

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-H3-1(29)13	1978	26	36

GENERAL NOTES

DESIGN SPECIFICATIONS:

Standard Specifications for Highway Bridges (11th Edition) with subsequent interim specifications.

DESIGN LOADS:

Pedestrian load 85 psf. or H10.

DESIGN STRESSES:

1. Reinforced Concrete - See AASHTO Specs.

$f'_c = 3,000$ psi, $f_c = 1200$, $n = 9$

$f_s = 20,000$ psi

2. Prestressed Concrete

See prestressing notes below.

3. Allowable soil bearing pressure of 3500 psf.

MATERIALS:

1. Cast-in-place concrete - Class A.

2. Reinforcing Steel - ASTM A-615 Grade 40.

3. Weld Wire Fabric - ASTM A-185 $f_y = 65,000$ psi.

4. Precast Prestressed Concrete - See Prestressing Notes.

CONSTRUCTION METHODS:

1. See Standard Specifications and Special Provisions.

2. Girder concrete seats and creep blocks to be poured monolithically with the abutment walls. Top surfaces of concrete seats to have a steel trowel finish.

3. Except as otherwise noted, all vertical dimensions are measured plumb.

4. Secure elastomeric bearing pads and preformed fabric bearing pads to concrete girder seats.

5. Abutment footings shall be excavated and poured neat against undisturbed ground. Any over excavation shall be backfilled with Class D concrete at the Contractor's expense and as directed by the Engineer.

6. Chamfer all formed corners $\frac{3}{4}$ " and round all finished corners $\frac{1}{4}$ " radius unless noted otherwise.

PRESTRESSING NOTES

1. Pretensioned strands shall be 270 ksi ultimate strength 7 wire, stress-relieved strands.

$\frac{1}{2}$ " ϕ (area = .153 in.²)

$f'_c = 5,500$ psi

$f'_c = 4,000$ psi

Total loss other than friction = 45,000 psi.

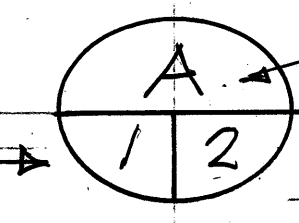
2. Strand pattern shall be symmetrical about the longitudinal ϕ of the beam.

3. Strand release sequence shall not induce any lateral deflection of the beam.

4. Contractor shall submit his proposed strand pattern and releasing sequence to the Engineer for approval.

5. Lifting devices shall be placed as close as possible to the center line of bearings of the beam. Details and location of lifting devices shall be submitted to the Engineer for approval. Such approval does not relieve the Contractor of his responsibilities if the beam is damaged due to failure of the lifting devices.

SYMBOL

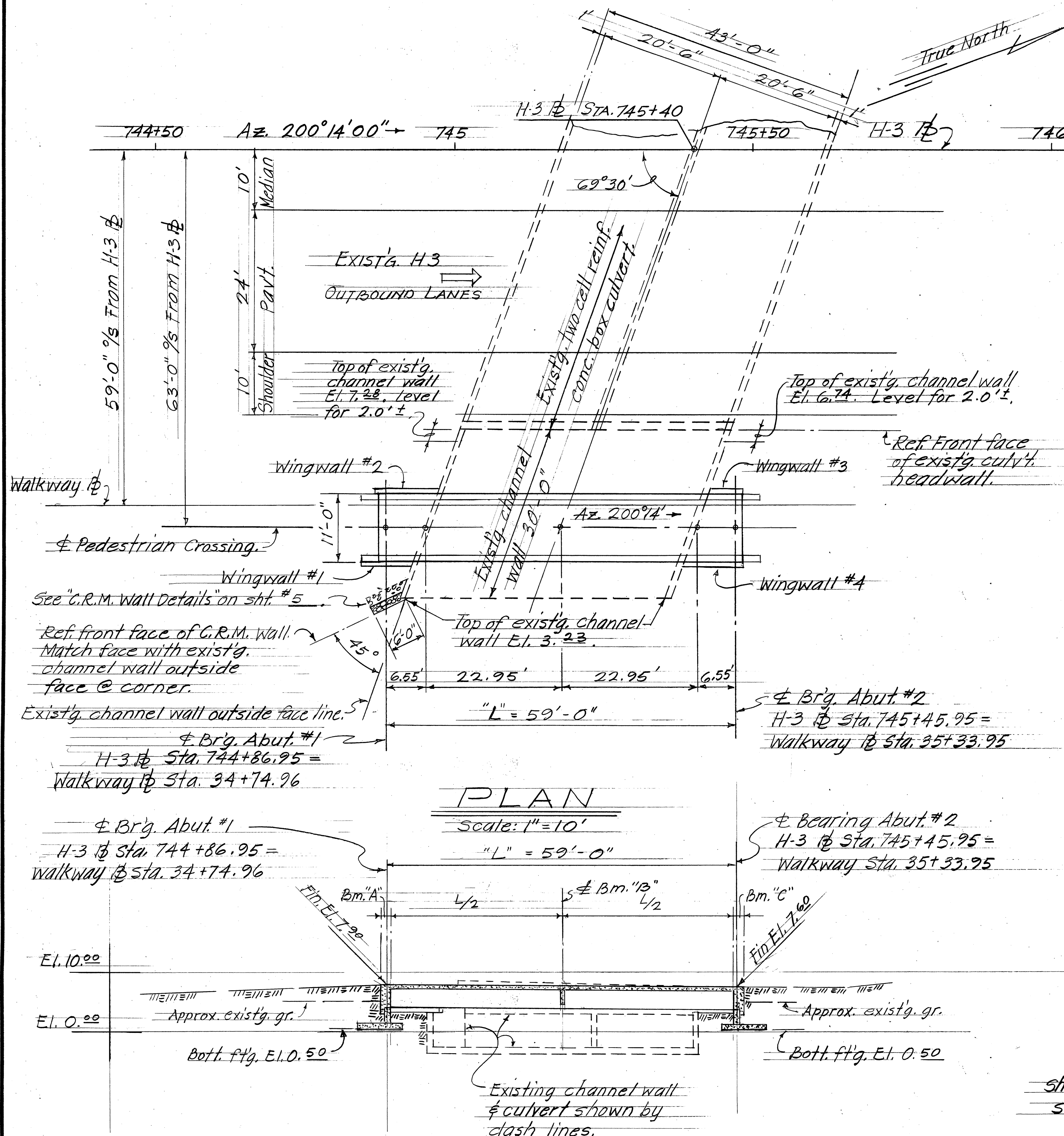


Section or detail designation.

sheet number detail or section taken.

sheet number detail or section drawn on.

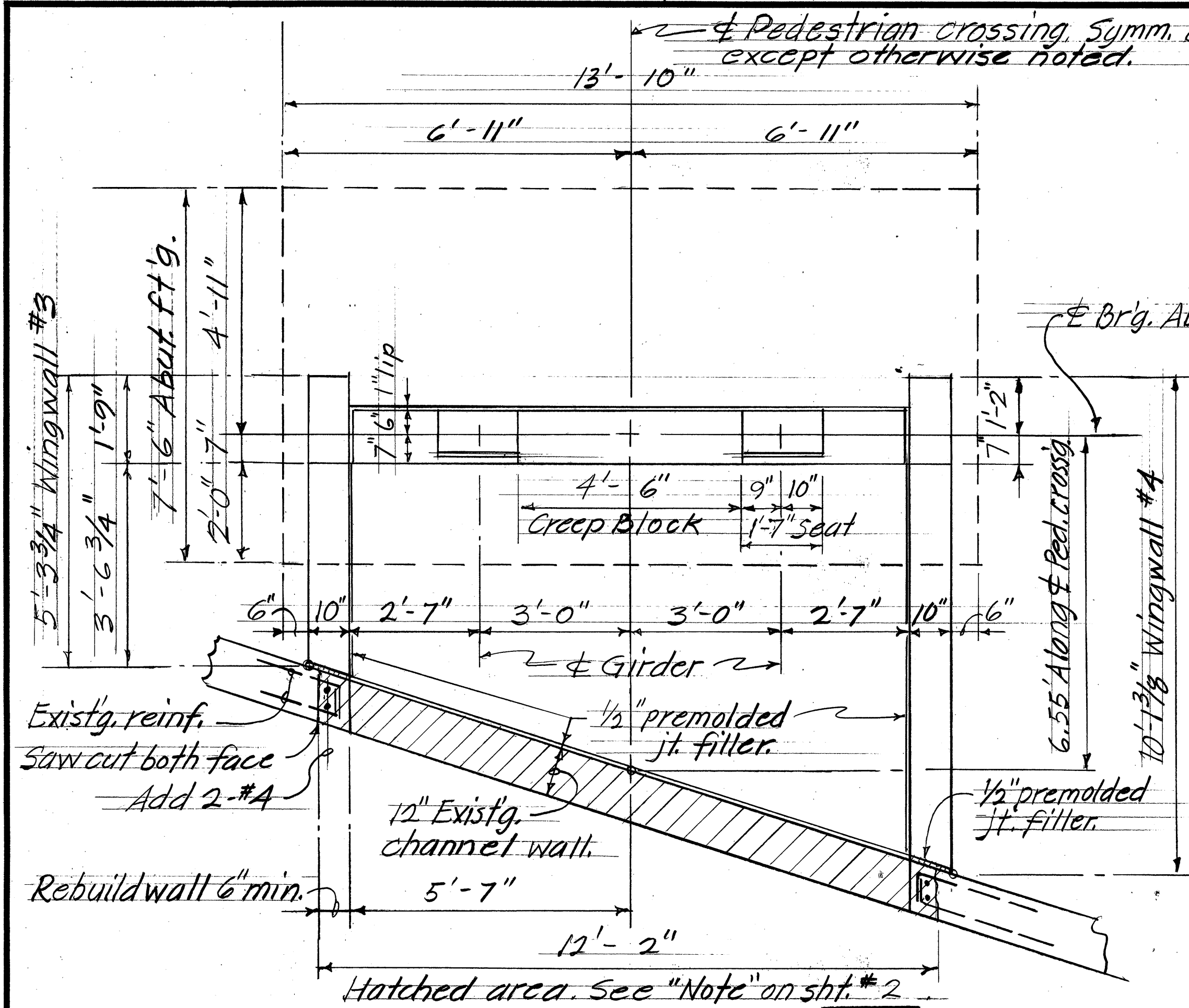
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION LAND TRANSPORTATION FACILITIES DIVISION
PEDESTRIAN CROSSING
PLAN, PROFILE & NOTES
SAFETY IMPROVEMENTS ALONG INTERSTATE ROUTE H-3 (PEDESTRIAN WALKWAY) KANEHOE BAY DRIVE TO KMCAS FAL PROJ. NO. 1-H3-1(29)13 Sept., 1977
SHEET NO. 1 OF 6 SHEETS



