

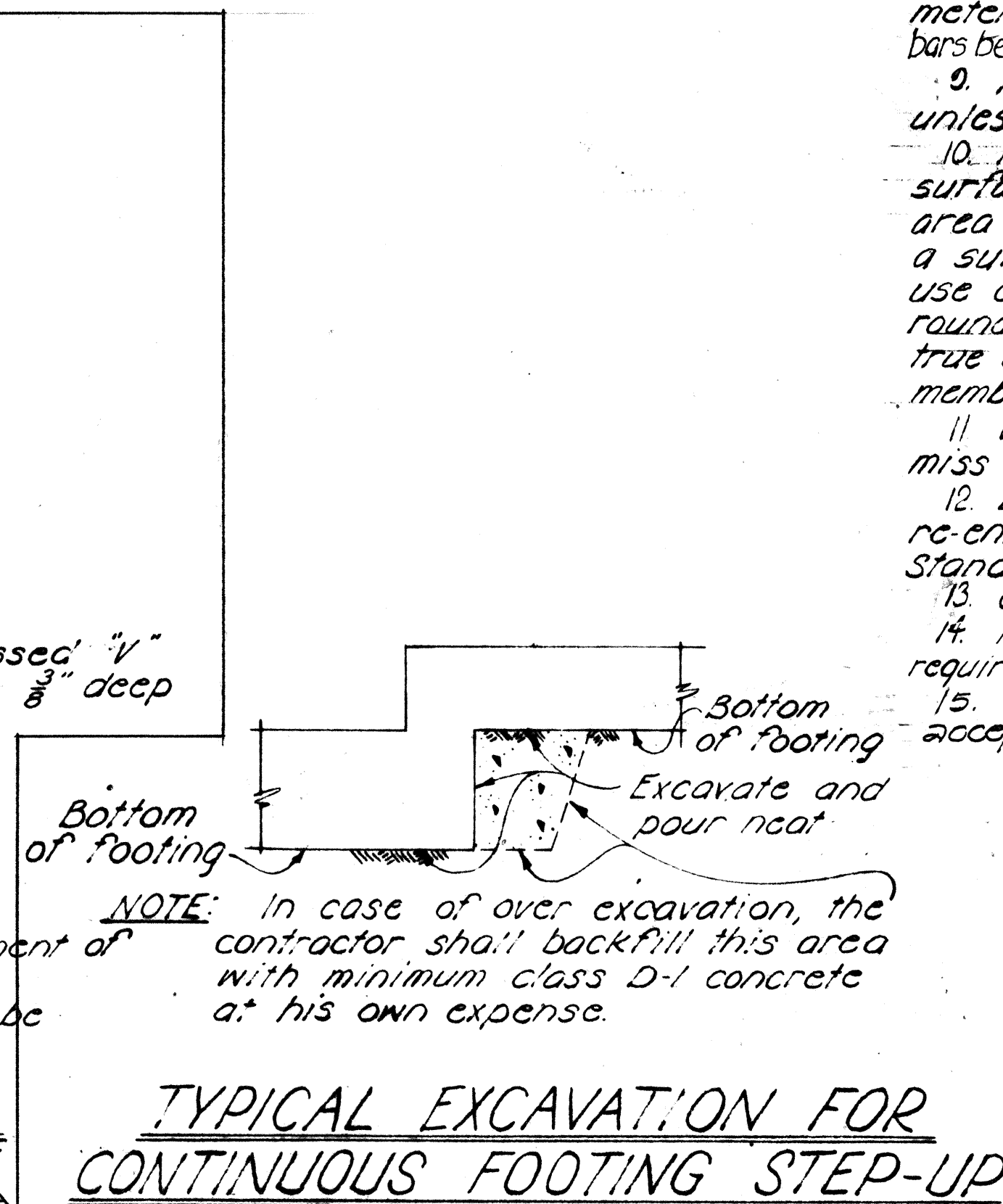
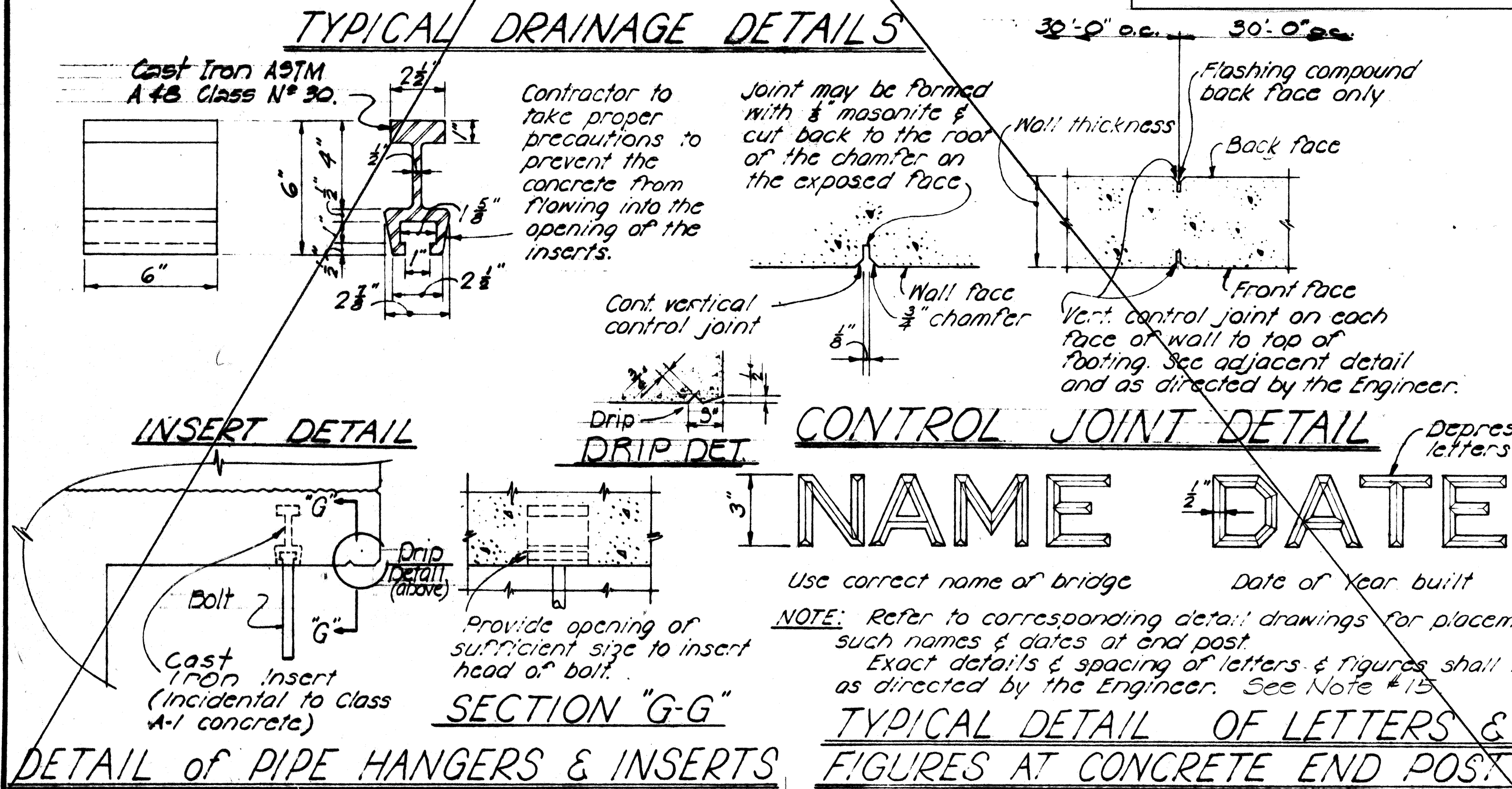
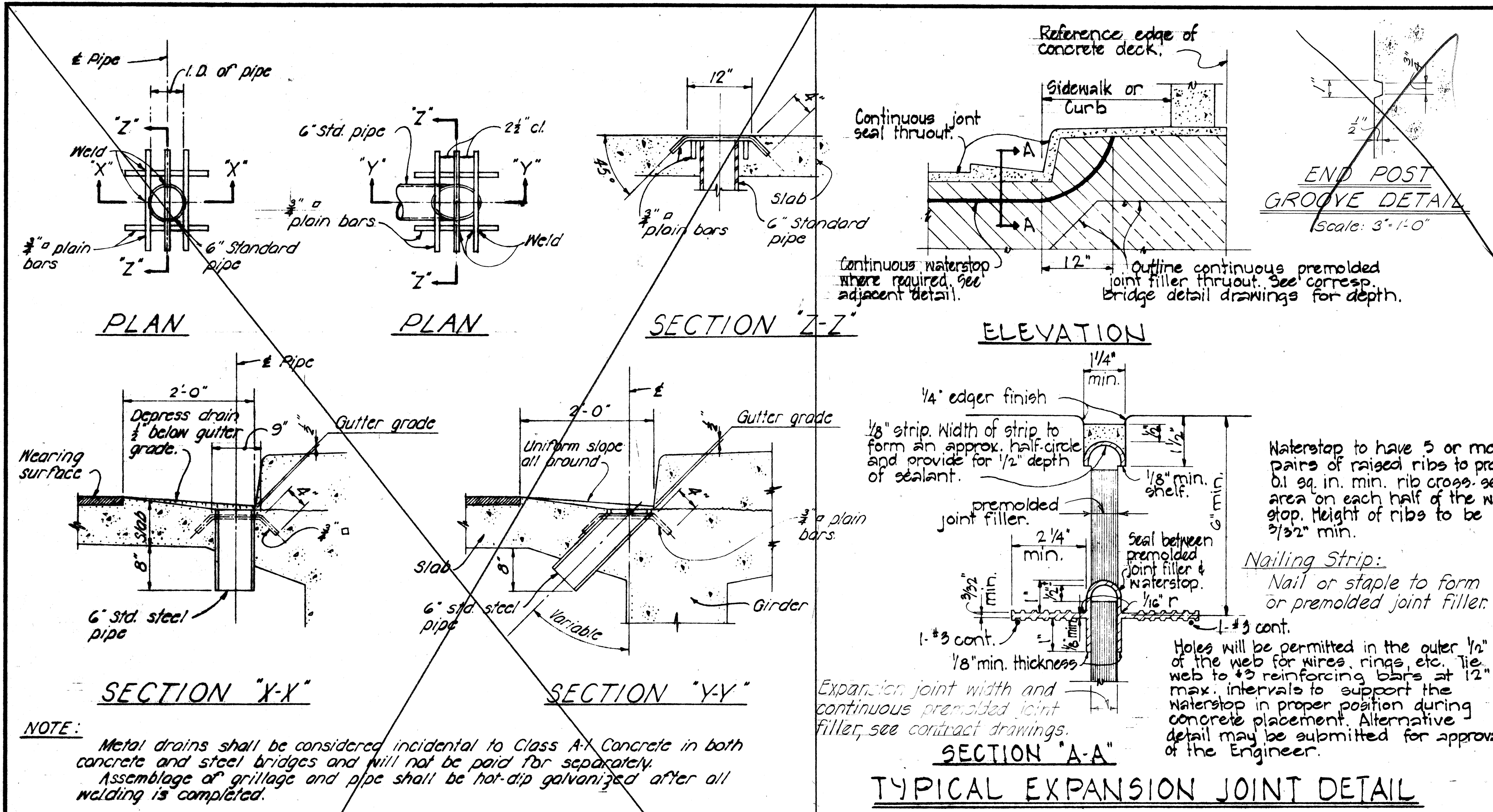
REVISION
Jan. '67
Feb. '67
Apr. 67

