

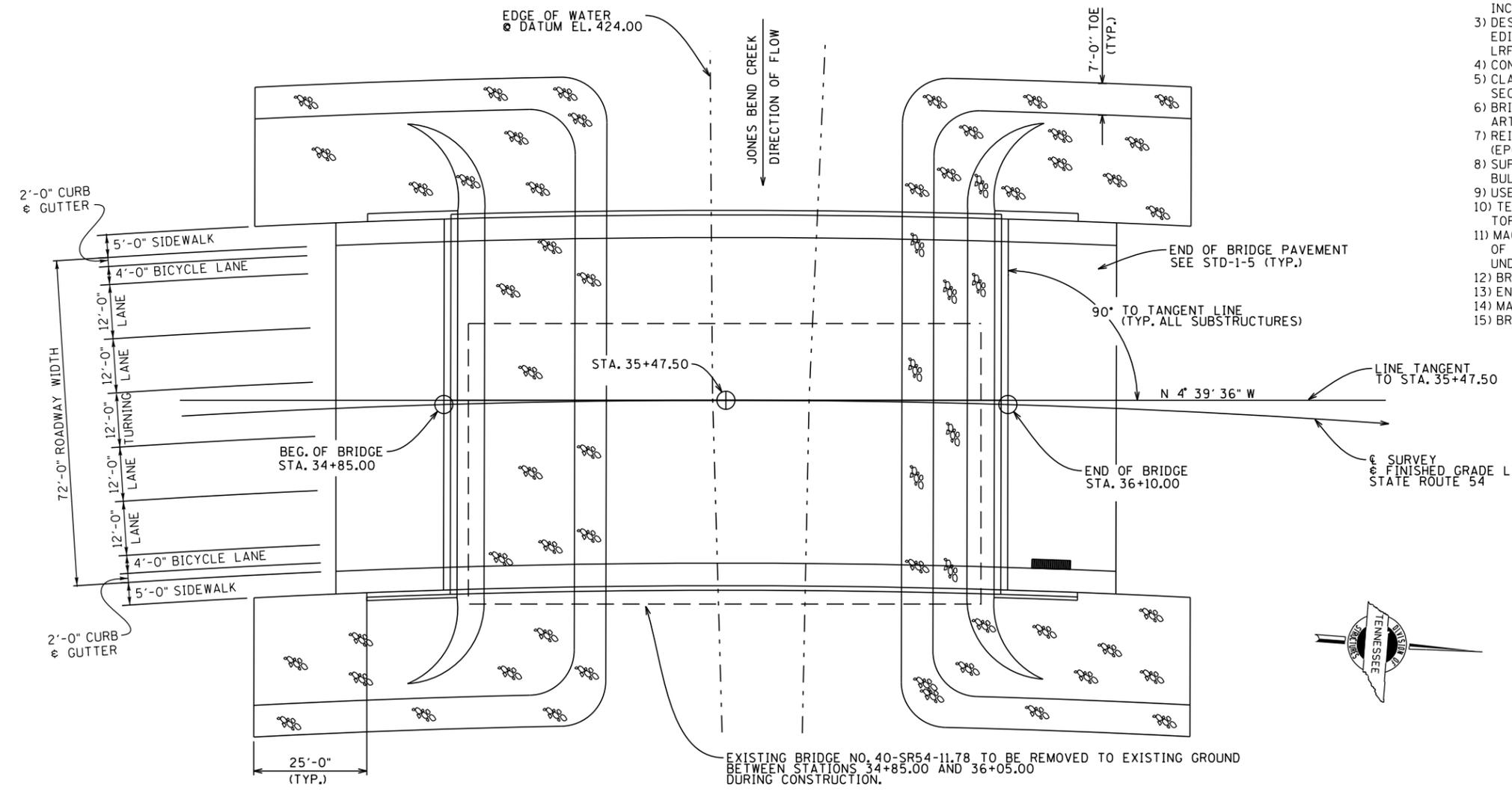
CONST. NO. 40003-1213-14

PROJECT NO.	YEAR	SHEET NO.
	1997	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

