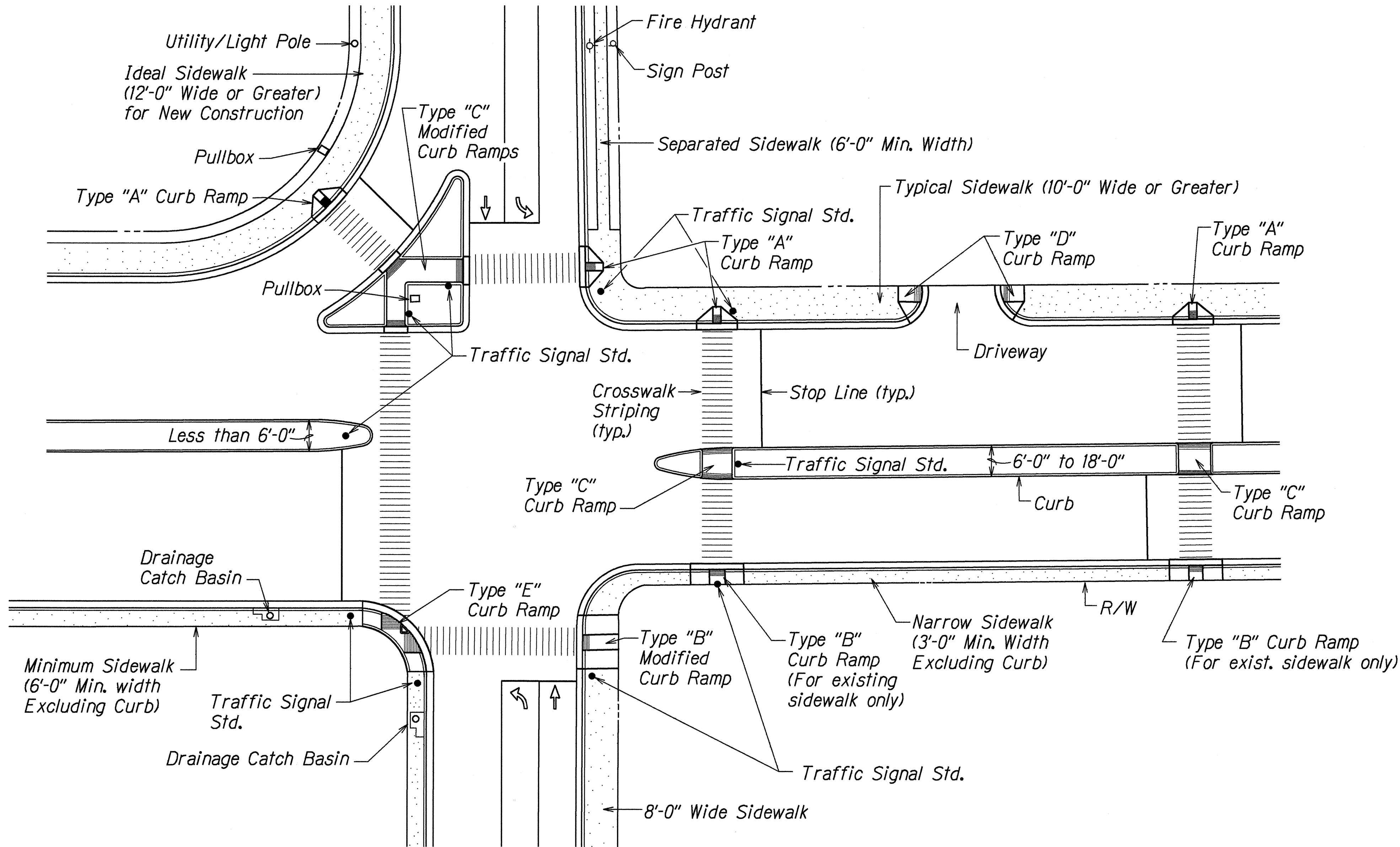


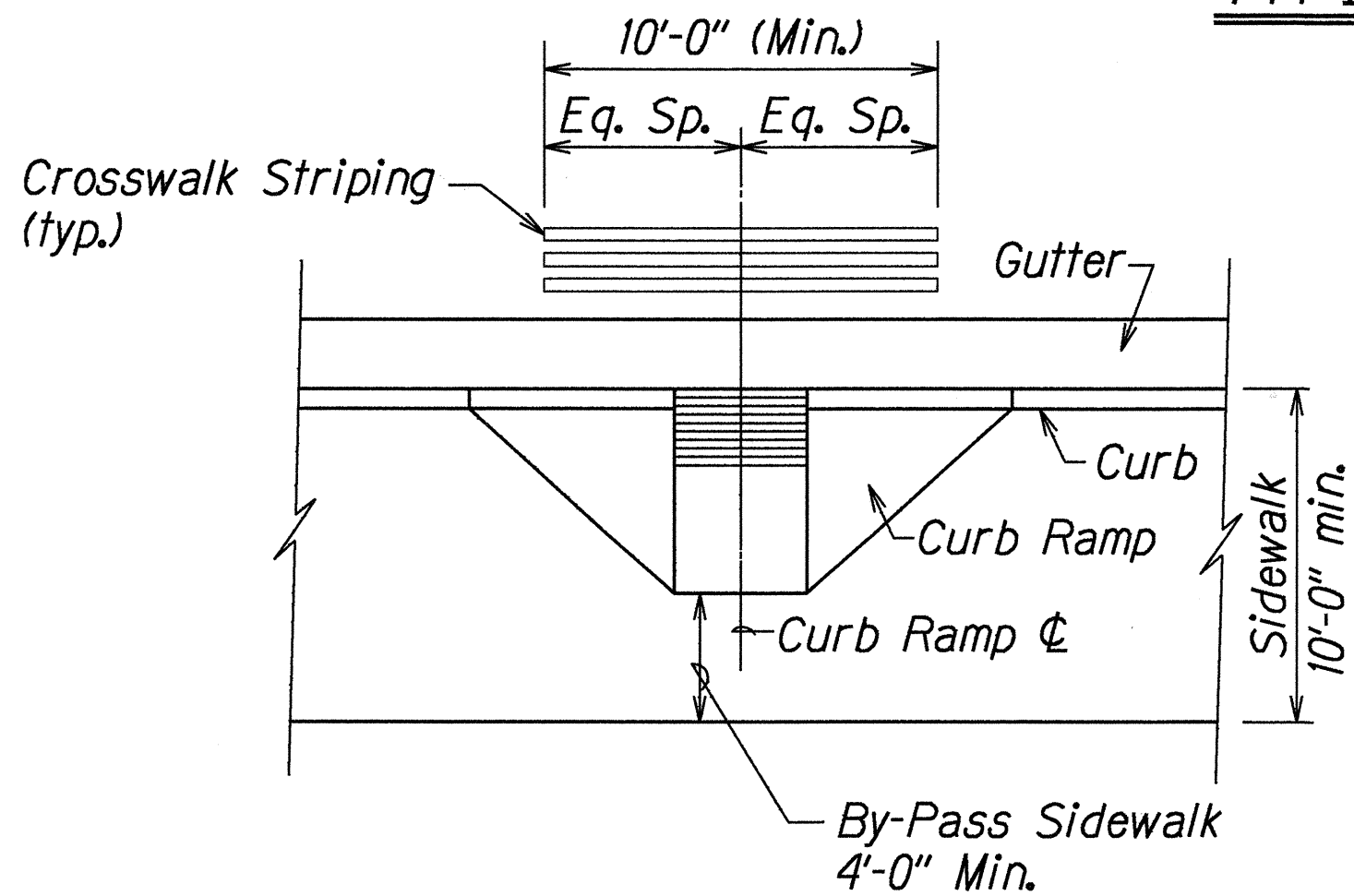
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(47)	2000	ADD.11	89

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:l. 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 Section 4.4.1 and will be subject to Engineer's approval.
- A minimum of 36 inches clear width and 80 inches head room clearance height shall be provided along walkways.



TYPICAL CURB RAMPS



TYPICAL CROSSWALK STRIPING AT CURB RAMP

SURVEY PLOTTED BY	DATE
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TRACED BY	
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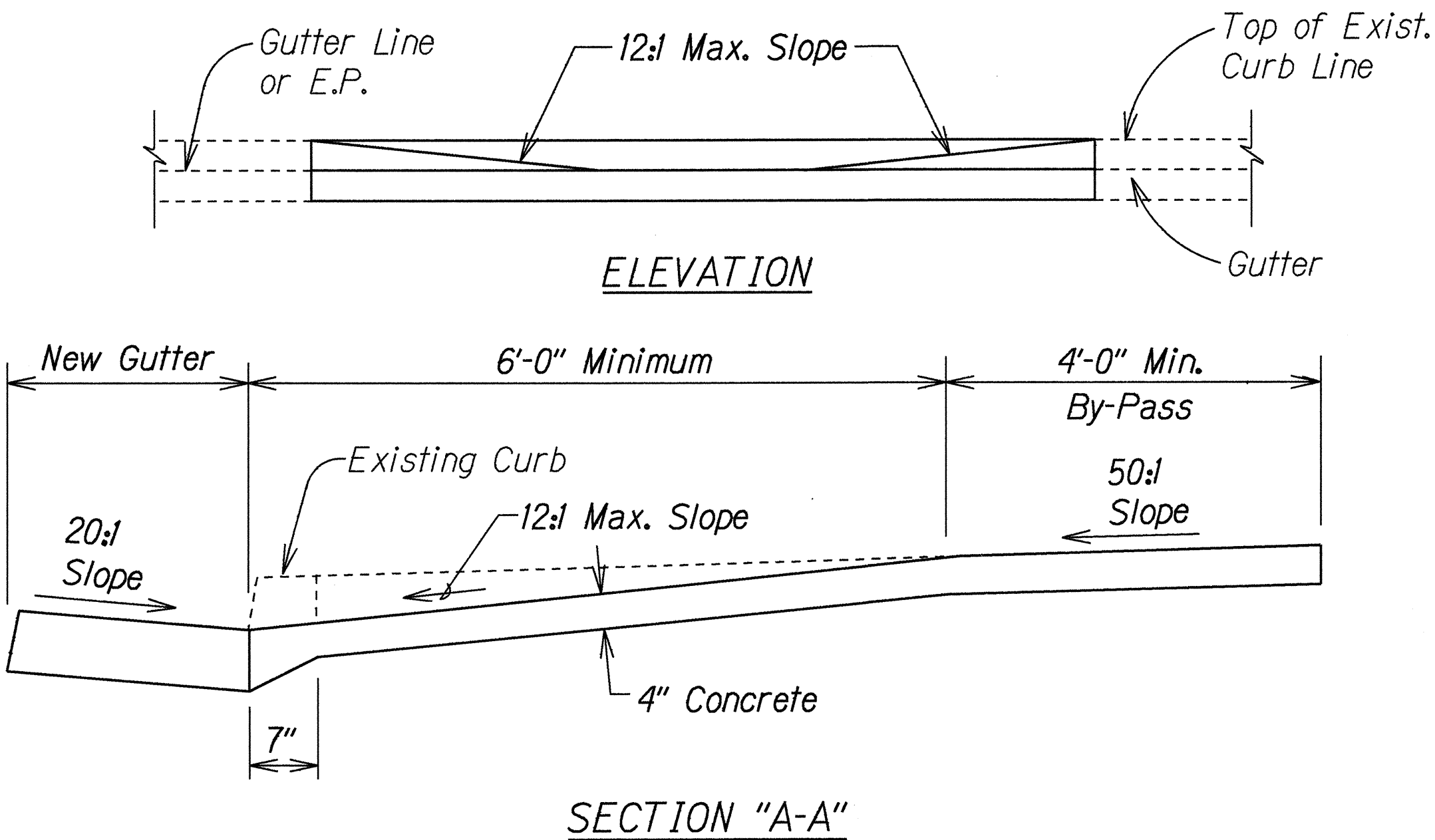
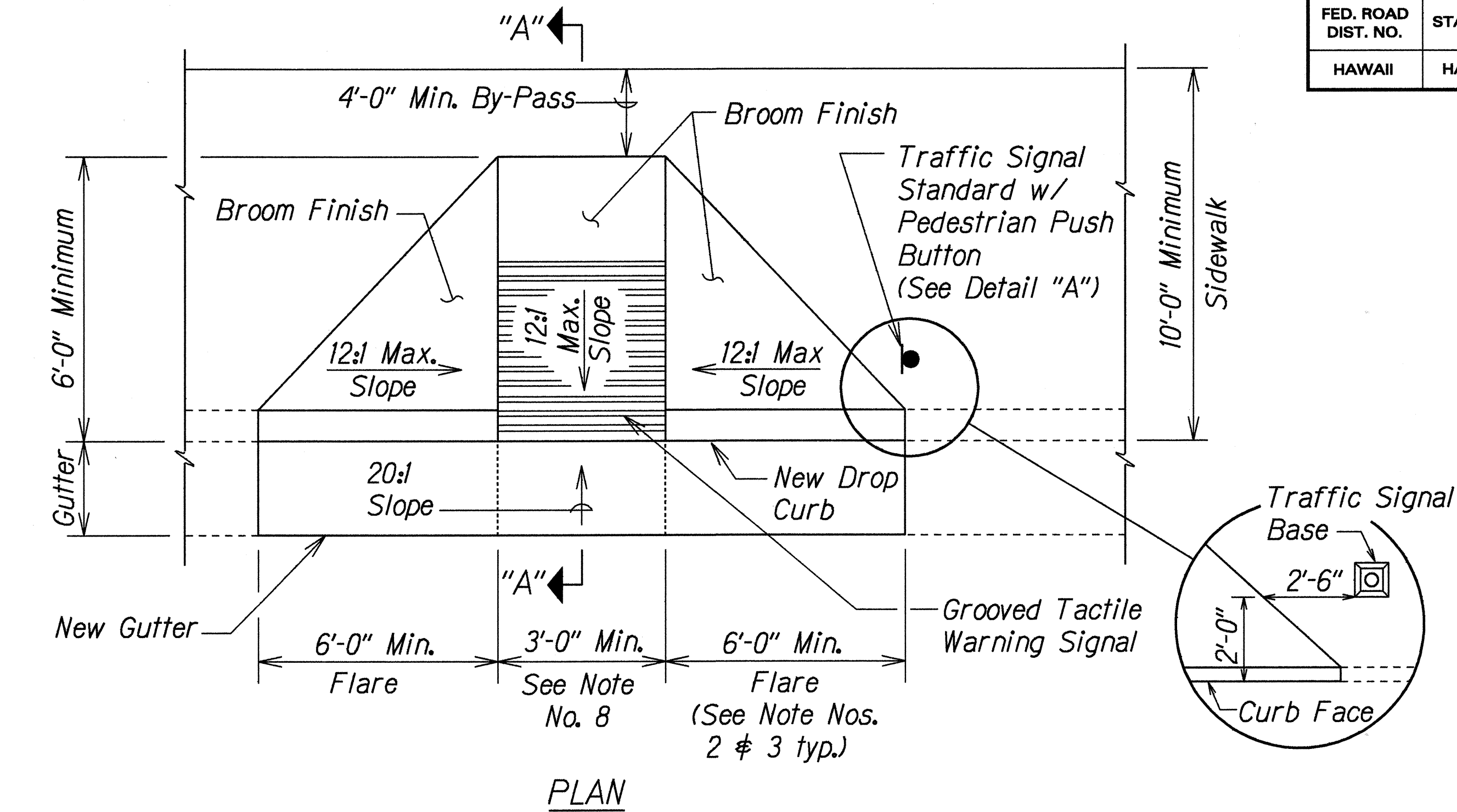
9-10-99	Added General Note No. 11.
8-26-99	Revised General Note No. 10.
DATE	REVISION

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
CURB RAMP DETAIL
KALANIANA'OLE HIGHWAY RESURFACING
Ainakoa Avenue to West Hind Drive
Federal-Aid Project No. NH-072-1(47)
Not to Scale
Date: Aug., 1999
SHEET No. 1 OF 12 SHEETS

