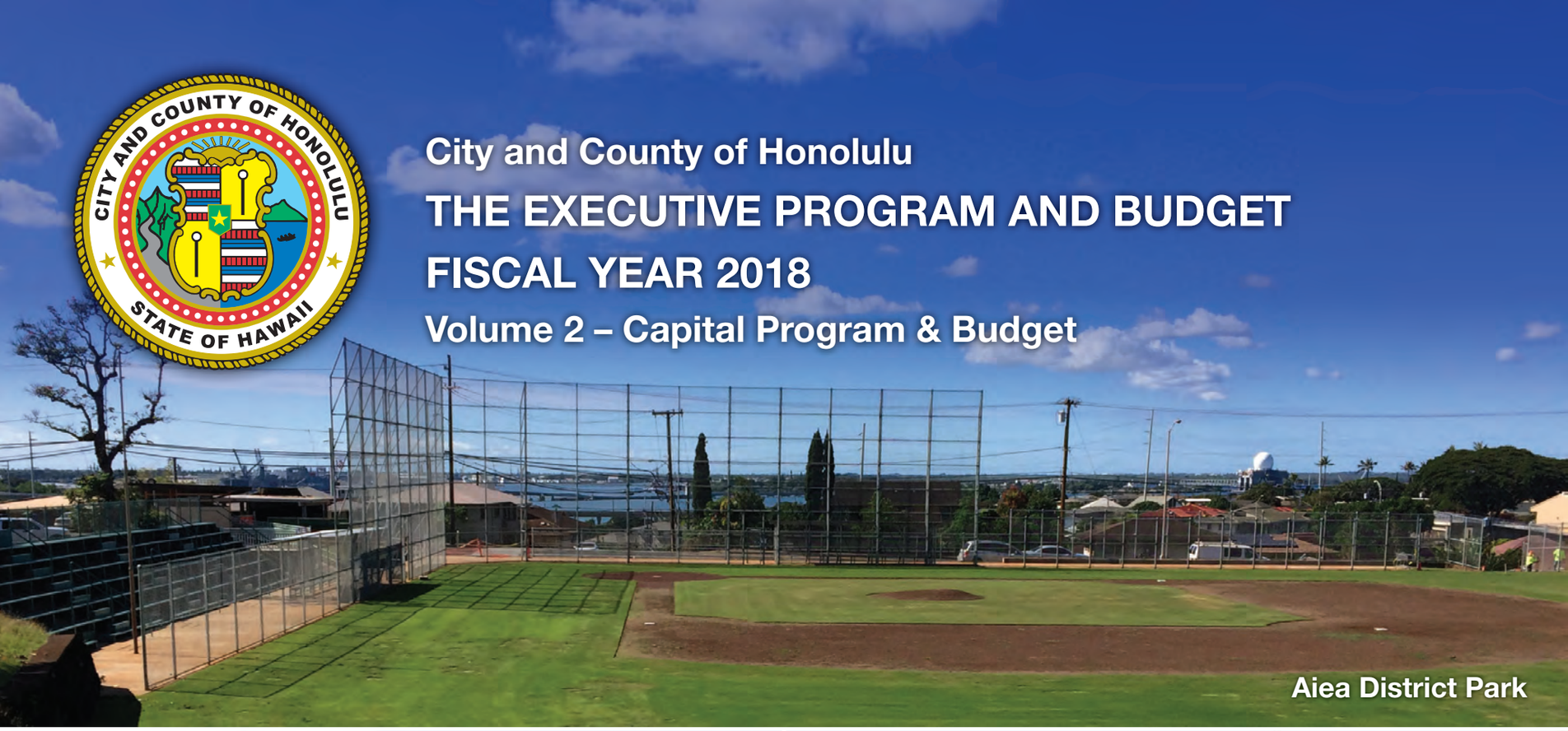
City and County of Honolulu

THE EXECUTIVE PROGRAM AND BUDGET

FISCAL YEAR 2018

Volume 2 – Capital Program & Budget



Aiea District Park

Kanewai Community Park

Street Improvements

Honolulu Zoo Reptile Facility

Sand Island Wastewater Treatment Plant

CITY AND COUNTY OF HONOLULU

KIRK CALDWELL
MAYOR

ROY K. AMEMIYA, JR., MANAGING DIRECTOR

NELSON H. KOYANAGI, JR., DIRECTOR OF BUDGET AND FISCAL SERVICES

CITY COUNCIL

RON MENOR, COUNCIL CHAIR
DISTRICT IX (WAIKELE TO MAKAKILO AND MILILANI TOWN)

COUNCILMEMBERS:

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ERNEST Y. MARTIN	DISTRICT II	(MOKULEIA AND MILILANI MAUKA TO KAHALUU)
IKAIKA ANDERSON, VICE CHAIR	DISTRICT III	(WAIMANALO TO HEEIA)
TREVOR OZAWA	DISTRICT IV	(HAWAII KAI TO ALA MOANA BEACH PARK)
ANN H. KOBAYASHI	DISTRICT V	(KAPAHULU TO MAKIKI)
CAROL FUKUNAGA	DISTRICT VI	(MAKIKI TO KALIHI)
JOEY MANAHAN	DISTRICT VII	(KALIHI TO HALAWA VALLEY)
BRANDON ELEFANTE	DISTRICT VIII	(FORT SHAFTER TO WAIPIO GENTRY)

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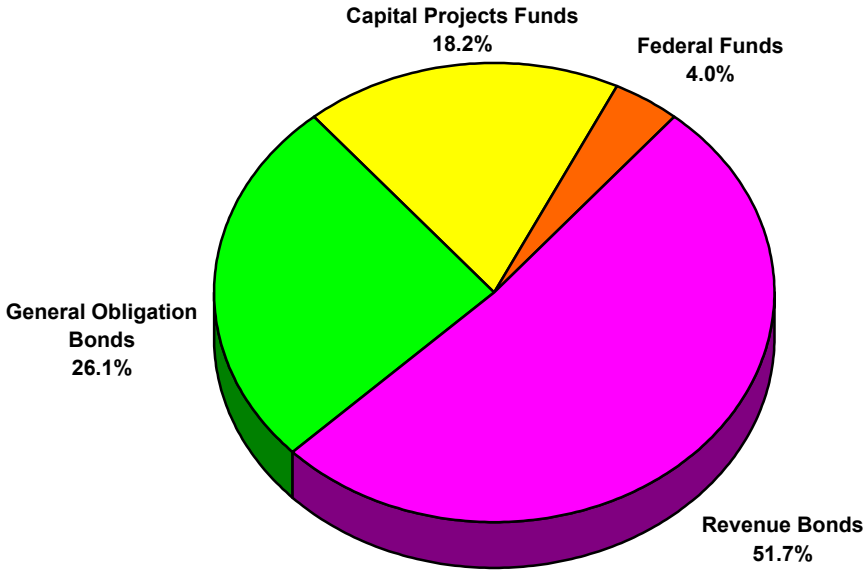
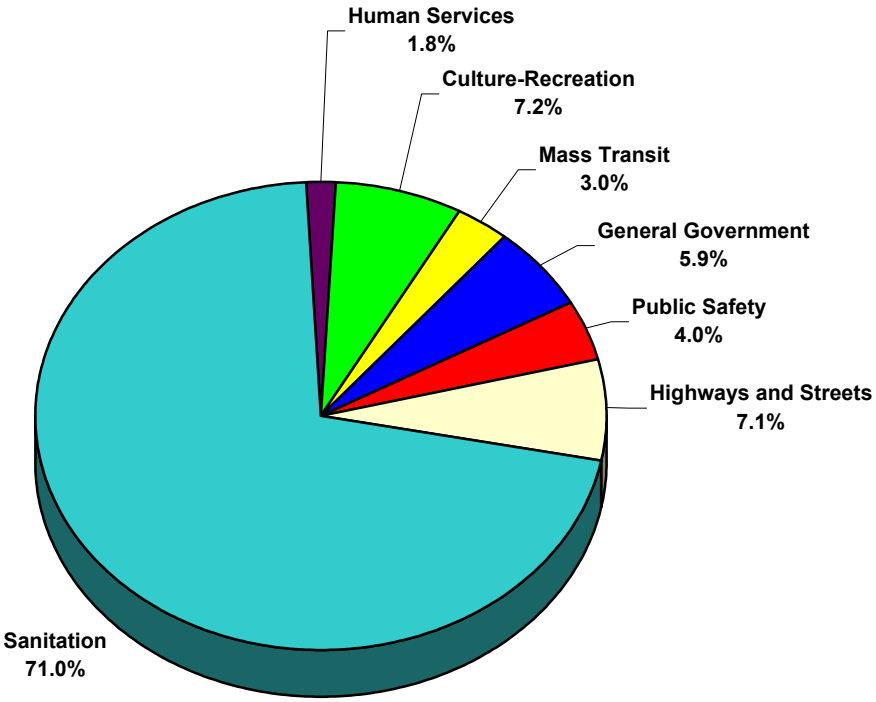
Capital Program Resources
FY 2018



$956 Million

Capital Program Distribution FY 2018



$956 Million

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PHASE		FUND SOURCE	
ART	ART	AF	Affordable Housing Fund
CONST	CONSTRUCTION	CD	Community Development Fund
DGN	DESIGN	CF	Clean Water and Natural Lands Fund
EQUIP	EQUIPMENT	FG	Federal Grants Fund
INSP	INSPECTION	GI	General Improvement Bond Fund
LAND	LAND	GN	General Fund
OTHER	OTHER	HI	Highway Improvement Bond Fund
PLAN	PLANNING	HN	Hanauma Bay Nature Preserve Fund
RELOC	RELOCATION	PP	Parks and Playgrounds Fund
		SR	Sewer Revenue Bond Improvement Fund
		SW	Sewer Fund
		UT	Utilities' Share
		WB	Solid Waste Improvement Bond Fund
		WF	Solid Waste Special Fund

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Function/Sub-Function

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Six-Year CIP and Budget FY 2018-2023

PROCUREMENT OF MAJOR EQUIPMENT

Project:	1998602	Function:	General Government	Council:	99
Priority No.:	1	Program:	Staff Agencies	Nbrd Board:	99
TMK:		Department:	Budget and Fiscal Services	Senate:	99
				House:	99
				Other:	

Description: Purchase of major equipment for agencies/departments to operate effectively and provide essential public services. Equipment may include trucks, vehicles and heavy equipment for the delivery of services.

Justification: Purchase of major equipment is needed for departments to provide services they are charged with. Deferral of equipment purchase and further delays may significantly impact the ability of departments to provide services to the public.

Use of Funds: Acquisition of major equipment for agencies/departments to deliver services to the public in a timely and cost effective manner.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
EQUIP	BT	0	0	0	0	0	0	0	0	0	0	0
EQUIP	DN	303	0	0	0	0	0	0	0	0	0	0
EQUIP	GC	2,259	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	50,060	0	6,129	4,129	0	0	0	0	0	4,129	0
EQUIP	GN	527	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	12,578	0	2,620	2,251	0	0	0	0	0	2,251	0
EQUIP	HN	0	0	0	0	0	0	0	0	0	0	0
EQUIP	HW	5,286	0	0	0	0	0	0	0	0	0	0
EQUIP	SV	1,347	0	0	0	0	0	0	0	0	0	0
EQUIP	SW	0	0	0	0	0	0	0	0	0	0	0
EQUIP	WB	60,869	0	5,506	7,841	0	0	0	0	0	7,841	0
EQUIP	WF	0	0	0	0	0	0	0	0	0	0	0
	Total	133,229	0	14,255	14,221	0	0	0	0	0	14,221	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
EQUIP	7/1/2017	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	5

Six-Year CIP and Budget FY 2018-2023

PROJECT ADJUSTMENTS ACCOUNT

Project:	1979110	Function:	General Government	Council:	99
Priority No.:	2	Program:	Staff Agencies	Nbrd Board:	99
TMK:		Department:	Budget and Fiscal Services	Senate:	99
				House:	99
				Other:	

Description: Funds from this account may be expended to pay for any excess in contract price(s) or project cost when the contract price(s) or the project cost exceeds the city's estimate for land acquisition, planning, design, construction, inspection, relocation and equipment for projects included in the capital improvements program and budget.

Justification: Provide the necessary funds needed to expeditiously initiate and complete the programmed projects.

Use of Funds: Funding for any project cost exceeding the estimate for land acquisition, planning, design, construction, inspection, other equipment, and relocation for projects included in the capital budget.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
OTHER	GI	0	1	1	1	1	1	1	1	1	6	0
OTHER	HI	0	1	1	1	1	1	1	1	1	6	0
OTHER	PP	0	0	0	0	0	0	0	0	0	0	0
OTHER	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	0	2	2	2	2	2	2	2	2	12	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
OTHER	7/1/2017	6/30/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

Department Summary: Budget and Fiscal Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
BT	0	0	0	0	0	0	0	0	0	0	0
DN	303	0	0	0	0	0	0	0	0	0	0
GC	2,259	0	0	0	0	0	0	0	0	0	0
GI	50,060	1	6,130	4,130	1	1	1	1	1	4,135	0
GN	527	0	0	0	0	0	0	0	0	0	0
HI	12,578	1	2,621	2,252	1	1	1	1	1	2,257	0
HN	0	0	0	0	0	0	0	0	0	0	0
HW	5,286	0	0	0	0	0	0	0	0	0	0
PP	0	0	0	0	0	0	0	0	0	0	0
SR	0	0	0	0	0	0	0	0	0	0	0
SV	1,347	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0	0	0
WB	60,869	0	5,506	7,841	0	0	0	0	0	7,841	0
WF	0	0	0	0	0	0	0	0	0	0	0
Total	133,229	2	14,257	14,223	2	2	2	2	2	14,233	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
EQUIP	133,229	0	14,255	14,221	0	0	0	0	0	14,221	0
OTHER	0	2	2	2	2	2	2	2	2	12	0
Total	133,229	2	14,257	14,223	2	2	2	2	2	14,233	0

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INTEGRATED FINANCIAL & HUMAN RESOURCE SYSTEM (FINANCIAL ACCOUNTING SYSTEM)

Project:	2002750	Function:	General Government	Council:	99
Priority No.:	1	Program:	Staff Agencies	Nbrd Board:	99
TMK:		Department:	Information Technology	Senate:	99
				House:	99
				Other:	

Description: Design and develop an integrated Enterprise Resource Planning (ERP) system solution to replace the legacy financial accounting system (CIFIS), payroll/personnel system (CHRMS) and fixed asset system (FACS). Project will be undertaken through phases, the first phase is replacement of the financial system and the second phase would integrate the Payroll/HR systems within three years. An integrated ERP system will facilitate the City's efficiency with the management of additional information and reports, without an increase in staffing requirements.

Justification: The City has a 20+ year old Financial Accounting system (CIFIS) with inherent limitations reflective of its age. Current technology can now integrate the management of updated accounting requirements, which include fixed asset management reports, in addition to payroll/personnel reporting requirements under a single system. The integrated system will replace two separate antiquated systems, which are the payroll/ personnel system (CHRMS) implemented 10 years ago and the 20+ year old accounting system (CIFIS).

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	11,857	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	3,989	0	0	0	0	0	0	0	0	0	0
OTHER	GI	3,738	0	0	0	0	0	0	0	0	0	0
	Total	19,585	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2011	6/30/2014
EQUIP	7/1/2011	6/30/2012
OTHER	7/1/2011	6/30/2014

Annual Effect on Operating Budget	
No of Positions	4
Salary Cost	176
Cur Exp & Equip	2,001
Maint Cost	567
Useful Life	20

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Department Summary: Information Technology

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
GI	19,585	0	0	0	0	0	0	0	0	0	0
Total	19,585	0	0	0	0	0	0	0	0	0	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	0	0	0	0	0	0	0	0	0	0	0
DGN	11,857	0	0	0	0	0	0	0	0	0	0
CONST	0	0	0	0	0	0	0	0	0	0	0
INSP	0	0	0	0	0	0	0	0	0	0	0
EQUIP	3,989	0	0	0	0	0	0	0	0	0	0
OTHER	3,738	0	0	0	0	0	0	0	0	0	0
Total	19,585	0	0	0	0	0	0	0	0	0	0

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Program Summary: Staff Agencies

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
BT	0	0	0	0	0	0	0	0	0	0	0
DN	303	0	0	0	0	0	0	0	0	0	0
GC	2,259	0	0	0	0	0	0	0	0	0	0
GI	69,644	1	6,130	4,130	1	1	1	1	1	4,135	0
GN	527	0	0	0	0	0	0	0	0	0	0
HI	12,578	1	2,621	2,252	1	1	1	1	1	2,257	0
HN	0	0	0	0	0	0	0	0	0	0	0
HW	5,286	0	0	0	0	0	0	0	0	0	0
PP	0	0	0	0	0	0	0	0	0	0	0
SR	0	0	0	0	0	0	0	0	0	0	0
SV	1,347	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0	0	0
WB	60,869	0	5,506	7,841	0	0	0	0	0	7,841	0
WF	0	0	0	0	0	0	0	0	0	0	0
Total	152,814	2	14,257	14,223	2	2	2	2	2	14,233	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	0	0	0	0	0	0	0	0	0	0	0
DGN	11,857	0	0	0	0	0	0	0	0	0	0
CONST	0	0	0	0	0	0	0	0	0	0	0
INSP	0	0	0	0	0	0	0	0	0	0	0
EQUIP	137,219	0	14,255	14,221	0	0	0	0	0	14,221	0
OTHER	3,738	2	2	2	2	2	2	2	2	12	0
Total	152,814	2	14,257	14,223	2	2	2	2	2	14,233	0

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925 DILLINGHAM BOULEVARD ACQUISITION - KAPALAMA HALE

Project:	2017083	Function:	General Government	Council:	06
Priority No.:	11	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	15
TMK:		Department:	Design and Construction	Senate:	20
				House:	39
				Other:	

Description: Acquisition of real property to provide government services to the public.

Justification: Provide a permanent location for the provision of government services.

Use of Funds: Acquisition of real property to provide government services to the public.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	27,500	0	0	0	0	0	27,500	0
	Total	0	0	0	27,500	0	0	0	0	0	27,500	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2017	1/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	100

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ALA MOANA TRANSIT PLAZA - TRANSIT ORIENTED DEVELOPMENT

Project:	2017073	Function:	General Government	Council:	05
Priority No.:		Program:	Public Facilities-Additions And Improvements	Nbrd Board:	11
TMK:	23039016	Department:	Design and Construction	Senate:	12
				House:	22
				Other:	

Description: Acquire land and develop a transit plaza in the Ala Moana area.

Justification: Development of a transit plaza will provide multi-modal connectivity to the Ala Moana rail station.

Use of Funds: Acquire land, plan and provide relocation assistance for a new bus transit plaza.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	12,000	0	0	0	0	0	0	0	0
PLAN	GI	0	0	100	0	100	0	0	0	0	100	0
DGN	GI	0	0	0	0	200	200	200	200	0	800	0
CONST	GI	0	0	0	0	0	0	0	0	3,000	3,000	6,300
INSP	GI	0	0	0	0	0	0	0	0	150	150	300
RELOC	GI	0	0	2,000	0	0	0	0	0	0	0	0
	Total	0	0	14,100	0	300	200	200	200	3,150	4,050	6,600

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2016	12/31/2017
PLAN	8/1/2016	6/30/2018
DGN	7/1/2017	12/31/2018
CONST	7/1/2019	12/31/2021
INSP	7/1/2019	12/31/2021
RELOC	8/1/2016	6/30/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	40
Maint Cost	120
Useful Life	50

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ART IN PUBLIC FACILITIES

Project:	1996611	Function:	General Government	Council:	99
Priority No.:	12	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Acquire works of art to be displayed in public facilities or areas.

Justification: Provision of not less than one percent of building construction funds to acquire works of art as required by section 3-2.7 ROH. Includes re-appropriation of lapsed FY 2014 funds from the Waianae Police Station Replacement, Project No. 2006039.

Use of Funds: Provide funds for works of art to be displayed in City facilities or areas.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
ART	GI	1,237	0	0	0	0	0	0	0	0	0	0
ART	GN	80	0	240	200	0	0	0	0	0	200	0
	Total	1,317	0	240	200	0	0	0	0	0	200	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
ART	7/1/2016	6/30/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

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CIVIC CENTER IMPROVEMENTS

Project:	1996007	Function:	General Government	Council:	06
Priority No.:	3	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	13
TMK:	21033010	Department:	Design and Construction	Senate:	18
				House:	35
				Other:	

Description: Plan, design, construct, inspect, and provide related equipment for Civic Center improvements such as structural, infrastructure and security improvements as required. Civic center facilities include but are not limited to City Hall, the Annex, Mission Memorial and the Frank F. Fasi Municipal Building.

Justification: Improve civic center facilities to ensure continued operation of City services.

Use of Funds: Plan, design, construct, inspect and provide related equipment for civic center improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	0	5	360	165	10	10	10	10	10	215	0
DGN	GI	1,366	5	385	285	50	50	50	50	50	535	0
CONST	GI	15,121	980	1,540	2,040	1,900	1,900	1,900	1,900	2,900	12,540	0
INSP	GI	525	5	10	5	20	20	20	20	20	105	0
EQUIP	GI	255	5	10	5	20	20	20	20	20	105	0
RELOC	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	17,267	1,000	2,305	2,500	2,000	2,000	2,000	2,000	3,000	13,500	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2013	12/1/2025
DGN	7/1/2013	12/1/2025
CONST	12/31/2013	12/31/2025
INSP	12/31/2013	12/31/2025
EQUIP	12/31/2013	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	30
Maint Cost	0
Useful Life	25

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CIVIC CENTER PARKING STRUCTURE- WATERPROOFING & RECONSTRUCTION

Project:	2012077	Function:	General Government	Council:	06
Priority No.:		Program:	Public Facilities-Additions And Improvements	Nbrd Board:	13
TMK:		Department:	Design and Construction	Senate:	18
				House:	35
				Other:	

Description: Remove the existing deteriorated deck coating at Civic Center Parking Structure (CCPS) and replace it with a new coating. Inspect and replace all expansion joints in the structure. Correct all spalling in walls, floors, columns, etc. Waterproofing surfaces as needed. Design and install a new emergency generator system for the garage sump pumps and emergency lighting systems.

Justification: The existing elastomeric coating is delaminating, which causes tripping hazards and affects its protection to the structure. Correspondingly, the lack of protection from water intrusion has caused damage to the concrete structure and to the expansion joints. This project is needed for health and safety concerns and to prevent further damage to the structure and to ensure that the pumps and emergency lighting systems for the garage are operational.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	1,400	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	28,000
INSP	GI	0	0	0	0	0	0	0	0	0	0	2,000
	Total	1,400	0	0	0	0	0	0	0	0	0	30,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2013	12/1/2014

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

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CULTURE AND ARTS CORRIDOR

Project:	2015095	Function:	General Government	Council:	06
Priority No.:		Program:	Public Facilities-Additions And Improvements	Nbrd Board:	11
TMK:		Department:	Design and Construction	Senate:	13
				House:	26
				Other:	

Description: Prepare a plan for the development of an arts corridor in the area of the Honolulu Museum of Art, the Blaisdell Center and other City assets.

Justification: Develop and enhance underutilized City resources in the area of the Honolulu Museum of Art, the Blaisdell Center and other City assets.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	250	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	0	250	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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ENERGY CONSERVATION IMPROVEMENTS

Project:	1998007	Function:	General Government	Council:	99
Priority No.:	4	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design, construct, provide construction inspection and related equipment for energy conservation and renewable energy systems at various City-owned facilities.

Justification: Replace obsolete mechanical and electrical systems at City facilities equipment with energy efficient systems. Energy efficient systems will reduce the City's dependence on fossil fuels; reduce energy costs which are consistent with the City's overall sustainability goals.

Use of Funds: Plan, design, construct, inspect and provide related equipment for energy conservation (efficiency) improvements at various City facilities.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	161	0	5	45	30	30	30	30	30	195	0
DGN	FG	6	0	0	0	0	0	0	0	0	0	0
DGN	GI	1,090	0	85	75	30	30	30	30	30	225	0
CONST	FG	443	0	0	0	0	0	0	0	0	0	0
CONST	GI	18,467	0	355	370	415	415	415	415	415	2,445	0
INSP	FG	43	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	5	5	20	20	20	20	20	105	0
EQUIP	GI	181	0	5	5	5	5	5	5	5	30	0
OTHER	FG	5	0	0	0	0	0	0	0	0	0	0
	Total	20,395	0	455	500	500	500	500	500	500	3,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2013	6/30/2024
DGN	9/1/2013	6/30/2024
CONST	7/1/2013	10/1/2025
INSP	7/1/2013	10/1/2025
EQUIP	7/1/2013	10/1/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

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EWA VILLAGES - HISTORIC PLANTATION MANAGERS HOUSE RENOVATION

Project:	2008047	Function:	General Government	Council:	09
Priority No.:		Program:	Public Facilities-Additions And Improvements	Nbrd Board:	23
TMK:	91017046	Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design and construct improvements to the Historical Plantation Manager's house.

Justification: Improve recreational resource for community

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	20	0	0	0	0	0	0	0	0	0	0
DGN	GI	180	0	0	0	0	0	0	0	0	0	100
CONST	GI	0	0	0	0	0	0	0	0	0	0	1,000
INSP	GI	0	0	0	0	0	0	0	0	0	0	25
	Total	200	0	0	0	0	0	0	0	0	0	1,125

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2008	7/1/2010

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

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HONOLULU HALE IMPROVEMENTS

Project:	2014131	Function:	General Government	Council:	06
Priority No.:		Program:	Public Facilities-Additions And Improvements	Nbrd Board:	12
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design remediation of hazardous materials, including mold, lead and asbestos, in the second floor Councilmember Offices and Council Staff Offices.

Justification: Provide Honolulu Hale improvements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	75	0	0	0	0	0	0	0	0	0
DGN	GI	0	100	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	0	175	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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IWILEI HYGIENE CENTER

Project:	2017085	Function:	General Government	Council:	07
Priority No.:		Program:	Public Facilities-Additions And Improvements	Nbrd Board:	13
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct, inspect and provide related equipment for a hygiene center facility with public restrooms, showers and laundry facilities to serve homeless individuals and the general public.

Justification: Plan, design, construct, inspect and provide related equipment for a hygiene center facility with public restrooms, showers and laundry facilities to serve homeless individuals and the general public.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	25	0	0	0	0	0	0	0	0
DGN	GI	0	0	50	0	0	0	0	0	0	0	0
CONST	GI	0	0	1,800	0	0	0	0	0	0	0	0
INSP	GI	0	0	25	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	100	0	0	0	0	0	0	0	0
	Total	0	0	2,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018
INSP	7/1/2016	12/31/2018
EQUIP	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

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KAIMUKI MUNICIPAL PARKING LOT IMPROVEMENTS

Project:	2016086	Function:	General Government	Council:	05
Priority No.:	10	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	04
TMK:		Department:	Design and Construction	Senate:	13
				House:	24
				Other:	

Description: Plan, design, construct and inspect improvements to Kaimuki Municipal Parking Lot , including remediation of tree roots and resurfacing parking lot.

Justification: Improve Municipal Parking Lot.

Use of Funds: Design and construct parking lot improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	175	0	0	0	0	0	0	0	0	0
DGN	GI	0	325	0	10	0	0	0	0	0	10	0
CONST	GI	0	900	0	3,000	0	0	0	0	0	3,000	0
INSP	GI	0	100	0	0	0	0	0	0	0	0	0
	Total	0	1,500	0	3,010	0	0	0	0	0	3,010	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	7/31/2017
DGN	7/1/2016	7/31/2017
CONST	8/1/2017	12/31/2018
INSP	7/1/2015	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KAPALAMA CANAL CATALYTIC PROJECT - TRANSIT ORIENTED DEVELOPMENT

Project:	2015091	Function:	General Government	Council:	07
Priority No.:	8	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	15
TMK:		Department:	Design and Construction	Senate:	15
				House:	29
				Other:	

Description: Develop transit connections in the area of the Kapalama intermodal facility.

Justification: Provide improved multimodal access to transit station and catalyze surrounding development.

Use of Funds: Design transit connections in the area of the Kapalama intermodal facility.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	500	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	500	400	100	0	0	0	0	0	100	0
CONST	GI	0	0	0	0	0	0	0	0	5,000	5,000	5,000
	Total	500	500	400	100	0	0	0	0	5,000	5,100	5,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2017
DGN	7/1/2015	12/31/2020
CONST	7/1/2022	6/30/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	120
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

KAPOLEI CONSOLIDATED CORPORATION YARD

Project:	1995006	Function:	General Government	Council:	01
Priority No.:	5	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	34
TMK:	91026004	Department:	Design and Construction	Senate:	19
				House:	40
				Other:	

Description: Development of the master planned consolidated corporation yard for the Department of Facilities Maintenance on a 19 acre parcel at Kapolei as provided per UNILATERAL AGREEMENT AND DECLARANT FOR CONDITIONAL ZONING FOR THE KAPOLEI CITY dated February 27, 1990 by THE TRUSTEES UNDER THE WILL AND OF THE ESTATE OF JAMES CAMPBELL, DECEASED.

Justification: Development of City facilities to support operations and services for the City of Kapolei.

Use of Funds: Design and construct corporation yard improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	296	0	0	0	0	0	0	0	0	0	0
DGN	GI	1,865	0	10	50	0	0	0	0	0	50	0
CONST	GI	18,184	0	10,905	3,150	0	0	0	0	0	3,150	0
INSP	GI	749	0	90	0	0	0	0	0	0	0	0
EQUIP	GI	64	0	0	0	0	0	0	0	0	0	0
RELOC	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	21,158	0	11,005	3,200	0	0	0	0	0	3,200	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2006	12/1/2008
DGN	7/1/2006	7/1/2013
CONST	7/1/2007	6/30/2021
INSP	7/1/2010	6/30/2021
EQUIP	7/1/2010	6/30/2021
RELOC	7/1/2010	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	20
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

LAIE CORPORATION YARD IMPROVEMENTS

Project:	2017072	Function:	General Government	Council:	02
Priority No.:	7	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	23
				House:	47
				Other:	

Description: Design improvements at Laie Corporation Yard.

Justification: Upgrade of corporation yard infrastructure and replacement of deteriorated structures.

Use of Funds: Design corporation yard improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	0	0	250	200	0	0	0	0	0	200	0
CONST	GI	0	0	0	0	2,500	3,500	0	0	0	6,000	0
	Total	0	0	250	200	2,500	3,500	0	0	0	6,200	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	1/1/2017	1/1/2018
CONST	7/1/2018	12/31/2023

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

MANANA CORPORATION YARD IMPROVEMENTS

Project:	2009025	Function:	General Government	Council:	08
Priority No.:		Program:	Public Facilities-Additions And Improvements	Nbrd Board:	21
TMK:	97024041	Department:	Design and Construction	Senate:	18
				House:	34
				Other:	

Description: Plan, design and construct a new corporation yard for the Department of Facility Maintenance (DFM) and the Department of Parks and Recreation (DPR) Public Building and Electrical Maintenance Division (DFM-PBEM) and Maintenance Support Services (DPR-MSS). Corporation yard facility elements such as a new warehouse, offices, locker rooms, shops, storage facilities will be included to support operational requirements.

Justification: The existing facility consists of 1940 warehouses and termite-eaten trailers. The DFM-PBEM Street Lighting activity was forced to relocate from their permanent site in Kakaako to Manana in 2000 as part of the Kakaako Redevelopment. This DPR- MSS operation relocated from sites near the Ala Wai Golf Course and Kapahulu. The existing facility suffers from water infiltration from flooding and rain. This results in damage to materials, vehicles, and employee safety. An additional detriment to productivity is the lack of warehouse space and hazardous conditions for loading/off-loading materials from service vehicles.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	100	0	0	0	0	0	0	0	0	0	0
PLAN	HI	178	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	650	0	0	0	0	0	0	0	0
DGN	HI	400	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	10,000	10,000	24,000
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	150	150	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	300	300	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
RELOC	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	678	0	650	0	0	0	0	0	10,450	10,450	24,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2010	12/31/2011
DGN	7/1/2012	12/31/2020
CONST	7/1/2018	12/31/2024
INSP	7/1/2018	12/31/2024
EQUIP	7/1/2018	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	20
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) MODIFICATION FOR COR

Project:	2004050	Function:	General Government	Council:	99
Priority No.:	1	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: (8) Corporation Yards and (4) Satellite Yards need modification to control site runoff and discharges from equipment to prevent pollution of our drainage and coastal waterways. Vehicle wash down and corporation yard runoff is presently not contained in an environmentally acceptable manner.

Justification: NPDES Phase I and Phase II passage by the federal government requires control and elimination of discharges originating from Municipal Corporation Yards under penalty of citation and fines.

Use of Funds: Plan, design, construct and inspect NPDES improvements at various facilities such as Waialua Corporation Yard Phase II.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	0	0	0	0	0	0	0	0	0	0	0
PLAN	HI	50	0	0	5	0	0	0	0	0	5	0
DGN	HI	2,970	0	250	235	50	0	0	0	0	285	0
CONST	HI	17,696	0	0	5	1,850	0	0	0	0	1,855	0
INSP	HI	719	0	0	5	50	0	0	0	0	55	0
EQUIP	HI	0	0	0	0	50	0	0	0	0	50	0
	Total	21,435	0	250	250	2,000	0	0	0	0	2,250	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2008	12/1/2021
DGN	7/1/2007	12/1/2017
CONST	7/1/2008	12/1/2022
INSP	7/1/2008	12/1/2022
EQUIP	7/1/2008	12/1/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

PEARL CITY CORPORATION YARD RENOVATIONS

Project:	1994015	Function:	General Government	Council:	08
Priority No.:	6	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	21
TMK:	97023009	Department:	Design and Construction	Senate:	18
				House:	36
				Other:	

Description: Plan, design, and construct renovations to Pearl City - Ewa Corporation Yard. Relocate Division of Roads Maintenance office and locker room facilities to newly acquired property adjacent to existing corporation yard and rehabilitate existing facilities to comply with NPDES requirements. Corporation yard improvements to be budgeted in three phases.

Justification: Existing corporation yard is inefficient as the office is unable to monitor activities within the yard. The storage space is inadequate for supplies and equipment and substantial improvements were recommended by the study prepared for the NPDES Modifications for Corporation Yard projects.

Use of Funds: Design corporation yard improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	99	0	0	0	0	0	0	0	0	0	0
DGN	GI	500	0	25	625	0	0	200	0	0	825	0
CONST	GI	3,960	0	0	0	0	5,000	0	0	5,500	10,500	0
INSP	GI	0	0	0	0	0	100	0	0	100	200	0
EQUIP	GI	55	0	0	0	0	0	0	0	0	0	0
	Total	4,613	0	25	625	0	5,100	200	0	5,600	11,525	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2011	6/30/2012
DGN	7/1/2018	4/30/2023
CONST	7/1/2013	12/31/2025
INSP	7/1/2013	12/31/2025
EQUIP	7/1/2013	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	5
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

PEARLRIDGE BUS TRANSFER CENTER AND PLAZA - TRANSIT ORIENTED DEVELOPMENT

Project:	2015092	Function:	General Government	Council:	08
Priority No.:	9	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	21
TMK:		Department:	Design and Construction	Senate:	16
				House:	33
				Other:	

Description: This is a multi-phase project Phase 1 - Initial funding for planning (including site assessment and remediation), design, and land acquisition (TMK: 9-8-009-0014, TMK: 9-8-009-015, TMK: 9-8-009-016 and TMK: 9-8-009-05) of a bus transfer center and plaza. Phase 2 - Funding for additional planning, design and construction for the bus facility and the plaza. Phase 3 - Request for Proposal for a Public-Private Partnership housing development which may consist of a mix of workforce and market housing, and commercial space.

Justification: This project is a direct outcome of the community-based Aiea-Pearl City Neighborhood Transit-Oriented Development Plan. The overall project is intended as a catalyst to spur broader neighborhood improvements in this rail station area. The bus facility will avoid on-street bus queuing and will be adjacent to the rail station, and the Pearl Harbor Historic Trail.

Use of Funds: Plan, design, construct, inspect and provide related equipment for a mixed use bus transit center and plaza.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	12,000	0	0	0	0	0	0	0	0	0	0
PLAN	GI	395	0	0	250	0	0	0	0	0	250	0
DGN	GI	0	500	500	500	0	0	0	0	0	500	0
CONST	GI	0	0	2,485	500	0	0	0	0	0	500	0
INSP	GI	0	0	5	5	0	0	0	0	0	5	0
EQUIP	GI	0	0	5	5	0	0	0	0	0	5	0
RELOC	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	12,395	500	2,995	1,260	0	0	0	0	0	1,260	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2014	6/30/2015
PLAN	7/1/2014	6/30/2018
DGN	7/1/2014	6/30/2018
CONST	7/1/2015	12/31/2019
INSP	7/1/2017	12/31/2019
EQUIP	7/1/2017	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	40
Maint Cost	120
Useful Life	50

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PUBLIC BUILDING FACILITIES IMPROVEMENTS

Project:	1987042	Function:	General Government	Council:	99
Priority No.:	2	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: To fund primarily urgent unanticipated improvements to City-owned public facilities.

Justification: To provide funds necessary to construct emergency and/or unanticipated work that often occurs during the course of the year, to minimize any adverse impact on the delivery of essential City services.

Use of Funds: Plan, design, construct, inspect and provide related equipment for improvements to City-owned facilities.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	50	5	30	1	10	10	10	10	10	51	500
PLAN	SW	0	0	0	0	0	0	0	0	0	0	0
DGN	DV	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	5,245	5	115	445	20	20	20	20	20	545	1,000
DGN	SW	57	0	0	0	0	0	0	0	0	0	0
CONST	DV	609	0	0	0	0	0	0	0	0	0	0
CONST	GI	28,607	980	1,850	2,550	1,950	1,950	1,950	1,950	1,950	12,300	97,500
CONST	SW	243	0	0	0	0	0	0	0	0	0	0
INSP	GI	834	5	5	3	10	10	10	10	10	53	500
EQUIP	FG	5	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	215	5	0	1	10	10	10	10	10	51	500
OTHER	FG	400	0	0	0	0	0	0	0	0	0	0
RELOC	DV	100	0	0	0	0	0	0	0	0	0	0
RELOC	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	36,364	1,000	2,000	3,000	2,000	2,000	2,000	2,000	2,000	13,000	100,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2010	12/31/2024
DGN	7/1/2010	12/31/2024
CONST	7/1/2010	12/31/2024
INSP	7/1/2010	12/31/2024
EQUIP	7/1/2010	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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REVITALIZATION OF SUN YAT - SEN AND COLLEGE WALK MALLS

Project:	2017086	Function:	General Government	Council:	06
Priority No.:		Program:	Public Facilities-Additions And Improvements	Nbrd Board:	13
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct, inspect and provide related equipment to re-purpose existing trellis columns to create two market kioks demonstration projects on Sun Yat -Sen Mall and College Walk Mall in the Downtown/Chinatown area.

Justification:

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	50	0	0	0	0	0	0	0	0
DGN	GI	0	0	2	0	0	0	0	0	0	0	0
CONST	GI	0	0	495	0	0	0	0	0	0	0	0
INSP	GI	0	0	2	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	1	0	0	0	0	0	0	0	0
	Total	0	0	550	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018
INSP	7/1/2016	12/31/2018
EQUIP	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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WEST LOCH R-1 WATERLINE IMPROVEMENTS

Project:	2010143	Function:	General Government	Council:	09
Priority No.:		Program:	Public Facilities-Additions And Improvements	Nbrd Board:	23
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Upgrade existing R-1 water irrigation system/waterline in West Loch

Justification: The existing water line is deteriorating and needs to be rehabilitated and upgraded.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	192	0	0	0	0	0	0	0	0	0	0
DGN	GI	19	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	211	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2010	6/30/2011
DGN	7/1/2011	6/30/2012

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

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Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DV	709	0	0	0	0	0	0	0	0	0	0
FG	901	0	0	0	0	0	0	0	0	0	0
GI	113,931	4,925	36,735	41,895	7,300	13,300	4,900	4,700	29,700	101,795	166,725
GN	80	0	240	200	0	0	0	0	0	200	0
HI	22,013	0	250	250	2,000	0	0	0	0	2,250	0
SW	300	0	0	0	0	0	0	0	0	0	0
Total	137,934	4,925	37,225	42,345	9,300	13,300	4,900	4,700	29,700	104,245	166,725

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	12,000	0	12,000	27,500	0	0	0	0	0	27,500	0
PLAN	2,041	510	570	466	150	50	50	50	50	816	500
DGN	15,098	1,435	2,722	2,525	350	300	500	300	100	4,075	1,100
CONST	103,329	2,860	19,430	11,615	8,615	12,765	4,265	4,265	28,765	70,290	161,800
INSP	2,870	110	142	23	100	150	50	50	450	823	2,825
EQUIP	775	10	121	16	85	35	35	35	335	541	500
OTHER	405	0	0	0	0	0	0	0	0	0	0
RELOC	100	0	2,000	0	0	0	0	0	0	0	0
ART	1,317	0	240	200	0	0	0	0	0	200	0
Total	137,934	4,925	37,225	42,345	9,300	13,300	4,900	4,700	29,700	104,245	166,725

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Program Summary: Public Facilities-Additions And Improvements

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DV	709	0	0	0	0	0	0	0	0	0	0
FG	901	0	0	0	0	0	0	0	0	0	0
GI	113,931	4,925	36,735	41,895	7,300	13,300	4,900	4,700	29,700	101,795	166,725
GN	80	0	240	200	0	0	0	0	0	200	0
HI	22,013	0	250	250	2,000	0	0	0	0	2,250	0
SW	300	0	0	0	0	0	0	0	0	0	0
Total	137,934	4,925	37,225	42,345	9,300	13,300	4,900	4,700	29,700	104,245	166,725

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	12,000	0	12,000	27,500	0	0	0	0	0	27,500	0
PLAN	2,041	510	570	466	150	50	50	50	50	816	500
DGN	15,098	1,435	2,722	2,525	350	300	500	300	100	4,075	1,100
CONST	103,329	2,860	19,430	11,615	8,615	12,765	4,265	4,265	28,765	70,290	161,800
INSP	2,870	110	142	23	100	150	50	50	450	823	2,825
EQUIP	775	10	121	16	85	35	35	35	335	541	500
OTHER	405	0	0	0	0	0	0	0	0	0	0
RELOC	100	0	2,000	0	0	0	0	0	0	0	0
ART	1,317	0	240	200	0	0	0	0	0	200	0
Total	137,934	4,925	37,225	42,345	9,300	13,300	4,900	4,700	29,700	104,245	166,725

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LAND EXPENSES

Project:	1971153	Function:	General Government	Council:	99
Priority No.:	1	Program:	Public Facilities-Improvements-Land Acquisitio	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Funds provided for incidental land expenses such as unforeseen additional lands and easements, temporary easements, appraisals, relocation assistance, document fees, and other related land expenses involving CIP projects and other related land services, such as appraisals of city-owned properties proposed to be developed.

Justification: To enable the capital improvement projects to be completed on schedule when unforeseen land expenses occur and to provide the city with appraisal reports to make policy decisions on city developments and/or land acquisition, and disposition of City owned property.

Use of Funds: Provision of funds for incidental land expenses such as for additional lands and easements, appraisals, relocation assistance, document fees, and other related land expenses involving CIP projects including appraisals of city-owned properties for sale and/or disposition and the City's housing buy back program shared appreciation.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	8,129	0	225	200	200	200	200	200	200	1,200	1,350
LAND	GN	54	800	0	0	0	0	0	0	0	0	0
RELOC	GI	0	0	25	25	25	25	25	25	25	150	150
RELOC	GN	0	250	0	0	0	0	0	0	0	0	0
	Total	8,182	1,050	250	225	225	225	225	225	225	1,350	1,500

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2009	12/31/2025
RELOC	7/1/2009	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
GI	8,129	0	250	225	225	225	225	225	225	1,350	1,500
GN	54	1,050	0	0	0	0	0	0	0	0	0
Total	8,182	1,050	250	225	225	225	225	225	225	1,350	1,500

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	8,182	800	225	200	200	200	200	200	200	1,200	1,350
RELOC	0	250	25	25	25	25	25	25	25	150	150
Total	8,182	1,050	250	225	225	225	225	225	225	1,350	1,500

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Program Summary: Public Facilities-Improvements-Land Acquisitions

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
GI	8,129	0	250	225	225	225	225	225	225	1,350	1,500
GN	54	1,050	0	0	0	0	0	0	0	0	0
Total	8,182	1,050	250	225	225	225	225	225	225	1,350	1,500

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	8,182	800	225	200	200	200	200	200	200	1,200	1,350
RELOC	0	250	25	25	25	25	25	25	25	150	150
Total	8,182	1,050	250	225	225	225	225	225	225	1,350	1,500

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Function Summary: General Government

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
BT	0	0	0	0	0	0	0	0	0	0	0
DN	303	0	0	0	0	0	0	0	0	0	0
DV	709	0	0	0	0	0	0	0	0	0	0
FG	901	0	0	0	0	0	0	0	0	0	0
GC	2,259	0	0	0	0	0	0	0	0	0	0
GI	191,704	4,926	43,115	46,250	7,526	13,526	5,126	4,926	29,926	107,280	168,225
GN	660	1,050	240	200	0	0	0	0	0	200	0
HI	34,591	1	2,871	2,502	2,001	1	1	1	1	4,507	0
HN	0	0	0	0	0	0	0	0	0	0	0
HW	5,286	0	0	0	0	0	0	0	0	0	0
PP	0	0	0	0	0	0	0	0	0	0	0
SR	0	0	0	0	0	0	0	0	0	0	0
SV	1,347	0	0	0	0	0	0	0	0	0	0
SW	300	0	0	0	0	0	0	0	0	0	0
WB	60,869	0	5,506	7,841	0	0	0	0	0	7,841	0
WF	0	0	0	0	0	0	0	0	0	0	0
Total	298,931	5,977	51,732	56,793	9,527	13,527	5,127	4,927	29,927	119,828	168,225

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	20,182	800	12,225	27,700	200	200	200	200	200	28,700	1,350
PLAN	2,041	510	570	466	150	50	50	50	50	816	500
DGN	26,955	1,435	2,722	2,525	350	300	500	300	100	4,075	1,100
CONST	103,329	2,860	19,430	11,615	8,615	12,765	4,265	4,265	28,765	70,290	161,800
INSP	2,870	110	142	23	100	150	50	50	450	823	2,825

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
EQUIP	137,993	10	14,376	14,237	85	35	35	35	335	14,762	500
OTHER	4,143	2	2	2	2	2	2	2	2	12	0
RELOC	100	250	2,025	25	25	25	25	25	25	150	150
ART	1,317	0	240	200	0	0	0	0	0	200	0
Total	298,931	5,977	51,732	56,793	9,527	13,527	5,127	4,927	29,927	119,828	168,225

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GENERATOR IMPROVEMENTS AT VARIOUS POLICE FACILITIES

Project:	2006033	Function:	Public Safety	Council:	99
Priority No.:		Program:	Police Stations And Buildings	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Design and construct upgrades to generators and related appurtenances at various police stations facilities.

Justification: Improvements necessary to ensure communication for public safety in the event of commercial power failure.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	356	0	0	0	0	0	0	0	0	0	0
CONST	GI	1,499	0	0	0	0	0	0	0	0	0	0
INSP	GI	100	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	1,955	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2009	6/1/2011
CONST	12/1/2009	12/1/2018
EQUIP	12/1/2009	12/1/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

Six-Year CIP and Budget FY 2018-2023

HONOLULU POLICE DEPARTMENT NPDES SMALL MS4 PERMIT PROGRAM

Project:	2007020	Function:	Public Safety	Council:	99
Priority No.:	5	Program:	Police Stations And Buildings	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design and construct improvements which include vehicle and equipment wash racks; structural Best Management Practices (BMPs), and covered storage for heavy vehicles and oil products at police stations and facilities.

Justification: Ensure compliance with the Environmental Protection Agency (EPA) and State Department of Health Storm Water Management Programs is mandated by both Federal and State laws.

Use of Funds: Plan, design, construct, inspect and provide related equipment for improvements at police stations and facilities to meet National Pollutant Discharge Elimination System (NPDES) requirements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	475	0	0	5	0	0	0	0	0	5	0
DGN	GI	1,191	0	400	5	0	0	0	0	0	5	0
CONST	GI	3,931	0	1,000	80	0	0	0	0	0	80	0
INSP	GI	218	0	100	5	0	0	0	0	0	5	0
EQUIP	GI	0	0	0	5	0	0	0	0	0	5	0
	Total	5,815	0	1,500	100	0	0	0	0	0	100	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2009	12/1/2022
DGN	7/1/2009	12/1/2022
CONST	12/1/2009	12/31/2019
INSP	12/1/2009	12/31/2019
EQUIP	12/1/2009	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	175
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

HPD HEADQUARTERS IMPROVEMENTS

Project:	2015082	Function:	Public Safety	Council:	06
Priority No.:	2	Program:	Police Stations And Buildings	Nbrd Board:	11
TMK:		Department:	Design and Construction	Senate:	13
				House:	25
				Other:	

Description: Plan, design, construct, inspect and provide related equipment to the Honolululu Police Department Headquarters.

Justification: Improvements to extend the useful life of the facility.

Use of Funds: Plan, design, construct, inspect and provide related equipment for improvements to the Honolulu Police Department Headquarters.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	5	5	10	10	10	10	10	55	150
DGN	GI	350	0	20	655	15	15	15	15	15	730	150
CONST	GI	1,050	0	960	825	965	965	965	965	965	5,650	8,400
INSP	GI	0	0	10	10	5	5	5	5	5	35	150
EQUIP	GI	0	0	5	5	5	5	5	5	5	30	150
	Total	1,400	0	1,000	1,500	1,000	1,000	1,000	1,000	1,000	6,500	9,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	12/31/2025
DGN	7/1/2014	12/31/2025
CONST	12/1/2014	12/31/2025
INSP	12/1/2014	12/31/2025
EQUIP	12/1/2014	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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KALIHI POLICE STATION EXPANSION

Project:	2000063	Function:	Public Safety	Council:	07
Priority No.:		Program:	Police Stations And Buildings	Nbrd Board:	16
TMK:	13024006	Department:	Design and Construction	Senate:	14
				House:	30
				Other:	

Description: To expand the existing 13,328 sq.ft. building by 3,992 sq.ft. by constructing over the makai portion of the parking lot to create additional locker room and office space. The expansion would extend above the parking lot, but at the same time retain existing parking spaces and driveway.

Justification: Station improvements will address personnel space requirements, accommodate equipment obtained with Homeland Security funds, and increase operational efficiency. The conference room is currently being used as an office space by three separate details. Various storage rooms are being used as office space for unit supervisors. Some of the offices for support units are too small to accommodate the number of personnel assigned to these units.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	CD	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	0	0	0	0	0	0	0	100	0	100	0
DGN	GI	37	0	0	0	0	0	0	0	250	250	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	4,000
INSP	GI	0	0	0	0	0	0	0	0	0	0	300
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	100
	Total	37	0	0	0	0	0	0	100	250	350	4,400

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2021	6/30/2022
DGN	7/1/2022	6/30/2023
CONST	7/1/2024	12/30/2023
INSP	7/1/2024	12/30/2023
EQUIP	7/1/2024	12/30/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

MICROWAVE RADIO SPUR EQUIP AND FACILITIES UPGRADE

Project:	2009034	Function:	Public Safety	Council:	99
Priority No.:	3	Program:	Police Stations And Buildings	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Upgrade microwave spur radio antenna tower and supporting facilities that interface with the city's microwave loop to each district police station.

Justification: The current microwave spur radio equipment is outdated and replacement parts are difficult to obtain. Antenna towers require maintenance and reinforcement to withstand a Category 4 hurricane. The microwave spur radio systems are required to provide back-up communications to support the district police stations with hotline telephones, Voice over Internet Protocol telephones, and computer data connectivity.

Use of Funds: Plan, design, construct, inspect and provide related equipment for facilities improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	5	10	38	5	50	10	10	123	0
DGN	GI	109	0	350	10	150	5	300	10	10	485	0
CONST	GI	370	0	5	2,020	5	885	10	1,000	1,000	4,920	0
INSP	GI	61	0	5	200	3	100	0	100	100	503	0
EQUIP	GI	1,538	0	5	10	5	5	10	5	5	40	0
	Total	2,078	0	370	2,250	200	1,000	370	1,125	1,125	6,070	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	8/16/2010	2/14/2022
DGN	4/18/2011	12/31/2025
CONST	3/1/2011	3/31/2025
INSP	1/1/2011	3/31/2022
EQUIP	1/1/2012	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

Six-Year CIP and Budget FY 2018-2023

PEARL CITY POLICE STATION

Project:	2003027	Function:	Public Safety	Council:	08
Priority No.:		Program:	Police Stations And Buildings	Nbrd Board:	21
TMK:	97094022	Department:	Design and Construction	Senate:	18
				House:	36
				Other:	

Description: Plan, design, and construct a replacement police station in Pearl City.

Justification: Replacement station design will improve overall operations.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	250	0	0	0	0	0	0	0	0	0	0
DGN	GI	400	0	0	0	0	0	0	0	0	0	2,000
CONST	GI	296	0	0	0	0	0	0	0	0	0	30,500
INSP	GI	0	0	0	0	0	0	0	0	0	0	2,500
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	946	0	0	0	0	0	0	0	0	0	35,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2015
DGN	1/1/2015	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

POLICE EVIDENCE WAREHOUSE

Project:	2003022	Function:	Public Safety	Council:	07
Priority No.:		Program:	Police Stations And Buildings	Nbrd Board:	20
TMK:		Department:	Design and Construction	Senate:	33
				House:	16
				Other:	

Description: Site selection, plan, design, and construct a new warehouse with the capacity for approximately 50 vehicles and storage to secure evidence. Clean detail facility will also be incorporated.

Justification: Provide permanent evidence storage warehouse.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	2,000
PLAN	GI	0	0	50	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	1,800
CONST	GI	0	0	0	0	0	0	0	0	0	0	25,000
INSP	GI	0	0	0	0	0	0	0	0	0	0	1,200
	Total	0	0	50	0	0	0	0	0	0	0	30,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2017	6/30/2023
PLAN	7/1/2015	6/30/2017
DGN	7/1/2018	6/30/2024
CONST	7/20/2020	6/30/2027
INSP	7/20/2020	6/30/2027

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

POLICE STATIONS BUILDINGS IMPROVEMENTS

Project:	2002025	Function:	Public Safety	Council:	99
Priority No.:	1	Program:	Police Stations And Buildings	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design and construct improvements (inclusive of energy conservation improvements) to police stations and building to extend the useful life of the facility.

Justification: Compliance with the Commission of Accreditation for Law Enforcement Agencies (CALEA) requires that all police stations and facilities meet current building code requirements and standardized operational procedures which include the sight and sound separation of detainees by gender and further by juvenile and adults.

Use of Funds: Plan, design, construct, inspect and provide related equipment for improvements to police stations and facilities.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	156	5	0	10	5	5	5	5	5	35	150
DGN	GI	2,301	55	910	325	25	25	25	25	25	450	150
CONST	GI	15,068	930	1,050	2,145	1,940	1,940	1,940	1,940	1,940	11,845	11,400
INSP	GI	326	5	30	10	25	25	25	25	25	135	150
EQUIP	GI	84	5	10	10	5	5	5	5	5	35	150
RELOC	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	17,935	1,000	2,000	2,500	2,000	2,000	2,000	2,000	2,000	12,500	12,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2013	12/31/2025
DGN	7/1/2013	12/31/2025
CONST	7/1/2013	12/31/2025
INSP	7/1/2013	12/31/2025
EQUIP	7/1/2013	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

POLICE TRAINING ACADEMY EXPANSION

Project:	2009014	Function:	Public Safety	Council:	08
Priority No.:		Program:	Police Stations And Buildings	Nbrd Board:	22
TMK:	93002009	Department:	Design and Construction	Senate:	18
				House:	42
				Other:	

Description: Plan, design, construct, and provide construction inspection for master planned improvements such as, an auditorium, a cafeteria, administration/classroom buildings, a multimedia computer laboratory, office and storage space, and a Hogan's Alley building on adjoining property under the jurisdiction of the Police Department.

Justification: A City audit completed in August of 2007 stated that the current training academy has limited physical space which limits the number of recruits that can be trained each year. In 2008, the Training Division increased its number of recruit classes held each year from three to four which will further strain the resources at the academy. Additional space is also needed to conduct annual and remedial training of current officers as well as to accommodate supervisory and executive development training courses being conducted at the academy at the same time as the recruit training.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	100	0	0	0	0	0	100	0	100	200	4,340
DGN	GI	0	0	0	0	0	0	0	750	250	1,000	15,000
CONST	GI	0	0	0	0	0	0	0	0	0	0	33,500
	Total	100	0	0	0	0	0	100	750	350	1,200	52,840

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2020	12/31/2025
DGN	7/1/2020	12/31/2025
CONST	7/1/2021	12/31/2026

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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UPGRADE SECURITY CAMERA SYSTEMS AT VARIOUS POLICE FACILITIES

Project:	2006034	Function:	Public Safety	Council:	99
Priority No.:	4	Program:	Police Stations And Buildings	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Multi-year program to update/modernize existing audio/video security camera systems to digital recording system for both interior and exterior of various police facilities, beginning with Alapai, Wahiawa and Pearl City. System to be installed will be a centralized Access Control and Monitoring System (ACAMS) to include cameras, access controls, ID badging, and intrusion detection devices.

Justification: Upgrade security camera systems at various police facilities.

Use of Funds: Plan, design, construct, inspect and provide related equipment for upgrades to security cameras at various police facilities.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	109	0	0	1	0	0	0	0	0	1	0
DGN	GI	306	0	50	110	0	0	0	0	0	110	0
CONST	GI	2,715	0	450	447	0	0	0	0	0	447	0
INSP	GI	0	0	0	1	0	0	0	0	0	1	0
EQUIP	GI	475	0	0	1	0	0	0	0	0	1	0
	Total	3,605	0	500	560	0	0	0	0	0	560	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	11/1/2009	8/1/2019
DGN	2/1/2010	8/1/2019
CONST	8/1/2010	4/1/2020
INSP	8/1/2010	4/1/2020
EQUIP	10/1/2010	4/1/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	5

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WAHIAWA POLICE STATION

Project:	2014075	Function:	Public Safety	Council:	02
Priority No.:		Program:	Police Stations And Buildings	Nbrd Board:	26
TMK:		Department:	Design and Construction	Senate:	22
				House:	40
				Other:	

Description: Acquire land, design, construct and inspect station improvements such as facility stabilization improvements.

Justification: Improvement required to support station operations.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	488	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	488	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2013	8/1/2014
DGN	7/1/2013	12/31/2014
CONST	7/1/2013	12/31/2014
INSP	7/1/2013	12/31/2014

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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WAIANAE POLICE STATION REPLACEMENT

Project:	2006039	Function:	Public Safety	Council:	01
Priority No.:		Program:	Police Stations And Buildings	Nbrd Board:	24
TMK:	86001029	Department:	Design and Construction	Senate:	21
				House:	45
				Other:	

Description: Plan, desing construct, inspect and provide related equipment for a replacement police station in Waianae; multi-year funded.

Justification: The renovation of the existing station, which is very old and is in constant need of repair, requires extensive structural improvements to meet National Law Enforcement Accreditation requirements. In addition, it will be extremely costly to install the infrastructure needed for modern technology. The replacement station will address all accreditation and technology requirements, and station requirements to accommodate equipment obtained with Homeland Security funds.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	178	0	0	0	0	0	0	0	0	0	0
DGN	GI	1,681	0	0	0	0	0	0	0	0	0	0
CONST	GI	16,627	0	0	0	0	0	0	0	0	0	0
INSP	GI	1,217	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	860	0	0	0	0	0	0	0	0	0	0
	Total	20,561	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2006	6/30/2010
DGN	7/1/2009	11/30/2011
CONST	1/1/2013	1/30/2016
INSP	1/1/2013	1/30/2016
EQUIP	1/1/2013	1/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CD	0	0	0	0	0	0	0	0	0	0	0
GI	54,921	1,000	5,420	6,910	3,200	4,000	3,470	4,975	4,725	27,280	143,240
Total	54,921	1,000	5,420	6,910	3,200	4,000	3,470	4,975	4,725	27,280	143,240

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	0	0	0	0	0	0	0	0	0	0	2,000
PLAN	1,267	5	60	31	53	20	165	125	125	519	4,640
DGN	6,730	55	1,730	1,105	190	45	340	800	550	3,030	19,100
CONST	42,044	930	3,465	5,517	2,910	3,790	2,915	3,905	3,905	22,942	112,800
INSP	1,922	5	145	226	33	130	30	130	130	679	4,300
EQUIP	2,958	5	20	31	15	15	20	15	15	111	400
RELOC	0	0	0	0	0	0	0	0	0	0	0
Total	54,921	1,000	5,420	6,910	3,200	4,000	3,470	4,975	4,725	27,280	143,240

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HONOLULU POLICE DEPARTMENT EQUIPMENT ACQUISITION

Project:	2005028	Function:	Public Safety	Council:	99
Priority No.:	1	Program:	Police Stations And Buildings	Nbrd Board:	99
TMK:		Department:	Police	Senate:	99
				House:	99
				Other:	

Description: Acquisition of equipment essential to police operations such as patrol cars, motorcycles and vehicles to support police operations.

Justification: Acquisition of equipment essential to police operations to ensure public safety.

Use of Funds: Acquisition of equipment for the Honolulu Police Department operations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
EQUIP	GI	30,845	0	10,428	4,300	0	0	0	0	0	4,300	0
EQUIP	GN	879	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	31,724	0	10,428	4,300	0	0	0	0	0	4,300	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
EQUIP	7/1/2013	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	5

Six-Year CIP and Budget FY 2018-2023

Department Summary: Police

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
GI	30,845	0	10,428	4,300	0	0	0	0	0	4,300	0
GN	879	0	0	0	0	0	0	0	0	0	0
HI	0	0	0	0	0	0	0	0	0	0	0
Total	31,724	0	10,428	4,300	0	0	0	0	0	4,300	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
EQUIP	31,724	0	10,428	4,300	0	0	0	0	0	4,300	0
Total	31,724	0	10,428	4,300	0	0	0	0	0	4,300	0

Program Summary: Police Stations And Buildings

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CD	0	0	0	0	0	0	0	0	0	0	0
GI	85,766	1,000	15,848	11,210	3,200	4,000	3,470	4,975	4,725	31,580	143,240
GN	879	0	0	0	0	0	0	0	0	0	0
HI	0	0	0	0	0	0	0	0	0	0	0
Total	86,645	1,000	15,848	11,210	3,200	4,000	3,470	4,975	4,725	31,580	143,240

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	0	0	0	0	0	0	0	0	0	0	2,000
PLAN	1,267	5	60	31	53	20	165	125	125	519	4,640
DGN	6,730	55	1,730	1,105	190	45	340	800	550	3,030	19,100
CONST	42,044	930	3,465	5,517	2,910	3,790	2,915	3,905	3,905	22,942	112,800
INSP	1,922	5	145	226	33	130	30	130	130	679	4,300
EQUIP	34,682	5	10,448	4,331	15	15	20	15	15	4,411	400
RELOC	0	0	0	0	0	0	0	0	0	0	0
Total	86,645	1,000	15,848	11,210	3,200	4,000	3,470	4,975	4,725	31,580	143,240

Six-Year CIP and Budget FY 2018-2023

CHARLES H. THURSTON TRAINING CENTER (HFD TRAINING CENTER)

Project:	2003029	Function:	Public Safety	Council:	07
Priority No.:		Program:	Fire Stations And Buildings	Nbrd Board:	19
TMK:	11002012	Department:	Design and Construction	Senate:	15
				House:	32
				Other:	

Description: Master plan and design for the HFD Training Center to include additional classroom space, recruit training facility, and review of the existing structure related to the master plan.

Justification: The existing facility has inadequate classroom space for the numerous required training classes. The original structure was built to facilitate future second-story construction. A new recruit facility will ensure that recruit training and certification requirements are maintained without interruption of other on-going training classes. The HFD needs to get maximum use of the existing space in order to meet safety and training requirements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	400	0	0	0	0	0	0	0	500	500	0
DGN	GI	567	0	0	0	0	0	0	0	0	0	4,000
CONST	GI	0	0	0	0	0	0	0	0	0	0	45,000
INSP	GI	0	0	0	0	0	0	0	0	0	0	1,875
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	1,500
RELOC	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	967	0	0	0	0	0	0	0	500	500	52,375

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2022	12/31/2023
DGN	7/1/2023	12/31/2028
CONST	7/1/2023	12/31/2028
INSP	7/1/2023	12/31/2028
EQUIP	7/1/2023	12/31/2028

Annual Effect on Operating Budget	
No of Positions	9
Salary Cost	1,148
Cur Exp & Equip	82
Maint Cost	25
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

EAST KAPOLEI FIRE STATION

Project:	2009036	Function:	Public Safety	Council:	01
Priority No.:		Program:	Fire Stations And Buildings	Nbrd Board:	34
TMK:		Department:	Design and Construction	Senate:	19
				House:	40
				Other:	

Description: Plan, design, and construct a new fire station in East Kapolei.

Justification: Within the next 20-25 years, an estimated 60,000 homes, the University of Hawaii West Oahu Campus, and light industrial and mixed-use commercial space are anticipated to be constructed on the Ewa plain. A new station will address the Standards of Response Coverage for the projected growth in the area.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	83	0	0	0	0	0	0	0	0	0	0
PLAN	GN	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	770	0	0	0	0	0	0	0	0	0	0
DGN	GN	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	9,800	0	0	0	0	0	0	0	0	0	0
INSP	GI	195	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	335	0	0	0	0	0	0	0	0	0	0
	Total	11,182	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2008	9/1/2008
DGN	9/1/2008	2/1/2009
CONST	3/1/2009	12/31/2015
INSP	3/1/2010	12/31/2013
EQUIP	7/1/2012	12/31/2013

Annual Effect on Operating Budget	
No of Positions	30
Salary Cost	2,382
Cur Exp & Equip	622
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

EWA FIRE STATION RENOVATION

Project:	2016087	Function:	Public Safety	Council:	09
Priority No.:		Program:	Fire Stations And Buildings	Nbrd Board:	23
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan renovations to facility for use by the City for emergency ambulance services.

Justification: Improve Fire Station.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	50	0	0	0	0	0	0	0	0	0
	Total	0	50	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

FIRE STATION BUILDINGS IMPROVEMENTS

Project:	1998021	Function:	Public Safety	Council:	99
Priority No.:	1	Program:	Fire Stations And Buildings	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design and construct improvements (inclusive of energy conservation improvements) to fire stations and buildings to extend the useful life of the facility.

Justification: Upgrade facilities to address required improvements to support on-going fire operations and service to the public.

Use of Funds: Plan, design, construct, inspect and provide related equipment for fire facility improvements and replacements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	5	5	10	10	10	10	10	10	60	150
DGN	GI	3,642	50	125	245	50	50	50	50	50	495	150
CONST	GI	16,867	885	8,295	1,695	1,900	1,900	1,900	1,900	1,900	11,195	11,400
INSP	GI	455	40	115	40	20	20	20	20	20	140	150
EQUIP	GI	10	20	110	10	20	20	20	20	20	110	150
RELOC	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	20,975	1,000	8,650	2,000	2,000	2,000	2,000	2,000	2,000	12,000	12,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2013	12/31/2025
DGN	7/1/2013	12/31/2025
CONST	6/30/2014	12/31/2025
INSP	6/30/2014	12/31/2025
EQUIP	6/30/2014	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

HAUULA FIRE STATION RELOCATION

Project:	2000068	Function:	Public Safety	Council:	02
Priority No.:		Program:	Fire Stations And Buildings	Nbrd Board:	28
TMK:		Department:	Design and Construction	Senate:	23
				House:	46
				Other:	

Description: Relocate the Hauula Fire Station to an area outside of the flood and inundation zone.

Justification: The existing facility and site are inadequately sized and programmed to accommodate the current HFD operations. The present station is located in a floodway and renovation estimates of the existing fire station to upgrade to code requirements will exceed the cost to plan, design, and construct a replacement fire station at the existing location. The new fire station will be located outside of the floodway, will provide for continued and uninterrupted emergency response services to the community. The replacement fire station will not increase the work capacity, change the function of the existing fire station, or scope of the service area.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	CD	1,000	0	0	0	0	0	0	0	0	0	0
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	216	0	0	0	0	0	0	0	0	0	0
CONST	CD	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	1,000	0	0	0	0	0	0	0	0	0
INSP	CD	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	CD	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
RELOC	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	1,216	1,000	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	9/1/2009	6/30/2010
PLAN	1/1/2010	6/30/2016
DGN	7/1/2013	1/31/2016
CONST	12/1/2014	6/30/2019
INSP	12/1/2014	6/30/2019
EQUIP	7/1/2015	6/30/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	5
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

HONOLULU FIRE DEPARTMENT NPDES SMALL MS4 PERMIT PROGRAM

Project:	2007012	Function:	Public Safety	Council:	99
Priority No.:	2	Program:	Fire Stations And Buildings	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design and construct improvements which include vehicle and equipment wash racks; structural Best Management Practices (BMPs), and covered storage for heavy vehicles and oil products at fire stations and facilities, such as the Honolulu Fire Department maintenance facility.

Justification: Ensure compliance with the Environmental Protection Agency (EPA) and State Department of Health Storm Water Management Programs, which is mandated by both Federal and State laws.

Use of Funds: Design, construct, inspect and provide equipment for improvements at fire stations and facilities to meet National Pollutant Discharge Elimination System (NPDES) requirements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	835	0	5	0	5	5	5	5	5	25	0
DGN	GI	1,436	0	220	10	75	75	75	75	75	385	0
CONST	GI	3,542	0	950	1,950	900	900	900	900	900	6,450	0
INSP	GI	440	0	310	330	10	10	10	10	10	380	0
EQUIP	GI	0	0	20	10	10	10	10	10	10	60	0
	Total	6,253	0	1,505	2,300	1,000	1,000	1,000	1,000	1,000	7,300	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2006	12/31/2025
DGN	7/1/2006	12/31/2025
CONST	9/1/2006	12/31/2025
INSP	9/1/2006	12/31/2025
EQUIP	9/1/2006	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

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KALIHI FIRE STATION INTERIOR IMPROVEMENTS

Project:	2015096	Function:	Public Safety	Council:	07
Priority No.:		Program:	Fire Stations And Buildings	Nbrd Board:	15
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct, inspect and provide related equipment for station improvements. Station improvements will include upgrades to the station plumbing, personnel shower and locker room facilities.

Justification: Upgrade facilities to support on-going fire operations.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	460	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	460	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2015	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

KOA RIDGE FIRE STATION

Project:	2011078	Function:	Public Safety	Council:	08
Priority No.:		Program:	Fire Stations And Buildings	Nbrd Board:	21
TMK:		Department:	Design and Construction	Senate:	16
				House:	35
				Other:	

Description: Site selction, plan, design, construct and inspect a new fire station to serve the the Koa Ridge development.

Justification: Provide new fire station to address the Standards of Cover requirements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	1,000
PLAN	GI	0	0	0	0	0	0	0	0	50	50	100
DGN	GI	0	0	0	0	0	0	0	0	0	0	750
CONST	GI	0	0	0	0	0	0	0	0	0	0	8,000
INSP	GI	0	0	0	0	0	0	0	0	0	0	200
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	300
ART	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	50	50	10,350

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2022	12/31/2023

Annual Effect on Operating Budget	
No of Positions	30
Salary Cost	2,382
Cur Exp & Equip	622
Maint Cost	15
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

KUAKINI FIRE STATION RECONSTRUCTION

Project:	2014079	Function:	Public Safety	Council:	06
Priority No.:		Program:	Fire Stations And Buildings	Nbrd Board:	14
TMK:		Department:	Design and Construction	Senate:	13
				House:	27
				Other:	

Description: Renovation of the existing fire station to include station interior and infrastructure improvements to support operational requirements.

Justification: The existing facility infrastructure requires improvements to continue to support current requirements and future demands of the HFD. Station renovation improvement estimates are approximately one-third to one-half of the cost to plan, design and construct a new fire station.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	3,150	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	34	0	0	0	0	0	0	0	0	0	0
	Total	3,184	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	2/11/2011	7/1/2013
CONST	7/1/2013	6/30/2017
INSP	7/1/2013	6/30/2017
EQUIP	7/1/2013	6/30/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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MAKAKILO FIRE STATION IMPROVEMENTS

Project:	2015097	Function:	Public Safety	Council:	01
Priority No.:		Program:	Fire Stations And Buildings	Nbrd Board:	34
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct, inspect and provide relaed equipment for station improvements. Station improvement will address the upgrades to the HVAC system, kitchen, personnel domitory, shower and locker room facilities.

Justification: Upgrade facilities to support on-going fire operations.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	510	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	510	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2015	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

NUUANU REGIONAL FIRE STATION

Project:	2006037	Function:	Public Safety	Council:	06
Priority No.:		Program:	Fire Stations And Buildings	Nbrd Board:	14
TMK:	18005027	Department:	Design and Construction	Senate:	13
				House:	27
				Other:	

Description: Requesting funds to construct a new two-bay, regional fire station to include a relocated fire communication center and new regional emergency depot to replace the existing structurally inadequate and substandard facility.

Justification: Existing Facility is inadequately sized and programmed to accommodate the current HFD workforce and associated equipment. Station renovation and repair estimates to meet code and program requirements will exceed the cost to plan, design, and construct a new fire station. Current Fire Communication Center located in FMB basement has been subject to flooding, poor HVAC control, and lacks adequate infrastructure to meet the expanding roll and demands of a modern dispatch center. Recent and past manmade and natural disasters have cut the HFD off from its supply depot in Waipahu. Give the HFD a secure communication center that meets NFPA 1221. Assist the HFD in decentralizing the HFD emergency supply network where Metro Honolulu Fire Stations can obtain quick access to emergency supplies during natural and manmade disasters. In times of natural and manmade disasters, the facility can also offer residents a safe refuge. The replacement fire station will not increase the capacity of the existing fire station, nor change the basic service area.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	0	0	0	0	0	0	0	0	50	50	0
DGN	GI	0	0	0	0	0	0	0	0	50	50	1,000
CONST	GI	0	0	0	0	0	0	0	0	0	0	21,000
INSP	GI	0	0	0	0	0	0	0	0	0	0	1,050
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	2,000
RELOC	GI	0	0	0	0	0	0	0	0	0	0	0
ART	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	100	100	25,050

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2022	12/31/2023
DGN	8/1/2024	12/31/2026
CONST	7/1/2026	12/31/2028
INSP	7/1/2026	12/31/2028
EQUIP	7/1/2026	12/31/2028

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	10
Useful Life	50

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PEARL CITY FIRE STATION RELOCATION

Project:	2017076	Function:	Public Safety	Council:	08
Priority No.:	3	Program:	Fire Stations And Buildings	Nbrd Board:	21
TMK:		Department:	Design and Construction	Senate:	18
				House:	34
				Other:	

Description: Site selection for a replacement fire station in Pearl City.

Justification: Relocation of the fire station will facilitate fire protection coverage for the projected development in the Pearl City area.

Use of Funds: Plan a replacement fire station.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	50	200	0	0	0	0	0	200	0
	Total	0	0	50	200	0	0	0	0	0	200	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

WAIALUA FIRE STATION RELOCATION

Project:	2002023	Function:	Public Safety	Council:	02
Priority No.:		Program:	Fire Stations And Buildings	Nbrd Board:	27
TMK:	18005027	Department:	Design and Construction	Senate:	22
				House:	46
				Other:	

Description: Site selection, acquire land, plan, design, and construct a replacement fire station, and related site and off-site improvements to maintain the Standards of Response Coverage in the Waialua area.