GENERAL NOTES

- SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION (MARCH 1, 2006 EDITION).
- LOADING: HL-93 LIVE LOADING; SEISMIC CATEGORY C, WITH $A_s=0.376$, $S_{ps}=0.732$, $S_{p1}=0.314$ (1000 YEAR RETURN PERIOD). DEAD LOADS TO INCLUDE 35 LB/SQ FT FOR FUTURE OVERLAY
- DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FIFTH EDITION, 2010, WITH INTERIMS, AND THE 2009 AASHTO GUIDE SPECIFICATIONS FOR LRFD SEISMIC BRIDGE DESIGN, EDITION 1, WITH 2010 INTERIMS.
- CONCRETE: CLASS 'A' (CAST IN PLACE) $f'_c=3000$ PSI EXCEPT AS NOTED OTHERWISE.
- CLASS 'D' CONCRETE FOR BRIDGE DECKS SHALL BE IN ACCORDANCE WITH SECTION 604 OF THE STANDARD SPECIFICATIONS.
- BRIDGE DECK SURFACE FINISH: TO BE IN ACCORDANCE WITH NOTE "C" IN ARTICLE 604.23 OF THE STANDARD SPECIFICATIONS.
- REINFORCING STEEL: TO BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE. (EPOXY COAT ALL SLAB STEEL.)
- SUPERSTRUCTURE: TO CONSIST OF 1 SPAN OF PRECAST CONCRETE BULB-TEE (BT-72) WITH COMPOSITE CONCRETE DECK SLAB.
- USE STD-11-1 BRIDGERAIL WITH STRUCTURAL TUBING.
- TEXTURE COATING: TO BE MOUNTAIN GREY (36440), EXCEPT INSIDE FACE AND TOP OF BRIDGERAIL TO BE WHITE (37886).
- MACHINED RIP-RAP SHALL BE CLASS "A-1" IN ACCORDANCE WITH SECTION 709 OF THE STANDARD SPECIFICATIONS AND SHALL BE PAID FOR AS A ROADWAY ITEM UNDER ITEM 709-05.06 - TON.
- BRIDGE DECK DRAINS ARE NOT REQUIRED.
- END OF BRIDGE DRAINS ARE REQUIRED AS SHOWN IN PLAN VIEW.
- MAINTAIN TRAFFIC BY STAGE CONSTRUCTION.
- BRIDGE EXCAVATION BASED ON FINAL PROFILE AT ABUTMENTS.



CURVE DATA

(STATE ROUTE 54)

P.I. = 39+00.66
 N = 728604.6760
 E = 1282855.5994
 $\Delta = 28^\circ 34' 37''$ (RT)
 D = 2'45"00"
 R = 2083.48
 L = 1039.16
 T = 530.63
 S.E. = 0.026 f_{ft}
 TRANSITION LENGTH = 175'-0"
 DESIGN SPEED = 40 MPH

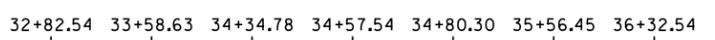
72'-0" ROADWAY WITH 2'-5" SIDEWALKS AND STD-11-1 BRIDGERAIL WITH STRUCTURAL TUBING
 2025 ADT = 12,230
 DESIGN SPEED = 40 MPH

BRIDGE NO. 1

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 PRELIMINARY LAYOUT
 STATE ROUTE 54
 OVER
 JONES BEND CREEK
 BRIDGE I.D. NO. 40SR0540021
 STATION 34+85.00
 LOG MILE 11.7
 HENRY COUNTY
 2011

HYDRAULIC DATA

DRAINAGE AREA = 5.60 mi^2
 DESIGN DISCHARGE (100 YR.) = 3,540 cfs
 WATER AREA PROVIDED BELOW EL. 433.25 = 2,403.78 ft^2
 100 YEAR VELOCITY = 8.99 fps
 100 YEAR BRIDGE BACKWATER = 2.00 ft @ EL. 432.99 ft
 ROADWAY OVERTOPPING ELEV. = 434.00 ft
 500 YEAR DISCHARGE = 4,400 cfs @ EL. 434.34 ft



