

DEPARTMENT OF TRANSPORTATION

Repeal of Chapter 19-127 and  
Adoption of Chapter 19-127.1  
Hawaii Administrative Rules

February 12, 1993

SUMMARY

Chapter 19-127, Hawaii Administrative Rules, entitled "Design, Construction, and Maintenance of Public Streets and Highways", is repealed.

Chapter 19-127.1, Hawaii Administrative Rules, entitled "Design, Construction, and Maintenance of Public Streets and Highways", is adopted.

HAWAII ADMINISTRATIVE RULES

TITLE 19  
DEPARTMENT OF TRANSPORTATION

SUBTITLE 5  
MOTOR VEHICLE SAFETY OFFICE

CHAPTER 127.1  
DESIGN, CONSTRUCTION, AND MAINTENANCE  
OF PUBLIC STREETS AND HIGHWAYS

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Historical note. This chapter is based substantially upon chapter 19-127, Hawaii Administrative Rules. [Eff 8/26/82; R JAN 21 1994 ]

§19-127.1-1 Scope. This chapter shall apply to all persons and agencies who design, construct, and maintain facilities which are, or are intended to become, public streets and highways in the State. Existing public streets and highways which do not conform to the guidelines set forth in this chapter shall not be affected, but any replacements or upgrading made to these streets and highways, or major portions thereof, shall conform to this chapter, where conformance is deemed practicable by the director. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-2 Definitions. As used in this chapter, unless the context clearly indicates otherwise:

"AASHTO guides" means the current edition of the "Guides of the American Association of State Highway and Transportation Officials" published by the American Association of State Highway Transportation Officials.

"ANSI standard" means the current edition of the "American National Standards Institute" published by the Illuminating Engineering Society.

"Control of access" means a restriction or prohibition of ingress or egress or both ingress and egress between a highway or street and adjacent land. The restrictions or prohibition may be complete or may affect vehicular access only.

"Director" means the director of the state department of transportation or person acting directly or through their duly authorized representatives.

"Flasher" means a portable power operated lens-directed enclosed light, illuminated by rapid intermittent flashes of short duration, temporarily installed for advance warning or for the marking of severe or unexpected hazards in or near the roadway.

"Highway, street, or road" means a general term denoting a public way for the purposes of vehicular travel, including the entire area within the right-of-way.

"Manual" means the Hawaii Statewide Uniform Design Manual for Streets and Highways and Standard Plans.

"Median" means the portion of a divided highway separating the traveled ways for traffic in opposite directions.

"Traveled way" means the portion of a roadway opened to movement of vehicles, exclusive of shoulders and auxiliary lanes.

"State" means the State of Hawaii.

"State or county agency having jurisdiction" means the state or county department or agency having the responsibility for the design, construction, or maintenance of highways, streets, or roads where the work is to be done. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-3 Guidelines. Design practices for which guidelines are not expressly established in this chapter shall conform to the highway design, street operational practices and street light standards set forth in the ANSI standard, AASHTO guides and the manual. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-4 Design guidelines. (a) The design guidelines established by this chapter should be followed as closely as is practicable in the construction or reconstruction of all highways, streets, or roads undertaken either by state or county authorities in the state or by individuals intending to dedicate the facilities to governmental authorities.

(b) Any deviations from these guidelines which affect highway safety shall not be made unless prior approval of these deviations has been granted by the state or county agency having jurisdiction.

(c) Interim improvements for safety or the facilitating of traffic flow that deviate from these guidelines may be made when deemed necessary by the state or county agency having jurisdiction.

[Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

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§19-127.1-5 Geometric design. The design guidelines for safety features, such as sight distance, horizontal and vertical curvature, width of lanes and shoulders, spacing of decision points, bridges, guardrails, and poles, should be the minimum guidelines established by the AASHTO guides and the manual. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-6 Roadside areas. The roadside should be clear of all nonessential obstacles as determined by the state or county agency having jurisdiction. The area beyond the shoulder should be free of obstacles within a clear zone distance from the edge of the traveled way. Rounded ditch sections and flat side slopes which can be traversed by an out-of-control vehicle should be utilized. Ramps to stop runaway vehicles should be constructed whenever the terrain makes it necessary. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-7 Utility poles. Utility poles should be located as set forth in chapter 19-105. All other sign poles, light standards, or any other poles should be located within a clear zone distance as established by the AASHTO guides, or should be designed to "break away" or shear off when struck by a vehicle. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-8 Guardrails and barriers. Where it is not feasible or desirable either to locate a possible roadside hazard within the clear zone distance or to design it to break away or shear off, guardrails, concrete barriers, or energy absorbing protective devices should be installed to protect out-of-control vehicles leaving the roadway. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127-1.9 Pedestrian walkways. Where pedestrian

traffic is permitted, the pedestrian sidewalks or walk areas should be separated from vehicular traffic in accordance with the guidelines. Barriers, curbs, or guardrails should be used at potentially hazardous locations. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-10 Skid resistance of pavements. The roadway pavement should be designed so that the surface can develop skid resistance qualities. The design of pavement shall consider materials and methods that will minimize the loss of skid resistance qualities in the wearing surface. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-11 Roadway lighting. (a) The installation of new, or the upgrading of existing, highway lighting systems should be undertaken with the following priority, except where considerations of accident frequency or potential demand otherwise:

- (1) Highways, streets, and roads in urban areas.
- (2) Junctions of major highways in rural areas.
- (3) Locations on or sections of other highways, streets, and roads having high ratio of night-to-day motor vehicle or pedestrian accidents.
- (4) Tunnels and long underpasses.

