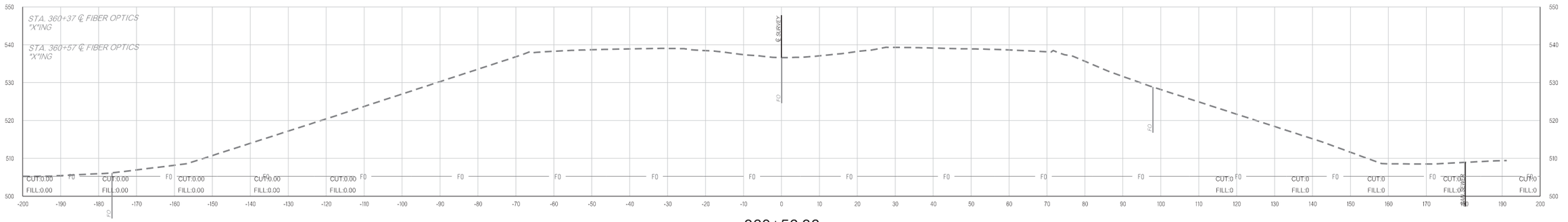
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

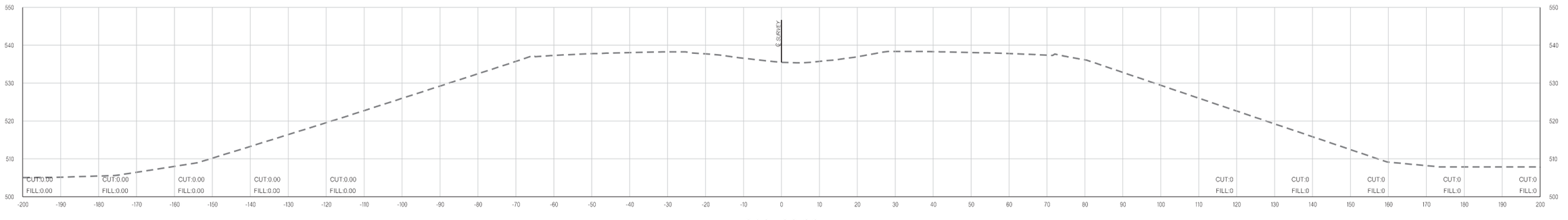




361+00.00



360+56.36



360+00.00

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X029

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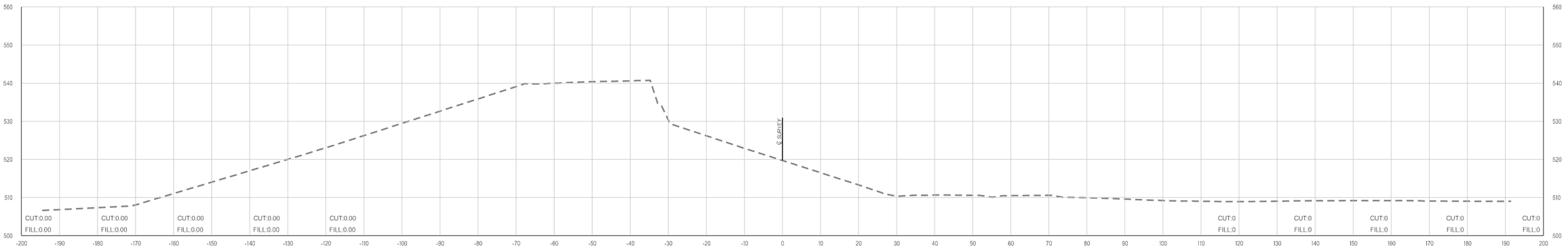
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



