PRE324.DGN

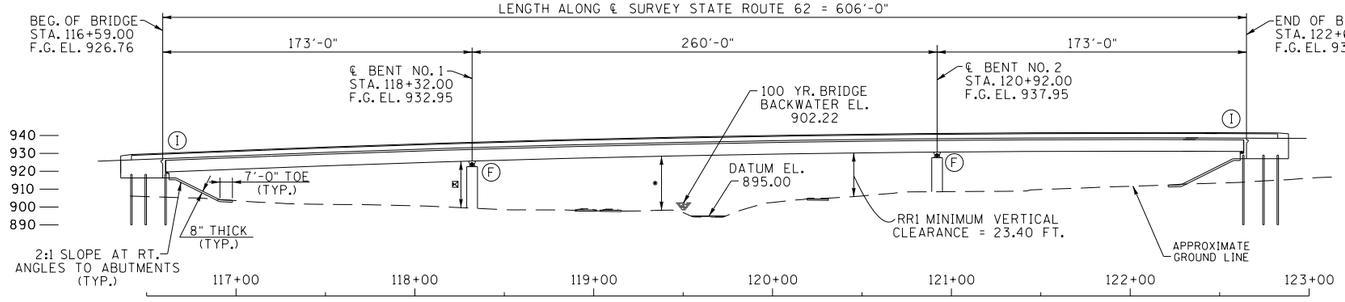
P.E. NO. 47023-1257-14

CONST. NO. 47023-2261-14

PROJECT NO.	YEAR	SHEET NO.
STP-62(25)	2010	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
1	2-18-10	ALP	GENERAL REVISIONS
2	6-23-10	ALP	GENERAL REVISIONS



ⓘ DENOTES: INTEGRAL
Ⓕ DENOTES: FIXED

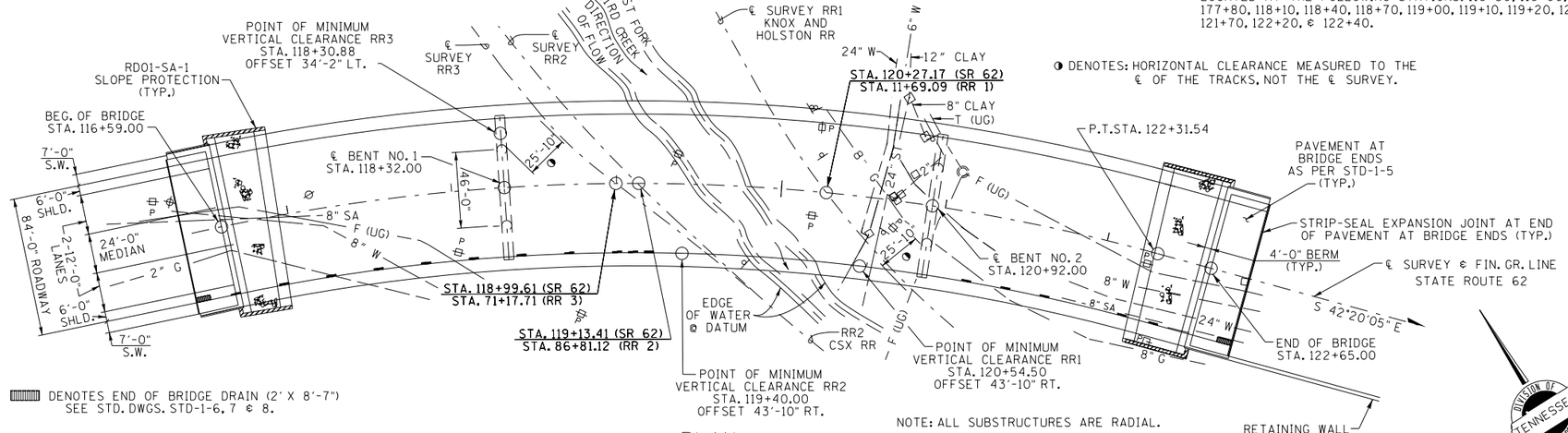
ELEVATION

SCALE: 1" = 40'

• RR2 MINIMUM VERTICAL CLEARANCE = 27.88 FT.
◙ RR3 MINIMUM VERTICAL CLEARANCE = 26.98 FT.

▬ DENOTES: MODIFIED PARAPET TYPE DECK DRAINS REQUIRED (ALTERNATE A (8'-4" LONG) WITH TOP PLATE). SEE STD. DWG. NO. STD-1-2. DRAINS ARE LOCATED AT THE FOLLOWING STATIONS: 116+59, 116+90, 117+20, 117+50, 177+80, 118+10, 118+40, 118+70, 119+00, 119+10, 119+20, 121+20, 121+45, 121+70, 122+20, ℄ 122+40.

