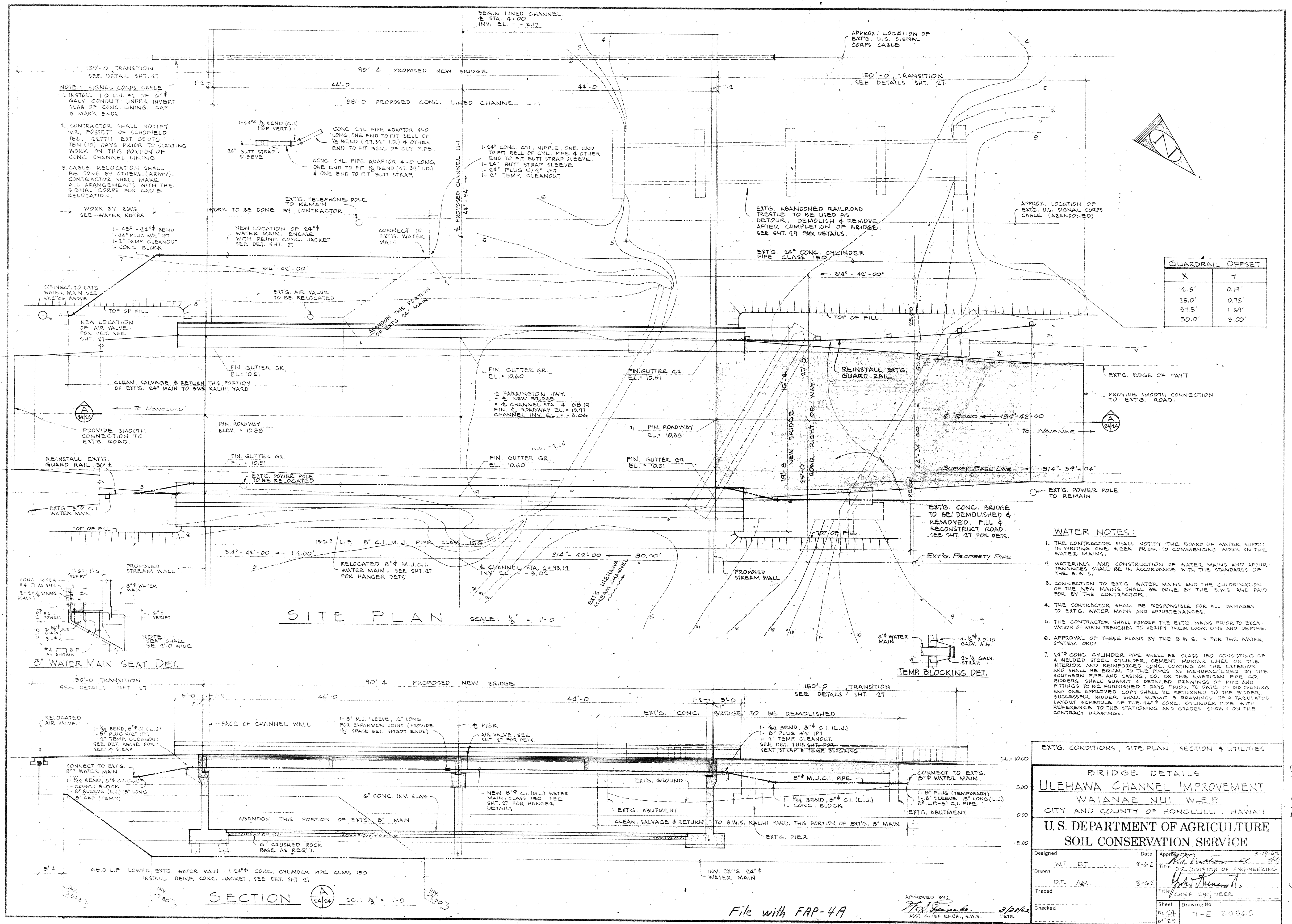




Hand-drawn architectural drawings of a bridge railing, showing two elevations: Hand Rail Elevation and End Post Elevation.

Hand Rail Elevation:

- Overall height: 3'-0"
- Top rail height: 9"
- Middle rail height: 9"
- Bottom rail height: 9"
- Labels: CAP ENDS, FIN. GR.

End Post Elevation:

- Overall height: 3'-0"
- Top rail height: 5'-0"
- Middle rail height: 4'-0"
- Bottom rail height: 1'-0"
- Labels: END OF BRIDGE DECK, FIN. GR.
- Reinforcement details: #4 @ 18", 2-#5, T & B

HAND RAIL ELEVATION

END POST ELEVATION

TYP SECT @ WALKWAY

TYP. SECT. THRU FARRINGTON HIGHWAY $\frac{1}{4}" = 1'-0"$

NOTE: PROVIDE SMOOTH PAVED
TRANSITION TO EXT'G.
DRIVEWAYS.

② BRIDGE PIER,
 ADD 15' 4" x 4'-6"
 @ EA. CORNER
 ADD 1- # 5 x 5'-0", TOP
 @ EA. SIDE
 AIR VALVE
 OPNS.
 PLAN

$\frac{3}{8} \times \frac{1}{2}$ " F.B. AROUND PERIMETER (GALV.)
 $\frac{3}{16}$ " F.H. MACH. SCREW (BRASS) (4 REQ'D.)
 $1 \frac{1}{2} \times 2 \times 0 \frac{1}{8}$ " CHECKERED FL. (GALV.) W/ $\frac{3}{4}$ " ϕ LIFTING HOLE.
 $1 \times \frac{1}{2}$ " F.B. AROUND PERIMETER (GALV.)
COVER & FAST DET.

TYP. SECT. @ END POST
 $\frac{1}{2}'' = 1' - 0$

NOTE

1. $\frac{1}{2}$ " x 3" INCISED LETTERS.
2. DETAILS OF LETTERS AND ARRANGEMENT TO BE SUBMITTED LATER
3. LETTERS TO BE INCISED ON HIGHWAY FACE OF END POST.

