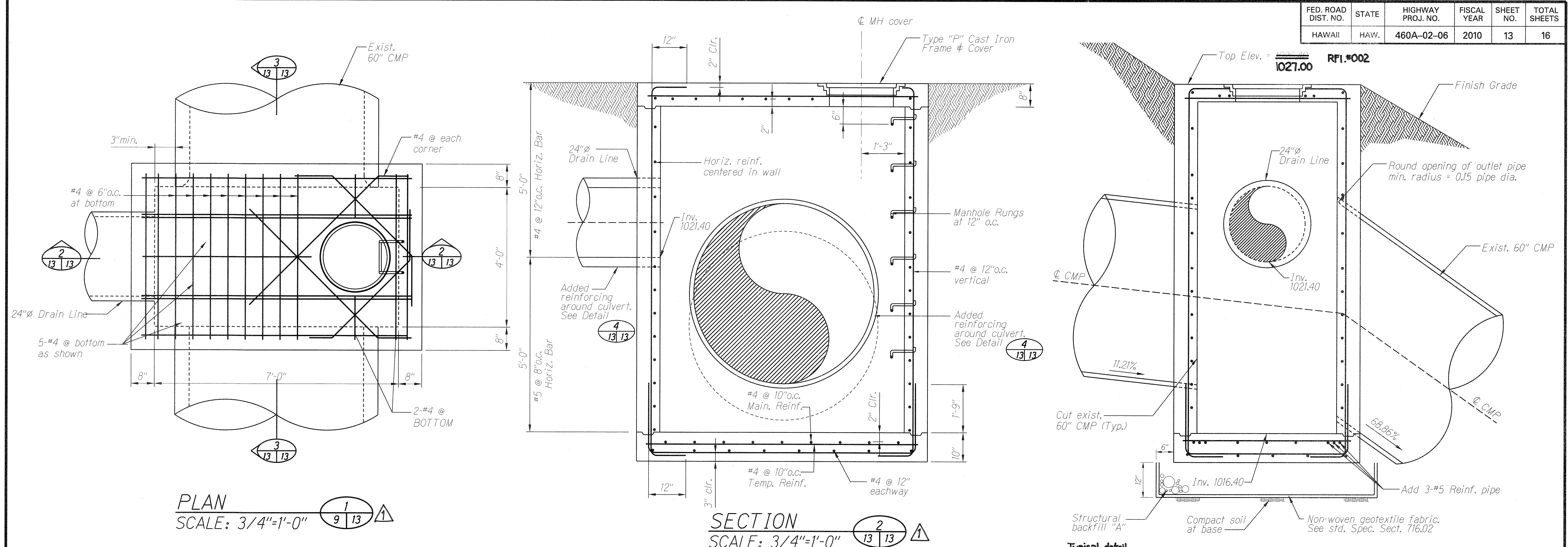
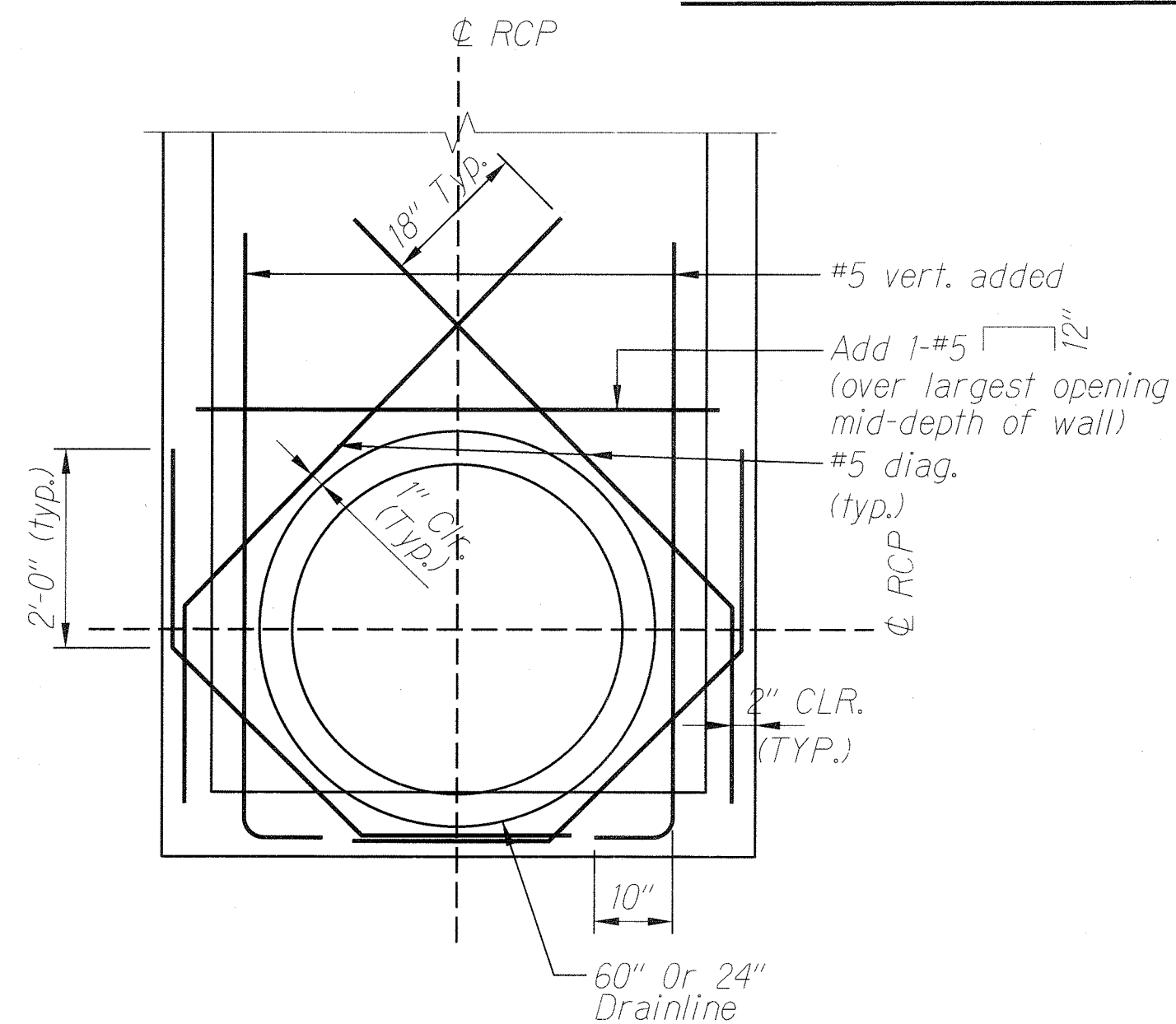