◑ DENOTES: HORIZONTAL CLEARANCE MEASURED TO THE ℄ OF THE TRACKS, NOT THE ℄ SURVEY.



▥▥▥ DENOTES END OF BRIDGE DRAIN (2' X 8'-7") SEE STD. DWGS. STD-1-6, 7 & 8.

NOTE: ALL SUBSTRUCTURES ARE RADIAL.

PLAN

SCALE: 1" = 40'

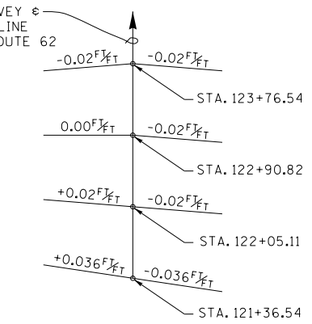
CURVE DATA

STATE ROUTE 62

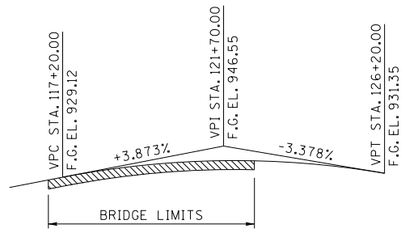
PI = 117+40.24
N = 604,106.9807
E = 2,572,474.6863
Δ = 50°26'54" RT.
D = 4°46'29"
R = 1,200.00'
L = 1,056.59'
T = 565.30'
S.E. = 0.036 $^{FT}/_{FT}$
DES. SPEED = 45 M.P.H.
TL IN = 190'
TL OUT = 240'

HYDRAULIC DATA

DRAINAGE AREA = 1.35 ACRES
DESIGN DISCHARGE = 970 cfs
WATER AREA PROVIDED BELOW EL. 902.22 = 354.55 sf
100 YEAR VELOCITY = 441 fps
100 YEAR BRIDGE BACKWATER = 0.00 ft.
ROADWAY OVERTOPPING EL. = 910.00



TRANSITION SKETCH



VCL = 900'

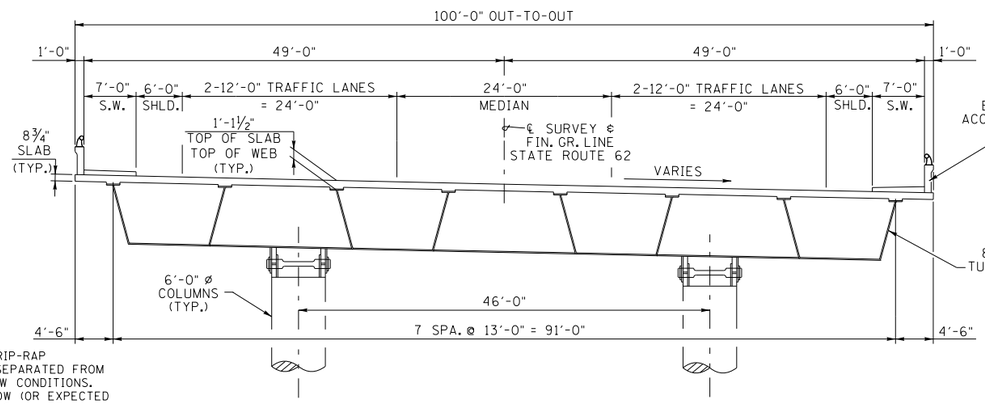
GRADE SKETCH

STATE ROUTE 62

GENERAL NOTES

1) SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION. (MARCH 1, 2006 EDITION).
2) LOADING: HL-93 (DEAD LOADS TO INCLUDE 35 LB/FT² FOR FUTURE OVERLAY.)
3) DESIGN SPECIFICATIONS: AASHTO LRFD 4TH EDITION, 2007 WITH ADDENDA (SEISMIC ZONE "1", SDS = 0.336, SD1 = 0.119, 1000 YEAR RETURN PERIOD)
4) CONCRETE: CLASS "A" f'c = 3000 PSI, BRIDGE DECK CLASS "D" f'c = 4000 PSI
5) REINFORCING STEEL: TO BE ASTM A615 GRADE 60. (EPOXY COAT ALL SLAB STEEL.)
6) SUPERSTRUCTURE: TO CONSIST OF 3 SPANS OF STEEL TUB GIRDERS (84" WEB - GRADE 50W) AND COMPOSITE CONCRETE DECK SLAB.
7) USE STD-11-1 BRIDGE RAILING.
8) BENTS ARE TWO-POST, FIXED CAP STRUCTURES WITH SPREAD FOOTINGS ON ROCK OR PILES WHERE INDICATED.
9) BRIDGE DECK DRAINS ARE REQUIRED.
10) END OF BRIDGE DRAINS ARE REQUIRED.
11) TEXTURE COATING: TO BE MOUNTAIN GREY (36440) EXCEPT TRAFFIC FACE AND TOP OF PARAPET TO BE OFF-WHITE (37886).
12) MACHINED RIP-RAP SHALL BE CLASS "A-3", TO MEET THE QUALITY REQUIREMENTS OF SECTION 709 AND SHALL BE MEASURED AND PAID FOR UNDER ROADWAY ITEMS.
13) BRIDGE EXCAVATION IS BASED ON FINAL PROFILE AT ABUTMENTS AND EXISTING GROUNDLINE AT BENTS.
14) BRIDGE DECK FINISH TO BE IN ACCORDANCE WITH NOTE "C" IN ARTICLE 604.22 OF THE STANDARD SPECIFICATIONS.
15) ABUTMENT PILES SHALL HAVE 2FT. EMBEDMENT AND BE ENCASED BY SPIRAL BARS.