(b) Roadway lighting levels on highways with speed limits over fifty miles per hour should conform to the lighting level and uniformity prescribed in the AASHTO guides.

(c) Roadway lighting levels on highways, streets, and roads should conform to the lighting levels and uniformity prescribed in the ANSI standard or AASHTO guides except that state or county agencies having jurisdiction may follow specifications outlined in the manual.

(d) All roadway lighting systems should be installed according to current and acceptable

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electrical and construction practices.

[Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-12 Construction and maintenance guidelines. The construction and maintenance guidelines established by this chapter should be followed as closely as is practicable in the construction, reconstruction, and maintenance of all highways, streets, and roads undertaken either by state or county authorities in the state or by individuals intending to dedicate these highways, streets and roads to governmental authorities. All deviations from these guidelines which affect highway safety shall not be made unless prior approval of these deviations has been granted by the director. Minor deviations may be made with the approval of the traffic engineer from the state or county agency having jurisdiction.

[Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-13 Construction or maintenance work affecting traffic. All work affecting traffic on new or existing public highways, streets, and roads should be so conducted as to offer the least possible obstruction and inconvenience to vehicular and pedestrian traffic and all of said work shall be subject to the prior approval of the director.

[Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-14 Traffic control devices and lighting at construction sites. Traffic control devices and highway lighting, at least equal to the existing devices and lighting, should be provided and maintained in a construction or maintenance area for the benefit of vehicular and pedestrian traffic during the progress of any construction or maintenance work.

[Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-15 Flow of traffic through construction site. The flow of vehicular traffic through construction or maintenance worksites should be controlled by chapter 19-129. [Eff JAN 21 1994 ]  
(Auth: HRS §286-8) (Imp: HRS 286-8)

§19-127.1-16 Lanes closed to traffic. Not more than one lane should be closed to vehicular traffic at one time, on highways, streets, or roads except when special approval is granted by the state or county agency having jurisdiction. [Eff JAN 21 1994 ]  
(Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-17 Excavation work. Except in cases of extreme emergency, when it becomes necessary to excavate along or across an existing highway, street or road, the excavation work should be performed during off-peak traffic hours as determined by the traffic engineer of the state or county agency having jurisdiction. Except in cases of extreme emergency, all excavation work during peak hours shall cease and the excavation shall be spanned with safe non-skid bridging material securely anchored so that the full width of the traveled way will be available to vehicular traffic. This section should not apply when a highway, street, or road has been closed to vehicular traffic and designated a construction area.  
[Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-18 Pedestrian traffic through construction sites. Pedestrian traffic should be provided with safe and convenient passage through construction or maintenance worksites wherever practicable. Temporary sidewalks or smoothed, all-weather surfaces should be provided for pedestrians. Signs, traffic cones, barricades, and other devices should be used to warn pedestrians of hazards and to direct pedestrian traffic to detour routes. If pedestrian traffic cannot be afforded safe and convenient passage through a worksite, the worksite should be barricaded off and pedestrian traffic should



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be excluded. [Eff JAN 21 1994 ] (Auth: HRS §286-8)  
(Imp: HRS §286-8)

§19-127.1-19 Traffic incident to construction or maintenance. All traffic incident to a construction or maintenance operation should follow approved traffic patterns, as determined by the traffic engineer from the state or county agency having jurisdiction over the operation. Crossing median strips should not be permitted except at designated openings provided therefor.

[Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-20 Time of maintenance operations. Any maintenance operation on highways, streets, or roads with a speed limit over fifty miles per hour should be carried on so as to minimize the time, length, and frequency of these operations. [Eff JAN 21 1994 ]  
(Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-21 Stockpiling of excavated material. Excavated material should not be stockpiled, after working hours, on the roadway, shoulder, sidewalks, walkways, or ditch areas of any highway, street or road. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-22 Detours. (a) Where existing roads are not available for use as detour routes, all traffic may be routed through the worksite with as little inconvenience or delay as possible. A reasonably smooth and even roadway surface satisfactory for use by public traffic should be provided.

