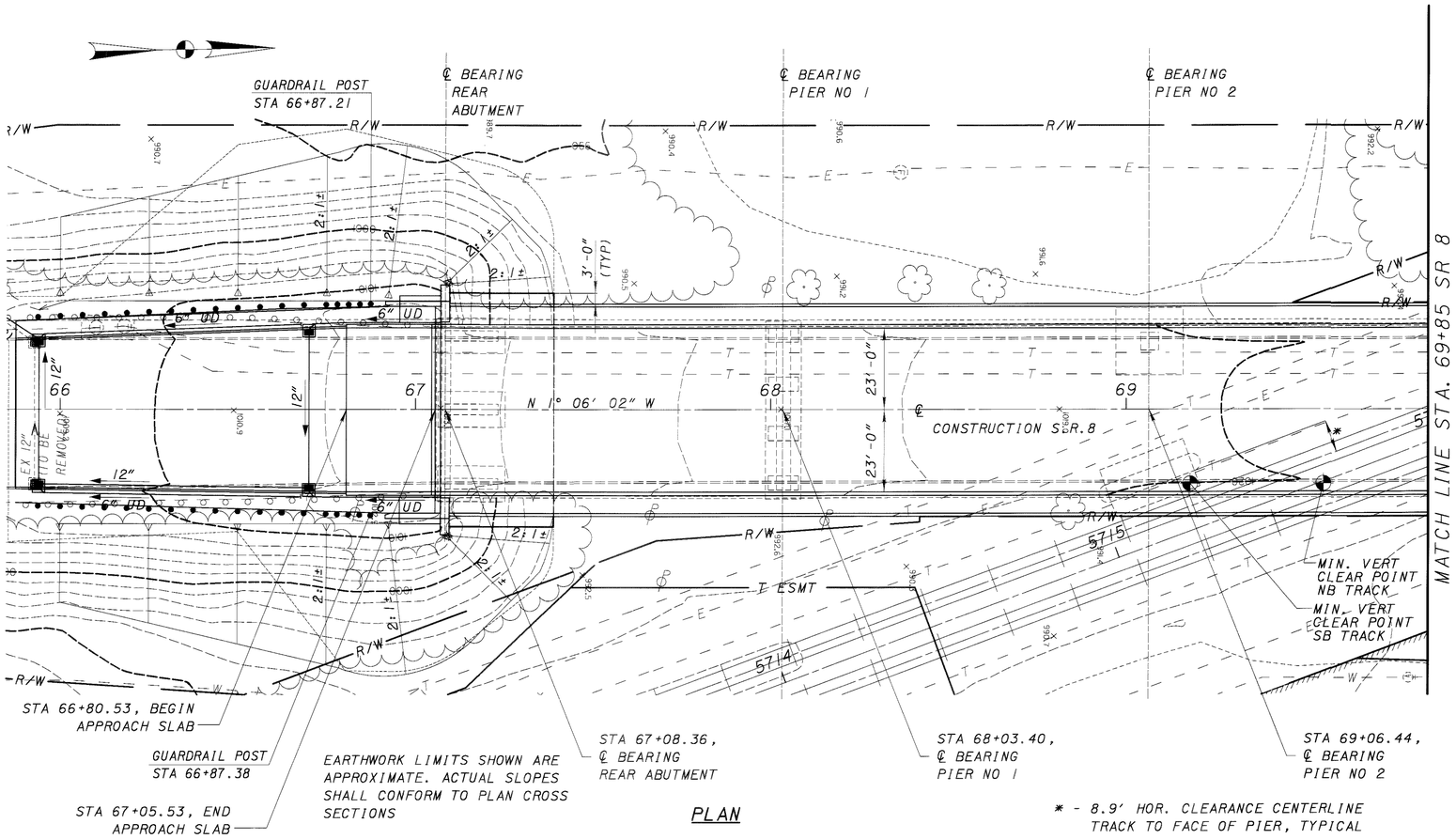
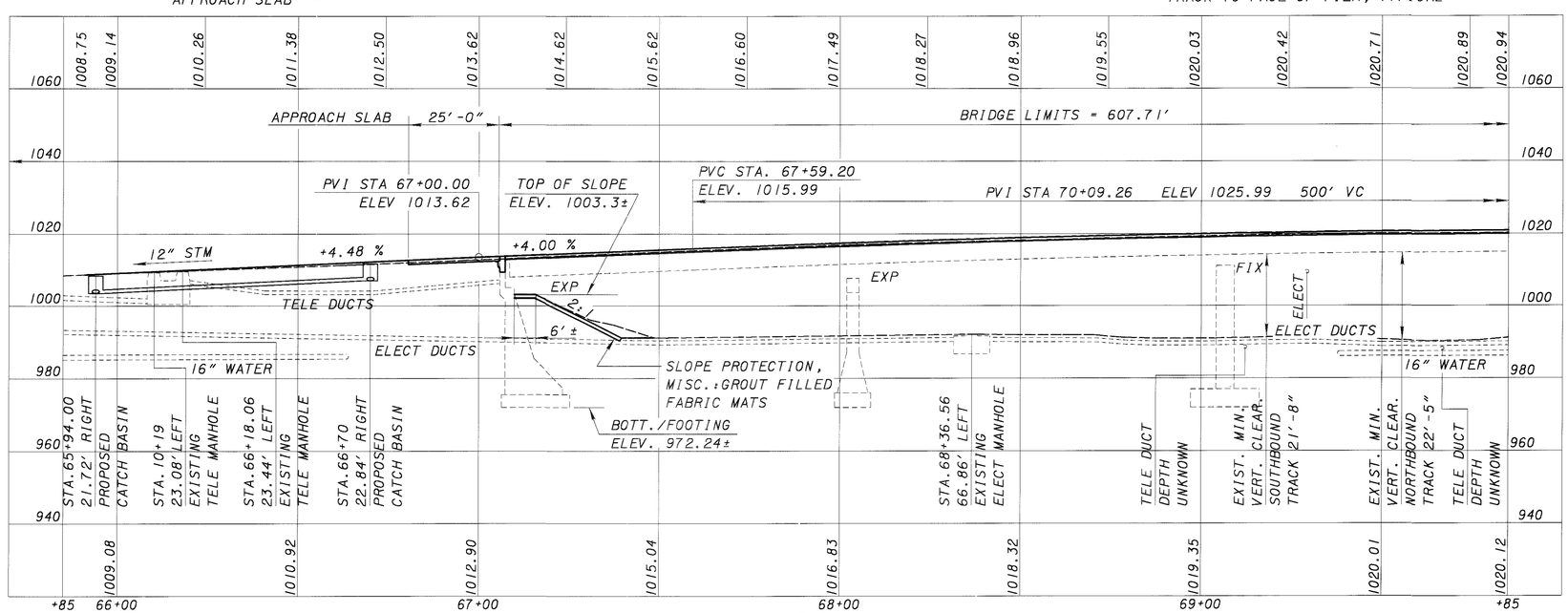


