

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99C-01-99	2002	C.O. 28	45

I. B. # Sta. 48+50 o/s 24' Lt. to I.B. # Sta. 52+00 Lt.
Demolish, remove and dispose existing GDI
Construct: Type 61614P GDI
61616 Grass Swale

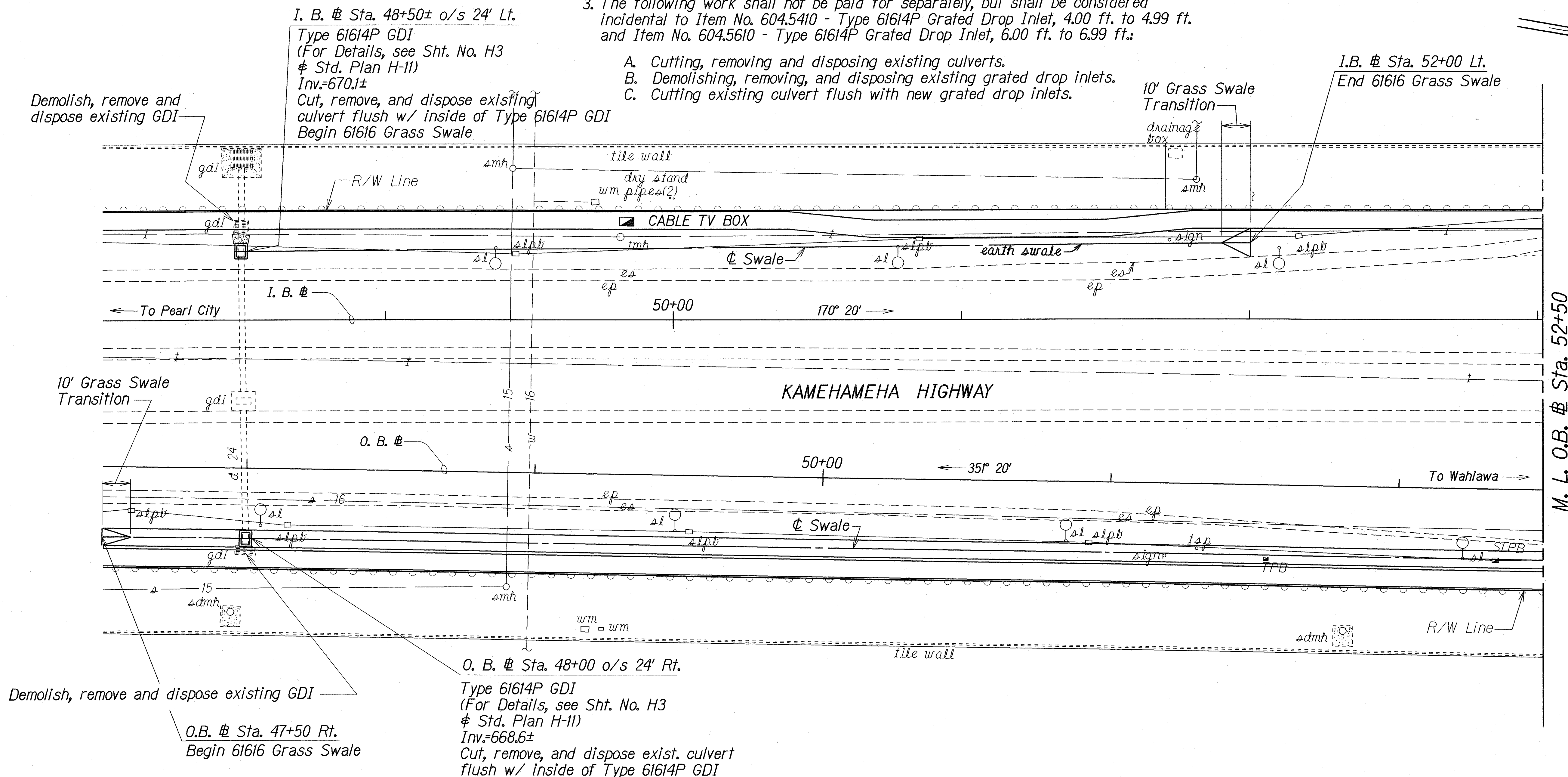
Estimated Quantities

Type 61614P GDI, 6.00 Ft. to 6.99 Ft. = 1 Ea.
61616 Grass Swale = 350 L.F.
Grassed Surface = 234 S.Y.

DRAINAGE NOTES:

- Existing drainage systems will be functional at all times during construction. The Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to accomplish maintenance of flow. The cost shall be incidental to the various Contract Items.
- The Contractor shall verify the locations of all existing culverts and utilities in the field. Any existing culverts and utilities damaged during construction shall be repaired or replaced by the Contractor at no cost to the State.
- The following work shall not be paid for separately, but shall be considered incidental to Item No. 604.5410 - Type 61614P Grated Drop Inlet, 4.00 ft. to 4.99 ft. and Item No. 604.5610 - Type 61614P Grated Drop Inlet, 6.00 ft. to 6.99 ft.:
 - Cutting, removing and disposing existing culverts.
 - Demolishing, removing, and disposing existing grated drop inlets.
 - Cutting existing culvert flush with new grated drop inlets.

- Cutting and connecting the existing 24-Inch RCP to the Type 61614P GDI at O.B. # Station 54+18 Rt. shall not be paid for separately, but shall be considered incidental to Item No. 604.5410 - Type 61614P Grated Drop Inlet, 4.00 ft to 4.99 ft.



DESIGNED BY	DATE
TRACED BY	3/4/02
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

O.B. # Sta. 47+50 Rt. to O.B. # Sta. 52+50 Rt.
Construct: 61616 Grass Swale

Estimated Quantities

61616 Grass Swale = 500 L.F.
Grassed Surface = 334 S.Y.

O. B. # Sta. 48+00 o/s 24' Rt.
Type 61614P GDI
(For Details, see Sht. No. H3
Std. Plan H-11)
Inv.=668.6±
Cut, remove, and dispose exist. culvert
flush w/ inside of Type 61614P GDI

O. B. # Sta. 48+00 o/s 24' Rt.
Demolish, remove and dispose existing GDI
Construct: Type 61614P GDI

Estimated Quantities

Type 61614P GDI, 6.00 Ft. to 6.99 Ft. = 1 Ea.

8/29/02	Revised Plan notes and Drainage Note No. 4.
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PLAN

KAMEHAMEHA HIGHWAY
SIDEWALK IMPROVEMENTS
Meheula Parkway To Kuahelani Avenue
Project No. 99C-01-99

Scale: 1"=20'
Date: March 2002

SHEET No. *HI* OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99C-01-99	2002	C.O. 29	45

I.B. # Sta. 54+10 o/s 38' Lt. to I.B. # Sta. 55+60± Lt.

