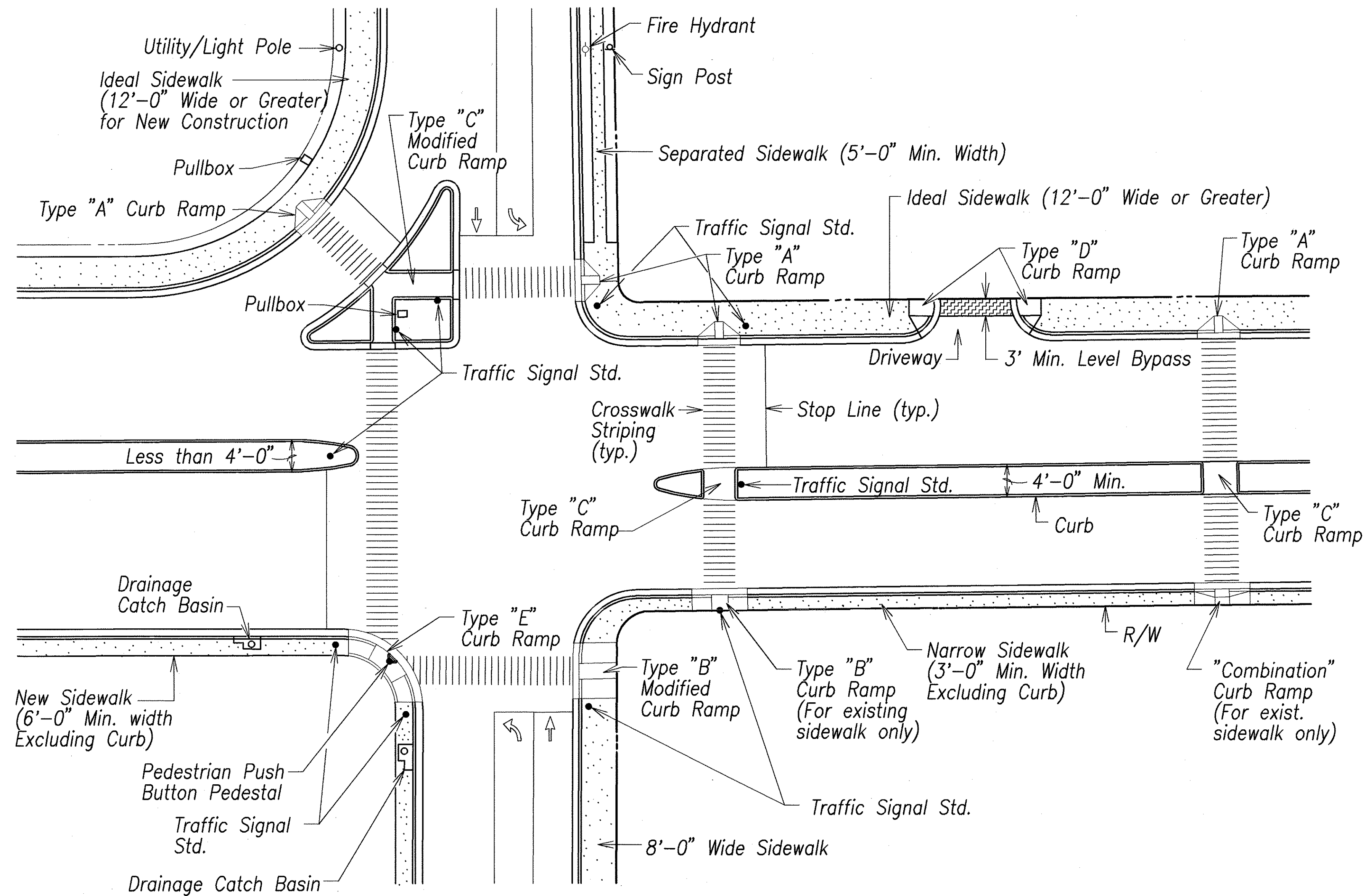


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(95)	2004	17	128



TYPICAL CURB RAMPS

ORIGINAL PLAN	DATE
SURVEY PLATTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NOTE BOOK	
No.	



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Signature: *Greg H. Hiyakumoto* April 30, 2006
 DATE: _____

"OBSERVATION OF CONSTRUCTION" IS DEFINED IN CHAPTER 18-115, HAWAII ADMINISTRATIVE RULES ENTITLED "PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS".

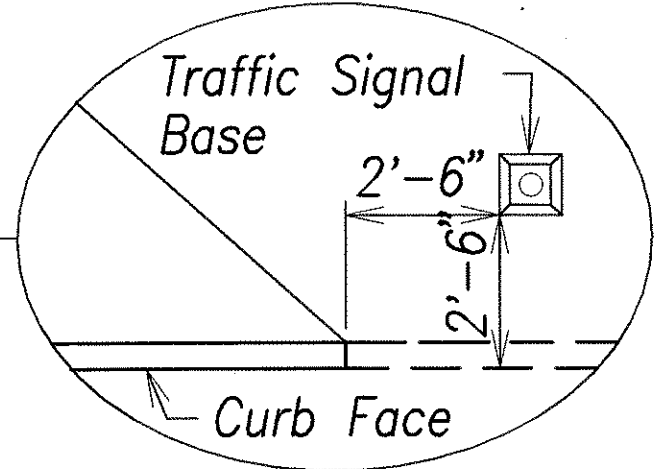
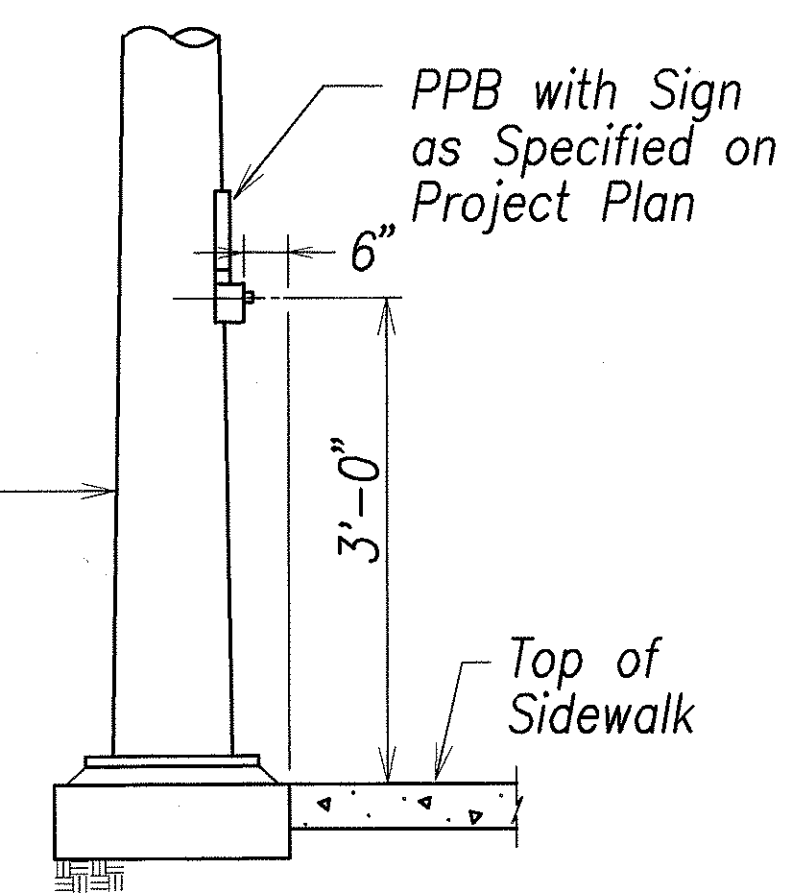
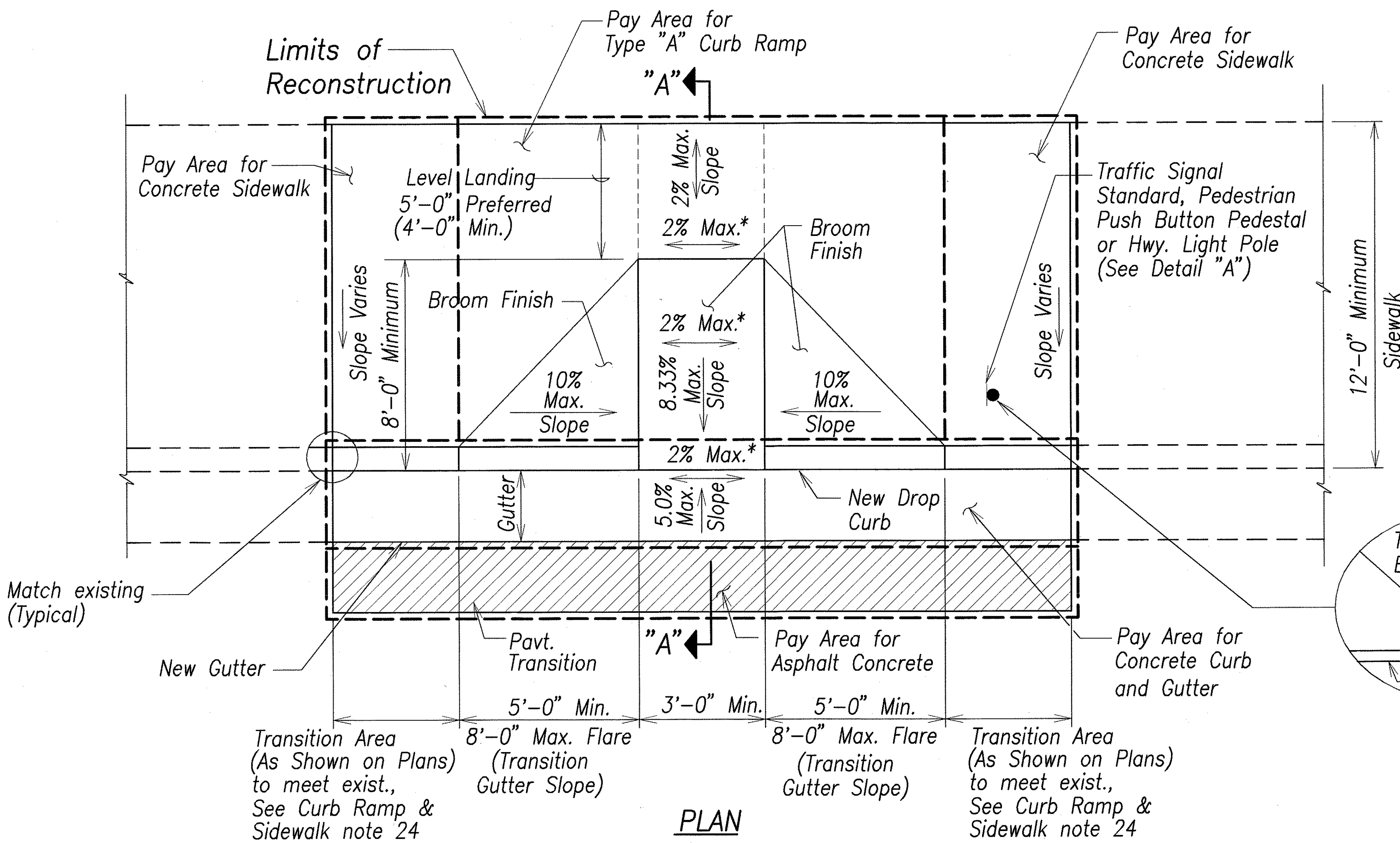
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

TYPICAL CURB RAMP LAYOUT
Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 4
 Fed. Aid Proj. No. CMAQ-0300(95)

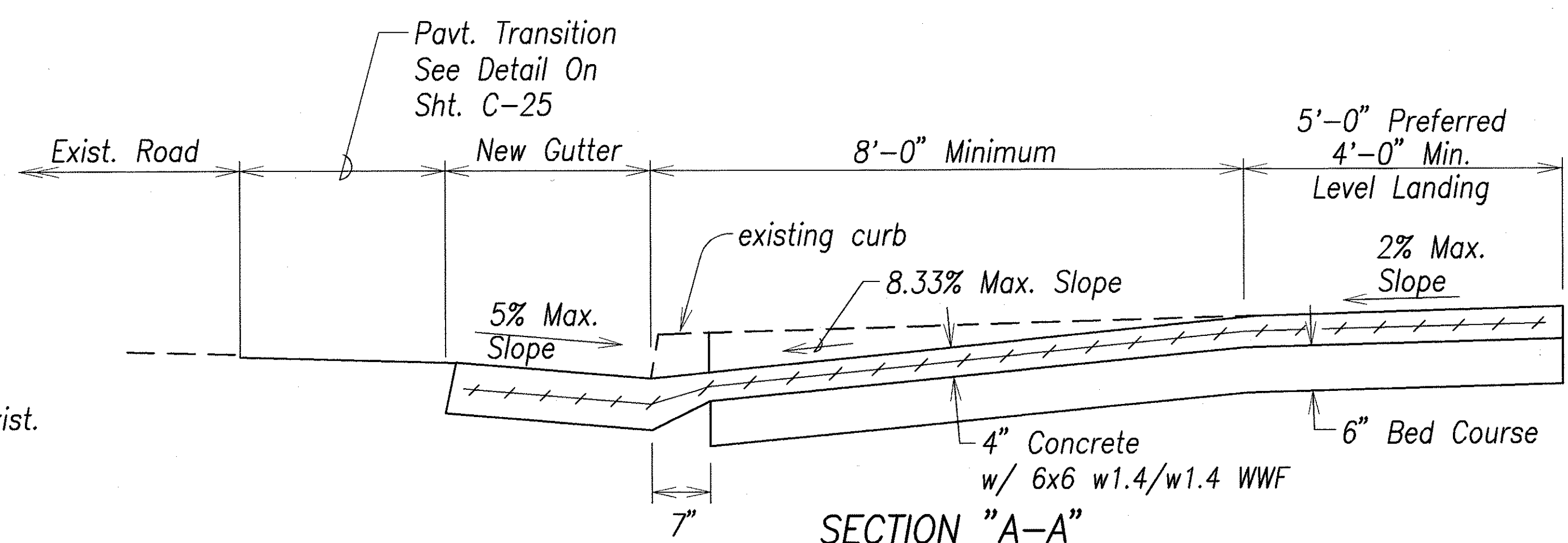
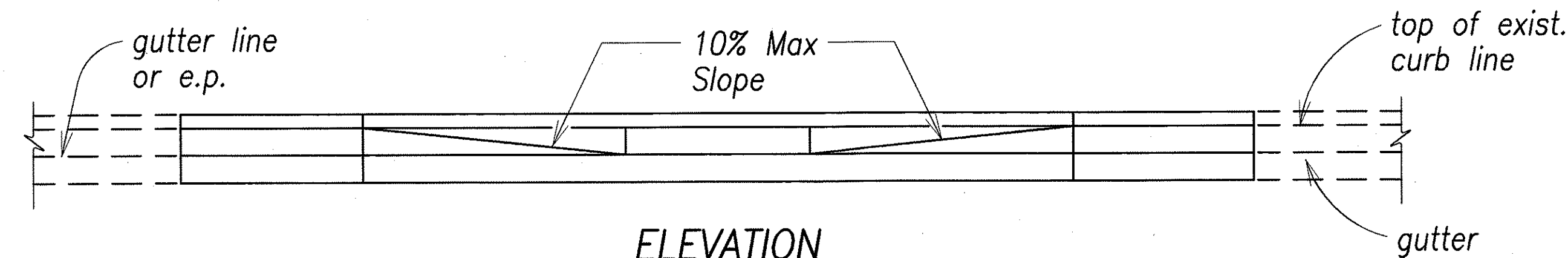
Scale: None Date: AUGUST 2004

SHEET No. C-16 OF 93 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(95)	2004	18	128

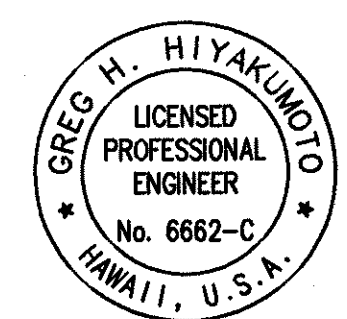


* If roadway slope >2% conform to roadway slope and file a Technical Infeasibility (TI) Statement



SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

CURB RAMP - TYPE "A"
SIDEWALK WIDTH 12'-0" OR GREATER



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April 30, 2006

SIGNATURE DATE

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS - 1

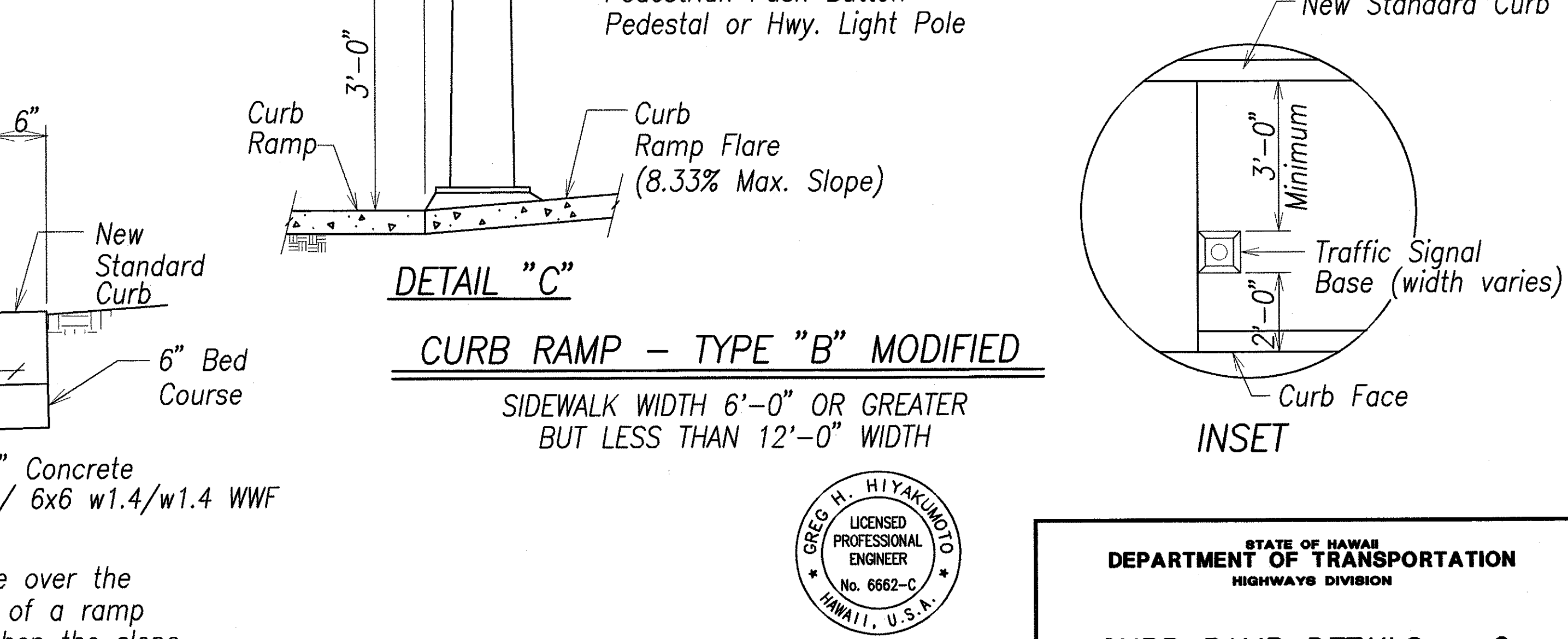
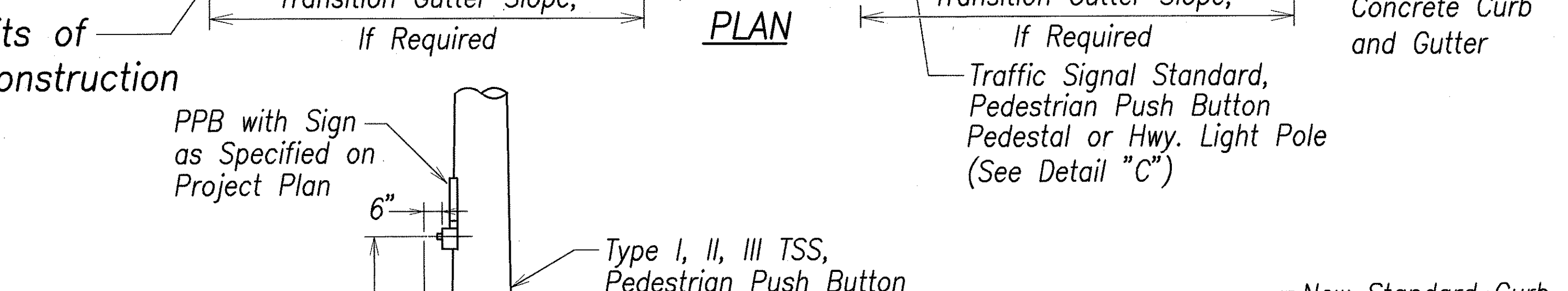
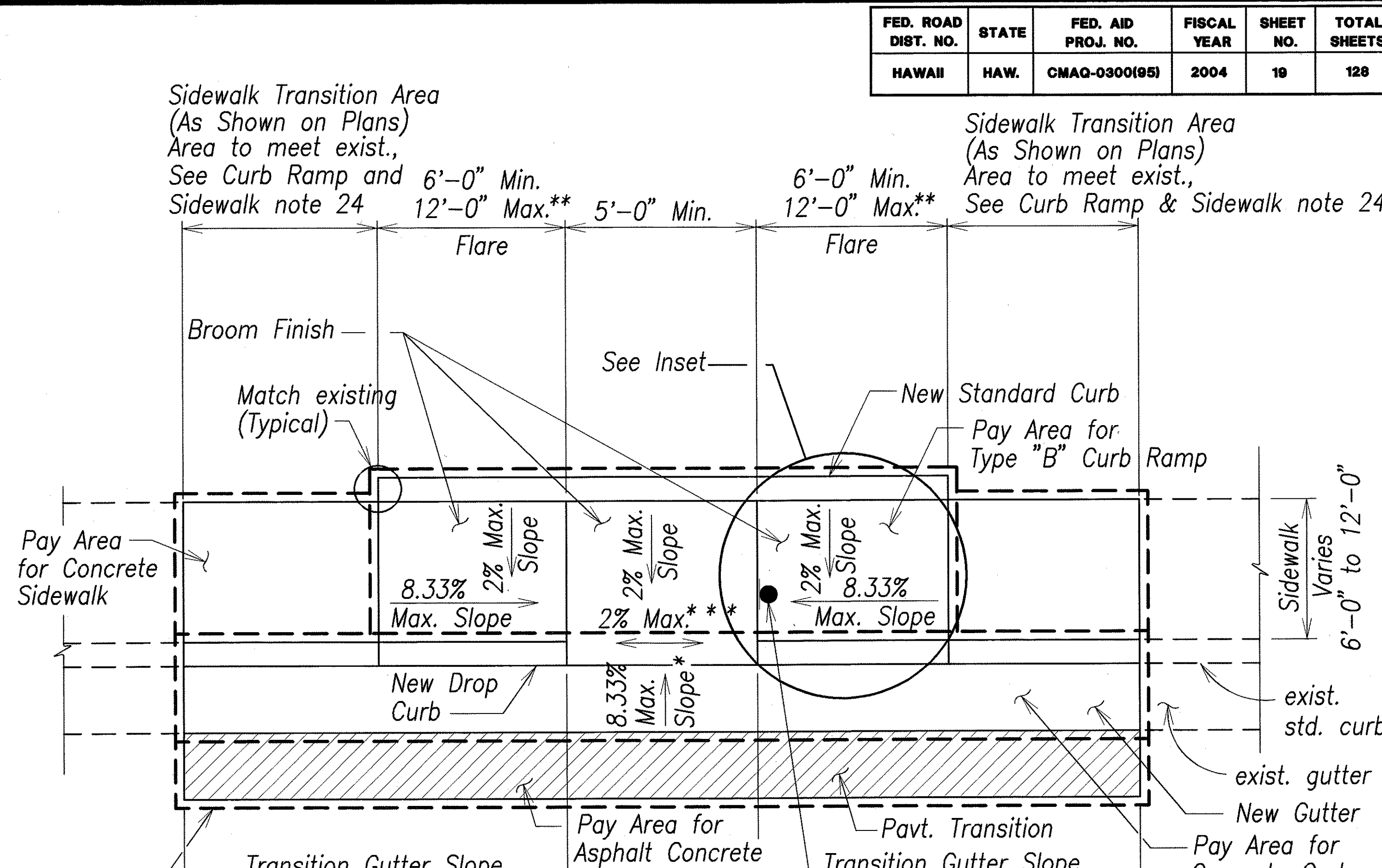
Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 4

Fed. Aid Proj. No. CMAQ-0300(95)

Scale: None Date: AUGUST 2004

SHEET No. C-17 OF 93 SHEETS

Sidewalk Transition Area
(As Shown on Plans)
Area to meet exist.



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G. H. Hiyakimoto April 30, 2006
SIGNATURE *G. H. H.* EXP. DATE

"OBSERVATION OF CONSTRUCTION" IS DEFINED
IN CHAPTER 16-115, HAWAII ADMINISTRATIVE
RULES ENTITLED "PROFESSIONAL ENGINEERS,
ARCHITECTS, SURVEYORS AND LANDSCAPE
ARCHITECTS."

