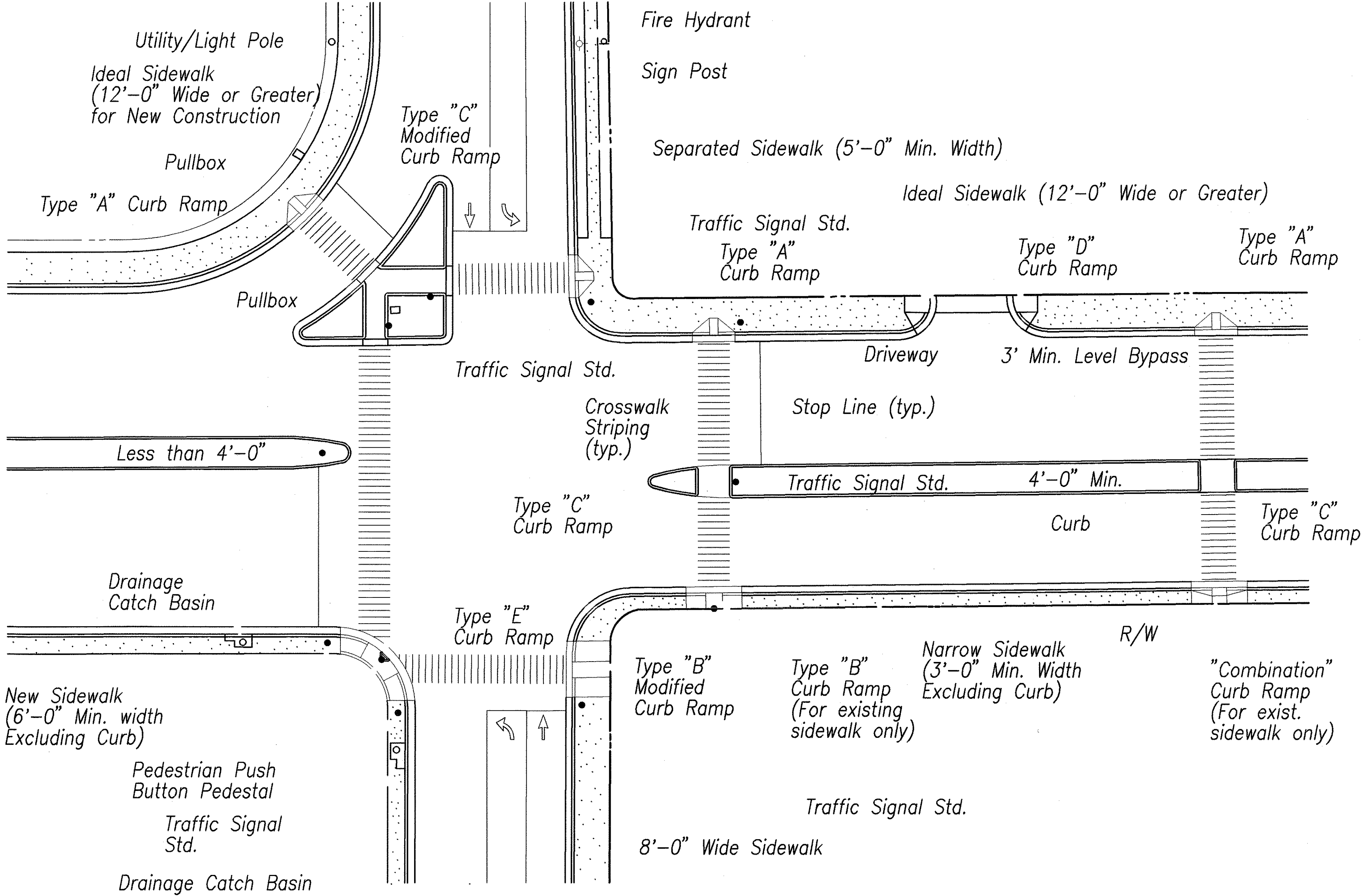
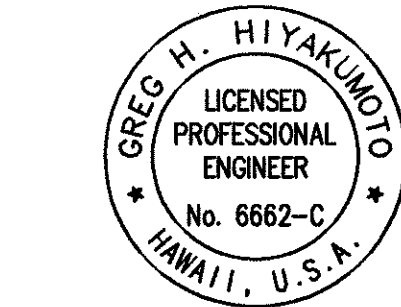


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(96)	2004	19	153



TYPICAL CURB RAMPS

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



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SIGNATURE *Greg H. Hiyaundo* DATE April 30, 2006

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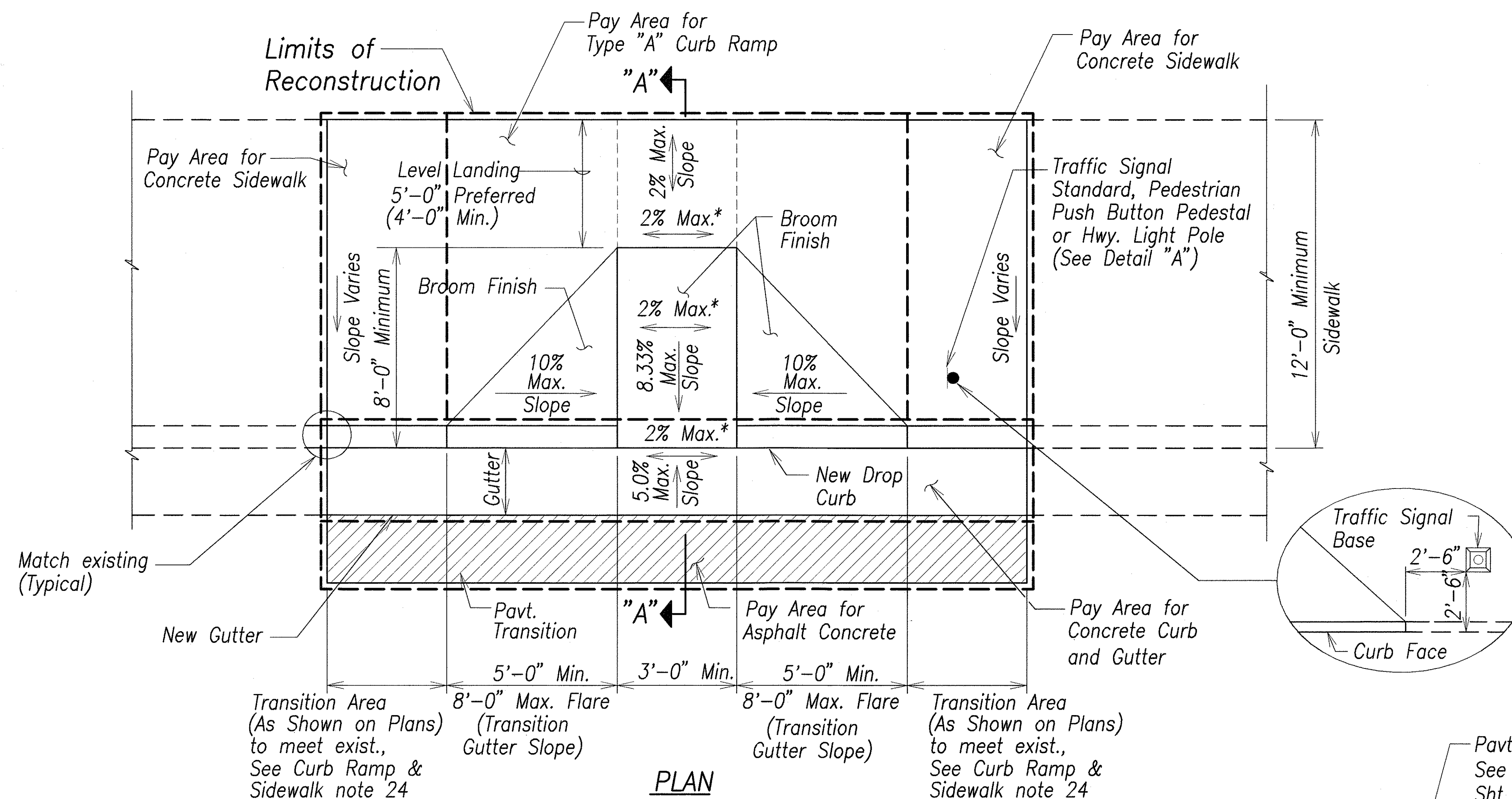
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL CURB RAMP LAYOUT
Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 5
Fed. Aid Proj. No. CMAQ-0300(96)

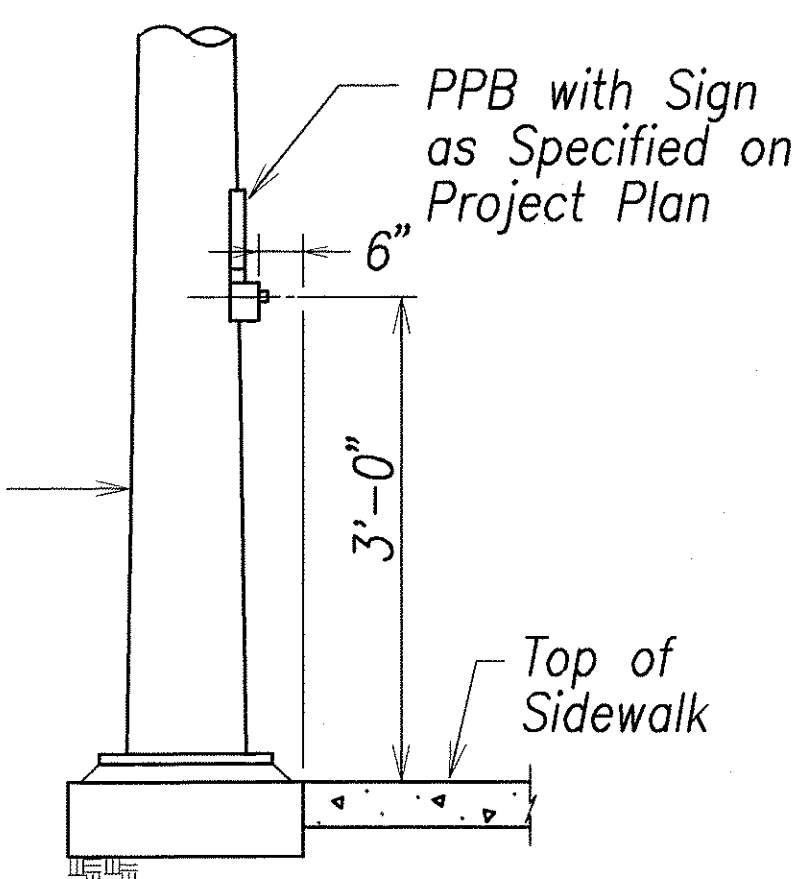
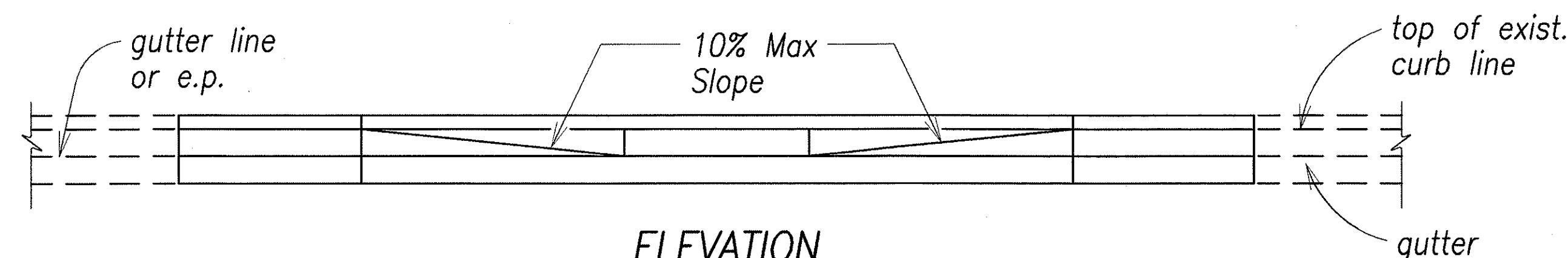
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SHEET No. C-18 OF 153 SHEETS

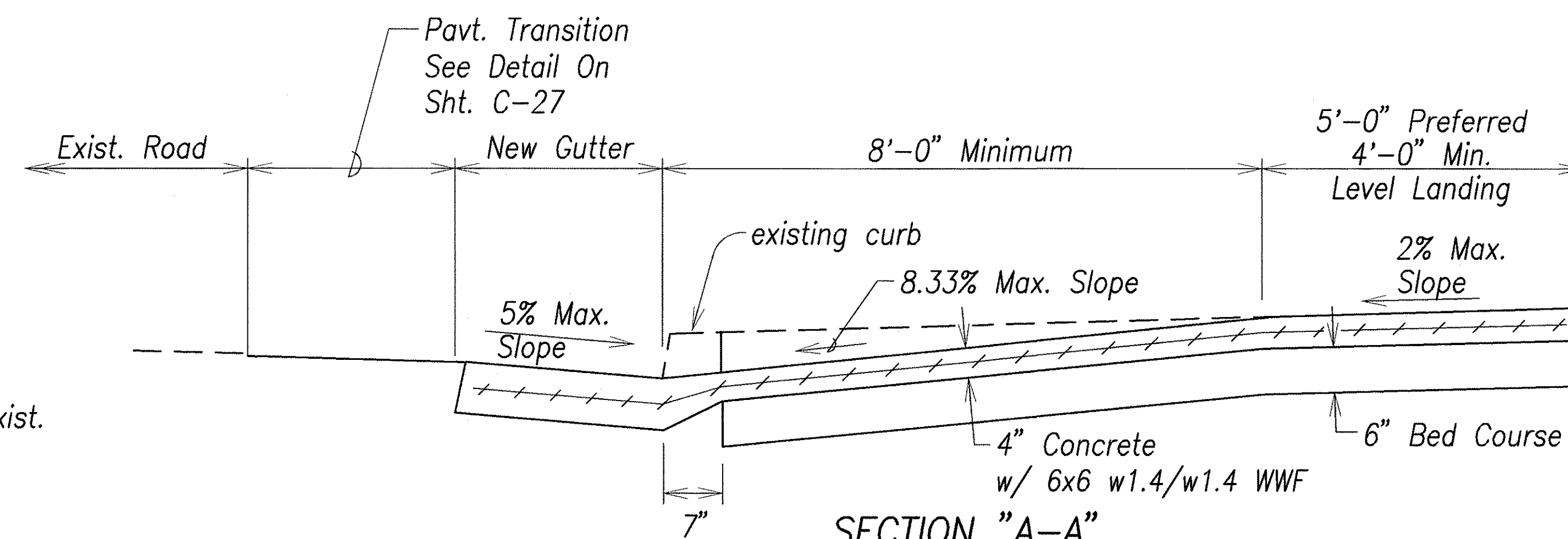
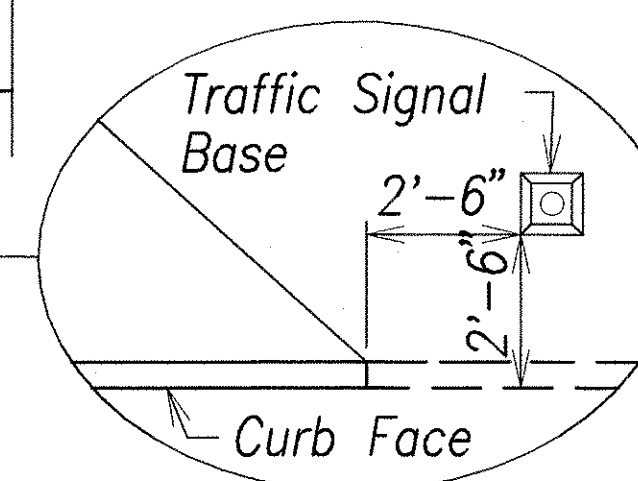
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(96)	2004	20	153



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



DETAIL "A"



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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 5
Fed. Aid Proj. No. CMAQ-0300(96)

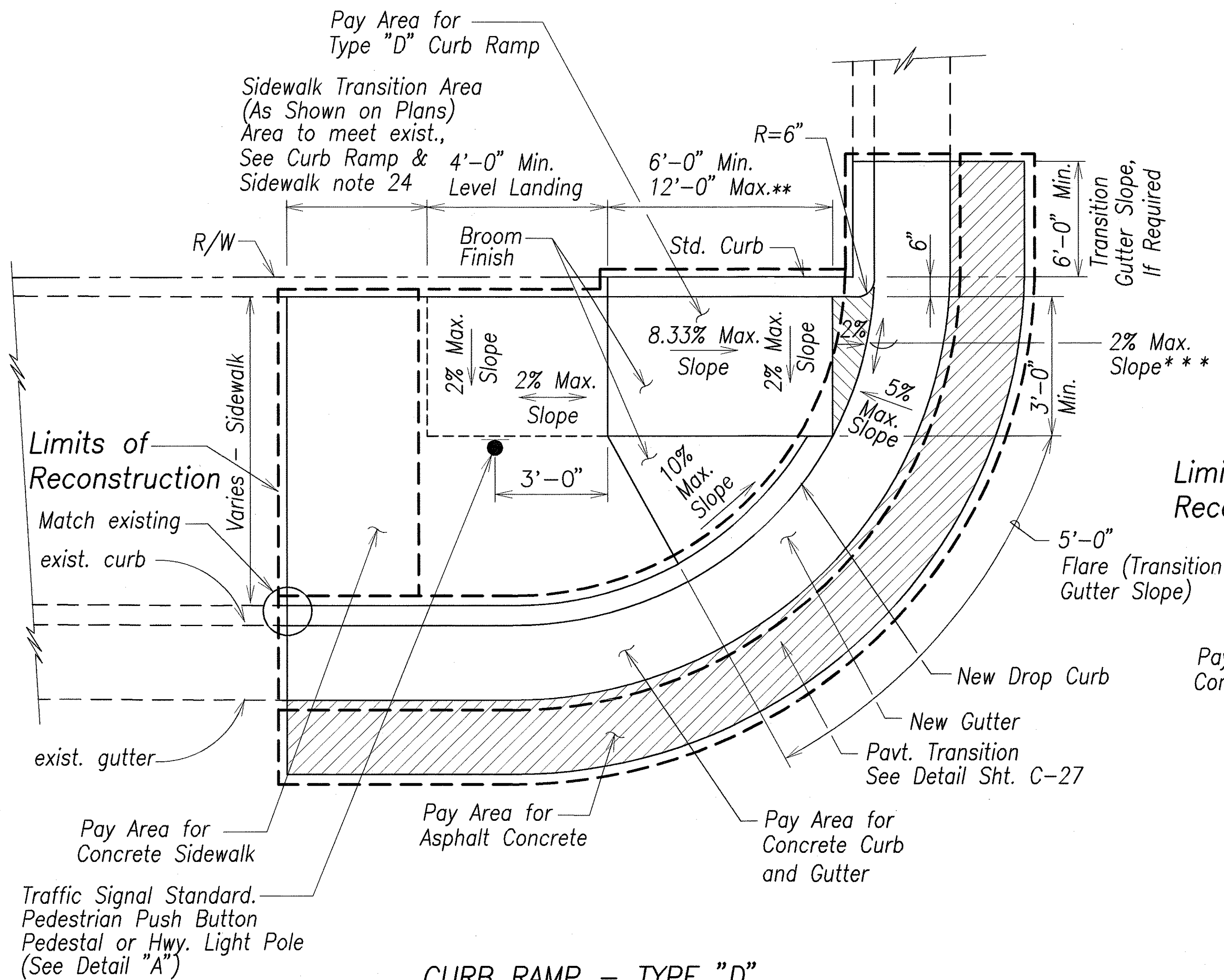
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SHEET No. C-19 OF 153 SHEETS

