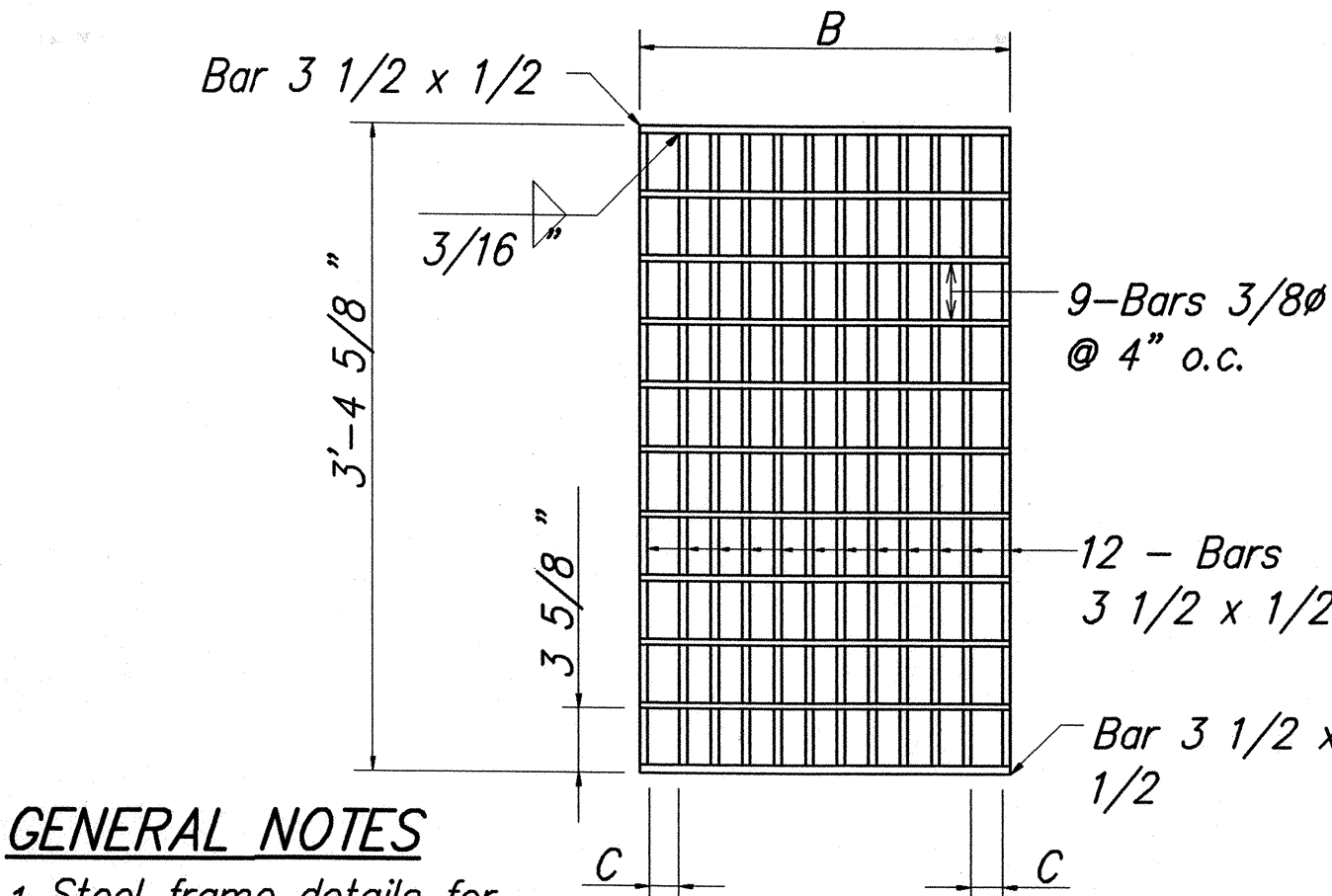


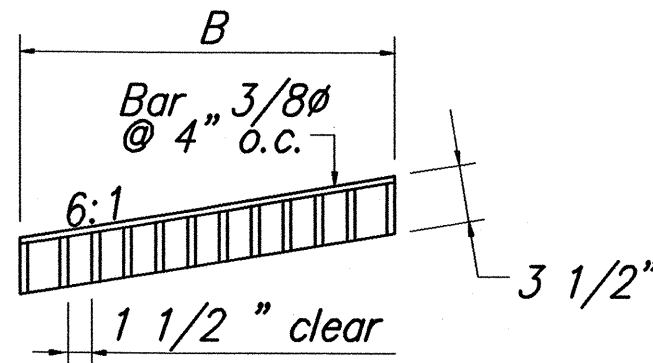
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-2(55)	2004	ADD.32	112