GENERAL NOTES

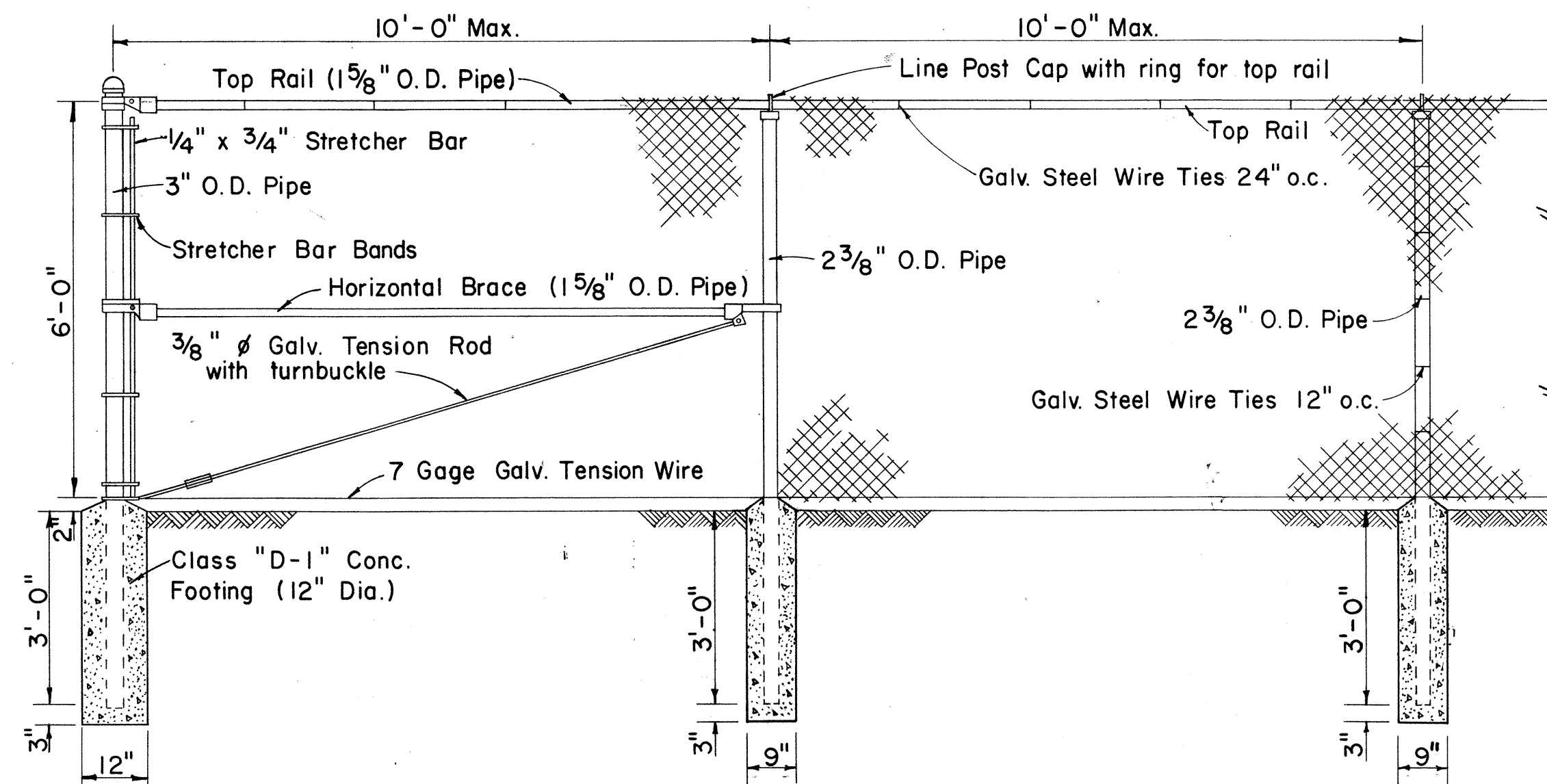
Elastometric Pads: Top & bottom of bridge bearing pads shall be secured against displacement with adhesives approved by the Engineer. Pads shall be incidental to concrete and will not be paid for separately.

- The Contractor shall verify the location of all existing utility lines and notify the respective owners before commencing work of excavation.
- All concrete shall be Class A-1 unless otherwise noted.
- Clearance for reinforcing bars shall be as follows, unless otherwise noted:
 - 1" For stirrups of beams & pier caps.
 - 2" For ties of columns.
 - 2" For formed walls.
 - 3" For footings.
- Concrete seats receiving steel plates, lead plates or neoprene pads shall be poured monolithically with supporting structures & top surfaces of the concrete seats shall be finished with a steel trowel to a smooth level at the elevation shown on the plans.
- Reinforcing shall be detailed in accordance with A.C.I. Manual of Standard Practice for Detailing Reinforced Concrete Highway Structures unless otherwise noted.
- Reinforcing bars shall be securely tied at all intersections & lap splices & shall be held in place during pouring to maintain their proper locations as shown on plans.
- Splices of reinforcing - See Special Provisions.

- Minimum spacing between parallel bars shall be $2\frac{1}{2}$ times the diameter of bars, but in no case shall the clear distance between the bars be less than $\frac{1}{4}$ times the maximum size of the coarse aggregate.
- All dimensions relating to reinforcing are to centers of bars unless otherwise noted.
- Forms for all exposed surfaces of separation structures and surfaces of retaining walls visible from a traveled way or from a populated area shall be plywood except that metal forms may be permitted provided a surface finish satisfactory to the Engineer can be obtained and the use of such forms is approved in writing by the Engineer. Forms for round columns shall be made of materials that will give a smooth finish and true dimensions as given in the plans. Forms for prestressed concrete members shall be either metal or plywood.
- Vertical column bars shall be arranged in such a manner as to miss pier cap bars above as directed by the Engineer.
- Except as otherwise noted on drawings, all exterior corners & re-entrant angles in concrete work shall be chamfered $\frac{3}{4} \times \frac{3}{4}$. See Standard Specifications.
- Concrete Finish - See Special Provisions.
- All welders and welding procedures shall be qualified according to the requirements of the Special Provisions.
- Gothic letters and figures approximating dimensions shown will be acceptable if approved by the Engineer.



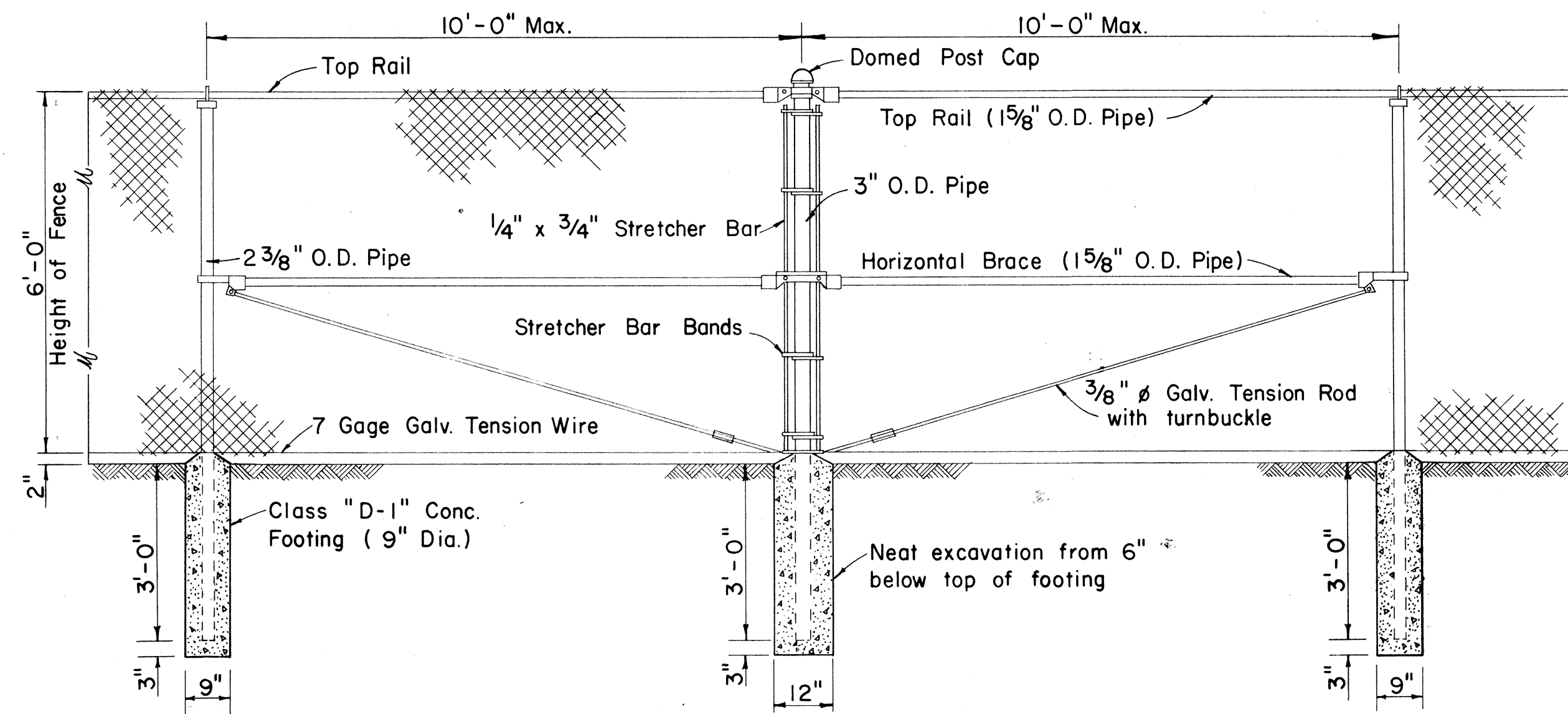
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-083-1(2) UNIT 3	1968	12	16



