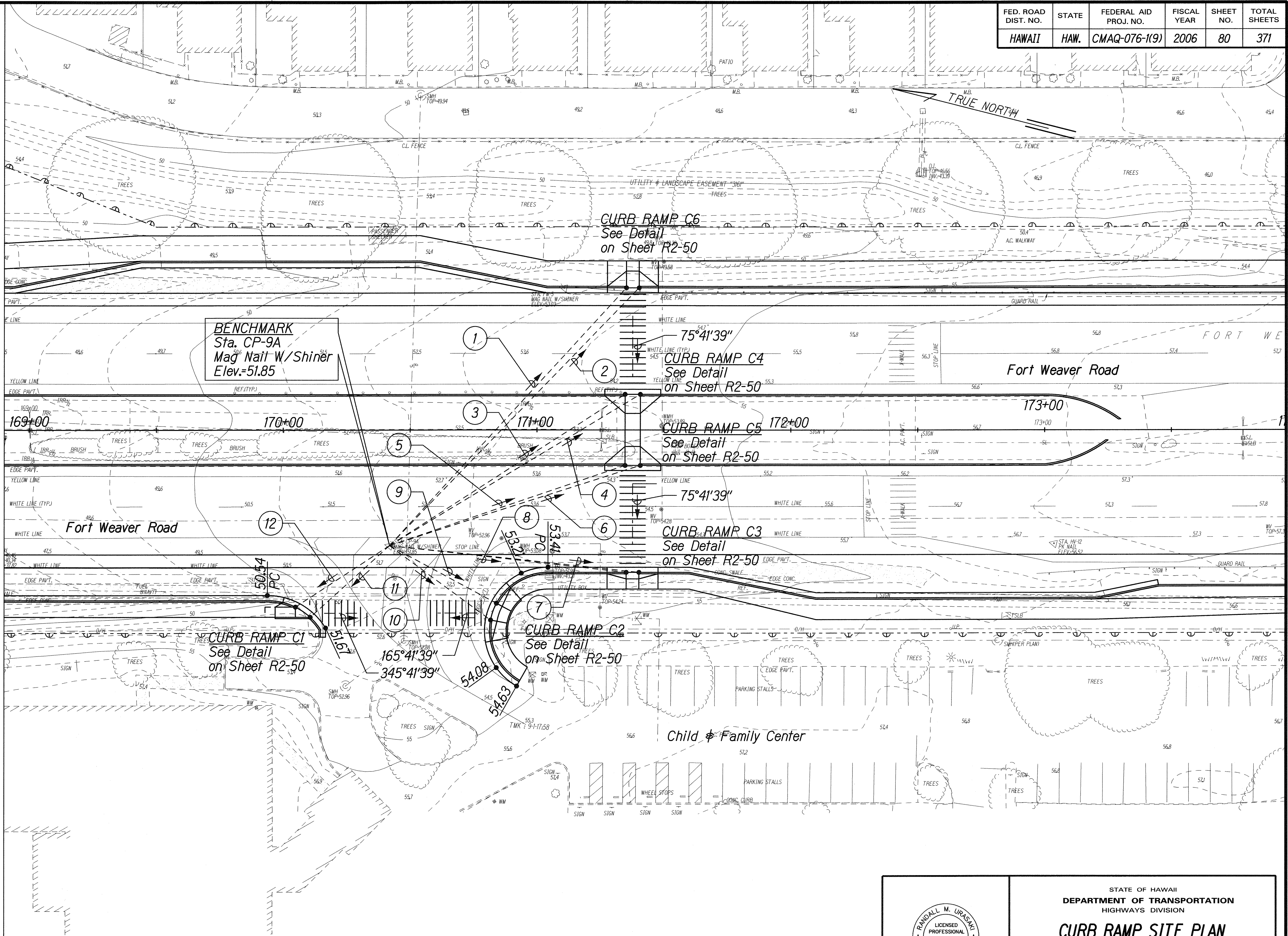


FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-(9)	2006	80	371

- 1 298°17'1" 137.79'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 2 299°46'38" 141.23'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 3 313°2'13" 110.17'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 4 314°38'47" 115.26'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 5 326°57'53" 97.94'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 6 328°1'48" 103.64'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 7 351°49'28" 98.82'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 8 352°9'1" 93.85'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 9 14°3'11" 47.87'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 10 22°3'47" 49.45'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 11 123°40'49" 42.03'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 12 132°37'51" 44.23'
Tie: BM to Intersection of Ramp Edge and Curb Face



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
N.	

W/FORT WEAVER ROAD/ROAD/C-RAMP-PLAN02.dgn

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.
SIGNATURE: *R. Uraski* EXPIRATION DATE: 04/30/10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

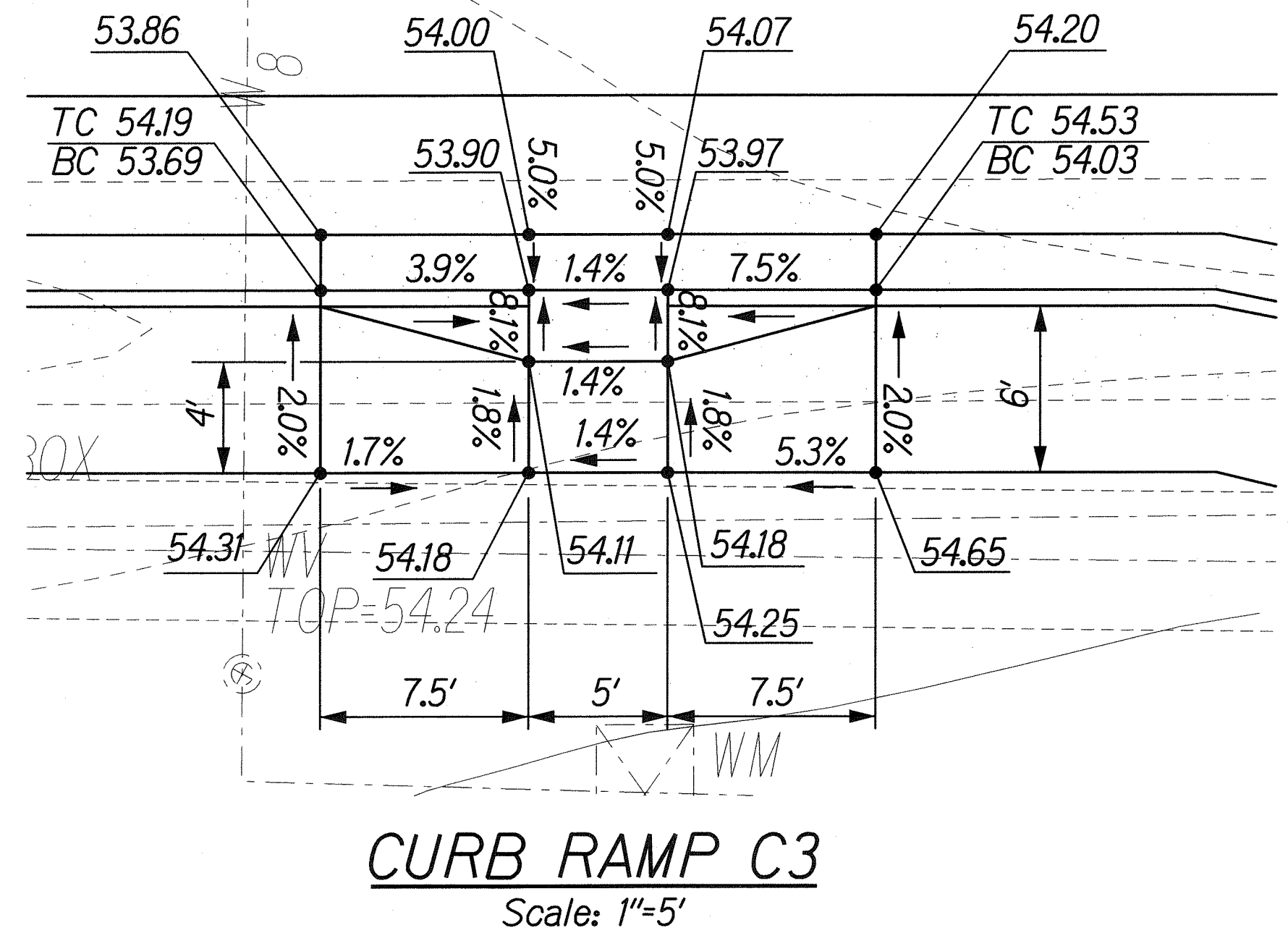
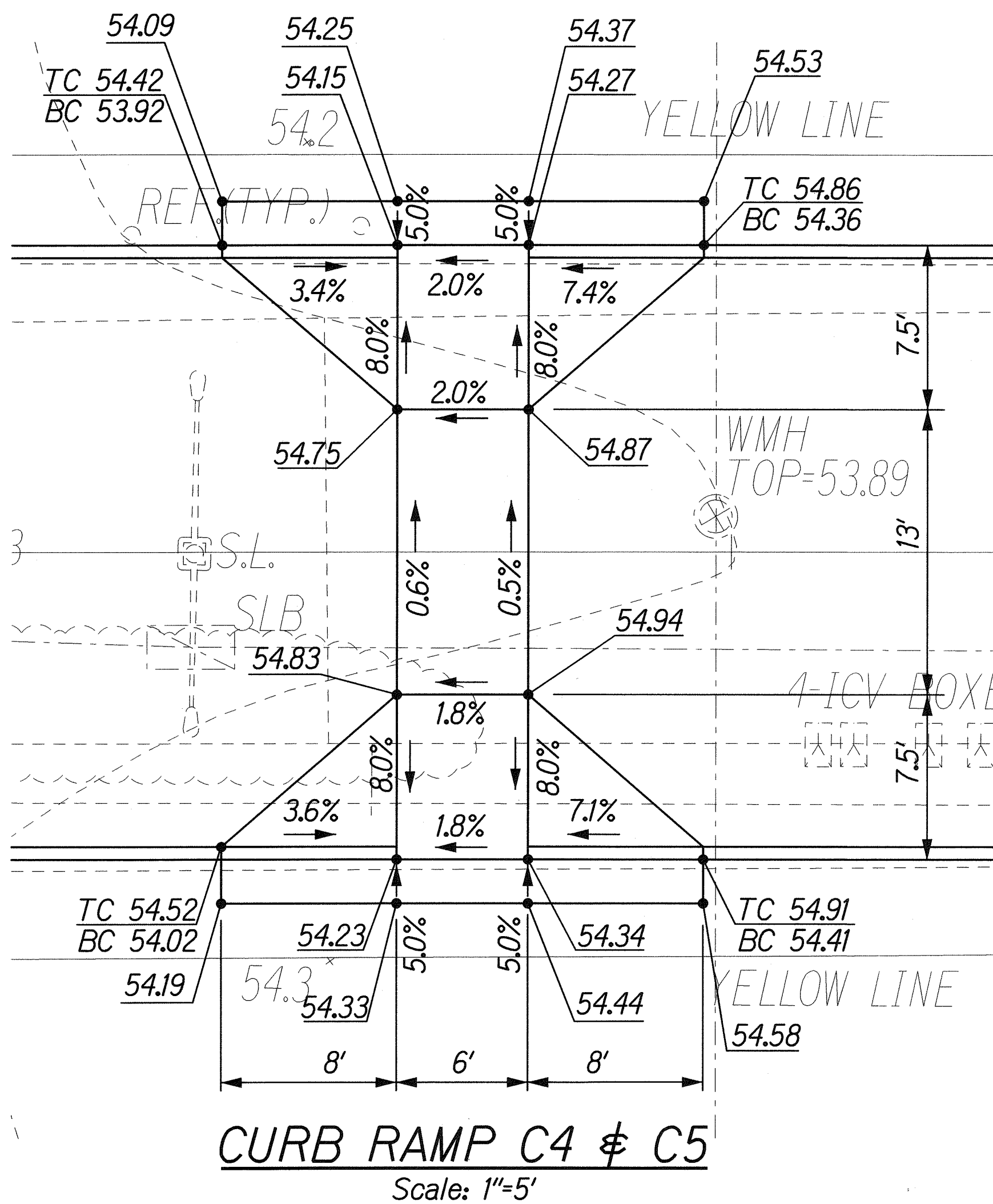
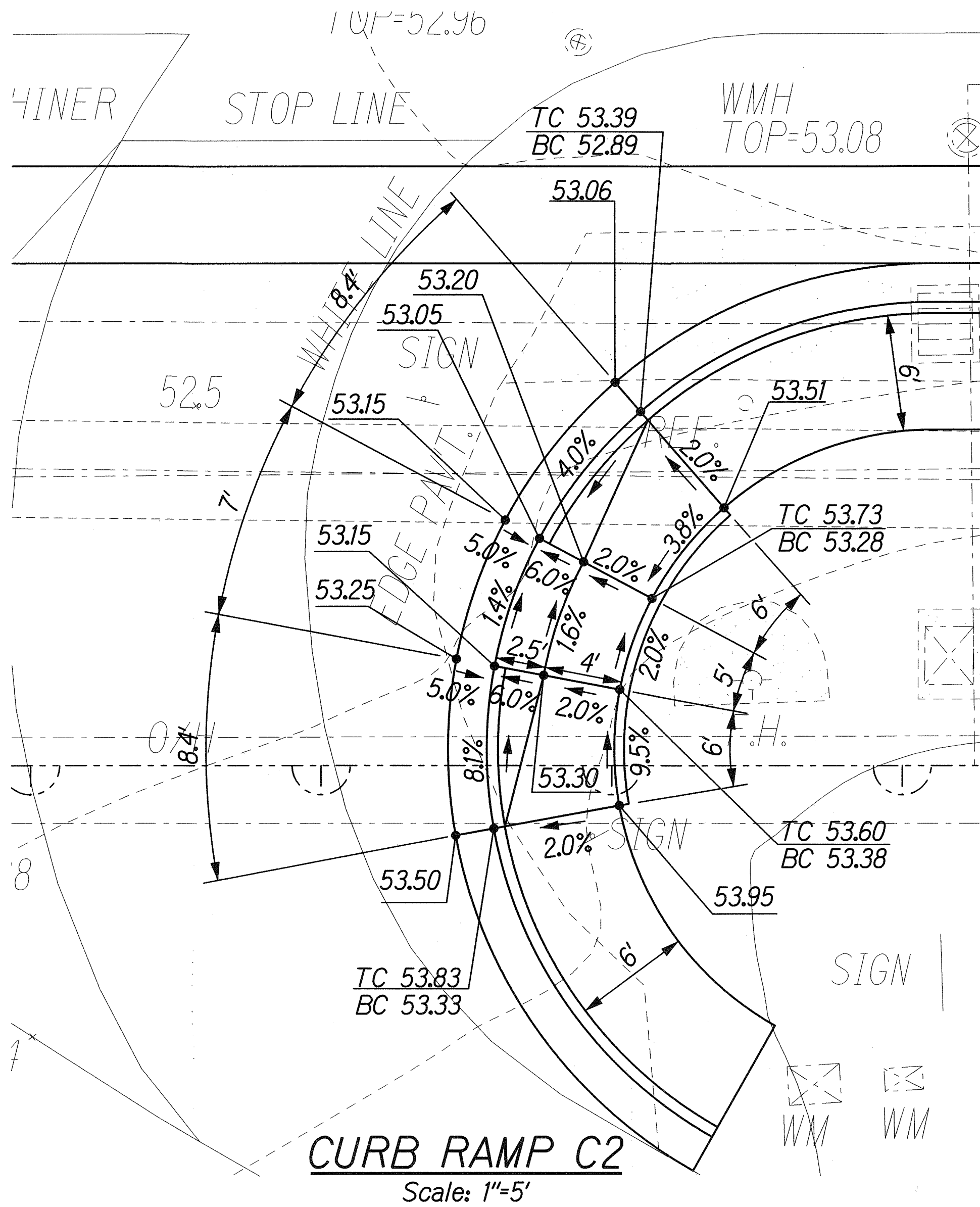
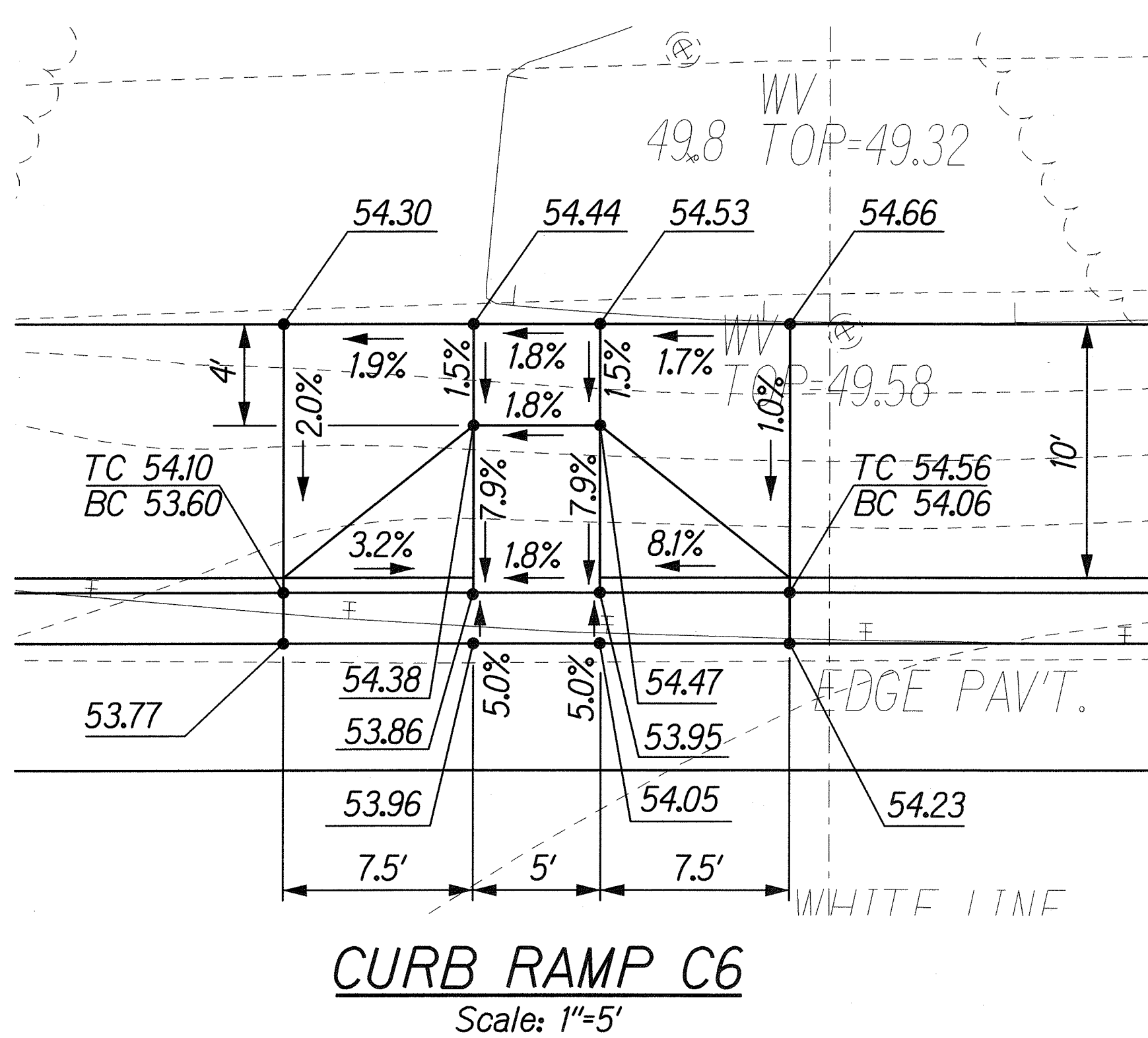
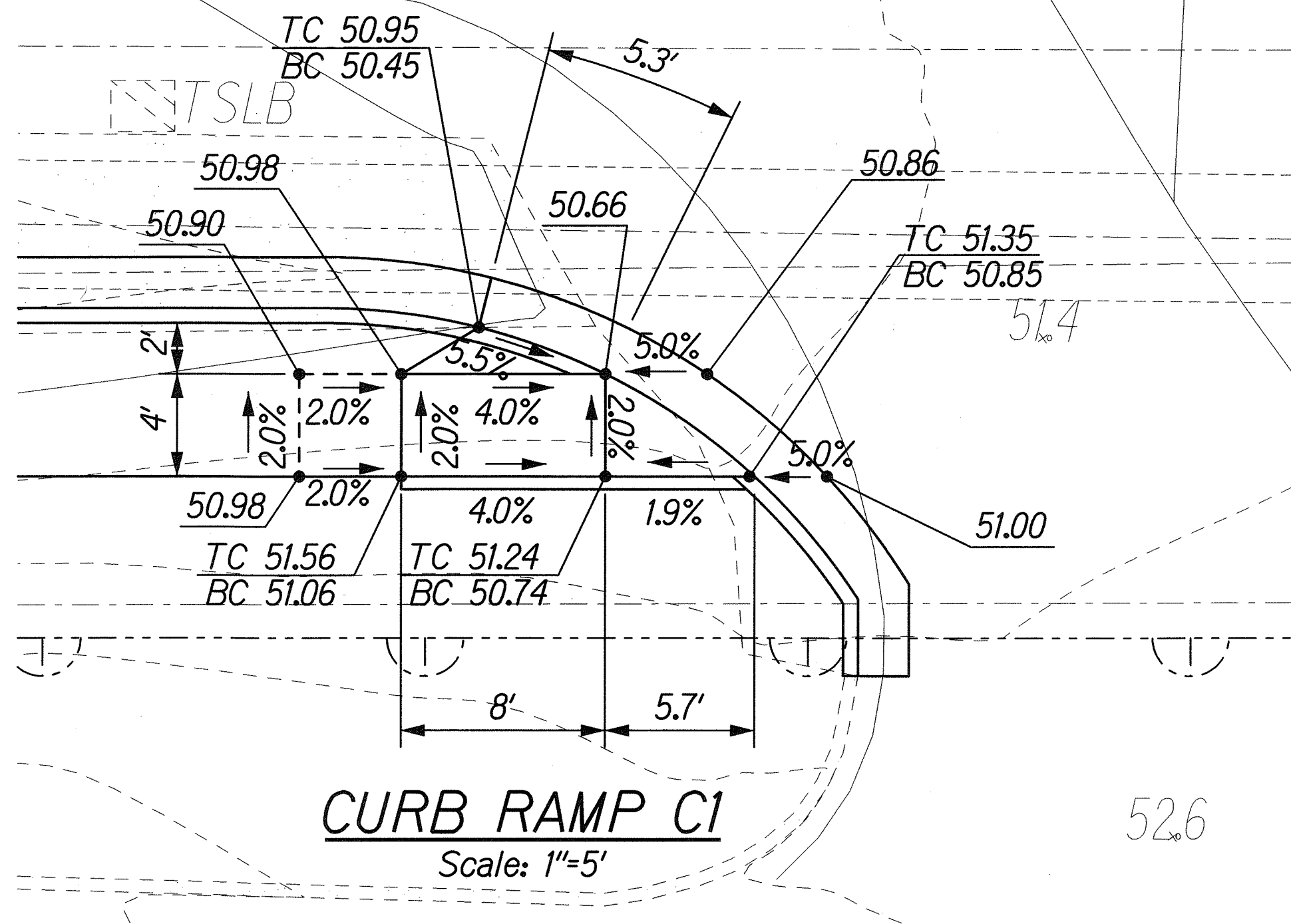
CURB RAMP SITE PLAN
FORT WEAVER ROAD AT STA. 171+00

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=20' Date: Feb. 22, 2008

SHEET No. R2-49 OF 79 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	81	371



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
NOTED BY	
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L:\FORT WEAVER ROAD\ROAD\VC-RAMP-DET03.dgn

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SIGNATURE: *R. Uraski* EXPIRATION DATE: 04/30/10 OF THE LICENSE.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS
FORT WEAVER ROAD AT STA. 171+00

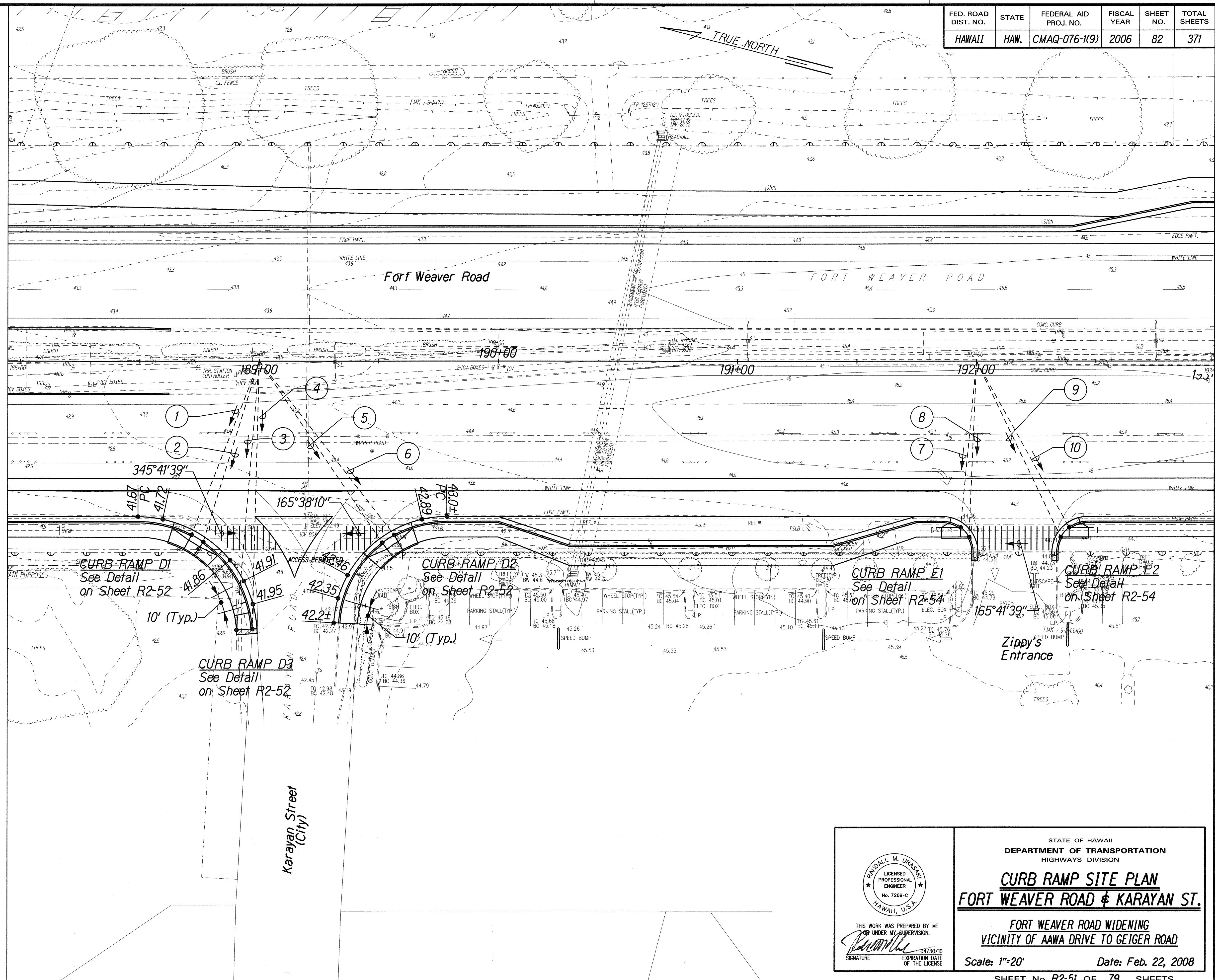
FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=5' Date: Feb. 22, 2008

