

WAI Committee

From: McNeff, Mathew <mathew.mcneff@hawaiianelectric.com>
Sent: Monday, July 1, 2024 2:36 PM
To: WAI Committee
Cc: Decker, Shayna
Subject: Hawaiian Electric comments to BILL 90 (2023), RELATING TO UTILITY LINES AND FACILITIES (WAI-12)
Attachments: honolulu-hi-1.pdf; SubRulesRegs_1.pdf; 07.01.2024_WAI Committee_Bill 90_Hawaiian Electric.pdf

You don't often get email from mathew.mcneff@hawaiianelectric.com. [Learn why this is important](#)

Good afternoon,

Please see attached comments to Bill 90 and documents referenced therein.

Aloha,

MATHEW MCNEFF

Director, Hawaiian Electric, Maui County

O: 808.872.3245

mathew.mcneff@hawaiianelectric.com

Hawaiian Electric

PO Box 398, Kahului, HI 96733



CONFIDENTIALITY NOTICE: This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and/or privileged information. Any unauthorized review, use, copying, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender immediately by reply e-mail and destroy the original message and all copies.



**Hawaiian
Electric**

**COMMENTS BEFORE THE
WATER AND INFRASTRUCTURE COMMITTEE**

**Bill 90 (2023)
A BILL FOR AN ORDINANCE AMENDING SECTION 18.20.140, MAUI COUNTY
CODE, RELATING TO UTILITY LINES AND FACILITIES**

Tuesday, July 2, 2024
1:30 PM
Council Chamber

Mathew McNeff
Director, Maui, Moloka'i and Lāna'i
Hawaiian Electric

Aloha Chair Cook, Vice Chair Sugimura, and Members of the Committee,

My name is Mathew McNeff, and I am sharing comments on behalf of Hawaiian Electric on Bill 90 (2023), entitled "A BILL FOR AN ORDINANCE AMENDING SECTION 18.20.140, MAUI COUNTY CODE, RELATING TO UTILITY LINES AND FACILITIES." We understand Bill 90's (2023) purpose is to require the undergrounding of utility lines, consistent with an objective of the Maui County General Plan relating to Improving Physical Infrastructure.

In terms of County of Maui's Bill 90 (2023), it would help if the language clarified:

- That the bill is intended to be applied to new properties and not meant to cover conversions or replacements of existing overhead infrastructure or current infrastructure.

For any current/existing overhead to underground conversions, Hawaiian Electric is a regulated public utility and must comply with the tariff rules approved by the Hawai'i Public Utilities Commission ("PUC") that govern such work. Once the PUC approves

governing tariff rules, they have the force of law. On this point, Tariff Rule 13 requires that the cost of converting an existing overhead line or service to underground must be borne by the applicant requesting the change.

In particular, when mutually agreed upon by the customer or applicant and Hawaiian Electric, overhead facilities will be replaced with underground facilities, provided the customer or applicant requesting the change makes a contribution of the estimated cost equal to the installed cost of the underground facilities less the estimated cost of the net salvage of the overhead facilities removed. Accordingly, if applied outside of new properties to existing electrical infrastructure, Bill 90 (2023) would have a major financial impact upon Maui County residents.

For reference, Hawaiian Electric adheres to a similar ordinance on O'ahu that states it is applicable to new developments. Please see the [Honolulu ordinance linked here](#) for reference. This ordinance is housed in the Subdivision of Land section of Honolulu Revised Ordinances. Subdivision rules can be found at https://www.honolulu.gov/rep/site/csd/mrc_docs/SubRulesRegs_1.PDF. (Both also attached here).

Thank you for the opportunity to provide comments and we look forward to continued discussions on Bill 90 (2023).

ARTICLE 5: UTILITY LINES

Sections

- 22-5.1 Installation of utility lines
- 22-5.2 Exception
- 22-5.3 Modification
- 22-5.4 Appeal
- 22-5.5 Applicability
- 22-5.6 Definition
- 22-5.7 Penalty

§ 22-5.1 Installation of utility lines.

Notwithstanding any ordinance or regulation to the contrary, utility lines, including but not limited to those required for electric, telephone, street lighting, cable television services, and other related facilities, shall be installed underground in all subdivisions laid out within the city in accordance with the applicable standards and methods employed for such underground installation by the public utility companies involved; provided that if a subdivision consists of three lots or less and if no other lot situated within 500 feet of such subdivision is provided with utility lines and related facilities installed in accordance with this article for underground installation, the subdivider may, at the subdivider's discretion, arrange to have such utility lines and related facilities installed overhead in accordance with the standards and methods employed for such overhead installation by the public utility companies; and provided further, that the underground installation of utility lines shall not be required within agricultural subdivisions consisting of lots with minimum area of 2 acres and which are exempted under § 1-109 of the subdivision rules and regulations of the city from the requirements applicable to the construction of street improvements and utilities. The subdivider shall be responsible for making the necessary arrangements with the public utility companies concerned for the installation of such utility lines and related facilities in accordance with the requirements of this article. The utility lines and related facilities shall be installed in such a manner so as not to interfere with other underground utilities of the city or the proposed locations of such underground utilities.

(Sec. 22-5.1, R.O. 1978 (1983 Ed.)) (1990 Code, Ch. 22, Art. 5, § 22-5.1)

§ 22-5.2 Exception.

This article shall not apply to the following types of utility lines and related facilities:

- (1) Poles used exclusively for police and fire alarm boxes, traffic control facilities, street lighting, or similar equipment belonging to or operated by either the State or the city;
- (2) Overhead lines attached to the exterior surface of a building by means of a bracket or other fixture and extending from one location of the building to another location on the same building or to an adjacent building without crossing any street or alley;
- (3) Electric distribution or transmission system in excess of 15 kV;
- (4) Electric distribution transformers and related switching and protective equipment mounted on pads or metal poles without crossarm;
- (5) Electric distribution circuits of the 12 kV class supported by metal poles without crossarm; and
- (6) Communication distribution terminals and television cable apparatuses mounted on pads or aboveground pedestals.

(Sec. 22-5.2, R.O. 1978 (1983 Ed.)) (1990 Code, Ch. 22, Art. 5, § 22-5.2)

§ 22-5.3 Modification.

(a) Whenever the strict application of the requirements of this article would be impractical because of the nature of the surface, subsurface, or topographical conditions of the property to be subdivided, or because of the high cost of installing the utility lines and related facilities underground in accordance with the requirements of this article as compared to the cost involved in making similar type of installation in other subdivisions of similar nature and of equivalent size in the city, or because of any requirement under Articles 14-8 through 14-15, which prevents the strict application of the requirement of this article to an improvement district project, the director may make such modification thereof as in the director's opinion is reasonably necessary in the interest of the public and not contrary to the intent and purposes of this article.

(b) Before making any such modification, the director shall refer the request for any such modification to the chief engineer and the director of transportation services for their recommendations.

(Sec. 22-5.3, R.O. 1978 (1983 Ed.)) (1990 Code, Ch. 22, Art. 5, § 22-5.3)

§ 22-5.4 Appeal.

Any person adversely affected by the director's action may appeal from such action to the zoning board of appeals,

pursuant to § 22-3.7.

(Sec. 22-5.4, R.O. 1978 (1983 Ed.)) (1990 Code, Ch. 22, Art. 5, § 22-5.4)

§ 22-5.5 Applicability.

The requirements under this article shall apply to all subdivisions laid out after the effective date of this article; provided such requirements shall not apply to any subdivision for which tentative approval of the preliminary map and approval of the construction plans have been granted, and the performance of the work under such construction plans has been secured by bond or in the alternative for a subdivision involving five lots or less, the work under such construction plans has started, on or before the effective date of this article, and that approval of final map of such subdivision is subsequently granted in accordance with the subdivision rules and regulations.

(Sec. 22-5.5, R.O. 1978 (1983 Ed.)) (1990 Code, Ch. 22, Art. 5, § 22-5.5)

§ 22-5.6 Definition.

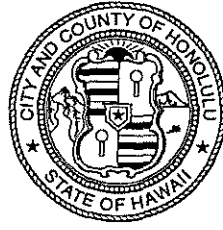
The terms subdivider and subdivision used herein means the same as the terms are defined in Article 3 of this chapter.

(Sec. 22-5.6, R.O. 1978 (1983 Ed.)) (1990 Code, Ch. 22, Art. 5, § 22-5.6)

§ 22-5.7 Penalty.

Any person, firm, or corporation which violates this article shall be fined not more than \$1,000 or imprisoned not more than one year, or both.

(Sec. 22-5.7, R.O. 1978 (1983 Ed.)) (1990 Code, Ch. 22, Art. 5, § 22-5.7)



SUBDIVISION RULES and REGULATIONS

DEPARTMENT OF PLANNING AND PERMITTING
City and County of Honolulu

CITY AND COUNTY OF HONOLULU

DEPARTMENT OF PLANNING AND PERMITTING

Adopted June, 1973

Effective date September 13, 1973

Amended Sections 1-107, and 1-115 July 28, 1981

Effective date August 20, 1981

Amended Sections 2-203(c) and 3-302(b) June 6, 1984

Effective date June 16, 1984

Amended Sections 1-107, 1-109(a), 1-115, 2-202(a), 4-410, 4-411, 4-412 and 4-413 July 19, 1989

Effective date September 11, 1989

Subdivision Rules and Regulations Standards replaced in its entirety by Subdivision Street

Standards adopted on December 1, 2000

Effective date June 1, 2001

Reprinted August, 2005

SUBDIVISION RULES AND REGULATIONS

Planning Commission
City and County of Honolulu

C O N T E N T S

<p>SECTION 1 GENERAL PROVISIONS Page</p> <p>1-101. Title and Authority 1</p> <p>1-102. Purpose 1</p> <p>1-103. Scope 1</p> <p>1-104. Administration 1</p> <p>1-105. Appeals 1</p> <p>1-106. Violations and Penalties 2</p> <p>1-107. Definitions 2</p> <p>1-108. Subdivision Committee 3</p> <p>1-109. Exemptions 3</p> <p>1-110. Consolidation 3</p> <p>1-111. Dedication 3</p> <p>1-112. Modifications 4</p> <p>1-113. Fees 4</p> <p>1-114. Public Utility Easements 4</p> <p>1-115. Agricultural Subdivision 4</p> <p>SECTION 2 PRELIMINARY MAP</p> <p>2-201. Requirements 5</p> <p>2-202. Procedures 6</p> <p>2-203. Action 6</p> <p>SECTION 3 FINAL MAP</p> <p>3-301. Requirements 7</p> <p>3-302. Procedures 8</p> <p>3-303. Action 8</p> <p>SECTION 4 DESIGN STANDARDS</p> <p>4-401. Conformance to General Plan 9</p> <p>4-402. Conformance to Other Regulations 9</p> <p>4-403. Land Suitability 9</p> <p>4-404. Design Review 9</p> <p>4-405. Streets and Highways 9</p> <p>4-406. Access 11</p> <p>4-407. Drainage, Water, Sewers, and Utilities 11</p> <p>4-408. Pedestrian Ways 12</p> <p>4-409. Block Width and Length 12</p> <p>4-410. Lot Area, Width and Depth 12</p> <p>4-411. Grading 12</p> <p>4-412. Street Names 12</p> <p>4-413. Optional Developments 12</p>	<p>SECTION 5 IMPROVEMENTS Page</p> <p>5-501. General 13</p> <p>5-502. Streets and Highways 13</p> <p>5-503. Private Streets 13</p> <p>5-504. Drainage 14</p> <p>5-505. Street Lighting 14</p> <p>5-506. Underground Utilities 14</p> <p>5-507. Water Supply and System 14</p> <p>5-508. Sewers 14</p> <p>5-509. Street Monuments 14</p> <p>5-510. Street Name Signs 15</p> <p>5-511. Traffic Controls 15</p> <p>5-512. Planting 15</p> <p>5-513. Street Trees 15</p> <p>5-514. Pedestrian Way 15</p> <p>SECTION 6 CONSTRUCTION</p> <p>6-601. Construction Plans 15</p> <p>6-602. Completion of Improvements for Final Map Approval 16</p> <p>6-603. Construction Procedures 17</p> <p>6-604. Inspection 17</p> <p>6-605. Certification 17</p> <p>6-606. Repair and Replacement of Improvements 18</p> <p>6-607. Approval of Improvements 18</p> <p>SECTION 7 CONFLICTING RULES AND REGULATIONS 18</p> <p>SECTION 8 SEVERABILITY 19</p> <p>SECTION 9 EFFECTIVE DATE 19</p> <p>SUBDIVISION STREET STANDARDS SN-1</p> <p>STREET NAME STANDARDS SN-2</p>
---	---

**SUBDIVISION RULES AND REGULATIONS
OF THE
PLANNING COMMISSION
CITY AND COUNTY OF HONOLULU**

SECTION 1. GENERAL PROVISIONS

Section 1-101. Title and Authority.

These rules and regulations may be cited as the Subdivision Rules and Regulations of the City and County of Honolulu. These rules and regulations are adopted pursuant to the authority granted by the City Charter and Chapter 22, Revised Ordinances 1990, as amended.

Section 1-102. Purpose.