PLAN

* - 8.9' HOR. CLEARANCE CENTERLINE
TRACK TO FACE OF PIER, TYPICAL



ELEVATION

BENCHMARK

OM #1093 ON WEST SIDE OF NORTHFIELD ROAD,
200' ± NORTH OF KRICK ROAD
STA 60+14.20, 18.93' LT.
ELEV. = 997.30

TRAFFIC DATA

AVERAGE DAILY TRAFFIC (2003) = 11400
AVERAGE DAILY TRUCK TRAFFIC (2003) = 912
AVERAGE DESIGN YEAR (2023) = 15200

EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL PLATE GIRDERS WITH CONCRETE DECK AND SUBSTRUCTURE.

SPANS: 95'-0½"±, 103'-0½"±, 102'-9⅞"±, 103'-3"± 102'-11¼"±, 94'-11½"± c/c BEARINGS (FROM SURVEY)

SIDEWALK: 3'-4⅜" LEFT AND 3'-4⅜" RIGHT (FACE OF CURB TO FACE OF PARAPET)

ROADWAY: 39'-11¼" (FACE TO FACE OF SIDEWALKS)

WEARING SURFACE: 1¼" (MIN.) LATEX MODIFIED CONCRETE OVERLAY

LOADING: H-20-33

DATE BUILT: 1936

ALIGNMENT: TANGENT

SUPERELEVATION: NONE (NORMAL CROWN)

SKEW: NONE

APPROACH SLABS: AS-1-81 (25'-0" LONG)

LONGITUDE: 81° 31' 37"

LATITUDE: 41° 22' 06"

PROPOSED STRUCTURE

TYPE: CONTINUOUS STEEL PLATE GIRDERS WITH NEW REINFORCED CONCRETE DECK, EXISTING PIERS AND ABUTMENTS MODIFIED FOR ADDITIONAL BRIDGE WIDTH

SPANS: 95'-0½"±, 103'-0½"±, 102'-9⅞"±, 103'-3"± 102'-11¼"±, 94'-11½"± c/c BEARINGS (FROM SURVEY)

SIDEWALK: 5'-0" LEFT AND 5'-0" RIGHT (BACK OF BARRIER TO FACE OF 3" CURB AT EDGE OF DECK)

ROADWAY: 46'-0"* (TOE TO TOE OF BARRIERS)

WEARING SURFACE: MONOLITHIC CONCRETE

LOADING: H-20-33 (HS-20-44 NEW DECK), CASE II

ALIGNMENT: TANGENT

SUPERELEVATION: NONE (NORMAL CROWN)

SKEW: NONE

APPROACH SLABS: AS-1-81 (25'-0" LONG)

LONGITUDE: 81° 31' 37"

LATITUDE: 41° 22' 06"

*THE MINIMUM REQUIRED BRIDGE ROADWAY WIDTH IS 50'-0" PER THE O.D.O.T. LOCATION AND DESIGN MANUAL. A DESIGN EXCEPTION HAS BEEN APPROVED FOR A 46'-0" BRIDGE ROADWAY WIDTH DUE TO LOADING LIMITATIONS.

