

Antennas have been around as long as we have had radio and television services. Antennas associated with communication purposes have grown tremendously especially since the U.S. introduction of mobile communication devices in the early 1980s. While the telecommunication industry has provided more convenient communication capabilities for individuals, it has also increased the public agencies' ability to provide faster and more efficient response to those in need, particularly on an emergency basis.

While the benefits of the telecommunications industry cannot be disputed, communities have opposed the antennas due to aesthetic impacts, particularly on public views and on neighborhood character. Their visibility has increased, especially where antennas are mounted on free-standing towers.

The general public has also raised concerns about the environmental effects of electromagnetic field exposure associated with radio transmissions, as evidenced by the presence of antennas. However, the Federal Communications Commission (FCC) is responsible for evaluating the human environmental effects of radio frequency (RF) emissions from FCC-regulated transmitters. The federal guidelines specifically preclude local decisions affecting environmental effects of radio frequency emissions, assuming that the provider is in compliance with the Commission's RF rules.

The following are general principles governing utilization of antennas:

- Encourage co-location of antennas; towers should host the facilities of more than one service provider to minimize their proliferation and reduce visual impacts.
- Mount antennas onto existing buildings or structures so that public scenic views and open spaces will not be negatively affected. However, except for the occupant's personal use, antennas on single-family dwelling roofs in residential districts are not appropriate.
- Use stealth technology (e.g. towers disguised as trees) especially on free-standing antenna towers in order to blend in with the surrounding environment and minimize visual impacts.

5. IMPLEMENTATION

Implementation of the **'Ewa Development Plan** will be accomplished by:

- Limiting urban development to areas within the Community Growth Boundary to support the vision for protection of agricultural lands and open space in 'Ewa;
- Guiding development in areas of critical concern including Kalaeloa through Special Area Plans;
- Guiding public investment in infrastructure through Functional Plans that support the vision, and implement the policies and guidelines of the Development Plan;
- Recommending approval, approval with modifications and/or conditions, or denial of developments seeking zoning and other development approvals based on how well they support the vision for 'Ewa's development and implement the Development Plan's policies, and guidelines;
- Implementing Development Plan priorities through the Public Infrastructure Map amendments and the City's annual budget process;
- Evaluating progress in fulfilling the vision of the **'Ewa Development Plan** every two years and presenting the results of the evaluation in the **Biennial Report**; and
- Conducting a review of the vision, policies, principles, guidelines, and Capital Improvement Program (CIP) priority investments of the **'Ewa Development Plan** every five years and recommending revisions as necessary.

5.1 PHASING OF DEVELOPMENT

Active projects in various stages of the development process are proceeding for all the undeveloped areas in 'Ewa within the Community Growth Boundary.

1. As identified in Table 2.1, residential projects with estimated development capacity of almost 35,000 units either can exempt themselves from County zoning or already have the zoning needed to proceed to apply for subdivision approval, and construction and building permits. These projects, subject to availability of infrastructure, are the projects likely to be developed first. These projects, if subject to County zoning, will have to meet unilateral agreement conditions (if adopted as part of zoning approval for each of these projects), and subdivision approval requirements that help insure that adequate infrastructure is available, and that project development implements key elements of the Plan vision.
2. Finally, there are projects which need the State Land Use Commission to approve a change from the State Agricultural District to the Urban District and then the City Council to approve a zone change. These projects have an estimated residential development capacity of over 13,000 units.

The City Council, in reviewing and deciding on the zone changes for these latter projects, will have the opportunity to evaluate the availability of infrastructure and require conditions that the developer must meet as a condition of zoning to insure infrastructure adequacy and attainment of key elements of the Plan vision.

However, there are two major projects involving substantial amounts of residential, commercial, and office development which are not required to gain Council approval or incorporate conditions regarding infrastructure adequacy or other elements of the 'Ewa Plan vision.

- The Department of Hawaiian Home Lands (DHHL) currently is developing 630 acres in 'Ewa, located along the Kualaka'i Parkway. Because the DHHL has the power under the State Constitution to exempt itself from all State and County land use laws, rules and regulations, the City has no ability to require DHHL to follow the 'Ewa Plan vision, policies and guidelines. Over 2,600 residential units and a million square feet of retail and office space could be developed under DHHL's plans for the area, as of 2010.
- In 2002, the State Legislature transferred redevelopment responsibility for Kalaeloa to the Hawai'i Community Development Authority (HCDA). HCDA also has the power, under its establishing statutes, to exempt itself from County land use laws, rules and regulations. The HCDA estimates

that almost 6,500 dwelling units could be developed at Kalaeloa by 2025, and over 116 thousand square feet of commercial space, 725 thousand square feet of office space, 1.8 million square feet of light industrial space, and 470 thousand square feet of light industrial mixed use space.

The City will seek the cooperation of the Department of Hawaiian Home Lands and the Hawai'i Community Development Authority in implementing the vision for 'Ewa's development.

5.1.1 PRIVATE DEVELOPMENT PHASING

The **'Ewa Development Plan** provides a clear signal to private landowners and developers as to where development will be supported.