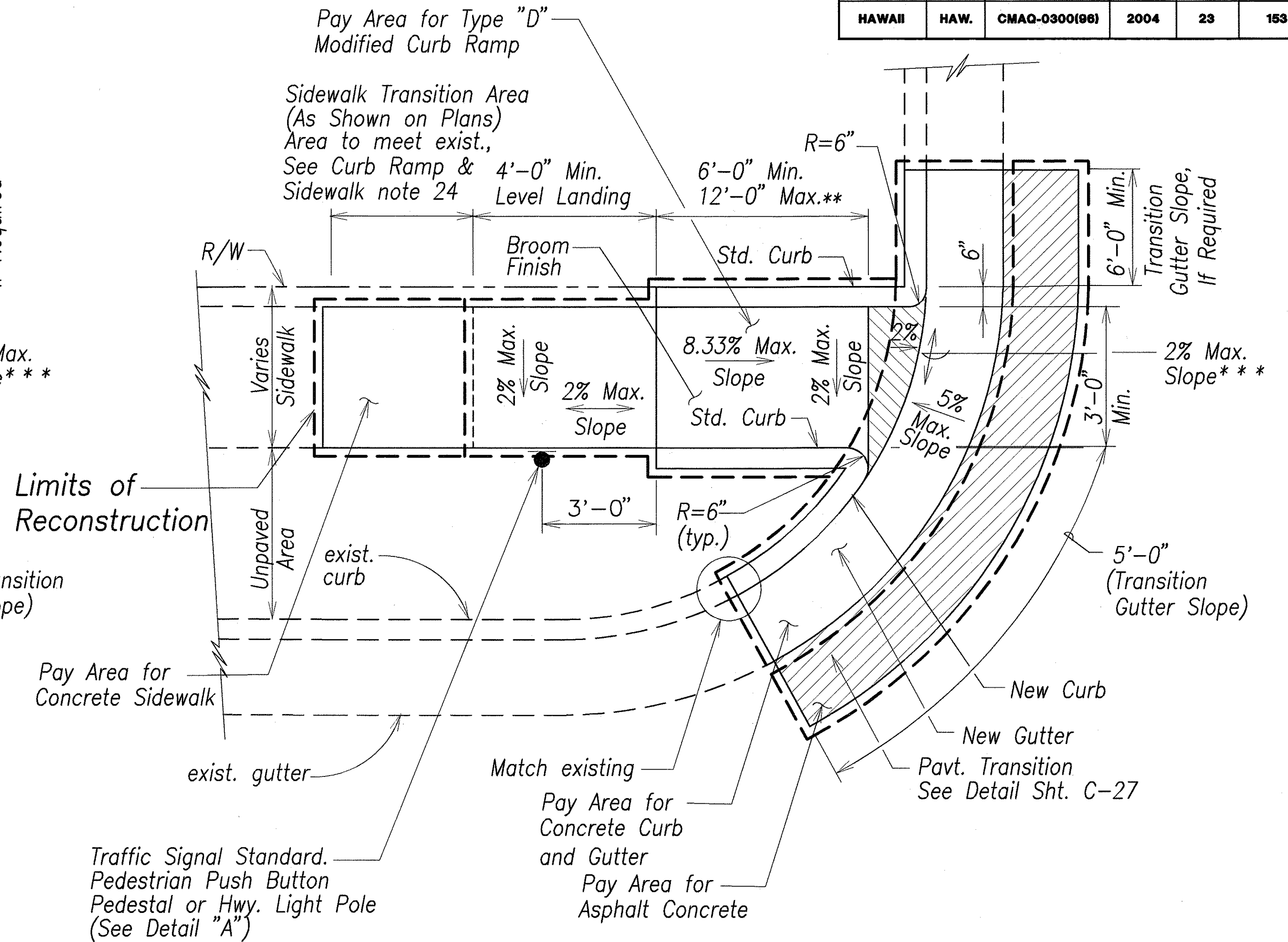
ORIGINAL PLAN	DATE
DRAWN BY	
TRACED BY	
CHECKED BY	
NOTED BY	
NO.	

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

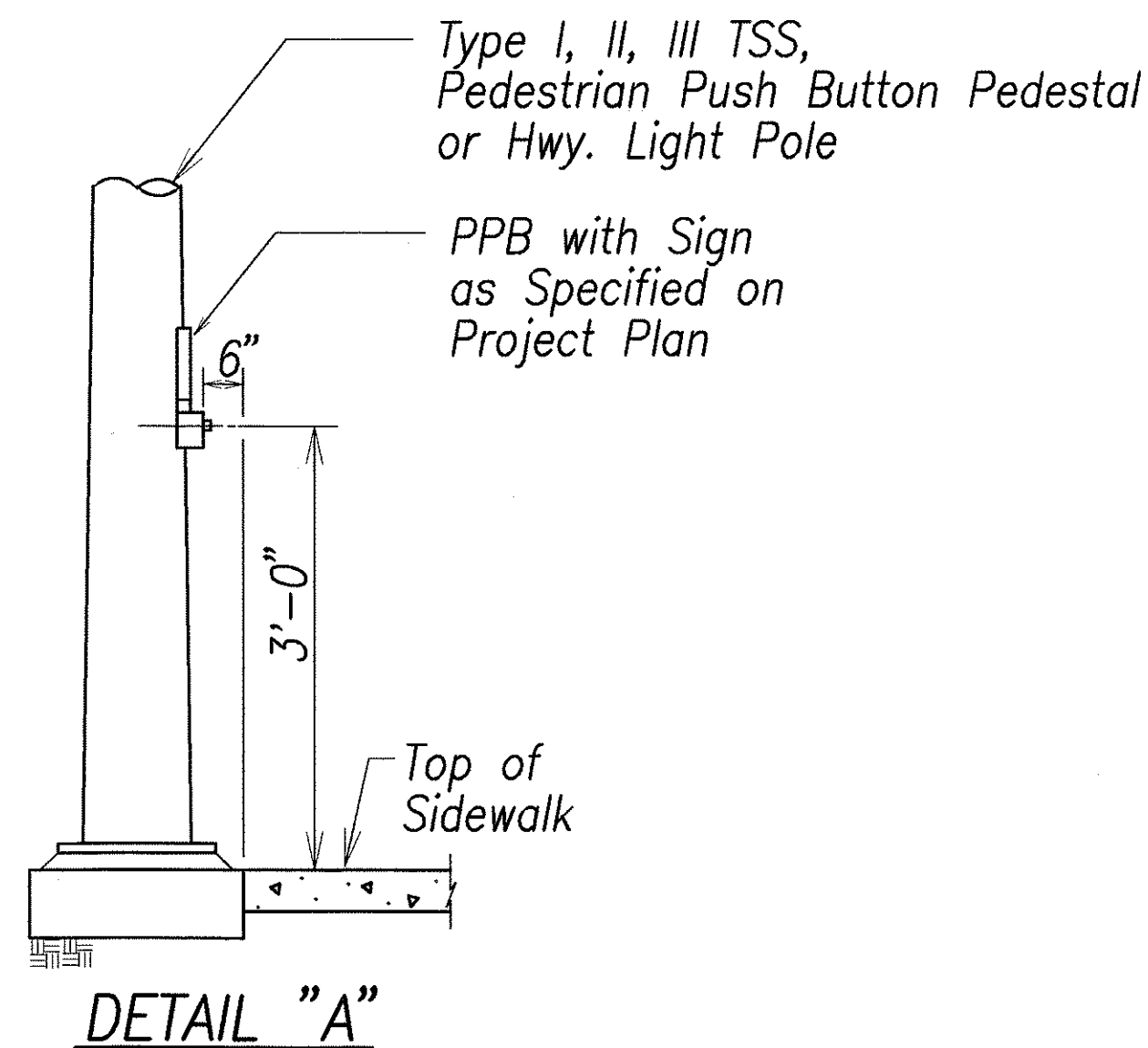
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(96)	2004	23	153



CURB RAMP - TYPE "D"



CURB RAMP - TYPE "D" MODIFIED



- * 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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Signature: *Greg H. Hiyaumoto* DATE: April 30, 2006

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

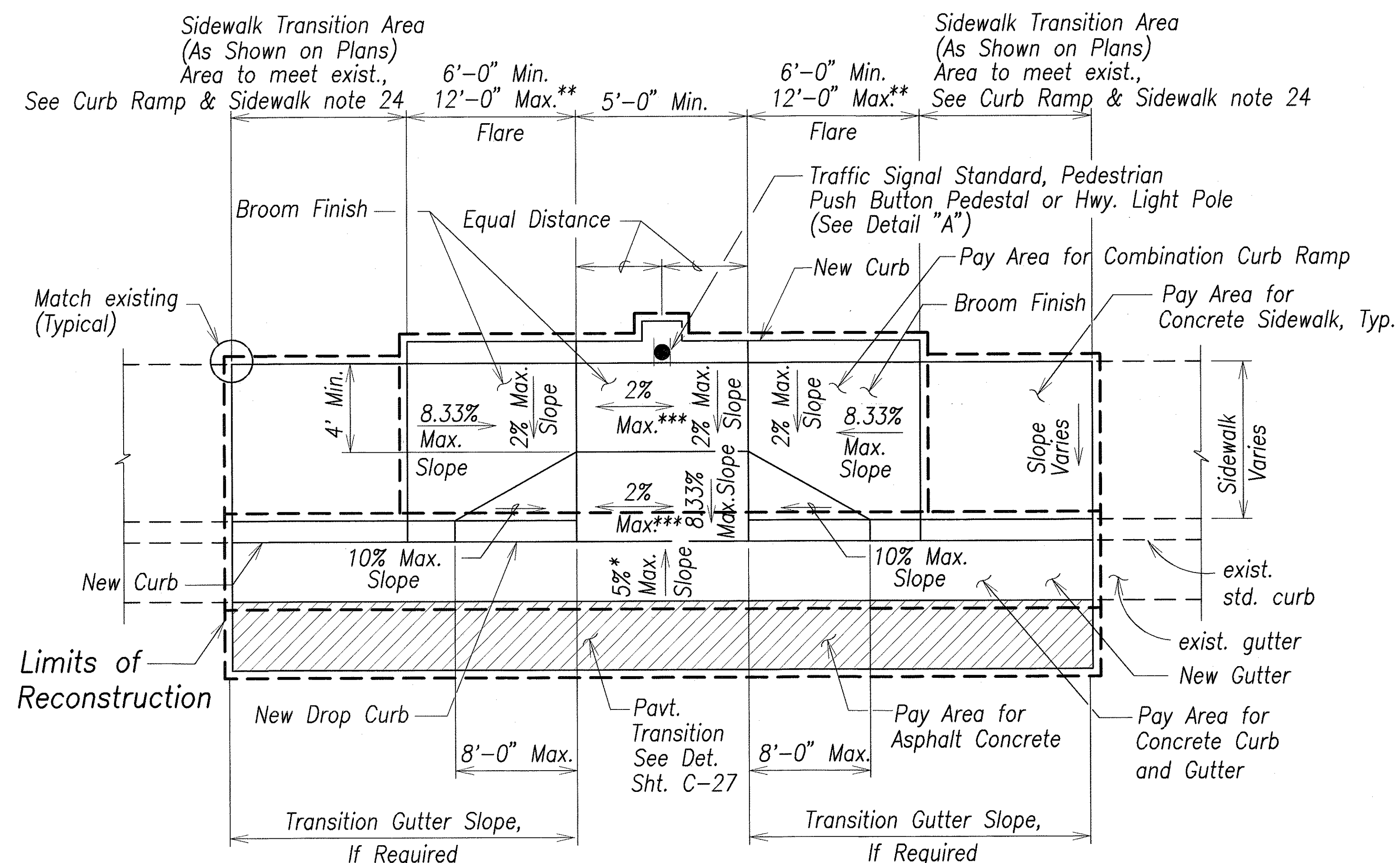
CURB RAMP DETAILS - 4

Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 5
Fed. Aid Proj. No. CMAQ-0300(96)

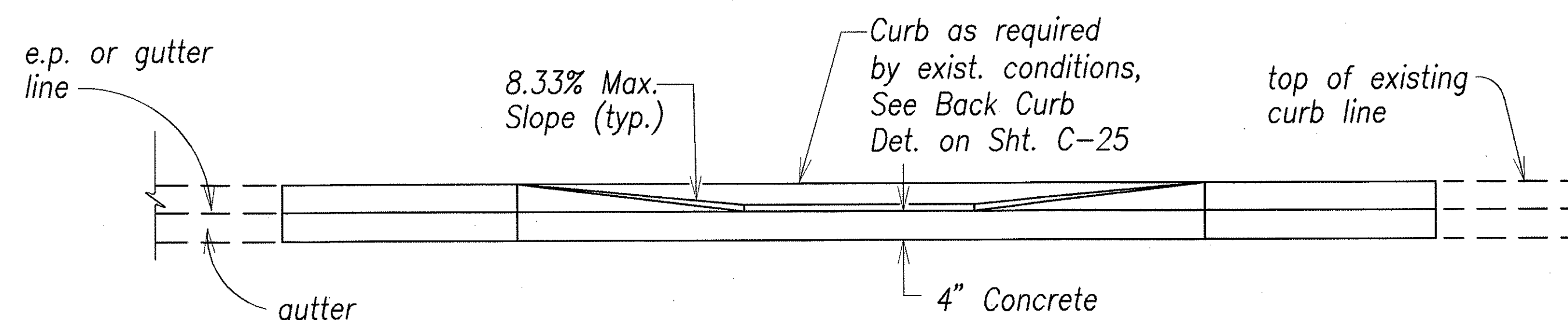
Scale: None Date: August 2004

SHEET No. C-22 OF 153 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(96)	2004	24	153



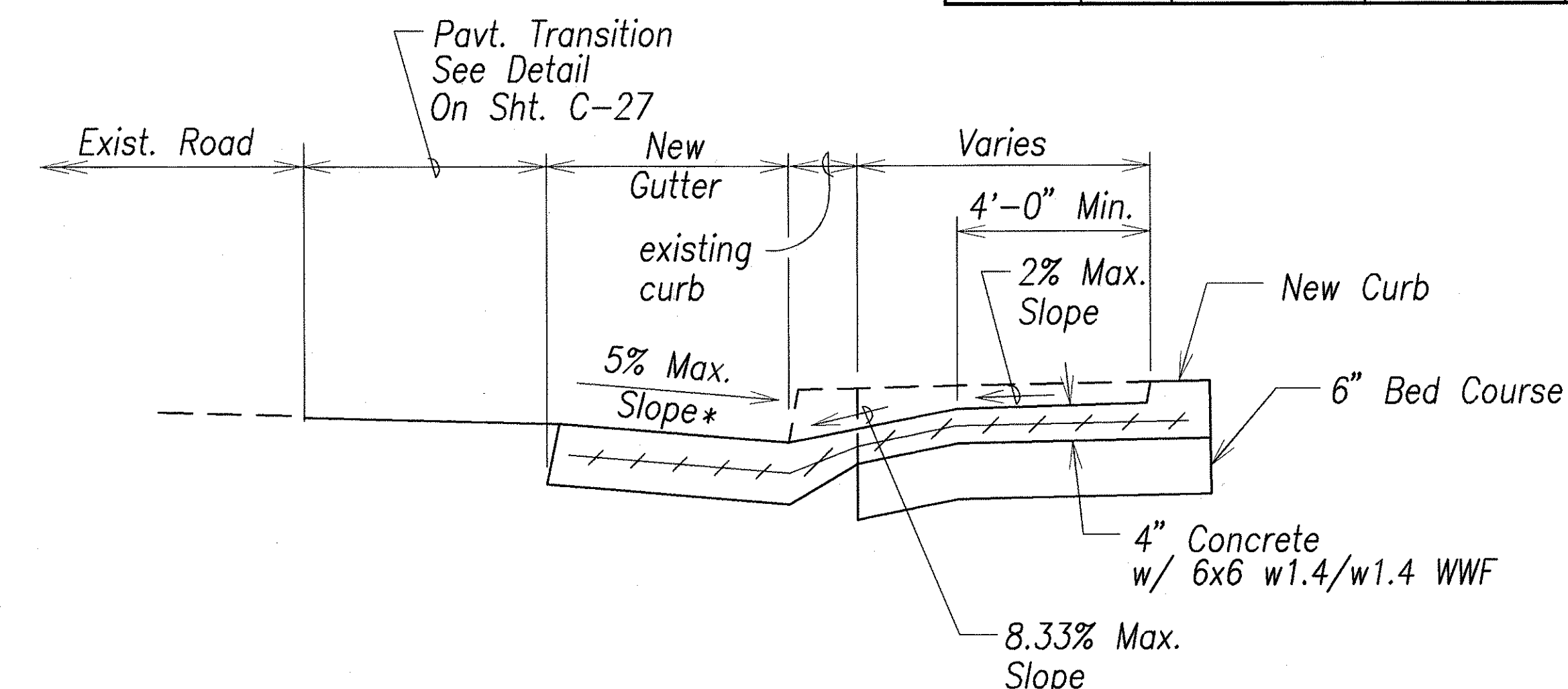
PLAN



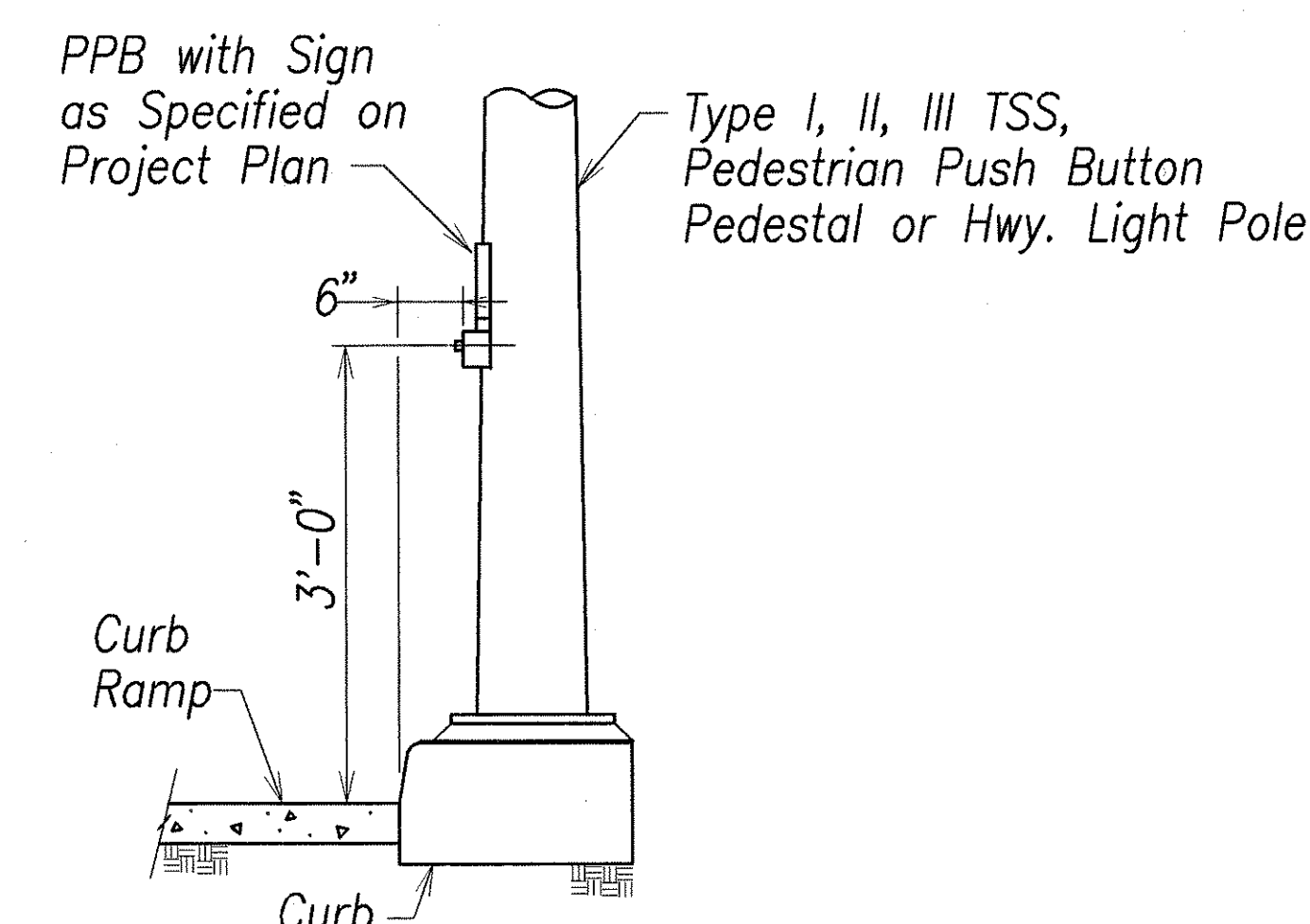
ELEVATION

- * 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

CURB RAMP - COMBINATION



TYPICAL SECTION



DETAIL "A"

