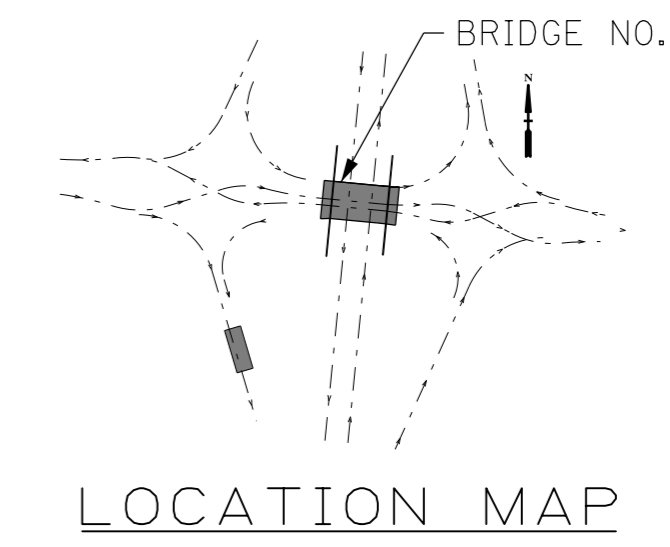
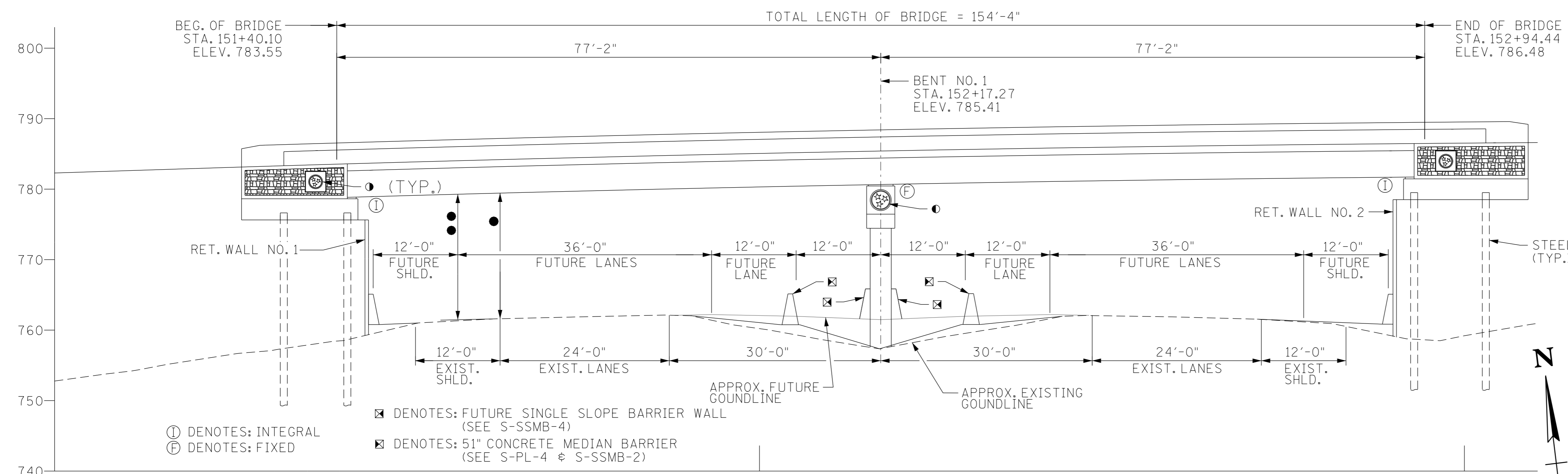
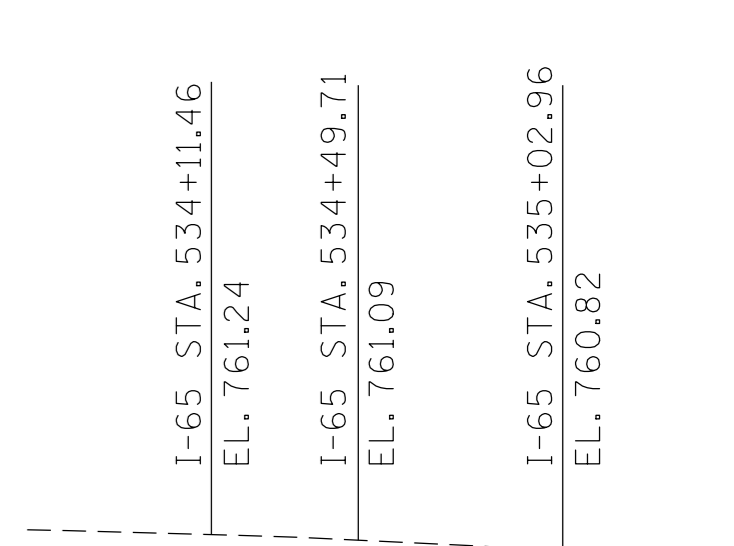
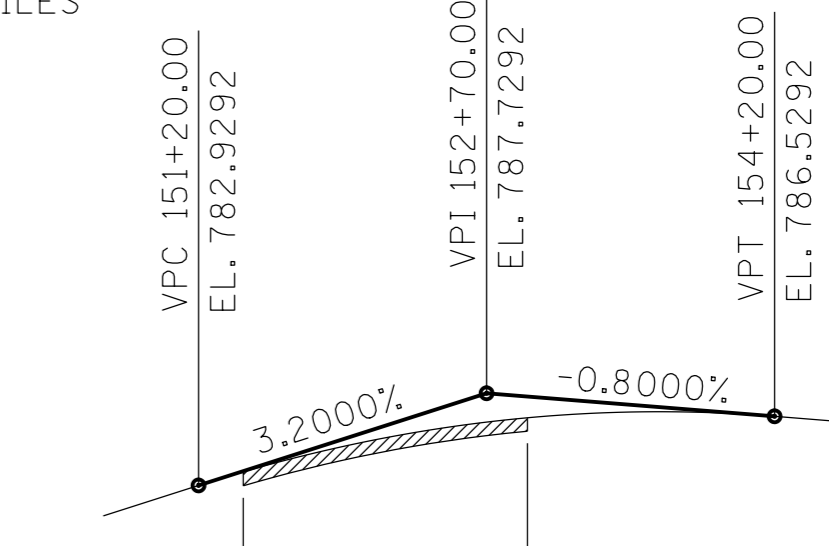


