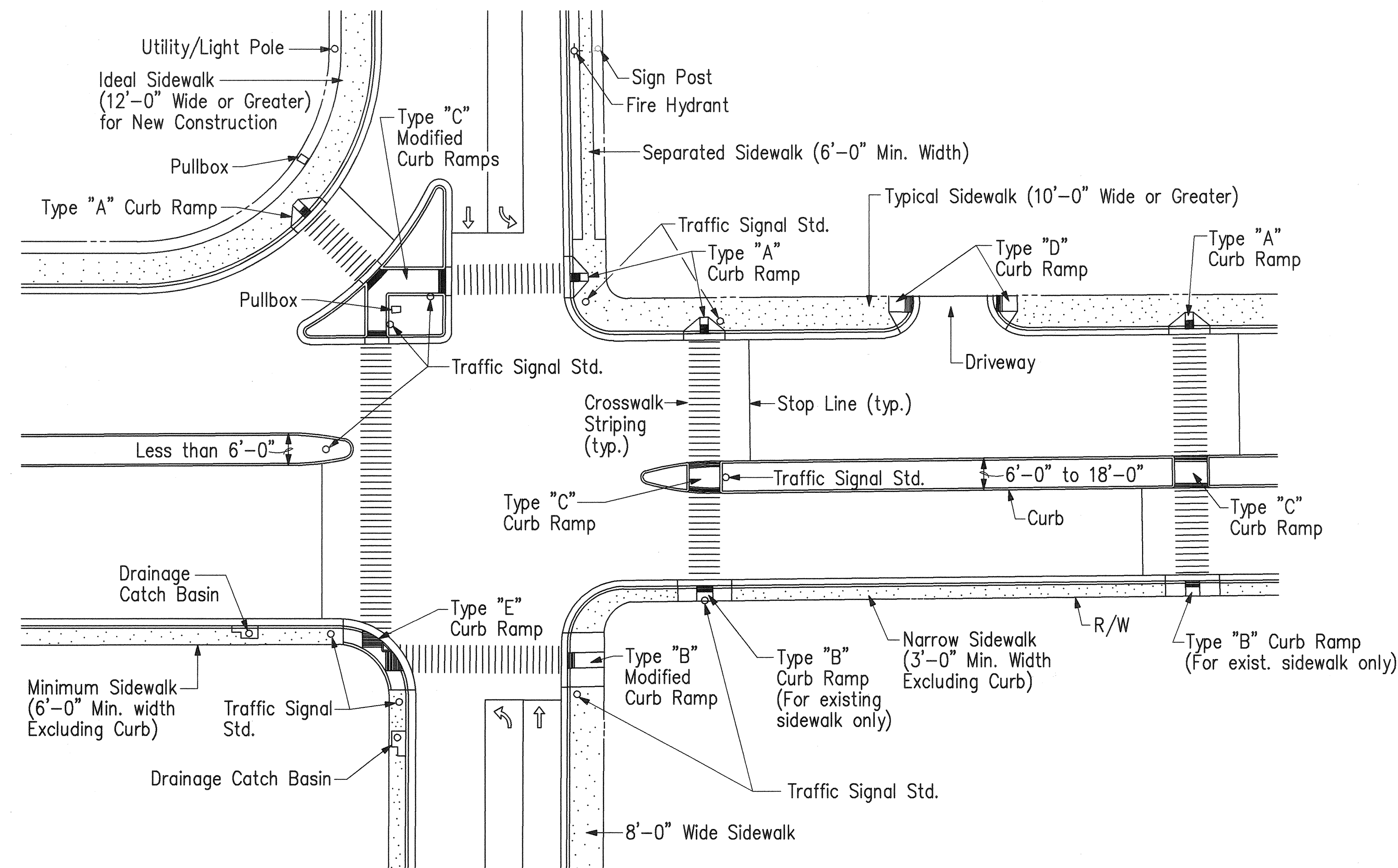
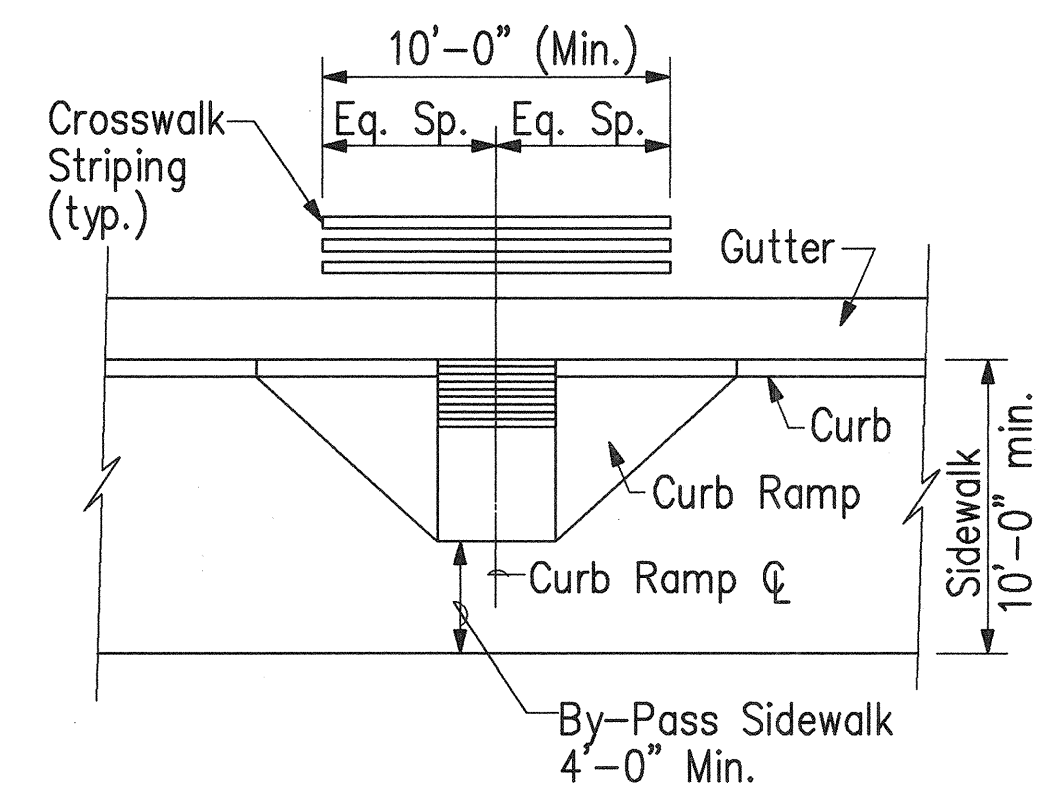


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	98A-01-98	1999	7	23



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.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
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CAD By J. Munro, 55-52

