



| NO OF PILES | ITEM | SPAN (FT) | PILE LOADS | | | | |
|-------------|------------------------|-----------|------------|-------|-------|-------|----|
| | | | 25 | 30 | 35 | 40 | 50 |
| 5 | CLASS 'A' CONC.-CU.YD. | 9.30* | | | | | |
| | DEF. REIN. STEEL-LB. | 2164 | | | | | |
| | AVE. PILE LOAD-TONS | 29.3 | | | | | |
| | SIZE OF BARS A | #10 | | | | | |
| 6 | CLASS 'A' CONC.-CU.YD. | 9.51* | 9.51* | 9.27* | | | |
| | DEF. REIN. STEEL-LB. | 1144 | 1144 | 1144 | | | |
| | AVE. PILE LOAD-TONS | 26.4 | 27.5 | 30.6 | | | |
| | SIZE OF BARS A | #7 | #7 | #7 | | | |
| 7 | CLASS 'A' CONC.-CU.YD. | | 9.29* | 9.23* | 9.23* | | |
| | DEF. REIN. STEEL-LB. | | 1743 | 1743 | 1743 | | |
| | AVE. PILE LOAD-TONS | | 26.2 | 29.0 | 31.7 | | |
| | SIZE OF BARS A | | #9 | #9 | #9 | | |
| 8 | CLASS 'A' CONC.-CU.YD. | | | 9.26* | 9.26* | 9.20* | |
| | DEF. REIN. STEEL-LB. | | | 2622 | 2622 | 2622 | |
| | AVE. PILE LOAD-TONS | | | 25.3 | 27.8 | 30.0 | |
| | SIZE OF BARS A | | | #11 | #11 | #11 | |
| 9 | CLASS 'A' CONC.-CU.YD. | | | | | 9.24* | |
| | DEF. REIN. STEEL-LB. | | | | | 2599 | |
| | AVE. PILE LOAD-TONS | | | | | 26.8 | |
| | SIZE OF BARS A | | | | | #11 | |

* Assuming Use of 14" R.C. Piles. † Assuming Use of 16" R.C. Piles.

GENERAL NOTES:
 CONSTRUCTION SPECIFICATIONS: Latest Approved Louisiana Dept. of Highway Standard Specifications.
 DESIGN SPECIFICATIONS: A.S.T.M. 1953, as Amended to Dec. 31, 1955.
 LIVE LOAD: H20-S16-44 (Modified).
 All concrete to be Class 'A'.
 Reinforcing steel shall be Intermediate or Hard Grade A.S.T.M.-A15 or Rail Steel A.S.T.M.-A16, conforming to A.S.T.M.-A305.
 Dimensions to Reinforcing Steel are to Bar Center.
 Concrete and Reinforcing Steel in Curb, Sidewalk, and Handrail-Flare are included in end bent quantities and are to be paid for as part of bent.
 All spaced corners to be chamfered 3" unless otherwise noted.
 To provide for future expansion of bridge, the end bents are designed for the same loads as the intermediate bents.
 Maximum Pile Loads unless otherwise instructed by Bridge Design Section:
 14" R.C. Piles - 28 tons 16" R.C. Piles - 32 tons