LOCATION VIEW

PIPE HANGER &
AIR VALVE DETAIL

SECTION  $3/4" = 1'-0"$

[illegible]

CONCRETE JACKET DETAIL $\frac{3}{8}'' = 1'-0''$

7'-0"
C
27
CONC. BLOCK DET.
3/4" = 1'-0"

PAVEMENT TRANSITION DETAIL

FIN. O.R.
 REUSE EXIST. VALVE BOX FRAME & COVER
 7
 TOP OF VALVE
 C. BRIDGE W/ METER LEVELING BASE
 REUSE EXIST. 2" AIR VALVE 3/4" SHUT. 24" FOR LOCATION
 COVER OVER PIPE VARIABLE - 1" MIN. TO 3" DEPENDENT ON VALVE 2
 2" GALV. PIPE (CUT TO FIT)
 2" UNION OR JOINT
 1 1/2" x 2" CORR. STOP
 REUSE AS REQ.
 3/8" x 1" STEEL STRAP
 HEX. NUT
 2" x 3/8" x 2" WASHER
 3/8" ϕ BOLT
 3" x 1/4" x 3" WASHER
 HEX. NUT
 EXIST. 24" CONC. CYL. PIPE

ANCHOR
BOLT DET

AIR VALVE DET. - 24" ϕ WATER MAIN
SCALE: $\frac{3}{4}$ " = 1'-0"

4. TRANSITION PROFILE: FARRINGTON HIGHWAY

The diagram illustrates the welding details for a hand rail. It consists of two main views: a Plan view and a Section view.

Plan View: Shows a top-down perspective of the rail assembly. A central circular hole represents the rail's cross-section. A vertical line through the center is labeled "RAIL POST". To the right, a dimension of $5 \times 4 \times 0.5$ is noted, followed by "WELD UP HOT-DIPPED GALV.". A small detail sketch at the top right shows a corner joint with a $\frac{1}{4}$ inch dimension.

Section View: Shows a cross-section of the rail. The rail itself is a shaded rectangle with a height of $3\frac{1}{2}$ inches. It is supported by a base plate, also shaded, which has a width of 3 inches. A dimension of $2 - \frac{1}{2}$ inches is shown for the base plate's thickness. To the right, a detail sketch shows a fillet weld joint with a $\frac{1}{4}$ inch dimension and the label "ANC." (Anchor).

Section View Labels:

- $3\frac{1}{2}$
- 3
- $2 - \frac{1}{2}$
- ANC.

Section View Title:

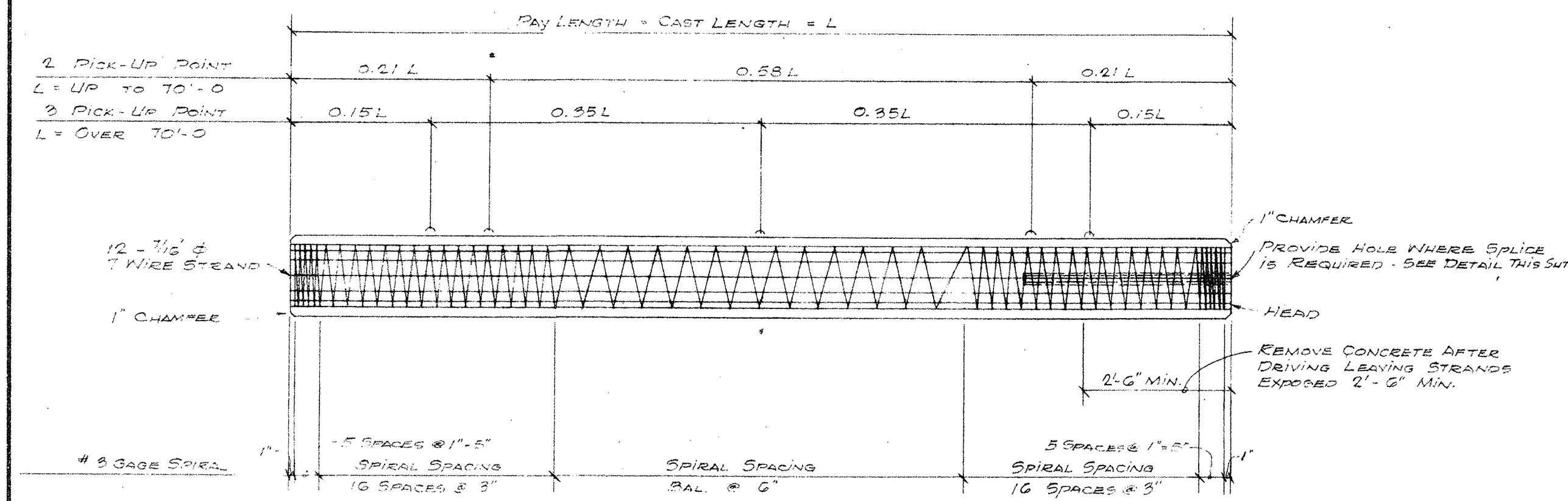
SECTION

Hand Rail Weld Up Details:

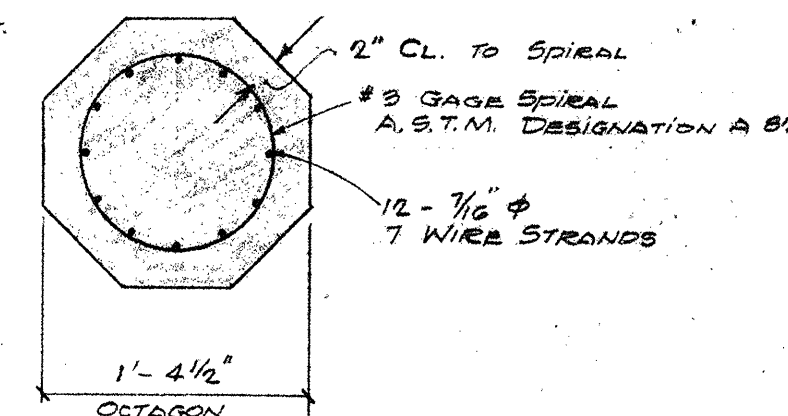
$1'' = 1'-0''$

SECTION
HAND RAIL
WELD P DETS
1" = 1'-0"