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAIL

VINEYARD BOULEVARD
TRAFFIC SIGNAL UPGRADE AT NUUANU AVENUE
PROJECT NO. 98A-01-98

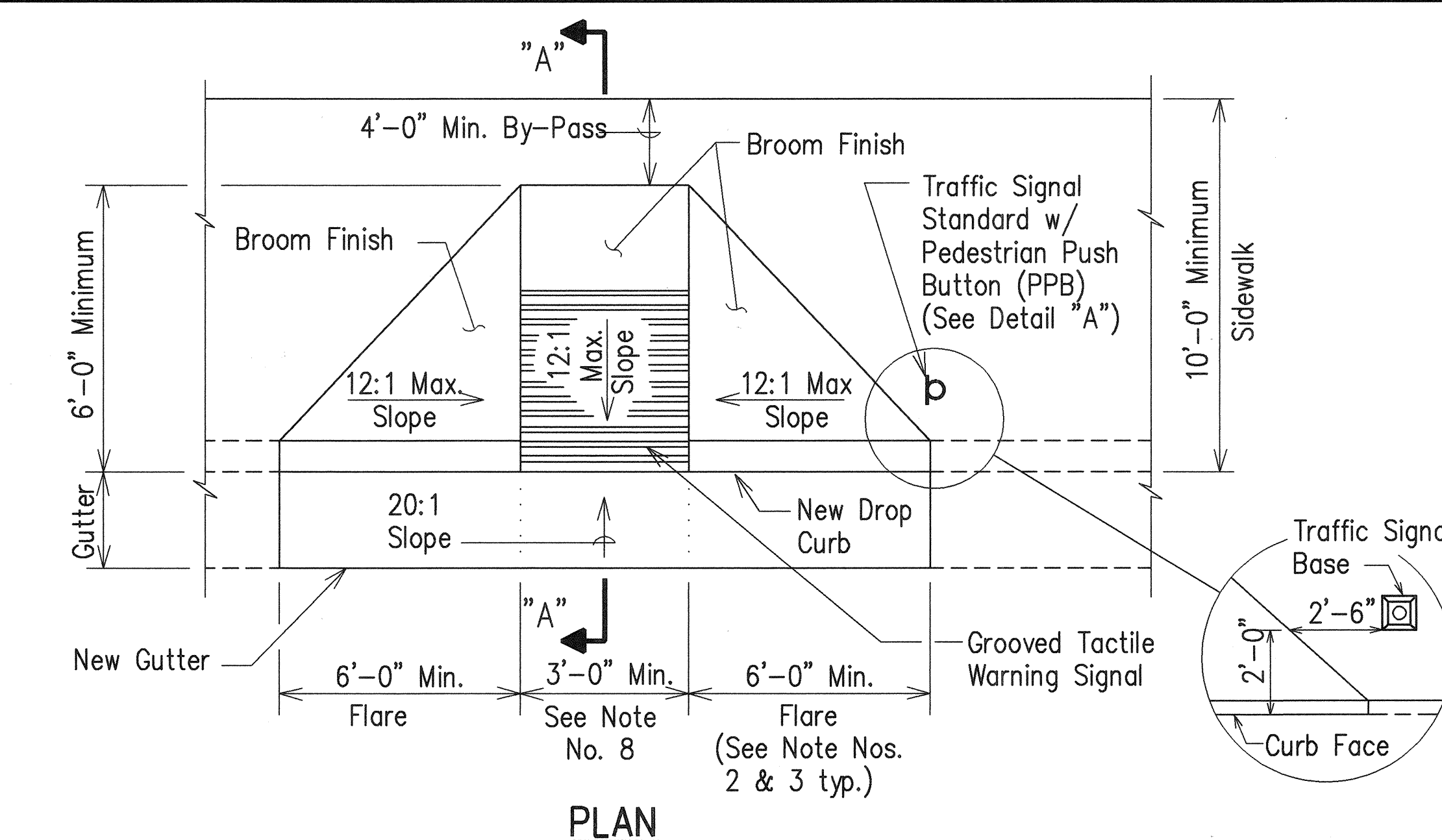
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SHEET NO. C3 OF 6 SHEETS

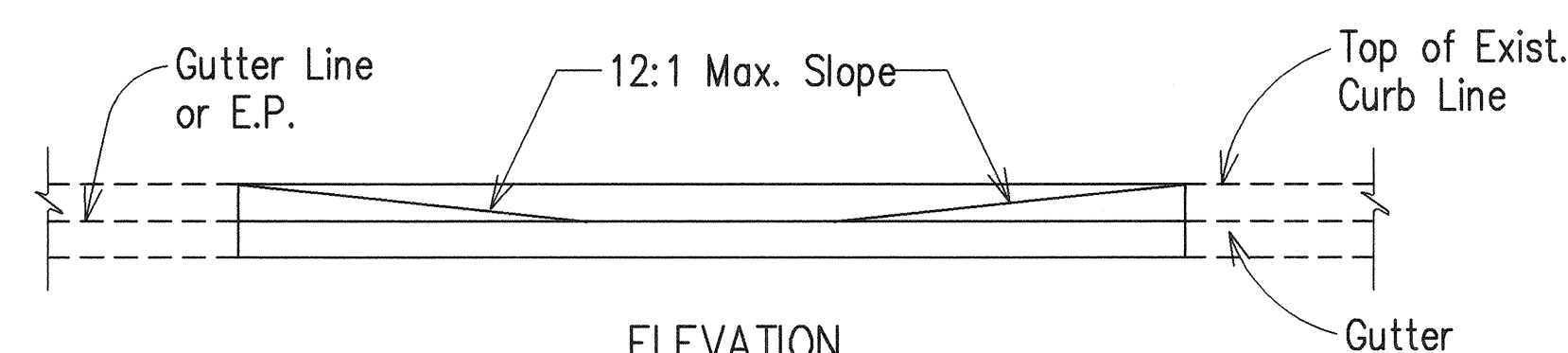
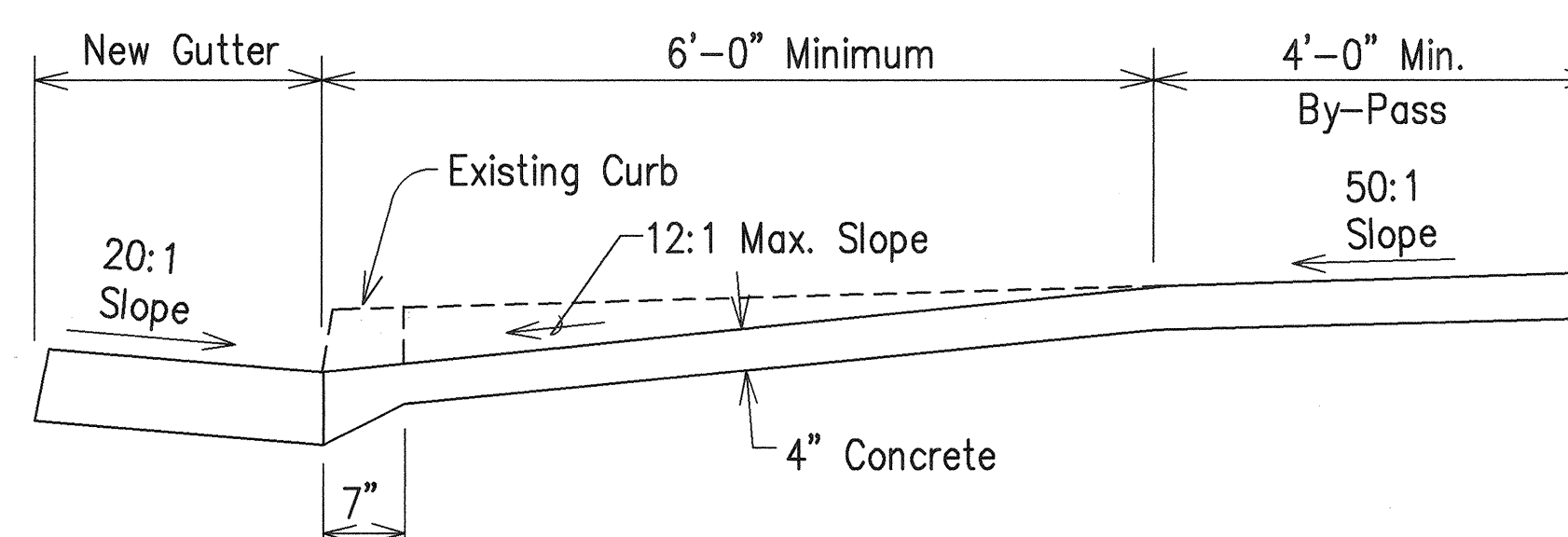
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	98A-01-98	1999	8	23

