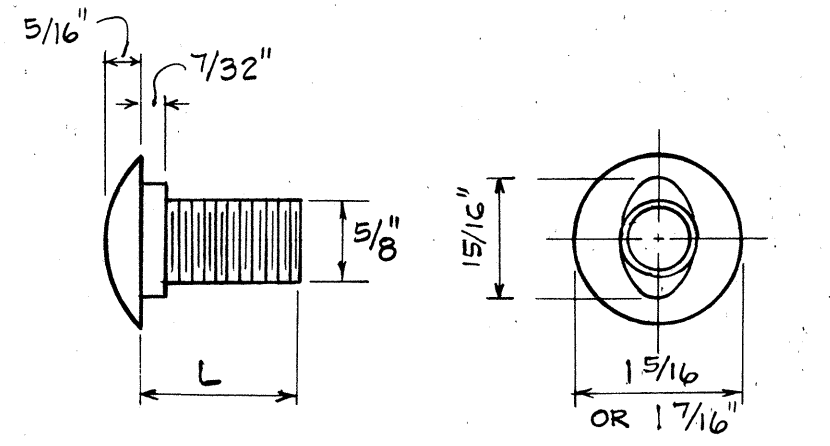
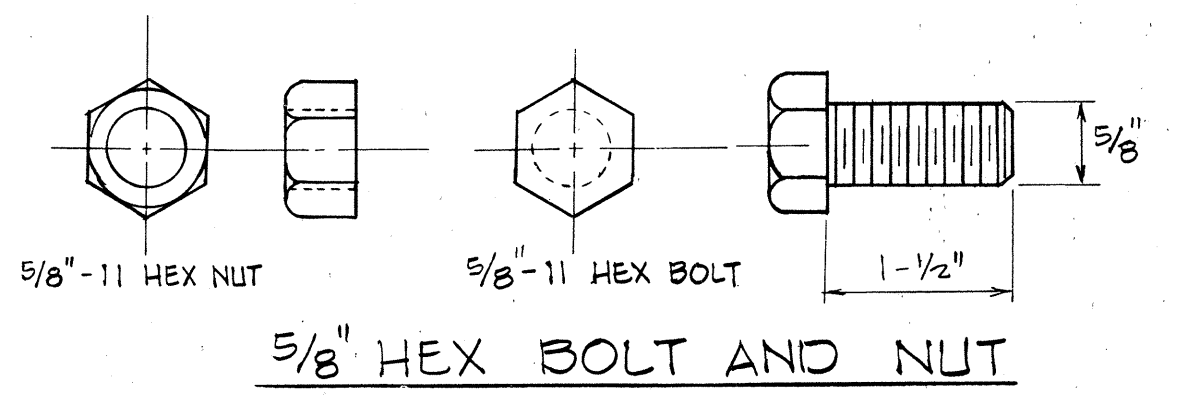
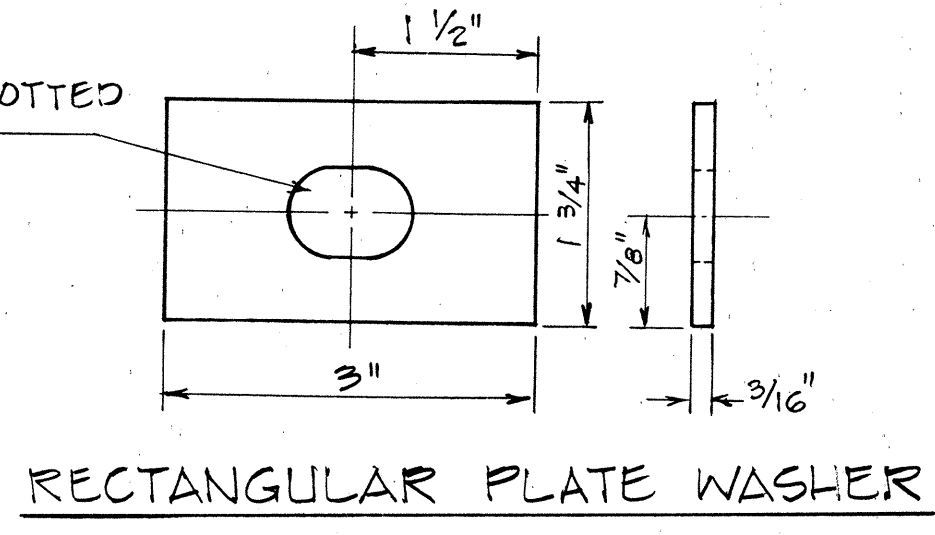
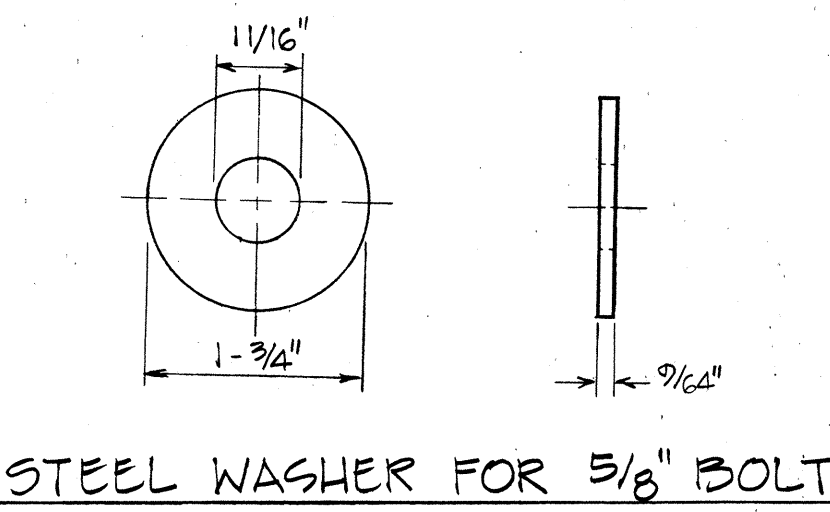
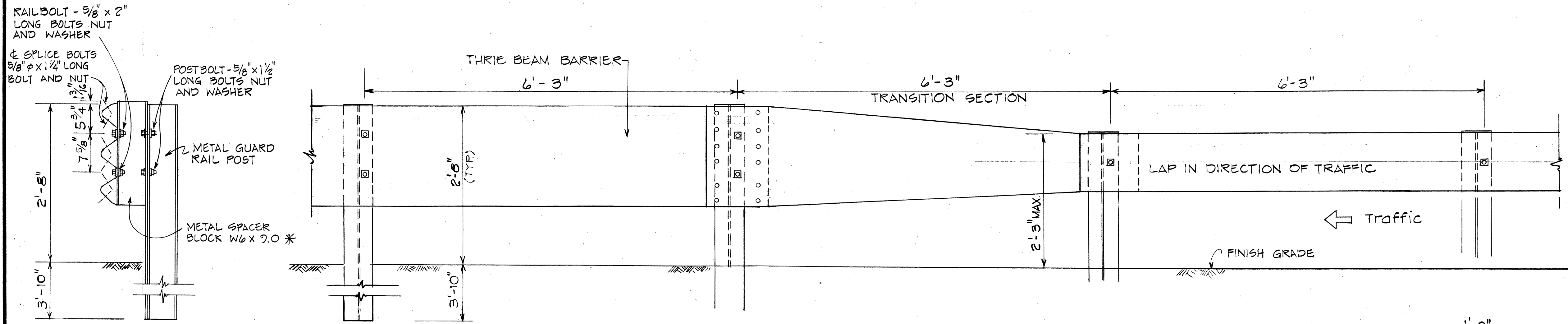
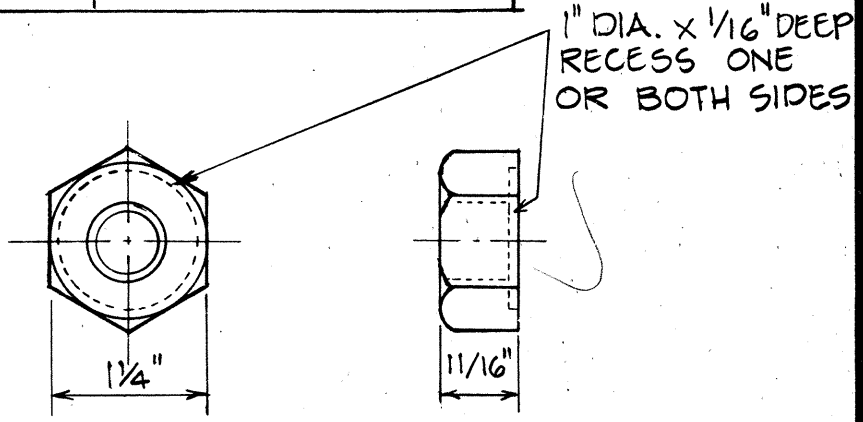


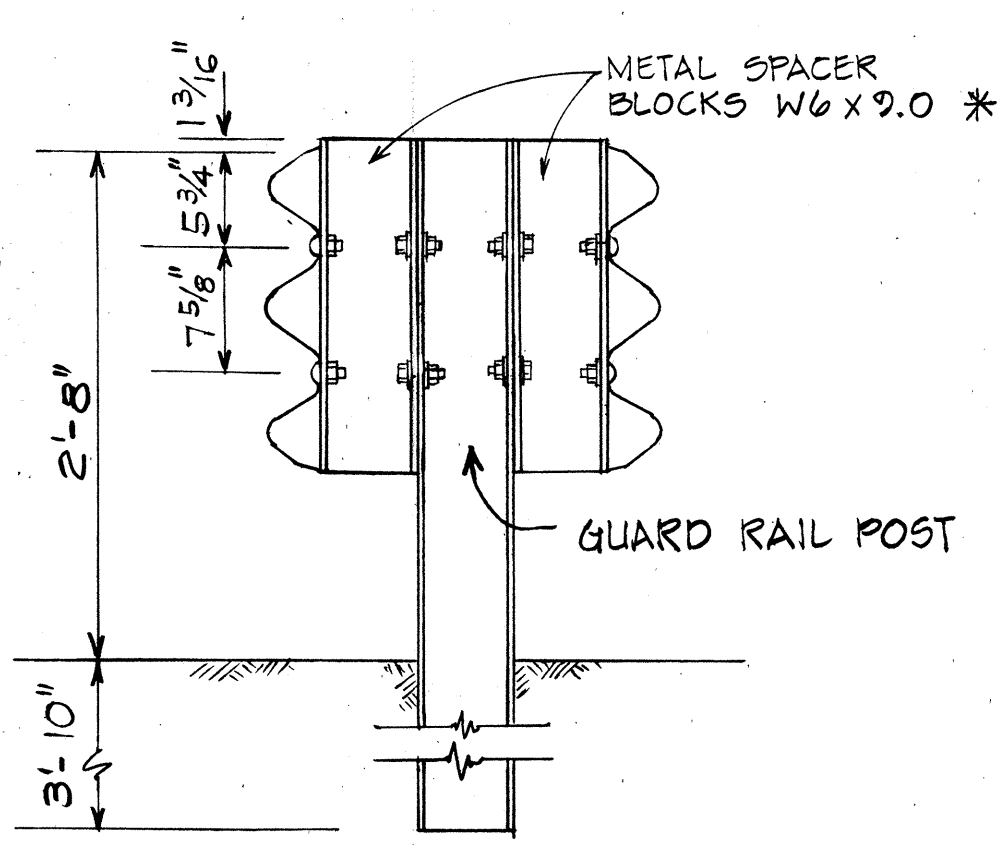
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	74-004-01-82M 74-004-02-82	1982	15	30