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

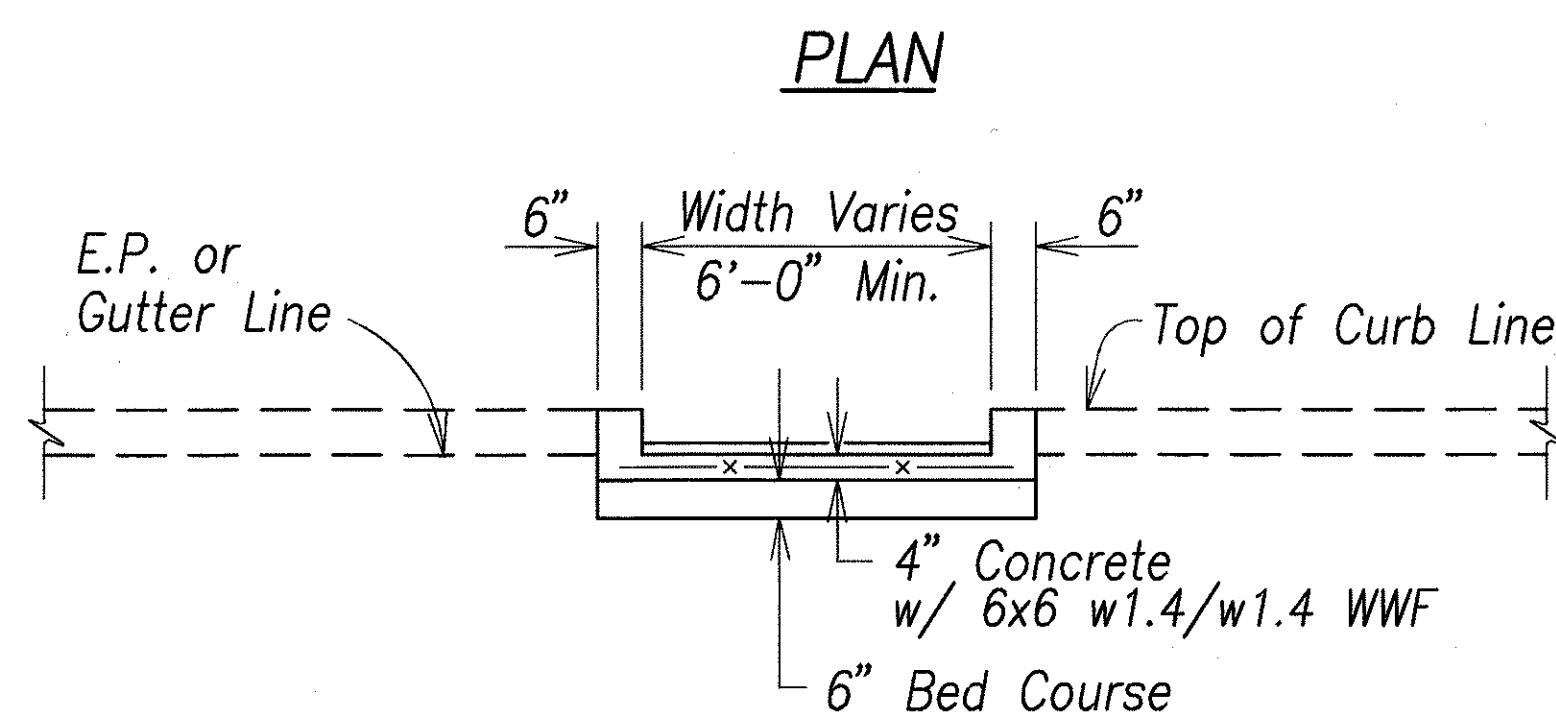
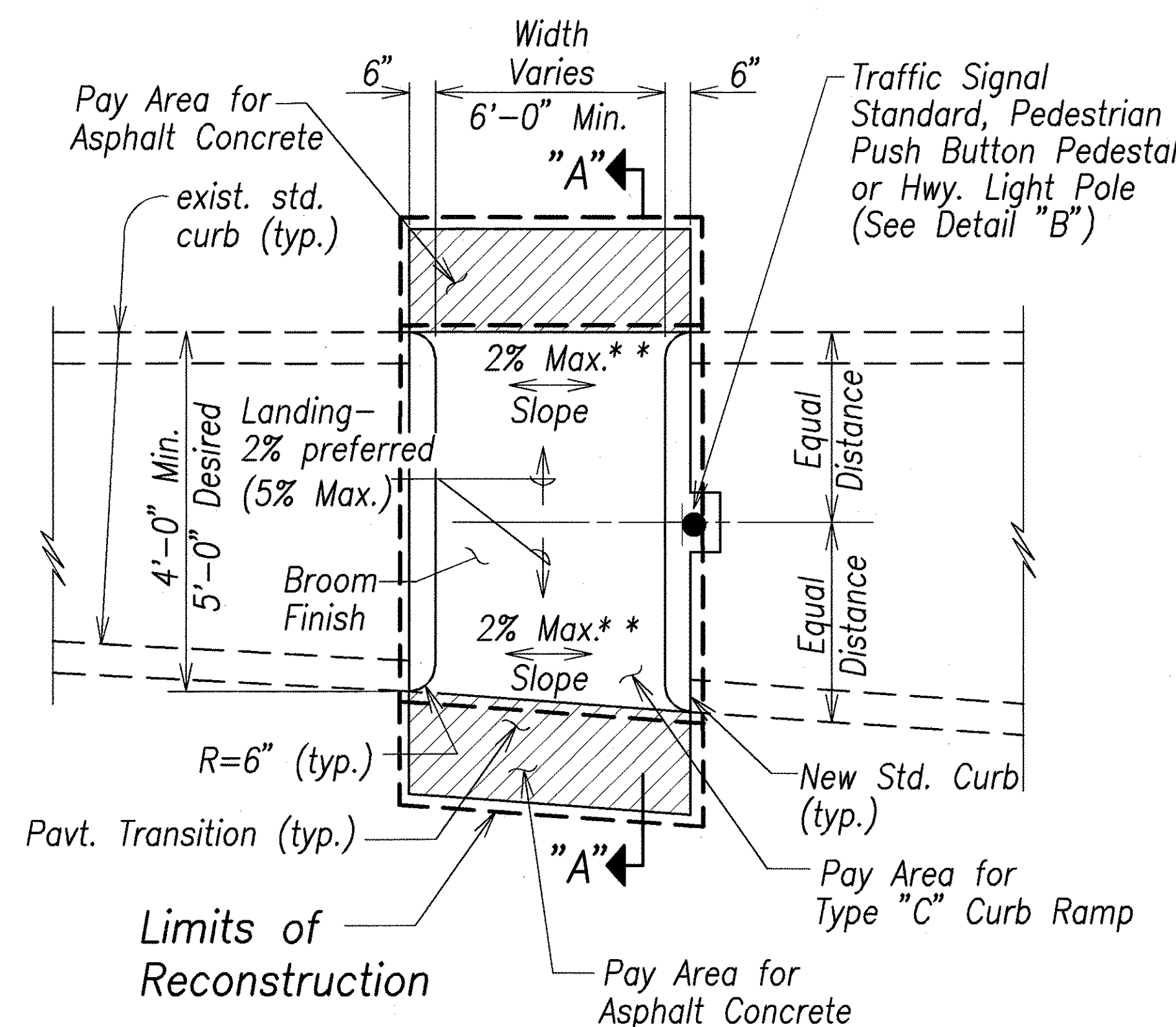
CURB RAMP DETAILS – 2

Pedestrian Facilities & ADA Compliance
at Various Locations on Oahu, Unit 4
Fed. Aid Proj. No. CMAQ-0300(95)

Scale: None Date: AUGUST 2004

SHEET No. C-18 OF 93 SHEETS

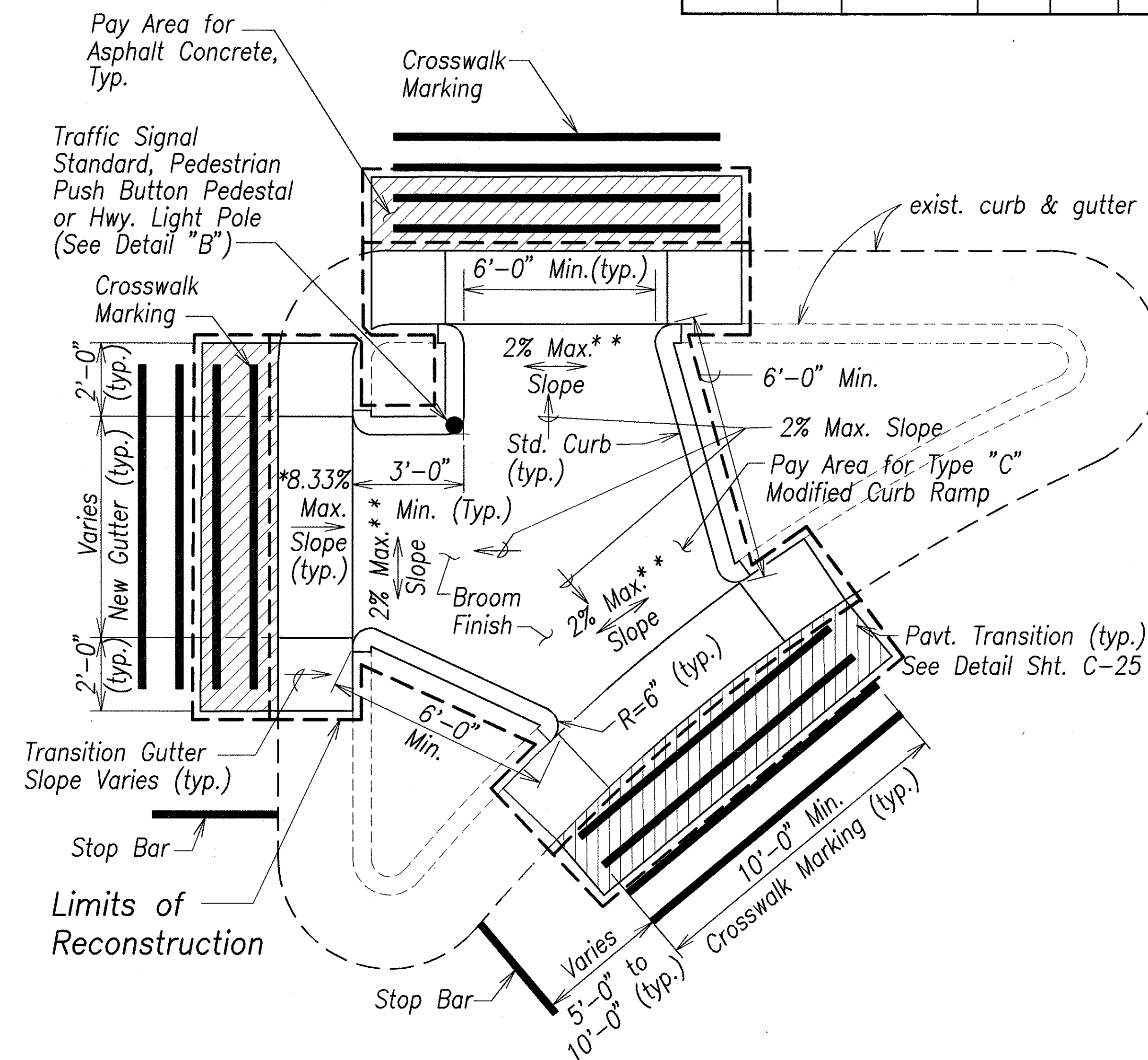
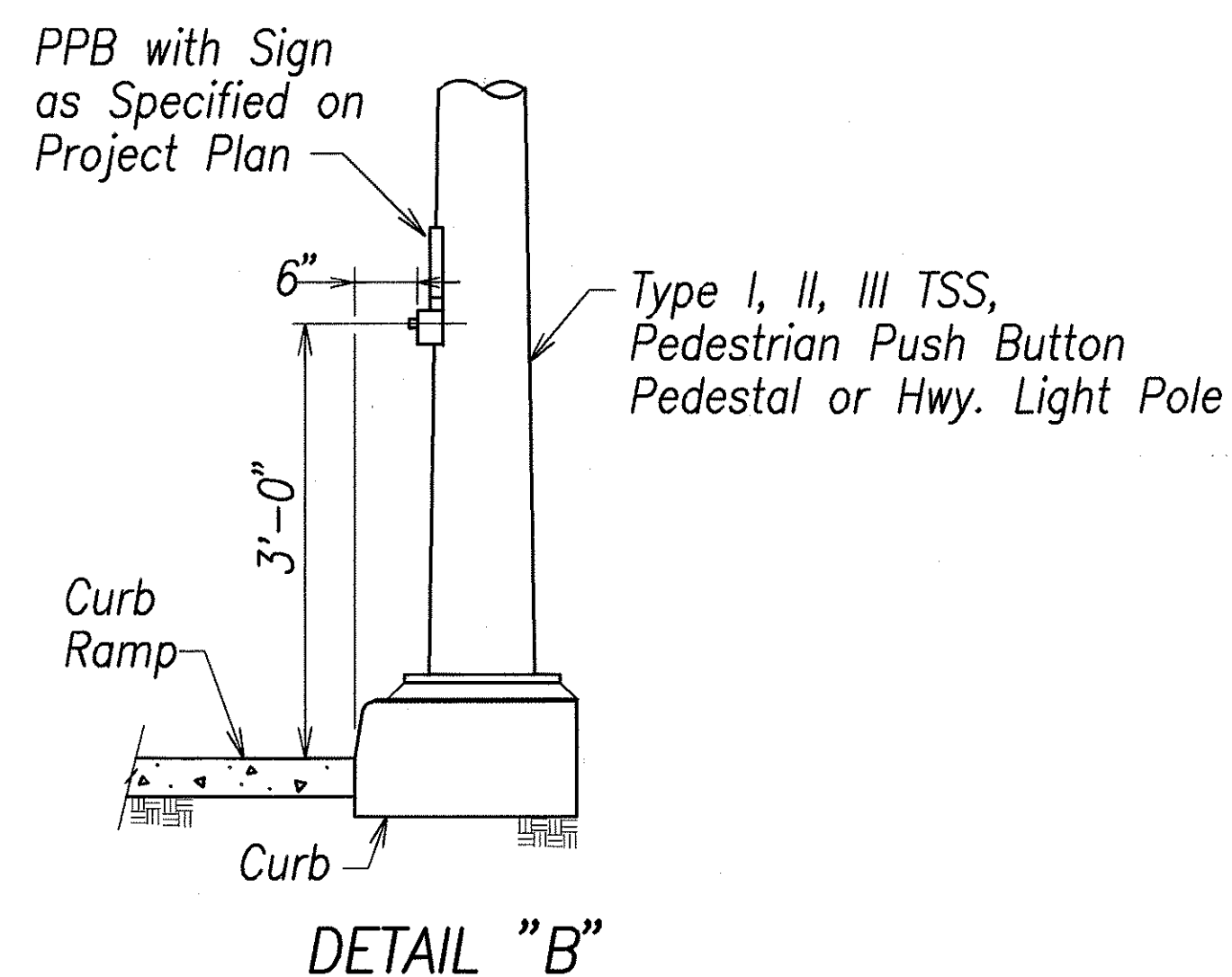
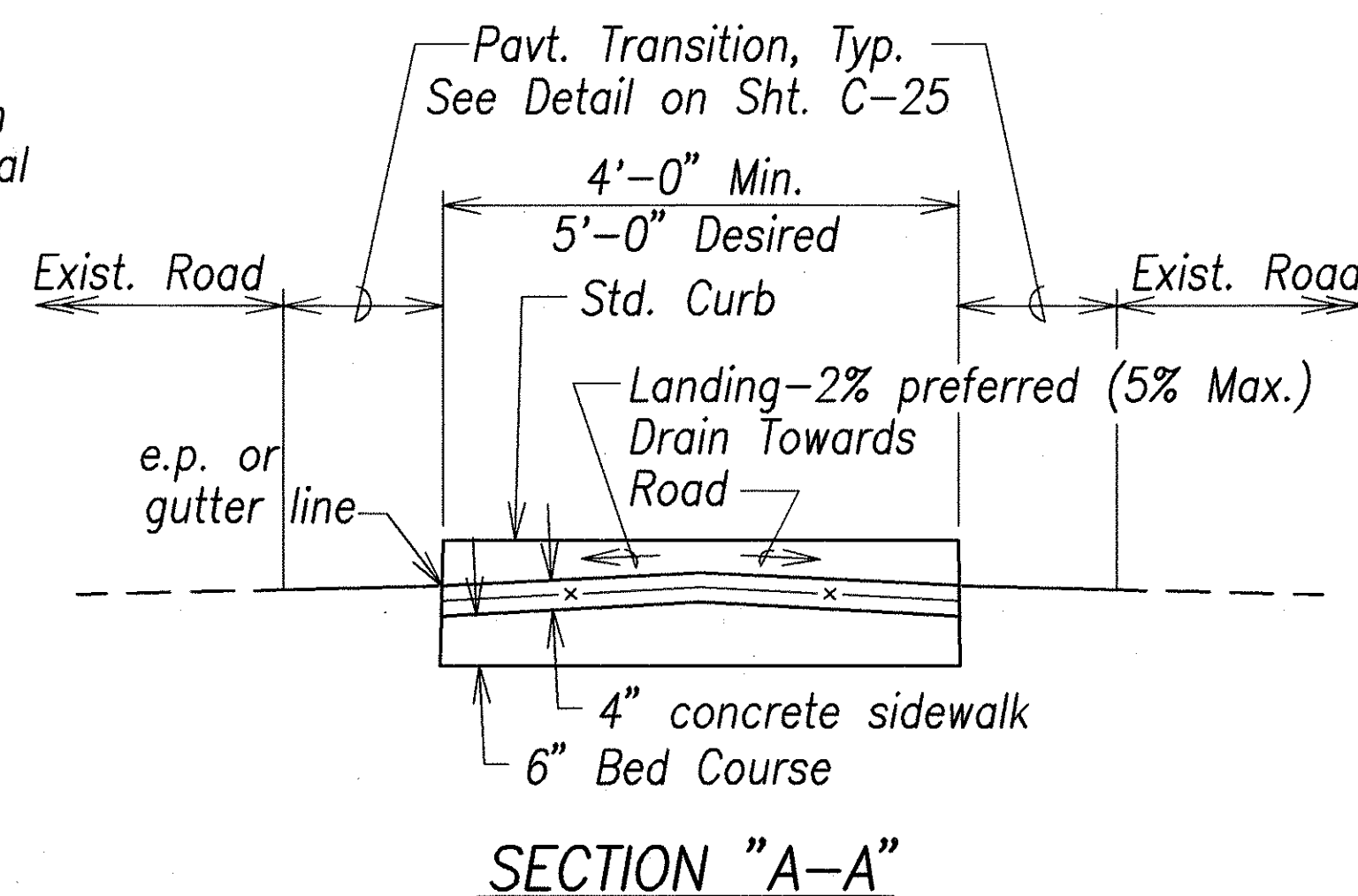
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(95)	2004	20	128



CURB RAMP - TYPE "C"

Not to scale
USE AT MEDIAN CROSSINGS, ISLANDS

- * See Curb Ramp and Sidewalk Note No. 9
- ** If roadway slope >2% conform to roadway slope and file a Technical Infeasibility (TI) Statement



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SIGNATURE: *Greg H. Hiyakimoto* DATE: April 30, 2006

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

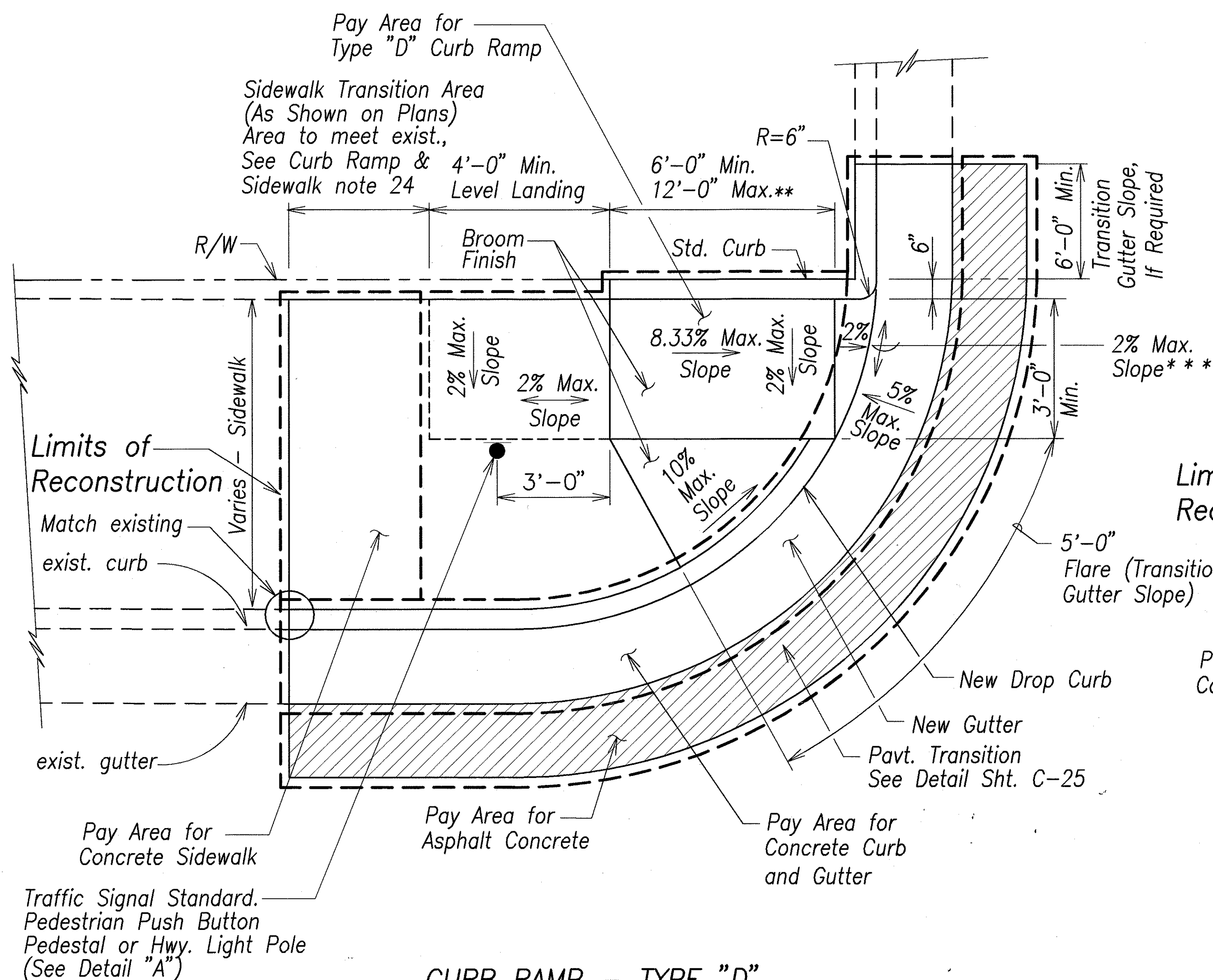
CURB RAMP DETAILS - 3

Pedestrian Facilities & ADA Compliance
at Various Locations on Oahu, Unit 4
Fed. Aid Proj. No. CMAQ-0300(95)

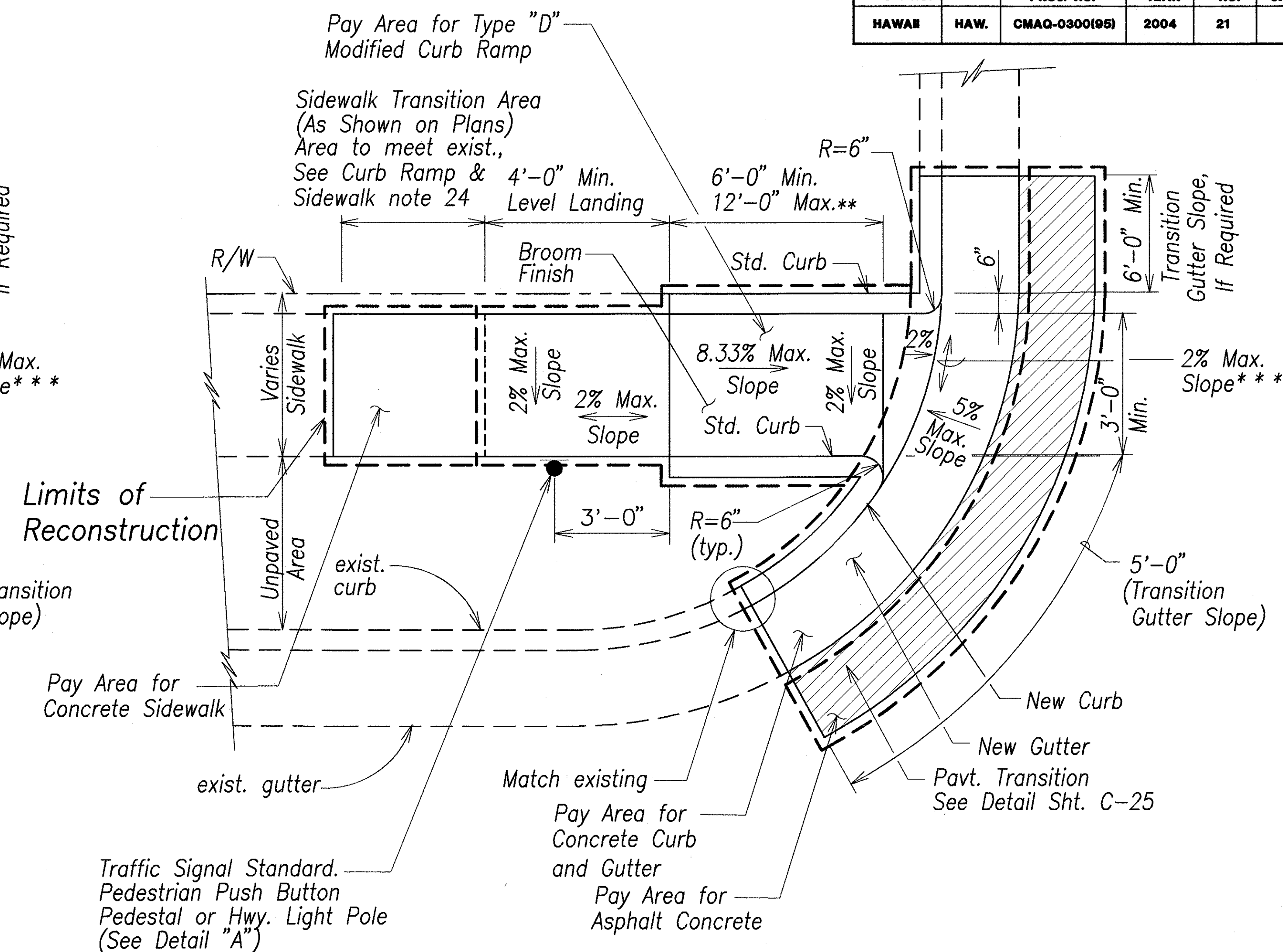
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SHEET No. C-19 OF 93 SHEETS