END POST

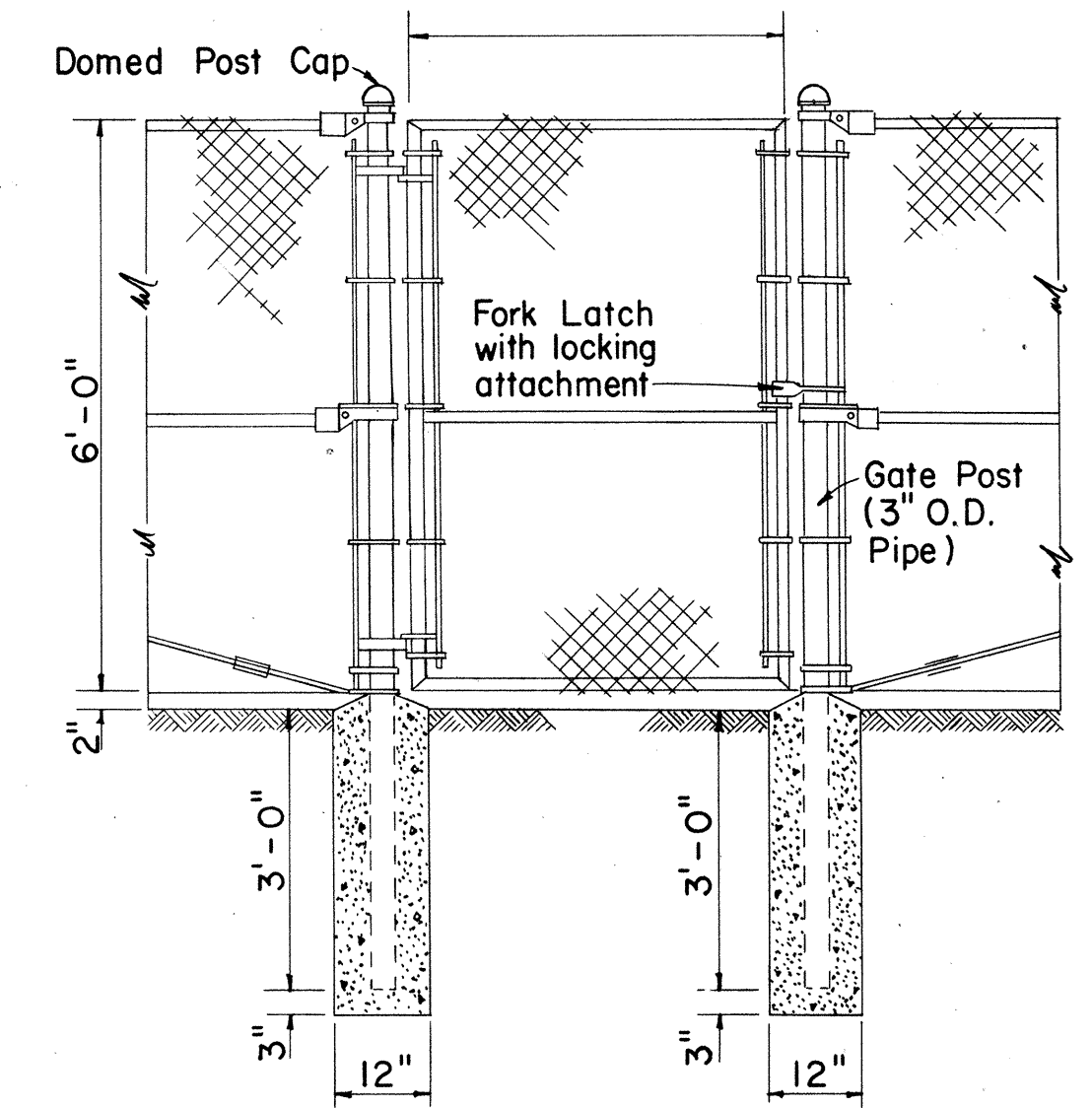
LINE POST

LINE POST



PULL POST

LINE POST



GATE POST

GATE POST

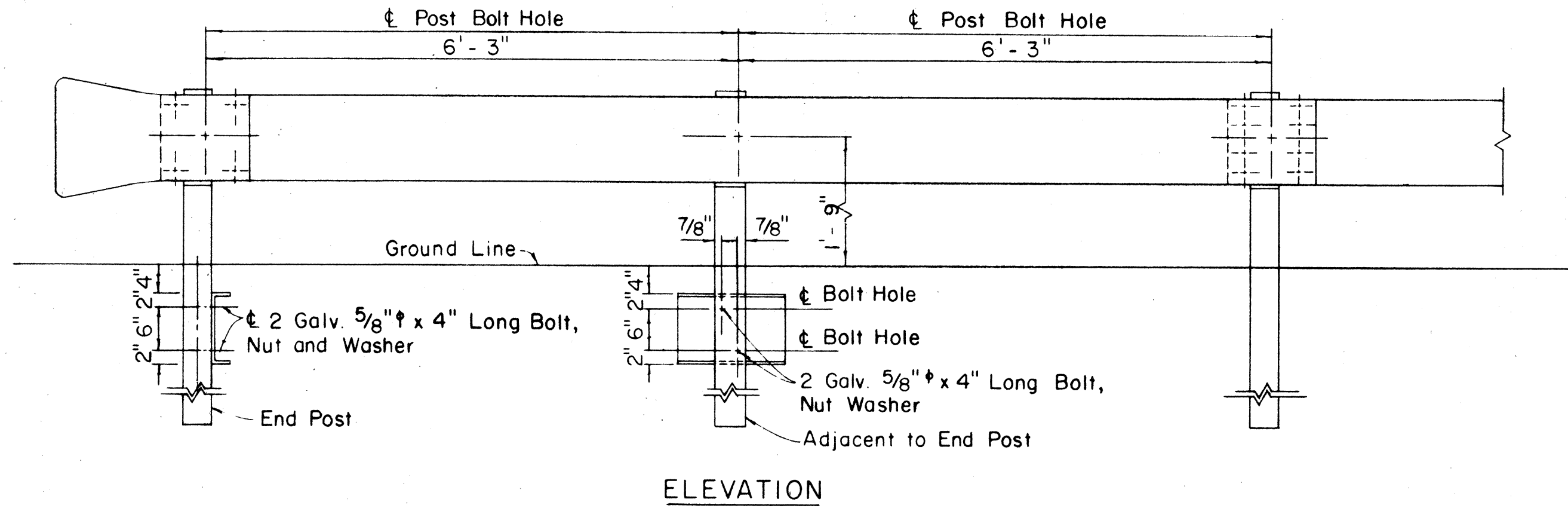
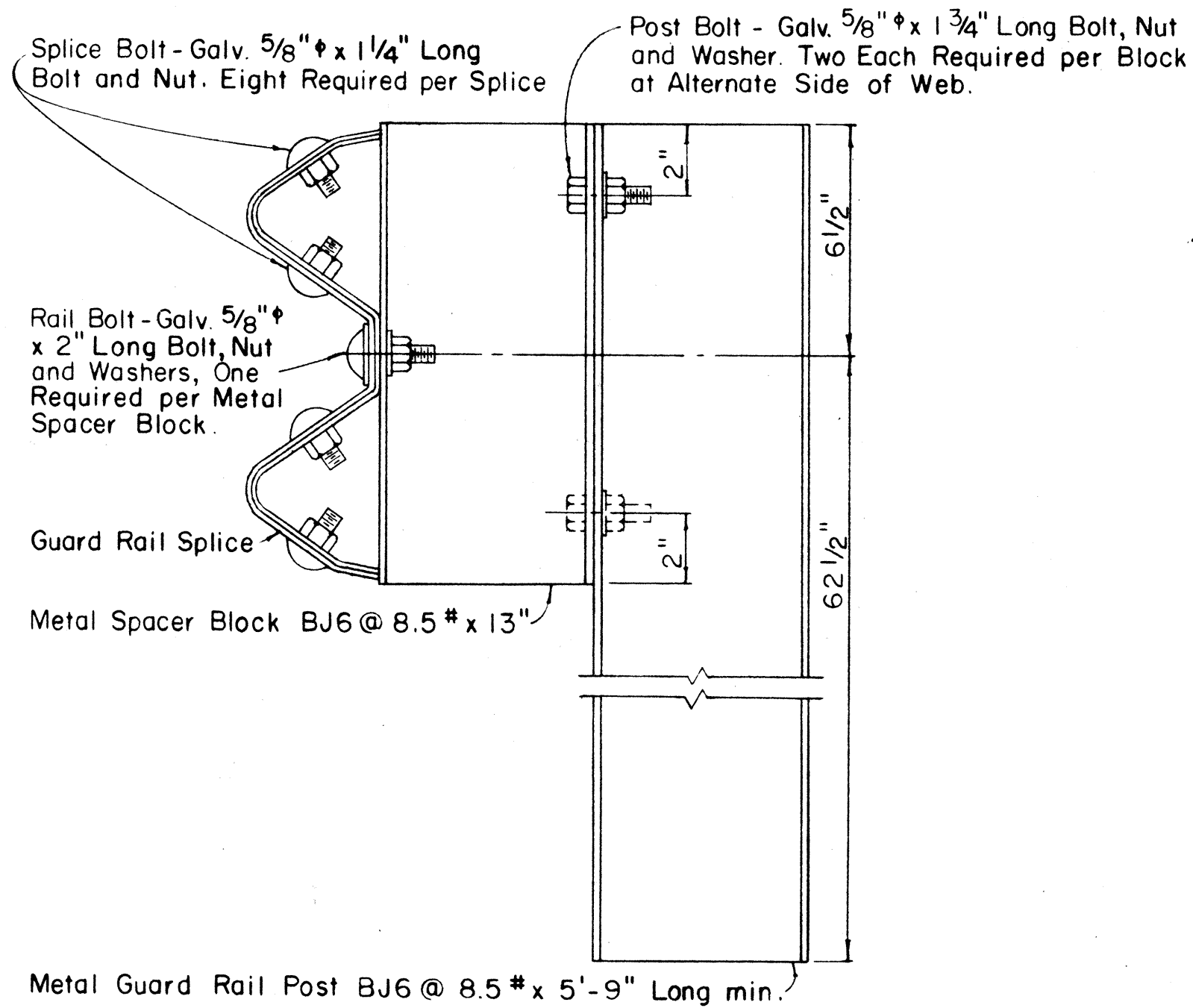
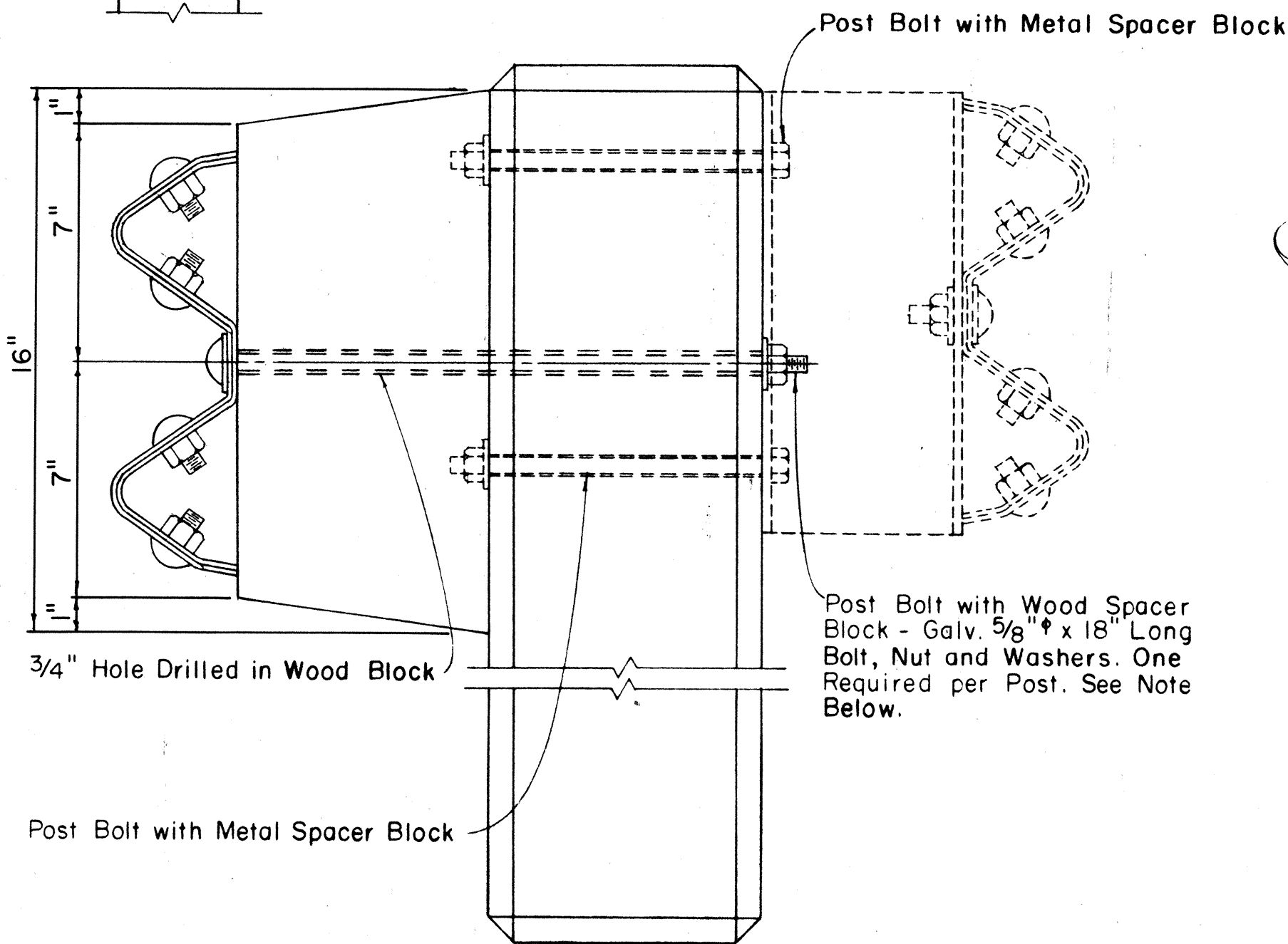
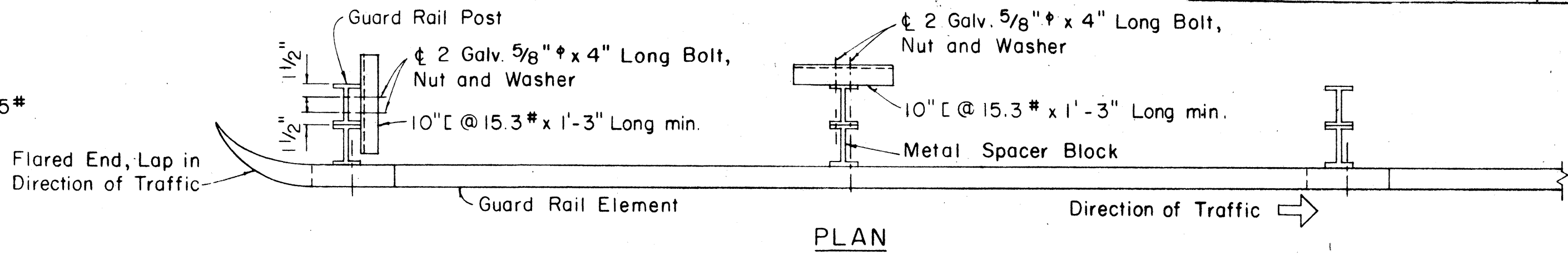
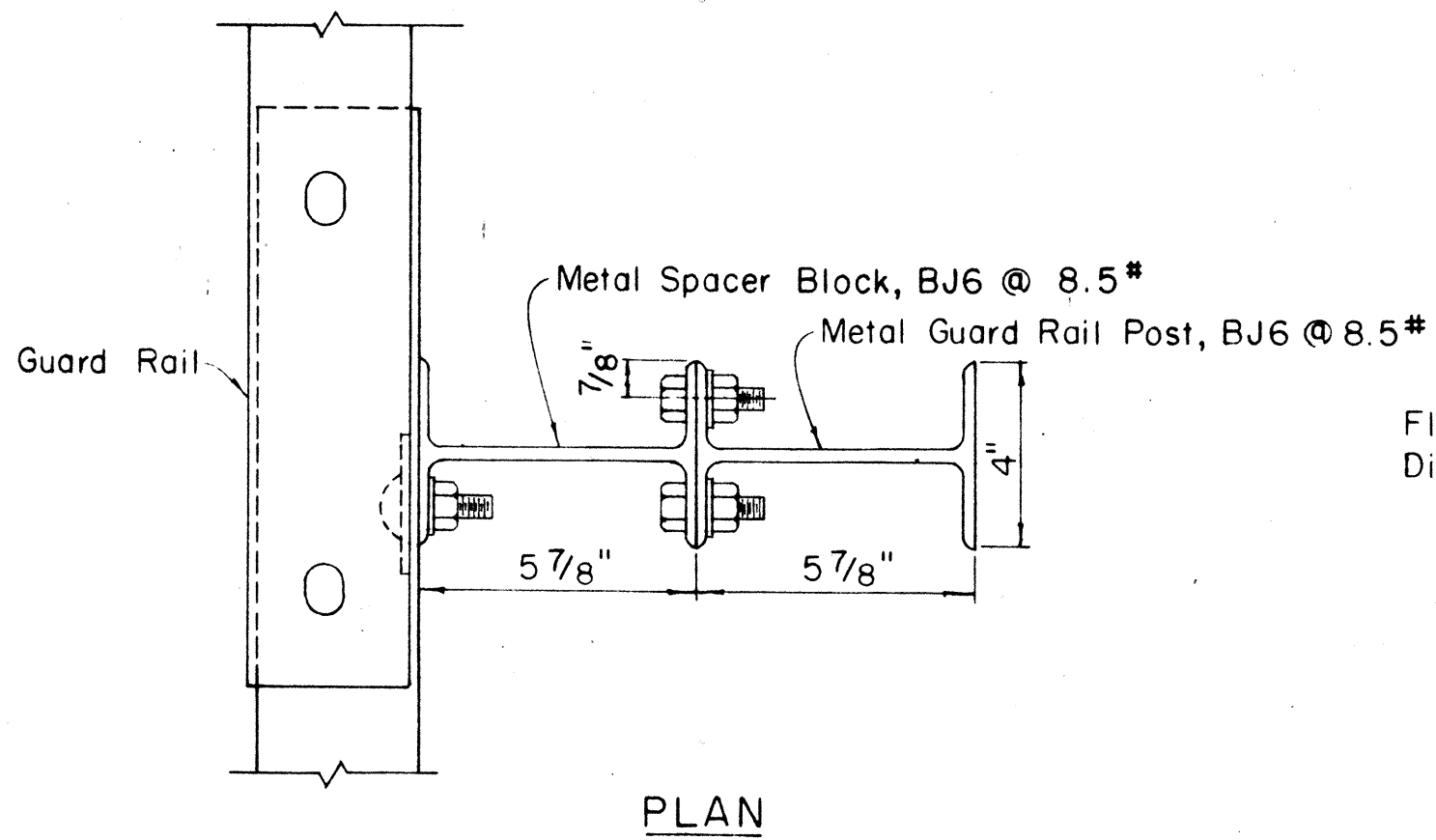
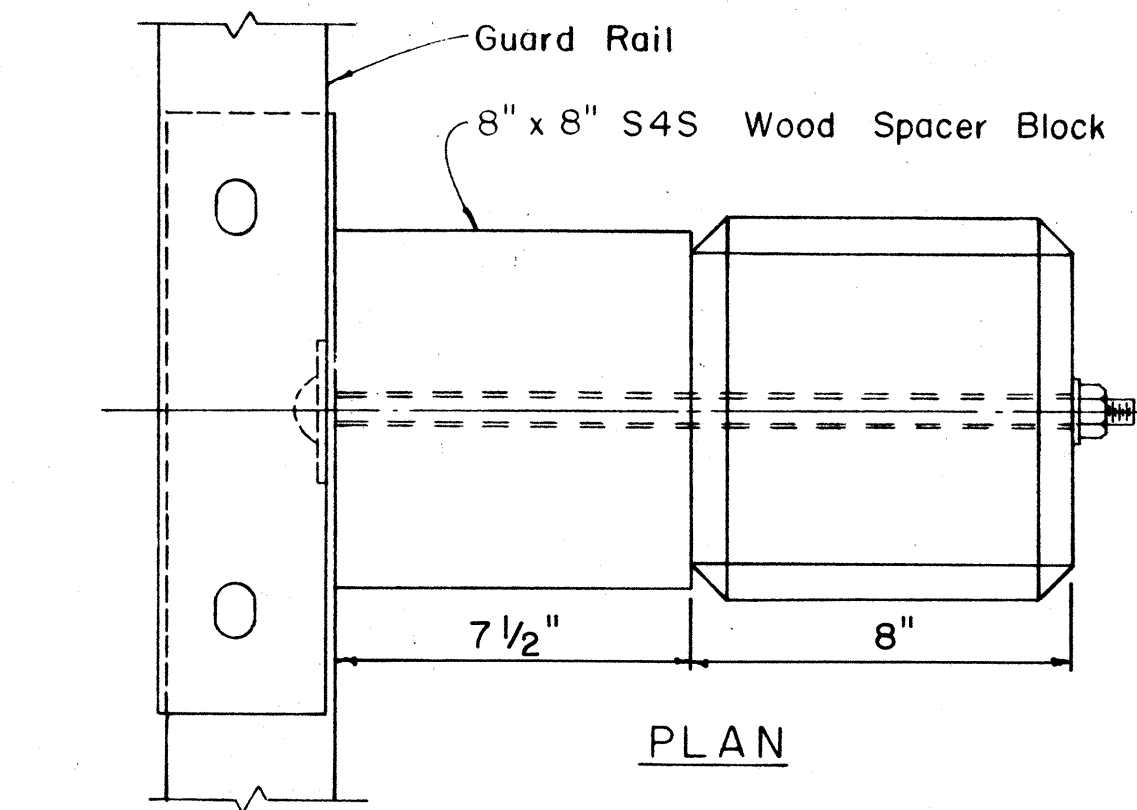
CHAIN LINK FENCE DETAIL

