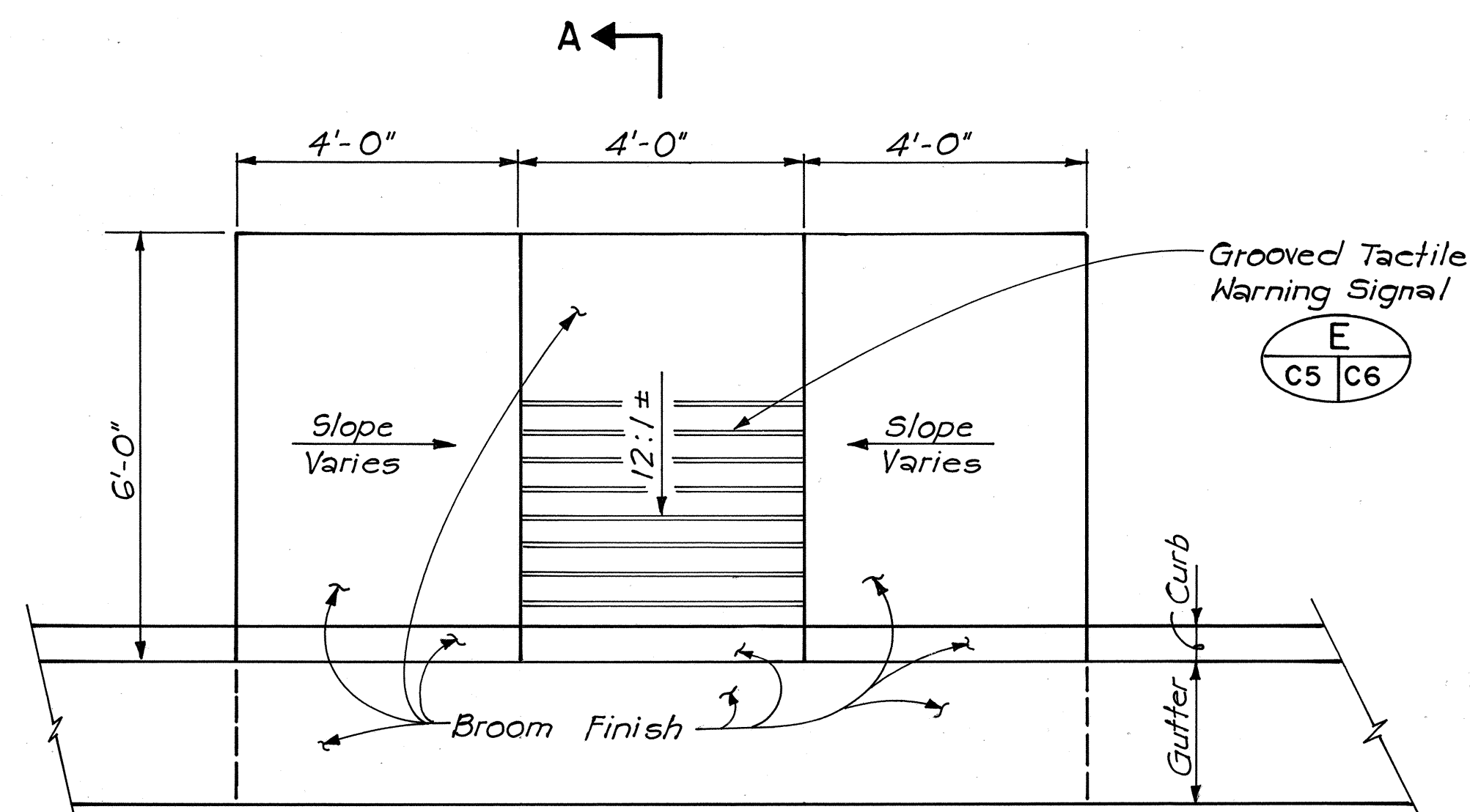
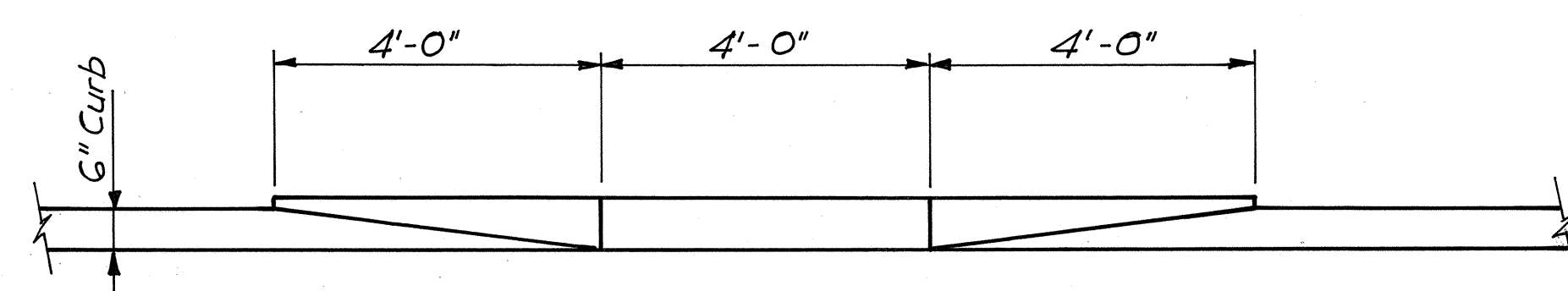


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1R-HI-1(169):17	1983	32	280



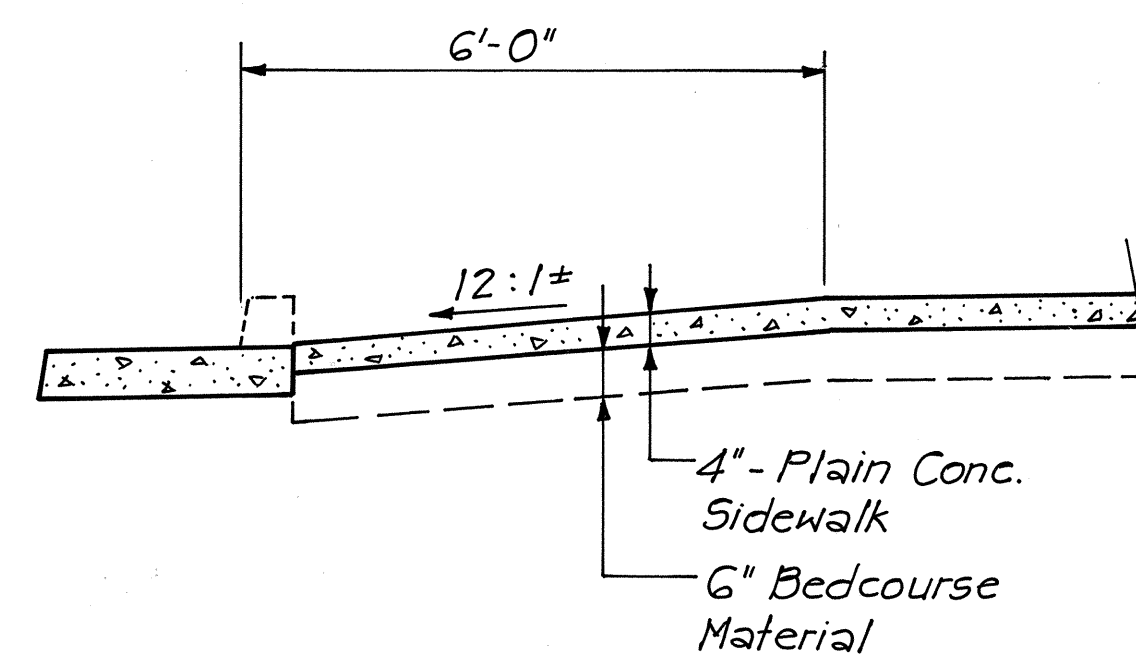
PLAN



ELEVATION

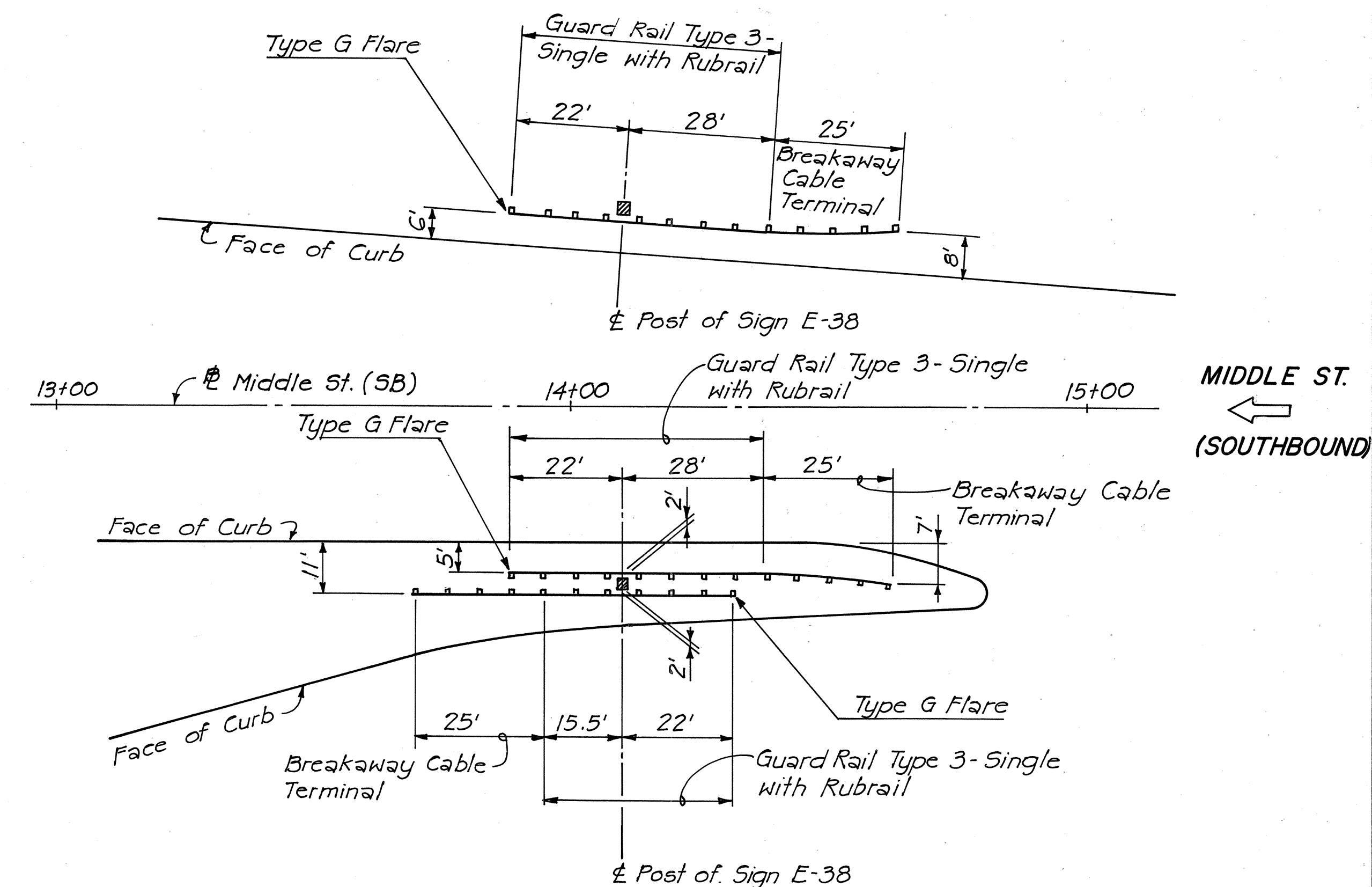
WHEEL CHAIR RAMP

Scale: 1" = 2'



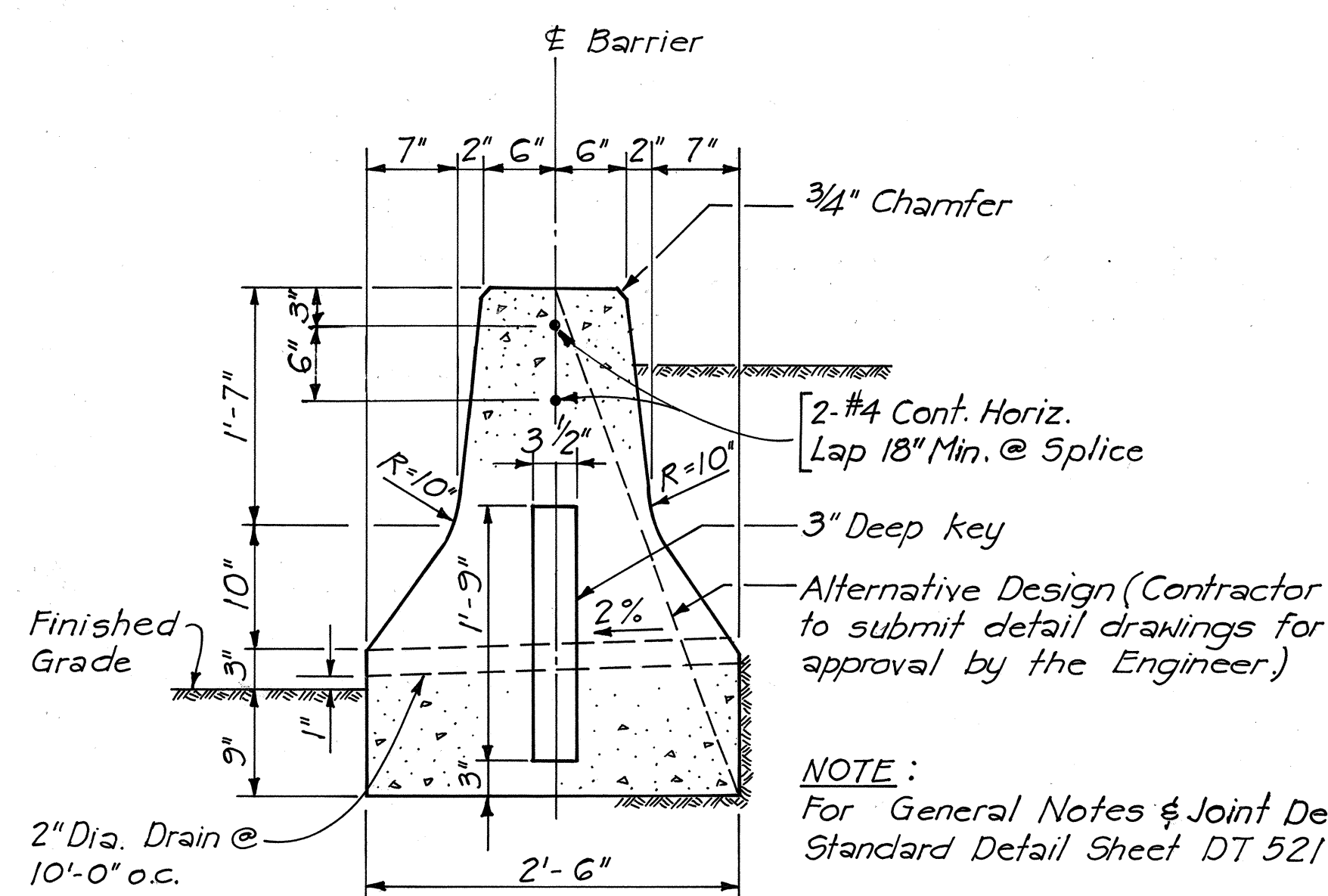
SECTION A-A

NOTE: Payment for Wheel Chair Ramp shall be made under "Plain Concrete Sidewalk"



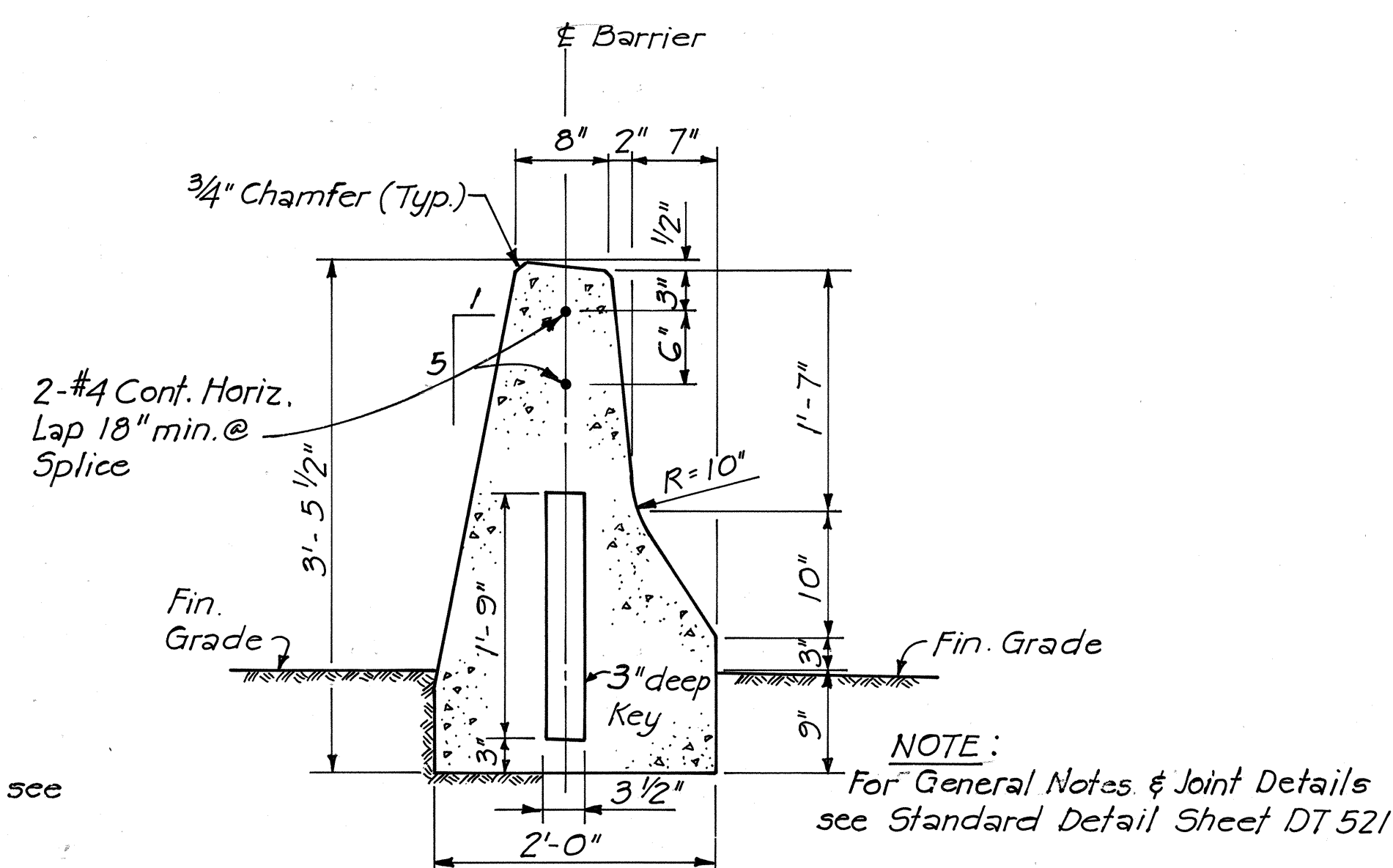
GUARD RAILS AT SIGN E-38

Scale: 1" = 20'



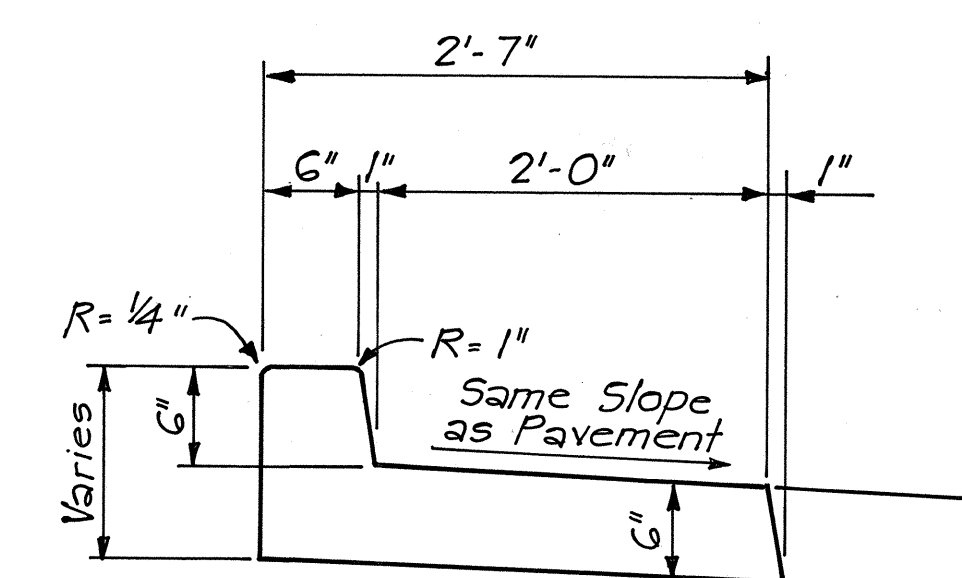
GUARD RAIL TYPE 4E

Scale: 1" = 1'-0"



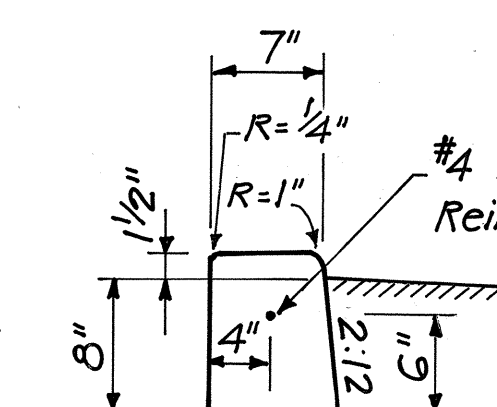
GUARD RAIL TYPE 4F

Scale: 1" = 1'-0"



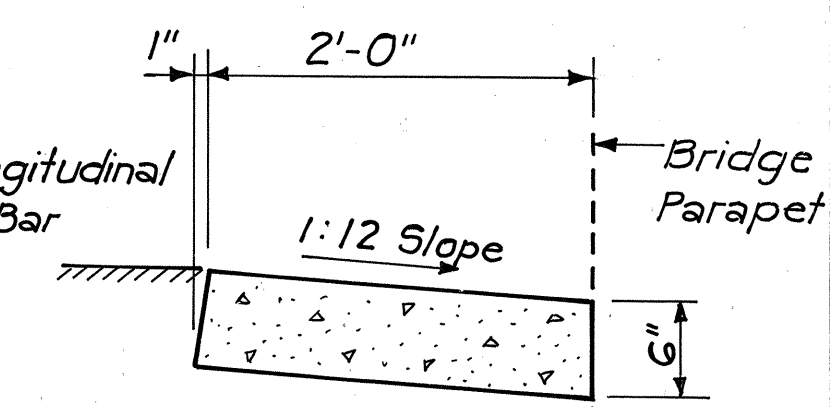
CURB & GUTTER, TYPE 2DGM

Scale: 1" = 1'



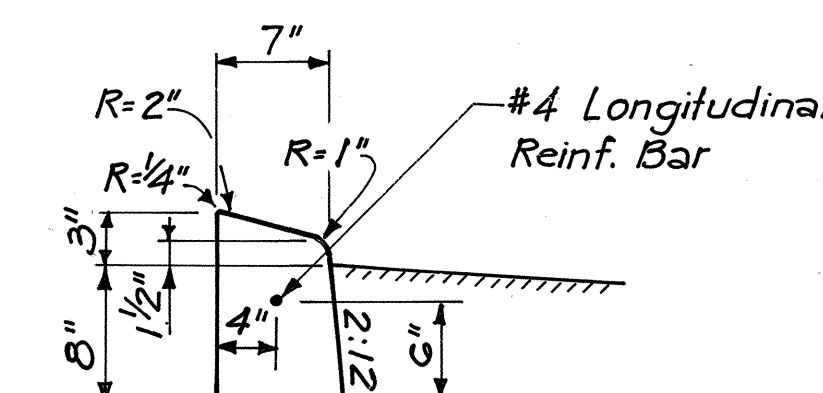
CURB, TYPE 2L

Scale: 1" = 1'



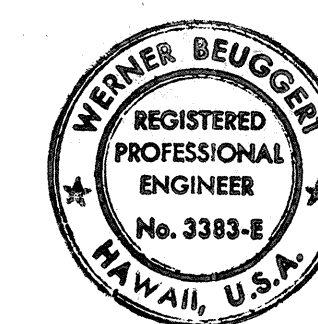
GUTTER, TYPE 2A

Scale: 1" = 1'



CURB, TYPE 2K

Scale: 1" = 1'



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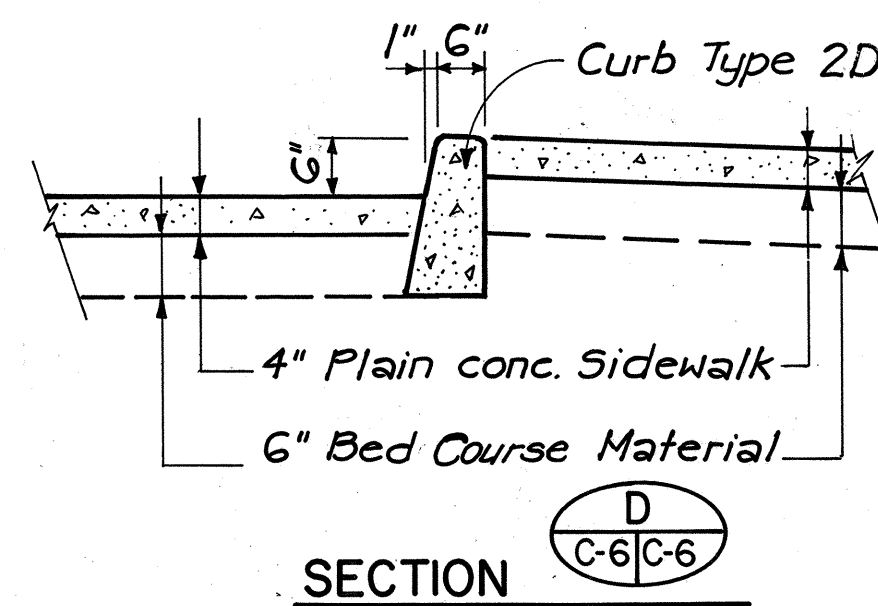
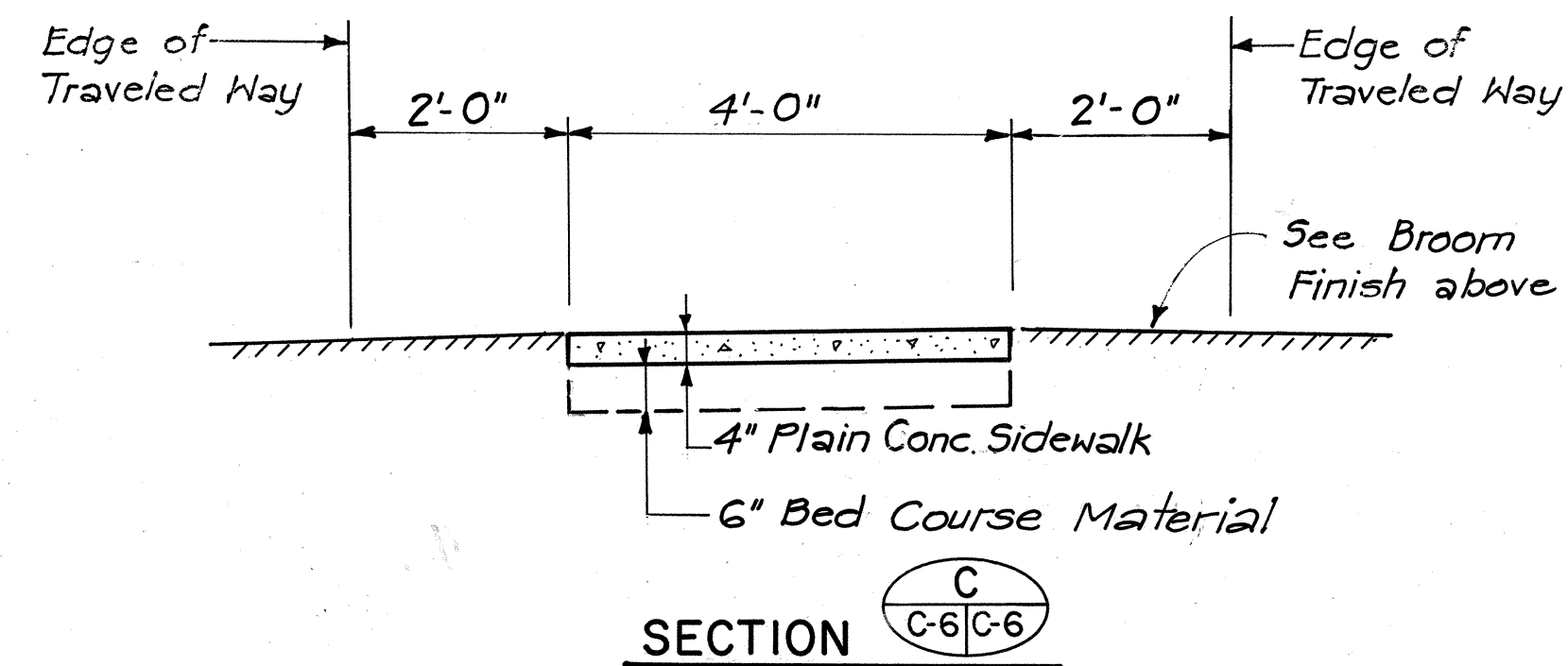
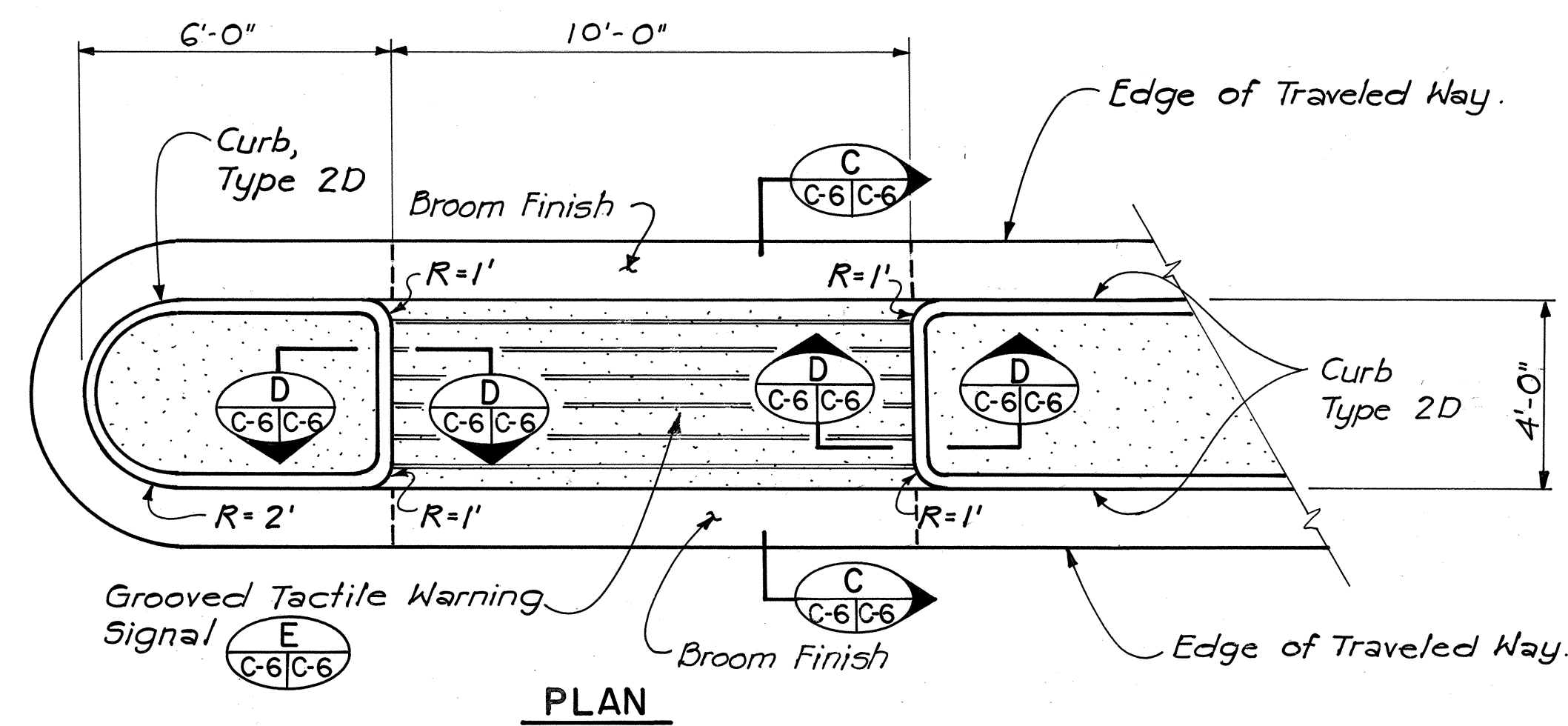
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS DETAILS

INTERSTATE ROUTE H-1
PROJECT NO. I-IR-HI-1(169):17

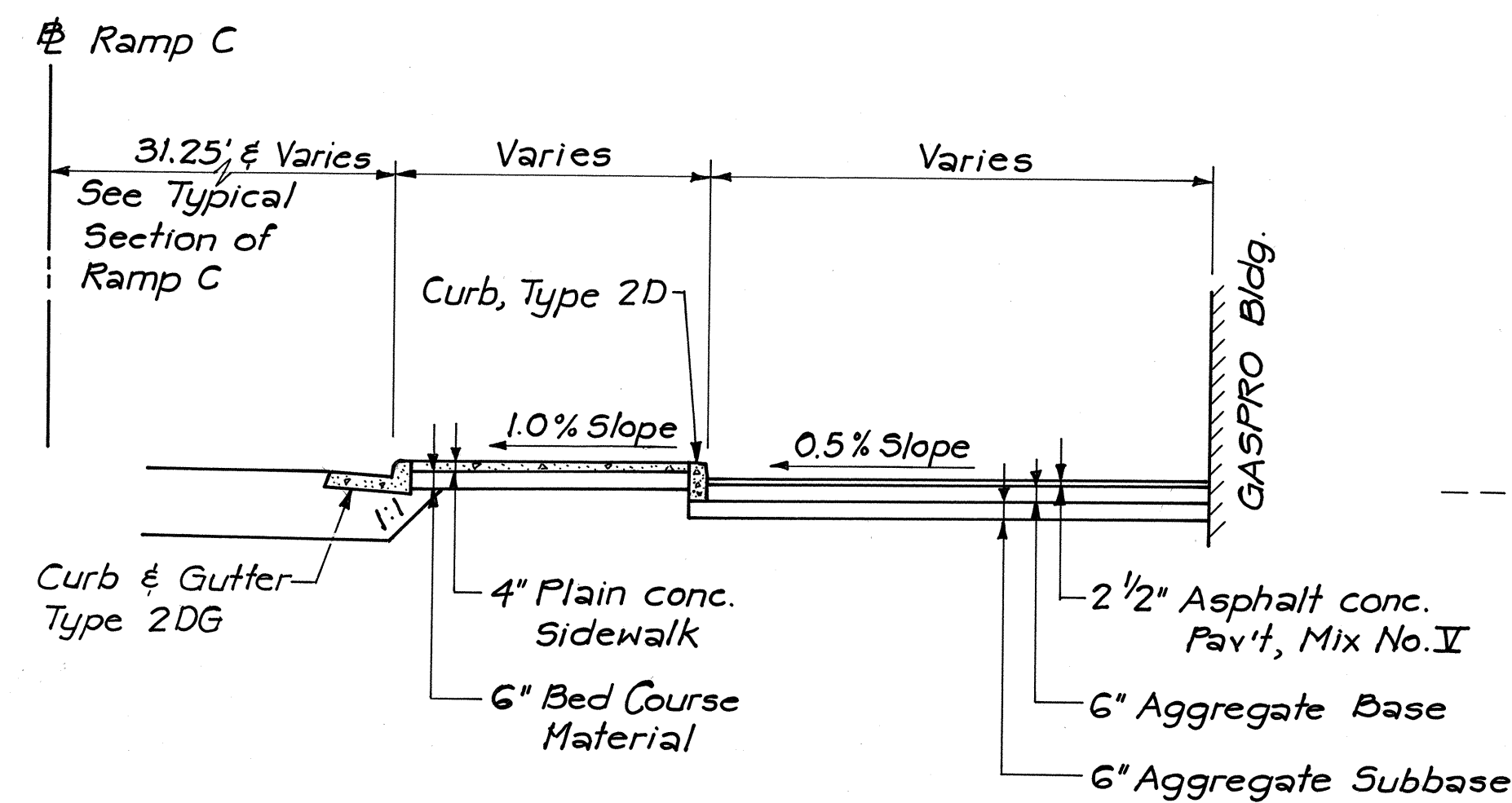
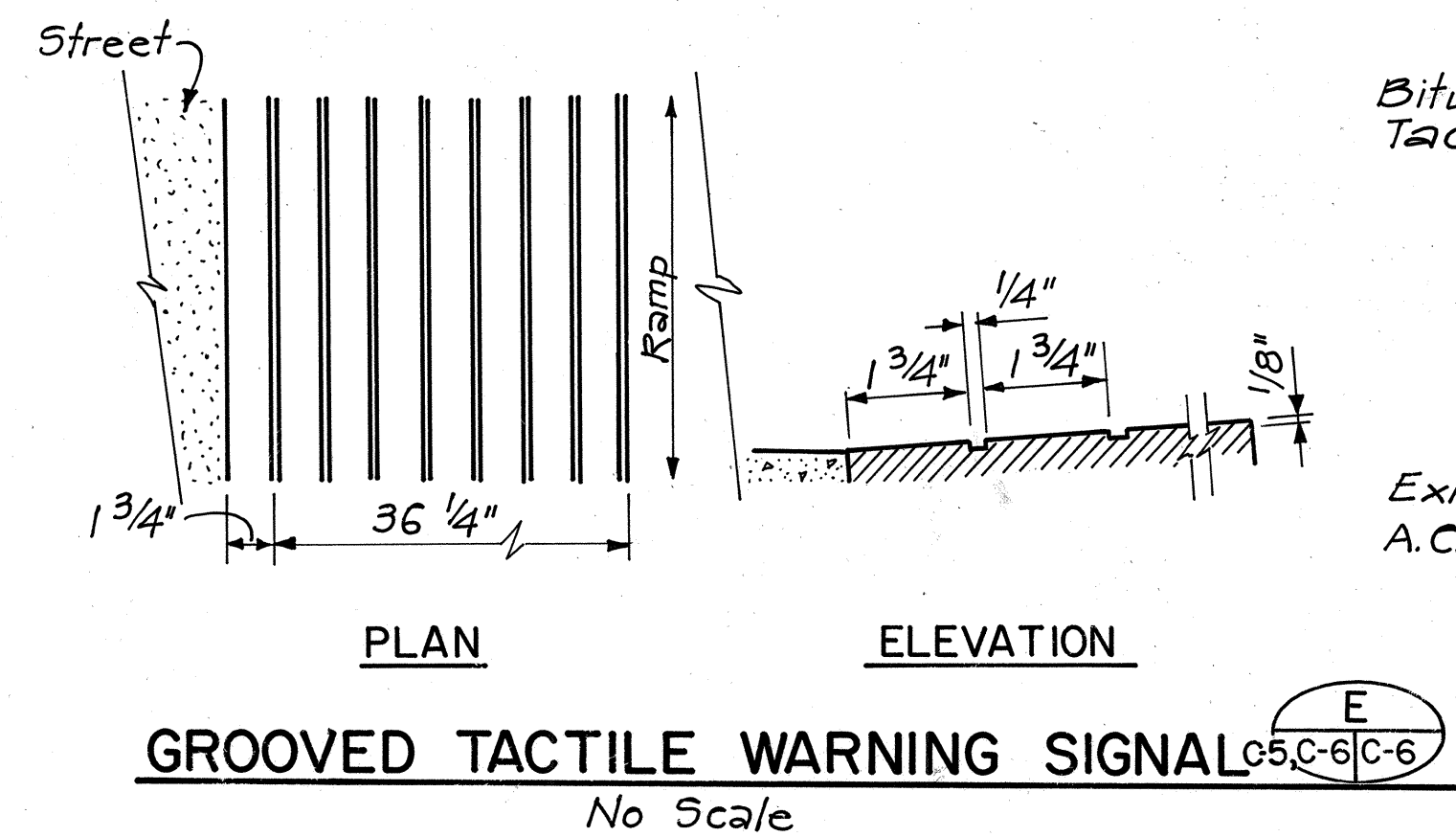
SCALE: AS SHOWN DATE: 3/15/82
SHEET NO. C-5 OF 17 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-HI-1(16):17	1983	33	280