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).



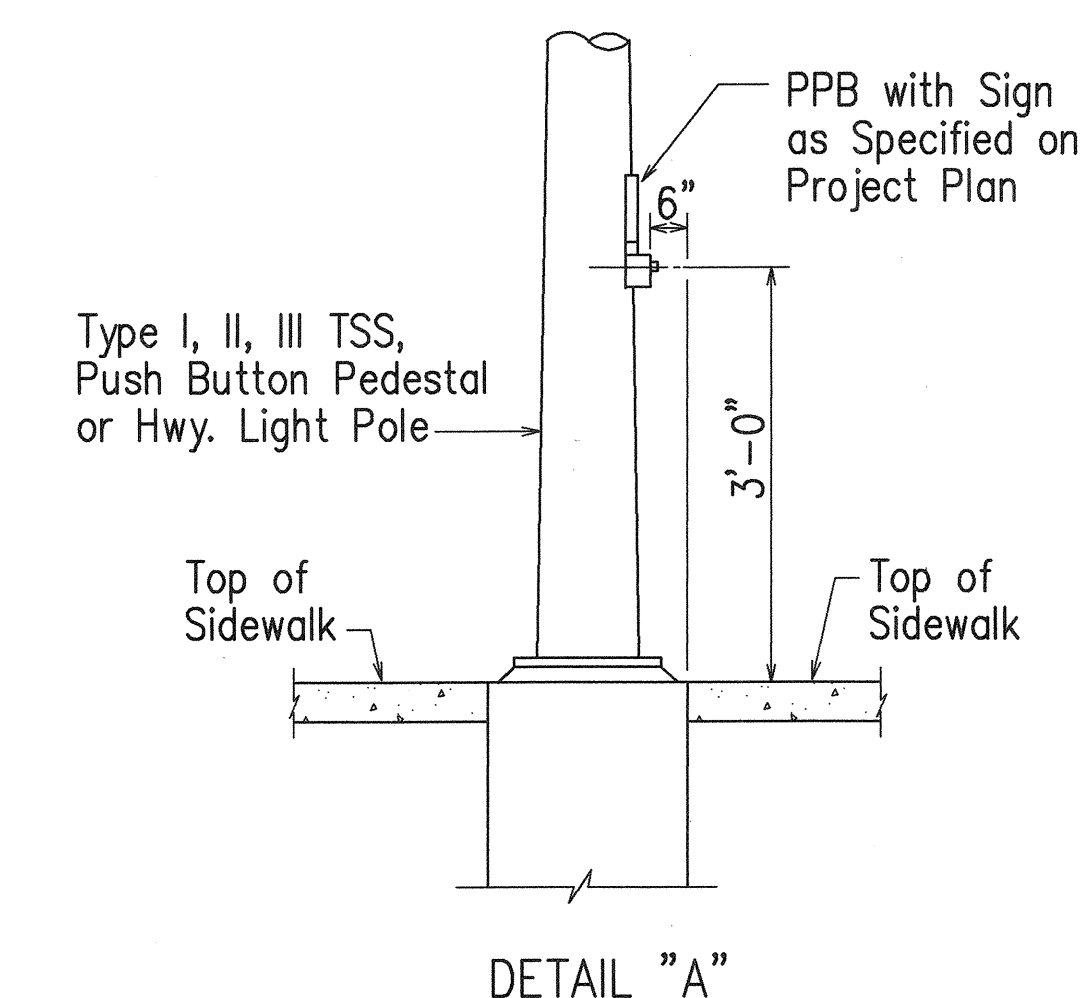
PLAN

ELEVATION

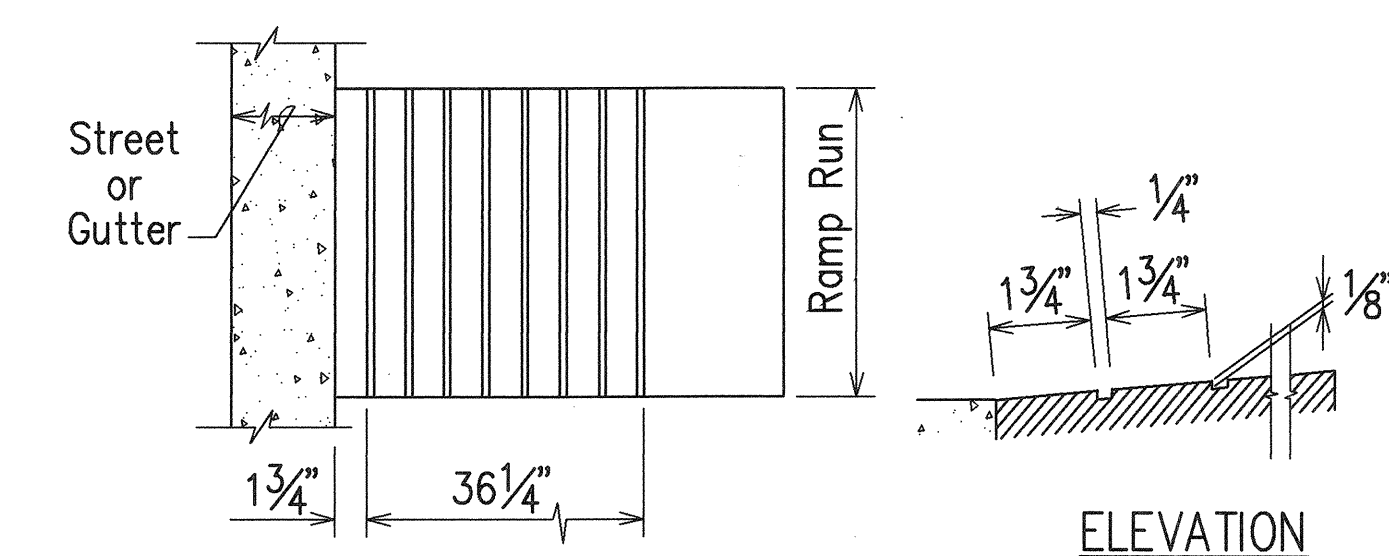
SECTION "A-A"