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

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
No.	DESIGNED BY	
	CHECKED BY	

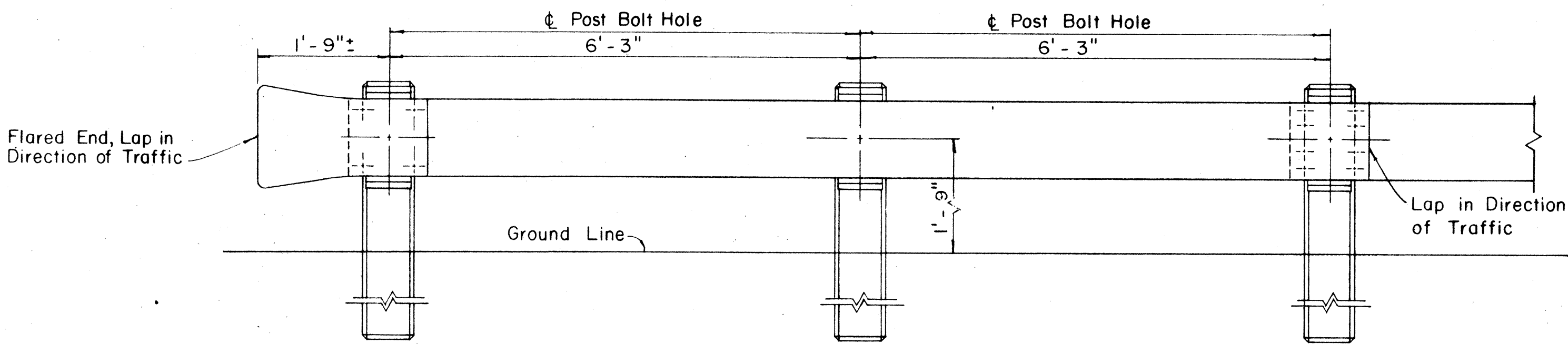
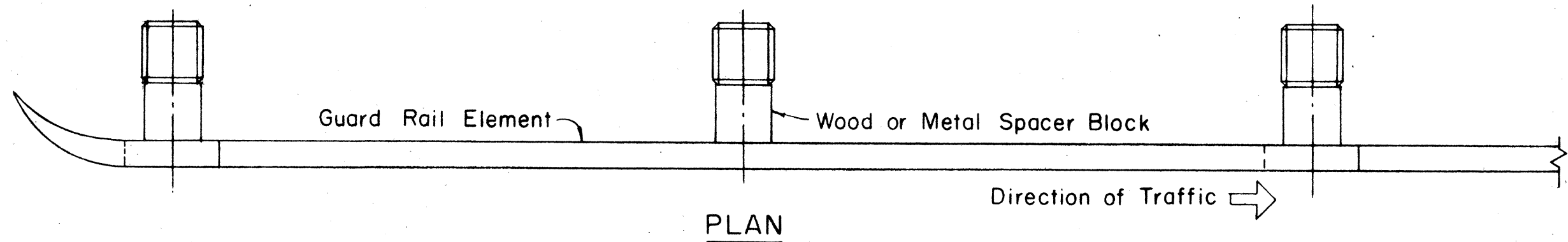
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
PEDESTRIAN OVERPASS OVER KAMEHAMEHA HIGHWAY AT KANEOHE ELEMENTARY SCHOOL	
STANDARD CHAIN LINK FENCE DETAILS	
Project No. F-083-1(2) UNIT 3	
Scales: As Noted	Date: MAY, 1968
SHEET NO. 12 OF 16 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FO83-1(2) UNIT 3	1968	13	16