PROFILE ALONG ϕ PEDESTRIAN CROSSING

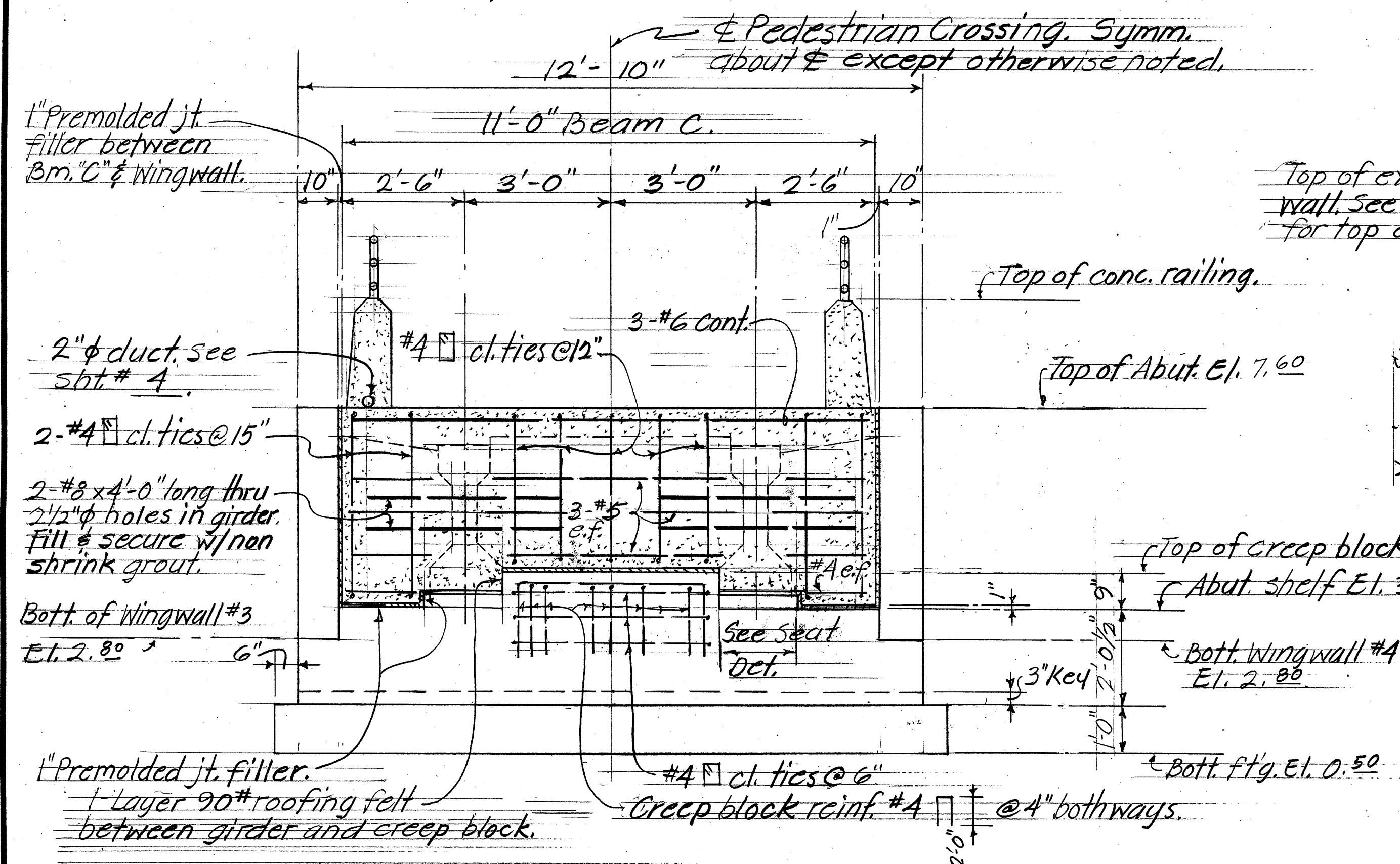
Scale: 1" = 10'

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1H3-1(29)13	1978	28	36



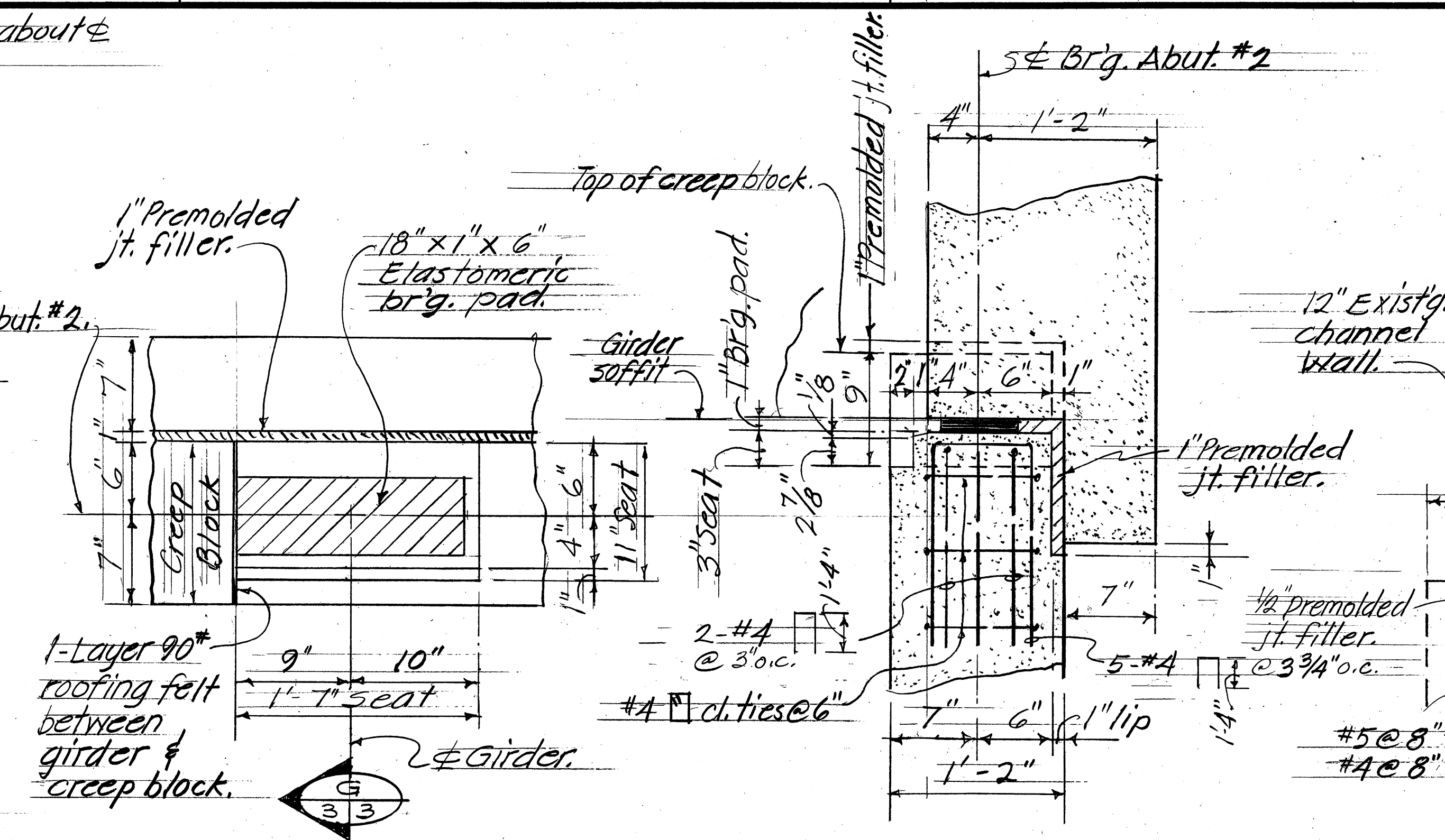
ABUT. NO 2 PLAN

scale: 1/2" = 1'-0"



ELEVATION ~ ABUT. NO 2

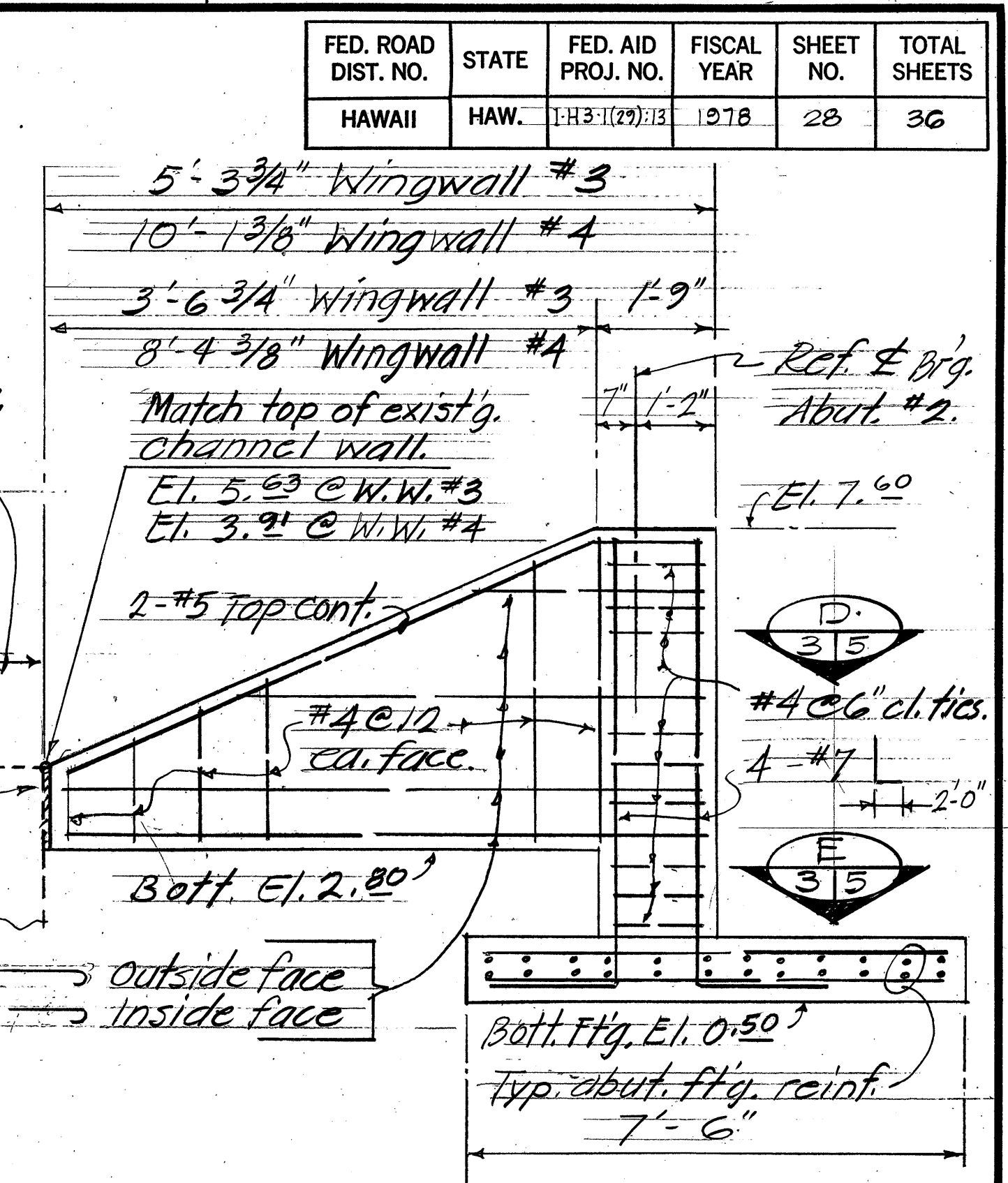
scale: 1/2" = 1'-0"