The **Urban Expansion Area** is shown on the Phasing Map in Appendix A. The Urban Expansion Area shows where new urban development is occurring and where applications for new urban development will be accepted for processing.

Projects in the Urban Expansion Area needing zone changes and other development approvals would be eligible for processing with the adoption of the revised Plan and will be supported if:

- The project implements the vision for 'Ewa and relevant policies and guidelines, and
- Adequate infrastructure will be available to meet the demand resulting from the project.

No additional areas should be approved for development beyond the Community Growth Boundary in order to protect agricultural and preservation lands.

5.1.2 PUBLIC FACILITY INVESTMENT PRIORITIES

The regional directed growth strategy requires the cooperation of both public and private agencies in planning, financing, and constructing infrastructure. The City must take an active role in planning infrastructure and coordinating construction of needed infrastructure, such as expansion of Honouliuli Wastewater Treatment Plant and recovery of nonpotable water from its effluent, development of drainage systems for the

Kalo'i Gulch and Kapolei watersheds, provision of recreational open spaces, and development of the regional transportation system, parks, police and fire facilities.

Significant Capital Improvement Projects of the highest priority for the **'Ewa Development Plan** are:

- A dedicated Rapid Transit Corridor linking the City of Kapolei, Kalaeloa, the University of Hawai'i West O'ahu Campus, and Waipahū;
- Elementary, middle, and high schools identified by the State Department of Education as needed by 2035, as shown in Table 4.3;
- Additional City offices in the City of Kapolei;
- Additional State offices in the City of Kapolei;
- The University of Hawai'i West O'ahu campus and related development near the intersection of Kualaka'i Parkway and Farrington Highway;
- Uncompleted elements of the **'Ewa Highway Master Plan**, and the East-West arterial between UH West O'ahu and Fort Weaver Road;
- A network of collector / connector roads (at approximately 1/4 mile intervals) where feasible;
- Drainage improvements for Kalo'i Gulch, Kapolei, and West Loch Watersheds;
- New potable and non-potable water sources; and
- Expanded wastewater treatment plant capacity, and recycling of non-potable water reclaimed from wastewater effluent at the Honouliuli Wastewater Treatment Plant.

5.2 SPECIAL AREA PLANS

Special Area Plans provide more detailed policies, principles, and guidelines than the Development Plan for areas requiring particular attention. The form and content of Special Area Plans depends on what characteristics and issues need to be addressed in greater detail for the planning and guiding of development or use within the Special Area.

Special Area Plans can be used to guide land use development and infrastructure investment in Special Districts, Redevelopment Districts, or Resource Areas. Plans for Special Districts would provide guidance for development and infrastructure investment

in areas with distinct historic or design character or significant public views. Plans for Redevelopment Districts would provide strategies for the revitalization or redevelopment of an area. Plans for Resource Areas would provide resource management strategies for areas with particular natural or cultural resource values.

Kalaeloa is the only area in 'Ewa currently identified for Special Area Plan status. Its Special Area Plan is a combination of a Redevelopment District and Resource Area Plan.

The **Kalaeloa Redevelopment Plan**, a Special Area Plan of the **'Ewa Development Plan**, was prepared by the Barbers Point Naval Air Station Redevelopment Commission in December 2000 under guidelines of the Federal Base Realignment and Closure Act (BRAC). It was accepted by the City Council as the Special Area Plan for Kalaeloa in April 2001.

Responsibility for planning for and coordinating redevelopment of Kalaeloa was transferred from the Redevelopment Commission to the Hawaiian Community Development Authority (HCDA) in 2002 by the Hawai'i State Legislature. HCDA has prepared a community-based **Kalaeloa Master Plan** that was approved by the HCDA Board and the Governor in 2006, and should be submitted to the City Council for acceptance as the revised Special Area Plan for Kalaeloa.

5.3 FUNCTIONAL PLANS

Functional Plans are meant to provide guiding principles and strategies, which will be used by the various functional agencies to determine needs, assign priorities, phase infrastructure and facilities development, and secure financing to meet the needs identified in the Development Plan.

City agencies responsible for developing infrastructure and public facilities shall review existing Functional Plans, and in consultation with the Director of Planning and Permitting, update the existing Plans or prepare and submit to the Mayor new long-range Functional Plans for providing facilities and services for 'Ewa to the year 2035.

Agencies with Functional Planning responsibilities (and representative plans) include:

- Department of Planning and Permitting;
- Department of Design and Construction;
- Department of Environmental Services (Solid Waste Management Plan);
- Honolulu Fire Department;
- Honolulu Emergency Services Department;
- O'ahu Metropolitan Planning Organization (O'ahu Regional Transportation Plan);
- Department of Parks and Recreation;
- Honolulu Police Department;
- Department of Transportation Services (O'ahu Regional Transportation Plan); and
- Board of Water Supply (O'ahu Water Management Plan).

The Functional Plans should provide:

- A Resource-constrained Long-Range Capital Improvement Program with priorities;
- A Long-Range Financing Plan, with any necessary new revenue measures;
- A Development Schedule with first priority to areas designated for earliest development; and
- Service and facility design standards, including Level of Service Guidelines for determining infrastructure adequacy.

