

BENCHMARK: BM#H-216 - Top of wingwall 21' Lt., Sta. 385+45, Elev. 418.34.

EXISTING STRUCTURE: SN 041-0092 was originally built in 1922 as SBI Route 37 Section 2-B as a single span RC slab on closed abutments. In 1952 it was reconstructed by widening the existing structure in kind. The bridge is 20'-9 1/2" bk.-bk. abuts. and 40'-4" o.-o. Structure is to be removed and replaced using stage construction to maintain one lane of traffic at all times.

Salvage: None

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
 Reinforcement bars designated (E) shall be epoxy coated.
 Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
 Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.
 Precast alternate is not allowed.

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TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal and Disposal of Unsuitable Material	Cu. Yd.	134
Stone Riprap, Class A5	Sq. Yd.	78
Filter Fabric	Sq. Yd.	78
Removal of Existing Structures	Each	1
Reinforcement Bars, Epoxy Coated	Pound	26,360
Bar Splicers	Each	97
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	88.1
Temporary Sheet Piling	Sq. Ft.	473
Steel Railing, Type 2399	Foot	53
Rockfill-Foundation	Ton	179
Protective Coat	Sq. Yd.	13

DESIGN SPECIFICATIONS

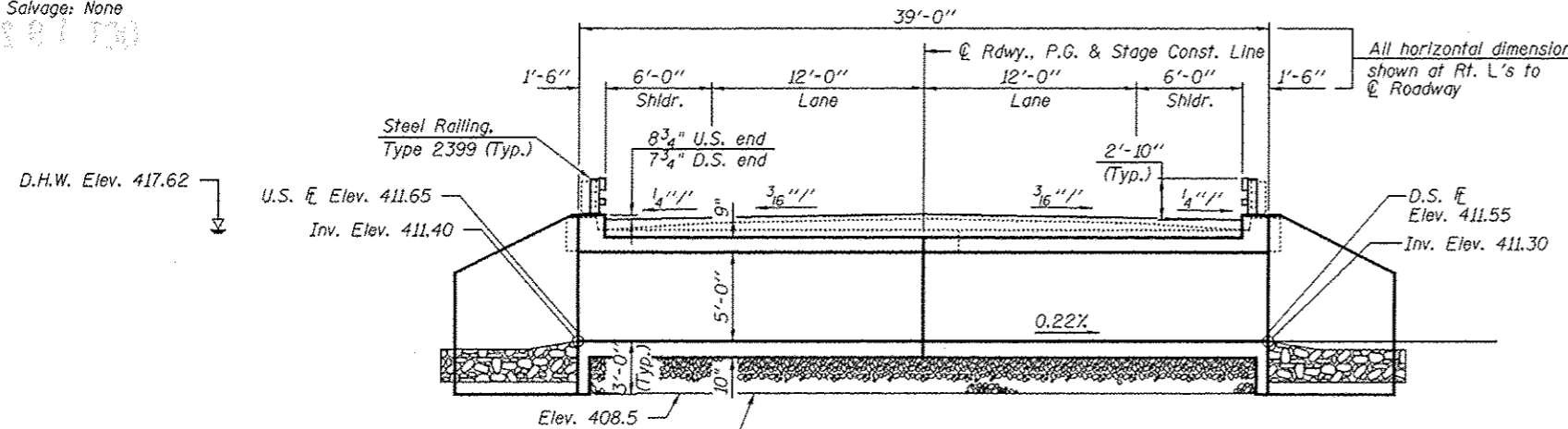
2002 AASHTO Standard Specifications for Highway Bridges

LOADING HS-20-44

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

DESIGN STRESSES

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinf.)



