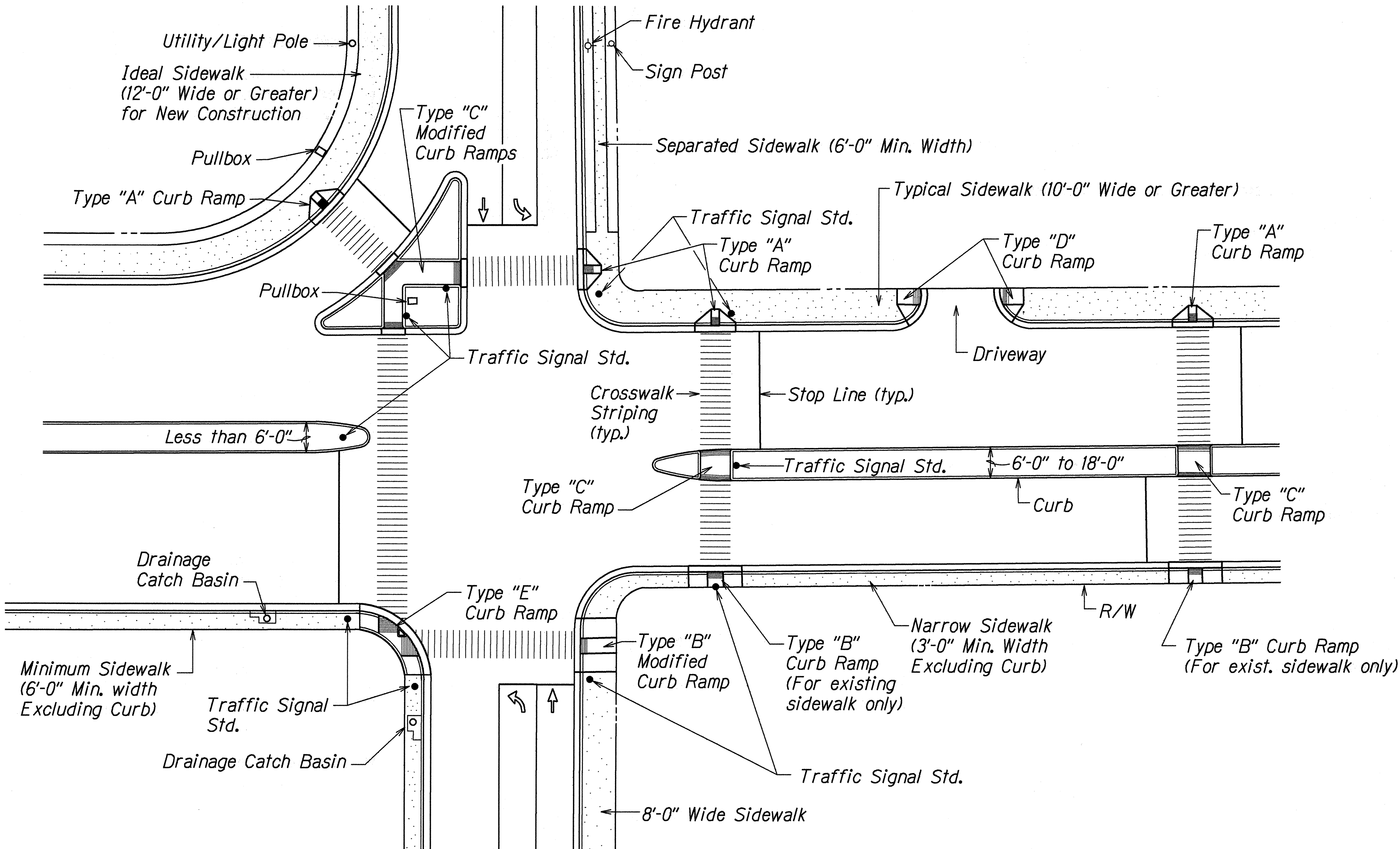
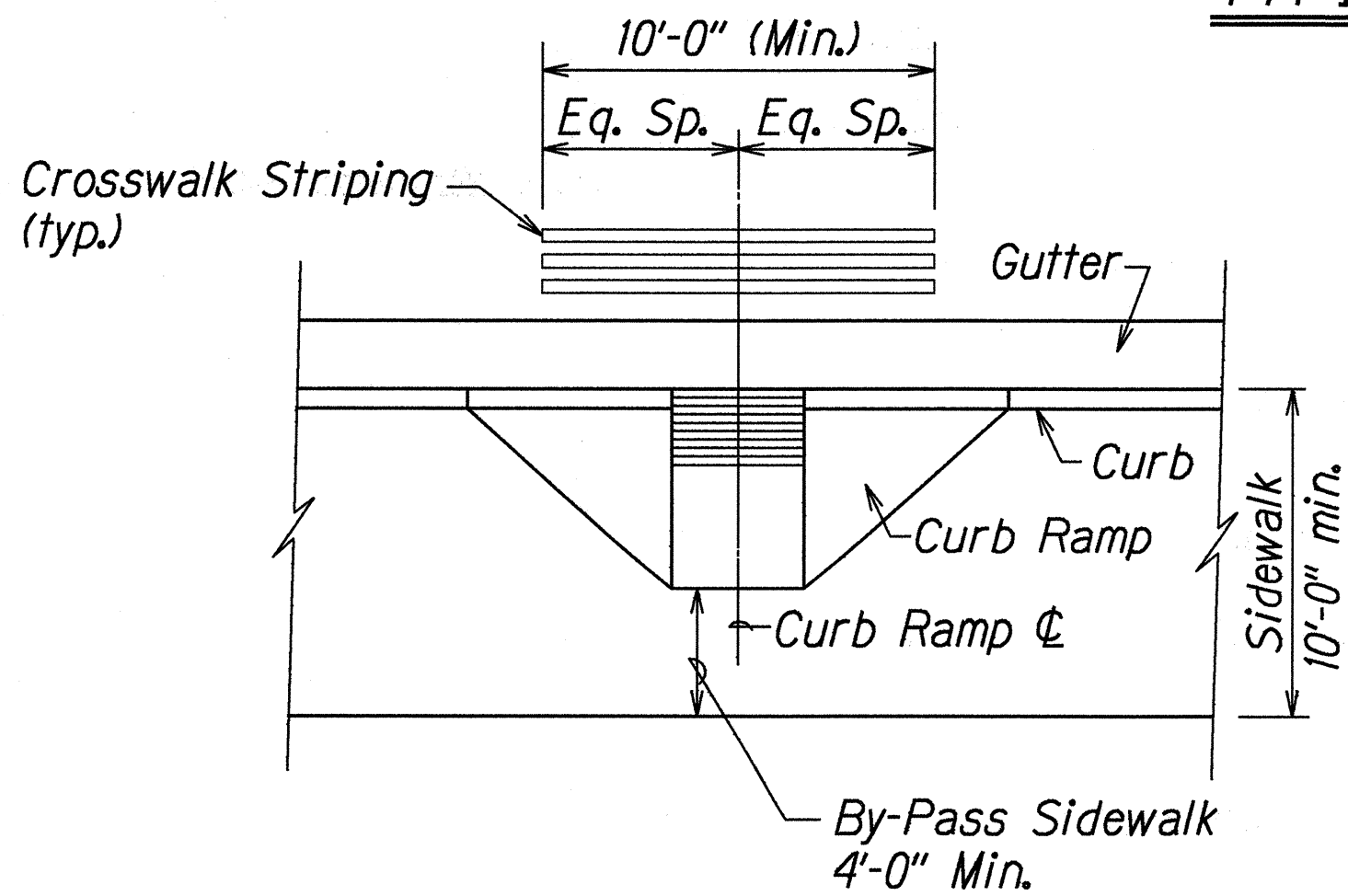


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-02-99	2000	7	32



TYPICAL CURB RAMPS



TYPICAL CROSSWALK STRIPING  
AT CURB RAMP

GENERAL NOTES:

- When necessitated by existing physical conditions, alternate Curb Ramps may be used subject to Engineer's approval.
- Subject to field conditions, the Engineer shall determine final location of Curb Ramp.
- 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.
- All sidewalks shall provide a minimum clear width of 3'-0" (excluding curb) for pedestrian circulation.
- Narrow Sidewalks (3'-0" min. width excluding curb) will prohibit the installation of any sign posts, utility poles, fire hydrants, traffic signals standards, light poles, etc. in the sidewalk, which will prevent a 3'-0" wide clear zone for pedestrian circulation. Also, Narrow Sidewalks shall require a minimum 6'-0" wide, excluding curbs, by 10'-0" long passing space at intervals not to exceed 200 feet.
- For New Construction, the minimum sidewalk width shall be 6'-6", excluding curbs at signalized intersections and the cross slope shall not exceed 50:1. Sidewalk width may be decreased to 6'-0" excluding curbs at non-signalized intersections. For high pedestrian traffic the width shall be a minimum of 12'-0" and/or determined by the Engineer.
- If possible, install utility poles, fire hydrants, light poles, sign posts, pullboxes, etc. off of sidewalk but within the right-of way.
- Single curb ramps serving two street crossing directions is prohibited in new construction.
- New Curb Ramps shall be installed at 90° to the sidewalk or to the maximum extent feasible.
- 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 (ADA) Accessibility Guidelines and will be subject to Engineer's approval.

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

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/std/curb ramp.dgn  
R 5-1-98 TE-68 sht. 1 of 5

