

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

SCALE IN FEET

F.A.I. ROUTE 70
SECTION 82-3HVB-R-3
ST. CLAIR COUNTY

PIER CAP REPAIRS WITHIN
POPLAR STREET COMPLEX

C-98-089-81

*82-3HVB-R-3

SECTION NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET
F.A.I. 70	8	ST. CLAIR	4	1
F.A.I. 70	8	ST. CLAIR	4	1

P -98-025-76



LOCATION OF SECTION INDICATED THUS: —

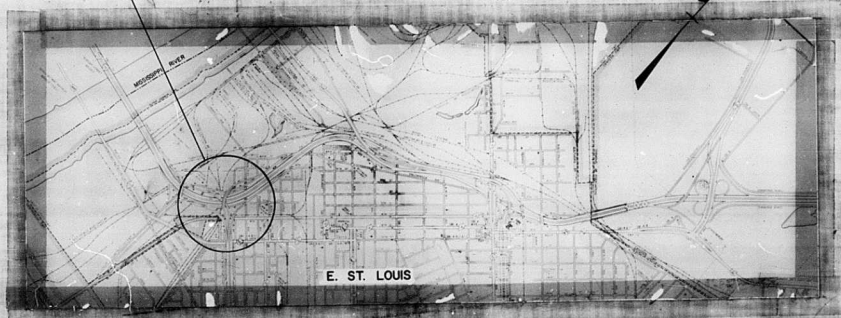
INDEX OF SHEETS

- 1 TITLE SHEET
- 2 GENERAL PLAN, SUMMARY OF QUANTITIES
- 3 POST-TENSIONING SYSTEM, GENERAL NOTES
- 4 END CONNECTION BRACKET

STANDARDS

2298-5	2314-4
2299-9	2315-5
2300-2	

THIS PROJECT CONSISTS OF THE
PIER CAP REPAIR AT VARIOUS
LOCATIONS IN THE POPLAR STREET
COMPLEX.



E. ST. LOUIS

LOCATION MAP



MICROFILMED _____
REEL NUMBER _____
AWARDED _____
RESIDENT ENGINEER _____
AS BUILT CHANGES WERE MADE
ON THE FOLLOWING SHEETS _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Feb 1982

