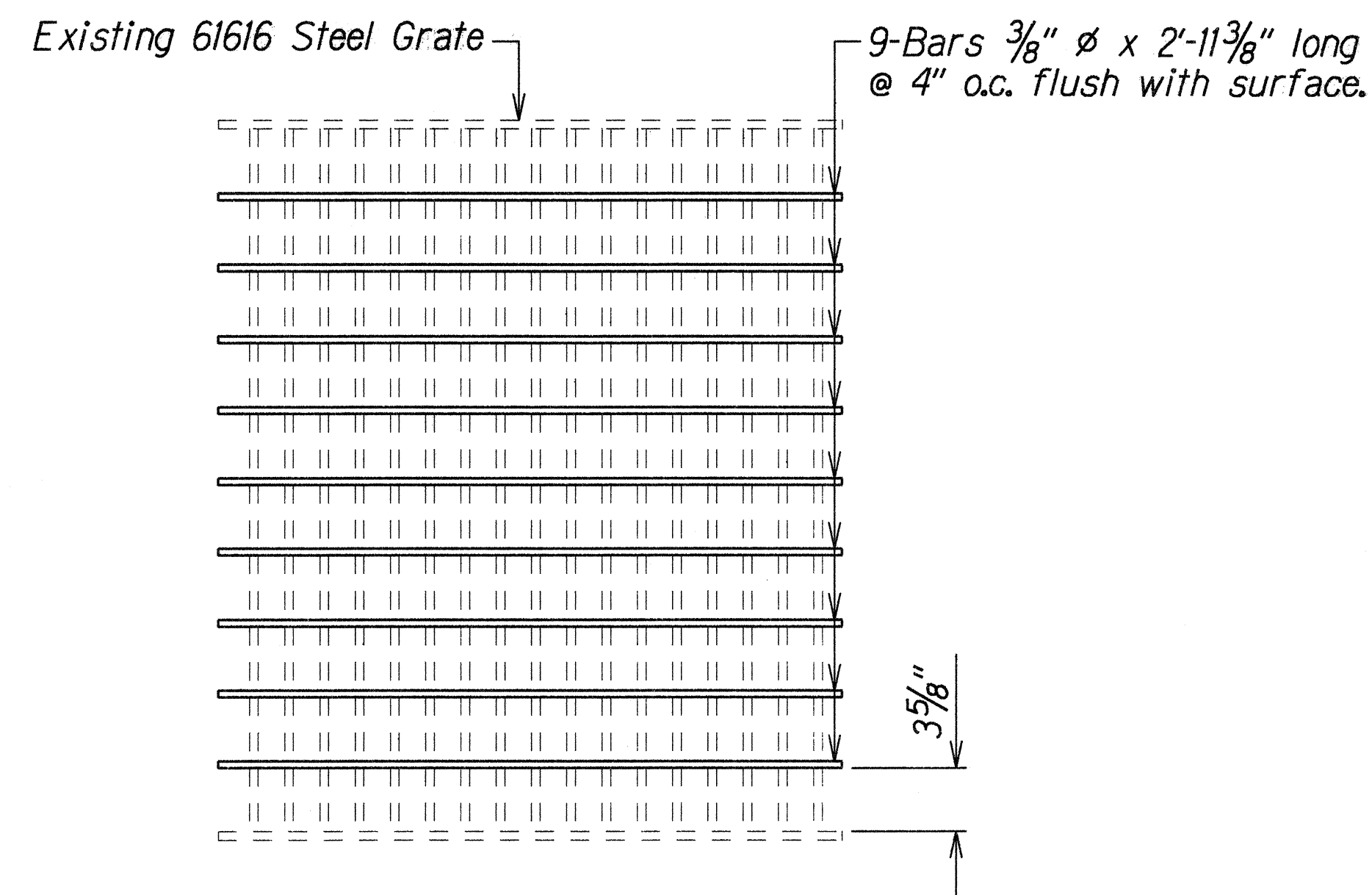
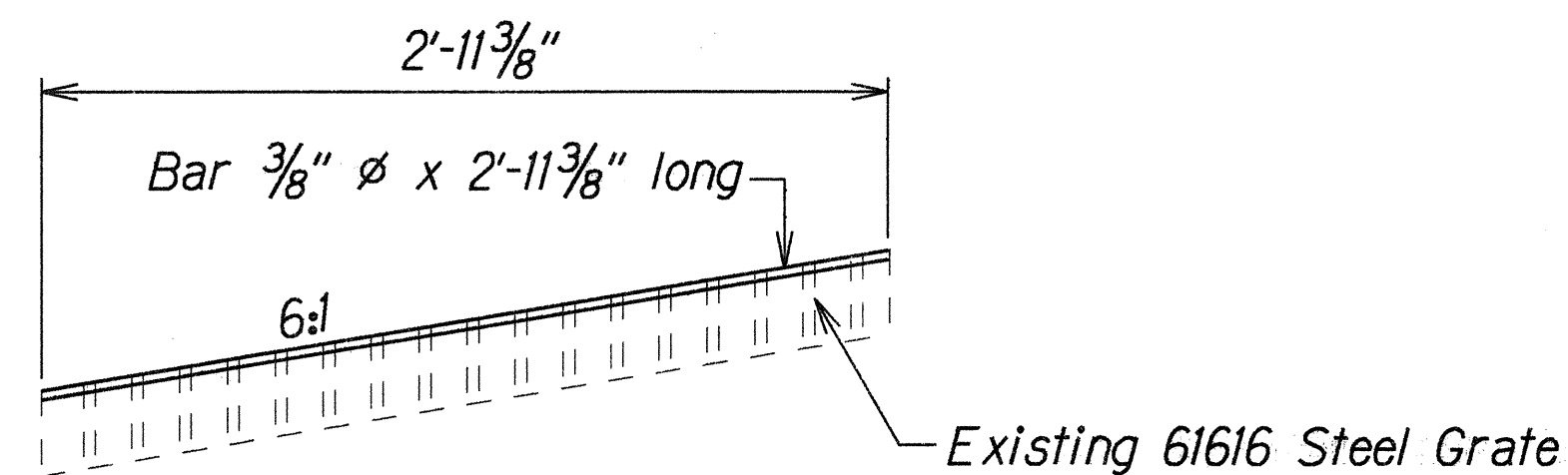


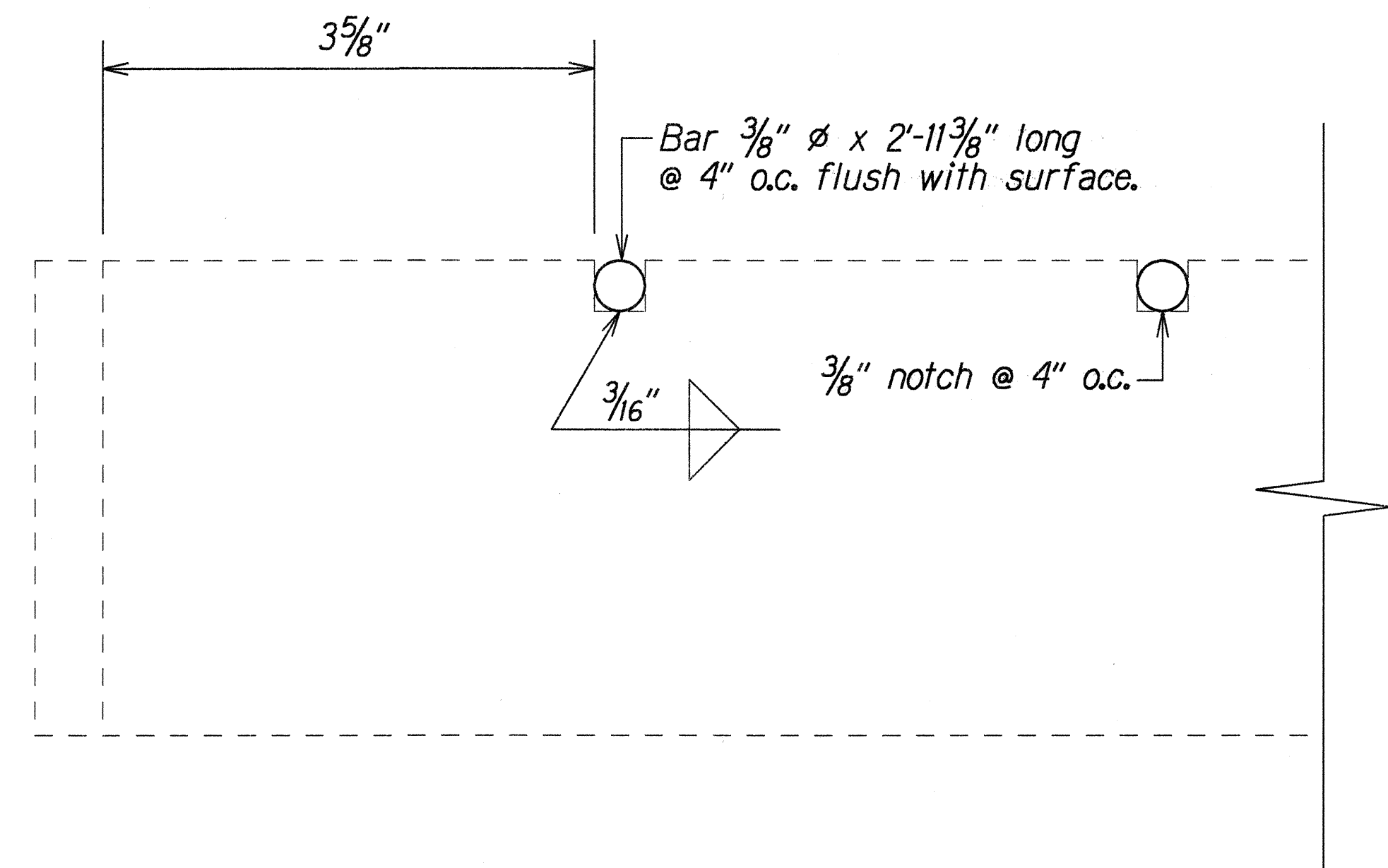
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83D-01-96M	1996	24	50