The purpose of these rules and regulations is to regulate and control the subdivision and consolidation of land for the following purposes; all of which promote the general welfare and an environment that is safer, healthier, more convenient, efficient, and attractive:

- (a) To implement the General Plan and Development Plan of the City.
- (b) To insure and promote the observance of desirable planning and engineering design principles and practice.
- (c) To Promote good civic planning and design and assure an arrangement of lots, streets, utilities and other features so as to achieve an orderly layout and efficient use of the land.
- (d) To preserve, enhance and improve the natural amenities, qualities, and environment of the community by securing a harmonious relationship between the subdivision and its environment.
- (e) To coordinate street improvements with relation to existing and planned street and highway system and insure adequate provisions for traffic control, traffic safety, water supply, sewage drainage, and electrical and other utility lines.
- (f) To prevent population congestion and to secure safety from fire and other dangers to persons and property.
- (g) To promote efficient expenditure of public money.

Section 1-103. Scope.

- (a) No person shall subdivide or consolidate land without complying with the provisions of these rules and regulations and receives approval of the final map.
- (b) No person shall designate an easement unless it conforms to the provisions of these rules and regulations and receives approval.
- (c) No person shall submit a map of a subdivision or consolidation, for recordation or filing in the State Registrar of Conveyances or Registrar of the Land Courts, unless a final map has been approved by the Director.
- (d) No person shall sell, transfer, or advertise, any interest in land located in a subdivision or consolidation until the final map thereof has been approved by the Director and recorded in the State Registrar of Conveyances, Registrar of the Land Courts or Office of the State Surveyor.
- (e) Within a subdivision, no roadway system shall be opened to the general public and no building shall be occupied for any use permitted in the zoning district until all improvements required by these rules and regulations have been constructed, installed, and approved by the Director.

Section 1-104. Administration.

The Director shall administer the provisions of these rules and regulations.

Section 1-105. Appeals.

Appeals from the actions of the Director in the administration of these rules and regulations shall be made according to the provisions of the City Charter.

Section 1-106. Violations and Penalties.

Violations and penalties shall be in accordance with the provisions of Chapter 22, R.O. 1990, as amended.

Section 1-107. Definitions.

Unless plainly evident from the context that a different meaning is intended, certain words and phrases used herein are defined as follows:

Agricultural Subdivision. An "agricultural subdivision" is a subdivision within the agricultural district.

Approval. "Approval" by the City means that the subdivision or consolidation have met the standards and requirements of the City.

Bikeway. "Bikeway" is as defined in Chapter 15 of R.O. 1990, as amended.

Chief Engineer. The "Chief Engineer" shall mean the Director and Chief Engineer of the Department of Public Works, City and County of Honolulu.

City. "City" means the City and County of Honolulu, whose geographical limits include the Island of Oahu and all other islands in the State of Hawaii, not included in any other country and the waters adjacent thereto.

Consolidation. "Consolidation" means the combining of two or more lots into one lot. It includes reconsolidation, and when appropriate to the context, relates to the land consolidated and may include consolidation of unregistered land with registered land.

Country Subdivision. A "Country Subdivision" is a subdivision within the Country District.

Dead-end Street or Cul-de-sac. The terms "dead-end street" or "cul-de-sac" mean any street having only one permanent outlet for vehicular traffic.

Development Plan. "Development Plan" is as defined in the City Charter.

Director. The "Director" means the Director of Land Utilization, City and County of Honolulu.

Easement. "Easement" is a grant of the right to use a strip of land for specific purpose.

Engineer. "Engineer" means a registered professional engineer in the State of Hawaii.

Frontage Street. "Frontage Street" is a street parallel and adjacent to a major street providing access to abutting properties, but protected from heavy through traffic.

General Plan. "General Plan" is as defined in the City Charter.

Lot. A "Lot" is a parcel of land intended as a unit for transfer of ownership or interest therein or for development purpose.

Lot Area. "Lot Area" is as defined in the Land Use Ordinance.

Manager. "Manager" means the Manager and Chief Engineer of the Board of Water Supply, City and County of Honolulu.

Pedestrian Way. A "Pedestrian Way" is a right-of-way or easement for pedestrian traffic. It may also be used as a bikeway, utility easement or for restricted vehicular traffic.

Private Street. A "Private Street" is a street or easement providing access to land, retained in private ownership and not dedicated to the City.

Street. A "Street" is any public or private right-of-way primarily for vehicular use.

Major Street – A street of considerable continuity which can carry a large volume of traffic and used primarily as a route between communities, large urban areas, or from one section of the city to another.

Secondary Street – A street which carries or collects traffic from minor streets either directly or via other secondary streets.

Minor Streets – A street other than a major or secondary street providing access to abutting property and serving local traffic only.

Subdivider. A "subdivider" is a person, firm, corporation, partnership, association, trust, or other legal entity or combination thereof causing land to be subdivided or consolidated, who is the owner of the land or the duly authorized agent or lessee of the owner.

Subdivision. "Subdivision" is the division of land into two or more lots, parcels, or other division of land, including designation of easements, for the purpose, whether immediate or future, of sale, lease, rental, transfer of title to or interest in, any or all of such lots or other division and shall include resubdivision.

Surveyor. A "surveyor" is a registered professional land surveyor in the State of Hawaii.

Traffic Engineer. "Traffic Engineer" means the Director of Transportation Services, City and County of Honolulu.

Section 1-108. Subdivision Committee.

There shall be a Subdivision Committee which shall hold regular meetings and make recommendations to the Director on subdivision applications and such other matters pertaining to the subdivision of land as may be presented to it by the Director.

- (a) The Committee shall be composed of Heads or their authorized representative of those city agencies, with an interest in matters pertaining to the subdivision of land.
- (b) Appropriate state and federal agencies with an interest in matters pertaining to the subdivision of land, may be invited by the Director to attend and participate in committee meetings on a regular basis.

Section 1-109. Exemptions.

The Director may make the following exemptions to various requirements of these rules and regulations;

- (a) **Agricultural and Country Subdivisions.** An agricultural or Country subdivision may be exempted from construction of streets to the standards of these regulations; provided, the streets constructed are in accordance with the street details approved by the Director, Traffic Engineer and Chief Engineer.

Section 1-110. Consolidation.

The owner of any land subdivided into lots shall file an application under these rules and regulations if he wishes to consolidate two or more lots. Procedures in connection therewith shall conform to the requirements for approval of a subdivision.

Section 1-111. Dedication.

At the time of filing a preliminary map, a subdivider shall designate on the map whether he intends to dedicate any streets, lands, facilities, or easements to the City or to the State. He shall inform the Director of all parcels of lands, streets, easements and improvements that he intends to dedicate including lands, easements or improvements which are required to be dedicated to the City or to the State. Streets and improvements shall be constructed to City standards for acceptance by dedication by the City. Prior to certification of completion of improvements by the Chief Engineer, Traffic Engineer, Director of Recreation and Manager, the subdivider shall file with the Department of Public Works, the Board of Water Supply or other appropriate agency the necessary deeds of dedication for conveyance of streets, improvements, and required easements and facilities that are part of or within the subdivision, free and clear of all encumbrances, or subject to easements for pipelines, irrigation systems or other facilities, as may be approved by the City Council or the Board of Water Supply upon a filing that such easements will not adversely affect the interest of the City or the public. Certification of completion of improvements shall be made after the documents are approved as to form. No lands and improvements shall be accepted for dedication by the City which has not been improved and approval of improvements has not been granted by the Director, except the City may accept certain easements before the facility is constructed therein.

Conveyances shall be in conformity with all applicable statutes, ordinances, and regulations.

Where a subdivider intends not to dedicate, the subdivision roadways and improvements shall comply with the requirements of private streets and improvements.

Section 1-112. Modifications.

The Director may modify provisions of these rules and regulations whenever the land to be subdivided or consolidated is of such size and shape or is affected by such location, or topographical condition, or is devoted to such uses that it is impractical in the particular case to conform fully to these rules and regulations; or if the subdivision or consolidation is by a public agency and in the public interest.

Modification from specific compliance may be granted where a plan provides adequate public spaces and improvements for circulation, recreation, light, air, and all other needs of the development when fully constructed and populated, and covenants or other legal provisions are provided as will assure continued conformity to and achievement of the development.

Modification requests must be in writing and substantiated by facts presented with the request, indicating that the modification is reasonably necessary and not contrary to the intent and purpose of these rules and regulations.

Before granting any modifications, the Director may refer the request to the Chief Engineer, Traffic Engineer, Manager or other appropriate agency for consideration and recommendation.

Section 1-113. Fees.

Filing fees shall be in accordance with the provisions of Chapter 22, R.O. 1990, as amended.

Section 1-114. Public Utility Easements.

Where only the designation of easements for the construction, installation or maintenance of cables, lines, anchors, guys, poles, pipelines, conduits, and similar installations with their associated facilities, of public utilities subject to the provisions of Chapter 269, Hawaii Revised Statutes, are involved, it shall be sufficient compliance with these rules and regulations if the Utility Company files 15 copies of a map with the Director showing the name of the owner, tax map key, the purpose of the easement, street and street names, and property lines and existing and proposed easements clearly identified with areas, dimensions and other data to definitely locate and identify the easements, without otherwise complying with the requirements for preliminary or final maps as herein set forth, and such map shall be deemed approved 30 days after filing, subject to disapproval by the Director by written notice to the one so filing, given within 30 days of the filing, if the Director finds that the easements so designated will result in a condition likely to be harmful or dangerous to the health, safety or welfare of the neighborhood or community.

Section 1-115. Agricultural Subdivision.

Agricultural subdividers shall show that the subdivision will provide feasible agricultural use for subdivision purchasers or tenants, and that covenants and restrictions exist to ensure that the subdivided property will be put to agricultural use in conformity with applicable Federal, State and City laws and regulations.

For proposed uses other than agricultural use, the subdivider shall show that sufficient covenants and restrictions exist to ensure that the subdivided property will be used in conformity with applicable laws and regulations.

The subdivider shall include the following with the agricultural subdivision application for review and approval by the Director:

- (a) Verification by the Board of Water Supply of the availability of sufficient agricultural quality water to support agricultural use of all lots proposed for subdivision, whether such water is to be supplied by the Board or another water supplier.
- (b) Covenants, lease, agreement of sale, mortgage and other instrument of conveyance requiring lot purchasers to maintain land in agricultural use in conformity with Federal, State and City laws and regulations, enforceable by the City either by the subdivider or the subdivider's successor in interest, or an Association composed of all subdivision lot owners and indication applicable laws and penalties for violation thereof. All subsequent sales of property, lease and rental agreements shall include these restrictions.
- (c) Notice of all restrictions contained in laws and regulations to be provided to all prospective subdivision lot purchasers, in the sales agreement, deeds, covenants and other instrument of conveyance.

- (d) Other information and documentation as may be required by the Director to review and ensure feasible agricultural use within the agricultural subdivision in conformity with applicable Federal, State, and City laws and regulations.

The information and documents shall be required for agricultural subdivision consisting of 5 lots or more, however, the requirements shall be applicable as determined by the Director if the proposed agricultural subdivision appears to be a part of an incremental pattern of future agricultural subdivision development.

All agricultural subdivisions with the State Agricultural District into 2 or more lots shall be subject to the requirements of Section 205-4.5 HRS, State Land Use Commission regulations and all applicable laws prior to approval of the subdivision.

The Director may refer the Agricultural Subdivision proposal to the State Department of Agriculture for their review and recommendations.

SECTION 2. PRELIMINARY MAP

Section 2-201. Requirements.

- (a) A preliminary map filed with the Director shall be prepared by or under the supervision of an engineer or surveyor.
- (b) The preliminary map shall be of one of the following sizes, in inches: 10 x 15, 15 x 21, 21 x 32, 30 x 36, 36 x 42, or 42 inches wide with restriction as to length. The map shall be prepared and drawn according to one of the following scales: 10, 20, 30, 40, 50, 60, 100, 200, 300, 400, 500, 1000, 2000, 3000, 4000, or 5000 feet to an inch. When more than one sheet is required, an index sheet of the same size as the other sheets shall be filed showing the entire subdivision on one sheet with block and lot numbers.
- (c) The preliminary map shall include the requirements set forth below and shall clearly show all or as much of the following information as the Director may require:
 - (1) Name, address, and signature of owner or owners of the land to be subdivided, the subdivider, and signature and stamp of the engineer or surveyor. If the preliminary map is not signed by the owner or owners, the preliminary map shall be accompanied by a certificate or letter from the owner stating that the subdivider is an authorized agent of the owner of the land.
 - (2) Date, north arrow, scale, tax map key, geographic locations and subdivision description. The proposed name of the subdivision shall not duplicate nor resemble the name of another subdivision in the City. It shall be subject to approval by the Director.
 - (3) Where a subdivision is otherwise difficult to locate by tax map key or existing streets, show the location of the subdivision in relation to the entire tract and the surrounding area and the names and locations of subdivisions immediately adjacent to it.
In an area which is subdivided in increments, the preliminary map shall be accompanied by an overall development plan of the total area showing general data of future streets and topography.
In a subdivision which may reasonably be expected to be resubdivided in whole or in part at some future time, there shall be shown in dotted lines on the preliminary map a plan of any possible future subdivision and street extensions under the provisions of these rules and regulations.
If the preliminary map covers a larger tract or parcel of land than shown on the final map, the preliminary map shall constitute only that portion in conformity with the final map approved by the Director. Each portion of a preliminary map shall constitute a separate and distinct map in conformity with each and every final map submitted for approval to the Director and each final map so submitted shall be considered a new application.
 - (4) Lot layout and approximate dimensions, lot width, lot number of each lot, area of each lot, total number of lots, and total area of the proposed subdivision.