Justification: The present station is on the historic registry, and is located in a floodway and tsunami inundation zone. The existing facility is no longer adequately sized and programmed to accommodate fire current operations. Renovation estimates to upgrade the existing station to current requirements will exceed the cost to plan, design, and construct a new fire station. Relocation of a new replacement fire station outside of floodway, coastal hazard, and tsunami inundation zones will provide continued and uninterrupted emergency response services to the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	1,000	1,000	0
PLAN	GI	50	0	0	0	0	0	0	0	0	0	100
DGN	GI	0	0	0	0	0	0	0	0	0	0	300
CONST	GI	0	0	0	0	0	0	0	0	0	0	7,000
INSP	GI	0	0	0	0	0	0	0	0	0	0	200
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	300
RELOC	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	50	0	0	0	0	0	0	0	1,000	1,000	7,900

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2022	12/31/2023
PLAN	7/1/2024	9/30/2025
DGN	7/1/2024	6/30/2025
CONST	9/1/2025	7/30/2027
INSP	9/1/2025	7/30/2027
EQUIP	1/1/2025	7/30/2027

Annual Effect on Operating Budget	
No of Positions	3
Salary Cost	350
Cur Exp & Equip	433
Maint Cost	10
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CD	1,000	0	0	0	0	0	0	0	0	0	0
GI	43,796	2,050	10,205	4,500	3,000	3,000	3,000	3,000	4,650	21,150	107,675
GN	0	0	0	0	0	0	0	0	0	0	0
Total	44,796	2,050	10,205	4,500	3,000	3,000	3,000	3,000	4,650	21,150	107,675

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	1,000	0	0	0	0	0	0	0	1,000	1,000	1,000
PLAN	1,368	55	60	210	15	15	15	15	615	885	350
DGN	6,630	50	345	255	125	125	125	125	175	930	6,200
CONST	34,329	1,885	9,245	3,645	2,800	2,800	2,800	2,800	2,800	17,645	92,400
INSP	1,090	40	425	370	30	30	30	30	30	520	3,475
EQUIP	379	20	130	20	30	30	30	30	30	170	4,250
RELOC	0	0	0	0	0	0	0	0	0	0	0
ART	0	0	0	0	0	0	0	0	0	0	0
Total	44,796	2,050	10,205	4,500	3,000	3,000	3,000	3,000	4,650	21,150	107,675

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HONOLULU FIRE DEPARTMENT EQUIPMENT ACQUISITION

Project:	2005021	Function:	Public Safety	Council:	99
Priority No.:	1	Program:	Fire Stations And Buildings	Nbrd Board:	99
TMK:		Department:	Fire	Senate:	99
				House:	99
				Other:	

Description: Acquisition of replacement equipment essential to fire operations.

Justification: Replacement of equipment essential to fire operations.

Use of Funds: Acquire equipment for Honolulu Fire Department operations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
EQUIP	CD	4,163	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	26,964	0	3,730	3,354	0	0	0	0	0	3,354	0
EQUIP	GN	2,449	0	0	0	0	0	0	0	0	0	0
	Total	33,576	0	3,730	3,354	0	0	0	0	0	3,354	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
EQUIP	7/1/2014	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	7

Six-Year CIP and Budget FY 2018-2023

Department Summary: Fire

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CD	4,163	0	0	0	0	0	0	0	0	0	0
GI	26,964	0	3,730	3,354	0	0	0	0	0	3,354	0
GN	2,449	0	0	0	0	0	0	0	0	0	0
Total	33,576	0	3,730	3,354	0	0	0	0	0	3,354	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
EQUIP	33,576	0	3,730	3,354	0	0	0	0	0	3,354	0
Total	33,576	0	3,730	3,354	0	0	0	0	0	3,354	0

Six-Year CIP and Budget FY 2018-2023

Program Summary: Fire Stations And Buildings

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CD	5,163	0	0	0	0	0	0	0	0	0	0
GI	70,760	2,050	13,935	7,854	3,000	3,000	3,000	3,000	4,650	24,504	107,675
GN	2,449	0	0	0	0	0	0	0	0	0	0
Total	78,372	2,050	13,935	7,854	3,000	3,000	3,000	3,000	4,650	24,504	107,675

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	1,000	0	0	0	0	0	0	0	1,000	1,000	1,000
PLAN	1,368	55	60	210	15	15	15	15	615	885	350
DGN	6,630	50	345	255	125	125	125	125	175	930	6,200
CONST	34,329	1,885	9,245	3,645	2,800	2,800	2,800	2,800	2,800	17,645	92,400
INSP	1,090	40	425	370	30	30	30	30	30	520	3,475
EQUIP	33,955	20	3,860	3,374	30	30	30	30	30	3,524	4,250
RELOC	0	0	0	0	0	0	0	0	0	0	0
ART	0	0	0	0	0	0	0	0	0	0	0
Total	78,372	2,050	13,935	7,854	3,000	3,000	3,000	3,000	4,650	24,504	107,675

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COMPUTERIZED TRAFFIC CONTROL SYSTEM

Project:	1999311	Function:	Public Safety	Council:	99
Priority No.:	2	Program:	Traffic Improvements	Nbrd Board:	99
TMK:		Department:	Transportation Services	Senate:	99
				House:	99
				Other:	

Description: To expand the Intelligent Transportation Systems (ITS) program and components by installing additional traffic cameras at various locations on Oahu. The project includes the design and construction of traffic cameras, and the installation and implementation of the latest technological innovations (i.e., transportation communication networks, traffic signal coordination applications, traffic monitoring cameras & traffic optimization programs) directed to reduce traffic delays, and mitigate congestion. Design, construct, inspect and purchase equipment for traffic cameras, signal controls and traffic center technology at various locations such as, construction work in Mililani Town and expand fiber to Wahiawa and design work in Makakilo and expand fiber to Nanakuli. Phase 17: Design, Phase 15: Construction.

Justification: Program continuity is needed to comply with the ITS Regional Architecture Plan, a federal mandate and funding prerequisite.

Use of Funds: Design, construct, inspect and provide related equipment for the Intelligent Transportation Systems (ITS) program.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	FG	1,089	0	0	400	400	400	400	400	400	2,400	0
DGN	HI	202	0	0	100	100	100	100	100	100	600	0
CONST	FG	7,537	0	0	3,220	3,220	3,220	3,220	3,220	3,220	19,320	0
CONST	HI	2,492	0	0	830	830	830	830	830	830	4,980	0
INSP	FG	230	0	0	0	0	0	0	0	0	0	0
INSP	HI	256	0	0	45	45	45	45	45	45	270	0
EQUIP	HI	12	0	0	5	5	5	5	5	5	30	0
	Total	11,818	0	0	4,600	4,600	4,600	4,600	4,600	4,600	27,600	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	8/1/2013	12/31/2024
CONST	6/1/2013	12/31/2024
INSP	6/1/2013	12/31/2024
EQUIP	6/1/2013	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

Six-Year CIP and Budget FY 2018-2023

HONOLULU TRAFFIC MANAGEMENT CENTER AIR CONDITIONING SYSTEM IMPROVEMENTS

Project:	2011027	Function:	Public Safety	Council:	06
Priority No.:		Program:	Traffic Improvements	Nbrd Board:	11
TMK:		Department:	Transportation Services	Senate:	12
				House:	28
				Other:	

Description: Replace the existing Air Condition system at the Honolulu Traffic Management Center. The Honolulu Traffic Management Center is the hub for all traffic images that is distributed to various agencies (police, fire, Department of Emergency Management, news media) for live traffic information and is responsible for the efficient, effective, and safe operation of the traffic signals. Due to numerous costly repairs it was recommended that the existing air conditioning system be replaced.

Justification: The existing air condition system at the Traffic Management Center is twenty (20) years old and has experienced numerous and costly repairs and leaks. The Department of Design and Construction and the maintenance company recommends that the air conditioning units be replaced as it has passed its life expectancy. Additionally, the manufacturing of the refrigerant used in the existing units were banned in 2010 making it very costly to repair because of the availability of parts and materials. The new air conditioning units will be much more energy efficient and reduce maintenance costs. It was also pointed out the compressor for the units are leaking oil and the evaporator cooling coils are corroded and failing. Replacing the compressor and evaporator coils will cost more than a new unit.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	HI	93	0	0	0	0	0	0	0	0	0	0
CONST	HI	561	0	0	0	0	0	0	0	0	0	0
INSP	HI	137	0	0	0	0	0	0	0	0	0	0
	Total	791	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	8/1/2013	10/1/2013
CONST	12/1/2013	6/30/2015
INSP	12/1/2013	6/30/2015

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

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MOANALUA EMERGENCY BYPASS ROADWAY

Project:	2017028	Function:	Public Safety	Council:	07
Priority No.:		Program:	Traffic Improvements	Nbrd Board:	20
TMK:		Department:	Transportation Services	Senate:	
				House:	
				Other:	

Description: Planning for an emergency roadway between Moanalualani Place and the nearest hospital facility.

Justification:

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	400	0	0	0	0	0	0	0	0
	Total	0	0	400	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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PEDESTRIAN SAFETY IMPROVEMENTS

Project:	2010026	Function:	Public Safety	Council:	03
Priority No.:		Program:	Traffic Improvements	Nbrd Board:	31
TMK:		Department:	Transportation Services	Senate:	24
				House:	51
				Other:	

Description: Design, construct and inspect pedestrian safety improvements along Ku'ulei Road between Maluniu Avenue and Kailua Road/Oneawa Street in Kailua. Work will include re-construction of sidewalks, median islands and traffic signals.

Justification: The Kailua community has requested traffic engineering solutions to provide for and ensure the safety of pedestrians using Ku'ulei Road.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	FG	0	0	0	0	0	0	0	0	0	0	0
PLAN	HI	40	0	0	0	0	0	0	0	0	0	0
DGN	FG	0	0	0	0	0	0	0	0	0	0	0
CONST	FG	0	0	0	0	0	0	0	0	0	0	0
INSP	FG	0	0	0	0	0	0	0	0	0	0	0
	Total	40	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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PULAMA ROAD EMERGENCY BYPASS ROUTE

Project:	2009083	Function:	Public Safety	Council:	02
Priority No.:		Program:	Traffic Improvements	Nbrd Board:	29
TMK:		Department:	Transportation Services	Senate:	23
				House:	48
				Other:	

Description: Improve Pulama Road for use during periods when Kamehameha Hwy. is closed due to accident or natural disasters.

Justification: Improve Pulama Road for use during periods when Kamehameha Hwy. is closed.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	20	0	0	0	0	0	0	0	0	0	0
PLAN	HI	80	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	0	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	100	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2010	6/30/2014

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

TRAFFIC ENGINEERING DEVICES AT VARIOUS LOCATIONS

Project:	2010030	Function:	Public Safety	Council:	99
Priority No.:	3	Program:	Traffic Improvements	Nbrd Board:	99
TMK:		Department:	Transportation Services	Senate:	99
				House:	99
				Other:	

Description: To provide traffic engineering devices at various locations such as mini circles on Hele Street and devices in other communities as well as locations determined through the Complete Streets planning process.

Justification: To address localized traffic safety concerns in a timely and cost effective manner.

Use of Funds: Plan, design, construct, inspect and provide related equipment for traffic engineering devices at various locations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	HI	0	5	5	5	5	5	5	5	5	30	20
DGN	GI	5	0	0	0	0	0	0	0	0	0	0
DGN	HI	677	100	45	100	100	100	100	100	100	600	400
CONST	GI	70	0	0	0	0	0	0	0	0	0	0
CONST	HI	1,641	330	400	330	330	330	330	330	330	1,980	1,320
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	592	60	45	60	60	60	60	60	60	360	240
EQUIP	HI	0	5	5	5	5	5	5	5	5	30	20
	Total	2,984	500	500	500	500	500	500	500	500	3,000	2,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2024
DGN	7/1/2015	12/31/2024
CONST	7/1/2015	12/31/2024
INSP	7/1/2015	12/31/2024
EQUIP	7/1/2015	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

Six-Year CIP and Budget FY 2018-2023

TRAFFIC IMPROVEMENTS AT VARIOUS LOCATIONS

Project:	1996306	Function:	Public Safety	Council:	99
Priority No.:	4	Program:	Traffic Improvements	Nbrd Board:	99
TMK:		Department:	Transportation Services	Senate:	99
				House:	99
				Other:	

Description: The installation of capital improvements at various islandwide locations to reduce traffic congestion and potential conflicts with vehicular, pedestrian and bicycle traffic at busy intersections and local and major streets.

Justification: To relieve congestion and improve traffic safety through an ongoing program consisting of strategic, cost effective capital improvements.

Use of Funds: Acquire land, plan, design, construct and inspect traffic improvements at various locations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	FG	0	80	0	0	0	0	0	0	0	0	0
LAND	HI	73	16	5	5	0	0	0	0	0	5	50
PLAN	HI	199	14	100	5	10	10	10	10	10	55	50
DGN	FG	2,002	400	400	80	80	80	80	80	80	480	90
DGN	HI	4,866	84	100	80	80	80	80	80	80	480	400
CONST	FG	2,705	1,200	1,750	350	350	350	350	350	350	2,100	960
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	HI	7,673	515	435	350	350	350	350	350	350	2,100	870
INSP	FG	766	200	200	0	0	0	0	0	0	0	0
INSP	HI	1,507	44	50	80	80	80	80	80	80	480	270
	Total	19,790	2,553	3,040	950	950	950	950	950	950	5,700	2,690

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2016	12/31/2028
PLAN	7/1/2016	12/31/2028
DGN	7/1/2016	12/31/2028
CONST	7/1/2016	12/31/2028
INSP	7/1/2016	12/31/2028

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

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TRAFFIC SIGNAL AT NORTH KING STREET AND RICHARD LANE

Project:	2016026	Function:	Public Safety	Council:	07
Priority No.:		Program:	Traffic Improvements	Nbrd Board:	15
TMK:		Department:	Transportation Services	Senate:	14
				House:	99
				Other:	

Description: Design and construct a traffic signal at North King Street and Richard Lane.

Justification:

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	HI	0	250	0	0	0	0	0	0	0	0	0
CONST	HI	0	250	0	0	0	0	0	0	0	0	0
	Total	0	500	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2015	6/30/2016
CONST	7/1/2016	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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TRAFFIC SIGNAL MAINTENANCE FACILITY

Project:	2006016	Function:	Public Safety	Council:	08
Priority No.:		Program:	Traffic Improvements	Nbrd Board:	21
TMK:		Department:	Transportation Services	Senate:	18
				House:	35
				Other:	

Description: To design and provide relocation for a traffic signal maintenance facility for storage of existing equipment and supplies necessary to operate and maintain traffic and pedestrian signals and traffic related technology.

Justification: The findings of the Concept of Operations Plan mandated by the Federal Highway Administration (FHWA) as part of its requirement for federal funding of Traffic Signals and Technology Operations and Capital Improvements revealed that there was insufficient storage for existing equipment for the Traffic Signals and Technology Division's Maintenance Branch. The original traffic signal maintenance facility needed to relocate in 2000 to a temporary location currently in Manana. FHWA has indicated that if this requirement is not fulfilled, and the City is unable to properly maintain its existing signals for Oahu, federal funding may be restricted.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	FG	5	0	0	0	0	0	0	0	0	0	0
PLAN	HI	10	0	0	0	0	0	0	0	0	0	0
DGN	FG	167	0	0	0	0	0	0	0	0	0	0
DGN	HI	422	0	0	0	0	0	0	0	0	0	0
CONST	FG	0	0	0	0	0	0	0	0	0	0	0
CONST	HI	113	0	0	0	0	0	0	0	0	0	0
INSP	HI	800	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
RELOC	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	1,517	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
RELOC	7/1/2014	11/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	10

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TRAFFIC SIGNAL OPTIMIZATION

Project:	2007001	Function:	Public Safety	Council:	99
Priority No.:		Program:	Traffic Improvements	Nbrd Board:	99
TMK:		Department:	Transportation Services	Senate:	99
				House:	99
				Other:	

Description: To develop and implement optimum traffic signal timing plans for approximately 150 traffic signalized intersections. Plan and design traffic signal timing to reflect traffic patterns and reduce traffic congestion, volume and pollution at various areas such as, Kapolei/Ewa, Waikele, Pearl City, Moanalua/Puuloa, Waikiki, Kailua, and Downtown Honolulu.

Justification: It is necessary to optimize traffic signal timing at regular intervals due to changes in traffic patterns. This is a continuation of the City's island wide traffic signal optimization program.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HW	0	0	0	0	0	0	0	0	0	0	0
DGN	FG	1,261	0	0	0	0	0	0	0	0	0	0
DGN	HI	374	0	0	0	0	0	0	0	0	0	0
DGN	HW	0	0	0	0	0	0	0	0	0	0	0
	Total	1,635	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2017	6/30/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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TRAFFIC SIGNALS AT VARIOUS LOCATIONS

Project:	1999312	Function:	Public Safety	Council:	99
Priority No.:	1	Program:	Traffic Improvements	Nbrd Board:	99
TMK:		Department:	Transportation Services	Senate:	99
				House:	99
				Other:	

Description: Continue the program to facilitate the safe and orderly movement of vehicular and pedestrian traffic at various locations. Includes installing/modifying traffic signals and upgrading existing traffic signals on Oahu.

Justification: Field analysis and traffic related incidents have warranted the installing, modifying, and upgrading of traffic signals to comply with traffic code safety requirements.

Use of Funds: Plan, design, construct, inspect and provide related equipment for traffic signal improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	5	20	5	5	5	5	5	5	30	0
DGN	FG	1,773	350	500	500	500	500	500	500	500	3,000	0
DGN	HI	1,058	70	85	70	70	70	70	70	70	420	0
CONST	FG	18,064	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	15,000	0
CONST	HI	3,175	500	450	400	400	400	400	400	400	2,400	0
INSP	FG	2,276	300	300	300	300	300	300	300	300	1,800	0
INSP	HI	304	50	35	20	20	20	20	20	20	120	0
EQUIP	HI	15	5	160	5	5	5	5	5	5	30	0
	Total	26,666	3,780	4,050	3,800	3,800	3,800	3,800	3,800	3,800	22,800	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2014	12/31/2024
DGN	7/1/2015	12/31/2024
CONST	7/1/2015	12/31/2024
INSP	7/1/2015	12/31/2024
EQUIP	6/1/2015	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

Six-Year CIP and Budget FY 2018-2023

WAIPIO POINT ACCESS ROAD IMPROVEMENTS

Project:	2003223	Function:	Public Safety	Council:	08
Priority No.:		Program:	Traffic Improvements	Nbrd Board:	22
TMK:	93002001	Department:	Transportation Services	Senate:	18
				House:	42
				Other:	

Description: The Navy granted the City an easement for the use of Waipio Access Road. The City will provide roadway improvements necessary to meet the conditions of the easement. These improvements include: roadway improvements, drainage improvements, parking improvements, and a pedestrian bicycle multi-path that connects to the Pearl Harbor bike trail that will facilitate the orderly flow of traffic to access the Waipio Soccer Complex on the roadway up to the entrance of the Waipio Peninsula Soccer Complex.

Justification: The terms and conditions of the 50-year Grant of Easement requires that the City operate, maintain and improve the roadway.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	149	0	0	0	0	0	0	0	0	0	0
DGN	HI	400	0	0	0	0	0	0	0	0	0	0
CONST	FG	3,057	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
INSP	FG	696	0	0	0	0	0	0	0	0	0	0
INSP	HI	86	0	0	0	0	0	0	0	0	0	0
	Total	4,388	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
INSP	7/1/2014	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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Department Summary: Transportation Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
FG	41,628	5,030	5,650	7,350	7,350	7,350	7,350	7,350	7,350	44,100	1,050
GI	244	0	400	0	0	0	0	0	0	0	0
HI	27,857	2,303	1,940	2,500	2,500	2,500	2,500	2,500	2,500	15,000	3,640
HW	0	0	0	0	0	0	0	0	0	0	0
Total	69,729	7,333	7,990	9,850	9,850	9,850	9,850	9,850	9,850	59,100	4,690

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	73	96	5	5	0	0	0	0	0	5	50
PLAN	503	24	525	15	20	20	20	20	20	115	70
DGN	14,389	1,254	1,130	1,330	1,330	1,330	1,330	1,330	1,330	7,980	890
CONST	47,088	5,295	5,535	7,980	7,980	7,980	7,980	7,980	7,980	47,880	3,150
INSP	7,651	654	630	505	505	505	505	505	505	3,030	510
EQUIP	27	10	165	15	15	15	15	15	15	90	20
RELOC	0	0	0	0	0	0	0	0	0	0	0
Total	69,729	7,333	7,990	9,850	9,850	9,850	9,850	9,850	9,850	59,100	4,690

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Program Summary: Traffic Improvements

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
FG	41,628	5,030	5,650	7,350	7,350	7,350	7,350	7,350	7,350	44,100	1,050
GI	244	0	400	0	0	0	0	0	0	0	0
HI	27,857	2,303	1,940	2,500	2,500	2,500	2,500	2,500	2,500	15,000	3,640
HW	0	0	0	0	0	0	0	0	0	0	0
Total	69,729	7,333	7,990	9,850	9,850	9,850	9,850	9,850	9,850	59,100	4,690

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	73	96	5	5	0	0	0	0	0	5	50
PLAN	503	24	525	15	20	20	20	20	20	115	70
DGN	14,389	1,254	1,130	1,330	1,330	1,330	1,330	1,330	1,330	7,980	890
CONST	47,088	5,295	5,535	7,980	7,980	7,980	7,980	7,980	7,980	47,880	3,150
INSP	7,651	654	630	505	505	505	505	505	505	3,030	510
EQUIP	27	10	165	15	15	15	15	15	15	90	20
RELOC	0	0	0	0	0	0	0	0	0	0	0
Total	69,729	7,333	7,990	9,850	9,850	9,850	9,850	9,850	9,850	59,100	4,690

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FLOOD CONTROL IMPROVEMENTS AT VARIOUS LOCATIONS

Project:	2000101	Function:	Public Safety	Council:	99
Priority No.:	1	Program:	Flood Control	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Miscellaneous flood control improvements at various locations. Flood control improvements to include: channel wall reconstruction, invert reconstruction, debris basin reconstruction, fencing and access improvements.

Justification: Flood protection for public safety.

Use of Funds: Acquire land, plan, design, construct and inspect flood control improvements at various locations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	32	5	10	10	10	10	10	10	10	60	60
PLAN	GI	1,867	6	135	200	90	90	90	90	90	650	650
DGN	GI	3,876	91	1,405	800	200	200	200	200	200	1,800	1,300
CONST	GI	14,580	2,148	2,000	990	1,700	1,700	1,700	1,700	1,700	9,490	7,200
INSP	GI	0	0	20	10	100	100	100	100	100	510	500
	Total	20,355	2,250	3,570	2,010	2,100	2,100	2,100	2,100	2,100	12,510	9,710

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	9/1/2006	12/31/2028
PLAN	9/1/2006	12/31/2028
DGN	9/1/2004	12/31/2028
CONST	9/1/2006	12/31/2028
INSP	9/1/2006	12/31/2028

Annual Effect on Operating Budget	
No of Positions	13
Salary Cost	390
Cur Exp & Equip	450
Maint Cost	0
Useful Life	50

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HALAWA STREAM DREDGING

Project:	2004020	Function:	Public Safety	Council:	07
Priority No.:		Program:	Flood Control	Nbrd Board:	20
TMK:	66002001	Department:	Design and Construction	Senate:	14
				House:	30
				Other:	

Description: Planning, design and construction dredging to restore drainage capacity of Halawa Stream.

Justification: Sediment build-up in Halawa Stream has been noted by Department of Facility Maintenance and residents. Dredging of the sediment needed to restore stream capacity.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	750	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	5,000	5,000	0
INSP	GI	0	0	0	0	0	0	0	0	100	100	0
	Total	750	0	0	0	0	0	0	0	5,100	5,100	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/15/2008	10/29/2010
DGN	10/29/2010	10/26/2015
CONST	7/1/2020	12/31/2024
INSP	7/1/2020	12/31/2024

Annual Effect on Operating Budget	
No of Positions	4
Salary Cost	105
Cur Exp & Equip	235
Maint Cost	0
Useful Life	0

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KAHALUU FLOOD CONTROL LAGOON DREDGING

Project:	2014072	Function:	Public Safety	Council:	02
Priority No.:		Program:	Flood Control	Nbrd Board:	29
TMK:		Department:	Design and Construction	Senate:	23
				House:	48
				Other:	

Description: Dredging improvements to Kahaluu Flood Control Lagoon.

Justification: Dredging improvements to prevent flooding during heavy rains.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	350	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	12,000
	Total	350	0	0	0	0	0	0	0	0	0	12,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	9/1/2013	12/31/2020
CONST	7/1/2024	12/31/2025

Annual Effect on Operating Budget	
No of Positions	6
Salary Cost	240
Cur Exp & Equip	200
Maint Cost	0
Useful Life	25

Six-Year CIP and Budget FY 2018-2023

KAHAWAINUI STREAM DREDGING, LAIE

Project:	2014087	Function:	Public Safety	Council:	02
Priority No.:		Program:	Flood Control	Nbrd Board:	28
TMK:		Department:	Design and Construction	Senate:	23
				House:	47
				Other:	

Description: Dredging of Kahawainui Stream.

Justification: Dredging of existing flood control channel to prevent flooding during heavy rainfall.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	350	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	7,000	7,000	2,000
	Total	350	0	0	0	0	0	0	0	7,000	7,000	2,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	9/1/2013	12/30/2021
CONST	7/1/2022	12/31/2024

Annual Effect on Operating Budget	
No of Positions	3
Salary Cost	120
Cur Exp & Equip	100
Maint Cost	0
Useful Life	25

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KAHUKU REGIONAL FLOOD STUDY

Project:	2017087	Function:	Public Safety	Council:	02
Priority No.:		Program:	Flood Control	Nbrd Board:	28
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Provision of funds for the City's share of a regional study in cooperation with the U.S. Army Corps of Engineers and the State of Hawaii.

Justification:

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GN	0	0	100	0	0	0	0	0	0	0	0
	Total	0	0	100	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KALIHI FLOOD CONTROL IMPROVEMENTS

Project:	2017088	Function:	Public Safety	Council:	07
Priority No.:		Program:	Flood Control	Nbrd Board:	15
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Provision of funds to acquire land (TMK: 1-2-001:026) plan, design, construct and inspect flood control improvements in the Kalihi area.

Justification:

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	195	0	0	0	0	0	0	0	0
PLAN	GI	0	0	1	0	0	0	0	0	0	0	0
DGN	GI	0	0	1	0	0	0	0	0	0	0	0
CONST	GI	0	0	1	0	0	0	0	0	0	0	0
INSP	GI	0	0	1	0	0	0	0	0	0	0	0
	Total	0	0	199	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2016	12/31/2018
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018
INSP	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KALIHI-PALAMA STREAM BANK IMPROVEMENTS

Project:	2017082	Function:	Public Safety	Council:	07
Priority No.:		Program:	Flood Control	Nbrd Board:	15
TMK:	12015006	Department:	Design and Construction	Senate:	15
				House:	32
				Other:	

Description: Design and construct restoration improvements to reinforce the Kalihi Stream bank along the Kalihi-Palama Bus Facility.

Justification: Provide protection of the bus facility from the Kalihi Stream bank erosion.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	HI	0	0	1,400	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	750	750	0	0	0	1,500	0
	Total	0	0	1,400	0	750	750	0	0	0	1,500	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2016	12/31/2018
CONST	7/1/2019	12/31/2023

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	10
Useful Life	30

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KAPUNAHALA STREAM FLOOD CONTROL PROJECT, KANEOHE, TMK:4-5-23 & 24.

Project:	1998503	Function:	Public Safety	Council:	03
Priority No.:		Program:	Flood Control	Nbrd Board:	30
TMK:		Department:	Design and Construction	Senate:	24
				House:	49
				Other:	

Description: Develop alternatives for flood control in the Kapunahala subdivision. Prepare construction documents, cost estimates and environmental documents. Conduct hydraulic analysis and construct improvements.

Justification: Prevent possible flooding in the Pilina Way and adjacent area. A recent rainstorm caused a landslide in the stream. Anticipate minor adjustments in easements which may require land acquisition.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	1,000	750	750	0	2,500	0
PLAN	GI	181	0	0	0	0	0	0	0	0	0	0
DGN	FG	91	0	0	0	0	0	0	0	0	0	0
DGN	GI	200	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	2,000	2,000	8,000
INSP	GI	0	0	0	0	0	0	0	0	200	200	0
	Total	472	0	0	0	0	1,000	750	750	2,200	4,700	8,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2019	12/31/2023
PLAN	9/1/2004	10/1/2012
DGN	12/1/2011	12/1/2017
CONST	7/1/2022	12/1/2024
INSP	7/1/2022	12/1/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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KAWA STREAM AND DITCH IMPROVEMENTS

Project:	2006012	Function:	Public Safety	Council:	03
Priority No.:		Program:	Flood Control	Nbrd Board:	30
TMK:		Department:	Design and Construction	Senate:	24
				House:	99
				Other:	

Description: Stream improvements from Kaneohe Bay Drive to Parkway and Kawa ditch improvements from Kawa Stream to Mokulele Drive.

Justification: To prevent property damages and further damage to the existing stream lining and unlined stream. The unlined portion of Kawa Stream's bank area continues to erode, which threatens area properties. Completion of lining work in this area will protect the integrity of the stream banks, and reduce the threat of erosion to adjacent properties.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	244	0	0	0	0	0	0	0	0	0	0
DGN	GI	500	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	3,000	0	0	0	0	0	0	0	34,000
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	744	0	3,000	0	0	0	0	0	0	0	34,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2008	11/30/2012
DGN	12/1/2012	6/1/2017
CONST	7/1/2017	6/30/2020

Annual Effect on Operating Budget	
No of Positions	4
Salary Cost	120
Cur Exp & Equip	30
Maint Cost	0
Useful Life	40

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KIIKII STREAM DREDGING, WAIALUA

Project:	2014098	Function:	Public Safety	Council:	02
Priority No.:		Program:	Flood Control	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	23
				House:	99
				Other:	

Description: Design services for dredging of Kiikii Stream.

Justification: Maintenance dredging to prevent flooding during heavy rains.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	350	0	0	0	0	0	0	0	0	0	12,000
	Total	350	0	0	0	0	0	0	0	0	0	12,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	9/1/2013	9/1/2016

Annual Effect on Operating Budget	
No of Positions	3
Salary Cost	120
Cur Exp & Equip	100
Maint Cost	0
Useful Life	25

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MANOA VALLEY FLOOD CONTROL

Project:	2006021	Function:	Public Safety	Council:	05
Priority No.:		Program:	Flood Control	Nbrd Board:	07
TMK:		Department:	Design and Construction	Senate:	11
				House:	23
				Other:	

Description: Planning study for stream flood control in Manoa Valley, within the City's jurisdiction. Construct stream flood control improvements.

Justification: Complaints from residents.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	200	0	0	0	0	0	0	0	0	0	0
DGN	GI	180	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	380	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	8/31/2006	12/31/2009
DGN	3/15/2010	12/1/2012
CONST	12/1/2012	6/30/2014

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

WAILUPE STREAM FLOOD CONTROL

Project:	2001016	Function:	Public Safety	Council:	04
Priority No.:		Program:	Flood Control	Nbrd Board:	02
TMK:		Department:	Design and Construction	Senate:	09
				House:	18
				Other:	

Description: Conduct a flood mitigation study to study and outline solutions to the flooding potential of Wailupe Stream. Funding to complement State and Federal funding.

Justification: Construct flood control measures to Wailupe Stream where over 1,000 homes are in the Wailupe Valley FEMA flood plain area.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	675	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	4,000	5,000	0	0	0	9,000	0
	Total	675	0	0	0	4,000	5,000	0	0	0	9,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2003	9/1/2004
DGN	12/1/2003	6/1/2014
CONST	7/1/2019	12/31/2022

Annual Effect on Operating Budget	
No of Positions	3
Salary Cost	120
Cur Exp & Equip	30
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
FG	91	0	0	0	0	0	0	0	0	0	0
GI	24,335	2,250	6,769	2,010	6,100	8,100	2,850	2,850	16,400	38,310	77,710
GN	0	0	100	0	0	0	0	0	0	0	0
HI	0	0	1,400	0	750	750	0	0	0	1,500	0
Total	24,426	2,250	8,269	2,010	6,850	8,850	2,850	2,850	16,400	39,810	77,710

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	32	5	205	10	10	1,010	760	760	10	2,560	60
PLAN	3,917	6	236	200	90	90	90	90	90	650	650
DGN	5,897	91	2,806	800	200	200	200	200	200	1,800	13,300
CONST	14,580	2,148	5,001	990	6,450	7,450	1,700	1,700	15,700	33,990	63,200
INSP	0	0	21	10	100	100	100	100	400	810	500
Total	24,426	2,250	8,269	2,010	6,850	8,850	2,850	2,850	16,400	39,810	77,710

Six-Year CIP and Budget FY 2018-2023

Program Summary: Flood Control

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
FG	91	0	0	0	0	0	0	0	0	0	0
GI	24,335	2,250	6,769	2,010	6,100	8,100	2,850	2,850	16,400	38,310	77,710
GN	0	0	100	0	0	0	0	0	0	0	0
HI	0	0	1,400	0	750	750	0	0	0	1,500	0
Total	24,426	2,250	8,269	2,010	6,850	8,850	2,850	2,850	16,400	39,810	77,710

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	32	5	205	10	10	1,010	760	760	10	2,560	60
PLAN	3,917	6	236	200	90	90	90	90	90	650	650
DGN	5,897	91	2,806	800	200	200	200	200	200	1,800	13,300
CONST	14,580	2,148	5,001	990	6,450	7,450	1,700	1,700	15,700	33,990	63,200
INSP	0	0	21	10	100	100	100	100	400	810	500
Total	24,426	2,250	8,269	2,010	6,850	8,850	2,850	2,850	16,400	39,810	77,710

Six-Year CIP and Budget FY 2018-2023

EMS AND OCEAN SAFETY STATION

Project:	2009032	Function:	Public Safety	Council:	04
Priority No.:		Program:	Other Protection	Nbrd Board:	01
TMK:	39017021	Department:	Design and Construction	Senate:	09
				House:	18
				Other:	

Description: Construct a combined station for EMS and Ocean Safety on the property encompassing the park and ride on Keahole Street and Kalanianaole Highway. HESD would only need a small portion of the area of the proposed dog park and could co-exist with the dog park. The structure would encompass roughly 3,830 square feet.

Justification: The facility would allow EMS to respond directly onto the highway rather than onto a residential street, as is the current practice. Ocean Safety and Lifeguard unit would have quicker access to main roads for response of back up personnel; currently jet skis are launched from a trailer on the back of a truck. This location would provide the option of launching directly into the marina, thereby improving response times for the Jet Ski rescue operators.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	50	0	50	0
DGN	GI	0	0	0	0	0	0	0	50	250	300	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	2,500
INSP	GI	0	0	0	0	0	0	0	0	0	0	250
	Total	0	0	0	0	0	0	0	100	250	350	2,750

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2021	12/31/2023
DGN	7/1/2021	12/31/2023
CONST	7/1/2024	12/31/2025
INSP	7/1/2024	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	200
Maint Cost	20
Useful Life	25

Six-Year CIP and Budget FY 2018-2023

OCEAN SAFETY LIFEGUARD TOWERS REPLACEMENT

Project:	2017075	Function:	Public Safety	Council:	99
Priority No.:	1	Program:	Other Protection	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Replace lifeguard towers at beaches on O'ahu. This is the first year of a six-year plan.

Justification: New towers will provide improved employee working conditions and greater visibility to do their job. Maintenance costs for the old towers would be eliminated.

Use of Funds: Design, construct and install replacement lifeguard towers.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	0	0	100	100	5	5	5	5	5	125	50
CONST	GI	0	0	5	5	5	5	5	5	5	30	50
EQUIP	GI	0	0	250	250	240	240	240	240	240	1,450	500
	Total	0	0	355	355	250	250	250	250	250	1,605	600

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2016	12/31/2025
CONST	9/1/2016	12/31/2025
EQUIP	9/1/2016	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

OCEAN SAFETY STATIONS

Project:	2017089	Function:	Public Safety	Council:	99
Priority No.:		Program:	Other Protection	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct, inspect and provide related equipment for improvements at existing Ocean Safety facilities, and, plan and design new station storage and office facilities in the four Ocean Safety districts.

Justification:

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	100	0	0	0	0	0	0	0	0
DGN	GI	0	0	100	0	0	0	0	0	0	0	0
CONST	GI	0	0	800	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	1,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018
INSP	7/1/2016	12/31/2018
EQUIP	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

OCEAN SAFETY SUB-STATION DISTRICT I REPLACEMENT

Project:	2007029	Function:	Public Safety	Council:	04
Priority No.:		Program:	Other Protection	Nbrd Board:	05
TMK:	31031003	Department:	Design and Construction	Senate:	99
				House:	21
				Other:	

Description: Plan, design and construct a replacement Ocean Safety District I Substation currently located within in the existing Waikiki Natatorium structure. The replacement substation will not increase the capacity nor change the function of the existing substation nor change the service area.

Justification: The structure of the current substation is planned to be removed for an alternate use. The replacement substation will ensure the health safety of park patrons.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	59	0	0	0	0	0	0	0	0	0	0
DGN	GI	40	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	99	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2007	6/30/2011
DGN	7/1/2007	6/30/2011

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

Six-Year CIP and Budget FY 2018-2023

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
GI	99	0	1,355	355	250	250	250	350	500	1,955	3,350
Total	99	0	1,355	355	250	250	250	350	500	1,955	3,350

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	59	0	100	0	0	0	0	50	0	50	0
DGN	40	0	200	100	5	5	5	55	255	425	50
CONST	0	0	805	5	5	5	5	5	5	30	2,550
INSP	0	0	0	0	0	0	0	0	0	0	250
EQUIP	0	0	250	250	240	240	240	240	240	1,450	500
Total	99	0	1,355	355	250	250	250	350	500	1,955	3,350

Six-Year CIP and Budget FY 2018-2023

Program Summary: Other Protection

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
GI	99	0	1,355	355	250	250	250	350	500	1,955	3,350
Total	99	0	1,355	355	250	250	250	350	500	1,955	3,350

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	59	0	100	0	0	0	0	50	0	50	0
DGN	40	0	200	100	5	5	5	55	255	425	50
CONST	0	0	805	5	5	5	5	5	5	30	2,550
INSP	0	0	0	0	0	0	0	0	0	0	250
EQUIP	0	0	250	250	240	240	240	240	240	1,450	500
Total	99	0	1,355	355	250	250	250	350	500	1,955	3,350

Six-Year CIP and Budget FY 2018-2023

ALA WAI CANAL IMPROVEMENTS

Project:	2016088	Function:	Public Safety	Council:	04
Priority No.:		Program:	Other Protection-Miscellaneous	Nbrd Board:	09
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Long term planning to assess the feasibility of opening the Ala Wai Canal to allow water to flow and not be stagnant.

Justification:

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	150	0	0	0	0	0	0	0	0	0
	Total	0	150	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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DIAMOND HEAD HILLSIDE EROSION MITIGATION

Project:	2017090	Function:	Public Safety	Council:	04
Priority No.:		Program:	Other Protection-Miscellaneous	Nbrd Board:	05
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design funds to assess the stability of the hillside along Diamond Head road between TNKs: 3-1-035:003 and 3-1-035:09.

Justification:

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GN	0	0	50	0	0	0	0	0	0	0	0
DGN	GN	0	0	100	0	0	0	0	0	0	0	0
	Total	0	0	150	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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DRAINAGE OUTFALL IMPROVEMENTS

Project:	2005002	Function:	Public Safety	Council:	99
Priority No.:	3	Program:	Other Protection-Miscellaneous	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design and construct improvements for various existing City drainage outfalls on the island of Oahu.

Justification: Complaints from public and requests from the Department of Facility Maintenance. Tidal backflow concerns could pose nuisance, health, safety and litigation concerns. Clogging of outfall due to coral, sand, and silt blockage at stream outlets may result in flooding.

Use of Funds: Acquire land, plan, design, construct and inspect drainage outfall improvements at various locations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	5	0	0	0	0	0	5	0
PLAN	GI	150	0	10	5	0	0	0	0	0	5	0
DGN	GI	1,168	10	10	5	10	10	10	10	10	55	300
CONST	GI	1,006	190	280	790	190	190	190	190	190	1,740	900
INSP	GI	0	0	0	10	0	0	0	0	0	10	0
	Total	2,324	200	300	815	200	200	200	200	200	1,815	1,200

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2005	12/31/2023
DGN	1/1/2007	12/31/2028
CONST	9/1/2008	12/31/2028

Annual Effect on Operating Budget	
No of Positions	3
Salary Cost	35
Cur Exp & Equip	10
Maint Cost	0
Useful Life	40

Six-Year CIP and Budget FY 2018-2023

KANEOHE STREAM BANK RESTORATION NEAR KEOLE PLACE

Project:	1998514	Function:	Public Safety	Council:	03
Priority No.:		Program:	Other Protection-Miscellaneous	Nbrd Board:	30
TMK:		Department:	Design and Construction	Senate:	24
				House:	48
				Other:	

Description: Restoration of eroded bank areas along Kaneohe stream near 45-525 and 45-526 Keole Place and 45-533 Keole Street.

Justification: Prevent further erosion in area.

Use of Funds: Design and construct stream bank restoration in Kaneohe near Keole Place.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	195	0	0	0	0	0	50	0	0	50	0
CONST	GI	0	0	0	0	0	0	0	0	3,950	3,950	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	195	0	0	0	0	0	50	0	3,950	4,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2020	6/30/2022
CONST	7/1/2022	12/31/2025

Annual Effect on Operating Budget	
No of Positions	4
Salary Cost	100
Cur Exp & Equip	20
Maint Cost	0
Useful Life	40

Six-Year CIP and Budget FY 2018-2023

KAPALAMA CANAL EROSION CONTROL, STABILIZATION, AND DREDGING - TRANSIT ORIENTE

Project:	2015102	Function:	Public Safety	Council:	07
Priority No.:		Program:	Other Protection-Miscellaneous	Nbrd Board:	15
TMK:		Department:	Design and Construction	Senate:	14
				House:	28
				Other:	

Description: Conduct environmental study, planning and design necessary to acquire required permits to construct erosion control. embankment stabilization and related dredging improvements along Kapalama Canal.

Justification: Improvements to promote improved water quality and access to the canal.

Use of Funds: Design canal erosion control and embankment stabilization improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	250	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	500	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	5,000	5,000	5,000
	Total	250	0	500	0	0	0	0	0	5,000	5,000	5,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	12/31/2019
DGN	7/1/2015	12/31/2022
CONST	7/1/2017	12/31/2022

Annual Effect on Operating Budget	
No of Positions	3
Salary Cost	58
Cur Exp & Equip	19
Maint Cost	3
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

KUAHEA STREET AREA MOVEMENT, PALOLO VALLEY

Project:	1997504	Function:	Public Safety	Council:	05
Priority No.:		Program:	Other Protection-Miscellaneous	Nbrd Board:	06
TMK:		Department:	Design and Construction	Senate:	10
				House:	20
				Other:	

Description: Project will study the earth movement problem in Kuahea Street area in Palolo Valley.

Justification: Study, determine alternatives, design, construct and inspect improvements and land acquisition.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
LAND	ST	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	ST	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	ST	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	3,791	0	0	0	0	0	0	0	0	0	0
CONST	ST	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	ST	0	0	0	0	0	0	0	0	0	0	0
	Total	3,791	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	2/1/2010	12/1/2016
CONST	6/1/2014	12/1/2016

Annual Effect on Operating Budget	
No of Positions	3
Salary Cost	90
Cur Exp & Equip	20
Maint Cost	0
Useful Life	40

Six-Year CIP and Budget FY 2018-2023

MANOA STREAM TRIBUTARY RETAINING WALL

Project:	2002030	Function:	Public Safety	Council:	05
Priority No.:		Program:	Other Protection-Miscellaneous	Nbrd Board:	07
TMK:		Department:	Design and Construction	Senate:	11
				House:	23
				Other:	

Description: Construct stream retaining wall with chain link fence at eroded stream embankment.

Justification: To provide a continuous wall along the Kokohead side of the stream to protect an existing stream wall and bridge abutment from erosion.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	250	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	250	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2011	6/30/2013
DGN	2/1/2011	4/1/2013
CONST	5/1/2012	6/30/2013
INSP	5/1/2012	6/30/2013

Annual Effect on Operating Budget	
No of Positions	1
Salary Cost	30
Cur Exp & Equip	10
Maint Cost	0
Useful Life	40

Six-Year CIP and Budget FY 2018-2023

MOANALUA STREAM LINING RECONSTRUCTION

Project:	2003059	Function:	Public Safety	Council:	07
Priority No.:		Program:	Other Protection-Miscellaneous	Nbrd Board:	17
TMK:		Department:	Design and Construction	Senate:	15
				House:	30
				Other:	

Description: Reconstruct sections of stream concrete linings that are cracked, bulging or otherwise deteriorated.

Justification: Public health and safety and environmental protection. City obligation to repair damaged areas of concrete lined channels that were initially constructed with Federal Funds.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	165	0	0	0	0	0	0	0	0	0	0
CONST	GI	400	0	0	0	0	0	0	0	0	0	0
	Total	565	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	6/1/2010	6/30/2013
CONST	6/30/2013	10/1/2014

Annual Effect on Operating Budget	
No of Positions	13
Salary Cost	90
Cur Exp & Equip	30
Maint Cost	0
Useful Life	40

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PROTECTIVE CHAIN- LINK FENCING AT KAPALAMA CANAL

Project:	2016091	Function:	Public Safety	Council:	07
Priority No.:		Program:	Other Protection-Miscellaneous	Nbrd Board:	15
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Design and construct protective chain-link fencing improvements along Kapalama Canal, which includes the installation of a 4'-0" high chain-link fence on Kokea Street and Kohou Street sides of the embankment from Olomea Street to Nimitz Highway.

Justification:

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	0	80	0	0	0	0	0	0	0	0	0
CONST	GI	0	160	0	0	0	0	0	0	0	0	0
	Total	0	240	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2015	12/31/2016
CONST	7/1/2016	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	7

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PROTECTIVE CHAIN-LINK FENCING AT THE CHILDREN'S DISCOVERY CENTER

Project:	2016092	Function:	Public Safety	Council:	05
Priority No.:		Program:	Other Protection-Miscellaneous	Nbrd Board:	13
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and inspect protective chain-link fencing improvements around the Children's Discovery Center located at 111 Ohe Street (TMK: 2-1-060:017)

Justification:

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GN	0	1	0	0	0	0	0	0	0	0	0
DGN	GN	0	1	0	0	0	0	0	0	0	0	0
CONST	GN	0	247	0	0	0	0	0	0	0	0	0
INSP	GN	0	1	0	0	0	0	0	0	0	0	0
	Total	0	250	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	6/30/2016
DGN	7/1/2015	6/30/2016
CONST	7/1/2016	12/31/2017
INSP	7/1/2016	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

PUHAWAI ROAD CULVERT DRAINAGE IMPROVEMENTS

Project:	2013087	Function:	Public Safety	Council:	01
Priority No.:		Program:	Other Protection-Miscellaneous	Nbrd Board:	24
TMK:		Department:	Design and Construction	Senate:	21
				House:	44
				Other:	

Description: Plan, design and construct flood control improvements at Puhawai Road Culvert.

Justification: Planning study necessary to analyze capacity of existing culverts and determine necessary improvements to alleviate flooding of Puhawai Road. The State DLNR has identified public safety issues from flooding along Puhawai Road in the Lualualei Valley. The State intends to commit an initial $2 million towards the planning, design and construction of culvert improvements within the Mailiili Drainage Basin thru the use of a memorandum of agreement between the State and City for the project work. Financing will be coordinated between the State and City via the terms within the MOA. Scope of work will be limited to those drainage structures under City jurisdiction and subject to availability of funds.

Use of Funds: Design drainage improvements for Puhawai Road Culvert.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	ST	216	0	0	0	0	0	0	0	0	0	0
DGN	ST	0	0	0	0	0	0	0	0	0	0	0
CONST	ST	0	0	0	0	0	0	0	0	0	0	0
	Total	216	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2012	12/31/2017
DGN	7/1/2017	12/31/2017
CONST	7/1/2018	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	40

Six-Year CIP and Budget FY 2018-2023

ROADWAY AND CRIB WALL REPAIRS - TANTALUS DRIVE

Project:	2017091	Function:	Public Safety	Council:	06
Priority No.:		Program:	Other Protection-Miscellaneous	Nbrd Board:	05
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design for repairs to an existing crib wall, and improvements to a portion of Tantalus Drive in the vicinity of 3798 Tantalus Drive.

Justification: Repairs needed for safety.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	250	0	0	0	0	0	0	0	0
DGN	GI	0	0	50	0	0	0	0	0	0	0	0
	Total	0	0	300	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

ROCK SLIDE POTENTIAL INSPECTIONS AND MITIGATIVE IMPROVEMENTS

Project:	2001154	Function:	Public Safety	Council:	99
Priority No.:	2	Program:	Other Protection-Miscellaneous	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Inspect embankments on City & County streets and roads for rockfall and other earth stability hazards. Overall program includes prioritization of areas based on evaluation; recommendation of mitigative alternatives with associated cost; and design, construction and inspection of mitigative areas.

Justification: Enhance safety to the public. The rock slide inspection program provides a list of potential rockfall sites and is needed to provide the City with a rationale to justify the site selections for mitigation based on funding limits and priorities established by the hazard rating.

Use of Funds: Acquire land, plan, design, construct and inspect mitigative measures for unanticipated rockfall and other earth stability hazards.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	1	10	0	1	10	10	10	10	10	51	60
PLAN	HI	724	10	0	1	10	10	10	10	10	51	60
DGN	HI	5,684	50	10	1	10	10	10	10	10	51	1,200
CONST	HI	8,738	400	590	996	920	920	920	920	920	5,596	7,000
INSP	HI	65	30	0	1	50	50	50	50	50	251	600
	Total	15,211	500	600	1,000	1,000	1,000	1,000	1,000	1,000	6,000	8,920

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	8/1/2008	12/1/2028
PLAN	8/1/2008	12/1/2028
DGN	8/1/2008	12/1/2028
CONST	10/1/2007	12/1/2028
INSP	10/1/2007	12/1/2028

Annual Effect on Operating Budget	
No of Positions	6
Salary Cost	240
Cur Exp & Equip	60
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

TELECOMMUNICATIONS FACILITIES UPGRADE

Project:	2002080	Function:	Public Safety	Council:	99
Priority No.:	1	Program:	Other Protection-Miscellaneous	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Upgrade public safety telecommunication sites which include but are not limited to: towers, electrical, structural, air conditioning, radio channels expansion, and security infrastructure upgrades.

Justification: Provide radio and microwave communication infrastructure between government agencies to ensure public safety. Several existing tower sites require structural improvements to include increase tower high wind loading capacity, additional radio channel capabilities for existing users (Honolulu Police Department, Honolulu Fire Department, Department of Emergency Management, the BUS, and future addition of Departments of Facility Maintenance and Environmental Services radios), mechanical and electrical improvements to on site telecommunication support facilities.

Use of Funds: Acquire land, plan, design, construct, inspect and provide related equipment for telecommunication facilities improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	5	20	20	20	15	15	200	290	0
PLAN	GI	1,355	15	10	350	200	400	500	500	500	2,450	1,450
DGN	GI	8,226	15	10	700	400	500	500	500	500	3,100	3,500
CONST	GI	14,457	15	5,030	1,000	5,000	3,245	2,000	2,500	5,500	19,245	26,280
INSP	GI	1,173	15	300	150	400	400	400	350	350	2,050	3,450
EQUIP	GI	21,404	22,660	500	2,750	400	400	400	500	500	4,950	5,400
	Total	46,614	22,720	5,855	4,970	6,420	4,965	3,815	4,365	7,550	32,085	40,080

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	8/1/2010	1/30/2024
DGN	4/3/2011	12/29/2026
CONST	8/26/2012	10/20/2026
INSP	8/26/2012	12/19/2026
EQUIP	8/26/2012	12/19/2026

Annual Effect on Operating Budget	
No of Positions	4
Salary Cost	200
Cur Exp & Equip	40
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

WAILUPE VALLEY HILLSIDE RESTORATION

Project:	1991042	Function:	Public Safety	Council:	04
Priority No.:		Program:	Other Protection-Miscellaneous	Nbrd Board:	02
TMK:		Department:	Design and Construction	Senate:	09
				House:	18
				Other:	

Description: Project will study the earth movement problem in Wailupe Valley. After alternatives are evaluated, construction of appropriate improvements within the City's responsibilities will be done.

Justification: Study, determine alternatives, design and construct improvements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	700	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	8,000	4,000	0	12,000	0
INSP	GI	0	0	0	0	0	0	700	300	0	1,000	0
	Total	700	0	0	0	0	0	8,700	4,300	0	13,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	9/1/2010	1/21/2018
CONST	7/1/2020	12/31/2023

Annual Effect on Operating Budget	
No of Positions	5
Salary Cost	200
Cur Exp & Equip	40
Maint Cost	0
Useful Life	40

Six-Year CIP and Budget FY 2018-2023

WOODLAWN AREA EARTH STABILIZATION

Project:	2011082	Function:	Public Safety	Council:	05
Priority No.:		Program:	Other Protection-Miscellaneous	Nbrd Board:	07
TMK:		Department:	Design and Construction	Senate:	11
				House:	23
				Other:	

Description: Project will evaluate the adequacy of the existing mitigation system and methods of reinforcing the system.

Justification: Study, determine alternative, design and construction inspection improvements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	610	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	8,000	8,000	8,000
	Total	610	0	0	0	0	0	0	0	8,000	8,000	8,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2011	6/30/2019
CONST	7/1/2022	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	40

Six-Year CIP and Budget FY 2018-2023

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
GI	55,299	23,310	6,955	5,785	6,620	5,165	12,765	8,865	24,700	63,900	54,280
GN	0	250	150	0	0	0	0	0	0	0	0
HI	15,211	500	600	1,000	1,000	1,000	1,000	1,000	1,000	6,000	8,920
ST	216	0	0	0	0	0	0	0	0	0	0
Total	70,727	24,060	7,705	6,785	7,620	6,165	13,765	9,865	25,700	69,900	63,200

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	1	10	5	26	30	30	25	25	210	346	60
PLAN	2,695	176	320	356	210	410	510	510	510	2,506	1,510
DGN	16,997	156	680	706	420	520	570	520	520	3,256	5,000
CONST	28,391	1,012	5,900	2,786	6,110	4,355	11,110	7,610	23,560	55,531	47,180
INSP	1,238	46	300	161	450	450	1,150	700	400	3,311	4,050
EQUIP	21,404	22,660	500	2,750	400	400	400	500	500	4,950	5,400
Total	70,727	24,060	7,705	6,785	7,620	6,165	13,765	9,865	25,700	69,900	63,200

Six-Year CIP and Budget FY 2018-2023

Program Summary: Other Protection-Miscellaneous

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
GI	55,299	23,310	6,955	5,785	6,620	5,165	12,765	8,865	24,700	63,900	54,280
GN	0	250	150	0	0	0	0	0	0	0	0
HI	15,211	500	600	1,000	1,000	1,000	1,000	1,000	1,000	6,000	8,920
ST	216	0	0	0	0	0	0	0	0	0	0
Total	70,727	24,060	7,705	6,785	7,620	6,165	13,765	9,865	25,700	69,900	63,200

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	1	10	5	26	30	30	25	25	210	346	60
PLAN	2,695	176	320	356	210	410	510	510	510	2,506	1,510
DGN	16,997	156	680	706	420	520	570	520	520	3,256	5,000
CONST	28,391	1,012	5,900	2,786	6,110	4,355	11,110	7,610	23,560	55,531	47,180
INSP	1,238	46	300	161	450	450	1,150	700	400	3,311	4,050
EQUIP	21,404	22,660	500	2,750	400	400	400	500	500	4,950	5,400
Total	70,727	24,060	7,705	6,785	7,620	6,165	13,765	9,865	25,700	69,900	63,200

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Function Summary: Public Safety

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CD	5,163	0	0	0	0	0	0	0	0	0	0
FG	41,719	5,030	5,650	7,350	7,350	7,350	7,350	7,350	7,350	44,100	1,050
GI	236,503	28,610	45,262	27,214	19,170	20,515	22,335	20,040	50,975	160,249	386,255
GN	3,328	250	250	0	0	0	0	0	0	0	0
HI	43,068	2,803	3,940	3,500	4,250	4,250	3,500	3,500	3,500	22,500	12,560
HW	0	0	0	0	0	0	0	0	0	0	0
ST	216	0	0	0	0	0	0	0	0	0	0
Total	329,998	36,693	55,102	38,064	30,770	32,115	33,185	30,890	61,825	226,849	399,865

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	1,106	111	215	41	40	1,040	785	785	1,220	3,911	3,170
PLAN	9,809	266	1,301	812	388	555	800	810	1,360	4,725	7,220
DGN	50,683	1,606	6,891	4,296	2,270	2,225	2,570	3,030	3,030	17,421	44,540
CONST	166,432	11,270	29,951	20,923	26,255	26,380	26,510	24,000	53,950	178,018	321,280
INSP	11,901	745	1,521	1,272	1,118	1,215	1,815	1,465	1,465	8,350	13,085
EQUIP	90,068	22,695	15,223	10,720	700	700	705	800	800	14,425	10,570
RELOC	0	0	0	0	0	0	0	0	0	0	0
ART	0	0	0	0	0	0	0	0	0	0	0
Total	329,998	36,693	55,102	38,064	30,770	32,115	33,185	30,890	61,825	226,849	399,865

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BIKEPATHS, WAIALUA AND HALEIWA

Project:	2015036	Function:	Highways and Streets	Council:	02
Priority No.:		Program:	Bikeways And Bikepaths	Nbrd Board:	27
TMK:		Department:	Transportation Services	Senate:	23
				House:	99
				Other:	

Description: Plan, design, construct and acquire land for the development of bikepaths on Goodale Avenue and Haleiwa Road in Waialua and Haleiwa.

Justification:

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	0	0	0	0	0	0	0	0	0	0	0
PLAN	HI	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	294	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	294	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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BIKEWAY IMPROVEMENTS

Project:	1979063	Function:	Highways and Streets	Council:	99
Priority No.:	1	Program:	Bikeways And Bikepaths	Nbrd Board:	99
TMK:		Department:	Transportation Services	Senate:	99
				House:	99
				Other:	

Description: An on-going island-wide program for the implementation of the Oahu Bicycle Master Plan improvements, new projects, and the upgrade of existing bicycle facilities at various locations such as Waikiki area.

Justification: Address user safety of public facilities as well as to encourage the use of bicycles as a safe, healthy and economical mode of transportation.

Use of Funds: Acquire land, plan, design, construct, inspect and provide related equipment for bikeway improvements to include the primary urban center.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	BK	0	0	0	5	0	0	0	0	0	5	0
LAND	HI	0	0	0	0	0	0	0	0	0	0	0
PLAN	BK	301	0	0	100	0	0	0	0	0	100	0
PLAN	HI	191	0	0	0	0	0	0	0	0	0	0
DGN	BK	181	0	0	300	0	0	0	0	0	300	0
DGN	FG	88	0	0	0	0	0	0	0	0	0	0
DGN	HI	1,276	0	0	0	0	0	0	0	0	0	0
CONST	BK	644	0	0	460	430	430	430	430	430	2,610	0
CONST	FG	1,379	0	520	1,840	520	520	520	520	520	4,440	0
CONST	HI	2,933	0	430	0	0	0	0	0	0	0	0
INSP	BK	333	0	0	45	130	130	130	130	130	695	0
INSP	FG	599	0	120	0	120	120	120	120	120	600	0
INSP	HI	142	0	130	0	0	0	0	0	0	0	0
EQUIP	BK	10	0	0	10	0	0	0	0	0	10	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	8,077	0	1,200	2,760	1,200	1,200	1,200	1,200	1,200	8,760	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2016	6/30/2022
PLAN	7/1/2016	6/30/2024
DGN	7/1/2016	6/30/2024
CONST	7/1/2016	6/30/2024
INSP	7/1/2016	6/30/2024
EQUIP	7/1/2016	6/30/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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HAMAKUA DRIVE BIKEWAY IMPROVEMENTS

Project:	2015033	Function:	Highways and Streets	Council:	03
Priority No.:		Program:	Bikeways And Bikepaths	Nbrd Board:	31
TMK:		Department:	Transportation Services	Senate:	24
				House:	50
				Other:	

Description: Install bike lanes and sharrows along Hamakua Drive between Kailua Road and Keolu Drive in the Kailua area.

Justification: To ensure user safety of public facilities as well as to encourage the use of bicycles as a safe, healthy and economical mode of transportation.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	HI	35	0	0	0	0	0	0	0	0	0	0
CONST	FG	0	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
INSP	FG	1	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	36	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2014	6/30/2015

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	5

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KAPAHULU AVENUE BIKEPATH IMPROVEMENTS

Project:	2017029	Function:	Highways and Streets	Council:	05
Priority No.:		Program:	Bikeways And Bikepaths	Nbrd Board:	08
TMK:		Department:	Transportation Services	Senate:	
				House:	
				Other:	

Description: Plan, design and construct bike path improvements, including a community garden, along the corner of Kapahulu Avenue and Date Street.

Justification: To encourage the use of bicycles as a safe, healthy and economical mode of transportation in the Kapahulu area.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	10	0	0	0	0	0	0	0	0
DGN	GI	0	0	10	0	0	0	0	0	0	0	0
CONST	GI	0	0	100	0	0	0	0	0	0	0	0
	Total	0	0	120	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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MULTIMODAL BIKE PLAN

Project:	2014026	Function:	Highways and Streets	Council:	99
Priority No.:		Program:	Bikeways And Bikepaths	Nbrd Board:	99
TMK:		Department:	Transportation Services	Senate:	99
				House:	99
				Other:	

Description: Integrate bikeway into multimodal transportation systems, including but not limited to TheBus and its transit centers and a primary core (PUC) cycle track.. The study may also include bicycle facilities, bike share programs and integration of new bike paths into existing roadways and bike paths, including the consideration of Complete Streets' principles.

Justification: Provide bicycle access into multimodal transportation systems.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	200	0	0	0	0	0	0	0	0	0	0
DGN	HI	0	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	200	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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OAHU PEDESTRIAN MASTER PLAN

Project:	2017030	Function:	Highways and Streets	Council:	99
Priority No.:		Program:	Bikeways And Bikepaths	Nbrd Board:	99
TMK:		Department:	Transportation Services	Senate:	
				House:	
				Other:	

Description: Provision of funding for an Oahu pedestrian master plan to evaluate pedestrian safety improvements, with Phase I involving urban Honolulu to complement the Oahu Bike Plan: A Bicycle.

Justification: Provision of funding for an Oahu pedestrian master plan to evaluate pedestrian safety improvements, with Phase I involving urban Honolulu to complement the Oahu Bike Plan: A Bicycle.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	500	0	0	0	0	0	0	0	0
	Total	0	0	500	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

PEDESTRIAN AND BICYCLE PATH, KAHALUU, OAHU

Project:	2017031	Function:	Highways and Streets	Council:	02
Priority No.:		Program:	Bikeways And Bikepaths	Nbrd Board:	29
TMK:		Department:	Transportation Services	Senate:	
				House:	
				Other:	

Description: Plan and design a multi-use, two-way pathway in Kahalu'u.

Justification: Plan and design a multi-use, two-way pathway in Kahalu'u.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	100	0	0	0	0	0	0	0	0
DGN	HI	0	0	100	0	0	0	0	0	0	0	0
	Total	0	0	200	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

PEDESTRIAN AND BICYCLE PATH, KAILUA, OAHU

Project:	2017035	Function:	Highways and Streets	Council:	04
Priority No.:		Program:	Bikeways And Bikepaths	Nbrd Board:	31
TMK:		Department:	Transportation Services	Senate:	
				House:	
				Other:	

Description: Plan, design and construct a protected two-way pedestrian and bicycle path encircling the periphery of the block containing Kailua Intermediate School, Kailua Elementary School, and Kailua Library; a protected two-way pedestrian and bicycle path connection along Kailua Road to Kailua Beach Park; and ground and site improvements at adjacent properties, as necessary.

Justification: Plan, design and construct a protected two-way pedestrian and bicycle path encircling the periphery of the block containing Kailua Intermediate School, Kailua Elementary School, and Kailua Library; a protected two-way pedestrian and bicycle path connection along Kailua Road to Kailua Beach Park; and ground and site improvements at adjacent properties, as necessary.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	1	0	0	0	0	0	0	0	0
DGN	HI	0	0	1	0	0	0	0	0	0	0	0
CONST	HI	0	0	198	0	0	0	0	0	0	0	0
	Total	0	0	200	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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Department Summary: Transportation Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
BK	1,468	0	0	920	560	560	560	560	560	3,720	0
FG	2,066	0	640	1,840	640	640	640	640	640	5,040	0
GI	0	0	620	0	0	0	0	0	0	0	0
HI	5,072	0	960	0	0	0	0	0	0	0	0
Total	8,607	0	2,220	2,760	1,200	1,200	1,200	1,200	1,200	8,760	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	0	0	0	5	0	0	0	0	0	5	0
PLAN	692	0	611	100	0	0	0	0	0	100	0
DGN	1,874	0	111	300	0	0	0	0	0	300	0
CONST	4,956	0	1,248	2,300	950	950	950	950	950	7,050	0
INSP	1,074	0	250	45	250	250	250	250	250	1,295	0
EQUIP	10	0	0	10	0	0	0	0	0	10	0
Total	8,607	0	2,220	2,760	1,200	1,200	1,200	1,200	1,200	8,760	0

Program Summary: Bikeways And Bikepaths

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
BK	1,468	0	0	920	560	560	560	560	560	3,720	0
FG	2,066	0	640	1,840	640	640	640	640	640	5,040	0
GI	0	0	620	0	0	0	0	0	0	0	0
HI	5,072	0	960	0	0	0	0	0	0	0	0
Total	8,607	0	2,220	2,760	1,200	1,200	1,200	1,200	1,200	8,760	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	0	0	0	5	0	0	0	0	0	5	0
PLAN	692	0	611	100	0	0	0	0	0	100	0
DGN	1,874	0	111	300	0	0	0	0	0	300	0
CONST	4,956	0	1,248	2,300	950	950	950	950	950	7,050	0
INSP	1,074	0	250	45	250	250	250	250	250	1,295	0
EQUIP	10	0	0	10	0	0	0	0	0	10	0
Total	8,607	0	2,220	2,760	1,200	1,200	1,200	1,200	1,200	8,760	0

Six-Year CIP and Budget FY 2018-2023

ACQUISITION OF KAKAAKO ROADWAY

Project:	2017092	Function:	Highways and Streets	Council:	06
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	11
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Provision of funds to acquire a certain portion of Waimanu Street from the Imperial Plaza (TMK 2-1-049:027) driveway on the street to Ward Avenue.

Justification: Provision of funds to acquire a certain portion of Waimanu Street from the Imperial Plaza (TMK 2-1-049:027) driveway on the street to Ward Avenue.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	0	0	48	0	0	0	0	0	0	0	0
OTHER	HI	0	0	1	0	0	0	0	0	0	0	0
RELOC	HI	0	0	1	0	0	0	0	0	0	0	0
	Total	0	0	50	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2016	12/31/2018
OTHER	7/1/2016	12/31/2018
RELOC	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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COMPLETE STREETS

Project:	2017084	Function:	Highways and Streets	Council:	99
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Acquire land, plan, design, construct and inspect complete streets improvements which may include areas adjacent to Transit Oriented Development (TOD) areas.

Justification: Improve safety for all modes of traffic and alleviate traffic congestion.

Use of Funds: Design, construct and inspect complete streets improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	0	0	0	0	0	0	0	0	0	0	0
PLAN	HI	0	0	50	0	0	0	0	0	0	0	0
DGN	HI	0	0	100	0	0	0	0	0	0	0	0
CONST	HI	0	0	1,200	0	0	0	0	0	0	0	0
INSP	HI	0	0	50	0	0	0	0	0	0	0	0
	Total	0	0	1,400	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2019
DGN	7/1/2016	12/31/2019
CONST	7/1/2017	12/31/2019
INSP	7/1/2017	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

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COMPLETE STREETS IMPROVEMENTS

Project:	2015066	Function:	Highways and Streets	Council:	99
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Acquire land, plan, design, construct and inspect for Complete Streets improvements in high-volume traffic neighborhoods in urban Honolulu adjacent to Transit Oriented Development areas.

Justification:

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	0	0	0	0	0	0	0	0	0	0	0
PLAN	HI	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	0	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

COMPLETE STREETS IMPROVEMENTS IN TRANSIT ORIENTED DEVELOPMENT (TOD) AREAS

Project:	2015027	Function:	Highways and Streets	Council:	99
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Implement Complete Streets projects in Transit Oriented Development (TOD) areas.

Justification: Improve safety for all modes of traffic and alleviate traffic congestion in TOD areas.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	0	0	0	0	0	0	0	0	0	0	0
PLAN	HI	259	0	0	0	0	0	0	0	0	0	0
DGN	HI	300	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	390	0	0	0	0	0	0	0	0	0	0
	Total	949	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2014	6/30/2020
PLAN	7/1/2014	6/30/2020
DGN	7/1/2014	6/30/2020
CONST	7/1/2014	6/30/2021
INSP	7/1/2014	6/30/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	120
Useful Life	50

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COMPLETE STREETS PEDESTRIAN SAFETY IMPROVEMENTS-LILIHA/NUUANU

Project:	2015067	Function:	Highways and Streets	Council:	06
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Acquire land, plan, design, construct and inspect for Complete Streets pedestrian safety improvements in high-volume traffic neighborhoods involving the Liliha Street and Nuuanu Avenue traffic corridors.

Justification:

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	0	0	0	0	0	0	0	0	0	0	0
PLAN	HI	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	0	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

CURB RAMPS AT VARIOUS LOCATIONS, OAHU

Project:	1988001	Function:	Highways and Streets	Council:	99
Priority No.:	1	Program:	Highways, Streets And Roadways	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Design, construct and inspect the construction work of ADA improvements within public right-of-ways to provide compliance with ADA Curb Ramp Transition Plan, requests from the physically impaired and for alteration projects.

Justification: Removal of architectural barriers to the physically impaired as required by law.

Use of Funds: Plan, design, construct, inspect and provide related equipment for ADA curb ramps and provide funding for a court monitor.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	0	0	10	0	0	0	0	0	0	0	0
PLAN	HI	0	0	0	10	0	0	0	0	0	10	0
DGN	FG	3,667	0	0	0	0	0	0	0	0	0	0
DGN	HI	14,403	40	10	500	0	0	0	0	0	500	0
CONST	CD	0	0	0	0	0	0	0	0	0	0	0
CONST	HI	34,203	900	2,000	1,600	2,980	2,000	0	0	0	6,580	0
CONST	UT	3	0	0	0	0	0	0	0	0	0	0
INSP	HI	746	50	100	150	90	0	0	0	0	240	0
EQUIP	HI	0	0	0	5	0	0	0	0	0	5	0
OTHER	DV	167	0	0	0	0	0	0	0	0	0	0
OTHER	HI	523	10	10	10	10	0	0	0	0	20	0
	Total	53,713	1,000	2,130	2,275	3,080	2,000	0	0	0	7,355	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2011	6/30/2021
CONST	7/1/2011	12/31/2022
INSP	7/1/2011	12/31/2022
OTHER	7/1/2011	12/31/2022

Annual Effect on Operating Budget	
No of Positions	6
Salary Cost	240
Cur Exp & Equip	100
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

FARRINGTON HIGHWAY IMPROVEMENTS

Project:	2011089	Function:	Highways and Streets	Council:	99
Priority No.:	2	Program:	Highways, Streets And Roadways	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan and design improvements on the City portions of Farrington Highway.

Justification: The completion of these improvements are an integral part of the sustainability of District 1. Such improvements: bike paths, curbs, pedestrian sidewalks, drainage, overhead lighting and gutters are necessary for function and safety.

Use of Funds: Acquire land, plan and design highway improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	0	0	0	900	0	0	0	0	0	900	0
PLAN	FG	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	1,000	0	0	0	0	0	0	0	0	0	0
PLAN	HI	0	0	10	90	50	0	0	0	0	140	0
DGN	FG	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	0	0	990	10	8,950	3,000	0	0	0	11,960	0
CONST	FG	0	0	0	0	0	0	8,000	8,000	8,000	24,000	0
CONST	HI	0	0	0	0	0	0	22,000	22,000	22,000	66,000	0
INSP	FG	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	1,000	0	1,000	1,000	9,000	3,000	30,000	30,000	30,000	103,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2012	6/30/2018
DGN	7/1/2013	6/30/2021
CONST	7/1/2013	6/30/2025
INSP	7/1/2013	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	40

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GUARDRAIL IMPROVEMENTS

Project:	1998515	Function:	Highways and Streets	Council:	99
Priority No.:	8	Program:	Highways, Streets And Roadways	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Design, construct and inspect guardrail improvements at various locations.

Justification: Public safety. Design, construct and reconstruct guardrails warranted by the Department of Transportation Services to meet the latest AASHTO standards.

Use of Funds: Acquire land, plan, design, construct, inspect and provide related equipment for guardrail improvements at various locations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	0	0	0	10	0	0	0	0	0	10	0
PLAN	HI	0	0	0	10	0	0	0	0	0	10	0
DGN	HI	882	10	40	10	40	40	40	40	40	210	240
CONST	HI	2,064	250	200	776	200	200	200	200	200	1,776	1,200
INSP	HI	0	0	20	10	20	20	20	20	20	110	120
EQUIP	HI	0	0	0	4	0	0	0	0	0	4	0
	Total	2,946	260	260	820	260	260	260	260	260	2,120	1,560

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	9/1/2006	12/31/2025
CONST	12/1/2006	12/31/2025
INSP	12/1/2006	12/31/2025

Annual Effect on Operating Budget	
No of Positions	2
Salary Cost	60
Cur Exp & Equip	20
Maint Cost	0
Useful Life	50

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HALEIWA WALKWAY IMPROVEMENTS

Project:	2011092	Function:	Highways and Streets	Council:	02
Priority No.:	6	Program:	Highways, Streets And Roadways	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	23
				House:	47
				Other:	

Description: Plan and design walkways and other related improvements as described in Resolution 09-338, CD1. Construct walkways and other roadway improvements along Kamehameha Highway in Haleiwa between the Opaeula Stream Bridge and the Anahulu River Bridge as described in Resolution 09-338, CD1.

Justification: Resolution 09-338, CD1 was unanimously passed on January 27, 2009. This resolution was adopted to study roadway improvements to improve access by pedestrians, wheelchair bound and disabled persons from traversing the roadway instead of a safe (shoulder) area within rural Haleiwa Town. It has been documented that 51% of visitors to Oahu make their way to the North Shore including Haleiwa Town. This project is being done as an Improvement District and is supported by the North Shore Neighborhood Board #27 and the North Shore Chamber of Commerce. Improvement Districts are defined by tax map boundaries as per ROH Chapter 36, in addition to ROH Sec. 14-24.2 for Cost of Water System improvements.

Use of Funds: Design improvements consistent with the character of Haleiwa.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	165	0	0	0	0	0	0	0	0	0	0
PLAN	HI	2,790	0	0	0	0	0	0	0	0	0	0
DGN	HI	45	0	0	200	0	0	0	0	0	200	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	3,000	0	0	200	0	0	0	0	0	200	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	3/1/2012	7/1/2015
DGN	7/1/2015	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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HIGHWAY STRUCTURE IMPROVEMENTS

Project:	2004015	Function:	Highways and Streets	Council:	99
Priority No.:	7	Program:	Highways, Streets And Roadways	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design and construct highway and drainage structure improvements at various locations .

Justification: Public safety. To rehabilitate highway and drainage structure improvements to original function.

