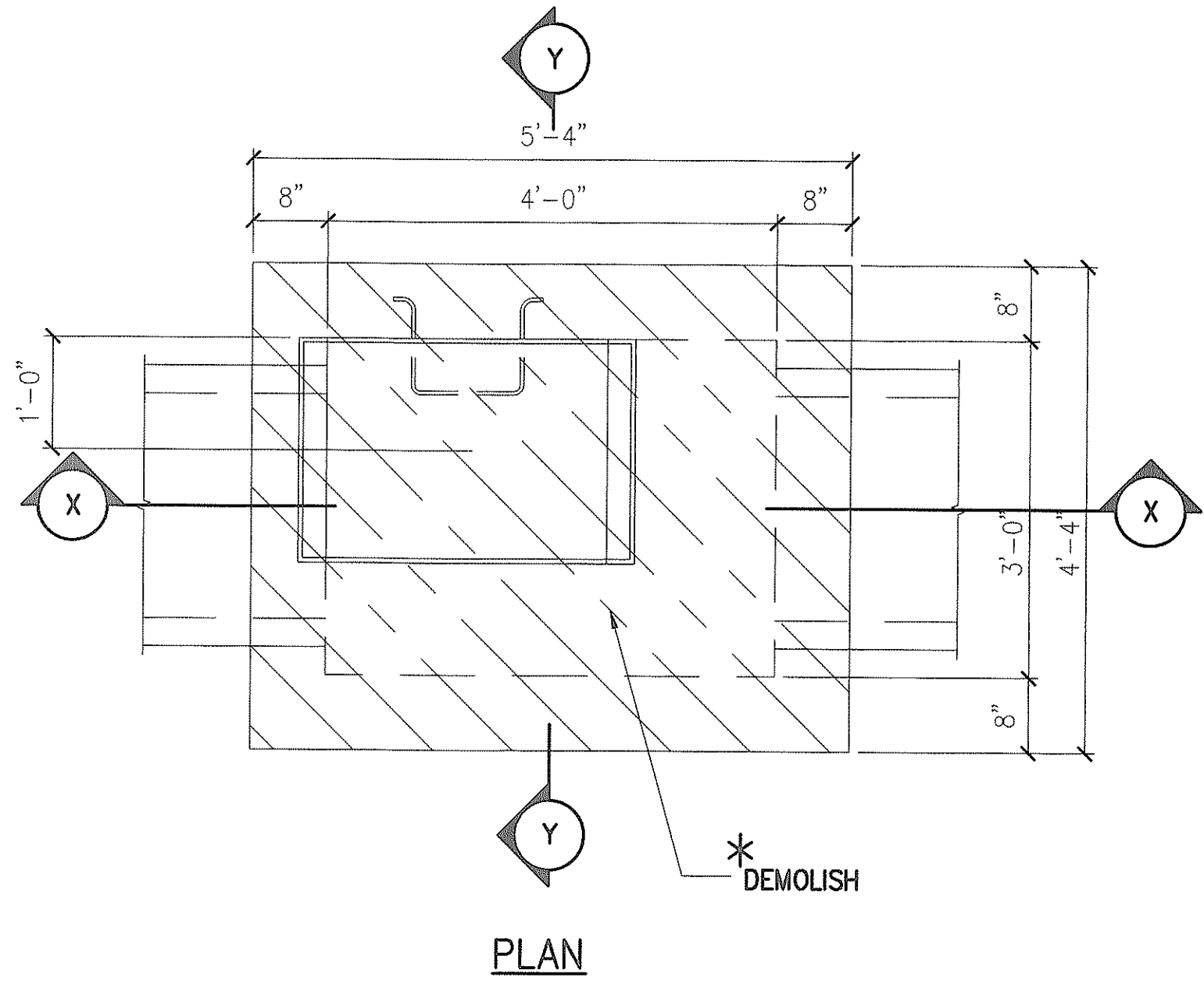
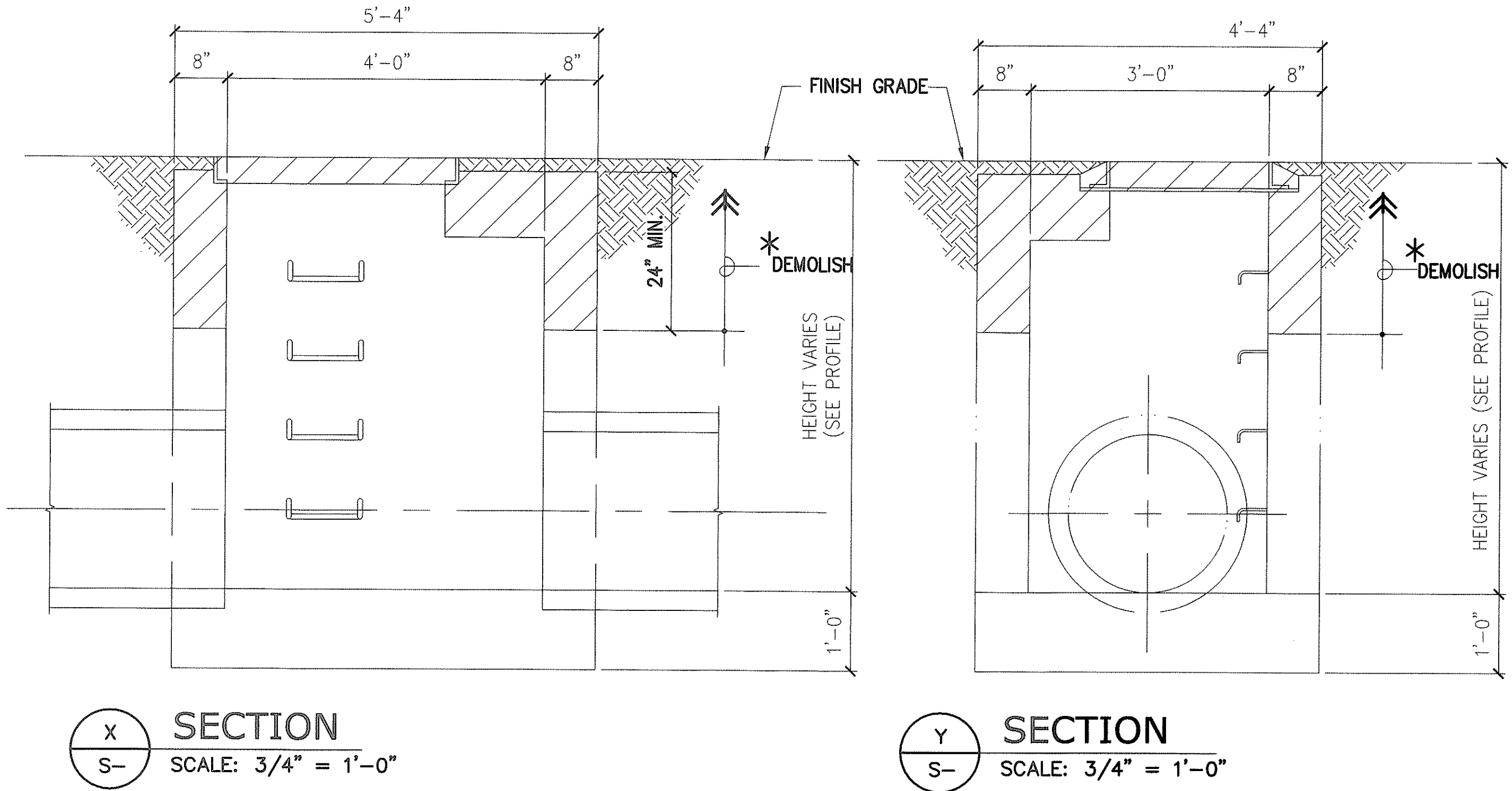