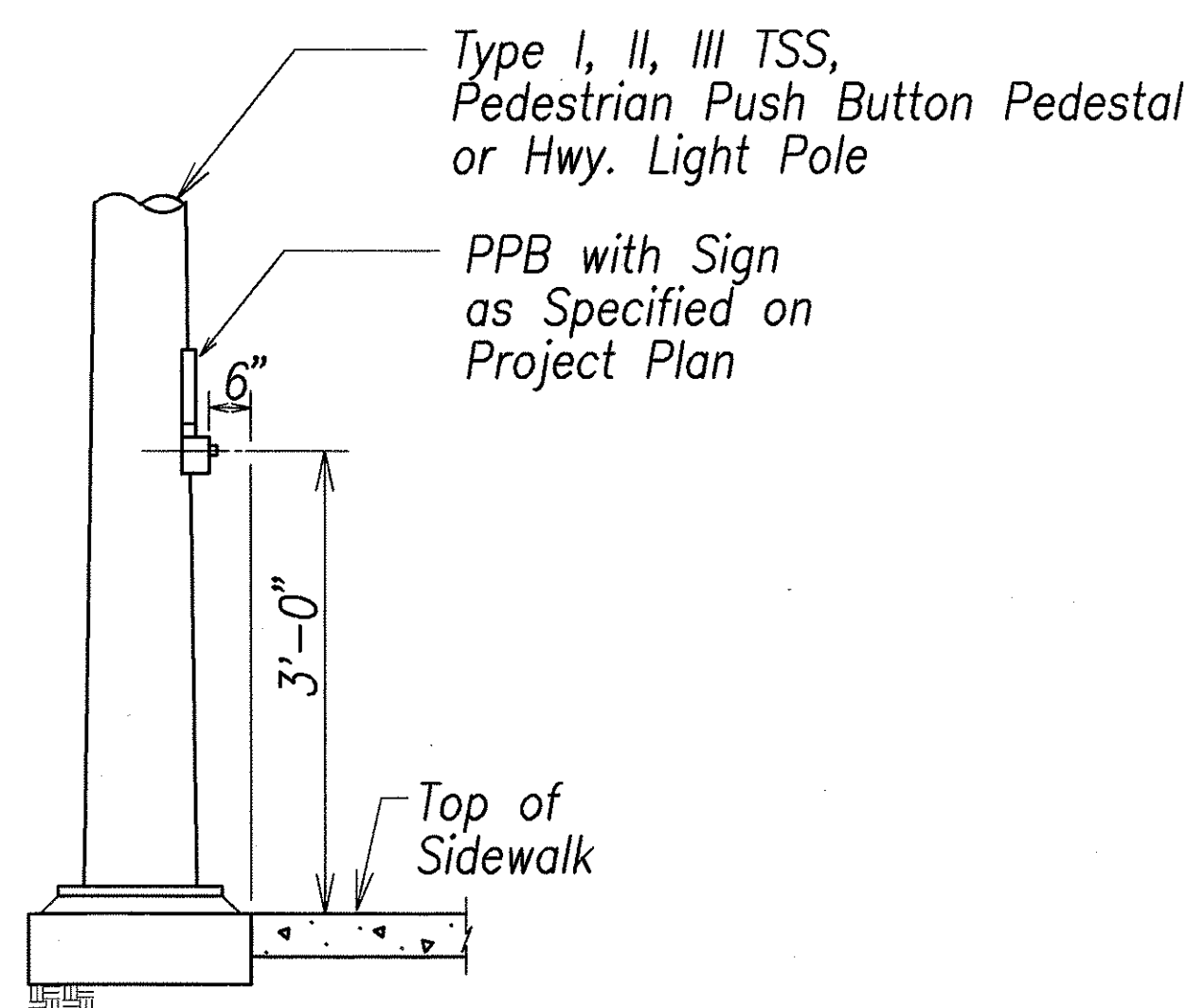
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(95)	2004	21	128



CURB RAMP - TYPE "D"



CURB RAMP - TYPE "D" MODIFIED



DETAIL "A"

- * See Curb Ramp and Sidewalk Note No. 9
- ** The slope of the ramp shall take precedence over the length of the ramp. If the maximum slope of a ramp cannot be met within a length of 12 feet, then the slope of the ramp shall be set when the length of the ramp is set at the maximum of 12 feet.
- *** If roadway slope >2% conform to roadway slope and file a Technical Infeasibility (TI) Statement



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DATE

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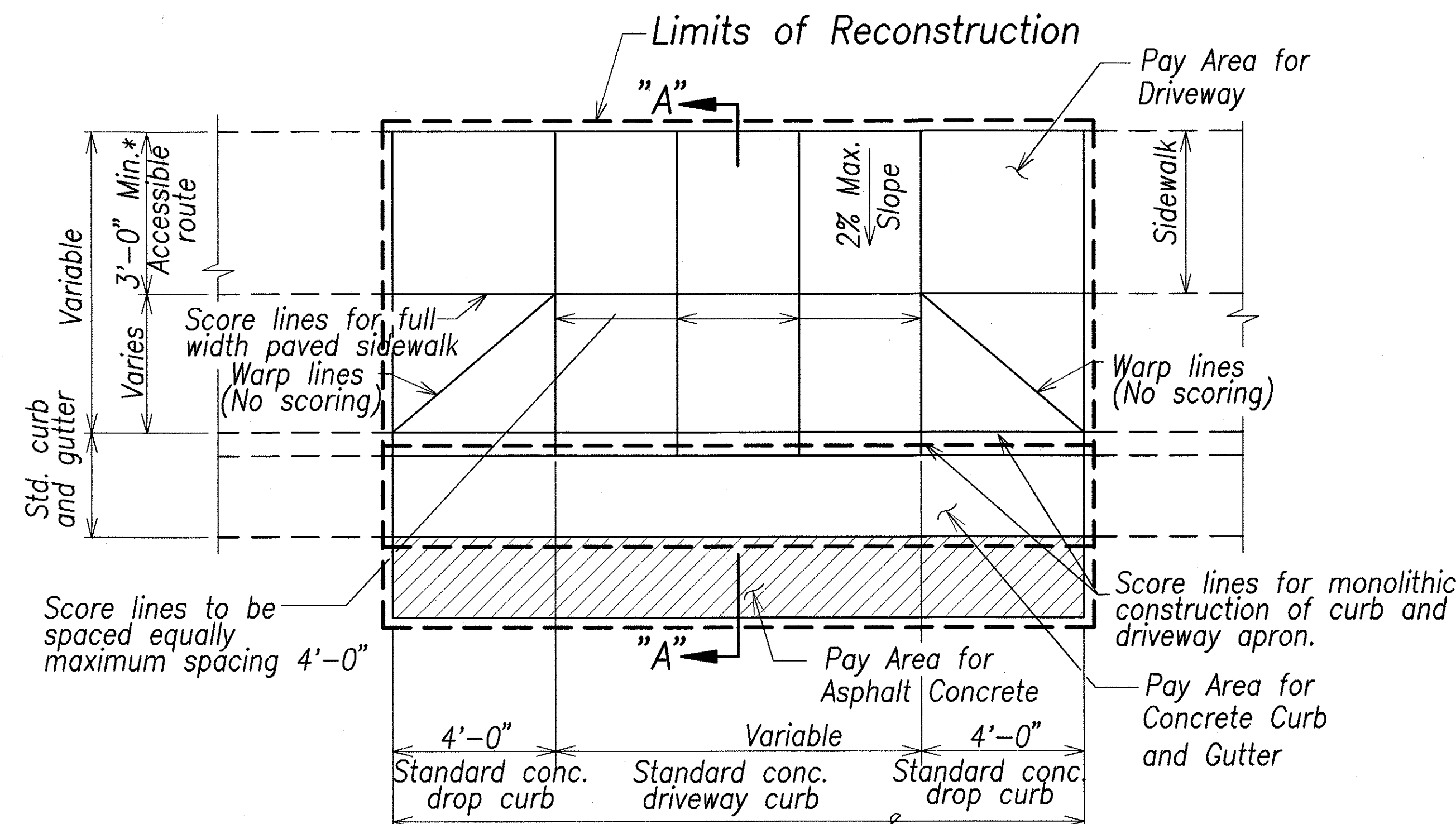
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS - 4
Pedestrian Facilities & ADA Compliance
at Various Locations on Oahu, Unit 4
Fed. Aid Proj. No. CMAQ-0300(95)

Scale: None Date: AUGUST 2004

SHEET No. C-20 OF 93 SHEETS

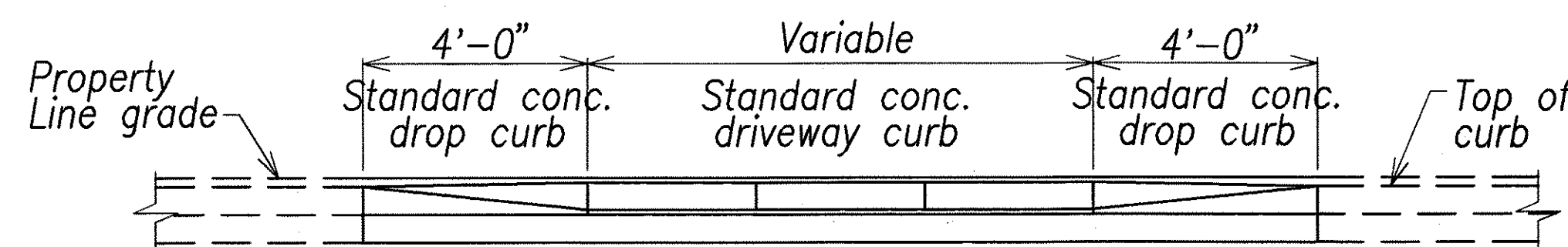
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(95)	2004	24	128



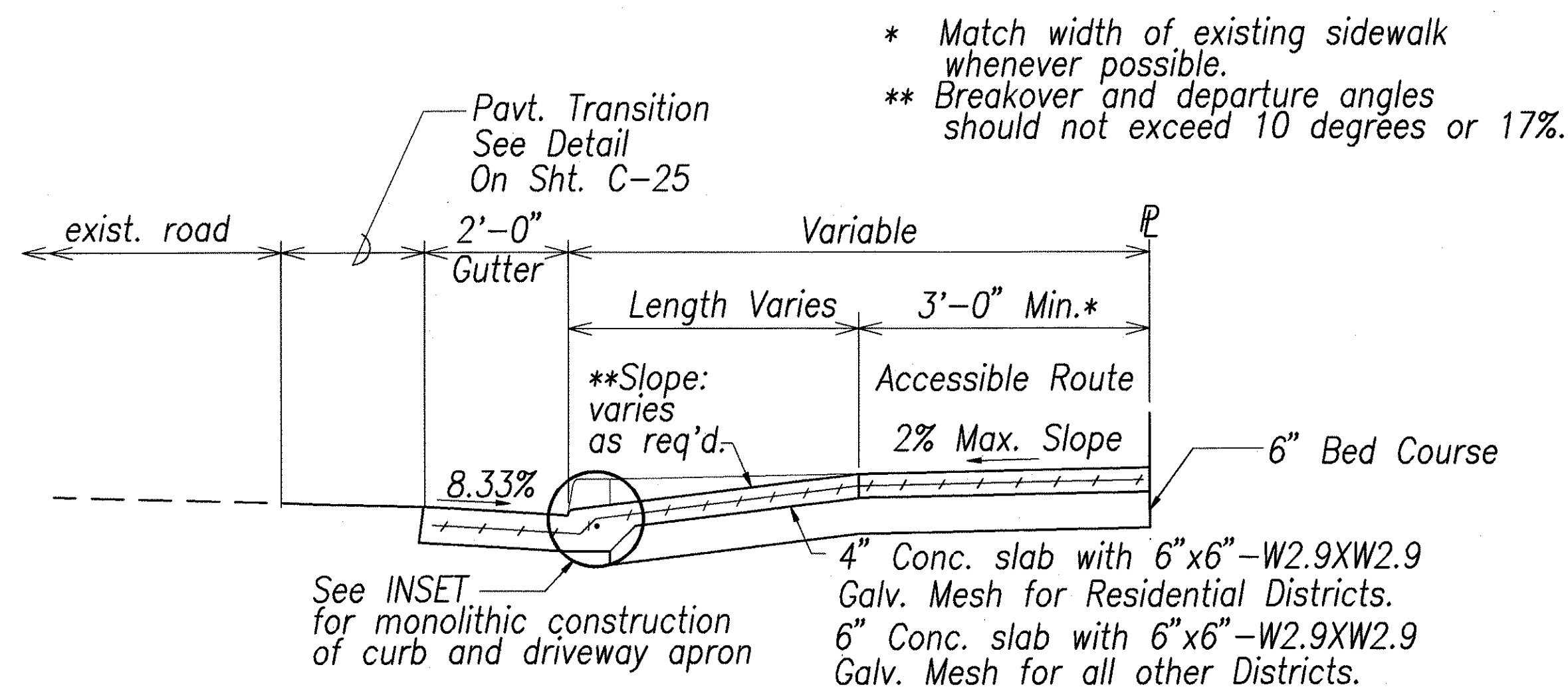
Limits of reinforcement. 4" thick concrete reinforced with 6"x6"-W2.9XW2.9 galv. welded wire fabric for residential districts. 6" thick for all other districts. Surface shall be broom finished.

Curb return type driveway may be permitted for parking areas exceeding 100 spaces, fire stations and hospitals.

PLAN
NOT TO SCALE

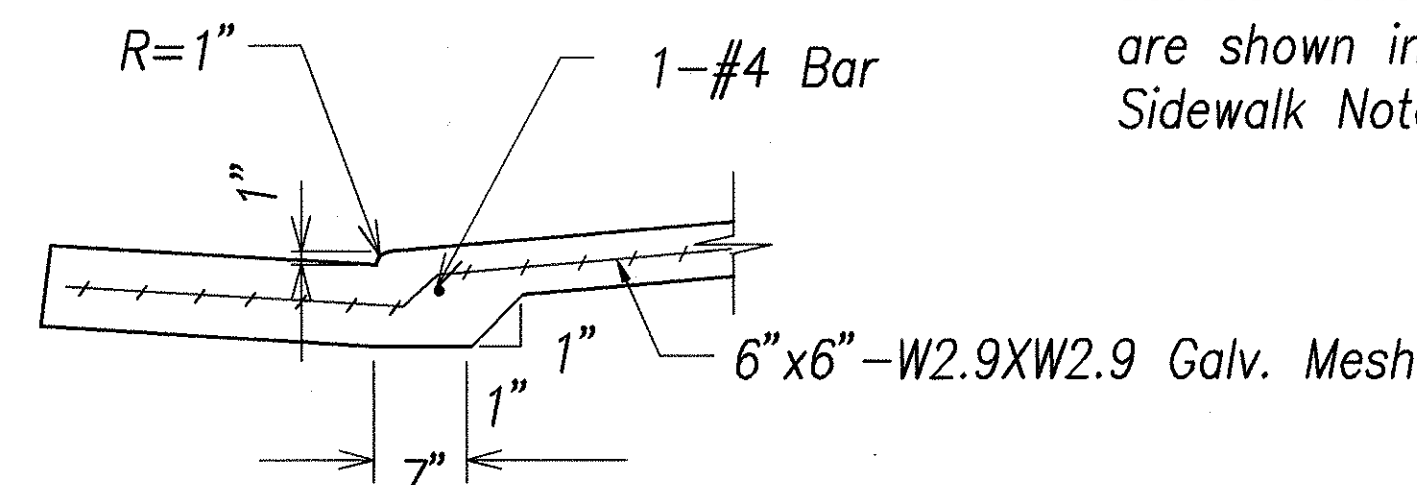


ELEVATION
NOT TO SCALE

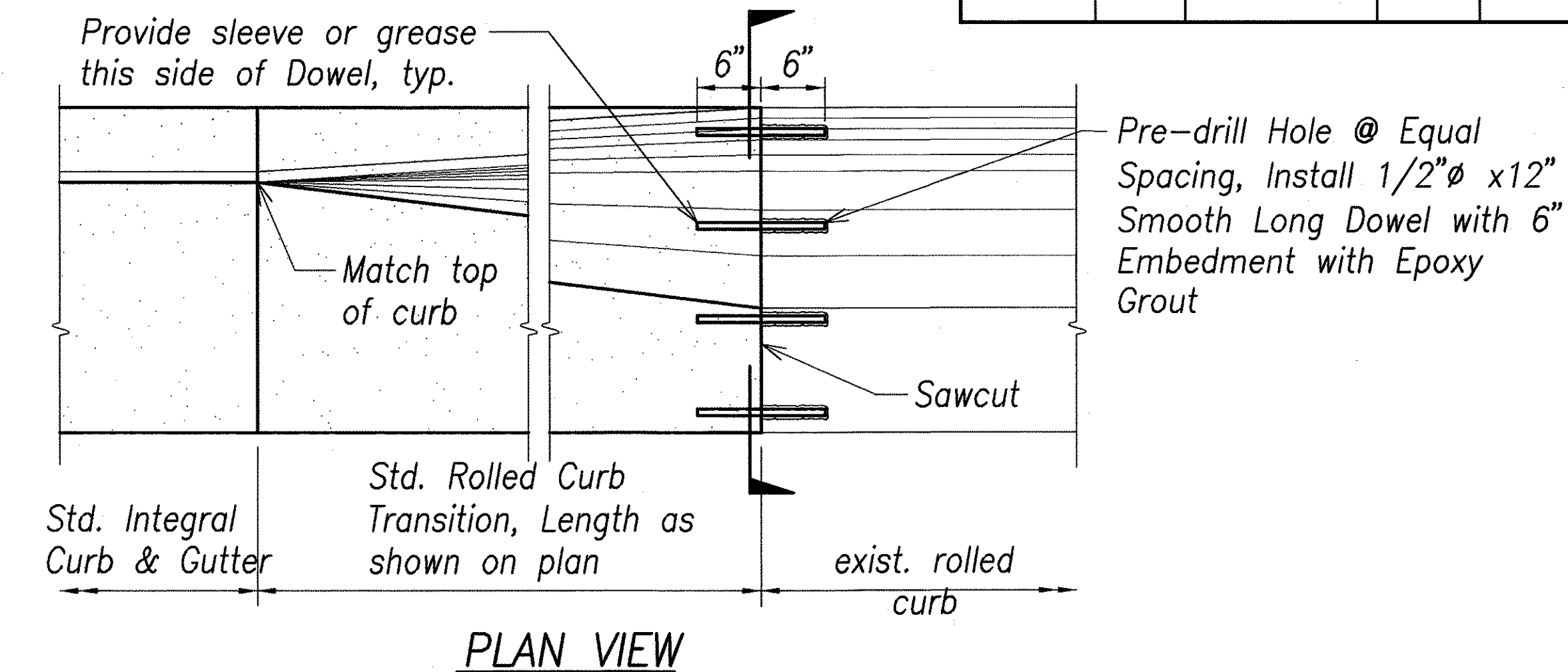


SECTION A-A
NOT TO SCALE

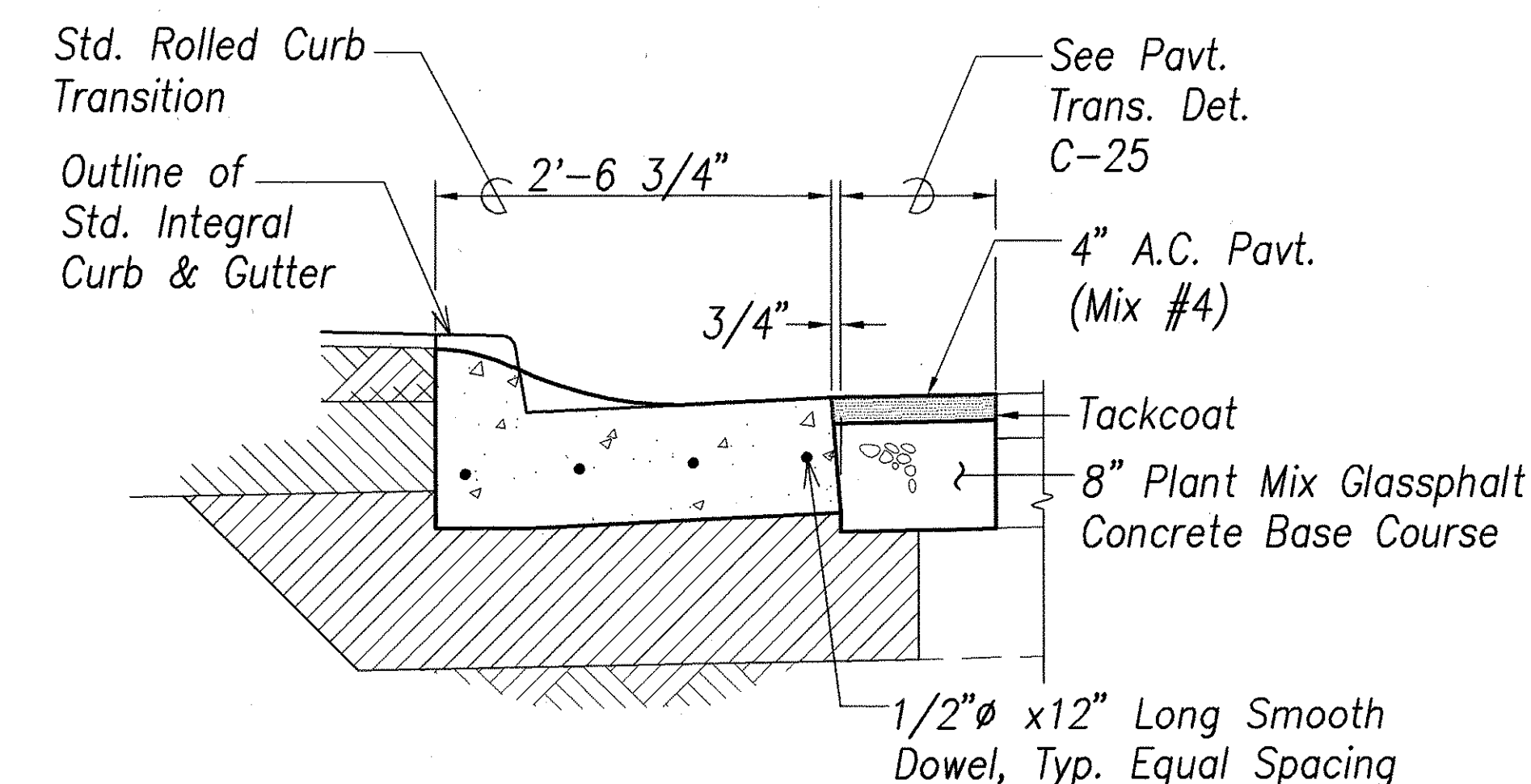
DRIVEWAY APRON



INSET
NOT TO SCALE



PLAN VIEW

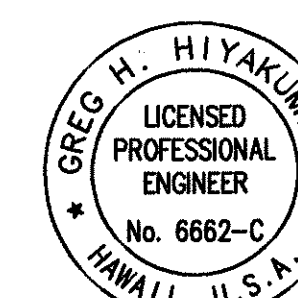


SECTION

ROLLED CURB TRANSITION CONNECTION DETAIL
NOT TO SCALE

NOTES:

- For extension to existing driveway, scoring and finish shall match existing scoring and finish. For driveway constructed in built up areas, scoring conforming to scoring at adjacent driveways may be authorized.
- This detail is only one method for providing ADA access. Other methods can be used. These methods are shown in references listed in Curb Ramp and Sidewalk Note No. 21.