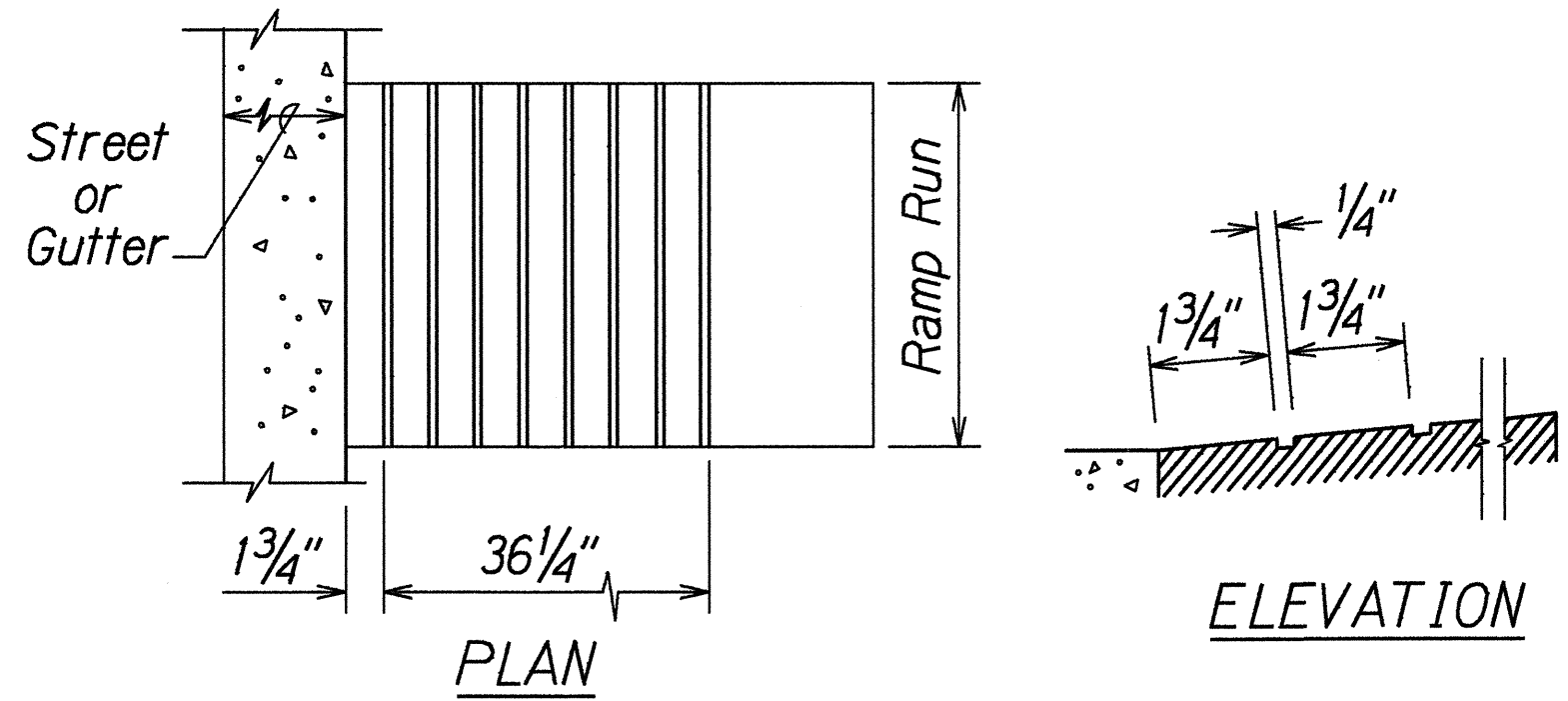
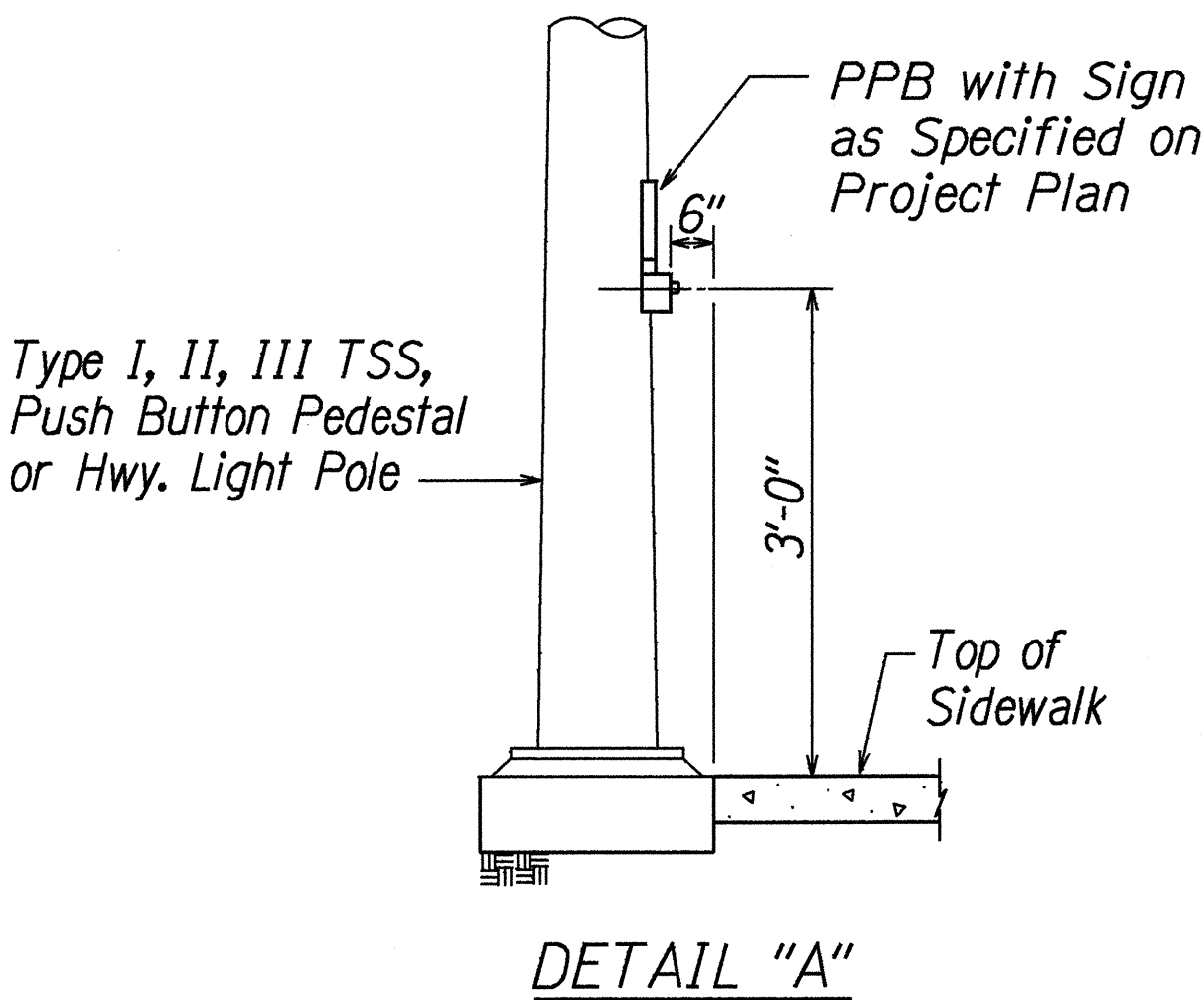
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(47)	2000	ADD.12	89

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 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).
12. Prior to placing curb ramps, remove and dispose the existing sidewalk or curb ramp. Excavate for placement of bed course and curb ramp. Remove and replace soft and yielding materials with acceptable material. Shape and compact the subgrade. After compacting the subgrade, place 4-inches of bedcourse on the top of the compacted subgrade. Compact the bed course material.
13. All cross slope for curb ramp is 50:1.



CURB RAMP - TYPE "A"
SIDEWALK WIDTH 10'-0" OR GREATER



GROOVED TACTILE WARNING SIGNAL

8-26-99 Added Curb Ramp Note Nos. 12 and 13.

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAIL

KALANIANA'OLE HIGHWAY RESURFACING
Ainakoa Avenue to West Hind Drive
Federal-Aid Project No. NH-072-1(47)

Not to Scale Date: Aug., 1999

SHEET No. 2 OF 12 SHEETS

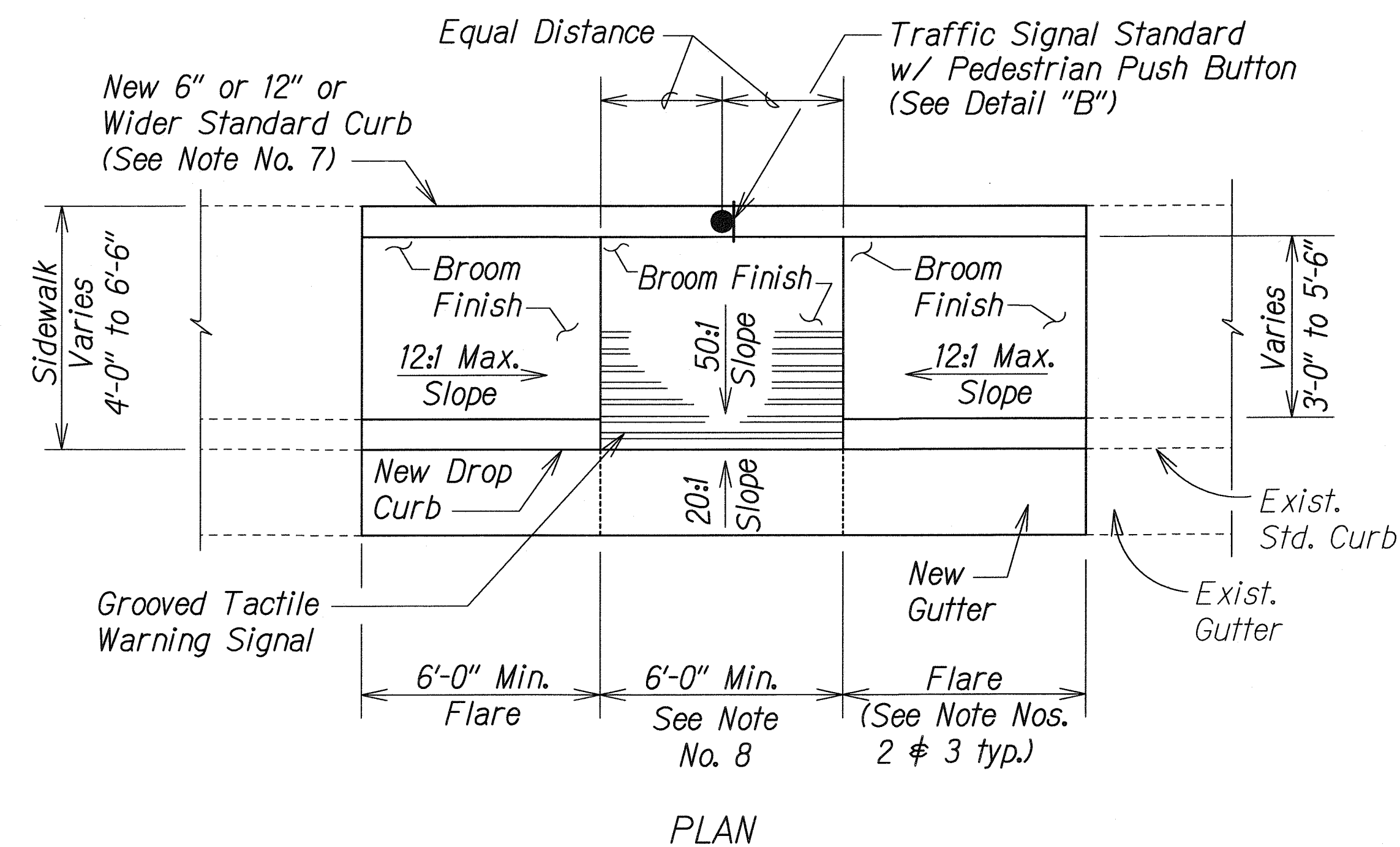
ADD.12

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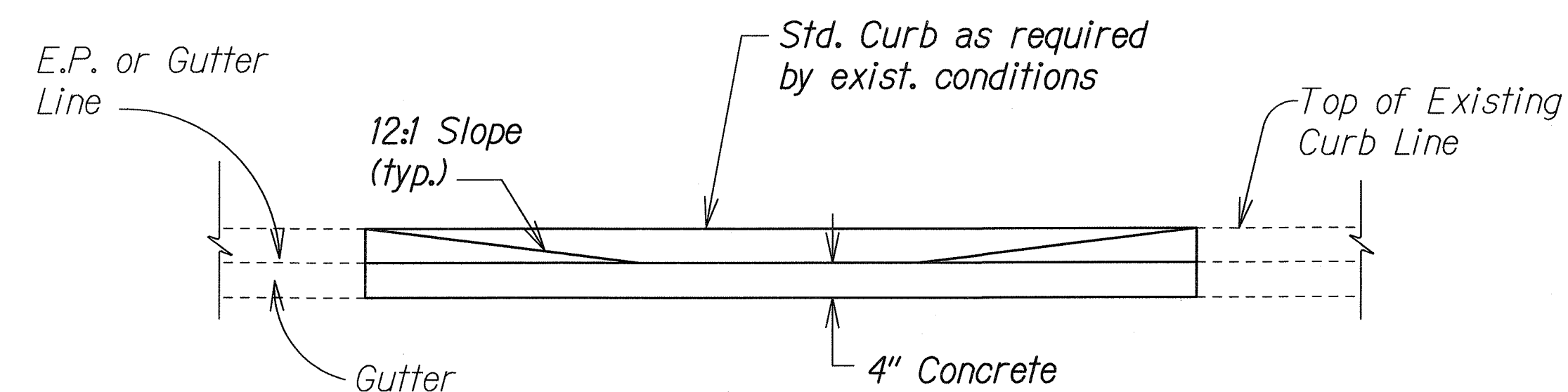
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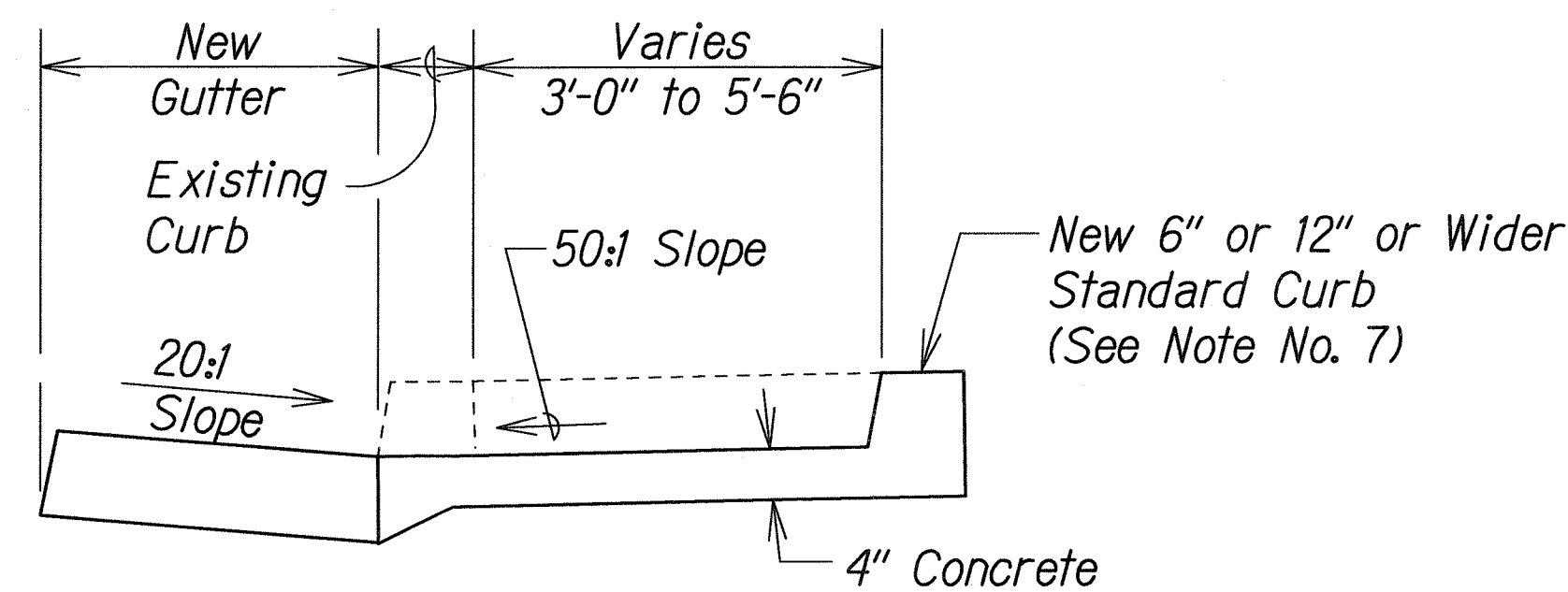
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(47)	2000	13	89



