

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

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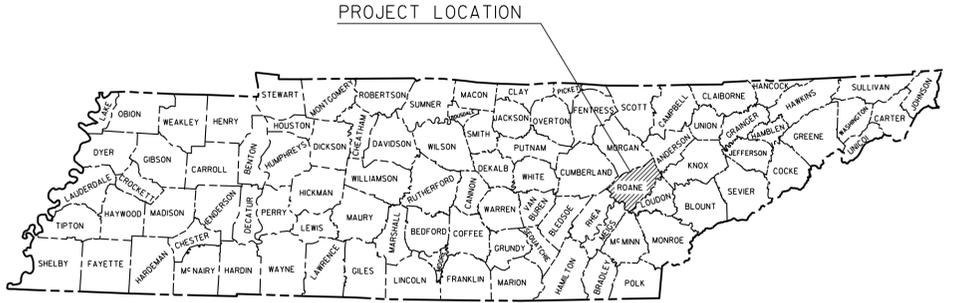
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

ROANE COUNTY

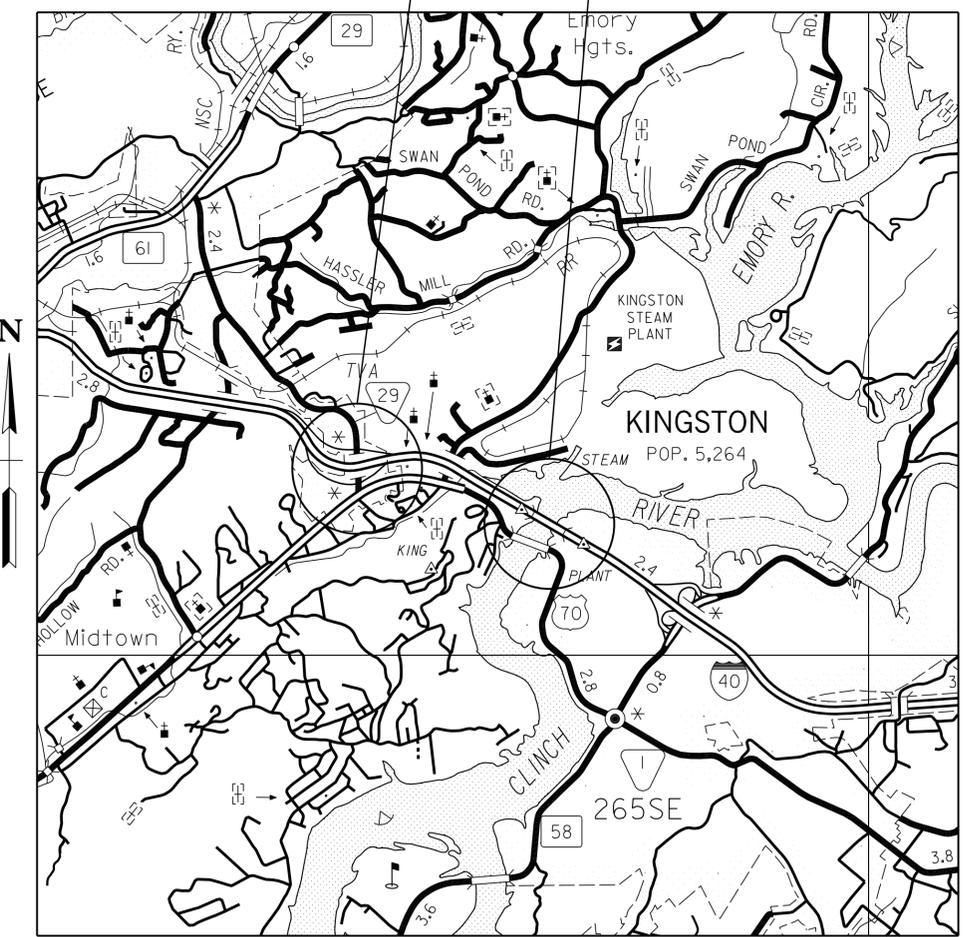
INTERSTATE 40 OVER
STATE ROUTE 29/PINE RIDGE ROAD (RT & LT)
& CLINCH RIVER/LAKEWOOD DRIVE

BRIDGE REPAIR

TENN.	YEAR	SHEET NO.
	2014	1
FED. AID PROJ. NO.		
STATE PROJ. NO.		73100-4116-04



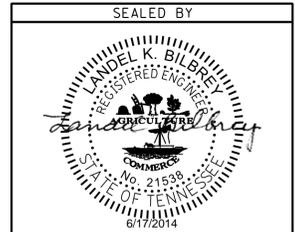
BRIDGE NO. 73-10040-09.96 (RT & LT) BRIDGE NO. 73-10040-11.15



BRIDGE NO. 73-10040-9.96 (RT & LT)
(INTERSTATE 40 OVER STATE ROUTE 29)
ADT = 39,125 = 2013
POSTED SPEED = 70 M.P.H.

BRIDGE NO. 73-10040-11.15
(INTERSTATE 40 OVER CLINCH RIVER/LAKEWOOD DRIVE)
ADT = 45,145 = 2013
POSTED SPEED = 70 M.P.H.

UNOFFICIAL SET
NOT FOR BIDDING



APPROVED: *Paul D. Degges*
PAUL D. DEGGES, CHIEF ENGINEER

DATE

APPROVED: *John Schroer*
JOHN SCHROER, COMMISSIONER

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED FEBRUARY 4, 2014 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT CIVIL ENGINEERING MANAGER I: BRIAN K. EGLI, P.E.
DESIGNED BY ARGE, WAGGONER, SUMNER & CANNON, INC.
DESIGNER MARRIS T. JONES CHECKED BY LANDEL K. BILBREY, P.E.
P.E. NO. 73100-4116-04
PIN NO. 118499.00

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: _____
DIVISION ADMINISTRATOR DATE

\$USER\$
\$DATE\$
\$TIME\$
\$INSTR\$
\$PRF\$

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	1A

ROADWAY DESIGN STANDARDS

DRAWING NO.	CURRENT REVISION DATE	DESCRIPTION
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD-L-5	5-01-08	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL

SAFETY APPURTENANCES AND FENCE

☆ S-GR-11	11-26-07	W-BEAM AND THRIE BEAM BARRIER RAIL AND RUB RAIL ALTERNATES
☆ S-GR-12	5-27-03	W-BEAM BARRIER POST DETAILS AND SPECIFICATIONS
☆ S-GR-13	5-27-03	BARRIER RAIL MOUNTING POST BLOCK-OUTS WITH VERTICAL ADJUSTMENT HOLES
☆ S-GR-13A		BARRIER RAIL MOUNTING POST FOR PLASTIC BLOCK-OUTS WITH HORIZONTAL ADJUSTMENT HOLES
☆ S-GR-14	4-17-12	W-BEAM BARRIER FASTENING HARDWARE AND BRIDGE APPROACH DELINEATORS
☆ S-GR-15	6-30-05	W-BEAM BARRIER TERMINAL ELEMENT DETAILS
☆ S-GR-38A	6-30-05	DETAILS FOR CONSTRUCTION OF ALTERNATE EARTH PAD FOR TYPE 38 GUARDRAIL END TERMINALS
☆ S-GR-43		TANGENTIAL GUARDRAIL TERMINAL ANCHOR (TYPE 38) POST LAYOUT AND ERECTION DETAILS
☆ S-GR-44		TANGENTIAL GUARDRAIL TERMINAL ANCHOR (TYPE 38) (2 TUBE) GUARDRAIL ELEMENT POST AND ASSEMBLY DETAILS

TRAFFIC CONTROL APPURTENANCES

T-FAB-1	5-27-97	FLASHING YELLOW ARROW BOARD
T-M-1	11-1-11	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	1-15-13	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-3	9-19-91	MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS & PAVED SHOULDERS ON CONVENTIONAL ROADS
T-M-5	4-23-13	MARKING DETAILS FOR EXPRESSWAYS & FREEWAYS
T-M-6	6-22-12	MARKING DETAIL FOR EXPRESSWAY & FREEWAY INTERCHANGES
T-M-7	1-12-12	GORE MARKING DETAILS FOR EXPRESSWAY & FREEWAY INTERCHANGES
T-M-8	1-12-12	MARKING DETAILS FOR EXPRESSWAYS & FREEWAYS
T-PBR-1	6-30-09	INTERCONNECTED PORTABLE BARRIER RAIL
T-WZ-12	3-13-09	ONE LANE CLOSURE DETAIL FOR BRIDGES ON DIVIDED HIGHWAYS
T-WZ-16	3-13-09	LANE SHIFT ON DIVIDED HIGHWAYS AND FREEWAYS
T-WZ-21	3-15-11	LANE CLOSURE WITH LEFT HAND MERGE AND LANE SHIFT
T-WZ-32	3-03-06	TRAFFIC CONTROL PLAN SIGNAL LAYOUT FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
T-WZ-34	9-01-05	TRAFFIC CONTROL PLAN GENERAL NOTES FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
T-WZ-35	4-02-12	TRAFFIC CONTROL PLAN PAY ITEM AND SIGN DETAILS FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE

EROSION PREVENTION AND SEDIMENT CONTROL

EC-STR-3C	8-01-12	SILT FENCE WITH WIRE BACKING
EC-STR-3E	8-01-12	SILT FENCE FABRIC JOINING DETAILS
EC-STR-6A	8-01-12	ENHANCED ROCK CHECK DAM

BRIDGE APPURTENANCES

STD-1-1	7-31-00	BRIDGE RAILING CONCRETE PARAPET
STD-1-2	3-28-08	SLIDER PLATES AND DECK DRAINS
STD-1-3	7-31-00	STANDARD CONCRETE MEDIAN BARRIER
STD-1-4	1-05-01	SLIDER PLATES FOR MEDIAN BARRIER
SBR-2-115	1-04-96	GENERAL NOTES AND DETAILS FOR EXPANSION JOINT REPLACEMENT CONSTRUCTION TYPES "A" THRU "J" - 1991
SBR-2-116	1-04-96	GENERAL NOTES AND DETAILS FOR EXPANSION JOINT REPLACEMENT TYPES "A" THRU "J" - 1991
SBR-2-117	5-30-96	STRIP SEAL EXPANSION JOINTS-REPLACEMENT CONSTRUCTION DETAILS TYPE "A" AND "B" - 1991
SBR-2-118	5-30-96	STRIP SEAL EXPANSION JOINTS-REPLACEMENT CONSTRUCTION DETAILS TYPE "C" AND "D" - 1991

☆ DENOTES: RETIRED ROADWAY STANDARDS TO BE PRINTED WITH THE PLANS.

LIST OF DRAWINGS

DWG NO.	LAST REV. DATE	DRAWING
BR-116-18	-----	LAYOUT OF BRIDGE TO BE REPAIRED
BR-116-19	-----	ESTIMATED BRIDGE QUANTITIES
BR-116-20	-----	SUPERSTRUCTURE
BR-116-21	-----	BEAM & JOINT REPAIR DETAILS
BR-116-22	-----	ABUTMENT REPAIR DETAILS
BR-116-23	-----	BENT REPAIR DETAILS (LT)
BR-116-24	-----	BENT REPAIR DETAILS (RT)
BR-116-25	-----	MISCELLANEOUS REPAIR DETAILS
BR-116-26	-----	LAYOUT OF BRIDGE TO BE REPAIRED
BR-116-19	-----	ESTIMATED BRIDGE QUANTITIES
BR-116-27	-----	SUPERSTRUCTURE
BR-116-28	-----	SUPERSTRUCTURE REPAIR DETAILS
BR-116-29	-----	SUPERSTRUCTURE REPAIR DETAILS
BR-116-30	-----	SUPERSTRUCTURE REPAIR DETAILS
BR-116-31	-----	ABUTMENT REPAIR DETAILS
BR-116-32	-----	PIERS NO., 1, 2, 3, 4, 5 & 6 REPAIR DETAILS
BR-116-33	-----	PIERS NO., 7, 8 & 9 REPAIR DETAILS
BR-116-34	-----	PIERS NO., 10, 11 & 12 REPAIR DETAILS
BR-116-25	-----	MISCELLANEOUS REPAIR DETAILS
BR-116-35	-----	NAVIGATIONAL LIGHTING DETAILS
BR-116-36	-----	NAVIGATIONAL LIGHTING DETAILS

*** LIST OF REFERENCE DRAWINGS**

H-4-2 THRU H-4-41	-----	ORIGINAL BRIDGE PLANS
BR-28-62 THRU BR-28-81	-----	PREVIOUS BRIDGE REPAIR PLANS
K-29-78 THRU K-29-85	-----	ORIGINAL BRIDGE PLANS
BR-56-10	-----	LAYOUT OF BRIDGE TO BE REPAIRED (2002)

LIST OF SPECIAL PROVISIONS

NO.	LAST REV. DATE	REGARDING
SP604CR	**	REPAIR OF BRIDGE DECK CRACKS
SP202ACM	**	SPECIAL PROVISION REGARDING REMOVAL OF ASBESTOS CONTAINING MATERIALS

* DENOTES: THESE DRAWINGS ARE TO BE PRINTED WITH PLANS.

** DENOTES: CURRENT REVISION DATE, AS PER CONTRACT DOCUMENTS.

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SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

LIST OF DRAWINGS,
STANDARD DRAWINGS,
APPURTENANCES,
AND SPECIAL
PROVISIONS

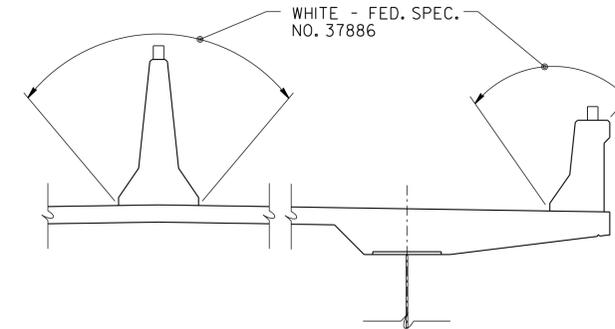
ESTIMATED BRIDGE QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	73-10040-9.96	73-10040-9.96	73-10040-11.15	TOTAL QUANTITY
			/ S.R. 29 RIGHT LANE	/ S.R. 29 LEFT LANE	/ CLINCH RIVER	
202-01.02	REMOVAL OF ASBESTOS	L.S.	1	-	-	1
① 602-10.01	STRUCTURAL STEEL REPAIRS	L.S.	-	-	1	1
② * 602-10.20	BOLTS	EACH	-	-	30	30
③ 603-02.01	REPAINTING EXISTING STEEL STRUCTURES (BRIDGE NO. 73-10040-11.15)	LS	-	-	1	1
④ 603-05.20	CONTAINMENT & DISPOSAL OF WASTE (BRIDGE NO. 73-10040-11.15)	LS	-	-	1	1
604-03.01	CLASS A CONCRETE (BRIDGES)	C.Y.	-	-	1	1
604-04.02	APPLIED TEXTURE FINISH (EXISTING STRUCTURES)	S.Y.	1,537	1574	2702	5,813
⑤ * 604-10.05	CONCRETE	S.F.	62	106	421	589
⑥ 604-10.14	REMOVE EXISTING WEARING SURFACE	L.S.	0.50	0.50	-	1
604-10.18	REINFORCING STEEL (REPAIRS)	LB.	-	-	200	200
604-10.30	BRIDGE DECK REPAIRS (FULL DEPTH OF SLAB)	S.Y.	5	5	-	10
604-10.32	EXPANSION JOINT REPAIRS (TYPE "A")	L.F.	-	-	75	75
604-10.34	CONCRETE OVERLAYED BRIDGE DECK REPAIR (FULL DEPTH)	S.Y.	-	-	345	345
604-10.35	EXPANSION JOINT REPAIRS (TYPE "C")	L.F.	-	-	225	225
604-10.44	EXPANSION JOINT REPAIRS	L.F.	134	134	-	268
604-10.50	BRIDGE DECK REPAIRS (PARTIAL DEPTH OF SLAB)	S.Y.	130	130	-	260
⑦ * 604-10.54	CONCRETE REPAIRS	S.F.	62	106	421	589
604-10.56	CONCRETE OVERLAYED BRIDGE DECK REPAIR (PARTIAL DEPTH)	S.Y.	-	-	150	150
604-10.58	EPOXY INJECTION (INJECTION)	GAL.	1	1	8	10
604-10.62	EPOXY INJECTION REPAIR (COMPLETE AND IN PLACE)	L.F.	21	12	157	190
⑧ 604-10.91	MISCELLANEOUS BRIDGE ITEMS (CLEAN BIRD DROPPINGS)	L.S.	-	-	1	1
⑩ 617-01	BRIDGE DECK SEALANT	S.Y.	822	810	-	1,632
617-05	SEALANT (HMWM)	GAL.	-	-	101	101
⑨ 714-16.01	NAVIGATIONAL LIGHTING	L.S.	-	-	1	1

* DENOTES ITEM SHALL BE BID AS CONTINGENCY AND MAY BE DECREASED, INCREASED OR ELIMINATED AS DIRECTED BY THE ENGINEER.

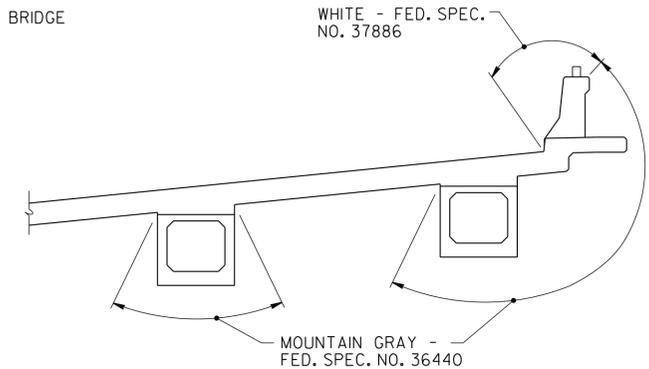
FOOTNOTES:

- ① INCLUDES ALL LABOR AND MATERIALS NECESSARY FOR THE REMOVAL OF ALL FENCING COMPONENTS AND LARGE REBAR ATTACHED TO THE GIRDERS AND BRIDGE COMPONENTS NEAR ABUTMENT NO. 1, AND GRINDING OFF ANY WELDS. ALSO, TO INCLUDE MAGNETIC TESTS OF THOSE AREAS FOR CRACKS AND OTHER SURFACE DEFECTS, ONCE THE WELDS HAVE BEEN REMOVED. FOR DETAILS, SEE DWG. NO. BR-116-30.
- ② INCLUDES ALL LABOR AND MATERIALS TO REPLACE MISSING OR DETERIORATED BOLTS, NUTS, AND/OR WASHERS "IN-KIND" AS NEEDED. REPLACE THE NUTS ON EACH ANCHOR BOLT AT BENT NO. 12 AS DIRECTED BY THE ENGINEER.
- ③ INCLUDES ALL LABOR AND MATERIALS NECESSARY FOR THE SURFACE PREPARATION AND PAINTING OF BEARING DEVICES AT BENTS, AND CLEANING AND PAINTING SURFACE AREAS OF DAMAGED PAINT ON ALL STRUCTURAL STEEL AND INSPECTION CATWALK, AS DIRECTED BY THE ENGINEER, FOR AN APPROXIMATE WEIGHT OF 6,291,000 LBS. SEE NOTES ON GENERAL NOTES SHEET.
- ④ INCLUDES CONTAINMENT AND DISPOSAL OF ALL WASTE GENERATED DURING CLEANING AND PAINTING OF STRUCTURAL STEEL, AND BEARINGS AT BENTS. SEE NOTES ON GENERAL NOTES SHEET.
- ⑤ INCLUDES ALL LABOR AND MATERIALS TO PLACE HIGH EARLY STRENGTH CONCRETE FOR REPAIR AREAS NOTED IN THE PLANS.
- ⑥ INCLUDES ALL COST OF LABOR AND MATERIALS REQUIRED TO REMOVE AND DISPOSE OF THE EXISTING WEARING SURFACE (APPROX. 4"±) WITHIN THE LIMITS OF BRIDGE NO. 73-10040-9.96.
- ⑦ INCLUDES ALL LABOR AND MATERIALS TO PLACE A POLYMER MODIFIED CEMENTITIOUS STRUCTURAL PATCHING MATERIAL FOR REPAIR AREAS NOTED IN PLANS.
- ⑧ INCLUDES ALL LABOR AND MATERIALS NECESSARY FOR THE WATER WASH CLEANING AND REMOVAL OF BIRD DROPPINGS FROM THE STEEL PORTIONS OF THE BRIDGE.
- ⑨ INCLUDES ALL ITEMS AND LABOR NECESSARY TO INSTALL THE NAVIGATIONAL LIGHTING COMPLETE AS SHOWN ON THE PLANS, INCLUDING CONNECTION TO POWER SOURCE. POWER SOURCE TO BE FURNISHED BY OTHERS. THE CONTRACTOR SHALL FURNISH NAVIGATION LIGHTING IN ACCORDANCE WITH THE COAST GUARD PERMIT. SHOP DRAWINGS FOR NAVIGATION LIGHTING SUPPORT BRACKETS SHALL BE SUBMITTED FOR APPROVAL. FOR ADDITIONAL DETAILS AND NOTES, SEE DWG. NOS. BR-116-35 AND BR-116-36.
- ⑩ INCLUDES ALL LABOR AND MATERIALS NECESSARY FOR THE CLEANING AND INSTALLATION OF NEW JOINT MATERIAL.



APPLIED TEXTURE FINISH

(INTERSTATE 40 OVER CLINCH RIVER)
SYMMETRIC ABOUT \bar{C} BRIDGE



APPLIED TEXTURE FINISH

(INTERSTATE 40 OVER STATE ROUTE 29)
SYMMETRIC ABOUT \bar{C} EACH BRIDGE

TEXTURE FINISH NOTES - (73-10040-9.96 OVER STATE ROUTE 29 ONLY)

IN ADDITION TO SURFACES SHOWN, ALL EXPOSED CONCRETE SURFACES ON THE BENTS, ABUTMENT NO. 1, ABUTMENT NO. 2, AND WINGWALLS, ARE TO RECEIVE AN APPLIED TEXTURE FINISH, MOUNTAIN GREY, (FED. SPEC. NO. 36440). THE MEDIAN BARRIER WALL (ON UNDER ROUTE) IS TO RECEIVE AN APPLIED TEXTURE FINISH, WHITE, (FED. SPEC. NO. 37886).

COST OF TEXTURE COATING SHALL BE INCLUDED IN ITEM NO. 604-04.02.

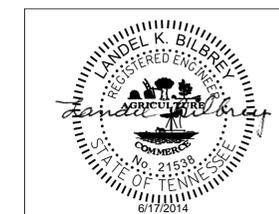
THE CONTRACTOR SHALL USE CONTAINMENT SCREENS OR OTHER MEASURES AS NECESSARY TO PREVENT ANY TEXTURE COATING FROM ENTERING THE ENVIRONMENT. CONTAINMENT MEASURES SHALL BE APPROVED BY THE ENGINEER AND COST SHALL BE INCLUDED IN ITEMS BID ON.

THE EXISTING SURFACES THAT ARE TO RECEIVE A TEXTURE FINISH SHALL BE FREE OF ALL FLAKING TEXTURE COATING, RUST, DIRT, OIL, AND OTHER FOREIGN SUBSTANCES PRIOR TO THE APPLICATION OF THE TEXTURE FINISH. THE SURFACE SHALL BE CLEANED TO THE COMPLETE SATISFACTION OF THE ENGINEER USING A HIGH PRESSURE WASH. COST TO BE INCLUDED IN ITEM NO. 604-04.02.

THE WASH WATER IS TO BE FILTERED AND PAINT CHIPS AND DEBRIS COLLECTED PRIOR TO RELEASE OF WATER.

**UNOFFICIAL
SET**

NOT FOR
BIDDING



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED BRIDGE QUANTITIES
INTERSTATE 40 OVER
PINE RIDGE ROAD &
CLINCH RIVER/LAKWOOD DRIVE
BRIDGE NO. 73-10040-9.96 (RT & LT)
BRIDGE NO. 73-10040-11.15
ROANE COUNTY
2014

DESIGNED BY M. JONES DATE 08/12
DRAWN BY M. JONES DATE 08/12
SUPERVISED BY L. BILBREY DATE 08/12
CHECKED BY L. BILBREY DATE 08/12

USERS
DATE \$
SCALE \$
INCHES \$
BY \$
DATE \$

GENERAL NOTES:**SPECIFICATIONS:**

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, TENNESSEE DEPARTMENT OF TRANSPORTATION, (MARCH 1, 2006 EDITION)

LOADING:

H20-44 LIVE LOADING, SEISMIC ZONE B ACCELERATION COEFFICIENT Z=0.10

DESIGN SPECIFICATIONS:

AASHTO STANDARD SPECIFICATIONS, 17TH EDITION WITH ADDENDA

CONCRETE:

TO BE CLASS "A" (CAST IN PLACE), $f_c=3,000$ psi, EXCEPT AS NOTED OTHERWISE.

CLASS "D" CONCRETE:

CONCRETE FOR BRIDGE DECK SHALL BE IN ACCORDANCE WITH SECTION 604 OF THE STANDARD SPECIFICATIONS.

CONCRETE CURING

ALL CONCRETE IN REPAIR AREAS SHALL BE CURED ACCORDING TO THE STANDARD SPECIFICATIONS.

BRIDGE DECK FORMS:

BRIDGE DECK FORMS FOR CONCRETE DECKS SHALL BE CONSTRUCTED USING REMOVABLE FORMS. SEE ARTICLE 604.05 OF THE STANDARD SPECIFICATIONS.

REINFORCING STEEL:

SHALL BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE (EPOXY COAT ALL SLAB STEEL). SEE SECTION 604 & 907 OF THE STANDARD SPECIFICATIONS.

NOTE:

THE CONTRACTOR SHALL PROVIDE 100% CONVENTIONAL FALL PROTECTION FOR WORKERS INSTALLING DECKING ABOVE 15 FEET.

GROUTED BARS IN DRILLED HOLES:

HORIZONTALLY DRILLED HOLES SHALL BE DRILLED 1/2" IN DIAMETER LARGER THAN THE BAR, CLEANED, PACKED WITH NON-SHRINK GROUT, AND THE BAR ROTATED (NOT DRIVEN) TO ITS SEAT. VERTICALLY DRILLED HOLES SHALL BE DRILLED 1/4" IN DIAMETER LARGER THAN THE BAR, CLEANED, PACKED WITH EPOXY GROUT, AND THE BAR SHALL BE DRIVEN TO ITS SEAT. ALL GROUTING MATERIAL SHALL BE APPROVED BY TDOT MATERIALS AND TESTS.

SHOP DRAWINGS:

SEE SECTION 105.02 OF THE STANDARD SPECIFICATIONS. A COPY SHALL ALSO BE SUBMITTED TO THE DIVISION OF STRUCTURES, BRIDGE INSPECTION AND REPAIR OFFICE.

FALSEWORK OVER TRAFFIC:

SEE SECTION 604.06 OF THE STANDARD SPECIFICATIONS.

REQUIREMENTS AND RESTRICTIONS FOR PHASE CONSTRUCTION:

ONE TRAFFIC LANE (14'-8" FOR BRIDGES 73-10040-9.96 (RT & LT) AND 12'-9" FOR BRIDGES 73-10040-11.15 (RT & LT)) SHALL BE MAINTAINED IN EACH DIRECTION DURING PHASE 1, WITH A WIDE-LOAD DETOUR. SEE TRAFFIC CONTROL PLANS FOR WIDE-LOAD DETOUR PLAN. AT LEAST ONE 16 FOOT LANE (16'-0") SHALL BE MAINTAINED IN EACH DIRECTION ON ALL BRIDGES DURING PHASE 2.

FORMS AND FALSEWORK:

CONCRETE FORM WORK, FALSEWORK, AND TEMPORARY SUPPORTS SHALL BE REMOVED FROM THE JOB SITE AFTER WORK IS COMPLETED. COST OF FORMS, FALSEWORK, AND TEMPORARY SUPPORT SHALL BE INCLUDED IN ITEMS BID ON. THIS WORK SHALL BE COMPLETED BEFORE FINAL PAYMENT IS APPROVED.

FINISHING CONCRETE SURFACES:

CONCRETE FINISHING SHALL BE IN ACCORDANCE WITH SECTION 604.21 OF THE TENNESSEE STANDARD SPECIFICATIONS. A CLASS I FINISH FOLLOWED BY AN APPLIED TEXTURE FINISH SHALL BE USED IN LIEU OF A CLASS II FINISH WHERE DESIGNATED IN THE PLANS. NO TEXTURE COATING SHALL BE APPLIED PRIOR TO COMPLETION OF PAVING AND HAULING OPERATIONS AT THE BRIDGE SITE. FOR LOCATION DETAILS, SEE DRAWING NO. BR-116-19.

SPECIAL NOTE FOR UTILITIES:

IT IS INTENDED THAT THE COST OF MATERIALS AND LABOR NECESSARY FOR THE COMPLETE INSTALLATION OF UTILITIES SHALL BE BORNE BY OTHERS AND SHALL NOT BE PAID FOR AS A PART OF THIS CONTRACT. THE CONTRACTOR SHALL COOPERATE WITH OTHERS IN THE INSTALLATION OF UTILITIES WITH NO ADDITIONAL COMPENSATION ALLOWED THE CONTRACTOR AS A RESULT.

DEMOLITION:

THE CONTRACTOR SHALL TAKE SPECIAL CARE TO PROTECT ANY PARTS OF THE STRUCTURE THAT ARE NOT TO BE REMOVED SPECIFICALLY. THE CONTRACTOR IS NOT ALLOWED TO USE A HYDRAULIC RAM MOUNTED ON A BACKHOE (COMMONLY CALLED A HOE RAM) OR OTHER SIMILARLY HEAVY EQUIPMENT FOR CONCRETE REMOVAL. PNEUMATIC HAMMERS MAY BE USED, AS SPECIFIED, TO REMOVE UNSOUND CONCRETE. SAWING OR CUTTING OF THE CONCRETE IS ACCEPTABLE SO LONG AS ANY SPECIFIED PROJECTION OF THE EXISTING REINFORCEMENT IS MAINTAINED. ALL DEVICES PROPOSED FOR CONCRETE DEMOLITION SHALL MEET THE APPROVAL OF THE ENGINEER.

SPECIAL NOTES TO CONTRACTOR:

CONTRACTOR SHALL USE EXTREME CARE AND TAKE ANY MEASURE NECESSARY TO INSURE THAT NO DEBRIS IS DROPPED INTO THE STREAM OR TRACKS BELOW. THIS SHALL BE ACCOMPLISHED BY THE USE OF BASKETS, NETTING, WRAPPING, WORK PLATFORM, OR OTHER SIMILARLY EFFECTIVE MEANS. ANY DEBRIS WHICH IS ALLOWED TO DROP ON THE BANKS BELOW THE BRIDGE SHALL NOT BE ALLOWED TO ENTER THE WATER AND SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. COST OF REMOVING AND DISPOSING OF DEBRIS SHALL BE INCLUDED IN OTHER ITEMS BID.

THE CONTRACTOR IS RESPONSIBLE FOR AND SHOULD TAKE ALL PRECAUTIONS TO ENSURE THE STABILITY OF THE STRUCTURE DURING THE REPAIRS.

THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND QUANTITIES BEFORE ORDERING ANY MATERIALS.

THE CONTRACTOR SHALL CHECK LOCATION OF ALL EXISTING SUBSTRUCTURES AND VERIFY SPAN LENGTHS BEFORE ORDERING STEEL.

NO WORK SHALL BE ALLOWED IN THE STREAMS. IF A SITUATION ARISES WHERE WORK IN THE STREAM IS NECESSARY, THE ENGINEER SHALL CONTACT THE ENVIRONMENTAL PERMITTING OFFICE IMMEDIATELY.

CLEANING AND PAINTING OF BEARINGS:

ALL STEEL BEARINGS SHALL BE CLEANED IN ACCORDANCE WITH TENNESSEE STANDARD SPECIFICATIONS SECTION 603.05(A). HAND OR POWER TOOL CLEANING SHALL REMOVE ALL RUST, SCALE, LOOSE PAINT AND DIRT. AFTER CLEANING, THE BEARINGS SHALL BE PAINTED WITH AN APPROVED EPOXY MASTIC PAINT APPLIED AT A MINIMUM DRY FILM THICKNESS OF 4.0 MILS. THE COLOR OF THE EPOXY MASTIC SHALL BE ALUMINUM OR GREY.

SEE THE TENNESSEE DEPARTMENT OF TRANSPORTATION'S QUALIFIED PRODUCTS LIST FOR ACCEPTABLE BRANDS OF EPOXY MASTIC. ALL PRODUCTS USED, INCLUDING THINNERS, MUST BE SUPPLIED BY THE SAME MANUFACTURER.

THE COATING APPLICATOR SHALL FOLLOW THE MANUFACTURER'S PRINTED INSTRUCTIONS AND SHALL HAVE THESE INSTRUCTIONS ON SITE DURING THE COURSE OF THE WORK.

CLEANING AND PAINTING: (BR. NO. 73-10040-11.15 ONLY)

ALL STRUCTURAL STEEL SHALL BE BLASTCLEANED AND PAINTED. BLASTCLEANING SHALL BE IN ACCORDANCE WITH SECTION 603.05(b). PAINT SHALL BE SYSTEM "A" – INORGANIC ZINC. COLOR OF THE FINISH COAT SHALL COMPLY WITH FEDERAL STANDARD NO. 595b, FEDERAL SPECIFICATION 14120 (GREEN). SEE SECTIONS 603 AND 910 OF THE STANDARD SPECIFICATION.

CONTAINMENT AND DISPOSAL:

OUR RECORDS SHOW THAT THIS BRIDGE HAS OR HAS HAD LEAD/CHROMATE PAINT APPLIED TO IT DURING ITS HISTORY. THEREFORE, THE CONTRACTOR SHALL ASSUME THAT REMNANTS OF THAT PAINT REMAIN ON THE BRIDGE. SEE TENNESSEE STANDARD SPECIFICATIONS SECTION 603.13 FOR SPECIAL PRECAUTIONS THAT MUST BE TAKEN IN THE REMOVAL, CONTAINMENT AND DISPOSAL OF THE SURFACE PREPARATION WASTE AND PAINT REMOVAL MEDIA, AND WORKER AND PUBLIC SAFETY.

ACCORDING TO OUR RECORDS THE EXISTING PAINT SYSTEM CONTAINS AN INORGANIC ZINC PRIMER AND URETHANE TOP COAT. THE CONTRACTOR SHALL CONTAIN AND DISPOSE OF ALL PAINT REMOVAL WASTE IN ACCORDANCE WITH SECTION 603.13.

SPECIAL NOTE SURFACE PREPARATION: BR. NO. 73-10040-11.15 ONLY)

OUR RECORDS SHOW THAT THIS BRIDGE HAS OR HAS HAD LEAD/CHROMATE PAINT APPLIED TO IT DURING ITS HISTORY. THEREFORE, THE CONTRACTOR SHALL ASSUME THAT REMNANTS OF THAT PAINT REMAIN ON THE BRIDGE ALONG WITH THE POSSIBILITY OF THE PRESENCE OF MILLSCALE. CONTRACTOR SHALL BID ACCORDINGLY.

CONCRETE OR PATCHING MATERIAL:

NO CONCRETE OR PATCHING MATERIALS SHALL BE PLACED BY PNEUMATIC METHODS.

QUICK SET PATCHING MATERIAL:

QUICK-SET PATCHING MATERIAL SHALL BE A POLYMER MODIFIED CEMENTIOUS MATERIAL. SEE TDOT QUALIFIED PRODUCTS LIST 13, SECTION B.6, FOR ACCEPTABLE MATERIALS.

HIGH EARLY STRENGTH CONCRETE (FOR INDICATED AREAS OF SUBSTRUCTURE REPAIR):

THE MIX SHALL MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, CLASS "A" EXCEPT THE CEMENT CONTENT SHALL BE A MINIMUM OF 714 LBS., THE WATER CEMENT RATION SHALL BE A MAXIMUM OF 0.40, NO FLY ASH REPLACEMENT WILL BE PERMITTED, AND THE MINIMUM 28 DAY COMPRESSIVE STRENGTH SHALL BE 3,500 P.S.I. LOADING SHALL NOT BE PERMITTED ON ANY AREAS UNTIL TEST SPECIMENS ATTAIN A COMPRESSIVE STRENGTH OF 3,000 P.S.I. MINIMUM AND THE CONCRETE HAS BEEN IN PLACE A MINIMUM OF TEN (10) DAYS.

SPECIAL NOTE CONCERNING CONCRETE FOR AREAS OF DECK REPAIR:

CONCRETE SHALL BE HIGH EARLY STRENGTH CONCRETE WITH A COMPRESSIVE STRENGTH OF $f_c=3,000$ P.S.I. AT EIGHTEEN (18) HOURS. THE CONTRACTOR SHALL PROVIDE PROOF PRIOR TO BEGINNING WORK THAT THE PROPOSED CONCRETE MIX WILL OBTAIN THE REQUIRED PROPERTIES. PROOF SHALL BE PROVIDED BY AN INDEPENDENT TESTING COMPANY AND SUBMITTED TO THE MATERIALS AND TEST DIVISION OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION FOR APPROVAL. TRAFFIC SHALL NOT BE PERMITTED ON ANY REPAIR AREA UNTIL TEST SPECIMENS ATTAIN A COMPRESSIVE STRENGTH OF 3,000 P.S.I. AND THE CONCRETE HAS BEEN IN PLACE A MINIMUM OF EIGHTEEN (18) HOURS.

SEASONAL LIMITATIONS NOTE:

THE SWALLOW NESTS CANNOT BE DISTURBED WHILE EGGS OR YOUNG ARE PRESENT IN THE NEST. THE APPROXIMATE DATE FOR NESTING ACTIVITIES BEGINNING IS MAY 1 AND THE FLEDGLING FOR THE CLIFF SWALLOW IS JULY, 15. NOTE THAT THESE ARE APPROXIMATE DATES AND NESTING COULD OCCUR EARLIER AND LAST UNTIL LATER. THE DATES ARE FOR GUIDANCE ONLY AND THE EMPHASIS IS ON THE PRESENCE OR ABSENCE OF EGGS OR YOUNG, NOT THE DATES. THE CONTRACTOR CANNOT DISTURB THE SWALLOWS OR NESTS AS LONG AS EGGS AND/OR YOUNG ARE PRESENT. THE USFWS HAS GIVEN THE DATE OF JULY 15 AS THE TYPICAL TIME WHEN YOUNG SHOULD BE LEAVING THE NEST. HOWEVER, THIS DATE COULD BE UP TO A MONTH OR MORE LATER DEPENDING ON WHEN THE SWALLOWS ACTUALLY LAY THEIR EGGS. IF THE BIRDS ARE PRESENT AND EGGS OR YOUNG ARE IN THE NEST, THEY ARE NOT TO BE DISTURBED UNTIL THE YOUNG LEAVE THE NESTS. IF WORK BEGINS PRIOR TO THE BIRDS NESTING, THE CONTRACTOR CAN REMOVE THE NESTS AND TAKE MEASURES TO PREVENT THE SWALLOWS FROM BUILDING NESTS AND WORK THROUGHOUT THE NESTING SEASON. THIS COULD BE INSTALLATION OF NETTING, TARPS OR JUST HAVING SOMEBODY AVAILABLE TO REMOVE THE NESTS BEFORE THE BIRDS CAN LAY EGGS IN THEM.

SPECIAL NOTE CONCERNING WORK OVER A NAVIGABLE WATERWAY:

THE CONTRACTOR SHALL COMPLY FULLY WITH ANY REQUIREMENTS ESTABLISHED BY THE CORPS OF ENGINEERS, U.S. COAST GUARD, AND ANY OTHER AGENCIES WHICH MAY HAVE JURISDICTION RELATIVE TO CONSTRUCTION WORK OVER A NAVIGABLE STREAM WHICH IS APPLICABLE TO THIS CONTRACT, AND WHICH MAY NOT BE COVERED BY EXISTING PERMITS. THE CONTRACTOR SHALL SUBMIT A DESCRIPTION OF WORK AND SKETCHES OF ANY FALSEWORK, SCAFFOLDING, DEBRIS CONTAINMENT SYSTEMS, ETC., WHICH MAY BE REQUIRED DURING CONSTRUCTION WHICH MAY ENCROACH UPON THE VERTICAL AND/OR HORIZONTAL CLEARANCES FOR WATERWAY TRAFFIC TO THE U.S. COAST GUARD FOR APPROVAL BEFORE ANY WORK IS BEGUN.