Use of Funds: Plan, design, construct and inspect, highway drainage and earth retaining structures at various locations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	21	10	0	0	10	10	10	10	10	50	60
PLAN	HI	60	0	10	5	0	0	0	0	0	5	0
DGN	GI	803	0	0	0	0	0	0	0	0	0	0
DGN	HI	1,510	10	10	10	10	10	10	10	10	60	60
CONST	GI	17	0	0	0	0	0	0	0	0	0	0
CONST	HI	3,923	220	220	230	220	220	220	220	220	1,330	1,140
INSP	HI	80	10	10	5	10	10	10	10	10	55	300
	Total	6,414	250	250	250	250	250	250	250	250	1,500	1,560

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	1/1/2012	6/30/2028
PLAN	9/1/2011	6/30/2028
DGN	9/1/2011	6/30/2028
CONST	9/1/2012	6/30/2028
INSP	9/1/2012	6/30/2028

Annual Effect on Operating Budget	
No of Positions	5
Salary Cost	200
Cur Exp & Equip	50
Maint Cost	0
Useful Life	40

Six-Year CIP and Budget FY 2018-2023

KAPAA QUARRY ROAD IMPROVEMENTS

Project:	2017093	Function:	Highways and Streets	Council:	03
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	31
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design and construct improvements to Kapaa Quarry Road.

Justification: Plan, design and construct improvements to Kapaa Quarry Road.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	1	0	0	0	0	0	0	0	0
DGN	HI	0	0	1	0	0	0	0	0	0	0	0
CONST	HI	0	0	498	0	0	0	0	0	0	0	0
	Total	0	0	500	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/0218
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

LAI ROAD IMPROVEMENTS

Project:	2017094	Function:	Highways and Streets	Council:	05
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	06
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design and construct improvements for the road shoulder stabilization of Lai Road located in Palolo.

Justification: Plan, design and construct improvements for the road shoulder stabilization of Lai Road located in Palolo.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	5	0	0	0	0	0	0	0	0
DGN	HI	0	0	10	0	0	0	0	0	0	0	0
CONST	HI	0	0	200	0	0	0	0	0	0	0	0
	Total	0	0	215	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

MOANALUA LOOP REALIGNMENT, WAIMALU

Project:	2003074	Function:	Highways and Streets	Council:	08
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	20
TMK:		Department:	Design and Construction	Senate:	16
				House:	34
				Other:	

Description: Realign roadway to remove roadway encroachment in private property and construct rock barrier to protect motorists from rock slides.

Justification: The roadway should not encroach into private property.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	10
PLAN	GI	0	0	0	0	0	0	0	0	0	0	400
DGN	GI	0	0	0	0	0	0	0	0	0	0	10
	Total	0	0	0	0	0	0	0	0	0	0	420

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2024	12/31/2025
PLAN	7/1/2024	12/31/2025
DGN	12/1/2024	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	40

Six-Year CIP and Budget FY 2018-2023

PUUHALE ROAD IMPROVEMENTS

Project:	2017095	Function:	Highways and Streets	Council:	07
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	15
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design infrastructure improvements including sidewalks and drainage along Puuhale Road.

Justification: Plan and design infrastructure improvements including sidewalks and drainage along Puuhale Road.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	100	0	0	0	0	0	0	0	0
DGN	GI	0	0	100	0	0	0	0	0	0	0	0
	Total	0	0	200	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

RAIL STATION CONNECTIVITY - TRANSIT ORIENTED DEVELOPMENT

Project:	2015093	Function:	Highways and Streets	Council:	99
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Develop pedestrian, bicycling, and transit connections in the areas surrounding the rail intermodal centers.

Justification: Access to other modes will be needed at each rail station to ensure the system is well-used. Rail passengers may walk, ride a bicycle, take the bus, use TheHandi-Van, get dropped off or park nearby to access rail transit. Improvements may include, but are not limited to, pedestrian bridges, paths and walkways, crosswalks and sidewalks, signage and wayfinding, bikeshare stations and infrastructure, secure bicycle storage, bus transit centers, bus stops, TheHandi-Van loading zones, drop-off and pick-up areas, and park-and-rides.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	10	0	0	0	0	0	0	0	0
PLAN	GI	103	0	100	0	0	0	0	0	0	0	0
DGN	GI	426	0	700	0	0	0	0	0	0	0	0
CONST	GI	1,419	0	2,500	0	0	0	0	0	0	0	0
INSP	GI	0	0	190	0	0	0	0	0	0	0	0
	Total	1,948	0	3,500	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2014	6/30/2015
PLAN	7/1/2014	6/30/2018
DGN	1/1/2015	6/30/2020
CONST	7/1/2015	6/30/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	120
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

RECONSTRUCTION OF CONCRETE SIDEWALKS

Project:	1998537	Function:	Highways and Streets	Council:	99
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: The reconstruction/replacement of existing concrete sidewalks at various locations.

Justification: Restore selected sidewalks through reconstruction or rehabilitation to improve service, reduce maintenance cost comply with ADA requirements and promote pedestrian safety.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	0	0	0	0	0	0	0	0	0
DGN	FG	238	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	1,619	0	0	0	0	0	0	0	0	0	0
CONST	FG	1,021	0	0	0	0	0	0	0	0	0	0
CONST	GI	1,664	0	0	0	0	0	0	0	0	0	0
CONST	HI	9,626	0	0	0	0	0	0	0	0	0	0
INSP	FG	167	0	0	0	0	0	0	0	0	0	0
INSP	HI	300	0	0	0	0	0	0	0	0	0	0
	Total	14,634	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2010	6/30/2015

Annual Effect on Operating Budget	
No of Positions	8
Salary Cost	320
Cur Exp & Equip	100
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

REHABILITATION OF STREETS

Project:	1997502	Function:	Highways and Streets	Council:	99
Priority No.:	5	Program:	Highways, Streets And Roadways	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Rehabilitation of existing roadways and related roadway elements such as bridges, culverts, guardrails, roadway retaining structures, and other improvements at various locations throughout the City.

Justification: Restore selected streets, roadways and related improvements as required by building code for the rehabilitation and reconstruction to improve the riding quality, structural integrity, and eliminate potential hazards.

Use of Funds: Plan, design, construct and inspect streets and related improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	0	1	0	0	0	0	0	0	0	0	0
PLAN	HI	0	1	0	500	0	0	0	0	0	500	0
DGN	GI	1,425	0	0	0	0	0	0	0	0	0	0
DGN	HI	51,326	2,998	3,000	2,000	2,000	2,000	2,000	2,000	2,000	12,000	12,000
CONST	FG	15,660	0	0	0	0	0	0	0	0	0	0
CONST	GI	27,354	0	0	0	0	0	0	0	0	0	0
CONST	HI	825,946	120,000	130,000	26,500	27,000	27,000	27,000	27,000	27,000	161,500	192,000
CONST	ST	0	0	0	0	0	0	0	0	0	0	0
CONST	UT	500	0	0	0	0	0	0	0	0	0	0
INSP	FG	3,023	0	0	0	0	0	0	0	0	0	0
INSP	HI	31,919	2,000	2,000	1,000	1,000	1,000	1,000	1,000	1,000	6,000	6,000
	Total	957,153	125,000	135,000	30,000	30,000	30,000	30,000	30,000	30,000	180,000	210,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	8/1/2011	12/1/2028
CONST	8/1/2011	12/1/2028
INSP	8/1/2011	12/1/2028

Annual Effect on Operating Budget	
No of Positions	20
Salary Cost	600
Cur Exp & Equip	300
Maint Cost	0
Useful Life	15

Six-Year CIP and Budget FY 2018-2023

SALT LAKE BOULEVARD WIDENING

Project:	1989123	Function:	Highways and Streets	Council:	07
Priority No.:	3	Program:	Highways, Streets And Roadways	Nbrd Board:	18
TMK:		Department:	Design and Construction	Senate:	15
				House:	32
				Other:	

Description: Plan, design, construct and inspect roadway improvements for Salt Lake Boulevard Widening. The last segment of the project may be broken into 2 or 3 phases.

Justification: Improve traffic circulation and flow.

Use of Funds: Plan and design roadway improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	FG	0	0	0	0	0	0	0	0	0	0	0
LAND	HI	44	0	0	0	0	0	0	0	0	0	0
PLAN	HI	1,000	0	0	10	0	0	0	0	0	10	0
DGN	FG	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	3,426	0	0	500	0	0	0	0	0	500	0
CONST	FG	5,321	0	0	0	0	8,000	8,000	0	0	16,000	0
CONST	HI	234	0	0	0	0	22,000	22,000	0	0	44,000	0
CONST	ST	0	0	0	0	0	0	0	0	0	0	0
CONST	UT	84	0	0	0	0	0	0	0	0	0	0
INSP	FG	980	0	0	0	0	0	0	0	0	0	0
INSP	HI	600	0	0	0	0	0	0	0	0	0	0
	Total	11,690	0	0	510	0	30,000	30,000	0	0	60,510	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	4/14/2011	1/31/2016
DGN	2/1/2016	3/31/2018
CONST	1/1/2019	1/31/2023
INSP	1/1/2019	1/31/2023

Annual Effect on Operating Budget	
No of Positions	3
Salary Cost	90
Cur Exp & Equip	30
Maint Cost	0
Useful Life	50

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STREETSCAPE IMPROVEMENTS - TRANSIT ORIENTED DEVELOPMENT

Project:	2015094	Function:	Highways and Streets	Council:	99
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Streetscape improvements near transit stations to make station areas more attractive, accessible and comfortable for pedestrian amenities like sidewalks, lighting, and cross-walks installation concurrent with rail station completion-additional improvements such as pedestrain scaled lighting, benches, and other sidewalk improvements.

Justification: Station areas will see a large increase in pedestrian activity. Streetscape improvements will make the station areas more attractive, more comfortable and increase the sense of personal security for those walking and bicycling near stations. Improvements may include, but are not limited to, landscaping, benches, shade structures, lighting, sidewalk repair, pedestrian plazas, signage, information kiosks and other amenities.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	59	0	0	0	0	0	0	0	0	0	0
DGN	GI	149	0	0	0	0	0	0	0	0	0	0
CONST	GI	700	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	908	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	12/31/2018
DGN	7/1/2014	12/31/2018
CONST	7/1/2014	12/31/2018
INSP	7/1/2015	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	120
Useful Life	50

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UTILITY SHARE EXPENSES

Project:	1991064	Function:	Highways and Streets	Council:	99
Priority No.:	9	Program:	Highways, Streets And Roadways	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Provide funds to the appropriate utility companies to share in construction costs.

Justification: City needs to provide funds to utilities in accordance with accepted accounting procedures.

Use of Funds: Pay for utility company's share of construction costs.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CONST	UT	558	100	100	100	100	100	100	100	100	600	0
	Total	558	100	100	100	100	100	100	100	100	600	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2011	6/30/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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WAHIAWA ROADWAYS IMPROVEMENTS

Project:	2017096	Function:	Highways and Streets	Council:	02
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	26
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design and construct improvements to shoulders on unimproved roadways in Wahiawa.

Justification: Plan, design and construct improvements to shoulders on unimproved roadways in Wahiawa.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	100	0	0	0	0	0	0	0	0
DGN	GI	0	0	100	0	0	0	0	0	0	0	0
CONST	GI	0	0	800	0	0	0	0	0	0	0	0
	Total	0	0	1,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/0218
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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WAIANAE COAST EMERGENCY ACCESS ROADS

Project:	2017097	Function:	Highways and Streets	Council:	01
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	24
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Provision of funds to acquire land, plan and design a secondary emergency access roadway for the Leeward Coast residents. No monies for this project shall be expended or encumbered unless matching funds are provided for this project by the State of Hawaii.

Justification: Provision of funds to acquire land, plan and design a secondary emergency access roadway for the Leeward Coast residents. No monies for this project shall be expended or encumbered unless matching funds are provided for this project by the State of Hawaii.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	0	0	1	0	0	0	0	0	0	0	0
PLAN	HI	0	0	1,499	0	0	0	0	0	0	0	0
DGN	HI	0	0	1,500	0	0	0	0	0	0	0	0
	Total	0	0	3,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2016	12/31/2018
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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WAIKIKI IMPROVEMENTS

Project:	1995515	Function:	Highways and Streets	Council:	04
Priority No.:	4	Program:	Highways, Streets And Roadways	Nbrd Board:	09
TMK:		Department:	Design and Construction	Senate:	12
				House:	22
				Other:	

Description: Reconstruction of sidewalks, driveways and landscaping along Kalakaua Avenue.

Justification: Sidewalk improvements are required due to trip and fall claims and ADA slope issues.

Use of Funds: Design, construct and inspect sidewalks and driveways along Kalakaua Avenue.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	FG	394	0	0	0	0	0	0	0	0	0	0
PLAN	GI	10	0	0	0	0	0	0	0	0	0	0
PLAN	HI	144	0	0	0	0	0	0	0	0	0	0
PLAN	ST	38	0	0	0	0	0	0	0	0	0	0
DGN	GI	819	0	0	200	0	0	0	0	0	200	0
DGN	HI	2,592	0	1,000	0	0	0	0	0	0	0	0
CONST	GI	6,149	0	0	3,700	3,000	0	0	0	0	6,700	0
CONST	HI	10,702	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	100	0	0	0	0	0	100	0
INSP	HI	1,000	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	37	0	0	0	0	0	0	0	0	0	0
	Total	21,886	0	1,000	4,000	3,000	0	0	0	0	7,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2014	12/31/2019
CONST	5/31/2018	12/31/2022
INSP	5/31/2018	12/31/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CD	0	0	0	0	0	0	0	0	0	0	0
DV	167	0	0	0	0	0	0	0	0	0	0
FG	30,472	0	0	0	0	8,000	16,000	8,000	8,000	40,000	0
GI	42,261	0	4,700	4,000	3,000	0	0	0	0	7,000	420
HI	1,002,715	126,510	144,805	35,055	42,590	57,510	74,510	52,510	52,510	314,685	213,120
ST	38	0	0	0	0	0	0	0	0	0	0
UT	1,145	100	100	100	100	100	100	100	100	600	0
Total	1,076,798	126,610	149,605	39,155	45,690	65,610	90,610	60,610	60,610	362,285	213,540

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	65	11	69	910	10	10	10	10	10	960	70
PLAN	6,023	1	1,875	625	50	0	0	0	0	675	400
DGN	83,629	3,058	7,561	3,430	11,000	5,050	2,050	2,050	2,050	25,630	12,310
CONST	947,149	121,470	137,718	32,906	33,500	59,520	87,520	57,520	57,520	328,486	194,340
INSP	39,206	2,060	2,370	1,265	1,120	1,030	1,030	1,030	1,030	6,505	6,420
EQUIP	37	0	0	9	0	0	0	0	0	9	0
OTHER	690	10	11	10	10	0	0	0	0	20	0
RELOC	0	0	1	0	0	0	0	0	0	0	0
Total	1,076,798	126,610	149,605	39,155	45,690	65,610	90,610	60,610	60,610	362,285	213,540

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RECONSTRUCTION OF SIDEWALKS

Project:	2018087	Function:	Highways and Streets	Council:	99
Priority No.:	1	Program:	Highways, Streets And Roadways	Nbrd Board:	99
TMK:		Department:	Facilities Maintenance	Senate:	99
				House:	99
				Other:	

Description: Reconstruct/replacement of existing sidewalks at various locations.

Justification: Sidewalk improvements to facilitate pedestrian safety.

Use of Funds: Construct and inspect sidewalks improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CONST	HI	0	0	0	3,500	0	0	0	0	0	3,500	0
INSP	HI	0	0	0	150	0	0	0	0	0	150	0
	Total	0	0	0	3,650	0	0	0	0	0	3,650	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2017	12/31/2019
INSP	7/1/2017	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

Six-Year CIP and Budget FY 2018-2023

TANTALUS AND ROUND TOP MASTER PLAN

Project:	2017112	Function:	Highways and Streets	Council:	06
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	10
TMK:		Department:	Facilities Maintenance	Senate:	
				House:	
				Other:	

Description: Provision of funds for the City's share of the Tantalus and Road Top Master Plan to address a variety of recreational, residential, commercial use, environmental, and road maintenance issues that require coordination across jurisdictional lines, and develop opportunities for public-private community partnerships in the area. The State's portion of funding was appropriated in Act 119, Session Laws of Hawaii 2015, page 375, Part IV, Section 47, Item D.10.

Justification: Provision of funds for the City's share of the Tantalus and Road Top Master Plan to address a variety of recreational, residential, commercial use, environmental, and road maintenance issues that require coordination across jurisdictional lines, and develop opportunities for public-private community partnerships in the area. The State's portion of funding was appropriated in Act 119, Session Laws of Hawaii 2015, page 375, Part IV, Section 47, Item D.10.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	149	0	0	0	0	0	0	0	0
DGN	GI	0	0	149	0	0	0	0	0	0	0	0
CONST	GI	0	0	1	0	0	0	0	0	0	0	0
INSP	GI	0	0	1	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	1	0	0	0	0	0	0	0	0
	Total	0	0	300	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018
INSP	7/1/2016	12/31/2018
EQUIP	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

Department Summary: Facilities Maintenance

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
GI	0	0	300	0	0	0	0	0	0	0	0
HI	0	0	0	3,650	0	0	0	0	0	3,650	0
Total	0	0	300	3,650	0	0	0	0	0	3,650	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	0	0	149	0	0	0	0	0	0	0	0
DGN	0	0	149	0	0	0	0	0	0	0	0
CONST	0	0	1	3,500	0	0	0	0	0	3,500	0
INSP	0	0	1	150	0	0	0	0	0	150	0
EQUIP	0	0	1	0	0	0	0	0	0	0	0
Total	0	0	300	3,650	0	0	0	0	0	3,650	0

Six-Year CIP and Budget FY 2018-2023

HANAKAHI STREET IMPROVEMENTS

Project:	2017032	Function:	Highways and Streets	Council:	09
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	23
TMK:		Department:	Transportation Services	Senate:	
				House:	
				Other:	

Description: Design and construct traffic calming devices along Hanakahi Street.

Justification: Design and construct traffic calming devices along Hanakahi Street.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	HI	0	0	200	0	0	0	0	0	0	0	0
CONST	HI	0	0	200	0	0	0	0	0	0	0	0
	Total	0	0	400	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

KALAELOA BOULEVARD RESTORATION

Project:	2013026	Function:	Highways and Streets	Council:	01
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	34
TMK:		Department:	Transportation Services	Senate:	21
				House:	43
				Other:	

Description: To design, construct and inspect improvements on Kalaeloa Boulevard between OR&L Railroad to Lauwiliwili Street (Mauka).

Justification: This is to relieve traffic congestion in the ewa region where it is projected the majority of residential and job growth will occur.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	HI	0	0	0	0	0	0	0	0	0	0	0
CONST	FG	329	0	0	0	0	0	0	0	0	0	0
CONST	HI	495	0	0	0	0	0	0	0	0	0	0
INSP	FG	10	0	0	0	0	0	0	0	0	0	0
INSP	HI	458	0	0	0	0	0	0	0	0	0	0
	Total	1,292	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2013	6/30/2012
CONST	7/1/2013	7/31/2014
INSP	7/1/2013	9/30/2014

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

KAPALAMA MULTI-MODAL STUDY - TRANSIT ORIENTED DEVELOPMENT

Project:	2015034	Function:	Highways and Streets	Council:	07
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	15
TMK:		Department:	Transportation Services	Senate:	15
				House:	29
				Other:	

Description: Prepare a multi-modal plan for improvements to following streets: King, Kohou, Kokea Streets and Dillingham Boulevard, promoting improved traffic circulation and transit access, pedestrian and bicycle safety and access, and parking management.

Justification: Provide multi-modal access in the Kapalama Transit Oriented Development area.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	FG	400	0	0	0	0	0	0	0	0	0	0
PLAN	HI	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	0	0	400	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	400	0	400	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/30/2015	12/31/2016
DGN	7/31/2017	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	120
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

KAPOLEI PARKWAY CONSTRUCTION

Project:	2011028	Function:	Highways and Streets	Council:	01
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	34
TMK:		Department:	Transportation Services	Senate:	20
				House:	42
				Other:	

Description: Provide an extension of the existing Kapolei Parkway from Kamokila Blvd. to Kamaaha Ave. and adjoining roadways.

Justification: Provide congestion relief to the ewa region where expanded roadway improvements are needed and where the majority of the residential and employment growth are projected. This project is also identified in the Oahu Regional Transportation Plan 2030.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	EW	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	661	0	0	0	0	0	0	0	0	0	0
CONST	EW	799	0	0	0	0	0	0	0	0	0	0
CONST	FG	11,393	0	0	0	0	0	0	0	0	0	0
CONST	HI	8,353	0	0	0	0	0	0	0	0	0	0
INSP	EW	103	0	0	0	0	0	0	0	0	0	0
INSP	FG	1,112	0	0	0	0	0	0	0	0	0	0
INSP	HI	497	0	0	0	0	0	0	0	0	0	0
	Total	22,919	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2014	6/30/2015
CONST	7/1/2014	12/1/2015
INSP	7/1/2014	12/1/2015

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

KUAHELANI AVENUE AND MEHEULA PARKWAY IMRPOVEMENTS

Project:	2017033	Function:	Highways and Streets	Council:	09
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	25
TMK:		Department:	Transportation Services	Senate:	
				House:	
				Other:	

Description: Design protected left turn at the intersection of Kuahelani and Meheula Parkway.

Justification: Design protected left turn at the intersection of Kuahelani and Meheula Parkway.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	HI	0	0	100	0	0	0	0	0	0	0	0
	Total	0	0	100	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

Kuakini Street Extension

Project:	2015040	Function:	Highways and Streets	Council:	06
Priority No.:	1	Program:	Highways, Streets And Roadways	Nbrd Board:	15
TMK:		Department:	Transportation Services	Senate:	13
				House:	27
				Other:	

Description: To plan, design, construct and inspect traffic improvements to connect Kuakini Street to Hala Drive to alleviate daily traffic congestion at the intersection of Kuakini Street and Lanakila Avenue.

Justification: Alleviate traffic congestion.

Use of Funds: Design traffic improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	HI	0	0	0	100	0	0	0	0	0	100	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	100	0	0	0	0	0	0	0	0	0	0
	Total	100	0	0	100	0	0	0	0	0	100	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2014	6/30/2018
CONST	7/1/2015	6/30/2016
INSP	7/1/2015	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

KUAKINI STREET EXTENSION

Project:	1995525	Function:	Highways and Streets	Council:	07
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	14
TMK:		Department:	Transportation Services	Senate:	13
				House:	27
				Other:	

Description: To plan, design, construct and inspect traffic improvements to connect Kuakini Street to Hala Drive to alleviate the daily traffic congestion at the intersection of Kuakini Street and Lanakila Avenue. No monies shall be expended or encumbered for the Kuakini Street Extension unless Federal matching funds are allotted and released to the City.

Justification: To alleviate the daily traffic congestion.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	51	0	10	0	0	0	0	0	0	0	0
CONST	FG	1,285	0	0	0	0	0	0	0	0	0	0
CONST	HI	321	0	125	0	0	0	0	0	0	0	0
INSP	FG	528	0	0	0	0	0	0	0	0	0	0
INSP	HI	62	0	50	0	0	0	0	0	0	0	0
	Total	2,247	0	185	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2013	6/30/2015
CONST	7/1/2013	6/30/2017
INSP	7/1/2013	6/30/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

KUPUNA LOOP AND KUPUOHI STREET IMPROVEMENTS

Project:	2017034	Function:	Highways and Streets	Council:	09
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	22
TMK:		Department:	Transportation Services	Senate:	
				House:	
				Other:	

Description: Design, construct and inspect traffic improvements at the intersection of upper Kupuna Loop and Kupuohi Street.

Justification: Design, construct and inspect traffic improvements at the intersection of upper Kupuna Loop and Kupuohi Street.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	HI	0	0	100	0	0	0	0	0	0	0	0
CONST	HI	0	0	130	0	0	0	0	0	0	0	0
INSP	HI	0	0	30	0	0	0	0	0	0	0	0
	Total	0	0	260	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018
INSP	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

MAKAKILO DRIVE EXTENSION.

Project:	2005025	Function:	Highways and Streets	Council:	01
Priority No.:	3	Program:	Highways, Streets And Roadways	Nbrd Board:	34
TMK:		Department:	Transportation Services	Senate:	20
				House:	39
				Other:	

Description: To provide a second access roadway from Makakilo Drive to the H-1 freeway.

Justification: The second access roadway project is included in the OMPO's Oahu Regional Transportation Plan 2030 which provides an additional access to H-1 and helps to relieve congestion.

Use of Funds: Design a second access roadway from Makakilo Drive to the H-1 Freeway.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	FG	0	0	0	0	0	0	0	0	0	0	0
LAND	HI	0	0	0	0	0	0	0	0	0	0	10,000
PLAN	FG	400	0	0	0	0	0	0	0	0	0	0
PLAN	HI	314	0	0	0	0	0	0	0	0	0	0
DGN	FG	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	3,000	0	0	1,500	0	0	0	0	0	1,500	0
CONST	FG	0	0	0	0	0	0	0	0	30,000	30,000	0
CONST	HI	0	0	0	0	0	0	0	0	49,000	49,000	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	3,714	0	0	1,500	0	0	0	0	79,000	80,500	10,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	10/1/2013	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

RAIL STATION CONNECTIVITY - TRANSIT ORIENTED DEVELOPMENT

Project:	2018026	Function:	Highways and Streets	Council:	99
Priority No.:	2	Program:	Highways, Streets And Roadways	Nbrd Board:	99
TMK:		Department:	Transportation Services	Senate:	99
				House:	99
				Other:	

Description: Acquire land, plan, design, construct and inspect transit connections in the areas surrounding the rail intermodal centers.

Justification: Develop transit connections in the areas surrounding the rail intermodal centers.

Use of Funds: Acquire land, plan, design, construct and inspect transit connections in the areas surrounding rail intermodal centers.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	10	10	10	10	10	10	60	0
PLAN	GI	0	0	0	100	100	100	100	50	10	460	0
DGN	GI	0	0	0	100	100	100	100	50	10	460	0
CONST	GI	0	0	0	3,740	3,740	3,740	3,740	3,840	3,920	22,720	0
INSP	GI	0	0	0	50	50	50	50	50	50	300	0
	Total	0	0	0	4,000	4,000	4,000	4,000	4,000	4,000	24,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2017	12/31/2024
PLAN	7/1/2017	12/31/2024
DGN	7/1/2017	12/31/2024
CONST	7/1/2017	12/31/2024
INSP	7/1/2017	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

TRAFFIC STUDY OF UNIVERSITY AVENUE IMPROVEMENTS

Project:	2012029	Function:	Highways and Streets	Council:	05
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	07
TMK:		Department:	Transportation Services	Senate:	11
				House:	23
				Other:	

Description: Plan to compile a traffic study of various traffic improvements on University Avenue between Maile Way and Oahu Avenue.

Justification: To study traffic improvements to promote the safety of pedestrian and vehicular traffic along the University Avenue and Maile Way intersection.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	60	0	0	0	0	0	0	0	0	0	0
DGN	HI	0	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	60	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

Department Summary: Transportation Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
EW	902	0	0	0	0	0	0	0	0	0	0
FG	15,457	0	0	0	0	0	0	0	30,000	30,000	0
GI	0	0	0	4,000	4,000	4,000	4,000	4,000	4,000	24,000	0
HI	14,373	0	1,345	1,600	0	0	0	0	49,000	50,600	10,000
Total	30,733	0	1,345	5,600	4,000	4,000	4,000	4,000	83,000	104,600	10,000

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	0	0	0	10	10	10	10	10	10	60	10,000
PLAN	1,174	0	0	100	100	100	100	50	10	460	0
DGN	3,712	0	810	1,700	100	100	100	50	10	2,060	0
CONST	22,976	0	455	3,740	3,740	3,740	3,740	3,840	82,920	101,720	0
INSP	2,870	0	80	50	50	50	50	50	50	300	0
Total	30,733	0	1,345	5,600	4,000	4,000	4,000	4,000	83,000	104,600	10,000

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Program Summary: Highways, Streets And Roadways

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CD	0	0	0	0	0	0	0	0	0	0	0
DV	167	0	0	0	0	0	0	0	0	0	0
EW	902	0	0	0	0	0	0	0	0	0	0
FG	45,929	0	0	0	0	8,000	16,000	8,000	38,000	70,000	0
GI	42,261	0	5,000	8,000	7,000	4,000	4,000	4,000	4,000	31,000	420
HI	1,017,088	126,510	146,150	40,305	42,590	57,510	74,510	52,510	101,510	368,935	223,120
ST	38	0	0	0	0	0	0	0	0	0	0
UT	1,145	100	100	100	100	100	100	100	100	600	0
Total	1,107,531	126,610	151,250	48,405	49,690	69,610	94,610	64,610	143,610	470,535	223,540

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	65	11	69	920	20	20	20	20	20	1,020	10,070
PLAN	7,197	1	2,024	725	150	100	100	50	10	1,135	400
DGN	87,341	3,058	8,520	5,130	11,100	5,150	2,150	2,100	2,060	27,690	12,310
CONST	970,125	121,470	138,174	40,146	37,240	63,260	91,260	61,360	140,440	433,706	194,340
INSP	42,076	2,060	2,451	1,465	1,170	1,080	1,080	1,080	1,080	6,955	6,420
EQUIP	37	0	1	9	0	0	0	0	0	9	0
OTHER	690	10	11	10	10	0	0	0	0	20	0
RELOC	0	0	1	0	0	0	0	0	0	0	0
Total	1,107,531	126,610	151,250	48,405	49,690	69,610	94,610	64,610	143,610	470,535	223,540

Six-Year CIP and Budget FY 2018-2023

AHILAMA BRIDGE REPLACEMENT

Project:	2014084	Function:	Highways and Streets	Council:	02
Priority No.:		Program:	Bridges, Viaducts And Grade Separation	Nbrd Board:	29
TMK:		Department:	Design and Construction	Senate:	23
				House:	48
				Other:	

Description: Plan, design and construct a replacement bridge for the one-lane Ahilama Bridge with a two-lane box culvert.

Justification: Improve bridge.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	25	0	0	0	0	0	0	0	0	0
DGN	HI	0	25	0	0	0	0	0	0	0	0	0
CONST	HI	0	400	0	0	0	0	0	0	0	0	0
INSP	HI	0	25	0	0	0	0	0	0	0	0	0
EQUIP	HI	0	25	0	0	0	0	0	0	0	0	0
	Total	0	500	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	3/1/2014	6/30/2015
DGN	3/1/2014	6/30/2015
CONST	6/30/2015	12/31/2017
INSP	7/1/2015	12/31/2017
EQUIP	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

BRIDGE INSPECTION, INVENTORY AND APPRAISAL

Project:	2000060	Function:	Highways and Streets	Council:	99
Priority No.:		Program:	Bridges, Viaducts And Grade Separation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Conduct bridge inspection and appraisal at various locations. Federal funds will be matched for all bridges over 20 feet span.

Justification: Bridge inspection and appraisal required pursuant to CFR, Ch. 23, Part 650, Subpart C, Section 650.305.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
INSP	FG	3,093	0	0	0	0	0	0	0	0	0	0
INSP	HI	925	0	0	0	0	0	0	0	0	0	0
INSP	HW	1,530	0	0	0	0	0	0	0	0	0	0
	Total	5,547	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2008	12/31/2016
DGN	1/1/2010	12/31/2016
INSP	1/1/2010	12/31/2016

Annual Effect on Operating Budget	
No of Positions	2
Salary Cost	120
Cur Exp & Equip	30
Maint Cost	0
Useful Life	75

Six-Year CIP and Budget FY 2018-2023

BRIDGE REHABILITATION AT VARIOUS LOCATIONS

Project:	1998520	Function:	Highways and Streets	Council:	99
Priority No.:	1	Program:	Bridges, Viaducts And Grade Separation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Rehabilitate bridges/culverts that are severely damaged or too large in scope or in locations that the Department of Facility Maintenance is unable to rehabilitate with its in-house crews.

Operating Impact: The capital improvements planned will not have impact on the operating budget until construction of the proposed rehabilitation. Additional personnel and current expense would then have operating impact on the City's budget.

Justification: To ensure public safety bridge damages are identified through annual inspections by the Department of Design and Construction in conjunction with the Department of Facility Maintenance. Structures are in need of structural rehabilitation.

Use of Funds: Acquire land, plan, design, construct, inspect and provide related equipment for bridge improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	1	5	5	10	10	10	10	10	10	60	60
PLAN	HI	0	6	5	10	10	10	10	10	10	60	60
DGN	HI	6,485	6	600	10	80	80	80	80	80	410	1,500
CONST	FG	1,138	0	0	0	0	0	0	0	0	0	0
CONST	HI	15,594	2,535	1,980	2,450	2,400	2,400	2,400	2,400	2,400	14,450	9,600
INSP	HI	205	0	10	10	0	0	0	0	0	10	600
EQUIP	HI	0	0	0	10	0	0	0	0	0	10	0
	Total	23,423	2,552	2,600	2,500	2,500	2,500	2,500	2,500	2,500	15,000	11,820

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	11/1/2011	12/31/2024
PLAN	10/1/2011	12/31/2024
DGN	10/1/2011	12/31/2024
CONST	11/1/2011	12/31/2024
INSP	11/1/2011	12/31/2024

Annual Effect on Operating Budget	
No of Positions	5
Salary Cost	200
Cur Exp & Equip	50
Maint Cost	0
Useful Life	75

Six-Year CIP and Budget FY 2018-2023

FARRINGTON HWY BRIDGES (#923, #924, #902)

Project:	2016079	Function:	Highways and Streets	Council:	01
Priority No.:		Program:	Bridges, Viaducts And Grade Separation	Nbrd Board:	34
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Rehabilitation and load upgrade of three (3) single span concrete slab bridges (circa 1940) crossing Kaloi Gulch, Hunehune Stream, and Palehua Stream, respectively; on concrete abutments supported on spread footings.

Justification: The bridges are located on a moderately busy thoroughfare; however, increased useage is anticipated with the widening of Farrington Highway included in the Ewa Highway Master Plan, with anticipated upgrades to nearby streets and the H-1 Freeway. The bridges are overstressed for AASHTO traffic loads.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CONST	HI	0	1,000	0	0	0	0	0	0	0	0	0
	Total	0	1,000	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2015	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	40

Six-Year CIP and Budget FY 2018-2023

KALIHI STREET NO. 3 BRIDGE (#148) REPLACEMENT

Project:	1971138	Function:	Highways and Streets	Council:	06
Priority No.:		Program:	Bridges, Viaducts And Grade Separation	Nbrd Board:	16
TMK:		Department:	Design and Construction	Senate:	14
				House:	30
				Other:	

Description: Replace existing structural steel bridge with new reinforced concrete bridge.

Justification: Existing structural steel bridge is badly corroded, load limited, foundation is scoured (undermined) and requires frequent extensive maintenance and repair.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	2,000	0	0	0	0	2,000	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	2,000	0	0	0	0	2,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	3/31/2018	3/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	75

Six-Year CIP and Budget FY 2018-2023

KAPIOLANI BLVD DOUBLE BOX CULVERT (#273)

Project:	2016077	Function:	Highways and Streets	Council:	05
Priority No.:		Program:	Bridges, Viaducts And Grade Separation	Nbrd Board:	08
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Rehabilitation of a two-cell concrete culvert (circa 1930s) crossing Hausten Ditch, with top slab and walls supported on wood piles; includes the repair of spalls and cracks, and load upgrade with the addition of precast planks within the road subgrade; also, the temporary relocation of utilities during construction.

Justification: The culvert is located on a major City thoroughfare and is severely overstressed for AASHTO traffic loads. Bottom mat reinforcing for the top slab is visible at numerous locations, further reducing load capacity.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CONST	HI	0	1,500	0	0	0	0	0	0	0	0	0
	Total	0	1,500	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2015	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	40

Six-Year CIP and Budget FY 2018-2023

NORTH KING ST BRIDGE (#150)

Project:	2016083	Function:	Highways and Streets	Council:	06
Priority No.:		Program:	Bridges, Viaducts And Grade Separation	Nbrd Board:	13
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Load upgrade of a four (4) span concrete slab and girder bridge (circa 1923) crossing Nuuanu Stream, supported on concrete piers on concrete piles. Work is anticipated to include the replacement of the existing AC overlay and fill with reinforced concrete topping to increase load capacity.

Justification: The bridge is located on a major City thoroughfare through the heart of downtown Honolulu and is severely overstressed for AASHTO traffic loads.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CONST	HI	0	500	0	0	0	0	0	0	0	0	0
	Total	0	500	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2015	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	40

Six-Year CIP and Budget FY 2018-2023

NUMANA ROAD BRIDGE (#129) REPLACEMENT

Project:	2014077	Function:	Highways and Streets	Council:	06
Priority No.:		Program:	Bridges, Viaducts And Grade Separation	Nbrd Board:	16
TMK:		Department:	Design and Construction	Senate:	14
				House:	30
				Other:	

Description: Replace existing structural steel bridge with new reinforced concrete bridge.

Justification: Existing structural steel bridge is badly corroded, load limited, foundation is scoured (undermined) and requires frequent extensive maintenance and repair.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	2,000	2,000	0	0	0	4,000	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	2,000	2,000	0	0	0	4,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2016	12/31/2017
CONST	7/1/2019	12/31/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	75

Six-Year CIP and Budget FY 2018-2023

REHABILITATION OF HAUULA HOMESTEAD ROAD BRIDGE NO. 514

Project:	2009017	Function:	Highways and Streets	Council:	02
Priority No.:		Program:	Bridges, Viaducts And Grade Separation	Nbrd Board:	28
TMK:		Department:	Design and Construction	Senate:	23
				House:	47
				Other:	

Description: Repair erosion damage of the upstream wingwall and at the ends of the concrete lining at the Hauula Homestead Road Bridge over Maakua Stream.

Justification: Rehabilitate the wingwall and concrete lining to prevent water intrusion behind wingwall and under lining.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	HI	0	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	400	0	0	0	0	400	0
INSP	HI	0	0	0	0	40	0	0	0	0	40	0
	Total	0	0	0	0	440	0	0	0	0	440	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2019	12/31/2021
INSP	7/1/2018	12/31/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	75

Six-Year CIP and Budget FY 2018-2023

REHABILITATION OF NORTH SCHOOL STREET BRIDGE OVER KALIHI STREAM

Project:	2005008	Function:	Highways and Streets	Council:	06
Priority No.:		Program:	Bridges, Viaducts And Grade Separation	Nbrd Board:	14
TMK:		Department:	Design and Construction	Senate:	14
				House:	99
				Other:	

Description: Rehabilitation of North School Street Bridge over Kalihi Stream by repairing scour holes at the abutment and other structural bridge elements.

Justification: Public safety improvements to extend the useful life of bridges.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	208	0	0	0	0	0	0	0	0	0	0
CONST	HI	218	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	427	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	12/1/2013	6/1/2016
DGN	12/1/2011	12/1/2013
CONST	7/1/2013	9/1/2016
INSP	7/1/2013	9/1/2016

Annual Effect on Operating Budget	
No of Positions	3
Salary Cost	90
Cur Exp & Equip	30
Maint Cost	0
Useful Life	75

Six-Year CIP and Budget FY 2018-2023

SEISMIC RETROFIT AT BRIDGES

Project:	1998517	Function:	Highways and Streets	Council:	99
Priority No.:		Program:	Bridges, Viaducts And Grade Separation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Retrofit existing bridges for seismic loads. Project proposed to analyze, evaluate, prioritize and construct seismic retrofit measures for City bridges.

Justification: Public safety. Enhance safety of existing bridges.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	0	0	0	0	0	0	0	0	0	0	0
PLAN	HI	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	3,409	0	0	0	0	0	0	0	0	0	0
CONST	HI	3,433	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	6,842	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	10/1/2007	6/30/2016
PLAN	10/1/2007	6/30/2016
DGN	8/1/2007	6/30/2016
CONST	10/1/2007	6/30/2016
INSP	10/1/2007	6/30/2016

Annual Effect on Operating Budget	
No of Positions	3
Salary Cost	90
Cur Exp & Equip	20
Maint Cost	0
Useful Life	75

Six-Year CIP and Budget FY 2018-2023

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
FG	4,232	0	0	0	0	0	0	0	0	0	0
GI	0	0	0	0	4,000	2,000	0	0	0	6,000	0
HI	30,477	6,052	2,600	2,500	2,940	2,500	2,500	2,500	2,500	15,440	11,820
HW	1,530	0	0	0	0	0	0	0	0	0	0
Total	36,238	6,052	2,600	2,500	6,940	4,500	2,500	2,500	2,500	21,440	11,820

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	1	5	5	10	10	10	10	10	10	60	60
PLAN	0	31	5	10	10	10	10	10	10	60	60
DGN	10,102	31	600	10	80	80	80	80	80	410	1,500
CONST	20,383	5,935	1,980	2,450	6,800	4,400	2,400	2,400	2,400	20,850	9,600
INSP	5,752	25	10	10	40	0	0	0	0	50	600
EQUIP	0	25	0	10	0	0	0	0	0	10	0
Total	36,238	6,052	2,600	2,500	6,940	4,500	2,500	2,500	2,500	21,440	11,820

Six-Year CIP and Budget FY 2018-2023

Program Summary: Bridges, Viaducts And Grade Separation

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
FG	4,232	0	0	0	0	0	0	0	0	0	0
GI	0	0	0	0	4,000	2,000	0	0	0	6,000	0
HI	30,477	6,052	2,600	2,500	2,940	2,500	2,500	2,500	2,500	15,440	11,820
HW	1,530	0	0	0	0	0	0	0	0	0	0
Total	36,238	6,052	2,600	2,500	6,940	4,500	2,500	2,500	2,500	21,440	11,820

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	1	5	5	10	10	10	10	10	10	60	60
PLAN	0	31	5	10	10	10	10	10	10	60	60
DGN	10,102	31	600	10	80	80	80	80	80	410	1,500
CONST	20,383	5,935	1,980	2,450	6,800	4,400	2,400	2,400	2,400	20,850	9,600
INSP	5,752	25	10	10	40	0	0	0	0	50	600
EQUIP	0	25	0	10	0	0	0	0	0	10	0
Total	36,238	6,052	2,600	2,500	6,940	4,500	2,500	2,500	2,500	21,440	11,820

Six-Year CIP and Budget FY 2018-2023

CARLOS LONG STREET DRAINAGE IMPROVEMENTS, PALOLO (TMK: 3-4-12: 24 & 25)

Project:	2001039	Function:	Highways and Streets	Council:	05
Priority No.:		Program:	Storm Drainage	Nbrd Board:	06
TMK:	34012024	Department:	Design and Construction	Senate:	10
				House:	20
				Other:	

Description: Replace present substandard drainage system on Carlos Long Street.

Justification: During heavy storms Carlos Long Street drainage system overflows onto the roadway creating a traffic safety issue.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	HI	84	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	0	1,000	3,000	1,000	0	5,000	0
	Total	84	0	0	0	0	1,000	3,000	1,000	0	5,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	8/1/2019	9/1/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	40

Six-Year CIP and Budget FY 2018-2023

DRAINAGE IMPROVEMENTS AT NAKULA AND EAMES STREET

Project:	2007099	Function:	Highways and Streets	Council:	02
Priority No.:		Program:	Storm Drainage	Nbrd Board:	26
TMK:		Department:	Design and Construction	Senate:	22
				House:	46
				Other:	

Description: Design and construct a drainage system in the vicinity of 1707, 1695, 1687 Eames Street and backside of 1684 & 1688 Nakula Street.

Justification: Drainage improvements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	56	0	0	0	0	0	0	0	0	0	0
DGN	HI	0	0	200	0	0	10	0	0	0	10	0
CONST	HI	0	0	0	0	0	1,490	1,000	0	0	2,490	0
	Total	56	0	200	0	0	1,500	1,000	0	0	2,500	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	11/1/2007	3/1/2009
DGN	7/1/2017	9/30/2018
CONST	10/1/2019	10/31/2022

Annual Effect on Operating Budget	
No of Positions	2
Salary Cost	60
Cur Exp & Equip	20
Maint Cost	0
Useful Life	40

Six-Year CIP and Budget FY 2018-2023

DRAINAGE IMPROVEMENTS AT VARIOUS LOCATIONS

Project:	2000052	Function:	Highways and Streets	Council:	99
Priority No.:	1	Program:	Storm Drainage	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Miscellaneous drainage improvements at various locations, to include drain manholes, box culverts and drain extensions.

Operating Impact: The capital improvements planned will not have an impact on the operating budget until construction of the proposed improvements. Additional personnel and current expense would then have an impact on the City's budget.

Justification: Drainage improvement needed at various locations to alleviate ponding and other drainage concerns.

Use of Funds: Acquire land, plan, design, construct and inspect drainage improvements at various locations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	2	5	10	10	20	20	20	20	20	110	120
PLAN	HI	449	5	990	110	180	180	180	180	180	1,010	1,140
DGN	HI	3,079	5	2,450	95	200	200	200	200	200	1,095	1,500
CONST	FG	162	0	0	0	0	0	0	0	0	0	0
CONST	HI	10,032	1,485	1,500	2,075	2,100	2,100	2,100	2,100	2,100	12,575	12,000
INSP	HI	0	0	0	210	0	0	0	0	0	210	0
	Total	13,723	1,500	4,950	2,500	2,500	2,500	2,500	2,500	2,500	15,000	14,760

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	9/1/2005	12/1/2030
PLAN	9/1/2005	12/1/2030
DGN	9/1/2005	12/1/2030
CONST	9/1/2006	12/1/2030

Annual Effect on Operating Budget	
No of Positions	5
Salary Cost	150
Cur Exp & Equip	30
Maint Cost	0
Useful Life	40

Six-Year CIP and Budget FY 2018-2023

EROSION CONTROL IMPROVEMENTS

Project:	2017074	Function:	Highways and Streets	Council:	99
Priority No.:	2	Program:	Storm Drainage	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design, construct and inspect erosion control improvements at various locations.

Justification:

Use of Funds: Plan, design, construct and inspect erosion control improvements at various locations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	HI	0	0	100	100	0	0	0	0	0	100	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	0	0	600	600	0	0	0	0	0	600	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	50	50	0	0	0	0	0	50	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	50	50	0	0	0	0	0	50	0
	Total	0	0	800	800	0	0	0	0	0	800	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2020
DGN	7/1/2016	12/31/2020
CONST	7/1/2017	12/31/2020
INSP	7/1/2017	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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PAPIPI ROAD DRAINAGE IMPROVEMENTS

Project:	2006015	Function:	Highways and Streets	Council:	01
Priority No.:		Program:	Storm Drainage	Nbrd Board:	23
TMK:		Department:	Design and Construction	Senate:	19
				House:	41
				Other:	

Description: Plan, design, and construct drainage improvements.

Justification: Drainage improvement needed to alleviate ponding and other drainage concerns.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	100	0	0	0	0	0	0	0	0	0	0
PLAN	HI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	100	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	40

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STORM DRAINAGE IMPROVEMENTS

Project:	2000117	Function:	Highways and Streets	Council:	99
Priority No.:		Program:	Storm Drainage	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Investigate and install drainage system improvements at various locations.

Justification: Drainage improvements needed to resolve storm drain system problems.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	112	0	0	0	0	0	0	0	0	0	0
PLAN	HI	558	0	0	0	0	0	0	0	0	0	0
DGN	HI	1,430	0	0	0	0	0	0	0	0	0	0
CONST	HI	4,288	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	6,388	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	9/1/2011	12/1/2019
PLAN	9/1/2011	12/1/2019
DGN	10/1/2011	12/1/2019
CONST	9/1/2012	12/1/2019

Annual Effect on Operating Budget	
No of Positions	3
Salary Cost	90
Cur Exp & Equip	30
Maint Cost	0
Useful Life	40

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
FG	162	0	0	0	0	0	0	0	0	0	0
GI	100	0	0	0	0	0	0	0	0	0	0
HI	20,089	1,500	5,950	3,300	2,500	5,000	6,500	3,500	2,500	23,300	14,760
Total	20,350	1,500	5,950	3,300	2,500	5,000	6,500	3,500	2,500	23,300	14,760

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	114	5	10	10	20	20	20	20	20	110	120
PLAN	1,162	5	1,090	210	180	180	180	180	180	1,110	1,140
DGN	4,593	5	3,250	695	200	210	200	200	200	1,705	1,500
CONST	14,481	1,485	1,550	2,125	2,100	4,590	6,100	3,100	2,100	20,115	12,000
INSP	0	0	50	260	0	0	0	0	0	260	0
Total	20,350	1,500	5,950	3,300	2,500	5,000	6,500	3,500	2,500	23,300	14,760

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NPDES MS4 EROSION PRONE AREA IMPROVEMENTS

Project:	2010051	Function:	Highways and Streets	Council:	99
Priority No.:	11	Program:	Storm Drainage	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Long term planning, design and construction of erosion control measures within the City's municipal storm drainage system including streets, streams, storm drains, facilities, and other City owned properties, to mitigate the discharge of sediment from erosion prone areas. The project will develop an island-wide identification and prioritization plan that will be used towards implementing erosion mitigation measures, including within Total Maximum Daily Load (TMDL) approved areas such as the Ala Wai Canal, Kawa, Waimanalo, Kaneohe, Kapaa and Upper Kaukonahua Stream watersheds.

Justification: NPDES permit {Part D.1.f.(3)} requires improvements to erosion prone areas within the City's MS4 with the potential for significant water quality impact. Permit requires the City to continuously address priority watersheds while developing a long term plan for the entire island within 3 years (February 2018) of the effective date of the permit, and completion of erosion area improvements by June 30, 2024. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds: Plan, design, construct and inspect erosion control improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	1,220	150	250	0	0	0	0	0	0	0	0
DGN	HI	1,035	250	150	0	0	0	0	0	0	0	0
CONST	HI	1,452	750	1,125	0	0	0	0	0	0	0	0
INSP	HI	315	75	125	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	4,022	1,225	1,650	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2010	12/31/2021
DGN	7/30/2010	12/31/2021
CONST	12/31/2012	12/31/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	40

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NPDES MS4 RETROFIT STRUCTURAL BMP IMPROVEMENTS PROGRAM

Project:	2015048	Function:	Highways and Streets	Council:	99
Priority No.:		Program:	Storm Drainage	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Long term planning, design and construction of structural Best Management Practice (BMP) improvements to address the City's existing municipal storm drain system that may be contributing to water quality concerns and may be suitable for retrofit. The project will develop an island-wide identification and prioritization plan that will be used towards implementing structural BMP options throughout the permit term. Recommended improvements may include catch basin filters, hydrodynamic separators, booms, inlet screens, Low Impact Development (LID) designs and other measures to reduce pollutant discharge.

Justification: NPDES MS4 permit {Part D1.f.(1).(vi)} requires implementation of structural BMP measures to address retrofitting the existing MS4. Permit requires the City to continuously address retrofits to its existing system while developing a long term plan that targets at least 10% of the City's overall storm water assets for the entire island within 2 years (February 2017), and begin implementation within 3 years (February 2018), of the effective date of the permit. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	350	100	0	0	0	0	0	0	0	0	0
DGN	HI	0	250	0	0	0	0	0	0	0	0	0
CONST	HI	0	10	0	0	0	0	0	0	0	0	0
INSP	HI	0	10	0	0	0	0	0	0	0	0	0
	Total	350	370	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2020
DGN	7/1/2014	6/30/2020
CONST	12/1/2015	6/30/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	10

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NPDES MS4 STRUCTURAL BMPS FOR CITY INDUSTRIAL FACILITIES

Project:	2014095	Function:	Highways and Streets	Council:	99
Priority No.:	8	Program:	Storm Drainage	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Long term planning, design and construction of various structural Best Management Practice (BMP) improvements to reduce pollutant discharges from various City Industrial Facilities. The project will develop a City-wide identification and prioritization plan that will be used towards implementing various BMP measures, including treatment and source control technologies. Recommended structural BMPs shall include installing catch basin filters, hydrodynamic separators, booms and inlet screens, canopy structures, and Low Impact Development (LID) designs. Non-compliance is dependent on results from required annual storm water runoff samples taken from the facilities. Wastewater Treatment Plants, Landfills and Baseyards have strict pollutant concentration discharge levels. City's municipal storm water permit requires City industrial facilities to continuously meet the federal and state water quality based discharge limitations.

Justification: NPDES MS4 permit{Part B.4 and F.2} requires implementation of structural BMPs to the Best Available Technology (BAT)/Best Conventional Pollutant Control Technology (BCT), if exceedances of water quality standards are not met during annual first flush samples collected from various City industrial facilities such as Landfills, Wastewater Treatment Plants, Maintenance Baseyards, Fueling Stations, Refuse Transfer Stations, and Bus Facilities. Designs to focus on reducing targeted pollutants (i.e. copper, zinc, oil and grease, nutrients, etc.) that may exceed standards. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	50	10	50	0	0	0	0	0	0	0	0
DGN	HI	200	10	200	0	0	0	0	0	0	0	0
CONST	HI	0	500	10	0	0	0	0	0	0	0	0
INSP	HI	0	10	10	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	250	530	270	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2013	12/31/2020
DGN	10/1/2013	12/31/2020
CONST	7/1/2015	12/31/2020
INSP	7/1/0215	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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NPDES MS4 STRUCTURAL BMPS FOR TRASH REDUCTION

Project:	2014053	Function:	Highways and Streets	Council:	99
Priority No.:	9	Program:	Storm Drainage	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Long term planning, design and construction of various structural Best Management Practice (BMP) improvements to reduce debris discharges from the City's storm drainage system. The project will develop an island-wide identification and prioritization plan that will be used towards implementing various trash reduction measures, including areas prone to high trash accumulation rates such as Ulehawa Channel, Palolo Stream, Kapakahi Stream, Kalihi Stream and Ewa Beach Drainage Channel. Recommended structural BMPs may include installing catch basin filters, hydrodynamic separators, booms and inlet screens targeted at capturing trash.

Justification: NPDES MS4 permit {Part D.1.f.(1).(vii)} requires implementation of trash reduction measures for the short term to reduce the amount of trash discharged from the MS4 by 50% by June 30, 2023 while developing a long term plan to reduce the amount of trash by 100% by June 30, 2034. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds: Plan, design, construct and inspect improvements to reduce debris discharges from the City's storm drainage system.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	150	10	150	0	0	0	0	0	0	0	0
DGN	HI	250	10	250	0	0	0	0	0	0	0	0
CONST	HI	0	500	10	0	0	0	0	0	0	0	0
INSP	HI	0	50	10	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	400	570	420	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2013	12/31/2020
DGN	10/1/2013	12/31/2020
CONST	7/1/2015	12/31/2020
INSP	7/1/2015	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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STORM DRAINAGE BEST MANAGEMENT PRACTICES, DOWNTOWN-CHINATOWN

Project:	2010057	Function:	Highways and Streets	Council:	06
Priority No.:	7	Program:	Storm Drainage	Nbrd Board:	13
TMK:		Department:	Environmental Services	Senate:	13
				House:	99
				Other:	

Description: Long term planning, design and construction of structural Best Management Practice (BMP) improvements for storm drains in the Downtown and Chinatown areas. Storm water discharges from this area enter Nuuanu Stream, which has been identified by the State DOH and EPA as one of the top priority watersheds as defined by the State's 303(d) list. Downtown and Chinatown has also been identified as a critical location for water quality improvements based on the density of commercial businesses, visitors and residents, vehicular counts, number of complaints and greater probability for pollutant generation. Recommended structural BMPs may include installing catch basin filters, hydrodynamic separators, booms, inlet screens, Low Impact Development (LID) designs and other measures to reduce pollutant discharge.

Justification: NPDES MS4 permit {Part D1.f.(1).(vi)} requires implementation of structural BMP measures to address retrofitting the existing MS4 as outlined in the City's Action Plan. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds: Plan and design structural Best Management Practice (BMP) improvements for storm drains in the Downtown and Chinatown areas.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	120	50	150	0	0	0	0	0	0	0	0
DGN	HI	300	150	250	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	420	200	400	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2019
DGN	7/1/2015	12/31/2019
CONST	7/1/2016	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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STORM DRAINAGE BEST MANAGEMENT PRACTICES IN THE SALT LAKE DRAINAGE SYSTEM

Project:	2001020	Function:	Highways and Streets	Council:	07
Priority No.:		Program:	Storm Drainage	Nbrd Board:	18
TMK:		Department:	Environmental Services	Senate:	15
				House:	32
				Other:	

Description: Long term planning, design and construction of various structural Best Management Practice (BMP) improvements for City drain lines which discharge into Salt Lake, which is privately owned. Storm water runoff from this area discharges into Moanalua Stream, which has been identified by the State DOH and EPA as one of the top priority watersheds as defined by the State's Section 303(d) list. Structural BMPs would be installed to address pollutants of concern such as sediment, trash, nutrients and metals that are typically associated with urbanized areas. Recommended improvements may include catch basin filters, hydrodynamic separators, booms, inlet screens, Low Impact Development (LID) designs and other measures to reduce pollutant discharge.

Justification: NPDES MS4 permit {Part D1.f.(1).(vi)} requires implementation of structural BMP measures to address retrofitting the existing MS4 as outlined in the City's Action Plan. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	510	0	0	0	0	0	0	0	0	0	0
DGN	HI	550	150	0	0	0	0	0	0	0	0	0
CONST	HI	1,068	10	0	0	0	0	0	0	0	0	0
INSP	HI	140	10	0	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	2,268	170	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2009	12/1/2018
DGN	12/1/2015	12/1/2018
CONST	12/1/2009	12/1/2019
INSP	12/1/2009	12/1/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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STORM DRAINAGE BEST MANAGEMENT PRACTICES IN THE VICINITY OF KAELEPULU POND

Project:	2001021	Function:	Highways and Streets	Council:	03
Priority No.:	5	Program:	Storm Drainage	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	25
				House:	51
				Other:	

Description: Long term planning, design and construction of structural Best Management Practice (BMP) improvements for City drain lines which discharge into Kaelepulu Pond, which is privately owned. Kaelepulu Stream has been identified by the State DOH and EPA as one of the top priority watersheds as defined by the State's Section 303(d) list. Structural BMPs would be installed to address pollutants of concern such as sediment, trash, nutrients and metals that are typically associated with urbanized areas. Recommended improvements may include catch basin filters, hydrodynamic separators, booms, inlet screens, Low Impact Development (LID) designs and other measures to reduce pollutant discharge.

Justification: NPDES MS4 permit {Part D1.f.(1).(vi)} requires implementation of structural BMP measures to address retrofitting the existing MS4 as outlined in the City's Action Plan. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds: Plan, design, construct and inspect structural best management practices improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	1,090	10	10	0	0	0	0	0	0	0	0
DGN	HI	720	10	10	0	0	0	0	0	0	0	0
CONST	HI	598	1,000	1,000	0	0	0	0	0	0	0	0
INSP	HI	0	100	300	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	2,408	1,120	1,320	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2005	12/31/2019
DGN	1/1/2009	12/31/2019
CONST	7/1/2011	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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STORM DRAINAGE BEST MANAGEMENT PRACTICES IN THE VICINITY OF WAHIAWA RESERVOI

Project:	2005065	Function:	Highways and Streets	Council:	02
Priority No.:		Program:	Storm Drainage	Nbrd Board:	26
TMK:		Department:	Environmental Services	Senate:	22
				House:	46
				Other:	

Description: Implement structural best management practices (BMP's) for City drain lines which discharge into Wahiawa Reservoir.

Justification: Efforts to mitigate pollutant discharge have included source oriented solutions: street sweeping, storm drain cleaning, public education, and enforcement. This project would add structural BMPs to the effort, including catch basin in-line filters and other devices. Without this project, the storm drainage from the City's storm drain system into Wahiawa Reservoir may result in City non-compliance with NPDES MS4 permit requirements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	60	0	0	0	0	0	0	0	0	0	0
DGN	HI	70	0	0	0	0	0	0	0	0	0	0
CONST	HI	378	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	508	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	8/1/2009	12/31/2013
DGN	8/1/2009	12/31/2013
CONST	8/1/2010	12/31/2013

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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STORM DRAINAGE BMP'S IN THE VICINITY OF KUAPA POND

Project:	2001022	Function:	Highways and Streets	Council:	04
Priority No.:	6	Program:	Storm Drainage	Nbrd Board:	01
TMK:		Department:	Environmental Services	Senate:	25
				House:	17
				Other:	

Description: Long term planning, design, and construction of structural Best Management Practice (BMP) improvements for City drain lines which discharge into Kuapa Pond, which is privately owned. Kuapa Pond has been identified by the State DOH and EPA as one of the top priority watersheds as defined by the State's Section 303(d) list. Structural BMPs would be installed to address pollutants of concern such as sediment, trash, nutrients and metals that are typically associated with urbanized areas. Recommended improvements may include catch basin filters, hydrodynamic separators, booms, inlet screens, Low Impact Development (LID) designs and other measures to reduce pollutant discharge.

Justification: NPDES MS4 permit {Part D1.f.(1).(vi)} requires implementation of structural BMP measures to address retrofitting the existing MS4 as outlined in the City's Action Plan. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds: Plan, design, construct and inspect structural Best Management Practice (BMP) improvements for City drain lines which discharge into Kuapa Pond.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	80	10	10	0	0	0	0	0	0	0	0
DGN	HI	370	10	10	0	0	0	0	0	0	0	0
CONST	HI	0	1,000	250	0	0	0	0	0	0	0	0
INSP	HI	0	100	150	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	450	1,120	420	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2005	12/1/2018
DGN	12/1/2009	12/1/2018
CONST	7/1/2015	12/1/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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STORM DRAINAGE BMPS, WAILUPE-KULIOUOU-NIU STREAM

Project:	2014050	Function:	Highways and Streets	Council:	04
Priority No.:	4	Program:	Storm Drainage	Nbrd Board:	02
TMK:		Department:	Environmental Services	Senate:	09
				House:	18
				Other:	

Description: Long term planning, design and construction of structural Best Management Practice (BMP) improvements for City drain lines which discharge into the Wailupe, Kuliouou and Niu Streams. Each of these streams has been identified by the State DOH and EPA as one of the top priority watersheds as defined by the State's Section 303(d) list. Structural BMPs would be installed to address pollutants of concern such as sediment, trash, nutrients and metals that are typically associated with urbanized areas. Recommended improvements may include catch basin filters, hydrodynamic separators, booms, inlet screens, Low Impact Development (LID) designs and other measures to reduce pollutant discharge.

Justification: NPDES MS4 permit {Part D1.f.(1).(vi)} requires implementation of structural BMP measures to address retrofitting the existing MS4 as outlined in the City's Action Plan. Permit deadline to implement has been set for June 24, 2016. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds: Plan, design, construct and inspect structural best management practices improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	330	10	10	0	0	0	0	0	0	0	0
DGN	HI	190	10	10	0	0	0	0	0	0	0	0
CONST	HI	0	500	300	0	0	0	0	0	0	0	0
INSP	HI	0	50	100	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	520	570	420	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	8/1/2013	12/31/2017
DGN	8/1/2013	12/31/2017
CONST	4/1/2017	4/1/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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STORM DRAIN OUTLETS NEAR ALA WAI CANAL

Project:	2003135	Function:	Highways and Streets	Council:	04
Priority No.:	1	Program:	Storm Drainage	Nbrd Board:	09
TMK:		Department:	Environmental Services	Senate:	12
				House:	22
				Other:	

Description: Long term planning, design and construction of structural Best Management Practice (BMP) improvements for storm drains that outlet directly into the Ala Wai Canal. The Ala Wai Canal has been identified by the State DOH and EPA as one of the top priority watersheds as defined by the State's Section 303(d) list. Total Maximum Daily Load (TMDL) limits have been imposed on the City that requires additional measures to reduce pollutants to the Ala Wai Canal. Structural BMPs would be installed to address pollutants of concern such as sediment, trash, nutrients and metals that are typically associated with urbanized areas and as described in the City's permit.

Justification: NPDES MS4 permit {Part D1.f.(1).(vi)} requires implementation of structural BMP measures to address retrofitting the existing MS4 as outlined in the City's Action Plan. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds: Plan and design structural best management practices improvements for storm drains near Ala Wai Canal.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	150	0	50	0	10	0	10	10	0	30	0
DGN	HI	130	0	200	0	10	0	10	10	0	30	0
CONST	HI	494	0	0	0	1,000	0	1,500	1,500	0	4,000	0
INSP	HI	0	0	0	0	100	0	150	150	0	400	0
	Total	774	0	250	0	1,120	0	1,670	1,670	0	4,460	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2004	12/1/2018
DGN	1/1/2005	12/1/2018
CONST	12/1/2007	6/30/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

WAIKIKI DRAIN OUTFALL IMPROVEMENTS

Project:	2009106	Function:	Highways and Streets	Council:	04
Priority No.:	3	Program:	Storm Drainage	Nbrd Board:	09
TMK:		Department:	Environmental Services	Senate:	12
				House:	22
				Other:	

Description: Long term planning, design and construction of structural Best Management Practice (BMP) improvements to the storm drain outfalls that discharge directly to the ocean in Waikiki (Hilton Hawaiian Village to Colony Surf). Waikiki has been identified as a priority location for water quality improvements. Recommended improvements may include one-way bladder gate devices to prevent sand from entering the outfalls, and will address tidal surges that result in water quality concerns due to the clogging of pipes with rocks, sand and debris.

Justification: Project to be based on priority locations for retrofit, water quality improvements, and operational efficiencies. The project will improve the storm drain outfalls in Waikiki to prevent sand from clogging the outfalls, and help towards compliance with the City's NPDES MS4 permit.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	60	0	10	0	0	0	0	0	0	0	0
DGN	HI	350	0	10	0	0	0	0	0	0	0	0
CONST	HI	0	0	500	0	500	0	0	0	0	500	0
INSP	HI	0	0	150	0	50	0	0	0	0	50	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	410	0	670	0	550	0	0	0	0	550	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2011	12/31/2015
DGN	9/1/2013	12/31/2016
CONST	10/1/2016	12/31/2019
INSP	10/1/2016	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

Department Summary: Environmental Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
HI	12,781	5,875	5,820	0	1,670	0	1,670	1,670	0	5,010	0
Total	12,781	5,875	5,820	0	1,670	0	1,670	1,670	0	5,010	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	4,170	350	690	0	10	0	10	10	0	30	0
DGN	4,165	850	1,090	0	10	0	10	10	0	30	0
CONST	3,991	4,270	3,195	0	1,500	0	1,500	1,500	0	4,500	0
INSP	455	405	845	0	150	0	150	150	0	450	0
EQUIP	0	0	0	0	0	0	0	0	0	0	0
Total	12,781	5,875	5,820	0	1,670	0	1,670	1,670	0	5,010	0

Six-Year CIP and Budget FY 2018-2023

NPDES MS4 EROSION PRONE AREA IMPROVEMENTS

Project:	2018071	Function:	Highways and Streets	Council:	
Priority No.:	1	Program:	Storm Drainage	Nbrd Board:	
TMK:		Department:	Facilities Maintenance	Senate:	
				House:	
				Other:	

Description: Long term planning, design and construction of erosion control measures within the City's municipal storm drainage system including streets, streams, storm drains, facilities, and other City owned properties, to mitigate the discharge of sediment from erosion prone areas. The project will develop an island-wide identification and prioritization plan that will be used towards implementing erosion mitigation measures, including within Total Maximum Daily Load (TMDL) approved areas such as the Ala Wai Canal, Kawa, Waimanalo, Kaneohe, Kapaa and Upper Kaukonahua Stream watersheds. (Previously Project #2010051)

Justification: NPDES permit {Part D.1.f.(3)} requires improvements to erosion prone areas within the City's MS4 with the potential for significant water quality impact. Permit requires the City to continuously address priority watersheds while developing a long term plan for the entire island within 3 years (February 2018) of the effective date of the permit, and completion of erosion area improvements by June 30, 2024. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds: Plan, design, construct and inspect erosion control improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	0	150	250	150	150	150	150	1,000	0
DGN	HI	0	0	0	250	150	250	250	250	250	1,400	0
CONST	HI	0	0	0	1,125	1,125	1,125	1,125	1,125	1,125	6,750	0
INSP	HI	0	0	0	125	125	125	125	125	125	750	0
	Total	0	0	0	1,650	1,650	1,650	1,650	1,650	1,650	9,900	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2010	12/31/2022
DGN	7/30/2010	12/31/2022
CONST	12/31/2012	12/31/2022
INSP	12/31/2012	12/31/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

NPDES MS4 RETROFIT STRUCTURAL BMP IMPROVEMENTS PROGRAM

Project:	2018072	Function:	Highways and Streets	Council:
Priority No.:	2	Program:	Storm Drainage	Nbrd Board:
TMK:		Department:	Facilities Maintenance	Senate:
				House:
				Other:

Description: Long term planning, design and construction of structural Best Management Practice (BMP) improvements to address the City's existing municipal storm drain system that may be contributing to water quality concerns and may be suitable for retrofit. The project will develop an island-wide identification and prioritization plan that will be used towards implementing structural BMP options throughout the permit term. Recommended improvements may include catch basin filters, hydrodynamic separators, booms, inlet screens, Low Impact Development (LID) designs and other measures to reduce pollutant discharge. (Formerly project #2015048)

Justification: NPDES MS4 permit {Part D1.f.(1).(vi)} requires implementation of structural BMP measures to address retrofitting the existing MS4. Permit requires the City to continuously address retrofits to its existing system while developing a long term plan that targets at least 10% of the City's overall storm water assets for the entire island within 2 years (February 2017), and begin implementation within 3 years (February 2018), of the effective date of the permit. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds: Plan, design, construct and inspect storm water discharge retrofit structural BMP improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	0	150	150	150	150	150	150	900	0
DGN	HI	0	0	0	250	250	250	250	250	250	1,500	0
CONST	HI	0	0	0	500	500	1,000	1,000	1,000	1,000	5,000	0
INSP	HI	0	0	0	50	50	100	100	100	100	500	0
	Total	0	0	0	950	950	1,500	1,500	1,500	1,500	7,900	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2024
DGN	7/1/2017	12/31/2024
CONST	7/1/2017	12/31/2024
INSP	7/1/2017	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

NPDES MS4 STRUCTURAL BMPS FOR CITY INDUSTRIAL FACILITIES

Project:	2018073	Function:	Highways and Streets	Council:
Priority No.:	3	Program:	Storm Drainage	Nbrd Board:
TMK:		Department:	Facilities Maintenance	Senate:
				House:
				Other:

Description: Long term planning, design and construction of various structural Best Management Practice (BMP) improvements to reduce pollutant discharges from various City Industrial Facilities. The project will develop a City-wide identification and prioritization plan that will be used towards implementing various BMP measures, including treatment and source control technologies. Recommended structural BMPs shall include installing catch basin filters, hydrodynamic separators, booms and inlet screens, canopy structures, and Low Impact Development (LID) designs. Non-compliance is dependent on results from required annual storm water runoff samples taken from the facilities. Wastewater Treatment Plants, Landfills and Baseyards have strict pollutant concentration discharge levels. City's municipal storm water permit requires City industrial facilities to continuously meet the federal and state water quality based discharge limitations. (Formerly Project #2014095)

Justification: NPDES MS4 permit{Part B.4 and F.2} requires implementation of structural BMPs to the Best Available Technology (BAT)/Best Conventional Pollutant Control Technology (BCT), if exceedances of water quality standards are not met during annual first flush samples collected from various City industrial facilities such as Landfills, Wastewater Treatment Plants, Maintenance Baseyards, Fueling Stations, Refuse Transfer Stations, and Bus Facilities. Designs to focus on reducing targeted pollutants (i.e. copper, zinc, oil and grease, nutrients, etc.) that may exceed standards. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds: Plan, design, construct and inspect improvements for the purpose of improving water quality in storm water runoff from City Industrial Facilities.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	0	50	50	50	50	50	50	300	0
DGN	HI	0	0	0	200	200	200	200	200	200	1,200	0
CONST	HI	0	0	0	1,000	1,000	1,000	1,000	1,000	1,000	6,000	0
INSP	HI	0	0	0	100	100	100	100	100	100	600	0
	Total	0	0	0	1,350	1,350	1,350	1,350	1,350	1,350	8,100	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2024
DGN	7/1/2017	12/31/2024
CONST	7/1/2017	12/31/2024
INSP	7/1/2017	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

NPDES MS4 STRUCTURAL BMPS FOR TRASH REDUCTION

Project:	2018074	Function:	Highways and Streets	Council:
Priority No.:	4	Program:	Storm Drainage	Nbrd Board:
TMK:		Department:	Facilities Maintenance	Senate:
				House:
				Other:

Description: Long term planning, design and construction of various structural Best Management Practice (BMP) improvements to reduce debris discharges from the City's storm drainage system. The project will develop an island-wide identification and prioritization plan that will be used towards implementing various trash reduction measures, including areas prone to high trash accumulation rates such as Ulehawa Channel, Palolo Stream, Kapakahi Stream, Kalihi Stream and Ewa Beach Drainage Channel. Recommended structural BMPs may include installing catch basin filters, hydrodynamic separators, booms and inlet screens targeted at capturing trash. (Formerly Project #2014053)

Justification: NPDES MS4 permit {Part D.1.f.(1).(vii)} requires implementation of trash reduction measures for the short term to reduce the amount of trash discharged from the MS4 by 50% by June 30, 2023 while developing a long term plan to reduce the amount of trash by 100% by June 30, 2034. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds: Plan, design, construct and inspect improvements to reduce debris discharges from the City's storm drainage system.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	0	150	150	150	150	150	150	900	0
DGN	HI	0	0	0	250	250	250	250	250	250	1,500	0
CONST	HI	0	0	0	500	500	1,000	1,000	1,000	1,000	5,000	0
INSP	HI	0	0	0	50	50	100	100	100	100	500	0
	Total	0	0	0	950	950	1,500	1,500	1,500	1,500	7,900	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2024
DGN	7/1/2017	12/31/2024
CONST	7/1/2017	12/31/2024
INSP	7/1/2017	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

NPDES MS4 TMDL STRUCTURAL BMP IMPROVEMENTS PROGRAM

Project:	2018075	Function:	Highways and Streets	Council:
Priority No.:	5	Program:	Storm Drainage	Nbrd Board:
TMK:		Department:	Facilities Maintenance	Senate:
				House:
				Other:

Description: Long term planning, design and construction of structural Best Management Practice (BMP) improvements for the purpose of improving water quality in storm water and storm drainage systems. The project will target pollutants such as nutrients and sediments in areas which have Total Maximum Daily Load (TMDL) Waste Load Allocations, or are projected to have such limitations. TMDLs have been established for the Ala Wai Canal, Waimanalo, Kapaa, Kawa, Kaneohe and Upper Kaukonahua Streams.