PLAN

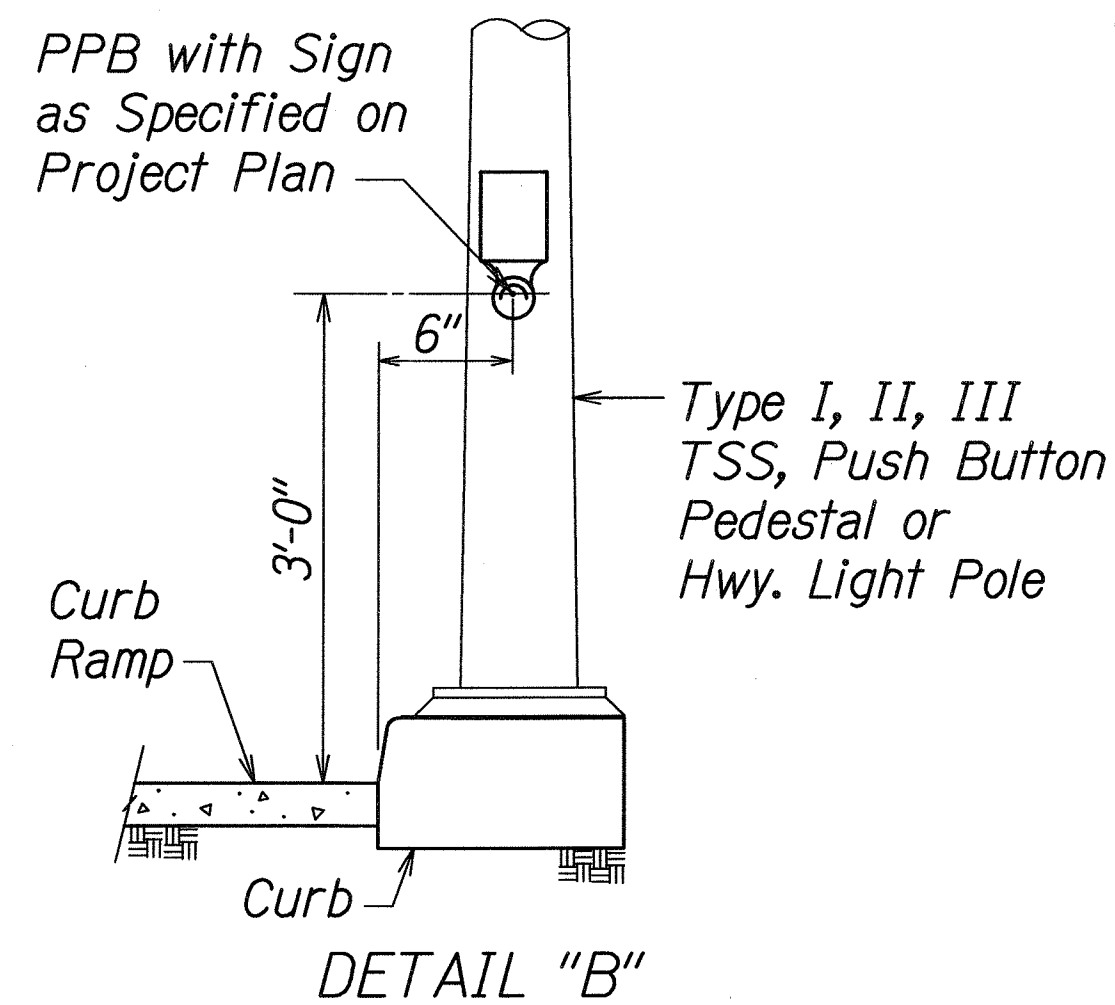


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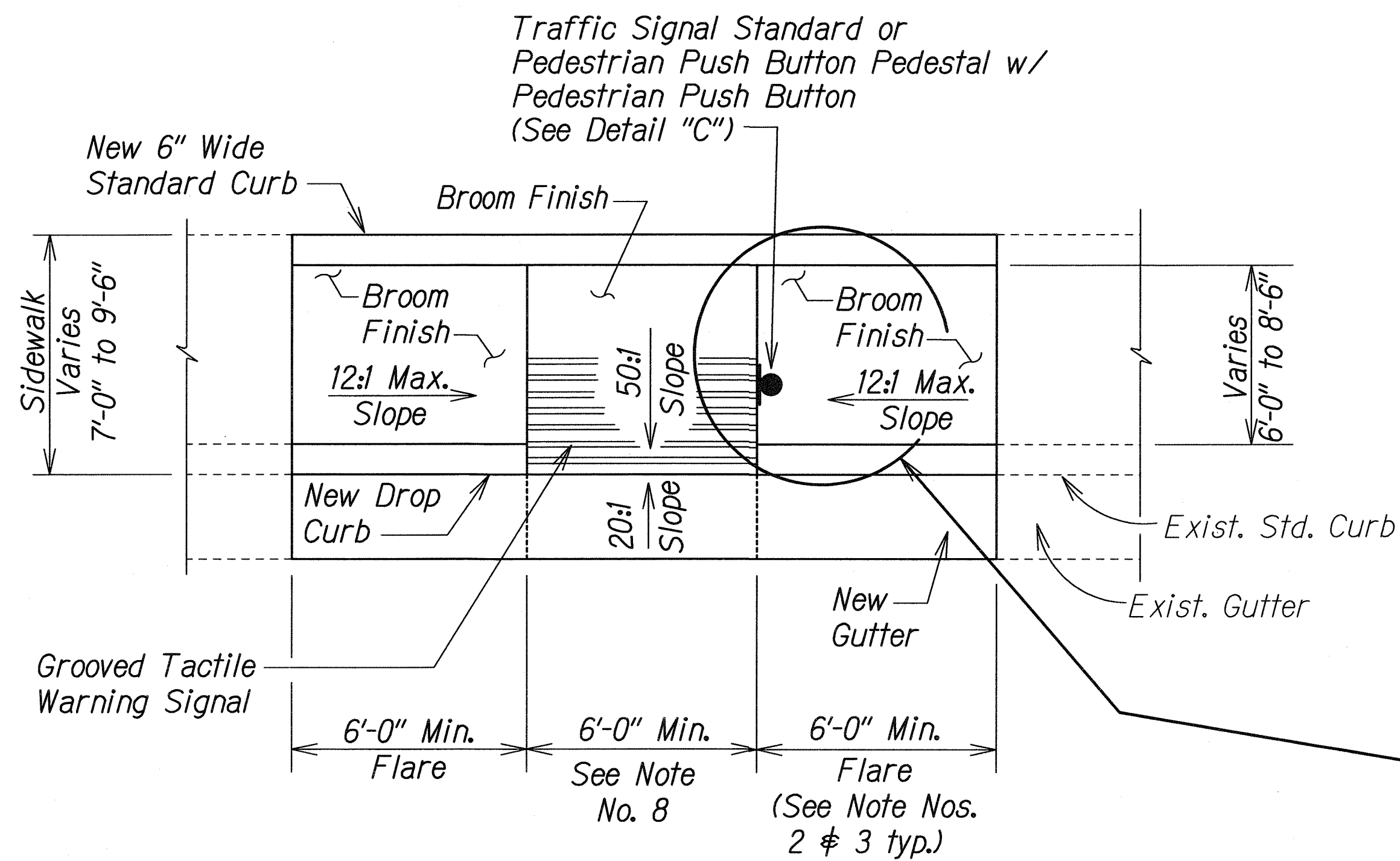


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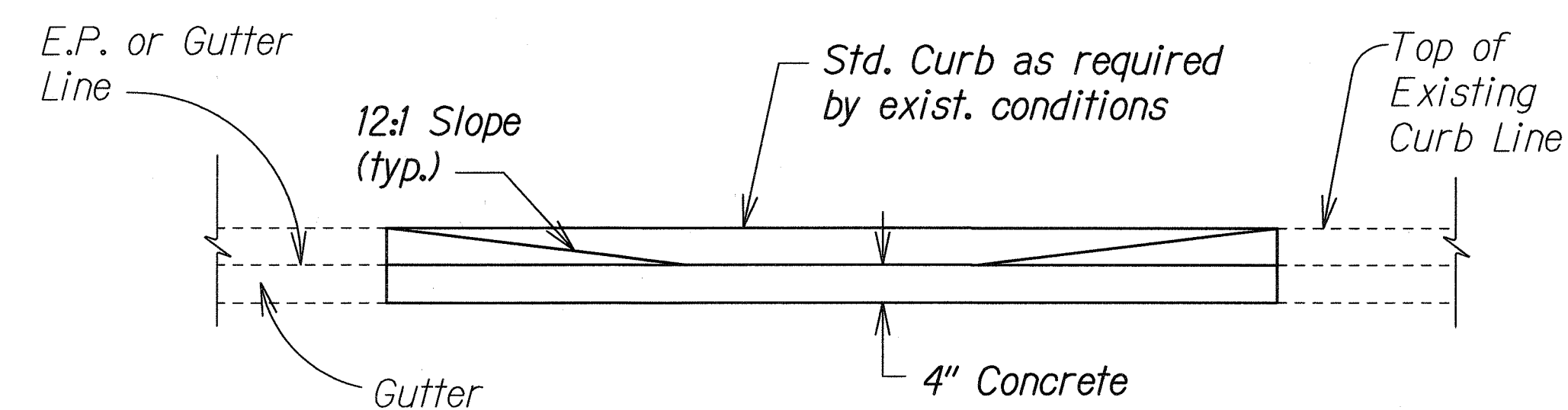
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SIDEWALK WIDTH 4'-0" OR GREATER
BUT LESS THAN 7'-0" WIDTH
(FOR EXISTING SIDEWALK ONLY)



DETAIL "B"

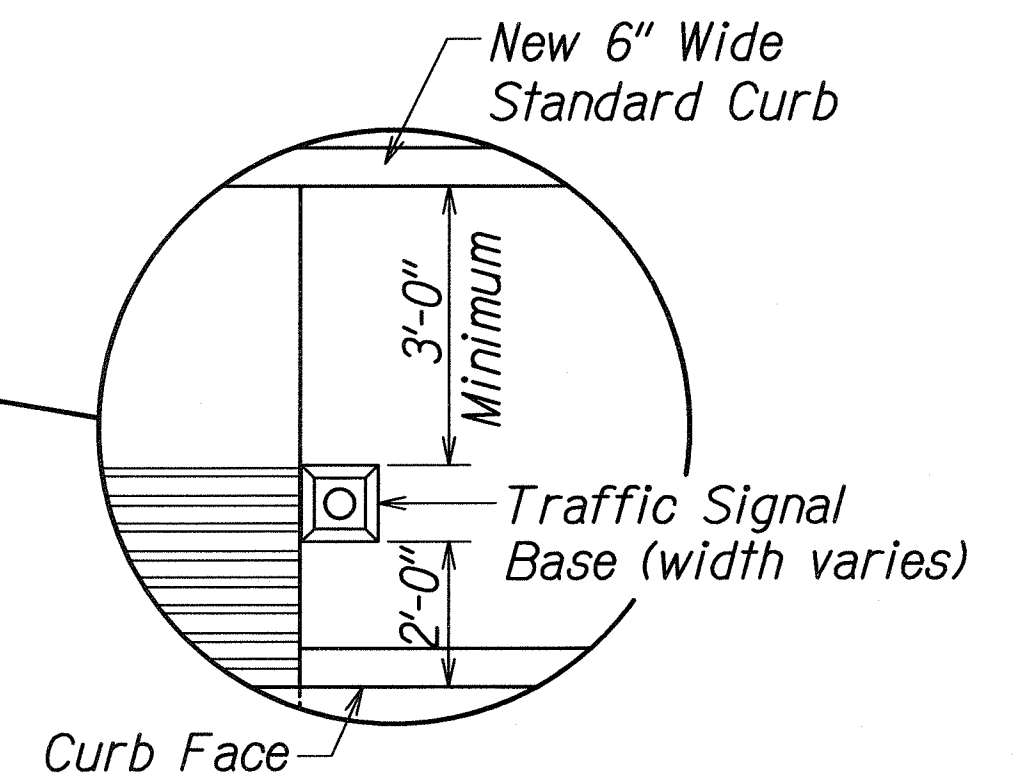


PLAN



ELEVATION

CURB RAMP - TYPE "B" MODIFIED
SIDEWALK WIDTH 7'-0" OR GREATER
BUT LESS THAN 12'-0" WIDTH



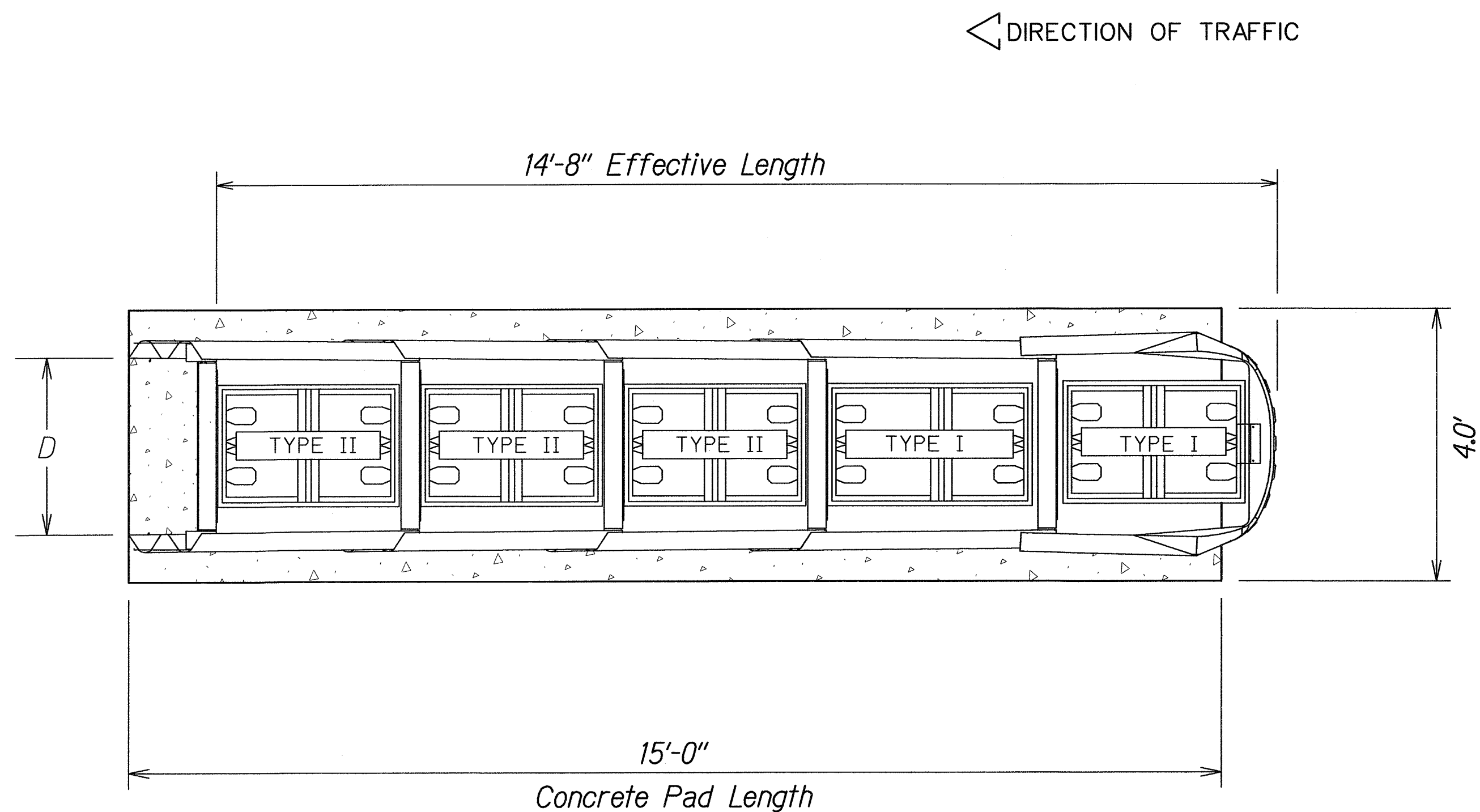
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Roadway	Text for as-built posting

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
CURB RAMP DETAIL	
KALANIANA'OLE HIGHWAY RESURFACING Ainakoa Avenue to West Hind Drive Federal-Aid Project No. NH-072-1(47)	
Not to Scale	Date: Aug., 1999
SHEET No. 3 OF 12 SHEETS	

"AS-BUILT"

