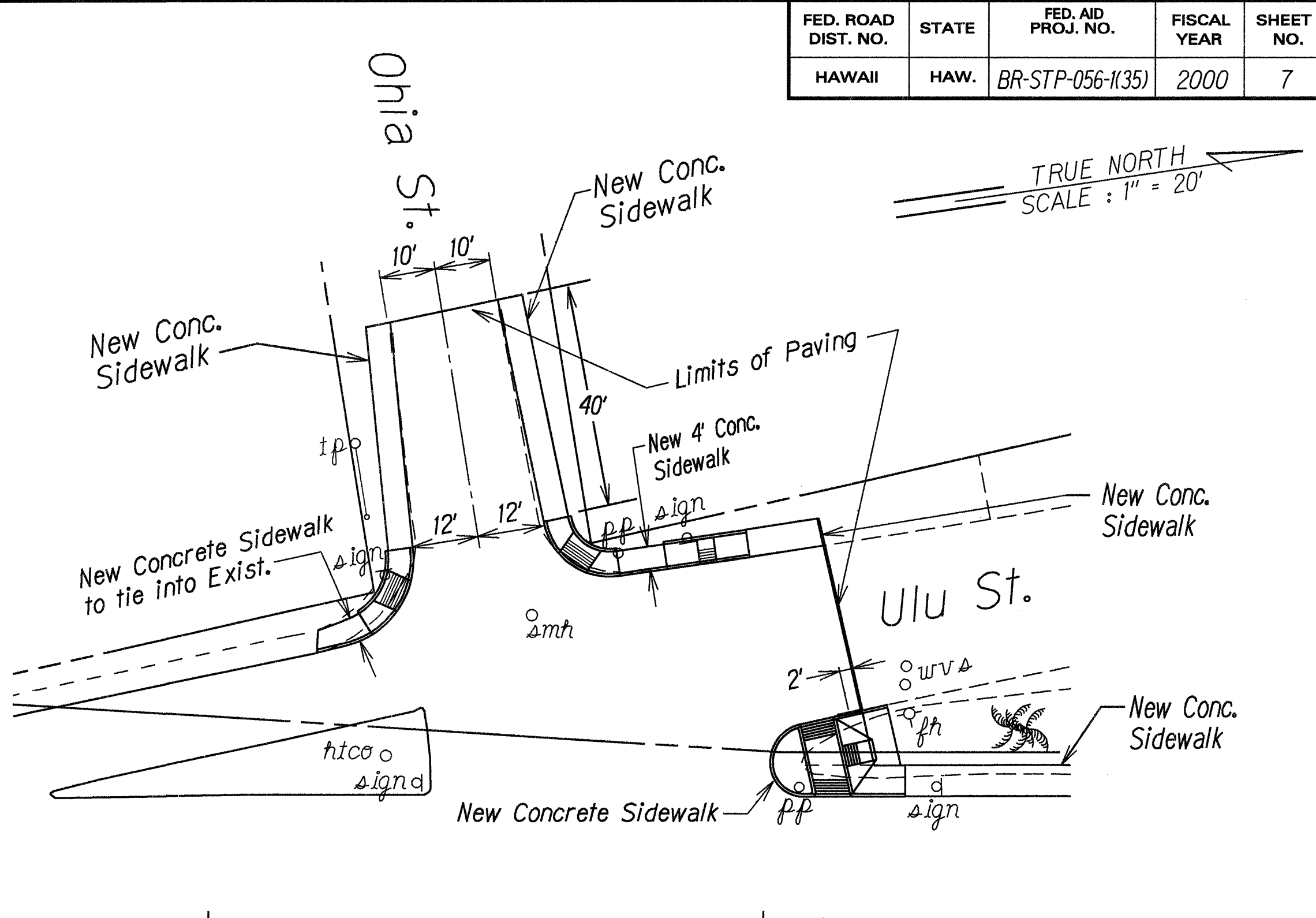
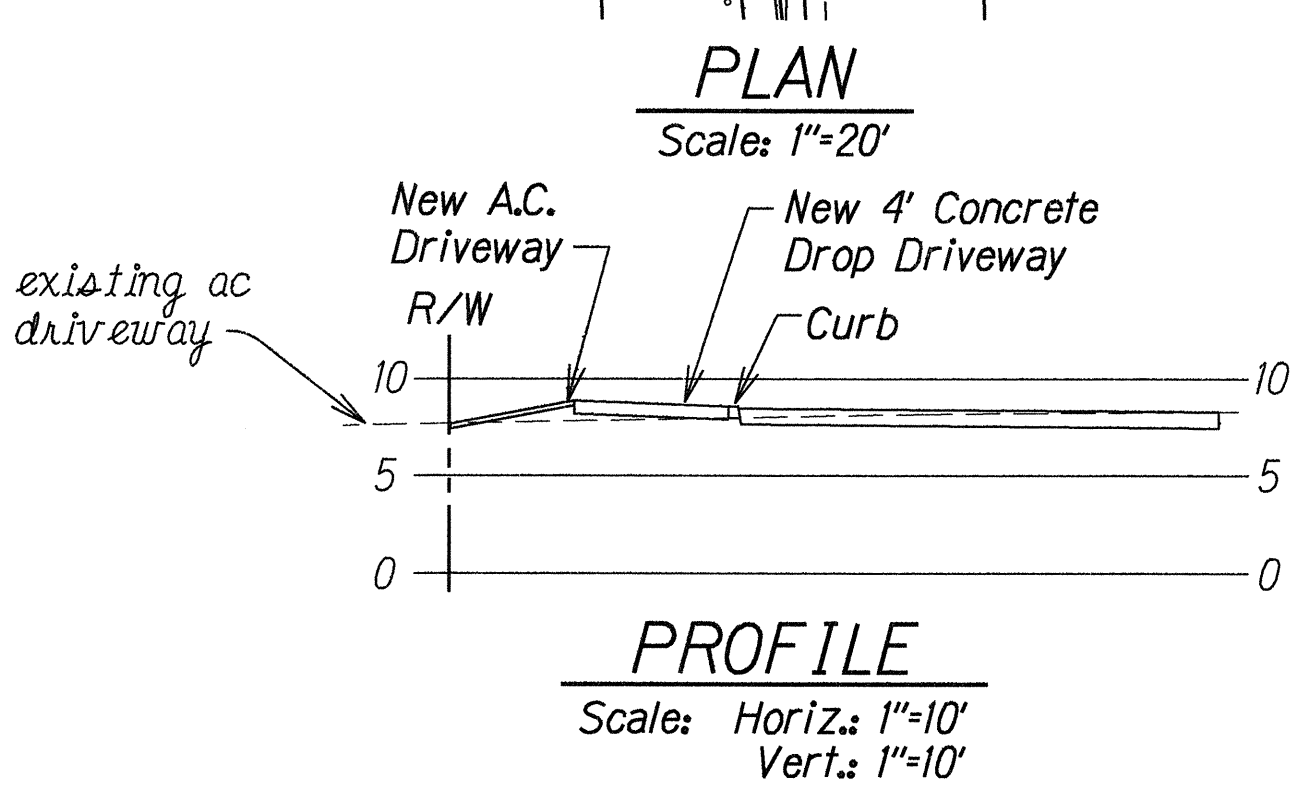
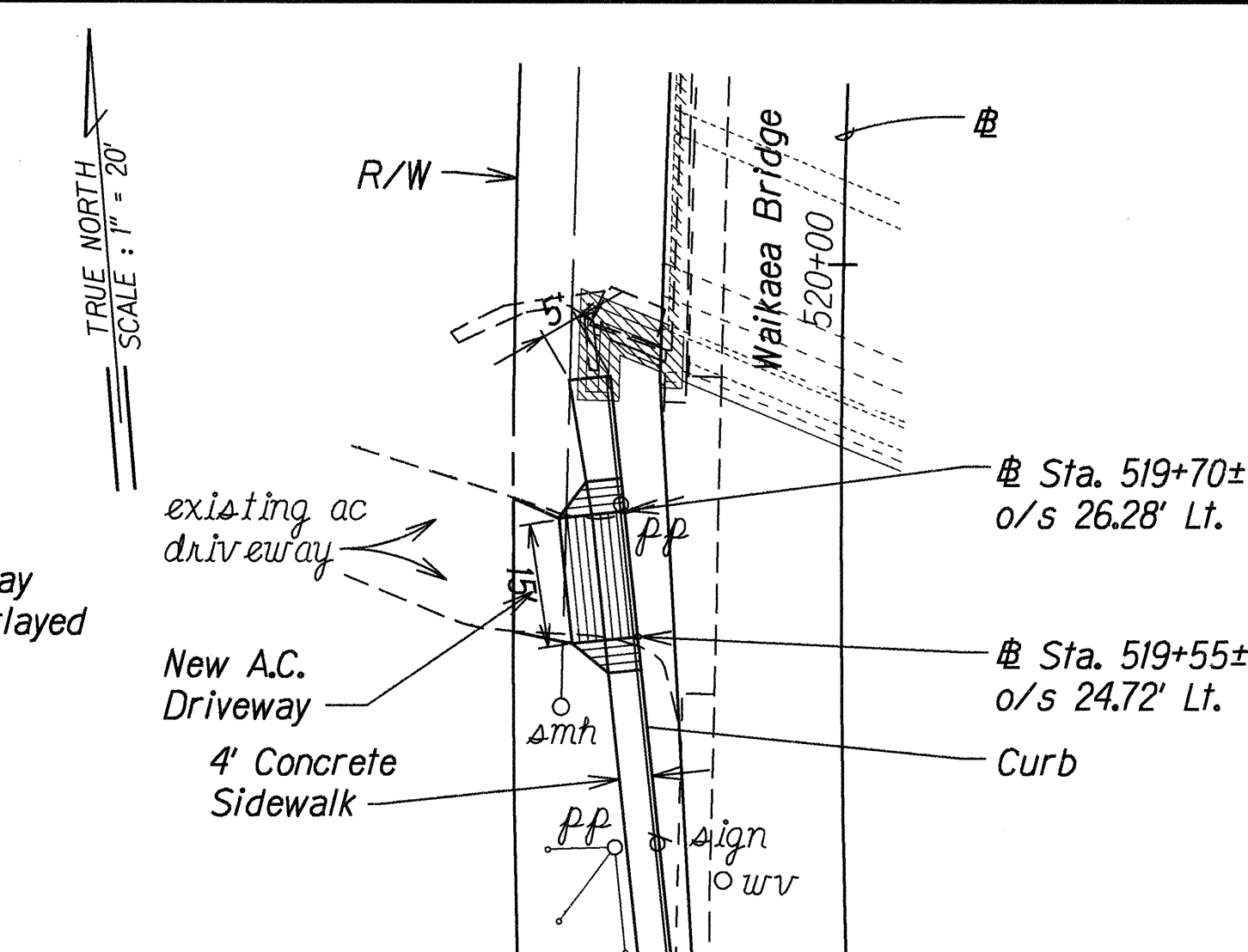