| NO OF PILES | SPAN (FT) TYPE | 25 | | | 30 | | | 35 | | | 40 | | | 50 | | | |
|-------------|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | I | II | III | |
| 5 | CLASS 'A' CONC.-CU.YD. | 18.64* | 19.69* | 20.22* | | | | | | | | | | | | | |
| | DEF. REIN. STEEL-LB. | 3582 | 3972 | 4167 | | | | | | | | | | | | | |
| | AVE. PILE LOAD-TONS | | 29.3 | | | | | | | | | | | | | | |
| | SIZE OF BARS A | | #10 | | | | | | | | | | | | | | |
| 6 | CLASS 'A' CONC.-CU.YD. | 18.61* | 19.70* | 20.24* | 19.22* | 20.30* | 20.34* | 19.12* | 20.76* | 21.32* | | | | | | | |
| | DEF. REIN. STEEL-LB. | 2562 | 2952 | 3197 | 2508 | 2976 | 3173 | 2612 | 3002 | 3197 | | | | | | | |
| | AVE. PILE LOAD-TONS | | 26.4 | | 27.5 | | | 30.6 | | | | | | | | | |
| | SIZE OF BARS A | | #7 | | #7 | | | #7 | | | | | | | | | |
| 7 | CLASS 'A' CONC.-CU.YD. | | | | | | | 19.74* | 20.83* | 21.37* | 20.27* | 21.35* | 21.87* | 21.34* | 21.35* | 21.06* | |
| | DEF. REIN. STEEL-LB. | | | | | | | 3211 | 3601 | 3796 | 3234 | 3624 | 3819 | 3242 | 3632 | 3827 | |
| | AVE. PILE LOAD-TONS | | | | | | | 26.2 | | | 29.0 | | | 31.7 | | | |
| | SIZE OF BARS A | | | | | | | #9 | | | #9 | | | #9 | | | |
| 8 | CLASS 'A' CONC.-CU.YD. | | | | | | | | 20.32* | 21.41* | 21.95* | 20.37* | 21.43* | 22.00* | 20.92* | 21.96* | 22.52* |
| | DEF. REIN. STEEL-LB. | | | | | | | | 4196 | 4586 | 4781 | 4193 | 4583 | 4784 | 4226 | 4616 | 4811 |
| | AVE. PILE LOAD-TONS | | | | | | | | 25.3 | | | 27.8 | | | 30.0 | | |
| | SIZE OF BARS A | | | | | | | | #11 | | | #11 | | | #11 | | |
| 9 | CLASS 'A' CONC.-CU.YD. | | | | | | | | | | | | | | 20.85* | 22.81* | 23.56* |
| | DEF. REIN. STEEL-LB. | | | | | | | | | | | | | | 4204 | 4594 | 4789 |
| | AVE. PILE LOAD-TONS | | | | | | | | | | | | | | 26.8 | | |
| | SIZE OF BARS A | | | | | | | | | | | | | | #11 | | |

* Assuming Use of 14" R.C. Piles. † Assuming Use of 16" R.C. Piles.

| BENT | GROUND TO GRADE (FT) | SUBSOIL | NO OF BATTER PILES |
|------|----------------------|---------|--------------------|
| I | 0-5 | POOR | 0 |
| | 0-8 | GOOD | |
| II | 5-10 | POOR | 2 |
| | 8-16 | GOOD | |
| III | 10+ | POOR | 3 |
| | 16+ | GOOD | |

| SPAN (FEET) | "C" | "H1" | "H2" |
|-------------|------------|-----------|------------|
| 25 | 2'-10 1/2" | 4'-6 1/2" | 5'-2 1/2" |
| 30 | 3'-1 1/2" | 4'-9 1/2" | 5'-5 1/2" |
| 35 | 3'-4 1/2" | 5'-0 1/2" | 5'-8 1/2" |
| 40 | 3'-7 1/2" | 5'-5 1/2" | 5'-11 1/2" |
| 45 | 3'-7 1/2" | 5'-9 1/2" | 5'-11 1/2" |
| 50 | 3'-10 1/2" | 5'-6 1/2" | 6'-2 1/2" |

Discarded
 RETRACED
 7/25/61
 Egm.

INTERMEDIATE BENTS

STANDARD PLAN
 PRECAST CONCRETE PILE BENTS
 FOR 25' TO 50' 1-BEAM SPANS
 LIVE LOAD H20-S16-44 MODIFIED
 40'-0" ROADWAY 1'-6" SIDEWALKS
 3-LANE ROADWAY

DESIGNED: *Chas. W. Hill* DETAILED: *C.N.H. S.N.* TRACED: *E.C. A.C.*
 CHECKED: *Acved* CHECKED: *Nanna*

STATE OF LOUISIANA
 DEPARTMENT OF HIGHWAYS

DATE: 7/18/61
 NO. 9-59
 DESCRIPTION: BRIDGE DESIGN SECTION