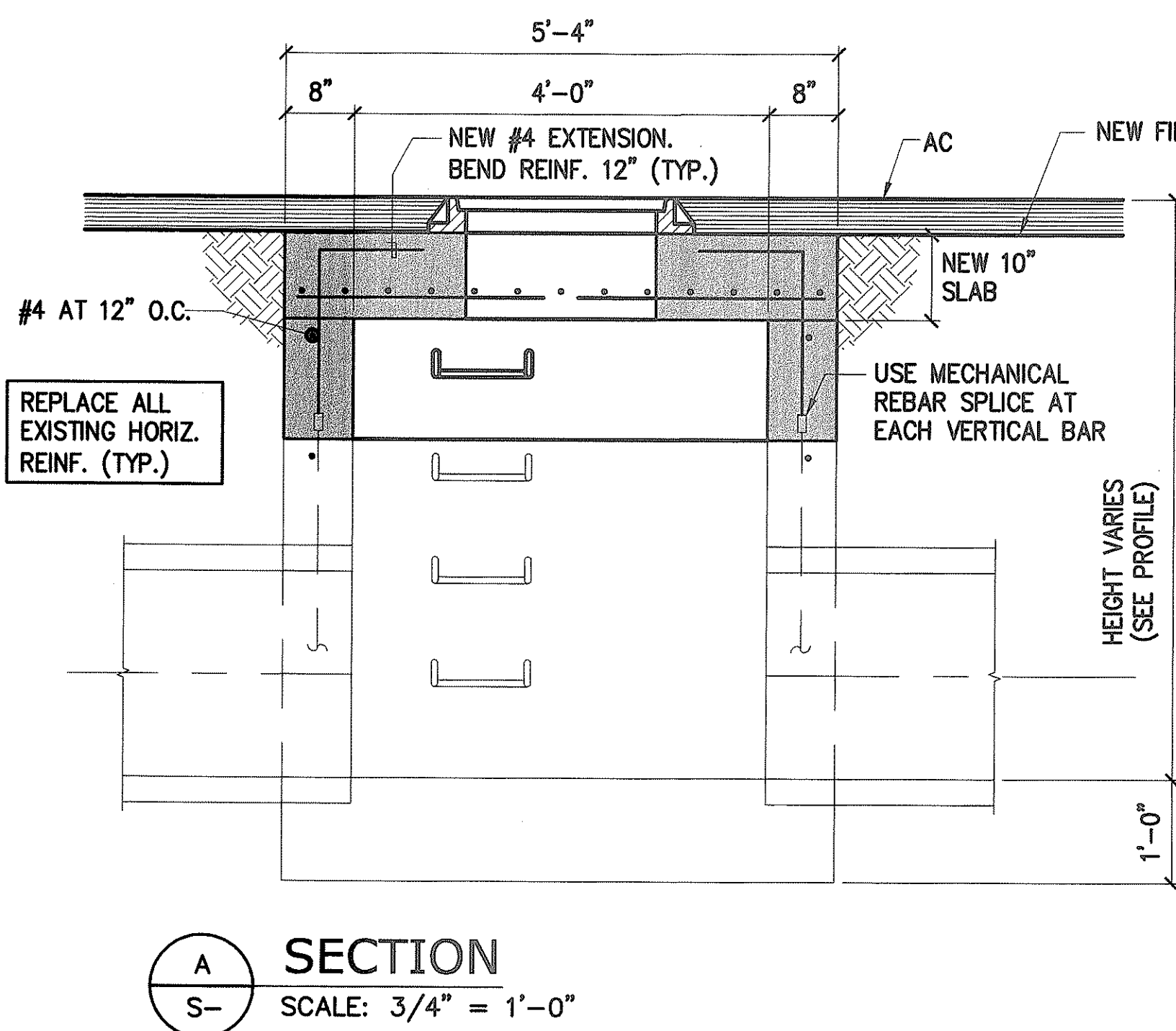
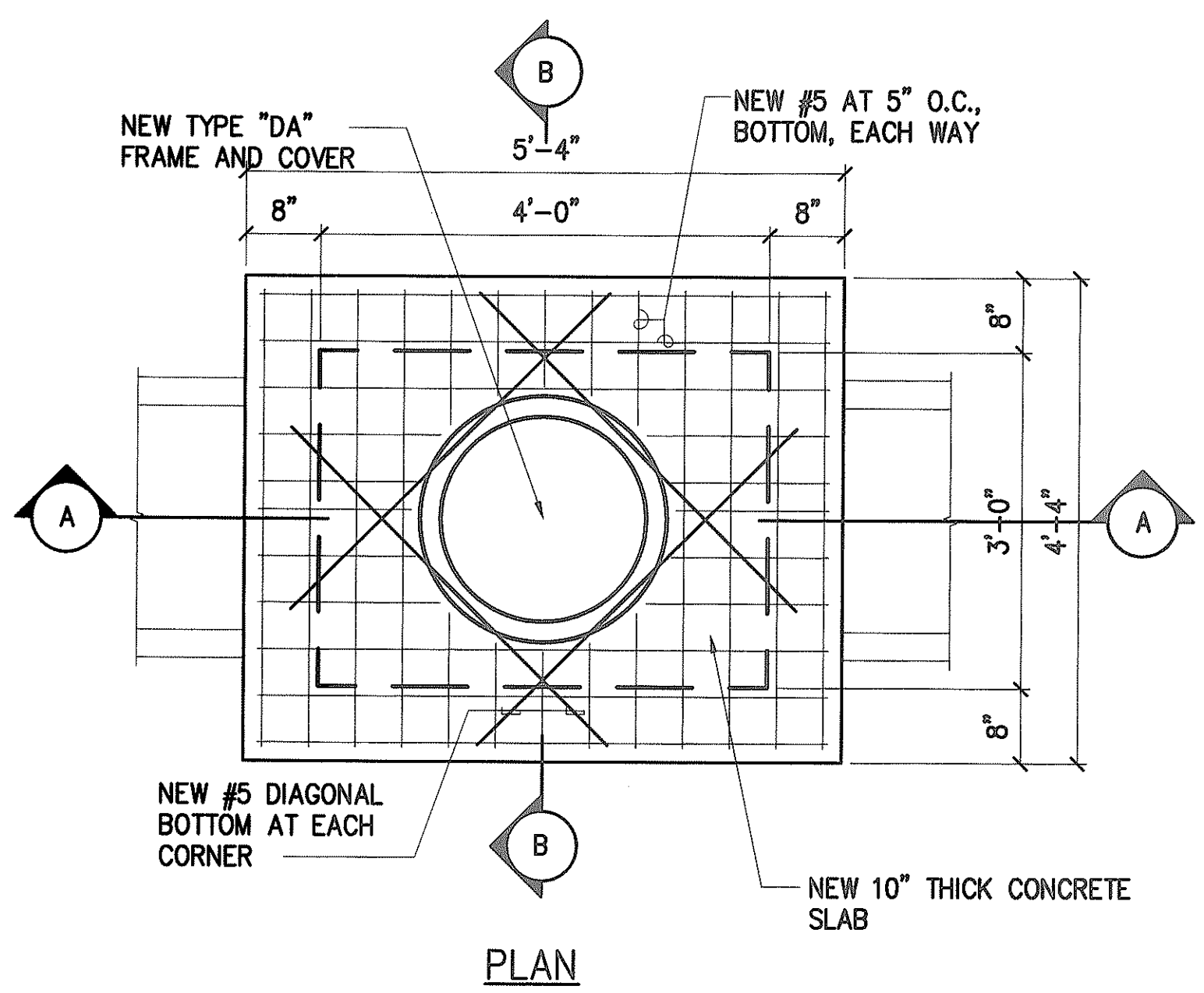
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-M-05-04	2004	31	33



