

LOCATION MAP
OKLAHOMA COUNTY

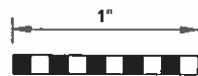


DESIGN DATA

ADT 2018	=	7,000
ADT 2038	=	11,200
V	=	50 MPH

SCALES

PLAN	1" = 40'
PROFILE HORIZONTAL	1" = 40'
PROFILE VERTICAL	1" = 40'



CONVENTIONAL SIGNS

	PROPOSED ROADS
	RAILROADS
	RANGE AND TOWNSHIP
	SECTION LINES
	QUARTER SECTION LINES
	FENCES
	GROUND LINES
	EXISTING ROADS
	BASE LINE
	GRADE LINES
	TELEPHONE AND TELEGRAPH
	ELECTRIC LINES
	OIL WELLS
	BUILDINGS
	DRAINAGE STRUCTURES - EXISTING
	DRAINAGE STRUCTURES - NEW
	RIGHT-OF-WAY LINES - EXISTING
	RIGHT-OF-WAY LINES - NEW
	RIGHT-OF-WAY MARKERS - IN PLACE
	RIGHT-OF-WAY MARKERS - REMOVE AND RESET
	RIGHT-OF-WAY MARKERS - NEW
	CONTROLLED ACCESS
	RIGHT-OF-WAY FENCE

CITY OF MIDWEST CITY

PLAN OF PROPOSED N.E. 36TH STREET OVER CRUTCHO CREEK

PROJECT NO. 1563
BRIDGE REHABILITATION PLANS

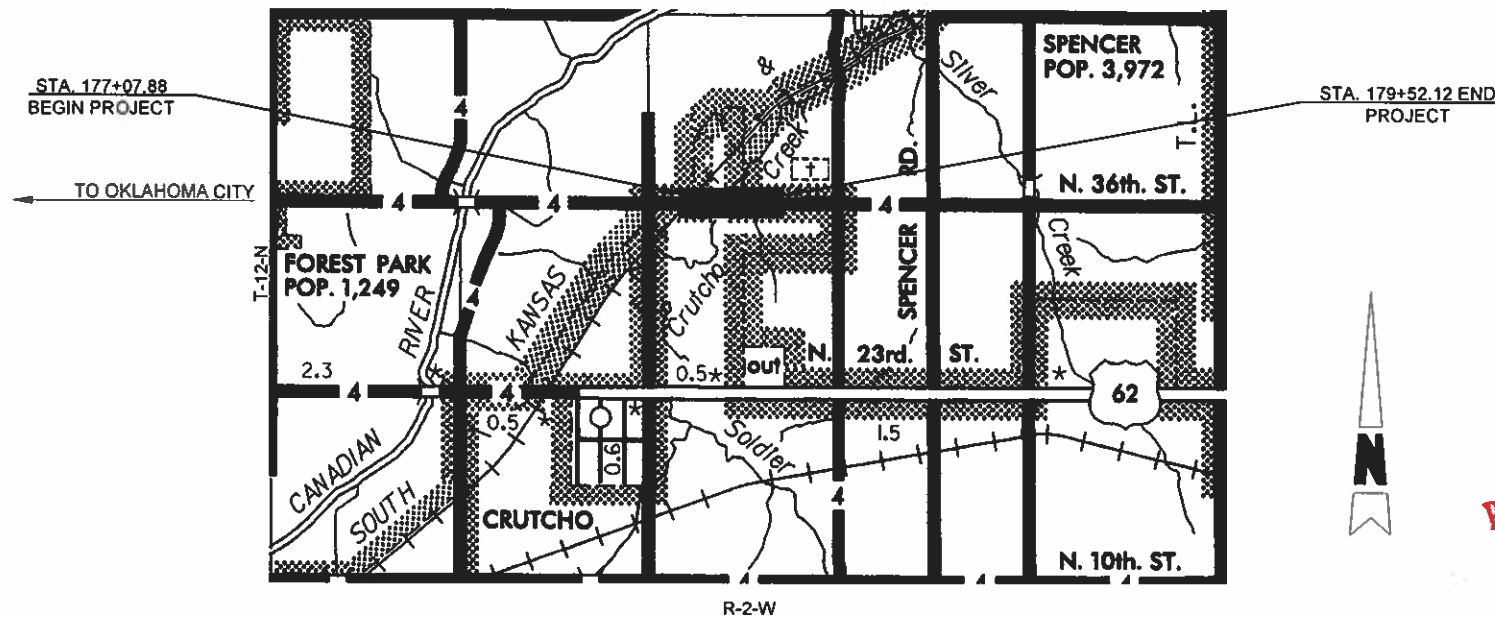
OKLAHOMA COUNTY

LATITUDE 35°30'27.27" N, LONGITUDE 97°23'59.11" W

SHEET NO.	SHEET DESCRIPTION
0001	TITLE SHEET
AB01, AB02	GENERAL NOTES AND SUMMARY OF PAY QUANTITIES - BRIDGE
AR01	GENERAL NOTES AND SUMMARY OF PAY QUANTITIES - ROADWAY
AT01	GENERAL NOTES AND SUMMARY OF PAY QUANTITIES - TRAFFIC
B001, B002	GENERAL PLAN AND ELEVATION - BRIDGE 'A'
B003	BRIDGE CONSTRUCTION SEQUENCING
B004	DETAILS OF REMOVALS - BRIDGE
B005, B006	DETAILS OF SUPERSTRUCTURE
B007	DETAILS OF ROCKER BEARINGS AT ABUTMENTS
B008	DETAILS OF RAILINGS
R001	DETAILS OF REMOVALS AND EROSION CONTROL
T001	TRAFFIC CONTROL PLAN

ODOT REQUIRED STANDARD DRAWINGS

2019 ROADWAY	2009 TRAFFIC	2009 BRIDGE
RSF-0	TCS1-1-01	EJ-DTL-02E
SSS-2-1	TCS2-1-00	
LECS-5-2	TCS3-1-01	
	TCS4-1-01	
	TCS5-1-00	
	TCS6-1-02	
	TCS7-1-02	
	TCS8-1-00	
	TCS9-1-01	
	TCS10-1-00	
	PM6-1-00	
	WSD1-1-00	
	WSD2-1-00	
	SBS1-1-00	



City of Midwest City
RELEASED FOR CONSTRUCTION
1/04/24
[Signature]

2019 OKLAHOMA STANDARD SPECIFICATIONS FOR
HIGHWAY CONSTRUCTION GOVERN.

EST NO. 22-02415

PROJECT LENGTH

ROADWAY LENGTH	00.00 FT	0.00 MI
BRIDGE LENGTH	244.25 FT	0.046 MI
PROJECT LENGTH		0.046 MI



BRIDGE REHAB PLANS
PREPARED BY EST, INC.

EST
615 N. HUDSON AVE., SUITE 300
OKLAHOMA CITY, OK 73102
(405) 815-3600

[Signature] 11/15/23
AMY BACKEL, OKLA. LIC NO. 27708 DATE



EST, INC. CERTIFICATE OF AUTHORIZATION NO. 3639 (PELS)
EST, INC. CERTIFICATE OF AUTHORIZATION EXPIRES 6/30/2024

PROJECT NO. 1563

SHEET NO. 0001

BRIDGE GENERAL NOTES

SPECIFICATIONS

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

DESCRIPTION OF WORK

IN GENERAL, THE WORK TO BE PERFORMED ON THIS PROJECT CONSISTS OF THE FOLLOWING:

1. CLEAN ALL BRIDGE SEATS AND PIER CAPS OF DEBRIS.
2. EXPANSION JOINT REPLACEMENT WITH A PREFORMED SILICONE FOAM JOINT AT EACH ABUTMENT.
3. REPLACE ROCKER BEARINGS AT ABUTMENTS WITH IN-KIND STEEL ROCKER BEARINGS.
4. REPAIR SETTLEMENT ISSUES AT APPROACH SLABS BETWEEN THE EXISTING CURB AND WINGWALL.
5. REPAIR AND REPLACE CORRODED SECTIONS OF EXISTING BRIDGE RAILS.
6. EXTEND BRIDGE DRAINS.

PROTECTION OF EXISTING BRIDGES, APPROACHES, AND UNDERPASSES

THE BIDDERS AND CONTRACTOR ARE RESPONSIBLE FOR FULLY UNDERSTANDING THE NATURE OF THE WORK AND THE CONDITIONS UNDER WHICH THE WORK WILL BE PERFORMED. THE CONTRACTOR SHALL ADOPT METHODS CONSISTENT WITH GOOD CONSTRUCTION PRACTICE AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGING THE EXISTING BRIDGES, APPROACHES, AND UNDERPASSES. ANY DAMAGE TO THE EXISTING BRIDGES, APPROACHES, OR UNDERPASSES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER.

VERIFICATION OF EXISTING CONDITIONS

ALL DIMENSIONS OF THE EXISTING BRIDGE AND ROADWAYS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, BOTH SURVEYED AND AS-BUILT, NECESSARY TO CONNECT THE NEW MATERIAL AND SHALL BE SOLELY RESPONSIBLE FOR THE ACCURACY THEREOF. REFER TO THE AS-BUILT PLANS FOR DIMENSIONS AND DETAILS NOT SHOWN IN THE PLANS.

ORIGINAL AS BUILT PLANS

FOR ADDITIONAL DETAILS AND INFORMATION, THE BIDDERS AND CONTRACTOR SHOULD CONSULT THE AS-BUILT PLANS FOR THE ORIGINAL CONSTRUCTION OF THE BRIDGES. THE AS-BUILT PLANS ARE AVAILABLE FROM THE CITY.

PREFORMED SILICONE FOAM JOINT

PRIOR TO SHIFTING TRAFFIC TO TWO-WAY TRAFFIC ON THE NORTH SIDE OF THE BRIDGE, THE NORTH SIDE OF THE EXPANSION JOINTS SHALL BE FINISHED. ALL MATERIALS REMOVED FROM THE EXISTING BRIDGE SHALL BE CONTAINED AND PREVENTED FROM FALLING ON THE STREAM AND CHANNEL BANKS BELOW THE BRIDGE. ALL MATERIALS REMOVED FROM THE EXISTING BRIDGE SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

ALL COSTS NECESSARY TO COMPLETE THE EXPANSION JOINT REPAIRS AS SPECIFIED INCLUDING THE COST OF CLEANING THE EXISTING REINFORCING STEEL, CONCRETE, TEMPORARILY PROTECTING THE REPAIRS WITH STEEL PLATES OR OTHER METHODS AS NEEDED, PREFORMED FOAM, SILICONE, ADHESIVES, SUPPORT PLATES, STEEL ANGLES, ANCHOR BARS, WELDING, MATERIAL, LABOR, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT OF "PREFORMED SILICONE EXPANSION JOINTS".

REMOVAL OF BRIDGE ITEMS

THE PAY ITEM "REMOVAL OF BRIDGE ITEMS" SHALL INCLUDE THE REMOVAL AND DISPOSAL OF THE FOLLOWING ITEMS FROM THE EXISTING BRIDGE AS SHOWN IN THE PLANS:

1. PORTIONS OF DECK SLABS INCLUDING SIDEWALKS AND CURBS AND EXPANSION JOINTS.
2. PORTIONS OF METAL HANDRAILS.
3. PORTIONS OF BEARING ASSEMBLIES AT ABUTMENTS.

WHEN MAKING REMOVALS ON THE EXISTING BRIDGES, THE CONTRACTOR SHALL TAKE EVERY PRECAUTION NECESSARY TO PREVENT DAMAGING THE REMAINING COMPONENTS OR ANY NEW CONSTRUCTION ATTACHED TO THE BRIDGE. ANY COMPONENT OF THE EXISTING BRIDGE OR NEW CONSTRUCTION ATTACHED TO THE BRIDGES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED OR COMPLETELY REPLACED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER. THE ENGINEER WILL DETERMINE IF THE COMPONENT CAN BE SATISFACTORILY REPAIRED OR IF THE COMPONENT SHALL BE COMPLETELY REPLACED. BEFORE MAKING ANY REMOVALS WITH IMPACT TOOLS OR EQUIPMENT, THE ABUTMENTS AND SHALL BE UNIFORMLY SAW CUT ALONG THE REMOVAL OR CUT LINES SHOWN IN THE PLANS. THE USE OF ANY TOOL OR EQUIPMENT THAT RESULTS IN EXCESSIVE REMOVAL OF OR DAMAGE TO THE COMPONENTS OF THE BRIDGE NOT INTENDED FOR REMOVAL WILL NOT BE ALLOWED. THE ENGINEER WILL DETERMINE IF THE TOOL OR EQUIPMENT WILL BE ALLOWED.

ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED OR AS SHOWN IN THE PLANS INCLUDING THE COST OF SAWING, CUTTING, GRINDING, CHIPPING, HAMMERING, BLAST CLEANING, DEMOLITION, CONTAINMENT AND REMOVAL OF DEBRIS, MATERIAL, LABOR, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER LUMP SUM OF "REMOVAL OF BRIDGE ITEMS"

FALSEWORK AND JACKING

INSTALLATION OF FALSEWORK ON THE BRIDGE WILL BE REQUIRED AS FOLLOWS:

1. TO CONTAIN AND PREVENT MATERIALS REMOVED FROM THE EXISTING BRIDGE OR NEW CONSTRUCTION MATERIALS ATTACHED TO THE BRIDGE FROM FALLING IN THE STREAM OR ON THE CHANNEL BANKS BELOW THE BRIDGE.
2. TO LIFT AND TEMPORARILY SUPPORT THE EXISTING BEAM ENDS AS REQUIRED TO REPLACE THE

EXISTING BEARING ASSEMBLIES. ANY DISPLACEMENT TO THE SUPERSTRUCTURE WHILE JACKING SHALL BE THE MINIMUM AMOUNT NECESSARY TO REMOVE THE LOADS FROM THE BEARINGS. WHEN LIFTING, THE DIFFERENTIAL VERTICAL DISPLACEMENT BETWEEN ADJACENT BEAM ENDS SHALL BE NO MORE THAN $\frac{1}{4}$ ". THE JACKING AND INSTALLATION OF FALSEWORK SHALL NOT RESULT IN DAMAGE TO THE BRIDGE OR ANY NEW MATERIAL ATTACHED TO THE BRIDGE. ANY DAMAGE TO THE BRIDGE OR NEW MATERIAL ATTACHED TO THE BRIDGE RESULTING FROM THE JACKING OR INSTALLATION OF FALSEWORK SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER.

THE CONTRACTOR SHALL SUBMIT A PLAN OF THE FALSEWORK TO THE ENGINEER FOR APPROVAL. THE PLAN SHALL INCLUDE A LAYOUT OF FALSEWORK AND STRUCTURAL CALCULATIONS FOR THE DESIGN OF THE FALSEWORK. THE SUBMITTED PLAN SHALL BE DESIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF OKLAHOMA. THE PLAN AND STRUCTURAL CALCULATIONS SHALL BE PREPARED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, LATEST EDITION AND SECTION 502 OF THE STANDARD SPECIFICATIONS. INSTALLATION OF THE FALSEWORK SHALL NOT BEGIN UNTIL THE CONTRACTOR HAS RECEIVED APPROVAL OF THE SUBMITTED PLAN FROM THE ENGINEER.

ALL COSTS NECESSARY TO COMPLETE THE WORK AS SPECIFIED OR AS SHOWN IN THE PLANS INCLUDING THE COST OF FALSEWORK, ENGINEER SERVICES, MATERIAL, LABOR, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER LUMP SUM OF "FALSEWORK AND JACKING".