NOTE: ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G., FOR PIER FOOTING, RIP-RAP PLACEMENT, MULTI-BARREL CULVERT/BRIDGE CONSTRUCTION, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS, EC-STR-31 AND TEMPORARY DIVERSION CULVERTS, EC-STR-32 FOR SINGLE BARREL CULVERT CONSTRUCTION.



TYPICAL CROSS SECTION

LOOKING FORWARD ON SURVEY

84'-0" RDWY. W/ 2 - 7'-0" SIDEWALKS AND STD-11-1 BRIDGE RAILING
DESIGN SPEED 45 M.P.H.
2024 ADT = 35,170

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRELIMINARY LAYOUT STATE ROUTE 62 (WESTERN AVENUE) OVER CSX RAILROAD, KNOXVILLE AND HOLSTON RIVER RAILROAD, AND EAST FORK THIRD CREEK BR. I.D. NO. 47SR0620025 STATION 119+62.00 KNOX COUNTY 2010

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

RAILROAD GENERAL NOTES:

1) FURNISH DEMOLITION PLAN FOR ALL DEMOLITION EFFECTING RAILROAD RIGHT-OF-WAY.
2) ALL EXCAVATIONS ON RAILROAD RIGHT-OF-WAY SHALL BE PROTECTED BY HANDRAILS IN MINIMUM CONFORMANCE WITH AREMA SPECIFICATIONS AND PRE-APPROVED BY CSXT.
3) FURNISH GIRDER ERECTION PLANS WITH LOAD CALCULATIONS FOR 150% CRANE BOOM AND SWING CAPACITIES FOR LOADS OVER RAILROAD RIGHT-OF-WAY.
4) CONTRACTOR TO PROVIDE DETAILED METHOD OF PROTECTION FOR RAILROAD DURING COATING WORK, INCLUDE OVERSPRAY PROTECTION.
5) A CSXT FLAGMAN MUST BE PRESENT WHEN THE CONTRACTOR IS WORKING ON OR OVER CSXT PROPERTY.

DESIGNED BY R.L.C./A.L.P. DATE 8-09
DRAWN BY K.L.F./A.L.P. DATE 8-09
SUPERVISED BY R.L.C./C.M.D. DATE 8-09
CHECKED BY DATE

CLASS "A-3" MACHINED RIP-RAP = 302 TONS

PRE324.DGN

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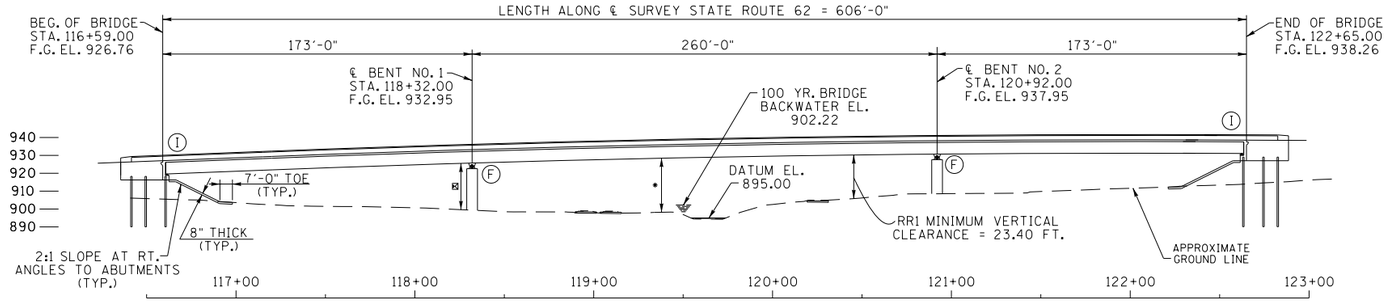