Justification: NPDES MS4 permit {Part F.3} requires the permittee to reduce the amount of pollutants discharged from its system to comply with the City's Total Maximum Daily Loads (TMDL) in accordance with Waste Load Allocations developed by the State DOH and EPA. Deadline to comply with this permit requirement has been set for end of FY21. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds: Plan, design, construct and inspect storm water structural Best Management Practices improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	0	100	250	100	250	250	250	1,200	0
DGN	HI	0	0	0	250	100	100	100	100	100	750	0
CONST	HI	0	0	0	500	500	500	1,000	1,000	1,000	4,500	0
INSP	HI	0	0	0	50	100	100	100	100	100	550	0
	Total	0	0	0	900	950	800	1,450	1,450	1,450	7,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2024
DGN	7/1/2017	12/31/2024
CONST	7/1/2017	12/31/2024
INSP	7/1/2017	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

STORM DRAINAGE BEST MANAGEMENT PRACTICES, DOWNTOWN-CHINATOWN

Project:	2018076	Function:	Highways and Streets	Council:
Priority No.:	6	Program:	Storm Drainage	Nbrd Board:
TMK:		Department:	Facilities Maintenance	Senate:
				House:
				Other:

Description: Long term planning, design and construction of structural Best Management Practice (BMP) improvements for storm drains in the Downtown and Chinatown areas. Storm water discharges from this area enter Nuuanu Stream, which has been identified by the State DOH and EPA as one of the top priority watersheds as defined by the State's 303(d) list. Downtown and Chinatown has also been identified as a critical location for water quality improvements based on the density of commercial businesses, visitors and residents, vehicular counts, number of complaints and greater probability for pollutant generation. Recommended structural BMPs may include installing catch basin filters, hydrodynamic separators, booms, inlet screens, Low Impact Development (LID) designs and other measures to reduce pollutant discharge. (Formerly Project #2010057)

Justification: NPDES MS4 permit {Part D1.f.(1).(vi)} requires implementation of structural BMP measures to address retrofitting the existing MS4 as outlined in the City's Action Plan. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds: Plan, design, construct and inspect structural Best Management Practices improvements for storm drains in the Downtown and Chinatown areas.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	0	10	10	10	0	0	0	30	0
DGN	HI	0	0	0	100	10	10	0	0	0	120	0
CONST	HI	0	0	0	1,000	1,500	1,500	0	0	0	4,000	0
INSP	HI	0	0	0	100	300	300	0	0	0	700	0
	Total	0	0	0	1,210	1,820	1,820	0	0	0	4,850	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2023
DGN	7/1/2017	12/31/2023
CONST	7/1/2017	12/31/2023
INSP	7/1/2017	12/31/2023

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

STORM DRAINAGE BEST MANAGEMENT PRACTICES IN THE SALT LAKE DRAINAGE SYSTEM

Project:	2018077	Function:	Highways and Streets	Council:
Priority No.:	7	Program:	Storm Drainage	Nbrd Board:
TMK:		Department:	Facilities Maintenance	Senate:
				House:
				Other:

Description: Long term planning, design and construction of various structural Best Management Practice (BMP) improvements for City drain lines which discharge into Salt Lake, which is privately owned. Storm water runoff from this area discharges into Moanalua Stream, which has been identified by the State DOH and EPA as one of the top priority watersheds as defined by the State's Section 303(d) list. Structural BMPs would be installed to address pollutants of concern such as sediment, trash, nutrients and metals that are typically associated with urbanized areas. Recommended improvements may include catch basin filters, hydrodynamic separators, booms, inlet screens, Low Impact Development (LID) designs and other measures to reduce pollutant discharge. (Formerly Project #2001020)

Justification: NPDES MS4 permit {Part D1.f.(1).(vi)} requires implementation of structural BMP measures to address retrofitting the existing MS4 as outlined in the City's Action Plan. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds: Plan, design, construct and inspect storm drainage Best Management Practices for the Salt Lake Drainage System.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	0	10	0	0	0	0	0	10	0
DGN	HI	0	0	0	10	0	0	0	0	0	10	0
CONST	HI	0	0	0	1,500	0	0	0	0	0	1,500	0
INSP	HI	0	0	0	150	0	0	0	0	0	150	0
	Total	0	0	0	1,670	0	0	0	0	0	1,670	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2020
DGN	7/1/2017	12/31/2020
CONST	7/1/2017	12/31/2020
INSP	7/1/2017	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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STORM DRAINAGE BEST MANAGEMENT PRACTICES IN THE VICINITY OF KAELEPULU POND

Project:	2018078	Function:	Highways and Streets	Council:
Priority No.:		Program:	Storm Drainage	Nbrd Board:
TMK:		Department:	Facilities Maintenance	Senate:
				House:
				Other:

Description: Long term planning, design and construction of structural Best Management Practice (BMP) improvements for City drain lines which discharge into Kaelepulu Pond, which is privately owned. Kaelepulu Stream has been identified by the State DOH and EPA as one of the top priority watersheds as defined by the State's Section 303(d) list. Structural BMPs would be installed to address pollutants of concern such as sediment, trash, nutrients and metals that are typically associated with urbanized areas. Recommended improvements may include catch basin filters, hydrodynamic separators, booms, inlet screens, Low Impact Development (LID) designs and other measures to reduce pollutant discharge. (Formerly Project #2001021)

Justification: NPDES MS4 permit {Part D1.f.(1).(vi)} requires implementation of structural BMP measures to address retrofitting the existing MS4 as outlined in the City's Action Plan. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	0	0	10	0	0	0	0	10	0
DGN	HI	0	0	0	0	10	0	0	0	0	10	0
CONST	HI	0	0	0	0	1,000	0	0	0	0	1,000	0
INSP	HI	0	0	0	0	100	0	0	0	0	100	0
	Total	0	0	0	0	1,120	0	0	0	0	1,120	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2018	12/31/2021
DGN	7/1/2018	12/31/2021
CONST	7/1/2018	12/31/2021
INSP	7/1/2018	12/31/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

STORM DRAINAGE BMPS IN THE VICINITY OF KUAPA POND

Project:	2018079	Function:	Highways and Streets	Council:	
Priority No.:		Program:	Storm Drainage	Nbrd Board:	
TMK:		Department:	Facilities Maintenance	Senate:	
				House:	
				Other:	

Description: Long term planning, design, and construction of structural Best Management Practice (BMP) improvements for City drain lines which discharge into Kuapa Pond, which is privately owned. Kuapa Pond has been identified by the State DOH and EPA as one of the top priority watersheds as defined by the State's Section 303(d) list. Structural BMPs would be installed to address pollutants of concern such as sediment, trash, nutrients and metals that are typically associated with urbanized areas. Recommended improvements may include catch basin filters, hydrodynamic separators, booms, inlet screens, Low Impact Development (LID) designs and other measures to reduce pollutant discharge. (Formerly Project #2001022)

Justification: NPDES MS4 permit {Part D1.f.(1).(vi)} requires implementation of structural BMP measures to address retrofitting the existing MS4 as outlined in the City's Action Plan. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	0	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

STORM DRAINAGE BMPS, WAILUPE-KULIOUOU-NIU STREAM

Project:	2018080	Function:	Highways and Streets	Council:	
Priority No.:		Program:	Storm Drainage	Nbrd Board:	
TMK:		Department:	Facilities Maintenance	Senate:	
				House:	
				Other:	

Description: Long term planning, design and construction of structural Best Management Practice (BMP) improvements for City drain lines which discharge into the Wailupe, Kuliouou and Niu Streams. Each of these streams has been identified by the State DOH and EPA as one of the top priority watersheds as defined by the State's Section 303(d) list. Structural BMPs would be installed to address pollutants of concern such as sediment, trash, nutrients and metals that are typically associated with urbanized areas. Recommended improvements may include catch basin filters, hydrodynamic separators, booms, inlet screens, Low Impact Development (LID) designs and other measures to reduce pollutant discharge. (Formerly Project #2014050)

Justification: NPDES MS4 permit {Part D1.f.(1).(vi)} requires implementation of structural BMP measures to address retrofitting the existing MS4 as outlined in the City's Action Plan. Permit deadline to implement has been set for June 24, 2016. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	0	0	10	0	0	0	0	10	0
DGN	HI	0	0	0	0	10	0	0	0	0	10	0
CONST	HI	0	0	0	0	1,000	0	0	0	0	1,000	0
INSP	HI	0	0	0	0	100	0	0	0	0	100	0
	Total	0	0	0	0	1,120	0	0	0	0	1,120	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2018	12/31/2021
DGN	7/1/2018	12/31/2021
CONST	7/1/2018	12/31/2021
INSP	7/1/2018	12/31/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

STORM DRAIN OUTLETS IN WAIKIKI BEACH

Project:	2018081	Function:	Highways and Streets	Council:
Priority No.:	8	Program:	Storm Drainage	Nbrd Board:
TMK:		Department:	Facilities Maintenance	Senate:
				House:
				Other:

Description:

Justification:

Use of Funds: Plan, design, construct and inspect storm drain outlet improvements in Waikiki.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	0	10	50	0	10	10	0	80	0
DGN	HI	0	0	0	10	200	0	10	10	0	230	0
CONST	HI	0	0	0	1,000	10	0	1,000	1,000	0	3,010	0
INSP	HI	0	0	0	250	10	0	100	100	0	460	0
	Total	0	0	0	1,270	270	0	1,120	1,120	0	3,780	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2024
DGN	7/1/2017	12/31/2024
CONST	7/1/2017	12/31/2024
INSP	7/1/2017	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

STORM DRAIN OUTLETS NEAR ALA WAI CANAL

Project:	2018082	Function:	Highways and Streets	Council:
Priority No.:		Program:	Storm Drainage	Nbrd Board:
TMK:		Department:	Facilities Maintenance	Senate:
				House:
				Other:

Description: Long term planning, design and construction of structural Best Management Practice (BMP) improvements for storm drains that outlet directly into the Ala Wai Canal. The Ala Wai Canal has been identified by the State DOH and EPA as one of the top priority watersheds as defined by the State's Section 303(d) list. Total Maximum Daily Load (TMDL) limits have been imposed on the City that requires additional measures to reduce pollutants to the Ala Wai Canal. Structural BMPs would be installed to address pollutants of concern such as sediment, trash, nutrients and metals that are typically associated with urbanized areas and as described in the City's permit. (Formerly Project #2003135)

Justification: NPDES MS4 permit {Part D1.f.(1).(vi)} requires implementation of structural BMP measures to address retrofitting the existing MS4 as outlined in the City's Action Plan. Non-compliance with permit requirements may lead to penalties and fines.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	0	0	10	0	10	10	0	30	0
DGN	HI	0	0	0	0	10	0	10	10	0	30	0
CONST	HI	0	0	0	0	1,000	0	1,500	1,500	0	4,000	0
INSP	HI	0	0	0	0	100	0	150	150	0	400	0
	Total	0	0	0	0	1,120	0	1,670	1,670	0	4,460	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2018	12/31/2024
DGN	7/1/2018	12/31/2024
CONST	7/1/2018	12/31/2024
INSP	7/1/2018	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

WAIKIKI DRAIN OUTFALL IMPROVEMENTS

Project:	2018083	Function:	Highways and Streets	Council:	
Priority No.:		Program:	Storm Drainage	Nbrd Board:	
TMK:		Department:	Facilities Maintenance	Senate:	
				House:	
				Other:	

Description: Long term planning, design and construction of structural Best Management Practice (BMP) improvements to the storm drain outfalls that discharge directly to the ocean in Waikiki (Hilton Hawaiian Village to Colony Surf). Waikiki has been identified as a priority location for water quality improvements. Recommended improvements may include one-way bladder gate devices to prevent sand from entering the outfalls, and will address tidal surges that result in water quality concerns due to the clogging of pipes with rocks, sand and debris. (Formerly Project #2009106)

Justification: Project to be based on priority locations for retrofit, water quality improvements, and operational efficiencies. The project will improve the storm drain outfalls in Waikiki to prevent sand from clogging the outfalls, and help towards compliance with the City's NPDES MS4 permit.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CONST	HI	0	0	0	0	500	0	0	0	0	500	0
INSP	HI	0	0	0	0	50	0	0	0	0	50	0
	Total	0	0	0	0	550	0	0	0	0	550	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2018	12/31/2021
INSP	7/1/2018	12/31/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

Department Summary: Facilities Maintenance

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
HI	0	0	0	9,950	11,850	8,620	10,240	10,240	7,450	58,350	0
Total	0	0	0	9,950	11,850	8,620	10,240	10,240	7,450	58,350	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	0	0	0	630	940	610	770	770	750	4,470	0
DGN	0	0	0	1,320	1,190	1,060	1,070	1,070	1,050	6,760	0
CONST	0	0	0	7,125	8,635	6,125	7,625	7,625	5,125	42,260	0
INSP	0	0	0	875	1,085	825	775	775	525	4,860	0
Total	0	0	0	9,950	11,850	8,620	10,240	10,240	7,450	58,350	0

Six-Year CIP and Budget FY 2018-2023

Program Summary: Storm Drainage

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
FG	162	0	0	0	0	0	0	0	0	0	0
GI	100	0	0	0	0	0	0	0	0	0	0
HI	32,870	7,375	11,770	13,250	16,020	13,620	18,410	15,410	9,950	86,660	14,760
Total	33,131	7,375	11,770	13,250	16,020	13,620	18,410	15,410	9,950	86,660	14,760

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	114	5	10	10	20	20	20	20	20	110	120
PLAN	5,332	355	1,780	840	1,130	790	960	960	930	5,610	1,140
DGN	8,758	855	4,340	2,015	1,400	1,270	1,280	1,280	1,250	8,495	1,500
CONST	18,472	5,755	4,745	9,250	12,235	10,715	15,225	12,225	7,225	66,875	12,000
INSP	455	405	895	1,135	1,235	825	925	925	525	5,570	0
EQUIP	0	0	0	0	0	0	0	0	0	0	0
Total	33,131	7,375	11,770	13,250	16,020	13,620	18,410	15,410	9,950	86,660	14,760

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KAMEHAMEHA HIGHWAY STREET LIGHTING IMPROVEMENTS

Project:	2008038	Function:	Highways and Streets	Council:	07
Priority No.:		Program:	Street Lighting	Nbrd Board:	15
TMK:		Department:	Design and Construction	Senate:	15
				House:	30
				Other:	

Description: Replace approximately fifteen (15) street lights and underground electrical service on the makai side of Kamehameha Highway from Puuhale Road to the Gaspro entrance.

Justification: The direct buried electrical power cables are deteriorated and unreliable.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	HI	50	0	0	0	0	0	0	0	0	0	0
CONST	HI	317	0	0	0	0	0	0	0	0	0	0
	Total	367	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2007	7/1/2008
CONST	7/1/2010	7/1/2011

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

Six-Year CIP and Budget FY 2018-2023

KAPIOLANI BOULEVARD STREET LIGHT IMPROVEMENTS

Project:	2015089	Function:	Highways and Streets	Council:	05
Priority No.:		Program:	Street Lighting	Nbrd Board:	11
TMK:		Department:	Design and Construction	Senate:	12
				House:	22
				Other:	

Description: Replace existing street light system along Kapiolani Boulevard with new. First phase of project to be from Ward Avenue to Piikoi Street.

Justification: The reliability of the existing system is compromised; tree roots have broken electrical conduits and wires are old and brittle. Additionally, mature monkeypod trees limit the light illuminating the roadway. A new system with better lighting uniformity will uphold public health and safety given the anticipated growth in the Kakaako area, the volume of vehicular and pedestrian traffic along Kapiolani is expected to significantly increase.

Use of Funds: Construct street light improvements on Kapiolani Boulevard.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	HI	100	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	750	0	0	0	0	750	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	100	0	0	0	750	0	0	0	0	750	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2015	12/31/2016
CONST	7/1/2018	12/31/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

Six-Year CIP and Budget FY 2018-2023

KINAU STREET LIGHTING IMPROVEMENTS

Project:	2006030	Function:	Highways and Streets	Council:	05
Priority No.:		Program:	Street Lighting	Nbrd Board:	10
TMK:		Department:	Design and Construction	Senate:	11
				House:	99
				Other:	

Description: Upgrade existing street lighting on Kinau Street from Alapai Street to Waiau Place, approximately 150 lights.

Justification: Public requesting brighter street lighting along Kinau Street especially at crosswalks. Higher volume of traffic from the Kinau off-ramp creates need for brighter lights.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	HI	120	0	0	0	0	0	0	0	0	0	40
CONST	HI	0	0	0	0	0	0	0	0	0	0	4,500
	Total	120	0	0	0	0	0	0	0	0	0	4,540

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2006	12/1/2007

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

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KIONAOLE ROAD STREET LIGHTING IMPROVEMENTS

Project:	2010108	Function:	Highways and Streets	Council:	03
Priority No.:		Program:	Street Lighting	Nbrd Board:	30
TMK:		Department:	Design and Construction	Senate:	25
				House:	49
				Other:	

Description: Install new street lighting system on Kionaole Road from the H-3 freeway overpass to the Koolau Golf Course Club House (approximately 2600 L.F. of new streetlighting along Kionaole Road, Kailua-side of the H-3 Interstate highway, in the vicinity of TMK: 4-5-042-010).

Justification: Kionaole Road is unlighted City roadway that is heavily used at night when social functions are held at the Koolau Golf Course Club House. The roadway runs through a forested area and is extremely dark at night. Requests have been made to install street lights to increase traffic safety at night.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	90	0	0	0	0	0	0	0	0	0	0
CONST	GI	185	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	275	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	9/1/2014	9/30/2015

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

Six-Year CIP and Budget FY 2018-2023

PEARL CITY AREA (MOMILANI) STREET LIGHTING IMPROVEMENTS

Project:	2007040	Function:	Highways and Streets	Council:	08
Priority No.:		Program:	Street Lighting	Nbrd Board:	21
TMK:		Department:	Design and Construction	Senate:	16
				House:	34
				Other:	

Description: Replace approximately 190 street light standards in the Momilani area, including but not limited to Hoohai, Hoomalolo, Hoolaulea, Hoowae, Hoolele, Hoomoana, Hookumu, Hookauhua, Hoohai, Hoohoihoi.

Justification: Existing street light standards are old and corroded, underground conduits and wiring brittle.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	HI	259	0	0	0	0	0	0	0	0	0	0
CONST	HI	2,945	0	0	0	0	0	0	0	0	0	0
	Total	3,204	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2009	6/1/2010
CONST	7/1/2010	9/30/2013

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

Six-Year CIP and Budget FY 2018-2023

ST. LOUIS HEIGHTS (CHAMINADE TERRACE) STREET LIGHTING IMPROVEMENTS

Project:	2007041	Function:	Highways and Streets	Council:	05
Priority No.:		Program:	Street Lighting	Nbrd Board:	05
TMK:		Department:	Design and Construction	Senate:	10
				House:	20
				Other:	

Description: Replace approximately 46 street light standards and underground wiring in the St. Louis Heights area such as Kaminaka, Kanalui Street & Place, Kalaepohaku Street & Place, Pule Place, and Akeakamai.

Justification: Existing light standards are corroded. Underground conduits and wiring brittle.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	HI	105	0	0	0	0	0	0	0	0	0	0
CONST	HI	716	0	0	0	0	0	0	0	0	0	0
	Total	822	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2009	7/1/2010
CONST	7/1/2010	9/30/2013

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

Six-Year CIP and Budget FY 2018-2023

STREET LIGHT METER CABINETS, TRANSFORMERS AND STREET LIGHTING IMPROVEMENTS

Project:	2007043	Function:	Highways and Streets	Council:	99
Priority No.:	1	Program:	Street Lighting	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Replace street light meter cabinets, City-owned electrical transformers, street lights, conduits and electrical appurtenances at various locations.

Justification: Existing meter cabinets and transformers are corroded and need to be replaced. Underground street lighting cables and conduits may also be deteriorated.

Use of Funds: Design, construct, inspect and provide related equipment for street light meter cabinet, transformer and street lighting improvements at various locations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	50	0	0	0	0	0	0	0	0	0	0
DGN	HD	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	776	0	10	50	50	50	50	50	50	300	300
CONST	HD	0	0	0	0	0	0	0	0	0	0	0
CONST	HI	2,802	0	1,200	440	450	450	450	450	450	2,690	2,700
INSP	HI	0	0	0	5	0	0	0	0	0	5	0
EQUIP	FG	79	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	40	5	0	0	0	0	0	5	0
OTHER	FG	7	0	0	0	0	0	0	0	0	0	0
	Total	3,714	0	1,250	500	500	500	500	500	500	3,000	3,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2006	7/1/2015
DGN	7/1/2009	12/31/2030
CONST	7/1/2010	12/31/2030
EQUIP	7/1/2016	12/31/2030

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
FG	86	0	0	0	0	0	0	0	0	0	0
GI	185	0	0	0	0	0	0	0	0	0	0
HD	0	0	0	0	0	0	0	0	0	0	0
HI	8,331	0	1,250	500	1,250	500	500	500	500	3,750	7,540
Total	8,602	0	1,250	500	1,250	500	500	500	500	3,750	7,540

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	50	0	0	0	0	0	0	0	0	0	0
DGN	1,500	0	10	50	50	50	50	50	50	300	340
CONST	6,965	0	1,200	440	1,200	450	450	450	450	3,440	7,200
INSP	0	0	0	5	0	0	0	0	0	5	0
EQUIP	79	0	40	5	0	0	0	0	0	5	0
OTHER	7	0	0	0	0	0	0	0	0	0	0
Total	8,602	0	1,250	500	1,250	500	500	500	500	3,750	7,540

Program Summary: Street Lighting

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
FG	86	0	0	0	0	0	0	0	0	0	0
GI	185	0	0	0	0	0	0	0	0	0	0
HD	0	0	0	0	0	0	0	0	0	0	0
HI	8,331	0	1,250	500	1,250	500	500	500	500	3,750	7,540
Total	8,602	0	1,250	500	1,250	500	500	500	500	3,750	7,540

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	50	0	0	0	0	0	0	0	0	0	0
DGN	1,500	0	10	50	50	50	50	50	50	300	340
CONST	6,965	0	1,200	440	1,200	450	450	450	450	3,440	7,200
INSP	0	0	0	5	0	0	0	0	0	5	0
EQUIP	79	0	40	5	0	0	0	0	0	5	0
OTHER	7	0	0	0	0	0	0	0	0	0	0
Total	8,602	0	1,250	500	1,250	500	500	500	500	3,750	7,540

Function Summary: Highways and Streets

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
BK	1,468	0	0	920	560	560	560	560	560	3,720	0
CD	0	0	0	0	0	0	0	0	0	0	0
DV	167	0	0	0	0	0	0	0	0	0	0
EW	902	0	0	0	0	0	0	0	0	0	0
FG	52,474	0	640	1,840	640	8,640	16,640	8,640	38,640	75,040	0
GI	42,546	0	5,620	8,000	11,000	6,000	4,000	4,000	4,000	37,000	420
HD	0	0	0	0	0	0	0	0	0	0	0
HI	1,093,838	139,937	162,730	56,555	62,800	74,130	95,920	70,920	114,460	474,785	257,240
HW	1,530	0	0	0	0	0	0	0	0	0	0
ST	38	0	0	0	0	0	0	0	0	0	0
UT	1,145	100	100	100	100	100	100	100	100	600	0
Total	1,194,109	140,037	169,090	67,415	75,100	89,430	117,220	84,220	157,760	591,145	257,660

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	180	21	84	945	50	50	50	50	50	1,195	10,250
PLAN	13,271	387	4,420	1,675	1,290	900	1,070	1,020	950	6,905	1,600
DGN	109,576	3,944	13,581	7,505	12,630	6,550	3,560	3,510	3,440	37,195	15,650
CONST	1,020,901	133,160	147,347	54,586	58,425	79,775	110,285	77,385	151,465	531,921	223,140
INSP	49,358	2,490	3,606	2,660	2,695	2,155	2,255	2,255	1,855	13,875	7,020
EQUIP	125	25	41	34	0	0	0	0	0	34	0
OTHER	697	10	11	10	10	0	0	0	0	20	0
RELOC	0	0	1	0	0	0	0	0	0	0	0
Total	1,194,109	140,037	169,090	67,415	75,100	89,430	117,220	84,220	157,760	591,145	257,660

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ENHANCED MATERIALS RECOVERY FACILITY

Project:	2018046	Function:	Sanitation	Council:
Priority No.:	5	Program:	Waste Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: Project provides a glass recycling facility, materials recycling facility and white goods processing facility to allow better management of glass materials, mixed recyclable materials and white good materials collected by the Refuse Division.

Justification: Recycling facilities are needed for the management of recyclables collected by the Refuse Division

Use of Funds: Plan, design, construct, inspect and purchase equipment for recycling facilities.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	WB	0	0	0	1	1	0	0	0	0	2	0
DGN	WB	0	0	0	1	1	0	0	0	0	2	0
CONST	WB	0	0	0	3,800	3,000	0	0	0	0	6,800	0
INSP	WB	0	0	0	1	1	0	0	0	0	2	0
EQUIP	WB	0	0	0	1	1	0	0	0	0	2	0
	Total	0	0	0	3,804	3,004	0	0	0	0	6,808	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2017	2/1/2019
DGN	12/1/2017	2/1/2020
CONST	12/1/2017	2/1/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

INTEGRATED SOLID WASTE MANAGEMENT PROGRAM

Project:	2005061	Function:	Sanitation	Council:	99
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Development of an integrated solid waste management program.

Justification: Project will provide for State DOH mandated long range planning document (ISWMP) for the disposal of waste on Oahu (programmed every 5 years).

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	WB	0	0	0	0	0	0	0	0	0	0	0
PLAN	WB	201	0	0	0	0	0	0	0	0	0	0
DGN	WB	222	0	0	0	0	0	0	0	0	0	0
CONST	WB	0	0	0	0	0	0	0	0	0	0	0
	Total	423	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2011	12/1/2017
DGN	7/20/2015	7/20/2015

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

KAPAA REFUSE COLLECTION FACILITIES RENOVATION

Project:	2017048	Function:	Sanitation	Council:	03
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	24
				House:	49
				Other:	

Description: This project will renovate the existing Kapaa Refuse Collection Facility to improve functionality and reconstruct deteriorated and termite damaged facilities.

Justification: The existing collection facility is deteriorated and in need of reconstruction and other improvements to increase the safety and functionality of the work area.

Use of Funds: Plan, design, construct and inspect renovations at Kapaa Refuse Collection Facility.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	WB	0	0	1	0	0	0	0	0	0	0	0
DGN	WB	0	0	99	0	0	0	0	0	0	0	0
CONST	WB	0	0	500	0	0	0	0	0	0	0	0
INSP	WB	0	0	80	0	0	0	0	0	0	0	0
	Total	0	0	680	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	7/1/2017
DGN	7/1/2016	7/1/2017
CONST	7/1/2017	12/1/2018
INSP	7/1/2017	12/1/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

KAPAA TRANSFER STATION RENOVATION

Project:	2017050	Function:	Sanitation	Council:	03
Priority No.:	10	Program:	Waste Collection And Disposal	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	24
				House:	49
				Other:	

Description: This project provides improvements and renovation of the Kapaa Transfer Station, including a permanent separate loadout area for homeowners to recycle their greenwaste.

Justification: Homeowner greenwaste at Kapaa Transfer Station is required, by DOH, to be recycled. The current makeshift arrangement causes the transfer station to double handle the greenwaste. A permanent separate loadout will eliminate the double handling and will also enhance safety and NPDES compliance by having a location designed for this purpose.

Use of Funds: Design renovations at Kapaa Transfer Station.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	WB	0	0	1	0	0	0	0	0	0	0	0
DGN	WB	0	0	149	350	0	0	0	0	0	350	0
CONST	WB	0	0	0	0	3,500	0	0	0	0	3,500	0
INSP	WB	0	0	0	0	300	0	0	0	0	300	0
	Total	0	0	150	350	3,800	0	0	0	0	4,150	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	7/1/2018
DGN	7/1/2016	7/1/2018
CONST	7/1/2018	12/1/2019
INSP	7/1/2018	12/1/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

KAWAILOA TRANSFER STATION - LOADOUT MODIFICATION

Project:	2017047	Function:	Sanitation	Council:	08
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	27
TMK:		Department:	Environmental Services	Senate:	23
				House:	47
				Other:	

Description: This project provides a second loadout area to supplement the sole loadout area currently in existence at the Kawailoa Transfer Station.

Justification: The added loadout area will allow for operational flexibility and reliability, and provide a second loadout area similar to the other transfer stations.

Use of Funds: Plan and design improvements at Kawailoa Transfer Station.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	WB	0	0	1	0	0	0	0	0	0	0	0
DGN	WB	0	0	249	0	0	0	0	0	0	0	0
CONST	WB	0	0	0	0	2,000	0	0	0	0	2,000	0
INSP	WB	0	0	0	0	200	0	0	0	0	200	0
	Total	0	0	250	0	2,200	0	0	0	0	2,200	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	7/1/2018
DGN	3/1/2018	12/1/2019
CONST	1/1/2019	12/1/2019
INSP	1/1/2019	12/1/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

KEEHI TRANSFER STATION - FUEL STATION RENOVATION

Project:	2007057	Function:	Sanitation	Council:	07
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	19
TMK:		Department:	Environmental Services	Senate:	15
				House:	31
				Other:	

Description: Fueling demand at Keehi Transfer Station increased due to the Honolulu baseyard being relocated to Keehi. This project will replace and relocate the existing deteriorated steel structure for the refueling station, replace the old, slow fuel pumps, and relocate equipment to enable fueling on both sides of the pumps. The project may also include an automated electronic card reader system.

Justification: The existing refueling station structure is deteriorated and in need of rehabilitation or replacement. Improvements are necessary to service the increase in vehicles due to the relocation of the Honolulu yard, and reduce the prolonged waits for refueling. Also, the improvements will allow fueling of more than one vehicle at a time, and improve the traffic flow for better safety and efficiency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	WB	200	0	0	0	0	0	0	0	0	0	0
CONST	WB	0	0	0	0	0	0	0	0	0	0	0
	Total	200	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	12/1/2006	12/1/2012

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

KEEHI TRANSFER STATION - LOADOUT MODIFICATIONS

Project:	2015046	Function:	Sanitation	Council:	07
Priority No.:	4	Program:	Waste Collection And Disposal	Nbrd Board:	15
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Project provides modifications to the existing load out bays at the Keehi Transfer Station to allow for use of top loading refuse hauling trailers. The existing compactor system which is currently being used to load the trailers will be removed.

Justification: The existing compactor system at Keehi Transfer Station that is currently used to load municipal solid waste has resulted in NPDES/DOT notices due to the leakage of liquids from the trash when the loads are compacted into the trailers. The compactors are also very old and do not compact the loads consistently which causes the trailers to be either too light or too heavy for efficient and safe hauling. The conversion of Keehi Transfer Station to a top loading system will alleviate the on-going inefficiencies and problems. The proposed top loading system is successfully being used at the City's two other transfer stations.

Use of Funds: Construct and inspect transfer station improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	WB	0	0	1	0	0	0	0	0	0	0	0
DGN	WB	0	0	349	0	0	0	0	0	0	0	0
CONST	WB	1,000	0	0	3,000	0	0	0	0	0	3,000	0
INSP	WB	0	0	0	250	0	0	0	0	0	250	0
	Total	1,000	0	350	3,250	0	0	0	0	0	3,250	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	7/1/2017
DGN	2/1/2015	12/1/2018
CONST	11/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

Six-Year CIP and Budget FY 2018-2023

LEEWARD REFUSE COLLECTION BASEYARD AND CONVENIENCE CENTER

Project:	2014052	Function:	Sanitation	Council:	01
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	34
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: The growth of the island's population in the leeward areas supports the need for planning for a new leeward baseyard. Planning will evaluate the proposed site for a new baseyard on existing City land adjacent to the H-Power facility, develop alternatives and the project description, and undertake environmental work. Improvements to include a new convenience center facility to allow the public to drop off loads.

Justification: A new leeward baseyard is needed to provide adequate service for projected population growth and new development. Convenience center is needed to reduce the public dropping off loads at the landfill.

Use of Funds: Plan and design leeward refuse collection baseyard and convenience center.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	WB	0	0	0	0	0	0	0	0	0	0	0
PLAN	WB	250	250	1	0	0	0	0	0	0	0	0
DGN	WB	0	0	500	0	1	0	0	0	0	1	0
CONST	WB	0	0	0	0	18,000	0	0	0	0	18,000	0
INSP	WB	0	0	0	0	800	0	0	0	0	800	0
EQUIP	WB	0	0	0	0	1	0	0	0	0	1	0
	Total	250	250	501	0	18,802	0	0	0	0	18,802	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2016	12/1/2017
DGN	8/1/2017	6/1/2020
CONST	7/1/2018	6/1/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

OAHU SECONDARY LANDFILL - SITE SELECTION STUDY

Project:	2010046	Function:	Sanitation	Council:	99
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Project will study potential locations for a secondary landfill on Oahu, including the required environmental review process. Study to also include providing the required facilitation, technical assistance and guidance needed to implement and manage a landfill site selection advisory committee.

Justification: Site selection study is needed in order to adequately evaluate and consider potential secondary landfill sites.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	WB	0	0	0	0	0	0	0	0	0	0	0
PLAN	WB	1,300	0	0	0	0	0	0	0	0	0	0
	Total	1,300	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	11/1/2009	12/31/2015

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

Six-Year CIP and Budget FY 2018-2023

REFUSE CONVENIENCE CENTER IMPROVEMENTS

Project:	2007058	Function:	Sanitation	Council:	99
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: This project will examine existing convenience centers and propose and design changes to improve efficiency. The project will also study the need for additional convenience centers, possible locations for these centers, and provide cost analysis. Facilities to be examined include convenience centers (Ewa, Laie, Wahiawa, Waianae, Waimanalo, and Waipahu) and possibly transfer stations (Kapaa, Kawailoa, and Keehi).

Justification: This project addresses concerns raised by the State Department of Health regarding storage of white goods (e.g. bulky items, household appliances) at the convenience centers. There are also long queues at some convenience centers.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	WB	50	0	0	0	0	0	0	0	0	0	0
DGN	WB	150	0	0	0	0	0	0	0	0	0	0
CONST	WB	0	0	0	0	0	0	0	0	0	0	0
	Total	200	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2006	12/1/2011
DGN	12/1/2006	12/1/2011

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

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REFUSE FACILITIES ENERGY SAVINGS PROJECT

Project:	2014055	Function:	Sanitation	Council:	99
Priority No.:	1	Program:	Waste Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Project will examine energy uses at a Refuse facility or facilities, and implement improvements to reduce energy consumption, improve energy efficiency, and/or implement renewable energy systems. The work may include installation of photovoltaic systems, and/or installation of other energy saving systems and fixtures inclusive of improvements needed for the upgrades.

Justification: Energy efficiency improvements and renewable energy projects are intended to reduce life cycle costs of operations, as well as reduce dependency on imported fuels. As a supplemental environmental project, this offsets a possible assessment from the EPA.

Use of Funds: Design, construct and inspect energy savings improvements at refuse facilities.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	WB	0	399	1	1	1	0	0	0	0	2	0
CONST	WB	6,503	3,600	12,000	2,000	3,000	0	0	0	0	5,000	0
INSP	WB	0	1	1	300	300	0	0	0	0	600	0
	Total	6,503	4,000	12,002	2,301	3,301	0	0	0	0	5,602	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	6/1/2015	12/1/2019
CONST	4/1/2016	12/1/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

Six-Year CIP and Budget FY 2018-2023

REFUSE FACILITIES IMPROVEMENTS AT VARIOUS LOCATIONS

Project:	2010054	Function:	Sanitation	Council:	99
Priority No.:	8	Program:	Waste Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Various repairs, improvements or modifications include, but are not limited to, roof repairs, tipping floor repairs, drainage repairs, structural repairs, office repairs, etc., at various Refuse facilities (transfer stations, convenience centers, collection yards, closed landfills).

Justification: Repair, improvements or modifications to Refuse facilities, which require contractor work, are needed on a continuing basis. This funding will allow such projects to be implemented in a timely and efficient manner. The need, scope, and priority of the work is subject to change during the year, commonly due to forces beyond the control of the Refuse Division. The proposed annual funding will allow for the necessary flexibility in the program.

Use of Funds: Design, construct and inspect refuse facilities improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	WB	871	500	500	500	500	500	500	500	500	3,000	0
CONST	WB	2,558	750	1,000	750	750	750	750	750	750	4,500	0
INSP	WB	471	100	100	100	100	100	100	100	100	600	0
EQUIP	WB	0	0	0	0	0	0	0	0	0	0	0
	Total	3,900	1,350	1,600	1,350	1,350	1,350	1,350	1,350	1,350	8,100	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2015	6/30/2022
CONST	7/1/2015	6/30/2022
INSP	7/1/2015	6/30/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

Six-Year CIP and Budget FY 2018-2023

SOLID WASTE TO ENERGY FACILITY

Project:	2003134	Function:	Sanitation	Council:	01
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	34
TMK:		Department:	Environmental Services	Senate:	21
				House:	43
				Other:	

Description: Expansion of the Solid Waste to Energy Facility with the addition of a sorting facility and waste-to-energy unit. The sorting facility will allow haulers to dispose refuse (now being taken to landfill) into recyclable, combustible and non-combustible components which will be directed to the proper disposal option.

Justification: To conserve landfill capacity, diversion of mixed loads of municipal solid waste will direct the recyclable and combustible factions away from landfill. Waste presently disposed of at landfill during the annual maintenance shutdown of existing H-Power units will be processed at this facility.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	WB	2,354	0	0	0	0	0	0	0	0	0	0
DGN	WB	14,174	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	WB	309,700	0	0	0	0	0	0	0	0	0	0
INSP	WB	3,250	0	0	0	0	0	0	0	0	0	0
OTHER	WB	11	0	0	0	0	0	0	0	0	0	0
	Total	329,488	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2003	12/1/2009
DGN	12/1/2003	8/1/2011
CONST	11/1/2009	12/31/2012

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

Six-Year CIP and Budget FY 2018-2023

SOLID WASTE TO ENERGY FACILITY (H-POWER) ACCESS IMPROVEMENTS

Project:	2014063	Function:	Sanitation	Council:	01
Priority No.:	9	Program:	Waste Collection And Disposal	Nbrd Board:	34
TMK:		Department:	Environmental Services	Senate:	21
				House:	43
				Other:	

Description: An additional traffic lane is proposed to improve the traffic flow at the expanded H-Power facility, reduce the queuing of disposal trucks and trailers on the main roadways, and provide for safer traffic flow into and out of the facility. Planning phase is anticipated to include a traffic study.

Justification: The expanded H-Power facility is diverting more loads from the landfill, with corresponding increase in traffic flow. The addition of a new traffic lane will provide for safer vehicle traffic flow and reduce the amount of queuing on the roadways.

Use of Funds: Design, construct and inspect facility access improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	WB	0	0	0	0	0	0	0	0	0	0	0
PLAN	WB	31	0	0	0	0	0	0	0	0	0	0
DGN	WB	1	25	0	1	0	0	0	0	0	1	0
CONST	WB	0	500	500	500	100	0	0	0	0	600	0
INSP	WB	0	0	50	50	10	0	0	0	0	60	0
	Total	32	525	550	551	110	0	0	0	0	661	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2013	12/1/2016
DGN	12/1/2014	12/1/2018
CONST	6/1/2016	6/1/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

SOLID WASTE TO ENERGY FACILITY (HPOWER) CONVERSION TECHNOLOGIES

Project:	2018050	Function:	Sanitation	Council:
Priority No.:	6	Program:	Waste Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: The project is for the development of critical conversion technologies to allow for the processing of materials that are still being taken by the landfill and for the improvement in handling of difficult to recycle materials, most notably developing beneficial uses for ash, residue and Auto Shredder Residue (ASR).

Justification: Successfully diverting all or portions of these materials from landfill disposal will extend the life of the Waimanalo Gulch Sanitary Landfill. It may also allow for the difficult to recycle materials to be used as a resource instead of being landfilled.

Use of Funds: Plan and design conversion technologies for HPOWER.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	WB	0	0	0	120	120	0	0	0	0	240	0
DGN	WB	0	0	0	1	1,000	0	0	0	0	1,001	0
CONST	WB	0	0	0	0	10,000	10,000	0	0	0	20,000	0
INSP	WB	0	0	0	0	1,000	1,000	0	0	0	2,000	0
EQUIP	WB	0	0	0	0	1,200	1	0	0	0	1,201	0
	Total	0	0	0	121	13,320	11,001	0	0	0	24,442	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/1/2018
DGN	7/1/2018	12/1/2020
CONST	7/1/2018	12/1/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

SOLID WASTE TO ENERGY FACILITY (HPOWER) EXTERIOR IMPROVEMENTS TO 3RD BOILER

Project:	2018048	Function:	Sanitation	Council:
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: Plan, design, construct, inspect and purchase related equipment for improvements to the 3rd Boiler facility.

Justification: Plan, design, construct, inspect and purchase related equipment for improvements to the 3rd Boiler facility.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	WB	0	0	0	0	0	0	0	200	0	200	0
DGN	WB	0	0	0	0	0	0	0	1	0	1	0
CONST	WB	0	0	0	0	0	0	0	18,000	0	18,000	0
INSP	WB	0	0	0	0	0	0	0	1,800	0	1,800	0
EQUIP	WB	0	0	0	0	0	0	0	1,080	0	1,080	0
	Total	0	0	0	0	0	0	0	21,081	0	21,081	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

SOLID WASTE TO ENERGY FACILITY (H-POWER) FOURTH BOILER

Project:	2018047	Function:	Sanitation	Council:	
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Plan and design a fourth boiler for HPOWER.

Justification: The project will consider alternatives that might be employed to process select and/or additional wastes to accommodate population growth and avoiding waste diversions to the landfill.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	WB	0	0	0	0	0	0	0	5,400	0	5,400	0
DGN	WB	0	0	0	0	0	0	0	27,000	0	27,000	0
	Total	0	0	0	0	0	0	0	32,400	0	32,400	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

SOLID WASTE TO ENERGY FACILITY (H-POWER) IMPROVEMENTS

Project:	2014065	Function:	Sanitation	Council:	01
Priority No.:	2	Program:	Waste Collection And Disposal	Nbrd Board:	34
TMK:		Department:	Environmental Services	Senate:	21
				House:	43
				Other:	

Description: Project will provide various improvements to the City's expanded H-Power facility. Various improvements to the site are proposed and will be evaluated and coordinated into a master plan. This funding will allow for the planning, engineering and implementation of anticipated future support projects which are not covered under existing contracts for the facility. The modifications and improvements may include, but not be limited to, additional storage areas and facilities, internal traffic flow improvements and parking, excess heat recovery projects, proposed roofing reinforcing for photovoltaic systems, and bulky waste processing improvements and infrastructure.

Justification: Planning for long-term improvements to the City's H-Power facility is necessary. The improvements should be planned and implemented in a logical and cost effective manner to achieve life-cycle cost benefits. Excess heat recovery improvements will increase the energy recovered from waste. Bulky waste processing improvements and infrastructure will help ensure reduction of bulky waste diversion to landfill. This project will provide needed improvements to the facility and allow H-Power to be managed efficiently by meeting needs not covered under the existing operating contracts.

Use of Funds: Plan, design, construct, inspect and provide related equipment for HPOWER.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	WB	0	1	0	240	120	50	0	0	0	410	0
DGN	WB	100	1	0	1	600	240	0	0	0	841	0
CONST	WB	3,702	3,400	0	1,000	5,500	7,000	0	0	0	13,500	0
INSP	WB	0	300	0	900	1,000	400	0	0	0	2,300	0
EQUIP	WB	0	0	0	1	1	1	0	0	0	3	0
	Total	3,802	3,702	0	2,142	7,221	7,691	0	0	0	17,054	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2013	12/1/2019
DGN	12/1/2014	12/1/2021
CONST	12/1/2015	12/1/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

Six-Year CIP and Budget FY 2018-2023

SOLID WASTE TO ENERGY FACILITY (H-POWER) -IMPROVEMENTS FOR PROCESSING SEWAGE

Project:	2013102	Function:	Sanitation	Council:	01
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	34
TMK:		Department:	Environmental Services	Senate:	21
				House:	43
				Other:	

Description: Improvements to H-POWER facility to allow for the inclusion of sewage sludge into the refuse stream, including receiving pit, day storage silo, pumps, piping and burner injection equipment to facilitate receiving and processing sewage sludge.

Justification: Improvements needed to allow sewage sludge that would otherwise go to landfill to be diverted into the waste stream for production of beneficial electrical power.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	WB	0	0	0	0	0	0	0	0	0	0	0
CONST	WB	10,566	0	0	0	0	0	0	0	0	0	0
INSP	WB	600	0	0	0	0	0	0	0	0	0	0
	Total	11,166	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	4/1/2013	12/31/2014
CONST	5/1/2014	10/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

Six-Year CIP and Budget FY 2018-2023

SOLID WASTE TO ENERGY FACILITY (HPOWER) RECONSTRUCTION OF ASH BUILDING

Project:	2018049	Function:	Sanitation	Council:
Priority No.:	3	Program:	Waste Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: The project will provide for the reconstruction of the corroded/deteriorated ash building at H-Power. The processing of ash and reclaiming of metals is a critical function of H-Power and both take place in the ash building.

Justification: The deteriorated condition of the building may begin to pose health, safety and regulatory concerns due to fugitive dust and fumes. The reconstruction of the ash building will help to alleviate these issues.

Use of Funds: Plan, design, construct and inspect reconstruction of ash building for HPOWER.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	WB	0	0	0	120	0	0	0	0	0	120	0
DGN	WB	0	0	0	1	0	0	0	0	0	1	0
CONST	WB	0	0	0	5,000	7,000	0	0	0	0	12,000	0
INSP	WB	0	0	0	1,000	200	0	0	0	0	1,200	0
	Total	0	0	0	6,121	7,200	0	0	0	0	13,321	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	6/1/2018
DGN	7/1/2017	6/1/2020
CONST	10/1/2017	6/1/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

SOLID WASTE TO ENERGY FACILITY (H-POWER) - REHABILITATION

Project:	2011047	Function:	Sanitation	Council:	01
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	34
TMK:		Department:	Environmental Services	Senate:	21
				House:	43
				Other:	

Description: The operating agreement for H-POWER identifies refurbishment projects the City is to fund to maintain plant thru-put and energy generation guarantees. These necessary refurbishment projects, which are capital replacements, restore equipment that has reached the end of its useful life, and are not normal wear and tear type maintenance.

Justification: Providing for this work on a consistent basis during scheduled maintenance down periods will ensure continued efficient operation of the facility and prevent major failures which would require the facility to stop accepting waste. This funding ensures that contract requirements are met and will allow for maximum performance of the plant.

Use of Funds: Design, construct and inspect facility rehabilitation.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	WB	0	0	0	0	0	0	0	0	0	0	0
DGN	WF	0	1	1	0	0	0	0	0	0	0	0
CONST	WB	9,998	0	0	0	0	0	0	0	0	0	0
CONST	WF	42,998	9,998	2,998	0	0	0	0	0	0	0	0
INSP	WB	0	0	0	0	0	0	0	0	0	0	0
INSP	WF	1,000	1	1	0	0	0	0	0	0	0	0
	Total	53,996	10,000	3,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	1/1/2013	12/1/2019
CONST	1/1/2013	12/1/2019
INSP	1/1/2013	12/1/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

Six-Year CIP and Budget FY 2018-2023

SOLID WASTE TO ENERGY FACILITY - POLLUTION CONTROL IMPROVEMENTS

Project:	2008060	Function:	Sanitation	Council:	01
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	34
TMK:		Department:	Environmental Services	Senate:	21
				House:	43
				Other:	

Description: Project upgrades the Solid Waste to Energy Facility to comply with the latest EPA Maximum Achievable Control Technology (MACT) air emission standards.

Justification: Regulatory compliance.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	WB	249	0	0	0	0	0	0	0	0	0	0
DGN	WB	3,750	0	0	0	0	0	0	0	0	0	0
CONST	WB	43,001	0	0	0	0	0	0	0	0	0	0
INSP	WB	2,000	0	0	0	0	0	0	0	0	0	0
OTHER	WB	1	0	0	0	0	0	0	0	0	0	0
	Total	49,001	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2007	4/1/2008
CONST	4/1/2008	11/30/2010

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	11

Six-Year CIP and Budget FY 2018-2023

WAIMANALO GULCH LANDFILL - ACCESS ROADWAY RECONSTRUCTION

Project:	2017049	Function:	Sanitation	Council:	01
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	34
TMK:		Department:	Environmental Services	Senate:	20
				House:	43
				Other:	

Description: This project provides a new all-weather landfill access roadway to replace the temporary roadway which is susceptible to erosion, dust, and washouts during heavy rain events. Project will also consider possible beneficial ash reuse through the use of ash in the asphalt mix for the roadway.

Justification: Landfill entry roadway has reached the end of its useful life and needs to be reconstructed. Also, a portion of the haul road is currently unpaved. Improvements are needed to prevent erosion, dust, and washouts during heavy rain events. The major construction work at the landfill is completed, affording an opportune time to make permanent improvements to the road.

Use of Funds: Plan, design, construct and inspect reconstruction of the Waimanalo Gulch Landfill access roadway.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	WB	0	0	1	0	0	0	0	0	0	0	0
DGN	WB	0	0	100	0	0	0	0	0	0	0	0
CONST	WB	0	0	1,000	0	0	0	0	0	0	0	0
INSP	WB	0	0	100	0	0	0	0	0	0	0	0
	Total	0	0	1,201	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	7/1/2017
DGN	7/1/2016	7/1/2018
CONST	7/1/2017	12/1/2018
INSP	7/1/2017	12/1/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	40

Six-Year CIP and Budget FY 2018-2023

WAIMANALO GULCH LANDFILL - LEACHATE DISPOSAL PROJECT

Project:	2017046	Function:	Sanitation	Council:	01
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	34
TMK:		Department:	Environmental Services	Senate:	20
				House:	43
				Other:	

Description: This project will extend a new sewer main to the landfill to eliminate the current monthly leachate pumping, hauling and storage costs which are currently contracted out. The project will also provide for permanent leachate storage tanks needed for heavy rainfall events.

Justification: Landfill leachate disposal is an ongoing EPA/DOH regulatory requirement that will also continue for 30 years after the landfill closes as part of the mandated post closure requirements. Project will provide significant cost savings by eliminating the leachate pumping and hauling, estimated at approximately $40,000 to $90,000+ per month depending on the amount of leachate generated.

Use of Funds: Plan, design, construct and inspect leachate disposal improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	WB	0	0	100	0	0	0	0	0	0	0	0
DGN	WB	0	0	298	0	1	0	0	0	0	1	0
CONST	WB	0	0	1	0	3,500	0	0	0	0	3,500	0
INSP	WB	0	0	1	0	200	0	0	0	0	200	0
EQUIP	WB	0	0	0	0	1	0	0	0	0	1	0
	Total	0	0	400	0	3,702	0	0	0	0	3,702	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	7/1/2018
DGN	7/1/2017	7/1/2019
CONST	7/1/2018	12/1/2019
INSP	7/1/2018	12/1/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

WAIPAHU ASH LANDFILL CLOSURE

Project:	1993010	Function:	Sanitation	Council:	08
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	22
TMK:		Department:	Environmental Services	Senate:	17
				House:	35
				Other:	

Description: Complete the project to close the ash landfill site. Additional construction work is necessary to cap and encompass the additional burn area along the south and southeast border of the landfill adjacent to the Waipio Soccer Complex.

Justification: The ash landfill needs to be properly closed to comply with the State Department of Health requirements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	101	0	0	0	0	0	0	0	0	0	0
DGN	WB	147	0	0	0	0	0	0	0	0	0	0
CONST	GI	5,964	0	0	0	0	0	0	0	0	0	0
CONST	WB	9,132	0	0	0	0	0	0	0	0	0	0
INSP	GI	235	0	0	0	0	0	0	0	0	0	0
INSP	WB	746	0	0	0	0	0	0	0	0	0	0
	Total	16,326	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	1/1/1992	12/1/2008
CONST	10/1/2004	6/1/2011

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

WAIPAHU INCINERATOR SITE CLOSURE - AREA CLEANUP AND IMPROVEMENTS

Project:	2002008	Function:	Sanitation	Council:	08
Priority No.:	7	Program:	Waste Collection And Disposal	Nbrd Board:	22
TMK:		Department:	Environmental Services	Senate:	17
				House:	35
				Other:	

Description: This project will provide for the final environmental cleanup of the Waipahu Incinerator Building and assessment and remediation of any onsite and offsite areas per settlement agreement with the State Department of Health.

Justification: This project is necessary to remove equipment and utility lines that are now a safety hazard to occupants of the building. The City wishes to fully utilize the building. In its present condition, only a small portion of the building is being used. Project is to satisfy settlement agreement with the State Department of Health.

Use of Funds: Design, construct and inspect site closure cleanup and improvements at the Waipahu Incinerator site.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	WB	950	0	0	1	0	0	0	0	0	1	0
CONST	WB	0	0	0	2,500	0	0	0	0	0	2,500	0
INSP	WB	0	0	0	250	0	0	0	0	0	250	0
	Total	950	0	0	2,751	0	0	0	0	0	2,751	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	6/1/2009	12/1/2019
CONST	10/1/2017	12/1/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Department Summary: Environmental Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
GI	6,300	0	0	0	0	0	0	0	0	0	0
WB	428,240	9,827	17,684	22,741	64,010	20,042	1,350	54,831	1,350	164,324	0
WF	43,998	10,000	3,000	0	0	0	0	0	0	0	0
Total	478,537	19,827	20,684	22,741	64,010	20,042	1,350	54,831	1,350	164,324	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	0	0	0	0	0	0	0	0	0	0	0
PLAN	4,435	251	106	481	241	50	0	5,600	0	6,372	0
DGN	20,667	926	2,246	857	2,104	740	500	27,501	500	32,202	0
CONST	445,122	18,248	17,999	18,550	56,350	17,750	750	18,750	750	112,900	0
INSP	8,302	402	333	2,851	4,111	1,500	100	1,900	100	10,562	0
EQUIP	0	0	0	2	1,204	2	0	1,080	0	2,288	0
OTHER	12	0	0	0	0	0	0	0	0	0	0
Total	478,537	19,827	20,684	22,741	64,010	20,042	1,350	54,831	1,350	164,324	0

Program Summary: Waste Collection And Disposal

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
GI	6,300	0	0	0	0	0	0	0	0	0	0
WB	428,240	9,827	17,684	22,741	64,010	20,042	1,350	54,831	1,350	164,324	0
WF	43,998	10,000	3,000	0	0	0	0	0	0	0	0
Total	478,537	19,827	20,684	22,741	64,010	20,042	1,350	54,831	1,350	164,324	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	0	0	0	0	0	0	0	0	0	0	0
PLAN	4,435	251	106	481	241	50	0	5,600	0	6,372	0
DGN	20,667	926	2,246	857	2,104	740	500	27,501	500	32,202	0
CONST	445,122	18,248	17,999	18,550	56,350	17,750	750	18,750	750	112,900	0
INSP	8,302	402	333	2,851	4,111	1,500	100	1,900	100	10,562	0
EQUIP	0	0	0	2	1,204	2	0	1,080	0	2,288	0
OTHER	12	0	0	0	0	0	0	0	0	0	0
Total	478,537	19,827	20,684	22,741	64,010	20,042	1,350	54,831	1,350	164,324	0

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AIEA HEIGHTS SEWERS, SECTION 4, IMPROVEMENT DISTRICT, TMK 9-9-15 TO 17

Project:	1971280	Function:	Sanitation	Council:	07
Priority No.:	1	Program:	Improvement District-Sewers	Nbrd Board:	20
TMK:		Department:	Environmental Services	Senate:	16
				House:	33
				Other:	

Description: Remaining portion of unsewered properties bounded by Aiea Stream, forest reserve boundary, Aiea-Kalauao boundary and Kaupili Place. Area of project is about 54 acres. Sewage pump station or low pressure sewer system (lpss) may be required. Land acquisition for easements is estimated at 75,000 square feet.

Justification: Project of local benefits which will eliminate defective cesspools and health hazards. Continuation of Aiea system. Will serve approximately 132 homes.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	1	0	1	0
PLAN	SR	0	0	0	0	0	1	0	1	0	2	0
DGN	SR	0	0	0	0	0	500	0	1	0	501	0
CONST	SR	0	0	0	0	0	0	0	2,400	0	2,400	0
INSP	SR	0	0	0	0	0	0	0	600	0	600	0
	Total	0	0	0	0	0	501	0	3,003	0	3,504	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2020	6/30/2022
DGN	7/1/2020	6/30/2024
CONST	7/1/2022	6/30/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

EWA BEACH SEWERS, SECTION 4, IMPROVEMENT DISTRICT, TMK:9-1-01:37 - 42

Project:	1997811	Function:	Sanitation	Council:	09
Priority No.:	4	Program:	Improvement District-Sewers	Nbrd Board:	23
TMK:		Department:	Environmental Services	Senate:	19
				House:	40
				Other:	

Description: Provide sewer service to an area of properties bounded by the Honouliuli-Puuloa district boundary, North road, the U.S. Naval Reservation and Kilaha Street. The area of the project is about 162 acres and will be serviced with 8 and 10 inch lines.

Justification: The project is of local benefit which will eliminate defective cesspools and health hazards. The project will service approximately 979 lots.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,750	0	0	0	0	0	1	0	0	1	0
CONST	SA	0	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	22,000	0	0	22,000	0
INSP	SR	0	0	0	0	0	0	1,600	0	0	1,600	0
	Total	1,750	0	0	0	0	0	23,601	0	0	23,601	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2008	6/30/2024
CONST	7/1/2021	6/30/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

KAHALUU SEWERS, SECTION 3, IMPROVEMENT DISTRICT, TMK 4-7-12 TO 18, 24,

Project:	1981040	Function:	Sanitation	Council:	02
Priority No.:	5	Program:	Improvement District-Sewers	Nbrd Board:	29
TMK:		Department:	Environmental Services	Senate:	23
				House:	47
				Other:	

Description: A sewer district of all unsewered properties bounded by Kamehameha Highway, Waihee Road, Ahilama Road, and Kaimalolo Place. Project area is about 200 acres. The project is being designed for low pressure sewer system (lpss), with 1-1/4 to 6 inch HDPE pipe. Land acquisition for easements is approximately 24,270 square feet.

Justification: Project of local benefit which will eliminate defective cesspools and health hazards. Project will serve approximately 297 lots.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	1	0	1	261
PLAN	SR	0	0	0	0	0	0	0	200	0	200	2
DGN	SR	0	0	0	0	0	0	0	1	0	1	900
CONST	SA	0	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	9,500
INSP	SR	0	0	0	0	0	0	0	0	0	0	600
	Total	0	0	0	0	0	0	0	202	0	202	11,263

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	12/1/2022	12/1/2025
PLAN	12/1/2022	12/1/2025
DGN	12/1/2022	12/1/2028

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

KAHALUU SEWERS, SECTION 5, IMPROVEMENT DISTRICT

Project:	2015052	Function:	Sanitation	Council:	03
Priority No.:		Program:	Improvement District-Sewers	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: A sewer district of all unsewered properties between Hui Io street and the end of Ahuimanu Road. Project area is 128 acres with 6 and 8 inch pipe. Land acquisition for easements is approximately 14,300 square feet. A sewage pump station or low pressure pump systems may be required.

Justification: Project of local benefit which will eliminate defective cesspools and health hazards. Project will serve approximately 531 lots.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	122
PLAN	SR	0	0	0	0	0	0	0	0	0	0	202
DGN	SR	0	0	0	0	0	0	0	0	0	0	701
	Total	0	0	0	0	0	0	0	0	0	0	1,025

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	6/1/2024	12/1/2027
PLAN	6/1/2024	12/1/2027
DGN	6/1/2024	12/1/2030

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KAILUA SEWERS, SECTION 10, IMPROVEMENT DISTRICT

Project:	2015053	Function:	Sanitation	Council:	03
Priority No.:		Program:	Improvement District-Sewers	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	24
				House:	50
				Other:	

Description: Bounded by the end of Mokapu Boulevard, Naval Reservation boundary, Kailua Bay and Kawai Nui Drainage Canal, the area of project is about 42 acres. Land acquisition for easements is estimated to be 25,000 square feet. For the parcels that cannot be served by gravity sewer service, either individual low pressure sewer pumps will be needed at each parcel, or a central wastewater pump station may be needed requiring a site area of 7,500 square feet.

Justification: The project will extend the Kailua sewer system to an area containing approximately 114 existing homes currently not served by public sewers. Parcels that cannot be served by gravity sewer service will need a pump station, or alternative individual low pressure pumps. The project is of local benefit which will eliminate cesspools and the associated hazards to public health and the environment.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	300	0	1	0	301	0
DGN	SR	0	0	0	0	0	1	0	800	0	801	0
	Total	0	0	0	0	0	301	0	801	0	1,102	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2020	6/30/2024
DGN	7/1/2020	6/30/2027

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KAMEHAMEHA HIGHWAY SEWERS, IMPROVEMENT DISTRICT, KANEOHE

Project:	2005064	Function:	Sanitation	Council:	02
Priority No.:	2	Program:	Improvement District-Sewers	Nbrd Board:	29
TMK:		Department:	Environmental Services	Senate:	23
				House:	48
				Other:	

Description: Project consists of providing sewers to 37 lots along Kamehameha Highway in Kahaluu between 47-004 and 47-069 Kamehameha Highway. Area consists of approximately six acres and will be serviced by a low pressure sewer system (LPSS).

Justification: The unsewered area is to be serviced by an improvement district as recommended in the Kailua-Kaneohe-Kahaluu Facilties Plan, 1998. The project is of local benefit which will eliminate cesspools and the associated hazards to public health and the environment.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	1	0	1	2	0
PLAN	SR	15	0	0	0	0	0	100	0	1	101	0
DGN	SR	0	0	0	0	0	0	300	0	100	400	0
CONST	SA	0	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	1,050	1,050	0
INSP	SR	0	0	0	0	0	0	0	0	200	200	0
	Total	15	0	0	0	0	0	401	0	1,352	1,753	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2021	6/30/2023
DGN	7/1/2021	12/1/2025
CONST	12/1/2023	12/1/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

MAKIKI HEIGHTS AND PUOWAINA DRIVE SEWERS, IMPROVEMENT DISTRICT

Project:	1972065	Function:	Sanitation	Council:	06
Priority No.:	3	Program:	Improvement District-Sewers	Nbrd Board:	10
TMK:		Department:	Environmental Services	Senate:	11
				House:	24
				Other:	

Description: Improvement district includes areas at the entrance to Punchbowl area, along Prospect Street, and above Nehoa Street on the slopes of Tantalus. Project area is approximately 96 acres. Land acquisition for easements is estimated at approximately 100,000 square feet. Planning study in 2013 indicated the cost to sewer these areas was very high, and therefore the project is deferred, and will be re-scheduled in the future subject to changes in feasibility or requirements.

Justification: The project is of local benefit which will eliminate approximately 300 cesspools and the associated hazards to public health and the environment. This project will provide public sewers for an existing developed area of Oahu.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	377	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	SA	0	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	377	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	8/1/2009	7/1/2014

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

WAIMANALO SEWERS, SECTION 2, IMPROVEMENT DISTRICT

Project:	2015054	Function:	Sanitation	Council:	
Priority No.:		Program:	Improvement District-Sewers	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Provide sewer service to an area of properties makai (ocean-side) of Kalanianaole Highway, between and including Aloiloi Street and Wailea Street. The project will service approximately 350 lots.

Justification: The project is of local benefit which will eliminate cesspools, some of which may be detrimental to the public health or environment.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	100
PLAN	SR	0	0	0	0	0	0	0	300	0	300	2
DGN	SR	0	0	0	0	0	0	0	1	0	1	600
CONST	SR	0	0	0	0	0	0	0	0	0	0	6,500
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	301	0	301	7,202

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2022	12/1/2025
DGN	7/1/2022	12/1/2028

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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Department Summary: Environmental Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
GI	0	0	0	0	0	0	0	0	0	0	0
SA	0	0	0	0	0	0	0	0	0	0	0
SR	2,141	0	0	0	0	802	24,002	4,307	1,352	30,463	19,490
Total	2,141	0	0	0	0	802	24,002	4,307	1,352	30,463	19,490

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	0	0	0	0	0	0	1	2	1	4	483
PLAN	391	0	0	0	0	301	100	502	1	904	206
DGN	1,750	0	0	0	0	501	301	803	100	1,705	2,201
CONST	0	0	0	0	0	0	22,000	2,400	1,050	25,450	16,000
INSP	0	0	0	0	0	0	1,600	600	200	2,400	600
Total	2,141	0	0	0	0	802	24,002	4,307	1,352	30,463	19,490

Program Summary: Improvement District-Sewers

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
GI	0	0	0	0	0	0	0	0	0	0	0
SA	0	0	0	0	0	0	0	0	0	0	0
SR	2,141	0	0	0	0	802	24,002	4,307	1,352	30,463	19,490
Total	2,141	0	0	0	0	802	24,002	4,307	1,352	30,463	19,490

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	0	0	0	0	0	0	1	2	1	4	483
PLAN	391	0	0	0	0	301	100	502	1	904	206
DGN	1,750	0	0	0	0	501	301	803	100	1,705	2,201
CONST	0	0	0	0	0	0	22,000	2,400	1,050	25,450	16,000
INSP	0	0	0	0	0	0	1,600	600	200	2,400	600
Total	2,141	0	0	0	0	802	24,002	4,307	1,352	30,463	19,490

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AHUIMANU WASTEWATER PRELIMINARY TREATMENT FACILITY FORCE MAIN AND SEWER IMP

Project:	2008063	Function:	Sanitation	Council:	03
Priority No.:	10	Program:	Sewage Collection And Disposal	Nbrd Board:	29
TMK:		Department:	Environmental Services	Senate:	24
				House:	48
				Other:	

Description: Project includes condition assessment of the existing force main, report to EPA/DOH, follow-up condition assessment work and improvements, and development of alternatives for long-term reliability of service. The project may include modifications to the existing force main, pump system, appurtenances and gravity pipe system, or alternative systems. The alternative sewer improvement project includes a new gravity sewer in Haiku Road, which would divert flow from the existing force main starting at the intersection of Kahekili Highway and Haiku Road, which would effectively reduce the length of the Ahuimanu force main.

Justification: The existing force main is a critical link in the wastewater system for Ahuimanu, due to limited options for providing back-up service should the force main experience a break. Investigation and assessment of this force main is necessary to determine its structural and operating conditions. Implementing the follow-up action plan and recommended improvements/modifications is necessary for continued reliable service. The proposed gravity sewer in Haiku Road would effectively shorten the length of the existing force main, thus replacing the need for some of the force main rehabilitation work, and reducing the long-term maintenance costs of the force main.

Use of Funds: Plan, design, construct and inspect force main and sewer improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	1	0	0	0	0	0	0	0	0	0
LAND	SW	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	1,262	1	1	0	0	0	0	0	0	0	0
PLAN	SW	0	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,540	200	1	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	3,000	2,000	0	0	0	0	0	0	0	0
CONST	SW	315	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	300	200	0	0	0	0	0	0	0	0
	Total	3,117	3,502	2,202	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2009	7/1/2014
DGN	7/1/2011	12/1/2018
CONST	6/30/2013	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

AHUIMANU WASTEWATER PRE-TREATMENT FACILITY IMPROVEMENTS AND EQUALIZATION F

Project:	2013046	Function:	Sanitation	Council:	03
Priority No.:	34	Program:	Sewage Collection And Disposal	Nbrd Board:	29
TMK:		Department:	Environmental Services	Senate:	24
				House:	48
				Other:	

Description: The Ahuimanu wastewater preliminary treatment facility and pump system needs upgrades/modifications/ improvements in accordance with current spill contingency plans, projected peak wet weather flows, and reliability needs, including possible equalization storage tank facilities. The project may include improvements or modifications to screenings and grit removal, pumping, septage receiving, and other material handling facilities. The project may also include related facility modifications and appurtenances for reduction of potential odors and corrosion, and for continued long-term reliability.

Justification: This project will address requirements of the 2010 Consent Decree, as well as address long-term reliability needs.

Use of Funds: Plan and design wastewater pre-treatment and equalization facility improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	101	1	0	0	1	1	0	0	0	2	0
PLAN	SW	901	0	1	0	0	0	0	0	0	0	0
DGN	SR	900	1,000	0	0	500	1	0	0	0	501	0
DGN	SW	901	0	1,000	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	40,000	1	0	0	0	40,001	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	800	800	0	0	0	1,600	0
	Total	2,803	1,001	1,001	0	41,301	803	0	0	0	42,104	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2013	1/1/2018
DGN	1/1/2015	12/30/2021
CONST	1/1/2017	12/30/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

AIRPORT SEWER REHABILITATION/RECONSTRUCTION

Project:	2006052	Function:	Sanitation	Council:	07
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	19
TMK:		Department:	Environmental Services	Senate:	15
				House:	30
				Other:	

Description: To rehabilitate manholes and sewer lines on Aolele Street, and upstream sewers. Phase 1 includes approximately 1830 lf of 42" diameter reinforced concrete pipe and 13 manholes which need to be rehabilitated. Phase 2 of the project will include additional rehabilitation work on the sewer mains upstream of the phase 1 work area.

Justification: Addressing this deficiency is required by the 2010 Consent Decree, as project SI-CS-50. Investigation work on sewers in the vicinity found that additional upstream sewers also need rehabilitation. The additional work will be included in phase 2 of the project.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	248	0	0	0	0	0	0	0	0	0	0
DGN	SR	654	0	0	0	0	0	0	0	0	0	0
CONST	SR	6,285	0	0	0	0	0	0	0	0	0	0
INSP	SR	610	0	0	0	0	0	0	0	0	0	0
	Total	7,797	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2006	12/1/2008
DGN	12/1/2008	1/1/2010
CONST	1/1/2010	12/1/2012
INSP	1/1/2010	12/1/2012

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

ALA MOANA BOULEVARD/AUAHI STREET SEWER REHABILITATION

Project:	2005071	Function:	Sanitation	Council:	06
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	11
TMK:		Department:	Environmental Services	Senate:	12
				House:	26
				Other:	

Description: This project combines three projects along Auahi Street and Ala Moana Boulevard, between Ward Avenue and Keawe Street. Auahi Street Structural Rehabilitation, SI-CS-53, rehabilitates approximately 2300 feet of the 6x6 sewer in Auahi Street, and approximately 370 feet of sewer in Keawe St. and Ward Ave. Ala Moana-24 Structural Rehabilitation, SI-CS-54, rehabilitates approximately 2100 feet of 24-inch pipe in Ala Moana Boulevard. Ala Moana-36 Structural Rehabilitation, SI-CS-55, rehabilitates approximately 2200 feet of 36-inch pipe in Ala Moana Boulevard. Sewer manholes in this area will also be rehabilitated. The project will also look at the possibility of abandoning the 24 and/or 36-inch sewers, by reconfiguring flows in the Kakaako area.

Justification: These projects are required by the 2010 Consent Decree, as projects SI-CS-53, 54, and 55.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	228	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,601	0	0	0	0	0	0	0	0	0	0
CONST	SR	12,330	0	0	0	0	0	0	0	0	0	0
INSP	SR	800	0	0	0	0	0	0	0	0	0	0
	Total	14,959	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	2/1/2005	5/13/2009
DGN	6/1/2008	6/30/2012
CONST	6/30/2010	12/31/2013

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

ALA MOANA-KAKA'AKO TRUNK SEWER

Project:	2015049	Function:	Sanitation	Council:	04
Priority No.:	40	Program:	Sewage Collection And Disposal	Nbrd Board:	11
TMK:		Department:	Environmental Services	Senate:	12
				House:	22
				Other:	

Description: Proposed new gravity sewer line from the diamond head end of Ala Moana Park to the vicinity of existing Ala Moana Wastewater Pump Stations (WWPS) nos. 1 and 2. Alternative configurations and routes for the new sewer to be evaluated. This project would be done in coordination with a proposed new or reconstructed Ala Moana WWPS, near nos. 1 and 2, to accommodate this new deeper sewer, and would potentially allow elimination of three other existing upstream WWPS's.

Justification: Long-term improvement to accommodate future growth, projected wet weather flows, provide ease of maintenance of sewers, and possible elimination of three existing upstream WWPS's.

Use of Funds: Plan and design Ala Moana-Kaka'ako trunk sewer.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	1	1	1	0	0	3	0
PLAN	SR	0	0	0	0	500	1	1	1	0	503	0
PLAN	SW	0	0	1,000	1,000	0	0	0	0	0	1,000	0
DGN	SR	0	0	0	0	10,000	1	2,000	1,000	0	13,001	0
DGN	SW	0	0	1	1	0	0	0	0	0	1	0
CONST	SR	0	0	0	0	0	0	150,000	1	0	150,001	0
INSP	SR	0	0	0	0	0	0	12,000	1	0	12,001	0
	Total	0	0	1,001	1,001	10,501	3	164,002	1,003	0	176,510	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/20/2018	7/20/2020
PLAN	1/1/2017	1/1/2021
DGN	1/1/2019	1/1/2025
CONST	1/1/2022	1/1/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

ALA MOANA WASTEWATER PUMP STATION FORCE MAIN NO. 2 REHABILITATION

Project:	2010050	Function:	Sanitation	Council:	06
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	13
TMK:		Department:	Environmental Services	Senate:	13
				House:	26
				Other:	

Description: Improvements and rehabilitation work needed for the existing Ala Moana WWPS Force Main No. 2, per recommendations from condition assessment work conducted in 2007 to 2008, in accordance with the 2007 Force Main Stipulated Order and the 2010 Consent Decree.

Justification: The work is in accordance with the requirements of the 2007 Force Main Stipulated Order, the 2010 Consent Decree, and follow-up action plans.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	900	0	0	0	0	0	0	0	0	0	0
DGN	SR	500	0	0	0	0	0	0	0	0	0	0
CONST	SR	229	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	1,629	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2010	6/1/2018
DGN	6/1/2010	12/1/2012
CONST	10/1/2011	12/1/2012

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

ALA MOANA WASTEWATER PUMP STATION FORCE MAINS NO. 3 AND 4

Project:	2006046	Function:	Sanitation	Council:	05
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	13
TMK:		Department:	Environmental Services	Senate:	13
				House:	26
				Other:	

Description: Work includes new force mains no. 3 and no. 4, to provide back-up capacity, and to convey the projected peak wet weather flows from the Ala Moana WWPS to the Sand Island WWTP.

Justification: The project will meet the requirements of the 2010 Consent Decree, project no. SI-PS-06. Currently, the ability to conduct assessments and maintenance on the existing force mains is limited due to less than full back-up capacity in the existing lines. The new force mains will allow fully reliable service when assessment and maintenance work is needed.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	1,076	0	0	0	0	0	0	0	0	0	0
PLAN	SR	1,081	0	0	0	0	0	0	0	0	0	0
DGN	SR	8,501	0	0	0	0	0	0	0	0	0	0
CONST	SR	128,345	0	0	0	0	0	0	0	0	0	0
INSP	SR	4,700	0	0	0	0	0	0	0	0	0	0
	Total	143,703	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2006	12/31/2009
DGN	12/31/2009	6/30/2016
CONST	6/30/2011	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

ALA MOANA WASTEWATER PUMP STATION NO.3

Project:	2015050	Function:	Sanitation	Council:	05
Priority No.:	33	Program:	Sewage Collection And Disposal	Nbrd Board:	13
TMK:		Department:	Environmental Services	Senate:	13
				House:	26
				Other:	

Description: Proposed new wastewater pump station (WWPS) in the vicinity of the existing Ala Moana WWPS nos. 1 and 2. Project may also include reconstruction of part or all of WWPS nos. 1 and 2, as well as the associated force main and gravity sewer connections at the WWPS's. Alternative configurations and sites to be considered. The project is proposed to be done in coordination with the new proposed Ala Moana-Kaka'ako Trunk Sewer project, and may allow possible elimination of three other existing WWPS's upstream.

Justification: Long-term improvement to provide capacity for future growth, projected peak wet weather flows, improved efficiency and reliability, and modernization of pumping facilities. Along with the new proposed Ala Moana-Kaka'ako Trunk Sewer project, the project may allow possible elimination of three other existing WWPS's upstream.

Use of Funds: Acquire land, plan and design Ala Moana Wastewater Pump Station No. 3.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	30,000	1	1	1	1	0	0	4	0
PLAN	SR	0	0	1	1,000	1,000	500	1	1	1	2,503	0
DGN	SR	0	0	0	1	1	8,000	2,000	1	1,000	11,003	0
CONST	SR	0	0	0	0	0	0	0	0	100,000	100,000	0
INSP	SR	0	0	0	0	0	0	0	0	3,000	3,000	0
	Total	0	0	30,001	1,002	1,002	8,501	2,002	2	104,001	116,510	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	9/1/2016	12/31/2021
PLAN	9/1/2017	1/1/2022
DGN	9/1/2018	12/31/2024
CONST	1/1/2023	1/1/2026

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

ALA MOANA WASTEWATER PUMP STATION ODOR CONTROL

Project:	2017051	Function:	Sanitation	Council:	05
Priority No.:	50	Program:	Sewage Collection And Disposal	Nbrd Board:	13
TMK:		Department:	Environmental Services	Senate:	13
				House:	26
				Other:	

Description: Project includes odor control improvements in the area of the Ala Moana Wastewater Pump Station, including improvements on land anticipated to be acquired adjacent to the existing pump station site, as well as on the existing site.