ANCHORAGE INTO EXISTING CONCRETE

NEW REINFORCING STEEL BARS AND ANCHOR BOLTS SHALL BE ANCHORED INTO THE EXISTING CONCRETE WHERE SHOWN ON THE PLANS. THE NEW REINFORCING STEEL BARS AND ANCHOR BOLTS SHALL BE ANCHORED INTO HOLES DRILLED INTO THE EXISTING CONCRETE USING AN EPOXY ADHESIVE. THE EPOXY ADHESIVE SHALL BE "HILTI HTE 50 TRANSPORTATION EPOXY" (WWW.US.HILTI.COM) OR AN APPROVED EQUIVALENT. THE NEW REINFORCING STEEL BARS AND ANCHOR BOLTS SHALL BE ANCHORED INTO THE CONCRETE IN ACCORDANCE WITH SECTION 509.04.D(3) OF THE STANDARD SPECIFICATIONS EXCEPT WHERE MODIFIED BY THE EPOXY ADHESIVE MANUFACTURERS'S RECOMMENDATIONS.

DRILLING INTO THE CONCRETE TO INSTALL THE NEW REINFORCING STEEL BARS OR ANCHOR BOLTS SHALL BE ACCOMPLISHED WITHOUT CUTTING ANY REINFORCING STEEL BARS IN THE EXISTING CONCRETE. PRIOR TO DRILLING, THE CONTRACTOR SHALL LOCATE AND MARK THE REINFORCING STEEL BARS WITH NONDESTRUCTIVE TOOLS, EQUIPMENTS AND METHODS APPROVED BY THE ENGINEER. IF ANY REINFORCING STEEL BARS ARE ENCOUNTERED DURING DRILLING; THE DRILLING SHALL CEASE, THE FLAWED DRILL HOLE SHALL BE GROUTED AND A NEW HOLE SHALL BE DRILLED IN A LOCATION THAT IS CLEAR OF THE EXISTING REINFORCING STEEL BARS. ANY ADJUSTMENT IN THE LOCATIONS OF THE NEW REINFORCING STEEL BARS OR ANCHOR BOLTS FROM THE PLAN LOCATION SHALL BE THE MINIMUM AMOUNT NECESSARY TO AVOID CUTTING THE EXISTING STEEL BARS AND SHALL BE APPROVED BY THE ENGINEER.

THE NEW REINFORCING STEEL BARS AND ANCHOR BOLTS SHALL BE ANCHORED WITH EPOXY ADHESIVE ALONG THE FULL DEPTH OF THE DRILLED HOLES. THE ANCHORAGE LENGTH OR HOLE DEPTH SHALL BE NO LESS THAN BOTH THE DEPTHS SHOWN IN THE PLANS AND THE DEPTHS RECOMMENDED BY THE EPOXY ADHESIVE MANUFACTURER FOR THE PARTICULAR BAR OR ANCHOR BOLT SIZES. IF THE ANCHORAGE LENGTH OR HOLE DEPTH INCREASES BEYOND THE PLAN DIMENSIONS, THE TOTAL LENGTH OF THE REINFORCING STEEL BARS AND ANCHOR BOLTS SHALL BE INCREASED ACCORDINGLY.

ALL COSTS TO ANCHOR THE NEW REINFORCING STEEL BARS AND ANCHOR BOLTS INTO THE NEW OR EXISTING CONCRETE OF THE BRIDGES AS SPECIFIED OR AS SHOWN IN THE PLANS INCLUDING THE COST OF LOCATING EXISTING REINFORCING STEEL BARS, DRILLING, REPAIRING FLAWED DRILL HOLES, INCREASING THE LENGTH OF THE NEW REINFORCING STEEL BARS OR ANCHOR BOLTS BEYOND THE PLAN LENGTHS, EPOXY ADHESIVE, MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

PNEUMATICALLY PLACED MORTAR REPAIRS

PNEUMATICALLY PLACED MORTAR REPAIRS SHALL BE MADE ON THE ABUTMENTS. THE ACTUAL LOCATIONS AND EXTENTS OF THE REPAIRS SHALL BE DETERMINED BY THE ENGINEER. THE REPAIRS SHALL ONLY BE MADE IN THE AREAS SELECTED BY THE ENGINEER, AND PAYMENT WILL ONLY BE MADE FOR THE ACTUAL REPAIRS PERFORMED.

PRIOR TO MAKING THE MORTAR REPAIRS, ALL DETERIORATED, LOOSE AND UNSOUND CONCRETE SHALL BE REMOVED FROM THE REPAIR AREAS IN ACCORDANCE WITH THE GENERAL NOTE "REMOVAL OF UNSOUND CONCRETE." THE PNEUMATICALLY PLACED MORTAR SHALL BE "QUIKRETE SHOTCRETE MS" (WWW.QUIKRETE.COM) OR AN APPROVED EQUIVALENT. ALL USE OF PNEUMATICALLY PLACED MORTAR ON THE PROJECT SHALL BE IN ACCORDANCE WITH SECTION 521 OF THE STANDARD SPECIFICATIONS EXCEPT AS MODIFIED BY THE MORTAR MANUFACTURER'S RECOMMENDATIONS. CORROSION INHIBITOR SHALL BE APPLIED TO THE REPAIR AREAS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ANCHOR STUDS AND WELDED WIRE FABRIC REQUIRED BY SECTION 521.04.D(1) OF THE STANDARD SPECIFICATIONS WILL NOT BE MEASURED FOR PAYMENT. ALL COSTS OF MAKING REPAIRS WITH PNEUMATICALLY PLACED MORTAR INCLUDING THE COST OF ANCHOR STUDS, WELDED WIRE FABRIC, SHOTCRETE MORTAR, MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD OF "PNEUMATICALLY PLACED MORTAR."

ALL COST OF APPLYING CORROSION INHIBITOR TO THE REPAIR AREAS SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD OF "CORROSION INHIBITOR (SURFACE APPLIED)."

REMOVAL OF UNSOUND CONCRETE

PRIOR TO REMOVING ANY AREAS OF UNSOUND CONCRETE ON THE BRIDGES, A SAW OR CHIPPING TOOL SHALL BE USED TO CUT THE PERIMETER OF THE AREA TO A DEPTH OF AT LEAST ONE (1) INCH. THE CUTS SHALL BE MADE APPROXIMATELY PERPENDICULAR TO THE EXISTING SURFACE AND PARALLEL TO THE LINES OF THE STRUCTURE. ALL UNSOUND CONCRETE SHALL BE REMOVED WITHIN THE CUT PERIMETER. AFTER REMOVAL OF ALL UNSOUND CONCRETE, THE NEWLY EXPOSED CONCRETE SURFACE SHALL BE SAND-BLASTED OR WATER-BLASTED TO REMOVE ALL CONCRETE RESIDUE AND LOOSE PARTICLES, AND ALL EXPOSED REINFORCING STEEL SHALL BE SAND-BLASTED TO REMOVE RUST.

ALL UNSOUND CONCRETE REMOVALS SHALL BE ACCOMPLISHED WITH HAND TOOLS OR POWER-DRIVEN HAND TOOLS. NO VEHICLE MOUNTED TOOLS OR EQUIPMENT WILL BE ALLOWED TO MAKE ANY REMOVALS OF UNSOUND CONCRETE. ALL POWER-DRIVEN HAND TOOLS USED TO MAKE THE REMOVALS SHALL SATISFY SECTION 513.03.C OF THE STANDARD SPECIFICATIONS. ALL JACK HAMMER TOOLS SHALL BE OPERATED AT ANGLES NO GREATER THAN 45 DEGREES FROM THE REMOVAL SURFACES. THE USE OF ANY TOOL OR EQUIPMENT THAT RESULTS IN EXCESSIVE REMOVAL OF OR DAMAGE TO THE SOUND CONCRETE, AS DETERMINED BY THE ENGINEER, WILL NOT BE ALLOWED. ALL BLASTING EQUIPMENT SHALL SATISFY SECTION 513.03.A OF THE STANDARD SPECIFICATIONS.

ALL MATERIALS REMOVED FROM THE EXISTING BRIDGES SHALL BE CONTAINED AND PREVENTED FROM FALLING ON THE ROADWAY OR IN THE STREAM OR CHANNEL BANKS BELOW THE BRIDGES. ALL MATERIALS REMOVED FROM THE EXISTING BRIDGES SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

ALL COSTS NECESSARY TO REMOVE THE UNSOUND CONCRETE AND BLAST CLEAN THE CONCRETE SURFACES AND REINFORCING STEEL INCLUDING THE COST OF SAWING, CUTTING, GRINDING, CHIPPING, HAMMERING, BLAST CLEANING, DEMOLITION, CONTAINMENT AND REMOVAL OF DEBRIS, MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

EPOXY RESIN CRACK REPAIRS

CRACKS IN THE ABUTMENTS SHALL BE REPAIRED BY INJECTING WITH EPOXY RESIN. THE ACTUAL LOCATIONS AND EXTENTS OF THE CRACK REPAIRS SHALL BE DETERMINED BY THE ENGINEER. THE REPAIRS SHALL ONLY BE MADE IN THE AREAS SELECTED BY THE ENGINEER, AND PAYMENT WILL ONLY BE MADE FOR THE ACTUAL REPAIRS PERFORMED.

NO CRACKS SHALL BE REPAIRED UNTIL ALL UNSOUND CONCRETE ADJACENT TO THE CRACKS HAS BEEN REMOVED IN ACCORDANCE WITH THE GENERAL NOTE "REMOVAL OF UNSOUND CONCRETE." CRACKS EXTENDING THROUGH UNSOUND CONCRETE SHALL NOT BE REPAIRED WITH EPOXY RESIN BUT SHALL BE REMOVED WITH THE REMOVAL OF THE UNSOUND CONCRETE. ALL CRACK REPAIRS ON THE EXISTING BRIDGES SHALL BE CONDUCTED IN ACCORDANCE WITH SECTION 520 OF THE STANDARD SPECIFICATIONS.

ALL COSTS TO COMPLETE THE CRACK REPAIRS INCLUDING THE COST OF ALL CRACK CLEANING, CRACK PREPARATION, EPOXY RESIN, MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BIDS PER LINEAR FOOT OF "PREPARATION OF CRACKS, ABOVE WATER" AND PER GALLON OF "EPOXY RESIN, ABOVE WATER."

BEARING ASSEMBLIES

BEARING ASSEMBLIES SHALL SATISFY THE REQUIREMENTS OF SECTION 507 OF THE STANDARD SPECIFICATIONS.

ALL COSTS OF PROVIDING AND INSTALLING THE BEARING ASSEMBLIES AS SPECIFIED OR AS SHOWN IN THE PLANS INCLUDING ANCHOR PLATES, NUTS AND WASHERS AND ALL MATERIAL; LABOR; EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH OF "STRUCTURAL STEEL."

SEALING CONSTRUCTION JOINTS IN THE DECK SLABS

THE CONSTRUCTION JOINTS IN THE DECK SLABS SHALL BE SEALED WITH HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM) OR EPOXY RESIN AS SHOWN IN THE PLANS AND IN ACCORDANCE WITH SECTION 523 OF THE STANDARD SPECIFICATIONS.

ALL COSTS TO SEAL THE CONSTRUCTION JOINTS IN THE DECK SLABS INCLUDING THE COST OF CRACK PREPARATION, HMWM, RESIN, MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT OF "SEALER CRACK PREPARATION" AND THE UNIT PRICE BID PER GALLON OF "SEALER RESIN."

CLEANING DEBRIS FROM BRIDGE SEATS

THE CONTRACTOR SHALL CLEAN ALL DEBRIS FROM THE EXISTING BRIDGE SEATS. ALL DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER. ALL COSTS FOR THIS WORK SHALL BE INCLUDED IN OTHER ITEMS OF WORK.

STEEL DRAINS

CONTRACTOR SHALL PERFORM BRIDGE DRAIN WORK FROM A SNOOPER. THE CONTRACTOR SHALL NOT ACCESS BRIDGE DRAINS FROM BELOW THE BRIDGE AS A 404 PERMIT WAS NOT OBTAINED.

ALL COSTS TO EXTEND THE BRIDGE DRAINS, INCLUDING THE COST OF MATERIAL, LABOR, EQUIPMENTS, AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT OF "STRUCTURAL STEEL A36".

N.E. 36TH ST. OVER CRUTCHO CREEK

OKLAHOMA COUNTY

GENERAL NOTES AND SUMMARY OF PAY QUANTITIES - BRIDGE (SHEET NO. 1 OF 2)

PROJECT NO. 1563

SHEET NO. AB01

BRIDGE GENERAL NOTES (CONTINUED)

MECHANICAL SPLICES

ALL MECHANICAL SPLICES SHALL BE ONE OF THE FOLLOWING OR AN APPROVED EQUIVALENT:

1. nVENT LENTON SA COUPLER WITH MOUNTING PLATE, COATED (WWW.ERICO.COM)
2. BARSPLICE ZAP SCREWLOK TYPE 2 (WWW.BARSPLICE.COM)

THE MECHANICAL SPLICES SHALL SATISFY THE REQUIREMENTS OF SECTION 511.04.C.(3) OF THE STANDARD SPECIFICATIONS AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE LENGTHS OF REINFORCING STEEL BARS SHALL BE ADJUSTED IF NECESSARY TO ACCOMMODATE THE MECHANICAL SPLICES. ALL ADJUSTMENTS OF THE REINFORCING STEEL BARS SHALL BE CONDUCTED IN ACCORDANCE WITH THE MECHANICAL SPLICE MANUFACTURER'S RECOMMENDATIONS AND APPROVED BY THE ENGINEER.

ALL COSTS OF INSTALLING THE MECHANICAL SPLICES INCLUDING THE COST OF THE MECHANICAL SPLICES, ADJUSTING THE LENGTHS OF REINFORCING STEEL BARS TO ACCOMMODATE THE MECHANICAL SPLICES, MATERIAL, LABOR, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE PER BID EACH OF "MECHANICAL SPLICES".

PREFORMED SILICONE FOAM JOINTS

THE PREFORMED SILICONE FOAM JOINT SHALL BE CONSTRUCTED AS SHOWN IN THE PLANS AND IN ACCORDANCE WITH SECTION 518 OF THE STANDARD SPECIFICATIONS.

ALL COSTS TO INSTALL THE PREFORMED SILICONE FOAM JOINT INCLUDING THE COST OF PREFORMED FOAM, SILICONE, ADHESIVES, SUPPORT PLATES, STEEL ANGLES, L1 SUPPORT BARS, W1 AND W2 ANCHOR BARS, WELDING, MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT OF "PREFORMED SILICONE FOAM JOINTS."

PAY QUANTITY NOTES

- (BR-1) PAYMENT FOR THIS ITEM WILL BE BASED UPON PLAN QUANTITIES ONLY. SEE SECTION 109.01B OF THE STANDARD SPECIFICATIONS.
- (BR-2) INCLUDES THE FOLLOWING FOR FABRICATION OF STEEL PARTS OF ROCKER BEARINGS: 2,570.00 POUNDS.
- (BR-3) INCLUDES THE FOLLOWING FOR FABRICATION OF STEEL PARTS OF BRIDGE DRAIN: 1,150.00 POUNDS.
- (BR-4) ESTIMATED QUANTITY TO BE USED AS APPROVED BY THE ENGINEER.