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
FILE	

J:\FORT WEAVER ROAD\ROAD\VC-RAMP-PLAN03.dgn

- 1 96°57'29" 77.87'
Tie: Sta. 189+00 to Intersection
of Ramp Edge and Curb Face
- 2 92°49'26" 79.09'
Tie: Sta. 189+00 to Intersection
of Ramp Edge and Curb Face
- 3 80°26'40" 112.81'
Tie: Sta. 189+00 to Intersection
of Ramp Edge and Curb Face
- 4 77°06'48" 112.05'
Tie: Sta. 189+00 to Intersection
of Ramp Edge and Curb Face
- 5 41°31'16" 91.79'
Tie: Sta. 189+00 to Intersection
of Ramp Edge and Curb Face
- 6 37°48'50" 92.12'
Tie: Sta. 189+00 to Intersection
of Ramp Edge and Curb Face
- 7 81°2'31" 69.88'
Tie: Sta. 192+00 to Intersection
of Ramp Edge and Curb Face
- 8 78°0'55" 73.64'
Tie: Sta. 192+00 to Intersection
of Ramp Edge and Curb Face
- 9 50°1'20" 81.64'
Tie: Sta. 192+00 to Intersection
of Ramp Edge and Curb Face
- 10 46°29'13" 79.71'
Tie: Sta. 192+00 to Intersection
of Ramp Edge and Curb Face



FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	82	371

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FOR UNDER MY SUPERVISION.
SIGNATURE: *R. Urasky* EXPIRATION DATE: 04/30/10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

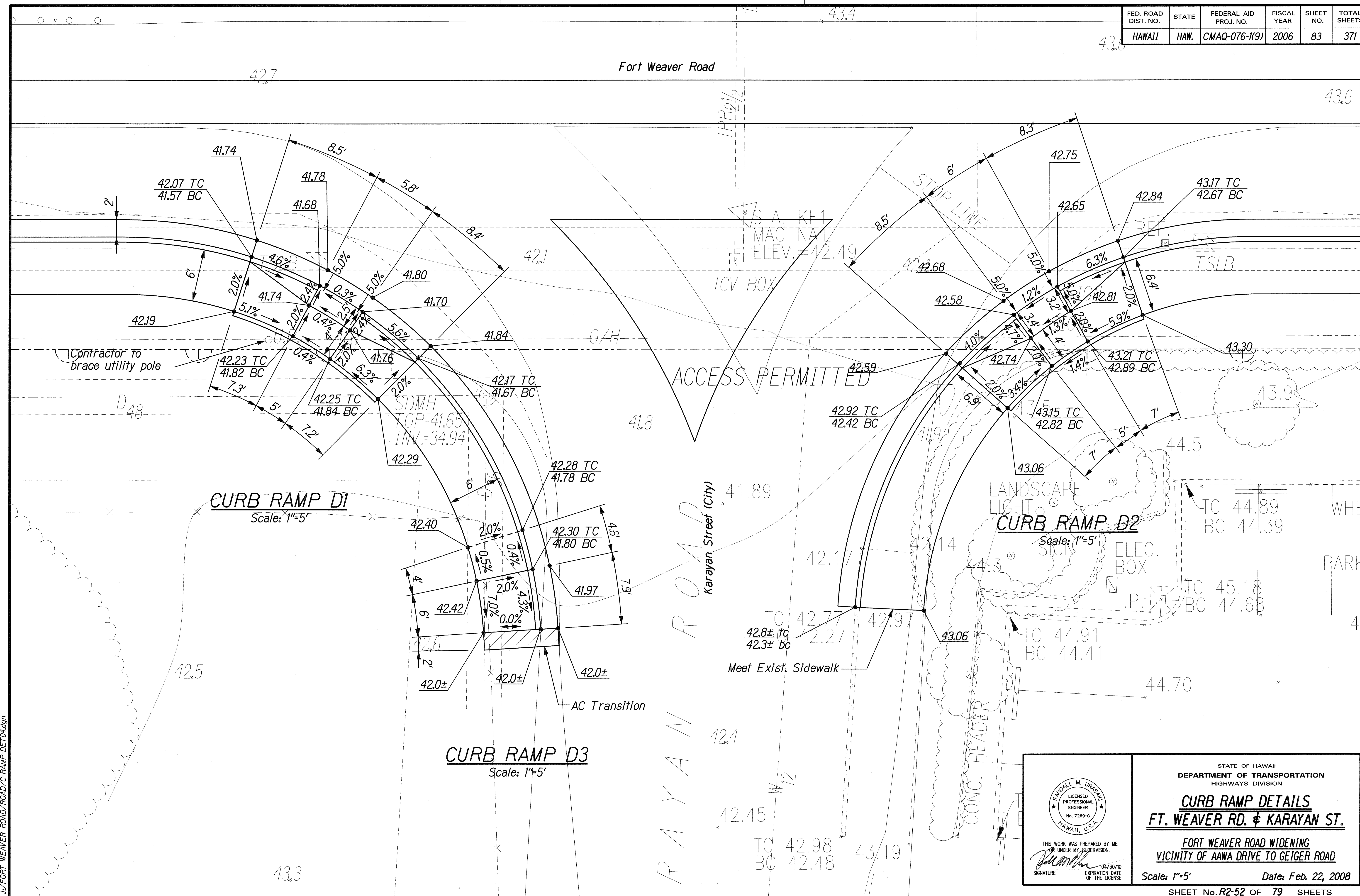
CURB RAMP SITE PLAN
FORT WEAVER ROAD & KARAYAN ST.

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=20' Date: Feb. 22, 2008

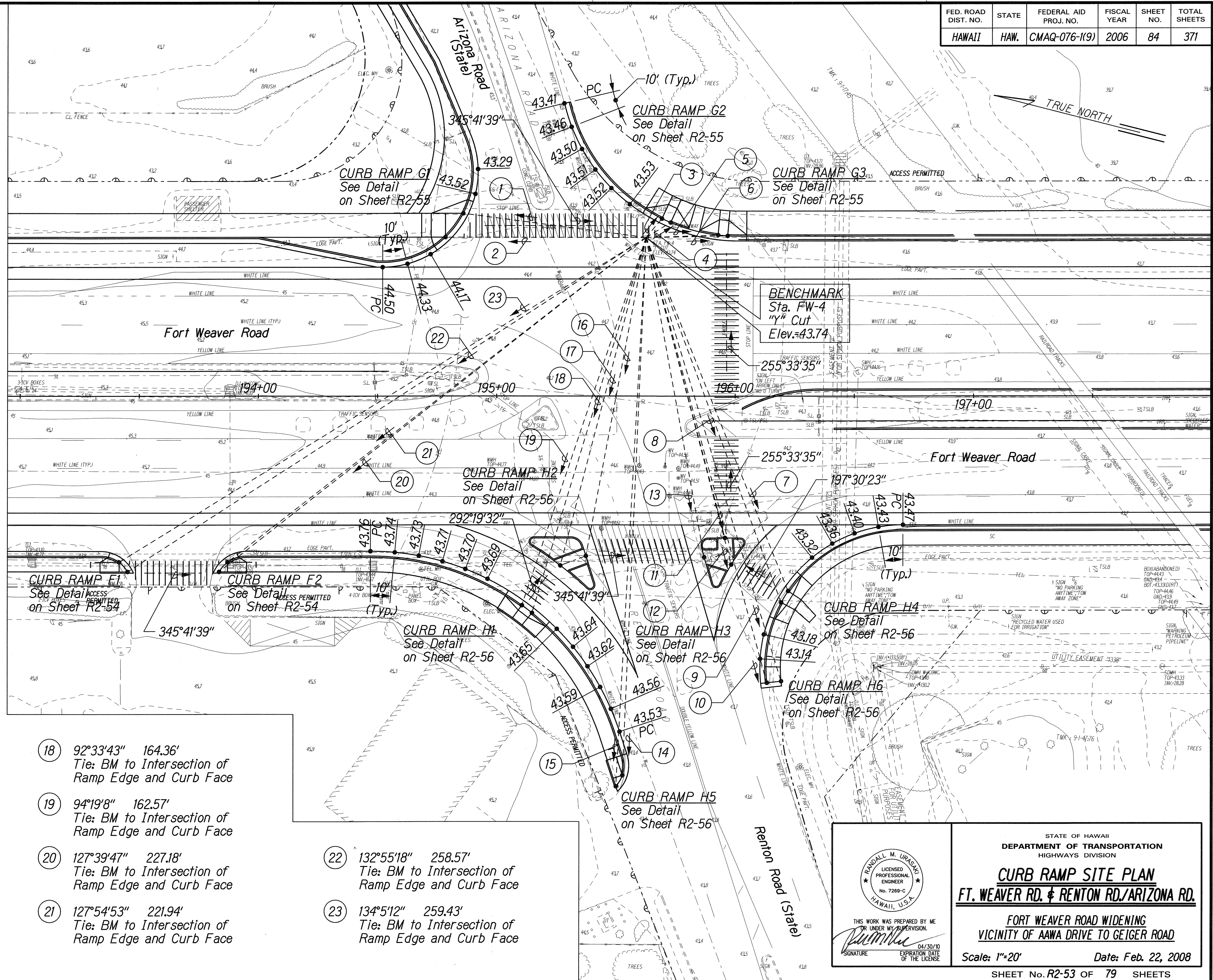
SHEET No. R2-51 OF 79 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET:
HAWAII	HAW.	CMAQ-076-1(9)	2006	83	371



FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-(K9)	2006	84	371

- 1 173°15'43" 77.41'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 2 165°49'36" 84.20'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 3 295°12'44" 10.39'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 4 313°48'55" 12.09'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 5 343°34'52" 30.21'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 6 344°25'37" 34.18'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 7 53°43'34" 159.67'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 8 55°18'30" 163.13'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 9 58°42'48" 194.44'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 10 60°27'36" 193.41'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 11 60°54'42" 130.15'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 12 61°1'48" 141.60'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 13 65°19'49" 136.14'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 14 78°10'14" 225.65'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 15 78°47'32" 230.37'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 16 86°20'17" 135.72'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 17 90°17'57" 141.98'
Tie: BM to Intersection of Ramp Edge and Curb Face



- 18 92°33'43" 164.36'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 19 94°19'8" 162.57'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 20 127°39'47" 227.18'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 21 127°54'53" 221.94'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 22 132°55'18" 258.57'
Tie: BM to Intersection of Ramp Edge and Curb Face
- 23 134°5'12" 259.43'
Tie: BM to Intersection of Ramp Edge and Curb Face

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	

L:\FORT WEAVER ROAD\ROAD\CRAMP-PLAN04.dgn

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE: *R. Uraski* EXPIRATION DATE: 04/30/10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

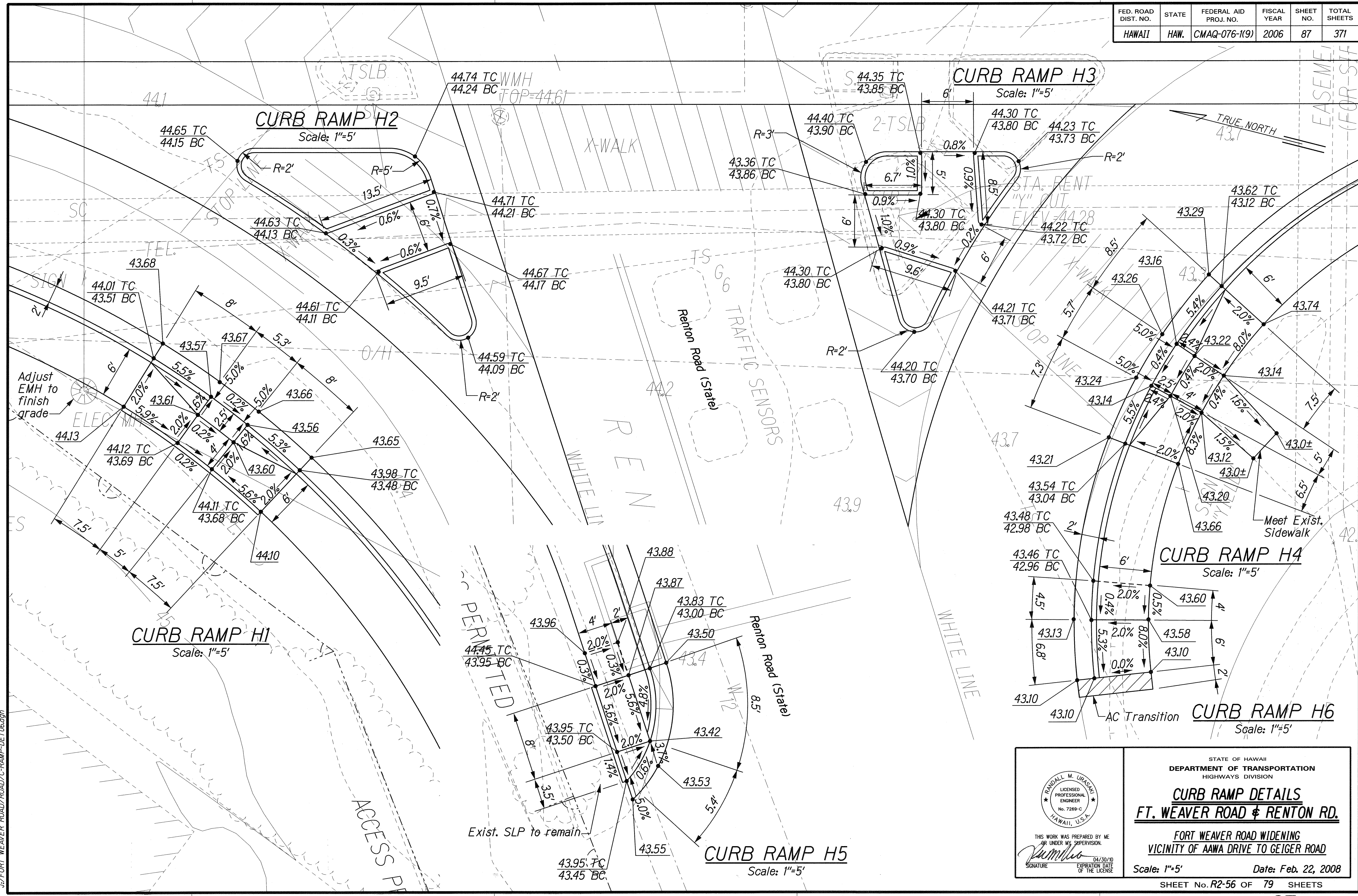
CURB RAMP SITE PLAN
FT. WEAVER RD. & RENTON RD./ARIZONA RD.

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=20' Date: Feb. 22, 2008

SHEET No. R2-53 OF 79 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	87	371



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
N.	

U:\FORT WEAVER ROAD\ROAD\C-RAMP-DET06.dgn

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature: *R. Uraski* Date: 04/30/10

EXPIRATION DATE OF THE LICENSE:

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS
FT. WEAVER ROAD & RENTON RD.

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=5' Date: Feb. 22, 2008

SHEET No. R2-56 OF 79 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	88	371

See Sheet R2-58

① ~~241°36'41"~~ 143.47'
Tie: BM to Intersection of Ramp Edge and Curb Face

② ~~245°22'56"~~ 137.40'
Tie: BM to Intersection of Ramp Edge and Curb Face

③ ~~272°6'42"~~ 141.47'
Tie: BM to Intersection of Ramp Edge and Curb Face

④ ~~275°24'26"~~ 146.01'
Tie: BM to Intersection of Ramp Edge and Curb Face

⑤ ~~276°0'23"~~ 136.86'
Tie: BM to Intersection of Ramp Edge and Curb Face

⑥ 349°55'00" 63.23'
Tie: BM to Intersection of Ramp Edge and Curb Face

⑦ 8°19'33" 53.30'
Tie: BM to Intersection of Ramp Edge and Curb Face

⑧ 142°7'44" 50.03'
Tie: BM to Intersection of Ramp Edge and Curb Face

⑨ 148°3'18" 52.30'
Tie: BM to Intersection of Ramp Edge and Curb Face

⑩ 233°17'29" 168.92'
Tie: BM to Intersection of Ramp Edge and Curb Face

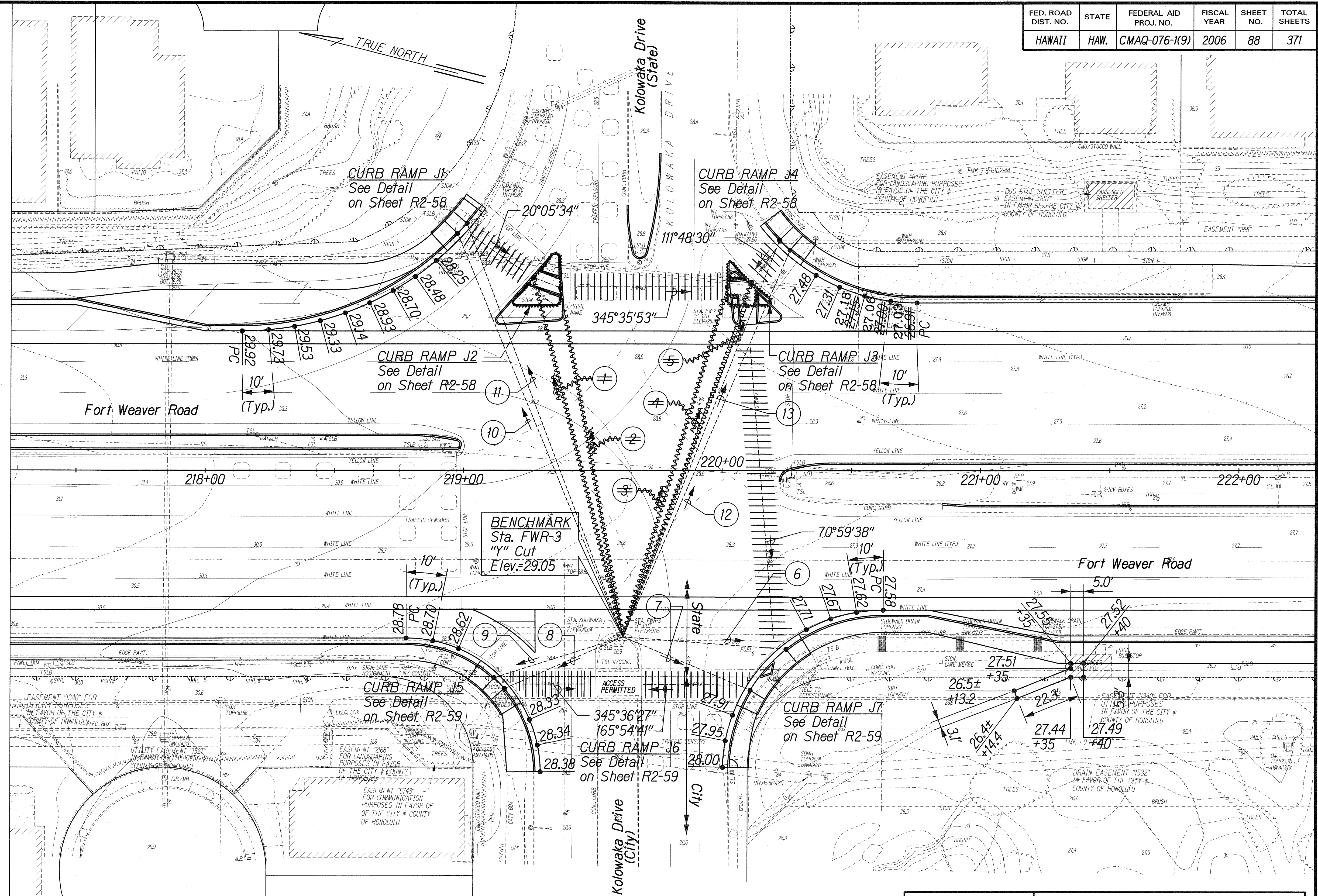
⑪ 234°53'58" 171.26'
Tie: BM to Intersection of Ramp Edge and Curb Face

⑫ 278°52'12" 163.11'
Tie: BM to Intersection of Ramp Edge and Curb Face

⑬ 277°3'31" 165.09'
Tie: BM to Intersection of Ramp Edge and Curb Face

LEGEND FOR AS-BUILT POSTINGS

	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting



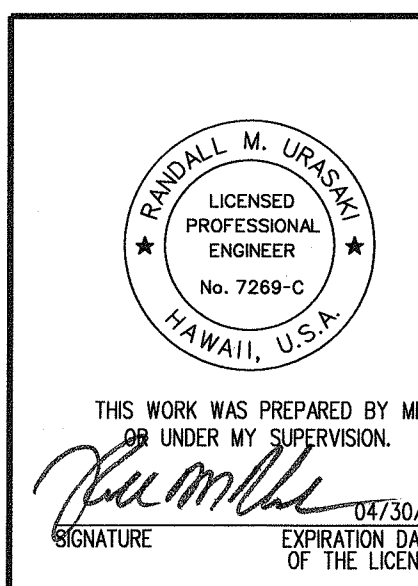
Approved: (FOR WORK IN CITY ROW ONLY)

Mehni Jabeen
for Chief, Civil Engineering Branch, DPP

5/7/08
Date

H. J. ...
Chief, Traffic Review Branch, DPP

7/2/08
Date



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

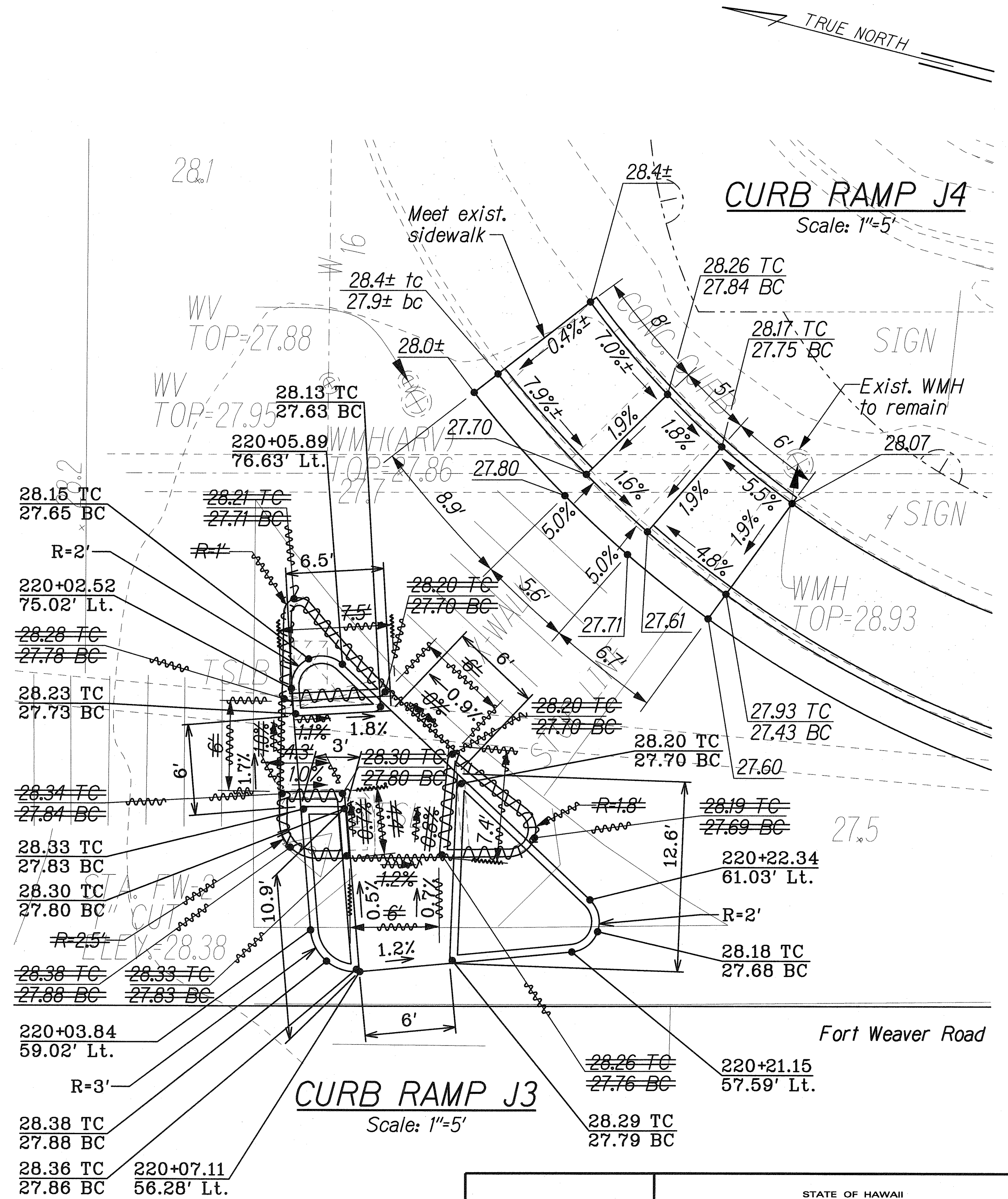
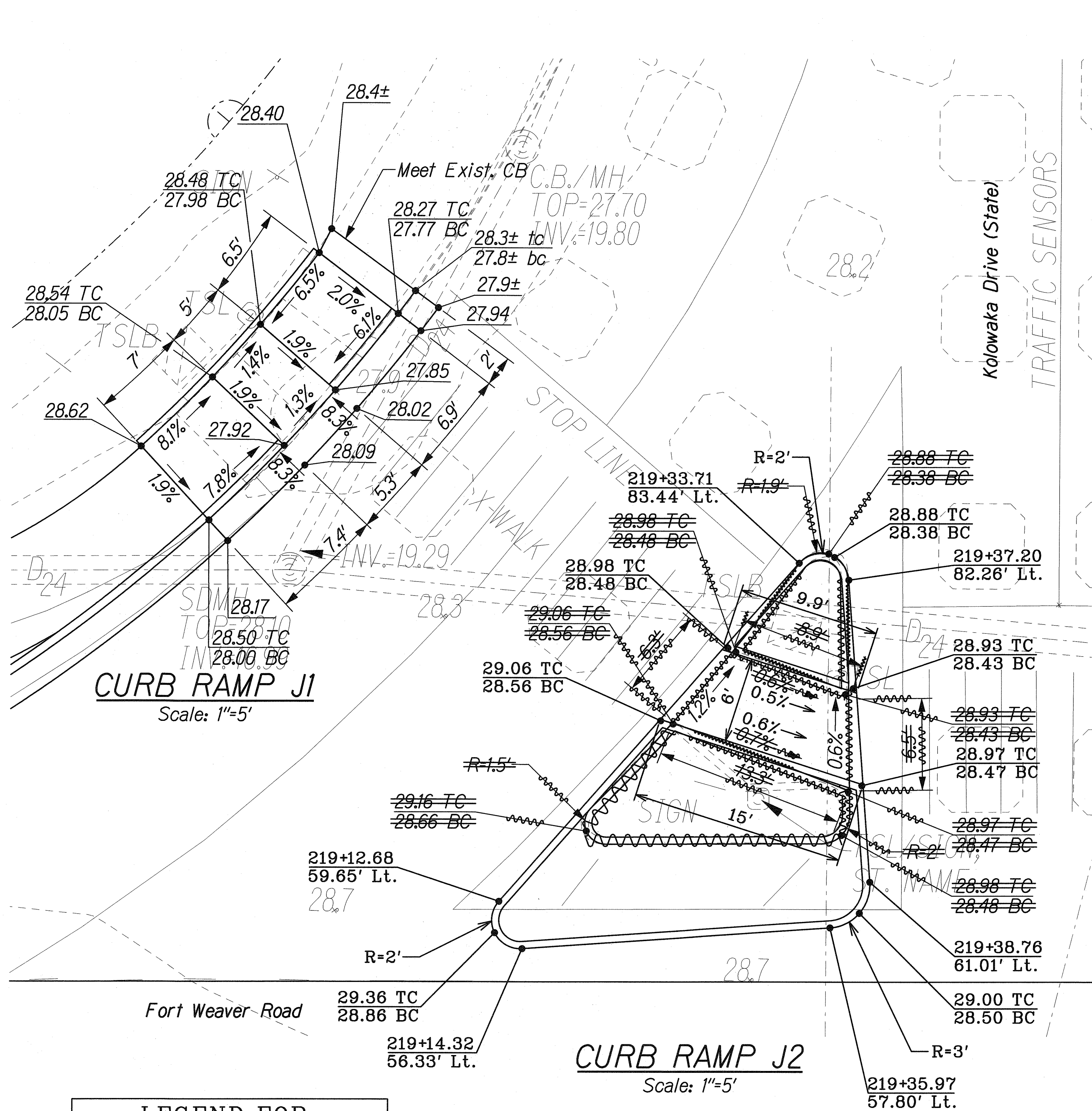
CURB RAMP SITE PLAN
FT. WEAVER RD. & KOLOWAKA DR.