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



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



NOTCH DETAIL
Scale: Full Size

NOTE:

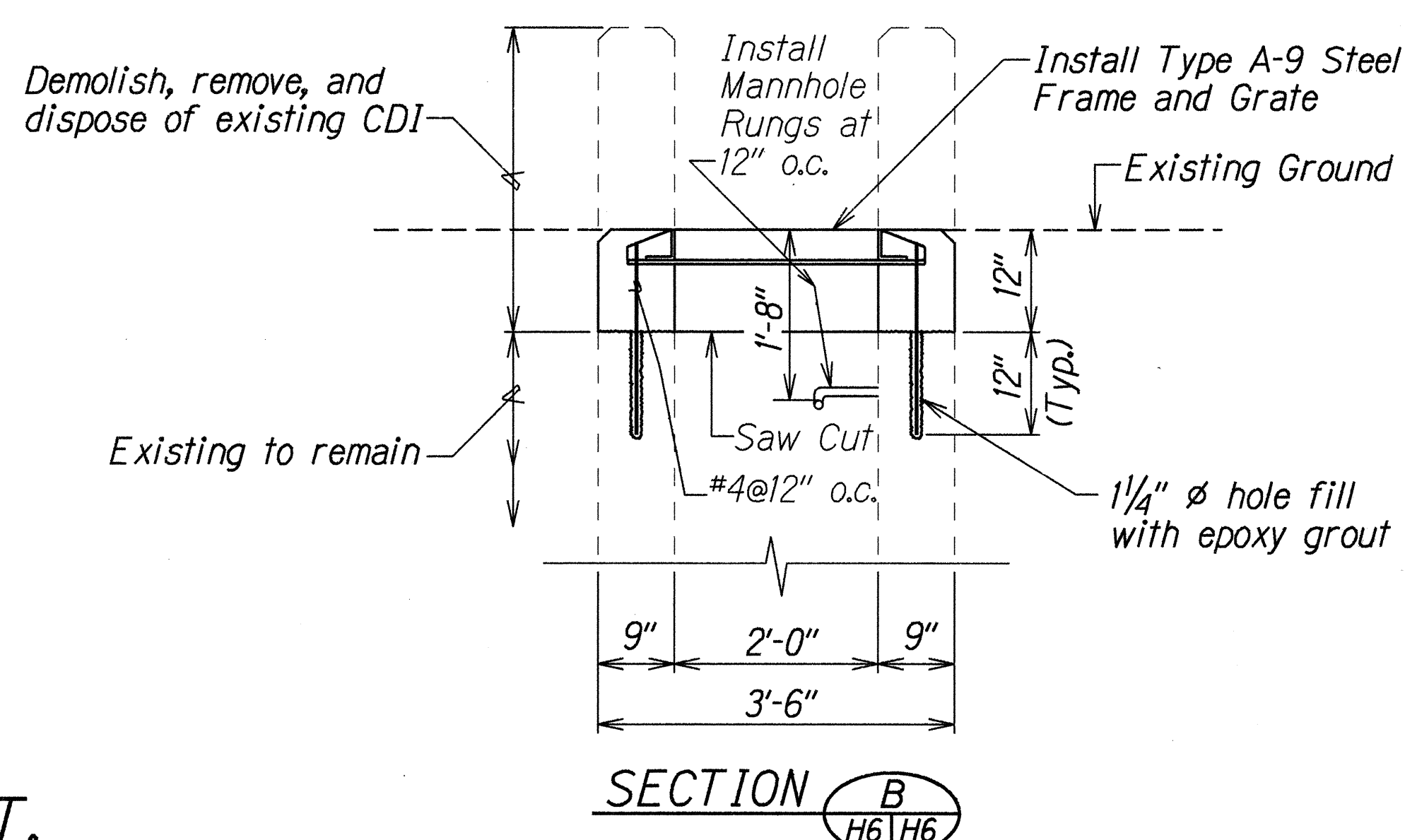
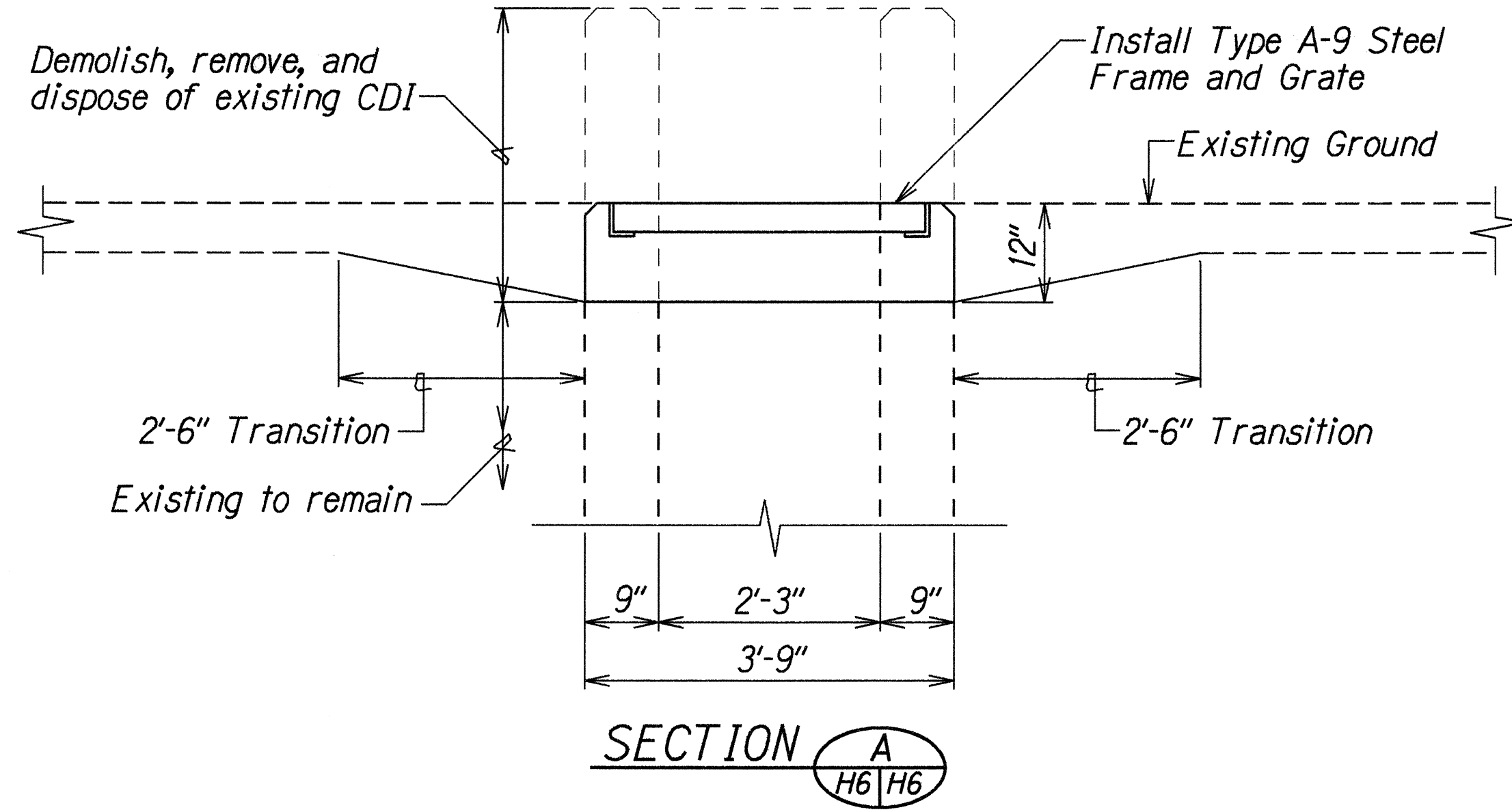
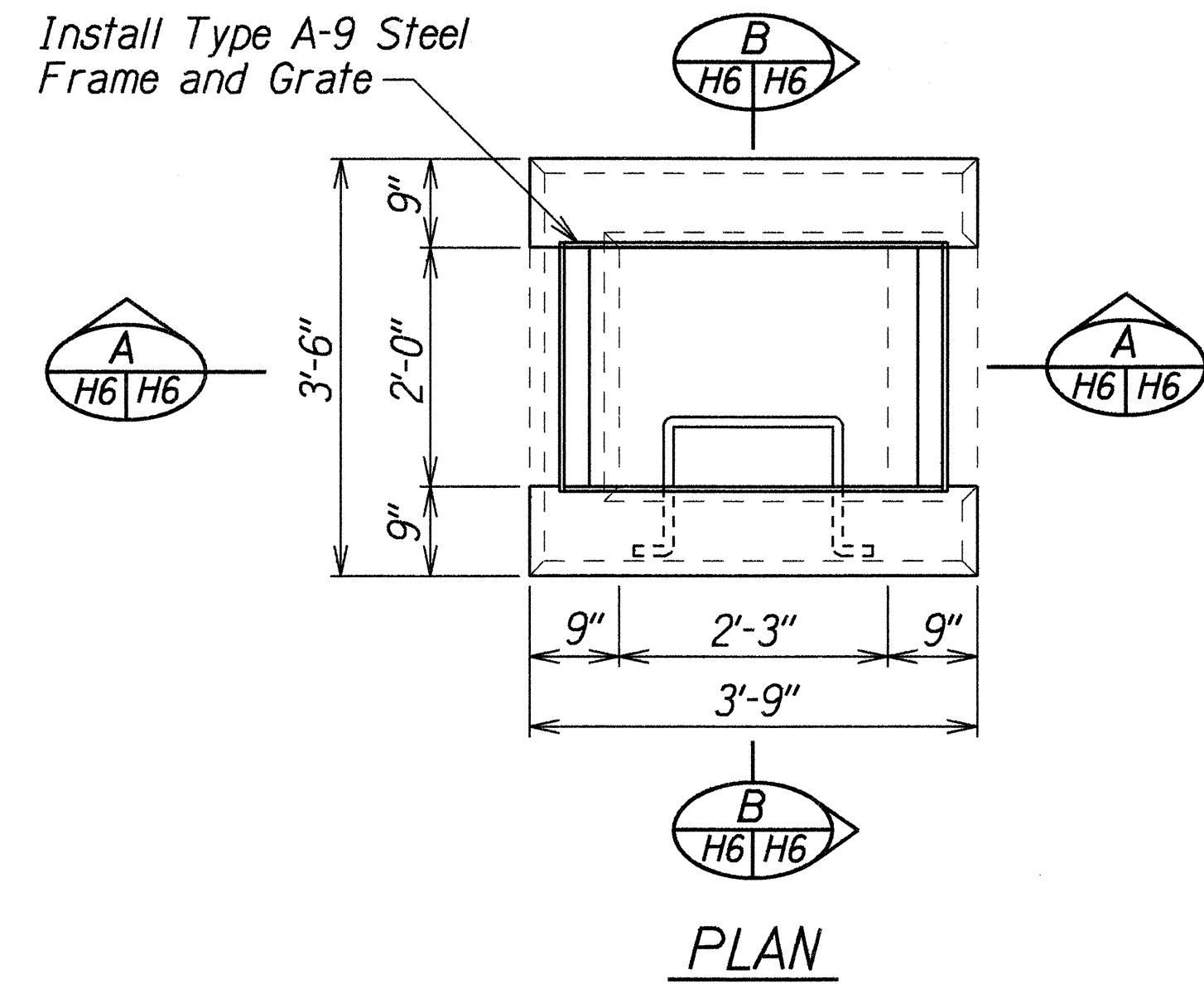
- Existing Drainage System shall be functional at all times.
- Grated Drop Inlets shall not be left open while the existing grates are being modified.
- Any steel straps welded to the existing grate shall be removed and remaining welds from the steel straps shall be ground flush with the grate.
- The grate shall be cleaned of all rust before the notches are cut.
- The grate shall be galvanized after the $\frac{3}{8}$ " ϕ bars are welded into the notches.
- Grates shall fit into the frames of existing grated drop inlets without rocking. Any adjustments to the grate shall be done before galvanizing.

