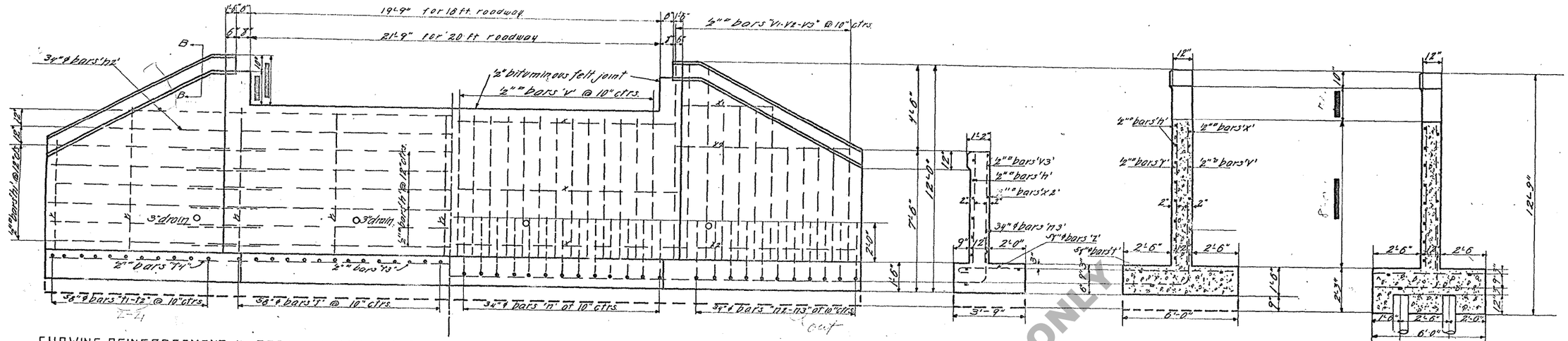


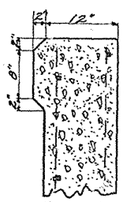
SHOWING REINFORCEMENT IN FRONT OF WALL AND TOP OF FOOTING

SHOWING REINFORCEMENT IN BACK OF WALL AND BOTTOM OF FOOTING

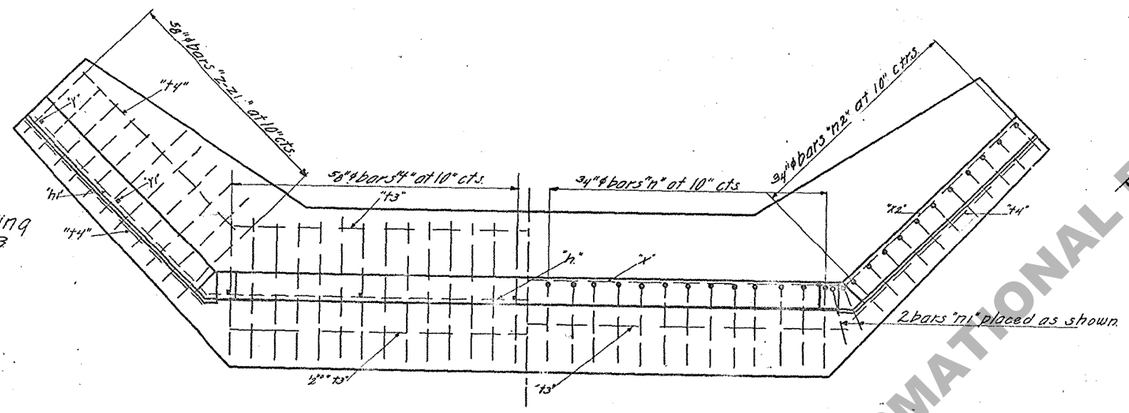
END OF WING

SECTION A-A WITHOUT PILES

SECTION A-A WITH PILES

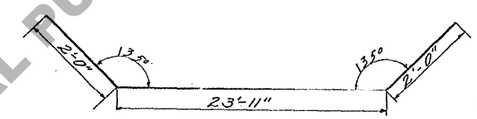


Detail of coping Section B-B

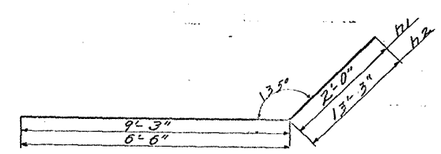


SHOWING REINFORCEMENT IN FRONT OF WALL AND TOP OF FOOTING

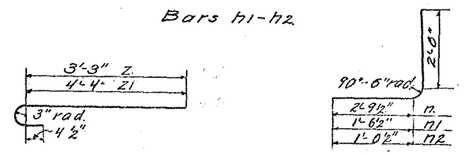
SHOWING REINFORCEMENT IN BACK OF WALL AND BOTTOM OF FOOTING



Bars h



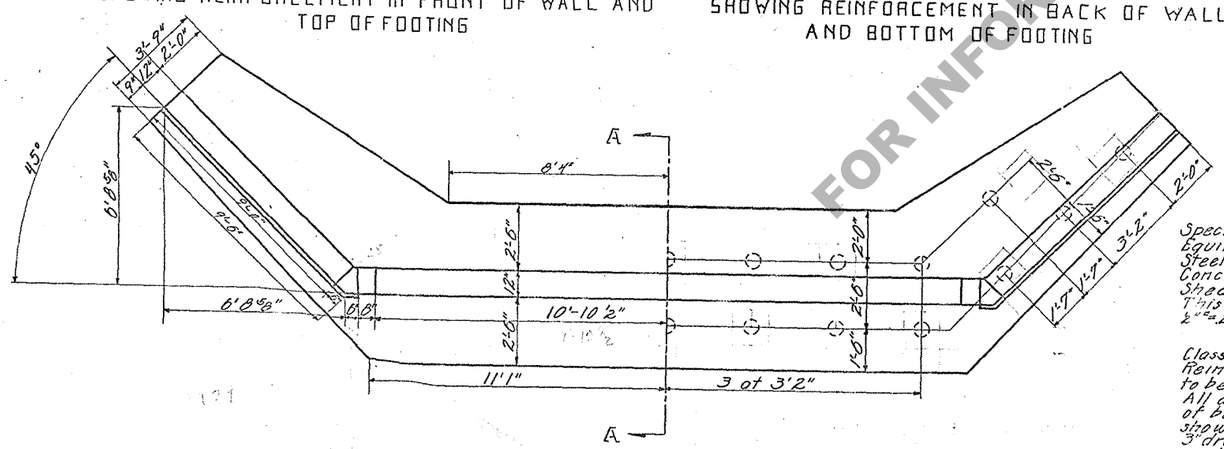
Bars h1-h2



BILL OF MATERIAL

Bar	No.	Size	Length Unit	Length Total	Weight	Location.
t3	3	½"ϕ	23'-9"	71'-3"		Horizontal in footing
t4	6	½"ϕ	9'-6"	57'-0"		" " "
n	6	½"ϕ	27'-11"	167'-6"		" " web
n1	12	½"ϕ	11'-3"	135'-0"		" " wing.
n2	4	½"ϕ	19'-9"	79'-0"		" " "
V	26	½"ϕ	7'-9"	201'-6"		vertical " web
V1	6	½"ϕ	10'-6"	63'-0"		" " wing.
V2	9	½"ϕ	8'-3"	66'-0"		" " "
V3	10	½"ϕ	6'-0"	60'-0"		" " "
Y	2	½"ϕ	5'-0"	10'-0"		" " "
Y1	7	½"ϕ	7'-6"	52'-6"		" " web
X	3	½"ϕ	23'-9"	71'-3"		Horizontal " "
X1	2	½"ϕ	9'-9"	9'-6"		" " wing.
X2	4	½"ϕ	9'-3"	37'-0"		" " "
				1088'-6"	918	
t	28	⅝"ϕ	5'-9"	161'-0"		" " footing
z	12	⅝"ϕ	5'-6"	66'-0"		" " "
z1	10	⅝"ϕ	4'-5"	44'-2"		" " "
				271'-2"	283	
n	28	¾"ϕ	6'-1"	170'-4"		" " "
n1	4	¾"ϕ	4'-10"	19'-4"		" " "
n2	22	¾"ϕ	4'-4"	95'-4"		" " "