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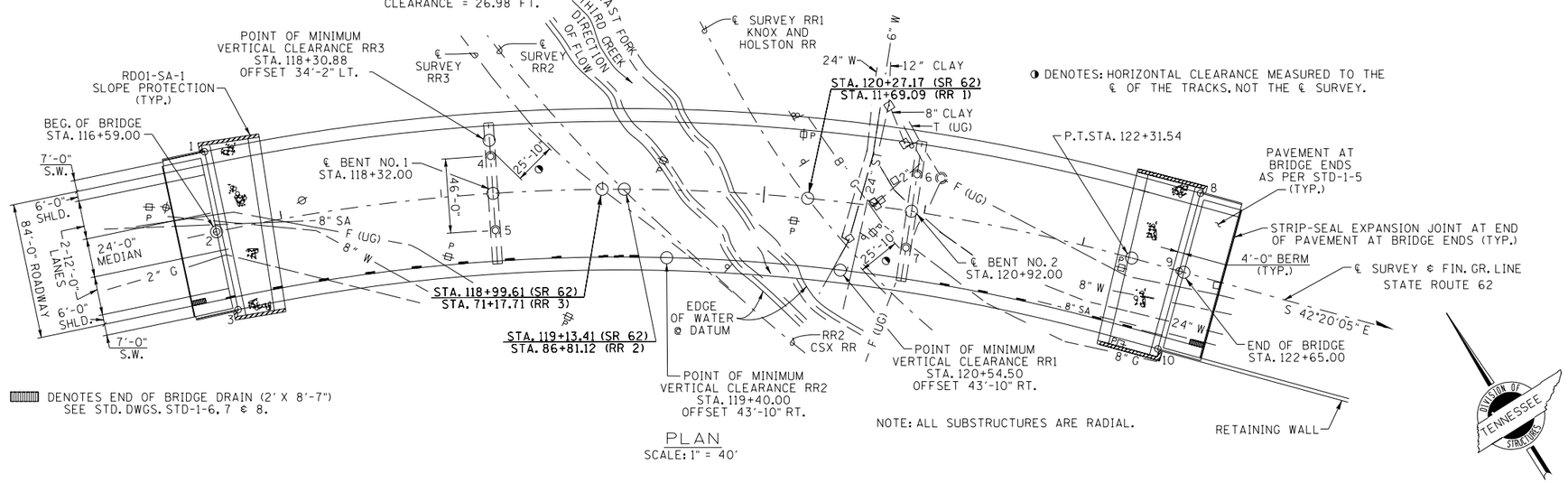
ELEVATION
SCALE: 1" = 40'



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NOTE: ALL SUBSTRUCTURES ARE RADIAL.

PLAN
SCALE: 1" = 40'

▥ DENOTES END OF BRIDGE DRAIN (2' X 8'-7") SEE STD. DWGS. STD-1-6, 7 & 8.

POINT	STATION	OFFSET	N	E	GROUND ELEV.	ROCK ELEV.
1	116+60.50	50'-0" (LT.)	604052.549	2572404.040		
2	116+60.50	0'-0"	604005.684	2572386.611		
3	116+60.50	50'-0" (RT.)	603958.820	2572369.183		
4	118+32.00	23'-0" (LT.)	603954.837	2572553.550		
5	118+32.00	23'-0" (RT.)	603914.445	2572531.538		
6	120+92.00	23'-0" (LT.)	603803.920	2572770.727		
7	120+92.00	23'-0" (RT.)	603769.204	2572740.547		
8	122+63.50	50'-0" (LT.)	603699.148	2572913.876		
9	122+63.50	0'-0"	603665.475	2572876.915		
10	122+63.50	50'-0" (RT.)	603631.802	2572839.953		

NOTES:

DESIGN SPECIFICATIONS: AASHTO 2007 LRFD BRIDGE DESIGN SPECIFICATIONS, 4TH EDITION WITH INTERIMS. (SEISMIC ZONE "1", AS = 0.187, SDS = 0.336, SD1 = 0.119, 1000 YEAR RETURN PERIOD)

REQUIRED:

1) SUFFICIENT GROUND, ROCK AND CORING INFORMATION FOR BRIDGE FOUNDATIONS.
2) APPROXIMATE EXISTING GROUND AND ROCK LINE.

BENCHMARKS:

BM S-7
STATE ROUTE 62
STA. 118+85.71
79.71' RT.
ELEV. 898.70
PK NAIL

BM S-13
STATE ROUTE 62
STA. 120+18.64
57.48' LT.
ELEV. 908.69
PK NAIL

NOTE: THIS DRAWING IS FOR FOUNDATION DATA ONLY AND IS NOT TO BE USED AS A LAYOUT.

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