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=20' Date: Feb. 22, 2008

SHEET No. R2-57 OF 79 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	89	371



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS
FT. WEAVER RD. & KOLOWAKA DR.

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: 1"=5' Date: Feb. 22, 2008

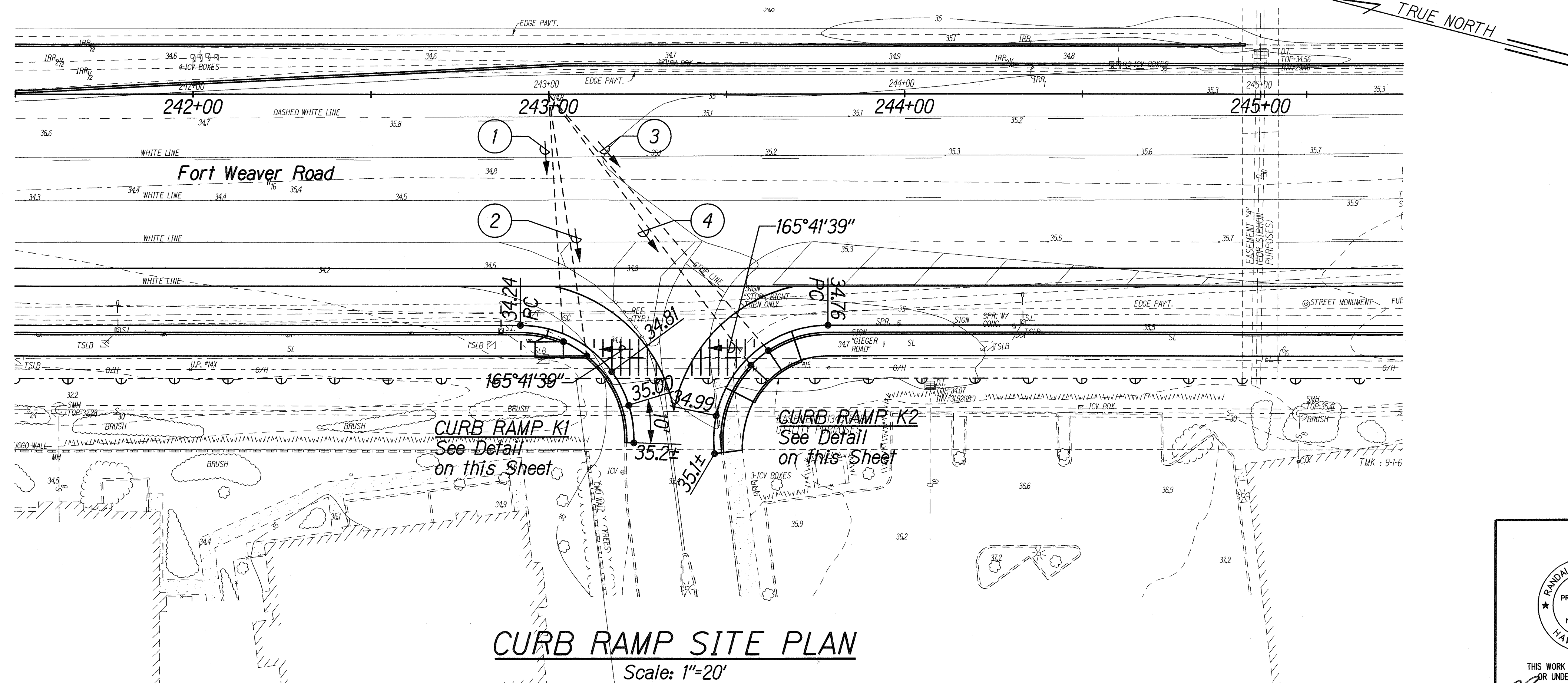
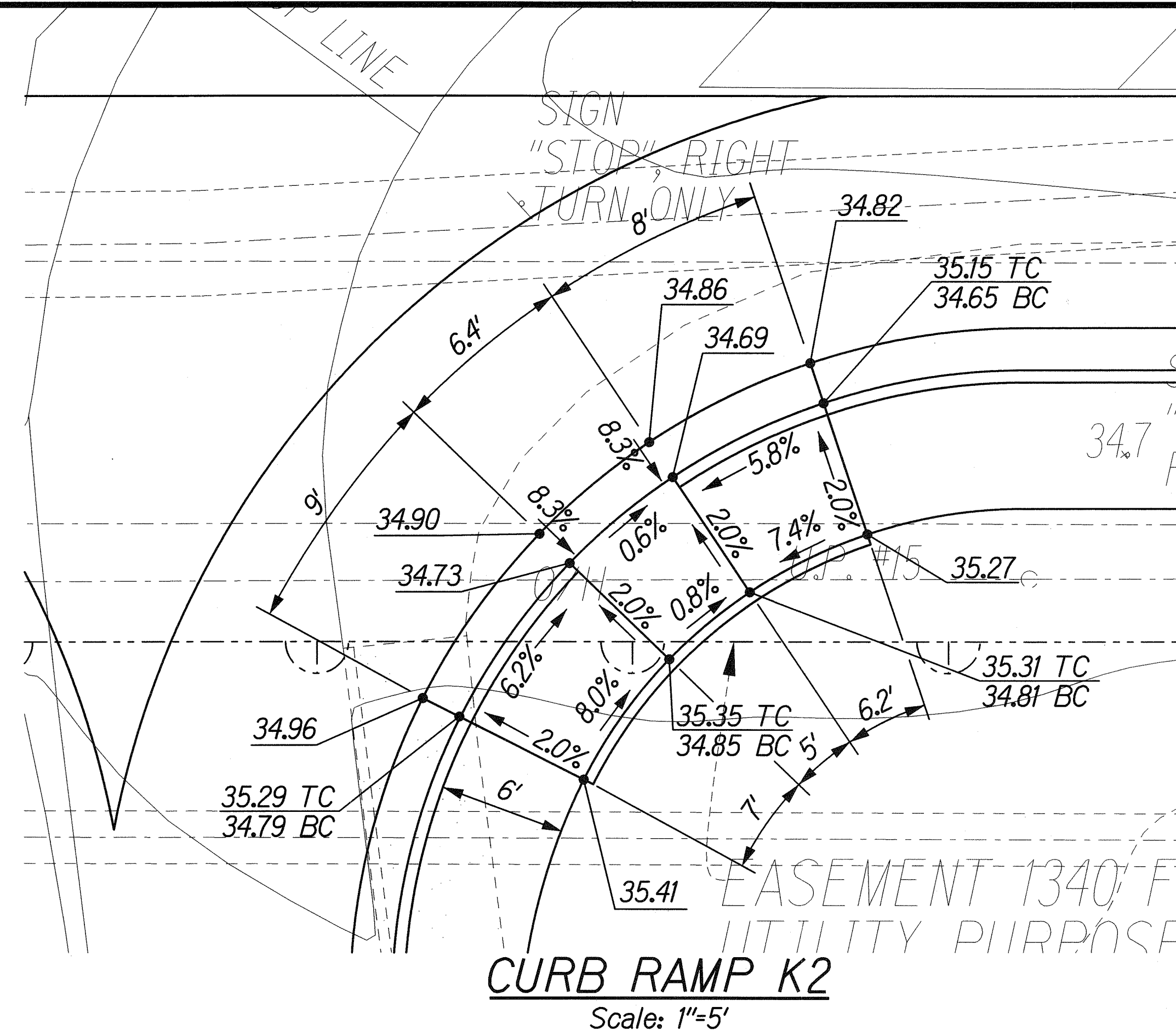
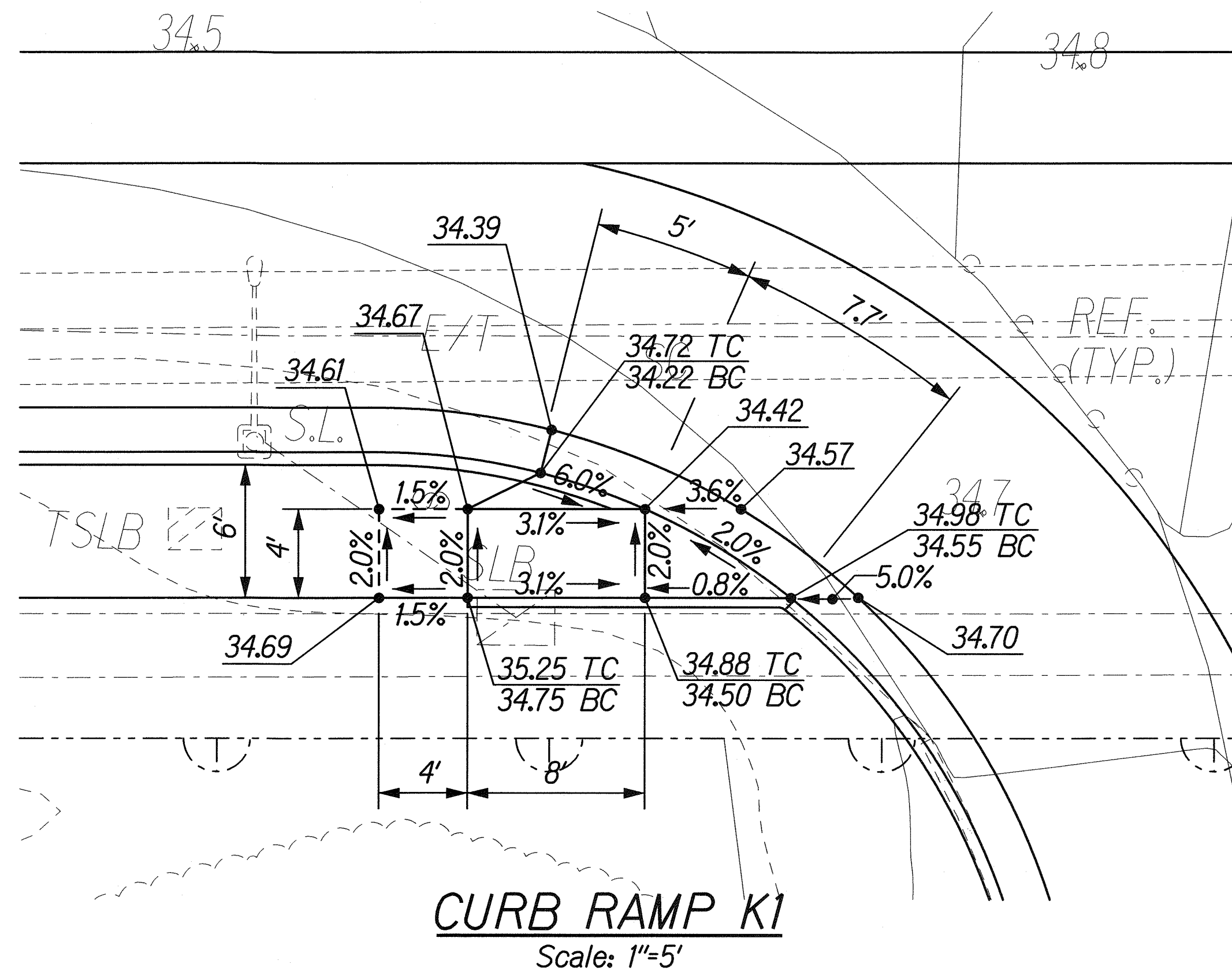
THIS WORK WAS PREPARED BY ME
UNDER MY SUPERVISION.

[Signature]

EXPIRATION DATE OF THE LICENSE: 04/30/10

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	91	371

- ① 72°10'20" 69.71'
Tie: # Sta. 243+00 to Intersection of Ramp Edge and Curb Face
- ② 67°17'56" 74.38'
Tie: # Sta. 243+00 to Intersection of Ramp Edge and Curb Face
- ③ 35°3'28" 94.99'
Tie: # Sta. 243+00 to Intersection of Ramp Edge and Curb Face
- ④ 38°53'51" 95.13'
Tie: # Sta. 243+00 to Intersection of Ramp Edge and Curb Face



DATE	_____
SURVEY PLOTTED BY	_____
DESIGNED BY	_____
NOTES BOOK	_____
CHECKED BY	_____

L:\FORT WEAVER ROAD\ROAD\CURB RAMP\PLAN06.dgn

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP SITE PLAN & DETAILS
FORT WEAVER ROAD AT STA. 243+00

FORT WEAVER ROAD WIDENING
VICINITY OF AWA DRIVE TO GEIGER ROAD

Scale: As Noted Date: Feb. 22, 2008

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.

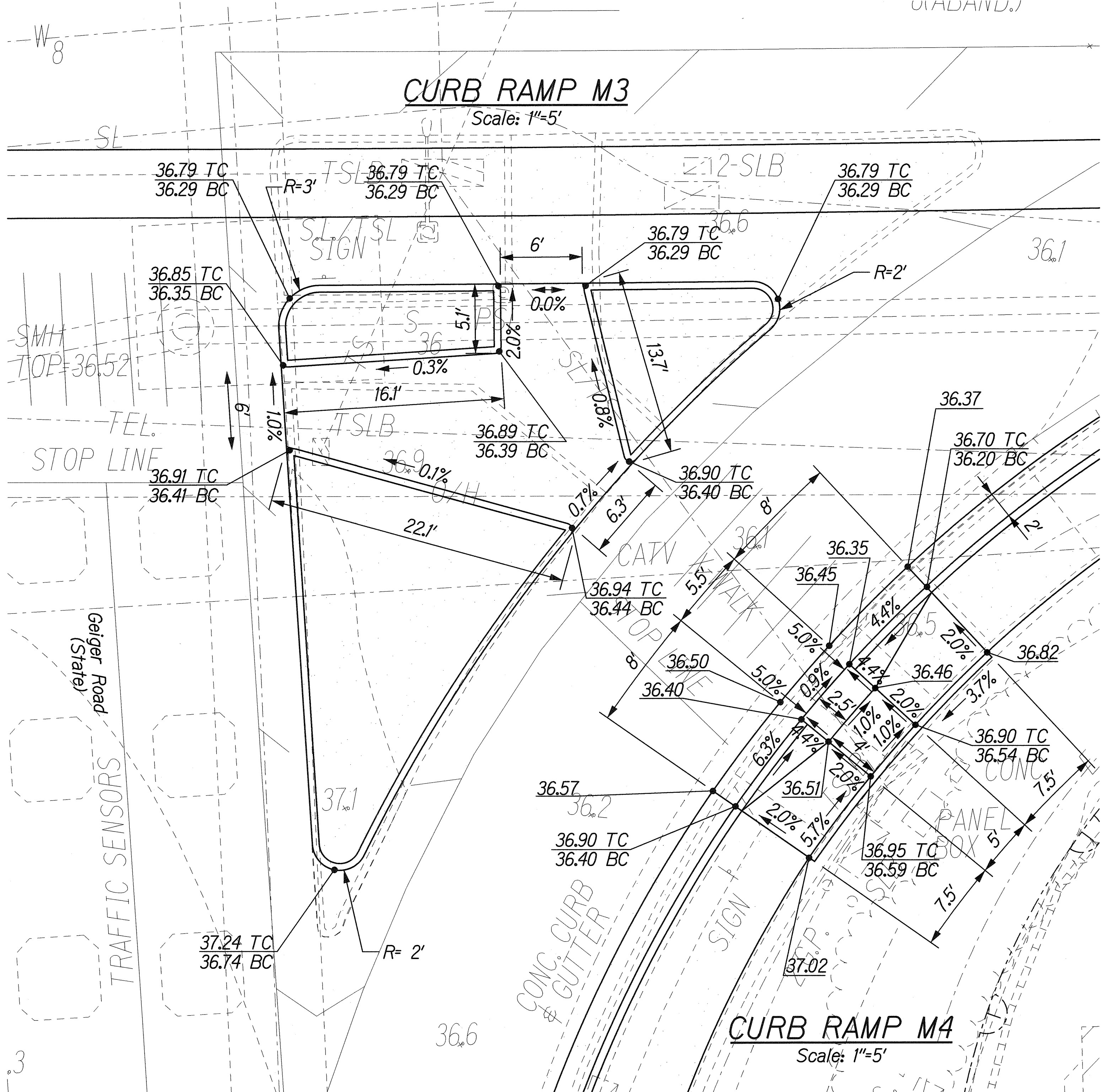
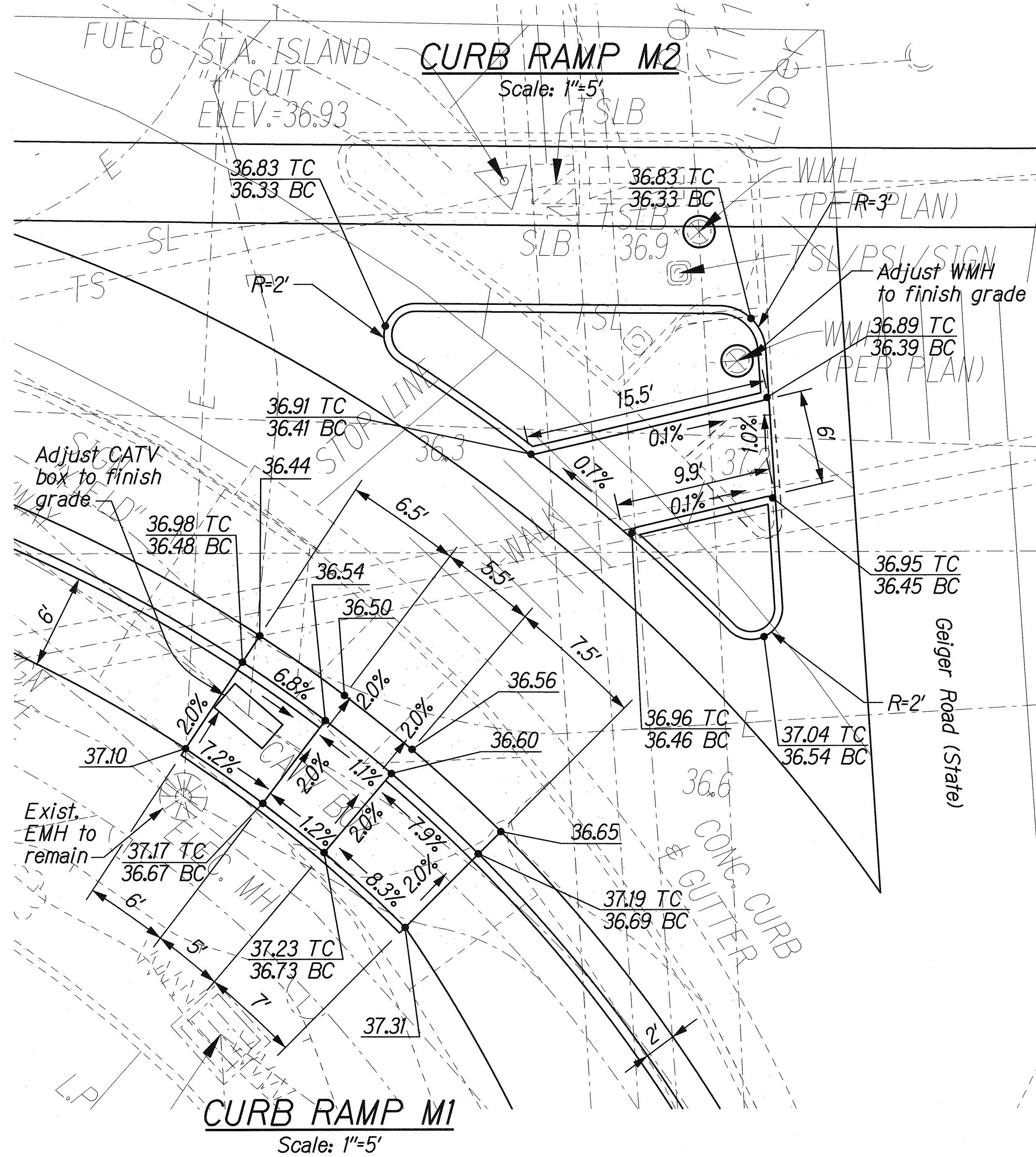
Randall M. Urasky
SIGNATURE 04/30/10
EXPIRATION DATE OF THE LICENSE

RANDALL M. URASKY
LICENSED PROFESSIONAL ENGINEER
No. 7269-C
HAWAII, U.S.A.

SHEET No. R2-60 OF 79 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	94	371

UNADJUSTED



DATE	_____
DESIGNED BY	_____
TRACED BY	_____
NOTED BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
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44 FORT WEAVER ROAD/ROAD/C-RAMP-DET10.dgn

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SIGNATURE: *Ram Uraski* EXPIRATION DATE: 04/30/10 OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS
FT. WEAVER RD. & GEIGER RD.

