

Bench Mark: M-234 B.M. Elev. 464.95 brass disk in the S.W. corner of existing 090-0048.

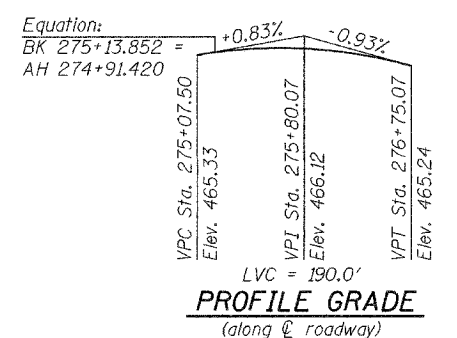
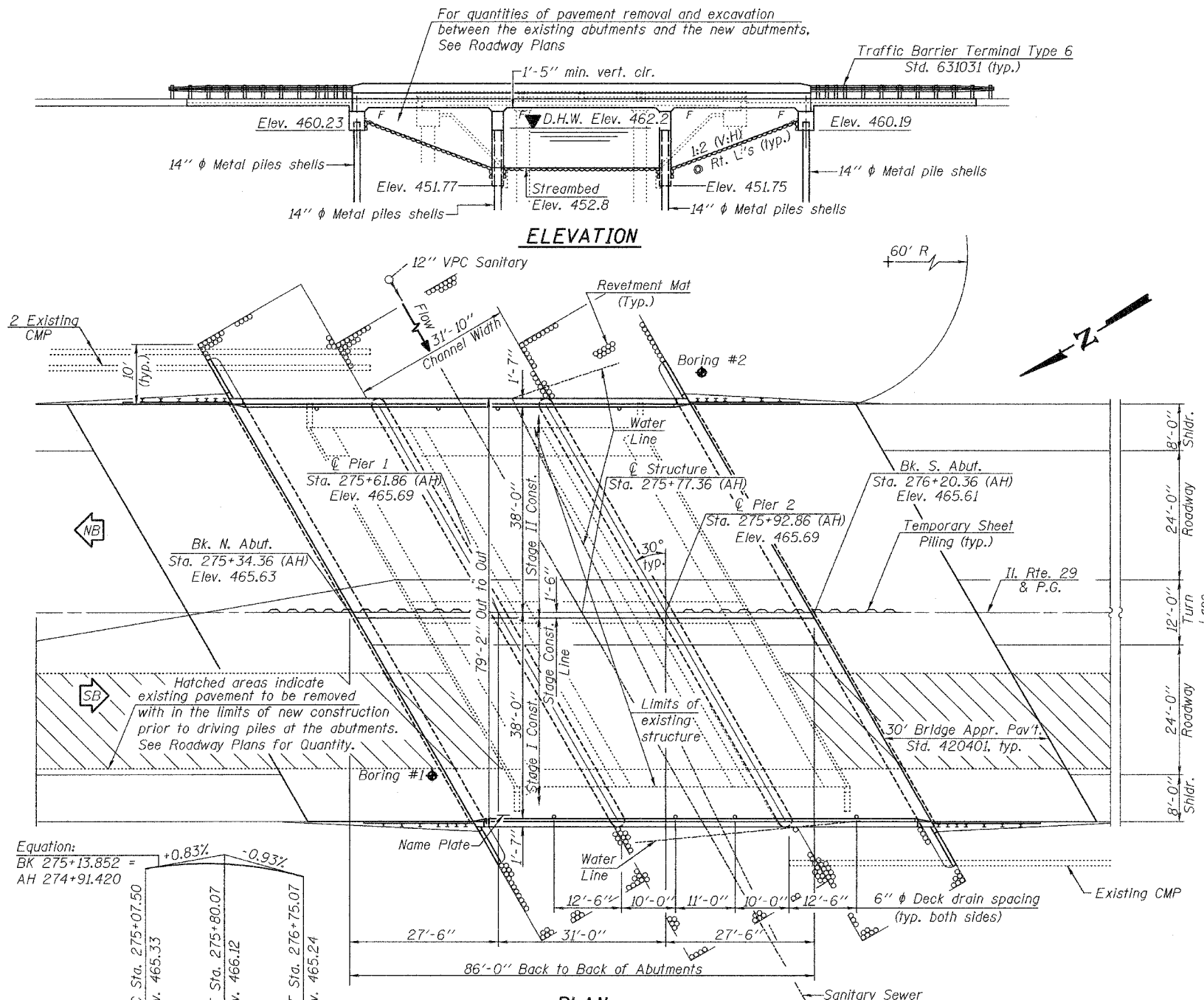
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

Existing Structure: S.N. 090-0048 Built in 1958 as S.B.I. Rte. 24, Section 11BR-1 at Station 275+77.36 as a 3-span continuous RC slab bridge 61'-0" Bk.- to Bk. of abutments with two 24 ft. roadways and a 4 ft. median. Open pile abutments and piers, supported on concrete piles. Existing structure to be removed & replaced. Traffic to be maintained using stage construction.