27-APR-2020 2:48
 Projects\029700 Buckner Road Interchange\Functional\Bridges\BucknerRd-I65\BucknerRd-I65-BridgePrelim.dgn



PROJECT NO.	YEAR	SHEET NO.
NH-I-65-2(113)	2020	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



ELEVATION
 SCALE: 1" = 10'-0"

● DENOTES: 3'-0" DIA. TRI-STAR EMBLEM (SEE STD-8-6 FOR DETAILS)
 ○ DENOTES: 2'-0" DIA. TRI-STAR EMBLEM (SEE STD-8-6 FOR DETAILS)

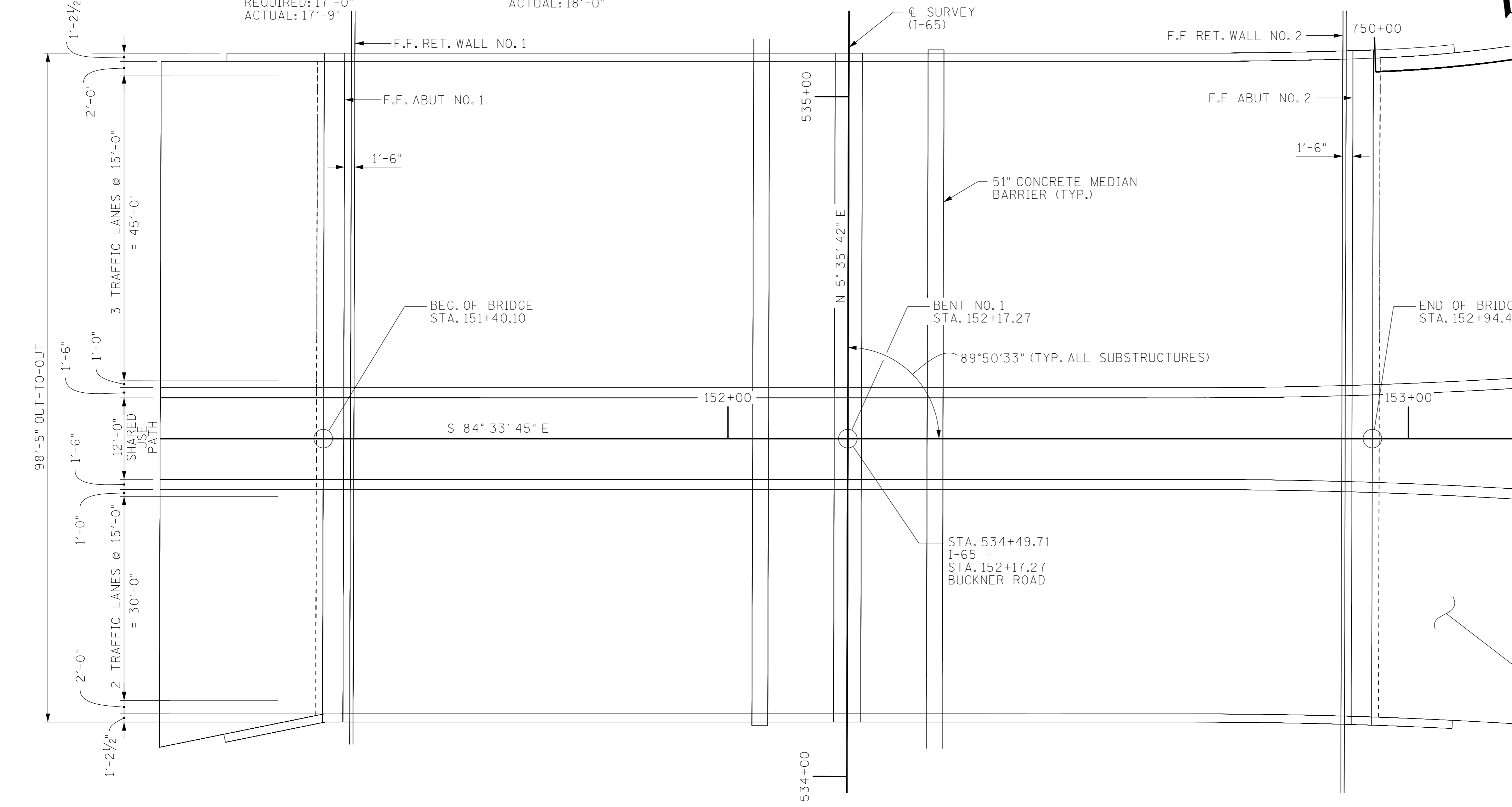
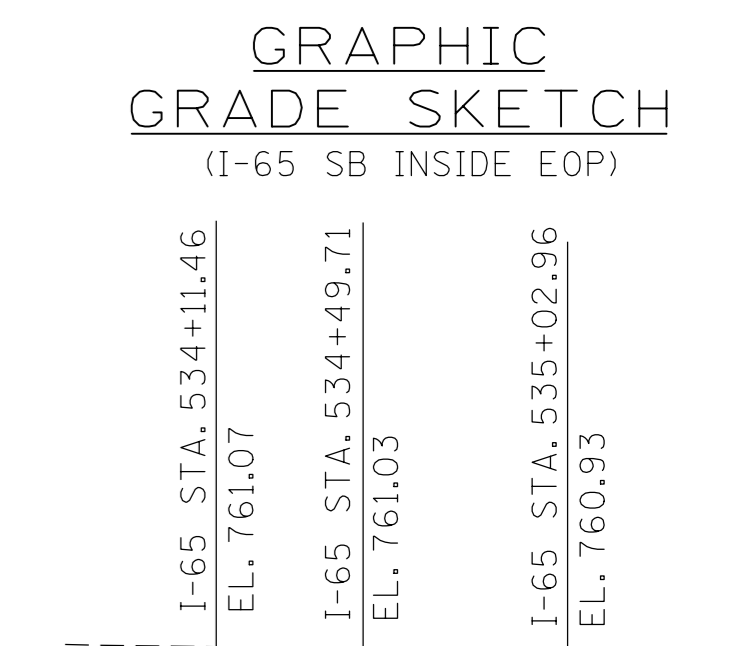
⊙ DENOTES: INTEGRAL
 ⊕ DENOTES: FIXED

● DENOTES: FUTURE MIN. VERT. CLEARANCE: REQUIRED: 17'-0" ACTUAL: 17'-9"

● DENOTES: MIN. VERT. CLEARANCE: REQUIRED: 17'-0" ACTUAL: 18'-0"

GRADE SKETCH
 (BUCKNER ROAD)