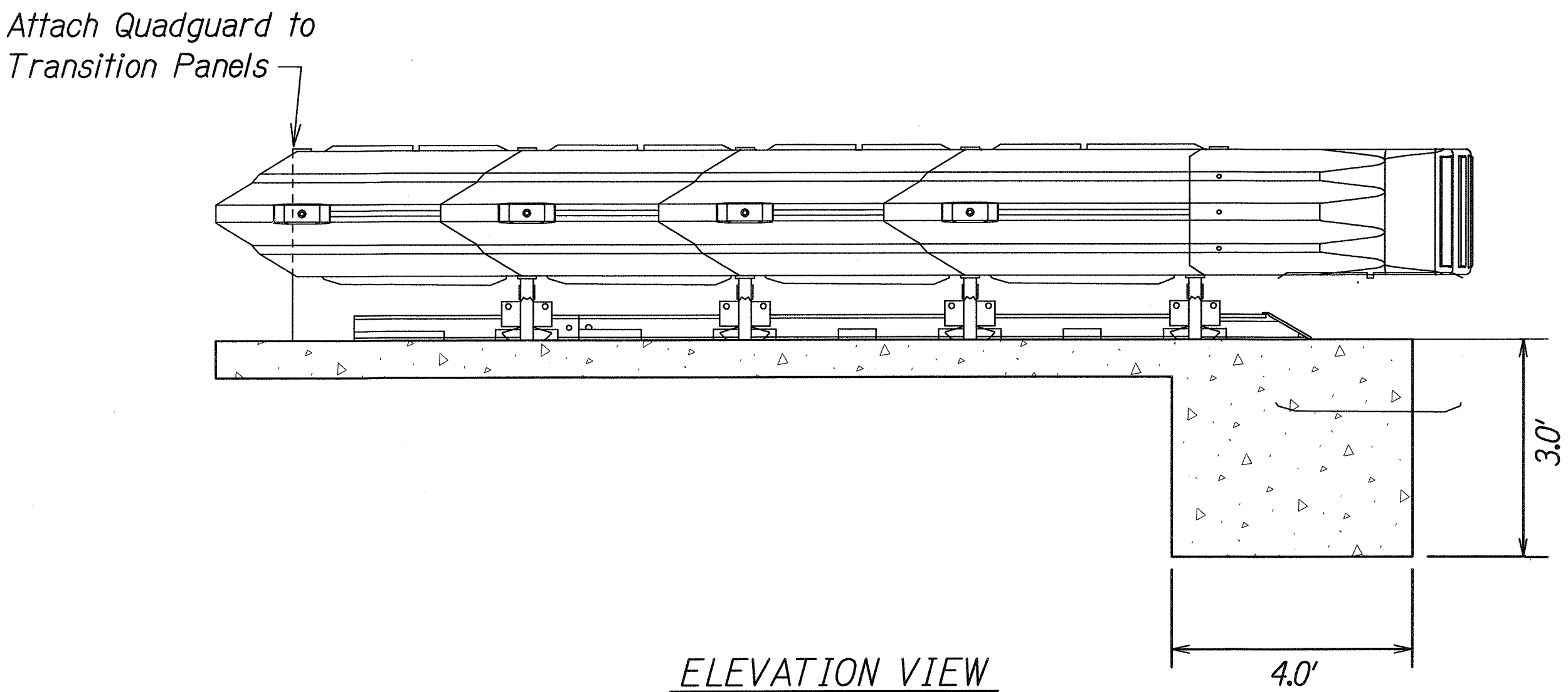
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HAWAII	HAW.	NH-072-1(47)	1999	13S-1	89



QUADGUARD CRASH ATTENUATOR

Model #	D
QS3004Y	30"
QS6904Y	69"
QS9004Y	90"

Installed Two (2) New 4 Bays of 30" Guardrail
@ Sta. 78 + 31± and Sta. 79 + 72±
See Page C.O. 30



QUADGUARD CRASH ATTENUATOR WITH CONCRETE PAD DETAILS

Not To Scale

LEGEND FOR AS-BUILT POSTINGS

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Roadway	Text for as-built posting

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

QUADGUARD DETAILS

KALANIANA'OLE HIGHWAY RESURFACING
Ainakoa Avenue to West Hind Drive
Federal-Aid Project No. NH-072-1(47)

Scale: As Shown Date: April, 1998

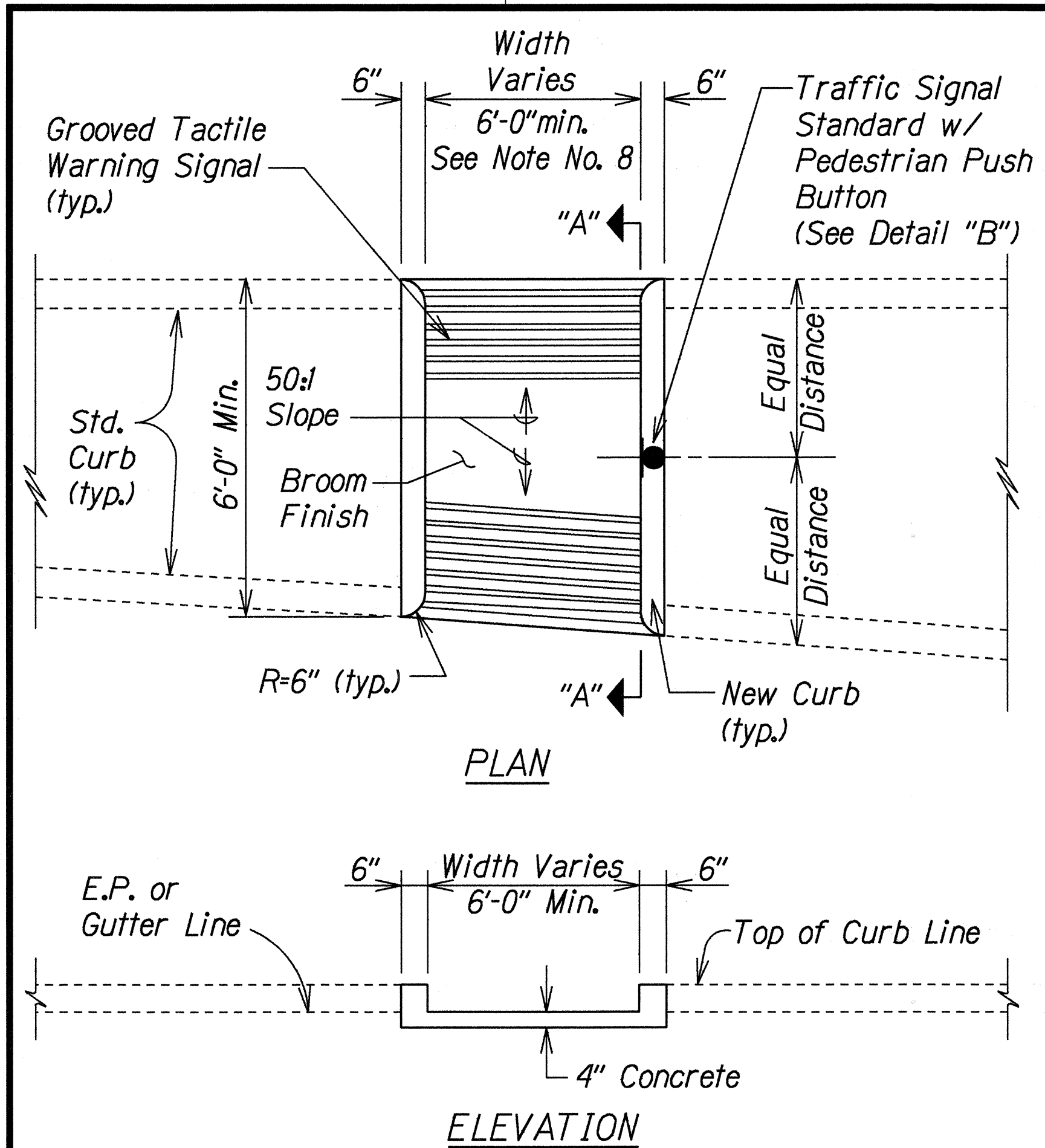
SHEET No. 1 OF 1 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	3/12/99
06/22/99	TRACED BY	
06/22/99	DESIGNED BY	
06/22/99	CHECKED BY	

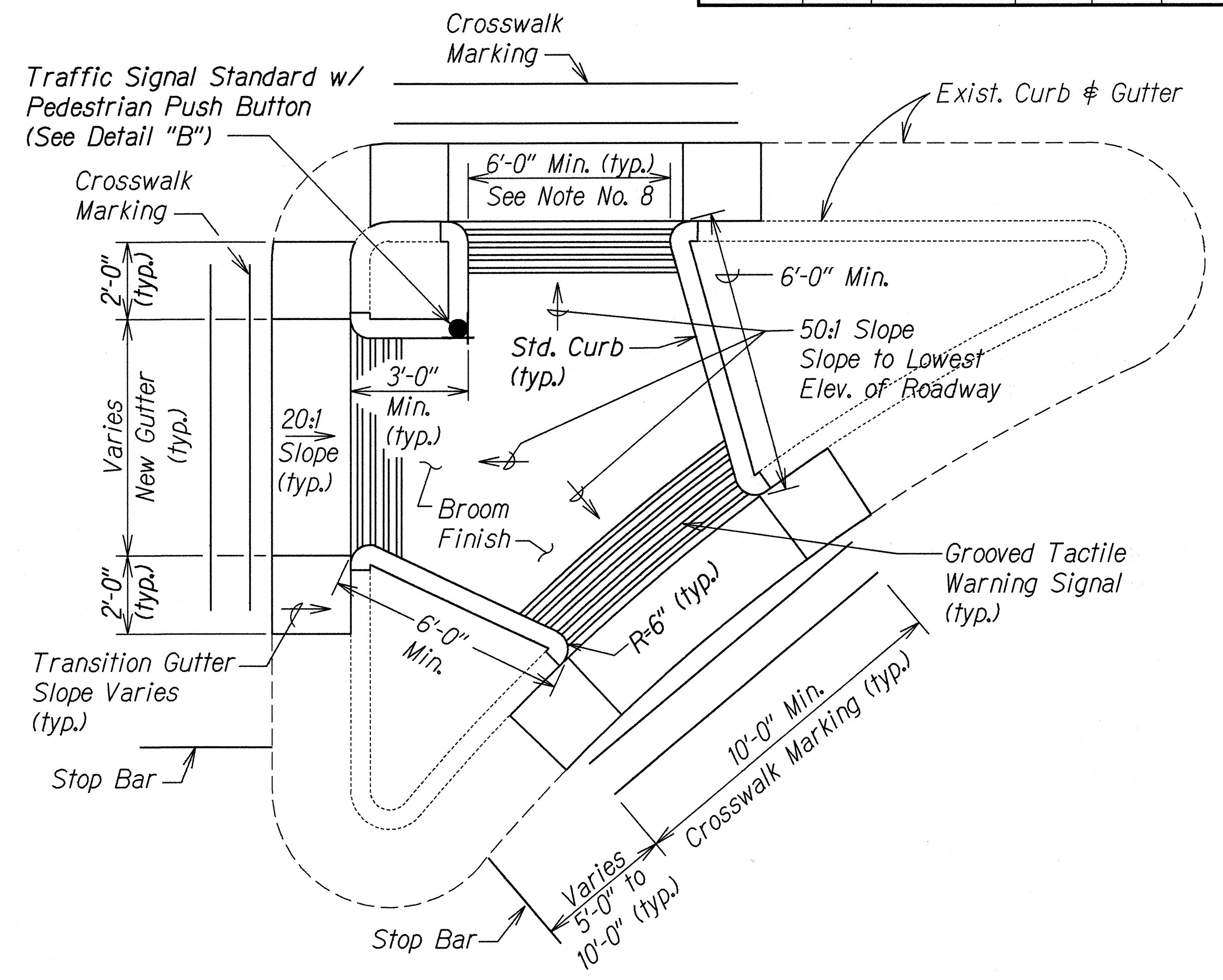
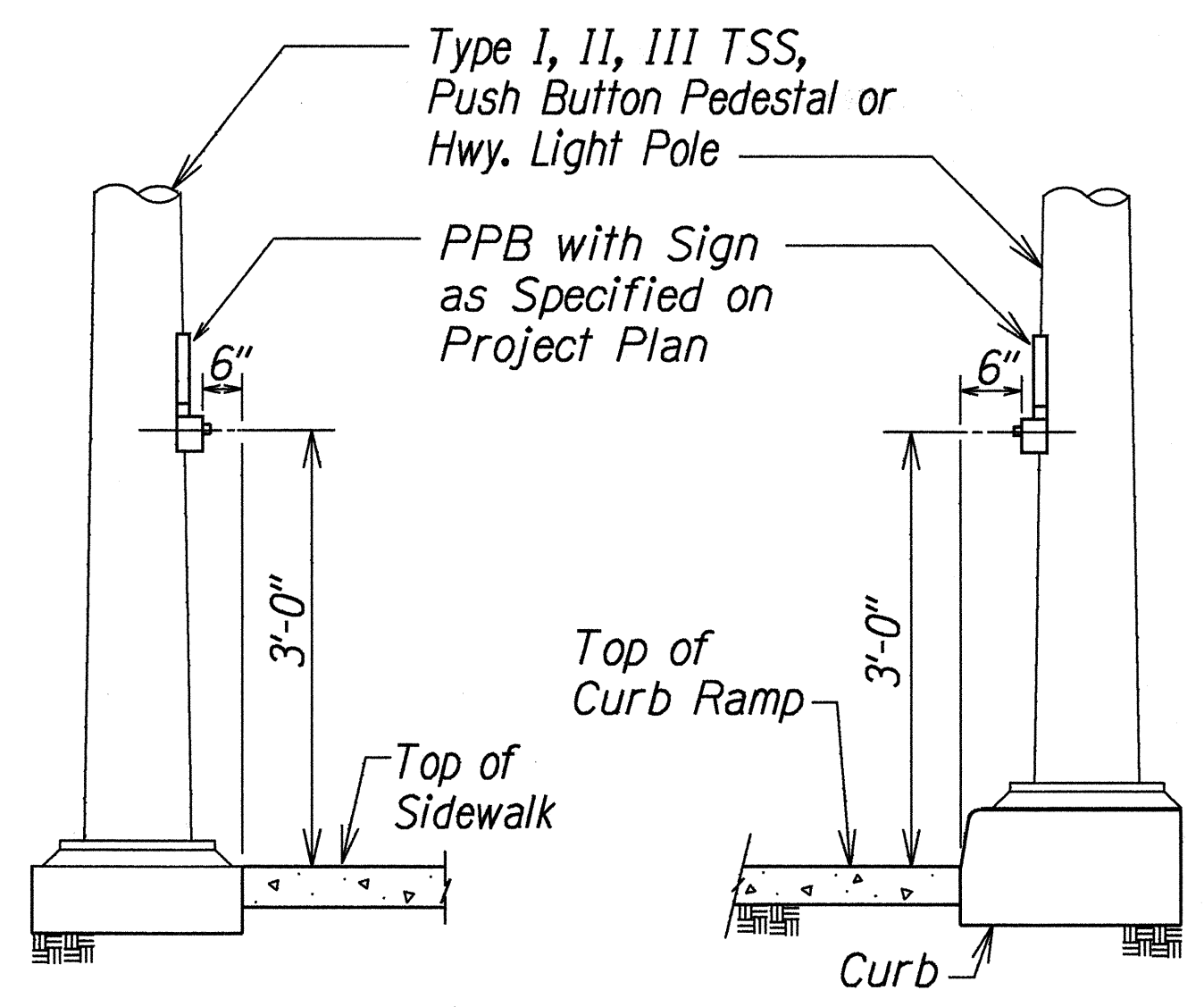
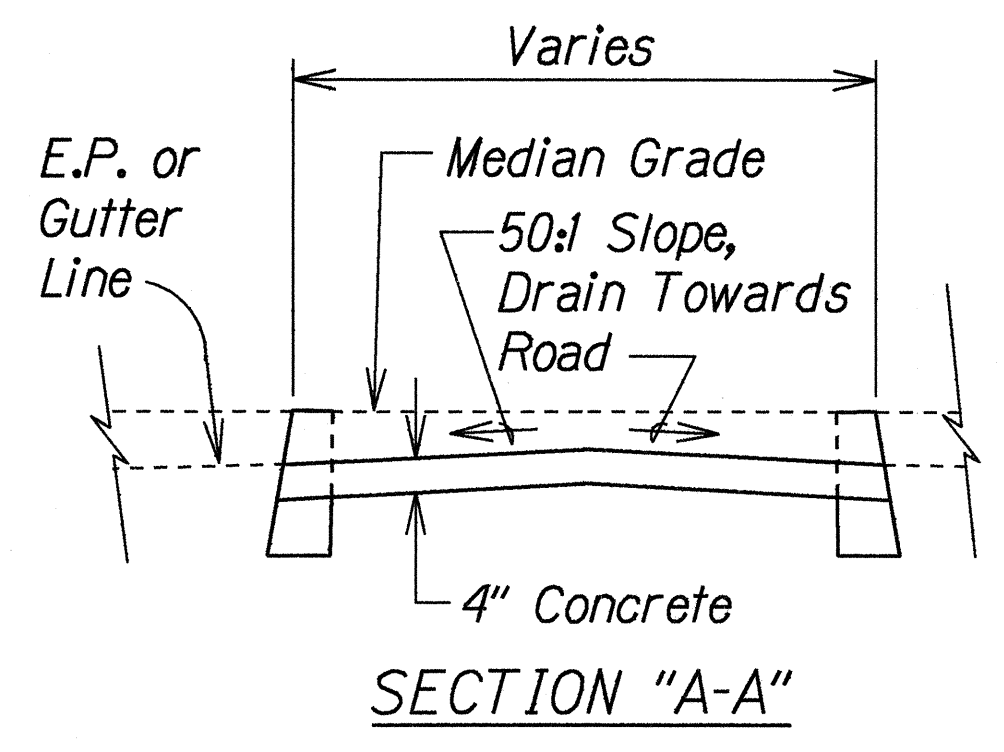
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13S-1