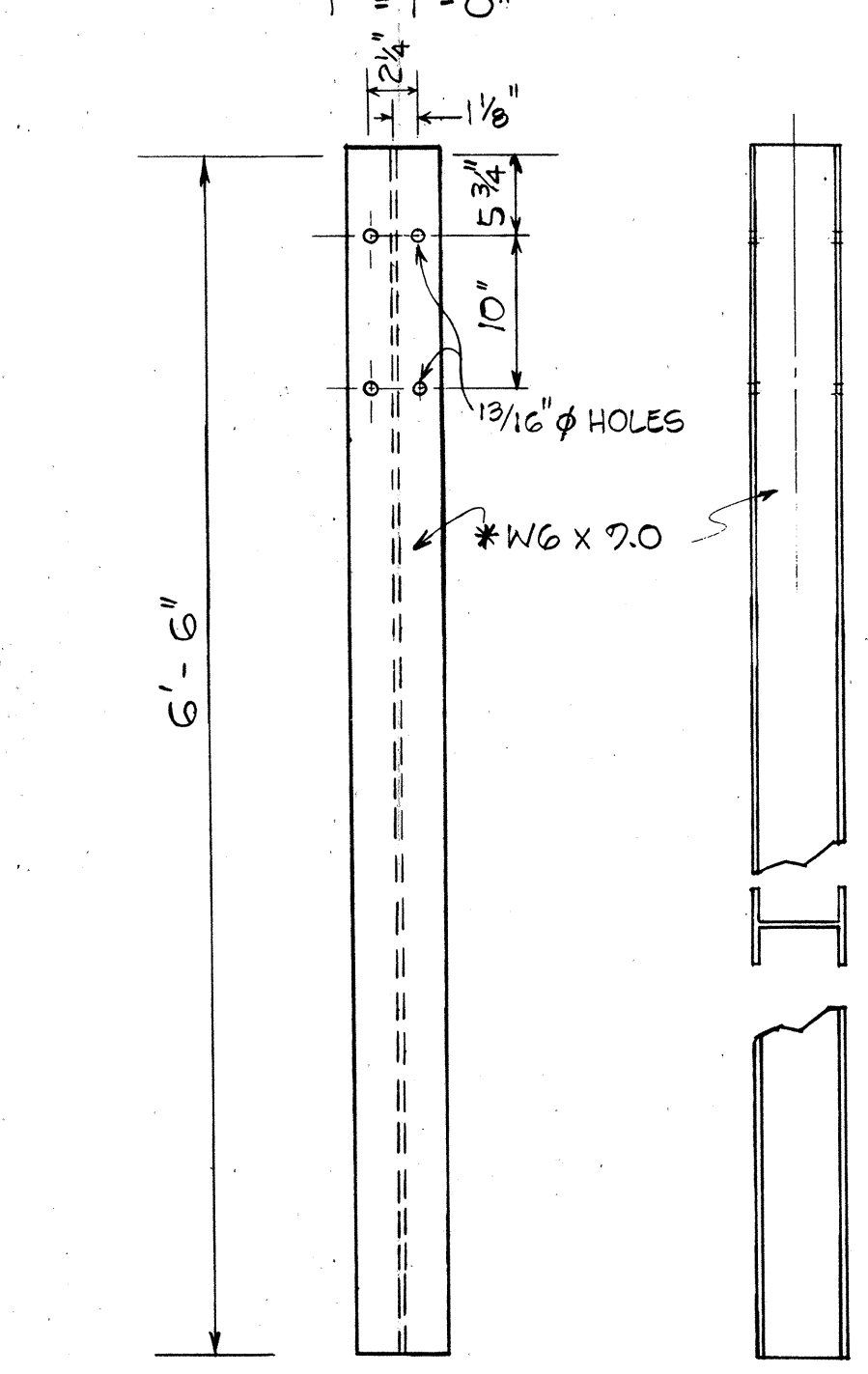
L	THREAD LENGTH
1 1/4"	FULL THREAD
2"	1 1/2" MIN THREAD LENGTH



SINGLE METAL GUARD RAIL ON METAL POST W/METAL SPACER BLK.

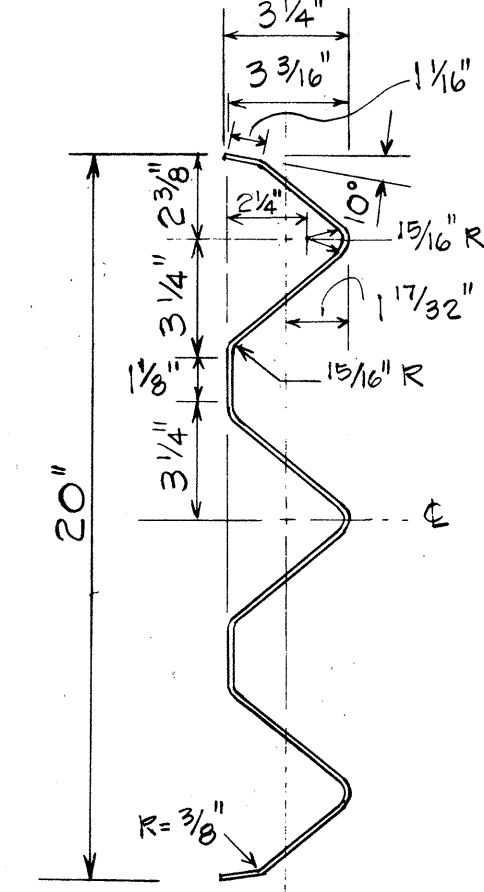


DOUBLE METAL GUARD RAIL ON METAL POST WITH METAL SPACER BLOCK

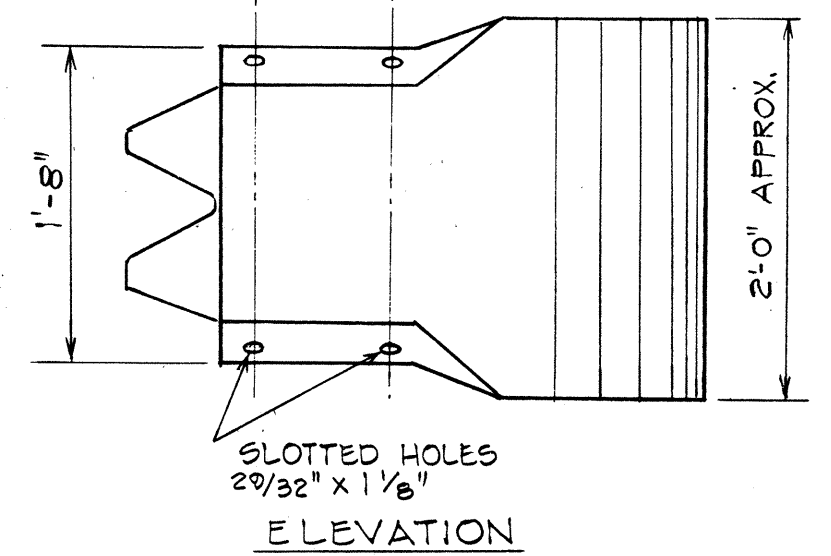
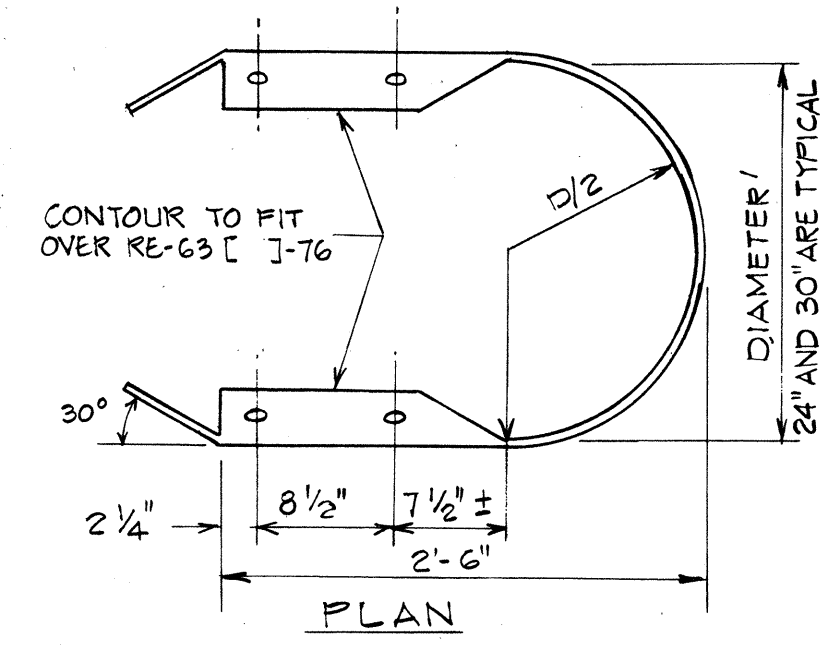
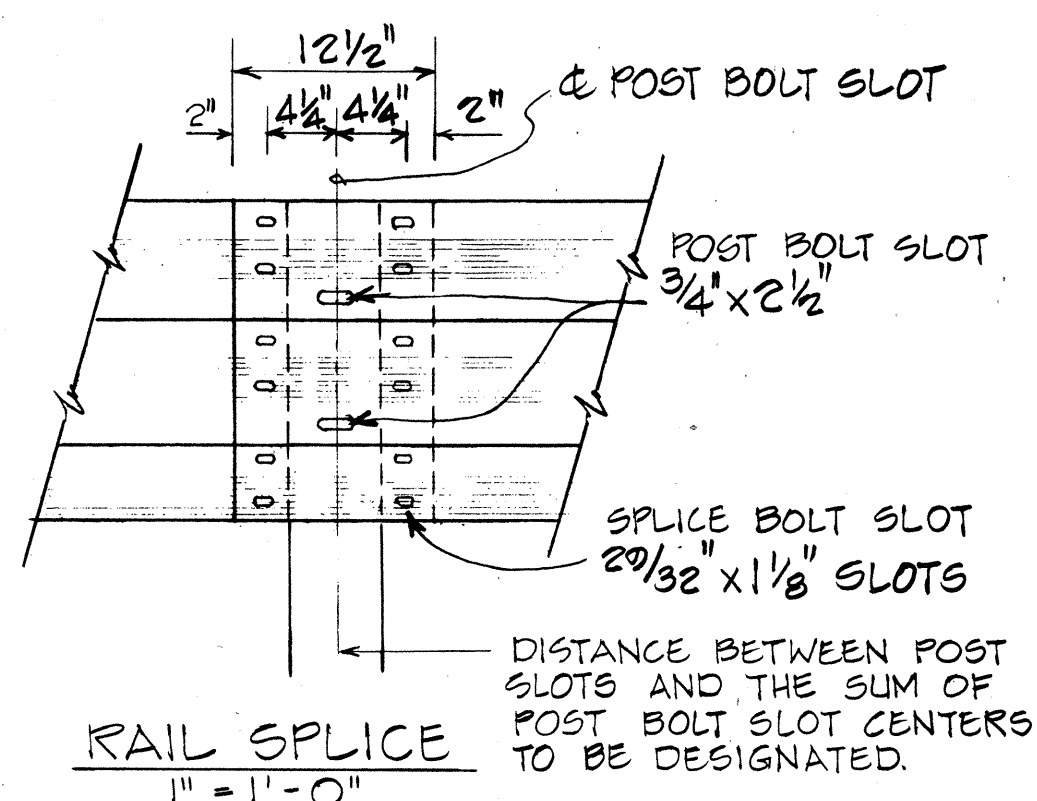