CONTACT: DAVID STUDT, U.S. COAST GUARD, BRIDGE ADMINISTRATOR, 1222 SPRUCE STREET, ST. LOUIS, MO 63103-2832.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	2A

UNOFFICIAL
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BRIDGE
GENERAL
NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	2B

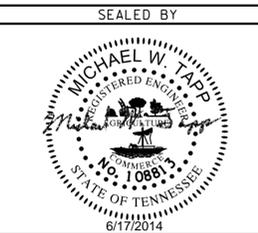
ESTIMATED ROADWAY QUANTITIES						
ITEM NO.	DESCRIPTION	UNIT	73-10040-9.96 / S.R. 29 RIGHT LANE	73-10040-9.96 / S.R. 29 LEFT LANE	73-10040-11.15 / CLINCH RIVER	TOTAL QUANTITY
201-05.31	VEGETATION REMOVAL	LS	0.25	0.25	0.5	1
* 204-08.01	BACKFILL MATERIAL (FLOWABLE FILL)	C.Y.	-	2	1	3
* 209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	-	280	70	350
209-08.08	ENHANCED ROCK CHECK DAM	EACH	2	-	-	2
307-03.08	ASPHALT CONCRETE MIX (PG76-22) (BPMB-HM) GRADING B-M2	TON	109	109	-	218
(1) 411-03.10	ACS MIX(PG76-22) GRADING D	TON	134	134	152	420
411-12.01	SCORING SHOULDERS (CONTINUOUS) (16IN WIDTH)	L.M.	0.1	0.1	0.1	0.3
415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	1162	1162	2290	4614
705-04.07	TAN ENERGY ABSORBING TERM (NCHRP 350, TL3)	EACH	-	1	2	3
705-04.09	EARTH PAD FOR TYPE 38 GR END TREATMENT	EACH	-	1	1	2
(2) 705-08.51	PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3	EACH	2	2	4	8
706-01	GUARDRAIL REMOVED	L.F.	-	38	88	126
(3) 709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	-	20	-	20
712-01	TRAFFIC CONTROL	LS	0.25	0.25	0.5	1
712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	760	770	3530	5060
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	35	130	225	390
(4) 712-04.50	PORTABLE BARRIER RAIL DELINEATOR	EACH	50	50	295	395
712-05.01	WARNING LIGHTS (TYPE A)	EACH	-	-	8	8
712-05.03	WARNING LIGHTS (TYPE C)	EACH	70	55	120	245
712-06	SIGNS (CONSTRUCTION)	S.F.	499	467	966	1932
(5) 712-06.16	SIGNS (CONSTRUCTION) (REDUCED SPEED WARNING)	EACH	2	-	2	4
712-08.03	ARROW BOARD (TYPE C)	EACH	1	1	2	4
(6) 712-09.01	REMOVABLE PAVEMENT MARKING LINE	L.F.	1225	1740	1200	4165
(7) 712-09.02	REMOVABLE PAVEMENT MARKING LINE (8" BARRIER LINE)	L.F.	4420	17470	31135	53025
712-09.04	REMOVABLE PAVEMENT MARKING (STOP LINE)	L.F.	-	-	20	20
713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	3	-	3	6
716-01.12	RAISED PVMT MARKERS (MONO-DIRECTIONAL) (1 COLOR LENS)	EACH	-	-	460	460
716-01.13	RAISED PVMT MARKERS (BI-DIRECTIONAL) (2 COLOR LENS)	EACH	3	3	36	42
716-01.23	SNOWPLWBLE PVMT MRKRS (BI-DIR) (2-COLOR)	EACH	22	7	38	67
716-02.23	PLASTIC PAVEMENT MARKING (12 IN BARRIER LINE)	L.F.	-	-	650	650
716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	-	-	0.5	0.5
716-12.01	ENHANCED FLATLINE THERMO PVMT MRKNG (4" LINE)	L.M.	0.4	0.4	-	0.8
716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6" LINE)	L.M.	1.9	0.8	2.6	5.3
717-01	MOBILIZATION	LS	0.25	0.25	0.5	1
730-40	TEMPORARY TRAFFIC SIGNAL SYSTEM	EACH	-	-	1	1

* DENOTES: ITEM TO BE BID AS CONTINGENCY AND CAN BE INCREASED, DECREASED, OR ELIMINATED AS DIRECTED BY THE ENGINEER.

FOOTNOTES:

- INCLUDES COST OF 1.0 TON OF TACK COAT FOR THE CLINCH RIVER BRIDGE AND 1.2 TONS OF TACK COAT FOR EACH OF THE S.R. 29 BRIDGES AT A RATE OF 0.1 GAL/S.Y. FOR MILLED SURFACES. RATE SHALL BE 0.07 GAL/S.Y. BETWEEN LIFTS OF NEW ASPHALT SURFACE.
- THIS ITEM SHALL BE A PORTABLE ENERGY ASORBING TERMINAL MEETING THE REQUIREMENTS OF NCHRP 350 FOR TEST LEVEL 3. EXAMPLES WOULD BE A QUAD-GUARD, A REACT 350, OR A TRACC. THE PAY ITEM WILL INCLUDE FURNISHING AND INSTALLING ALL COMPONENTS AS SHOWN ON THE MANUFACTURER'S DRAWING.
- COST TO INCLUDE ALL LABOR AND MATERIALS NECESSARY FOR THE RESHAPING OF THE DITCHES ON THE NORTH SIDE OF THE S.R. 29 OVERPASS FOR A LENGTH OF 50 FEET PER DITCH.
- TOTAL TO BE 20% WHITE AND 80% YELLOW.
- ITEM TO BE USED ONLY WHEN THE CONTRACTOR ESTABLISHES A REDUCED SPEED LIMIT WITHIN THE PROJECT CONSTRUCTION WORK ZONE LIMITS. ITEMS INCLUDE SIGN FACE (TN-44), SUPPORTS, AND TWO TYPE "B" FLASHERS PER THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TURNING ON THE TYPE "B" FLASHERS WHEN WORKERS ARE IN THE CONSTRUCTION WORK ZONE AND TURNING THEM OFF WHEN WORKERS ARE NO LONGER IN THE CONSTRUCTION WORK ZONE.
- SHALL BE 6" LINE FOR USE ON S.R. 29 AND LAKEWOOD DRIVE
- FOR USE ON I-40

UNOFFICIAL SET
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	2C

GENERAL NOTES

GRADING

- (1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- (2) CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.
- (3) THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY SAME. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.

GUARDRAIL

- (4) THE CONTRACTOR SHALL NOT REMOVE ANY SECTIONS OF EXISTING GUARDRAIL TO REWORK SHOULDERS OR FLATTEN SLOPES UNTIL THE ENGINEER CONCURS IN THE NECESSITY OF REMOVAL DUE TO CONSTRUCTION REQUIREMENTS AND THE APPROPRIATE WARNING DEVICES ARE INSTALLED. THE PROPOSED GUARDRAIL, INCLUDING ANY ANCHOR SYSTEM, SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD. NO PAYMENT WILL BE MADE FOR A SECTION OF PROPOSED GUARDRAIL, INCLUDING ANCHORS, UNTIL IT IS COMPLETE IN PLACE.
- (5) IF ANY APPROACH END OF A SECTION OF GUARDRAIL OR BRIDGE RAIL MUST TEMPORARILY BE LEFT INCOMPLETE AND EXPOSED TO TRAFFIC, THE CONTRACTOR SHALL USE TWO (2) TEMPORARY BARRICADES OR DRUMS WITH TYPE A LIGHTS AND ROUNDED END ELEMENTS AS MINIMUM MEASURES TO PROTECT TRAFFIC FROM THE HAZARD OF AN EXPOSED END. ALL COST OF FURNISHING AND INSTALLING A TEMPORARY ROUNDED END ELEMENT SHALL BE INCLUDED IN THE COST OF THE PROPOSED GUARDRAIL.

DRAINAGE

- (6) THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

UTILITIES

- (7) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.
- (8) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR IT'S REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.
- (9) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

- (10) PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.
- (11) THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106.

MISCELLANEOUS

- (12) NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA

PAVEMENT MARKINGS

S.R. 29 (PINE RIDGE ROAD)

- (13) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 4" ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-12.01, ENHANCED FLATLINE THERMO PVMT MRKNG (4IN LINE), L.M. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

I-40

- (14) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 6" ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-12.02, ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE), L.M. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

LAKEWOOD DRIVE

- (15) PERMANENT PAVEMENT LINE MARKINGS SHALL BE REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01 PAINTED PAVEMENT MARKING (4IN LINE), L.M.

LANE SHIFTS

- (16) THE PAVEMENT MARKING ON THE LANE SHIFTS FOR EDGELINES ON WILL BE INSTALLED AND MAINTAINED TO THE SAME STANDARDS AS FOR PERMANENT MARKINGS ON THE MAIN ROADWAY. THESE MARKINGS SHALL BE IN PLACE PRIOR TO ALLOWING TRAFFIC ONTO THE PAVEMENT. THESE PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 712-09.01, REMOVEABLE PAVEMENT MARKING LINE, L.F. AND ITEM NO. 712-09.02, REMOVEABLE PAVEMENT MARKING LINE (8" BARRIER LINE), L.F.

- (17) BEFORE OPENING THE LANE SHIFTS TO TRAFFIC, THE TRANSITIONAL MARKINGS ON THE EXISTING ROADWAY MUST BE IN PLACE. ALL EXISTING MARKINGS IN THE AREA OF THESE TRANSITIONAL MARKINGS SHALL BE OBLITERATED AND ALL EXISTING RAISED PAVEMENT MARKERS SHALL BE REMOVED TO ELIMINATE CONFLICTING MARKINGS. REMOVAL OF THE EXISTING CONFLICTING MARKINGS AND RAISED PAVEMENT MARKERS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN ITEM NO. 712-01 TRAFFIC CONTROL, LUMP SUM.

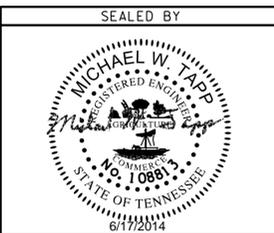
PAVEMENT

PAVING

- (18) THE CONTRACTOR SHALL BE REQUIRED TO COLD PLANE AND PAVE IN THE DIRECTION OF TRAFFIC.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (19) ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.
- (20) IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.
- (21) A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.
- (22) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
- (23) USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- (24) THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF A OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE.. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- (25) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ROADWAY
GENERAL
NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	2D

GENERAL NOTES

EROSION PREVENTION AND SEDIMENT CONTROL

DISTURBED AREA

- (26) AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.
- (27) PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED (I.E. CLEARING AND GRUBBING INITIATED) MORE THAN 15 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS MULCHED, SEEDED WITH MULCH, OR OTHER TEMPORARY COVER IS INSTALLED.
- (28) CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. EXISTING VEGETATION SHOULD BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.
- (29) ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS.
- (30) CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION.
- (31) NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION OF THE PROJECT. OFF-SITE BORROW OR WASTE AREAS ARE TO BE INCLUDED IN THE TOTAL DISTURBED AREA IF THE BORROW OR WASTE AREA IS EXCLUSIVE TO THE PROJECT PER TDOT'S WASTE AND BORROW MANUAL.

SEDIMENT CONTROL

- (32) EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- (33) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.
- (34) WATER PUMPED FROM WORK AREAS AND EXCAVATION MUST BE HELD IN SETTLING BASINS OR TREATED BY FILTRATION OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE INTO SURFACE WATERS. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES AND FULLY DESCRIBED IN THE EPSC PLANS. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS SHALL NOT BE LOCATED CLOSER THAN 20 FEET FROM THE TOP BANK OF A STREAM. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL-VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT. DISCHARGES FROM BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. DISCHARGES MUST NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITH THE RECEIVING STREAM.
- (35) CHECK DAMS SHALL BE USED WHERE RUNOFF IS CONCENTRATED. CLEAN ROCK, BRUSH, GABION, OR SANDBAG CHECK DAMS SHALL BE PROPERLY CONSTRUCTED TO REDUCE VELOCITY AND CONTROL EROSION.
- (36) FOR AN OUTFALL IN A DRAINAGE AREA OF 10 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN OR EQUIVALENT CONTROL MEASURES THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A MINIMUM 2-YEAR/ 24-HOUR STORM EVENT, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND

CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.

- (37) IF PERMANENT OR TEMPORARY VEGETATION IS TO BE USED AS AN EPSC MEASURE, THEN THE TIMING OF PLANTING OF VEGETATION SHALL BE SHOWN IN THE SWPPP. DELAYING PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED, IF POSSIBLE.
- (38) OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ACCESS (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED, AS NEEDED, TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.
- (39) TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY.

STREAM/WETLAND

- (40) SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EPSC MEASURES TO PROTECT WATER QUALITY MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. APPROPRIATE EPSC MEASURES MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG STREAM BANKS IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS IN ACCORDANCE WITH TDOT STANDARDS. THEY MUST BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.
- (41) NEW CHANNEL CONSTRUCTION SHALL BE COMPLETED IN THE DRY AND STABILIZED FOR AT LEAST 72 HOURS PRIOR TO DIVERTING WATER FROM THE EXISTING AND/OR TEMPORARY CHANNEL.
- (42) INSTREAM EPSC DEVICES REQUIRE THE ENVIRONMENTAL DIVISION'S PERMITS SECTION REVIEW AND MUST BE PROCESSED BY THE PERMITS SECTION TO OBTAIN TDEC, USACE, AND TVA PERMITS.
- (43) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS, SHALL BE ONLY AS SHOWN ON THE PROJECT PLANS AND/OR AS SO SPECIFIED IN THE ARAP/401, SECTION 404 PERMIT(S) AND/OR TVA26(A), IF APPLICABLE. ANY ADDITIONAL PERMITS REQUIRED BY THE CONTRACTOR'S METHOD OF OPERATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN, AFTER RECEIVING THE APPROVAL OF TDOT ENVIRONMENTAL DIVISION.
- (44) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING.
- (45) STREAM BEDS SHALL NOT BE USED AS TRANSPORTATION ROUTES FOR CONSTRUCTION EQUIPMENT. TEMPORARY CROSSINGS MUST BE LIMITED TO ONE POINT PER STREAM AND EPSC MEASURES MUST BE USED WHERE THE STREAM BANKS ARE DISTURBED. WHERE THE STREAMBED IS NOT COMPOSED OF BEDROCK, A PAD OF CLEAN ROCK MUST BE USED AT THE CROSSING POINT AND CULVERTED TO PREVENT THE IMPOUNDMENT OF WATER FLOW. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION, WHICH CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS. OTHER MATERIALS USED FOR ALL TEMPORARY FILLS MUST BE COMPLETELY REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED AND THE AFFECTED AREAS RETURNED TO THEIR PREEXISTING ELEVATION. ALL TEMPORARY CROSSINGS MUST BE CONSTRUCTED IN ACCORDANCE WITH STD. DWG. EC-STR-25 UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ALTERNATIVELY, PLACING A TEMPORARY BRIDGE (BAILEY BRIDGE OR EQUIVALENT, TIMBERS, ETC.) FROM TOP OF BANK TO TOP OF BANK OR THE APPROPRIATE USE OF BARGES AT THE CROSSING TO AVOID DISTURBANCE OF THE STREAMBED IS AN ACCEPTABLE OPTION.
- (46) HEAVY EQUIPMENT WORKING IN WETLANDS MUST BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ANY MATS AND OTHER MEASURES USED FOR HEAVY EQUIPMENT MUST BE REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED.
- (47) WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS PROVIDED FOR IN THE PLANS.

SPECIES

- (48) NO ACTIVITY MAY SUBSTANTIALLY DISRUPT THE MOVEMENT OF THOSE SPECIES OF AQUATIC LIFE INDIGENOUS TO THE WATER BODY, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA. THE SWPPP SHALL BE MODIFIED TO INCLUDE EPSC MEASURES TO PREVENT NEGATIVE IMPACTS TO LEGALLY PROTECTED STATE OR FEDERAL FAUNA

OR FLORA OR AS INDICATED IN THE ECOLOGICAL STUDIES OR ON THE PERMIT(S).

INSPECTION, MAINTENANCE, REPAIR

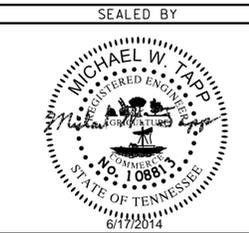
- (49) EPSC CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES.
- (50) INSPECTION, REPAIR, AND MAINTENANCE OF EPSC MEASURES/STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.
- (51) SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND BE TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS AND DOES NOT MIGRATE INTO WATERS OF THE STATE/U.S. COST FOR THIS TREATMENT IS TO BE INCLUDED IN PRICE BID FOR ITEM NO. 209-05 SEDIMENT REMOVAL, C.Y.
- (52) THE CONTRACTOR SHALL INSTALL A RAIN GAUGE EVERY LINEAR MILE AT ALL SITES WHERE CLEARING, GRUBBING, EXCAVATION, GRADING CUTTING OR FILLING IS BEING ACTIVELY PERFORMED, OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED. IF THE PROJECT LENGTH IS LESS THAN ONE LINEAR MILE, ONE RAIN GAUGE SHALL BE INSTALLED AT THE CENTER OF THE PROJECT OR AS INDICATED BY THE TDOT EPSC INSPECTOR. THE CONTRACTOR SHALL ENSURE THAT EACH GAUGE IS MAINTAINED IN GOOD WORKING CONDITION. TDOT AND/OR THE CONTRACTOR SHALL RECORD DAILY PRECIPITATION AND FORECASTED PERCENTAGE OF PRECIPITATION IN DETAILED RECORDS OF RAINFALL EVENTS INCLUDING DATES, AMOUNTS OF RAINFALL PER GAUGE, THE ESTIMATED DURATION (OR STARTING AND ENDING TIMES), AND FORECASTED PERCENTAGE OF PRECIPITATION FOR THE PROJECT. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER ON A MONTHLY BASIS. THE COST FOR THE RAIN GAUGES IS TO BE INCLUDED IN THE UNIT BID PRICES FOR OTHER ITEMS. RAIN GAUGES SHALL BE AS SPECIFIED IN THE APPROVED TDOT RAINFALL MONITORING PLAN.
- (53) INSPECTION OF EPSC MEASURES SHALL BE DONE AT LEAST TWICE PER CALENDAR WEEK AT LEAST 72 HOURS APART. A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. QUALITY ASSURANCE/QUALITY CONTROL SITE ASSESSMENT OF EPSC SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION'S COMPREHENSIVE INSPECTION OFFICE GUIDELINES.
- (54) OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO SURROUNDING WATERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWNSTREAM LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.
- (55) UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE MORE THAN 24 HOURS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN THE TIMEFRAME, WRITTEN DOCUMENTATION MUST BE PROVIDED IN THE FIELD BOOK AND AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION.
- (56) THE TDOT PROJECT SUPERVISOR (OR THEIR DESIGNEE) AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE TDOT PROJECT SUPERVISOR OR THEIR DESIGNEE WILL COMPLETE THE INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.

MATERIALS

- (57) WASTE AND BORROW AREAS SHALL BE LOCATED IN NON-WETLAND AREAS AND ABOVE THE 100-YEAR, FEDERAL EMERGENCY MANAGEMENT AGENCY FLOODPLAIN. BORROW AND WASTE DISPOSAL AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY AN ARAP, 404, OR NPDES PERMIT, OBTAINED SOLELY BY THE CONTRACTOR.

**UNOFFICIAL
SET**

NOT FOR
BIDDING



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**ROADWAY
GENERAL
NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	2E

GENERAL NOTES

EROSION PREVENTION AND SEDIMENT CONTROL (CONT'D) SWPPP, PERMITS, PLANS, RECORDS

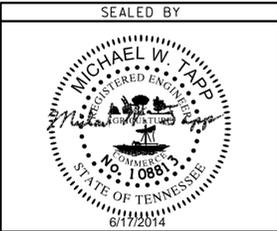
- (58) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS.
- (59) ANY DISAGREEMENT BETWEEN THE PROJECT PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE TDOT PROJECT ENGINEER. THE ENVIRONMENTAL DIVISION, DESIGN DIVISION, AND HEADQUARTERS CONSTRUCTION OFFICE SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.
- (60) THE FOLLOWING INFORMATION SHALL BE MAINTAINED ON OR NEAR THE SITE: DATES THAT MAJOR GRADING ACTIVITIES OCCUR, DATES WHERE CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, DATES WHEN STABILIZATION MEASURES ARE INITIATED, EPSC INSPECTION RECORDS, QUALITY ASSURANCE SITE ASSESSMENT RECORDS, PRECIPITATION RECORDS, SWPPP, PROJECT ENVIRONMENTAL PERMITS, AND A COPY OF THE PROJECT EPSC INSPECTOR'S TDEC LEVEL 1 CERTIFICATION.
- (61) ALL WATER QUALITY AND STORM WATER PERMITS, INCLUDING A COPY OF THE NOC WITH NPDES PERMIT TRACKING NUMBER AND THE LOCATION OF THE SWPPP, SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE ACCESSIBLE TO THE PUBLIC. THE NAME, COMPANY NAME, EMAIL ADDRESS, TELEPHONE NUMBER AND ADDRESS OF THE PROJECT SITE OWNER, OPERATOR, OR A LOCAL CONTACT PERSON WITH A BREIF DESCRIPTION OF THE PROJECT SHALL ALSO BE POSTED. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE, THE INFORMATION SHALL BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION NEAR WHERE THE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY. THIS LOCATION SHALL BE POSTED AT THE CONSTRUCTION SITE. ALL POSTINGS SHALL BE MAINTAINED IN LEGIBLE CONDITION.
- (62) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS OR MODIFICATIONS OF THE SWPPP ARE NEEDED. THE ROADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.
- (63) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY. THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED WHEN MAJOR DESIGN REVISIONS ARE REQUESTED BY CONSTRUCTION. THE ENVIRONMENTAL DIVISION MAY BE CONTACTED FOR GUIDANCE ON SPECIFIC SWPPP NEEDS. A COPY OF ANY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS SHALL BE RETAINED IN THE SWPPP.
- (64) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER A CHANGE IN CHEMICAL TREATMENT METHODS IS MADE INCLUDING USE OF A DIFFERENT CHEMICAL, DIFFERENT DOSAGE OR APPLICATION RATE, OR A DIFFERENT AREA OF APPLICATION.
- (65) IF A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION) THE SWPPP SHALL BE MODIFIED OR UPDATED.
- (66) PROJECT INSPECTORS AND SUPERVISORS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF EPSC PLANS SHALL SUCCESSFULLY COMPLETE THE TDEC "LEVEL 1 - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY REFRESHER COURSES AS REQUIRED TO MAINTAIN CERTIFICATION. A COPY OF CERTIFICATION RECORDS FOR THE COURSES SHALL BE KEPT ON SITE AND AVAILABLE UPON REQUEST.

LITTER, DEBRIS, WASTE, PETROLEUM

- (67) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS. AFTER USE, MATERIALS USED FOR EPSC WILL BE REMOVED FROM THE SITE.
- (68) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.

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SET**

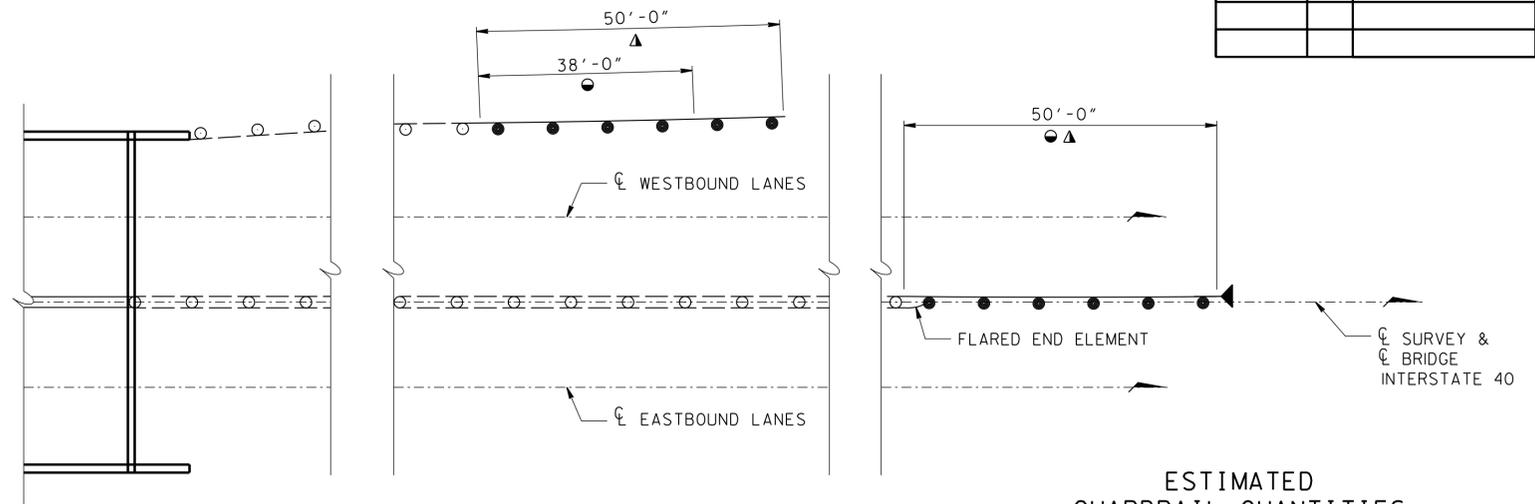
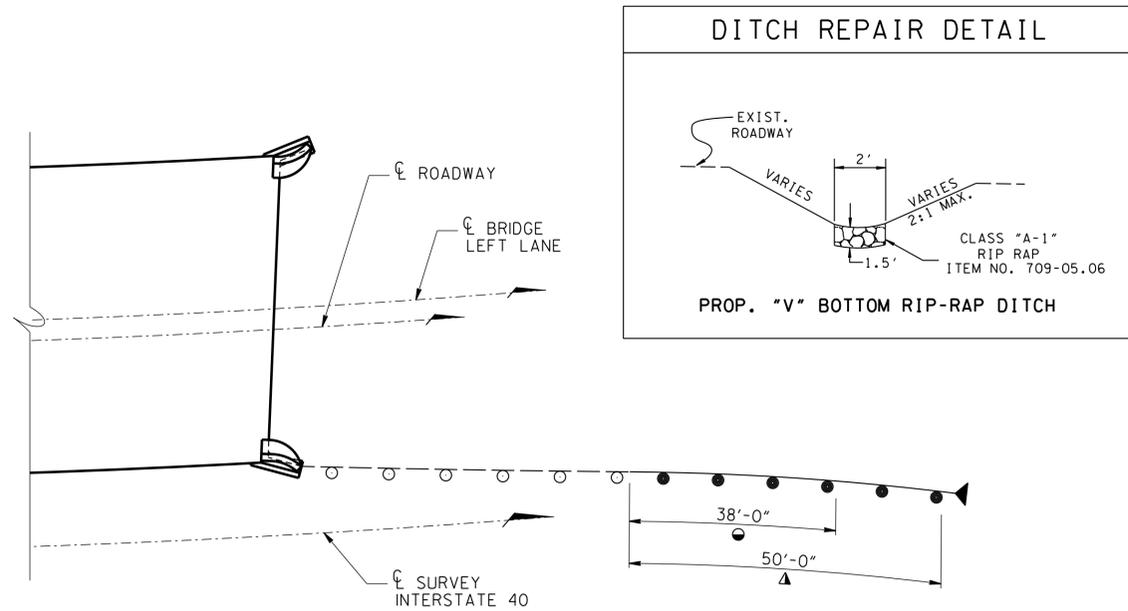
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**ROADWAY
GENERAL
NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	2F



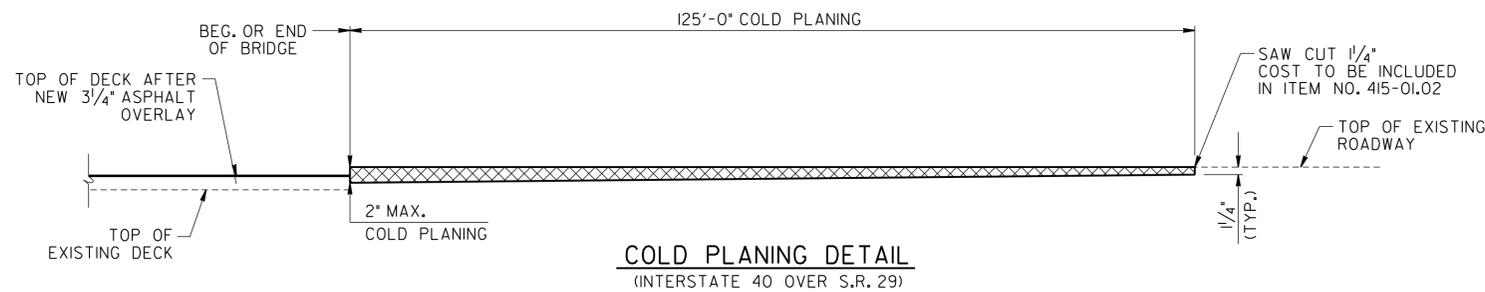
PLAN - LEFT LANE
(INTERSTATE 40 OVER S.R. 29)
(END OF BRIDGE)
(N.T.S.)

● DENOTES: ITEM NO. 706-01
▲ DENOTES: ITEM NO. 705-04.07

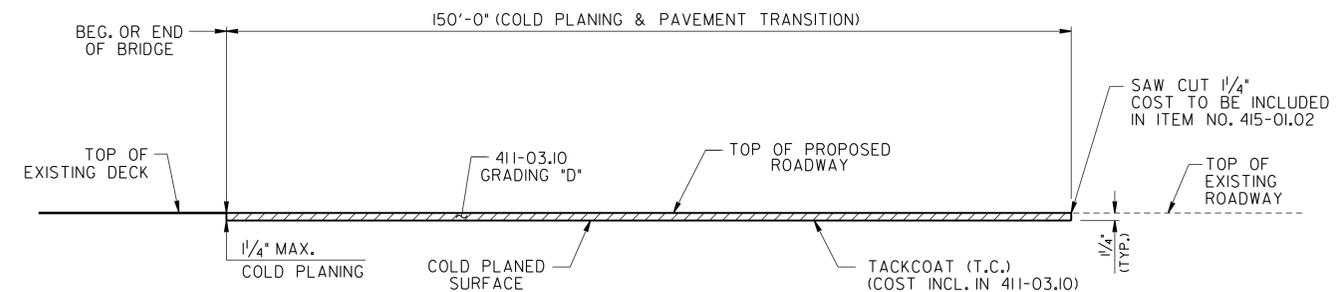
PLAN - LEFT LANE
(INTERSTATE 40 OVER CLINCH RIVER/LAKEWOOD DRIVE)
(END OF BRIDGE)
(N.T.S.)

**ESTIMATED
GUARDRAIL QUANTITIES**

LOCATION	GUARDRAIL REMOVED, (L.F.) 706-01	TAN ENERGY ABSORBING TERM (NCHRP 350, TL3) (EACH) 705-04.07
I-40/S.R. 29	38	1
I-40/CLINCH RIVER	88	2

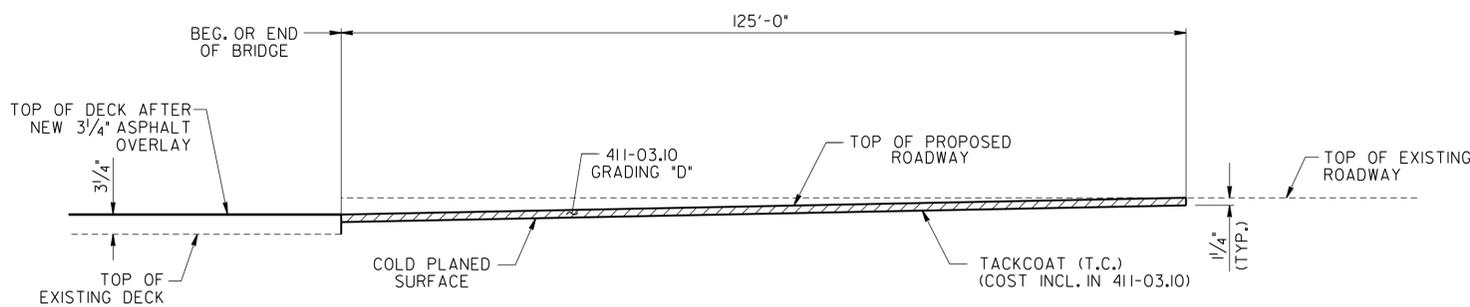


COLD PLANING DETAIL
(INTERSTATE 40 OVER S.R. 29)



COLD PLANING & PAVEMENT TRANSITION DETAIL
(INTERSTATE 40 OVER CLINCH RIVER)

NOTE: SEE SECTIONS 617 AND 906.04 OF THE TENNESSEE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

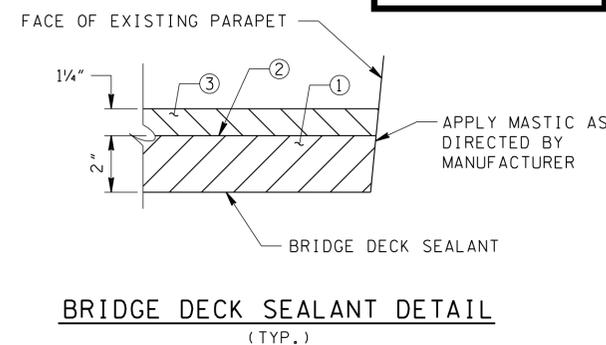


PAVEMENT TRANSITION DETAIL
(INTERSTATE 40 OVER S.R. 29)

NOTE: SEE SECTIONS 617 AND 906.04 OF THE TENNESSEE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

PAVEMENT SCHEDULE

①	BITUMINOUS PLANT MIX (BINDER) (2" THICK) 307-03.08, ASPHALT CONCRETE MIX (PG76-22) (BPMB-HM) GRADING B-M2
②	BITUMINOUS TACK COAT TO BE INCLUDED IN OTHER ITEMS
③	BITUMINOUS SURFACE MIX (1/4" THICK) 411-03.10, ACS MIX (PG76-22) GRADING D



BRIDGE DECK SEALANT DETAIL
(TYP.)

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SET**
NOT FOR
BIDDING

NOTES

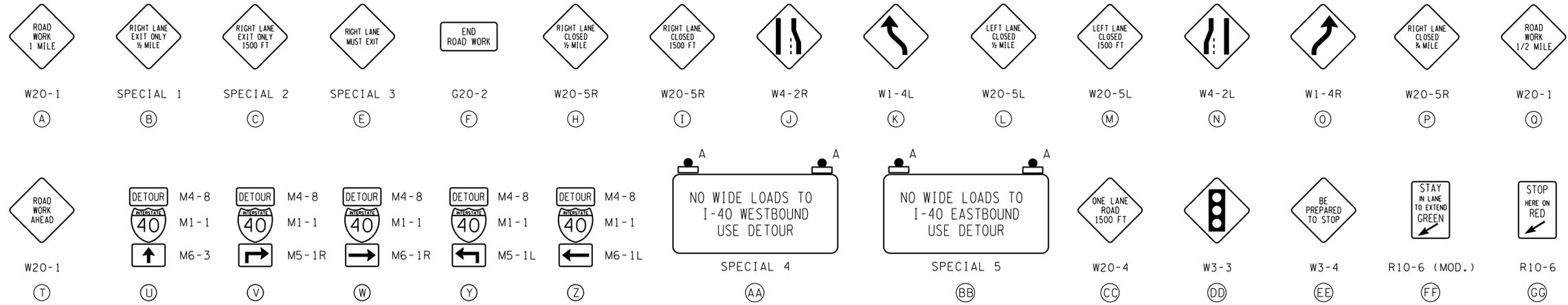
- ALL COST TO REMOVE EXISTING GUARDRAIL SHALL BE INCLUDED IN ITEM NO 706-01.
- COLD PLANING MAY BE MORE OR LESS DEPENDING UPON CROSS SLOPES OF THE ROADWAYS. HOWEVER, 1/4" SAW CUT AT BEGINNING OF TRANSITION SHALL BE MAINTAINED.
- IF COLD PLANING UNCOVERS BASE STONE, MINERAL AGGREGATE, TYPE A BASE, GRADING D MATERIAL SHALL BE ADDED IN A MINIMUM OF ONE 6" COMPACTED LIFT. AN APPLICATION OF PRIME COAT SHALL BE PLACED BETWEEN THE BASE STONE AND ANY ASPHALT AT A RATE OF 0.35 GAL/SY. ALL COST TO EXCAVATE BASE STONE, INSTALL GRADING D MATERIAL, AND APPLY PRIME COAT SHALL BE INCLUDED IN THE BID FOR OTHER ITEMS.
- SEE SECTION 906.04 FOR DETAILS OF BRIDGE DECK SEALANT AND MASTIC.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**GUARDRAIL PLAN
& PAVEMENT
TRANSITION
DETAILS**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2013	73100-4116-04	3



TRAFFIC CONTROL SIGN QUANTITIES						
	DESCRIPTION	SIZE	I-40 QUANTITY	S.R. 29 QUANTITY	LAKEWOOD QUANTITY	SIGNS (CONST.) 712-06, S.F.
	G20-2	END ROAD WORK	4	3		56
	G20-2	END ROAD WORK			2	9
*	R2-1	SPEED LIMIT	2			16
*	R4-1 (MOD.)	DO NOT PASS IN RIGHT LANE	1			35
	R10-6	STOP HERE ON RED			2	12
	R10-6 (MOD.)	STAY IN LANE TO EXTEND GREEN			2	17.5
	M1-1	INTERSTATE ROUTE 40	17			68
	M4-8	DETOUR	17			34
	M5-1R	ADVANCE TURN ARROW (RIGHT)	4			8.75
	M5-1L	ADVANCE TURN ARROW (LEFT)	3			6.56
	M6-1R	DIRECTIONAL ARROW (RIGHT)	4			8.75
	M6-1L	DIRECTIONAL ARROW (LEFT)	3			6.56
	M6-3	DIRECTIONAL ARROW (STRAIGHT)	3			6.56
	W1-4R	REVERSE CURVE (RIGHT)	10			160
	W1-4R	REVERSE CURVE (RIGHT)			2	12.50
	W1-4L	REVERSE CURVE (LEFT)	4			64
**	W3-3	SIGNAL AHEAD (SYMBOL)			2	18
**	W3-4	BE PREPARED TO STOP			1	16
*	W3-5	REDUCED SPEED LIMIT AHEAD	2			32
*	W4-2R	LANE ENDS (RIGHT)	10			160
	W4-2L	LANE ENDS (LEFT)		3		48
**	W16-2P	1000 FEET			2	6
*	W20-1	ROAD WORK 2 MILES	2			32
*	W20-1	ROAD WORK 1 MILE	7	1		128
	W20-1	ROAD WORK 1/2 MILE			1	16
	W20-1	ROAD WORK 1500 FTE			2	32
**	W20-1	ROAD WORK 1000 FT			2	32
**	W20-1	ROAD WORK AHEAD		2		32
*	W20-4	ONE LANE ROAD 1500 FT			1	16
*	W20-5R	RIGHT LANE CLOSED 1 MILE	2	1		48
	W20-5R	RIGHT LANE CLOSED 3/4 MILE	3			48
	W20-5R	RIGHT LANE CLOSED 1/2 MILE	10			160
	W20-5R	RIGHT LANE CLOSED 1500 FT	10			160
	W20-5L	LEFT LANE CLOSED 1/2 MILE	1			16
	W20-5L	LEFT LANE CLOSED 1500 FT	1			16
**	W20-7A	FLAGGER AHEAD (SYMBOL)			2	18
***	TN-55A	RECORD-A-COMMENT	2			64
	SPECIAL 1	RIGHT LANE EXIT ONLY 1/2 MILE	2	1		48
	SPECIAL 2	RIGHT LANE EXIT ONLY 1500 FT	2	1		48
	SPECIAL 3	RIGHT LANE MUST EXIT	2	2		64
	SPECIAL 4	NO WIDE LOADS I-40 WESTBOUND	2			44
	SPECIAL 5	NO WIDE LOADS I-40 EASTBOUND	2			44
*	SPECIAL 6	MERGE NOW	1			16
**	SPECIAL 7	MAXIMUM _ MINUTE RED			2	28
**	SPECIAL 8	MAINTAIN _ MPH SPEED			2	21
	TOTALS					1932

* FOR USE OF THESE SIGNS, SEE STD. DWG. T-WZ-21.
** FOR USE OF THESE SIGNS, SEE STD. DWGS. T-WZ-32, T-WZ-34 AND T-WZ-35.
*** 96" X 48" (BLUE BACKGROUND WITH WHITE COPY) 0.100" SHEET ALUMINUM.

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
	ARROW BOARD TYPE C
	ARROW BOARD TYPE C (SINGLE ARROW)
	CHANGEABLE MESSAGE SIGN
	FLEXIBLE DRUMS (CHANNELIZING)
	PORTABLE BARRIER RAIL (WITH BARRIER RAIL DELINEATORS)
	REMOVABLE SINGLE SOLID WHITE LINE
	SIGN (CONSTRUCTION)
	SIGN (EXISTING)
	TEMPORARY ATTENUATOR
	TRAFFIC FLOW
	WARNING LIGHT (TYPE A) (LOW-INTENSITY FLASHING)
	WORK ZONE

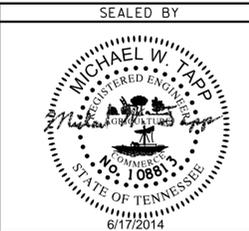
MAXIMUM X MINUTE RED (SPECIAL 7)
MAINTAIN XX MPH SPEED (SPECIAL 2)
RIGHT LANE CLOSED 1 MILE (W20-5R)
TDOT Construction Record-A-Comment 1-877-SmartWay
TN-55A

THE WIDE LOAD DETOUR ONLY APPLIES TO PHASE I OF THE TRAFFIC CONTROL PLAN.

TRAFFIC CONTROL NOTES

- THESE TRAFFIC CONTROL PLANS DO NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF INSTALLING TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE CURRENT EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
- CONSTRUCTION SIGNING SHOWN IN THIS PLANS IS TO SERVE AS A GUIDE ONLY. OTHER SIGNS MAY BE REQUIRED DURING VARIOUS PHASES OF CONSTRUCTION.
- NO TRAFFIC SHALL BE DETOURED OR ROADWAY CLOSED, ABANDONED, OR REMOVED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
- ADVANCE WARNING SIGNS ARE TO BE PLACED PRIOR TO BEGINNING OF CONSTRUCTION AND REMAIN IN PLACE UNTIL THE COMPLETION OF THIS PROJECT.
- SEE THE CURRENT EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", THE TDOT SUPPLEMENT TO "STANDARD HIGHWAY SIGNS", AND THE CONSTRUCTION WORK ZONE AND TRAFFIC CONTROL GENERAL NOTES FOR TRAFFIC DETAILS NOT SHOWN.
- CONTRACTOR IS TO COVER ALL CONFLICTING SIGNS DURING CONSTRUCTION. COVERINGS SHALL BE REMOVED AT COMPLETION OF CONSTRUCTION. COST ASSOCIATED WITH COVERING AND UNCOVERING SIGNS TO BE INCLUDED IN ITEM 712-06, SIGNS (CONSTRUCTION).
- THE CONTRACTOR IS TO COORDINATE ALL LANE CLOSURES WITH THE TDOT REGIONAL OFFICE AND THE COUNTY ENGINEER.
- IF INGRESS/EGRESS IS REQUIRED FOR PRIVATE ENTRANCE, THE CONTRACTOR SHALL USE A FLAGMAN TO DIRECT ANY TRAFFIC FOR THE PRIVATE ENTRANCE. ALL COST FOR THE FLAGMAN SHALL BE INCLUDED IN THE COST OF ITEM NO. 712-01, TRAFFIC CONTROL, (LS).
- FOR ALL DETAILS NOT SHOWN, SEE STD. DWGS. T-WZ-12, T-WZ-16, T-WZ-21, T-WZ-32, T-WZ-34 AND T-WZ-35. STD. DWGS. T-WZ-32, T-WZ-34 AND T-WZ-35 TO BE USED FOR WORK ON LAKEWOOD DRIVE UNDERNEATH THE CLINCH RIVER BRIDGE.