A resource-constrained program is one that identifies the fiscal resources that can be reasonably expected to be available to finance the improvements.

Level of Service Guidelines for determining adequacy of public facilities and infrastructure to support new development shall be established by the responsible City line agencies as part of their review and update of Functional Plans. Level of Service Guidelines for infrastructure and utilities which are primary State agency responsibilities (such as schools) shall be established by the Department of Planning and Permitting in consultation with the responsible State agencies.

In preparing the Functional Plans, a proactive public involvement process should be established which provides the public with access to complete information about

infrastructure and public facility needs assessment, alternatives evaluation, and financing. Outreach activities should involve the Neighborhood Boards, community organizations, landowners, and others who might be significantly affected by the infrastructure or public facilities projects to be developed under the Functional Plan.

The process should be characterized by opportunities for early and continuing involvement, timely public notice, public access to information needed to evaluate the decision, and the opportunity to suggest alternatives and to express preferences.

5.4 REVIEW OF ZONING AND OTHER DEVELOPMENT APPLICATIONS

A primary way in which the vision of the 'Ewa Development Plan will guide land use will be through the review of applications for zone changes and other development approvals. Approval for all development projects should be based on the extent to which the project supports the policies, and guidelines of the Development Plan.

All applications for projects requiring zone changes will be reviewed by the Department of Planning and Permitting for consistency with the policies, principles, and guidelines of the Ewa Development Plan during the Zone Change Application process. Those projects requiring environmental assessments shall follow the provisions of Hawaii Revised Statutes, Chapter 343.

All projects involving significant zone changes will require either an Environmental Assessment or an Environmental Impact Statement (See Section 5.4.1) which must include a Project Master Plan when 25 acres or more are involved (See Section 5.4.2). This is submitted to the Department of Planning and Permitting for review and acceptance prior to initiation of the first Zone Change Application for the project. (See definition of significant zone change in Section 5.4.1 below, and the definition of Project Master Plan in Section 5.4.2 below.)

5.4.1 ENVIRONMENTAL ASSESSMENT

Projects involving a significant zone change will be required to submit an Environmental Assessment (prepared in compliance with procedures for Chapter 343, Hawai'i Revised

Statutes) to the Department of Planning and Permitting to help the Department determine whether the project involves a significant environmental impact and if the project is supportive of the vision for 'Ewa's development.

A project will be considered to involve a significant zone change if:

- The application involves a zone change of 25 acres or more to any zoning district or combination of zoning districts, excluding preservation and agricultural zoning districts; or
- The project is more than 10 acres and involves a change from one zoning district to a Residential, or Country zoning district; or
- The project is more than 5 acres and involves a change from one zoning district to an Apartment, Resort, Commercial, Industrial, or Mixed Use zoning district; or
- The project would have major social, environmental, or policy impacts, or cumulative impacts due to a series of applications in the same area.

The Director of the Department of Planning and Permitting will determine, based on review of the Environmental Assessment, whether an Environmental Impact Statement (prepared in compliance with procedures for Chapter 343, Hawaii Revised Statutes) will be required or whether a Finding of No Significant Impact should be issued.

In applying for a zoning change, the applicant must either:

- Receive a determination from the Director of Planning and Permitting that the project does not involve a significant zone change; or
- Submit an Environmental Assessment or Environmental Impact Statement with the zone change application.

Before an application for a significant zone change can be accepted for processing by the Department of Planning and Permitting, the applicant must either:

- Receive a Finding of No Significant Impact (FONSI) from the Director of Planning and Permitting; or
- Receive an acceptance of a Final Environmental Impact Statement (FEIS) for the project from the Director of Planning and Permitting.

All Environmental Assessments/Environmental Impact Statements (EA/EIS) required for a significant zone change involving 25 acres or more should include a Project Master

Plan (See Section 5.4.2 following). The scope of the EA/EIS must cover, at a minimum, the specific development associated with a particular zone change application, but at the option of the applicant, may cover subsequent phases of a larger project, as well.

Zone change applications for a project already assessed under the National Environmental Policy Act, Hawaii Revised Statutes Chapter 343, Revised Ordinances of Honolulu Chapter 25 (Shoreline Management), or a preceding zoning change application, will not require a new Environmental Assessment so long as the Director of Planning and Permitting determines that the desired zoning and land use generally conform to that described in the existing Environmental Assessment/Environmental Impact Statement.

5.4.2 PROJECT MASTER PLANS

The Project Master Plan is intended solely as a guide to help describe in words and illustrations how a project promotes the vision, policies, and guidelines for 'Ewa.

Projects associated with a significant zone change for 25 acres or more, shall include a Project Master Plan as part of the Environmental Assessment or Environmental Impact Statement submitted to the Department of Planning and Permitting. The Project Master Plan shall cover all project phases. It shall be reviewed to determine whether the project supports the vision, policies, and guidelines of the **'Ewa Development Plan**. In the event a FONSI or Final EIS has already been accepted by the City for a particular project, a subsequent Project Master Plan will not be required.