- (5) The features of the General Plan and Development Plan, the General Plan land use designation and the existing zoning on and adjacent to the subdivision.
- (6) Locations, names, dimensions, approximate gradients and radius of curves of existing and proposed streets with and adjacent to the subdivision; approximate location, area, dimensions of existing and proposed easements; existing drainage facilities; method of sewage disposal; and the source of water supply.
- (7) Approximate location of areas subject to inundation or storm water overflow, and of all areas covered by waterways, including ditches, gullies, streams, and drainage courses within or abutting the subdivision and dangerous areas and features such as slide areas or falling boulder areas, likely to be harmful to the proposed subdivision or the surrounding area. Possible Flood Area designation in accordance with Article 12 of Chapter 14, R.O. 1990, as amended.
- (8) Existing contours at vertical intervals of five feet where the slope is greater than ten percent, and not more than two feet where the slope is less than ten percent and the finished condition to be achieved by the proposed grading to be shown by contours, cross sections, spot elevations or other datum.

Approximate location and general description of any historical, or significant landmarks or other natural features, and trees with a trunk diameter of 12 inches or more at 5 feet above ground, and an indication as to the proposed retention or disposition of such features.

- (9) Show existing improvements including buildings and their locations in relation to existing and proposed street and lot lines, the dimensions to street and lot lines, and the uses and height of existing buildings or structures, if they are to be retained. Indicate if the buildings or structures are to be demolished.
 - (10) Proposed use of the lots whether for parks, open spaces, single-family dwellings, multi-family dwellings, hotel, business, industrial, or other purposes, and existing parks, and other public places or spaces with adjoining properties.
 - (11) Location, with notations, and the sizes of all parcels of land, including streets, improvements, facilities, and easements proposed to be dedicated to the City, or whether the streets, improvements, facilities, and easements are to remain private.
 - (12) Shoreline setback in accordance with the Shoreline Setback Rules and Regulations of the City.
- (d) After review of the preliminary map by the Director, other information such as existing and proposed sewers, water, drainage facilities, street trees, street lights, gas, electric and telephone conduits or lines and other utilities within and adjacent to the subdivision, together with invert elevations based on City datum, or reports such as soils report or drainage study, as may be required by the Director or upon recommendation of the Chief Engineer, Traffic Engineer or manager, shall be furnished. Information not practical to be shown on maps shall be furnished in a written statement accompanying the maps.

Section 2-202. Procedures.

- (a) The subdivider shall file with the Director; 20 copies of the preliminary map and filing fee.
- (b) The Director shall act on the preliminary map with 30 days after filing.
- (c) The time of filing is the time at which the preliminary map and filing fee are received by the Director who shall indicate the date of filing on one copy of the preliminary map.

Section 2-203. Action.

Upon review and report by the Subdivision Committee and other governmental agencies as required, the Director shall act upon the preliminary map as follows:

- (a) **Tentative approval of the Preliminary Map.** Tentative approval of the preliminary map means that the preliminary map conforms to all the requirements of these rules and regulations; and it authorizes the subdivider to proceed with preparation of construction plans for streets, utilities, and other improvements and requirements as may be required by the Director and to proceed with preparation of the final map.

In the case of a subdivision which does not involve construction or widening of streets or highways, or construction of utilities, including sewer and water mains, the subdivider, after obtaining tentative approval of the preliminary map, may prepare a final map of the proposed subdivision. Approval of the final map may be granted upon certification of the Chief Engineer and Manager that, where required, an adequate deposit or deposits for installation of necessary service laterals have been made for water and sewer service connections.

Any proposed subdivision at the time tentative approval of the preliminary map is granted, shall be required to conform to any changes or amendments to these rules and regulations or other applicable laws, rules and regulations, standards, and policies in effect at the time. New or amended standards shall be required to be met as a condition of permitting as extension of time.

- (b) **Disapproval.** Disapproval by the Director means the preliminary map does not conform to all or portions of the requirements of these rules and regulations.
- (c) **Deferral.** Deferral by the Director means the preliminary map requires further consideration, study or consultation, or additional reports or data are required from the subdivider, or minor changes to the preliminary map are required. The deferral shall be for a period of 90-days. A request for an extension of the deferral may be made by the subdivider in writing to the Director stating the reasons therefor, prior to the expiration of the 90-day period. Only a single six month extension may be granted by the Director. Failure to receive tentative approval of the preliminary map within the prescribed 90-day or six month deferral period shall automatically terminate all proceedings, and the application shall become null and void. If a subdivider desires to reactivate his application, he must file a new application and submit a new preliminary map with the required filing fee.
- (d) Actions of the Director shall be reported in writing directly to the subdivider stating or describing reasons, requirements or any conditions of action on the preliminary map.

Tentative approval of the preliminary map shall not be entered in writing on the map or be construed to mean approval of the subdivision for recordation or any other purpose.

If the proposed subdivision covers only a portion of a large tract or parcel of land, the action of the Director shall be directed to only that portion of the large tract or parcel. Each and every other portion shall constitute a separate action, and each portion shall be submitted as a new application.

If the preliminary map is disapproved, the stamp of disapproval shall be issued on a copy or print of the preliminary map.

In a subdivision which involves no streets, drainage or other improvements, the preliminary map may be approved by the Director as a final map, provided the preliminary map meets requirements of a final map.

SECTION 3. FINAL MAP

Section 3-301. Requirements.

- (a) A final map filed with the Director shall be prepared by or under the supervision of a surveyor.
- (b) Size and scale of the final map shall be as required under Section 2-201 of these rules and regulations. A final map which affects Land Court lands shall comply with requirements of the Land Court.
- (c) The final map shall include the requirements set forth below and any additional information which the Director may require:
 - (1) Name of the owner or owners, and stamp and signature of the surveyor.
 - (2) Date, north arrow, scale, tax map key, geographic location and subdivision description.
 - (3) Subdivision boundary lines, right-of-way lines, lot lines with true azimuths and distances, radii, points of curvature, and the lot area with lot identification and total area of the subdivision.

- (4) Easements, denoted by fine broken lines, clearly identified with area, widths, lengths, and azimuths, and sufficient title thereto to definitely locate and identify the easement.
 - (5) The map shall be accurately surveyed, coordinated to City and County street monuments and government survey triangulation stations and permanently monumented on the ground with adequate monuments of a permanent nature.
 - (6) Reference points of existing surveys shall be identified and all other monuments found or established in making the survey of the subdivision.
 - (7) Approved street names.
 - (8) Shoreline setback in accordance with the Shoreline Setback Rules and Regulations of the City.
 - (9) Stream and other setback lines and minimum floor elevations for structures.
 - (10) Possible flood area designation and encumbrances in accordance with Article 12 of Chapter 14, R.O. 1990, as amended.
- (d) The final map shall conform substantially to the preliminary map given tentative approval and the Director may disapprove a final map which does not so conform. At any stage of the subdivision application, any proposed revision to the preliminary map shall be submitted in writing to the Director for his approval.

Section 3-302. Procedures.

- (a) Within one year after tentative approval of the preliminary map, the subdivider shall file with the Director, 15 copies of the final map.
- (b) The time limit specified may be extended not exceeding six months as may be granted in writing by the Director. Request for extension of time for filing of the final map shall be made by the subdivider in writing to the Director stating the reasons therefor, prior to expiration of the one-year period. Only two time extensions shall be granted by the Director, except in cases where the construction plans have been approved by the Director and construction of improvements has commenced.
- (c) Failure to file a final map with the required period shall automatically terminate all proceedings and the subdivision shall become null and void. Before a final map may thereafter be approved, the subdivider shall recommence proceedings by filing a new application with the required filing fee.
- (d) The time of filing a final map shall be taken to mean the time at which the same together with all required data are received by the Director, who shall indicate the date of filing upon one copy of the final map.

Section 3-303. Action.

Upon review and report by the Subdivision committee and other governmental agencies as required, the Director shall act upon the final map within 45 days after filing as follows:

- (a) **Approval.** Approval of the final map means the subdivision has met all requirements of these rules and regulations. Approval of the subdivision shall be issued in writing to the subdivider, and the stamp of approval shall be placed on a copy or print of the final map. The approval of the final map by the Director shall not be deemed to constitute or effect an acceptance by the City of the dedication of any streets, easements or other property shown on the map and shall not relieve the subdivider of responsibility for errors or other discrepancies in the subdivision. Errors or discrepancies shall be revised or corrected, to the satisfaction of the Director. No approval shall be granted unless any and all assessment liens outstanding to the City have been paid in full or ratably reallocated between or among the lots resulting from the subdivision. The approved final map on file with the Department of Land Utilization of the City shall be an official record for the purpose of administering city laws, ordinances, and other regulations.
- (b) **Disapproval.** Disapproval shall mean the final map does not conform to all or portions of the requirements of these rules and regulations. The reasons for such action shall be stated in a letter to the subdivider and a stamp of disapproval shall be placed on a copy or print of the final map.

SECTION 4. DESIGN STANDARDS

Section 4-401. **Conformance to General Plan.**

Each subdivision shall conform to and implement the intent and purpose of the General Plan and Development Plan.

Section 4-402. **Conformance to Other Regulations.**

In addition to conforming to the standards and requirements of these rules and regulations, subdivisions shall conform to State laws, regulations and standards of the Board of Water Supply, the Land Use Ordinance, and other ordinances, and requirements and standards of other agencies of the State of Hawaii or the City. The subdivider shall be responsible for securing required approvals and permits for subdivisions regulated by law or regulations other than these rules and regulations.

Section 4-403. **Land Suitability.**

No subdivision shall be granted tentative approval of the preliminary map or approval of the final map if the land is found by the Director, upon consultation with the Chief Engineer or other government agencies to be unsuitable for the proposed use by reason of proneness to flooding, bad drainage, geological conditions, unstable subsurface, ground water or seepage conditions, inundation or erosion by sea water, proneness to slides or similar hazards, adverse earth or rock formation or topography, or other features or conditions likely to be harmful or dangerous to the health, safety, or welfare of future residents of the proposed subdivision or of the surrounding neighborhood or community, unless satisfactory protective improvements or other measures have been proposed or taken by the subdivider and approved by the Chief Engineer or other appropriate agency.

No subdivision shall be granted approval of the final map until protective measures or improvements to make the land suitable for the proposed uses, have been constructed and certified in writing to be complete and acceptable by the Chief Engineer or other agency.

Section 4-404. **Design Review.**

The authority to approve, approve with conditions, or to disapprove the design of a subdivision shall be vested in the Director. The subdivider shall revise, delete, amend, and comply with the design requirements of the Director.

A Design Review Advisory Committee shall be created in accordance with the Charter of the City and County of Honolulu. In the event that the subdivider and the Director fail to agree on the design of a subdivision, the Director shall solicit the recommendations of the Design Review Advisory Committee.

Design review shall be conducted consistent with the intent and purpose of these rules and regulations and shall consider adequate provisions for street pattern, street alignment, street width, geometric design, and block lengths; lot layout, dimensions, areas, and uses; location, alignment and width of easements and utilities; traffic safety, traffic circulation, traffic control, street capacity, and vehicular and pedestrian access including bikeways to and within the subdivision; grading work and any alternative designs that could be utilized to minimize the extent of grading; public and emergency services; effect on surrounding area and environment; and effect on areawide traffic.

Section 4-405. **Streets and Highways.**

- (a) **Standards.** The standards for street right-of-way shall be accordance with the standards adopted by the Planning Commission.
- (b) **Rights-of-way and alignments.** The right-of-way and alignment of all streets shall conform to and implement the intent and purpose of the General Plan and Development Plan. Where the General Plan or Development Plan do not indicate street right-of-way or alignment, subdivision streets shall be laid out in the most advantageous design for the subdivision as well as for the surrounding area, and coordinated so as to compose a convenient system and subject to approval of the Director upon consultation with the Traffic Engineer and Chief Engineer.

The rights-of-way and alignments of all streets and highways shall be considered in their relation to existing and planned streets, topographical conditions, and to public convenience and safety, and in their appropriate relation to the proposed uses, existing zoning, General Plan and Development Plan of the land to be served.

In order to provide access or permit a satisfactory future subdivision of adjoining land and to preclude the creation of landlocked parcels, all streets shall extend to the boundary of the proposed subdivision and shall include the construction of bridges, temporary turn-arounds or other related facilities as required by the Director upon consultation with the Chief Engineer and Traffic.

Where a subdivision abuts or contains an existing or proposed major street, the Director may require a frontage street, reverse frontage with screen planting contained in a nonaccess reservation along the rear property, or such other treatment as may be necessary for adequate protection of the lots.

