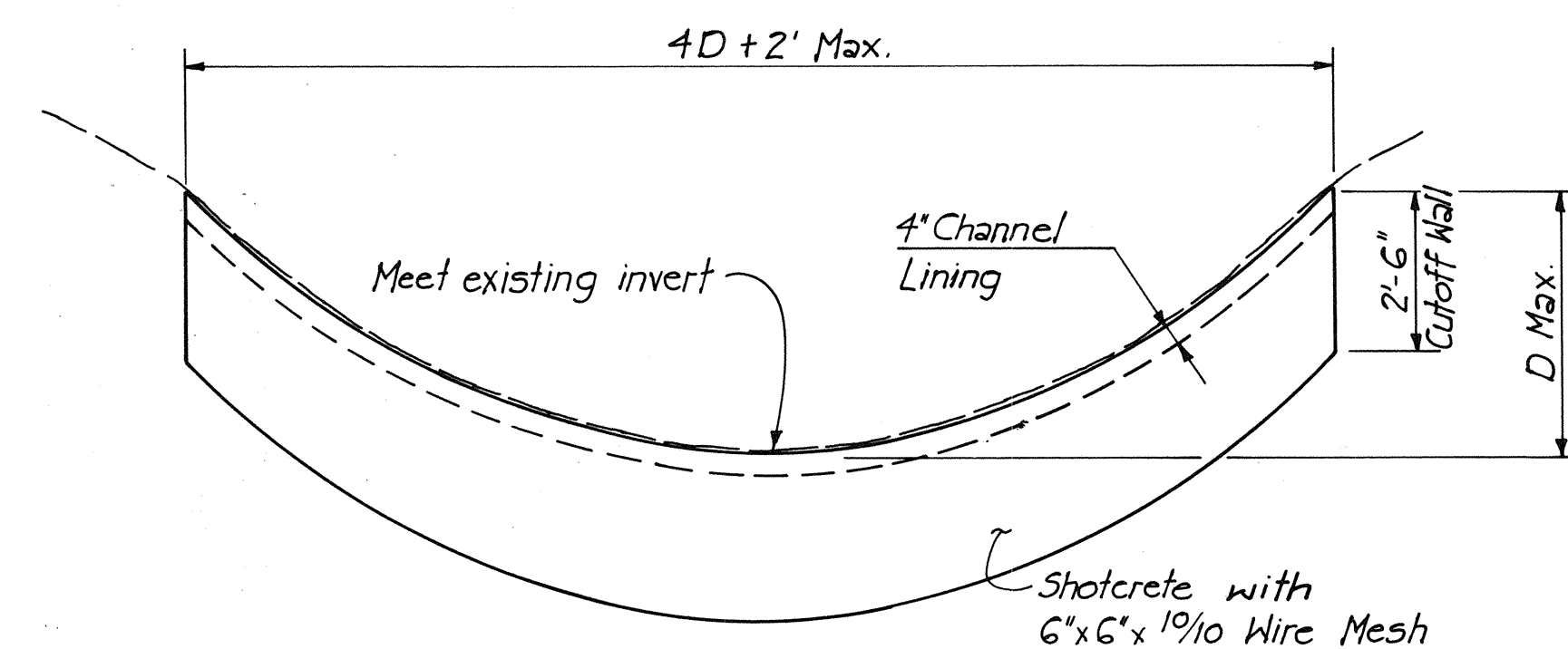
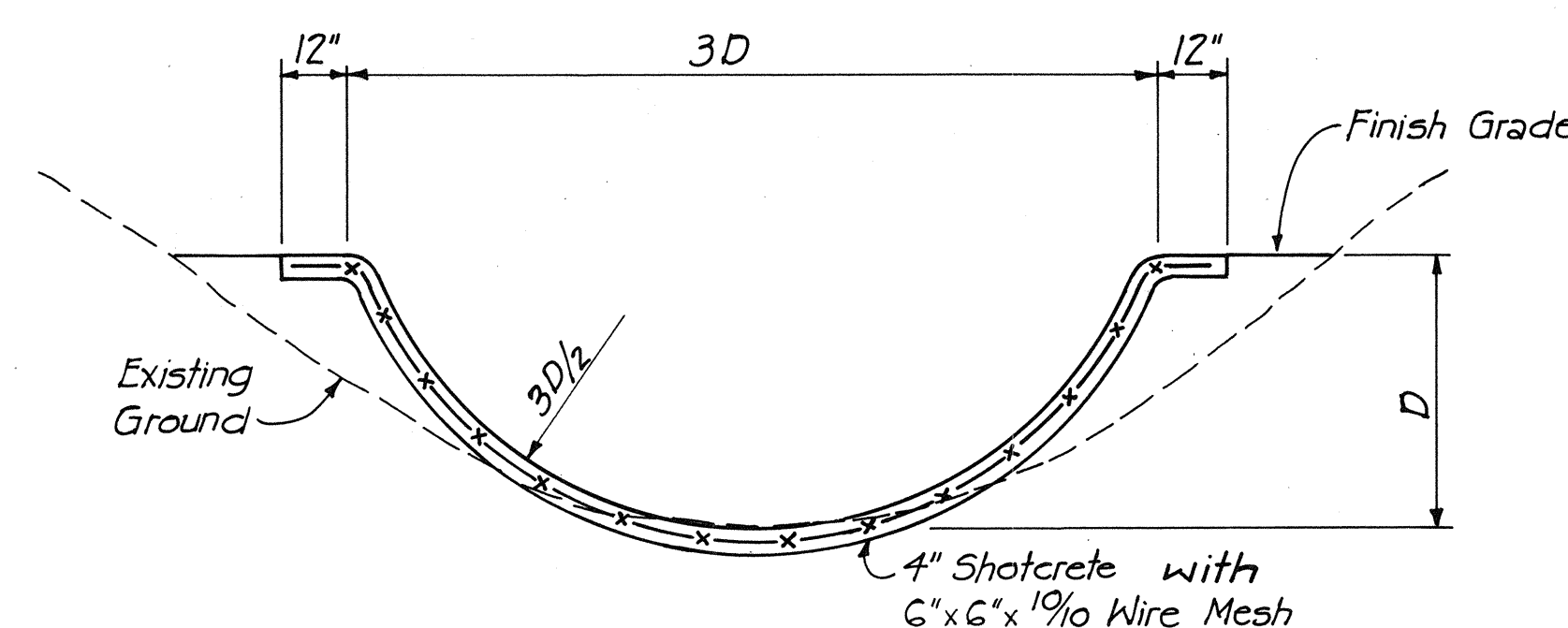


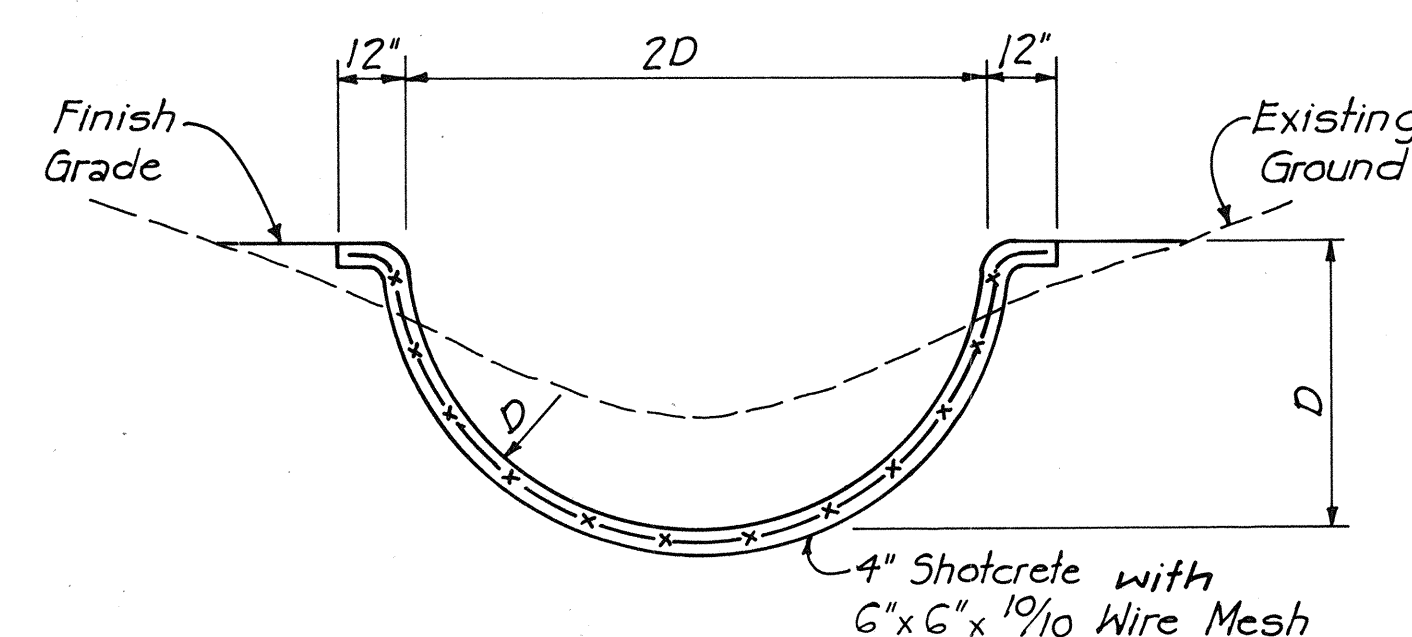
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(36)	1988	16	25



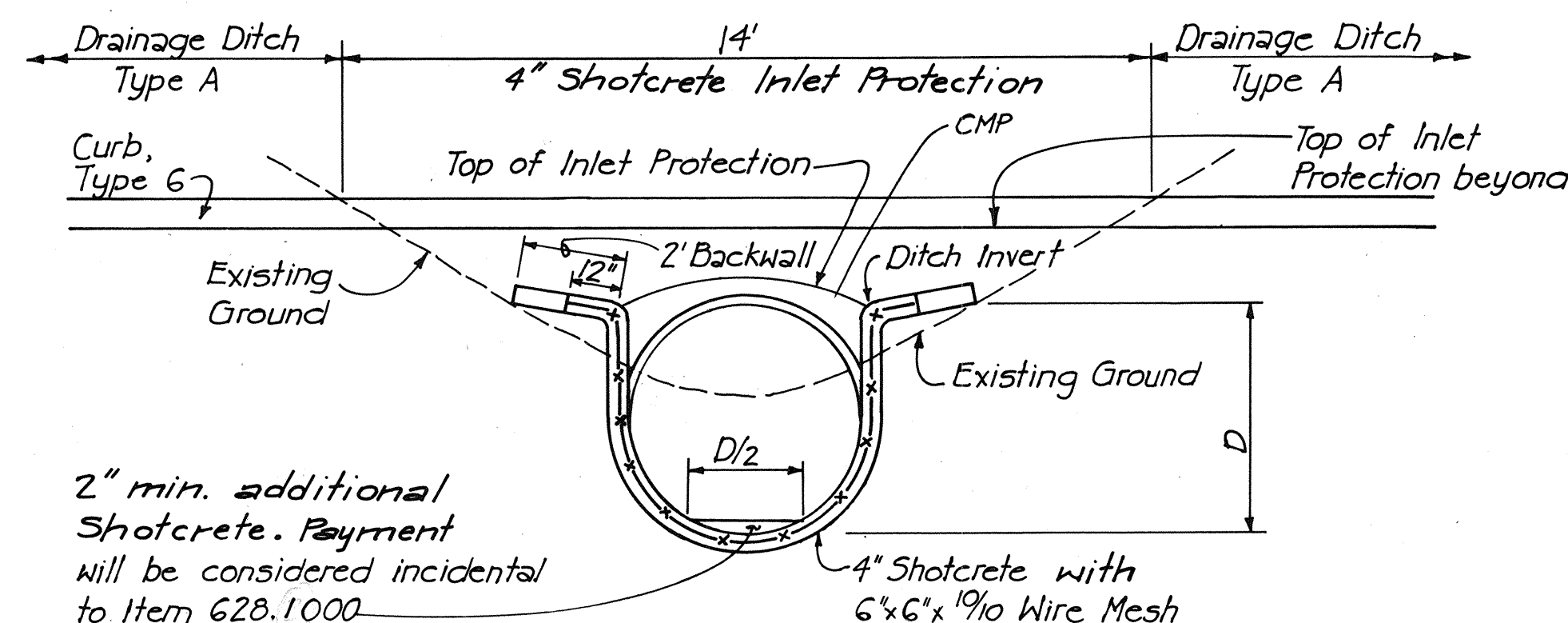
SECTION A
Scale: 3/8" = 1'-0"