FORT WEAVER ROAD WIDENING
VICINITY OF AWA DRIVE TO GEIGER ROAD

Scale: 1"=5' Date: Feb. 22, 2008

SHEET No. R2-63 OF 79 SHEETS

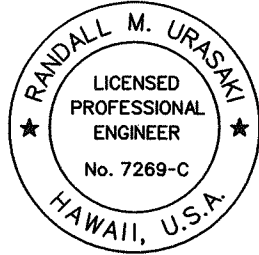
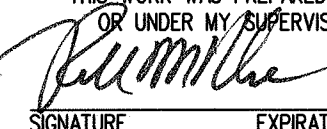
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	95	371

CURB RAMP AND SIDEWALK NOTES:

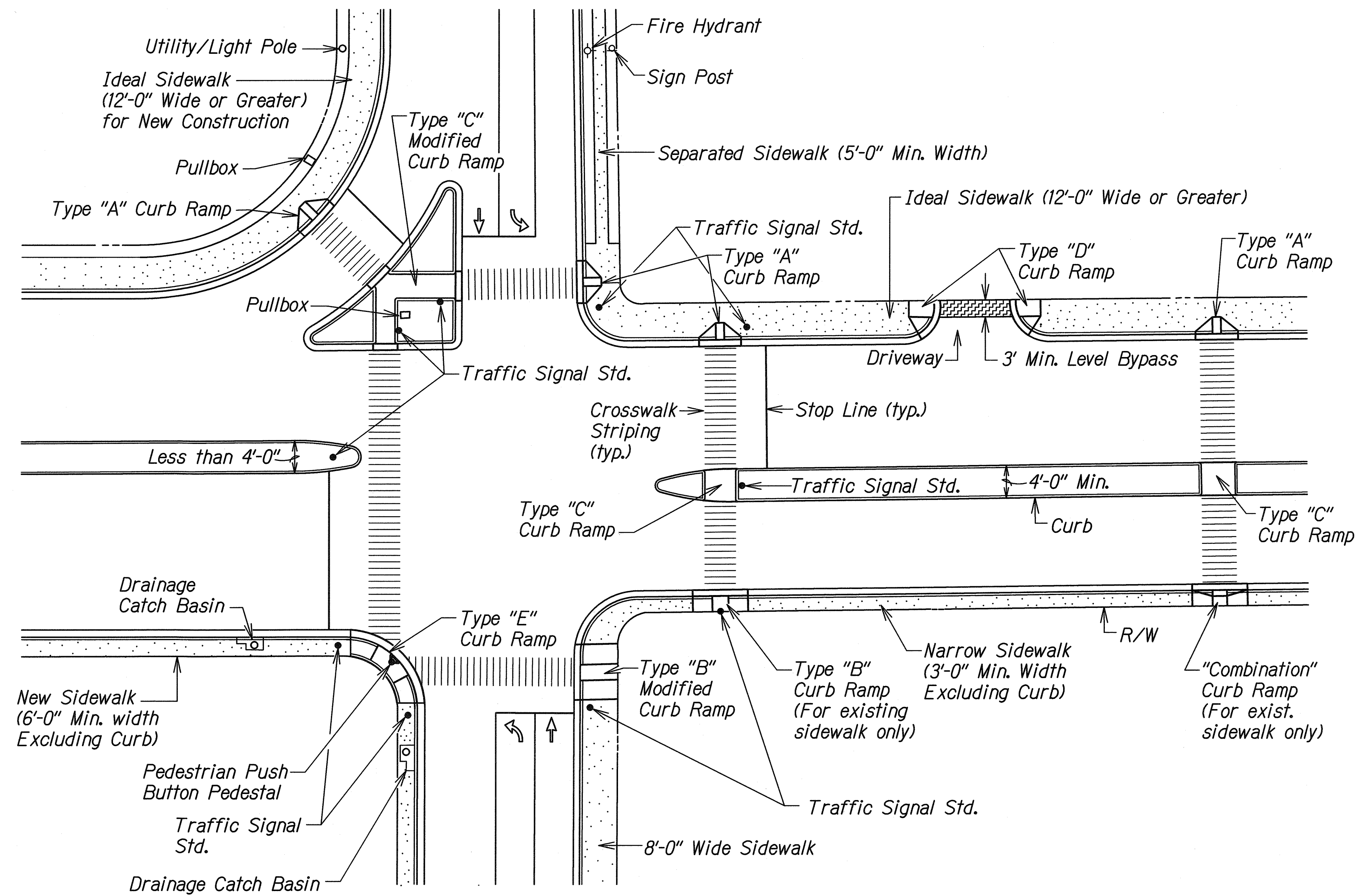
- These typical details are intended as curb ramp guidelines for design and construction.
- A 2% maximum cross slope shall be maintained in the direction of pedestrian traffic.
- Subject to field conditions, the Engineer shall determine the final location of curb ramps.
- All pullboxes shall be installed away from the curb ramp and within the sidewalk/unpaved area to the maximum extent feasible.
- Where necessary, existing pullboxes, handholes, manholes, etc. shall be adjusted to match curb ramp grade. Adjustments shall not be paid for separately but shall be considered incidental to the various curb ramp items unless indicated otherwise.
- Transitions from ramps to gutters and roadways shall be flush.
- Curb ramps and sidewalks shall be constructed to eliminate ponding to the maximum extent feasible.
- The pedestrian push button shall meet operational and reach requirements of the American with Disabilities Act Accessibility Guidelines (ADAAG):
 - Forward Reach. The maximum height for forward reach shall be 48".
 - Side Reach. The maximum height for side reach shall be 54".
 - Operation. Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbf.
- The maximum slopes of adjoining gutters or road surface immediately fronting the curb ramp shall not exceed 5% for Type A, D and Combination ramps and 8.33% for Type B, C, and E ramps.
- There shall be a 30"x48" level ground surface (2% max. cross slope, both directions) for a forward or side approach, as appropriate, to a pedestrian push button.
- Construction joints are required to join curb ramps with sidewalks.
- Unless otherwise noted, new gutters are required as shown.
- All curb ramps shall be reinforced with 6x6 W1.4/W1.4 welded wire fabric.
- Surface of sidewalks and curb ramps shall be firm, stable, and slip-resistant. This includes the surfaces of pullboxes, valve covers, manhole covers, etc.
- Bed course material is required for curb ramps, sidewalks, and gutters.
- All sidewalks shall provide a minimum clear width of 3'-0" (excluding curb) for pedestrian circulation. If this cannot be met, a minimum 32-inch clear width is allowed for a distance of 24-inches.
- Passing spaces along new sidewalks with 5' clear width or less shall be provided at maximum 200' intervals as required by ADA guidelines. The passing area shall be a minimum 5' wide by 5' long as feasible.
- If possible, install utility poles, fire hydrants, light poles, sign posts, pullboxes, etc. off of sidewalk but within the right-of-way.
- Objects protruding from utility poles and walls adjacent to the sidewalks (i.e. wall mounted fire hydrants, telephones, meters on poles, etc.) shall be mounted to meet the current American with Disabilities Act Accessibility Guidelines (ADAAG) and will be subject to Engineer's approval.
- If a curb ramp is not constructed according to the plans, the Contractor shall reconstruct the curb ramp at no cost to the State. Construction tolerance for Portland Cement Concrete shall be based on 1/4 inch per 10 ft. (±0.2%). Remedial measures will not be accepted.
- Additional information is available from:
 - American with Disabilities Act Accessibility Guidelines (ADAAG), Jan. 1998, The Access Board.
 - Accessible Rights-of-Way: A Design Guide, Nov. 1999, The Access Board.
 - Designing Sidewalks and Trails for Access, Part 1, July 1999, FHWA.
 - Designing Sidewalks and Trails for Access, Part 2, Sept. 2001, FHWA.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
N.	QUANTITIES BY	
	CHECKED BY	

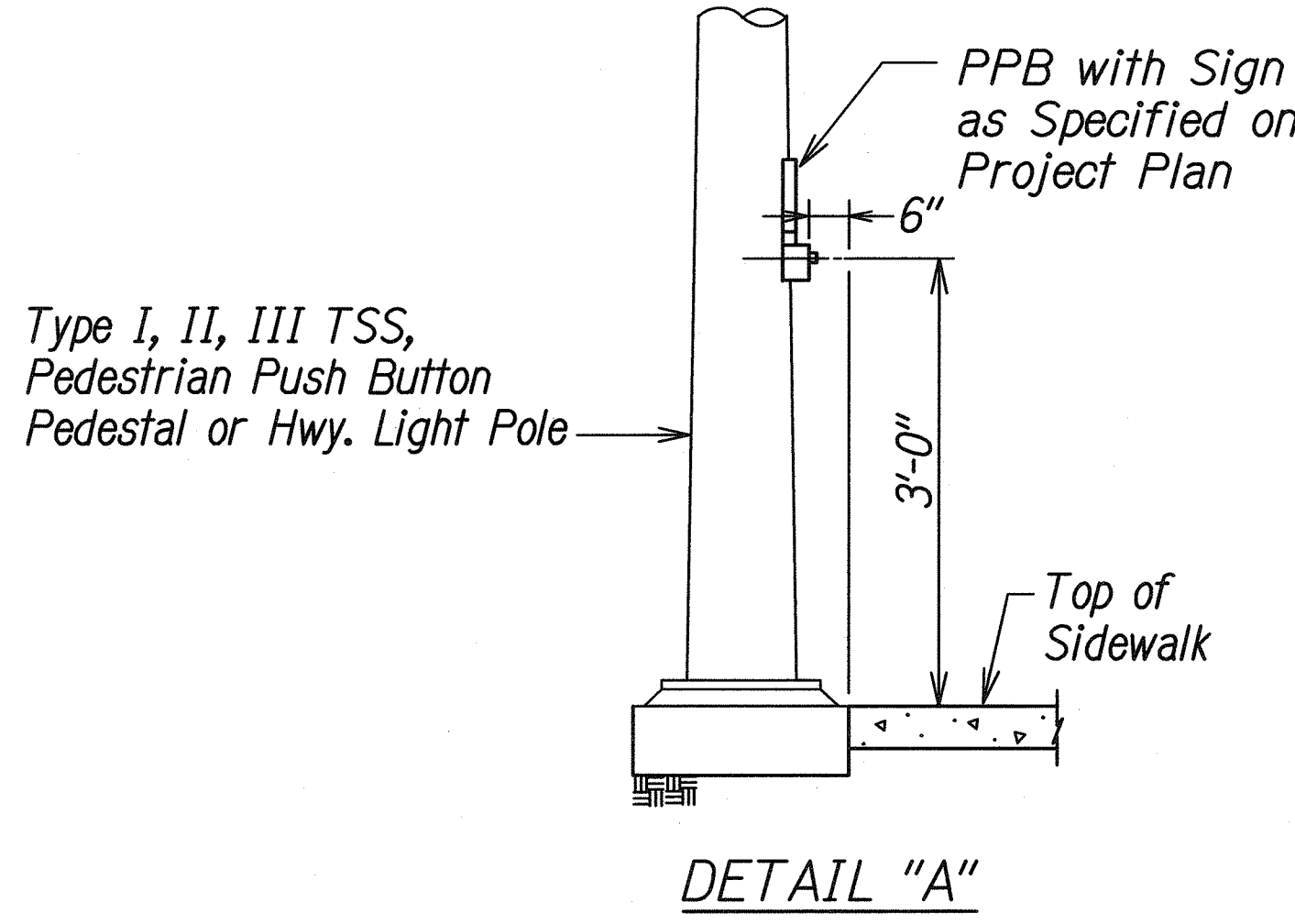
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R12-06-06 TE-XX sh1. 1 of 9

 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  SIGNATURE EXPIRATION DATE OF THE LICENSE 04/30/10	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION CURB RAMP AND SIDEWALK NOTES FORT WEAVER ROAD WIDENING VICINITY OF AAWA DRIVE TO GEIGER ROAD Scale: NTS Date: Feb. 22, 2008

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	96	371



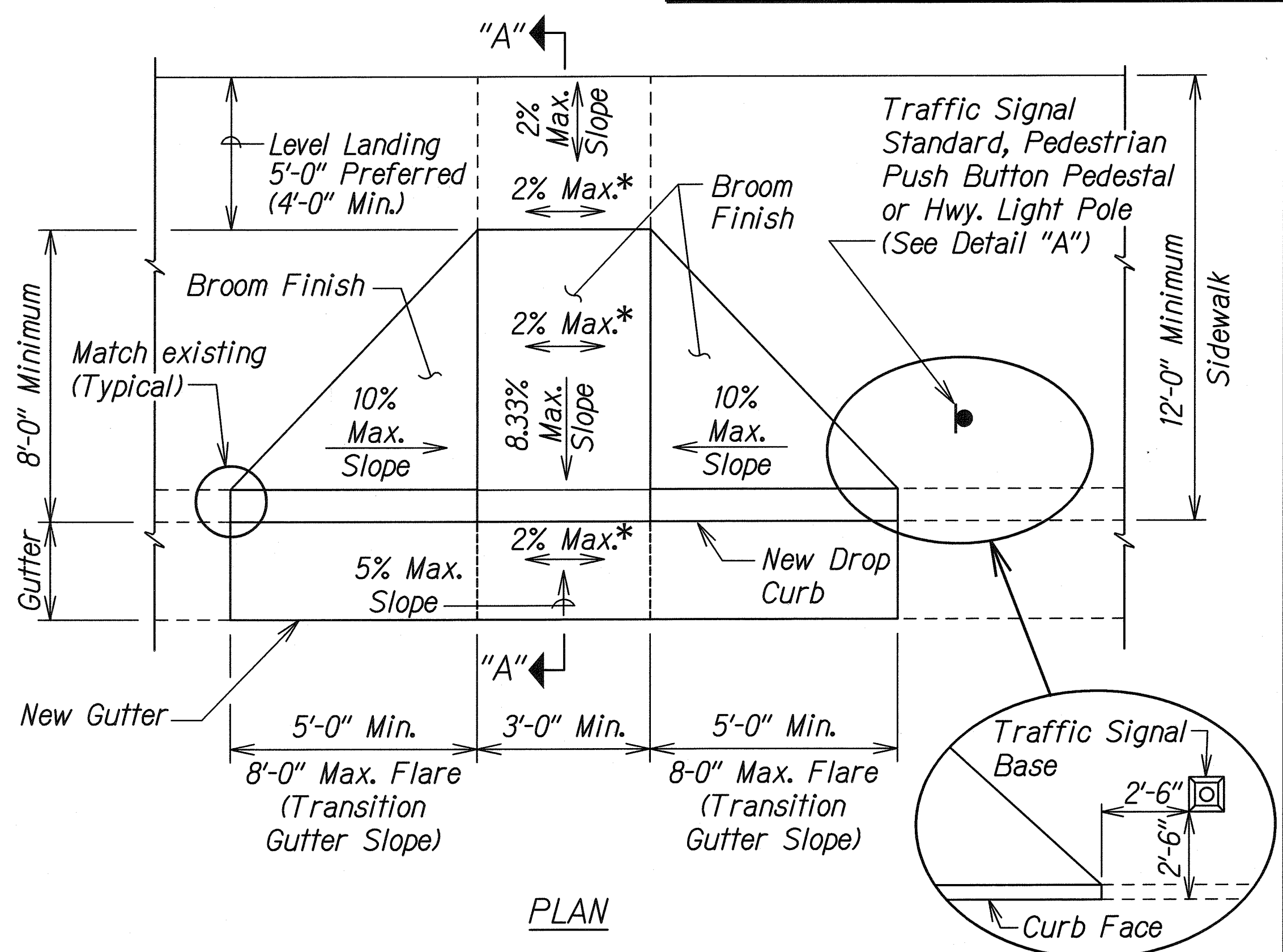
TYPICAL CURB RAMPS



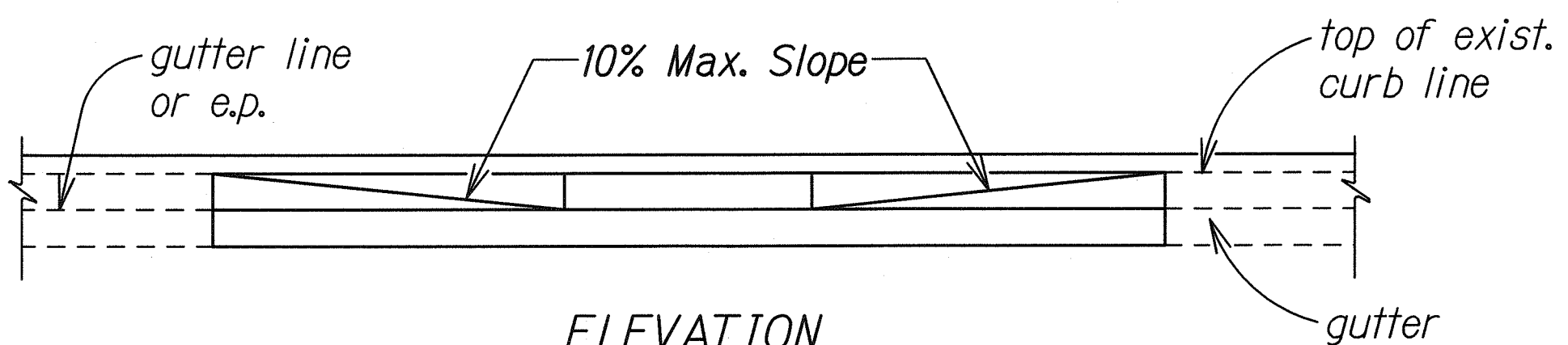
DETAIL "A"

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

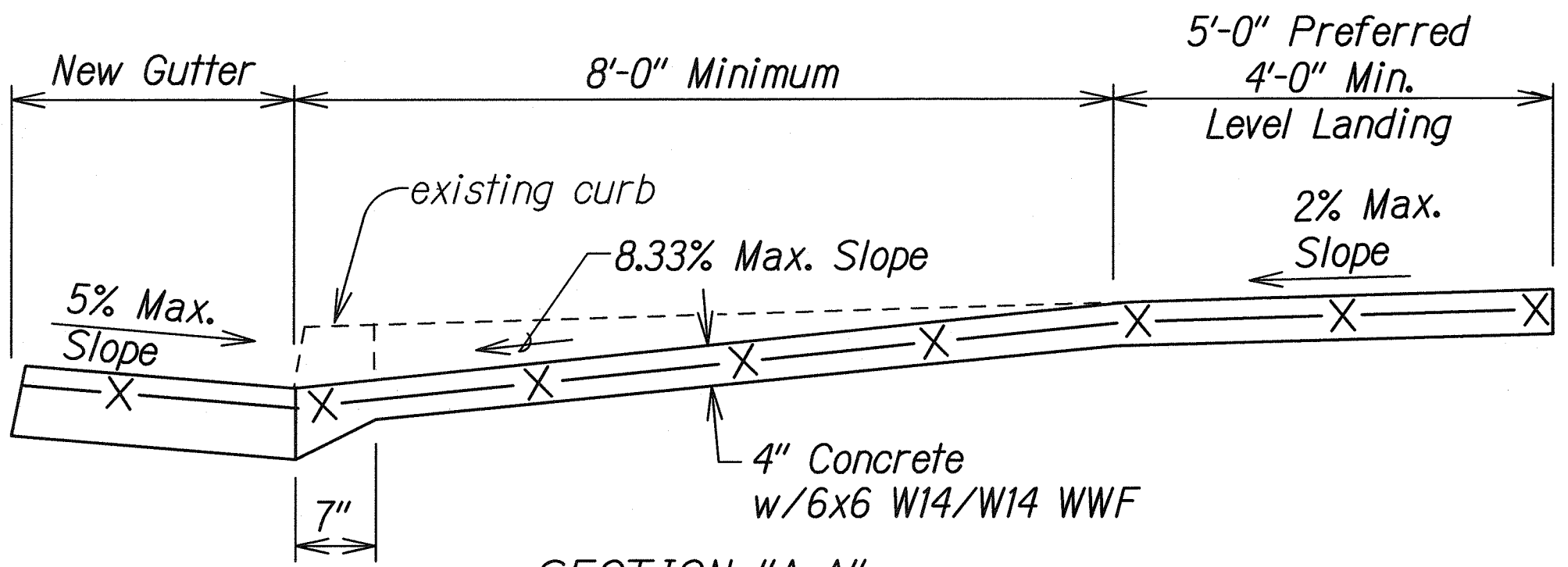
* If Roadway Slope >2% Conform to Roadway Slope and File Technical Infeasibility (TI) Statement



PLAN



ELEVATION



SECTION "A-A"

DESIGNED BY	DATE
TRACED BY	
NOTED BY	
CHECKED BY	
IN CHARGE	

R12-06-06 TE-XX sh. 2 of 9

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

SIGNATURE: *R. Urasak* EXPIRATION DATE: 04/30/10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS

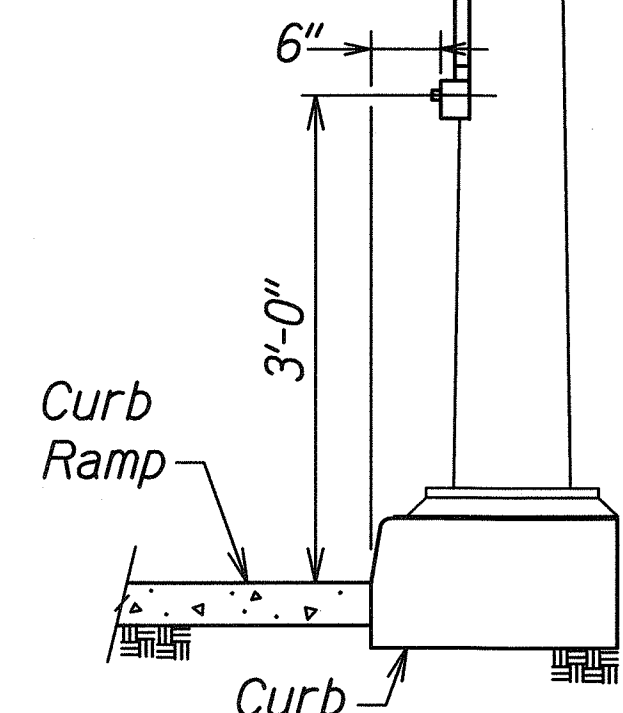
FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: NTS Date: Feb. 22, 2008

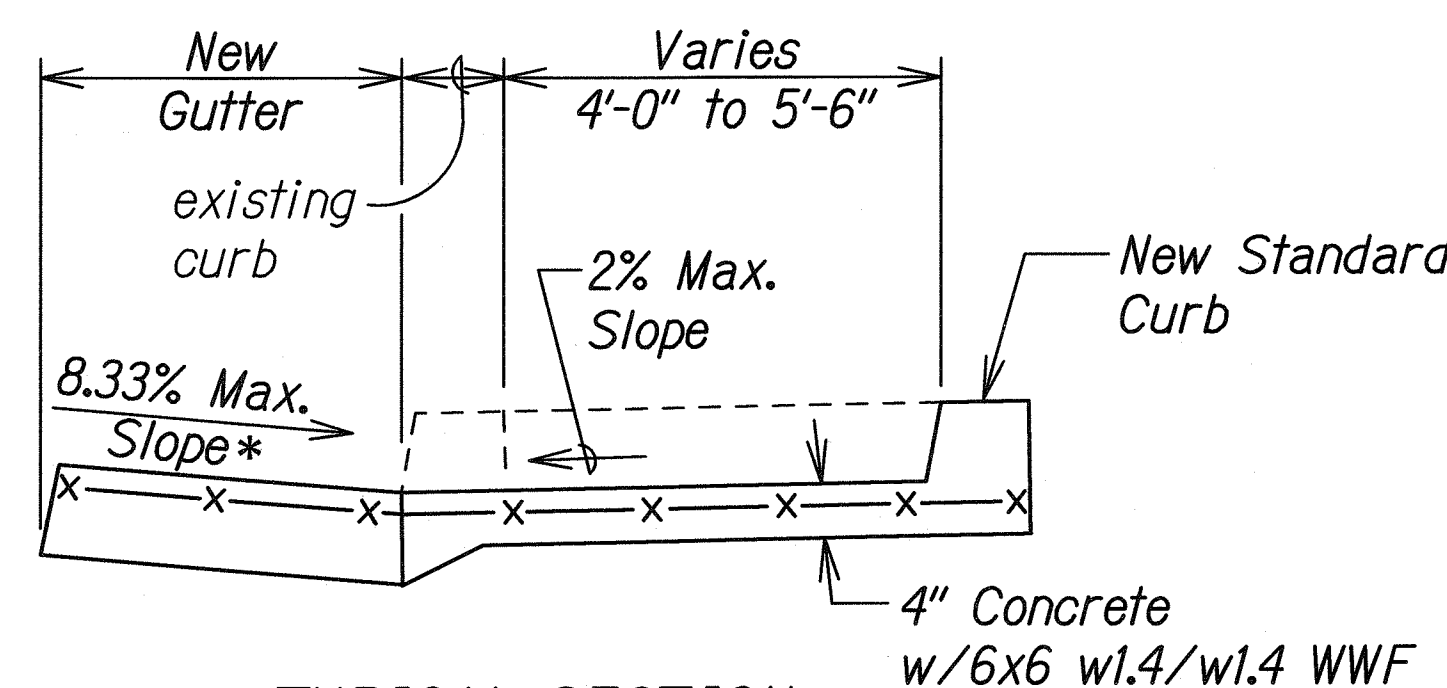
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	97	371

PPB with Sign as Specified on Project Plan

Type I, II, III TSS, Pedestrian Push Button Pedestal or Hwy. Light Pole



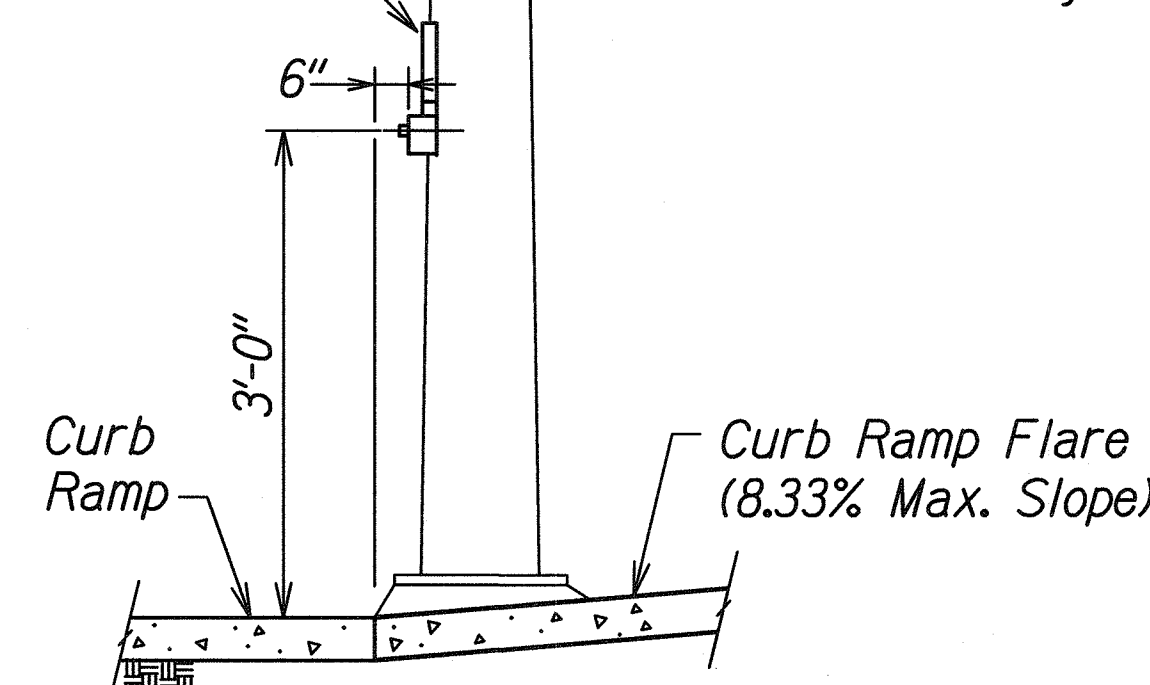
DETAIL "B"