POST DETAILS
1" = 1'-0"

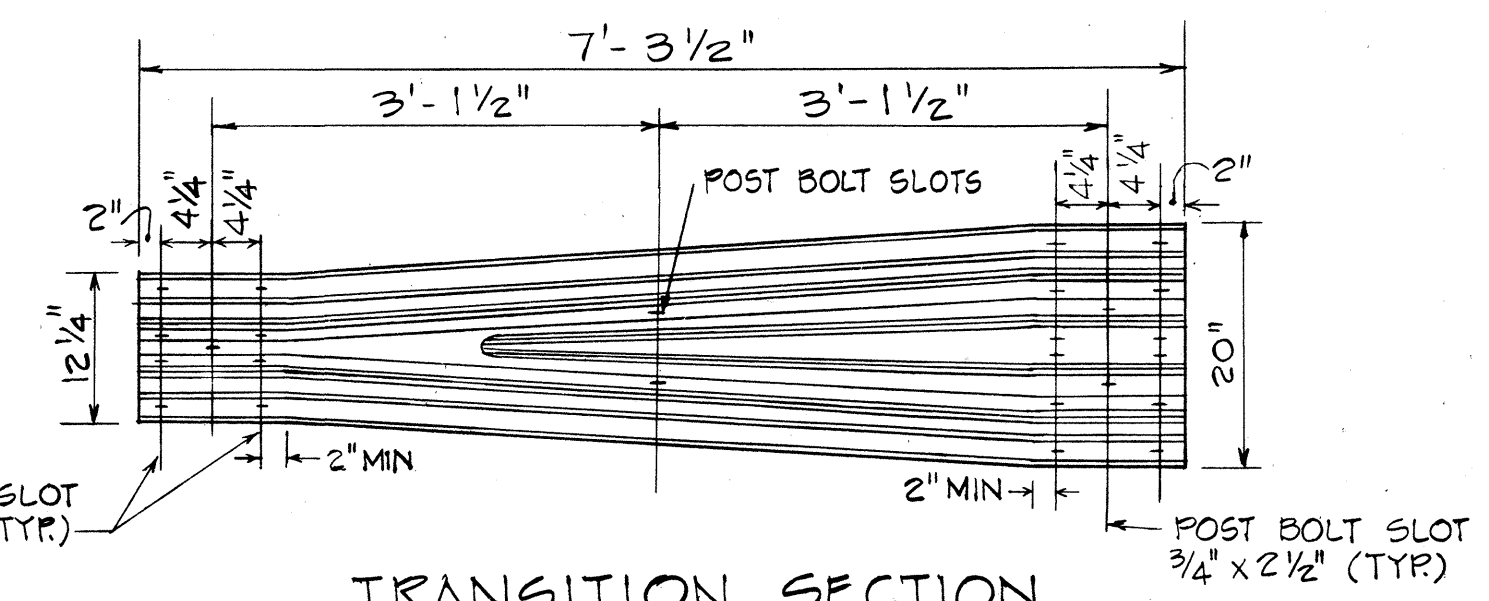
SECTION THRU RAIL ELEMENT
Not to Scale



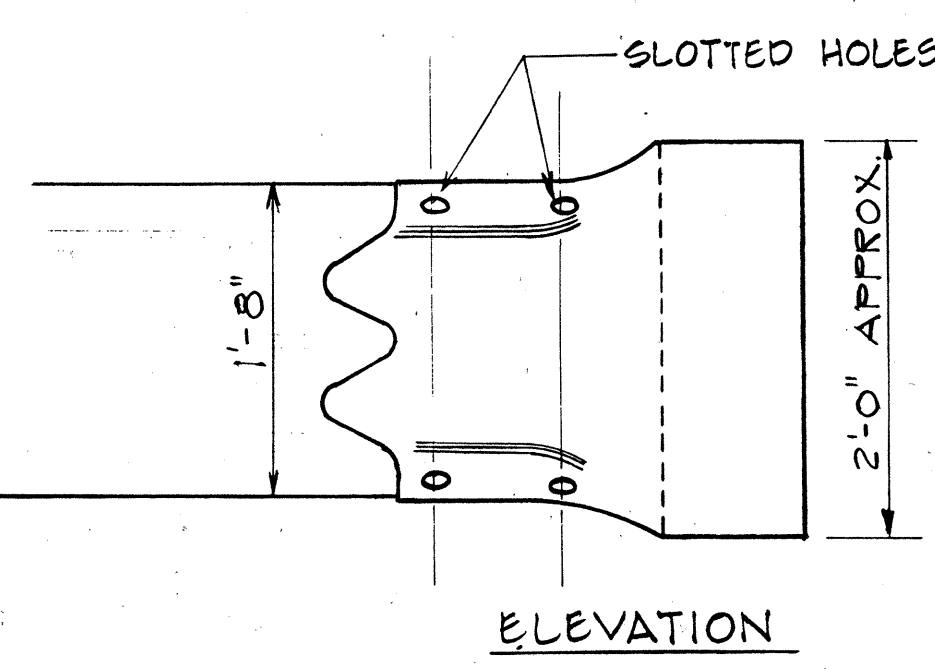
TRANSITION SECTION
Scale: 1" = 1'-0"



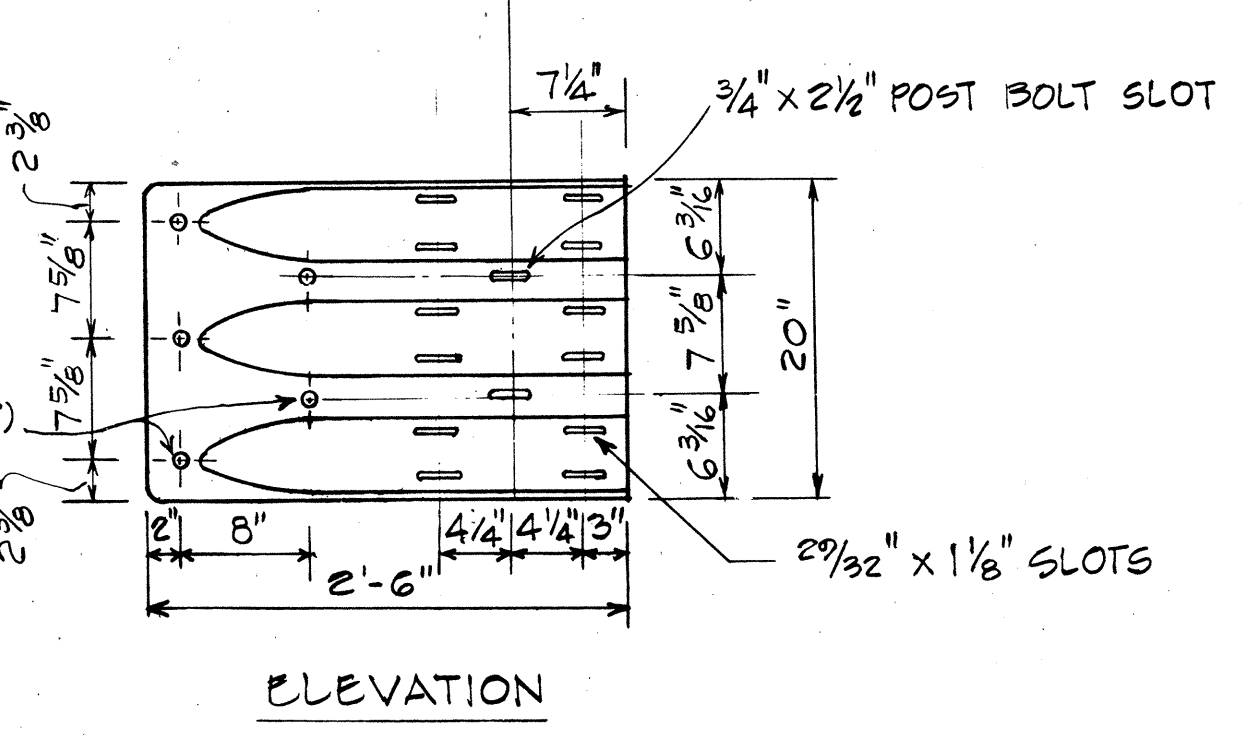
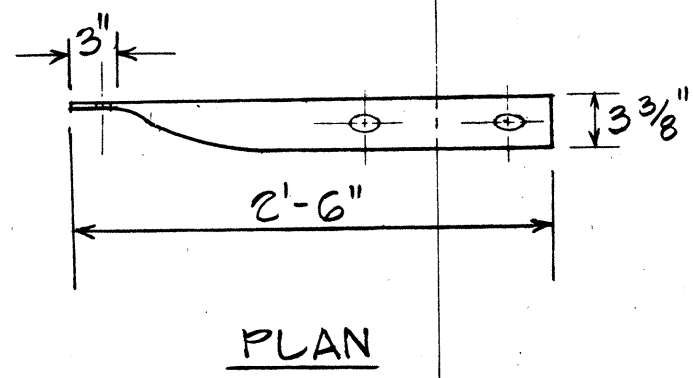
BACK UP PLATE