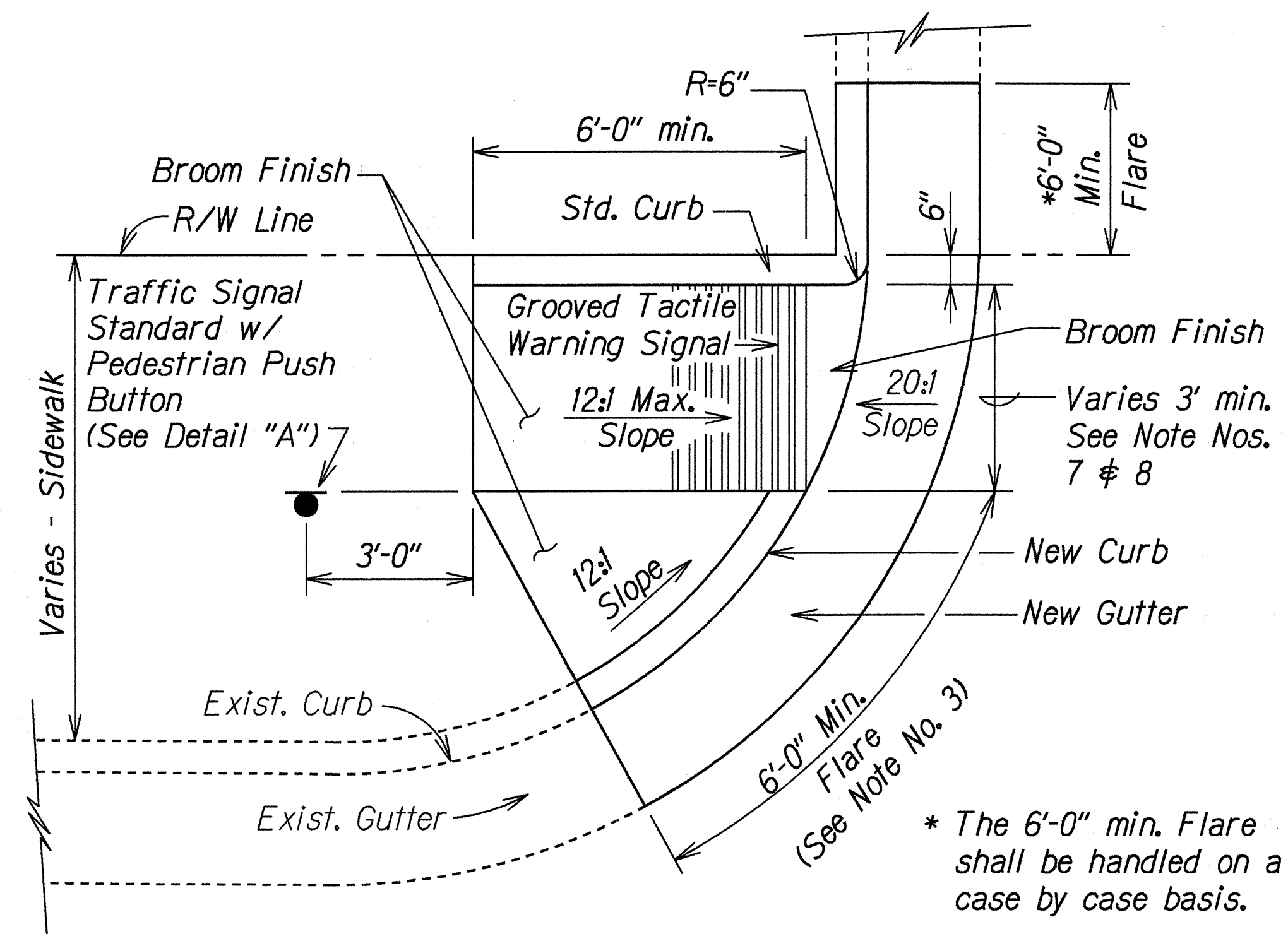
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HAWAII	HAW.	NH-072-1(47)	2000	14	89



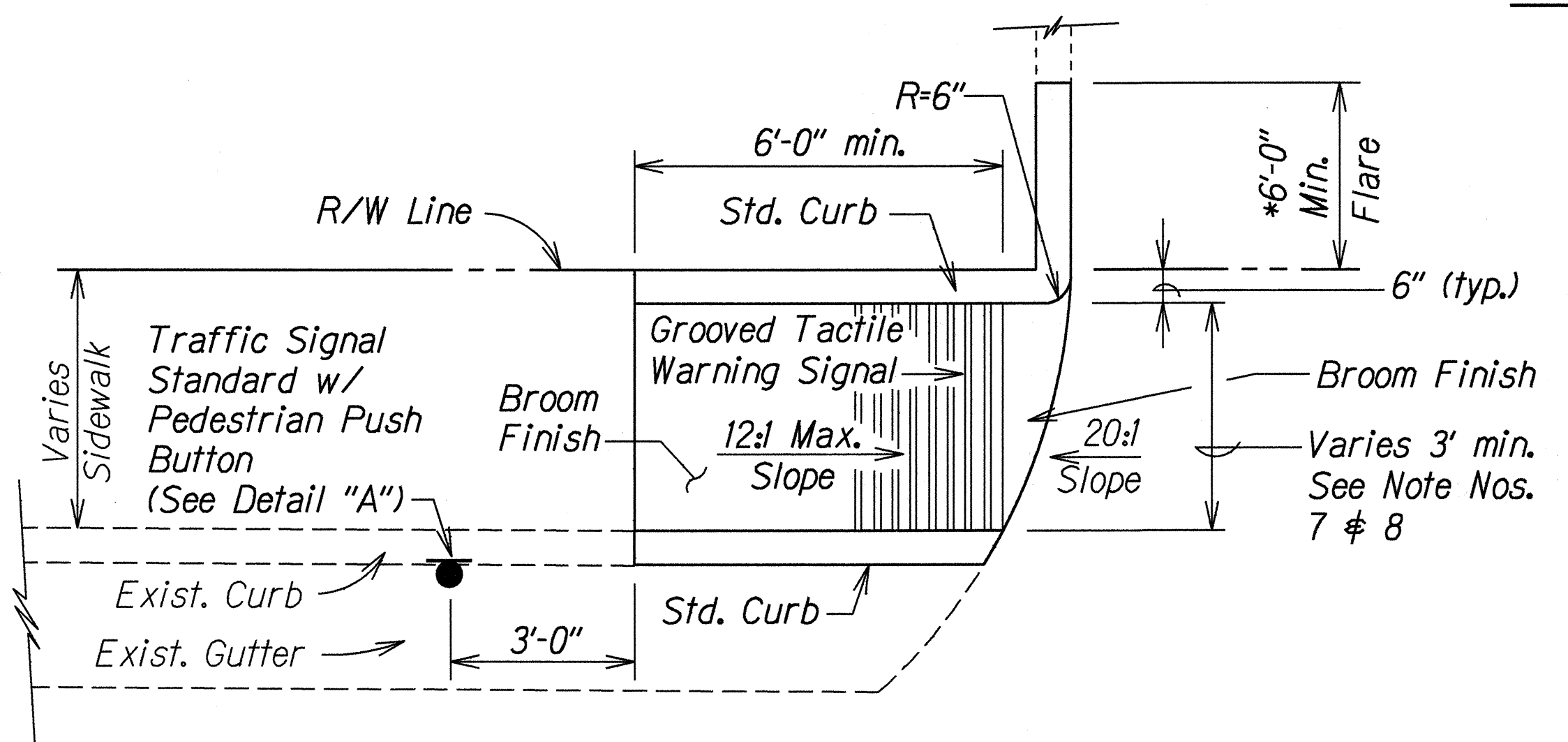
CURB RAMP - TYPE "C"
USE AT MEDIAN CROSSINGS, ISLANDS



CURB RAMP - TYPE "C" MODIFIED



* The 6'-0" min. Flare shall be handled on a case by case basis.



* The 6'-0" min. Flare shall be handled on a case by case basis.

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

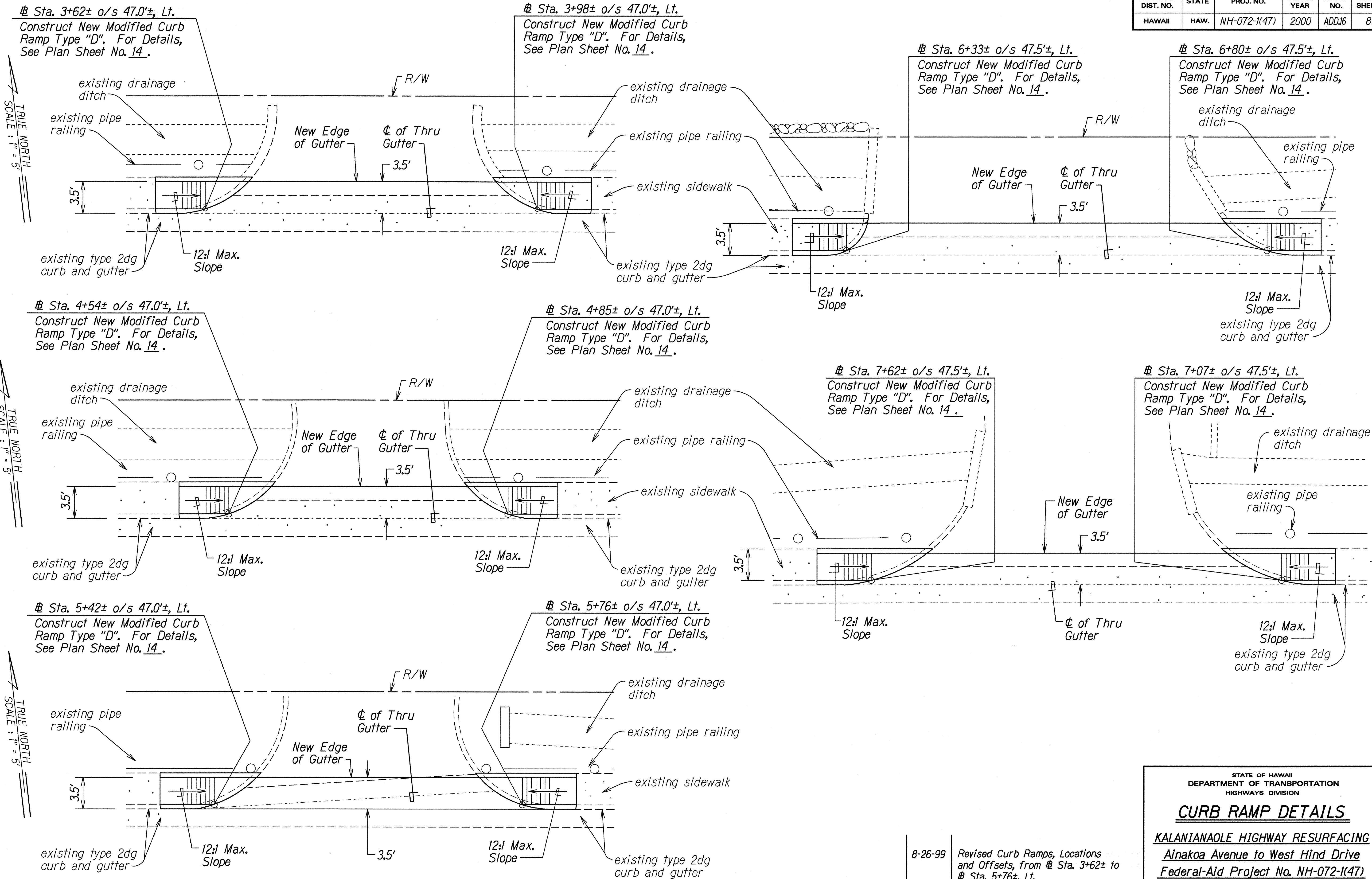
CURB RAMP DETAIL

KALANIANA'OLE HIGHWAY RESURFACING
Ainakoa Avenue to West Hind Drive
Federal-Aid Project No. NH-072-1(47)

Not to ScaleDate: Aug., 1999

SHEET No. 4 OF 12 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(47)	2000	ADD.16	89



SURVEY PLOTTED BY	DATE	15/28/23
DRAWN BY	DESIGNED BY	QUANTITIES BY
NOTE BOOK	DATE	CHECKED BY
14/28/23	14/28/23	14/28/23

8-26-99	Revised Curb Ramps, Locations and Offsets, from Sta. 3+62± to Sta. 5+76±, Lt.
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

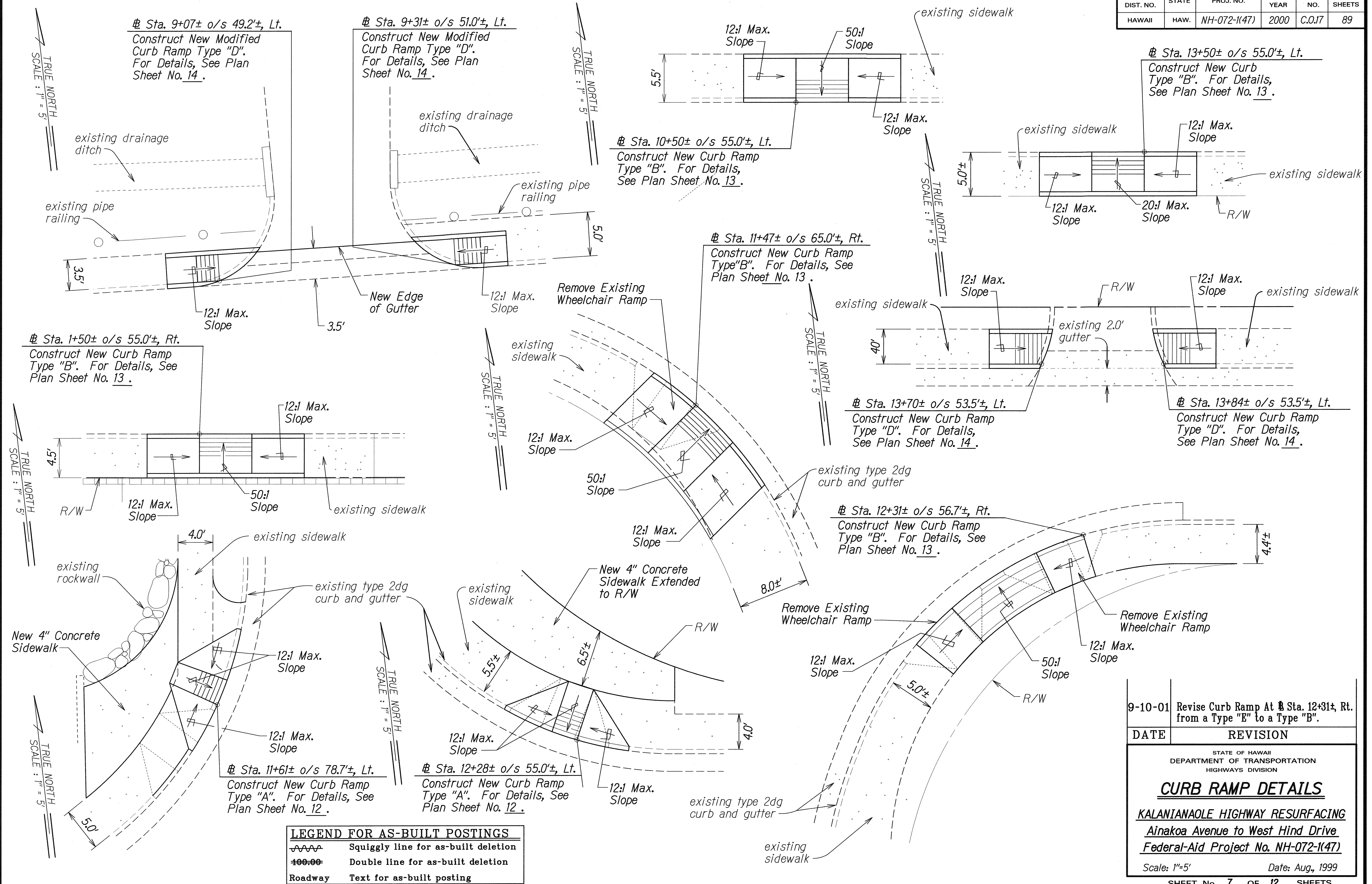
CURB RAMP DETAILS

KALANIANA'OLE HIGHWAY RESURFACING
Ainako'a Avenue to West Hind Drive
Federal-Aid Project No. NH-072-1(47)

Scale: 1"=5' Date: Aug, 1999

SHEET No. 6 OF 12 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(47)	2000	C.O.17	89