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



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DATE: April 30, 2006

SIGNATURE: [Signature]

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STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

CURB RAMP DETAILS - 5

Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 5

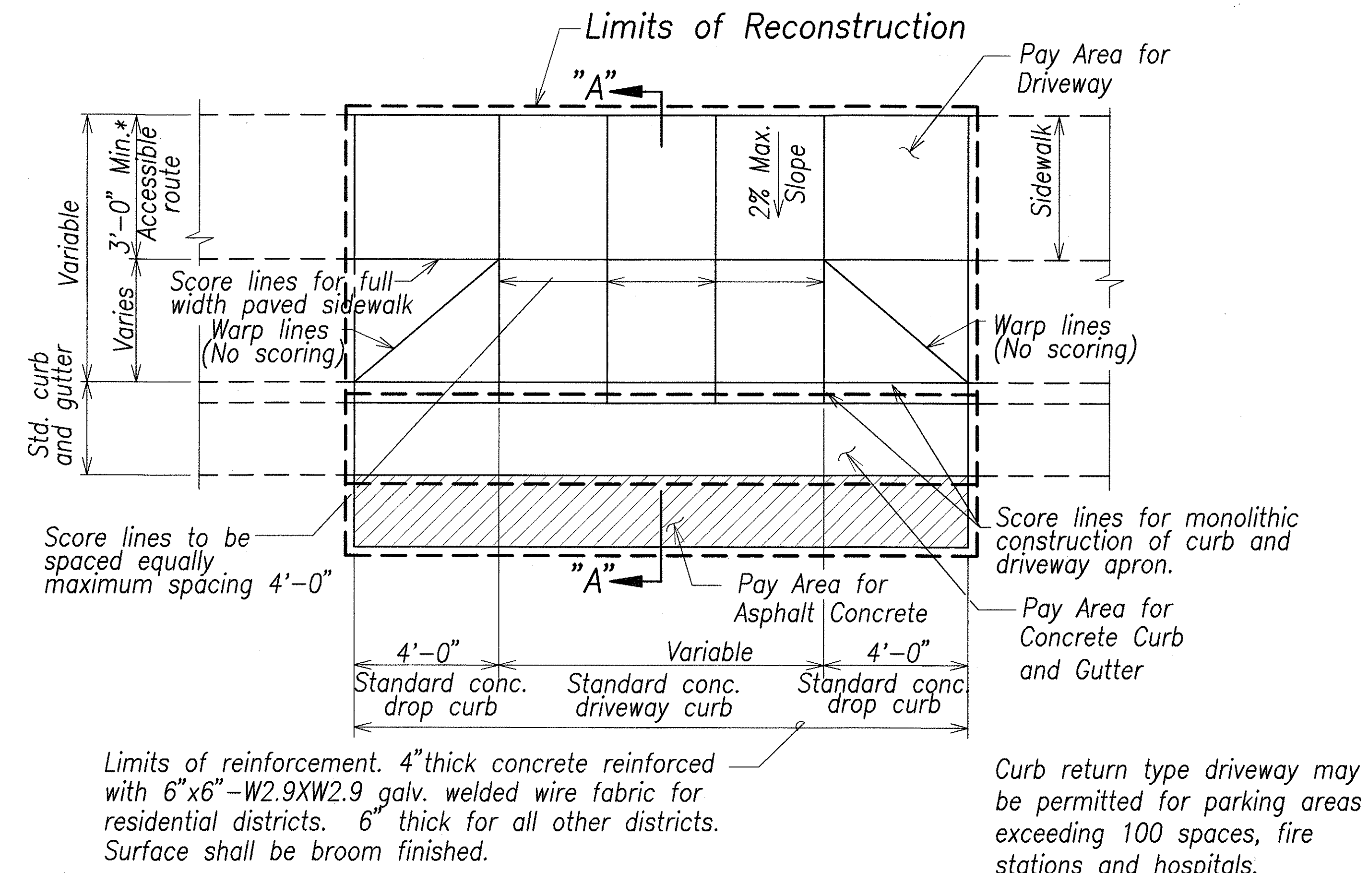
Fed. Aid Proj. No. CMAQ-0300(96)

Scale: None

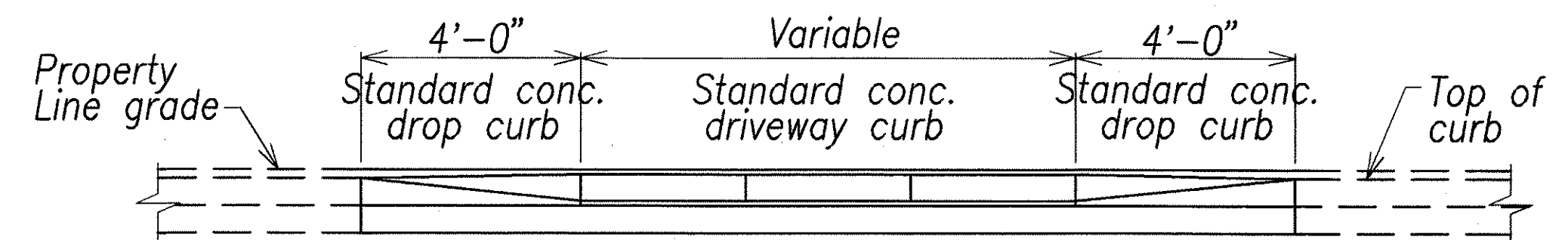
Date: August 2004

SHEET No. C-23 OF 153 SHEETS

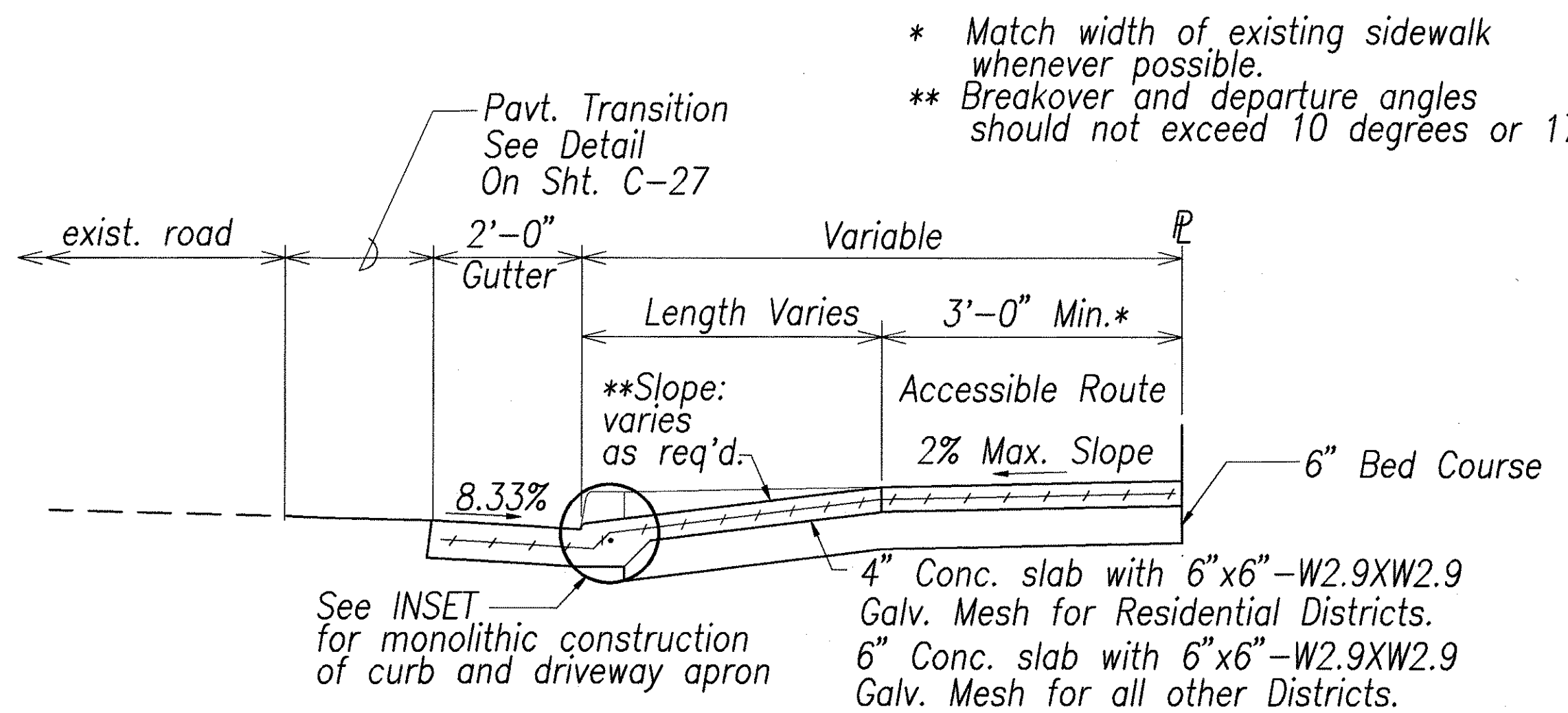
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(96)	2004	26	153



PLAN
NOT TO SCALE

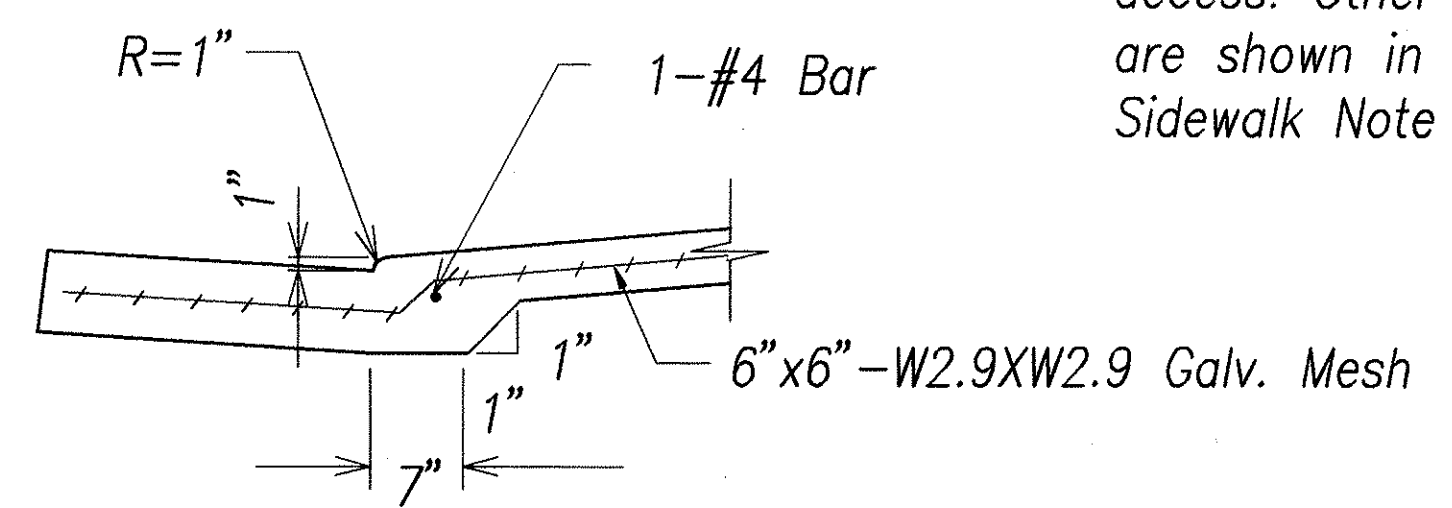


ELEVATION
NOT TO SCALE

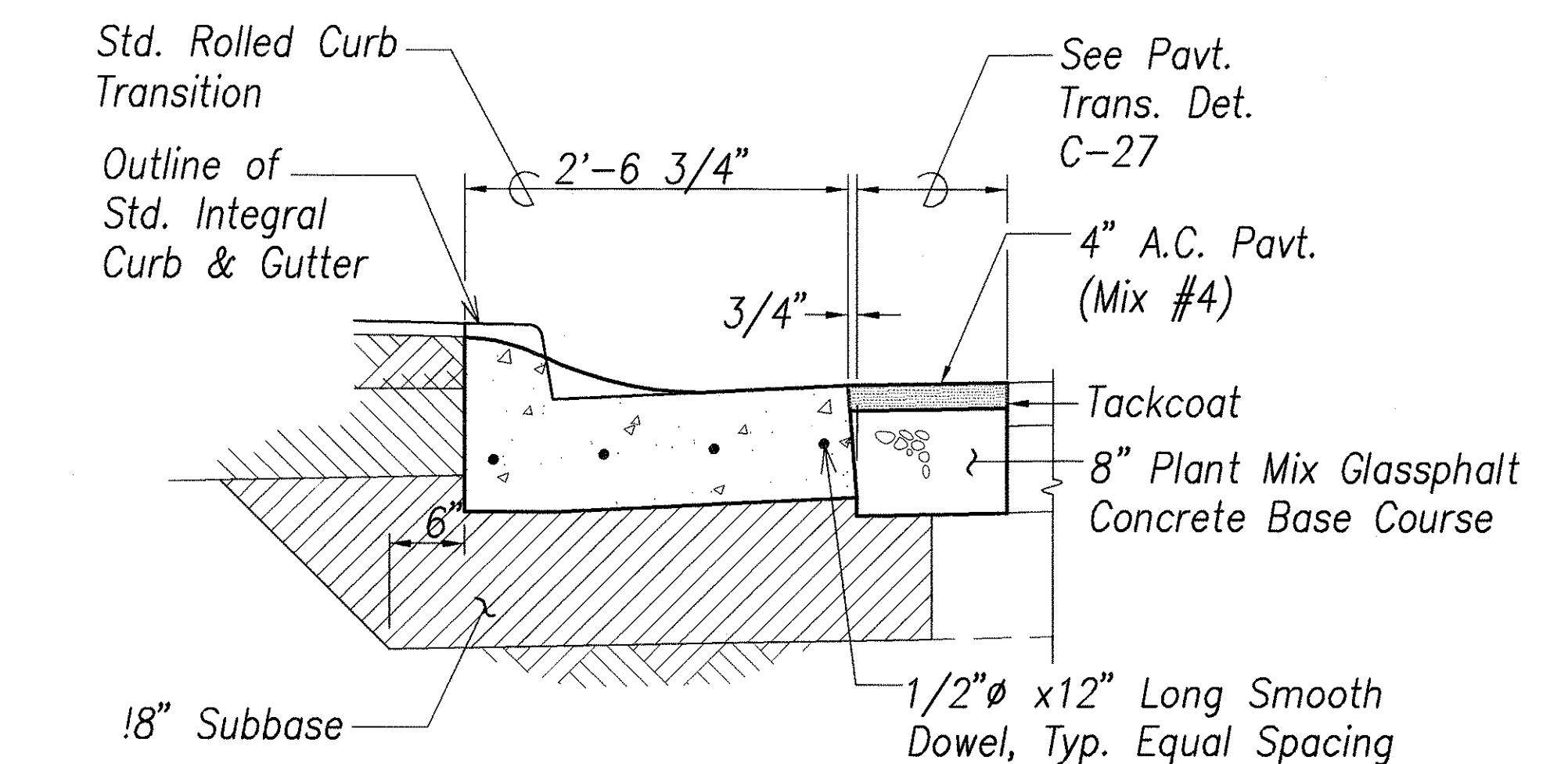


SECTION A-A
NOT TO SCALE

DRIVEWAY APRON



INSET
NOT TO SCALE



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 .

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

GREG H. HIYAKUNO
LICENSED PROFESSIONAL ENGINEER
No. 6682-C
HAWAII, U.S.A.