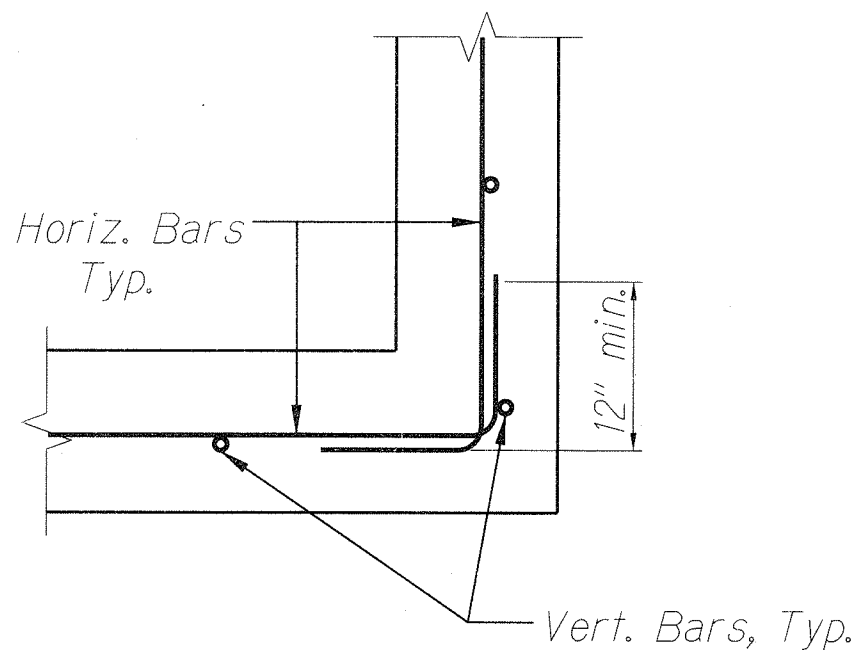
FED. ROAD DIST. NO.	STATE	HIGHWAY PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-02-06	2010	13	16



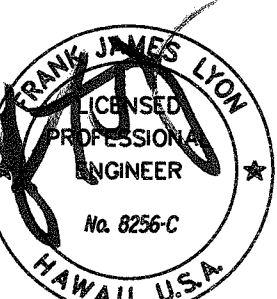
SPECIAL DRAIN MANHOLE DETAIL (NOT IN PAVEMENT)
SCALE: AS SHOWN



TYP. ADDED REINF. AT PIPES
SCALE: 3/4"=1'-0"

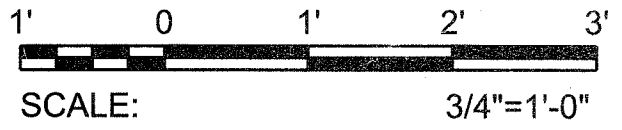


TYP. CORNER REINFORCEMENT LAPPING
SCALE: 3/4"=1'-0"