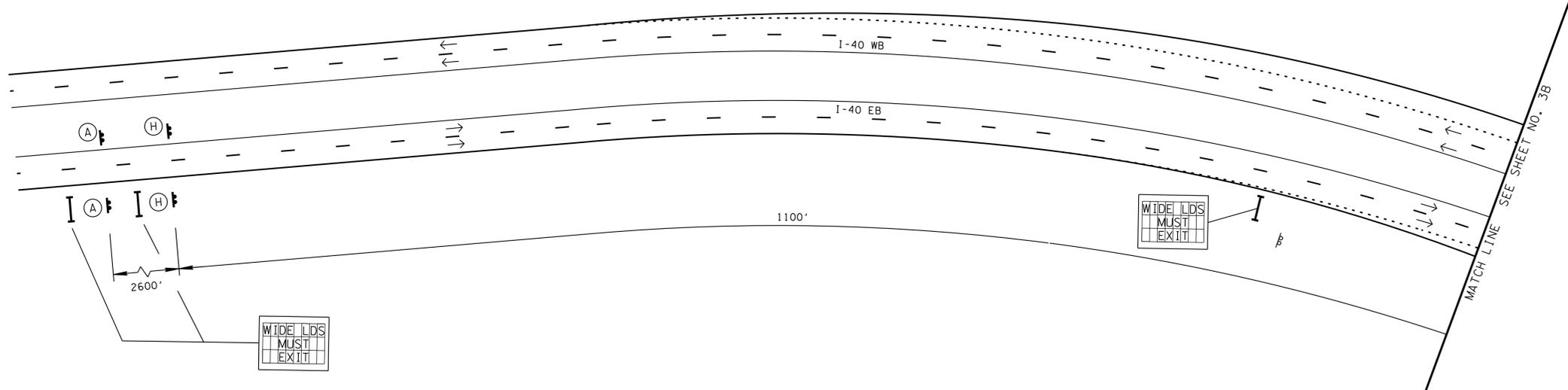
UNOFFICIAL SET
NOT FOR BIDDING



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL NOTES & QUANTITIES
SCALE: N.T.S.

TENNESSEE D.O.T.
 DESIGN DIVISION
 FILE NO.

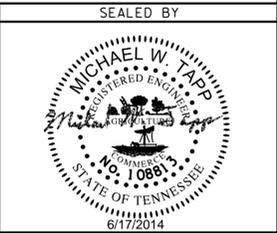
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	3A



UNOFFICIAL SET
 NOT FOR BIDDING

NOTE:

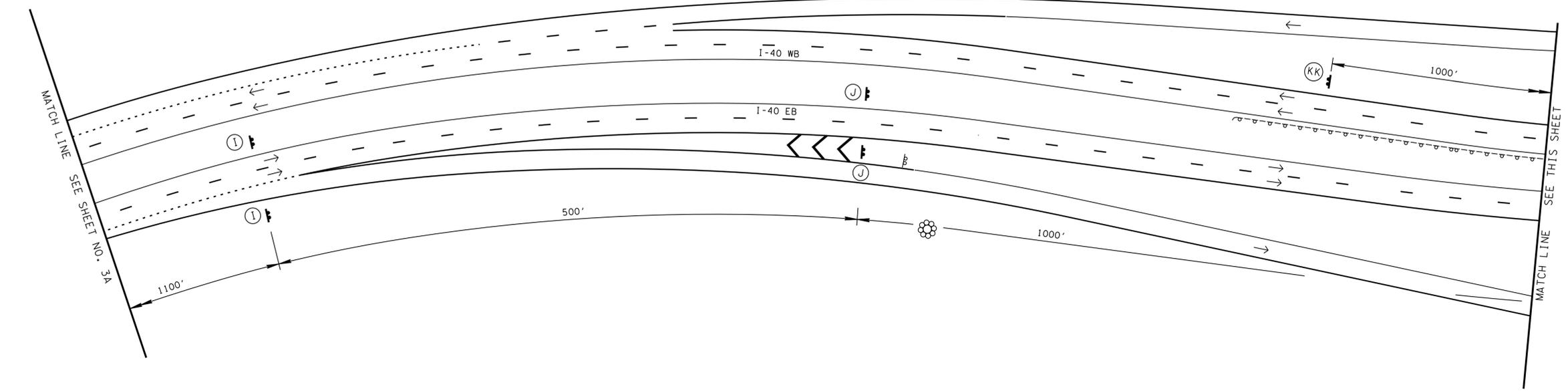
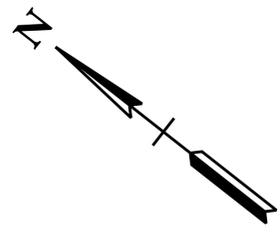
CHANGEABLE MESSAGE SIGN UNITS SHALL BE PLACED 1 MILE AND 1/2 MILE IN ADVANCE OF THE EXIT, IN ADDITION TO THE ONE AT THE BEGINNING OF THE RAMP TAPER.



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
PHASE 1
 INTERSTATE 40
 SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	3B



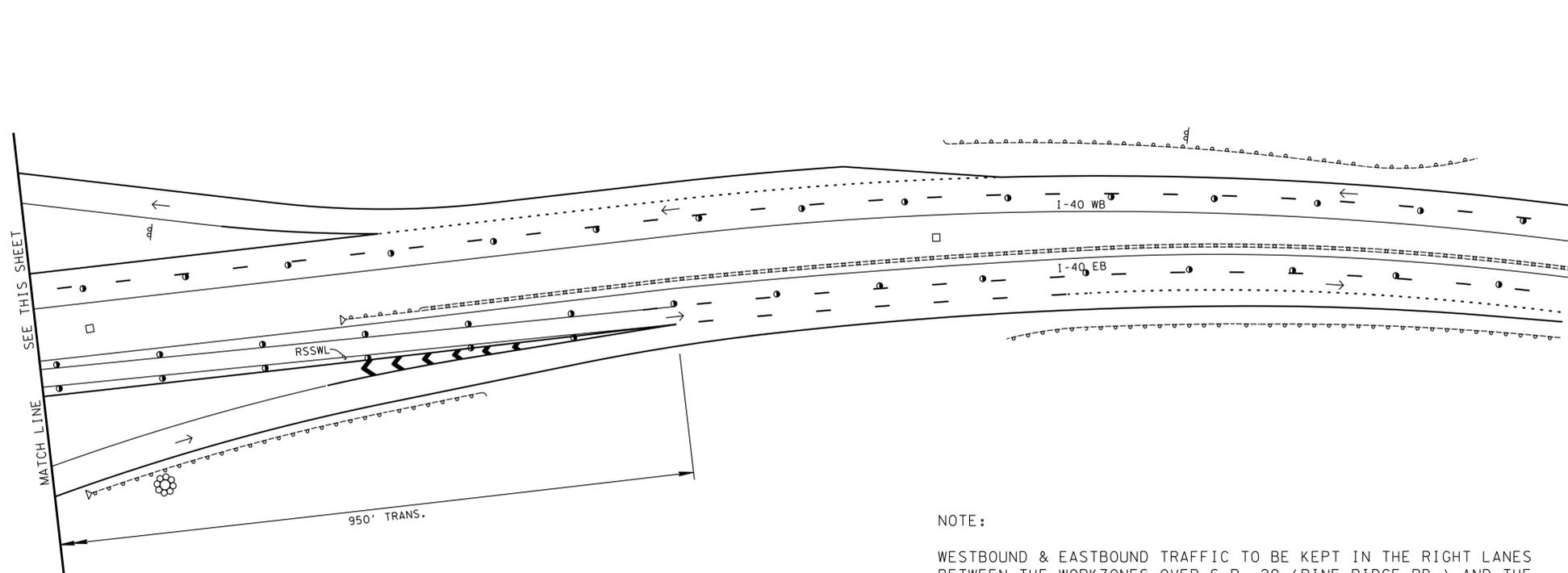
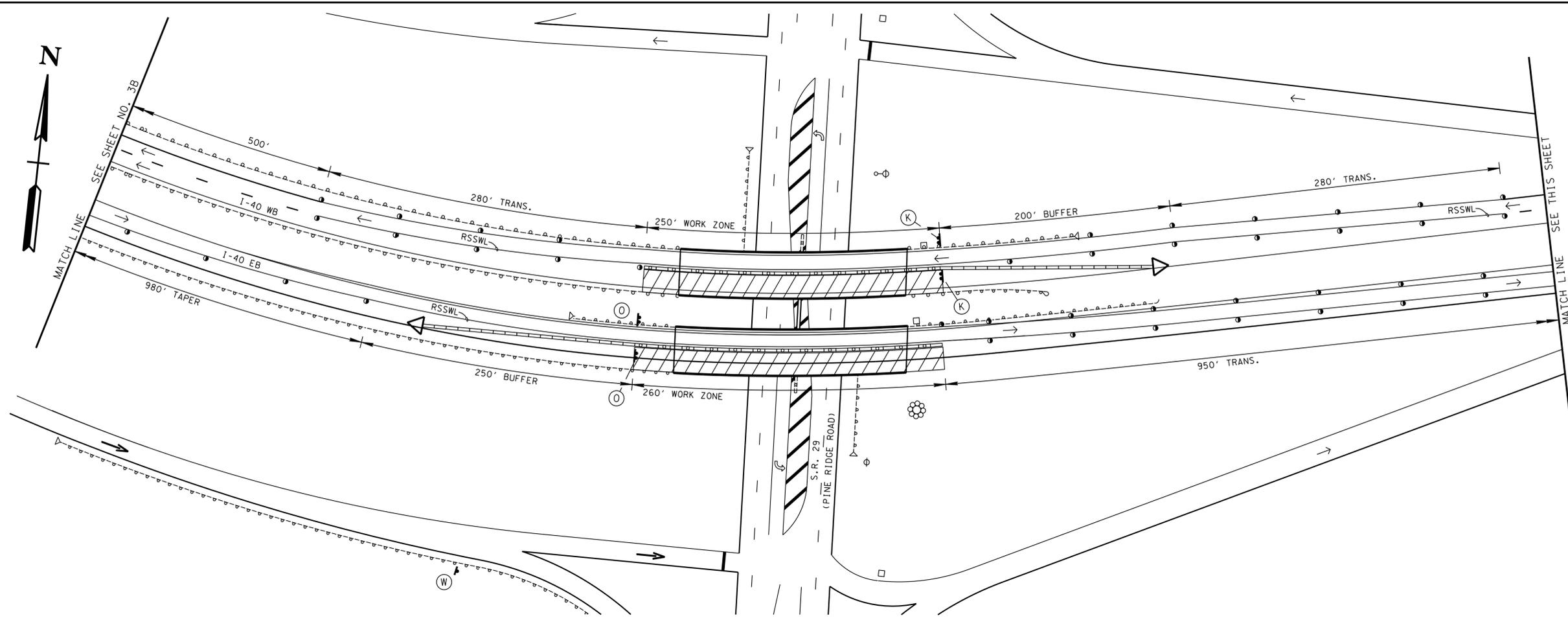
UNOFFICIAL SET
 NOT FOR BIDDING



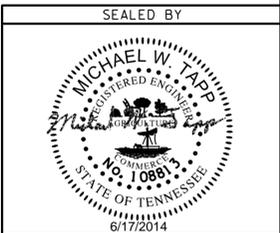
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
PHASE 1
 INTERSTATE 40
 SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	3C



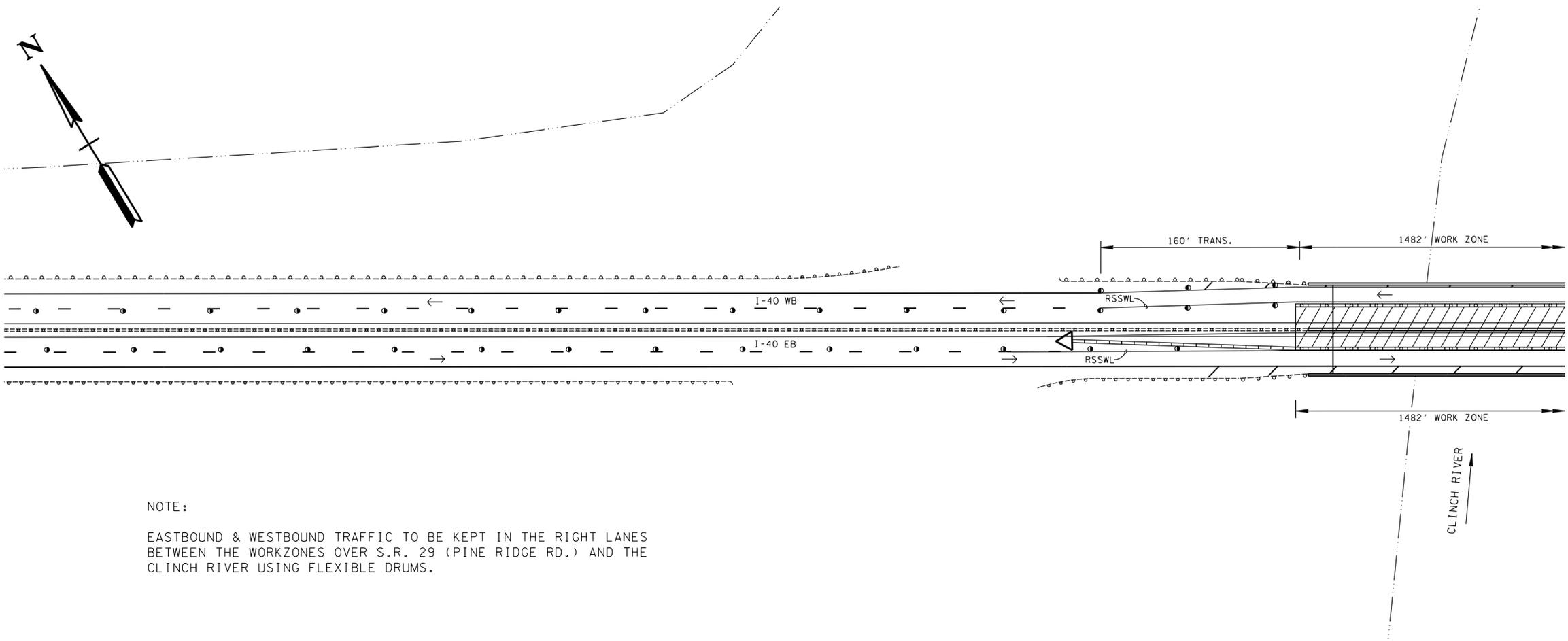
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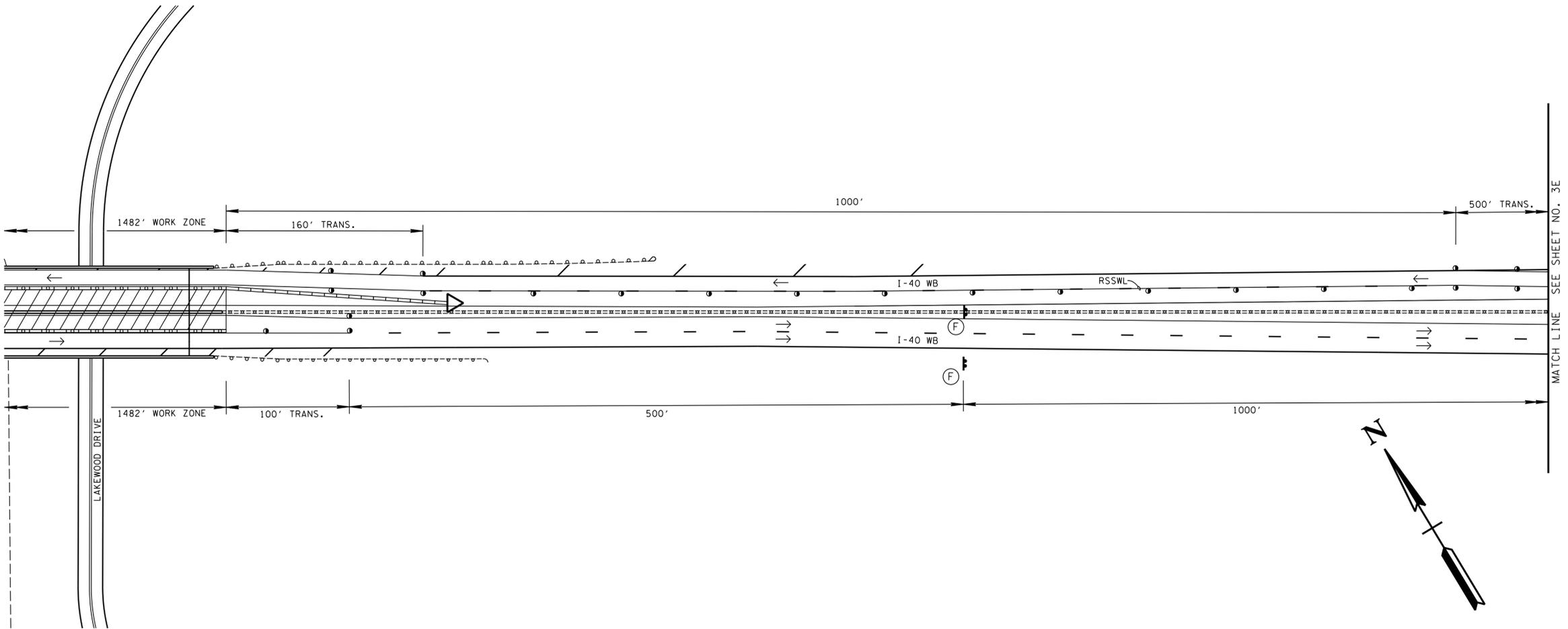
NOTE:
 WESTBOUND & EASTBOUND TRAFFIC TO BE KEPT IN THE RIGHT LANES BETWEEN THE WORKZONES OVER S.R. 29 (PINE RIDGE RD.) AND THE CLINCH RIVER USING FLEXIBLE DRUMS.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL PLAN
 PHASE 1
 INTERSTATE 40
 SCALE: 1" = 50'

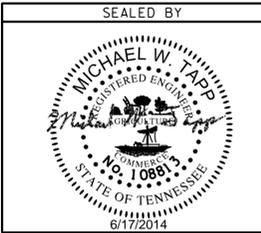
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	3D



NOTE:
 EASTBOUND & WESTBOUND TRAFFIC TO BE KEPT IN THE RIGHT LANES BETWEEN THE WORKZONES OVER S.R. 29 (PINE RIDGE RD.) AND THE CLINCH RIVER USING FLEXIBLE DRUMS.



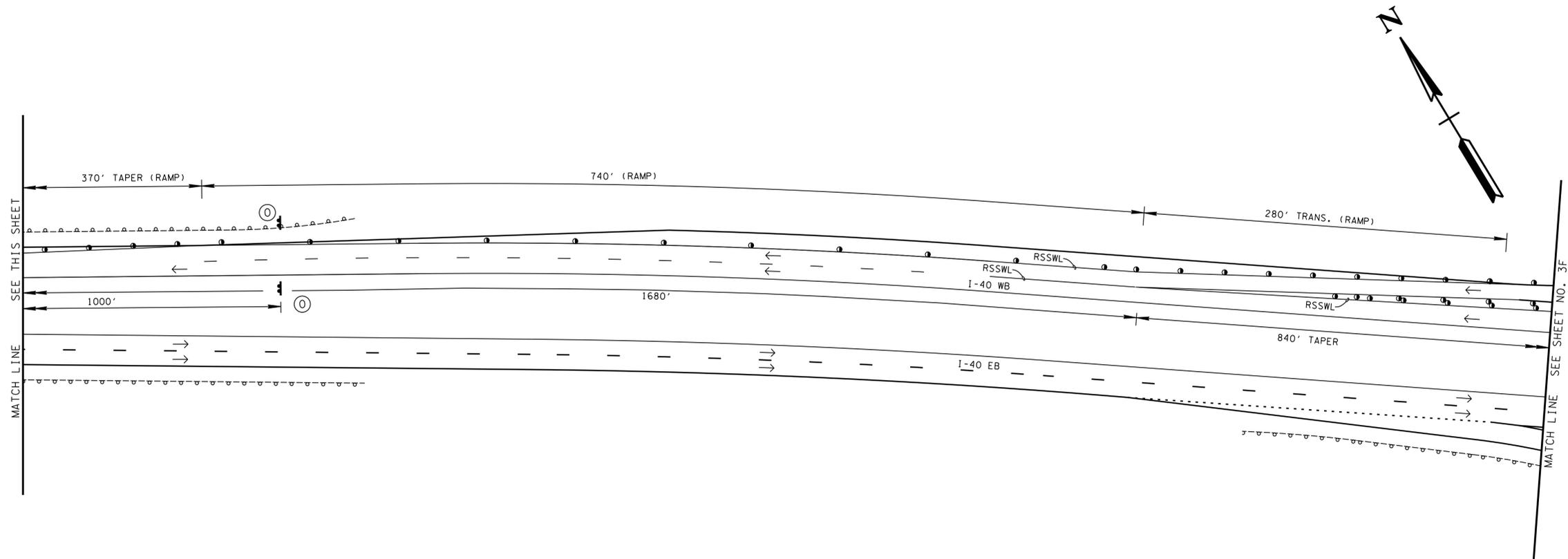
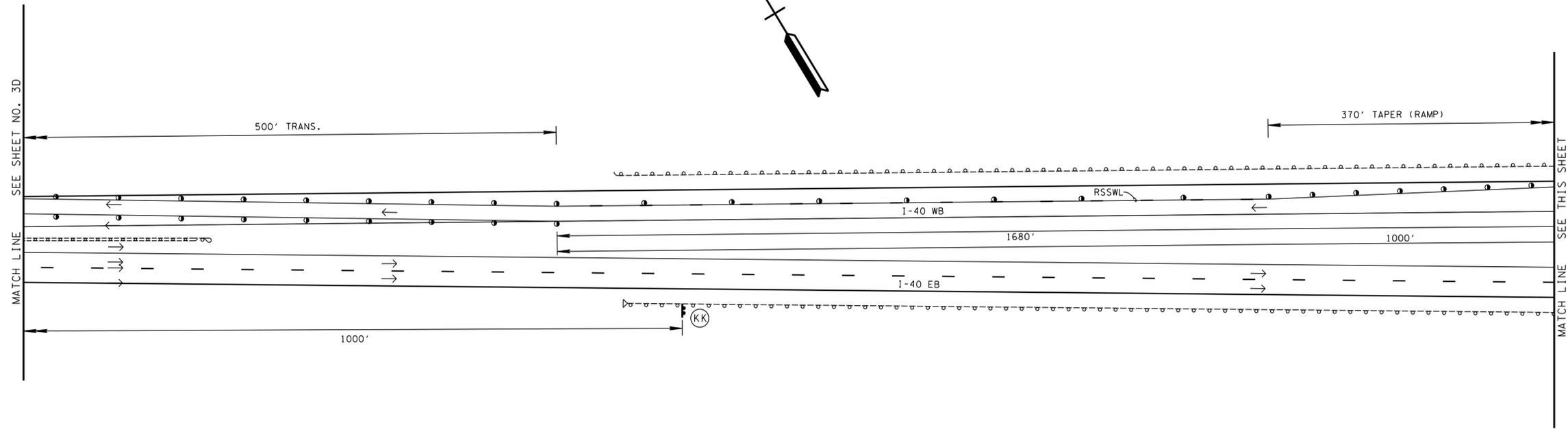
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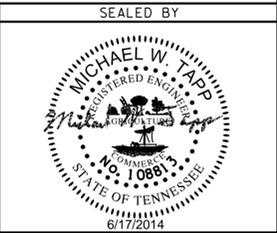
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL PLAN
 PHASE 1
 INTERSTATE 40**
 SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	3E



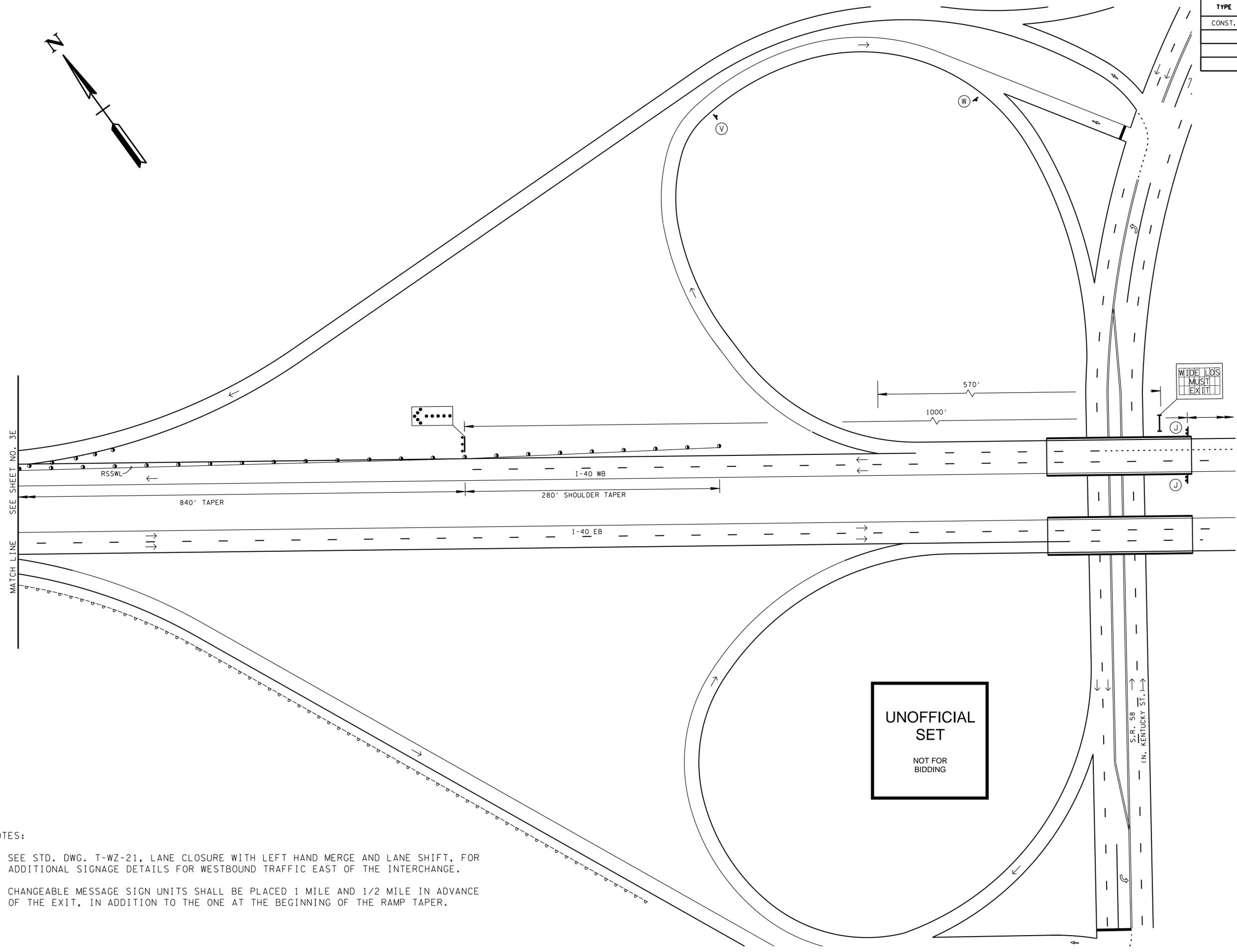
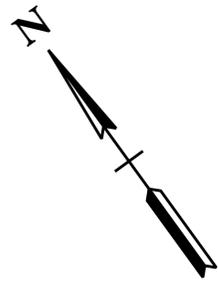
UNOFFICIAL SET
 NOT FOR BIDDING



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
 PHASE 1
 INTERSTATE 40
 SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	3F



SEE SHEET NO. 3E
 MATCH LINE

RSSWL

840' TAPER

I-40 WB

I-40 EB

280' SHOULDER TAPER

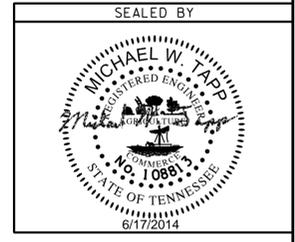
570'

1000'

WIDE LANES
 MUST
 EXIT

UNOFFICIAL SET
 NOT FOR BIDDING

S.R. 58
 (N. KENTUCKY ST.)



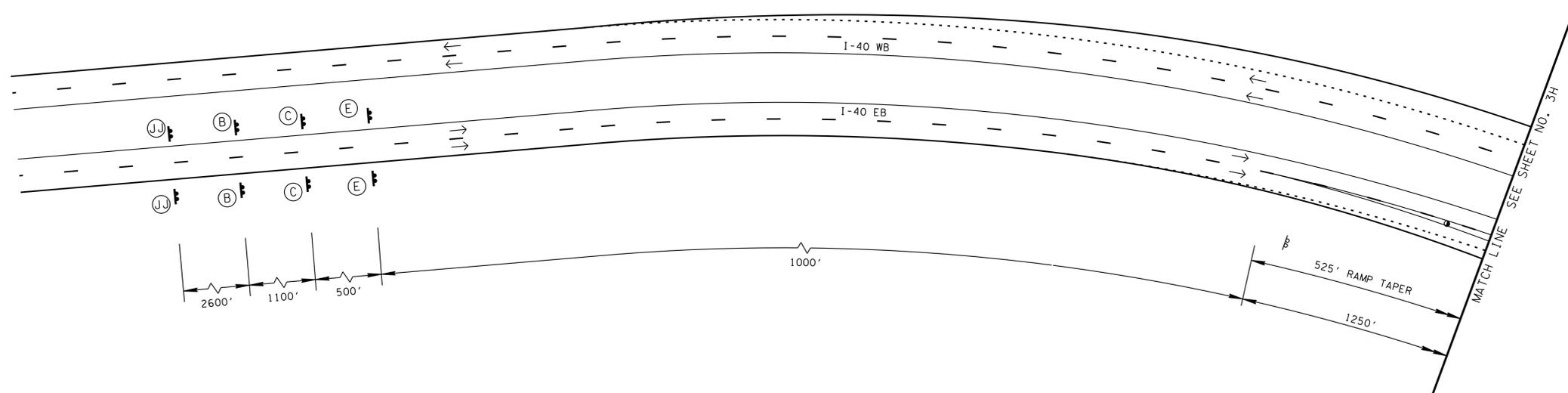
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
PHASE 1
 INTERSTATE 40
 SCALE: 1" = 50'

NOTES:

- SEE STD. DWG. T-WZ-21, LANE CLOSURE WITH LEFT HAND MERGE AND LANE SHIFT, FOR ADDITIONAL SIGNAGE DETAILS FOR WESTBOUND TRAFFIC EAST OF THE INTERCHANGE.
- CHANGEABLE MESSAGE SIGN UNITS SHALL BE PLACED 1 MILE AND 1/2 MILE IN ADVANCE OF THE EXIT, IN ADDITION TO THE ONE AT THE BEGINNING OF THE RAMP TAPER.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	3G



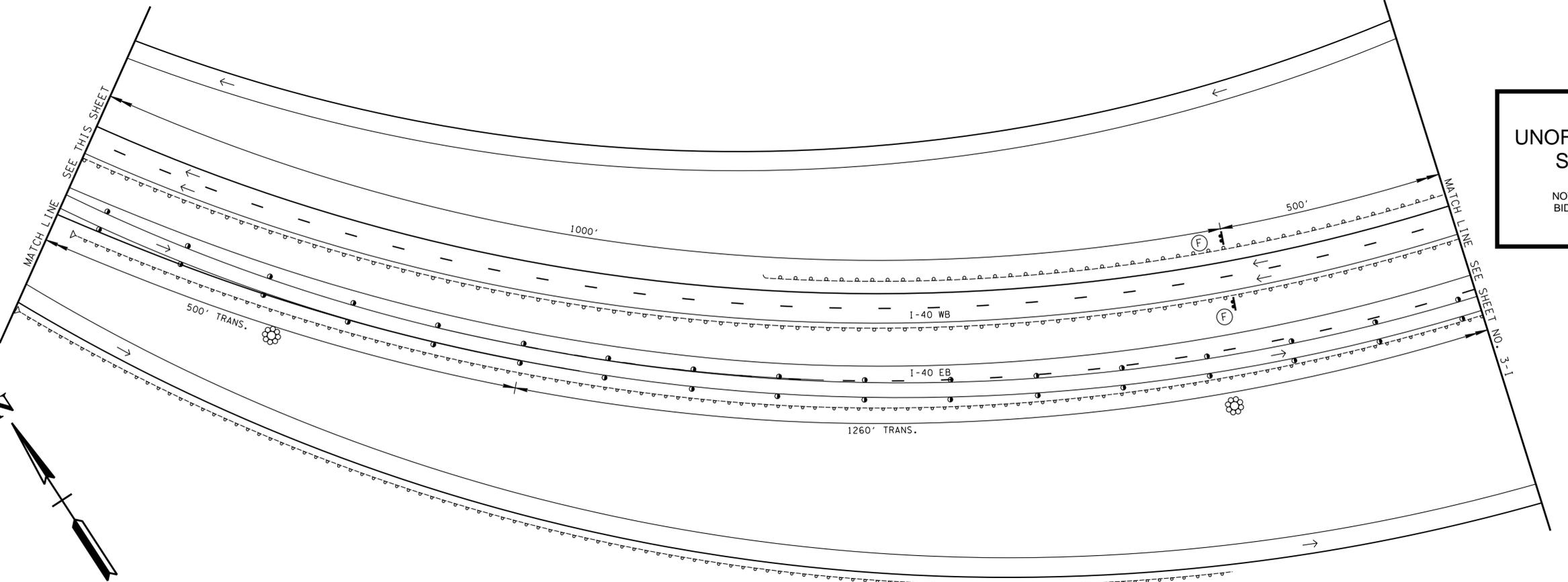
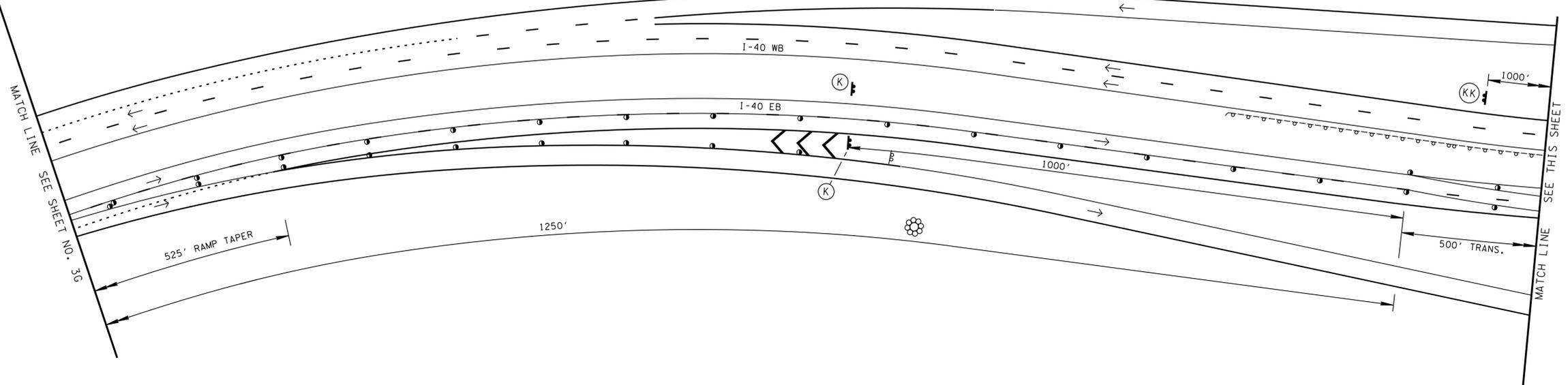
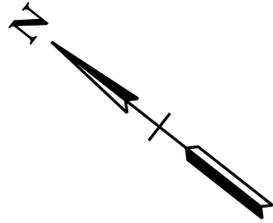
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 NOT FOR BIDDING

SEALED BY

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL PLAN
 PHASE 2
 INTERSTATE 40**
 SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	3H



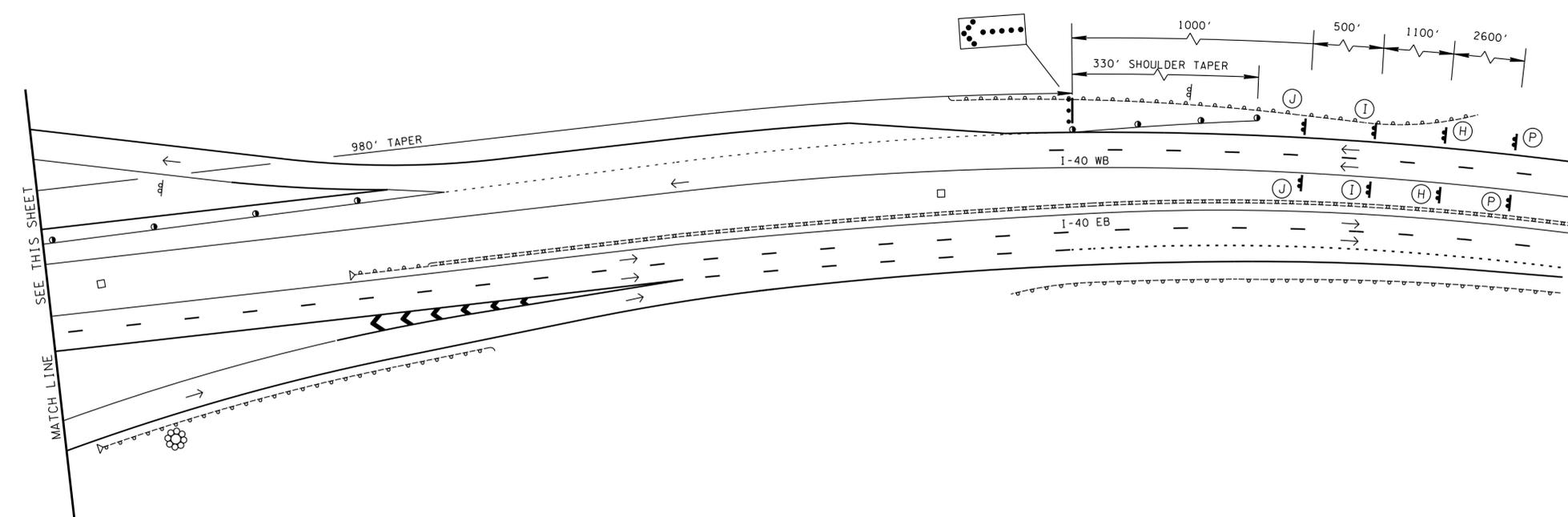
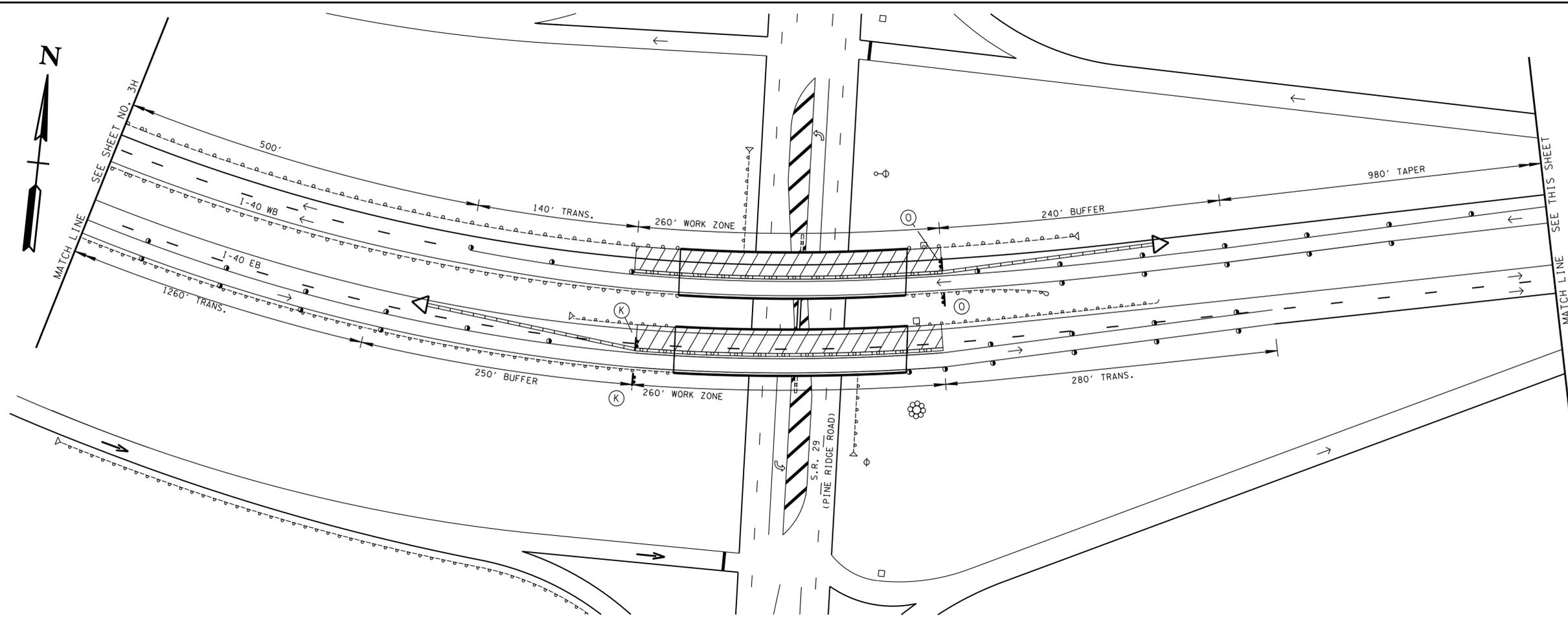
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 NOT FOR BIDDING



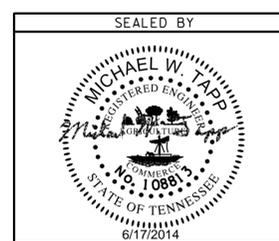
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
PHASE 2
 INTERSTATE 40
 SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	3-1