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adache ciuni lynn associates inc.
5585 transportation boulevard, cleveland, ohio 44125

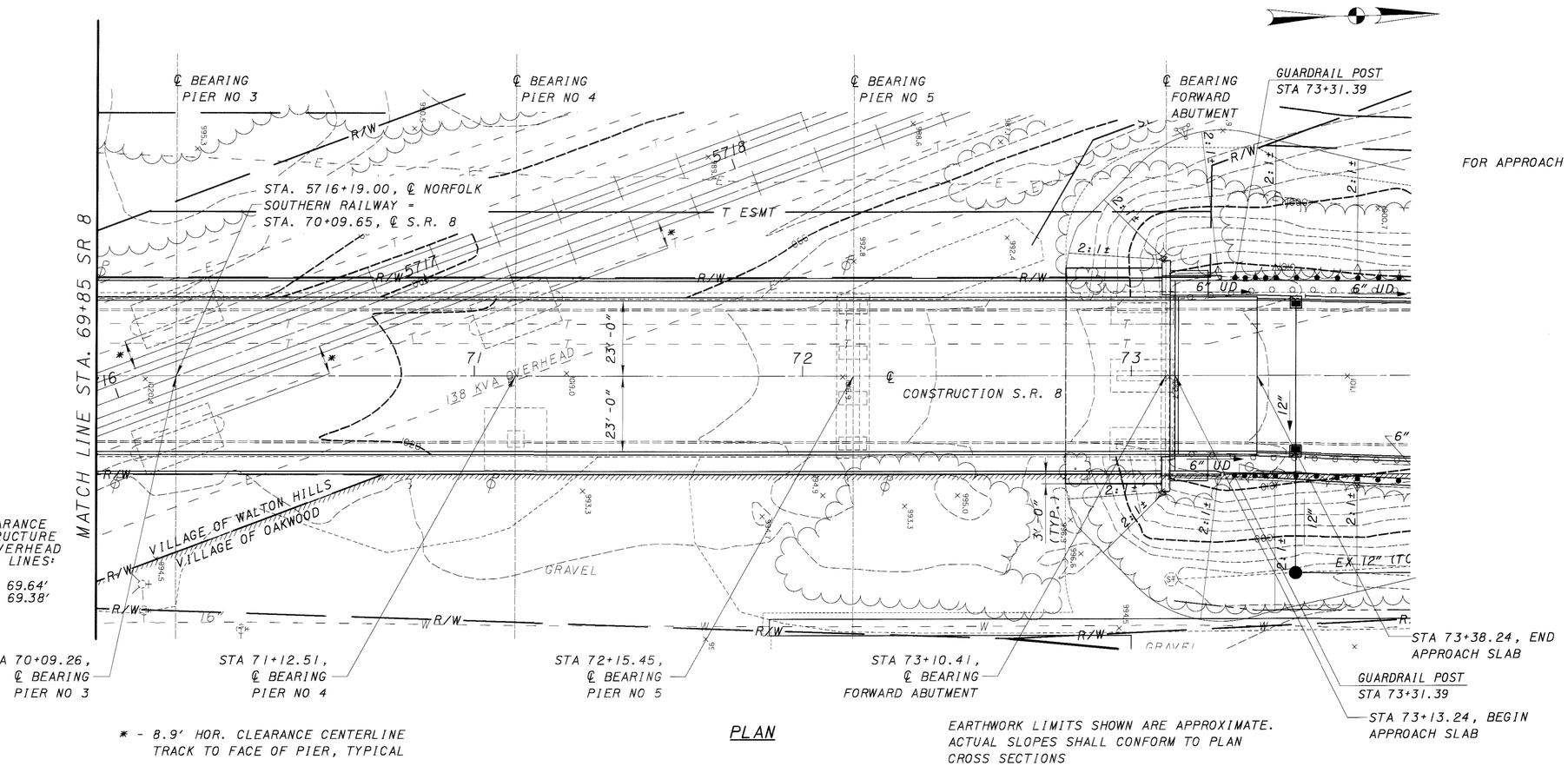
DATE	REVIEWED	STRUCTURE FILE NUMBER
3/02	EAF	1801201