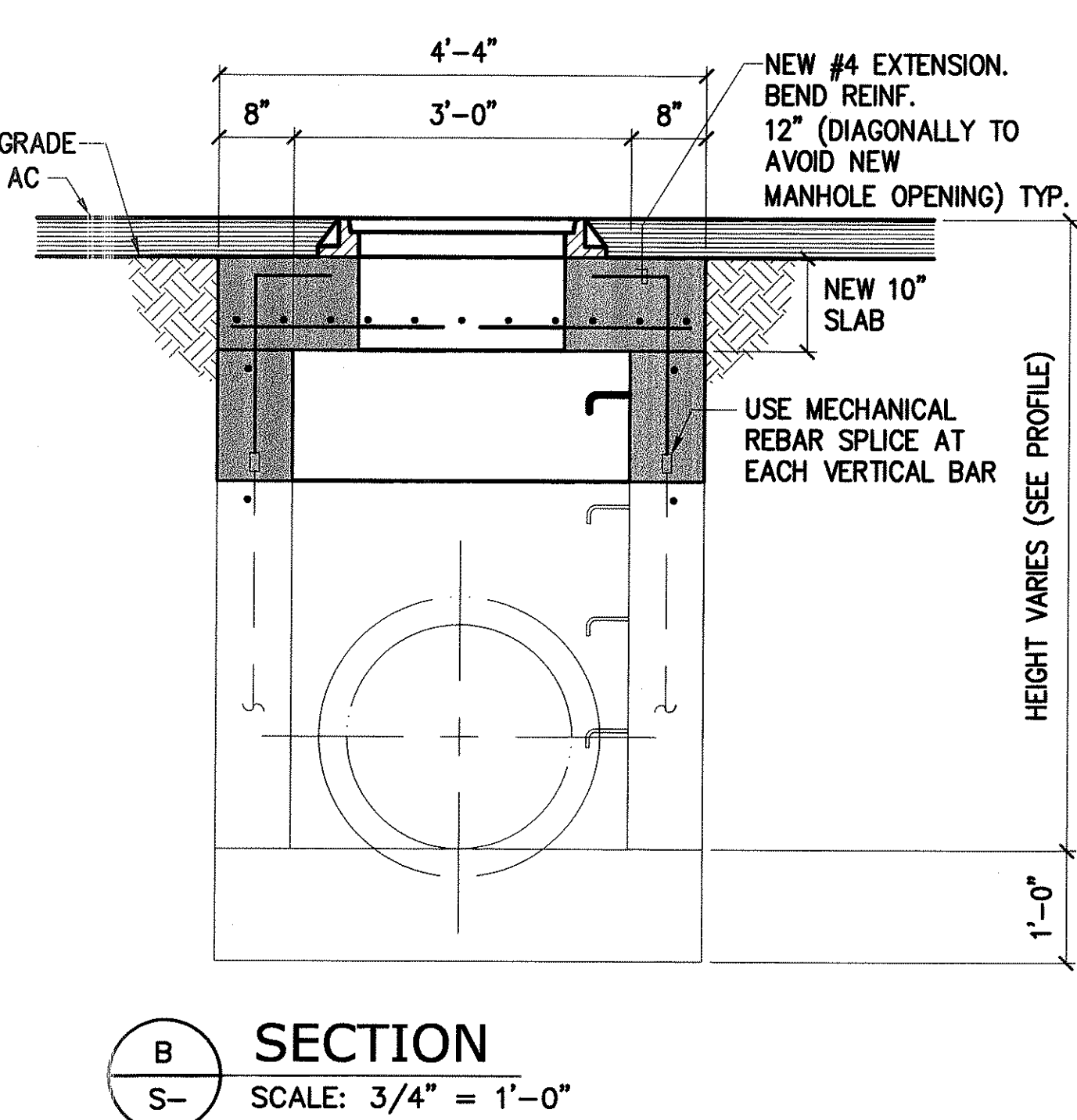
- *DEMOLITION NOTES**
1. SAW-CUT CONCRETE WALLS OF EXISTING GRATED DROP INLET 1" (ON EACH SIDE WALL) PRIOR TO DEMOLISHING.
 2. DEMOLISH CONCRETE AS REQUIRED WITHOUT DAMAGING EXISTING VERTICAL REINFORCING OF WALL.