CURB RAMP - TYPE "A"

SIDEWALK WIDTH 10'-0" OR GREATER



DETAIL "A"



ELEVATION

GROOVED TACTILE WARNING SIGNAL

ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

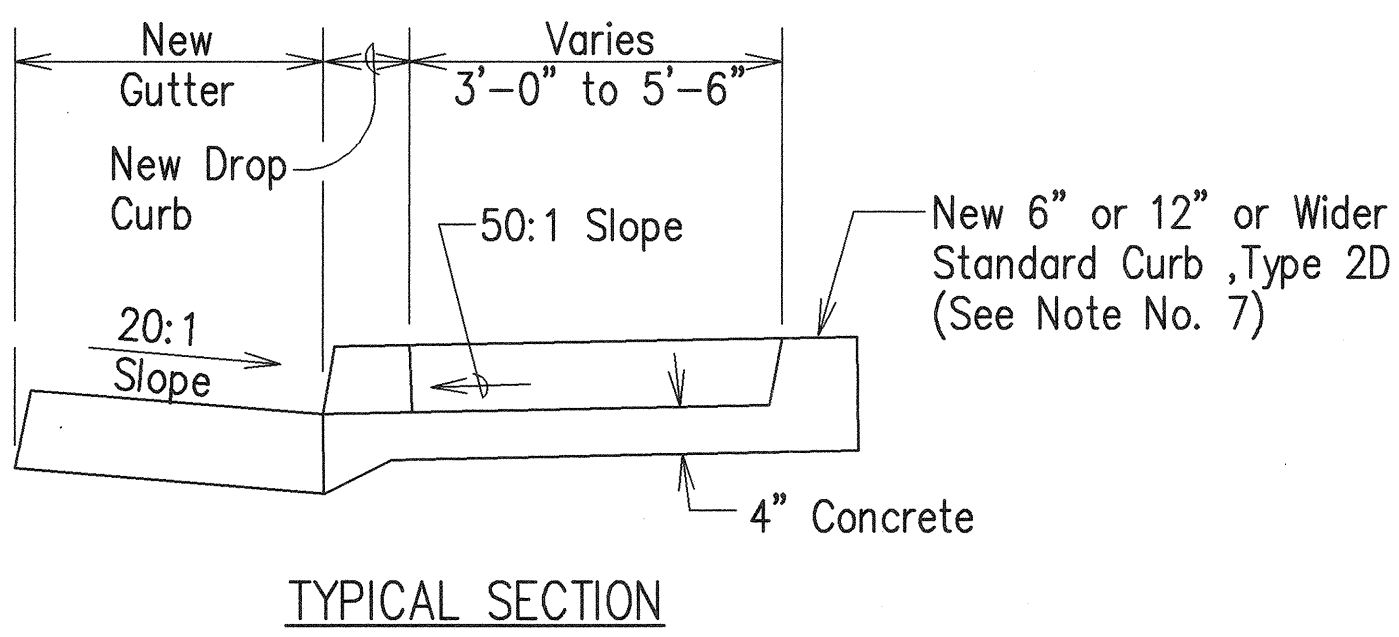
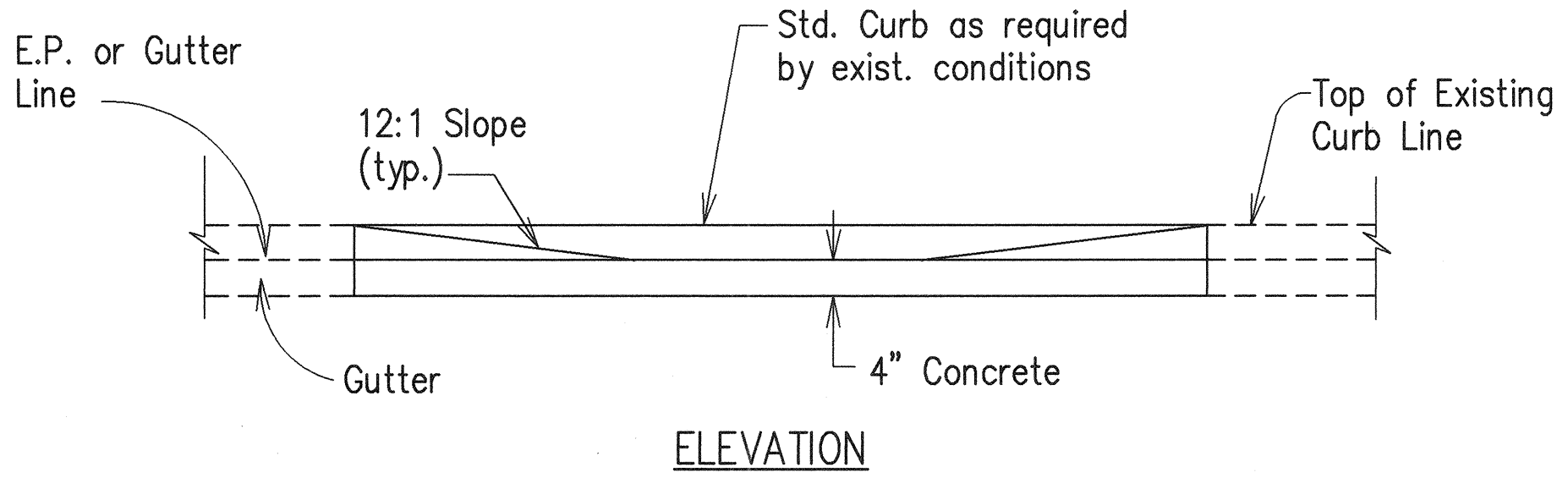
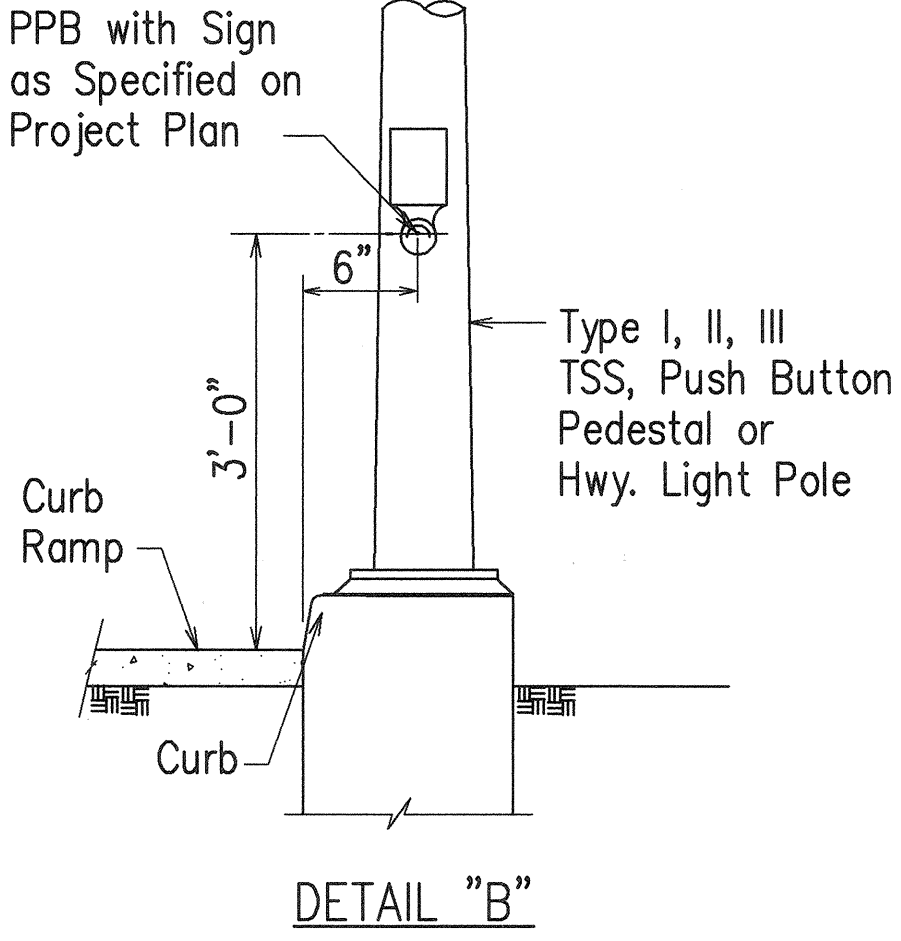
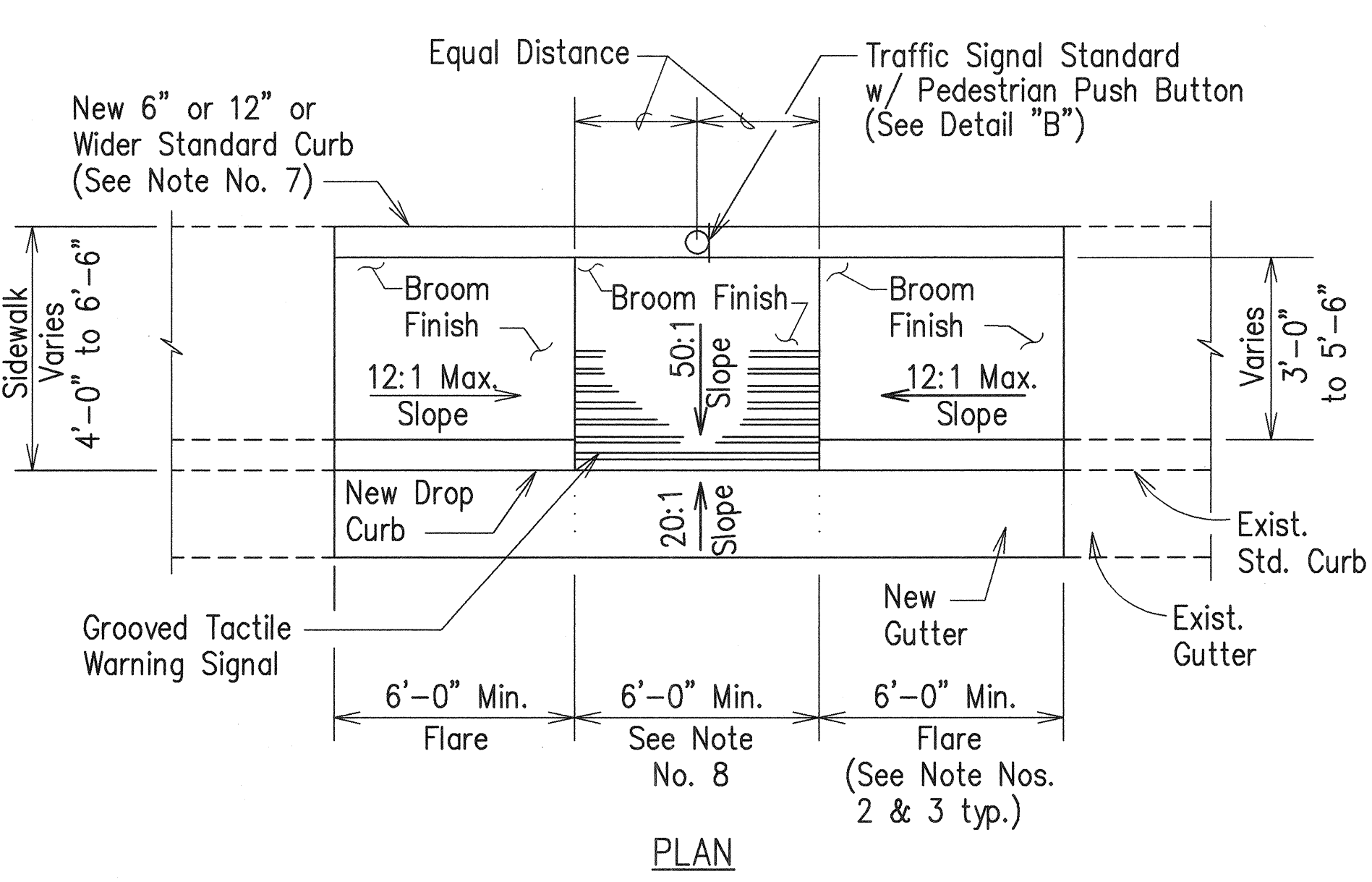
CURB RAMP DETAIL

