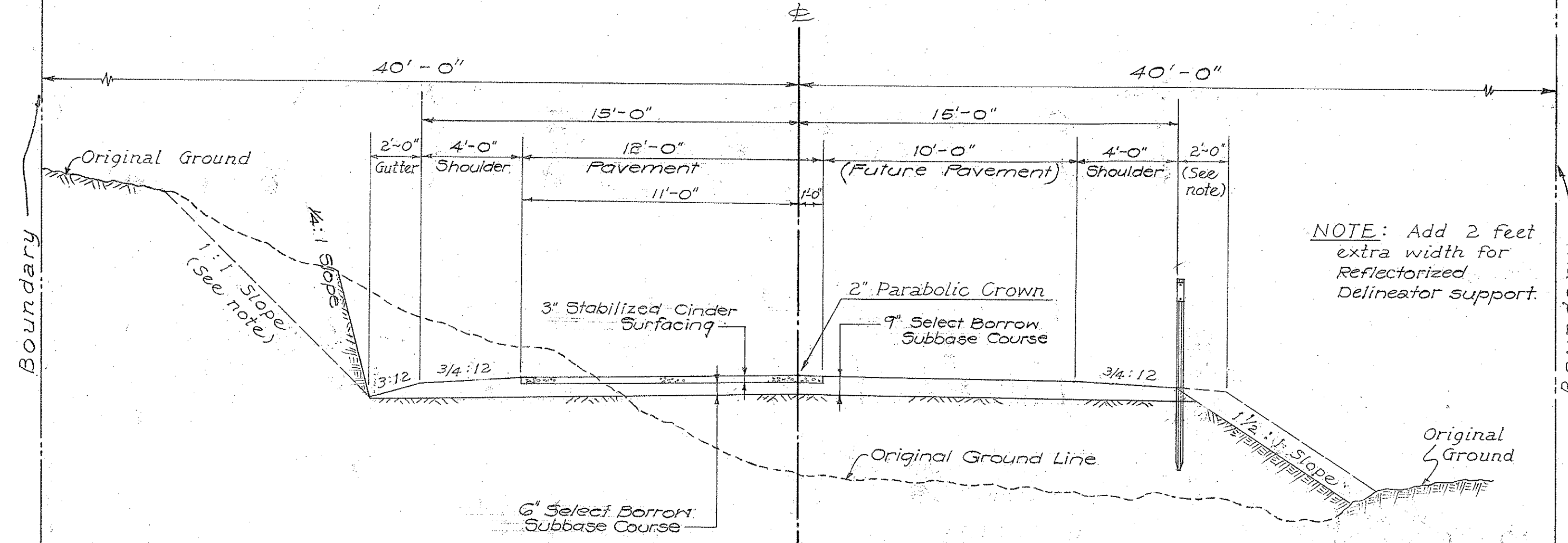


DIST. No.	STATE	PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	A-137-02-60	1960	2	18

NOTE: Due to the sag in the Roadway Profile Grade between Sta. 1068+50 and Sta. 1064+00 the gutter slope shown below shall be steepened, as ordered by the Engineer, to provide proper outlet drainage.

For excavation in rock, see Subarticle 13.2(D) of Standard Specifications.



NOTE: Where, in the opinion of the Engineer the cut slopes will not stand at 1/4:1, he shall order the slopes flattened to 1:1. See Section 13 of the Special Provisions also.

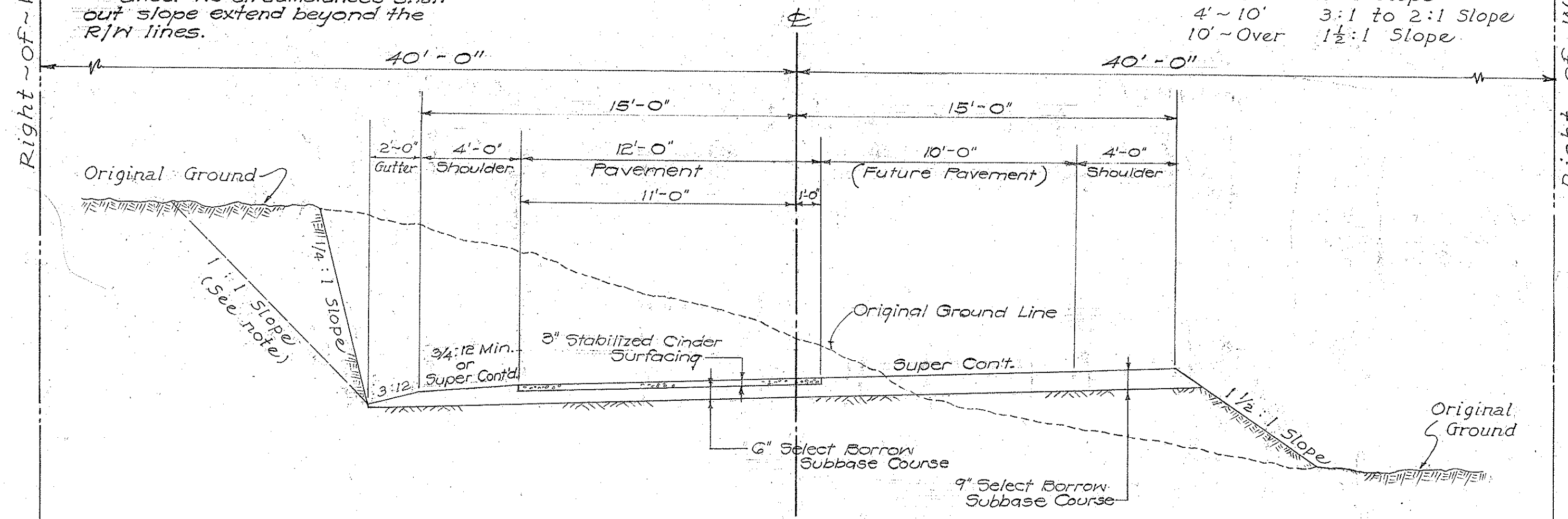
Under no circumstances shall cut slope extend beyond the R/H lines.