- (c) **Dead-end streets or cul-de-sac.** Dead-end streets or cul-de-sac shall have a turn-around area with a maximum gradient of 5%. Dead-end streets and turning area shall conform to the standards adopted by the Planning Commission.
- (d) **Future streets.** Where the preliminary map covers only a part of the subdivider's tract, a sketch of the proposed future street system of the entire tract shall be furnished, and the street system of the part submitted shall be considered in connection with the street system of the part not subdivided. The action by the Director on the preliminary map shall in no way indicate any action or approval on the part not subdivided.
- (e) **Future subdivision.** Where a tract is subdivided into larger parcels than for the minimum size lots provided for in these rules and regulations, the Director may require adequate streets to serve the future subdivision in conformity with the street and other requirements of these rules and regulations.
- (f) **Intersections.** Street intersections shall be as near right angles as possible. Acute angles between street intersections are to be avoided. Intersections of more than four approaches shall not be allowed unless approved by the Director upon consultation with the Chief Engineer and Traffic Engineer. Jog and acute angles in a street shall be held to a minimum. When acute angles or jogs are necessary, the street intersection shall be designed with reasonably long radius as approved by the Director upon recommendation of the Traffic Engineer. At the street intersection, adjacent properties shall be so graded and developed that adequate sight distance can be maintained. Streets entering upon opposite sides of any given street shall have their centerlines directly opposite each other, or said centerline shall be offset by at least 300 feet, to eliminate close proximity of T-intersections, or as otherwise approved by the Director upon consultation with the Traffic Engineer. Intersection gradients, sight distances, offsets and design of the intersection shall be approved by the Director upon consultation with the Traffic Engineer.
- (g) **Gradients.** Gradient of all streets shall be designed for adequate drainage and traffic requirements, and the development and grading of the subdivision. Gradients shall be a reasonable minimum and in conformity with the General Plan and Development Plan, but shall in no case be less than 0.4 percent, and shall not exceed seven percent for major and secondary streets; ten percent for minor streets; and 15 percent for dead-end streets of less than 300 feet. Where a street has a grade in excess of 12 percent, reinforced concrete pavement is required, in conformity with the standards of the Chief Engineer. Modifications may be permitted by the Director upon consultation with the Chief Engineer and Traffic Engineer when necessary to meet topographical conditions.
- (h) **Horizontal and vertical curves.** Horizontal and vertical curves shall be designed to the standards of the Traffic Engineer. Modification may be permitted by the Traffic Engineer when necessary to meet topographical conditions.
- (i) **Property line radius.** The property line radius at a street intersection shall be a minimum of 20 feet for secondary, minor, and dead-end streets, and 30 feet for major streets. Where streets of different widths intersect each other, the smaller radius shall govern. The Director may require a greater length of radius upon consultation with the Traffic Engineer when design of the subdivision indicates such need.

- (j) **Existing streets.** Existing streets abutting or within the proposed subdivision which are of inadequate width or are not in conformity with the General Plan and Development Plan, shall be provided with the additional rights-of-way at the time of subdivision.
- (k) **Half streets.** No half streets shall be developed except where essential to the reasonable incremental development of a subdivision, when it is in conformance with other provisions of these rules and regulations and when the Director is given satisfactory evidence that the remaining half will be constructed.

Section 4-406. Access.

Land shall be subdivided so as to provide each lot, with satisfactory access to an adequate public street by means of either a public street or private street, of approved width and improvements. Permanent easement for access to a street may be established upon approval of the Director. Improvements for easements shall be provided as required by the Director.

Reserve strips or nonaccess areas controlling the access to streets shall not be permitted except as required by the Director, as necessary for the public safety and welfare and where the control of such strip is definitely placed under conditions approved by the Director.

Public and private streets and highways including pedestrian ways, bridges, structures and facilities for adequate vehicular and pedestrian access to meet the needs and requirements of the proposed subdivision, shall be provided subject to the approval of the Director upon consultation with the Traffic Engineer and Chief Engineer. Factors to be considered are adequate width and improvements for adequate, proper and safe vehicular and pedestrian traffic circulation for ingress and egress to the proposed subdivision. Where major access to a proposed subdivision crosses or connects to a major street or highway, such access shall be provided with acceleration lanes, deceleration lanes, turning lanes, traffic controls, overpass or underpass structures, off and on ramps and other traffic engineering improvements as required by the Director upon consultation with the Traffic Engineer and Chief Engineer in accordance with the requirements and standards of the Department of Transportation Services, Department of Public Works and the State Highways Division.

Private streets providing access to or within a proposed subdivision shall be improved to meet the requirements of these rules and regulations.

Section 4-407. Drainage, Water, Sewers, and Utilities.

- (a) **General.** Drainage, water and sewer systems, and utility lines, including but not limited to those required for electric, communications, and street lighting, necessary for the general use of the occupants in the subdivision shall be installed by the subdivider.
- (b) **Location of utilities.** Utilities shall generally be located in accordance with the standards and requirements of each agency. The location of utilities shall not be contrary to any location provided by the General Plan and Development Plan.

If the location for any of the utilities, such as sewers, storm drains, water and gas pipes, electric and telephone lines and conduits, which are likely to be required within a subdivision, either for the service thereof or for the service to the surrounding areas, do not lie wholly within the street right-of-way, the Director upon consultation with the Chief Engineer and Manager may require the location of such utilities on routes elsewhere than within said street right-of-way. The subdivider shall designate the required area or areas for all such utility locations and shall deliver proper easements for them.
- (c) **Easements.** Adequate width shall be provided for easements for sewers, storm drains, water, public utilities and government-owned facilities as required by the Chief Engineer or the Manager, as appropriate. Easements for all government-owned utilities except those under the jurisdiction of the Board of Water Supply, shall be conveyed to the City and documents with supporting materials, such as maps, search of title or lien letter, transfer certificate of title, releases, consents, or other materials, as may be required, shall be delivered to the City for acceptance. Easements for water facilities shall be conveyed for the use of the Board of Water Supply and documents with all supporting materials shall be delivered to the Board of Water Supply for acceptance. Dedication shall be in accordance with Section 1-111.

Where a subdivision is traversed by a natural water course, drainage way, channel or stream, there shall be provided a drainage easement of drainage right-of-way conforming substantially with the lines of such water course, and such width as will be adequate for the purpose.

Whenever it is determined that future easements are necessary, the future easements shall be designated on the final map indicating that the City may accept such easements at any time. The location of all easements shall generally border the boundaries of lots. Easements traversing a lot shall not be allowed except when approved by the Director.

Section 4-408. Pedestrian Ways.

The Director may require the designation and dedication of a right-of-way, easement or easements of sufficient length and width to provide for a pedestrian way within a block; over or under streets, highways, streams, rivers or gullies; or to public beaches, shorelines, parks, forest areas, schools or other facilities of a public nature and to serve the subdivision.

Section 4-409. Block, Width, and Length.

Intersecting through streets shall determine the width and length of a block. The widths and lengths of blocks shall conform to the General Plan and Development Plan. Where the subdivision is not covered by the General Plan and Development Plan the widths and lengths of blocks shall be approved by the Director upon consultation with the Traffic Engineer and Chief Engineer.

Section 4-410. Lot Area, Width, and Depth.

The minimum lot area, width, and depth for each lot in a subdivision shall conform to the requirements of the Land Use Ordinance.

The side lines of lots shall be approximately at right angles to the street or radial to curved street, except where topography or other conditions make this impractical.

Irregular boundaries, in order to conform to building spacing or lot area or width requirements, shall not be permitted. The Director may disapprove a subdivision because of the irregular shape of the lot.

The lot areas, width, and pattern of lot lines shall be such that existing structures shall comply with the requirements of the Land Use Ordinance of the district in which located. The requirements for lot area, lot width and access shall not be applicable to subdivision of land in cemetery lots.

Section 4-411. Grading.

Lots in Residential districts shall provide a minimum buildable area equal to half of the minimum lot size of the zoning district within which finish grades shall be less than 40 percent slope and any filling of the lot to obtain slopes of less than 40 percent shall not exceed 5 feet in depth.

These requirements shall not apply to the following:

- a. Subdivisions which implement the site plan that has been approved as a Cluster Housing or Planned Development-Housing Project;
- b. Lots on which a new dwelling unit or additional dwelling unit would not be permitted; and
- c. Grading which is necessary to meet City construction standards for driveways, roadways, drainage, sewerage and other infrastructure requirements, or to meet conditions or permits approved under the Land Use Ordinance.

Grading shall conform to Chapter 23, ROH.

Section 4-412. Street Names.

Street names shall conform to Article 8 of Chapter 22, ROH.

Section 4-413. Optional Development.

The Subdivision for an optional development shall conform to the provisions of the Land Use Ordinance and such subdivision shall conform to the conditions of the approved permit.

SECTION 5. IMPROVEMENTS

Section 5-501. General.

The subdivider shall improve all streets, highways, and easements and install drainage facilities, sewer, water, street lights, traffic control devices, street trees, and utilities within the subdivision. If it is determined by the Director that the subdivision has been submitted only for the purpose of clarifying records, or for conveyance of large portions of land, the Director upon consultation with the Chief Engineer, Traffic Engineer, Director of Recreation, and Manager may waive all or a portion of the improvements which otherwise would be required. The minimum improvements which the subdivider shall make prior to approval of the final map shall be as stated herein.

The total cost of improvements and cost of maintenance, and providing the necessary services up to the date of acceptance by the city of the dedication of the subdivision improvements, shall be borne by the subdivider. The construction of improvements, shall comply with the standards, specifications, and plans on file with the various government agencies.

The owner or owners of property or future owners or any person in control of such property shall be responsible to maintain and repair any private subdivision improvements, private drainage ways or protective improvements located in such property which serves the property or adjoining properties.

Section 5-502. Streets and Highways.

- (a) Streets and highways shall be on a grade to permit proper drainage and shall have sidewalks, gutters, curbing, pavements, bridges, and other improvements as required by the Director upon consultation with the Chief Engineer and Traffic Engineer.

Streets shall be designed for the site soil conditions and shall contain water mains, sewers, storm drainage facilities, street survey monuments, utilities, traffic controls, and other improvements as herein specified. Streets shall be constructed in accordance with standards and specifications of the Chief Engineer and shall be installed under his supervision. Sidewalks shall comply with the provisions of Chapter 20, R.O. 1990, as amended. The Director upon consultation with the Chief Engineer and Traffic Engineer may authorize a grassed area between the curb and property line, or unpaved sidewalks, in subdivisions where topographical conditions, or other reasons make sidewalks impractical.

- (b) Streets within or abutting the subdivision shall be improved to the standards of these rules and regulations. Where the proposed subdivision abuts a General Plan or Development Plan street, or existing substandard public or private street, improvements may be required to be constructed only on the lesser or one-half of said street or 30 feet abutting the proposed subdivision, as determined by the Director upon consultation with the Chief Engineer, Traffic Engineer and Manager. Said improvements shall be constructed in conformance with the General Plan and Development Plan and all improvements, bridges, structures, or road widening required shall be constructed and installed by the subdivider and may be required to be dedicated to the City as determined by the Director upon consultation with the Chief Engineer, Traffic Engineer and Manager. In calculating the area of each lot in the proposed subdivision, the area of such street widening shall be excluded. Such improvements shall not relieve any lot owners from the provisions of any Improvement District Project.
- (c) The location of subdivision street connection to a State highway shall be subject to approval of the State Department of Transportation. The Department of Transportation may require a traffic study where subdivision streets connect to a State highway.

Section 5-503. Private Streets.

Private streets used as principal access, abutting, or within a subdivision, shall be improved to conform to the requirements of these rules and regulations. The subdivider shall bear responsibility for private streets including maintenance and regulating traffic.

Private streets and private improvements shall be maintained by the subdivider or owners of property contiguous or adjacent thereto in such manner that adequate access by vehicular traffic and services is permitted at any time so that fire, police, health and public utility vehicles can service the area. If private streets and improvements are not maintained, the Chief Engineer, Traffic Engineer, or Manager determines that the maintenance is inadequate to provide necessary services for the subdivision, public services may withheld from the area until adequate access is provided for such services.

The subdivider and subsequent property-owners shall be responsible for informing future owners of the affected properties that City agencies are not responsible for any maintenance or repair work or any other services with the limits of the private subdivision and the private improvements.

At or near the entrance of each private street, a sign shall be installed depicting the words "Private Street" or "Private Road." The type and location of the sign shall be subject to the approval of the Traffic Engineer and the subdivider shall bear the total cost of the purchase and installation of the sign.

The Board of Water Supply shall be consulted regarding conditions under which the public water system may be extended into a private street.

Section 5-504. Drainage.

Drainage and drainage structures and facilities including culverts and bridges, shall be installed according to standards of the Chief Engineer.

Section 5-505. Street Lighting.

Street lights and related apparatus and appliances shall be installed by the subdivider in all subdivisions, including agricultural subdivisions and street connections to public highways, in accordance with the provisions of Chapter 22, R.O. 1990, as amended.

Section 5-506. Underground Utilities.

Utility lines shall be installed in accordance with the provisions of Chapter 22, R.O. 1990, as amended.

Section 5-507. Water Supply and System.

The subdivider shall provide an adequate and potable water supply and system including water mains and fire hydrants to and within the subdivision. The system shall conform to the rules and regulations and standards of the Board of Water Supply. If a private water system is to be used, construction for the system shall also conform to the standards of the Board of Water Supply.

Section 5-508. Sewers.

Subdivision shall be provided with an adequate and approved sewage disposal system. In every subdivision where connection to a sewer is practical and reasonable, the subdivider shall be required to install an adequate sewerage system connected thereto.