BRIDGE LIMITS
 K = 75
 VC = 300.0000'
 V = 45 MPH



- GENERAL NOTES**
- SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION. (JAN. 1, 2015 EDITION).
 - LOADING: HL-93 LIVE LOADING; SEISMIC CATEGORY A WITH $A_s=0.092$, $S_{ds}=0.194$, $S_{d1}=0.078$, (1000 YEAR RETURN PERIOD). DEAD LOAD INCLUDES 35 LB/SQ. FT. FOR FUTURE WEARING SURFACE.
 - DESIGN SPECIFICATIONS: AASHTO LRFD EIGHTH EDITION, 2017, AND THE 2011 AASHTO GUIDE SPECIFICATIONS FOR LRFD SEISMIC BRIDGE DESIGN, EDITION 2 (WITH INTERIMS).
 - CONCRETE: CLASS "A" $f'_c = 3000$ PSI, CLASS "DS" $f'_c = 4000$ PSI FOR BRIDGE DECK.
 - CLASS "DS" CONCRETE FOR BRIDGE DECK SHALL BE IN ACCORDANCE WITH SECTION 604 OF THE STANDARD SPECIFICATIONS.
 - REINFORCING STEEL: TO BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE. SEE SECTION 604 AND 907 OF THE STANDARD SPECIFICATIONS. (EPOXY COAT ALL SLAB STEEL).
 - SUPERSTRUCTURE: TO CONSIST OF 2 SPANS CONCRETE AASHTO TYPE III BEAMS WITH COMPOSITE DECK SLAB.
 - BRIDGE DECK SURFACE FINISH: TO BE IN ACCORDANCE WITH METHOD (3) IN ARTICLE 604 OF THE STANDARD SPECIFICATIONS.

ROADWAY WIDTH = 96'-0"
 STD-1-1SS PARAPET
 DESIGN SPEED: 30 MPH
 STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

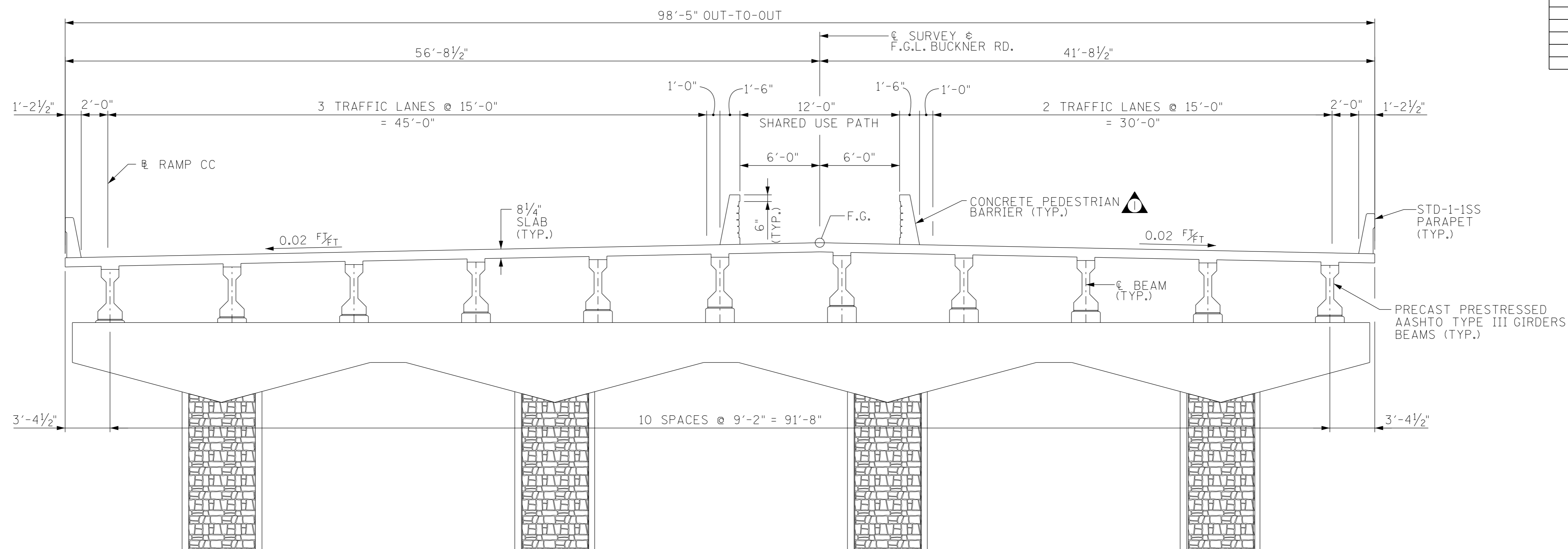
PRELIMINARY LAYOUT
 OF BRIDGE NO. 1
 BUCKNER ROAD OVER
 INTERSTATE 65
 FED. ID. NO. 94I00650057
 STA. 152+17.27
 WILLIAMSON COUNTY
 2020