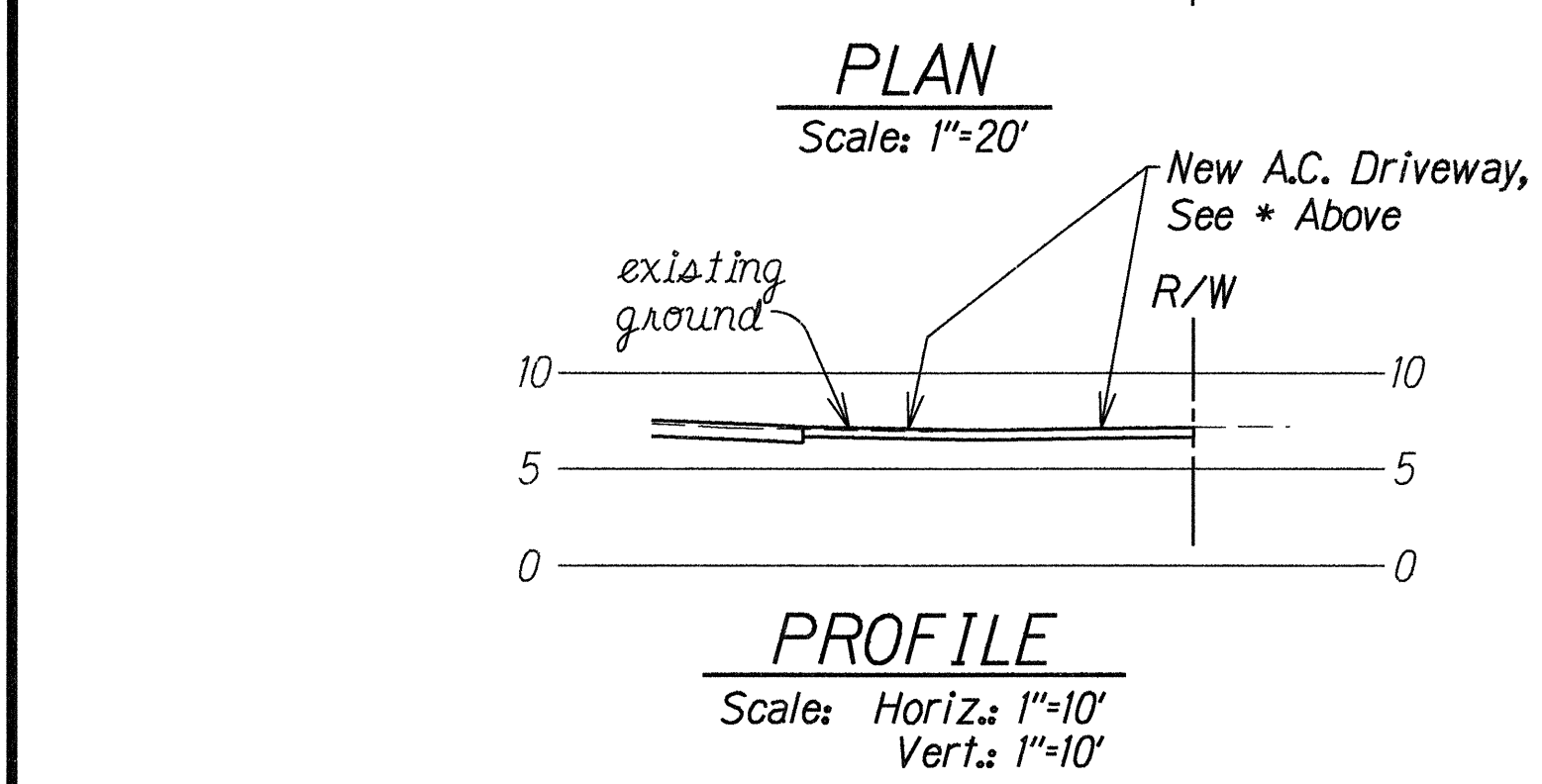
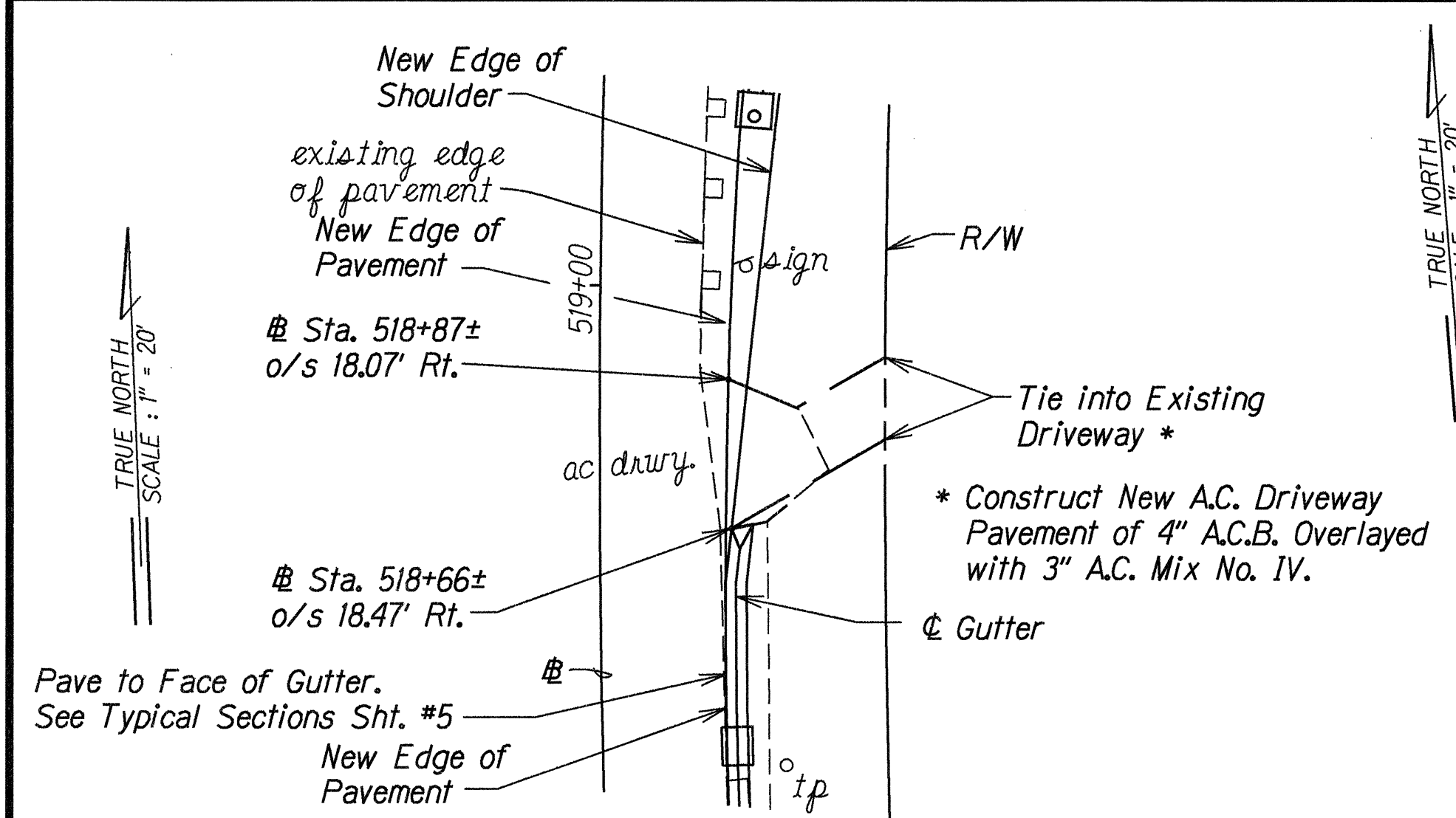
