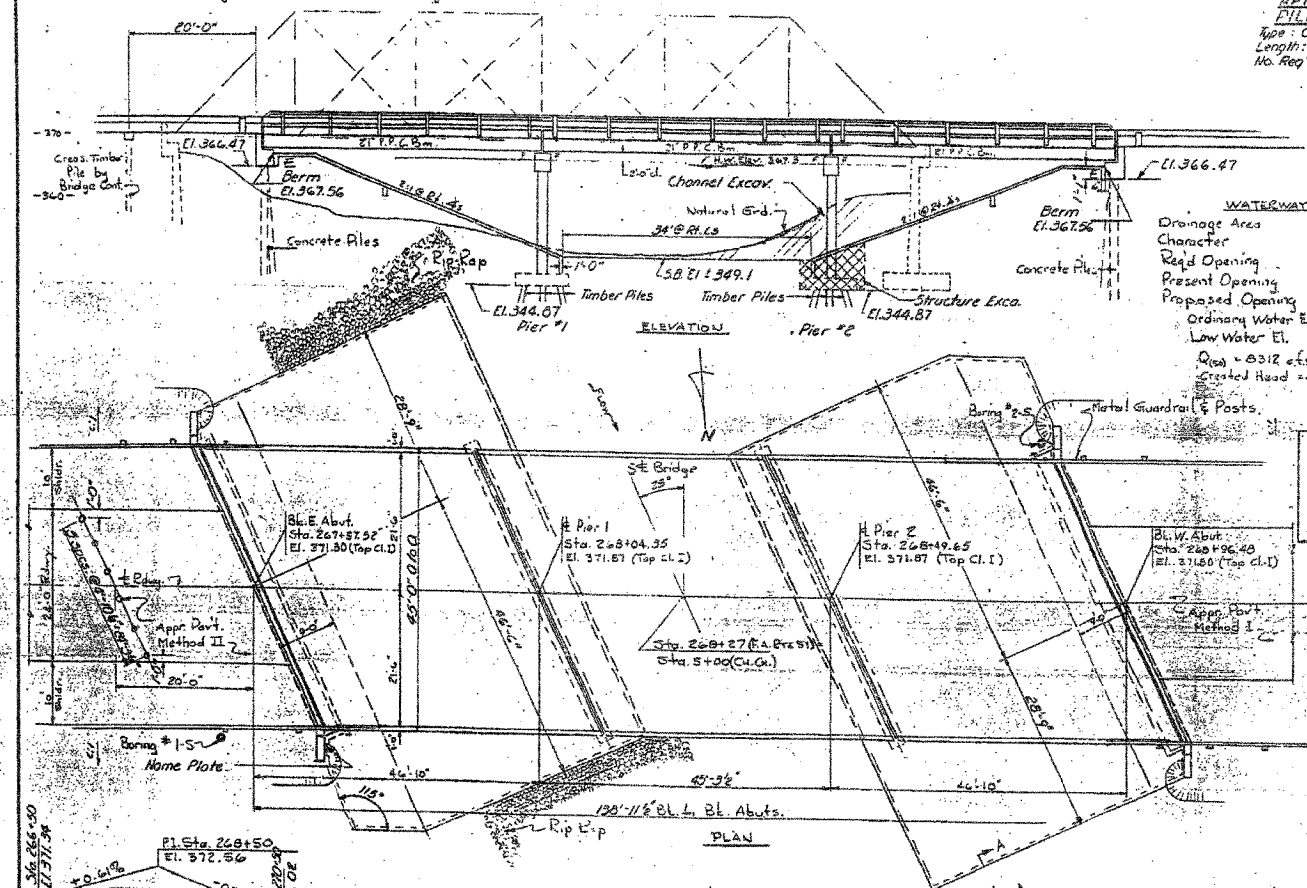


Contract # 78025

B.M. = 54' cut in N.E. Wingwall 16' Rt. Sta. 267+44 El. 370.14
 Existing Structure - Penn Truss - 120' Span, 21' high, P.C.
 Closed Abut. Built 1932 as Sec. 1048C Sta. 268+05
 S.B. I.R. 146. Existing Structure to be removed
 prior to new bridge construction. No culverts.

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DATE	BY	REVISION
12/15/00	WJ	1.0
12/15/00	WJ	1.1
12/15/00	WJ	1.2
12/15/00	WJ	1.3
12/15/00	WJ	1.4
12/15/00	WJ	1.5
12/15/00	WJ	1.6
12/15/00	WJ	1.7
12/15/00	WJ	1.8
12/15/00	WJ	1.9
12/15/00	WJ	2.0



**APPROACH
 FILE DATA**
 Type: Crossed
 Length: 10'
 No. Req'd: 6

GENERAL NOTES
 All reinforcement bars shall be lapped 24 diameters unless otherwise shown.
 The basic lead silica chromate point system shall be used for two coats of shop painting of structural steel.
 Expansion guards which are not cast in the precast unit shall be fabricated and erected in accordance with Article 803.07 (c) of the Standard Specifications and are included in quantity of structural steel.
 Slope wall shall be reinforced with welded wire fabric 6" x 6" mesh, weighing 36" per 100 sq. ft.
 Layout of slope walls may be varied in the field to suit ground conditions as directed by the Engineer.
 The Contractor shall drive one test pile each in a permanent location of E. Abutment and Pier 2 as directed by the Engineer before ordering the remainder of piles.
 Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