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

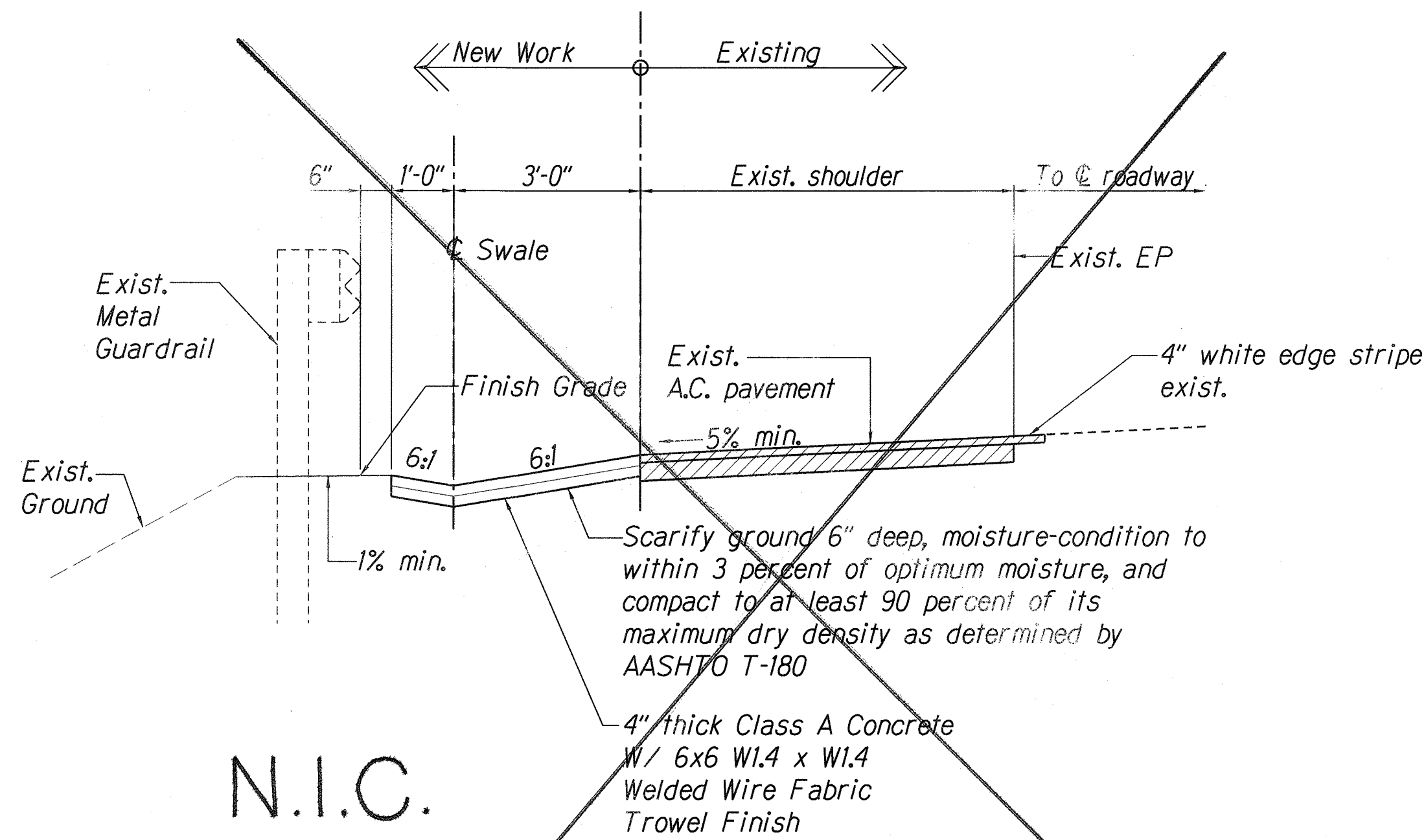
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DRAINAGE MISC.
DETAILS - 1
MAUNALO A HIGHWAY
Slope Stabilization at Milepost 13
Highway Project No. 460A-02-06
Scale: AS NOTED Date: JAN 2010
SHEET No. 13 OF 16 SHEETS



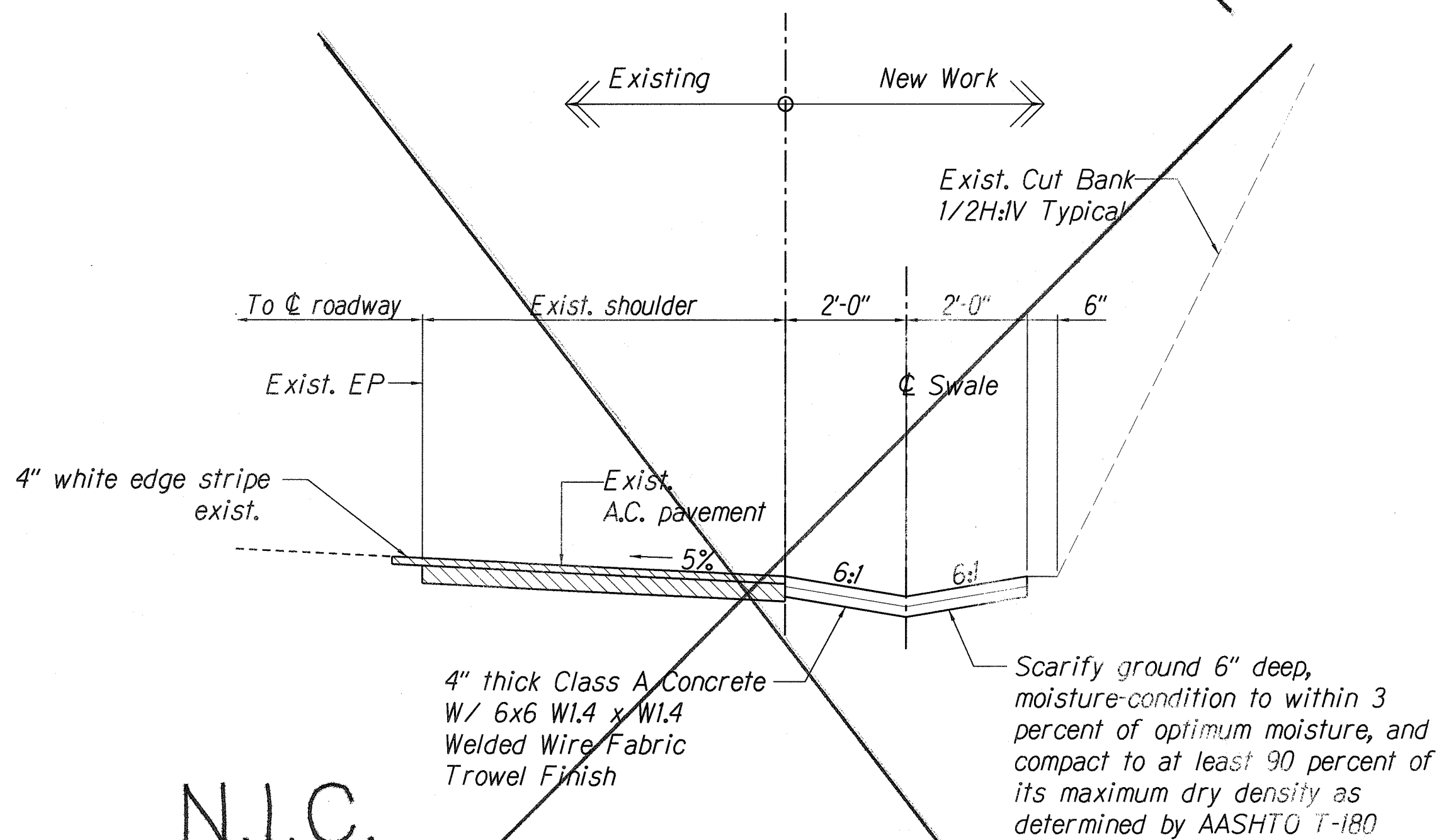
"AC-BUILT"