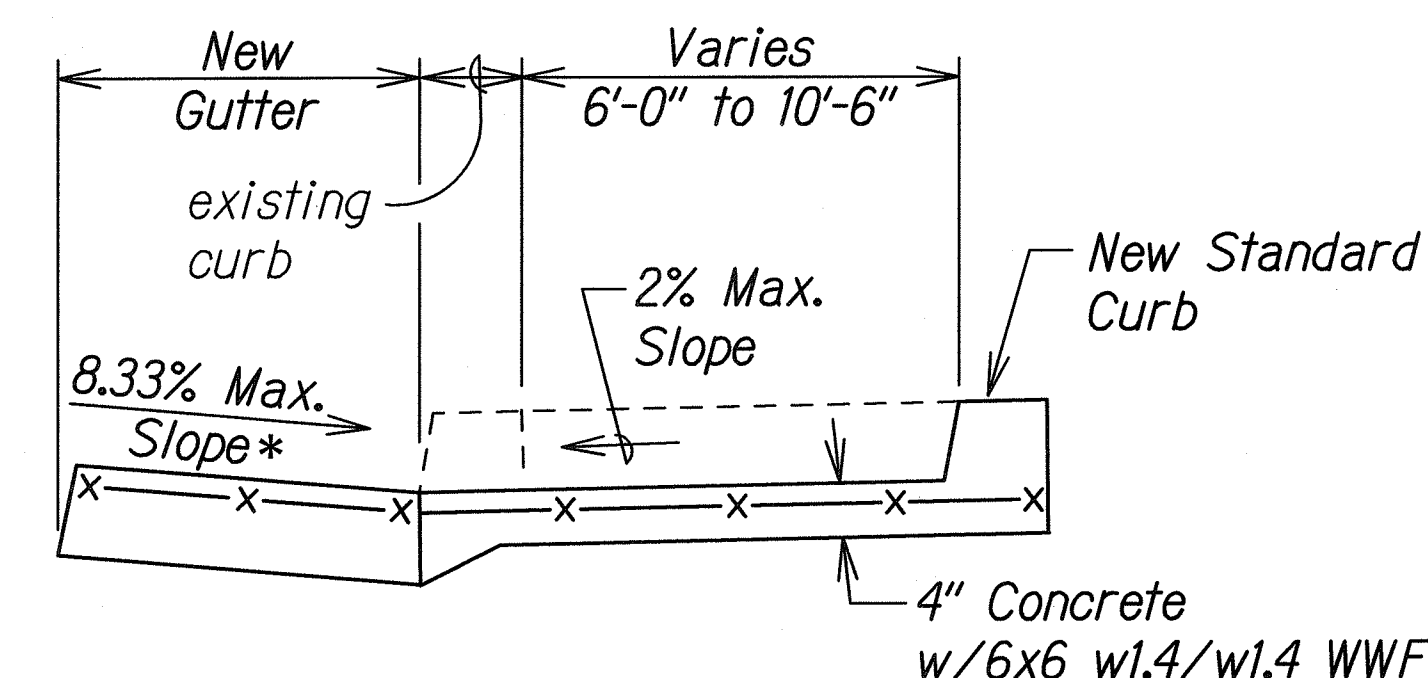
TYPICAL SECTION

PPB with Sign as Specified on Project Plan

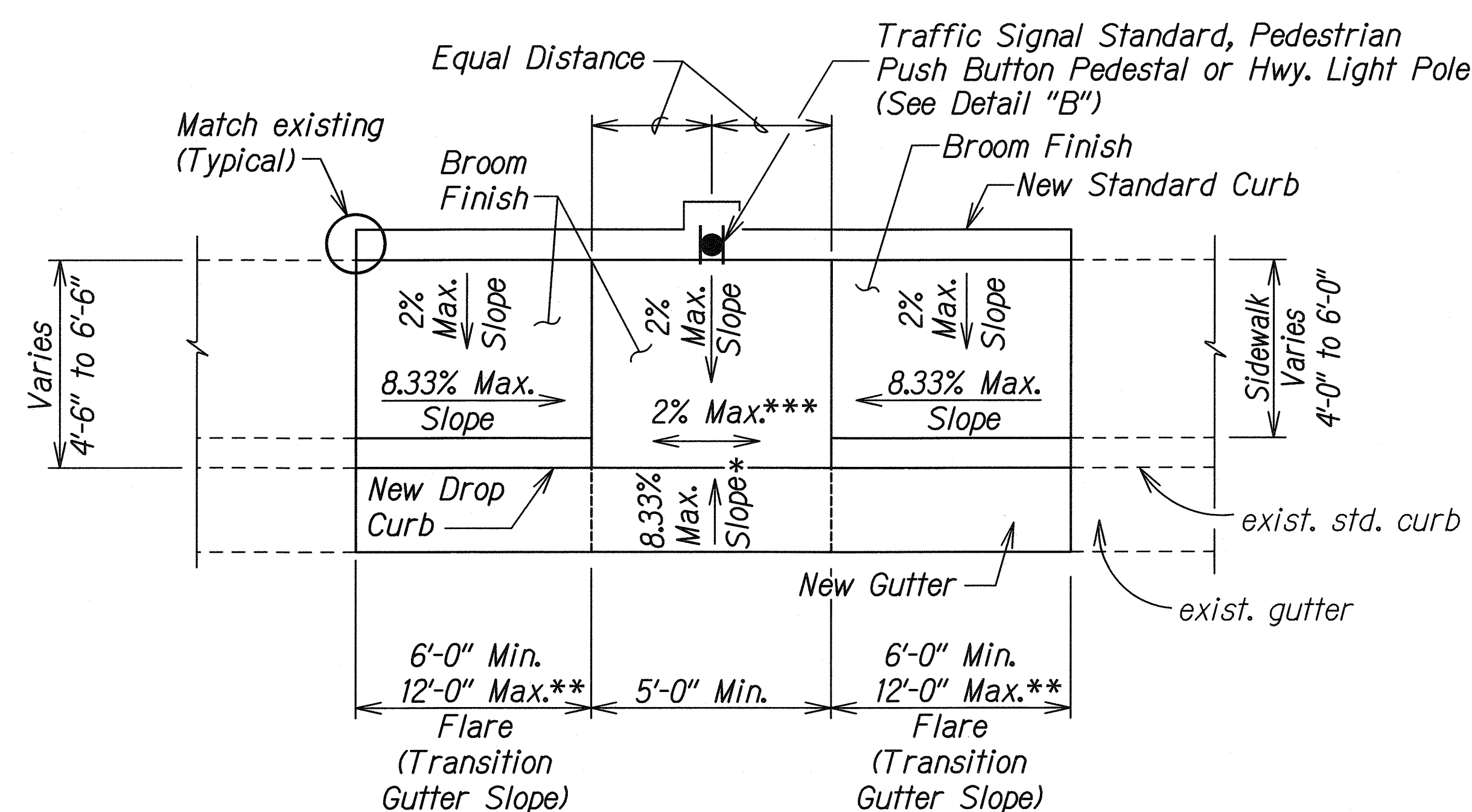
Type I, II, III TSS, Pedestrian Push Button Pedestal or Hwy. Light Pole



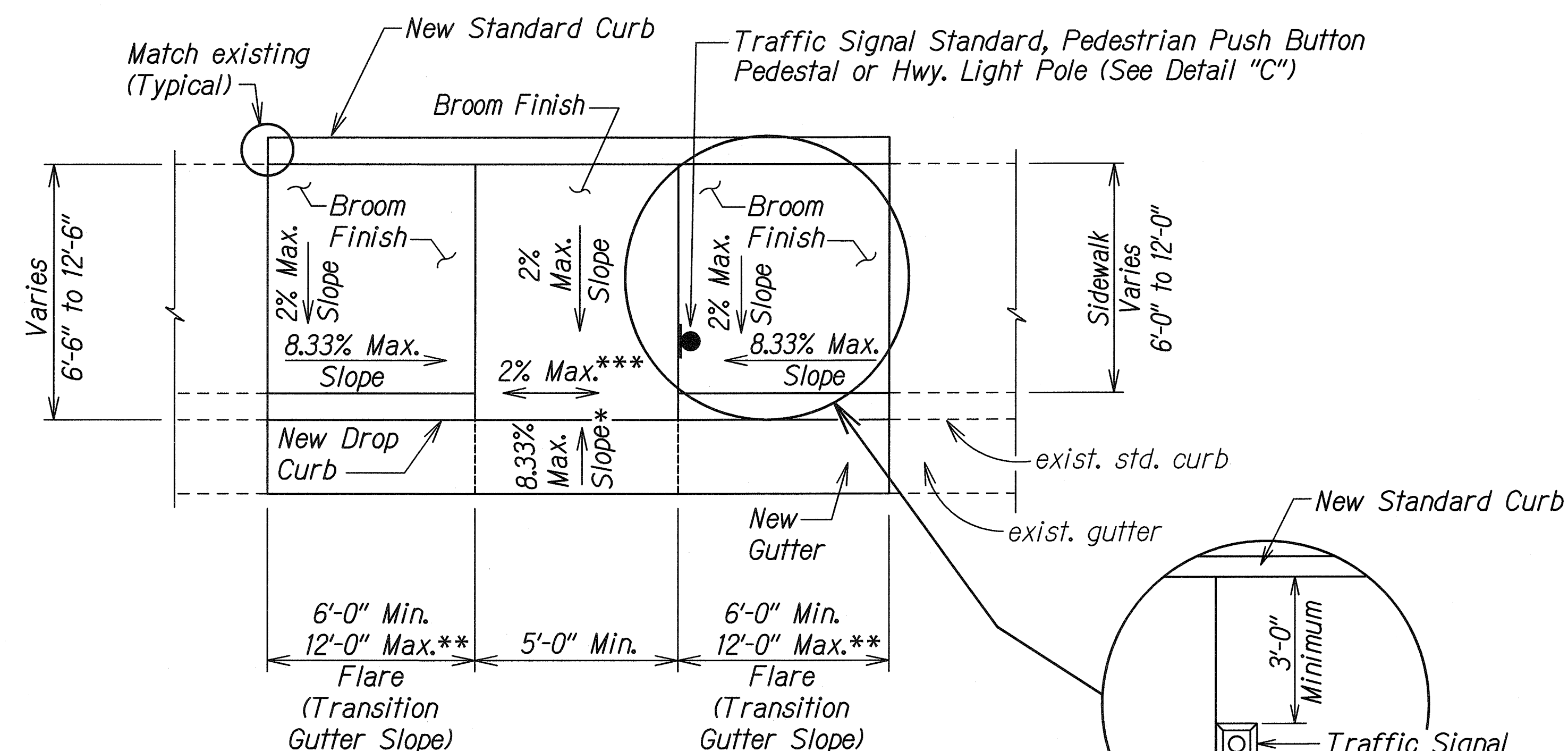
DETAIL "C"



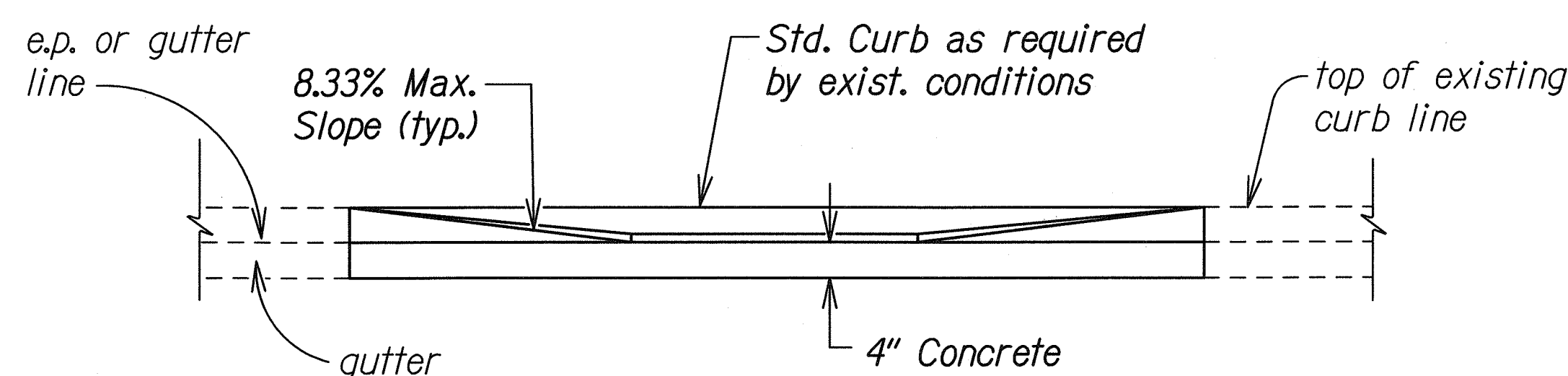
TYPICAL SECTION



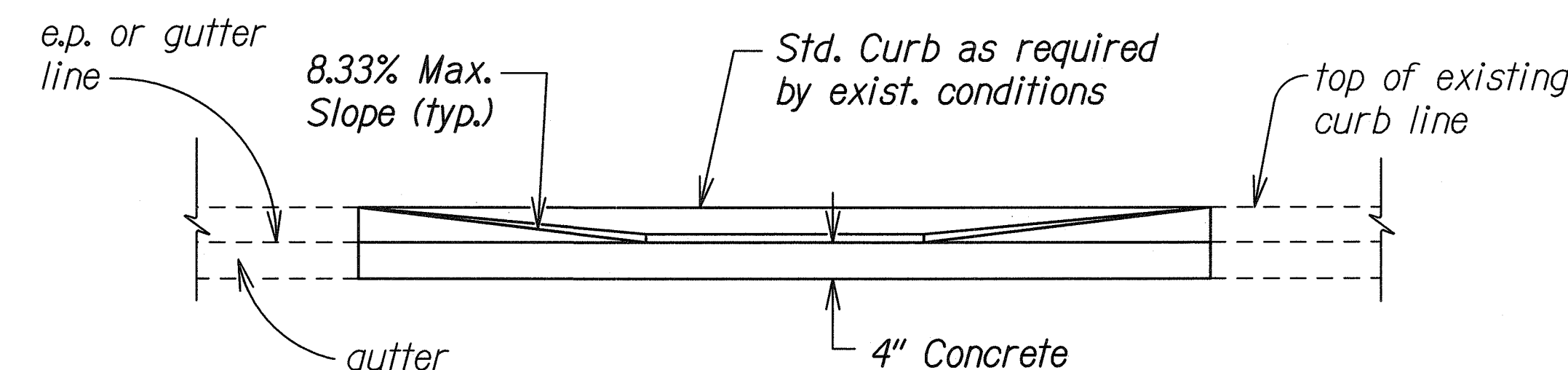
PLAN



PLAN



ELEVATION



ELEVATION

CURB RAMP - TYPE "B"
SIDEWALK WIDTH 4'-0" OR GREATER
BUT LESS THAN 6'-0" WIDTH

- * 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 Technical Infeasibility (TI) Statement

CURB RAMP - TYPE "B" MODIFIED
SIDEWALK WIDTH 6'-0" OR GREATER
BUT LESS THAN 12'-0" WIDTH

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.

SIGNATURE: *Randall M. Urasaka*
EXPIRATION DATE OF THE LICENSE: 04/30/10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

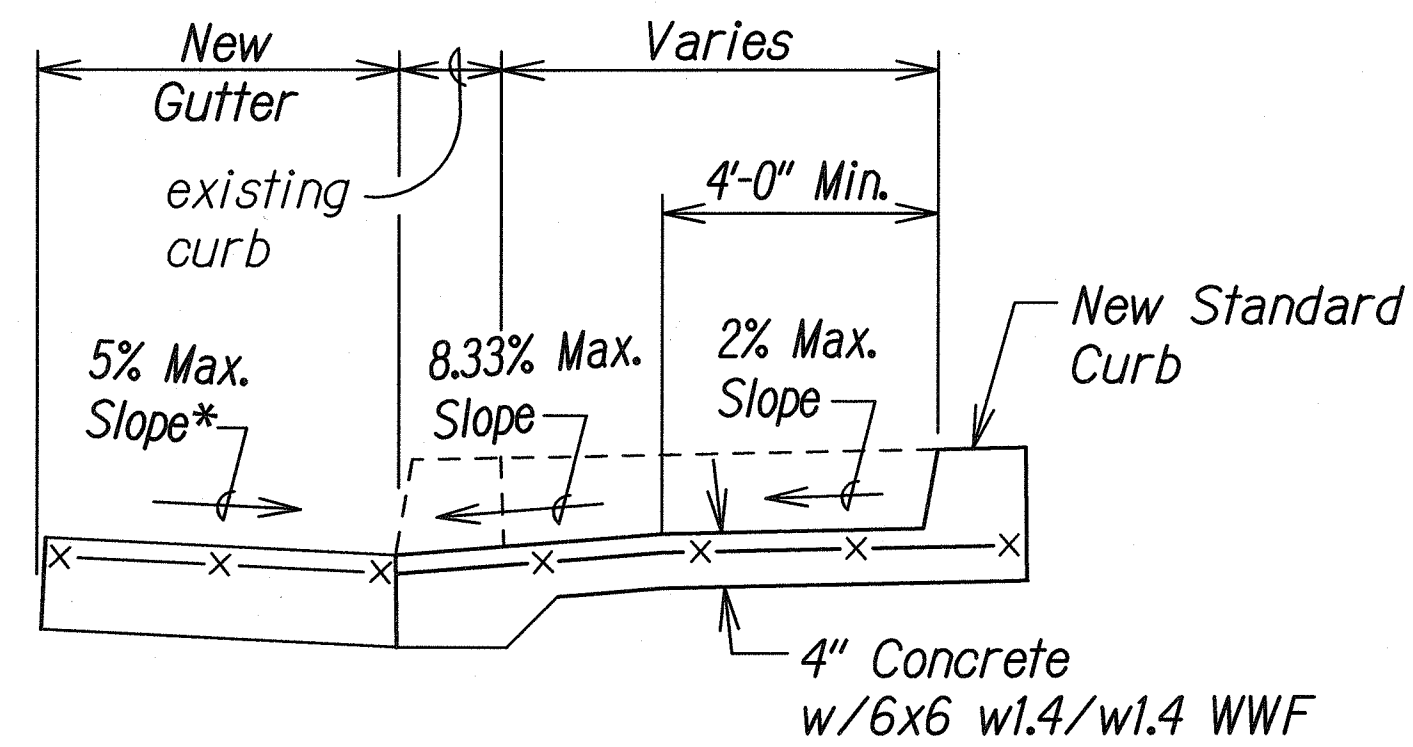
CURB RAMP DETAILS

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

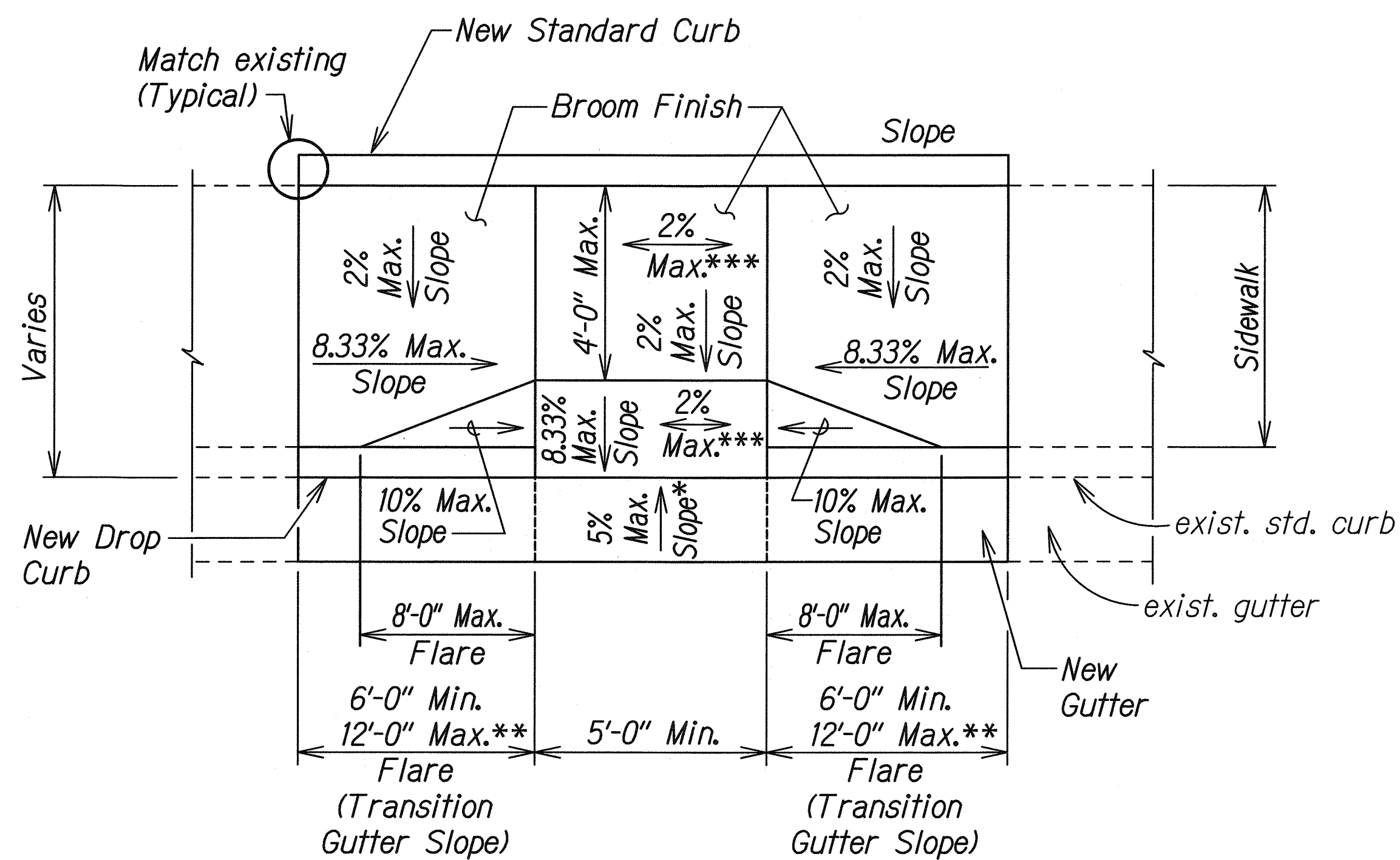
Scale: NTS Date: Feb. 22, 2008

SHEET No. R2-66 OF 79 SHEETS

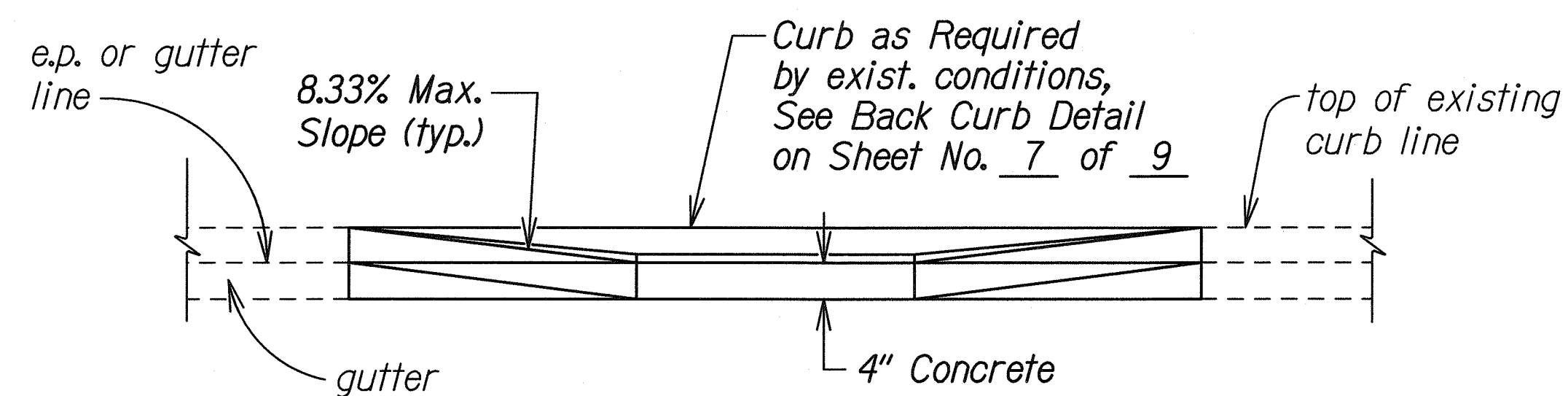
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	98	371



TYPICAL SECTION



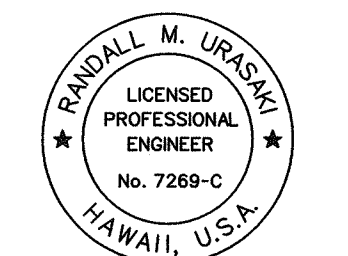
PLAN



ELEVATION

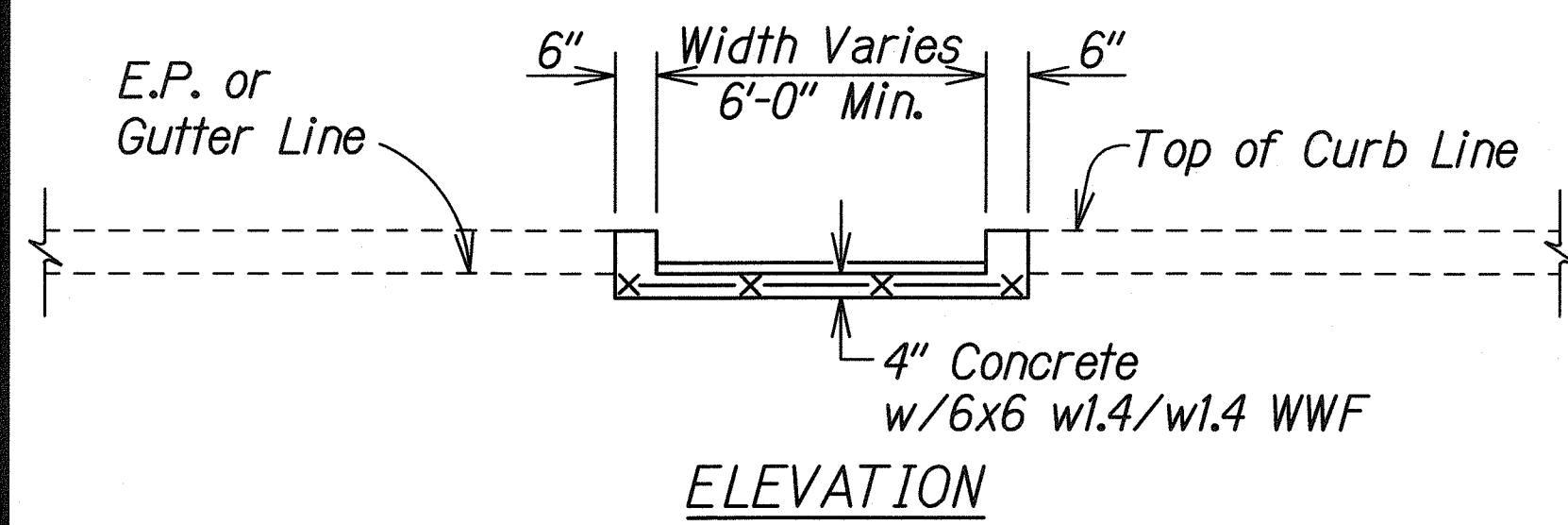
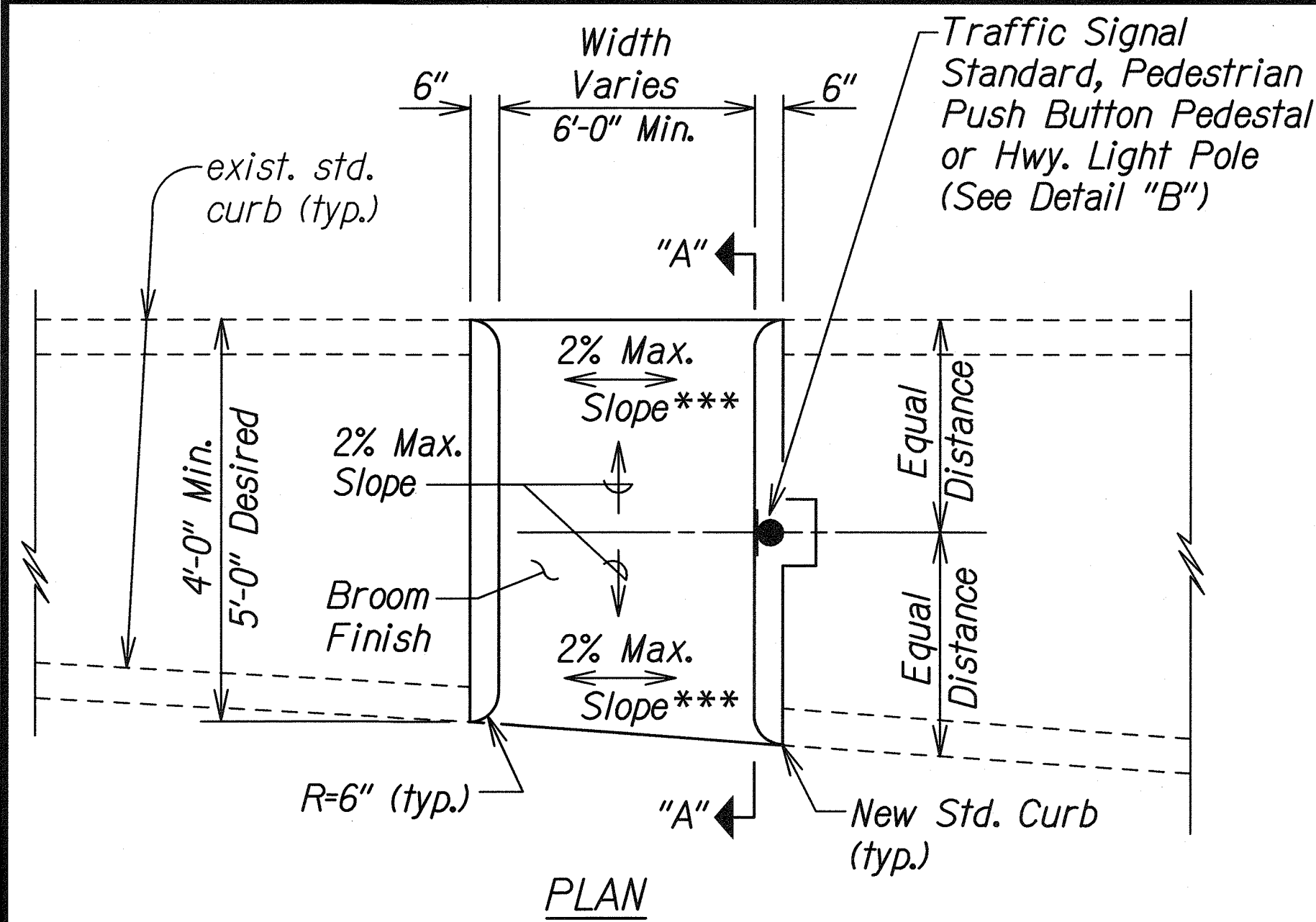
CURB RAMP - COMBINATION