PLAN SECTION

SEAT DETAILS

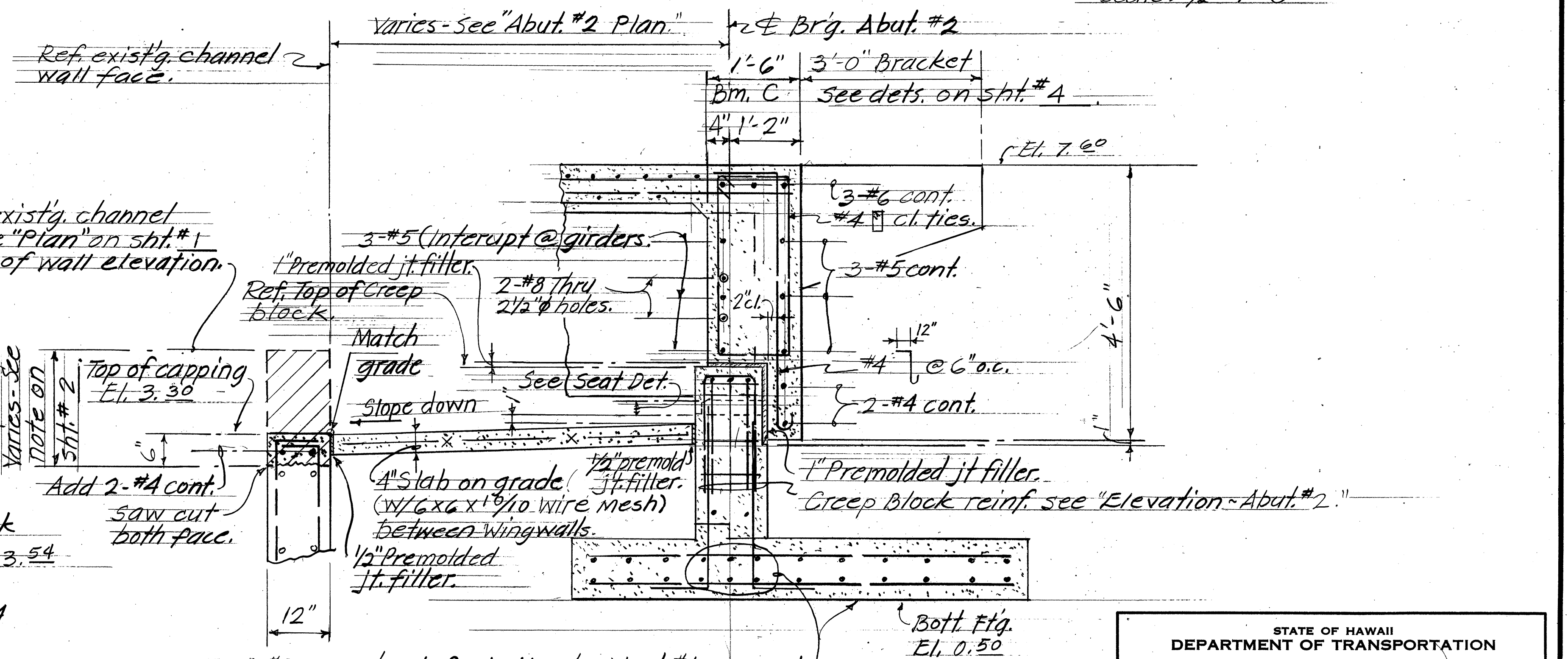
scale: 1/2" = 1'-0"



ELEVATION ~ WINGWALL NO 4

WINGWALL NO 3 SIMILAR EXCEPT OTHERWISE NOTED

scale: 1/2" = 1'-0"



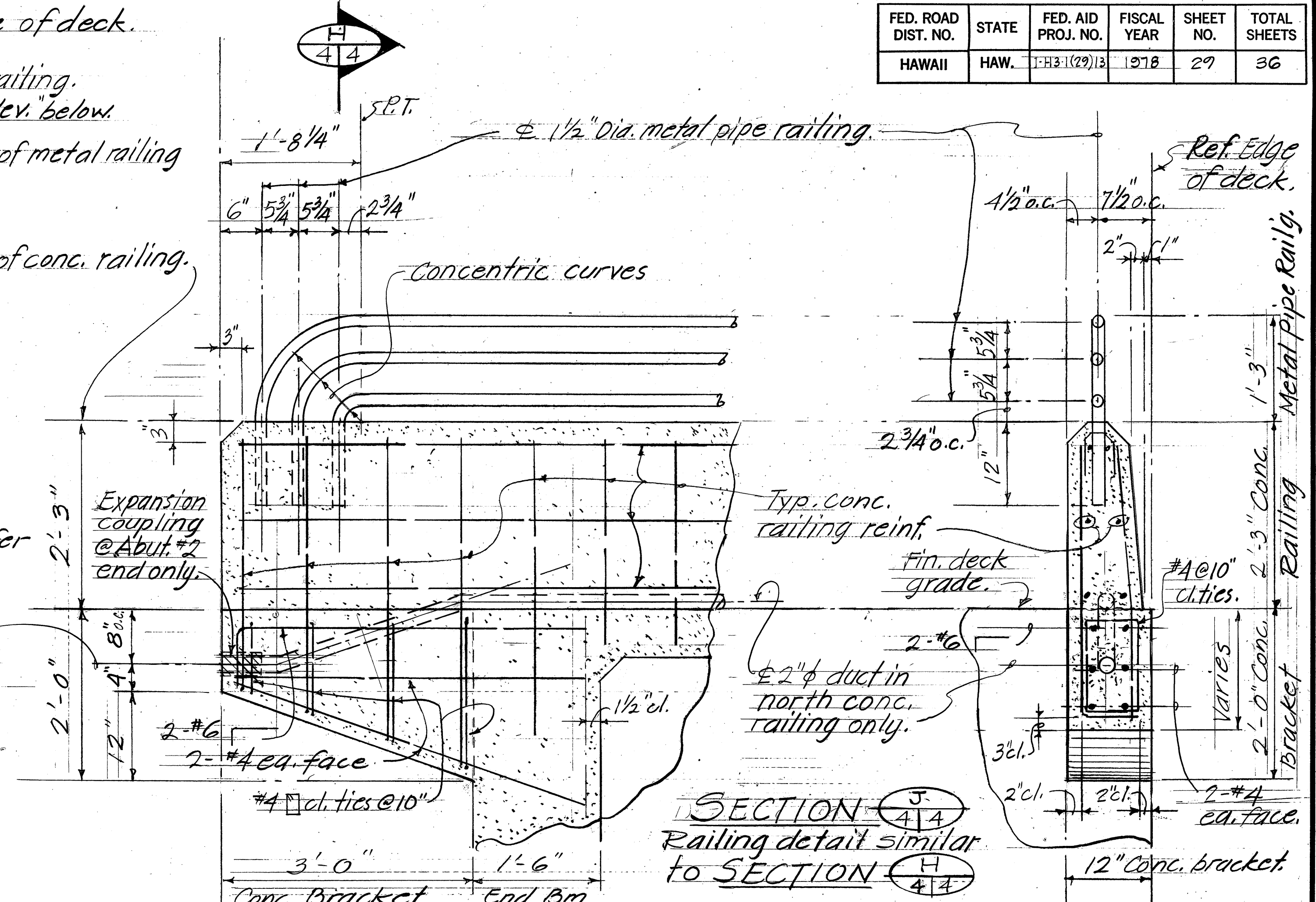
TYP. SECTION THRU ABUT. NO 2

scale: 3/4" = 1'-0"