The Project Master Plan should be based on the best information available to the applicant at the time the Zone Change Application is submitted to the City.

5.4.2.1 Coverage and Scope

The Project Master Plan should cover all phases of the project and should describe, using narrative and graphic illustration, how the project conforms to the vision for 'Ewa, and the relevant policies, and guidelines for the project site, the surrounding lands, and the region.

5.4.2.2 Key Elements

While the scope and detail will vary according to the scope and complexity of the project, the Project Master Plan should contain the following elements. When a key element enumerated below is adequately addressed elsewhere in an EA/EIS, discussion of related issues should be referenced within the Master Plan portion of the document.

- **Statement of Consistency with the ‘Ewa Development Plan’ Vision -** The Master Plan should indicate how the project supports the vision, policies, and guidelines of the ‘Ewa Development Plan’.
- **Site Analysis -** The Master Plan should identify how the proposed development physically relates to prominent existing site features, views identified in Table 3.2 and on the Open Space Map in Appendix A, and surrounding urban or urbanizing areas and should describe any related opportunities and constraints.
- **Land Use -** The Master Plan should indicate the proposed pattern of land uses by general zoning district category.
 - Land uses proposed for lands in any future development phases that are not included in the current Zone Change Application will be considered only conceptual and intended to serve only as a working guide for future development.
 - In larger projects, residential neighborhoods should be designated, and concepts intended to create a sense of neighborhood should be described.
 - The Master Plan should identify where the community’s “main street” or village or town center is located and show how any planned commercial development will help create a pedestrian friendly environment for that center.
 - For projects that involve multiple uses, the intended relationship between zoning districts should be described.
- **Open Space -** The Master Plan should discuss open space as a component of the overall land use element, and should indicate how the proposed development promotes the Development Plan open space and guidelines and the vision of an integrated regional open space system.
- **Circulation -** The Master Plan should indicate:

- General street patterns and the application of street and block standards which minimize dead end streets and provide adequate connectivity;
- Intended connections to the regional roadway network and adjacent communities; and
- Potential transit routes and pedestrian and bicycle routes.
- **Design Theme or Character** - The Master Plan should depict, with sketches, photos or descriptions, the intended general urban design of the area. These vignettes should be represented and understood to be conceptual depictions of the potential general design theme of the project.
- **Telecommunications** - The Master Plan should indicate the sites and network conduit facilities that would be provided to meet expected telecommunications infrastructure needs, if applicable.

5.4.2.3 Review Procedures

The Department of Planning and Permitting shall review the Project Master Plan concurrently with the Environmental Assessment/Environmental Impact Statement and shall determine whether the Project Master Plan supports the 'Ewa Development Plan vision or whether changes are needed.

5.4.2.4 Modification of Master Plans for Future Phases

Often, projects are developed in phases. As a result, the Project Master Plan is likely to cover more land than the developer is currently requesting for a zone change. The feasibility and desirability of plans for later phases of the Project Master Plan can be greatly altered in light of more detailed study of site characteristics and site planning, or change in market forces or government policies.

As a result, elements of Master Plans covering lands in phases which are not included in a current Zone Change Application should be considered only conceptual and intended to serve only as a working guide for future development. Changes to these parts of a Master Plan can be made by the developer at any time without requiring approval by the City.

If a Master Plan has been revised in planning for a subsequent phase of a project, an updated version of the Master Plan should be submitted with the zone change application for that phase. No new Environmental Assessment or Master Plan review should be required unless there has been a major alteration in the project vision and land uses from that proposed in the original Master Plan.

5.4.3 ADEQUATE FACILITIES REQUIREMENT

All projects requesting zone changes shall be reviewed to determine if adequate public facilities and infrastructure will be available to meet the needs created as a result of the development. Level of Service Guidelines to define adequate public facilities and infrastructure requirements will be established during the Capital Improvement Program.

In order to guide development and growth in an orderly manner as required by the City's **General Plan**, zoning and other development approvals for new developments should be approved only if the responsible City and State agencies indicate that adequate public facilities and utilities will be available at the time of occupancy or if conditions the functional agency indicates are necessary to assure adequacy are otherwise sufficiently addressed.

The Department of Planning and Permitting will review and summarize any individual agency's findings regarding public facilities and utilities adequacy which are raised as part of the EA/EIS process. The Department of Planning and Permitting will address these findings and any additional agency comments submitted as part of the agency review of the zone change application, and will recommend conditions that should be included in the Unilateral Agreement or Development Agreement to insure adequacy of facilities.

5.4.4 ZONING APPLICATION REVIEW

Zoning applications will be reviewed by the Department of Planning and Permitting for consistency with the **General Plan**, the **'Ewa Development Plan**, and any applicable Special Area Plan provisions as part of the Zone Change application review.

The Director of Planning and Permitting will recommend either approval, approval with changes and/or conditions, or denial within the prescribed period as set forth in ROH

Section 21-2.40, and the Director's written review of the application shall address the consistency or inconsistency of the project with the General Plan, the 'Ewa Development Plan and any applicable Special Area Plan and shall become part of the zone change report which will be sent to the Planning Commission and the City Council.