METAL GUARD RAIL ON METAL POST WITH METAL SPACER BLOCK

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



METAL GUARD RAIL ON CONCRETE POST WITH WOOD OR METAL SPACER BLOCK

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

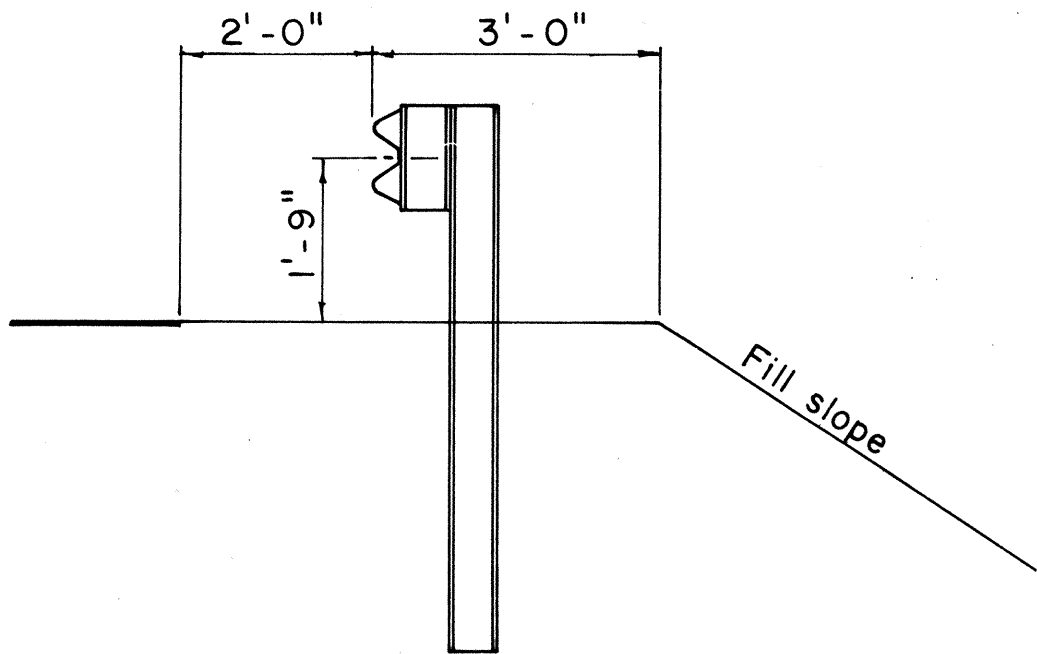
SINGLE METAL GUARD RAIL ON PRECAST CONCRETE POST WITH WOOD OR METAL SPACER BLOCK

Scale: 3" = 1' - 0"

NOTE
Single Guard Rails Shown. For Double Guard Rails Additional Spacer Blocks and Rail Elements Required on Opposite Side of Posts. See Bolt Schedule for Required Bolt Lengths.

SINGLE METAL GUARD RAIL ON METAL POST WITH METAL SPACER BLOCK

Scale: 3" = 1' - 0"



TYPICAL GUARD RAIL DETAIL

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

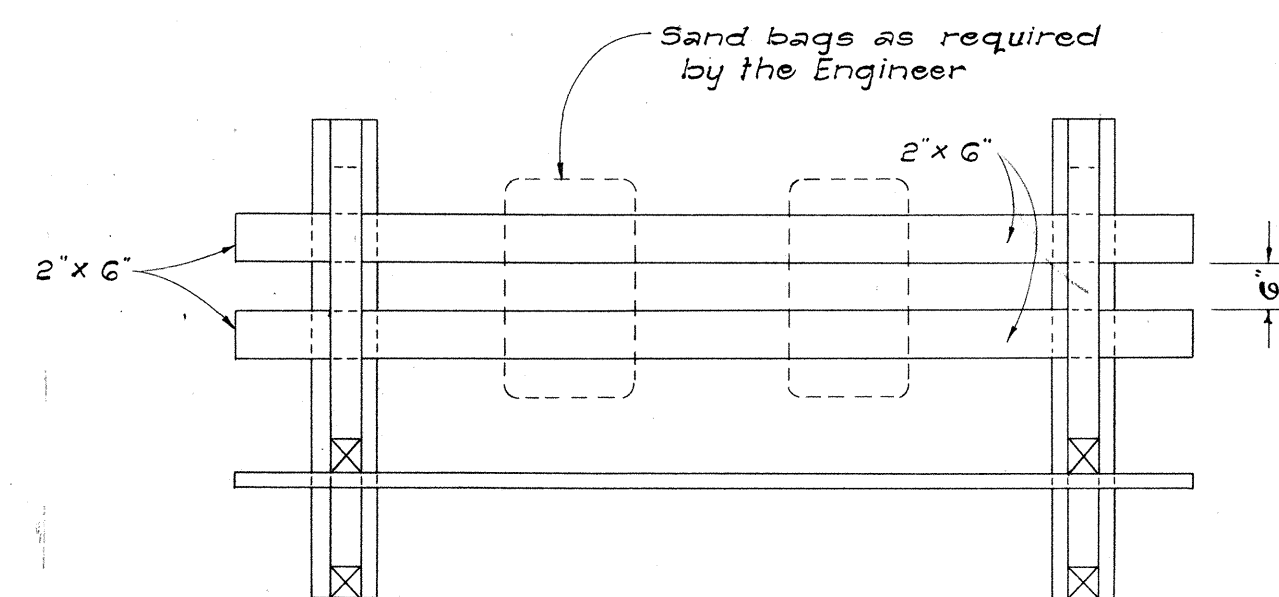
REVISED: October 27, 1967
REVISED: August 10, 1967