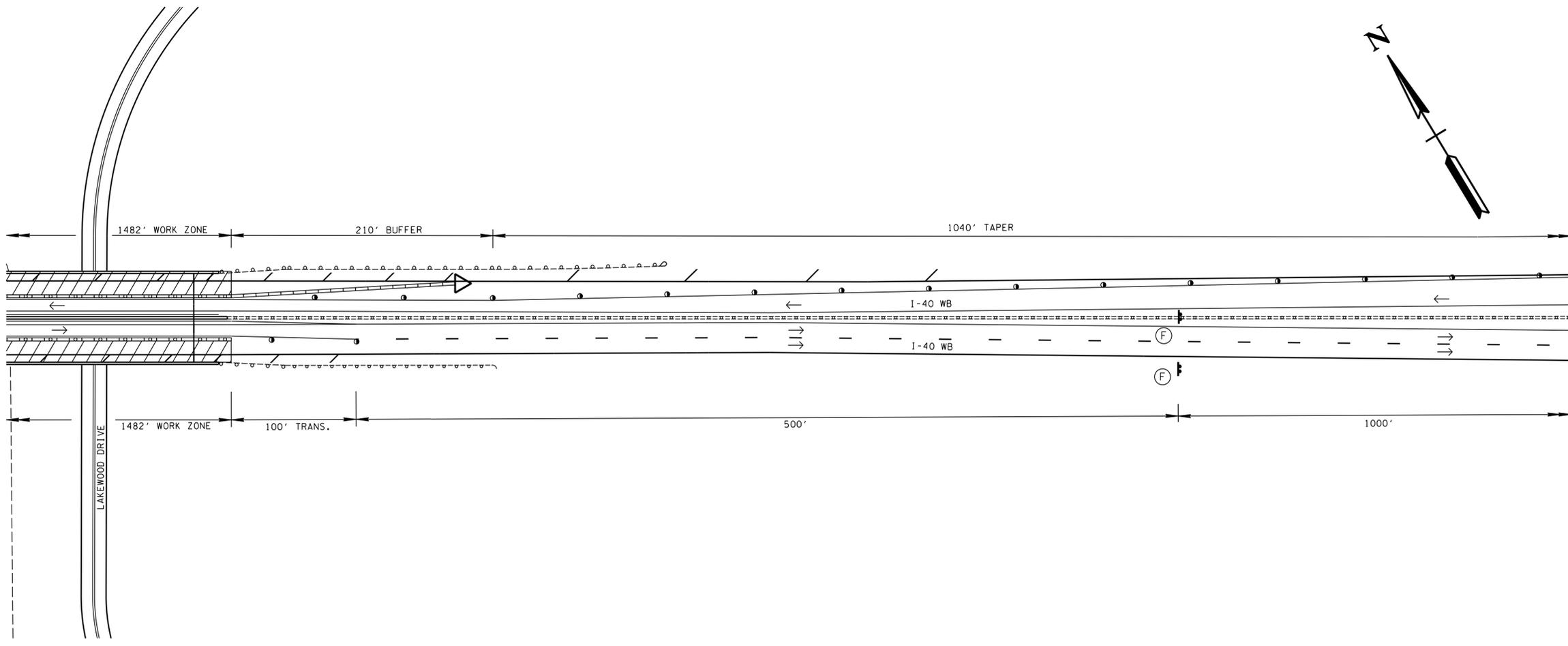
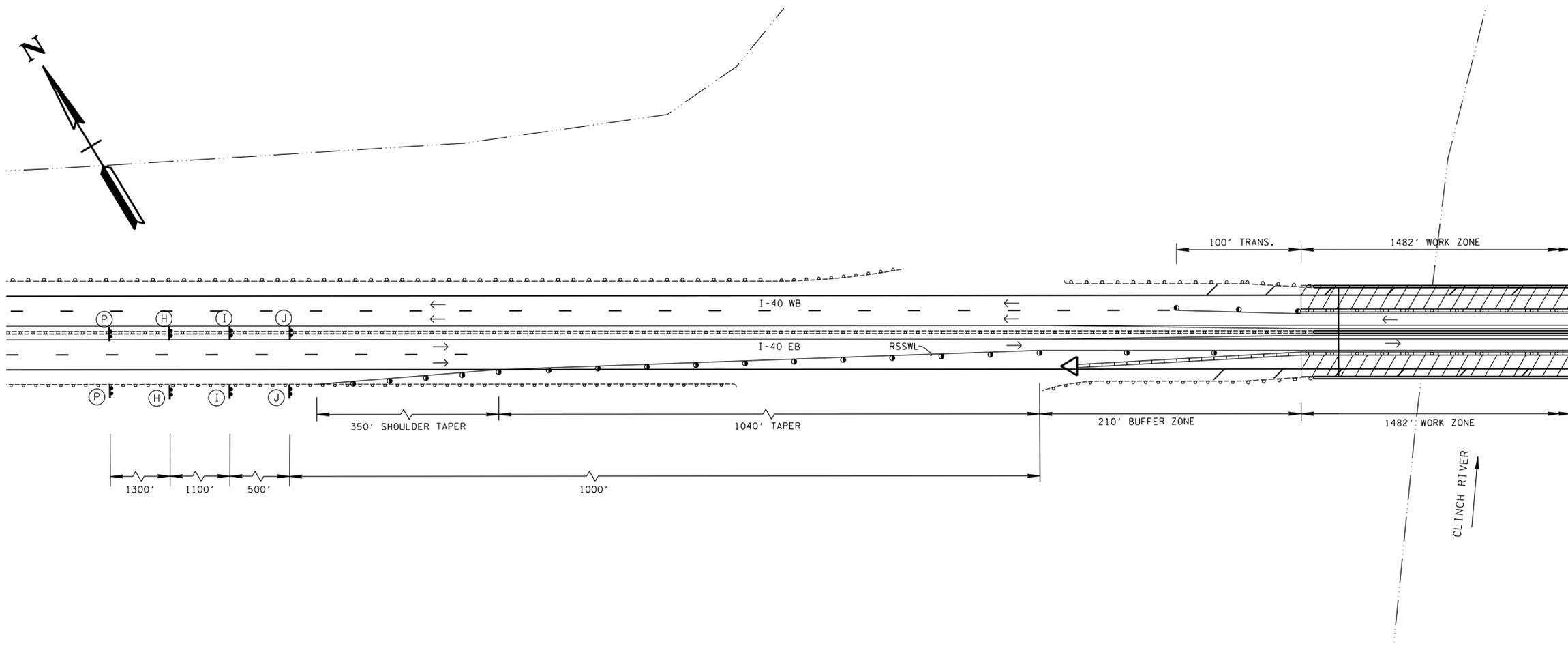
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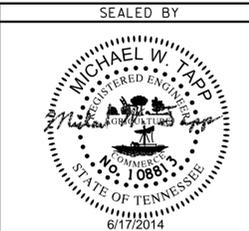
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
PHASE 2
 INTERSTATE 40
 SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	3J

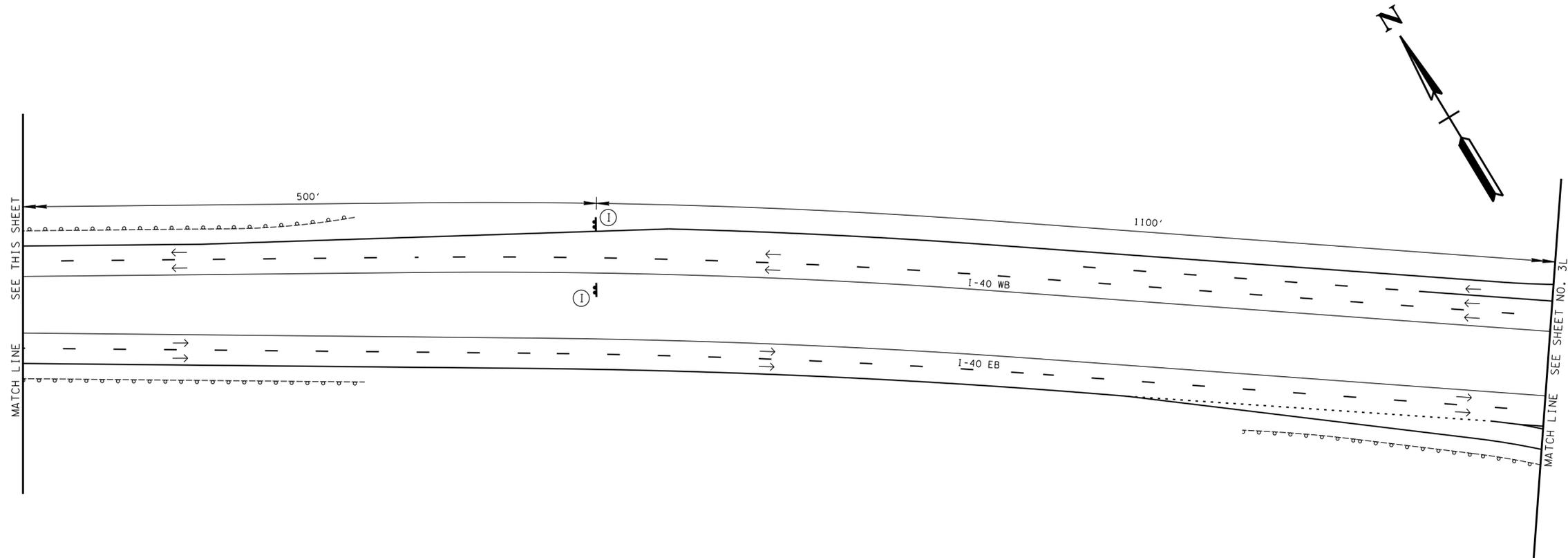
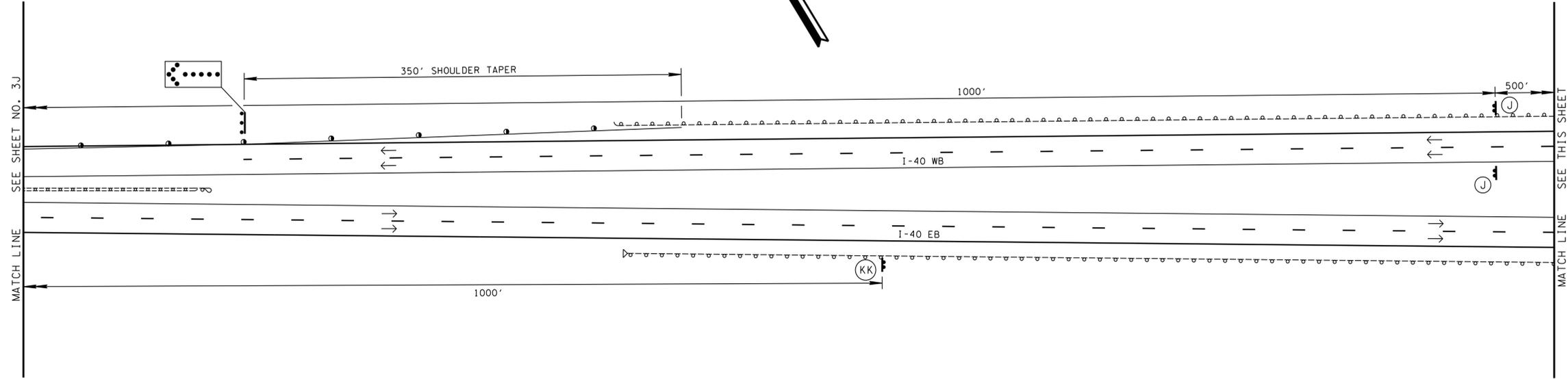


UNOFFICIAL SET
 NOT FOR BIDDING



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL PLAN
PHASE 2
 INTERSTATE 40
 SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	3K



UNOFFICIAL SET
 NOT FOR BIDDING

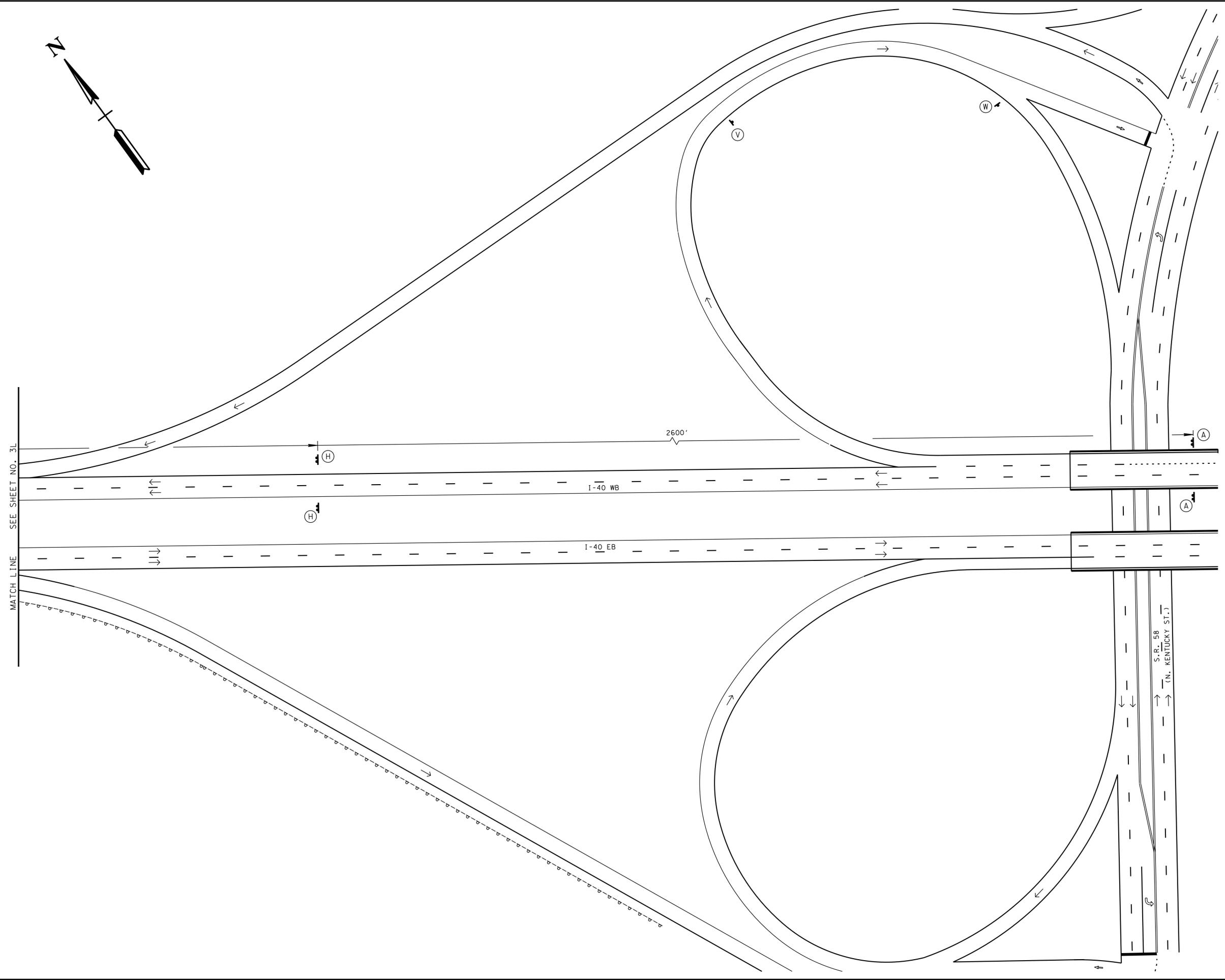


STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
PHASE 2
 INTERSTATE 40
 SCALE: 1" = 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	3L



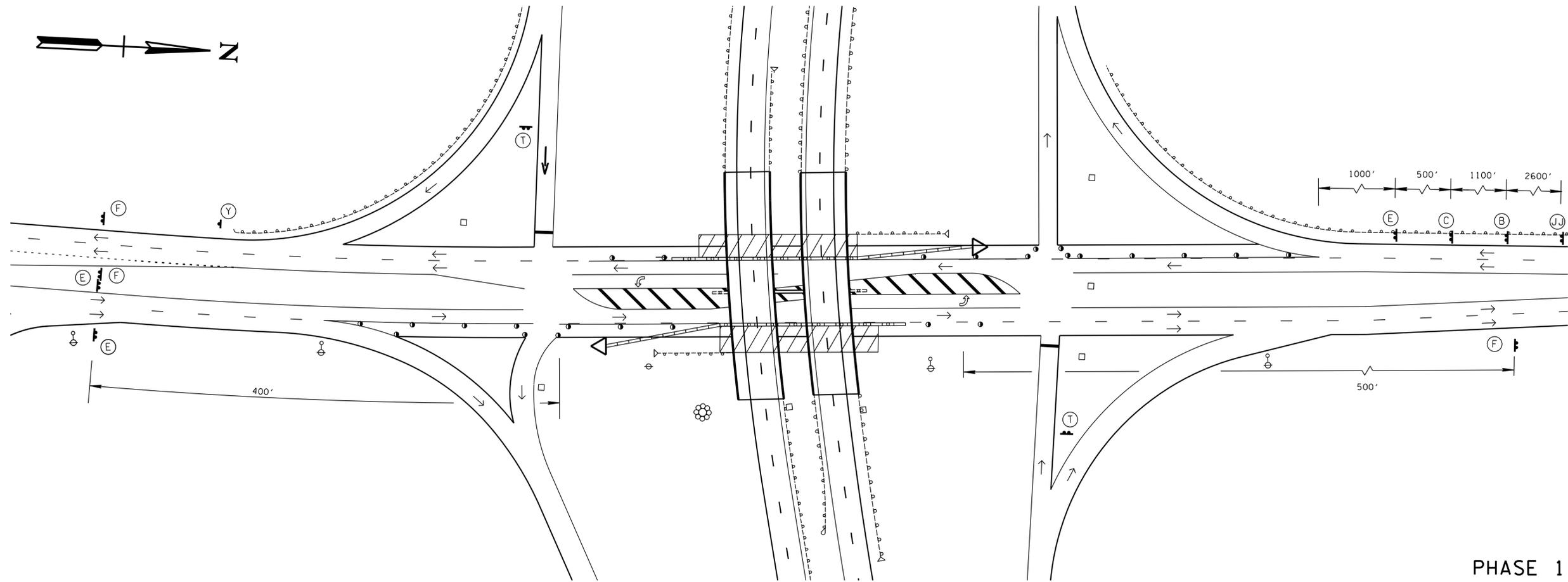
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NOT FOR BIDDING



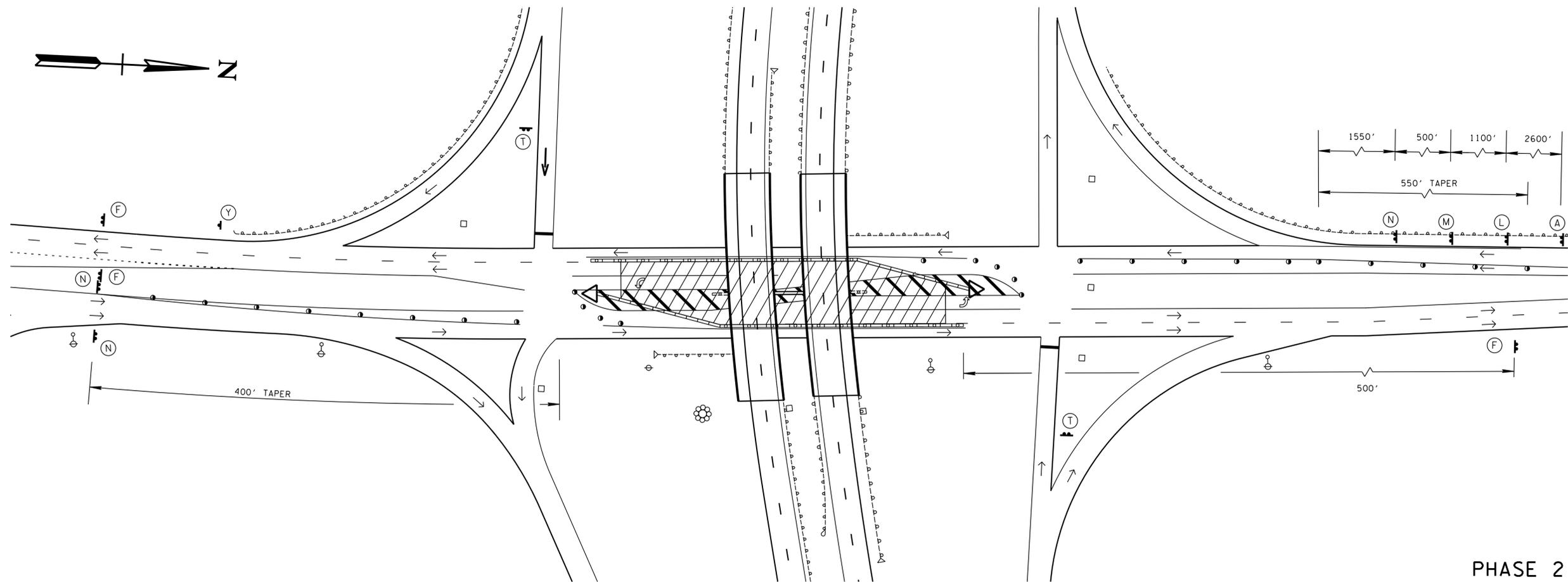
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL PLAN
PHASE 2
INTERSTATE 40**
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	3M

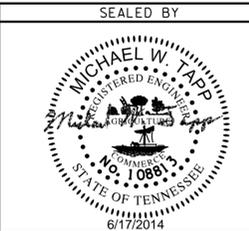


PHASE 1



PHASE 2

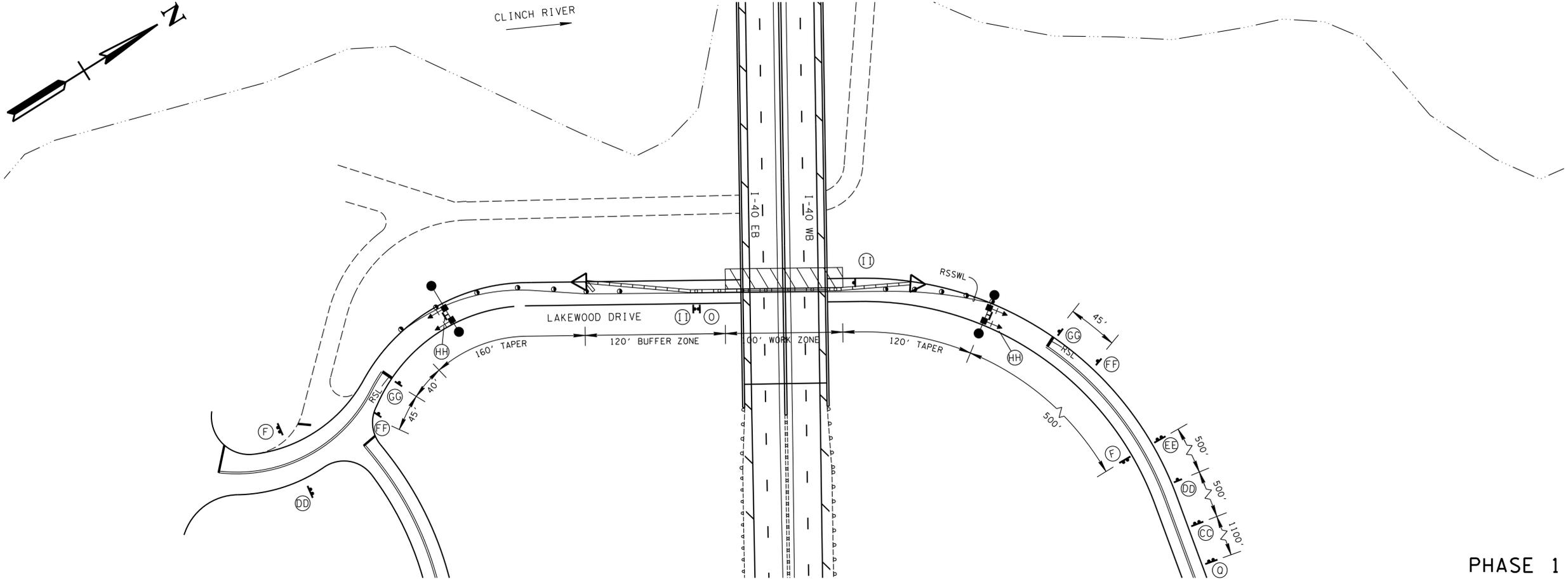
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 NOT FOR BIDDING



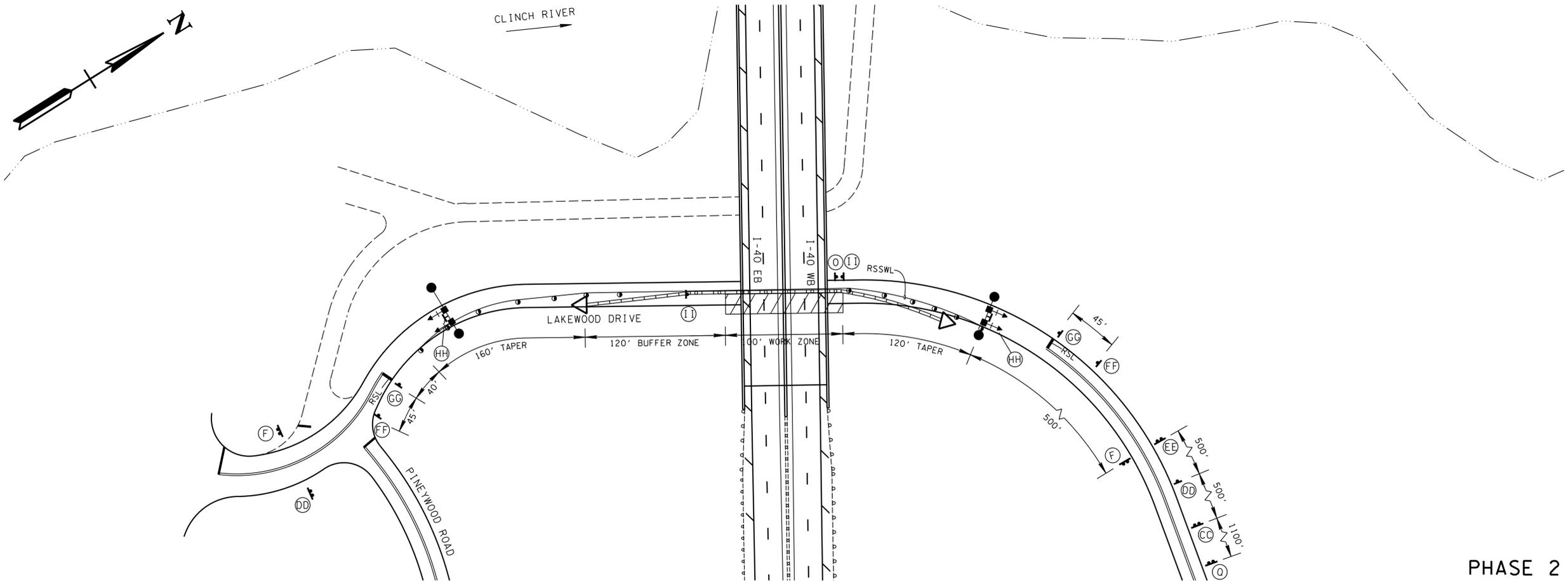
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL PLAN
 PHASES 1 & 2**
 S.R. 29 (PINE RIDGE ROAD)
 SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	3N



PHASE 1



PHASE 2

UNOFFICIAL SET
 NOT FOR BIDDING

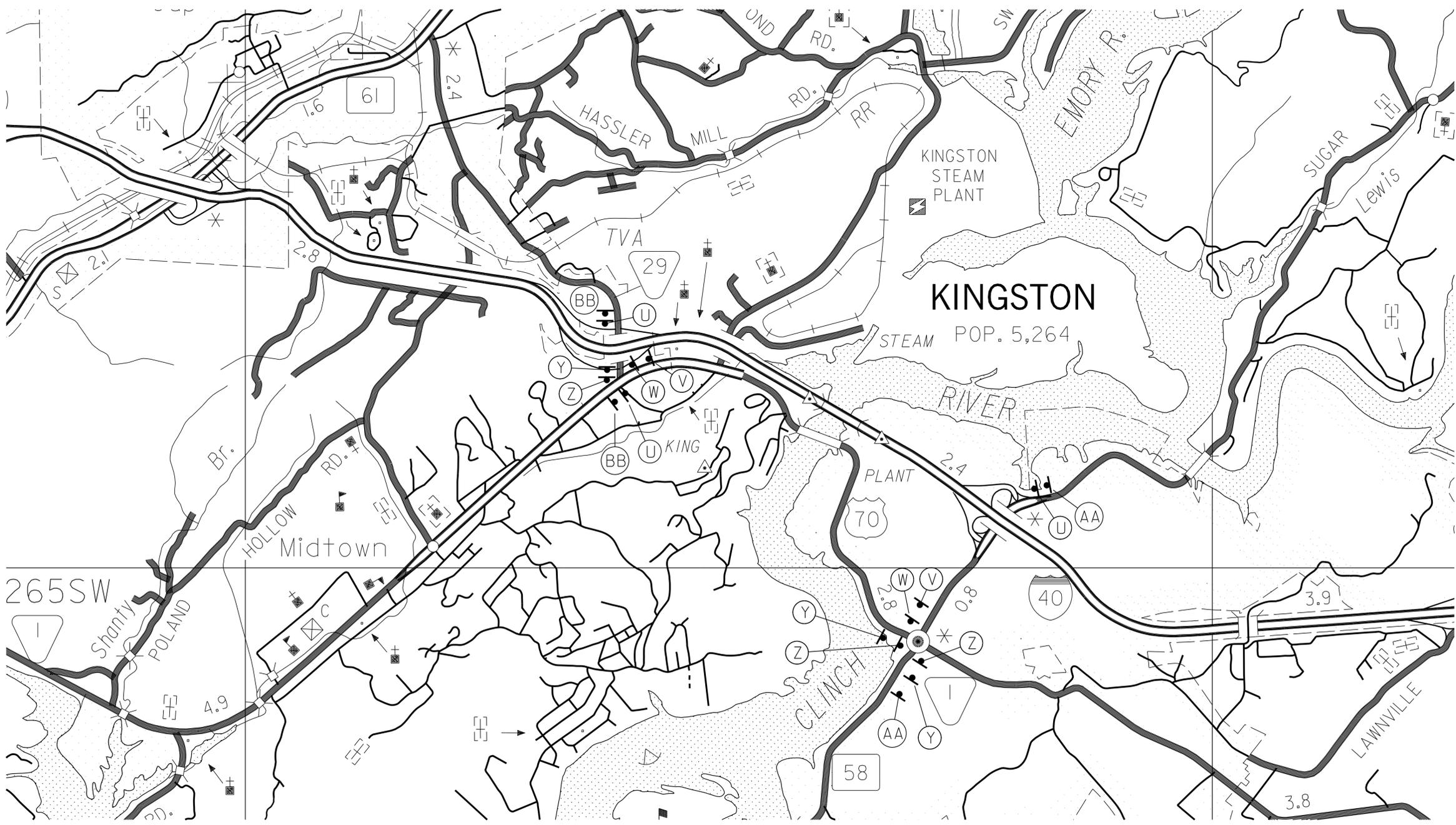
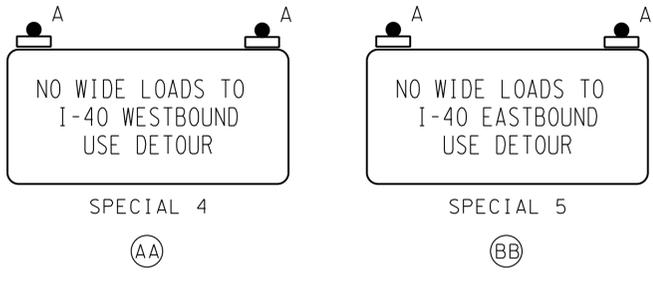
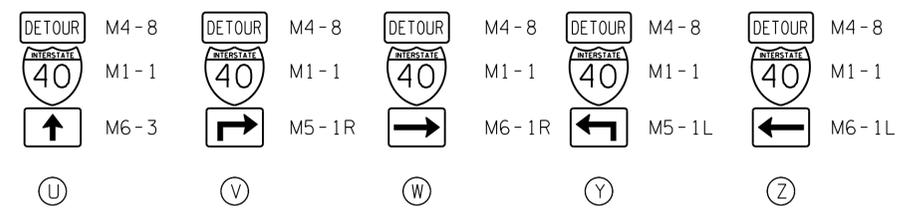


STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

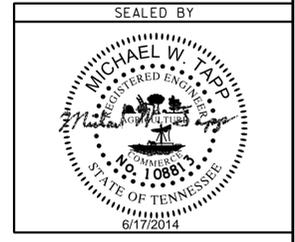
TRAFFIC CONTROL PLAN PHASES 1 & 2
 LAKEWOOD DRIVE
 SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	73100-4116-04	3-0

THE WIDE LOAD DETOUR ONLY APPLIES TO PHASE I OF THE TRAFFIC CONTROL PLAN.



UNOFFICIAL SET
 NOT FOR BIDDING

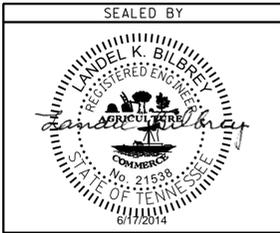


STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL PLAN
 WIDE LOAD DETOUR PLAN
 SCALE: 1"=3200'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2013	73100-4116-04	4

PROJECT COMMITMENTS			
COMMITMENT ID	SOURCE DIVISION	DESCRIPTION	STA. / LOCATION
EDHZ001	ENVIRONMENTAL DIVISION, HAZARDOUS MATERIALS	<p>TO MINIMIZE THE RISK TO CONSTRUCTION WORKERS, TDOT IS COMMITTED TO THE REMOVAL OF ASBESTOS-CONTAINING MATERIALS (ACM) FROM BRIDGES THAT ARE BEING DEMOLISHED, REHABILITATED OR REPAIRED. ACM ABATEMENT SHOULD BE COMPLETED PRIOR TO ANY DEMOLITION ACTIVITIES. ABATEMENT SHOULD BE ACCOMPLISHED PER SP202ACM SPECIAL PROVISION REGARDING REMOVAL OF ASBESTOS-CONTAINING MATERIALS. BRIDGE NO. 73100400009 (I-40 EB OVER SR-29, LM 9.96) HAS ACM IN THE BLACK, ASPHALT-BASED JOINT SEALANT AT THE WINGWALL/ABUTMENT. THIS MATERIAL WAS NOT OBSERVED ON THE WESTBOUND BRIDGE, BUT IF FOUND, SHOULD BE SAMPLED OR TREATED AS ACM.</p> <p>THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING A NOTICE TO THE TDEC, DIVISION OF AIR POLLUTION CONTROL TEN (10) DAYS IN ADVANCE OF ANY ACM ABATEMENT OR DEMOLITION ACTIVITIES.</p> <p>IN THE EVENT HAZARDOUS SUBSTANCES/WASTES ARE ENCOUNTERED WITHIN THE RIGHT-OF-WAY, THEIR DISPOSITION SHALL BE SUBJECT TO ALL APPLICABLE REGULATIONS, INCLUDING THE APPLICABLE SECTIONS OF THE FEDERAL RESOURCE CONSERVATION AND RECOVERY ACT, AS AMENDED; AND THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT, AS AMENDED; AND THE TENNESSEE HAZARDOUS WASTE MANAGEMENT ACT OF 1983, AS AMENDED.</p>	BLACK, ASPHALT-BASED JOINT SEALANT AT WINGWALL/ABUTMENT ON THE EAST BOUND BRIDGE

UNOFFICIAL SET
NOT FOR BIDDING



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROJECT COMMITMENTS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	71300-4116-04	U1-1

ROANE CO.
71300-4116-04 (CONST.)

UTILITIES INDEX

SHEET NAME: UTILITIES INDEX AND UTILITY OWNERS
SHEET NUMBER: U1-1

UTILITIES SEE NO CONFLICT

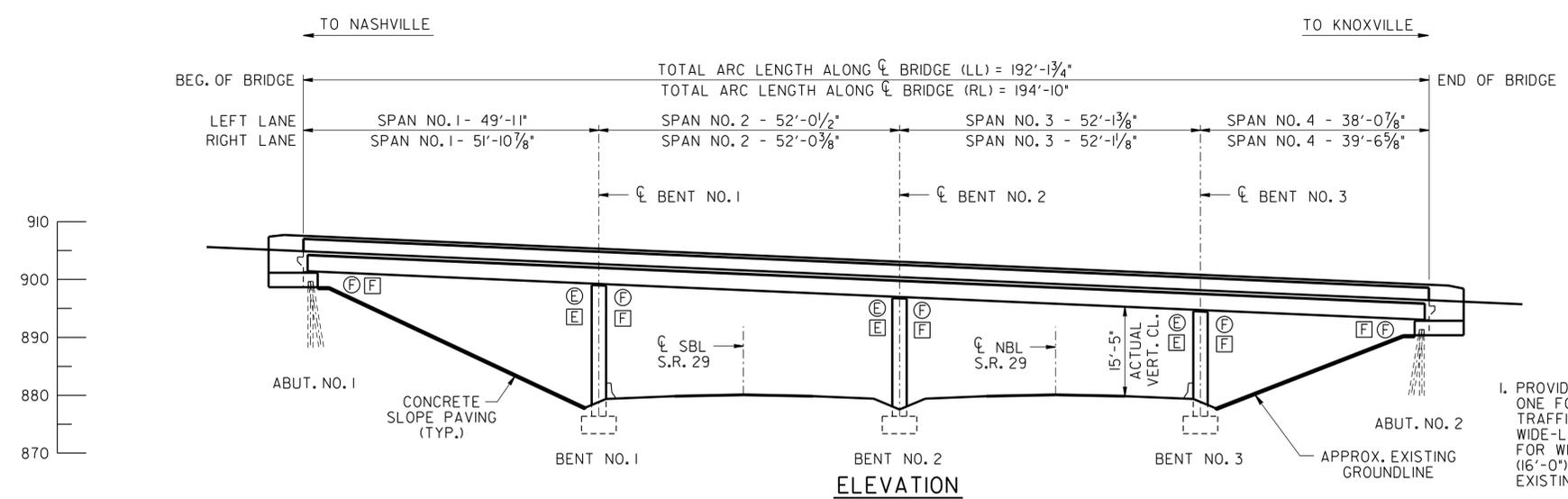
UTILITIES NOT IN ROADWAY CONTRACT

- POWER - ROCKWOOD ELECTRIC UTILITIES BOARD (NO CONFLICT)
341 W. ROCKWOOD ST.
ROCKWOOD, TN 37854
BILL MUSROCK (865) 717-5416
- WATER - ROCKWOOD GAS, WATER, & SEWER(NO CONFLICT)
110 N. CHAMBERLAND AVE.
ROCKWOOD, TN 37854
KIM RAMSEY (865)806-1701
- PHONE - AT&T (NO CONFLICT)
9733 PARKSIDE DRIVE
KNOXVILLE, TN 37922
DAVID OVERMAN (865)539-8579

UNOFFICIAL SET

NOT FOR BIDDING

PROJECT NO.	YEAR	SHEET NO.	
73100-4116-04	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

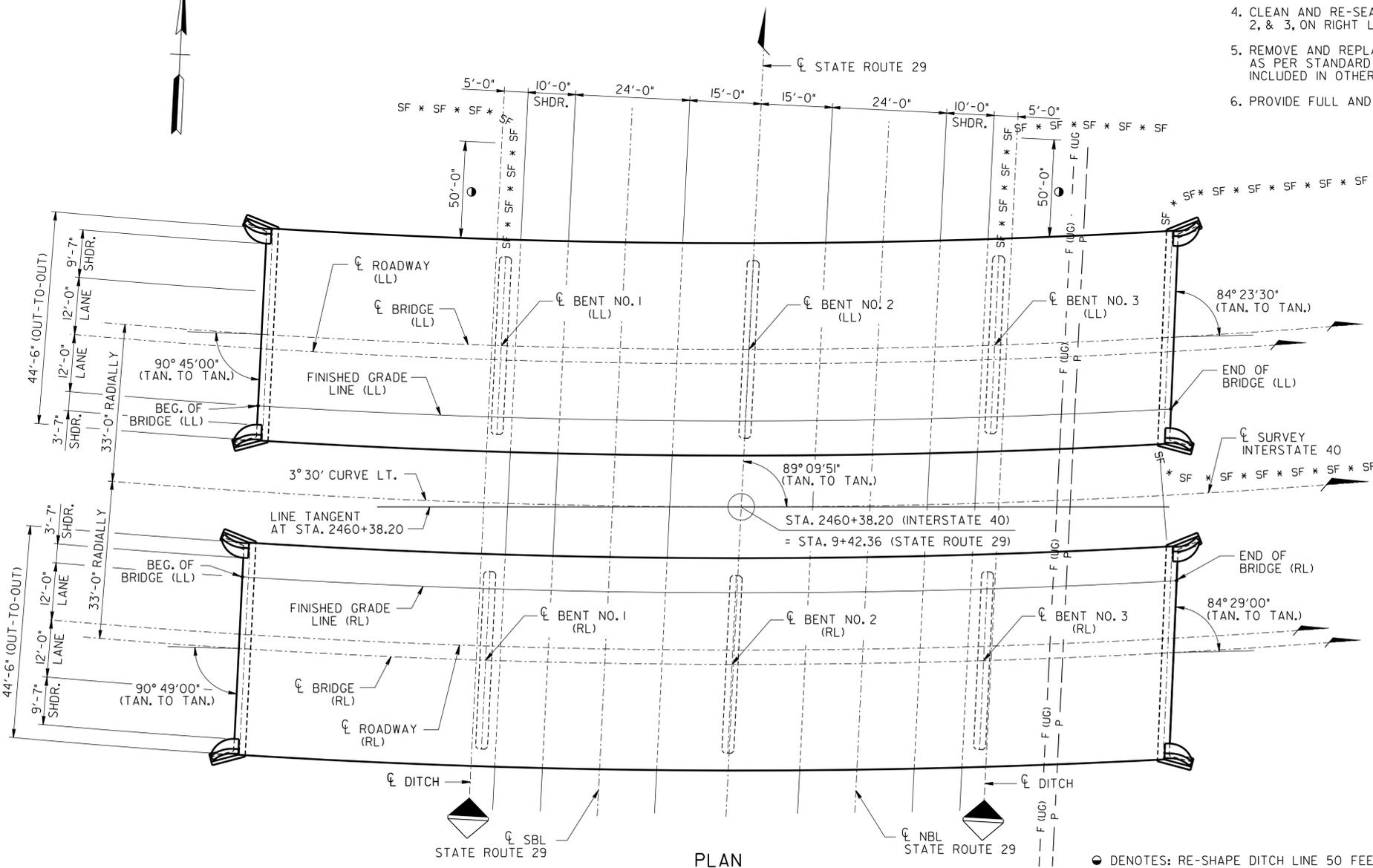


E DENOTES: EXPANSION
 F DENOTES: FIXED
 O DENOTES: EXISTING SUPPORT CONDITIONS

SBL DENOTES: SOUTH BOUND LANES
 NBL DENOTES: NORTH BOUND LANES
 □ DENOTES: PROPOSED SUPPORT CONDITIONS

GENERAL SCOPE OF WORK

1. PROVIDE REQUIRED TRAFFIC CONTROL TO MAINTAIN ONE FOURTEEN FOOT-EIGHT INCH (14'-8") LANE OF TRAFFIC IN EACH DIRECTION DURING PHASE 1, WITH A WIDE-LOAD DETOUR. SEE TRAFFIC CONTROL SHEETS FOR WIDE-LOAD DETOUR PLAN. MAINTAIN ONE 16 FOOT (16'-0") LANE OF TRAFFIC IN EACH DIRECTION ON THE EXISTING BRIDGES DURING PHASE 2.
2. REMOVE VEGETATION ON AND AROUND BRIDGE 10 FEET OUTSIDE BRIDGE LIMITS ON ALL SIDES.
3. REMOVE EXISTING ASPHALT WEARING SURFACE AND PROVIDE AN ASPHALT SEAL ACROSS THE ENTIRE DECK.
4. CLEAN AND RE-SEAL EXPANSION JOINTS AT BENT NOS. 1, 2, & 3, ON RIGHT LANE AND LEFT LANE BRIDGES.
5. REMOVE AND REPLACE EXISTING PARAPET DELINEATORS AS PER STANDARD DRAWING STD-I-1. COST TO BE INCLUDED IN OTHER ITEMS.
6. PROVIDE FULL AND PARTIAL DEPTH DECK REPAIRS.
7. PROVIDE SPALL REPAIRS WITH HIGH EARLY STRENGTH CONCRETE AND POLYMER MODIFIED CEMENTITIOUS MATERIAL ON THE SUBSTRUCTURES AND PARAPETS.
8. PROVIDE EPOXY INJECTION REPAIRS ON THE SUBSTRUCTURES.
9. EXCAVATE AROUND PILES ONE FOOT BELOW GRADE AND ENCASE IN CONCRETE AT ABUTMENT NO. 2, LEFT LANE.
10. PROVIDE TEXTURE COATING FOR ALL PARAPETS, SUBSTRUCTURES, AND THE UNDER ROUTE BARRIER WALLS.
11. PROVIDE NEW ASPHALT TRANSITIONS BETWEEN EXISTING ASPHALT AND DECK OVERLAY.
12. PROVIDE UPGRADED GUARDRAIL END TREATMENTS AS SHOWN IN THE PLANS.
13. RE-SHAPE AND PROTECT THE DITCH LINE ON WESTBOUND SIDE OF UNDER ROUTE.