ADD. 13

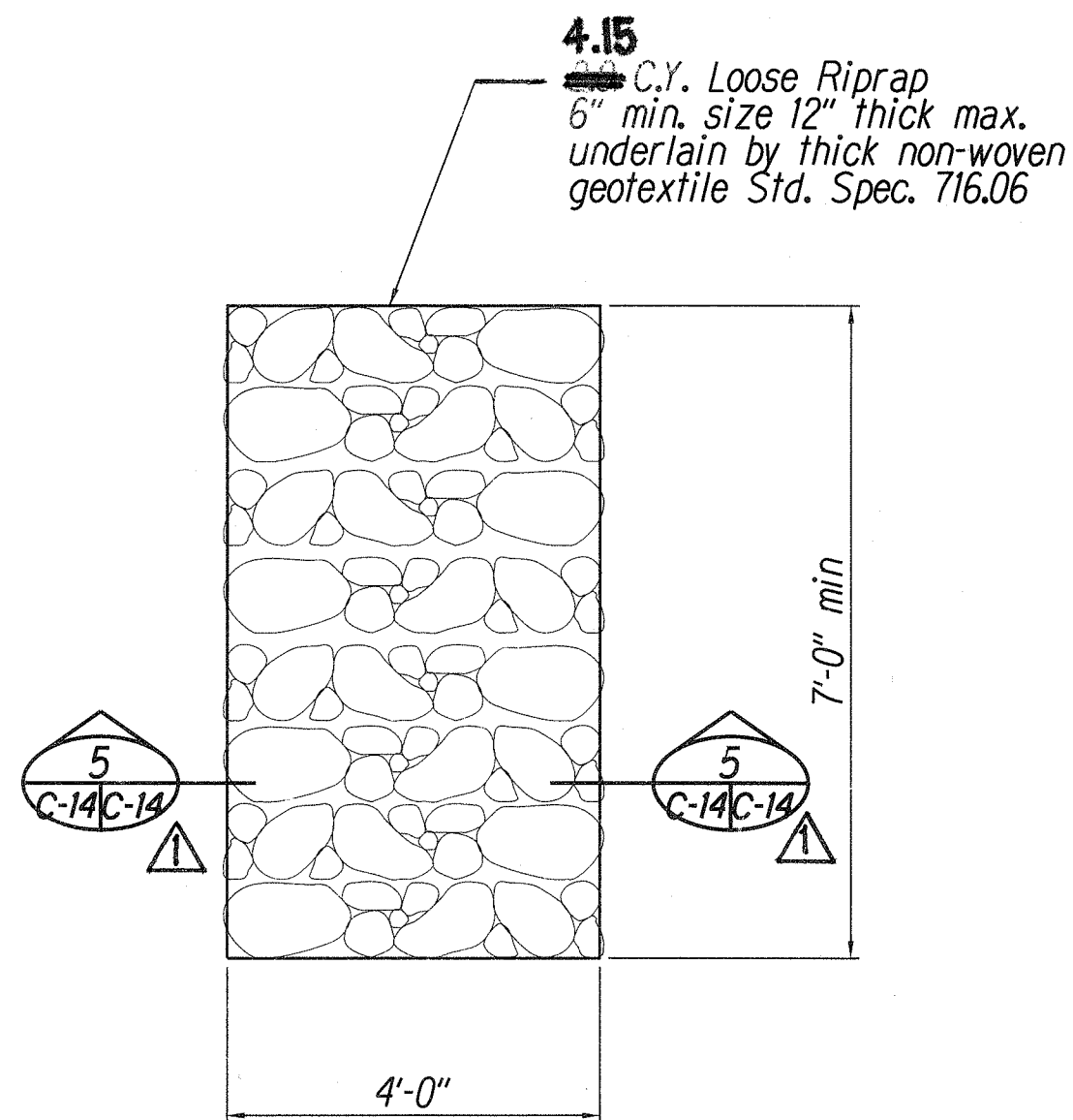
FED. ROAD DIST. NO.	STATE	HIGHWAY PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-02-06	2010	15	16