DESIGNED BY: VOLKERT DATE: 11/2019
 DRAWN BY: B. ANDERSON DATE: 11/2019
 SUPERVISED BY: J. ALLEN DATE: 11/2019
 CHECKED BY: J. ALLEN DATE: 11/2019



PLAN
 SCALE: 1" = 10'-0"

PROJECT NO.	YEAR	SHEET NO.	
NH-I-65-2(113)	2020		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	9/3/20	JTE	REM. BARRIER DETAIL & REV. CALLOUT



TYPICAL SECTION
(LOOKING FORWARD - NEAR MIDSPAN)



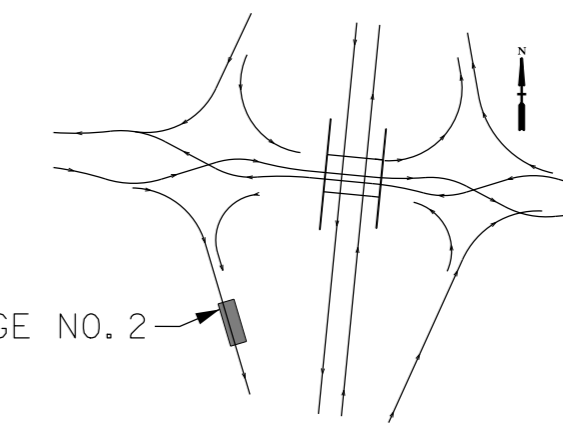
03-SEP-2020 13:59
Projects\029700 - Buckner Road Interchange\Functionals\Bridge\BucknerRd-65\Superstructure

DESIGNED BY VOLKERT DATE 11/2019
DRAWN BY B. ANDERSON DATE 11/2019
SUPERVISED BY J. ALLEN DATE 11/2019
CHECKED BY J. ALLEN DATE 11/2019

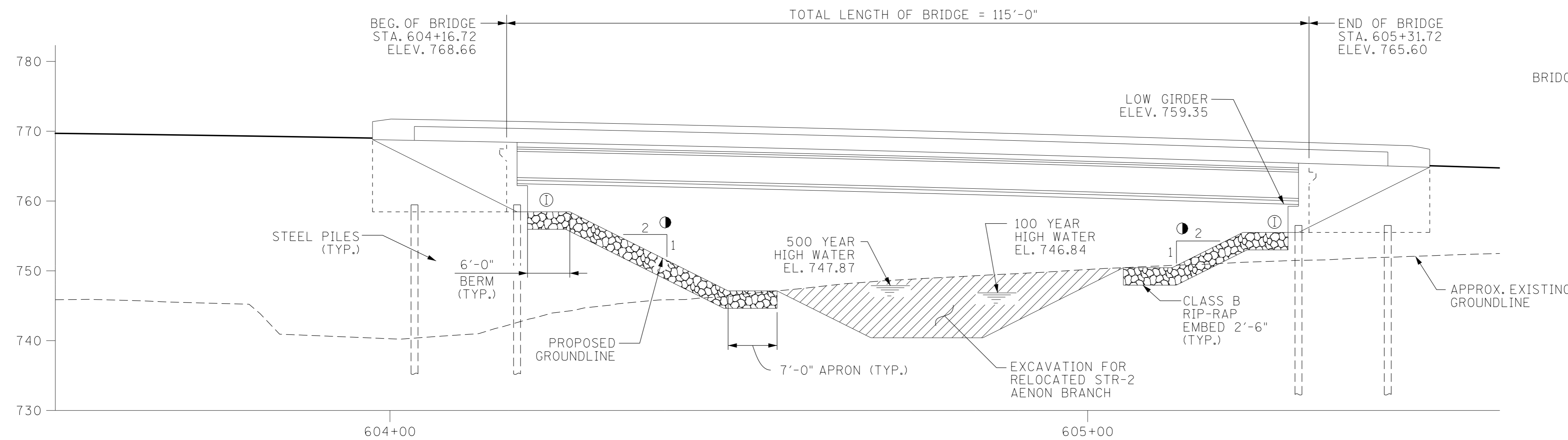


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PRELIMINARY
SUPERSTRUCTURE
BRIDGE NO. 1
BUCKNER ROAD OVER
INTERSTATE 65
FED. ID. NO. 94I00650057
STA. 152+17.27
WILLIAMSON COUNTY
2020