VINEYARD BOULEVARD
TRAFFIC SIGNAL UPGRADE AT NUUANU AVENUE
PROJECT NO. 98A-01-98

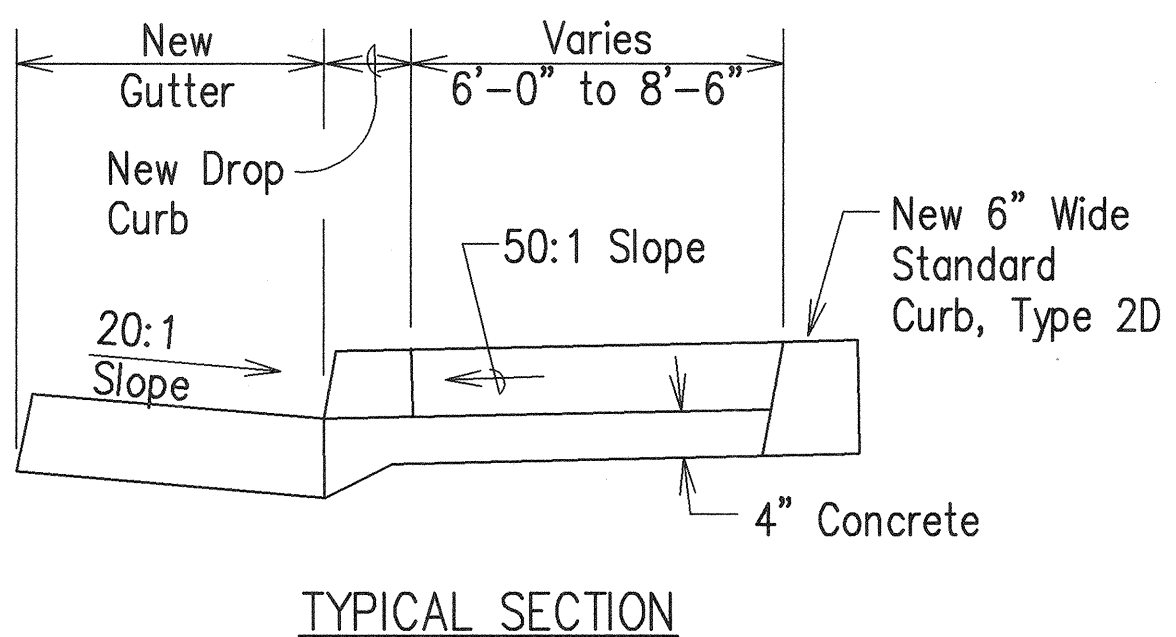
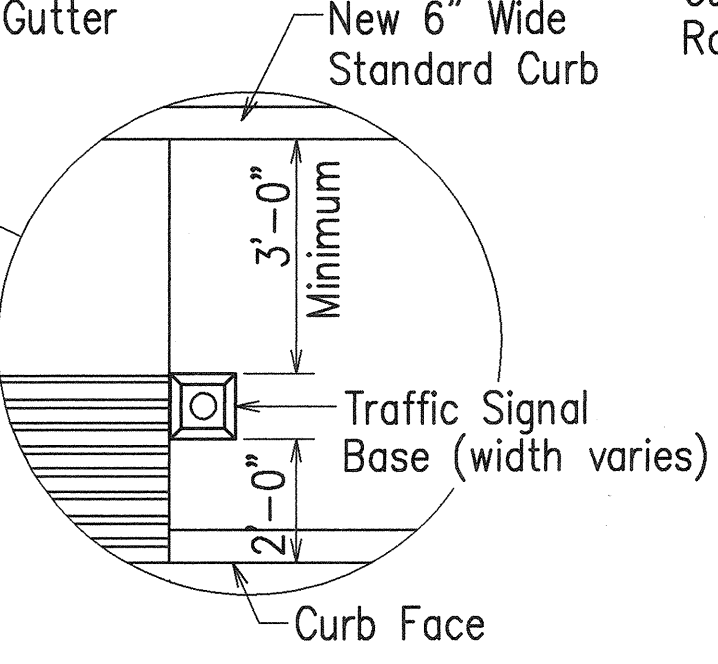
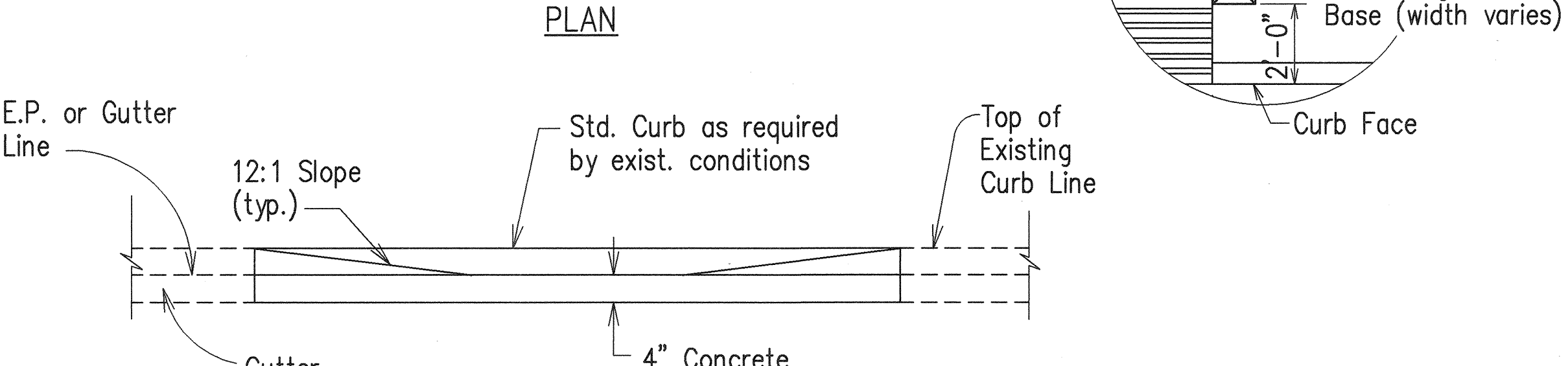
