

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-032-K(010)	2014	ADD.16	51

CURB RAMP AND SIDEWALK NOTES:

1. These typical details are intended as curb ramp guidelines for design and construction. These guidelines shall not replace site specific curb ramp plans.
2. A 2% maximum cross slope shall be maintained in the direction of pedestrian traffic.
3. Subject to field conditions, the Engineer shall determine the final location of curb ramps.
4. All pullboxes shall be installed away from the curb ramp and within the sidewalk/unpaved area to the maximum extent feasible.
5. 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.
6. Transitions from ramps to gutters and roadways shall be flush.
7. Curb ramps and sidewalks shall be constructed to eliminate ponding to the maximum extent feasible.
8. The pedestrian push button shall meet operational and reach requirements of the American with Disabilities Act Accessibility Guidelines (ADAAG):

a) Forward Reach. The maximum height for forward reach shall be 48".

b) Side Reach. The maximum height for side reach shall be 48".

c) 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.
9. 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.
10. 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.
11. Construction joints are required to join curb ramps with sidewalks.
12. Unless otherwise noted, new gutters are required as shown.
13. All curb ramps shall be reinforced with 6x6 W1.4/W1.4 welded wire fabric.
14. Surface of sidewalks and curb ramps shall be firm, stable, and slip-resistant. This includes the surfaces of pullboxes, valve covers, manhole covers, etc.
15. Bed course material is required for curb ramps, sidewalks, and gutters.
16. 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.
17. 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.
18. If possible, install utility poles, fire hydrants, light poles, sign posts, pullboxes, etc. off of sidewalk but within the right-of-way.
19. 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.
20. 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.