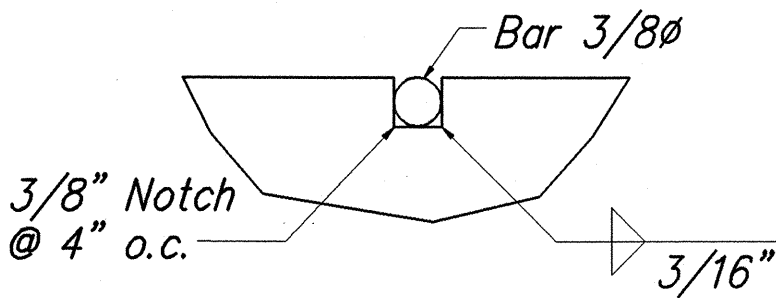
GENERAL NOTES

- Steel frame details for grates shall be the steel frames shown on Standard Plan H-13.
- Grates shall be hot dip galvanized after fabrication.
- Use in locations off the road bed on all types of highways. (Pedestrian safe)
- Cross slope of grate at Sta. 79+78 shall be 2%. See Std. Plan H-13 for frame details.

PLAN



SECTION



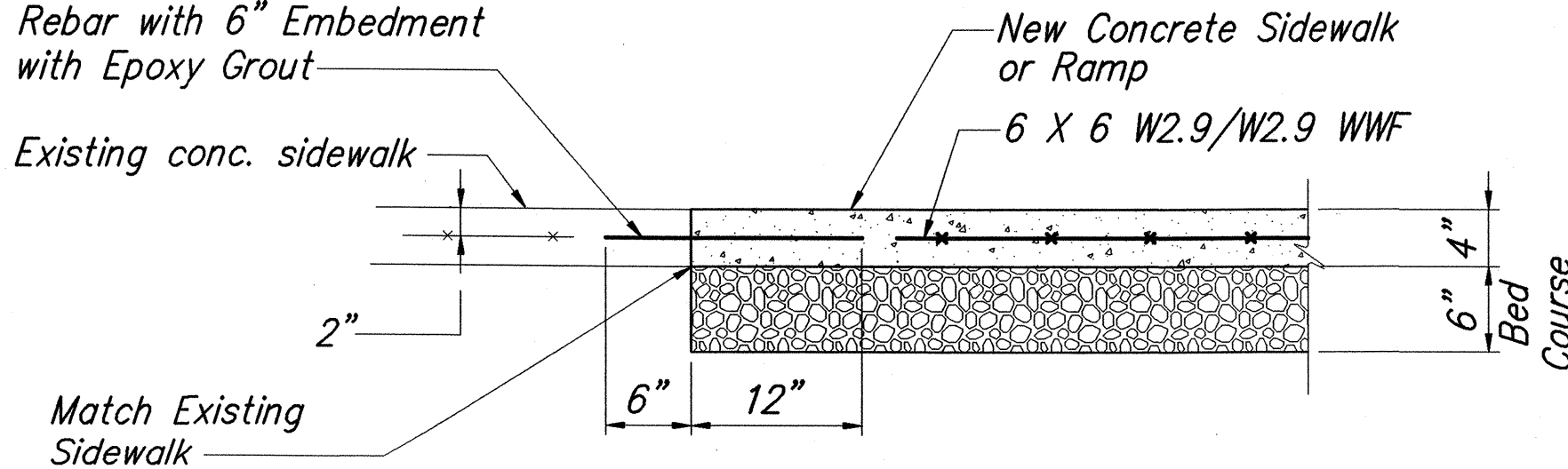
NOTCH DETAIL NTS

DIMENSIONS					
TYPE	NO. BARS	A	B	C	D
61614P	12		1'-11 1/2"	2"	