362+50.00
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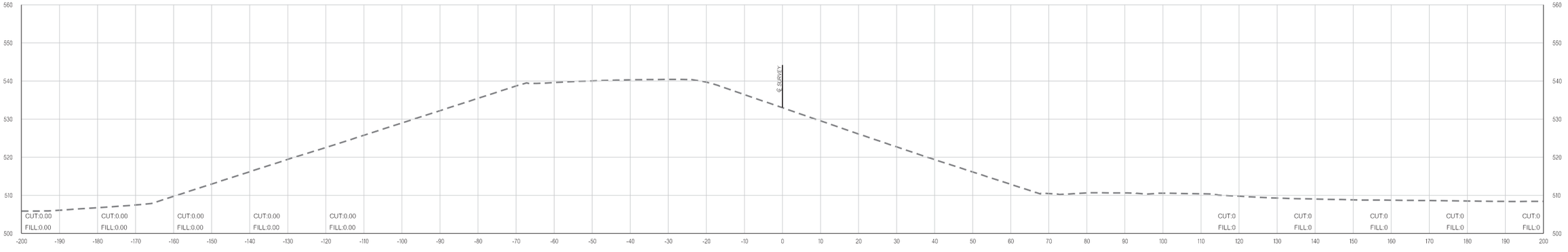
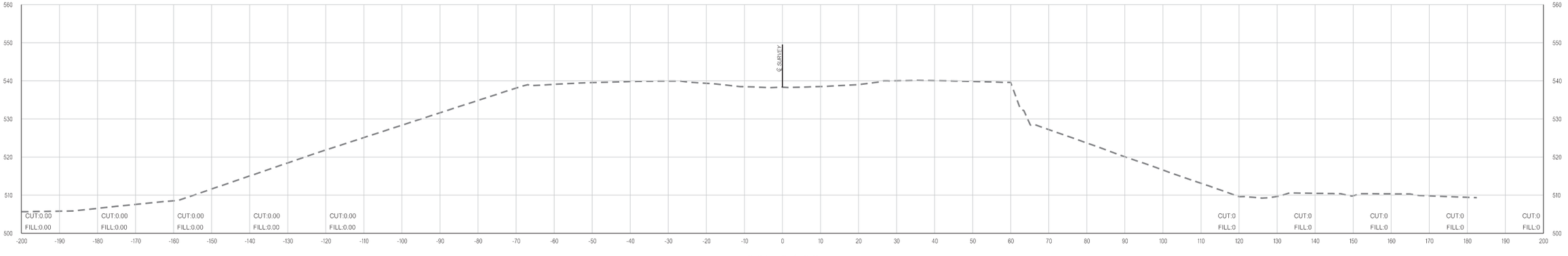


362+00.00



361+34.80
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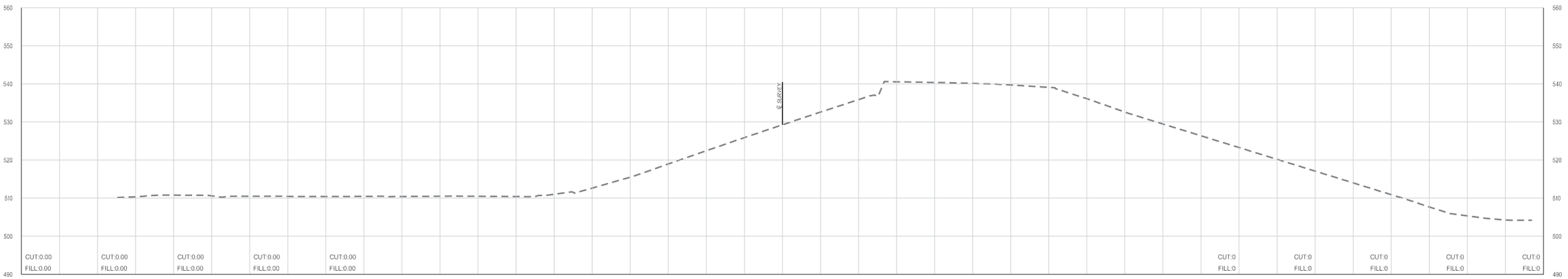
10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X030

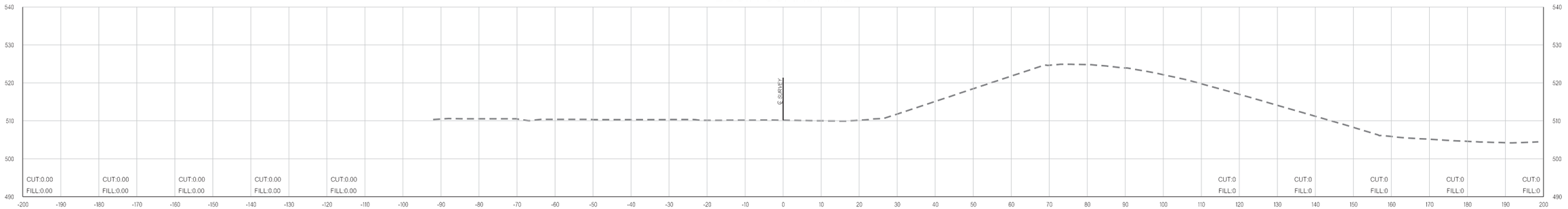
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