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

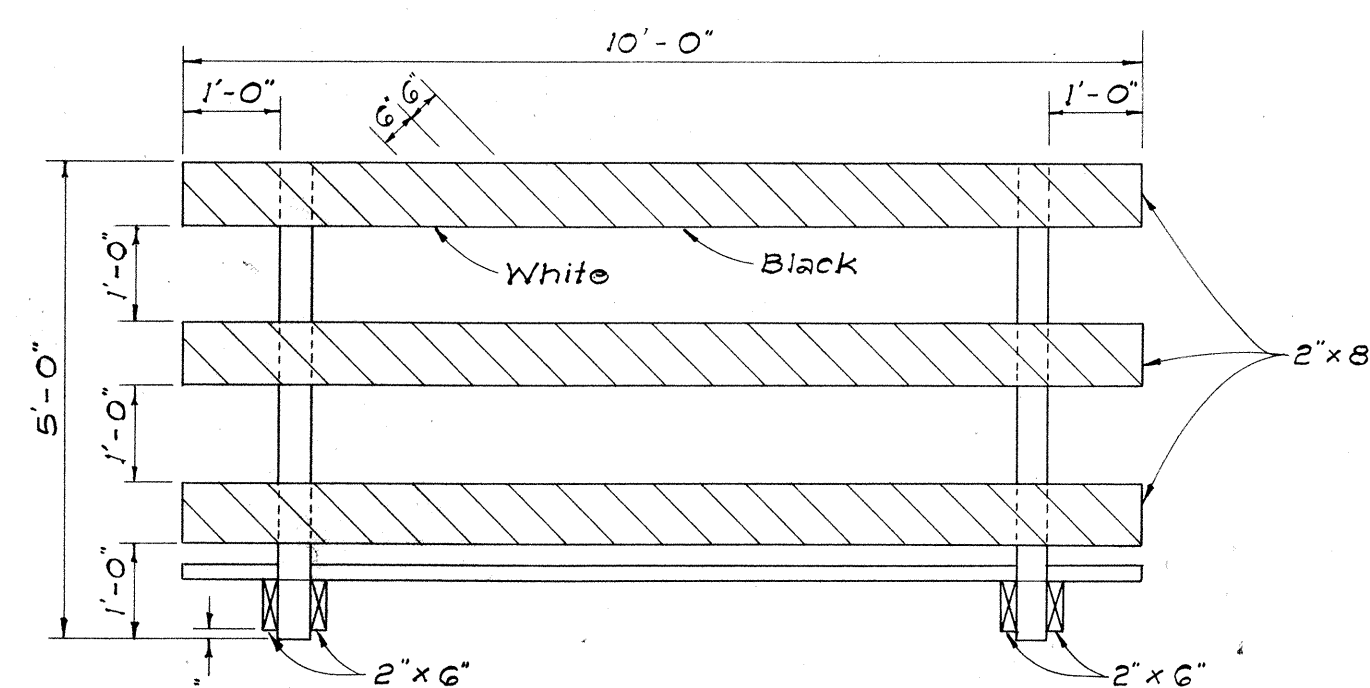
STANDARD DETAILS
METAL GUARD RAIL

Scale: as noted

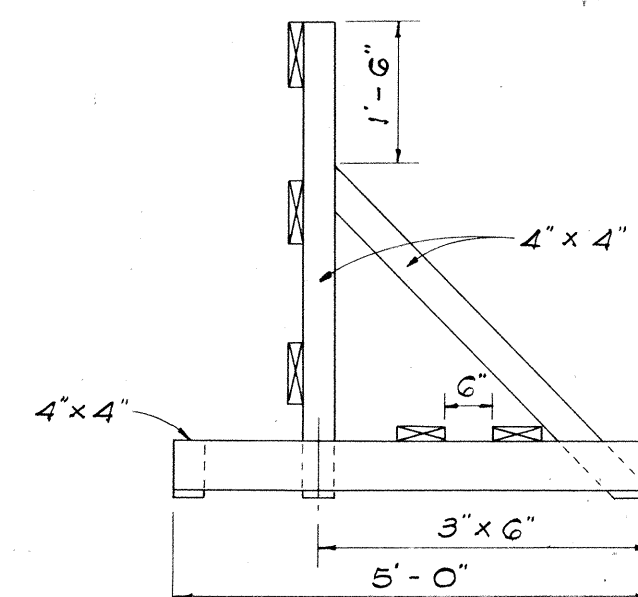
SHEET No. 13 OF 16 SHEETS



PLAN VIEW

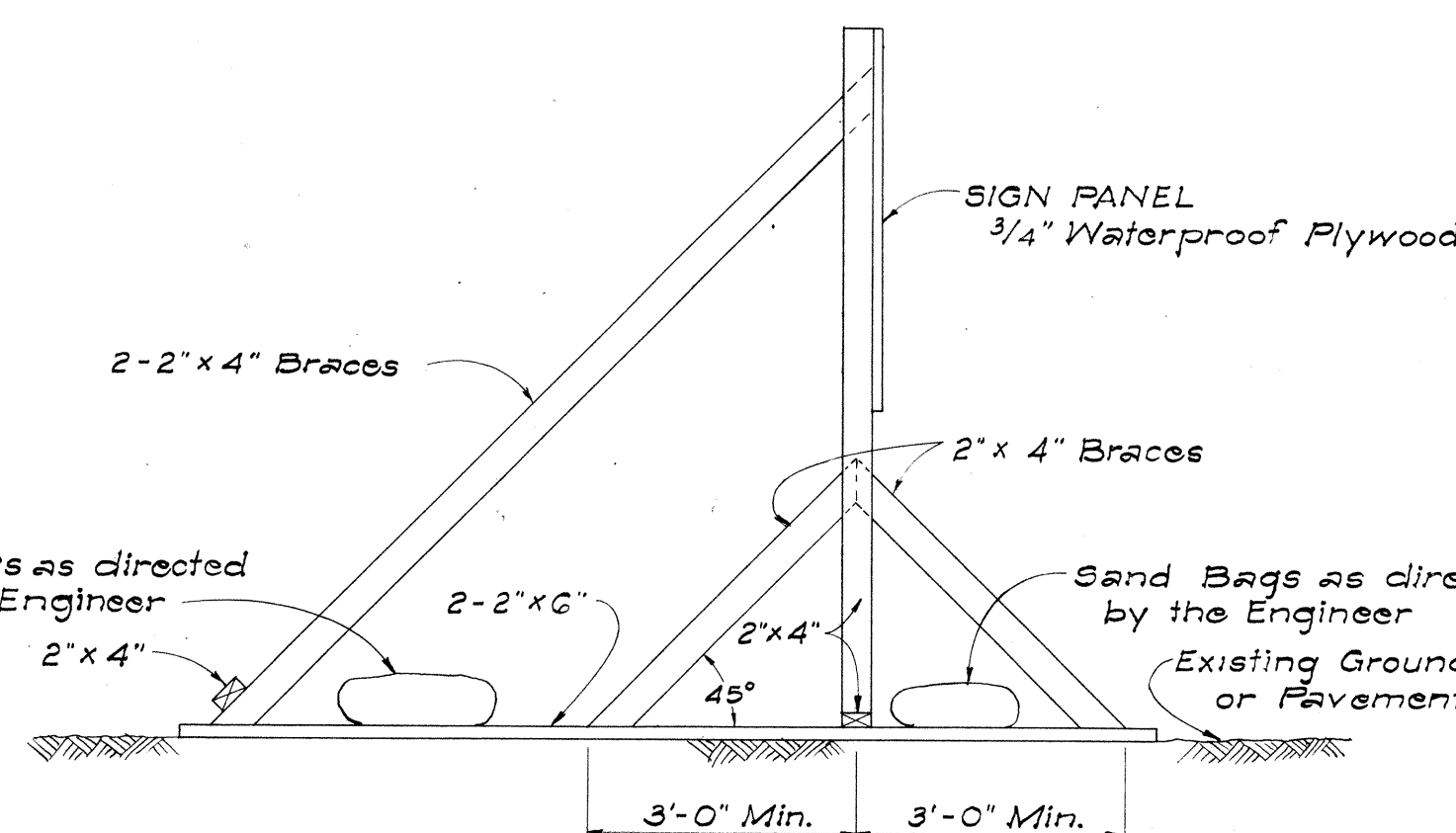


FRONT VIEW

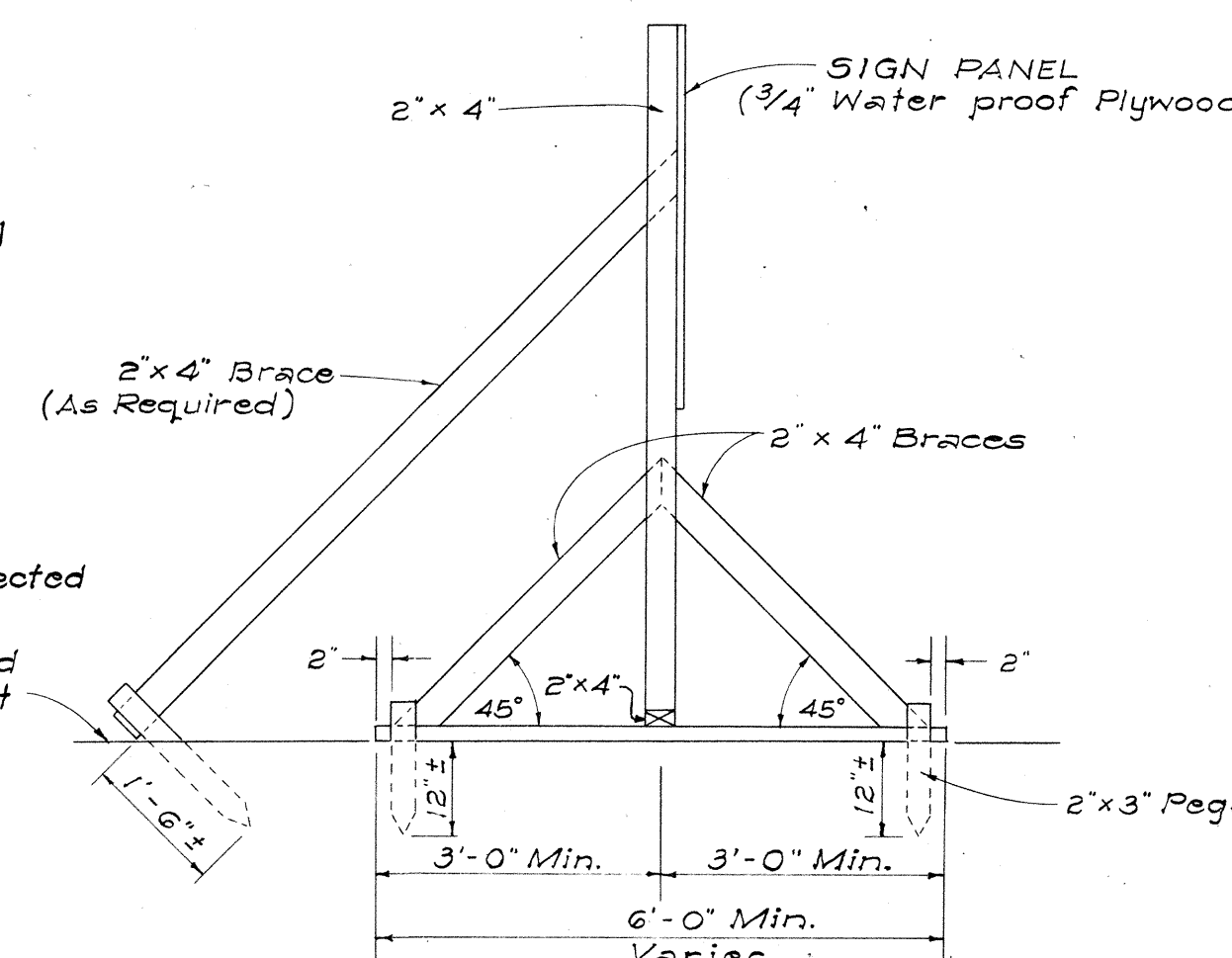


END VIEW

CLASS I BARRICADE



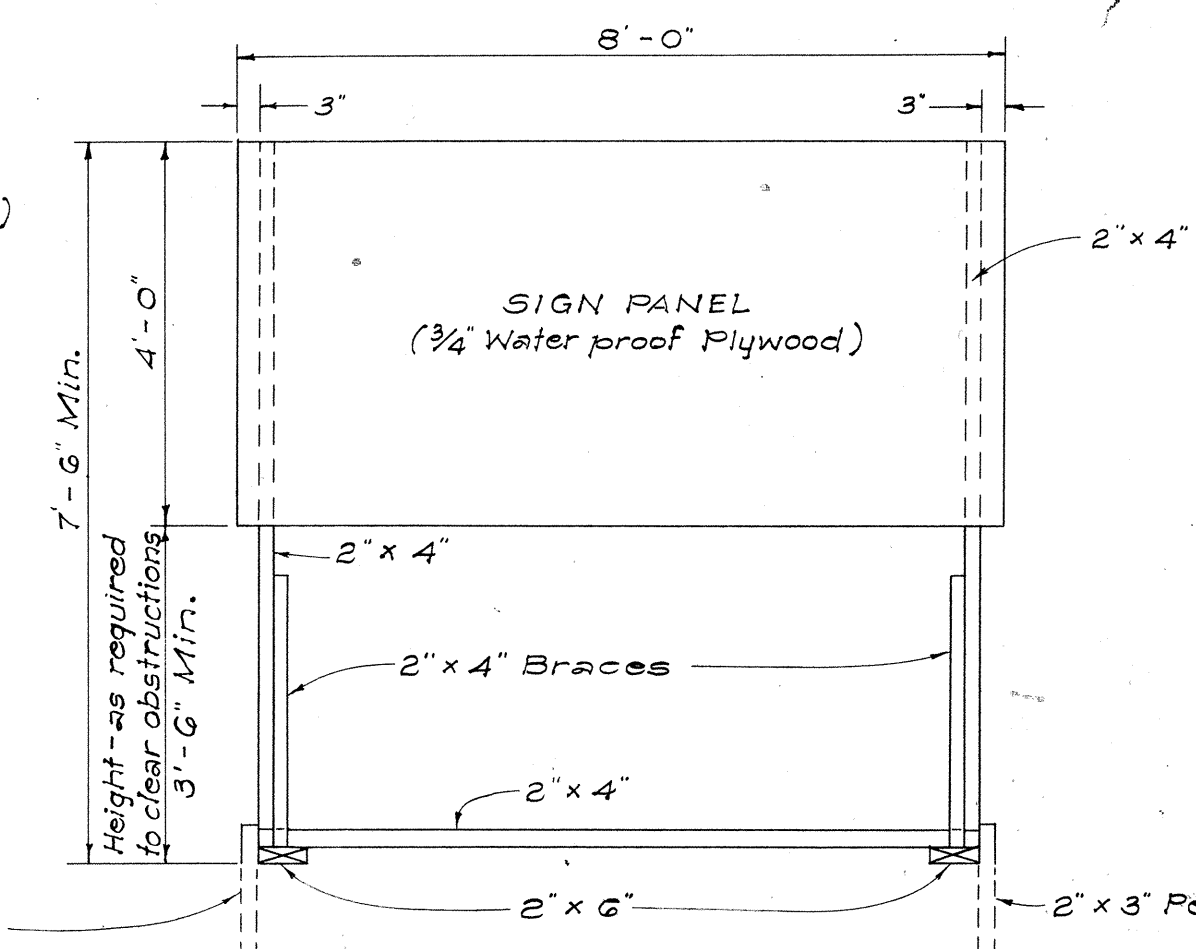
SIDE VIEW
(SIGN FRAME WEIGHTED DOWN)



SIDE VIEW
(SIGN FRAME ANCHORED IN GROUND)

ELEVATIONS

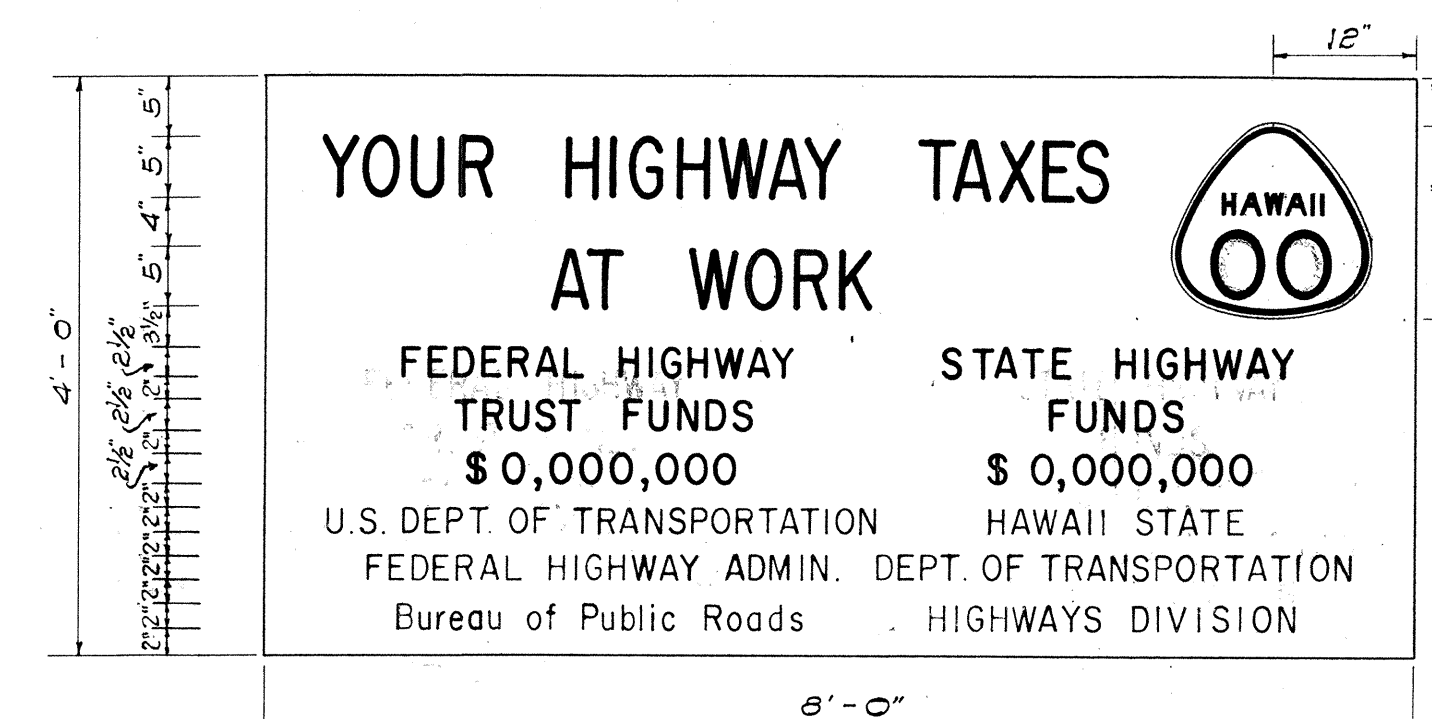
Scale: 1/2" = 1'-0"



FRONT VIEW

NOTES:

- A. CONSTRUCTION IDENTIFICATION SIGNS**
- The sign legend shall be black on white background.
 - The Contractor shall construct, install and maintain the project signs at the locations shown on the plans and as ordered by the Engineer.
 - The signs shall be removed and stockpiled upon completion of the project as ordered by the Engineer and are to become State property.
 - Letters shall be Series "C" of the sizes shown on the plan and shall conform with the "Standard Alphabet for Highway Signs", Bureau of Public Roads, 1952.
 - The Contractor shall fill in the proper numerals in place of ciphers as ordered by the Engineer.