DETAILS OF TYPE 61616M GRATE

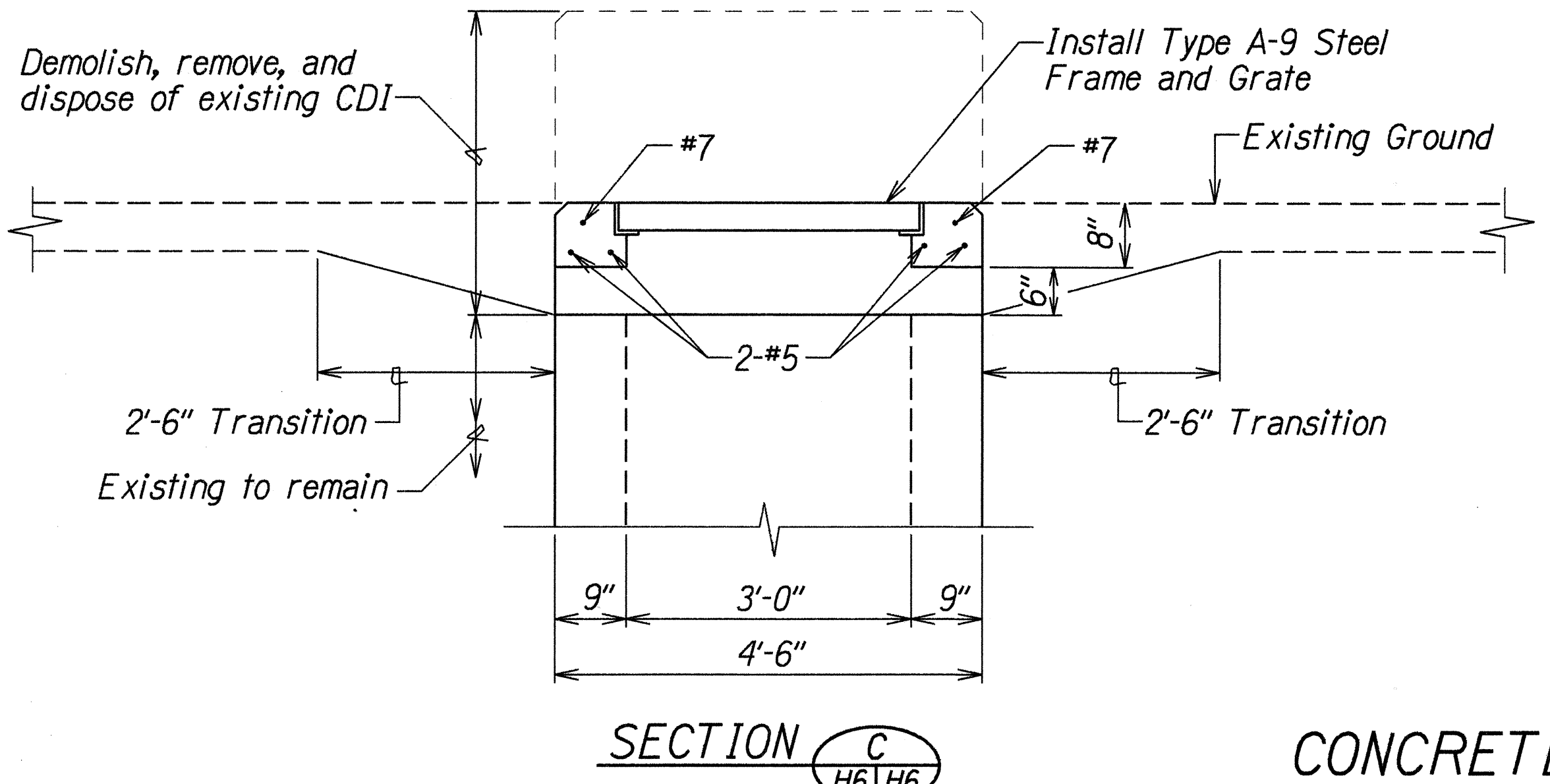
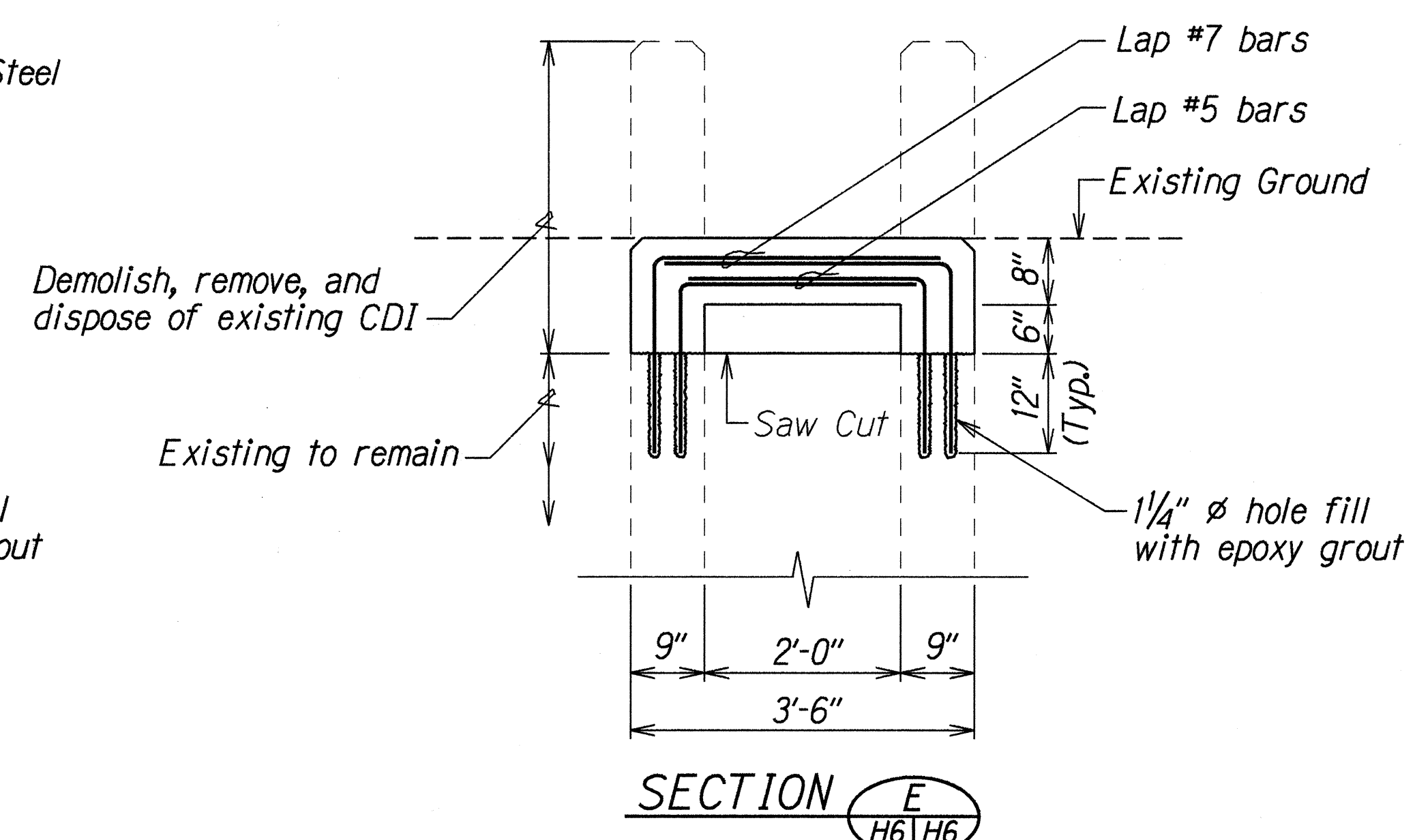
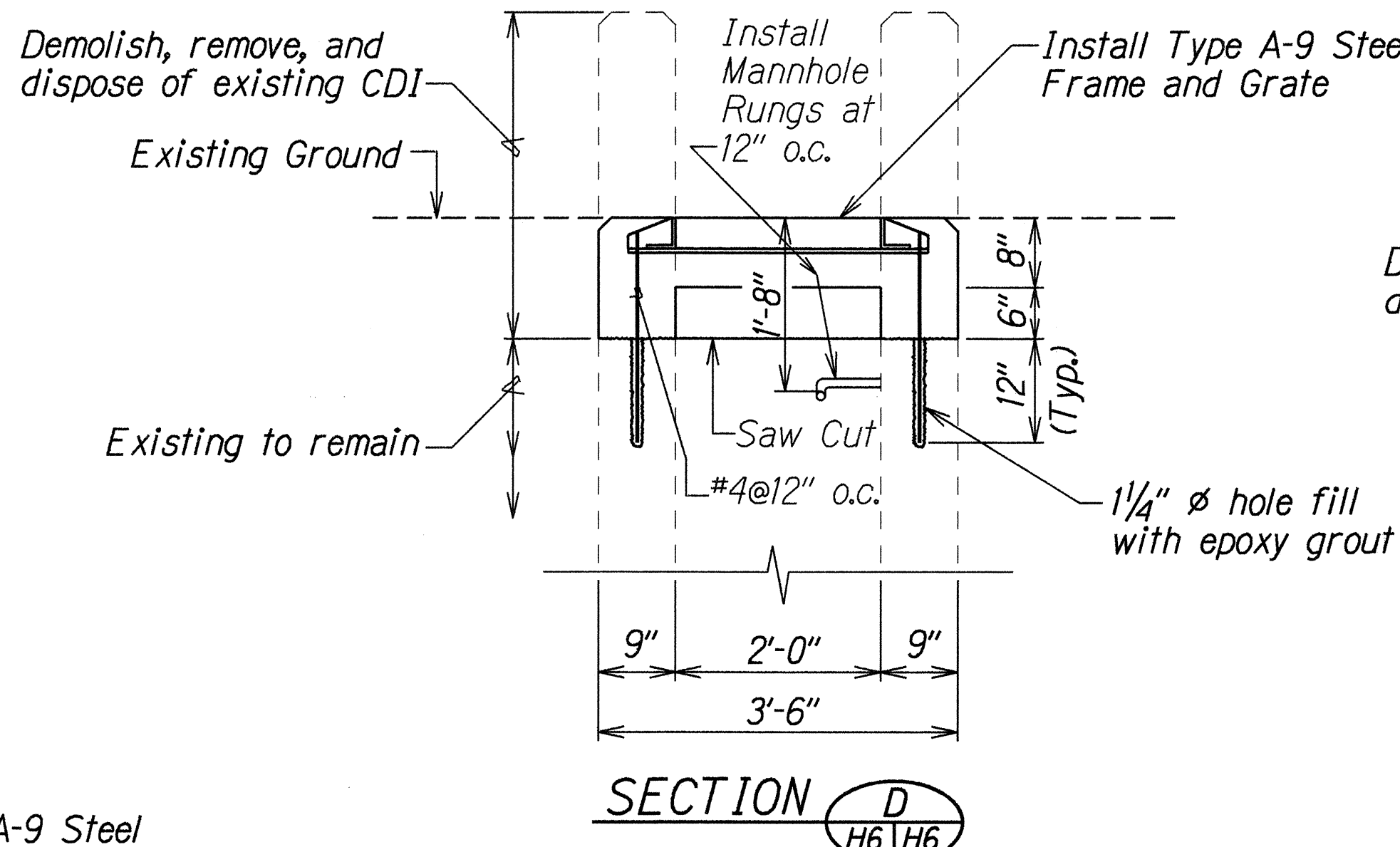
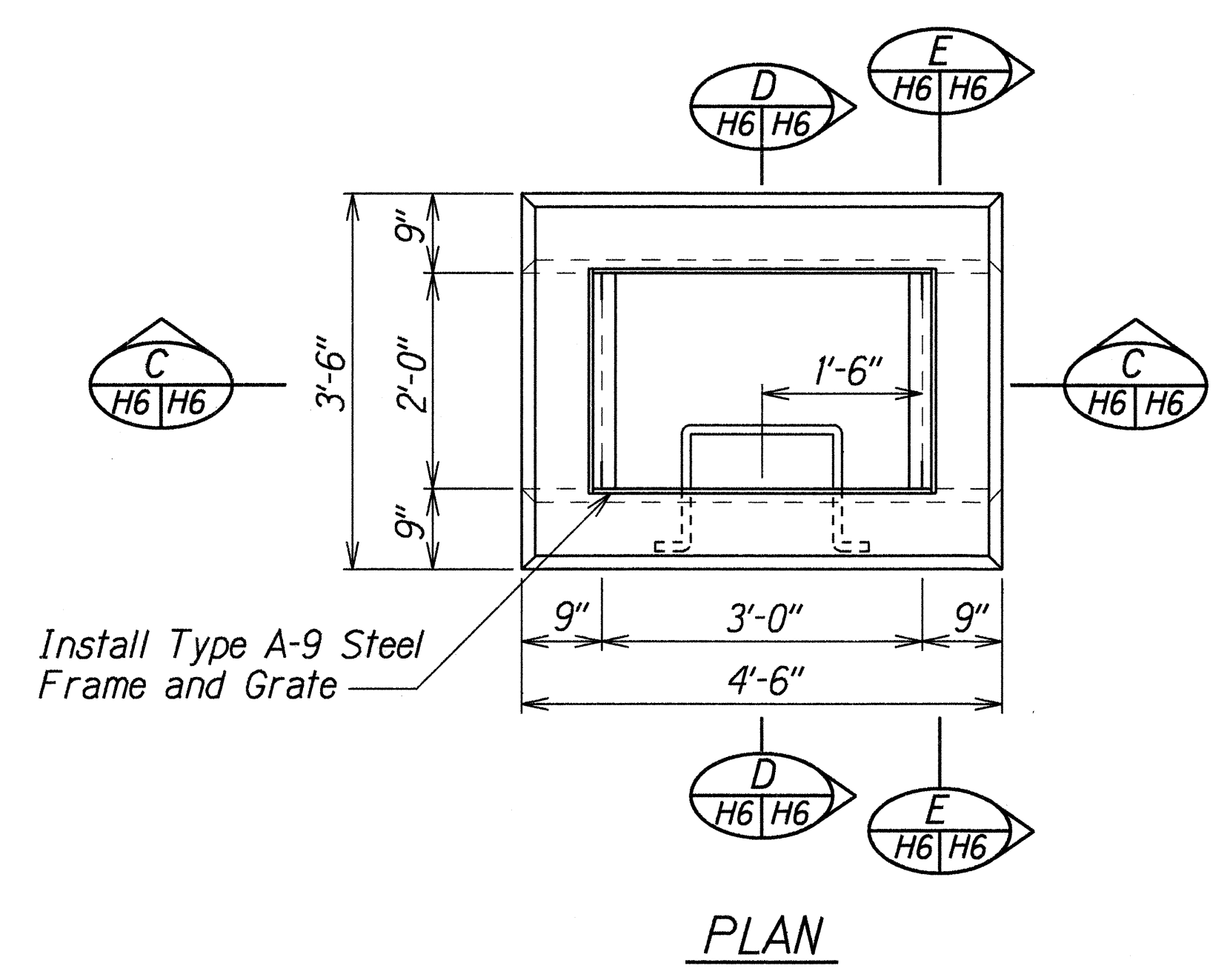
ORIGINAL PLAN	DATE
DESIGNED BY	10/1/96
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
APPROVED BY	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<u>DRAINAGE DETAILS</u>	
<u>KAMEHAMEHA HIGHWAY RESURFACING</u>	
<u>Crouching Lion to Makao Road</u>	
<u>Proj. No. 83D-01-96M</u>	
Scale: As Noted	Date: April, 1996
SHEET No. H5 OF 7 SHEETS	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83D-01-96M	1996	25	50