Demolish, remove and dispose existing GDI
clean and salvage existing grate.

Construct: Sidewalk Drain
Type 61614P GDI
61616 Grass Swale

Estimated Quantities

Sidewalk Drain = 1 Ea.
Type 61614P GDI, 4.00 Ft. to 4.99 Ft. = 1 Ea.
61616 Grass Swale = 75 L.F.
Grassed Surface = 50 S.Y.

I.B. # Sta. 54+10 o/s 38' Rt.

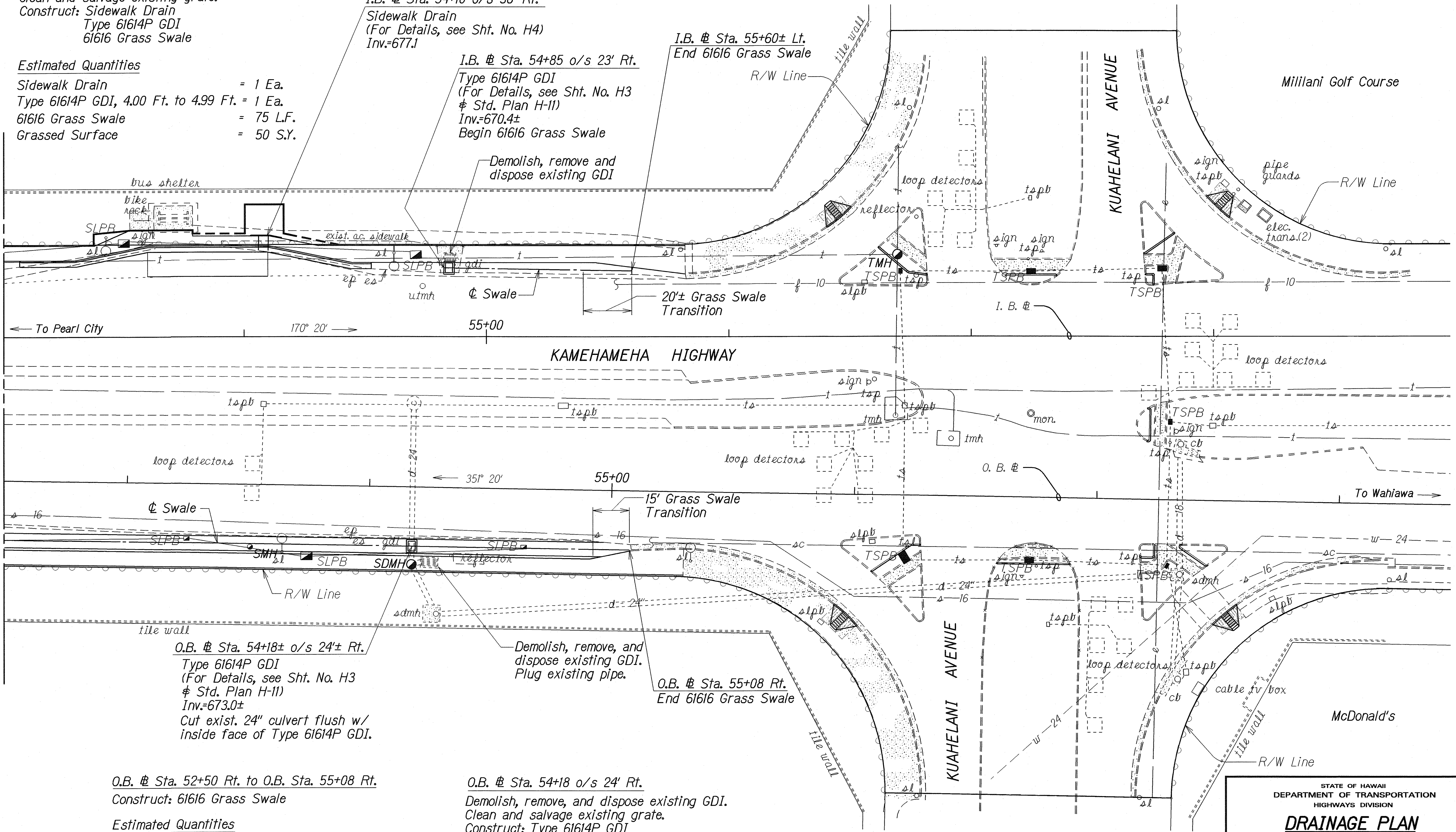
Sidewalk Drain
(For Details, see Sht. No. H4)
Inv.=677.1

I.B. # Sta. 54+85 o/s 23' Rt.

Type 61614P GDI
(For Details, see Sht. No. H3
Std. Plan H-11)
Inv.=670.4±
Begin 61616 Grass Swale

I.B. # Sta. 55+60± Lt.
End 61616 Grass Swale

M. L. O.B. # Sta. 52+50



O.B. # Sta. 54+18± o/s 24± Rt.

Type 61614P GDI
(For Details, see Sht. No. H3
Std. Plan H-11)
Inv.=673.0±
Cut exist. 24" culvert flush w/
inside face of Type 61614P GDI.

O.B. # Sta. 52+50 Rt. to O.B. Sta. 55+08 Rt.

Construct: 61616 Grass Swale

Estimated Quantities

61616 Grass Swale = 258 L.F.
Grassed Surface = 172 L.F.

O.B. # Sta. 54+18 o/s 24' Rt.

Demolish, remove, and dispose existing GDI.
Clean and salvage existing grate.
Construct: Type 61614P GDI

Estimated Quantities

Type 61614P GDI, 4.00 Ft. to 4.99 Ft. = 1 Ea.