5.4.5 UNILATERAL AGREEMENTS

Before the enactment of an ordinance for a zone change, conditions may be associated with the zone change approval. These conditions are set forth in the applicant's Unilateral Agreement which is recorded with the Bureau of Conveyances and/or the Land Court so that the conditions set forth in the agreement run with the land and bind all subsequent owners of the property.

The Director of Planning and Permitting evaluates zone change requests and may initially recommend conditions of approval in a report to the Planning Commission which evaluates the requested zone change and recommends approval, denial or approval with conditions. The Director's recommendations and the Planning Commission recommendations are sent to the City Council which makes the final decision on the proposed development, including what conditions should be included in the Unilateral Agreement.

In the evaluation, the Director of Planning and Permitting evaluates the proposed zone change for consistency with the 'Ewa Development Plan vision, policies and guidelines. In addition, Project Master Plans submitted for large projects at the time of the zone change application may be referenced as a working guide in formulating conditions of approval.

5.4.6 DEVELOPMENT AGREEMENTS

Before the enactment of an ordinance for a zone change, the City and the applicant may negotiate a Development Agreement. The Development Agreement sets forth mutually acceptable contractual conditions agreed upon by the City and the applicant once an ordinance for a zoning change has been approved. The Development Agreement conditions are recorded with the Bureau of Conveyances and/or the Land Court so that the conditions of the agreement run with the land and bind all subsequent owners of the property.

Development agreements negotiated by the City Council shall be consistent with the Development Plan vision for 'Ewa and should incorporate key conditions that are necessary to implement the Development Plan vision.

5.5 ANNUAL CIP REVIEW

Annually, the Director of Planning and Permitting will work jointly with the Director of Budget and Fiscal Services and the City agencies to review all projects in the City's Capital Improvement Program (CIP) budget for conformance to the purposes of the **General Plan**, the **'Ewa Development Plan**, and other Development Plans, any applicable Special Area Plan provisions, and the appropriate Functional Plans. The Director of Planning and Permitting will make a written report of findings in the budget submittal to the Council, pursuant to Revised Charter Section 6-1503.

Public review of how projects in the City's CIP budget help accomplish the vision of the **'Ewa Development Plan** should be a high priority. Public review should be encouraged both in the screening of agency CIP budget proposals in the preliminary draft CIP Budget (which is available in November), in review of projects included in the Draft CIP Budget (typically completed sometime in January or February), and in the City Council's formal public review and CIP Budget adoption processes.

5.6 BIENNIAL REPORT

Every two years, the Department of Planning and Permitting prepares the **Biennial Report**. The **Report** is a review of the City in terms of the **General Plan** and the Development Plans.

Each Biennial Report should address the achievements and progress in fulfilling the vision of the **'Ewa Development Plan**.

5.7 FIVE YEAR DEVELOPMENT PLAN REVIEW

The Department of Planning and Permitting shall conduct a comprehensive review of the **'Ewa Development Plan** and shall report its findings and recommended revisions to the Planning Commission and the City Council five years after adoption and every five years thereafter.

In the Five Year review, the **'Ewa Development Plan** will be evaluated to see if the regional vision, policies, guidelines, and implementing actions are still appropriate.

5.8 DEVELOPMENT PLAN COMMON PROVISIONS AND EXISTING LAND USE APPROVALS

This Development Plan will go into effect upon adoption by ordinance. At that time, the revised Development Plan will become a self-contained document, not reliant on the Development Plan Common Provisions which formerly applied to the **'Ewa Development Plan** as well as all the other Development Plans.

Land use approvals granted under previously approved Development Plan amendments will remain in force and guide zoning decisions unless clearly inconsistent with the vision and policies of the **'Ewa Development Plan**.

Development can proceed in accordance with existing zoning, Unilateral Agreements, and approved Urban Design Plans.

If an Environmental Assessment or Environmental Impact Statement (EA/EIS) was accepted in the course of a Development Plan land use approval for a project, it should be acceptable to meet the requirement for an initial project EA/EIS when zone change applications are submitted for subsequent phases of the project unless the project scope and land uses are being significantly changed from that described in the initial EA/EIS.

5.9 RELATION TO GENERAL PLAN POPULATION GUIDELINES

The **‘Ewa Development Plan** implements the **General Plan** population distribution policies (in Population Objective C) as follows:

- ‘Ewa's projected share of O‘ahu population in 2025 (13.8 percent) will be slightly above the **General Plan** guideline of 13 percent;
- Development will be encouraged within the secondary urban center at Kapolei and the urban fringe areas in ‘Ewa; and
- The recommended land use pattern also implements Population Objective C, Policy 3, which is to limit growth in areas outside the PUC, Central O‘ahu, and ‘Ewa so that the suburban and country character of these outlying areas can be maintained.

The **General Plan** population distribution guidelines will continue to be used as a guide to direct the pattern of growth and development in the ‘Ewa Development Plan Area. Assessments of this performance will be reported in both the Biennial Report and in the Five Year Reviews of the Development Plan.