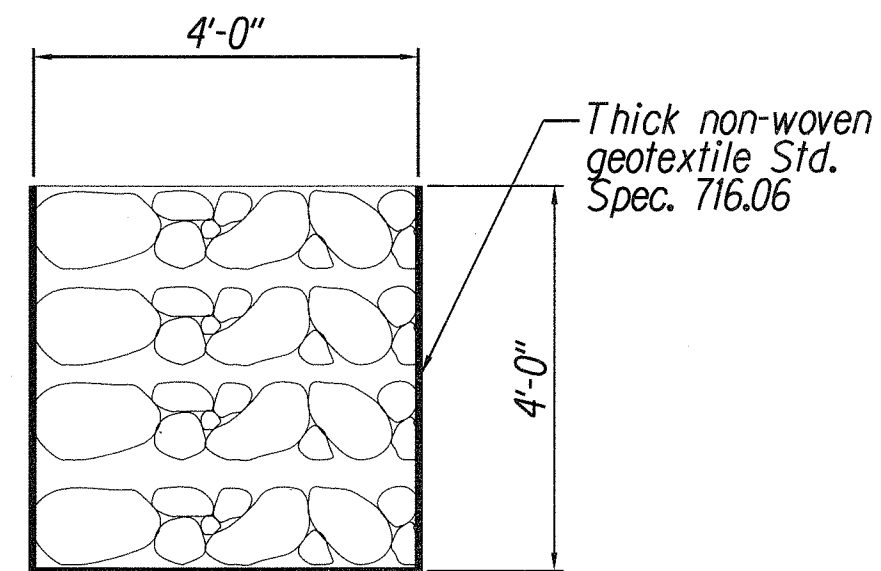
LEFT SHOULDER DETAIL
SCALE: 1/2"=1'-0"



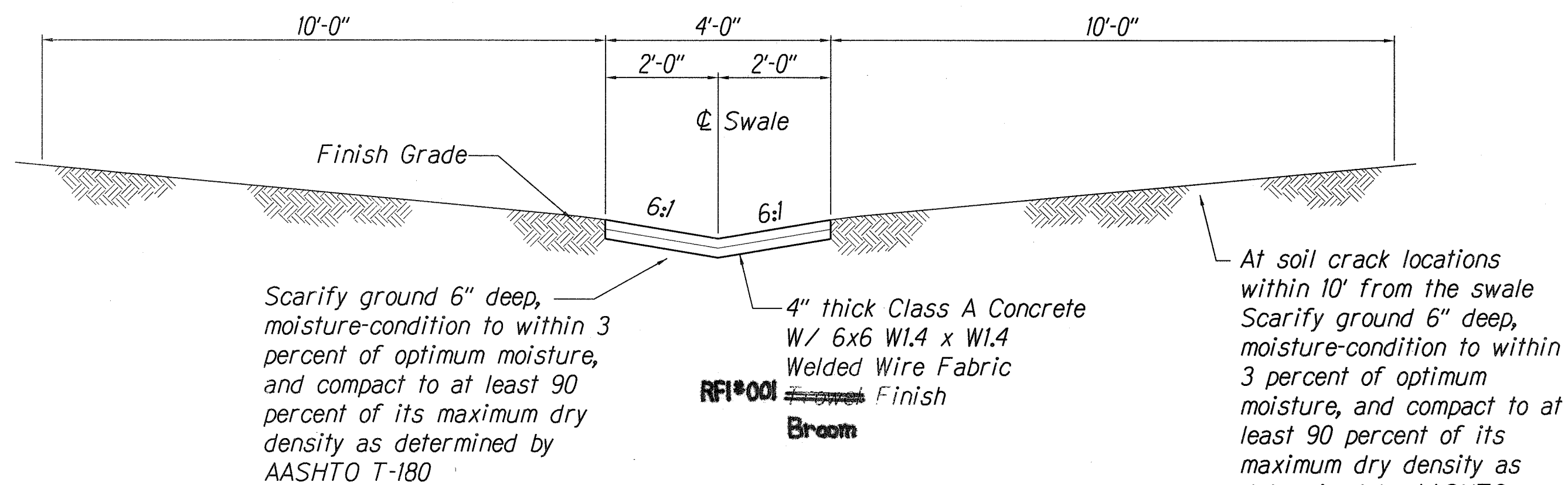
RIGHT SHOULDER DETAIL
SCALE: 1/2"=1'-0"



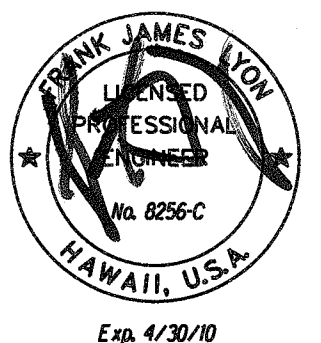
ENERGY DISSIPATER
SCALE: 1/2"=1'-0"