Justification: Adequate odor control is needed to minimize impacts to the public from wastewater odor, and to ensure compliance with regulations. Odor control measures may also provide protection to structures and facilities from corrosive substances.

Use of Funds: Plan and design odor control improvements at Ala Moana WWPS area.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	1	0	1	0	0	2	0
PLAN	SW	0	0	500	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	0	1,000	0	1	1	0	1,002	0
DGN	SW	0	0	1	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	15,000	1	0	15,001	0
INSP	SR	0	0	0	0	0	0	700	700	0	1,400	0
	Total	0	0	501	0	1,001	0	15,702	702	0	17,405	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	7/1/2021
DGN	7/1/2017	7/1/2023
CONST	7/1/2021	7/1/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

ALA MOANA WASTEWATER PUMP STATION UPGRADE

Project:	2013048	Function:	Sanitation	Council:	05
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	13
TMK:		Department:	Environmental Services	Senate:	13
				House:	26
				Other:	

Description: This project is intended to upgrade the WWPS capacity from 167 MGD to the projected peak flow, including wet weather flow, for the year 2030 or alternative planning period. Updating of the flow projections is on-going. Project also includes surge control for the force main system, per the follow-up action plan from the force main condition assessment work.

Justification: This project will address requirements of the 2010 Consent Decree in regards to the surge control work, which has a 2020 deadline, as well as address long-term capacity and reliability needs.

Use of Funds: Plan, design, construct and inspect upgrades to Ala Moana Wastewater Pump Station.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	601	0	0	1	0	0	0	0	0	1	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	1,001	0	0	1	0	0	0	0	0	1	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	20,000	0	0	0	0	0	20,000	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	2,000	0	0	0	0	0	2,000	0
	Total	1,602	0	0	22,002	0	0	0	0	0	22,002	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2013	1/1/2018
DGN	6/1/2016	12/31/2020
CONST	7/1/2018	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

ALA MOANA WWPS FORCE MAIN NO.2 SYSTEM

Project:	2017060	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Project includes the next scheduled condition assessment of the existing force main system, follow-up action plan and improvements, for 2021. The project may include rehabilitation work for the force main system and appurtenances.

Justification: Investigation and assessment of the force main system is necessary to determine the structural and operating conditions. Implementing the follow-up action plan and recommended improvements/ modifications is necessary for continued reliable service.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	1,000	0	0	0	1,000	0
DGN	SR	0	0	0	0	0	1	0	0	0	1	0
	Total	0	0	0	0	0	1,001	0	0	0	1,001	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2020	7/1/2022
DGN	12/1/2020	7/1/2023

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

ALIAMANU NO. 1 AND NO. 2 WASTEWATER PUMP STATION FORCE MAINS

Project:	2008069	Function:	Sanitation	Council:	07
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	18
TMK:		Department:	Environmental Services	Senate:	15
				House:	99
				Other:	

Description: Project includes condition assessment of the existing force mains, report to EPA/DOH, follow-up condition assessment work and improvements, and development of alternatives for long-term reliability of service. The project may include improvements, replacement and/or partial replacement of the existing force mains and appurtenances.

Justification: Investigation and assessment of the force mains is necessary to determine their structural and operating conditions, and to address requirements of the 2010 Consent Decree. Implementing the follow-up action plan and recommended improvements/modifications is necessary for continued reliable service.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	1,301	0	0	0	0	0	0	0	0	0	0
DGN	SR	902	0	0	0	0	0	0	0	0	0	0
CONST	SR	1,867	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	4,070	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2007	12/30/2015
DGN	12/1/2013	12/1/2017
CONST	6/1/2015	12/1/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

ALIAMANU NO. 1 AND NO. 2 WASTEWATER PUMP STATIONS UPGRADE AND SEWER RELIEF

Project:	2004088	Function:	Sanitation	Council:	07
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	18
TMK:		Department:	Environmental Services	Senate:	15
				House:	99
				Other:	

Description: This project will evaluate the need to upgrade two wastewater pump stations (WWPS) for the projected peak wet weather design flows, in accordance with the 2010 Consent Decree, identified as projects #SI-PS-16 and #SI-PS-17. The project will also provide mitigation against potential area flooding, and provide other miscellaneous improvements. The project also evaluated the need for sewer relief to about 2,250 ft of sewerline downstream of the pump stations, identified as project #SI-CS-01, but it was determined to be not required. FY2008 construction funds used for Phase 1 improvements, for controlling infiltration and inflow to the WWPS's. Subsequent planning work includes evaluation of the Phase 1 results, and options for the possible elimination of No. 1 WWPS by constructing a deeper gravity sewer, to be done under the proposed Aliamanu No. 1 WWPS-Gravity Sewer Replacement project.

Justification: Hydraulic deficiencies in these 2 existing WWPS's were projected in the Final Sewer I/I Plan, 1999. The projects are in close proximity, have similar scope and schedule, and thus have been consolidated into one project for efficiency. This project will address requirements of the 2010 Consent Decree, as well as address long-term reliability needs.

Use of Funds: Plan and design upgrades and sewer relief at Aliamanu No. 1 and No. 2 Wastewater Pump Stations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	984	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,992	0	0	0	0	0	0	0	0	0	0
CONST	SR	332	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	3,308	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	2/1/2005	8/1/2015
DGN	7/1/2008	12/1/2016
CONST	7/1/2009	12/1/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

ALIAMANU NO.1 WWPS - GRAVITY SEWER REPLACEMENT

Project:	2017057	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Project will replace the existing Aliamanu No.1 WWPS by constuction of a new gravity sewer to go around the pump station.

Justification: Long-term cost savings are anticipated by eliminating the pump station. This improvement would also replace the requirements for project no. SI-PS-16 of the 2010 Consent Decree, para. 18.f., which requires consideration of upgrading the capacity of the pump station, with the construction completion schedule allowed after 2020.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	1	0	1	0	1	3	0
PLAN	SR	0	0	0	0	500	0	1	0	1	502	0
DGN	SR	0	0	0	0	1	0	1,000	0	200	1,201	0
CONST	SR	0	0	0	0	0	0	0	0	20,000	20,000	0
INSP	SR	0	0	0	0	0	0	0	0	800	800	0
	Total	0	0	0	0	502	0	1,002	0	21,002	22,506	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	10/1/2019	7/1/2021
PLAN	7/1/2019	7/1/2022
DGN	7/1/2019	7/1/2024
CONST	1/1/2023	7/1/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

AWA STREET WASTEWATER PUMP STATION, FORCE MAIN AND SEWER SYSTEM IMPROVEME

Project:	2011046	Function:	Sanitation	Council:	07
Priority No.:	22	Program:	Sewage Collection And Disposal	Nbrd Board:	15
TMK:		Department:	Environmental Services	Senate:	13
				House:	29
				Other:	

Description: This project initially included miscellaneous structural, mechanical and electrical improvements in the planning phase, and force main assessment and upgrade work. The project includes possible upgrades to the pump station capacity based on the wet weather flow re-assessment program of the 2010 Consent Decree, and also alternative sewer system improvements which may allow decommissioning or re-sizing the capacity of the pump station. The current recommendation is for new sewer relief lines to be constructed to allow for re-sizing of the pump station. The construction to be done with FY17 and FY18 funds includes a proposed new sewer relief in Waikamilo Road, proposed pump station and force main improvements and related work. Future construction funds in FY22 are for a proposed Phase 2, to include additional sewer relief/rehabilitation work needed in the area.

Justification: This project will address the requirements of the 2010 Consent Decree, project #SI-PS-04, and also parts of other projects including SI-CS-08 and SI-CS-10, and will provide long-term improvements for sewer capacity in the Iwilei area, for future growth and projected wet weather flows, and continued reliable service of the pump station system.

Use of Funds: Plan, design, construct and inspect pump station, force main and sewer system improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	1	1	0	0	0	1	1	0	2	0
LAND	SW	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	1,003	1	1	1	0	0	1	1	0	3	0
PLAN	SW	501	0	0	0	0	0	0	0	0	0	0
DGN	SR	2,001	2,000	2,000	500	0	0	2,000	1,000	1	3,501	0
DGN	SW	2,500	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	1	80,000	40,000	0	0	0	100,000	1	140,001	0
INSP	SR	0	1	1,500	1,500	0	0	0	1,500	1,500	4,500	0
	Total	6,005	2,004	83,502	42,001	0	0	2,002	102,502	1,502	148,007	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/30/2011	6/30/2017
DGN	6/30/2014	6/30/2020
CONST	7/1/2017	6/30/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

BEACHWALK WASTEWATER PUMP STATION

Project:	2006125	Function:	Sanitation	Council:	04
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	09
TMK:		Department:	Environmental Services	Senate:	12
				House:	22
				Other:	

Description: Project upgrades the capacity of the WWPS to address projected wet weather peak flow. Project may include provision for lowering the wetwell to accommodate a new lower trunk line in Lewers St, either by an addition to the existing wetwell, or by constructing an entirely new wetwell. Other alternatives may include eliminating or relocating the WWPS. Initial phase of the project, funded with FY2009 Construction funds, includes interim upgrade and reliability improvements, pending the recommendation for elimination of the pump station.

Justification: The objective of the project is to provide capacity in the Beachwalk WWPS system in accordance with wet weather flow projections, and also to address reliability requirements, including requirements of the 2007 Stipulated Order and the 2010 Consent Decree.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SR	2,010	0	0	0	0	0	0	0	0	0	0
CONST	SR	4,816	0	0	0	0	0	0	0	0	0	0
INSP	SR	1,050	0	0	0	0	0	0	0	0	0	0
	Total	7,876	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/1996	7/1/2010
DGN	2/1/2006	6/30/2013
CONST	9/1/2009	6/30/2013

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

BEACHWALK WASTEWATER PUMP STATION FORCE MAIN

Project:	1995811	Function:	Sanitation	Council:	04
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	09
TMK:		Department:	Environmental Services	Senate:	12
				House:	22
				Other:	

Description: New force main and modifications/upgrades to the existing Beachwalk wastewater pump station (WWPS) and force main system to improve reliability and increase wet weather hydraulic capacity. The new force main may be converted to a gravity trunk sewer in the future, which would allow the decommissioning of the existing WWPS and force main system. This conversion is subject to the proposed future new pump station to be located downstream, at Ala Moana Park or alternative location.

Justification: This project addresses the need to provide a replacement/back-up force main as required by the 2010 Consent Decree.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	578	0	0	0	0	0	0	0	0	0	0
DGN	SR	3,357	0	0	0	0	0	0	0	0	0	0
CONST	SR	62,623	0	0	0	0	0	0	0	0	0	0
INSP	SR	4,358	0	0	0	0	0	0	0	0	0	0
	Total	70,917	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/1996	5/1/2006
DGN	10/1/2005	12/31/2013
CONST	9/30/2009	12/31/2013

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

BEACHWALK WASTEWATER PUMP STATION FORCE MAIN SYSTEM

Project:	2016046	Function:	Sanitation	Council:	04
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	09
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: The project includes a condition assessment of the old Beachwalk Force Main, including an updated follow-up action plan, and subsequent rehabilitation work and improvements for the force main that are determined to be needed. Condition assessment work to be in accordance with requirements of the 2010 wastewater Consent Decree.

Justification: This project is in accordance with the requirements of the 2010 Consent Decree, and the 2011 Follow-up Action Plan for this force main which includes a condition assessment by Sept. 30, 2017.

Use of Funds: Plan and design improvements to Beachwalk wastewater pump station force main system.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SW	1,000	1,000	0	300	0	1	0	0	0	301	0
DGN	SW	1	1	0	500	0	1	0	0	0	501	0
CONST	SW	0	0	0	0	0	2,000	0	0	0	2,000	0
INSP	SW	0	0	0	0	0	1	0	0	0	1	0
	Total	1,001	1,001	0	800	0	2,003	0	0	0	2,803	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	9/30/2018
DGN	6/1/2017	6/30/2022
CONST	5/1/2020	5/1/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

BERETANIA STREET SEWER IMPROVEMENTS

Project:	2017059	Function:	Sanitation	Council:
Priority No.:	48	Program:	Sewage Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: Project includes gravity sewer improvements in the Beretania Street area, including reconstruction and/or relocation of sewer lines and sewer manholes to address deficiencies with the existing shallow system. Sewer improvements will meet current design standards. Work may include, but is not limited to, improvements between Artesian Street and Pawaa Lane, sewers to the east of Isenberg Street, and reconstruction of sewer laterals.

Justification: Sewer improvements are needed to reconstruct and/or relocate existing sewer lines and sewer manholes that are not deep enough, which has in the past interfered with road rehabilitation and improvements. Deeper sewer lines will allow appropriate road improvements to be done in the future.

Use of Funds: Plan and design improvements to the Beretania Street sewers.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SW	0	0	250	1	1	0	0	0	0	2	0
DGN	SW	0	0	1	250	1	0	0	0	0	251	0
CONST	SW	0	0	0	0	2,500	1	0	0	0	2,501	0
INSP	SW	0	0	0	0	200	100	0	0	0	300	0
	Total	0	0	251	251	2,702	101	0	0	0	3,054	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2017	7/1/2019
DGN	5/1/2017	12/1/2021
CONST	1/1/2019	12/1/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

CENTRAL OAHU WASTEWATER FACILITIES AND EFFLUENT REUSE

Project:	2007065	Function:	Sanitation	Council:	02
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	26
TMK:		Department:	Environmental Services	Senate:	23
				House:	46
				Other:	

Description: This project will provide for needed improvements identified in the Central Oahu Wastewater Facilities Plan which addresses long term wastewater collection, treatment, disposal, and reuse alternatives for the Wahiawa wastewater service area in Central Oahu. The project includes replacement/upgrades of wastewater treatment facilities to implement the recommendations of the plan for the treatment, disposal and reuse of wastewater. Project includes facilities to ensure the treatment plant meets recycled water requirements, per State DOH guidelines.

Justification: Project provides for the continued reliability of the plant, and production of recycled water per State DOH guidelines. The Wahiawa Wastewater Treatment Plant (WWTP) is currently under a Consent Decree (Consent Decree, Civil No. 94-1896-05) filed in State Court on March 2, 1998.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	FG	200	0	0	0	0	0	0	0	0	0	0
PLAN	SR	100	0	0	0	0	0	0	0	0	0	0
DGN	FG	234	0	0	0	0	0	0	0	0	0	0
DGN	SR	5,869	0	0	0	0	0	0	0	0	0	0
CONST	SR	30,489	0	0	0	0	0	0	0	0	0	0
INSP	SR	2,000	0	0	0	0	0	0	0	0	0	0
	Total	38,891	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2000	3/1/2014
DGN	12/1/2009	12/31/2018
CONST	1/10/2011	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

CHINATOWN SEWER REHABILITATION

Project:	2008070	Function:	Sanitation	Council:	06
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	13
TMK:		Department:	Environmental Services	Senate:	13
				House:	29
				Other:	

Description: Project consists of the rehabilitation or replacement of existing sewerlines in Chinatown. The project will remedy structural defects, address hydraulic capacity issues, prevent excessive pipe cracking and root damage, and address problems due to unstable soil conditions. The project includes sewer rehabilitation, lateral reconnections, surface repaving, and restoration work.

Justification: This area-wide sewer rehabilitation project includes work that addresses identified deficiencies. Rehabilitation work is required under the Gravity Sewer Rehabilitation and Replacement Program of the 2010 Consent Decree.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	1,001	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,501	1	0	0	0	0	0	0	0	0	0
CONST	SR	3,002	10,000	0	0	0	0	0	0	0	0	0
INSP	SR	0	800	0	0	0	0	0	0	0	0	0
	Total	5,504	10,801	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2007	12/1/2015
DGN	7/1/2009	12/31/2018
CONST	12/1/2011	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

COLLECTION SYSTEM MAINTENANCE - HALAWA BUILDING EXPANSION

Project:	2015044	Function:	Sanitation	Council:	06
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	20
TMK:		Department:	Environmental Services	Senate:	33
				House:	16
				Other:	

Description: Expand the existing Collection System Maintenance (CSM), ENV Dept, building located on Iwaena Street in Halawa. Expanded space is to accommodate engineers and other staff working for the CSM Division.

Justification: Space is needed to accommodate the engineering and other support activities, including enhanced computerized systems, for the CSM Division, reducing the need for contracting office space.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SW	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	1,500	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	1,500	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	1/1/2017
DGN	7/1/2014	5/1/2018
CONST	5/1/2016	5/1/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

DOWSETT HIGHLANDS RELIEF SEWER

Project:	2009099	Function:	Sanitation	Council:	06
Priority No.:	23	Program:	Sewage Collection And Disposal	Nbrd Board:	14
TMK:		Department:	Environmental Services	Senate:	13
				House:	26
				Other:	

Description: Plan, design and construct relief sewers in the Dowsett Highlands and Nuuanu area, or alternative project solution, to address the updated flow projections, per the requirements of the 2010 Consent Decree. The project combines two projects from the Consent Decree, both in the Nuuanu area, Dowsett Highlands Relief Sewer (SI-CS-42) and Nuuanu Relief Sewer (SI-CS-29). A new gravity relief sewer is recommended to divert flows away from SI-CS-42 and SI-CS-29, with the goal of alleviating flow surcharge conditions which may potentially cause sanitary sewer overflows during wet weather events. A new relief sewer alignment is proposed along portions of Nuuanu Pali Dr, Pali Hwy, Nuuanu Ave, and Dowsett Ave, to the intersection of Nuuanu Ave and School St. The work may also include rehabilitation of existing sewers and manholes which will help meet the goals of the project.

Justification: The project is intended to meet the requirements of the 2010 Consent Decree, project #SI-CS-42, to address hydraulic capacity issues. Project will also address portions or all of project #SI-CS-29, Nuuanu Relief Sewer.

Use of Funds: Plan, design, construct and inspect relief sewer improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	1	0	0	0	0	0	0	0	0
PLAN	SR	401	0	1	1	0	0	0	0	0	1	0
PLAN	SW	2	1	0	0	0	0	0	0	0	0	0
DGN	SR	2,201	0	1,700	4,500	0	0	0	0	0	4,500	0
DGN	SW	2,000	500	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	30,000	80,000	0	0	0	0	0	80,000	0
INSP	SR	0	0	800	1,200	0	0	0	0	0	1,200	0
	Total	4,604	501	32,502	85,701	0	0	0	0	0	85,701	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2011	12/1/2016
DGN	12/1/2014	6/30/2020
CONST	12/1/2017	6/30/2020
INSP	12/1/2017	6/30/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

ENCHANTED LAKE WASTEWATER PUMP STATION UPGRADE

Project:	2002044	Function:	Sanitation	Council:	03
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	24
				House:	50
				Other:	

Description: This project expands the Enchanted Lake WWPS capacity to accommodate the projected peak wet weather design flow. The project includes installing pumps, and misc. work to accommodate the upgrade, including some piping changes, a new generator, and electrical upgrades.

Justification: The project addresses the projected hydraulic deficiencies in the Enchanted Lake WWPS based on the analysis in the EPA-approved Final Sewer I/I Plan, 1999. The project addresses requirements of the 2010 Consent Decree.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	12	0	0	0	0	0	0	0	0	0	0
DGN	SR	699	0	0	0	0	0	0	0	0	0	0
CONST	SR	2,494	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
EQUIP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	3,205	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2001	11/1/2007
DGN	7/1/2007	6/30/2014
CONST	8/1/2008	6/30/2014

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

ENV SUPPORT FACILITIES AT HONOULIULI WWTP

Project:	2017053	Function:	Sanitation	Council:
Priority No.:	35	Program:	Sewage Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: Project includes a new laboratory, administration and ocean team buildings, central SCADA operation facility, central shops, covered warehouses and truck parking, maintenance buildings, truck washing facilities, facility for debris drying, and miscellaneous road, utility and site improvements, to be located at the Honouliuli WWTP site

Justification: New support facilities are needed to provide for moving of some functions from the Sand Island WWTP to the Honouliuli WWTP in preparation of upgrading Sand Island WWTP to full secondary treatment. Also, this will provide for relocation of the central SCADA operations and related emergency operations activities from Sand Island to a more protected location. Warehouse and storage improvements are needed for storm water quality improvements per the NPDES program requirements.

Use of Funds: Plan and design support facilities improvements at Honouliuli WWTP.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	500	1	1	1	0	0	0	3	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	1	600	1	600	0	0	0	1,201	0
CONST	SR	0	0	0	0	1	120,000	0	0	0	120,001	0
INSP	SR	0	0	0	0	0	1,200	1,200	0	0	2,400	0
	Total	0	0	501	601	3	121,801	1,200	0	0	123,605	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2017	7/1/2022
DGN	10/1/2018	7/1/2022
CONST	1/1/2020	7/1/2022
INSP	1/1/2020	7/1/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

EWA BEACH WASTEWATER PUMP STATION FORCE MAIN SYSTEM IMPROVEMENTS

Project:	2012056	Function:	Sanitation	Council:	01
Priority No.:	17	Program:	Sewage Collection And Disposal	Nbrd Board:	23
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: The project includes assessment, rehabilitation work and improvements for the existing force main, and work at the pump station that may be needed to provide compatibility with the force main system. Depending on the recommendations from the assessment, the project may include future reconstruction, rehabilitation, diversion facilities and/or other improvements for all or portions of the force main. Funds in FY17 and FY18 are for the first phase of force main improvements in the vicinity of the pump station. Future construction funds in FY2023 are programmed for second phase improvements, which may include a second force main.

Justification: This project will address requirements in the 2010 Consent Decree for force main assessment, planning and follow-up action.

Use of Funds: Design, construct and inspect pump station force main system improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	500	0	0	0	0	1	1	1	3	0
PLAN	SW	600	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	2,000	0	0	0	0	2,000	500	500	3,000	0
DGN	SW	401	0	500	1	0	0	0	0	0	1	0
CONST	SR	0	0	0	0	0	0	0	0	30,000	30,000	0
CONST	SW	0	0	4,500	1	0	0	0	0	0	1	0
INSP	SR	0	0	0	0	0	0	0	0	1,200	1,200	0
INSP	SW	0	0	600	400	0	0	0	0	0	400	0
	Total	1,001	2,500	5,600	402	0	0	2,001	501	31,701	34,605	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2012	12/30/2016
DGN	6/1/2016	12/1/2020
CONST	12/1/2017	12/1/2020
INSP	12/1/2017	12/1/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

FORT DERUSSY WASTEWATER PUMP STATION, FORCE MAIN, AND UNIVERSITY AVENUE/McC

Project:	2013050	Function:	Sanitation	Council:	04
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	11
TMK:		Department:	Environmental Services	Senate:	12
				House:	22
				Other:	

Description: Evaluate need for improvements to the Fort DeRussy WWPS, force main and sewer system to address projected future peak flows, including peak wet weather flows, as required by the 2010 Consent Decree. Provide the recommended improvements, including reliability improvements to electrical, mechanical and structural components at the WWPS. Evaluate alternative sewer relief lines to allow possible future decommissioning of the WWPS. The current recommended alternative includes new sewer relief lines in Kuhio Avenue, in University Avenue, Fern Street, and possibly other locations, which could allow the WWPS to be decommissioned.

Justification: This project will address requirements of the 2010 Consent Decree, long-term reliability needs, and sewer capacity needs in the collection system upstream, for future growth and projected wet weather flows.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	1	1	0	2	0
PLAN	SR	0	0	0	0	0	0	1	1	1	3	0
PLAN	SW	800	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	0	0	0	1,000	500	500	2,000	0
DGN	SW	903	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	30,000	30,000	0
INSP	SR	0	0	0	0	0	0	0	0	1,000	1,000	0
	Total	1,703	0	0	0	0	0	1,002	502	31,501	33,005	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2014	1/1/2018
DGN	5/1/2016	12/30/2025
CONST	12/1/2023	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

HALAWA WASTEWATER PUMP STATION FORCE MAIN SYSTEM IMPROVEMENTS

Project:	2012046	Function:	Sanitation	Council:	06
Priority No.:	12	Program:	Sewage Collection And Disposal	Nbrd Board:	20
TMK:		Department:	Environmental Services	Senate:	14
				House:	33
				Other:	

Description: The project includes assessment, rehabilitation work and improvements for the existing force main, and work at the pump station that may be needed to provide compatibility with the force main system. Depending on the recommendations from the assessment, the project may include future reconstruction, rehabilitation, diversion facilities and/or other improvements for all or portions of the force main.

Justification: This project will address requirements in the 2010 Consent Decree for force main assessment, planning and follow-up action.

Use of Funds: Design, construct and inspect pump station force main system improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	1	0	0	0	0	400	0	0	400	0
PLAN	SW	400	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	1	1	0	0	0	0	0	0	0	0
DGN	SW	401	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	2,000	3,500	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	300	1	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	801	2,302	3,502	0	0	0	400	0	0	400	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2012	6/30/2017
DGN	5/1/2016	12/31/2019
CONST	6/1/2017	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

HART STREET WASTEWATER PUMP STATION FORCE MAIN SYSTEM IMPROVEMENTS

Project:	2012047	Function:	Sanitation	Council:	07
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	15
TMK:		Department:	Environmental Services	Senate:	15
				House:	29
				Other:	

Description: The project includes assessment, rehabilitation work and improvements for the existing force main, and work at the pump station that may be needed to provide compatibility with the force main system. The project includes replacement of the connection to the old force main at the pump station, including valve and meter work, and other improvements to the old force main identified in the 2011 revised follow-up action plan from the assessment of the old force main.

Justification: This project will address requirements in the 2010 Consent Decree for force main assessment, planning and follow-up action.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	2,946	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	2,946	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	12/31/2012	12/31/2014

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

HART STREET WWPS FORCE MAIN IMPROVEMENTS PHASE 3

Project:	2017054	Function:	Sanitation	Council:
Priority No.:	26	Program:	Sewage Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: Project includes the next scheduled condition assessment of the existing force main system, follow-up action plan and improvements, by 2019. The project may include rehabilitation work for the force main system and appurtenances. It is anticipated that the project will include rehabilitation of the back-up force main.

Justification: Investigation and assessment of the force main system is necessary to determine the structural and operating conditions. Implementing the follow-up action plan and recommended improvements/ modifications is necessary for continued reliable service.

Use of Funds: Plan and design force main improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	1	0	1	0	2	0
PLAN	SW	0	0	900	400	0	0	0	0	0	400	0
DGN	SR	0	0	0	0	0	800	0	200	0	1,000	0
DGN	SW	0	0	1	1	0	0	0	0	0	1	0
CONST	SR	0	0	0	0	0	0	0	20,000	0	20,000	0
INSP	SR	0	0	0	0	0	0	0	1,400	0	1,400	0
	Total	0	0	901	401	0	801	0	21,601	0	22,803	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2016	7/1/2021
DGN	10/1/2016	7/1/2024
CONST	1/1/2021	7/1/2024
INSP	1/1/2022	7/1/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

HEEIA WASTEWATER PUMP STATION IMPROVEMENTS

Project:	2009111	Function:	Sanitation	Council:	03
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	30
TMK:		Department:	Environmental Services	Senate:	23
				House:	48
				Other:	

Description: Plan, design and construct improvements to the Heeia Wastewater Pump Station in Kaneohe, Oahu. The work may include, but not be limited to, replacing pumps, piping, mechanical and electrical equipment, emergency generator, structural work, upgraded ventilation system, misc. upgrades to meet current building codes, and misc. site improvements. Updated peak wet weather flow estimates will be considered in the design.

Justification: The project will provide improvements, and compliance with current building codes, to ensure continued reliability of operations of the wastewater pump station. Some equipment is outdated, making parts difficult to obtain. Some minor cracking of the above ground structure has occurred. An upgraded emergency power system will ensure reliable operation during an extended power outage.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	1	0	0	0	1	0
LAND	SW	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	201	0	0	0	0	1	0	0	0	1	0
PLAN	SW	1	0	0	0	0	0	0	0	0	0	0
DGN	SR	650	0	0	0	0	1	0	0	0	1	0
DGN	SW	400	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	5,000	0	0	0	5,000	0
INSP	SR	0	0	0	0	0	500	0	0	0	500	0
	Total	1,252	0	0	0	0	5,503	0	0	0	5,503	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2008	12/31/2018
DGN	1/1/2015	12/31/2022
CONST	12/1/2020	12/31/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

HELE STREET SEWER RELIEF/REHABILITATION, KAILUA

Project:	2010062	Function:	Sanitation	Council:	03
Priority No.:	43	Program:	Sewage Collection And Disposal	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	25
				House:	51
				Other:	

Description: The project includes evaluation of existing sewers, and is anticipated to provide rehabilitation/relief of sewer lines in the area of Hele St., Kailua.

Justification: This project is needed to address hydraulic and/or structural deficiencies that are found, and is included in the requirements of the 2010 Consent Decree, project KK-CS-15. Construction completion is allowed to be done after 2020.

Use of Funds: Design, construct and inspect sewer relief/rehabilitation.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	703	0	0	0	0	0	0	0	0	0	0
DGN	SR	601	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	1	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	10,000	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	400	0	0	0	0	0	0	0	0
	Total	1,304	0	10,401	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2009	12/31/2017
DGN	12/31/2011	12/31/2020
CONST	12/31/2017	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

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HONOLULU AREA WASTEWATER PUMP STATION FACILITIES IMPROVEMENTS

Project:	2013051	Function:	Sanitation	Council:	99
Priority No.:	45	Program:	Sewage Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: The project includes evaluation and improvements determined to be needed at four existing wastewater pump stations (WWPS), Moana Park, Niu Valley, Paiko Drive and Kuliouou, including associated force mains and appurtenances. Project will evaluate projected flows, including peak wet weather flows, to address requirements of the flow assessment of the 2010 Consent Decree. Based on the flow assessment, the flow capacity at these WWPSs has been determined to be adequate for purposes of the Consent Decree. Project will also provide miscellaneous reliability improvements to electrical, mechanical and structural components at the pump stations, and alternatives as developed in the planning phase.

Justification: This project will address long-term capacity and reliability needs.

Use of Funds: Design wastewater pump station facilities improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	1	0	0	1	0	0	0	0	1	0
PLAN	SW	1,000	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	800	0	0	200	0	0	0	0	200	0
DGN	SW	2	0	400	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	5,000	0	0	0	0	5,000	0
INSP	SR	0	0	0	0	400	0	0	0	0	400	0
	Total	1,002	801	400	0	5,601	0	0	0	0	5,601	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2013	1/1/2018
DGN	1/1/2017	1/1/2022
CONST	12/1/2019	1/1/2022
INSP	12/1/2019	1/1/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

HONOULIULI WASTEWATER BASIN ODOR CONTROL

Project:	2010069	Function:	Sanitation	Council:	01
Priority No.:	30	Program:	Sewage Collection And Disposal	Nbrd Board:	23
TMK:		Department:	Environmental Services	Senate:	20
				House:	43
				Other:	

Description: Improvements required in the Honouliuli wastewater basin, including at the Honouliuli Wastewater Treatment Plant (WWTP), to address odor and corrosion issues. Construction funds in FY16 and FY17 will be used for new odor control facilities by the headworks area at the WWTP.

Justification: Adequate odor control is needed to minimize impacts to the public from wastewater odor, and to ensure compliance with air permit requirements. Odor control measures also provide protection to structures and facilities from corrosive substances.

Use of Funds: Design, construct and inspect odor control improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	902	1	0	0	0	0	0	0	0	0	0
DGN	SR	1,603	200	1	0	0	0	0	0	0	0	0
CONST	SR	0	10,000	1,000	0	0	0	0	0	0	0	0
INSP	SR	0	500	500	0	0	0	0	0	0	0	0
	Total	2,505	10,701	1,501	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2009	12/31/2016
DGN	12/31/2014	6/1/2019
CONST	6/1/2017	6/1/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

HONOULIULI WASTEWATER TREATMENT PLANT AND SEWER BASIN FACILITIES

Project:	2009110	Function:	Sanitation	Council:	01
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	23
TMK:		Department:	Environmental Services	Senate:	20
				House:	43
				Other:	

Description: Planning to include updating the Wastewater Facilities Plan, including evaluating alternatives for construction of new facilities to meet Federal and State requirements and for long-term improvements. Work will include the required EA and/or EIS. Work will address control of wet weather flow from the Waipahu, Pearl City, Waimalu, and Halawa Wastewater Pump Stations and from other tributary basins to the Honouliuli WWTP. Deep sewer tunnel and storage alternatives will be considered, including associated new Influent Pump Station facilities. Work may include geotechnical engineering, survey work, and similar preliminary work, and for design work that may be needed on an expedited basis to meet mandated schedules. Land acquisition of adjacent property to provide for expansion and upgrade of the WWTP. Planning work includes facility planning for secondary treatment upgrade at Honouliuli WWTP, and planning for treatment, handling, disposal and reclamation options for sludge and bio-solids. Includes initial planning for proposed new facilities at the Honouliuli WWTP site, which may include office space, laboratory, maintenance shops and storage, equipment storage, ocean monitoring support facilities, and/or operations and emergency facilities, in support of department wastewater functions.

Justification: The work is required to meet Federal and State requirements, including requirements of the 2010 Consent Decree, NPDES permits, and for long-term odor control and reliability improvements. The planning work is needed to identify and prioritize work for prevention and/or reduction of wastewater spills, including facilities that need to be rehabilitated or replaced, facilities needed to convey, store and/or contain the projected wet weather design flows, and facilities needed to support the department functions. Upgrade to full secondary treatment is required by the 2010 Consent Decree. Long-term improvements in facilites are needed to support future needs of the wastewater function, including meeting permit requirements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	26,510	0	0	0	0	0	0	0	0	0	0
PLAN	SR	14,000	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,000	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
EQUIP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	41,510	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2008	12/1/2019
DGN	1/1/2012	12/1/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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HONOULIULI WASTEWATER TREATMENT PLANT OUTFALL IMPROVEMENTS/REHABILITATION

Project:	2010053	Function:	Sanitation	Council:	01
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	23
TMK:		Department:	Environmental Services	Senate:	20
				House:	43
				Other:	

Description: Conduct an assessment of the existing outfall, and provide improvements or rehabilitation work determined to be needed for the outfall. Planning work is on-going, but latest indications are that no improvements or repairs are needed at this time.

Justification: Inspection, assessment, improvements and/or rehabilitation of the outfall to ensure continued reliability of this critical infrastructure.

Use of Funds: Plan and design Honouliuli wastewater treatment plant outfall.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	400	0	0	0	0	0	0	0	0	0	0
PLAN	SW	500	1	0	0	0	0	0	0	0	0	0
DGN	SR	1	0	0	0	0	0	0	0	0	0	0
DGN	SW	1	600	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	902	601	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2011	1/1/2018
DGN	10/1/2018	6/1/2024
CONST	12/1/2021	6/1/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

HONOULIULI WASTEWATER TREATMENT PLANT SECONDARY TREATMENT

Project:	2012058	Function:	Sanitation	Council:	01
Priority No.:	20	Program:	Sewage Collection And Disposal	Nbrd Board:	23
TMK:		Department:	Environmental Services	Senate:	20
				House:	43
				Other:	

Description: Upgrade the Honouliuli Wastewater Treatment Plant to include full secondary treatment of wastewater. The project includes the related support facilities, site improvements, solids handling facilities, odor control and applicable utility improvements needed for this upgrade, including rehabilitation or reconstruction of facilities that may be needed within the plant, to ensure the plant meets the projected future flows for the planning period, and for compliance with all applicable regulations and permits.

Justification: The project will address the requirements of the 2010 Consent Decree, para. 30.

Use of Funds: Plan, design, construct and inspect wastewater treatment plant improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	1	1	1	1	1	0	0	0	0	2	0
PLAN	SW	3,000	0	0	0	0	0	0	0	0	0	0
DGN	SR	10,000	10,000	1,000	35,000	14,000	10,000	18,000	0	0	77,000	0
DGN	SW	2	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	60,000	240,000	190,000	1	0	0	0	430,001	0
INSP	SR	0	0	1,500	2,000	1,500	1,500	0	0	0	5,000	0
	Total	13,003	10,001	62,501	277,001	205,501	11,501	18,000	0	0	512,003	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2013	7/1/2017
DGN	5/1/2016	6/1/2024
CONST	12/1/2017	6/1/2024
INSP	12/1/2017	6/1/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

HONOULIULI WASTEWATER TREATMENT PLANT UPGRADE, PHASE 2

Project:	2013053	Function:	Sanitation	Council:	01
Priority No.:	21	Program:	Sewage Collection And Disposal	Nbrd Board:	23
TMK:		Department:	Environmental Services	Senate:	20
				House:	43
				Other:	

Description: Project includes rehabilitation and/or upgrades at the Honouliuli Wastewater Treatment Plant (WWTP). The project may include work at the headworks and pre-treatment segments, including rehabilitation and/or protective coatings of concrete tanks, pipes and structures exposed to corrosive gases. Project may also include receiving facilities for sludge, septage and other liquid wastes, and miscellaneous road, drainage, utilities and other site improvements. Upgrades are scheduled for influent screens, screenings lifting system, and the pre-aeration basin odor covers. Project will also provide miscellaneous reliability improvements to electrical, mechanical and structural components at the WWTP, as developed in the planning phase.

Justification: Upgrades, improvements and/or rehabilitation of existing components at the WWTP are required to ensure continued reliability and efficiency of the facilities.

Use of Funds: Design, construct and inspect upgrades at Honouliuli Wastewater Treatment Plant.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SW	502	0	0	0	0	0	0	0	0	0	0
DGN	SW	800	0	1	200	0	0	0	0	0	200	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	10,000	1	0	0	0	0	0	1	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	800	800	0	0	0	0	0	800	0
	Total	1,302	0	10,801	1,001	0	0	0	0	0	1,001	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	7/1/2017
DGN	5/1/2016	6/1/2020
CONST	12/1/2017	6/1/2020
INSP	12/1/2017	6/1/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

IWILEI/KALIHI KAI SEWER REHABILITATION/RECONSTRUCTION

Project:	2007066	Function:	Sanitation	Council:	07
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	15
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: This project includes sewer and manhole rehabilitation in Iwilei and Kalihi Kai areas. Planning phase includes evaluation of Republican St-Nimitz Hwy-Awa Structural Rehabilitation-Phase 2, SI-CS-51B, for manhole rehabilitation along Auiki Street, Republican Street and Nimitz Highway-Awa pipelines; and Dillingham Blvd-Iwilei Structural Rehabilitation, SI-CS-52, for rehabilitation of manholes and sewers on Dillingham Boulevard, Iwilei Road, and Waiakamilo Road. Other sewers in the vicinity of these identified deficiencies will be included, based on recommendations in the planning phase.

Justification: The project will address requirements in the 2010 Consent Decree, including projects SI-CS-51B, SI-CS-52, and may include portions of SI-CS-08.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	1,301	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,652	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	2,953	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	2/1/2008	9/1/2014
DGN	12/1/2009	10/31/2018
CONST	12/31/2011	10/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

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KAHALA WASTEWATER PUMP STATION AND FORCE MAIN SYSTEM IMPROVEMENTS

Project:	2013054	Function:	Sanitation	Council:	04
Priority No.:	36	Program:	Sewage Collection And Disposal	Nbrd Board:	03
TMK:		Department:	Environmental Services	Senate:	13
				House:	24
				Other:	

Description: Project includes follow-up action plan items, including items required by the 2010 Consent Decree, condition assessment work and improvements to ensure long-term reliability of the existing pump station and two force mains. The project may include rehabilitation and/or upgrades to the existing pump system, force mains, force main discharge infrastructure, gravity sewers connected in the vicinity, and appurtenances. Project may include pump, valve and piping replacements, and reliability improvements to electrical, mechanical and structural components at the WWPS.

Justification: This project will address requirements of the 2010 Consent Decree, as well as address long-term reliability and efficiency needs.

Use of Funds: Plan and design pump station and force main system improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	501	0	0	0	0	1	0	0	0	1	0
PLAN	SW	0	0	500	200	0	0	0	0	0	200	0
DGN	SR	800	0	0	0	0	1	1	0	0	2	0
DGN	SW	0	0	800	400	0	0	0	0	0	400	0
CONST	SR	0	0	0	0	0	30,000	1	0	0	30,001	0
INSP	SR	0	0	0	0	0	800	800	0	0	1,600	0
	Total	1,301	0	1,300	600	0	30,802	802	0	0	32,204	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2014	1/1/2020
DGN	6/30/2017	6/1/2023
CONST	12/1/2020	6/1/2023
INSP	12/1/2020	6/1/2023

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

KAHANAHOU WASTEWATER PUMP STATION UPGRADE AND SEWER IMPROVEMENTS

Project:	2009107	Function:	Sanitation	Council:	03
Priority No.:	11	Program:	Sewage Collection And Disposal	Nbrd Board:	30
TMK:		Department:	Environmental Services	Senate:	24
				House:	48
				Other:	

Description: Plan, design, and construct upgrade improvements to the Kahanahou Wastewater Pump Station (WWPS) in Kaneohe, Oahu, and related sewer system improvements. The work may include, but not be limited to, replacing or modifications to pumps, piping, mechanical and electrical equipment, emergency power system, structures, ventilation system, and misc. site improvements. Work may include improvements determined to be needed to downstream sewers and force main pipes, between Kahanahou WWPS and Waikapoki WWPS and vicinity, to address increased peak wet weather pumping rates from the proposed upgraded pumps at Kahanahou WWPS. Work may include construction of a new force main in an alternative alignment to discharge downstream of the Waikapoki WWPS.

Justification: The project will provide upgrades and improvements, and compliance with current building codes, to ensure continued reliability and efficiency of the wastewater pump station. The project will address the requirements of the 2010 Consent Decree, project #KK-PS-10, including upgrades to address wet weather flows.

Use of Funds: Acquire land, design, construct and inspect pump station upgrade and sewer improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	100	0	0	0	0	0	0	0	0
LAND	SW	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	451	1	0	0	0	0	0	0	0	0	0
PLAN	SW	502	0	0	0	0	0	0	0	0	0	0
DGN	SR	850	300	1,000	0	0	0	0	0	0	0	0
DGN	SW	600	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	10,000	2,000	0	0	0	0	0	0	0	0
INSP	SR	0	600	600	0	0	0	0	0	0	0	0
	Total	2,403	10,901	3,700	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2009	1/1/2017
DGN	7/1/2012	6/30/2020
CONST	6/1/2017	6/30/2020
INSP	6/1/2017	6/30/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

KAILUA ROAD WASTEWATER PUMP STATION FORCE MAIN SYSTEM IMPROVEMENTS

Project:	2012048	Function:	Sanitation	Council:	03
Priority No.:	13	Program:	Sewage Collection And Disposal	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	25
				House:	50
				Other:	

Description: The project includes assessment, rehabilitation work and improvements for the existing force main, and work at the pump station that may be needed to provide compatibility with the force main system. Depending on the recommendations from the assessment, the project may include future reconstruction, rehabilitation, diversion facilities and/or other improvements for all or portions of the force main.

Justification: This project will address requirements in the 2010 Consent Decree for force main assessment, planning and follow-up action.

Use of Funds: Design, construct and inspect wastewater pump station force main system improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	1	1	0	0	0	0	0	0	0	0	0
PLAN	SW	350	0	0	0	0	0	0	0	0	0	0
DGN	SR	250	250	1	0	0	0	0	0	0	0	0
DGN	SW	552	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	2,000	3,000	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	300	100	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	1,153	2,551	3,101	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/31/2011	12/31/2016
DGN	7/1/2015	6/30/2018
CONST	6/1/2017	6/30/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

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KAILUA ROAD WASTEWATER PUMP STATION IMPROVEMENTS

Project:	2017058	Function:	Sanitation	Council:	03
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Project includes improvements to the existing pump station, and may include, but not be limited to, replacing pumps, piping, mechanical and electrical equipment, and miscellaneous upgrades to meet current building codes, and miscellaneous site improvements. Updated peak wet weather flow estimates will be considered in the design.

Justification: The project will provide improvements, and compliance with current building codes, to ensure continued reliability of operations of the wastewater pump station. Some equipment is outdated, making parts difficult to obtain.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	1	0	0	0	0	1	0
DGN	SR	0	0	0	0	1	1	0	0	0	2	0
CONST	SR	0	0	0	0	6,000	1	0	0	0	6,001	0
INSP	SR	0	0	0	0	500	300	0	0	0	800	0
	Total	0	0	0	0	6,502	302	0	0	0	6,804	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2017	7/1/2019
DGN	10/1/2017	7/1/2021
CONST	6/1/2019	7/1/2021
INSP	6/1/2019	7/1/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KAILUA WASTEWATER TREATMENT PLANT AND SEWER BASIN FACILITIES

Project:	2009109	Function:	Sanitation	Council:	03
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	24
				House:	50
				Other:	

Description: Planning to include updating the Kailua-Kaneohe-Kahaluu Wastewater Facilities Plan, including evaluating alternatives for construction of new facilities to meet Federal and State requirements and for long-term improvements. Work will include the required EA and/or EIS. Work will address control of wet weather flow from the Kaneohe WWPTF and from Kailua town to the Kailua Regional WWTP. Deep sewer tunnel and storage alternatives will be considered, including associated new Influent Pump Station facilities. Design funds may be used for geotechnical engineering, survey work, and similar preliminary work, and for design work needed on an expedited basis to meet mandated schedules. The budgets for design and construction of the recommended major improvements are included under separately identified project names.

Justification: The work is required to meet Federal and State requirements, including requirements of the 2010 Consent Decree, and for long-term odor control and reliability improvements. The plan will help identify and prioritize work which may be needed for the appropriate treatment of wastewater, and for the prevention and/or reduction of wastewater spills, including facilities that need to be rehabilitated or replaced to reduce risk of failure, and facilities needed to convey, store and/or contain the projected wet weather design flows.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	5,600	0	0	0	0	0	0	0	0	0	0
PLAN	SW	1,500	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,000	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
EQUIP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	8,100	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2008	12/1/2018
DGN	6/1/2009	12/1/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

KAILUA WASTEWATER TREATMENT PLANT ENERGY IMPROVEMENTS

Project:	2013103	Function:	Sanitation	Council:	03
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	24
				House:	50
				Other:	

Description: Project will provide improvements at the Kailua WWTP to increase energy efficiency, implement renewable energy projects, reduce energy demand, and/or conserve energy use. Improvements may include, but not be limited to, electricity demand management facilities, lighting system improvements, electrical power conditioning improvements, higher-efficiency equipment and systems, and renewable energy projects such as photovoltaic systems and co-generation facilities.

Justification: Energy efficiency improvements and renewable energy projects are intended to reduce life cycle costs of treatment plant operations, as well as reduce dependency on imported fuels.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SR	854	0	0	0	0	0	0	0	0	0	0
CONST	SR	12,753	0	0	0	0	0	0	0	0	0	0
INSP	SR	200	0	0	0	0	0	0	0	0	0	0
	Total	13,807	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2012	6/30/2013
DGN	7/1/2012	12/31/2017
CONST	4/1/2013	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

KAILUA WASTEWATER TREATMENT PLANT IMPROVEMENTS

Project:	2008071	Function:	Sanitation	Council:	03
Priority No.:	18	Program:	Sewage Collection And Disposal	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	24
				House:	50
				Other:	

Description: Improvements required at Kailua Wastewater Treatment Plant to address reliability, odor and noise issues. Construction funding in FY2011 for phase 1 and 2 odor control improvements, and miscellaneous reliability improvements. The odor control improvements include upgrades to the foul air system fans, upgrade three odor treatment systems with improved use of bio-filters and the existing bio-towers, upgrade seals on process tanks and buildings, chemical dosing stations in the collection system and at the plant headworks, re-direct in-plant sewer to reduce odors entering the headworks, replace gas flare, improve/replace covers for the dissolved air/sludge tanks, dewatering building truck bay enclosure and improvements, centrifuge drain improvements, and miscellaneous improvements. Re-programming some funds into FY15 and FY17 for work not completed yet.

Justification: Continued reliability of treatment and capacity is required by NPDES permit. Odor control improvements required to address odor problems, and to ensure compliance with State air permit requirements.

Use of Funds: Design and inspect improvements at Kailua Wastewater Treatment Plant.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	701	0	0	0	0	0	0	0	0	0	0
DGN	SR	5,160	0	300	0	0	0	0	0	0	0	0
CONST	SR	19,868	0	0	0	0	0	0	0	0	0	0
INSP	SR	3,800	0	1,000	0	0	0	0	0	0	0	0
	Total	29,529	0	1,300	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2007	12/1/2008
DGN	7/1/2007	12/1/2017
CONST	8/1/2010	12/1/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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KAILUA WASTEWATER TREATMENT PLANT OUTFALL IMPROVEMENTS/REHABILITATION

Project:	2010048	Function:	Sanitation	Council:	03
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	24
				House:	50
				Other:	

Description: Conduct an assessment of the existing outfall, and provide improvements or rehabilitation work determined to be needed for the outfall.

Justification: Inspection, assessment, improvements and/or rehabilitation of the outfall to ensure continued reliability of this critical infrastructure.

Use of Funds: Acquire land, plan and design Kailua wastewater treatment plant outfall improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SW	0	1	0	0	1	0	0	0	0	1	0
PLAN	SR	400	0	0	0	1	0	0	0	0	1	0
PLAN	SW	300	1	0	0	0	0	0	0	0	0	0
DGN	SR	1	0	0	0	600	0	150	0	0	750	0
DGN	SW	1	600	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	3,000	0	0	3,000	0
INSP	SR	0	0	0	0	0	0	300	0	0	300	0
	Total	702	602	0	0	602	0	3,450	0	0	4,052	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/31/2010	12/1/2019
DGN	12/1/2016	12/1/2023
CONST	9/1/2021	12/1/2023

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

KAILUA WASTEWATER TREATMENT PLANT-SOLIDS HANDLING SYSTEM IMPROVEMENTS

Project:	2017055	Function:	Sanitation	Council:	03
Priority No.:	42	Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Replacement of and/or modifications to the existing solids handling systems at the Kailua Wastewater Treatment Plant to modernize the facility, improve the efficiency of the operations and increase the reliability. Planning phase will evaluate alternative options for solids receiving, thickening, mixing, digestion, dewatering, and other handling processes. Project includes appurtenant improvements such as site work, structures, energy savings, and odor control systems.

Justification: Project will provide needed modification and/or replacement of solids handling processes and facilities, with improved efficiency and reliability of the solids handling operation and odor control.

Use of Funds: Plan and design solids handling system improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	1	1	0	0	2	0
PLAN	SW	0	0	400	350	0	0	0	0	0	350	0
DGN	SR	0	0	0	0	0	900	500	1	0	1,401	0
DGN	SW	0	0	1	1	0	0	0	0	0	1	0
CONST	SR	0	0	0	0	0	0	20,000	1	0	20,001	0
INSP	SR	0	0	0	0	0	0	800	800	0	1,600	0
	Total	0	0	401	351	0	901	21,301	802	0	23,355	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2017	7/1/2019
DGN	6/1/2017	7/1/2023
CONST	6/1/2021	7/1/2023
INSP	6/1/2021	7/1/2023

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

KAILUA WASTEWATER TREATMENT PLANT-TUNNEL INFLUENT PUMP STATION AND HEADWO

Project:	2013056	Function:	Sanitation	Council:	03
Priority No.:	8	Program:	Sewage Collection And Disposal	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	24
				House:	50
				Other:	

Description: This project will provide a new influent pump station and a new and/or expanded headworks facilities at the Kailua Wastewater Treatment Plant (WWTP), and the related electrical, mechanical, structural, odor control, and site work improvements. The tunnel influent pump station (TIPS) will be constructed within the vertical shaft built for the tunneling operation. After the tunnel is completed, this new pump station will lift wastewater from the deep tunnel into the WWTP headworks. The headworks facility will provide grit removal and screening prior to the primary settling tanks. This project, along with the deep sewer tunnel, replaces the requirement in the 2010 Consent Decree for a second Kaneohe to Kailua force main. The modification to the 2010 Consent Decree needed for this project substitution was approved in March 2012.

Justification: This project will address requirements of the 2010 Consent Decree in accordance with the Consent Decree modification. This alternative is considered to have long-term benefits and savings over the force main alternative. The project also provides enhanced reliability and efficiency.

Use of Funds: Design, construct and inspect treatment plant-tunnel influent pump station and headworks facility improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	0	1	0	0	0	0	0	0	0	0	0
DGN	SR	9,500	2,000	3,300	1	1	0	0	0	0	2	0
CONST	SR	182,841	1	45,000	1	1	0	0	0	0	2	0
CONST	SW	4,551	0	0	0	0	0	0	0	0	0	0
INSP	SR	1,200	1,200	3,000	100	100	0	0	0	0	200	0
	Total	198,092	3,202	51,300	102	102	0	0	0	0	204	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2012	7/1/2016
DGN	7/1/2012	11/30/2018
CONST	8/30/2015	11/30/2018
INSP	8/30/2015	11/30/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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KAILUA WASTEWATER TREATMENT PLANT UPGRADE

Project:	2013057	Function:	Sanitation	Council:	03
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	24
				House:	50
				Other:	

Description: Project includes rehabilitation and/or upgrades at the Kailua Wastewater Treatment Plant (WWTP), including work needed for the electrical system, energy efficiency work, demolition of old unused facilities, and the pump stations within the WWTP. Upgrades scheduled for the FY13 funds include valve and slide-gate replacements and upgrades, sludge line replacement, DAF thickener system rehabilitation, and primary settling tank improvements. Project will also provide the associated reliability improvements to electrical, mechanical, structural and site work components at the WWTP, as developed in the engineering phases.

Justification: Upgrades, improvements and/or rehabilitation of existing components at the WWTP are required to ensure continued reliability and efficiency of the facilities.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SR	5,447	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	5,447	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2012	1/1/2014
DGN	7/1/2012	5/1/2016
CONST	11/1/2012	5/1/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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KAILUA WASTEWATER TREATMENT PLANT UPGRADE, PHASE 2

Project:	2016050	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Project includes Phase 2 work for rehabilitation and/or upgrades at the Kailua Wastewater Treatment Plant (WWTP), including work needed for the electrical system, emergency generator system, sludge and septic waste receiving and handling, demolition of old unused facilities, and pump stations within the WWTP. Project will provide reliability improvements to electrical, mechanical, structural and site work components at the WWTP, as developed in the engineering phases.

Justification: Upgrades, improvements and/or rehabilitation of existing components at the WWTP are required to ensure continued reliability and efficiency of the facilities.

Use of Funds: Plan and design improvements to Kailua wastewater treatment plant.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	301	1	0	1	0	1	0	0	0	2	0
PLAN	SW	0	0	0	0	0	0	0	0	0	0	0
DGN	SR	400	700	0	300	0	100	0	0	0	400	0
DGN	SW	0	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	1	0	0	0	10,000	0	0	0	10,000	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	1	0	0	0	300	0	0	0	300	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	701	703	0	301	0	10,401	0	0	0	10,702	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2017	12/30/2018
DGN	9/1/2017	12/30/2022
CONST	9/1/2020	12/30/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

KALANIANAOLE HIGHWAY SEWER SYSTEM IMPROVEMENTS

Project:	2002037	Function:	Sanitation	Council:	04
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	02
TMK:		Department:	Environmental Services	Senate:	08
				House:	16
				Other:	

Description: This project includes rehabilitation of the sewers, and provision of sewer relief, in Kalanianaole Highway. It is estimated that approximately 5,010 lf of 16-, 24-, and 30-inch diameter sewer pipe will be rehabilitated, and approximately 6,000 lf of 10-inch relief sewer will be needed. The planning phase will consider various alternatives to address the deficiencies, including sewer rehab, sewer replacement, siphon modifications, LPSS alternatives, and pump station modifications. FY13 funds are for rehabilitation of the sewer at the far end, at the influent to the Kahala Wastewater Pump Station.

Justification: This project will rehabilitate sewer lines, and will address requirements of the 2010 Consent Decree, projects #SI-CS-18 and #SI-CS-62.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	471	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,260	0	0	0	0	0	0	0	0	0	0
CONST	SR	9,095	0	0	0	0	0	0	0	0	0	0
INSP	SR	1,347	0	0	0	0	0	0	0	0	0	0
EQUIP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	12,172	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/20/2015	7/20/2015
PLAN	1/1/2005	9/1/2007
DGN	6/1/2007	1/1/2013
CONST	3/1/2009	12/1/2014

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

KALIHI/NUUANU AREA SEWER REHABILITATION

Project:	2005075	Function:	Sanitation	Council:	06
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	12
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: The project will include structural and/or hydraulic rehabilitation of existing gravity sewers in the collection basin areas of Lower Kalihi, Pacific Heights, Punchbowl, and Liliha. These project areas are identified as SCIP 12, 15, 19, and 13 respectively. The construction phase of the work is being done under multiple construction contracts, and portions of the work are phased.

Justification: The project addresses requirements of the 2010 Consent Decree, including all or portions of projects SI-CS-28, SI-CS-29, SI-CS-36, SI-CS-39, SI-CS-40, SI-CS-42, SI-CS-51B, SI-CS-52 and SI-CS-63.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	900	0	0	0	0	0	0	0	0	0	0
PLAN	SR	893	0	0	0	0	0	0	0	0	0	0
DGN	SR	3,878	0	0	0	0	0	0	0	0	0	0
CONST	SR	63,396	0	0	0	0	0	0	0	0	0	0
INSP	SR	3,300	0	0	0	0	0	0	0	0	0	0
	Total	72,368	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	3/1/2005	12/1/2009
DGN	1/1/2007	12/1/2017
CONST	3/1/2008	12/1/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

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KALIHI VALLEY SEWERS - RELIEF/RECONSTRUCTION

Project:	2018058	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Plan, design and construct relief sewers and reconstruction of existing sewers in Kalihi Valley to provide additional capacity in the sewer collection system to accommodate projected growth and projected wet weather flows. This project also provides funding for rehabilitation and improvements to sewerlines in Kalihi Valley that may be identified as priority for reducing and preventing wastewater spills.

Justification: The project addresses the need for effective sewer improvements, relief, reconstruction and rehabilitation, to continue after the period of the Consent Decree, to help ensure prevention and reduction of wastewater spills in the future.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	700	0	700	0
DGN	SR	0	0	0	0	0	0	0	1	0	1	0
	Total	0	0	0	0	0	0	0	701	0	701	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2022	7/1/2025
DGN	7/1/2024	12/31/2028
CONST	7/1/2026	12/31/2028

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KAMEHAMEHA HIGHWAY WASTEWATER PUMP STATION FORCE MAIN SYSTEM IMPROVEMENT

Project:	2012049	Function:	Sanitation	Council:	07
Priority No.:	16	Program:	Sewage Collection And Disposal	Nbrd Board:	18
TMK:		Department:	Environmental Services	Senate:	15
				House:	31
				Other:	

Description: The project provides rehabilitation work and improvements for the system, consisting of the new and old force mains, and work at the Kamehameha Highway Wastewater Pump Station, located in the Mapunapuna area, that may be needed to provide compatibility with the force main system. Based on the recommendations from the planning phase, and the flow diversion report for the 2010 Consent Decree, the project may include reconstruction, rehabilitation, diversion facilities and/or other improvements for all or portions of the force mains.

Justification: This project will address requirements in the 2010 Consent Decree for force main flow-diversion improvements and follow-up action.

Use of Funds: Acquire land, plan, design, construct and inspect force main system improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	100	0	0	0	0	0	100	0
LAND	SW	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	0	0	0	300	0	0	0	0	0	300	0
PLAN	SW	501	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	1,000	0	0	0	0	0	1,000	0
DGN	SW	602	0	250	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	8,500	0	0	0	0	0	8,500	0
CONST	SW	0	0	5,500	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	600	0	0	0	0	0	600	0
INSP	SW	0	0	550	0	0	0	0	0	0	0	0
	Total	1,103	0	6,300	10,500	0	0	0	0	0	10,500	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/31/2011	12/31/2017
DGN	12/31/2013	6/30/2020
CONST	12/31/2017	6/30/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

KAMEHAMEHA HIGHWAY WASTEWATER PUMP STATION UPGRADE, MAPUNAPUNA

Project:	2010060	Function:	Sanitation	Council:	07
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	18
TMK:		Department:	Environmental Services	Senate:	15
				House:	31
				Other:	

Description: This project provides for required capacity of the wastewater pump station to address updated peak wet weather flow estimates, and provides for other needed improvements which will be evaluated in the planning phase. The work may include, but not be limited to, replacing pumps, piping, mechanical and electrical equipment, ventilation system, misc. upgrades to meet current building codes, and misc. site improvements. Capacity of the tributary and downstream areas will be considered in the planning phase.

Justification: Project is needed to address hydraulic capacity needs anticipated during peak wet weather storm flows, and to ensure continued reliability of operations of the wastewater pump station. The project will address requirements in the 2010 Consent Decree, project SI-PS-01.

Use of Funds: Design, construct and inspect improvements to Kamehameha Highway wastewater pump station.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	501	0	0	0	0	0	0	0	0	0	0
DGN	SR	801	1	0	250	0	0	0	0	0	250	0
CONST	SR	0	6,000	0	1	0	0	0	0	0	1	0
INSP	SR	1,600	1,600	0	1	0	0	0	0	0	1	0
	Total	2,902	7,601	0	252	0	0	0	0	0	252	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/31/2010	6/30/2016
DGN	5/1/2014	5/1/2019
CONST	6/1/2017	5/1/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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KANEOHE BAY #2 WASTEWATER PUMP STATION FORCE MAIN

Project:	2009108	Function:	Sanitation	Council:	03
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	30
TMK:		Department:	Environmental Services	Senate:	24
				House:	50
				Other:	

Description: Plan, design and construct a replacement force main system for the Kaneohe #2 Wastewater Pump Station in Kaneohe, Oahu. The existing force main is approximately 131 feet long, and consists mostly of 14-inch diameter pipe, built in the mid-1960's. The new force main system will be constructed in approximately the same alignment, or in an alternative alignment, and could include retaining portions of the existing system if determined to be appropriate based on an assessment of the existing conditions. The project may include work at the pump station needed to provide compatibility with the new force main system.

Justification: The project will provide improvements to ensure continued reliability of the force main. The project will address requirements in the 2010 Consent Decree, para. 13.d.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	200	0	0	0	0	0	0	0	0	0	0
DGN	SR	600	0	0	0	0	0	0	0	0	0	0
CONST	SR	3,077	0	0	0	0	0	0	0	0	0	0
INSP	SR	300	0	0	0	0	0	0	0	0	0	0
	Total	4,177	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2009	12/1/2014
DGN	12/1/2011	6/1/2017
CONST	12/1/2014	6/1/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

KANEOHE BAY #3 WASTEWATER PUMP STATION FORCE MAIN

Project:	2012050	Function:	Sanitation	Council:	03
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	30
TMK:		Department:	Environmental Services	Senate:	24
				House:	50
				Other:	

Description: The project includes assessment, follow-up action work, rehabilitation work and improvements for the existing force main, and work at the pump station that may be needed to provide compatibility with the force main system. Depending on the recommendations from the assessment, the project may include future reconstruction, rehabilitation, diversion facilities and/or other improvements for all or portions of the force main, and additional assessment work.

Justification: The project addresses requirements in the 2010 Consent Decree for force main assessment, planning and follow-up action.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	250	0	0	0	0	0	0	0	0	0	0
PLAN	SW	350	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	1	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	601	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/31/2011	6/30/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

KANEOHE/KAILUA FORCE MAIN NO. 1 REHABILITATION

Project:	2010068	Function:	Sanitation	Council:	03
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	30
TMK:		Department:	Environmental Services	Senate:	24
				House:	48
				Other:	

Description: Improvements and rehabilitation work needed for the existing Kaneohe/Kailua Force Main No. 1, per recommendations from condition assessment work conducted in 2008. Air valve study done in 2012 provided additional recommendations. An additional assessment report was completed by 12/31/2014, as required. This force main will be decommissioned when the Consent Decree requirements regarding the new sewer tunnel, para. 17, are completed. Future funds are for possible requirements related to decommissioning, and for contingencies.

Justification: The project addresses requirements in the 2010 Consent Decree, and subsequent additional requirements for the force main contained in the 2012 amendment, including force main assessment, planning and follow-up action.

Use of Funds: Plan, design, construct and inspect rehabilitation work at Kaneohe/Kailua Force Main No. 1.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	1,400	0	0	0	0	1	0	0	0	1	0
DGN	SR	140	0	0	0	0	200	0	0	0	200	0
CONST	SR	0	0	0	0	0	3,000	0	0	0	3,000	0
INSP	SR	0	0	0	0	0	500	0	0	0	500	0
	Total	1,540	0	0	0	0	3,701	0	0	0	3,701	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/31/2010	12/31/2018
DGN	1/1/2014	1/1/2022
CONST	1/1/2020	1/1/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

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KANEOHE/KAILUA SEWER TUNNEL

Project:	2012055	Function:	Sanitation	Council:	03
Priority No.:	9	Program:	Sewage Collection And Disposal	Nbrd Board:	30
TMK:		Department:	Environmental Services	Senate:	24
				House:	99
				Other:	

Description: New gravity sewer tunnel to connect the Kaneohe Wastewater Pre-Treatment Facility (WWPTF) to the Kailua Wastewater Treatment Plant (WWTP). Gravity tunnel will be sized to provide storage of peak wet weather flows. Project includes new influent pump station to be installed at the tunnel terminus point at the Kailua WWTP, connection sewers at the Kaneohe facility and the Kailua WWTP, odor control systems, and associated site improvements. This project will allow for the decommissioning of the Kaneohe WWPTF and existing force main system to Kailua WWTP. This project will also replace the projects being planned for the force main no. 2, rehabilitation of the force main no. 1, and wet weather storage tanks being planned at the Kaneohe WWPTF and Kailua WWTP sites.
This project, along with the tunnel influent pump station project, replaces the requirement in the 2010 Consent Decree for a second Kaneohe to Kailua force main. The amendment to the 2010 Consent Decree needed for this project substitution was approved in March 2012.

Justification: The gravity sewer tunnel project replaces the force main no. 2 project and wet weather storage tank projects. It is considered to provide overall benefits to the system, including long-range lower capital and operating costs, improved minimization of wastewater spills, and more efficient and reliable treatment of odors and wastewater.
This project will address requirements of the 2012 First Amended Consent Decree.

Use of Funds: Design, construct and inspect sewer tunnel improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	2,500	0	0	0	0	0	0	0	0	0	0
PLAN	SR	500	0	0	0	0	0	0	0	0	0	0
DGN	SR	16,500	1	1,800	1	0	0	0	0	0	1	0
CONST	SR	183,114	1	1	5,000	0	0	0	0	0	5,000	0
INSP	SR	8,047	3,500	2,000	1,000	0	0	0	0	0	1,000	0
	Total	210,661	3,502	3,801	6,001	0	0	0	0	0	6,001	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/31/2011	12/31/2013
DGN	12/31/2011	6/30/2018
CONST	12/31/2011	6/30/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	-500
Useful Life	150

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KUNIA WASTEWATER PUMP STATION FORCE MAIN SYSTEM IMPROVEMENTS

Project:	2012051	Function:	Sanitation	Council:	09
Priority No.:	28	Program:	Sewage Collection And Disposal	Nbrd Board:	22
TMK:		Department:	Environmental Services	Senate:	20
				House:	39
				Other:	

Description: The project includes assessment, rehabilitation work and improvements for the existing force main, and work at the pump station that may be needed to provide compatibility with the force main system. Project may include site work at the WWPS needed to address erosion and drainage. Depending on the recommendations from the assessment, the project may include future reconstruction, rehabilitation, diversion facilities and/or other improvements for all or portions of the force main. Construction work to be done in phases.

Justification: The project addresses requirements in the 2010 Consent Decree for force main assessment, planning and follow-up action.

Use of Funds: Plan, design and construct force main system improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	100	0	0	1	0	0	0	0	0	1	0
PLAN	SW	400	0	100	0	0	0	0	0	0	0	0
DGN	SR	1	0	0	300	0	0	0	0	0	300	0
DGN	SW	202	0	100	0	0	0	0	0	0	0	0
CONST	SR	420	0	0	1,900	0	0	0	0	0	1,900	0
CONST	SW	0	0	750	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	1,123	0	950	2,201	0	0	0	0	0	2,201	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/31/2011	12/31/2016
DGN	7/1/2013	6/30/2024
CONST	5/1/2016	6/30/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

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LAIE SEWERS

Project:	2008073	Function:	Sanitation	Council:	02
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	28
TMK:		Department:	Environmental Services	Senate:	23
				House:	46
				Other:	

Description: This project will install new Low Pressure Sewer Systems for the remaining unsewered areas in Laie, including Laie Point and along Kamehameha Highway, including Laniloa Beach Sections, and be part of the municipal sewer system.

Justification: These areas are currently on cesspool systems. Sewering these areas as part of the municipal sewer system will eliminate cesspool use.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	SR	100	0	0	0	0	0	0	0	0	0	0
CONST	SR	6,500	0	0	0	0	0	0	0	0	0	0
INSP	SR	600	0	0	0	0	0	0	0	0	0	0
	Total	7,200	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2009	12/1/2010
CONST	7/1/2009	12/1/2010
INSP	7/1/2009	12/1/2010

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

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MAKAHA BEACH TRUNK SEWER, TMK 8-4-01, 02, 08 TO 10 AND 18

Project:	1971342	Function:	Sanitation	Council:	01
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	24
TMK:		Department:	Environmental Services	Senate:	24
				House:	49
				Other:	

Description: Recommendations from previous facilities plans included construction of 3600 feet of 12 to 24 inch pipe on Farrington Highway along Makaha Beach. Land acquisition for easements estimated at 10,000 square feet. Project scope will be subject to evaluation and revision in the on-going update to the Waianae Wastewater Facilities Plan.

Justification: Project of local and general benefit which will eliminate defective cesspools and potential health hazards. It is an extension of the Makaha Interceptor Sewer and would serve future development areas.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	0	0	0	0	0	0	0	300	1	301	0
DGN	SR	0	0	0	0	0	0	0	1	400	401	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	301	401	702	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2022	12/31/2024
DGN	1/1/2023	12/31/2026
CONST	9/1/2024	12/31/2026

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

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MAKAU STREET WASTEWATER PUMP STATION AND FORCE MAIN TMK: 8-4-10:54

Project:	1997810	Function:	Sanitation	Council:	01
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	24
TMK:		Department:	Environmental Services	Senate:	21
				House:	44
				Other:	

Description: Recommendations from previous facilities plans included construction of a wastewater pump station and force main in the vicinity of Makau Street. This pump station will enable the Makaha Sewers Section 5, I.D. project to be serviced. Project scope will be subject to evaluation and revision in the on-going update to the Waianae Wastewater Facilities Plan.

Justification: The pump station and force main system may be required to allow the Makaha Sewers Section 5 Improvement District to be serviced.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	0	0	0	0	0	0	0	0	400	400	0
DGN	SR	0	0	0	0	0	0	0	0	1	1	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	401	401	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2023	12/1/2026
DGN	1/1/2024	12/1/2028
CONST	1/1/2026	12/1/2028

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

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MANOA SEWER RELIEF/REHABILITATION

Project:	2008074	Function:	Sanitation	Council:	05
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	07
TMK:		Department:	Environmental Services	Senate:	10
				House:	24
				Other:	

Description: This project will address projected hydraulic deficiencies in the Manoa sewer mainlines and in the Manoa collection sewers, and will address structural deficiencies as determined in the planning phase. Project scope includes sewers located in the vicinity of East Manoa Road, Lowrey Avenue, Kahaloa Drive, Woodlawn Drive, and the University of Hawaii at Manoa Campus. Construction funds in 2012 and 2013 are for priority sewer rehabilitation work to address structural conditions found through CCTV inspection and sewer condition assessment work.

Justification: The project includes priority sewer rehabilitation work needed in the Manoa area. The project also initially included project SI-CS-15, Manoa Relief Sewer, from para. 18.f of the 2010 Consent Decree. The projected wet weather flows for project SI-CS-15 have been addressed in the 18.f Report of Evaluation and Recommendations, December 2014, and based on the evaluation, project SI-CS-15 may be required, but construction completion is allowed after 2020. Additional monitoring and evaluation will be done under the capacity assessment program to determine the priority and schedule for SI-CS-15 improvements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	401	0	0	0	0	0	0	0	0	0	0
DGN	SR	671	0	0	0	0	0	0	0	0	0	0
CONST	SR	1,880	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	2,952	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2008	12/1/2014
DGN	5/1/2011	12/31/2015
CONST	7/1/2012	12/31/2015

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

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MAUNAWILI WASTEWATER PUMP STATIONS, FORCE MAINS AND SEWER IMPROVEMENTS, KAI

Project:	2013059	Function:	Sanitation	Council:	03
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	24
				House:	49
				Other:	

Description: This project is to address peak wet weather flow projections for the Maunawili Park WWPS and Maunawili Estates WWPS, Kailua, and provide for miscellaneous structural, mechanical, electrical and site improvements as determined in the planning phase. Project may also include improvements to the pump stations, force mains and sewer lines in the vicinity as determined in the planning phase to address the peak flows. Project includes KK-CS-19, Maunawili Relief Sewer, and KK-PS-14, Maunawili Estates WWPS Upgrade, per para. 18.g. of the 2010 Consent Decree, and in accordance with the Final Deferred Projects Report, May 2014.

Justification: Subject to the results of the planning phase evaluations, and in accordance with the I/I assessment update per the 2010 Consent Decree, for project nos. KK-CS-19 and KK-PS-14, and field verifications, the project will address peak wet weather flow requirements. The project also includes miscellaneous structural, mechanical, electrical and site improvements needed to ensure pump station and force main reliability and compliance with current standards.

Use of Funds: Plan and design improvements for Maunawili wastewater pump stations, force mains and sewers.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
LAND	SW	0	1	0	0	0	0	0	0	0	0	0
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	700	100	0	300	0	0	0	0	0	300	0
DGN	SR	0	0	0	0	0	1	0	0	0	1	0
DGN	SW	602	600	0	600	0	0	0	0	0	600	0
CONST	SR	0	0	0	0	0	8,000	0	0	0	8,000	0
INSP	SR	0	0	0	0	0	600	0	0	0	600	0
	Total	1,302	701	0	900	0	8,601	0	0	0	9,501	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2014	12/1/2020
DGN	7/1/2017	12/1/2023
CONST	12/1/2020	12/1/2023

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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MILILANI WASTEWATER PRE-TREATMENT FACILITY HEADWORKS UPGRADE

Project:	1999807	Function:	Sanitation	Council:	09
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	25
TMK:		Department:	Environmental Services	Senate:	18
				House:	38
				Other:	

Description: This project was originally named "Mililani Reclamation Facility". Project name and objective have been adjusted following the recommendation of the planning report. The revised objective is to upgrade the WWPTF headworks capacity to handle peak wet weather flows required by the Sewer I/I Plan, including grinder and grit removal upgrades, miscellaneous sewer upgrades/repairs in the vicinity of the plant, and misc. improvements to reduce maintenance costs.

Justification: The project addresses the requirements of the 2010 Consent Decree, project #HN-TP-02. The headworks upgrades will reduce maintenance costs associated with hauling of screenings and grit, cleaning of the siphon downstream of the WWPTF, and related operations at the facility.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	89	0	0	0	0	0	0	0	0	0	0
DGN	SR	517	0	0	0	0	0	0	0	0	0	0
CONST	SR	1,885	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	2,491	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	3/1/1999	6/1/2007
DGN	4/11/2007	4/1/2010
CONST	4/1/2010	12/31/2012

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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OLD SEWER TUNNEL REHABILITATION

Project:	2008077	Function:	Sanitation	Council:	05
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	05
TMK:		Department:	Environmental Services	Senate:	09
				House:	20
				Other:	

Description: This project will rehabilitate manholes and the sewerline as determined in the planning phase. The location of the Old Sewer Tunnel pipeline is from the vicinity of UH Manoa to Ward Ave, and continuing along School Street towards Kalihi.