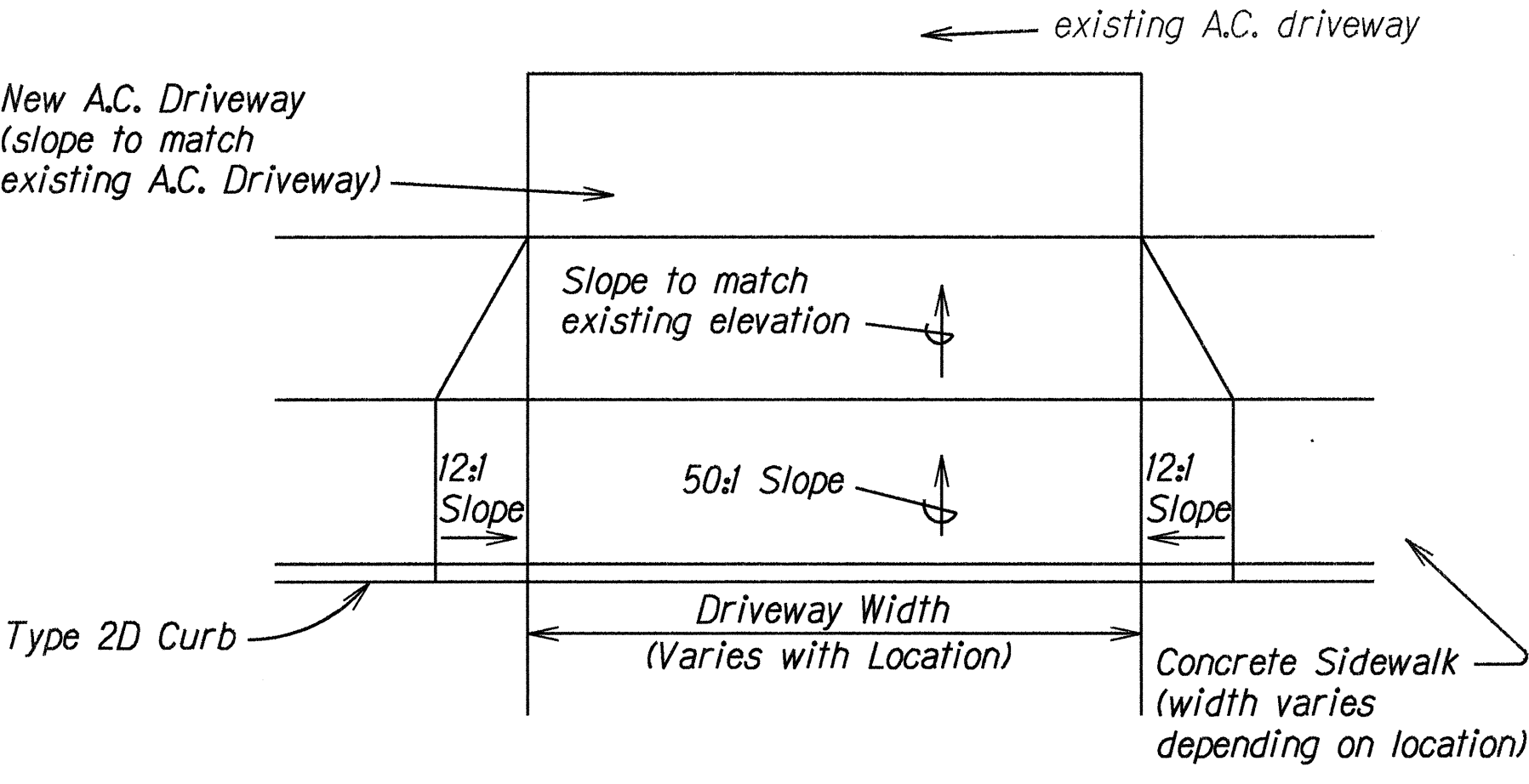
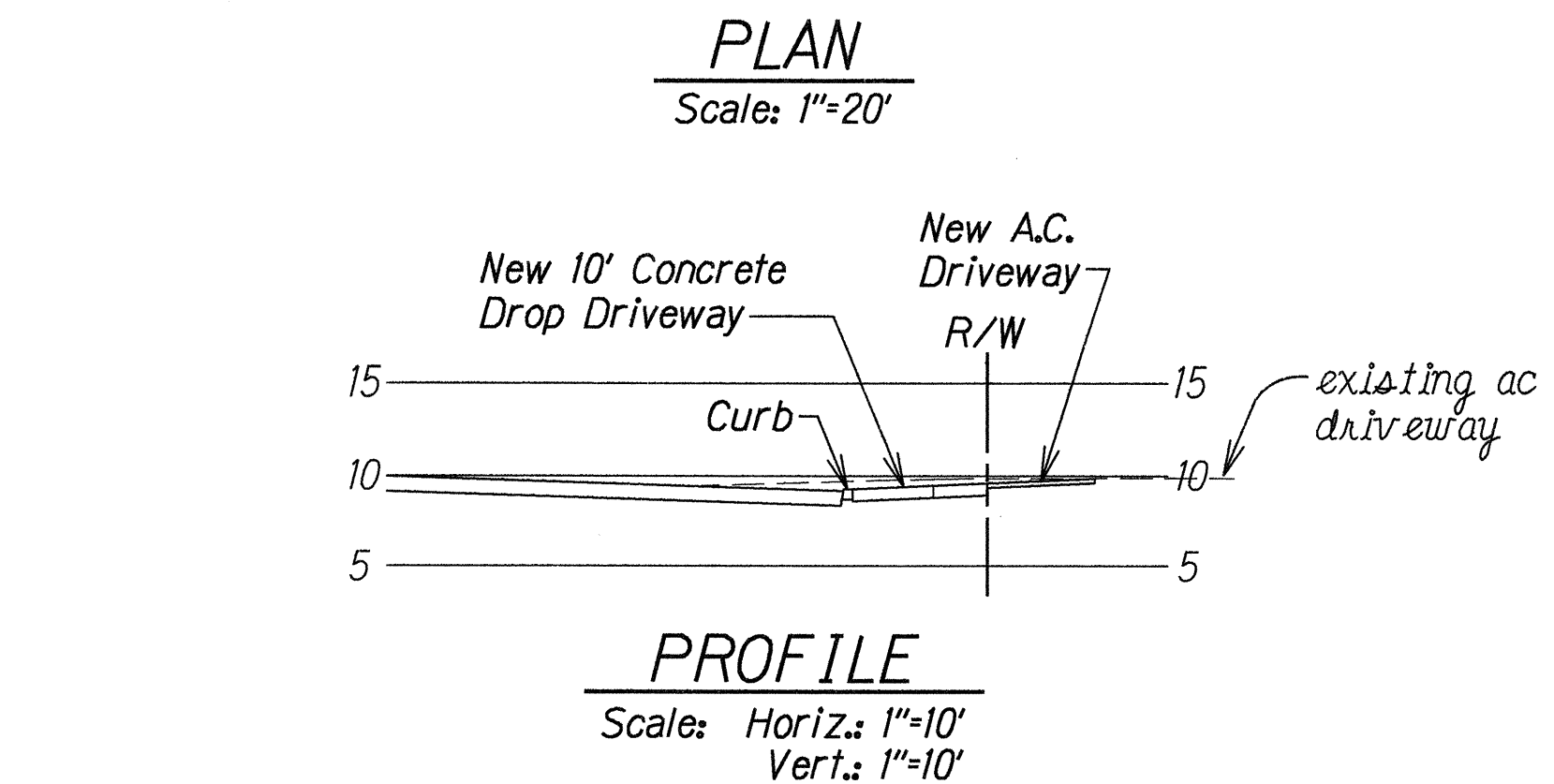
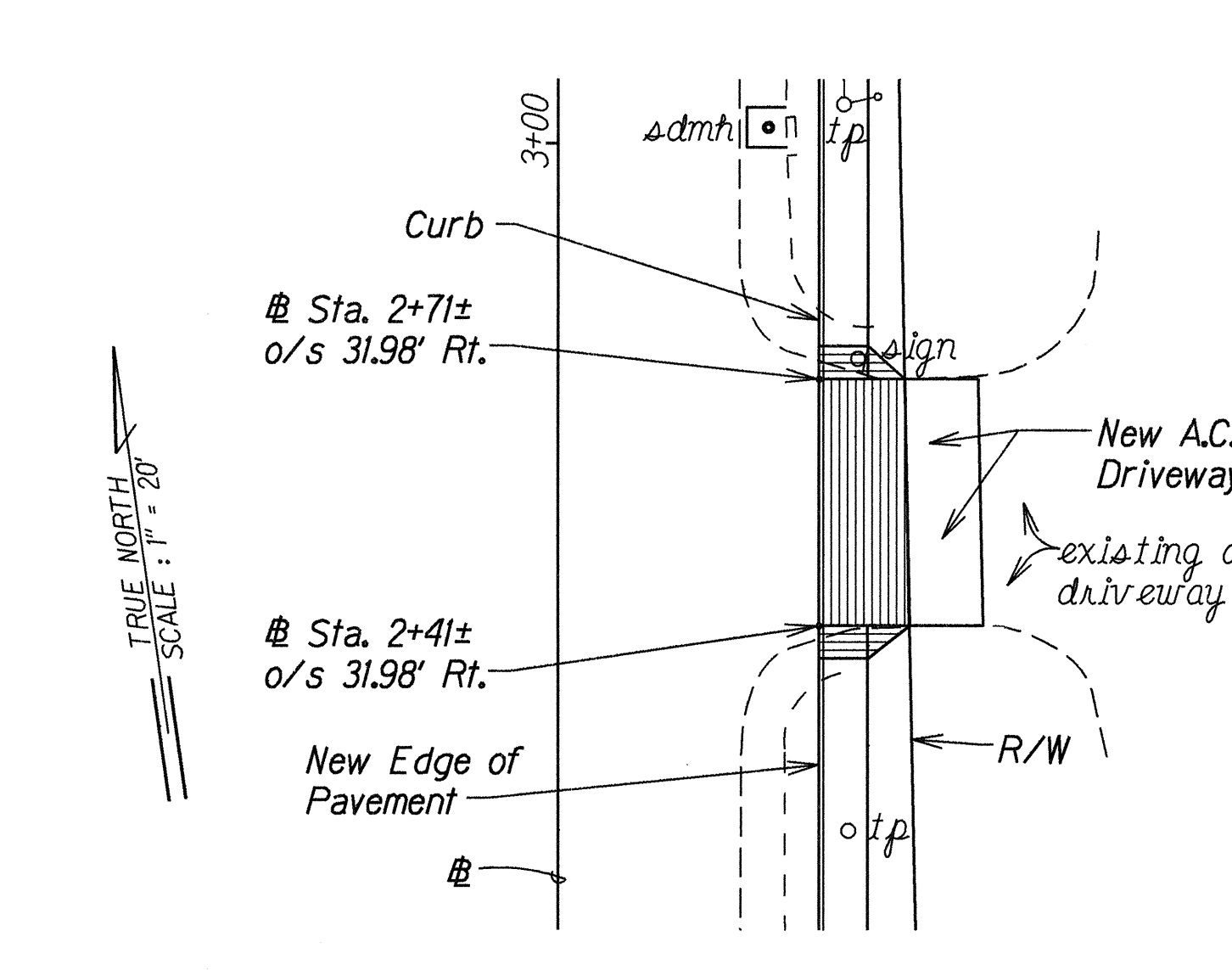