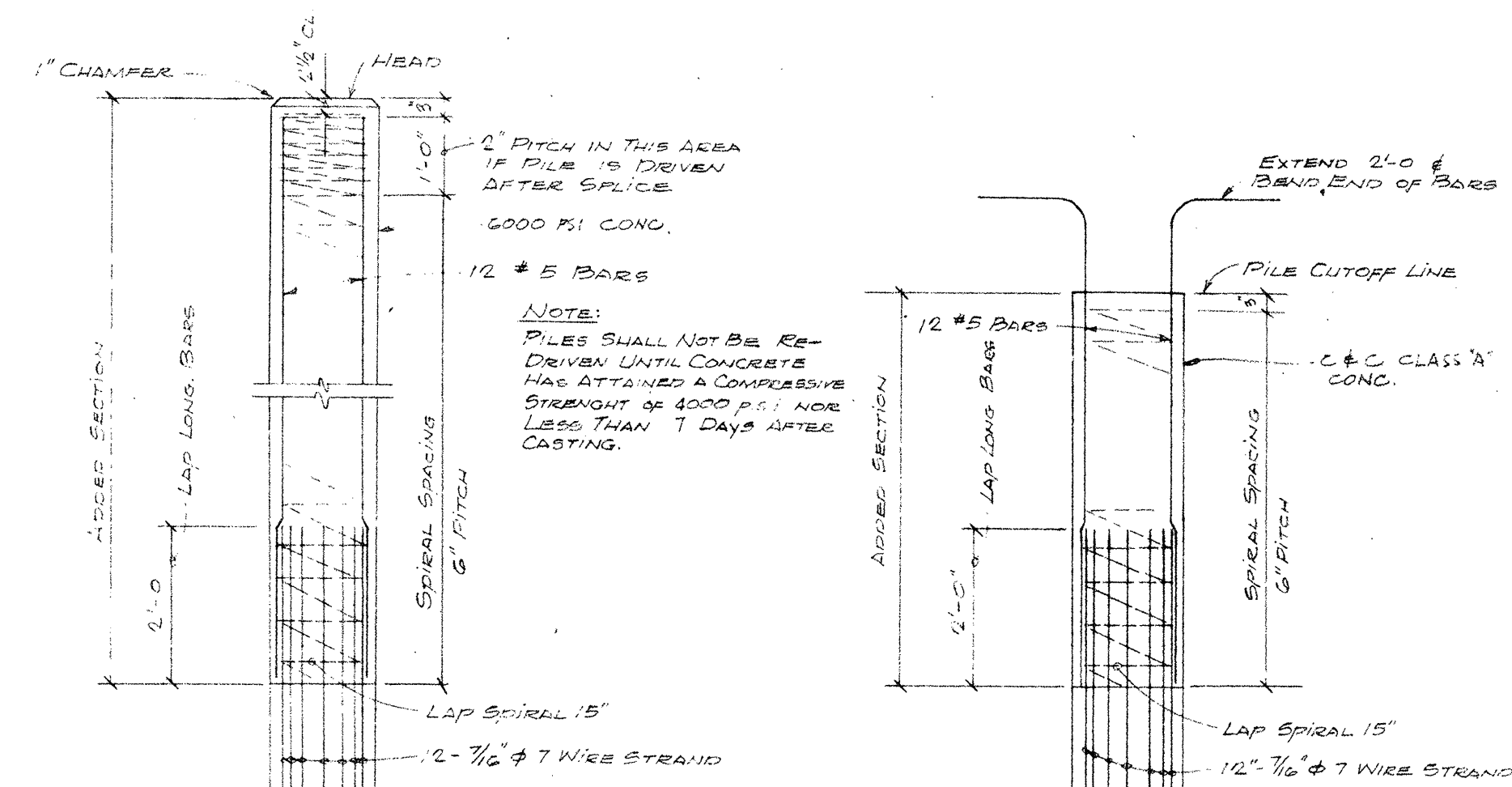
<u>HAND RAIL, ROAD, AND WATER DETAILS</u>			
<u>BRIDGE DETAILS</u>			
<u>ULEHAWA CHANNEL IMPROVEMENT</u>			
<u>WAIANAE NUI W.P.P</u>			
CITY AND COUNTY OF HONOLULU, HAWAII			
U. S. DEPARTMENT OF AGRICULTURE			
SOIL CONSERVATION SERVICE			
Designed	Date	Approved	3-7-62
W.T. D.T.	3-6-62	<i>W. H. Thompson</i>	
Drawn	3-6-62	Title	DIST. DIVISION OF ENGINEERING
A.M.	3-6-62	<i>John Thompson</i>	
Traced		Title	CHIEF ENGINEER
Checked		Sheet	No. 27
		Drawing No.	7-E-20545
		of 29	