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

CURB RAMP DETAIL

FARRINGTON HIGHWAY

Intersection Improvements at Leoku Street

Project No. 7101A-02-99

Not to Scale

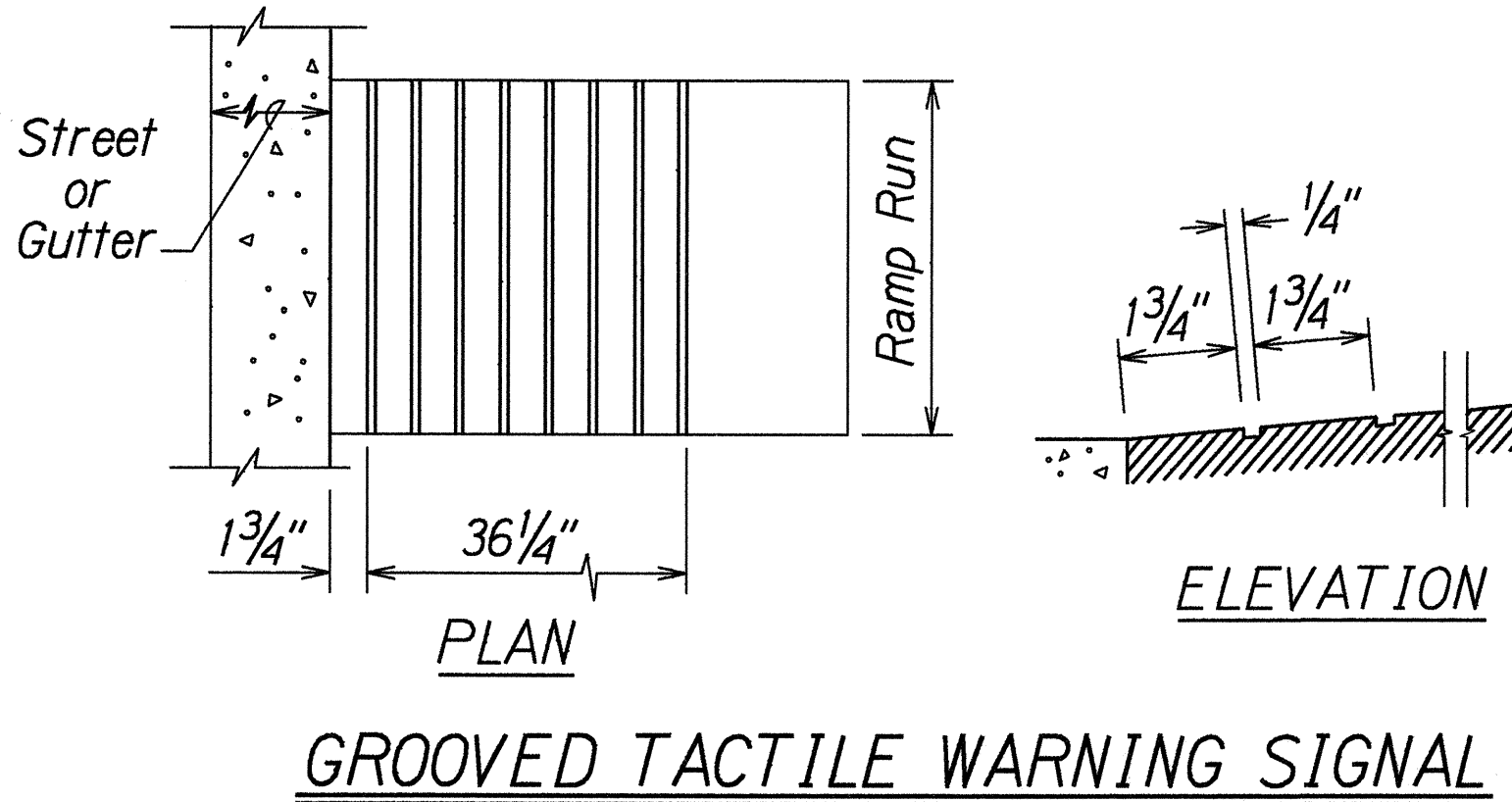
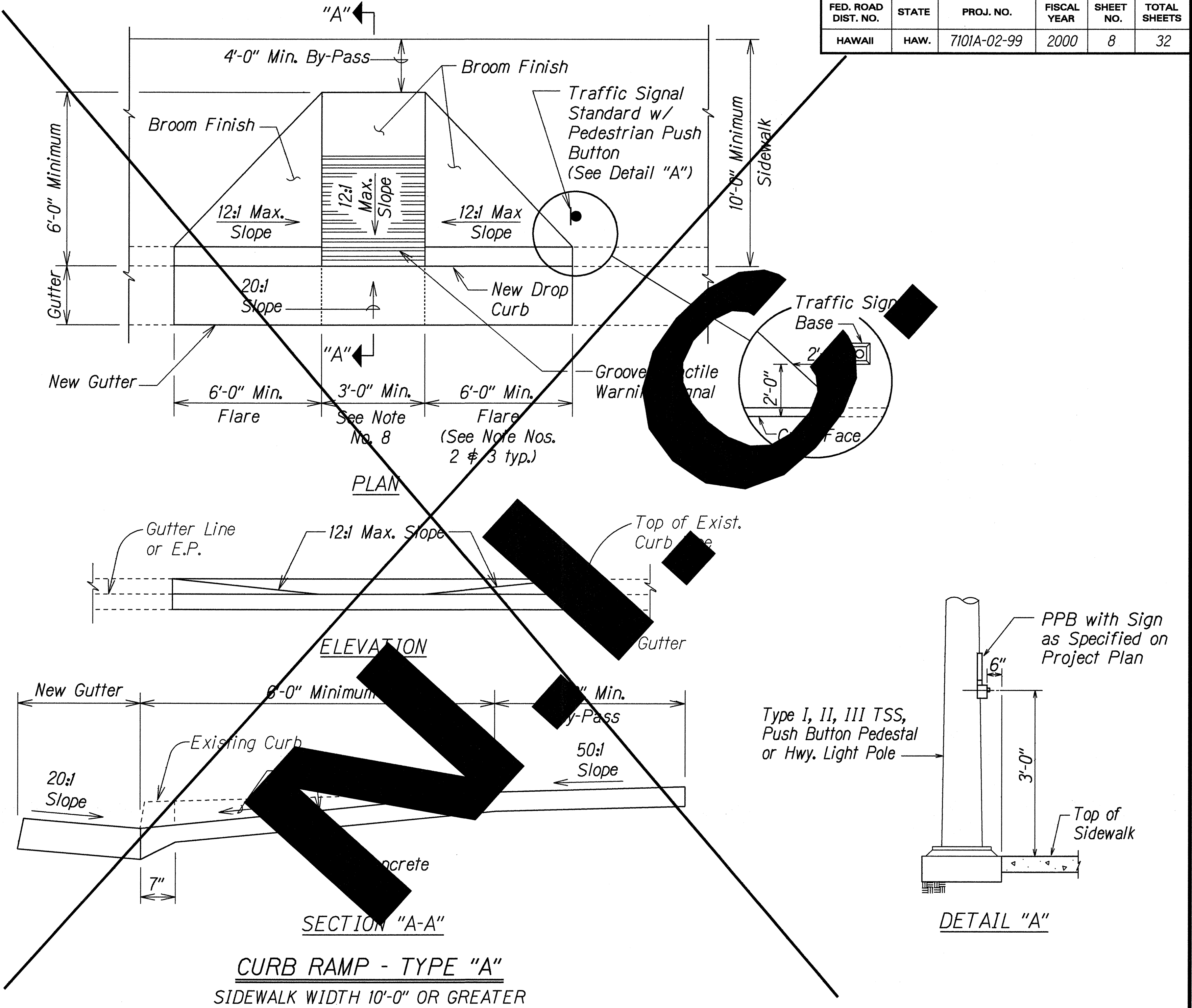
Date: April, 2000

SHEET No. 1 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-02-99	2000	8	32

**CURB RAMP NOTES:**

1. The New Gutter fronting the curb ramps shall not exceed a slope of 20:1. Area without a gutter shall be handled on a case by case basis in order to meet the 20:1 slope requirement.
2. The New Gutter fronting the 6'-0" minimum flares on both sides of the New Curb Ramps shall have a transition slope from 20:1 to the existing gutter slope.
3. When the curb exceeds the standard 6" height, the side flares and ramp may be greater than 6'-0" in order to meet the 12:1 maximum slope requirement.
4. Curb Ramps shall be reinforced if adjacent sidewalks are reinforced.
5. The Contractor shall use the Edge of Pavement (E.P.) fronting the new curb ramp or gutter as the control elevation when constructing the New Curb Ramp or Curb Ramp with gutter.
6. For Type "B" & Type "E" Curb Ramps, New Standard Curb shall be 12" wide when installing Type I Traffic Signal Standard (TSS) or Pedestrian Push Button Pedestal (PPB). Where Type II or Type III TSS or Highway Light Pole is utilized, the width of the New Standard Curb shall be determined by the Engineer. For sidewalk less than 4'-0" (excluding curb), an Engineer approved 3'-0" wide minimum curb ramp shall be installed.
7. The width of the curb ramp including curbs shall match the width of the sidewalk. When the sidewalk width is less than 4'-0", an Engineer approved, modified sidewalk with a minimum 3'-0" wide curb ramp excluding curbs shall be installed.
8. The width of the curb ramp run shall be increased to 10'-0" at areas with high pedestrian traffic and as directed by the Engineer or shown on the plans.
9. A minimum 3'-0" wide by 5'-0" long (excluding curbs) flat, stable paved surface with a cross slope of 50:1 shall be provided for a parallel approach to the pedestrian push button.
10. The pedestrian push button shall meet current American with Disabilities Act (ADA) Accessibility Guidelines (ADAAG 4.27) and will be subject to Engineer's approval.
11. All Pullboxes shall be installed within the sidewalk/unpaved area or as directed by the Engineer. Pullboxes shall not be installed within the curb ramp (including flares).



STATE OF HAWAII  
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HIGHWAYS DIVISION

**CURB RAMP DETAIL**  
FARRINGTON HIGHWAY  
Intersection Improvements at Leoku Street  
Project No. 7101A-02-99  
Not to Scale  
Date: April, 2000

SHEET No. 2 OF 7 SHEETS

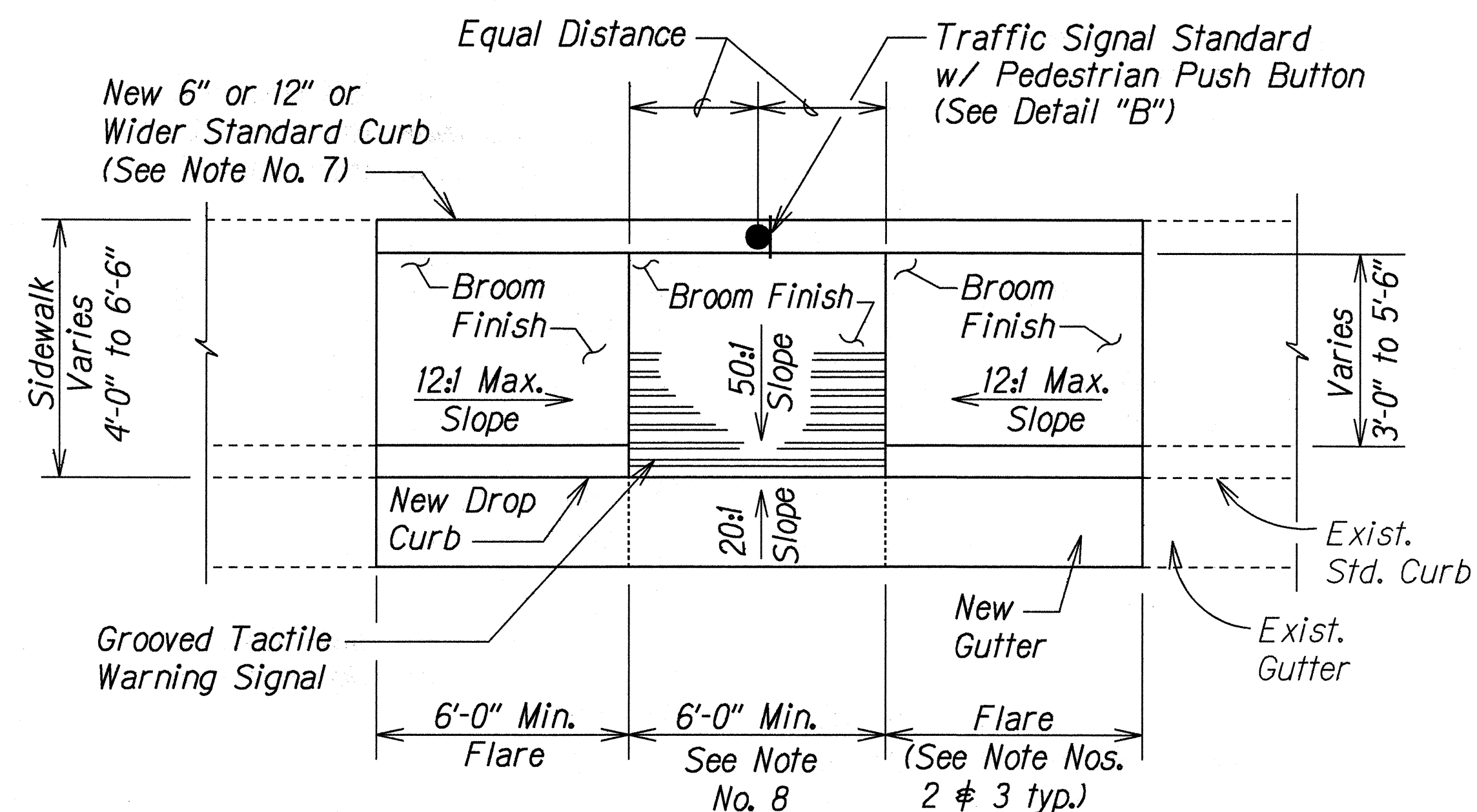
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DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
DESIGNED BY	
IN CHARGE	