ORIGINAL PLAN	DATE
DESIGNED BY	3/2/02
DRAWN BY	
CHECKED BY	
IN CHARGE	

8/29/02	Revised location of Type 61614P GDI at O.B. # Sta. 54+18, o/s 24± Rt. Revised Plan notes.
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DATE	REVISION
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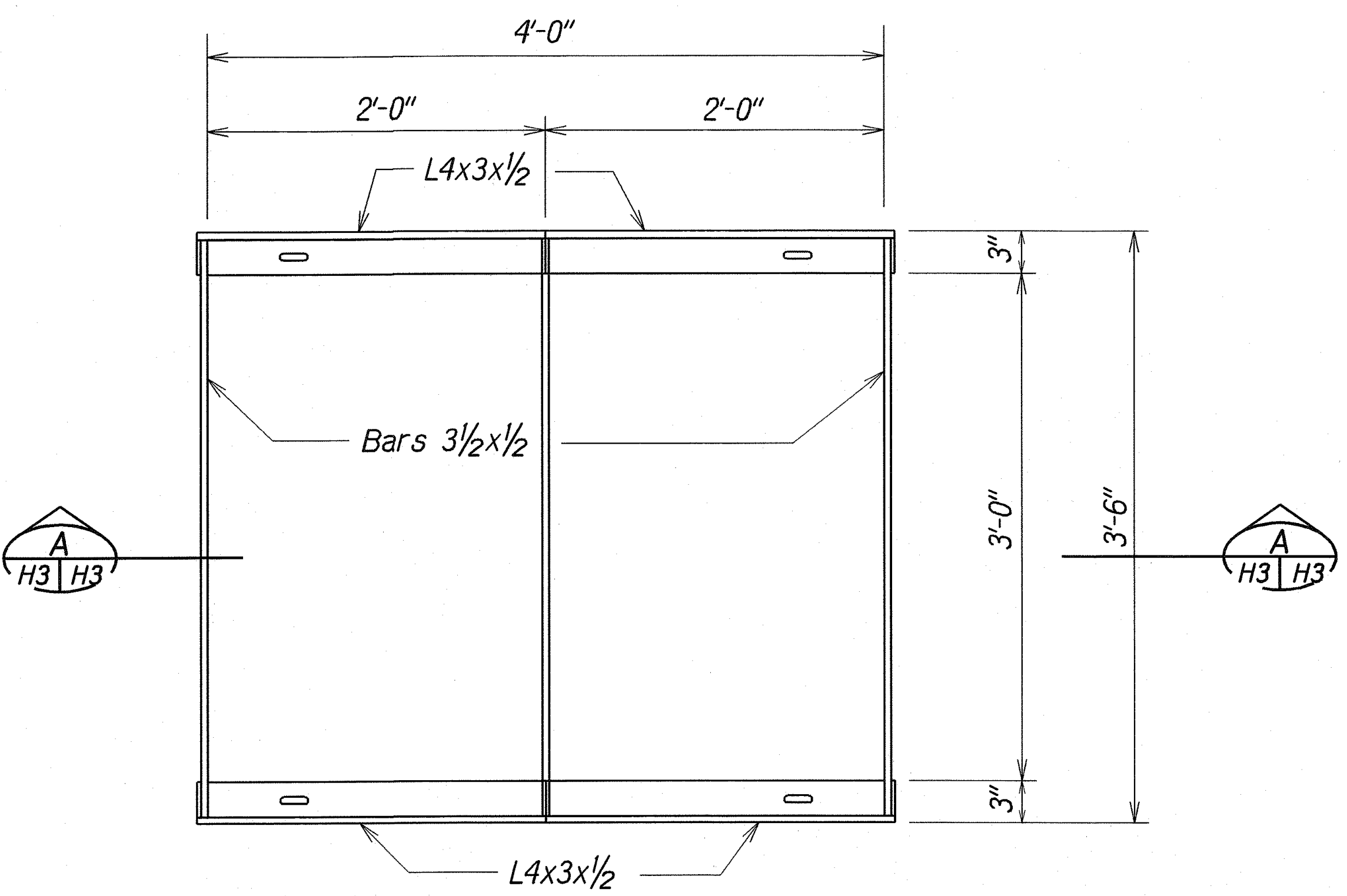
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PLAN
KAMEHAMEHA HIGHWAY
SIDEWALK IMPROVEMENTS
Meheula Parkway To Kuahelani Avenue
Project No. 99C-01-99

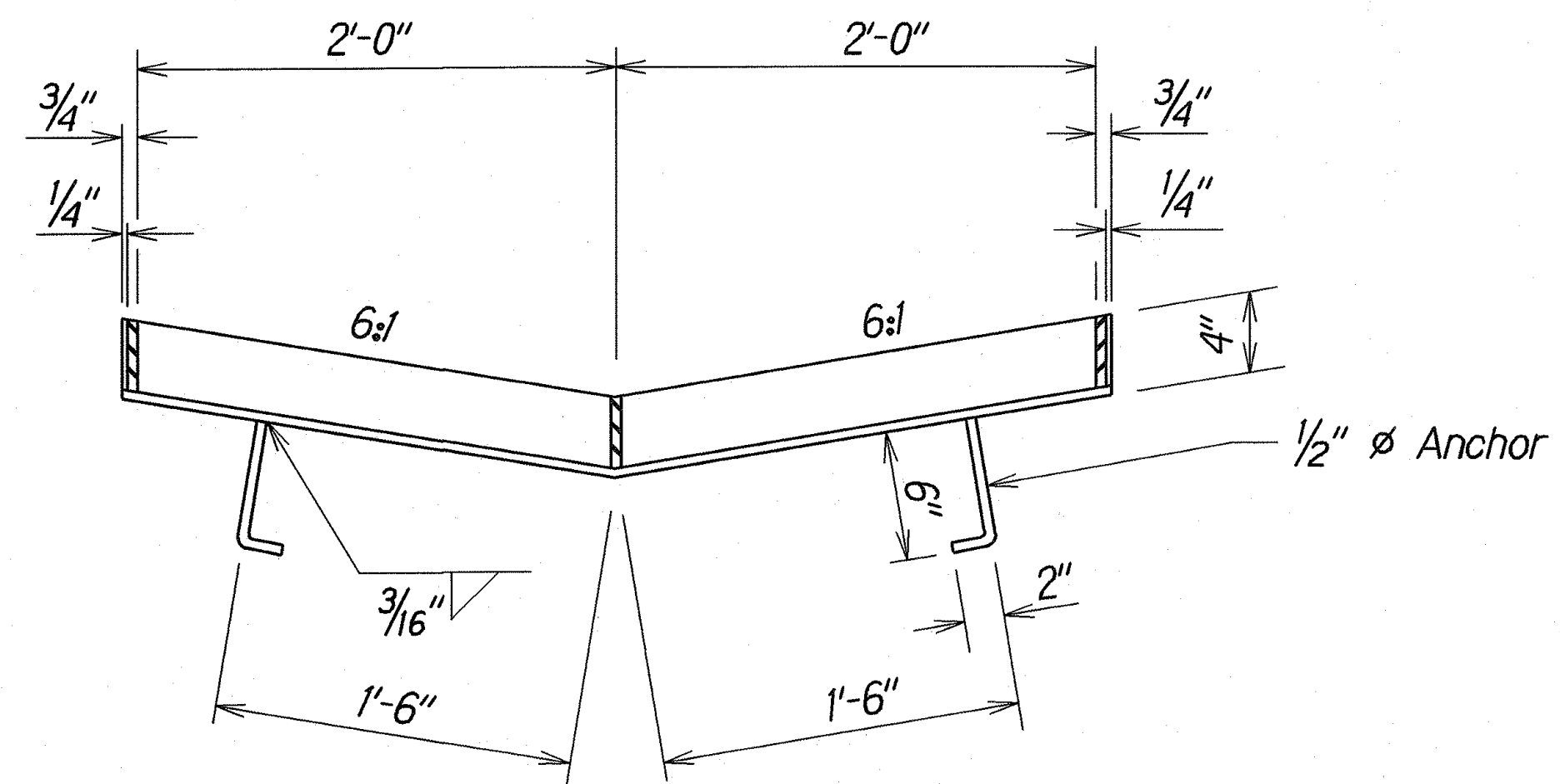
Scale: 1"=20' Date: March 2002

SHEET No. H2 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99C-01-99	2001	30	45