EXAMINED Feb 8 82

APPROVED Thomas R. Knight

DATE Feb 16 82

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED _____

DIVISION ENGINEER _____ DATE _____

CONTRACT NO. 35391

ST. CLAIR COUNTY SECTION 82-3HVB-R-3 F.A. ROUTE 70

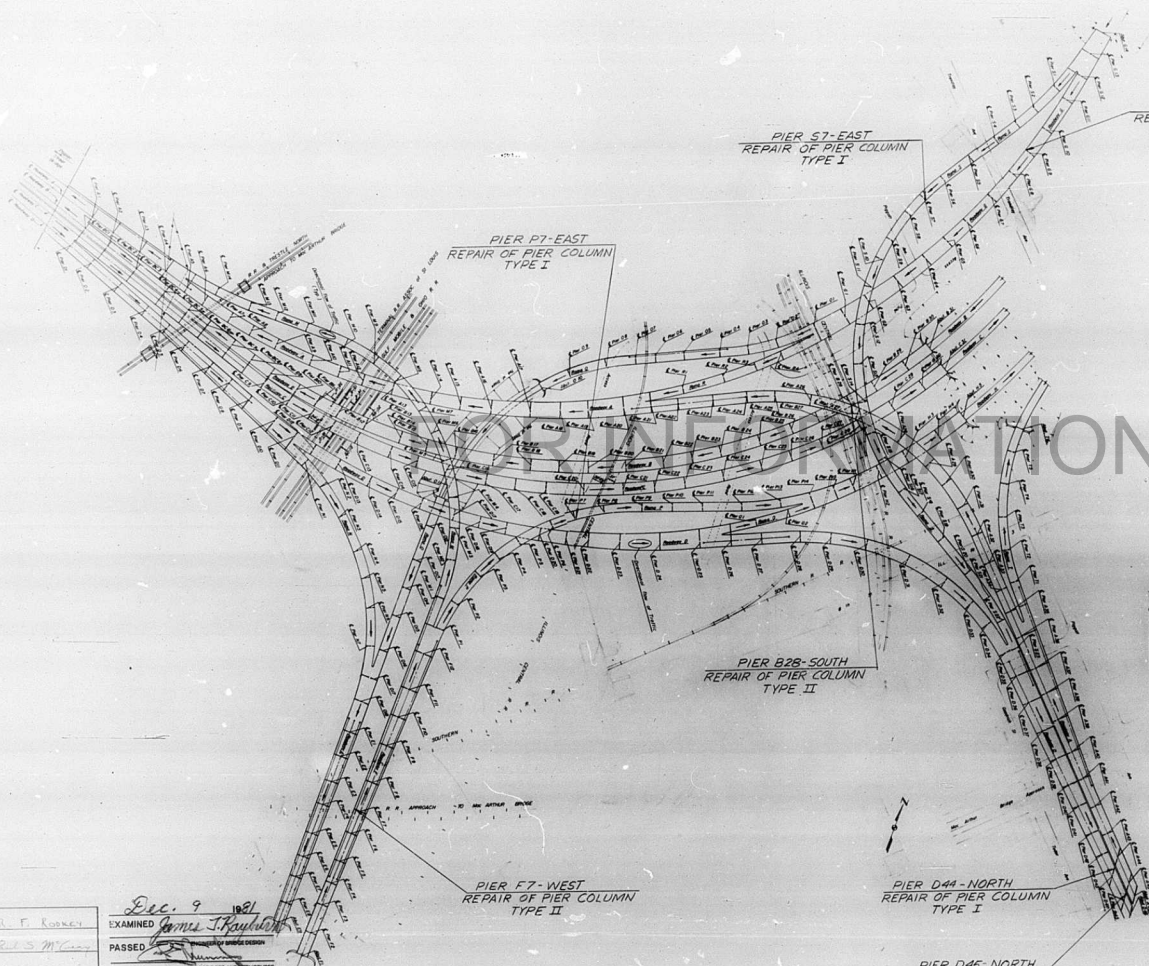
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

82-3HV-B-3

FAI
70 St. Clair 4 2

Sheet No.
3 of 3



PRINTED INFORMATION ONLY

SUMMARY OF QUANTITIES

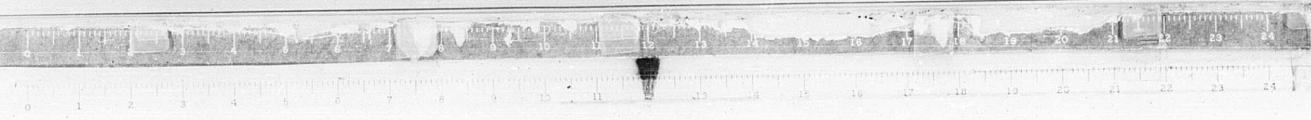
CODE NO.	ITEM	UNIT	Y007
X07723	Repair of Pier Columns - Type I	Each	
X07724	Repair of Pier Columns - Type II	Each	
698007	Traffic Control and Protection, Standard P15	L. SUM	
X04748		L. SUM	

Description of Type I and Type II Repair.