				285'-0"	428	

Total reinforcing steel 1629#
Lin. Ft of piling 22 at 20' = 440 ft.
Class 'A' conc. (with piling) = 29.08 cu yds
Class 'A' conc. (without piling) = 22.71 cu. yds.



PLAN

SHOWING PILES IF REQUIRED

DESIGN DATA

Specifications: Louisiana Highway Commission.
Equivalent fluid pressure: 30 lbs. per cu. ft.
Steel in tension: 16000 lbs per sq. inch.
Concrete in compression 650 lbs per sq. inch.
Shear Class A conc. 40 lbs per sq. inch.
This design is based on the net areas of bars as follows:
½"ϕ = .25 sq. in. ¾"ϕ = .442 sq. in. ⅝"ϕ = .307 sq. in.

GENERAL NOTES

Class A concrete to be used thruout: Proportions 1:2:4.
Reinforcing steel to be deformed bars. Square twisted bars not to be considered as deformed.
All dimensions relative to reinforcement are to centers of bars. No splices of bars will be permitted other than those shown on plans.
3" drains to be placed at 10 ft. ctrs. in wings and abutments just above ground line.
All material and workmanship as per spec. of La. Hwy. Com.
All exposed corners to be chamfered 1".
If piles are used, footing is to be deepened 9" as shown by dotted lines in the drawing. The number, kind and amount of reinforcing steel to remain unchanged.

Vail 12-2-45

STANDARD
12 FT. R.C. ABUTMENT

LOUISIANA HIGHWAY COMMISSION
BATON ROUGE LA

Scale ⅜"=1'-0" Date Nov. 1923.

APPROVED

STATE HIGHWAY ENGINEER

FOR INFORMATIONAL PURPOSES ONLY

(B-2-001)