(b) Any detour route which will remain in effect for more than forty-eight hours should have a roadway with a smooth, all-weather surface and, wherever practicable, all-weather paving should be used, and lane lines shall be applied. [Eff JAN 21 1994 ]  
(Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-23 Storage of equipment. Construction equipment and vehicles, when not in operation, should not be parked on the traveled way, median strips or shoulders closer than eight feet from the edge of the roadway of any highway, street, or road. Construction equipment and vehicles, when not in operation, should not be parked on the roadway, medial strips, or shoulders in any manner which obstructs or endangers traffic. Construction equipment and vehicles marked on the roadway or on medial strips or shoulders within twelve feet of the edge of the roadway should be mounted with amber flashers or properly barricaded with barricades equipped with amber flashers.  
[Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-24 Vehicles or equipment awaiting use. Vehicles waiting to be loaded or unloaded, or equipment of any type not immediately necessary for the work, should not be parked or allowed to stand so as to impede, obstruct, interfere with, or endanger the flow of normal traffic. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-25 Maintenance of roadway surfaces. Pavement surfaces of the roadway should be maintained with skid resistance qualities as determined by the state department of transportation materials testing Branch. Potholes, faults, depressions, and localized failures should be repaired as soon after they are reported as is practicable. Unpaved roadway surfaces should be maintained so as to be passable with safety and comfort at all times and in all weather conditions. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-26 Maintenance of shoulders. The surfaces of shoulders should be maintained in a smooth and safe condition so as to permit the shoulders to be used for emergency stops and parking. Shoulders should be stable enough to support normal traffic. Shoulders with drops or buildups of three inches or more should

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be restored to pavement grade level. Brush and grass on shoulders should be cut before they reach a height of one foot. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-27 Removal of litter and dead animals. Litter and dead animals on the roadway should be removed after being reported or observed. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-28 Repair of fences, rails, etc. Damaged fences, guardrails, and other barriers on highways, streets, and roads should be repaired immediately after they are reported if their condition is hazardous to traffic. If their condition is not hazardous to traffic, they should be repaired as soon as is practicable. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-29 Removal of spillage. Spillage of materials along or across the roadway should be removed as soon as is practicable by the operator of the vehicle or by the hauling company employees. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-30 Maintenance of pavement markings. Painted pavement marking should be renewed when condition reaches No. 4 degree of abrasion and erosion (American Society for Testing and Materials method: D821). Tape and thermoplastic markings should be renewed as determined by the traffic engineer of the state or county agency having jurisdiction. Raised markers should be maintained so that at least ninety per cent of the markers are in place. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-31 Maintenance of signs, etc. Signs, markers, and reflectors should be maintained so that

they are legible at all times. Damaged or weathered signs, markers, and reflectors should be replaced as required, with urgency being given to regulatory and warning signs. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-32 Repair of traffic control signals and signs. Malfunctioning or damaged traffic control signals and signs regulating moving vehicles, such as "stop", "one way", and "do not enter" signs should be repaired, within capability, immediately after being reported or observed. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-33 Inspection of lights. All highway lights should be inspected at night at least semi-annually. Defective lights should be repaired, within capability, immediately after they are reported. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-34 Street sweeping. All highways, major streets, and roads should be swept to remove loose gravel and debris at least once a month. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-35 Storm damages. Storm damage that affects the safe passage of traffic should be restored to passable condition. Permanent repairs should be accomplished as soon as possible. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-36 Severability. If any section or part of this chapter is held invalid for any reason, the invalidity shall not affect the validity of the remaining section or parts of this chapter. [Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

§19-127.1-37

§19-127.1-37 Repeal. All rules and regulations governing the design, construction, and maintenance of public highways, streets, and roads in effect prior to the effective date of this chapter are repealed.

[Eff JAN 21 1994 ] (Auth: HRS §286-8) (Imp: HRS §286-8)

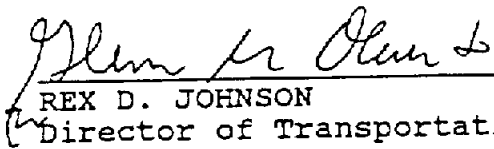
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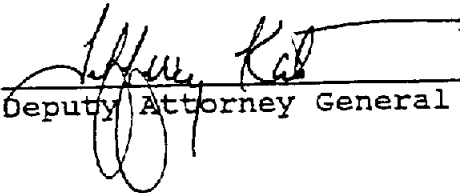
DEPARTMENT OF TRANSPORTATION

Chapter 19-127.1 Hawaii Administrative Rules, on the Summary Page dated February 12, 1993, were adopted on October 8, 1993, following public hearings held on September 15, 17, 20, 21, and 23, 1993 after public notices were given in the Honolulu Advertiser on August 8, in the Maui News, the Garden Island News and the Hawaii Tribune-Herald on August 6, and the Molokai News on August 11, 1993.


The repeal of chapter 19-127 and the adoption of chapter 19-127.1 shall take effect ten days after filing with the office of the Lieutenant Governor.

  
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REX D. JOHNSON  
Director of Transportation

APPROVED AS TO FORM:

  
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Deputy Attorney General

APPROVED:

  
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JOHN WAIHEE  
Governor  
State of Hawaii

Date: JAN 10 1994 JAN 11 9 31 AM '94 LEUTENANT GOVERNOR'S OFFICE  
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Filed