CURB RAMP NOTES:

- 1. These details are intended as guidelines for curb ramp construction. A site specific detail that meets American with Disabilites Act (ADA) requirements shall be shown on the plans.
- 2. To ensure constructability, spot elevations shall be used in the design.

 Benchmarks and horizontal ties shall be provided for construction stakeout.
- 3. A 2% maximum cross slope shall be maintained in the direction of pedestrian traffic.
- 4. Curb ramps shall be installed at 90° to the sidewalk or to the maximum extent feasible, in alterations.
- 5. At intersections, curb ramps for each crosswalk are preferred and shall be in line and into the crosswalk. However, for existing sites, a single curb ramp (diagonal curb ramp) serving two crosswalks can be approved if the design detail is acceptable by the State.
- 6. Subject to field conditions, the Engineer shall determine the final location of curb ramps.
- 7. If a curb ramp cannot be designed according to these guidelines and the American with Disabilities Act Accessibility Guidelines (ADAAG), either a "Technically Infeasible" form (for existing construction) or a "Structurally Impracticable" form (for new construction) shall be filled—out and submitted to the Disability and Communication Access Board (DCAB).
- 8. The maximum slopes of adjoining gutters or road surface immediately fronting the curb ramp shall not exceed 5%. The 5% counterslope may be exceeded when the change of grade does not exceed 13% over a distance of 2 ft.
- 9. All pullboxes shall be installed away from the curb ramp and within the sidewalk/unpaved area or as directed by the Engineer. Pullboxes may be installed within Type A curb ramp flares, but not within curb ramp runs.
- 10. 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.
- 11. Transitions from ramps to gutters and streets shall be flush and free of abrupt level changes.
- 12. Curb ramps and sidewalks shall be designed and constructed to eliminate ponding to the maximum extent feasible.
- 13. The pedestrian push button shall meet operational and reach requirements of the ADAAG.
- 14. There shall be a 30"x48" level ground surface for a forward or side approach, as appropriate, to a pedestrian push button.
- 15. Construction joints are required to join curb ramps with sidewalks, curbs, and gutters. (See Standard Plan D-14 for construction joint detail).
- 16. Curb ramps shall be reinforced if adjacent sidewalks are reinforced.
- 17. Surface of sidewalks and curb ramps shall be firm, stable, and slip-resistant. This includes the surfaces of pullboxes, valve covers, manhole covers, etc.
- 18. Bed course material is required for curb ramps, sidewalks, and gutters.
- 19. All plans and specifications shall be submitted (for review) to DCAB to ensure conformance with the ADAAG as well as any supplemental design specifications established or adopted by DCAB.
- 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.

ED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR		TOTAL SHEETS
HAWAII	HAW.	NH-058-1(3)	2001	16	39

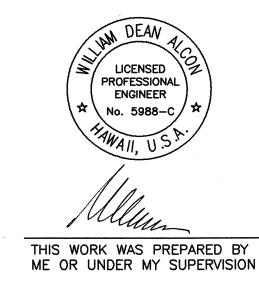
21. Additional information is available from:

a) Accessible Rights—of—Way: A Design Guide, November 1999, The Access Board.

b) Designing Sidewalks and Trails for Access, July 1999, FHWA.

SIDEWALK NOTES:

- 1. 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.
- 2. Narrow sidewalks (3'-0" min. width, excluding curb) may prohibit the installation of any sign posts, utility poles, fire hydrants, traffic signal standards, light poles, etc. in the sidewalk.
- 3. Passing spaces along new sidewalks 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.
- 4. For new construction, the minimum sidewalk width shall be 6'-0" (excluding curb). The cross slope shall not exceed 2%. For high pedestrian traffic, the width shall be a minimum of 12'-0" or as determined by the Engineer.
- 5. If possible, install utility poles, fire hydrants, light poles, sign posts, pullboxes, etc. off of sidewalk but within the right-of-way.
- 6. 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.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP GENERAL NOTES

NAWILIWILI ROAD RESURFACING
Kaumualii Highway to Waapa Road
Federal Aid Proj. No. NH-058-1(3)

Scale: NTS

Date: Nov. 2000

SHEET No. 1 OF 1 SHEETS