No salvage

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
F.A.P. 669	11BR-2	TAZEWELL	442	256
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

Contract #88804



DESIGNED: *Plt E. Loggins*  
 CHECKED: *A. B. ...*  
 DRAWN: *Amber M. Seiber*  
 CHECKED: *PEC/JEA*

EXAMINED: *Thomas J. ...*  
 PASSED: *Robert E. ...*

Mar 5 2006



EXPIRES 11-30-2006

WATERWAY INFORMATION

Drainage Area = 2.5 mi<sup>2</sup> Low Grade Elev. 461.4 (E&P) @ Sta. 281+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Overtop (E)	10	1032	119	208	458.4	1.8	0.0	460.2	458.4	
Overtop (P)	30	1400	159	372	460.1	1.3	0.0	461.4	461.4	
Design	40	1600	251	421	462.2	0.5	0.0	462.7	462.2	
Base	50	1795	298	533	464.7	0.2	0.1	464.9	464.8	
Max. Calc.	100	2119	298	533	465.2	0.3	0.1	465.5	465.3	

INDEX OF SHEETS

1. General Plan and Elevation
2. Stage Construction Details & Temporary Steep Piling Layout
3. Temporary Concrete Barrier
- 4-5. Top of Slab Elevations
- 6-7. Superstructure
- 8-9. Abutments
10. Piers
11. Bar Splicers
12. Pile Base Sheet
- 13-14. Soil Borings

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M31, or M322 Grade 60. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer. The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework in addition to allowance for dead load deflection. The backfill behind the abutments shall be placed after the deck slab is in place and the forms removed. The Contractor is advised that the existing concrete superstructure is a continuous structure and removal must be done in a proper sequence, possibly with false work support. All construction joints shall be bonded. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project. The cost of removing the existing slopewall and revetment mat is included in the cost of "Removal of Existing Structures". The Contractor shall drive (2) Metal Shell Test Piles at permanent locations, one at Pier #1 and one at South Abutment as directed by the Engineer before ordering the remainder of piles.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		225.8	225.8
Concrete Superstructure	Cu. Yd.	316.3		316.3
Reinforcement Bars, Epoxy Coated	Pound	87070	20850	107920
Protective Coat	Sq. Yd.	788		788
Structure Excavation	Cu. Yd.		331	331
Floor Drains	Each	8		8
Bridge Deck Grooving	Sq. Yd.	698		698
Furnishing Metal Piles Shells 14" φ	Foot		3353	3353
Driving and Filling Shells	Foot		3353	3353
Temporary Sheet Piling	Sq. Ft.		1057	1057
Fabric Formed Concrete Revetment Mat	Sq. Yd.		1092	1092
Name Plates	Each	1		1
Bar Splicers	Each	215	76	291
Underwater Structure Excavation Protection, Location 1	Each		1	1
Underwater Structure Excavation Protection, Location 2	Each		1	1
Porous Granular Embankment (Special)	Cu. Yd.		161.2	161.2
Test Pile Metal Shell	Each		2	2
Pipe Underdrains for Structures 4"	Foot		252	252
Geocomposite Wall Drain	Sq. yd.		66.8	66.8

STATION 275+77.36  
 BUILT 200 BY  
 STATE OF ILLINOIS  
 F.A.P. RT. 669 SEC. 11BR-2  
 LOADING HS20-44  
 STR. NO. 090-0174

NAME PLATE

See Std. 515001

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

1996 AASHTO with 1997 thru 2002 Interims

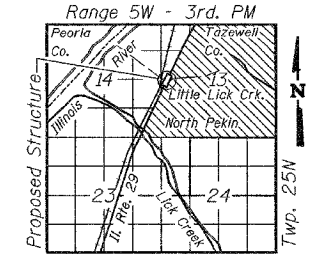
DESIGN STRESSES

FIELD UNITS

f<sub>c</sub> = 3,500 psi  
 f<sub>y</sub> = 60,000 psi (reinforcement)

SEISMIC DATA

Seismic Performance Category (SPC) = A  
 Bedrock Acceleration Coefficient (A) = 4.25/g  
 Site Coefficient (S) = 1.0



LOCATION SKETCH

GENERAL PLAN

ILLINOIS ROUTE 29 OVER  
 LITTLE LICK CREEK  
 F.A.P. ROUTE 669-SEC. 11BR-2  
 TAZEWELL COUNTY  
 STATION 275+77.36  
 STRUCTURE NO. 090-0174