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April 30, 2006
SIGNATURE: [Signature] DATE

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRIVEWAY APRON

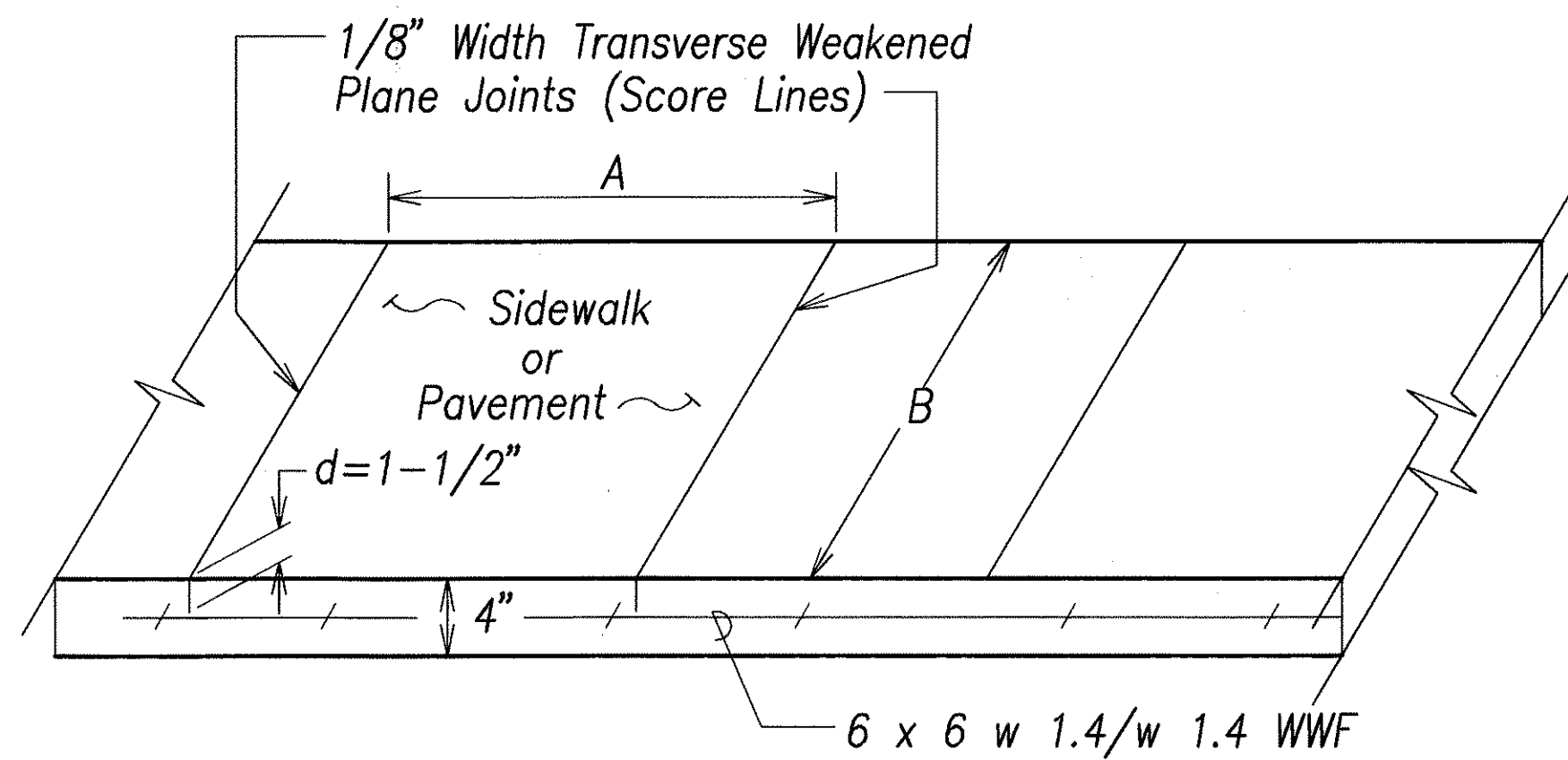
Pedestrian Facilities & ADA Compliance
at Various Locations on Oahu, Unit 4
Fed. Aid Proj. No. CMAQ-0300(95)

Scale: None

Date: AUGUST 2004

SHEET No. C-23 OF 93 SHEETS

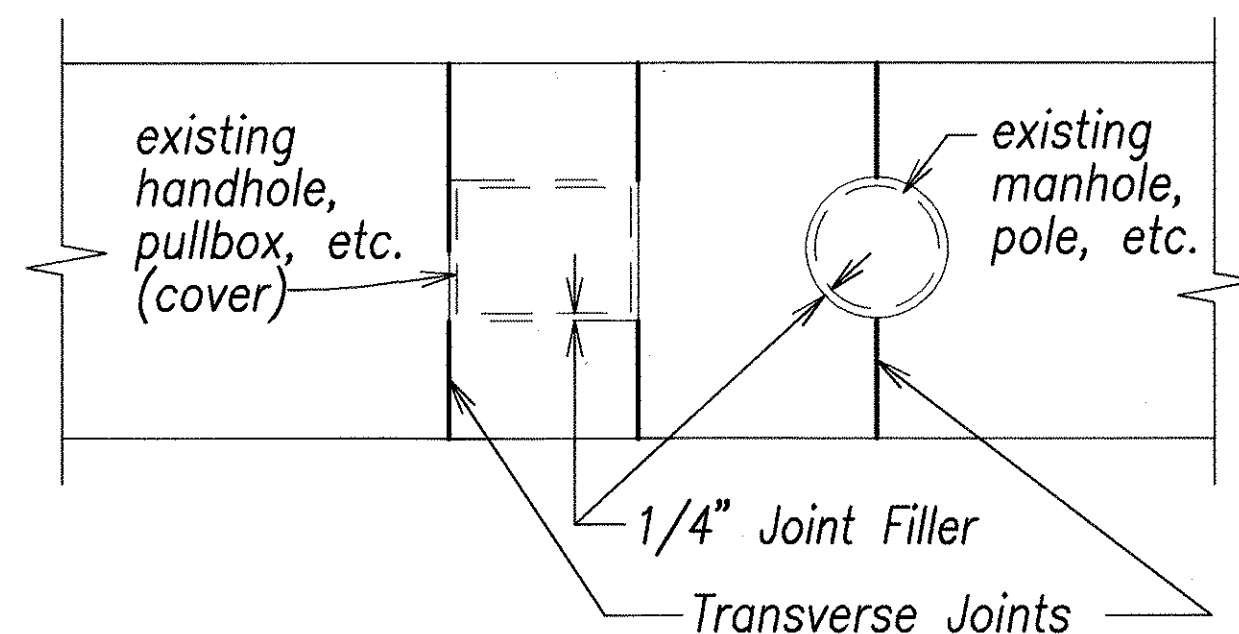
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(95)	2004	25	128



Note: A = 6' if B ≤ 8'.
If B > 8', Add Longitudinal Joint

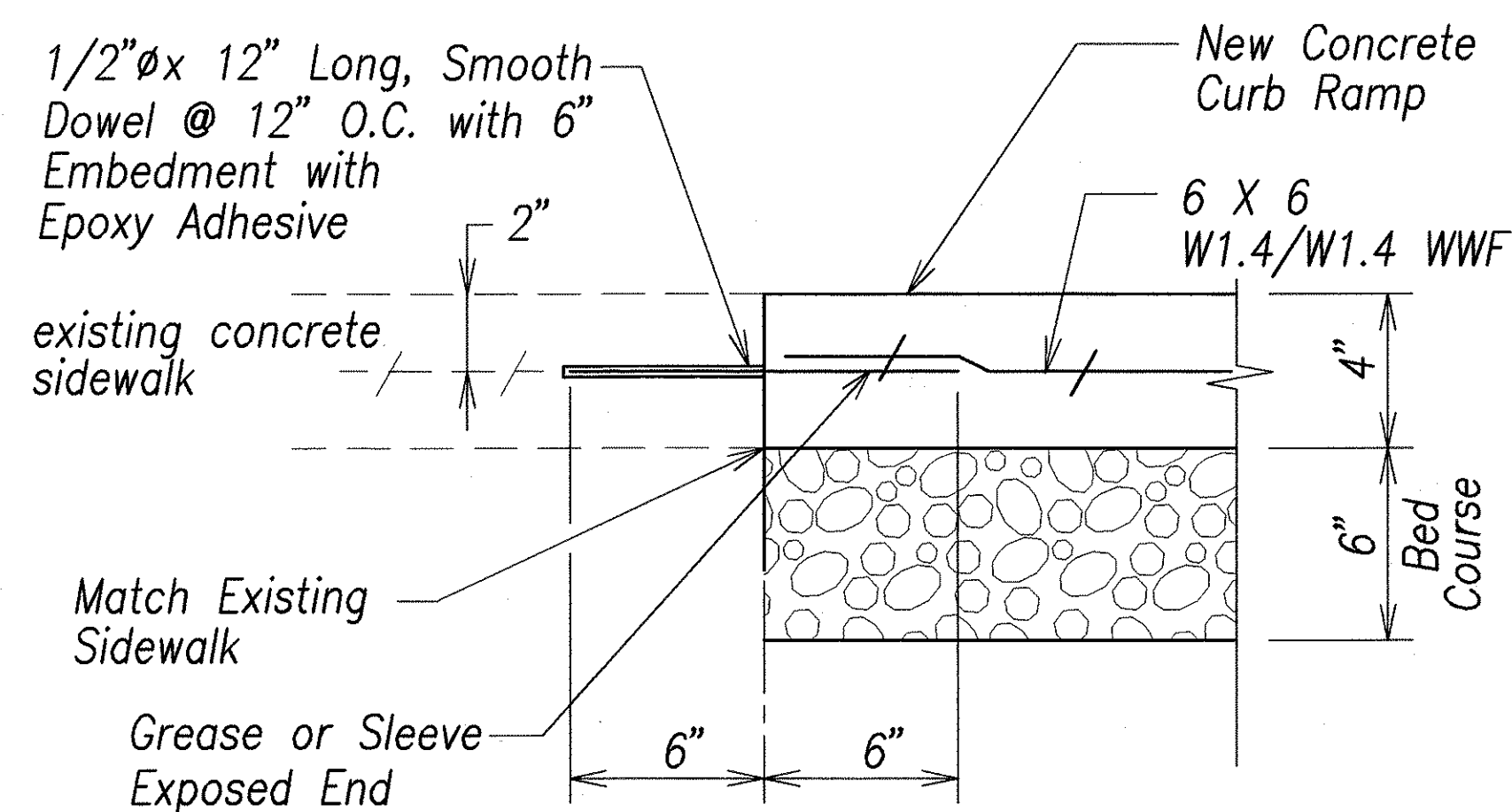
SIDEWALK SCORE LINE DETAIL

Not to scale



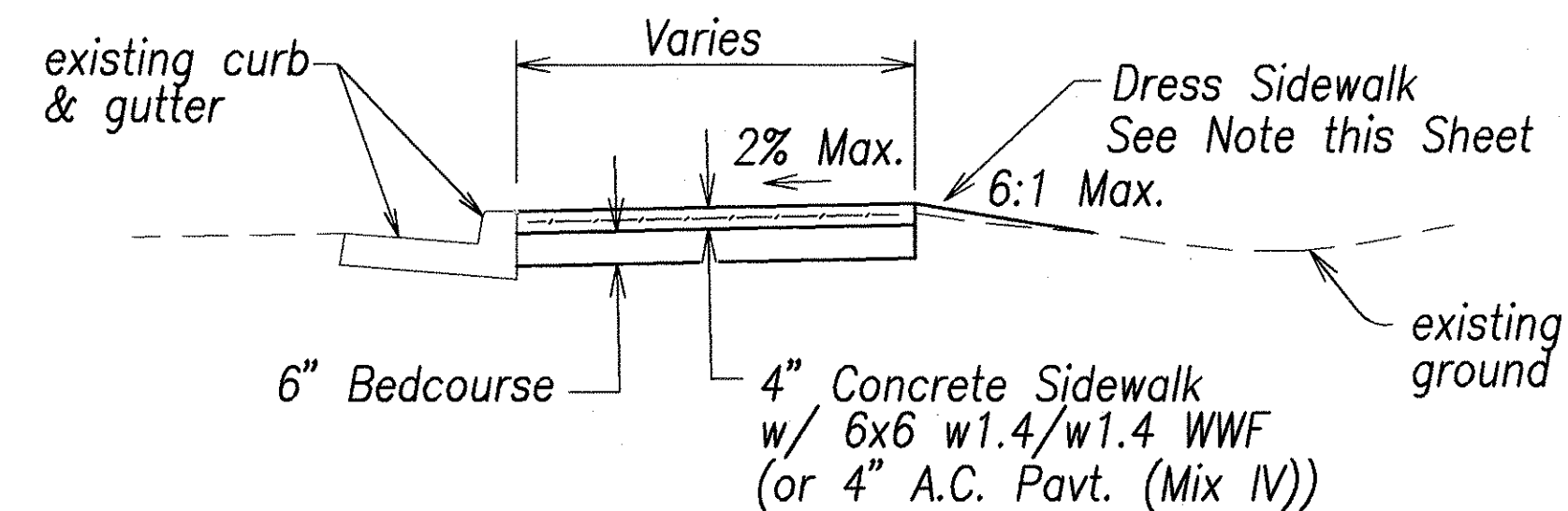
SIDEWALK ISOLATION JOINT DETAIL

Not to scale



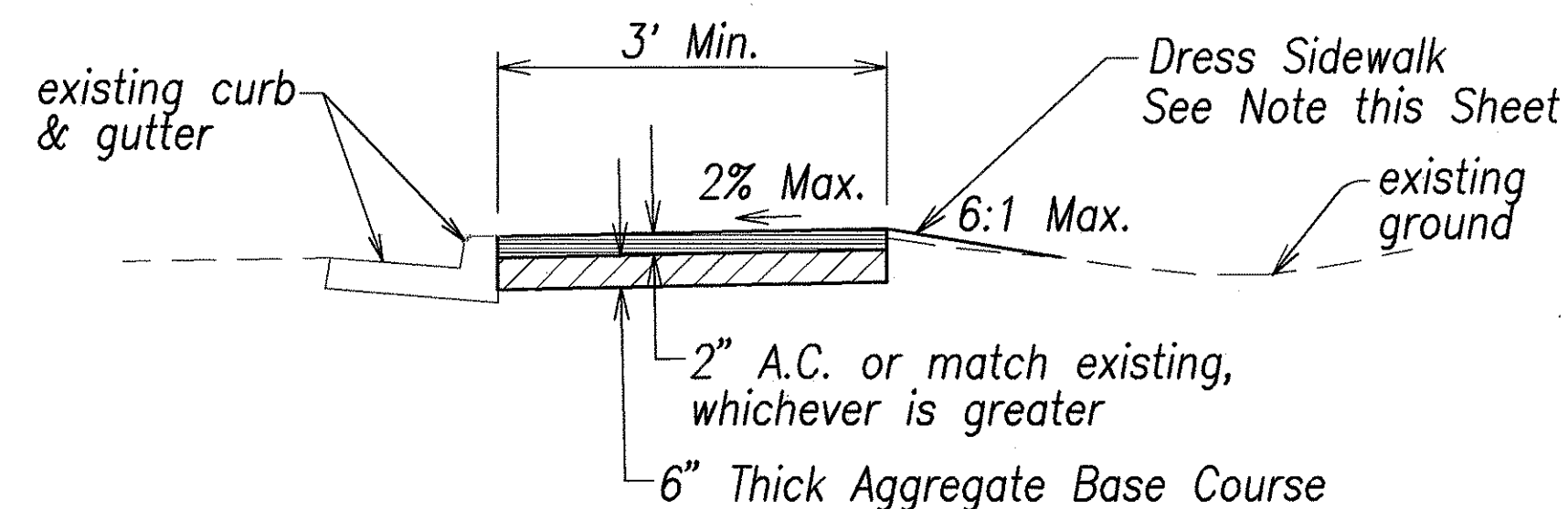
TYPICAL CONSTRUCTION JOINT AT EXISTING SIDEWALK

Not to scale



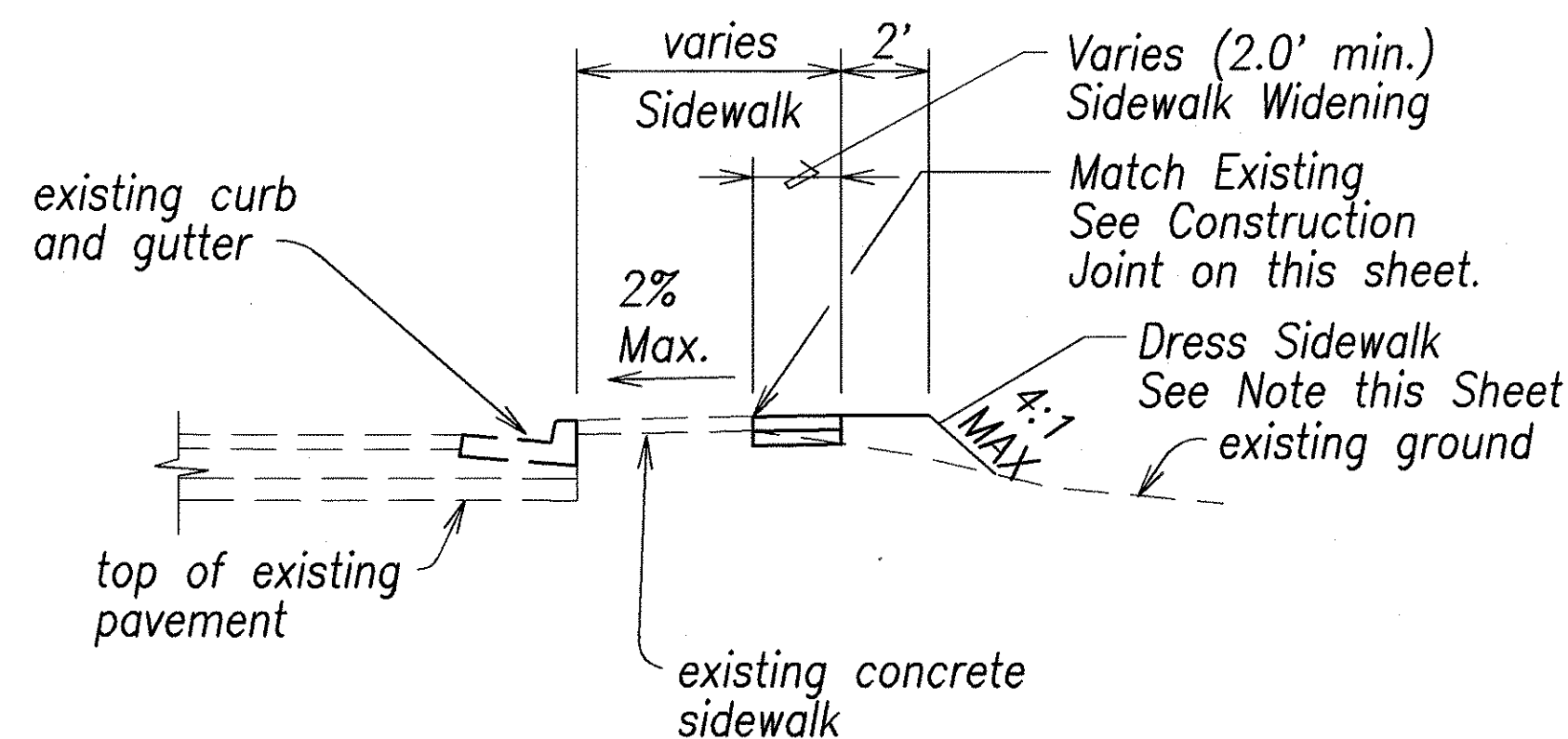
SIDEWALK DETAIL

Not to scale



A.C. SIDEWALK DETAIL

Not to scale

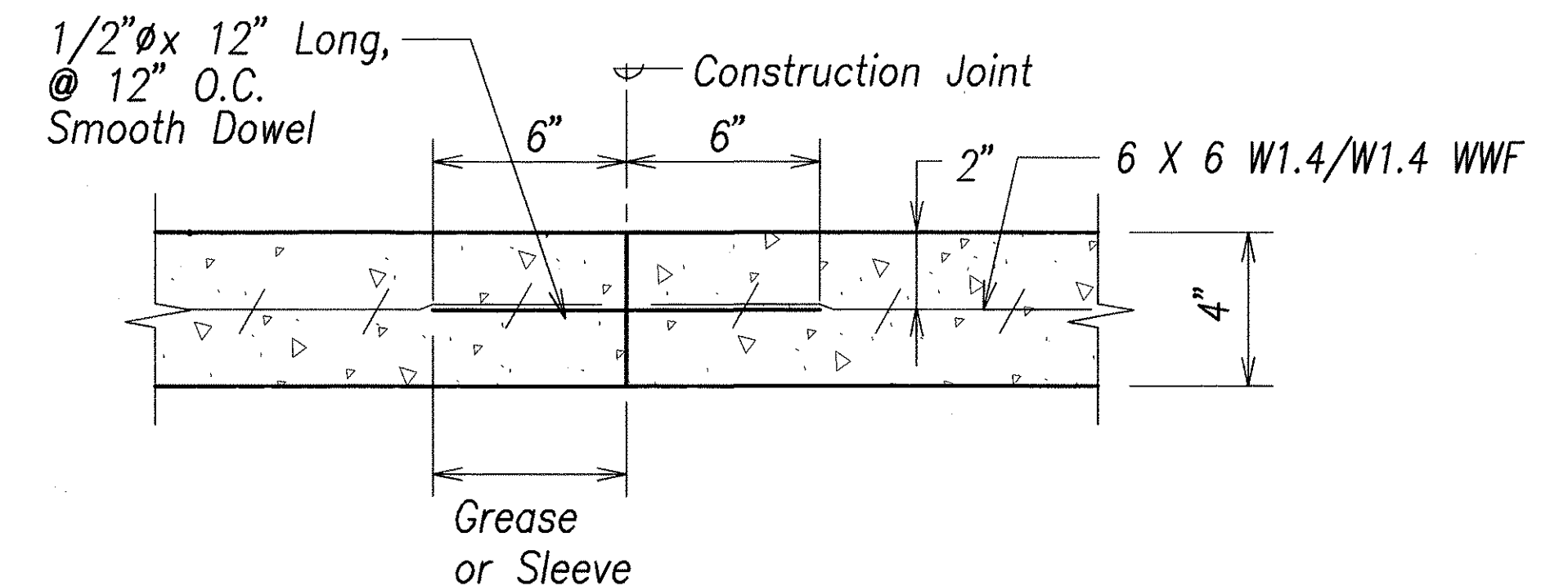


SIDEWALK WIDENING SECTION

Not to scale

NOTES:

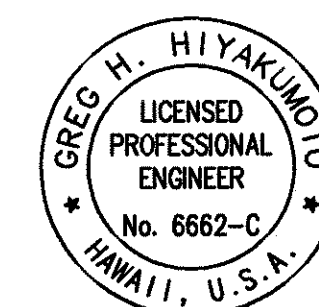
1. Dressing of sidewalk shall consist of clearing, grubbing, grading, reshaping and compacting the area adjacent to the improvement with suitable material as shown on the plans and/or as directed by the Engineer. If existing ground is asphalt or concrete surface, dress sidewalk with A.C. pavement, Mix No. IV. This work shall be considered incidental to the new sidewalk.
2. Transverse and Longitudinal Weakened Plane Joints for sidewalk shall be considered incidental to the New Sidewalk.
3. Installation of dowels and tie bars including drilling, and epoxy grout shall be incidental to Sidewalk.