SUPER ELEVATION

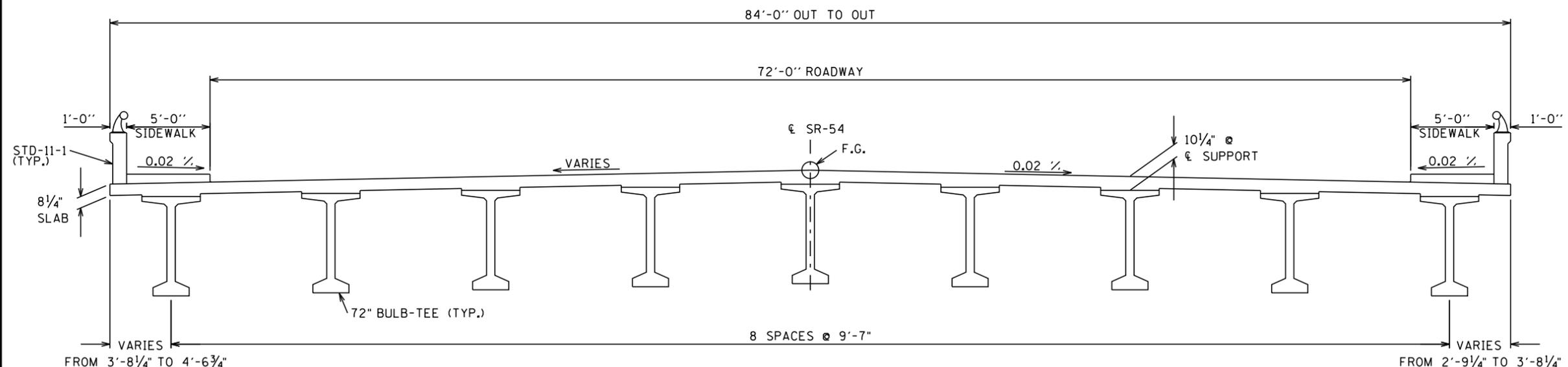
DESIGNED BY: N. BOYLE DATE: 9/2011
 DRAWN BY: N. BOYLE DATE: 9/2011
 SUPERVISED BY: KDM DATE: 9/2011
 CHECKED BY: DATE:

CORRECT *Dayne J. Jeyar*
 ENGINEER OF STRUCTURES

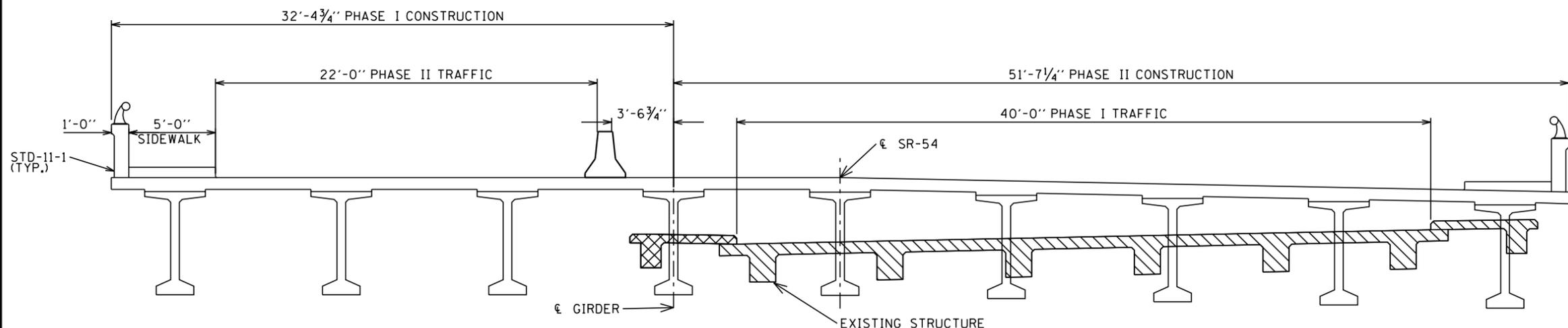
TEMPORARY MEDIAN BARRIER = 350 FT

CLASS "A-1" RIP-RAP = 1943 TONS

P.E. NO. 40003-2218-14			
PROJECT NO.	YEAR	SHEET NO.	
NHE-54(26)	2014		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



TYPICAL CROSS SECTION
 LOOKING FORWARD ON SURVEY
 NOT TO SCALE



PHASED CONSTRUCTION CROSS SECTION
 LOOKING FORWARD ON SURVEY
 NOT TO SCALE

 DENOTES: PHASE I REMOVAL
 DENOTES: PHASE II REMOVAL

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