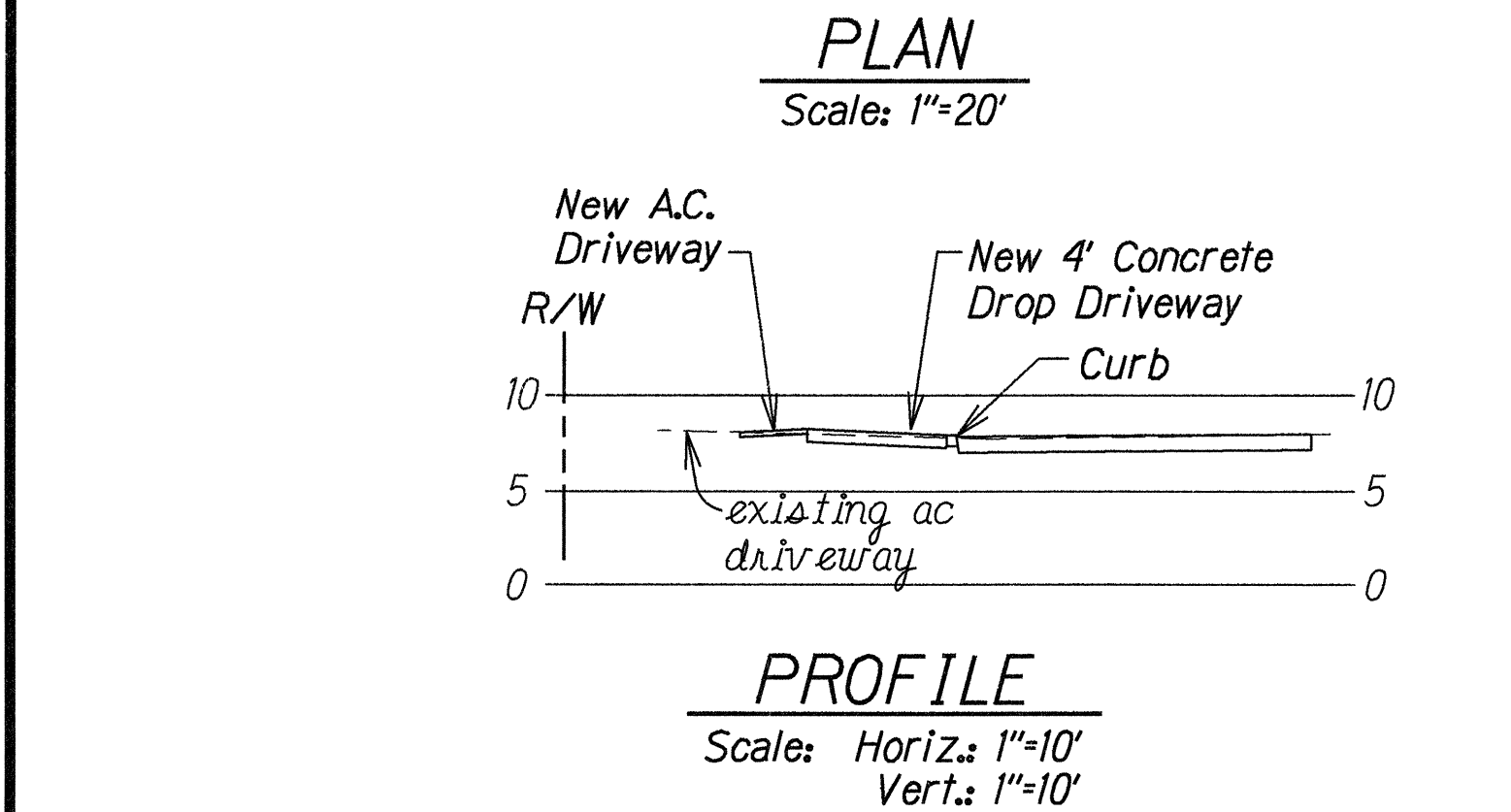
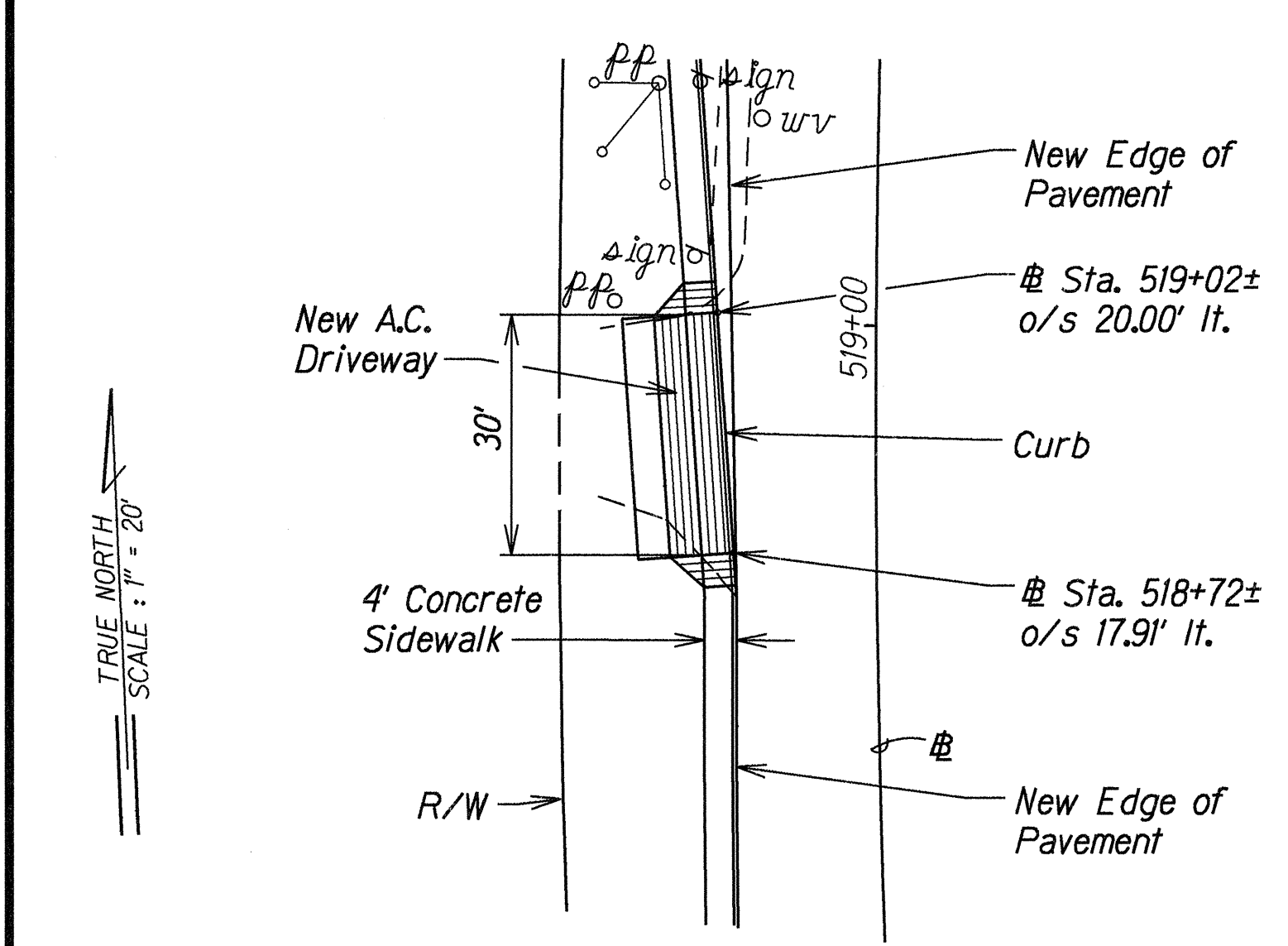