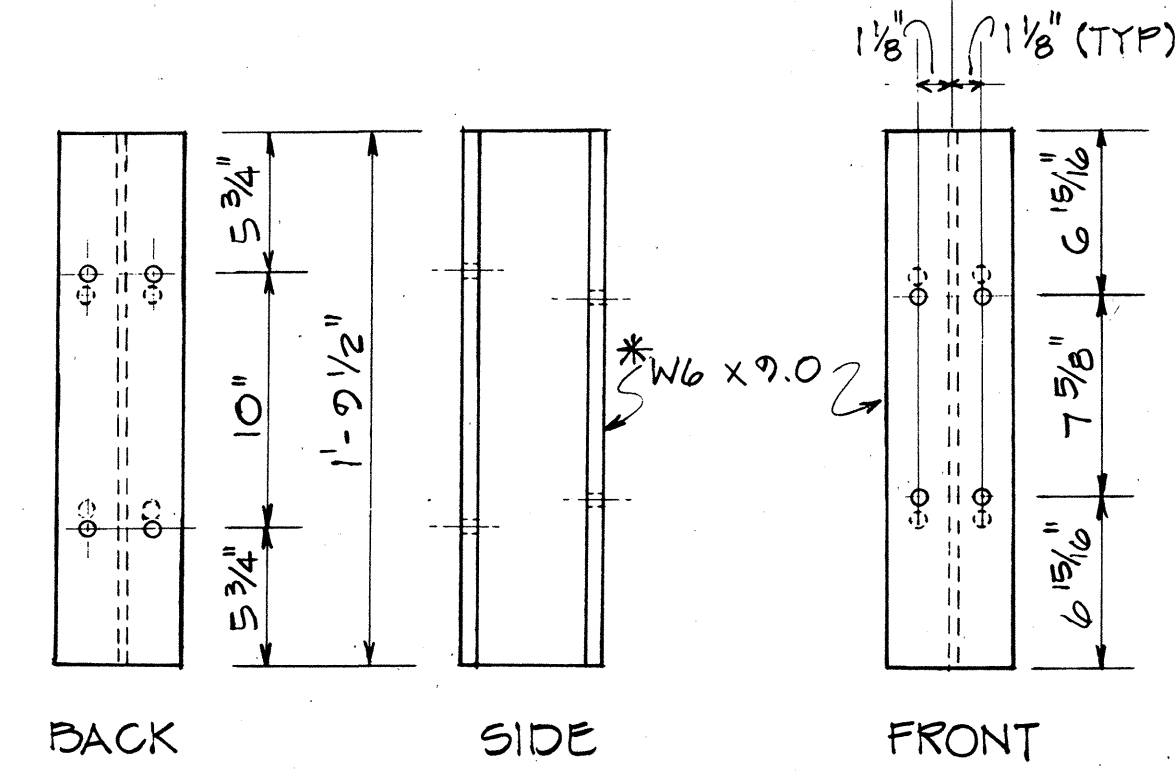
TRANSITION SECTION



END SECTION (ROUNDED)
1" = 1'-0"



TERMINAL CONNECTOR
1" = 1'-0"



BACK SIDE FRONT
SPACER BLOCK

* REPLACED W6 x 8.5, WHICH IS ACCEPTABLE AS AN ALTERNATE.

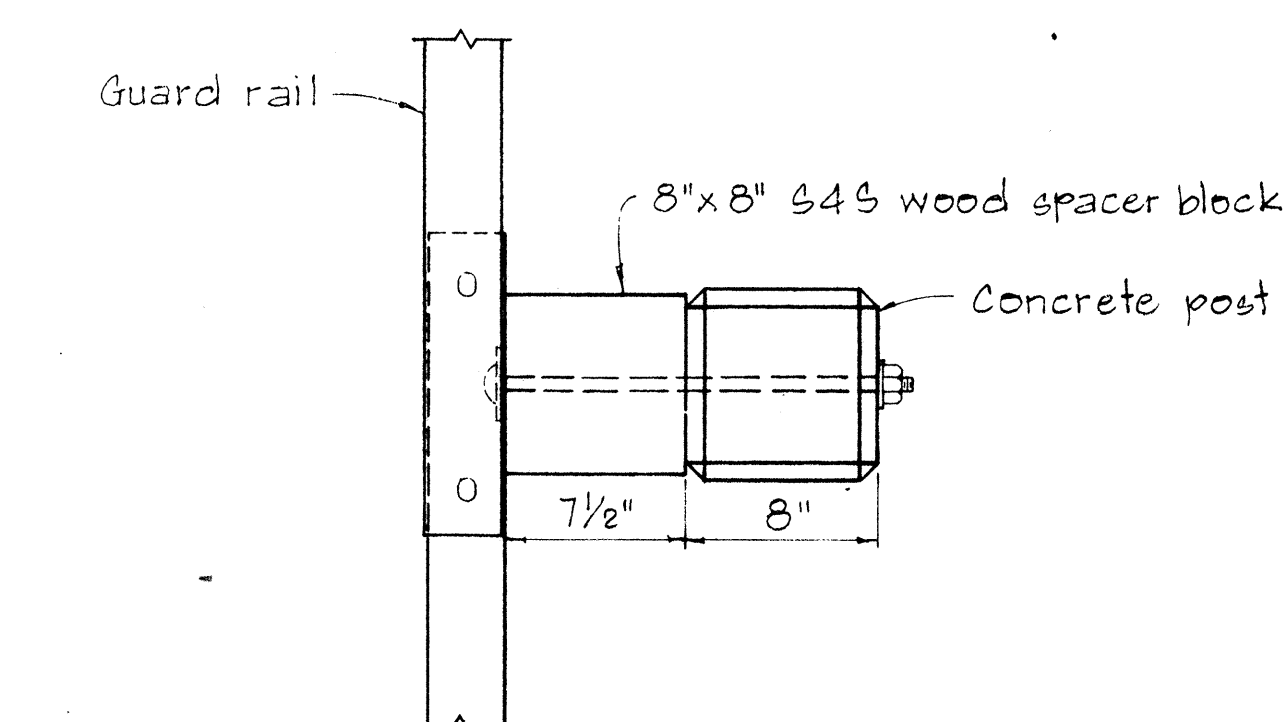
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

TYPICAL DETAIL
GUARD RAIL TYPE 3
THREE BEAM

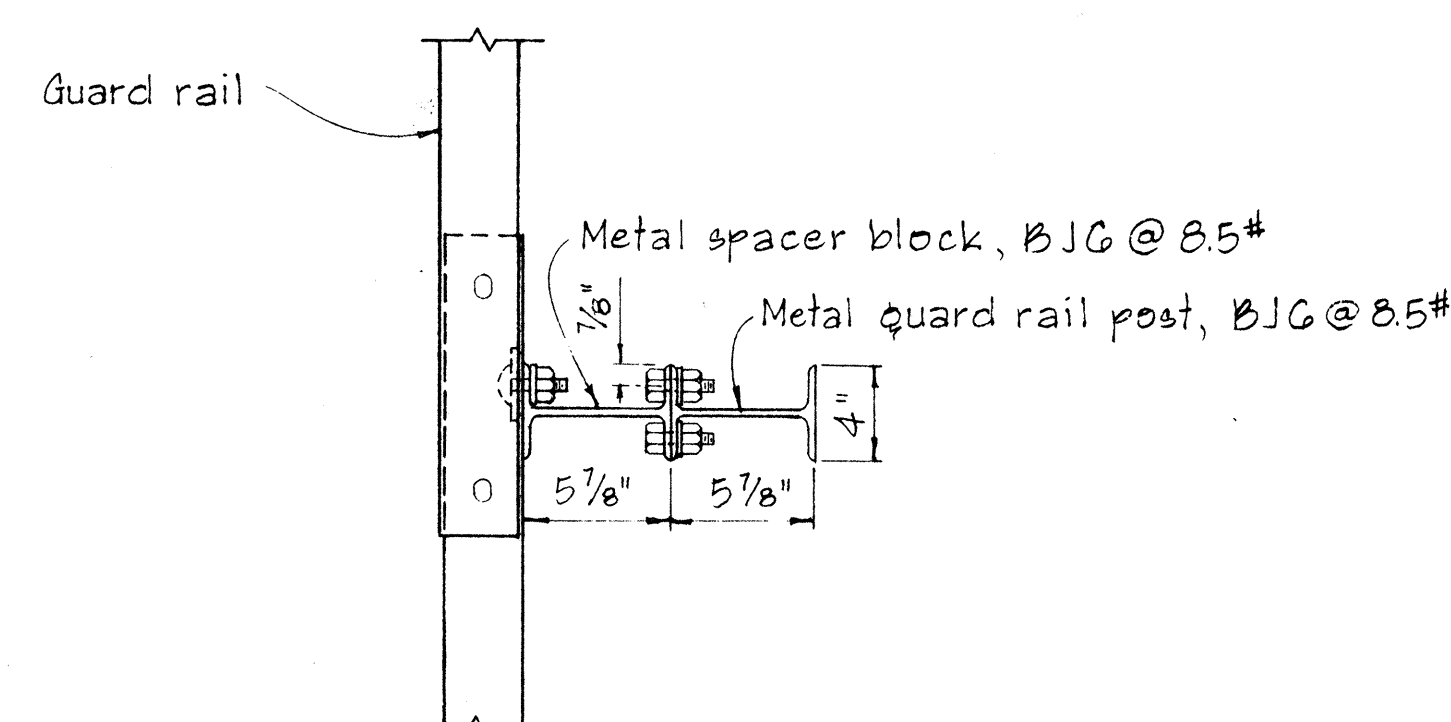
Scale: As Shown Date: April, 1980
SHEET No. 1 OF 6 SHEETS

ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

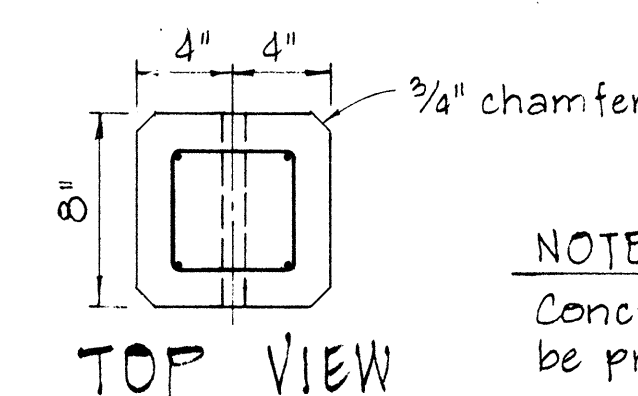
FED. ROAD DIST. NO.	STATE	D. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7400A-01-82M 7400A-02-82	1982	16	30



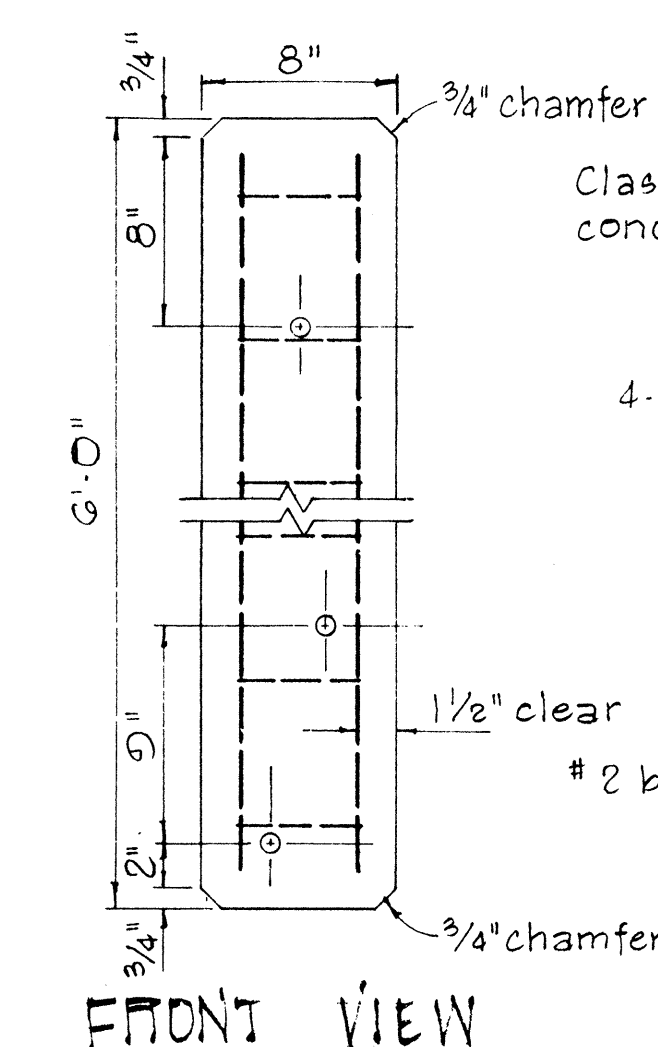
PLAN



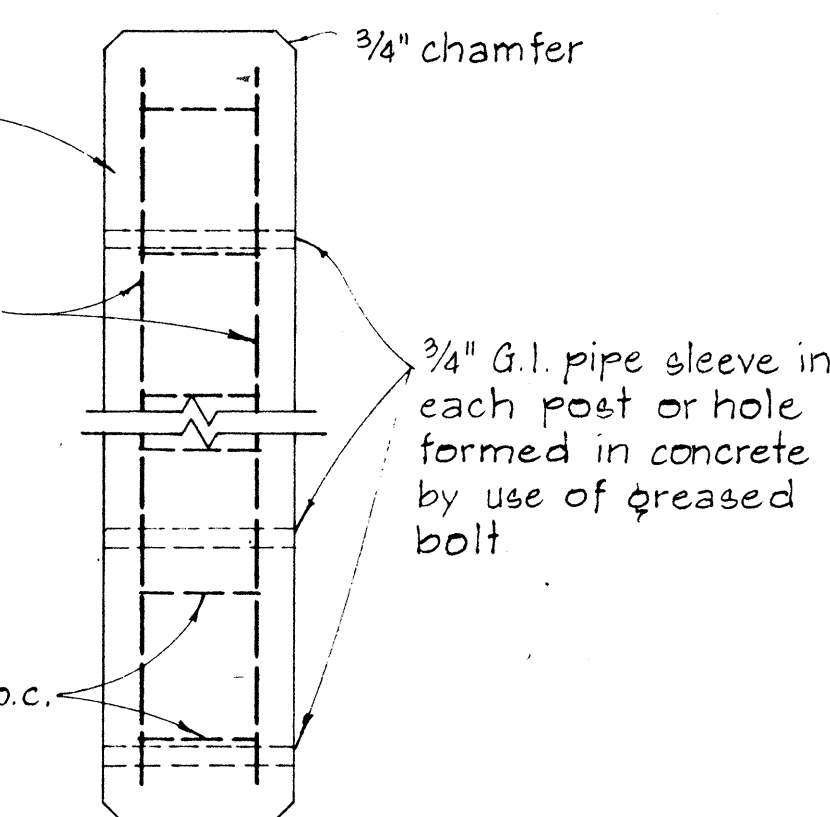
PLAN



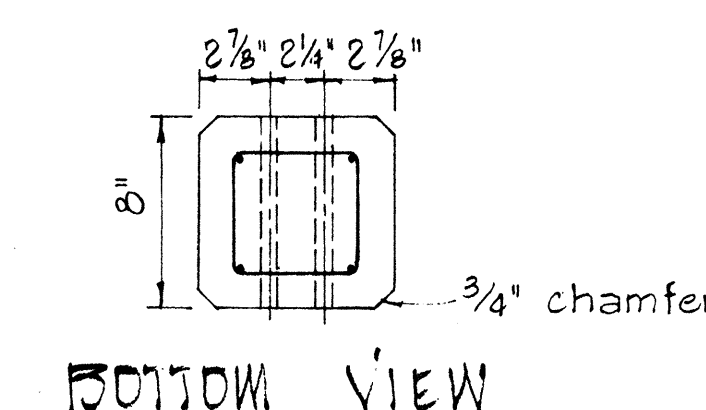
NOTE:
Concrete post shall be precast



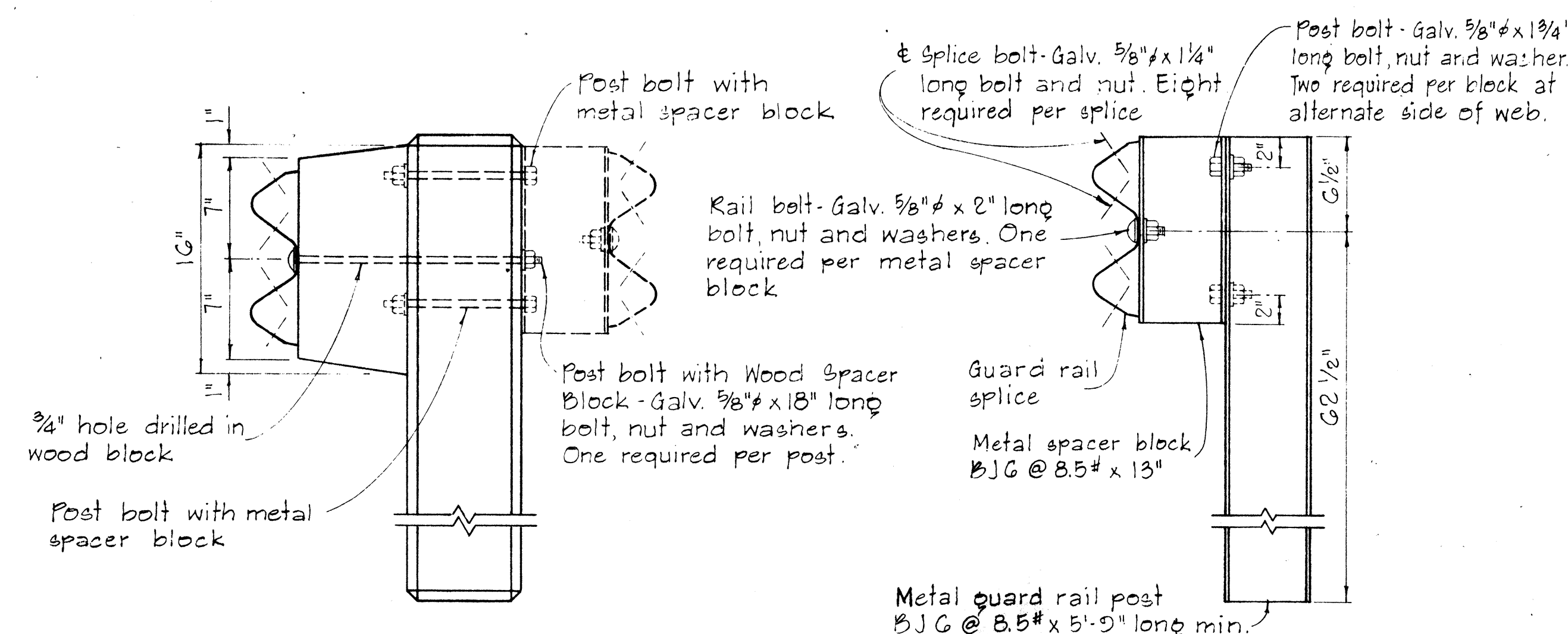
FRONT VIEW



SIDE VIEW

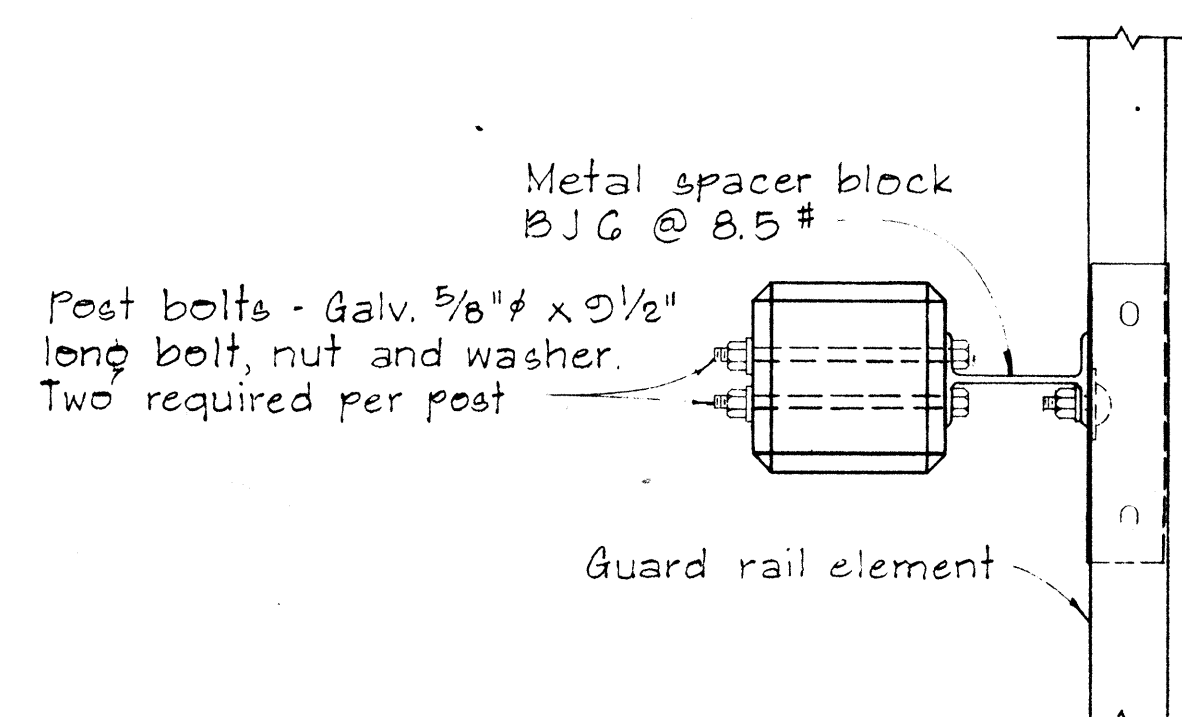