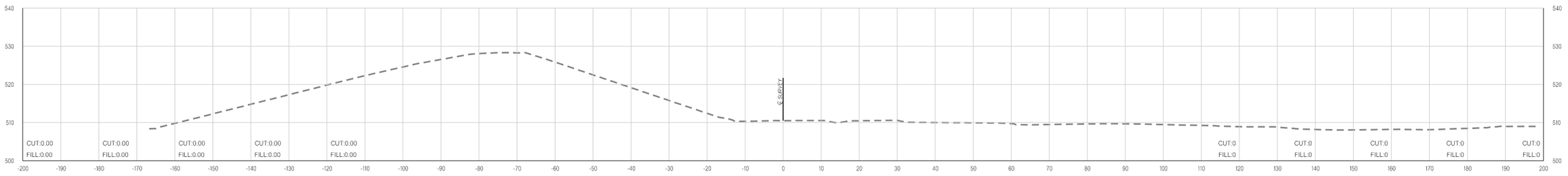
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



365+00.00
BEGIN GUARDRAIL



364+00.00



363+00.00

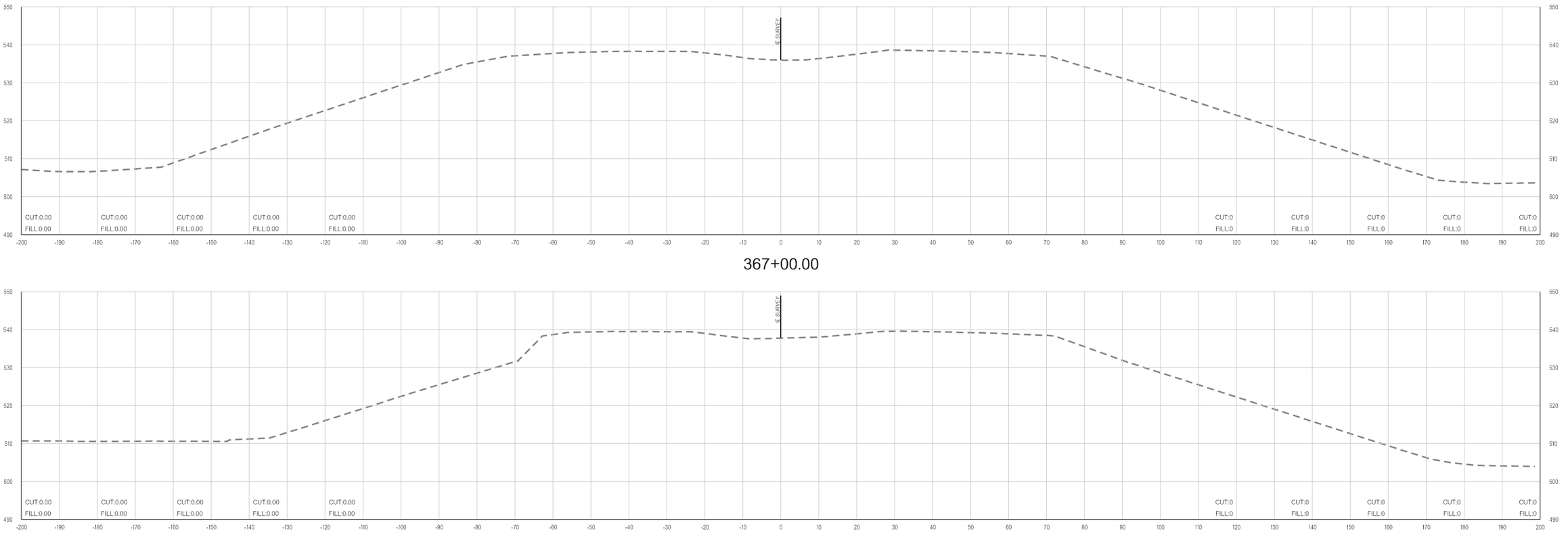
COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X031

