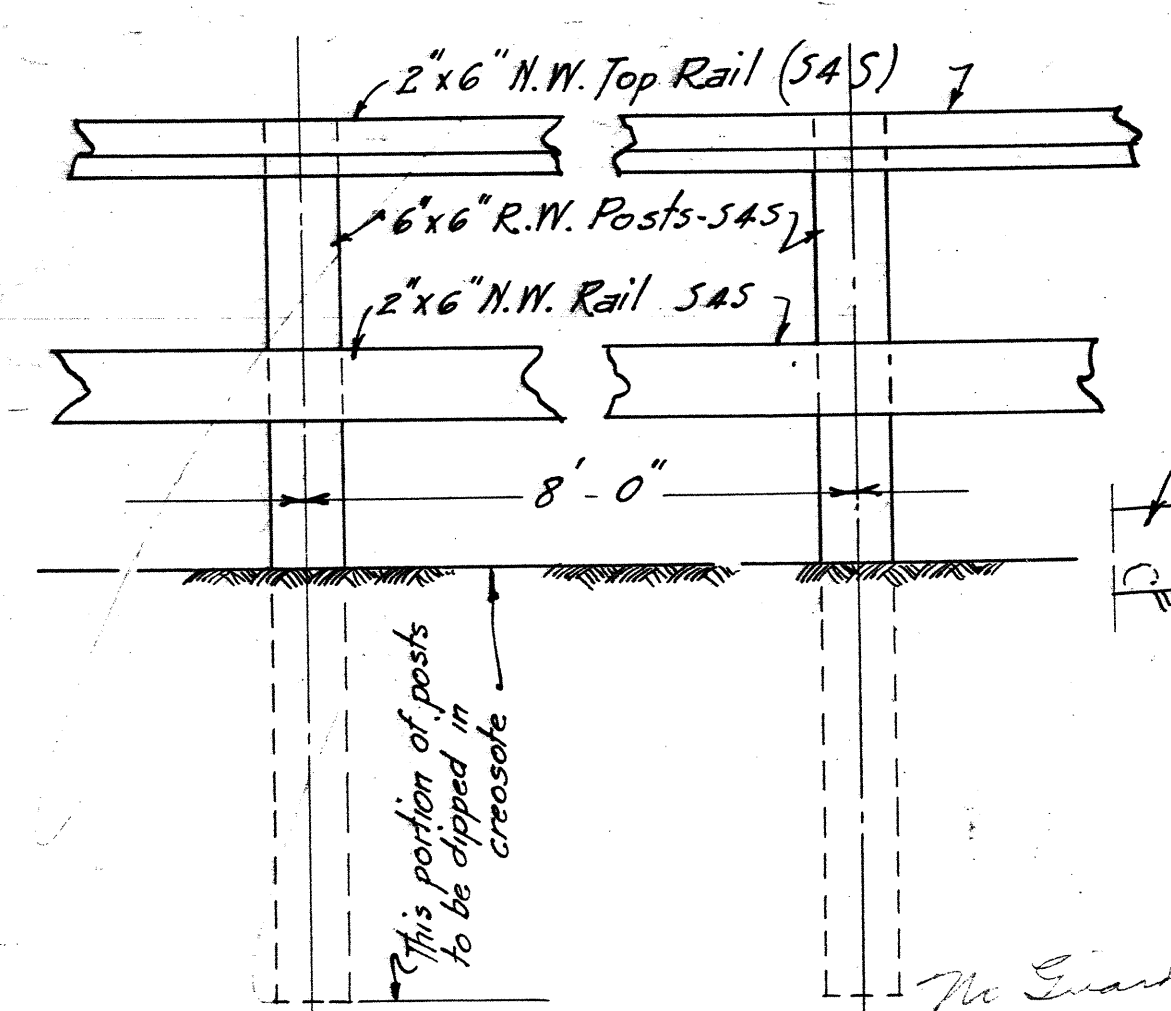