SECTION
SCALE: 1/2"=1'-0"



TYPICAL SWALE SECTION - OFF ROAD
SCALE: 1/2"=1'-0"



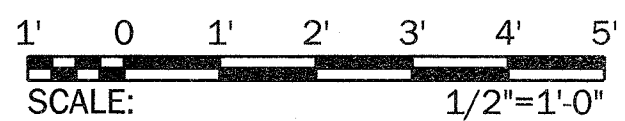
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE MISC.
DETAILS - 3

MAUNALO A HIGHWAY
Slope Stabilization at Milepost 13
Highway Project No. 460A-02-06

Scale: AS NOTED
Date: JAN 2010



SHEET No. 15 OF 16 SHEETS

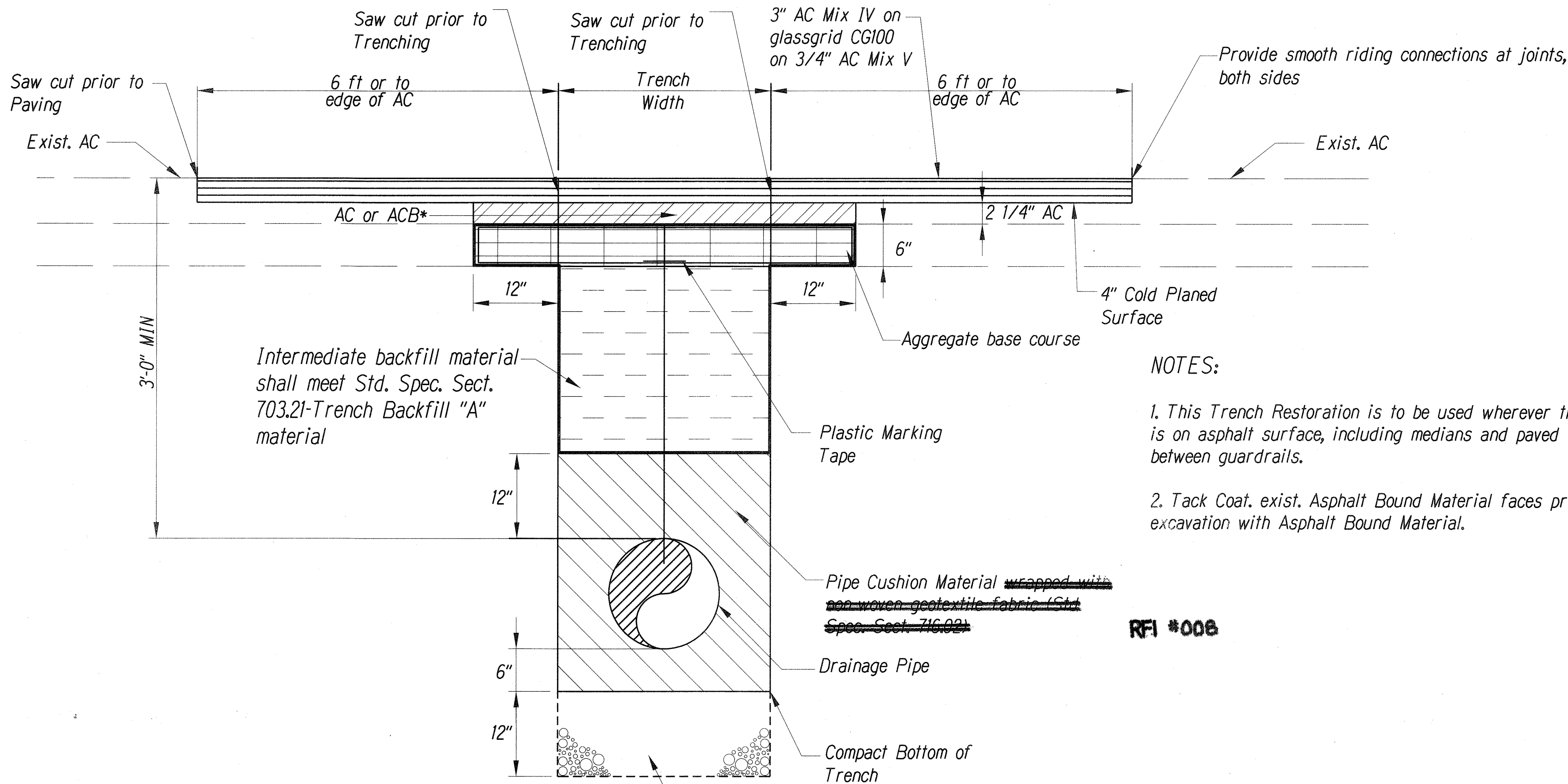
"AS-BUILT"

ADD. 15

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
IN CHARGE	
NOTED BY	
DATE	

2-19-10	Revised Sheet Reference Numbers
DATE	REVISION

FED. ROAD DIST. NO.	STATE	HIGHWAY PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-02-06	2010	16	16

