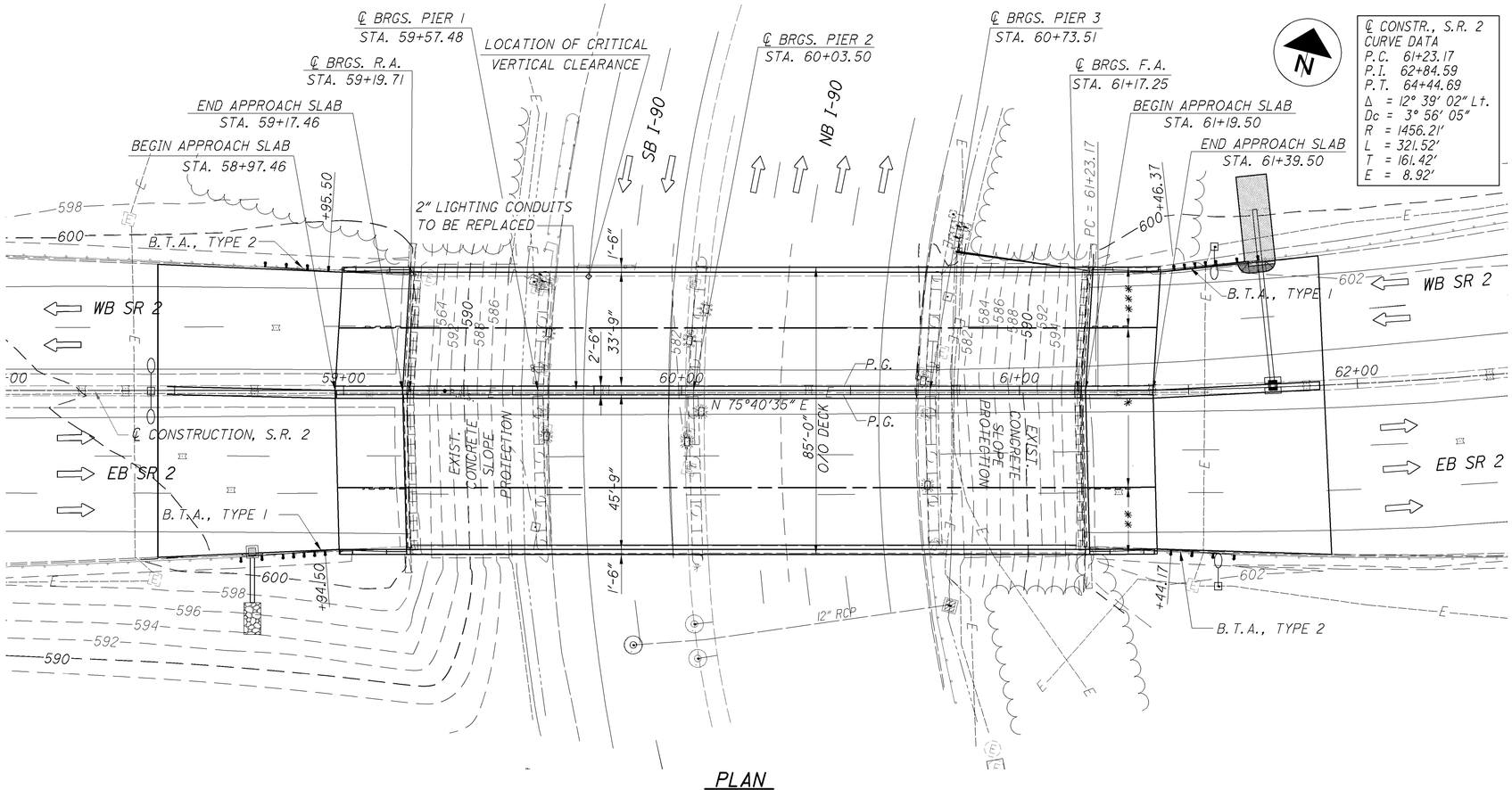