10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

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

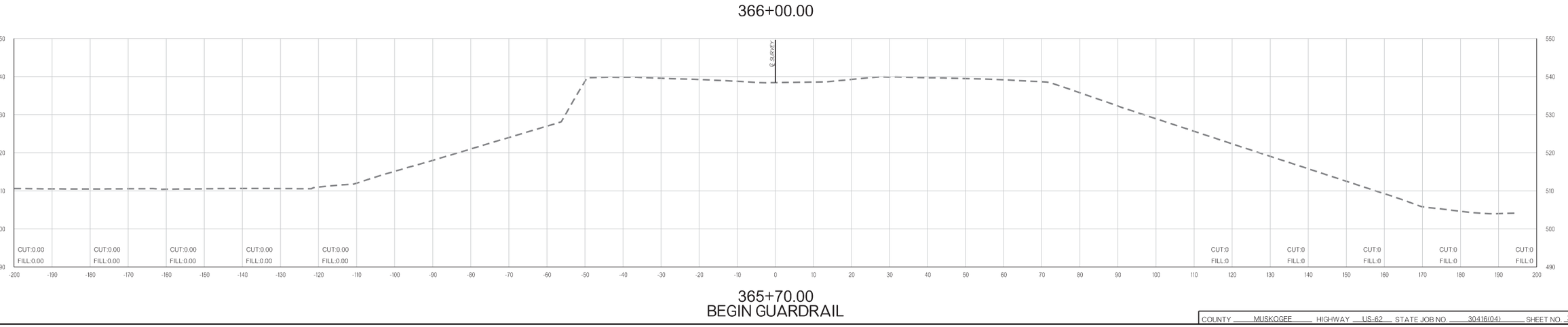
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



367+00.00

366+00.00



365+70.00
BEGIN GUARDRAIL

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X032

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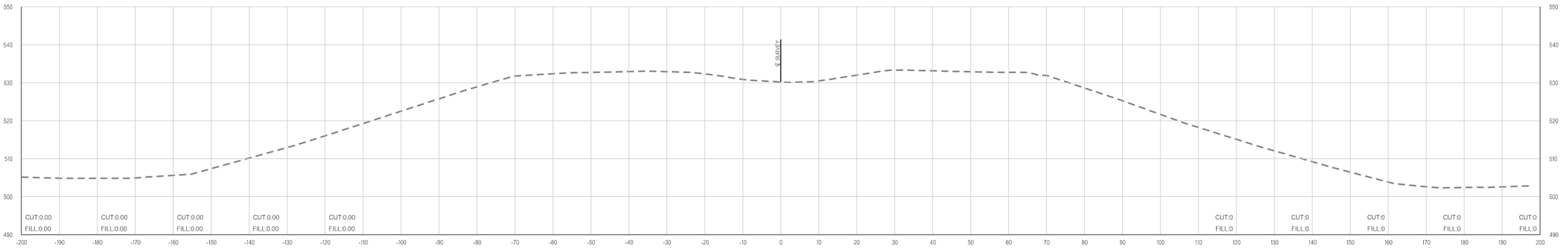
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



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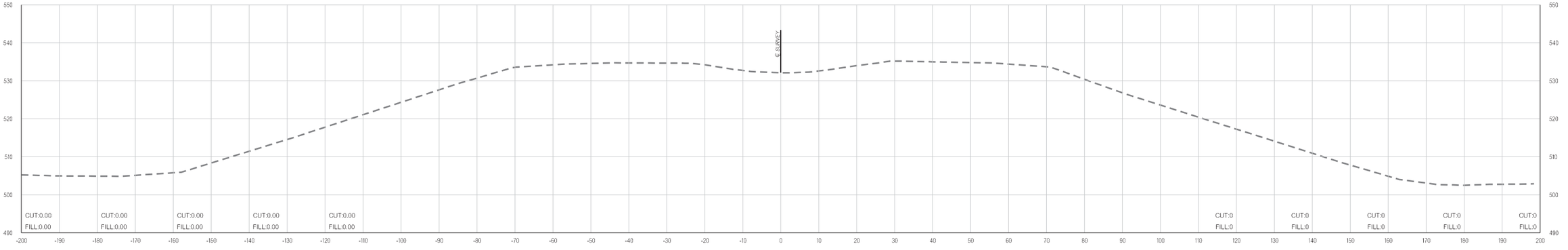
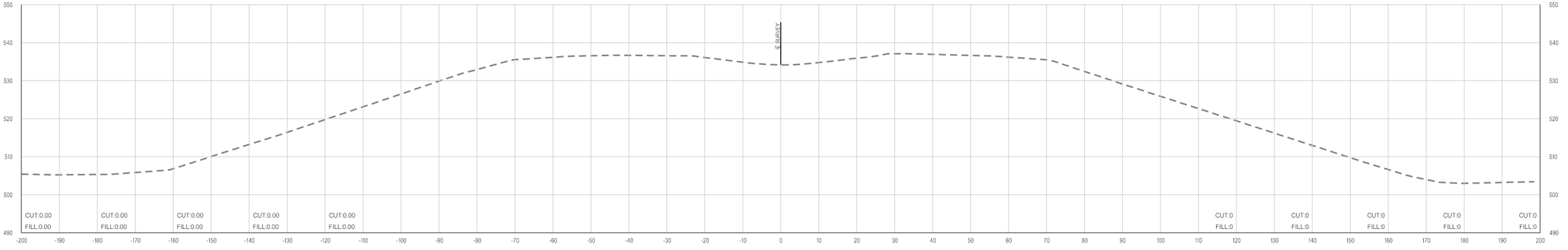
END GUARDRAIL, BEGIN GUARDRAIL TAPER