TYPICAL ROAD SECTION ON TANGENT
Scale: 1/4" = 1'-0"

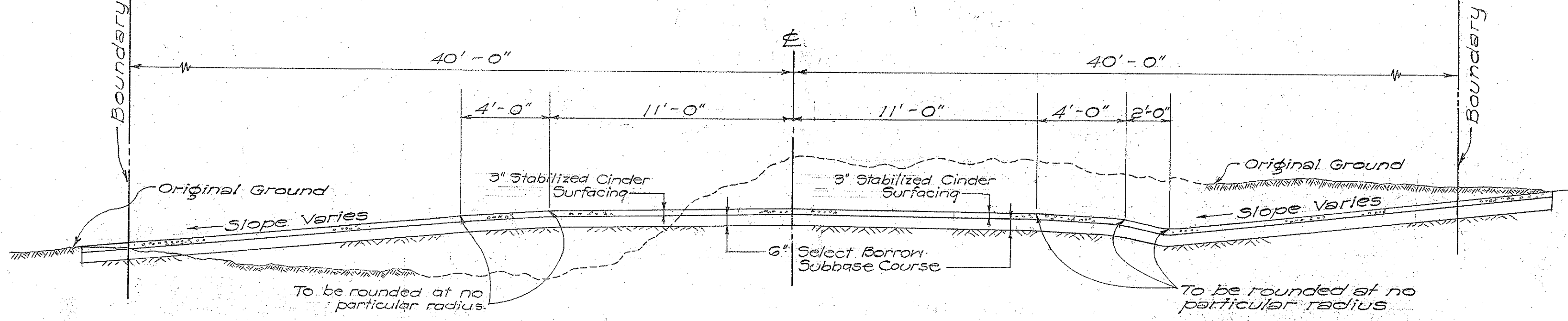
NOTE: Fill slopes shall be flattened as per Fill Slope Table with excess material where ordered by the Engineer.

FILL SLOPE TABLE

0' - 4'	4:1 Slope
4' - 10'	3:1 to 2:1 Slope
10' - Over	1 1/2:1 Slope

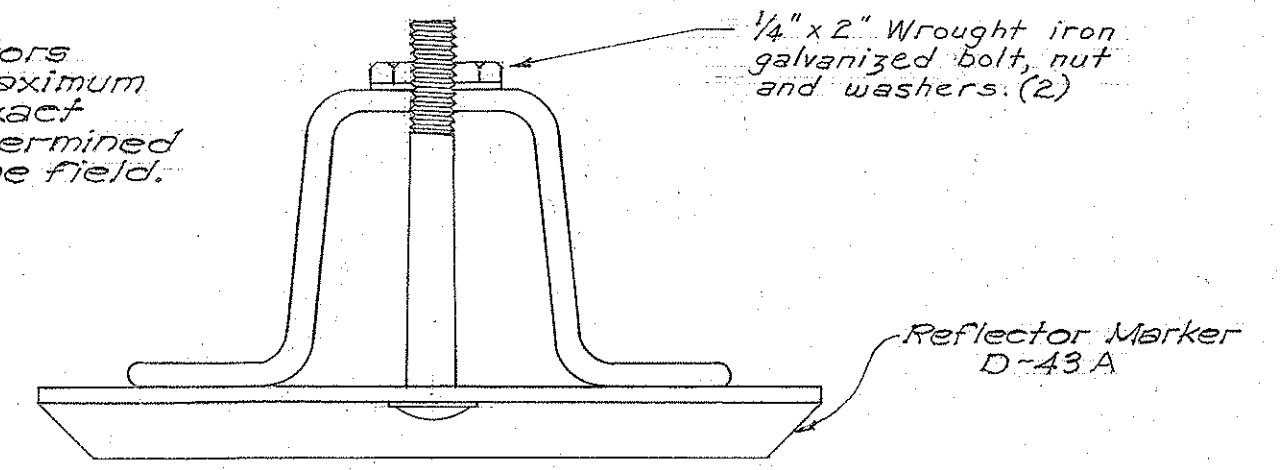
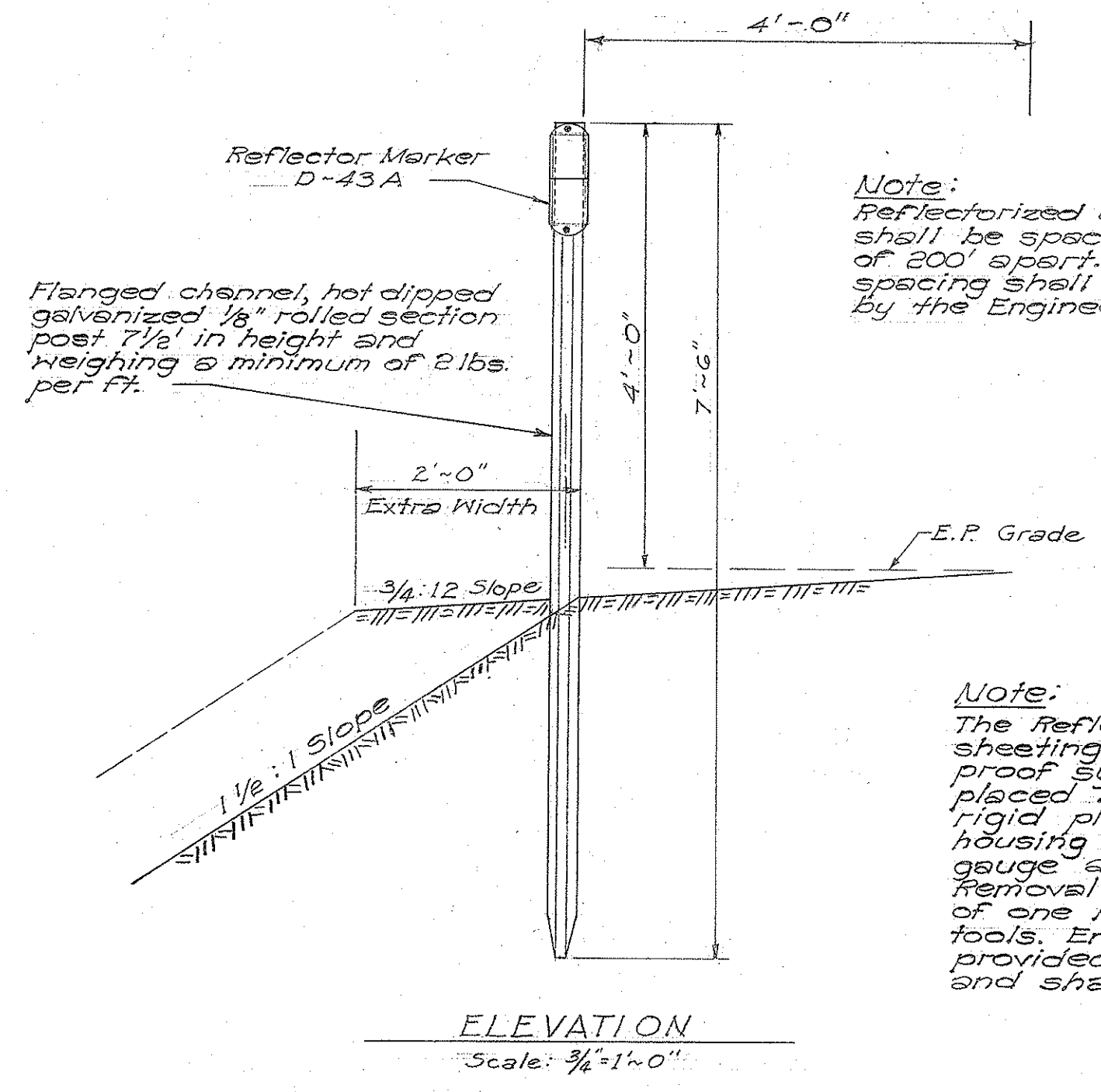