CONCRETE DROP INLET AT STA. 993+44± LT.



NOTES:

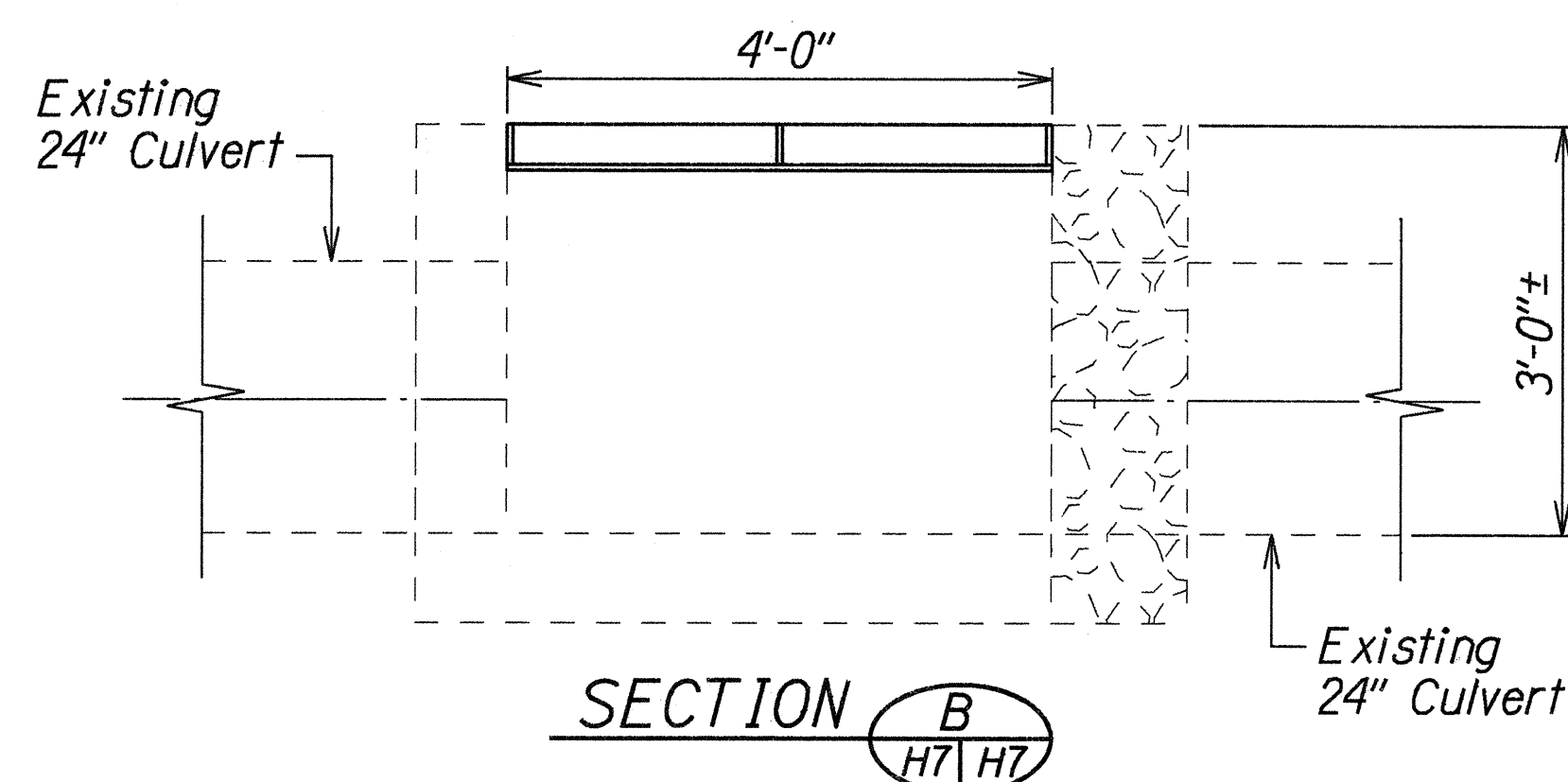
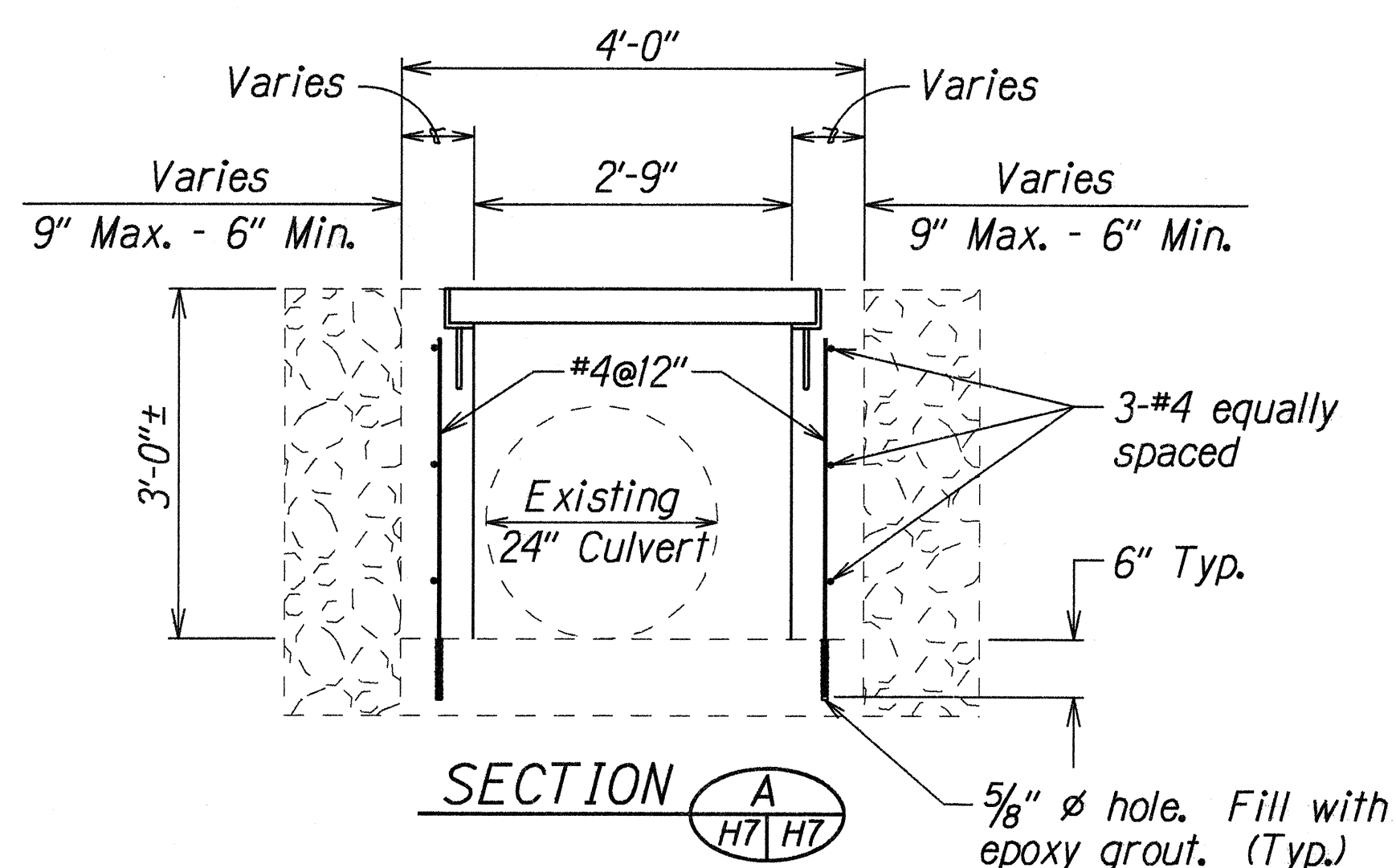
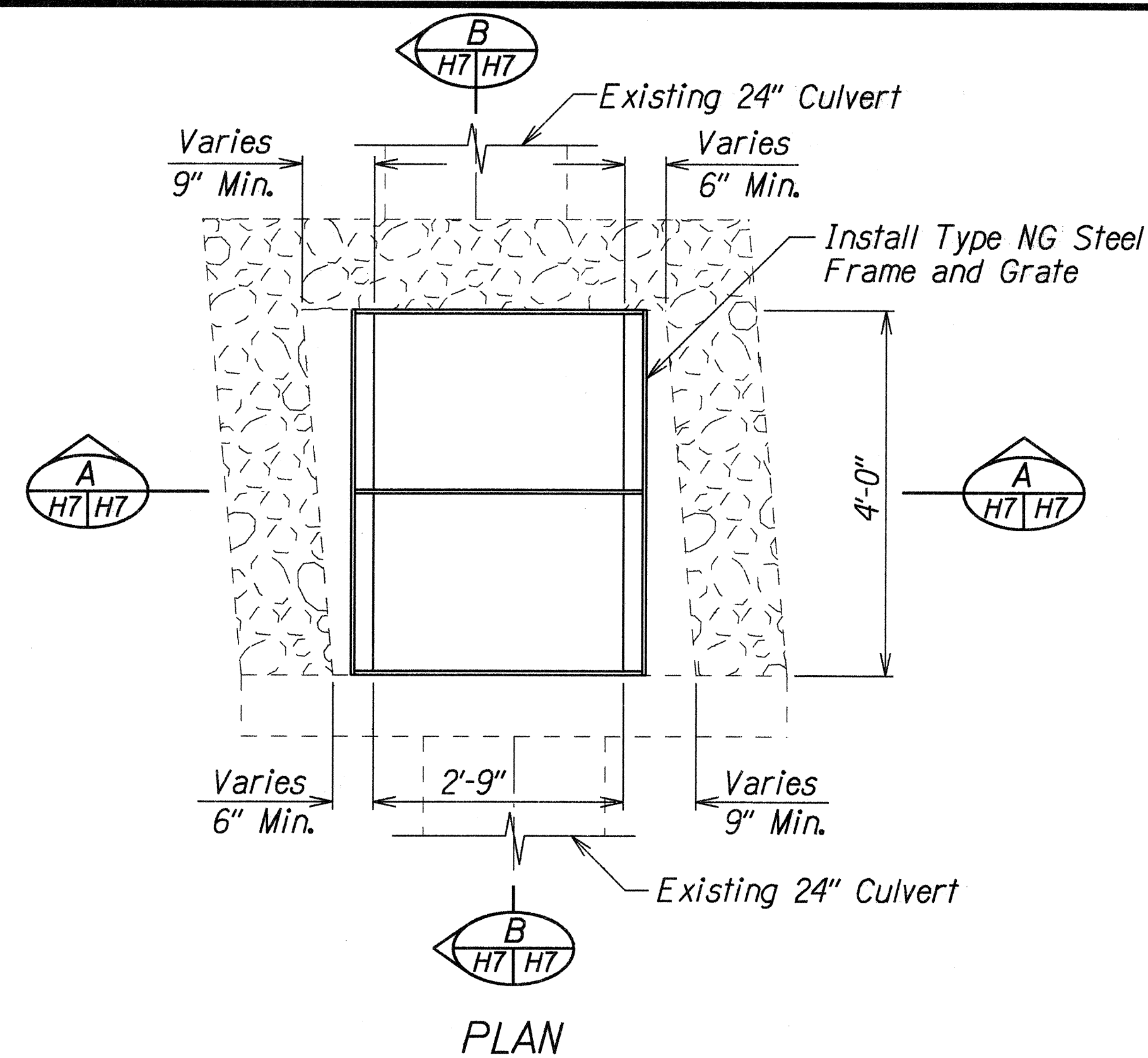
1. Only non-pneumatic type of drill as approved by the Engineer will be permitted for drilling holes in concrete. The approximate diameter of drilled holes for installation of studs shall be 5/8 inches. After installing studs the voids shall be filled with epoxy grout as directed by the Engineer. Above work shall be considered incidental to the various contract items.
2. Frames and grates shall be hot dip galvanized after fabrication.

CONCRETE DROP INLET AT STA. 997+97± LT.