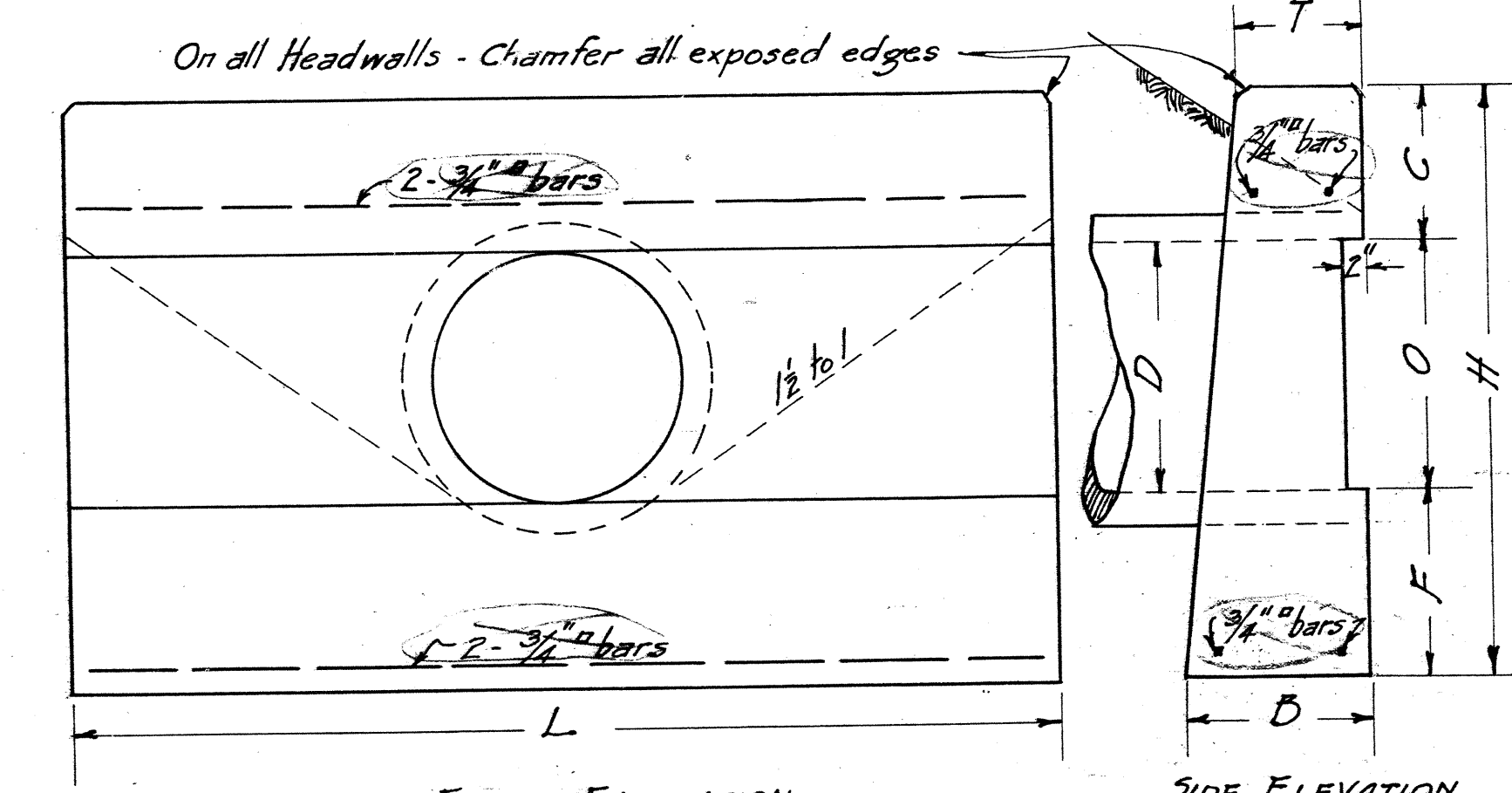