Sewers shall conform to the provisions of Chapter 14, R.O. 1990, as amended, and shall be designed in accordance with the Division of Sewers Design Standards and at the location specified by the Chief Engineer as necessary to provide the subdivision with adequate sewage disposal; provided, that this location shall not be contrary to the location fixed for utilities by the Development Plan.

The Director may require construction of a sewage treatment plant upon consultation with the Chief Engineer and Manager. The sewage treatment plant shall be constructed to the standards of the Chief Engineer, the State Department of Health and the Manager.

The Director upon consultation with the Chief Engineer, Manager and the State Department of Health may allow a sewage disposal plan and system which conforms to requirements of the State Department of Health.

Section 5-509. Street Monuments.

Street monuments shall be placed and properly coordinated with government survey triangulation stations at all street intersections and angle points and at such intermediate points and of such standards as required by the Chief Engineer. Street monuments and bench mark elevations based on City datum shall be recorded on construction plan tracings. Street monuments shall be installed with an accuracy of 1 to 10,000 for City property, 1 to 8,000 for residential suburban property, and 1 to 5,000 for farm, agricultural, or other rural property as provided in the Rules and Procedure of the Land Court, State of Hawaii.

Section 5-510. Street Name Signs.

Street name signs for all streets within a subdivision shall be installed by the subdivider coincident with the construction of street improvements and utilities to serve the subdivision or made a part of the contract for subdivision improvements. The type and location of street name signs are subject to approval of the Traffic Engineer and shall conform to his standard specifications.

Section 5-511. Traffic Controls.

Traffic signs and markings for controlling, safeguarding, or expediting vehicular and pedestrian traffic shall be installed by the subdivider in each subdivision including agricultural subdivisions, coincident with construction of street improvements and utilities, before the roadways are open to public traffic, and before the first home is occupied, and before a business enterprise or public or quasi-public agency commences operations, and shall be a part of the contract for subdivision improvements. Plans and specifications showing type, location, and installation of traffic signs and markings shall be submitted for approval to the Director and the Traffic Engineer and shall conform to the standard specifications on file in the Department of Transportation Services. The subdivider shall bear full responsibility of regulating traffic and total cost of maintaining and regulating traffic signs and markings in a satisfactory condition until such time as the streets are accepted by the City or the City acquires jurisdiction to regulate private streets within the subdivision. The subdivider may install other traffic control devices where it is determined by the Director or Traffic Engineer that the devices are necessary for providing adequate access to a subdivision.

Section 5-512. Planting.

To preserve and enhance scenic character and to prevent environmental problems in the subdivision and the surrounding community, subdivision construction plans, shall include a planting plan to be reviewed and approved by the Director. Planting within the street right-of-way shall be subject to approval of the Director of Recreation and maintained by the subdivider until such time as the streets are dedicated to the City.

Screen planting, landscaping, area and slope planting, shall be provided and maintained by the subdivider until the plant growth is established and as required by the Director. Planting shall be conducted in accordance with an approved schedule of planting.

Section 5-513. Street Trees.

The subdivider shall develop a Street Tree Planting Plan for each subdivision indicating the quantities, locations, types, size and planting specifications which shall be reviewed and approved by the Director and Director of Recreation. The subdivider shall plant the street trees in conformance with the standards of the Department of Recreation. The subdivider shall plant and maintain the street trees to the acceptability of the Director of Recreation and until such time as the streets are accepted by the City.

Section 5-514. Pedestrian Way.

Whenever a pedestrian way is designated for a subdivision, the minimum width shall be 12 feet except as otherwise approved by the Director.

A four-foot wide walkway designed for the particular soil condition shall be provided as required by the Director. Such walkways shall be graded and provided with drainage and other facilities necessary for their proper use and shall be surrounded by a solid wall, except for entrances and exits, or by a fence with a screening hedge, or as otherwise required by the Director. Pedestrian overpass or underpass structures and improvements shall be designed and constructed by the subdivider based upon plans approved by the Director.

SECTION 6. CONSTRUCTION

Section 6-601. Construction Plans.

After the subdivider has received tentative approval of the preliminary map from the Director, and before beginning construction of improvements, the subdivider shall prepare and submit construction plans and specifications showing details of grading, road construction, drainage structures, sewers, water and all other utilities, improvements, landscaping and planting proposed to be installed in the proposed subdivision, in conformance with the approved preliminary map. The construction plans shall be drawn on acceptable tracing medium to City standards as to size and general drafting practice. Included with the construction plans shall be a general layout map showing the location of lots and streets and the location of water lines, sewer mains, drainage system and other utilities.

The subdivider shall submit copies of the construction plans to the Director, Chief Engineer, Traffic Engineer, Manager, Director of Recreation, and the State Department of Health or other agencies as required by the Director, for their consideration, recommendations, and approval. Plans submitted for approval shall bear the stamp of a registered professional engineer, in accordance with the regulations of the State Department of Regulatory Agencies.

Construction plans shall be considered approved for construction purposes when the construction plans bear the approval signature of the Director, and officers of other governmental agencies as required by the Director. No construction work shall commence without the approved construction plans.

Section 6-602. Completion of Improvements for Final Map Approval.

After the subdivision has received tentative approval of the preliminary map and approval of the construction plans, the subdivider, as a condition to approval of the final map shall comply with either subsection (a) or (b) below.

- (a) **Construction approval prior to final map approval.** The subdivider may proceed with construction of required improvements, utilities, and facilities, and after completion of the same in accordance with the approved construction plans and approval of improvements is granted by the Director, the Director shall take action on the final map.
- (b) **Final map approval prior to construction.** In lieu of completion of the required improvements, utilities, and facilities prior to final map approval, the subdivider may enter into an agreement with the City and Board of Water Supply, and file with the Director a surety bond or other security as hereinafter specified, to assure the City and Board of Water Supply the construction, installation, maintenance, and services of such improvements, utilities and facilities as shown on the approved construction plans. The Director, after execution and acceptance of the agreement and bond, shall take action on the final map.

- (1) **Agreement.** The agreement and surety bond or other security shall be approved by the Corporation Counsel as to form and legality. The agreement shall specify that the subdivider agrees to make, install, complete, and provide services for all required improvements, utilities and facilities within a specified time to the satisfaction of the Director, Chief Engineer, Traffic Engineer, Director of Recreation, and the Manager and shall provide that if the subdivider fails to complete the work within the specified time or provide the necessary services, the City and the Board of Water Supply may collect the full estimated cost from the subdivider, parties executing the bond, or both and complete the project. The City shall be authorized in the event of any default in performance of work, services, or construction of improvements for which bonds or securities were deposited, to use some or all of the bond or security to cause the required work or services, including engineering and administrative work to be done and for payment of all costs. Failure of the subdivider to complete the work shall be violation of these rules and regulations. The subdivider shall be firmly bound by the specified time of completion of all improvements. The time limit may be extended for one six month extension period which may be granted by the Director upon recommendation of the Chief Engineer, Traffic Engineer, Director of Recreation or Manager.

The agreement may provide for partial withdrawal of the security, in money or bonds, as the work progresses, upon certification of the Chief Engineer, Traffic Engineer, Director of Recreation and Manager. When a substantial portion of required improvements has been completed to satisfaction of the Chief Engineer, Traffic Engineer, Director of Recreation and Manager and completion of remaining improvements is delayed beyond control of the subdivider, the Director may consent to a reduction of the surety bond or security proportionate to an amount estimated to be adequate to assure completion of the remaining improvements. Agreement and bond to secure and guarantee construction of improvements shall be so conditioned that the surety executing the bond or making a deposit shall be firmly bound under continuing obligation for the payment of all necessary costs and expenses, including engineering and administrative expenses, incurred or expended by the City in causing any work to be done.

- (2) **Bond and other security.** The surety bond, or other security that must be filed with the agreement shall be in an amount equal to the cost of all work and services required to be completed by the subdivider including engineering and other administrative costs and approved by the Chief Engineer, Traffic Engineer, Director of Recreation and Manager, and shall remain in effect until subdivision improvements are approved by the Director. Cost estimates prepared by the subdivider and approved by the Chief Engineer, Traffic Engineer, Director of Recreation and Manager, shall be delivered in writing to the Director. No personal surety bond shall be accepted by the Director or the Manager. The bond or security shall be conditioned to be payable to the City and the Board of Water Supply. Should the subdivider fail to complete all work required within the specified time, the City and/or the Board of Water Supply may collect the monies of the bond or security and require all unfinished work to be completed, and the parties executing the bond shall be firmly bound to pay for all necessary cost therefor.

Securities shall be filed with the Director and deposited with the City.

A performance guarantee to be filed with the agreement shall be one of the following:

- (i) A Surety bond executed by the subdivider as principal, and a corporate surety company authorized to do business in the State, as surety.
- (ii) A deposit of money made with the Director of a responsible escrow agent designated by the Director and the Manager in behalf of the City and the Manager as their agents.
- (iii) Where the subdivider has entered into a contract with a responsible contractor for construction of improvements and utilities, he shall file the following with the Director: 1) a certified copy of the contract, 2) a certified copy of the contractor's performance bond, and 3) a surety bond, other than personal surety, of a sum equal to at least 50 percent of the cost of all the work, including engineering and administrative work required to be completed by the subdivider as estimated by the Chief Engineer, Traffic Engineer, Director of Recreation and Manager. The surety bond shall be payable to the City and the Board of Water Supply, and shall be conditioned as described above.
- (iv) Negotiable bonds or other securities approved by the Corporation Counsel and the Director of Finance of the City for securing deposits of public money.

Section 6-603. Construction Procedures.

Before starting construction, the subdivider shall notify the Director, Chief Engineer, Traffic Engineer, Director of Recreation and Manager at least one week in advance of the date he will begin construction, the contractor's name, contract price, construction schedule, and any other pertinent information, and shall file four sets of prints of the approved construction plans with each of the following: the Division of Engineering and Division of Sewers of the Department of Public Works, Division of Traffic Planning and Division of Street Lighting of the Department of Transportation Services, the Board of Water Supply, and the Department of Recreation; and one print with the Director. Every three months, the subdivider shall report the status of construction to the Director indicating progress and the work remaining.

At any stage of construction and prior to approval of improvements, if the Director, Chief Engineer, Traffic Engineer, Director of Recreation or Manager find that any of the work is likely to create problems jeopardizing property or public safety, they may require a temporary stopping of work, plan revisions, or remedial work procedure changes such as limiting the area which may be graded or developed at one time.

Section 6-604. Inspection.

During construction, the work is subject to inspection at any time by the Chief Engineer, Traffic Engineer, Manager, Director of Recreation and the Director.

Section 6-605. Certification.

Upon completion of improvements, and prior to their approval, they shall be inspected by the Chief Engineer, Traffic Engineer, Director of Recreation and Manager. The cost of testing any improvement, if required by the Chief Engineer, Traffic Engineer, Director of Recreation or Manager, shall be borne by the subdivider.

If the street lighting conforms to approved plans and specifications, and the installation is energized and continues in proper operating condition for a period of one week, and the required agreement and surety bond for energizing under Chapter 22, R.O. 1990, as amended, was accepted and approved by the City, the Traffic Engineer shall approve the installation and issue a certificate to the subdivider attesting such inspection, test, and approval. The subdivider shall arrange with the public power company and bear the cost of arrangements and electrical energy used for the tests.

Subdivision improvements shall not be approved by the Director until he has received written certification they are complete and acceptable to the City from the Chief Engineer, Traffic Engineer, Director of Recreation, and Manager. The subdivider must accomplish the following, in addition to the testing above, in order to obtain such certification:

- (a) File tracings of construction plans as actually constructed, showing all changes from the original plans, with the Department of Public Works. Also file duplicate tracings of the sewer system as actually constructed showing all changes from the original plans with the Department of Public Works.
- (b) File tracings of the street lighting system and traffic control devices as actually constructed, showing all changes from the original plans, with the Department of Transportation Services.
- (c) File tracings of the street tree planting plans as planted, with the Department of Recreation.
- (d) File tracings of the water system as actually constructed, showing all changes from the original plans, with the Board of Water Supply.

Section 6-606. Repair and Replacement of Improvements.

The subdivider shall file with the City such agreement and surety bonds as specified below to insure the adequacy and workability of provisions for repair and replacement of the subdivision improvements.

Approval of improvements for dedication will not be given unless the subdivider enters into an agreement with the City, wherein the subdivider agrees to pay costs of repairing and replacing the subdivision improvements and guarantees their adequacy. The subdivider shall also file a surety bond or other security other than personal surety, with the City as obligee, conditioned upon faithful performance of said agreement. The amount of the surety bond shall be ten percent of the cost of construction as estimated by the Chief Engineer, Traffic Engineer, Director of Recreation, and Manager.

The agreement shall specify that the subdivider agrees to repair and replace subdivision improvements, utilities, and facilities to the satisfaction of the City and shall provide that if the subdivider fails to complete such work with the specified time, the City may collect the monies of the bond or security and complete the same. The City shall be authorized in the event of default in the performance of any work for which bonds or securities were deposited, to use some or all of the bond or securities to cause the required work, including engineering and administrative work, to be done and for payment of costs therefor.