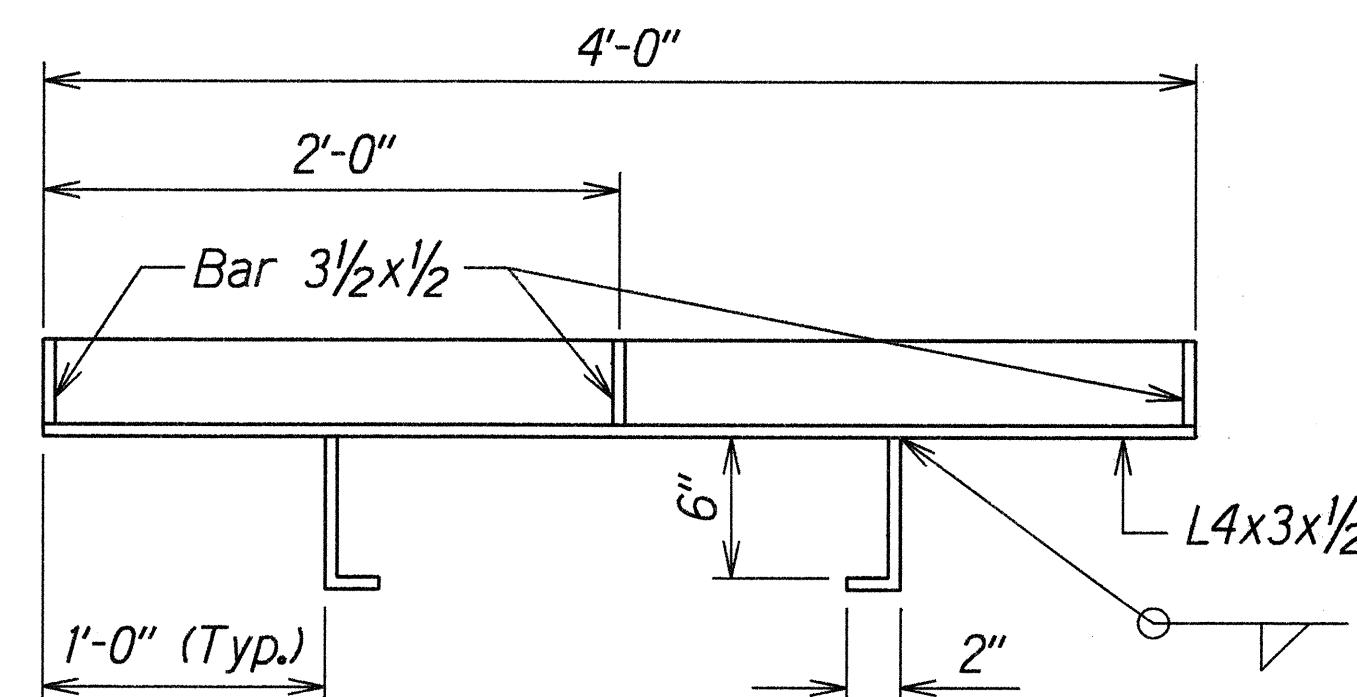
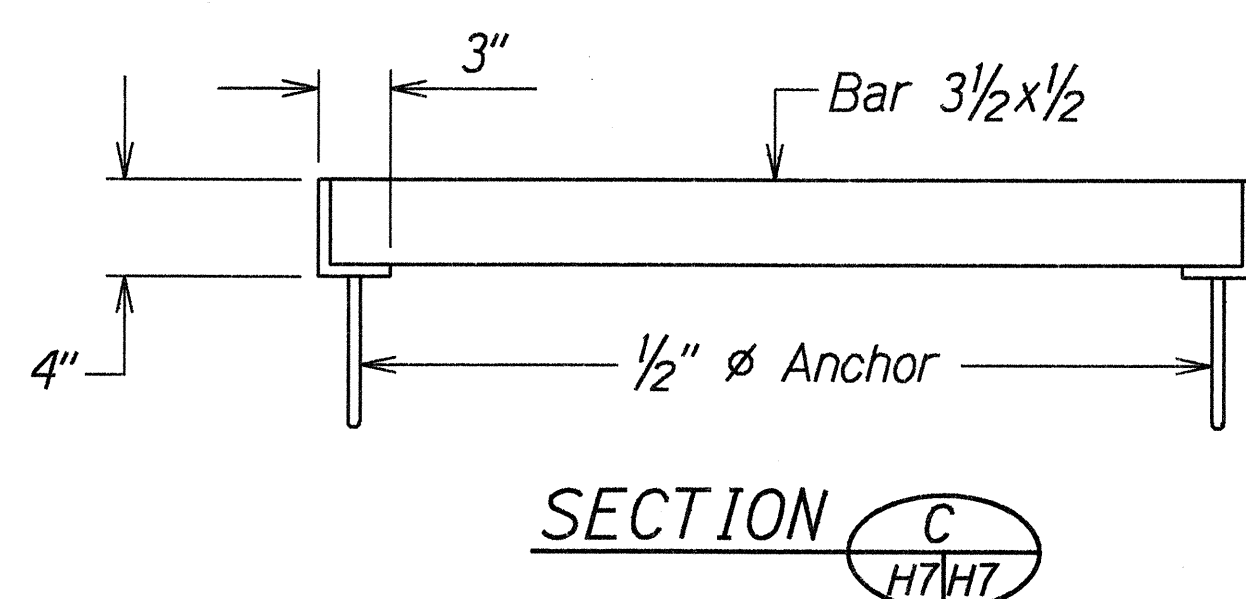
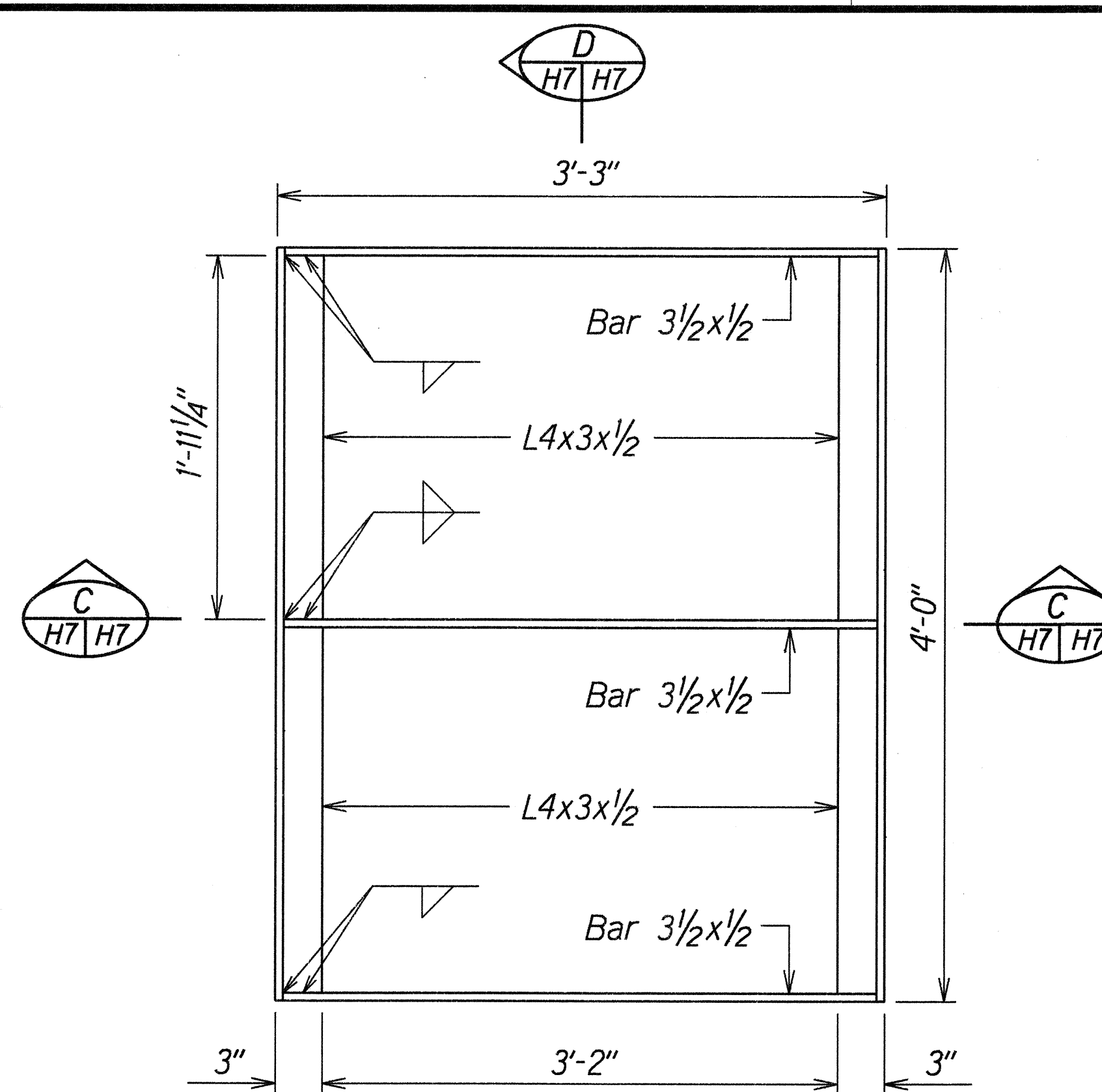
DATE	APRIL 1996
SURVEY PLANNED BY	RUSSELL SATO
DRAWN BY	DAVID SATO
DESIGNED BY	DAVID SATO
CHECKED BY	DAVID SATO
ORIGINAL PLAN	DAVID SATO