TYPICAL ROAD SECTION ON CURVE
Scale: 1/4" = 1'-0"



NOTE: Sideroad approaches shall conform to pavement grade, crown, shoulder and gutter.

DETAIL OF TYPICAL SIDEROAD APPROACHES
Scale: 1/4" = 1'-0"



Note: Reflectorized delineators shall be spaced a maximum of 200' apart. The exact spacing shall be determined by the Engineer in the field.

Note: The Reflector Marker Unit shall consist of amber or clear reflective sheeting composed of glass spheres embedded in a weather-proof synthetic sheet resin, the reflective face, of which shall be placed behind and sealed to a clear or amber weatherproof rigid plastic comprising a sealed optical system. The complete housing shall be fabricated of 5052-H34 aluminum alloy, .060 gauge and shall be provided with an anodized protective coating. Removal of the plastic delineator shall be permitted only by removal of one housing end cap. End caps shall not be removable without tools. End caps shall be interchangeable between housing sizes provided. Holes for mounting shall accommodate 1/4" carriage bolts and shall be punched to fit post having holes on 1" center.

DETAIL OF REFLECTORIZED DELINEATOR

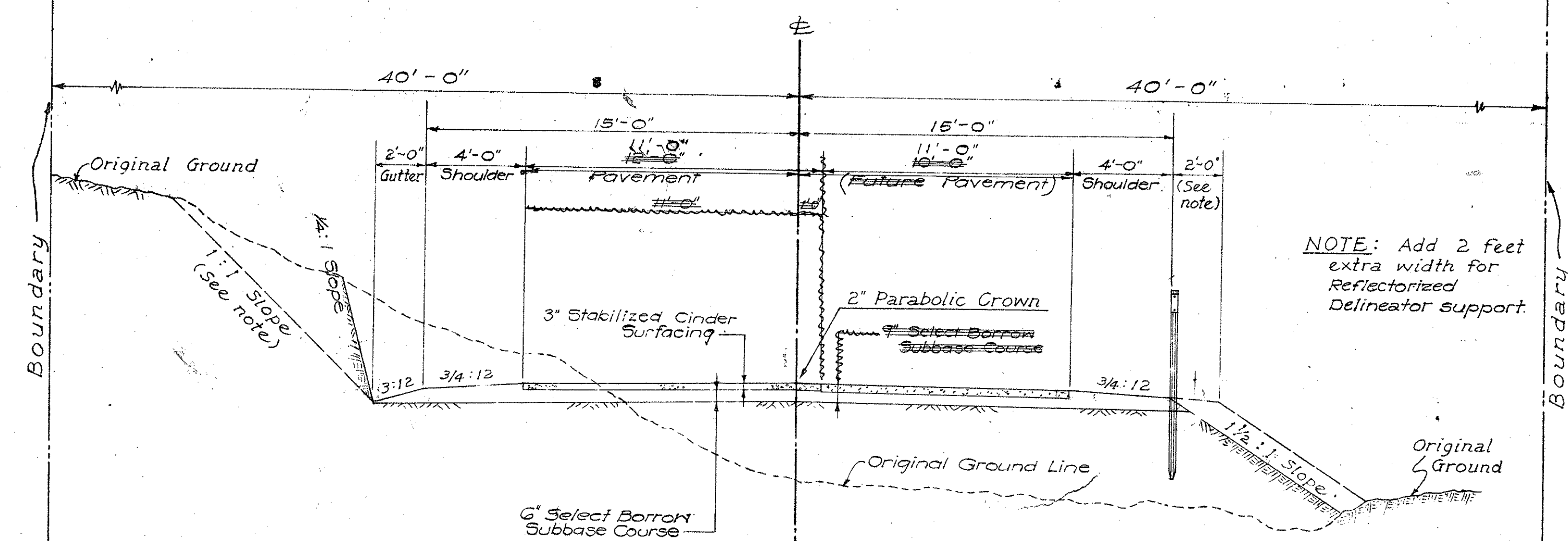
SECTION "B"

DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STATE OF HAWAII

TYPICAL SECTIONS &
DETAIL OF REFLECTORIZED DELINEATOR
Kaimu-Kapoho Road
Project A-137-02-60
Puna, Hawaii
Scale: As Noted Date: Dec. 1960
SHEET No. 1 OF 2 SHEETS

NOTE: Due to the sag in the Roadway Profile Grade between Sta. 1068+50 and Sta. 1094+00 the gutter slope shown below shall be steepened, as ordered by the Engineer, to provide proper outlet drainage.