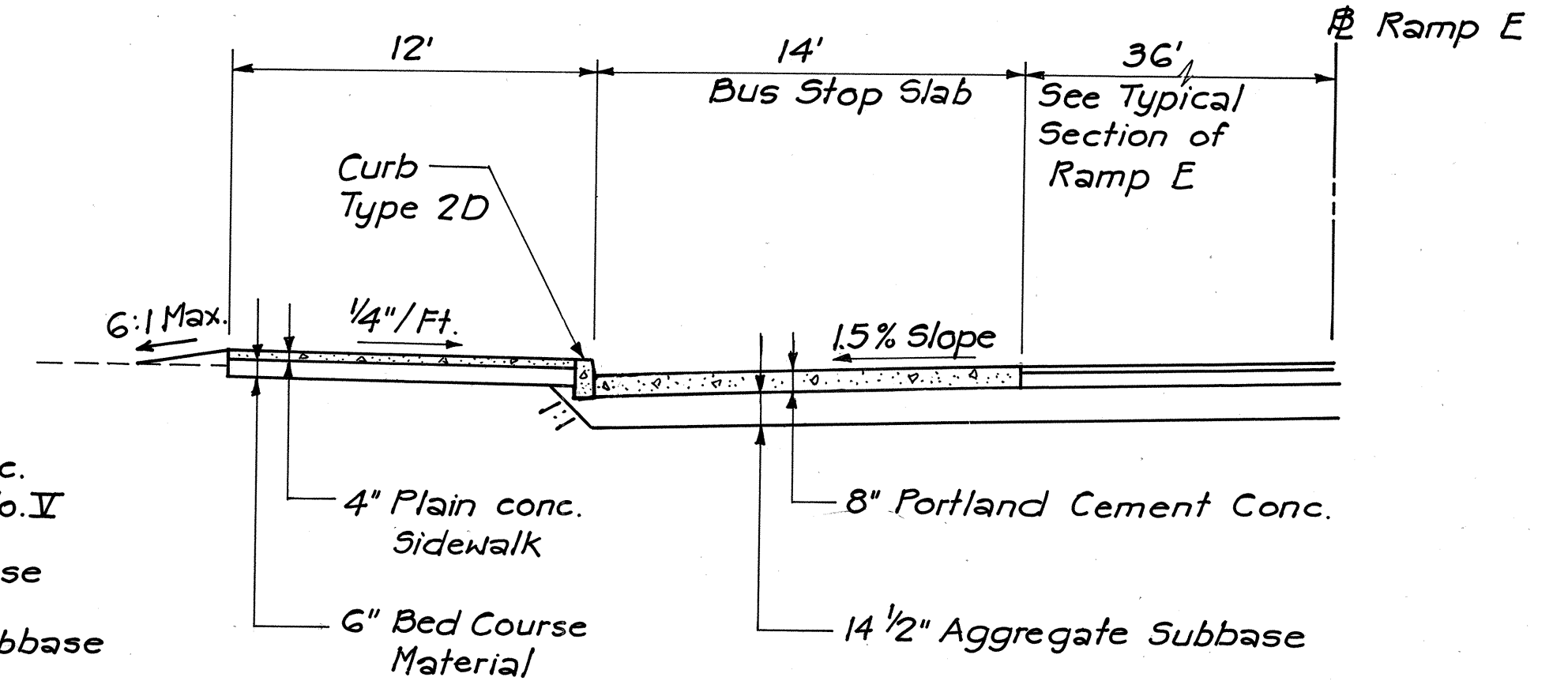
MEDIAN OPENING

At Dillingham Blvd. (Ramp E Sta. 33+26)
No Scale



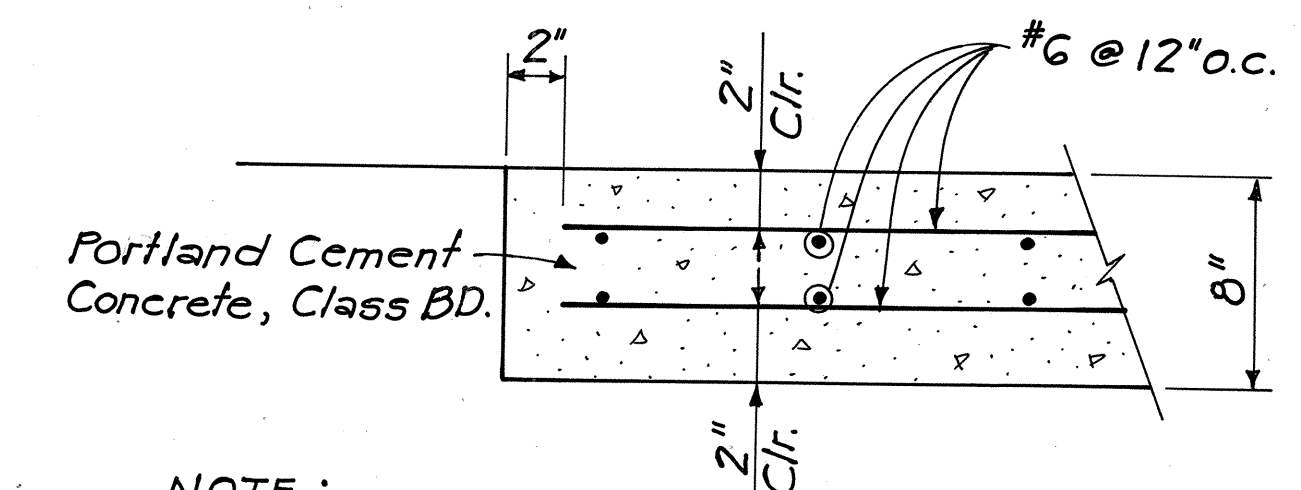
SECTION

GASPRO DRIVEWAY AT RAMP C STA.32+00, RIGHT
Scale: 1" = 5'

SECTION

B	
C-3	C-6

BUS STOP AT RAMP E STA. 31+00, LEFT.
Scale: 1" = 5'

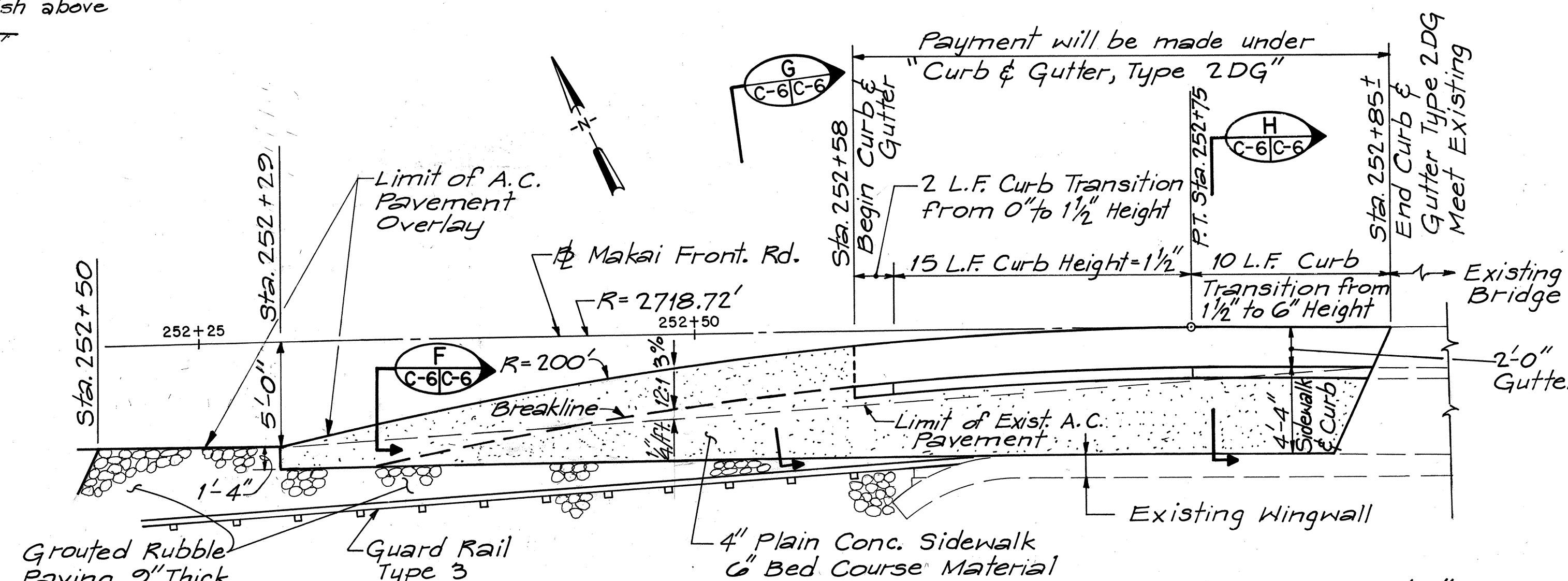


NOTE :

1 1/4" deep, saw cut Transverse Construction Joints shall be provided at 15 feet spacing. Reinforcing bars shall be continuous.

BUS STOP SLAB

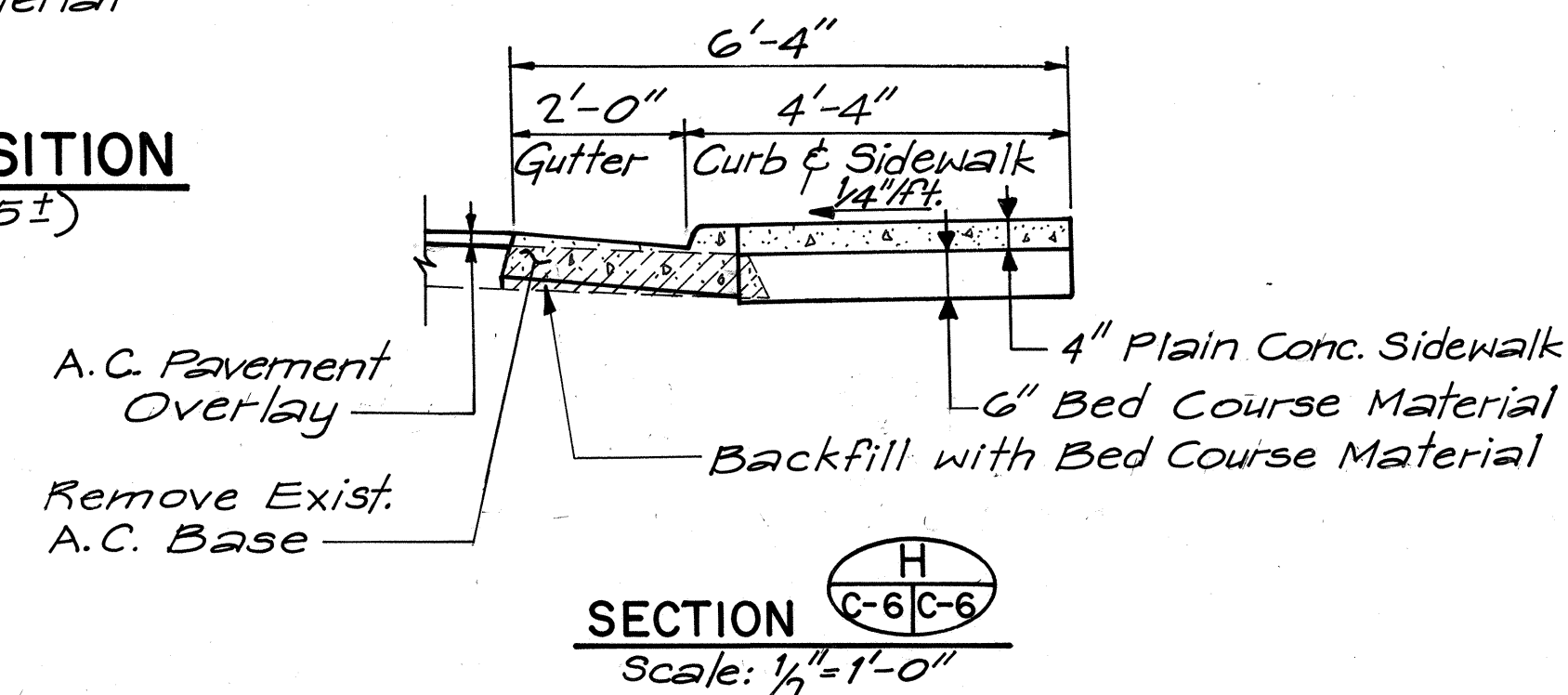
No Scale



PLAN DETAIL
CURB AND SIDEWALK TRANSITION

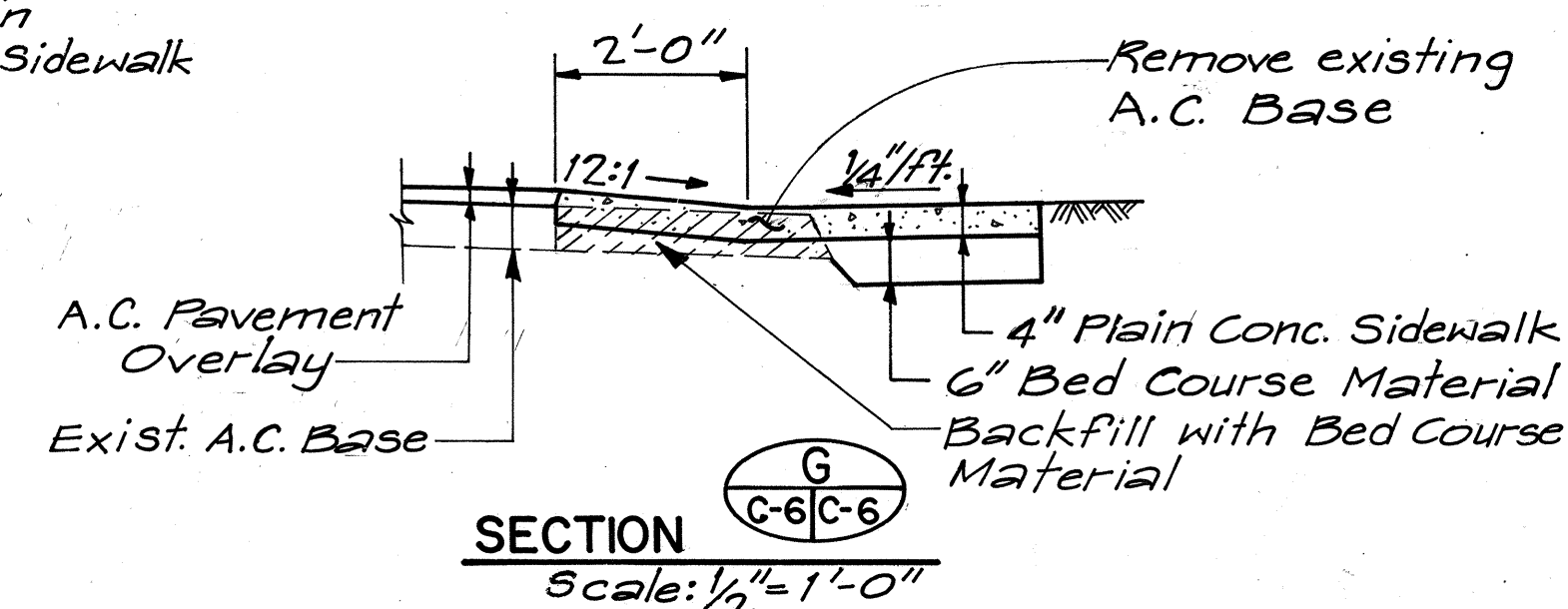
(Makai Fr. Rd. Sta. 252+29 to 252+85±)
Scale: 1" = 5'-0"

NOTE: Payment for removal of existing A.C. Base will be considered incidental to various contract items.



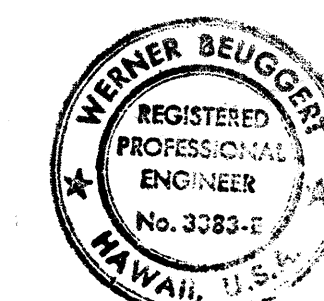
SECTION C-6 | C-6

Scale: $\frac{1}{4}'' = 1'-0''$



SECTION

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



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Wm. H. H. H.

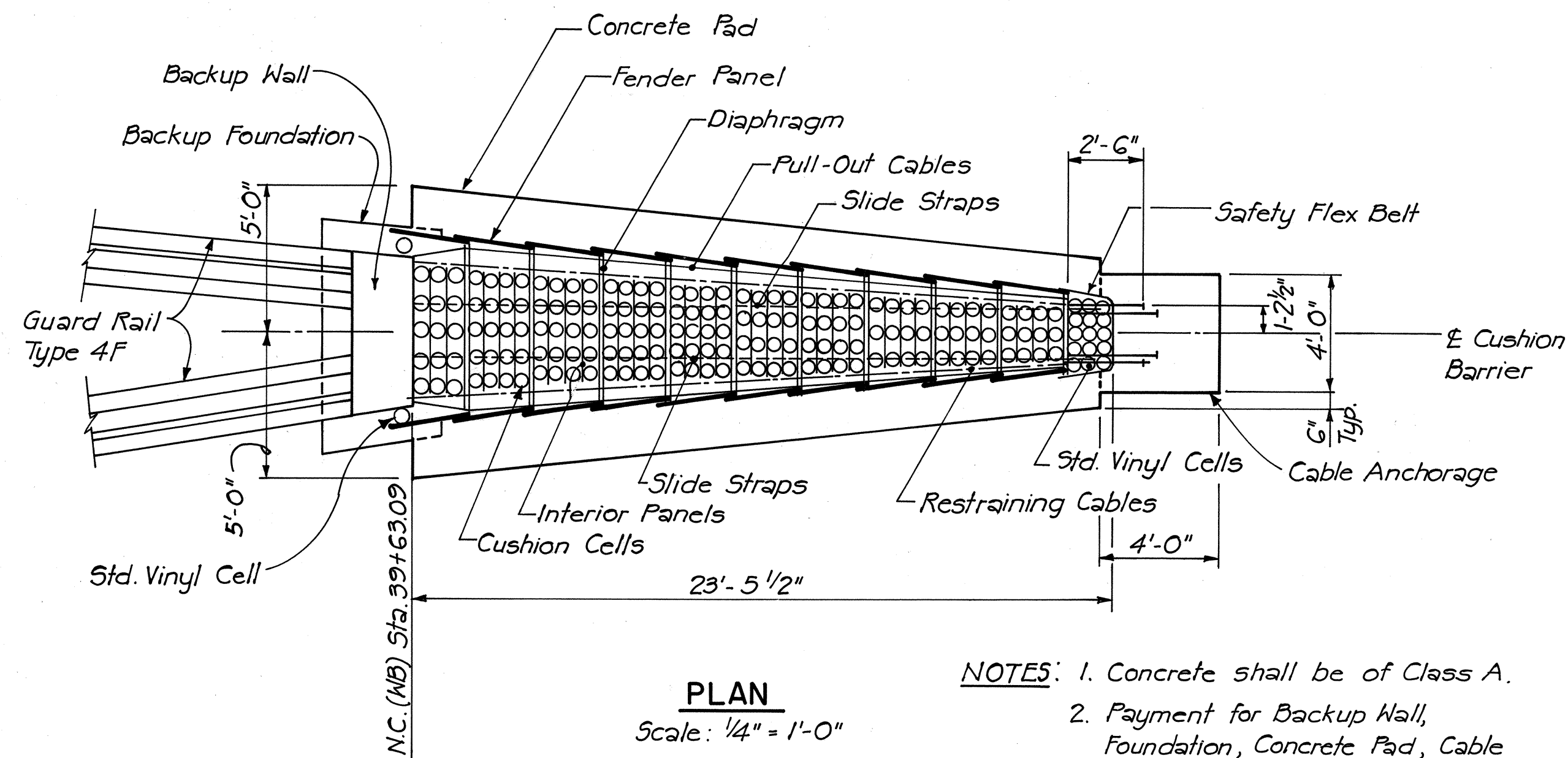
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

MISCELLANEOUS DETAILS

INTERSTATE ROUTE H-1
PROJECT NO. I-IR-HI-1(169):17

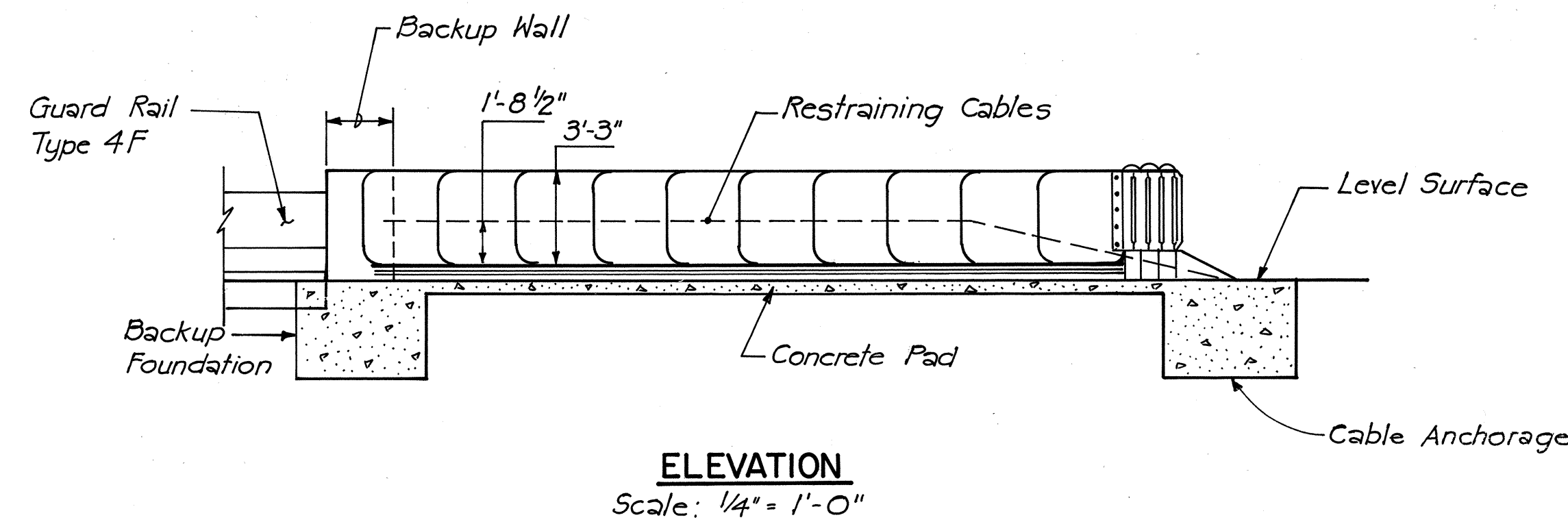
SCALE: As shown DATE: 3/15/82
SHEET No.C-6 OF 17 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-IR-HI-1(169):17	1983	34	280

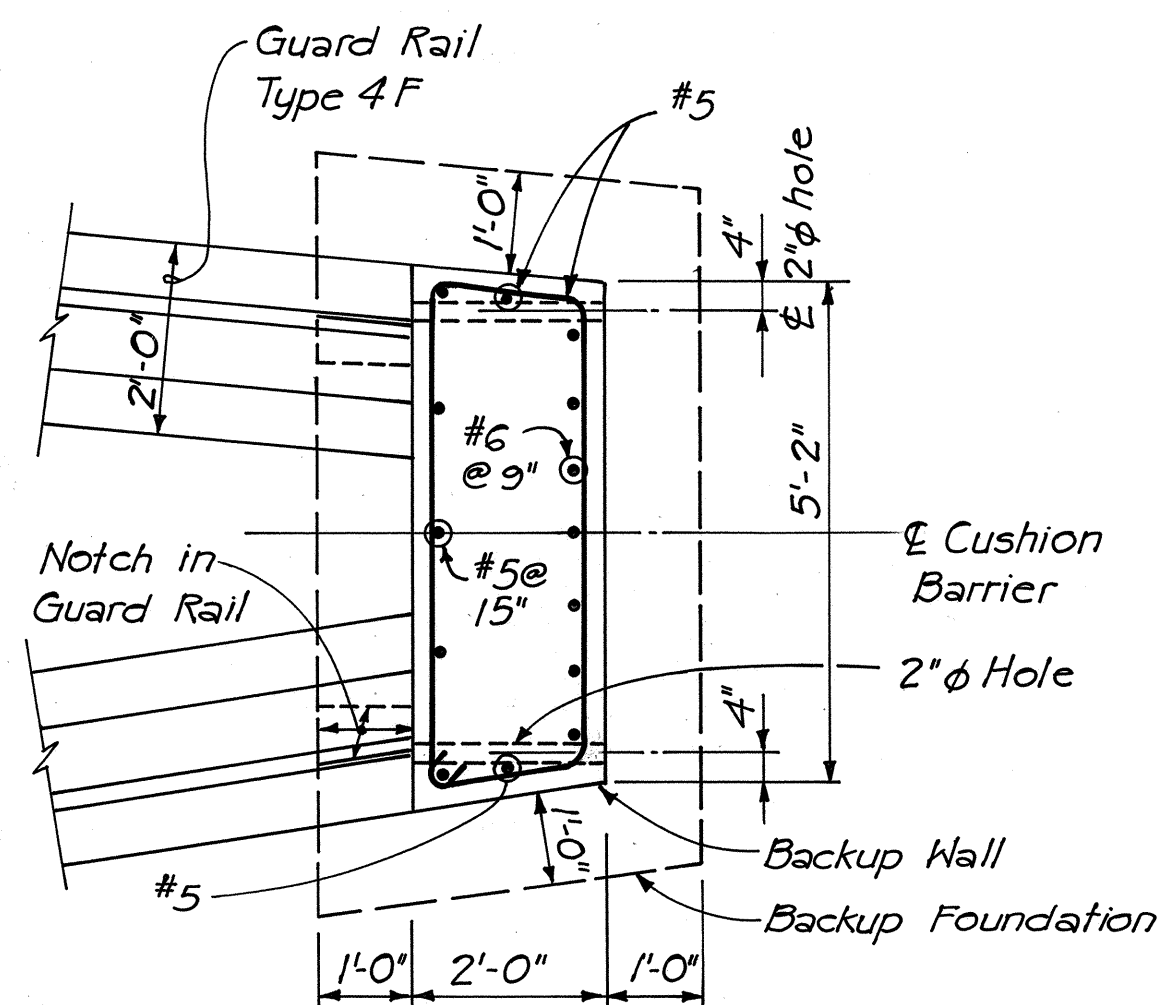


PLAN
Scale: 1/4" = 1'-0"

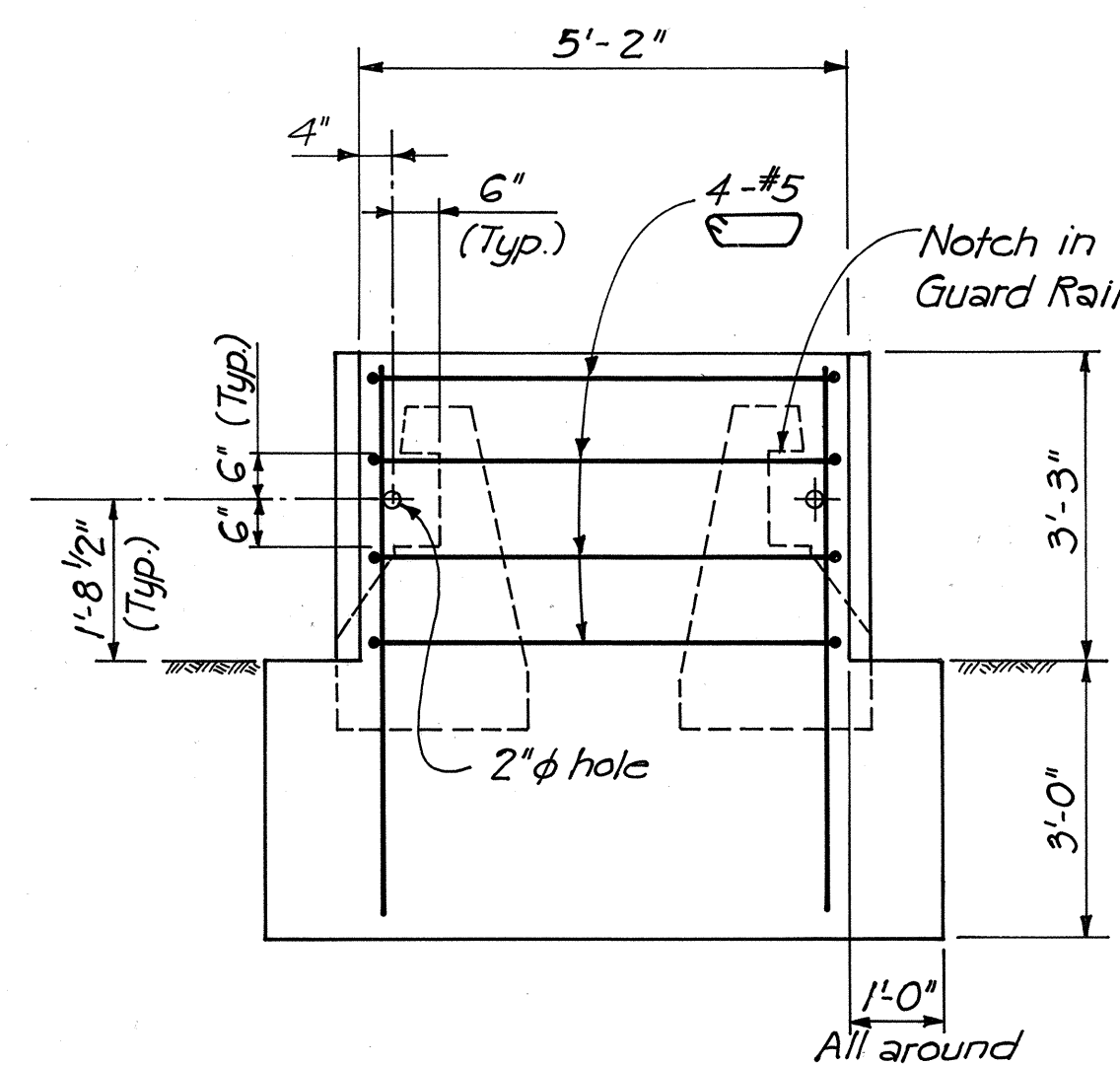
NOTES: 1. Concrete shall be of Class A.
2. Payment for Backup Wall, Foundation, Concrete Pad, Cable Anchorage, Excavation and other incidentals shall be considered incidental to "Cushion Barrier".