(LL) DENOTES: LEFT LANE
 (RL) DENOTES: RIGHT LANE

LIST OF DRAWINGS

DWG NO.	LAST REV. DATE	DRAWING
BR-116-18		LAYOUT OF BRIDGE TO BE REPAIRED
BR-116-19		ESTIMATED BRIDGE QUANTITIES
BR-116-20		SUBSTRUCTURE
BR-116-21		BEAM & JOINT REPAIR DETAILS
BR-116-22		ABUTMENT REPAIR DETAILS
BR-116-23		BENT REPAIR DETAILS (LT)
BR-116-24		BENT REPAIR DETAILS (RT)
BR-116-25		MISCELLANEOUS REPAIR DETAILS

LIST OF REFERENCE DRAWINGS*

K-15-59	STANDARD CONCRETE HANDRAIL
K-15-60	STANDARD BRIDGE DETAILS, EXPANSION DEVICES, BEARING DEVICES, PILE SPLICE
K-29-78 THRU K-29-86	ORIGINAL BRIDGE PLANS
BR-56-10 THRU BR-56-15	BRIDGE REPAIR PLANS (2002)

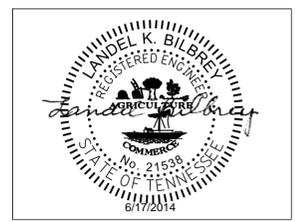
LIST OF SPECIAL PROVISIONS

NO.	LAST REV. DATE	REGARDING
SP604CR	**	REPAIR OF BRIDGE DECK CRACKS

* DENOTES: THESE DRAWINGS ARE TO BE PRINTED WITH PLANS.
 ** DENOTES: CURRENT REVISION DATE, AS PER CONTRACT DOCUMENTS.

UNOFFICIAL SET
 NOT FOR BIDDING

2013 EST. ADT = 39,125
 POSTED SPEED LIMIT = 70 M.P.H.



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

LAYOUT OF BRIDGE TO BE REPAIRED
 INTERSTATE 40 OVER
 STATE ROUTE 29/PINE RIDGE ROAD
 BRIDGE NO. 73-10040-9.96 (RT & LT)
 ROANE COUNTY
 2014

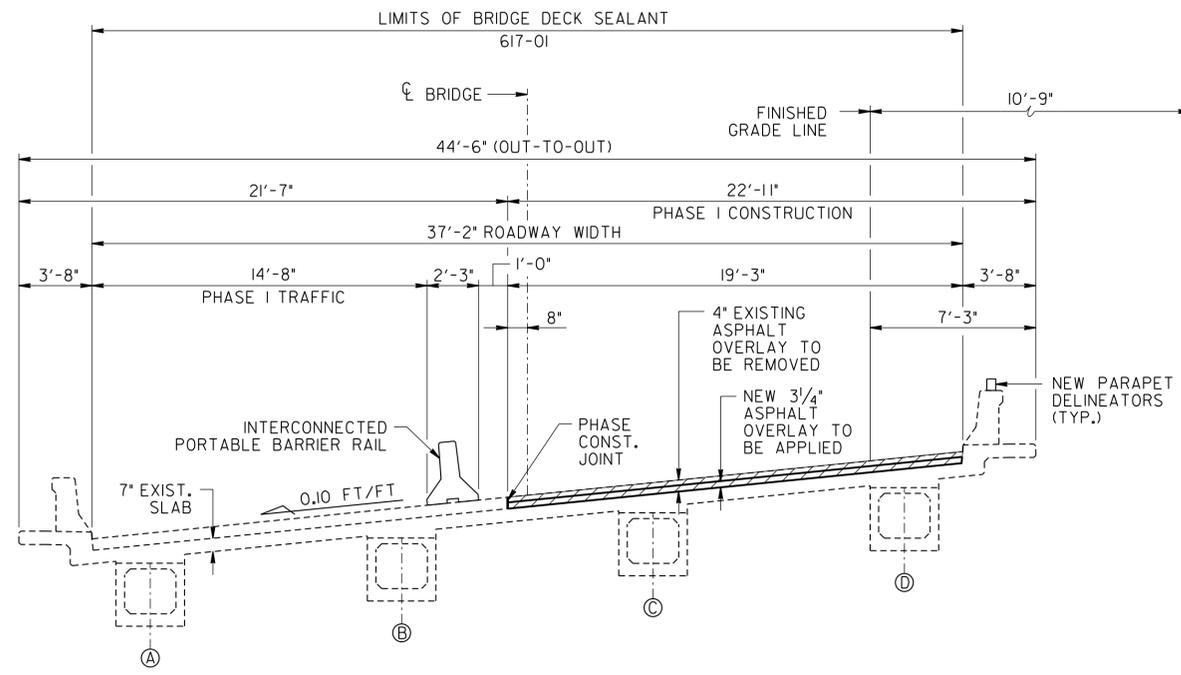
TOTAL DISTURBED AREA = 1,400 S.F. (0.03 ACRES)

BR-116-18

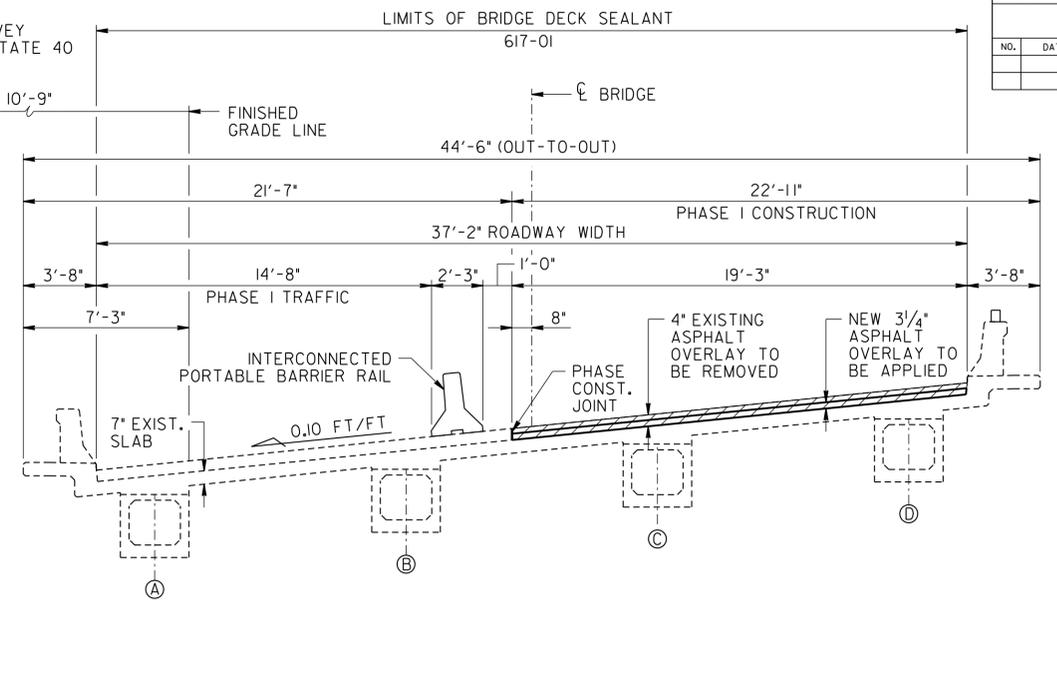
6/16/2014 F:\35\350334\350334\Bridges\40 over Pine Ridge Road - 9.96 (RT & LT)\3503409XLAY001.dgn

DESIGNED BY M. JONES DATE 08/12
 DRAWN BY M. JONES DATE 08/12
 SUPERVISED BY L. BILBREY DATE 08/12
 CHECKED BY L. BILBREY DATE 08/12

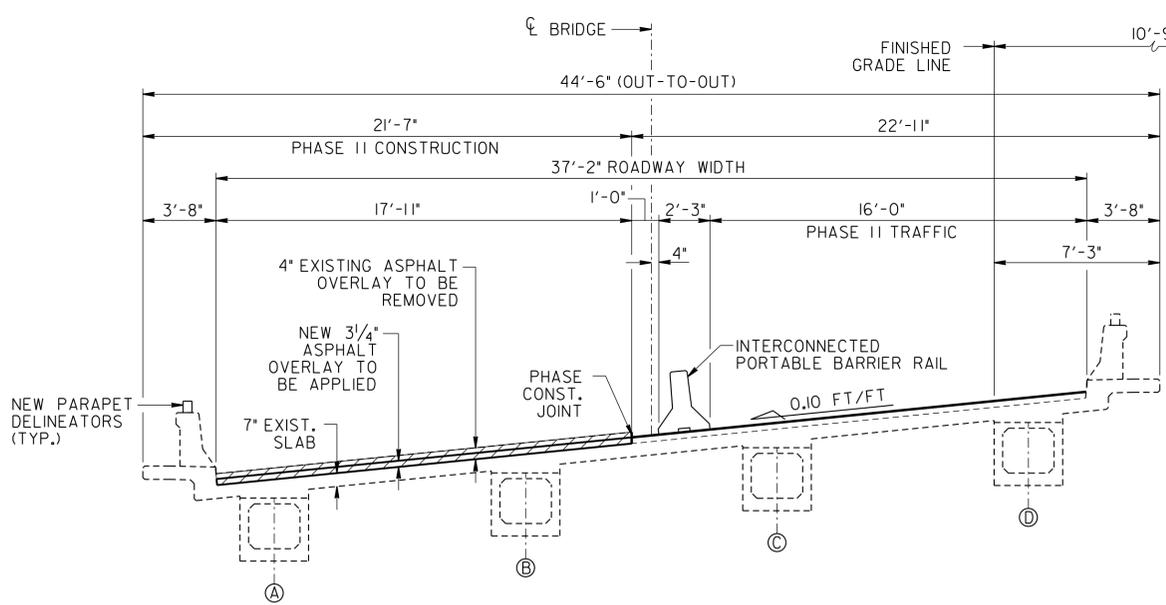
PROJECT NO.	YEAR	SHEET NO.	
73100-4116-04	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



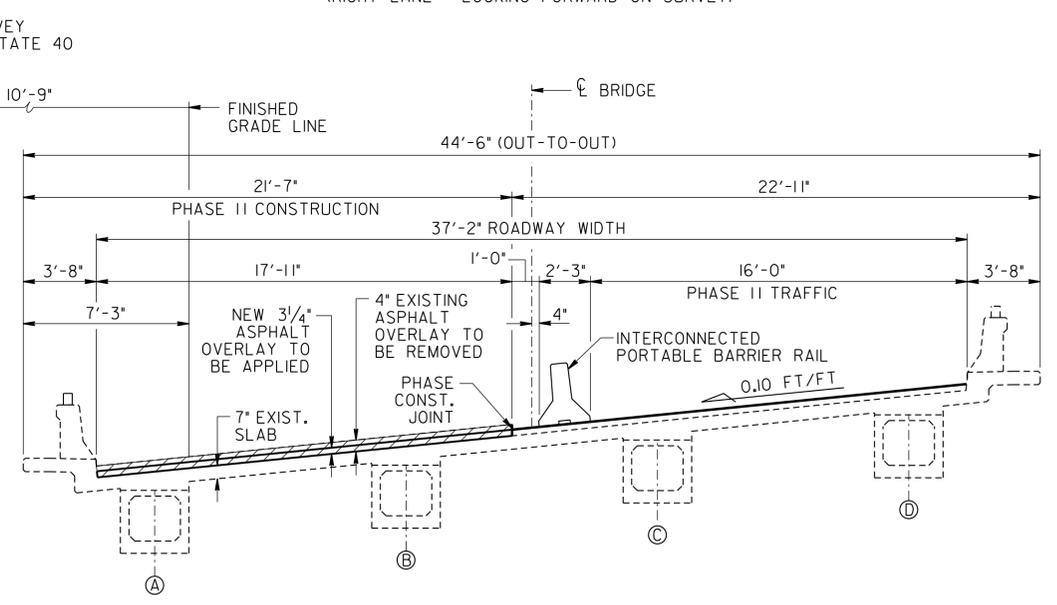
TYPICAL SECTION - PHASE I CONSTRUCTION
(LEFT LANE - LOOKING FORWARD ON SURVEY)



TYPICAL SECTION - PHASE I CONSTRUCTION
(RIGHT LANE - LOOKING FORWARD ON SURVEY)

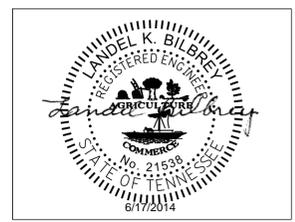


TYPICAL SECTION - PHASE II CONSTRUCTION
(LEFT LANE - LOOKING FORWARD ON SURVEY)



TYPICAL SECTION - PHASE II CONSTRUCTION
(RIGHT LANE - LOOKING FORWARD ON SURVEY)

UNOFFICIAL SET
NOT FOR BIDDING



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

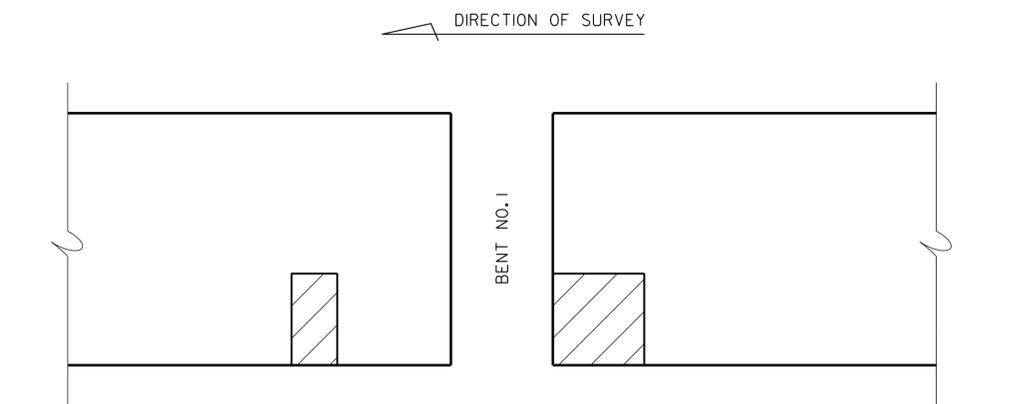
SUPERSTRUCTURE
INTERSTATE 40 OVER
STATE ROUTE 29/PINE RIDGE ROAD
BRIDGE NO. 73-10040-9.96 (RT & LT)
ROANE COUNTY
2014

6/16/2014 F:\35\35034\3503409\Bridges\I-40 over Pine Ridge Road - 9.96 (RT & LT)\3503409XSUP001.dgn

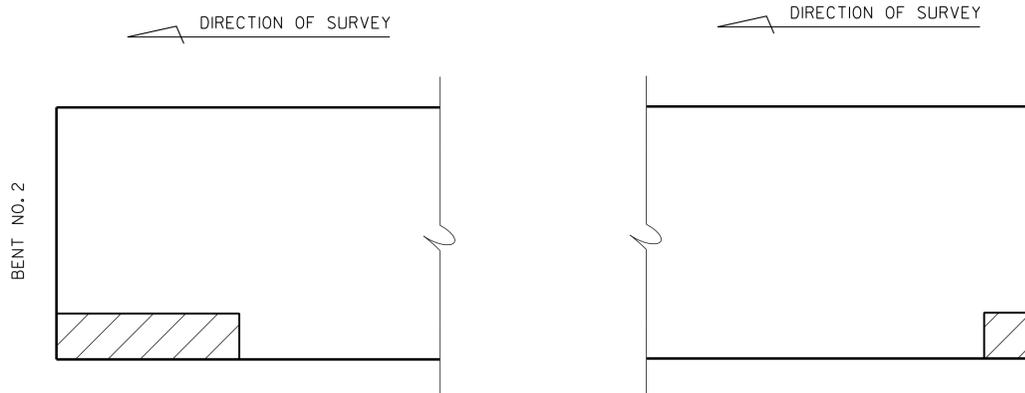
DESIGNED BY M. JONES DATE 08/12
DRAWN BY M. JONES DATE 08/12
SUPERVISED BY L. BILBREY DATE 08/12
CHECKED BY L. BILBREY DATE 08/12

PROJECT NO.	YEAR	SHEET NO.	
73100-4116-04	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

UNOFFICIAL SET
NOT FOR BIDDING

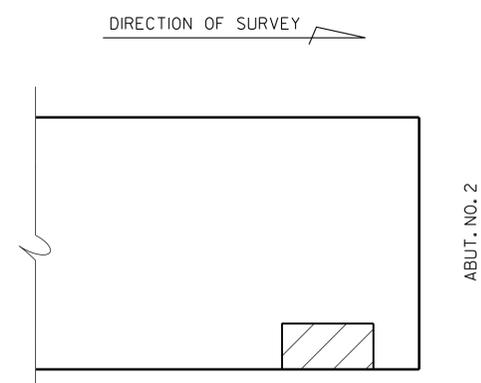


BEAM "A" - (LEFT LANE)
(EXTERIOR FACES @ BENT NO. 1)



BEAM "B" - (LEFT LANE)
(BAY NO. 1 @ BENT NO. 2)

BEAM "C" - (LEFT LANE)
(BAY NO. 2 @ BENT NO. 2)



BEAM "D" - (LEFT LANE)
(EXTERIOR FACE @ ABUT. NO. 2)

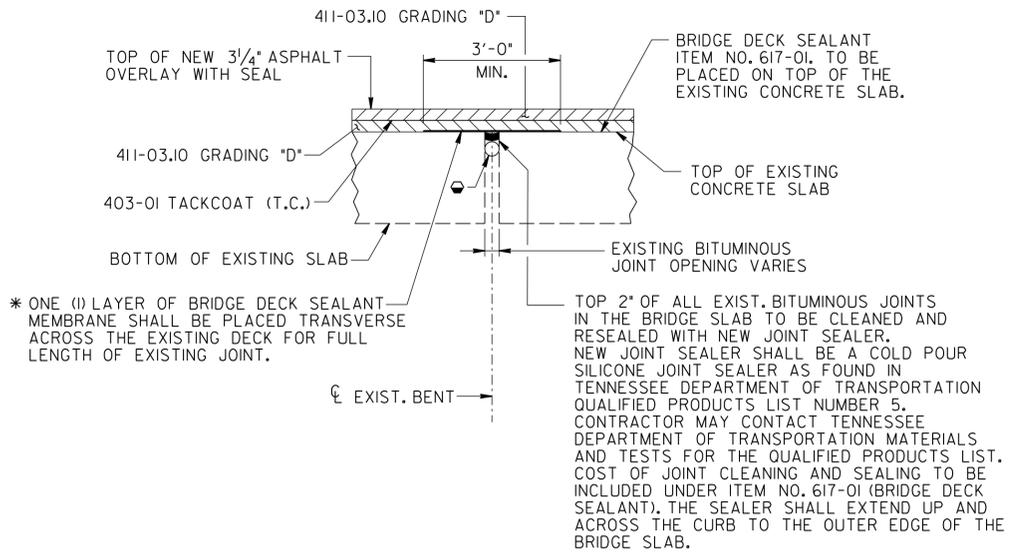
ESTIMATED QUANTITIES

LOCATION OF REPAIR	ITEM NO. 604-10.05 AND/OR 604-10.54 APPROX. REPAIR AREAS (S.F.)
BEAM "A" (LL)	2
BEAM "B" (LL)	1
BEAM "C" (LL)	1
BEAM "D" (LL)	1

▨ DENOTES: APPROXIMATE AREA TO BE REPAIRED UNDER ITEM NO. 604-10.05 AND/OR 604-10.54. SEE REPAIR DETAILS ON DWG. NO. BR-116-25.
(LL) DENOTES: LEFT LANE

NOTE: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING REPAIRS.

DESIGNED BY M. JONES DATE 08/12
DRAWN BY M. JONES DATE 08/12
SUPERVISED BY L. BILBREY DATE 08/12
CHECKED BY L. BILBREY DATE 08/12



* ONE (1) LAYER OF BRIDGE DECK SEALANT MEMBRANE SHALL BE PLACED TRANSVERSE ACROSS THE EXISTING DECK FOR FULL LENGTH OF EXISTING JOINT.

TOP 2" OF ALL EXIST. BITUMINOUS JOINTS IN THE BRIDGE SLAB TO BE CLEANED AND RESEALED WITH NEW JOINT SEALER. NEW JOINT SEALER SHALL BE A COLD POUR SILICONE JOINT SEALER AS FOUND IN TENNESSEE DEPARTMENT OF TRANSPORTATION QUALIFIED PRODUCTS LIST NUMBER 5. CONTRACTOR MAY CONTACT TENNESSEE DEPARTMENT OF TRANSPORTATION MATERIALS AND TESTS FOR THE QUALIFIED PRODUCTS LIST. COST OF JOINT CLEANING AND SEALING TO BE INCLUDED UNDER ITEM NO. 617-01 (BRIDGE DECK SEALANT). THE SEALER SHALL EXTEND UP AND ACROSS THE CURB TO THE OUTER EDGE OF THE BRIDGE SLAB.

EXISTING BITUMINOUS JOINT REPAIR
(TYPICAL AT BENT NOS. 1 THRU 3)

- DENOTES: THE MOVEMENT GAP SHALL BE CAULKED WITH A BACKER ROD OF SUITABLE DIAMETER. THE ROD SHALL BE PLACED AT A DEPTH TO ENSURE THE CORRECT WIDTH/DEPTH RATIO OF THE NEW BRIDGE JOINT SEALER. BACKER ROD AND CAULK SHALL BE AS PER THE SEALER MANUFACTURER.
- * DENOTES: SEE SECTIONS 617 AND 906.04 OF THE TENNESSEE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

EXPANSION JOINT REPAIR NOTES:

THE JOINT SEALANT SYSTEM CONSISTS OF A SURFACE PRIMER, A SELF-LEVELING OR NON-SAG SEALANT, AND BACKER MATERIAL. DETAILED SPECIFICATIONS AND INSTALLATION PROCEDURES SHALL BE SUBMITTED TO THE PROJECT ENGINEER PRIOR TO CONSTRUCTION. THE MANUFACTURER AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE WORKMANSHIP AND PERFORMANCE OF THE INSTALLED JOINT.

JOINT SEALANT:

THE SELF-LEVELING SILICONE SEALANT MATERIAL SHALL BE LISTED IN THE T.D.O.T. QUALIFIED PRODUCTS LIST.

SURFACE PRIMER:

THE JOINT SEALANT MUST BE APPLIED TO CONCRETE SURFACES WITH THE USE OF A SPECIAL PRIMER FOR EACH APPLICATION. THE VERTICAL FACES OF THE JOINT RECEIVING SURFACE PRIMER ARE TO BE FREE OF DUST PARTICLES, MOISTURE, OILS, AND LAITANCE AT THE TIME THE SURFACE PRIMER IS APPLIED, PER THE MANUFACTURER'S REQUIREMENTS. THE SURFACE PRIMER SHALL BE FULLY CURED BEFORE THE JOINT SEALANT IS INSTALLED.

JOINTS:

ALL EXISTING JOINT OPENINGS SHALL BE THOROUGHLY CLEANED OF FOREIGN MATERIAL AND EXISTING JOINT MATERIAL BEFORE PLACING THE NEW EXPANSION JOINTS.

GENERAL EXPANSION JOINT NOTES:

COST OF CLEANING AND SEALING JOINT, BACKER ROD, JOINT SEALER, LABOR, AND ANY MISCELLANEOUS MATERIALS NECESSARY TO BE INCLUDED UNDER ITEM NO. 604-10.44, EXPANSION JOINT REPAIRS, L.F.

THE EXPANSION JOINT MATERIALS USED SHALL BE ON THE TDOT APPROVED QUALIFIED LISTS FOR ACCEPTABLE PRODUCTS. THE JOINT SYSTEM SHALL BE INSTALLED UNDER THE DIRECT SUPERVISION OF AN AUTHORIZED TECHNICIAN PROVIDED BY THE EXPANSION JOINT SUPPLIER. THE TECHNICIAN MUST APPROVE ALL ASPECTS OF THE GEOMETRY AND PREPARATION.

TOP 3" OF JOINT SHALL BE BLAST CLEANED TO REMOVE LAITANCE AND OTHER DELETERIOUS MATERIAL BEFORE INSTALLATION OF BACKER ROD OR SEALANT.

ALL DEBRIS AND EXISTING JOINT MATERIAL SHALL BE REMOVED FOR THE FULL DEPTH OF THE EXISTING JOINT OPENING.

EXPANSION GAP WILL CHANGE AT OTHER TEMPERATURES AND THE CONTRACTOR SHALL COMPENSATE FOR JOINT MATERIAL IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS NO INCREASE IN THE UNIT BID PRICE SHALL BE ALLOWED.

THE DEPTH OF THE JOINT POURED SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS FOR PROPER INSTALLATION. THE PAVEMENT AND AIR TEMPERATURE SHALL BE 40°F AND RISING AND SHALL NOT FALL BELOW 40°F PRIOR TO COMPLETE CURE OF THE SEALANT.

THE SEALANT THICKNESS PLACED SHALL BE CHECKED PRIOR TO CURING AT A MINIMUM OF THREE (3) LOCATIONS ACROSS THE LENGTH OF JOINT TO ASSURE PROPER THICKNESS.

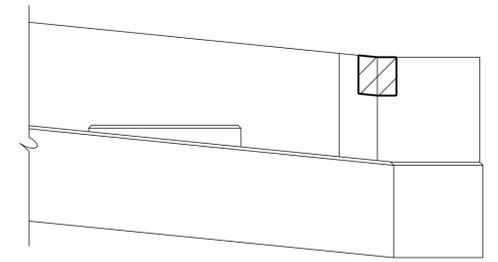
THE MOVEMENT GAP SHALL BE CAULKED WITH A BACKER ROD OF SUITABLE DIAMETER. THE ROD SHALL BE PLACED AT A DEPTH TO ENSURE THE CORRECT WIDTH DEPTH RATIO OF THE NEW BRIDGE JOINT SEALANT. BACKER ROD AND CAULK SHALL BE AS PER THE SEALANT MANUFACTURER.



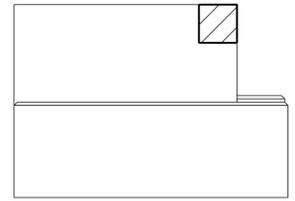
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BEAM & JOINT REPAIR DETAILS
INTERSTATE 40 OVER
STATE ROUTE 29/PINE RIDGE ROAD
BRIDGE NO. 73-10040-9.96 (RT & LT)
ROANE COUNTY
2014

6/16/2014 F:\35\35034\3503409\BR\ldge\1-40 over Pine Ridge Road - 9.96 (RT & LT)\3503409\BEAM\PR001.dgn

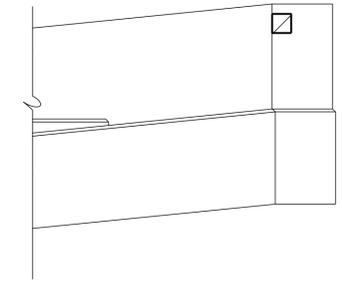
PROJECT NO.	YEAR	SHEET NO.	
73100-4116-04	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



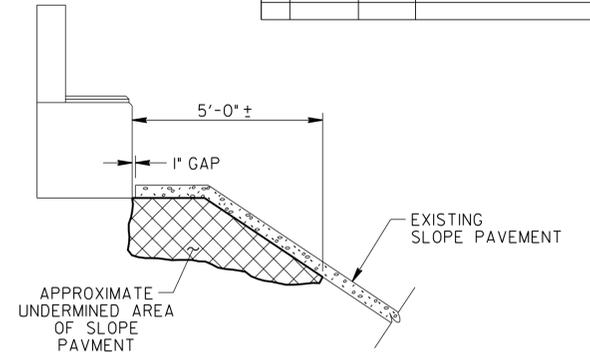
PART-ELEVATION
ABUTMENT NO. 1 (LL)



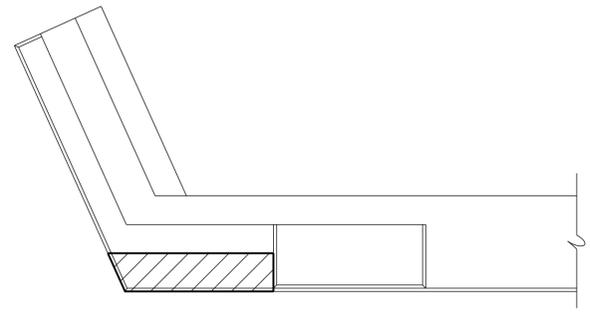
RIGHT WING PART-ELEVATION
ABUTMENT NO. 1 (RL)



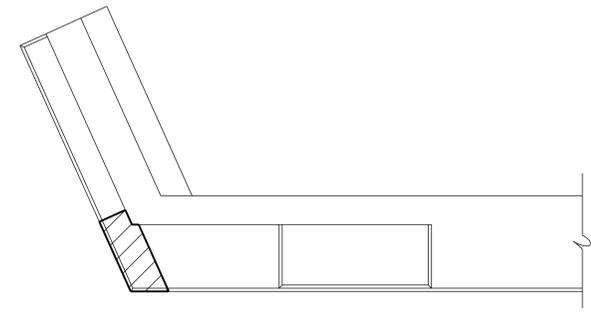
PART-ELEVATION
ABUTMENT NO. 2 (RL)



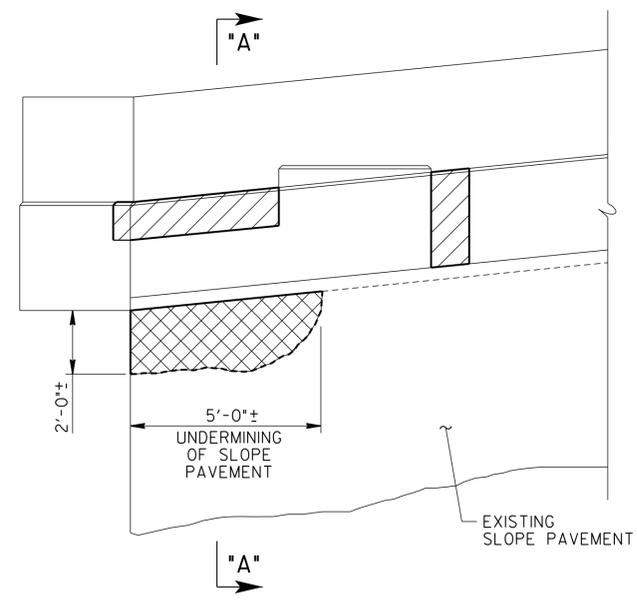
SECTION "A"-"A"



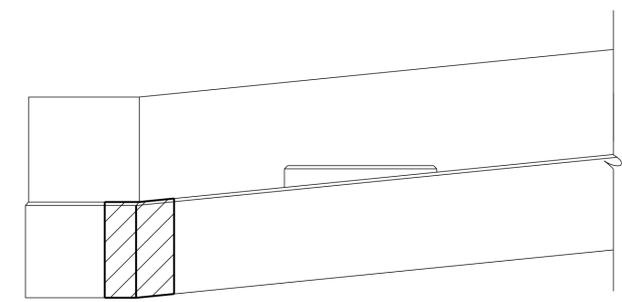
PART-PAN



PART-PAN



PART-ELEVATION
ABUTMENT NO. 2 (LL)



PART-ELEVATION
ABUTMENT NO. 2 (RL)

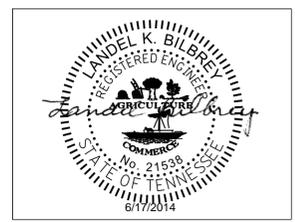
ESTIMATED QUANTITIES

LOCATION OF REPAIR	ITEM NO. 604-10.05 AND/OR 604-10.54 APPROX. REPAIR AREAS (S.F.)	ITEM NO. 204-08.01 BACKFILL MATERIAL (FLOWABLE FILL) (C.Y.)
ABUT. NO. 1 (LL)	1	-
ABUT. NO. 2 (LL)	12	2
ABUT. NO. 1 (RL)	1	-
ABUT. NO. 2 (RL)	8	-

- DENOTES: APPROXIMATE AREA TO BE REPAIRED UNDER ITEM NO. 604-10.05 AND/OR 604-10.54. SEE REPAIR DETAILS ON DWG. NO. BR-116-25.
- DENOTES: APPROXIMATE AREA OF UNDERMINED SLOPE PAVEMENT TO BE REPAIRED UNDER ITEM NO. 204-08.01 BACKFILL MATERIAL (FLOWABLE FILL).
- (LL) DENOTES: LEFT LANE
- (RL) DENOTES: RIGHT LANE

NOTE: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING REPAIRS.

UNOFFICIAL SET
NOT FOR BIDDING

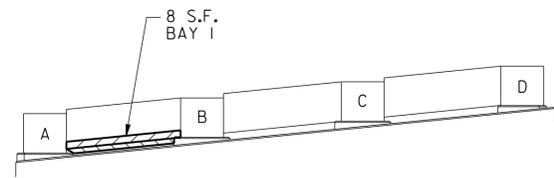


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ABUTMENT REPAIR DETAILS
INTERSTATE 40 OVER
STATE ROUTE 29/PINE RIDGE ROAD
BRIDGE NO. 73-10040-9.96 (RT & LT)
ROANE COUNTY
2014

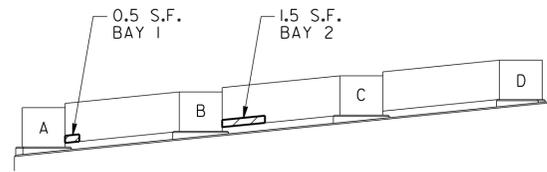
6/16/2014 F:\35\35034\3503409\Bridges\40 over Pine Ridge Road - 9.96 (RT & LT)\3503409\4BT001.dgn

DESIGNED BY M. JONES DATE 08/12
DRAWN BY M. JONES DATE 08/12
SUPERVISED BY L. BILBREY DATE 08/12
CHECKED BY L. BILBREY DATE 08/12

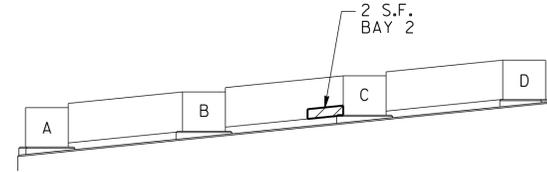
PROJECT NO.	YEAR	SHEET NO.	
73100-4116-04	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



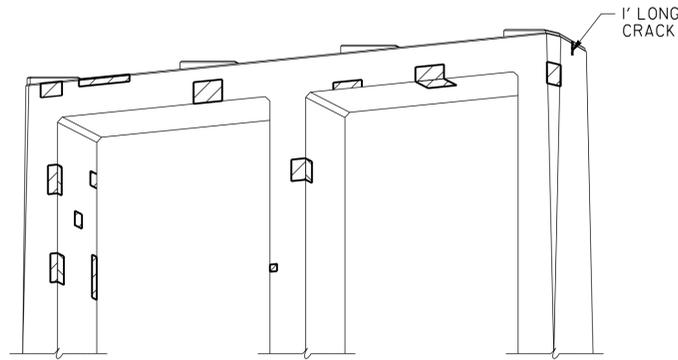
DIAPHRAGMS - BENT NO. 1 (LL)
(LOOKING FORWARD ON SURVEY)



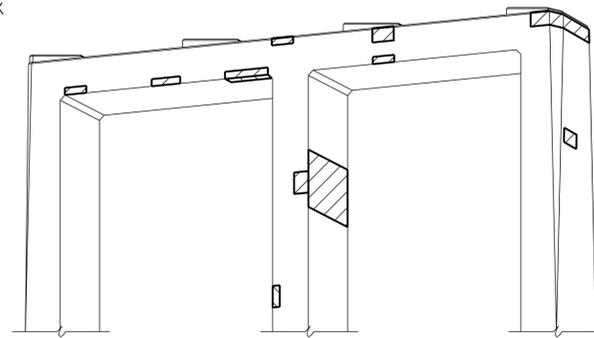
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(LOOKING FORWARD ON SURVEY)



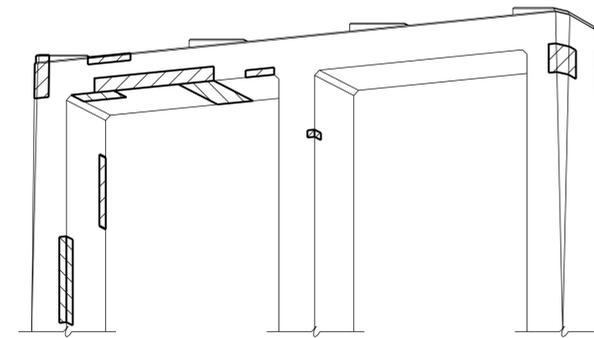
DIAPHRAGMS - BENT NO. 3 (LL)
(LOOKING FORWARD ON SURVEY)



ELEVATION - BENT NO. 1 (LL)
(LOOKING FORWARD ON SURVEY)



ELEVATION - BENT NO. 2 (LL)
(LOOKING FORWARD ON SURVEY)



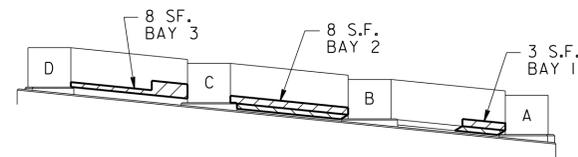
ELEVATION - BENT NO. 3 (LL)
(LOOKING FORWARD ON SURVEY)

UNOFFICIAL SET

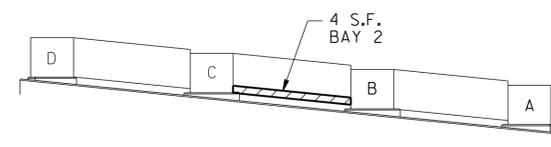
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ESTIMATED QUANTITIES

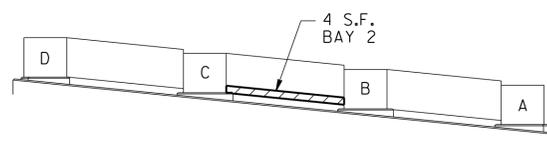
LOCATION OF REPAIR	ITEM NO. 604-10.05 AND/OR 604-10.54 APPROX. REPAIR AREAS (S.F.)	ITEM NO. 604-10.62 APPROX. REPAIR AREAS (L.F.)
BENT NO. 1 (LL)	82	4
BENT NO. 2 (LL)	58	4
BENT NO. 3 (LL)	54	4



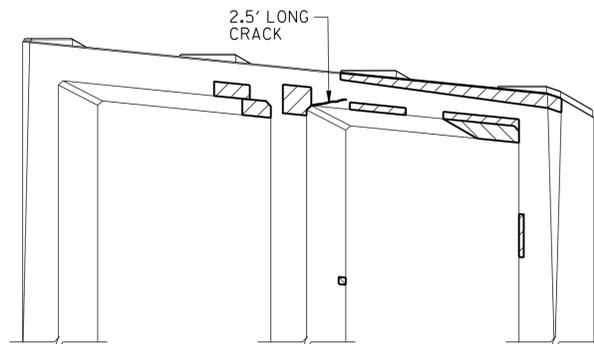
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(LOOKING BACK ON SURVEY)



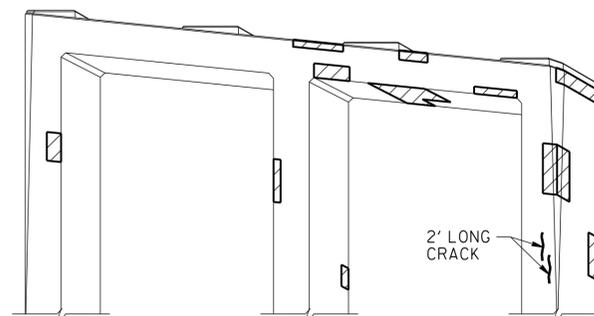
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(LOOKING BACK ON SURVEY)



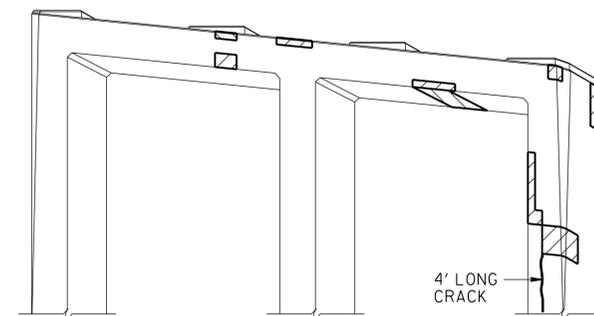
DIAPHRAGMS - BENT NO. 3 (LL)
(LOOKING BACK ON SURVEY)



ELEVATION - BENT NO. 1 (LL)
(LOOKING BACK ON SURVEY)



ELEVATION - BENT NO. 2 (LL)
(LOOKING BACK ON SURVEY)



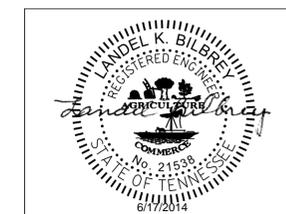
ELEVATION - BENT NO. 3 (LL)
(LOOKING BACK ON SURVEY)

▨ DENOTES: APPROXIMATE AREA TO BE REPAIRED UNDER ITEM NO. 604-10.05 AND/OR 604-10.54. SEE REPAIR DETAILS ON DWG. NO. BR-116-25.