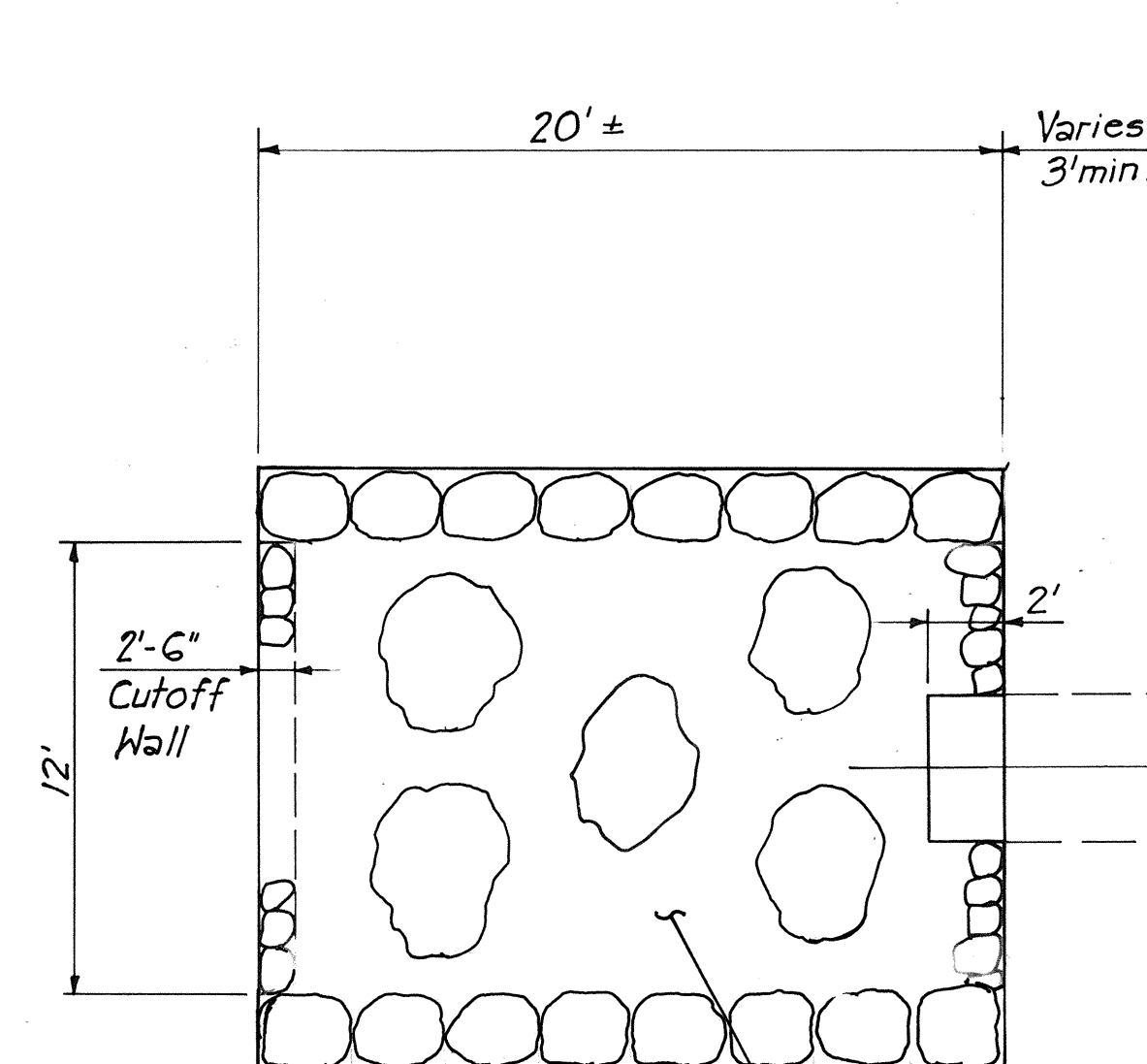
SECTION B
Scale: 3/8" = 1'-0"



SECTION C
Scale: 3/8" = 1'-0"

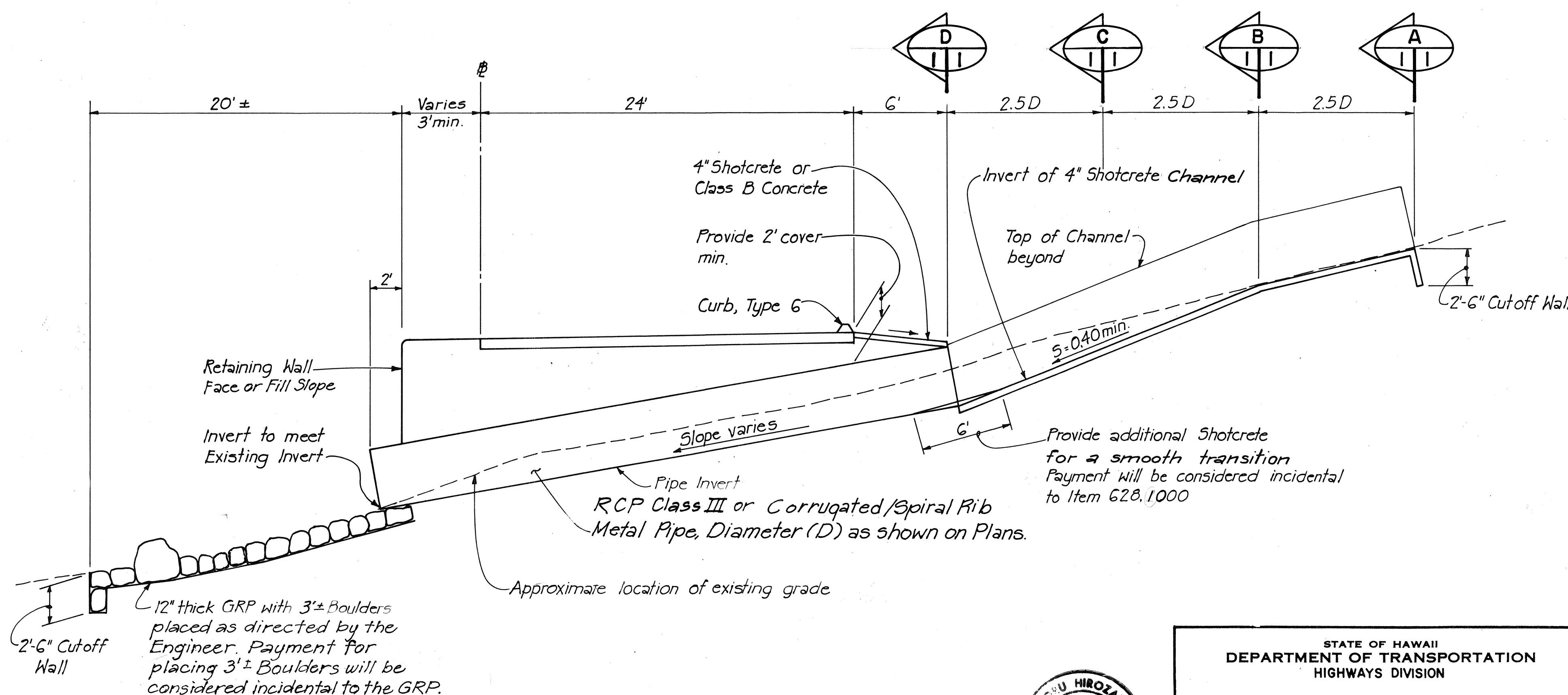
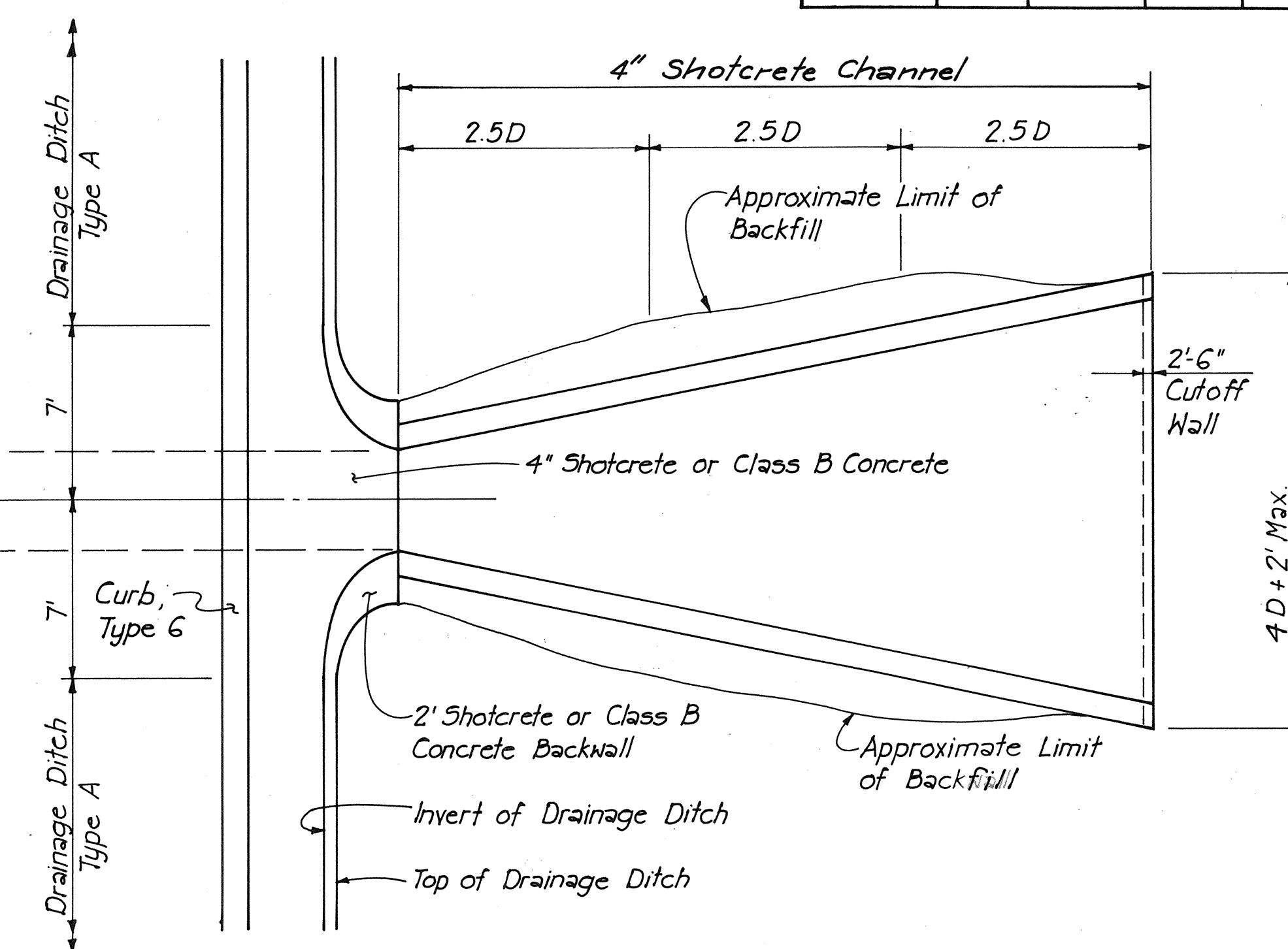


