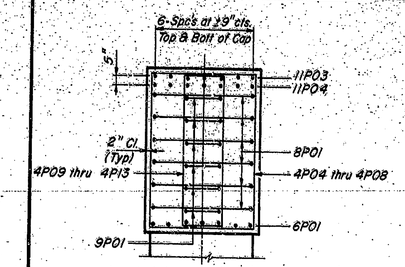
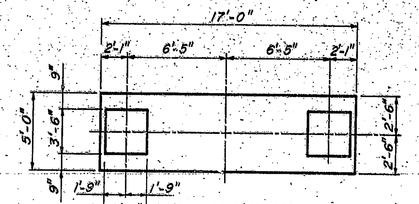
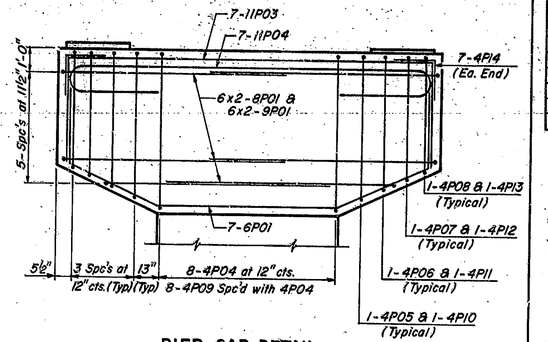


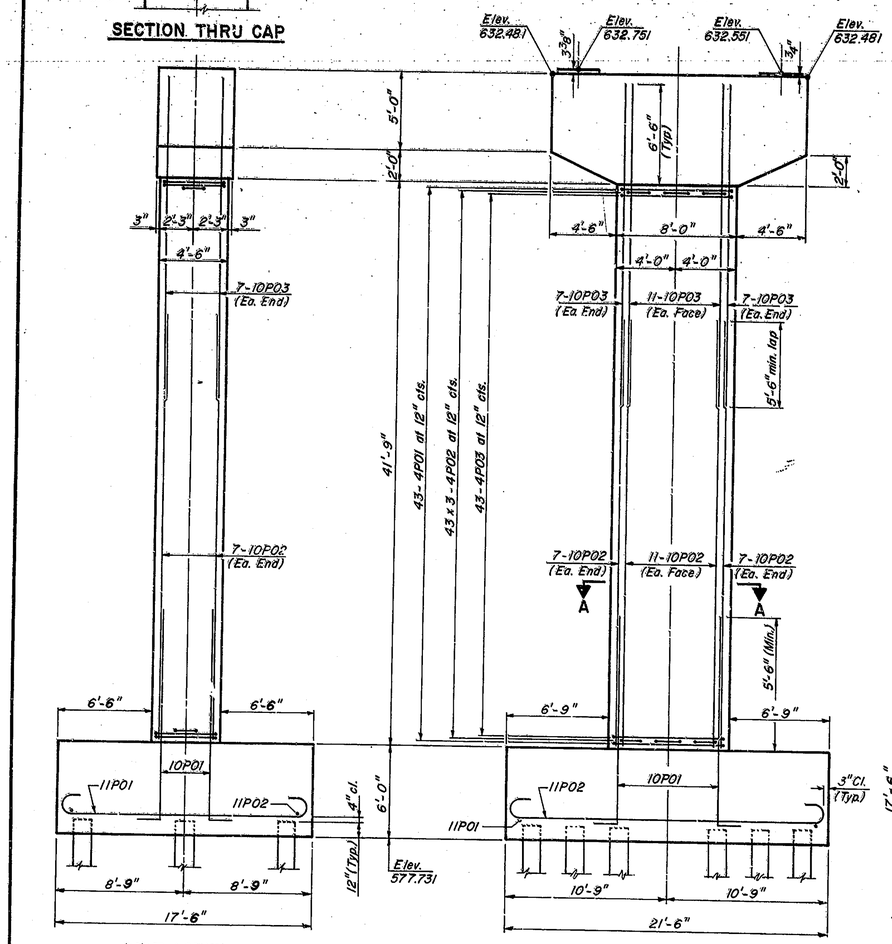
SECTION THRU CAP



PIER CAP PLAN

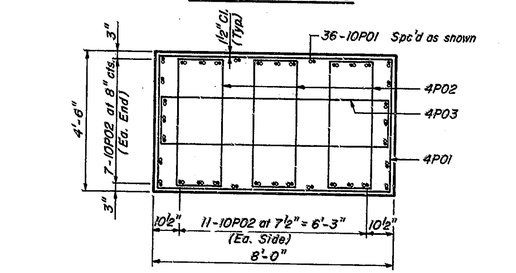


PIER CAP DETAIL

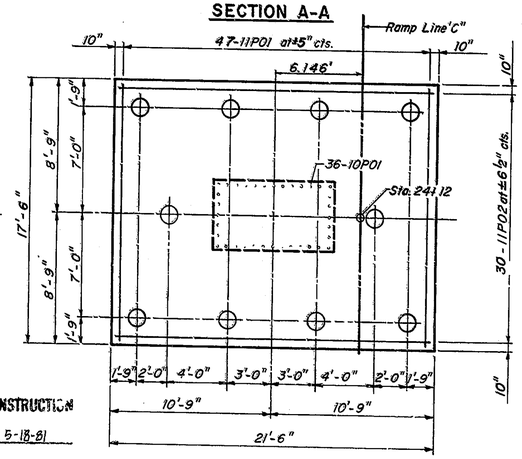


SIDE VIEW

ELEVATION
(Looking Up Station)