DRAWN	REVISED
RDW	

DESIGNED	CHECKED
TES	TJW

SITE PLAN
BRIDGE NO. CUY-08-0127
OVER NORFOLK - SOUTHERN RAILWAY

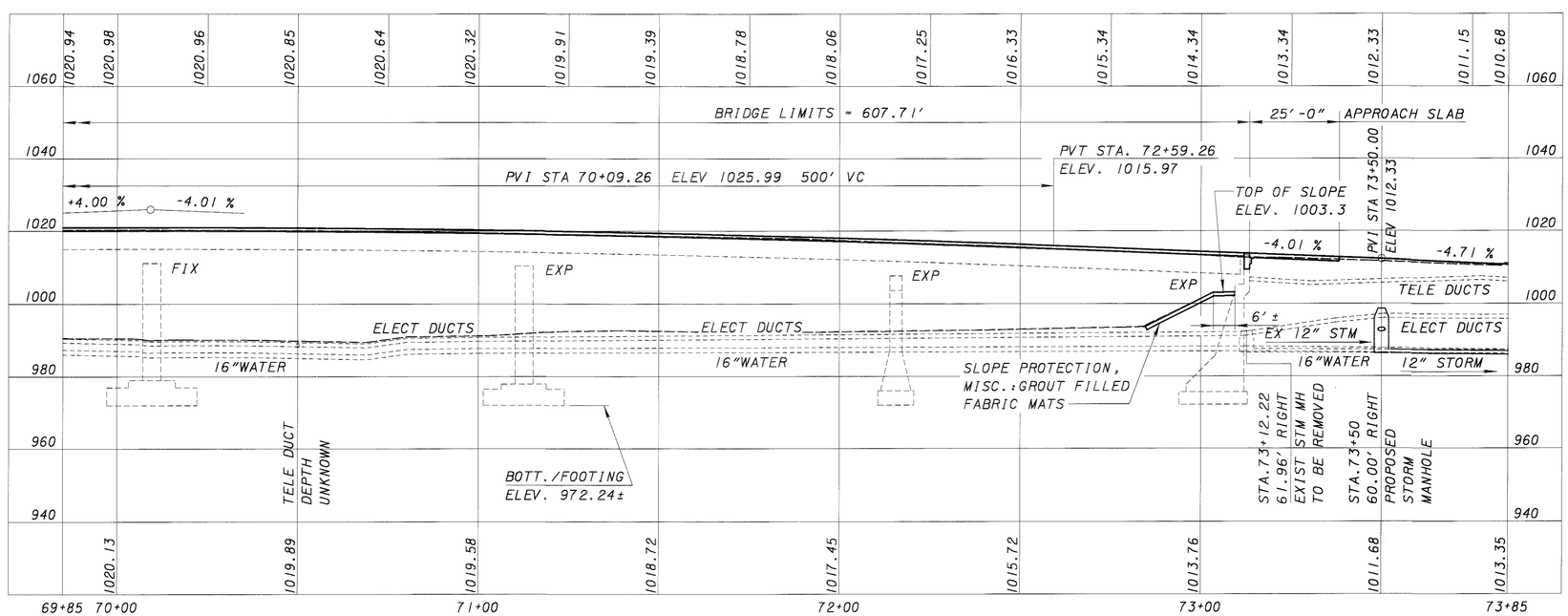
CUY-8-1.27



* - 8.9' HOR. CLEARANCE CENTERLINE TRACK TO FACE OF PIER, TYPICAL

PLAN

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



ELEVATION

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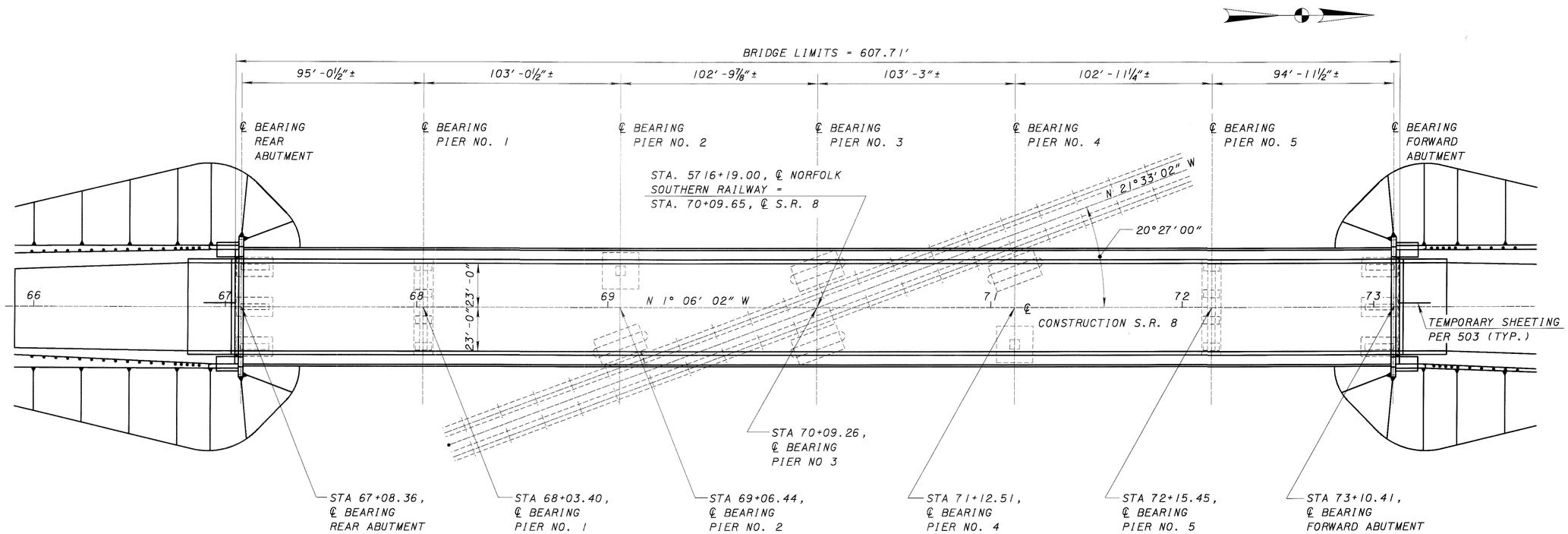
DESIGNED	DRAWN	REVIEWED	DATE
TES	RDW	EAF	3/02
CHECKED	REVISED	STRUCTURE FILE NUMBER	
TJW		1801201	