DATE	12/15/99
DESIGNED BY	J.E.
CHECKED BY	SE
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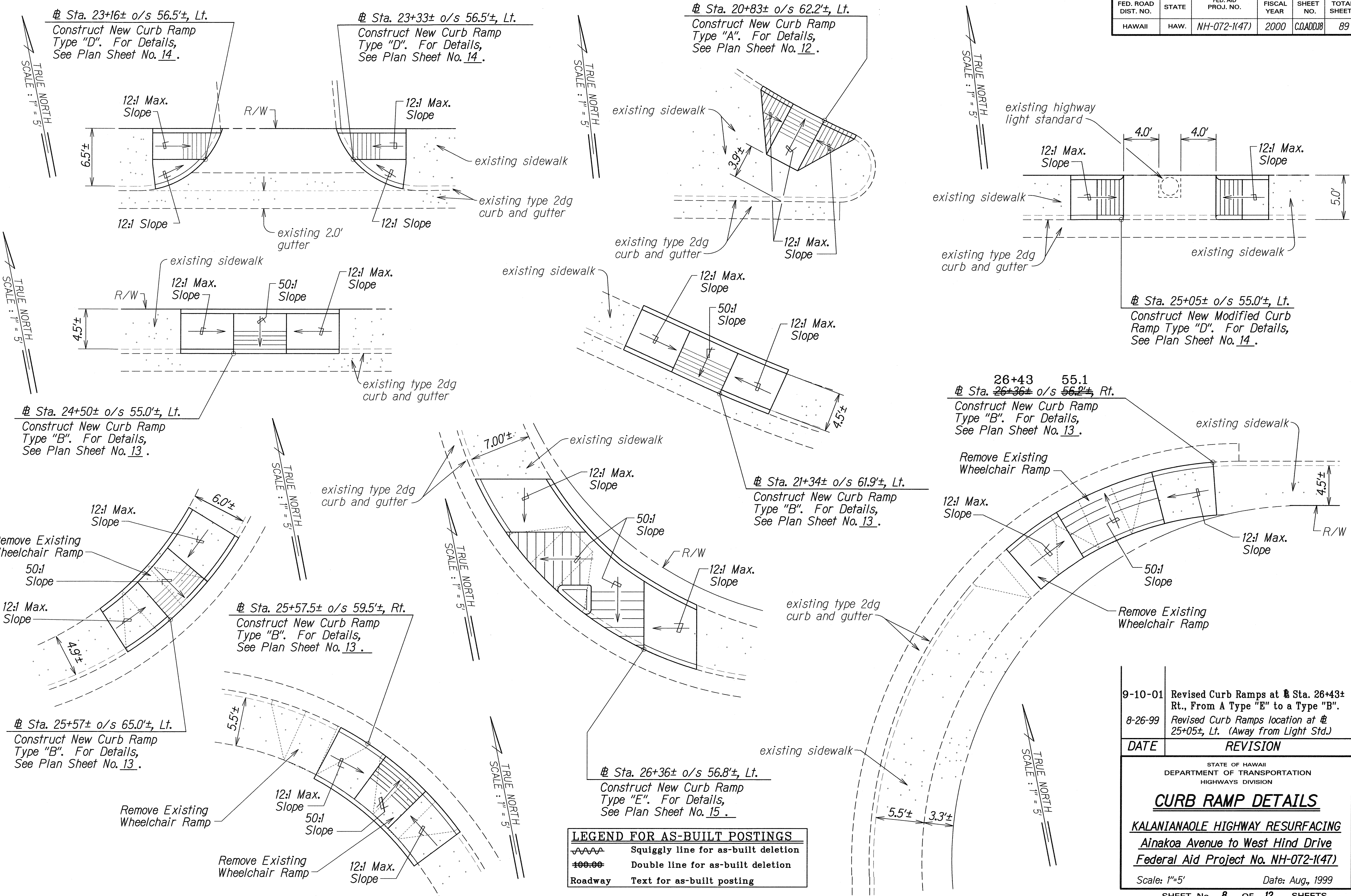
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9-10-01	Revise Curb Ramp At Sta. 12+31±, Rt. from a Type "E" to a Type "B".
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
CURB RAMP DETAILS	
KALANIANA'OLE HIGHWAY RESURFACING Ainako'a Avenue to West Hind Drive Federal-Aid Project No. NH-072-1(47)	
Scale: 1"=5'	Date: Aug., 1999
SHEET No. 7 OF 12 SHEETS	

"AS-BUILT"

C.O.17

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(47)	2000	C.O.ADD.18	89

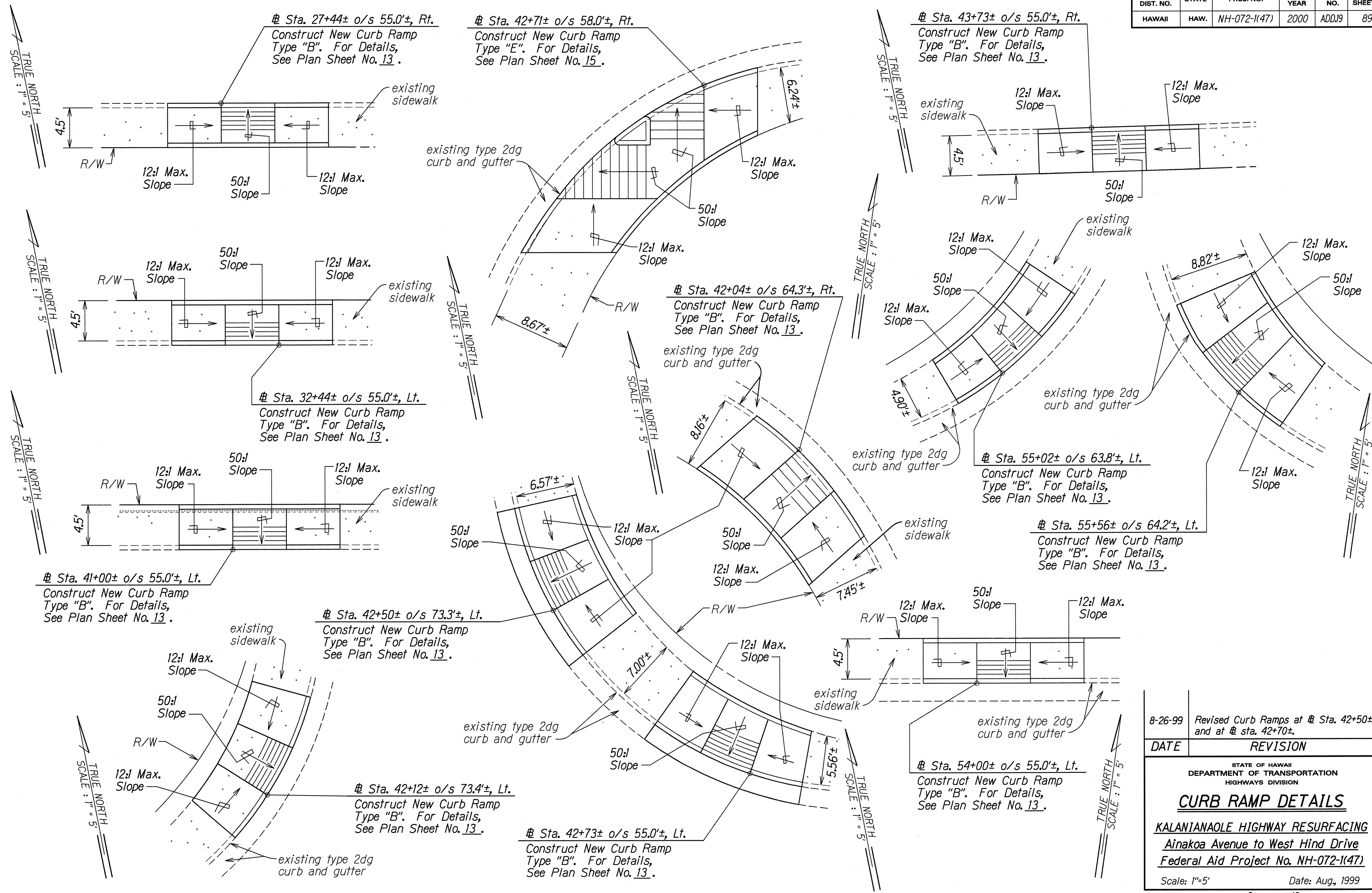


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LEGEND FOR AS-BUILT POSTINGS	
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Roadway	Text for as-built posting

9-10-01	Revised Curb Ramps at # Sta. 26+43± Rt., From A Type "E" to a Type "B".
8-26-99	Revised Curb Ramps location at # 25+05±, Lt. (Away from Light Std.)
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION CURB RAMP DETAILS KALANIANA'OLE HIGHWAY RESURFACING Ainakoa Avenue to West Hind Drive Federal Aid Project No. NH-072-1(47) Scale: 1"=5' Date: Aug, 1999 SHEET No. 8 OF 12 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(47)	2000	ADD.19	89

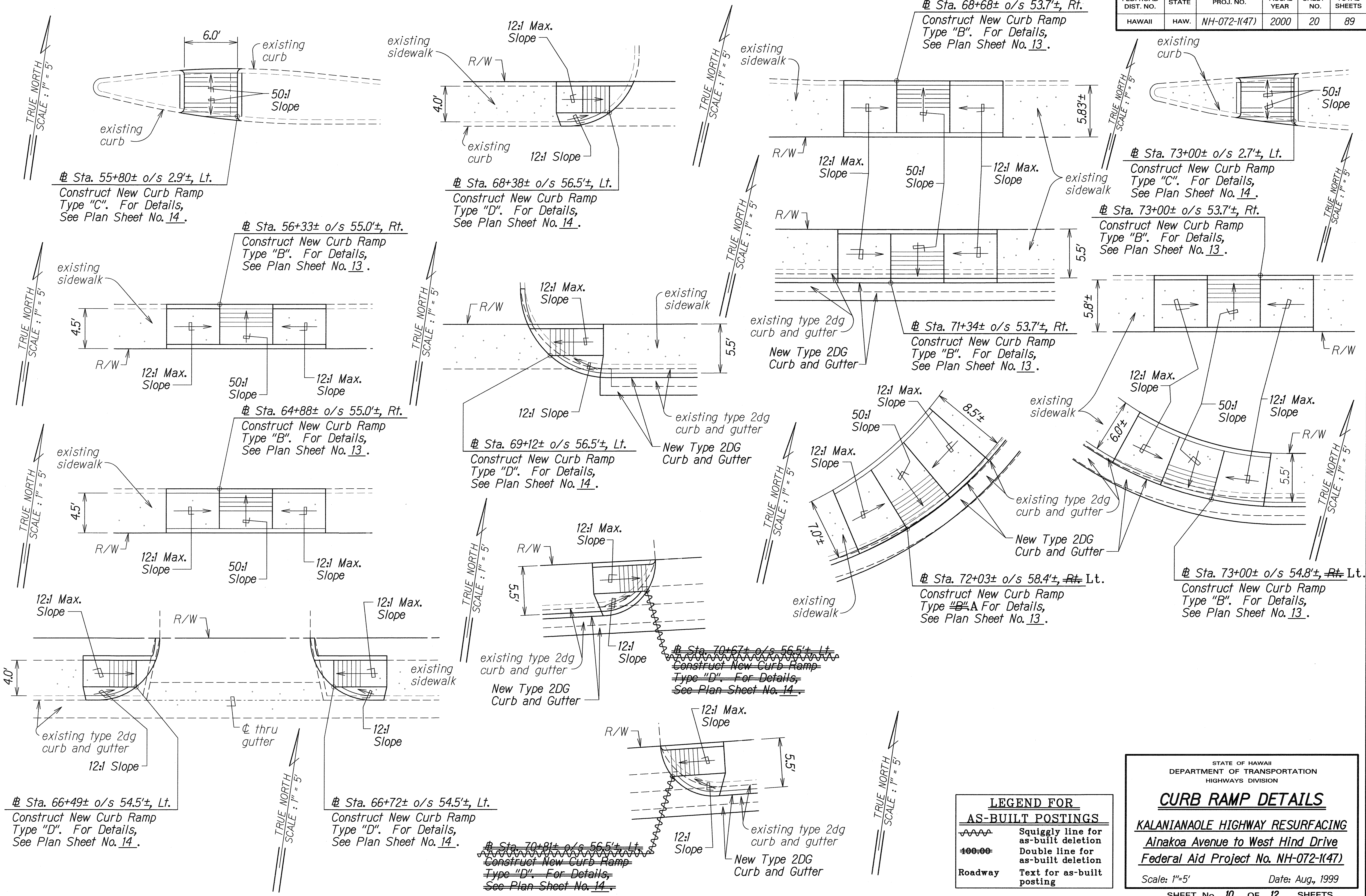


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DRAWN BY G.A.	5/4/99
CHECKED BY J.E.	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
DATE	
BY	
CHECKED BY	

8-26-99	Revised Curb Ramps at Sta. 42+50± and at Sta. 42+70±.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
CURB RAMP DETAILS	
KALANIANA'OLE HIGHWAY RESURFACING Ainakoa Avenue to West Hind Drive Federal Aid Project No. NH-072-1(47)	
Scale: 1"=5'	Date: Aug, 1999
SHEET No. 9 OF 12 SHEETS	

ADD.19

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(47)	2000	20	89



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ORIGINAL PLAN	
NOTE BOOK	
DATE	
BY	
CHECKED BY	

LEGEND FOR AS-BUILT POSTINGS	
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Roadway	Text for as-built posting

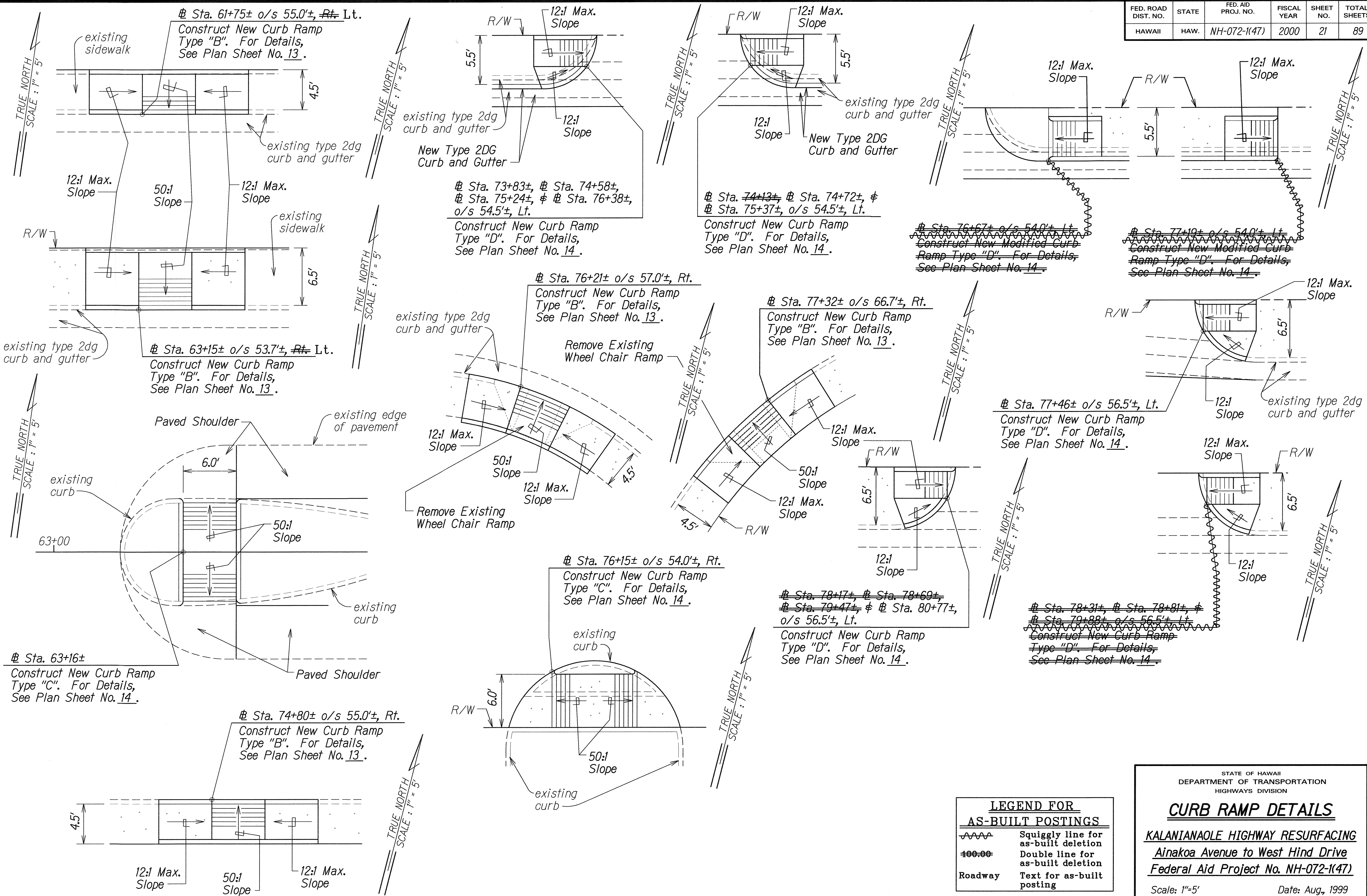
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  

### CURB RAMP DETAILS

KALANIANA'OLE HIGHWAY RESURFACING  
Ainako Avenue to West Hind Drive  
Federal Aid Project No. NH-072-1(47)  
Scale: 1"=5' Date: Aug, 1999  
SHEET No. 10 OF 12 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(47)	2000	21	89