For excavation in rock, see Subarticle 13.2(D) of Standard Specifications.



TYPICAL ROAD SECTION ON TANGENT

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

NOTE:

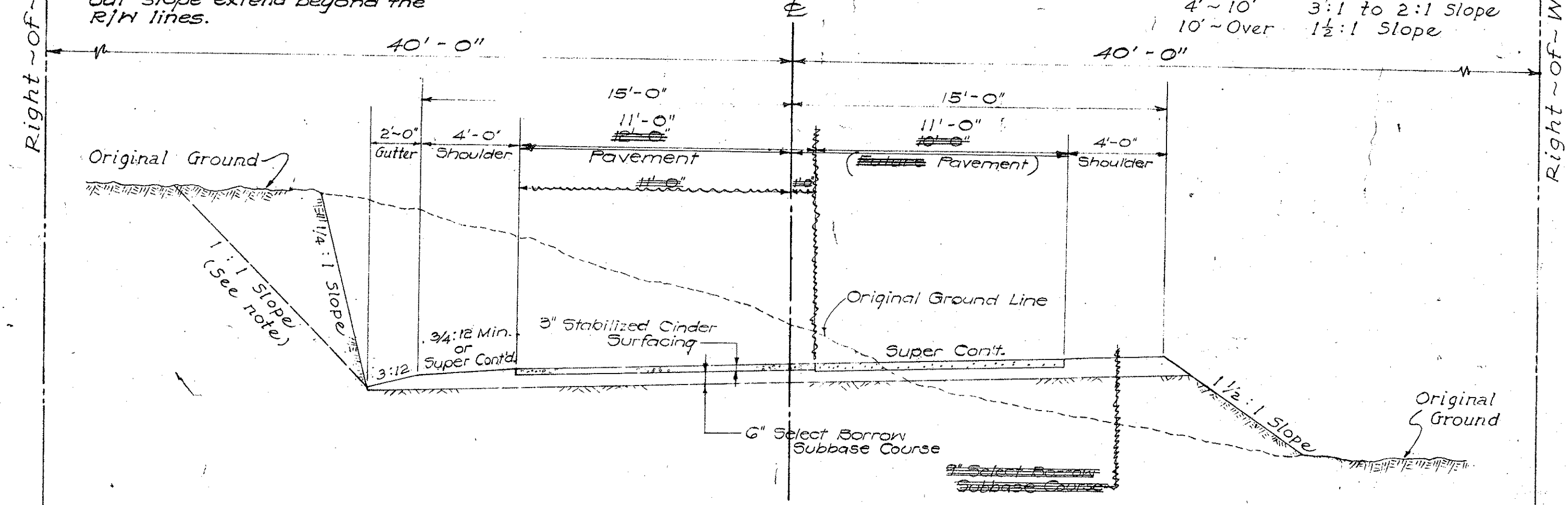
Where in the opinion of the Engineer the cut slopes will not stand at 1/4:1, he shall order the slopes flattened to 1:1. See Section 13 of the Special Provisions also.

Under no circumstances shall cut slope extend beyond the R/W lines.

NOTE: Fill slopes shall be flattened as per Fill Slope Table with excess material where ordered by the Engineer.