SECTION D
Scale: 3/8" = 1'-0"

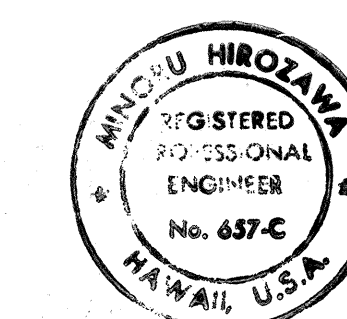


12" thick GRP with 3'± Boulders placed as directed by the Engineer. Payment for placing 3'± Boulders will be considered incidental to the GRP.

PLAN
Scale: 1" = 5'



TYPICAL CULVERT DETAILS
Scale: 1" = 5'
(REGULAR CULVERT)



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Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

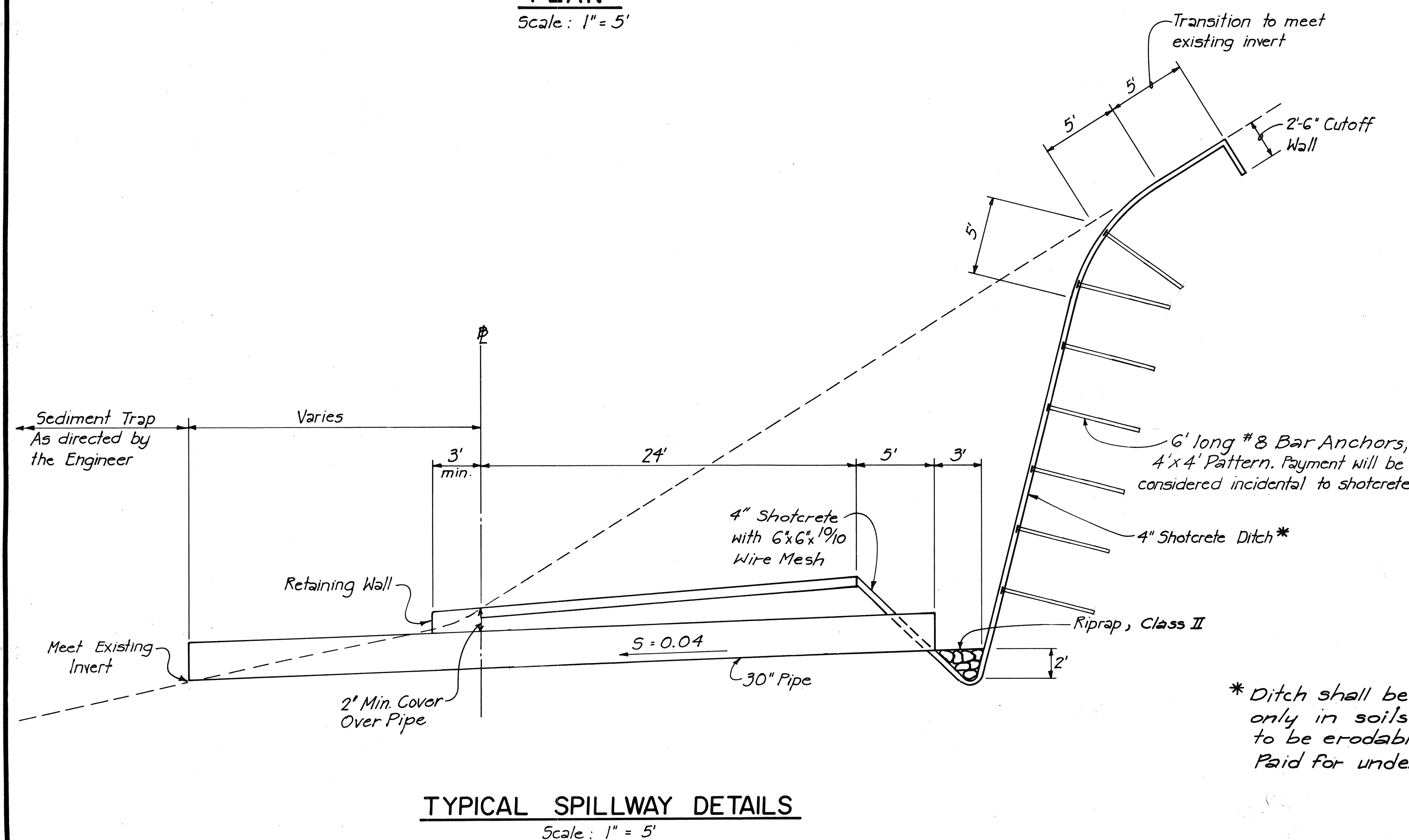
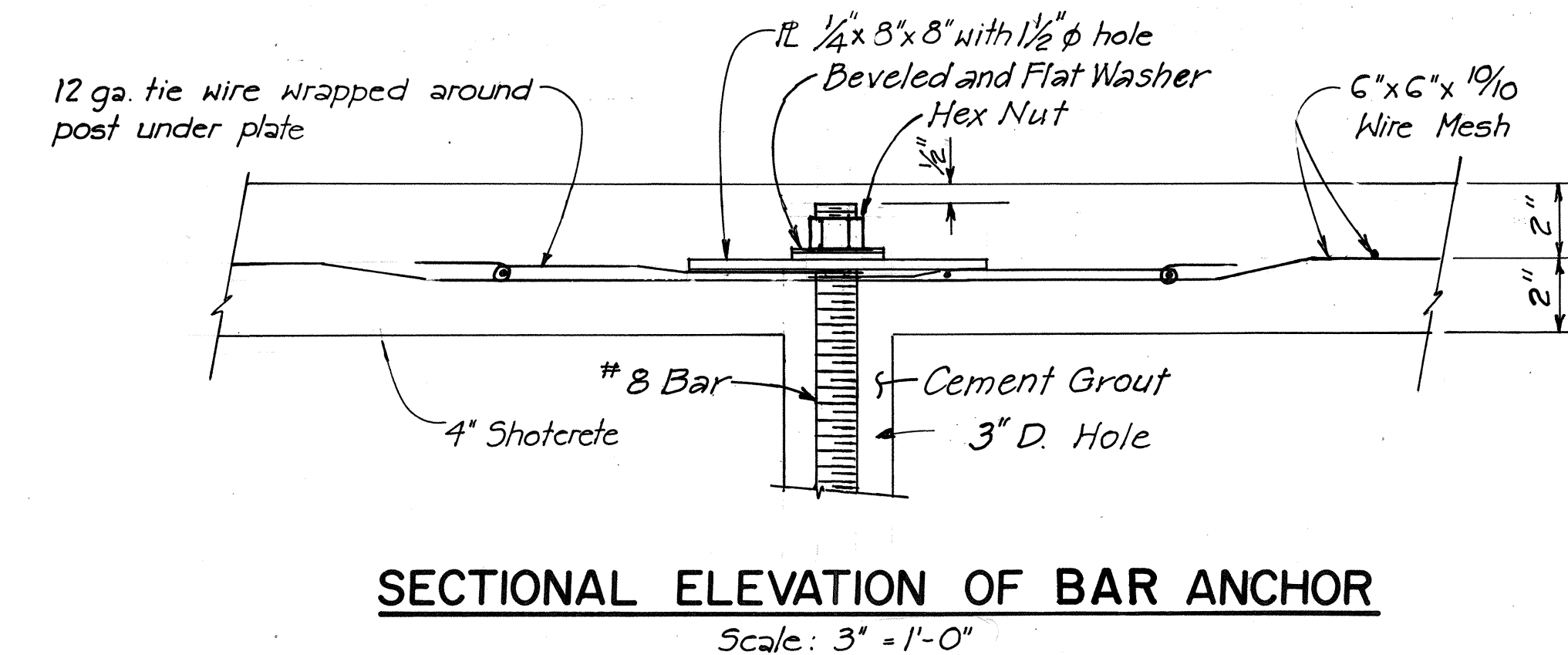
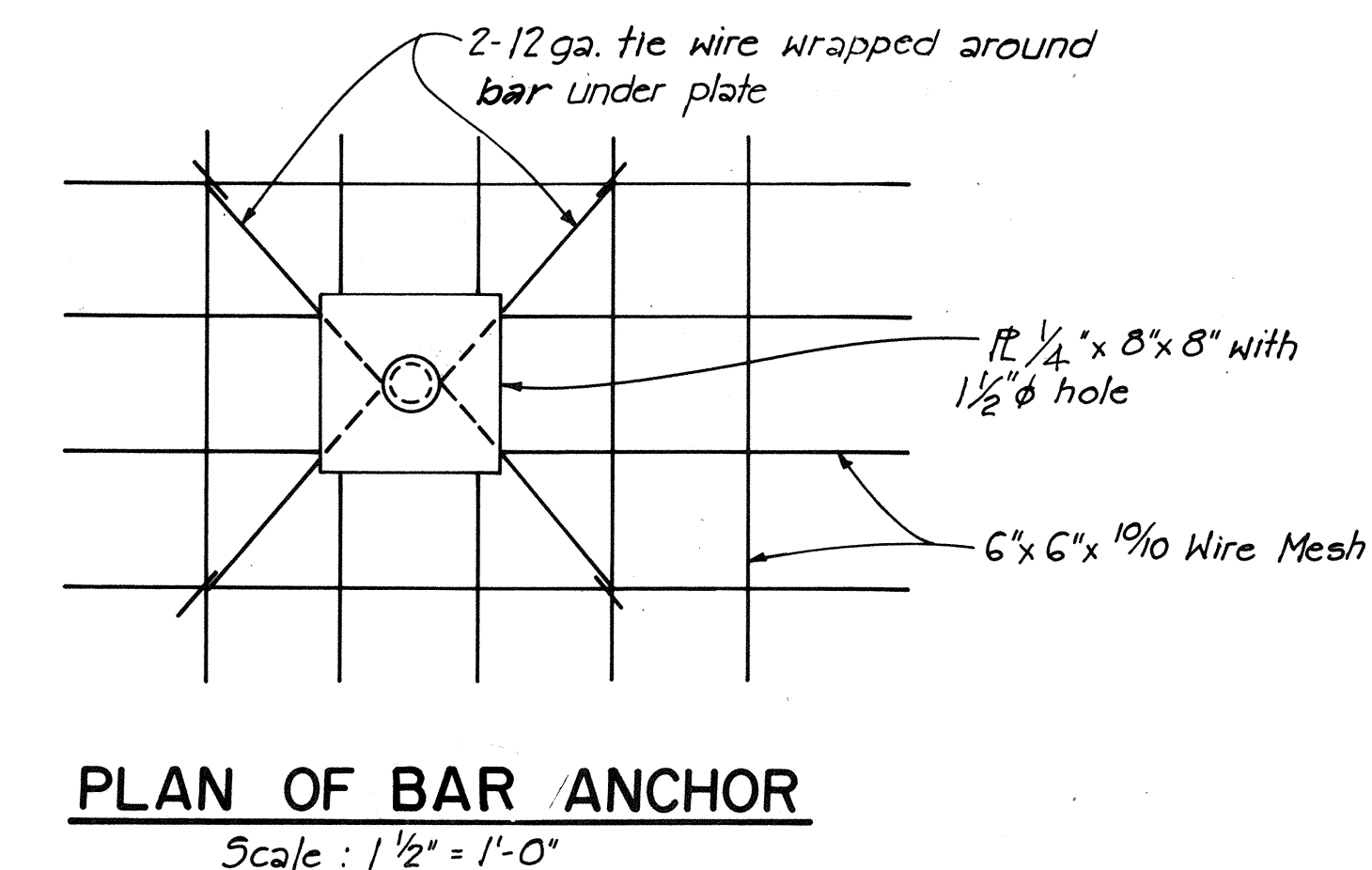