10/10/2000

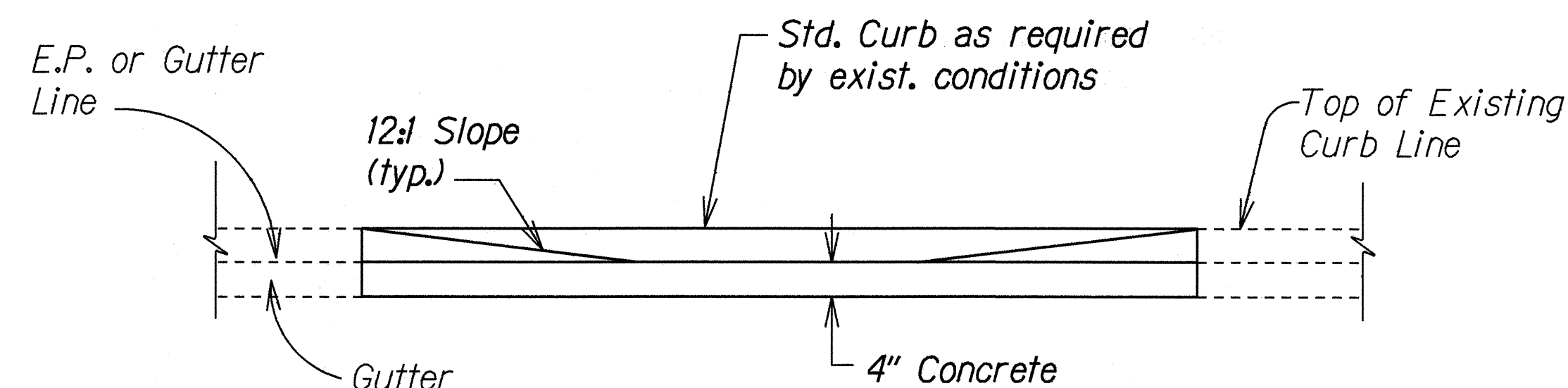
R 5-1-98 TE-69 sh. 2 of 5



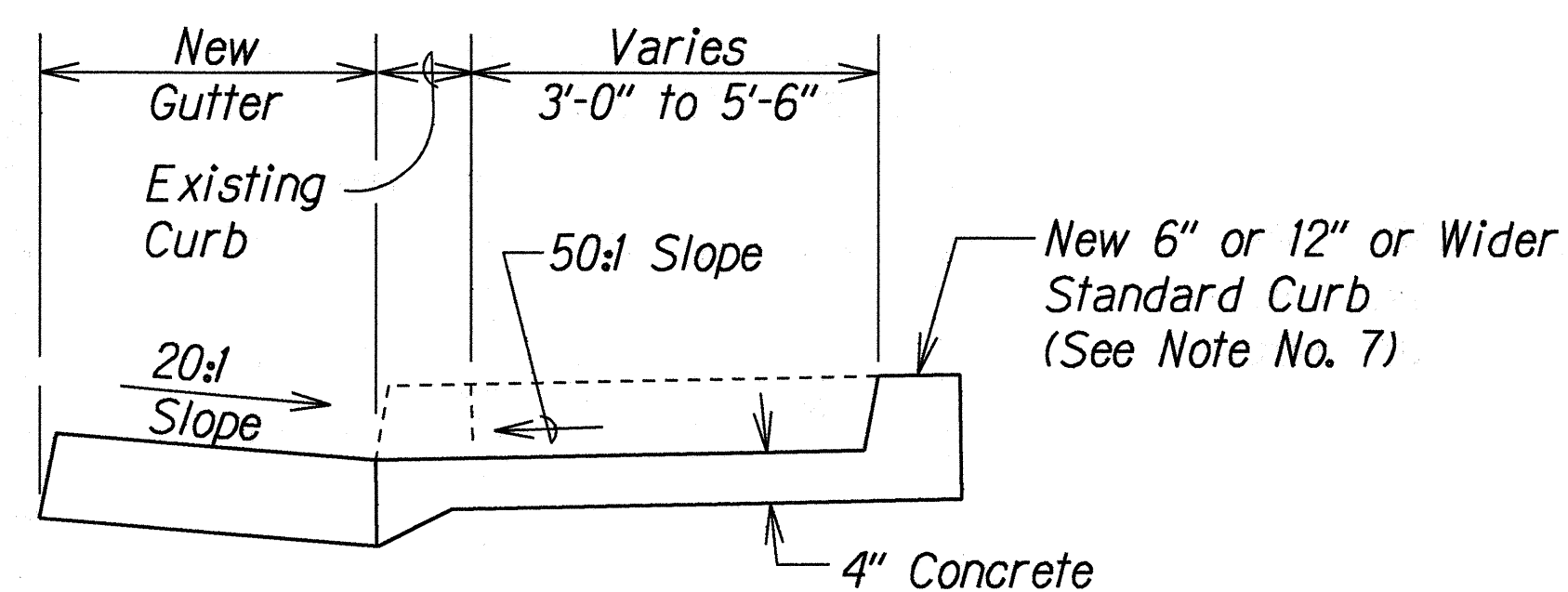
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-02-99	2000	9	32