TRANSVERSE CONSTRUCTION JOINT DETAIL

Not to scale

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



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Signature: [Signature] April 30, 2006
DATE

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIDEWALK DETAILS

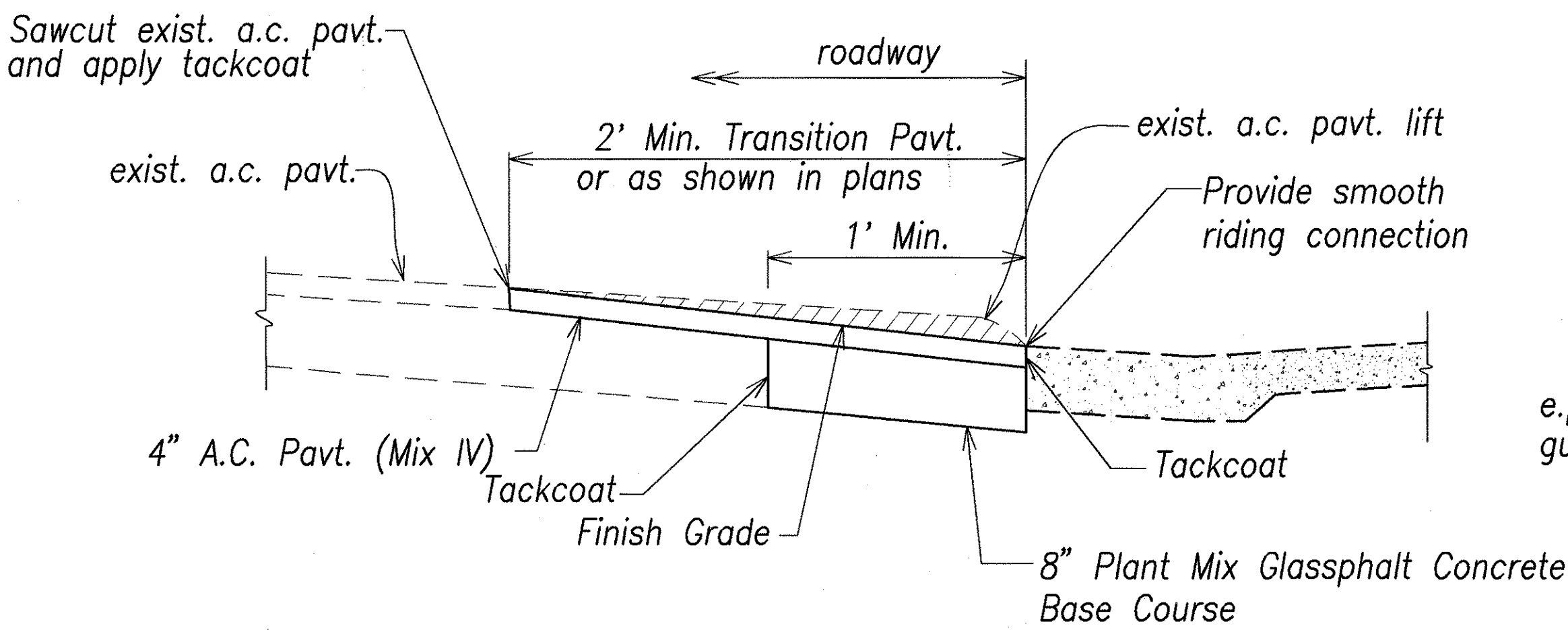
Pedestrian Facilities & ADA Compliance
at Various Locations on Oahu, Unit 4
Fed. Aid Proj. No. CMAQ-0300(95)

Scale: None

Date: AUGUST 2004

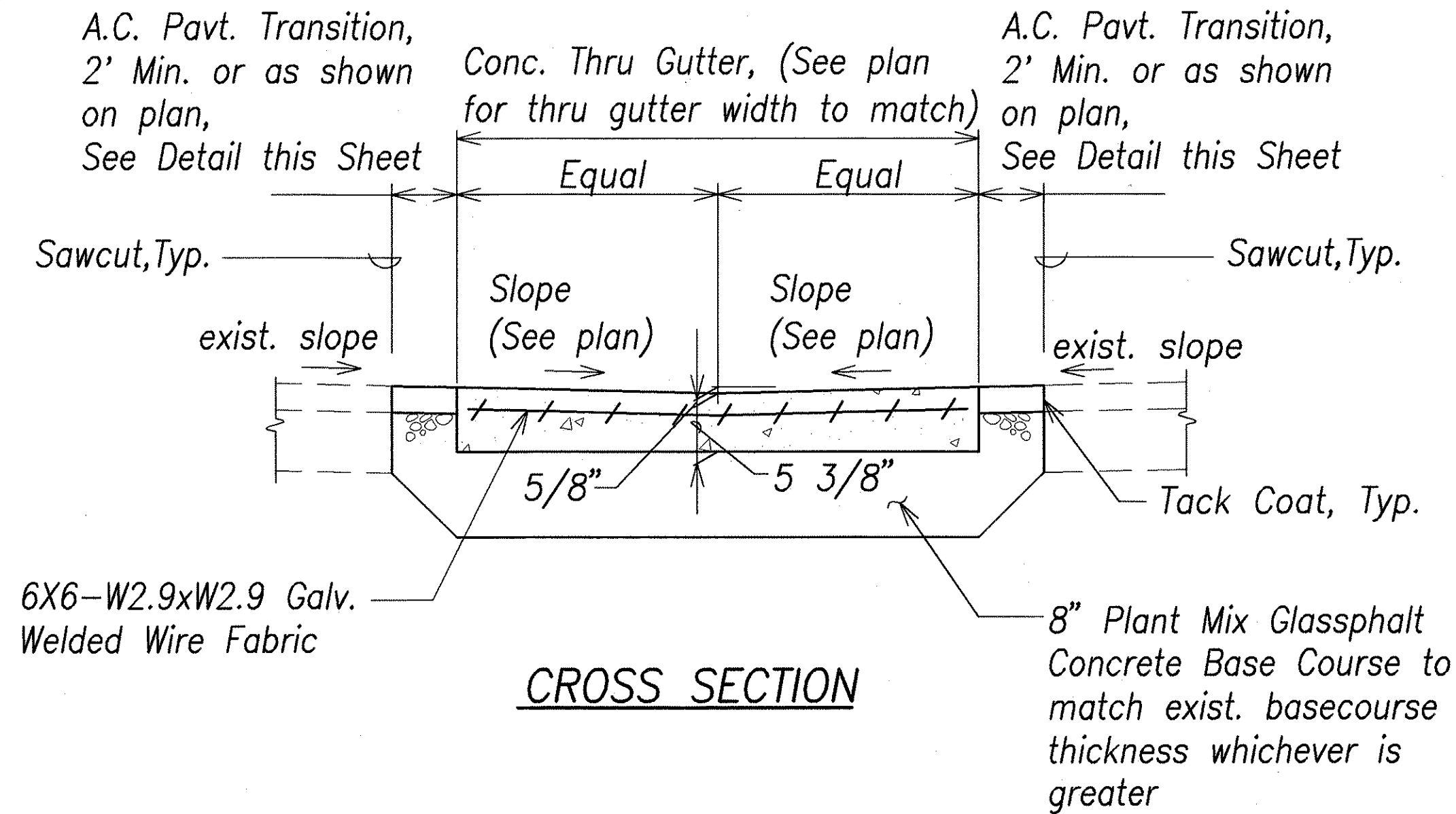
SHEET No. C-24 OF 93 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(95)	2004	25	128

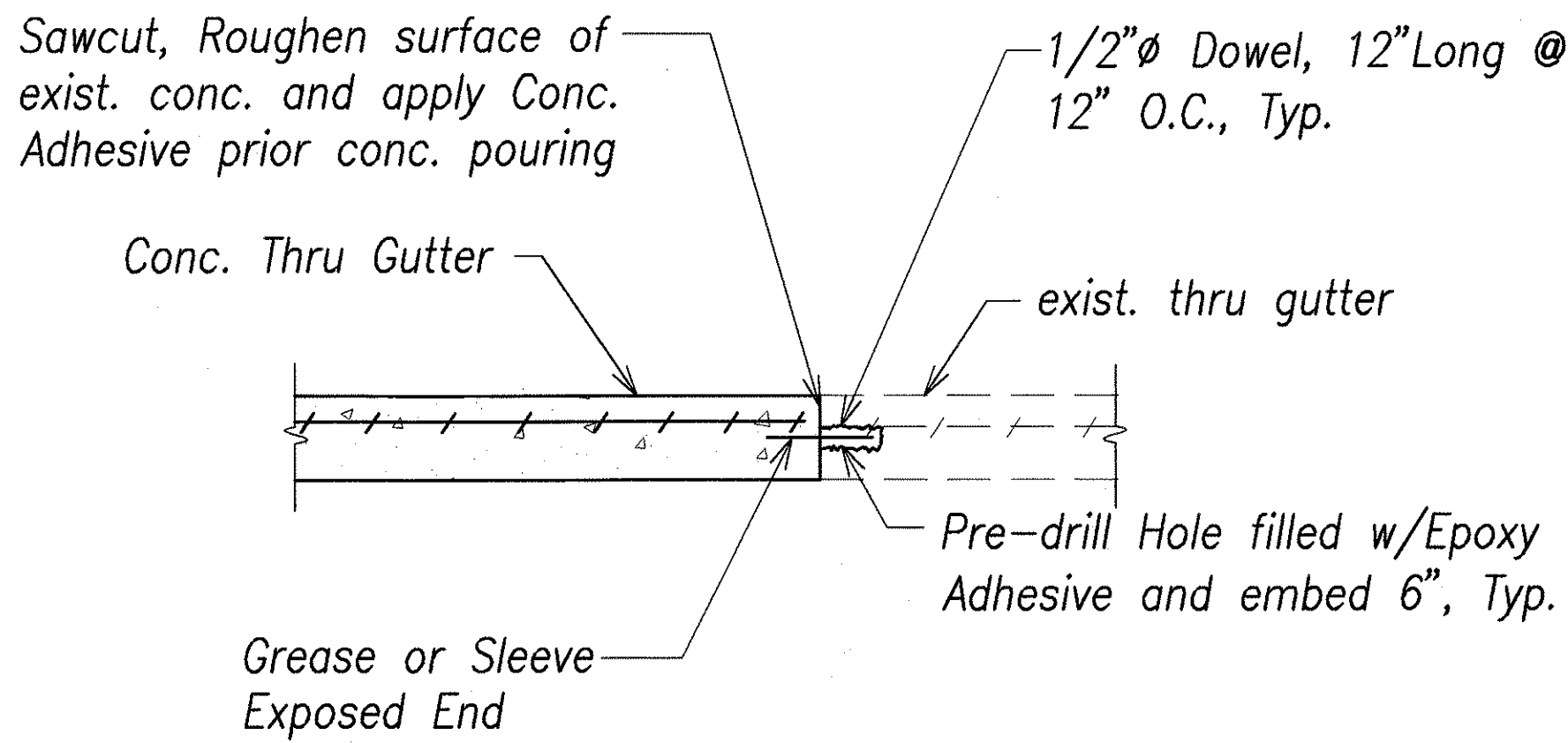


PAVEMENT TRANSITION DETAIL

Not to scale



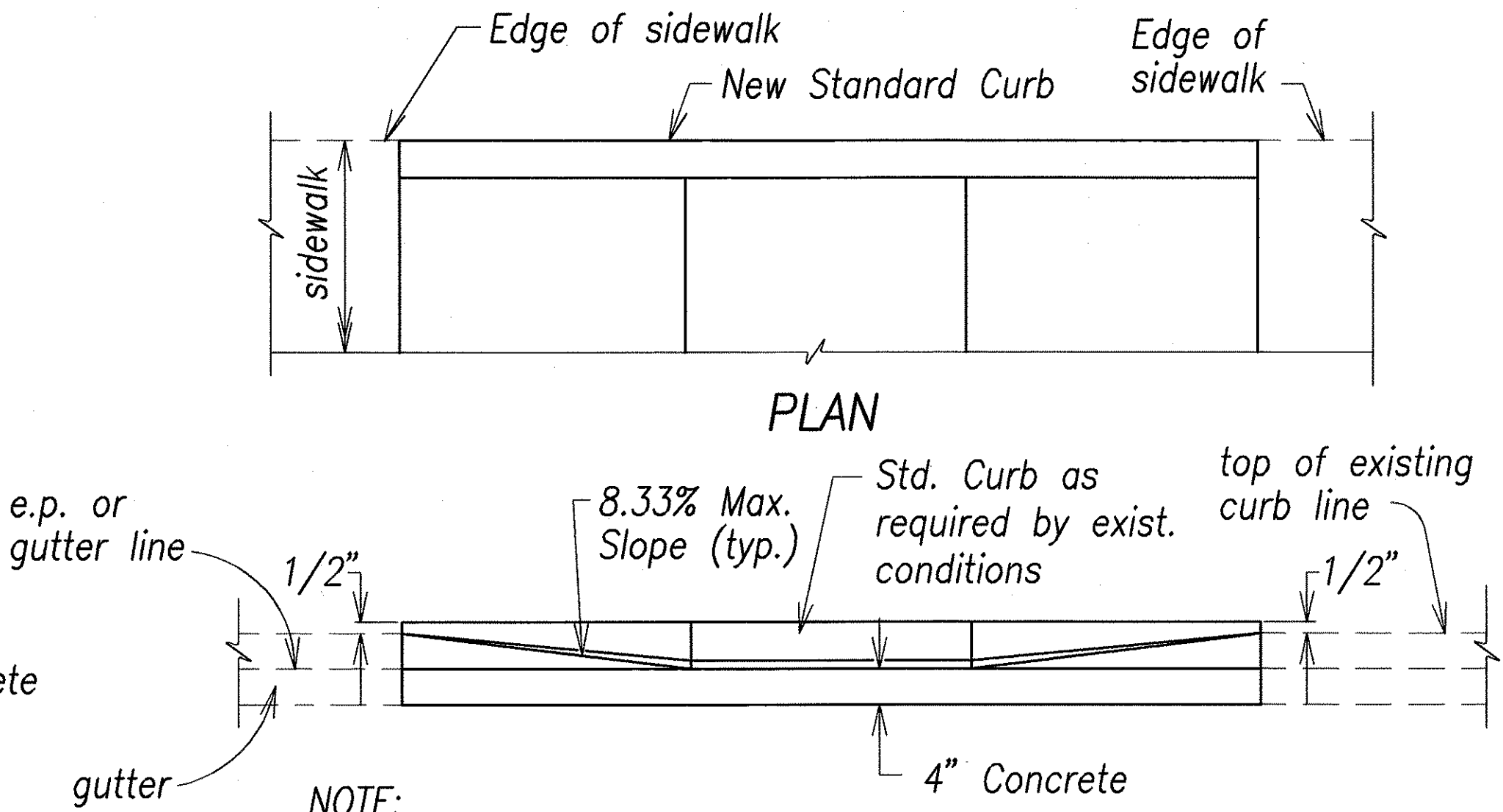
CROSS SECTION



LONGITUDINAL SECTION

CONCRETE THRU GUTTER CONNECTION DETAIL

Not to scale

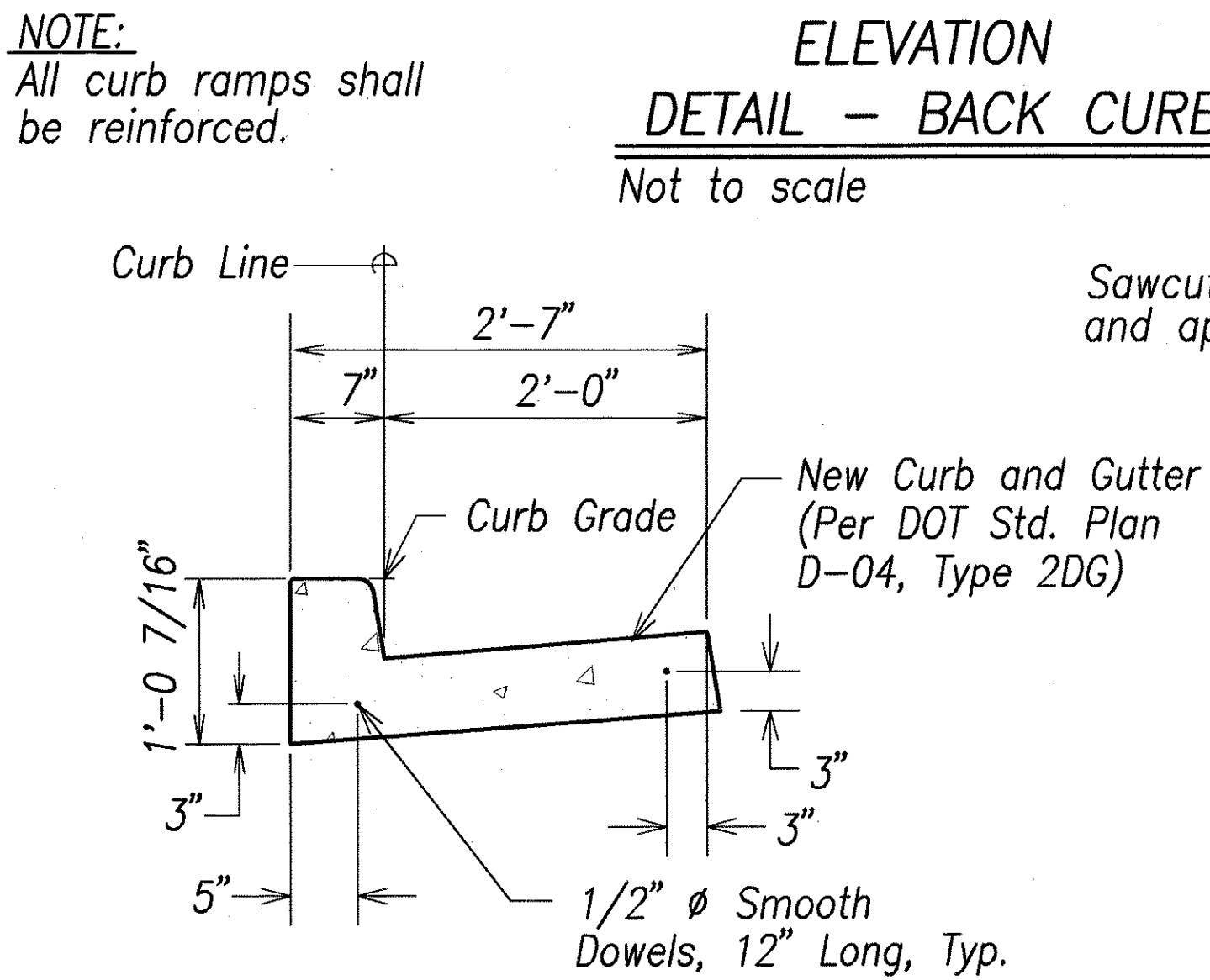


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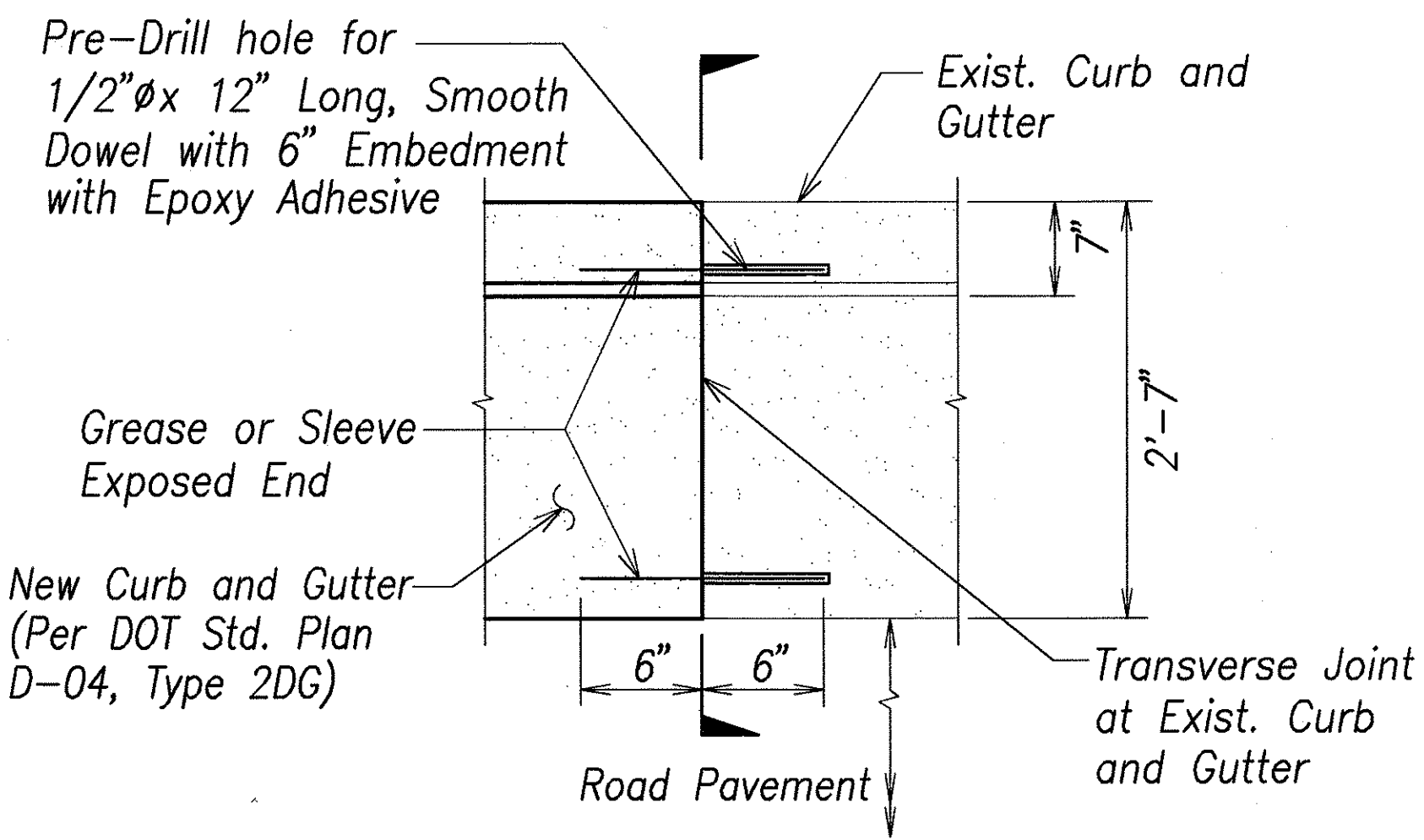
This detail can be used in situations where the edge of sidewalk cannot be flush with the face of (back) curb due to right of way restrictions.