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DATE April 30, 2006

SIGNATURE [Signature]

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRIVEWAY APRON

Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 5

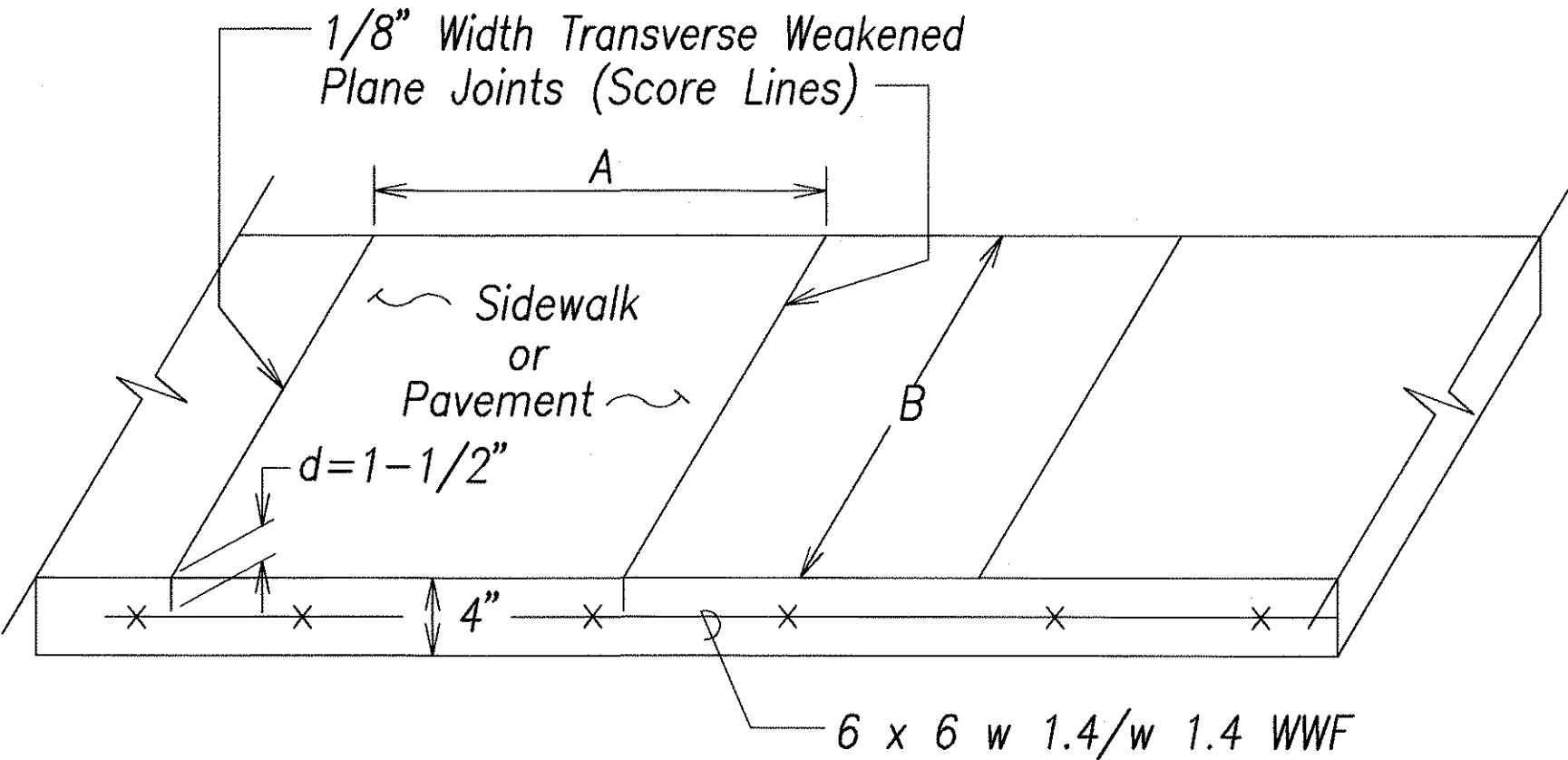
Fed. Aid Proj. No. CMAQ-0300(96)

Scale: None Date: August 2004

SHEET No. C-25 OF 153 SHEETS

26

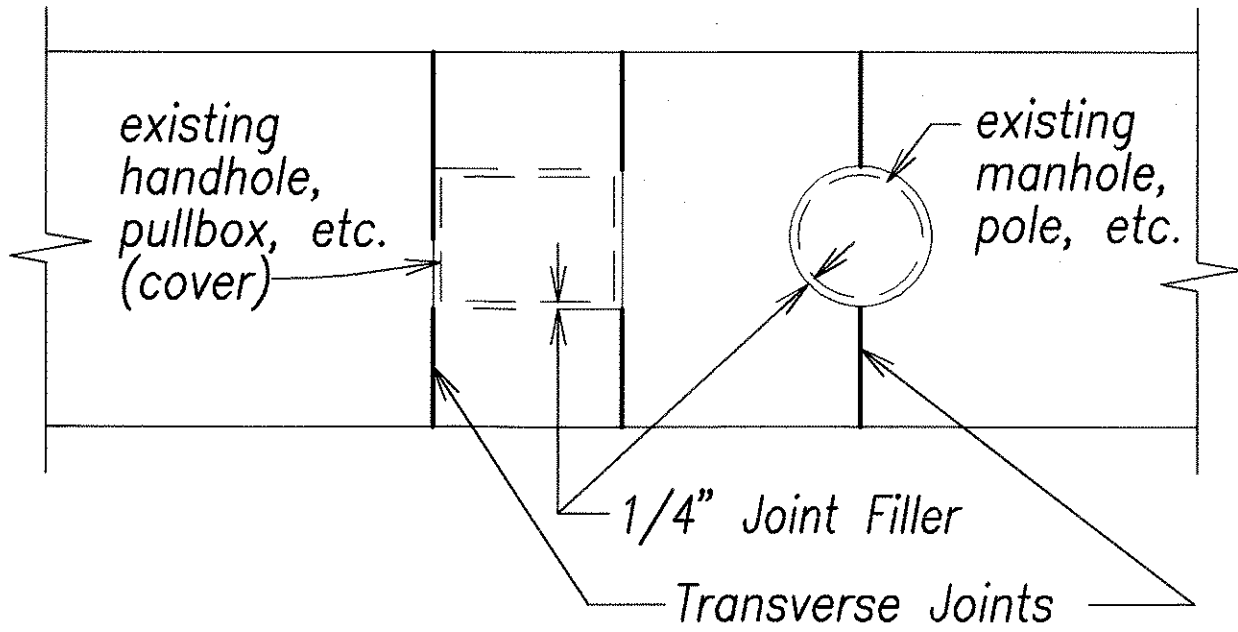
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(96)	2004	27	153



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

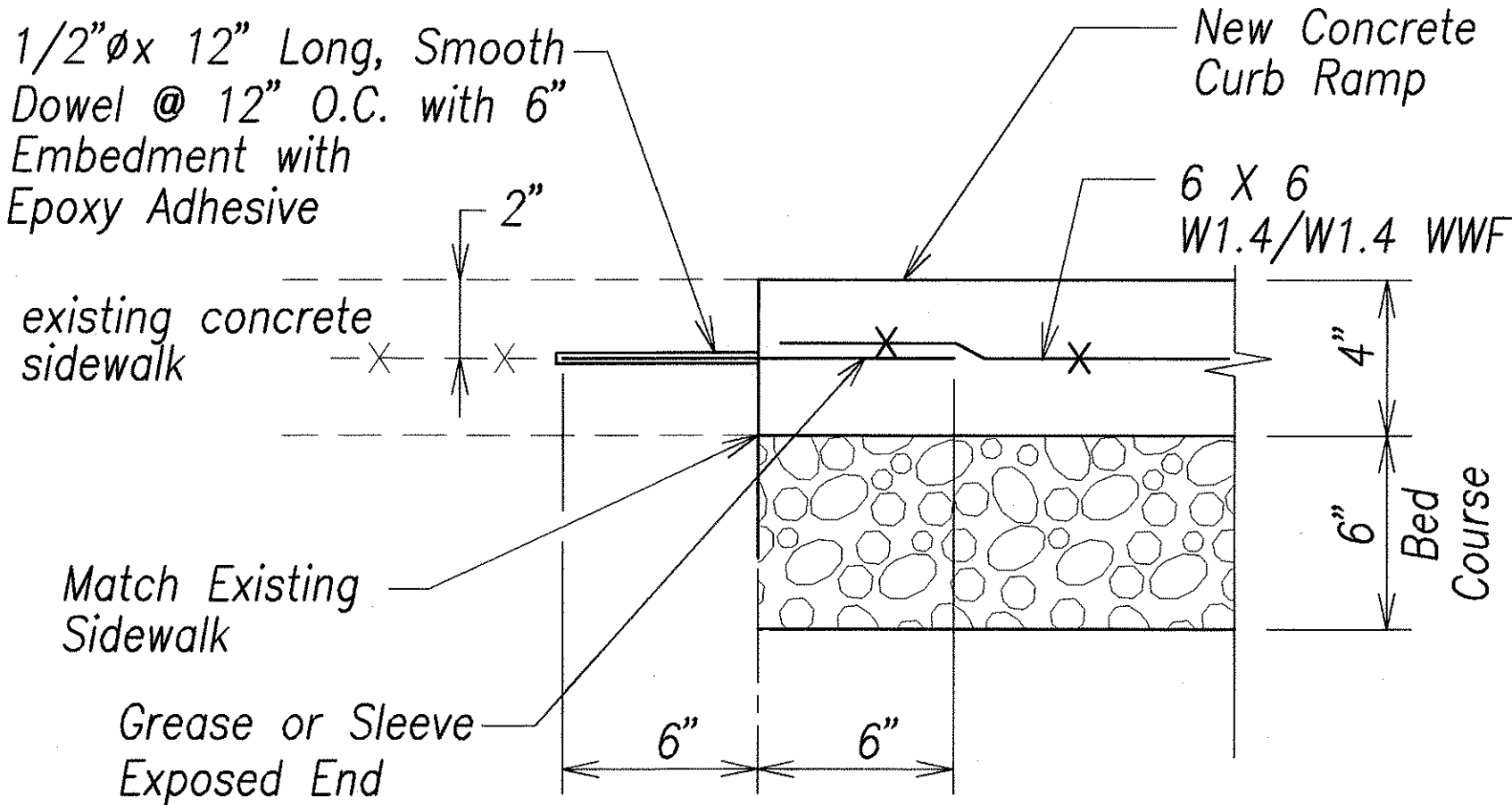
SIDEWALK SCORE LINE DETAIL

Not to scale



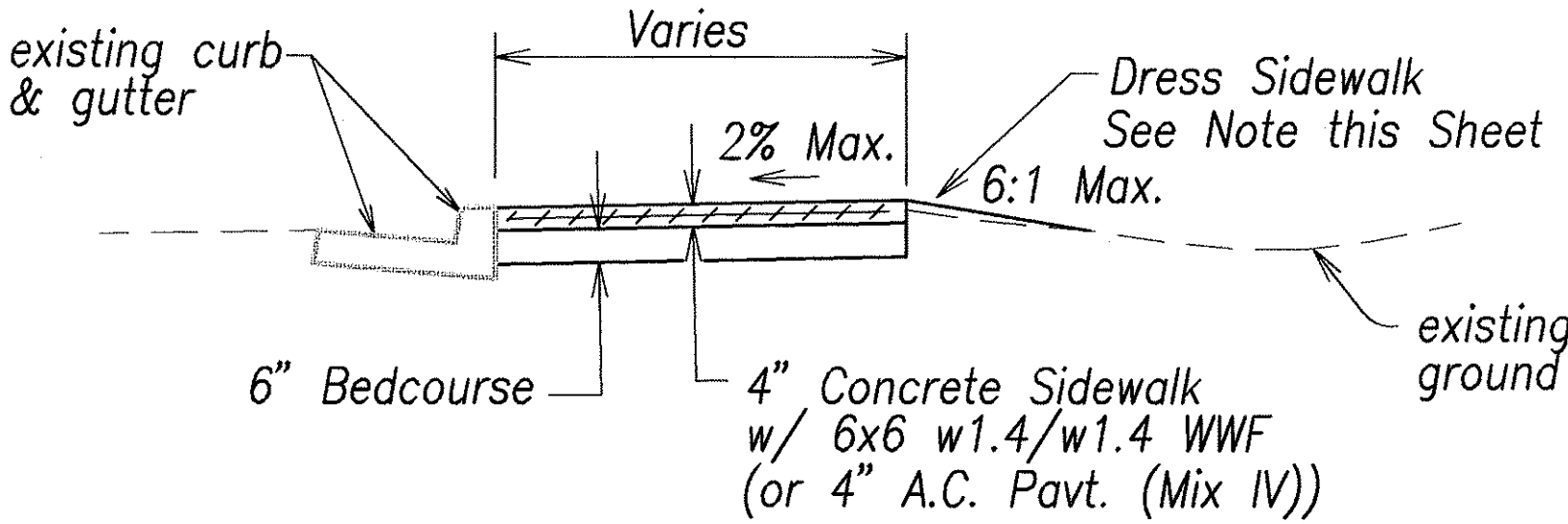
SIDEWALK ISOLATION JOINT DETAIL

Not to scale



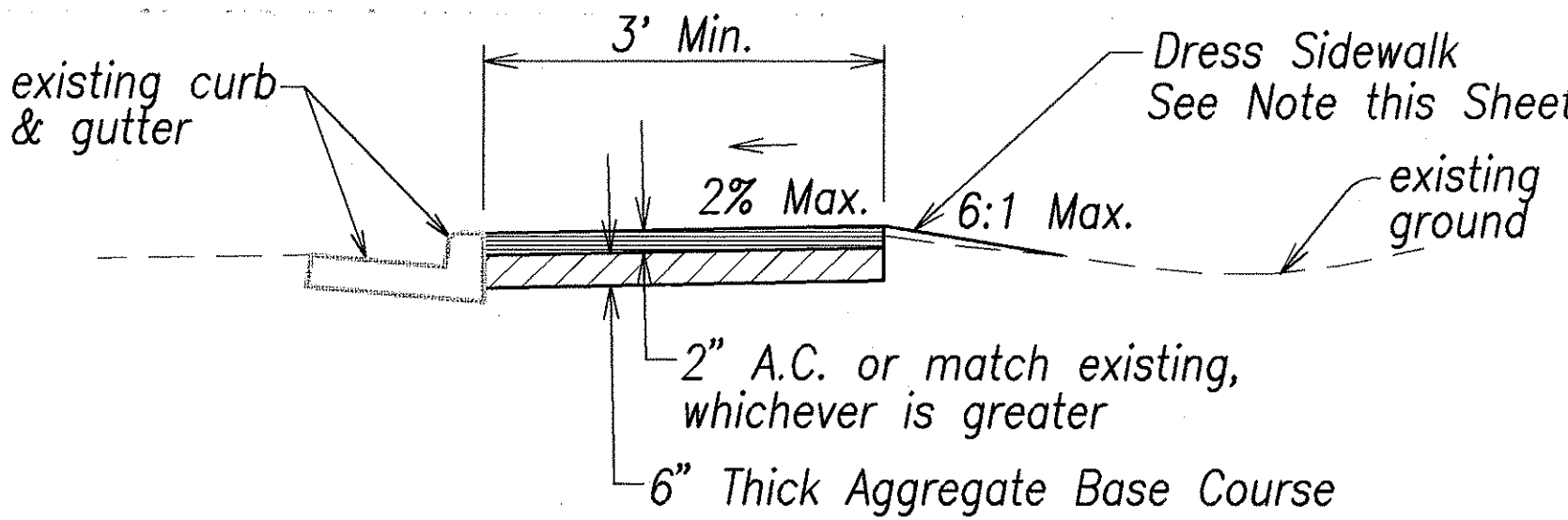
TYPICAL CONSTRUCTION JOINT AT EXISTING SIDEWALK

Not to scale



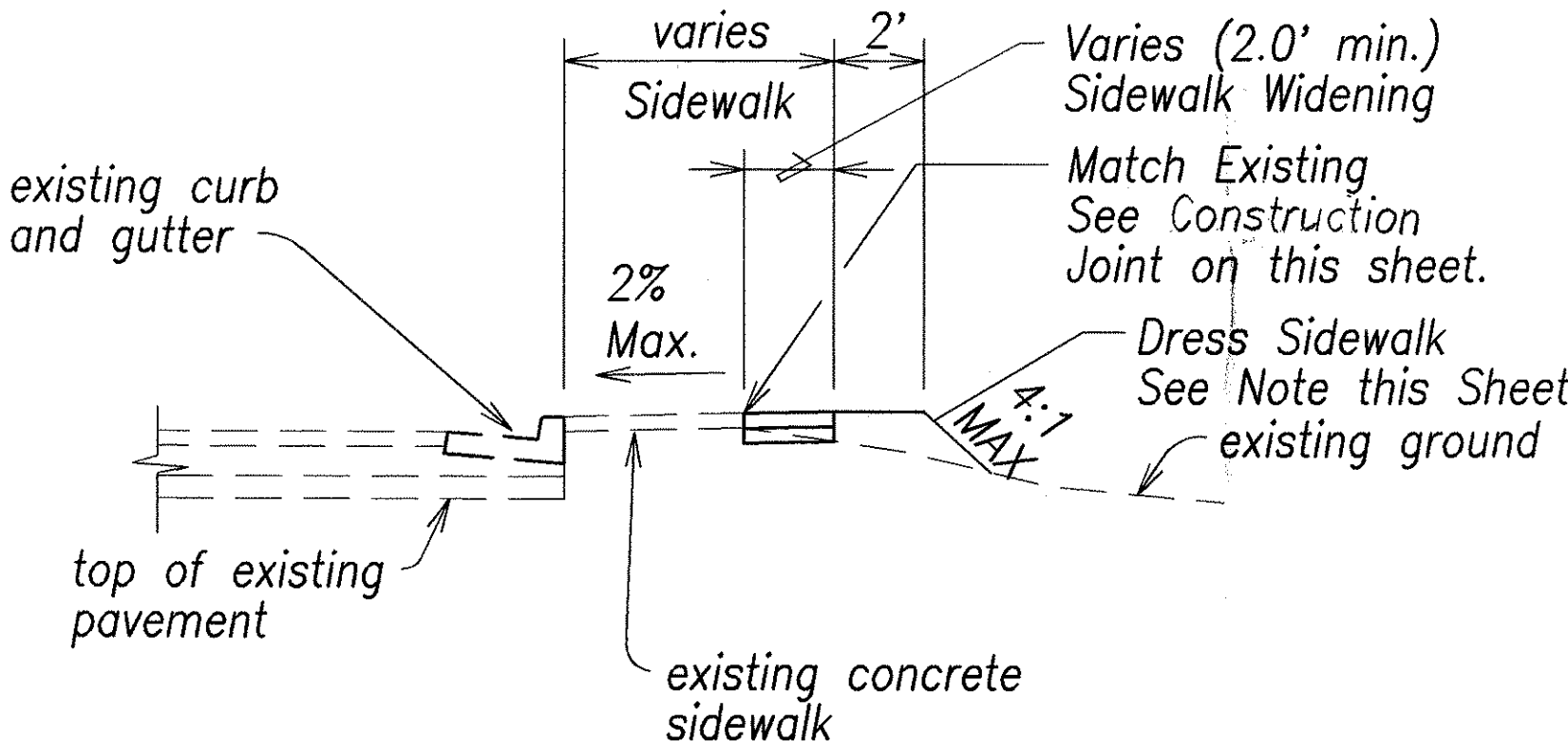
SIDEWALK DETAIL

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.