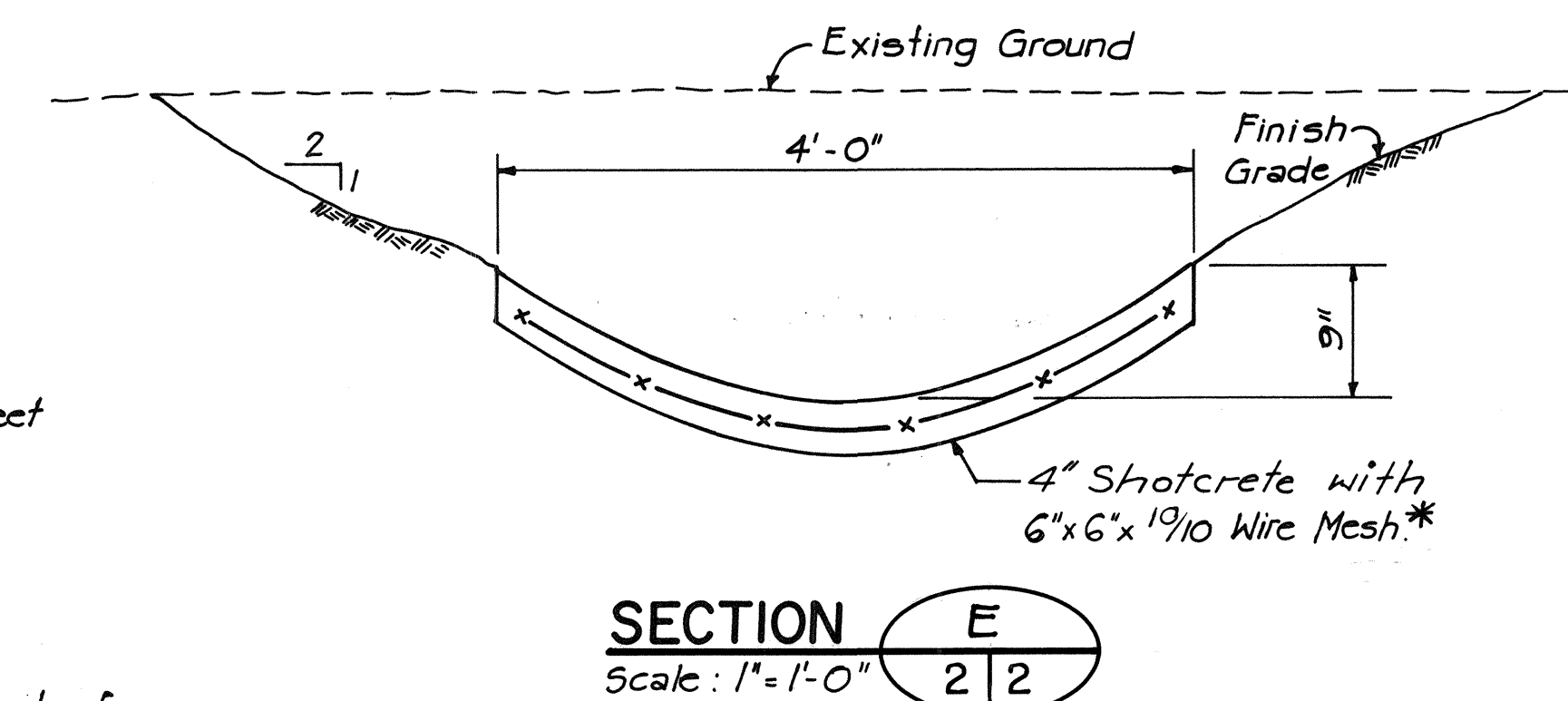
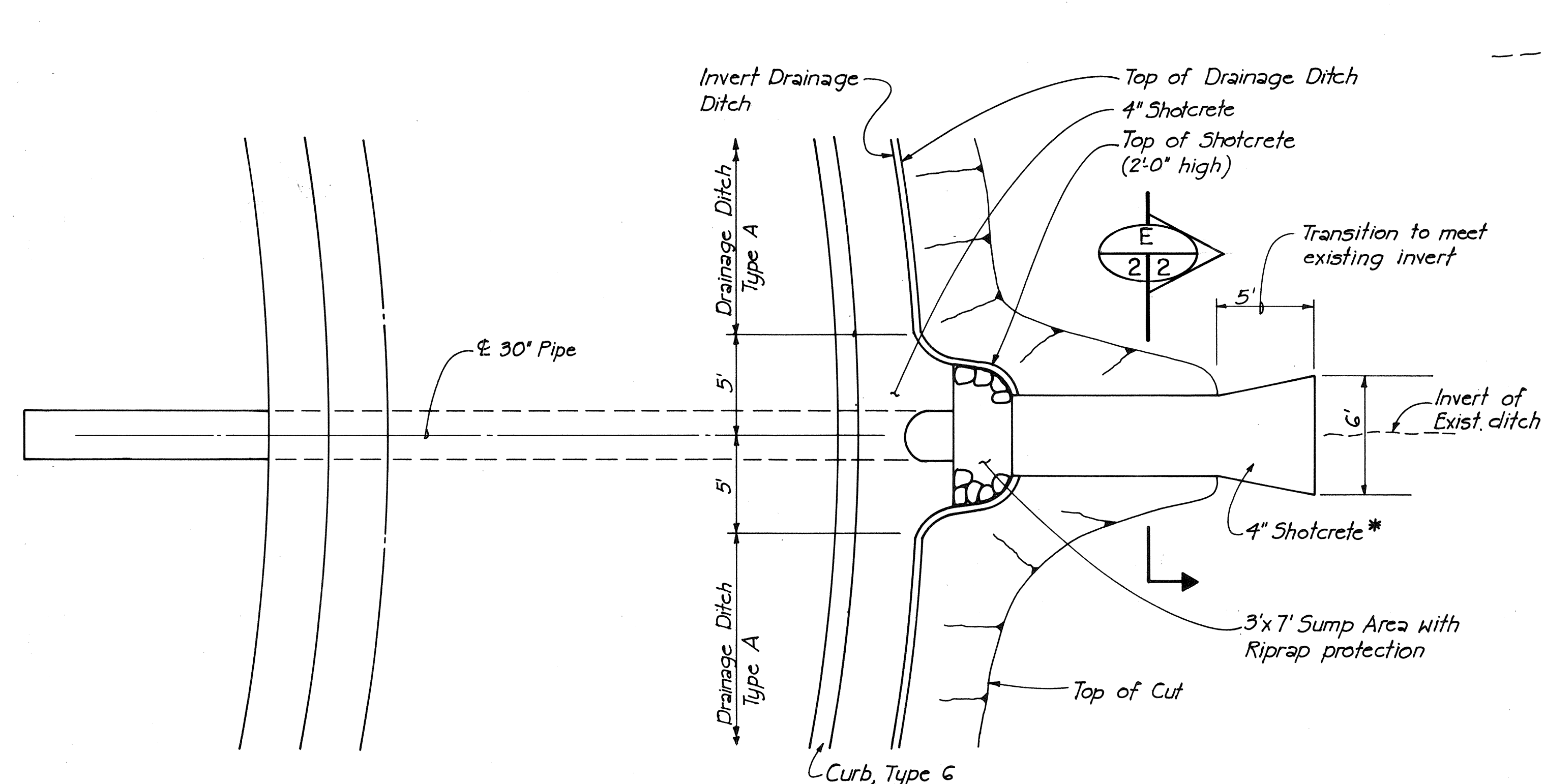
DRAINAGE DETAILS

INTERSTATE ROUTE H-3
HAIKU ACCESS ROAD
F.A.I. PROJECT NO. I-H3-1(36)

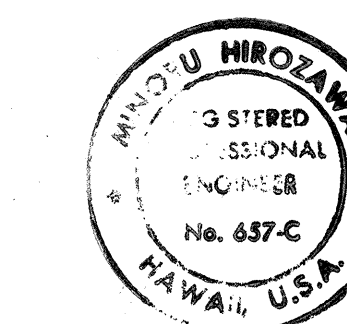
SCALE: AS NOTED DATE: MAY 1988
SHEET NO. 1 OF 4 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
DESIGNED BY		
NOTED BY		
CHECKED BY		

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(36)	1988	17	25



* Ditch shall be lined with Shotcrete only in soils that are considered to be erodable by the engineer. Paid for under item G28.1000.