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

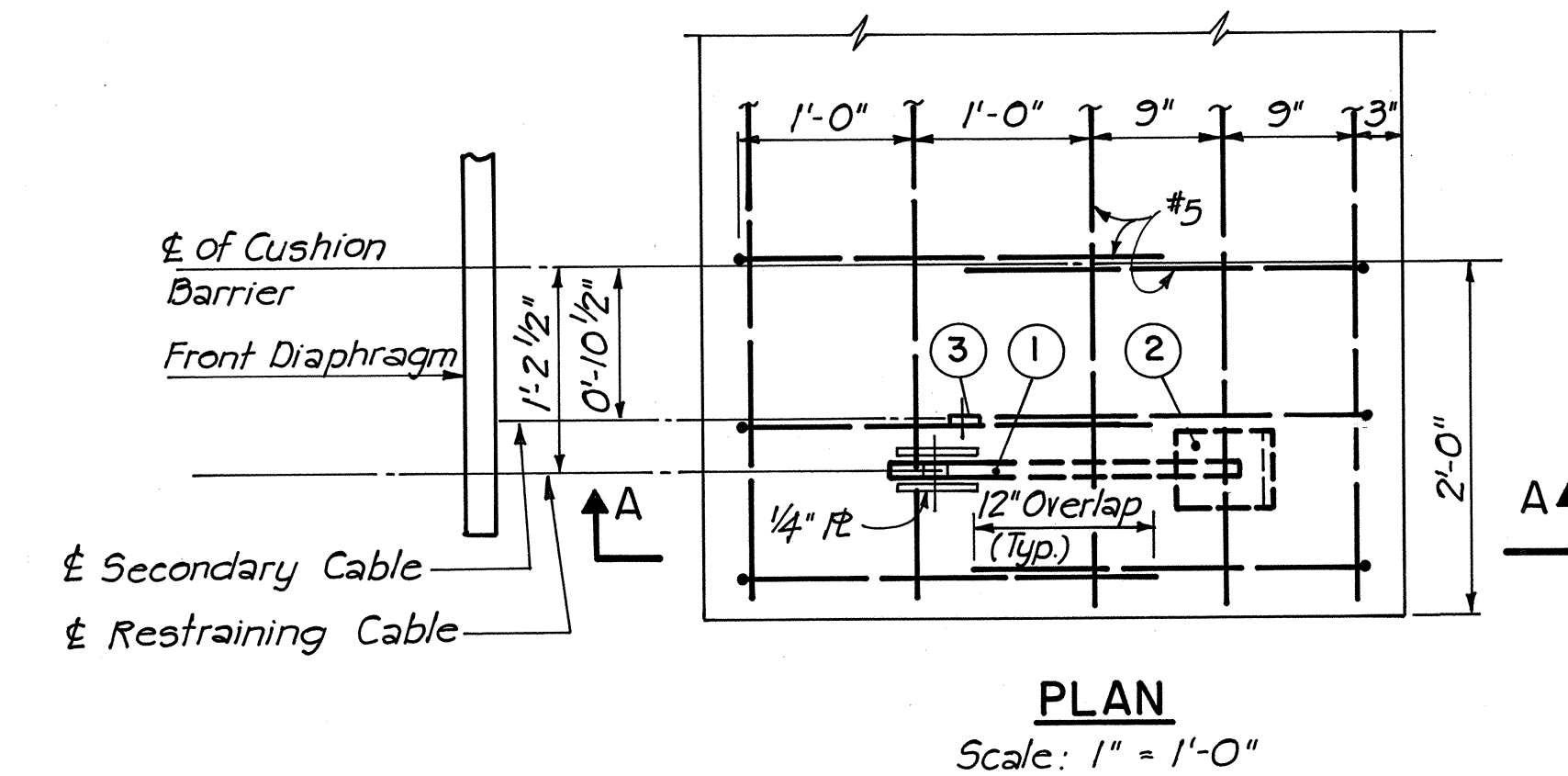


PLAN

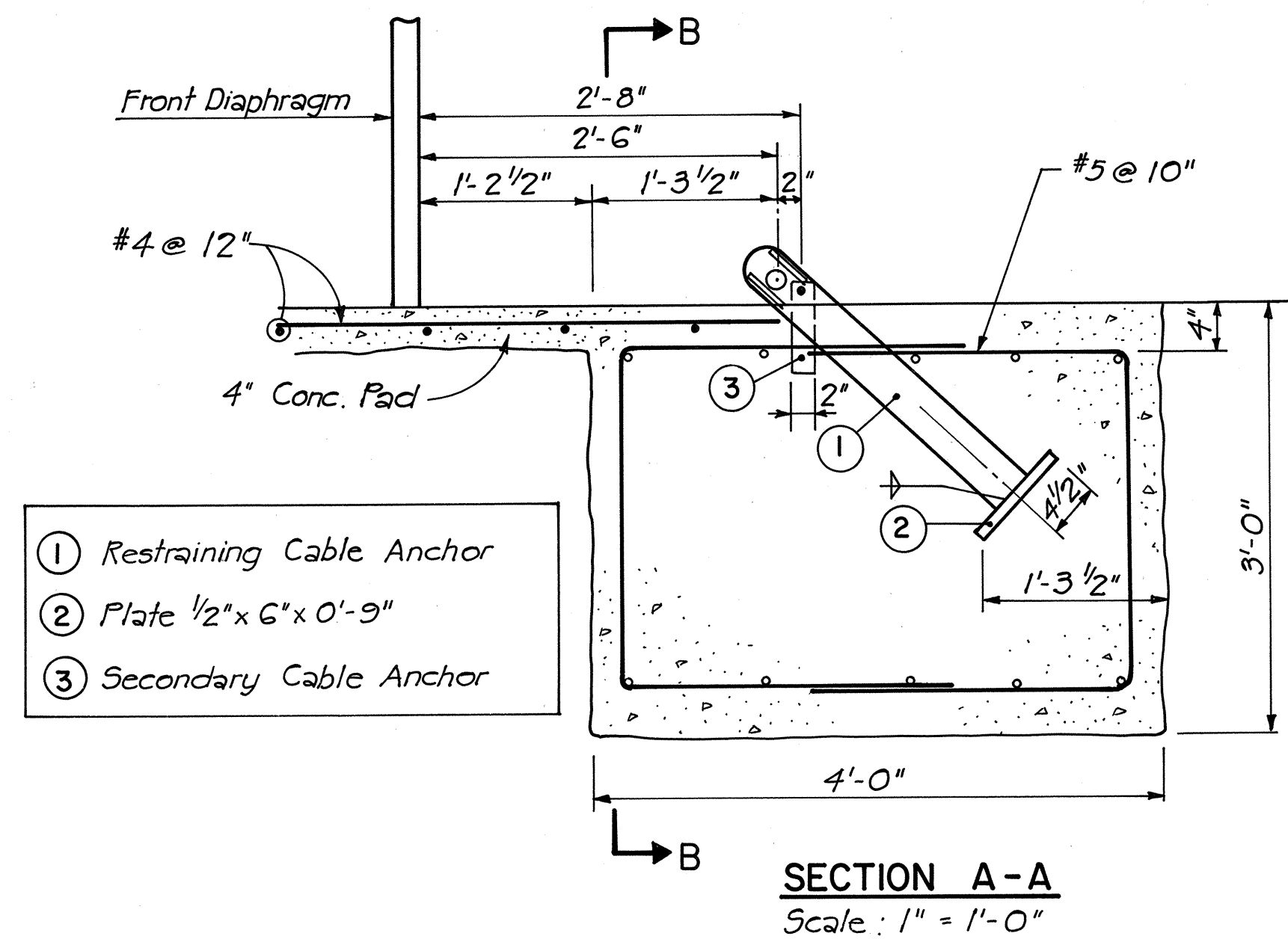


ELEVATION

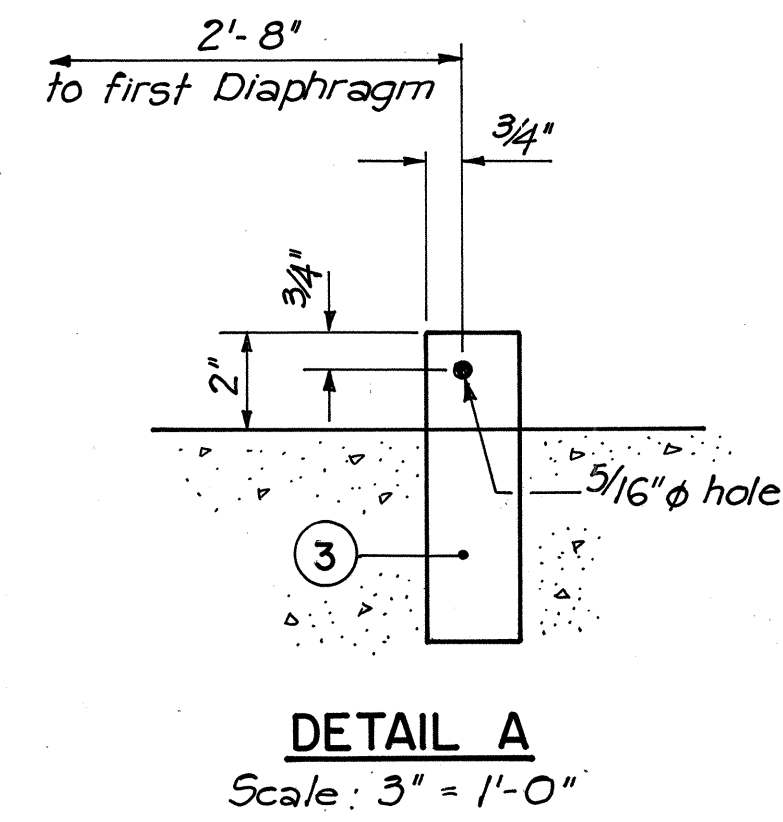
BACKUP WALL & FOUNDATION
Scale: 1/2" = 1'-0"



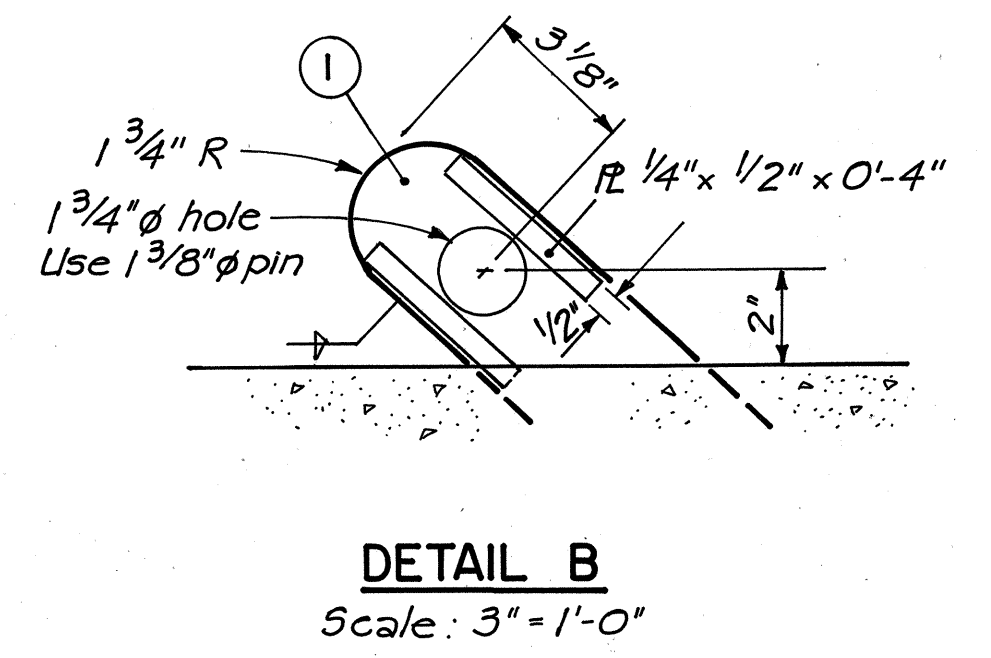
PLAN
Scale: 1" = 1'-0"



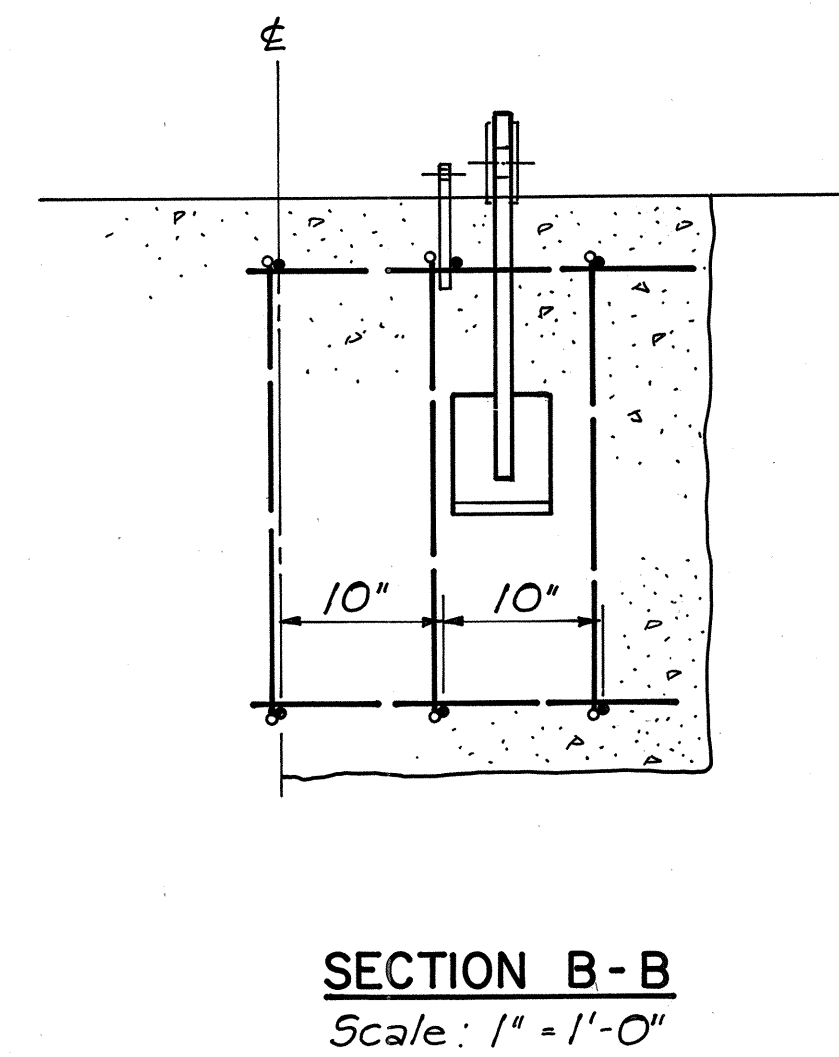
SECTION A-A
Scale: 1" = 1'-0"



DETAIL A
Scale: 3" = 1'-0"



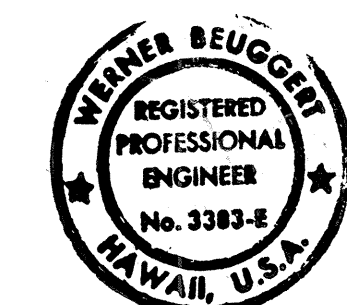
DETAIL B
Scale: 3" = 1'-0"



SECTION B-B
Scale: 1" = 1'-0"

CABLE ANCHORAGE

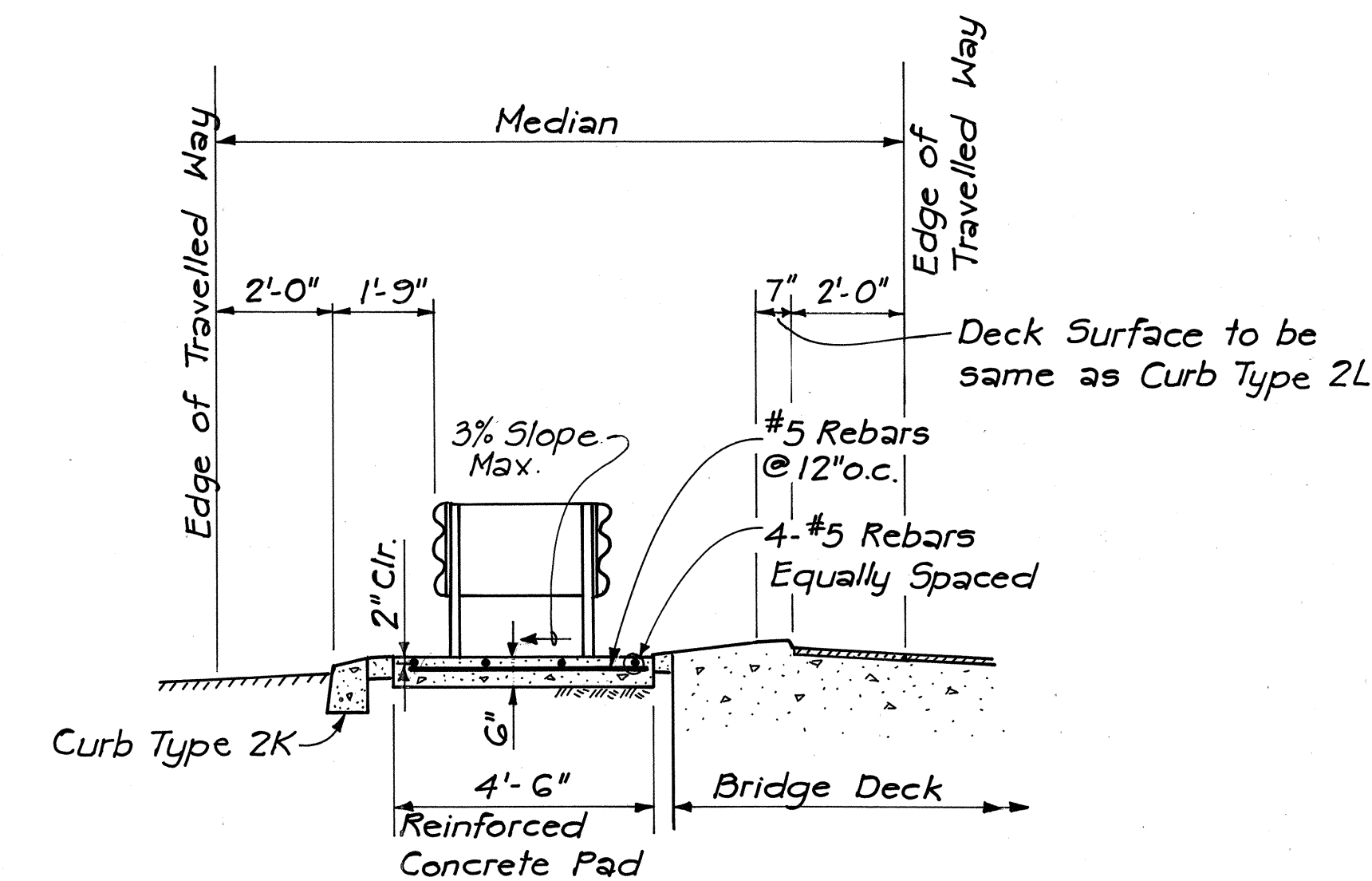
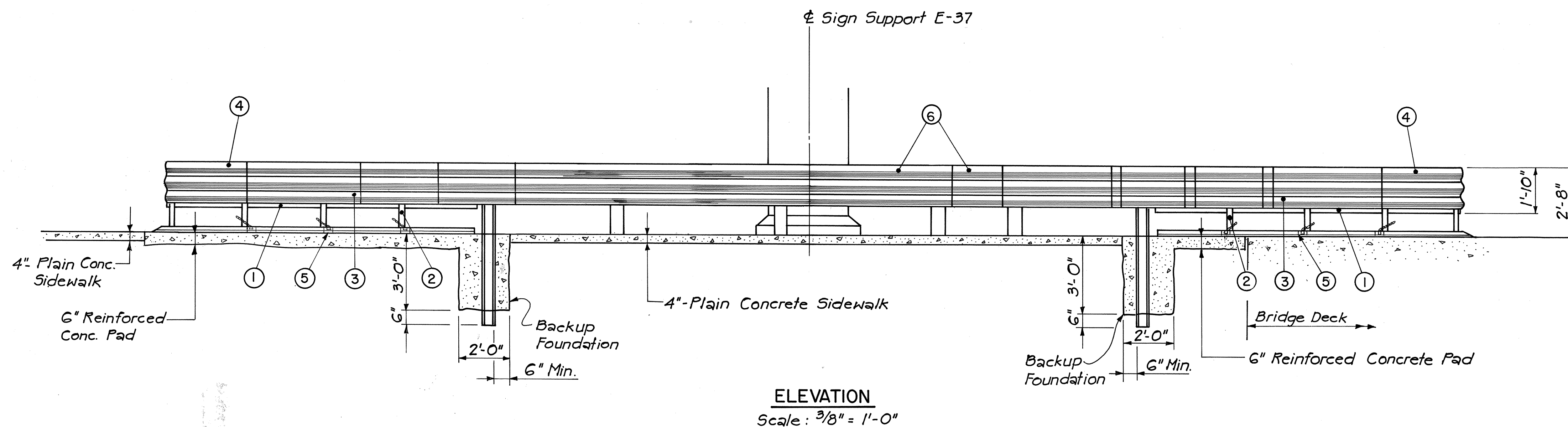
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CUSHION BARRIER
AT TERMINAL OF NIMITZ CONN. (WB)
AND RAMP D
INTERSTATE ROUTE H-1
PROJECT NO. I-IR-HI-1(169):17



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OR UNDER MY SUPERVISION.
Weiner Beugg

SCALE: AS SHOWN DATE: 3/15/82
SHEET NO. C-7 OF 17 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-HI-1169-17	1983	35	280

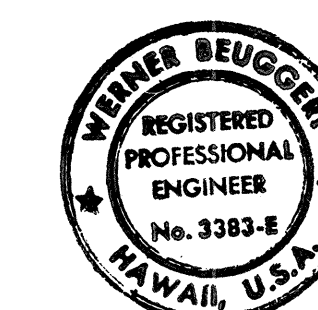
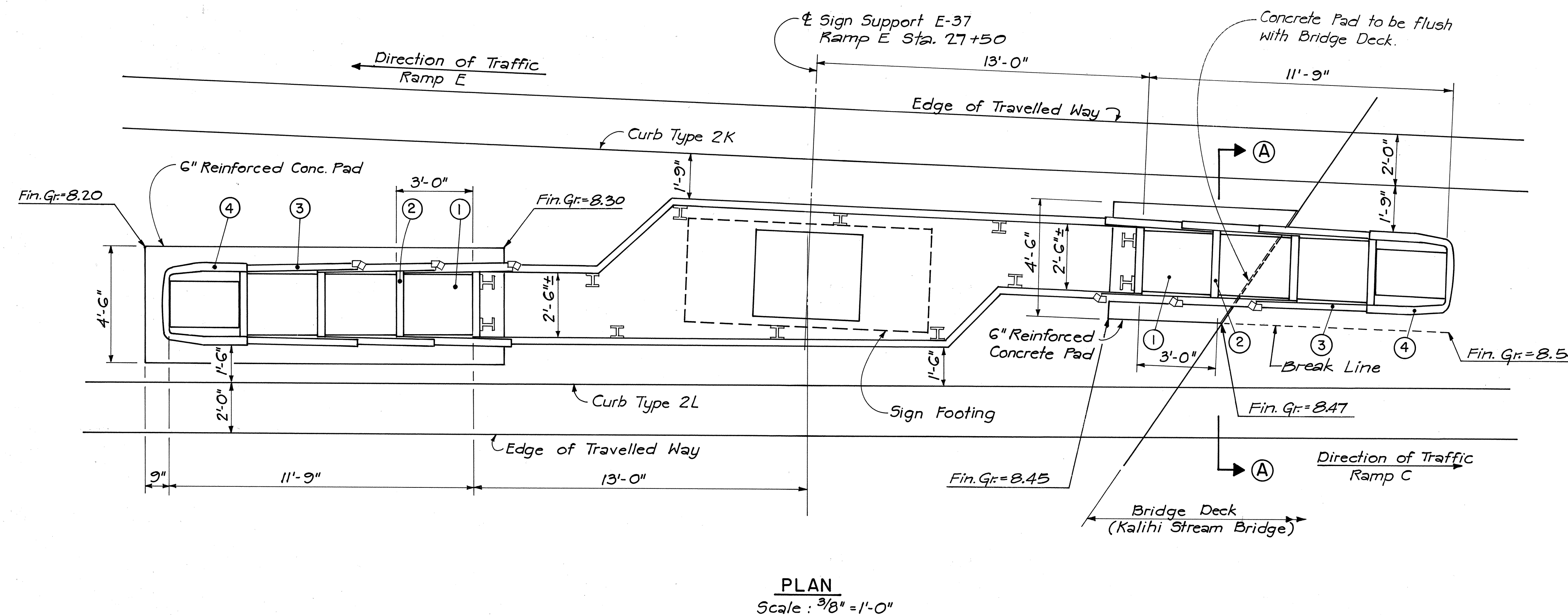


NOTES:

- Concrete for Reinforced Concrete Pad and Backup Foundation shall be Class A.
- Payment for Reinforced Concrete Pad, Backup Foundation, Excavation and other incidentals shall be considered incidental to "Guard Rail Energy Absorbing Terminal".

KEY

- Cartridge
- Diaphragm
- Thrie Beam Fender Panel
- Nose Cover
- Stabilizing Chain Rail
- Thrie Beam



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OR UNDER MY SUPERVISION
Werner Beigert

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

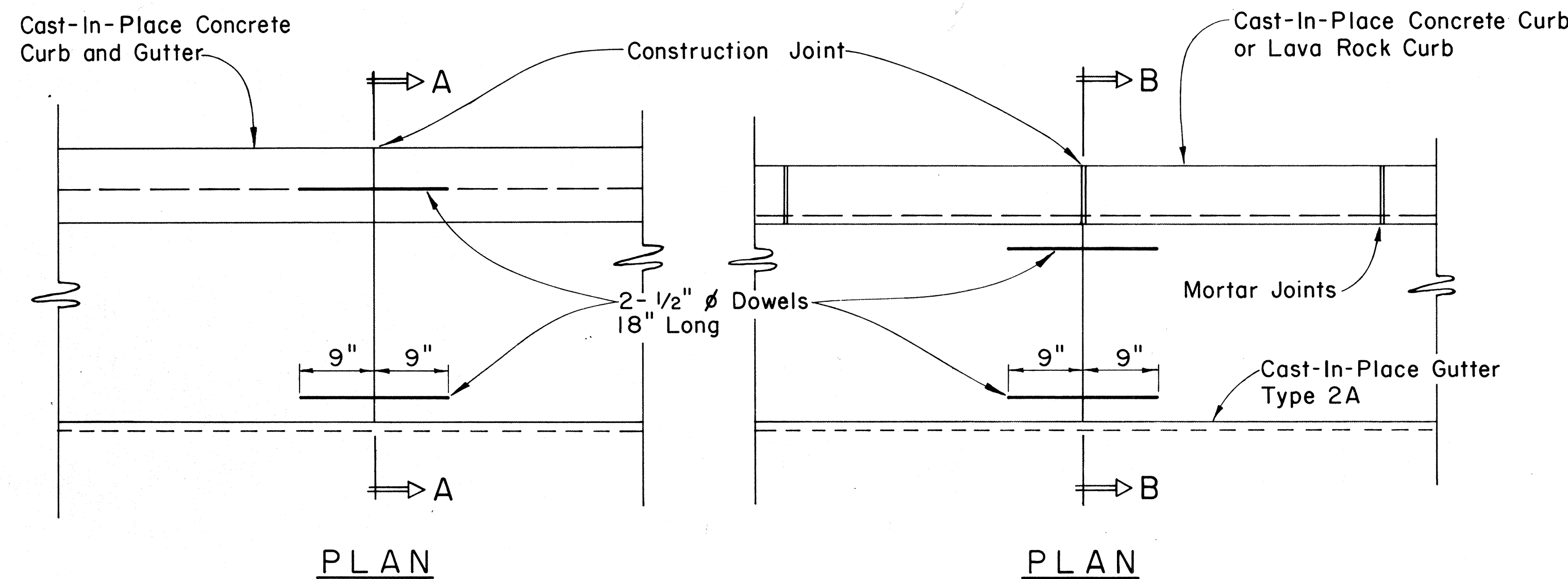
GUARD RAIL ENERGY ABSORBING TERMINALS
(FOR OVERHEAD SIGN SUPPORT E-37)

INTERSTATE ROUTE H-1
PROJECT NO. I-IR-HI-1169-17

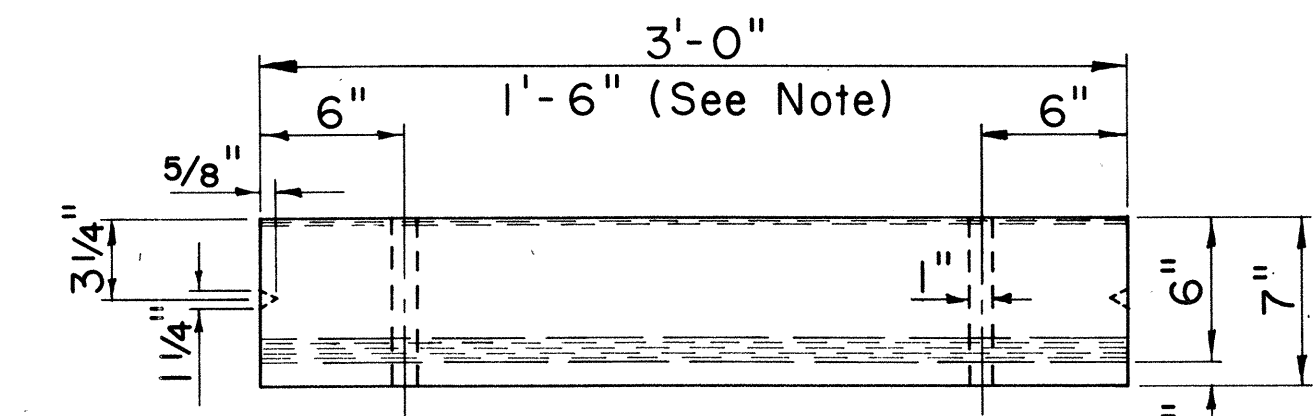
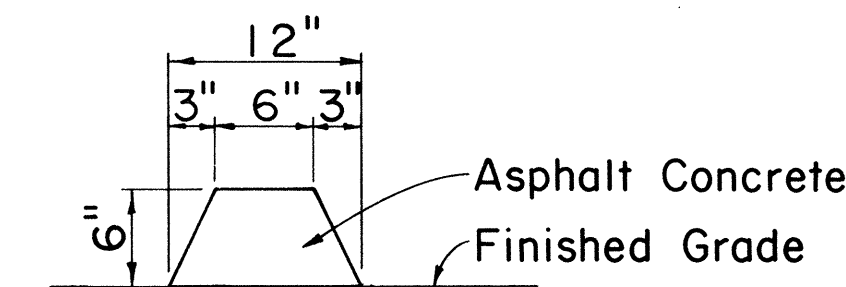
SCALE: AS SHOWN DATE: 3/15/82

SHEET No. C-8 OF 17 SHEETS

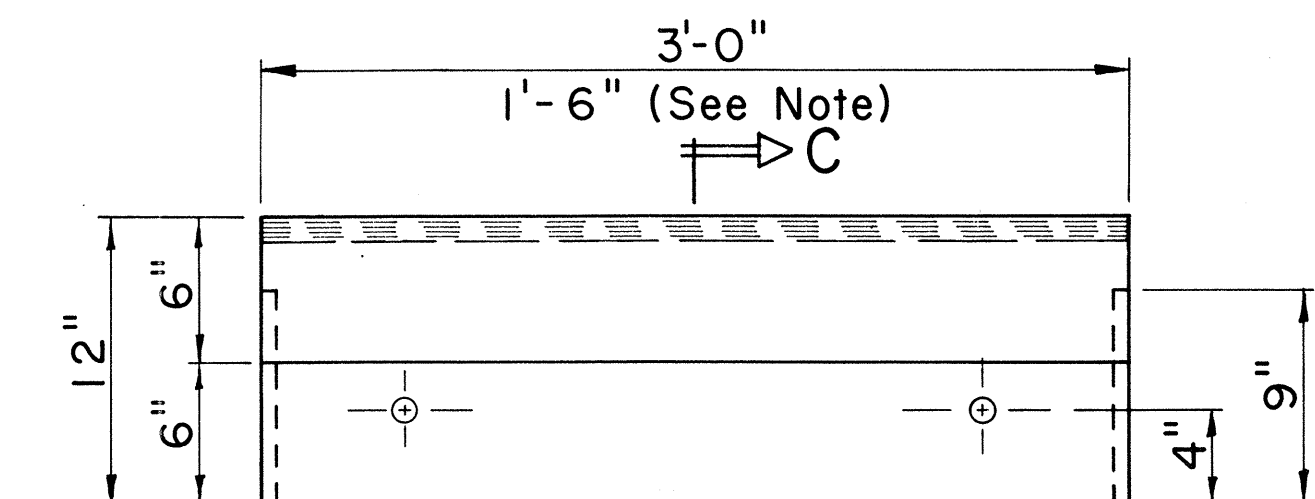
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HA-11-17	1983	36	280



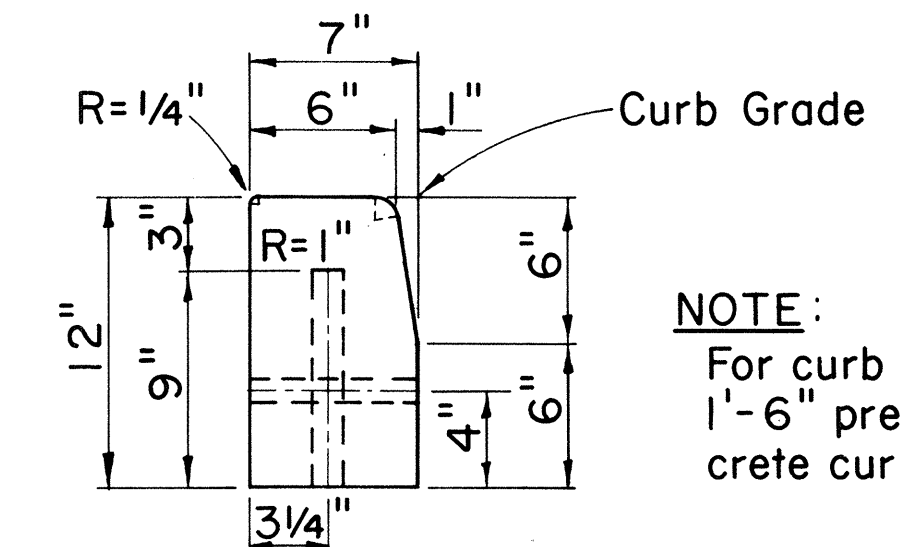
CURB, TYPE 6
BITUMINOUS CURB
 Scale: 1 1/2" = 1'-0"



PLAN

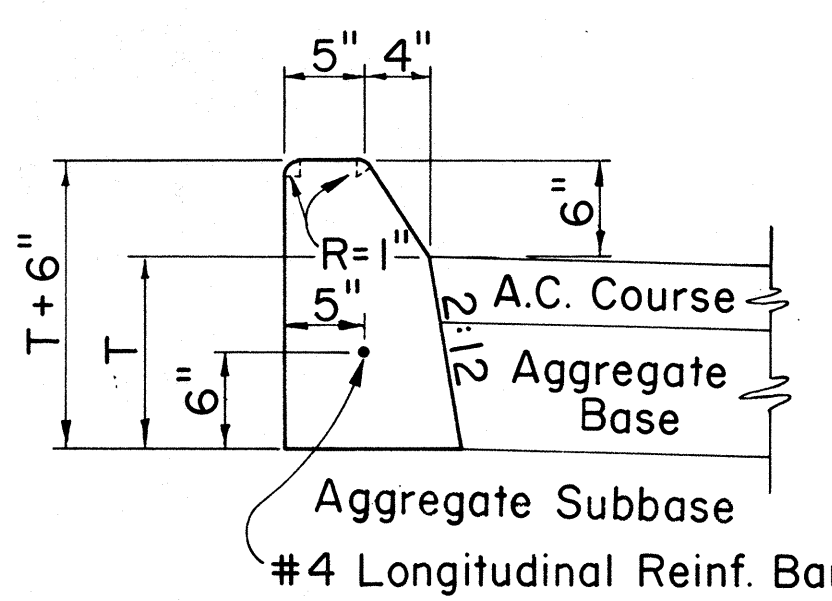
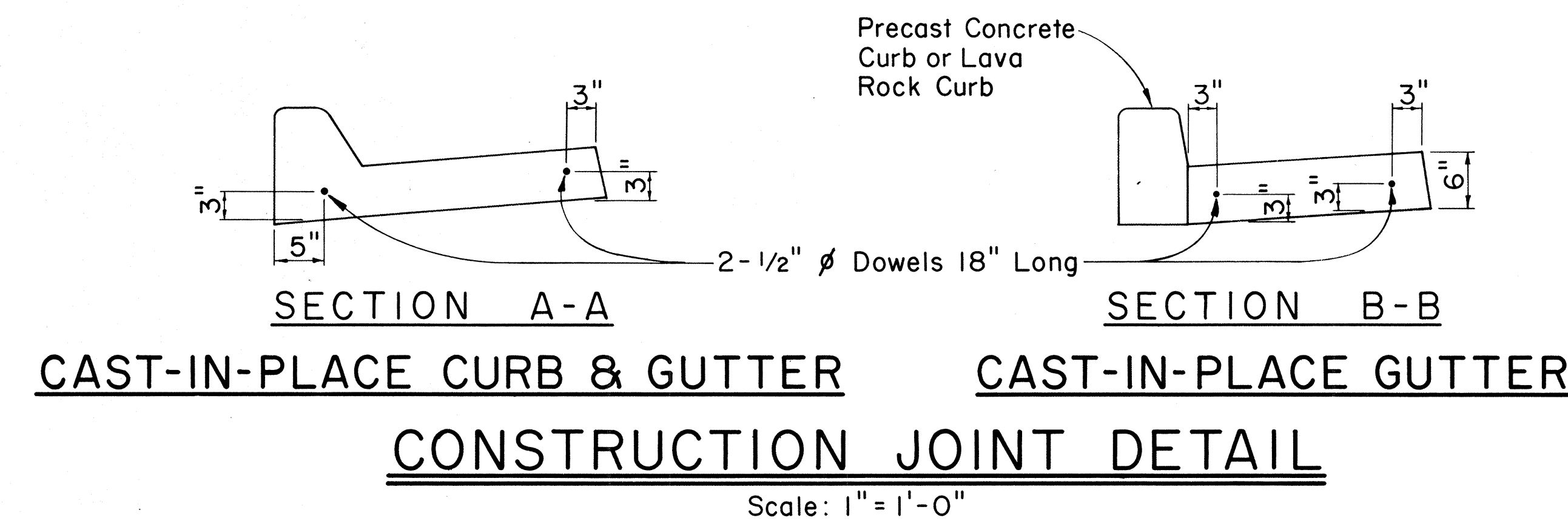


ELEVATION

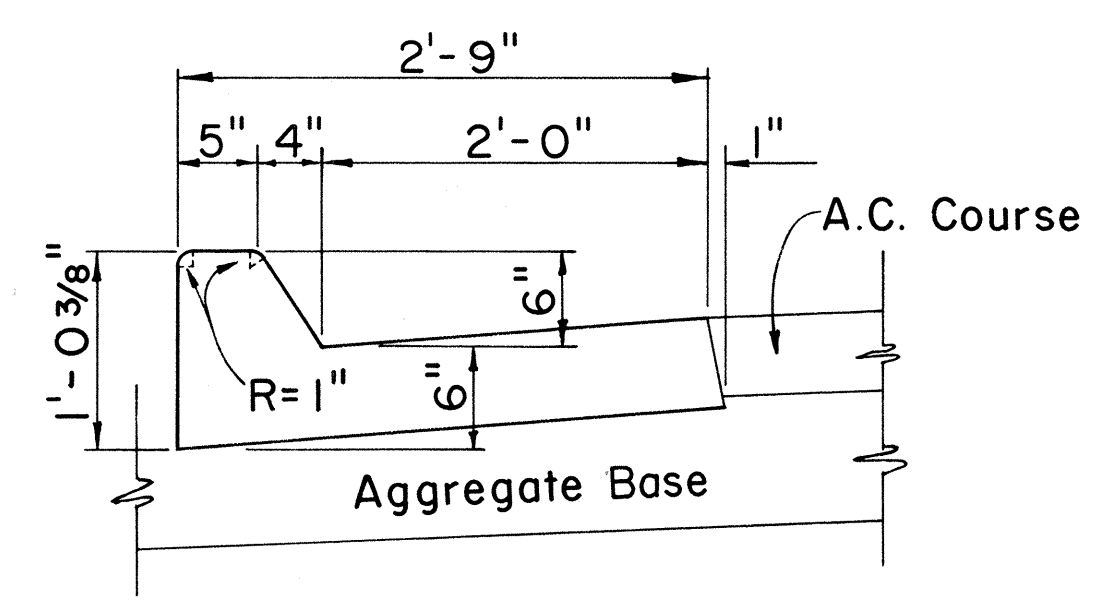


SECTION C-C

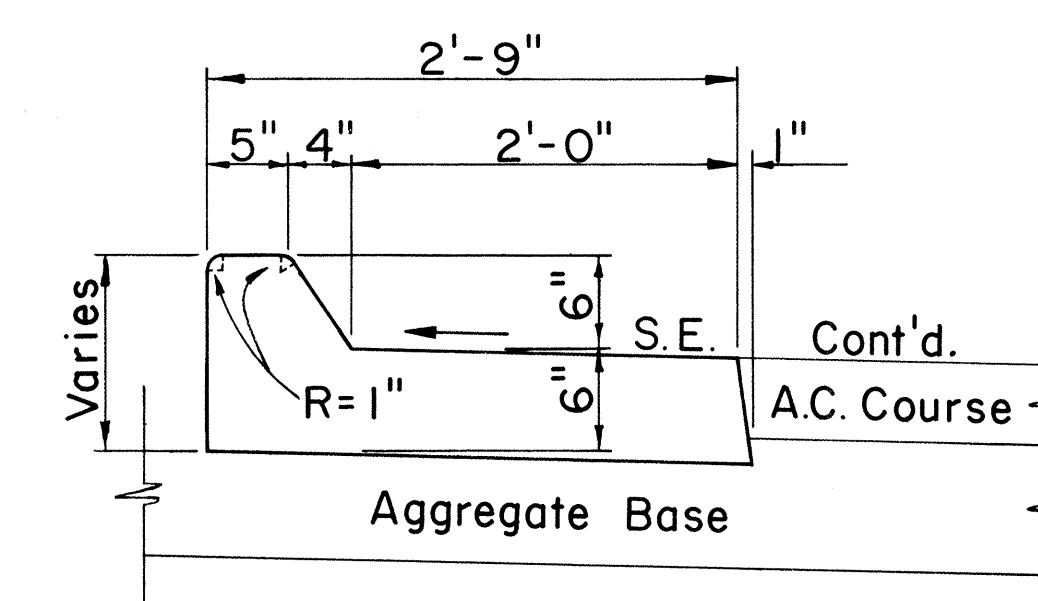
CURB, TYPE 3D
PRE-CAST CONC. CURB
 Scale: 1 1/2" = 1'-0"