ELEVATION DETAIL - BACK CURB

Not to scale



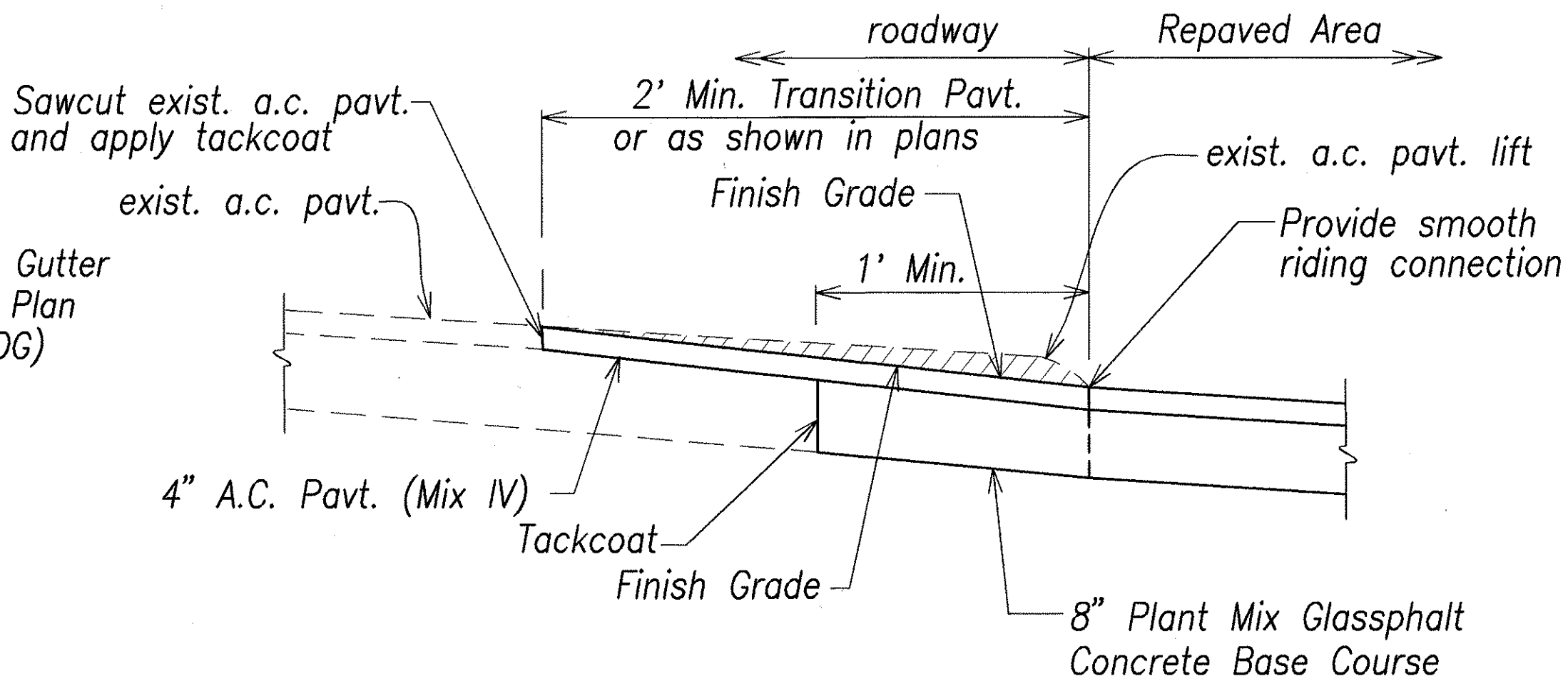
SECTION



PLAN

CURB AND GUTTER CONNECTION

Not to scale



PAVEMENT RESTORATION DETAIL

Not to scale

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

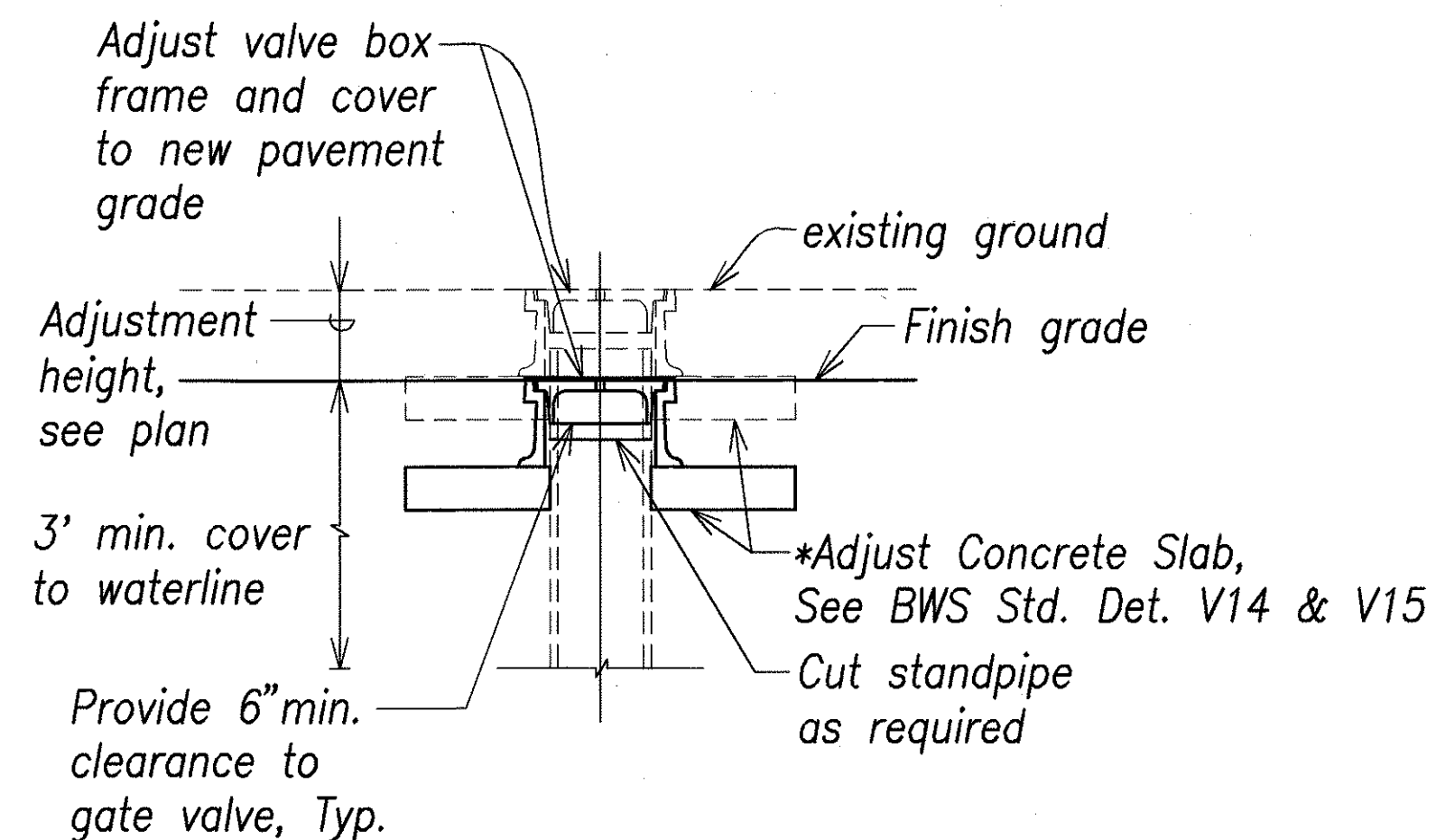


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 SIGNATURE: *Greg H. Hiyakimoto* DATE: April 30, 2006
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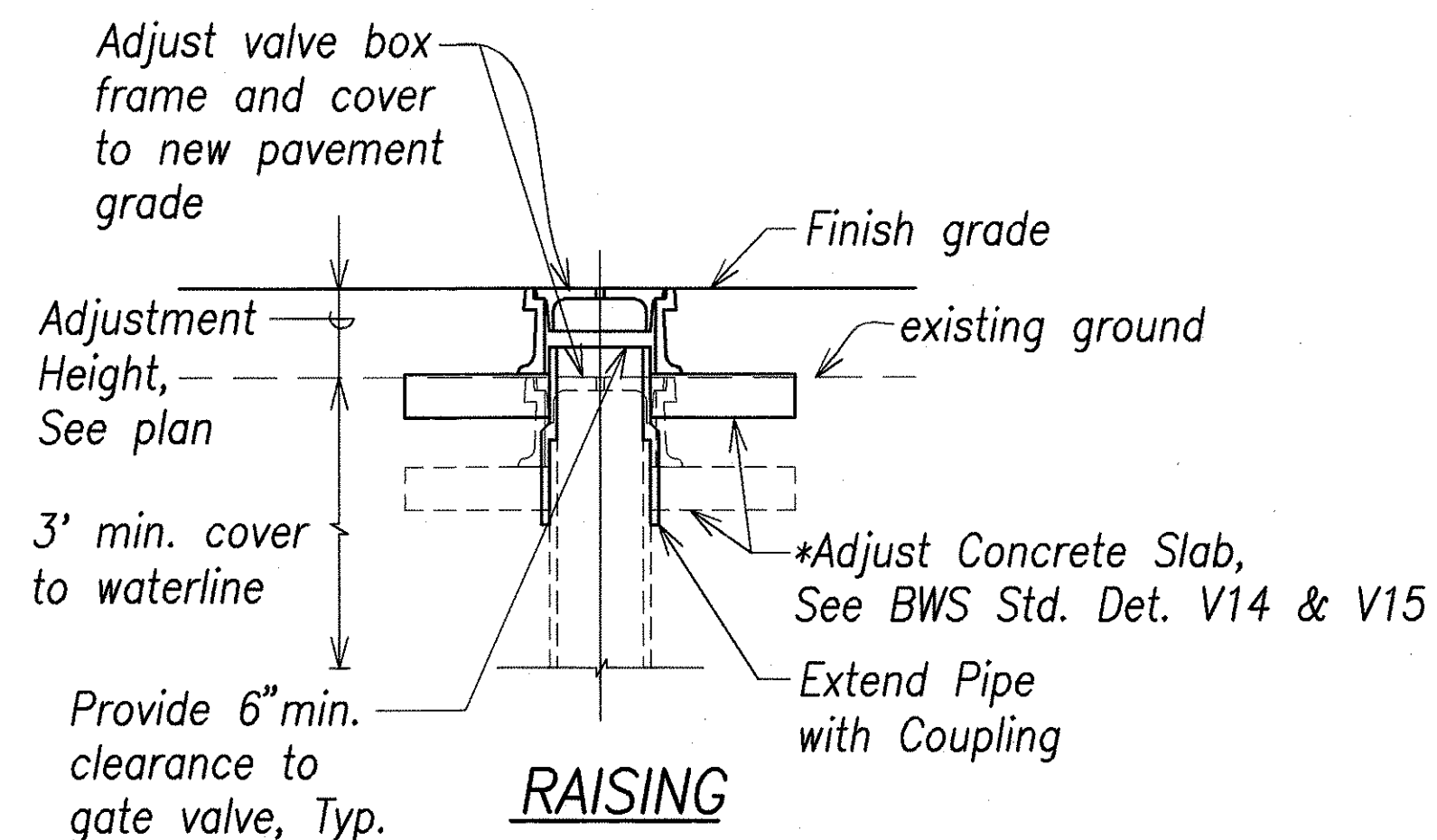
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS DETAILS
Pedestrian Facilities & ADA Compliance
at Various Locations on Oahu, Unit 4
Fed. Aid Proj. No. CMAQ-0300(95)
Scale: None Date: AUGUST 2004
SHEET No. C-25 OF 93 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(95)	2004	27	128



LOWERING

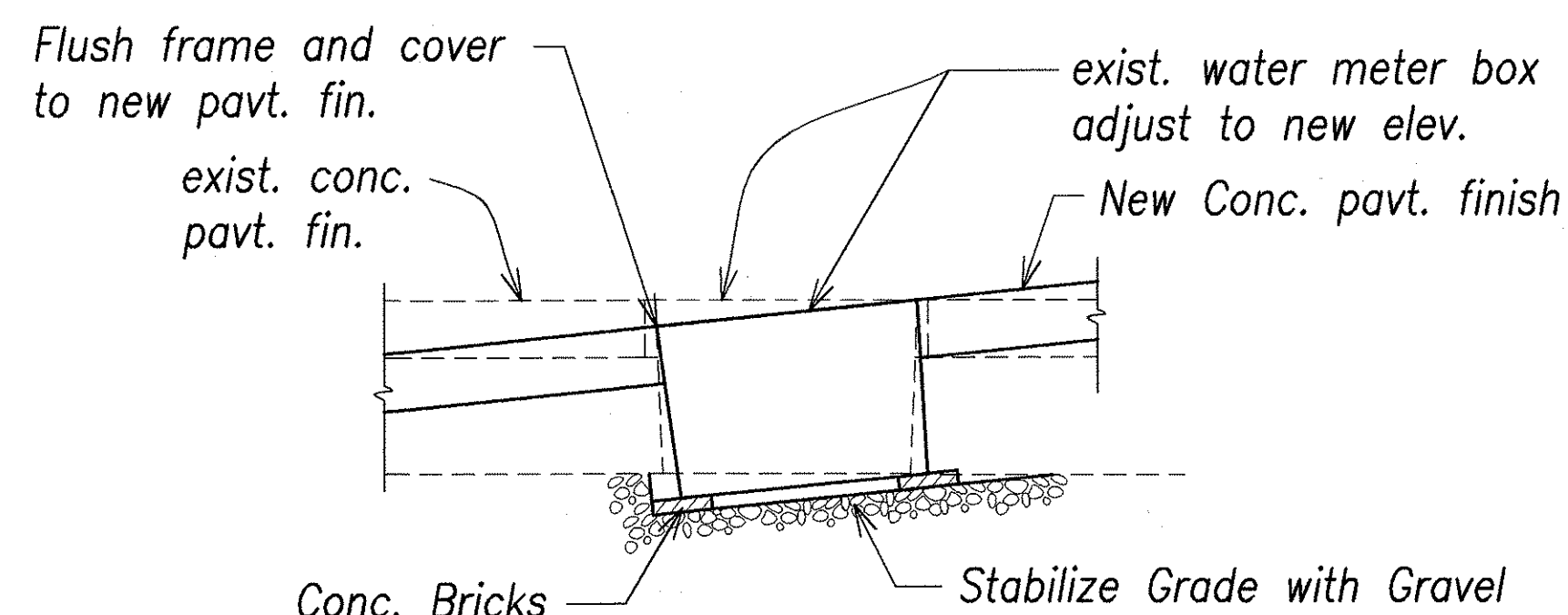


RAISING

*Note: If Valve is Located in Dirt Area and Less than 6" ϕ , Provide a 12"x4" Thick Collar

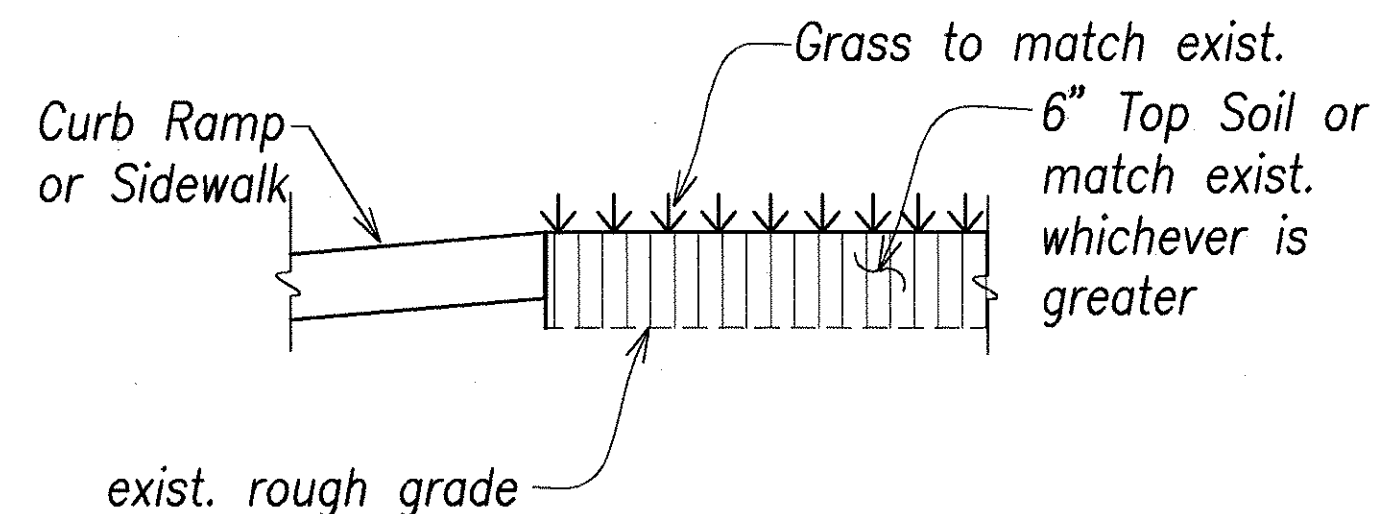
ADJUSTMENT OF VALVE BOX

Not to scale



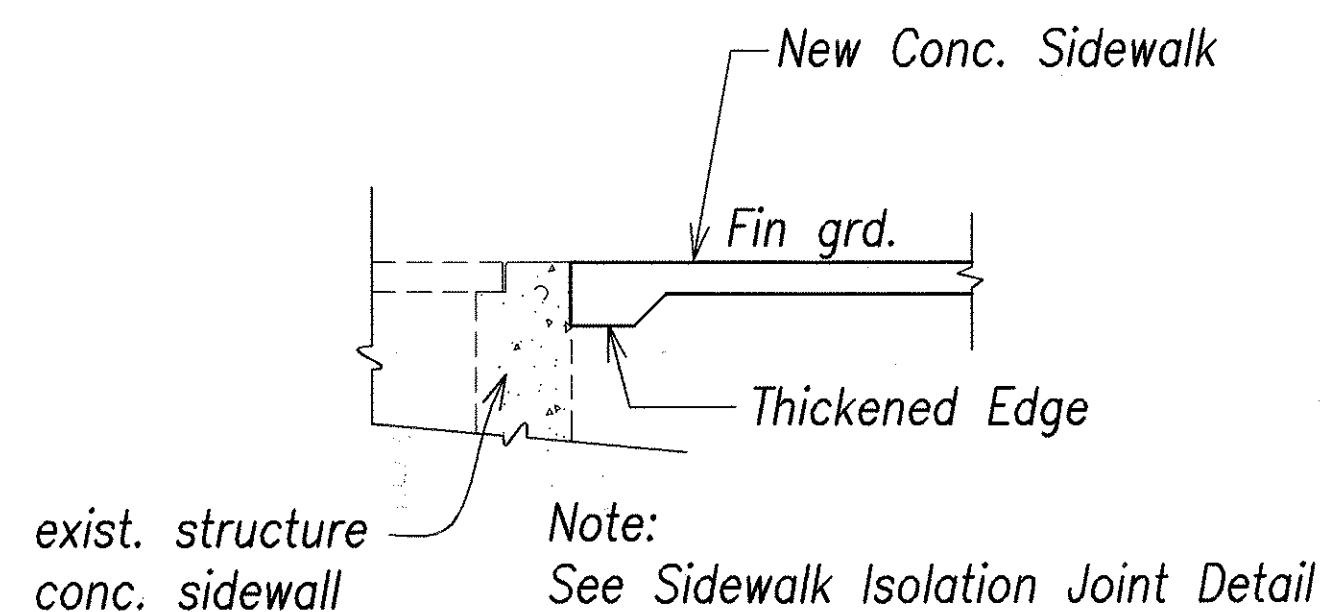
WATER METER FRAME AND COVER ADJUSTMENT

Not to scale



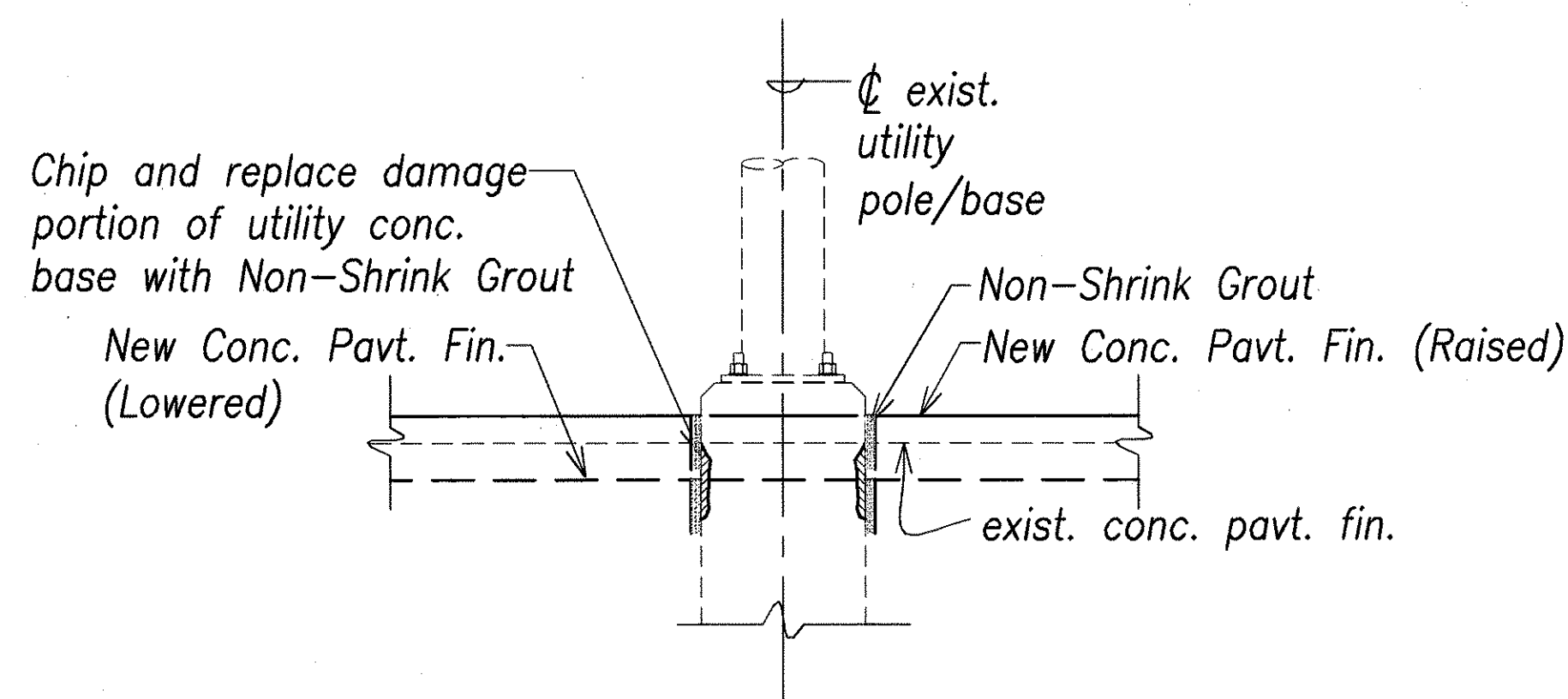
GRASS RESTORATION

Not to scale



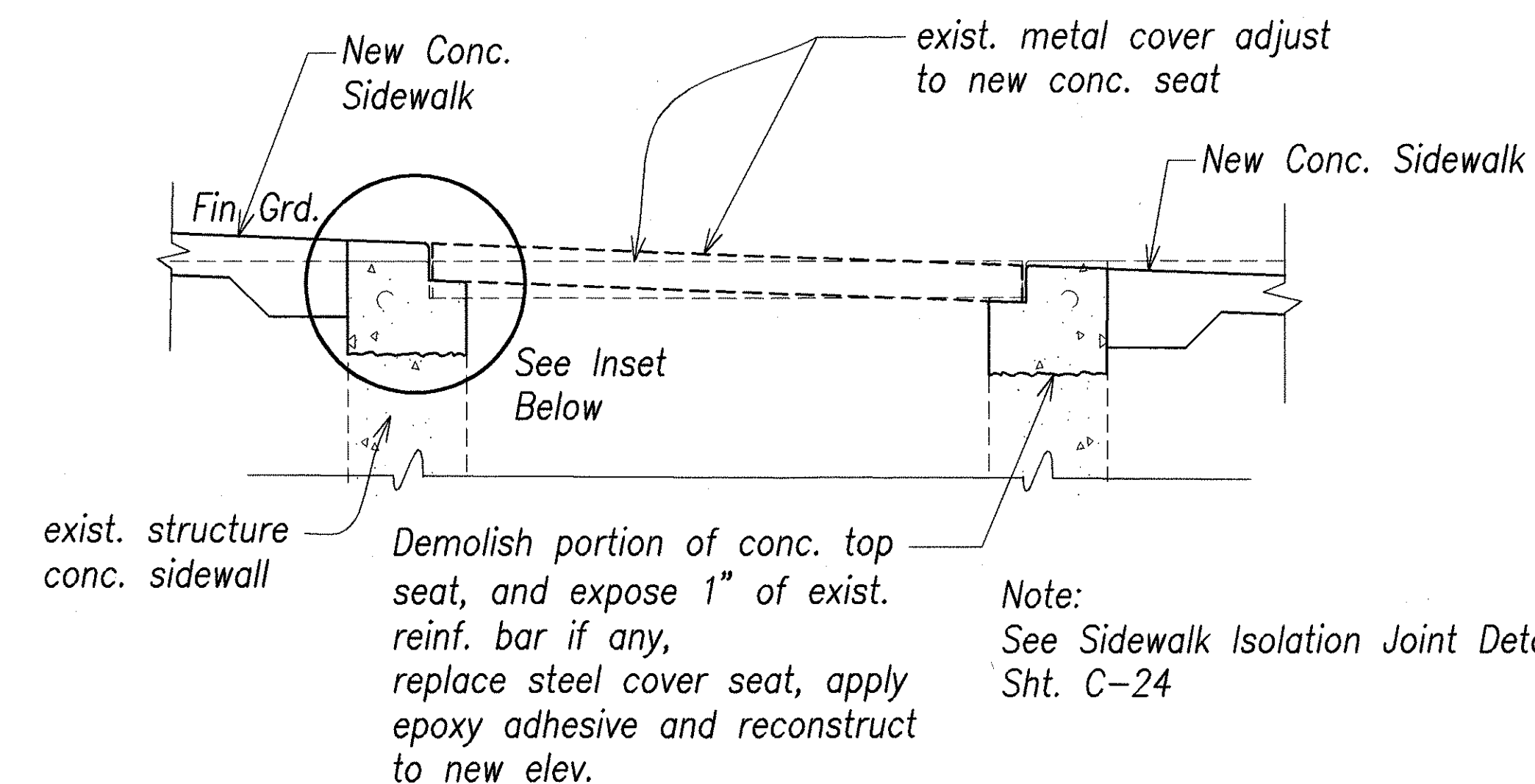
EXIST. STRUCTURE CONNECTION

Not to scale

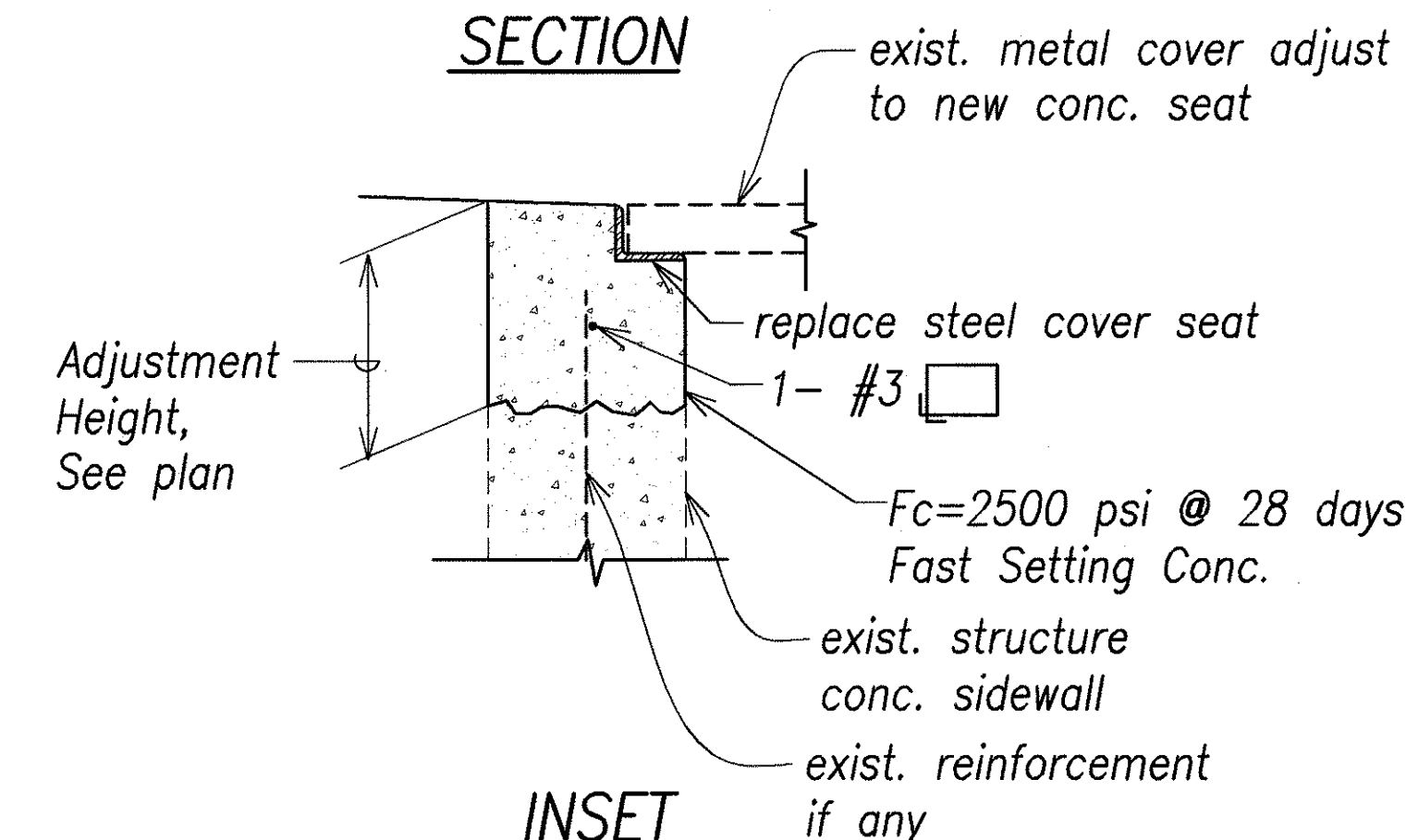


UTILITY CONC. BASE RESTORATION

Not to scale



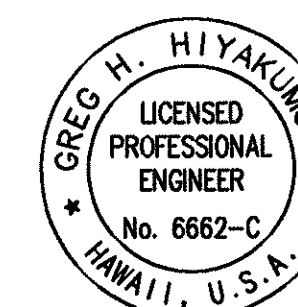
SECTION



INSET

EXIST. STRUCTURE RECONSTRUCTION

Not to scale



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 SIGNATURE: *Greg H. Hiyaunoto* DATE: April 30, 2006
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STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