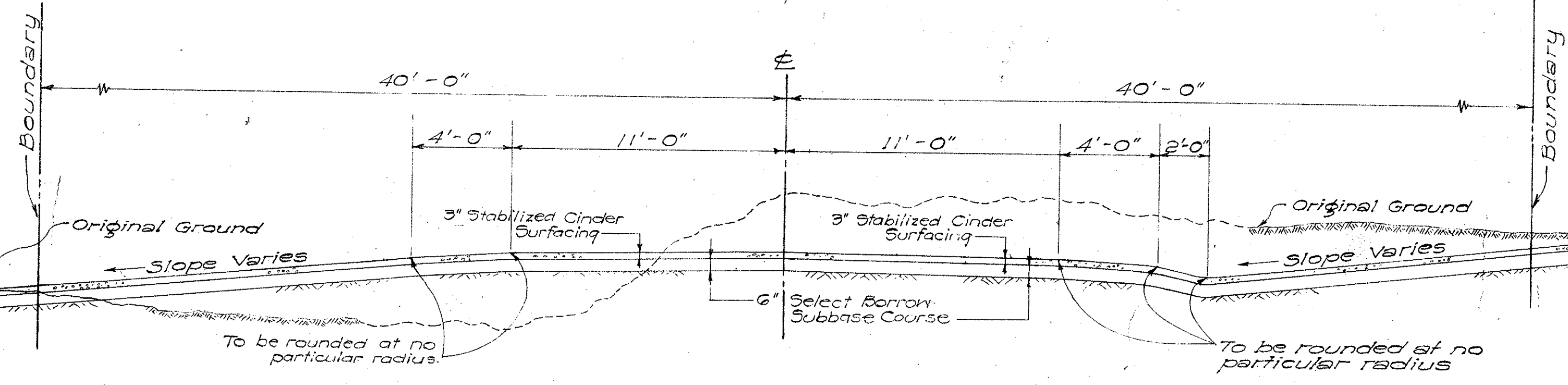
FILL SLOPE TABLE

0' - 4'	4:1 Slope
4' - 10'	3:1 to 2:1 Slope
10' - Over	1 1/2:1 Slope



TYPICAL ROAD SECTION ON CURVE

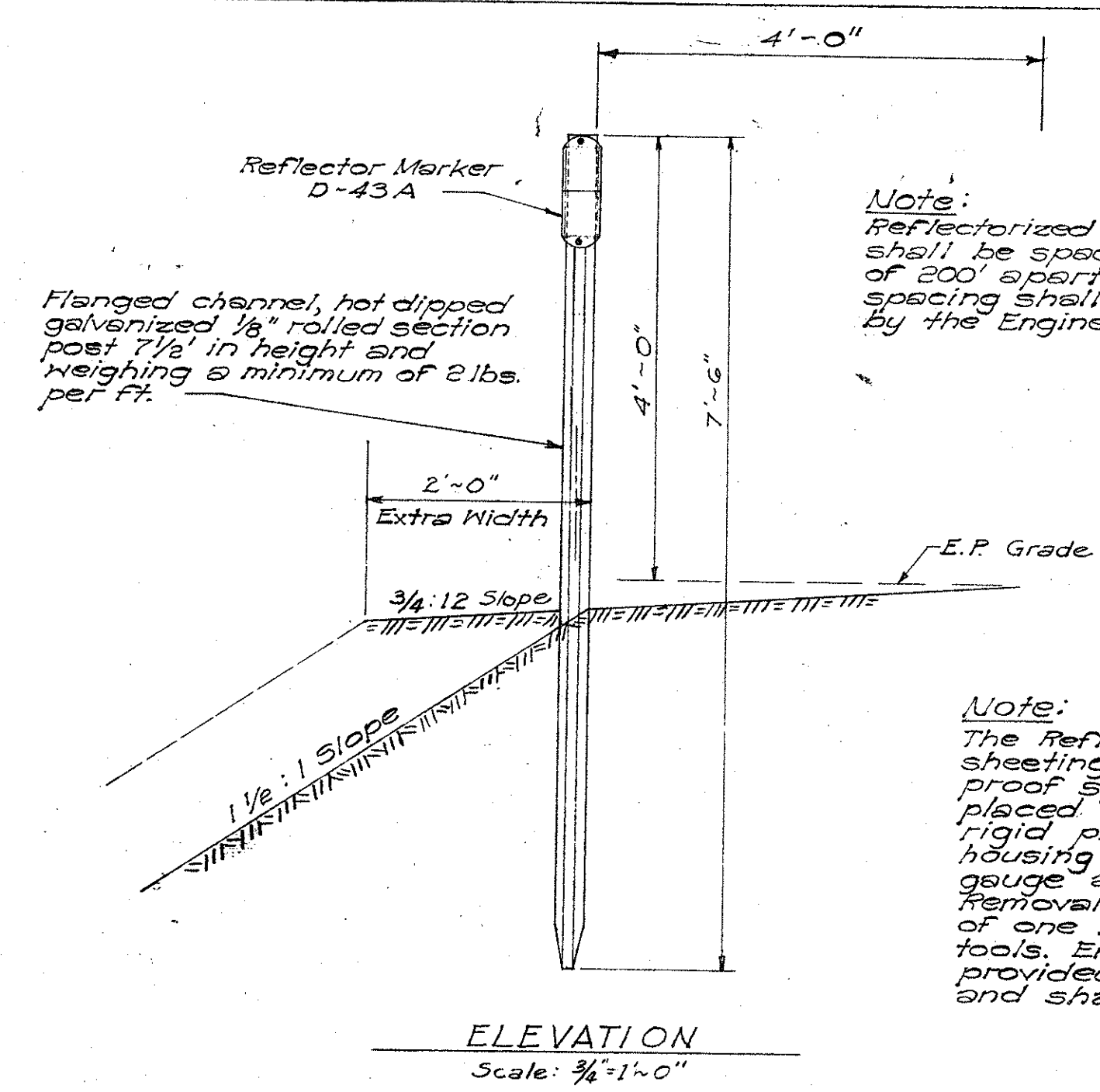
Scale: 1/4" = 1'-0"



DETAIL OF TYPICAL SIDEROAD APPROACHES

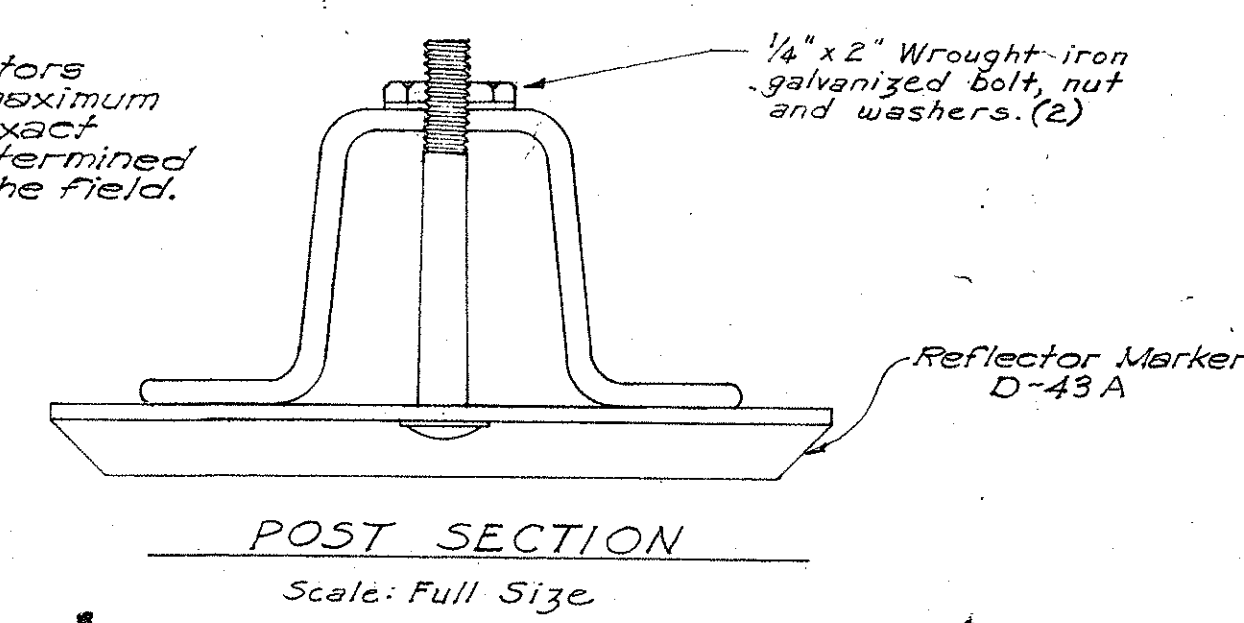
Scale: 1/4" = 1'-0"

NOTE: Sideroad approaches shall conform to pavement grade, crown, shoulder and gutter.