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-STP-056-1(35)	2000	7	70



**DETAIL
INTERSECTION IMPROVEMENT
AT OHIA STREET**
Scale: 1"=20'



**PLAN VIEW OF
DRIVEWAY TREATMENT (TYPICAL)**
N.T.S.

- Note:**
- For Curb Ramp Details, See Plan Sheet No. 8.
 - Widen Ohia Street to 24' (existing is 20') at its Intersection with Ulu Street, see Detail. The Pavement Structure for the Intersection Improvements Shall be 7" A.C.B. Overlayed with 3" A.C. Mix No. IV. Saw Cut at Paving Limits Prior to Roadway Excavation.
- Driveway Notes:**
- New A.C. Driveways shall be constructed of 6" Min. Aggregate Base and 3" Min. A.C. Mix No. IV., Unless Otherwise Noted.
 - Refer to Plan Sheet No. 2, Standard Plans Summary, for Typical Details of Reinforced Concrete Drop Driveways.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**DRIVEWAY DETAIL AND
INTERSECTION DET. AT OHIA ST.**

**KUHIO HIGHWAY
Waikaea Bridge Widening**

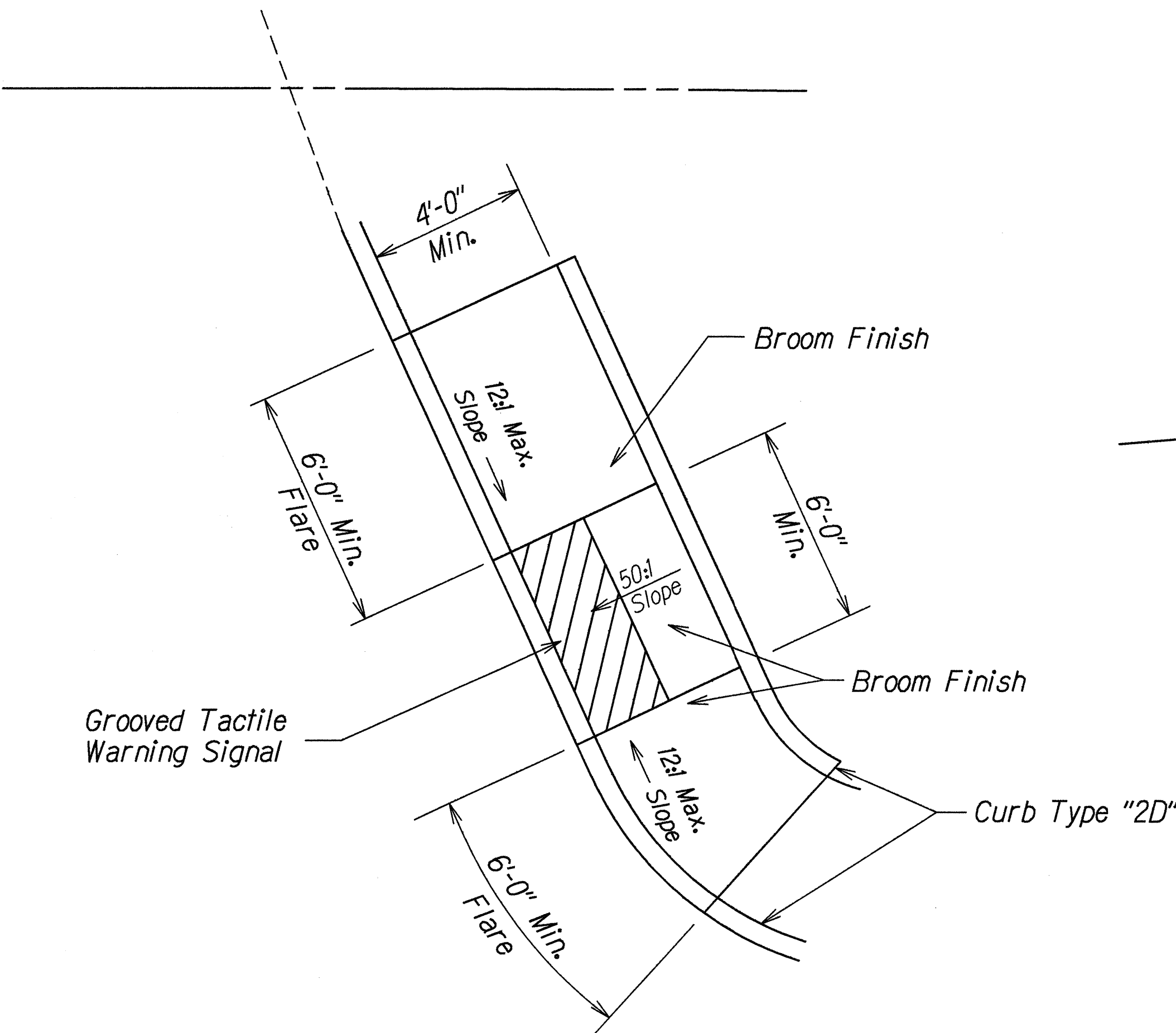
Fed. Aid Proj. No. BR-STP-056-1(35)