The agreement and surety bond shall be for a period of one year from the date of acceptance by the City of the dedication and shall be extended as required by the Chief Engineer, Traffic Engineer, Director of Recreation, or Manager.

The form of the agreement and surety bonds shall be approved by the Corporation Counsel as to form and legality and when fully executed, they shall be filed with the Director.

Section 6-607. Approval of Improvements.

Upon receipt of certificates of completion of improvements from the required agencies and acceptance of the executed repair and replacement agreement and surety bond for dedication purposes, the Director shall grant approval of improvements.

SECTION 7. CONFLICTING RULES AND REGULATIONS

The Subdivision Rules and Regulations of the City and County of Honolulu which were adopted by the Planning Commission on September 15, 1949, and all amendments thereto are hereby repealed, except that agricultural subdivisions previously created under the then existing laws shall be governed by them.

SECTION 8. SEVERABILITY

If any section, subsection, clause, phase, or sentence of these rules and regulations, or the application thereof to any person or circumstances is held invalid, such invalidity shall not affect other provisions or applications of these rules and regulations which can be given effect without the invalid provision or application, and to this end the provisions of these rules and regulations are declared to be severable.

SECTION 9. EFFECTIVE DATE

These rules and regulations shall take effect 30 days after filing thereof with the City Clerk following adoption by the Planning Commission; provided that the provisions of these rules and regulations shall not apply to any subdivision where tentative approval of the preliminary map has been granted by the Planning Director prior to the effective date of these rules and regulations and is subsequently granted final approval within the then existing laws.

The Planning Commission of the City and County of Honolulu, State of Hawaii, approved and adopted these rules and regulations on June 20, 1973, notice of public hearings - published in the Sunday Star Bulletin and Advertiser of May 6, 1973.

PLANNING COMMISSION
CITY AND COUNTY OF HONOLULU

/s/ E.B. Connell
Chairman

APPROVED AS TO FORM:

/s/ Andrew J. Sato
Deputy Corporation Counsel

I hereby certify that the attached Subdivision Rules and Regulations of the City and County of Honolulu, State of Hawaii, was duly adopted by the Planning Commission, City and County of Honolulu, on June 20, 1973, and that the attached is a true and correct copy.

Dated July 11, 1973 : Honolulu, Hawaii

/s/ E.B. Connell
Chairman
Planning Commission
City and County of Honolulu

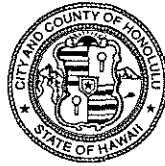
Approved this 7th day of
August A.D. 1973

/s/ Paul Devens
for Frank F. Fasi
Mayor
City and County of Honolulu

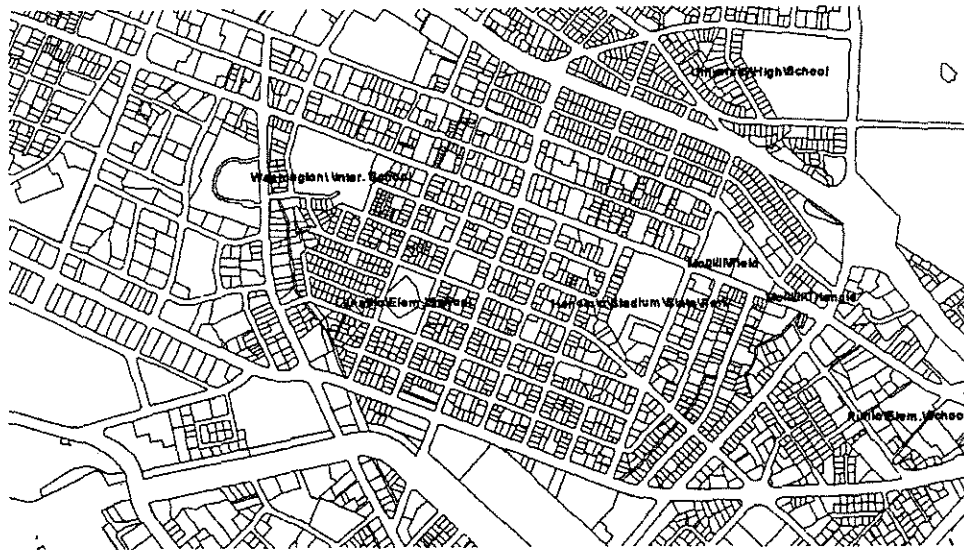
Received this 14th day of August, A.D. 1973

/s/Eileen K. Lota
Eileen K. Lota
City Clerk

SUBDIVISION STREET STANDARDS



Department of Planning and Permitting
City and County of Honolulu
Honolulu, Hawaii



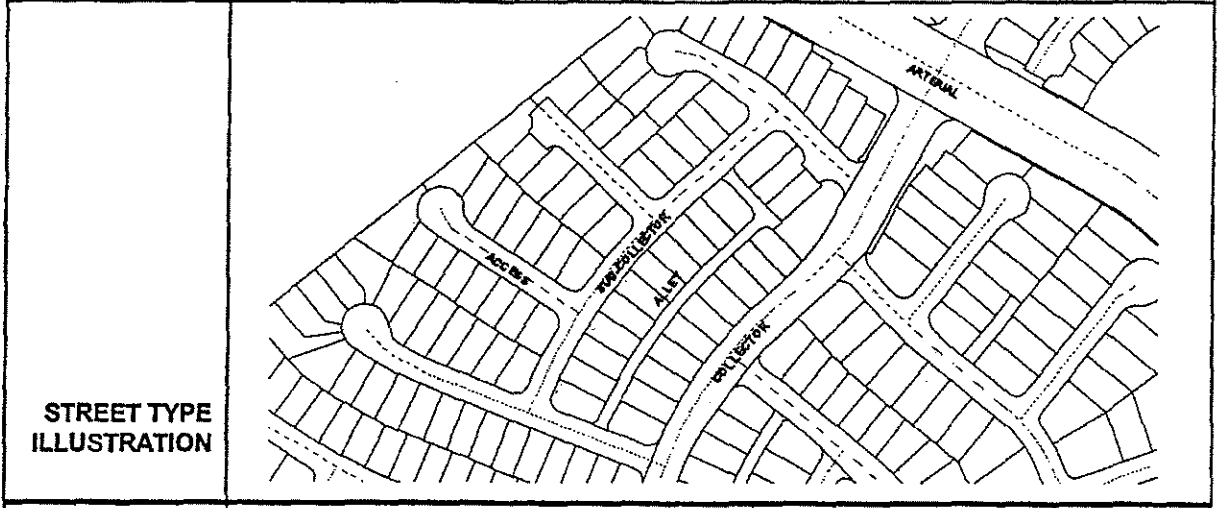
December 2000

PART 1

<p>Section 1-1 <u>Purpose and Intent</u></p>	<p>These standards update and replace, in its entirety, the Department of Land Utilization's SUBDIVISION RULES AND REGULATIONS STANDARDS, adopted by the Planning Commission on June 20, 1973. Roadways which have been constructed under these previous standards may be considered acceptable for development purposes and dedication to the City. The intent of the updated standards is to promote greener and more people-oriented streets throughout the City, provide a greater variety of street types, and create more opportunities for trees within City street rights-of-way and in future developments.</p>		
<p>Section 1-2 <u>Applicability</u></p>	<p>These standards shall apply to all application or construction plan review requests received by the Department of Planning and Permitting (DPP) on or after the effective date. Any project wishing to utilize these standards prior to the effective date may do so on or after the adopted date. Exceptions to these standards may be granted as follows:</p> <p>(A) Subdivision Applications. Subdivision applications which are submitted prior to the effective date and which obtain deferral or tentative approval before or after the effective date need not comply with the new standards. Subdivision applications which are submitted to the DPP prior to the effective date, which are rejected or expire, and which will be resubmitted after the effective date, must comply with the new standards.</p> <p>(B) Roadway Master Plans. Major roadways (arterial and collector as defined in these standards) that are shown on a Roadway Master Plan approved prior to the adoption of these standards may be designed and developed as approved by the Roadway Master Plan. However, internal minor roadways (sub-collector, access and alley) shall be designed and developed in accordance with these standards.</p> <p>(C) Extensions or Expansions to Existing Roadways. Roadway extension or road widening which is adjacent to an existing roadway may be designed and developed to match the adjoining or previously developed roadway standard. Continuation of an existing roadway across an intersection shall be designed in accordance with these standards. An appropriate transition shall be provided between different roadway standards.</p>		
<p>Section 1-3 <u>Modification</u></p>	<p>The Director of Planning and Permitting may modify these street standards in accordance with Section 1-112 of the Subdivision Rules and Regulations (SR&R).</p>		
<p>City and County of Honolulu</p>	<p style="text-align: center;">STREET STANDARDS</p>	<p>Street Details</p>	<p style="text-align: center;">2</p>

PART 1 Section 1-4

Arterial Street	A street which carries high traffic volume and public transit. In addition to the facilities mentioned above, the right-of-way dimensions include a minimum 14-foot wide planted median and four to six travel lanes. This street is defined as Major in the SR&R.
Collector Street	A street which carries residential neighborhood traffic, but which provides no or limited residential frontage. This street also services traffic within or abutting apartment, commercial or industrial uses. This street is defined as Secondary in the SR&R.
Sub-collector Street	A street which provides access to abutting properties and which may also conduct traffic from one or more residential access streets that intersect it. This street is defined as a Minor Street in the SR&R.
Access Street	A street which provides access to abutting properties; it shall be designed to carry no more traffic than that which is generated on the street itself. It should be used in dead-end (cul-de-sac) streets. Also referred to as a local street. This street is defined as a Minor Street and Dead End Street in the SR&R.
Alley	A special type of street which provides a secondary means of vehicular access to residential lots. Its use is intended to allow garages and driveways to be located at the rear of the property. It is intended to be a private street and may have grassed or paved shoulders. An alley will not be permitted to have a street name.
Marginal Access Street	A street parallel and adjacent to a collector or higher level street which provides access to abutting properties and separation from through traffic. Such streets shall be designed at the level of either residential access streets or subcollector streets as anticipated traffic volumes dictate.
Divided Street	Streets in which directional lanes are separated by a median, or a medial strip such as in an arterial street. It shall be designed to the aggregate dimensions of both segments.
Street	The entire area between the adjoining property lines of a road, highway or way privately or publicly owned and maintained and established for the use of vehicles, bicycles, pedestrians and utilities. Also referred to as a right-of-way.



PART 1 Section 1-5

Street Type, Volume, and Components

Street Type	Volume (Number of Dwellings)	Design Speed	Right-of-Way	Roadway Width	Parking	Bike lane (Min. 6 ft. width with or without gutter)	Curb and Gutter ¹	Sidewalk ²
Arterial		40 mph 40 mph	124-128 ft. ³ 102-108 ft. ³	68-76 ft. ⁴ 48-56 ft. ⁴	none none	both sides both sides	required required	Min. 6 ft. width required both sides
Collector	+1,000 du 501-1,000 du 201-500 du	30 mph 30 mph 30 mph	78 ft. 70 ft. 66 ft.	48 ft. 40 ft. 36 ft.	both sides both sides both sides	both sides none none	required required required	Min. 5 ft. width required both sides
Sub-Collector	101-200 du 51-100 du	25 mph 25 mph	50 ft. 48 ft.	28 ft. 26 ft.	both sides ⁵ both sides ⁵	none none	required required	5 ft. width required both sides
Access	26-50 du 0-25 du	25 mph 20 mph	44 ft. 40 ft.	24 ft. 20 ft.	one side one side	none none	required required	4 ft. width required both sides
Alley		15 mph	26 ft.	18 ft.	none	none	none	none

Footnotes

- ¹ Curbs, gutters, and swales shall be designed in accordance with City and County of Honolulu Standard Details.
- ² Full sidewalks may be required in conjunction with commercial or industrial uses. Sidewalks are to be located adjacent to property lines and constructed of concrete, except when used in arterial streets and shared with bicycle paths. Sidewalks shall be designed in accordance with City and County of Honolulu Standard Details.
- ³ Right-of-way widths include a 14-foot to 20-foot wide planted median for the 102-foot to 108-foot right-of-way and a 16-foot to 20-foot wide planted median for the 124-foot to 128-foot right-of-way. Actual median widths will be determined upon consultation with the Department of Planning and Permitting. Where possible, medians should be shaped so the center of the median is lower than the median curbs. This inverted shape would contain irrigation water within the planted median area.
- ⁴ In arterial streets, bicycle paths may be located outside the paved roadway when sidewalk area widths are at least 20 feet. When bicycle paths are located in the sidewalk area and shared with pedestrians, the shared pathway must be at least 10-foot wide and the roadway width may be reduced by 4 feet. These shared pathways need not be located adjacent to property lines, may meander, and may be constructed of paved asphalt. The roadway width may be 24 and 34 feet in conjunction with a 20 foot sidewalk area, or 28 and 38 feet in conjunction with a 16 foot sidewalk area.
- ⁵ Where staggered or intermittent on-street parking can be expected (i.e. streets containing driveways), parking may be permitted on both sides of the street.