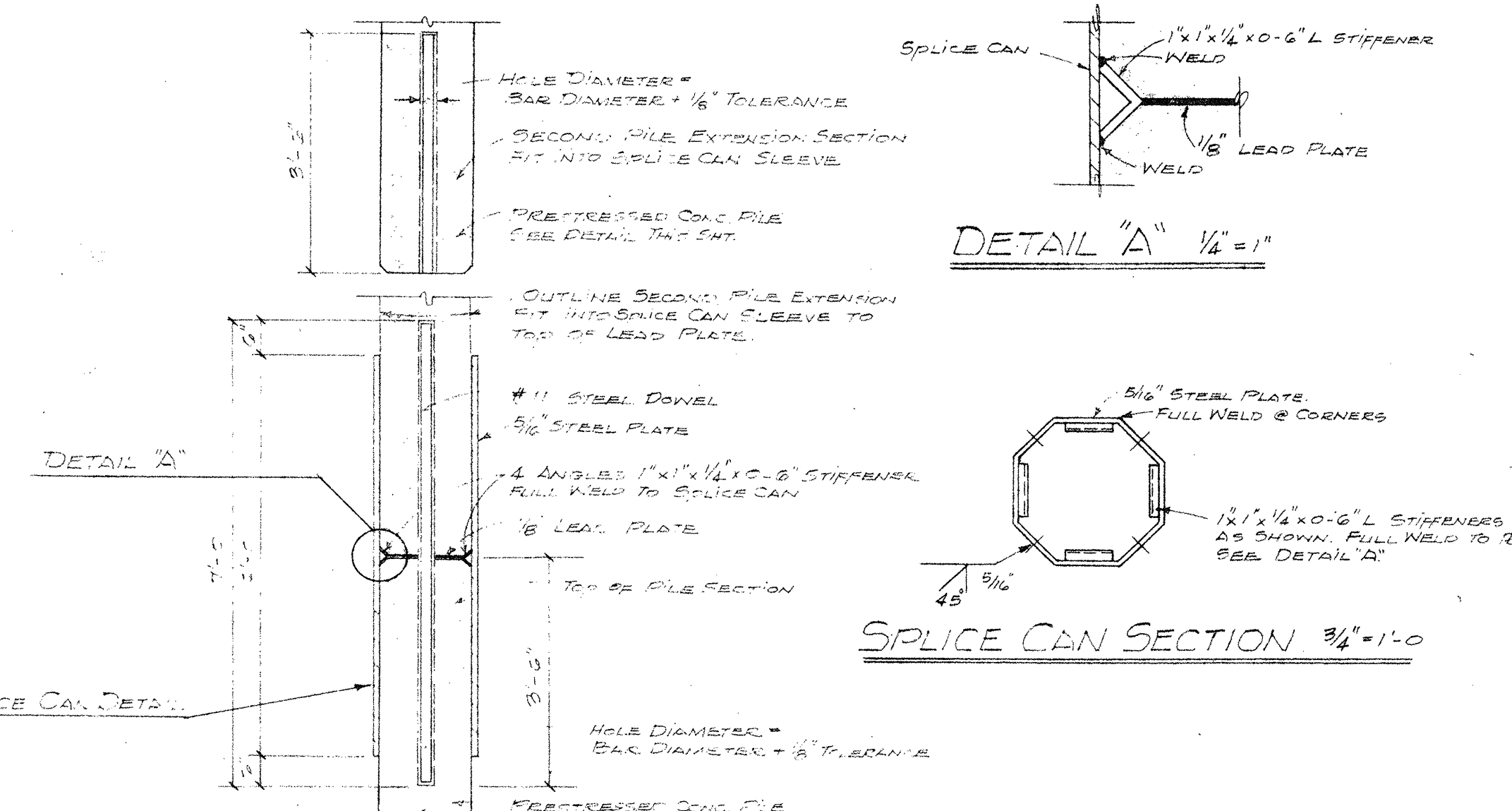
STIRRUP SPACING & TYPICAL DETAIL 1/2" = 1'-0"



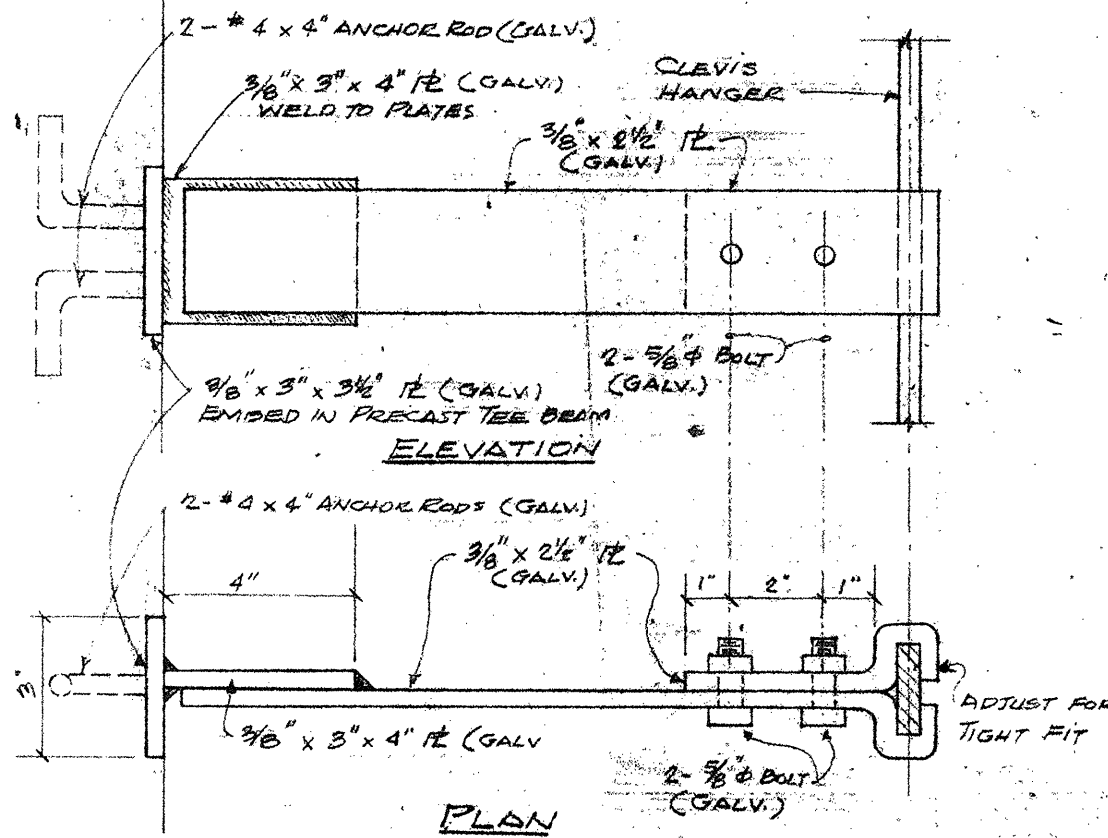
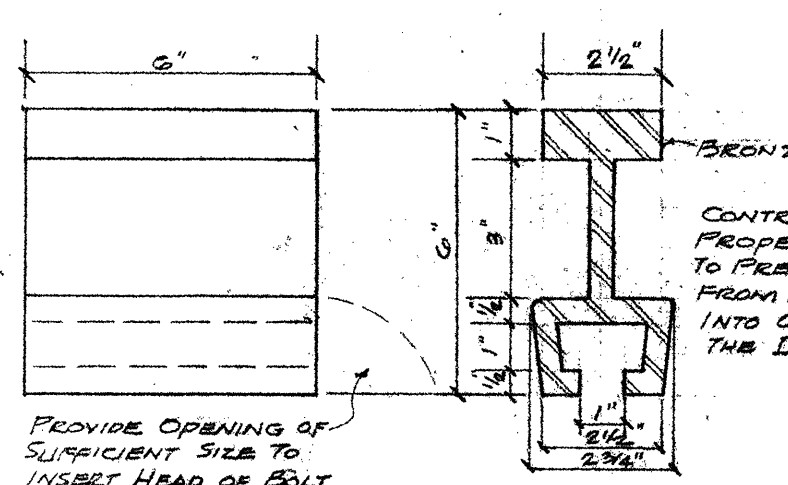
TYPICAL SECTION 1" = 1'-0"