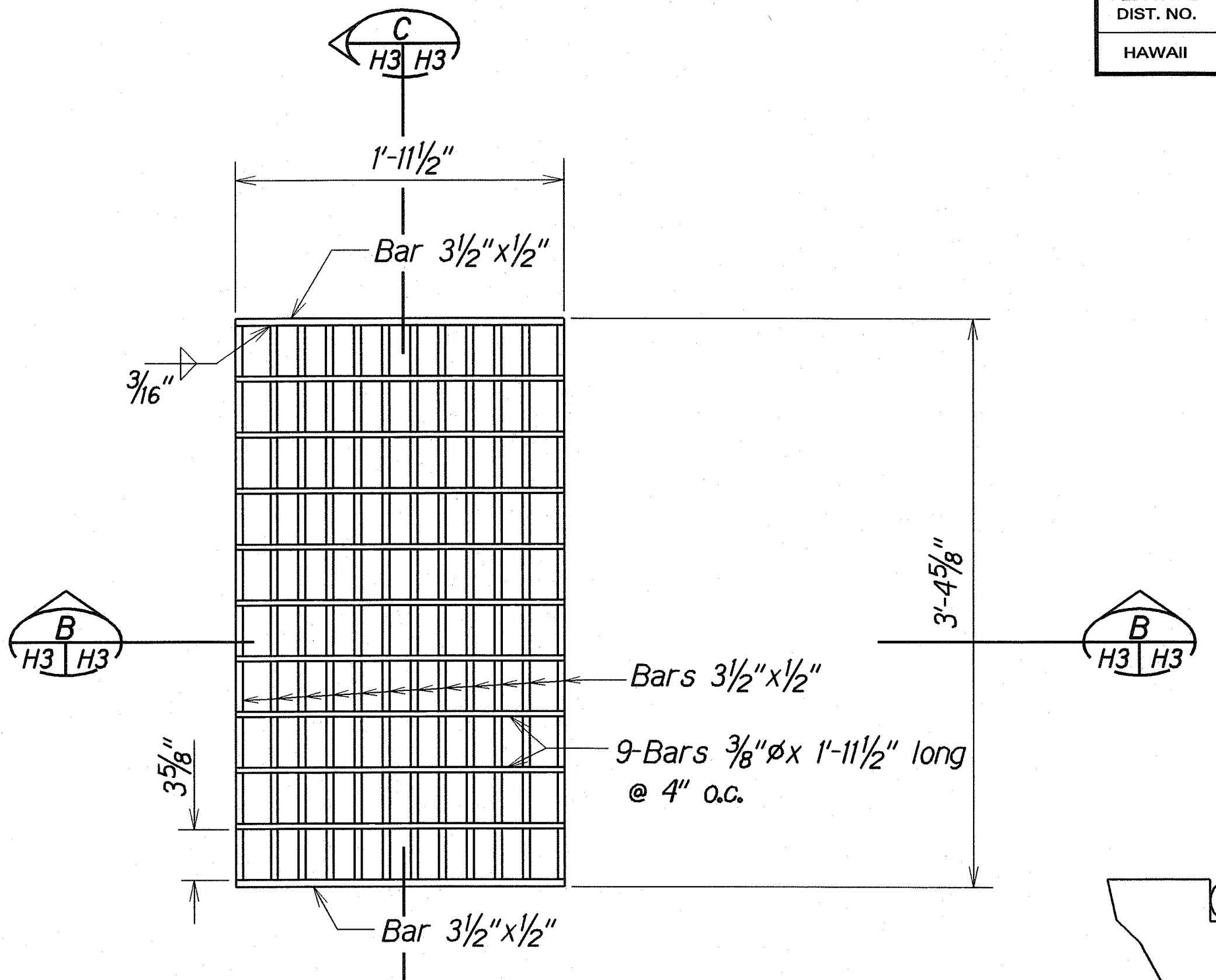


PLAN

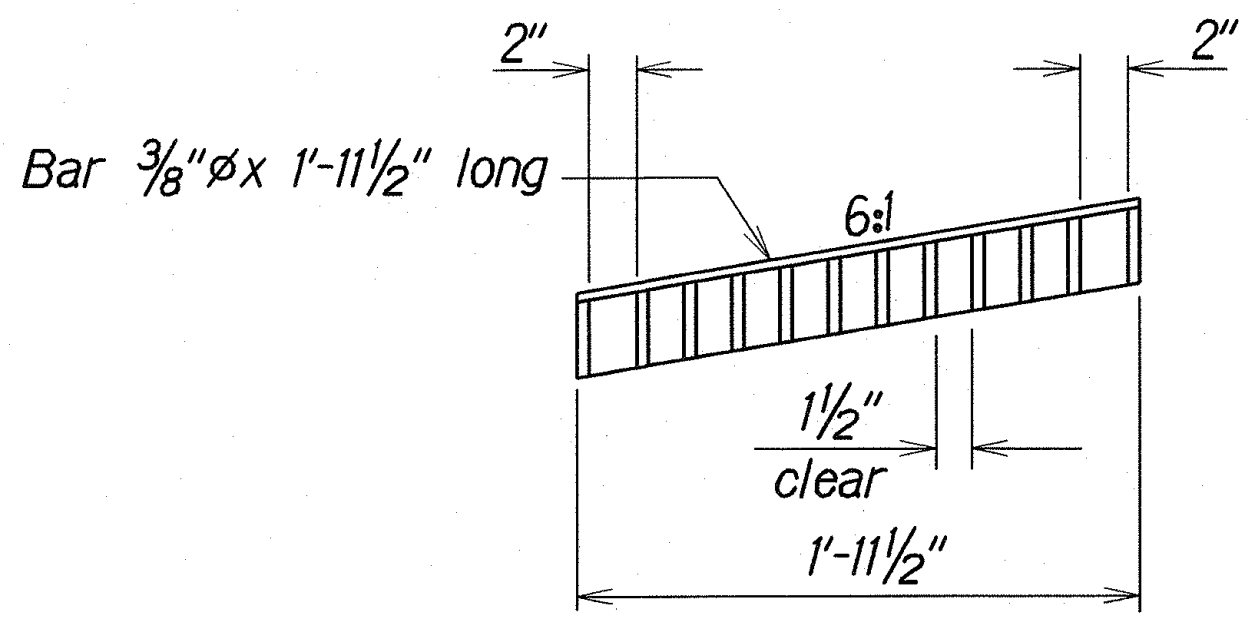


SECTION A-A

FRAME

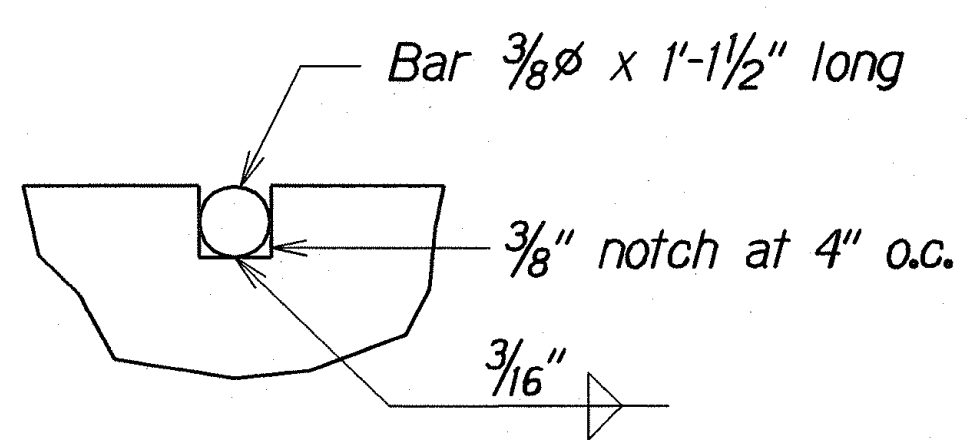