NOTE: Portion of Guard Rail above ground to be painted 3 coats of white lead and oil with sand finish.



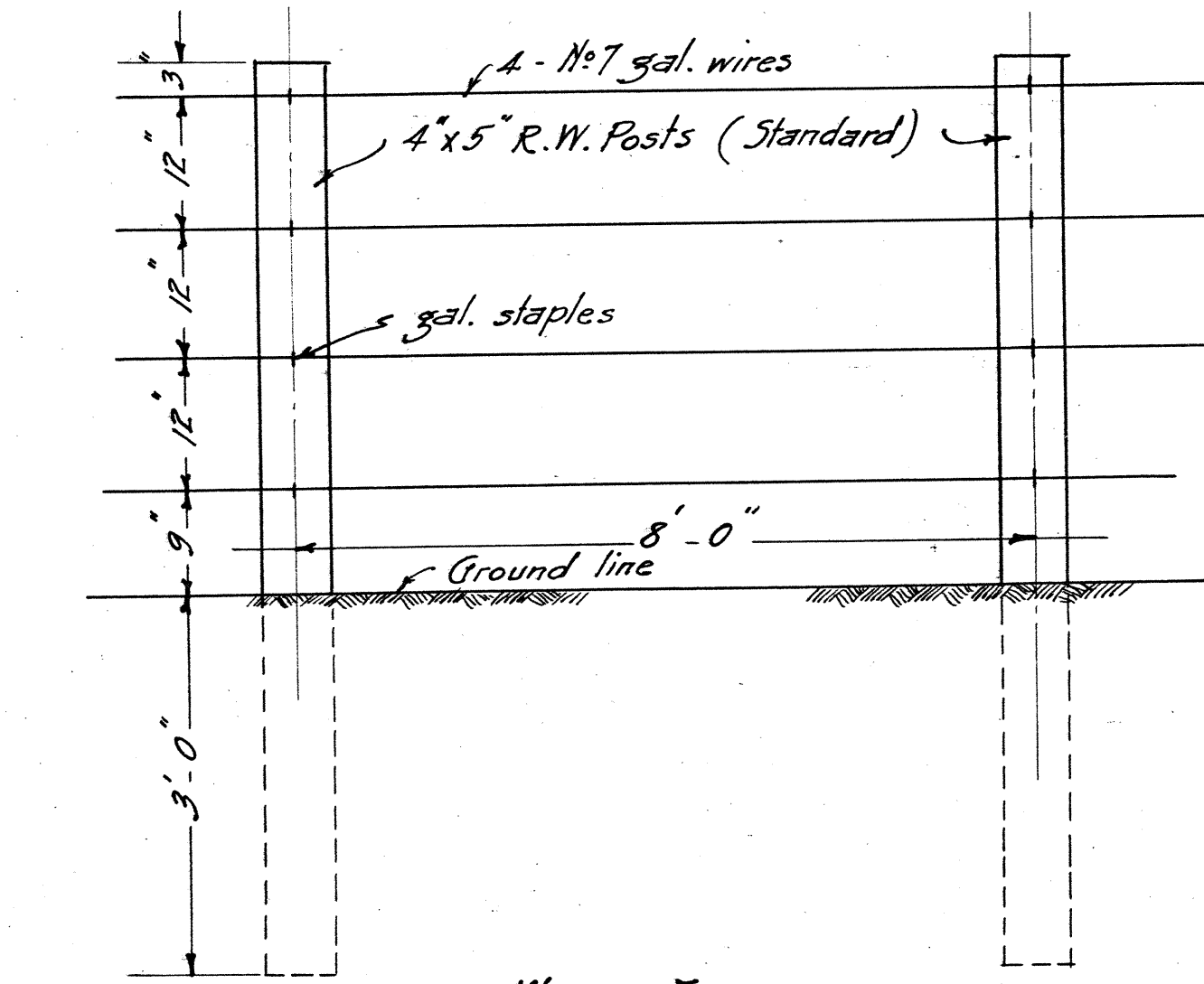
GUARD RAIL
Scale $\frac{3}{4}" = 1 \text{ ft.}$