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**STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION**

SIDEWALK DETAILS

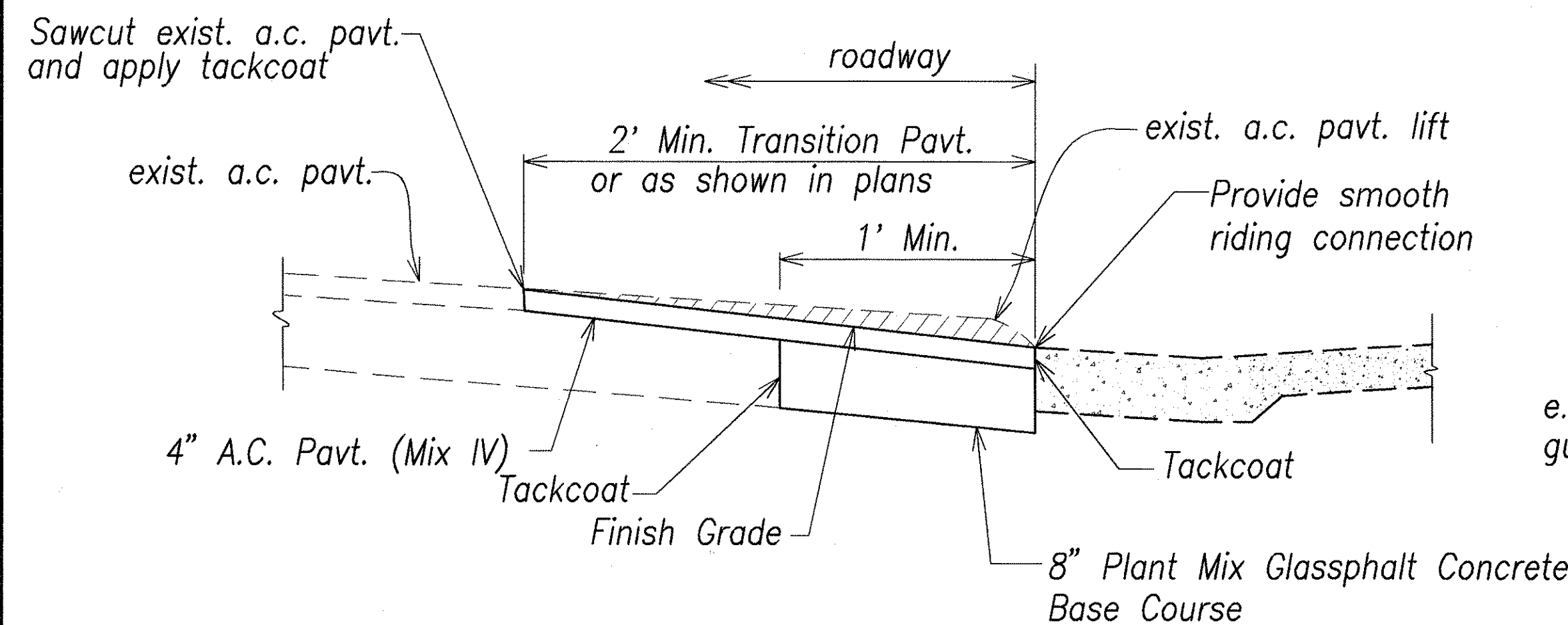
*Pedestrian Facilities & ADA Compliance
at Various Locations on Oahu, Unit 5
Fed. Aid Proj. No. CMAQ-0300(96)*

Scale: None

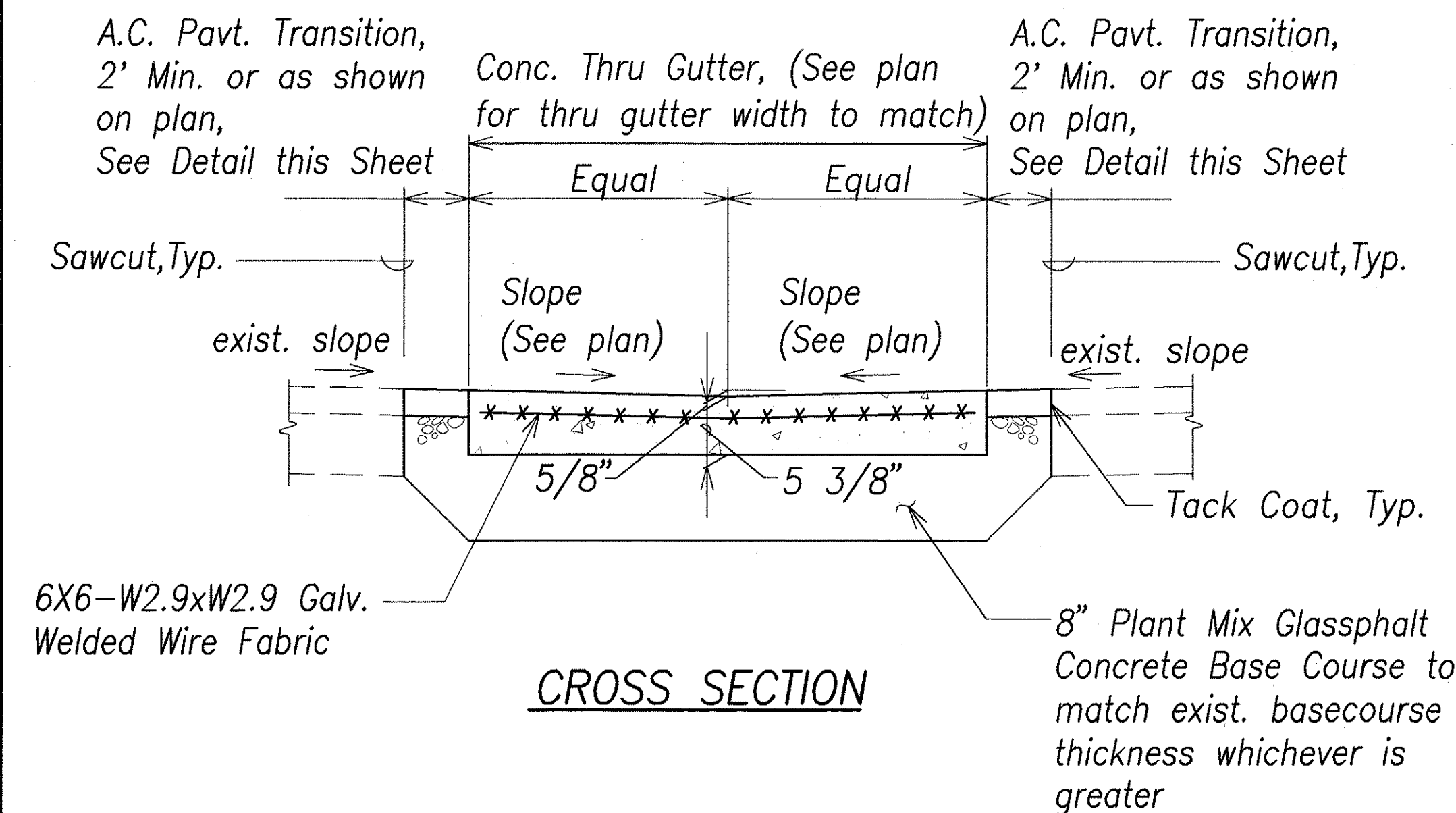
Date: August 2004

SHEET No. C-26 OF 153 SHEETS

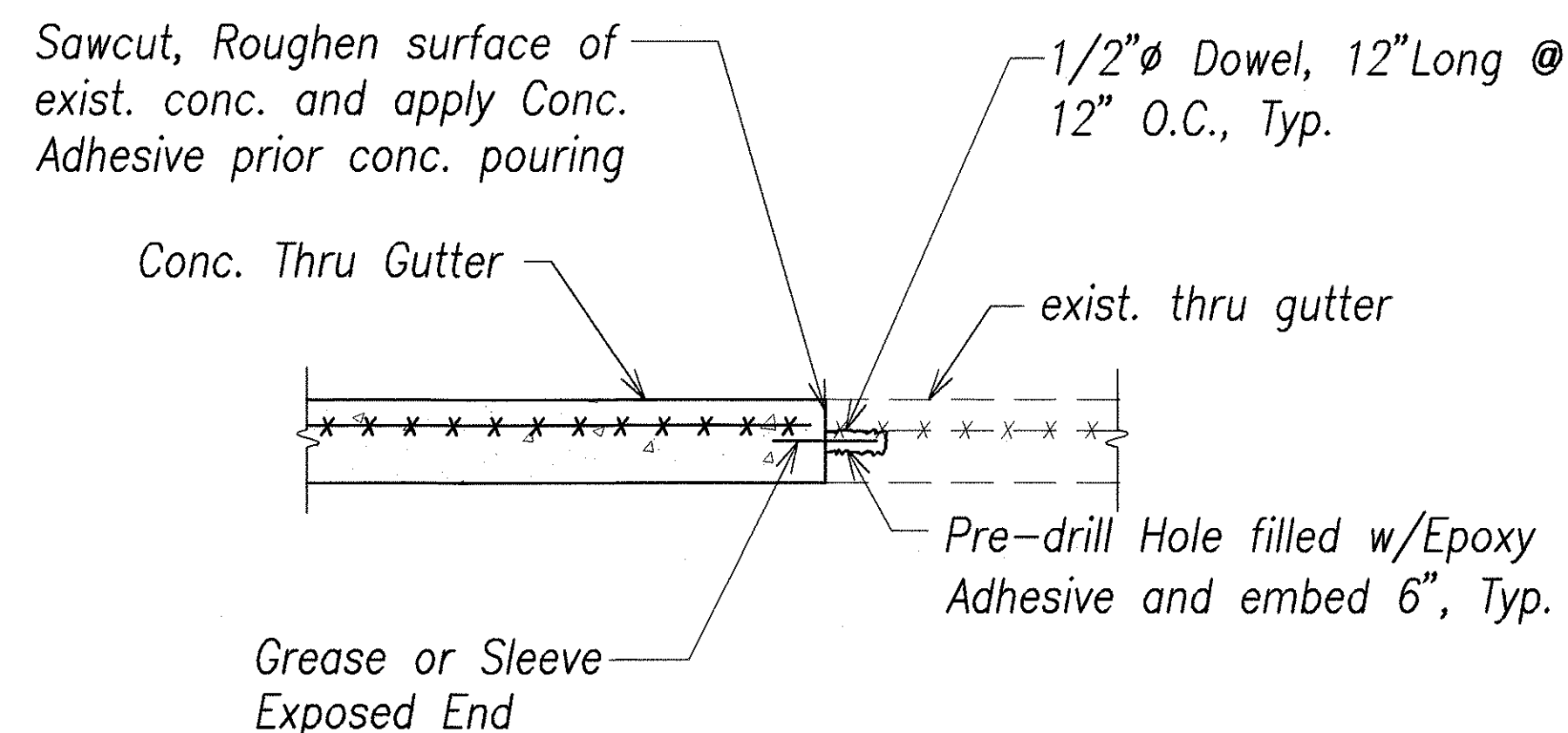
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(96)	2004	28	153



PAVEMENT TRANSITION DETAIL
Not to scale

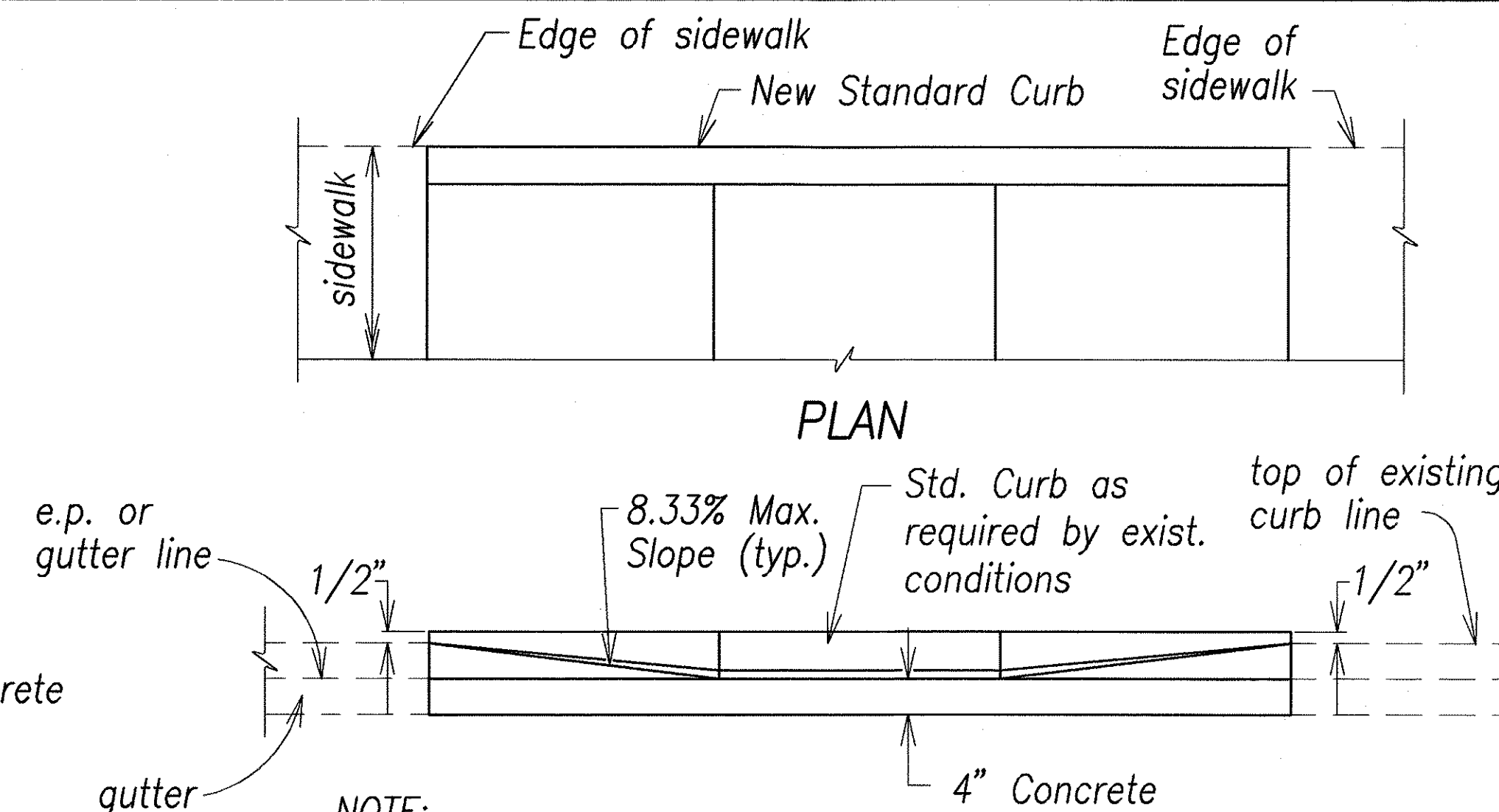


CROSS SECTION



LONGITUDINAL SECTION

CONCRETE THRU GUTTER CONNECTION DETAIL
Not to scale

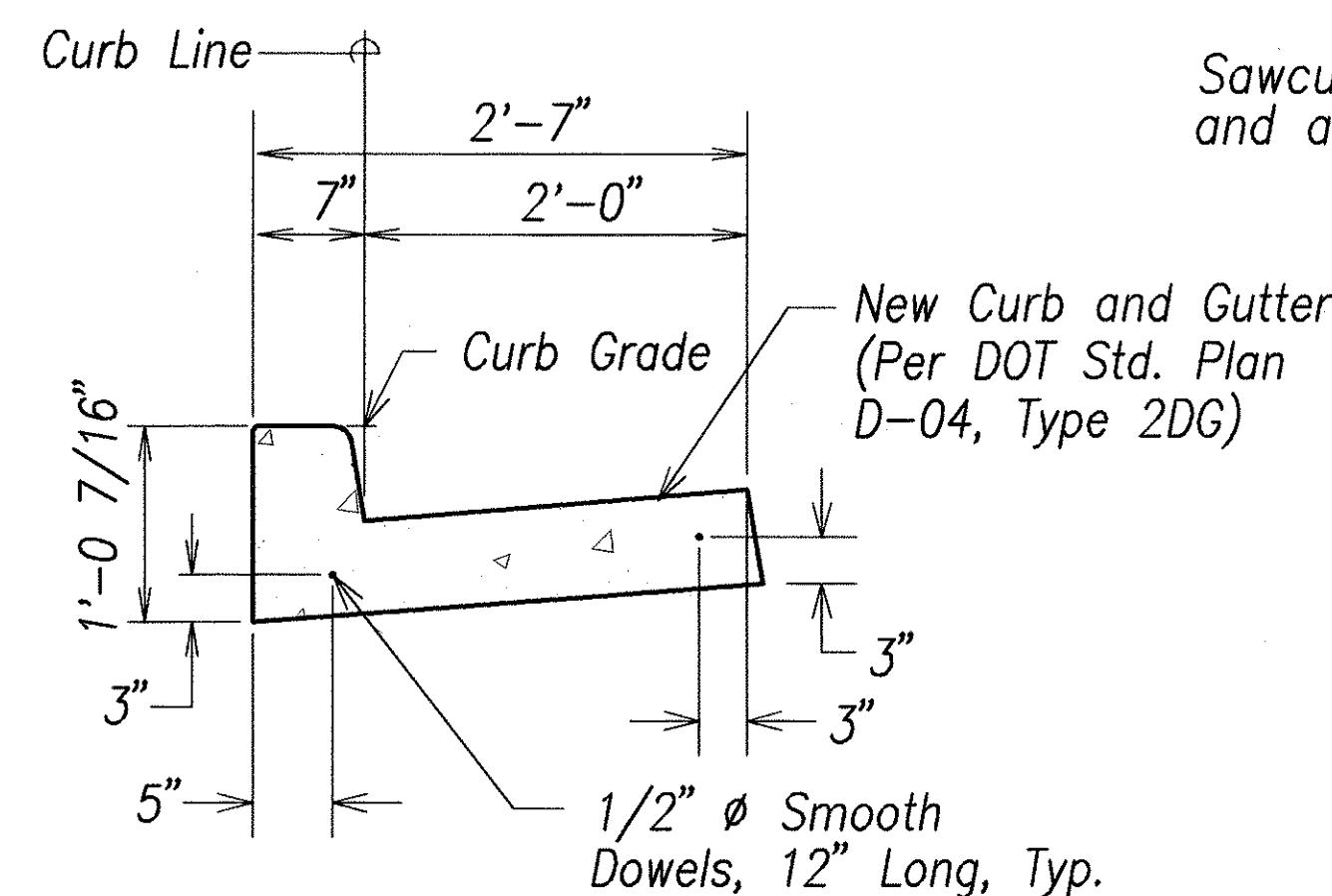


NOTE:

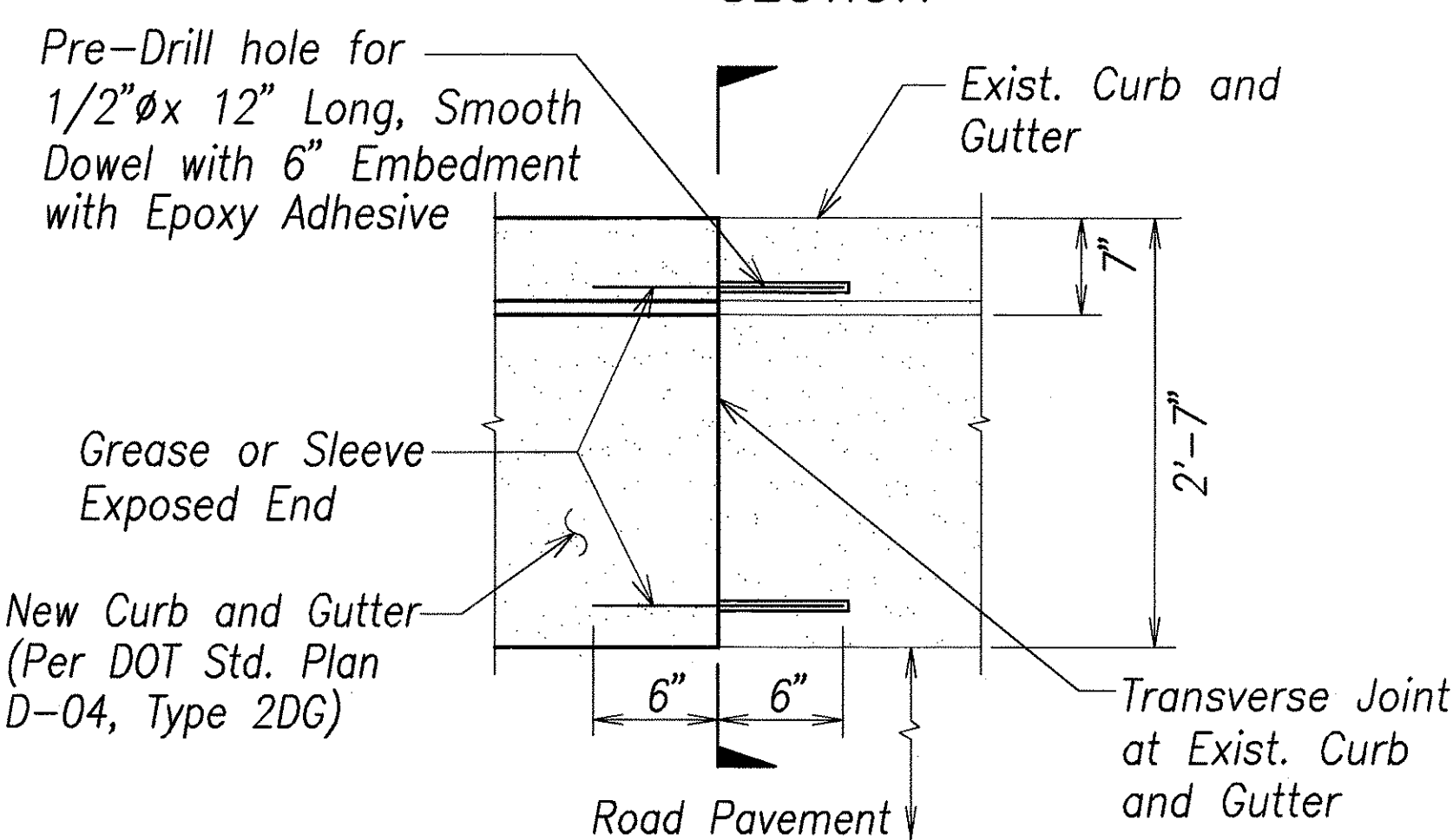
This detail can be used in situations where the edge of sidewalk cannot be flush with the face of (back) curb due to right of way restrictions.

**ELEVATION
DETAIL - BACK CURB**
Not to scale

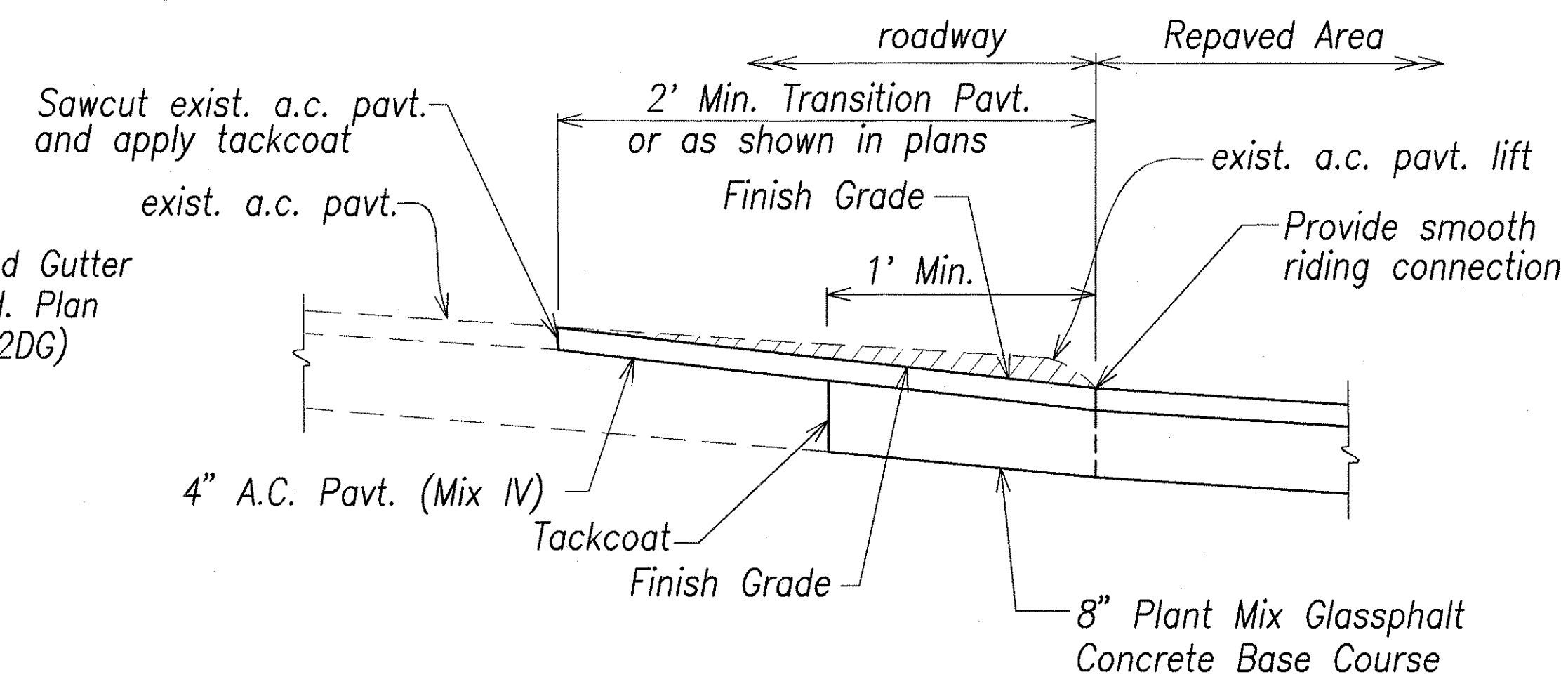
NOTE:
All curb ramps shall be reinforced.



SECTION



**PLAN
CURB AND GUTTER CONNECTION**
Not to scale



PAVEMENT RESTORATION DETAIL
Not to scale

DESIGNED BY	DATE
CHECKED BY	
NOTED BY	
QUANTITIES BY	
NO.	



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

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

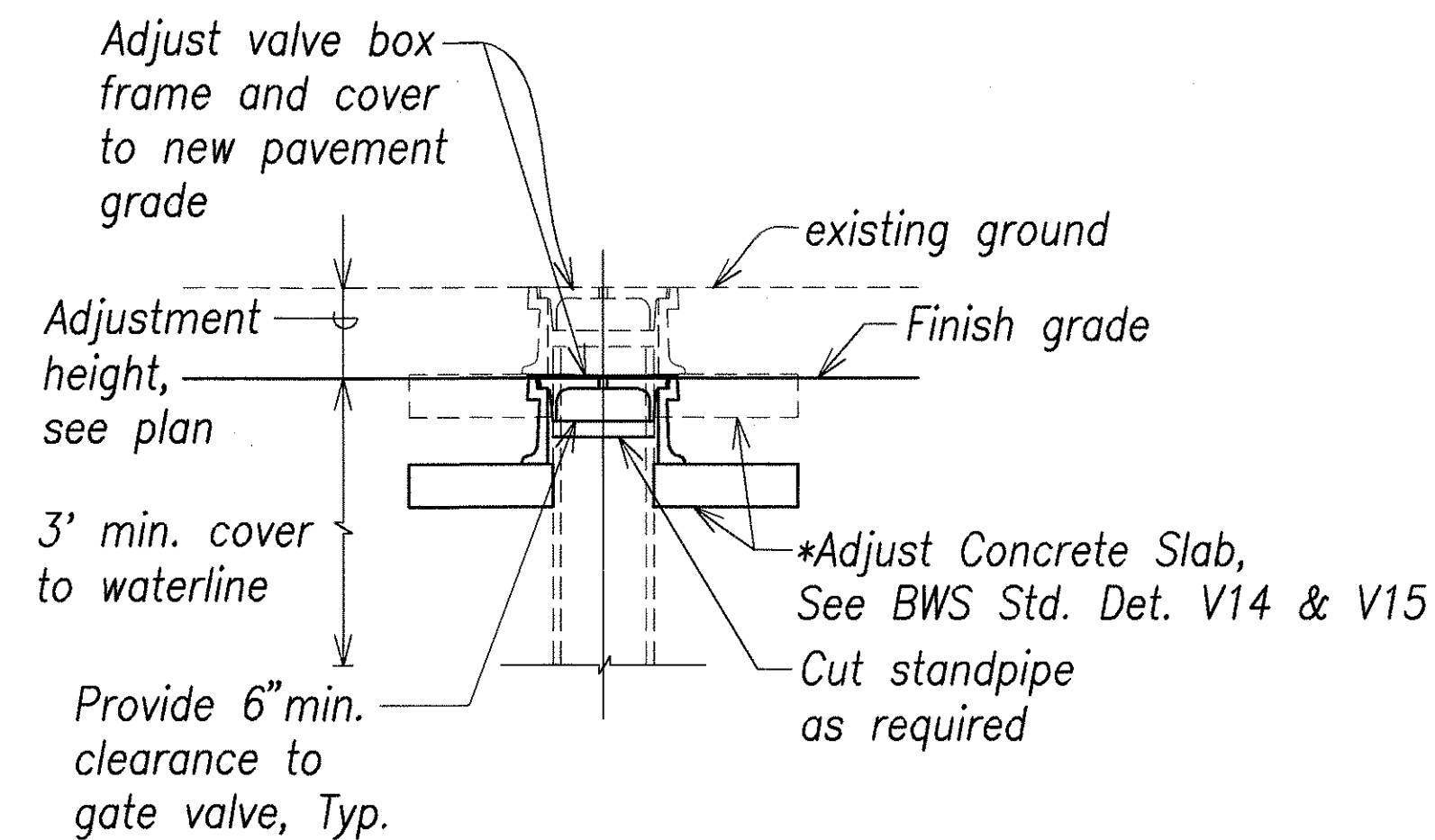
MISCELLANEOUS DETAILS

Pedestrian Facilities & ADA Compliance at Various Locations on Oahu, Unit 5
Fed. Aid Proj. No. CMAQ-0300(96)

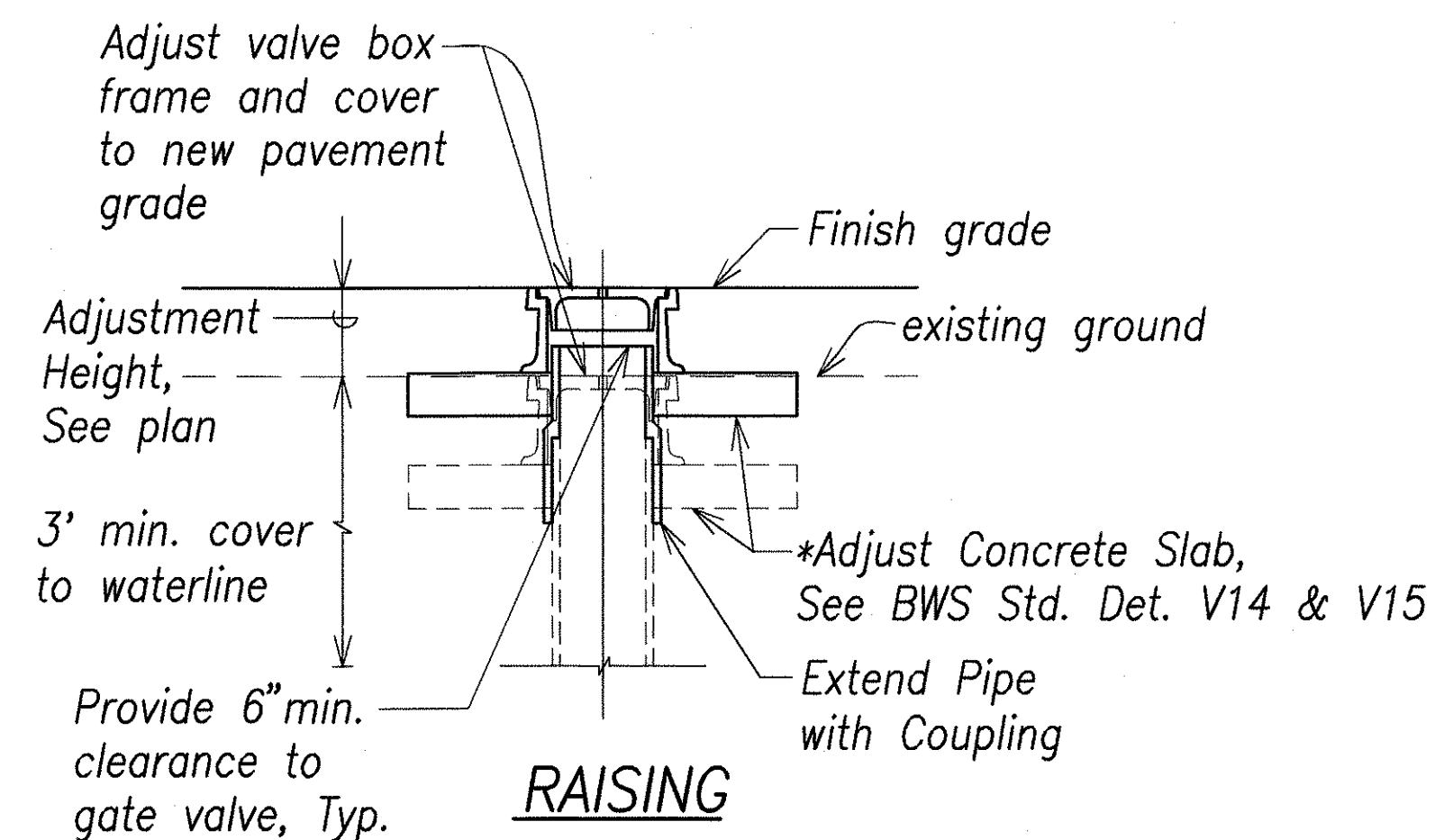
Scale: None Date: August 2004

SHEET No. C-27 OF 153 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(96)	2004	29	153