PLAN

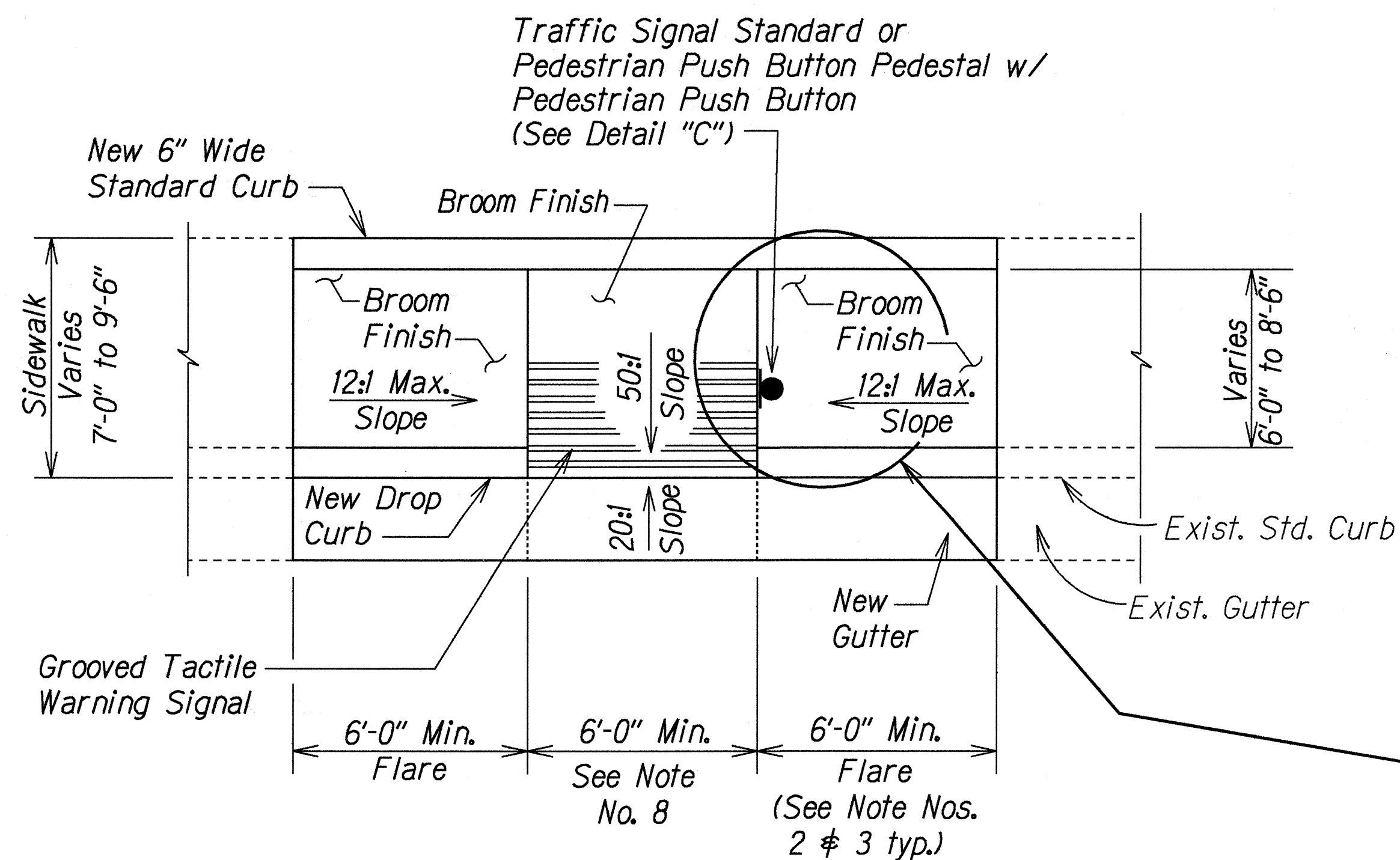


ELEVATION

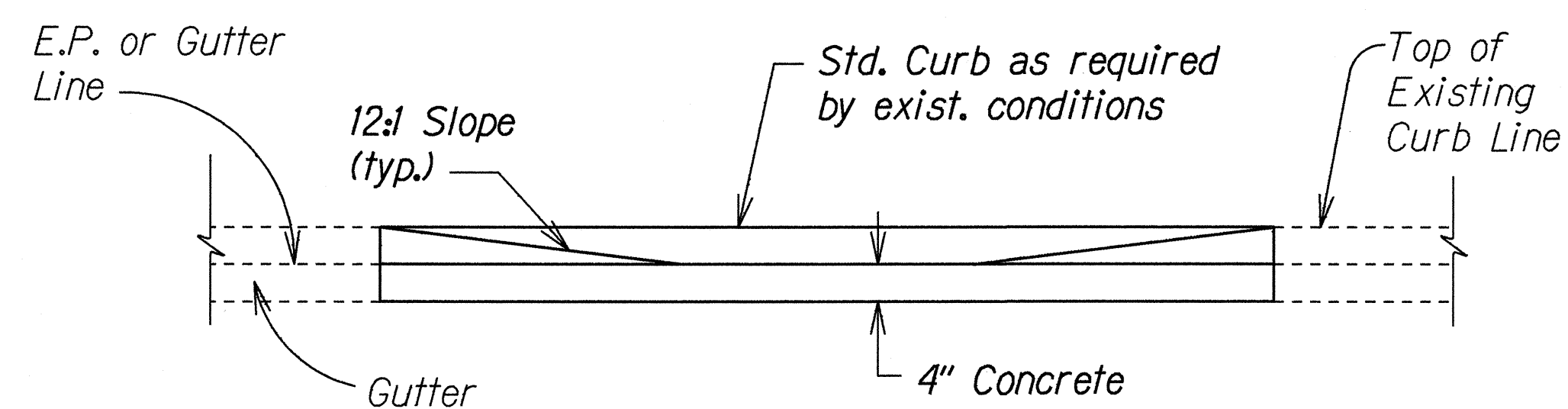


TYPICAL SECTION

**CURB RAMP - TYPE "B"**  
SIDEWALK WIDTH 4'-0" OR GREATER  
BUT LESS THAN 7'-0" WIDTH  
(FOR EXISTING SIDEWALK ONLY)



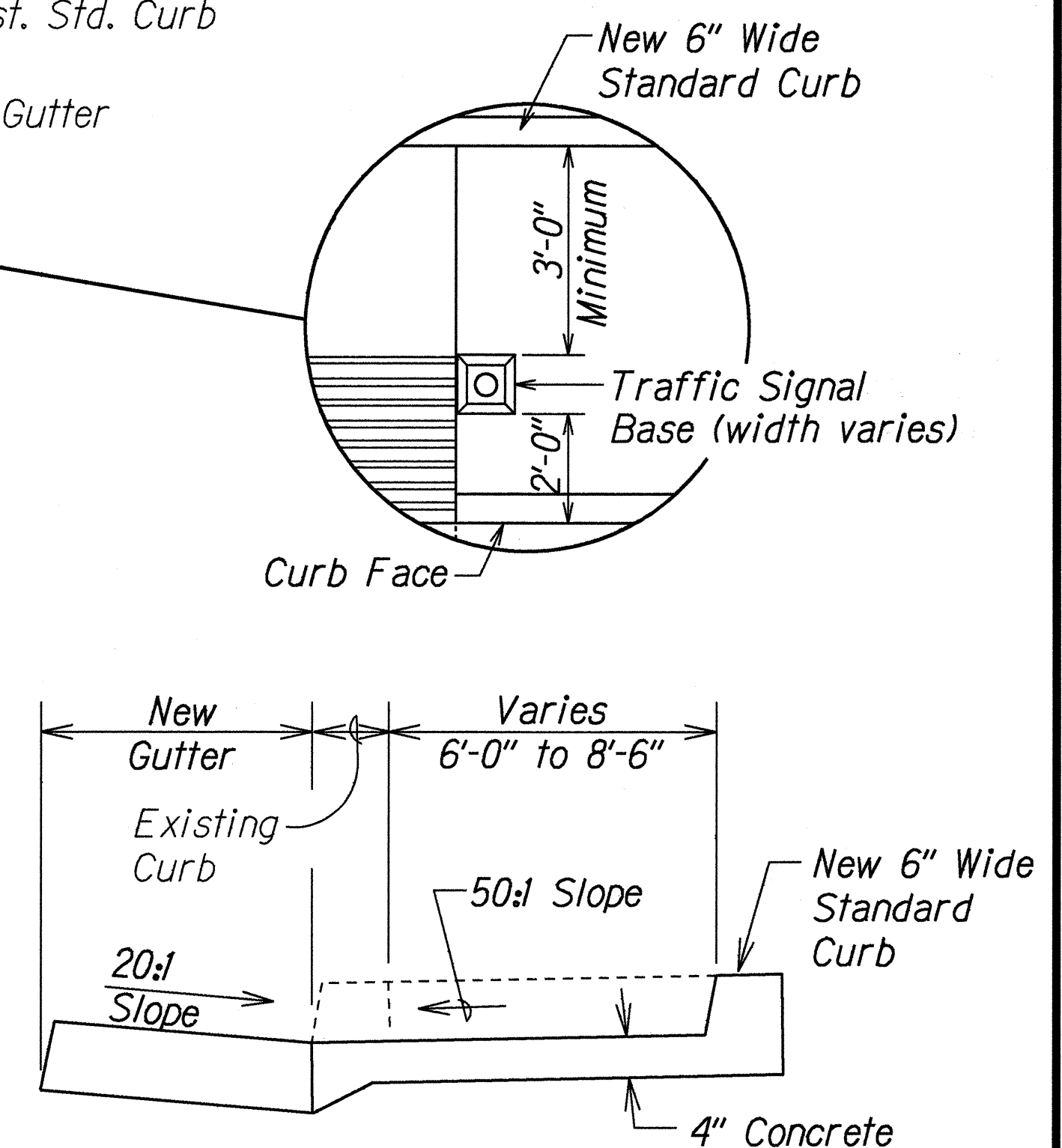
PLAN



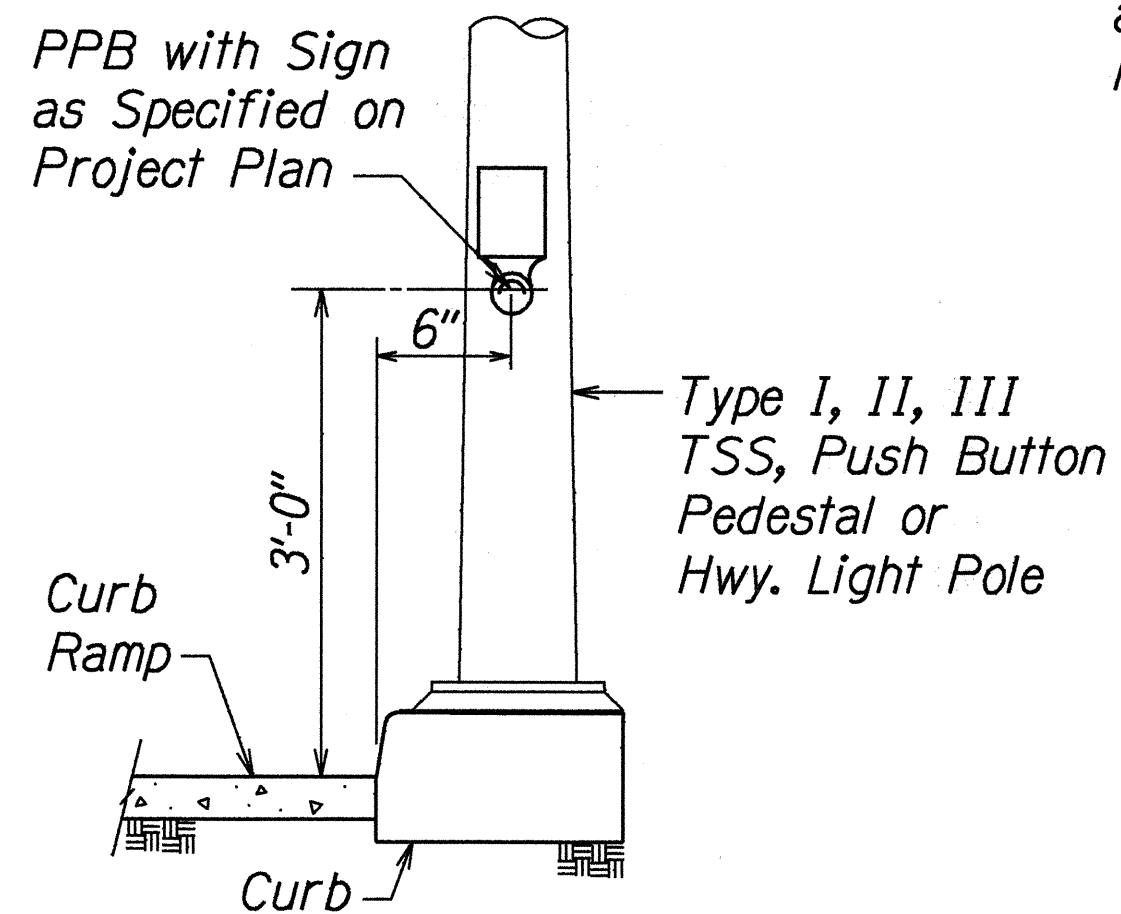
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**CURB RAMP - TYPE "B" MODIFIED**

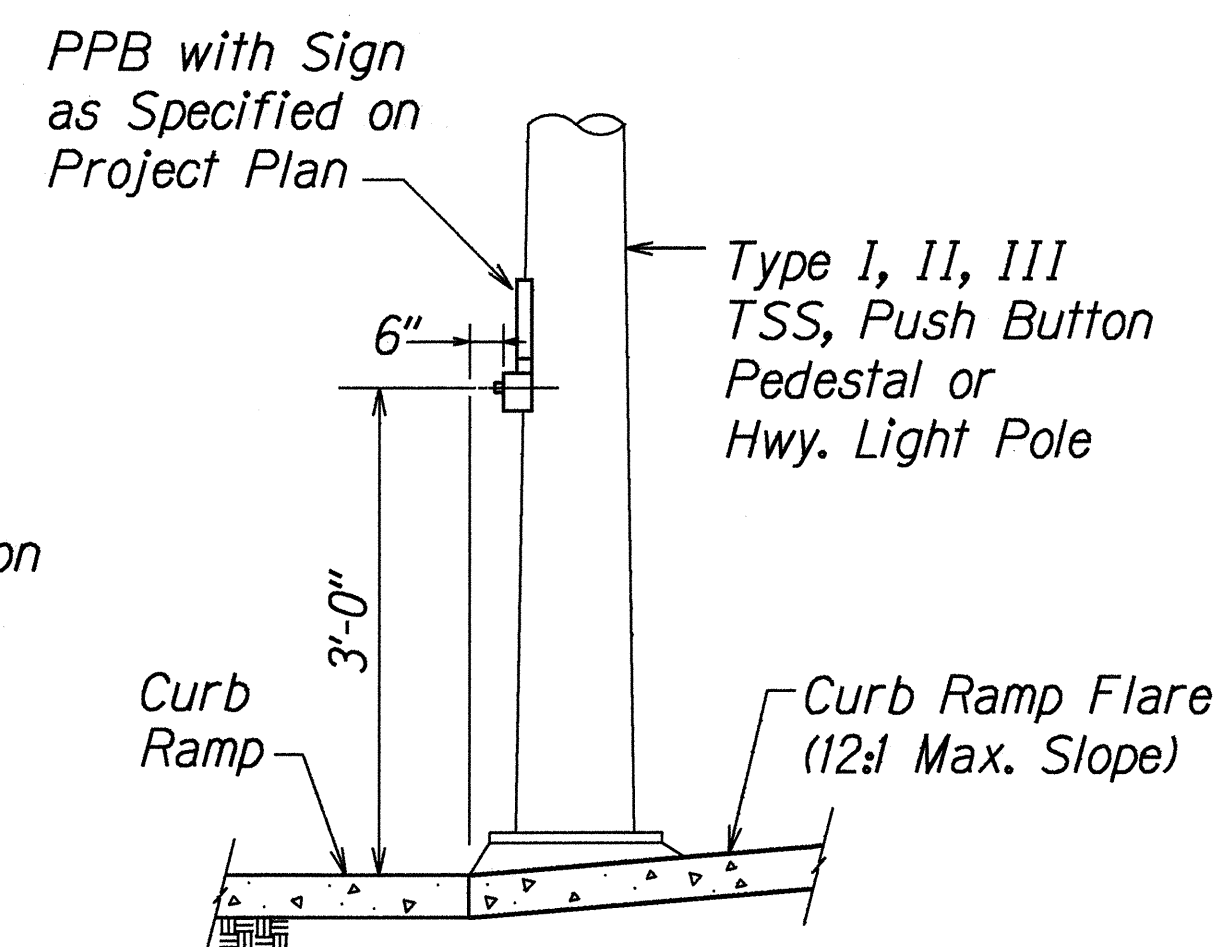
SIDEWALK WIDTH 7'-0" OR GREATER  
BUT LESS THAN 10'-0" WIDTH