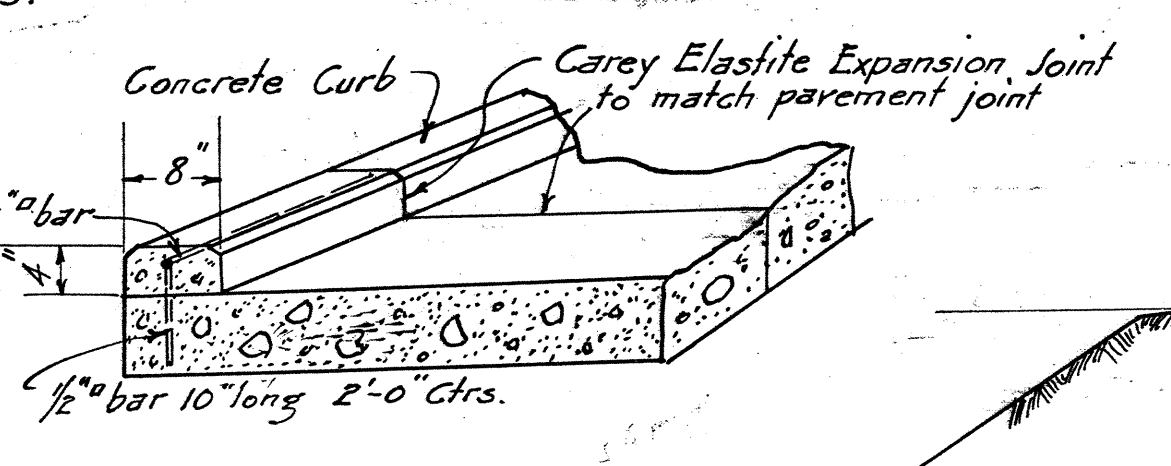
FRONT ELEVATION SIDE ELEVATION
HEADWALL FOR PIPE CULVERTS
Class B Concrete

D	B	T	L	F	O	C	H	Conc. 1 H.W.
18"	1'-6"	1'-0"	6'-6"	1'-6"	18"	1'-3"	4'-3"	1.74
21"	1'-6"	1'-0"	7'-0"	1'-6"	21"	1'-3"	4'-6"	1.83
24"	1'-6"	1'-0"	8'-0"	1'-6"	24"	1'-3"	4'-9"	1.92
27"	1'-6"	1'-0"	9'-0"	1'-6"	27"	1'-3"	5'-0"	2.01

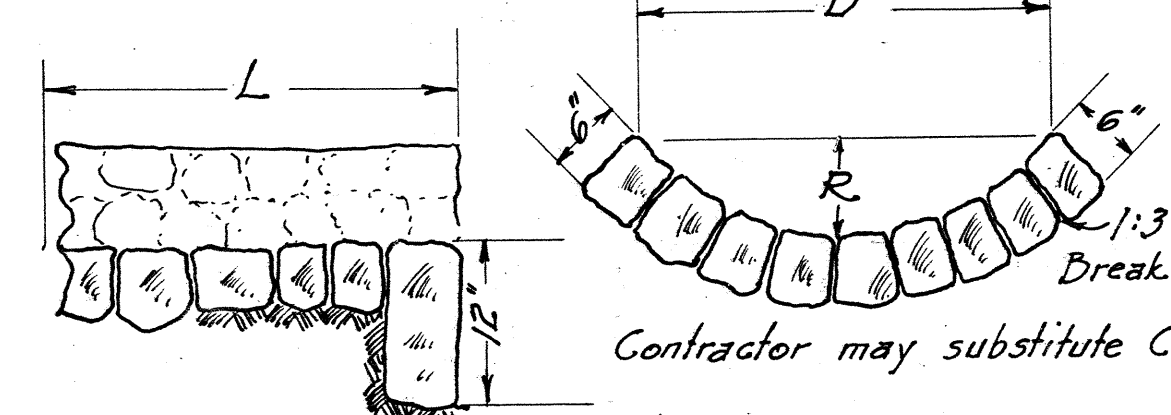
NOTE: Sta. 321+00, Outlet Headwall for 18" pipe culvert - "H" = 5'-9" "D" = 1'-8" "B" = 1'-6" "T" = 1'-0" "L" = 6'-6" "F" = 1'-6" "O" = 18" "C" = 1'-3" "H" = 4'-3" "Conc. 1 H.W." = 1.74
Sta. 338+65 "H" = 6'-0" "D" = 1'-8" "B" = 1'-6" "T" = 1'-0" "L" = 7'-0" "F" = 1'-6" "O" = 21" "C" = 1'-3" "H" = 4'-6" "Conc. 1 H.W." = 1.83
Sta. 342+95 "H" = 6'-0" "D" = 1'-8" "B" = 1'-6" "T" = 1'-0" "L" = 8'-0" "F" = 1'-6" "O" = 24" "C" = 1'-3" "H" = 4'-9" "Conc. 1 H.W." = 1.92
Headwalls for double 27" culvert, add D+6 inches to "L"
 $\frac{3}{4}"$ bars shown to be used only in double 27" culvert Headwalls.