TYPE 61614P STEEL GRATE

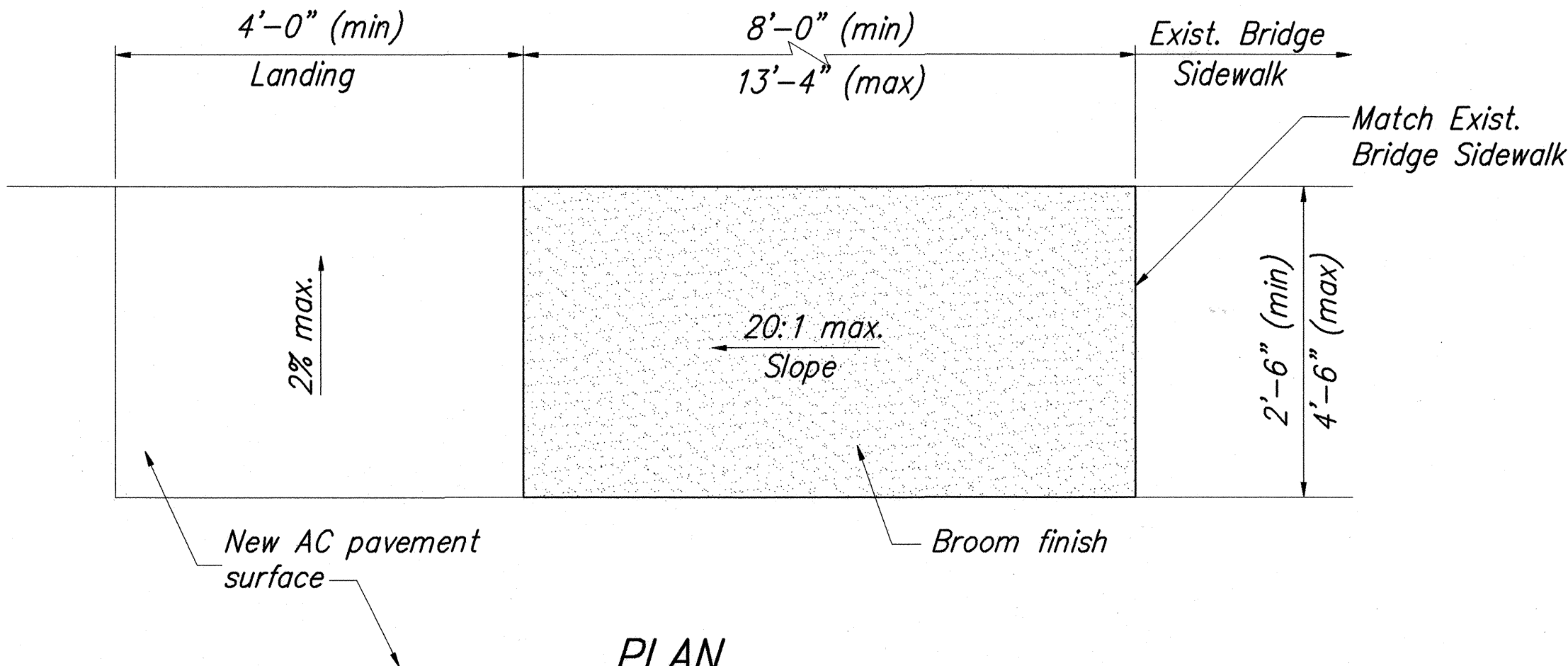
Scale: 1 1/2" = 1'-0"

Drill 5/8"Ø at 12" o.c. for No. 4 x 1'-6" Deformed Rebar with 6" Embedment with Epoxy Grout