SITE PLAN
BRIDGE NO. CUY-08-0127
OVER NORFOLK - SOUTHERN RAILWAY

CUY-8-1.27



GENERAL PLAN

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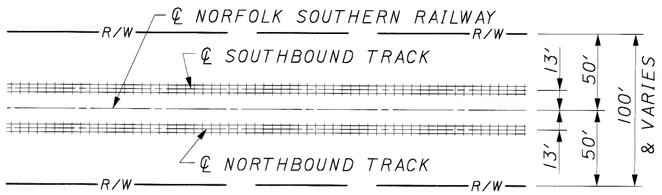
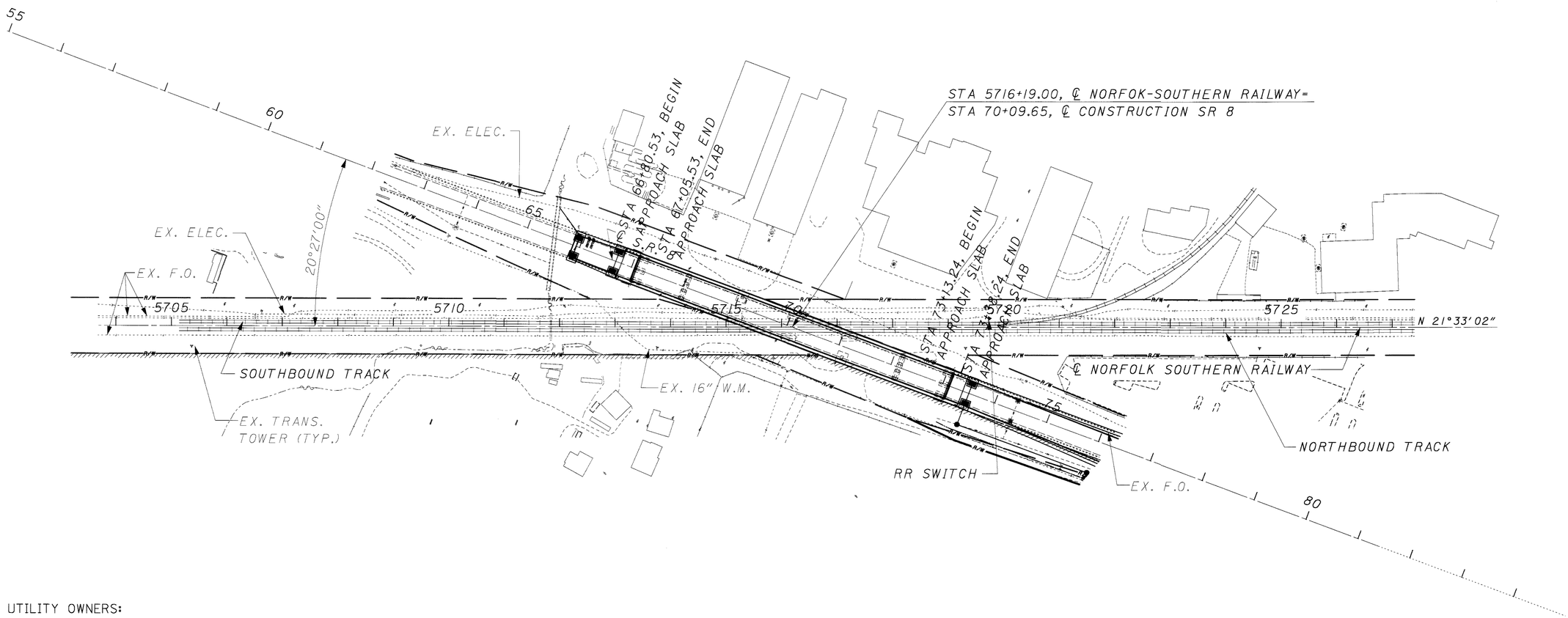
TJW		1801201	