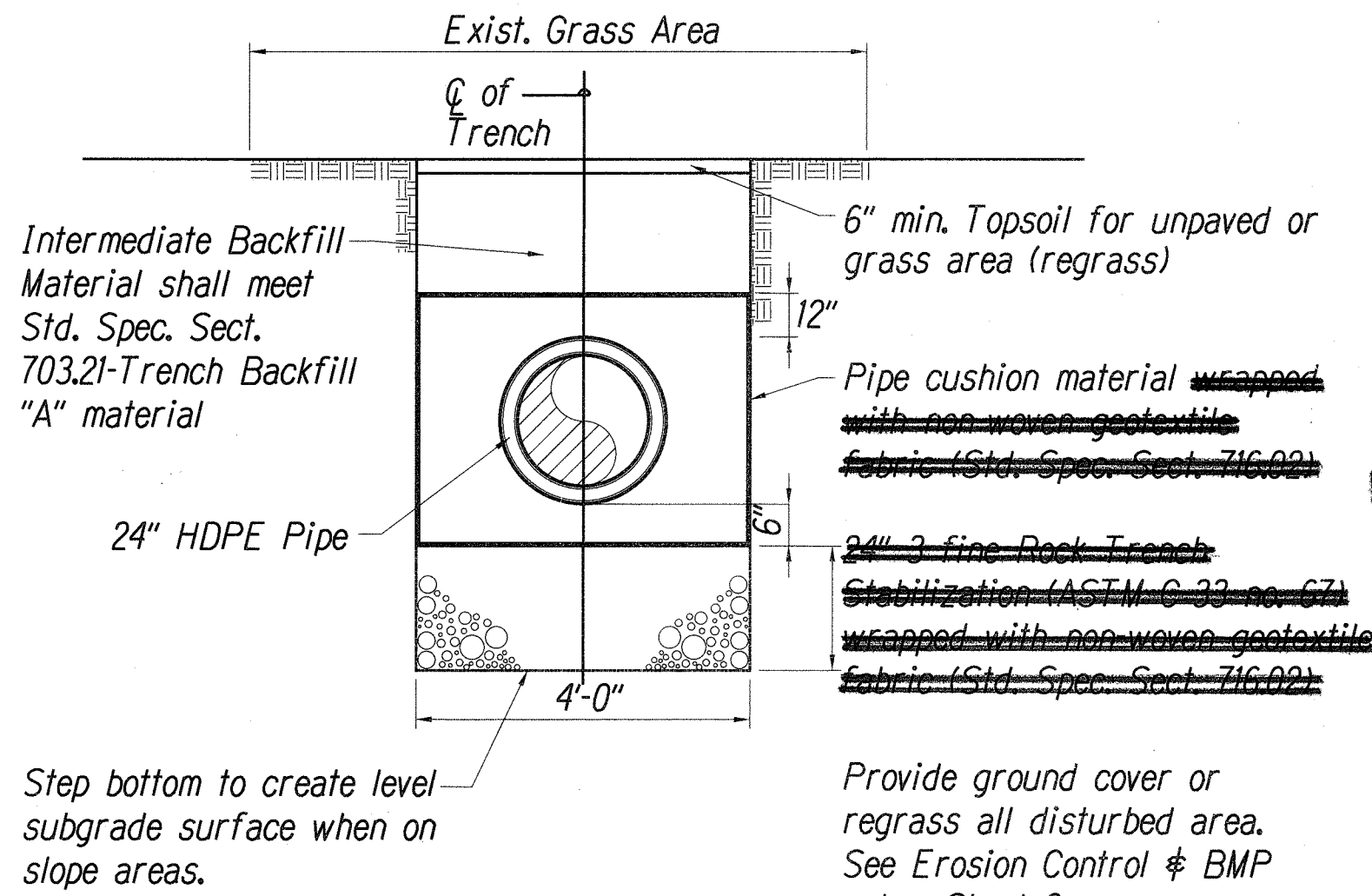


NOTES:

1. This Trench Restoration is to be used wherever the pavement is on asphalt surface, including medians and paved areas between guardrails.
2. Tack Coat, exist. Asphalt Bound Material faces prior to filling excavation with Asphalt Bound Material.