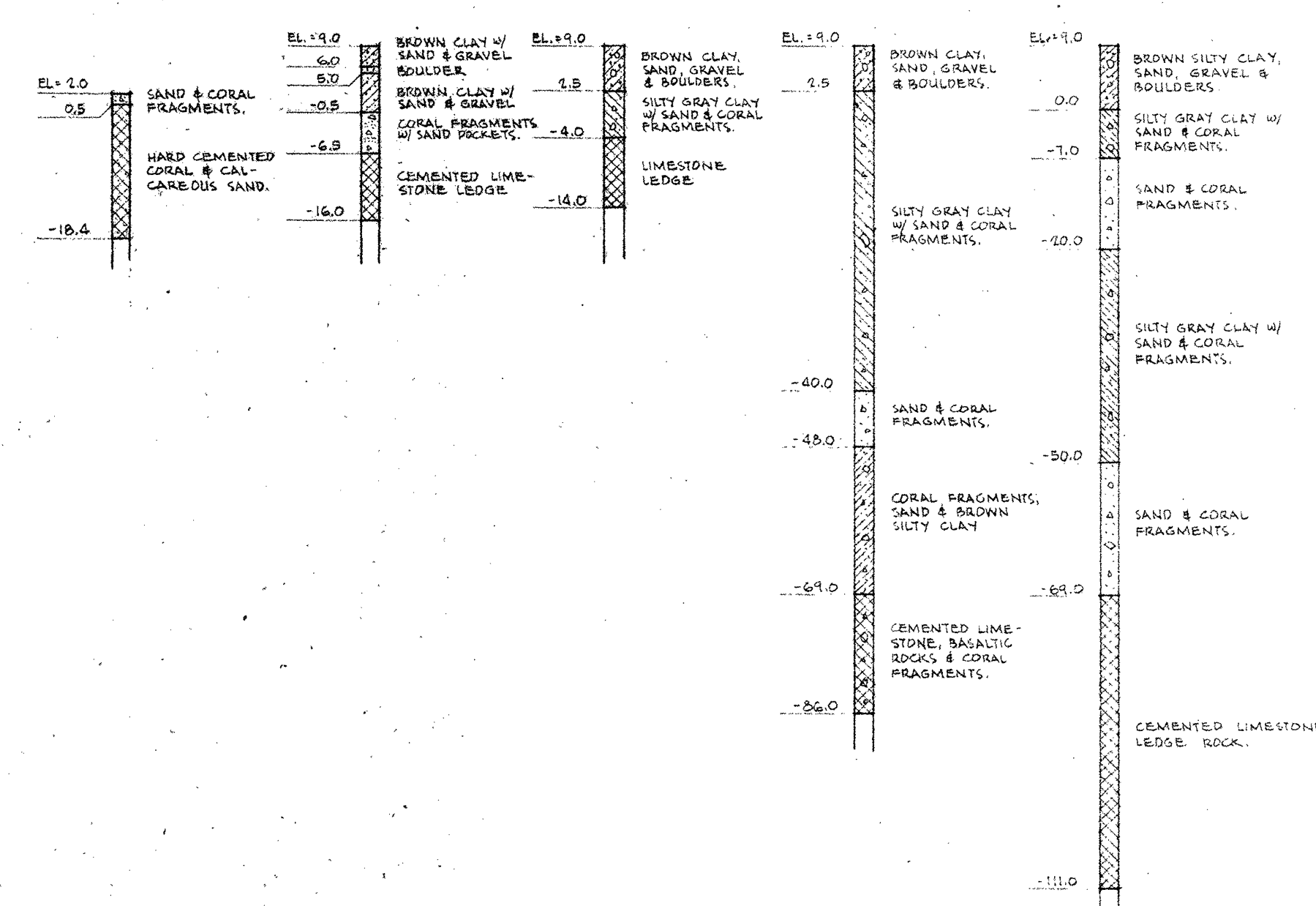
PILE BUILDUP 1/2" = 1'-0"