PLAN

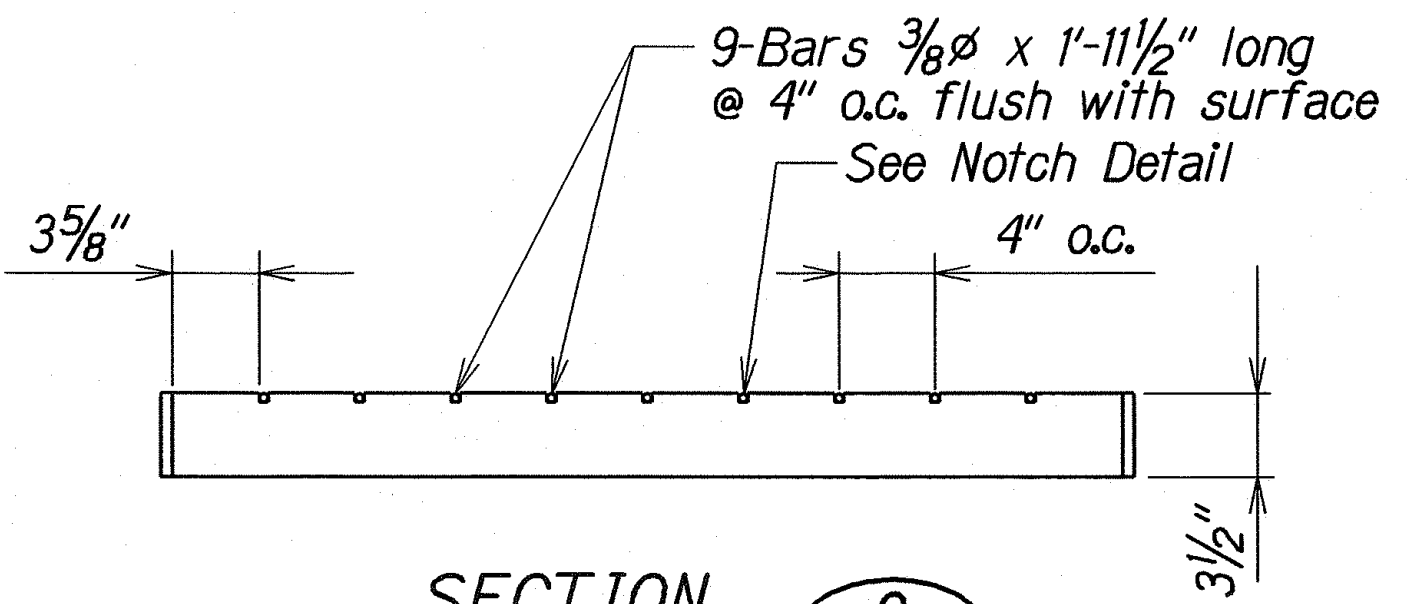


SECTION B-B

GRATE



NOTCH DETAIL
Full Size



SECTION C-C

NOTE:
All welds 3/8" unless otherwise noted.