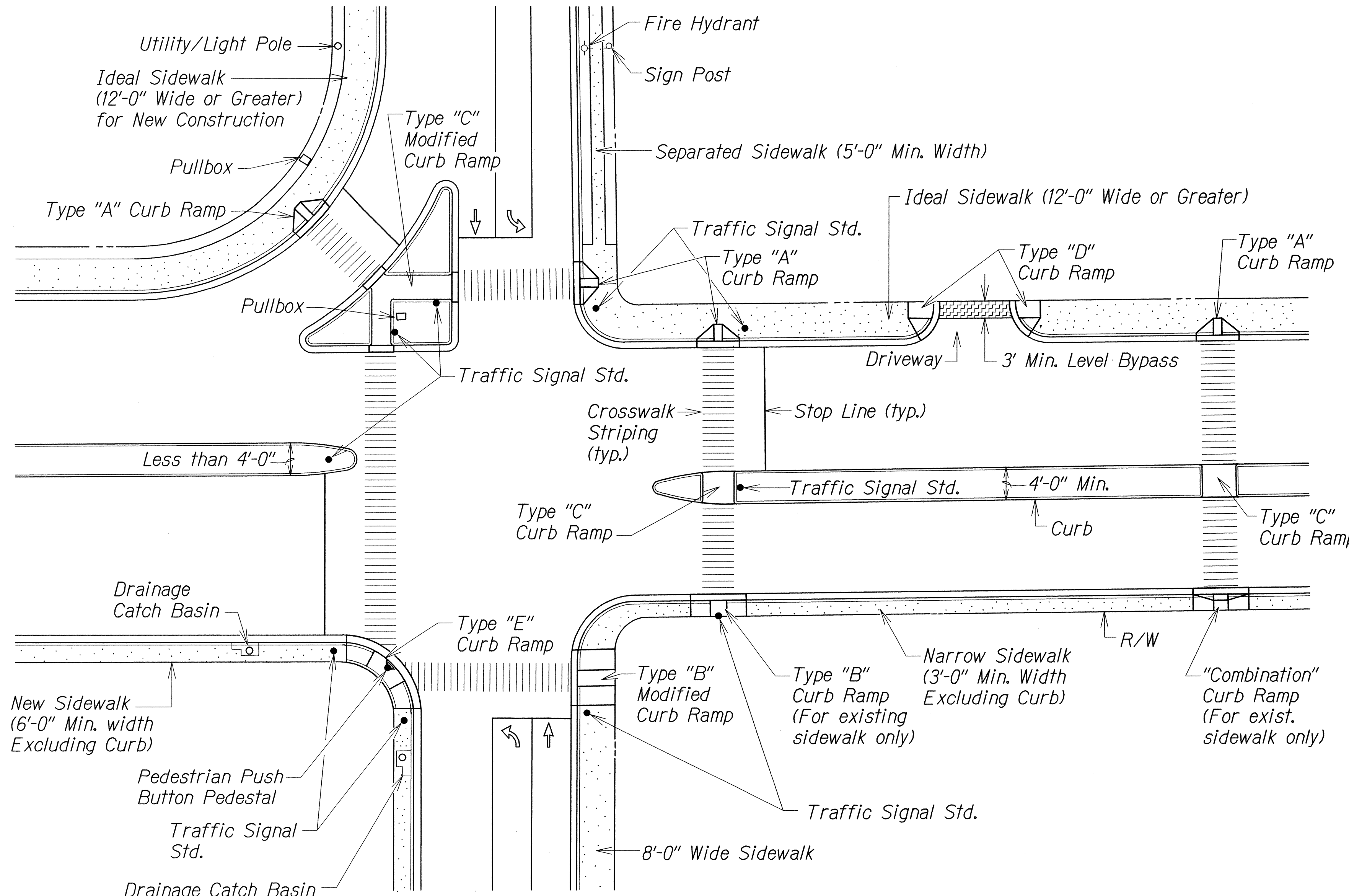
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
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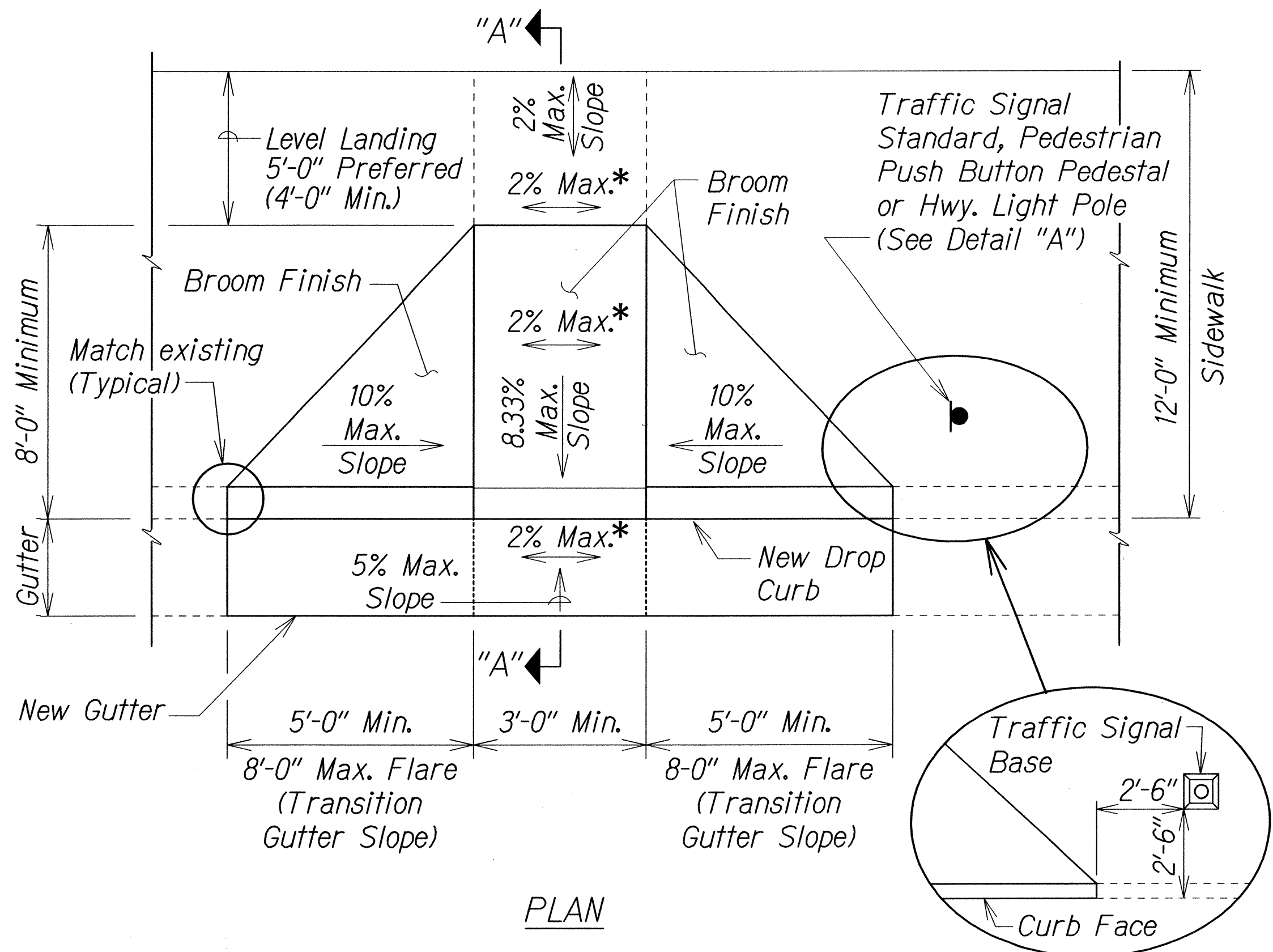
△3	12/8/14	Removed detectable warning detail and notes
DATE	REVISION	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION		
CURB RAMP AND SIDEWALK NOTES		
MAIN STREET RESURFACING		
High Street to Kaahumanu Avenue and		
KAAHUMANU AVENUE RESURFACING		
Main Street to Hobron Avenue		
Federal-Aid Project No. NH-032-K(010)		
Date: September, 2014		
SHEET No. 1 OF 2 SHEETS		