Justification: The project addresses requirements of the 2010 Consent Decree, project #SI-CS-60.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	612	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,041	0	0	0	0	0	0	0	0	0	0
CONST	SR	2,241	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	3,894	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2007	5/1/2015
DGN	5/1/2012	12/31/2017
CONST	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	150

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PACIFIC PALISADES WWPS, FORCE MAIN AND ALTERNATIVE DIVERSION SEWER LINE

Project:	1997812	Function:	Sanitation	Council:	08
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	21
TMK:		Department:	Environmental Services	Senate:	17
				House:	34
				Other:	

Description: This project is to address peak wet weather flow projections for the Pacific Palisades WWPS and provide for miscellaneous structural, mechanical, electrical and site improvements as determined in the planning phase. Project may include improvements to the pump station, force main and sewer lines in the vicinity, to provide for upgrades for peak flows. The project evaluated the alternative of constructing an estimated 10,000 lf of 18 and 21-inch gravity sewer line from the existing Pacific Palisades WWPS to the existing Waiawa WWPS, miscellaneous improvements at the Pacific Palisades WWPS and Waiawa WWPS sites, and possible future decommissioning of the Pacific Palisades WWPS. The evaluation indicated the full diversion sewer may not be cost effective at this time. Recommendations include improvements to the pump station and force main, proposed initial section of diversion sewer, and miscellaneous improvements.

Justification: The requirements of the 2010 Consent Decree, project no. HN-CS-09, which were initially considered for this project, have been addressed in the 18.f Report of Evaluation and Recommendations, December 2014. The recommended project currently includes upgrading capacity to address peak wet weather flows, and miscellaneous structural, mechanical, electrical and site improvements needed to ensure pump station reliability and compliance with current standards.

Use of Funds: Acquire land, plan and design wastewater pump station, force main and diversion sewer improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
LAND	SW	0	0	0	1	0	1	0	0	0	2	0
PLAN	SR	500	0	0	0	0	0	0	0	0	0	0
PLAN	SW	700	0	0	1	0	1	0	0	0	2	0
DGN	SR	1	0	0	0	0	0	0	0	0	0	0
DGN	SW	701	0	0	400	0	400	1	0	0	801	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	10,000	1	0	0	10,001	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	600	600	0	0	1,200	0
	Total	1,902	0	0	402	0	11,002	602	0	0	12,006	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2011	7/1/2019
DGN	7/1/2017	7/1/2023
CONST	7/1/2020	7/1/2023
INSP	7/1/2020	7/1/2023

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

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PALOLO VALLEY SEWER REHABILITATION

Project:	2008078	Function:	Sanitation	Council:	05
Priority No.:	29	Program:	Sewage Collection And Disposal	Nbrd Board:	06
TMK:		Department:	Environmental Services	Senate:	09
				House:	20
				Other:	

Description: This project is to address possible hydraulic and structural deficiencies in the collection sewers in Palolo Valley. This project will be based upon results of CCTV inspection and sewer assessment work, and consideration of conveying the projected peak wet weather design flow. Construction funds in 2012 and 2013 are for priority sewer rehabilitation work. Construction funds in FY17/FY18 are for the portion of SI-CS-17 to be done by a deadline of 6/30/20. Construction funds in FY22 are for the remainder of SI-CS-17, and SI-CS-27, which are allowed to be completed after 2020.

Justification: The project addresses requirements of the 2010 Consent Decree, including projects SI-CS-17, Palolo Relief Sewer, SI-CS-26, 9th Avenue Relief Sewer and SI-CS-27, Waiomao Stream Relief Sewer.

Use of Funds: Design, construct and inspect sewer rehabilitation.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	12	0	0	0	0	0	1	1	0	2	0
LAND	SW	0	0	1	0	0	0	0	0	0	0	0
PLAN	SR	1,001	0	0	0	0	0	400	1	0	401	0
PLAN	SW	0	0	1	0	0	0	0	0	0	0	0
DGN	SR	2,001	0	0	1	0	0	300	200	0	501	0
DGN	SW	0	0	300	0	0	0	0	0	0	0	0
CONST	SR	2,437	0	0	1,000	0	0	0	5,000	0	6,000	0
CONST	SW	0	0	6,000	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	400	0	0	0	400	0	800	0
INSP	SW	0	0	400	0	0	0	0	0	0	0	0
	Total	5,451	0	6,702	1,401	0	0	701	5,602	0	7,704	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2007	12/1/2017
DGN	5/1/2011	12/31/2024
CONST	7/1/2012	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

PEARL CITY/WAIPAHU SEWER TUNNEL

Project:	2018057	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Proposed new gravity sewer line from the existing Pearl City Wastewater Pump Station (WWPS) to the vicinity of the existing Waipahu WWPS, constructed by trenchless methods such as tunneling or micro-tunneling. Alternative configurations and routes for the new sewer to be evaluated. This project would be done in coordination with a proposed new or reconstructed Waipahu WWPS, to accommodate this new deeper sewer, and would allow elimination of the Pearl City WWPS and its associated force mains.

Justification: Long-term improvement to accommodate future growth, including transient-orientated-development (TOD), projected wet weather flows, provide ease of maintenance and operations, and elimination of the existing Pearl City WWPS.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	800	0	800	0
PLAN	SR	0	0	0	0	0	1,000	0	1	0	1,001	0
DGN	SR	0	0	0	0	0	1	0	5,000	0	5,001	0
	Total	0	0	0	0	0	1,001	0	5,801	0	6,802	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2020	7/1/2025
DGN	7/1/2022	12/31/2027
CONST	7/1/2024	12/31/2027

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

PEARL CITY/WAIPAHU TUNNEL WWPS

Project:	2018056	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Proposed new wastewater pump station (WWPS) in the vicinity of the existing Waipahu WWPS. Project may also include reconstruction of part or all of the existing Waipahu WWPS, as well as the associated force main and gravity sewer connections at the WWPS. Alternative configurations and sites to be considered. The project is proposed to be done in coordination with the new proposed Pearl City/Waipahu Sewer Tunnel project, and allow the elimination of the existing upstream Pearl City WWPS.

Justification: Long-term improvement to provide capacity for future growth, including transient-orientated-development (TOD), projected peak wet weather flows, improved efficiency and reliability, and modernization of pumping facilities. Along with the new proposed Pearl City/Waipahu Sewer Tunnel project, this project will allow the elimination of the existing upstream Pearl City WWPS.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	1	0	1	0
PLAN	SR	0	0	0	0	0	0	0	1,000	0	1,000	0
DGN	SR	0	0	0	0	0	0	0	1	0	1	0
	Total	0	0	0	0	0	0	0	1,002	0	1,002	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2022	7/1/2027
DGN	7/1/2024	12/31/2029
CONST	7/1/2026	12/31/2029

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

PEARL CITY WASTEWATER PUMP STATION, FORCE MAIN, AND SEWER SYSTEM ALTERNATIVE

Project:	2013060	Function:	Sanitation	Council:	08
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	21
TMK:		Department:	Environmental Services	Senate:	17
				House:	35
				Other:	

Description: This project is to address peak wet weather flow projections from Inflow/Infiltration (I/I) assessments for the Pearl City WWPS, accommodate projected future development, and provide for miscellaneous structural, mechanical, electrical and site improvements as determined in the planning phase. Project includes evaluating the need to upgrade the pump station capacities. The project may include flood proofing the existing station or relocating it to a site outside the flood zone. Project may also include improvements to the pump station force mains and sewer lines in the vicinity as determined in the planning phase, and to provide compatibility with pump station upgrades for peak flows.

Justification: Subject to the results of the planning phase evaluations, and in accordance with the I/I assessment update per the 2010 Consent Decree, for the Pearl City WWPS, project no. HN-PS-04, the project will address peak wet weather flow requirements, and projected future development flows. Due to the existing location in the flood zone, either additional flood-proofing or re-location may be necessary. Also, miscellaneous structural, mechanical, electrical and site improvements may be needed to ensure pump station and force main reliability and compliance with current standards.

Use of Funds: Acquire land, plan, design, construct and inspect improvements at Pearl City wastewater pump station.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	1	0	1	0	0	0	0	0	1	0
LAND	SW	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	0	1	0	1	1	0	0	0	0	2	0
PLAN	SW	900	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	700	0	300	1	0	0	0	0	301	0
DGN	SW	2	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	15,000	1	0	0	0	0	15,001	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	800	800	0	0	0	0	1,600	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	902	702	0	16,102	803	0	0	0	0	16,905	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2014	1/1/2018
DGN	6/1/2017	9/1/2021
CONST	9/1/2018	9/1/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

PROJECT MANAGEMENT FOR WASTEWATER PROJECTS

Project:	2001124	Function:	Sanitation	Council:	99
Priority No.:	1	Program:	Sewage Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Provision of funds for the planning, design and construction management for wastewater projects, including related expenses associated with these services.

Justification: Direct project administration cost.

Use of Funds: Provision of funds for direct costs for the administration of wastewater capital projects.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GN	893	0	0	0	0	0	0	0	0	0	0
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	10,622	2,244	0	0	0	0	0	0	0	0	0
DGN	GN	2,475	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	23,744	2,726	0	0	0	0	0	0	0	0	0
INSP	DN	0	0	0	0	0	0	0	0	0	0	0
INSP	DV	0	0	0	0	0	0	0	0	0	0	0
INSP	GN	1,830	0	0	0	0	0	0	0	0	0	0
INSP	SA	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	ST	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	20,460	3,433	0	0	0	0	0	0	0	0	0
INSP	UT	0	0	0	0	0	0	0	0	0	0	0
OTHER	SW	3,128	0	8,745	8,863	8,863	8,863	8,863	8,863	8,863	53,178	0
	Total	63,152	8,403	8,745	8,863	8,863	8,863	8,863	8,863	8,863	53,178	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/1/2018
DGN	7/1/2017	12/1/2018
INSP	7/1/2017	12/1/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

PUNAWAI WASTEWATER PUMP STATION AND FORCE MAIN SYSTEM IMPROVEMENTS, KANEO

Project:	2013061	Function:	Sanitation	Council:	03
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	30
TMK:		Department:	Environmental Services	Senate:	23
				House:	47
				Other:	

Description: This project is to address peak wet weather flow projections from Inflow/Infiltration (I/I) assessments for the Punawai WWPS, Kaneohe, and provide for miscellaneous structural, mechanical, electrical and site improvements as determined in the planning phase. Project includes sewer basin evaluation for reducing I/I, follow-on work for cost effective I/I reduction, and evaluating the need to upgrade the pump station capacities. Project may also include improvements to the pump station force main and sewer lines in the vicinity as determined in the planning phase, and to provide compatibility with pump station upgrades for peak flows.

Justification: Subject to the results of the planning phase evaluations, and in accordance with the I/I assessment update per the 2010 Consent Decree, the project will address peak wet weather flow requirements. Also, miscellaneous structural, mechanical, electrical and site improvements may be needed to ensure pump station and force main reliability and compliance with current standards.

Use of Funds: Plan and design improvements for Punawai wastewater pump station and force main system.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
LAND	SW	0	1	0	0	0	0	0	0	0	0	0
PLAN	SR	0	0	0	0	1	0	0	0	0	1	0
PLAN	SW	601	100	0	200	0	0	0	0	0	200	0
DGN	SR	0	0	0	0	1	0	0	0	0	1	0
DGN	SW	201	300	0	300	0	0	0	0	0	300	0
CONST	SR	0	0	0	0	3,500	0	0	0	0	3,500	0
INSP	SR	0	0	0	0	300	0	0	0	0	300	0
	Total	802	401	0	500	3,802	0	0	0	0	4,302	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2014	1/1/2020
DGN	6/1/2017	5/1/2022
CONST	12/1/2019	5/1/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

PYROLYSIS CARBONIZATION SYSTEM AT SAND ISLAND WASTEWATER TREATMENT PLANT

Project:	2015056	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Plan and design to integrate a pyrolysis carbonization system to recycle sewage sludge into a biomass solid fuel for renewable electric power generation at the Sand Island Wastewater Treatment Plant.

Justification:

Use of Funds: Continue to plan and design to integrate a pyrolysis carbonization system to recycle sewage sludge into biomass solid fuel for renewable electric power generation at the Sand Island Wastewater Treatment Plant.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	500	0	0	0	0	0	0	0	0	0
DGN	SR	0	500	0	0	0	0	0	0	0	0	0
	Total	0	1,000	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2015	12/1/2017
DGN	12/1/2015	12/1/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

RENTON ROAD SEWER AND MANHOLE REHABILITATION/RECONSTRUCTION

Project:	2003120	Function:	Sanitation	Council:	01
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	23
TMK:		Department:	Environmental Services	Senate:	20
				House:	42
				Other:	

Description: Rehabilitation or reconstruction of sewerline and manholes or manhole components along Renton Road pipelines, from the Honouliuli WWTP to the West Beach area. The structural deficiencies were initially identified in the Final Sewer I/I Plan, December, 1999. The more severe areas were addressed in the first phase of the project. FY14 construction funds are for the second phase, which is a requirement in the 2010 Consent Decree. The sewers are referred to as the Makakilo Interceptor sewer, consisting of approximately 12,485 linear feet of 30-inch sewer, and the Ko Olina Interceptor sewer, consisting of approximately 12,460 feet of 33-inch and 36-inch sewer trunk.

Justification: This project will address the requirements of the 2010 Consent Decree, project #HN-CS-04.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	222	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,222	0	0	0	0	0	0	0	0	0	0
CONST	SR	10,699	0	0	0	0	0	0	0	0	0	0
INSP	SR	700	0	0	0	0	0	0	0	0	0	0
	Total	12,844	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	2/1/2003	9/1/2007
DGN	10/1/2006	12/31/2016
CONST	1/1/2008	12/31/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

SAND ISLAND WASTEWATER BASIN ODOR CONTROL

Project:	2010049	Function:	Sanitation	Council:	07
Priority No.:	31	Program:	Sewage Collection And Disposal	Nbrd Board:	15
TMK:		Department:	Environmental Services	Senate:	13
				House:	30
				Other:	

Description: Improvements required in the Sand Island wastewater basin and at the Sand Island Wastewater Treatment Plant (WWTP) to address odor and corrosion issues. Construction funds in FY16 will be used for new odor control facilities by the UV Disinfection Facility and Effluent Pump Station areas at the WWTP.

Justification: Adequate odor control is needed to minimize public impacts due to wastewater odor, and ensure compliance with air permit requirements. Odor control measures also provide protection to structures and facilities from corrosive substances.

Use of Funds: Design, construct and inspect odor control improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	1,551	1	0	0	0	0	0	0	0	0	0
PLAN	SW	1,001	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,351	500	1	0	0	0	0	0	0	0	0
DGN	SW	500	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	15,000	1	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	800	800	800	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	5,203	16,301	802	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	3/1/2011	6/30/2018
DGN	3/30/2014	12/31/2019
CONST	6/1/2017	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

SAND ISLAND WASTEWATER TREATMENT PLANT AND SEWER BASIN FACILITIES

Project:	2009112	Function:	Sanitation	Council:	07
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	15
TMK:		Department:	Environmental Services	Senate:	13
				House:	30
				Other:	

Description: Planning to include updating the East Mamala Bay Wastewater Facilities Plan, including evaluating alternatives for construction of new facilities to meet Federal and State requirements and for long-term improvements. Work will include the required EA and/or EIS. Work will address control of wet weather flow from the Beachwalk, Ala Moana, and Hart St. Wastewater Pump Stations and from other tributary basins to the Sand Is. WWTP. Deep sewer tunnel and storage alternatives will be considered, including associated new pump station facilities. Design funds may be used for geotechnical engineering, survey work, and similar preliminary work, and for design work that may be needed on an expedited basis to meet mandated schedules. It is anticipated that design and construction of the recommended major improvements will be done under separately identified projects. Planning work includes facility planning for the future secondary treatment upgrade at the Sand Island WWTP.

Justification: The work is required to meet Federal and State requirements, including requirements of the 2010 Consent Decree, and for long-term odor control and reliability improvements. The plan will help identify and prioritize work which may be needed for the appropriate treatment of wastewater, and for the prevention and/or reduction of wastewater spills, including facilities that need to be rehabilitated or replaced to reduce risk of failure, and facilities needed to convey, store and/or contain the projected wet weather design flows.

Use of Funds: Plan wastewater treatment plant and sewer basin facilities.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	457	0	0	0	0	0	0	0	0	0	0
PLAN	SR	16,731	0	0	0	0	0	0	0	0	0	0
PLAN	SW	4,000	1,000	0	0	0	0	0	0	0	0	0
DGN	SR	2,101	0	0	0	0	0	0	0	0	0	0
DGN	SW	1	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
EQUIP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	23,290	1,000	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	3/1/2009	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

SAND ISLAND WASTEWATER TREATMENT PLANT ENERGY IMPROVEMENTS

Project:	2015045	Function:	Sanitation	Council:	07
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	15
TMK:		Department:	Environmental Services	Senate:	13
				House:	30
				Other:	

Description: Provide improvements at the existing Sand Island Wastewater Treatment Plant (WWTP) to reduce energy use, reduce maintenance costs, improve energy efficiency, provide better energy management, and/or provide alternative renewable energy production. Work may include replacement of Ultra-Violet Disinfection Equipment with more energy efficient equipment, use of biogas as an alternative fuel or energy source, and other similar measures.

Justification: Energy conservation measures are intended to reduce energy and energy related costs. Renewable energy sources may provide improved sustainability and reliability of operations.

Use of Funds: Plan, design, construct and inspect energy improvements at Sand Island Wastewater Treatment Plant.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	200	0	0	0	0	200	0
PLAN	SW	0	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	0	300	0	0	0	0	300	0
DGN	SW	0	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	22,000	0	0	0	0	22,000	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	1	0	0	0	0	1	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	22,501	0	0	0	0	22,501	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2016	1/1/2020
DGN	5/1/2016	1/1/2022
CONST	1/1/2018	1/1/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

SAND ISLAND WASTEWATER TREATMENT PLANT EXPANSION, PRIMARY TREATMENT

Project:	1994511	Function:	Sanitation	Council:	07
Priority No.:	19	Program:	Sewage Collection And Disposal	Nbrd Board:	15
TMK:		Department:	Environmental Services	Senate:	13
				House:	30
				Other:	

Description: Upgrade, refurbish and/or expand treatment units at the treatment plant, which are not already included in the Sand Island WWTP, Unit 1, Phase 2A (Headworks) Project, #89071, to bring overall plant capacity from 82 to 90 mgd average daily flow. Included is conversion of 6 flocculator/clarifier tanks to gravity settling tanks, reconstruction and rehabilitation work, odor control facilities, solids handling facilities, modifications to gravity thickeners, electrical system upgrade, emergency generators, and ancillary systems. Funds in FY11-FY14 fiscal years provide for the Phase 2 project work. FY17 funds are for contingencies, including improvements to the electrical/control rooms necessary for protection from water damage.

Justification: Project is required to increase the capacity of the treatment plant to accommodate anticipated future flows, and provide reconstruction/rehabilitation of essential facilities. The increase in the peak flow capacity of the plant will also accommodate projected peak wet weather design flows.

Use of Funds: Construct wastewater treatment plant improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	252	0	0	0	0	0	0	0	0	0	0
DGN	SR	11,460	0	0	0	0	0	0	0	0	0	0
CONST	SR	188,079	0	7,000	0	0	0	0	0	0	0	0
INSP	SR	12,375	0	0	0	0	0	0	0	0	0	0
	Total	212,166	0	7,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	3/1/1999	6/1/2006
DGN	3/1/1999	5/1/2019
CONST	4/1/2007	5/1/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

SAND ISLAND WASTEWATER TREATMENT PLANT IMPROVEMENTS/UPGRADE

Project:	2013062	Function:	Sanitation	Council:	07
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	15
TMK:		Department:	Environmental Services	Senate:	13
				House:	30
				Other:	

Description: Project includes rehabilitation and/or upgrades at the Sand Island Wastewater Treatment Plant (WWTP), including rehabilitation/renovation work for existing buildings, repair of deteriorated building exteriors, rehabilitation and/or protective coatings of concrete tanks, pipes and structures exposed to corrosive gases. Upgrades are proposed for disinfection equipment and system, electrical systems, emergency generator systems, effluent pump controls and hoist systems. Project may include receiving facilities for septage and other hauled wastes, and miscellaneous reliability and site improvements, including electrical, mechanical, civil and structural components at the WWTP, as developed in the planning phase.

Justification: Upgrades, improvements and rehabilitation of existing components at the WWTP are required to ensure continued reliability and efficiency of the facilities.

Use of Funds: Plan and design wastewater treatment plant improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	1	0	0	1	1	0	0	0	2	0
PLAN	SW	151	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	800	0	0	1	1	0	0	0	2	0
DGN	SW	751	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	6,000	7,000	0	0	0	13,000	0
INSP	SR	0	0	0	0	600	600	0	0	0	1,200	0
	Total	902	801	0	0	6,602	7,602	0	0	0	14,204	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2013	9/1/2018
DGN	6/1/2016	6/1/2022
CONST	6/1/2019	6/1/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

SAND ISLAND WASTEWATER TREATMENT PLANT OUTFALL IMPROVEMENTS/REHABILITATION

Project:	2009102	Function:	Sanitation	Council:	07
Priority No.:	41	Program:	Sewage Collection And Disposal	Nbrd Board:	15
TMK:		Department:	Environmental Services	Senate:	13
				House:	30
				Other:	

Description: Conduct an assessment of the existing outfall, and provide improvements or rehabilitation work determined to be needed for the outfall. Rehabilitation work is necessary for the flap gate at the end of the outfall. Also, shoreline protection improvements are needed to protect the outfall from damage at the shoreline area.

Justification: Inspection, assessment, improvements and/or rehabilitation of the outfall to ensure continued reliability of this critical infrastructure.

Use of Funds: Plan, design, construct and inspect improvements to the outfall at Sand Island wastewater treatment plant.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	900	0	250	0	0	0	0	0	0	0	0
DGN	SR	501	1	350	0	0	0	0	0	0	0	0
CONST	SR	0	2,500	5,500	0	0	0	0	0	0	0	0
INSP	SR	0	500	1	0	0	0	0	0	0	0	0
	Total	1,401	3,001	6,101	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/31/2009	7/31/2018
DGN	12/1/2014	12/31/2020
CONST	6/1/2017	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

SAND ISLAND WASTEWATER TREATMENT PLANT RETURN FLOW TREATMENT

Project:	2015055	Function:	Sanitation	Council:
Priority No.:	37	Program:	Sewage Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: Provide new treatment units to provide enhanced treatment of return flows within the Sand Island Wastewater Treatment Plant. Return flows include liquid streams coming from various existing treatment units, such as centrifuges, thickener tanks, etc., which are returned back into the main liquid wastewater stream for treatment. Work may include appurtenant units, equipment, pipes, lines, and electrical work needed to support the return flow treatment system.

Justification: Enhanced treatment of return flows may provide improved efficiency of operations, and improved reliability for compliance with permitted discharge limits.

Use of Funds: Design, construct and inspect treatment units for return flows at Sand Island wastewater treatment plant.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	100	1	0	0	0	0	0	0	0	0
DGN	SR	3,089	2,000	200	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	1	0	0	0	0	0	1	0
CONST	SR	0	1,000	24,000	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	8,000	0	0	0	0	0	8,000	0
INSP	SR	0	1	800	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	800	0	0	0	0	0	800	0
	Total	3,089	3,101	25,001	8,801	0	0	0	0	0	8,801	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	1/1/2019
DGN	12/1/2016	12/1/2020
CONST	12/1/2017	12/1/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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SAND ISLAND WASTEWATER TREATMENT PLANT SECONDARY TREATMENT

Project:	2012059	Function:	Sanitation	Council:	07
Priority No.:	49	Program:	Sewage Collection And Disposal	Nbrd Board:	15
TMK:		Department:	Environmental Services	Senate:	13
				House:	30
				Other:	

Description: Upgrade the Sand Island Wastewater Treatment Plant to include full secondary treatment of wastewater. Project also includes improvements related to the secondary treatment upgrades, site improvements and relocation work, septage receiving facilities, upgrades to grit processes and other pre-secondary treatment processes, flow equalization, intermediate pump station and other pump station work, sludge pumping, thickening and other solids handling, changes to disinfection facilities, maintenance and storage facilities, utilities, appurtenances and miscellaneous support facilities.

Justification: The project addresses requirements of the 2010 Consent Decree, para. 31.

Use of Funds: Plan and design wastewater treatment plant improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	500	1	1	0	0	502	0
PLAN	SW	2,000	0	4,000	500	0	0	0	0	0	500	0
DGN	SR	0	0	0	0	14,000	12,000	40,000	1	1	66,002	0
DGN	SW	1	0	1	14,000	0	0	0	0	0	14,000	0
CONST	SR	0	0	0	0	0	70,000	360,000	1	1	430,002	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	1,500	1,500	2,000	2,000	7,000	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	2,001	0	4,001	14,500	14,500	83,501	401,501	2,002	2,002	518,006	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2016	1/1/2021
DGN	1/1/2019	12/1/2035
CONST	1/1/2021	12/1/2035

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

SAND ISLAND WASTEWATER TREATMENT PLANT SOLIDS HANDLING

Project:	2012054	Function:	Sanitation	Council:	07
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	15
TMK:		Department:	Environmental Services	Senate:	13
				House:	30
				Other:	

Description: Solids handling facilities needed at the Sand Island Wastewater Treatment Plant to provide for adequate treatment, processing and handling of wastewater solids. Project includes the second egg-shaped digester, second sludge storage tank, and related improvements.

Justification: Adequate solids handling facilities are needed to process the wastewater solids, to ensure continued compliance with NPDES permit limits for wastewater treatment and effluent disposal.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SR	21,966	0	0	0	0	0	0	0	0	0	0
INSP	SR	1,000	0	0	0	0	0	0	0	0	0	0
	Total	22,966	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2011	12/1/2012
DGN	9/1/2011	7/1/2017
CONST	9/1/2012	7/1/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

SAND ISLAND WWTP HEADWORKS SCREENING IMPROVEMENTS

Project:	2016058	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Project includes replacement and upgrade of screening facilities at the headworks area of the wastewater treatment plant (WWTP), including associated ancillary systems. Improved screening will include screens with small openings to remove more fibrous material, which will minimize the accumulation of material and clogging of equipment further downstream in the treatment process.

Justification: Upgrade and improvements to the existing headworks screening at the WWTP is needed to ensure continued reliability and efficiency of the facilities, and continued compliance with effluent limits in the NPDES permit.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	1	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	150	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	8,000	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	150	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	0	8,301	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/30/2015	9/30/2017
DGN	5/1/2016	12/1/2019
CONST	6/1/2017	12/1/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

SAND ISLAND WWTP - RELOCATE REHABILITATION CENTER

Project:	2018055	Function:	Sanitation	Council:
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: Relocate the existing drug and alcohol treatment center from the existing location within the Sand Island Wastewater Treatment Plant (WWTP) to an off-site location. Project may also include demolishing and/or removing existing facilities, and preparing the site for the Sand Island WWTP Secondary Treatment project.

Justification: Site is necessary for the Sand Island WWTP Secondary Treatment project.

Use of Funds: Relocate the rehabilitation center at Sand Island wastewater treatment plant.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
RELOC	SR	0	0	0	0	0	0	0	0	0	0	0
RELOC	SW	0	0	0	8,000	0	0	0	0	0	8,000	0
	Total	0	0	0	8,000	0	0	0	0	0	8,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
RELOC	7/1/2017	7/1/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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SAND ISLAND WWTP SOLIDS SYSTEM IMPROVEMENTS/UPGRADE

Project:	2018054	Function:	Sanitation	Council:
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: Solids handling facilities needed at the Sand Island Wastewater Treatment Plant to provide for adequate treatment, processing and handling of wastewater solids. This projectâ¿¿s objective is the capacity upgrades needed to accommodate Secondary Treatment upgrades required by the 2010 Consent Decree, including the first and second phases of the upgrade, and also the capacity needed for the projected growth and development.

Justification: Adequate solids handling facilities are needed to process the wastewater solids, to ensure compliance with the 2010 Consent Decree requirements for Secondary Treatment, as well as capacity for projected growth and development.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	200	1	0	0	0	201	0
DGN	SR	0	0	0	0	3,000	1	1	0	0	3,002	0
CONST	SR	0	0	0	0	0	90,000	1	0	0	90,001	0
INSP	SR	0	0	0	0	0	1,200	800	0	0	2,000	0
	Total	0	0	0	0	3,200	91,202	802	0	0	95,204	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2019	6/1/2021
DGN	1/1/2019	12/31/2022
CONST	6/1/2020	12/31/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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SEWER CONDITION ASSESSMENT PROGRAM

Project:	2007068	Function:	Sanitation	Council:	99
Priority No.:	7	Program:	Sewage Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: This program will monitor the structural condition of sewers. The approach of the program is to track the structural condition of elements of the collection system by performing field inspections and condition assessments of gravity sewers and force mains.

Justification: Programs for the assessment of the condition of gravity sewers and force mains are included in the requirements of the 2010 Consent Decree.

Use of Funds: Plan for sewer and force main condition assessment.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	18,061	0	0	0	0	0	0	0	0	0	0
PLAN	SW	7,400	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	15,000	0
	Total	25,461	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	15,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2006	6/30/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

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SEWER I/I RELIEF AND REHABILITATION PROJECTS - ALA MOANA TRIBUTARY BASIN

Project:	2013063	Function:	Sanitation	Council:	99
Priority No.:	24	Program:	Sewage Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Project includes sewer relief and sewer rehabilitation projects identified by the Wet Weather I/I Assessment Update work, facility planning and condition assessments, in accordance with the requirements of the 2010 Consent Decree. This project covers the sewer collection basin that is tributary to the Ala Moana Wastewater Pump Station, which is roughly from the downtown and Punchbowl areas going eastward to Niu Valley. Project includes, but is not limited to, project SI-CS-49, Waikiki Relief Sewer, and SI-GM-01, Punahou Street Relief Sewer, in accordance with the Wet Weather I/I Assessment Update Report, December 2013, and the Final Deferred Projects Report, May 2014.

Justification: The sewer relief and rehabilitation projects will meet requirements of the 2010 Consent Decree, for the purpose of preventing and reducing sanitary sewer overflows.

Use of Funds: Acquire land, plan, design, construct and inspect sewer relief and rehabilitation projects.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	1	1	1	0	0	0	0	0	1	0
LAND	SW	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	2	1	1	1	0	0	0	0	0	1	0
PLAN	SW	1,401	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,500	500	1,000	500	0	0	0	0	0	500	0
DGN	SW	1,502	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	15,000	15,000	0	0	0	0	0	15,000	0
INSP	SR	0	0	1,500	1,500	0	0	0	0	0	1,500	0
	Total	4,405	502	17,502	17,002	0	0	0	0	0	17,002	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2013	1/1/2018
DGN	7/1/2015	7/1/2020
CONST	10/1/2017	7/1/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

SEWER I/I RELIEF AND REHABILITATION PROJECTS - HART ST. TRIBUTARY BASIN

Project:	2013064	Function:	Sanitation	Council:	99
Priority No.:	25	Program:	Sewage Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Project includes sewer relief and sewer rehabilitation projects identified by the Wet Weather I/I Assessment Update work, facility planning and condition assessments, in accordance with the requirements of the 2010 Consent Decree. This project covers the sewer collection basin that is tributary to the Hart St. Wastewater Pump Station, which roughly covers from the downtown area and westward to the Red Hill area. Project includes, but is not limited to, project SI-CS-44, Alewa Heights Relief Sewer, SI-CS-04, Auiki Street Relief Sewer, and SI-CS-39, Kalani Street Relief Sewer, in accordance with the Wet Weather I/I Assessment Update Report, December 2013, the Final Deferred Projects Report, May 2014, and the 18.f Report of Evaluation and Recommendations, December 2014.

Justification: The sewer relief and rehabilitation projects will meet requirements of the 2010 Consent Decree, for the purpose of preventing and reducing sanitary sewer overflows.

Use of Funds: Acquire land, plan, design, construct and inspect sewer relief and rehabilitation projects.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	1	1	1	0	0	0	0	0	1	0
LAND	SW	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	1	1	1	1	0	0	0	0	0	1	0
PLAN	SW	1,401	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,000	1,000	500	1	0	0	0	0	0	1	0
DGN	SW	2,002	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	30,000	1	0	0	0	0	0	1	0
INSP	SR	0	0	1,200	1,200	0	0	0	0	0	1,200	0
	Total	4,404	1,002	31,702	1,204	0	0	0	0	0	1,204	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2013	1/1/2018
DGN	5/1/2016	7/1/2020
CONST	12/1/2017	7/1/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

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SEWER I/I RELIEF AND REHABILITATION PROJECTS - LEEWARD AREA

Project:	2013065	Function:	Sanitation	Council:	99
Priority No.:	44	Program:	Sewage Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Project includes sewer relief and sewer rehabilitation projects identified by the Wet Weather I/I Assessment Update work, facility planning and condition assessments, in accordance with the requirements of the 2010 Consent Decree. This project covers the sewer collection basins that are tributary to the Honouliuli Wastewater Treatment Plant, the Waianae Wastewater Treatment Plant, and the Wahiawa Wastewater Treatment Plant, which roughly covers all leeward areas starting from Red Hill, to Wahiawa, Ewa Beach and Waianae.

Justification: The sewer relief and rehabilitation projects will meet requirements of the 2010 Consent Decree, for the purpose of preventing and reducing sanitary sewer overflows.

Use of Funds: Acquire land, plan and design sewer relief and rehab projects in the Leeward area.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	1	0	0	1	0	0	0	0	1	0
LAND	SW	0	0	1	0	0	0	0	0	0	0	0
PLAN	SR	0	1	0	0	1	0	0	0	0	1	0
PLAN	SW	600	0	1	0	0	0	0	0	0	0	0
DGN	SR	0	500	0	0	300	1	0	0	0	301	0
DGN	SW	2	0	200	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	4,000	0	0	0	0	4,000	0
INSP	SR	0	0	0	0	400	200	0	0	0	600	0
	Total	602	502	202	0	4,702	201	0	0	0	4,903	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2014	1/1/2018
DGN	10/1/2016	7/1/2021
CONST	7/1/2019	7/1/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

SEWER I/I RELIEF AND REHABILITATION PROJECTS - WINDWARD AREA

Project:	2013066	Function:	Sanitation	Council:	99
Priority No.:	38	Program:	Sewage Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Project includes sewer relief and sewer rehabilitation projects identified by the Wet Weather I/I Assessment Update work, facility planning and condition assessments, in accordance with the requirements of the 2010 Consent Decree. This project covers the sewer collection basins that are tributary to the Kailua Wastewater Treatment Plant, the Waimanalo Wastewater Treatment Plant, and the Kahuku Wastewater Treatment Plant, which roughly covers all windward areas starting from Waimanalo to Kailua, Kaneohe, Ahuimanu, and Kahuku. Project includes, but is not limited to, project KK-CS-27, Waikapoki Relief Sewer, in accordance with the Final Deferred Projects Report, May 2014.

Justification: The sewer relief and rehabilitation projects will meet requirements of the 2010 Consent Decree, for the purpose of preventing and reducing sanitary sewer overflows.

Use of Funds: Plan, design and construct sewer relief and rehabilitation projects for the Windward area.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	1	0	0	1	0	0	0	0	1	0
LAND	SW	0	0	1	0	0	0	0	0	0	0	0
PLAN	SR	1	1	0	0	1	0	0	0	0	1	0
PLAN	SW	601	0	1	1	0	0	0	0	0	1	0
DGN	SR	400	400	0	0	100	0	0	0	0	100	0
DGN	SW	602	0	600	100	0	0	0	0	0	100	0
CONST	SR	0	0	0	0	2,500	0	0	0	0	2,500	0
CONST	SW	0	0	1	1	0	0	0	0	0	1	0
INSP	SR	0	0	0	0	1	0	0	0	0	1	0
	Total	1,604	402	603	102	2,603	0	0	0	0	2,705	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2014	1/1/2019
DGN	5/1/2016	7/1/2020
CONST	12/31/2018	7/1/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

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SEWER I-I RELIEF & REHAB PROJECTS - WINDWARD, INCREMENT 2

Project:	2017061	Function:	Sanitation	Council:
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: Project includes Increment 2 of sewer relief and sewer rehabilitation projects identified by capacity assessment, facility planning and condition assessments, and in accordance with the requirements of the 2010 Consent Decree. This project covers the sewer collection basins that are tributary to the Kailua Wastewater Treatment Plant, the Waimanalo Wastewater Treatment Plant, and the Kahuku Wastewater Treatment Plant, which roughly covers all windward areas starting from Waimanalo to Kailua, Kaneohe, Ahuimanu, and Kahuku. Project may include, but not be limited to, project nos. KK-CS-16, Iana Street Relief Sewer, KK-CS-21, Kahuhipa Street Relief Sewer, KK-CS-25, Makahio Street Relief Sewer, and KK-CS-26, Keaahala Relief Sewer, in accordance with the Final Deferred Projects Report, May 2014, and the 18.f Report of Evaluation and Recommendations, December 2014.

Justification: The sewer relief and rehabilitation projects are needed for continued reliability of service. Project includes some improvements needed to meet requirements of the 2010 Consent Decree which have construction completion schedule allowed after 2020.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	300	0	1	0	0	301	0
DGN	SR	0	0	0	0	1	0	300	0	0	301	0
	Total	0	0	0	0	301	0	301	0	0	602	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2019	7/1/2022
DGN	10/1/2019	7/1/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

SEWER MAINLINE AND LATERAL PROJECTS

Project:	2000071	Function:	Sanitation	Council:	99
Priority No.:	6	Program:	Sewage Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Project will provide a vehicle for completing planning, design, and construction work for high priority sewer mainline and lateral projects. Funding is for island-wide sewer rehabilitation and reconstruction work. This project also provides funding for rehabilitation of sewerlines identified as high priority for reducing and preventing wastewater spills. Project includes easement access improvements at various locations, and also facilities improvements at the Collection Systems Maintenance baseyard in Halawa for project management and engineering support for this program

Justification: The sewer gravity main rehabilitation and replacement program is a requirement of the 2010 Consent Decree. The program addresses the continuing need for an effective sewer rehabilitation program, to continue during and after the period of the Consent Decree, to help ensure prevention and reduction of wastewater spills in the future. Access improvements are to provide a means for rehabilitation work to be done in difficult to reach sewer easements. Improvements to facilities at the Collections System Maintenance baseyard are needed for the continuing project management and engineering support for this sewer rehabilitation program.

Use of Funds: Acquire land, plan, design, construct and inspect mainline and lateral improvement projects.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	193	0	0	0	0	0	0	0	0	0	0
LAND	SW	69	100	100	100	100	100	100	100	100	600	0
PLAN	SR	1,024	0	0	0	0	0	0	0	0	0	0
PLAN	SW	575	200	200	200	200	200	200	200	200	1,200	0
DGN	SR	1,032	0	0	0	0	0	0	0	0	0	0
DGN	SW	301	700	700	700	500	500	500	500	500	3,200	0
CONST	SR	27,012	0	0	0	0	0	0	0	0	0	0
CONST	SW	56,075	18,000	18,000	18,000	14,000	14,000	14,000	14,000	14,000	88,000	0
INSP	SR	1,829	0	0	0	0	0	0	0	0	0	0
INSP	SW	251	500	500	500	500	500	500	500	500	3,000	0
	Total	88,361	19,500	19,500	19,500	15,300	15,300	15,300	15,300	15,300	96,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2018
DGN	7/1/2017	12/31/2018
CONST	7/1/2017	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

SEWER MANHOLE AND PIPE REHABILITATION AT PEARL CITY

Project:	2015057	Function:	Sanitation	Council:	08
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	21
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Repair and rehabilitate sewer manholes and pipes in the vicinity of Pearl City Wastewater Pump Station. Project includes rehabilitation of a junction sewer manhole at the pump station site. Initial Construction and Inspection phase funds for this work are provided in FY14 under project #2002043, and subsequently under this project #2015057 starting in FY15.

Justification: This project will help to prevent and reduce wastewater spills. Also, sewer gravity main rehabilitation and replacement program is a requirement of the 2010 Consent Decree.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	1	0	0	0	0	0	0	0	0	0	0
DGN	SR	100	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	101	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	4/1/2014	4/1/2015
DGN	4/1/2014	12/1/2017
CONST	4/1/2015	12/1/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

SEWER MANHOLE AND PIPE REHABILITATION AT VARIOUS LOCATIONS

Project:	2002043	Function:	Sanitation	Council:	99
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Repair and rehabilitate sewer manholes and pipes in areas identified in the Final Sewer Inflow/Infiltration Plan. Areas may include but are not limited to, Pearl City, Kaneohe, Nimitz Highway-Awa Street, Wahiawa and Waianae. Work to be accomplished in phases through several construction contracts. Additional phase funded with FY14 funds is for manhole rehabilitation in the vicinity of the Pearl City Wastewater Pump Station.

Justification: This project will help to prevent and reduce wastewater spills. This project is required by the Final Sewer I/I Plan, and includes project nos. HN-CS-05A, KK-CS-12A and 12B, SI-CS-51A, WH-CS-01, and WN-CS-01. Also, sewer gravity main rehabilitation and replacement program is a requirement of the 2010 Consent Decree.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
LAND	SW	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	314	0	0	0	0	0	0	0	0	0	0
PLAN	SW	1	0	0	0	0	0	0	0	0	0	0
DGN	SR	770	0	0	0	0	0	0	0	0	0	0
DGN	SW	500	0	0	0	0	0	0	0	0	0	0
CONST	SR	6,088	0	0	0	0	0	0	0	0	0	0
CONST	SW	1,179	0	0	0	0	0	0	0	0	0	0
INSP	SR	1,424	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	10,275	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	4/1/2002	3/1/2007
DGN	11/1/2006	3/1/2017
CONST	3/1/2008	3/1/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

UWALU WASTEWATER PUMP STATION UPGRADE

Project:	2008079	Function:	Sanitation	Council:	02
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	26
TMK:		Department:	Environmental Services	Senate:	22
				House:	40
				Other:	

Description: This project evaluated possible hydraulic deficiencies at the Uwalu WWPS, and will provide for miscellaneous structural, mechanical, civil and electrical improvements as determined in the planning phase. Project includes evaluating the need to upgrade the pump station capacity based on the collection sewer hydraulic analysis and field verification.

Justification: The requirements of the 2010 Consent Decree, project no. WH-PS-02, which were initially considered for this project, have been addressed in the 18.f Report of Evaluation and Recommendations, December 2014. The recommended project currently includes miscellaneous structural, mechanical, electrical and site improvements needed to ensure station reliability and compliance with current standards.

Use of Funds: Plan, design, construct and inspect pump station upgrade.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	121	1	0	0	0	0	0	0	0	0	0
DGN	SR	502	100	0	0	0	0	0	0	0	0	0
CONST	SR	2,562	700	0	0	0	0	0	0	0	0	0
INSP	SR	0	1	0	0	0	0	0	0	0	0	0
	Total	3,185	802	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2009	8/31/2015
DGN	5/1/2014	7/1/2018
CONST	7/1/2016	7/1/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

WAHIAWA,WHITMORE VILLAGE AND MAKAKILO AREA WASTEWATER PUMP STATION AND FA

Project:	2013069	Function:	Sanitation	Council:	99
Priority No.:	47	Program:	Sewage Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: This project provides condition assessment of existing wastewater facilities and design and construction of improvements, including pumping, structural, mechanical, electrical and site improvements and upgrades as determined in the planning phase. This project includes wastewater pump stations (WWPS) in the area of Wahiawa, including Grandview WWPS, Homelani WWPS, Kemoo Farm WWPS, Lakeview Circle WWPS, Nakula WWPS and Ohai Place WWPS, and also Whitmore Village Wastewater Pre-treatment Facility and the Makakilo City WWPS.

Justification: Pumping, structural, mechanical, electrical and site improvements identified in the planning phase are intended to ensure station reliability and compliance with current standards, which also provides prevention and reduction of potential sanitary sewer overflows.

Use of Funds: Plan and design wastewater pump station and facilities improvements in Wahiawa, Whitmore Village and Makakilo area.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	651	0	0	0	1	0	0	0	0	1	0
PLAN	SW	0	0	1	0	0	0	0	0	0	0	0
DGN	SR	550	0	0	0	1	0	0	0	0	1	0
DGN	SW	0	0	200	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	8,000	0	0	0	0	8,000	0
INSP	SR	0	0	0	0	1,000	0	0	0	0	1,000	0
	Total	1,201	0	201	0	9,002	0	0	0	0	9,002	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2012	12/1/2019
DGN	9/1/2016	5/1/2022
CONST	12/1/2019	5/1/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

WAIANAE WASTEWATER FACILITIES PLAN

Project:	2010047	Function:	Sanitation	Council:	01
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	24
TMK:		Department:	Environmental Services	Senate:	21
				House:	44
				Other:	

Description: Preparation of a wastewater facilities plan, and associated environmental impact statement, for the Waianae Wastewater Treatment Plant and its wastewater service basin. The facilities plan will address the wastewater management needs for the Waianae area for a 20-year planning period.

Justification: The facilities plan will evaluate the wastewater management needs for the planning area, and provide recommendations for future improvements.

Use of Funds: Plan Waianae wastewater facilities.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	800	0	0	0	0	0	0	0	0	0	0
PLAN	SW	700	700	0	300	0	0	0	0	0	300	0
	Total	1,500	700	0	300	0	0	0	0	0	300	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2010	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

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WAIANAE WASTEWATER TREATMENT PLANT IMPROVEMENTS/UPGRADE

Project:	2013067	Function:	Sanitation	Council:	01
Priority No.:	32	Program:	Sewage Collection And Disposal	Nbrd Board:	24
TMK:		Department:	Environmental Services	Senate:	21
				House:	44
				Other:	

Description: Project includes rehabilitation and/or upgrades at the Waianae Wastewater Treatment Plant (WWTP), including rehabilitation/renovation work for existing facilities, rehabilitation and/or protective coatings of concrete tanks, pipes and structures exposed to corrosive gases. Upgrades are proposed for the internal plant water system, electrical systems, existing digesters, including mixing systems and tank covers, pretreatment blowers, grit and pre-aeration tanks, diesel systems, oil storage, and electrical load center. Work may also include improvements to the influent pump station. Project will also provide miscellaneous reliability improvements to electrical, mechanical and structural components at the WWTP, as developed in the planning phase.

Justification: Upgrades, improvements and rehabilitation of existing components at the WWTP are required to ensure continued reliability and efficiency of the facilities.

Use of Funds: Plan, design, construct and inspect improvements at Waianae wastewater treatment plant.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	80	1	300	0	0	0	0	0	0	0	0
PLAN	SW	500	0	0	1	0	0	0	0	0	1	0
DGN	SR	720	800	600	0	0	0	0	0	0	0	0
DGN	SW	300	0	0	2,100	1	0	0	0	0	2,101	0
CONST	SR	0	18,000	1	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	13,000	1	0	0	0	0	13,001	0
INSP	SR	0	600	600	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	600	600	0	0	0	0	1,200	0
	Total	1,600	19,401	1,501	15,701	602	0	0	0	0	16,303	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2014	7/1/2017
DGN	12/1/2015	6/1/2021
CONST	6/1/2017	6/1/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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WAIANAE WASTEWATER TREATMENT PLANT OUTFALL IMPROVEMENTS/REHABILITATION

Project:	2013100	Function:	Sanitation	Council:	01
Priority No.:	46	Program:	Sewage Collection And Disposal	Nbrd Board:	24
TMK:		Department:	Environmental Services	Senate:	21
				House:	44
				Other:	

Description: Conduct an assessment of the existing outfall, and provide improvements or rehabilitation work determined to be needed for the outfall.

Justification: Inspection, assessment, improvements and/or rehabilitation of the outfall to ensure continued reliability of this critical infrastructure.

Use of Funds: Plan and design improvements to the outfall at Waianae wastewater treatment plant.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SW	400	100	100	0	1	1	0	0	0	2	0
DGN	SW	1	1	1	0	300	100	0	0	0	400	0
CONST	SR	0	0	0	0	0	2,000	0	0	0	2,000	0
INSP	SR	0	0	0	0	0	300	0	0	0	300	0
	Total	401	101	101	0	301	2,401	0	0	0	2,702	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2014	10/1/2018
DGN	6/1/2017	12/1/2022
CONST	6/1/2020	12/1/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

WAIANAE WWTP INFLUENT PUMP STATION UPGRADE & FLOW EQUALIZATION

Project:	2017062	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Project includes rehabilitation and/or upgrades at the Waianae Wastewater Treatment Plant, including improvements to the influent pump station, and consideration of alternative equalization storage facilities. Project will also provide related reliability improvements to electrical, mechanical, civil and structural components at these facilities.

Justification: Upgrades and improvements at the WWTP are required to ensure continued reliability and efficiency of the facilities. Includes project no. WN-TP-01, para. 18.g., per the requirements of the 2010 Consent Decree, which has a construction completion schedule allowed after 2020.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	400	0	1	0	0	401	0
DGN	SR	0	0	0	0	1	0	600	0	0	601	0
	Total	0	0	0	0	401	0	601	0	0	1,002	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2019	7/1/2022
DGN	10/1/2019	7/1/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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WAIAU AREA SEWER REHABILITATION/RECONSTRUCTION

Project:	2007070	Function:	Sanitation	Council:	08
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	21
TMK:		Department:	Environmental Services	Senate:	16
				House:	34
				Other:	

Description: This project will rehabilitate and/or reconstruct sewers to reduce infiltration and inflow (I/I) and address structural deficiencies as determined in the planning phase. The project area is located by Kamehameha Highway near Pearl Harbor's East Loch. The project will include I/I source detection to determine recommendations for rehabilitation of sewer mains, manholes, and lower laterals. The project may also include reconstructing pipelines where sewers are determined to be inadequate.

Justification: The project addresses requirements of the 2010 Consent Decree, project HN-CS-10A, Honouliuli Sewer Rehabilitation - 7D01A.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	401	0	0	0	0	0	0	0	0	0	0
DGN	SR	901	0	0	0	0	0	0	0	0	0	0
CONST	SR	10,449	0	0	0	0	0	0	0	0	0	0
INSP	SR	1,075	0	0	0	0	0	0	0	0	0	0
	Total	12,826	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	3/1/2007	12/1/2014
DGN	12/1/2009	7/1/2016
CONST	6/1/2014	7/1/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

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WAIKALUA WASTEWATER PUMP STATION UPGRADE AND ALTERNATIVE DIVERSION SEWER

Project:	2008080	Function:	Sanitation	Council:	03
Priority No.:	15	Program:	Sewage Collection And Disposal	Nbrd Board:	30
TMK:		Department:	Environmental Services	Senate:	24
				House:	48
				Other:	

Description: This project is to address possible hydraulic deficiencies at the Waikalua WWPS, and provide for miscellaneous structural, mechanical and electrical improvements as determined in the planning phase. Project includes evaluating the need to upgrade the pump station capacity based on the collection sewer hydraulic analysis and field verification, and will also evaluate alternative gravity sewer solutions which may allow decommissioning of the pump station. Subsequent evaluation of the alternative solution shows it to be not cost effective at this time, therefore the project will proceed with the pump station upgrade alternative.

Justification: The project addresses requirements of the 2010 Consent Decree, project no. KK-PS-02, which has a completion date allowed to be after 2020. Also, miscellaneous structural, mechanical, civil and electrical improvements are needed to ensure station reliability and compliance with current standards.

Use of Funds: Design, construct and inspect improvements at Waikalua wastewater pump station.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	282	1	0	0	0	0	0	0	0	0	0
PLAN	SW	100	0	0	0	0	0	0	0	0	0	0
DGN	SR	381	300	1	0	0	0	0	0	0	0	0
DGN	SW	350	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	3,500	1,500	0	0	0	0	0	0	0	0
INSP	SR	0	300	300	0	0	0	0	0	0	0	0
	Total	1,113	4,101	1,801	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2007	12/1/2016
DGN	5/1/2015	5/1/2020
CONST	6/1/2017	5/1/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

WAIKAPOKI WASTEWATER PUMP STATION UPGRADE

Project:	2006055	Function:	Sanitation	Council:	03
Priority No.:	14	Program:	Sewage Collection And Disposal	Nbrd Board:	30
TMK:		Department:	Environmental Services	Senate:	24
				House:	48
				Other:	

Description: This project is to address possible hydraulic deficiencies at the Waikapoki WWPS, and provide for miscellaneous structural, mechanical and electrical improvements as determined in the planning phase. Project includes evaluating the need to upgrade the pump station capacity based on the collection sewer hydraulic analysis and field verification. Project may also include addressing hydraulic issues in the tributary sewers immediately upstream of the pump station.

Justification: The project addresses requirements of the 2010 Consent Decree, project no. KK-PS-12. Also, miscellaneous structural, mechanical, civil and electrical improvements are needed to ensure station reliability and compliance with current standards.

Use of Funds: Design, construct and inspect wastewater pump station upgrade.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	219	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,122	1	1	0	0	0	0	0	0	0	0
CONST	SR	0	6,000	2,000	0	0	0	0	0	0	0	0
INSP	SR	1,000	500	500	0	0	0	0	0	0	0	0
	Total	2,341	6,501	2,501	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2006	12/1/2016
DGN	5/1/2014	5/1/2020
CONST	6/1/2017	5/1/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

WAIMALU WASTEWATER PUMP STATION FORCE MAIN AND WAIAU AREA SEWER IMPROVEME

Project:	2012052	Function:	Sanitation	Council:	08
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	21
TMK:		Department:	Environmental Services	Senate:	17
				House:	34
				Other:	

Description: The force main portion of the project includes alternatives for a proposed new force main, and work at the pump station that may be needed to provide compatibility with the force main system. The project may also include future reconstruction, rehabilitation of the existing force main, diversion facilities and/or other improvements for all or portions of the force main system. The sewer rehabilitation portion of the project will rehabilitate and/or reconstruct sewers to reduce infiltration and inflow (I/I) and address structural deficiencies. The project area is located by Kamehameha Highway near Pearl Harbor's East Loch. The project will include rehabilitation and reconstruction of sewer mains, manholes, and lower laterals.

Justification: The project addresses requirements in the 2010 Consent Decree for force main assessment, flow diversion planning and follow-up action, and also paragraph 18 requirements for sewer rehabilitation, project no. HN-CS-10A.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	900	0	0	0	0	0	0	0	0	0	0
	Total	900	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/31/2011	12/31/2014
DGN	7/31/2011	6/1/2017
CONST	7/1/2014	6/1/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

WAIMALU WASTEWATER PUMP STATION FORCE MAIN SYSTEM

Project:	2017056	Function:	Sanitation	Council:
Priority No.:	27	Program:	Sewage Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: Project includes the next scheduled condition assessment of the existing force main system, follow-up action plan and improvements, by 9/30/2018. The project may include rehabilitation work for the force main system and appurtenances.

Justification: Investigation and assessment of the force main system is necessary to determine the structural and operating conditions. Implementing the follow-up action plan and recommended improvements/ modifications is necessary for continued reliable service.

Use of Funds: Plan and design force main system improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	800	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	1	0	0	0	0	0	0	0	0
	Total	0	0	801	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2016	12/1/2019
DGN	10/1/2016	12/1/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

WAIMALU WASTEWATER PUMP STATION MODIFICATION/UPGRADE

Project:	2013068	Function:	Sanitation	Council:	08
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	20
TMK:		Department:	Environmental Services	Senate:	14
				House:	34
				Other:	

Description: This project is to address possible hydraulic deficiencies at the Waimalu WWPS, and provide for miscellaneous structural, mechanical, electrical and site improvements as determined in the planning phase. Project includes evaluating the need to upgrade the pump station capacity based on the collection sewer hydraulic analysis and field verification.

Justification: The requirements of the 2010 Consent Decree, project no. HN-CS-07, which were initially considered for this project, have been addressed in the 18.f Report of Evaluation and Recommendations, December 2014. The recommended project currently includes miscellaneous structural, mechanical, electrical and site improvements needed to ensure station reliability, capacity for future population growth and development, and compliance with current standards.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	1	0	0	0	0	1	0
PLAN	SW	501	1	0	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	0	1	0	0	0	0	1	0
DGN	SW	701	300	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	10,000	0	0	0	0	10,000	0
INSP	SR	0	0	0	0	1,200	0	0	0	0	1,200	0
	Total	1,202	301	0	0	11,202	0	0	0	0	11,202	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2013	1/1/2019
DGN	7/1/2016	5/1/2022
CONST	10/1/2019	5/1/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

WAIPAHU WASTEWATER PUMP STATION FORCE MAIN

Project:	2012053	Function:	Sanitation	Council:	09
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	22
TMK:		Department:	Environmental Services	Senate:	17
				House:	35
				Other:	

Description: The project includes a proposed new third force main for the Waipahu Wastewater Pump Station (WWPS). The work may also include rehabilitation work and improvements for the existing force mains and work at the pump station, that may be needed to provide compatibility with the force main system. Planning work includes study of alignment alternatives.

Justification: Additional force main capacity is needed to meet future flows, to possibly provide relief at WWPS's to meet wet weather peak flows, and to ensure a reliable system in the future. Current system consists of shared dual force mains for both the Waipahu WWPS and the Pearl City WWPS. This shared system will need additional capacity, and the recommendations from the facility planning favor construction of a third force main for Waipahu WWPS to provide improved system capacity and reliability.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	1	0	0	0	1	0	0	0	1	0
PLAN	SR	2,401	1	0	0	0	1	0	0	0	1	0
PLAN	SW	700	0	0	0	0	0	0	0	0	0	0
DGN	SR	3,500	500	0	0	0	500	1	0	0	501	0
DGN	SW	1	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	60,000	1	0	0	60,001	0
INSP	SR	0	0	0	0	0	2,000	2,000	0	0	4,000	0
	Total	6,602	502	0	0	0	62,502	2,002	0	0	64,504	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/31/2011	12/31/2019
DGN	12/31/2017	12/1/2023
CONST	9/30/2020	12/1/2023

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

WAIPAHU WWPS FORCE MAINS REHABILITATION

Project:	2018053	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: The project includes rehabilitation work and improvements for the existing two force mains for the Waipahu Wastewater Pump Station (WWPS). The work may also include rehabilitation work and improvements at the pump station that may be needed to provide compatibility with the force main system. The rehabilitation work will be done after the new third force main is completed.

Justification: Rehabilitation and/or improvements of the two existing force mains is needed to ensure continued reliability of this critical infrastructure.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	0	1	0	1	0	1	3	0
PLAN	SR	0	0	0	0	800	0	1	0	1	802	0
DGN	SR	0	0	0	0	1	0	2,000	0	500	2,501	0
CONST	SR	0	0	0	0	0	0	0	0	40,000	40,000	0
INSP	SR	0	0	0	0	0	0	0	0	800	800	0
	Total	0	0	0	0	802	0	2,002	0	41,302	44,106	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2019	12/31/2022
DGN	6/1/2021	12/31/2025
CONST	6/1/2023	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

WAIPIO WASTEWATER PUMP STATION UPGRADE

Project:	2007071	Function:	Sanitation	Council:	02
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	25
TMK:		Department:	Environmental Services	Senate:	22
				House:	45
				Other:	

Description: This project is to address possible hydraulic deficiencies at the Waipio WWPS, and provide for miscellaneous structural, mechanical, electrical and site improvements as determined in the planning phase. Project includes evaluating the need to upgrade the pump station capacity based on the collection sewer hydraulic analysis and field verification.

Justification: The requirements of the 2010 Consent Decree, project no. HN-PS-01, which were initially considered for this project, have been addressed in the 18.f Report of Evaluation and Recommendations, December 2014. The recommended project currently includes miscellaneous structural, mechanical, electrical and site improvements needed to ensure station reliability and compliance with current standards.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	274	1	0	0	0	0	0	0	0	0	0
PLAN	SW	2	0	0	0	0	0	0	0	0	0	0
DGN	SR	426	1	0	0	0	0	0	0	0	0	0
DGN	SW	400	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	4,000	0	0	0	0	0	0	0	0	0
INSP	SR	500	500	0	0	0	0	0	0	0	0	0
	Total	1,602	4,502	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2007	7/1/2017
DGN	5/1/2015	12/1/2019
CONST	6/1/2017	12/1/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Six-Year CIP and Budget FY 2018-2023

WASTEWATER EQUIPMENT

Project:	2000038	Function:	Sanitation	Council:	99
Priority No.:	3	Program:	Sewage Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Procurement of major equipment needed for the wastewater function of the Department of Environmental Services.

Justification: Equipment is needed to maintain and operate the wastewater facilities and collection system.

Use of Funds: Purchase major wastewater equipment.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
EQUIP	SR	8,816	0	0	0	0	0	0	0	0	0	0
EQUIP	SW	39,212	9,113	9,825	9,601	15,000	15,000	15,000	15,000	15,000	84,601	0
EQUIP	WB	0	0	0	0	0	0	0	0	0	0	0
	Total	48,028	9,113	9,825	9,601	15,000	15,000	15,000	15,000	15,000	84,601	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
EQUIP	7/1/2017	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

Six-Year CIP and Budget FY 2018-2023

WASTEWATER FACILITIES REPLACEMENT RESERVE

Project:	1998806	Function:	Sanitation	Council:	99
Priority No.:	4	Program:	Sewage Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Funds for unanticipated breakdowns at wastewater facilities, and emergency repairs of sewer collection systems. Federal law administered by the U.S. Environmental Protection Agency requires that reserve funds for facility replacement be established and available.

Justification: Federal law administered by the U.S. Environmental Protection Agency requires that reserve funds for facility replacement be established and available.

Use of Funds: Funding for emergency replacement of sewer collection systems and wastewater treatment facilities.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CONST	SR	19	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
OTHER	SR	1,126	0	0	0	0	0	0	0	0	0	0
OTHER	SW	8,631	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	30,000	0
	Total	9,776	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	30,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
OTHER	7/1/2017	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

WASTEWATER PLANNING AND PROGRAMMING

Project:	2003151	Function:	Sanitation	Council:	99
Priority No.:	2	Program:	Sewage Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Project provides funding for long range planning, facility planning, and programming for wastewater projects.

Justification: Direct wastewater project cost.

Use of Funds: Provision of funds for direct costs for the planning and programming of wastewater projects.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	272	0	0	0	0	0	0	0	0	0	0
PLAN	SW	1,239	295	0	0	0	0	0	0	0	0	0
OTHER	SW	85	0	315	316	316	316	316	316	316	1,896	0
	Total	1,596	295	315	316	316	316	316	316	316	1,896	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

WASTEWATER PROGRAM MANAGEMENT

Project:	2007073	Function:	Sanitation	Council:	99
Priority No.:	39	Program:	Sewage Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Wastewater program management services for wastewater projects.

Justification: Additional services needed for managing large CIP program.

Use of Funds: Plan, design and inspect program and manage implementation of wastewater projects.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	10,850	0	0	0	0	0	0	0	0	0	0
PLAN	SW	28,729	2,500	2,500	2,500	2,500	0	0	0	0	5,000	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	1,652	1	1	1	1	0	0	0	0	2	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	3,000	1	1	1	1	0	0	0	0	2	0
	Total	44,231	2,502	2,502	2,502	2,502	0	0	0	0	5,004	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2018
DGN	7/1/2017	12/31/2018
INSP	7/1/2017	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

WASTEWATER PUMP STATIONS - ELECTRICAL AND SCADA IMPROVEMENTS

Project:	2018052	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: This project includes Electrical and SCADA Improvements needed at existing City Wastewater Pump Stations (WWPS). The specific locations may be implemented in phases, prioritized based on the need. Improvements include electrical and control components, Supervisory Control and Data Acquisition (SCADA) systems and associated pump station controlling instrumentation, motor control centers (MCCs) and automatic transfer switches (ATSs). The specific improvements needed at each WWPS will be site specific.

Justification: The project addresses electrical and SCADA improvements needed at existing wastewater pump stations needed to ensure station reliability.

Use of Funds: Plan, design, construct and inspect electrical and SCADA improvements at wastewater pump stations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	0	1	0	0	0	0	0	1	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	1	0	0	0	0	0	1	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	17,000	0	0	0	0	0	17,000	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	3,000	0	0	0	0	0	3,000	0
	Total	0	0	0	20,002	0	0	0	0	0	20,002	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2018	1/1/2020
DGN	1/1/2018	1/1/2021
CONST	1/1/2018	1/1/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

WASTEWATER TREATMENT PLANT, PUMP STATION, AND FORCE MAIN PROJECTS

Project:	2001062	Function:	Sanitation	Council:	99
Priority No.:	5	Program:	Sewage Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	99
				House:	99
				Other:	

Description: Project will provide a vehicle for constructing high priority projects required at treatment plants and pump stations, including the associated force main pipes, to make needed repairs, replacements, upgrades or improvements. Funds for pump station and force main assessments, rehabilitation and improvements are needed to meet federal and state requirements. Funding is for island wide improvements.

Justification: The project addresses improvements needed at wastewater treatment plants, pump stations and force mains.

Use of Funds: Plan, design, construct and inspect wastewater treatment plant, pump station and force main improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	6,311	0	0	0	0	0	0	0	0	0	0
PLAN	SW	4,418	100	100	100	100	100	100	100	100	600	0
DGN	SR	14,280	0	0	0	0	0	0	0	0	0	0
DGN	SW	1,478	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	6,000	0
CONST	SR	47,524	0	0	0	0	0	0	0	0	0	0
CONST	SW	35,867	15,000	15,000	15,000	10,000	10,000	10,000	10,000	10,000	65,000	0
INSP	SR	4,202	0	0	0	0	0	0	0	0	0	0
INSP	SW	4,073	500	500	500	500	500	500	500	500	3,000	0
	Total	118,153	16,600	16,600	16,600	11,600	11,600	11,600	11,600	11,600	74,600	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2018
DGN	7/1/2017	12/31/2018
CONST	7/1/2017	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	60

Six-Year CIP and Budget FY 2018-2023

WEST BEACH NO 1 & NO 2 WWPS AND FORCE MAIN SYSTEMS IMPROVEMENTS

Project:	2018051	Function:	Sanitation	Council:
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: This project will provide construction of new replacement Force Mains for the existing West Beach WWPS Nos. 1 and 2. Alternative configurations and routes for the new force mains will be evaluated. Work may include evaluating the conditions of the force mains and pump stations, addressing capacity issues, rehabilitation work and improvements at the pump stations that may be needed to provide compatibility with the new force mains, and addressing decommissioning and/or rehabilitation of the existing force mains.

Justification: Replacement of the two existing Force Mains is needed to address recent force main breaks and to ensure reliability of this critical infrastructure in the future.

Use of Funds: Acquire land, plan, design, construct and inspect wastewater pump station and force main improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	SR	0	0	0	100	1	0	0	0	0	101	0
PLAN	SR	0	0	0	1	1	0	0	0	0	2	0
DGN	SR	0	0	0	2,000	1	0	0	0	0	2,001	0
CONST	SR	0	0	0	30,000	1	0	0	0	0	30,001	0
INSP	SR	0	0	0	1,500	500	0	0	0	0	2,000	0
	Total	0	0	0	33,601	504	0	0	0	0	34,105	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	7/1/2019
DGN	7/1/2017	12/31/2020
CONST	7/1/2018	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

WINDWARD AREA WASTEWATER PUMP STATION FACILITIES IMPROVEMENTS

Project:	2013101	Function:	Sanitation	Council:	03
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	24
				House:	51
				Other:	

Description: This project provides condition assessment of existing wastewater facilities and design and construction of improvements, including pumping, structural, mechanical, electrical and site improvements and upgrades as determined in the planning phase. This project includes wastewater pump stations (WWPS) in the Windward area, including initially A'ala WWPS, Alala Point WWPS, Coconut Grove WWPS, Halekou WWPS, Kahawai Stream WWPS and Kailua Road WWPS. Includes project no. KK-PS-03, A'ala WWPS Upgrade, per para. 18.g., of the 2010 Consent Decree, and in accordance with the Final Deferred Projects Report, May 2014. Construction phase funds for Kailua Road WWPS Improvements are under project #2017058. Other Windward WWPS's may be added in future budget years.

Justification: Pumping, structural, mechanical, electrical and site improvements identified in the planning phase are intended to ensure station reliability and compliance with current standards, which also provides prevention and reduction of potential sanitary sewer overflows. KK-PS-03, A'ala WWPS Upgrade, para. 18.g., has a construction completion schedule allowed after 2020.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	2	1	0	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	0	0	0	1	0	0	1	0
DGN	SW	1,300	300	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	3,000	0	0	3,000	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	300	0	0	300	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	1,302	301	0	0	0	0	3,301	0	0	3,301	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2012	1/1/2022
DGN	7/1/2016	6/1/2024
CONST	9/1/2021	6/1/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

Department Summary: Environmental Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DN	0	0	0	0	0	0	0	0	0	0	0
DV	0	0	0	0	0	0	0	0	0	0	0
FG	434	0	0	0	0	0	0	0	0	0	0
GI	578	0	0	0	0	0	0	0	0	0	0
GN	5,198	0	0	0	0	0	0	0	0	0	0
SA	0	0	0	0	0	0	0	0	0	0	0
SR	1,409,166	143,497	372,824	494,372	353,540	452,330	644,077	143,024	233,813	2,321,156	0
ST	0	0	0	0	0	0	0	0	0	0	0
SW	313,863	70,123	117,907	161,500	64,689	72,387	59,181	58,579	58,579	474,915	0
UT	0	0	0	0	0	0	0	0	0	0	0
WB	0	0	0	0	0	0	0	0	0	0	0
Total	1,729,239	213,620	490,731	655,872	418,229	524,717	703,258	201,603	292,392	2,796,071	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	31,717	111	30,207	305	108	105	107	904	102	1,631	0
PLAN	188,051	11,968	14,913	10,166	9,717	5,316	3,612	4,808	3,206	36,825	0
DGN	194,545	35,836	19,819	65,813	45,817	35,112	73,356	9,907	4,603	234,608	0
CONST	1,164,599	134,704	381,254	527,406	323,505	441,004	575,004	149,004	244,002	2,259,925	0
INSP	89,331	16,888	20,653	20,402	9,903	14,001	22,000	7,801	11,300	85,407	0
EQUIP	48,028	9,113	9,825	9,601	15,000	15,000	15,000	15,000	15,000	84,601	0
OTHER	12,969	5,000	14,060	14,179	14,179	14,179	14,179	14,179	14,179	85,074	0
RELOC	0	0	0	8,000	0	0	0	0	0	8,000	0
Total	1,729,239	213,620	490,731	655,872	418,229	524,717	703,258	201,603	292,392	2,796,071	0

Program Summary: Sewage Collection And Disposal

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DN	0	0	0	0	0	0	0	0	0	0	0
DV	0	0	0	0	0	0	0	0	0	0	0
FG	434	0	0	0	0	0	0	0	0	0	0
GI	578	0	0	0	0	0	0	0	0	0	0
GN	5,198	0	0	0	0	0	0	0	0	0	0
SA	0	0	0	0	0	0	0	0	0	0	0
SR	1,409,166	143,497	372,824	494,372	353,540	452,330	644,077	143,024	233,813	2,321,156	0
ST	0	0	0	0	0	0	0	0	0	0	0
SW	313,863	70,123	117,907	161,500	64,689	72,387	59,181	58,579	58,579	474,915	0
UT	0	0	0	0	0	0	0	0	0	0	0
WB	0	0	0	0	0	0	0	0	0	0	0
Total	1,729,239	213,620	490,731	655,872	418,229	524,717	703,258	201,603	292,392	2,796,071	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	31,717	111	30,207	305	108	105	107	904	102	1,631	0
PLAN	188,051	11,968	14,913	10,166	9,717	5,316	3,612	4,808	3,206	36,825	0
DGN	194,545	35,836	19,819	65,813	45,817	35,112	73,356	9,907	4,603	234,608	0
CONST	1,164,599	134,704	381,254	527,406	323,505	441,004	575,004	149,004	244,002	2,259,925	0
INSP	89,331	16,888	20,653	20,402	9,903	14,001	22,000	7,801	11,300	85,407	0
EQUIP	48,028	9,113	9,825	9,601	15,000	15,000	15,000	15,000	15,000	84,601	0
OTHER	12,969	5,000	14,060	14,179	14,179	14,179	14,179	14,179	14,179	85,074	0
RELOC	0	0	0	8,000	0	0	0	0	0	8,000	0
Total	1,729,239	213,620	490,731	655,872	418,229	524,717	703,258	201,603	292,392	2,796,071	0

Function Summary: Sanitation

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DN	0	0	0	0	0	0	0	0	0	0	0
DV	0	0	0	0	0	0	0	0	0	0	0
FG	434	0	0	0	0	0	0	0	0	0	0
GI	6,878	0	0	0	0	0	0	0	0	0	0
GN	5,198	0	0	0	0	0	0	0	0	0	0
SA	0	0	0	0	0	0	0	0	0	0	0
SR	1,411,307	143,497	372,824	494,372	353,540	453,132	668,079	147,331	235,165	2,351,619	19,490
ST	0	0	0	0	0	0	0	0	0	0	0
SW	313,863	70,123	117,907	161,500	64,689	72,387	59,181	58,579	58,579	474,915	0
UT	0	0	0	0	0	0	0	0	0	0	0
WB	428,240	9,827	17,684	22,741	64,010	20,042	1,350	54,831	1,350	164,324	0
WF	43,998	10,000	3,000	0	0	0	0	0	0	0	0
Total	2,209,918	233,447	511,415	678,613	482,239	545,561	728,610	260,741	295,094	2,990,858	19,490

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	31,717	111	30,207	305	108	105	108	906	103	1,635	483
PLAN	192,877	12,219	15,019	10,647	9,958	5,667	3,712	10,910	3,207	44,101	206
DGN	216,962	36,762	22,065	66,670	47,921	36,353	74,157	38,211	5,203	268,515	2,201
CONST	1,609,721	152,952	399,253	545,956	379,855	458,754	597,754	170,154	245,802	2,398,275	16,000
INSP	97,634	17,290	20,986	23,253	14,014	15,501	23,700	10,301	11,600	98,369	600
EQUIP	48,028	9,113	9,825	9,603	16,204	15,002	15,000	16,080	15,000	86,889	0
OTHER	12,981	5,000	14,060	14,179	14,179	14,179	14,179	14,179	14,179	85,074	0
RELOC	0	0	0	8,000	0	0	0	0	0	8,000	0
Total	2,209,918	233,447	511,415	678,613	482,239	545,561	728,610	260,741	295,094	2,990,858	19,490

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AFFORDABLE HOUSING STRATEGIC DEVELOPMENT PROGRAM

Project:	2016001	Function:	Human Services	Council:	99
Priority No.:	1	Program:	Human Services	Nbrd Board:	99
TMK:		Department:	Community Services	Senate:	99
				House:	99
				Other:	

Description: Provide Affordable Housing Funds (AF) for the renovation and/or development of low income affordable housing which may be administered or managed by the City and County of Honolulu or in conjunction with private non-profit or private developers. Projects assisted by these funds could include, but not be limited to, public-private partnerships, acquisition of strategic land parcels to be preserved for low income affordable housing (or the low income portion of mixed-income, mixed-use projects), and principal investments to leverage other funds to enable financing of larger scale rental housing projects. All projects are subject to the fund restrictions under the Charter provision in effect at the time of encumbrance.

Justification: Increase affordable housing inventory.

Use of Funds: Provide Affordable Housing Funds (AF) for the renovation and/or development of low income affordable housing which may be administered or managed by the City and County of Honolulu or in conjunction with private non-profit or private developers.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	AF	0	5	0	5	5	5	5	5	5	30	30
PLAN	AF	0	5	0	5	5	5	5	5	5	30	30
DGN	AF	0	5	0	5	5	5	5	5	5	30	30
CONST	AF	0	5	0	5	5	5	5	5	5	30	30
OTHER	AF	0	7,116	0	4,980	4,980	4,980	4,980	4,980	4,980	29,880	29,880
	Total	0	7,136	0	5,000	5,000	5,000	5,000	5,000	5,000	30,000	30,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2015	6/30/2050
PLAN	7/1/2015	6/30/2050
DGN	7/1/2015	6/30/2050
CONST	7/1/2015	6/30/2050
OTHER	7/1/2015	6/30/2050

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

Six-Year CIP and Budget FY 2018-2023

COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROGRAM

Project:	2007076	Function:	Human Services	Council:	99
Priority No.:	2	Program:	Human Services	Nbrd Board:	99
TMK:		Department:	Community Services	Senate:	99
				House:	99
				Other:	

Description: Community Development Block Grant (CDBG) Program, an entitlement program. Provide grants and/or loans to nonprofit organizations or City agencies to undertake housing, community development, economic development, and public or human service activities, which principally benefits persons of low and moderate income.