369+00.00



368+00.00

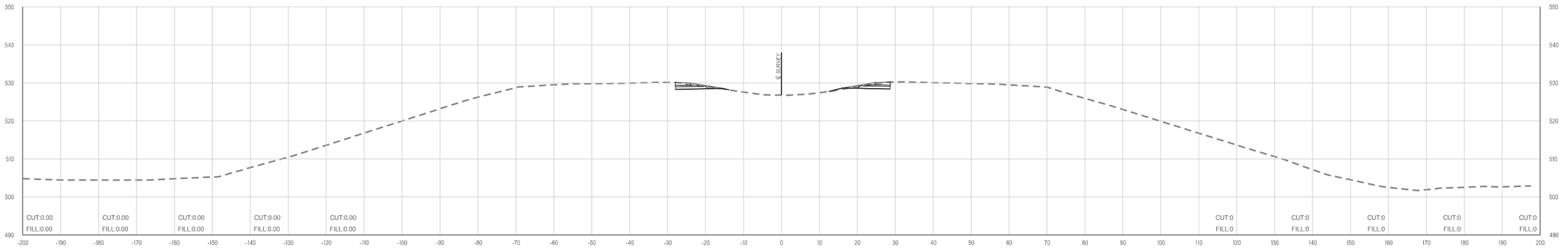
COUNTY MUSKOGEE	HIGHWAY US-62	STATE JOB NO. 30416(04)	SHEET NO. X033

10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

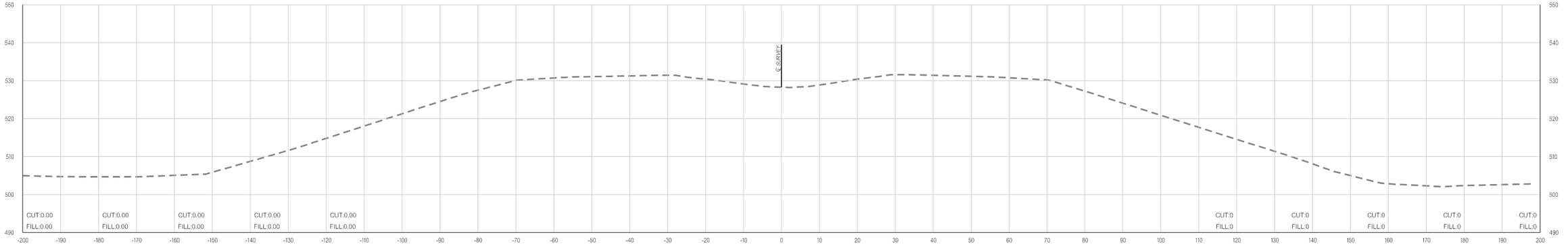
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



371+00.00



370+53.00
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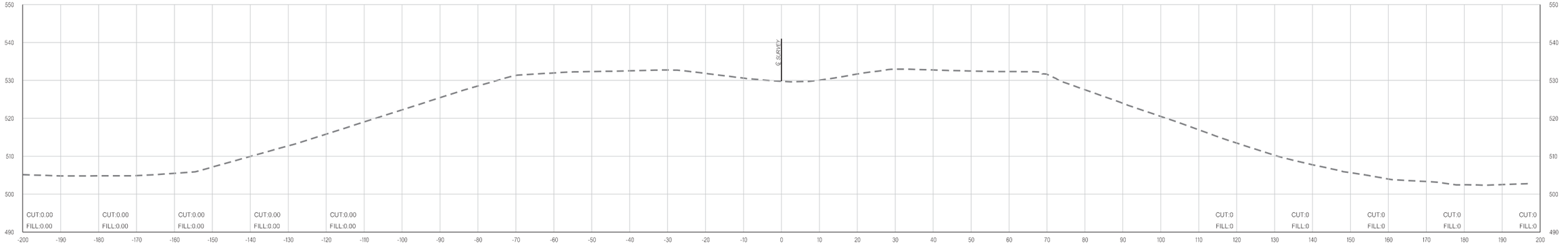