LOWERING

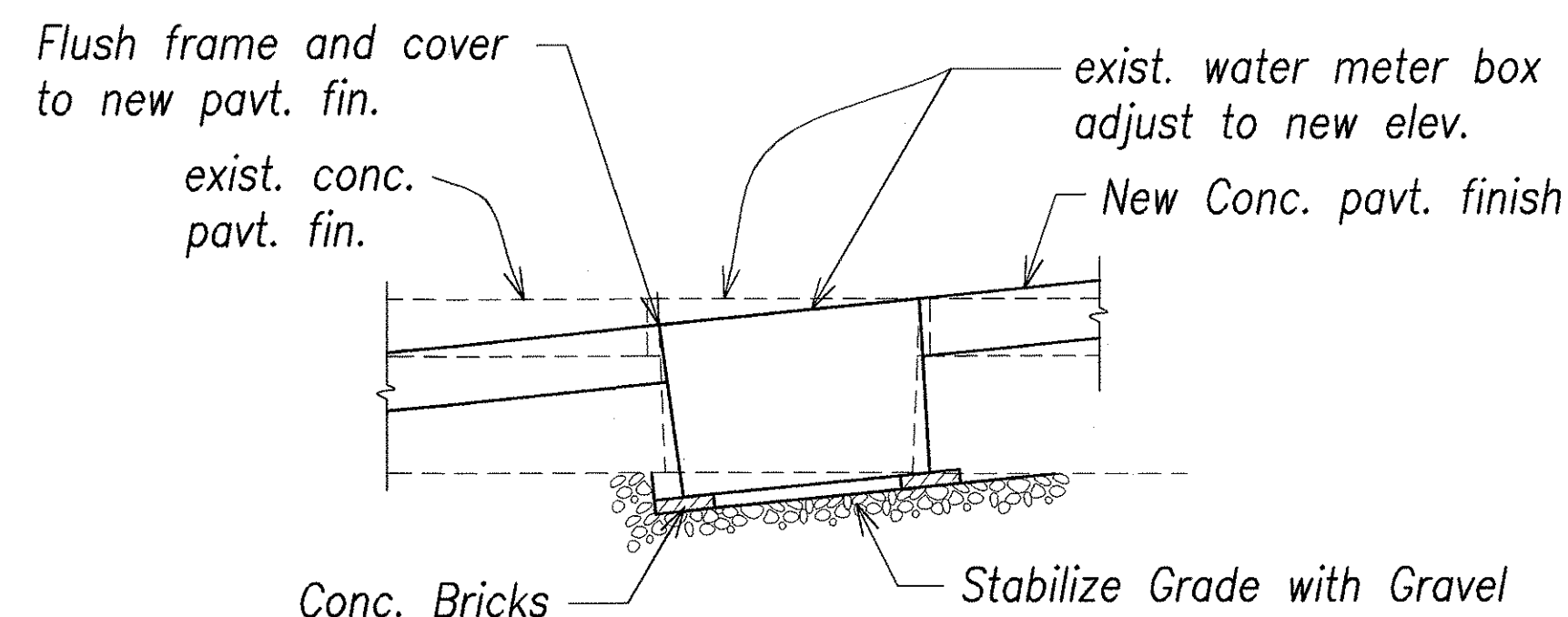


RAISING

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

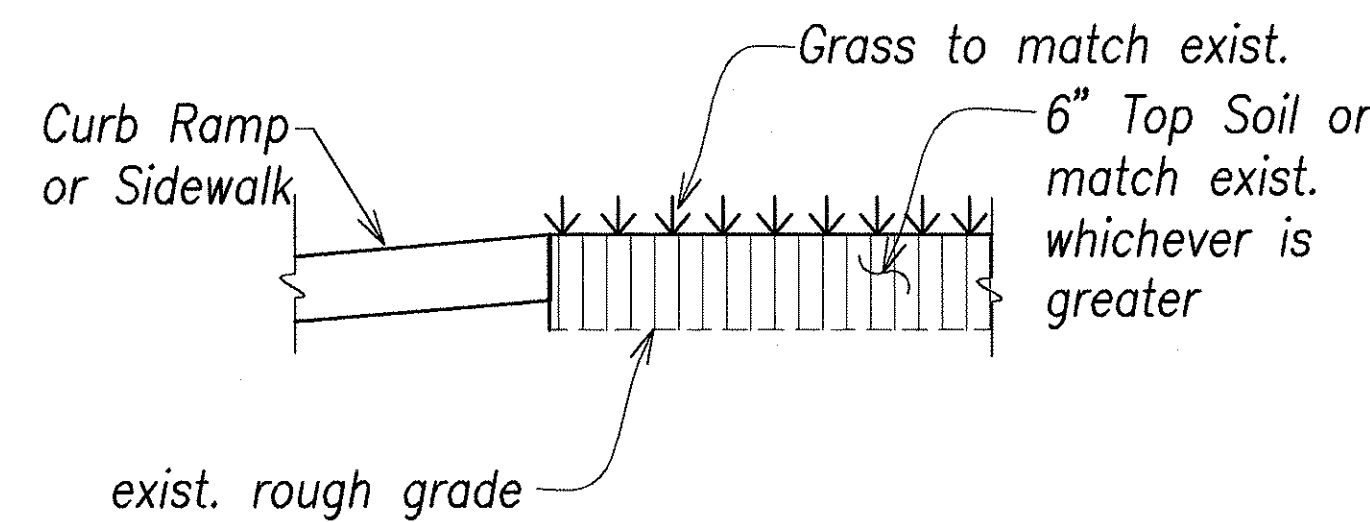
ADJUSTMENT OF VALVE BOX

Not to scale



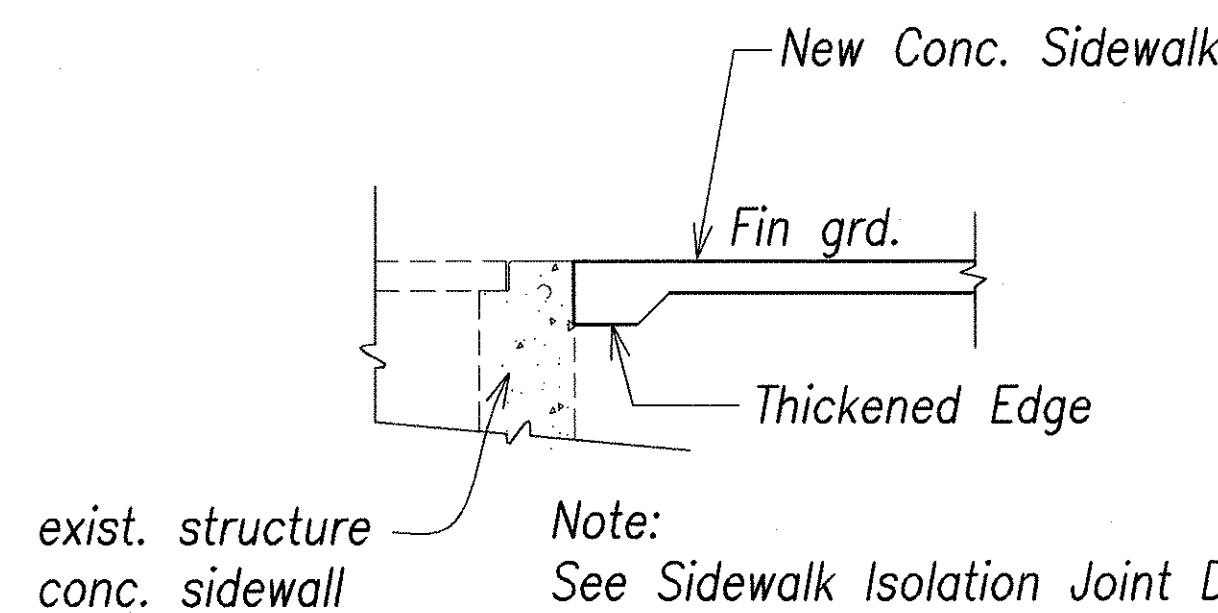
WATER METER FRAME AND COVER ADJUSTMENT

Not to scale



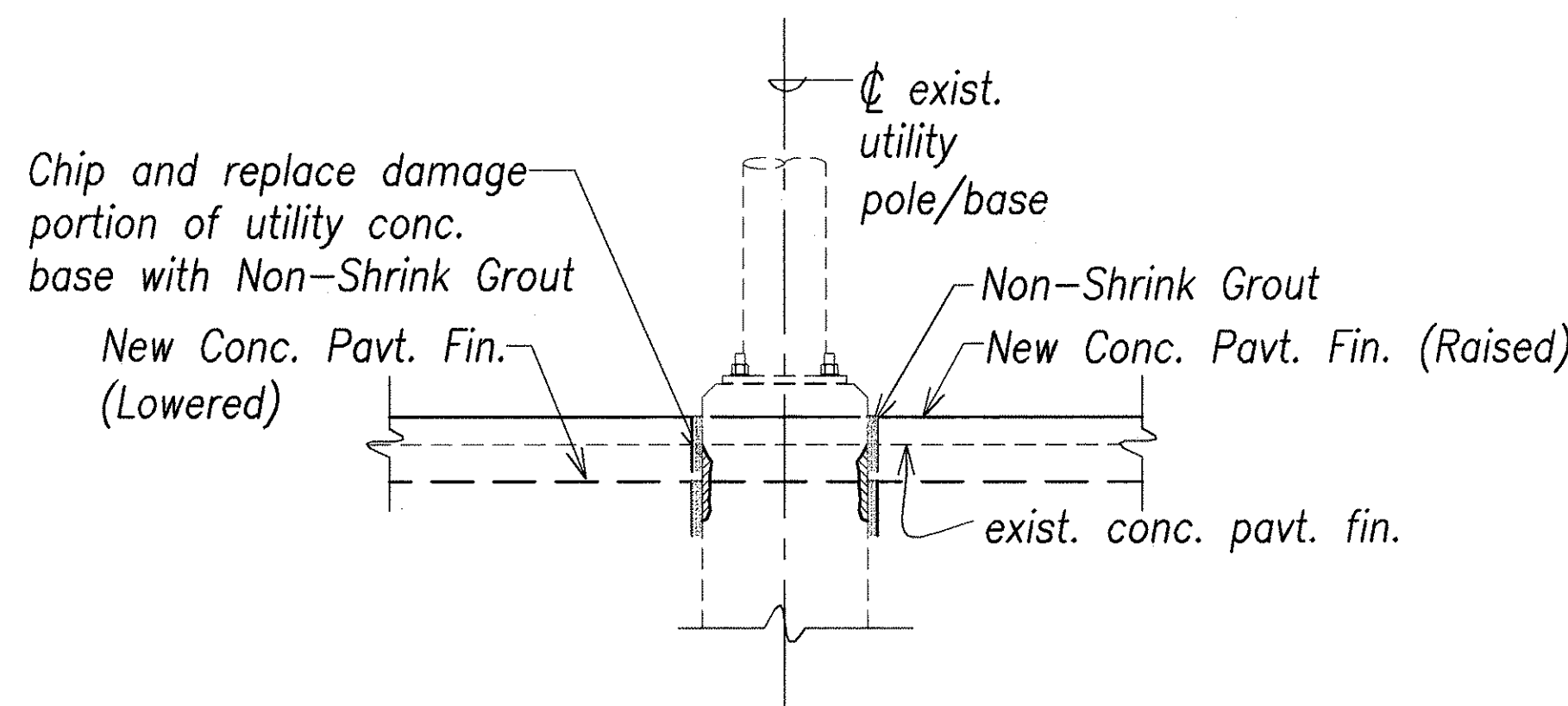
GRASS RESTORATION

Not to scale



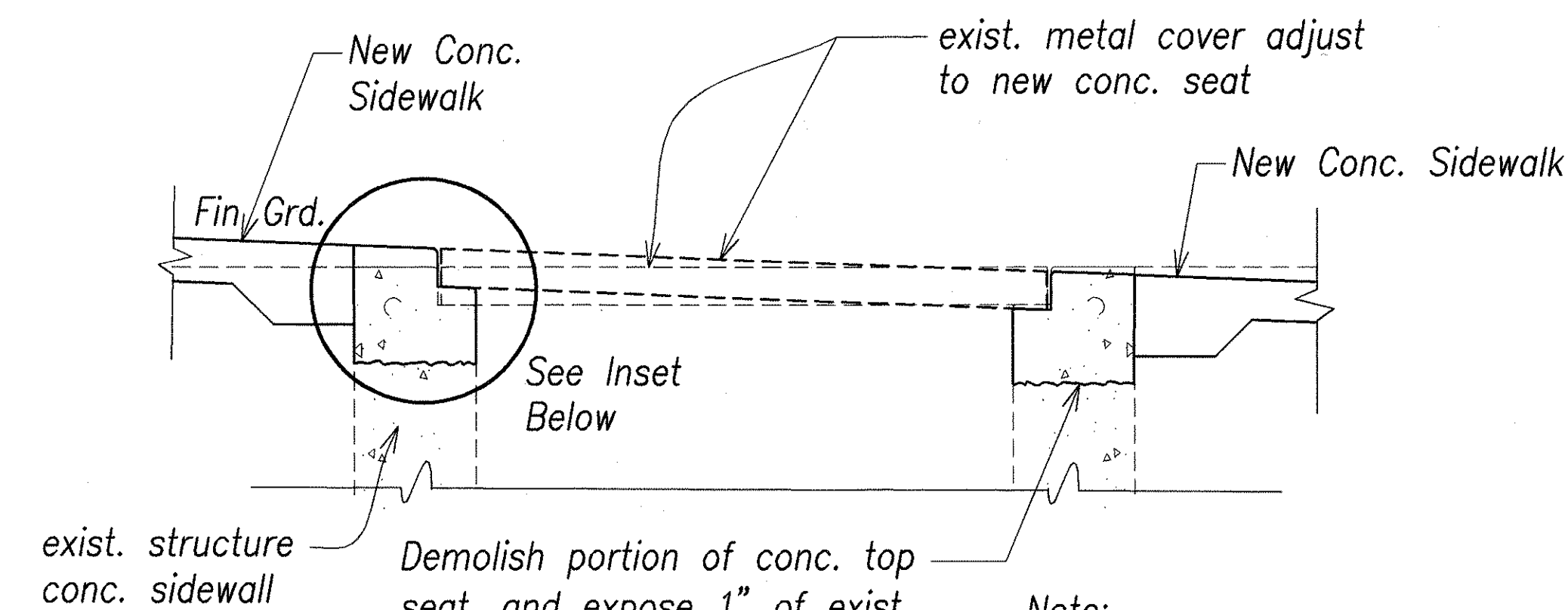
EXIST. STRUCTURE CONNECTION

Not to scale



UTILITY CONC. BASE RESTORATION

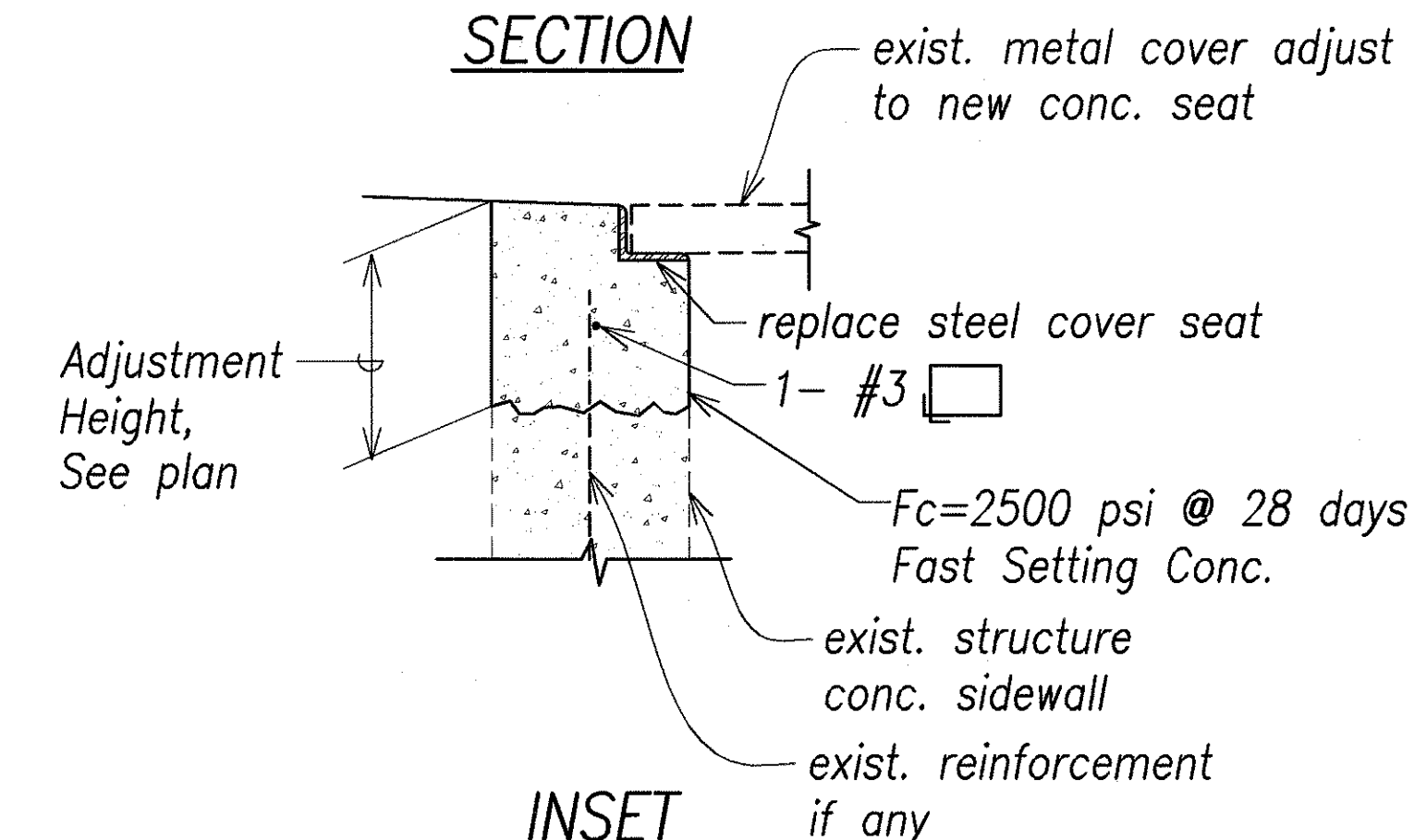
Not to scale



Demolish portion of conc. top seat, and expose 1" of exist. reinf. bar if any, replace steel cover seat, apply epoxy adhesive and reconstruct to new elev.

Note: See Sidewalk Isolation Joint Detail Sht. C-26

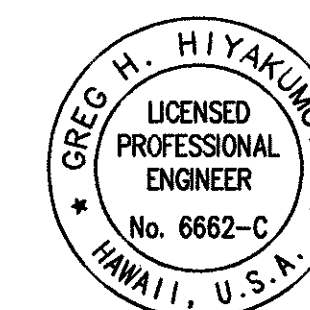
SECTION



INSET

EXIST. STRUCTURE RECONSTRUCTION

Not to scale



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Signature: *Greg H. Hiyaunio* 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 5
Fed. Aid Proj. No. CMAQ-0300(96)