PAY QUANTITIES				
0200 BRIDGE - NBI NO. 18335 - THREE SPAN (70'-100'-70') CONTINUOUS STEEL GIRDER BRIDGE WITH 45° SKEW LEFT FORWARD, 50'-0" CLEAR ROADWAY, 3'-0" SIDEWALKS AND TUBULAR BRIDGE RAIL				
ITEM		DESCRIPTION	UNIT	QUANTITY
502(B)	3310	FALSEWORK AND JACKING	(BR-1) LSUM	1.00
506(A)	7200	STRUCTURAL STEEL	(BR-1)(BR-2) LB	2,570.00
509(A)	210	CLASS AA CONCRETE	(BR-1) CY	18.00
511	2100	MECHANICAL SPLICES	(BR-1) EA	32.00
511(A)	2210	REINFORCING STEEL	(BR-1) LB	4,160.00
518(J)	0800	PREFORMED SILICONE FOAM JOINTS	(BR-1) LF	161.00
520(A)	1200	PREPARATION OF CRACKS, ABOVE WATER	(BR-4) LF	60.00
520(C)	1400	EPOXY RESIN, ABOVE WATER	(BR-4) GAL	6.00
521(A)	2200	PNEUMATICALLY PLACED MORTAR	(BR-4) SY	10.00
523(A)	3200	SEALER CRACK PREPARATION	(BR-1) LF	669.00
523(B)	3300	SEALER RESIN	(BR-1) GAL	7.00
535	7100	CORROSION INHIBITOR (SURFACE APPLIED)	(BR-1) SY	5.00
619(B)	6304	REMOVAL OF BRIDGE ITEMS	(BR-1) LSUM	1.00

0640 CONSTRUCTION PAY QUANTITIES				
ITEM		DESCRIPTION	UNIT	QUANTITY
641	2110	MOBILIZATION	LSUM	1.00

ALTERNATE 1 PAY QUANTITIES				
ITEM		DESCRIPTION	UNIT	QUANTITY
504	5110	TUBULAR METAL TRAFFIC RAIL	(BR-1) LF	117.00
512	3110	CLEANING AND PAINTING EXISTING BRIDGE METAL RAIL	(BR-1) LF	501.50
512	3300	COLLECTION AND HANDLING OF WASTE	(BR-1) LS	1.00

ALTERNATE 2 PAY QUANTITIES				
ITEM		DESCRIPTION	UNIT	QUANTITY
506(A)	7230	STRUCTURAL STEEL A36	(BR-1)(BR-3) LB	1,150.00

N.E. 36TH ST. OVER CRUTCHO CREEK	OKLAHOMA COUNTY
GENERAL NOTES AND SUMMARY OF PAY QUANTITIES - BRIDGE (SHEET NO. 2 OF 2)	
PROJECT NO. 1563	SHEET NO. AB02

ROADWAY GENERAL NOTES

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.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE ODOT 2019 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. SPECIAL PROVISIONS GOVERN OTHER STANDARD SPECIFICATIONS.

CONTRACTOR SHALL PROVIDE 14 DAYS WRITTEN NOTICE TO THE CITY PRIOR TO ANY CONSTRUCTION.

ALL TREES, BRUSH, AND OTHER DEBRIS THAT MIGHT INTERFERE WITH THE FLOW OF WATER SHALL BE CLEANED OUT WITHIN THE LIMITS OF WORK IN A MANNER APPROVED BY THE ENGINEER.

IN ORDER TO ALLEVIATE DUST CONDITION DURING GRADING OPERATIONS, THE CONTRACTOR SHALL SPRINKLE GRADING AT INTERVALS APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

CONTRACTOR SHALL PROVIDE MAINTENANCE OF ROADWAY FOR THE LENGTH OF THE ENTIRE PROJECT IN ACCORDANCE WITH SECTION 104.07 OF THE SPECIFICATIONS. THIS INCLUDES PATCHING OF EXISTING DRIVING LANES AND SHOULDERS AS REQUIRED.

THE CONTRACTOR SHALL NOT WASTE ANY EXCESS EXCAVATION UNTIL ALL PLANNED EMBANKMENTS AND BACKFILLS ARE COMPLETED.

THE CONTRACTOR SHALL FOLLOW ODOT STANDARD PDT-2-(LATEST REVISION) FOR PAVEMENT EDGE/SHOULDER DROP OFF.

ONLY THE SILICONE SEALANT OPTIONS, FROM STANDARD LECS-5, WILL BE ALLOWED ON THIS PROJECT.

ALL DIMENSIONS OF THE EXISTING BRIDGE AND ROADWAYS SHOWN ON THE PLANS ARE APPROXIMATE ONLY, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS NECESSARY TO CONNECT THE NEW MATERIAL AND SHALL BE SOLELY RESPONSIBLE FOR THE ACCURACY THEREOF, REFER TO THE AS-BUILT PLANS FOR DIMENSIONS AND DETAILS NOT SHOWN IN THE PLANS.

THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR FOURTEEN (14) DAYS PRIOR TO ALL CONSTRUCTION ACTIVITIES THAT REQUIRES A LANE CLOSURE.

ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF PUBLIC IMPROVEMENTS" MIDWEST CITY, OKLAHOMA AND SHALL BE UNDER THE SUPERVISION OF THE DEVELOPMENT SERVICES DEPARTMENT.

ANY CONSTRUCTION ITEMS THAT ARE NOT LISTED IN THE SUMMARY OF QUANTITIES SHALL BE CONSIDERED INCIDENTAL CONSTRUCTION ITEMS. THE COST OF INCIDENTAL CONSTRUCTION ITEMS SHALL BE INCLUDED IN THE COST OF OTHER BID ITEMS.

PAVING SUBGRADE SHALL BE COMPACTED TO A DENSITY OF AT LEAST 95% OF THE MINIMUM DRY DENSITY OBTAINED BY THE STANDARD COMPACTION TEST (ASTM D-698). TEST REPORTS SHALL BE SUBMITTED TO THE MIDWEST CITY ENGINEER'S OFFICE.

REFER TO THE STANDARD TYPICAL SECTIONS FOR CONCRETE PAVING DESIGN STANDARDS SHEET FOR RESIDENTIAL COLLECTOR STREET PAVING.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND COORDINATING WITH ALL PUBLIC OR PRIVATE UTILITY COMPANIES IN THE VICINITY OF CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND MAINTAINING CONSTRUCTION TRAFFIC CONTROL SIGNS AND DEVICES AS REQUIRED BY THE CITY OF MIDWEST CITY AND THE LATEST EDITION OF PART VI OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OR REPAIR OF TRAFFIC CONTROL DEVICES DAMAGED DUE TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ALL WORK THROUGH THE CITY OF MIDWEST CITY ENGINEER. NEW MATERIALS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO USE.

UNLESS OTHERWISE SPECIFIED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN CONSTRUCTION STAKING.

ALL PAVEMENT REMOVAL CONTIGUOUS TO PAVEMENT REMAINING SHALL BE SAWED IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM THE REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.

IN AREAS OF EXCAVATION, THE SUBGRADE SHALL BE SCARIFIED TO THE DEPTH SHOWN ON THE DETAIL, AND RECOMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THE MAXIMUM DRY DENSITY OBTAINED BY THE STANDARD COMPACTION TEST (ASTM D-698) AT A WATER CONTENT WITHIN 3% OF OPTIMUM.

UNLESS OTHERWISE STATED IN THE GENERAL CONDITIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TESTING. THE RESULTS OF THE TEST SHALL BE FORWARDED TO THE ENGINEER FOR HIS REVIEW AND APPROVAL. THE SOILS LABORATORY SHALL DETERMINE THE SUITABILITY OF EXISTING ON SITE MATERIAL PRIOR TO BEGINNING ANY FILL OPERATIONS.

SOLID SLAB SODDING SHALL BE PLACED 18" BEHIND THE CURB FOR EROSION PROTECTION.

THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION OF ALL UTILITIES AND MUST HAVE ALL UTILITIES LOCATED PRIOR TO COMMENCING ANY EXCAVATION. THE CONTRACTOR SHALL VERIFY THE INVERT AND FLOWLINE ELEVATIONS OF ALL WATER LINES, SANITARY SEWERS, STORM DRAINS, DRAINAGE STRUCTURES, AND SURFACE DRAINAGE COURSES PRIOR TO LAYING ANY NEW PIPE. THE CONTRACTOR MUST CALL OKIE AT (405) 840-5032 TO HAVE ALL PUBLIC UTILITIES (WATER AND SANITARY SEWER LINES) AND FRANCHISED UTILITIES (ELECTRIC LINES, TELEPHONE CABLES, FIBER OPTIC LINES, CABLE TELEVISION, GAS LINES, AND OIL PIPELINES) LOCATED AT LEAST TWO (2) DAYS PRIOR TO STARTING CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITY LINES AND STRUCTURES, WHETHER SHOWN OR NOT, BOTH PUBLIC AND PRIVATE. ANY DAMAGE TO THE UTILITY LINE OR STRUCTURE, BECAUSE OF THE CONTRACTOR'S ACTIONS, SHALL BE REPAIRED SOLELY AT THE CONTRACTOR'S EXPENSE TO A CONDITION AS GOOD OR BETTER THAN THAT PRIOR TO THE DAMAGE.

THE CONTRACTOR MUST CALL 9-1-1 IMMEDIATELY IF A NATURAL GAS PIPELINE IS CUT, DAMAGED OR OTHERWISE DISTURBED. THE MIDWEST CITY FIRE DEPARTMENT AND OKLAHOMA NATURAL GAS COMPANY MUST INSPECT THE PIPE BEFORE WORK CAN RESUME AT THAT LOCATION.

THE CONTRACTOR MUST NOTIFY THE FOLLOWING PERSONS AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF PLACING OR REMOVING ANY BARRICADES OR OTHERWISE MODIFYING EXISTING TRAFFIC CONTROL DEVICES OR PLACING ANY TEMPORARY TRAFFIC CONTROL DEVICE:

ENGINEER (405) 739-1215
CONSTRUCTION INSPECTOR (405) 739-1267

THE CONTRACTOR MUST NOTIFY ALL AFFECTED CITY UTILITY CUSTOMERS AT LEAST TWO (2) WORKING DAYS PRIOR TO ANTICIPATED SERVICE INTERRUPTION DURING CONSTRUCTION. STREETS TEMPORARILY CLOSED TO THROUGH TRAFFIC DURING CONSTRUCTION SHALL REMAIN OPEN TO LOCAL TRAFFIC TO THE MAXIMUM EXTENT PRACTICAL DURING THE WORK. DETOUR ROUTES SHALL BE FURNISHED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH AND ERECT ALL DETOUR SIGNAGE AS DIRECTED.

WHERE WORK IS CARRIED ON, IN, OR ADJACENT TO ANY STREET, ALLEY, OR PUBLIC PLACE, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, FURNISH AND ERECT SUCH BARRICADES, FENCES, LIGHTS, AND/OR OTHER PROTECTIVE BARRIERS, AND TAKE SUCH OTHER PRECAUTIONARY MEASURES FOR THE PROTECTION OF PERSONS OR PROPERTY AND OF THE WORK AS ARE NECESSARY. A SUFFICIENT NUMBER OF BARRICADES SHALL BE ERECTED TO KEEP VEHICLES FROM BEING DRIVEN INTO ANY WORK UNDER CONSTRUCTION. FAILURE TO COMPLY WITH THIS REQUIREMENT WILL RESULT IN THE ENGINEER SHUTTING DOWN THE WORK UNTIL THE CONTRACTOR HAS PROVIDED THE NECESSARY PROTECTION. ALL SUCH BARRICADES AND SIGNS AND THE USE THEREOF SHALL BE IN THE STRICT COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, PART VI - TEMPORARY TRAFFIC CONTROL

ALL CONSTRUCTION MATERIALS AND WORK SHALL CONFORM TO THE APPLICABLE CITY OF MIDWEST CITY AND THE OKLAHOMA DEPARTMENT OF TRANSPORTATION (ODOT) STANDARDS AND SPECIFICATIONS WITH THE ADDITIONAL SUPPLEMENTS, AS REFERENCED IN THE PROJECT DOCUMENTS.

THE CONTRACTOR SHALL DEVELOP AND MAKE ALL DETAIL SURVEYS NEEDED FOR CONSTRUCTION. THE COST OF THE CONSTRUCTION SURVEY AND STAKING SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF WORK..

ALL WORK NOT CLASSIFIED AS A CONTRACT PAY ITEM SHALL BE CONSIDERED INCIDENTAL CONSTRUCTION AND THE COST FOR SUCH SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF WORK.

ALL REMOVED SALVAGEABLE ITEMS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

ALL DITCHES DISTURBED DURING CONSTRUCTION SHALL BE RESHAPED AND SLOPED TO DRAIN. SOLID SLAB SOD SHALL BE USED IN ALL AREAS WHERE SOLID HAS BEEN EXPOSED AND POSITIVE MEANS OF SOD STABILIZATION SHALL BE USED TO PREVENT DISPLACEMENT OF SOD BY STORM WATERS.

EROSION CONTROL DEVICES IN THE FORM OF SEDIMENT FENCES ARE REQUIRED AT DRIVEWAY CULVERTS, STREET CULVERTS, DRAINAGE STRUCTURES, STORM SEWER MANHOLES, AND SANITARY SEWER MANHOLES LOCATED IN DITCHES WHERE SOIL HAS BEEN DISTURBED. THOSE ITEMS SHALL BE PLACED AS DIRECTED BY THE ENGINEER AND THE COST SHALL BE INCLUDED IN OTHER ITEMS.

SEDIMENT CONTROL FOR UTILITY CONSTRUCTION IS REQUIRED. TRENCHES MUST BE BACKFILLED AT THE END OF EACH DAY'S WORK. NO MORE TRENCH SHALL BE OPENED THAN CAN BE COMPLETED IN THE SAME DAY UNLESS TEMPORARY SILT FENCE IS PLACED IMMEDIATELY DOWNSTREAM OF ANY AREA INTENDED TO REMAIN DISTURBED FOR MORE THAN ONE DAY. EXCAVATED MATERIALS SHALL BE PLACED ON THE HIGH SIDE OF THE TRENCH.

CITY PERSONNEL ARE NOT PERMITTED TO ENTER ANY TRENCH OR EXCAVATION MORE THAN FIVE (5) FEET DEEP, FOR ANY REASON, UNLESS IT IS SLOPED OR SHORED IN ACCORDANCE WITH 29 CFR 1926 OSHA SUBPART P, "EXCAVATION AND TRENCHES."

0100 ROADWAY		PAY QUANTITIES		
ITEM		DESCRIPTION	UNIT	QUANTITY
(1) 201(A)	1200	CLEARING AND GRUBBING	LSUM	1.00
202(A)	2200	UNCLASSIFIED EXCAVATION	(R-1) CY	5.00
221(B)	2300	TEMPORARY SILT FENCE	(R-8) LF	380.00
230(A)	7200	SOLID SLAB SODDING	LS	1.00
303(A)	1200	AGGREGATE BASE TYPE A	CY	5.00
610(A)	5200	4" CONCRETE SIDEWALK	SY	20.00

(1) CLEARING AND GRUBBING WORK SHALL EXTEND TO CLEANING ANY DEBRIS ON THE BRIDGE ABUTMENTS, AND CLEARING ALL DIRT AND DEBRIS ON ALL BRIDGE SURFACES AT THE END OF THE PROJECT.

ALL DISTURBED, UNPAVED AREAS WITHIN EASEMENTS AND RIGHT-OF-WAY SHALL BE CLEARED, SODDED, AND WATERED IN ACCORDANCE WITH ODOT SPECIFICATIONS SECTION 230, "SODDING AND SPRIGGING", AS REQUIRED UNDER THE "SOLID SLAB SODDING" PAY ITEM IF PROVIDED OR AS OTHERWISE NOTED ON THE PLANS. SODDED AREAS SHALL BE REPAIRED AND MAINTAINED UNTIL ALL PORTIONS OF THE PROJECT ARE COMPLETE AND APPROVED FOR FINAL ACCEPTANCE. ALL AREAS DISTURBED AS A RESULT OF THE CONTRACTOR'S ACTIONS SHALL BE RESTORED IN A MANNER ACCEPTABLE TO THE ENGINEER IN A CONDITION AS GOOD OR BETTER THAN THAT PRIOR TO THE DISTURBANCE AT NO EXPENSE TO THE CITY.