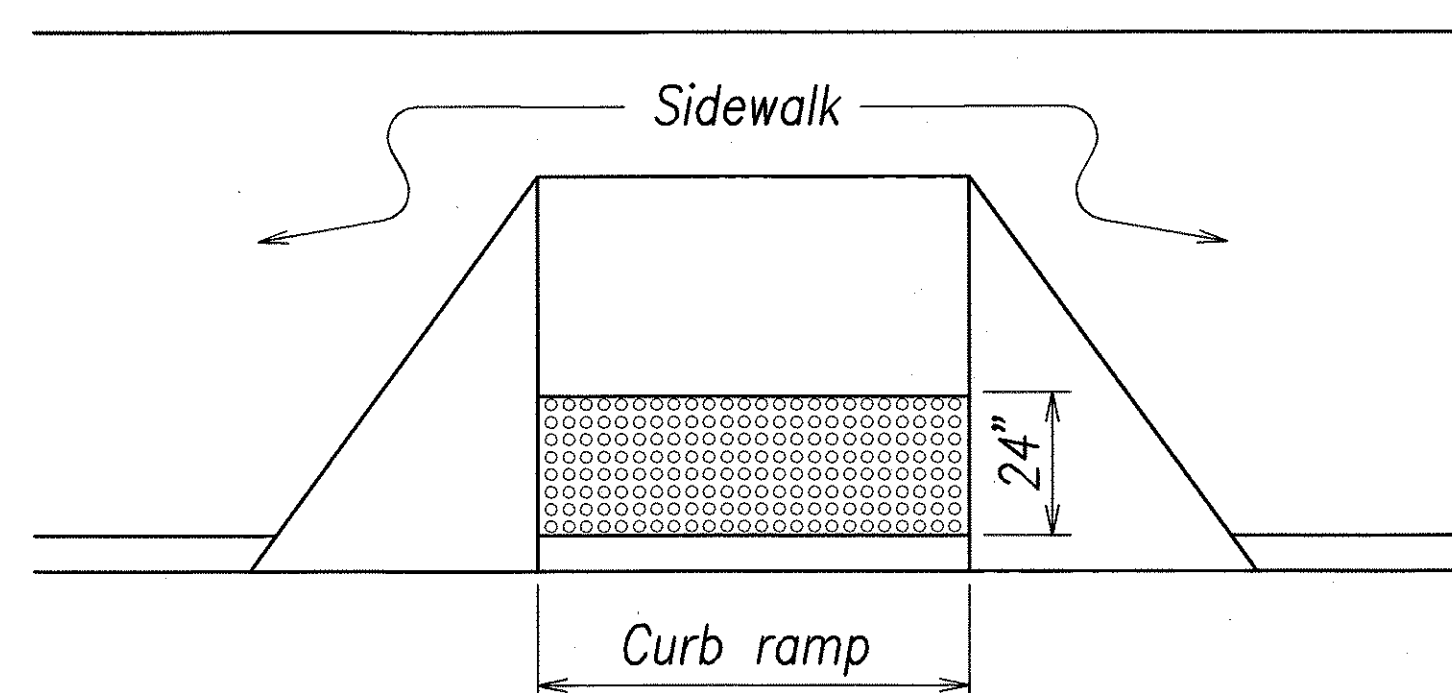
UTILITY DETAILS

Pedestrian Facilities & ADA Compliance
 at Various Locations on Oahu, Unit 4
 Fed. Aid Proj. No. CMAQ-0300(95)

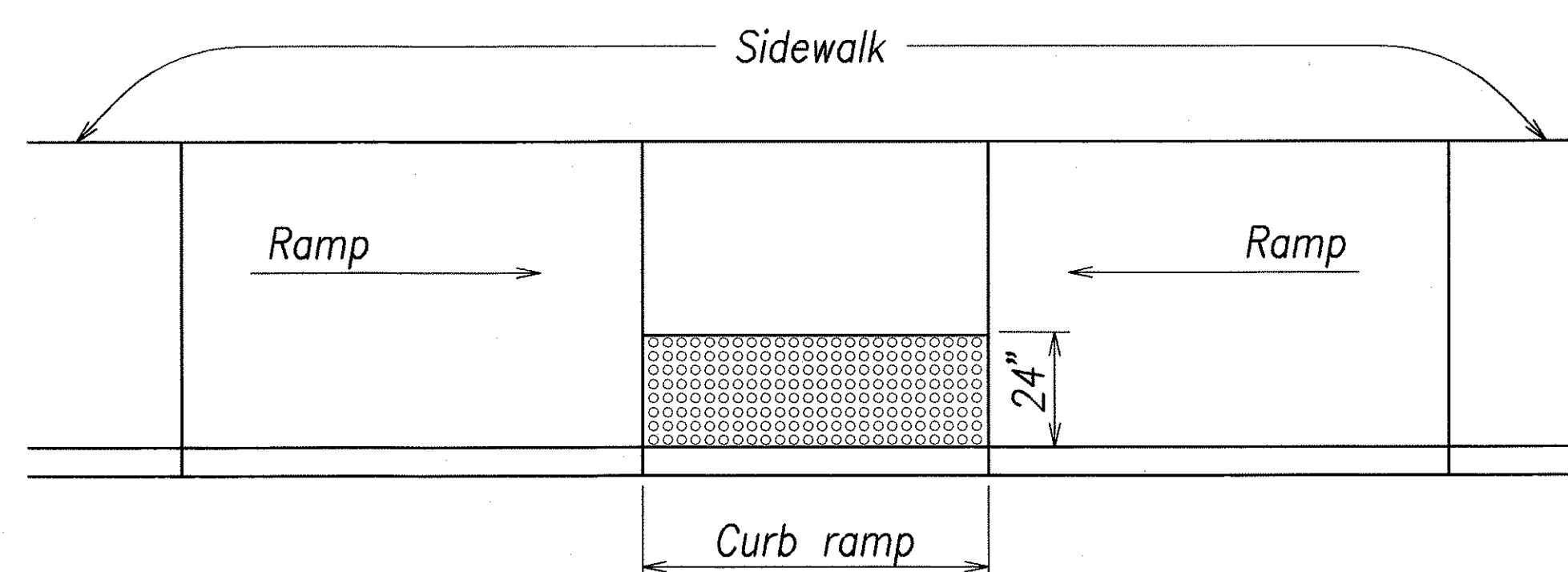
Scale: NONE Date: AUGUST 2004

SHEET No. C-26 OF 93 SHEETS

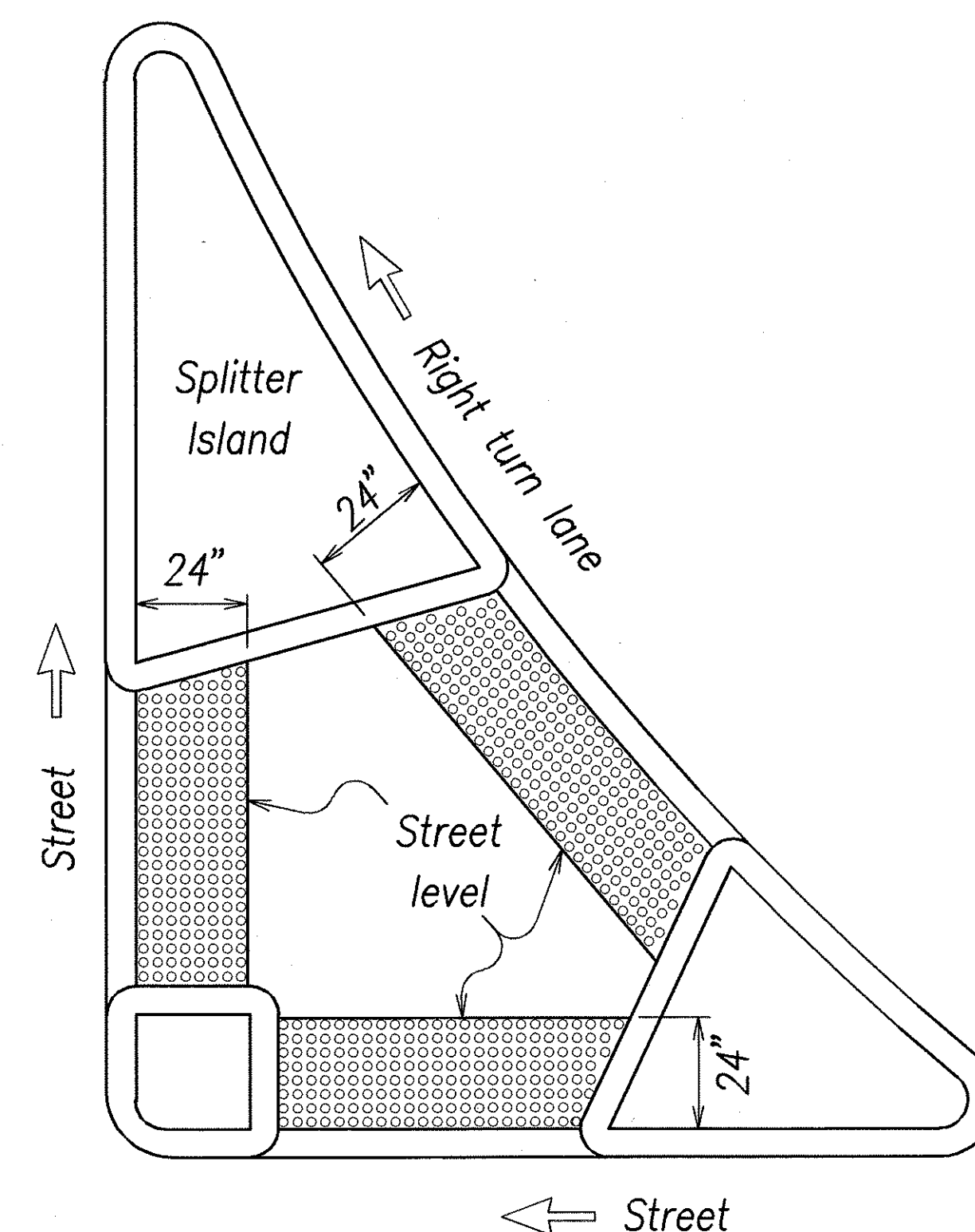
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(95)	2004	28	128



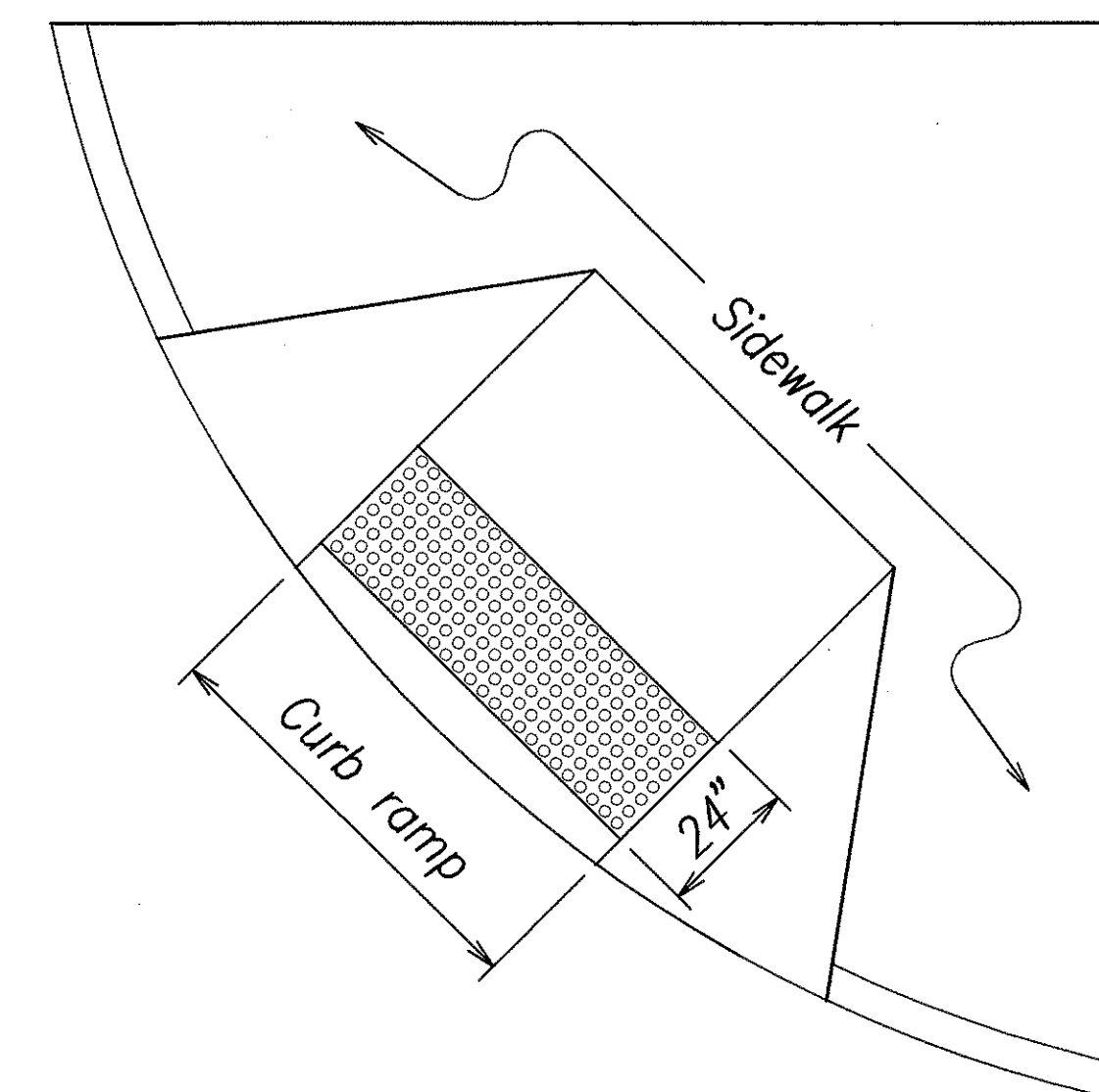
DETECTABLE WARNING AT CURB RAMP



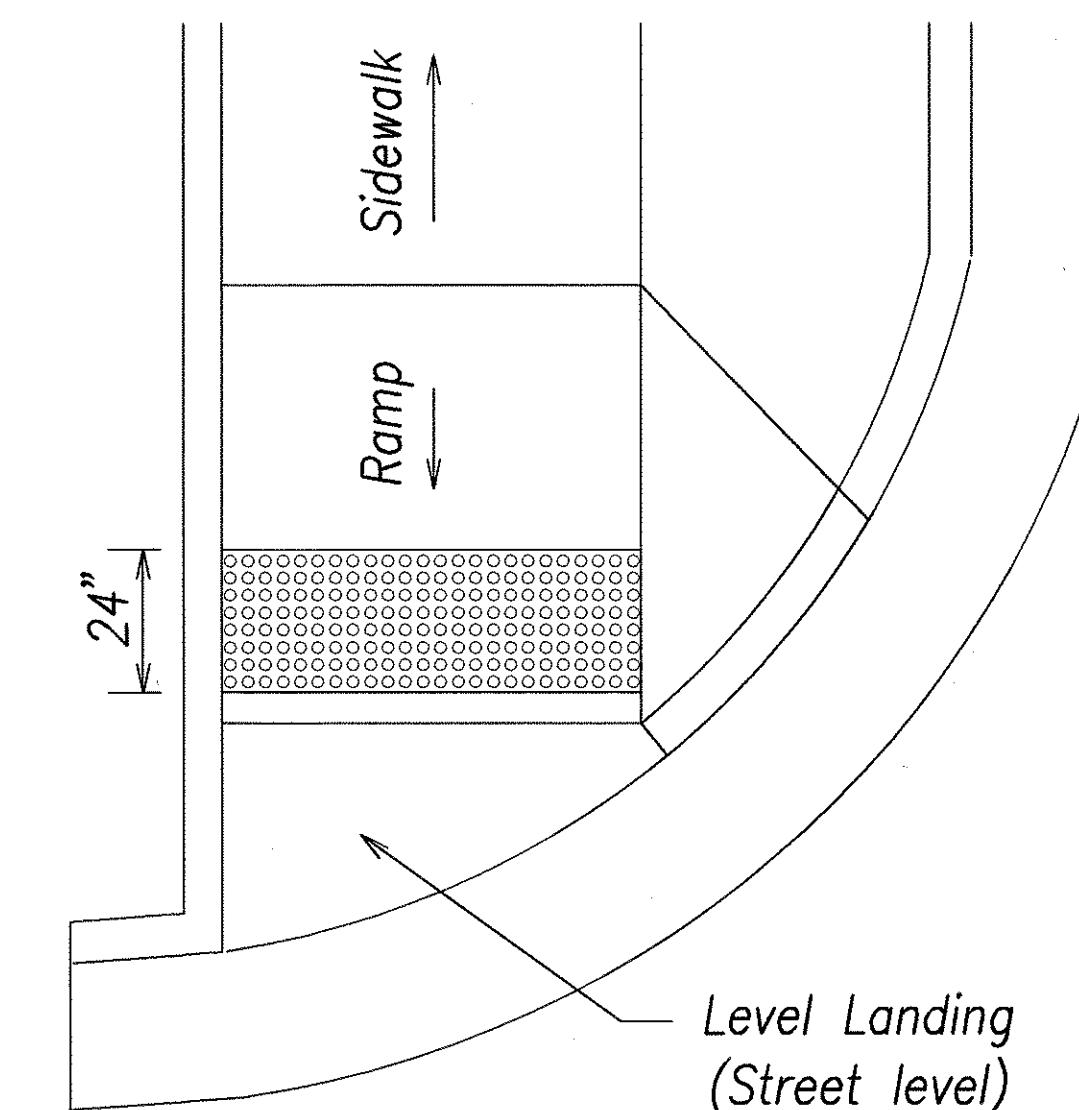
TRANSITION RAMP WITH DETECTABLE WARNING



REFUGE ISLAND WITH DETECTABLE WARNING



SHARED CURB RAMP WITH DETECTABLE WARNING



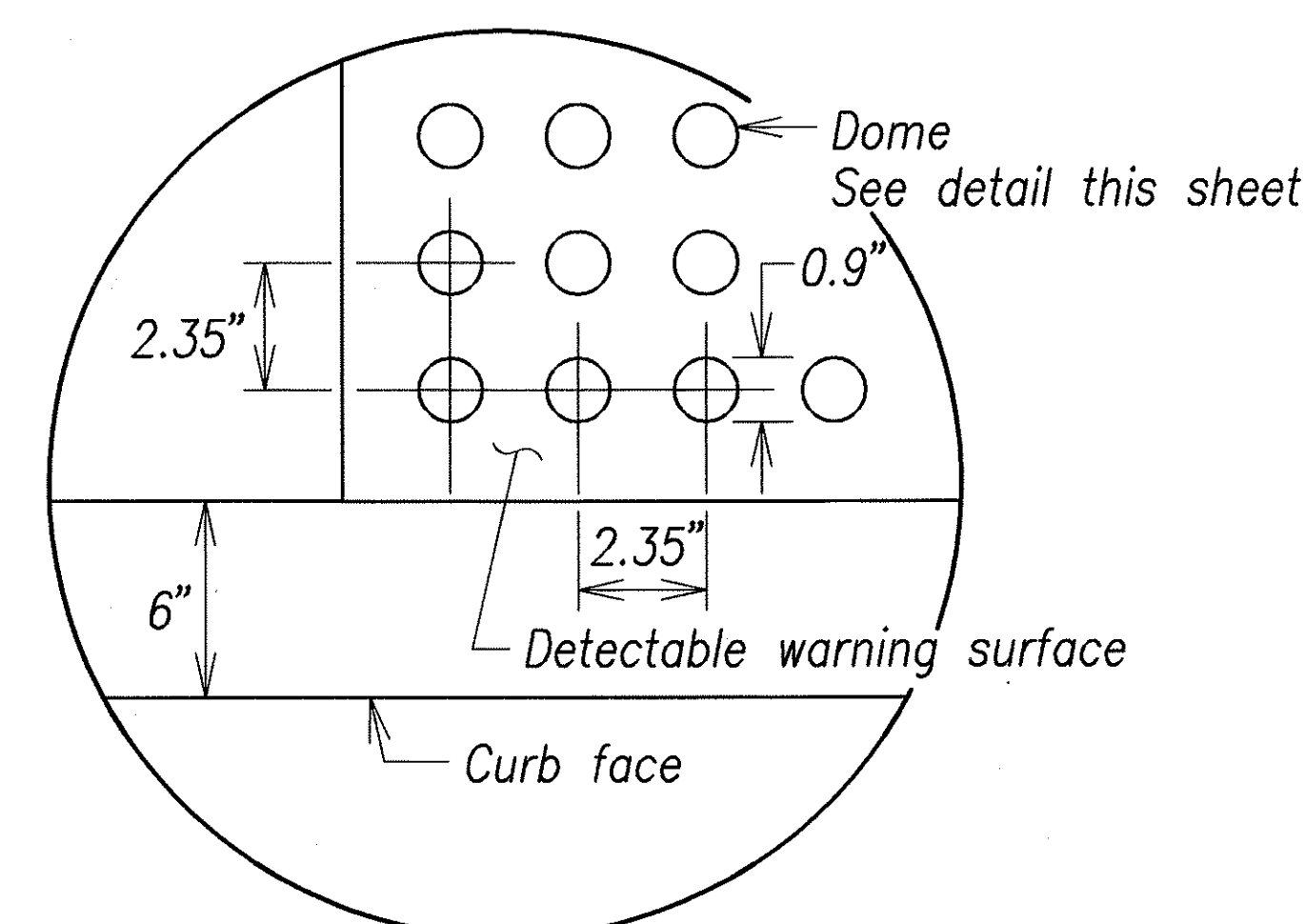
END OF SIDEWALK CURB RAMP WITH DETECTABLE WARNING

TYPICAL INSTALLATION OF DETECTABLE WARNINGS

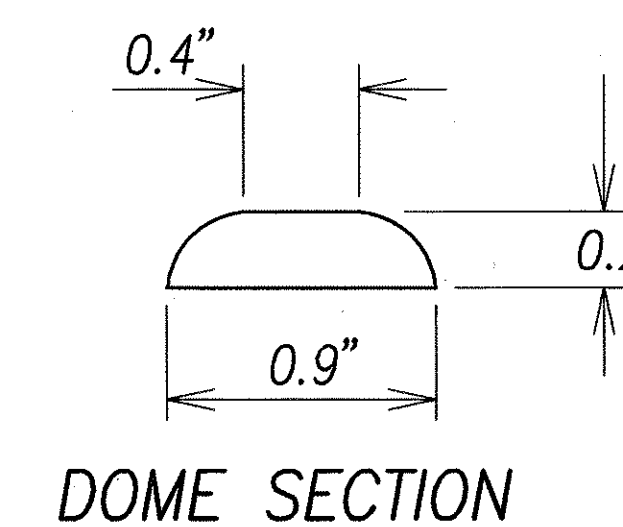
Not to Scale

NOTES:

1. Detectable warnings shall be 24 inches in the direction of travel and extend the full width of the curb ramp or flush surface (does not include flares).
2. Truncated domes shall have a diameter of 0.9 inch at the bottom, a diameter of 0.4 inch at the top, a height of 0.2 inch and a center-to-center spacing of 2.35 inches measured along one side of a square arrangement.
3. Domes shall be aligned on a square grid in the predominant direction of travel to permit wheels to roll between the domes.
4. The detectable warning shall be "safety yellow".
5. The material used to provide visual contrast shall be an integral part of the detectable warning surface.
6. The detectable warning shall be located so that the edge nearest the curb line or other potential hazard is 6 inches from the curb line.



ENLARGEMENT



DOMES SECTION



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

Signature: *Greg H. Hiakimoto* April 30, 2006
 EXPIRATION DATE

"OBSERVATION OF CONSTRUCTION" IS DEFINED IN CHAPTER 16-115, HAWAII ADMINISTRATIVE RULES ENTITLED "PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS".