Scale: As Shown Date: June, 1999

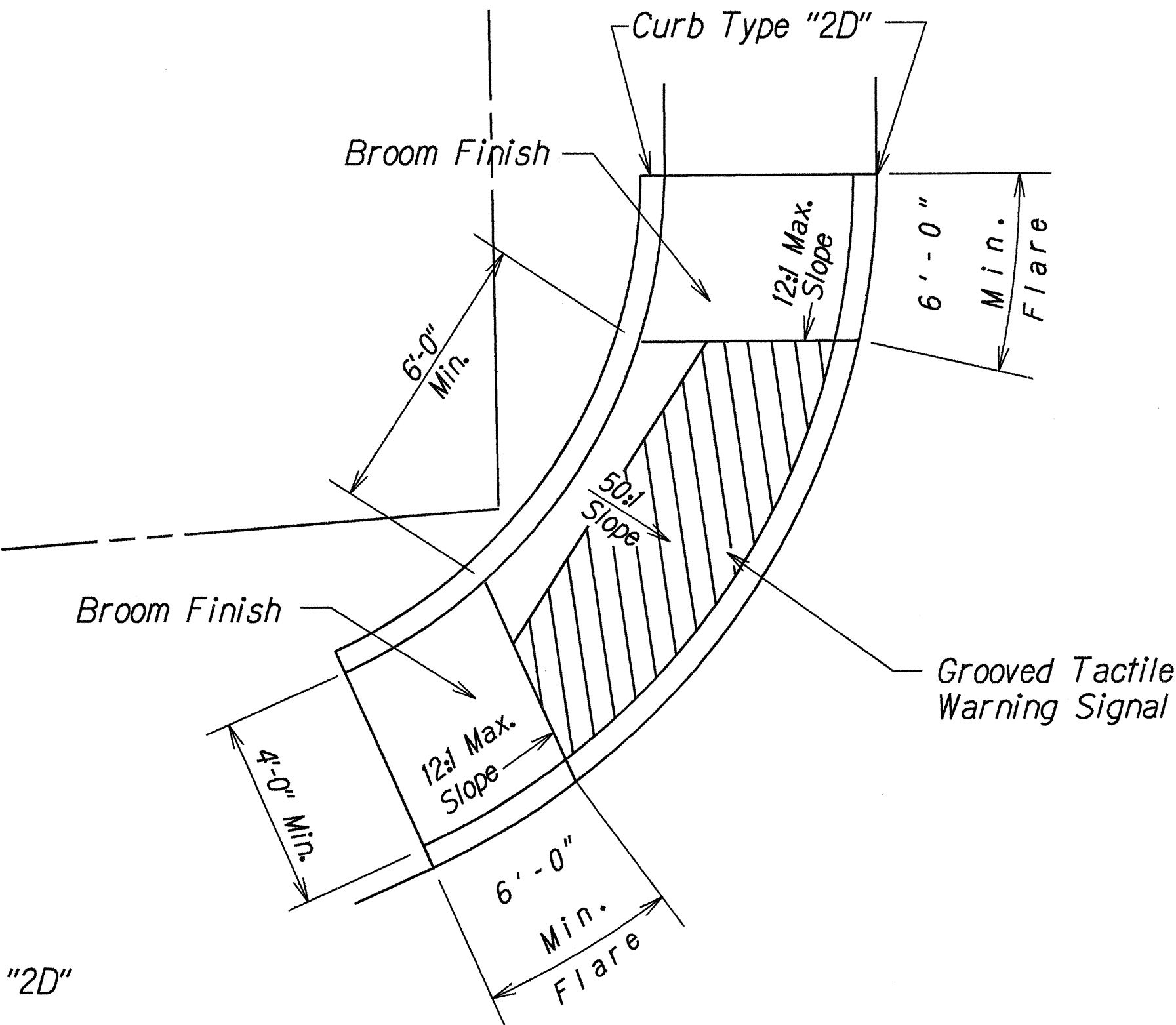
SHEET NO. 1 OF 1 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	12/20/99
DESIGNED BY	B. Hironaka, S. Hironaka
QUANTITIES BY	
CHECKED BY	

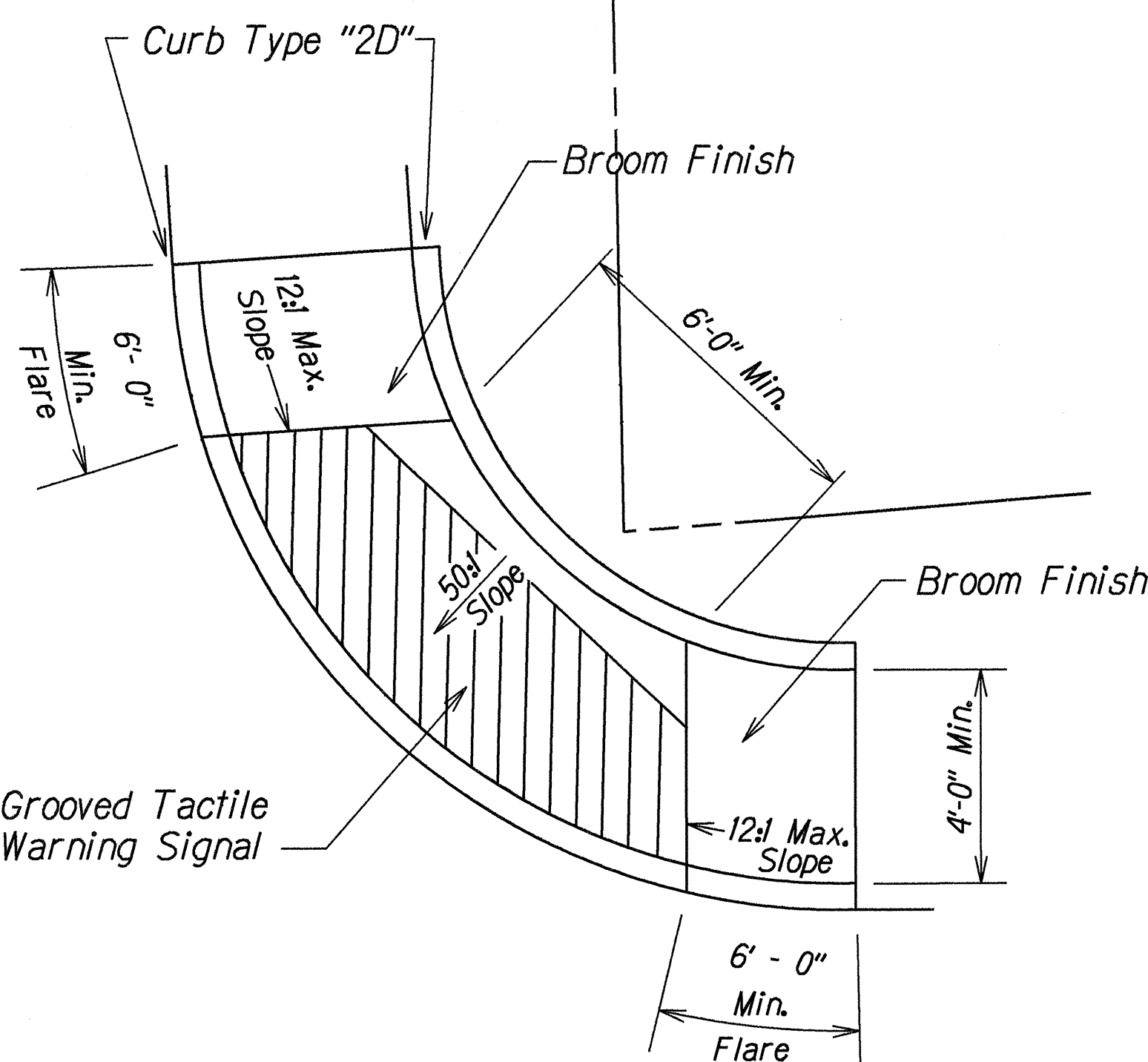
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-STP-056-1(35)	2000	8	70



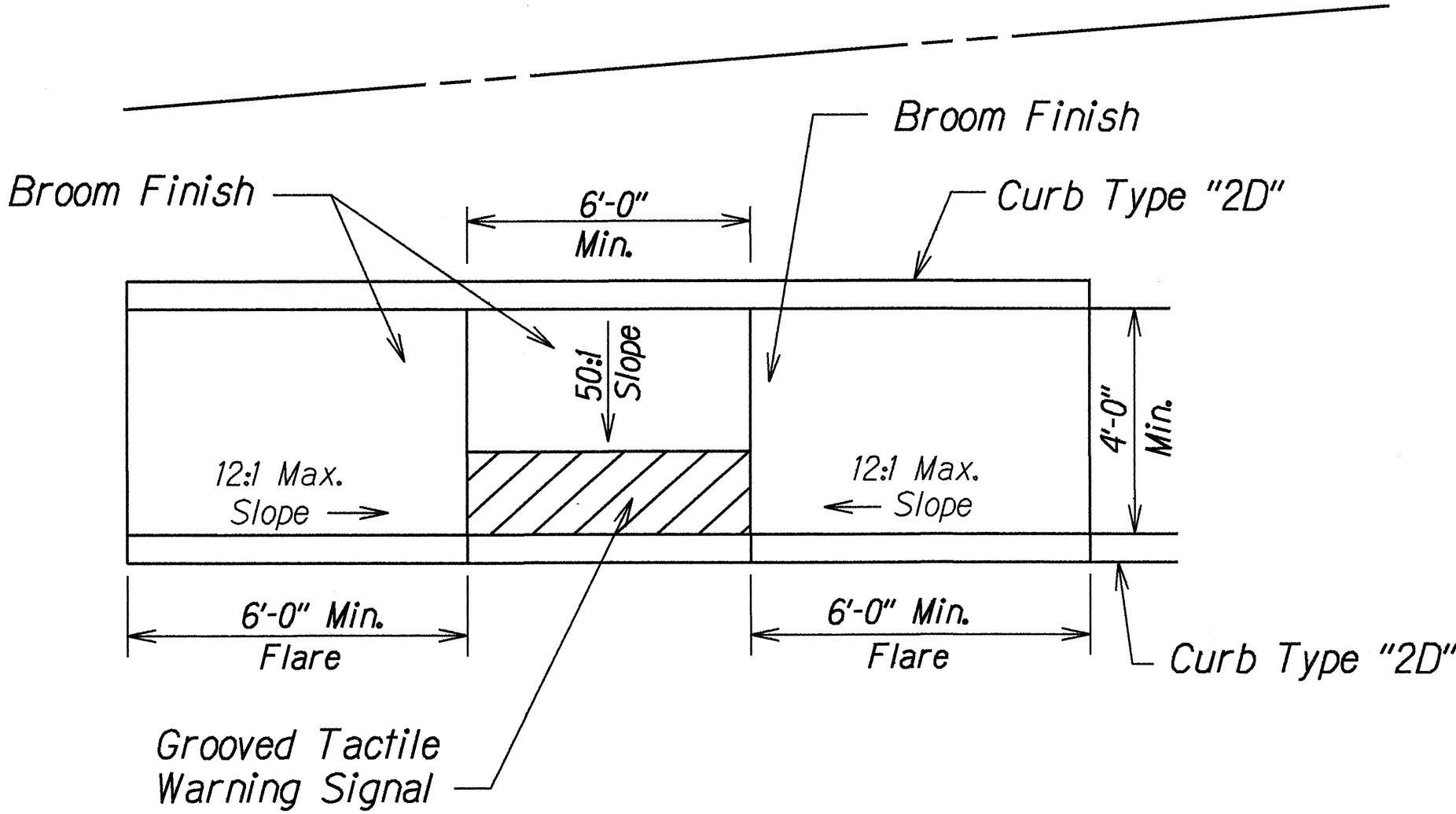
PLAN
Modified Curb Ramp "Type B1 "
Akia Street
Not to Scale