PAY QUANTITY NOTES:

- (R-1) PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITY ONLY. SEE SECTION 109.01B OF THE STANDARD SPECIFICATIONS
- (R-8) PRICE BID TO INCLUDE COST OF ALL NECESSARY MAINTENANCE, MAINTAINING DEVICE IN PROPER UPRIGHT POSITION, REMOVAL OF DEVICE, AND REMOVAL OF SEDIMENT WHEN IT REACHES HALF THE HEIGHT OF THE DEVICE

N.E. 36TH ST. OVER CRUTCHO CREEK OKLAHOMA COUNTY

GENERAL NOTES AND SUMMARY OF PAY QUANTITIES - ROADWAY

GENERAL TRAFFIC CONSTRUCTION NOTES

FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION ON THIS PROJECT, THE CONTRACTOR SHALL CONTACT THE MIDWEST CITY ENGINEERING AND CONSTRUCTION SERVICES DEPARTMENT AND ADVISE THE OFFICE WHEN SAID CONSTRUCTION WILL BEGIN AND THAT WIDE LOADS OVER 11 FT. SHOULD BE ADVISED AND RESTRICTED. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL CONTACT THE CITY AND ADVISE THE OFFICE THAT THE PROJECT IS COMPLETE.

THE STRUCTURAL DESIGN OF ALL POLES, MAST ARMS, HIGH-MAST POLES, AND OTHER SUPPORTS FOR SIGNS, LUMINAIRES, AND SIGNALS AS WELL AS THEIR CONNECTIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS. THE MANUFACTURER SHALL ENSURE THE FOLLOWING ARE APPLIED TO THE DESIGN:

THE MINIMUM DESIGN WIND SPEED AND DESIGN LIFE AS REQUIRED IN THE AASHTO SPECIFICATIONS;

THE CALCULATED STRESSES AND FORCES FROM THE DESIGN LOADINGS DO NOT EXCEED THOSE REQUIRED IN THE AASHTO SPECIFICATIONS;

A CATEGORY I FATIGUE IMPORTANCE FACTOR (IF) FOR ALL STRUCTURES; NO VIBRATORY MITIGATION SHALL BE ALLOWED. TRUCK-INDUCED GUSTS SHALL BE APPLIED TO ALL OVERHEAD TRAFFIC SIGNAL SUPPORTS.

ALL MEMBERS ARE AT LEAST THE MINIMUM THICKNESS AS REQUIRED IN THE AASHTO SPECIFICATIONS;

LUMINAIRE MAST ARMS SHALL BE DESIGNED TO SUPPORT AT LEAST A 50 LB. (22.7 KG) LUMINAIRE WITH AN EFFECTIVE PROJECTED AREA OF 2.5 FT2(0.23 M2);

THE ANCHOR BOLT DESIGN AND AMOUNT OF ANCHOR BOLTS TO BE USED SHALL BE AS REQUIRED IN THE AASHTO SPECIFICATIONS.

SIGNAL MAST ARMS AND POLES SHALL BE DESIGNED FOR SPECIFIC SIGNAL HEAD AND SIGN PLACEMENT.

UNLESS SITE SPECIFIC GEOTECHNICAL DATA IS AVAILABLE, FOUNDATIONS SHALL BE DESIGNED UTILIZING THESE PARAMETERS; SHEAR STRENGTH OF COHESIVE SOIL (C) OF 500 PSF, ANGLE OF INTERNAL FRICTION (F) OF 22 DEGREES, AND EFFECTIVE UNIT WEIGHT OF SOIL (G) OF 120 PCF.

MINIMUM HAND HOLE SIZE OF 3 INCH WIDTH BY 5 INCH HEIGHT.

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

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

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

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 CONTRACTOR AND SHALL BE NEATLY STACKED ON THE JOB SITE, AS DESIGNATED BY THE ENGINEER UNTIL SUCH TIME AS CONTRACTOR PERSONNEL CAN REMOVE THE MATERIAL FROM THE JOB SITE.

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

ALL ANCHOR BOLTS SHALL BE GRADE A-36 STEEL.

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

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.

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 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-2 (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.

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

EXISTING ROADWAY SHALL REMAIN OPEN DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER BARRICADES, LIGHTS, AND SIGNING WITHIN THE LIMITS OF CONSTRUCTION. 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 THE STANDARD DRAWINGS.

THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR FOURTEEN (14) DAYS PRIOR TO ALL CONSTRUCTION ACTIVITIES THAT REQUIRE A LANE/RAMP/TOLL FACILITY CLOSURE.

INSTALL PROJECT LIMIT AND ADVANCE WARNING SIGNS AS SHOWN ON THE TRAFFIC CONTROL PLANS (TCP) IN ACCORDANCE WITH THE MUTCD AND/OR AS DIRECTED BY THE ENGINEER. THESE SIGNS SHALL BE ERRECTED AND PLACED PRIOR TO COMMENCING ANY PROPOSED ROADWAY CONSTRUCTION AND SHALL REMAIN IN PLACE FOR THE DURATION OF THE PROJECT, UNTIL COMPLETION AND ACCEPTANCE OF THE PROJECT BY OTA.

CONTRACTOR SHALL NOT UTILIZE EMERGENCY VEHICLE TURN AROUNDS ON THE TURNPIKE UNLESS APPROVED BY THE ENGINEER.

TRUCK-MOUNTED ATTENUATORS SHALL BE USED TO PROTECT BLUNT ENDS EXPOSED TO TRAFFIC WHEN SAND-FILLED IMPACT ATTENUATORS OR GUARDRAIL ARE REMOVED. THE CONTRACTOR SHALL NOT LEAVE ANY EXPOSED ENDS OF STRUCTURES.

LANE LINES, AT A MINIMUM, SHALL BE ESTABLISHED AT ALL TIMES DURING CONSTRUCTION.

ALL EXISTING AND NEW BREAKAWAY SIGN POSTS, PIPES AND WIDE FLANGE BEAMS SHALL HAVE SHEET METAL BOLT RETAINER PLATES AS SPECIFIED IN ODOT 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.

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.

WHERE EXISTING SIGNS NEED RE-ADJUSTMENT TO KEEP THE SIGN 1" ABOVE THE FUSE PLATE TO COMPLY WITH STD. FGS1-1 AND FGS2-1-(LATEST REVISION), THE CONTRACTOR SHALL CUT ANY WIDE FLANGE SIGN POSTS THAT EXTEND ABOVE THE SIGN. THE CUT SURFACE SHALL BE GROUND SMOOTH AND GIVEN A HEAVY AND THOROUGH COAT OF ZINC-RICH PAINT IN A MANNER APPROVED BY ENGINEER.

DETAILS FOR MOUNTING SIGNS TO OVERHEAD STRUCTURES SHALL BE APPROVED BY THE ENGINEER AND SUBMITTED WITH SHOP DRAWINGS FOR OVERHEAD STRUCTURES. NO MOUNTING HOLES SHALL BE PERMITTED IN OVERHEAD STRUCTURES UPRIGHT MEMBERS.

ALL DIMENSIONS OF THE EXISTING BRIDGE COMPONENTS SHOWN ON THE BRIDGE MOUNT OVERHEAD SIGN DETAIL SHEET ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL DIMENSIONS NECESSARY TO FABRICATE BRIDGE MOUNT SIGN STRUCTURE AND SHALL BE SOLELY RESPONSIBLE FOR THE ACCURACY THEREOF.

CONTRACTOR SHALL PROVIDE THE ENGINEER A MINIMUM OF SEVEN (7) DAYS ADVANCE NOTICE FOR INSTALLATION OF OVERHEAD SIGN STRUCTURES AND OVERHEAD SIGNS. INSTALLATION SHOULD PREFERABLY BE ACCOMPLISHED ON SUNDAY BETWEEN 7:00 A.M. AND 10:00 A.M.

THE STATIONS AND LOCATIONS OF THE CABLE BARRIER SYSTEM AND END ANCHOR UNITS PLACEMENT, SHOWN ON THE PLAN AND DETAIL SHEETS, ARE APPROXIMATE. THE ENGINEER SHALL DETERMINE THE EXACT LOCATION OF THE CABLE BARRIER SYSTEM AND/OR END ANCHOR UNITS. THE CONTRACTOR SHALL VERIFY THESE LOCATIONS.

DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SURFACE DRAINAGE, SHALL VISUALLY INSPECT AND/OR MONITOR IT DURING RAINY OR WET WEATHER, AND TAKE NECESSARY STEPS TO ENSURE ALL AREAS IN THE MEDIAN ADEQUATELY DRAINS TO THE SATISFACTION OF THE ENGINEER.

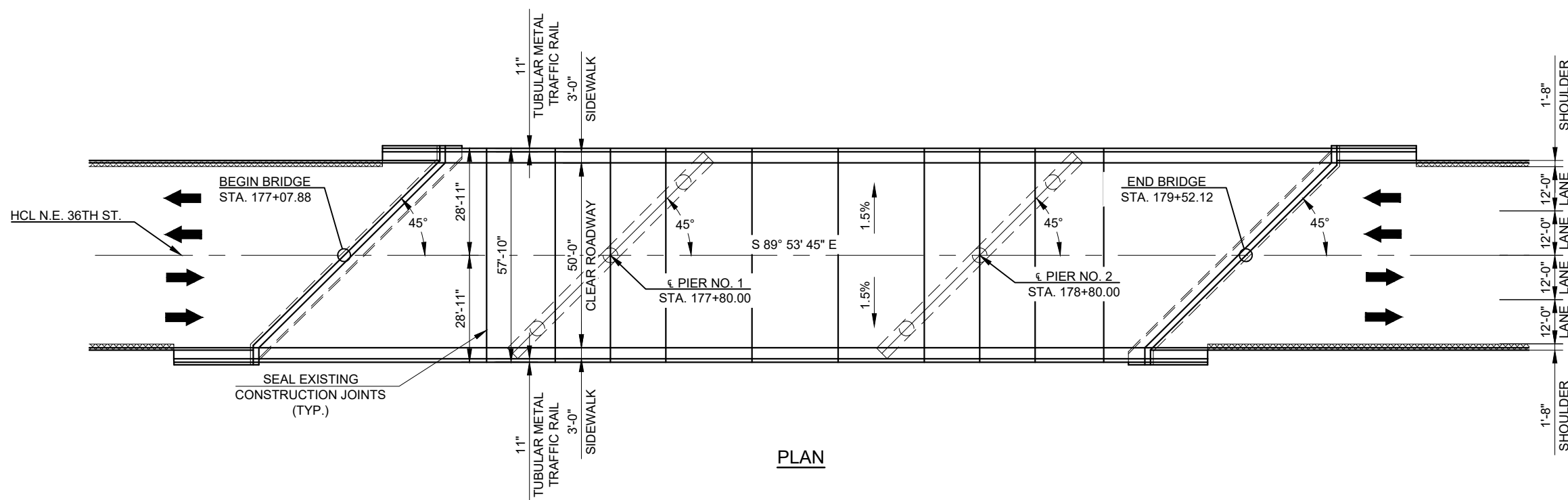
0300 TRAFFIC CONTROL		PAY QUANTITIES			
ITEM		DESCRIPTION		UNIT	QUANTITY
871(A)	2300	CONST. ZONE IMPACT ATTEN.	(TC-52,80,84)	SD	240.00
877(B)	4300	DELIVER PORTABLE LONGITUDINAL BARRIER	(TC-1,2)	LF	450.00
880(A)	6200	ARROW DISPLAY (TYPE C)	(TC-84)	SD	240.00
880(B)	6300	CONSTRUCTION SIGNS 0 TO 6.25 SF	(TC-23,28,33,84)	SD	480.00
880(B)	6310	CONSTRUCTION SIGNS 6.26 TO 15.99 SF	(TC-23,29,33,84)	SD	1,680.00
880(C)	6410	CONSTRUCTION BARRICADES (TYPE III)	(TC-23,84)	SD	480.00
880(E)	6600	WARNING LIGHTS (TYPE A)	(TC-84)	SD	960.00
880(F)	6700	DRUMS	(TC-84)	SD	15,600.00
882(A)	8210	PORT. CHANGEABLE MESSAGE SIGN	(TC-52,84,85)	SD	240.00

TRAFFIC PAY QUANTITY NOTES

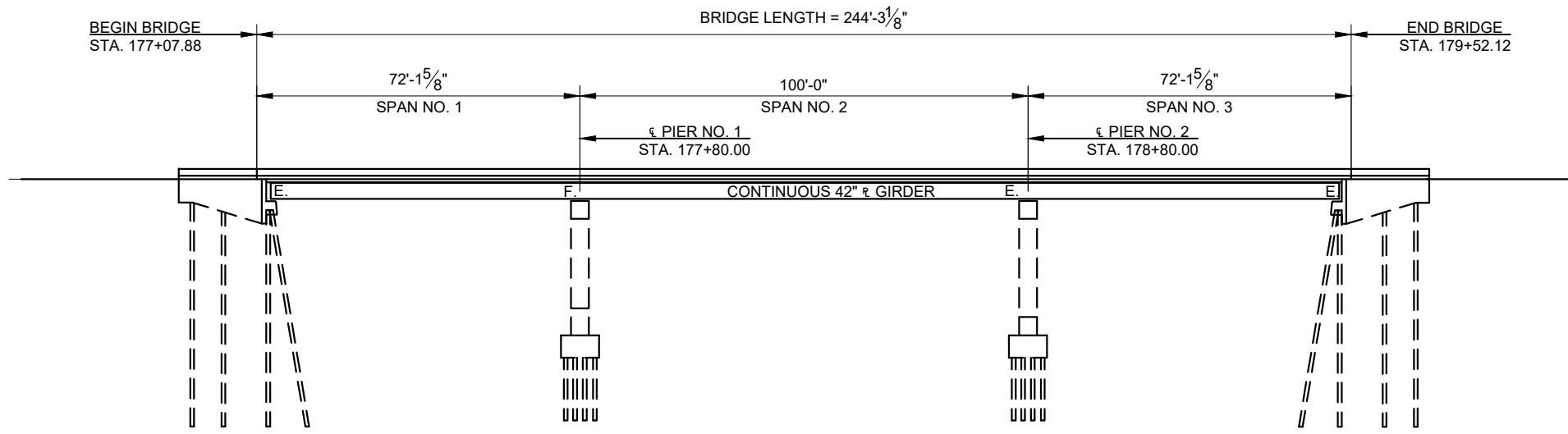
- (TC-1) THE CONTRACTOR SHALL FURNISH AND INSTALL SUCH LIGHTS, SIGNS, BARRICADES, AND PROVIDE FLAGGERS NECESSARY FOR THE CONTROL, SAFETY, AND MAINTENANCE OF TRAFFIC WHEN INSTALLING, RELOCATING, OR DELIVERING PORTABLE LONGITUDINAL BARRIER.
- (TC-2) QUANTITY INCLUDES SUFFICIENT LENGTH OF PORTABLE LONGITUDINAL BARRIER TO PROVIDE FOR THE LONGEST SECTION SHOWN ON THE PLANS. THIS SAME BARRIER WILL BE USED ON OTHER DETOUR PHASES.
- (TC-23) QUANTITY SHOWN FOR THIS ITEM INCLUDES THOSE SIGNS WHICH COMPRISE THE ROUTE MARKER ASSEMBLIES USED TO INDICATE THE DETOUR ROUTE.
- (TC-28) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 0 S.F. AND 6.25 S.F. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.
- (TC-29) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 6.26 S.F. AND 15.99 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 OR CONSTRUCTION ZONE IMPACT ATTENUATOR TO BE PLACED ON THIS PROJECT SHALL BE SUBJECT TO INSPECTION AND APPROVAL, BY THE CITY OF MIDWEST CITY, TO ASSURE THAT THEY ARE IN GOOD WORKING CONDITION, PRIOR TO PLACEMENT ON THE PROJECT.
- (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.
- (TC-84) 120 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>