▮ DENOTES: CRACK TO BE EPOXY INJECTED. QUANTITIES AND LOCATIONS GIVEN ARE APPROXIMATE, AND SHALL BE BID WITH THE CONTINGENCY THAT THEY MAY BE INCREASED, DECREASED, OR ELIMINATED BY THE ENGINEER, SEE EPOXY INJECTION NOTES ON DWG. NO. BR-116-25.

(LL) DENOTES: LEFT LANE

NOTE: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING REPAIRS.



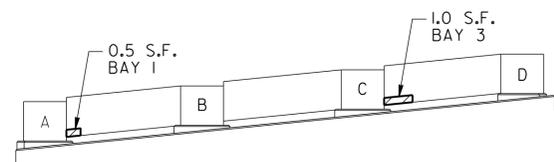
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BENT REPAIR DETAILS (LT)
INTERSTATE 40 OVER
STATE ROUTE 29/PINE RIDGE ROAD
BRIDGE NO. 73-10040-9.96 (RT & LT)
ROANE COUNTY
2014

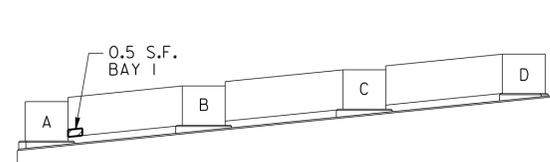
DESIGNED BY M. JONES DATE 08/12
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SUPERVISED BY L. BILBREY DATE 08/12
CHECKED BY L. BILBREY DATE 08/12

6/16/2014 F:\35\35034\3503409\Bridges\40 over Pine Ridge Road - 9.96 (RT & LT)\3503409\BNT001(LL).dgn

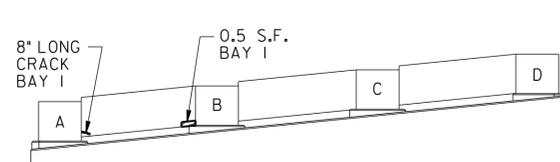
PROJECT NO.	YEAR	SHEET NO.	
73100-4116-04	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



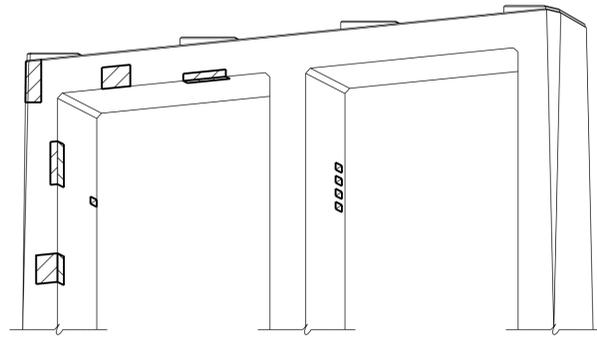
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(LOOKING FORWARD ON SURVEY)



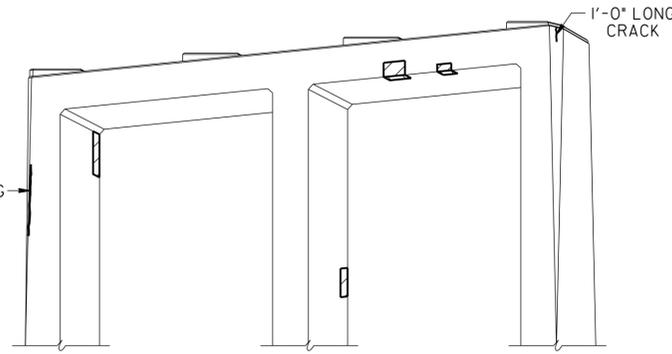
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(LOOKING FORWARD ON SURVEY)



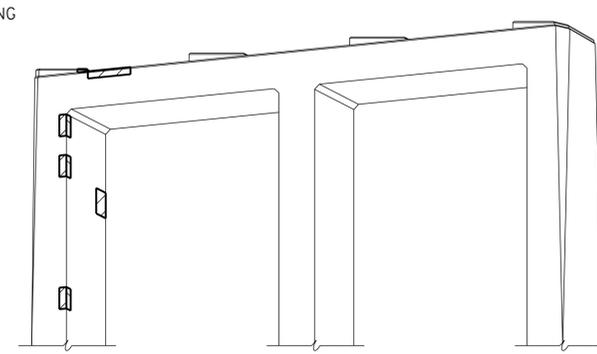
DIAPHRAGMS - BENT NO. 3 (RL)
(LOOKING FORWARD ON SURVEY)



ELEVATION - BENT NO. 1 (RL)
(LOOKING FORWARD ON SURVEY)



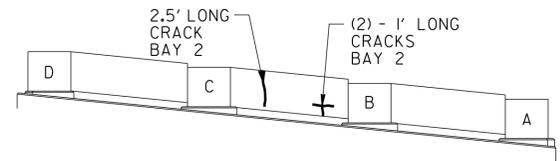
ELEVATION - BENT NO. 2 (RL)
(LOOKING FORWARD ON SURVEY)



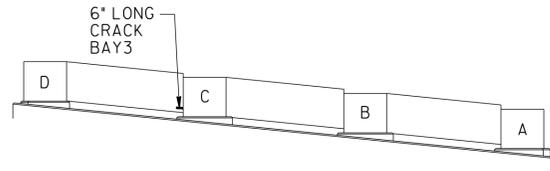
ELEVATION - BENT NO. 3 (RL)
(LOOKING FORWARD ON SURVEY)

**UNOFFICIAL
SET**

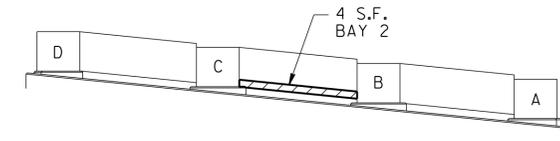
NOT FOR
BIDDING



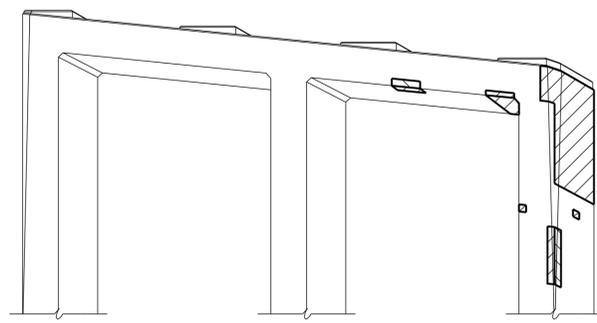
DIAPHRAGMS - BENT NO. 1 (RL)
(LOOKING BACK ON SURVEY)



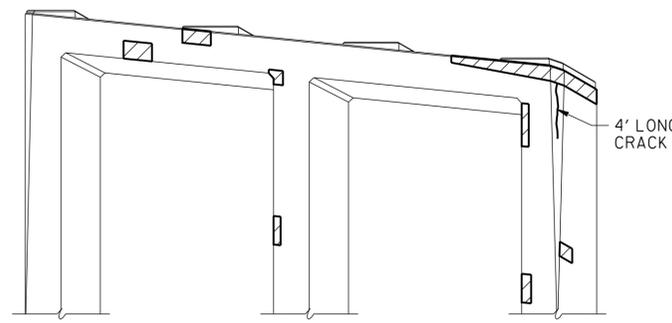
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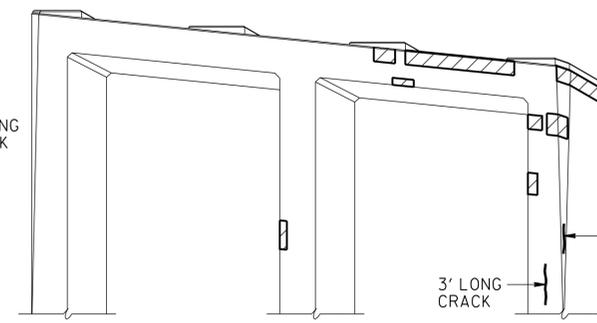
DIAPHRAGMS - BENT NO. 3 (RL)
(LOOKING BACK ON SURVEY)



ELEVATION - BENT NO. 1 (RL)
(LOOKING BACK ON SURVEY)



ELEVATION - BENT NO. 2 (RL)
(LOOKING BACK ON SURVEY)

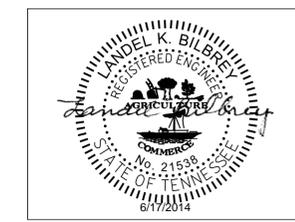


ELEVATION - BENT NO. 3 (RL)
(LOOKING BACK ON SURVEY)

ESTIMATED QUANTITIES

LOCATION OF REPAIR	ITEM NO. 604-10.05 AND/OR 604-10.54 APPROX. REPAIR AREAS (S.F.)	ITEM NO. 604-10.62 APPROX. REPAIR AREAS (L.F.)
BENT NO. 1 (RL)	59	5
BENT NO. 2 (RL)	26	10
BENT NO. 3 (RL)	30	6

- DENOTES: APPROXIMATE AREA TO BE REPAIRED UNDER ITEM NO. 604-10.05 AND/OR 604-10.54. SEE REPAIR DETAILS ON DWG. NO. BR-116-25.
 - DENOTES: CRACK TO BE EPOXY INJECTED. QUANTITIES AND LOCATIONS GIVEN ARE APPROXIMATE, AND SHALL BE BID WITH THE CONTINGENCY THAT THEY MAY BE INCREASED, DECREASED, OR ELIMINATED BY THE ENGINEER. SEE EPOXY INJECTION NOTES ON DWG. NO. BR-116-25.
 - (RL) DENOTES: RIGHT LANE
- NOTE: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING REPAIRS.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BENT REPAIR DETAILS (RT)
INTERSTATE 40 OVER
STATE ROUTE 29/PINE RIDGE ROAD
BRIDGE NO. 73-10040-9.96 (RT & LT)
ROANE COUNTY
2014

6/16/2014 F:\35\35034\3503409\BR-116-25.dgn over Pine Ridge Road - 9.96 (RT & LT)\3503409\BNT001(RL).dgn

DESIGNED BY M. JONES DATE 08/12
DRAWN BY M. JONES DATE 08/12
SUPERVISED BY L. BILBREY DATE 08/12
CHECKED BY L. BILBREY DATE 08/12

SPECIAL NOTES FOR EPOXY INJECTION

UNLESS OTHERWISE NOTED, THE INTENT OF THIS SPECIFICATION IS FOR DESIGNATED CRACKS TO BE INJECTED THEIR FULL LENGTH AND DEPTH.

DESIGNATED CRACKS SHALL BE INJECTED WITH AN APPROVED EPOXY RESIN ADHESIVE FILLING ALL VOIDS FOR THE CRACK DEPTH OR THICKNESS OF THE MEMBER. THE EPOXY RESIN ADHESIVE SHALL BE ON THE CURRENT QUALIFIED PRODUCTS LIST MAINTAINED BY THE DIVISION OF MATERIALS AND TEST. ALL CRACKS SHALL BE INJECTED USING AN ADHESIVE SUITABLE FOR THE FIELD CONDITIONS (CRACK WIDTH, TEMPERATURE, HUMIDITY, ETC.) RECOMMENDED BY THE ADHESIVE MANUFACTURER AS SHOWN ON MATERIAL DATA SHEETS. FOLLOWING INJECTION, ALL INJECTION PORTS AND CAPPING MATERIAL SHALL BE REMOVED FROM EXPOSED SURFACES LEAVING THE SURFACE SMOOTH AND FLUSH WITH THE SURROUNDING CONCRETE SURFACES.

THE CONTRACTOR SHALL HAVE SUFFICIENT EXPERIENCE AND TRAINING TO PERFORM THE EPOXY INJECTION IN ACCORDANCE WITH THESE PLANS. PRIOR TO PERFORMING ANY WORK, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A WRITTEN PROCEDURE FOR PERFORMING THE EPOXY INJECTION. THE PROCEDURE SHALL DESCRIBE IN DETAIL HOW THE WORK WILL BE PERFORMED. THE PROCEDURE SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING INFORMATION.

- 1) DESCRIPTION OF EQUIPMENT.
 - A. THE INJECTION EQUIPMENT SHALL BE OF THE TYPE THAT MIXES ADHESIVE COMPONENTS AT THE INJECTION HEAD.
 - B. THE INJECTION EQUIPMENT SHALL BE CAPABLE OF DISCHARGING MIXED ADHESIVE AT ANY PRESSURE UP TO 300 PSI. THE INJECTION EQUIPMENT SHALL BE EQUIPPED WITH GAUGES WHICH CAN MEASURE THE INJECTION PRESSURE AND VOLUME.
- 2) EQUIPMENT CALIBRATION PROCEDURES AND SCHEDULE.
- 3) MATERIALS TO BE USED (INCLUDING MANUFACTURER DATA SHEETS).
 - A. CAPPING MATERIAL
 - B. EPOXY ADHESIVE (TYPE TO BE APPROPRIATE FOR CRACK SIZES TO BE INJECTED).
- 4) PORT SPACING
 - A. PORT SPACING SHALL NOT BE LESS THAN THE THICKNESS OF THE CONCRETE IN THAT LOCATION.
- 5) INJECTION SEQUENCE
 - A. INJECTION SHALL PROCEED FROM LOWER END OF CRACK ALONG ADJACENT PARTS.
 - B. SKIPPING OF PORTS DURING INJECTION SHALL NOT BE ALLOWED.

THE CONTRACTOR SHALL HAVE THE MANUFACTURER'S INSTRUCTIONS FOR PROPORTIONING AND MIXING AVAILABLE AT THE JOB SITE AT ALL TIMES AND SHALL ENSURE THAT THE EQUIPMENT IS SUPPLYING THE MIXED ADHESIVE IN THE CORRECT PROPORTIONS.

TO ENSURE PROPER MIXING AND PROPORTIONING, SAMPLES SHALL BE TAKEN FROM THE INJECTOR HEAD AT THE START OF EACH WORKDAY AND EACH TIME THE ADHESIVE RESERVOIRS ARE REFILLED. THE SAMPLES SHALL BE IN A TEST CUP. THE SAMPLE SHALL BE MONITORED TO ENSURE THAT THE CURE TIME IS IN COMPLIANCE WITH THE MANUFACTURER'S DATA SHEETS. IF THE SAMPLES DO NOT CURE IN THE SPECIFIED TIME THEN THE EQUIPMENT USED TO PRODUCE THE SAMPLE SHALL NOT BE USED UNTIL THE PROBLEM IS CORRECTED.

CORE SAMPLES SHALL BE TAKEN AS VERIFICATION OF THE QUALITY OF WORK. THE CONTRACTOR SHALL TAKE ONE (1) ONE (1) INCH DIAMETER (FULL DEPTH OF CONCRETE AT LOCATION CORED) CORE SAMPLE STARTING WITH THE FIRST REPAIR LOCATION THEN EVERY THIRD REPAIR LOCATION AFTERWARDS. WORK SHALL NOT PROCEED UNTIL THE CORE SAMPLE IS TAKEN AND ACCEPTED. ALL CORE SAMPLES AND HOLES SHALL BE INDEXED FOR FUTURE REFERENCE. THE ENGINEER SHALL DESIGNATE ALL LOCATIONS TO BE CORED. IF ANY CORES SHOW UNACCEPTABLE RESULTS, ALL WORK SHALL BE STOPPED UNTIL THE CONTRACTOR SUBMITS A PROPOSAL FOR CORRECTING UNACCEPTABLE WORK.

THE INITIAL CORE WILL ALSO SERVE TO QUALIFY THE FOREMAN FOR THIS WORK. IF AT ANY TIME A NEW FOREMAN IS USED, HE SHALL BE QUALIFIED WITH A CORE SAMPLE.

THE CONTRACTOR, AT HIS EXPENSE, SHALL REPAIR ALL CORE HOLES WITH AN APPROVED CEMENTITIOUS PATCHING MATERIAL.

CORE SAMPLES SHALL BE VISUALLY INSPECTED TO CONFIRM THAT CRACKS ARE COMPLETELY FILLED WITH ADHESIVE. ANY CORE HAVING LESS THAN 95% OF THE CRACK FILLED WITH ADHESIVE SHALL BE CONSIDERED UNACCEPTABLE AND BE REJECTED.

CORE SAMPLES SHALL BE TESTED FOR BOND STRENGTH. SAMPLES MAY BE FRACTURED BY HAMMER BLOW TO CRACK AREA OR THROWN AT A HARD SURFACE. IF ADHESIVE FAILURE OCCURS BEFORE CONCRETE FAILURE, THE CORE SHALL BE CONSIDERED UNACCEPTABLE AND REJECTED.

PAYMENT FOR EPOXY INJECTION CRACK REPAIR SHALL BE MADE UNDER ITEM NUMBERS 604-10.62, EPOXY INJECTION REPAIR (COMPLETE AND IN PLACE), L.F. AND 604-10.58, EPOXY INJECTION (INJECTION), GAL.

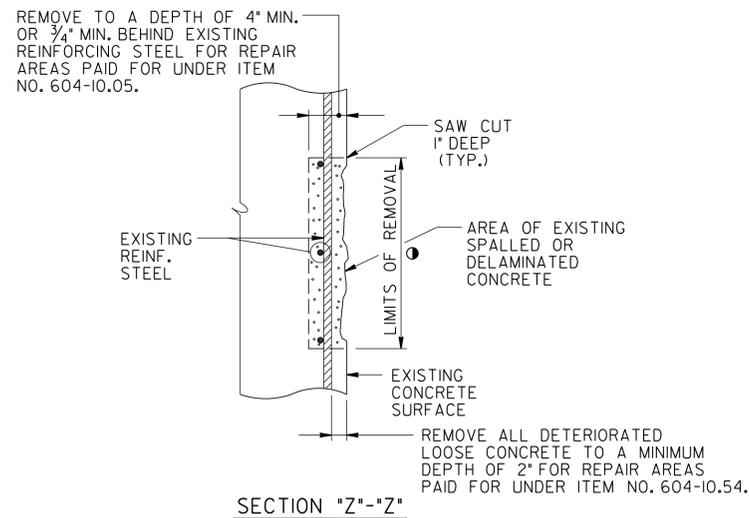
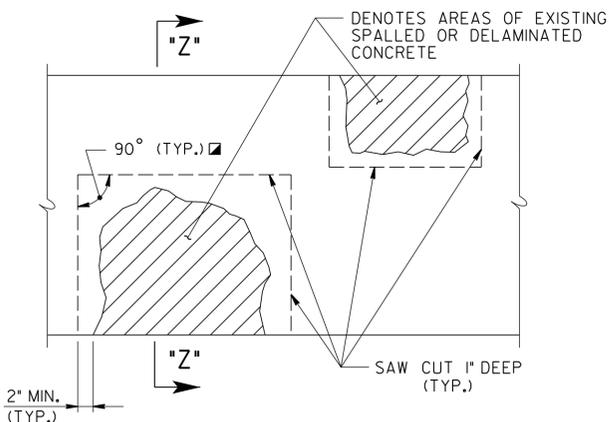
PRICE BID FOR ITEM NUMBER 604-10.62, EPOXY INJECTION REPAIR (COMPLETE AND IN PLACE), L.F., SHALL INCLUDE COST OF ALL LABOR AND MATERIALS (EXCEPT ADHESIVE) FOR GRINDING FOR SURFACE PREPARATION, CRACK PREPARATION, CAPPING, INJECTION OF ADHESIVE, ALL SAMPLING AND TESTING, REMOVAL OF CAPPING MATERIAL AND PORTS, AND OTHER INCIDENTALS. CRACKS SHALL BE MEASURED FOR PAYMENT ALONG THE LENGTH OF THE VISIBLE SURFACE CRACK.

PRICE BID FOR ITEM NUMBER 604-10.58, EPOXY INJECTION (INJECTION), GAL., SHALL INCLUDE COST FOR ADHESIVE MATERIAL INJECTED ONLY.

NO PAYMENT SHALL BE MADE FOR REWORK DEEMED NECESSARY BY FAILURE OF ADHESIVE SAMPLES OR CORE SAMPLES.

ALL WORK INCLUDING SAMPLING AND TESTING SHALL BE IN THE PRESENCE OF THE ENGINEER OR HIS REPRESENTATIVE OR CONTRACT INSPECTORS. ANY WORK DONE WITHOUT INSPECTORS PRESENT SHALL NOT BE PAID FOR. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH WEEKLY SCHEDULES OF WORK TO BE PERFORMED. SCHEDULES SHALL BE SUBMITTED AT LEAST THREE (3) DAYS IN ADVANCE OF WORK TO BE DONE. THE ENGINEER SHALL BE NOTIFIED OF ANY CHANGE IN THE SCHEDULE A MINIMUM OF TWENTY-FOUR (24) HOURS IN ADVANCE OF CHANGE.

DESIGNED BY M. JONES DATE 08/12
 DRAWN BY M. JONES DATE 08/12
 SUPERVISED BY L. BILBREY DATE 08/12
 CHECKED BY L. BILBREY DATE 08/12



DETAIL SHOWING AREAS OF EXISTING SPALLED OR DELAMINATED CONCRETE SURFACES TO BE REMOVED AND REPAIRED

- DENOTES: LIMITS AND LOCATION OF REPAIRS TO BE DESIGNATED BY THE ENGINEER.
- DENOTES: SAW CUT EXISTING CONCRETE SURFACES SO AS TO OBTAIN SQUARED CORNERS.

NOTE: EXTREME CARE SHALL BE TAKEN WHEN REMOVING THE EXISTING SPALLED OR DELAMINATED CONCRETE SO AS NOT TO DAMAGE THE EXISTING REINFORCING STEEL. ALL EXPOSED EXISTING REINFORCING STEEL SHALL RECEIVE A COMPLETE CLEANING TO REMOVE ALL RUST. ALL EXISTING REINFORCEMENT SHALL REMAIN IN PLACE AND INCORPORATED INTO THE NEW CONSTRUCTION. ALL WORK MUST MEET WITH THE FULL APPROVAL OF THE ENGINEER.

THE ENGINEER SHALL HAVE THE OPTION OF DESIGNATING A SPALLED OR DELAMINATED AREA TO BE REPAIRED UNDER ITEM NO. 604-10.05 OR 604-10.54. PATCHING MATERIAL FOR ITEM NO. 604-10.05 SHALL BE HIGH EARLY STRENGTH CONCRETE. PATCHING MATERIAL FOR ITEM NO. 604-10.54 SHALL BE A POLYMER MODIFIED CEMENTITIOUS STRUCTURAL PATCHING MATERIAL. SEE T.D.O.T. QUALIFIED PRODUCTS LIST 13, SECTION B.6.

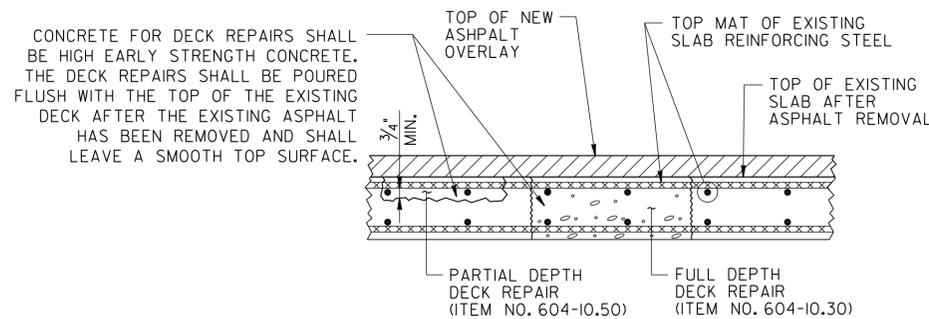
NOTE: PNEUMATICALLY PLACED CONCRETE IS NOT ALLOWED. COST OF SAW CUTTING, REMOVING SPALLED OR DELAMINATED CONCRETE, CLEANING, PATCHING MATERIAL, LABOR AND ANY MISCELLANEOUS MATERIALS NECESSARY TO COMPLETE THE REPAIRS AS SHOWN TO BE INCLUDED IN ITEM NO. 604-10.54, CONCRETE REPAIRS, S.F. OR ITEM NO. 604-10.05, CONCRETE, S.F.

THE ENGINEER SHALL DESIGNATE ALL SPALLED OR DELAMINATED CONCRETE REPAIR AREAS IN THE FIELD. QUANTITIES GIVEN ARE APPROXIMATE. ITEM NO. 604-10.05 AND 604-10.54 SHALL BE BID WITH THE CONTINGENCY THAT THEY MAY BE INCREASED, DECREASED OR ELIMINATED AS DIRECTED BY THE ENGINEER.

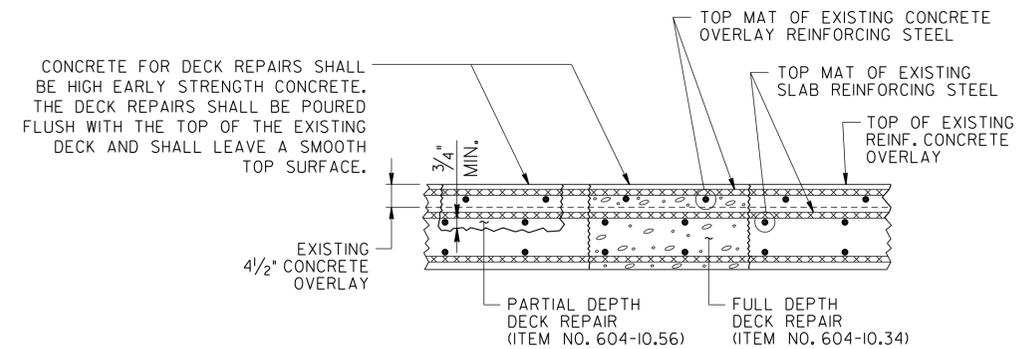
POWER HAND DRIVEN TOOLS USED FOR REMOVAL OF UNSOUND CONCRETE ARE SUBJECT TO THE FOLLOWING RESTRICTIONS:

1. PNEUMATIC HAMMERS HEAVIER THAN THE 35 LB. CLASS SHALL NOT BE USED.
2. CHIPPING HAMMERS OF THE 15 LB. CLASS SHALL BE USED TO REMOVE CONCRETE FROM BEHIND REINFORCING STEEL.

UNOFFICIAL SET
NOT FOR BIDDING



INTERSTATE 40 OVER PINE RIDGE ROAD



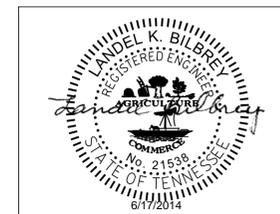
INTERSTATE 40 OVER CLINCH RIVER

DETAIL SHOWING FULL AND PARTIAL DEPTH DECK REPAIR

NOTE: CONCRETE FOR DECK REPAIRS SHALL BE HIGH EARLY STRENGTH CONCRETE F'c=3,000 PSI @ 18 HOUR STRENGTH. TRAFFIC SHALL NOT BE PERMITTED ON ANY REPAIR AREA UNTIL TEST SPECIMENS ATTAIN A COMPRESSIVE STRENGTH OF 3,000 PSI MINIMUM AND THE CONCRETE HAS BEEN IN PLACE A MINIMUM OF EIGHTEEN (18) HOURS.

NOTE: REMOVE CONCRETE IN ALL DELAMINATED AREAS TO A DEPTH OF 3/4" BELOW THE TOP BAR OF THE TOP MAT OF REINFORCING STEEL. ALL REINFORCING STEEL IN AREAS OF DECK REPAIR SHALL BE COMPLETELY CLEANED. AREAS OF CONCRETE REMOVAL SHALL BE DESIGNATED BY PERSONNEL FROM THE BRIDGE REPAIR OFFICE. INSPECTIONS TO DETERMINE AREAS OF DECK REPAIR SHALL BE SCHEDULED WITH THE BRIDGE REPAIR OFFICE AT LEAST THREE (3) DAYS IN ADVANCE. DECK REPAIR WILL BE PAID FOR UNDER ITEM NO. 604-10.50, BRIDGE DECK REPAIR (PARTIAL DEPTH OF SLAB) OR ITEM NO. 604-10.56, CONCRETE OVERLAYED BRIDGE DECK REPAIR (PARTIAL DEPTH OF SLAB) AND ITEM NO. 604-10.30, BRIDGE DECK REPAIR (FULL DEPTH OF SLAB) OR ITEM NO. 604-10.34, CONCRETE OVERLAYED BRIDGE DECK REPAIR (FULL DEPTH OF SLAB). DURING PARTIAL DEPTH REPAIRS, SHOULD DETERIORATED CONCRETE BE ENCOUNTERED WHICH APPEARS TO RUN FULL DEPTH IN THE SLAB, THE ENGINEER MAY DESIGNATE THESE AREAS TO BE REPAIRED UNDER ITEM NO. 604-10.30 OR ITEM NO. 604-10.34. POWER DRIVEN HAND TOOLS USED FOR THE REMOVAL OF UNSOUND CONCRETE IN MAKING PARTIAL AND FULL DEPTH REPAIR AREAS SUBJECT TO THE FOLLOWING RESTRICTIONS: PNEUMATIC HAMMERS FOR 1) PARTIAL DEPTH REPAIR AREAS, FULL DEPTH REPAIR AREAS, AND ALL DECK REPAIR AREAS OVER BEAMS WILL BE RESTRICTED TO 60 POUND CLASS. 2) CHIPPING HAMMERS OF THE 15 POUND CLASS SHALL BE USED TO REMOVE CONCRETE FROM BENEATH ANY REINFORCING STEEL.

NOTE: ITEM NOS. 604-10.30, 604-10.34, 604-10.50, AND 604-10.56 SHALL BE BID WITH THE CONTINGENCY THAT THIS ITEM MAY BE INCREASED, DECREASED OR ELIMINATED AS DIRECTED BY THE ENGINEER.

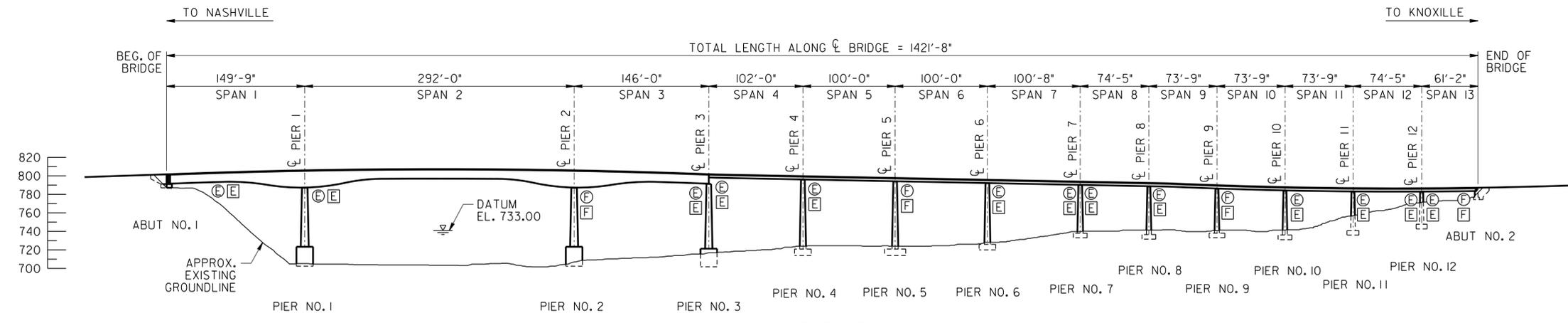


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS REPAIR DETAILS
 INTERSTATE 40 OVER
 PINE RIDGE ROAD &
 CLINCH RIVER/LAKWOOD DRIVE
 BRIDGE NO. 73-10040-9.96 (RT & LT)
 BRIDGE NO. 73-10040-11.15
 ROANE COUNTY
 2014

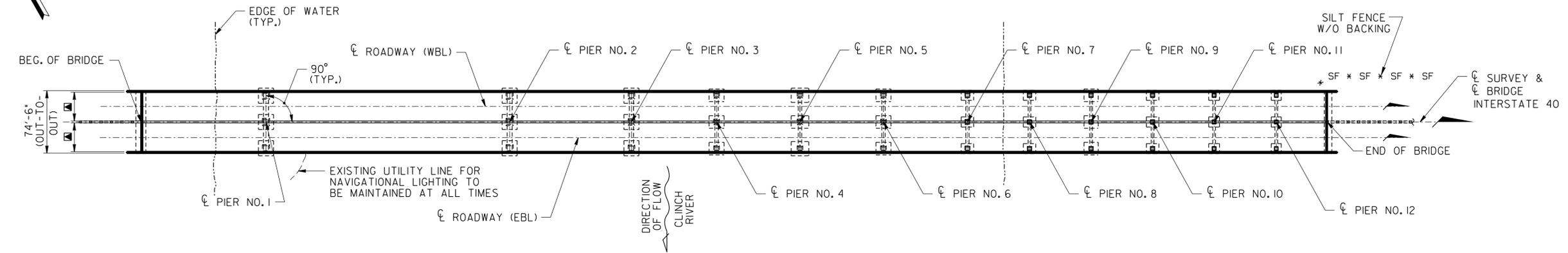
6/16/2014 F:\35\35034\3503409\Bridges\40 over Pine Ridge Road - 9.96 (RT & LT)\3503409\MDO01.dgn

PROJECT NO.	YEAR	SHEET NO.	
73100-4116-04	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



ELEVATION

F DENOTES: FIXED
 E DENOTES: EXPANSION
 (E) DENOTES: EXISTING SUPPORT CONDITIONS
 (E) DENOTES: PROPOSED SUPPORT CONDITIONS



PLAN

▲ DENOTES: 34'-4" ROADWAY WIDTH
 (EBL) DENOTES: EAST BOUND LANES
 (WBL) DENOTES: WEST BOUND LANES

GENERAL SCOPE OF WORK

1. PROVIDE REQUIRED TRAFFIC CONTROL TO MAINTAIN AT LEAST ONE 12'-9" LANE OF TRAFFIC IN EACH DIRECTION AND PROVIDE A WIDE-LOAD DETOUR DURING PHASE I, AND AT LEAST ONE 16'-0" LANE OF TRAFFIC IN EACH DIRECTION DURING PHASE II ON THE EXISTING BRIDGE.
2. REMOVE VEGETATION ON AND AROUND BRIDGE 10 FEET OUTSIDE BRIDGE LIMITS ON ALL SIDES.
3. BLAST CLEAN AND PAINT ALL STRUCTURAL STEEL.
4. HAND OR POWER-TOOL CLEAN AND PAINT EXISTING BEARINGS.
5. CLEAN BIRD DROPPINGS FROM THE BRIDGE.
6. REPAIR INSPECTION CATWALK. SEE NOTE ON SHEET BR-116-31.
7. REPLACE ANY MISSING RIVETS OR BOLTS WITH EQUIVALENT SIZED BOLTS AS NEEDED.
8. REMOVE ALL FENCING COMPONENTS AND LARGE REBAR ATTACHED TO GIRDERS AND BRIDGE COMPONENTS AT ABUTMENT NO. 1 AND GRIND OFF ANY WELDS. MAGNETIC TEST THE AREAS FOR CRACKS ONCE WELDS HAVE BEEN REMOVED. SEE DETAILS ON DWG. NO. BR-116-30.
9. PERFORM FULL AND PARTIAL DEPTH DECK REPAIRS UTILIZING METHACRYLATE AROUND THE EDGES OF THE PATCHES.
10. APPLY A METHACRYLATE SEALER TO ALL EXPOSED DECK CRACKS.
11. REMOVE AND REPLACE ALL EXPANSION JOINTS.
12. PLACE PARTIAL HEIGHT CHEEK WALLS ON ABUTMENT NO. 1 TO PROTECT THE BEARINGS.
13. PROVIDE SPALL REPAIRS WITH HIGH EARLY STRENGTH CONCRETE AND POLYMER MODIFIED CEMENTITIOUS MATERIAL ON SUBSTRUCTURES.
14. PROVIDE EPOXY INJECTION REPAIRS ON SUBSTRUCTURES.
15. PROVIDE TEXTURE COATING FOR TOP AND INSIDE FACE OF THE PARAPETS AND THE MEDIAN BARRIER WALL.
16. REMOVE EXISTING ASPHALT APPROACHES AND PROVIDE NEW ASPHALT TRANSITIONS AT BRIDGE ENDS.
17. REPLACE PARAPET DELINEATORS AS PER STANDARD DRAWING STD-1-1. COST TO BE INCLUDED IN OTHER ITEMS.
18. REPLACE EXISTING NAVIGATION LIGHTING WITH LED LIGHTS AND UPGRADE ELECTRICAL SYSTEM. REPLACE CONDUIT, WIRING, PULL BOXES, ETC.
19. REPLACE APPROACH GUARDRAILS AND END TERMINALS AS SHOWN IN THE PLANS.
20. REMOVE PARTIALLY ATTACHED UTILITY HANGER IN SPAN NO. 4, AT PIER NO. 3.

LIST OF DRAWINGS

DWG NO.	LAST REV. DATE	DRAWING
BR-116-26	-----	LAYOUT OF BRIDGE TO BE REPAIRED
BR-116-19	-----	ESTIMATED BRIDGE QUANTITIES
BR-116-27	-----	SUPERSTRUCTURE
BR-116-28	-----	SUPERSTRUCTURE REPAIR DETAILS
BR-116-29	-----	SUPERSTRUCTURE REPAIR DETAILS
BR-116-30	-----	SUPERSTRUCTURE REPAIR DETAILS
BR-116-31	-----	ABUTMENT REPAIR DETAILS
BR-116-32	-----	PIERS NO., 1, 2, 3, 4, 5 & 6 REPAIR DETAILS
BR-116-33	-----	PIERS NO., 7, 8 & 9 REPAIR DETAILS
BR-116-34	-----	PIERS NO., 10, 11 & 12 REPAIR DETAILS
BR-116-25	-----	MISCELLANEOUS REPAIR DETAILS
BR-116-35	-----	NAVIGATIONAL LIGHTING DETAILS
BR-116-36	-----	NAVIGATIONAL LIGHTING DETAILS

*** LIST OF REFERENCE DRAWINGS**

H-4-2 THRU H-4-48	-----	ORIGINAL BRIDGE PLANS
BR-28-62 THRU BR-28-81	-----	PREVIOUS BRIDGE REPAIR PLANS

LIST OF SPECIAL PROVISIONS

NO.	LAST REV. DATE	REGARDING
SP604CR	**	REPAIR OF BRIDGE DECK CRACKS

* DENOTES: THESE DRAWINGS ARE TO BE PRINTED WITH PLANS.
 ** DENOTES: CURRENT REVISION DATE, AS PER CONTRACT DOCUMENTS.