PROJECT NO.	YEAR	SHEET NO.	
NH-I-65-2(113)	2020		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



LOCATION MAP

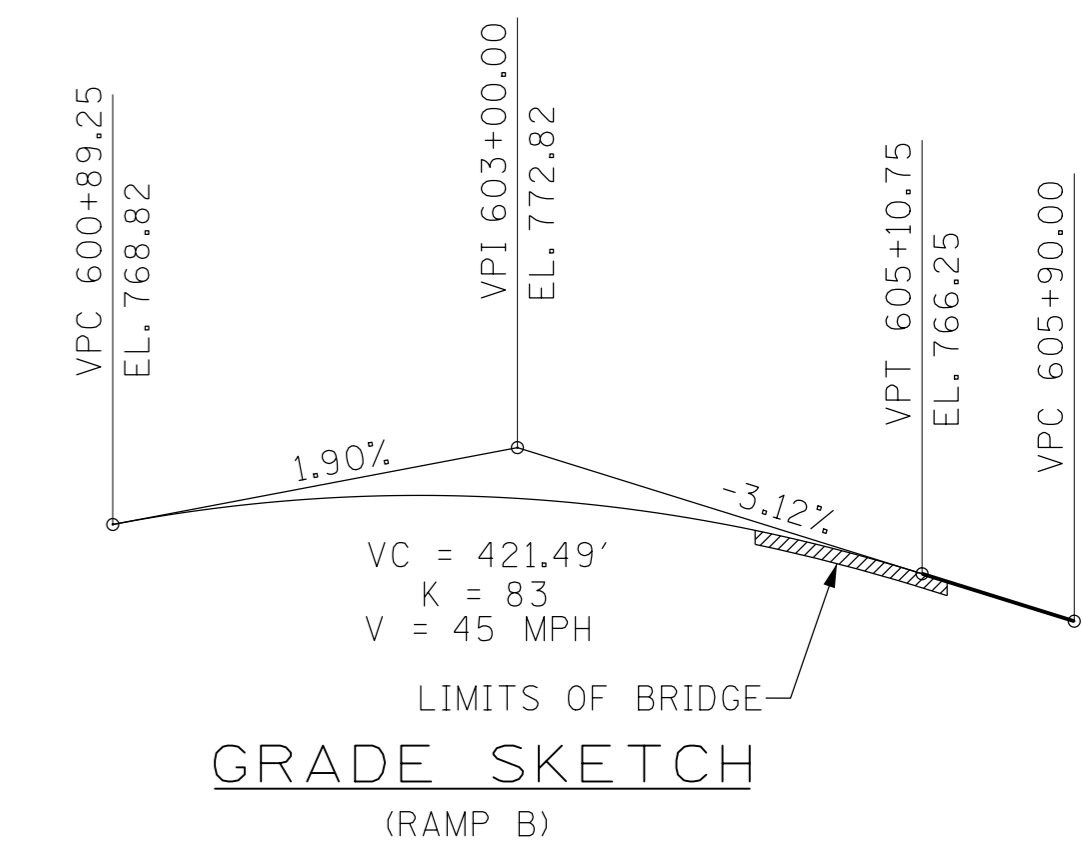


ELEVATION

SCALE: 1" = 10'-0"