Under the **‘Ewa Development Plan**, all proposed projects will be evaluated against how well they fulfill the vision for ‘Ewa set forth in the Development Plan and how closely they meet the policies, principles, and guidelines selected to implement that vision.

5.10 REVIEW AND REVISION OF DEVELOPMENT CODES

To insure that the vision, policies, and guidelines of the **‘Ewa Development Plan** and other Development Plans and Sustainable Communities Plans are implemented, current regulatory codes and standards should be reviewed and revised, as necessary, including the following:

- **Land Use Ordinance** (Chapter 21, Revised Ordinances of Honolulu). Zoning code standards and the zoning map for ‘Ewa need to be revised to reflect policies, principles and guidelines in the **‘Ewa Development Plan**.
- **Subdivision Rules and Regulations** (Department of Planning and Permitting, pursuant to Chapter 22, Revised Ordinances of Honolulu). Public right-of-way standards used for subdivision and consolidation of

land need to be revised to reflect transportation policies, principles, and guidelines in the Development Plan.

- **Traffic Standard Manual** (Department of Transportation Services, July 1976, as revised). Standards which are applied to local and most collector/connector streets need to be revised to reflect transportation policies, principles, and guidelines in the **‘Ewa Development Plan**.
- **State Highways Division Procedures Manual**, Vol. 8, Chapter 5, Section 4 (State Department of Transportation). These State highway standards need to be reviewed to identify provisions which may conflict with the transportation policies, principles, and guidelines in the **‘Ewa Development Plan**.
- **Standard Details for Public Works Construction** (Honolulu Department of Public Works with Kaua‘i, Mau‘i, and Hawai‘i County Departments of Public Works, September 1984). Engineering standards for the dedication of public works construction need to be revised to reflect **‘Ewa Development Plan** principles and guidelines.
- **Storm Drainage Standards** (Department of Planning and Permitting, January 2000). Standards for the dedication of drainage systems to incorporate grassed swales and retention basins into the design need to be created to reflect the Development Plan policies, principles, and guidelines for open space.
- **Park Dedication Rules and Regulations** (Department of Planning and Permitting, pursuant to Chapter 22, Article 7, Revised Ordinances of Honolulu). Regulations need to be reviewed to determine if passive drainage systems, which are designed for recreation use, should count toward park dedication requirements, especially in cases where the area would exceed the amount of land that would be required under current rules and regulations.
- **Wastewater Management Design Standards** (Department of Wastewater Management Design Standards, Volumes I and II) and the 1990 Revised Ordinance of Honolulu, Chapter 14 (relating to sewer services). These standards and ordinance may require review to further implement Development Plan policies and guidelines.

5.11 IMPLEMENTATION MATRIX

This section provides a summary of the Plan's policies and guidelines from Chapters 3 and 4 to help understand how the Plan will be implemented. This implementation matrix presents the policies and guidelines as generalized and consolidated statements. Chapters 3 and 4 should be consulted for the specific language of each policy or guideline.

For each policy and guideline statement, the matrix identifies:

- The regulatory code or program for effecting implementation,
- Agencies with responsibility for implementation, and
- The role of each agency.

Implementation of the policies and guidelines will depend on each agency's priorities and availability of resources.

The Department of Planning and Permitting is either a regulator or an implementer for many plan components, while simultaneously acting as the advocate for implementation of all the Plan vision elements and policies.

The key to abbreviations used in the table is found at the end of the table.

Table 5.1: Implementation Matrix

Policies and Guidelines Statements	Programs	Agencies	Roles
OPEN SPACE			
Provide long-range protection for diversified agriculture on lands outside Community Growth Boundary. Protect scenic views and natural, cultural, and historic resources	SLUDBA	LUC DPP	Regulator Advocate/ Regulator
	ZC	DPP	Regulator
Mountain Areas			
Protect and expand access to recreational resources in the mountains. Acquire and maintain a public campground and hiking trails in the area <i>mauka</i> of the Community Growth Boundary on the Wai‘anae Range. Acquire and maintain public access to mountain trails in the Pālehua Ridge area via Pālehua Road and Makakilo Drive.	State Trails State Parks	DLNR	Implementer / Regulator
	ZC/UA UDP	DPP	Regulator
Maintain the forest at higher elevations in the State Conservation District. Plan utility corridors and other uses to avoid disturbance to areas with high concentrations of native species.	Cons Distr	LUC	Regulator
		DLNR	Implementer
Identify and protect areas that are important to Native Hawaiian cultural practices	Cons Distr	LUC DLNR	Regulator Implementer
	Hist Pres	DLNR	Regulator
Natural Gulches and Drainageways			
Preserve the natural gulches on the slopes of the Wai‘anae Range foothills within the Community Growth Boundary as part of the open space system.	ZC	DPP	Advocate
	LUO SUB	DPP	Regulator
Integrate planned improvements to the ‘Ewa drainage systems into the regional open space network by emphasizing the use of retention basins and recreational access in the design approach.	Drain MP	DPP	Regulator
View drainageways and utility corridors as opportunities to link major open spaces with pedestrian and bike paths along open corridors in order to create the regional open space network.	Drain MP UDP	DPP	Regulator
Where practical, retain drainageways as natural or man-made vegetated channels rather than concrete channels.	Drain MP	DPP	Regulator