N.E. 36TH ST. OVER CRUTCHO CREEK	OKLAHOMA COUNTY
GENERAL NOTES AND SUMMARY OF PAY QUANTITIES - TRAFFIC	
PROJECT NO. 1563	SHEET NO. AT01



PLAN



ELEVATION

INDEX OF SHEETS

SHEET NO.	SHEET DESCRIPTION
B001, B002	GENERAL PLAN AND ELEVATION- BRIDGE 'A'
B003	BRIDGE CONSTRUCTION SEQUENCING
B004	DETAILS OF REMOVALS
B005, B006	DETAILS OF SUPERSTRUCTURE
B007	DETAILS OF ROCKER BEARINGS AT ABUTMENTS
B008	DETAILS OF RAILING

N.E. 36TH ST. OVER CRUTCHO CREEK OKLAHOMA COUNTY
 BRIDGE 'A'
GENERAL PLAN AND ELEVATION
BRIDGE 'A'
(SHEET NO. 1 OF 2)

PROJECT NO. 1563 SHEET NO. B001

Plot Date: 10/20/2023 8:38 AM Plotted By: Jones, Kate
 J:\OKC\DESIGN\22-02415 - MIDWEST CITY\36TH STREET BRIDGE REHABILITATION\BRIDGE PLAN SHEETS\22-02415_B001_02_GPE.DWG

SUMMARY OF QUANTITIES

DESCRIPTION	UNIT	ABUTMENTS	PIERS	SUPERSTRUCTURE	QUANTITY
FALSEWORK AND JACKING	LSUM	-	-	1.00	1.00
TUBULAR METAL TRAFFIC RAIL	LF	-	-	117.00	117.00
STRUCTURAL STEEL	LB	-	-	2,570.00	2,570.00
STRUCTURAL STEEL A36	LB	-	-	1,150.00	1,150.00
CLASS AA CONCRETE	CY	8.80	-	9.20	18.00
MECHANICAL SPLICES	EA	16.00	-	16.00	32.00
REINFORCING STEEL	LB	1,880.00	-	2,280.00	4,160.00
CLEANING AND PAINTING EXISTING BRIDGE METAL RAIL	LF	-	-	501.50	501.50
COLLECTION AND HANDLING OF WASTE	LSUM	-	-	1.00	1.00
PREFORMED SILICONE EXPANSION JOINTS	LF	-	-	161.00	161.00
PREPARATION OF CRACKS, ABOVE WATER	LF	-	-	60.00	60.00
EPOXY RESIN, ABOVE WATER	GAL	-	-	6.00	6.00
PNEUMATICALLY PLACED MORTAR	SY	-	-	10.00	10.00
SEALER CRACK PREPARATION	LF	-	-	669.00	669.00
SEALER RESIN	GAL	-	-	7.00	7.00
CORROSION INHIBITOR (SURFACE APPLIED)	SY	-	-	5.00	5.00
REMOVAL OF BRIDGE ITEMS	LSUM	-	-	-	1.00

ODOT REQUIRED STANDARD DRAWINGS

2009 BRIDGE
EJ-DTL-02E

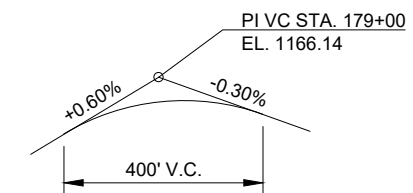
UTILITIES

UTILITY LINE LOCATOR (OKIE) 405-840-5032
1-800-522-6534

STRUCTURAL DESIGN DATA

MATERIAL:
CLASS AA CONCRETE, $f_c = 4,000$ PSI
REINFORCING STEEL, $f_y = 60,000$ PSI
STRUCTURAL STEEL, A36, $f_y = 36,000$ PSI

DESIGN:
ANSI/AASHTO/AWS D1.6 BRIDGE WELDING CODE



DESIGN PROFILE DATA

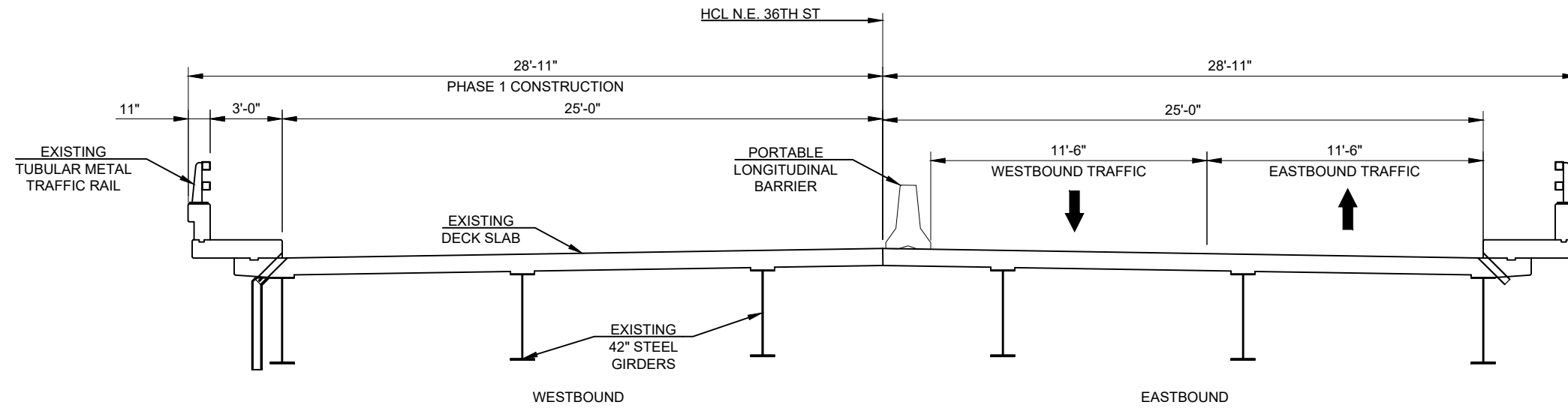
FINISH GRADE ALONG E N.E. 36TH ST.

N.E. 36TH ST. OVER CRUTCHO CREEK OKLAHOMA COUNTY
BRIDGE 'A'

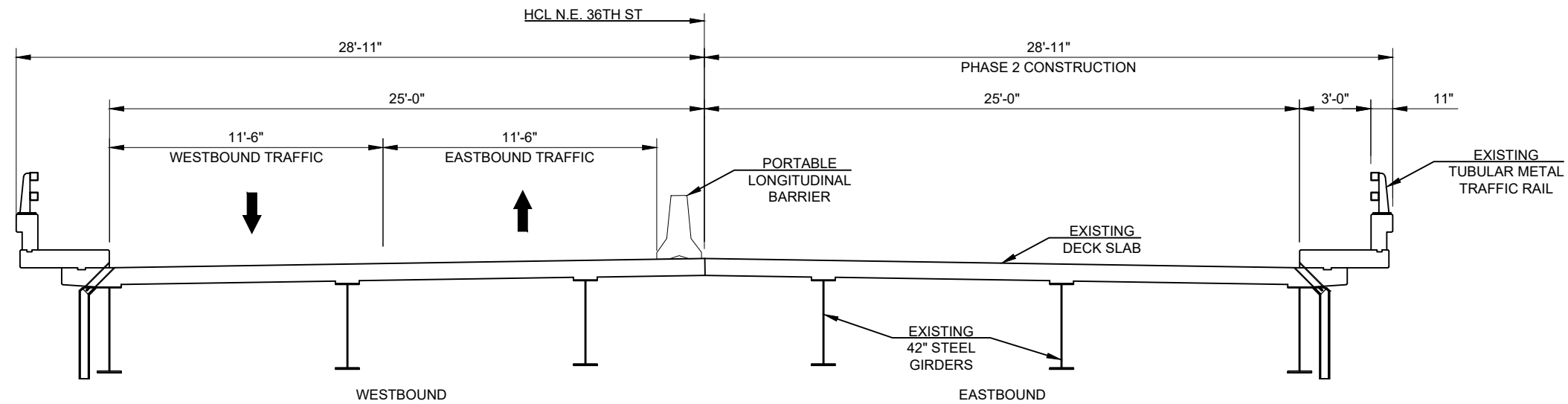
**GENERAL PLAN AND ELEVATION
BRIDGE 'A'
(SHEET NO. 2 OF 2)**

PROJECT NO. 1563

SHEET NO. B002



BRIDGE SUPERSTRUCTURE TYPICAL SECTION - PHASE 1 CONSTRUCTION



BRIDGE SUPERSTRUCTURE TYPICAL SECTION - PHASE 2 CONSTRUCTION

NOTES:
GIRDER JACKING AND BEARING REPLACEMENT SHALL BE PERFORMED FIRST IN EACH PHASE. THE EXPANSION JOINT WORK SHALL NOT BEGIN UNTIL THE BEARING WORK HAS BEEN COMPLETED.

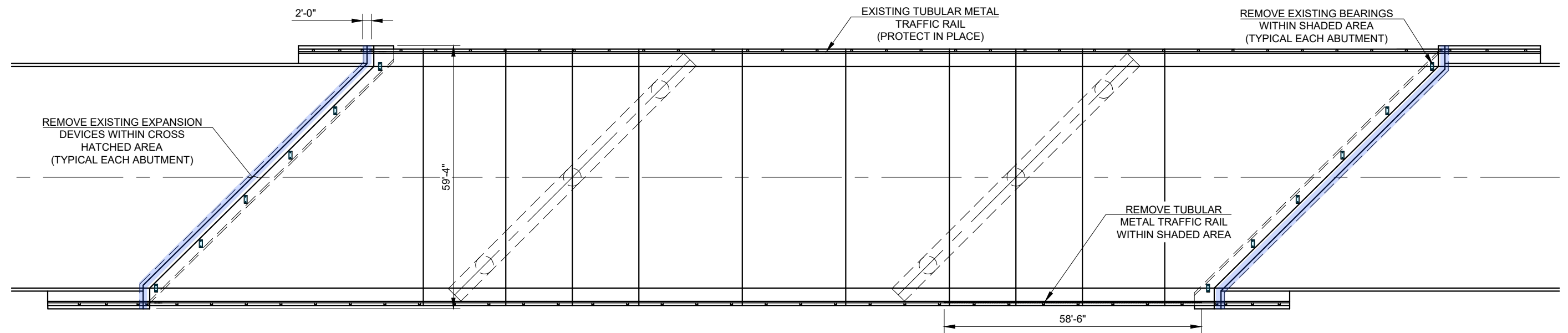
N.E. 36TH ST. OVER CRUTCHO CREEK OKLAHOMA COUNTY
BRIDGE 'A'

BRIDGE CONSTRUCTION SEQUENCING

PROJECT NO. 1563

SHEET NO. B003

Plot Date: 10/20/2023 8:59 AM Plotted By: Jones, Kalle
 J:\OKC_DESIGN\22-02415 - MIDWEST CITY\38TH STREET BRIDGE REHABILITATION\BRIDGE PLAN SHEETS\22-02415_B003_BRIDGE CONSTRUCTION SEQUENCING.DWG



PLAN

Plot Date: 10/20/2023 8:59 AM, Plotted By: Jones, Kate
 J:\OKC\DESIGN\22-02415 - MIDWEST CITY\38TH STREET BRIDGE REHAB\CAD\BRIDGE\PLAN SHEETS\22-02415_B004_DETAILS OF REMOVALS - BRIDGE.DWG

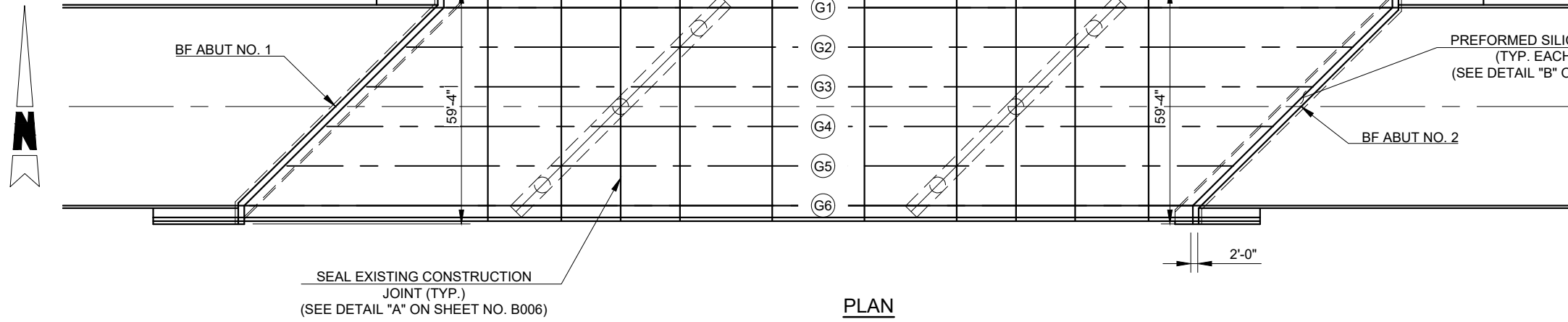
N.E. 36TH ST. OVER CRUTCHO CREEK
 BRIDGE 'A'