6-10-96	Changed Design of Concrete Drop Inlets
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
DRAINAGE DETAILS	
KAMEHAMEHA HIGHWAY RESURFACING Crouching Lion to Makao Road Proj. No. 83D-01-96M	
Scale: 3/4"=1'-0"	Date: April, 1996
SHEET No. H6 OF 7 SHEETS	

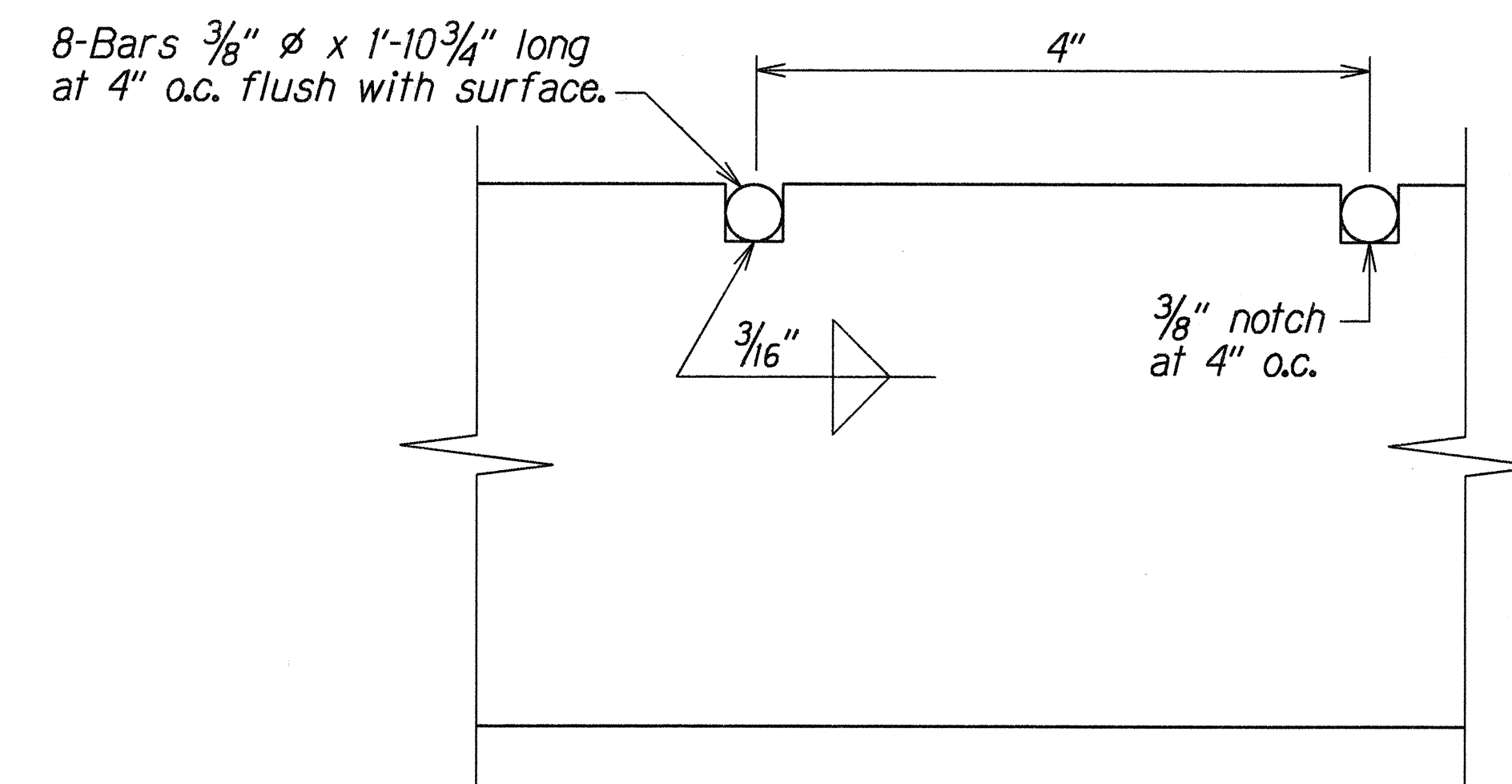
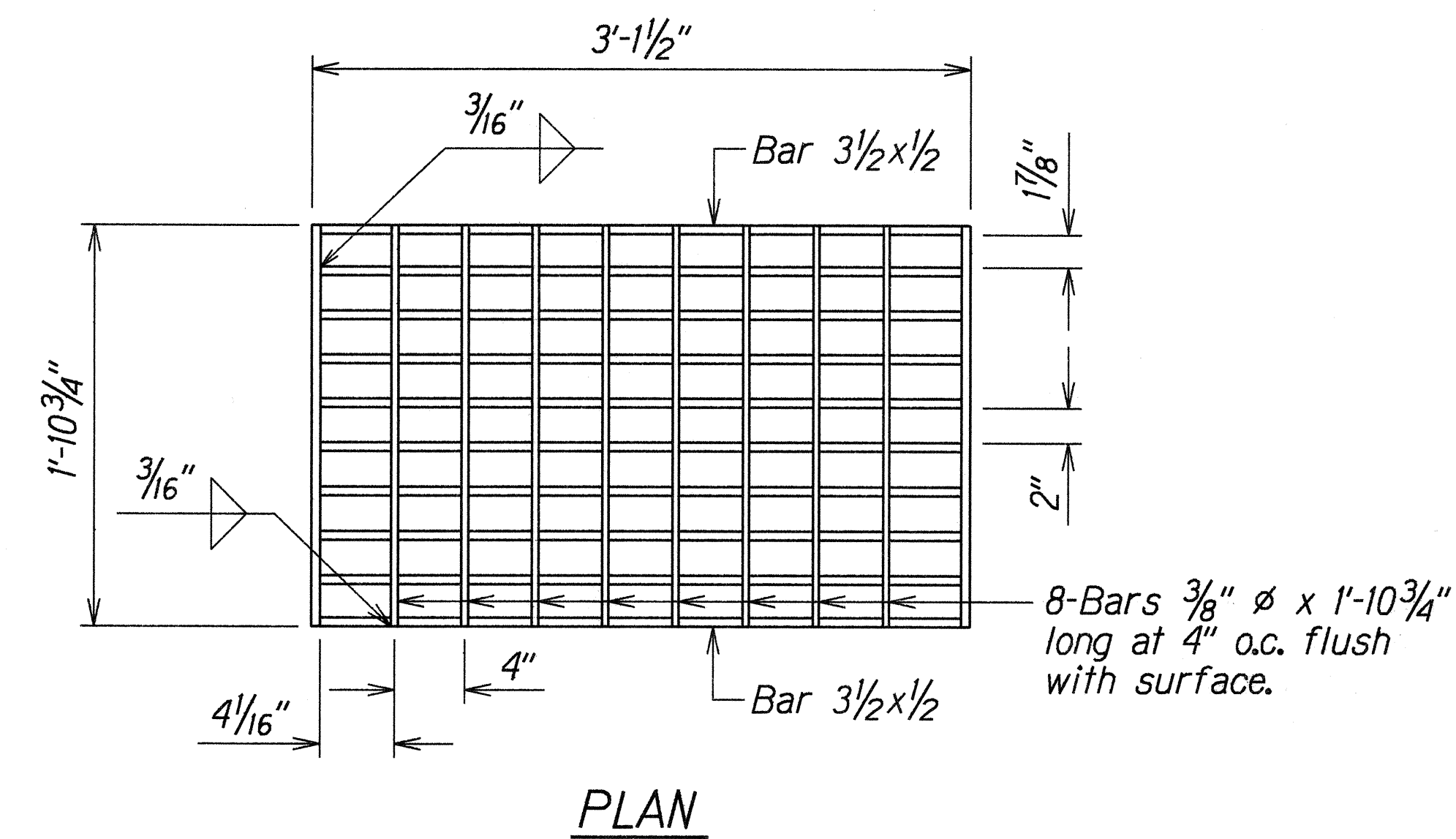
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83D-01-96M	1996	26	50



GRATED DROP INLET AT STA. 1156+10± RT.
Scale: 3/4"=1'-0"



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



GRATE DETAILS
Scale: Full Size

- NOTES:**
- All welds 3/8" unless otherwise noted.
 - Frame and grates shall be hot dip galvanized after fabrication.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

KAMEHAMEHA HIGHWAY RSURFACING
Crouching Lion to Makao Road
Proj. No. 83D-01-96M

Scale: As Noted Date: May, 1996

SHEET No. H7 OF 7 SHEETS