WATERWAY INFORMATION

Drainage Area	31.0 Sq. mi.
Channel Character	1190'
Read Opening	1190'
Proposed Opening	1190'
Ordinary Water El.	352
Low Water El.	350
Q ₁₀₀ = 8312 cfs.	
Created Head = 2.20	

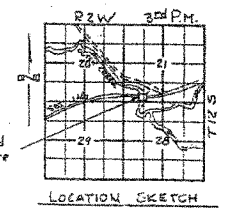
TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Bit Concrete Surface Course Class I	Tons	116		116
Removal of Existing Structures	Each			1
Channel Excavation	Cu. Yds.	7539		7539
Class X Concrete	Cu. Yds.	9.3	229.9	239.2
P.R.C. Deck Beams 21"	Sq. Ft.	6106		6106
Structural Steel	Lbs.	4040		4040
Steel Railings Type T	Lin. Ft.	272		272
Reinforcement Bars	Lbs.	370	1740	2110
Name Plates	Each			1
Protective Coat	Sq. Yds.	43		43
Waterproofing Membrane System	Sq. Yds.	626		626
Untreated Piles up to 30'	Lin. Ft.		825	825
Untreated Piles 30.1 to 45'	Lin. Ft.		1024	1024
Concrete Piles	Each		818	818
Test Piles Timber	Each		1	1
Test Piles Concrete	Each		1	1
Structure Excavation	Cu. Yds.		240	240
Slope Wall 6"	Sq. Yds.		290	290
Preformed Sealer 2 1/2"	Lin. Ft.	100		100
Stone Riprap	Sq. Yd.		190.5	190.5
Created Piles Up to 20 Ft.	Lin. Ft.		60	60
Concrete Removal	Sq. Yds.		60	60

STATION 268+27
 BUILT 19 BY
 STATE OF ILLINOIS
 F.A. RT. 51 SEC. 104B-1

LOADING HS 20
 NAME PLATE
 See Std. 2113

SECTION THRU
 CHANNEL CHANGE



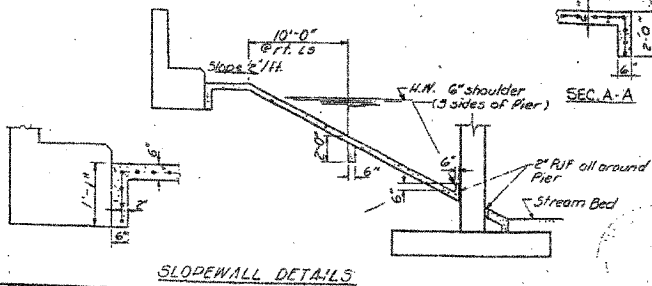
GENERAL PLAN & ELEVATION
 F.A. RTE. 51 OVER DUTCH CREEK
 F.A. RTE. 51 SEC. 104B-1
 UNION COUNTY
 STA. 268+27

*The initial jacking force per strand shall be 21,700 lbs.
PRECAST PRESTRESSED UNIT
 f_c = 3000 p.s.i.
 f_t = 4000 p.s.i.
 f₁₅ = 270,000 p.s.i. (7/8" # Strands)
 f₃₁ = 180,700 p.s.i. (1/2" # Strands)
DESIGN STRESSES (Field Unit)
 f_c = 1800 p.s.i. (Sub & Curb)
 f_s = 20,000 p.s.i. (Reinf.)
 n = 10
 v_e = 90 p.s.i.
 Allow 25' for future wearing surface

Design Specifications AASHTO 1998 as applicable
 LOADING HS 20-44

DESIGNED G.E. Ozyurt
 CHECKED D.A.D.
 DRAWN BER
 CHECKED D.A.D.

EXAMINED November 17, 1972
 PASSED
 APPROVED
 DIRECTOR OF HIGHWAYS



SLOPEWALL DETAILS

PLOT DATE = 12/03/2007
 FILE NAME = 104-32-existing-structure.dgn
 PLOT SCALE = 0.10000 1" = 10'
 USER NAME = CFC

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET TITLE
 EXISTING STRUCTURE PLANS

PROJECT
 IL ROUTE 146 OVER DUTCH CREEK
 FAP ROUTE 885 SECTION 104BR-1
 UNION COUNTY
 STATION 268+27.00
 STRUCTURE NUMBER 091-0059

PROJECT NO. 06056-5
 SCALE / / / /
 DATE / / / /
 DRAWN BY CFC
 CHECKED BY MCB/BD
 DRAWING NO.

COOMBE-BLOXDORF P.C.
 Engineers / Land Surveyors
 Springfield, Illinois
 Design Firm License No. 184-002703

1
 OF 9 SHTS