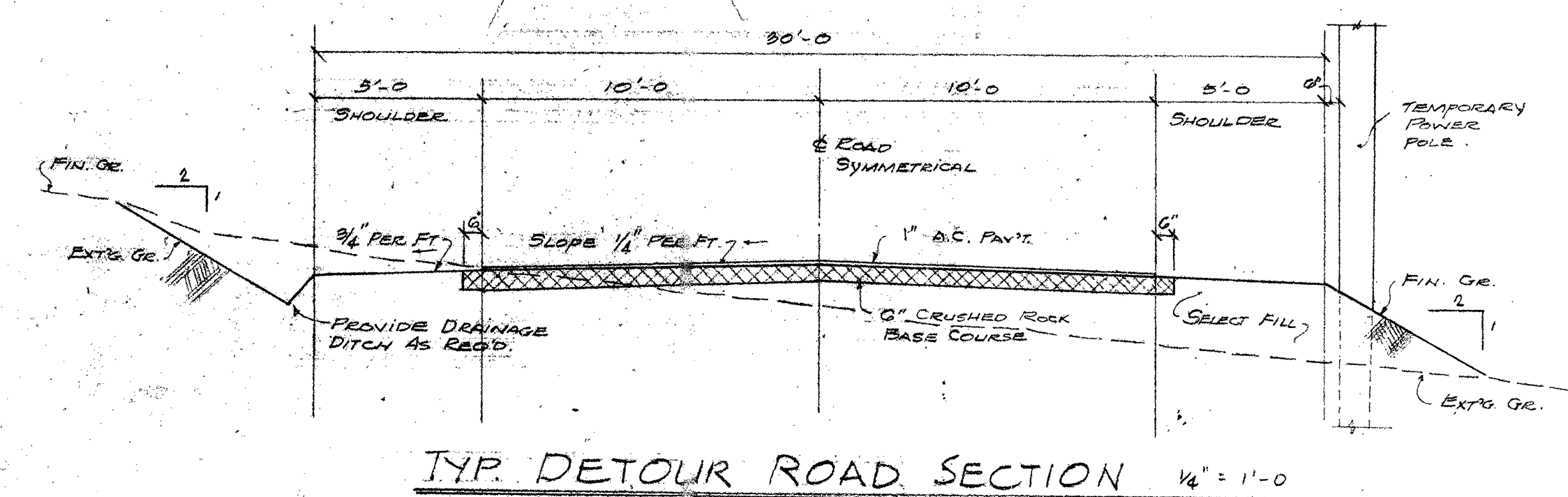
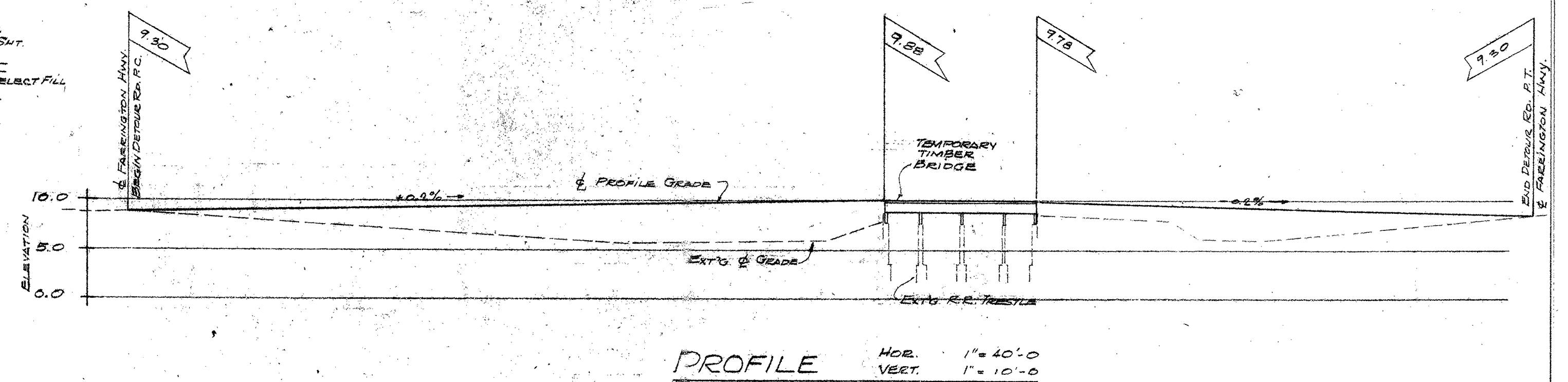
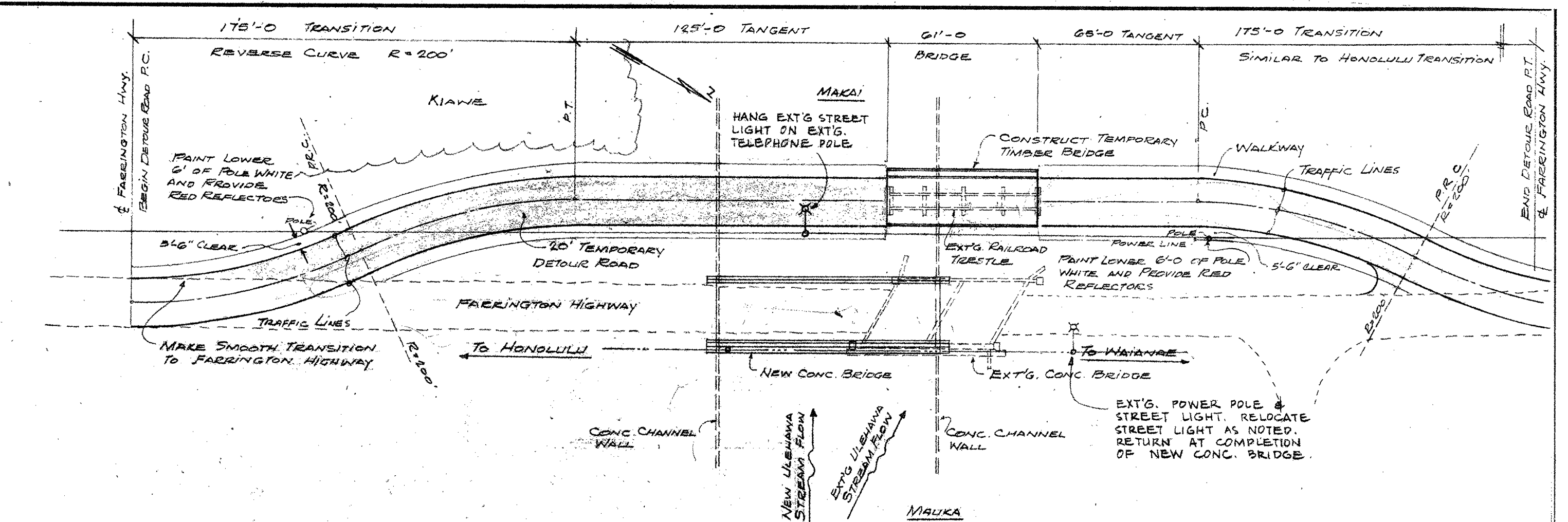
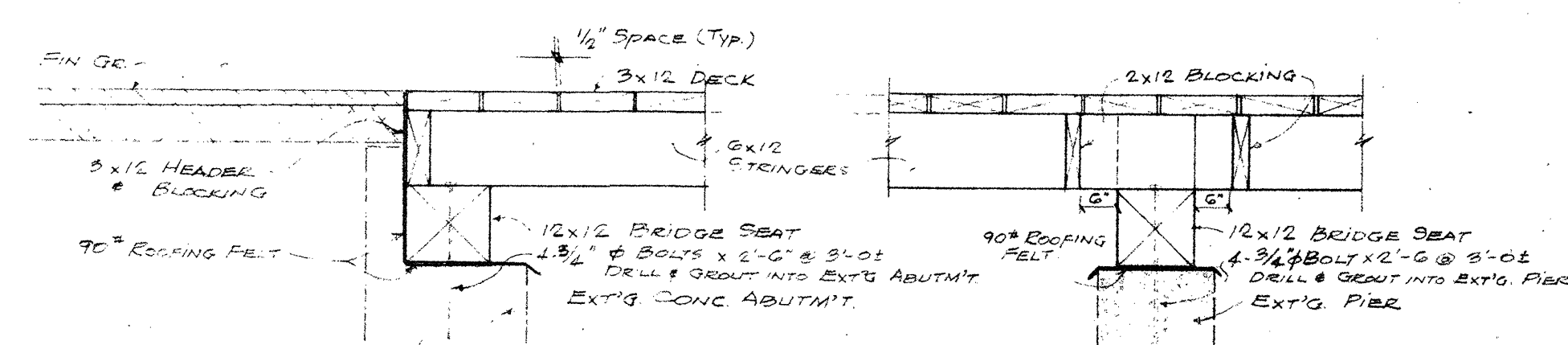