TYPICAL SECTION



DETAIL "B"



DETAIL "C"

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

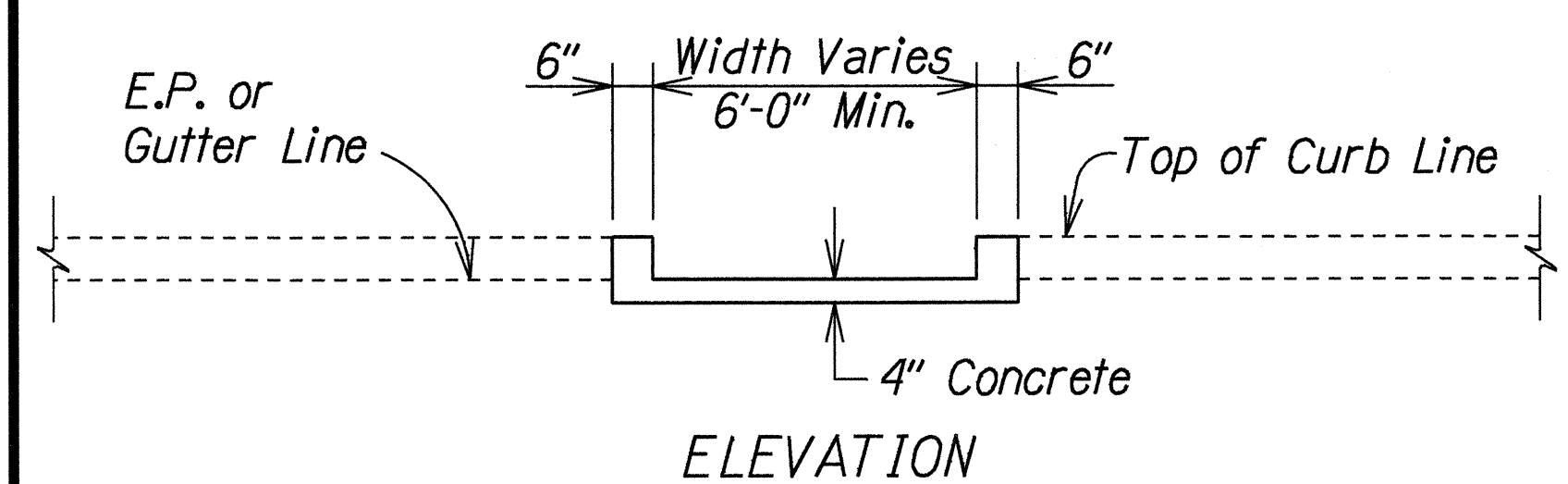
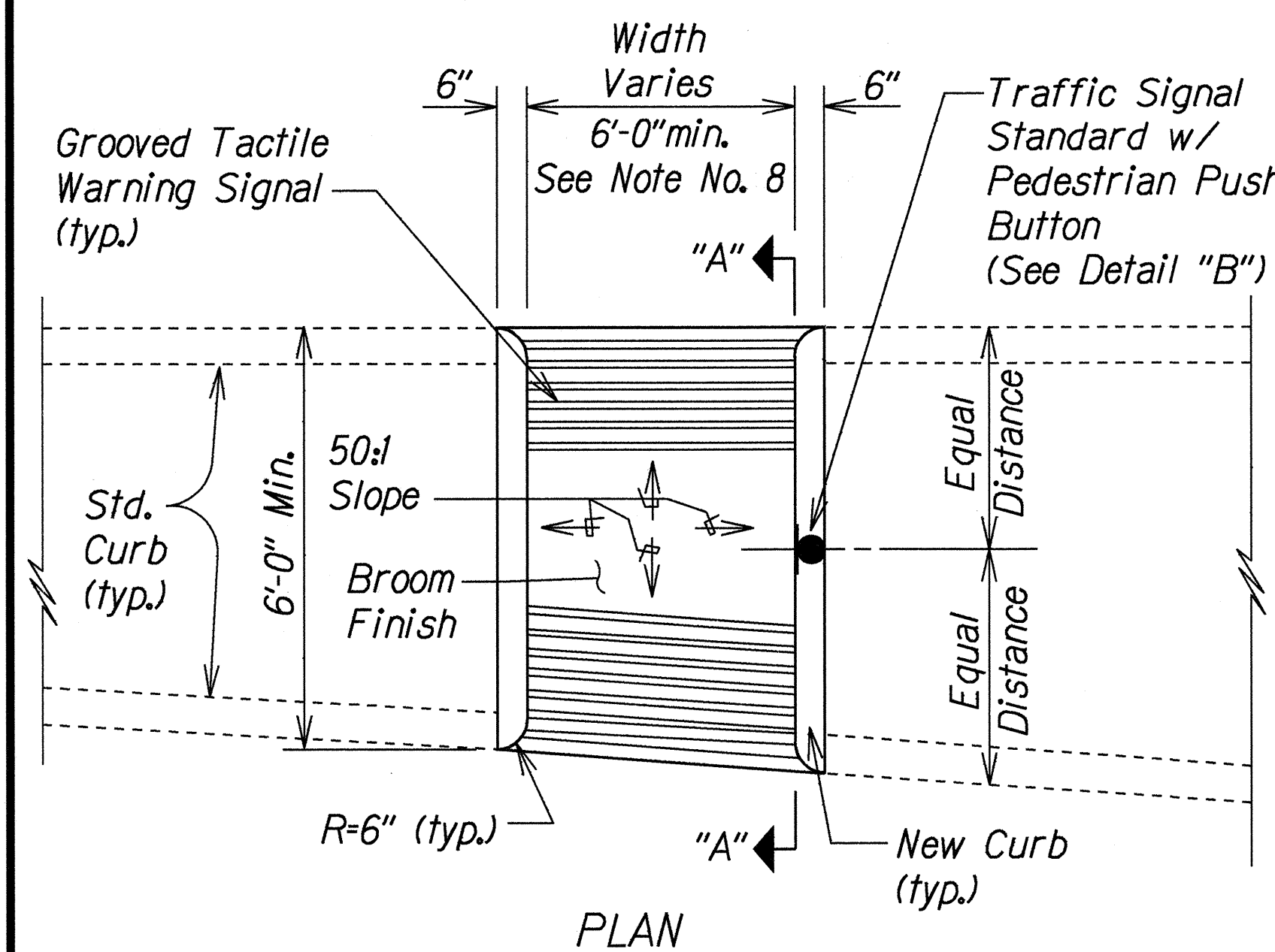
**CURB RAMP DETAIL**

FARRINGTON HIGHWAY  
Intersection Improvements at Leoku Street  
Project No. 7101A-02-99