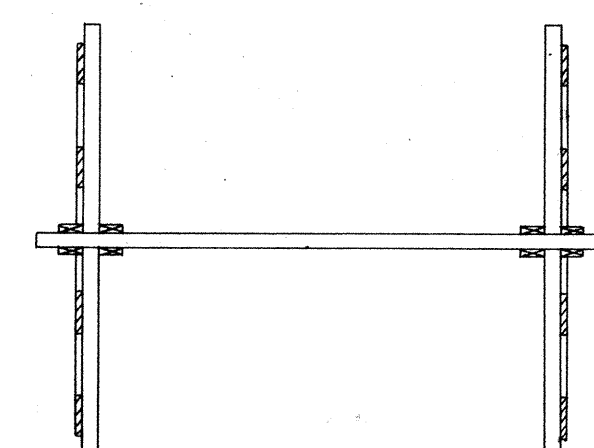


SIGN PANEL

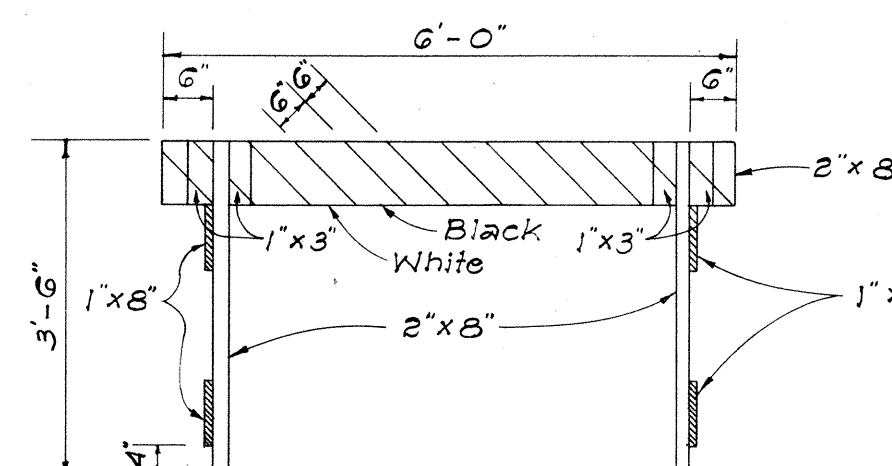
Scale: 3/4" = 1'-0"

PRIMARY AND SECONDARY SYSTEMS CONSTRUCTION IDENTIFICATION SIGN

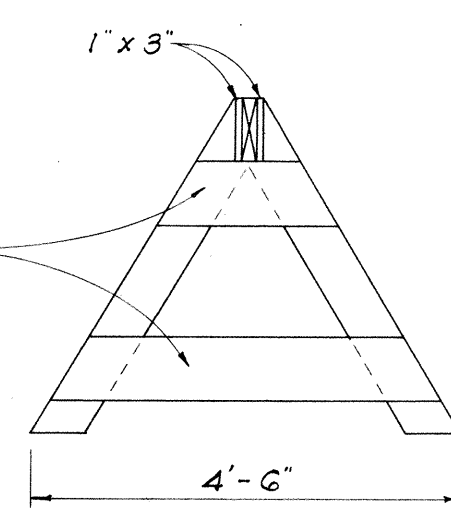
Scale: As Shown



PLAN VIEW



FRONT VIEW



END VIEW

CLASS II BARRICADE

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

REVISED: October 2, 1967

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL DETAILS
CONSTRUCTION IDENTIFICATION SIGN
AND
WOOD BARRICADES

SCALE: As Shown

DATE:

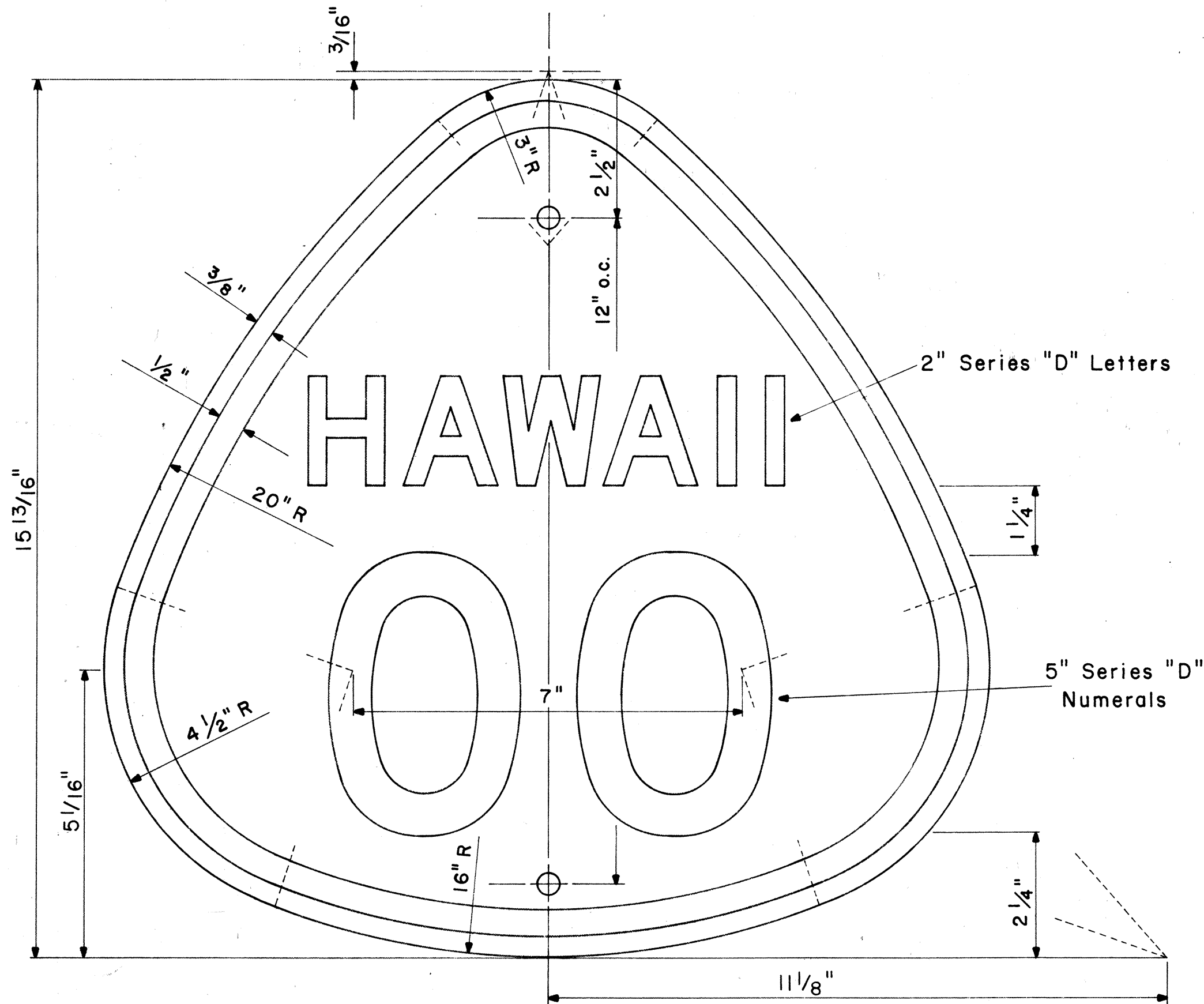
SHEET No. 15 OF 16 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	FO83-(2) UNIT 3	1968	16	16

GENERAL NOTES

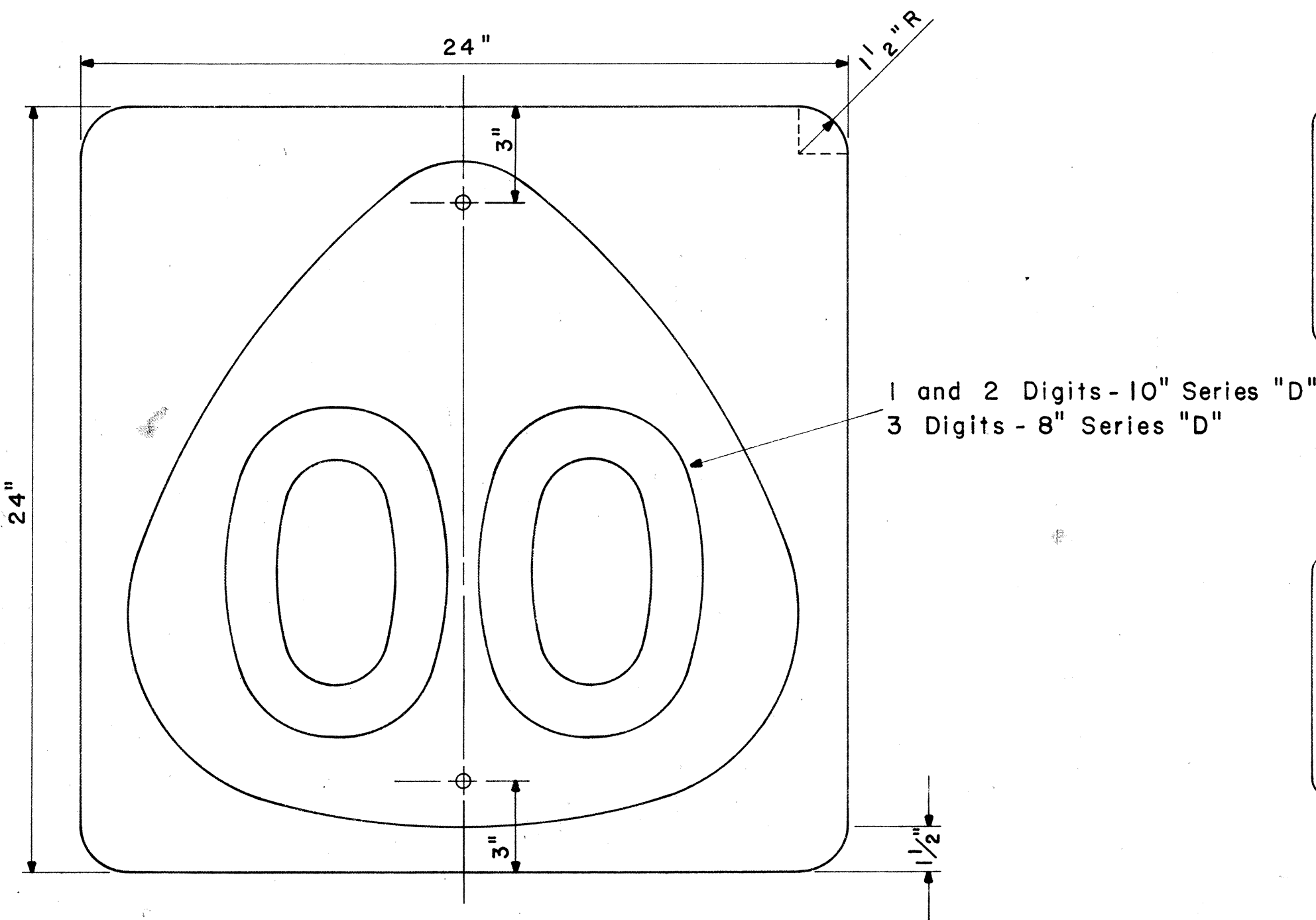
- The shape, color, dimensions, symbols, wording, lettering and reflectorizing of all signs shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways," dated June 1961 and the BPR manual "Standard Highway Signs," dated September 1961, unless otherwise specified.
- All letters and figures shall conform to the manual "Standard Alphabets for Highway Signs," Dept. of Commerce, Bureau of Public Roads, 1952.
- All markers shall be reflectorized unless otherwise specified.
- All markers shall have $\frac{3}{8}$ " bolt holes drilled at appropriate locations unless otherwise specified.
- All markers shall have a black legend on a white background unless otherwise specified.
- Sign message of Cardinal Direction Marker (M6-1) shall be denoted by the following suffixes:

M6-1-N : NORTH
M6-1-E : EAST
M6-1-S : SOUTH
M6-1-W : WEST
- Auxiliary markers denoted with the suffix "1" (M4-1-1) shall have a white legend on a blue background.
- Cardinal Direction Marker (M6-1) with suffix 1(3) shall have a white legend on a blue background and shall be 30"x 15" in size.
- For M1-3 and M1-4 signs, number in () indicates route number and shall be as shown on the plan.