ORIGINAL PLAN	DATE	1/4/02
SURVEY PLOTTED BY		
DRAWN BY		
DESIGNED BY		
CHECKED BY		

DETAIL OF TYPE 61614P STEEL FRAME & GRATES

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

KAMEHAMEHA HIGHWAY

SIDEWALK IMPROVEMENTS

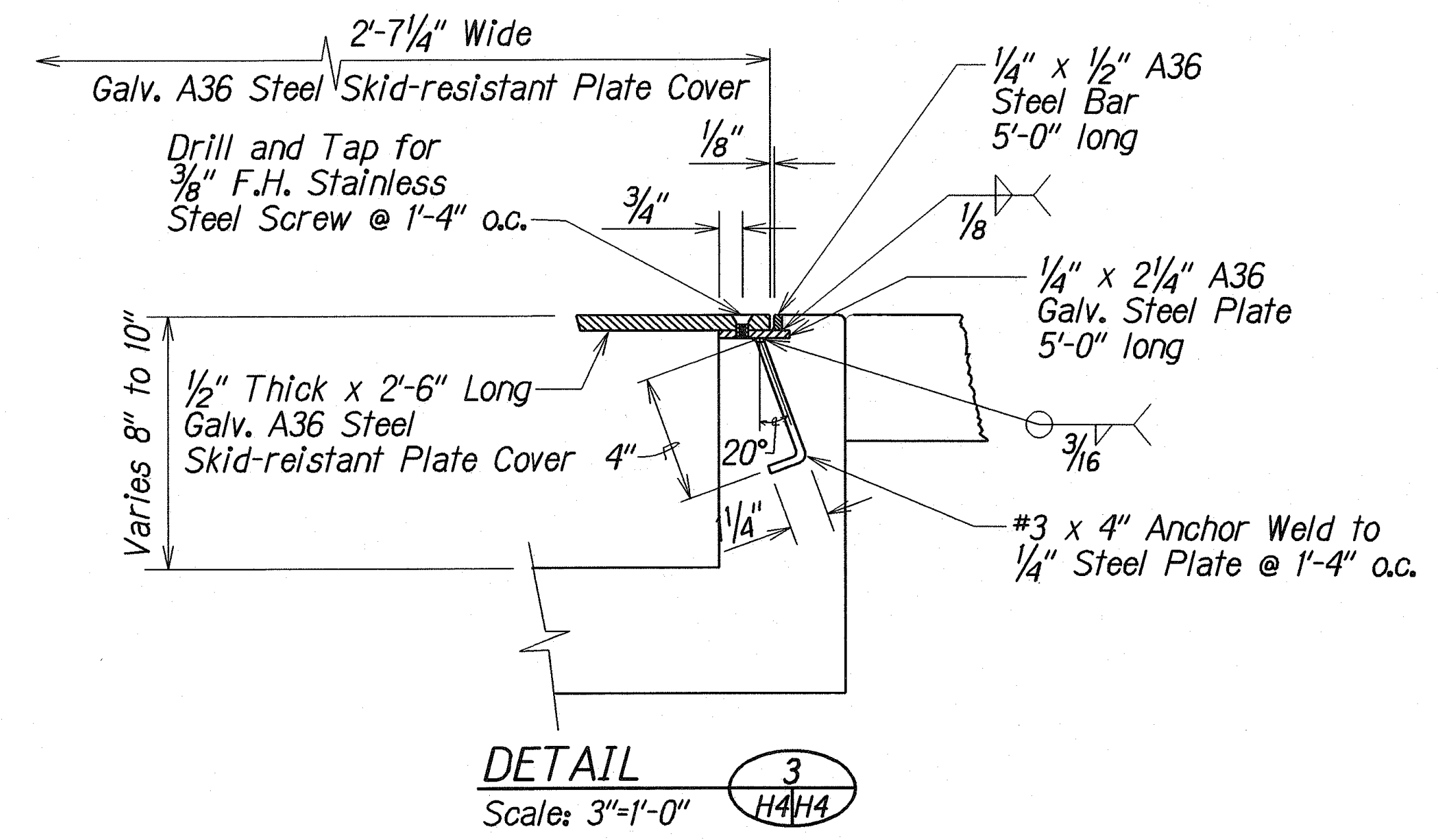
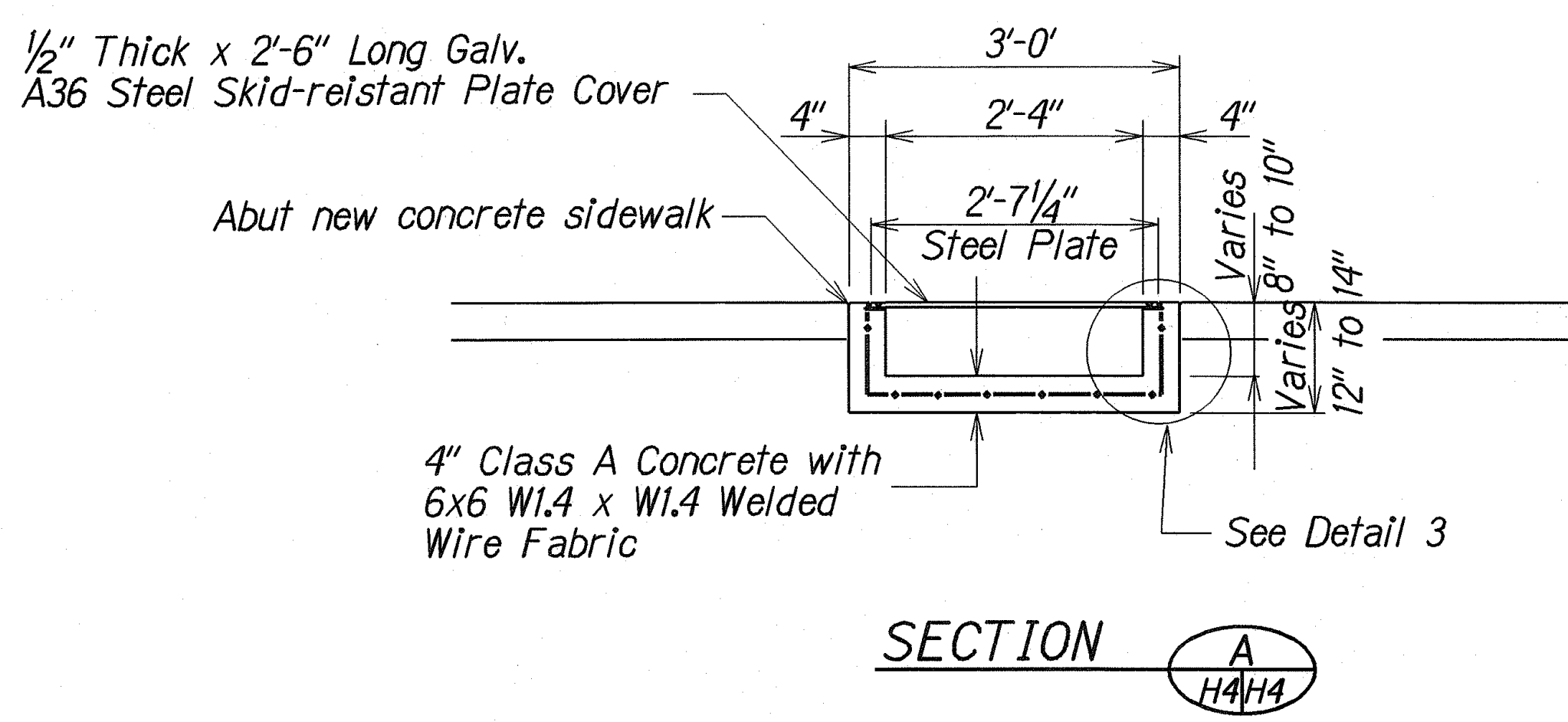
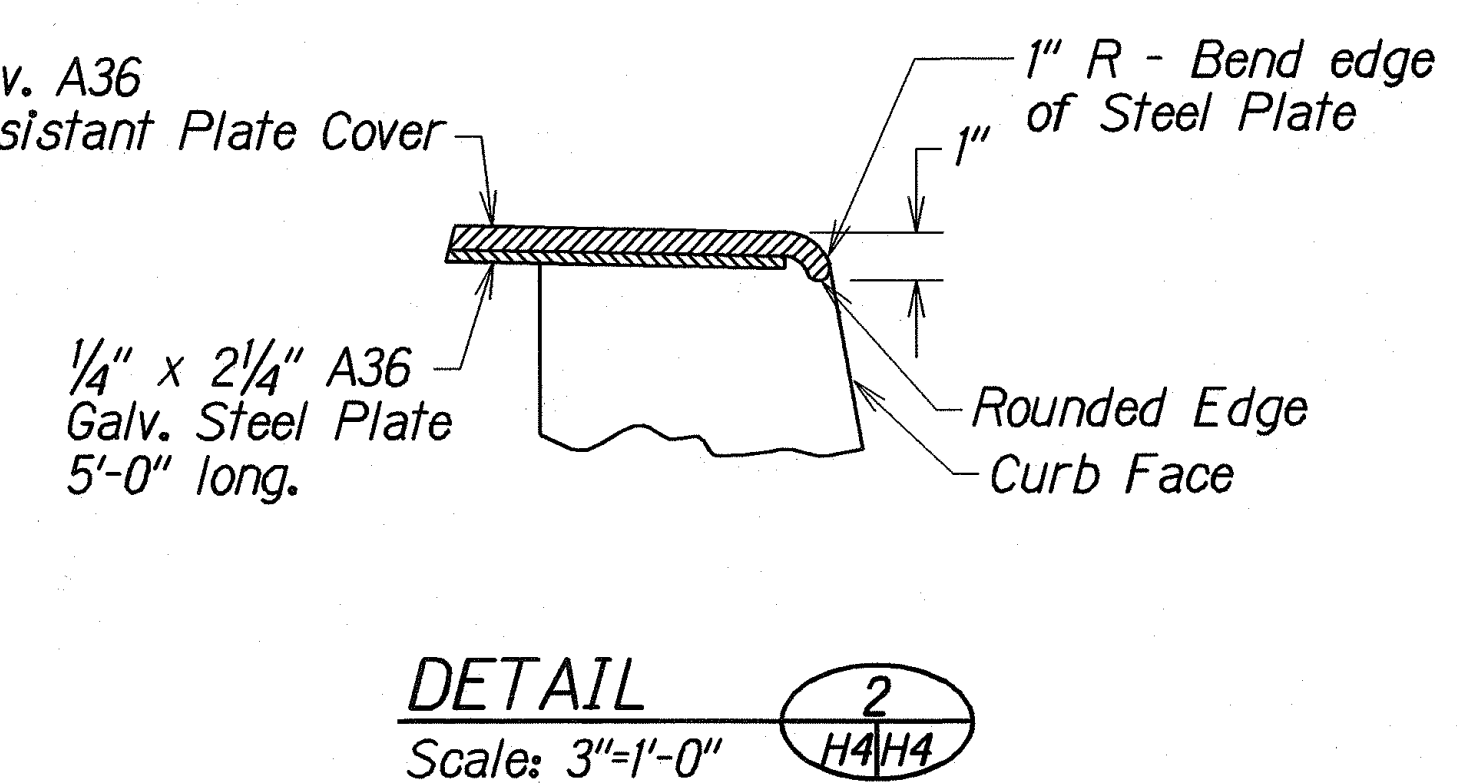