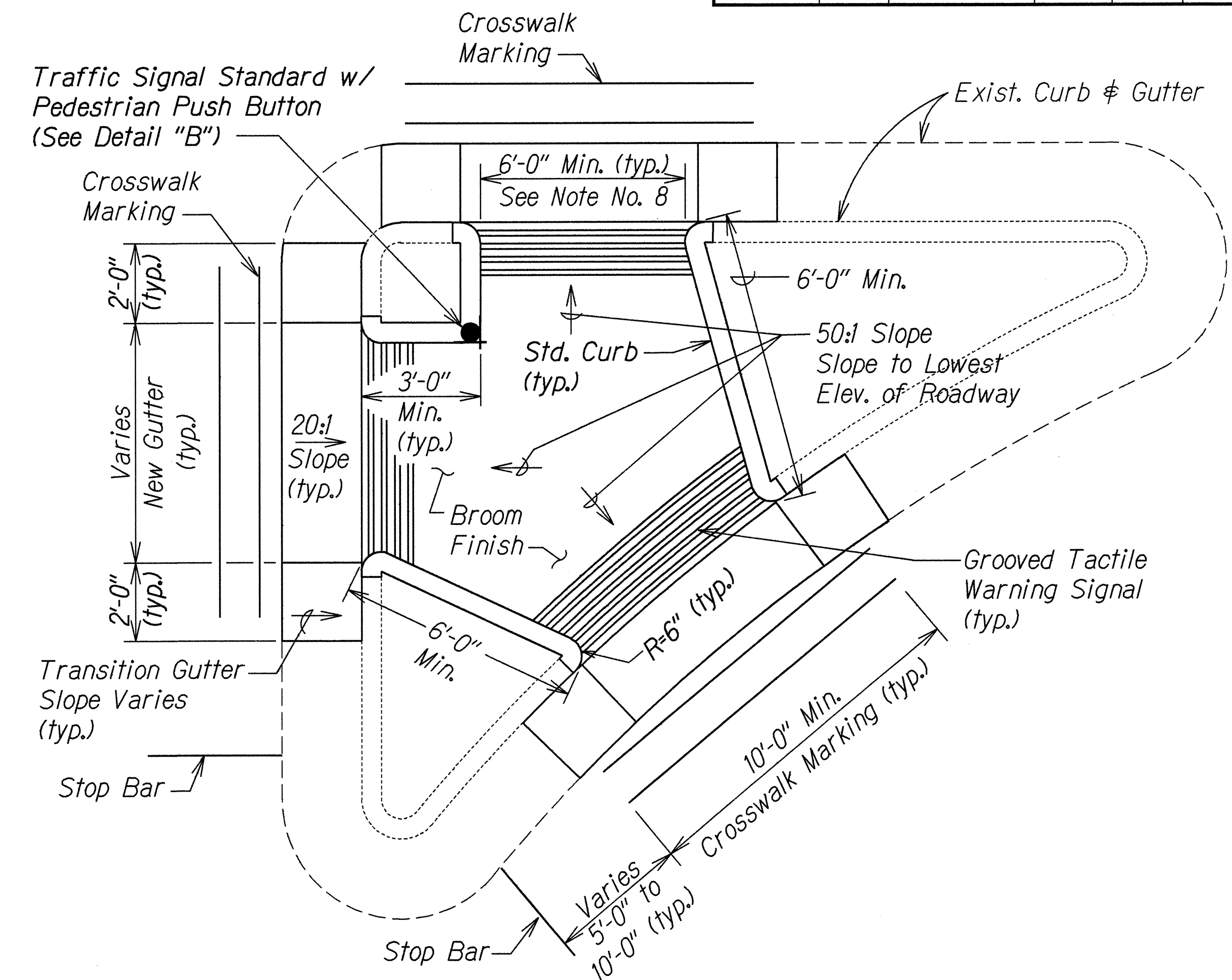
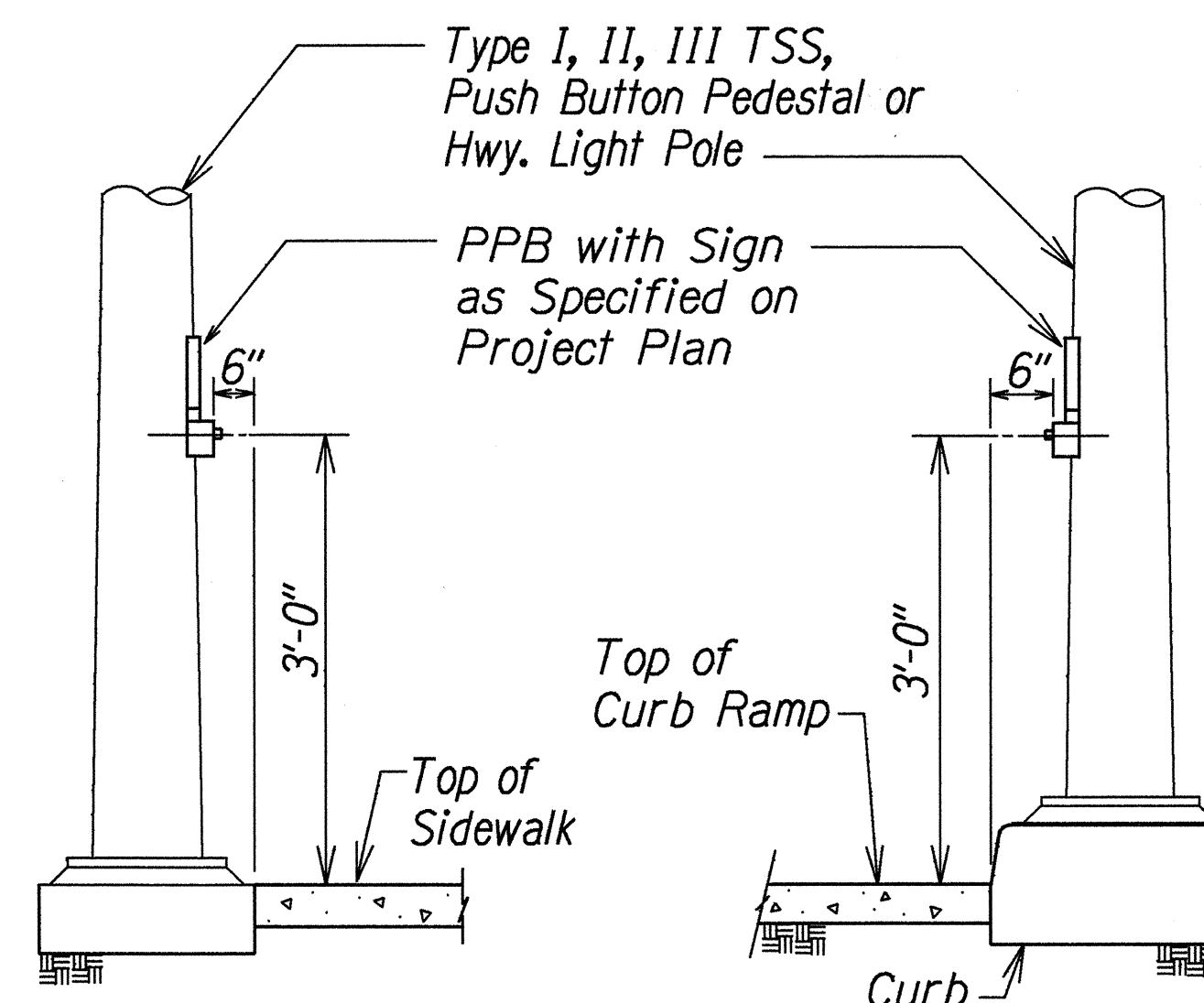
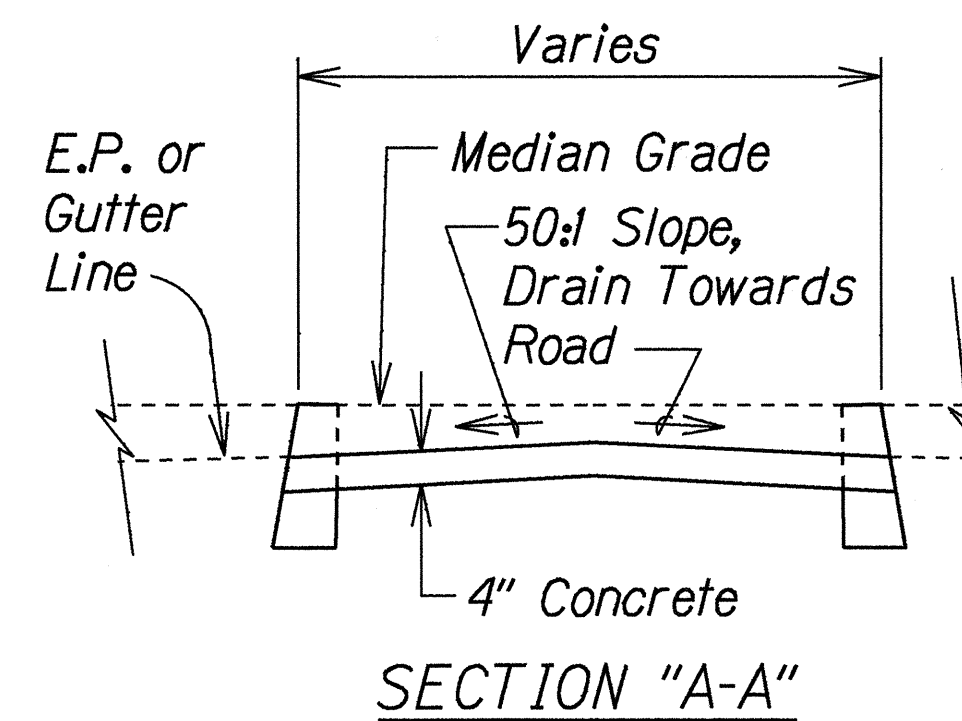
Not to Scale Date: April, 2000

SHEET No. 3 OF 7 SHEETS

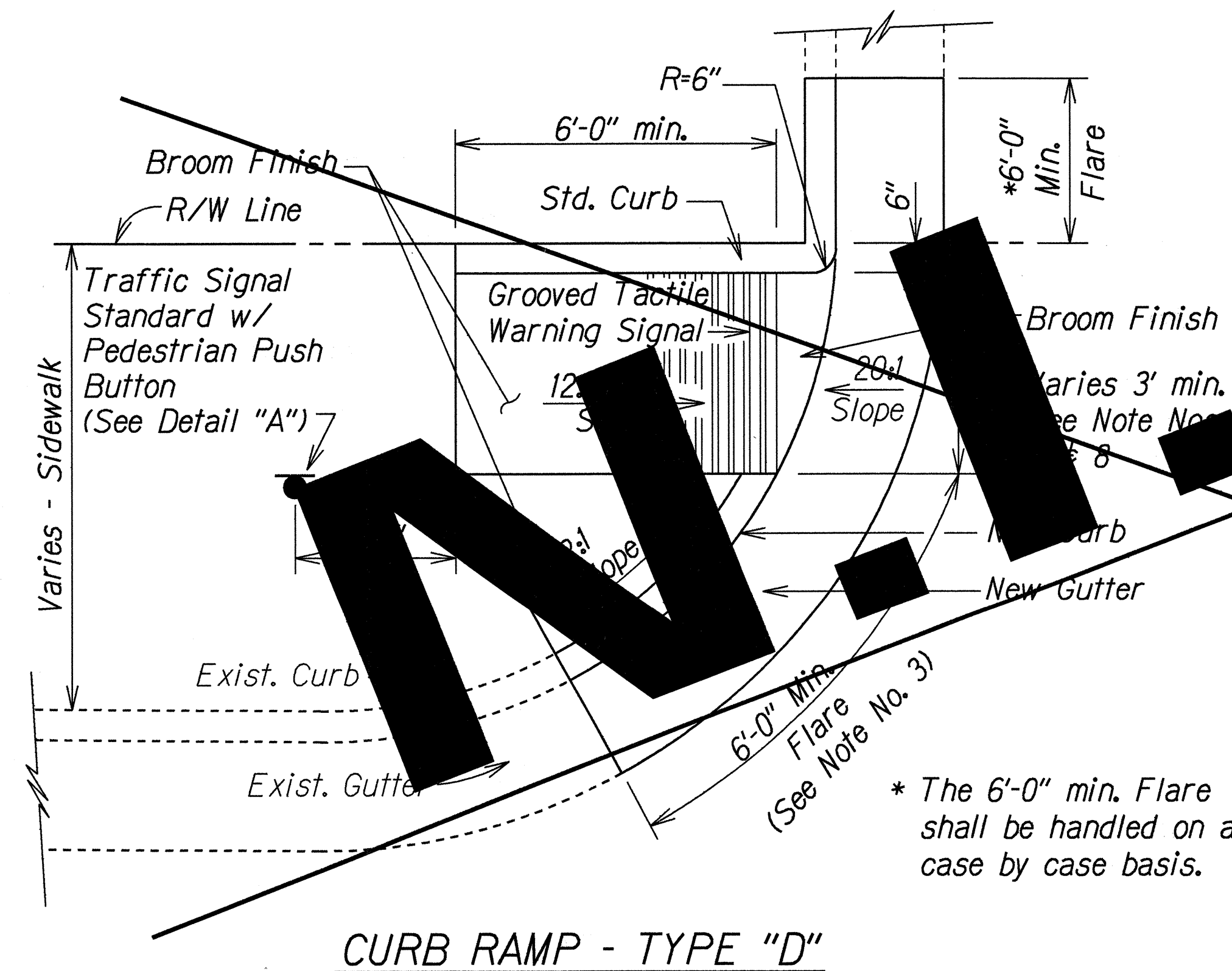
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-02-99	2000	10	32



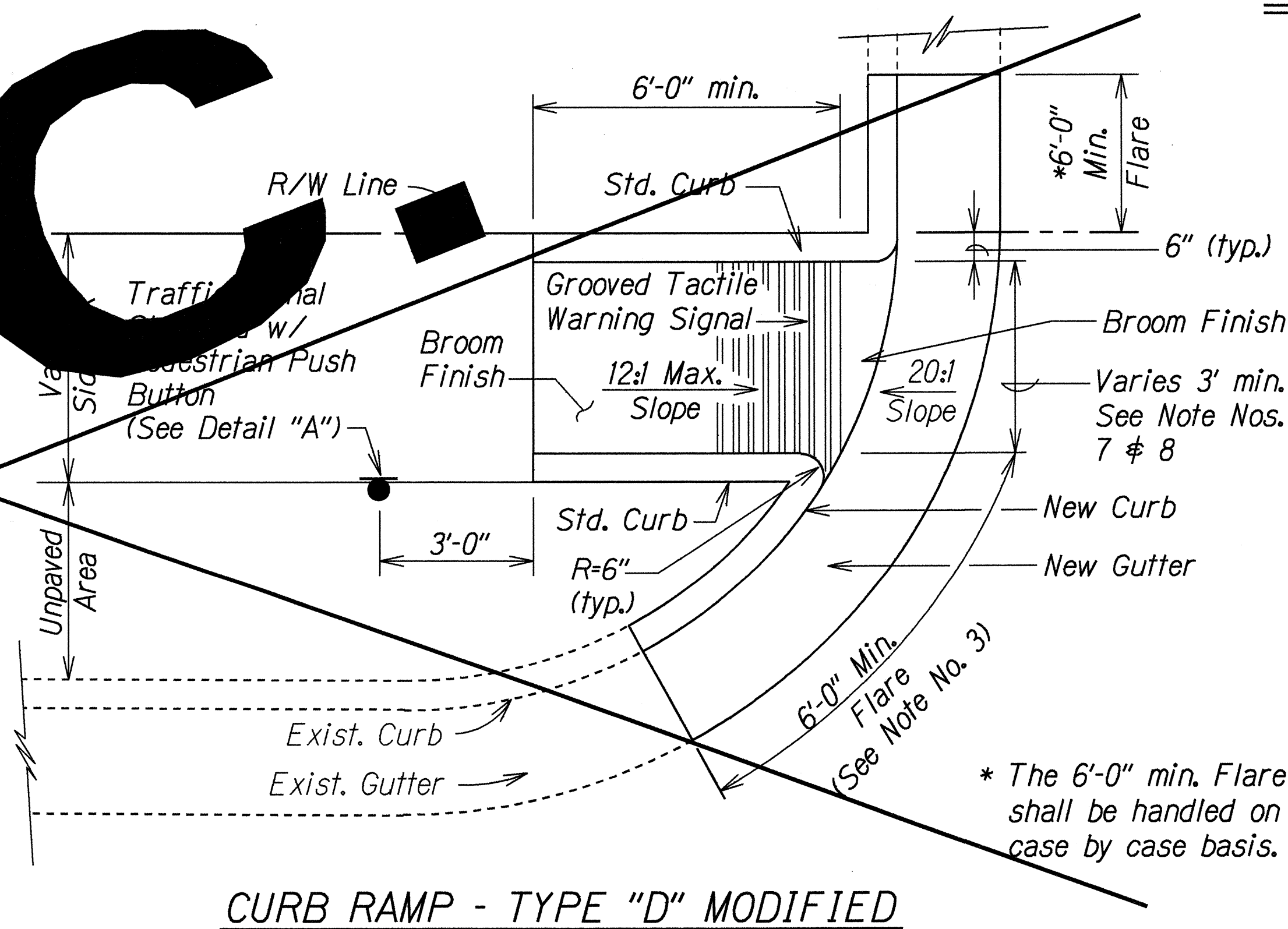
**CURB RAMP - TYPE "C"**  
USE AT MEDIAN CROSSINGS, ISLANDS



**CURB RAMP - TYPE "C" MODIFIED**



**CURB RAMP - TYPE "D"**



**CURB RAMP - TYPE "D" MODIFIED**

DESIGNED BY	DATE
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**CURB RAMP DETAIL**

