

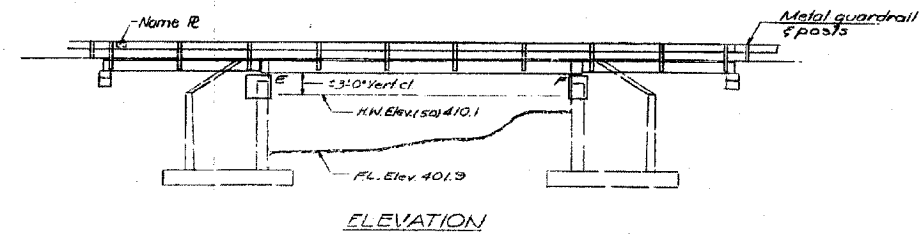
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FRANKLIN	30	12	9 SHEETS
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Benchmark located on west end of southwest wingwall of bridge, is right of Station 1060+22. Elevation 414.31.
 Existing structure 1028-0040. The existing structure built in 1928 as 33' 1/4" Section 107B-1 is a 43' 0" Sk to the single span bridge. The existing superstructure consists of 4 reinforced concrete T girders with an cut to cut of 24' 6". The existing substructure is composed of E.R.C. closed abutments. The existing superstructure shall be removed and replaced with P.P.C. deck beams. The existing substructure shall be widened in order to support the proposed superstructure.
 Traffic shall be maintained at all times utilizing stage construction. No salvage.

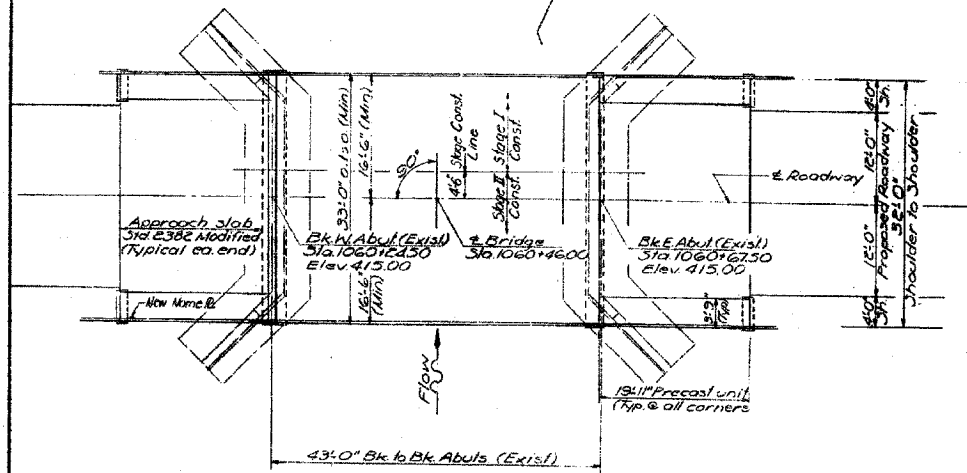
GENERAL NOTES

All structural steel shall be shop painted with two coats of basic lead silico chromate paint.
 Expansion guards which are not cast in the precast unit shall be fabricated and erected in accordance with Article 503.07(c) of the Standard Specifications and are included in quantity of structural steel.
 Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to normal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished of the unit price bid for the work.
 The top surface of the beams shall be finished in accordance with Article 505.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a minimum of 1/4".
 Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53, Grade 60.
 Shoulder transition to wingwall shall be shaped with broken concrete. Cast incidental.
 Limits of Waterproofing Membrane System and Class I shall be two feet beyond east end of deck beams to west end of deck beams and out to out of deck beams.
 A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.



STATION 1060+46.00
 REBUILT BY
 STATE OF ILLINOIS
 FA RTE 873 SEC. 107B-DR
 FA DRAW. 873-32(10)
 LOADING 4520
 STR. NO. 028-0040

NAME PLATE
 (S&T. 2113)



WATERWAY INFORMATION

Drainage Area 372 sq. mi. Low Grade Elev. 413.5 @ Sta. 1066+00

Flood	Flow	Opening	Head	Headwater	Headwater
yr.	CFS	Exist. Prop.	Exist. Prop.	Exist. Prop.	Exist. Prop.
Design	30 1750	251 251	410.1 1.52	1.52	411.62 411.62
Base	100 1750	259 259	410.3 1.90	1.90	412.2 412.2
Overlapping	500 2273	271 271	410.6 2.92	2.92	413.52 413.52
Max. Cof. E.	500				

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Removal of Existing Superstructures	Each	1		1
Bituminous Concrete Surface Course, Class I	Tons	22		22
Concrete Formwork	Sq. Yd.	4.3	8	12.3
Class I Concrete	Cu. Yd.	2.3	217	219.3
Precast Concrete Bridge Slab	Sq. Ft.	299		299
Precast Prestressed Concrete Deck Beams (17' Depth)	Sq. Ft.	1396		1396
Structural Steel	Pound	2350		2350
Reinforcement Bars	Pound	100	2800	2900
Name Plates	Each	1		1
Pretreated Joint Seal 2"	Lin. Ft.	33		33
Portland Cement Mortar Fining Course	Lin. Ft.	423		423
Waterproofing Membrane System	Sq. Yd.	163		163
Temporary Bridge Rail	Lin. Ft.	42		42
Steel Rolling, Spcs. S-1	Lin. Ft.	167		167

DESIGN STRESSES

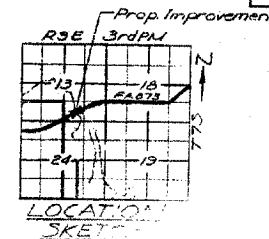
FIELD UNITS
 $f_c = 3500 \text{ psi}$
 $f_y = 60,000 \text{ psi (Point)}$

PRECAST UNITS
 $f_c = 4500 \text{ psi}$
 $f_s = 180,000 \text{ psi}$
 $f_s = 20,000 \text{ psi}$

PRECAST PRESTRESSED UNITS

$f_c = 5000 \text{ psi}$
 $f_c = 4000 \text{ psi}$
 $f_s = 270,000 \text{ psi (4# strands)}$
 $f_s = 180,000 \text{ psi (2# strands)}$

Allow 25% for future wearing surface
 Design Specifications 1977 AASHTO
 1982 AASHTO 1982 Interim Specs



GENERAL PLAN
 FA RTE 873 (ILL 149) OVER TILLEY CREEK
 FA ROUTE 873
 SECTION 107B-DR
 FRANKLIN COUNTY
 STATION 1060+46.00

DESIGNED: M. R. ...
 CHECKED: J. F. ...
 DRAWN: J. F. ...
 EXAMINED: ...
 PASSED: ...
 APPROVED: ...