GENERAL PLAN
BRIDGE NO. CUY-08-0127
OVER NORFOLK - SOUTHERN RAILWAY

CUY-8-1.27



LEGEND :
EX. - EXISTING
ELEC. - ELECTRIC
F.O. - FIBER OPTICS
TEL. - TELEPHONE
TRANS. - TRANSMISSION
W.M. - WATER MAIN



UTILITY OWNERS:

EAST OHIO GAS CO.
1201 EAST 55TH STREET
CLEVELAND, OH 44103
ATTN: SAM MERCURIO
(216) 736-6755

AMERITECH
13630 LORAIN AVE.-4th FLOOR
CLEVELAND, OH 44111
ATTN: DICK TAUS
(216) 476-6134

MCI- WORLDCOM
120 RAVINE STREET
AKRON, OH 44303
ATTN: AL GUEST
(330) 253-8267

CITY OF CLEVELAND DIVISION OF WATER
1201 LAKESIDE AVE.
CLEVELAND, OH 44114
ATTN: GUY SINGER
(216) 664-2444, EXT. 5555

QUEST
4650 LAKEHURST COURT
DUBLIN, OH 43017
ATTN: DANIEL N. NIESE
(614) 798-6000, EXT. 6277

THE ILLUMINATING CO.
6896 MILLER ROAD
BRECKSVILLE, OH 44141
ATTN: FRANK DIBBS
(440) 546-8748

AT&T
229 WEST 7th STREET-10th FLOOR
CINCINNATI, OH 45202
ATTN: JEFF BALLINGER
(513) 784-3238

NORFOLK SOUTHERN RAILWAY
TRAFFIC DATA :
NUMBER OF TRACKS - 2
NUMBER OF TRAINS - 65 PER DAY
SPEED - 50 M.P.H. (FREIGHT)
SPEED - 79 M.P.H. (PASSENGER)

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SUPPLEMENTAL SITE PLAN
BRIDGE NO. CUY-8-0127
OVER NORFOLK - SOUTHERN RAILWAY

CUY-8-1.27

ESTIMATED QUANTITIES

ITEM	ITEM EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL	SHEET 22
202	11201	LUMP		PORTIONS OF STRUCTURE REMOVED, AS PER PLAN				LUMP	5,8,9
202	98000	LUMP		REMOVAL, MISC.: PNEUMATICALLY PLACED MORTAR			LUMP		5,14
503	11100	LUMP		COFFERDAMS, CRIBS AND SHEETING	LUMP				3,9
503	21301	LUMP		UNCLASSIFIED EXCAVATION, AS PER PLAN	LUMP				6
512	33000	50	SQ. YD.	TYPE 2 WATERPROOFING	50				
516	11211	120	LIN. FT.	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN			120		20,21
516	13600	86	SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER	86				
518	21200	79	CU. YD.	POROUS BACKFILL WITH FILTER FABRIC	79				
518	40001	135	LIN. FT.	6" PERFORATED CORRUGATED PLASTIC PIPE, AS PER PLAN	135				11
518	40010	52	LIN. FT.	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	52				
519	11101	260	SQ. FT.	PATCHING CONCRETE STRUCTURES, AS PER PLAN *	45	215			6
SPECIAL	530E00300	500	LBS.	STRUCTURE, MISC.: REPLACEMENT OF EXISTING REINFORCING STEEL	500				6,9
601	21100	434	SQ.YD.	SLOPE PROTECTION, MISC.:GROUT FILLED FABRIC MATS	434				1,2,6
604	36601	4	EACH	PRECAST REINFORCED CONCRETE OUTLET, AS PER PLAN	4				6
SPECIAL	607E39910	1208	LIN. FT.	VANDAL PROTECTION FENCE, 8' STRAIGHT, COATED FABRIC			1208		
SPECIAL	607E40000	62	LIN. FT.	VANDAL PROTECTION FENCE, 5' STRAIGHT, COATED FABRIC	62				
815	00100	LUMP		SURFACE PREPARATION OF EXISTING STEEL, SYSTEM OZEU			LUMP		
815	00200	LUMP		FIELD PAINTING OF EXISTING STEEL, PRIME COAT, SYSTEM OZEU			LUMP		
815	00300	LUMP		FIELD PAINTING OF EXISTING STEEL, INTERMEDIATE COAT, SYSTEM OZEU			LUMP		
815	00400	LUMP		FIELD PAINTING OF EXISTING STEEL, FINISH COAT, SYSTEM OZEU			LUMP		
815	00504	120	MAN HOUR	GRINDING FINS, TEARS, SLIVERS			120		
843	50000	50	SQ. FT.	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR *	10	40			
844	48001	1512	CU. YD.	HIGH PERFORMANCE CONCRETE SUPERSTRUCTURE (DECK), AS PER PLAN			1512		6
844	48021	99	CU. YD.	HIGH PERFORMANCE CONCRETE SUPERSTRUCTURE (PARAPETS), AS PER PLAN			99	LUMP	6
844	48041	107	CU. YD.	HIGH PERFORMANCE CONCRETE SUBSTRUCTURE, AS PER PLAN	107			LUMP	6
863	10201	215	LBS.	STRUCTURAL STEEL MEMBERS, MISCELLANEOUS LEVEL FABRICATION, AS PER PLAN, FLOOR BEAM REPAIR			215		15
863	20000	1760	EACH	WELDED STUD SHEAR CONNECTORS			1760		
863	95030	250	EACH	STRUCTURAL STEEL, MISC.:RIVET AND BOLT REPLACEMENT *			250		6A
864	10050	671	SQ. YD.	SEALING OF CONCRETE SURFACES (NON-EPOXY)			671		
864	10100	3463	SQ. YD.	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	281	836	2346		