Justification: Assist in the development of viable urban communities, which principally benefits persons of low and moderate income.

Use of Funds: Provide funds for administration and grants and/or loans to nonprofit organizations or City agencies to undertake housing, community development, economic development, and public or human service activities, which principally benefit persons of low and moderate income.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
OTHER	CD	74,496	6,863	8,838	6,249	6,249	6,249	6,249	6,249	6,249	37,492	0
OTHER	FG	2,581	0	0	0	0	0	0	0	0	0	0
	Total	77,077	6,863	8,838	6,249	6,249	6,249	6,249	6,249	6,249	37,492	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
OTHER	7/1/2012	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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COMMUNITY REVITALIZATION INITIATIVE

Project:	2017002	Function:	Human Services	Council:	99
Priority No.:		Program:	Human Services	Nbrd Board:	99
TMK:		Department:	Community Services	Senate:	
				House:	
				Other:	

Description:

Justification:

Use of Funds: Provision of funds for the land acquisition, lease, development, and/or renovation of facilities for urban rest stops, navigation centers, workforce/affordable housing , and other community-focused projects initiated by community stakeholders in partnership with state housing development agencies or qualified nonprofits, provided that no more than $2 million may be expended in any one council district.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	10,000	0	0	0	0	0	0	0	0
PLAN	GI	0	0	1	0	0	0	0	0	0	0	0
DGN	GI	0	0	1	0	0	0	0	0	0	0	0
CONST	GI	0	0	7,997	0	0	0	0	0	0	0	0
OTHER	GI	0	0	1	0	0	0	0	0	0	0	0
	Total	0	0	18,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2016	12/31/2018
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018
OTHER	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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EMERGENCY SOLUTIONS GRANTS (ESG) PROGRAM

Project:	1995207	Function:	Human Services	Council:	99
Priority No.:	3	Program:	Human Services	Nbrd Board:	99
TMK:		Department:	Community Services	Senate:	99
				House:	99
				Other:	

Description: Provide grants to qualified homeless service providers to renovate or rehabilitate existing shelters, or for the payment of eligible essential services or operating expenses for homeless persons and families.

Justification: Assist homeless persons by providing shelter and supportive services.

Use of Funds: Provide funds for administration and grants to nonprofit organizations serving the homeless.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	FG	0	0	0	0	0	0	0	0	0	0	0
CONST	CD	0	0	0	0	0	0	0	0	0	0	0
CONST	FG	0	0	0	0	0	0	0	0	0	0	0
OTHER	CD	3,426	0	0	0	0	0	0	0	0	0	0
OTHER	FG	6,467	677	610	610	629	629	629	629	629	3,757	0
	Total	9,893	677	610	610	629	629	629	629	629	3,757	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
OTHER	7/1/2012	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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FAMILY JUSTICE CENTER

Project:	2013003	Function:	Human Services	Council:	06
Priority No.:		Program:	Human Services	Nbrd Board:	10
TMK:		Department:	Community Services	Senate:	11
				House:	24
				Other:	

Description: For the purchase, lease, or rehabilitation of a facility/units to provide housing for victims of domestic violence as referred by the Family Justice Center.

Justification: Provision of funds for the purposes consistent with the City Charter and the Revised Ordinance of Honolulu Chapter 6, Article 63 for affordable housing.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	AF	0	0	0	0	0	0	0	0	0	0	0
PLAN	AF	0	0	0	0	0	0	0	0	0	0	0
DGN	AF	0	0	0	0	0	0	0	0	0	0	0
CONST	AF	0	0	0	0	0	0	0	0	0	0	0
OTHER	AF	7	0	0	0	0	0	0	0	0	0	0
RELOC	AF	0	0	0	0	0	0	0	0	0	0	0
	Total	7	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
OTHER	7/1/2014	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

Six-Year CIP and Budget FY 2018-2023

HOME INVESTMENT PARTNERSHIPS (HOME) PROGRAM

Project:	2007077	Function:	Human Services	Council:	99
Priority No.:	4	Program:	Human Services	Nbrd Board:	99
TMK:		Department:	Community Services	Senate:	99
				House:	99
				Other:	

Description: HOME Investment Partnerships (HOME), an entitlement program. Provide grant and/or loan funds to private nonprofit organizations to assist with expanding the supply of affordable housing.

Justification: Provide additional affordable housing for lower-income persons.

Use of Funds: Provide funds for administration and grants and/or loans to nonprofit organizations developing affordable housing for lower income persons.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
OTHER	FG	33,366	3,383	1,657	3,617	1,200	1,200	1,200	1,200	1,200	9,617	0
	Total	33,366	3,383	1,657	3,617	1,200	1,200	1,200	1,200	1,200	9,617	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
OTHER	7/1/2012	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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HOMELESS RELOCATION INITIATIVE

Project:	2015002	Function:	Human Services	Council:	99
Priority No.:		Program:	Human Services	Nbrd Board:	99
TMK:		Department:	Community Services	Senate:	99
				House:	99
				Other:	

Description: Acquisition, development and/or renovation of facilities to relocate homeless individuals and families from parks, facilities and othe public areas to emergency, transitional and/or permanent housing. Consideration shall be given to working homeless and homeless families with children.

Justification: Acquisition, development and/or renovation of facilities to relocate homeless individuals and families from parks, facilities and othe public areas to emergency, transitional and/or permanent housing. Consideration shall be given to working homeless and homeless families with children.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	19,223	1	0	0	0	0	0	0	0	0	0
PLAN	GI	275	1	0	0	0	0	0	0	0	0	0
DGN	GI	2,322	1	0	0	0	0	0	0	0	0	0
CONST	GI	11,982	31,996	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	529	0	0	0	0	0	0	0	0	0	0
OTHER	GI	7,207	1	0	0	0	0	0	0	0	0	0
	Total	41,538	32,000	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	12/30/2017
DGN	7/1/2014	12/30/2017
CONST	7/1/2014	12/30/2017
EQUIP	7/1/2014	12/30/2017
OTHER	7/1/2014	12/30/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

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HOUSING OPPORTUNITIES FOR PERSONS WITH AIDS (HOPWA) PROGRAM

Project:	2000119	Function:	Human Services	Council:	99
Priority No.:	5	Program:	Human Services	Nbrd Board:	99
TMK:		Department:	Community Services	Senate:	99
				House:	99
				Other:	

Description: Provide grant funds to private nonprofit organizations to house and support persons with HIV/AIDS and their families.

Justification: Provision of additional housing and support services for persons with HIV/AIDS.

Use of Funds: Provide funds for administration and grants to nonprofit organizations serving persons with AIDS.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
OTHER	FG	6,133	435	428	427	423	423	423	423	423	2,540	0
	Total	6,133	435	428	427	423	423	423	423	423	2,540	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
OTHER	7/1/2012	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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HOUSING PARTNERSHIP PROGRAM

Project:	2013002	Function:	Human Services	Council:	99
Priority No.:		Program:	Human Services	Nbrd Board:	99
TMK:		Department:	Community Services	Senate:	99
				House:	99
				Other:	

Description: Provide Affordable Housing Funds (AFH) to qualified nonprofit agencies to support development and preservation of affordable rental housing for lower income households in the City and County of Honolulu. AFH funds will be distributed through a Request for Proposals process administered by the Department of Community Services. Affordable housing projects assisted with AFH funds must remain affordable to lower income households earning less than 50% of Honolulu's median income for the life of the project.

Justification: Provision of funds for the purposes consistent with the City Charter and the Revised Ordinance of Honolulu Chapter 6, Article 63 for affordable housing. There is a critical shortage of affordable rental housing for lower income households in the City and County of Honolulu. The City's efforts to create new affordable housing opportunities have been hampered by diminishing federal appropriations for the HOME and CDBG programs. By using AHF funds in partnership with nonprofit agencies to preserve and develop new affordable housing, the City will stabilize and enhance our community's inventory of affordable housing, and create much needed employment opportunities for our construction trades.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	AF	0	0	5	0	0	0	0	0	0	0	0
PLAN	AF	0	0	5	0	0	0	0	0	0	0	0
DGN	AF	0	0	5	0	0	0	0	0	0	0	0
CONST	AF	0	0	5	0	0	0	0	0	0	0	0
OTHER	AF	8,256	0	5,580	0	0	0	0	0	0	0	0
OTHER	GN	0	0	500	0	0	0	0	0	0	0	0
	Total	8,256	0	6,100	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2016	12/31/2018
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018
OTHER	7/1/2016	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

Six-Year CIP and Budget FY 2018-2023

HOUSING TRUST FUND (HTF) PROGRAM

Project:	2018001	Function:	Human Services	Council:	99
Priority No.:	6	Program:	Human Services	Nbrd Board:	99
TMK:		Department:	Community Services	Senate:	99
				House:	99
				Other:	

Description: Funding for the preservation and production of affordable housing and increase opportunities for families and individuals to access decent affordable homes.

Justification: Increase opportunities for families and individuals to access affordable homes primarily for extremely low-income households.

Use of Funds: Provide funds for administration and grants and/or loans to nonprofit organizations to increase and preserve the supply of affordable housing primarily for extremely low-income households.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
OTHER	FG	0	0	0	1,350	0	0	0	0	0	1,350	0
	Total	0	0	0	1,350	0	0	0	0	0	1,350	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
OTHER	7/1/2017	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

HUI KAUHALE, INC. (PREV CALLED: EWA VILLAGES - AREA H)

Project:	2002800	Function:	Human Services	Council:	01
Priority No.:		Program:	Human Services	Nbrd Board:	23
TMK:		Department:	Community Services	Senate:	00
				House:	00
				Other:	

Description: Ewa Village Apartments, Area H-Phase 1. Build the first phase of an 80-unit affordable housing development.

Justification: Provides affordable housing opportunities for lower income households.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
OTHER	FG	4,502	0	0	0	0	0	0	0	0	0	0
	Total	4,502	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
OTHER	9/1/2007	10/1/2012

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

KAKAAKO AFFORDABLE HOUSING FOR ARTISTS PROJECT

Project:	2014003	Function:	Human Services	Council:	05
Priority No.:		Program:	Human Services	Nbrd Board:	11
TMK:		Department:	Community Services	Senate:	13
				House:	26
				Other:	

Description: Acquire land, plan, design, construct, and inspect an affordable live/work space for low-income artists and their families in the Kakaako area.

Justification: Provide affordable live/work space for low-income artists and their families in the Kakaako area.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	AF	0	0	0	0	0	0	0	0	0	0	0
PLAN	AF	0	0	0	0	0	0	0	0	0	0	0
DGN	AF	0	0	0	0	0	0	0	0	0	0	0
CONST	AF	0	0	0	0	0	0	0	0	0	0	0
INSP	AF	0	0	0	0	0	0	0	0	0	0	0
OTHER	AF	4,400	5,000	0	0	0	0	0	0	0	0	0
	Total	4,400	5,000	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
OTHER	7/1/2013	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

OAHU PRESERVATION AND REVITALIZATION INITIATIVE

Project:	2017003	Function:	Human Services	Council:	99
Priority No.:		Program:	Human Services	Nbrd Board:	99
TMK:		Department:	Community Services	Senate:	
				House:	
				Other:	

Description: Provision of funds for the acquisition of land and other miscellaneous costs relating, but not limited, to TMKs 1-2-009:011 and 1-2-009:098 (portions) as detailed in Resolution 16-48, CD1,FD1; TMK 1-5-6-002:048 as detailed in Resolution 16-82; and TMKs 1-2-002:113 and 1-2-002:114.

Justification: Provision of funds for the acquisition of land and other miscellaneous costs relating, but not limited, to TMKs 1-2-009:011 and 1-2-009:098 (portions) as detailed in Resolution 16-48, CD1,FD1; TMK 1-5-6-002:048 as detailed in Resolution 16-82; and TMKs 1-2-002:113 and 1-2-002:114.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	9,900	0	0	0	0	0	0	0	0
OTHER	GI	0	0	100	0	0	0	0	0	0	0	0
	Total	0	0	10,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2016	12/31/2018
OTHER	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Department Summary: Community Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
AF	12,663	12,136	5,600	5,000	5,000	5,000	5,000	5,000	5,000	30,000	30,000
CD	77,921	6,863	8,838	6,249	6,249	6,249	6,249	6,249	6,249	37,492	0
FG	53,049	4,494	2,694	6,004	2,252	2,252	2,252	2,252	2,252	17,264	0
GI	41,538	32,000	28,000	0	0	0	0	0	0	0	0
GN	0	0	500	0	0	0	0	0	0	0	0
Total	185,171	55,494	45,633	17,252	13,501	13,501	13,501	13,501	13,501	84,756	30,000

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	19,223	6	19,905	5	5	5	5	5	5	30	30
PLAN	275	6	6	5	5	5	5	5	5	30	30
DGN	2,322	6	6	5	5	5	5	5	5	30	30
CONST	11,982	32,001	8,002	5	5	5	5	5	5	30	30
INSP	0	0	0	0	0	0	0	0	0	0	0
EQUIP	529	0	0	0	0	0	0	0	0	0	0
OTHER	150,841	23,475	17,714	17,232	13,481	13,481	13,481	13,481	13,481	84,636	29,880
RELOC	0	0	0	0	0	0	0	0	0	0	0
Total	185,171	55,494	45,633	17,252	13,501	13,501	13,501	13,501	13,501	84,756	30,000

Program Summary: Human Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
AF	12,663	12,136	5,600	5,000	5,000	5,000	5,000	5,000	5,000	30,000	30,000
CD	77,921	6,863	8,838	6,249	6,249	6,249	6,249	6,249	6,249	37,492	0
FG	53,049	4,494	2,694	6,004	2,252	2,252	2,252	2,252	2,252	17,264	0
GI	41,538	32,000	28,000	0	0	0	0	0	0	0	0
GN	0	0	500	0	0	0	0	0	0	0	0
Total	185,171	55,494	45,633	17,252	13,501	13,501	13,501	13,501	13,501	84,756	30,000

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	19,223	6	19,905	5	5	5	5	5	5	30	30
PLAN	275	6	6	5	5	5	5	5	5	30	30
DGN	2,322	6	6	5	5	5	5	5	5	30	30
CONST	11,982	32,001	8,002	5	5	5	5	5	5	30	30
INSP	0	0	0	0	0	0	0	0	0	0	0
EQUIP	529	0	0	0	0	0	0	0	0	0	0
OTHER	150,841	23,475	17,714	17,232	13,481	13,481	13,481	13,481	13,481	84,636	29,880
RELOC	0	0	0	0	0	0	0	0	0	0	0
Total	185,171	55,494	45,633	17,252	13,501	13,501	13,501	13,501	13,501	84,756	30,000

Function Summary: Human Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
AF	12,663	12,136	5,600	5,000	5,000	5,000	5,000	5,000	5,000	30,000	30,000
CD	77,921	6,863	8,838	6,249	6,249	6,249	6,249	6,249	6,249	37,492	0
FG	53,049	4,494	2,694	6,004	2,252	2,252	2,252	2,252	2,252	17,264	0
GI	41,538	32,000	28,000	0	0	0	0	0	0	0	0
GN	0	0	500	0	0	0	0	0	0	0	0
Total	185,171	55,494	45,633	17,252	13,501	13,501	13,501	13,501	13,501	84,756	30,000

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	19,223	6	19,905	5	5	5	5	5	5	30	30
PLAN	275	6	6	5	5	5	5	5	5	30	30
DGN	2,322	6	6	5	5	5	5	5	5	30	30
CONST	11,982	32,001	8,002	5	5	5	5	5	5	30	30
INSP	0	0	0	0	0	0	0	0	0	0	0
EQUIP	529	0	0	0	0	0	0	0	0	0	0
OTHER	150,841	23,475	17,714	17,232	13,481	13,481	13,481	13,481	13,481	84,636	29,880
RELOC	0	0	0	0	0	0	0	0	0	0	0
Total	185,171	55,494	45,633	17,252	13,501	13,501	13,501	13,501	13,501	84,756	30,000

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AIEA DISTRICT PARK

Project:	1998134	Function:	Culture - Recreation	Council:	08
Priority No.:	11	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	20
TMK:	98029001	Department:	Design and Construction	Senate:	15
				House:	33
				Other:	

Description: TMK: 9-9-005: 015; 9-8-029:001 (8.82 ACRES) - Plan, design and construct park improvements, such as replacement of ballfield lighting.

Justification: Improve recreational resource.

Use of Funds: Design and construct park improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	1	0	0	0	0	0	0	0	0
DGN	GI	2	0	1	50	0	0	0	0	0	50	0
DGN	PP	0	5	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	1,296	950	0	0	0	0	0	950	0
CONST	PP	0	63	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	1	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	1	0	0	0	0	0	0	0	0
EQUIP	PP	0	5	0	0	0	0	0	0	0	0	0
	Total	2	73	1,300	1,000	0	0	0	0	0	1,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2015	5/31/2017
CONST	12/1/2017	12/31/2019
INSP	7/1/2017	12/31/2019
EQUIP	7/1/2017	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

AINA HAINA NATURE PRESERVE EXPANSION, WAILUPE

Project:	2015100	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	02
TMK:	36024001	Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Provision of funds for the preservation of Aina Haina Nature Preserve Expansion, Wailupe (TMK: 3-6-024:001), as recommended by the Clean Water and Natural Lands Commission in Council Communication 49 (2014) for purposes consistent with the Revised Ordinances of Honolulu, Chapter 6, Article 62.

Justification: Preservation and conservation of land for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	CF	0	0	4,045	0	0	0	0	0	0	0	0
OTHER	CF	0	0	11	0	0	0	0	0	0	0	0
	Total	0	0	4,056	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2014	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

AINA KOA NEIGHBORHOOD PARK

Project:	2017098	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	03
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and provide related equipment for Aina Koa Neighborhood Park play apparatus.

Justification: Plan, design, construct and provide related equipment for Aina Koa Neighborhood Park play apparatus.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	5	0	0	0	0	0	0	0	0
DGN	GI	0	0	10	0	0	0	0	0	0	0	0
CONST	GI	0	0	125	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	110	0	0	0	0	0	0	0	0
	Total	0	0	250	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018
EQUIP	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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ALA MOANA REGIONAL PARK

Project:	1998107	Function:	Culture - Recreation	Council:	04
Priority No.:	3	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	11
TMK:	23037001	Department:	Design and Construction	Senate:	12
				House:	23
				Other:	

Description: TMK: 2-3-37:01 (119.18 ACRES) - Plan, design, construct and inspect park improvements to facilities such as McCoy Pavilion and restrooms, park irrigation system and canal walls

Justification: Improve and upgrade recreational facilities for the community.

Use of Funds: Plan, design, construct, inspect and provide related equipment for park improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	1,250	5	5	5	5	5	5	5	0	25	0
PLAN	PP	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	1,613	5	5	4,000	4,000	500	500	500	0	9,500	0
DGN	PP	290	0	0	0	0	0	0	0	0	0	0
CONST	DV	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	2,722	2,980	2,980	15,985	10,985	3,485	3,485	3,485	0	37,425	0
CONST	PP	2,611	256	321	0	0	0	0	0	0	0	0
INSP	GI	195	5	5	5	5	5	5	5	0	25	0
EQUIP	GI	86	5	5	5	5	5	5	5	0	25	0
	Total	8,766	3,256	3,321	20,000	15,000	4,000	4,000	4,000	0	47,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2013	12/31/2022
DGN	7/1/2013	12/31/2022
CONST	6/1/2008	12/31/2022
INSP	6/1/2008	12/31/2022
EQUIP	7/1/2015	12/31/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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ALA WAI COMMUNITY PARK

Project:	1974104	Function:	Culture - Recreation	Council:	05
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	08
TMK:	27004005	Department:	Design and Construction	Senate:	15
				House:	30
				Other:	

Description: TMK: 2-7-04:05; 2-7-36:01 POR. (10.5 ACRES) - Design and construct park improvements.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	282	0	0	0	0	0	0	0	0	0	80
CONST	FG	456	0	0	0	0	0	0	0	0	0	0
CONST	GI	2,660	0	0	0	0	0	0	0	0	0	200
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	3,398	0	0	0	0	0	0	0	0	0	280

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2010	6/30/2011

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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ALA WAI COMMUNITY PARK - CLUBHOUSE

Project:	2002117	Function:	Culture - Recreation	Council:	05
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	08
TMK:	27004005	Department:	Design and Construction	Senate:	10
				House:	21
				Other:	

Description: Design and construct improvements for the clubhouse and provide construction inspection.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	400	0	0	0	0	0	0	0	0	0	200
CONST	GI	0	0	0	0	0	0	0	0	0	0	3,500
INSP	GI	0	0	0	0	0	0	0	0	0	0	40
	Total	400	0	0	0	0	0	0	0	0	0	3,740

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2023	12/31/2025
CONST	7/1/2025	12/31/2027
INSP	7/1/2025	12/31/2027

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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BANZAI ROCK SKATE PARK

Project:	2010072	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:	59003031	Department:	Design and Construction	Senate:	22
				House:	45
				Other:	

Description: Plan, design, construct and inspect skate park improvements.

Justification: Implement master planned improvements for recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	15	0	0	0	0	0	0	0	0
DGN	GI	25	0	15	0	0	0	0	0	0	0	0
CONST	GI	1,260	0	70	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	1,285	0	100	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2013	12/31/2018
CONST	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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CANOE HALAU AT HALEIWA REGIONAL PARK

Project:	2014089	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design and construct canoe halau at Haleiwa Regional Park (Haleiwa Beach Park Mauka)

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	39	10	0	0	0	0	0	0	0	0	0
DGN	GI	0	10	0	0	0	0	0	0	0	0	0
CONST	GI	0	480	0	0	0	0	0	0	0	0	0
	Total	39	500	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2015	12/31/2017
CONST	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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CANOE HALAU AT VARIOUS PARKS

Project:	2013088	Function:	Culture - Recreation	Council:	99
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Canoe Halau at various parks.

Justification: Improve recreational resources.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	5	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	5	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2012	6/30/2013
DGN	7/1/2012	6/30/2013
CONST	7/1/2013	6/30/2014

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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COMFORT STATIONS AT VARIOUS PARKS

Project:	2015080	Function:	Culture - Recreation	Council:	99
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design construct, inspect and provide related equipment for new or replacement comfort stations at various parks.

Justification: Improve recreational resouces for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	226	0	0	0	0	0	0	0	0	0	0
DGN	PP	454	0	0	0	0	0	0	0	0	0	0
CONST	GI	628	0	0	0	0	0	0	0	0	0	0
CONST	PP	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	1,308	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2014	12/31/2014
CONST	1/30/2015	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

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CRANE COMMUNITY PARK

Project:	2015110	Function:	Culture - Recreation	Council:	05
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	04
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Provide park improvements.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	75	0	0	0	0	0	0	0	0
	Total	0	0	75	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2015
DGN	7/1/2014	6/30/2015
CONST	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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CRESTVIEW COMMUNITY PARK

Project:	2015074	Function:	Culture - Recreation	Council:	09
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	22
TMK:	94103001	Department:	Design and Construction	Senate:	18
				House:	35
				Other:	

Description: Design and construct park improvements.

Justification: Improve recreational facility for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	10
CONST	GI	0	0	0	0	0	0	0	0	0	0	1,240
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	1,250

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2024	12/31/2026
CONST	7/1/2024	12/31/2026

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

Six-Year CIP and Budget FY 2018-2023

DEPARTMENT OF PARKS AND RECREATION NPDES SMALL MS4 PERMIT PROGRAM

Project:	2007054	Function:	Culture - Recreation	Council:	99
Priority No.:	1	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design and construct improvements, which include vehicle and equipment wash racks, structural Best Management Practices (BMPs), various parks.

Justification: Ensure compliance with the Environmental Protection Agency (EPA) and State Department of Health Storm Water Management Programs, which is mandated by both federal and State laws.
Plan, design, construct and provide construction inspection and related equipment for improvements, which include vehicle and equipment wash racks, Structural Best Management Practices (BMPs) and covered storage for heavy vehicle and oil products at the park maintenance support services facilities such as Ala Moana Beach Park.

Use of Funds: Plan, design, construct, inspect and provide related equipment for NPDES improvements at various parks.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	841	0	10	5	5	5	5	5	5	30	0
DGN	GI	352	0	330	20	75	75	75	75	75	395	0
CONST	GI	558	0	650	455	650	650	650	650	650	3,705	0
INSP	GI	165	0	10	10	10	10	10	10	10	60	0
EQUIP	GI	0	0	0	10	10	10	10	10	10	60	0
	Total	1,916	0	1,000	500	750	750	750	750	750	4,250	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	2/1/2008	12/31/2025
DGN	5/1/2008	12/31/2025
CONST	6/1/2009	12/31/2025
INSP	6/1/2009	12/31/2025
EQUIP	6/1/2010	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

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DIVISION OF URBAN FORESTRY (DUF) ADMIN & ARBORICULTURE RELOCATION

Project:	2014073	Function:	Culture - Recreation	Council:
Priority No.:	17	Program:	Participant, Spectator And Other Recreation	Nbrd Board:
TMK:		Department:	Design and Construction	Senate:
				House:
				Other:

Description: Site selection, plan, design and construct Division of Urban Forestry and Arboriculture Section facility.

Justification: Relocate Division of Urban Forestry (DUF) Administration and Arboriculture Section personnel, vehicles, and equipment from Kapiolani Nursery. Facility to include shower, locker room, equipment storage, covered storage for vehicles.

Use of Funds: Design and construct replacement facility.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	0	0	90	0	0	0	0	0	0	0	0
DGN	GI	0	0	10	50	0	0	0	0	0	50	0
CONST	GI	0	0	0	750	0	0	0	0	0	750	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	38	0	0	0	0	0	0	0	0	0	0
OTHER	GI	0	0	0	0	0	0	0	0	0	0	0
RELOC	GI	0	0	0	0	0	0	0	0	0	0	0
ART	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	38	0	100	800	0	0	0	0	0	800	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	9/30/2017
DGN	7/1/2014	9/30/2020
CONST	7/1/2015	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

DIVISION OF URBAN FORESTRY/HORTICULTURE SERVICES OFFICE REPLACEMENT

Project:	2010089	Function:	Culture - Recreation	Council:	04
Priority No.:	16	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	05
TMK:	31026011	Department:	Design and Construction	Senate:	09
				House:	21
				Other:	

Description: Plan, design and construct an interim of Division of Urban Forestry (DUF) Administration and Horticulture Services Branch (HS) Administration offices.

Justification: Existing facility is obsolete and improvements are necessary to support efficient staff operations.

Use of Funds: Design a replacement office for Division of Urban Forestry/Horticulture Services.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	250	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	100	0	0	0	0	0	100	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	250	0	0	100	0	0	0	0	0	100	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2009	6/30/2011
DGN	7/1/2010	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	50

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DIVISION OF URBAN FORESTRY IMPROVEMENTS

Project:	2007038	Function:	Culture - Recreation	Council:	99
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Design and construct improvements to urban forestry facilities and sites such as botanical gardens.

Justification: Renovate and extend useful life of facilities.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	59	0	0	0	0	0	0	0	0	0	30
CONST	GI	837	0	0	0	0	0	0	0	0	0	150
INSP	GI	120	0	0	0	0	0	0	0	0	0	10
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	10
	Total	1,016	0	0	0	0	0	0	0	0	0	200

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2010	6/30/2011
DGN	7/1/2010	7/1/2018
CONST	7/1/2013	7/1/2019
INSP	7/1/2013	7/1/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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DIVISION OF URBAN FORESTRY TREE FARM - PATSY T MINK CENTRAL OAHU REGIONAL PAR

Project:	2014105	Function:	Culture - Recreation	Council:	09
Priority No.:	15	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	22
TMK:	94005074	Department:	Design and Construction	Senate:	19
				House:	41
				Other:	

Description: Plan, design and construct master planned tree farm in Patsy T Mink Central Oahu Regional Park. Improvements to include infrastructure and a restroom and wash facility for Division of Urban Forestry employees.

Justification: Development of the master planned tree farm to support the Department of Parks and Recreation, Division of Forestry's operations which include the planting and maintenance of park and street trees. The tree farm will replace the current tree farm in Waiawa on land leased from Kamehameha Schools.

Use of Funds: Design a tree farm facility.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	50	0	0	0	0	0	0	0	0	0	0
DGN	GI	50	0	0	200	0	0	0	0	0	200	0
CONST	GI	0	0	0	0	0	1,400	0	0	0	1,400	0
INSP	GI	0	0	0	0	0	50	0	0	0	50	0
EQUIP	GI	0	0	0	0	0	50	0	0	0	50	0
	Total	100	0	0	200	0	1,500	0	0	0	1,700	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	3/1/2014	6/30/2016
DGN	3/1/2014	12/31/2019
CONST	7/1/2017	12/31/2021
INSP	7/1/2017	12/31/2021
EQUIP	7/1/2017	12/31/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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DR. SUN YAT-SEN MEMORIAL PARK IMPORVEMENTS

Project:	2016074	Function:	Culture - Recreation	Council:	06
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	13
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and inspect fencing for Dr. Sun Yat-Sen Memorial Park

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	1	0	0	0	0	0	0	0	0	0
DGN	GI	0	1	0	0	0	0	0	0	0	0	0
CONST	GI	0	247	0	0	0	0	0	0	0	0	0
INSP	GI	0	1	0	0	0	0	0	0	0	0	0
	Total	0	250	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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EHUKAI BEACH PARK IMPROVEMENTS

Project:	2001159	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:	59020022	Department:	Design and Construction	Senate:	22
				House:	45
				Other:	

Description: Design and construct park improvements.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	52	0	0	0	0	0	0	0	0	0	40
CONST	GI	133	0	0	0	0	0	0	0	0	0	250
	Total	184	0	0	0	0	0	0	0	0	0	290

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2024	12/31/2025
CONST	7/1/2024	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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EWA BEACH DOG OBEDIENCE AND TRAINING FACILITY

Project:	2016076	Function:	Culture - Recreation	Council:	09
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	23
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design a dog obedience and training facility to include training areas for large and small dogs, shelter with benches, lighting for night activities, sanitary facilities, drinking fountains for dogs and handlers and other amenities needed by park users.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	10	0	0	0	0	0	0	0	0	0
DGN	GI	0	40	0	0	0	0	0	0	0	0	0
	Total	0	50	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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EWA BEACH SKATE PARK

Project:	2017099	Function:	Culture - Recreation	Council:	09
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	23
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design and construct park improvements to reconstruct skating area.

Justification: Plan, design and construct park improvements to reconstruct skating area.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	1	0	0	0	0	0	0	0	0
DGN	GI	0	0	1	0	0	0	0	0	0	0	0
CONST	GI	0	0	183	0	0	0	0	0	0	0	0
	Total	0	0	185	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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EWA MAHIKO DISTRICT PARK

Project:	1985053	Function:	Culture - Recreation	Council:	01
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	23
TMK:	91017051	Department:	Design and Construction	Senate:	20
				House:	42
				Other:	

Description: TMK 9-1-17-051 POR., 049 POR., & 004 POR. - Design and construct master planned park improvements

Justification: Develop recreational resource for Ewa community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	69	0	0	0	0	0	0	0	0	0	0
DGN	GI	1,093	0	0	0	0	0	0	0	0	0	250
CONST	FG	584	0	0	0	0	0	0	0	0	0	0
CONST	GI	9,441	0	0	0	0	0	0	0	0	0	1,500
INSP	GI	695	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
OTHER	DV	500	0	0	0	0	0	0	0	0	0	0
	Total	12,382	0	0	0	0	0	0	0	0	0	1,750

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2023	12/31/2025
CONST	7/1/2025	12/31/2027

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	164
Cur Exp & Equip	85
Maint Cost	0
Useful Life	50

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EWA VILLAGES COMMUNITY CENTER

Project:	2017100	Function:	Culture - Recreation	Council:	09
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	23
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design a community center.

Justification: Plan and design a community center.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	50	0	0	0	0	0	0	0	0
DGN	GI	0	0	50	0	0	0	0	0	0	0	0
	Total	0	0	100	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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FERN COMMUNITY PARK

Project:	2015073	Function:	Culture - Recreation	Council:	07
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	15
TMK:	13001059	Department:	Design and Construction	Senate:	14
				House:	30
				Other:	

Description: Design, construct,and inspect park improvements.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	55	0	0	0	0	0	0	0	0	0	0
CONST	GI	413	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	468	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2014	3/31/2015
CONST	4/1/2015	3/31/2016
INSP	4/1/2015	3/31/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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GEIGER COMMUNITY PARK

Project:	1994114	Function:	Culture - Recreation	Council:	01
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	23
TMK:	91061002	Department:	Design and Construction	Senate:	20
				House:	42
				Other:	

Description: Design, construct and provide equipment for court lighting for all four play courts.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	581	0	0	0	0	0	0	0	0	0	0
CONST	FG	633	0	0	0	0	0	0	0	0	0	0
CONST	GI	1,325	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	2,539	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2014	6/30/2015
CONST	7/1/2015	6/30/2016
EQUIP	7/1/2015	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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HAKIPUU LOI KALO, HAKIPUU, KOOLAUPOKO

Project:	2015111	Function:	Culture - Recreation	Council:	
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Provision of funds for the preservation of Hakipuu Loi Kalo, Hakipuu, Koolaupoko (TMKs: 4-9-003:003 & 004), as recommended by the Clean Water and Natural Lands Commission in Council Communication 49 (2014) for purposes consistent with the Revised Ordinances of Honolulu, Chapter 6, Article 62.

Justification: Land preservation as recommended by Clean Water and Natural Land Commission.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	CF	0	0	550	0	0	0	0	0	0	0	0
OTHER	CF	0	0	100	0	0	0	0	0	0	0	0
	Total	0	0	650	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2014	6/30/2016
OTHER	7/1/2014	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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HALE'IWA BEACH PARK

Project:	1977069	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:	62001002	Department:	Design and Construction	Senate:	07
				House:	14
				Other:	

Description: TMK: 6-2-01:02, 03 (12.7 ACRES) - Update park master plan, design, construct, inspect park improvements and provide related equipment.

Justification: Improve recreational resource for the comunity.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	50	0	0	0	0	0	0	0	0
DGN	GI	0	0	70	0	0	0	0	0	0	0	0
CONST	GI	0	0	850	0	0	0	0	0	0	0	0
INSP	GI	0	0	25	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	5	0	0	0	0	0	0	0	0
	Total	0	0	1,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018
INSP	7/1/2016	12/31/2018
EQUIP	7/1/2014	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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HALEIWA BEACH PARK REFURBISHMENT

Project:	2016094	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Provision of funds for planning and design to update the Haleiwa Beach Park Master Plan and conduct a feasibility study to determine the cost and scope of work to refurbish Haleiwa Beach Park.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	125	0	0	0	0	0	0	0	0	0
DGN	GI	0	125	0	0	0	0	0	0	0	0	0
	Total	0	250	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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HANAUMA BAY NATURE PRESERVE

Project:	2016101	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	01
TMK:		Department:	Design and Construction	Senate:	11
				House:	21
				Other:	

Description: Plan, design, construct, inspect and provide related equipment for park improvements.

Justification: Improve recreational resource for the community.

Use of Funds: Plan, design, construct, inspect and provide related equipment for park improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HN	0	5	5	0	0	0	0	0	0	0	0
DGN	HN	347	200	5	0	0	0	0	0	0	0	0
CONST	HN	190	1,532	1,180	0	0	0	0	0	0	0	0
INSP	HN	0	5	5	0	0	0	0	0	0	0	0
EQUIP	HN	0	5	5	0	0	0	0	0	0	0	0
	Total	537	1,747	1,200	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	6/30/2021
DGN	7/1/2015	6/30/2021
CONST	7/1/2016	6/30/2022
INSP	7/1/2016	6/30/2022
EQUIP	7/1/2016	6/30/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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HANAUMA BAY NATURE PRESERVE (TMK: 3-9-12:02; 50 ACRES)

Project:	1973059	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	01
TMK:	39012002	Department:	Design and Construction	Senate:	11
				House:	21
				Other:	

Description: TMK: 3-9-12:02 (50 ACRES) - Update park master plan. Plan, design, construct, inspect and provide related equipment for park improvements such as rockfall mitigation, facilities, infrastructure, and storm water discharge (National Pollutant Discharge Elimination System) improvements.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	50	0	0	0	0	0	0	0	0	0	0
PLAN	HN	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	924	0	0	0	0	0	0	0	0	0	0
DGN	HN	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	541	0	0	0	0	0	0	0	0	0	0
CONST	HN	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	HN	0	0	0	0	0	0	0	0	0	0	0
EQUIP	HN	0	0	0	0	0	0	0	0	0	0	0
	Total	1,514	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2011	6/30/2015
DGN	7/1/2011	6/30/2015
CONST	7/1/2014	6/30/2016
INSP	7/1/2014	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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HANAUMA BAY NPDES SMALL MS4 PERMIT PROGRAM

Project:	2010074	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	01
TMK:	39012002	Department:	Design and Construction	Senate:	08
				House:	15
				Other:	

Description: Plan, design and construct improvements to meet Best Management Practices for park facilities.

Justification: Improvements to meet Environmental Protection Agency (EPA) and State Department of Health Storm Water Management Programs, which is mandated by both federal and State laws.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	435	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	435	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2012	6/30/2014
DGN	7/1/2012	6/30/2014
CONST	7/1/2013	6/30/2014
INSP	7/1/2013	6/30/2014
EQUIP	7/1/2012	6/30/2014

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

Six-Year CIP and Budget FY 2018-2023

HANS L'ORANGE NEIGHBORHOOD PARK IMPROVEMENTS, WAIPAHU

Project:	2002053	Function:	Culture - Recreation	Council:	09
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	22
TMK:	94002021	Department:	Design and Construction	Senate:	19
				House:	36
				Other:	

Description: Replacement of basketball court lighting system and ballfield improvements.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	199	0	0	0	0	0	0	0	0
DGN	GI	312	0	1	0	0	0	0	0	0	0	0
CONST	GI	792	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	1,104	0	200	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

HAU'ULA COMMUNITY PARK IMPROVEMENTS

Project:	1993071	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	28
TMK:	54001008	Department:	Design and Construction	Senate:	23
				House:	47
				Other:	

Description: Design and construct park improvements such as reconstruct baseball backstop, dugouts and perimeter fencing.

Justification: Improvements to recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	273	0	0	0	0	0	0	0	0	0	0
CONST	GI	551	0	0	0	0	0	0	0	0	0	350
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	824	0	0	0	0	0	0	0	0	0	350

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2010	6/30/2013
DGN	7/1/2012	6/30/2014
CONST	7/1/2021	6/30/2022
INSP	7/1/2013	6/30/2015

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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HELEMANO WILDERNESS RECREATION AREA

Project:	2017101	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	26
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Provision of funds for the acquisition of land and miscellaneous costs for the preservation of Helemano Wilderness (TMKs: 1-2-003:004; 6-3-001:003; 6-4-004:001 (portion); 7-1-002:011; and 7-2-001:003, as recommended by the Clean Water and Natural Lands Commission in Council Communication 293 (2015) for purposes consistent with the Revised Ordinances of Honolulu 1990, Chapter 6, Article 62.

Justification: Provision of funds for the acquisition of land and miscellaneous costs for the preservation of Helemano Wilderness (TMKs: 1-2-003:004; 6-3-001:003; 6-4-004:001 (portion); 7-1-002:011; and 7-2-001:003, as recommended by the Clean Water and Natural Lands Commission in Council Communication 293 (2015) for purposes consistent with the Revised Ordinances of Honolulu 1990, Chapter 6, Article 62.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	CF	0	0	1,900	0	0	0	0	0	0	0	0
OTHER	CF	0	0	100	0	0	0	0	0	0	0	0
	Total	0	0	2,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

HERBERT K. PILILAAU COMMUNITY PARK, WAIANAE-REPL OF LIGHTING

Project:	2009027	Function:	Culture - Recreation	Council:	01
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	24
TMK:	85001060	Department:	Design and Construction	Senate:	21
				House:	45
				Other:	

Description: Plan, design and construct park improvements such as, reconstruction of playcourts, ballfields and playcourt lighting systems.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	0	0	0	0	250	0	0	0	0	250	0
CONST	GI	0	0	0	0	0	2,000	2,000	0	0	4,000	0
	Total	0	0	0	0	250	2,000	2,000	0	0	4,250	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2018	4/30/2019
CONST	7/1/2019	12/31/2023

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

HOAEAE COMMUNITY PARK

Project:	2015112	Function:	Culture - Recreation	Council:	09
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	22
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design park improvements to include more picnic and shaded areas.

Justification: Improve recreational resource

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2015
DGN	7/1/2014	4/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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HONOWAI PARK

Project:	2007018	Function:	Culture - Recreation	Council:	09
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	22
TMK:	94053119	Department:	Design and Construction	Senate:	18
				House:	41
				Other:	

Description: Plan and design park improvements to include revitalization of landscaping and reconstruction of baseball/ softball fields, backstop, dugouts, equipment shed and other related improvements.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	47	0	0	0	0	0	0	0	0	0	135
CONST	GI	160	0	0	0	0	0	0	0	0	0	520
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	207	0	0	0	0	0	0	0	0	0	655

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2016
DGN	7/1/2014	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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JOHN K. KALILI SURF CENTER IMPROVEMENTS AT HALEIWA ALII BEACH PARK

Project:	2016096	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design and construct improvements for the refurbishment and remodeling of the John K. Kalili Surf Center at Haleiwa Alii Beach Park.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	100	0	0	0	0	0	0	0	0	0
DGN	GI	0	200	0	0	0	0	0	0	0	0	0
CONST	GI	0	700	0	0	0	0	0	0	0	0	0
	Total	0	1,000	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2015	12/31/2017
CONST	7/1/2016	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KAHALA COMMUNITY PARK

Project:	1998146	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	03
TMK:	35011028	Department:	Design and Construction	Senate:	08
				House:	18
				Other:	

Description: Design, construct, and inspect park(8.806 ACRES).

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	1	0	0	0	0	0	0	0	0	0	0
CONST	GI	525	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	526	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2014	6/30/2015
CONST	7/1/2015	6/30/2016
INSP	7/1/2015	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

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KAHUKU DISTRICT PARK IMPROVEMENTS

Project:	2014090	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct, inspect and provide equipment for improvements at Kahuku District Park including field lights, light poles and a recreational facility.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	10	0	0	0	0	0	0	0	0	0
DGN	GI	0	50	0	0	0	0	0	0	0	0	0
CONST	GI	3,200	3,120	0	0	0	0	0	0	0	0	0
INSP	GI	0	10	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	10	0	0	0	0	0	0	0	0	0
	Total	3,200	3,200	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2015	12/31/2017
CONST	6/30/2017	12/31/2019
INSP	6/30/2017	12/31/2019
EQUIP	6/30/2017	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KAHUKU MUNICIPAL GOLF COURSE

Project:	2014091	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:	56002001	Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Provision of funds for land and miscellaneous costs to acquire the simple interest in the land beneath Kahuku Municipal Golf Course (TMK: 5-6-002:047, 048, and 049).

Justification: Preservation and conservation of land for the community.

Use of Funds: Provision of funds for land and miscellaneous costs to acquire the fee simple interest in the land beneath Kahuku Municipal Golf Course (TMK: 5-6-002:048) for the purposes of conservation and flood control.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	CF	12,178	0	7,018	0	0	0	0	0	0	0	0
LAND	GI	0	3,600	0	0	0	0	0	0	0	0	0
OTHER	CF	0	0	1	0	0	0	0	0	0	0	0
OTHER	GI	0	250	0	0	0	0	0	0	0	0	0
	Total	12,178	3,850	7,019	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2015	6/30/2017
OTHER	7/1/2015	6/30/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KAILUA BEACH PARK

Project:	2012082	Function:	Culture - Recreation	Council:	03
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	31
TMK:	43009002	Department:	Design and Construction	Senate:	25
				House:	51
				Other:	

Description: Plan, design, and reconstruct park pavillion and comfort station.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	90	0	0	0	0	0	0	0	0	0	0
CONST	GI	1,000	0	0	0	0	0	0	0	0	0	0
	Total	1,090	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	5/31/2015
DGN	6/1/2015	12/31/2016
CONST	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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KAILUA DISTRICT PARK

Project:	1971418	Function:	Culture - Recreation	Council:	03
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	31
TMK:	43056009	Department:	Design and Construction	Senate:	25
				House:	49
				Other:	

Description: TMK: 4-3-56:09 (18.6 Acres) - Reconstruct softball field lights and related improvements.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	55	0	0	0	0	0	0	0	0	0	0
DGN	GI	171	0	0	0	0	0	0	0	0	0	0
CONST	GI	2,139	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	2,366	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2009	12/1/2013
CONST	1/1/2013	6/30/2014
INSP	1/1/2013	6/30/2014

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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KA IWI COAST MUKA LANDS

Project:	2016104	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	01
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Provision of funds for the preservation of Ka Iwi Coast Mauka Lands (TMK:3-9-010:047, 3-9-010:050), as recommended by the Clean Water and Natural Lands Commission in Council Communication 221 (2014) for purposes consistent with the Revised Ordinances of Honolulu, Chapter 6, Article 62.

Justification: Preservation of lands consistent with the Revised Ordinances of Honolulu, Chapter 6, Article 62.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	CF	0	1,250	0	0	0	0	0	0	0	0	0
OTHER	CF	0	1,250	0	0	0	0	0	0	0	0	0
	Total	0	2,500	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	2/1/2016	6/30/2017
OTHER	2/1/2016	6/30/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KALAELOA REGIONAL PARK

Project:	2002088	Function:	Culture - Recreation	Council:	01
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	34
TMK:		Department:	Design and Construction	Senate:	20
				House:	42
				Other:	

Description: Prepare park master plan.

Justification: Develop new recreational resource subject to the conveyance of Kalaeloa land from the Federal government to the City.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	50	0	0	0	0	0	0	0	0	0	50
DGN	GI	0	0	0	0	0	0	0	0	0	0	700
CONST	GI	0	0	0	0	0	0	0	0	0	0	4,000
INSP	GI	0	0	0	0	0	0	0	0	0	0	300
	Total	50	0	0	0	0	0	0	0	0	0	5,050

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2010	12/31/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

KALAKAUA DISTRICT PARK

Project:	1985030	Function:	Culture - Recreation	Council:	07
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	15
TMK:	15025002	Department:	Design and Construction	Senate:	14
				House:	30
				Other:	

Description: Design, construct and provide related equipment for a play apparatus.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	61	75	0	0	0	0	0	0	0	0	0
CONST	GI	0	300	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	120	0	0	0	0	0	0	0	0	0
	Total	61	495	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2015	12/31/2017
CONST	7/1/2015	12/31/2017
EQUIP	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

KALAMA BEACH PARK BUILDING AND COMFORT STATION

Project:	2017102	Function:	Culture - Recreation	Council:	03
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	31
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design and construct improvements to repair the historical building and comfort station.

Justification: Plan, design and construct improvements to repair the historical building and comfort station.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	1	0	0	0	0	0	0	0	0
DGN	GI	0	0	1	0	0	0	0	0	0	0	0
CONST	GI	0	0	498	0	0	0	0	0	0	0	0
	Total	0	0	500	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KALIHI VALLEY DISTRICT PARK

Project:	2015072	Function:	Culture - Recreation	Council:	07
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	16
TMK:	13024002	Department:	Design and Construction	Senate:	14
				House:	28
				Other:	

Description: Design, construct, and inspect facility improvements.

Justification: Improve recreational facilities for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	107	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	107	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2014	6/30/2015

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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KALIHI WAENA NEIGHBORHOOD PARK

Project:	2014094	Function:	Culture - Recreation	Council:	07
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	15
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Design, construct and provide related equipment for a play apparatus.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	75	0	0	0	0	0	0	0	0	0
CONST	GI	0	300	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	15	0	0	0	0	0	0	0	0	0
	Total	0	390	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2015	12/31/2017
CONST	7/1/2016	12/31/2017
EQUIP	7/1/2016	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

KAMAMALU NEIGHBORHOOD PARK

Project:	1996106	Function:	Culture - Recreation	Council:	06
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	13
TMK:	21005001	Department:	Design and Construction	Senate:	11
				House:	26
				Other:	

Description: (5.27 ACRES) - Design and construct playcourt and tennis court lighting systems, and ballfield lighting control improvements.

Justification: Improve recreational resource.

Use of Funds: Design court lighting systems for Kamamalu Neighborhood Park.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	1	0	0	0	0	0	0	0	0
PLAN	PP	40	0	0	0	0	0	0	0	0	0	0
DGN	GI	80	0	1	0	200	0	0	0	0	200	0
CONST	GI	0	0	97	0	0	1,500	1,500	0	0	3,000	450
INSP	GI	0	0	1	0	0	100	100	0	0	200	0
	Total	119	0	100	0	200	1,600	1,600	0	0	3,400	450

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	6/30/2018
CONST	7/1/2019	11/30/2023
INSP	7/1/2019	11/30/2023

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

KAMEHAMEHA COMMUNITY PARK

Project:	2017103	Function:	Culture - Recreation	Council:	07
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	15
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Design, construct, and provide related equipment for a footpath along the park.

Justification: Design, construct, and provide related equipment for a footpath along the park.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	0	0	75	0	0	0	0	0	0	0	0
CONST	GI	0	0	300	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	15	0	0	0	0	0	0	0	0
	Total	0	0	390	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018
EQUIP	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KAMOKILA COMMUNITY PARK

Project:	2015077	Function:	Culture - Recreation	Council:	01
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	22
TMK:	91015018	Department:	Design and Construction	Senate:	19
				House:	43
				Other:	

Description: Design, construct, and inspect facility improvements.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	323	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	323	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2014	8/30/2015
CONST	9/1/2014	12/31/2015
INSP	9/1/2014	12/31/2015

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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KANEWAI COMMUNITY PARK, UNIVERSITY

Project:	1994100	Function:	Culture - Recreation	Council:	05
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	05
TMK:	28029011	Department:	Design and Construction	Senate:	11
				House:	23
				Other:	

Description: TMK 2-8-29:011 & 004 (9.314 ACRES) - Plan, design, construct and inspect park improvements.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	941	0	0	0	0	0	0	0	0	0	10
CONST	GI	2,289	0	0	0	0	0	0	0	0	0	1,440
INSP	GI	0	0	0	0	0	0	0	0	0	0	150
	Total	3,230	0	0	0	0	0	0	0	0	0	1,600

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2021	12/31/2025
CONST	7/1/2022	12/31/2027

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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KANEWAI SPRING, KULIOUOU

Project:	2017104	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	02
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Provision of funds for the acquisition of land and other miscellaneous costs for the preservation of Kanewai Spring, Kuliouou as recommended by the Clean Water and Natural Lands Commission in Council Communication 293 (2015) for purposes consistent with the Revised Ordinances of Honolulu 1990, Chapter 6, Article 62. See Ord 16-15, page 30 for conditions that are to be included in the Conservation Easement over the Kanewai Spring site before monies shall be expended or encumbered.

Justification: Provision of funds for the acquisition of land and other miscellaneous costs for the preservation of Kanewai Spring, Kuliouou as recommended by the Clean Water and Natural Lands Commission in Council Communication 293 (2015) for purposes consistent with the Revised Ordinances of Honolulu 1990, Chapter 6, Article 62. See Ord 16-15, page 30 for conditions that are to be included in the Conservation Easement over the Kanewai Spring site before monies shall be expended or encumbered.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	CF	0	0	900	0	0	0	0	0	0	0	0
OTHER	CF	0	0	100	0	0	0	0	0	0	0	0
	Total	0	0	1,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KAPAOLONO COMMUNITY PARK

Project:	1993076	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	04
TMK:	32025001	Department:	Design and Construction	Senate:	10
				House:	19
				Other:	

Description: Design and construct upgrade to playcourts lighting system.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	8	0	0	0	0	0	0	0	0	0	0
DGN	GI	20	0	0	0	0	0	0	0	0	0	0
CONST	GI	329	0	0	0	0	0	0	0	0	0	0
CONST	PP	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	358	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2014	6/30/2016
CONST	7/1/2014	6/30/2016
INSP	7/1/2014	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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KAPI'OLANI REGIONAL PARK, WAIKIKI

Project:	1998100	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	05
TMK:	31026011	Department:	Design and Construction	Senate:	09
				House:	19
				Other:	

Description: TMK: 3-1-43:01 (132.81 ACRES) - Design and construct baseyard facility improvements.

Justification: Improvements to maximize facility operations.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	7	0	0	0	0	0	0	0	0	0	0
DGN	GI	54	0	0	0	0	0	0	0	0	0	0
CONST	GI	138	0	0	0	1,000	0	0	0	0	1,000	0
CONST	PP	0	0	0	0	0	0	0	0	0	0	0
	Total	199	0	0	0	1,000	0	0	0	0	1,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2018	12/31/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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KAPIOLANI REGIONAL PARK - WAIKIKI SHELL PARKING LOT

Project:	1975054	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	05
TMK:	31026011	Department:	Design and Construction	Senate:	09
				House:	19
				Other:	

Description: Construct parking lot improvements.

Justification: Reconstruct parking lot to address uplifting of pavement.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	59	0	0	0	0	0	0	0	0	0	0
DGN	GI	593	0	0	0	0	0	0	0	0	0	0
DGN	PP	65	0	0	0	0	0	0	0	0	0	0
CONST	GI	3,025	0	0	0	0	0	0	0	0	0	0
CONST	PP	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	3,743	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2012	12/1/2014

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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KAPOLEI COMMUNITY PARK

Project:	2001068	Function:	Culture - Recreation	Council:	01
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	34
TMK:	91016056	Department:	Design and Construction	Senate:	20
				House:	42
				Other:	

Description: Reconstruction of baseball/softball fields, backstop and dugouts for irrigation and related improvements.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	150	0	150	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	2,000
	Total	0	0	0	0	0	0	0	150	0	150	2,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2021	12/31/2023
CONST	7/1/2023	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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KAPOLEI REGIONAL PARK

Project:	1973116	Function:	Culture - Recreation	Council:	01
Priority No.:	14	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	34
TMK:	91016002	Department:	Design and Construction	Senate:	19
				House:	40
				Other:	

Description: Plan an archery range and use for the bunkers.
Upgrade of irrigation system.
Design and construct master planned improvements including a gym recreation building and swimming pool.

Justification: Improve recreational resource for the community.

Use of Funds: Construct park improvements and provide related equipment.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	50	0	0	0	0	0	0	0	0	0	10
DGN	GI	349	0	100	0	0	0	0	0	0	0	590
CONST	GI	2,525	0	900	0	0	0	0	0	0	0	12,200
CONST	PP	0	0	0	145	0	0	0	0	0	145	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	PP	0	0	0	5	0	0	0	0	0	5	0
	Total	2,924	0	1,000	150	0	0	0	0	0	150	12,800

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2016	6/30/2017
CONST	7/1/2017	12/31/2019
EQUIP	7/1/2017	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	36
Cur Exp & Equip	9
Maint Cost	0
Useful Life	30

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KAPUNAHALA NEIGHBORHOOD PARK

Project:	2015075	Function:	Culture - Recreation	Council:	03
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	30
TMK:	45078014	Department:	Design and Construction	Senate:	25
				House:	49
				Other:	

Description: Replace fencing and related improvements along Anoi Road and build erosion barrier or wall topped with chain-link fencing.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2015
DGN	7/1/2014	6/30/2015
CONST	7/1/2015	12/31/2016
INSP	7/1/2015	12/31/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

KAWELA BAY LAND ACQUISITION

Project:	2014099	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Acquire land located at Turtle Bay, Kahuku.

Justification: Preserve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	4,250	4,900	0	0	0	0	0	0	0	0	0
OTHER	GI	0	100	0	0	0	0	0	0	0	0	0
	Total	4,250	5,000	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2015	6/30/2017
OTHER	7/1/2015	6/30/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KAWELA BAY TO KAHUKU POINT LAND CONSERVATION

Project:	2015115	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Acquire land from Kawela Bay to Kahuku point.

Justification: Preservation and conservation lands.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	CF	3,500	0	0	0	0	0	0	0	0	0	0
OTHER	CF	0	0	0	0	0	0	0	0	0	0	0
	Total	3,500	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2015	6/30/2016
OTHER	7/1/2015	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KEEHI LAGOON BEACH PARK

Project:	2007048	Function:	Culture - Recreation	Council:	07
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	19
TMK:	11003006	Department:	Design and Construction	Senate:	99
				House:	32
				Other:	

Description: Design and reconstruct the road barriers along the entire roadway from Lagoon Drive entrance and resurface/reconstruct 464 parking stalls and baseyard parking.

Justification: Road barriers, roadway and parking lots are in need of renovation.

Use of Funds: Design road barriers, roadway and parking lots at Keehi Lagoon Beach Park.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	25	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	1,500	1,500	0	0	0	3,000	0
INSP	GI	0	0	0	0	50	0	0	0	0	50	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	25	0	0	0	1,550	1,500	0	0	0	3,050	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2012	6/30/2018
CONST	7/1/2018	6/30/2021
INSP	7/1/2018	6/30/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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KEY PROJECT IMPROVEMENTS

Project:	2014100	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	29
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Design and construct repairs of the KEY Project facility, including repairs to the roof of the building extension and repaving the parking lot.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GN	30	0	0	0	0	0	0	0	0	0	0
CONST	GN	0	0	0	0	0	0	0	0	0	0	0
	Total	30	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2013	6/30/2014

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KILAUEA DISTRICT PARK

Project:	2015107	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	01
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Design, construct and provide related equipment for park improvements.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	PP	121	0	0	0	0	0	0	0	0	0	0
CONST	PP	0	0	0	0	0	0	0	0	0	0	0
EQUIP	PP	0	0	0	0	0	0	0	0	0	0	0
	Total	121	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2014	6/30/2015
CONST	7/1/2015	6/30/2016
EQUIP	7/1/2015	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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KOKO HEAD DISTRICT PARK

Project:	1971364	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	01
TMK:	39012001	Department:	Design and Construction	Senate:	11
				House:	21
				Other:	

Description: TMK: 3-9-12:01; 40 - Design and construct park improvements such as, improvements to the recreation building and court lighting improvements.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	PP	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	14	0	0	0	0	0	0	0	0	0	0
DGN	PP	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	PP	150	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	PP	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	PP	0	0	0	0	0	0	0	0	0	0	0
	Total	164	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2014	6/30/2016

Annual Effect on Operating Budget	
No of Positions	4
Salary Cost	73
Cur Exp & Equip	80
Maint Cost	0
Useful Life	30

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KOKO HEAD DISTRICT PARK LIGHTING IMPROVEMENTS

Project:	2017105	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	01
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Design and construct basketball court lighting improvements.

Justification: Design and construct basketball court lighting improvements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	0	0	5	0	0	0	0	0	0	0	0
CONST	GI	0	0	140	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	5	0	0	0	0	0	0	0	0
	Total	0	0	150	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018
EQUIP	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KOKO HEAD RIDING STABLES

Project:	2017106	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	01
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and construct improvements to the Koko Head Riding Stables infrastructure and facilities.

Justification: Plan and construct improvements to the Koko Head Riding Stables infrastructure and facilities.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	75	0	0	0	0	0	0	0	0
CONST	GI	0	0	575	0	0	0	0	0	0	0	0
	Total	0	0	650	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KOKUA KALIHI VALLEY

Project:	2016105	Function:	Culture - Recreation	Council:	06
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	16
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Provision of funds for the preservation of Hooulu Ola, Kioi and Pohakaa (TMK: 1-4-020:044), as recommended by Clean Water and Natural Lands Commission in Council Communication 221 (2014) for purposes consistent with the Revised Ordinances of Honolulu Chapter 6, Article 62.

Justification: Preservation of land as recommended by Clean Water and Natural Lands Commission in Council Communication 221 (2014).

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	CF	0	890	0	0	0	0	0	0	0	0	0
OTHER	CF	0	10	0	0	0	0	0	0	0	0	0
	Total	0	900	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2015	6/30/2018
OTHER	7/1/2015	6/30/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KOOLAULOA REGIONAL PARK MASTER PLAN

Project:	2017107	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	28
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Update the Koolauloa Regional Park Master Plan, including the investigation of potential locations for new parks in Punaluu and Kaaawa.

Justification: Update the Koolauloa Regional Park Master Plan, including the investigation of potential locations for new parks in Punaluu and Kaaawa.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	100	0	0	0	0	0	0	0	0
	Total	0	0	100	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KUALOA REGIONAL PARK

Project:	2014093	Function:	Culture - Recreation	Council:	02
Priority No.:	13	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	29
TMK:	49003044	Department:	Design and Construction	Senate:	23
				House:	47
				Other:	

Description: Plan, design and construct baseyard facilities, and other required park improvements.

Justification: Replacement of the aged existing baseyard facility and due to safety and liability reasons. The baseyard services parks in Recreation District No. 4 which include Waimanalo, Kailua, Kalama, Kaneohe, Heeia, Kahaluu, Kualoa, Hauula, Kahuku, Sunset Beach, Haleiwa, Pupukea and Wailua.

Use of Funds: Design, construct and provide related equipment for park improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	25	0	0	0	0	0	0	0	0
DGN	GI	0	0	275	50	0	0	0	0	0	50	0
CONST	GI	0	0	0	0	2,800	0	0	0	0	2,800	0
CONST	PP	0	0	0	545	0	0	0	0	0	545	0
INSP	GI	0	0	0	0	200	0	0	0	0	200	0
EQUIP	PP	0	0	0	5	0	0	0	0	0	5	0
	Total	0	0	300	600	3,000	0	0	0	0	3,600	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2017
DGN	7/1/2017	12/31/2019
CONST	7/1/2018	12/31/2021
INSP	7/1/2018	12/31/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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KUALOA REGIONAL PARK-RECONSTRUCTION OF WASTEWATER SYSTEM

Project:	2010077	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	29
TMK:		Department:	Design and Construction	Senate:	08
				House:	15
				Other:	

Description: Plan, design, construct and inspect park wastewater system improvements.

Justification: State Department of Health (SDOH) and Environmental Protection Agency (EPA) regulations.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	385	0	0	0	0	0	0	0	0	0	0
DGN	GI	570	0	0	0	0	0	0	0	0	0	0
CONST	GI	5,523	0	0	0	0	0	0	0	0	0	0
CONST	PP	69	0	0	0	0	0	0	0	0	0	0
INSP	GI	320	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	6,867	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2009	6/30/2012
DGN	7/1/2009	6/30/2012
CONST	7/1/2010	6/30/2015
INSP	7/1/2010	6/30/2015

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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KUHIO BEACH COMFORT STATION IMPROVEMENTS

Project:	2017108	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	09
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design comfort station improvements to include outdoor shower improvements, drainage improvements, and sand catchment system improvements.

Justification: Plan and design comfort station improvements to include outdoor shower improvements, drainage improvements, and sand catchment system improvements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	50	0	0	0	0	0	0	0	0
DGN	GI	0	0	150	0	0	0	0	0	0	0	0
	Total	0	0	200	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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KUNIA NEIGHBORHOOD PARK

Project:	2015116	Function:	Culture - Recreation	Council:	09
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	22
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design park improvements to include play apparatus, picnic tables and trees to provide shaded areas.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2014	6/30/2016
DGN	12/1/2014	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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LANAKILA DISTRICT PARK, LILIHA

Project:	1971449	Function:	Culture - Recreation	Council:	06
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	14
TMK:	17042002	Department:	Design and Construction	Senate:	13
				House:	27
				Other:	

Description: Design, construct and provide related equipment for park improvements.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	PP	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	70	0	0	0	0	0	0	0	0	0	70
DGN	PP	153	5	0	0	0	0	0	0	0	0	0
CONST	GI	331	0	0	0	0	0	0	0	0	0	100
CONST	PP	617	34	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	PP	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	PP	0	5	0	0	0	0	0	0	0	0	0
	Total	1,170	44	0	0	0	0	0	0	0	0	170

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2015	12/1/2016
CONST	12/1/2015	1/31/2017
EQUIP	12/1/2015	1/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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LEEWARD COAST LANDFILL COMPENSATION PACKAGE

Project:	2016109	Function:	Culture - Recreation	Council:	01
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	24
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Design and construct improvements to parks in Makakilo and from Kapolei to Kaena Point.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	90	100	0	0	0	0	0	0	0	0	0
CONST	GI	0	1,250	0	0	0	0	0	0	0	0	0
	Total	90	1,350	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2015	12/31/2017
CONST	1/2/2016	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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LEEWARD COAST PARK IMPROVEMENTS

Project:	2007078	Function:	Culture - Recreation	Council:	01
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Improvements to parks in Makakilo and from Kapolei to Kaena Point.

Justification: Sustain established recreational resources.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	703	0	100	0	0	0	0	0	0	0	0
CONST	GI	2,284	0	1,250	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	2,986	0	1,350	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2016	12/31/2020
CONST	7/1/2016	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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MAILI BEACH PARK

Project:	2016072	Function:	Culture - Recreation	Council:	01
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	24
TMK:	87015001	Department:	Design and Construction	Senate:	21
				House:	43
				Other:	

Description: Design, construction and inspect comfort station and related improvements.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	0	10	0	0	0	0	0	0	0	0	0
CONST	GI	0	900	0	0	0	0	0	0	0	0	0
INSP	GI	0	10	0	0	0	0	0	0	0	0	0
	Total	0	920	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2015	12/31/2018
CONST	7/1/2015	12/31/2018
INSP	7/1/2015	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

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MAKAHA BEACH PARK CONSOLIDATION

Project:	2014103	Function:	Culture - Recreation	Council:	01
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	24
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design improvements for Makaha Beach Park necessary for the consolidation of park parcels, to include the relocation of any roads on the park parcels.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	90	0	0	0	0	0	0	0	0	0
DGN	GI	0	1	0	0	0	0	0	0	0	0	0
	Total	0	91	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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MAKAHA BEACH PARK MASTER PLAN

Project:	2014104	Function:	Culture - Recreation	Council:	01
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	24
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design for implementation of the Makaha Beach Park Master Plan.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	50	0	0	0	0	0	0	0	0	0
DGN	GI	0	700	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	0	750	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2016	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

MAKIKI DISTRICT PARK

Project:	1971377	Function:	Culture - Recreation	Council:	05
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	10
TMK:		Department:	Design and Construction	Senate:	14
				House:	28
				Other:	

Description: (Prev Funded)(FY2004) Design and construct park improvements, to include but not limited to, renovation of existing park buildings including the library (TMK: 2-4-22:001, 026, 034, 045; 8.704 ACRES).

Justification: Maintain building facilities that are on the State Historic Register by renovation; improve recreational facilities.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	628	0	0	0	0	0	0	0	0	0	0
DGN	PP	25	0	0	0	0	0	0	0	0	0	0
CONST	GI	1,919	0	0	0	0	0	0	0	0	0	0
CONST	PP	773	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	PP	0	0	0	0	0	0	0	0	0	0	0
	Total	3,345	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2014	6/30/2015
CONST	7/1/2015	6/30/2016
EQUIP	7/1/2015	6/30/2016

Annual Effect on Operating Budget	
No of Positions	5
Salary Cost	177
Cur Exp & Equip	85
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

MANOA VALLEY DISTRICT PARK

Project:	2001100	Function:	Culture - Recreation	Council:	05
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	07
TMK:	29036003	Department:	Design and Construction	Senate:	10
				House:	24
				Other:	

Description: Design, construct, and inspect park improvements.

Justification: Improve recreational facility for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	63	0	0	0	0	0	0	0	0	0	0
DGN	GI	266	0	0	0	0	0	0	0	0	0	0
DGN	PP	0	5	0	0	0	0	0	0	0	0	0
CONST	GI	3,243	0	0	0	0	0	0	0	0	0	0
CONST	PP	83	57	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	PP	0	5	0	0	0	0	0	0	0	0	0
	Total	3,655	67	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2012	6/30/2013
DGN	7/1/2014	4/30/2016
CONST	6/1/2015	12/31/2017
INSP	7/1/2013	6/30/2015
EQUIP	7/1/2015	6/30/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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MAUNA LAHILAHI BEACH PARK PROTECTIVE BREAKWATER

Project:	2000037	Function:	Culture - Recreation	Council:	01
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	24
TMK:	84001008	Department:	Design and Construction	Senate:	21
				House:	45
				Other:	

Description: Plan, design and construct protective breakwater for shoreline erosion control of beach area.

Justification: Beach park shoreline erosion.

Use of Funds: Plan, design and construct park improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	151	0	10	0	0	0	0	0	0	0	0
DGN	GI	297	0	10	0	0	0	0	0	0	0	0
CONST	GI	0	0	780	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	448	0	800	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2010	8/30/2016
DGN	7/1/2010	8/30/2016
CONST	7/20/2017	7/20/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

MCCULLY DISTRICT PARK

Project:	1985089	Function:	Culture - Recreation	Council:	05
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	08
TMK:	23029002	Department:	Design and Construction	Senate:	11
				House:	22
				Other:	

Description: TMK: 2-3-29:02 (1.43 ACRES) - Plan, design, construct, inspect and provide related equipment for park improvements such as reconstruction of the swimming pool, and construction of a master planned comfort station, and other master planned improvements.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	100	0	0	0	0	0	0	0	0	0	0
DGN	GI	1,289	0	0	0	50	50	0	0	0	100	0
DGN	PP	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	3,990	0	0	0	0	0	0	0	0	0	600
CONST	PP	1,203	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	6,582	0	0	0	50	50	0	0	0	100	600

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2016
DGN	7/1/2018	6/30/2020
CONST	7/1/2014	6/30/2016
EQUIP	7/1/2014	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

MILILANI MAUKA DISTRICT PARK

Project:	2002110	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	35
TMK:	95049020	Department:	Design and Construction	Senate:	22
				House:	38
				Other:	

Description: Plan, design, construct, inspect and provide related equipment for master planned park improvements.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	12	0	250	0	0	0	0	0	0	0	100
DGN	GI	412	0	250	0	0	0	0	0	0	0	100
CONST	GI	1,773	0	0	0	0	0	0	0	0	0	5,300
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	2,197	0	500	0	0	0	0	0	0	0	5,500

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2023	12/31/2025
DGN	7/1/2023	12/31/2025
CONST	7/1/2024	12/31/2026

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	2
Maint Cost	0
Useful Life	30

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MITIGATIVE IMPROVEMENTS AT PARKS

Project:	2008046	Function:	Culture - Recreation	Council:	99
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design, construct, inspect and provide related equipment for mitigation improvements in City parks such as rock slides, retaining walls and other unanticipated required mitigative improvements.

Justification: Undertake required improvements in City parks to address rock slides, seawalls, retaining walls to improve recreational resources.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	141	0	0	0	0	0	0	0	0	0	0
DGN	GI	1,640	0	0	0	0	10	0	0	0	10	0
CONST	GI	1,499	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	3,280	0	0	0	0	10	0	0	0	10	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2012	6/30/2021
DGN	7/1/2012	6/30/2021
CONST	3/1/2013	7/1/2022
INSP	3/1/2013	6/30/2022
EQUIP	7/1/2013	6/30/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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MOANALUA COMMUNITY PARK SWIMMING POOL IMPROVEMENTS

Project:	2015118	Function:	Culture - Recreation	Council:	06
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	17
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct, inspect and provide related equipment to replace heating system at Moanalua Community Park Swimming Pool.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	1	0	0	0	0	0	0	0	0	0
DGN	GI	0	1	0	0	0	0	0	0	0	0	0
CONST	GI	0	27	0	0	0	0	0	0	0	0	0
INSP	GI	0	1	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	120	0	0	0	0	0	0	0	0	0
	Total	0	150	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2014	12/31/2017
CONST	7/1/2015	12/31/2017
INSP	7/1/2015	12/31/2017
EQUIP	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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NIU VALLEY NEIGHBORHOOD PARK

Project:	2011116	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	02
TMK:	37003010	Department:	Design and Construction	Senate:	08
				House:	18
				Other:	

Description: Plan, design, construct and provide related equipment for Niu Valley Neighborhood Park play apparatus.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	39	0	0	0	0	0	0	0	0	0	0
CONST	GI	270	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	309	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2015
DGN	7/1/2014	6/30/2015
CONST	7/1/2015	6/30/2016
EQUIP	7/1/2015	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

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OLD STADIUM PARK IMPROVEMENTS

Project:	2016113	Function:	Culture - Recreation	Council:	05
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	08
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and inspect park improvements to provide security for park facilities.

Justification: Improve recreational resource for the community

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	1	50	0	0	0	0	0	0	0	0
DGN	GI	0	1	200	0	0	0	0	0	0	0	0
CONST	GI	0	97	0	0	0	0	0	0	0	0	0
INSP	GI	0	1	0	0	0	0	0	0	0	0	0
	Total	0	100	250	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2015	12/31/2017
CONST	7/1/2016	12/31/2017
INSP	7/1/2016	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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ONE'ULA BEACH PARK, EWA BEACH

Project:	1995127	Function:	Culture - Recreation	Council:	01
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	23
TMK:	91012025	Department:	Design and Construction	Senate:	20
				House:	41
				Other:	

Description: TMK: 9-1-12:25 (30.0 ACRES) - Plan, design, construct, inspect and provide related equipment for master planned park improvements.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	113	10	50	0	0	0	0	0	0	0	10
PLAN	PP	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	136	10	50	0	0	0	0	0	0	0	200
DGN	PP	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	975	850	0	0	0	0	0	0	0	1,200
CONST	PP	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	5	50	0	0	0	0	0	0	0	0
INSP	PP	0	0	0	0	0	0	0	0	0	0	0
EQUIP	PP	0	0	0	0	0	0	0	0	0	0	0
	Total	248	1,000	1,000	0	0	0	0	0	0	0	1,410

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2015	12/31/2017
CONST	7/1/2015	12/31/2017
INSP	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

PACIFIC PALISADES COMMUNITY PARK, PEARL CITY

Project:	2001096	Function:	Culture - Recreation	Council:	08
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	21
TMK:	97059100	Department:	Design and Construction	Senate:	16
				House:	36
				Other:	

Description: TMK: 9-7-059: 100 (8.2 ACRES) - Plan, design, construct, inspect and provide related equipment for park improvements such as upgrade of the park water distribution system, reconstruct two basketball and four tennis courts.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	42	0	0	0	0	0	0	0	0	0	225
CONST	GI	201	0	0	0	0	0	0	0	0	0	1,150
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	243	0	0	0	0	0	0	0	0	0	1,375

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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PALOLO VALLEY DISTRICT PARK

Project:	1998180	Function:	Culture - Recreation	Council:	05
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	06
TMK:	34006003	Department:	Design and Construction	Senate:	09
				House:	20
				Other:	

Description: TMK: 3-4-006:003 ; 3-4-007:003, 010 - Design and construct park improvements such as, resurfacing or reconstruction of the playcourt area, improvements to the facility's restroom and playcourt lighting.