RFI #008

RFI #008



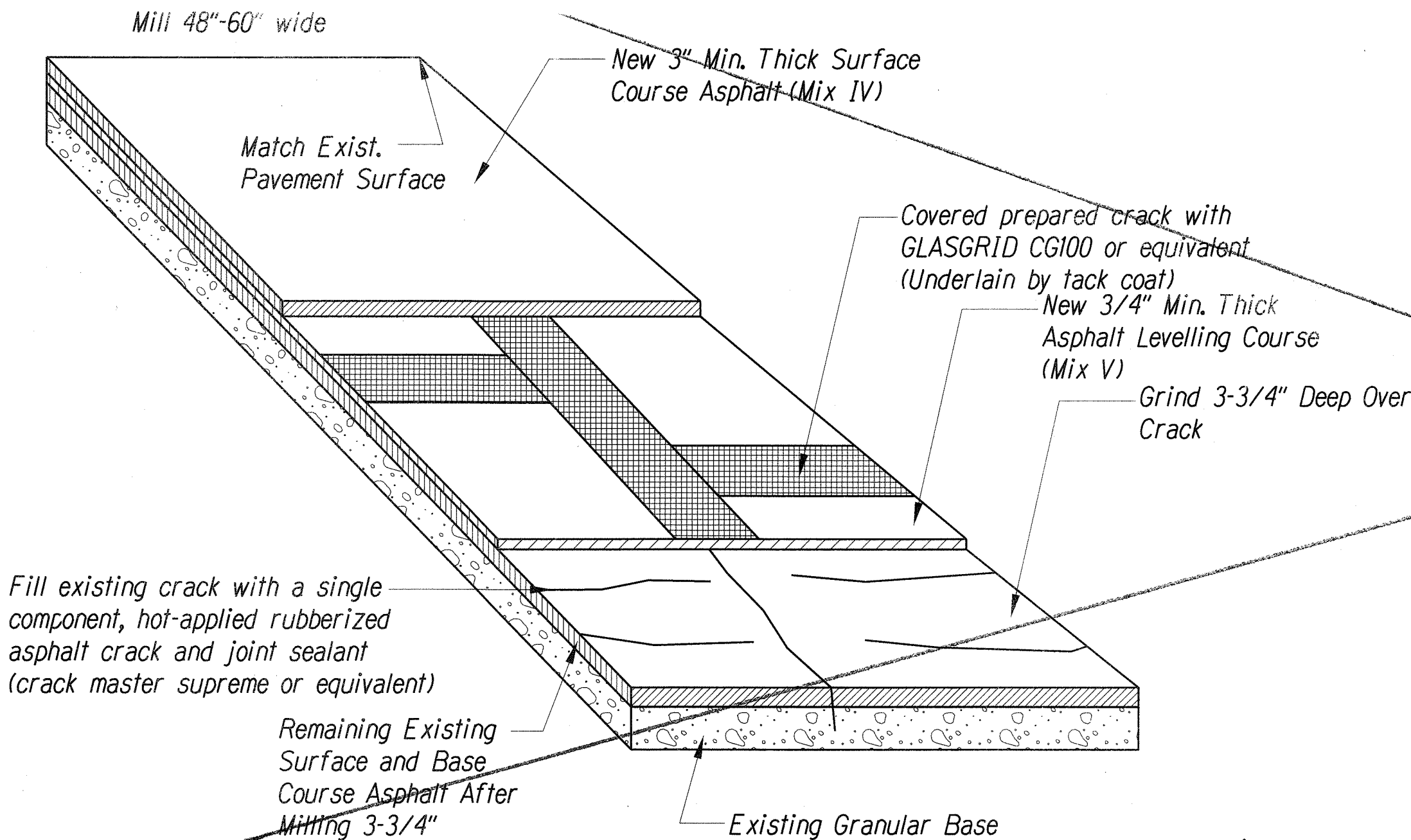
RFI #008

TRENCH RESTORATION DETAIL WITHIN GRASSED AREAS
SCALE: NOT TO SCALE

3
16 16

ASPHALT PAVEMENT RESTORATION OVER TRENCH EXCAVATIONS FOR EXISTING PAVEMENTS
SCALE: NOT TO SCALE

1
16 16



NOTES:

1. Contractor to be field verify locations at crack Asphalt surfaces.
2. Glasgrid to be applied to entire Asphalt surface (shoulders and travel lanes) as shown on Sheet 9.
3. When tested in accordance with ASTM D6690, the sealant shall have the following chemical and physical properties.

Recommended application temperature:	350 to 400 degrees Fahrenheit
Maximum heating temperature:	350 to 400 degrees Fahrenheit
Cone Penetration at 25 degrees Celsius:	50 Maximum
Flow at 60 degrees Celsius:	0
Softening point:	200 degrees Fahrenheit
Resiliency:	60 percent Minimum
Flexibility at 0 degrees Fahrenheit:	(1\"/>

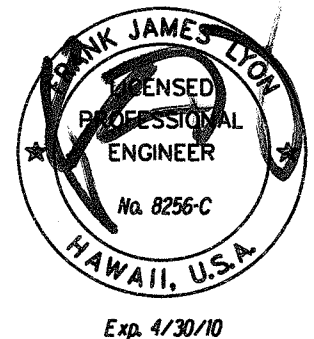
Prior to placement of the crack sealant, the crack shall be cleaned with compressed air to remove dust, loose aggregate, debris, and moisture. The blocks of sealant shall be melted in a proper melting device to its application temperature of 350 to 400 degrees Fahrenheit. Once the sealant is heated, it must be utilized, otherwise it must be properly disposed of, as it may not be reheated. Overheating of the sealant shall be avoided as it could cause the material to gel. A significant viscosity increase accompanied by stringiness

signals the approach of gelation. If this occurs, the sealant shall not be utilized, and where this material was used, it shall be removed. All appropriate OSHA safety regulations shall be adhered to during the use of the sealant material.

The sealant shall be applied with either a pump and wand system or a pour pot. After pouring the sealant into the crack, a sealing shoe or squeegee shall be used to level the material and to create an application width 2 to 3 inches wide over the crack.

4. The manufacturer or local product supplier representative of the pavement grid must be present during the first day of installation. The manufacturer's installation guidelines shall be adhered to unless otherwise indicated by the engineer.

5. Crack sealing work shall not be paid for separately but shall be considered incidental to the various paving items.



Exp. 4/30/10

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE MISC.
DETAILS - 4

MAUNALO A HIGHWAY
Slope Stabilization at Milepost 13
Highway Project No. 460A-02-06

Scale: AS NOTED Date: JAN 2010

SHEET No. 16 OF 16 SHEETS

"AS-BUILT"

ADD. 16