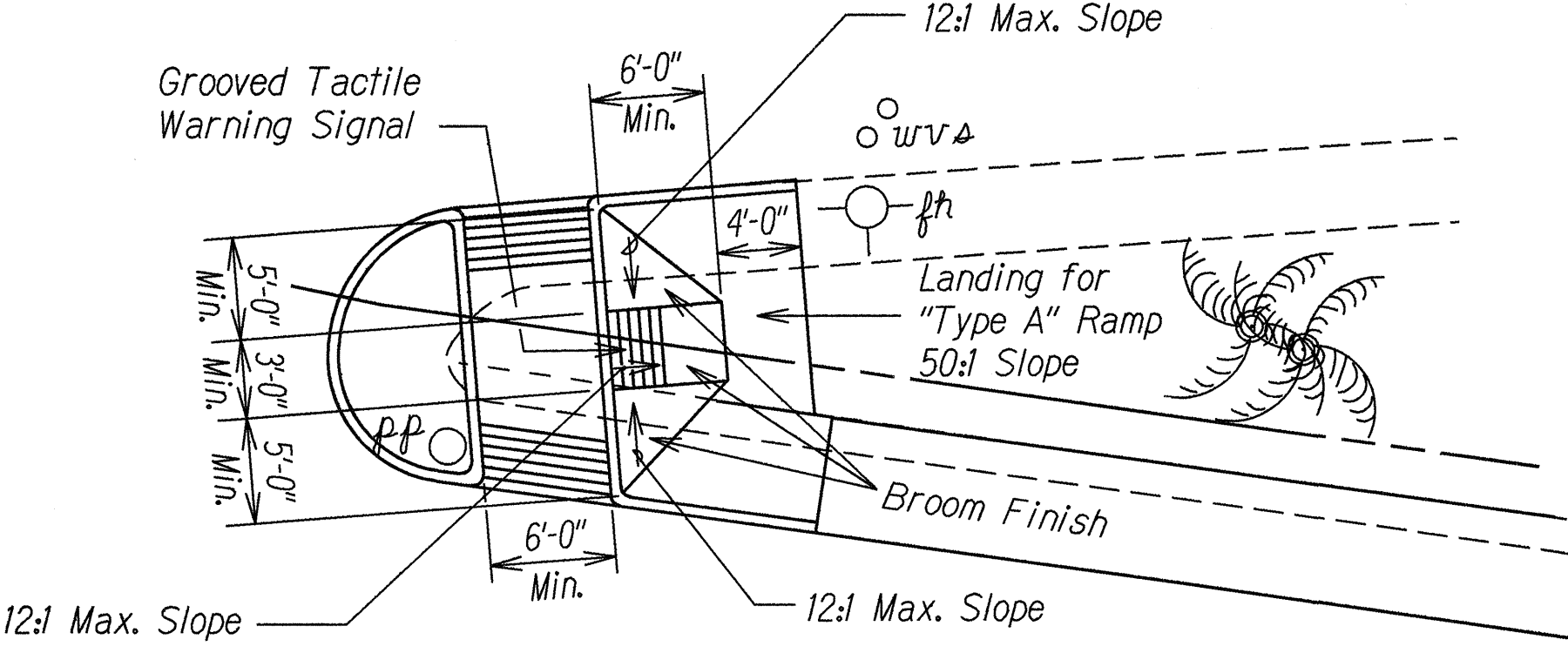
PLAN
Modified Curb Ramp "Type B2 "
Ohia Street/Ulu Street
Not to Scale



PLAN
Modified Curb Ramp "Type B3 "
Ohia Street/Ulu Street
Not to Scale



PLAN (typical of 2)
Modified Curb Ramp Type "B4 "
Ohia Street/Ulu Street and Kuhio Highway
Not to Scale



PLAN
Modified Type "C" Curb Ramp with Modified Curb Ramp "Type A1 "
Ohia Street/Ulu Street/Kuhio Highway
Not to Scale

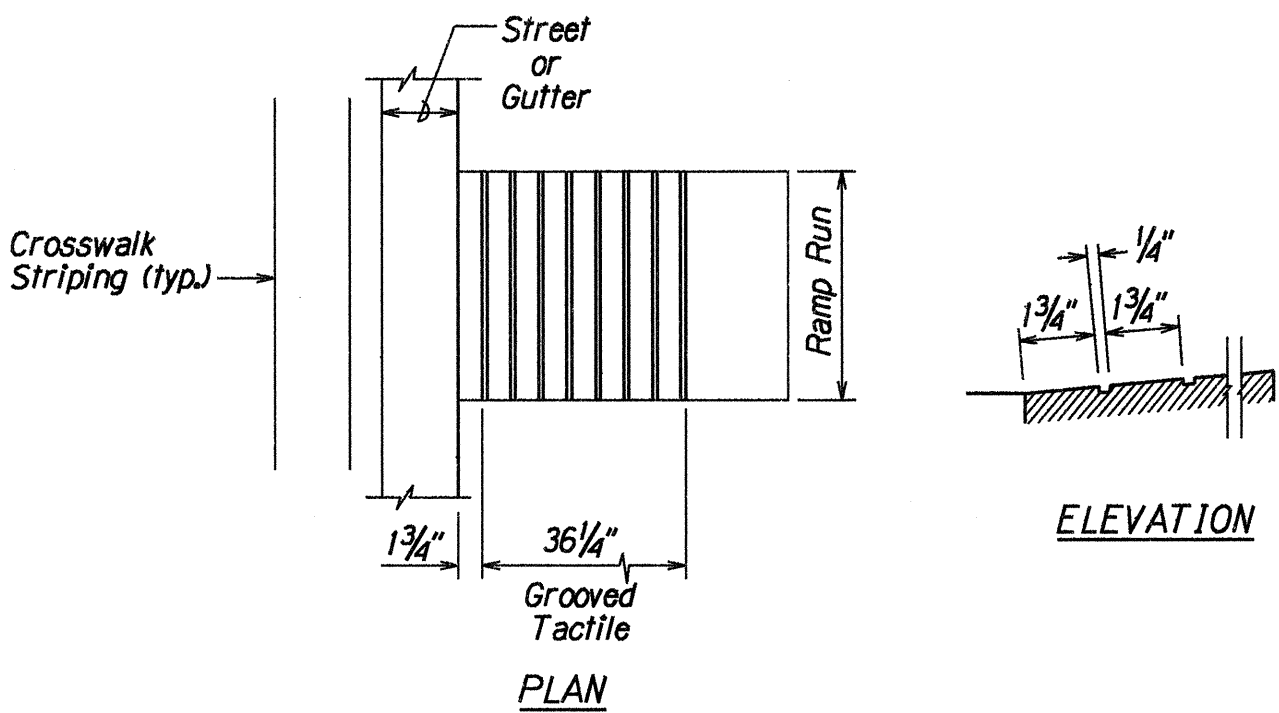
NOTE
All Grooved warning signals should be in the direction of the crosswalk path, which may or may not be perpendicular with the edge of the curb. Detail drawings are for illustration only.