- * 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

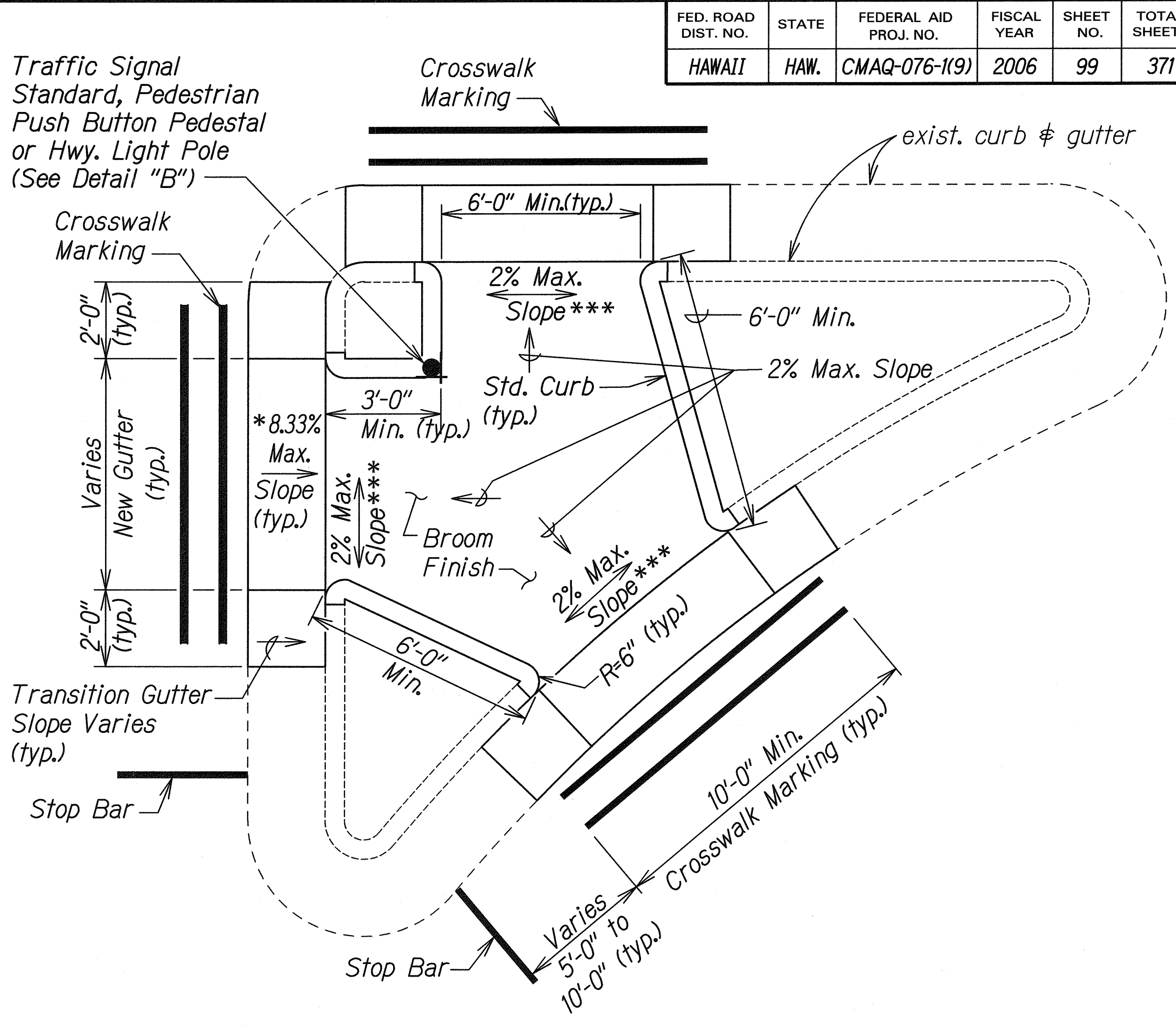
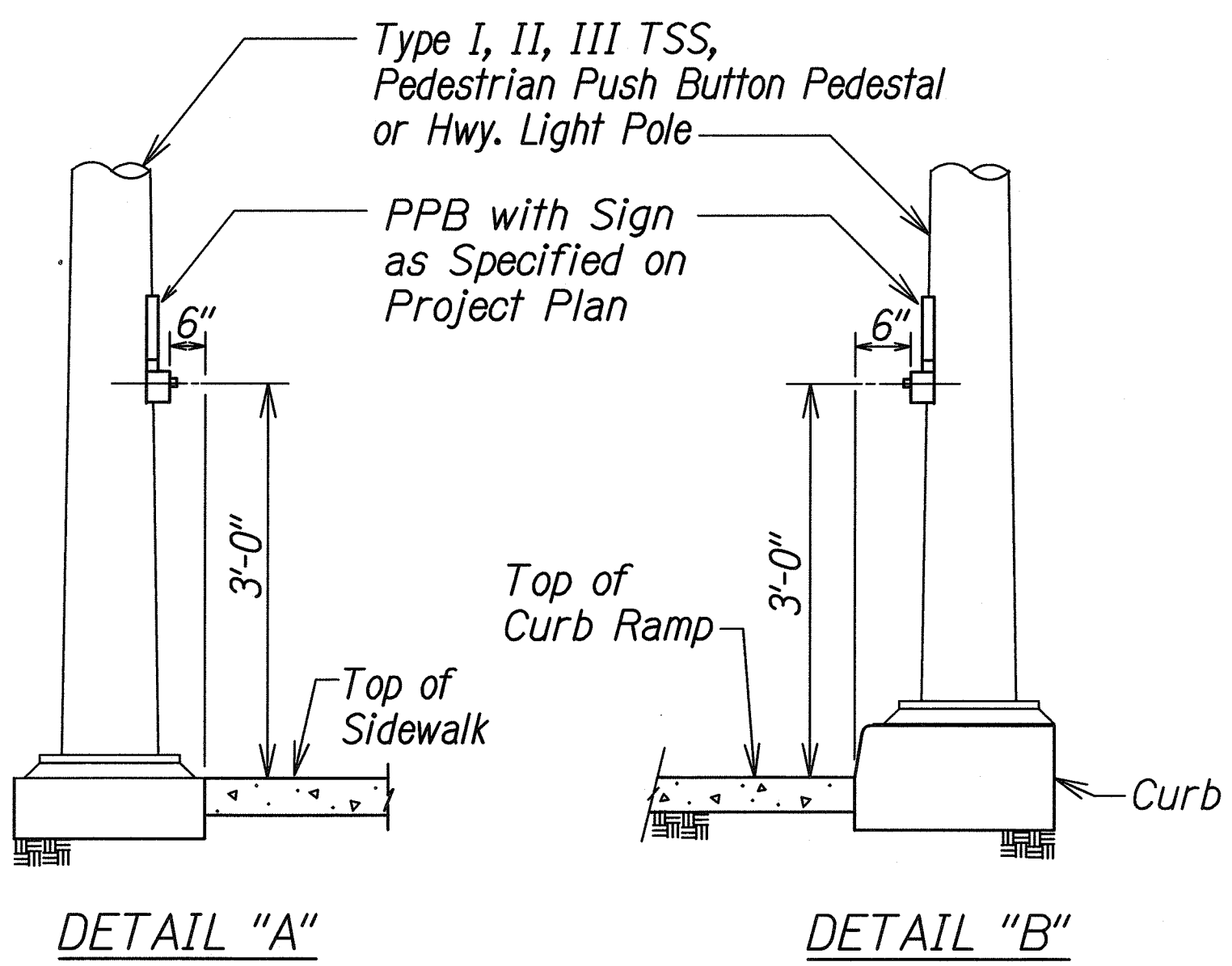
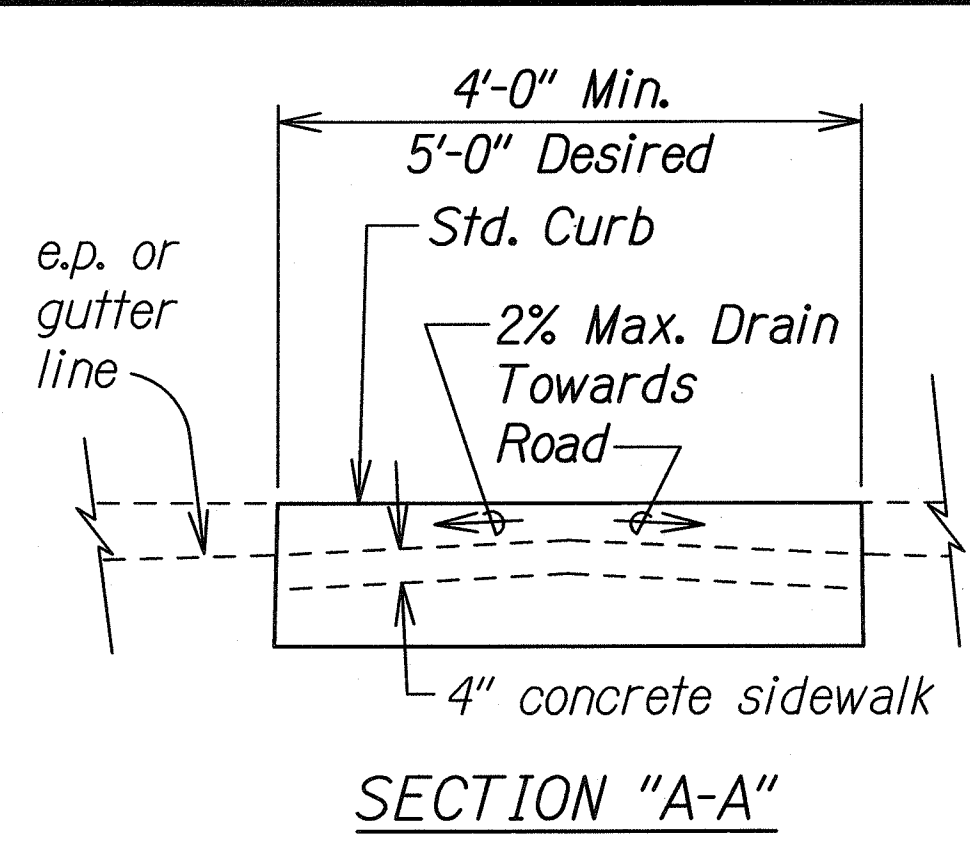
 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. SIGNATURE: <i>R. M. Urasaki</i> EXPIRATION DATE OF THE LICENSE: 04/30/10	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION CURB RAMP DETAILS FORT WEAVER ROAD WIDENING VICINITY OF AAWA DRIVE TO GEIGER ROAD Scale: NTS Date: Feb. 22, 2008	
	SHEET No. R2-67 OF 79 SHEETS	
	98	
	98	

R12-06-06 TE-XX sh. 4 of 9
 hdl/usr2/traffic/std/curbramp/rampb2-r12-06-06.dgn

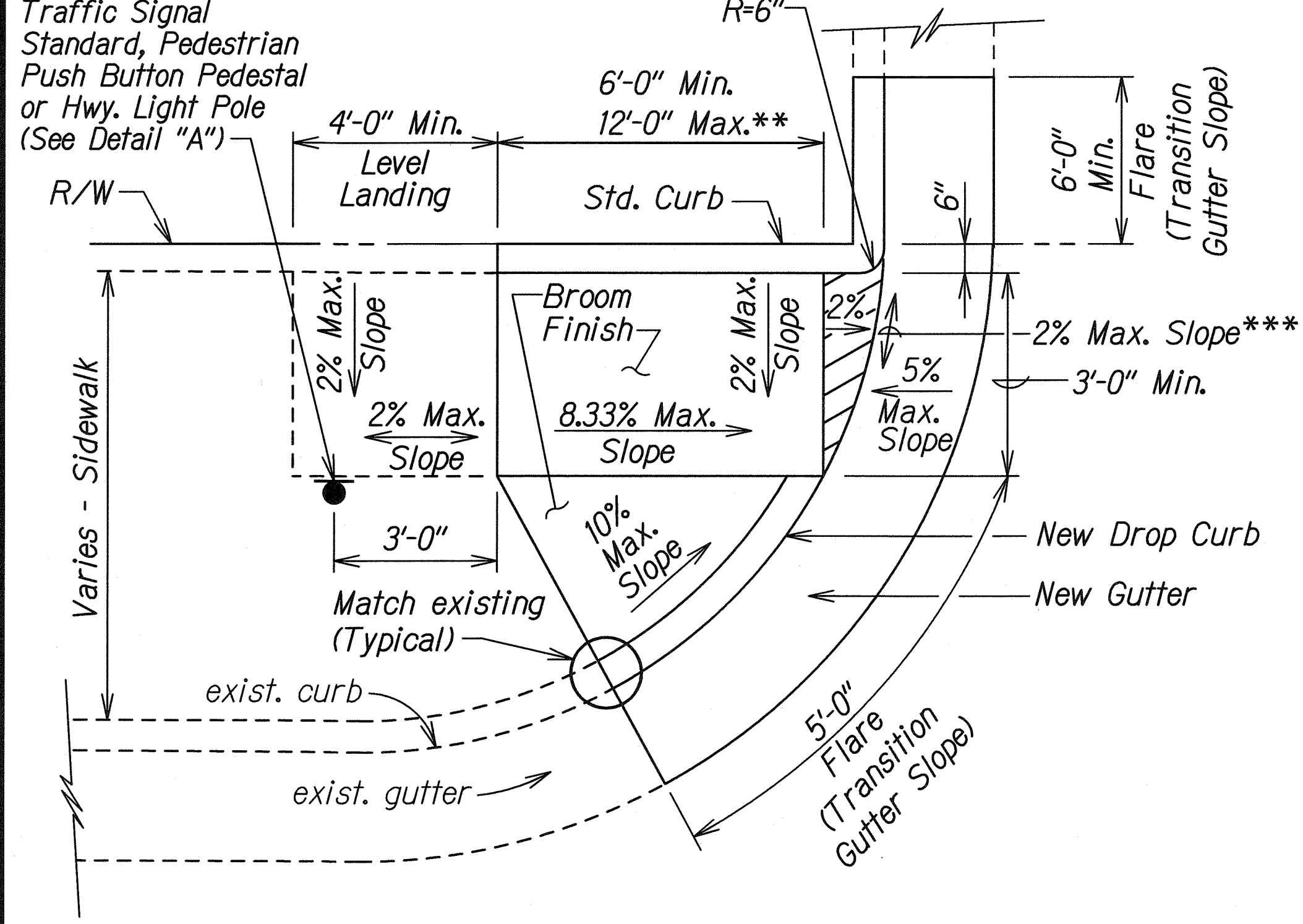
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	99	371



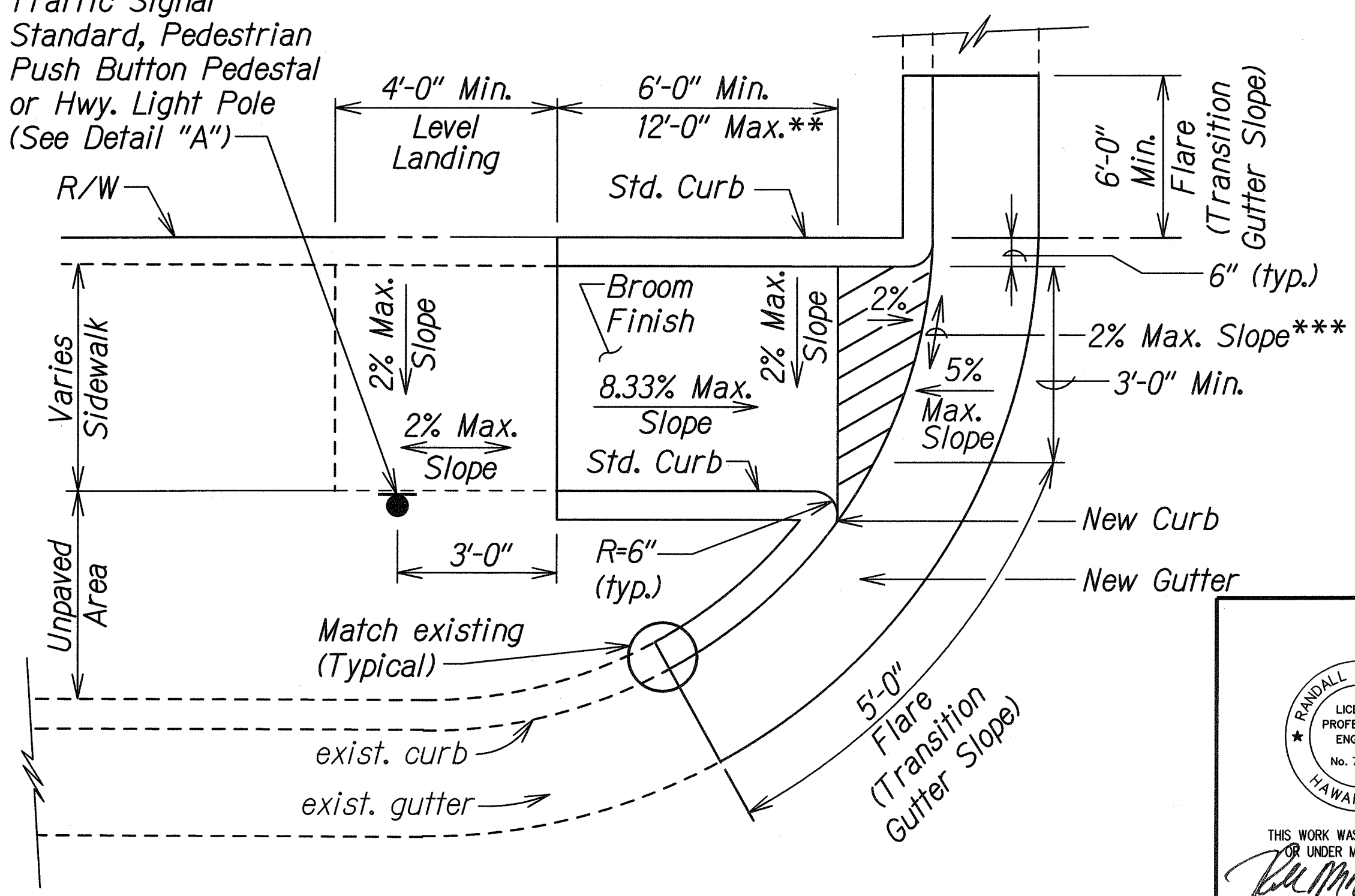
CURB RAMP - TYPE "C"
USE AT MEDIAN CROSSINGS, ISLANDS



CURB RAMP - TYPE "C" MODIFIED



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

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
SIGNATURE: *R. Urakami* EXPIRATION DATE OF THE LICENSE: 04/30/10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS

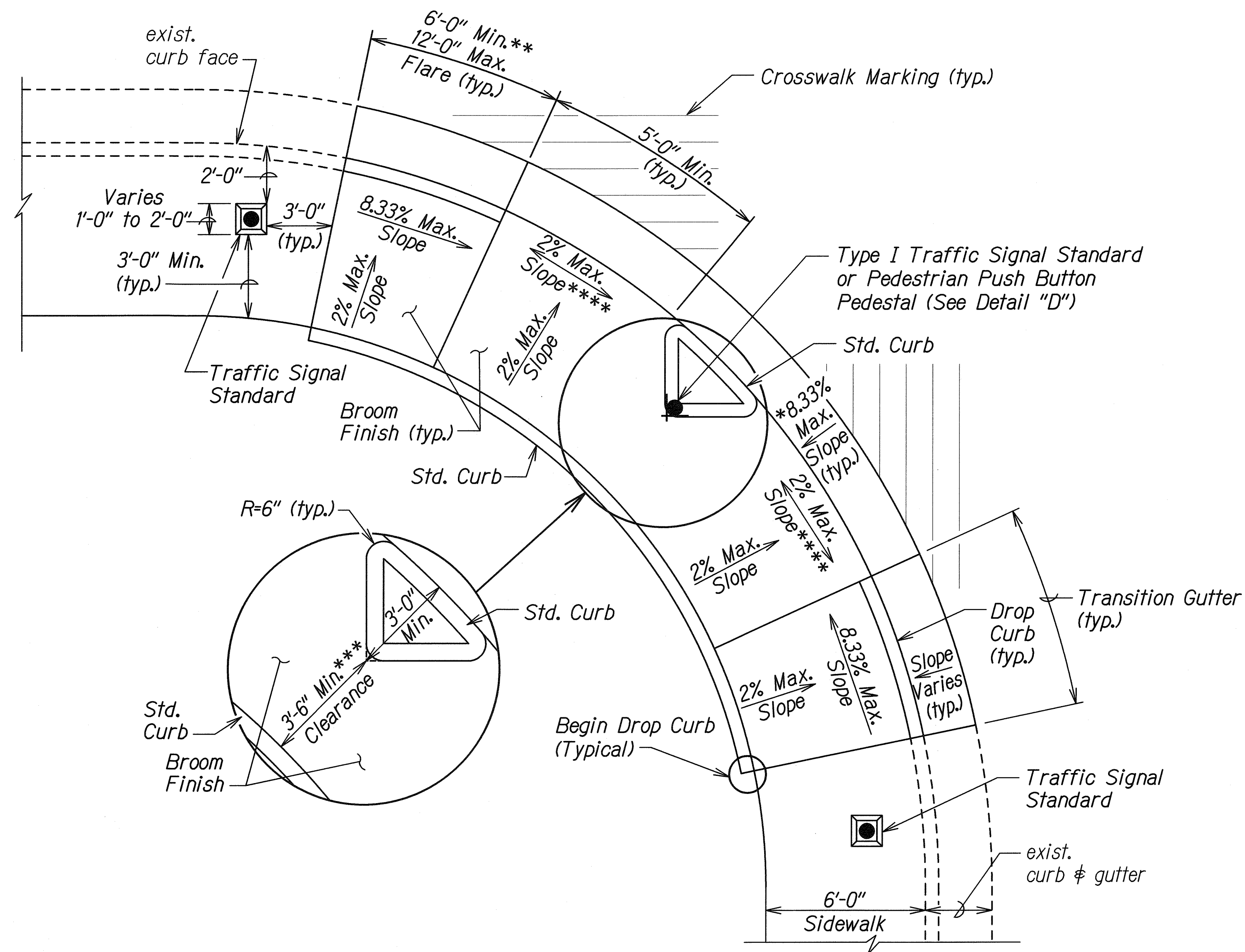
FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: NTS Date: Feb. 22, 2008