UNOFFICIAL SET
 NOT FOR BIDDING

2013 EST. ADT = 45,145
 POSTED SPEED LIMIT = 70 M.P.H.



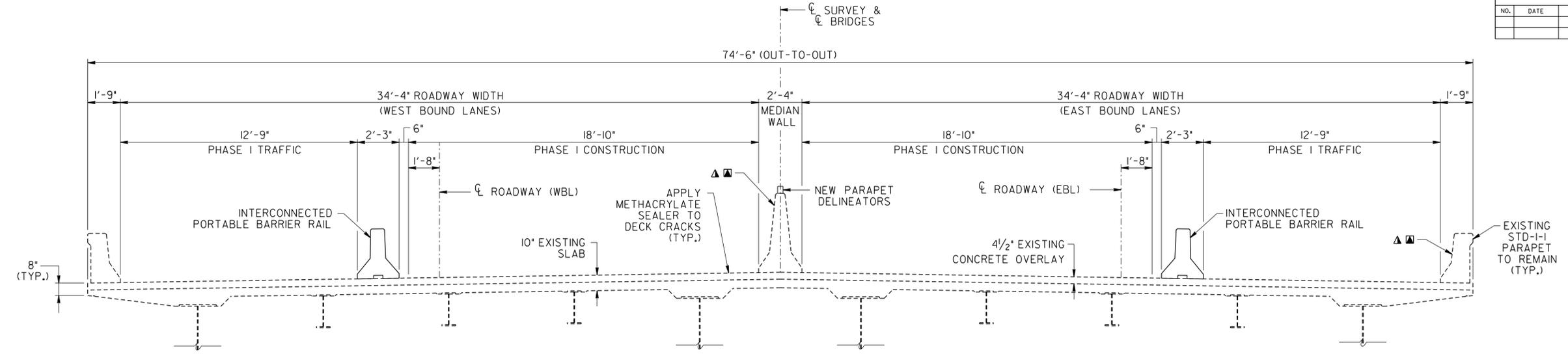
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 LAYOUT OF BRIDGE TO BE REPAIRED
 INTERSTATE 40 OVER
 CLINCH RIVER/LAKEWOOD DRIVE
 BRIDGE NO. 73-10040-11.15
 ROANE COUNTY
 2014

6/16/2014 F:\35\35034\3503409\BR\ldg\40 over Clinch River & Lakewood Drive - 11.5 RT & LT\3503409\AXL\A7001.dgn

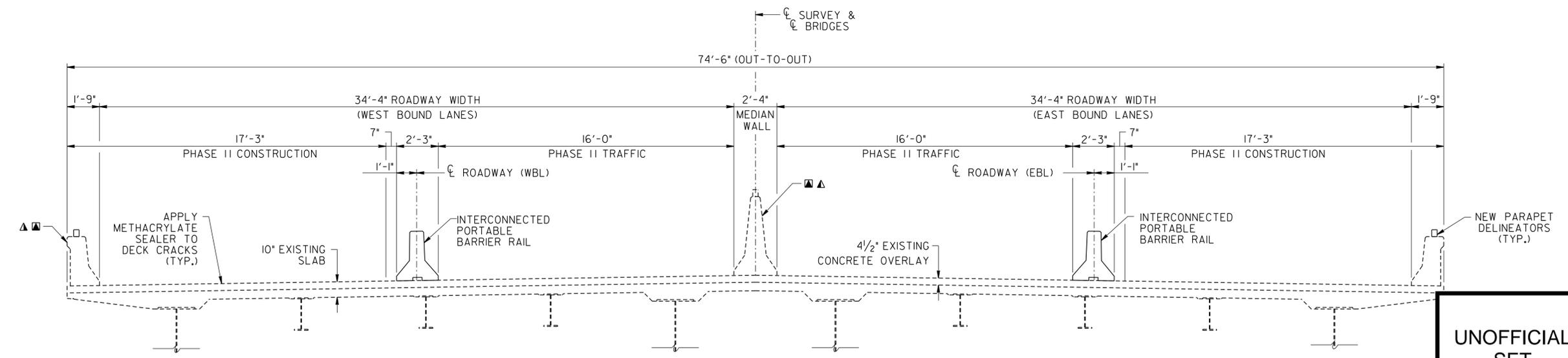
DESIGNED BY	M. JONES	DATE	08/12
DRAWN BY	M. JONES	DATE	08/12
SUPERVISED BY	L. BILBREY	DATE	08/12
CHECKED BY	L. BILBREY	DATE	08/12

TOTAL DISTURBED AREA = 350 S.F. (0.01 ACRES)

PROJECT NO.	YEAR	SHEET NO.	
73100-4116-04	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



TYPICAL SECTION - PHASE I CONSTRUCTION
 (LOOKING FORWARD ON SURVEY)
 (SPANS 1 THRU 3 SHOWN - OTHER SPANS SIMILAR)
 (EBL) DENOTES: EAST BOUND LANES
 (WBL) DENOTES: WEST BOUND LANES



TYPICAL SECTION - PHASE II CONSTRUCTION
 (LOOKING FORWARD ON SURVEY)
 (SPANS 1 THRU 3 SHOWN - OTHER SPANS SIMILAR)

UNOFFICIAL SET
 NOT FOR BIDDING

ESTIMATED QUANTITIES		
LOCATION OF REPAIR	ITEM NO. 604-10.05 AND/OR 604-10.54 APPROX. REPAIR AREAS (S.F.)	ITEM NO. 604-10.62 APPROX. REPAIR AREAS (L.F.)
PARAPETS & MEDIAN BARRIER	14	134

- ▲ DENOTES: APPROXIMATE AREA TO BE REPAIRED UNDER ITEM NO. 604-10.05 AND/OR 604-10.54. SEE REPAIR DETAILS ON DWG. NO. BR-116-25.
- ▲ DENOTES: CRACK TO BE EPOXY INJECTED. QUANTITIES ARE APPROXIMATE, AND SHALL BE BID WITH THE CONTINGENCY THAT THEY MAY BE INCREASED, DECREASED, OR ELIMINATED BY THE ENGINEER. SEE EPOXY INJECTION NOTES ON DWG. NO. BR-116-25.

NOTE: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING REPAIRS.



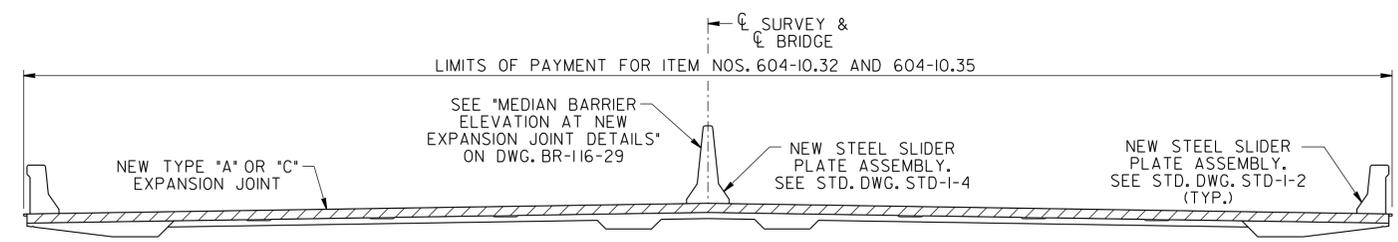
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
 INTERSTATE 40 OVER
 CLINCH RIVER/LAKEWOOD DRIVE
 BRIDGE NO. 73-10040-11.15
 ROANE COUNTY
 2014

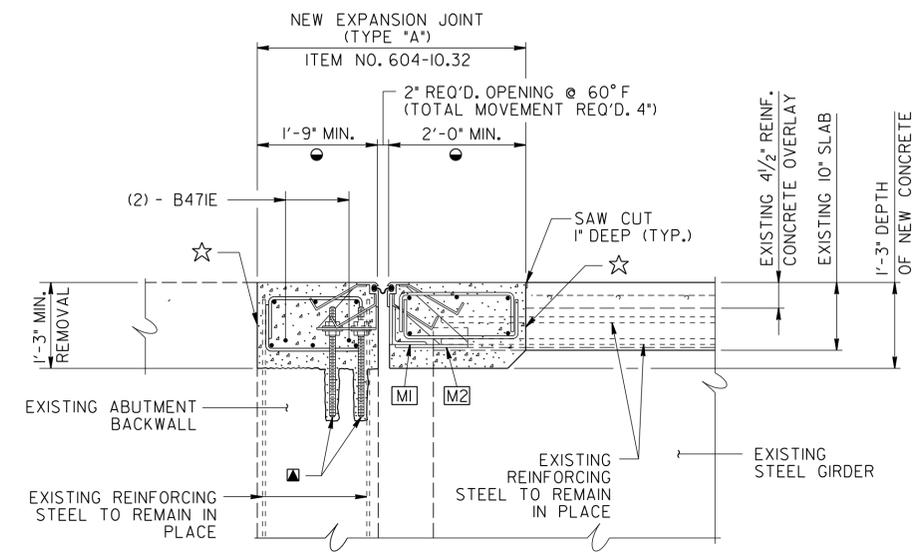
6/17/2014 F:\35\35034\3503409\Bridges\40 over Clinch River & Lakewood Drive - 11.15 (RT & LT)\3503409AXS\JP001.dgn

DESIGNED BY M. JONES DATE 08/12
 DRAWN BY M. JONES DATE 08/12
 SUPERVISED BY L. BILBREY DATE 08/12
 CHECKED BY L. BILBREY DATE 08/12

PROJECT NO.	YEAR	SHEET NO.	
73100-4116-04	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

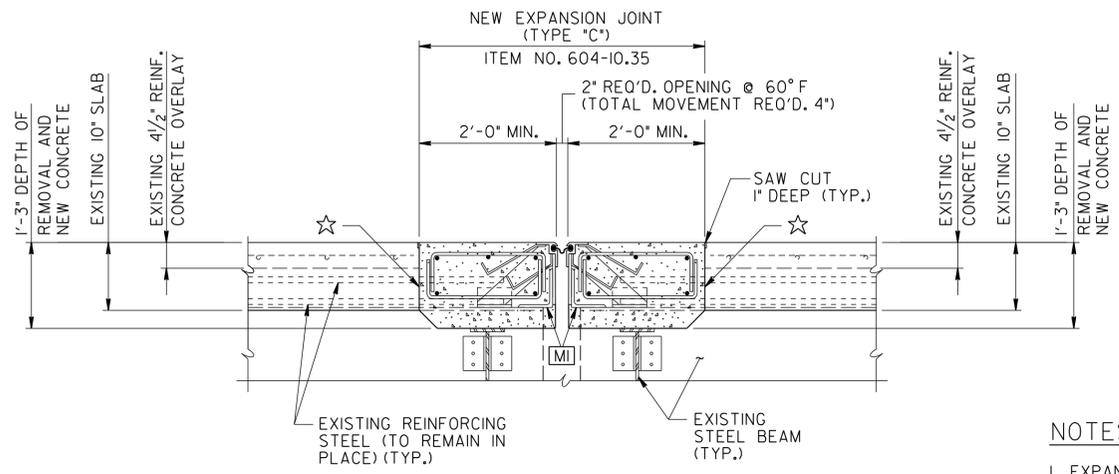


TYPICAL CROSS SECTION
(N.T.S.)



EXPANSION JOINT REPLACEMENT DETAIL - TYPE "A"

(ABUTMENT NO. 1)
(TOTAL NO. REQ'D. = 1)
(NOT TO SCALE)



EXPANSION JOINT REPLACEMENT DETAIL - TYPE "C"

(PIERS NO. 7 AND 12)
(NOT TO SCALE)

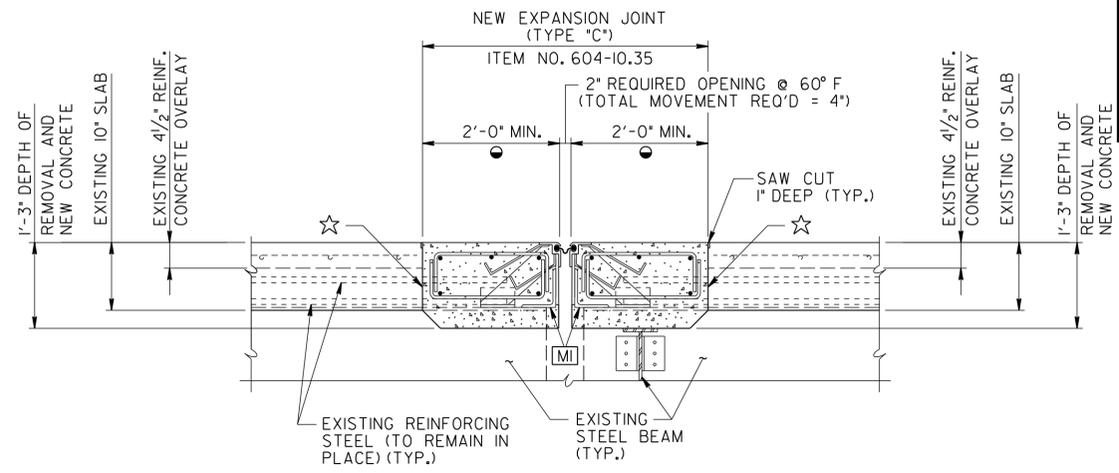
MODIFICATIONS TO STANDARD DRAWINGS

- [M1] USE L6x6x1/2 INSTEAD OF L6x4x1/2
- [M2] USE 1/2" PLATE TO EXTEND TOP FLANGE OF EXISTING BEAM TO SUPPORT L6x6x1/2

NOTES:

1. EXPANSION JOINT REPLACEMENT DETAILS SHOWN THIS SHEET ARE FOR GENERAL INFORMATION ONLY. FOR COMPLETE DETAILS AND NOTES, SEE STD. DWG. NOS. SBR-2-115, SBR-2-116, SBR-2-117 AND SBR-2-118.
2. EXPANSION JOINT REPLACEMENT SHALL BE CONSTRUCTED IN PHASES AS SHOWN IN THE PLANS. THE STEEL PORTIONS OF THE EXPANSION DEVICE SHALL BE FABRICATED IN SECTIONS IN ORDER TO MAINTAIN ONE (1) TRAFFIC LANE AT ALL TIMES. THE SECTIONS ARE TO BE CONNECTED WITH A FULL PENETRATION BUTT WELD. THE ELASTOMERIC SEAL SHALL BE ONE PIECE FOR FULL LENGTH OF EXPANSION JOINT. THE EXPANSION JOINT IS TO RUN THROUGH THE WIDTH OF THE PARAPET PLUS A 2" PROJECTION.
3. EXPANSION JOINT OPENING SHALL BE SET ACCORDING TO TEMPERATURE CHART SHOWN ON APPROVED EXPANSION JOINT SHOP DRAWINGS.
4. PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO ENSURE THE VERTICAL ALIGNMENT OF THE NEW STEEL EXTRUSION AND CONCRETE HEADER SURFACES CONFORM TO THE EXISTING ROADWAY PROFILE.
5. PROVISIONS SHALL BE MADE DURING SLAB REMOVAL TO PROTECT THE EXISTING LONGITUDINAL AND VERTICAL REINFORCING STEEL FROM DAMAGE. THE EXISTING REINFORCING STEEL SHALL BE COMPLETELY CLEANED, REALIGNED AND INCORPORATED INTO THE NEW CONSTRUCTION.
6. COST OF REMOVING CONCRETE FOR THE LIMITS SHOWN, RE-POURING WITH HIGH EARLY STRENGTH f'c = 3,500 P.S.I. @ 28 DAY STRENGTH CONCTETE, EPOXY COATED REINFORCING STEEL, SLIDER PLATE ASSEMBLIES AND EXPANSION JOINT ASSEMBLIES SHALL BE PAID FOR UNDER ITEM NO. 604-10.32 AND 604-10.35.
7. COST OF ALL INCIDENTALS SUCH AS WELDING, CLEANING, SAW CUTTING, DRILLING, COMPLETELY CLEANING THE EXISTING REINFORCING STEEL, EPOXY COATED REINFORCING STEEL, FORMING, ETC. AND ANY MISCELLANEOUS MATERIALS NECESSARY TO COMPLETE THE INSTALLATION OF THE NEW EXPANSION JOINTS, SHALL BE INCLUDED IN OTHER ITEMS BID ON.
8. ALL TRANSVERSE REINFORCING STEEL SHALL BE SPLICED WITH MECHANICAL THREADED COUPLERS. COST OF MECHANICAL COUPLERS SHALL BE INCLUDED UNDER ITEM NO. 604-10.32 AND 604-10.35. SEE DETAIL "A" ON DWG. NO. BR-116-29.
9. TRAFFIC SHALL NOT BE PERMITTED ON ANY PART OF THE REPAIR AREAS UNTIL TEST SPECIMENS ATTAIN A COMPRESSIVE STRENGTH OF 3,000 P.S.I. MINIMUM AND THE CONCRETE HAS BEEN IN PLACE A MINIMUM OF EIGHTEEN (18) HOURS.

UNOFFICIAL SET
NOT FOR BIDDING



EXPANSION JOINT REPLACEMENT DETAIL - TYPE "C"

(PIER NO. 3)
(NOT TO SCALE)



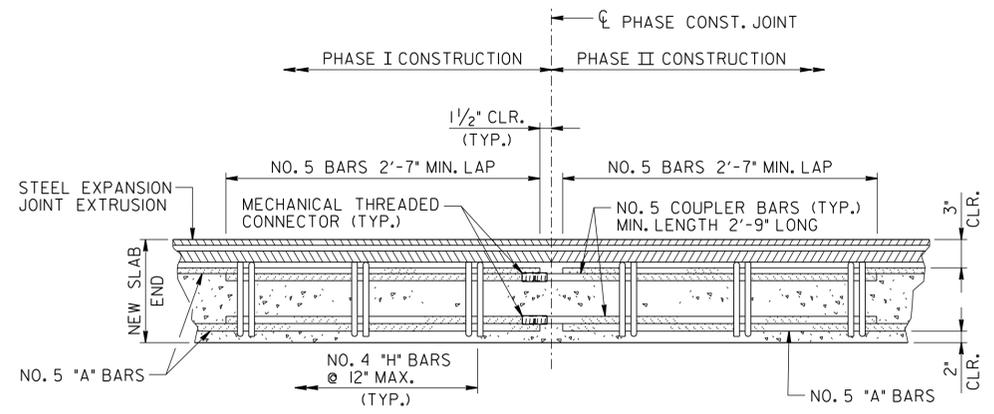
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE REPAIR DETAILS
INTERSTATE 40 OVER
CLINCH RIVER/LAKEWOOD DRIVE
BRIDGE NO. 73-10040-11.15
ROANE COUNTY
2014

6/16/2014 F:\35\35034\3503409\BR\ldge\1-40 over Clinch River & Lakewood Drive - 11.15 IRT & LT\3503409\AXSD001.dgn

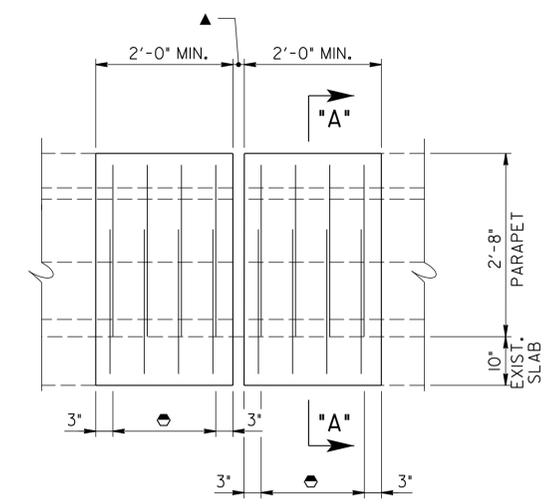
DESIGNED BY	M. JONES	DATE	08/12
DRAWN BY	M. JONES	DATE	08/12
SUPERVISED BY	L. BILBREY	DATE	08/12
CHECKED BY	L. BILBREY	DATE	08/12

PROJECT NO.	YEAR	SHEET NO.	
73100-4116-04	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



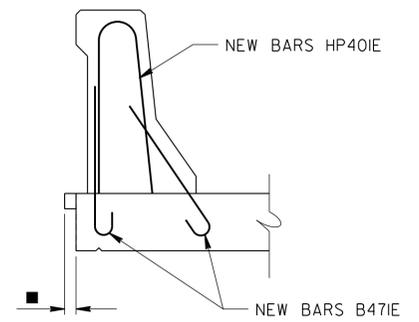
DETAIL "A"

NOTE: THE COST OF MECHANICAL THREADED CONNECTORS WITH NO. 5 COUPLER BARS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM NO. 604-10.32, EXPANSION JOINT REPAIRS (TYPE "A"), L.F. AND 604-10.35, EXPANSION JOINT REPAIRS (TYPE "C"), L.F.



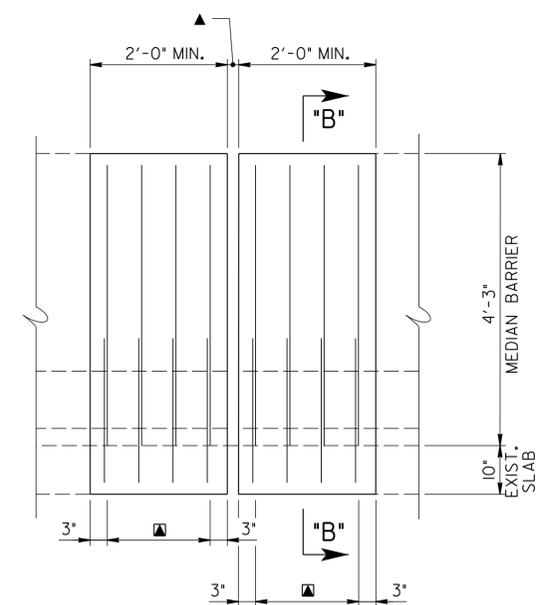
PARAPET ELEVATION AT NEW EXPANSION JOINTS

(LONGITUDINAL STEEL OMITTED FOR CLARITY)
 ▲ DENOTES: BARS HP40IE AND BARS B47IE @ 6" MAX. SPACING.
 ▲ DENOTES: SEE APPROVED EXPANSION JOINT SHOP DRAWINGS FOR OPENING DIMENSION.
 NOTE: PROVISIONS SHALL BE MADE DURING PARAPET REMOVAL TO PROTECT THE EXISTING LONGITUDINAL REINFORCING STEEL FROM DAMAGE. THE EXISTING LONGITUDINAL REINFORCEMENT SHALL BE INCORPORATED INTO THE NEW CONSTRUCTION.



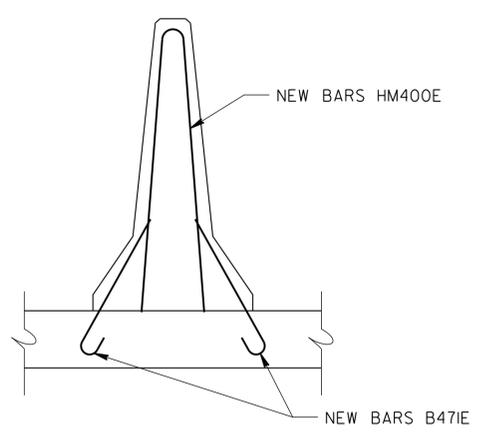
SECTION "A-A"

■ DENOTES: MEMBRANE RETAINER WITHOUT LEGS TO EXTEND 2" BEYOND DECK SLAB. THIS IS IN LIEU OF EXTENDING EXPANSION DEVICE UP FACE OF PARAPET AS SHOWN ON DWG. NO. SBR-2-116.



MEDIAN BARRIER ELEVATION AT NEW EXPANSION JOINTS

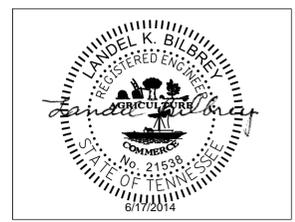
(LONGITUDINAL STEEL OMITTED FOR CLARITY)
 ▲ DENOTES: BARS HM400E AND BARS B47IE @ 6" MAX. SPACING.
 ▲ DENOTES: SEE APPROVED EXPANSION JOINT SHOP DRAWINGS FOR OPENING DIMENSION.
 NOTE: PROVISIONS SHALL BE MADE DURING MEDIAN BARRIER REMOVAL TO PROTECT THE EXISTING LONGITUDINAL REINFORCING STEEL FROM DAMAGE. THE EXISTING LONGITUDINAL REINFORCEMENT SHALL BE INCORPORATED INTO THE NEW CONSTRUCTION.



SECTION "B-B"

NOTE: COST OF ALL INCIDENTALS SUCH AS WELDING, CLEANING, SAW CUTTING, DRILLING, COMPLETELY CLEANING THE EXISTING REINFORCING STEEL, EPOXY COATED REINFORCING STEEL, FORMING, ETC. AND ANY MISCELLANEOUS MATERIALS NECESSARY TO COMPLETE THE INSTALLATION OF THE NEW EXPANSION JOINTS, SHALL BE INCLUDED IN OTHER ITEMS BID ON.

UNOFFICIAL SET
 NOT FOR BIDDING

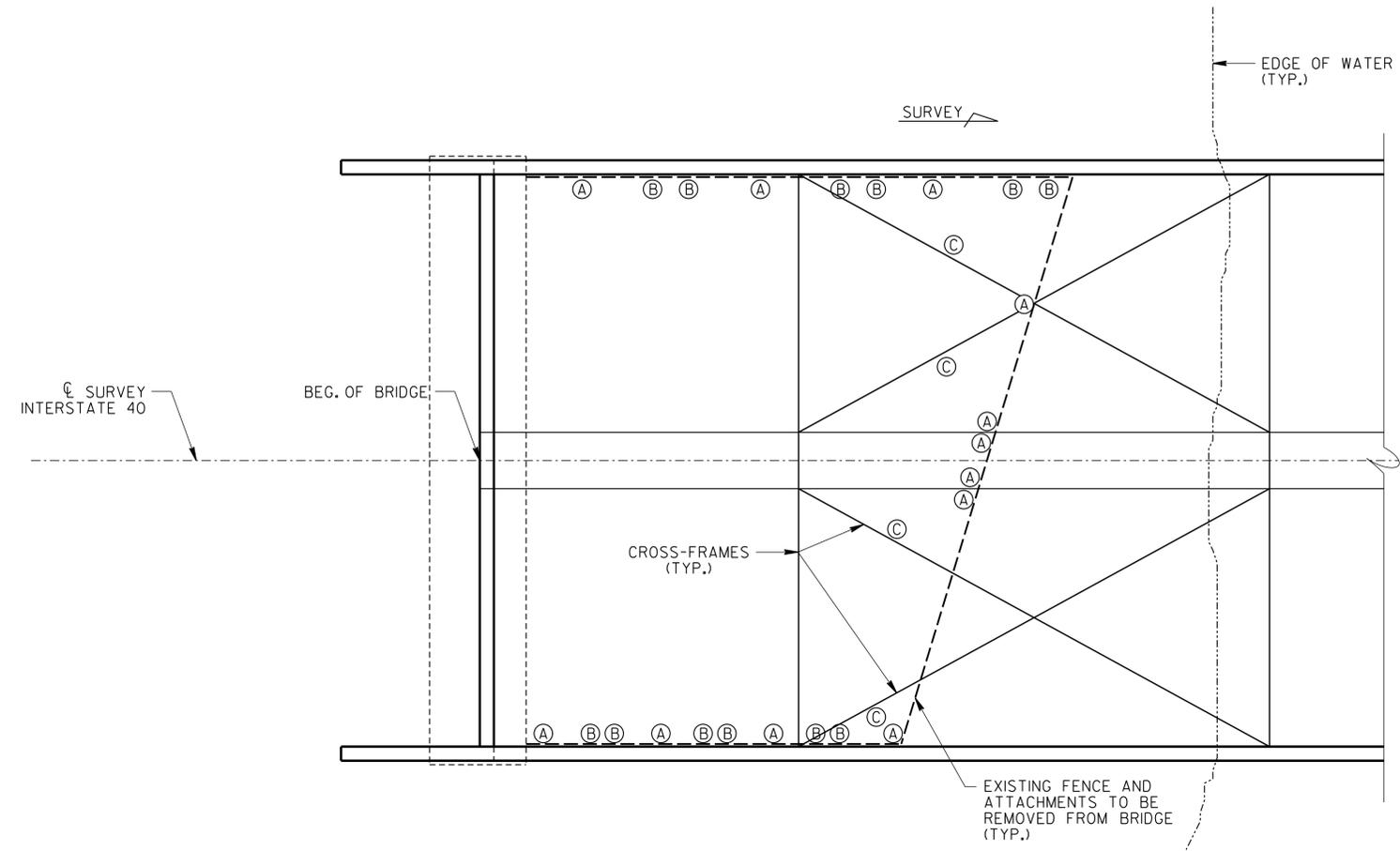


STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 SUPERSTRUCTURE REPAIR DETAILS
 INTERSTATE 40 OVER
 CLINCH RIVER/LAKEWOOD DRIVE
 BRIDGE NO. 73-10040-11.15
 ROANE COUNTY
 2014

6/16/2014 F:\35\35034\3503409\Bridg\idg\VI-40 over Clinch River & Lakewood Drive - 11.15 IRT & LT\3503409AXSD002.dgn

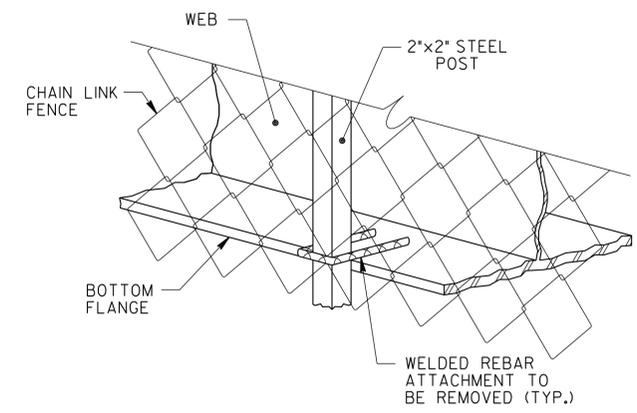
DESIGNED BY	M. JONES	DATE	08/12
DRAWN BY	M. JONES	DATE	08/12
SUPERVISED BY	L. BILBREY	DATE	08/12
CHECKED BY	L. BILBREY	DATE	08/12

PROJECT NO.	YEAR	SHEET NO.	
73100-4116-04	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

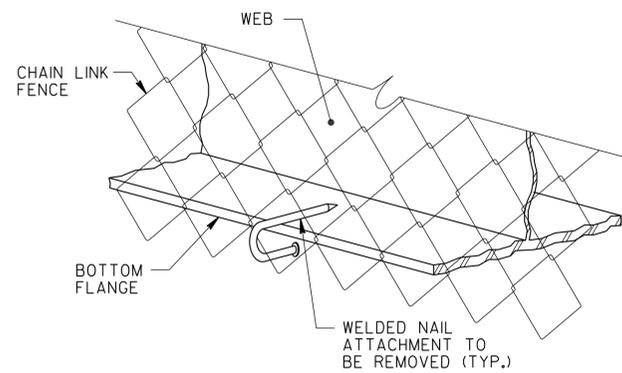


PLAN OF FENCE ATTACHMENT TO BRIDGE
(N.T.S.)

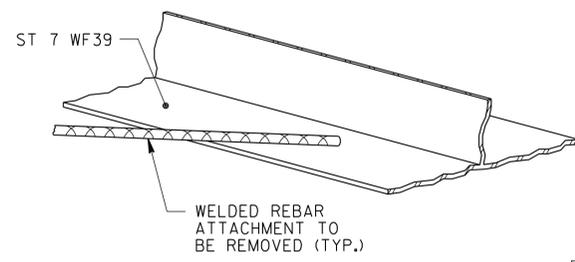
- (A) DENOTES: SEE DETAIL "A"
- (B) DENOTES: SEE DETAIL "B"
- (C) DENOTES: SEE DETAIL "C"



DETAIL "A"

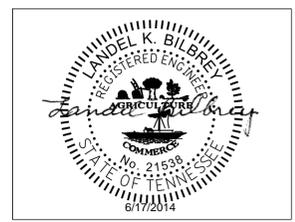


DETAIL "B"



DETAIL "C"

UNOFFICIAL SET
NOT FOR BIDDING

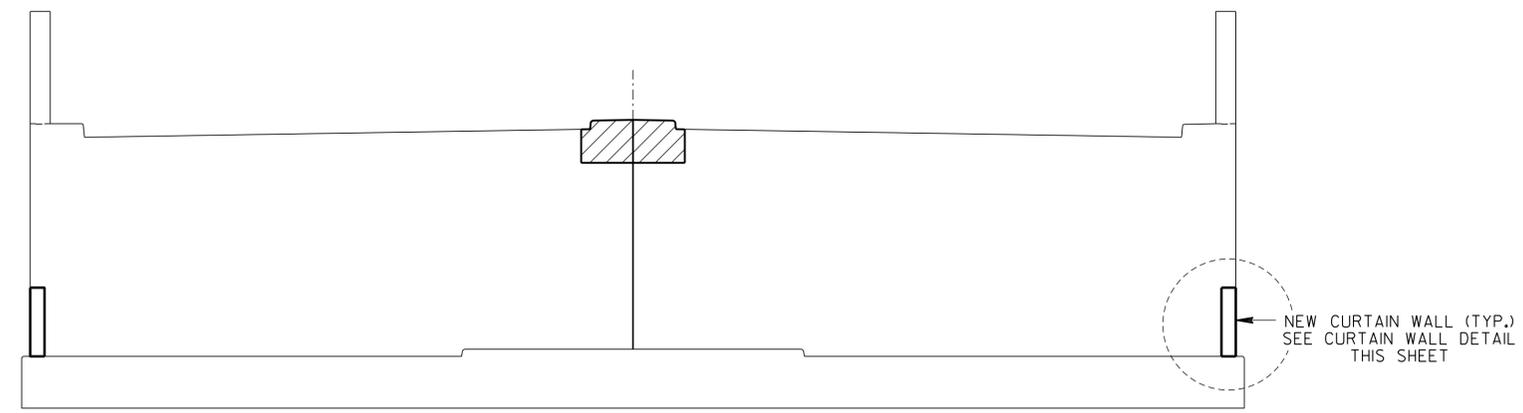


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE REPAIR DETAILS
INTERSTATE 40 OVER
CLINCH RIVER/LAKEWOOD DRIVE
BRIDGE NO. 73-10040-11.15
ROANE COUNTY
2014

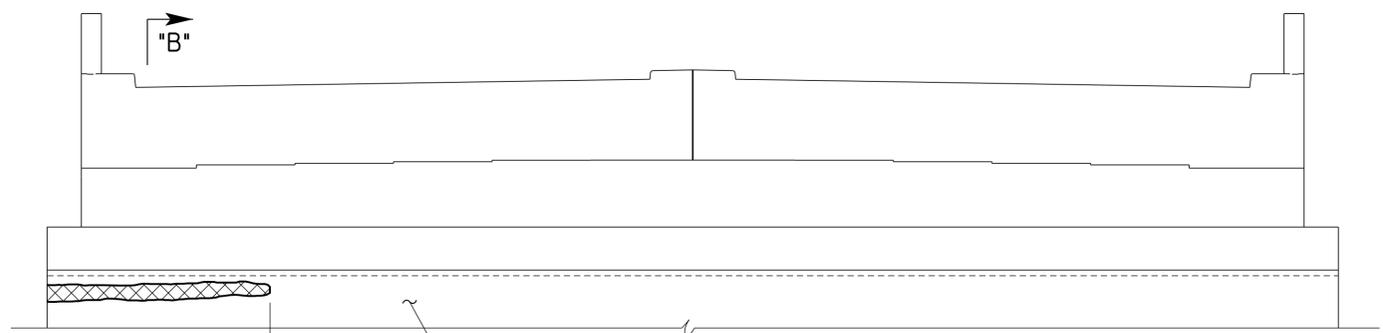
6/16/2014 F:\35\35034\3503409\Bridges\40 over Clinch River & Lakewood Drive - 11.15 RT & LT\3503409AXSD003.dgn

DESIGNED BY M. JONES DATE 08/12
 DRAWN BY M. JONES DATE 08/12
 SUPERVISED BY L. BILBREY DATE 08/12
 CHECKED BY L. BILBREY DATE 08/12

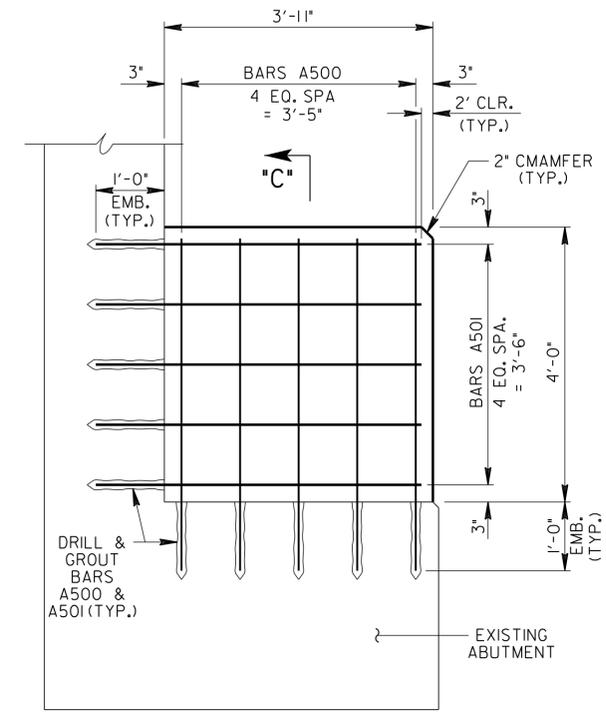
PROJECT NO.	YEAR	SHEET NO.	
73100-4116-04	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



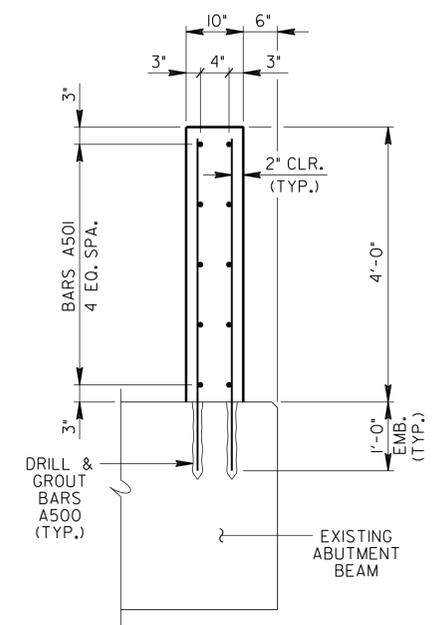
ELEVATION - ABUTMENT NO. 1
(LOOKING BACK ON SURVEY)



ELEVATION - ABUTMENT NO. 2
(LOOKING FORWARD ON SURVEY)



CURTAIN WALL DETAIL
(TYP.) (ABUT. NO. 1 ONLY)



SECTION "C"- "C"

BILL OF STEEL PER CURTAIN WALL				
DESIGNATION	LOCATION	SIZE	QTY.	LENGTH
A500	CURTAIN WALL	5	10	4'-10"
A501	CURTAIN WALL	5	10	4'-9"

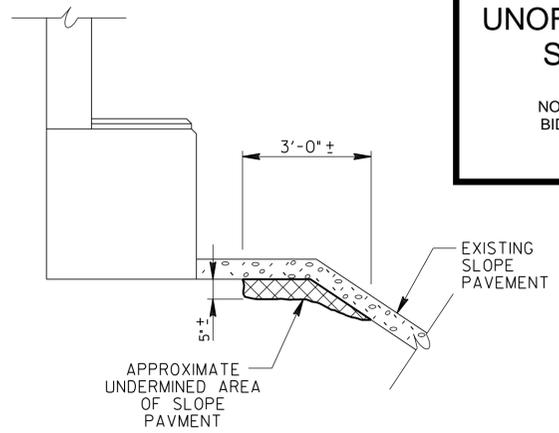
NOTE: REPAIR BROKEN SECTIONS OF INSPECTION WALK HAND RAIL CABLE WITH MINIMUM LENGTH. UTILIZE SAME ATTACHMENT METHOD AS SHOWN IN DETAIL SECTION G-G, SHEET H-4-24 IN ORIGINAL PLANS. (REPLACE IN KIND, TURNBUCKLES, CLAMPS, EYE AND THIMBLE, WASHERS, NUTS AND CABLE). ALL ATTACHMENT HARDWARE AND CABLE (APPROX. 50 FEET) TO BE GALVANIZED. COST TO BE INCLUDED IN OTHER ITEMS BID ON.

ESTIMATED QUANTITIES				
LOCATION OF REPAIR	ITEM NO. 604-10.05 AND/OR 604-10.54 APPROX. REPAIR AREAS (S.F.)	ITEM NO. 204-08.01 BACKFILL MATERIAL (FLOWABLE FILL) (C.Y.)	ITEM NO. 604-03.01 CLASS "A" CONCRETE (BRIDGES) (C.Y.)	ITEM NO. 604-10.18 REINFORCING STEEL (REPAIRS) (LB.)
ABUT. NO. 1	15	-	1	200
ABUT. NO. 2	-	1	-	-

- ▨ DENOTES: APPROXIMATE AREA TO BE REPAIRED UNDER ITEM NO. 604-10.05 AND/OR 604-10.54. SEE REPAIR DETAILS ON DWG. NO. BR-116-25.
- ▣ DENOTES: APPROXIMATE AREA TO BE REPAIRED UNDER ITEM NO. 204-08.01 BACKFILL MATERIAL (FLOWABLE FILL), C.Y.

NOTE: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING REPAIRS.

NOTE: COST OF ALL LABOR AND MATERIALS NECESSARY FOR THE INSTALLATION OF CURTAIN WALLS IS TO BE INCLUDED IN ITEM NOS. 604-03.01 AND 604-10.18.