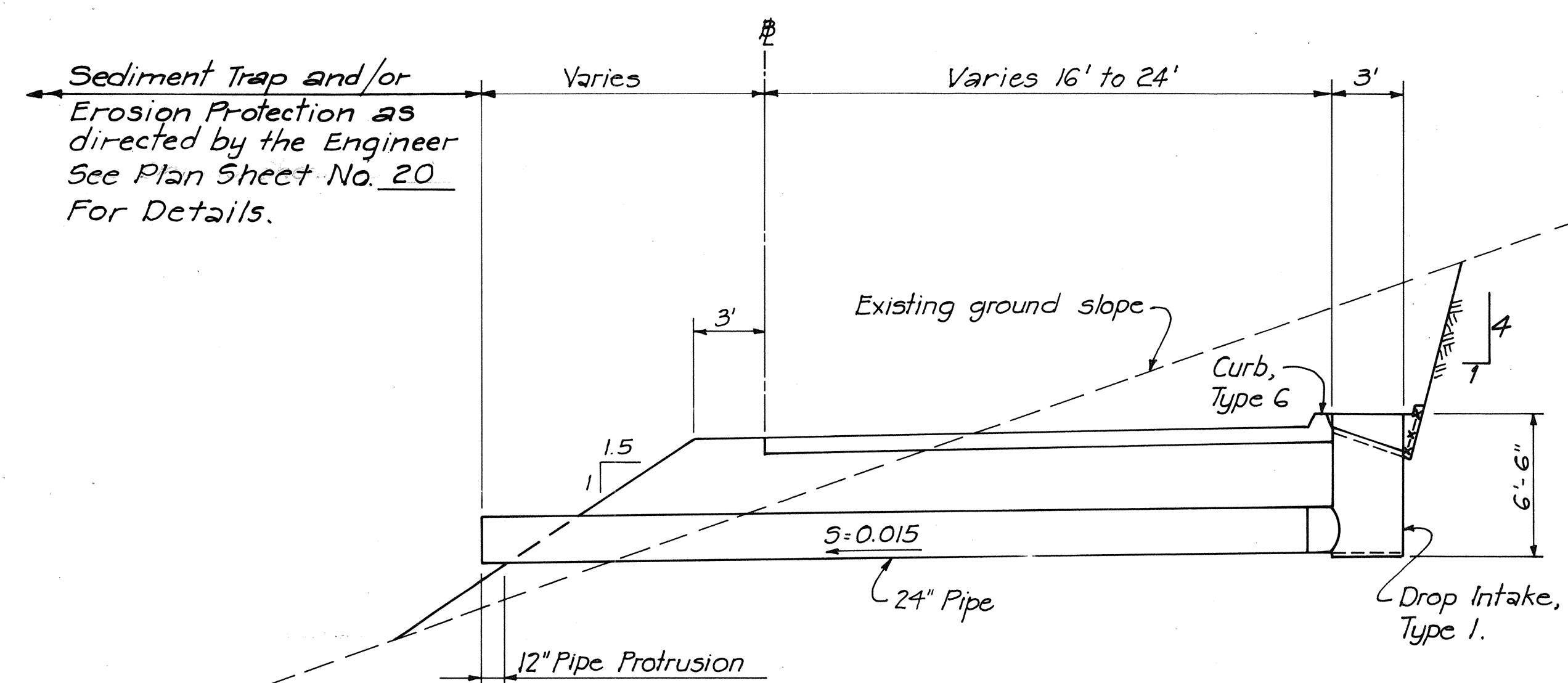


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Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DRAINAGE DETAILS
INTERSTATE ROUTE H-3
HAIKU ACCESS ROAD
F.A.I. PROJECT NO. I-H3-1(36)
SCALE: AS NOTED DATE: MAY 1988
SHEET NO. 2 OF 4 SHEETS

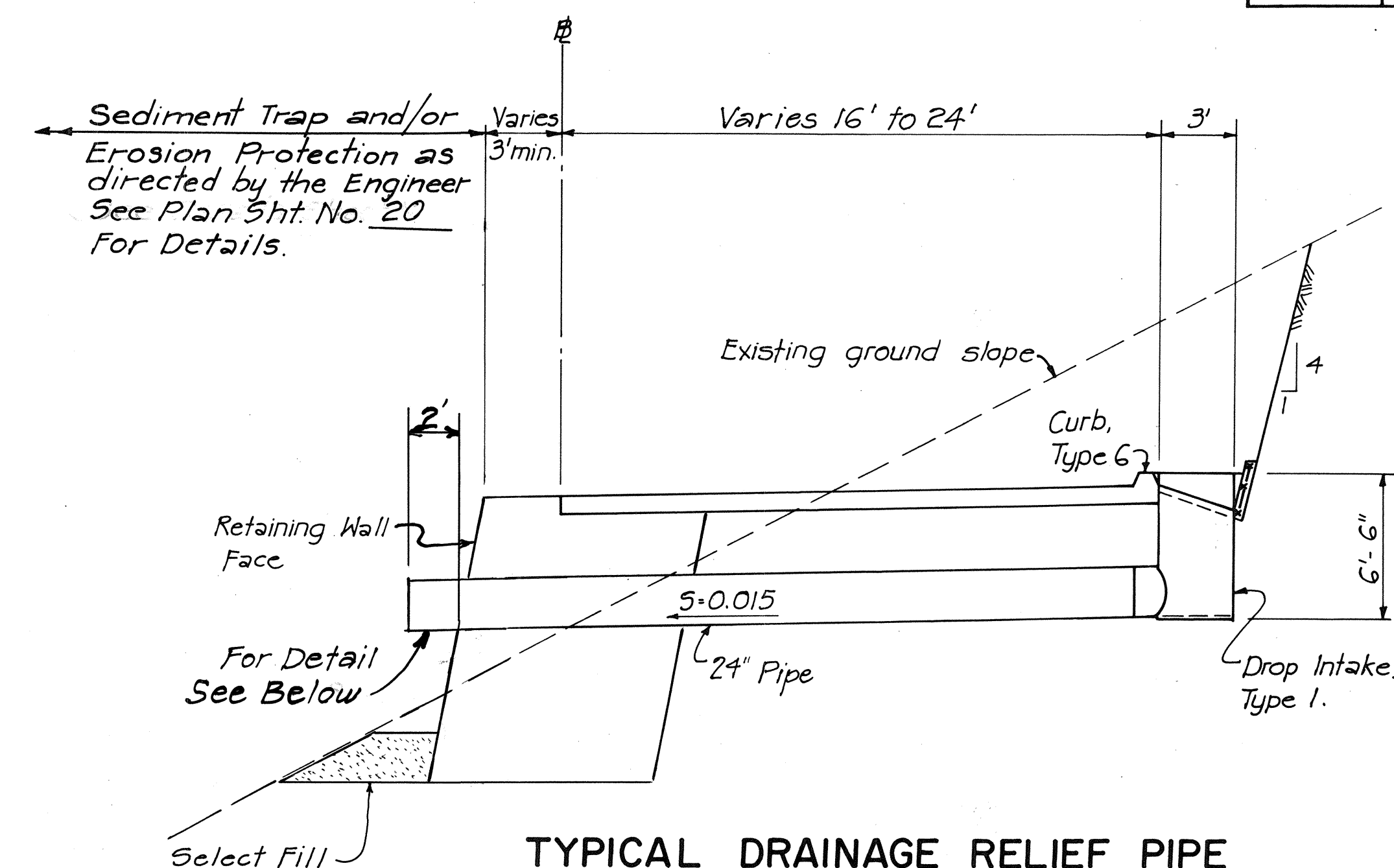
SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
NOTE BOOK	
CHECKED BY	
No.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(36)	1988	18	25



**TYPICAL DRAINAGE RELIEF PIPE
FILL SECTION**

Scale: 1" = 5'

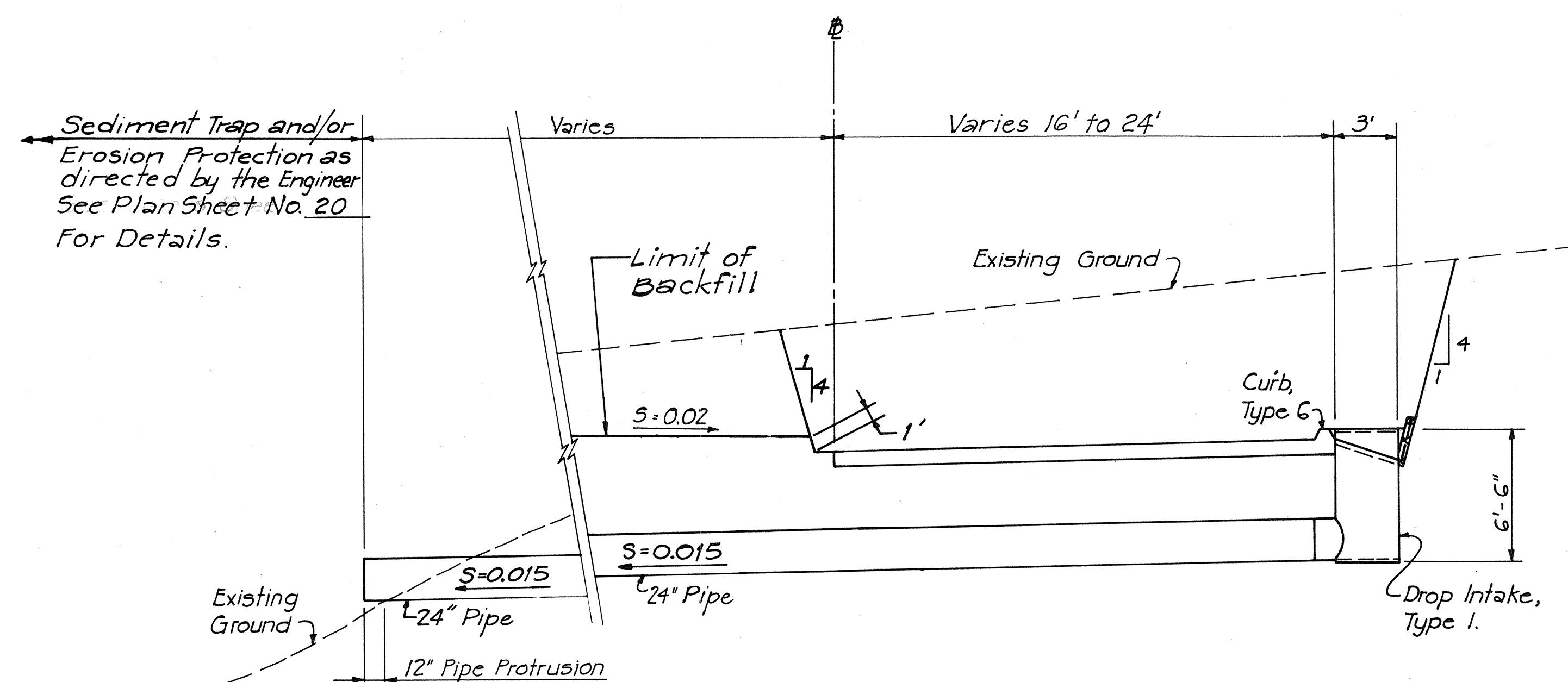


**TYPICAL DRAINAGE RELIEF PIPE
RETAINING WALL SECTION**

Scale: 1" = 5'