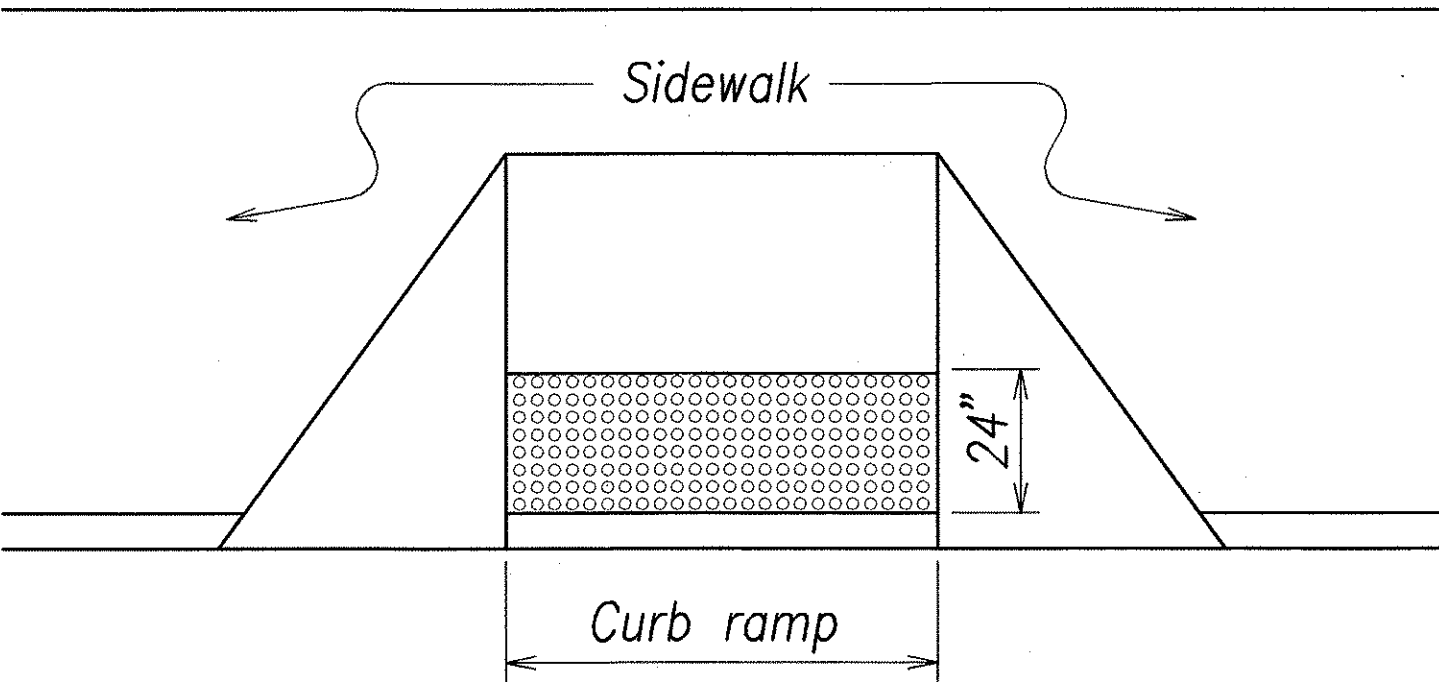
Scale: NONE

Date: August 2004

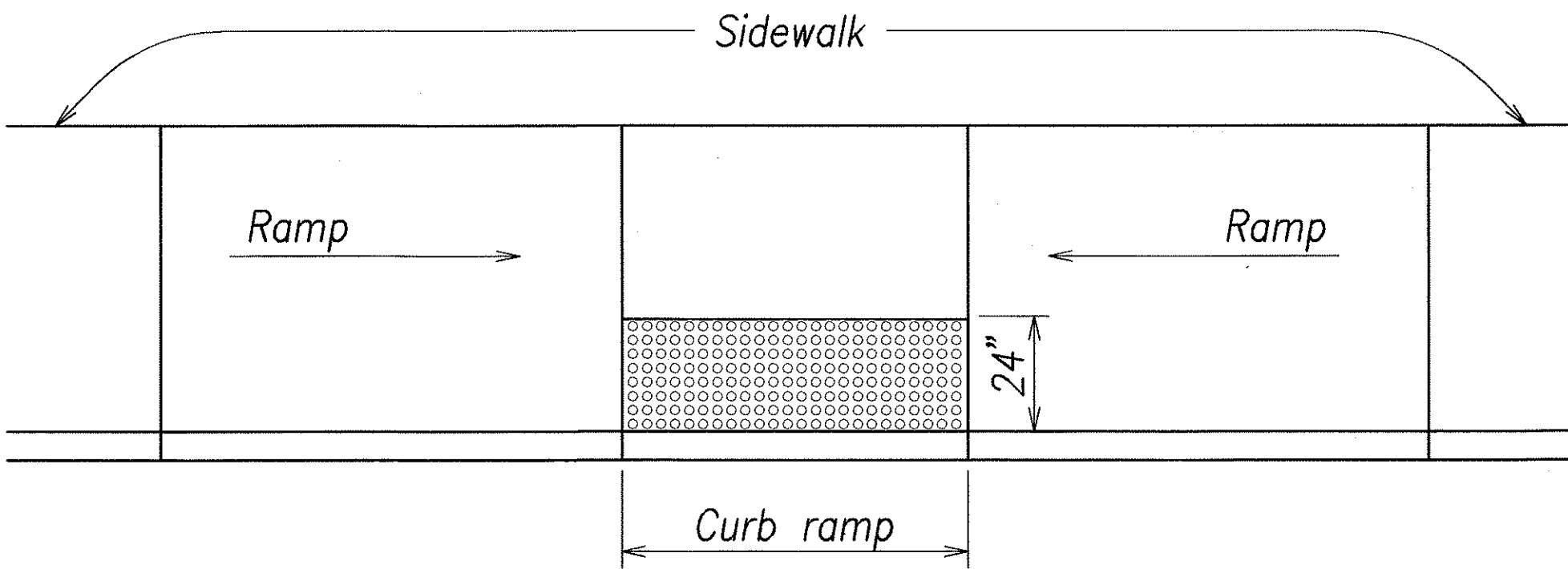
SHEET No. C-28 OF 153 SHEETS

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

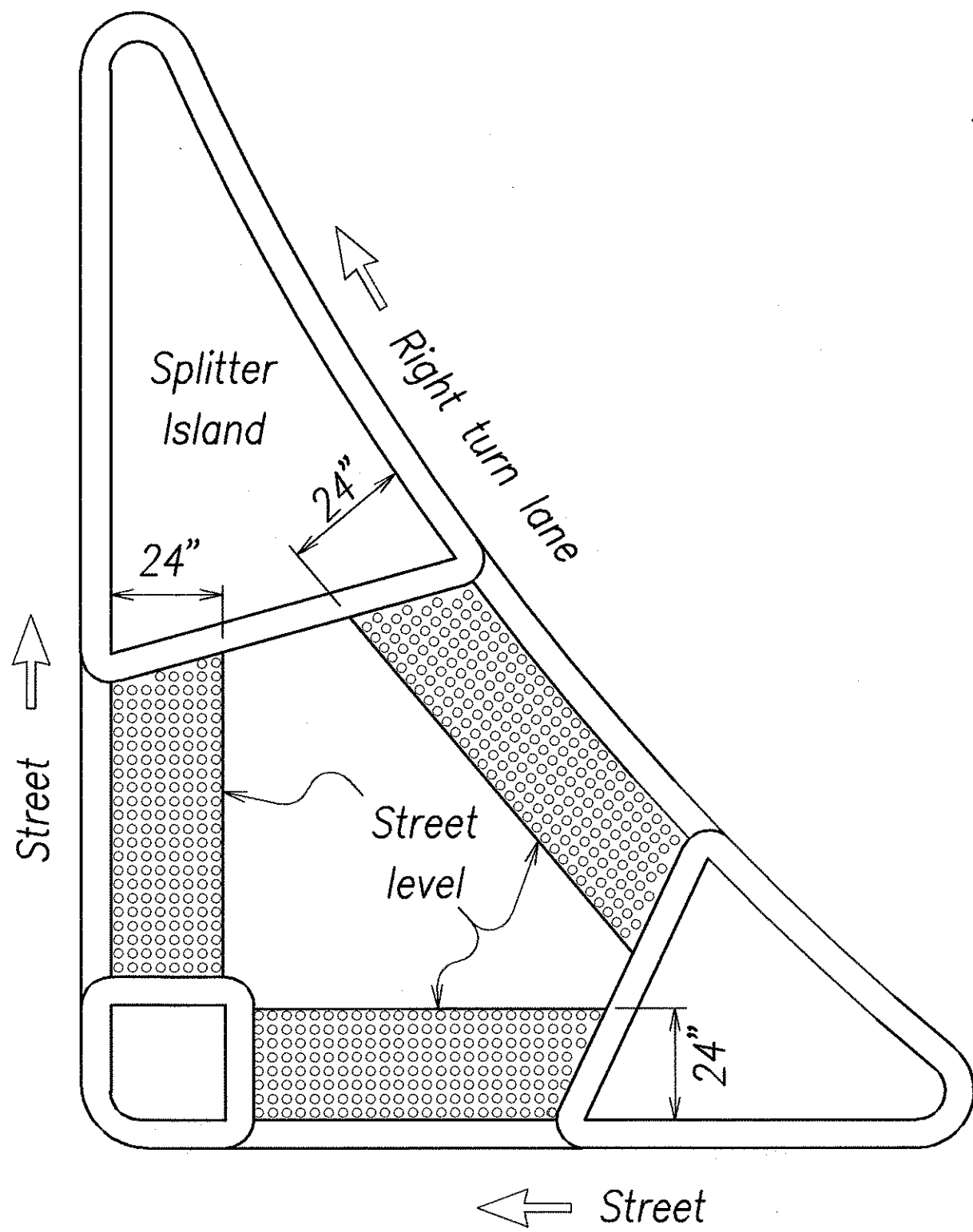
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(96)	2004	30	153



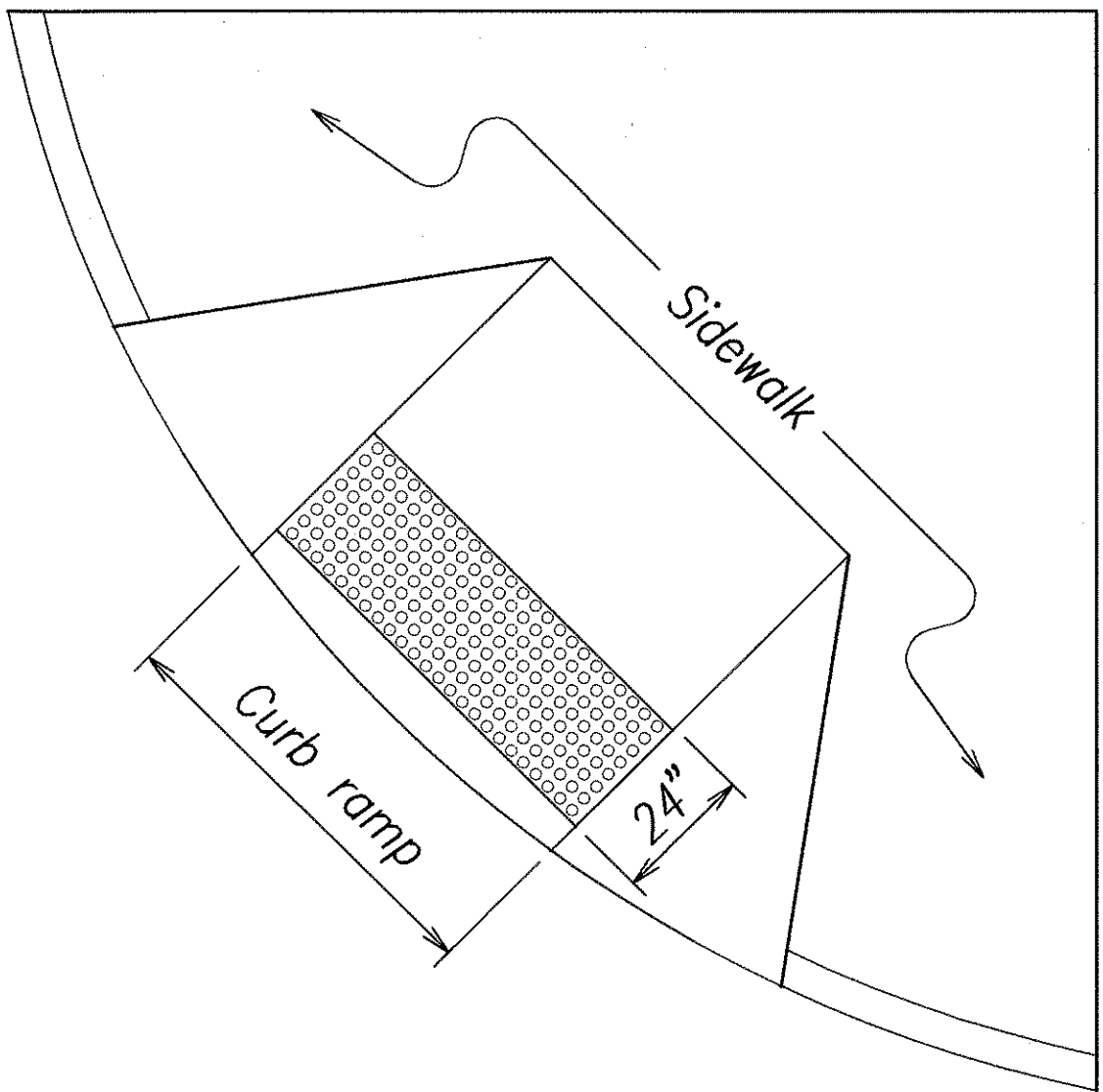
DETECTABLE WARNING AT CURB RAMP



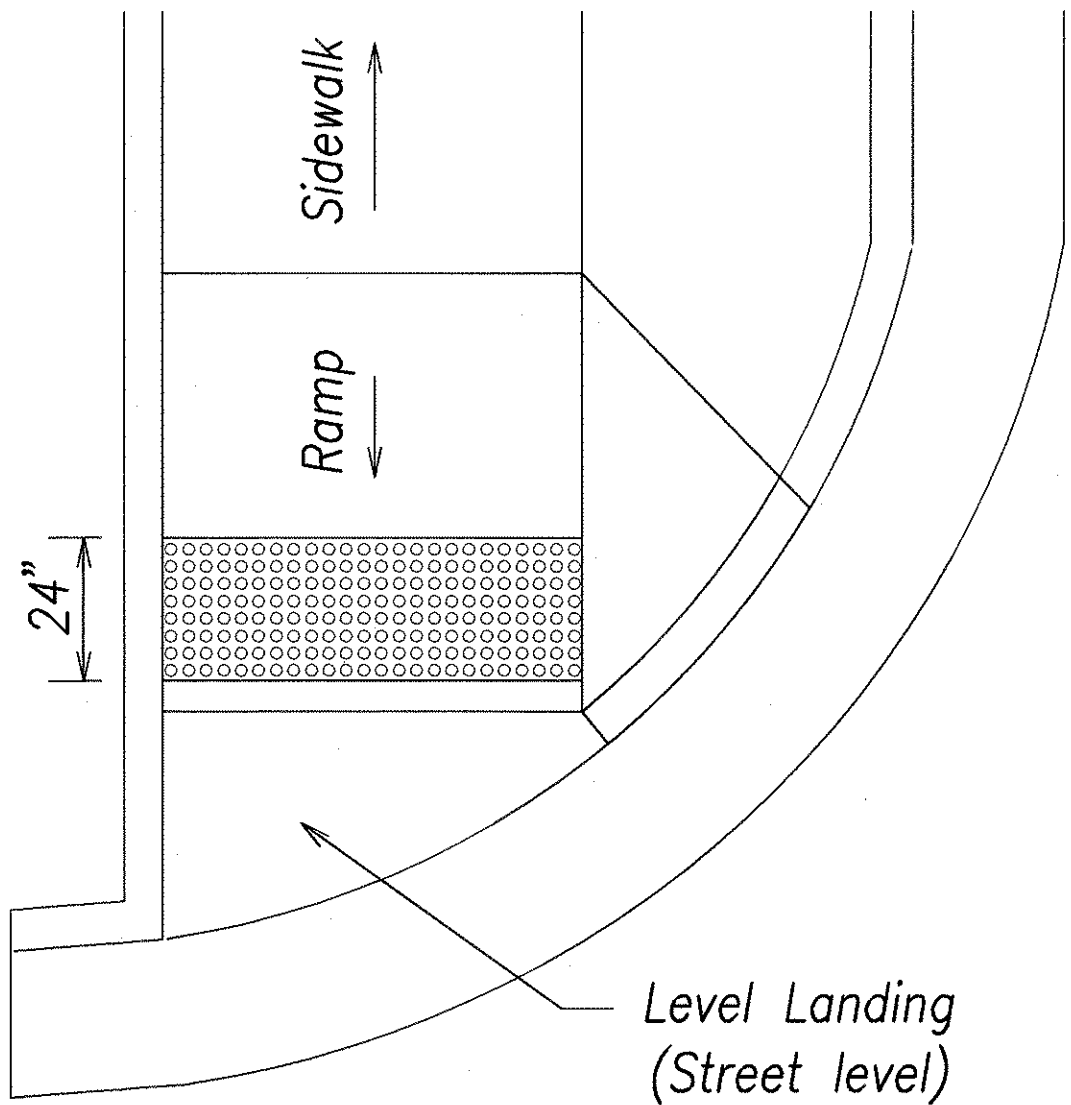
TRANSITION RAMP WITH DETECTABLE WARNING



REFUGE ISLAND WITH DETECTABLE WARNING



SHARED CURB RAMP WITH DETECTABLE WARNING



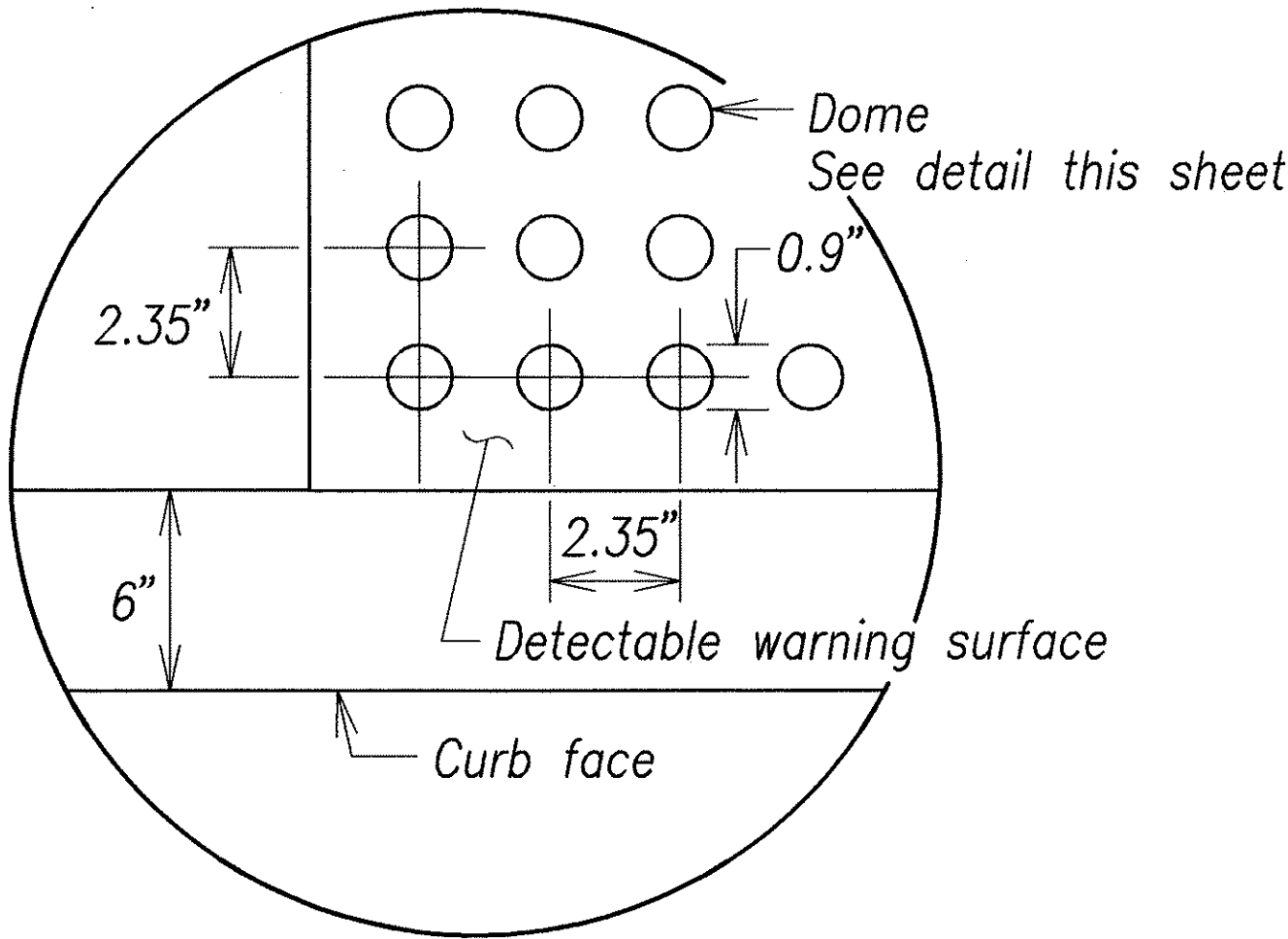
END OF SIDEWALK CURB RAMP WITH DETECTABLE WARNING

TYPICAL INSTALLATION OF DETECTABLE WARNINGS

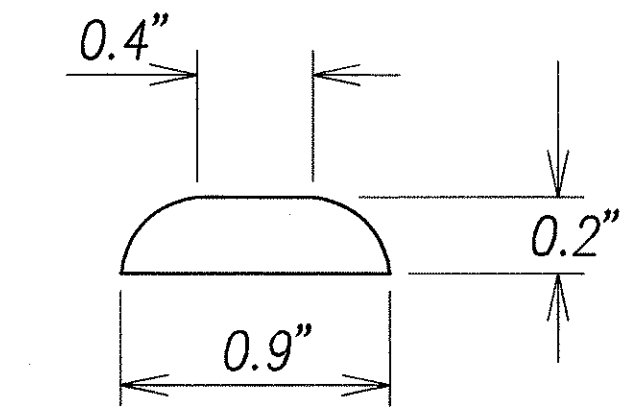
Not to Scale

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



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SIGNATURE DATE

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETECTABLE WARNING DETAILS
Pedestrian Facilities & ADA Compliance
at Various Locations on Oahu, Unit 5
Fed. Aid Proj. No. CMAQ-0300(96)

Scale: None
Date: August 2004

SHEET No. C-29 OF 153 SHEETS