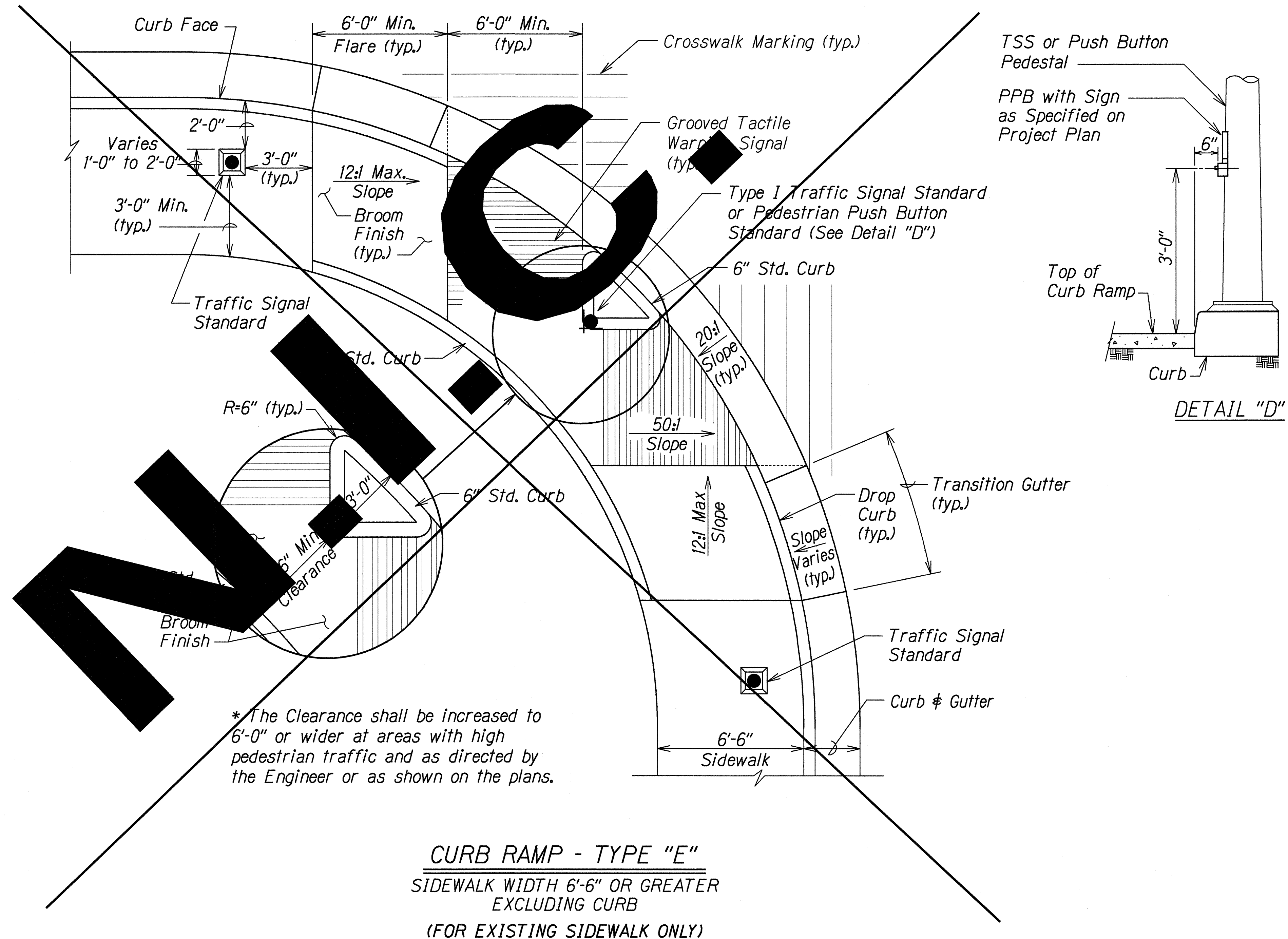
**FARRINGTON HIGHWAY**  
**Intersection Improvements at Leoku Street**  
**Project No. 7101A-02-99**

Not to Scale Date: April, 2000

SHEET No. 4 OF 7 SHEETS



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-02-99	2000	11	32



ORIGINAL PLAN	DATE
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QUANTITIES BY	
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STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