OKLAHOMA COUNTY

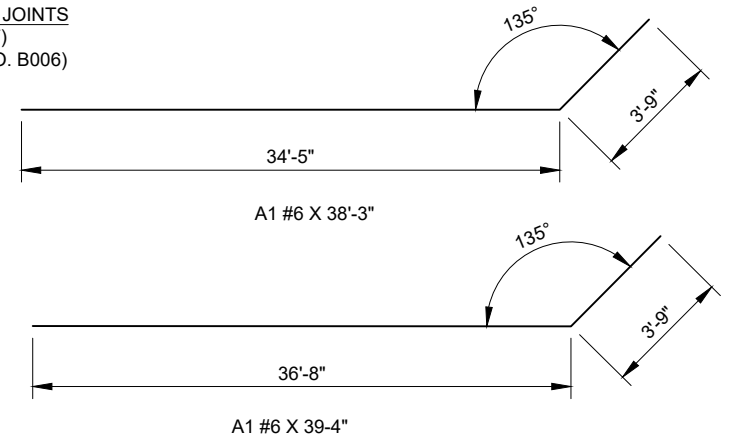
DETAILS OF REMOVALS - BRIDGE

PROJECT NO. 1563

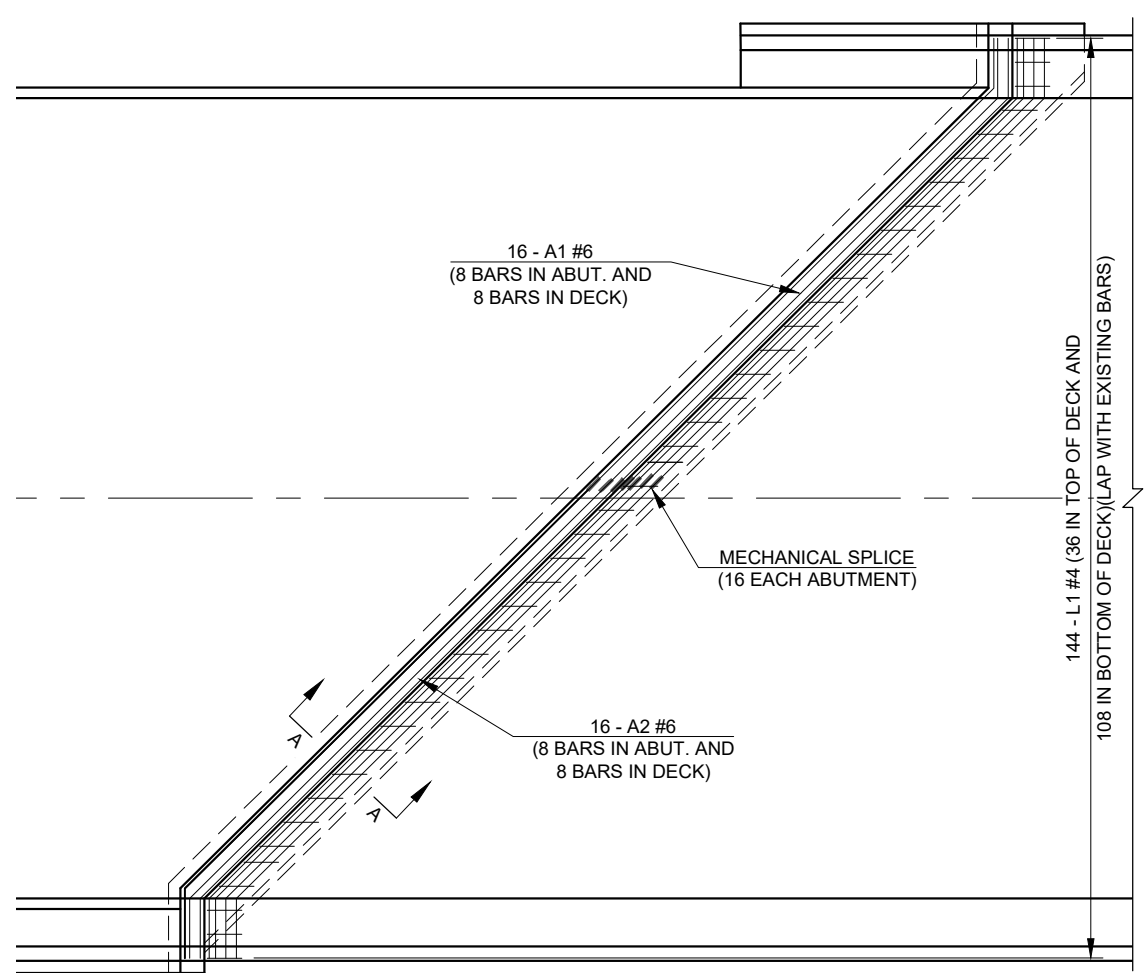
SHEET NO. B004



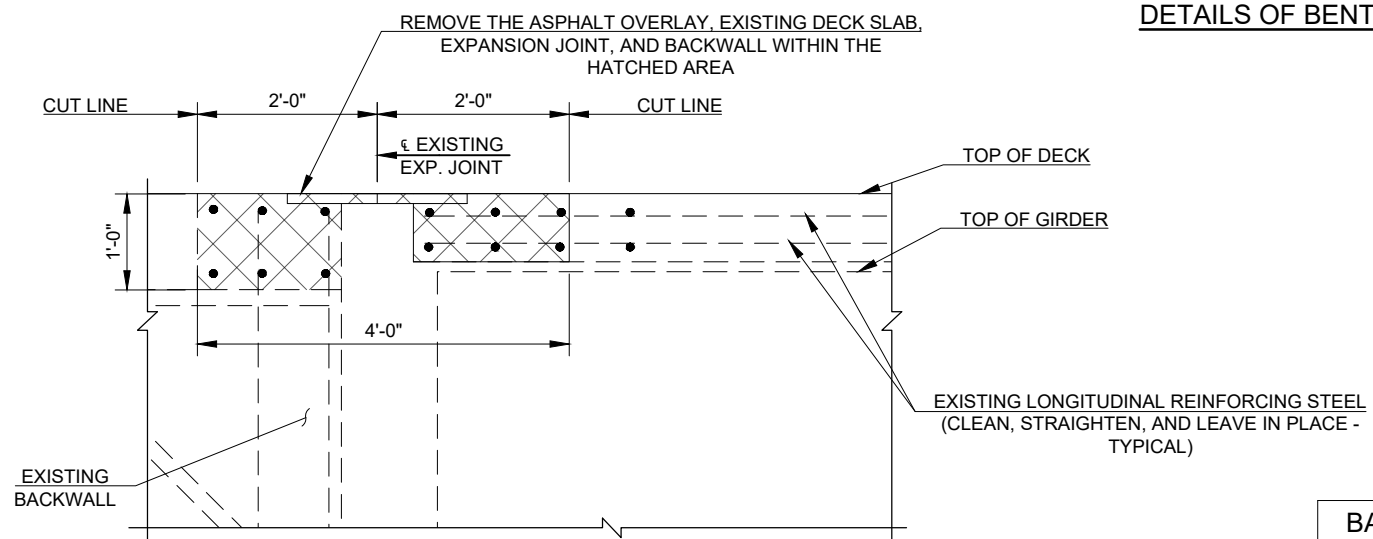
PLAN



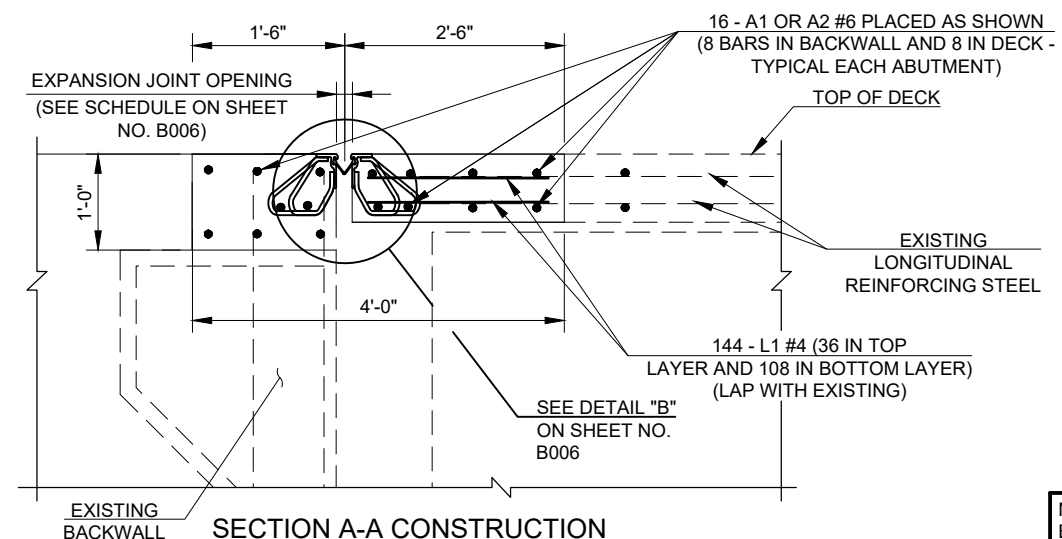
DETAILS OF BENT REINFORCING STEEL



PLAN OF TYPICAL EXPANSION JOINT REPLACEMENT



SECTION A-A REMOVAL



SECTION A-A CONSTRUCTION

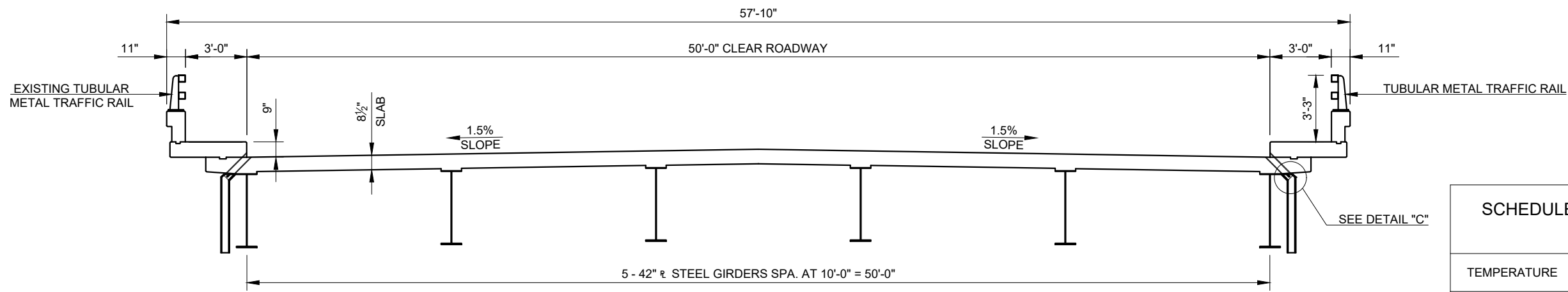
BAR LIST - ONE JOINT REPAIR PHASE 1 CONSTRUCTION (TWO REQUIRED)				
MARK	NO.	SIZE	FORM	LENGTH
EPOXY COATED				
A1	16	#6	BNT.	38'-2"
L1	72	#4	STR.	2'-2"

BAR LIST - ONE JOINT REPAIR PHASE 2 CONSTRUCTION (TWO REQUIRED)				
MARK	NO.	SIZE	FORM	LENGTH
EPOXY COATED				
A2	16	#6	BNT.	40'-5"
L1	72	#6	STR.	2'-2"

N.E. 36TH ST. OVER CRUTCHO CREEK OKLAHOMA COUNTY BRIDGE 'A'

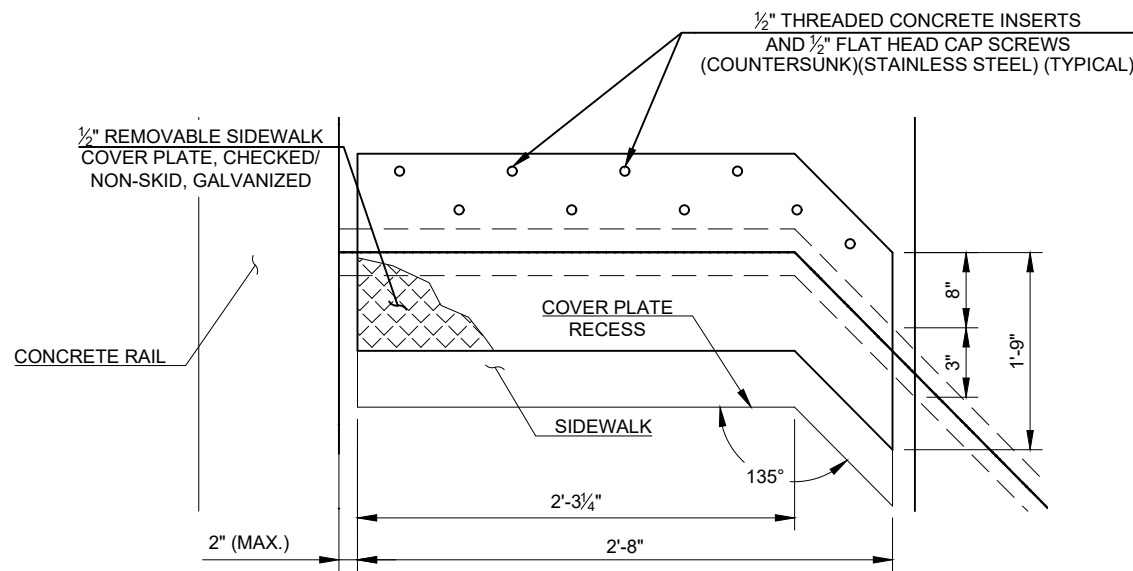
DETAILS OF SUPERSTRUCTURE (SHEET NO. 1 OF 2)

Plot Date: 10/20/2023 8:59 AM Plotted By: Jones, Kalle
 J:\C\OKC_DESIGN\22-02415 - MIDWEST CITY 38TH STREET BRIDGE REHABILITATION\PLAN SHEETS\22-02415_B005-DETAILS OF SUPERSTRUCTURE.DWG

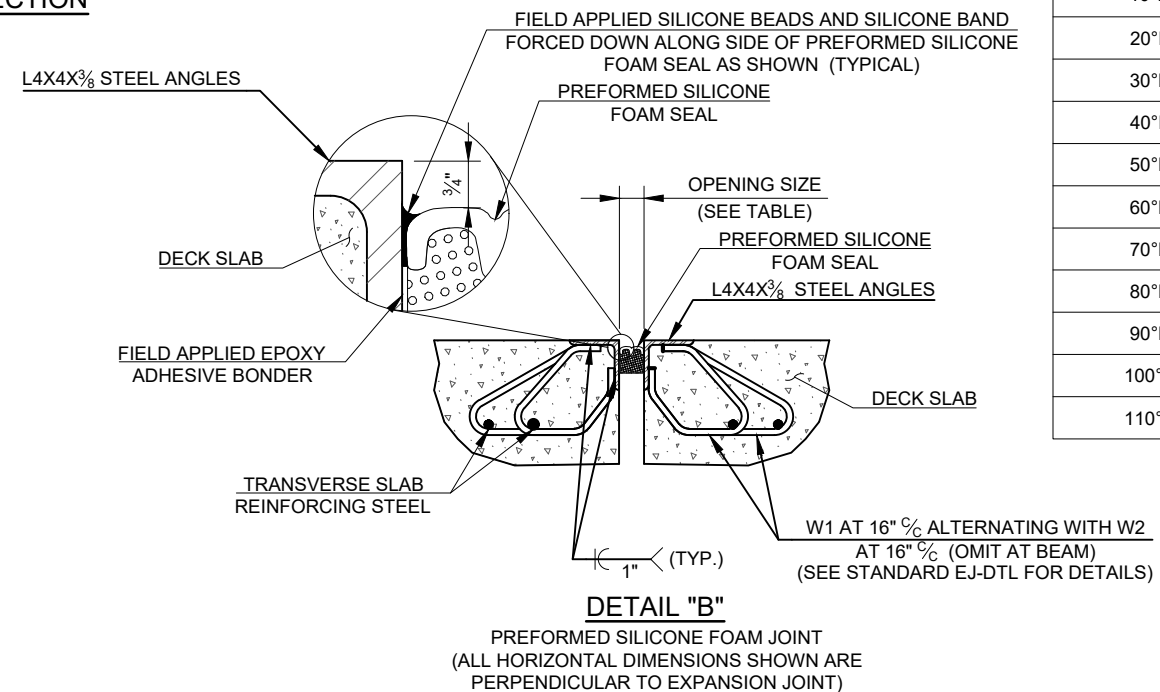


TYPICAL SECTION

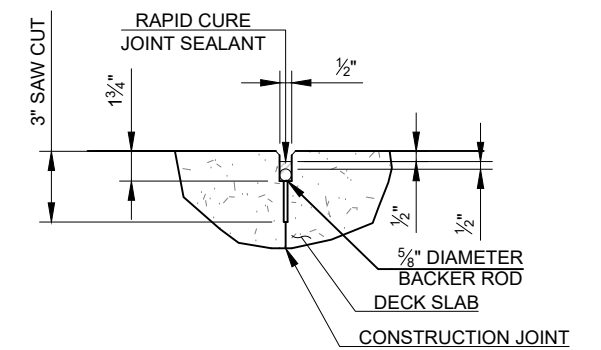
SCHEDULE OF EXPANSION JOINT OPENING WITH TEMPERATURE		
TEMPERATURE	OPENING AT ABUT NO. 1	OPENING AT ABUT NO. 2
0°F	2 3/4"	3"
10°F	2 1/16"	2 15/16"
20°F	2 5/8"	2 7/8"
30°F	2 5/8"	2 3/4"
40°F	2 9/16"	2 1/16"
50°F	2 9/16"	2 1/16"
60°F	2 1/2"	2 1/2"
70°F	2 1/16"	2 1/16"
80°F	2 1/16"	2 5/16"
90°F	2 3/8"	2 1/4"
100°F	2 3/8"	2 1/8"
110°F	2 5/16"	2 1/16"