370+00.00

10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

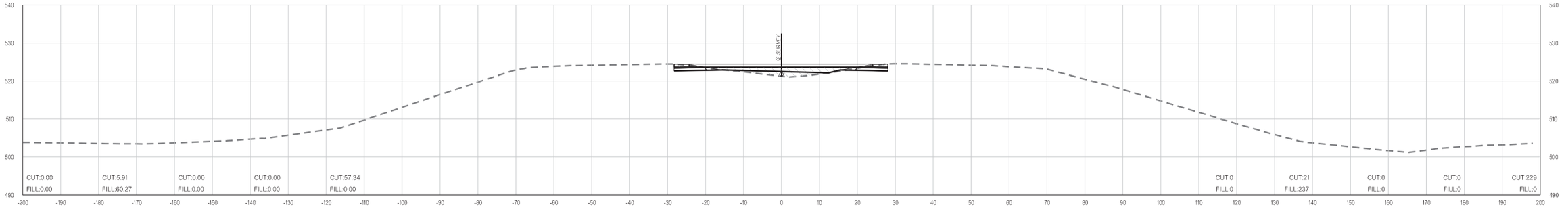
COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X034

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

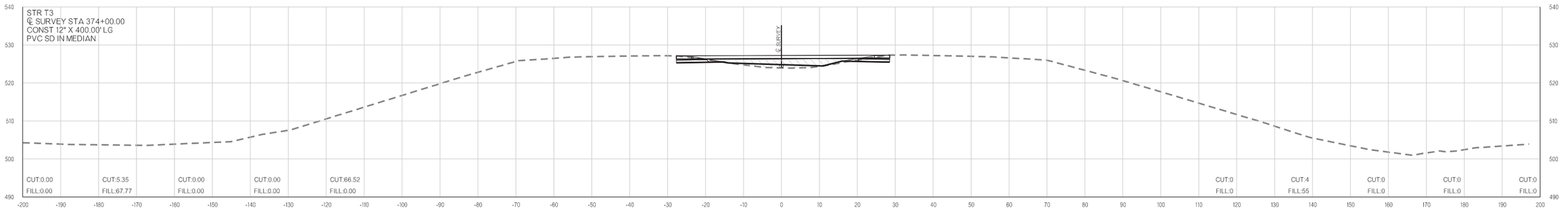
DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

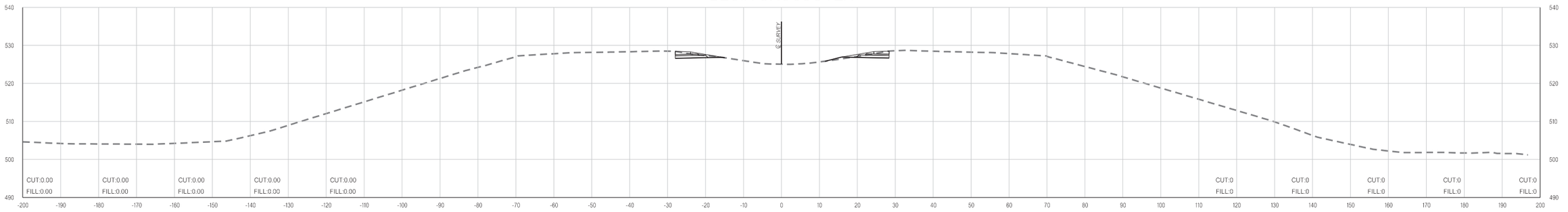
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



373+00.00



372+00.00
BEGIN CROSSOVER



371+56.29
BEGIN DETOUR, DETOUR HORIZONTAL CURVE PC

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X035

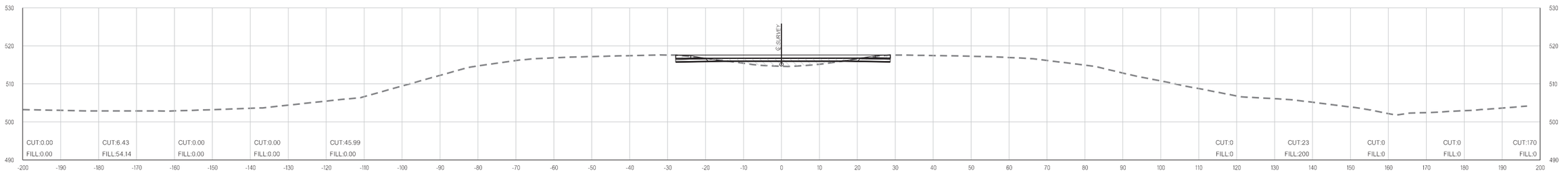
10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