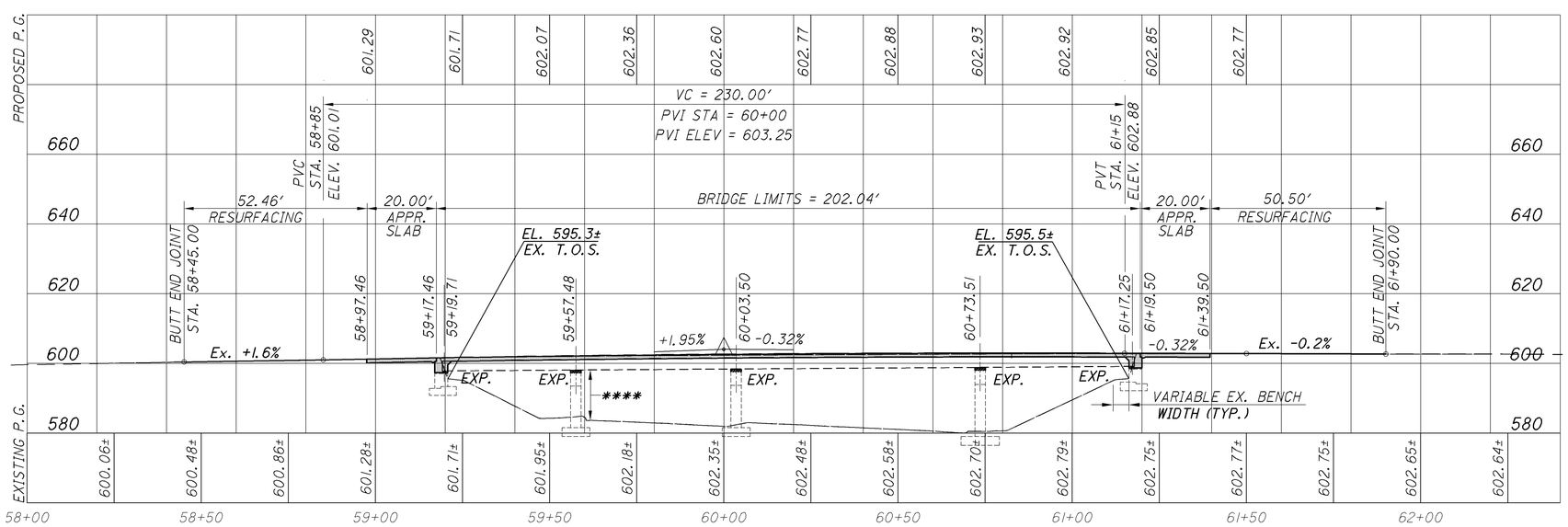