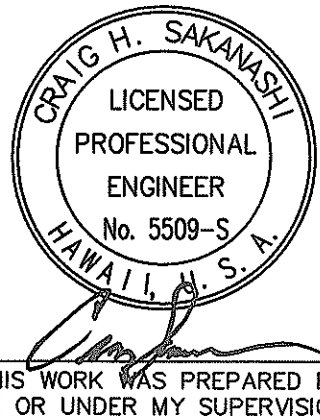
TYPICAL DEMOLITION PLANS OF EXISTING GRATED DROP INLET
AS NOTED



TYPICAL RE-CONSTRUCTION OF EXISTING GRATED DROP INLET TO MANHOLE COVER
AS NOTED

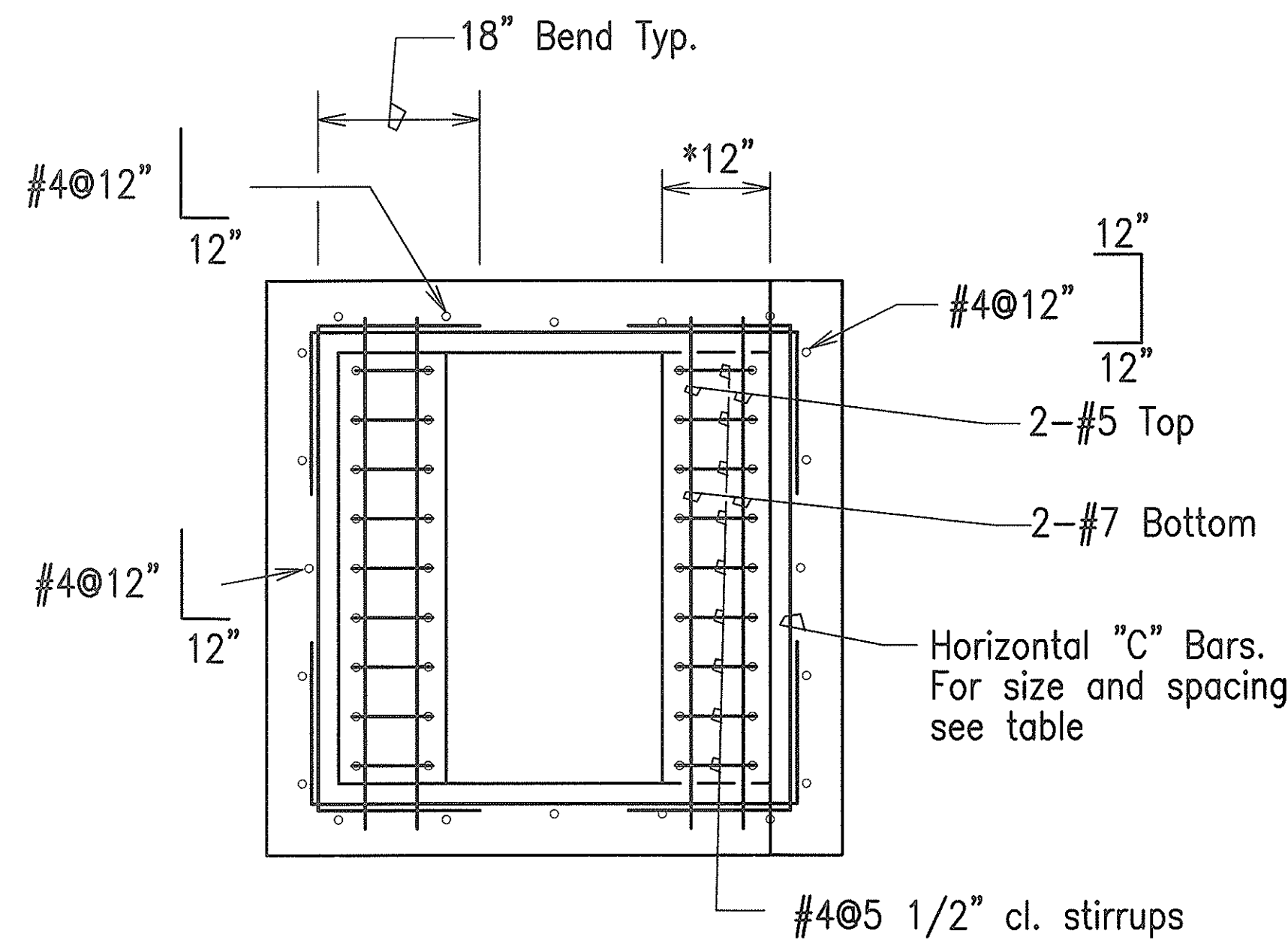
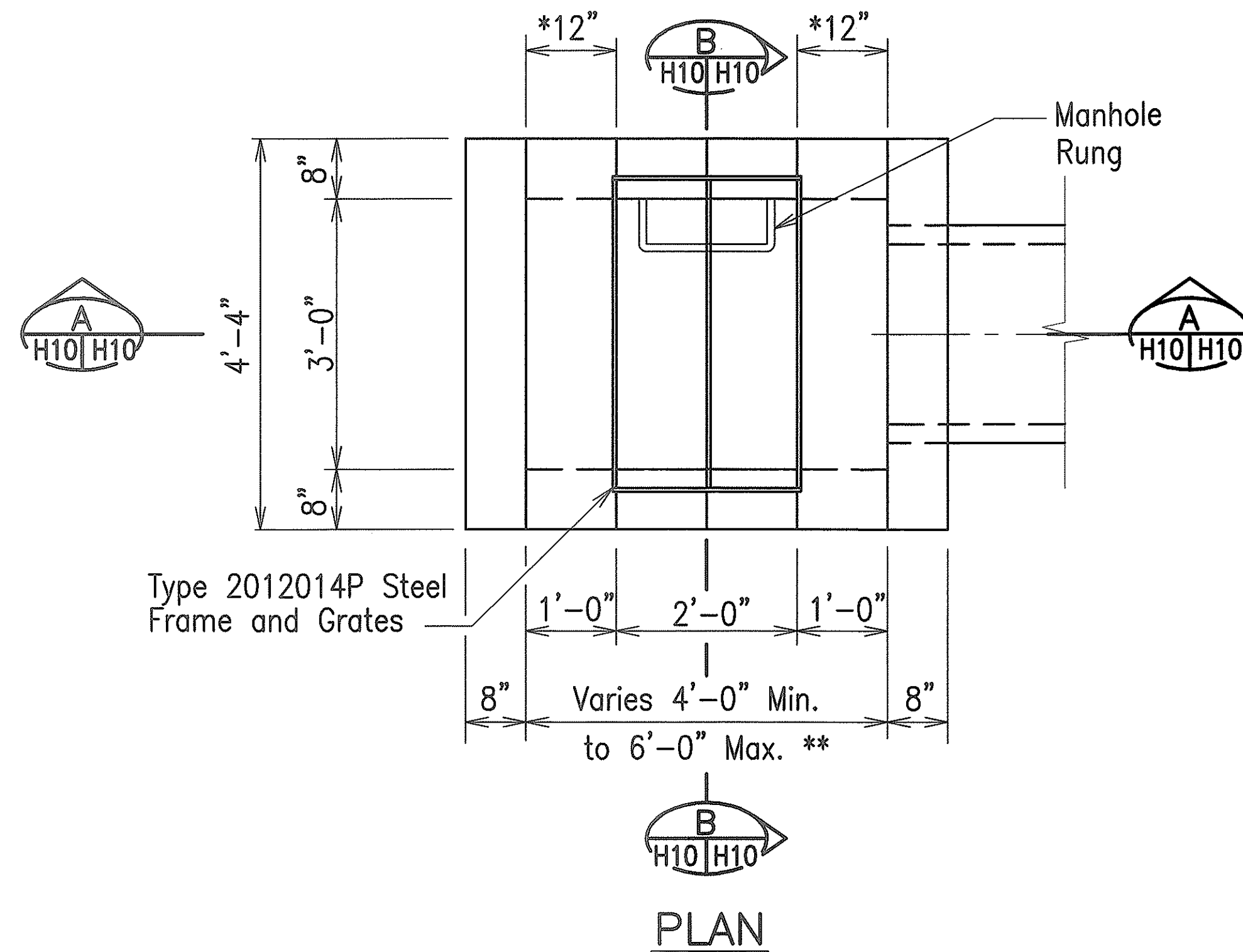


ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
NOTE BOOK	
DESIGNED BY	
CHECKED BY	
NO.	



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
DRAINAGE DETAILS-1
TRAFFIC OPERATIONAL IMPROVEMENTS AT VARIOUS LOCATIONS KAHULUI BEACH ROAD AT SMALL BOAT HARBOR ROAD
Project No. HWY-M-05-04
Scale: AS NOTED Date: May 2004
SHEET No. 1 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-M-05-04	2004	32	33



GENERAL NOTE

* For Minimum size box, eliminate beam and use typical wall and wall reinforcing shown in the top portion.