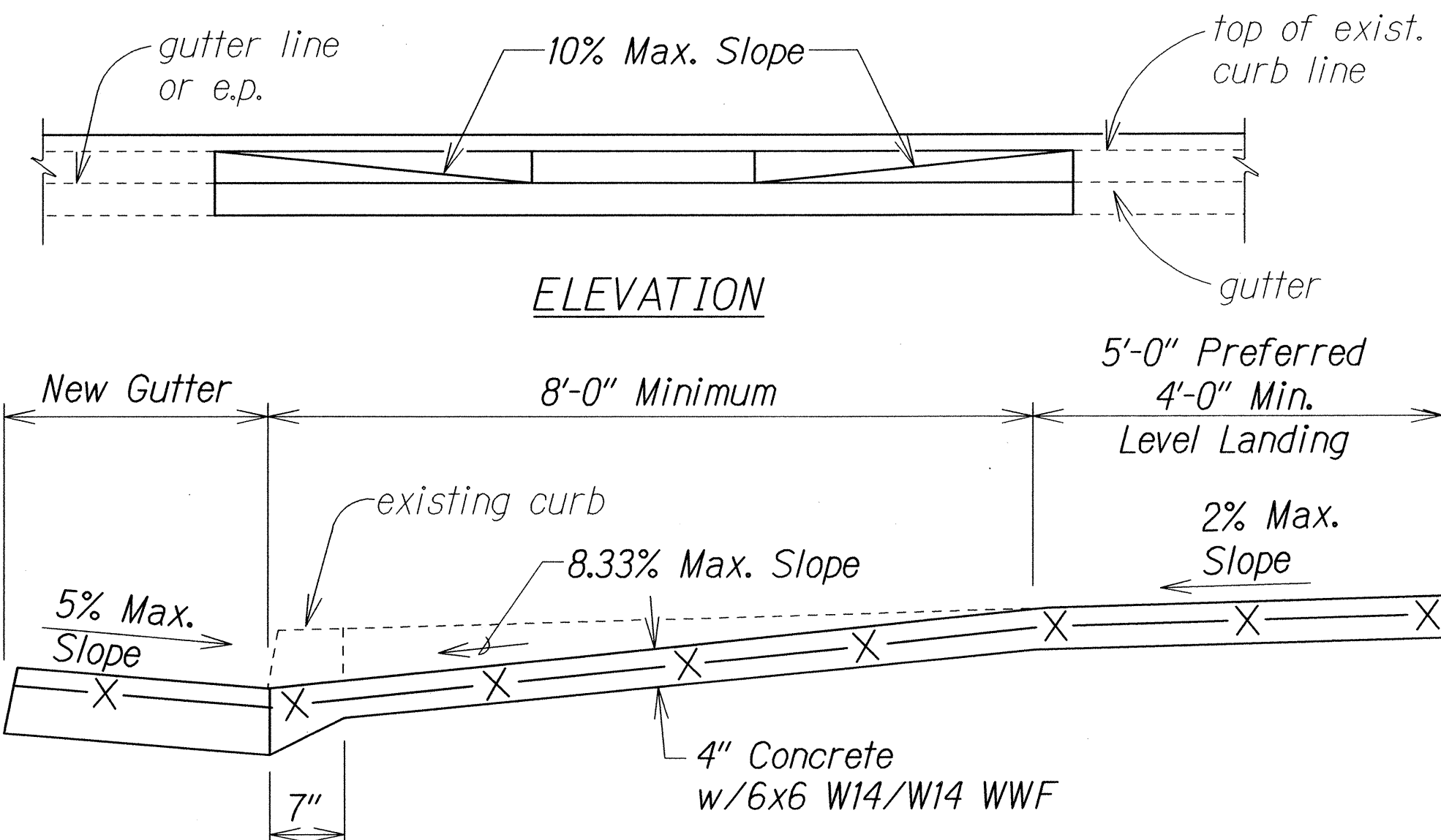
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HAWAII	HAW.	NH-032-1(010)	2014	17	51