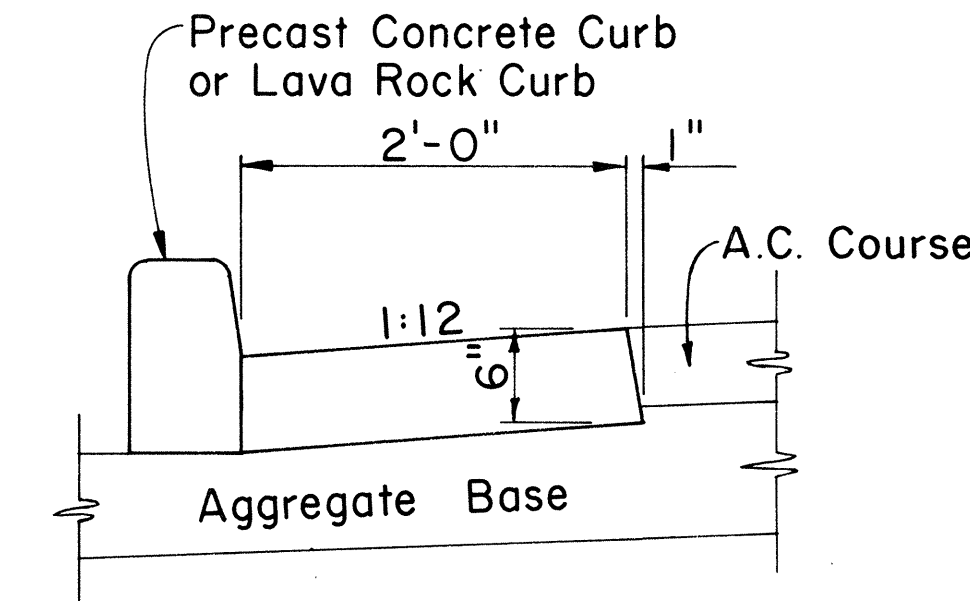
CURB, TYPE 2A



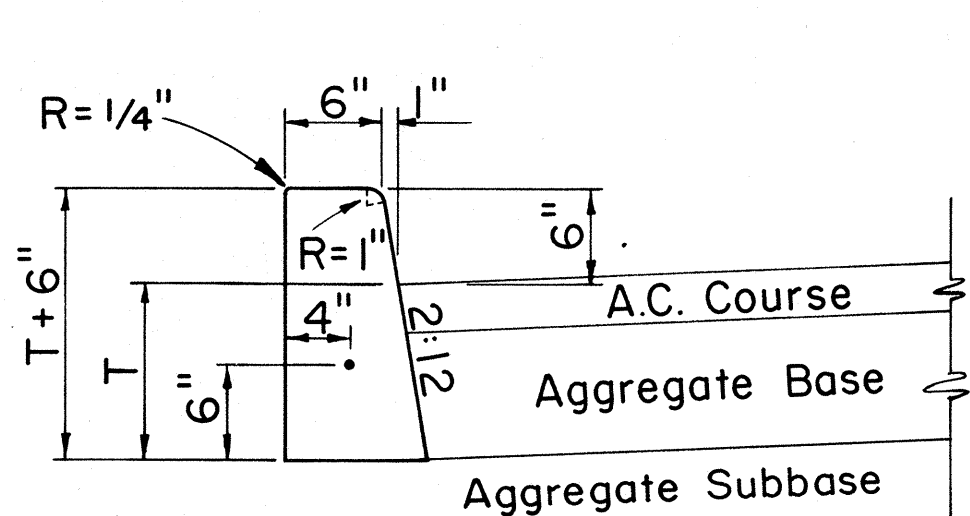
CURB & GUTTER, TYPE 2AG



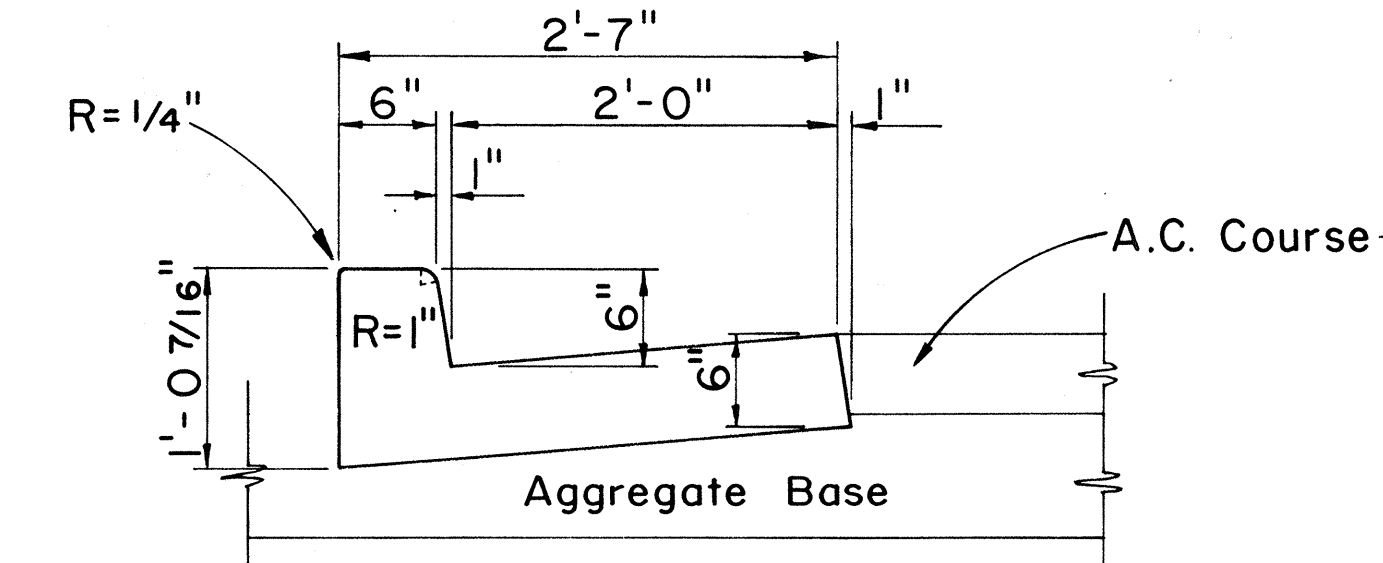
CURB & GUTTER, TYPE 2AGM



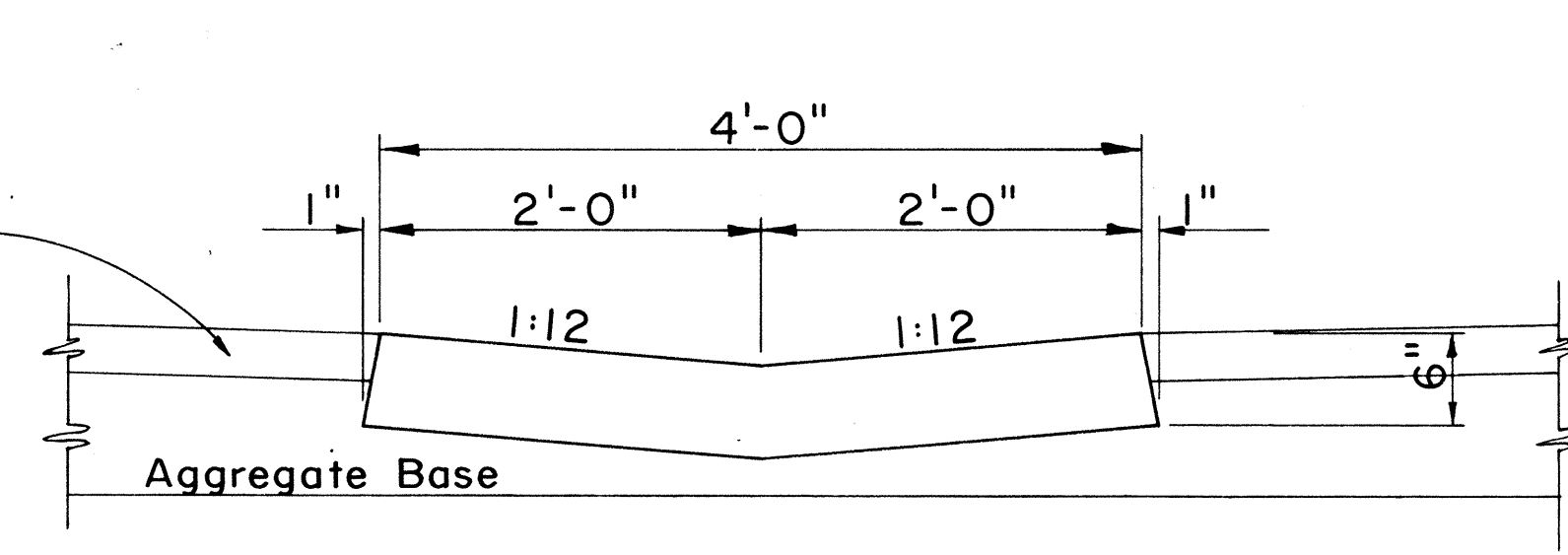
GUTTER, TYPE 2A



CURB, TYPE 2D



CURB & GUTTER, TYPE 2DG



GUTTER, TYPE 2G

CAST-IN-PLACE CONCRETE CURBS AND/OR GUTTERS
 Scale: 1" = 1'-0"

APPROVAL RECOMMENDED:
 M. Hironaka
 HIGHWAY DESIGN ENGINEER
 12-4-69
 DATE

APPROVED:
 R. E. Smith
 ASSISTANT CHIEF, ENGINEERING
 12-10-69
 DATE

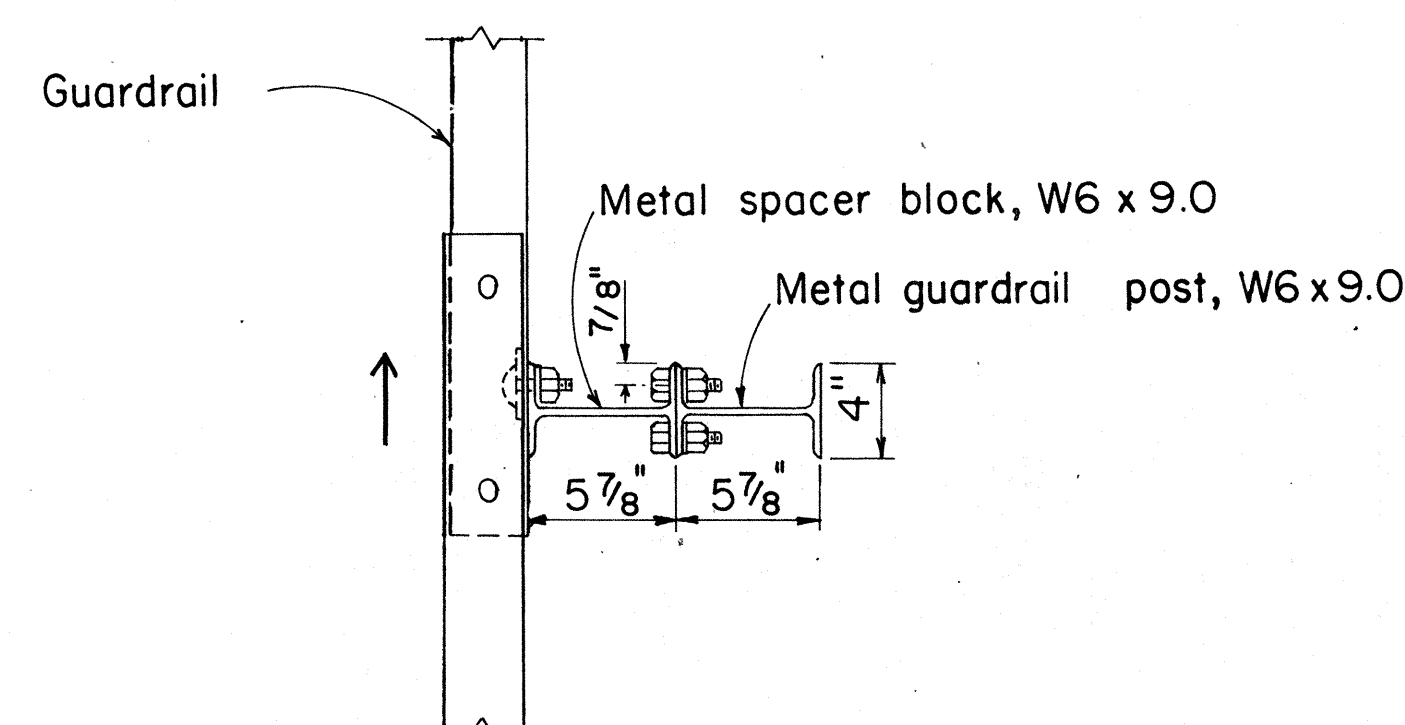
NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
STANDARD DETAILS
TYPICAL DETAILS OF CURB
AND/OR GUTTERS
 Scale: As Shown

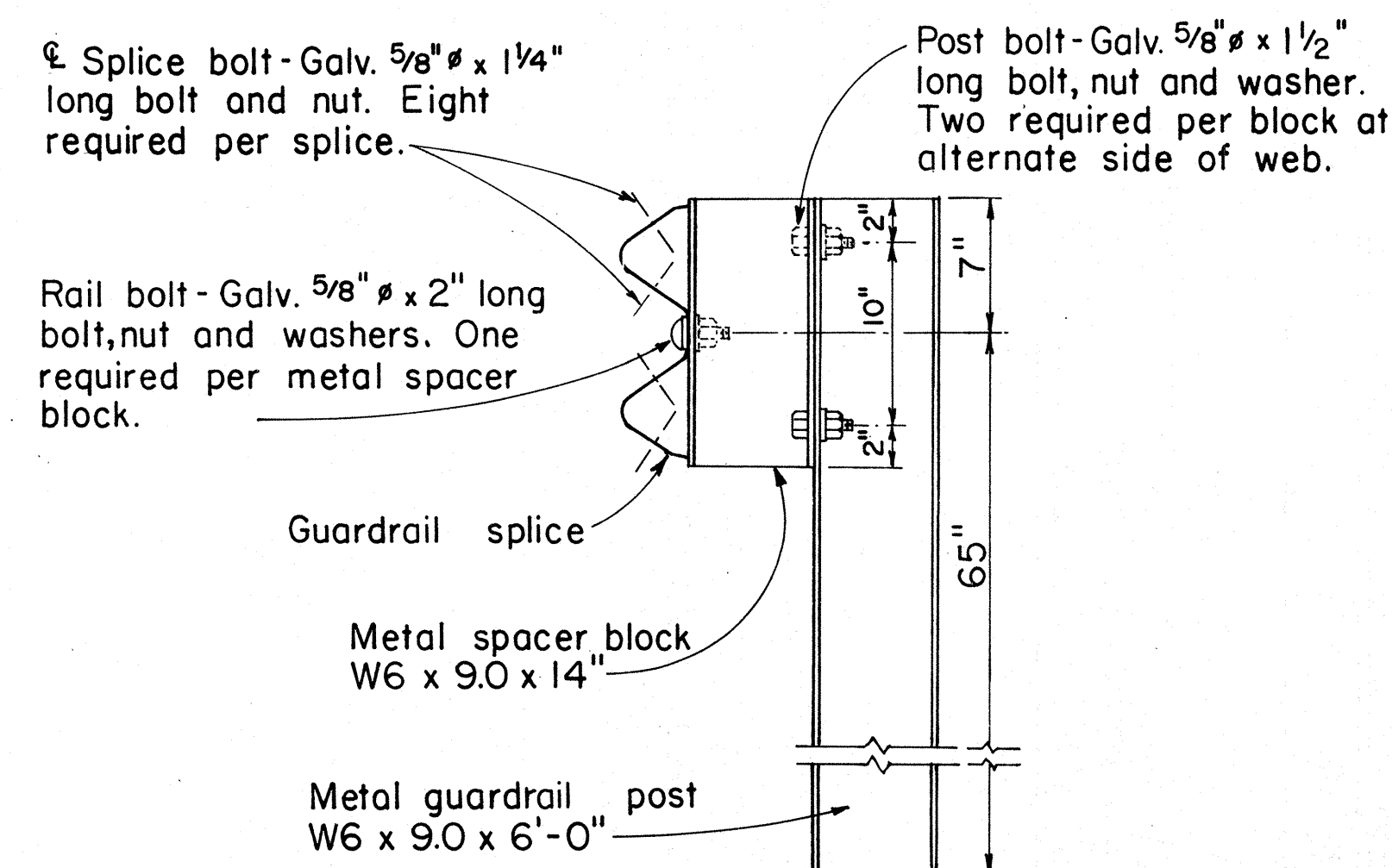
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-IR-HI-1(169)17	1983	37	280

GENERAL NOTES

- Both of the alternate type posts may be used on any one project however, only one type of post shall be used in any single run of guardrail.
- All hardware, posts and blocks shall be galvanized. No punching, drilling or cutting will be permitted after galvanizing.
- Connection details for bent plate post and block shall be similar to the details shown for structural shape post, and block.
- Where conditions require, special post lengths in increments of 6 inches may be specified.
- For details of rail elements, bolts and nuts, see sheet DT 501.
- All fasteners, posts, blocks and rail elements shall conform to the latest edition and amendments of "A Guide to Standardized Highway Barrier Rail Hardware", a report prepared and approved by the AASHTO-AGC-ARTBA Joint Cooperative Committee.



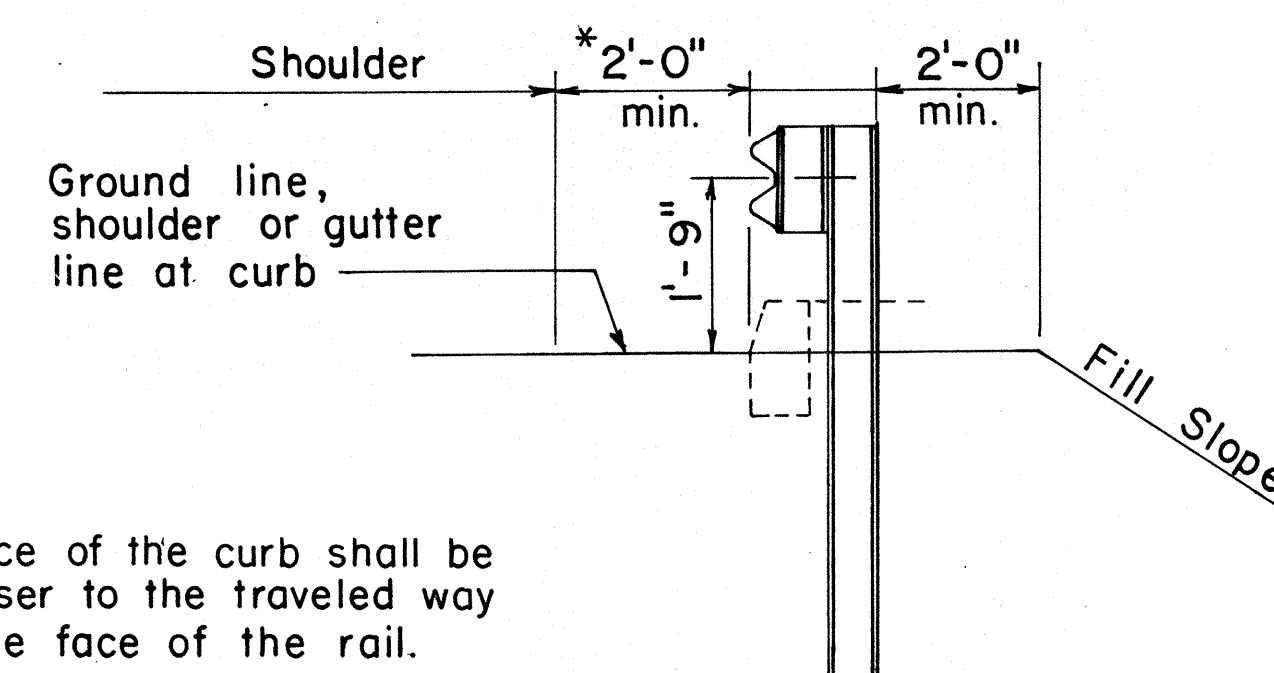
PLAN



ELEVATION

SINGLE METAL GUARDRAIL ON METAL POST WITH METAL SPACER BLOCK

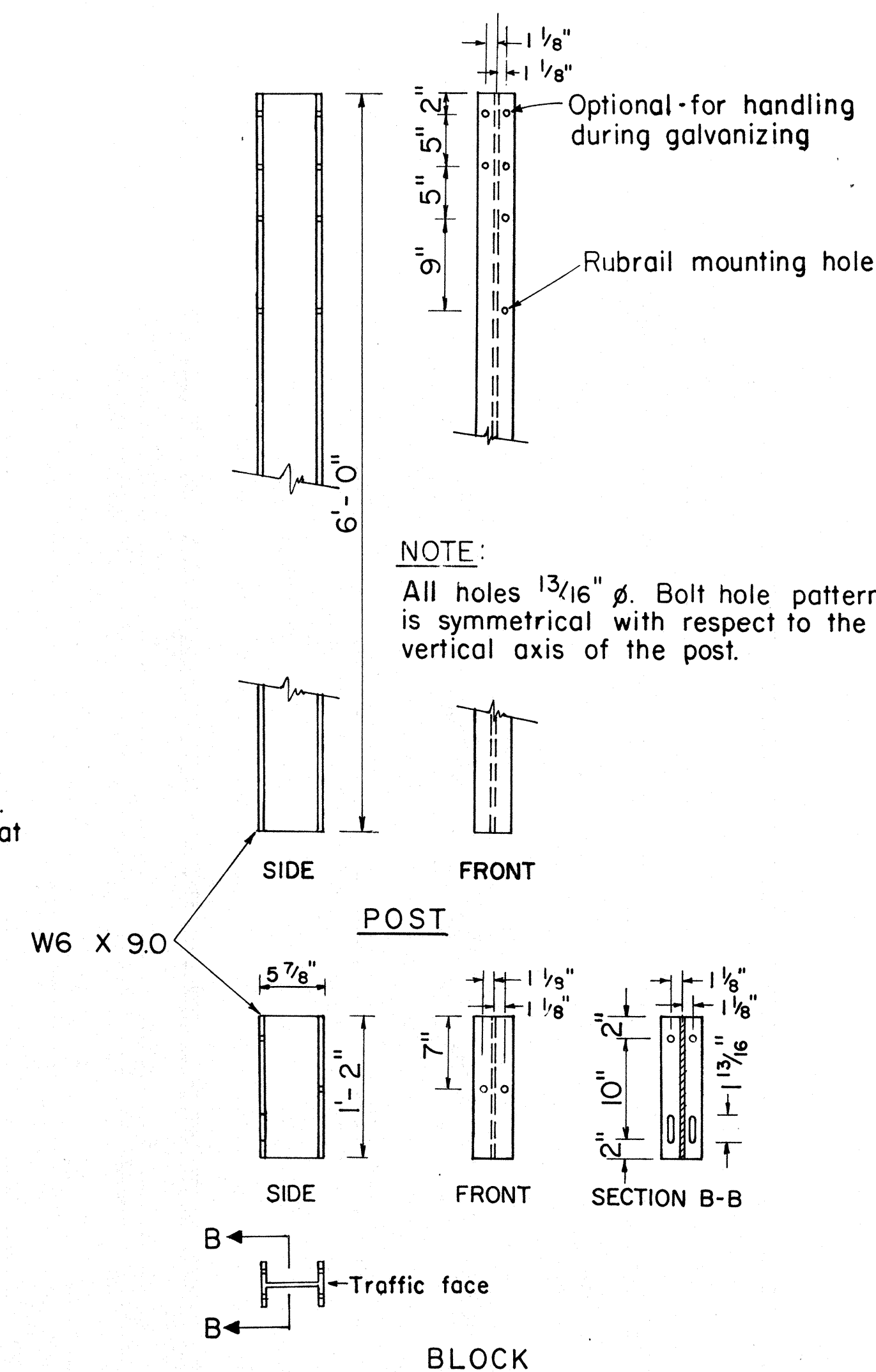
SCALE: 1 1/2" = 1'-0"



AT SHOULDER SECTION

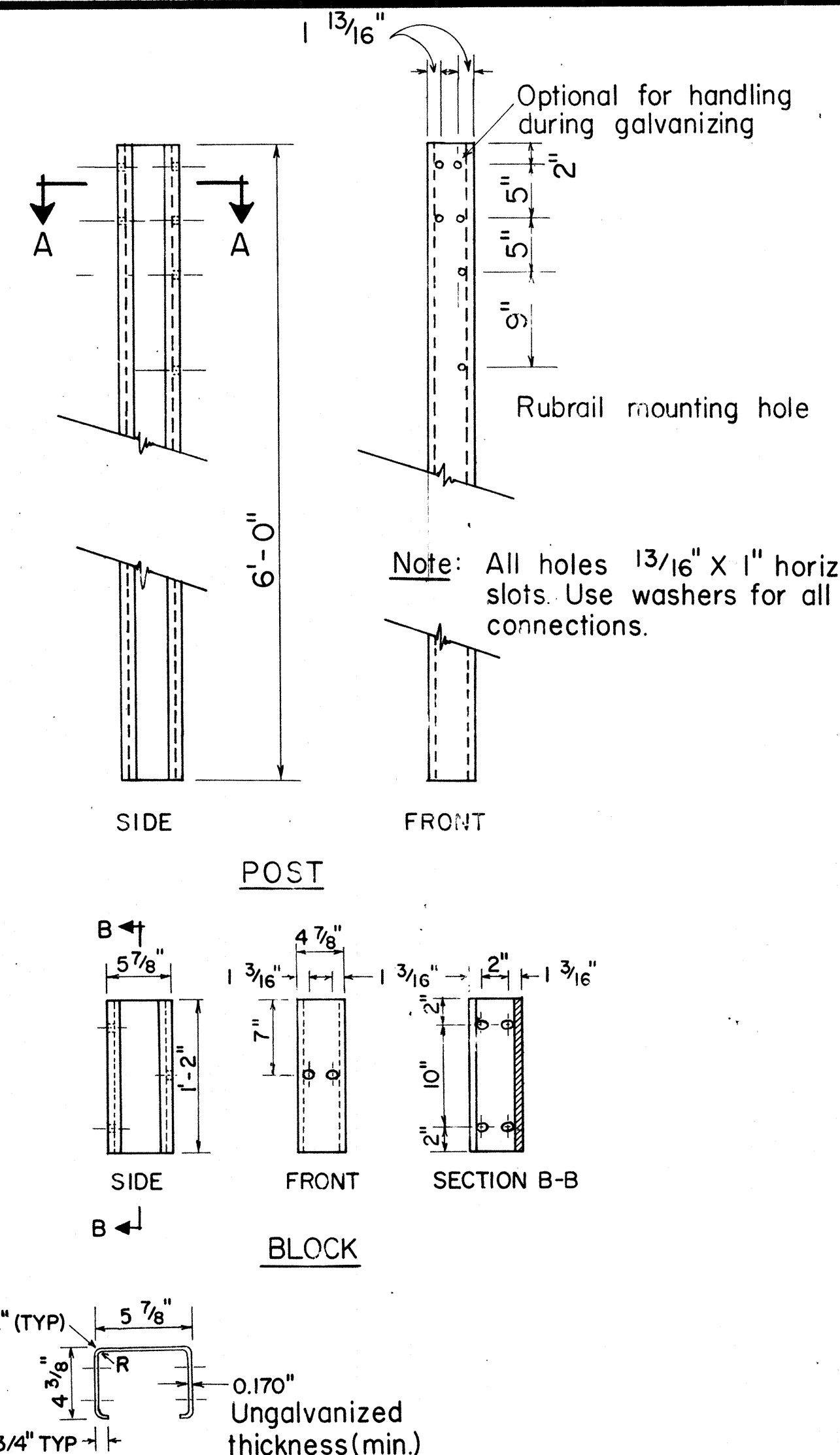
TYPICAL METAL GUARDRAIL DETAIL

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



STRUCTURAL SHAPE POST AND BLOCK

SCALE: 1" = 1'-0"

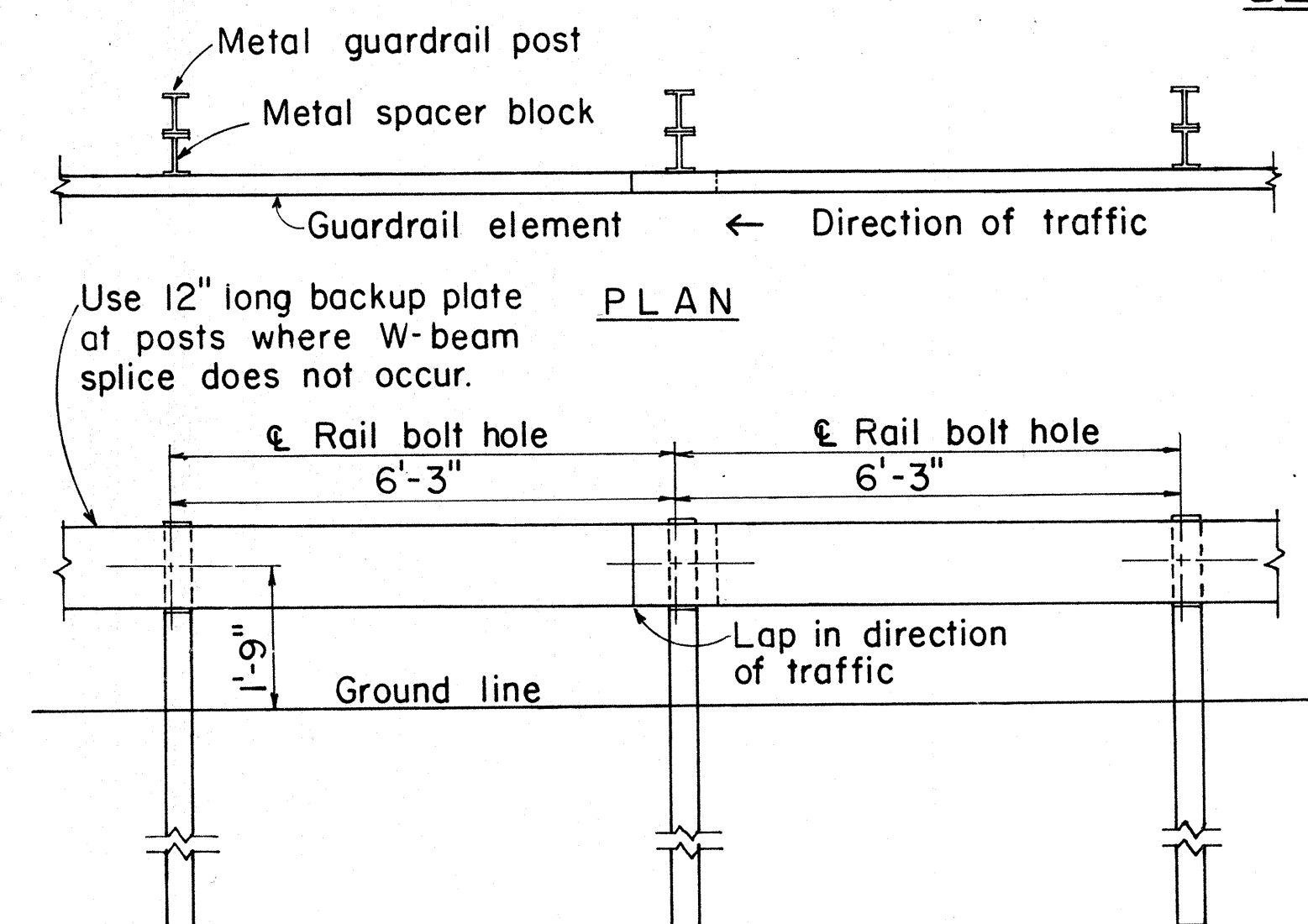


SECTION A-A BENT PLATE POST AND BLOCK

N.T.S.

BENT PLATE POST AND BLOCK

SCALE: 1" = 1'-0"



ELEVATION

METAL GUARDRAIL ON METAL POST WITH METAL SPACER BLOCK

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

APPROVAL RECOMMENDED:
TRAFFIC ENGINEER
DATE 9/1/82

APPROVED:
ASSISTANT CHIEF, ENGINEERING
DATE 9/22/82

NO.	REVISION	APPROVED BY	DATE
1	Supersedes sht. DT 500 approved 12/30/69.	H.P.	9/22/82
2	Added General Notes No. 6	S.D.	9/28/83

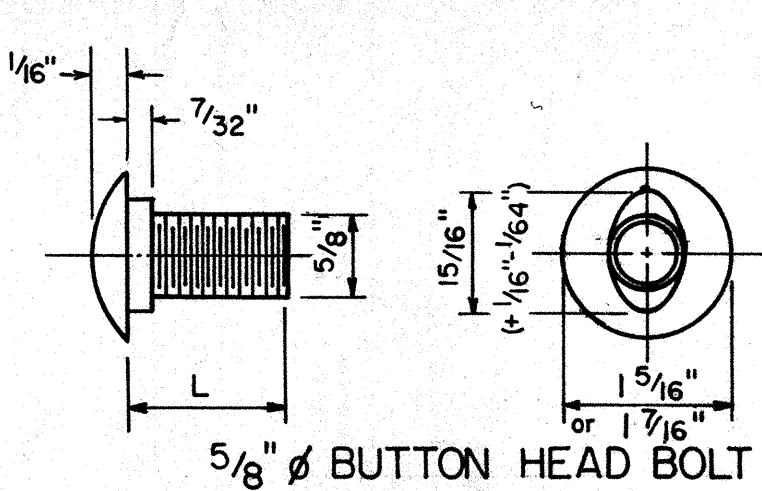
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
METAL GUARDRAIL

Scale: As Shown July, 1982

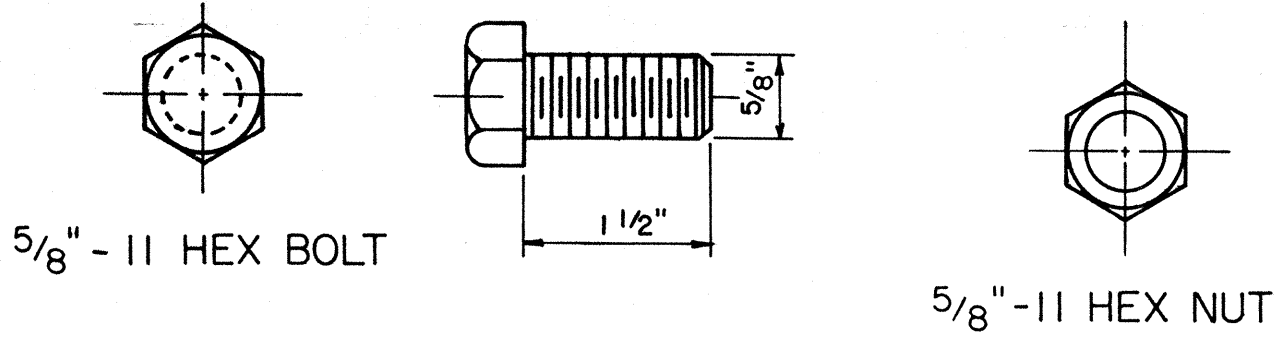
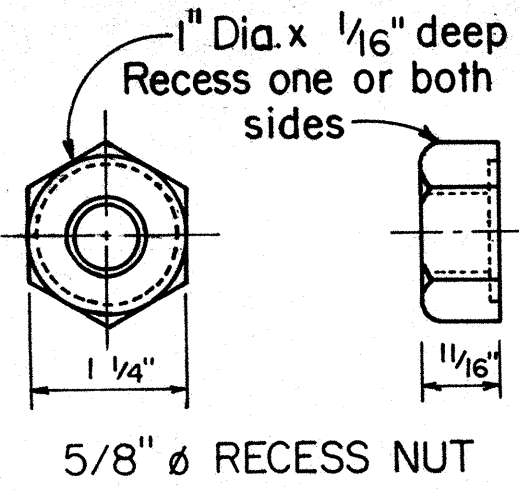
SHEET No. C-10 OF 17 SHEETS DT 500

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	11R-HI-1(169)117	1983	38	280

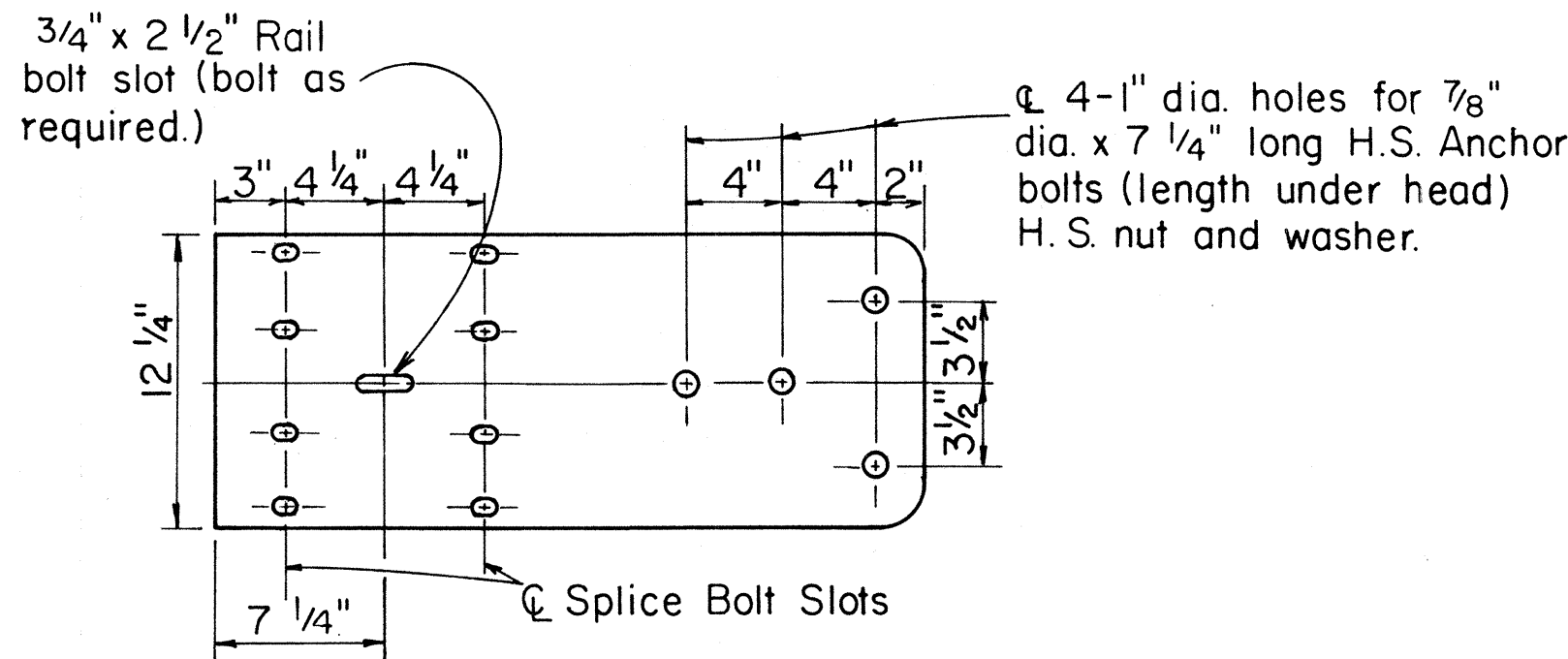
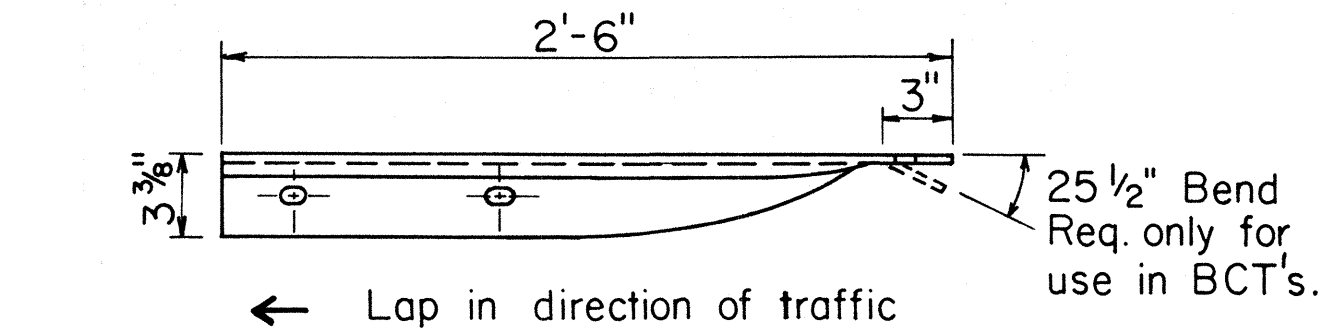