WIRE FENCE
Scale $\frac{3}{4}" = 1 \text{ ft.}$



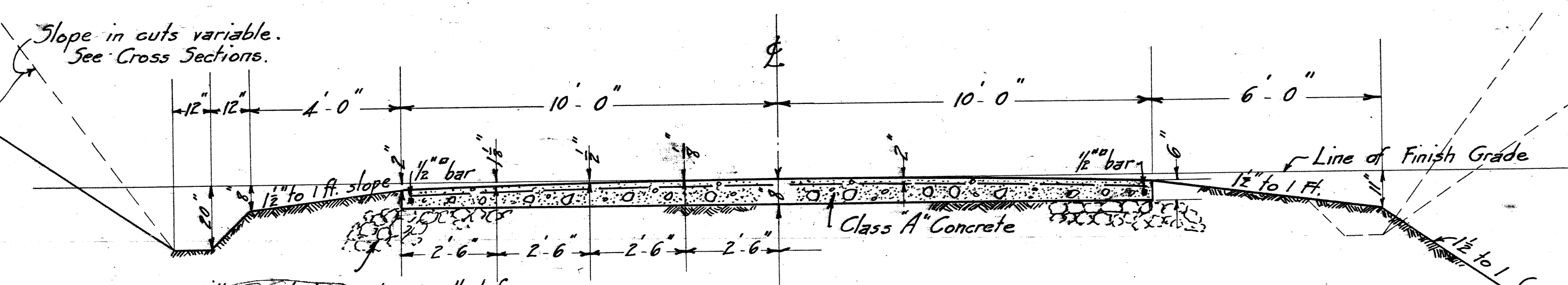
CONCRETE CURB
INSIDE EDGE OF SUPER-ELEVATED CURVES ON FILLS



Pipe	R	D	L
18"	8"	2'-6"	8'-0"
21"	8"	2'-6"	8'-0"
24"	8"	3'-0"	8'-0"
27"	8"	3'-6"	8'-0"