ELEVATION

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



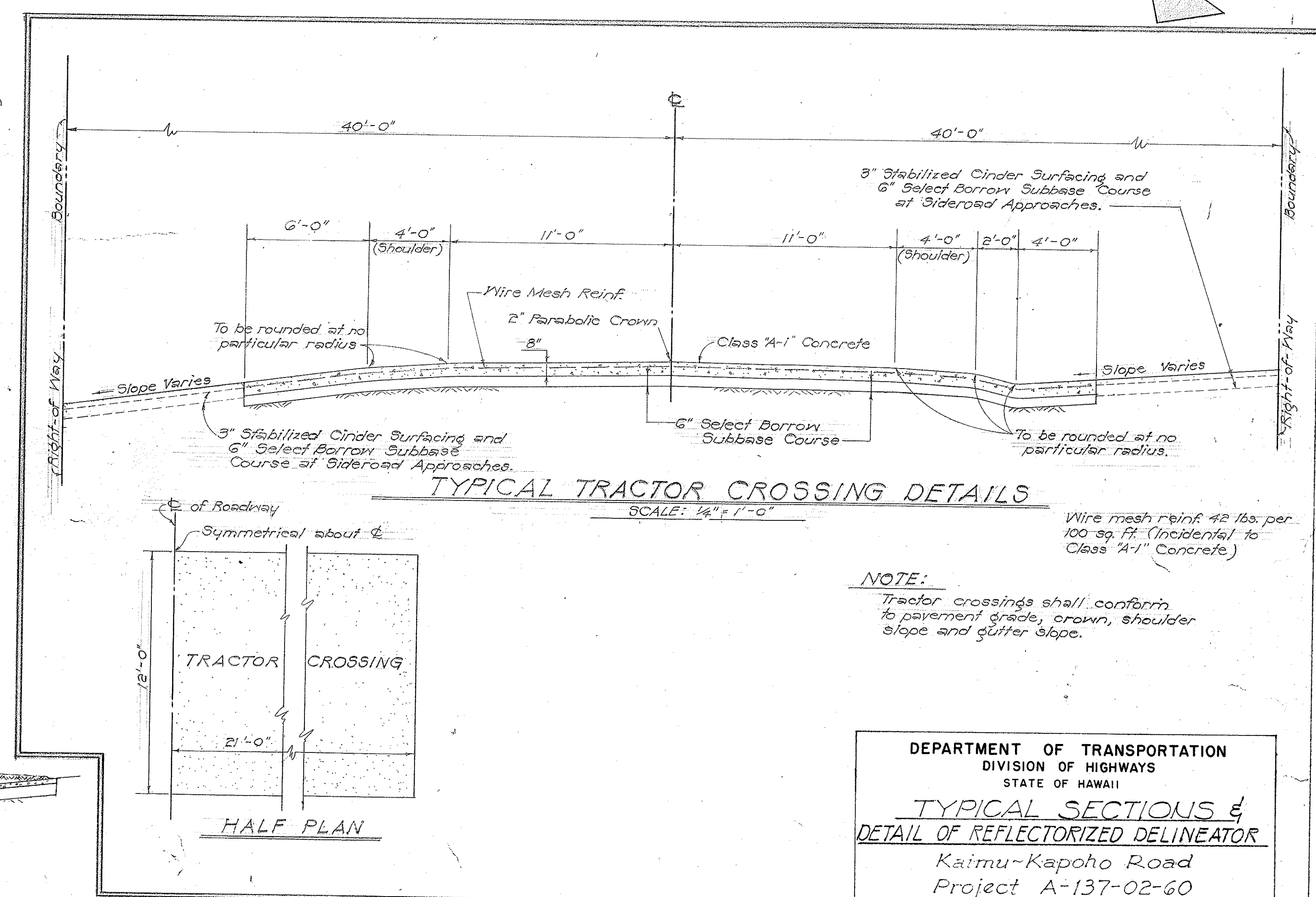
POST SECTION

Scale: Full Size

NOTE:

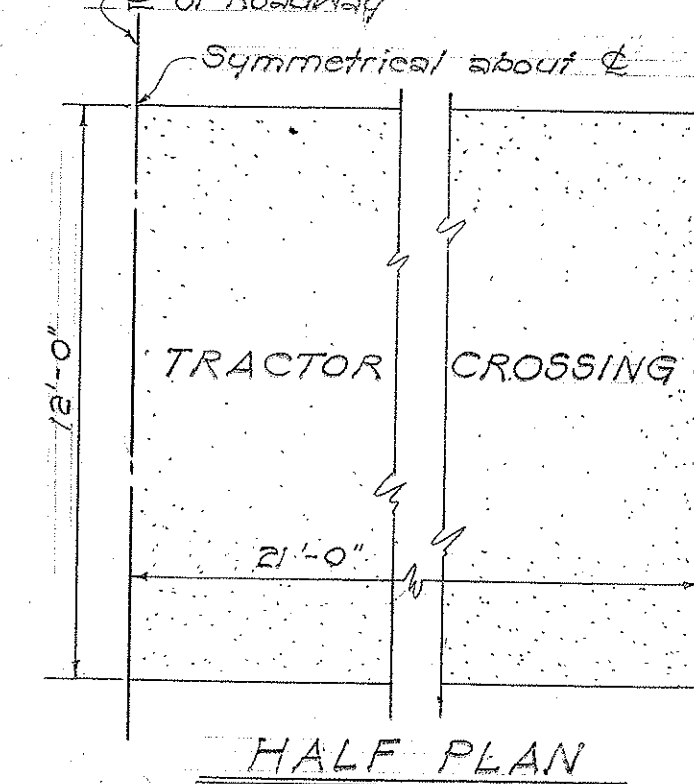
The Reflector Marker Unit shall consist of amber or clear reflective sheeting composed of glass spheres embedded in a weather-proof synthetic sheet resin, the reflective face, of which shall be placed behind and sealed to a clear or amber weatherproof rigid plastic comprising a sealed optical system. The complete housing shall be fabricated of 5052-H34 aluminum alloy, 16G gauge and shall be provided with an anodized protective coating. Removal of the plastic delineator shall be permitted only by removal of one housing end cap. End caps shall not be removable without tools. End caps shall be interchangeable between housing sizes provided. Holes for mounting shall accommodate 1/4 inch carriage bolts and shall be punched to fit post having holes on 1 inch center.