ORIGINAL PLAN	DATE	7/1/99
DESIGNED BY	DATE	7/1/99
CHECKED BY	DATE	7/1/99
APPROVED BY	DATE	7/1/99

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

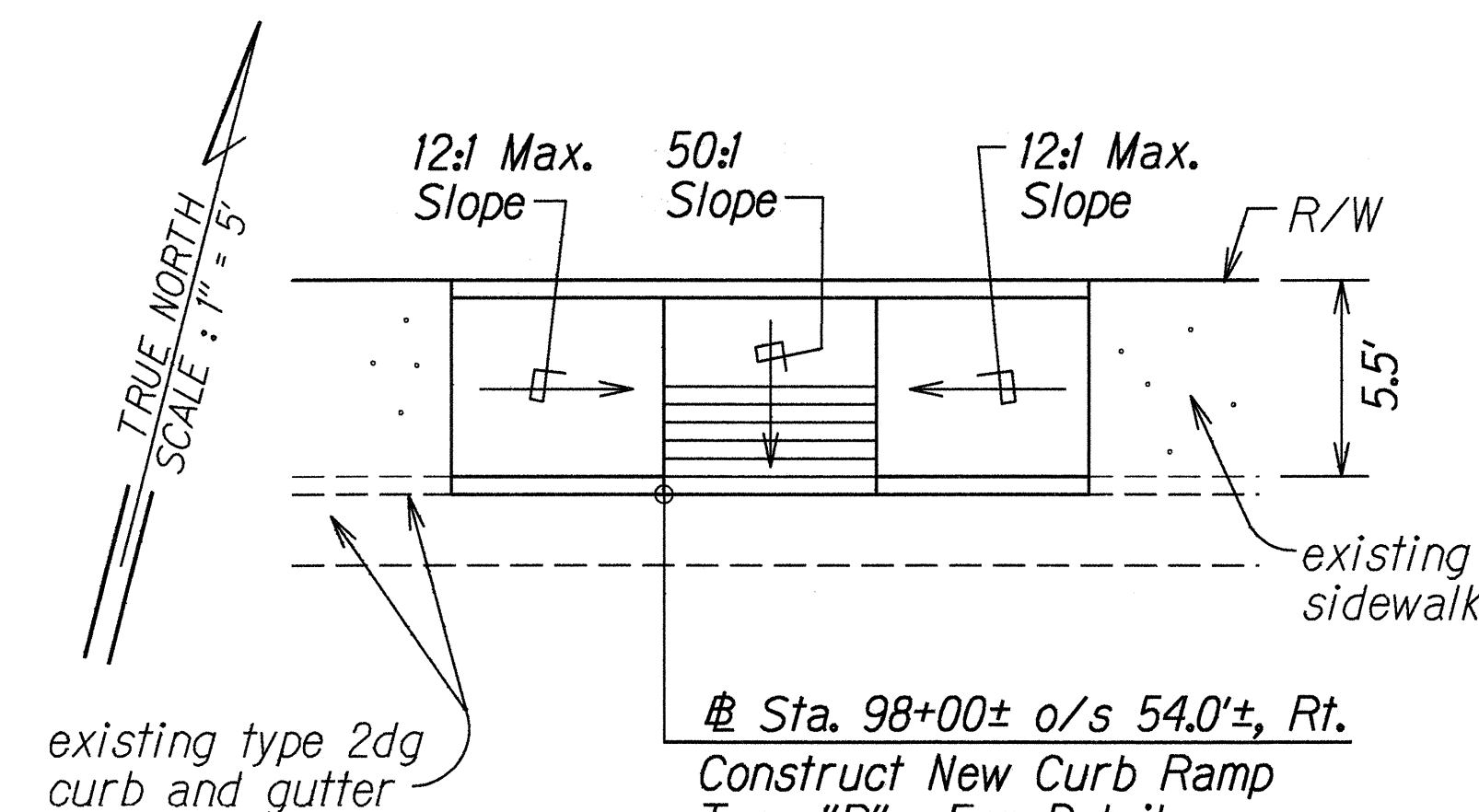
CURB RAMP DETAILS

KALANIANA'OLE HIGHWAY RESURFACING
Ainako'a Avenue to West Hind Drive
Federal Aid Project No. NH-072-1(47)

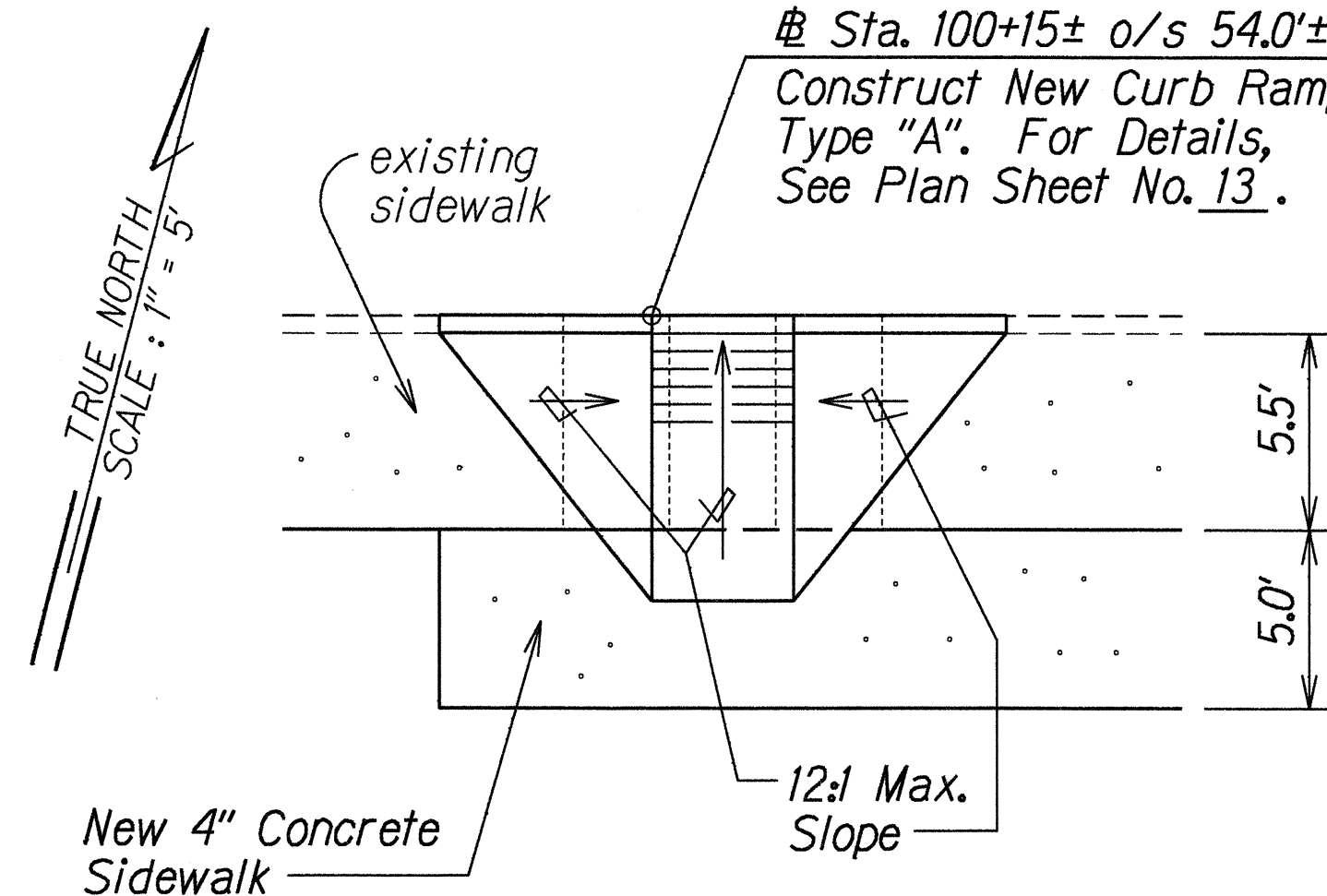
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SHEET No. 11 OF 12 SHEETS

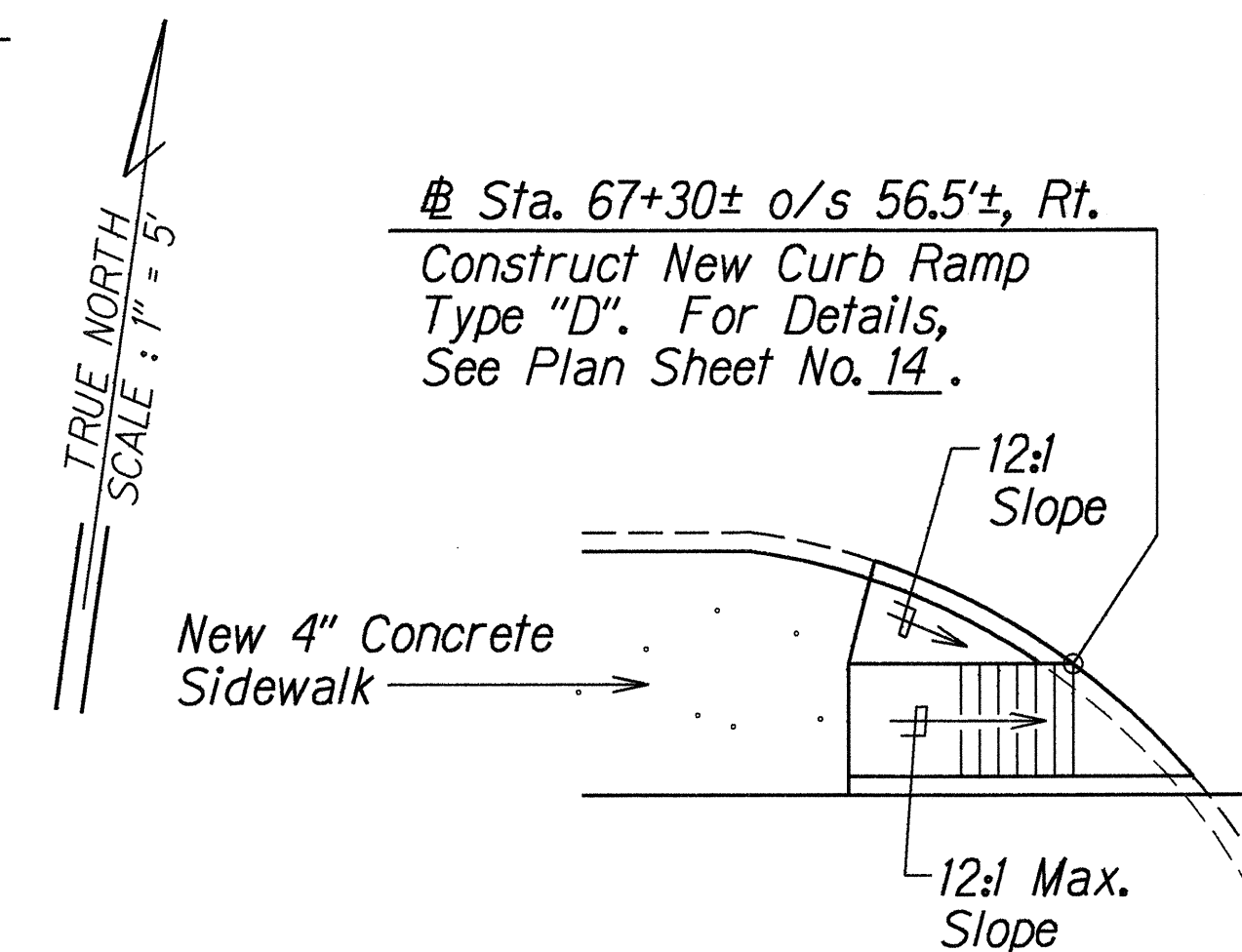
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-072-1(47)	2000	22	89



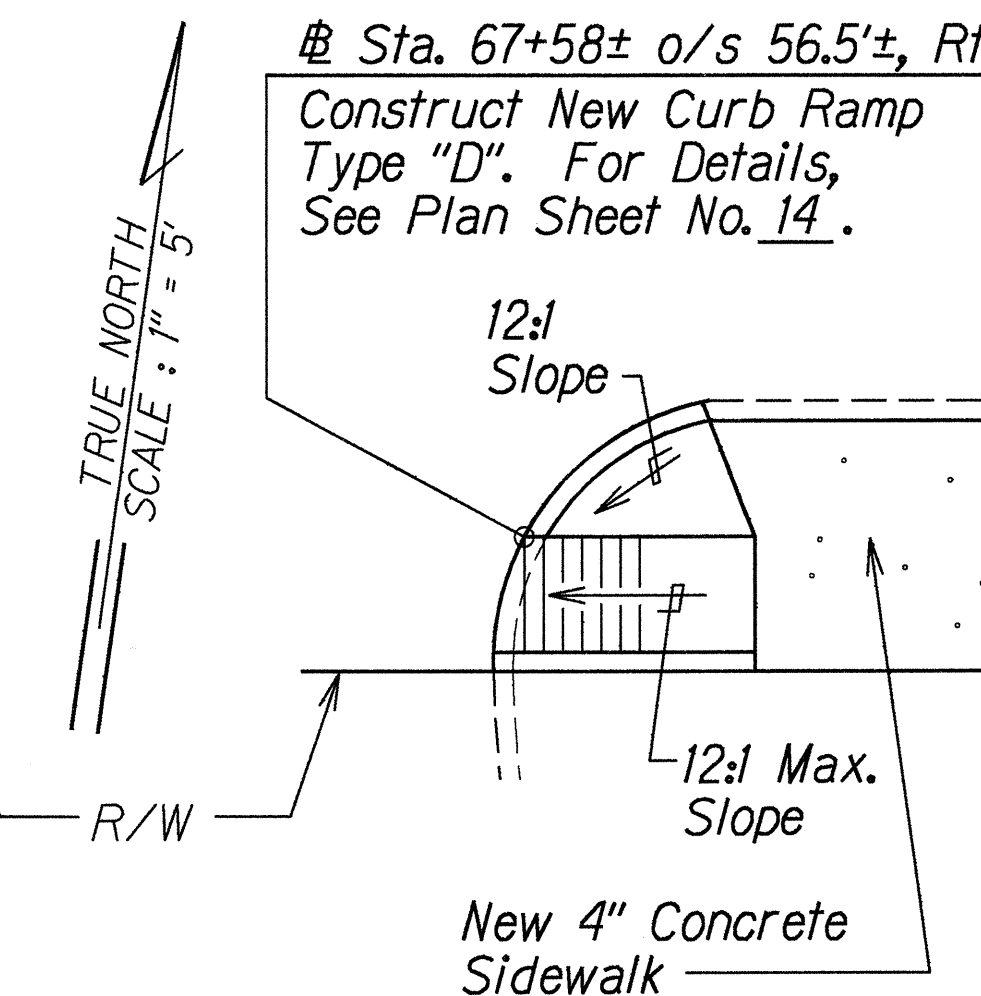
Sta. 98+00± o/s 54.0'±, Rt.
Construct New Curb Ramp Type "B". For Details, See Plan Sheet No. 13.



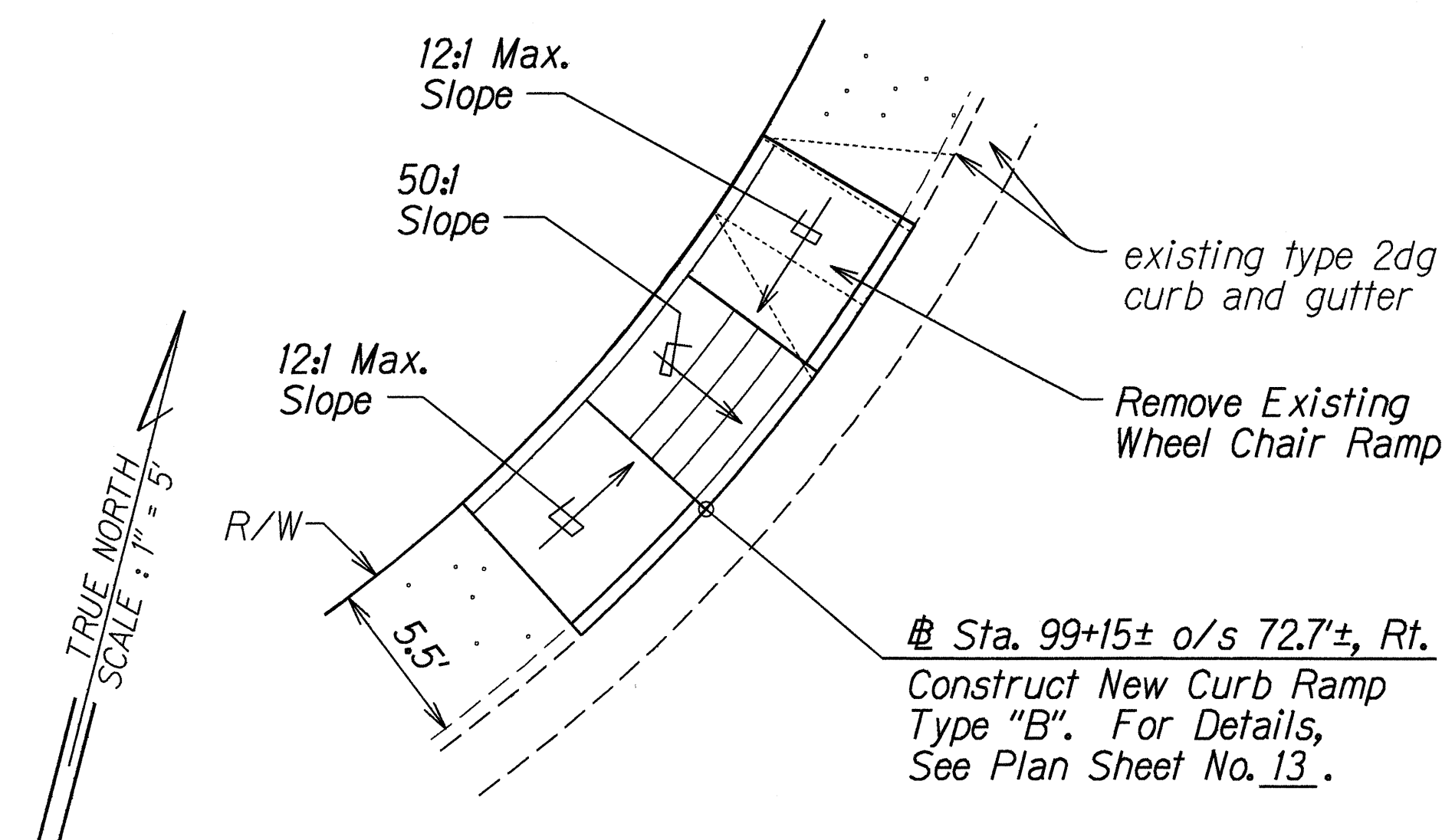
Sta. 100+15± o/s 54.0'±, Rt.
Construct New Curb Ramp Type "A". For Details, See Plan Sheet No. 13.