SECTION A-A



FOOTING PLAN

PILE DATA

TYPE: High Capacity (14"Ø Steel Encased Concrete)
ESTIMATED LENGTH: 85'
NUMBER REQUIRED: 10
10 Steel Pipe Sleeves Required to Elevation 520.

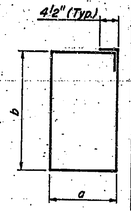
APPROVED FOR CONSTRUCTION
W. B. Abbott 5-18-81
W. B. ABBOTT
Assistant Engineer of Bridge Design

DESIGNED HB/MM C'K'D MM
DRAWN RT C'K'D GR
TRACED HG C'K'D GR

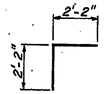
BAR BENDING DIAGRAMS

NOTES: Number preceding letter denotes bar size.
All dimension are out to out.
All bar bending pin diameters shall be in accordance with A.C.I. Standards.

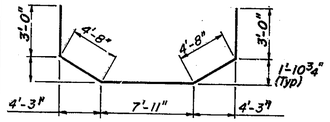
Bar	a	b
4P01	4'-3"	7'-9"
4P02	1'-6"	4'-3"
4P03	1'-7"	7'-9"
4P04	4'-"	6'-8"
4P05	4'-8"	6'-2½"
4P06	4'-8"	5'-9"
4P07	4'-8"	5'-4"
4P08	4'-8"	4'-10½"
4P09	1'-9"	6'-8"
4P10	1'-9"	6'-2"
4P11	1'-9"	5'-8½"
4P12	1'-9"	5'-3½"
4P13	1'-9"	4'-10"



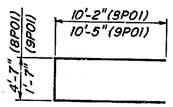
4P01 thru 4P13



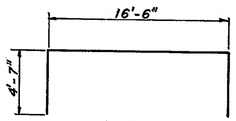
4P14



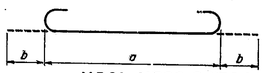
6P01



8P01 & 9P01

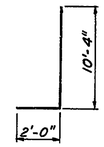


11P03



11P01, 11P02 & 11P04

Bar	a	b
11P01	17'-0"	1'-7"
11P02	21'-0"	1'-7"
11P04	16'-6"	4'-4"



10P01

BILL OF MATERIAL

Bar	No.	Length	Bent	Str.
4P01	43	24'-9"	•	
4P02	129	12'-3"	•	
4P03	43	19'-5"	•	
4P04	8	23'-7"	•	
4P05	2	22'-6"	•	
4P06	2	21'-7"	•	
4P07	2	20'-9"	•	
4P08	2	19'-10"	•	
4P09	8	17'-7"	•	
4P10	2	16'-7"	•	
4P11	2	15'-8"	•	
4P12	2	14'-10"	•	
4P13	2	13'-11"	•	
4P14	14	4'-4"	•	
6P01	7	23'-3"	•	
8P01	12	24'-11"	•	
9P01	12	22'-5"	•	
10P01	36	12'-4"	•	
10P02	36	32'-0"		•
10P03	36	21'-9"		•
11P01	47	20'-2"	•	
11P02	30	24'-2"	•	
11P03	7	25'-8"	•	
11P04	7	25'-2"	•	

ESTIMATED QUANTITIES

Item	Unit	Total
Reinforcing Steel	Lb.	25,752
Substructure Conc.	Cu. Yd.	76.1
Footing Conc.	Cu. Yd.	83.2
High Capacity Piles	Lin. Ft.	850
Steel Pipe Sleeves	Lin. Ft.	589

NOTES: All reinforcement bars shall conform to the requirements of ASTM, Grade 60.

Minimum compressive strength of both Footing and Substructure Concrete shall be 4,000psi

Figg and Muller Engineers Inc.
424 North Calhoun Street
Tallahassee Florida 32301

PIER 406 DETAILS

INDIANA STATE HIGHWAY COMMISSION

LAKE COUNTY - RAMP:- C SECTION:-
SCALE:- N.T.S. DATE:- MARCH 13, 1981
SUBMITTED FOR APPROVAL Eugene C. Foster
DRAWING:- OF SHEET:- 30 OF
PROJECT:- MM 220-1(8)
CONTRACT NO. B-12750
BRIDGE FILE:- 912-45-2546 REN

REGISTERED PROFESSIONAL ENGINEER 13543 STATE OF INDIANA