TYPICAL CURB RAMPS



PLAN

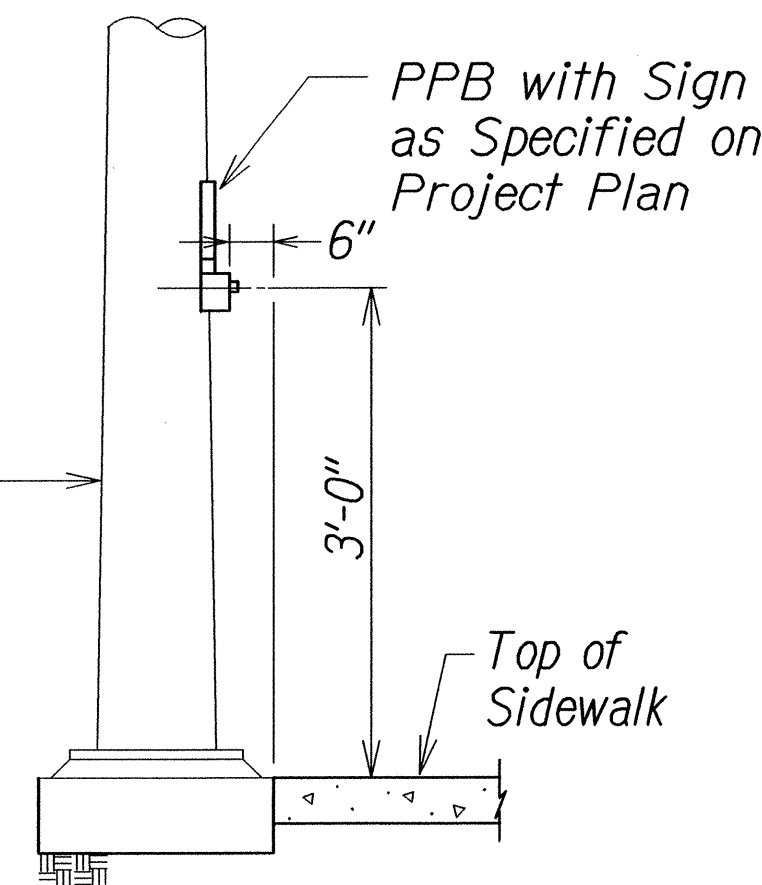


ELEVATION

SECTION "A-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



DETAIL "A"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

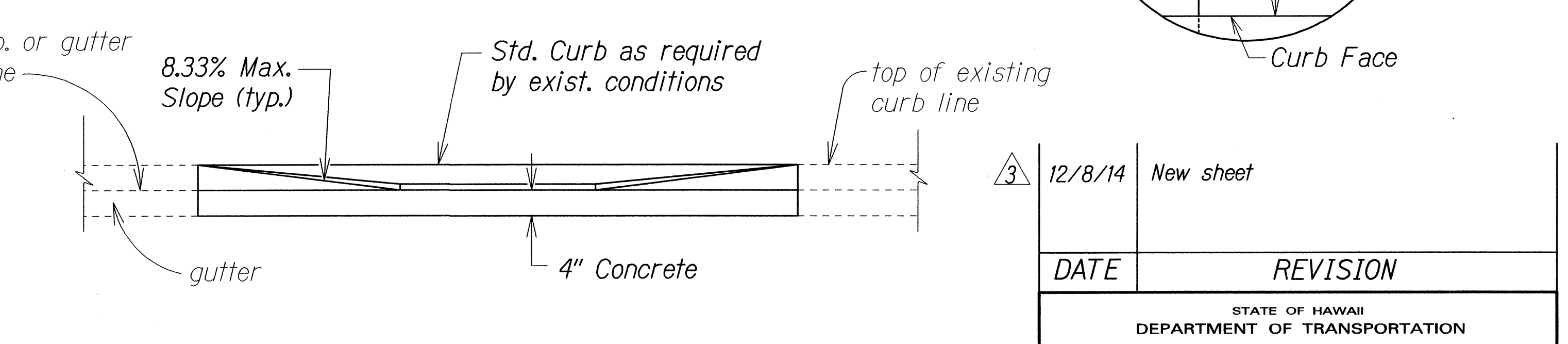
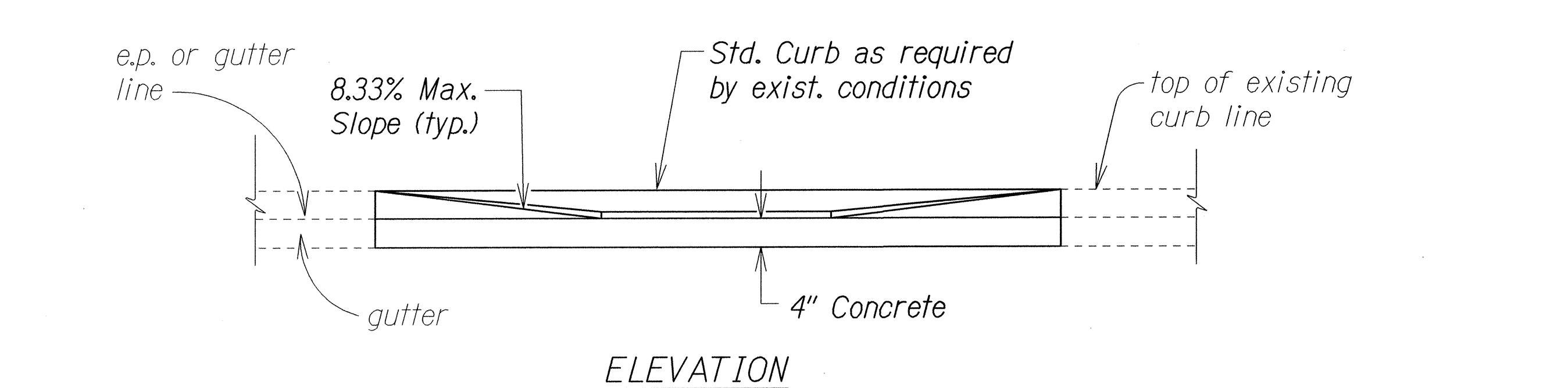
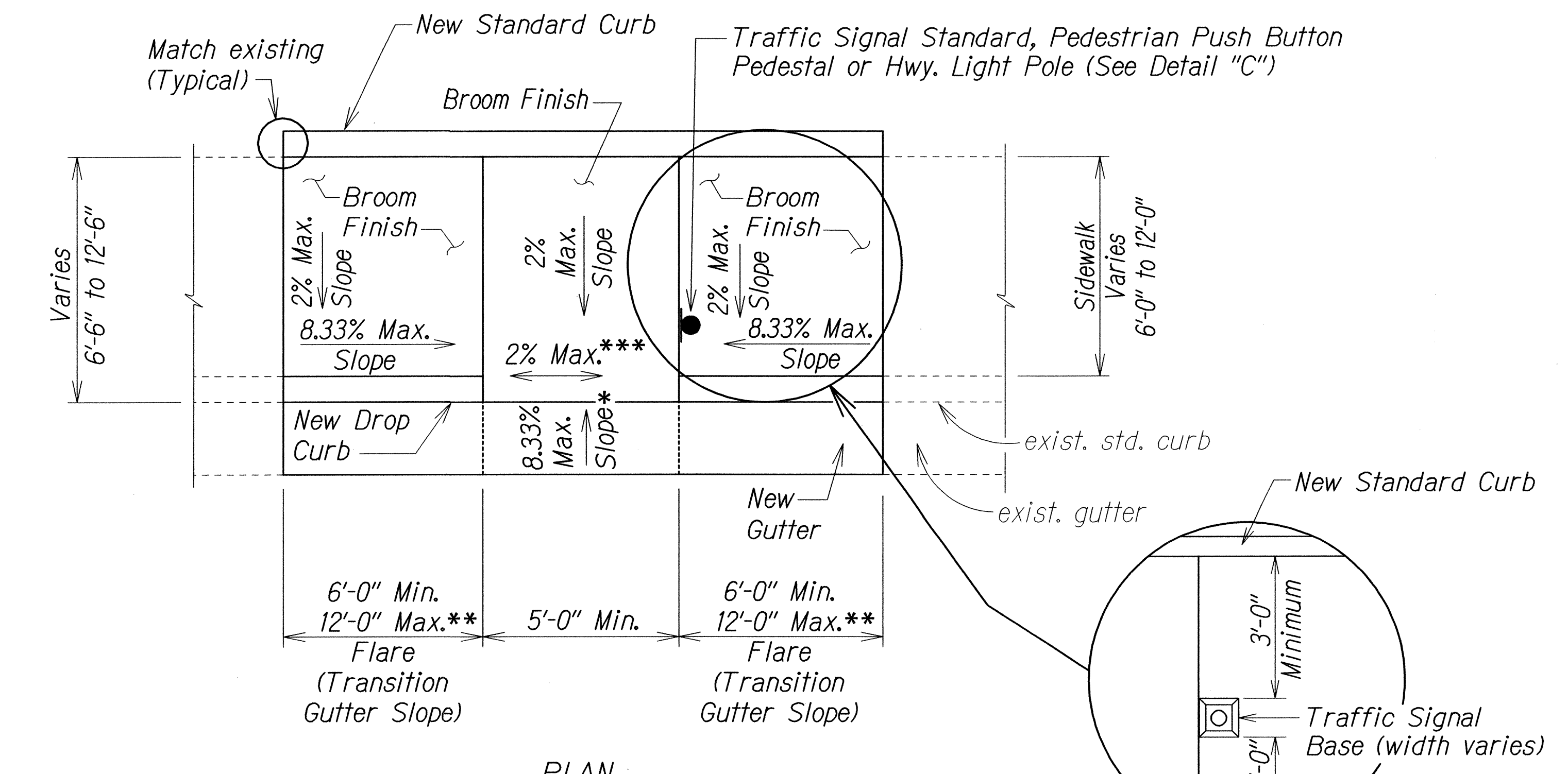