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

DETECTABLE WARNING DETAILS

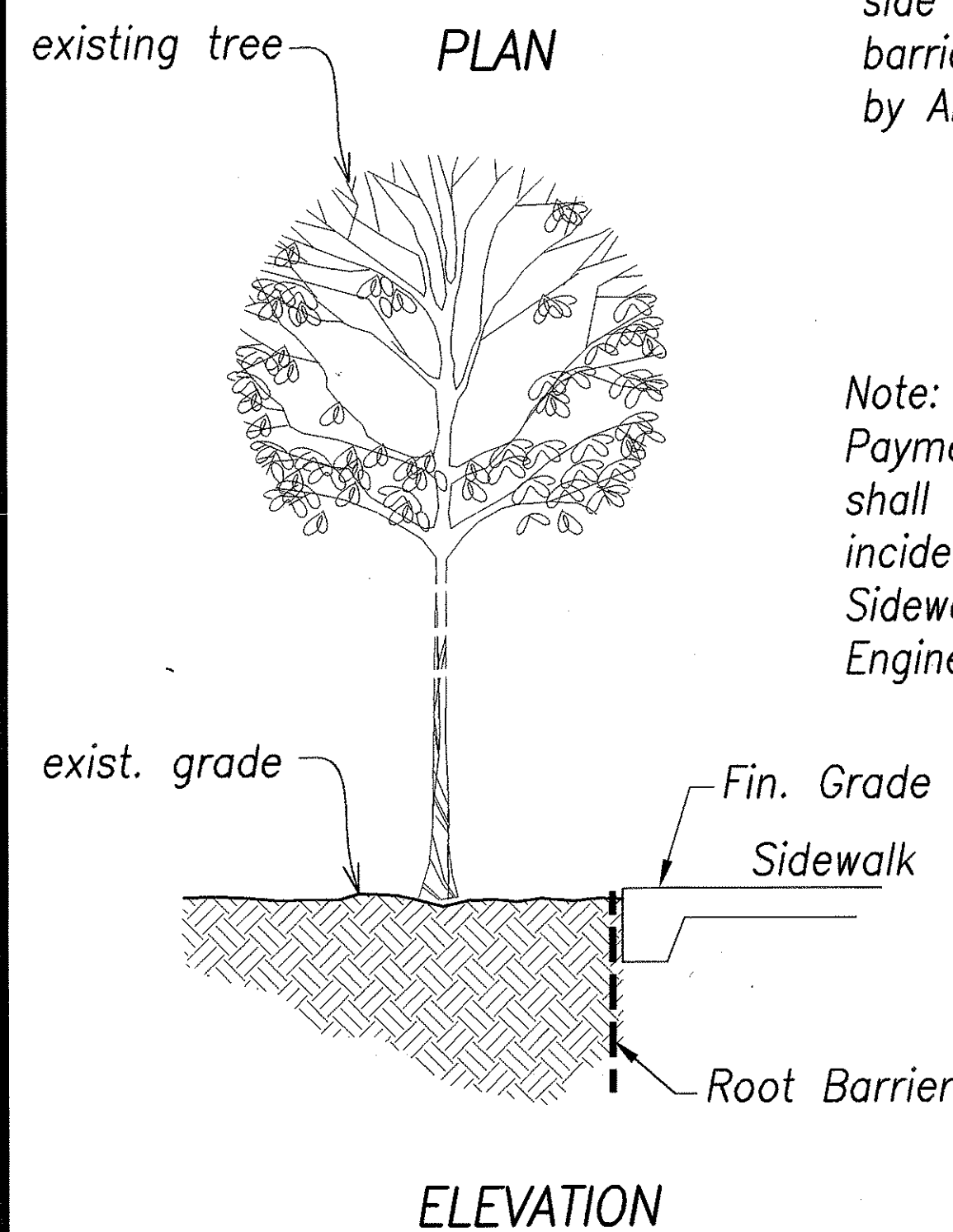
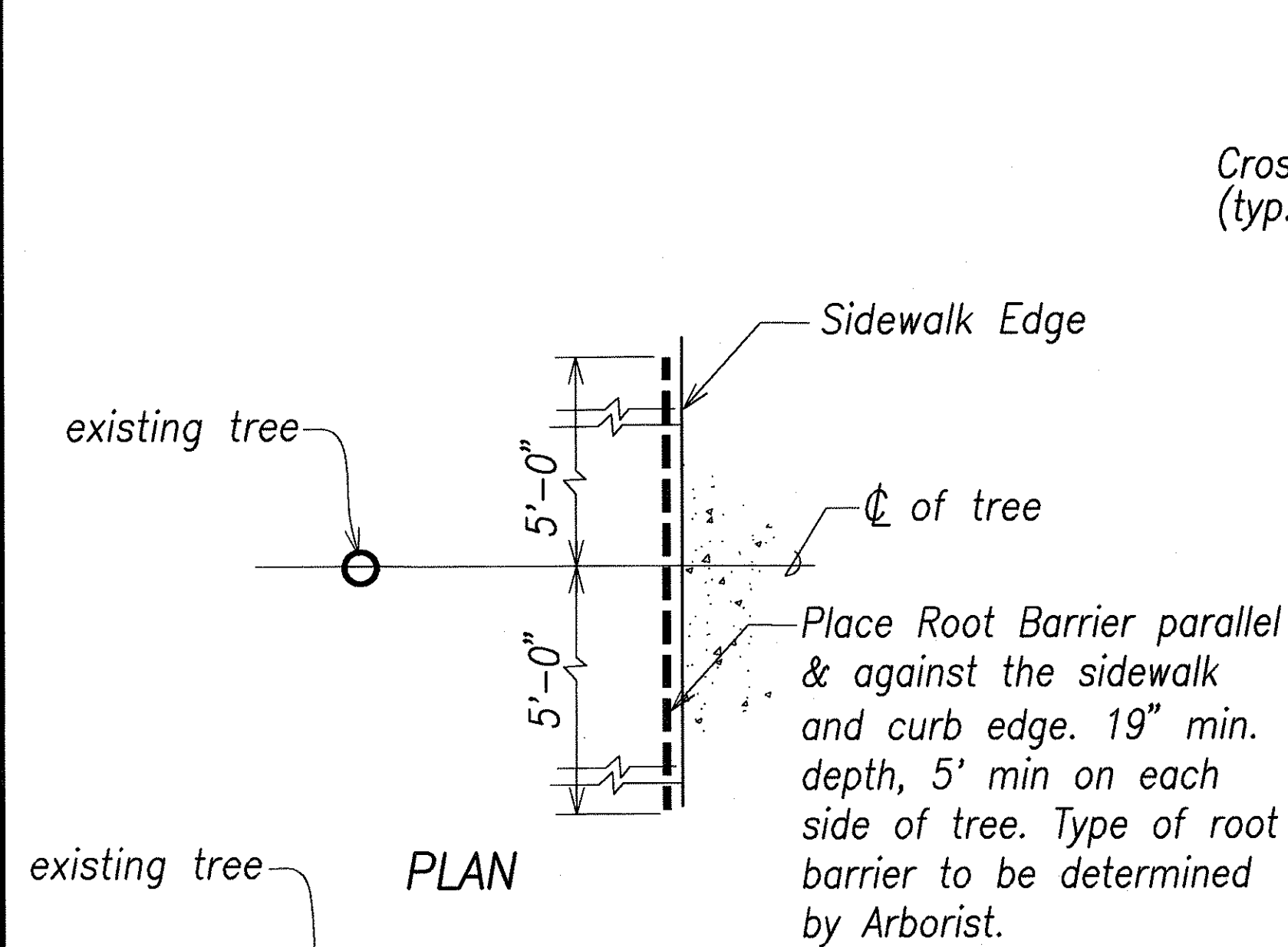
Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 4

Fed. Aid Proj. No. CMAQ-0300(95)

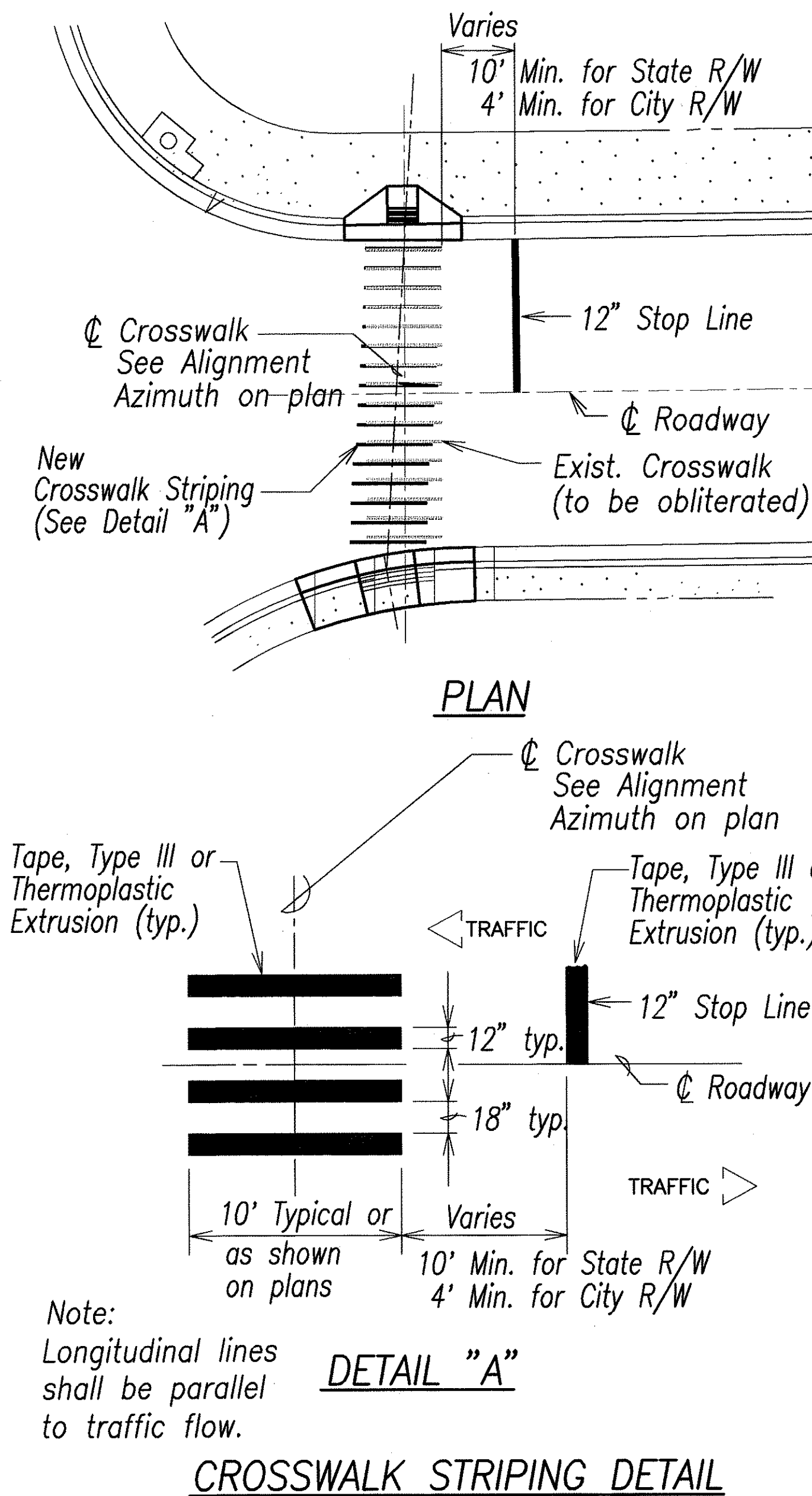
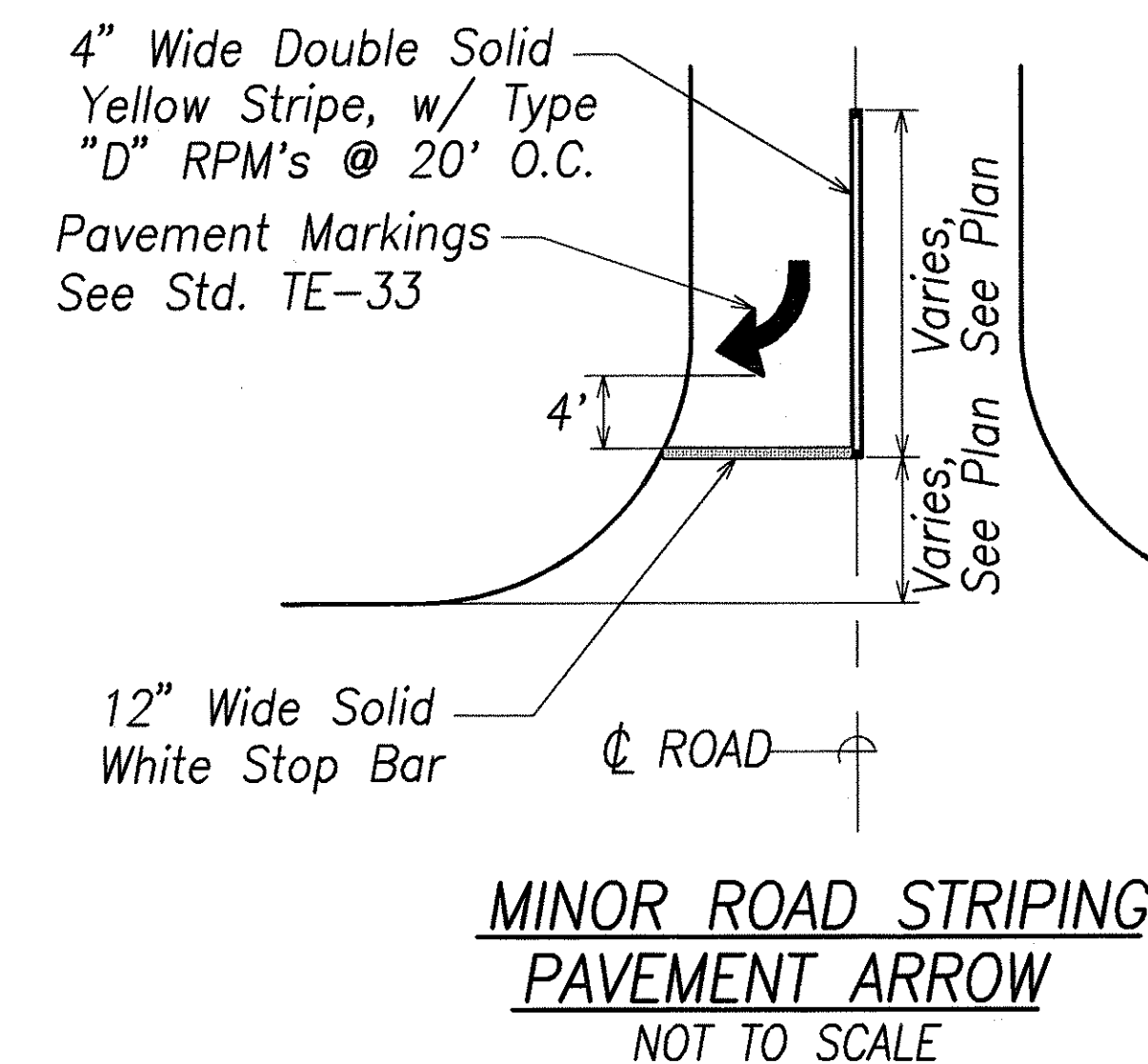
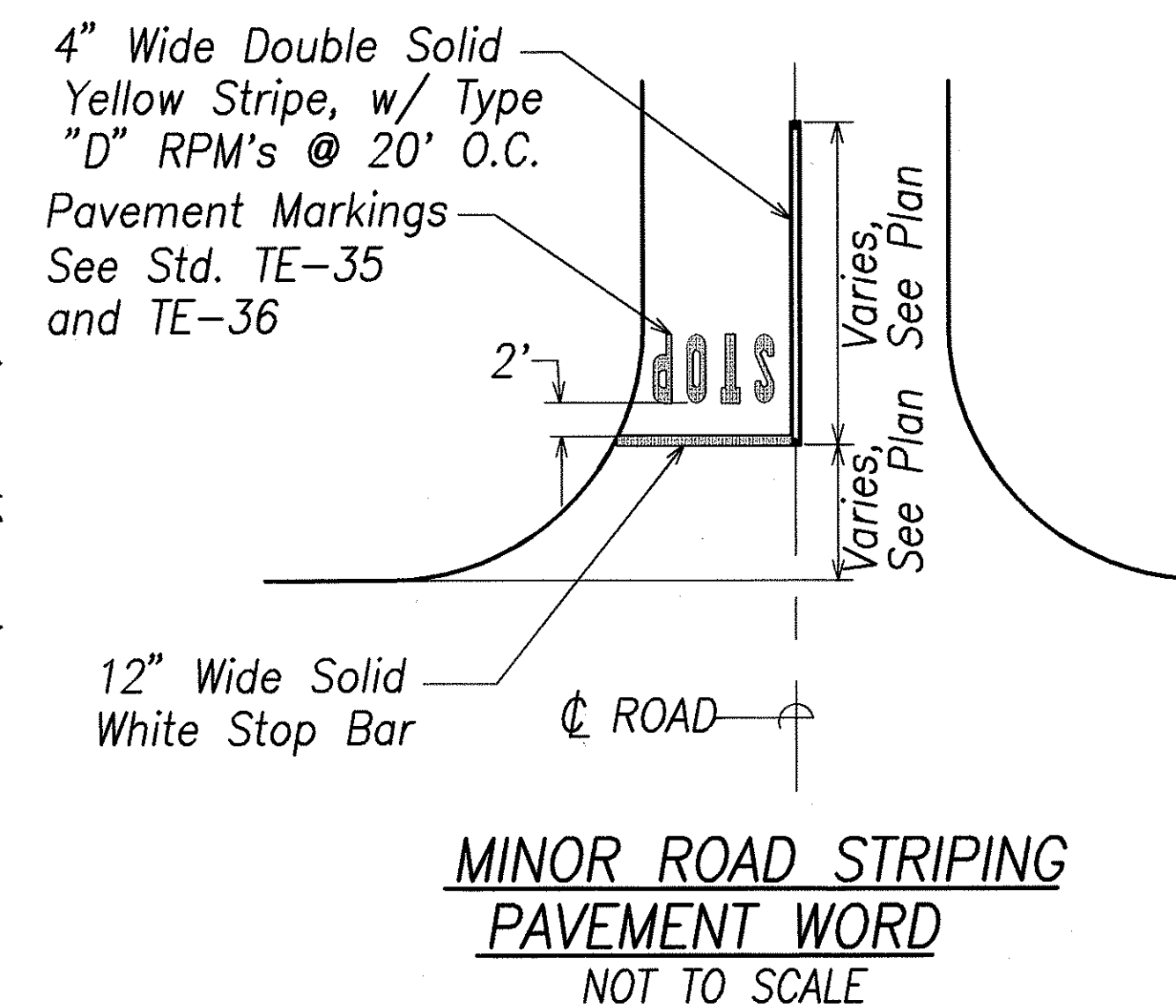
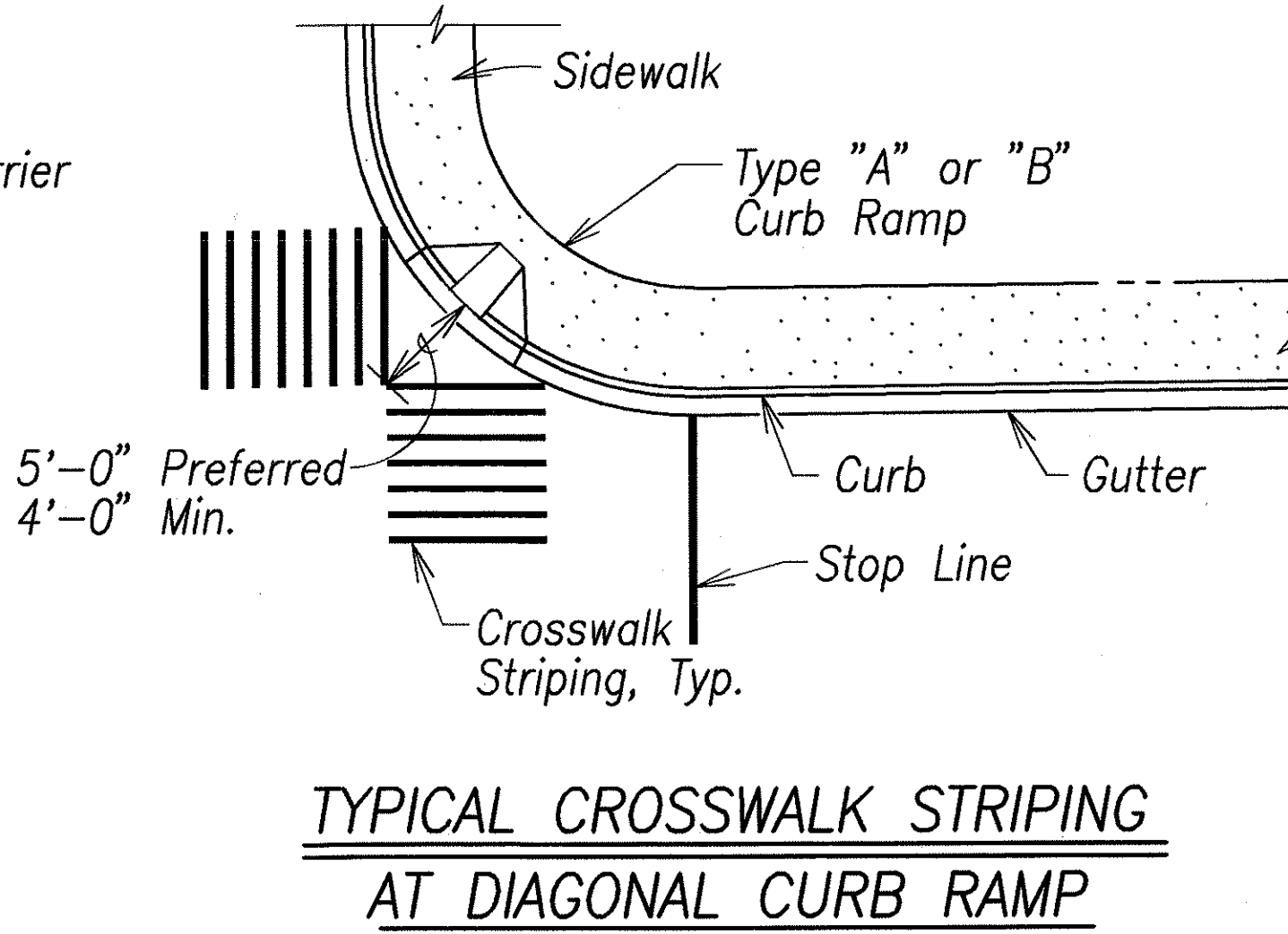
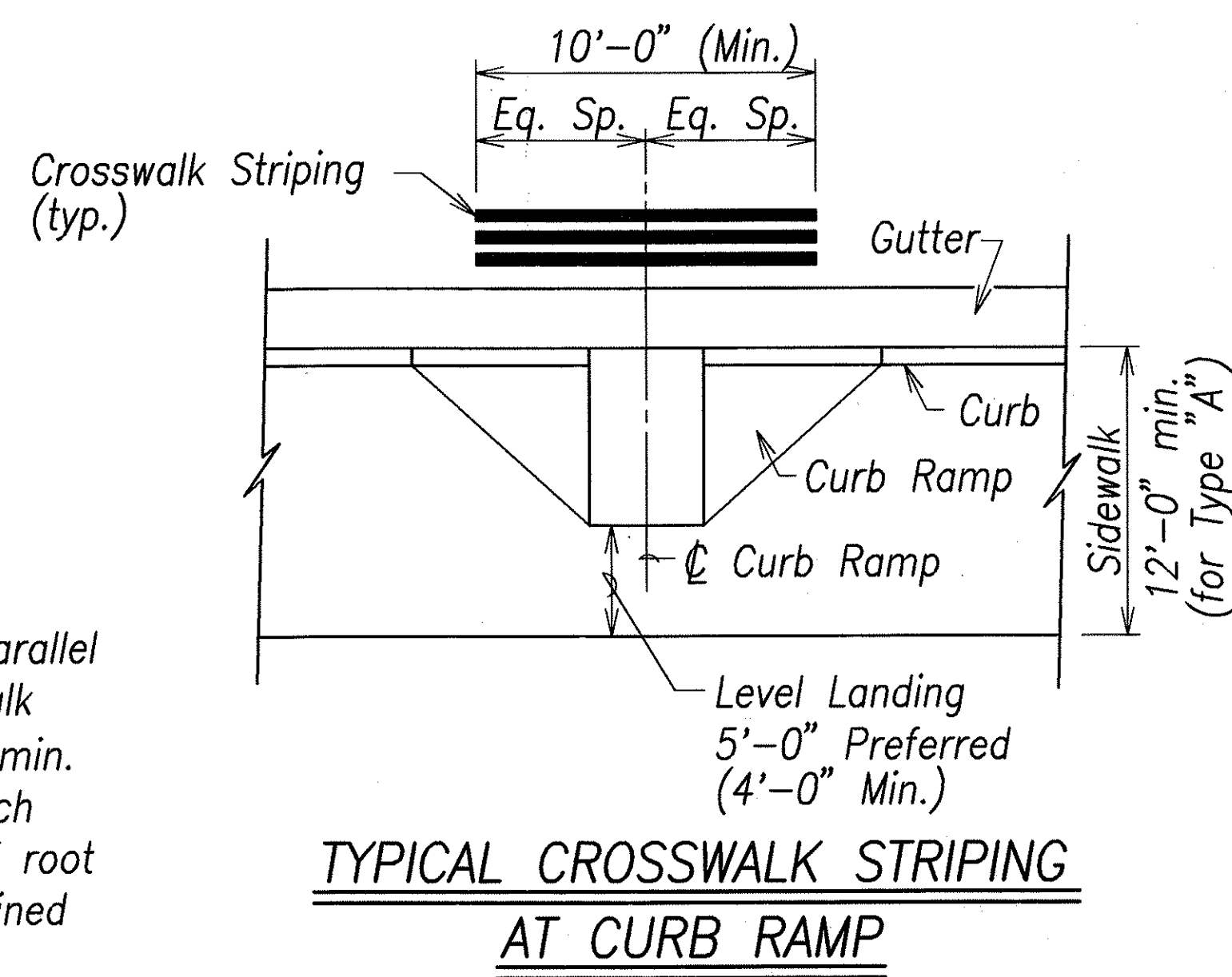
Scale: None Date: AUGUST 2004

SHEET No. C-27 OF 93 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(95)	2004	29	128



ROOT BARRIER DETAIL
Not to scale



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
 SIGNATURE: *Greg H. Hiyakumoko* DATE: April 30, 2006
 "OBSERVATION OF CONSTRUCTION" IS DEFINED IN CHAPTER 18-115, HAWAII ADMINISTRATIVE RULES ENTITLED "PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS".

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TREE AND STRIPING DETAILS
 Pedestrian Facilities & ADA Compliance
 at Various Locations on Oahu, Unit 4
 Fed. Aid Proj. No. CMAQ-0300(95)

Scale: None Date: AUGUST 2004

SHEET No. C-28 OF 93 SHEETS

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