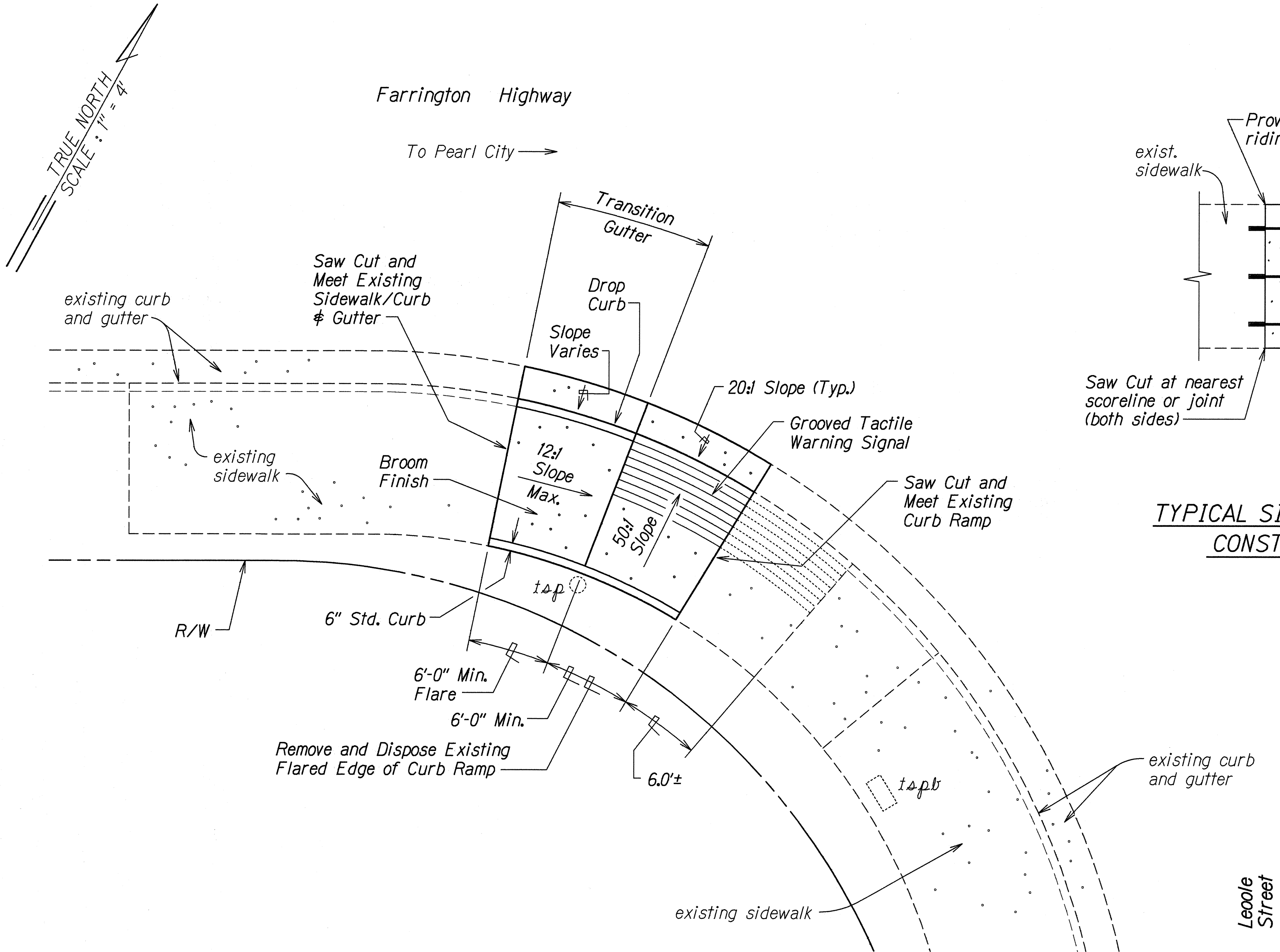
**CURB RAMP DETAIL**

**FARRINGTON HIGHWAY**  
Intersection Improvements at Leoku Street  
Project No. 7101A-02-99

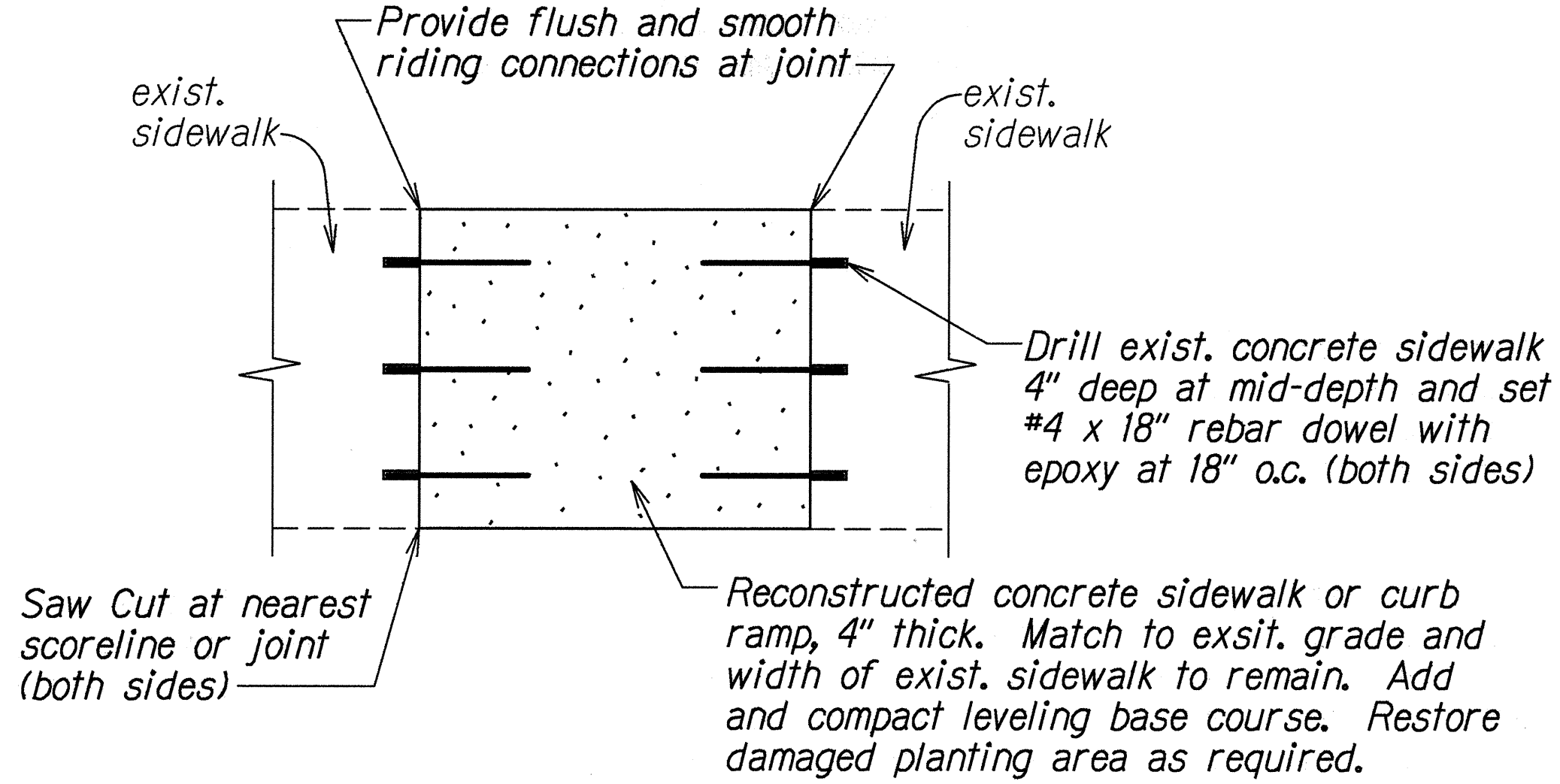
Not to Scale Date: April, 2000

SHEET No. 5 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-02-99	2000	12	32



Note:  
Installation of Rebar Dowels, Including Drilling, and Epoxy shall be Incidental to Concrete Sidewalk or Curb Ramp.



TYPICAL SIDEWALK/CURB RAMP  
CONSTRUCTION JOINT  
Not To Scale

SURVEY PLOTTED BY	DATE
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TRACED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
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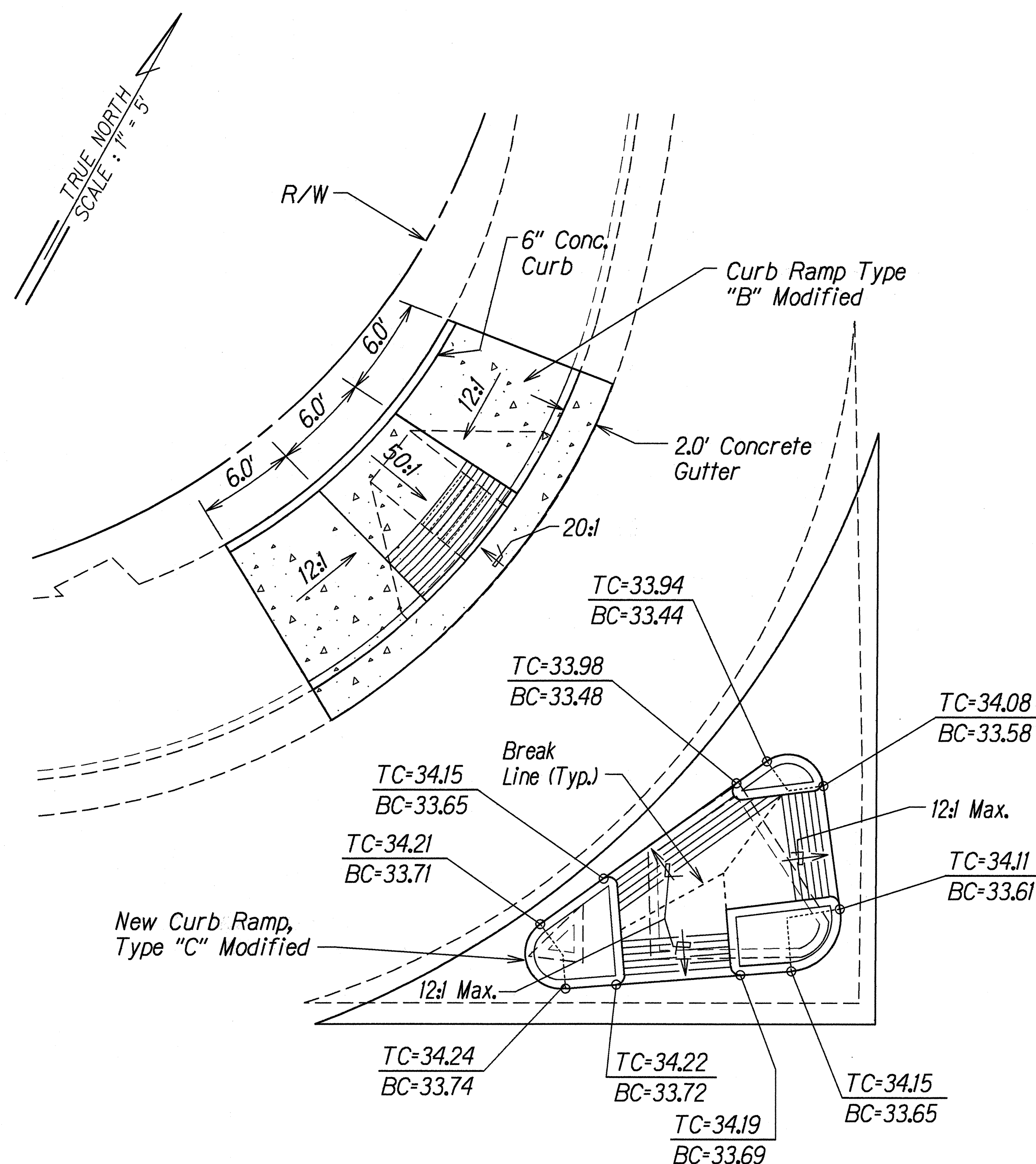
CURB RAMP - MODIFIED TYPE "E"

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  

### CURB RAMP DETAILS

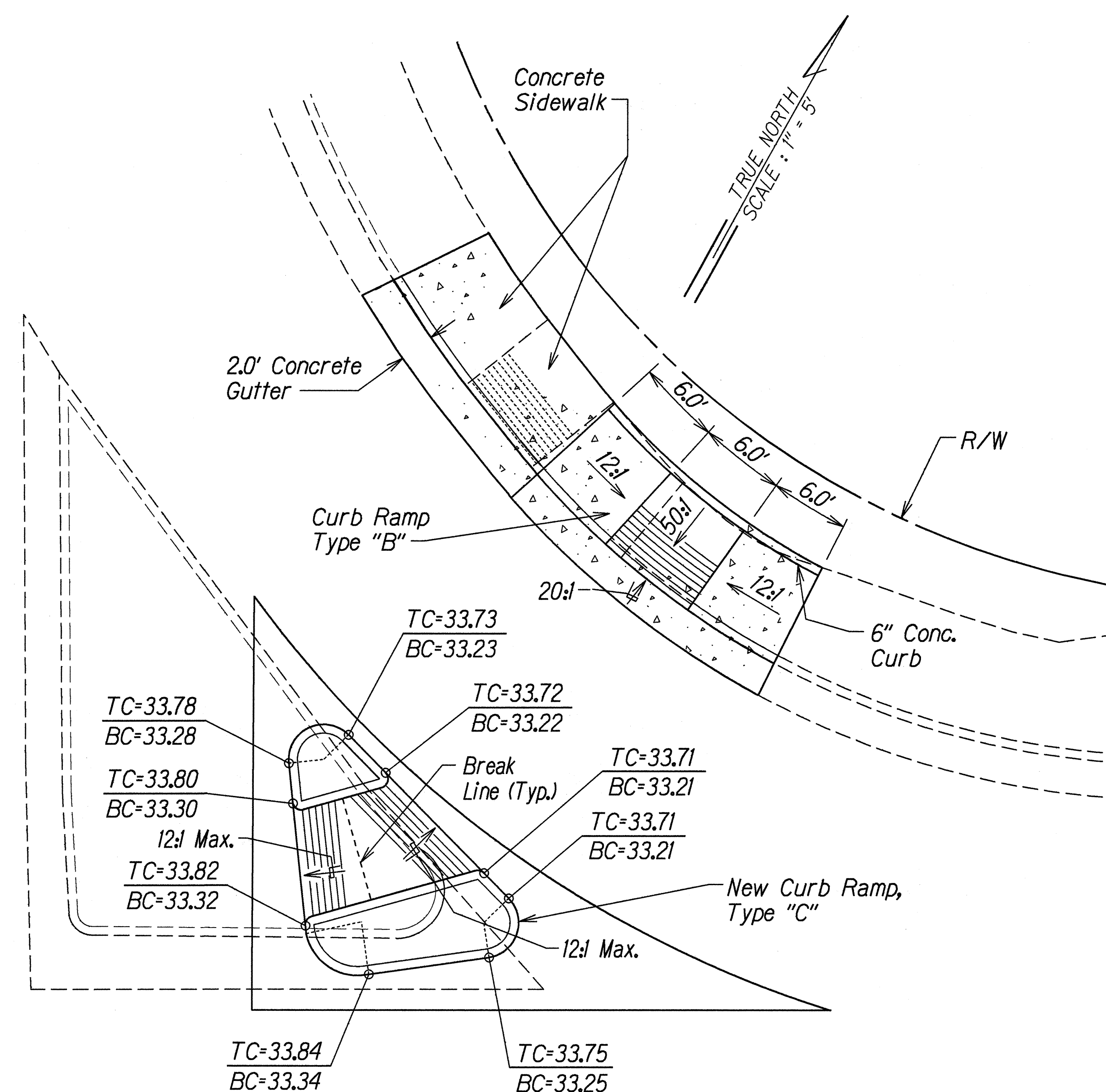
  
FARRINGTON HIGHWAY  
Intersection Improvements at Leolu Street  
Project No. 7101A-02-99  
Scale: 1"=4' Date: April, 2000  
SHEET No. 6 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-02-99	2000	13	32



Leoku Street

Farrington Highway



Notes:

1. All Slopes indicated are Maximum Allowed.
2. All Tactile Warning Grooves Extend Across Ramp Base Up to 3.0', Up the Shorter Side.

Legend

TC=XX.XX Top of Curb Elevation  
BC=XX.XX Bottom of Curb Elevation

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
DESIGNED BY	DRAWN BY	
CHECKED BY	TRACED BY	
NOTED BY	DESIGNED BY	
DATE	CHECKED BY	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**CURB RAMP DETAIL**

**PAVEMENT GRADES**

**FARRINGTON HIGHWAY**

**Intersection Improvements at Leoku Street**

**Project No. 7101A-02-99**

Scale: As Shown Date: May, 2000

SHEET No. 7 OF 7 SHEETS