BOTTOM VIEW



SINGLE METAL GUARD RAIL ON METAL POST
WITH METAL SPACER BLOCK

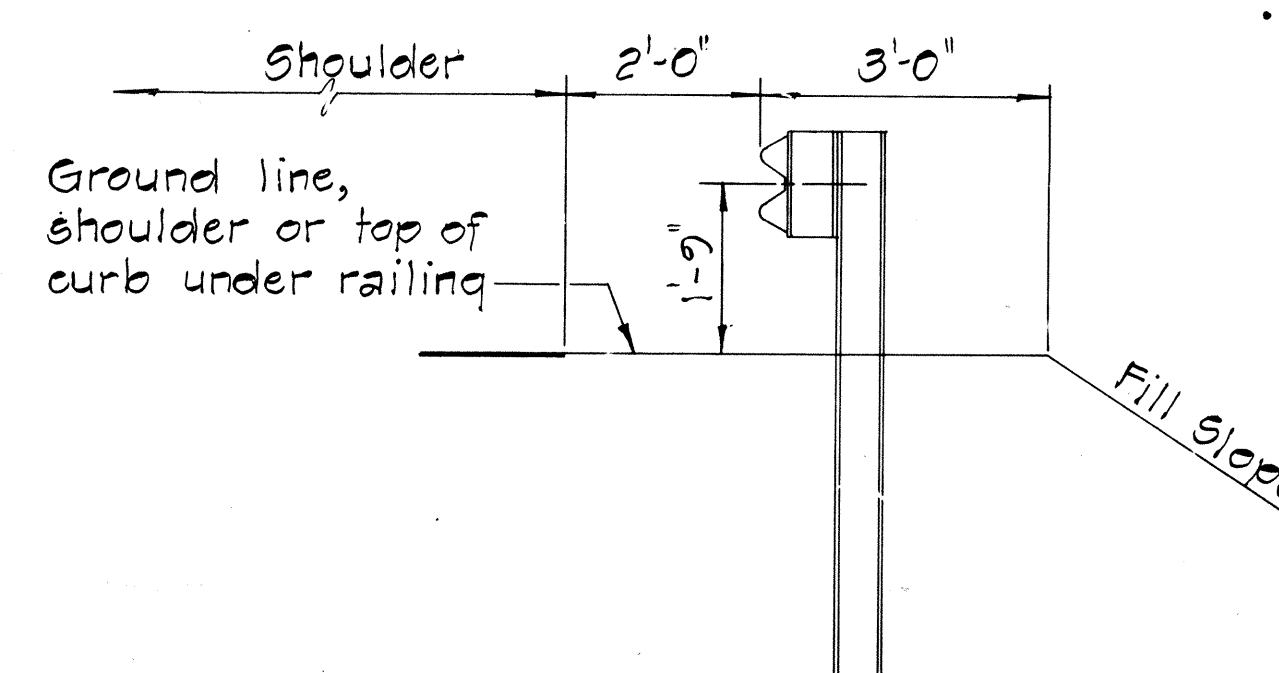
SCALE: $1\frac{1}{2}'' = 1'-0''$



PLAN

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

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



AT SHOULDER SECTION

TYPICAL METAL GUARD RAIL DETAIL

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

APPROVAL RECOMMENDED:

APPROVAL RECOMMENDED
Euchi Tanaka
TRAFFIC ENGINEER

12/29/69
DATE

APPROVED:

APPROVED: Herbert S. Zelenka
ASSISTANT CHIEF, ENGINEERING

12-30-69
DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

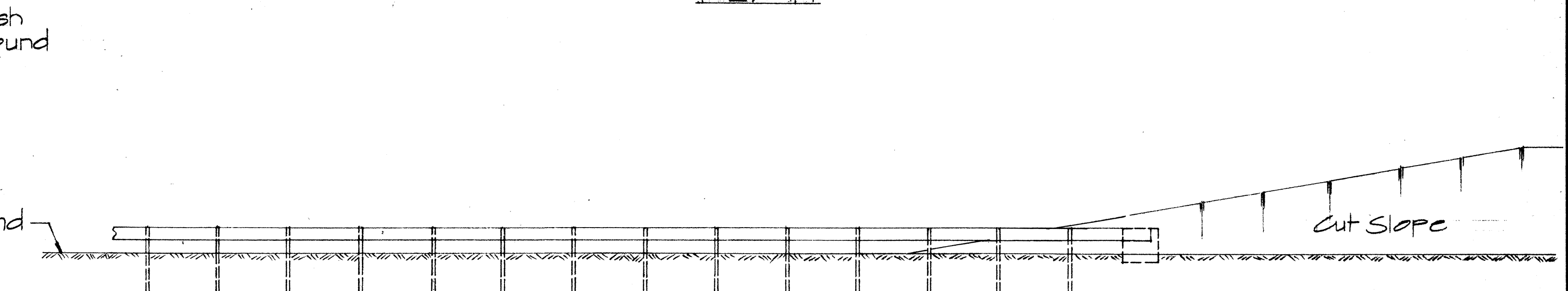
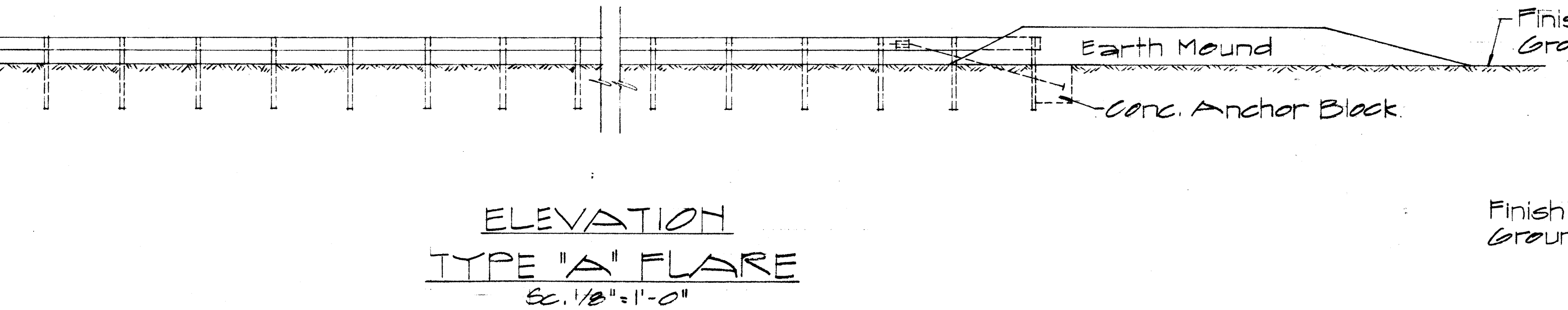
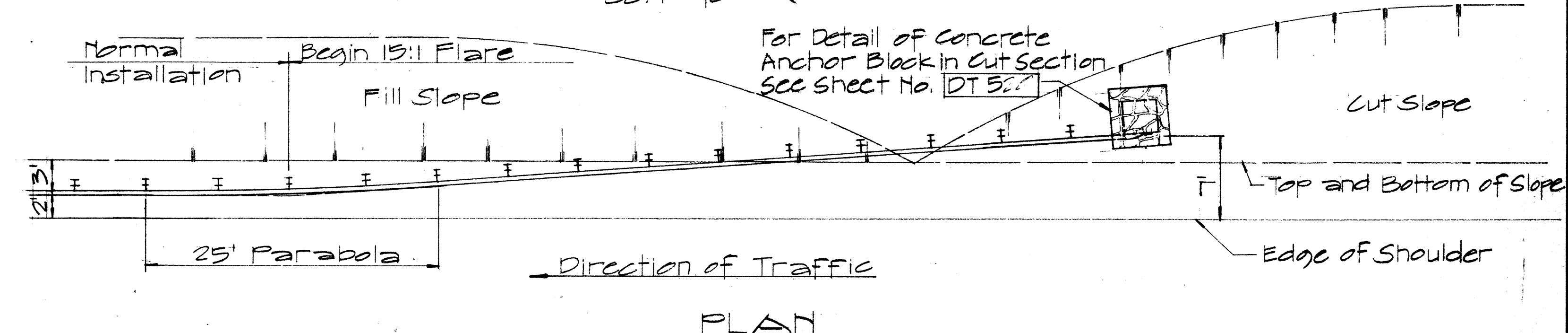
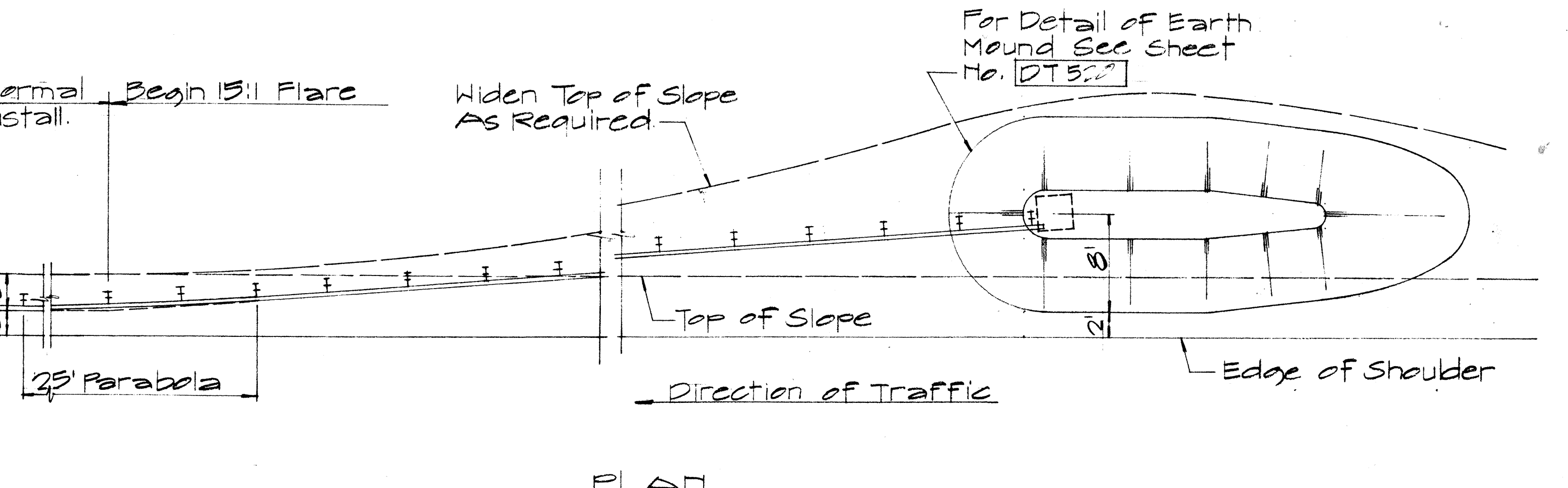
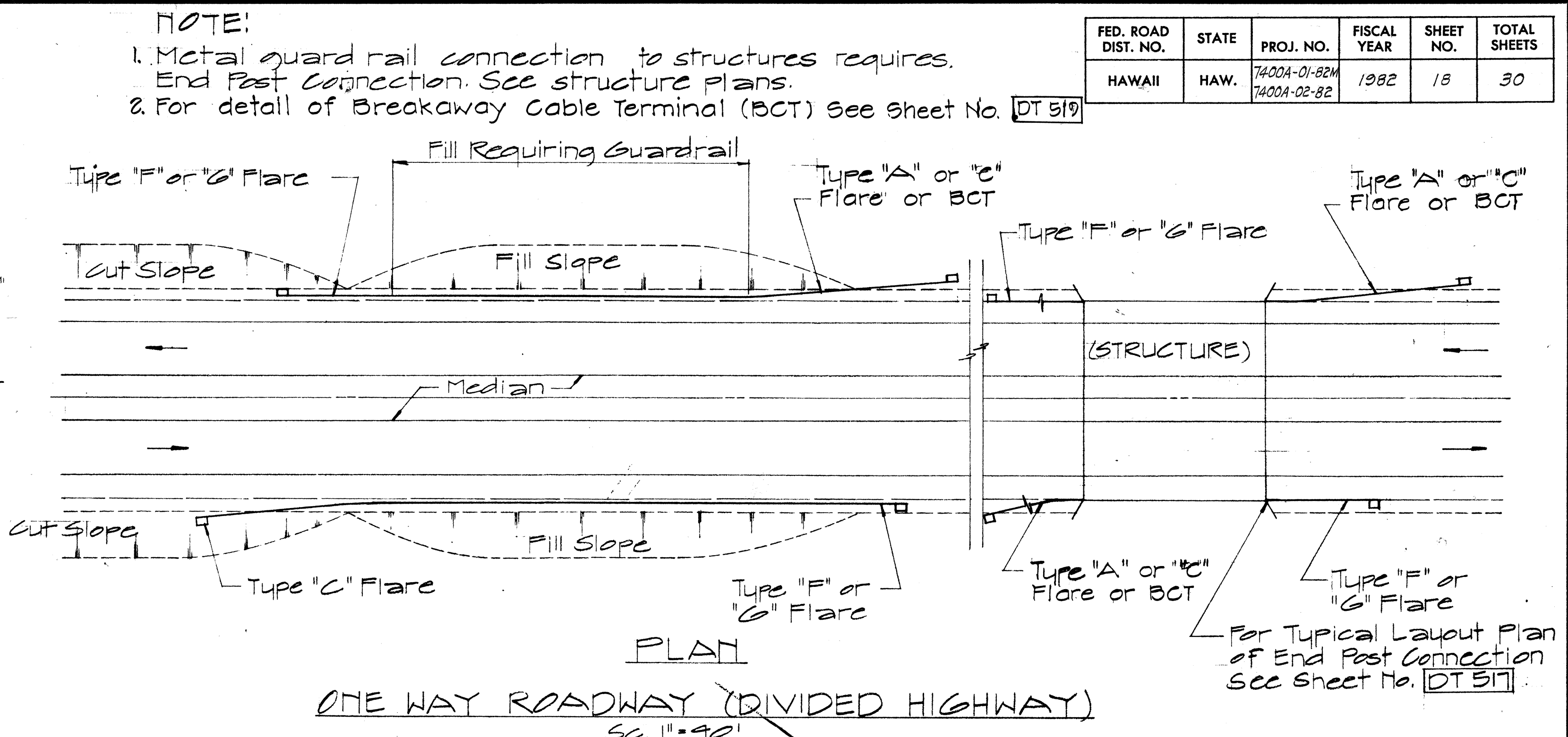
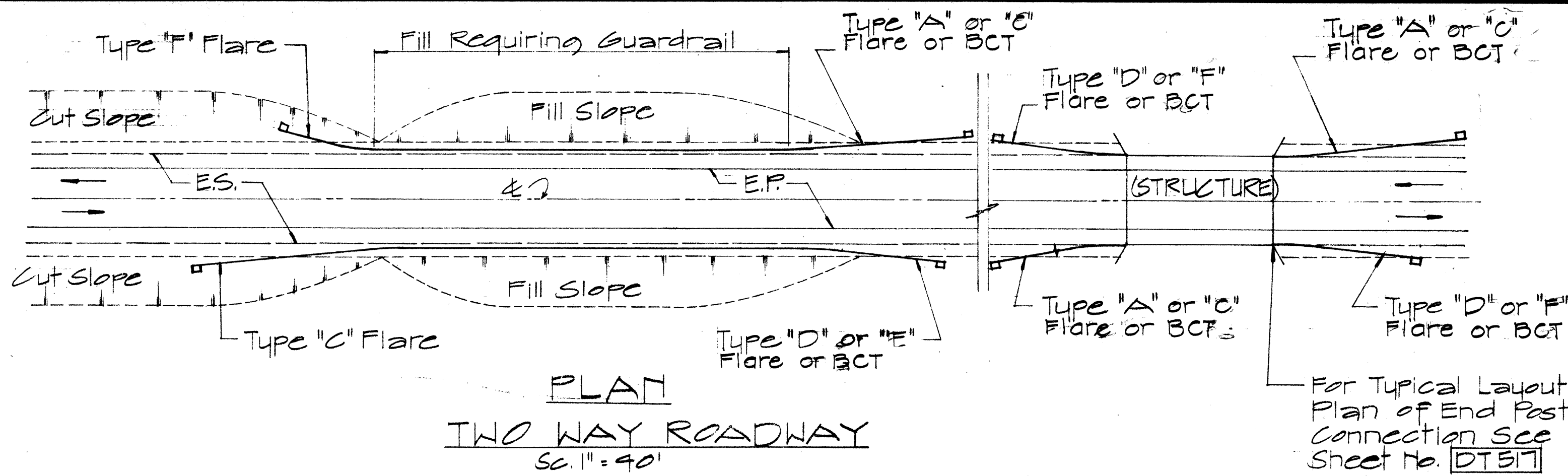
STANDARD DETAILS

METAL GUARD RAIL

SCALE: AS SHOWN

NOV. 1968

SHEET No. 2 OF 6 SHEETS DT 500



NOTE:
1. Metal guard rail connection to structures requires End Post Connection. See structure plans.
2. For detail of Breakaway Cable Terminal (BCT) See Sheet No. [DT 519]

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	74004-01-82M 74004-02-82	1982	18	30

APPROVAL RECOMMENDED:
Euschi Tanaka 12/29/62
TRAFFIC ENGINEER DATE

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

NO.	REVISION	APPROVED BY	DATE
1	Delete Type "B" Flare and Type "E" Flare	H.T.	6/15/78