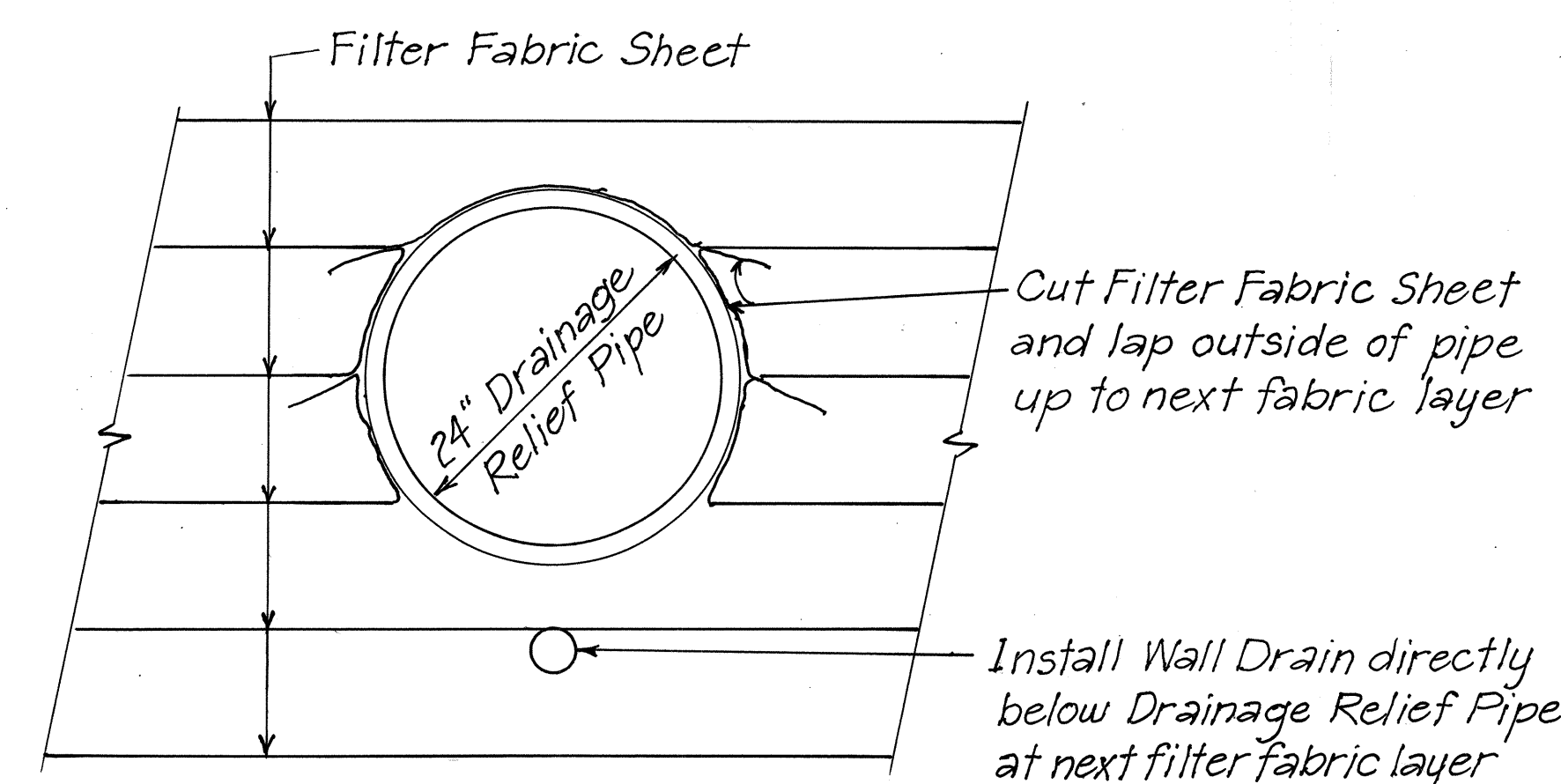
NOTES:

1. Drainage Relief Pipes shall be provided in sump areas, before stream crossings, and as directed by the Engineer.
2. If the Contractor elects to use RCP or Aluminum pipe, a concrete collar (24" wide by 6" thick with reinforcing) shall be used for the connection to the CSP stub from the Drop Intake. Payment for the concrete collar shall be incidental to the various contract items.



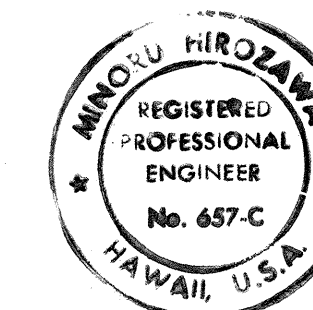
**TYPICAL DRAINAGE RELIEF PIPE
CUT SECTION**

Scale: 1" = 5'



**DRAINAGE RELIEF PIPE IN
FILTER FABRIC WALL**

N.T.S.



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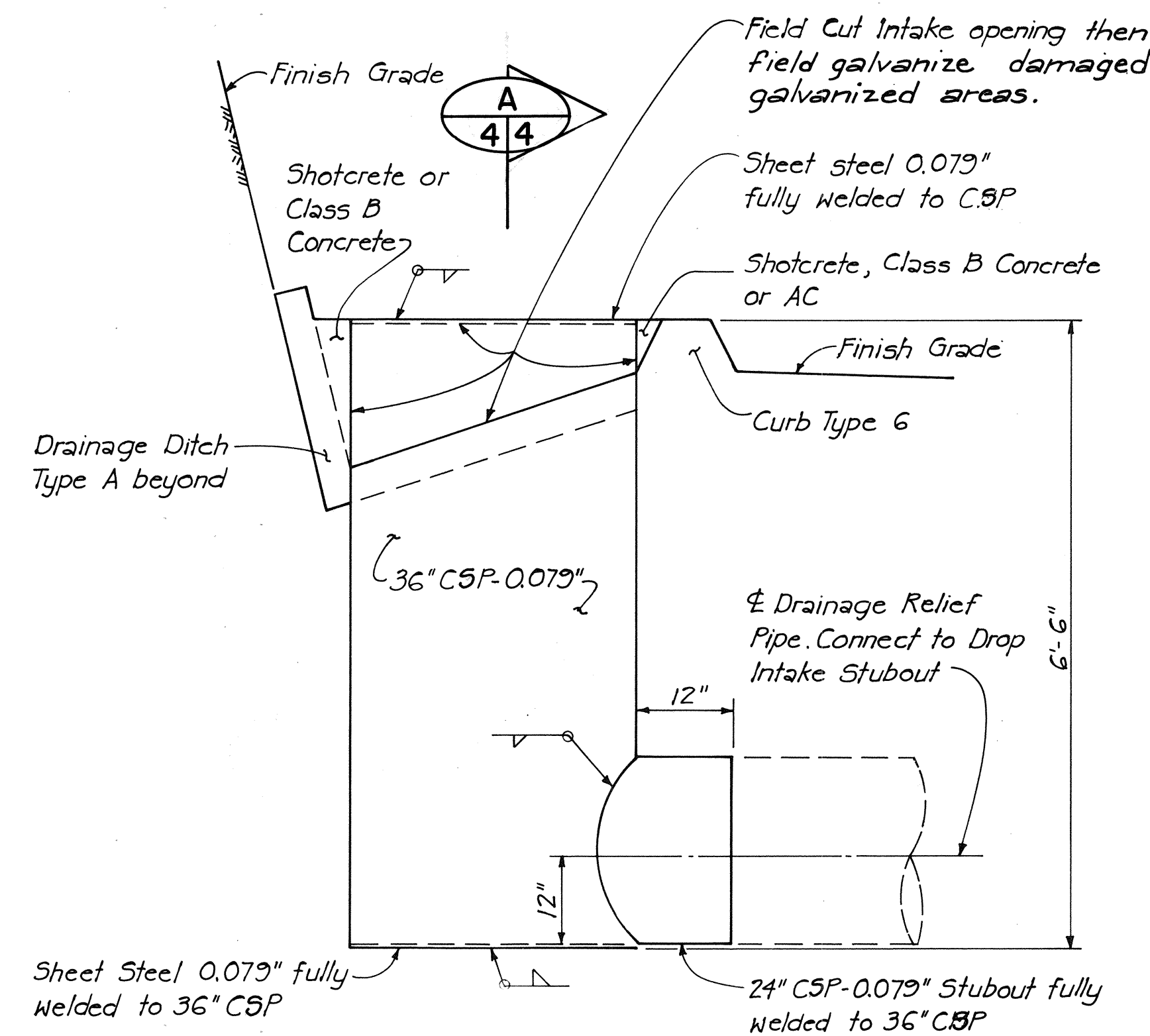
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

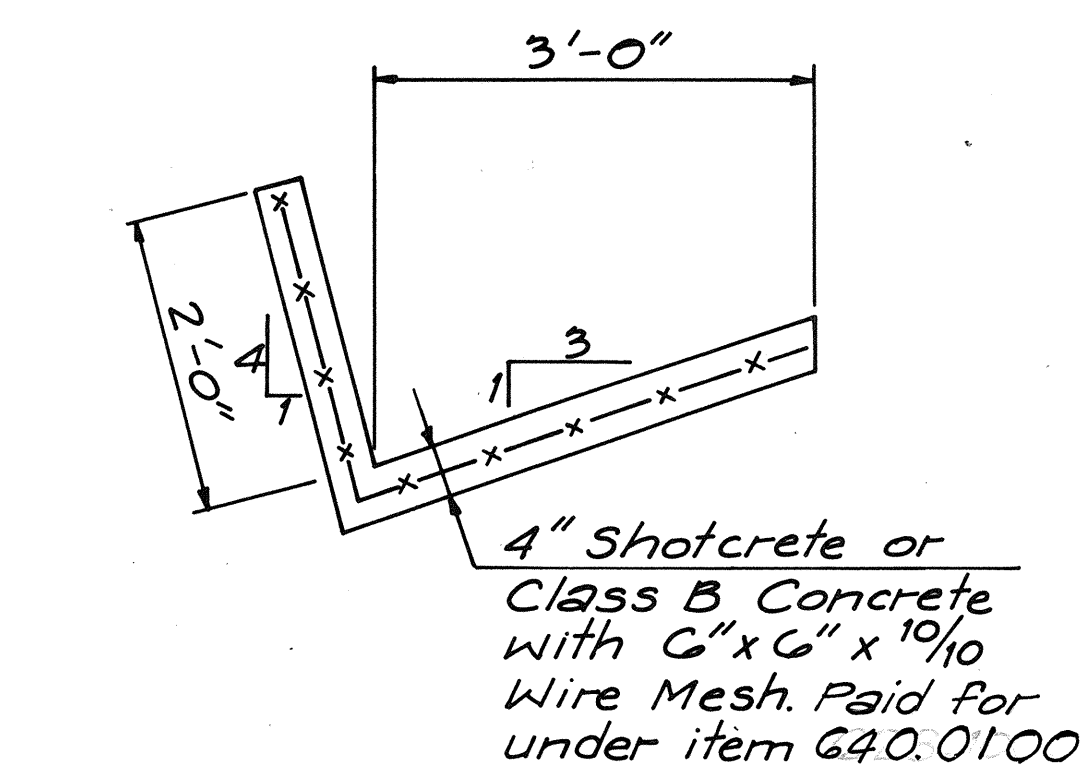
INTERSTATE ROUTE H-3
HAIKU ACCESS ROAD
F.A.I. PROJECT NO. I-H3-1(36)