DESIGNED R. F. KOSNEY
CHECKED R. S. M. GAY
DRAWN A. Sommer
CHECKED R. S. M. GAY

EXAMINED *James J. Spaulding* Dec. 9 1981
PASSED
APPROVED ENGINEER OF BRIDGES AND STRUCTURES
DIRECTOR OF HIGHWAYS

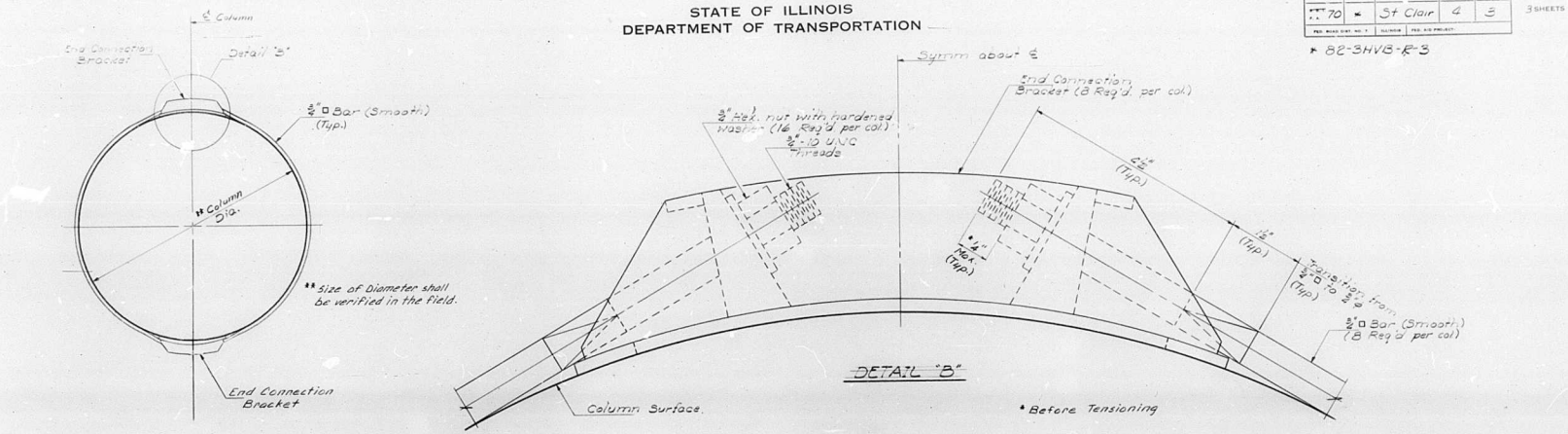
GENERAL PLAN
FAI RT. 70 SEC. 82-3HV-B-3
ST. CLAIR COUNTY



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE	SECTION	NO.	DATE	BY	SHEET NO.
1" = 70'	St Clair	4	3		3 SHEETS
PROJECT NO. 7					

82-3HV8-R-3

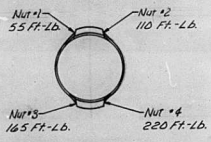


QUANTITY OF STRUCTURAL STEEL PER COLUMN IN LBS.

COL. DIA.	AASHTO M-223	AISI 4140	TOTAL
4'-0"	118	96	214
4'-6"	118	100	226
5'-0"	118	120	238
5'-6"	118	132	250
6'-0"	118	144	262
6'-6"	118	156	274
7'-0"	117	168	285

BAR TENSIONING PROCEDURE

The 3/8" bars shall be tensioned in sequence from the bottom bar to the top bar. Each bar shall be tensioned by tightening the nuts to the given torques according to the following sequence:

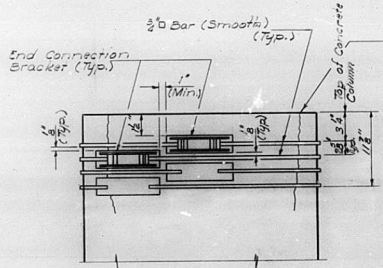


After tightening all four nuts on a bar they shall all be checked for 220 Ft.-Lb. Torque according to the same above sequence and the threads shall be set.

GENERAL NOTES

- Surfaces to receive Post-Tensioning System shall be cleaned as required to eliminate projections.
- End Connection Bracket shall conform to the requirements of A.A.S.H.T.O. M-223 Grade 50.
- The 3/8" bar shall conform to the requirements of AISI 4140 (Rockwell C Hardness of 25 to 30).
- The 3/8" hex. nut shall conform to the requirements of A.S.T.M. A-490.
- A lubricant approved by the Engineer shall be used between the 3/8" bars and the concrete surface.
- The end connection bracket and 3/8" bar shall be galvanized after shop fabrication in accordance with A.A.S.H.T.O. M-111 and A.S.T.M. A-385.
- The nuts and washers shall be galvanized in accordance with A.A.S.H.T.O. M-223.
- Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal 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 or for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

All Structural Steel is incidental to "Repair of Pier Columns-Type I" or "Repair of Pier Columns-Type II" as applicable.



TOP OF PIER COLUMNS
For locations see Special Provisions

DESIGNED R. F. ROBERTS
CHECKED R. S. M...
DRAWN J. SCHWELGER
CHECKED R. S. M... R.F.R.

Dec 9 1981
EXAMINED James J. Rayburn
PASSED
APPROVED
DIRECTOR OF HIGHWAYS

POST-TENSIONING SYSTEM
PIER COLUMNS REPAIR
F.A.T.R. TO SEC. 82-3HV8-R-3
ST. CLAIR COUNTY