DETAIL OF REFLECTORIZED DELINEATOR



TYPICAL TRACTOR CROSSING DETAILS

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



HALF PLAN

NOTE:

Tractor crossings shall conform to pavement grade, crown, shoulder slope and gutter slope.

Wire mesh reinf. 42 lbs. per 100 sq. ft. (Incidental to Class "A-1" Concrete)

DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STATE OF HAWAII

**TYPICAL SECTIONS &
DETAIL OF REFLECTORIZED DELINEATOR**

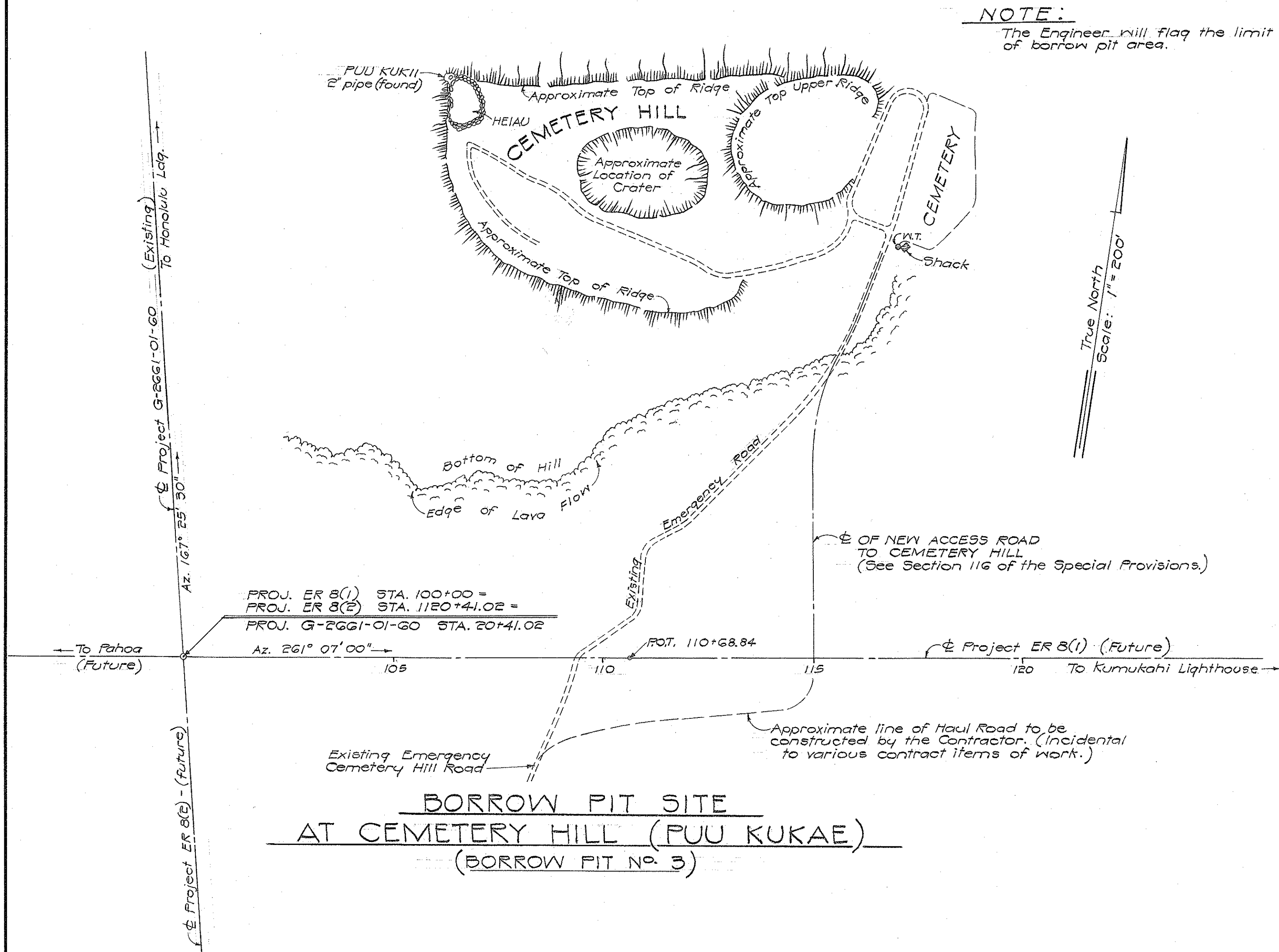
Kaimu-Kapoho Road
Project A-137-02-60
Puna, Hawaii