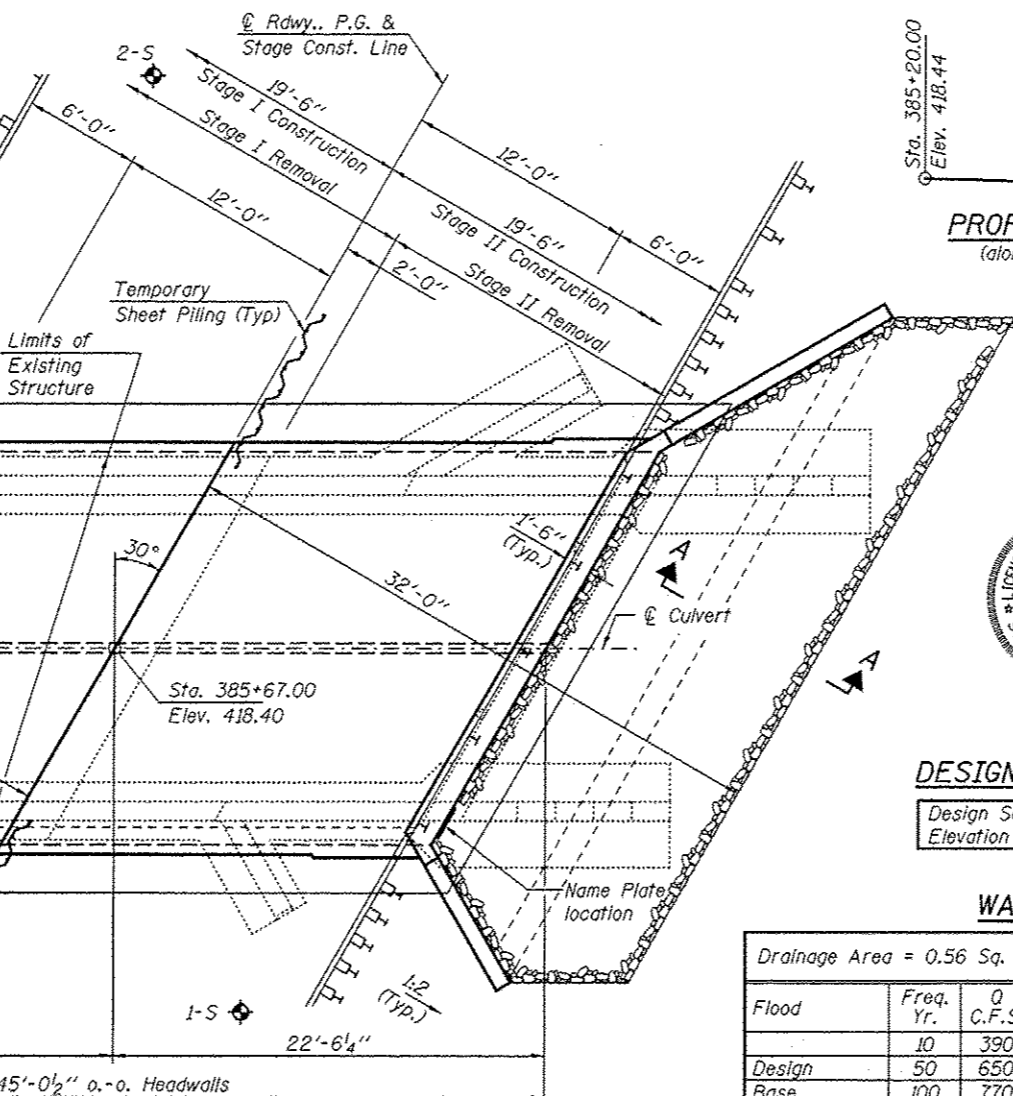
LONGITUDINAL SECTION

STATION 385+67.00
 BUILT 20__ BY
 STATE OF ILLINOIS
 F.A.S. RT. 2869 SEC. 2B-1
 LOADING HS-20
 STR. NO. 041-2019

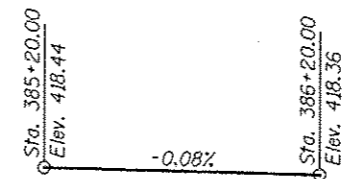
NAME PLATE
 See Std. 515001

Limits of Removal and Disposal of Unsuitable Material and Rockfill-Foundation

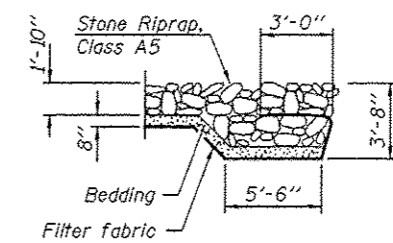
Traffic Barrier Terminal, Type 6A Standard 631032 (Typ.)



PLAN

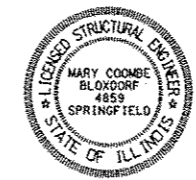


PROFILE GRADE
 (along & roadway)

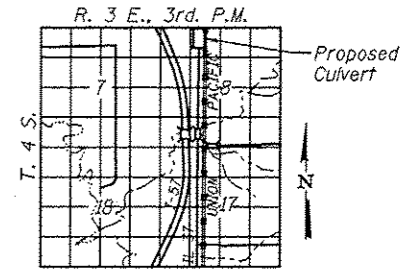


SECTION A-A

APPROVED
 For Structural Adequacy Only
Mary Coombe Bloxdorf
 Engineer of Bridges & Structures



Mary Coombe Bloxdorf
 ILLINOIS STRUCTURAL NO. 4859
 EXPIRES 11/30/12
 DATE: 10/04/12



LOCATION SKETCH

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	Upstream	Downstream
	408.40	408.30

WATERWAY INFORMATION

Drainage Area = 0.56 Sq. Mi. Existing Low Grade Elev. 418.0 @ Sta. 388+50
 Proposed Low Grade Elev. 418.0 @ Sta. 388+50

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural Head - Ft.		Headwater El.		
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	
Design	10	390	70	100	416.71	0.07	0.00	416.78	416.71
Base	50	650	70	100	417.62	0.28	0.01	417.90	417.63
Exist. Overtop	100	770	70	100	417.96	0.00	0.00	417.96	417.96
Prop. Overtop	50	650	70	-	417.62	0.28	-	417.90	417.62
	100	770	-	100	417.96	-	0.00	417.96	417.96

GENERAL PLAN
IL ROUTE 37
OVER UNNAMED STREAM
FAS ROUTE 2869 - SECTION 2B-1
JEFFERSON COUNTY
STATION 385+67.00
STRUCTURE NO. 041-2019