SURVEY PLOTTED BY	DATE
DRAWN BY K. Tanaka	11-24-99
TRACED BY B. Hiroaka/S. Hiroaka	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
dd/seen	
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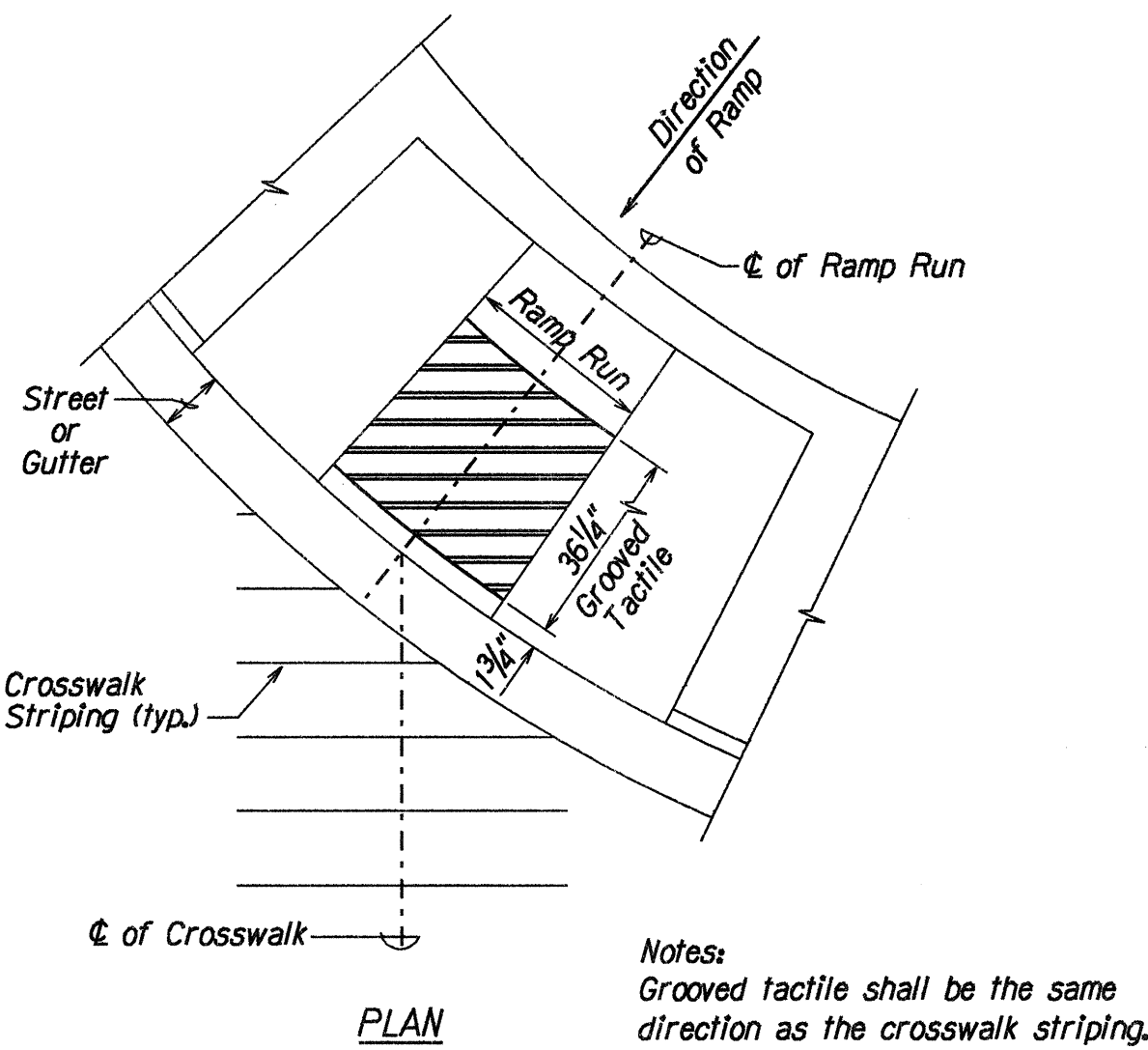
8/1/99	Revised Curb Ramp at Ohia St./Ulu St.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
CURB RAMP DETAILS	
KUHIO HIGHWAY	
Waikaea Bridge Widening	
F.A. Project No. BR-STP-056-1(35)	
Scale: Not to Scale	Date: April, 1996
SHEET No. 1 OF 1 SHEETS	

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 four inches of bed course on top of the compacted subgrade. Compact the bed course material.



GROOVED TACTILE WARNING SIGNAL
(RAMP RUN PERPENDICULAR TO CROSSWALK)



GROOVED TACTILE WARNING SIGNAL
(RAMP RUN NOT PERPENDICULAR TO CROSSWALK STRIPING)

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-STP-056-1(35)	2000	ADD.8S-1	70

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

1st of curb ramp dgn

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

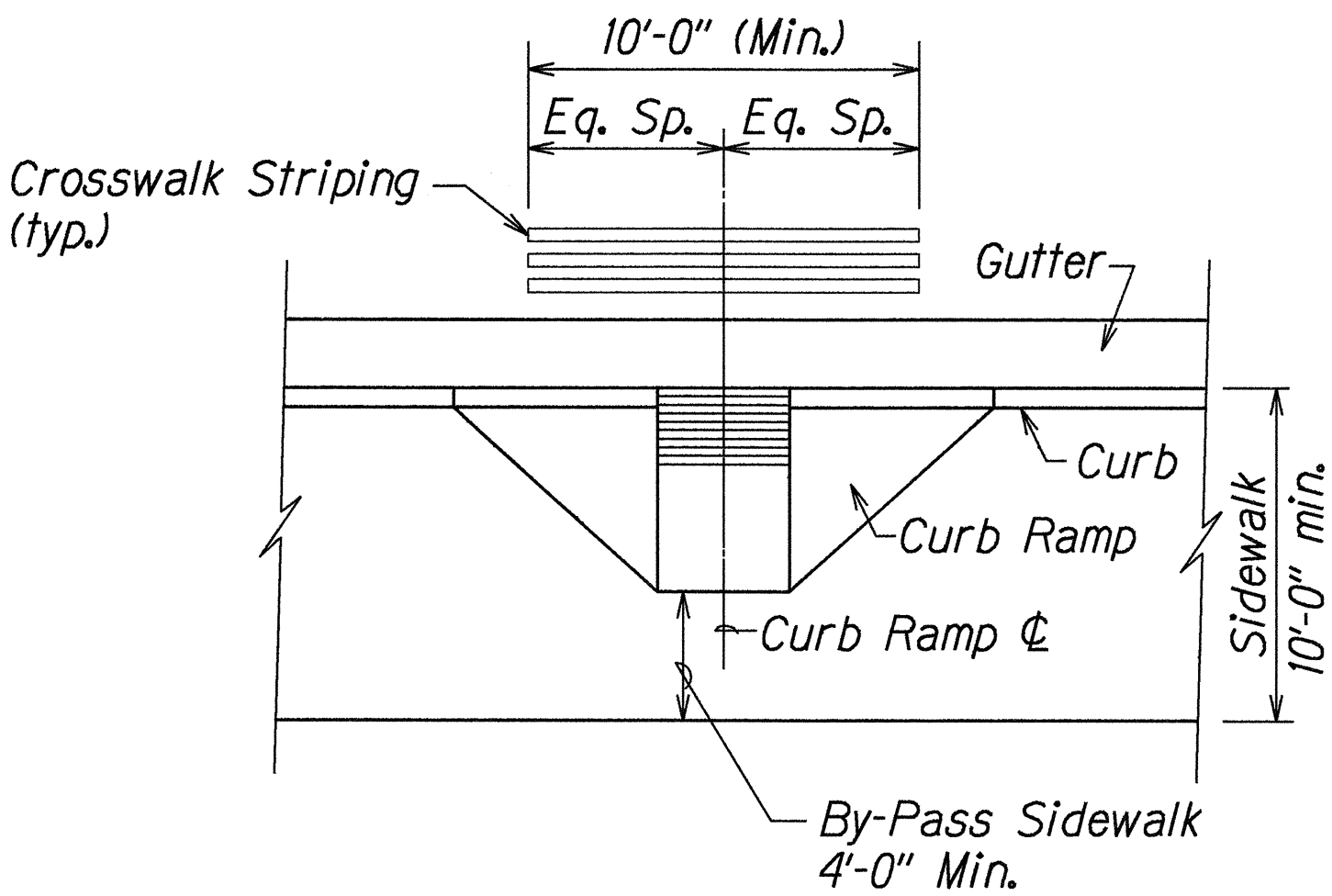
8/1/99	Added Sheet to Original Contract Plans.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
CURB RAMP DETAILS	
KUHIU HIGHWAY	
Waiakea Bridge Widening	
F.A. Project No. BR-STP-056-1(35)	
Not to Scale	Date: Sept., 1999
SHEET No. 1 OF 2 SHEETS	

ADD.8S-1

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-STP-056-K35	2000	ADD.8S-2	70

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.



TYPICAL CROSSWALK STRIPING
AT CURB RAMP

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

ORIGINAL PLAN	NOTE BOOK
No.	No.

tdl:traffic
/std/curb ramp

R 5-1-98 TE-68 Sht. 1 of 5

8/1/99 Added Sheet to Original Contract Plans.

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAIL

KUHIO HIGHWAY

Waiakea Bridge Widening

F.A. Project No. BR-STP-056-K35

Not to Scale

Date: Sept., 1999

SHEET No. 2 OF 2 SHEETS

ADD.8S-2