℄ CONSTR., S.R. 2
CURVE DATA
P.C. 61+23.17
P.I. 62+84.59
P.T. 64+44.69
Δ = 12° 39' 02" Lt.
Dc = 3° 56' 05"
R = 1456.21'
L = 321.52'
T = 161.42'
E = 8.92'

PLAN



PROFILE ALONG ℄ CONSTRUCTION, S.R. 2

LEGEND

- * PHASE 1 CONSTRUCTION
- ** PHASE 2 CONSTRUCTION
- *** PHASE 3 CONSTRUCTION
- **** 15.0' ACTUAL CRITICAL VERTICAL CLEARANCE
  16'-6" REQUIRED MINIMUM VERTICAL CLEARANCE
- APPROXIMATE LOCATION OF TEMP. SHORING
- PAVEMENT MARKER

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

BENCHMARKS

BM #1 STA. 58+04.78,	ELEV. 602.87,	OFFSET 281.15',	RT.
BM #2 STA. 58+33.38,	ELEV. 602.87,	OFFSET 54.94',	RT.
BM #3 STA. 61+31.52,	ELEV. 604.14,	OFFSET 52.58',	RT.

DESIGN TRAFFIC

	IR 90	SR 2
CURRENT ADT (2010) :	96,670	37,130
DESIGN ADT (2030) :	101,880	42,500
DIRECTIONAL DISTRIBUTION :	53%	63%
TRUCKS (24 HOURS B&C) :	10%	1%

EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL BEAMS WITH NON-COMPOSITE REINFORCED CONCRETE DECK AND REINFORCED CONCRETE SUBSTRUCTURE
SPANS: 38'± - 46'± - 70'± - 44'± C/C BRGS.
ROADWAY: 78'-0"± F/F 2'-0" SAFETY CURBS (INCLUDING 10'-0" MEDIAN)
LOADING FREQUENCY: CF=2000(51)
SKEW: 3°35' LF (WB) AND 1°29' RF (EB)
APPROACH SLABS: AS-1-54 (20' LONG)
WEARING SURFACE: CONCRETE
ALIGNMENT: TANGENT
SUPERELEVATION: ON TRANSITION
STRUCTURAL FILE NUMBER: 1808222
DATE BUILT: 1956

PROPOSED STRUCTURE

TYPE: CONTINUOUS STEEL BEAMS WITH NON-COMPOSITE REINFORCED CONCRETE DECK AND REINFORCED CONCRETE SUBSTRUCTURE
SPANS: 38'± - 46'± - 70'± - 44'± C/C BRGS.
ROADWAY: 82'-0" TOE/TOE PARAPET
LOADING: HS20 CASE I AND ALTERNATE MILITARY
FWS = 60 PSF
SKEW: 3°35' LF (WB) AND 1°29' RF (EB)
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLABS: 20'-0" LONG (AS-1-81)
ALIGNMENT: TANGENT
SUPERELEVATION: ON TRANSITION
COORDINATES: LATITUDE N 41°31'01" LONGITUDE W 81°40'32"

PROPOSED WORK

1. REPLACE THE EXISTING 84'-10" O/O DECK WITH A NEW 85'-0" O/O NON-COMPOSITE DECK.
2. REPLACE THE EXISTING PARAPETS WITH 42" STRAIGHT FACE PARAPETS. PRE-INSTALL HIGHWAY LIGHTING ELECTRICITY CONDUITS, IF NECESSARY.
3. REPLACE THE EXISTING MEDIAN BARRIER WITH 42" NEW JERSEY SHAPE CONCRETE BARRIERS. PRE-INSTALL HIGHWAY LIGHTING ELECTRICITY CONDUITS, IF NECESSARY.
4. MAINTAIN A MINIMUM OF ONE-LANE ONE-WAY TRAFFIC IN EACH DIRECTION ON EACH SIDE OF THE DECK DURING CONSTRUCTION.
5. CONVERT THE EXISTING STUB ABUTMENTS INTO SEMI-INTEGRAL ABUTMENTS.
6. REPLACE PORTIONS OF WINGWALLS ABOVE THE CONSTRUCTION JOINTS WITH THE BEAM SEATS.
7. RETROFIT EXISTING BEAM COVER PLATES FOR FATIGUE.
8. REPLACE EXISTING STEEL ROCKER AND BOLSTER BEARINGS WITH ELASTOMERIC BEARINGS.
9. REPLACE APPROXIMATELY 20' OF ROADWAY MEDIAN BARRIER BEYOND APPROACH SLABS AT BOTH ENDS OF BRIDGE.
10. RESURFACE APPROXIMATELY 50.50' OF PAVEMENT ON BOTH ENDS OF THE BRIDGE.

DESIGN AGENCY
COLUMBUS ENGINEERING CONSULTANTS, INC.
840 MICHIGAN AVENUE, COLUMBUS, OH 43215
TEL:(614)228-3500

DATE	REVIEWED	STRUCTURE FILE NUMBER
08/09	JJ	1808222

DRAWN	REVISED
DO	

DESIGNED	CHECKED
SS	YSJ

STA. 59+17.46 TO STA. 61+19.50

SITE PLAN
BRIDGE NO. CUY-90-1820
S.R. 2 OVER IR-90

CUY-90-18.20
PID No. 82167