** For Culverts larger than 30", the minimum dimension shall be D'.

*** For details of Type 2012012P steel frame and grate, see Standard Plan H-13 on Sheet 37. The cross slopes along the frame shall be 20:1 in lieu of 2:1 & 6:1.

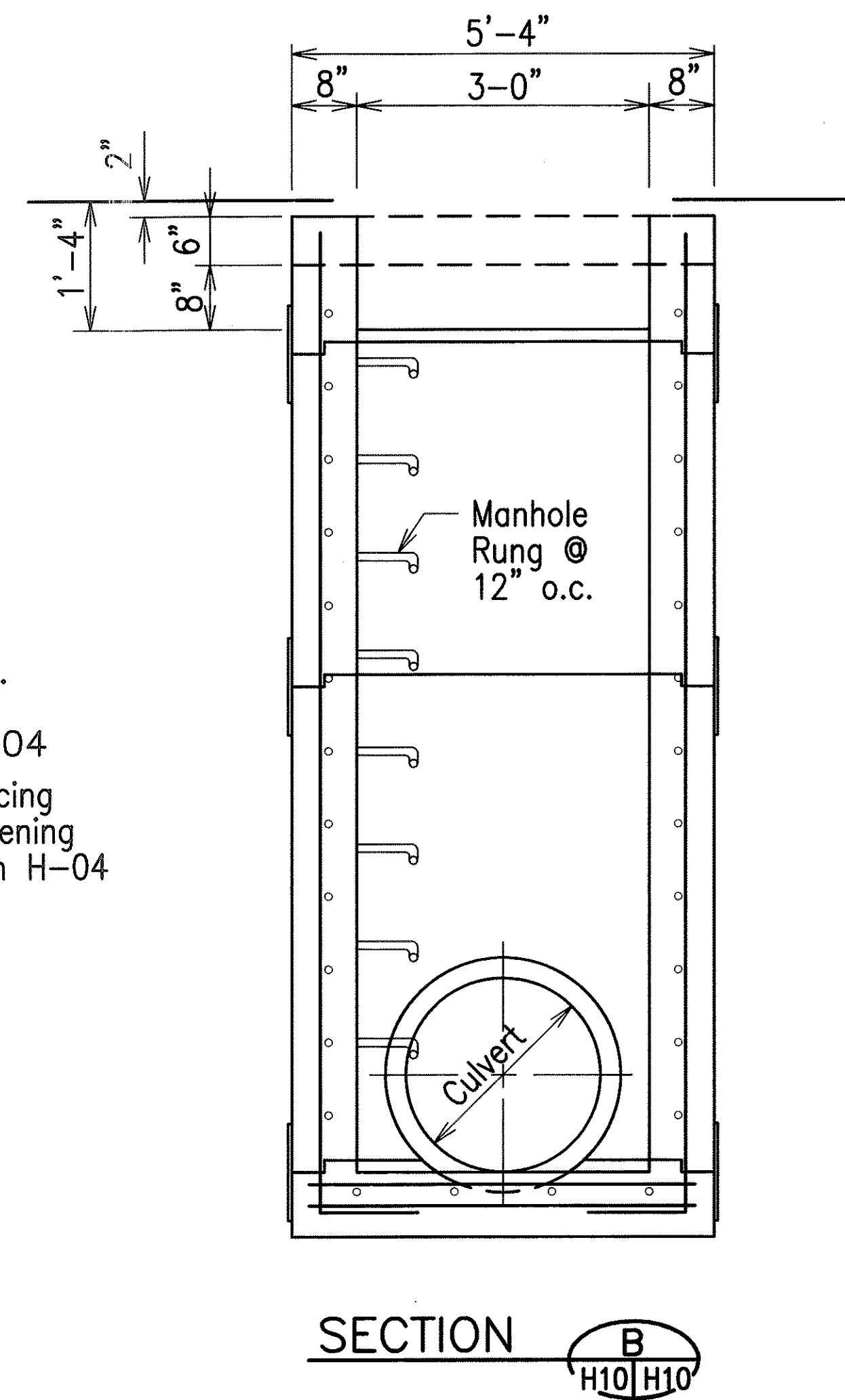
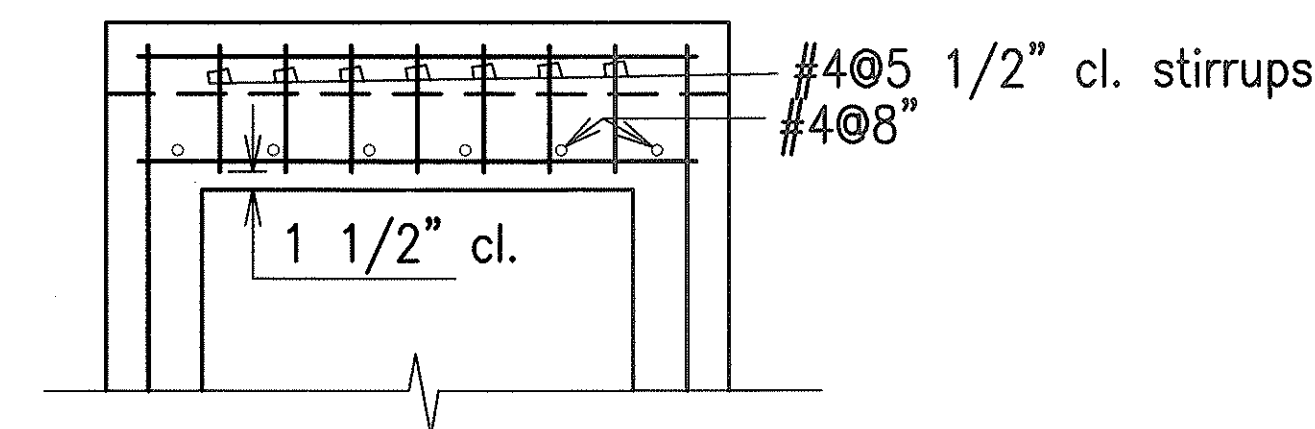
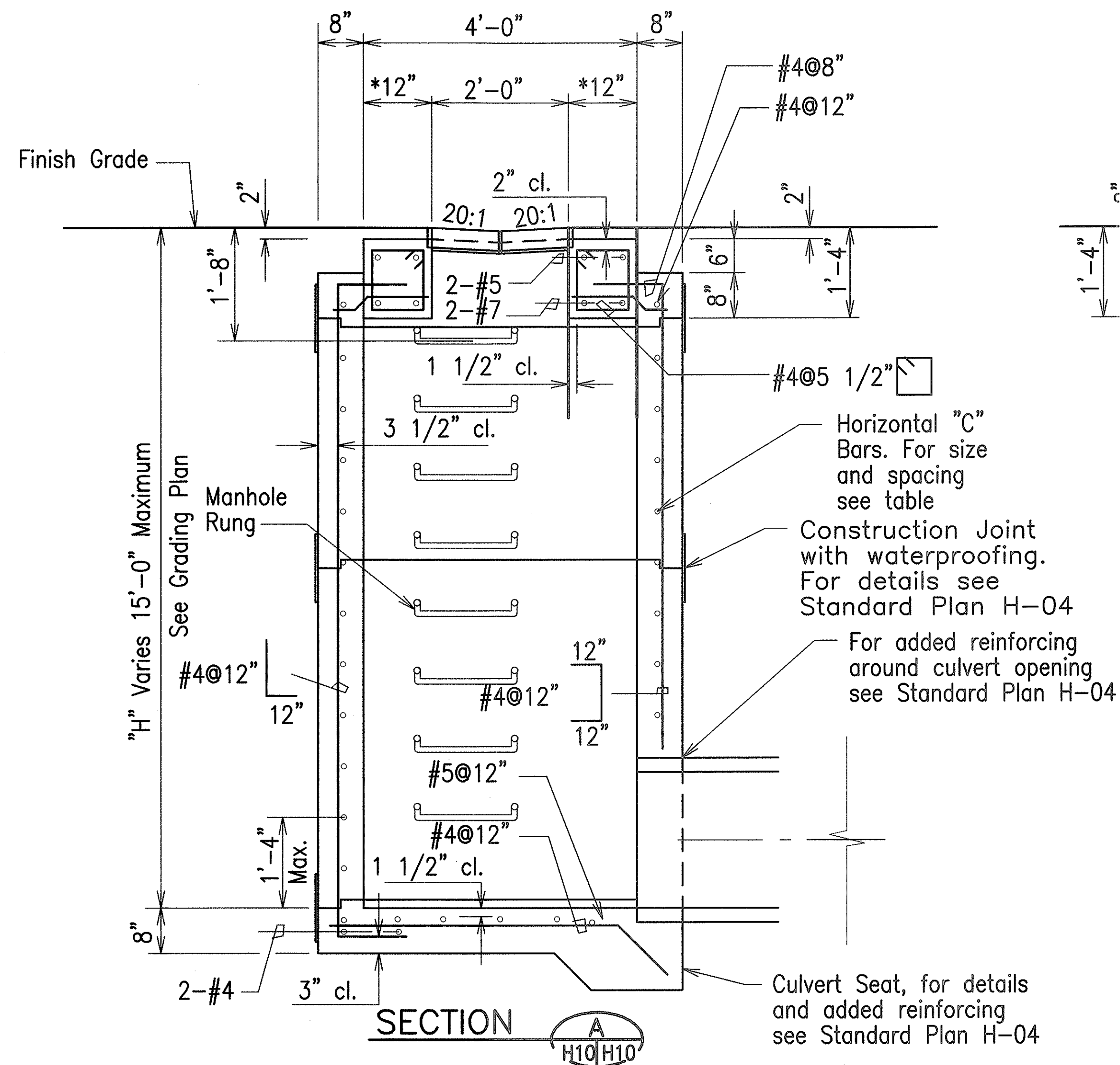
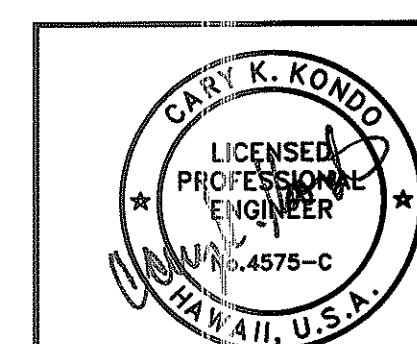