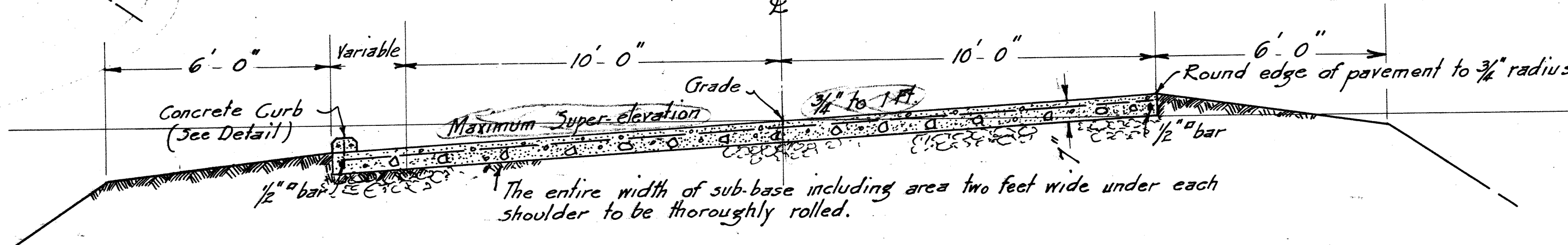
PAVED OUTLETS FOR PIPE CULVERTS

NOTE: Paving at Viaduct - D = 4'-0" R = 8" "D" for inlet paving, same as "L" for Drop Intake Length of intake paving = 8'-0"



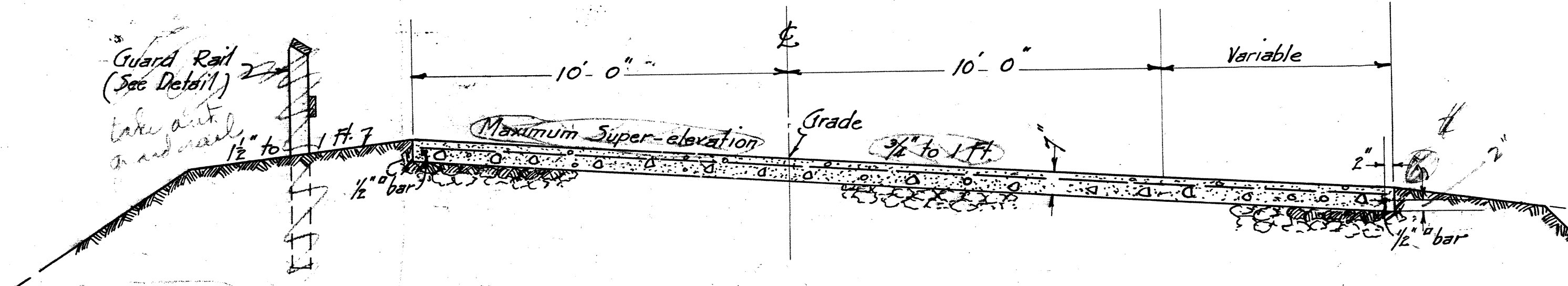
TYPICAL SECTION ON TANGENTS

NOTE: On tangents pavement to be 6 inches at edges and 8 inches at center. All super-elevated pavement to be 7 inches thick with full super-elevation at P.C. and P.T. of curves.



SUPER-ELEVATED SECTION (CURVE TO LEFT)

with cut or fill on outside and fill on inside of curve



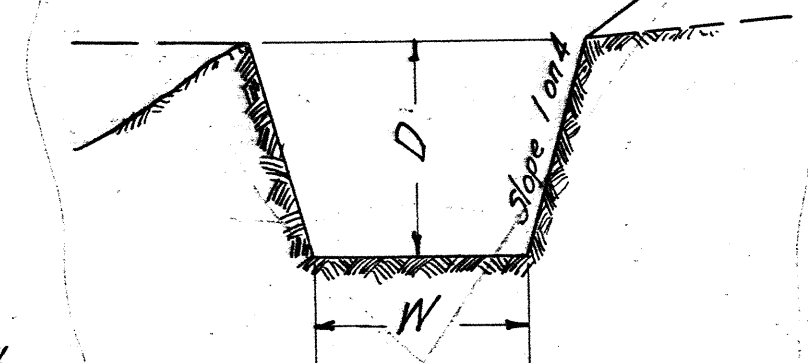
SUPER-ELEVATED SECTION (CURVE TO RIGHT)