STATE ROUTE MARKER
M1-3(00)

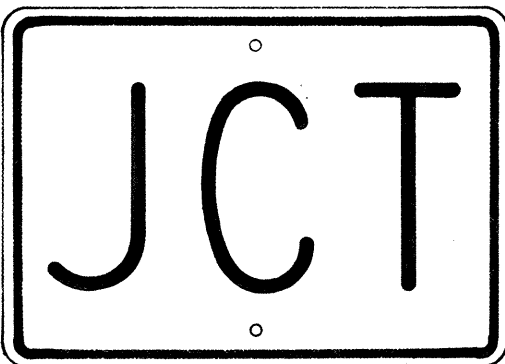
Scale: $\frac{1}{2}$ " = 1"



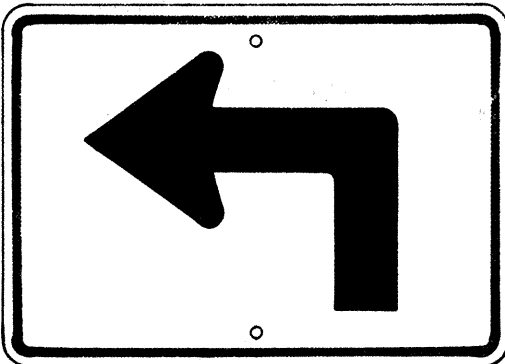
STATE ROUTE MARKER
M1-4(00)

Scale: $\frac{1}{4}$ " = 1"

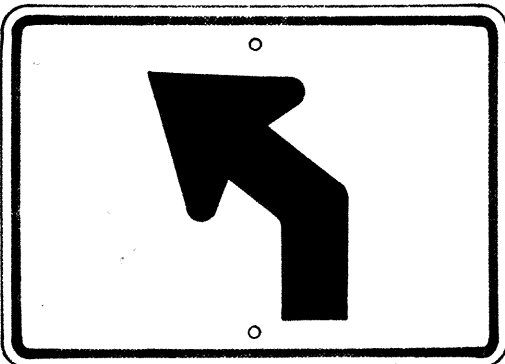
NOTE:
Multiply all dimensions of State Route Marker M1-3 by 1.3 for the dimensions of the shield for M1-4.



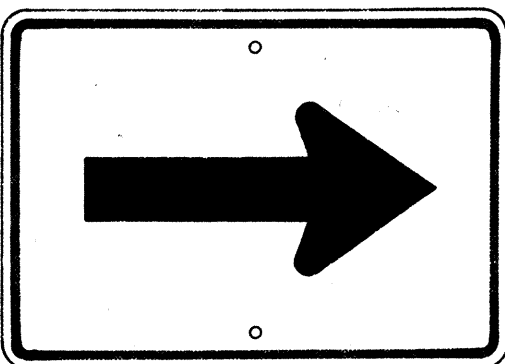
M2-1
21" x 15"



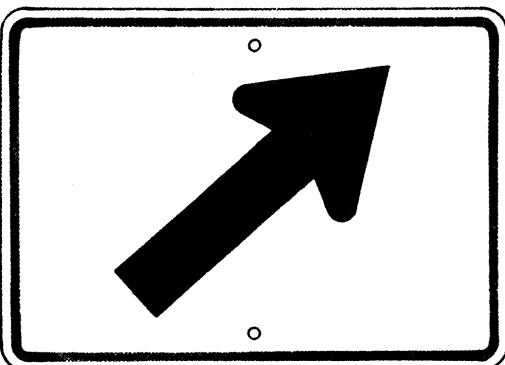
M3-1-L
* M3-1-R ↗
21" x 15"



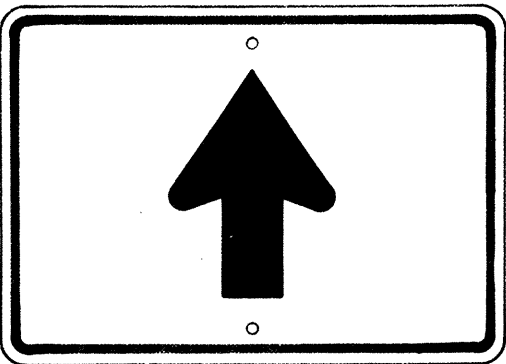
M3-2-L
* M3-2-R ↗
21" x 15"



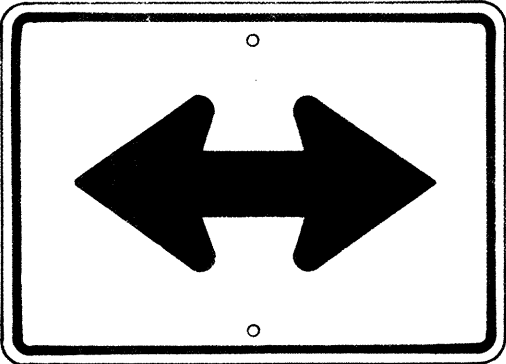
M4-1
21" x 15"



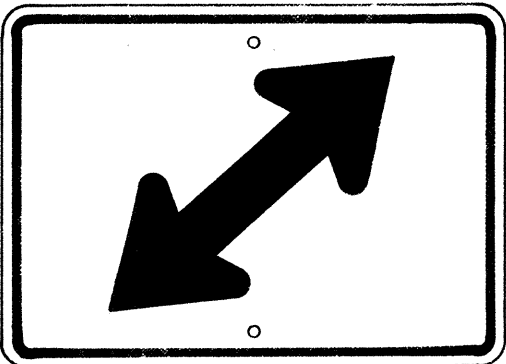
M4-2-R
* M4-2-L ↘
21" x 15"



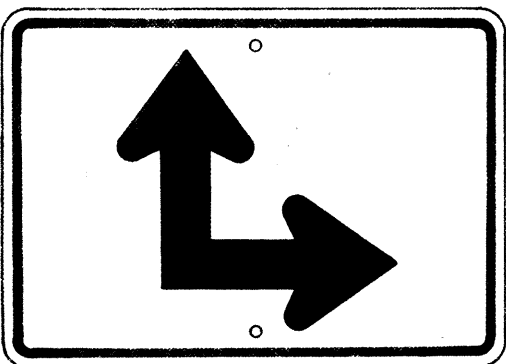
M4-3
21" x 15"



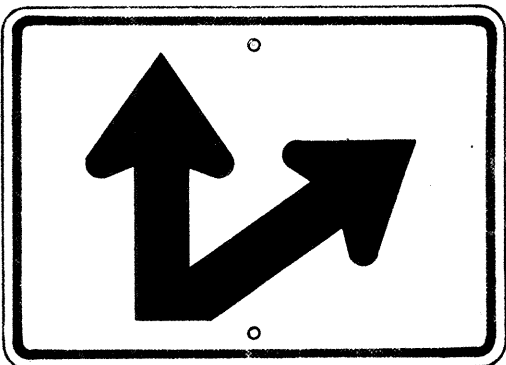
M4-4
21" x 15"



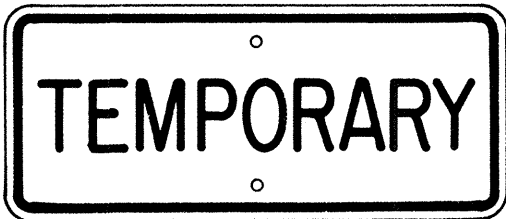
M4-5-R
* M4-5-L ↘
21" x 15"



M4-6-R
* M4-6-L ↘
21" x 15"



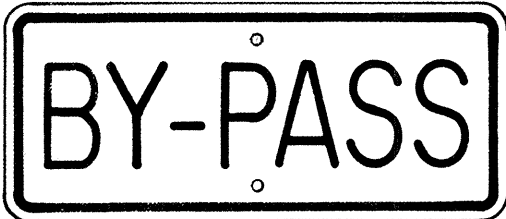
M4-7-R
* M4-7-L ↘
21" x 15"



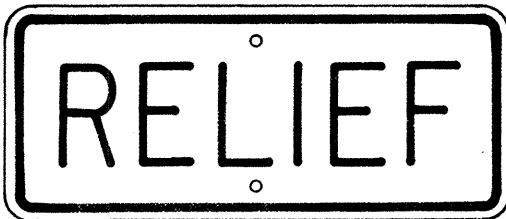
M5-1
21" x 9"



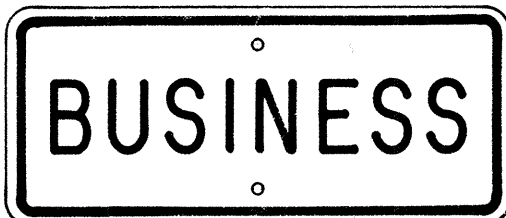
M5-2
21" x 9"



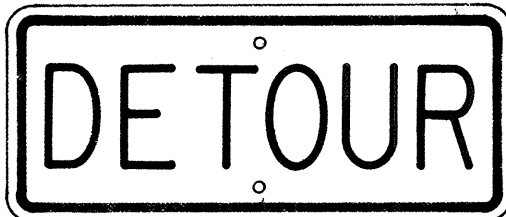
M5-3
21" x 9"



M5-4
21" x 9"



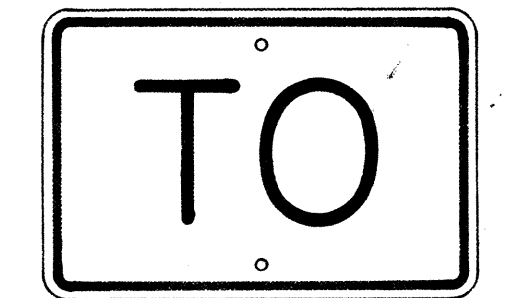
M5-5
21" x 9"



M5-6
21" x 9"



M6-1-N
21" x 9"
(See Note 6)



M7-1
18" x 12"

AUXILIARY MARKERS

Scale: $\frac{1}{8}$ " = 1"

* NOTE:
Signs shall be similar but opposite in direction.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD DETAILS
STATE ROUTE MARKERS
AND
AUXILIARY MARKERS
Scale: As Noted
SHEET NO. 16 OF 16 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
DRAWN BY	DESIGNED BY	
NOTE BOOK	QUANTITIES BY	
CHECKED BY		