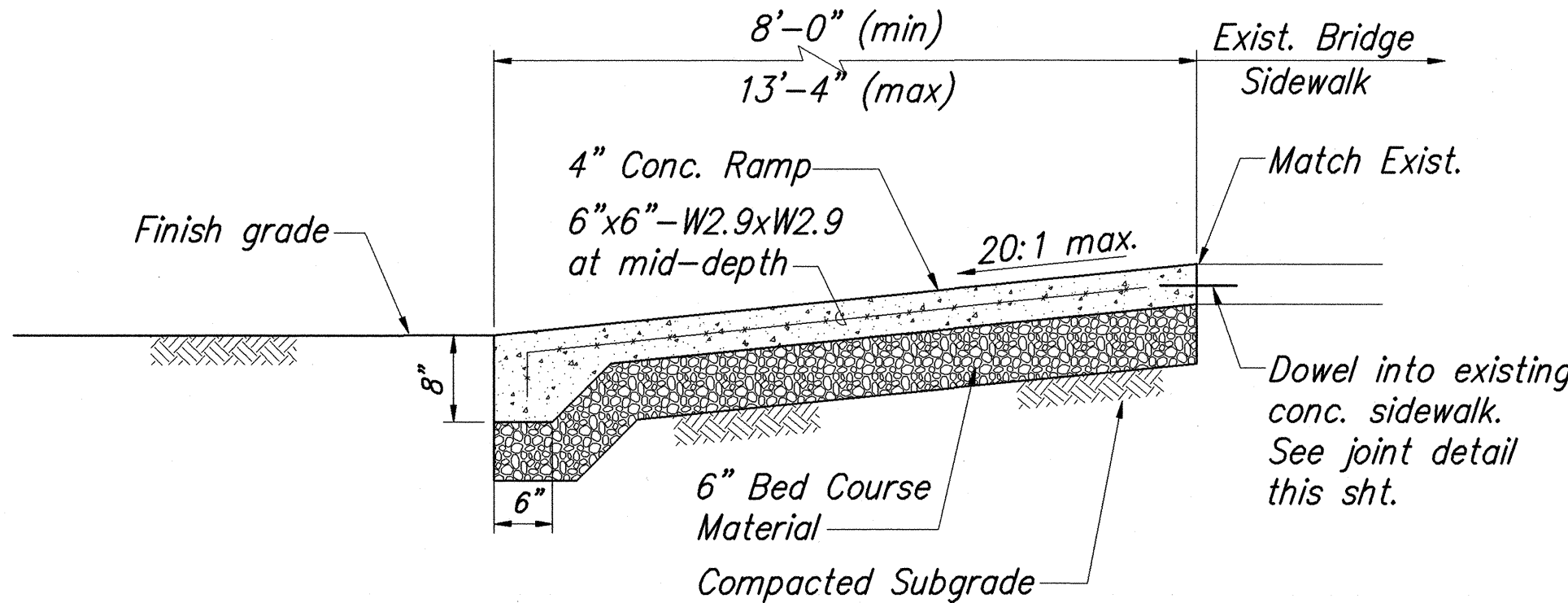


TYPICAL CONSTRUCTION JOINT AT EXISTING SIDEWALK

Not to scale



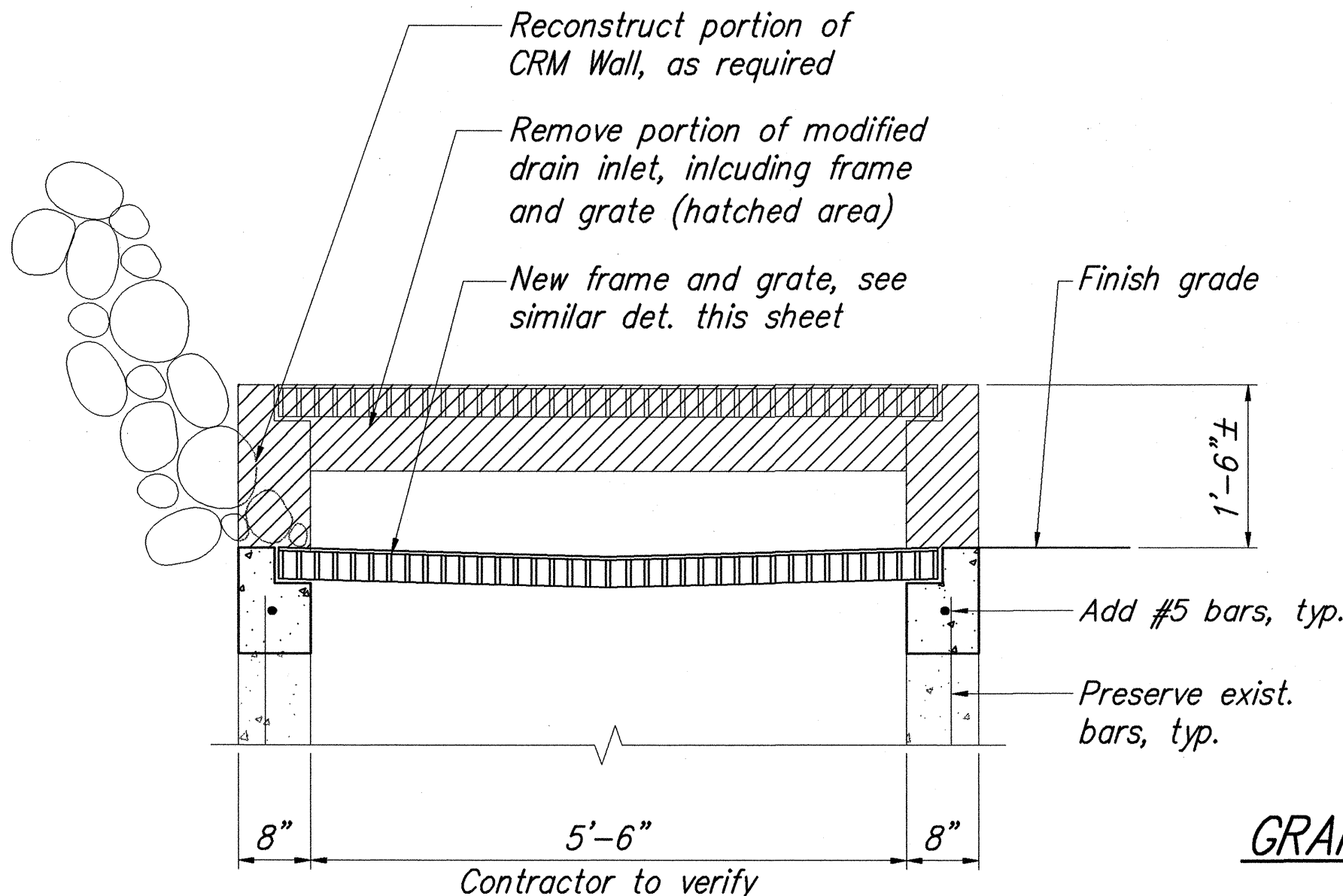
PLAN



SECTION

ACCESSIBLE RAMP DETAIL (MODIFIED TYPE "D")

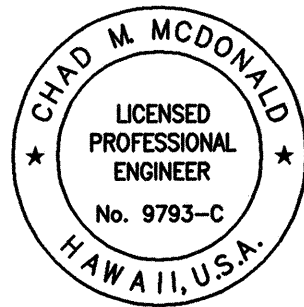
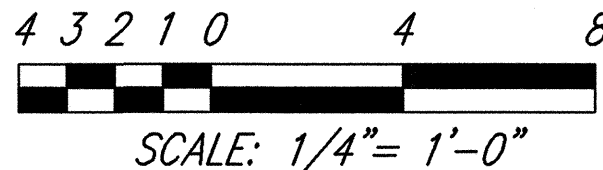
Scale: 3/4" = 1'-0"



1 DRAIN INLET RECONSTRUCTION

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

GRAPHIC SCALE:



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Chad M. McDonald
MITSUNAGA & ASSOCIATES

ACCESSIBILITY NOTES:

- A 2% maximum cross slope shall be maintained in the direction of pedestrian traffic.
- The maximum slopes of adjoining road surface immediately fronting the ramp shall not exceed 8.33%. The counterslope may be exceeded when the change of grade does not exceed 13% (11% preferred) over a distance of 2ft. Exceeding the 13% (11% preferred) change in grade will cause a person in a wheelchair to tip forward and/or fall backward.
- Transitions from ramps to roadways shall be flush.
- Ramps and sidewalks shall be constructed to eliminate ponding to the maximum extent feasible.
- Construction joints are required to join ramps with sidewalks.
- Surfaces of sidewalks and ramps shall be broom finish, firm, stable, and slip-resistant. This includes the surfaces of pullboxes, valve covers, manhole covers, etc.
- Bed course material is required for ramps and sidewalks.

6/18/04 1 Drain Inlet Detail added
DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS DETAILS

HAWAII BELT ROAD RESURFACING
East Paauilo Bridge to Kaala Bridge
Federal Aid-Project No. NH-019-2(55)

Scale: As Noted Date: April 2004

SHEET No. C-30 OF 49 SHEETS

ADD.32