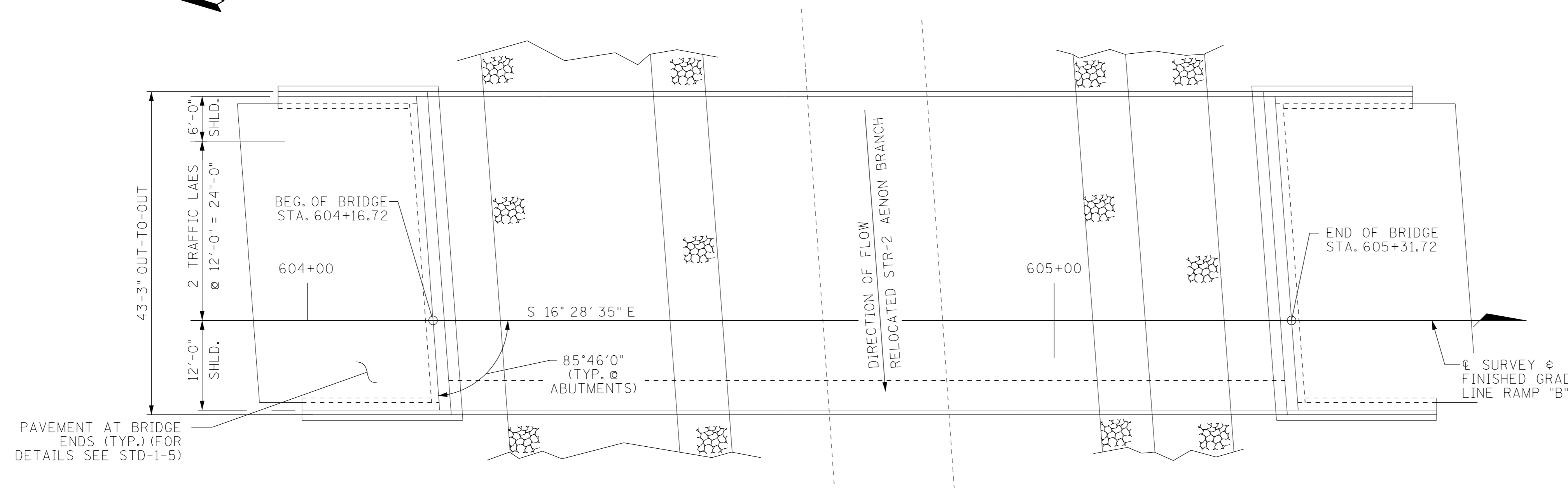
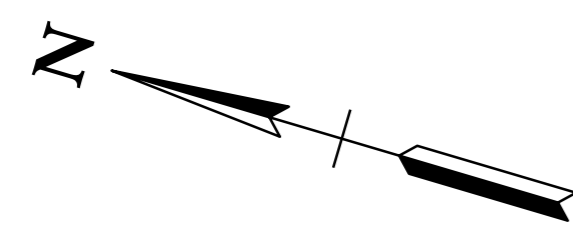
① DENOTES: INTEGRAL

● DENOTES: 2:1 SLOPES @ RIGHT ANGLES TO ABUTMENTS (TYP.)



GRADE SKETCH

(RAMP B)



PLAN

SCALE: 1" = 10'-0"

HYDRAULIC NOTES

DRAINAGE AREA = 0.99MI²
 DESIGN DISCHARGE (100 YR.) = 941CFS
 WATER AREA PROVIDED BELOW EL. 746.00 = 139.81 FT²
 100 YR. VELOCITY = 6.73 FPS
 100 YR. BRIDGE BACKWATER = 0.57 FT. @ EL. 746.84
 ROADWAY OVERTOPPING EL. = 764.28 FT

GENERAL NOTES

- 1) SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION. (JAN. 1, 2015 EDITION).
- 2) LOADING: HL-93 LIVE LOADING; SEISMIC CATEGORY A WITH $A_s=0.092$, $S_{0.5}=0.194$, $S_D=0.078$, (1000 YEAR RETURN PERIOD). DEAD LOAD INCLUDES 35 LB/SQ. FT. FOR FUTURE WEARING SURFACE.
- 3) DESIGN SPECIFICATIONS: AASHTO LRFD EIGHTH EDITION, 2017, AND THE 2011 AASHTO GUIDE SPECIFICATIONS FOR LRFD SEISMIC BRIDGE DESIGN, EDITION 2 (WITH INTERIMS).
- 4) CONCRETE: CLASS "A" $f'c = 3000$ PSI, CLASS "DS" $f'c = 4000$ PSI FOR BRIDGE DECK.
- 5) CLASS "DS" CONCRETE FOR BRIDGE DECK SHALL BE IN ACCORDANCE WITH SECTION 604 OF THE STANDARD SPECIFICATIONS.
- 6) REINFORCING STEEL: TO BE ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE. SEE SECTION 604 AND 907 OF THE STANDARD SPECIFICATIONS. (EPOXY COAT ALL SLAB STEEL).
- 7) SUPERSTRUCTURE: TO CONSIST OF 1 SPAN BT-63 BEAMS WITH COMPOSITE DECK SLAB.
- 8) BRIDGE DECK SURFACE FINISH: TO BE IN ACCORDANCE WITH METHOD (3) IN ARTICLE 604 OF THE STANDARD SPECIFICATIONS.