* AS DIRECTED BY THE ENGINEER

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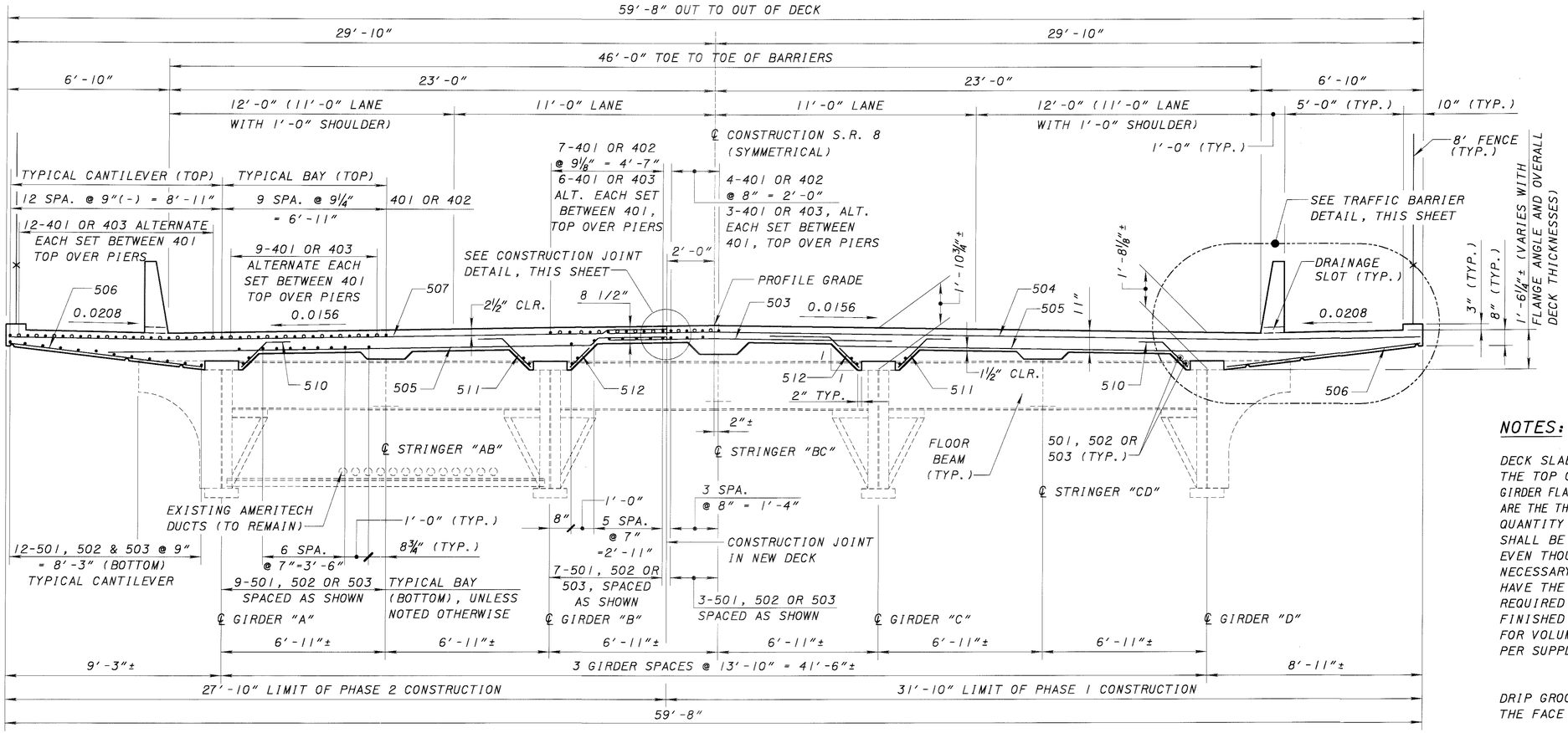
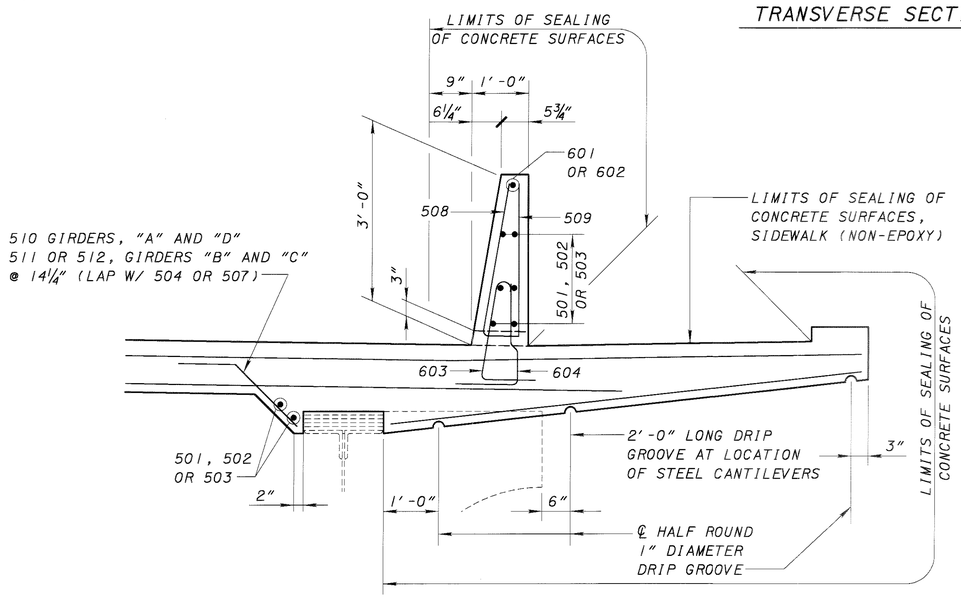
ESTIMATED QUANTITIES
BRIDGE NO. CUY-08-0127
OVER NORFOLK - SOUTHERN RAILWAY