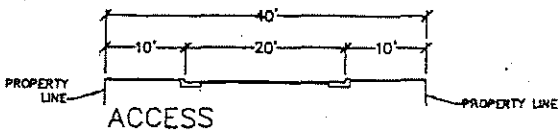
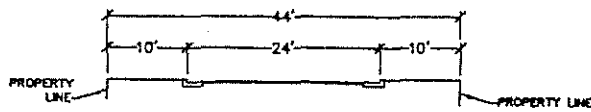
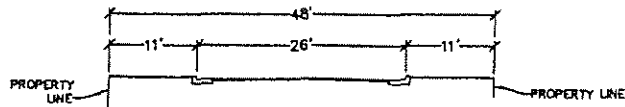
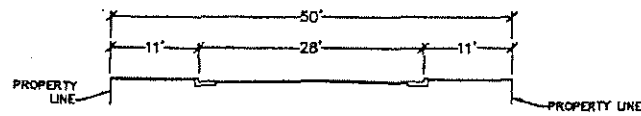
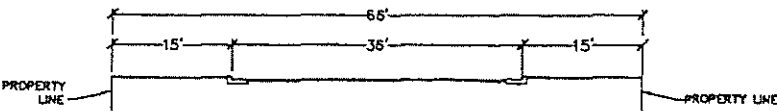
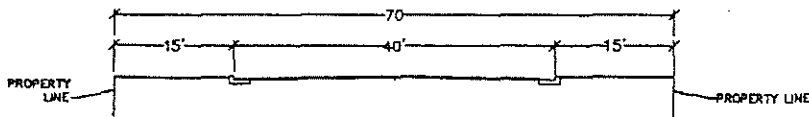
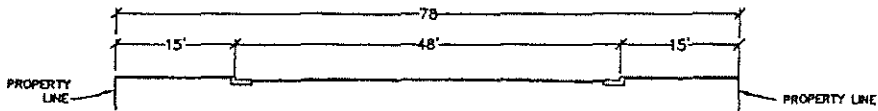
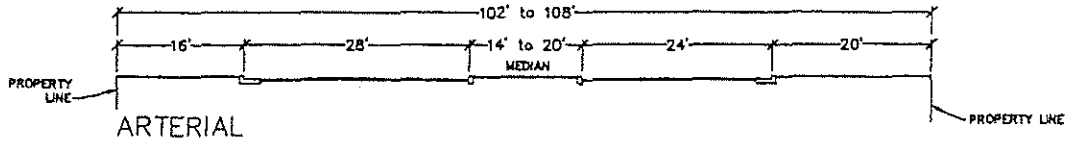
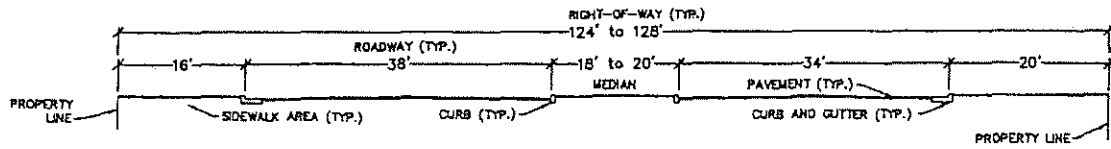
City and County of Honolulu

STREET STANDARD MATRIX

Street Details

4

PART 1 Section 1-6

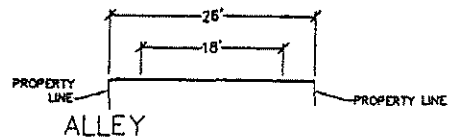


1. SIDEWALKS SHALL COMPLY WITH THE PROVISIONS OF THE REVISED ORDINANCE OF HONOLULU, CHAPTER 14, AS AMENDED.

2. ALLOWABLE GRADIENTS:

ALL STREETS - 0.4% MIN.
 ARTERIAL STREETS - 7.0% MAX.
 COLLECTOR STREETS - 7.0% MAX.
 SUB-COLLECTOR/ACCESS STREETS - 10.0% MAX.
 ALLEY - 10.0% MAX.
 15% MAX. - DEAD END STREETS < 300 FT.

3. WIDTH OF PAVEMENT MAY BE INCREASED OR DECREASED AS DETERMINED BY THE DIRECTOR OF PLANNING AND PERMITTING, UPON CONSULTATION WITH THE APPROPRIATE AGENCY.

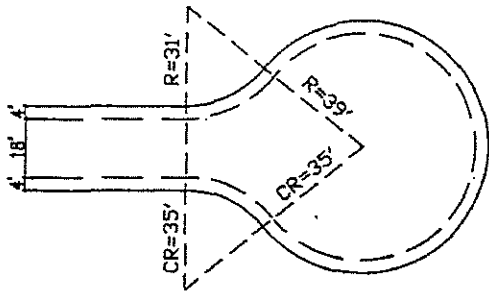


City and County
of Honolulu

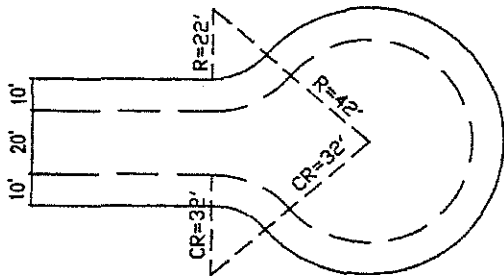
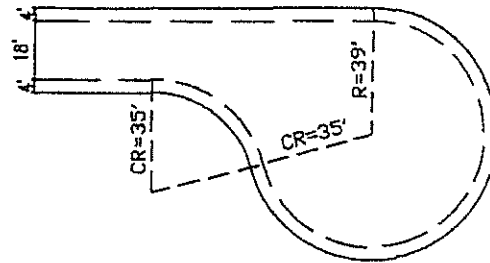
ROADWAY DIMENSIONS

Street Details

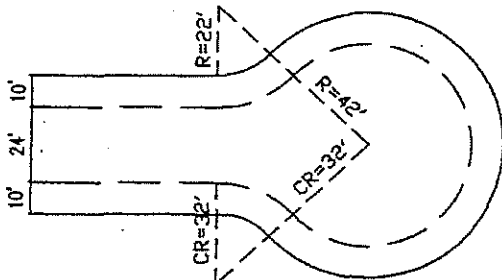
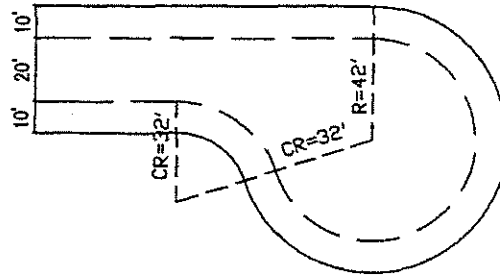
PART 1 Section 1-7



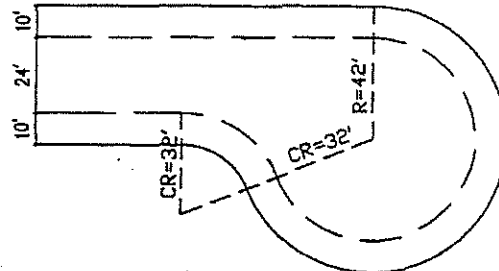
26-FT. RIGHT-OF-WAY



40-FT. RIGHT-OF-WAY



44-FT. RIGHT-OF-WAY



LEGEND

- CR = CURB RADIUS
- R = PROPERTY LINE RADIUS
- — — — — PROPERTY LINE
- — — — — CURB LINE

NOTE

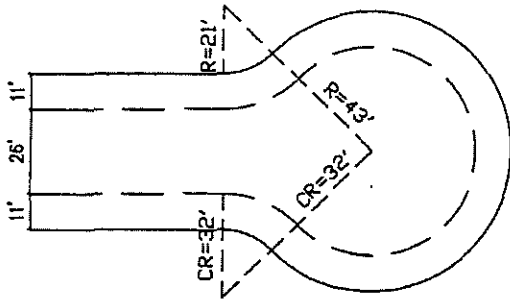
OTHER TYPES OF TURN AROUNDS, SUCH AS T SHAPED (HAMMERHEAD) OR PARTIAL HAMMERHEAD, MAY BE CONSIDERED PROVIDED IT IS ACCEPTABLE FOR CITY REFUSE COLLECTION, FOR PRIVATE ROADS, OR WHEN ANOTHER MEANS OF INGRESS/EGRESS IS PROVIDED.

City and County of Honolulu

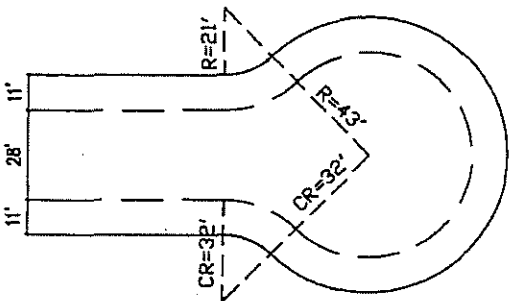
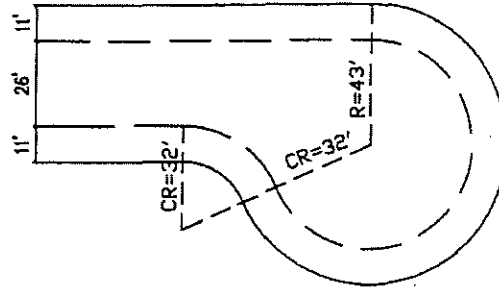
TURN AROUND DETAILS
(cul-de-sac)

Street Details

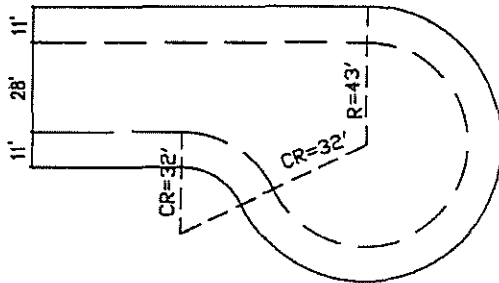
PART 1 Section 1-8



48-FT. RIGHT-OF-WAY



50-FT. RIGHT-OF-WAY



LEGEND

- CR = CURB RADIUS
- R = PROPERTY LINE RADIUS
- = PROPERTY LINE
- = CURB LINE

NOTE

OTHER TYPES OF TURN AROUNDS, SUCH AS "T" SHAPED (HAMMERHEAD) OR PARTIAL HAMMERHEAD, MAY BE CONSIDERED PROVIDED IT IS ACCEPTABLE FOR CITY REFUSE COLLECTION, FOR PRIVATE ROADS, OR WHEN ANOTHER MEANS OF INGRESS/EGRESS IS PROVIDED.

City and County
of Honolulu

TURN AROUND DETAILS
(cul-de-sac)

Street Details

Department of Planning and Permitting
City and County of Honolulu

**APPENDIX A
TO THE
SUBDIVISION STREET STANDARDS**



DECEMBER 2000

I. Background

Mayor Jeremy Harris has established "Green Honolulu" as one of the top initiatives of the City Administration.

Responding to this initiative, the Department of Planning and Permitting (formerly the Department of Land Utilization) contracted with the consultant team of Townscape, Inc., and Lester Inouye & Associates, Inc. for the "Honolulu Green Streets Project" in September of 1997. They were tasked with producing a study and specific recommendations addressing issues and obstacles related to creating greener streets (Reference "Final Report, Honolulu Green Streets Project dated November 1998).

These new street standards reflect the consultants' recommendations as well as other revisions to incorporate adopted legislative mandates regarding bike travel, pending and current legislation regarding accessibility, and an island-wide automated refuse collection service system.

II. Highlights of the New Street Standards

A. New Street Details are provided. The new roadway details reduce the pavement width for most street types, and increase the width of sidewalks and planter strips for higher traffic volume streets. The components of the proposed street details are enumerated below.

1. Roadway definitions and classifications are provided to reflect terms that more closely represent street usage and that are consistent with the Development Plans.
2. Vehicular travelways are reduced in width to encourage slower traffic speeds¹ and to reduce roadway construction costs.
3. Wider sidewalks and a standard for bicycle paths and lanes² are provided for higher traffic volume streets to make streets more useable for people riding bikes, walking, or jogging.
4. Wider planters are provided to make streets more accessible and to facilitate the planting and maintenance of street trees³.

¹ Reference Traffic Calming In Practice, which was developed by a number of English agencies, including the Association of London Borough Engineers and Surveyors.

² Reference Ordinance 94-78 which amends Section 15-3.1 ROH to promote safe bicycling.