Scale: As Noted Date: Dec. 1960

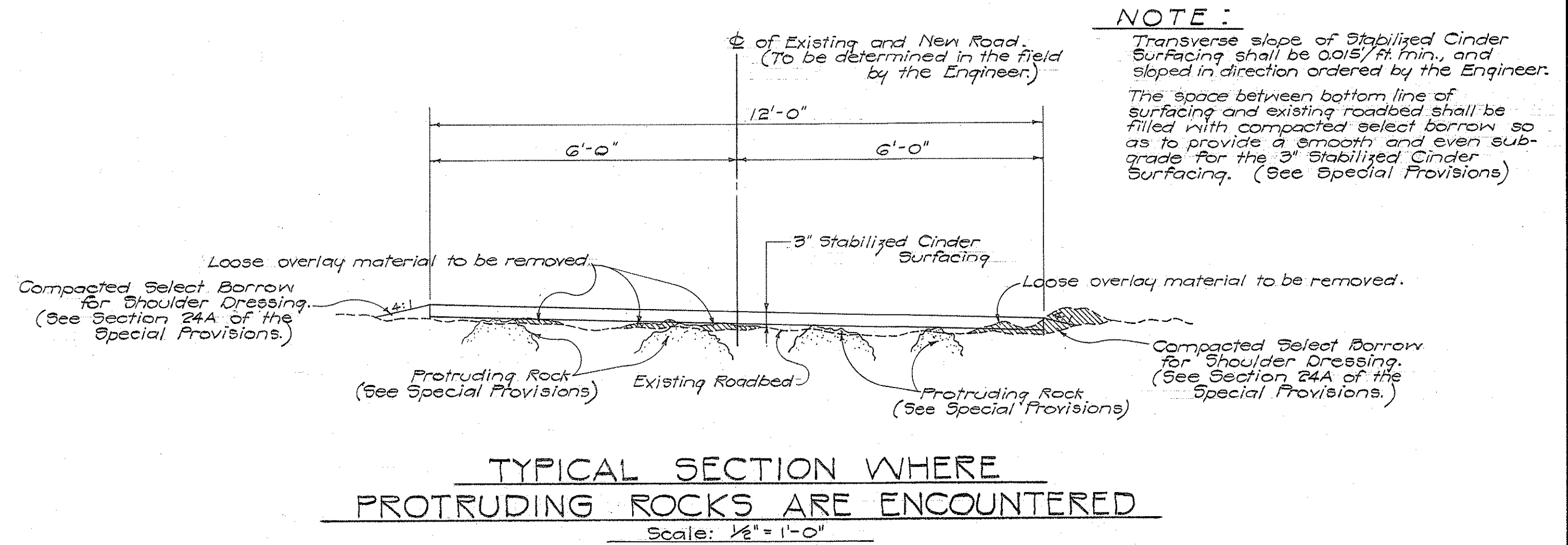
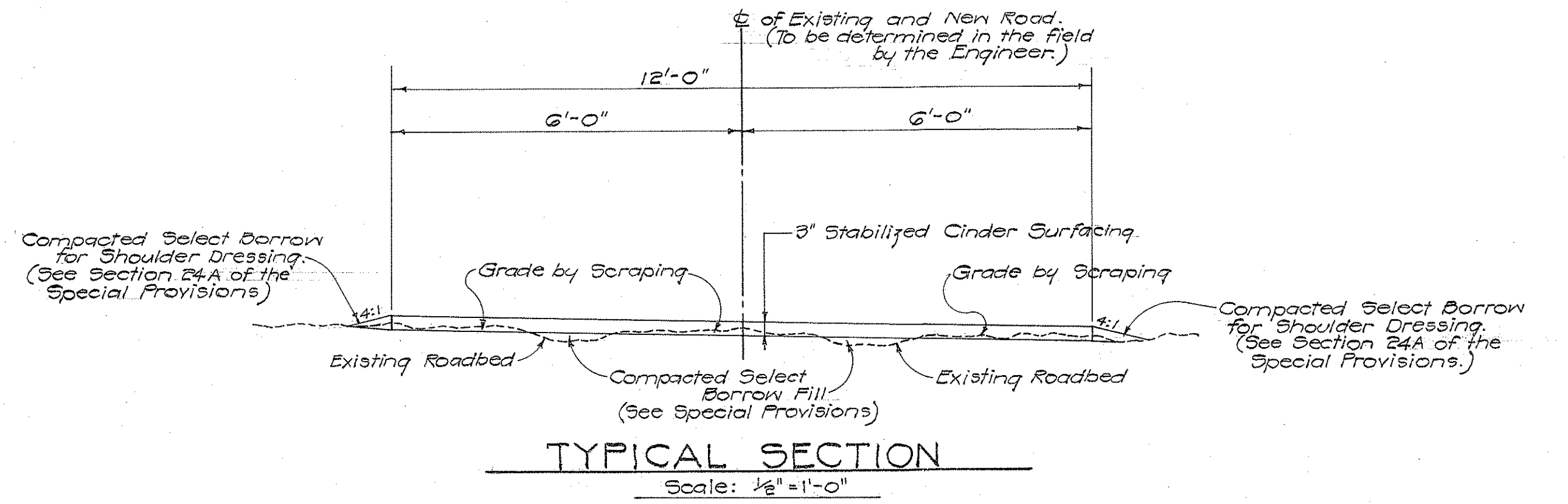
SHEET No. 1 OF 2 SHEETS

SECTION "B"

DIST. No.	STATE	PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	A-137-02-60	1960	3	18



BORROW PIT SITE AT CEMETERY HILL (PUU KUKAE) (BORROW PIT NO. 3)



SECTION "A"

NOTE:
Three short sections of existing road previously paved and totalling approximately 2,000 feet in length will require no resurfacing; however, where such existing pavement is less than 12 feet in width, stabilized cinder surfacing shall be constructed along the edges to widen its overall width of pavement to 12 feet.

DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STATE OF HAWAII

**TYPICAL SECTIONS (SECTION "A")
AND BORROW PIT NO. 3 SITE**

KAIMU-KAPOHO ROAD
PROJECT NO. A-137-02-60
PUNA, HAWAII

Scale: As Noted Date: April 1961

SHEET NO. 2 OF 2 SHEETS

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