Justification: Improve recreational resources.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	25	0	0	0	0	0	0	0	0	0	0
PLAN	PP	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	29	0	0	0	0	80	0	0	0	80	0
DGN	PP	62	0	0	0	0	0	0	0	0	0	0
CONST	GI	90	0	0	0	0	0	0	0	0	0	950
CONST	PP	205	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	40
INSP	PP	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GN	0	0	50	0	0	0	0	0	0	0	0
EQUIP	PP	0	0	0	0	0	0	0	0	0	0	0
	Total	411	0	50	0	0	80	0	0	0	80	990

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2012	6/30/2013
DGN	7/1/2012	6/30/2020
CONST	7/1/2013	6/30/2016
EQUIP	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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PATSY T. MINK CENTRAL OAHU REGIONAL PARK

Project:	1998040	Function:	Culture - Recreation	Council:	09
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	22
TMK:	94005074	Department:	Design and Construction	Senate:	19
				House:	41
				Other:	

Description: Plan and design park improvements to include a feasibility study to make improvements such as field condition upgrades for sports marketing purposes to attract national and international teams and events.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	50	0	0	0	0	0	0	0	0	0	60
DGN	GI	3,082	0	0	0	0	0	0	0	0	0	3,069
CONST	GI	8,843	0	0	0	0	0	0	0	0	0	23,430
CONST	PP	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	2,107
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	550
	Total	11,974	0	0	0	0	0	0	0	0	0	29,216

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2016
DGN	7/1/2014	6/30/2016

Annual Effect on Operating Budget	
No of Positions	6
Salary Cost	132
Cur Exp & Equip	13
Maint Cost	0
Useful Life	30

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PATSY T. MINK CENTRAL OAHU REGIONAL PARK DOG OBEDIENCE AND TRAINING FACILITY

Project:	2014112	Function:	Culture - Recreation	Council:	09
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	25
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design a dog obedience and training facility to include training areas for large and small dogs, shelters with benches, lighting for night activities, sanitary facilities, drinking fountains for dogs and handlers and other amenities needed by park users.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	50	0	0	0	0	0	0	0	0	0
DGN	GI	0	50	0	0	0	0	0	0	0	0	0
	Total	0	100	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	15

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PATSY T. MINK CENTRAL OAHU REGIONAL PARK - PARKING EXPANSION

Project:	2014113	Function:	Culture - Recreation	Council:	09
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	25
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design a parking lot to be located on the makai portion of the park.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	50	0	0	0	0	0	0	0	0	0
DGN	GI	100	50	50	0	0	0	0	0	0	0	0
	Total	100	100	50	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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PAWAA IN-HA PARK

Project:	2016085	Function:	Culture - Recreation	Council:	05
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	08
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design and construct a multicultural center at Pawaa In-Ha Park.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	200	0	0	0	0	0	0	0	0	0
DGN	GI	0	300	0	0	0	0	0	0	0	0	0
CONST	GI	0	2,000	0	0	0	0	0	0	0	0	0
	Total	0	2,500	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2015	12/31/2017
CONST	7/1/2016	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

PEARL HARBOR HISTORIC TRAIL

Project:	2015104	Function:	Culture - Recreation	Council:	08
Priority No.:	12	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	21
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Revitalize the Pearl Harbor Historic Trail with the reconstruction of the trail, installation of security bollards, signage and other related improvements.

Justification: Provide recreational resource for the community.

Use of Funds: Design, reconstruct and inspect trail improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	200	0	0	0	0	0	0	0	0	0	0
DGN	GI	300	0	0	10	0	0	0	0	0	10	0
CONST	GI	0	0	800	1,000	0	0	0	0	0	1,000	0
INSP	GI	0	0	100	90	0	0	0	0	0	90	0
	Total	499	0	900	1,100	0	0	0	0	0	1,100	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2014	6/30/2015
PLAN	7/1/2014	6/30/2015
DGN	7/1/2014	12/31/2020
CONST	7/1/2015	12/31/2020
INSP	7/1/2017	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

PEARLRIDGE COMMUNITY PARK (TMK: 9-8-013:029, 9.12 acres)

Project:	2010093	Function:	Culture - Recreation	Council:	08
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	20
TMK:		Department:	Design and Construction	Senate:	17
				House:	33
				Other:	

Description: Design, construct and inspect driveway improvements.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	330	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	330	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2014	6/30/2015
CONST	7/1/2015	6/30/2016
INSP	7/1/2015	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

PEARLRIDGE NEIGHBORHOOD PARK

Project:	2016082	Function:	Culture - Recreation	Council:	08
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	20
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Develop a passive community park on 3 contigous parcels makai of the Pearl Harbor Historic Trail in Aiea (TMK: 9-8-009:001, 9-8-009:008, 9-8-009:010) as recommended by the Clean Water and Natural Lands Commision for funding in the FY 16 budget.

Justification: Increase recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	CF	0	1,000	0	0	0	0	0	0	0	0	0
OTHER	CF	0	133	0	0	0	0	0	0	0	0	0
	Total	0	1,133	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2015	6/30/2017
OTHER	7/1/2015	6/30/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

PRESERVATION AND CONSERVATION LANDS

Project:	2009041	Function:	Culture - Recreation	Council:	99
Priority No.:	20	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: To provide funds for the purchase of or to otherwise acquire real estate or any interest therein for land conservation in the City.

Justification: To assist the City by providing a ready source of funds for the purchase of or to otherwise acquire real estate or any interest therein for land conservation in the City for the purposes as stated in the Revised Ordinances of Honolulu, Chapter 6, Article 62.

Use of Funds: Provide funds for the purchase of or to otherwise acquire real estate or any interest therein for land conservation in the City.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	CF	600	0	0	1,600	1,600	1,600	1,600	1,600	1,600	9,600	9,600
OTHER	CF	2,325	0	0	3,400	3,400	3,400	3,400	3,400	3,400	20,400	20,400
	Total	2,925	0	0	5,000	5,000	5,000	5,000	5,000	5,000	30,000	30,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2016	6/30/2050
OTHER	7/1/2016	6/30/2050

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	100

Six-Year CIP and Budget FY 2018-2023

PUNALUU BEACH PARK IMPROVEMENTS

Project:	2001086	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	28
TMK:		Department:	Design and Construction	Senate:	00
				House:	00
				Other:	

Description: Plan, design, and construct improvements to Punaluu Beach Park including beautification of the exterior separation from the roadway.

Justification: Improve recreational resource for the community

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	20	0	0	0	0	0	0	0	0	0
DGN	GI	0	20	0	0	0	0	0	0	0	0	0
CONST	GI	0	60	0	0	0	0	0	0	0	0	0
	Total	0	100	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2015	12/31/2017
CONST	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

PUPUKEA BEACH PARK IMPROVEMENTS - PHASE 1

Project:	2016089	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct, inspect and provide related equipment for improvements to the Shark's Cove Recreation Area as described in the Pupukea Beach Park Master Plan.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	70	0	0	0	0	0	0	0	0	0
DGN	GI	0	200	0	0	0	0	0	0	0	0	0
CONST	GI	0	1,391	0	0	0	0	0	0	0	0	0
INSP	GI	0	100	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	309	0	0	0	0	0	0	0	0	0
	Total	0	2,070	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	6/30/2016
DGN	7/1/2015	6/30/2016
CONST	7/1/2016	6/30/2017
INSP	7/1/2016	6/30/2017
EQUIP	7/1/2016	6/30/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

PUPUKEA BEACH PARK- REVISION OF MASTER PLAN

Project:	2011119	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	28
TMK:	59002072	Department:	Design and Construction	Senate:	22
				House:	46
				Other:	

Description: TMK:5-9-01:37 & 38;5-9-02:72;5-9-03:32 & 53 - Plan and design new park improvements.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	50	0	0	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	200
CONST	GI	0	0	0	0	0	0	0	0	0	0	1,000
	Total	50	0	0	0	0	0	0	0	0	0	1,200

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

PUUKUA, WAIMEA

Project:	2017109	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Provision of funds for the acquisition of land and miscellaneous costs for the preservation of Puukua, Waimea (TMK 6-1-002:005), as recommended by the Clean Water and Natural Lands Commission in Council Communication 293 (2015) for purposes consistent with the Revised Ordinances of Honolulu 1990, Chapter 6, Article 62.

Justification: Provision of funds for the acquisition of land and miscellaneous costs for the preservation of Puukua, Waimea (TMK 6-1-002:005), as recommended by the Clean Water and Natural Lands Commission in Council Communication 293 (2015) for purposes consistent with the Revised Ordinances of Honolulu 1990, Chapter 6, Article 62.

Use of Funds: .

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	CF	0	0	265	0	0	0	0	0	0	0	0
OTHER	CF	0	0	10	0	0	0	0	0	0	0	0
	Total	0	0	275	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

Six-Year CIP and Budget FY 2018-2023

PUU O HULU COMMUNITY PARK, MAILI

Project:	2007075	Function:	Culture - Recreation	Council:	01
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	36
TMK:	87010021	Department:	Design and Construction	Senate:	21
				House:	44
				Other:	

Description: Plan, design and construct master planned improvements, including comfort station, parking lot, and recreation building.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	5	0	0	0	0	0	0	0	0	0
DGN	GI	0	15	0	0	0	0	0	0	0	0	150
CONST	GI	702	485	0	0	0	0	0	0	0	0	750
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	702	505	0	0	0	0	0	0	0	0	900

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2019
DGN	7/1/2015	12/31/2019
CONST	7/1/2015	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

RECONSTRUCT WASTEWATER SYSTEMS FOR PARKS

Project:	1998105	Function:	Culture - Recreation	Council:	99
Priority No.:	2	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design, construct, inspect and provide related equipment for the reconstruction/improvements to park wastewater systems which may include previously unidentified cesspools.

Justification: Improve/upgrade park wastewater systems to increase operational and maintenance efficiencies.

Use of Funds: Plan, design, construct, inspect and provide related equipment for reconstruction of wastewater systems at various parks.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	268	0	0	20	0	0	0	0	0	20	0
DGN	GI	2,045	25	100	200	100	100	100	100	100	700	1,200
CONST	GI	4,303	450	890	2,760	1,390	1,390	1,390	1,390	1,390	9,710	22,680
CONST	PP	250	0	0	0	0	0	0	0	0	0	0
INSP	GI	180	25	10	10	10	10	10	10	10	60	120
EQUIP	GI	0	0	0	10	0	0	0	0	0	10	0
	Total	7,046	500	1,000	3,000	1,500	1,500	1,500	1,500	1,500	10,500	24,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	8/1/2014	12/31/2050
DGN	8/1/2014	12/31/2050
CONST	12/1/2014	12/31/2050
INSP	12/1/2014	6/30/2050
EQUIP	7/1/2014	12/31/2050

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	40

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RECREATION DISTRICT NO. 1 IMPROVEMENTS

Project:	1998128	Function:	Culture - Recreation	Council:	99
Priority No.:	6	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design and construct improvements (inclusive of energy conservation and NPDES improvements) at existing staffed park facilities to ensure continued recreational programs and other recreational resources and provide construction inspection and related equipment.

Justification: Improve recreational resources to support continued recreational programs, at established, existing staffed park facilities in the Recreation District.

Use of Funds: Plan, design, construct, inspect and provide related equipment for park improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	58	5	5	55	50	50	50	50	50	305	30
DGN	GI	2,185	10	10	130	50	50	50	50	50	380	60
CONST	GI	9,997	475	1,475	1,655	1,890	1,890	1,890	1,890	1,890	11,105	14,850
INSP	GI	89	5	5	5	5	5	5	5	5	30	30
EQUIP	GI	229	5	5	155	5	5	5	5	5	180	30
	Total	12,558	500	1,500	2,000	2,000	2,000	2,000	2,000	2,000	12,000	15,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2025
DGN	7/1/2014	6/30/2025
CONST	7/1/2014	6/30/2025
INSP	7/1/2014	6/30/2025
EQUIP	7/1/2014	6/30/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

RECREATION DISTRICT NO. 2 IMPROVEMENTS

Project:	1998129	Function:	Culture - Recreation	Council:	99
Priority No.:	7	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design and construct improvements (inclusive of energy conservation and NPDES improvements) at existing staffed park facilities to ensure continued recreational programs and other recreational resources and provide construction inspection and related equipment.

Justification: Improve recreational resources to support continued recreational programs at existing staffed park facilities in the Recreation District.

Use of Funds: Plan, design, construct, inspect and provide related equipment for park improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	5	6	5	50	50	50	50	50	255	30
PLAN	PP	130	0	0	0	0	0	0	0	0	0	0
DGN	GI	1,593	10	170	20	50	50	50	50	50	270	60
DGN	PP	55	0	0	0	0	0	0	0	0	0	0
CONST	GI	9,311	475	1,967	1,805	1,890	1,890	1,890	1,890	1,890	11,255	14,850
CONST	PP	917	0	0	0	0	0	0	0	0	0	0
INSP	GI	70	5	26	15	5	5	5	5	5	40	30
EQUIP	GI	115	5	6	155	5	5	5	5	5	180	30
	Total	12,190	500	2,175	2,000	2,000	2,000	2,000	2,000	2,000	12,000	15,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2025
DGN	7/1/2014	6/30/2025
CONST	7/1/2014	6/30/2025
INSP	7/1/2014	6/30/2025
EQUIP	7/1/2014	6/30/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

RECREATION DISTRICT NO. 3 IMPROVEMENTS

Project:	1998130	Function:	Culture - Recreation	Council:	99
Priority No.:	8	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design and construct improvements (inclusive of energy conservation and NPDES improvements) at existing staffed park facilities to ensure continued recreational programs and other recreational resources and provide construction inspection and related equipment.

Justification: Improve resources to support continued recreational programs at established existing staffed park facilities in the Recreation District.

Use of Funds: Plan, design, construct, inspect and provide related equipment for park improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	56	0	5	5	50	50	50	50	50	255	30
DGN	GI	3,848	10	170	30	50	50	50	50	50	280	60
CONST	GI	8,785	480	1,200	1,795	1,890	1,890	1,890	1,890	1,890	11,245	14,850
CONST	PP	36	0	0	0	0	0	0	0	0	0	0
INSP	GI	96	5	120	15	5	5	5	5	5	40	30
EQUIP	GI	0	5	5	155	5	5	5	5	5	180	30
	Total	12,821	500	1,500	2,000	2,000	2,000	2,000	2,000	2,000	12,000	15,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2025
DGN	7/1/2014	6/30/2025
CONST	7/1/2014	6/30/2025
INSP	7/1/2014	6/30/2025
EQUIP	7/1/2014	6/30/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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RECREATION DISTRICT NO. 4 IMPROVEMENTS

Project:	1998131	Function:	Culture - Recreation	Council:	99
Priority No.:	9	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design and construct improvements (inclusive of energy conservation and NPDES improvements) at existing staffed park facilities to ensure continued recreational programs and other recreational resources and provide construction inspection and related equipment..

Justification: Improve recreational resources to support continued recreational programs at established existing staffed park facilities in the Recreation District.

Use of Funds: Plan, design, construct, inspect and provide related equipment for park improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	16	8	10	110	50	50	50	50	50	360	30
DGN	GI	3,511	13	100	310	50	50	50	50	50	560	60
CONST	GI	9,364	925	1,360	1,570	1,890	1,890	1,890	1,890	1,890	11,020	14,850
CONST	PP	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	110	8	25	5	5	5	5	5	5	30	30
EQUIP	GI	459	5	5	5	5	5	5	5	5	30	30
	Total	13,459	959	1,500	2,000	2,000	2,000	2,000	2,000	2,000	12,000	15,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2025
DGN	7/1/2014	6/30/2025
CONST	7/1/2014	6/30/2025
INSP	7/1/2014	6/30/2025
EQUIP	7/1/2014	6/30/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

RECREATION DISTRICT NO. 5 IMPROVEMENTS

Project:	2005117	Function:	Culture - Recreation	Council:	09
Priority No.:	10	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	22
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design and construct improvements (inclusive of energy conservation and NPDES improvements) at existing staffed park facilities to ensure continued recreational programs and other recreational resources and provide construction inspection and related equipment.

Justification: Improve recreational resources to support continued recreational programs at established existing staffed park facilities in the Recreation District.

Use of Funds: Plan, design, construct, inspect and provide related equipment for park improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	5	5	5	5	5	5	5	30	30
DGN	GI	376	5	5	30	5	5	5	5	5	55	30
CONST	GI	1,645	485	2,290	455	480	480	480	480	480	2,855	5,880
INSP	GI	0	5	5	5	5	5	5	5	5	30	30
EQUIP	GI	0	5	5	5	5	5	5	5	5	30	30
	Total	2,021	500	2,310	500	500	500	500	500	500	3,000	6,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2025
DGN	7/1/2014	6/30/2025
CONST	7/1/2014	6/30/2025
INSP	7/1/2014	6/30/2025
EQUIP	7/1/2014	6/30/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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RENOVATE RECREATIONAL FACILITIES

Project:	2002072	Function:	Culture - Recreation	Council:	99
Priority No.:	5	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design, construct and provide construction inspection and related equipment for improvements at existing recreational facilities, to include play apparatus and lighting system for playcourts, playfields, parking lots, walkways, energy conservation, NPDES improvements, and mitigative park improvements.

Justification: Improve recreational resources for the community.

Use of Funds: Plan, design, construct, inspect and provide related equipment for park improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	11	10	25	25	25	25	25	25	150	150
DGN	GI	4,246	21	1,180	170	75	75	75	75	75	545	150
DGN	PP	90	0	0	0	0	0	0	0	0	0	0
CONST	GI	22,070	1,587	3,250	5,755	3,850	3,850	3,850	3,850	3,850	25,005	29,400
CONST	PP	1,078	471	1,015	98	0	0	0	0	0	98	0
INSP	GI	524	11	50	25	25	25	25	25	25	150	150
INSP	PP	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	917	20	10	25	25	25	25	25	25	150	150
EQUIP	PP	0	0	0	5	0	0	0	0	0	5	0
	Total	28,924	2,121	5,515	6,103	4,000	4,000	4,000	4,000	4,000	26,103	30,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2025
DGN	7/1/2014	6/30/2025
CONST	7/1/2014	6/30/2025
INSP	7/1/2014	6/30/2025
EQUIP	7/1/2014	6/30/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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SALT LAKE DISTRICT PARK SWIMMING POOL IMPROVEMENTS

Project:	2016073	Function:	Culture - Recreation	Council:	07
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	18
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct, inspect and provide related equipment to replace heating system at Salt Lake District Park swimming pool.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	1	0	0	0	0	0	0	0	0	0
DGN	GI	0	50	0	0	0	0	0	0	0	0	0
CONST	GI	0	350	0	0	0	0	0	0	0	0	0
INSP	GI	0	1	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	40	0	0	0	0	0	0	0	0	0
	Total	0	442	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2015	12/31/2017
CONST	7/1/2016	12/31/2017
INSP	7/1/2016	12/31/2017
EQUIP	7/1/2016	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	10

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SANDY BEACH PARK

Project:	2016090	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	01
TMK:	39010002	Department:	Design and Construction	Senate:	08
				House:	15
				Other:	

Description: Design and construct comfort station improvements.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	6	25	0	0	0	0	0	0	0	0	0
CONST	GI	512	675	0	0	0	0	0	0	0	0	0
	Total	518	700	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2015	12/30/2017
CONST	7/1/2015	12/30/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	25

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SENATOR FONG'S PLANTATION GARDEN

Project:	2013097	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	29
TMK:	47007015	Department:	Design and Construction	Senate:	23
				House:	47
				Other:	

Description: Provision of funds for the preservation of Senator Fong's Plantation Garden (TMK: 4-7-007:015), as recommended by the Clean Water and Natural Lands Commission in Council Communication 59 (2010) for purposes consistent with the Revised Ordinances of Honolulu, Chapter 6, Article 62.

Justification: Preserve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	CF	0	0	1,000	0	0	0	0	0	0	0	0
OTHER	CF	0	0	100	0	0	0	0	0	0	0	0
	Total	0	0	1,100	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2014	6/30/2018
OTHER	7/1/2014	6/30/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	100

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THOMAS SQUARE

Project:	2014096	Function:	Culture - Recreation	Council:	05
Priority No.:	4	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	10
TMK:	24001001	Department:	Design and Construction	Senate:	13
				House:	25
				Other:	

Description: Plan, design, construct, inspect park improvements and provide related equipment to support cultural and art events.

Justification: Improve recreational resource for the community.

Use of Funds: Plan, design, construct and inspect park improvements and provide related equipment.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	220	0	0	15	5	5	5	5	0	35	0
DGN	GI	1,239	100	0	490	250	100	100	100	0	1,040	0
CONST	DV	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	1,298	1,400	0	4,145	1,985	885	885	885	0	8,785	0
CONST	PP	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	30	5	5	5	5	0	50	0
EQUIP	GI	0	0	0	20	5	5	5	5	0	40	0
	Total	2,757	1,500	0	4,700	2,250	1,000	1,000	1,000	0	9,950	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2013	12/31/2022
DGN	7/1/2013	12/31/2022
CONST	7/1/2014	12/31/2022
EQUIP	7/1/2016	12/31/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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WAHIAWA DISTRICT PARK

Project:	2016081	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	26
TMK:	74008002	Department:	Design and Construction	Senate:	22
				House:	40
				Other:	

Description: Plan, design, construct, inspect and provide related improvements for Wahiawa District Park.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	500	0	0	0	0	0	0	0	0
DGN	GI	0	0	500	0	0	0	0	0	0	0	0
DGN	PP	0	5	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	4,300	0	0	0	0	0	0	0	0
CONST	PP	0	45	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	100	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	1,000	0	0	0	0	0	0	0	0
EQUIP	PP	0	5	0	0	0	0	0	0	0	0	0
	Total	0	55	6,400	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2020
DGN	7/1/2016	12/31/2020
CONST	7/1/2016	12/31/2020
EQUIP	7/1/2016	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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WAIALUA BAND STAND IMPROVEMENTS

Project:	2016084	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and inspect improvements to the Waialua Bandstand, including a new irrigation system.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	20	0	0	0	0	0	0	0	0	0
DGN	GI	0	20	0	0	0	0	0	0	0	0	0
CONST	GI	0	400	0	0	0	0	0	0	0	0	0
INSP	GI	0	10	0	0	0	0	0	0	0	0	0
	Total	0	450	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2015	12/31/2017
CONST	7/1/2016	12/31/2017
INSP	7/1/2016	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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WAIALUA DISTRICT PARK

Project:	2015078	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:	67001044	Department:	Design and Construction	Senate:	22
				House:	45
				Other:	

Description: Provide park improvements.

Justification: Improve recreational resource for the community.

Use of Funds: Construct park improvements and provide related equipment.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	PP	0	1	0	0	0	0	0	0	0	0	0
CONST	PP	0	60	0	0	0	0	0	0	0	0	0
INSP	PP	0	0	0	0	0	0	0	0	0	0	0
EQUIP	PP	0	0	0	0	0	0	0	0	0	0	0
	Total	0	61	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/31/2017	12/31/2019
CONST	7/31/2017	12/31/2019
INSP	7/31/2017	12/31/2019
EQUIP	7/31/2017	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

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WAIALUA DISTRICT PARK LIGHTING IMPROVEMENTS

Project:	2017110	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and inspect a new field lighting system to replace current system.

Justification: Plan, design, construct and inspect a new field lighting system to replace current system.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	100	0	0	0	0	0	0	0	0
DGN	GI	0	0	100	0	0	0	0	0	0	0	0
CONST	GI	0	0	2,700	0	0	0	0	0	0	0	0
INSP	GI	0	0	100	0	0	0	0	0	0	0	0
	Total	0	0	3,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018
CONST	7/1/2016	12/31/2018
INSP	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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WAIANAE DISTRICT PARK

Project:	1995122	Function:	Culture - Recreation	Council:	01
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	24
TMK:	85002001	Department:	Design and Construction	Senate:	21
				House:	45
				Other:	

Description: TMK: 8-5-02:01, 49 (22.92 ACRES) - Design and construct master planned improvements such as redesign and expand ballfield and fencing around multi purpose field.

Justification: Improve recreational resource to allow continued use by the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	PP	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	73	0	0	0	0	0	0	0	0	0	250
DGN	PP	250	0	0	0	0	0	0	0	0	0	0
CONST	GI	277	0	0	0	0	0	0	0	0	0	3,000
CONST	PP	1,062	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	PP	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	PP	0	0	0	0	0	0	0	0	0	0	0
	Total	1,662	0	0	0	0	0	0	0	0	0	3,250

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2011	6/30/2019
DGN	12/1/2011	6/30/2019
CONST	7/1/2013	6/30/2021
INSP	7/1/2014	6/30/2016
EQUIP	7/31/2017	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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WAIKIKI WAR MEMORIAL COMPLEX/WAIKIKI BEACH

Project:	1998117	Function:	Culture - Recreation	Council:	04
Priority No.:	18	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	05
TMK:	31043001	Department:	Design and Construction	Senate:	09
				House:	21
				Other:	

Description: Plan, design and construct mitigation measures.

Justification: The existing pool structure is collapsing and is a danger to the public and the environment. Planning and design of a long term solution must be undertaken to mitigate the hazards.

Use of Funds: Provide planning and design funds to complete the Environmental Impact Statement and State Historic Preservation consultation.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	1,250	0	0	250	0	0	0	0	0	250	30
DGN	GI	500	0	0	250	0	0	0	0	0	250	30
CONST	GI	92	0	0	0	0	0	0	0	0	0	2,940
	Total	1,842	0	0	500	0	0	0	0	0	500	3,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	12/31/2019
DGN	7/1/2014	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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WAIMANALO BAY BEACH PARK

Project:	2009044	Function:	Culture - Recreation	Council:	03
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	32
TMK:	41015015	Department:	Design and Construction	Senate:	25
				House:	51
				Other:	

Description: Prepare park master plan for park development.

Justification: Improve recreational resource for the community

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	150	0	50	0	0	0	0	0	0	0	0
DGN	GI	0	0	75	0	0	0	0	0	0	0	0
CONST	GI	0	0	1,800	0	0	0	0	0	0	0	0
INSP	GI	0	0	50	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	25	0	0	0	0	0	0	0	0
	Total	150	0	2,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	7/31/2019
DGN	7/1/2017	6/30/2019
CONST	7/1/2019	12/31/2020
INSP	7/1/2019	12/31/2020
EQUIP	7/1/2017	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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WAIPAHU DISTRICT PARK

Project:	2018085	Function:	Culture - Recreation	Council:
Priority No.:	19	Program:	Participant, Spectator And Other Recreation	Nbrd Board:
TMK:		Department:	Design and Construction	Senate:
				House:
				Other:

Description: Construct improvements at Waipahu District Park.

Justification: Construct improvements at Waipahu District Park.

Use of Funds: Construct and provide related equipment for park improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CONST	PP	0	0	0	83	0	0	0	0	0	83	0
EQUIP	PP	0	0	0	5	0	0	0	0	0	5	0
	Total	0	0	0	88	0	0	0	0	0	88	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2017	12/31/2019
EQUIP	7/1/2017	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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WAIPIO NEIGHBORHOOD PARK (TMK: 9-4-115:002; 12.30 acres)

Project:	2014115	Function:	Culture - Recreation	Council:	09
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	25
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Repave existing tennis courts and tennis practice courts and convert to basketball/volleyball courts.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	0	1	0	0	0	0	0	0	0	0	0
CONST	GI	0	424	0	0	0	0	0	0	0	0	0
	Total	0	425	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2015	12/31/2017
CONST	7/1/2016	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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WAIPIO PENINSULA RECREATION COMPLEX, WAIPIO PENINSULA

Project:	1998031	Function:	Culture - Recreation	Council:	08
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	22
TMK:	93002001	Department:	Design and Construction	Senate:	18
				House:	42
				Other:	

Description: Plan, design, construct, inspect and provide related equipment for park improvements

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	269	5	150	0	0	0	0	0	0	0	0
DGN	GI	375	5	150	0	0	0	0	0	0	0	0
CONST	GI	6,087	180	0	0	0	0	0	0	0	0	0
INSP	GI	289	5	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	5	0	0	0	0	0	0	0	0	0
	Total	7,020	200	300	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018
CONST	7/1/2015	12/31/2017
INSP	7/1/2015	12/31/2017
EQUIP	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	2
Salary Cost	38
Cur Exp & Equip	20
Maint Cost	0
Useful Life	30

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WEST LOCH SHORELINE PARK, WAIPAHU

Project:	1994103	Function:	Culture - Recreation	Council:	09
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	22
TMK:	94048006	Department:	Design and Construction	Senate:	20
				House:	41
				Other:	

Description: TMK 9-4-48: 74 (6.025 ACRES) - Plan, design, construct and inspect park improvements such as reconstruction of pedestrian bridge.

Justification: Improve recreatonal resoucre.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	50	0	0	0	0	0	0	0	0	0	0
DGN	GI	275	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	325	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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WHITMORE GYM, WAHIAWA

Project:	1992121	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	26
TMK:	71006077	Department:	Design and Construction	Senate:	07
				House:	13
				Other:	

Description: Plan and design expansion and upgrade to Whitmore Gym and Multipurpose Room.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	16	0	100	0	0	0	0	0	0	0	0
DGN	GI	71	0	100	0	0	0	0	0	0	0	0
CONST	GI	0	0	750	0	0	0	0	0	0	0	0
INSP	GI	0	0	50	0	0	0	0	0	0	0	0
	Total	87	0	1,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/20/2016	12/31/2019
DGN	7/20/2016	12/31/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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WILSON COMMUNITY PARK

Project:	2003098	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	03
TMK:	35017012	Department:	Design and Construction	Senate:	09
				House:	17
				Other:	

Description: Plan and design park improvements.

Justification: Improve recreational resource.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	10	0	0	0	0	0	0	0	0
DGN	GI	130	0	40	0	0	0	0	0	0	0	0
CONST	GI	470	0	170	0	0	0	0	0	0	0	0
RELOC	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	600	0	220	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/19/2019
CONST	7/1/2016	12/19/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CF	18,603	4,533	16,100	5,000	5,000	5,000	5,000	5,000	5,000	30,000	30,000
DV	500	0	0	0	0	0	0	0	0	0	0
FG	1,673	0	0	0	0	0	0	0	0	0	0
GI	197,544	36,547	42,955	46,450	38,050	26,490	23,350	19,900	14,750	168,990	198,026
GN	30	0	50	0	0	0	0	0	0	0	0
HN	537	1,747	1,200	0	0	0	0	0	0	0	0
PP	10,787	1,027	1,336	891	0	0	0	0	0	891	0
Total	229,675	43,855	61,641	52,341	43,050	31,490	28,350	24,900	19,750	199,881	228,026

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	20,528	11,640	15,678	1,600	1,600	1,600	1,600	1,600	1,600	9,600	9,600
PLAN	6,596	868	1,994	500	245	245	245	245	235	1,715	560
DGN	41,392	2,555	4,465	6,110	5,205	1,195	1,055	1,205	455	15,225	7,959
CONST	153,639	26,136	37,087	39,951	32,200	24,700	21,800	18,300	13,930	150,881	185,580
INSP	2,851	218	738	215	330	230	180	80	70	1,105	3,067
EQUIP	1,844	694	1,257	565	70	120	70	70	60	955	860
OTHER	2,825	1,743	422	3,400	3,400	3,400	3,400	3,400	3,400	20,400	20,400
RELOC	0	0	0	0	0	0	0	0	0	0	0
ART	0	0	0	0	0	0	0	0	0	0	0
Total	229,675	43,855	61,641	52,341	43,050	31,490	28,350	24,900	19,750	199,881	228,026

Program Summary: Participant, Spectator And Other Recreation

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CF	18,603	4,533	16,100	5,000	5,000	5,000	5,000	5,000	5,000	30,000	30,000
DV	500	0	0	0	0	0	0	0	0	0	0
FG	1,673	0	0	0	0	0	0	0	0	0	0
GI	197,544	36,547	42,955	46,450	38,050	26,490	23,350	19,900	14,750	168,990	198,026
GN	30	0	50	0	0	0	0	0	0	0	0
HN	537	1,747	1,200	0	0	0	0	0	0	0	0
PP	10,787	1,027	1,336	891	0	0	0	0	0	891	0
Total	229,675	43,855	61,641	52,341	43,050	31,490	28,350	24,900	19,750	199,881	228,026

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	20,528	11,640	15,678	1,600	1,600	1,600	1,600	1,600	1,600	9,600	9,600
PLAN	6,596	868	1,994	500	245	245	245	245	235	1,715	560
DGN	41,392	2,555	4,465	6,110	5,205	1,195	1,055	1,205	455	15,225	7,959
CONST	153,639	26,136	37,087	39,951	32,200	24,700	21,800	18,300	13,930	150,881	185,580
INSP	2,851	218	738	215	330	230	180	80	70	1,105	3,067
EQUIP	1,844	694	1,257	565	70	120	70	70	60	955	860
OTHER	2,825	1,743	422	3,400	3,400	3,400	3,400	3,400	3,400	20,400	20,400
RELOC	0	0	0	0	0	0	0	0	0	0	0
ART	0	0	0	0	0	0	0	0	0	0	0
Total	229,675	43,855	61,641	52,341	43,050	31,490	28,350	24,900	19,750	199,881	228,026

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BLAISDELL ARENA FIRE ALARM SYSTEM REPLACEMENT

Project:	2014074	Function:	Culture - Recreation	Council:	05
Priority No.:		Program:	Special Recreation Facilities	Nbrd Board:	11
TMK:		Department:	Design and Construction	Senate:	12
				House:	23
				Other:	

Description: A new alarm system is required at the Blaisdell Center Arena.

Justification: The existing fire alarm system is old, unreliable and parts are obsolete and cannot be replaced. In the event of a system failure events at the arena will be out of commission and events at the arena will have to be cancelled.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	389	0	0	0	0	0	0	0	0	0	0
INSP	GI	60	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	449	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2013	7/1/2014
CONST	7/1/2014	4/8/2016
INSP	7/1/2014	4/8/2016
EQUIP	7/1/2014	4/8/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

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BLAISDELL CENTER - PARKING LOT IMPROVEMENTS, TMK 2-3-08-1

Project:	1998006	Function:	Culture - Recreation	Council:	06
Priority No.:		Program:	Special Recreation Facilities	Nbrd Board:	11
TMK:	23008001	Department:	Design and Construction	Senate:	12
				House:	23
				Other:	

Description: Reconstruct parking lots and roadways of the Blaisdell Center complex.

Justification: Improvements to address structural integrity of facility.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	105	0	0	0	0	0	0	0	0	0	0
CONST	GI	592	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	697	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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BLAISDELL CENTER REDEVELOPMENT

Project:	2014076	Function:	Culture - Recreation	Council:	05
Priority No.:	6	Program:	Special Recreation Facilities	Nbrd Board:	11
TMK:	23008001	Department:	Design and Construction	Senate:	12
				House:	23
				Other:	

Description: Redevelop Blaisdell Center.

Justification: Maximize use of City enterprise resource.

Use of Funds: Design Blaisdell Center facility improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	350	0	1,000	0	0	0	0	0	0	0	0
DGN	GI	0	0	5,000	12,000	0	0	0	0	0	12,000	0
CONST	GI	0	0	0	0	80,000	80,000	80,000	120,000	20,000	380,000	0
	Total	350	0	6,000	12,000	80,000	80,000	80,000	120,000	20,000	392,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	6/30/2018
DGN	7/1/2017	7/31/2018
CONST	7/1/2019	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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BLAISDELL CENTER - UTILITY INFRASTRUCTURE IMPROVEMENTS

Project:	1995003	Function:	Culture - Recreation	Council:	05
Priority No.:		Program:	Special Recreation Facilities	Nbrd Board:	11
TMK:	23008001	Department:	Design and Construction	Senate:	12
				House:	23
				Other:	

Description: Improve the Blaisdell Center food and beverage concession operations (kitchen and Arena stands) by replacing obsolete equipment, refurbishing non-obsolete equipment, upgrading supporting utility systems, and making minor structural modifications. Upgrade the electrical, water and lighting services and floor drainage, install non-slip floor covering and extend concrete walls. Equipment will include small refrigerators, food steamers, and other food service equipment - (TMK 2-3-8-1).

Justification: Increase the efficiency of the food and beverage concession operations' 34-year old infrastructure, provide a safe working environment for concession employees, permit the expansion of services provided to concession patrons, and increase annual concession revenues.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	35	0	0	0	0	0	0	0	0	0	0
CONST	GI	165	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	200	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2013	6/30/2014
DGN	7/1/2013	6/30/2014
CONST	7/1/2014	6/6/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Six-Year CIP and Budget FY 2018-2023

DEPARTMENT OF ENTERPRISE SERVICES GOLF COURSE NPDES SMALL MS4 PERMIT PROGR

Project:	2007019	Function:	Culture - Recreation	Council:	99
Priority No.:	1	Program:	Special Recreation Facilities	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design and construct improvements, which include vehicle and equipment wash racks; structural Best Management Practices (BMPs), and covered storage for heavy vehicles and oil products at the Blaisdell Center, Waikiki Shell, Honolulu Zoo, and six municipal golf courses. Funds will be used to satisfy the requirements associated with NPDES controls and retrofits.

Justification: To comply with the Environmental Protection Agency (EPA) and State Department of Health Storm Water Management Programs, which is mandated by both federal and state laws.

Use of Funds: Construct NPDES improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	570	0	4	0	0	0	0	0	0	0	0
DGN	GI	1,329	0	4	0	250	250	0	0	0	500	500
CONST	GI	7,182	0	2,988	500	0	0	750	750	0	2,000	5,000
INSP	GI	1,000	0	4	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	10,081	0	3,000	500	250	250	750	750	0	2,500	5,500

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	2/1/2010	6/30/2015
DGN	5/1/2010	12/31/2030
CONST	6/1/2011	12/31/2030
INSP	6/1/2011	12/31/2030

Annual Effect on Operating Budget	
No of Positions	1
Salary Cost	12
Cur Exp & Equip	175
Maint Cost	0
Useful Life	30

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ENTERPRISE CONCESSION FACILITIES IMPROVEMENTS

Project:	2008089	Function:	Culture - Recreation	Council:	99
Priority No.:		Program:	Special Recreation Facilities	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design, and construct improvements (inclusive of energy conservation improvements) at Enterprise Concession facilities and provide construction inspection and related equipment.

Justification: Extend useful life of the facility.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	93	0	0	0	0	0	0	0	0	0	0
CONST	GI	259	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	53	0	0	0	0	0	0	0	0	0	0
	Total	406	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

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ENTERPRISE FACILITIES IMPROVEMENTS

Project:	1999012	Function:	Culture - Recreation	Council:	99
Priority No.:	10	Program:	Special Recreation Facilities	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Design and construct improvements (inclusive of energy conservation and NPDES improvements) for the Department of Enterprise Services facilities, such as, the Blaisdell Center and Waikiki Shell.

Justification: Continue the operations and maintain the safety and comfort of its patrons.

Use of Funds: Plan, design, construct, inspect and provide related equipment for improvements at enterprise facilities.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	10	5	5	5	5	5	0	0	0	15	0
DGN	GI	1,306	35	10	5	5	5	0	0	0	15	0
CONST	GI	6,908	300	460	55	55	55	0	0	0	165	0
INSP	GI	103	5	20	5	5	5	0	0	0	15	0
EQUIP	GI	0	5	5	5	5	5	0	0	0	15	0
	Total	8,327	350	500	75	75	75	0	0	0	225	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	6/30/2021
DGN	7/1/2015	6/30/2021
CONST	7/1/2015	6/30/2021
INSP	7/1/2015	6/30/2021
EQUIP	7/1/2015	6/30/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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EWA VILLAGES GOLF COURSE INSTALLATION OF PERIMETER FENCE

Project:	2009033	Function:	Culture - Recreation	Council:	03
Priority No.:		Program:	Special Recreation Facilities	Nbrd Board:	30
TMK:	45035001	Department:	Design and Construction	Senate:	24
				House:	48
				Other:	

Description: Design and construct perimeter fencing (6') around entire golf course.

Justification: Installation of perimeter fence to prevent injury to non-golfers who may inadvertenly enter on to golf course.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	110	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	2,000
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	110	0	0	0	0	0	0	0	0	0	2,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2024	12/31/2026

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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EWA VILLAGES GOLF COURSE - IRRIGATION PUMP STATION

Project:	2015083	Function:	Culture - Recreation	Council:	09
Priority No.:		Program:	Special Recreation Facilities	Nbrd Board:	23
TMK:	45035001	Department:	Design and Construction	Senate:	24
				House:	48
				Other:	

Description: Plan, design, construct, inspect and provide related equipment for irrigation pump station improvements.

Justification: Improve recreational resource for the community.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	40	0	0	0	0	0	0	0	0	0	0
CONST	GI	343	0	0	0	0	0	0	0	0	0	0
	Total	383	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2015
DGN	7/1/2014	6/30/2015
CONST	7/1/2015	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

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GOLF COURSE IMPROVEMENTS

Project:	2001053	Function:	Culture - Recreation	Council:	99
Priority No.:	9	Program:	Special Recreation Facilities	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design, construct and provide construction inspection for improvements (inclusive of energy conservation improvements) to municipal golf facilities such as the Ala Wai, Pali (Perimeter Fencing), Ted Makalena, West Loch, Ewa Villages and Kahuku Golf Courses.

Justification: Provide necessary improvements to municipal golf courses to ensure availability of recreation resources.

Use of Funds: Plan, design, construct and inspect golf course improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	5	5	15	15	15	15	15	15	90	150
DGN	GI	1,257	5	10	25	25	25	25	25	25	150	250
CONST	GI	6,017	130	435	250	150	150	150	150	150	1,000	1,500
INSP	GI	0	5	10	10	10	10	10	10	10	60	100
EQUIP	GI	0	5	40	0	0	0	0	0	0	0	0
	Total	7,274	150	500	300	200	200	200	200	200	1,300	2,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2025
DGN	7/1/2015	12/31/2025
CONST	7/1/2015	12/31/2025
INSP	7/1/2015	12/31/2025
EQUIP	7/1/2015	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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HONOLULU ZOO AREA PARKING LOT IMPROVEMENTS

Project:	2017111	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Special Recreation Facilities	Nbrd Board:	09
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design a parking structure at the Honolulu Zoo area.

Justification: Plan and design a parking structure at the Honolulu Zoo area.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	300	0	0	0	0	0	0	0	0
DGN	GI	0	0	200	0	0	0	0	0	0	0	0
	Total	0	0	500	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2018
DGN	7/1/2016	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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HONOLULU ZOO - BIRD FACILITY

Project:	2017079	Function:	Culture - Recreation	Council:	04
Priority No.:	3	Program:	Special Recreation Facilities	Nbrd Board:	05
TMK:	31043001	Department:	Design and Construction	Senate:	09
				House:	21
				Other:	

Description: Plan, design and construct a facility which includes bird exhibits and animal keepers work space.

Justification: The Association of Zoos and Aquariums (AZA) requires a Zoo master plan. This project is included as part of the Zoo's programmed planned priorities.

Use of Funds: Plan and design a replacement bird facility.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	50	0	0	0	0	0	50	0
DGN	GI	0	0	0	150	200	0	0	0	0	350	0
CONST	GI	0	0	0	0	0	0	1,500	2,000	0	3,500	0
	Total	0	0	0	200	200	0	1,500	2,000	0	3,900	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	6/30/2018
DGN	7/1/2018	12/31/2019
CONST	7/1/2020	12/31/2023

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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HONOLULU ZOO - HAWAII ISLAND EXHIBIT

Project:	2017078	Function:	Culture - Recreation	Council:	04
Priority No.:	4	Program:	Special Recreation Facilities	Nbrd Board:	05
TMK:	31043001	Department:	Design and Construction	Senate:	09
				House:	21
				Other:	

Description: Plan, design and construct educational habitat displays for native flora and fauna.

Justification: The Association of Zoos and Aquariums (AZA) requires a Zoo master plan. This project is included as part of the Zoo's programmed planned priorities. The exhibit promotes awareness of indigenous and endemic species unique to Hawaii, consistent with the Honolulu Zoo's mission with emphasis on Pacific Tropical ecosystems.

Use of Funds: Plan and design educational habitat displays for native flora and fauna.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	25	0	10	0	0	0	35	0
DGN	GI	0	0	0	75	0	40	0	0	0	115	0
CONST	GI	0	0	0	0	0	500	750	750	750	2,750	2,000
	Total	0	0	0	100	0	550	750	750	750	2,900	2,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	6/30/2020
DGN	7/1/2017	6/30/2020
CONST	7/1/2019	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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HONOLULU ZOO-HIPPO FILTRATION SYSTEM

Project:	2009038	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Special Recreation Facilities	Nbrd Board:	05
TMK:	31043001	Department:	Design and Construction	Senate:	09
				House:	21
				Other:	

Description: Hippopotamus facility needs a filtration apparatus, including tanks and catchbuckets.

Justification: Pool is emptied and cleaned daily, requiring a recycling/filtration system for the water areas. Installation of filtration would reduce the amount of wastewater discharges. Zoo is currently being charged for sewer fees.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	260	0	0	0	0	0	0	0	0	0	0
CONST	GI	2,640	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	2,900	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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HONOLULU ZOO IMPROVEMENTS

Project:	2001097	Function:	Culture - Recreation	Council:	04
Priority No.:	2	Program:	Special Recreation Facilities	Nbrd Board:	05
TMK:	31043001	Department:	Design and Construction	Senate:	09
				House:	21
				Other:	

Description: Design and construct improvements (inclusive of energy conservation and ADA improvements) the Honolulu Zoo.

Justification: Improvements are recommended as part of the master plan and for the American Zoo and Aquarium Association (AZA) accreditation issues, United States Department of Agriculture requirements and importation of animals for AZA conservation proposals.

Use of Funds: Plan, design, construct and inspect zoo improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	10	10	20	30	75	10	0	0	135	60
DGN	GI	1,380	50	215	115	130	75	290	0	0	610	90
CONST	GI	8,460	820	1,255	895	575	750	800	1,850	1,850	6,720	8,730
INSP	GI	0	10	10	20	5	0	0	0	0	25	60
EQUIP	GI	65	110	190	0	5	0	0	0	0	5	60
	Total	9,905	1,000	1,680	1,050	745	900	1,100	1,850	1,850	7,495	9,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	6/30/2021
DGN	7/1/2015	12/31/2022
CONST	7/1/2015	12/31/2024
INSP	7/1/2015	12/31/2024
EQUIP	7/1/2015	12/31/2024

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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HONOLULU ZOO PRIES BUILDING RENOVATION

Project:	2017077	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Special Recreation Facilities	Nbrd Board:	05
TMK:	31043001	Department:	Design and Construction	Senate:	09
				House:	21
				Other:	

Description: Design and construct improvements to the Pries building.

Justification: The Association of Zoos and Aquariums (AZA) requires a Zoo master plan. This project is included as part of the Zoo's programmed planned priorities.

Use of Funds: Design improvements to the Pries building.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	0	0	150	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	750	750	0	0	0	1,500	0
	Total	0	0	150	0	750	750	0	0	0	1,500	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2016	1/30/2018
CONST	7/1/2020	12/31/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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HONOLULU ZOO REPTILE/ AMPHIBIAN COMPLEX

Project:	2007044	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Special Recreation Facilities	Nbrd Board:	05
TMK:	31043001	Department:	Design and Construction	Senate:	09
				House:	21
				Other:	

Description: Design and construct a replacement of reptile/amphibian complex in keeping with the master planned improvements of the Zoo. The complex would connect the gateways of the American Tropical Forest, and serve as an educational resource of many of the world's fascinating ectothermic animals.

Operating Impact: The capital improvements planned will not have an impact on the operating budget until construction of the proposed replacement facility. Additional current expense would then have an operating impact on the City's budget. The projected increase in current expenses consists of one time start-up cost: $90,000 and annual recurring cost for additional electricity and supplies: $18,000.

Justification: Entire existing exhibit requires substantial reconstruction to meet American Zoo and Aquarium Association (AZA) requirements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	395	0	0	0	0	0	0	0	0	0	0
CONST	GI	2,155	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	2,550	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2012	6/30/2015
CONST	7/1/2013	12/31/2016
INSP	7/1/2013	12/31/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	108
Maint Cost	0
Useful Life	30

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HONOLULU ZOO WATER SYSTEM UPGRADE

Project:	2015084	Function:	Culture - Recreation	Council:	04
Priority No.:	5	Program:	Special Recreation Facilities	Nbrd Board:	05
TMK:	31043001	Department:	Design and Construction	Senate:	09
				House:	21
				Other:	

Description: Plan, design, construct, inspect and provide related equipment to upgrade the Honolulu Zoo water system.

Justification: Improve the recreational resource for the community.

Use of Funds: Plan and design Honolulu Zoo water system upgrade.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	300	0	200	10	0	0	0	0	0	10	0
DGN	GI	0	0	0	190	0	0	0	0	0	190	0
CONST	GI	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	300	0	200	200	0	0	0	0	0	200	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2015
DGN	7/1/2014	6/30/2017
CONST	7/1/2018	6/30/2021
INSP	7/1/2016	6/30/2021
EQUIP	7/1/2016	6/30/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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PALI GOLF COURSE

Project:	2010135	Function:	Culture - Recreation	Council:	03
Priority No.:		Program:	Special Recreation Facilities	Nbrd Board:	30
TMK:	45035001	Department:	Design and Construction	Senate:	24
				House:	48
				Other:	

Description: To design, construct and inspect reconstruction of roof, gutters & soffitt. Roof material and support has deteriorated. Gutters have failed which caused leaking of rain water onto soffitt and I beams which caused it to swell and fall off. Roof has many leaks and difficult to seal.

Justification: Due to roof material rain water is absorbed and is deteriorated which also deteriorated the support. Gutters have many leaks which are difficult to detect because of it being hidden in the soffitt. Leaking gutters caused soffitt to swell and caused support I beam to corrode.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
DGN	GI	100	0	0	0	0	0	0	0	0	0	0
CONST	GI	833	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	933	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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TED MAKALENA GOLF COURSE - NEW CART PATHS

Project:	2007025	Function:	Culture - Recreation	Council:	08
Priority No.:	8	Program:	Special Recreation Facilities	Nbrd Board:	22
TMK:	93002009	Department:	Design and Construction	Senate:	18
				House:	42
				Other:	

Description: Plan, design, construct, and provide construction inspection for phased new cart paths throughout the golf course, replace existing asphalt cart paths with concrete paths, and relocate cart paths located in middle of fairways to the side, then restore fairway turf. Also, replace cart staging area with concrete and install wash rack to capture and dispose of cart washing rinse.

Justification: Existing asphalt cart paths are in very poor condition and many areas are below fairway elevation. Cart paths that are in the middle of the fairway obstruct play.

Use of Funds: Design and construct golf course cart paths.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	309	0	50	50	50	0	0	0	0	100	0
CONST	GI	2,262	0	1,000	1,150	550	600	0	0	0	2,300	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	2,571	0	1,050	1,200	600	600	0	0	0	2,400	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2012	6/30/2016
CONST	7/1/2013	12/31/2022
INSP	7/1/2013	12/31/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

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WAIKIKI SHELL

Project:	2013081	Function:	Culture - Recreation	Council:	04
Priority No.:	7	Program:	Special Recreation Facilities	Nbrd Board:	05
TMK:	31043001	Department:	Design and Construction	Senate:	09
				House:	21
				Other:	

Description: Design and construct improvements such as stage floor, air conditioning and renovation of the existing dressing, renovation to the sound bunker and additional seating.

Justification: Improvements required supporting continued events.

Use of Funds: Plan, design, construct and inspect improvements to the Waikiki Shell.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	GI	0	0	0	20	0	0	0	0	0	20	0
DGN	GI	93	0	0	80	0	0	0	0	0	80	0
CONST	GI	408	0	0	885	0	0	0	0	0	885	0
INSP	GI	0	0	0	15	0	0	0	0	0	15	0
	Total	501	0	0	1,000	0	0	0	0	0	1,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2020
DGN	7/1/2017	12/31/2020
CONST	7/1/2017	12/31/2020
INSP	7/1/2017	12/31/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	30

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
GI	47,937	1,500	13,580	16,625	82,820	83,325	84,300	125,550	22,800	415,420	20,500
Total	47,937	1,500	13,580	16,625	82,820	83,325	84,300	125,550	22,800	415,420	20,500

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	1,230	20	1,524	145	50	105	25	15	15	355	210
DGN	6,813	90	5,639	12,690	660	395	315	25	25	14,110	840
CONST	38,613	1,250	6,138	3,735	82,080	82,805	83,950	125,500	22,750	400,820	19,230
INSP	1,163	20	44	50	20	15	10	10	10	115	160
EQUIP	118	120	235	5	10	5	0	0	0	20	60
Total	47,937	1,500	13,580	16,625	82,820	83,325	84,300	125,550	22,800	415,420	20,500

Program Summary: Special Recreation Facilities

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
GI	47,937	1,500	13,580	16,625	82,820	83,325	84,300	125,550	22,800	415,420	20,500
Total	47,937	1,500	13,580	16,625	82,820	83,325	84,300	125,550	22,800	415,420	20,500

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	1,230	20	1,524	145	50	105	25	15	15	355	210
DGN	6,813	90	5,639	12,690	660	395	315	25	25	14,110	840
CONST	38,613	1,250	6,138	3,735	82,080	82,805	83,950	125,500	22,750	400,820	19,230
INSP	1,163	20	44	50	20	15	10	10	10	115	160
EQUIP	118	120	235	5	10	5	0	0	0	20	60
Total	47,937	1,500	13,580	16,625	82,820	83,325	84,300	125,550	22,800	415,420	20,500

Function Summary: Culture - Recreation

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CF	18,603	4,533	16,100	5,000	5,000	5,000	5,000	5,000	5,000	30,000	30,000
DV	500	0	0	0	0	0	0	0	0	0	0
FG	1,673	0	0	0	0	0	0	0	0	0	0
GI	245,482	38,047	56,535	63,075	120,870	109,815	107,650	145,450	37,550	584,410	218,526
GN	30	0	50	0	0	0	0	0	0	0	0
HN	537	1,747	1,200	0	0	0	0	0	0	0	0
PP	10,787	1,027	1,336	891	0	0	0	0	0	891	0
Total	277,612	45,355	75,221	68,966	125,870	114,815	112,650	150,450	42,550	615,301	248,526

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	20,528	11,640	15,678	1,600	1,600	1,600	1,600	1,600	1,600	9,600	9,600
PLAN	7,826	888	3,518	645	295	350	270	260	250	2,070	770
DGN	48,205	2,645	10,104	18,800	5,865	1,590	1,370	1,230	480	29,335	8,799
CONST	192,252	27,386	43,225	43,686	114,280	107,505	105,750	143,800	36,680	551,701	204,810
INSP	4,014	238	782	265	350	245	190	90	80	1,220	3,227
EQUIP	1,962	814	1,492	570	80	125	70	70	60	975	920
OTHER	2,825	1,743	422	3,400	3,400	3,400	3,400	3,400	3,400	20,400	20,400
RELOC	0	0	0	0	0	0	0	0	0	0	0
ART	0	0	0	0	0	0	0	0	0	0	0
Total	277,612	45,355	75,221	68,966	125,870	114,815	112,650	150,450	42,550	615,301	248,526

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ALAPAI TRANSPORTATION MANAGEMENT CENTER

Project:	2006018	Function:	Utilities or Other Enterprises	Council:	06
Priority No.:	3	Program:	Mass Transit	Nbrd Board:	11
TMK:	21042004	Department:	Transportation Services	Senate:	12
				House:	28
				Other:	

Description: The Alapai Transportation Management Center will optimize traffic management and emergency response coordination among Department of Transportation Services, State Department of Transportation, Honolulu Police Department, Emergency Medical Services, and Honolulu Fire Department. This program will reduce traffic congestion on the island of Oahu through the application of current technology in the operations of the county's traffic signal and Closed Circuit Television (CCTV) Systems. The existing traffic management center was inaugurated in 1985 with the construction of the Honolulu Traffic Management Center. Subsequent system upgrades at the primary urban with ensuing project phases focused on the integration and upgrade of traffic signal and CCTV systems in the outlying areas. Future expansion of the system will be implemented with the new center.

Justification: The project will expand the CCTV traffic surveillance and traffic signal monitoring capabilities in the new Center to other areas in the City and County of Honolulu. The project will help accomplish the following:

a) Improve Daily Traffic Management Operations on Oahu;
b) Improve Incident and Emergency Management Operations, i.e. Service Patrol, 311;
c) Maximize Investments in Traffic Operations Equipment;
d) Deploy additional Intelligent Transportation Systems (ITS), i.e. 511, and
e) Ensure Adequate Space for Future Staffing and Functional Needs

Use of Funds: Design, construct, inspect and provide equipment for a transportation management center.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	339	0	0	0	0	0	0	0	0	0	0
DGN	FG	7,921	1	1	0	0	0	0	0	0	0	0
DGN	HI	9,255	5	0	400	0	0	0	0	0	400	0
CONST	FG	10,355	8,120	500	0	0	0	0	0	0	0	0
CONST	HI	35,989	14,212	25	100	0	0	0	0	0	100	0
INSP	FG	316	0	0	0	0	0	0	0	0	0	0
INSP	HI	3,030	876	10	1,000	0	0	0	0	0	1,000	0
EQUIP	HI	26	1,700	150	1,500	0	0	0	0	0	1,500	0
	Total	67,230	24,914	686	3,000	0	0	0	0	0	3,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2009	6/1/2010
DGN	6/29/2012	12/31/2018
CONST	4/27/2015	12/31/2018
INSP	8/4/2014	12/31/2018
EQUIP	7/1/2014	12/31/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	30
Maint Cost	2,199

Annual Effect on Operating Budget	
Useful Life	40

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BUS AND HANDI-VAN ACQUISITION PROGRAM

Project:	1978005	Function:	Utilities or Other Enterprises	Council:	99
Priority No.:	1	Program:	Mass Transit	Nbrd Board:	99
TMK:		Department:	Transportation Services	Senate:	99
				House:	99
				Other:	

Description: To provide buses and handi-vans.

Justification: This will enhance the delivery of public transit service island-wide. Buses that have met its life-cycle criteria for retirement will be replaced with new buses. This is the minimum requirement necessary to maintain safety and comfort to passengers.

Use of Funds: Purchase buses and handi-vans.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
INSP	FG	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	426	0	0	0	0	0	0	0	0	0	0
EQUIP	FG	172,809	15,752	16,443	16,394	16,752	17,086	18,098	18,498	18,498	105,326	0
EQUIP	HI	79,800	4,652	4,839	4,849	4,946	5,040	4,525	4,625	4,625	28,610	0
	Total	253,035	20,404	21,282	21,243	21,698	22,126	22,623	23,123	23,123	133,936	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
EQUIP	7/1/2015	11/30/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	12

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BUS STOP ADA ACCESS AND SITE IMPROVEMENTS

Project:	2001116	Function:	Utilities or Other Enterprises	Council:	99
Priority No.:	2	Program:	Mass Transit	Nbrd Board:	99
TMK:		Department:	Transportation Services	Senate:	99
				House:	99
				Other:	

Description: This is a continuation of projects to modify bus stops and bring them into compliance with the Americans with Disabilities Act (ADA).

Justification: This is part of the City's actions to comply with the Title II of the Americans with Disabilities Act (ADA) by addressing and implementing reasonable bus stop accessibility improvements for people with ambulatory disabilities.

Use of Funds: Plan, design, construct, inspect, provide related equipment and relocation for bus stop improvements at various locations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	FG	472	0	0	0	0	0	0	0	0	0	0
PLAN	HI	0	5	5	5	5	5	5	5	5	30	0
DGN	HI	1,246	365	365	365	365	365	365	365	365	2,190	0
CONST	FG	260	145	145	145	145	145	145	145	145	870	0
CONST	HI	3,176	350	100	350	350	350	350	350	350	2,100	0
INSP	HI	65	20	20	20	20	20	20	20	20	120	0
EQUIP	HI	0	5	5	5	5	5	5	5	5	30	0
RELOC	HI	0	5	0	5	5	5	5	5	5	30	0
	Total	5,220	895	640	895	895	895	895	895	895	5,370	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2025
DGN	7/1/2016	12/31/2025
CONST	7/1/2016	12/31/2025
INSP	7/1/2016	12/31/2025
EQUIP	7/1/2016	12/31/2025
RELOC	7/1/2016	12/31/2025

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

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BUS STOP SITE IMPROVEMENTS

Project:	2003007	Function:	Utilities or Other Enterprises	Council:	99
Priority No.:		Program:	Mass Transit	Nbrd Board:	99
TMK:		Department:	Transportation Services	Senate:	99
				House:	99
				Other:	

Description: Improve bus stops, bus shelters and make other related multimodal transit access improvements at various locations.

Justification: Provide safety, comfort and access to transit patrons at bus stops and transit centers.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	5	0	0	0	0	0	0	0	0	0	0
PLAN	FG	0	0	0	0	0	0	0	0	0	0	0
PLAN	HI	20	1	0	0	0	0	0	0	0	0	0
DGN	FG	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	1,137	4	0	0	0	0	0	0	0	0	0
CONST	FG	566	0	0	0	0	0	0	0	0	0	0
CONST	HI	3,998	95	0	0	0	0	0	0	0	0	0
INSP	FG	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	240	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	5,966	100	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2015	6/30/2018
PLAN	7/1/2015	6/30/2018
DGN	7/1/2015	6/30/2018
CONST	7/1/2015	6/30/2018
INSP	7/1/2015	6/30/2018
EQUIP	7/1/2015	6/30/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	20
Maint Cost	10
Useful Life	20

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EWA BEACH TRANSIT CENTER

Project:	2016027	Function:	Utilities or Other Enterprises	Council:	09
Priority No.:		Program:	Mass Transit	Nbrd Board:	23
TMK:		Department:	Transportation Services	Senate:	
				House:	
				Other:	

Description: Plan and design a community transit center to accomodate express, trunk, and circulator bus services. These improvements will meet the needs of the community including bus shelters, bike racks, information kiosks, and comfort stations.

Justification:

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	5	0	0	0	0	0	0	0	0	0
DGN	HI	0	45	0	0	0	0	0	0	0	0	0
	Total	0	50	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2017
DGN	7/1/2015	12/31/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	0

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MIDDLE STREET INTERMODAL CENTER

Project:	1999317	Function:	Utilities or Other Enterprises	Council:	07
Priority No.:		Program:	Mass Transit	Nbrd Board:	15
TMK:	12018001	Department:	Transportation Services	Senate:	13
				House:	29
				Other:	

Description: To establish an intermodal center to include handi-vans, regional transit center, parking and amenities.

Justification: This will enhance the delivery of public transit services and centralize the handivan offices and vehicles.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	8,723	0	0	0	0	0	0	0	0	0	0
PLAN	FG	123	0	0	0	0	0	0	0	0	0	0
PLAN	HI	286	0	0	0	0	0	0	0	0	0	2
DGN	FG	2,000	0	0	0	0	0	0	0	0	0	0
DGN	HI	2,735	0	0	0	0	0	0	0	0	0	2,900
CONST	FG	16,130	0	0	0	0	0	0	0	0	0	48,254
CONST	HI	19,162	0	0	0	0	0	0	0	0	0	12,211
INSP	HI	2,009	0	0	0	0	0	0	0	0	0	3
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	2
RELOC	HI	1,603	0	0	0	0	0	0	0	0	0	0
ART	FG	59	0	0	0	0	0	0	0	0	0	0
	Total	52,830	0	0	0	0	0	0	0	0	0	63,372

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

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MULTIMODAL TRANSIT FARE COLLECTION SYSTEM

Project:	2016035	Function:	Utilities or Other Enterprises	Council:	99
Priority No.:	4	Program:	Mass Transit	Nbrd Board:	99
TMK:		Department:	Transportation Services	Senate:	99
				House:	99
				Other:	

Description: Implementation on TheBUS , TheHandi-Van and HART rail of a multi-modal, closed loop, account based smart card fare payment system.

Justification: The integrated smart card system and equipment provides customers with a seamless payment method that is compatible on both modes of transit and avoids the need for two separate payment systems.

Use of Funds: Plan, design, inspect and provide related equipment for a new multimodal fare collection system.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	0	2,000	10	5	0	0	0	0	0	5	0
DGN	HI	3,600	1,000	10	10	0	0	0	0	0	10	0
INSP	HI	0	0	10	10	0	0	0	0	0	10	0
EQUIP	HI	1,400	2,000	6,970	3,440	0	0	0	0	0	3,440	0
	Total	5,000	5,000	7,000	3,465	0	0	0	0	0	3,465	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	8/31/2019
DGN	9/1/2015	2/28/2019
EQUIP	3/1/2016	1/26/2020

Annual Effect on Operating Budget	
No of Positions	19
Salary Cost	1,260
Cur Exp & Equip	100
Maint Cost	3,080
Useful Life	0

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PEDESTRIAN - TRANSIT CONNECTIONS

Project:	2006001	Function:	Utilities or Other Enterprises	Council:	99
Priority No.:		Program:	Mass Transit	Nbrd Board:	99
TMK:		Department:	Transportation Services	Senate:	99
				House:	99
				Other:	

Description: Improve pedestrian and bicycle safety and access at appropriate locations near bus stops and transit centers.

Justification: Provide safe, accessible connections for pedestrians and bicyclists using public transit.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	21	0	0	0	0	0	0	0	0	0	0
DGN	HI	489	0	0	0	0	0	0	0	0	0	0
CONST	FG	699	0	0	0	0	0	0	0	0	0	0
CONST	HI	619	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	1,828	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	6/30/2018
DGN	7/1/2015	6/30/2018
CONST	7/1/2015	6/30/2018
INSP	7/1/2015	6/30/2018
EQUIP	7/1/2015	6/30/2018

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	25
Useful Life	30

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TRANSIT SAFETY AND SECURITY PROJECTS

Project:	2008036	Function:	Utilities or Other Enterprises	Council:	99
Priority No.:	5	Program:	Mass Transit	Nbrd Board:	99
TMK:		Department:	Transportation Services	Senate:	99
				House:	99
				Other:	

Description: Provide various security improvements and upgrades to existing and future transit facilities, assets, and systems. This may include, but not limited to, safety and security technological measures, i.e. alarms and cameras, contactless card capable security gate/alarm at bus facility entrances/exits; physical hardening, i.e. lighting, fencing, bollards; and communication systems, i.e. data voice, inter-operability and infra-structures.

Justification: This is in compliance to the Federal Transit Administration's (FTA) requirements that one percent of FTA Section 5307 funds be set aside for transit safety and security.

Use of Funds: Design and install equipment for transit safety and security improvements at various locations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	43	1	5	0	0	0	0	0	0	0	0
DGN	FG	90	0	1	0	0	0	0	0	0	0	0
DGN	HI	133	1	0	73	0	0	0	0	0	73	0
CONST	HI	89	1	5	0	0	0	0	0	0	0	0
EQUIP	FG	1,415	296	330	297	0	0	0	0	0	297	0
EQUIP	HI	632	60	75	1	0	0	0	0	0	1	0
	Total	2,402	359	416	371	0	0	0	0	0	371	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	11/1/2014	6/30/2017
DGN	12/1/2014	6/30/2017
CONST	7/1/2015	6/30/2017
EQUIP	5/1/2014	6/30/2017

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	45
Useful Life	15

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WAHIAWA TRANSIT CENTER

Project:	2003009	Function:	Utilities or Other Enterprises	Council:	02
Priority No.:		Program:	Mass Transit	Nbrd Board:	26
TMK:		Department:	Transportation Services	Senate:	22
				House:	39
				Other:	

Description: To establish a community transit center to accommodate express, trunk, and circulator bus services. These improvements will meet the needs of the community including, bus shelters, bike racks, information kiosks, and comfort stations.

Justification: This will enhance the delivery of public transit services to Wahiawa.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	HI	0	0	0	0	0	0	0	0	0	0	0
PLAN	HI	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	686	0	0	0	0	0	0	0	0	0	0
DGN	ST	0	0	0	0	0	0	0	0	0	0	0
CONST	FG	2,182	0	0	0	0	0	0	0	0	0	0
CONST	HI	3,456	0	0	0	0	0	0	0	0	0	0
CONST	ST	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	707	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
RELOC	HI	6	0	0	0	0	0	0	0	0	0	0
ART	FG	200	0	0	0	0	0	0	0	0	0	0
	Total	7,238	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2010	6/30/2014
DGN	7/1/2010	6/30/2014
CONST	6/1/2010	6/30/2014

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	20

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WAHIAWA TRANSIT CENTER - RESTROOMS

Project:	2016041	Function:	Utilities or Other Enterprises	Council:	02
Priority No.:		Program:	Mass Transit	Nbrd Board:	26
TMK:		Department:	Transportation Services	Senate:	22
				House:	39
				Other:	

Description: Construct public restrooms at Wahiawa Transit Center.

Justification: Provide public restrooms at Wahiawa Transit Center.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
CONST	HI	0	450	0	0	0	0	0	0	0	0	0
	Total	0	450	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2015	8/31/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	2
Maint Cost	40
Useful Life	0

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WAIKIKI AREA TRANSIT CATALYTIC IMPROVEMENTS

Project:	2015031	Function:	Utilities or Other Enterprises	Council:	04
Priority No.:		Program:	Mass Transit	Nbrd Board:	09
TMK:		Department:	Transportation Services	Senate:	22
				House:	99
				Other:	

Description: This project includes: (1) planning (including project feasibility analyses), design and construction of transportation improvements in and around Waikiki and connecting to adjacent neighborhoods and to the Ala Moana rail station; and (2) installation of enhancements (such as electronic information displays, fare payment systems, and pedestrian-friendly amenities) as identified in the 2013 Waikiki Regional Circulator Study.

Justification: According to the 2013 Waikiki Regional Circulator Study, "Overall, the largest share of TheBus riders' trips originate in Waikiki where there is no transit center, terminal or station, just bus stops." The study identified a series of transit infrastructure improvements to correct the situation and improve the transit system in Waikiki and the surrounding communities.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
PLAN	HI	500	0	0	0	0	0	0	0	0	0	0
DGN	HI	500	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
ART	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	1,000	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2016
DGN	7/1/2015	6/30/2016

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	120
Useful Life	25

Department Summary: Transportation Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
FG	215,595	24,314	17,420	16,836	16,897	17,231	18,243	18,643	18,643	106,493	48,254
HI	186,153	27,858	12,604	12,138	5,696	5,790	5,275	5,375	5,375	39,649	15,118
ST	0	0	0	0	0	0	0	0	0	0	0
Total	401,748	52,172	30,024	28,974	22,593	23,021	23,518	24,018	24,018	146,142	63,372

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	8,728	0	0	0	0	0	0	0	0	0	0
PLAN	1,804	2,012	20	10	5	5	5	5	5	35	2
DGN	29,792	1,421	377	848	365	365	365	365	365	2,673	2,900
CONST	96,681	23,373	775	595	495	495	495	495	495	3,070	60,465
INSP	6,793	896	40	1,030	20	20	20	20	20	1,130	3
EQUIP	256,082	24,465	28,812	26,486	21,703	22,131	22,628	23,128	23,128	139,204	2
RELOC	1,610	5	0	5	5	5	5	5	5	30	0
ART	259	0	0	0	0	0	0	0	0	0	0
Total	401,748	52,172	30,024	28,974	22,593	23,021	23,518	24,018	24,018	146,142	63,372

Program Summary: Mass Transit

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
FG	215,595	24,314	17,420	16,836	16,897	17,231	18,243	18,643	18,643	106,493	48,254
HI	186,153	27,858	12,604	12,138	5,696	5,790	5,275	5,375	5,375	39,649	15,118
ST	0	0	0	0	0	0	0	0	0	0	0
Total	401,748	52,172	30,024	28,974	22,593	23,021	23,518	24,018	24,018	146,142	63,372

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	8,728	0	0	0	0	0	0	0	0	0	0
PLAN	1,804	2,012	20	10	5	5	5	5	5	35	2
DGN	29,792	1,421	377	848	365	365	365	365	365	2,673	2,900
CONST	96,681	23,373	775	595	495	495	495	495	495	3,070	60,465
INSP	6,793	896	40	1,030	20	20	20	20	20	1,130	3
EQUIP	256,082	24,465	28,812	26,486	21,703	22,131	22,628	23,128	23,128	139,204	2
RELOC	1,610	5	0	5	5	5	5	5	5	30	0
ART	259	0	0	0	0	0	0	0	0	0	0
Total	401,748	52,172	30,024	28,974	22,593	23,021	23,518	24,018	24,018	146,142	63,372

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Function Summary: Utilities or Other Enterprises

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
FG	215,595	24,314	17,420	16,836	16,897	17,231	18,243	18,643	18,643	106,493	48,254
HI	186,153	27,858	12,604	12,138	5,696	5,790	5,275	5,375	5,375	39,649	15,118
ST	0	0	0	0	0	0	0	0	0	0	0
Total	401,748	52,172	30,024	28,974	22,593	23,021	23,518	24,018	24,018	146,142	63,372

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	8,728	0	0	0	0	0	0	0	0	0	0
PLAN	1,804	2,012	20	10	5	5	5	5	5	35	2
DGN	29,792	1,421	377	848	365	365	365	365	365	2,673	2,900
CONST	96,681	23,373	775	595	495	495	495	495	495	3,070	60,465
INSP	6,793	896	40	1,030	20	20	20	20	20	1,130	3
EQUIP	256,082	24,465	28,812	26,486	21,703	22,131	22,628	23,128	23,128	139,204	2
RELOC	1,610	5	0	5	5	5	5	5	5	30	0
ART	259	0	0	0	0	0	0	0	0	0	0
Total	401,748	52,172	30,024	28,974	22,593	23,021	23,518	24,018	24,018	146,142	63,372

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Summary

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Summary Total

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
AF	12,663	12,136	5,600	5,000	5,000	5,000	5,000	5,000	5,000	30,000	30,000
BK	1,468	0	0	920	560	560	560	560	560	3,720	0
BT	0	0	0	0	0	0	0	0	0	0	0
CD	83,084	6,863	8,838	6,249	6,249	6,249	6,249	6,249	6,249	37,492	0
CF	18,603	4,533	16,100	5,000	5,000	5,000	5,000	5,000	5,000	30,000	30,000
DN	303	0	0	0	0	0	0	0	0	0	0
DV	1,375	0	0	0	0	0	0	0	0	0	0
EW	902	0	0	0	0	0	0	0	0	0	0
FG	365,846	33,838	26,404	32,030	27,139	35,473	44,485	36,885	66,885	242,897	49,304
GC	2,259	0	0	0	0	0	0	0	0	0	0
GI	764,651	103,583	178,532	144,539	158,566	149,856	139,111	174,416	122,451	888,939	773,426
GN	9,217	1,300	1,040	200	0	0	0	0	0	200	0
HD	0	0	0	0	0	0	0	0	0	0	0
HI	1,357,650	170,599	182,145	74,695	74,747	84,171	104,696	79,796	123,336	541,441	284,918
HN	537	1,747	1,200	0	0	0	0	0	0	0	0
HW	6,816	0	0	0	0	0	0	0	0	0	0
PP	10,787	1,027	1,336	891	0	0	0	0	0	891	0
SA	0	0	0	0	0	0	0	0	0	0	0
SR	1,411,307	143,497	372,824	494,372	353,540	453,132	668,079	147,331	235,165	2,351,619	19,490
ST	254	0	0	0	0	0	0	0	0	0	0
SV	1,347	0	0	0	0	0	0	0	0	0	0
SW	314,163	70,123	117,907	161,500	64,689	72,387	59,181	58,579	58,579	474,915	0
UT	1,145	100	100	100	100	100	100	100	100	600	0
WB	489,109	9,827	23,190	30,582	64,010	20,042	1,350	54,831	1,350	172,165	0
WF	43,998	10,000	3,000	0	0	0	0	0	0	0	0
Total	4,897,487	569,174	938,216	956,078	759,600	831,970	1,033,811	568,747	624,675	4,774,879	1,187,138

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2016	Appn 2017	2018	2019	2020	2021	2022	2023	Total 6 Years	Future Years
LAND	101,663	12,689	78,314	30,596	2,003	3,000	2,748	3,546	3,178	45,071	24,883
PLAN	227,903	16,288	24,854	14,260	12,091	7,532	5,912	13,060	5,827	58,682	10,328
DGN	484,495	47,819	55,746	100,649	69,406	47,388	82,527	46,651	12,623	359,244	75,220
CONST	3,201,297	383,002	647,983	677,366	587,930	685,679	845,064	420,104	517,162	3,733,305	987,525
INSP	172,569	21,769	27,077	28,503	18,297	19,286	28,030	14,181	15,470	123,767	26,760
EQUIP	534,787	57,122	69,769	61,650	38,772	37,993	38,438	40,113	39,323	256,289	11,992
OTHER	171,487	30,230	32,209	34,823	31,072	31,062	31,062	31,062	31,062	190,142	50,280
RELOC	1,710	255	2,026	8,030	30	30	30	30	30	8,180	150
ART	1,576	0	240	200	0	0	0	0	0	200	0
Total	4,897,487	569,174	938,216	956,078	759,600	831,970	1,033,811	568,747	624,675	4,774,879	1,187,138