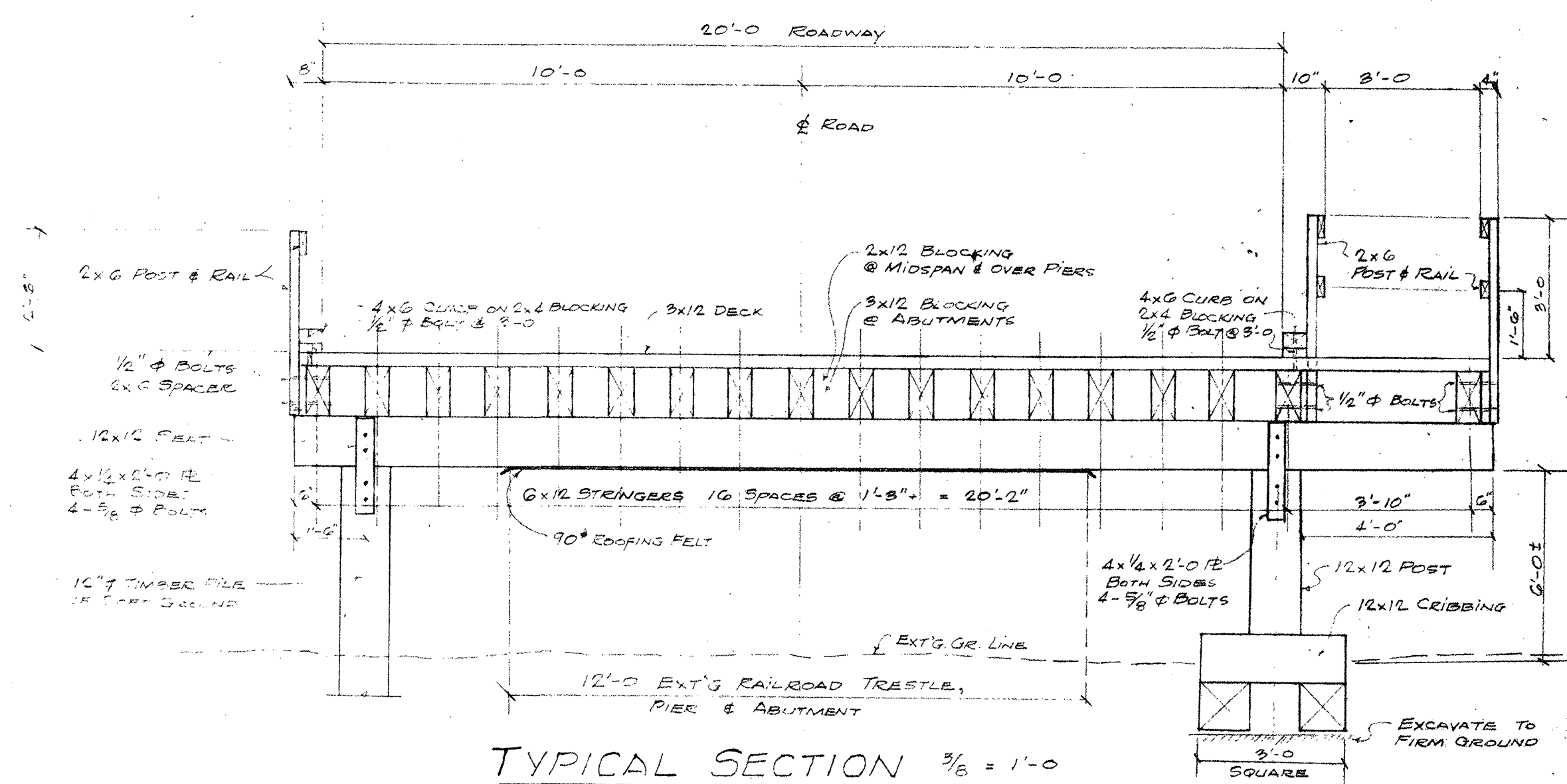
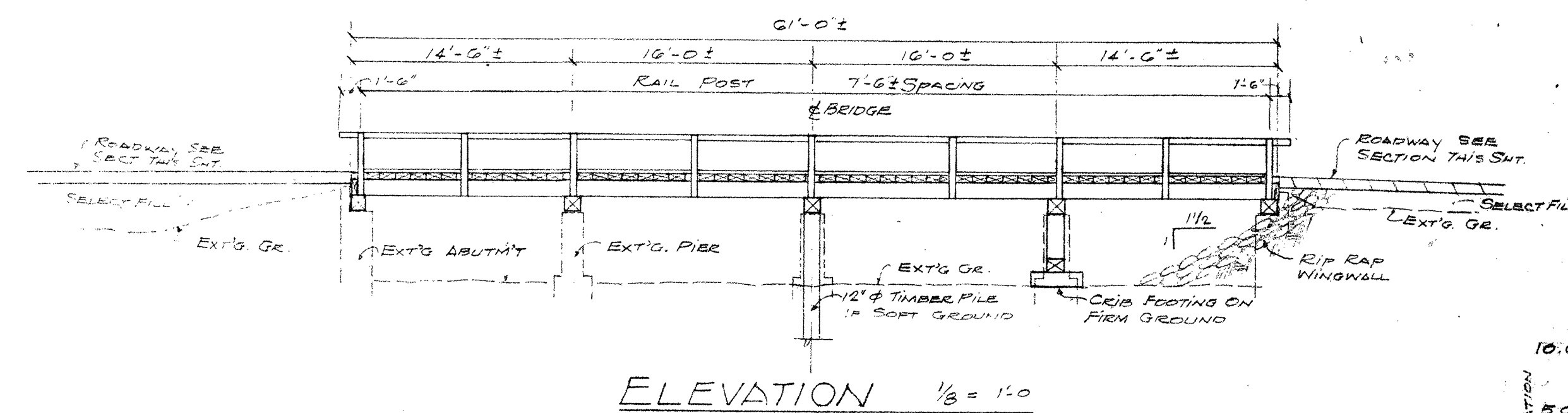
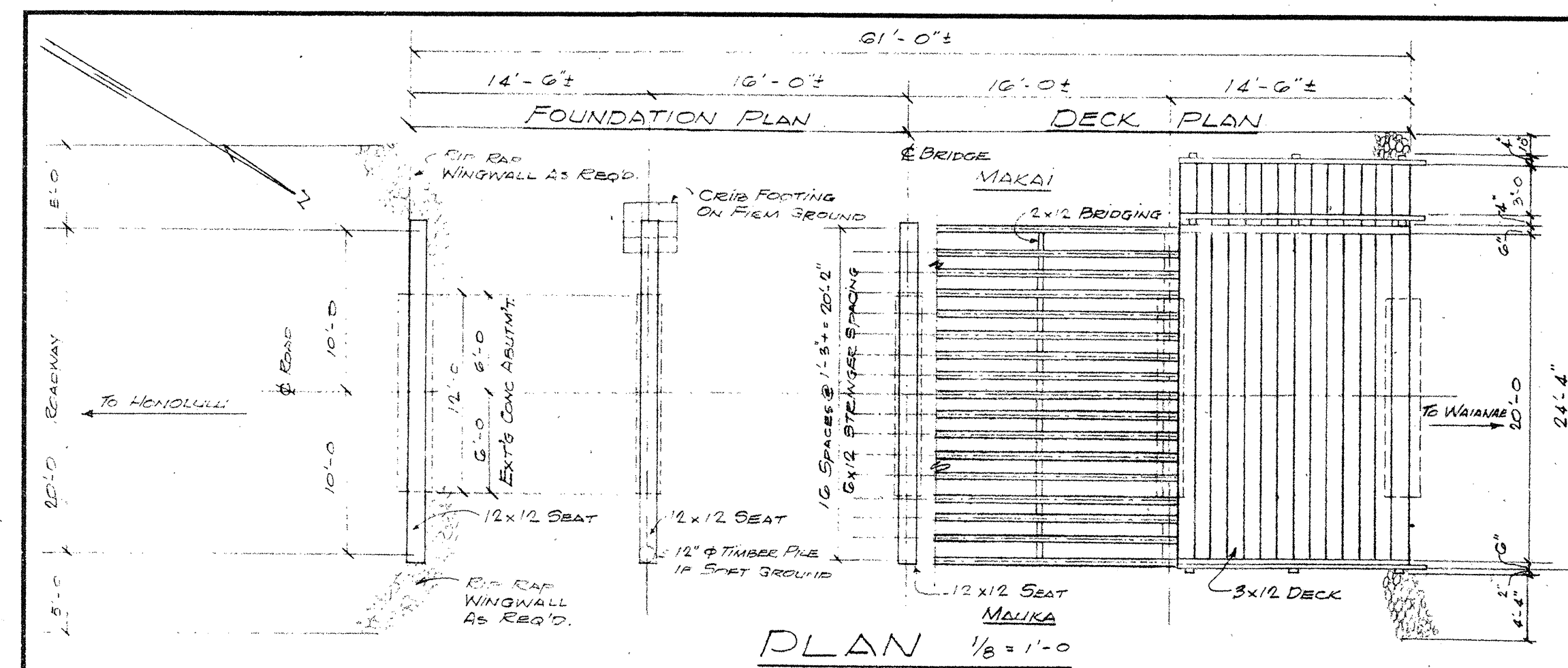