L	Thread Length	Intended Use
1 1/4"	Full length thread	Splice rail elements
2"	1 1/2" min. thread len.	Fasten rails to posts

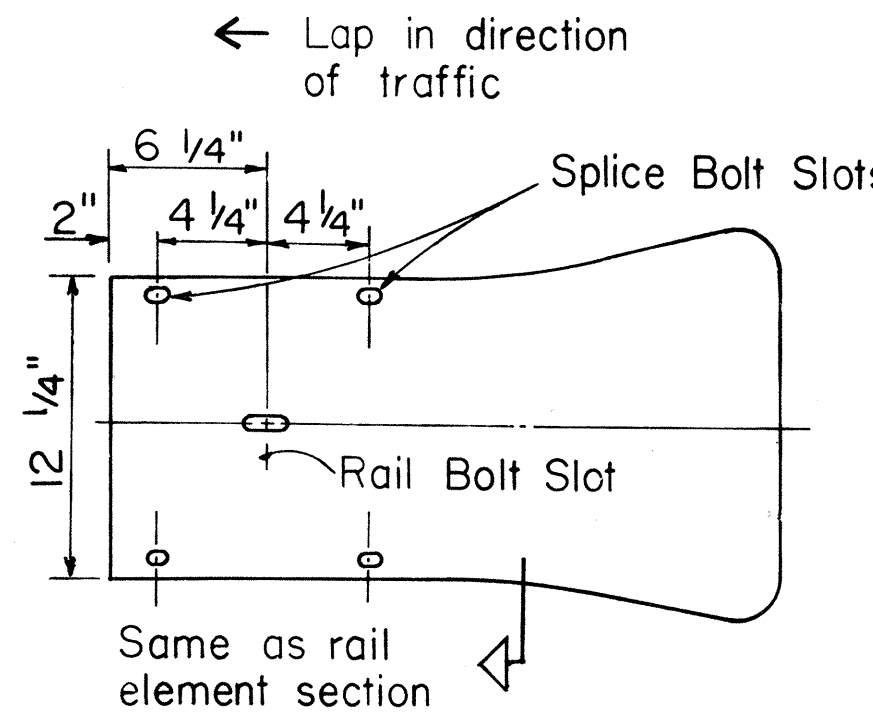
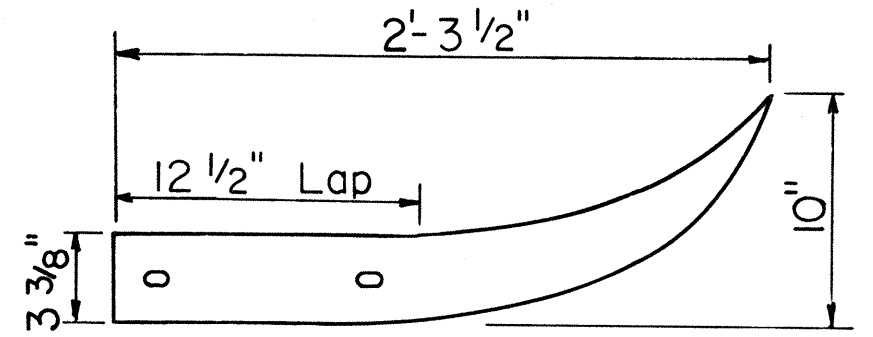
**5/8" BUTTON HEAD BOLT
AND RECESS NUT**
Scale: NTS



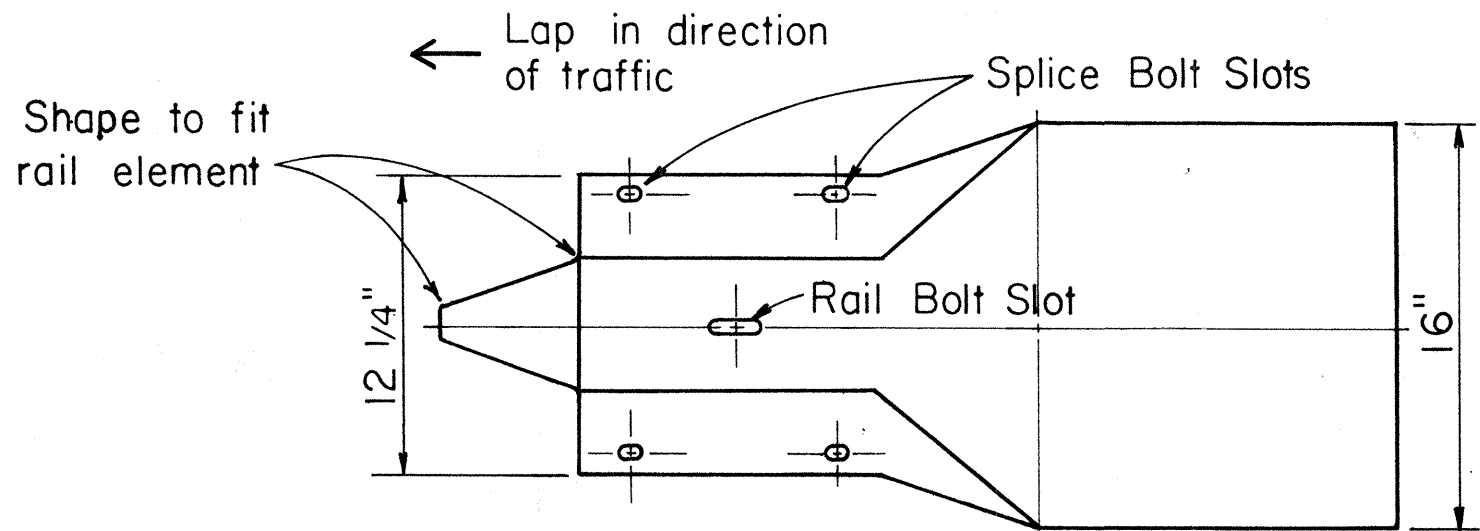
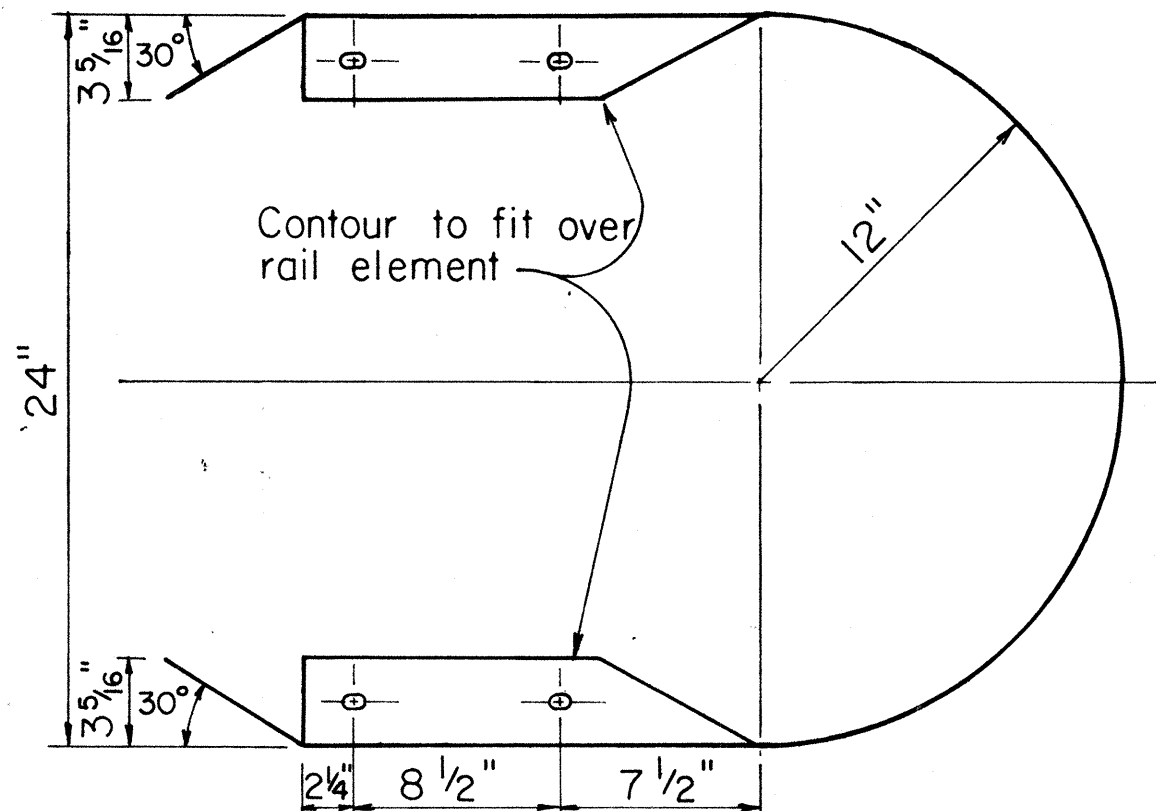
5/8" HEX POST BOLT AND NUT
Scale: N.T.S.



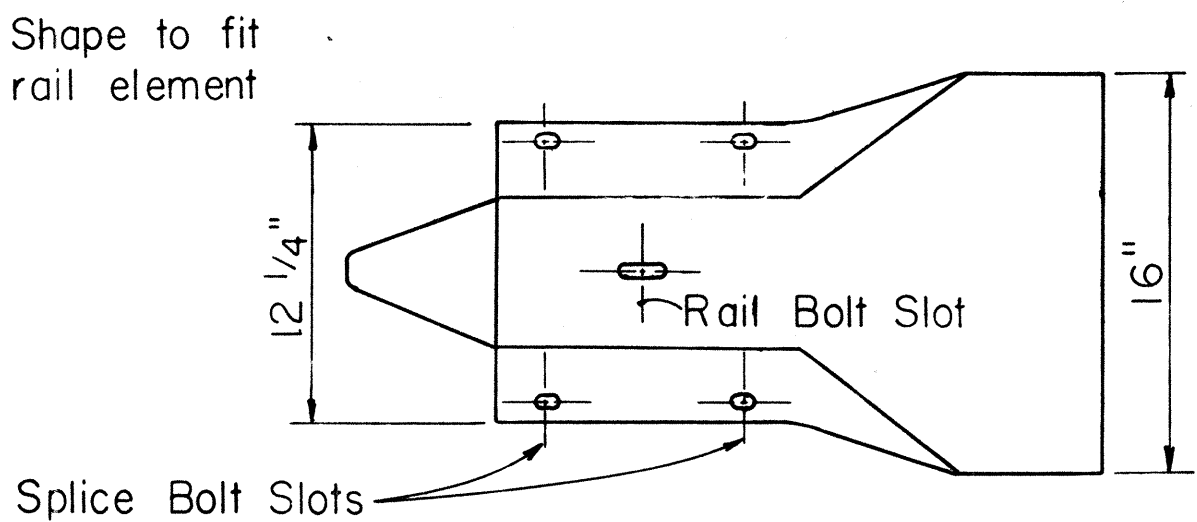
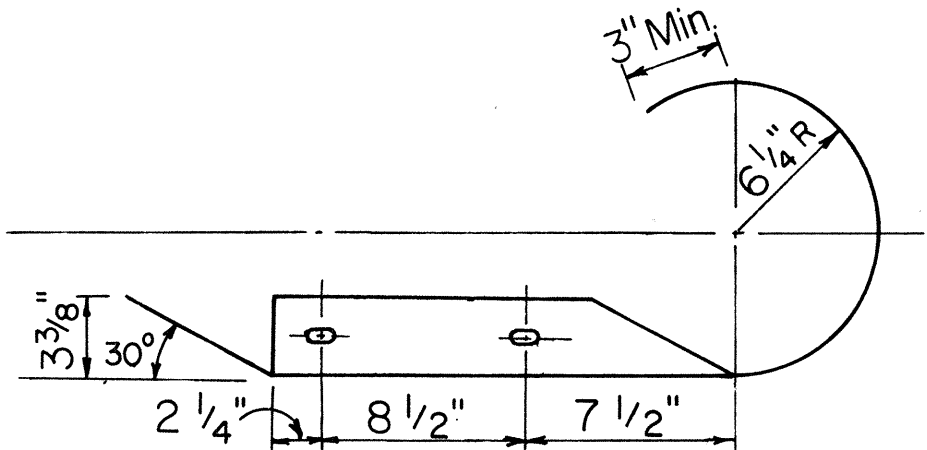
W BEAM TERMINAL CONNECTOR
Scale: 1 1/2" = 1'-0"



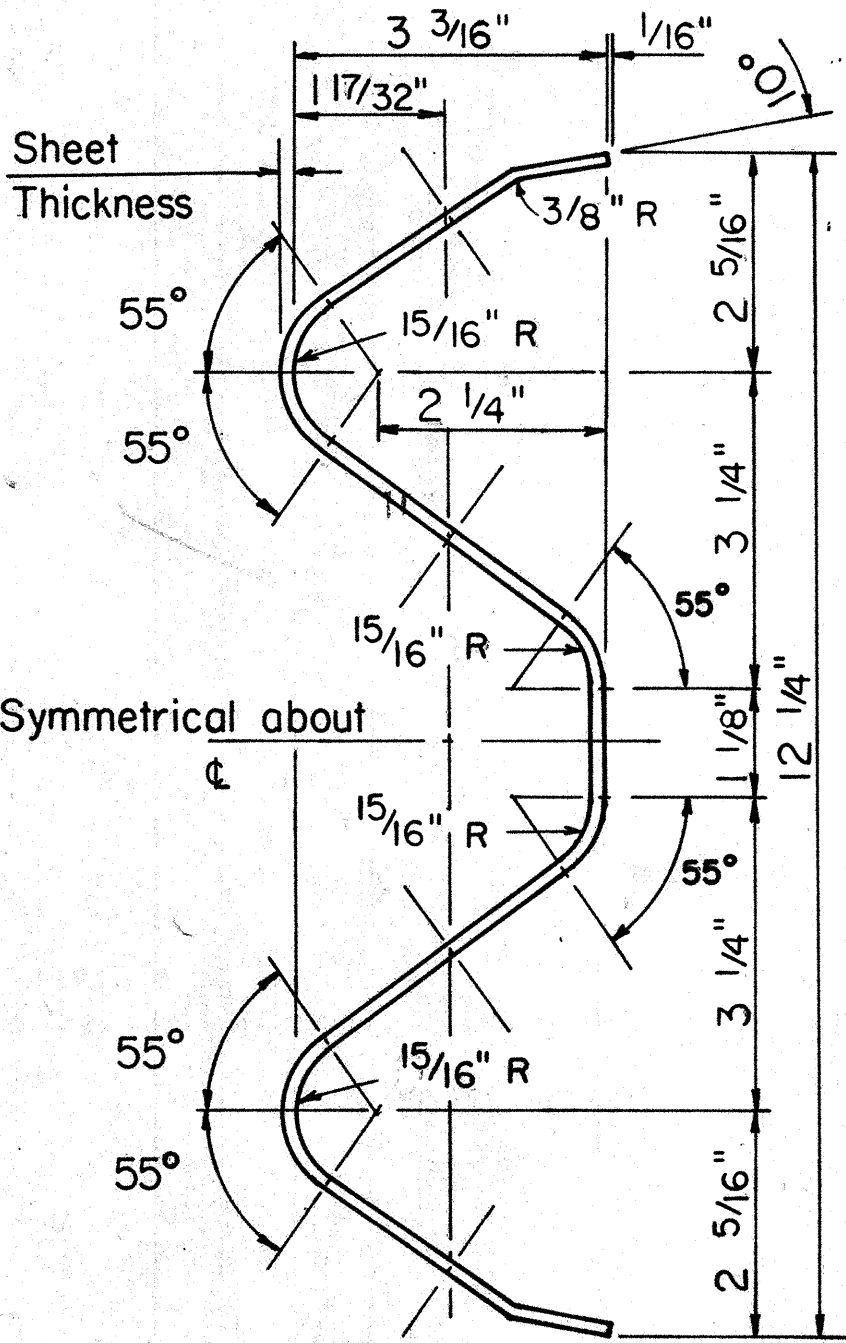
W BEAM END SECTION (FLARED)
Scale: 1 1/2" = 1'-0"



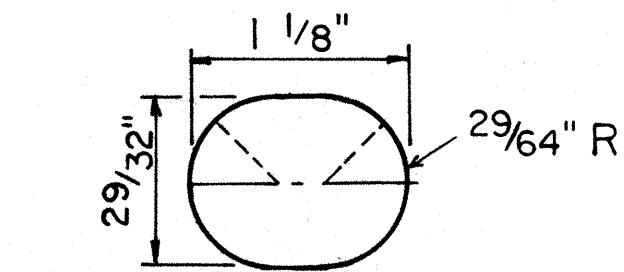
W BEAM END SECTION (BUFFER)
Scale: 1 1/2" = 1'-0"



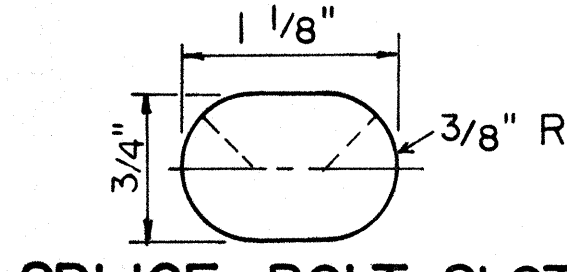
W BEAM END SECTION (ROUNDED)
Scale: 1 1/2" = 1'-0"



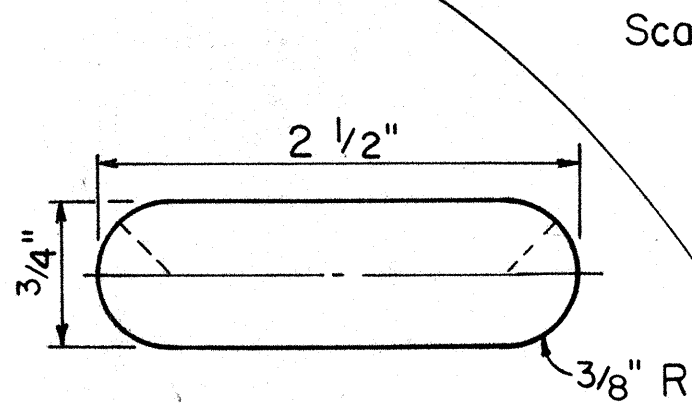
RAIL ELEMENT SECTION
Scale: 6" = 1'-0"



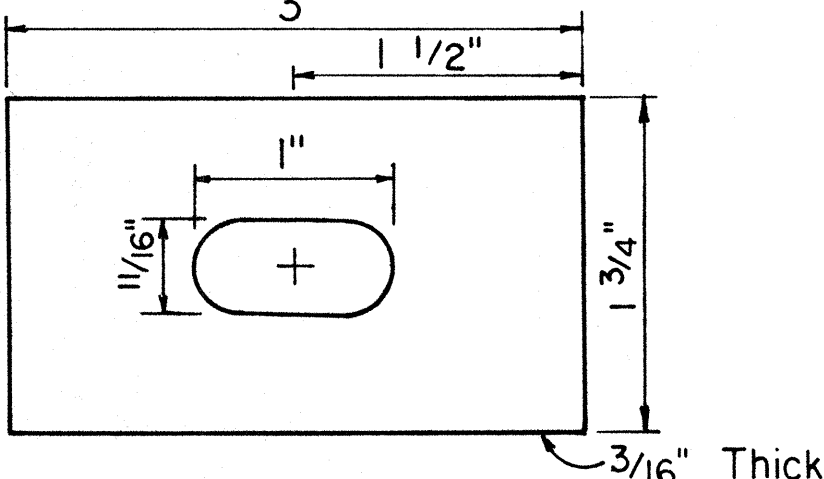
SPLICE BOLT SLOT



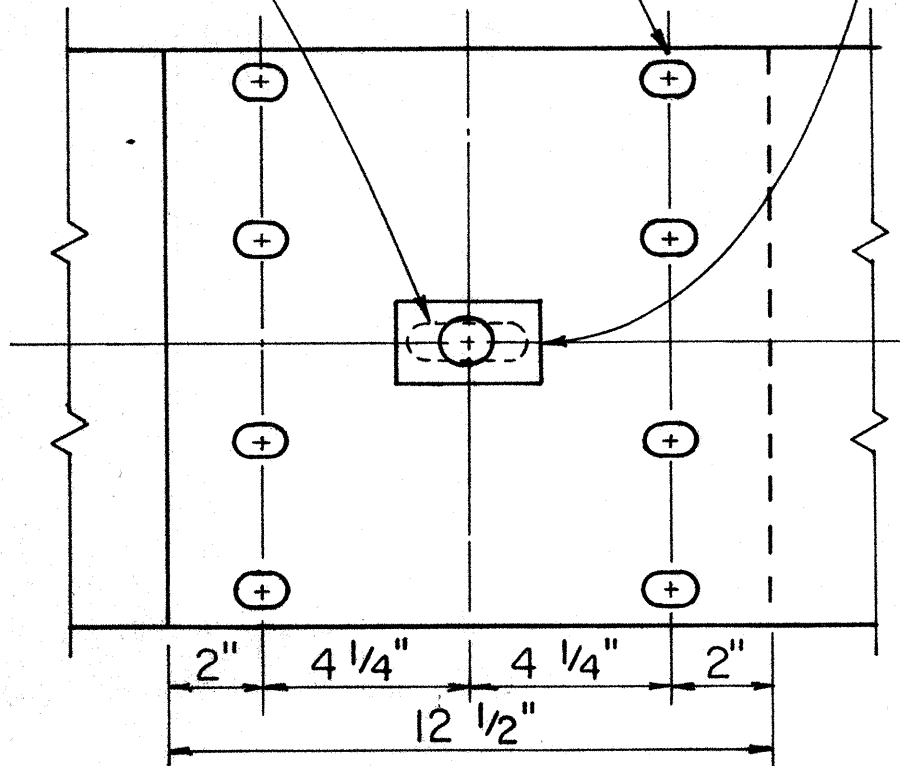
**SPLICE BOLT SLOT
FOR ALL ENDS**



RAIL BOLT SLOT



RAIL BOLT WASHER



RAIL SPLICE
Scale: 3" = 1'-0"

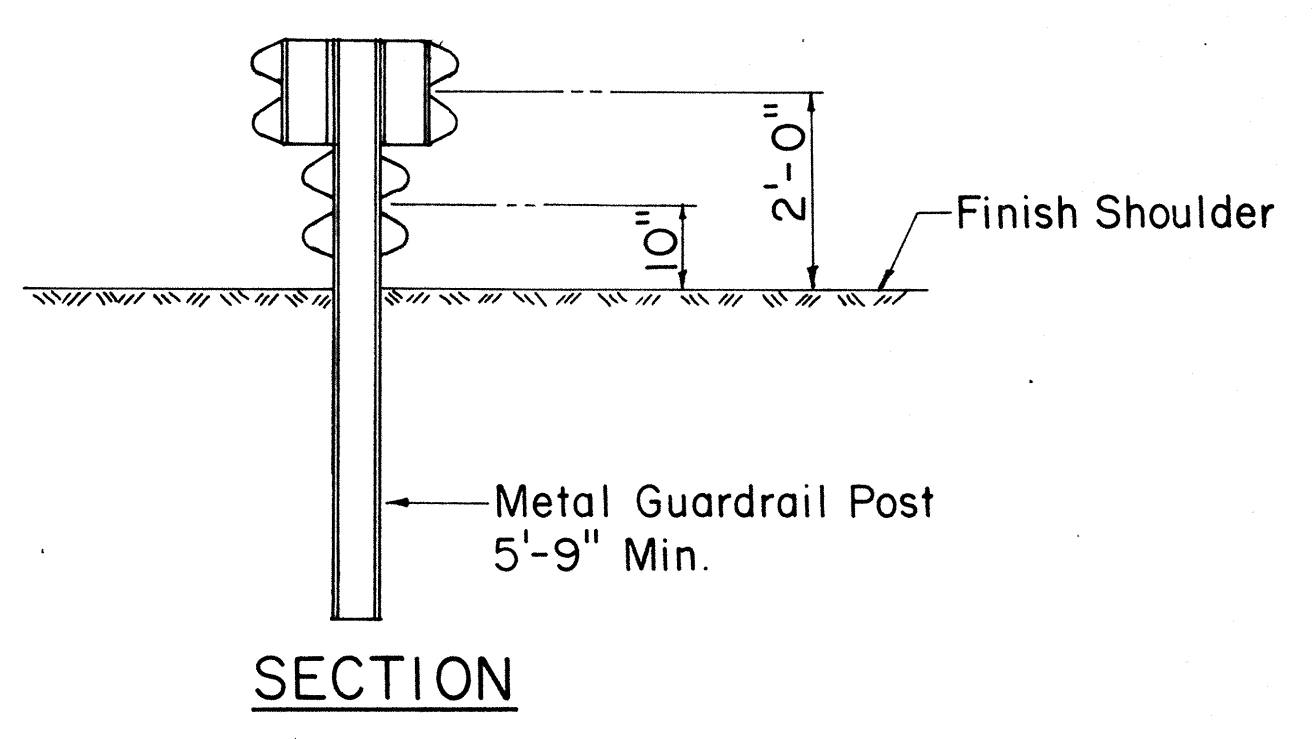
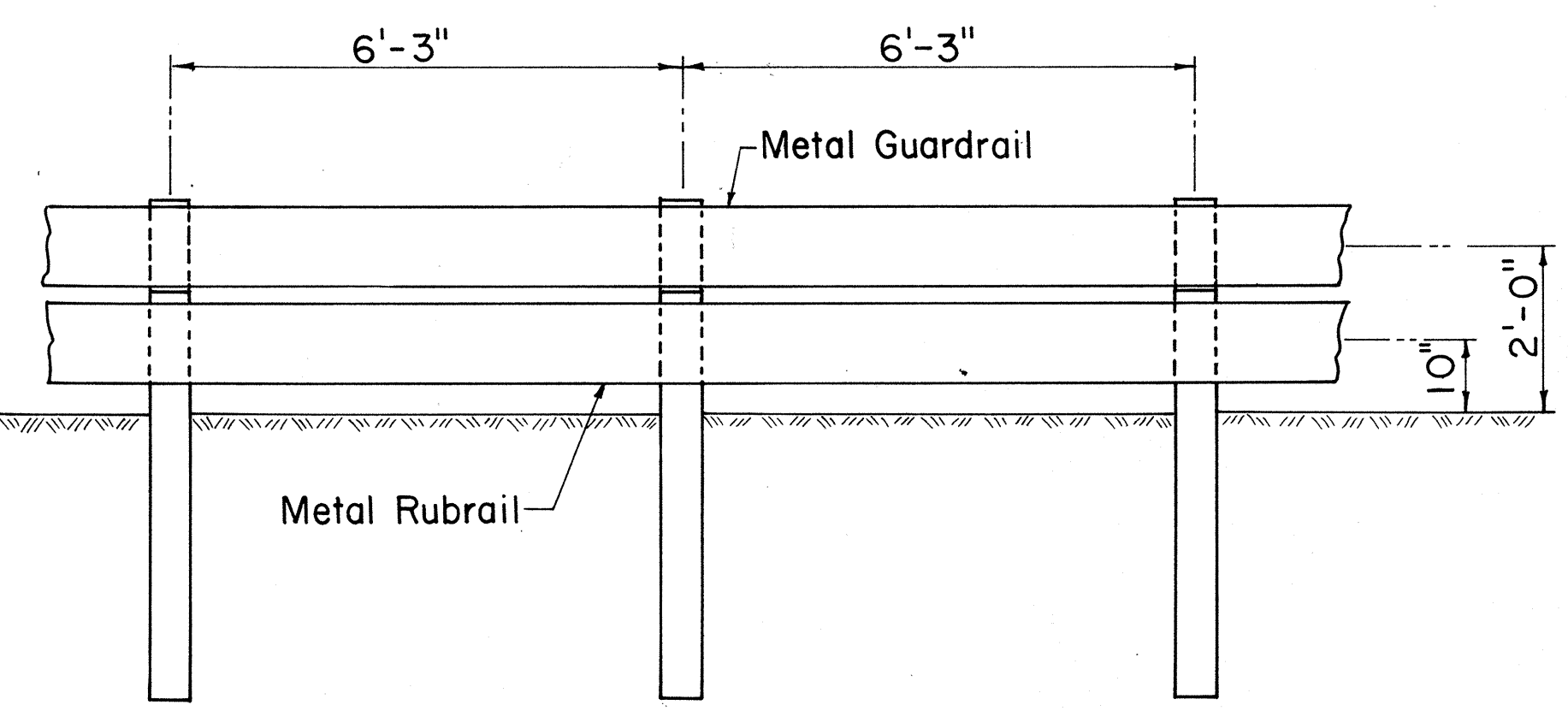
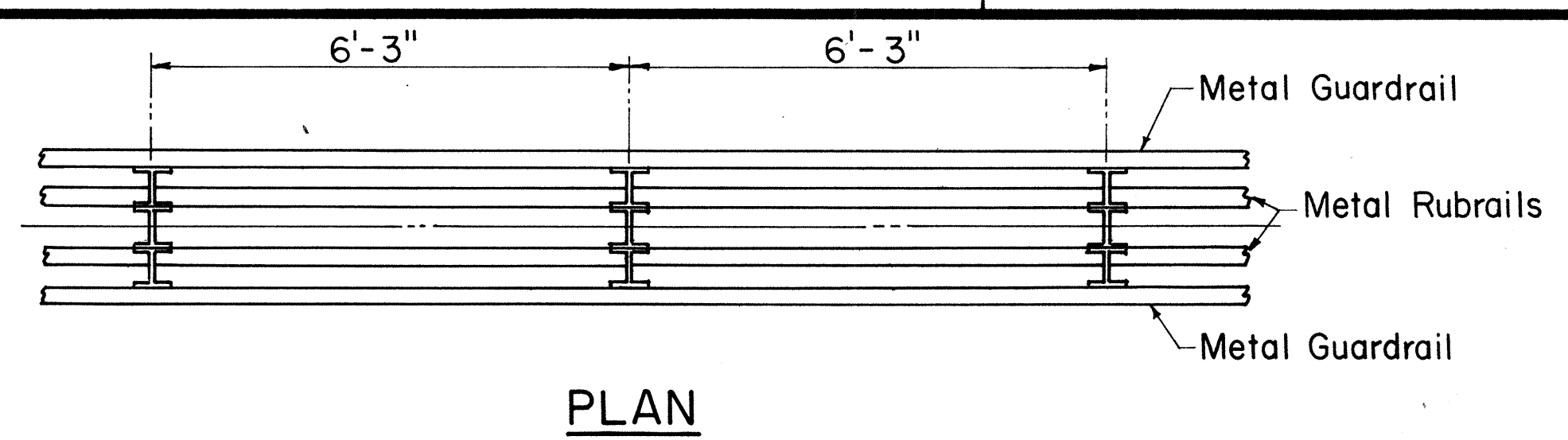
APPROVAL RECOMMENDED:
Eichi Tanaka 9/20/82
TRAFFIC ENGINEER DATE