ROADWAY WIDTH = 42'-0"
 STD-1-1SS PARAPET
 DESIGN SPEED: 50 MPH

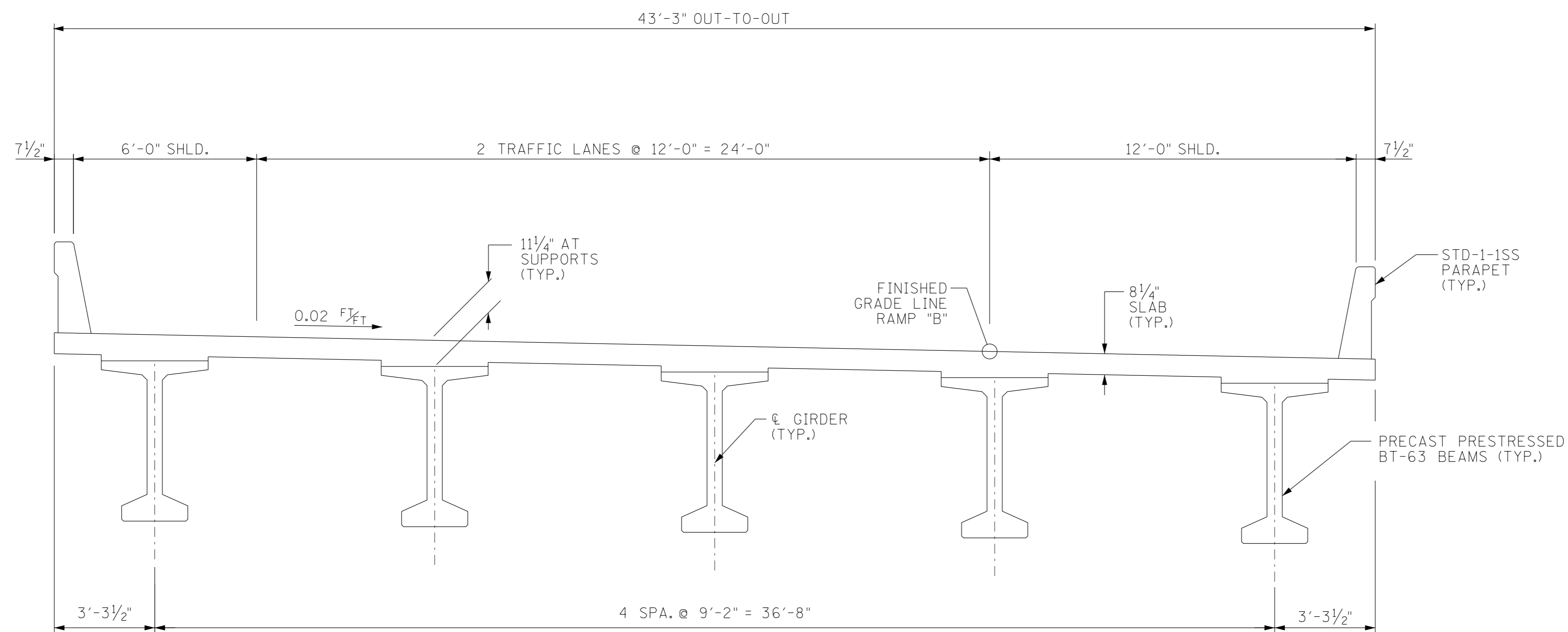
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 PRELIMINARY LAYOUT
 OF BRIDGE NO. 2
 RAMP "B" OVER
 RELOCATED STR-2
 AENON BRANCH
 FED. ID. NO. 94100650055
 STA. 604+74.22
 WILLIAMSON COUNTY
 2020

27-APR-2020 2:51 P:\Projects\029700 Buckner Road Interchange\Functionals\Bridge\Ramp B\RampBPrElim.dgn

DESIGNED BY VOLKERT DATE 11/2019
 DRAWN BY B. ANDERSON DATE 11/2019
 SUPERVISED BY J. ALLEN DATE 11/2019
 CHECKED BY J. ALLEN DATE 11/2019



PROJECT NO.	YEAR	SHEET NO.	
NH-I-65-2(113)	2020		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



TYPICAL SECTION
(LOOKING FORWARD)

27-APR-2020 2:51 Projects\029700 Buckner Road Interchange\Functionals\Bridge\Buckner Road Interchange\Structure-Ramp\BPr\film

DESIGNED BY VOLKERT DATE 11/2019
 DRAWN BY B. ANDERSON DATE 11/2019
 SUPERVISED BY J. ALLEN DATE 11/2019
 CHECKED BY J. ALLEN DATE 11/2019



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 PRELIMINARY
 SUPERSTRUCTURE
 RAMP "B" OVER
 RELOCATED STR-2
 AENON BRANCH
 FED. ID. NO. 94I00650055
 STA. 604+74.22
 WILLIAMSON COUNTY
 2020