with cut or fill on outside and cut on inside of curve

SECTIONS FOR CONCRETE PAVING

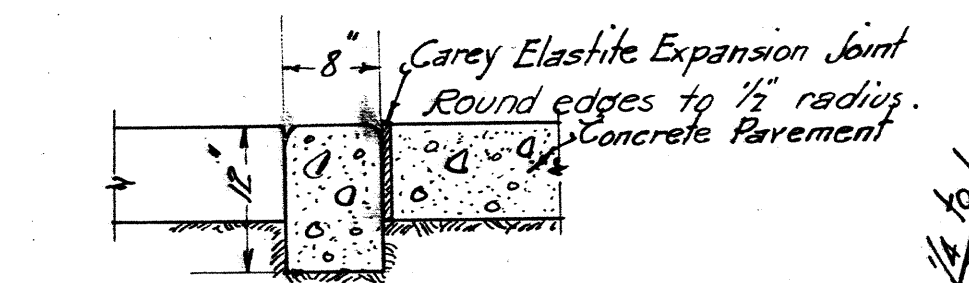
Scale $\frac{3}{8}" = 1 \text{ ft.}$

Reinforcement for pavement shall be Wire Mesh, which will be furnished by the City and County of Honolulu. Square bars to be furnished by contractor. Reinforcement shall be placed 2" below and parallel to the finished surface and extending to within 2 inches of sides and ends of pavement slabs. Expansion joints of Carey Elastite Expansion Joints $\frac{3}{8}"$ thick shall be placed not more than 50 feet apart. All joints shall project at least $\frac{1}{8}"$ above the pavement and to extend through the whole depth of pavement to sub-grade. Before opening pavement to traffic, the joints shall be cut off flush with top of pavement. Expansion joints to be placed at beginning (P.C.) and at ending (P.T.) of curves.

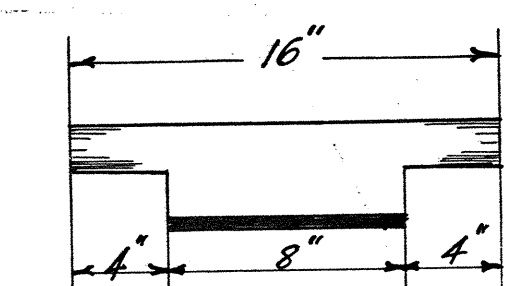


SECTION OF DITCH
Scale $\frac{3}{4}" = 1 \text{ ft.}$

Pipe	D	W
18"	24"	24"
21"	24"	24"
24"	24"	24"
27"	30"	30"



8x12x6" CONCRETE HEADER
Class H Concrete
Scale $\frac{3}{4}" = 1 \text{ ft.}$



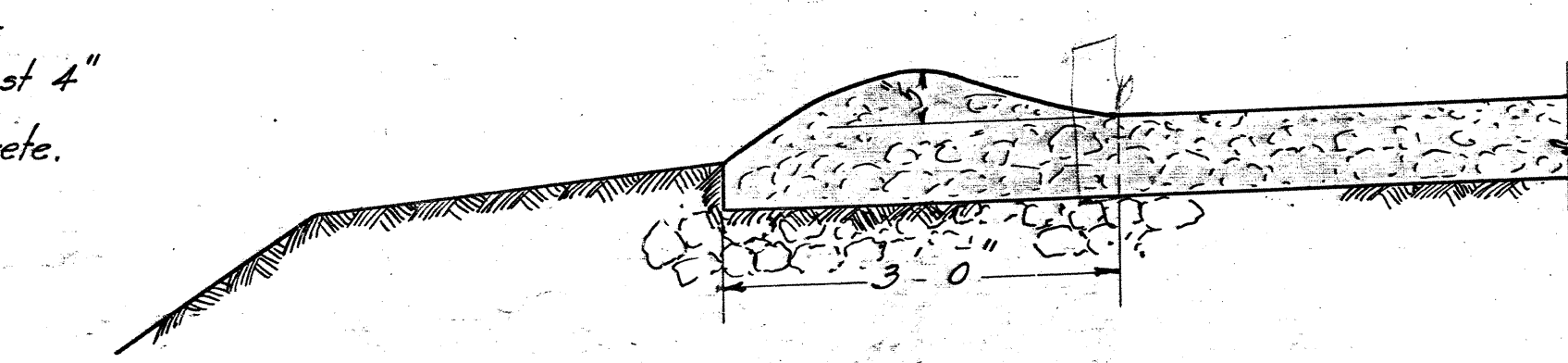
RUBBLE MASONRY RETAINING WALL
Scale $\frac{3}{4}" = 1 \text{ ft.}$

NOTE: Unless otherwise directed dry rubble wall shall have same cross-section.