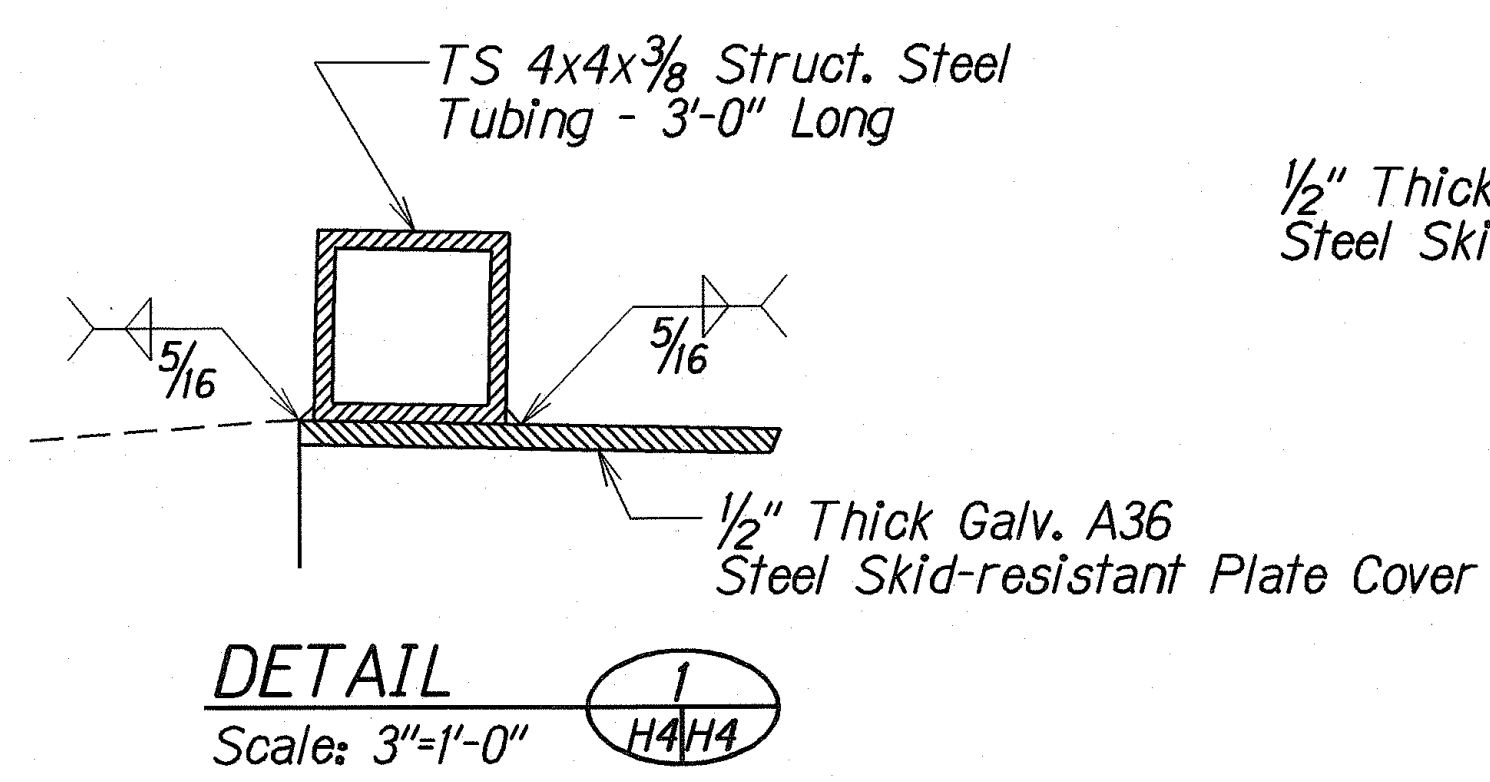
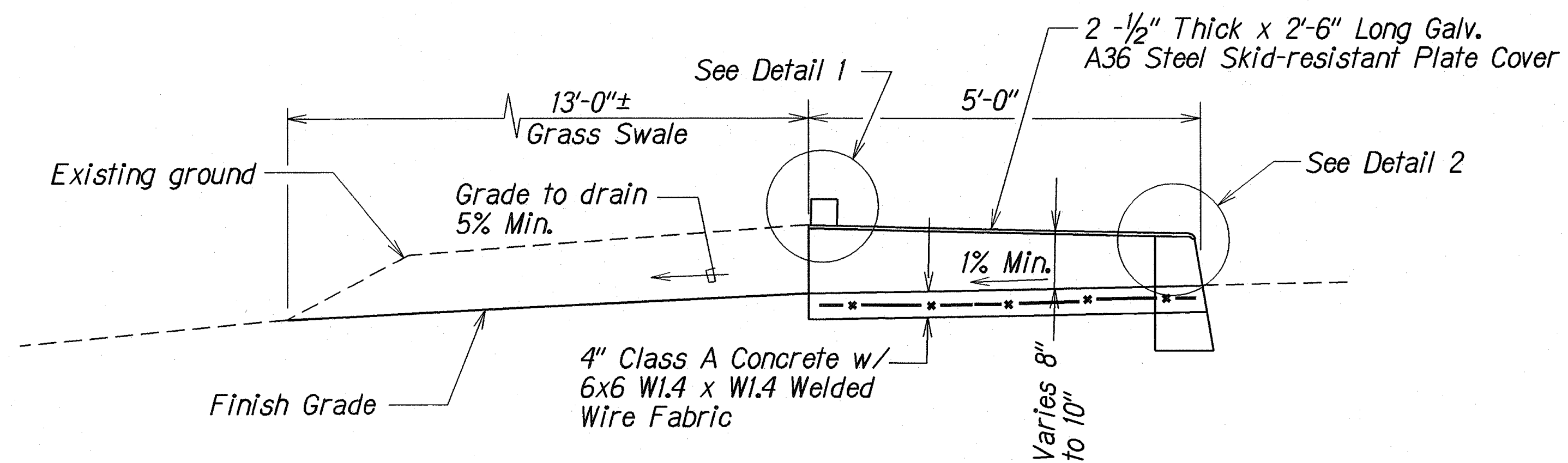
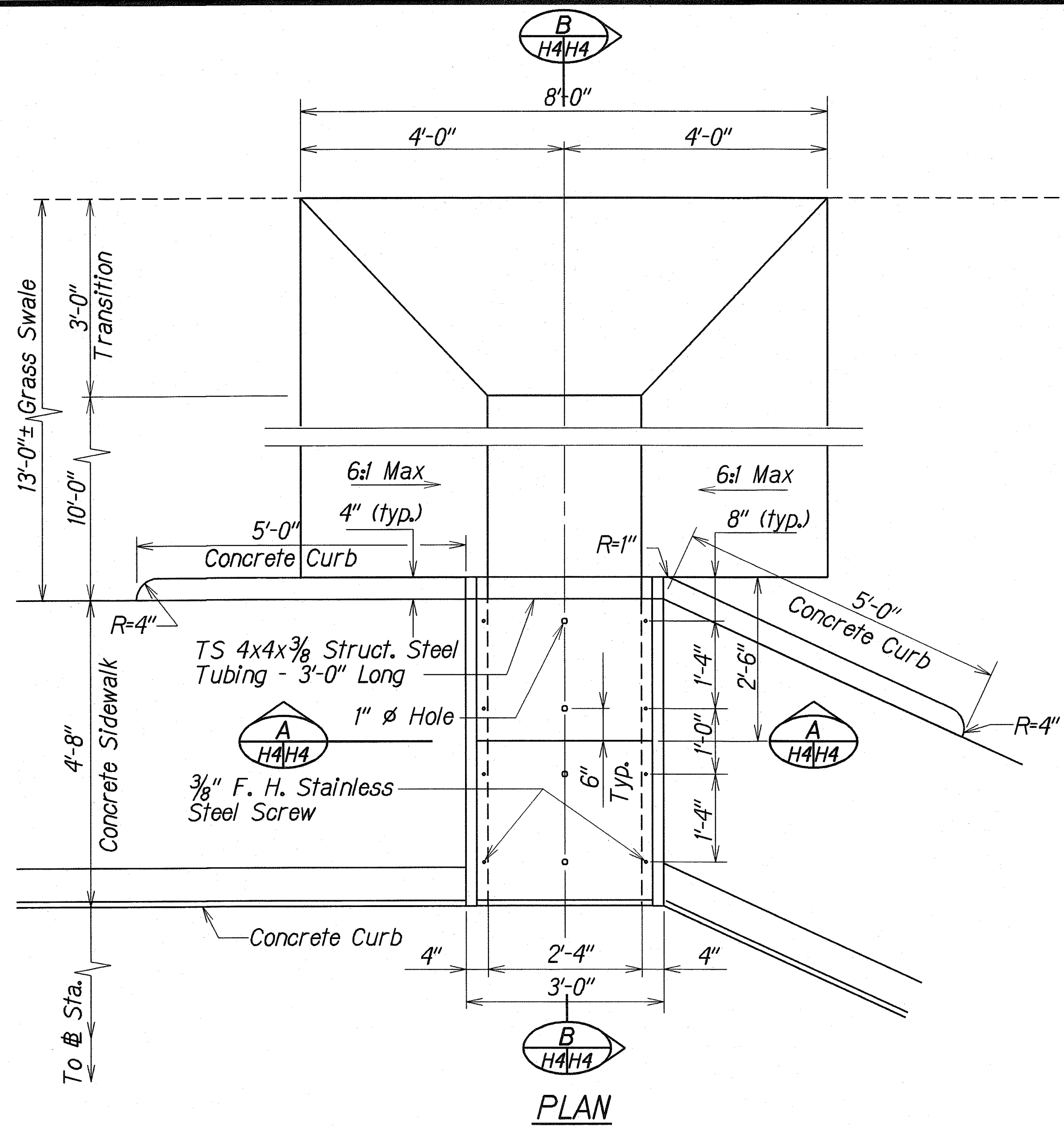
Meheula Parkway To Kuahelani Avenue

Project No. 99C-01-99

Scale: 1 1/2" = 1'-0"
Date: March 2002

SHEET No. H3 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99C-01-99	2002	31	45



DETAILS OF SIDEWALK DRAIN

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

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	3/4/02
QUANTITIES BY	TRACED BY	
CHECKED BY	DESIGNED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

KAMEHAMEHA HIGHWAY

SIDEWALK IMPROVEMENTS

Meheula Parkway to Kuahelani Avenue

Project No. 99C-01-99

Scale: As Shown
Date: March 2002

SHEET No. **H4** OF **4** SHEETS