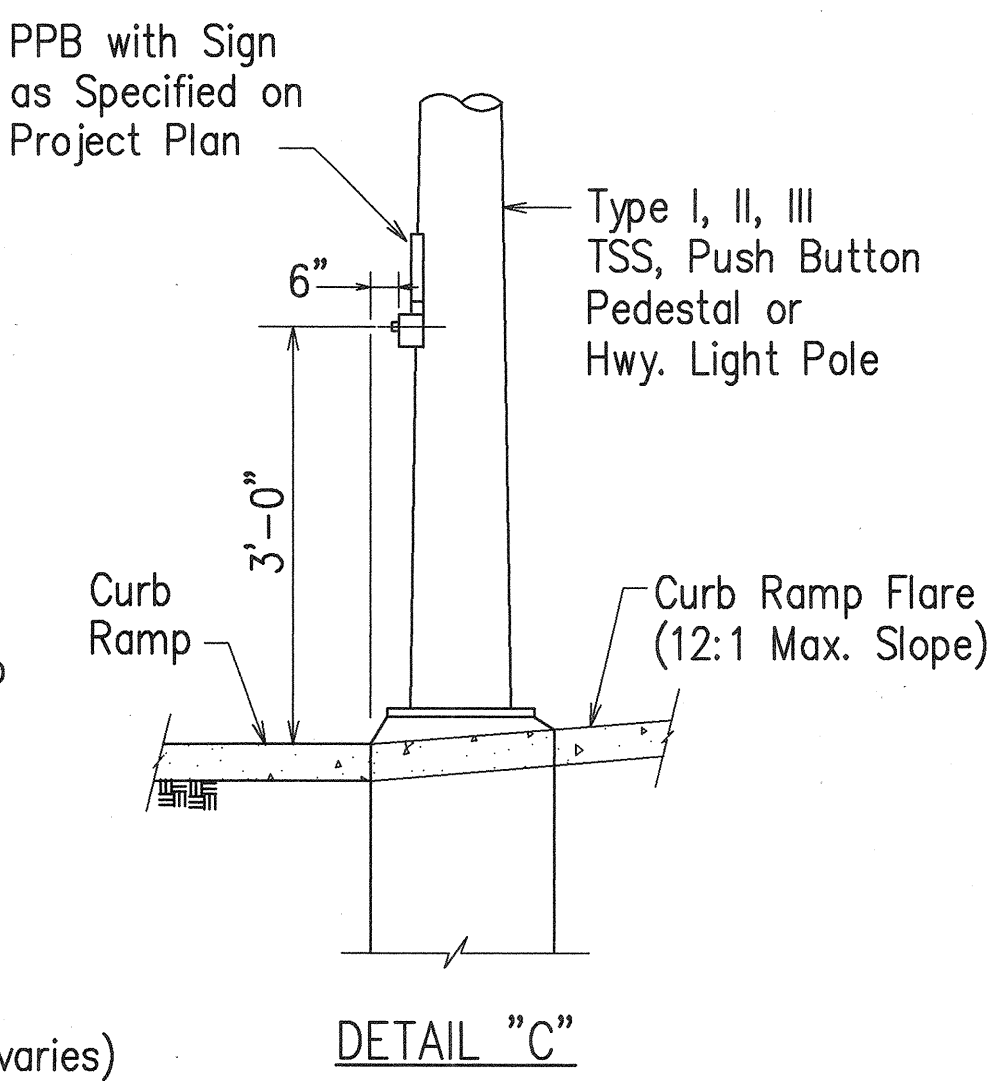
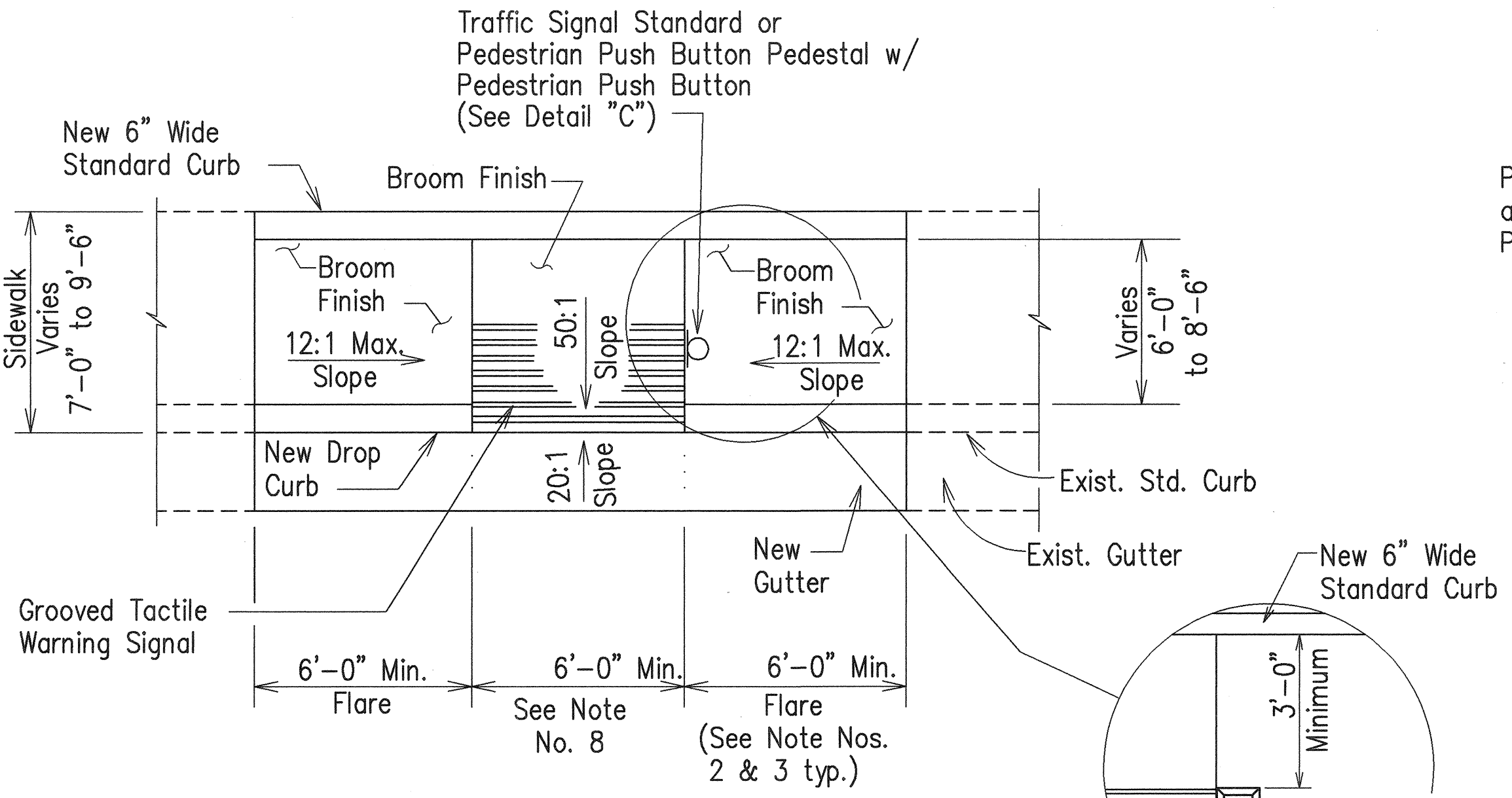
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SHEET NO. C4 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	98A-01-98	1999	9	23