Table 5.1: Implementation Matrix

Policies and Guidelines Statements	Programs	Agencies	Roles
Shoreline Areas			
Protect and expand access to recreational resources at the shoreline and in the ocean. Provide public pedestrian access, with limited improvements (e.g., parking, potable water supply), except where access is restricted by the military for security reasons.	SMA SUB Shore Stbk	DPP	Regulator
Maintain and enhance near-shore wetlands and mangroves as wildlife habitats.	ESA/MBTA	USFWS/NOAA	Implementer Regulator
		USACE	Regulator
		DLNR	Implementer Regulator
	INRMP	USDOD	Implementer
	ZC	DPP	Advocate
	SMA LUO/UA	DPP	Regulator
Identify and protect areas that are important to Native Hawaiian cultural practices	Cons Distr	LUC DLNR	Regulator Implementer
	Hist Pres	DLNR	Regulator
Coordinate private and public landowners' efforts to create continuous shoreline easements to ensure the maximum feasible degree of lateral public access.	KMP	HCDA	Regulator
	SMA SUB Shore Stbk UDP	DPP	Regulator
	SUB Shore Stbk	DPP	Regulator
Analyze the possible impact of sea level rise for new public and private projects in shoreline areas and incorporate, where appropriate and feasible, measures to reduce risks and increase resiliency to impacts of sea level rise.	CZM	OP	Regulator
	SMA SUB Shore Stbk	DPP	Regulator

Table 5.1: Implementation Matrix

Policies and Guidelines Statements	Programs	Agencies	Roles
Avoid the use of breakwaters or jetties at the Ocean Pointe/Hoakalei marina entrance in order to preserve surf sites.	SMA Shore Stbk	DPP	Regulator
Expand limited public access to the shoreline waters of West Loch beyond the West Loch Shoreline Park.	INRMP	DOD	Regulator Implementer
Agricultural Areas			
Permit facilities necessary to support intensive cultivation of arable agricultural lands.	Agric Distr	LUC	Regulator
	LUO	DPP	Regulator
Permit facilities to support limited outdoor recreation use, such as camping, horseback riding, and hiking, in areas where agricultural use is not feasible.	Agric Distr	LUC	Regulator
	SUP LUO	DPP	Regulator
Permit residential use only to the extent that it is accessory to the agricultural use.	LUO	DPP	Regulator
Design and locate buildings and other facilities that are accessory to an agricultural operation to minimize impact on nearby urban areas, arterial roads, and major collector streets.	LUO	DPP	Regulator
Golf Courses			
Locate and design golf courses to optimize their function as drainage retention areas.	UDP Drain MP	DPP	Regulator
Design golf courses to consider public safety and potential impacts on views and recreational resources, and accommodate and incorporate pedestrian paths and bikeways.	UDP LUO	DPP	Regulator
Wildland-Urban Fire Hazard Setbacks			
As determined appropriate by the Honolulu Fire Department, require residential or commercial developments that are adjacent either to preservation areas within the Community Growth Boundary or to lands within the State Conservation District to provide a setback to reduce the risk of fire spreading from the "wildlands" to the developed area.	SUB	DPP HFD	Regulator Advocate
Greenways and Open Space Corridors			
Provide additional connectivity for bicyclists and pedestrians by developing the Pearl Harbor Historic Trail between 'Aiea and Nānākuli.	State CIP City CIP	DOT DDC	Implementer Implementer

Table 5.1: Implementation Matrix

Policies and Guidelines Statements	Programs	Agencies	Roles
Provide sufficient easement width for the major trunk lines and transmission and distribution lines for utility systems to allow landscaping within and adjacent to the easement, consistent with all applicable operations, maintenance, and safety requirements. Place new transmission lines underground, where possible, under criteria specified in State law.	Cons Distr SUB BID/CFD	DLNR DPP PUC BFS HECO DA	Regulator Regulator Regulator Regulator Implementer Implementer
Permit the use of utility easements for pedestrian and bicycle routes, consistent with all applicable operations, maintenance, and safety requirements.	SUB	DPP HECO	Regulator Implementer
Design the rights-of-way for major and minor arterials as landscaped parkways or greenways, complete with a landscaped median strip, landscaped sidewalks, and bikeways.	SUB UDP	DPP	Regulator
REGIONAL PARKS AND RECREATION COMPLEXES			
Consider using public-private partnerships to build, and maintain new regional parks and recreation complexes in order to sustain economic development.	City CIP	DPR DDC	Implementer Implementer
	BID/CFD	DES BFS DA	Implementer Regulator Implementer
Develop a major regional park within Kalaeloa that provides beach-oriented recreation, camping, and support facilities near the shoreline, other active recreation facilities in mauka areas, and preserves for cultural and archaeological resources and for wildlife habitats such as wetlands and endangered plant colonies.	KMP	HCDA	Regulator
	City CIP	DDC DPR	Implementer Implementer
Complete development of Kapolei Regional Park to provide diverse active and passive recreation within easy walking distance of both the City Center and the Villages of Kapolei.	City CIP	DDC	Implementer
	Park MP	DPR	Implementer
Use best practices in the architectural and landscaping design, incorporation of natural features and indigenous plants, siting of facilities, connectivity, and provision of transit for regional parks and recreation complexes.	City CIP	DDC	Implementer
	Park MP	DPR	Implementer
	UDP SUB	DPP	Regulator
Develop additional beach and shoreline parks along the 'Ewa coastline.	City CIP	DDC DPR	Implementer Implementer