APPROVED:
Robert J. S. S. S. 9/22/82
ASSISTANT CHIEF, ENGINEERING DATE

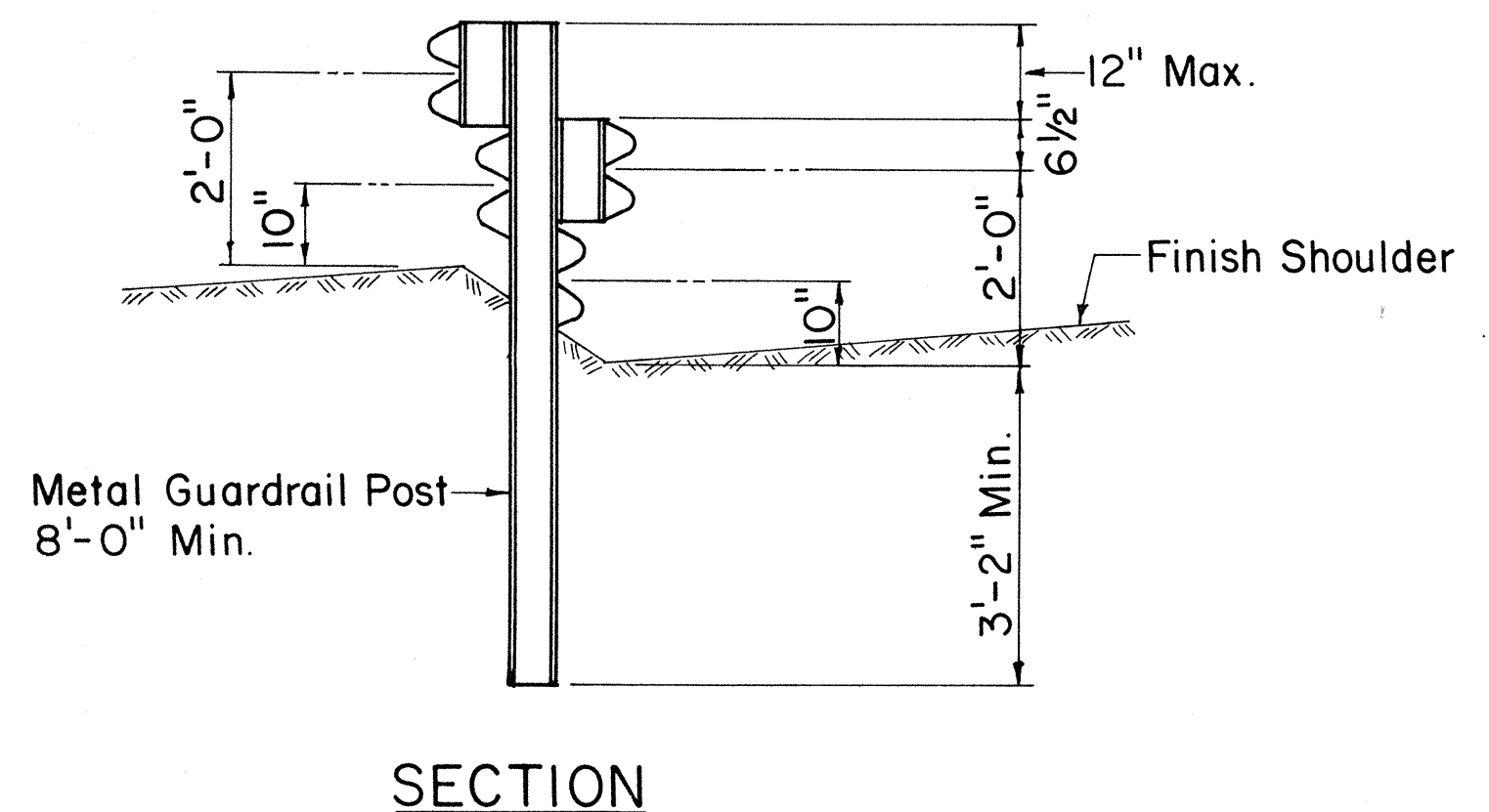
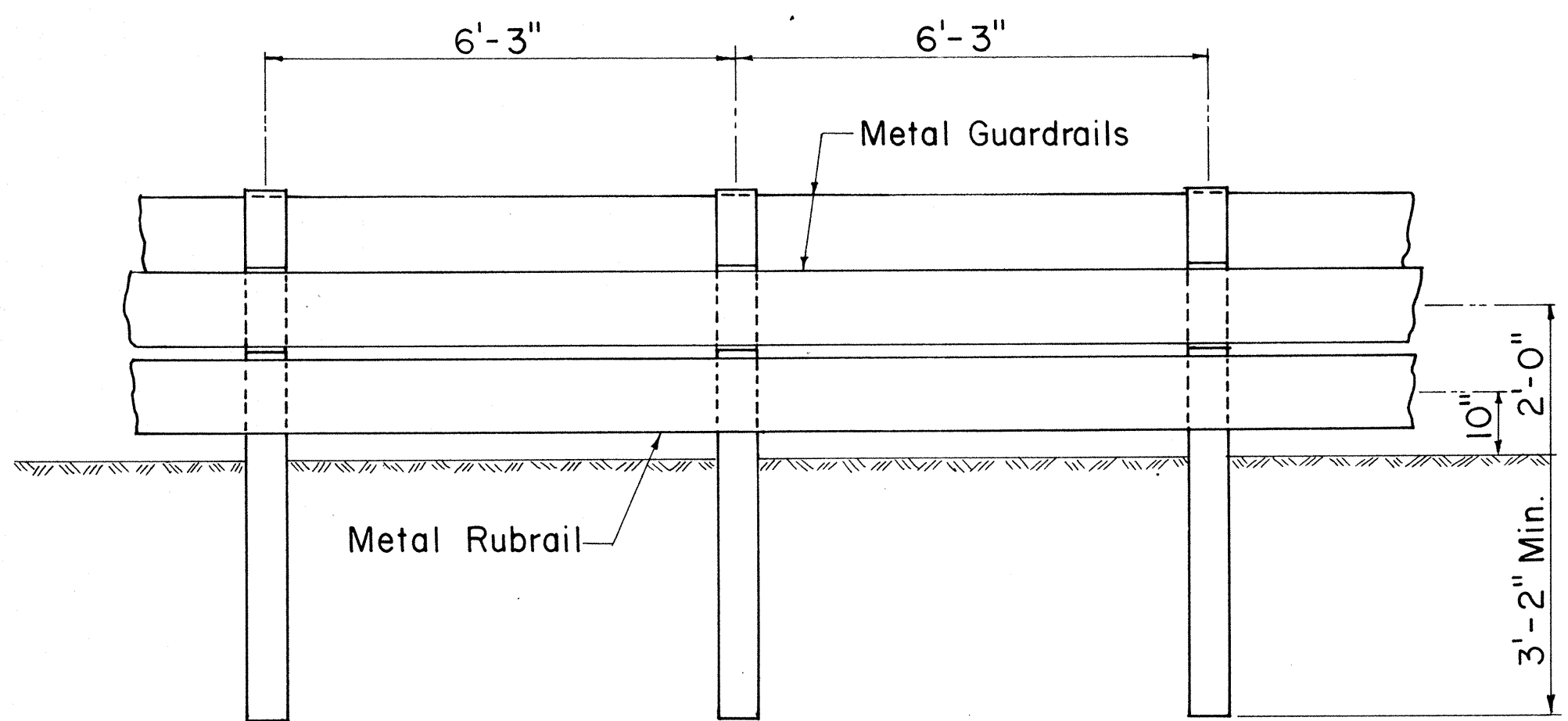
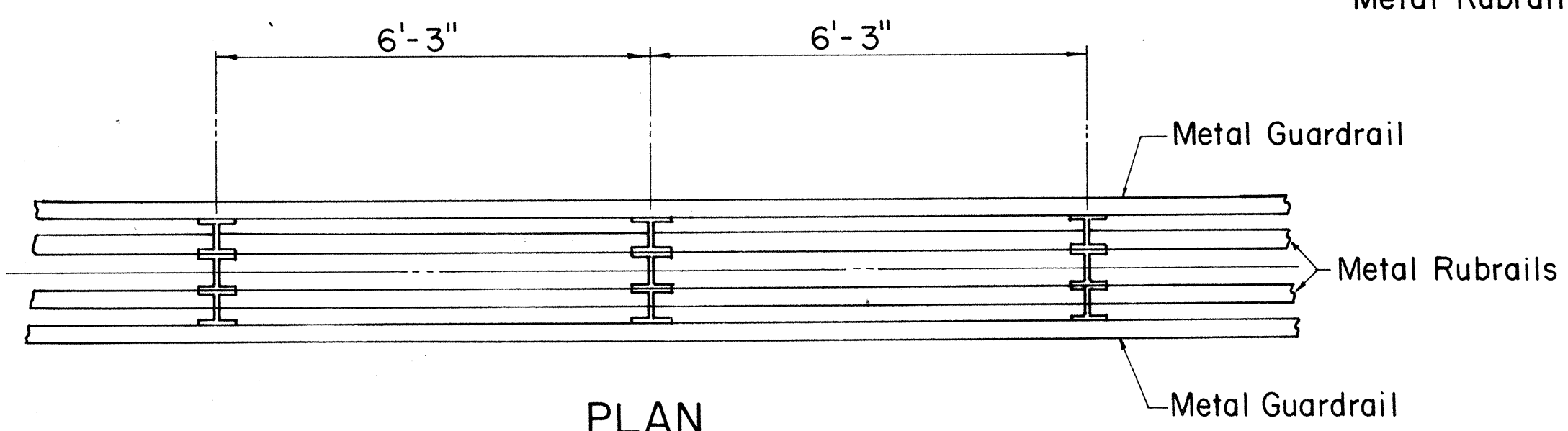
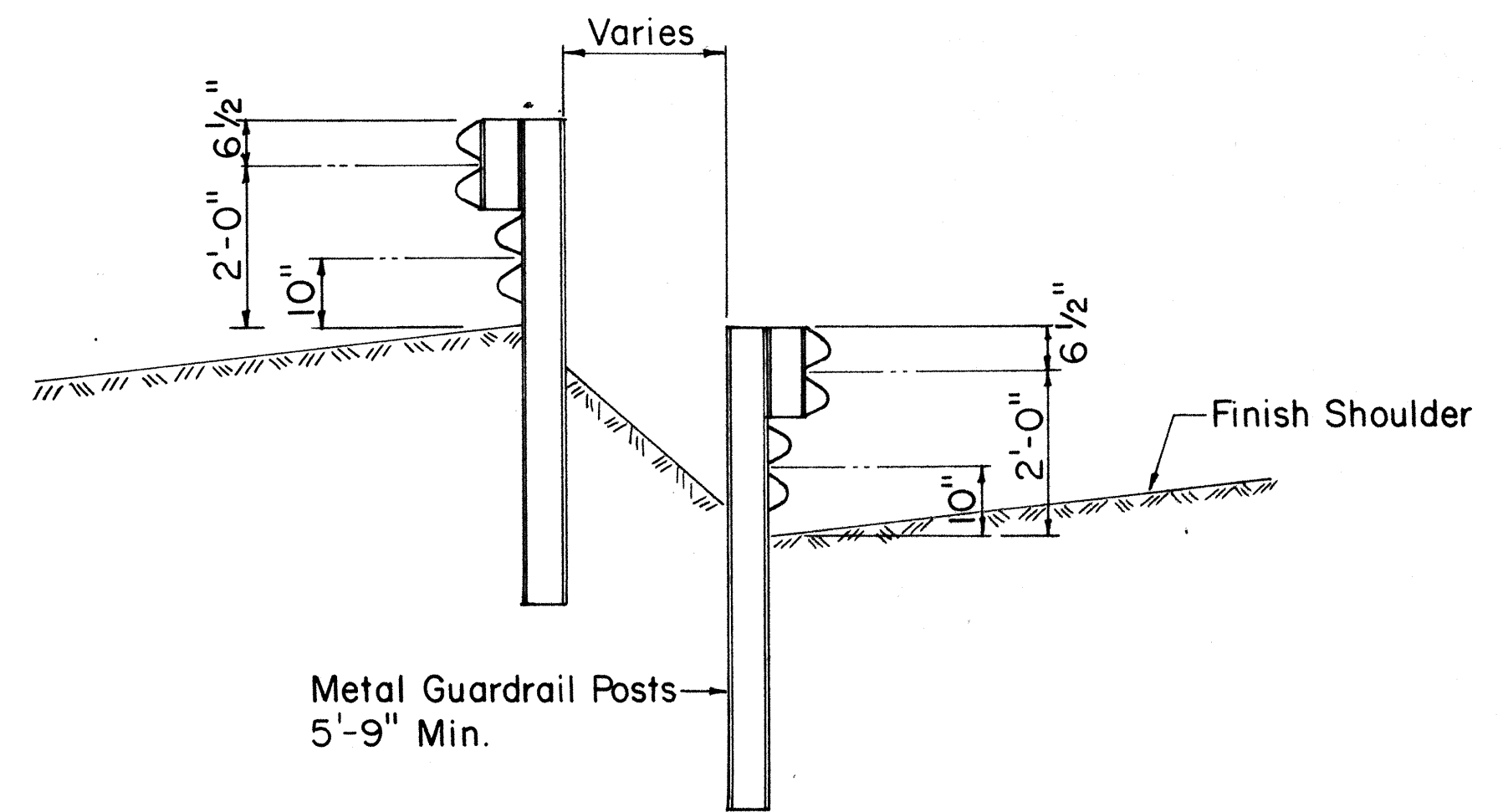
NO.	REVISION	APPROVED BY	DATE
1	Supersedes sht. DT 501 approved 12/30/69	H.T.	9/22/82

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
METAL GUARDRAIL
Scale: As Noted July, 1982
SHEET NO. C-II OF 17 SHEETS DT 501

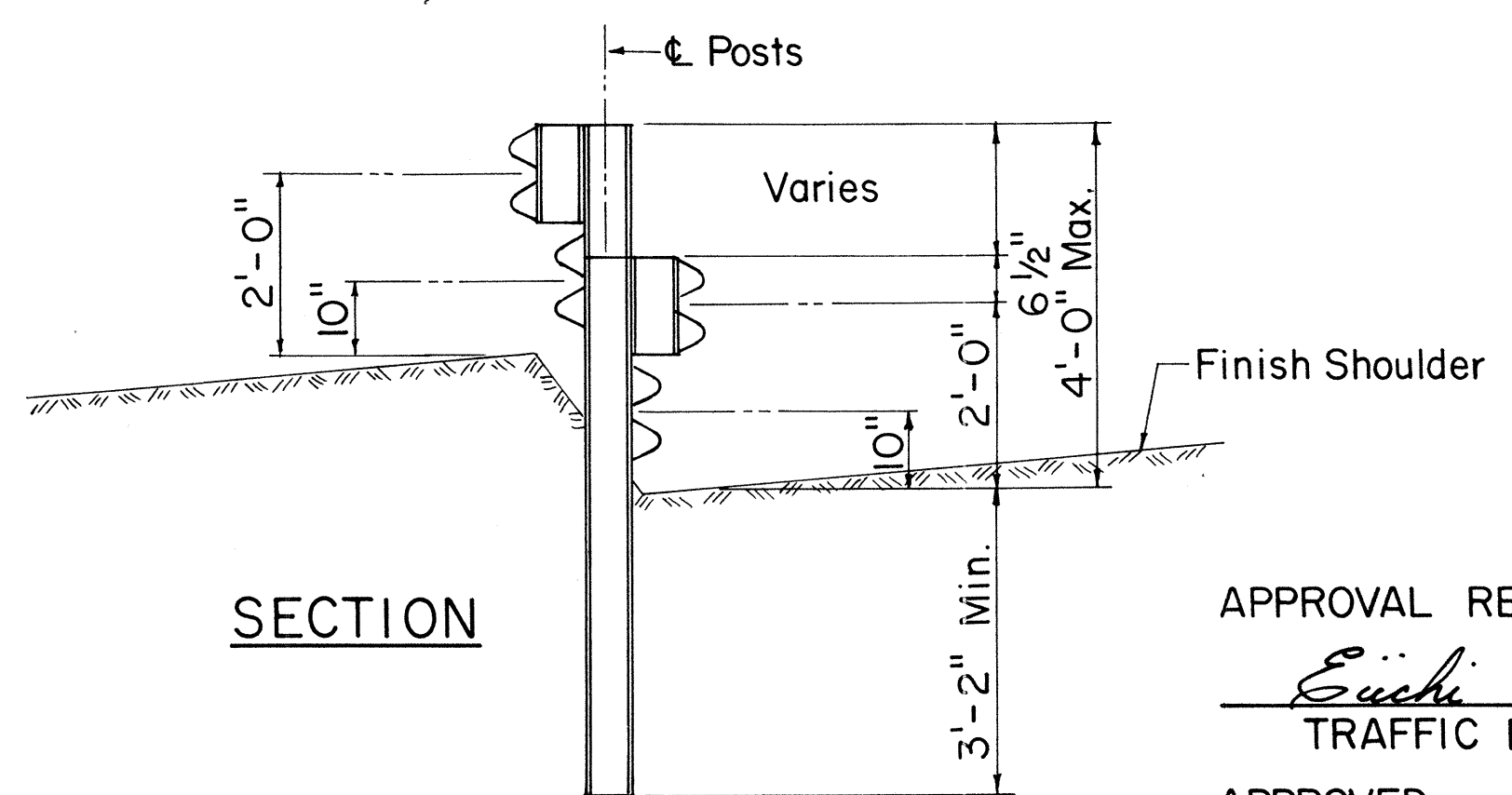
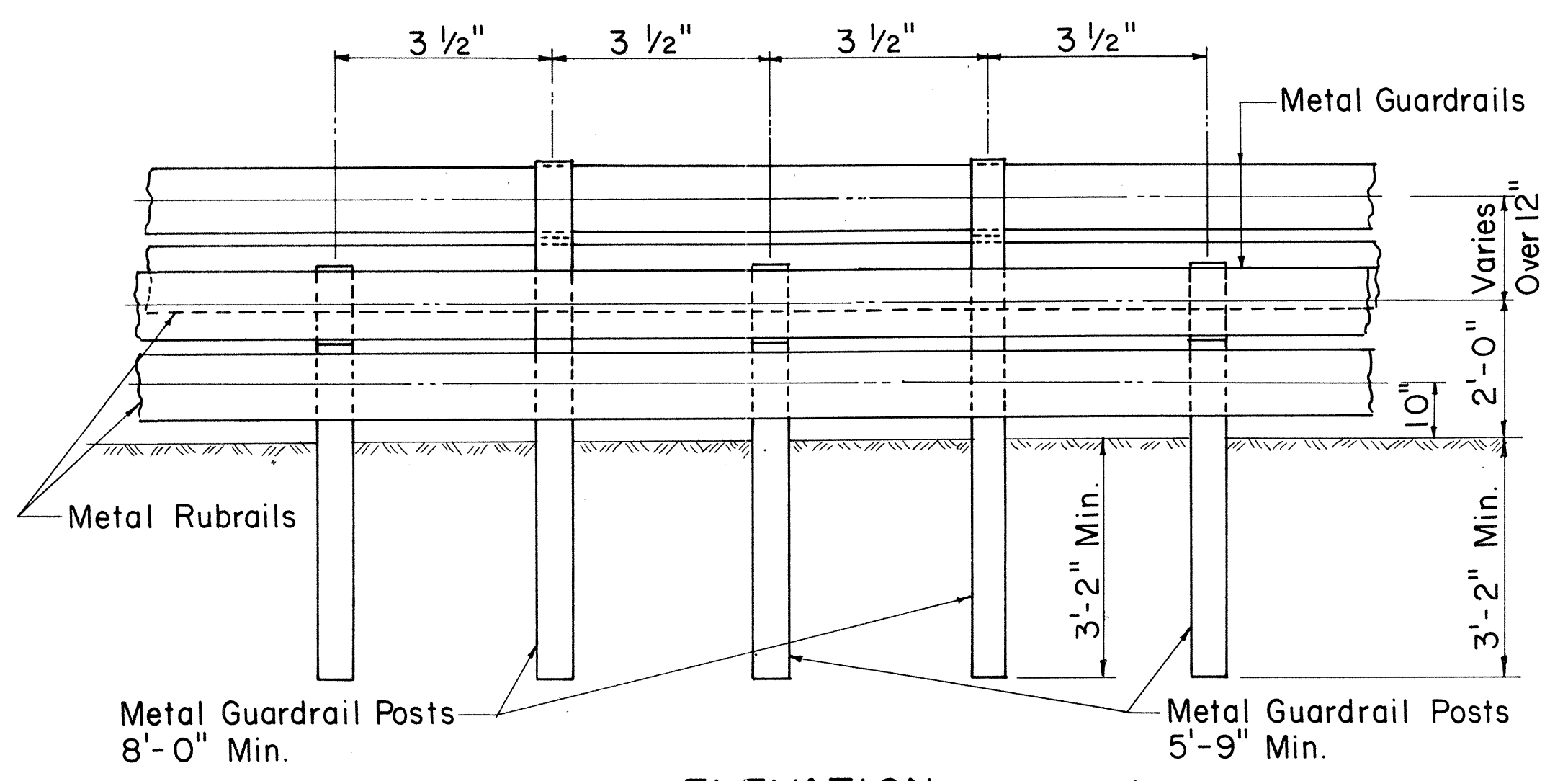
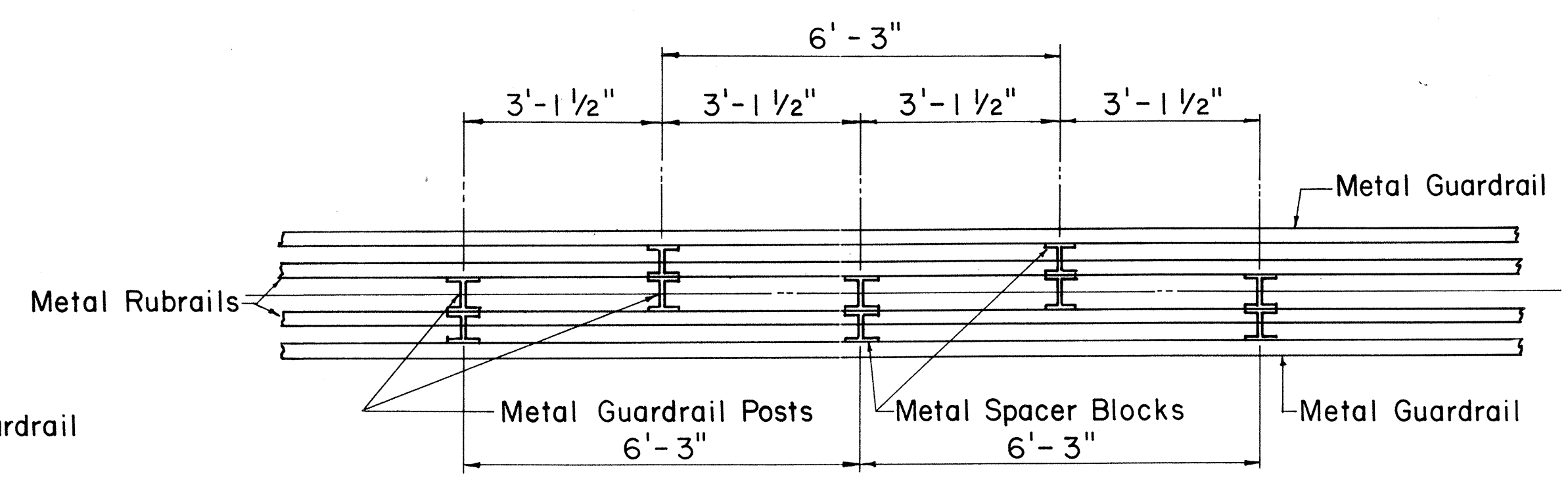
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-IR-HI-1(169):17	1983	39	280



TYPICAL MEDIAN BARRIER INSTALLATION



TYPICAL SAW TOOTH INSTALLATION



TYPICAL STAGGERED INSTALLATION

APPROVAL RECOMMENDED:
Euchi Tanaka 1/28/83
 TRAFFIC ENGINEER DATE

APPROVED:
J. Fujiyama 1-31-83
 ASSISTANT CHIEF, ENGINEERING DATE

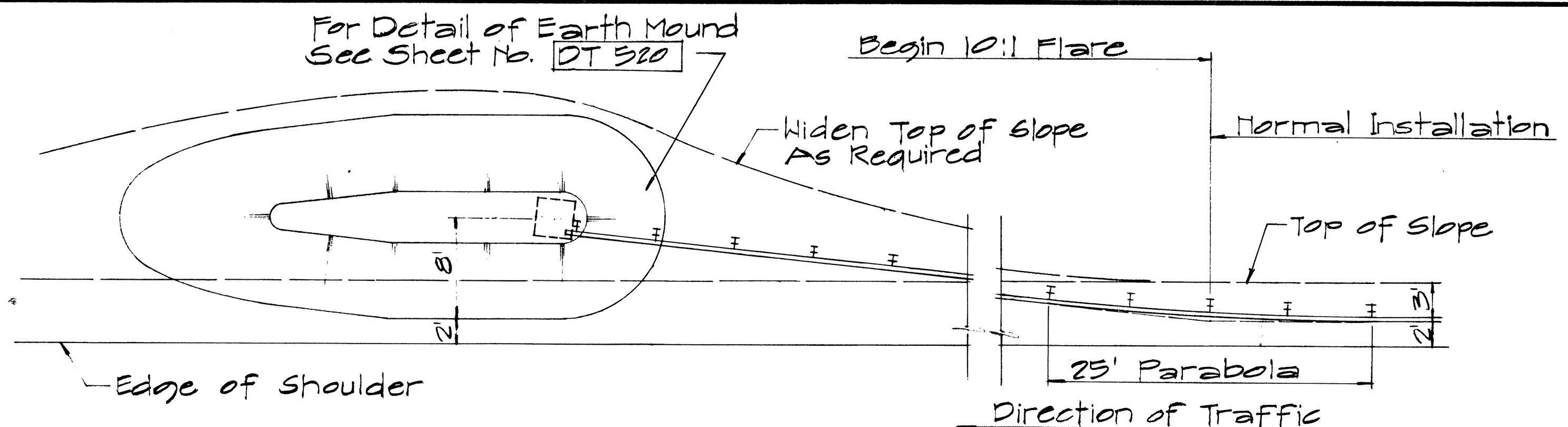
NO.	REVISION	APPROVED BY	DATE
1	Supersedes DT 514 Approved 12/30/69	<i>[Signature]</i>	1-31-83

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

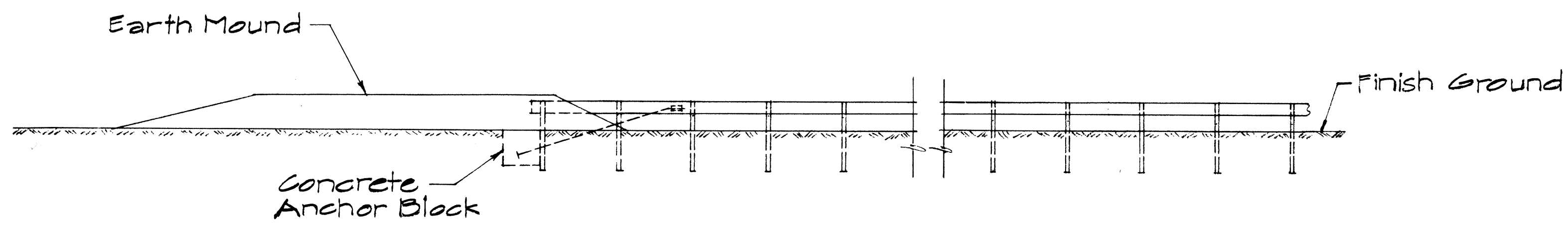
STANDARD DETAILS
METAL GUARDRAIL
WITH RUBRAIL

Scale: 1/2" = 1'-0" October 1982
 SHEET No.C-12 OF 17 SHEETS DT 514

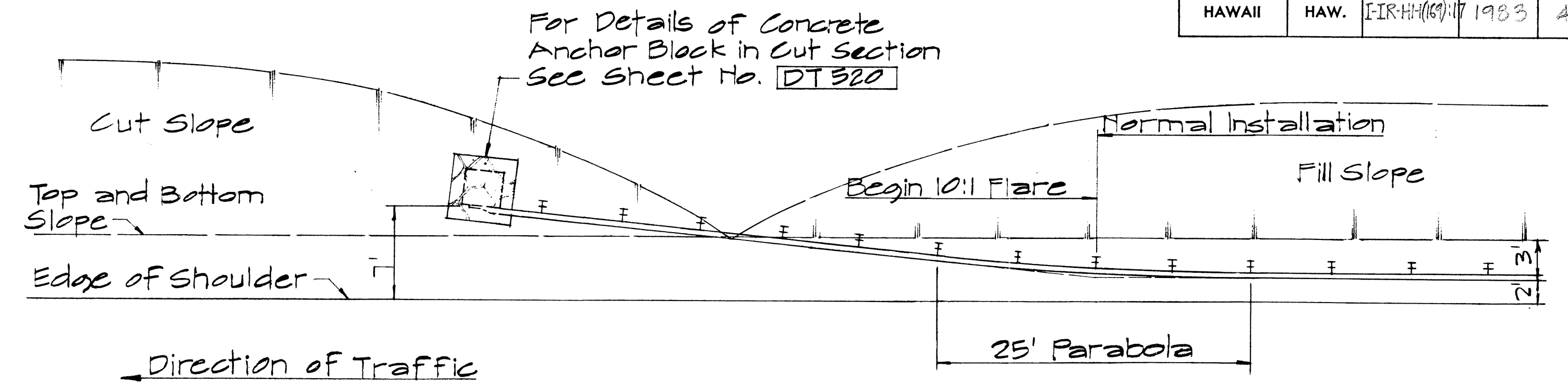
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H(69)17	1983	40	280



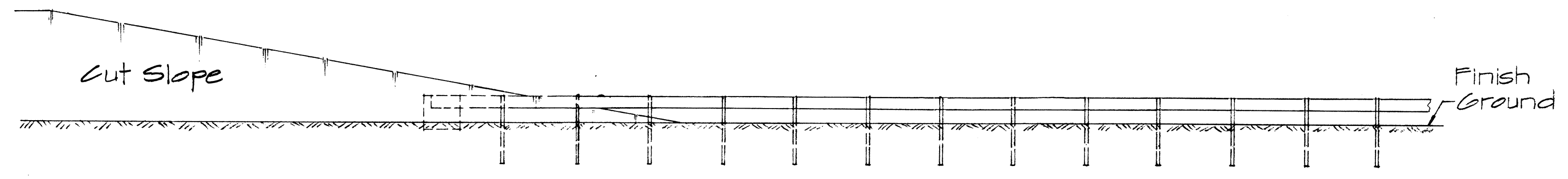
PLAN



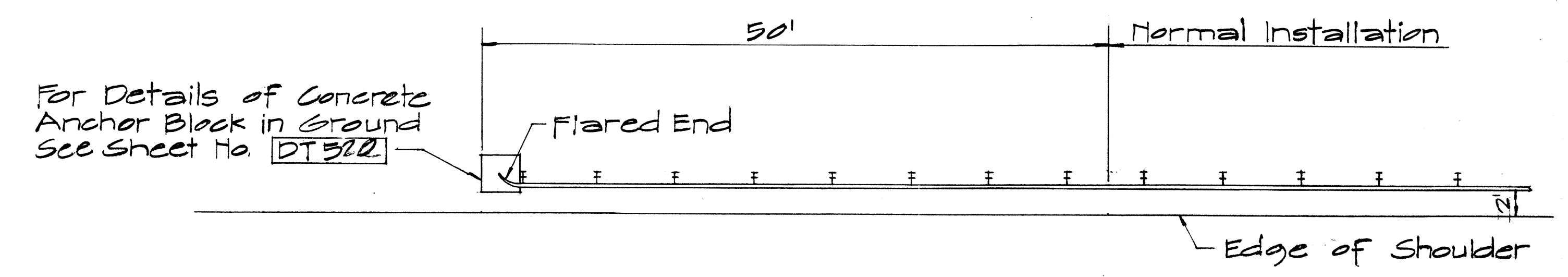
ELEVATION
TYPE "D" FLARE
Sc. 1/8" = 1'-0"



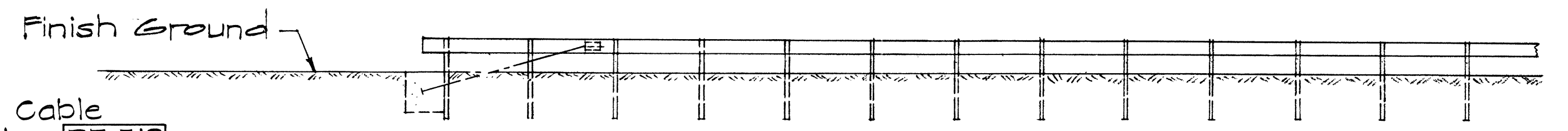
PLAN



ELEVATION
TYPE "F" FLARE
Sc. 1/8" = 1'-0"

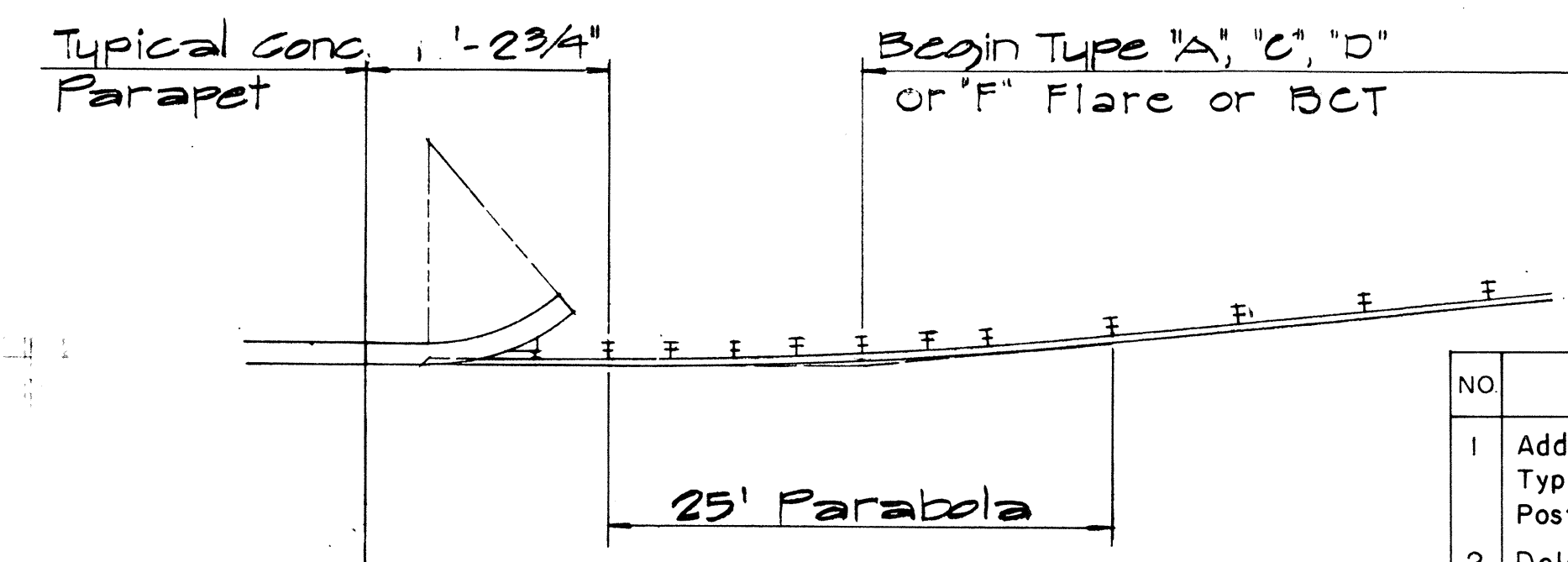


PLAN



ELEVATION
TYPE "G" FLARE
Sc. 1/8" = 1'-0"

NOTE:
For detail of Breakaway Cable Terminal (BCT) See Sheet No. DT 510



TYPICAL LAYOUT PLAN OF
END POST CONNECTION
Sc. 1/8" = 1'-0"

NO	REVISION	APPROVED BY	DATE
1	Additional Posts Added to Typical Layout Plan of End Post Connection	H.C.	4-12-72
2	Delete Type "B" Flare and Type "E" Flare	H.C.	6-15-78

APPROVAL RECOMMENDED:
Eishi Tanaka 12/29/69
TRAFFIC ENGINEER DATE

APPROVED:
W. S. Kal 12-29-69
ASSISTANT CHIEF, ENGINEERING DATE

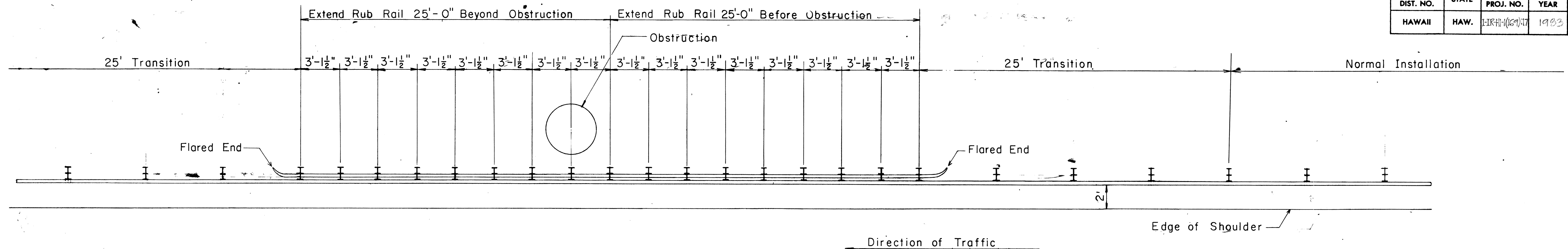
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
TRAILING END
FLARE - ONE & TWO
WAY ROADWAY

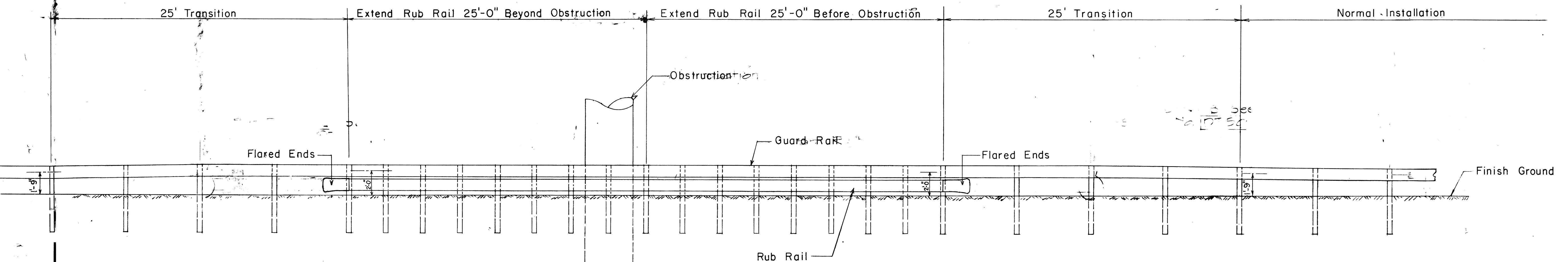
Scale: As Noted April 1969

SHEET No. C-13 OF 17 SHEETS DT 517

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HA-111(69)17	1983	41	280



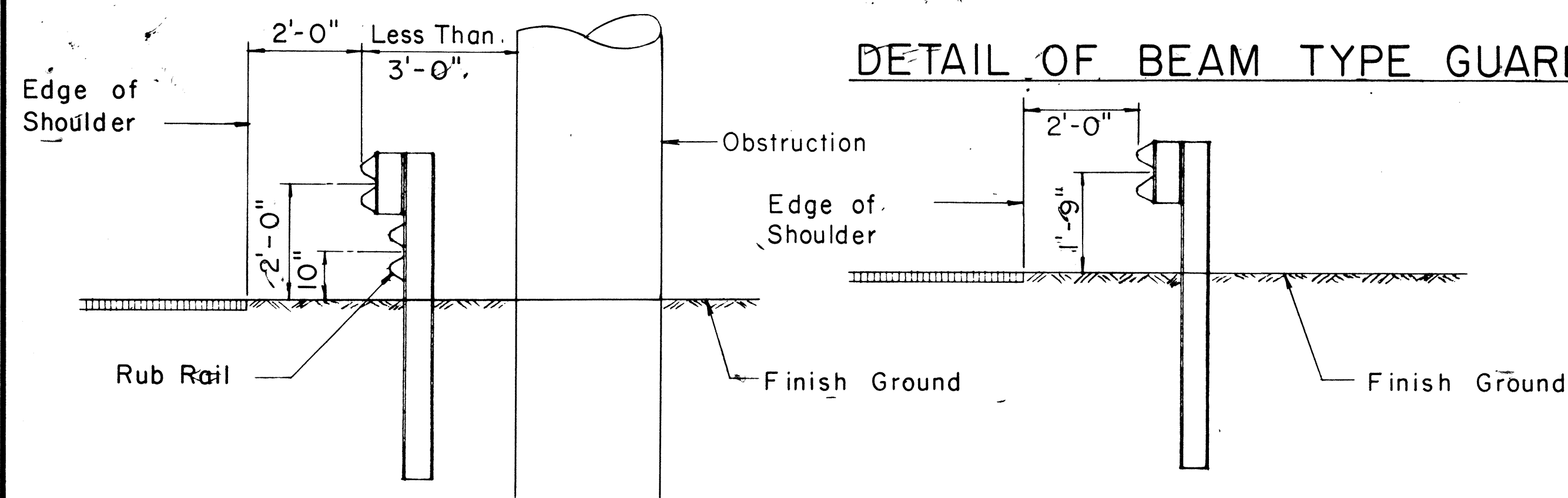
PLAN



ELEVATION

DETAIL OF BEAM TYPE GUARD RAIL WITH RUB RAIL AT OBSTRUCTION

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



TYP. SEC. AT OBSTRUCTION

TYP. SEC. AT NORMAL INSTALLATION

TYP. GUARD RAIL SECTIONS

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

APPROVAL RECOMMENDED:
E. A. Tanaka
 TRAFFIC ENGINEER 12/29/69
 DATE

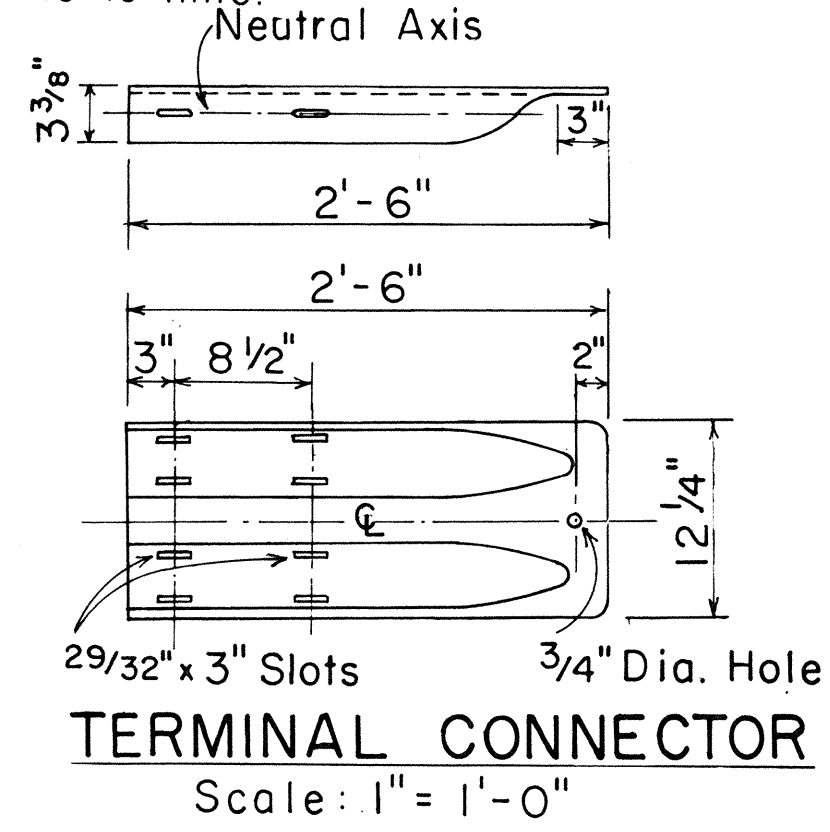
APPROVED:
W. S. Z. Z. Z.
 ASSISTANT CHIEF, ENGINEERING 12-30-69
 DATE

NO.	REVISION	APPROVED BY	DATE
1	Added Additional Guard Rail Posts and Installed Flared Ends at end of Rub Rail	H.T.	5/16/80

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION
STANDARD DETAIL
 BEAM TYPE GUARD RAIL WITH
 RUB RAIL AT OBSTRUCTION
 SHOULDER INSTALLATION
 SCALE: AS SHOWN DATE: JUNE, 1969
SHEET No. 41 OF 14 SHEETS DT 518

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-111(100)	1983	42	280

- NOTES:**
1. Anchor Plate and Anchor Cable Assembly (Standard Swaged Fitting and Stud). See Standard Detail Sheet No. DT 520.
 2. Other Anchor Cable Assemblies may be used. Minimum breaking strength of assembly should be 40,000 lbs.
 3. Second Terminal Post does not require holes to accomodate Anchor Cable.
 4. Slip Base Load shall be controlled with a Calibrated Torque Wrench - Torque 155 - 170 ft. lbs.
 5. Concrete shall be Class A.
 6. B.C.T. Hardware has been supersceded by "A Guide Standardized Highway Barrier Rail Hardware," A report prepared and approved by the AASHTO-AGC-ARTBA joint cooperation committee. All hardware shall conform to above mentioned publication and as revised from time to time.