SHEET No. R2-68 OF 79 SHEETS

tdl/ust2/traffic/std/curb/ramp/rampcd-r12-06-06.dgn
 R12-06-06 TE-XX sht. 5 of 9

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	100	371

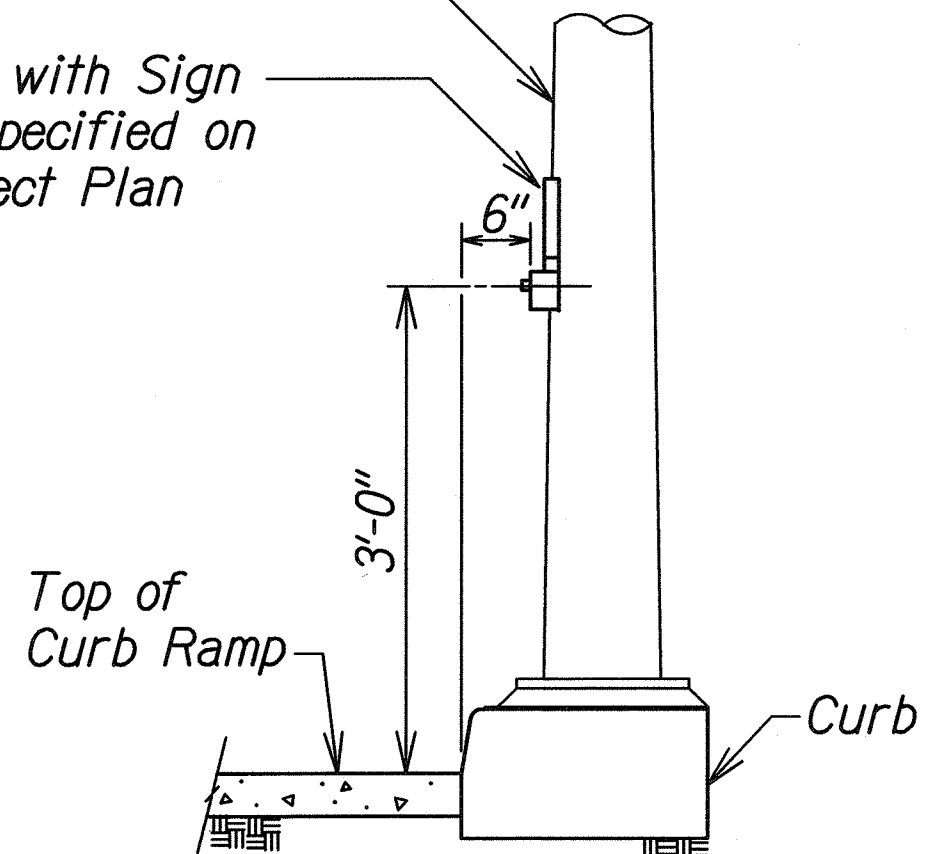


CURB RAMP - TYPE "E"
SIDEWALK WIDTH 7'-0" OR GREATER

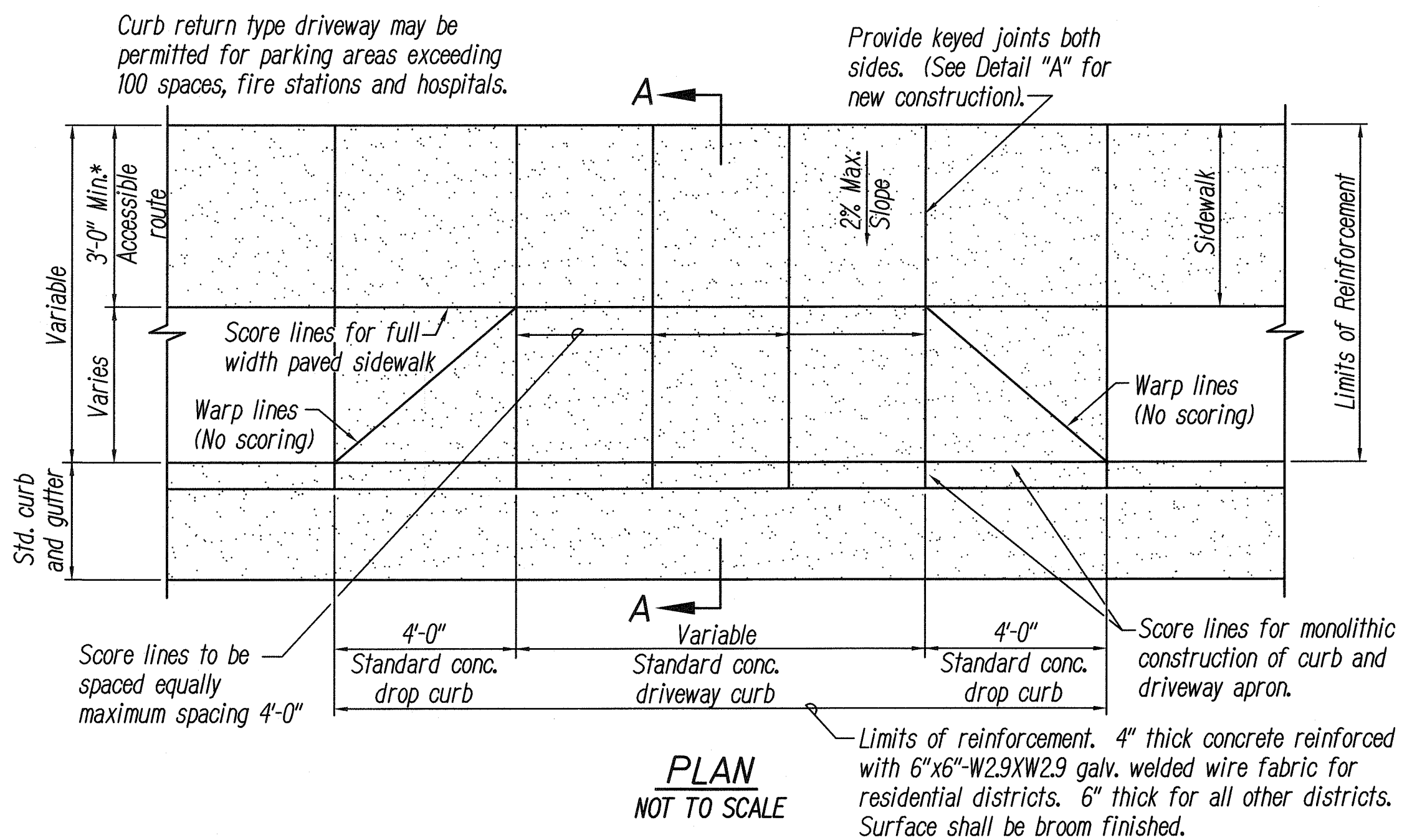
(TO BE USED ONLY WITH TRAFFIC SIGNAL STANDARD OR PEDESTRIAN PUSH BUTTON PEDESTAL ON TRIANGULAR "ISLAND")

- * 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.
- *** The Clearance shall be increased to 6'-0" or wider at areas with high pedestrian traffic or as directed by the Engineer or as shown on the plans.
- **** If Roadway Slope >2% Conform to Roadway Slope and File Technical Infeasibility (TI) Statement

Type I TSS or Pedestrian Push Button Pedestal
PPB with Sign as Specified on Project Plan



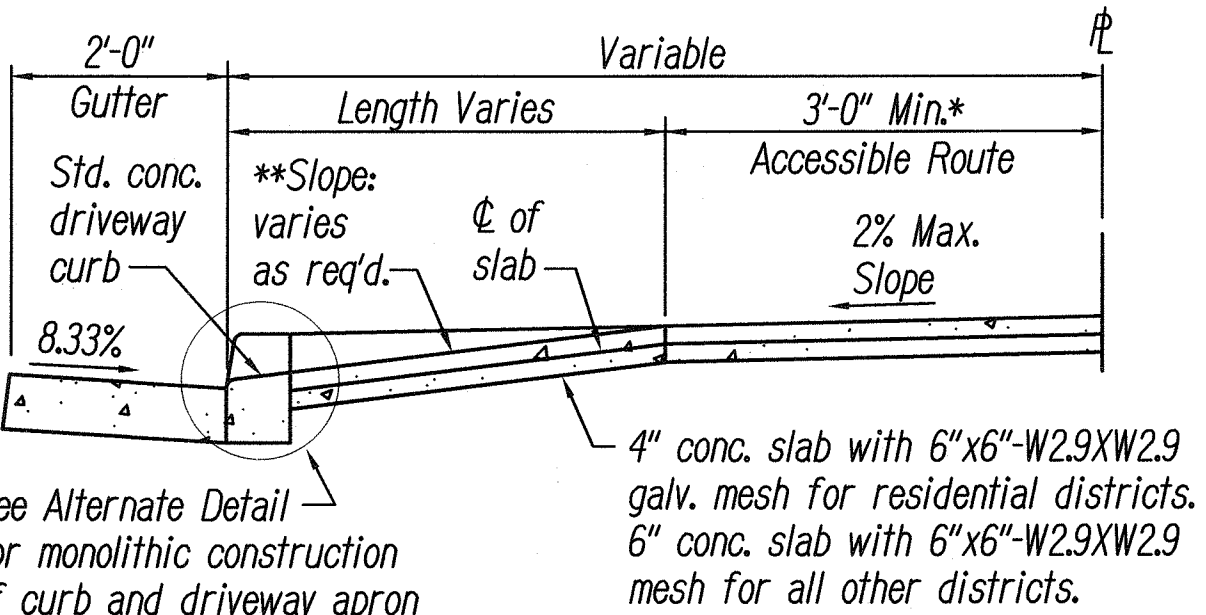
DETAIL "D"



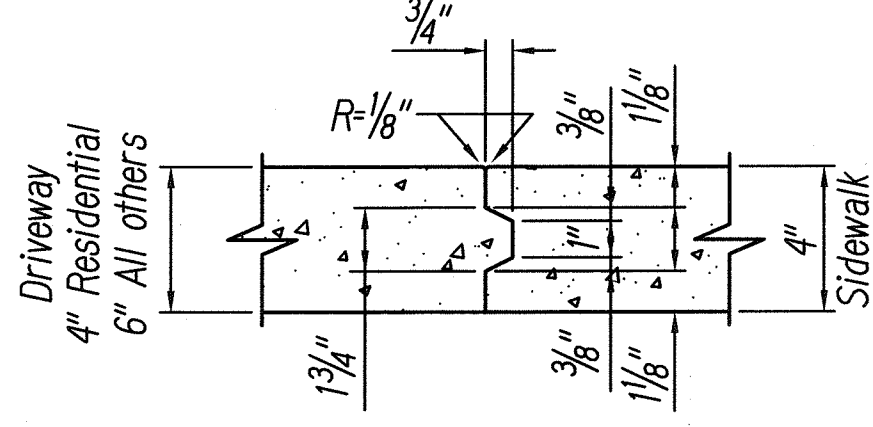
PLAN
NOT TO SCALE

ELEVATION
NOT TO SCALE

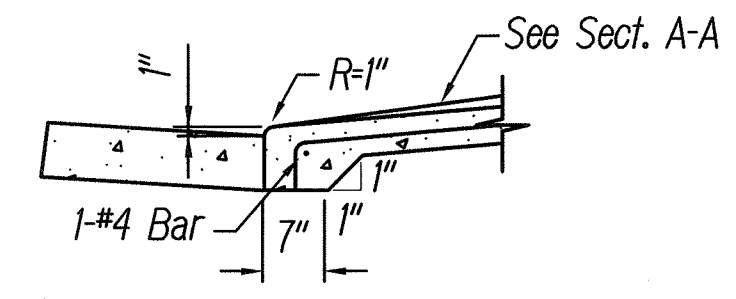
- * Match width of existing sidewalk whenever possible.
- ** Breakover and departure angles should not exceed 10 degrees or 17%.



SECTION A-A
NOT TO SCALE



DETAIL "A"
NOT TO SCALE
(NEW CONSTRUCTION)



ALTERNATE DETAIL
NOT TO SCALE

DRIVEWAY APRON

- 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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SIGNATURE: *R. Urasak* EXPIRATION DATE OF THE LICENSE: 04/30/10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS

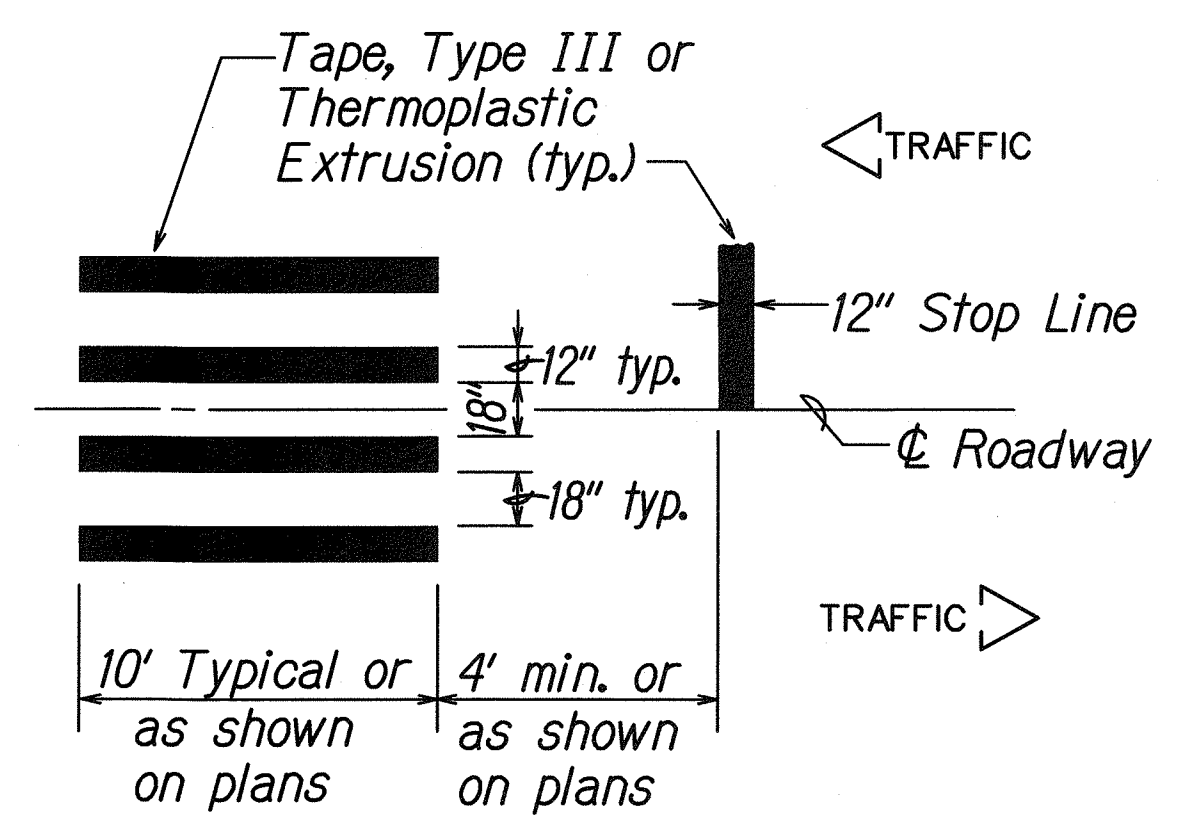
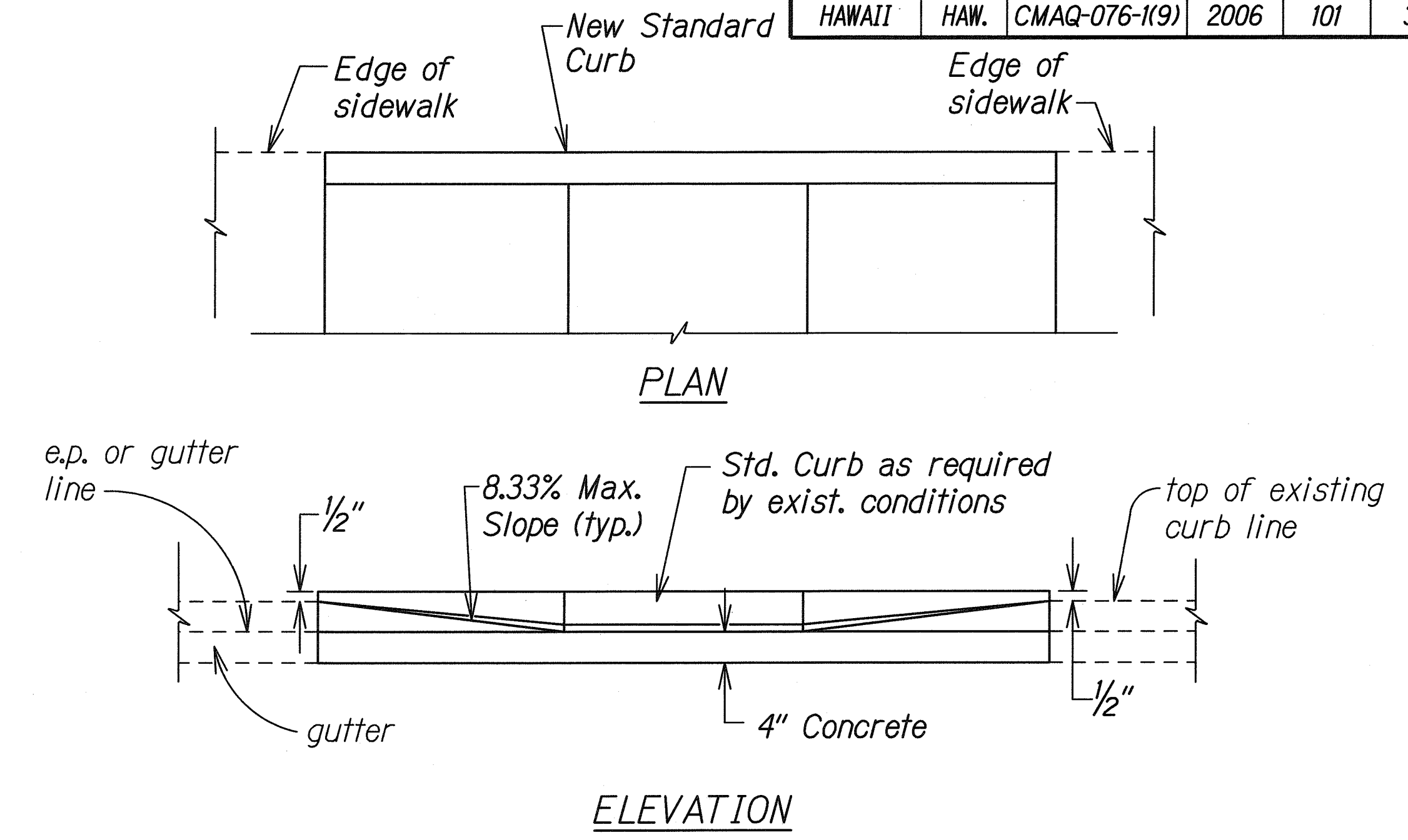
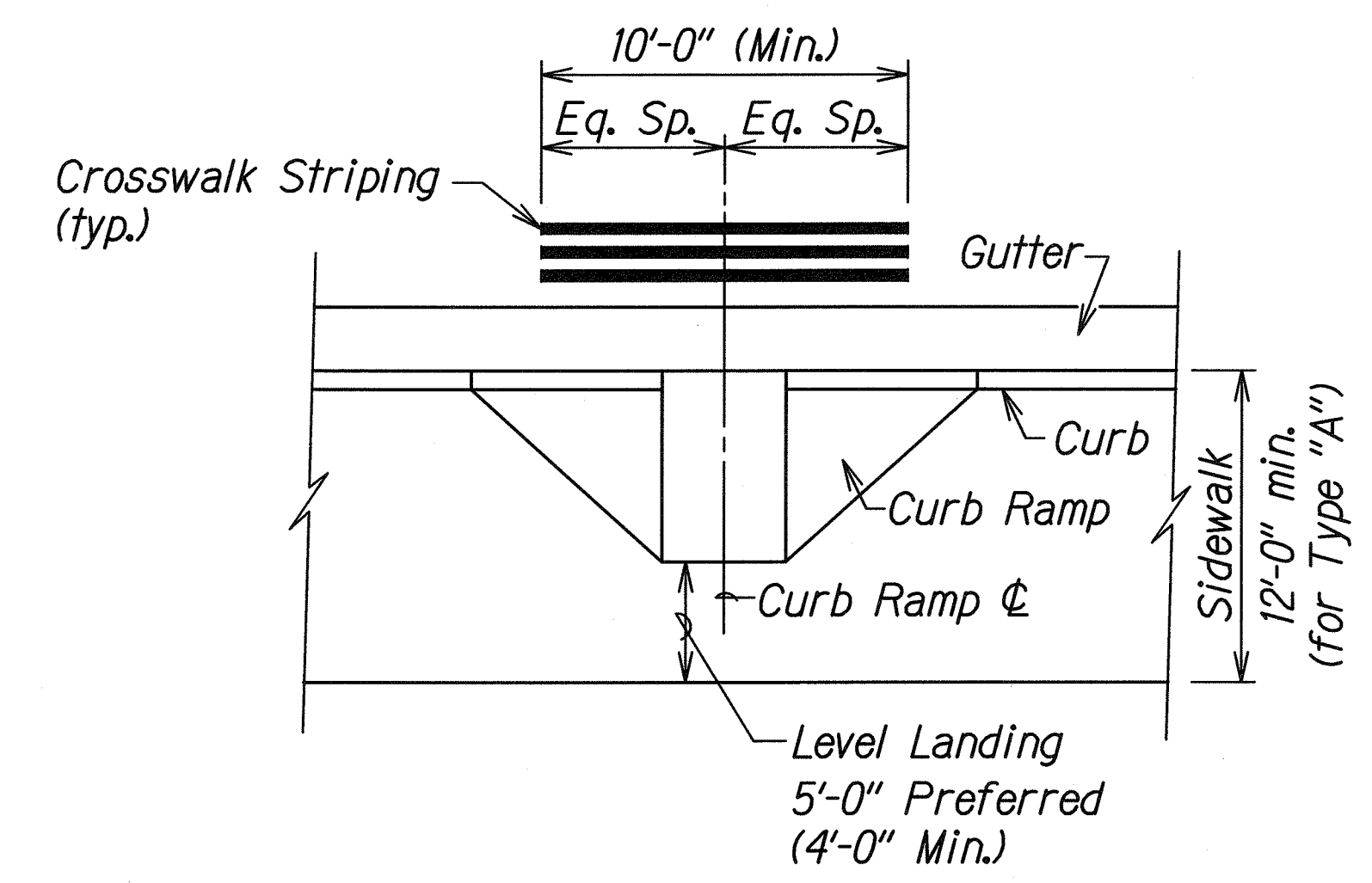
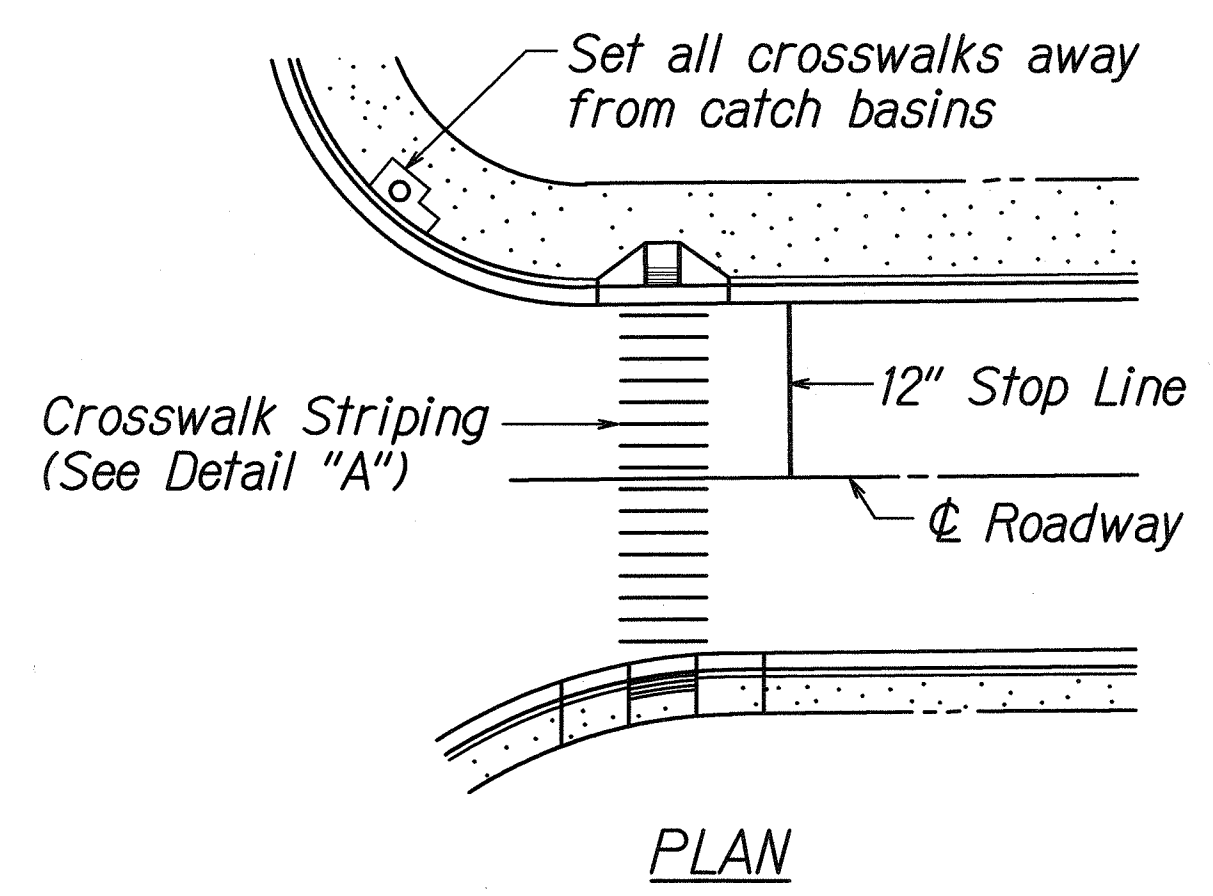
FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: NTS Date: Feb. 22, 2008

U:\FORT WEAVER ROAD\PACKAGE 2\ROAD\RAMPE-R12-06-06.dgn
tdl\usr2\traffic\std\curbramp\rampe-r12-06-06.dgn
R12-06-06 TE-XX sh. 6 of 9