TABLE: GRATED DROP INLET	
DEPTH "H"	"C" BARS
0'-0" to 5'-0"	#4 @ 10"
5'-1" to 10'-0"	#5 @ 9"
10'-1" to 15'-0"	#5 @ 6"

STANDARD PLAN H-11

TYPICAL DETAIL OF TYPE 2012014P GRATED DROP INLET

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



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS-2

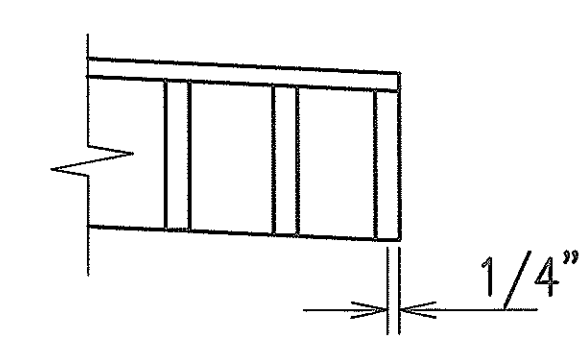
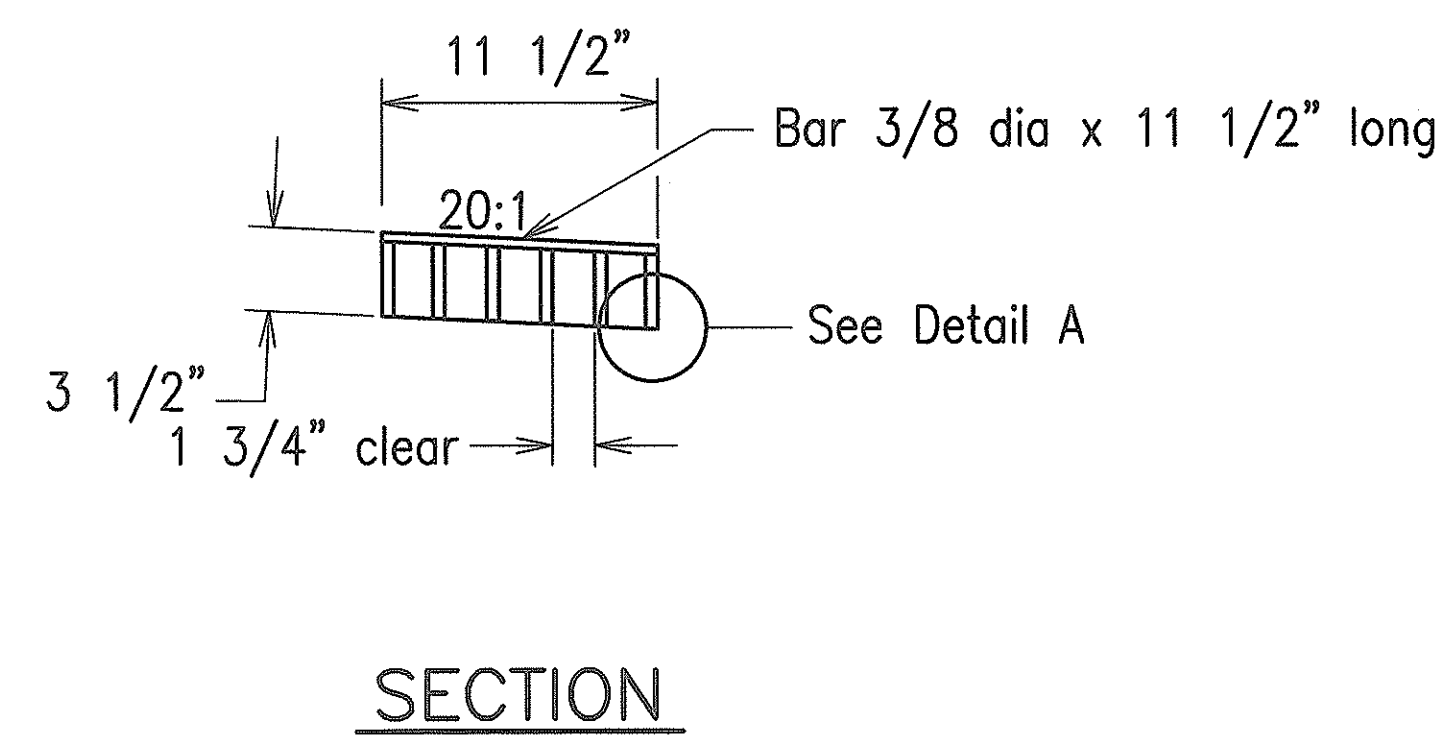
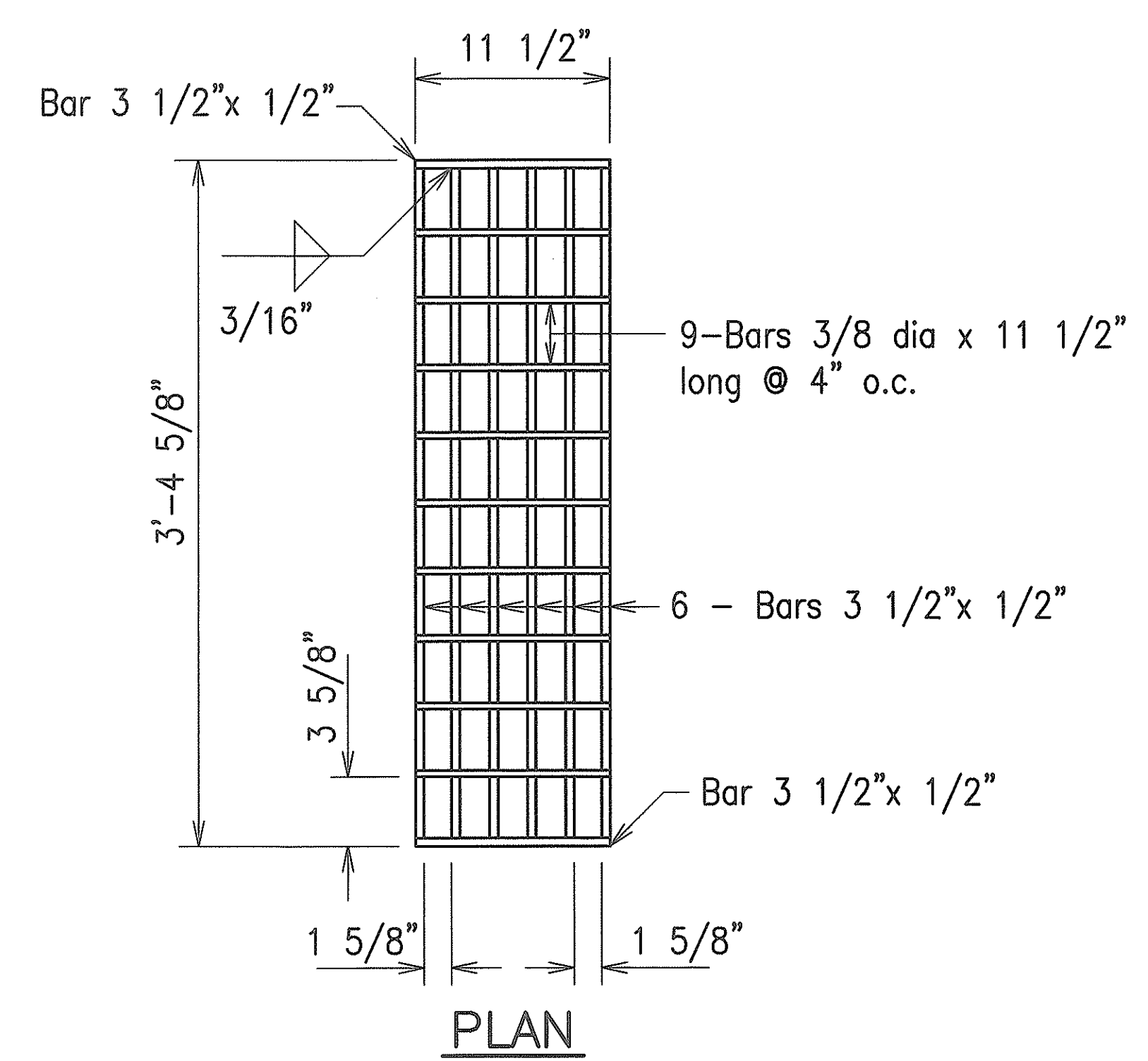
TRAFFIC OPERATIONAL IMPROVEMENTS
AT VARIOUS LOCATIONS
KAHULUI BEACH ROAD
AT SMALL BOAT HARBOR ROAD

Project No. HWY-M-05-04

Scale: AS NOTED Date: May 2004

SHEET No. 2 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-M-05-04	2004	33	33