PILE SPLICE DETAIL 1/2" = 1'-0"



LATERAL BRACING DETAIL 3" = 1'-0"





- NOTES

1. RAILS, CURBS & POSTS SHALL BE S&S AND PAINTED WITH 2 COATS EXTERIOR WHITE PAINT.
2. ALL OTHER STRUCTURAL TIMBER SHALL BE ROUGH DOUGLAS FIR, DENSE CONSTRUCTION.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS OF EXIST'G. RAILROAD TRESTLE BEFORE STARTING CONSTRUCTION OF BRIDGE.
4. CONTRACTOR MAY REUSE EXIST'G. SOUND RAILROAD TRESTLE STRINGERS.
5. PROVIDE ADEQUATE SIGN MARKERS FOR DETOUR. MAINTENANCE OF DETOUR ROAD SHALL BE DONE BY THE CONTRACTOR.

CONSTRUCTION DETOUR DETAILS			
BRIDGE DETAILS <u>ULEHAWA CHANNEL IMPROVEMENT</u> <u>WAIANAE NUI W.P.P.</u> CITY AND COUNTY OF HONOLULU, HAWAII			
U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE			
Designed	Date	Approved by	9-19-62
WT. DT.	3-62	<i>W. H. Hume</i>	
Drawn		Title	DIR. DIVISION OF ENGINEERING
DT. AM.	3-62	<i>W. H. Hume</i>	
Traced		Title	CHIEF ENGINEER
Checked		Sheet	
		No. 29	
		Drawing No.	7-E-20365