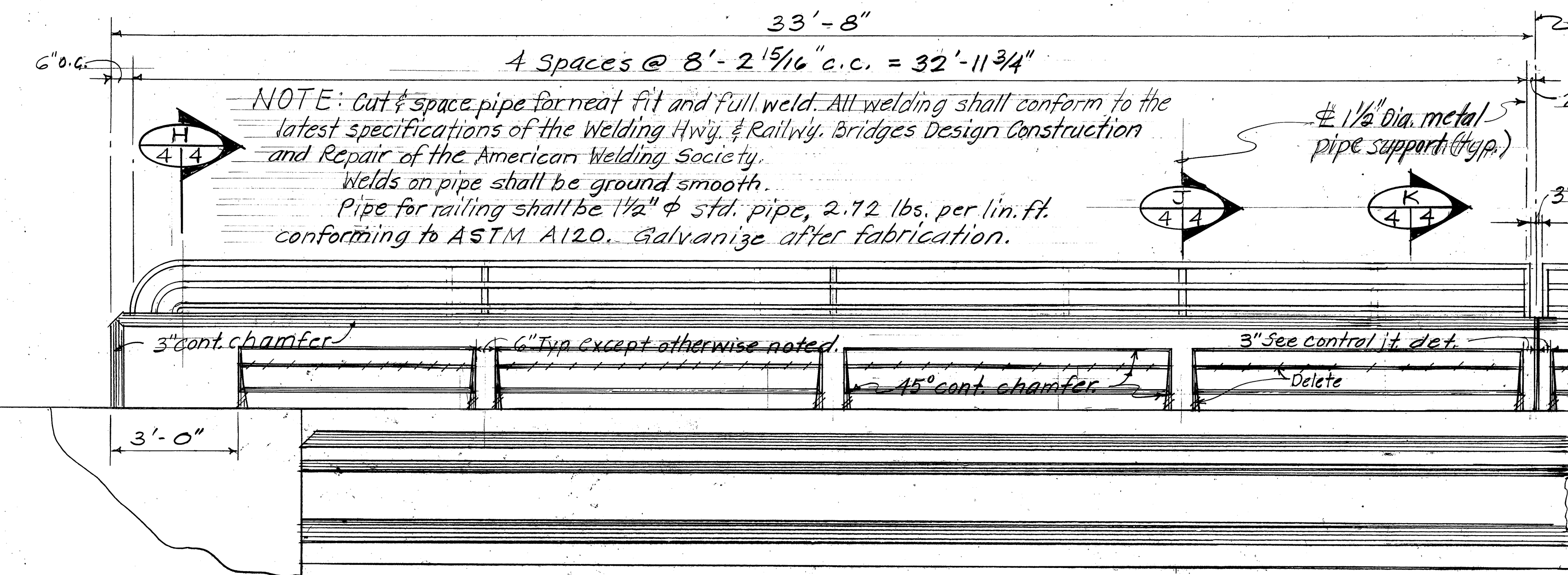
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
**PEDESTRIAN CROSSING
ABUTMENT NO 2 DETAILS**
SAFETY IMPROVEMENTS ALONG
INTERSTATE ROUTE H-3
(PEDESTRIAN WALKWAY)
KANE OHE BAY DRIVE TO KMCAS
F.A.I. PROJ. NO 1-H3-1(29)13 Sept., 1977