DETAIL A
Half Size
GRATE

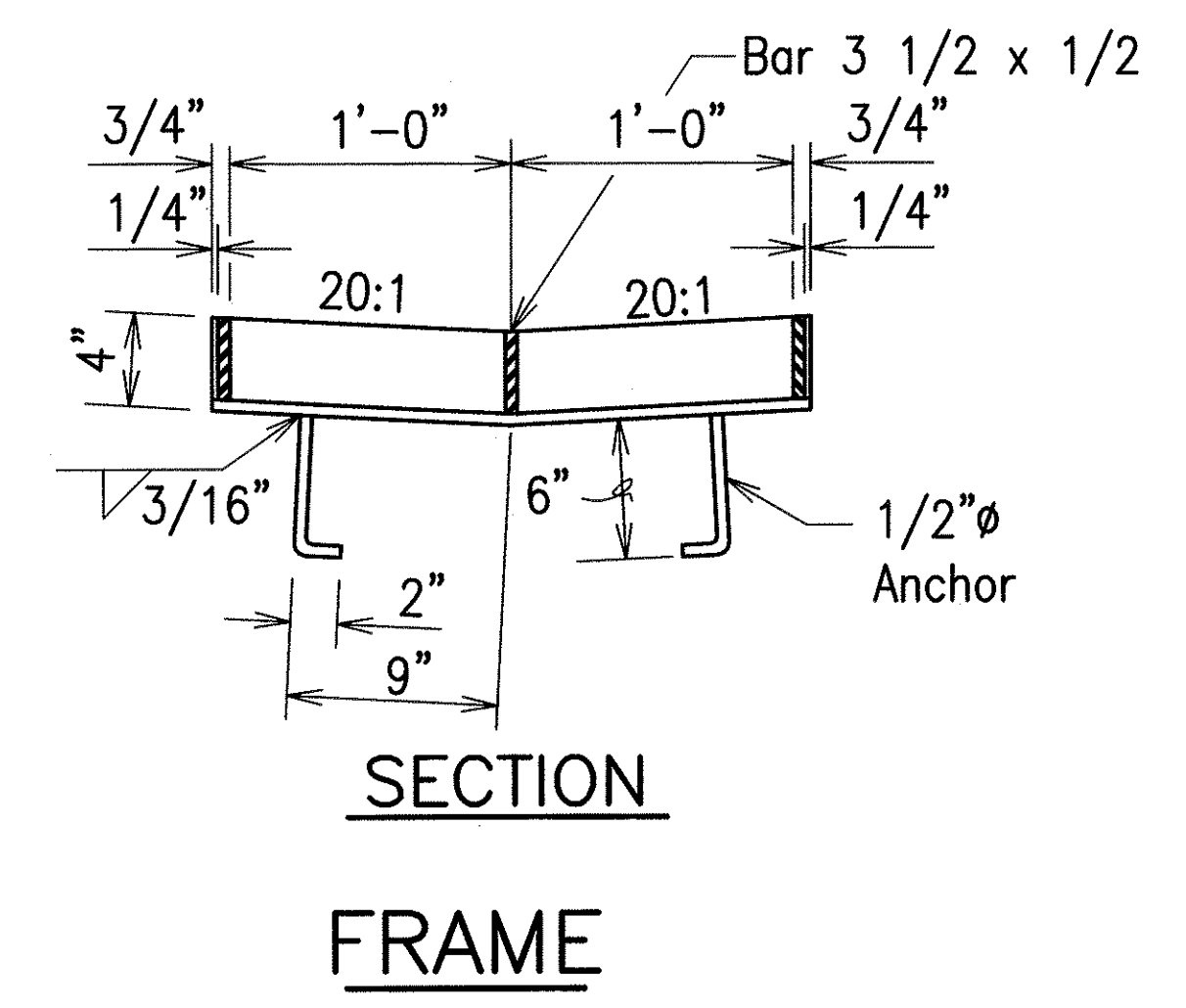
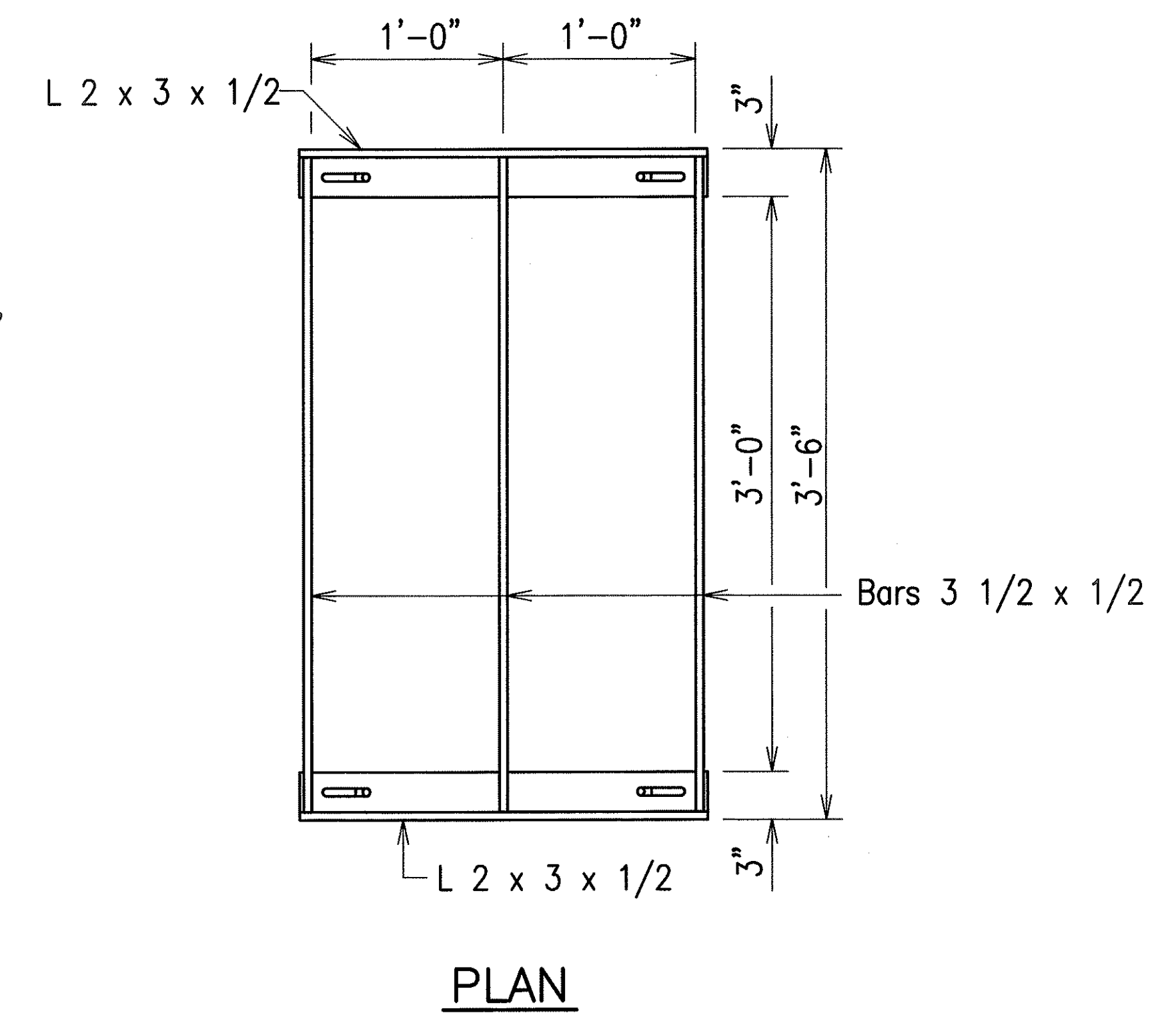
GENERAL NOTES

1. Frames and Grates shall be hot dip galvanized after fabrication.
2. The cross slope along the frame and grate shall be 20:1 in lieu of 2:1 and 6:1.
3. All welds 3/8" unless otherwise noted.

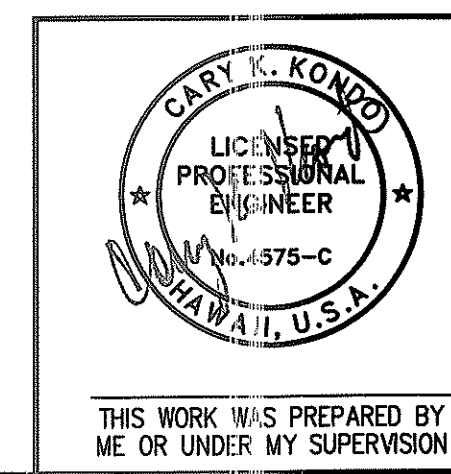
STANDARD PLANS H-13 AND H-18

TYPICAL DETAIL OF TYPE 2012012P STEEL FRAME AND GRATE

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



SECTION
FRAME



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS-3

TRAFFIC OPERATIONAL IMPROVEMENTS
AT VARIOUS LOCATIONS
KAHULUI BEACH ROAD
AT SMALL BOAT HARBOR ROAD
Project No. HWY-M-05-04
Scale: AS NOTED Date: May 2004
SHEET No. 3 OF 3 SHEETS