SUPER-ELEVATED SECTION OF ASPHALT MACADAM PAVING

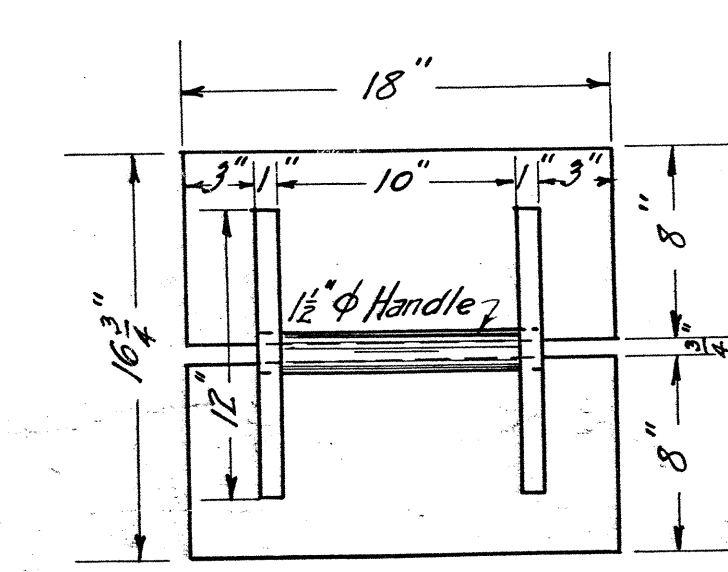
Scale $\frac{3}{8}" = 1 \text{ ft.}$

NOTE: On tangents, section for Asphalt Macadam Paving shall be the same as for Concrete Paving, except for thickness.



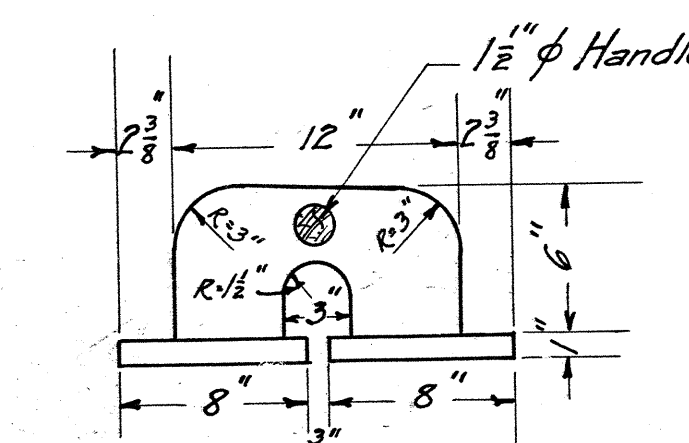
DETAIL OF INSIDE EDGE OF SUPER-ELEVATED CURVES ON ASPHALT MACADAM WHEN INSIDE EDGE COMES ON FILL.

Scale $\frac{3}{4}" = 1 \text{ ft.}$



PLAN

WOODEN SPLIT FLOAT
Scale $\frac{1}{2}" = 1 \text{ ft.}$



END VIEW

Sheet 1 of 2 sheets of details

STATE ASSIGNED
PROJECT NO. DD-083-02-89

OFFICE OF THE CITY & COUNTY ENGINEER
HONOLULU, HAWAII
KAMEHAMEHA HIGHWAY - 2ND UNIT
SECTION 7
DETAILS

ENGINEER: U.T. J.P.S. DATE: Sept. 10, 1921
DRAFTSMAN: H.M. CHECKED BY: B.B.H.
SCALE: Noted APPROVED: J. J. J. J.
CITY AND COUNTY ENGINEER

FILE	POCKET	FOLDER	NO.
4	XX	21	18