SHEET NO. 3 OF 6 SHEETS

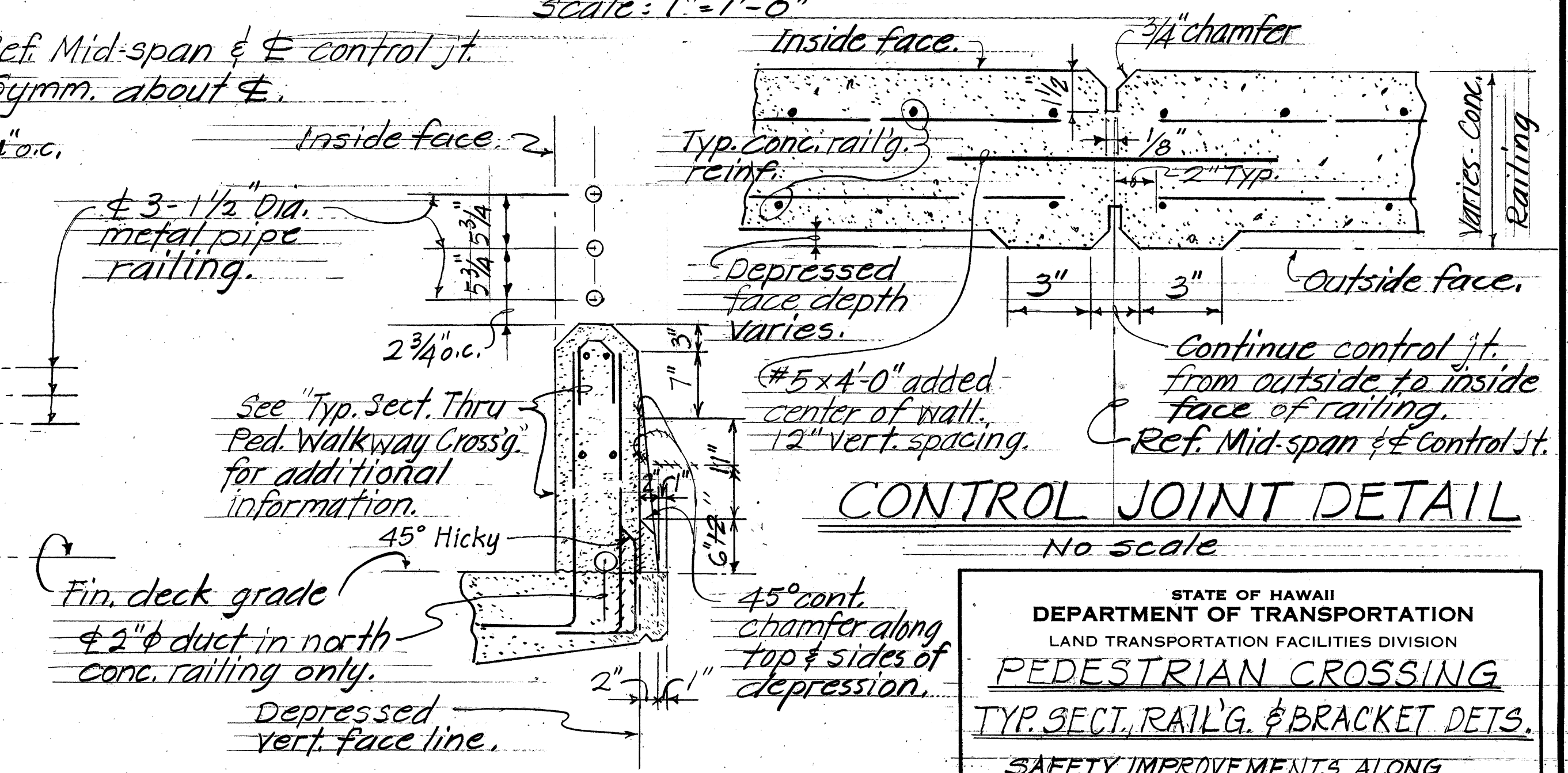
Scale: $1'' = 1' - 0''$



Scale: $1'' = 1'-0''$



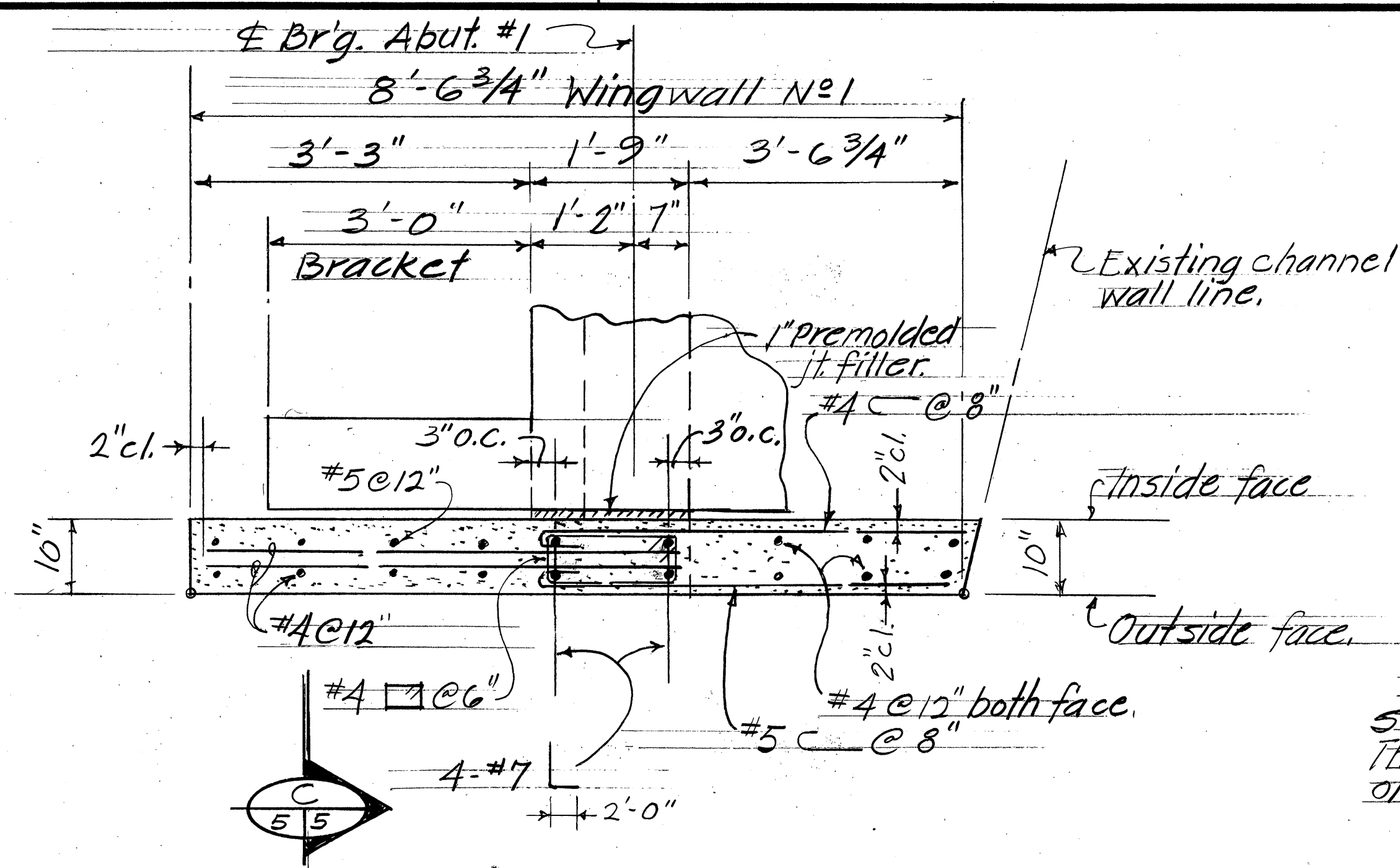
Scale: $\frac{1}{2}'' = 1' - 0$



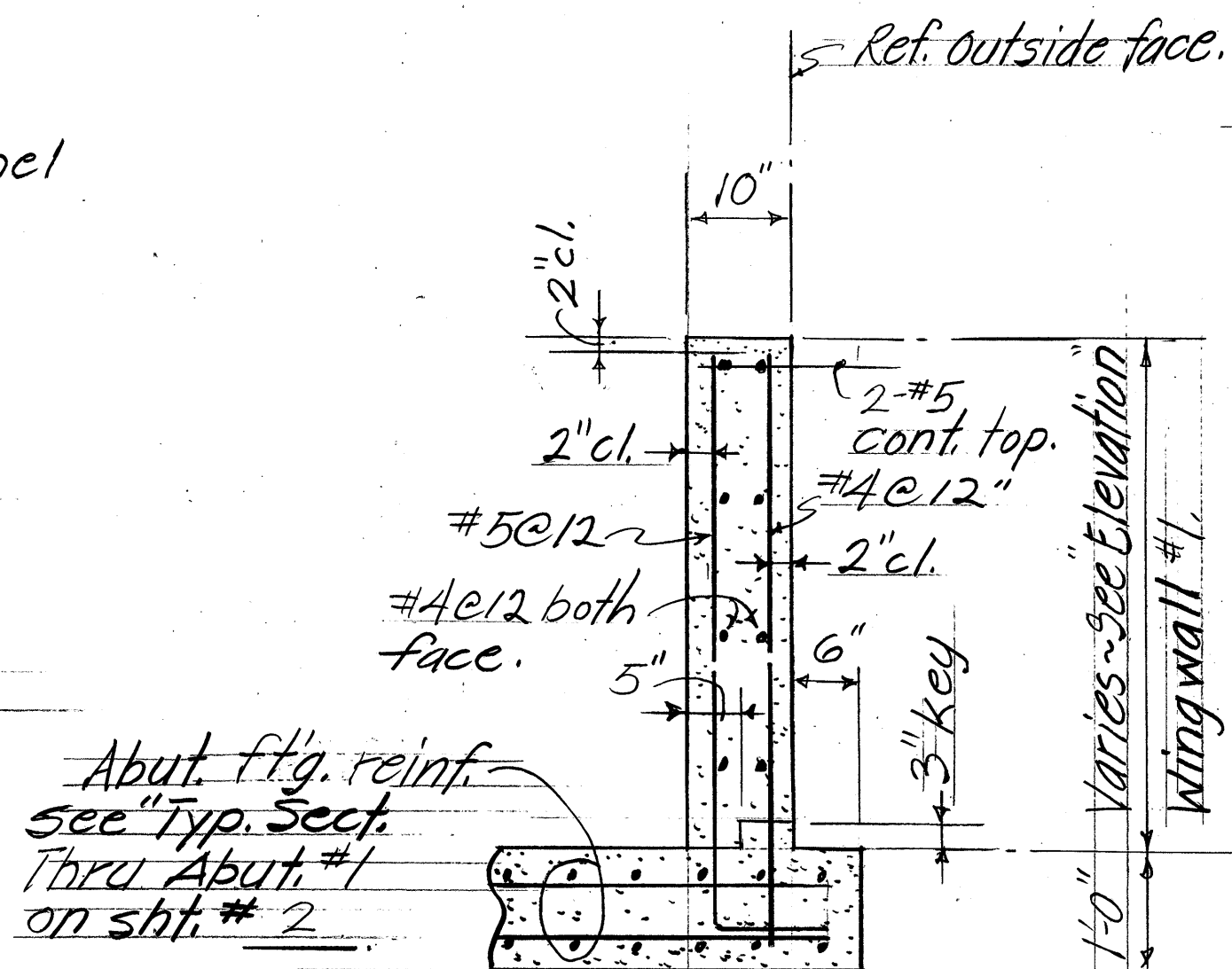
No scale

SHEET No. 4 OF 6 SHEETS

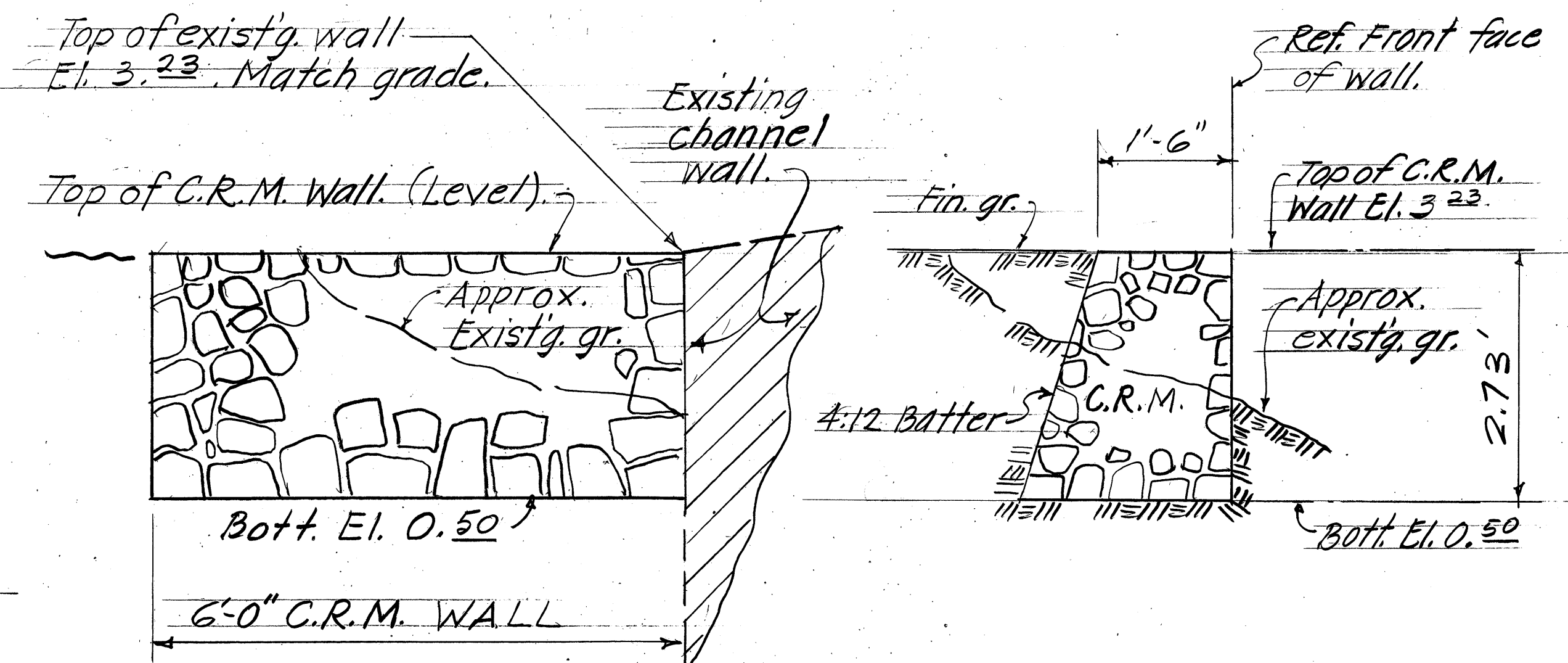
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1H3-1(29)13	1978	30	36