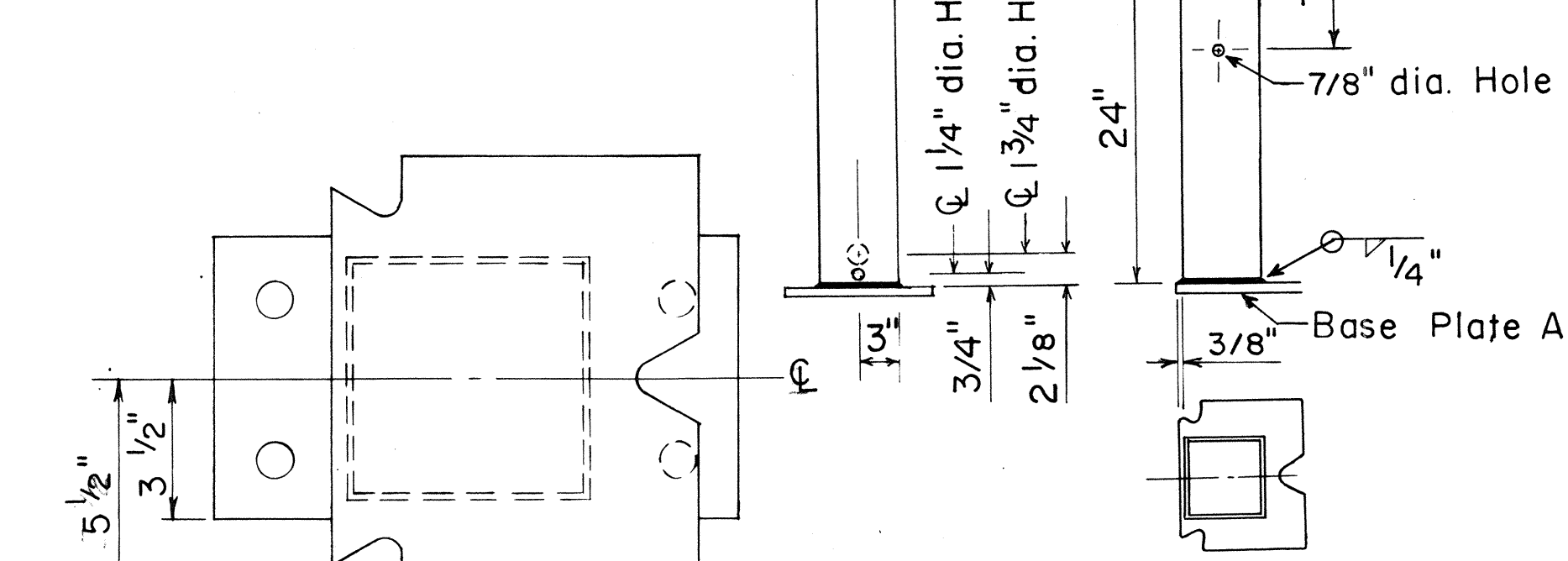
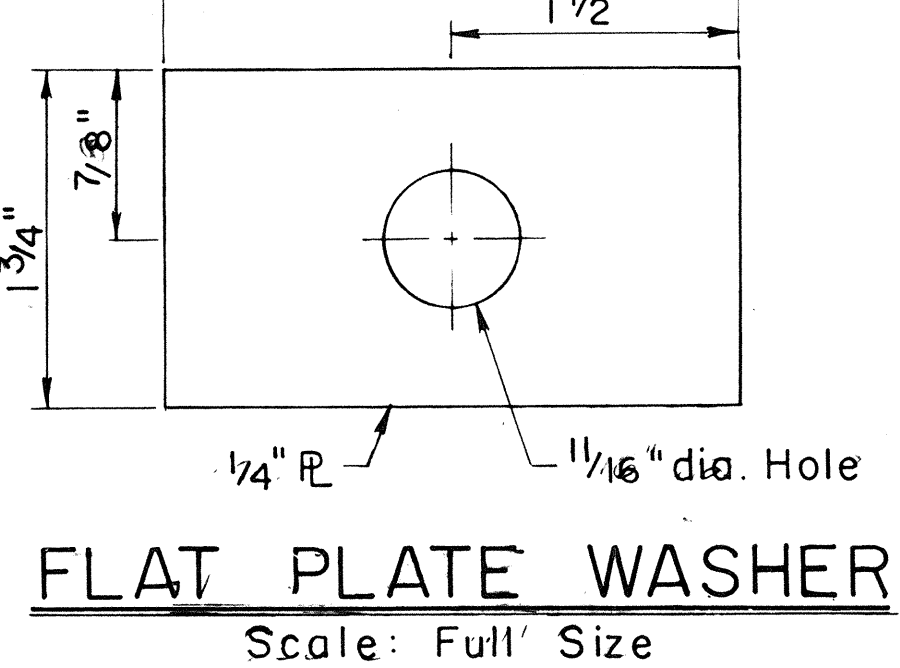
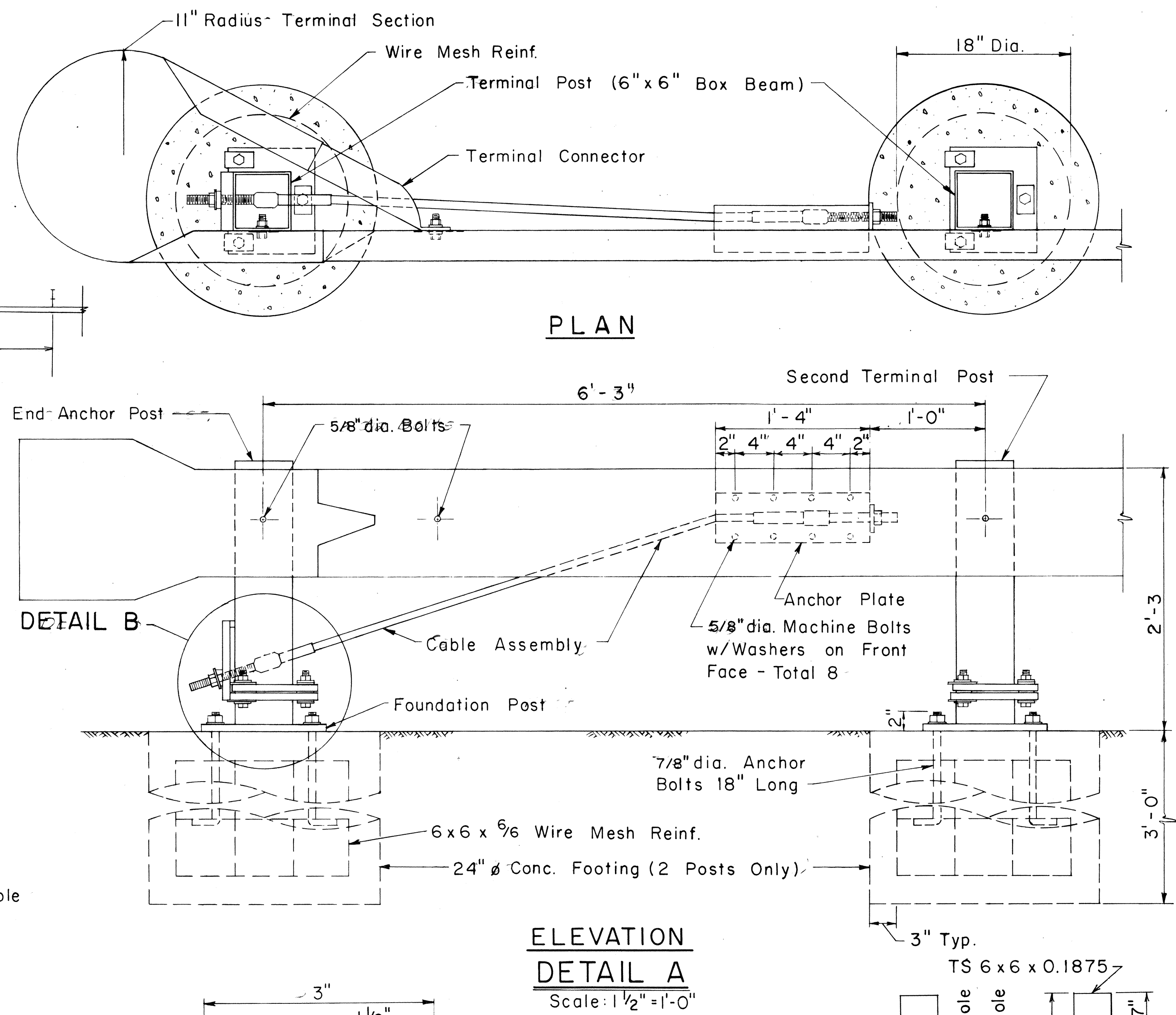
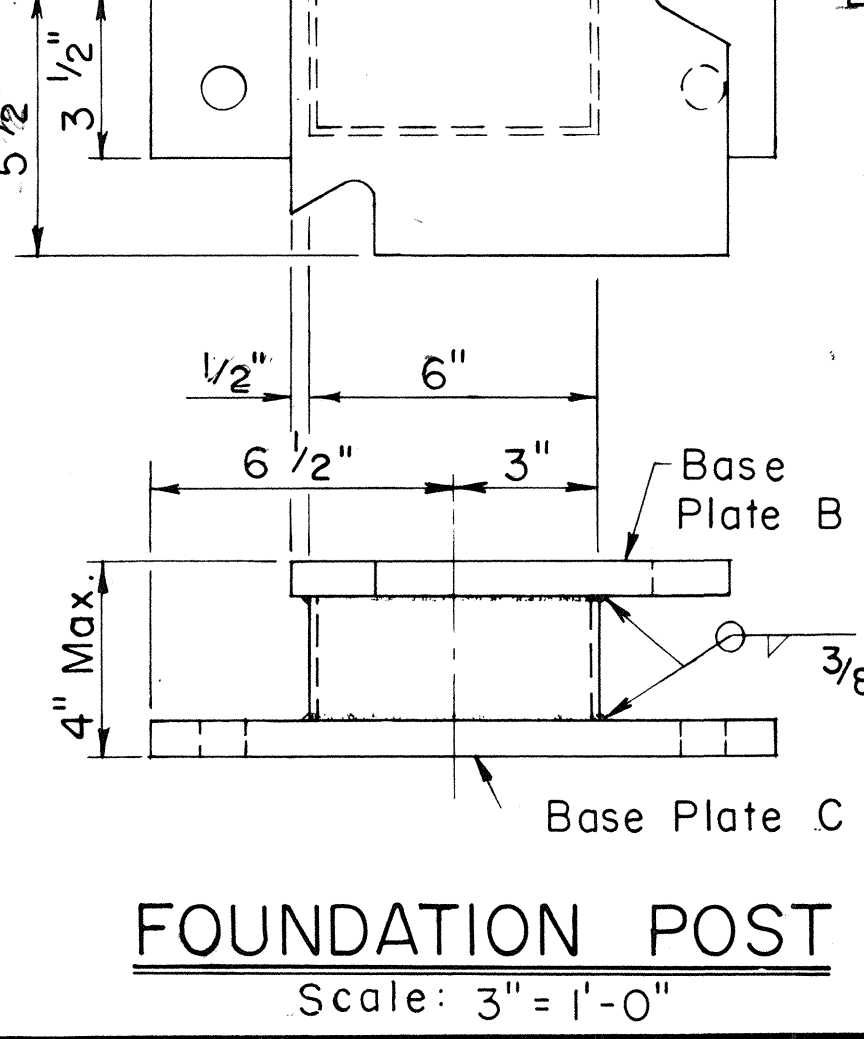
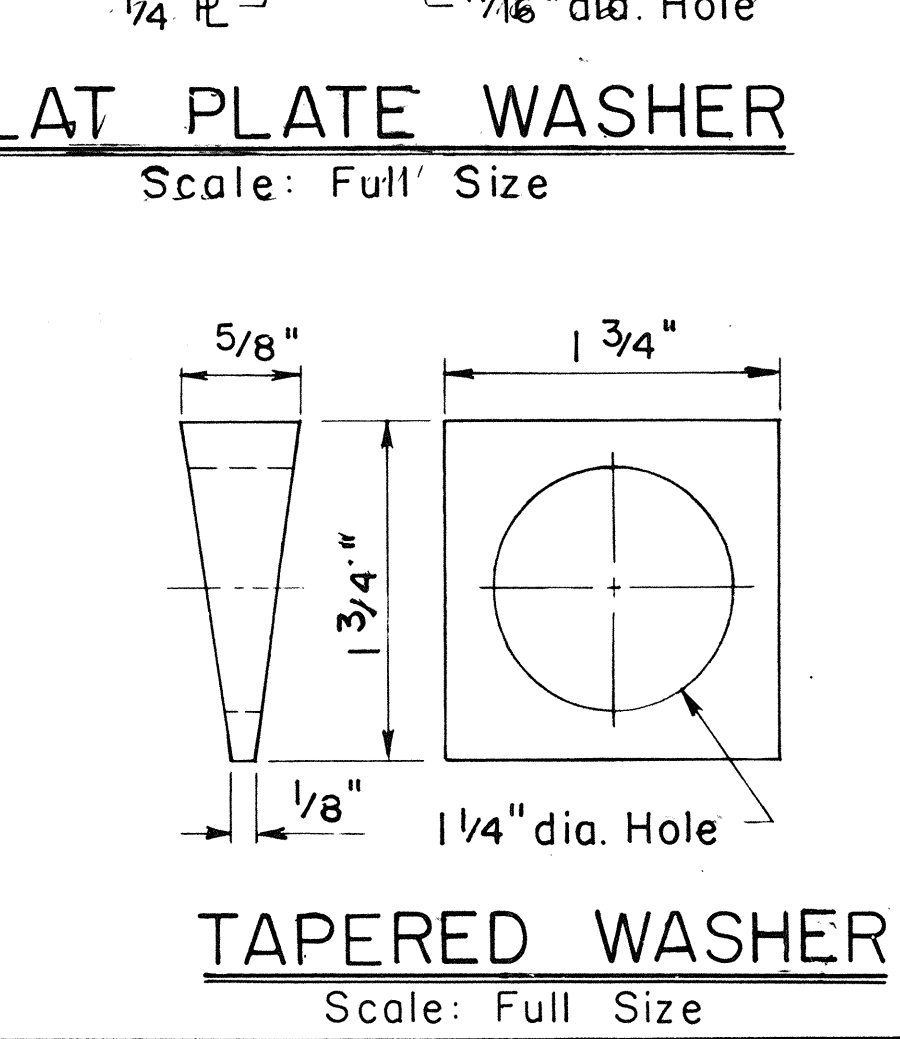
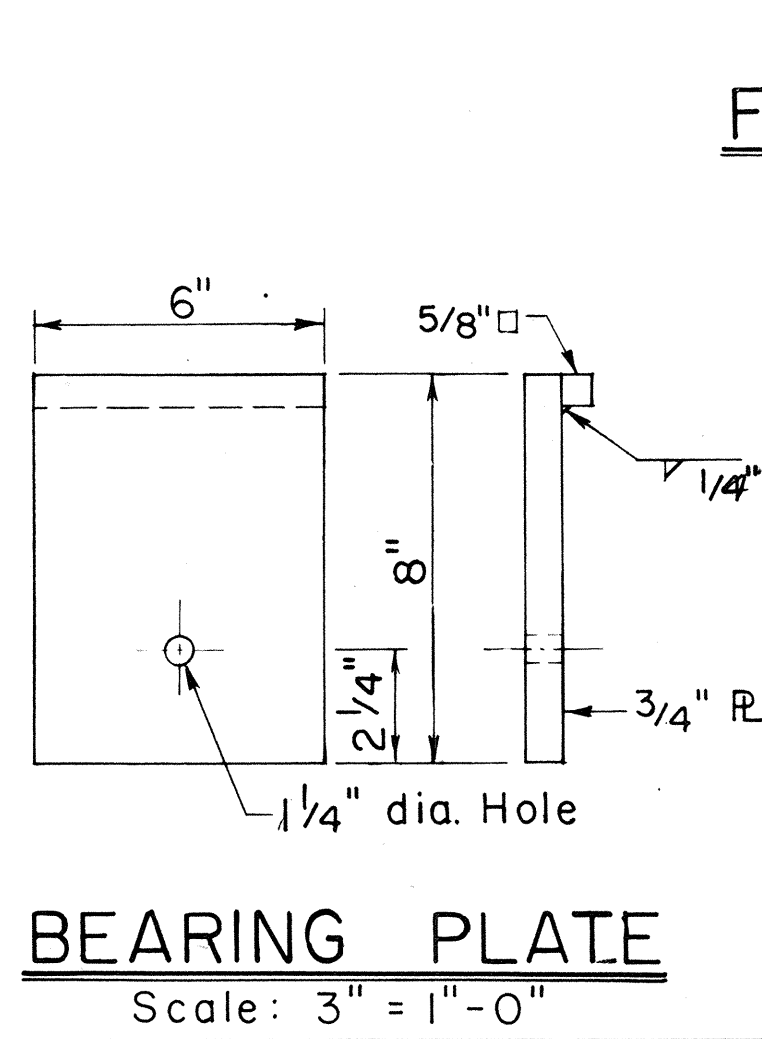
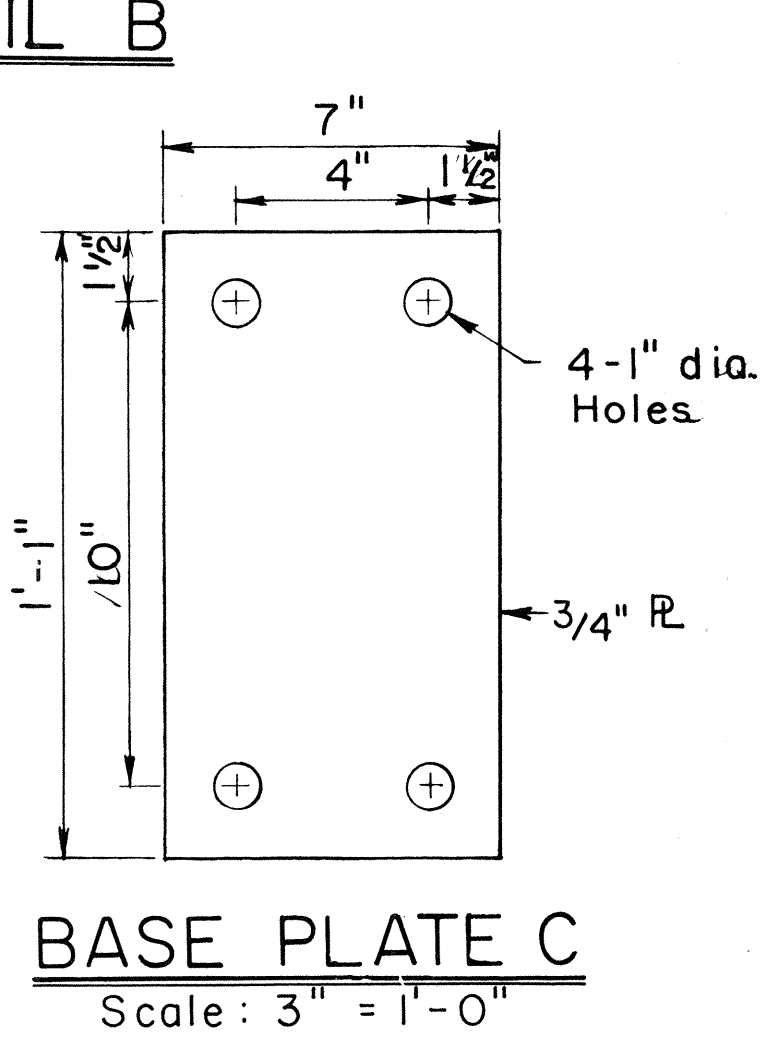
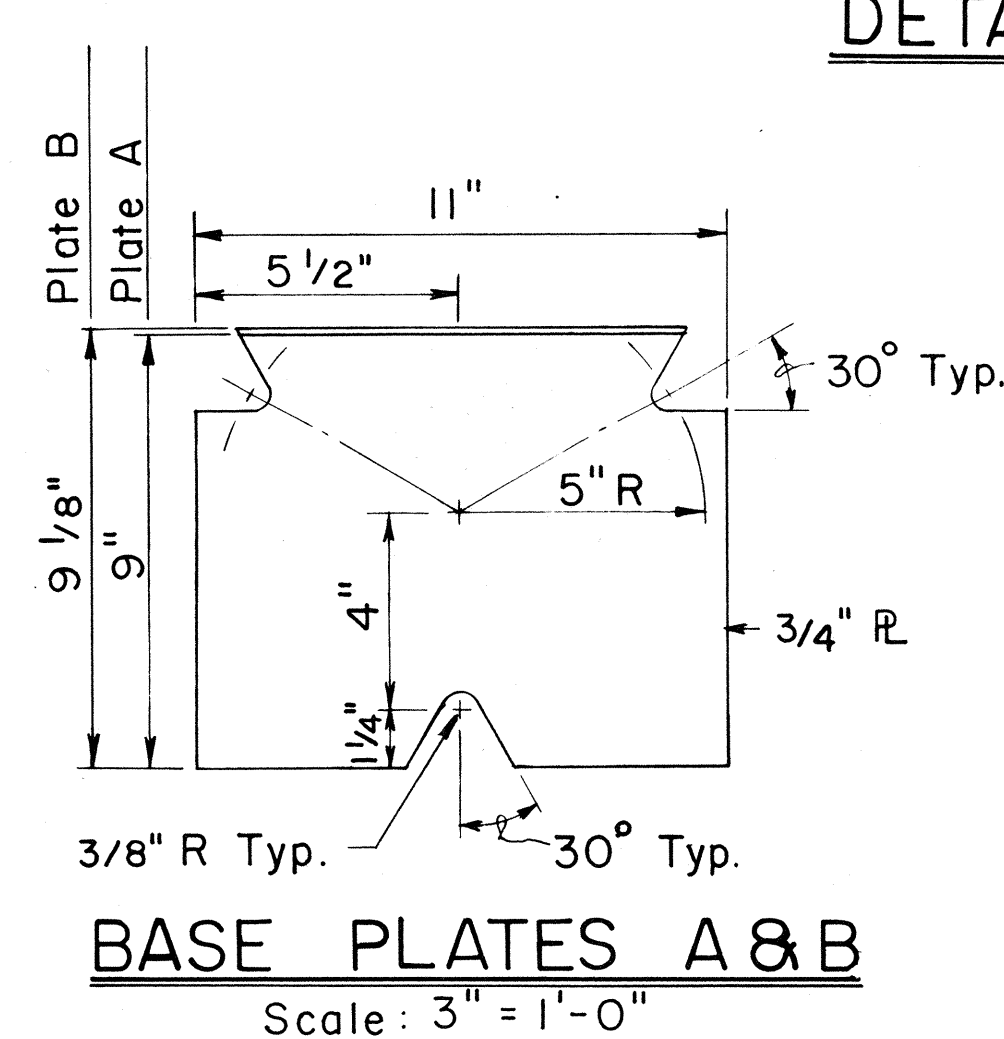
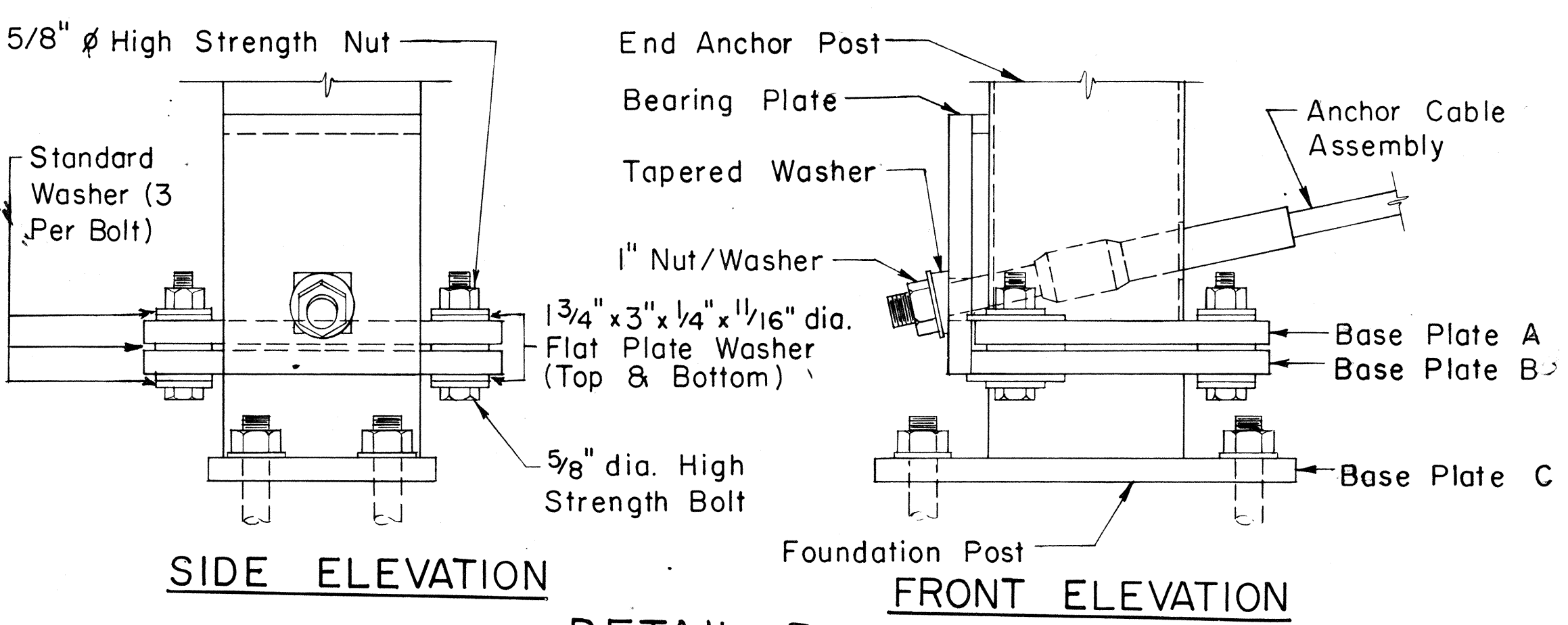
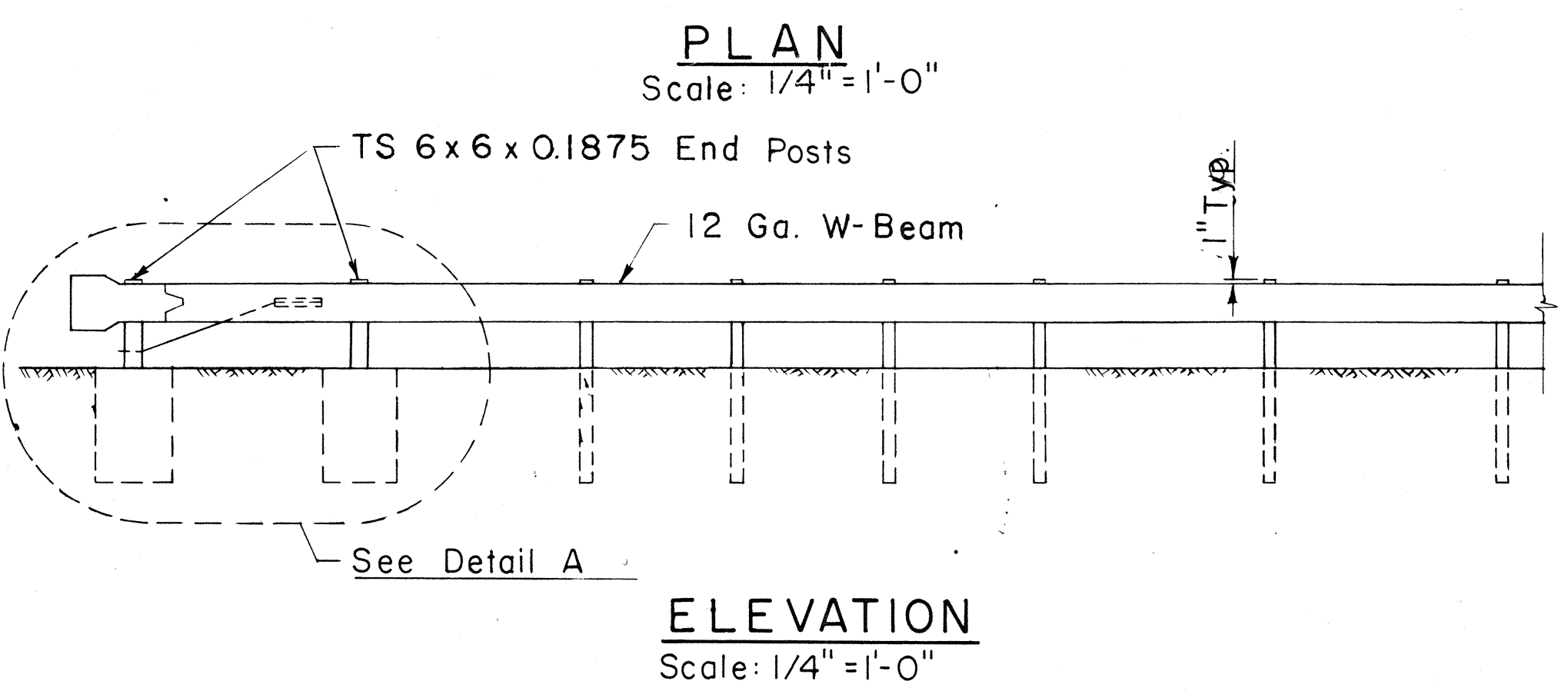
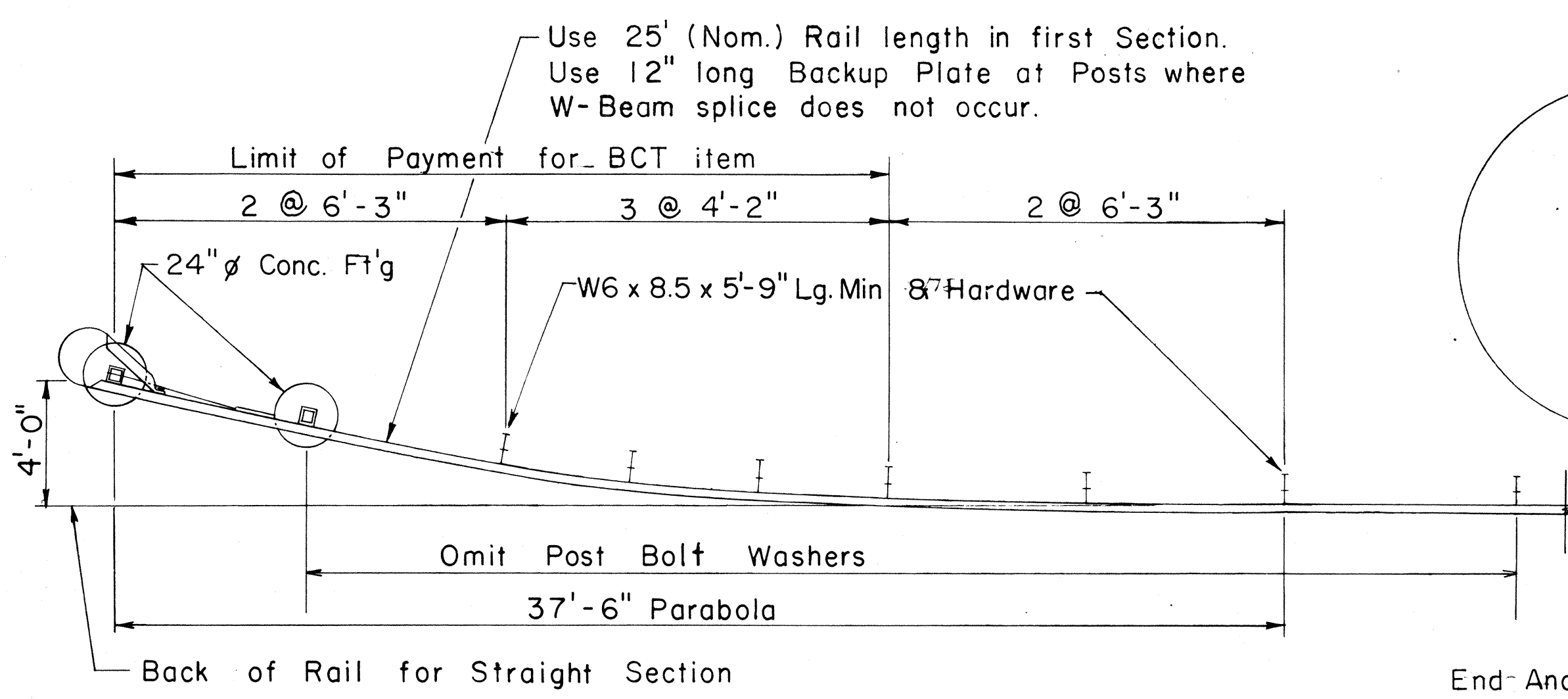
APPROVAL RECOMMENDED:
Eishi Tanaka
 TRAFFIC ENGINEER 6/14/78 DATE

APPROVED:
Harbor Zafetschi
 ASSISTANT CHIEF, ENGINEERING 6/15/78 DATE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

STANDARD DETAIL
 BREAKAWAY CABLE TERMINAL (BCT)