SCALE: AS NOTED DATE: MAY 1988
SHEET No. 3 OF 4 SHEETS

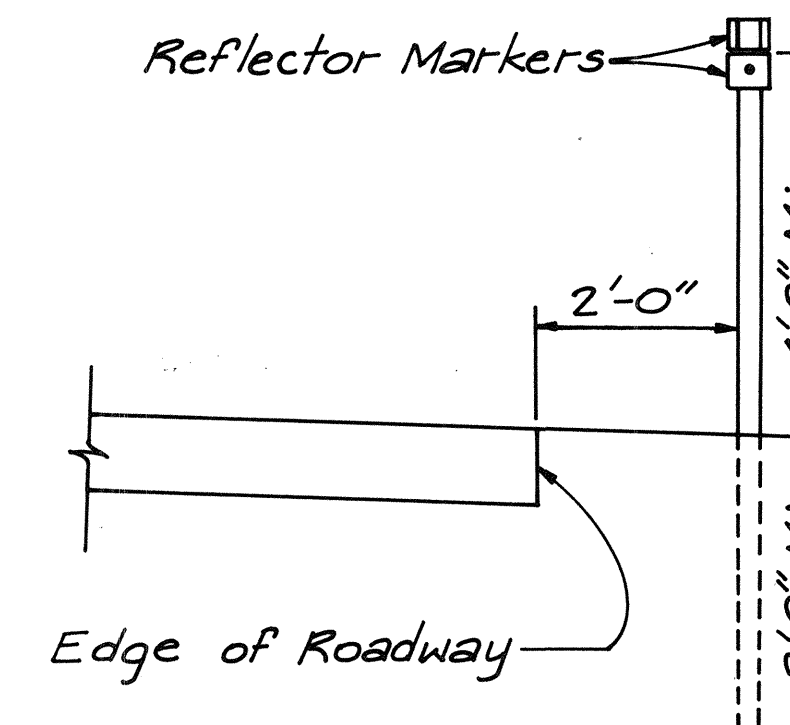
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(36)	1988	19	25



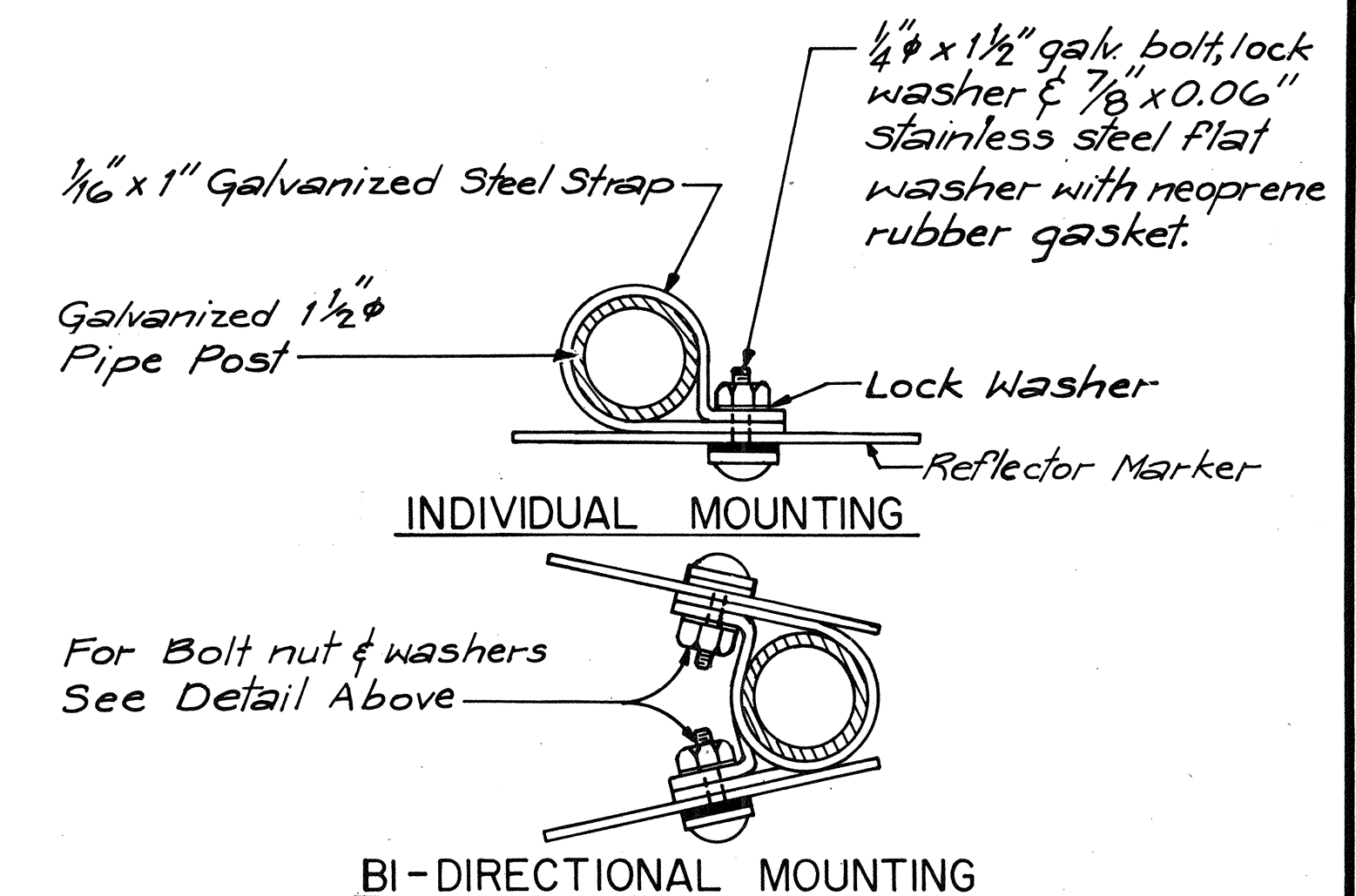
DROP INTAKE - TYPE I
Scale: 3/4" = 1'-0"



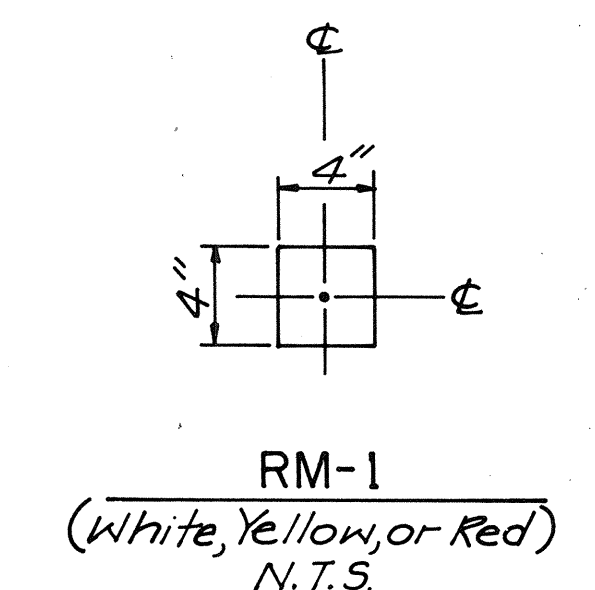
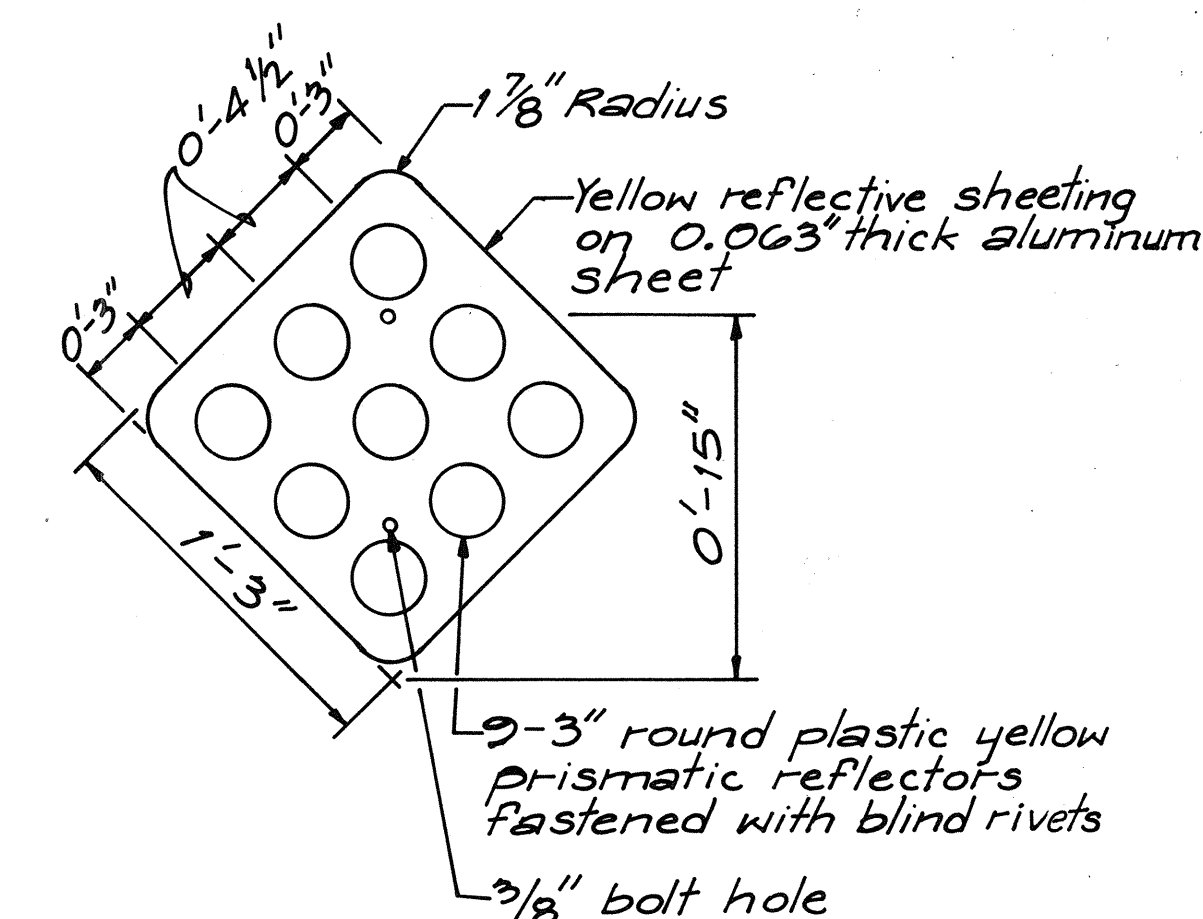
**TYPE A
DRAINAGE DITCH DETAIL**
Scale: 3/4" = 1'-0"



**REFLECTOR MARKER
MOUNTING DETAIL**
N.T.S.



TYPICAL MOUNTING DETAILS
N.T.S.