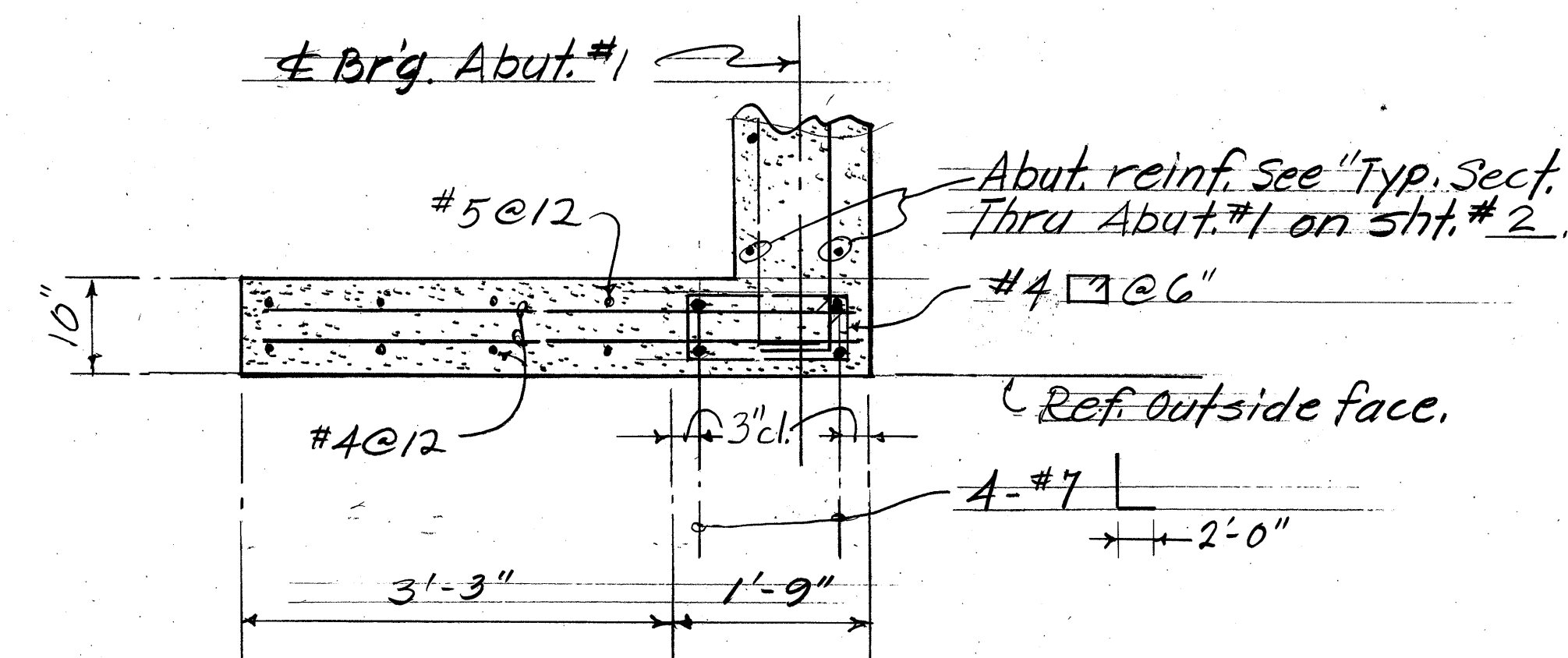
SECTION A-2/5



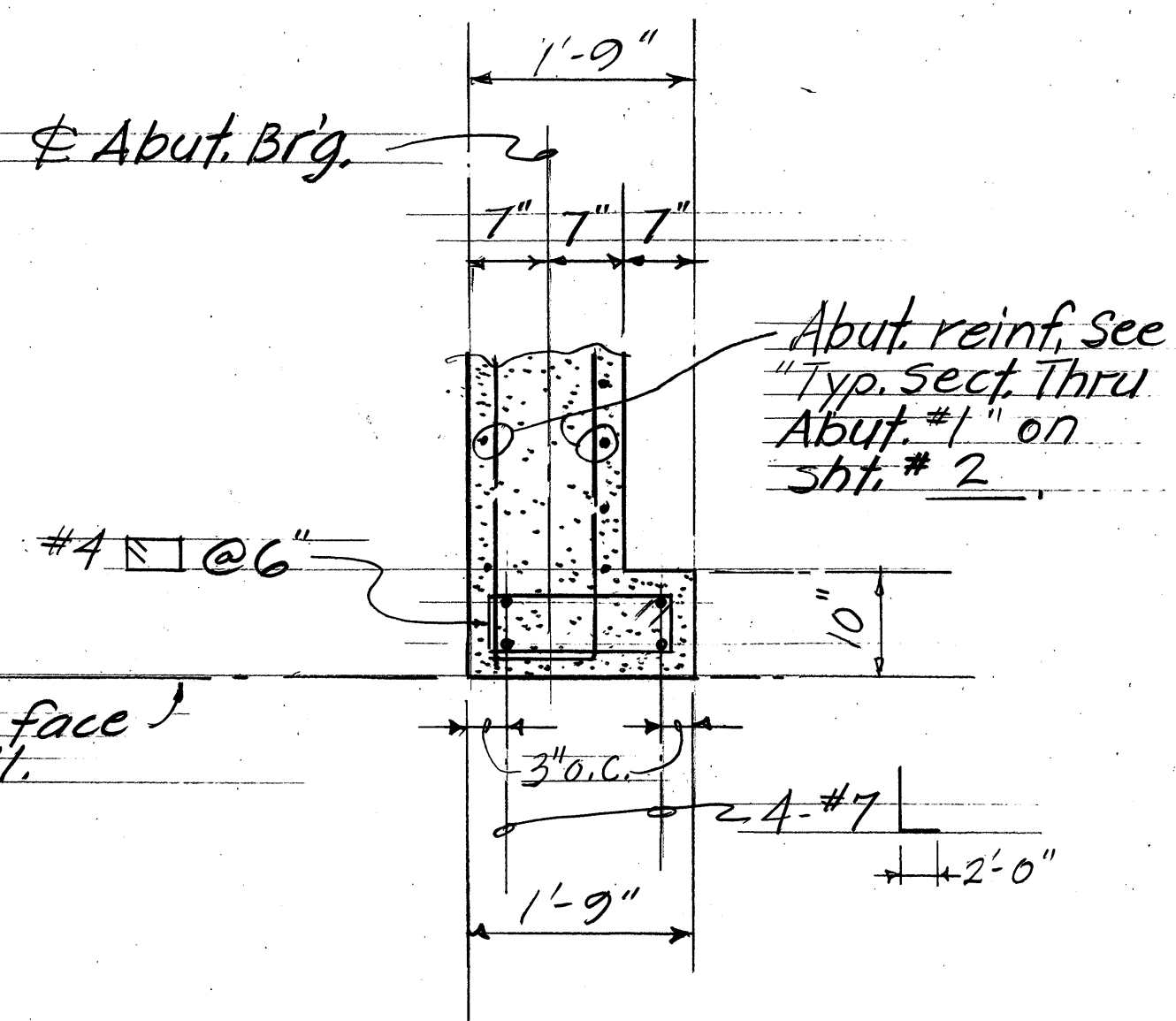
SECTION C-2/5



ELEVATION TYPICAL SECTION
C.R.M. WALL DETAILS
Scale: 3/4"=1'-0"

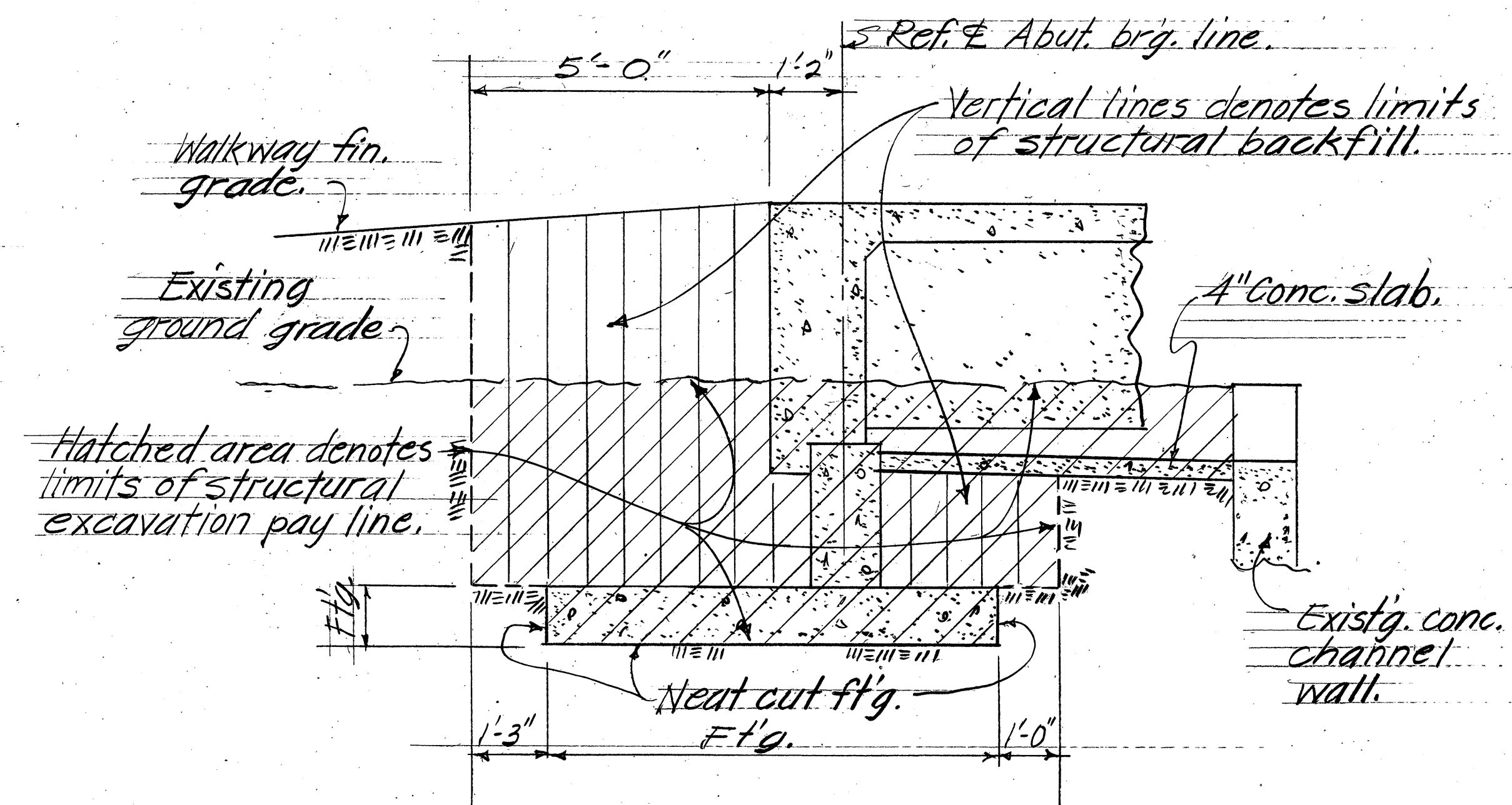


SECTION B-2/5

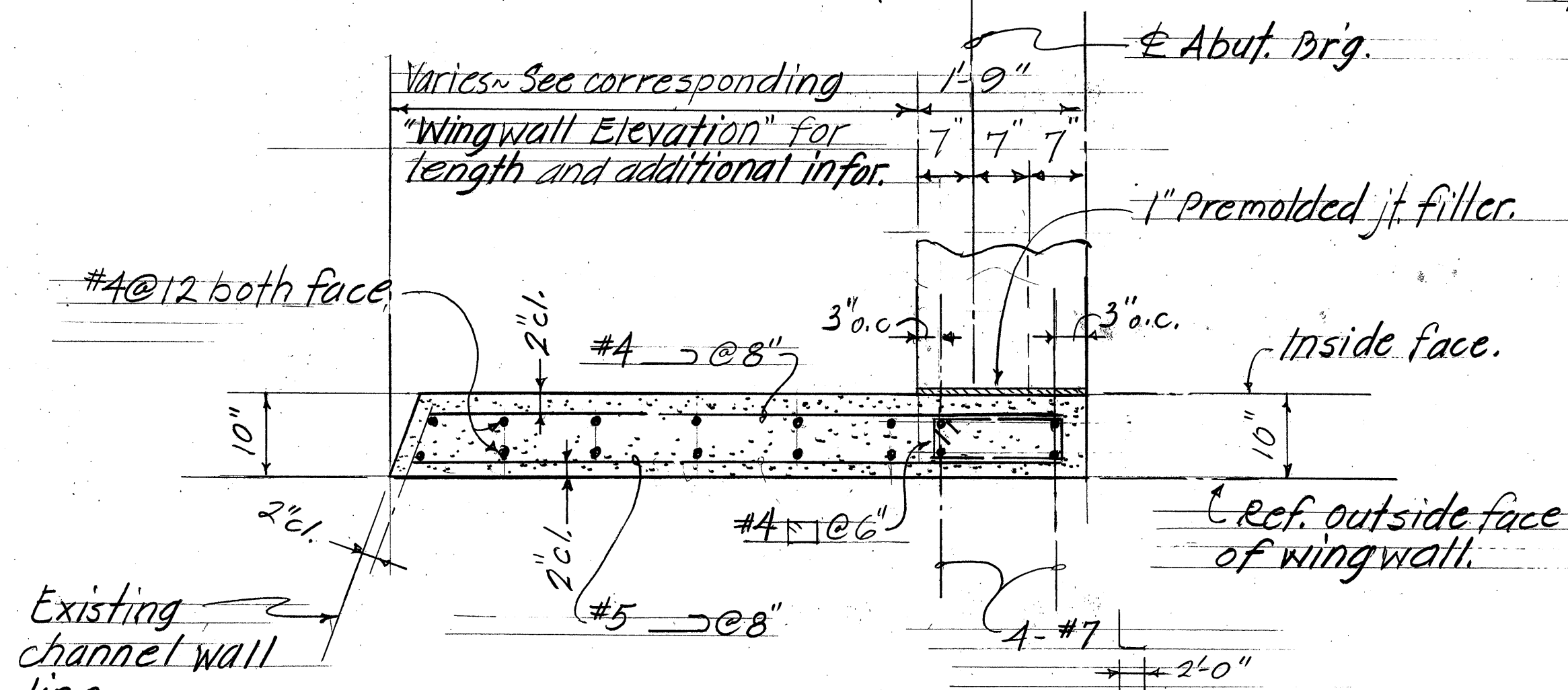


TYP. SECTION E-2/5

SECTION E-3/5 SIMILAR



TYP. ABUT. STRUCTURAL EXCAVATION
& BACKFILL DETAIL
Scale: 1/2"=1'-0"