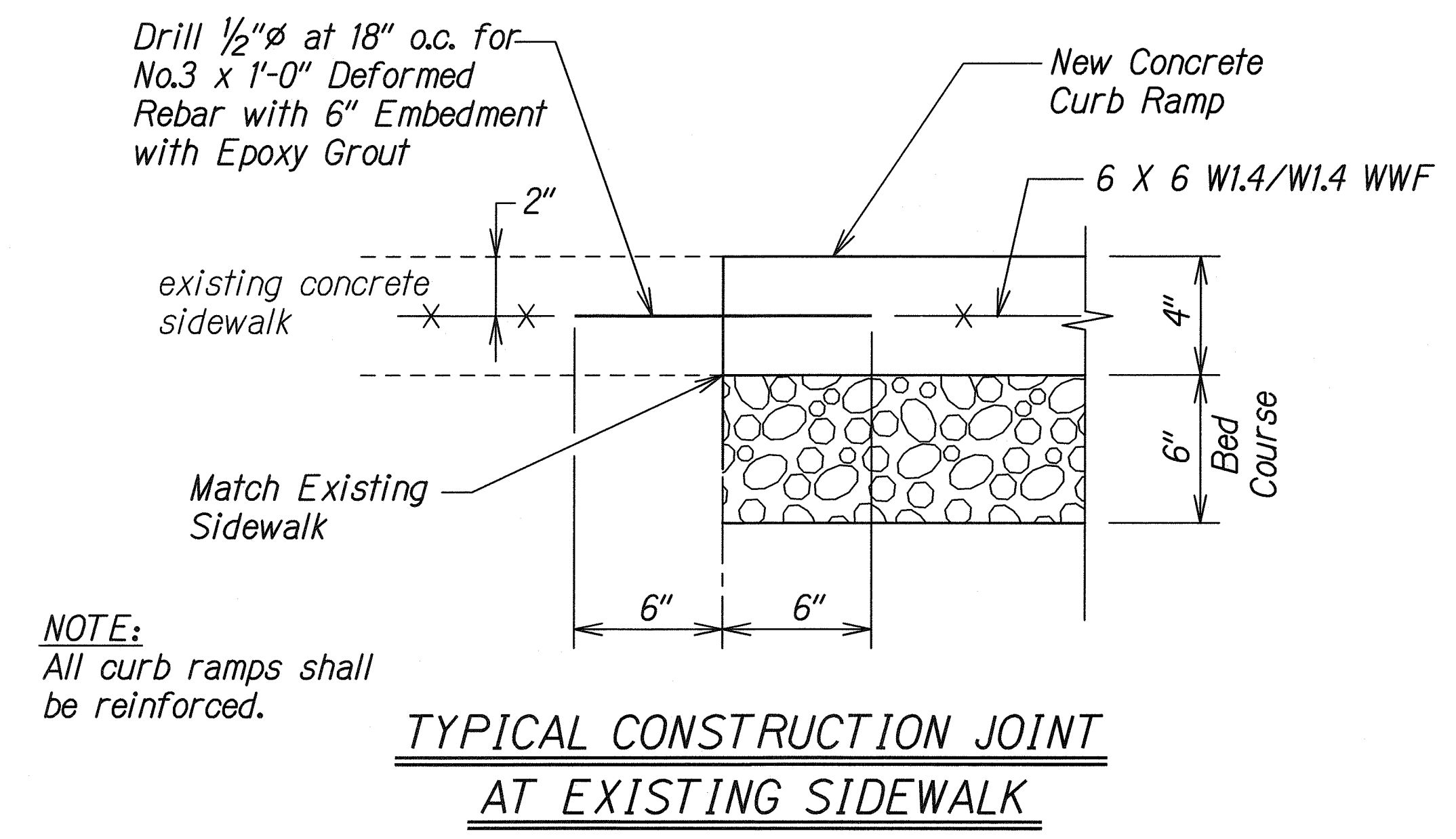
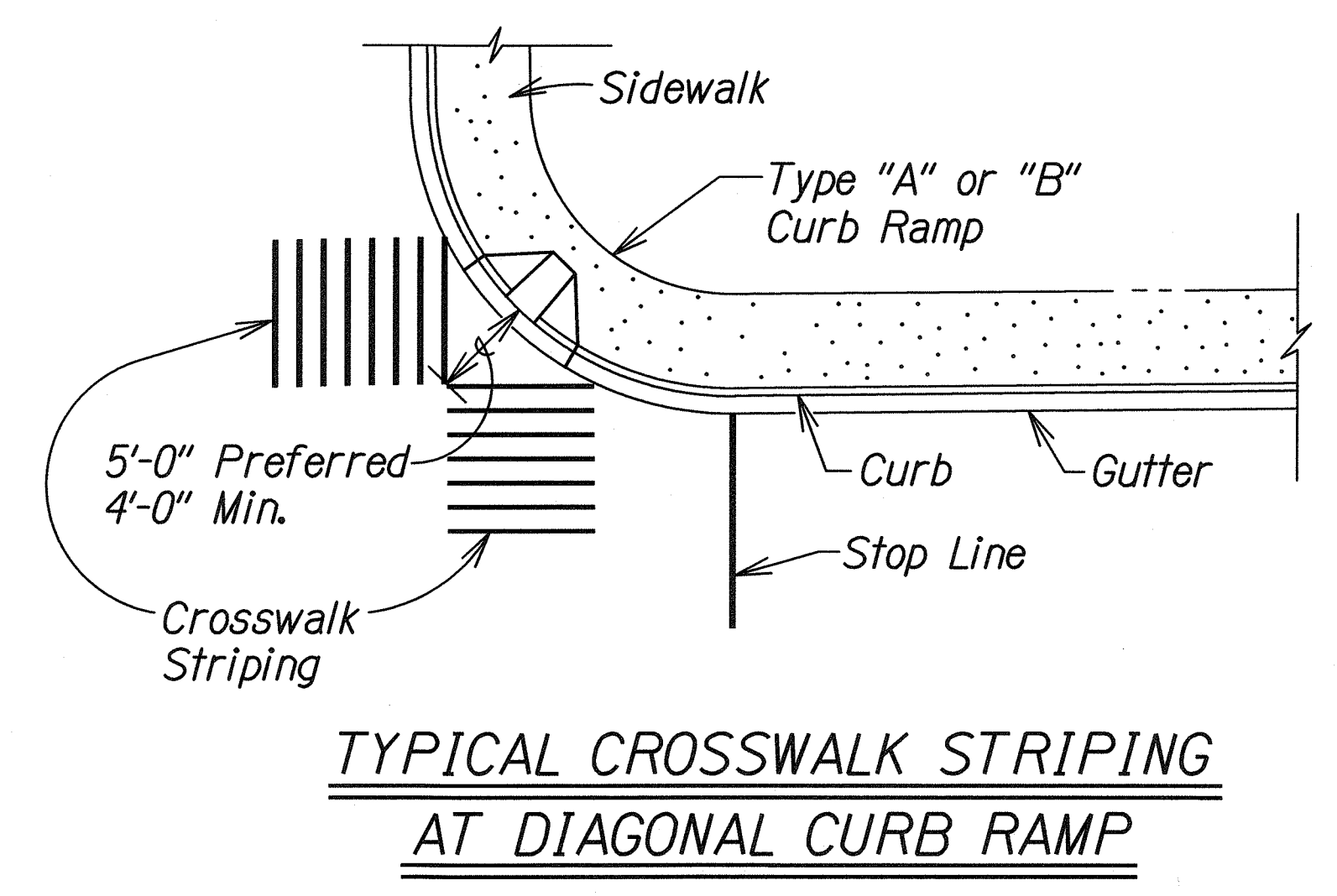
DESIGNED BY	DATE
TRACED BY	
DESIGNED BY	
TRACED BY	
DESIGNED BY	
TRACED BY	
DESIGNED BY	
TRACED BY	
DESIGNED BY	
TRACED BY	

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	101	371



CROSSWALK STRIPING DETAIL

NOTE:
Longitudinal lines shall be parallel to traffic flow.



NOTE:
All curb ramps shall be reinforced.

J:\FORT WEAVER ROAD\PACKAGE 2\ROAD\RAMP\MISC-R12-06-06.dgn
 J:\usr2\traffic\std\curbramp\rampmisc-r12-06-06.dgn
 R12-06-06 TE-XX sh. 7 of 9

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	

THIS WORK WAS PREPARED BY ME
FOR UNDER MY SUPERVISION.

Rum
SIGNATURE

04/30/10
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

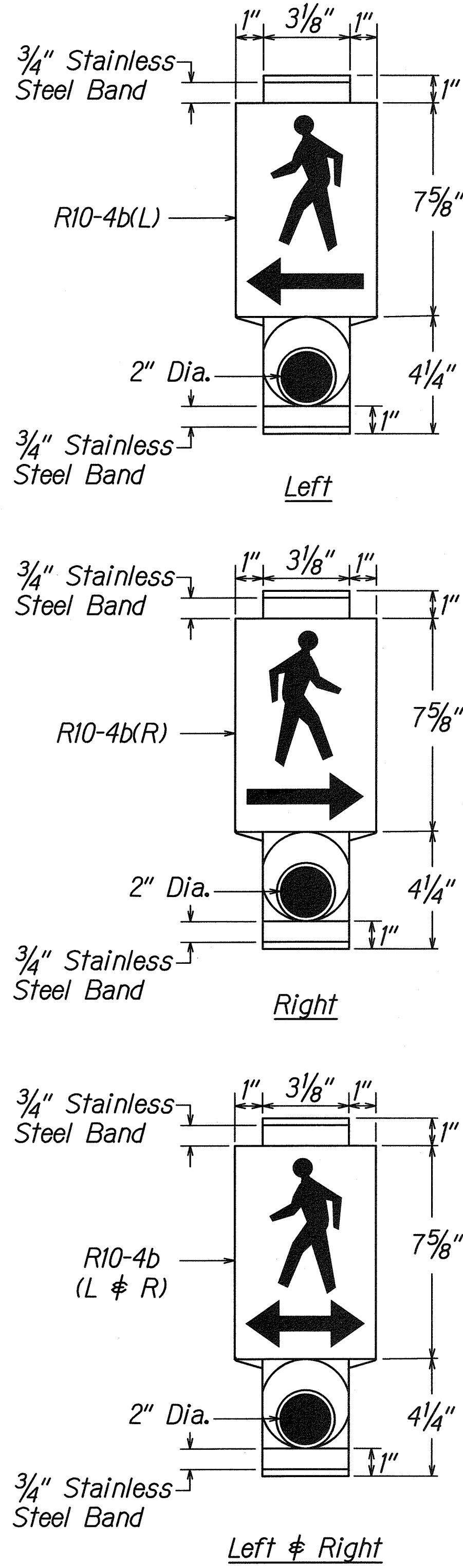
MISCELLANEOUS DETAILS

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

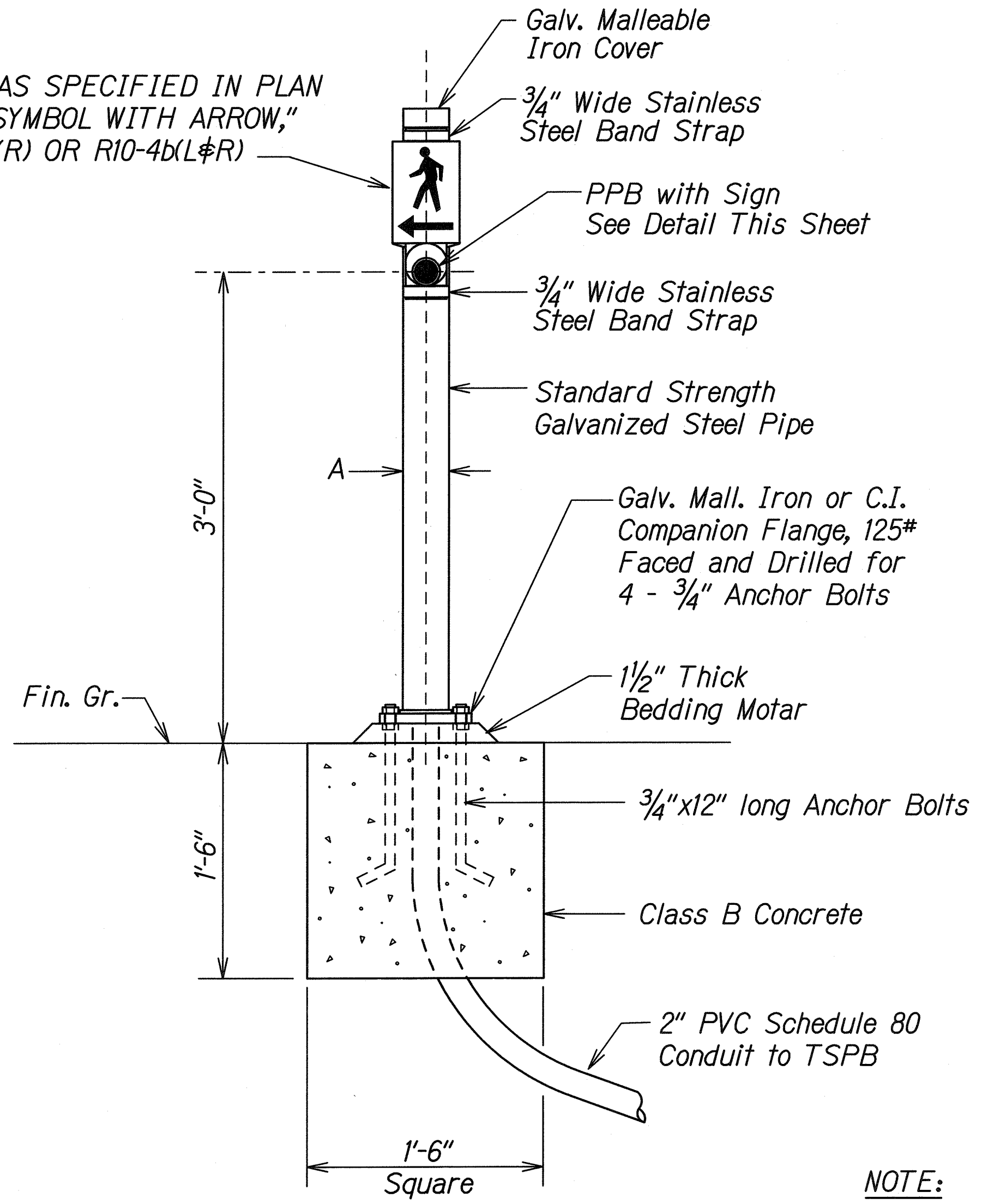
Scale: NTS Date: Feb. 22, 2008

SHEET No. R2-70 OF 79 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	102	371

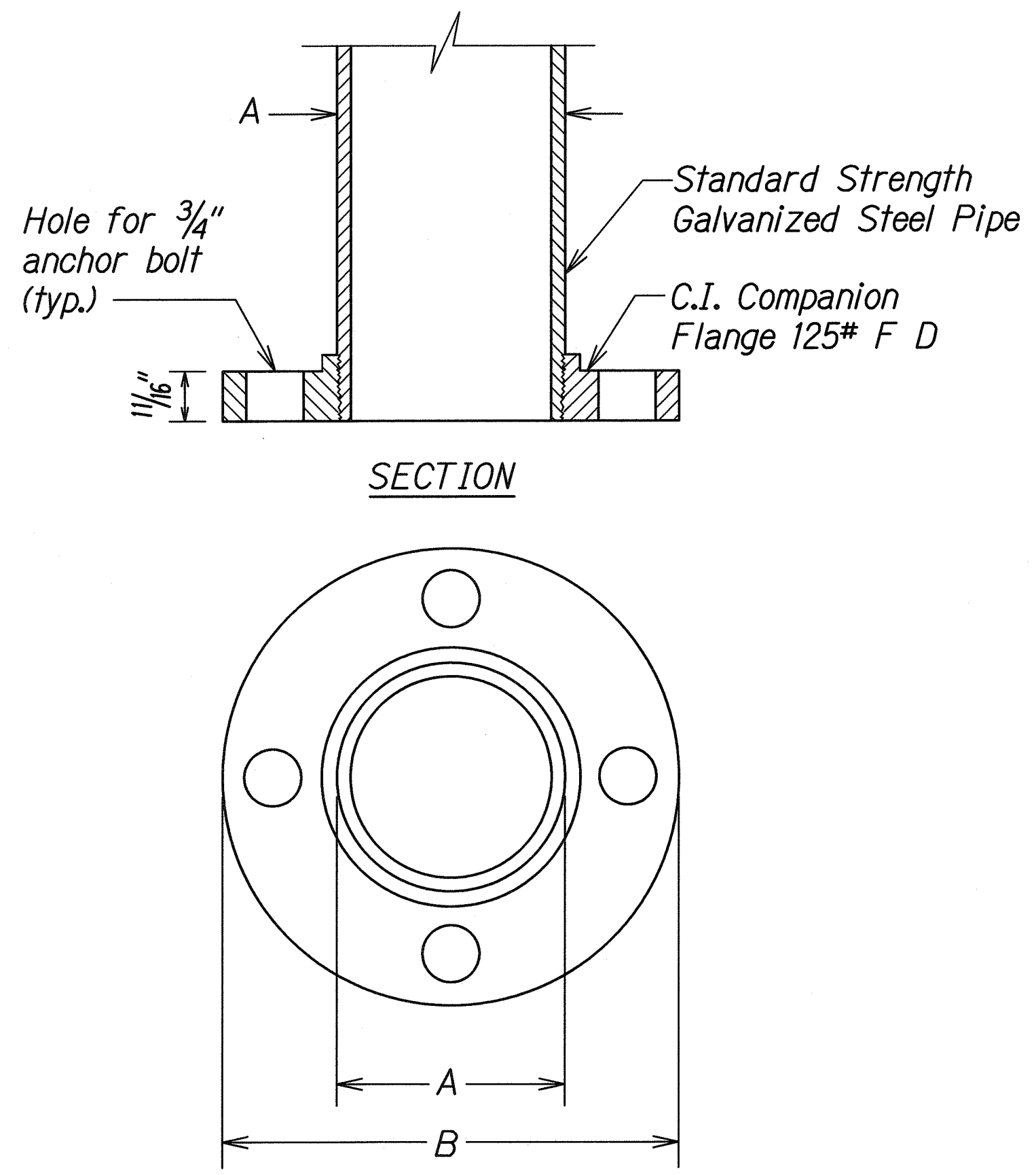


TRAFFIC SIGN AS SPECIFIED IN PLAN
 "WALKING MAN SYMBOL WITH ARROW,"
 R10-4b(L), R10-4b(R) OR R10-4b(L&R)



PPB POST AND FOOTING DETAIL

DATA TABLE FOR PPB POST		
AMOUNT OF PPB	DIMENSIONS	
	A	B
1	3 1/2"	8"
2-3	4 1/2"	9"



SECTION
 TOP VIEW
 FLANGE DETAIL

- NOTE:
1. Conduits shall protrude 2" max. above finished surface of foundation.
 2. Conduits shall slope away from post foundation.

PEDESTRIAN PUSH BUTTON WITH SIGN

Man, Arrow & Push Button - White
 Background - Black

NOTE:
 There shall be a 30" x 48" level ground surface (2% max. cross slope, both directions) for a forward or side approach, as appropriate, to a pedestrian push button. Location of pedestrian push button shall be shown on Civil Plans in addition to Electrical Plans.

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

td1/usr2/traffic/std/curbramp/ppbdet-r12-06-06.dgn
 R12-06-06 TE-XX sht. 8 of 9

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
 SIGNATURE: *R. Urasak* EXPIRATION DATE: 04/30/10 OF THE LICENSE.

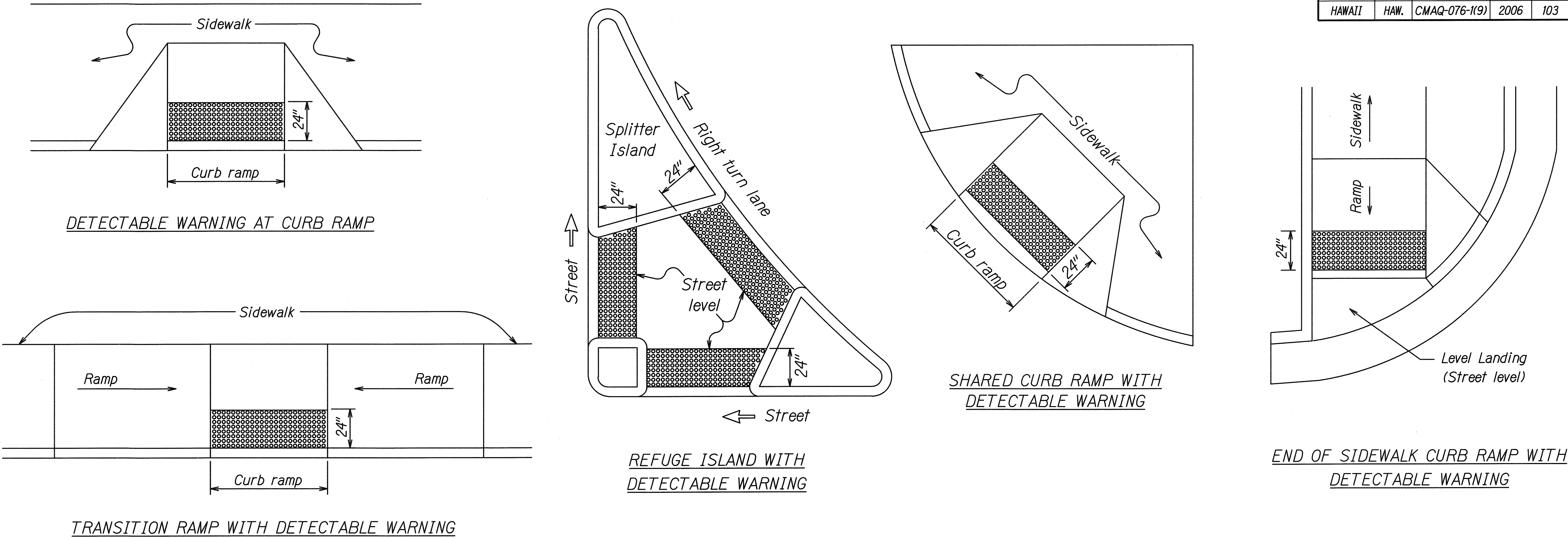
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

PEDESTRIAN PUSH BUTTON DETAILS

FORT WEAVER ROAD WIDENING
 VICINITY OF AAWA DRIVE TO GEIGER ROAD

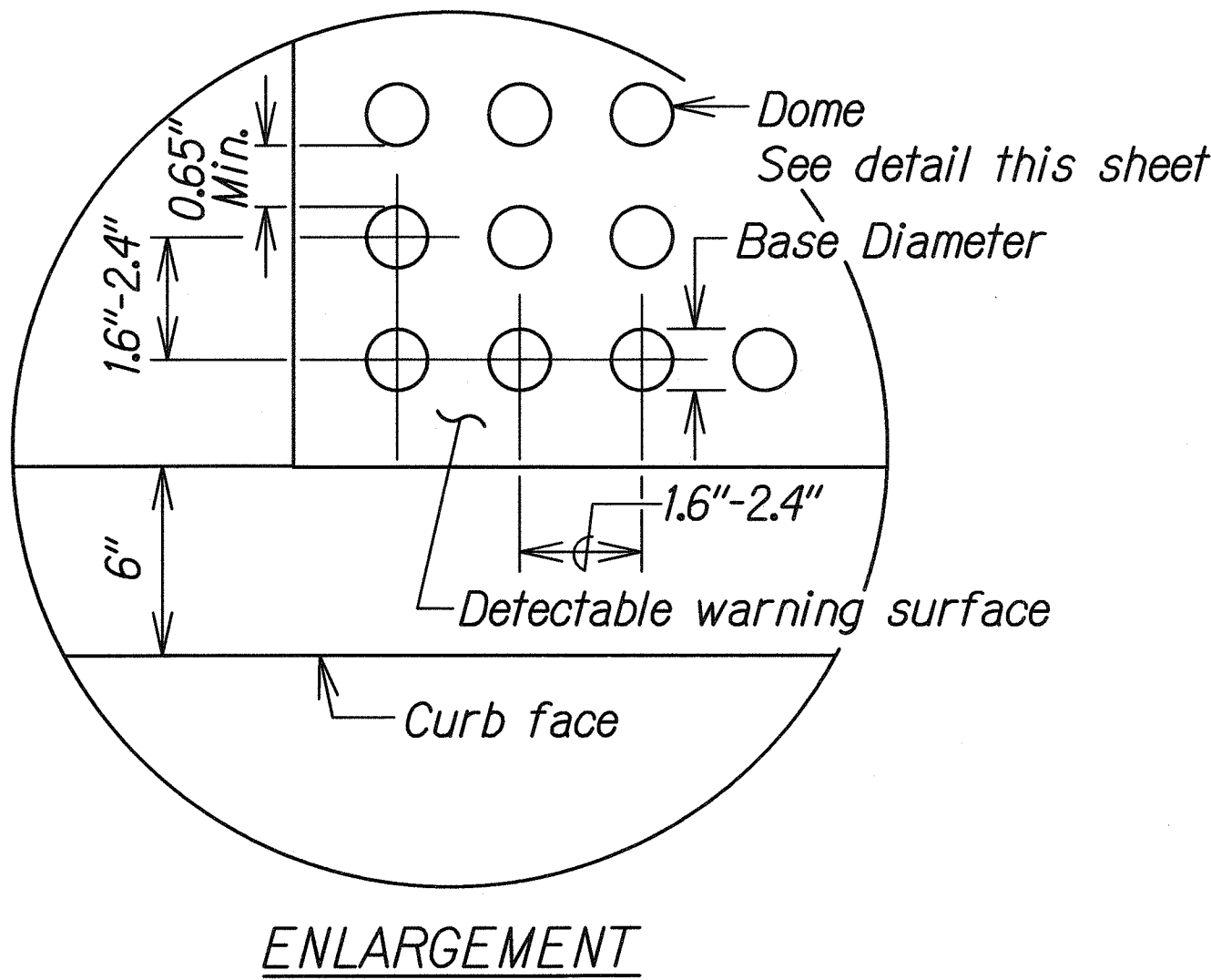
Scale: NTS Date: Feb. 22, 2008

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(9)	2006	103	371

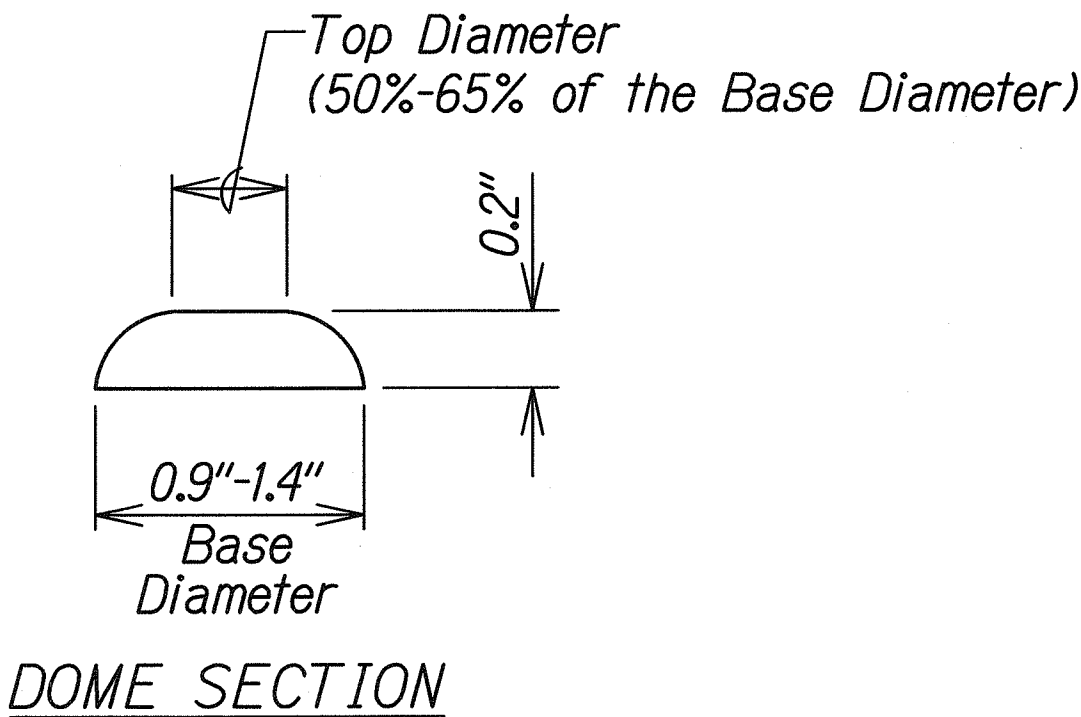


TYPICAL INSTALLATION OF DETECTABLE WARNINGS
Not to Scale

- 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 to 1.4 inch at the bottom, a diameter of 50%-65% of the base diameter at the top, a height of 0.2 inch and a center-to-center spacing of 1.6 to 2.4 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. There shall be a minimum of 70 percent contrast in light reflectance between the detectable warning and an adjoining surface, or 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 to 8 inches from the curb line.



DETECTABLE WARNING DETAIL
Not to Scale



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OR UNDER MY SUPERVISION.
SIGNATURE: *R. Uraski* EXPIRATION DATE: 04/30/10 OF THE LICENSE.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETECTABLE WARNING DETAILS

FORT WEAVER ROAD WIDENING
VICINITY OF AAWA DRIVE TO GEIGER ROAD

Scale: NTS Date: Feb. 22, 2008