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



CURB RAMP - TYPE "B" (MODIFIED)
 SIDEWALK WIDTH 7'-0" OR GREATER
 BUT LESS THAN 10'-0" WIDTH

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

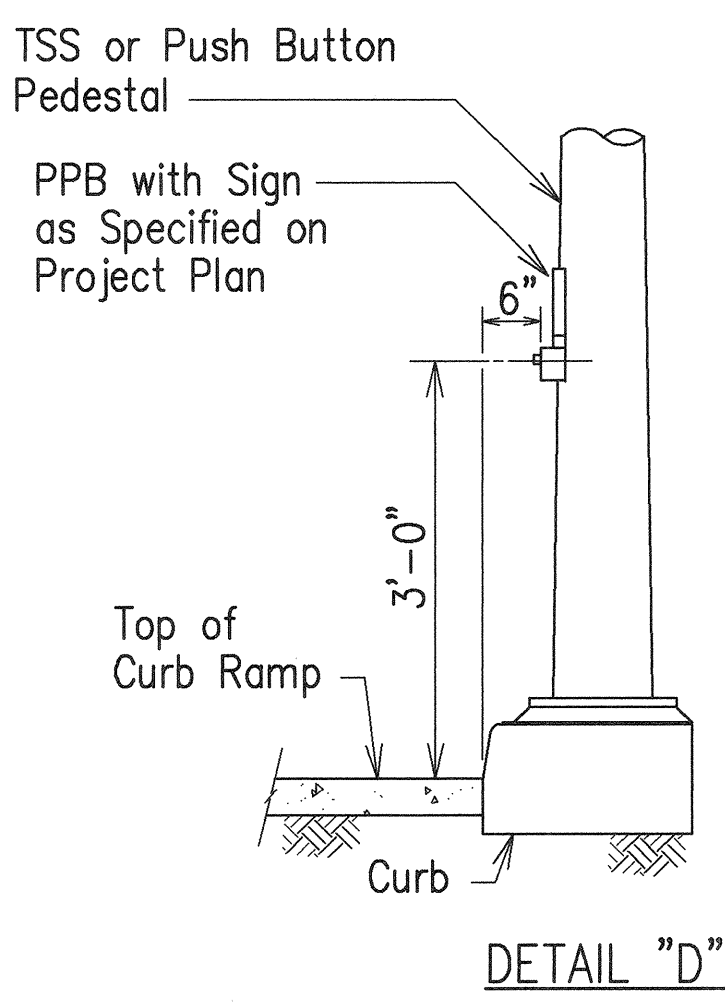
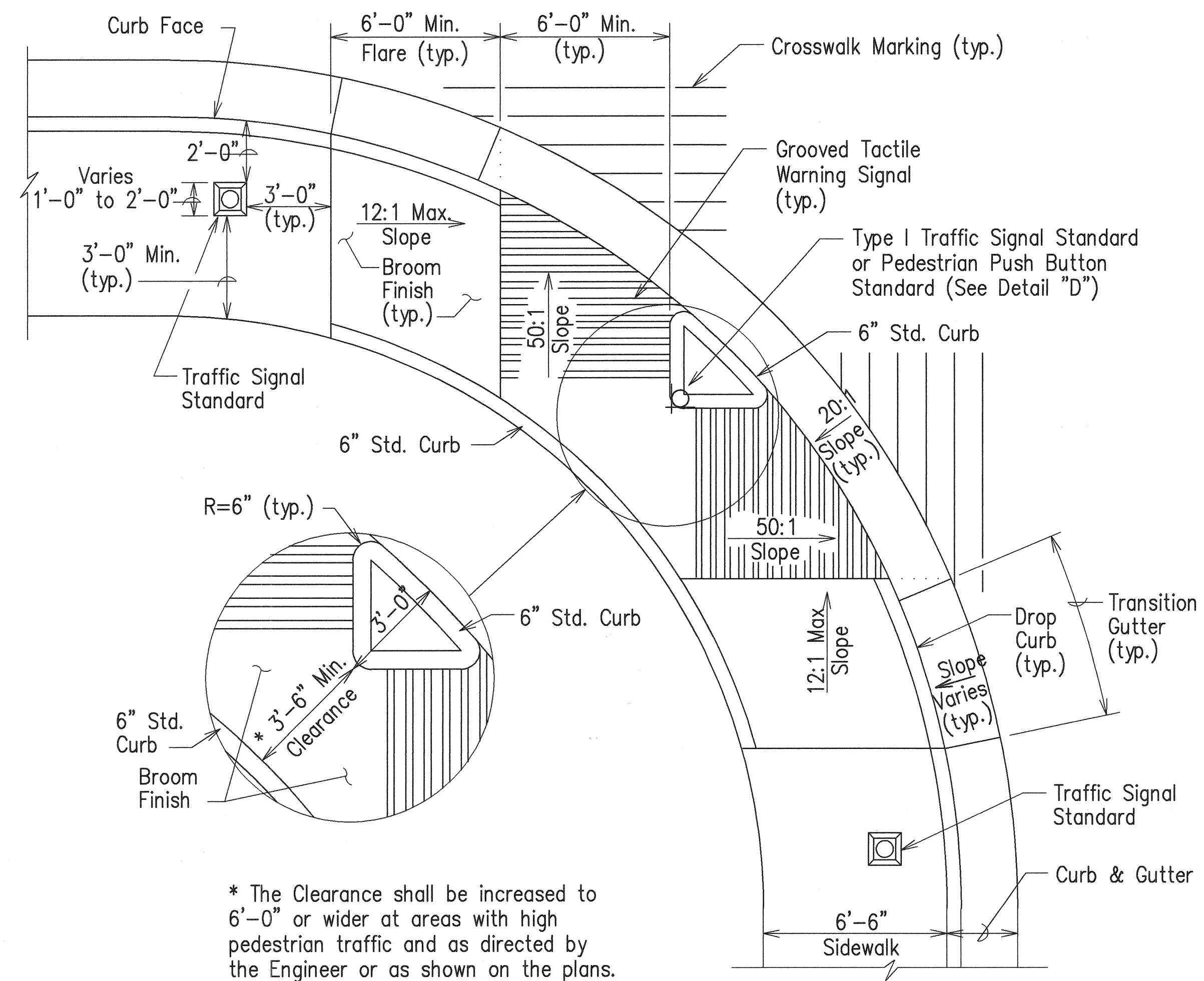
CURB RAMP DETAIL

VINEYARD BOULEVARD
 TRAFFIC SIGNAL UPGRADE AT NUUANU AVENUE
 PROJECT NO. 98A-01-98
 SCALE: NONE DATE: JANUARY 1999

SHEET NO. C5 OF 6 SHEETS

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HAWAII	HAW.	98A-01-98	1999	10	23



CURB RAMP - TYPE "E"
SIDEWALK WIDTH 6'-6" OR GREATER
EXCLUDING CURB
(FOR EXISTING SIDEWALK ONLY)

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CAD by J. Minura, 55-52

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP DETAIL

VINEYARD BOULEVARD
TRAFFIC SIGNAL UPGRADE AT NUUANU AVENUE
PROJECT NO. 98A-01-98
SCALE: NONE DATE: JANUARY 1999
SHEET NO. C6 OF 6 SHEETS