TYP. SECTION P-2/5

SECTION P-3/5 SIMILAR

WINGWALL DETAILS

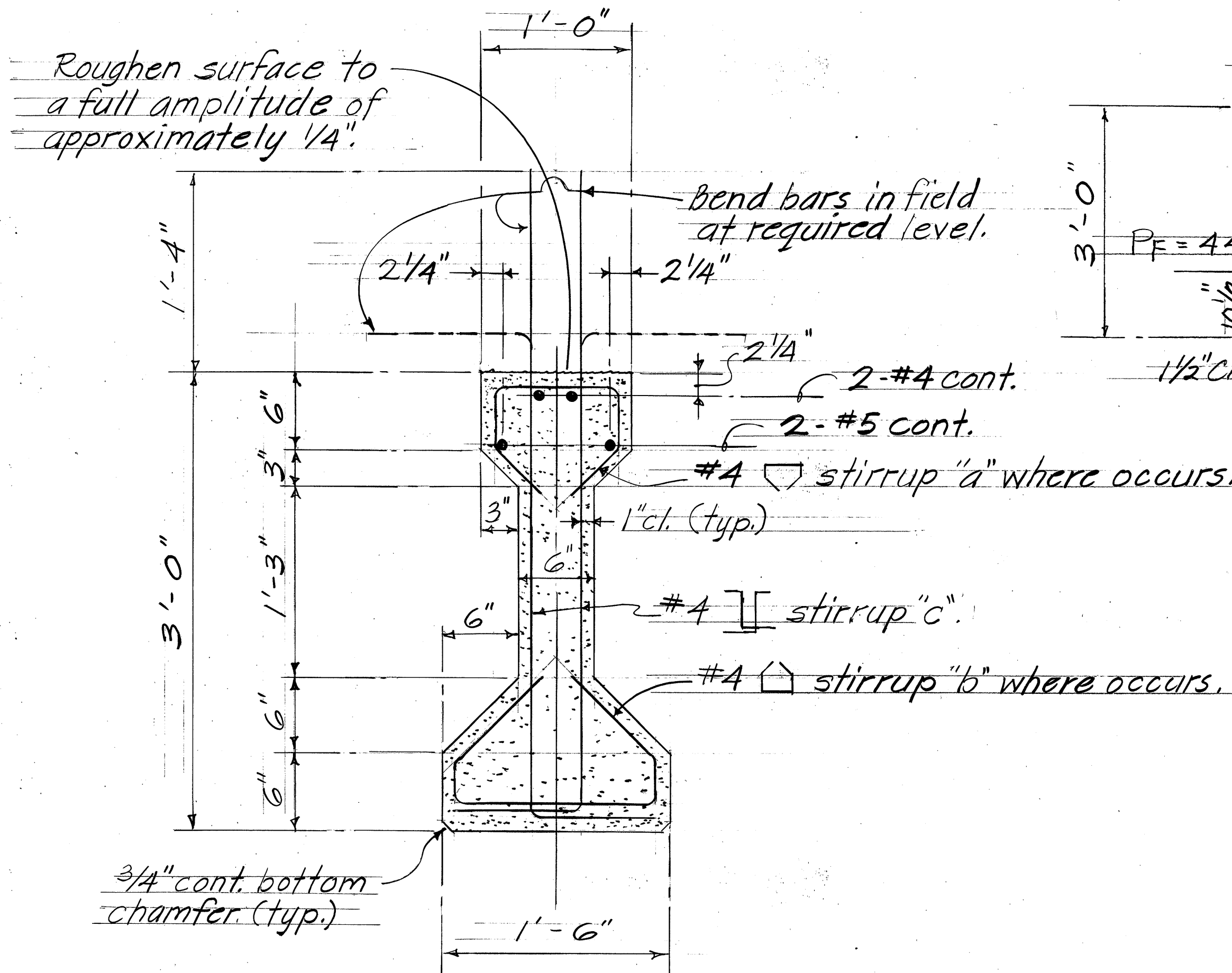
Scale: 3/4"=1'-0"

ESTIMATED QUANTITIES

CONCRETE IN FTG. LUMP SUM	81.0 C.Y.
CONC. ALL OTHERS LUMP SUM	31.0 C.Y.
REINF. STEEL LUMP SUM	7,600.0 LBS.
STRUCTURE EXCAVATION	53.0 C.Y.
TYPE II P/S GIRDER	120.0 L.F.
METAL PIPE RAILING	133.0 L.F.
CONCRETE RAILING	135.0 L.F.
STRUCTURAL BACKFILL	44.0 C.Y.

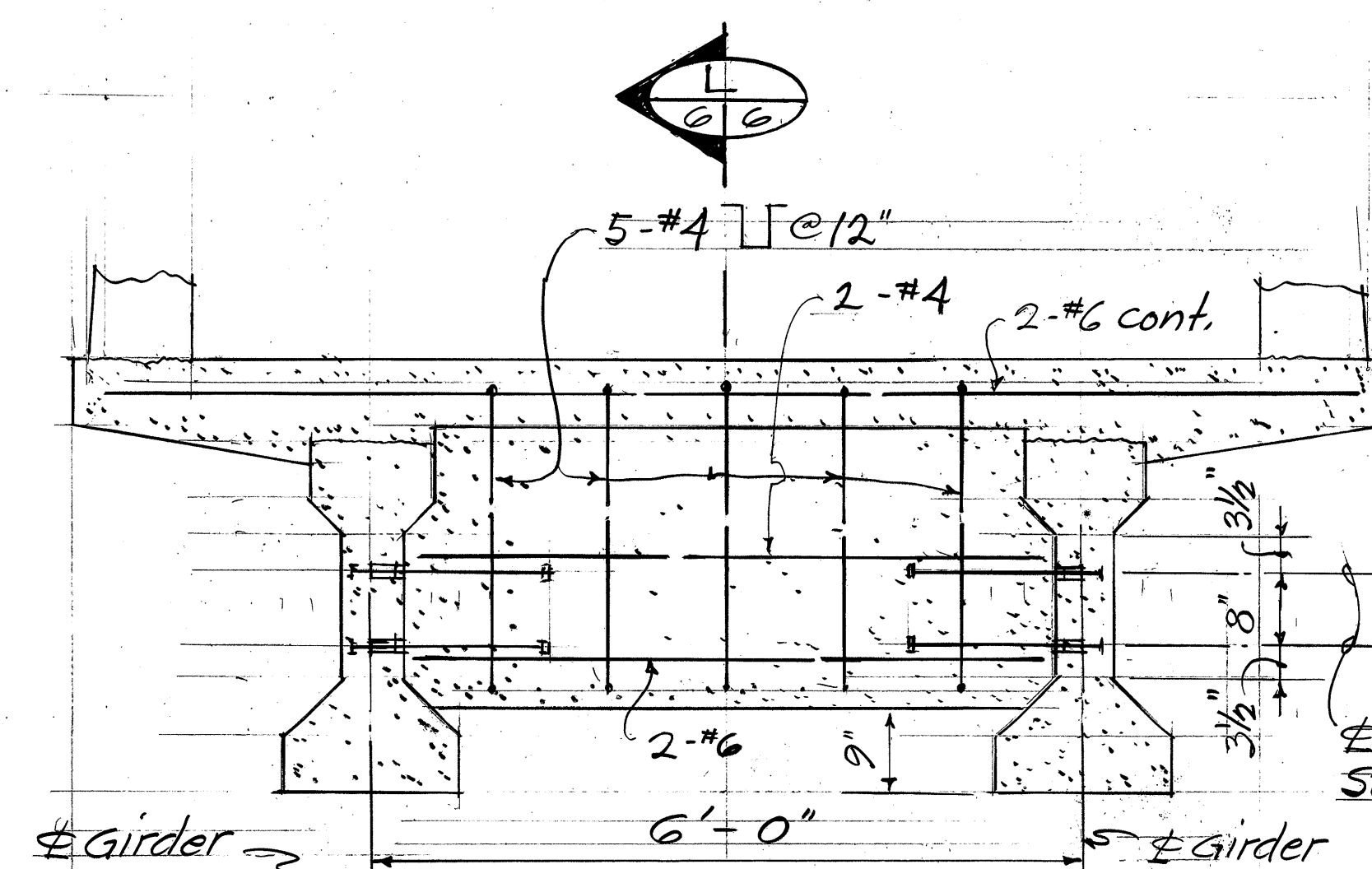
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION LAND TRANSPORTATION FACILITIES DIVISION
PEDESTRIAN CROSSING
WINGWALL & C.R.M. WALL DETS.
SAFETY IMPROVEMENTS ALONG INTERSTATE ROUTE H-3 (PEDESTRIAN WALKWAY) KANEHOE BAY DRIVE TO KMCAS EAL PROJ. NO. 1-H3-1(29)13 Sept. 1977
SHEET NO. 5 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-H31(29)13	1978	31	36