SECTION "B"- "B"

UNOFFICIAL SET
NOT FOR BIDDING

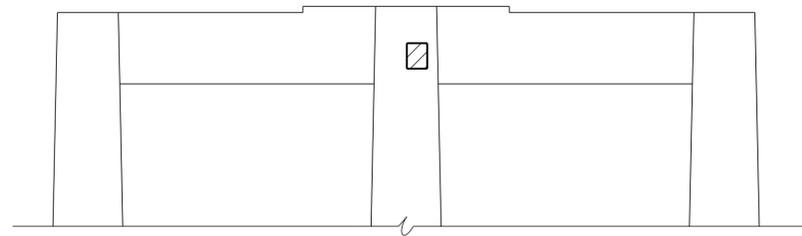


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ABUTMENT REPAIR DETAILS
INTERSTATE 40 OVER
CLINCH RIVER/LAKEWOOD DRIVE
BRIDGE NO. 73-10040-11.15
ROANE COUNTY
2014

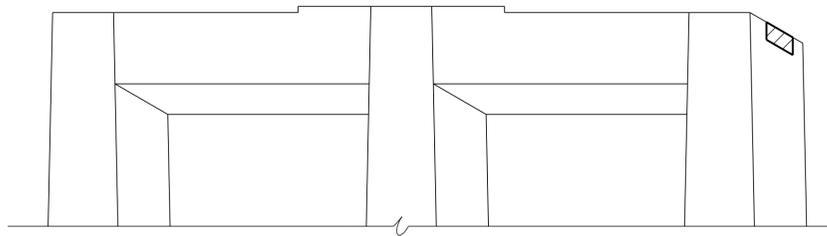
6/16/2014 F:\35\35034\3503409\Br\ldge\1-40 over Clinch River & Lakewood Drive - 11.15 RT & LT\3503409\ABT001.dgn

DESIGNED BY M. JONES DATE 08/12
DRAWN BY M. JONES DATE 08/12
SUPERVISED BY L. BILBREY DATE 08/12
CHECKED BY L. BILBREY DATE 08/12

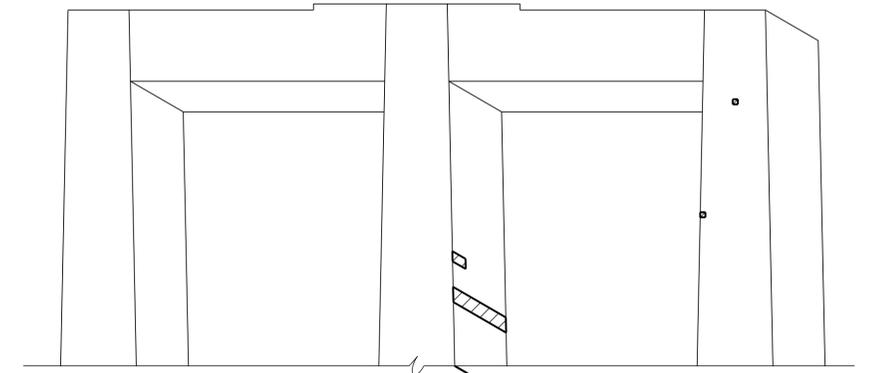
PROJECT NO.	YEAR	SHEET NO.	
73100-4116-04	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



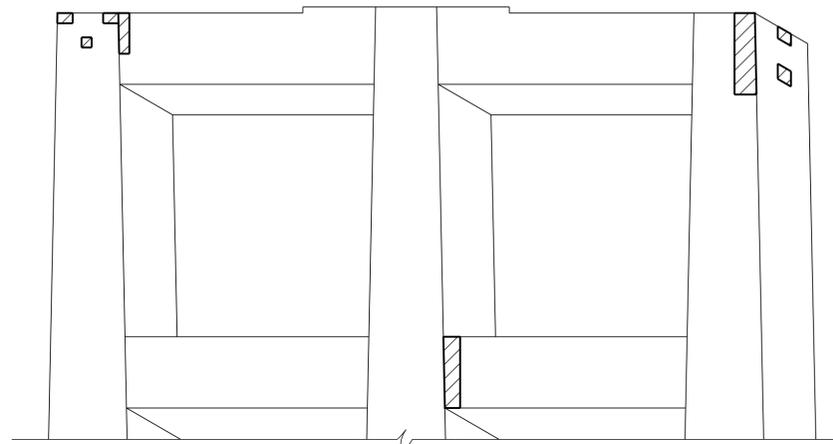
PART ELEVATION - PIER NO. 1
(LOOKING BACK ON SURVEY)



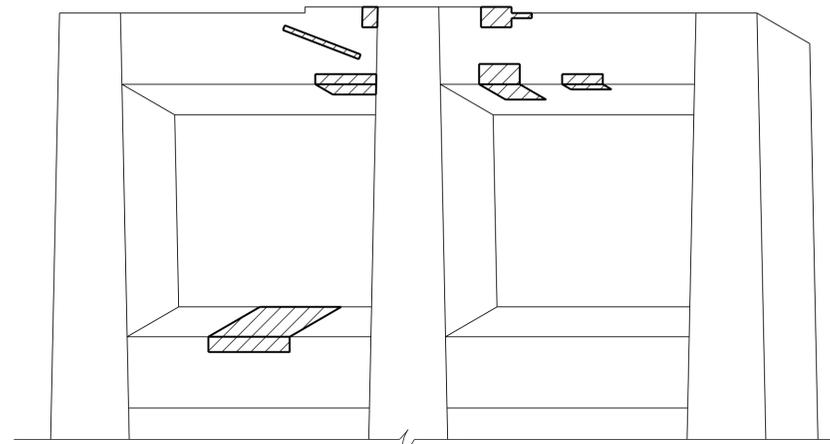
PART ELEVATION - PIER NO. 3
(LOOKING FORWARD ON SURVEY)



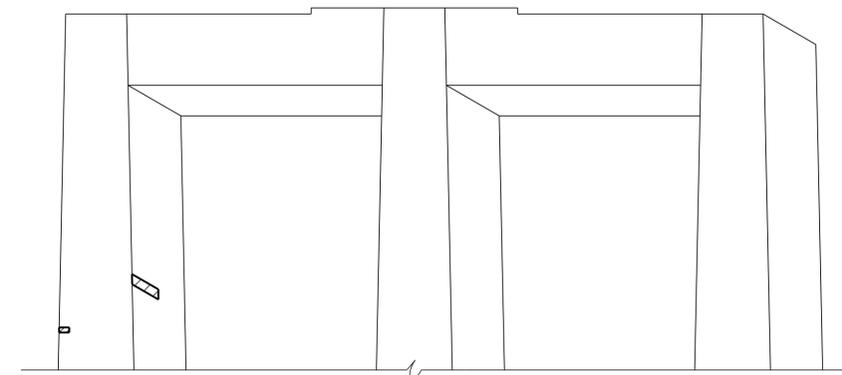
PART ELEVATION - PIER NO. 6
(LOOKING BACK ON SURVEY)



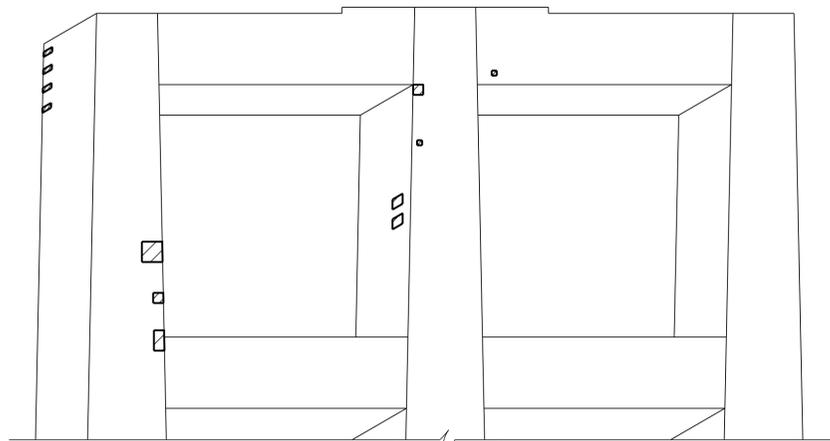
PART ELEVATION - PIER NO. 2
(LOOKING FORWARD ON SURVEY)



PART ELEVATION - PIER NO. 3
(LOOKING BACK ON SURVEY)



PART ELEVATION - PIER NO. 4
(LOOKING BACK ON SURVEY)



PART ELEVATION - PIER NO. 5
(LOOKING BACK ON SURVEY)

**UNOFFICIAL
SET**

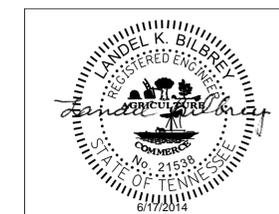
NOT FOR
BIDDING

ESTIMATED QUANTITIES

LOCATION OF REPAIR	ITEM NO. 604-10.05 AND/OR 604-10.54 APPROX. REPAIR AREAS (S.F.)
PIER NO. 1	5
PIER NO. 2	38
PIER NO. 3	120
PIER NO. 4	4
PIER NO. 5	12
PIER NO. 6	14

▨ DENOTES: APPROXIMATE AREA TO BE REPAIRED UNDER ITEM NO. 604-10.05 AND/OR 604-10.54. SEE REPAIR DETAILS ON DWG. NO. BR-116-25.

NOTE: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING REPAIRS.



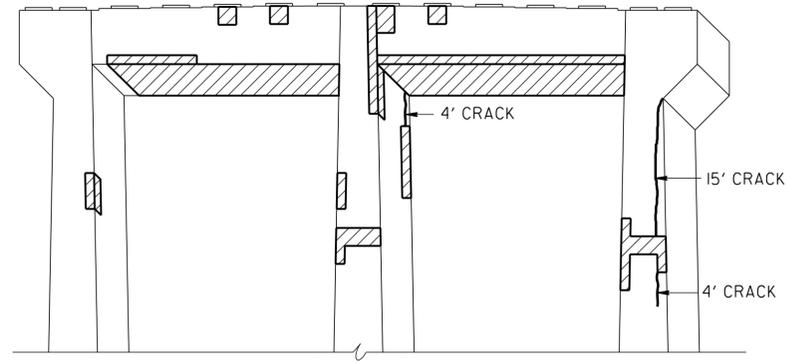
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PIERS NO. 1, 2, 3, 4, 5 & 6 REPAIR DETAILS
INTERSTATE 40 OVER
CLINCH RIVER/LAKEWOOD DRIVE
BRIDGE NO. 73-10040-11.15
ROANE COUNTY
2014

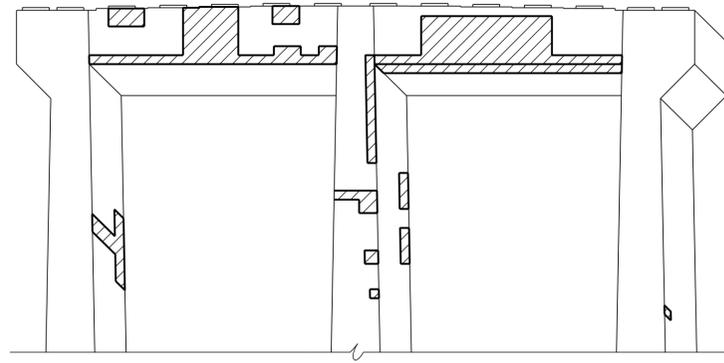
6/16/2014 F:\35\35034\3503409\BR\ldge\1-40 over Clinch River & Lakewood Drive - 11.15 RT & LT\3503409AXPIER01.dgn

DESIGNED BY M. JONES DATE 08/12
DRAWN BY M. JONES DATE 08/12
SUPERVISED BY L. BILBREY DATE 08/12
CHECKED BY L. BILBREY DATE 08/12

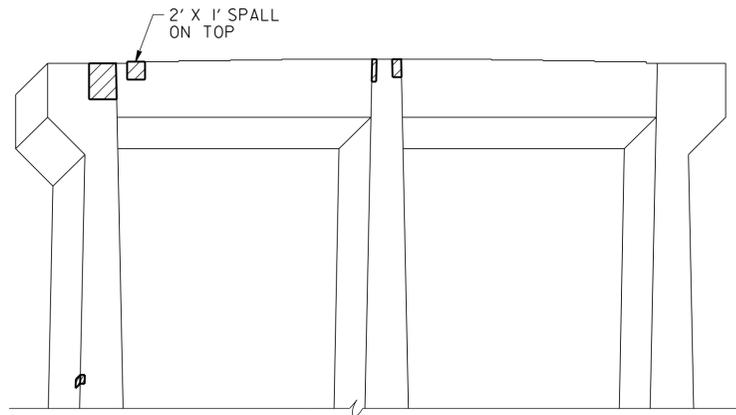
PROJECT NO.	YEAR	SHEET NO.	
73100-4116-04	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



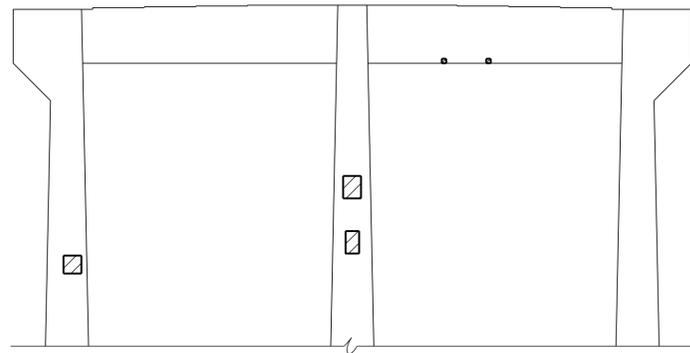
PART ELEVATION - PIER NO. 7
(LOOKING FORWARD ON SURVEY)



PART ELEVATION - PIER NO. 7
(LOOKING BACK ON SURVEY)



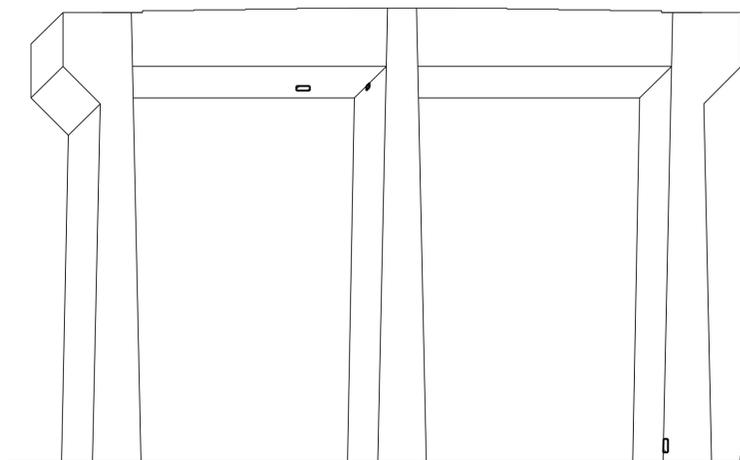
PART ELEVATION - PIER NO. 8
(LOOKING FORWARD ON SURVEY)



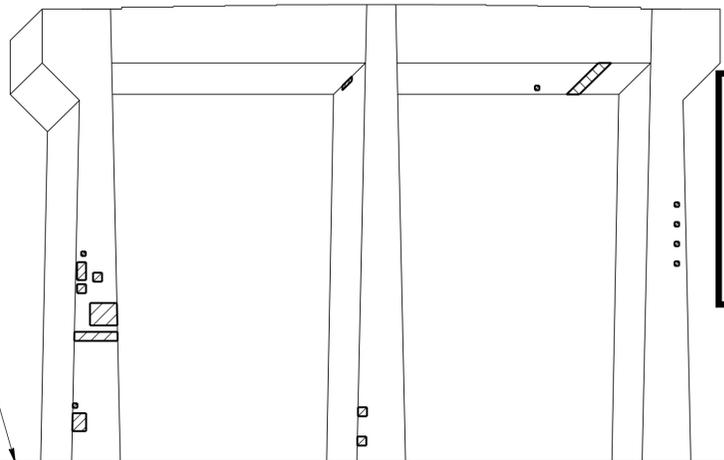
PART ELEVATION - PIER NO. 8
(LOOKING BACK ON SURVEY)

ESTIMATED QUANTITIES

LOCATION OF REPAIR	ITEM NO. 604-10.05 AND/OR 604-10.54 APPROX. REPAIR AREAS (S.F.)	ITEM NO. 604-10.62 APPROX. REPAIR AREAS (L.F.)
PIER NO. 7	468	23
PIER NO. 8	36	-
PIER NO. 9	37	-



ELEVATION - PIER NO. 9
(LOOKING FORWARD ON SURVEY)



ELEVATION - PIER NO. 9
(LOOKING BACK ON SURVEY)

UNOFFICIAL SET

NOT FOR BIDDING

- DENOTES: APPROXIMATE AREA TO BE REPAIRED UNDER ITEM NO. 604-10.05 AND/OR 604-10.54. SEE REPAIR DETAILS ON DWG. NO. BR-116-25.
- DENOTES: CRACK TO BE EPOXY INJECTED. QUANTITIES AND LOCATIONS GIVEN ARE APPROXIMATE, AND SHALL BE BID WITH THE CONTINGENCY THAT THEY MAY BE INCREASED, DECREASED, OR ELIMINATED BY THE ENGINEER. SEE EPOXY INJECTION NOTES ON DWG. NO. BR-116-25.
- NOTE: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING REPAIRS.



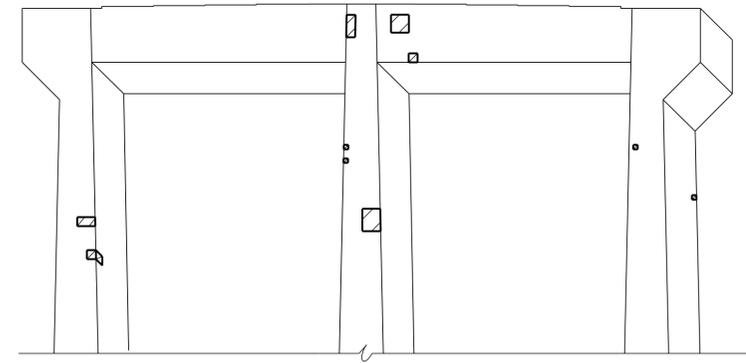
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PIERS NO. 7, 8 & 9 REPAIR DETAILS
INTERSTATE 40 OVER
CLINCH RIVER/LAKEWOOD DRIVE
BRIDGE NO. 73-10040-11.15
ROANE COUNTY
2014

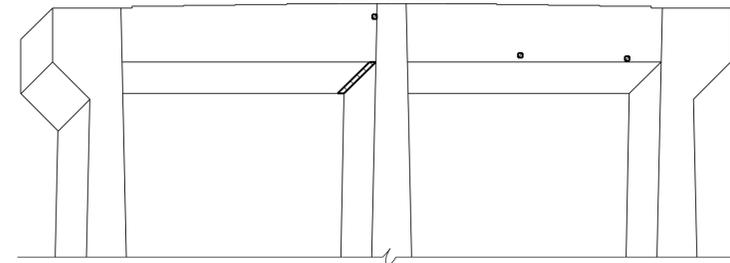
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DESIGNED BY M. JONES DATE 08/12
DRAWN BY M. JONES DATE 08/12
SUPERVISED BY L. BILBREY DATE 08/12
CHECKED BY L. BILBREY DATE 08/12

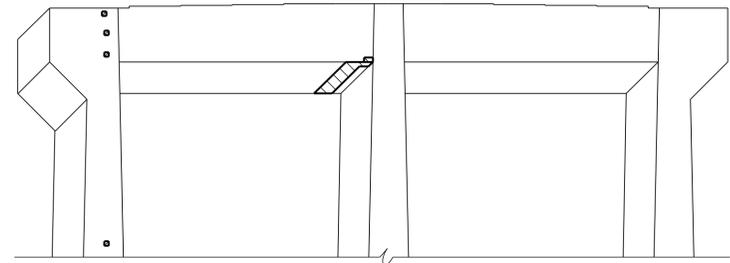
PROJECT NO.	YEAR	SHEET NO.	
73100-4116-04	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



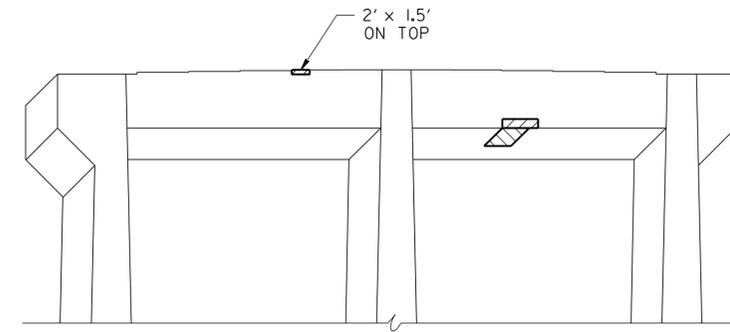
PART ELEVATION - PIER NO. 10
(LOOKING FORWARD ON SURVEY)



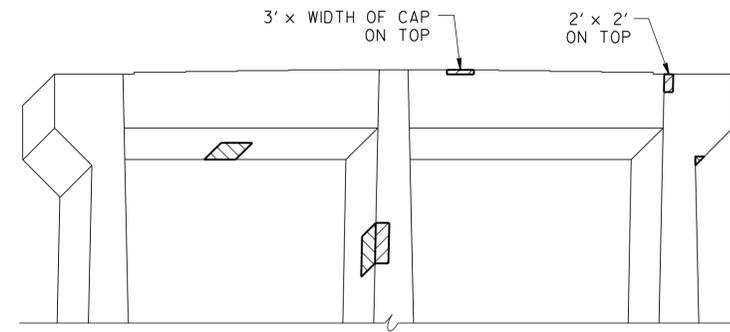
PART ELEVATION - PIER NO. 11
(LOOKING FORWARD ON SURVEY)



PART ELEVATION - PIER NO. 11
(LOOKING BACK ON SURVEY)



PART ELEVATION - PIER NO. 12
(LOOKING FORWARD ON SURVEY)



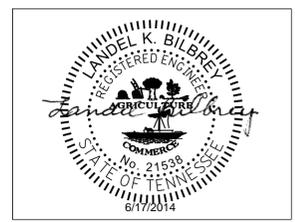
PART ELEVATION - PIER NO. 12
(LOOKING BACK ON SURVEY)

UNOFFICIAL SET
NOT FOR BIDDING

ESTIMATED QUANTITIES

LOCATION OF REPAIR	ITEM NO. 604-10.05 AND/OR 604-10.54 APPROX. REPAIR AREAS (S.F.)
PIER NO. 10	19
PIER NO. 11	13
PIER NO. 12	47

▨ DENOTES: APPROXIMATE AREA TO BE REPAIRED UNDER ITEM NO. 604-10.05 AND/OR 604-10.54. SEE REPAIR DETAILS ON DWG. NO. BR-116-25.
NOTE: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING REPAIRS.

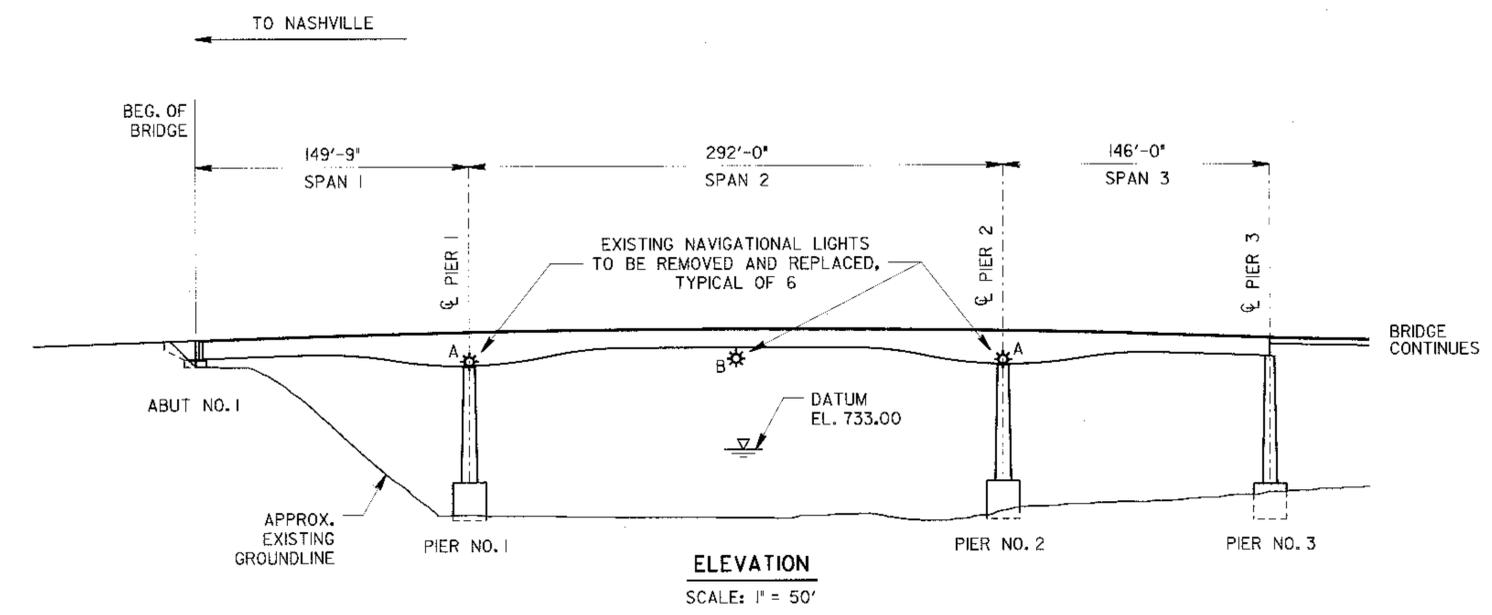


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PIERS NO. 10, 11 & 12 REPAIR DETAILS
INTERSTATE 40 OVER
CLINCH RIVER/LAKEWOOD DRIVE
BRIDGE NO. 73-10040-11.15
ROANE COUNTY
2014

6/16/2014 F:\35\35034\3503409\Br\ldge\1-40 over Clinch River & Lakewood Drive - 11.15 RT & LT\3503409AXPIER003.dgn

DESIGNED BY M. JONES DATE 08/12
DRAWN BY M. JONES DATE 08/12
SUPERVISED BY L. BILBREY DATE 08/12
CHECKED BY L. BILBREY DATE 08/12

PROJECT NO.	YEAR	SHEET NO.	
73100-4116-04	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



ELECTRICAL NOTES

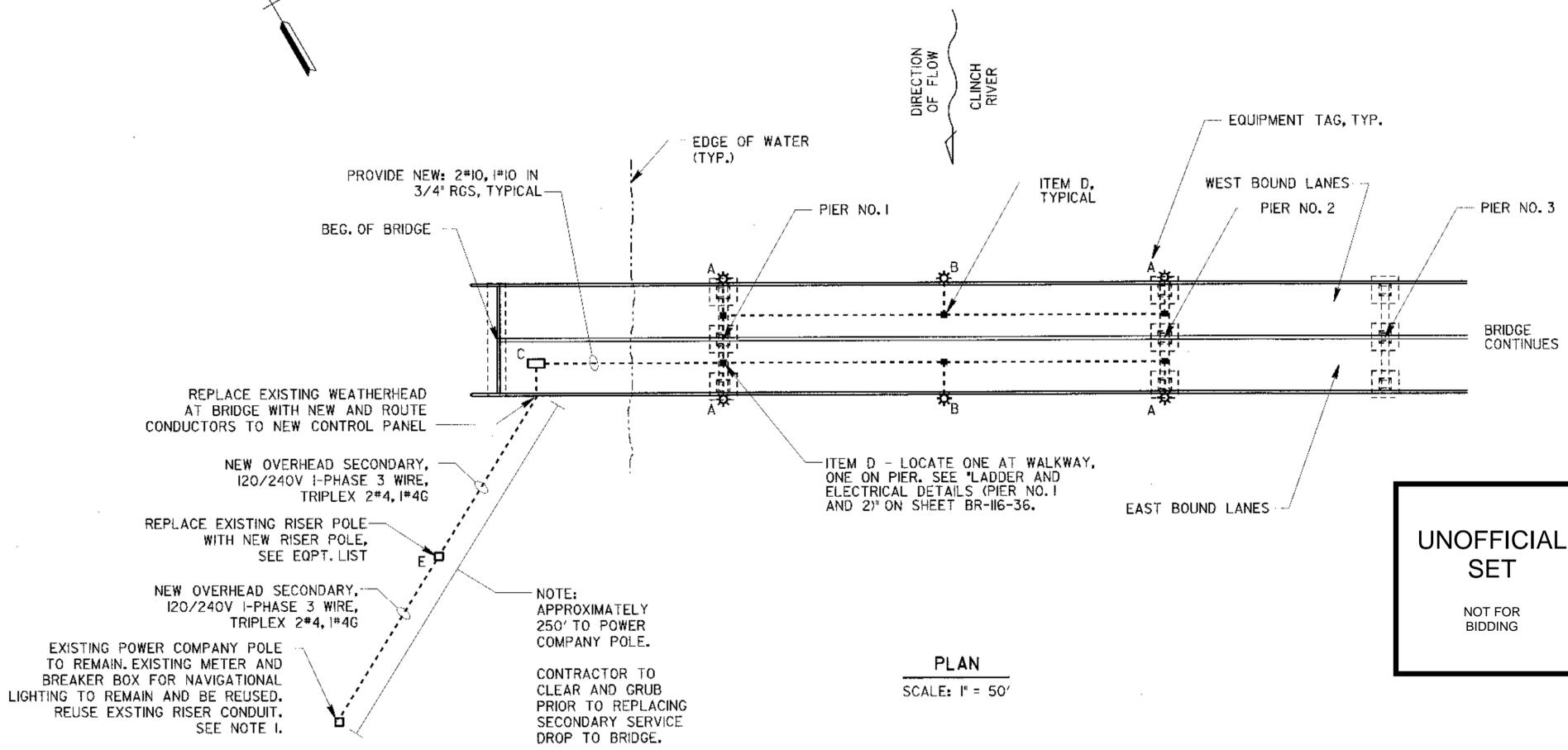
1. LOCAL ELECTRIC COMPANY IS ROCKWOOD ELECTRIC UTILITY. CONTACT SCOTT ALBERTSON, 865-717-5400 FOR COORDINATION. UTILITY SERVICE POLE CAN BE ACCESSED BY TAKING US-70 TO PARK PLACE APARTMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES FROM THE ELECTRIC UTILITY FOR DISCONNECTING AND RECONNECTING SERVICE IF REQUIRED.
2. PROPOSED CONDUIT, JUNCTION BOXES AND NAVIGATIONAL LIGHTS SHOWN IN APPROXIMATELY THE SAME LOCATIONS AS EXISTING EQUIPMENT. REMOVE EXISTING CONDUITS, CONDUCTORS, JUNCTION BOXES AND REPLACE WITH NEW AS SHOWN ON THE PLANS.
3. PROVIDE EXPANSION FITTINGS WHERE CONDUITS CROSS EXPANSION JOINTS.
4. CONTRACTOR SHALL PROVIDE TEMPORARY, SOLAR POWERED NAVIGATIONAL LIGHTS AS REQUIRED DURING CONSTRUCTION. THE BRIDGE SHALL NOT BE WITHOUT NAVIGATIONAL LIGHTS DURING THIS PROJECT; SEALITE SL-BR, CARMANAH M650, OR ENGINEER APPROVED EQUAL. SOLAR LIGHTS WILL BECOME THE PROPERTY OF TDOT AT PROJECT COMPLETION.
5. ALL WORK SHALL BE IN ACCORDANCE WITH THE NEC, LATEST EDITION RECOGNIZED BY THE AUTHORITY HAVING JURISDICTION.
6. ALL CONDUCTORS SHALL BE COPPER WITH 75-DEGREE INSULATION.
7. ALL CONDUITS SHALL BE RIGID GALVANIZED PAINTED TO MATCH SURROUNDING SURFACES.
8. ALL NEW NAVIGATION LIGHTS SHALL HAVE LED LIGHT SOURCES.

DEMOLITION NOTES

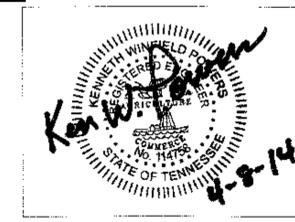
1. COORDINATE WITH PAINT / ASBESTOS REMOVAL AND CLEANING PRIOR TO STARTING NEW ELECTRICAL WORK.

EQUIPMENT LIST (ENGINEER APPROVED EQUALS ARE ACCEPTABLE)

- A- 180 DEGREE RED LED NAVIGATION LIGHT - FEDERAL SERIES BY EDKO CATALOG #590I-250 BX (TYPE I WITH CAST BRONZE HOUSING) (QTY = 4)
- B- 360 DEGREE GREEN LED NAVIGATION LIGHT - FEDERAL SERIES BY EDKO - CATALOG #590I-208 BX (TYPE 6-PSU, PIVOT TYPE WITH CAST BRONZE HOUSING) (QTY = 2)
- C- NEW LIGHTING CONTROL PANEL (QTY = 1) - 16"X16"X6"D NEMA 4X WITH HINGED DOOR AND HASP FOR PADLOCK. PROVIDE 30A/2P BREAKER, TIMECLOCK PHOTOCELL AND CONTACTOR. PROVIDE STAINLESS STEEL OR BRONZE MOUNTING HARDWARE. REPLACES EXISTING CONTROL CABINET AT CATWALK ACCESS. PROVIDE 120V CIRCUITS TO NAV LIGHTS AS SHOWN.
- D- NEW CAST JUNCTION BOX, NUMBER AS REQUIRED - CROUSE HINDS OR EQUAL WITH MOUNTING LUGS, CAST COVER AND GASKET.
- E- NEW TREATED RISER POLE, 20' (MIN.) CLASS V SET 6' DEEP IN CONCRETE.



UNOFFICIAL SET
NOT FOR BIDDING

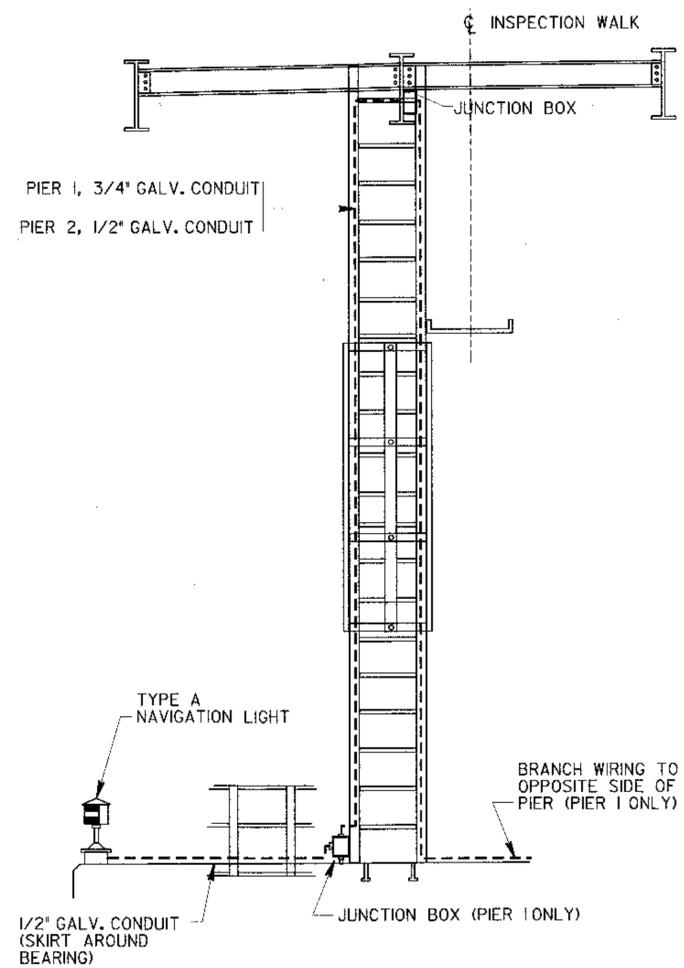


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

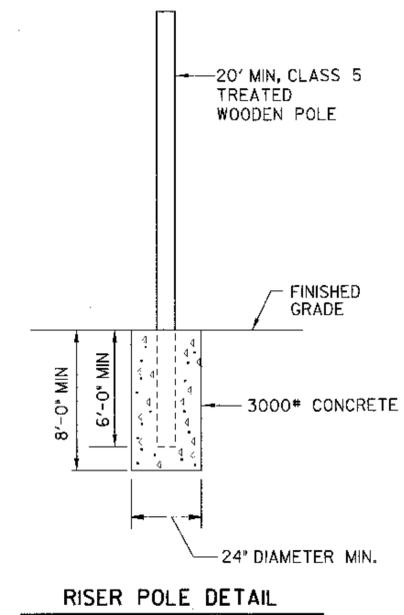
NAVIGATIONAL LIGHTING DETAILS
INTERSTATE 40 OVER
CLINCH RIVER/LAKEWOOD DRIVE
BRIDGE NO. 73-10040-11.15
ROANE COUNTY
2014

DESIGNED BY K. POWERS DATE 04/14
DRAWN BY K. POWERS DATE 04/14
SUPERVISED BY... DATE...
CHECKED BY... DATE...

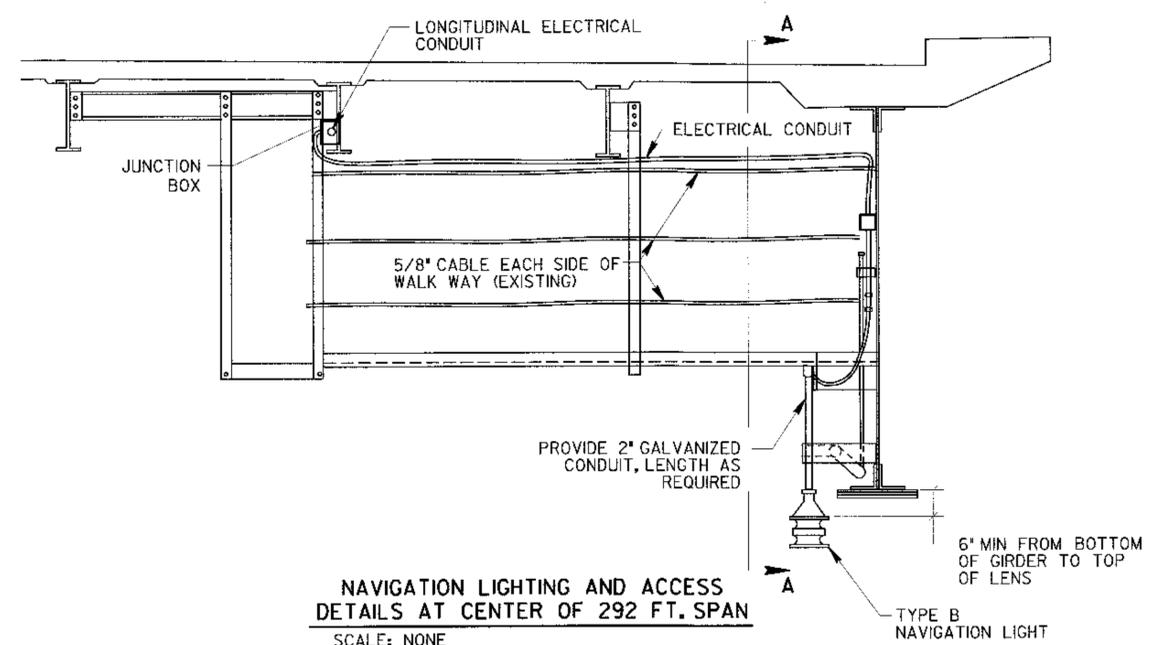
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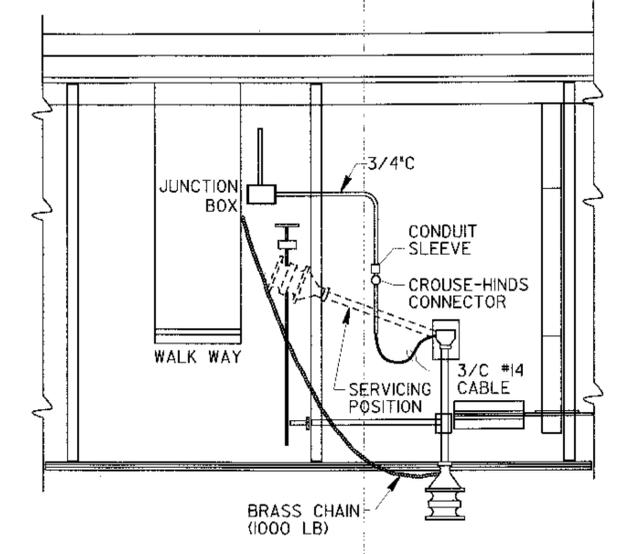
LADDER & ELECTRICAL DETAILS (PIER NO. 1 & 2)
SCALE: NONE



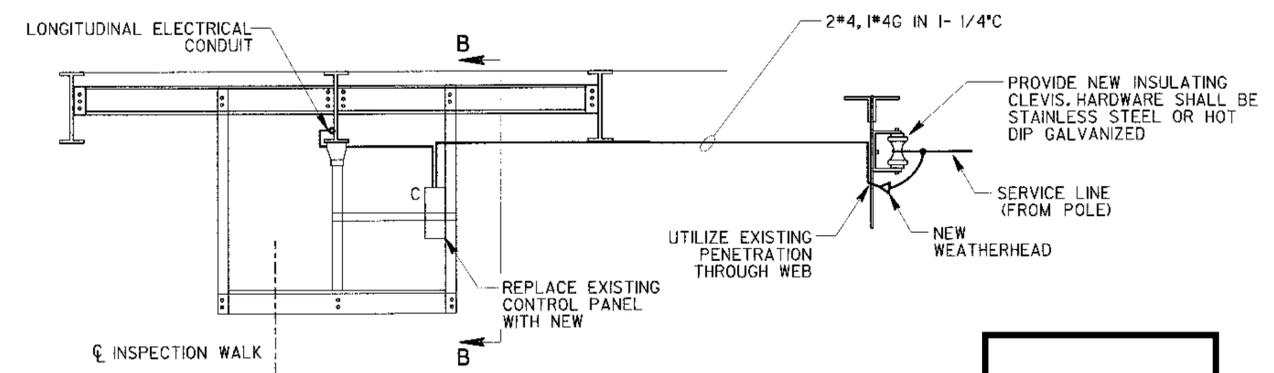
RISER POLE DETAIL
SCALE: NTS



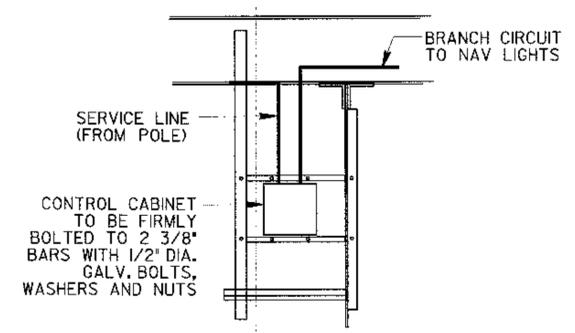
**NAVIGATION LIGHTING AND ACCESS
DETAILS AT CENTER OF 292 FT. SPAN**
SCALE: NONE



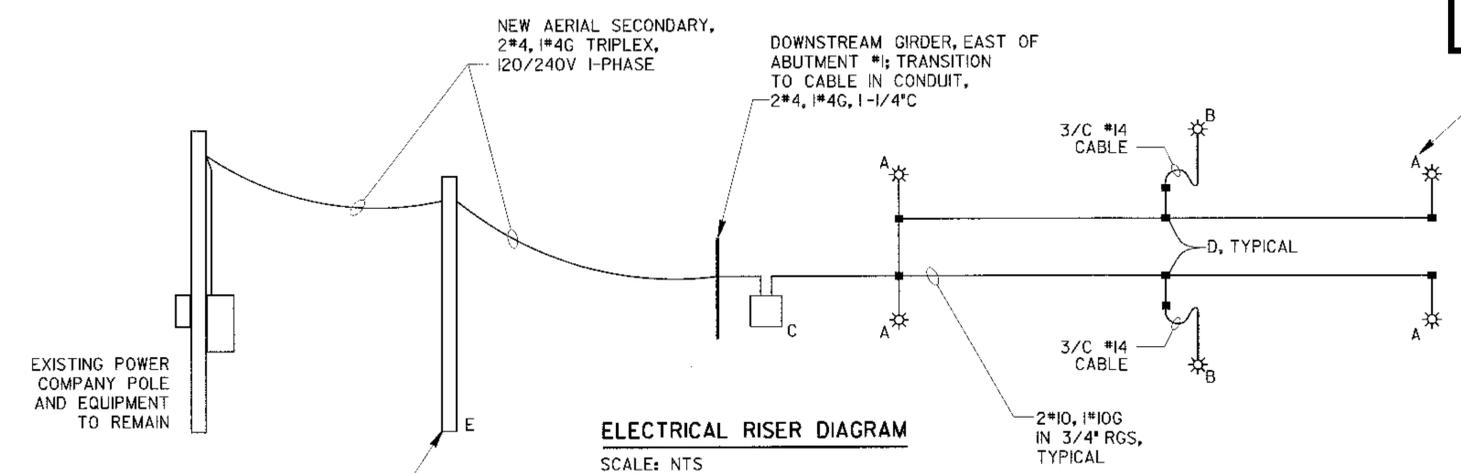
SECTION "A-A"
SCALE: NONE



ELEVATION AT CONTROL CABINET
SCALE: NONE

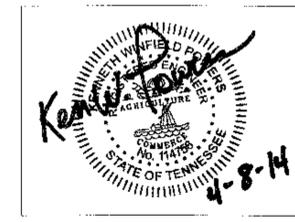


SECTION "B-B"
SCALE: NONE



ELECTRICAL RISER DIAGRAM
SCALE: NTS
SEE SHEET BR-116-35 FOR EQUIPMENT LIST.

UNOFFICIAL SET
NOT FOR BIDDING



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REPLACE EXISTING RISER POLE (SEE DETAIL, THIS SHEET) REFER TO SHEET BR-116-35 FOR APPROXIMATE LOCATION.