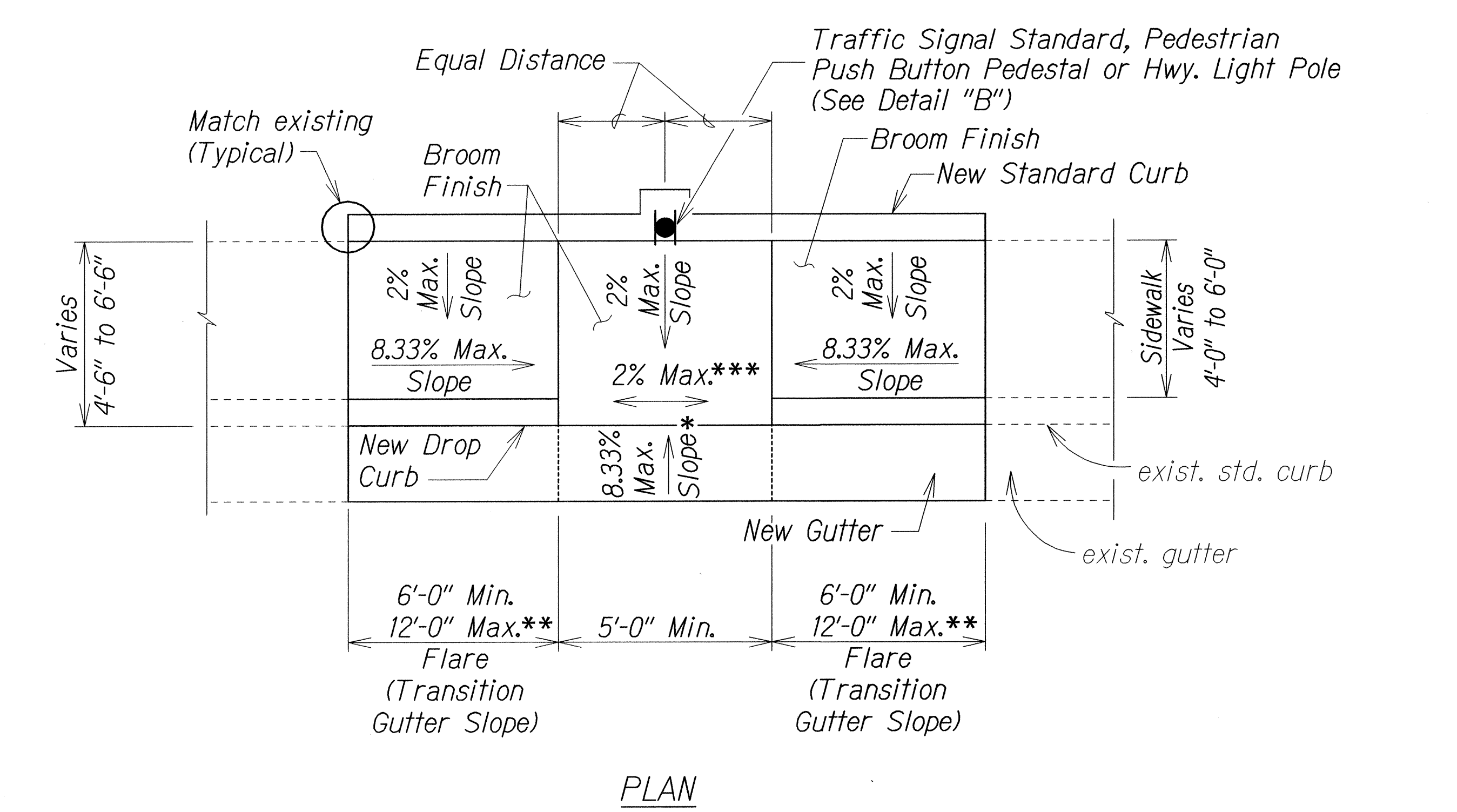
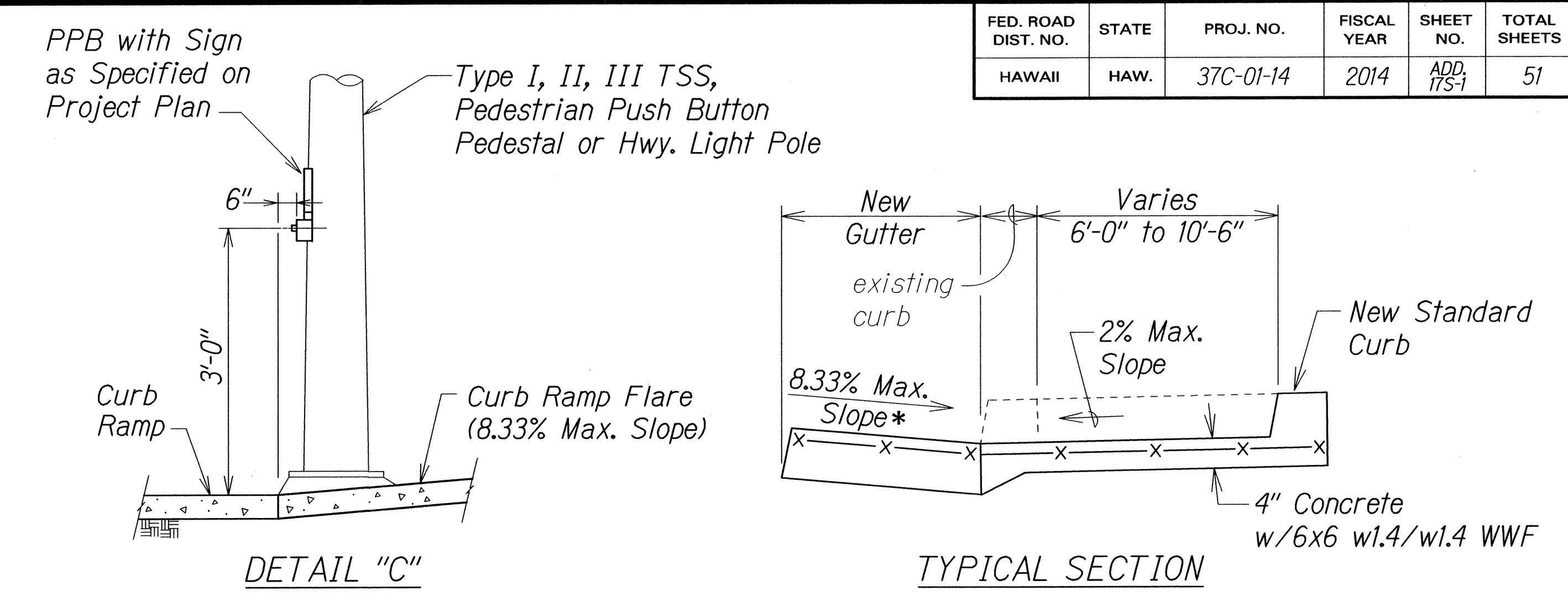
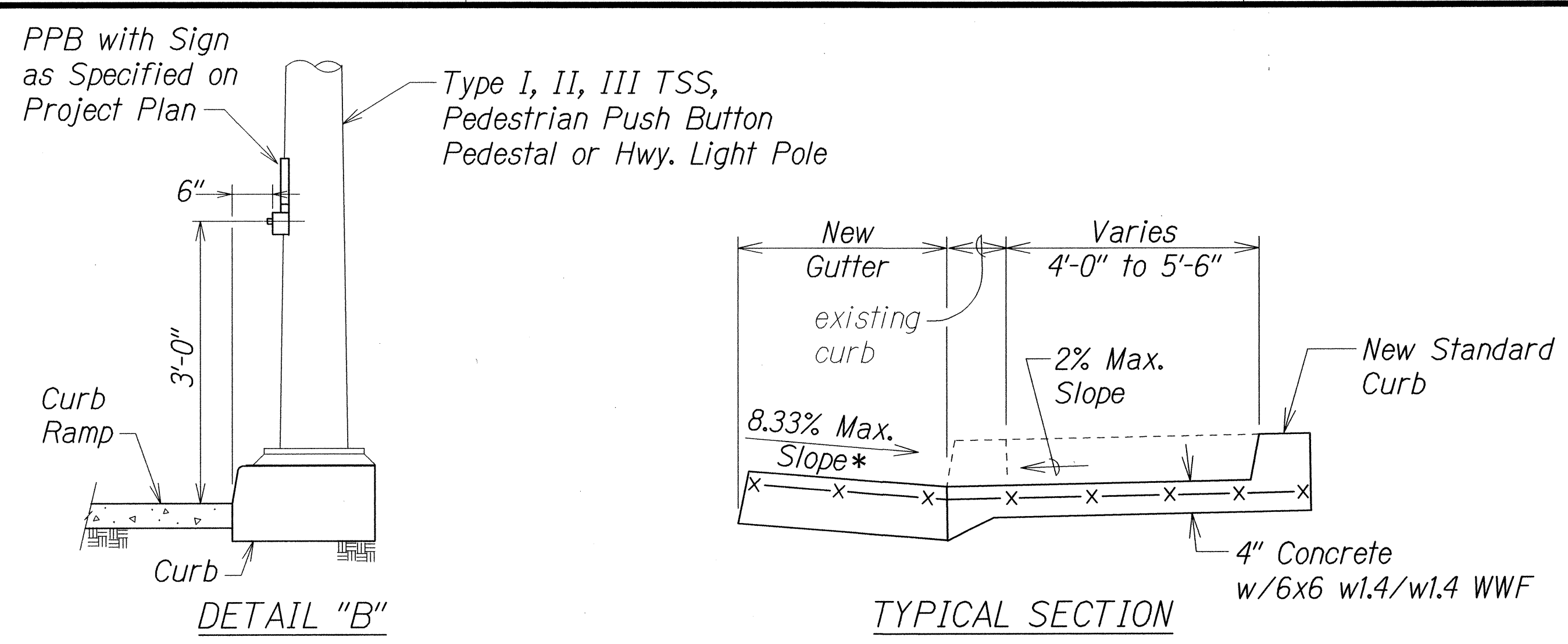
CURB RAMP DETAILS

MAIN STREET RESURFACING
High Street to Kaahumanu Avenue and
KAAHUMANU AVENUE RESURFACING
Main Street to Hobron Avenue
Federal-Aid Project No. NH-032-1(010)
Not to Scale Date: September, 2014

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R12-06-06 JE-XX sht. 2 of 9 tdl/usr2/traffic/std/curbramp/rampa-r12-06-06.dgn

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

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

DATE	12/8/14	REVISION	New sheet
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION CURB RAMP DETAILS MAIN STREET RESURFACING High Street to Kaahumanu Avenue and KAAHUMANU AVENUE RESURFACING Main Street to Hobron Avenue Federal-Aid Project No. NH-032-1(010) Not to Scale Date: September, 2014 SHEET No. 3 OF 3 SHEETS			

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