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

DESCRIPTION	REVISIONS	DATE

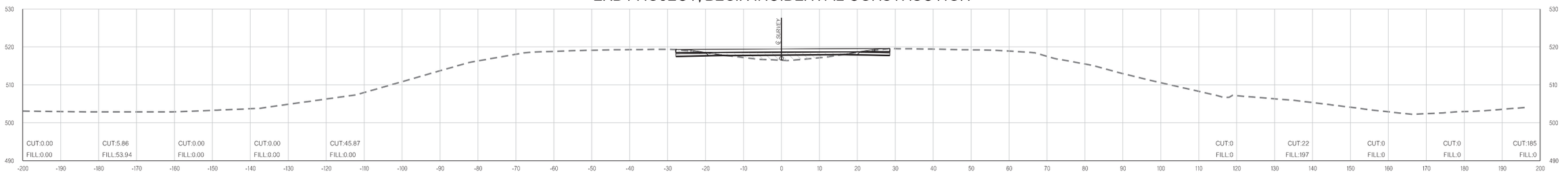
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

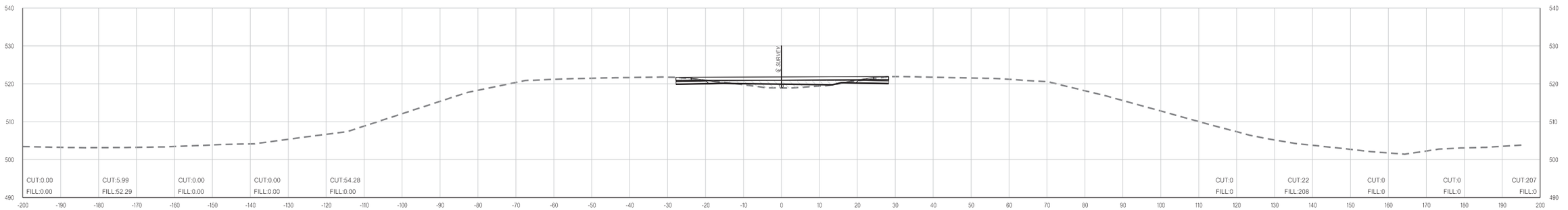


376+00.00

END PROJECT, BEGIN INCIDENTAL CONSTRUCTION



375+00.00



374+00.00

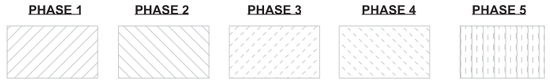
COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X036

10-29-20 pw:\\APP-PWS05-345.agency.OK.local:ODOTProjects\Documents\Projects\Division 1\JP30416-04\Roadway\Plan Sheets\30416(04) - CROSS SECTION.dgn

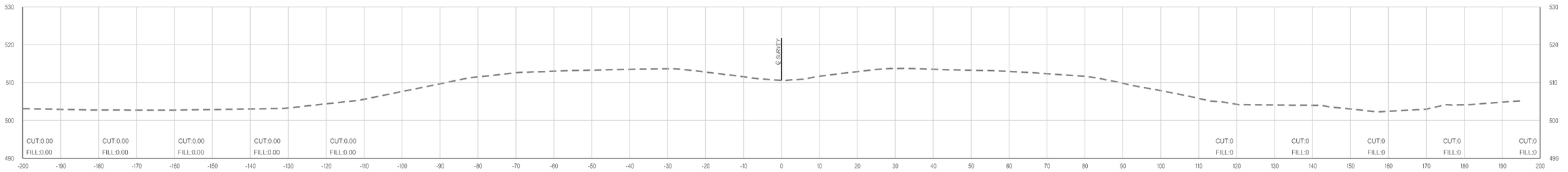
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