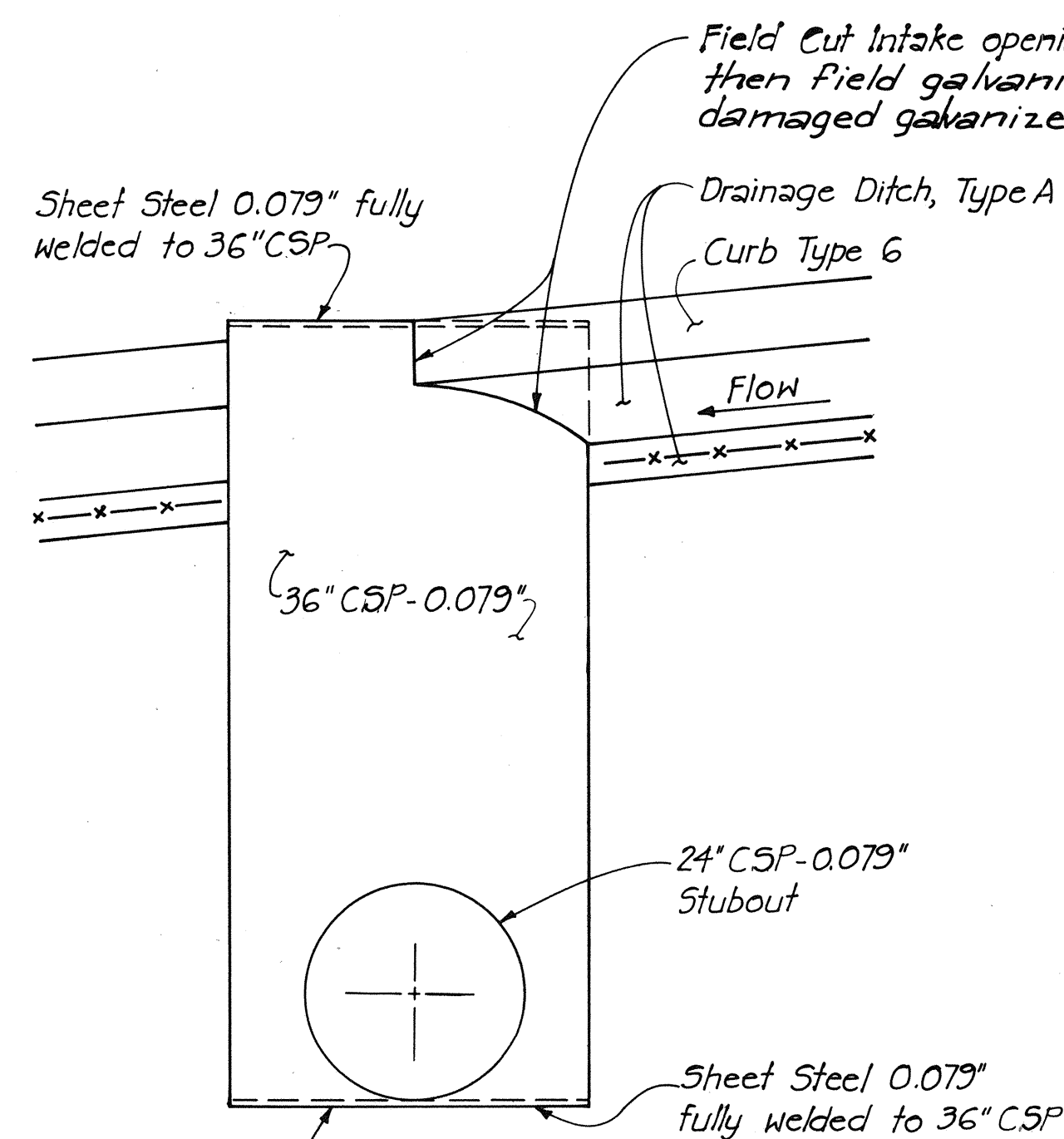


RM-9

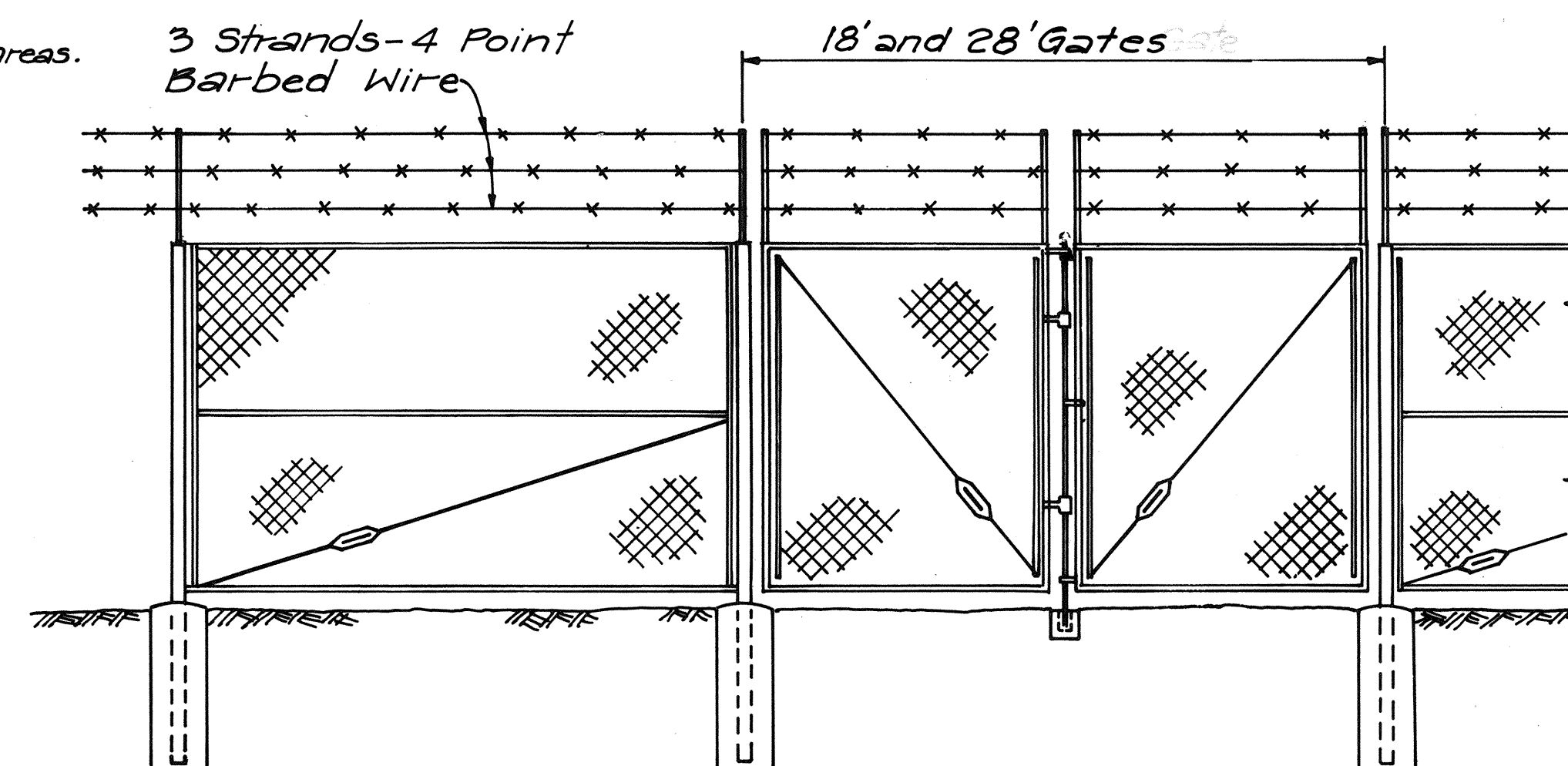
REFLECTOR MARKERS
N.T.S.

REFLECTOR NOTES:

- 1) Reflector marker RM-1 shall be:
 - a) Yellow if placed along the left edge of divided roadways, one-way roadways, and ramps in the direction of travel.
 - b) White if placed along the right edge of divided roadways, one-way roadways, and ramps in the direction of travel.
- 2) For reflector marker RM-2, reflective sheeting material may be used as an alternate.

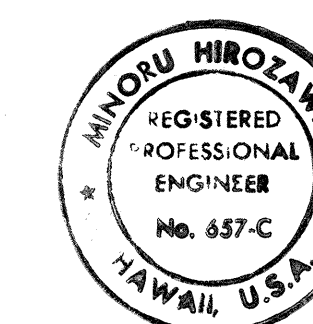
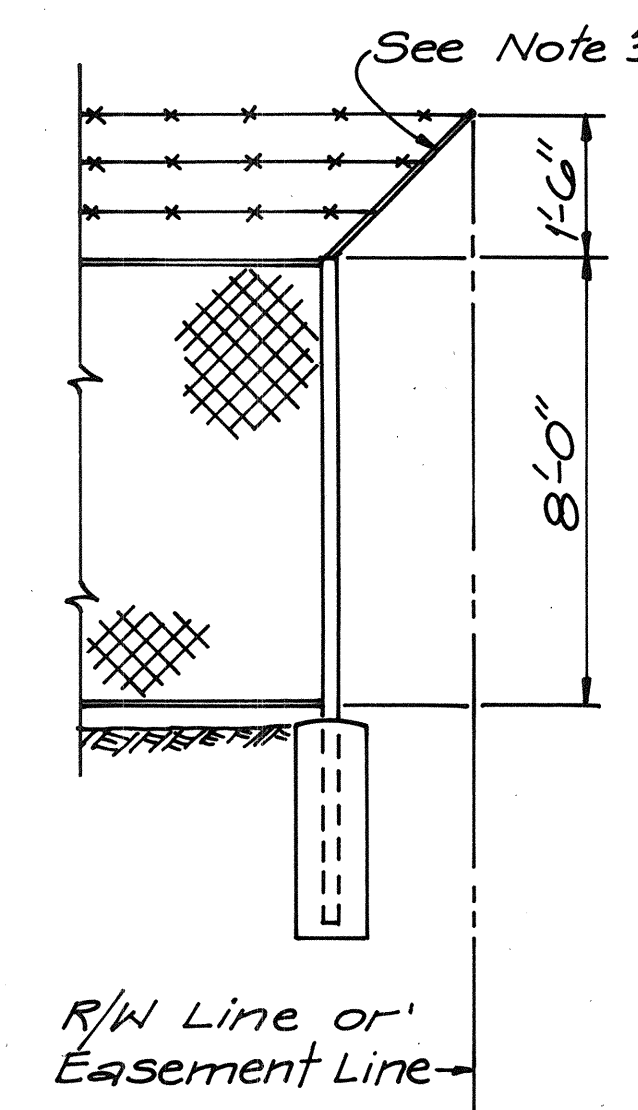


SECTION A-A
Scale: 3/4" = 1'-0"



- NOTES:**
1. Material and construction requirements are the same as for 6'-0" high chain link fence.
 2. Fence to be provided with 3 strands of 4 point barbed wire securely attached to single extension arms along top of fence.
 3. Single extension arms shall point outward at an angle of 45°. All extension arms to be 12 gage pressed steel.

SECURITY CHAIN LINK FENCE
N.T.S.



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STATE OF HAWAII
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**ROADWAY AND
DRAINAGE DETAILS**

INTERSTATE ROUTE H-3
 HAIKU ACCESS ROAD
 F.A.I. PROJECT NO. I-H3-1(36)

SCALE: AS NOTED
 DATE: MAY 1988
 SHEET NO. 4 OF 4 SHEETS

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