SIDEWALK COVER PLATES OVER EXPANSION DEVICE

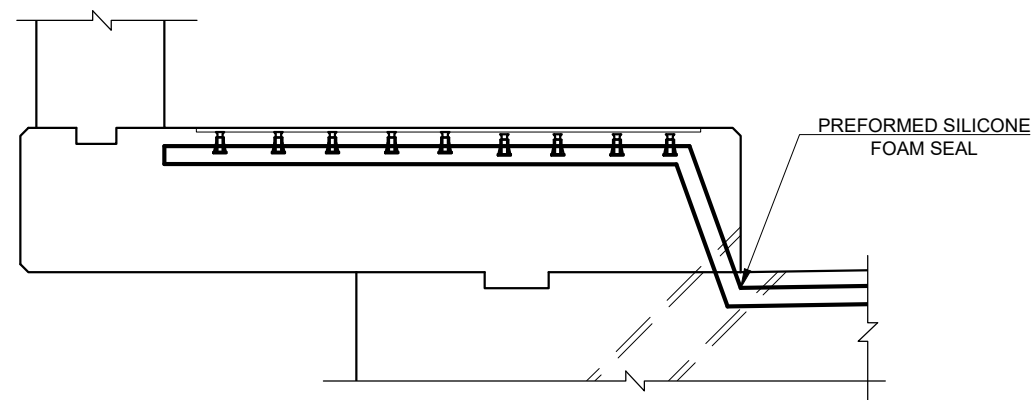


DETAIL "B"
PREFORMED SILICONE FOAM JOINT
(ALL HORIZONTAL DIMENSIONS SHOWN ARE PERPENDICULAR TO EXPANSION JOINT)

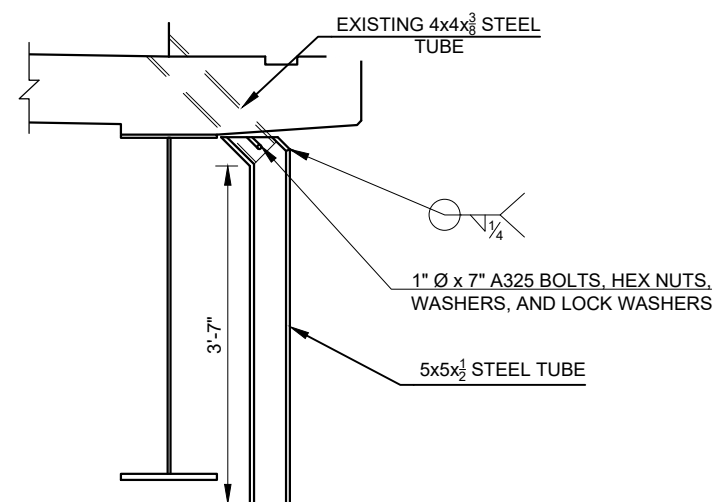


DETAIL "A"

NOTE:
ALL WORK NEEDED TO SEAL EXISTING CONSTRUCTION JOINTS SHALL BE PAID UNDER "SEALER CRACK PREPARATION" AND "SEALER RESIN".



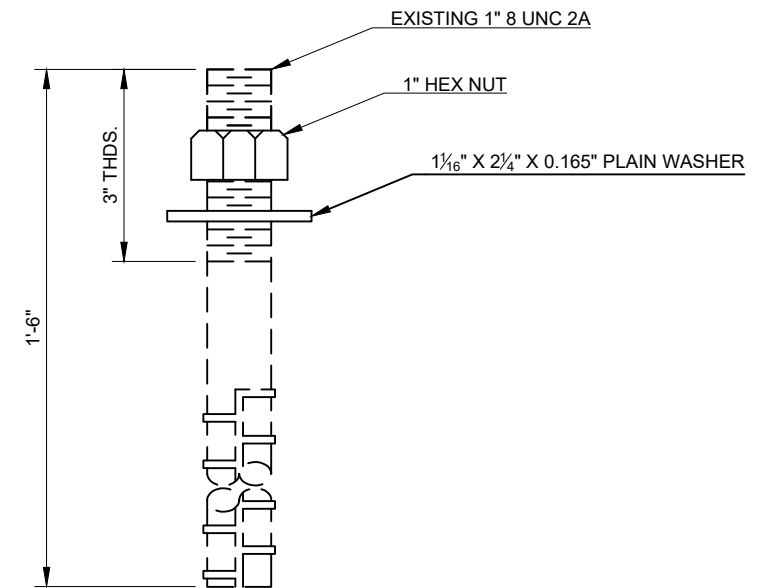
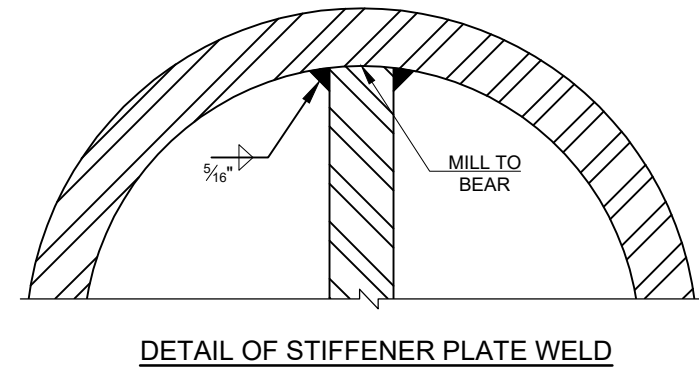
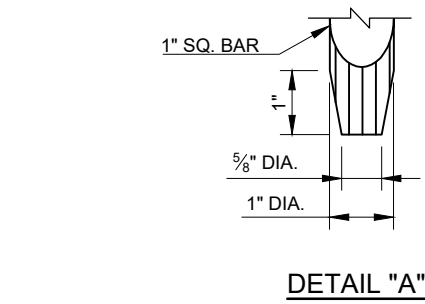
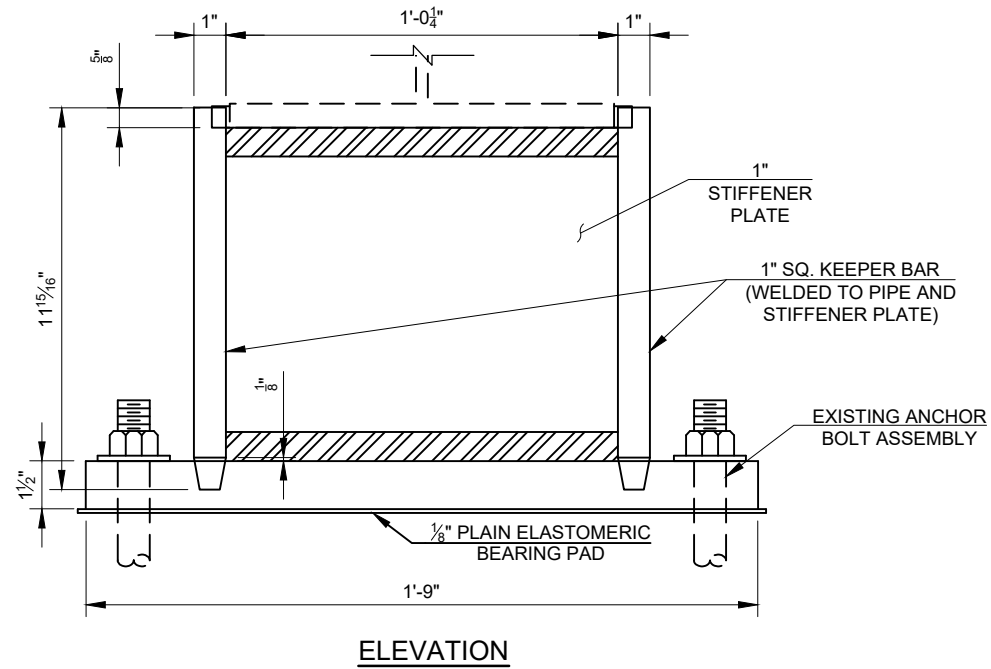
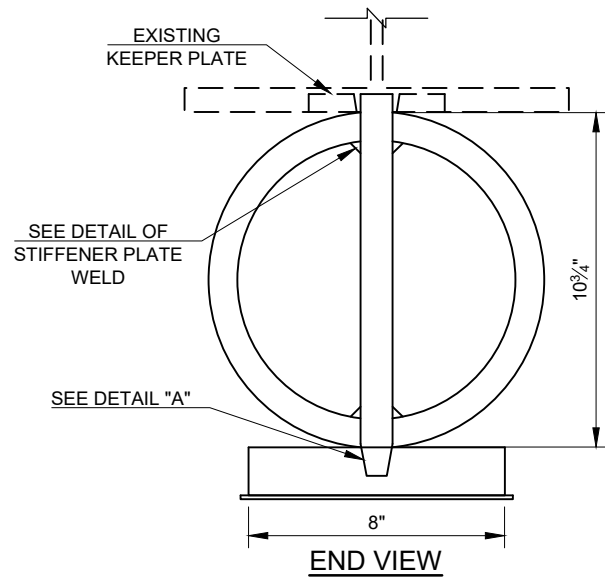
SECTION THRU SIDEWALK COVER PLATES



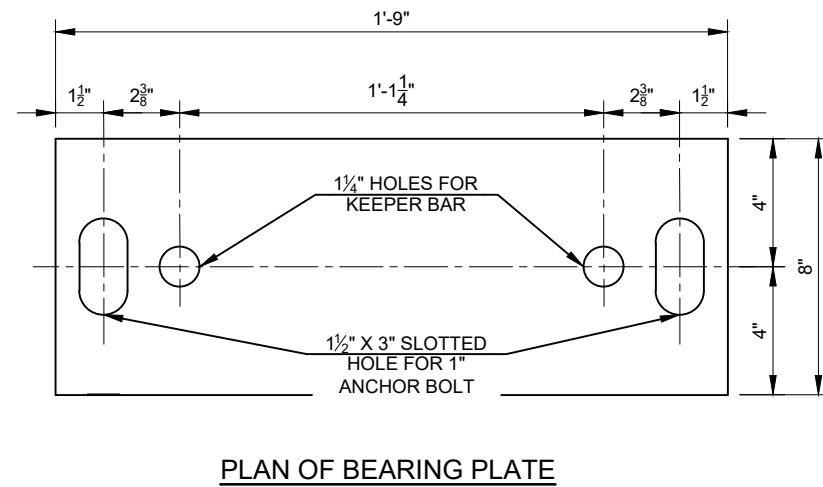
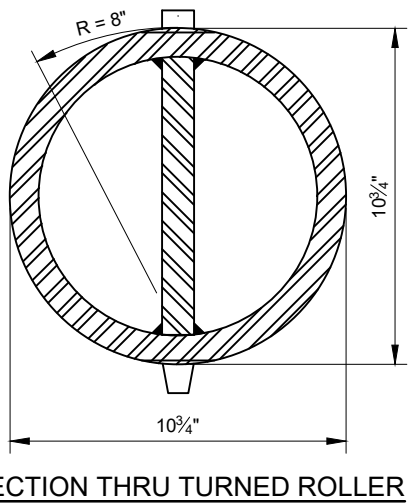
DETAIL "C" - BRIDGE DRAIN DETAILS

N.E. 36TH ST. OVER CRUTCHO CREEK OKLAHOMA COUNTY BRIDGE 'A'

**DETAILS OF SUPERSTRUCTURE
(SHEET NO. 2 OF 2)**



EXISTING ANCHOR BOLT
NEW WASHERS AND NUTS SHALL BE SUPPLIED FOR ALL BEARINGS REPLACED



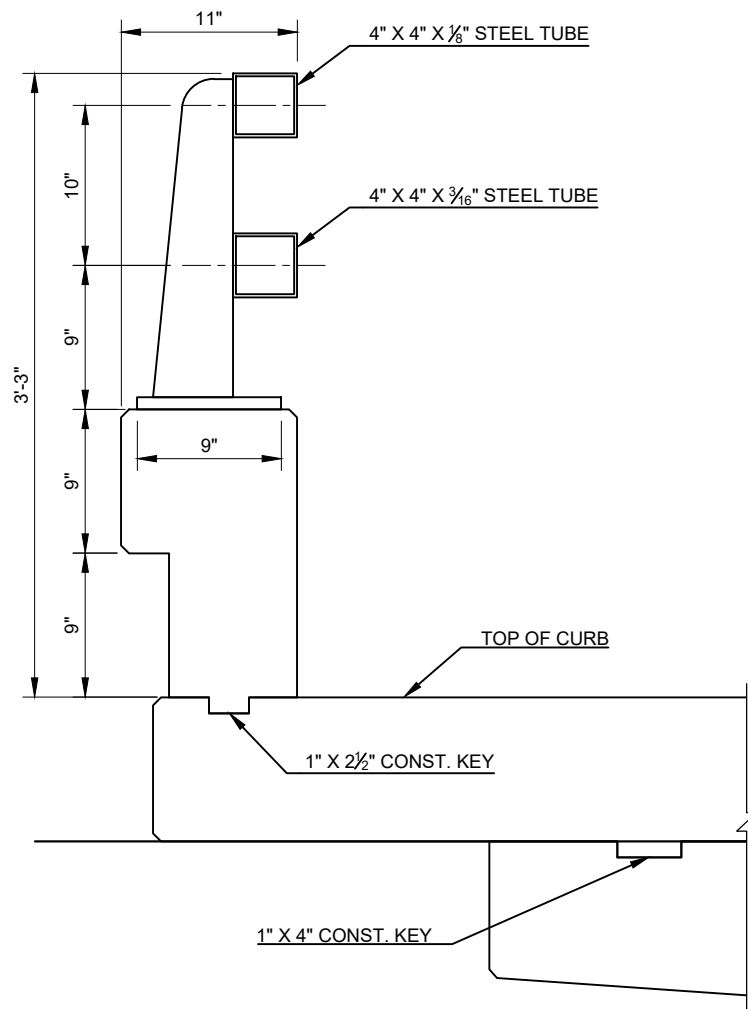
PLAN OF BEARING PLATE

NOTES

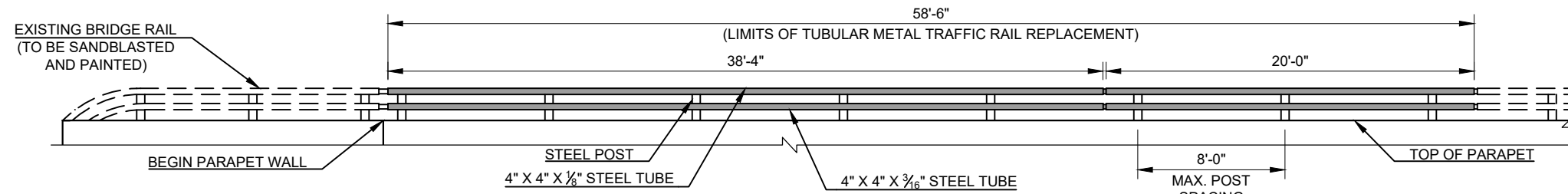
MAX. LENGTH OF EXPANSION TO EXPANSION SHOE = 300 FT.

ALL COMPONENTS OF THE ROCKER BEARING ASSEMBLIES SHALL SATISFY THE REQUIREMENTS OF SECTION 724.05.B "WEATHERING STEEL BEARING ASSEMBLIES" OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

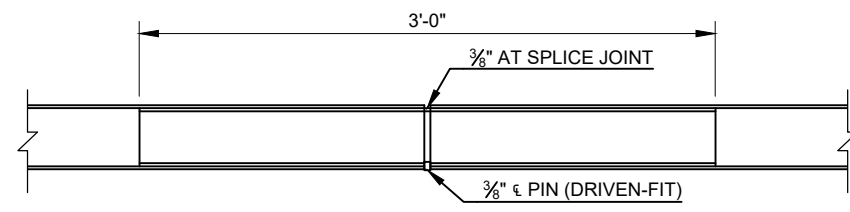
ALLOWANCE SHALL BE MADE FOR TEMPERATURE AT TIME OF SETTING OF BEARING ASSEMBLIES. BEARING ASSEMBLIES SHALL BE SET VERTICAL FOR 60°F. FOR EACH 100' OF EXPANSION TO THE BEARING, THE TOP OF THE BEARING SHALL BE SET 1/8" FROM VERTICAL IN THE DIRECTION OF THE EXPANSION FOR EACH 15° THE TEMPERATURE IS ABOVE 60° OR 1/8" FROM VERTICAL IN THE DIRECTION OF THE CONTRACTION FOR EACH 15° THE TEMPERATURE IS BELOW 60°.