Table 5.1: Implementation Matrix

Policies and Guidelines Statements	Programs	Agencies	Roles
Maintain prominent landforms at Pu‘u O Kapolei and Pu‘u Pālailai as natural visual features and regional landmarks. Develop Pu‘u Pālailai Park as a private nature park.	City CIP	DDC DPR	Implementer Implementer
	ZC	DPP	Regulator
	BID/CFD	BFS DA	Regulator Implementer
Retain, protect, and incorporate wetland, and other wildlife habitat and environmentally sensitive areas as passive recreational resources.	ESA/MBTA	USFWS/NOAA USACE DLNR	Regulator Implementer
	INRMP	DOD	Regulator Implementer
	SMA	DPP	Regulator
COMMUNITY-BASED PARKS			
Provide adequate parks and supporting amenities to meet residents' recreational needs.	Park Dedic.	DPP	Regulator
	City CIP	DDC	Implementer
		DPR	Implementer
Co-locate parks with elementary or intermediate schools. Coordinate design, development and use of recreational facilities with the DOE where efficient and effective.	State CIP	DOE	Implementer
	City CIP	DDC	Implementer
		DPR	Implementer
Where feasible, site parks near the center of neighborhoods, in order to maximize accessibility and connectivity. Provide pathways to parks from surrounding streets.	UDP SUB	DPP	Regulator
Use xeriscaping, non-potable irrigation water, and efficient irrigation systems wherever possible.	City CIP	DDC	Implementer
		DPR	Implementer
Support continuation of controlled access to the Wai‘anae Range mountain trails via Pālehua Road.	State CIP State Trails	DLNR	Implementer
HISTORIC AND CULTURAL RESOURCES			
Emphasize physical references to ‘Ewa's history and cultural roots to help define ‘Ewa's unique sense of place. Protect existing visual landmarks, and support creation of new culturally appropriate landmarks. Preserve significant historic features from the plantation era and earlier periods as recommended by the State Historic Preservation Officer. Retain significant vistas whenever possible.	ZC/UA	DPP	Regulator
	UDP		
	Hist Pres	SHPD	Regulator
	City CIP	DDC	Implementer
DFM		Implementer	

Table 5.1: Implementation Matrix

Policies and Guidelines Statements	Programs	Agencies	Roles
Assume that historic, cultural, and archaeological site mitigations approved as part of prior development approvals carry out the Plan vision and policies.	UA	DPP	Regulator
	UDP		
	Hist Pres	SHPD	Regulator
Sites Under Review			
Vary the treatment of sites according to their characteristics and potential value. Use in situ preservation and appropriate protection measures for historic, cultural, or archaeological sites with high preservation value. Allow historic sites to be converted from their original intended use to serve a new function if historic value is maintained, especially if interpretive value is enhanced.	Hist Pres	SHPD	Regulator
	LUO	DPP	Implementer
	City CIP	DDC	Implementer
		DFM	Implementer
Protect the Honouliuli Internment Camp site and the 'Ewa Marine Corps Air Field site in Kalaeloa from development while the value and appropriate treatment of the two sites are being determined.	Hist Pres	SHPD	Regulator
	KMP	HCDA	Regulator
		DPR	Implementer
Impacts of Development on Historic and Cultural Resources			
Plan and design adjacent uses to avoid conflicts or abrupt contrasts that detract from or destroy the physical integrity and historic or cultural value of the site.	Hist Pres	SHPD	Regulator
	City CIP	DDC	Implementer
		DFM	Implementer
Design and site all structures, where feasible, to reflect the need to maintain and enhance available views of significant landmarks and vistas. Whenever possible, relocate or place underground overhead utility lines and poles that significantly obstruct public views, under criteria specified in State law.	UA	DPP	Regulator
	UDP		
	BID/CFD	PUC	Regulator
		BFS	Regulator
		HECO	Implementer
DA	Implementer		
OR&L Historic Railway			
Maintain or repair the existing track to the extent feasible to permit historic and educational rides. Extend the route from 'Ewa Villages to Nānākuli. To allow connectivity within the region, accommodate cross-traffic at appropriate intervals along the right-of-way. Set back new development a minimum of 50 feet on either side of the R-O-W. Allow railroad accessory structures, parking, and loading areas in the R-O-W and setback areas.	Hist Pres	SHPD	Regulator
	U&OA	HiRS	Implementer
	DOT	Regulator	
	ZC	DPP	Advocate
	LUO SUB	DPP	Regulator