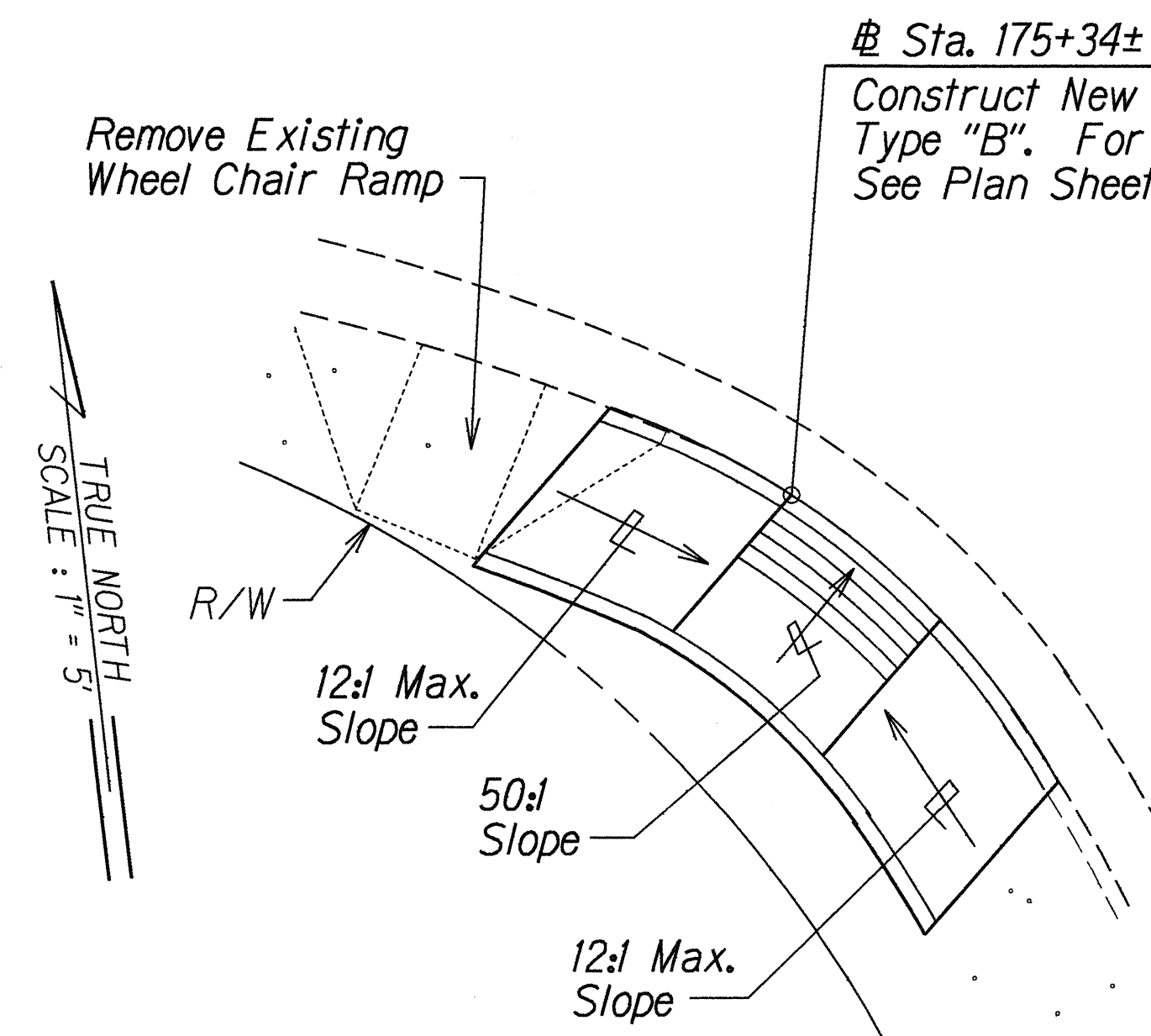
Sta. 67+30± o/s 56.5'±, Rt.
Construct New Curb Ramp Type "D". For Details, See Plan Sheet No. 14.



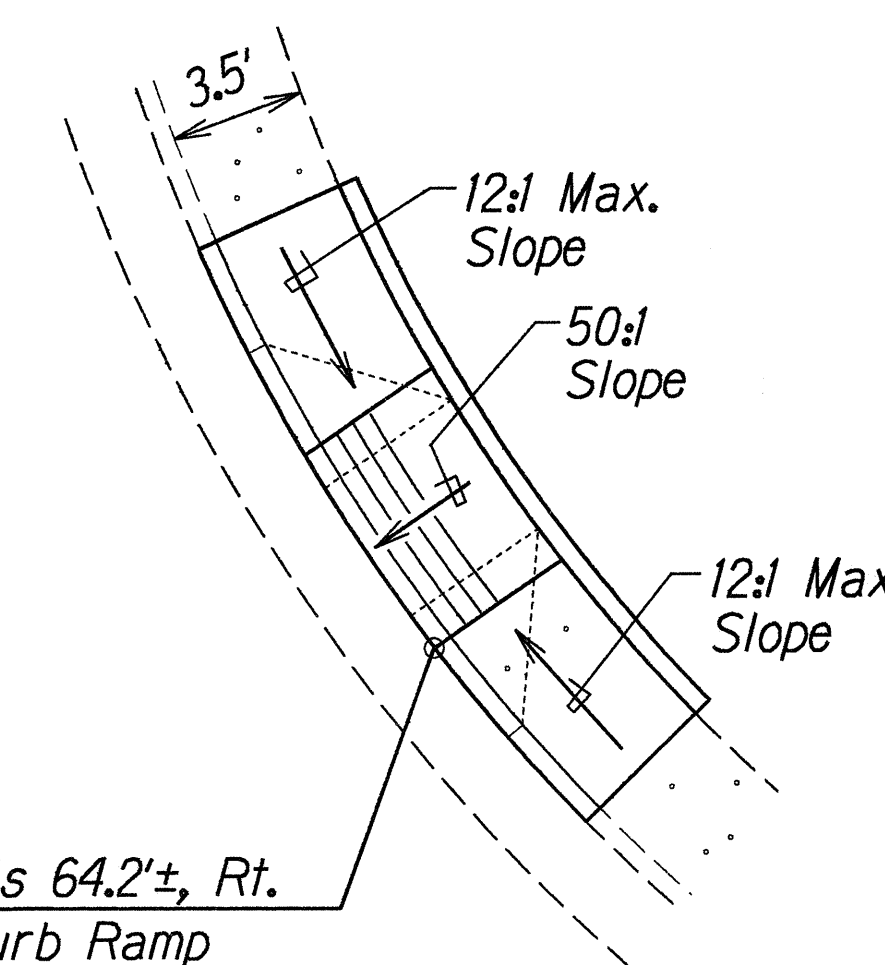
Sta. 67+58± o/s 56.5'±, Rt.
Construct New Curb Ramp Type "D". For Details, See Plan Sheet No. 14.



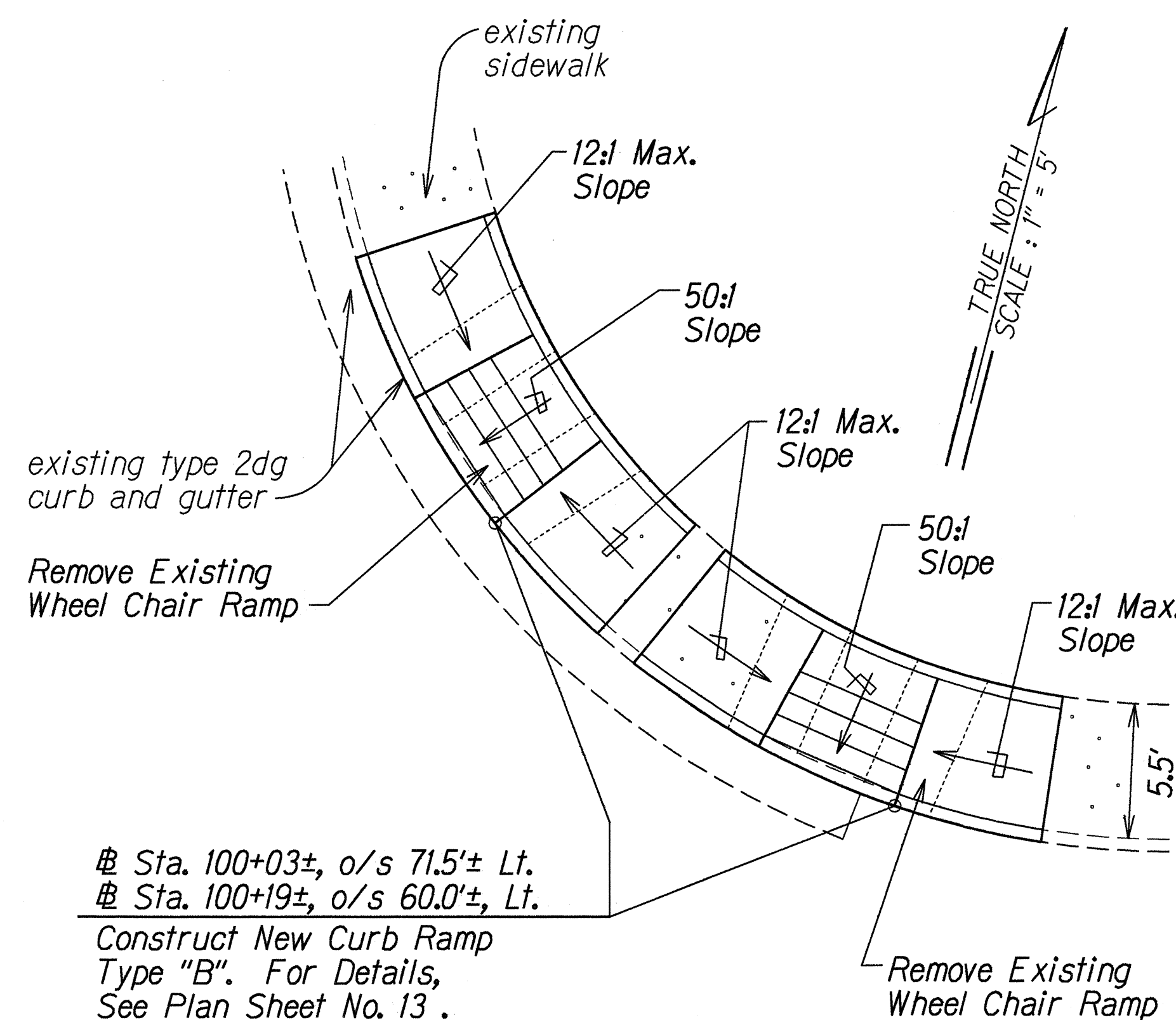
Sta. 99+15± o/s 72.7'±, Rt.
Construct New Curb Ramp Type "B". For Details, See Plan Sheet No. 13.



Sta. 175+34± o/s 64.0'±, Rt.
Construct New Curb Ramp Type "B". For Details, See Plan Sheet No. 13.

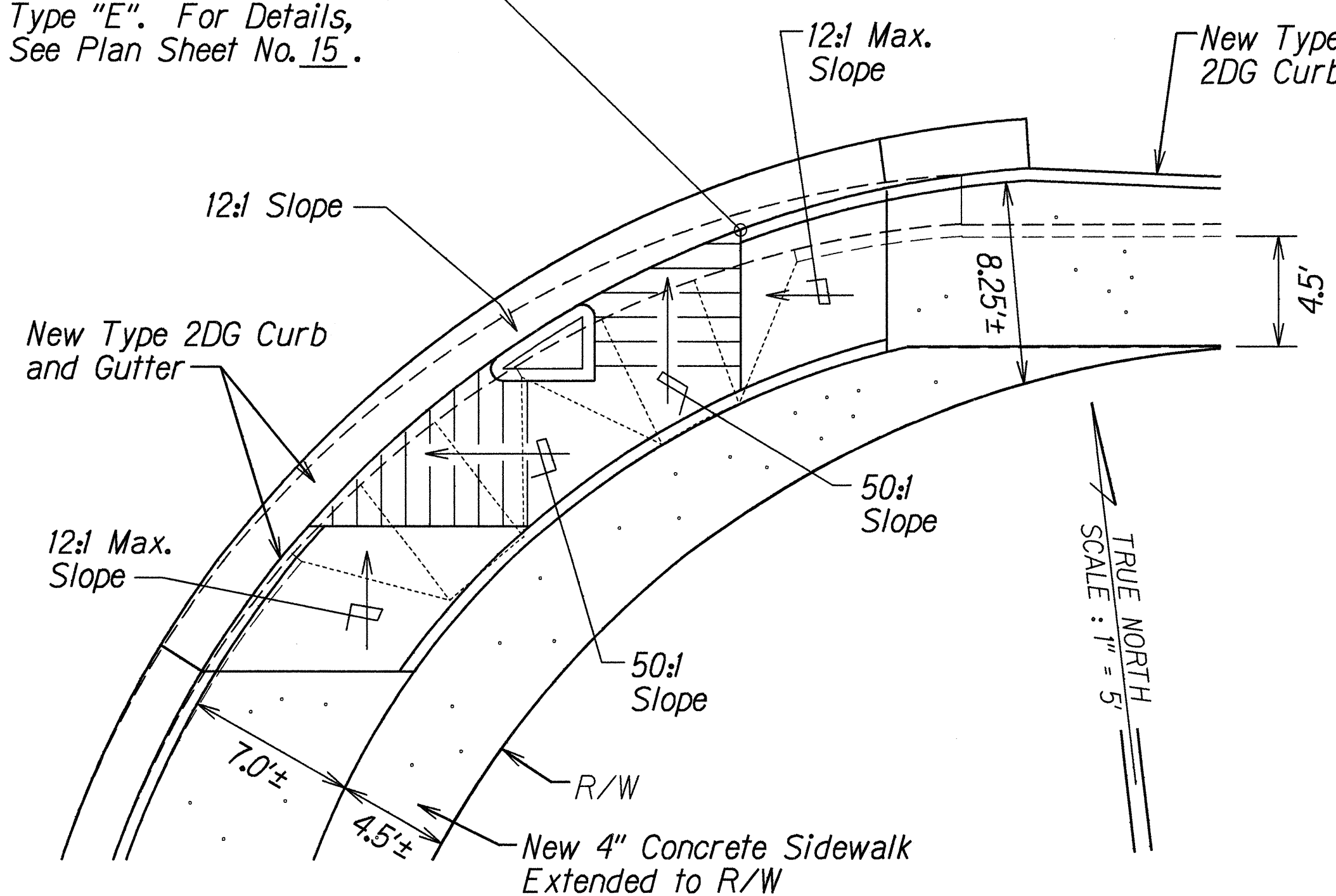


Sta. 00+47± o/s 64.2'±, Rt.
Construct New Curb Ramp Type "B". For Details, See Plan Sheet No. 13.



Sta. 100+03±, o/s 71.5'± Lt.
Sta. 100+19±, o/s 60.0'±, Lt.
Construct New Curb Ramp Type "B". For Details, See Plan Sheet No. 13.

Sta. 00+43± o/s 55.7'±, Rt.
Construct New Curb Ramp Type "E". For Details, See Plan Sheet No. 15.



SURVEY PLOTTED BY	DATE	5/17/99
DRAWN BY	BA	
CHECKED BY	LF	
NOTED BY	LF	
QUANTITIES BY		
CHECKED BY		
ORIGINAL PLAN		
NOTE BOOK		
DATE		
BY		
NO.		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAILS

KALANIANA'OLE HIGHWAY RESURFACING
Ainako Avenue to West Hind Drive
Federal Aid Project No. NH-072-1(47)

Scale: 1"=5' Date: Aug., 1999

SHEET No. 12 OF 12 SHEETS