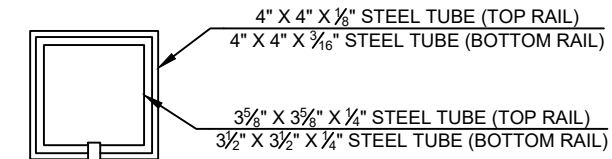
SECTION THRU PARAPET



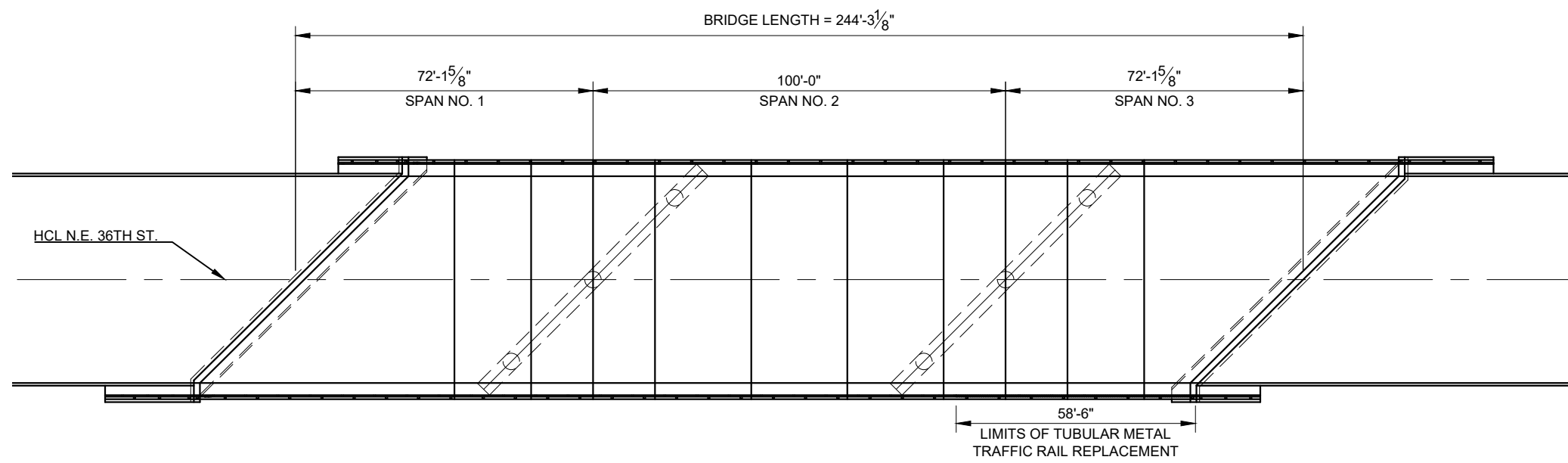
ELEVATION



STEEL SPLICE DETAIL



SECTION A-A



PLAN

NOTES

ENTIRE LENGTH OF TUBE WITH CORROSION SHALL BE REPLACED UP TO THE ORIGINAL SPLICES IN THE RAIL.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS OF EXISTING HANDRAIL AND PROPOSED HANDRAIL.

THE REPLACEMENT RAIL SHALL BE A36 STRUCTURAL STEEL.

ALL EXPOSED PORTIONS OF THE NEW AND EXISTING RAIL SHALL BE SANDBLASTED AND PAINTED FEDERAL STANDARD COLOR 17178, "ALUMINUM / SILVER" INCLUDING POSTS, ANCHOR PLATES, ANCHOR BOLTS, AND HARDWARE. ALL SANDBLASTING AND PAINTING SHALL BE PAID FOR UNDER "CLEANING AND PAINTING BRIDGE METAL RAIL."

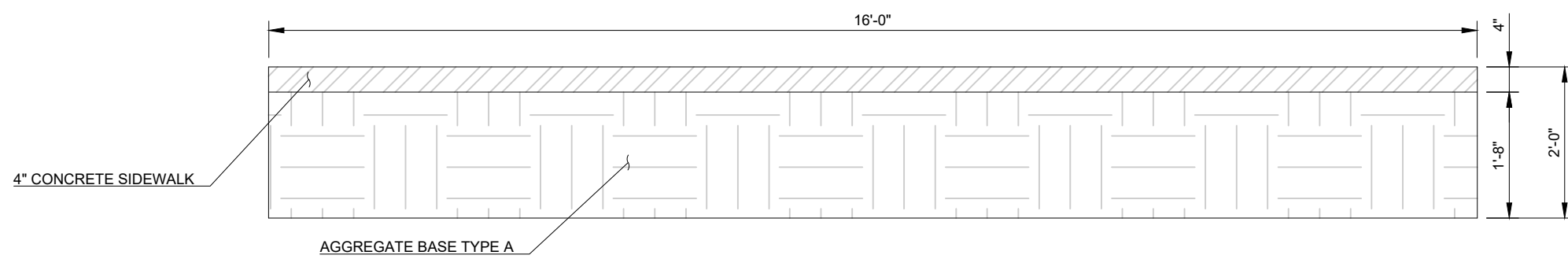
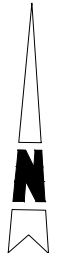
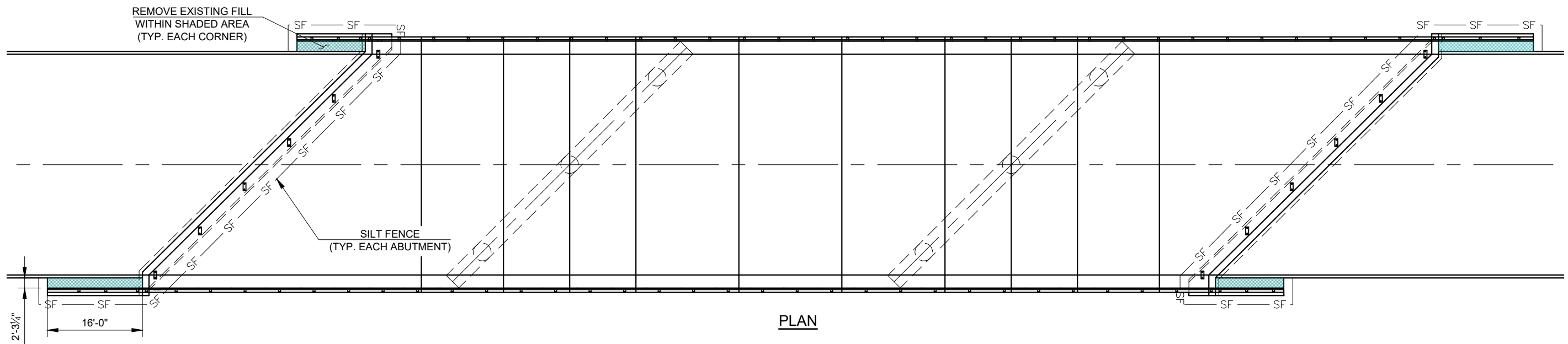
QUANTITY OF "TUBULAR METAL RAIL TRAFFIC RAIL" REPLACEMENT IS BASED ON INDIVIDUAL TUBES.



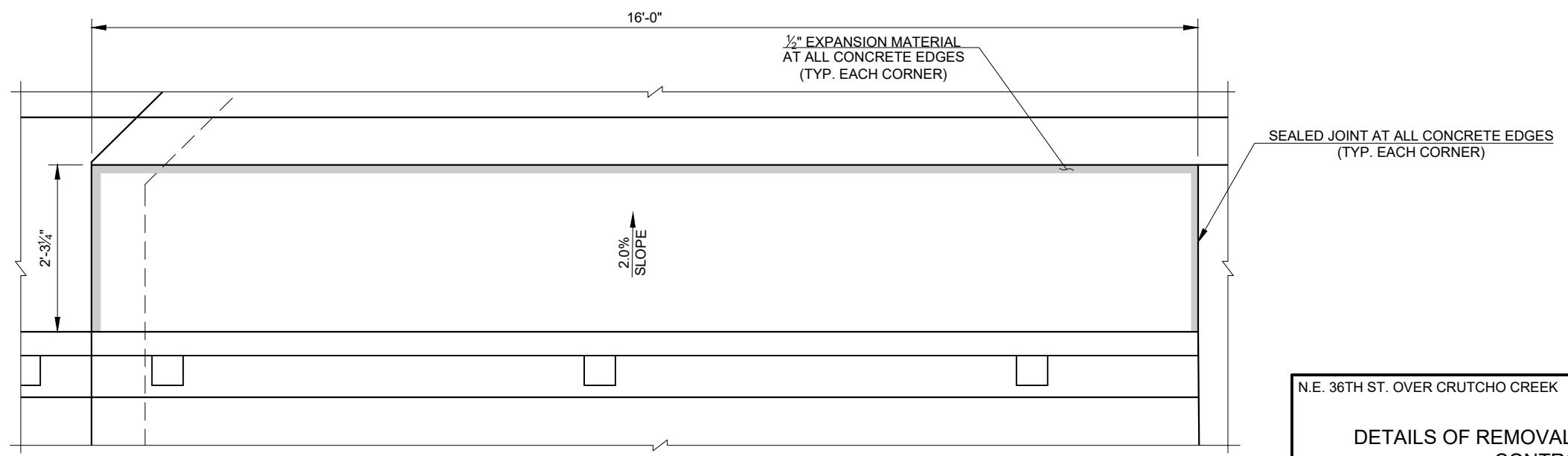
N.E. 36TH ST. OVER CRUTCHO CREEK OKLAHOMA COUNTY
BRIDGE 'A'

DETAILS OF BRIDGE RAILING

Plot Date: 10/20/2023 8:10 AM Plotted By: Jones, Kate
 J:\OKC\OKC_DESIGN\22-02415 - MIDWEST CITY, 36TH STREET BRIDGE REHABILITATION\BRIDGE PLAN SHEETS\22-02415_B008_DETAILS OF RAILING.DWG



NOTES:
 ALL DISTURBED RIPRAP DURING REMOVAL WORK SHALL BE RESET. ALL COSTS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.



N.E. 36TH ST. OVER CRUTCHO CREEK OKLAHOMA COUNTY

DETAILS OF REMOVALS AND EROSION CONTROL

PROJECT NO. 1563 SHEET NO. R001

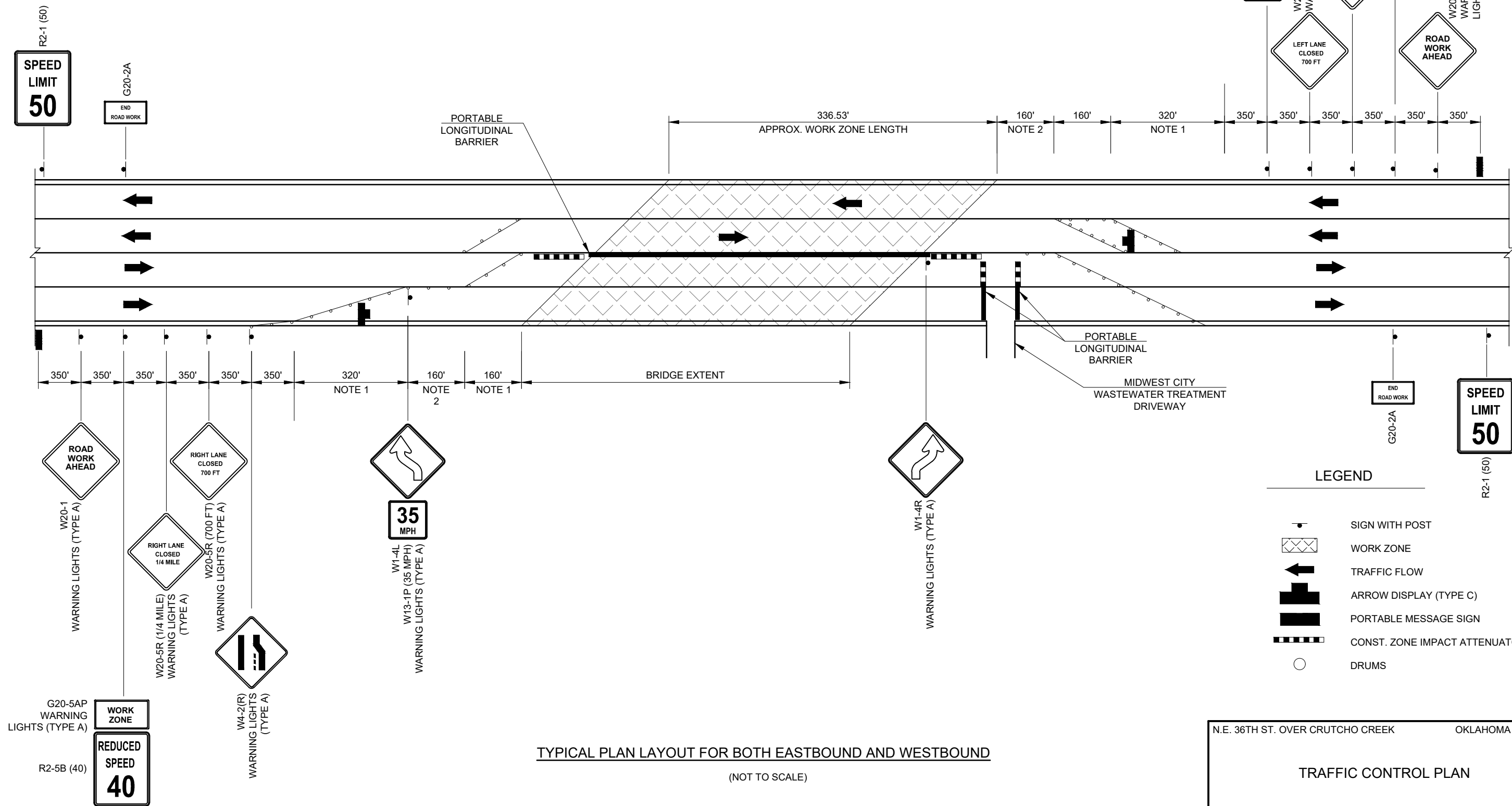
Plot Date: 10/20/2023 8:11 AM, Plotted By: Jones, Kalle
 J:\L\OKC\DESIGN\22-024\15 - MIDWEST CITY\38TH STREET BRIDGE REHABILITATION\BRIDGE PLAN SHEETS\22-024\15_R001_DETAILS OF REMOVALS - ROADWAY.DWG

NOTES:

A SUFFICIENT NUMBER OF CONSTRUCTION BARRICADES (TYPE III) SHALL BE USED TO COMPLETELY CLOSE THE ROADWAY TO TRAFFIC FROM THE EDGE OF PAVEMENT TO EDGE OF PAVEMENT. THE NUMBER OF TYPE III BARRICADES NEEDED TO CLOSE THE ROADWAY IS NOT SHOWN ON THE TRAFFIC CONTROL SHEETS.

NOTE 1
MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES SHALL BE EQUAL TO THE POSTED SPEED LIMIT. SPACING SHALL NOT EXCEED 50 FEET.

NOTE 2
MAXIMUM SPACING BETWEEN CHANNELIZNG DEVICES SHALL BE EQUAL TO TWICE THE POSTED SPEED LIMIT. SPACING SHALL NOT EXCEED 100 FEET.



TYPICAL PLAN LAYOUT FOR BOTH EASTBOUND AND WESTBOUND

(NOT TO SCALE)

N.E. 36TH ST. OVER CRUTCHO CREEK OKLAHOMA COUNTY

TRAFFIC CONTROL PLAN