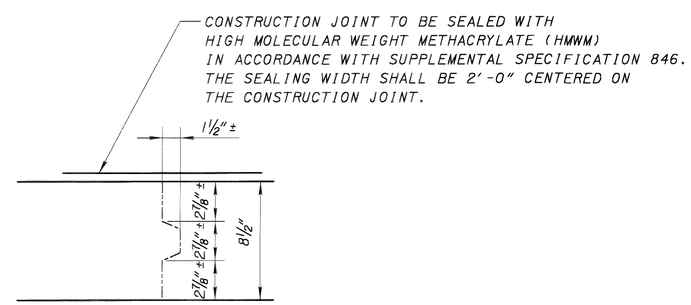
CUY-8-1.27



TRANSVERSE SECTION



TRAFFIC BARRIER AND DRIP GROOVE DETAIL



CONSTRUCTION JOINT DETAIL

NOTES:

DECK SLAB DEPTH: THE DISTANCES SHOWN FROM THE TOP OF DECK SLAB TO THE TOP OF THE GIRDER FLANGE ANGLES AND TOP OF STRINGER FLANGES ARE THE THEORETICAL DESIGN DIMENSIONS. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED UPON THESE DIMENSIONS, EVEN THOUGH DEVIATION FROM THESE MAY BE NECESSARY BECAUSE THE TOP FLANGES MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE. DEDUCTIONS SHALL BE MADE FOR VOLUME OF ENCASED STEEL PLATES AS PER SUPPLEMENTAL SPECIFICATION 842.18.

DRIP GROOVES SHALL TERMINATE 2'-0" FROM THE FACE OF ABUTMENT.

FOR STRUCTURAL GENERAL NOTES, SEE SHEETS 5/22 AND 6/22

FOR FRAMING PLAN AND LOCATIONS OF WELDED STUD SHEAR CONNECTORS TO BE INSTALLED ON GIRDERS IN SPANS 1 AND 6, SEE SHEET 14/22

FOR SLAB PLAN, SEE SHEET 17/22

FOR DECK SCREED ELEVATIONS, SEE SHEETS 18/22 AND 19/22

ALL REINFORCING BAR MARKS IN THE SUPERSTRUCTURE SHALL BE PREFIXED WITH THE LETTER "S".

FOR REINFORCING STEEL LIST AND BAR BENDING DIAGRAMS, SEE SHEET 22/22

MINIMUM BAR LAP SPLICES
NO. 4 BAR = 23"
NO. 5 BAR = 29"
NO. 6 BAR = 35"

FOR PHASE CONSTRUCTION DETAILS, SEE SHEET 10/22

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