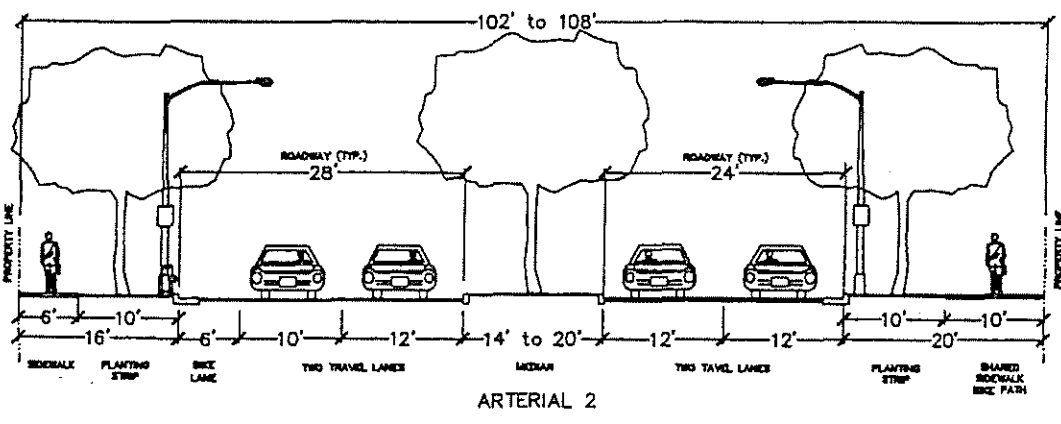
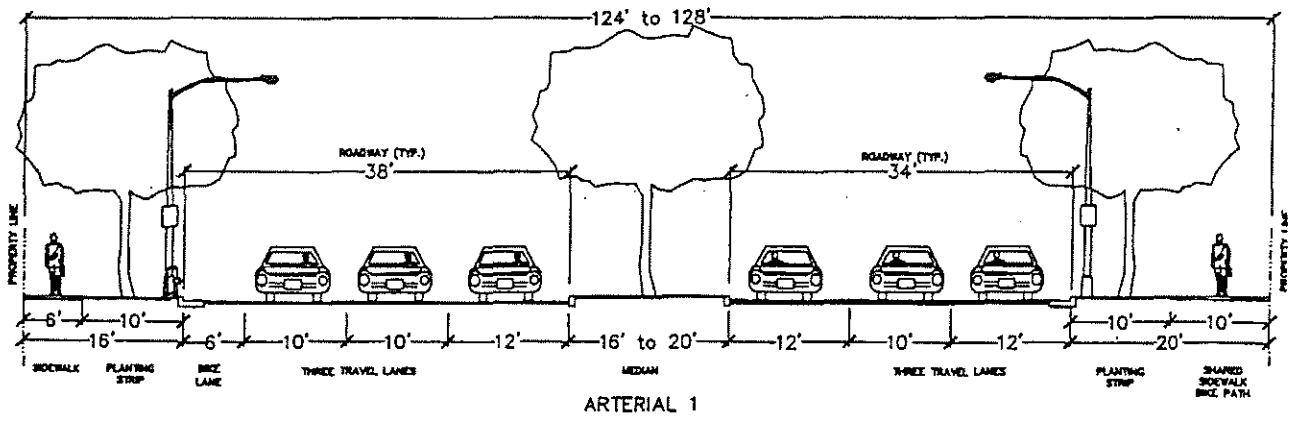
³ Reference Honolulu Green Streets Project , Final Report, November 1998.

5. Additional planter strip widths and planted medians are provided for higher traffic volume roads to encourage slower traffic speeds, to reduce the roadway crossing distance for pedestrians, and to facilitate larger street trees which are more appropriate to wider roadways.
6. A new alley roadway standard is provided to encourage alternative housing types which contribute to better streetscapes to facilitate the planting of street trees, reduce driveway entrances, and improve City infrastructure (such as increasing on-street parking and providing unobstructed pedestrian movement).

While increasing the overall right-of-way width to accommodate larger planting strips, sidewalks and bike lanes, the actual street width (roadway width) has decreased, thus offering a potential reduction to roadway construction costs. In addition, in the sub-collector and access street category, the roadway capacity for volume of traffic has been increased, thus expanding the usage of roadway widths of 28-feet or less, and further contributing to roadway construction cost savings.

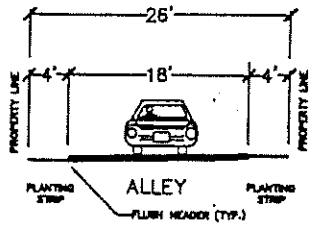
- B. New circular Turn Around Details are provided for the purpose of expanding island-wide automated refuse service⁴.

⁴ Reference August 1, 1994 Memo from the Department of Public Works, Division of Refuse Collection and Disposal.

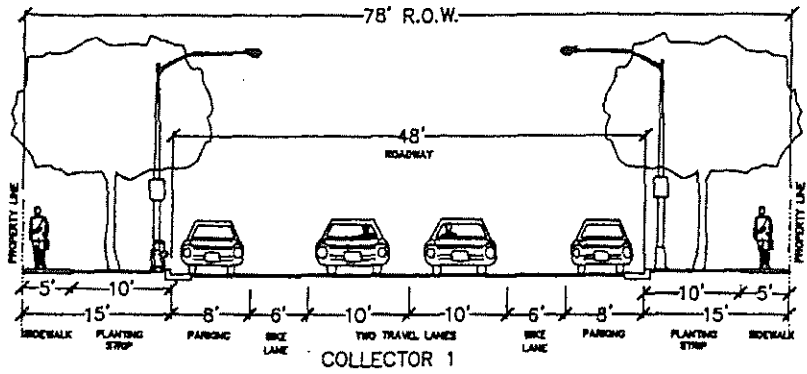


- HIGH TRAFFIC VOLUME / DIVIDED STREET.
- CARRIES PUBLIC TRANSIT.
- FOUR TO SIX TRAVEL LANES.
- TWO BIKE LANES.
- REPLACES 70FT, 76FT, 80FT, 90FT, OR 108FT ROW.

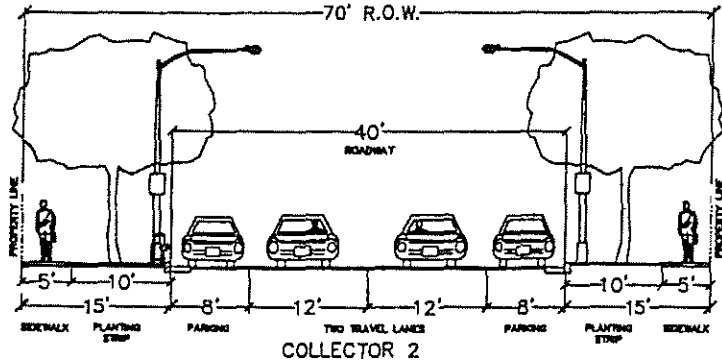
- NO BIKE LANE, NO PARKING
- GRASS OR PAVED SHOULDERS
- PRIVATE STREET.



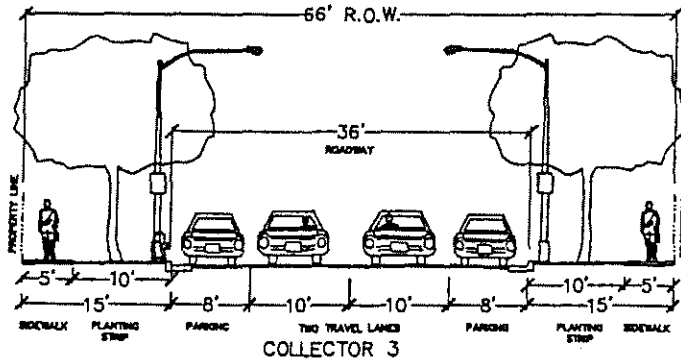
REPLACES 60FT. ROW
 TWO BIKE LANES.
 ALSO SERVES APARTMENT
 COMMERCIAL AND INDUSTRIAL USES.



VOLUME NOT TO EXCEED 10000U.
 REPLACES 56 & 60FT. ROW
 NO BIKE LANES.
 ALSO USE WHERE CONTINUOUS
 ON-STREET PARKING IS EXPECTED.



VOLUME NOT TO EXCEED 5000U.
 REPLACES 56 & 60FT. ROW
 NO BIKE LANES.
 ALSO SERVES APARTMENT USES.



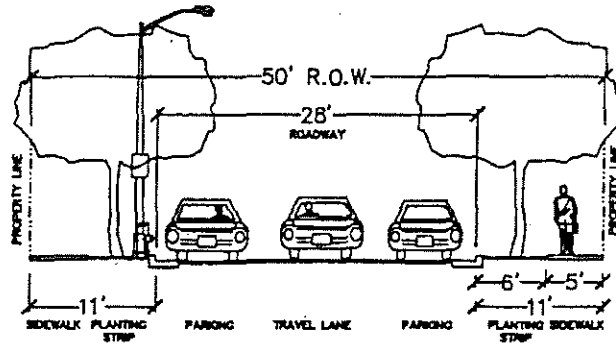
SOME THRU TRAFFIC FOR ONE OR MORE ACCESS STREETS.

NO BIKE LANE.

VOLUME NOT TO EXCEED 200 DU.

WHERE STAGGERED AND INTERMITTENT ON STREET PARKING IS EXPECTED/PARKING TWO SIDES.

REPLACES 40FT, 44FT & 50FT. R.O.W.



SUB COLLECTOR 1

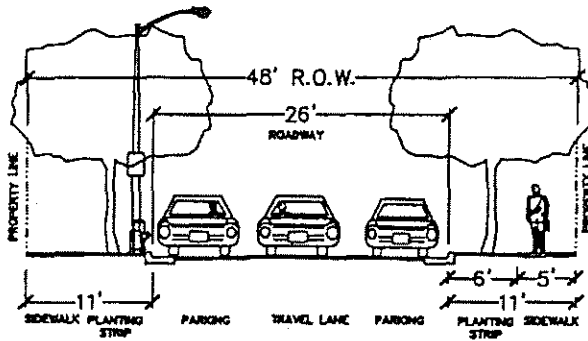
SOME THRU TRAFFIC FOR ONE OR MORE ACCESS STREETS.

NO BIKE LANE.

VOLUME NOT TO EXCEED 100 DU.

WHERE STAGGERED AND INTERMITTENT ON STREET PARKING IS EXPECTED/PARKING TWO SIDES.

REPLACES 40FT, 44FT & 50FT. R.O.W.



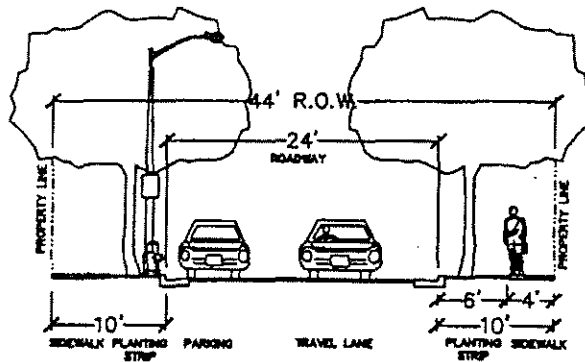
SUB COLLECTOR 2

CUL DE SAC SERVING LESS THAN +/- 50 UNITS.

NO BIKE LANE.

ALTERNATE PARKING

REPLACES 40FT & 44FT R.O.W.



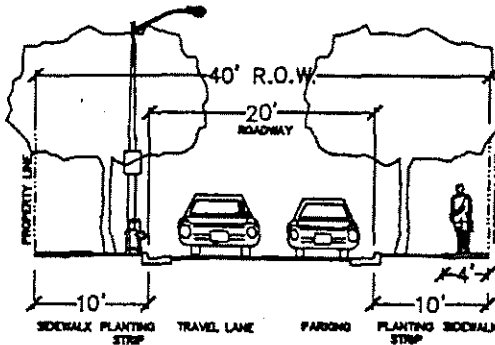
ACCESS 1

CUL DE SAC SERVING LESS THAN +/- 25 UNITS.

NO BIKE LANE.

PARKING ONE SIDE

REPLACES 24FT, 32FT, & 44FT R.O.W.



ACCESS 2

STREET NAME STANDARDS

A. The following nomenclature shall be used in the naming of streets:

FREEWAY	A divided arterial roadway for through traffic with full control of access, with grade separations at intersections. Whenever practicable, freeways shall be named after Hawaiian royalty.
HIGHWAY	A roadway generally serving through traffic on a continuous route providing the primary access between communities. Whenever practicable, highways shall be named after Hawaiian royalty.
PARKWAY	A major collector roadway, usually containing a medial strip with landscaped setback parklike areas on each side of the right-of-way, generally heavily planted with trees for its entire length.
BOULEVARD	A major collector with or without a medial strip, generally shorter than a highway, usually serving through traffic on a continuous route.
DRIVE	A long winding collector roadway, usually through a valley, mountainous area or plateau, having scenic qualities.
STREET	A fully improved through roadway serving local or minor collector traffic.
AVENUE	A fully improved through roadway serving local or minor collector traffic, landscaped and planted with trees.
CIRCLE	A roadway having a circular form, with only one access point to the adjoining street.
LOOP	A looped roadway having two access points off the same roadway.
PLACE	A cul-de-sac.
WAY	A cul-de-sac which is off another cul-de-sac.
COURT	A short roadway partially or wholly enclosed by buildings, giving the impression of a small open square.
MALL	A street or portions thereof on which vehicular traffic is to be restricted in whole or in part, and which is to be used exclusively or primarily for pedestrian travel or promenade.
ROAD	A collector roadway in the rural district, generally without full improvements such as curbs and sidewalks.
LANE	A narrow and short roadway with curbs or sidewalks.

However, a roadway with the characteristics of a "road" or "lane" as above described shall be entitled to be given a name only in circumstances where such a roadway constitutes an extension of an already existing and named "road" or "lane."

B. Street names within the City shall comply with the following requirements:

1. The street names selected shall:

- a. consist of Hawaiian names, word or phrases and shall be selected with a view to the appropriateness of the name to historic, cultural, scenic and topographical features of the area.
- b. not duplicate existing street names in spelling or sound, and shall be as dissimilar as possible in spelling or sound from any existing street names.
- c. be selected so as not to exceed the space limitation of a standard street name sign of the Department of Transportation Services (normally 18 spaces).