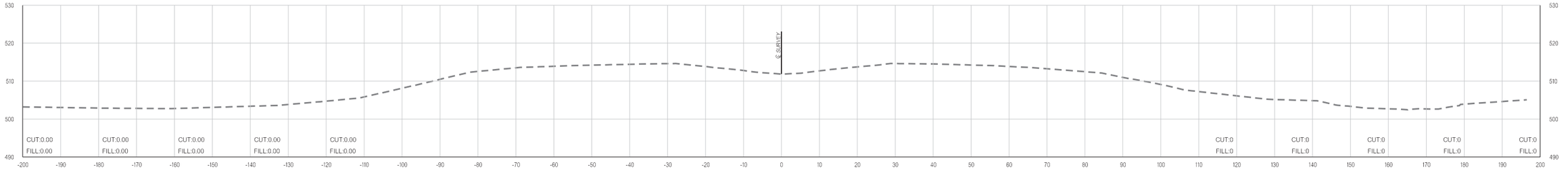
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



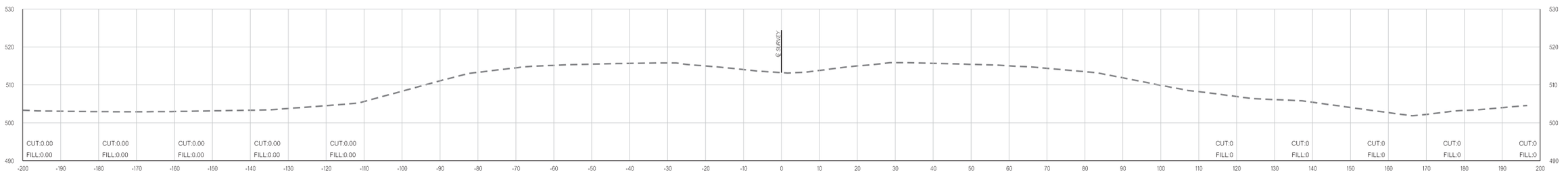
PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**



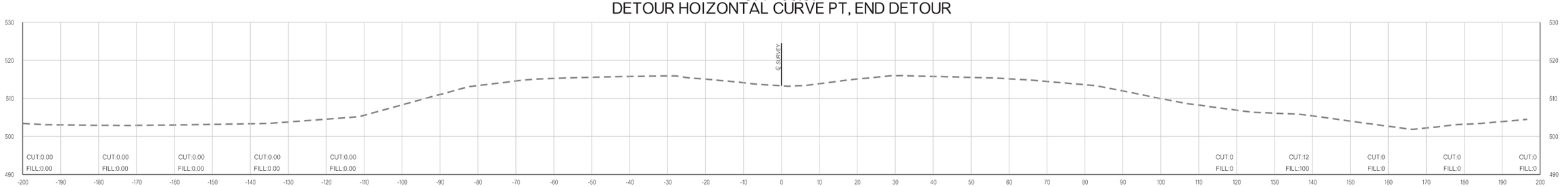
379+00.00



378+00.00



377+06.37
DETOUR HOIZONTAL CURVE PT, END DETOUR



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COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X037

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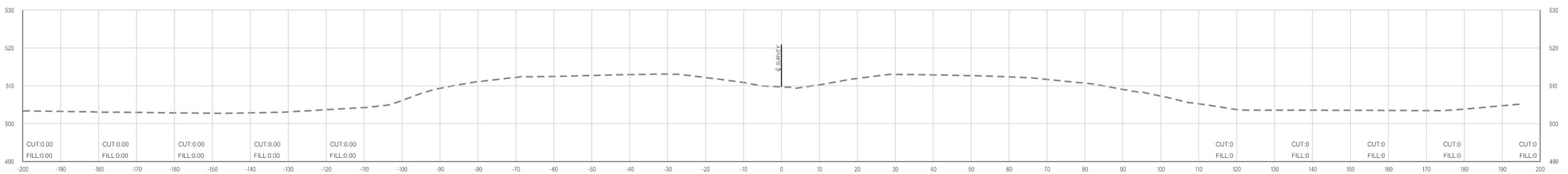
OKLAHOMA DEPARTMENT OF TRANSPORTATION					
FED. ROAD DIST. NO.	STATE	JOB PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.				

DESCRIPTION	REVISIONS	DATE

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

PHASE 1 **PHASE 2** **PHASE 3** **PHASE 4** **PHASE 5**

381+00.00
END INCIDENTAL CONSTRUCTION



379+92.11

COUNTY MUSKOGEE HIGHWAY US-62 STATE JOB NO. 30416(04) SHEET NO. X038

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