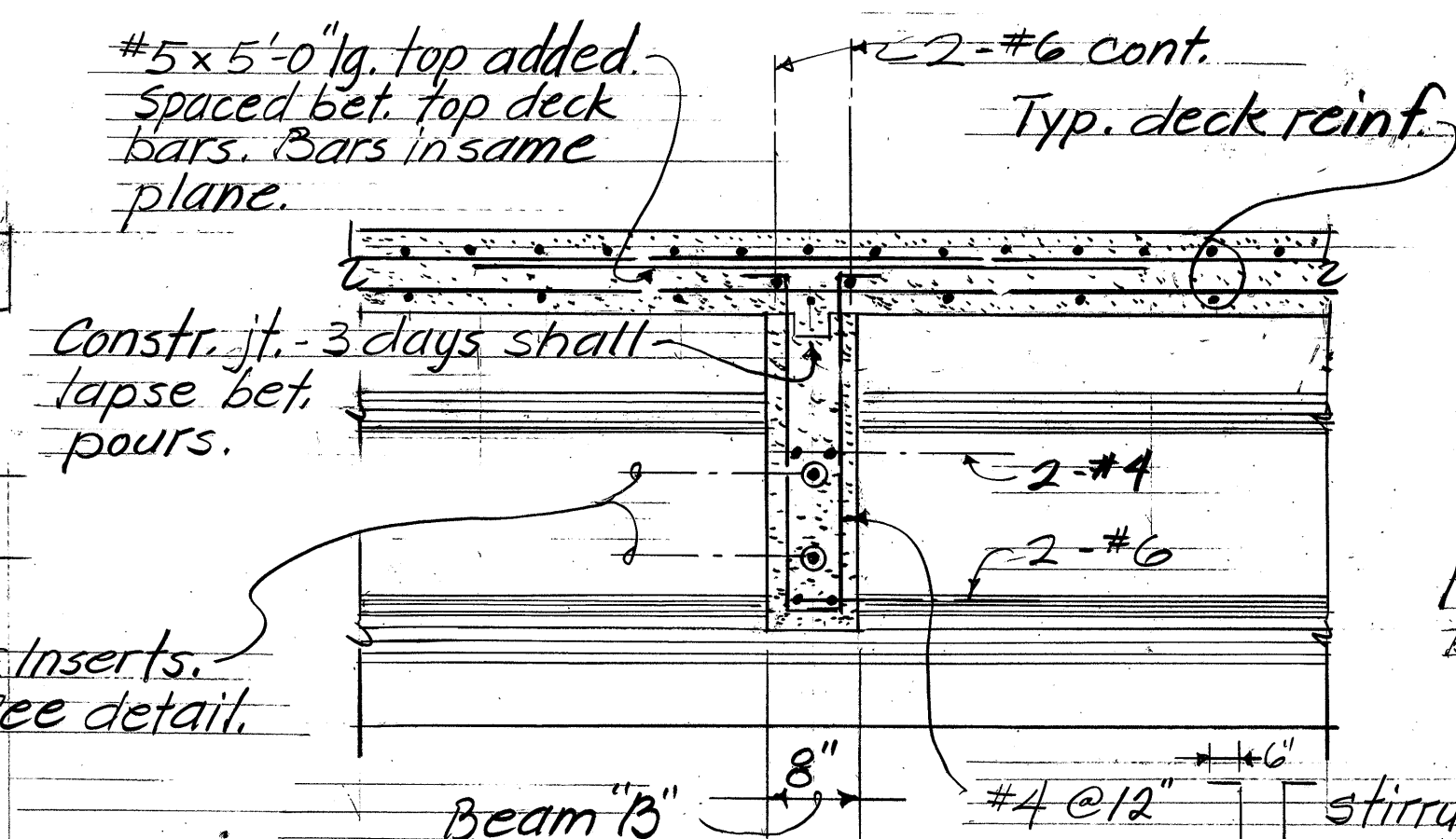


TYPICAL PRESTRESSED CONCRETE GIRDER
TYPE PG II

No Scale



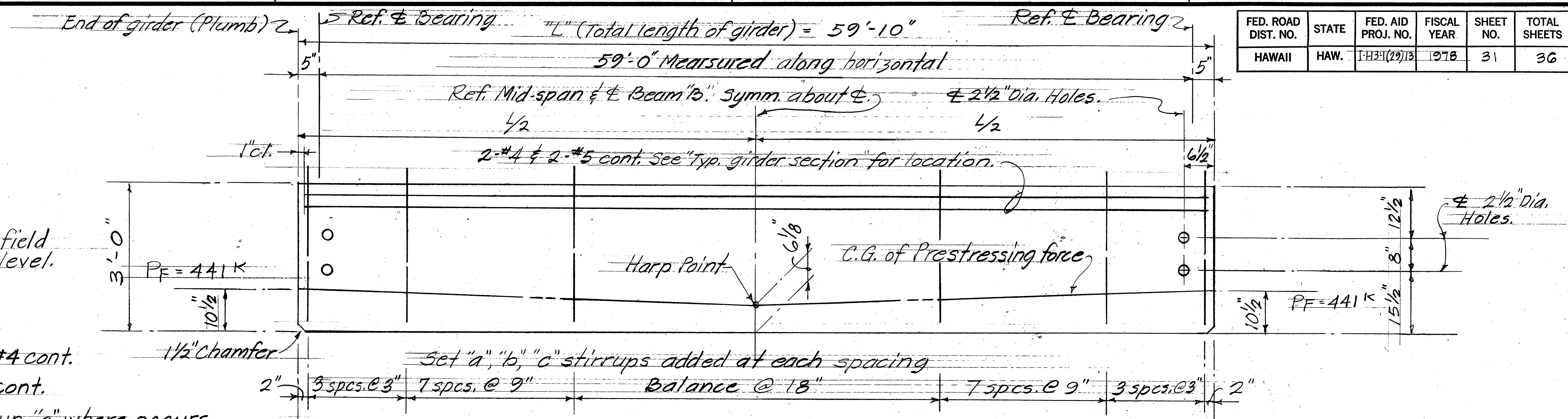
ELEVATION



SECTION

BEAM "B" DETAILS

No Scale



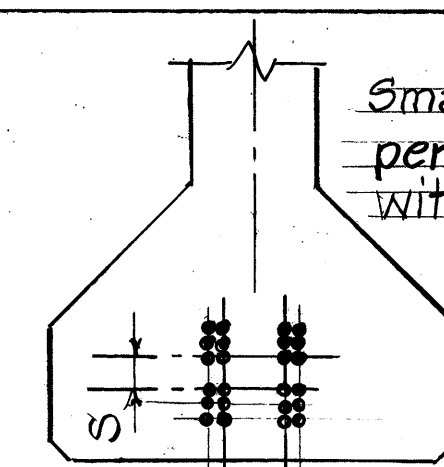
ELEVATION ~ TYPE PG II GIRDER DETAIL

No Scale

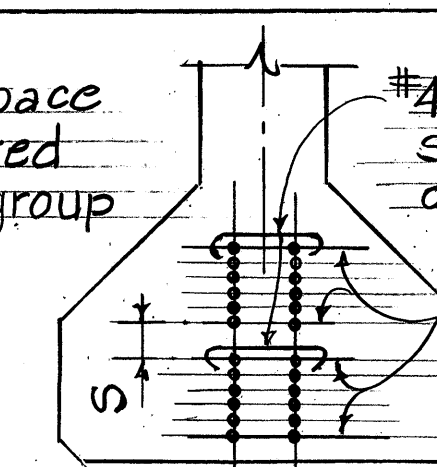
BUNDLING OF PRESTRESSING REINFORCEMENT

ARRANGEMENT AND CLEARANCE FOR PRETENSIONED STRANDS

1. Strands may be bundled in groups as shown.
2. The minimum distance "S" between groups or individual strands 2" for 1/2" strands.
3. "S" is measured between centers of adjacent strands.



CASE I

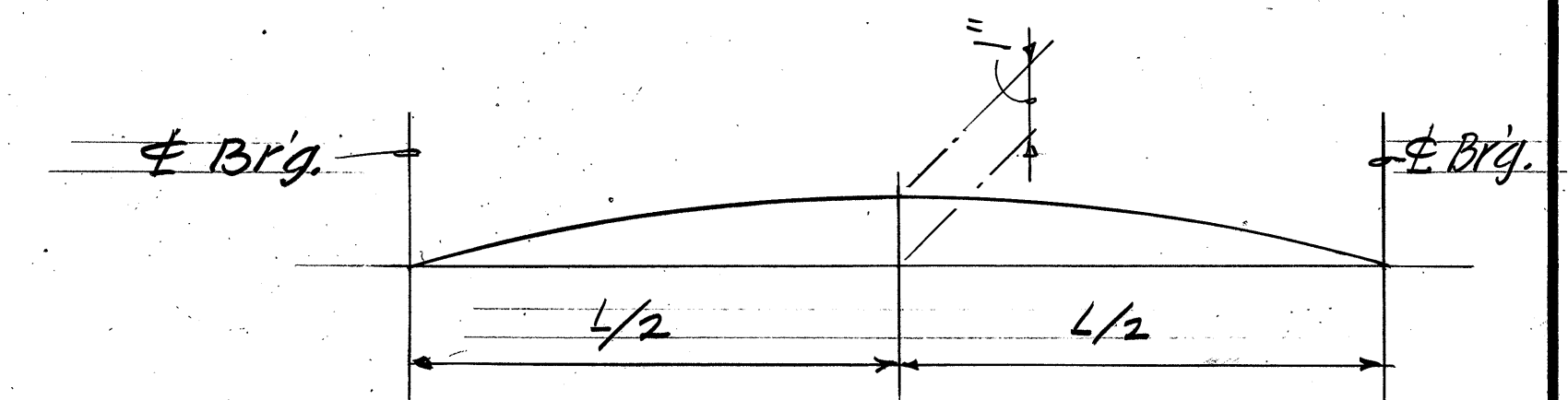


CASE II

Max. of 6 vertically stacked strands in any one group.

GENERAL NOTES

- For design stresses refer to sht. # 1
- Forms must be removed and the beams inspected before the strands are cut.
- For additional holes and inserts in prestressed girders for beam connections refer to corresponding beam details.
- For additional prestressed girder details not covered by these drawings refer to corresponding detail plans.
- All strand patterns shall be approved by the Engineer.
- P_F = Final prestress force after all losses.



D.L. CHAMBER DIAGRAM

No Scale

TYPICAL INSERT DETAIL

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION LAND TRANSPORTATION FACILITIES DIVISION
PEDESTRIAN CROSSING
P/B GIRDER & BEAM "B" DETS.
SAFETY IMPROVEMENTS ALONG
INTERSTATE ROUTE H-3
(PEDESTRIAN WALKWAY)
KANEOHE BAY DRIVE TO KMCAS
FAL. PROJ. NO. I-H3-1(29)13
Sept., 1977
SHEET No. 6 OF 6 SHEETS