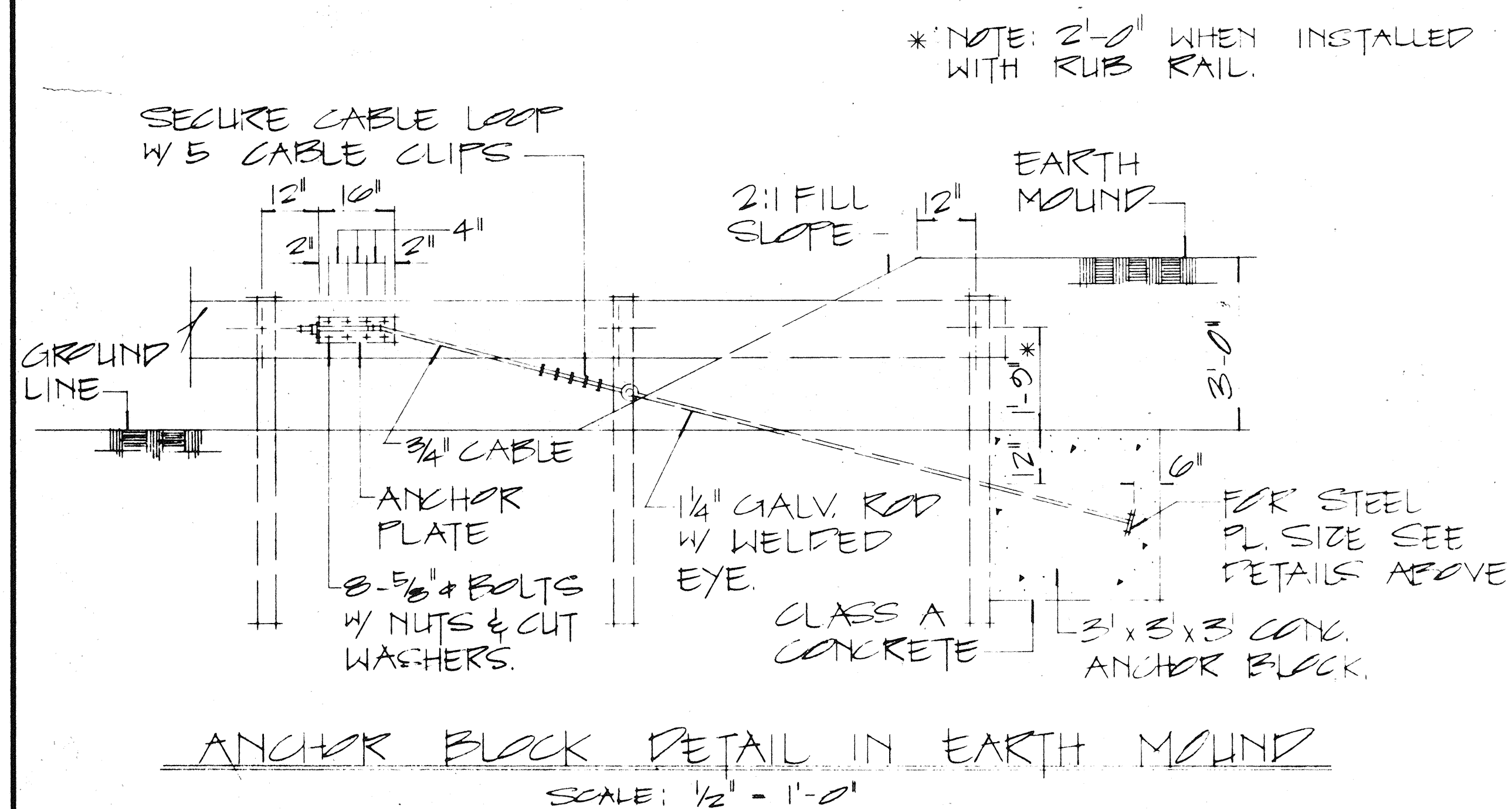
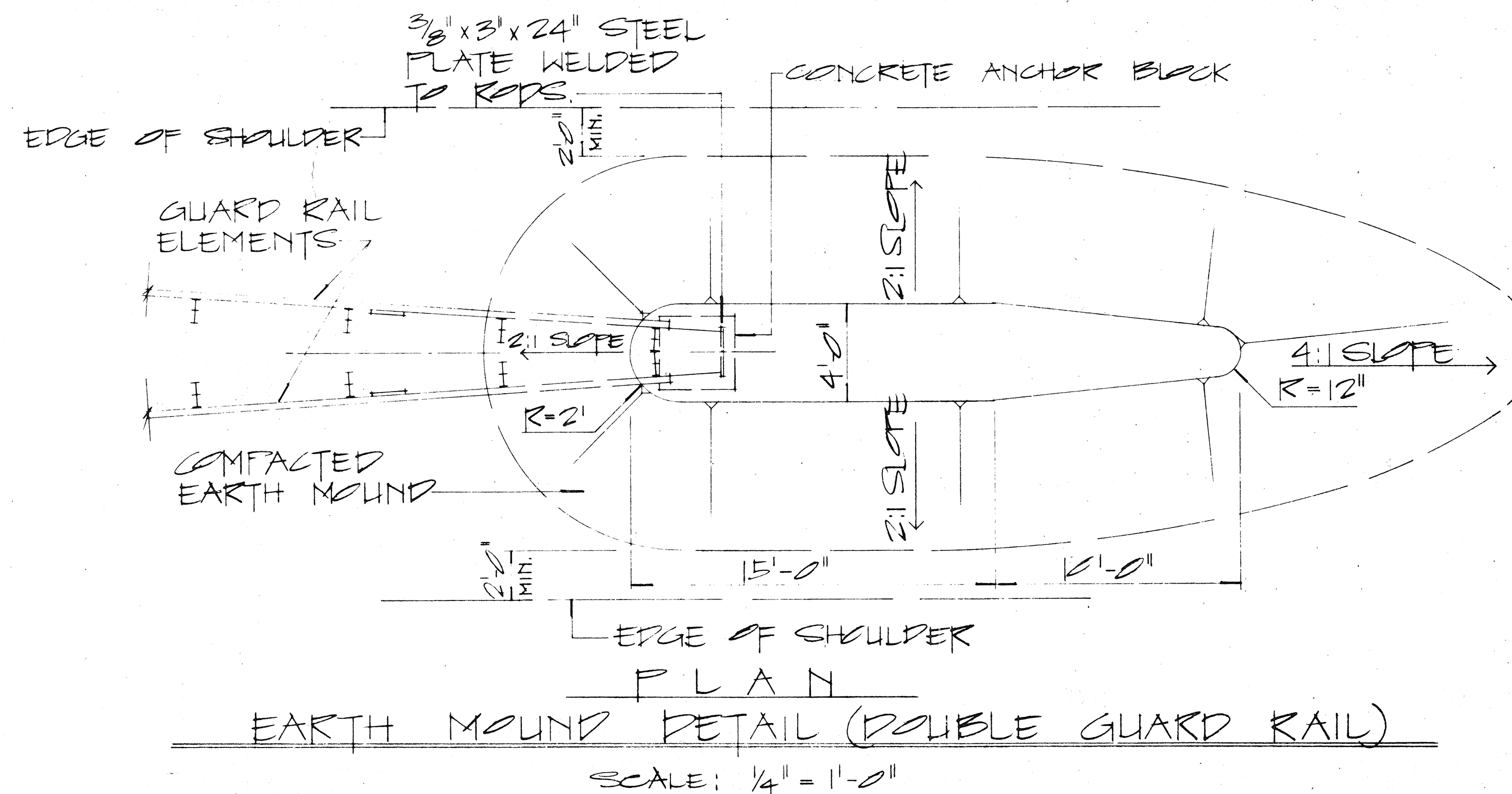
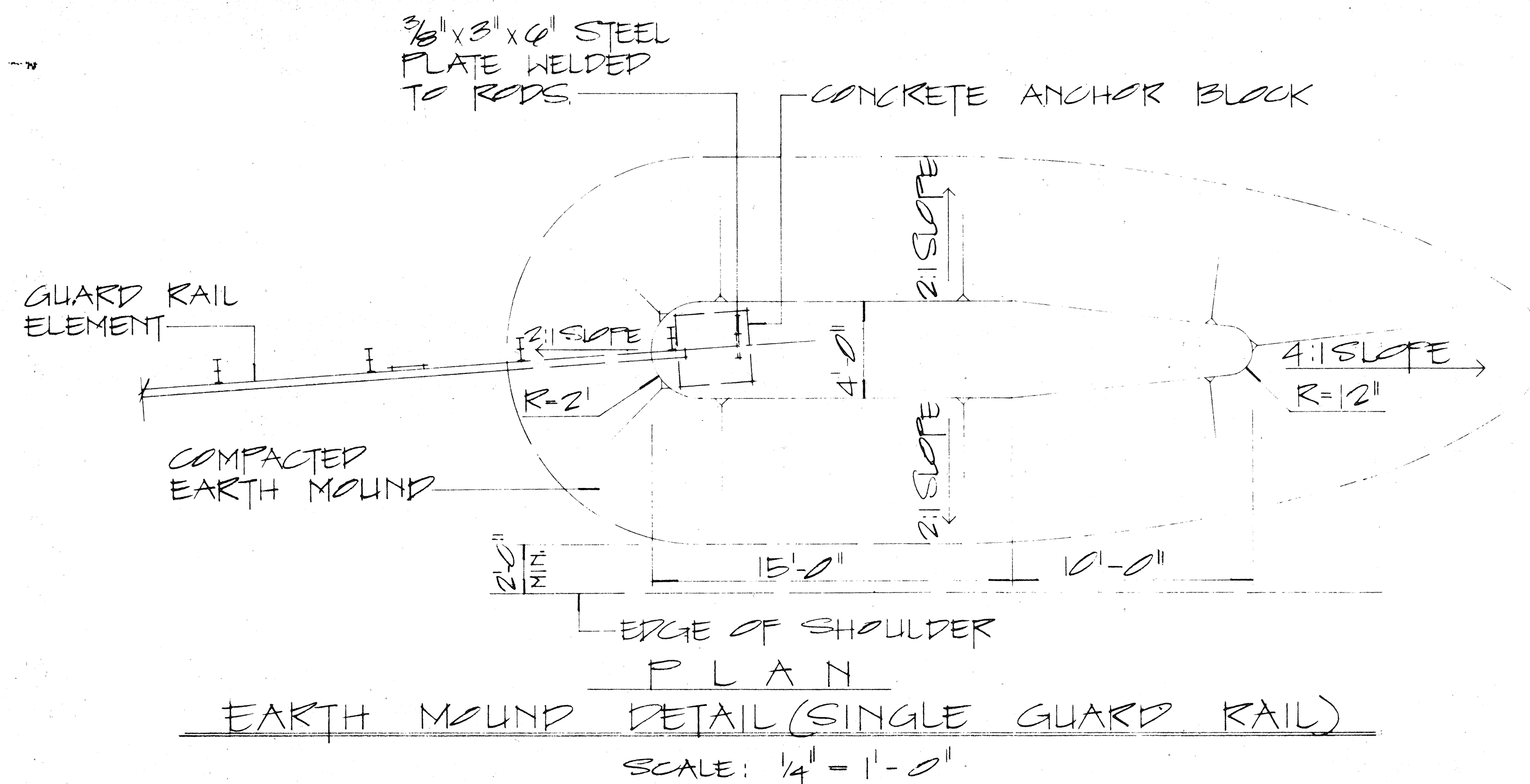
Scale: As Shown Date: June 1978
 SHEET No. 15 OF 17 SHEETS DT 519



NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 519 Approved 12/30/69	H.T.	6/15/78
2	Added Note 6	H.T.	12/11/80

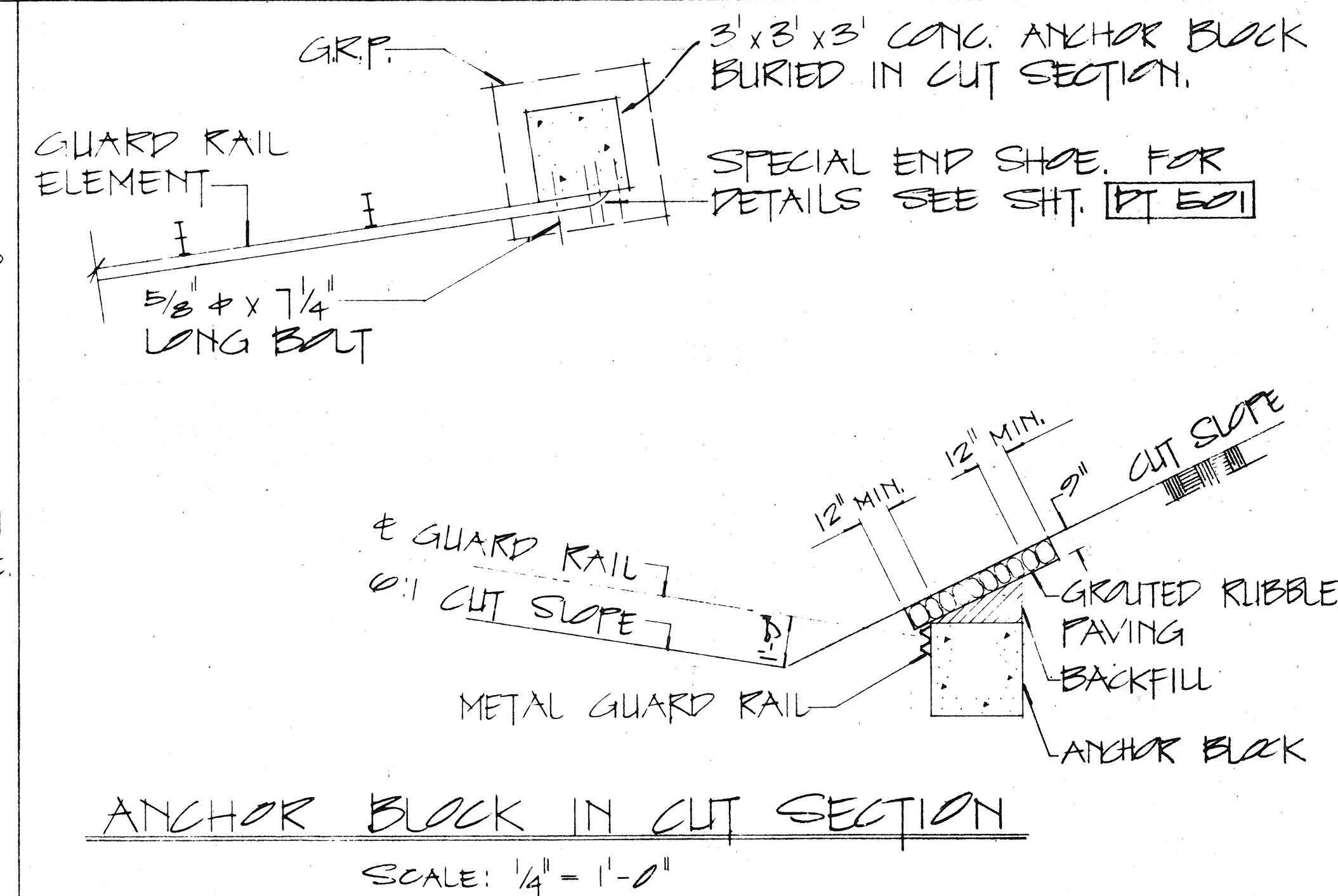
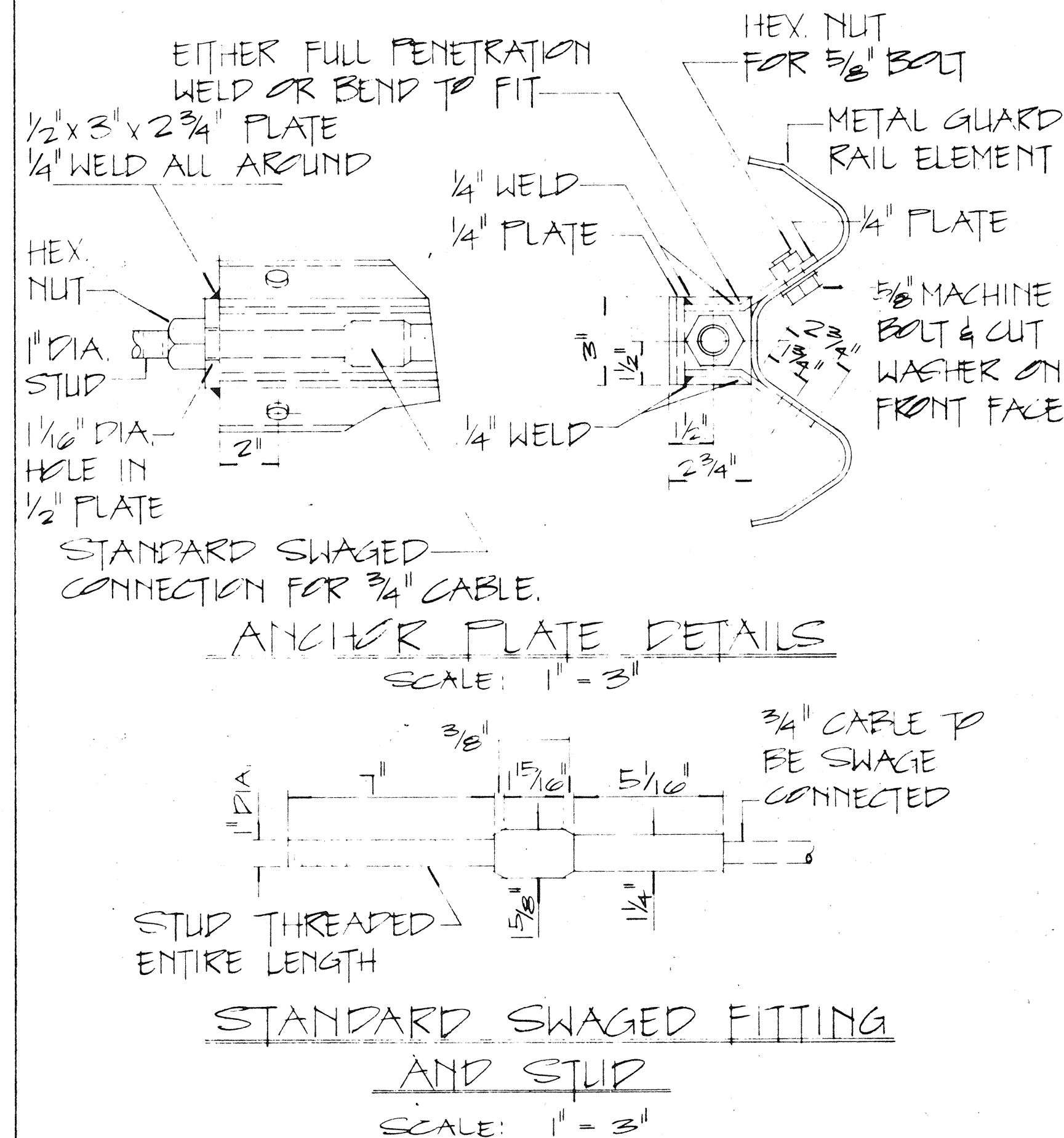
ORIGINAL PLAN
 DATE: _____
 DRAWN BY: _____
 DESIGNED BY: _____
 CHECKED BY: _____
 NO. _____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-HH(169)17	1983	43	280



NOTE:

1. GALVANIZED ANCHOR ROD, METAL GUARD RAIL AND POST BURIED IN GROUND, SHALL BE COVERED WITH A MIN. 20-MIL THICKNESS OF COAL TAR ENAMEL CONFORMING TO AWWA STANDARD: C 203
2. CONCRETE, G.R.P., EXCAVATION, EARTH MOUND, ANCHOR RODS AND MISCELLANEOUS APPURTENANCES NECESSARY TO ANCHOR THE GUARD RAIL ENDS SHALL BE INCIDENTAL TO THE METAL GUARD RAIL.



APPROVAL RECOMMENDED:
Eishi Tanaka 12/29/61
TRAFFIC ENGINEER DATE

APPROVED:
[Signature] 12-30-61
ASSISTANT CHIEF, ENGINEERING DATE

NO	REVISION	APPROVED BY	DATE

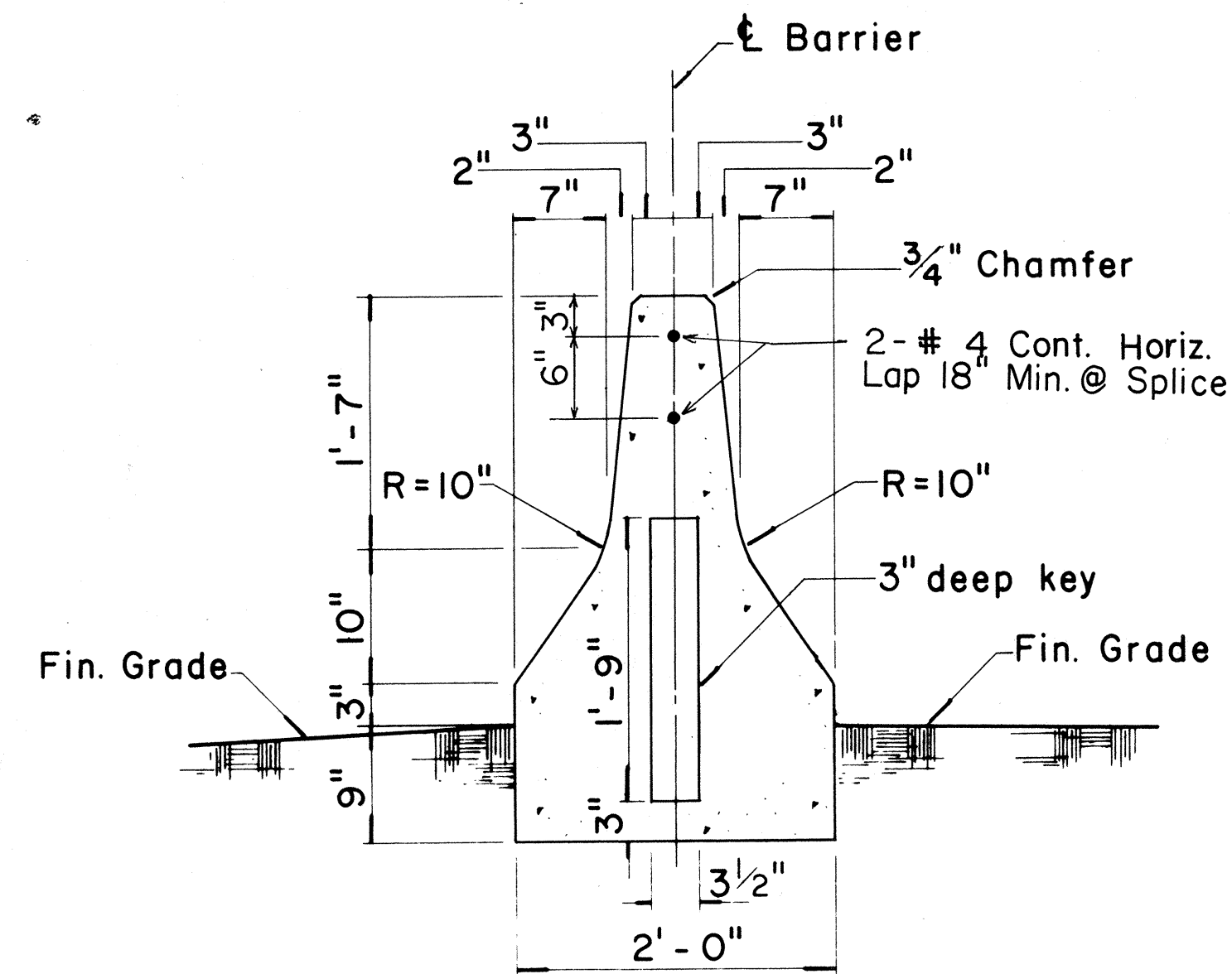
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS
EARTH MOUND AND
ANCHOR BLOCK DETAILS

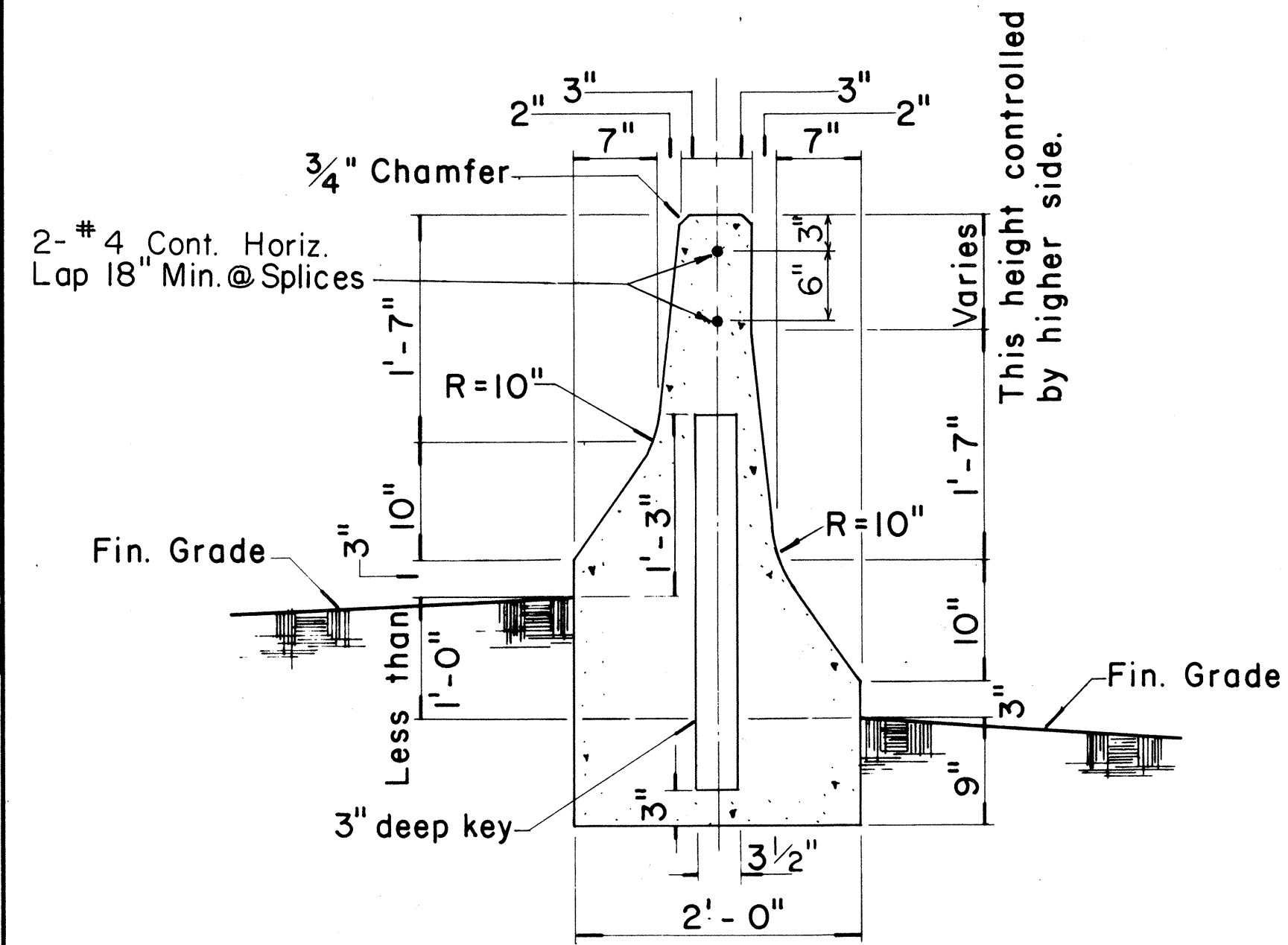
SCALE: AS SHOWN OCT 1969

SHEET No. C-16 OF 17 SHEETS DT 522

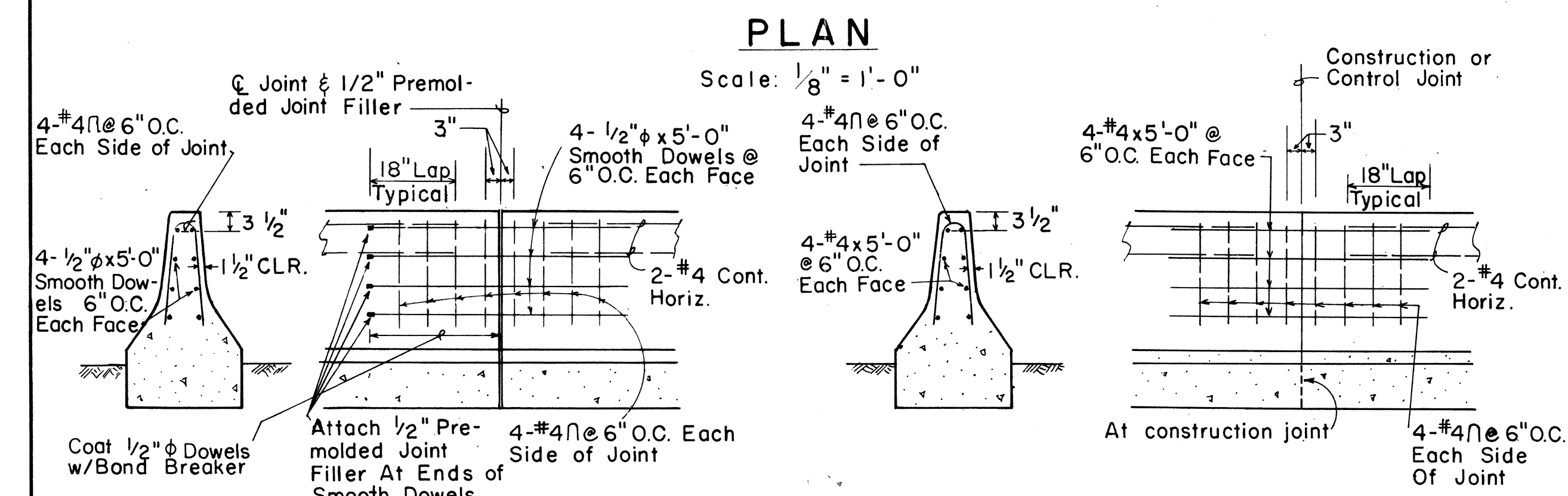
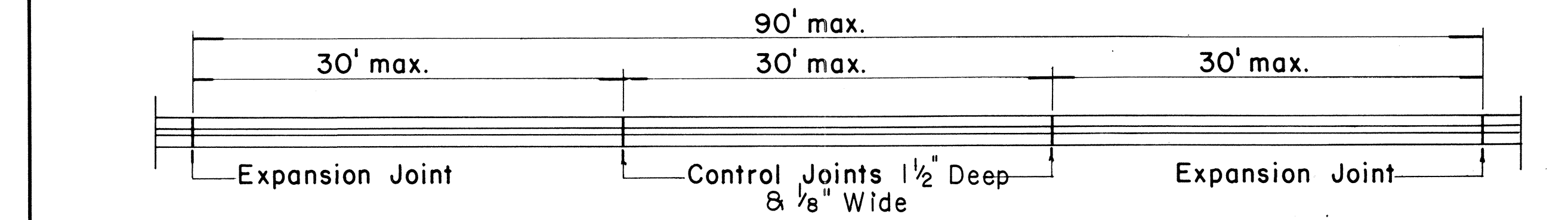
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-HH(16)17	1983	44	280



TYPE 4A
Scale: 1" = 1'-0"



TYPE 4B
Scale: 1" = 1'-0"



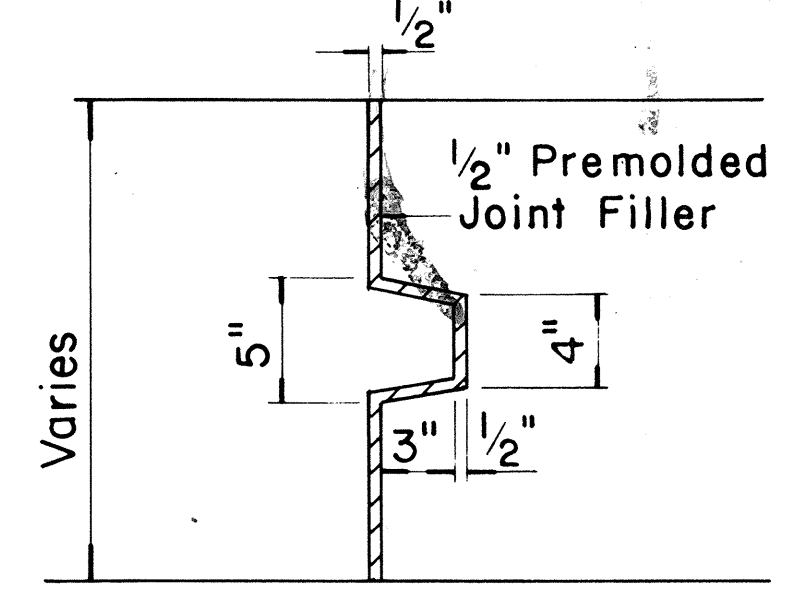
EXPANSION JOINT DETAIL
Scale: 1/2" = 1'-0"

GENERAL NOTES

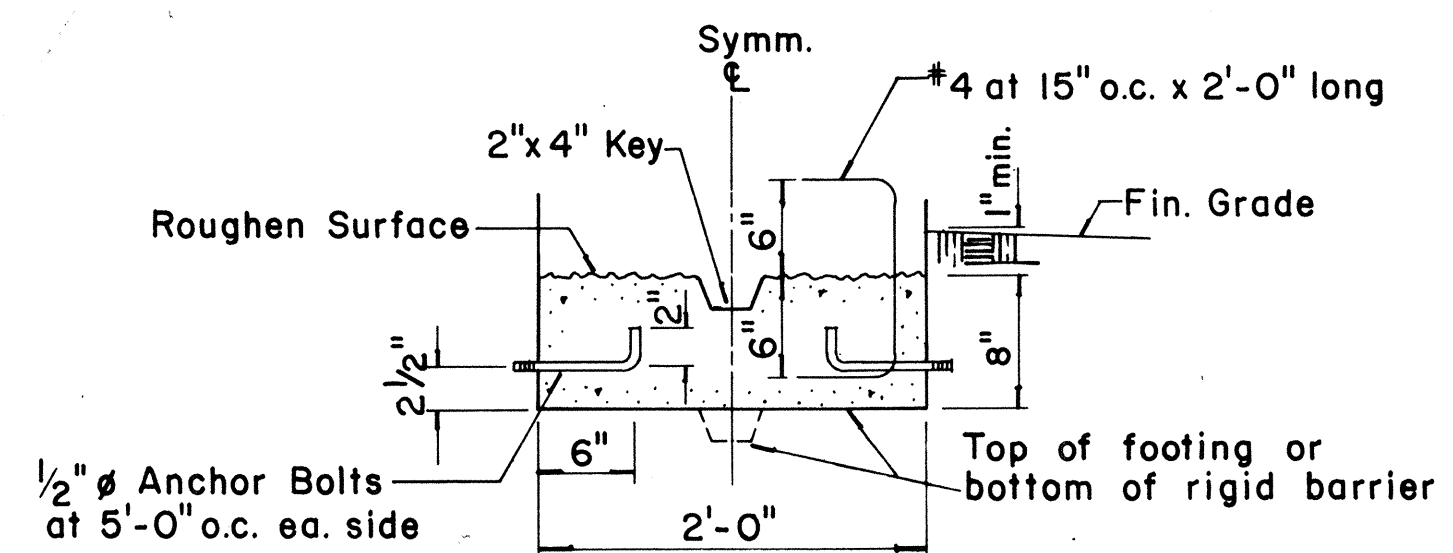
- Precast Rigid Barrier Guard Rail may be installed as an option to cast-in-place Type 4 Rigid Barrier Guard Rail. Contractor shall submit shop drawings to Engineer for approval.
- Expansion Joints shall be constructed at ninety-foot (90 ft.) maximum intervals and at existing expansion joints of structures. (Use 1/2" premolded joint filler, incidental to Type 4 Rigid Barrier Guard Rail). Control Joints shall be placed between expansion joints at 30' maximum. Shear keys shall be required at all construction joints.
- The exterior surface and vertical alignment of the Type 4 Rigid Barrier Guard Rail shall be constructed to give a uniform and presentable appearance. Variation of more than 1/4" in 20' max. and 1/2" in 40' or more will be considered objectionable. The Engineer will determine the acceptability of the work.

During the course of the work, samples may be tested and measurements made to establish whether or not the specified values or dimensions are being met. If the specified values or dimensions are not being met, the Engineer will determine the degree of the non-conformance, the effect on the serviceability of the project, whether the work be accepted and remain in place and, if so, the amount to be paid for such work, or whether the work shall be removed and replaced or otherwise corrected at the Contractor's expense.

NOTE: 1/2" PREMOLDED JOINT FILLER IS NOT REQUIRED AT CONSTRUCTION JOINTS.

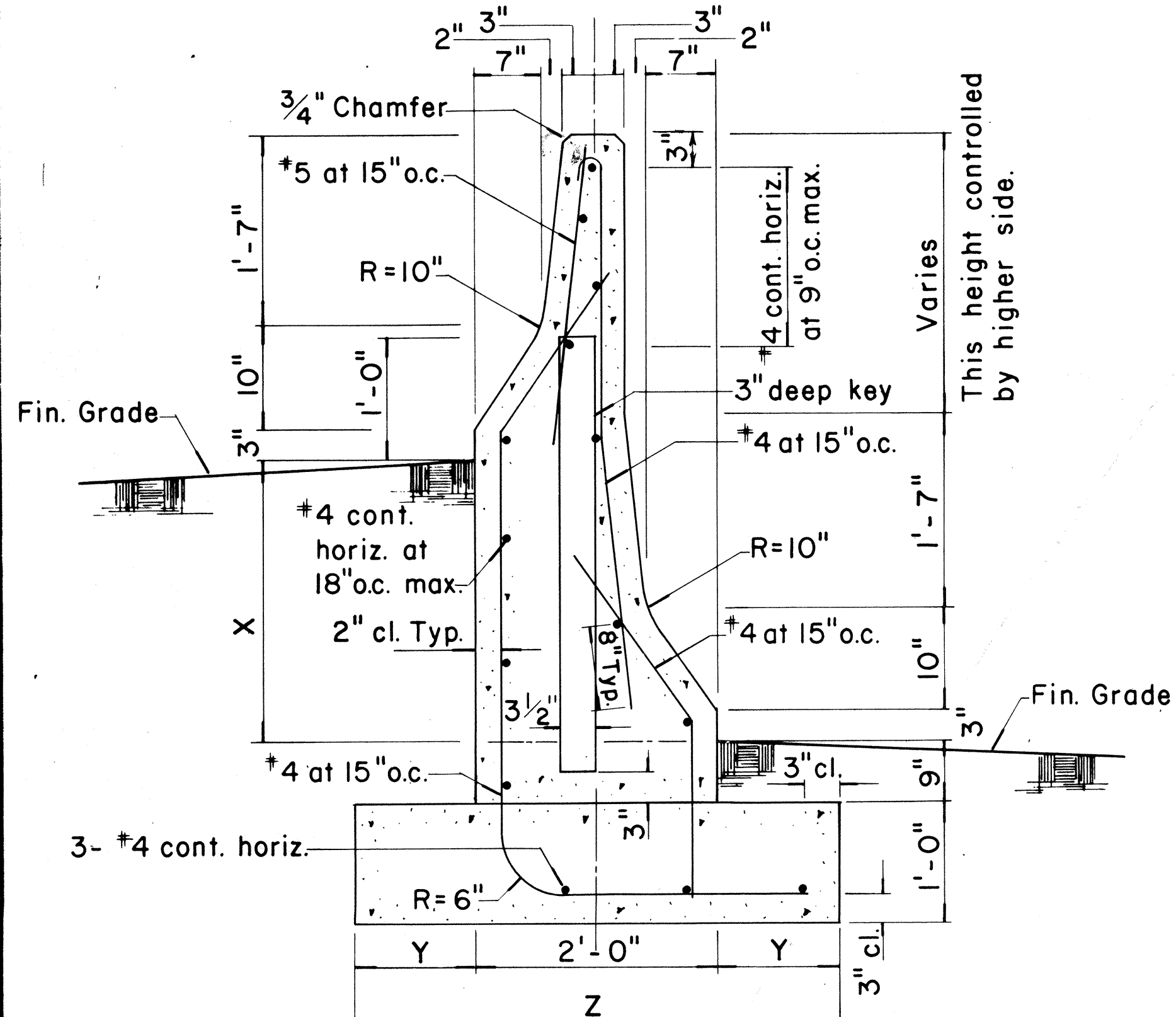


SECTION THRU KEY AT EXPANSION JOINT
Scale: 1 1/2" = 1'-0"



OPTIONAL CONSTRUCTION JOINT DETAILS
Scale: 1" = 1'-0"

NOTE:
The intent of the optional construction joint details for the Type 4 Rigid Barrier Guard Rail is to provide a method of securing the forms and preventing uplift so that the barrier will have a uniform and presentable appearance. The Contractor may submit an alternate method of constructing the barrier for the approval of the Engineer and for use on a trial basis. Any unsatisfactory work shall be removed or corrected as directed by the Engineer and at the Contractor's expense.



TYPE 4C & TYPE 4D
Scale: 1" = 1'-0"

TYPE	DIFFERENCE IN FIN. GRADE	FOOTING
	X	Y Z
4C	1'-0" min., 2'-4" max.	1'-0" 4'-0"
4D	Greater than 2'-4", 4'-4" max.	1'-3" 4'-6"

NOTE:
Except where noted all dimensions shall be the same for Type 4C and Type 4D.

NO.	REVISION	APPROVED BY	DATE
1	Supersede Sht. DT 521 Approved 2-10-72	H-1	1/21/81

APPROVAL RECOMMENDED:
Erich Tanaka 1/20/81
TRAFFIC ENGINEER DATE

APPROVED:
Richard A. Keiichi 1/21/81
ASSISTANT CHIEF, ENGINEERING DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
GUARD RAIL TYPE 4
(RIGID BARRIER)

Scale: As Shown
SHEET No. C-17 OF 17 SHEETS DT 521