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

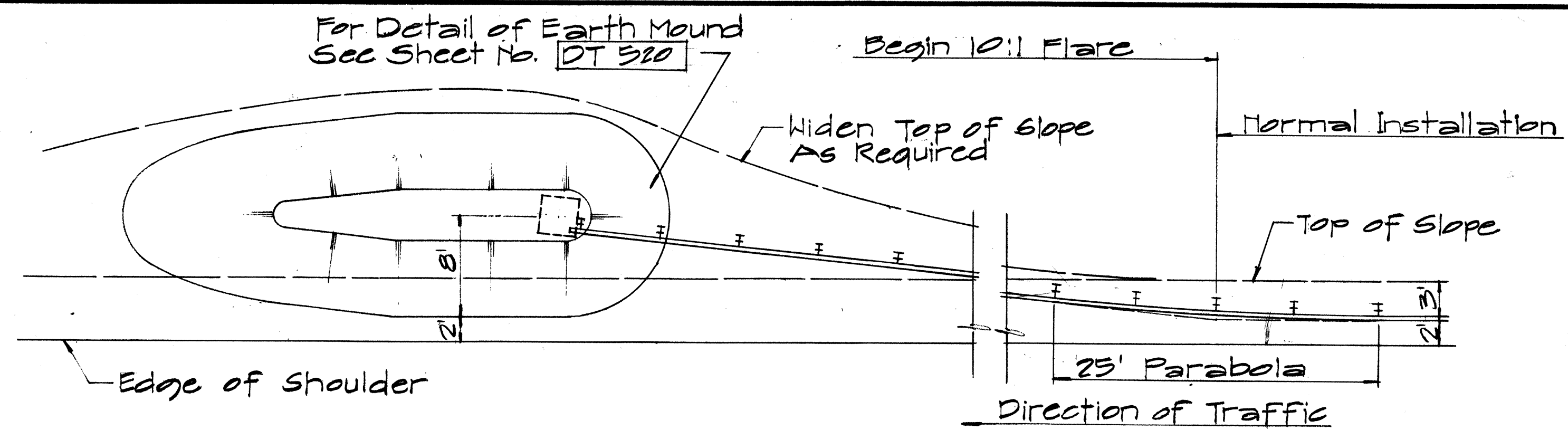
**STANDARD DETAILS
OF APPROACH END
FLARE - ONE & TWO
WAY ROADWAY**

Sc. As Noted April 1969

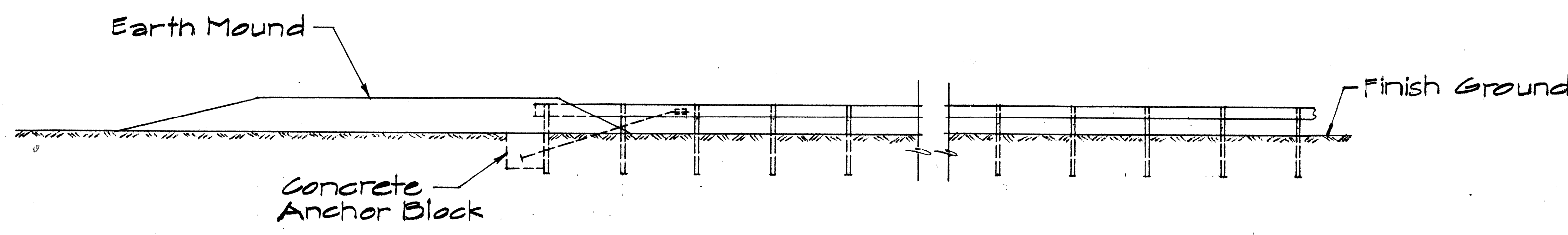
SHEET No. 4 OF 6 SHEETS [DT 516]

DATE
DESIGNED BY
CHECKED BY
NOTED BY
QUANTITIES BY
NO.

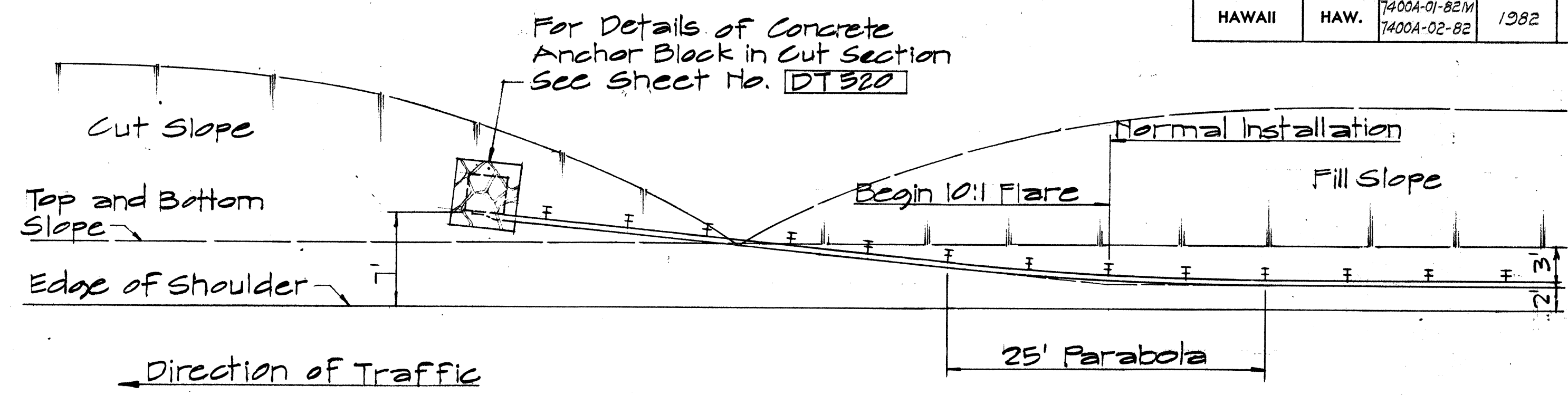
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7400A-01-B2M 7400A-02-B2	1982	19	30



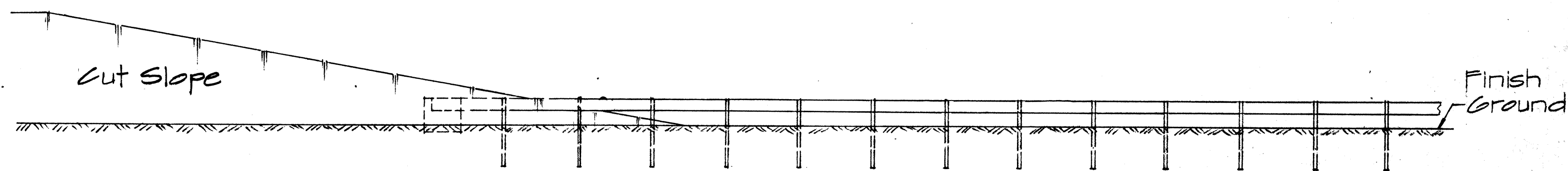
PLAN



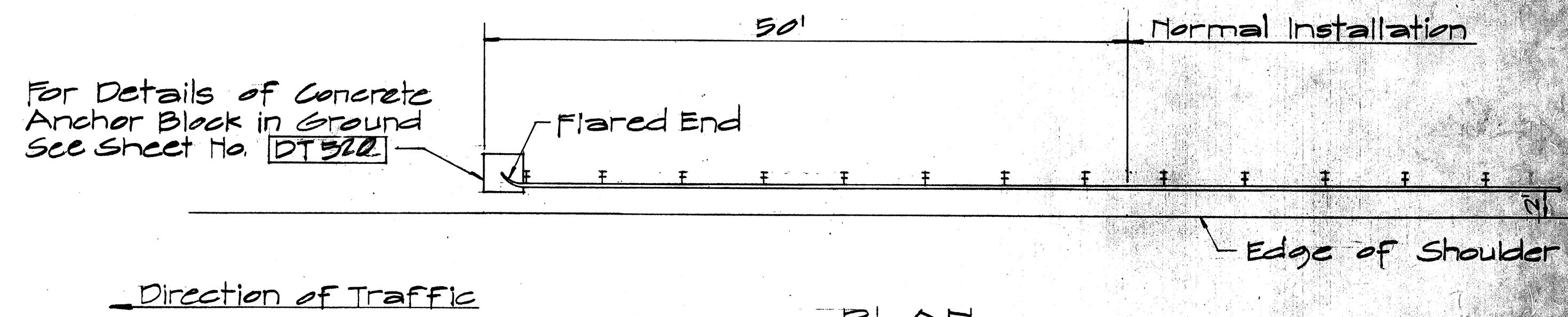
ELEVATION
TYPE "D" FLARE
Sc. 1/8" = 1'-0"



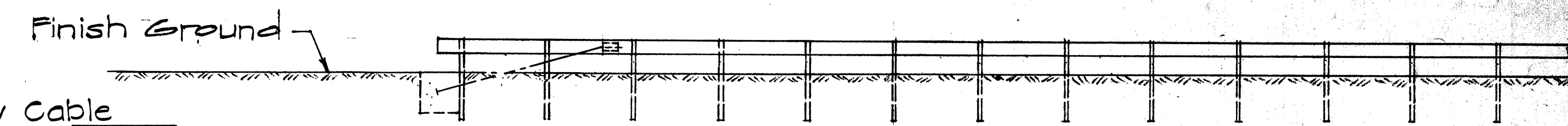
PLAN



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

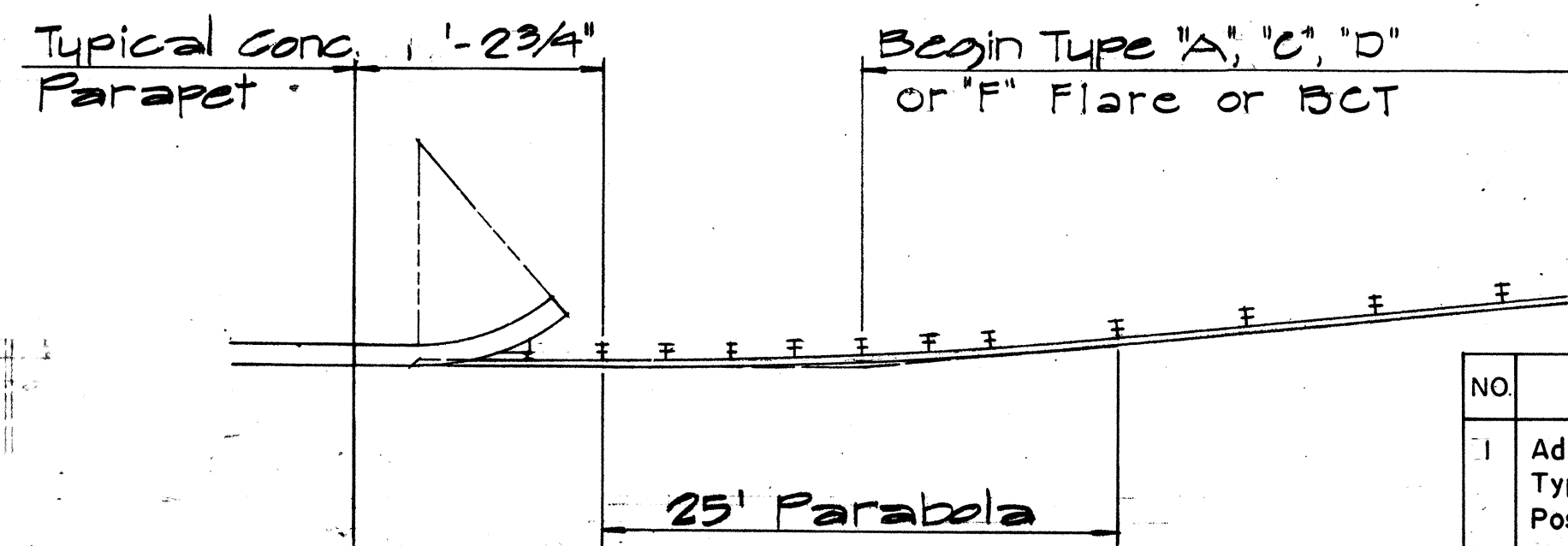


PLAN



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

NOTE:
For detail of Breakaway Cable Terminal (BCT) See Sheet No. DT 519



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

APPROVAL RECOMMENDED:
Eishi Tanaka 12/29/62
TRAFFIC ENGINEER DATE

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

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
TRAILING END
FLARE - ONE & TWO
WAY ROADWAY

Scale: As Noted April 1967

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
APPROVED BY	
DATE	

