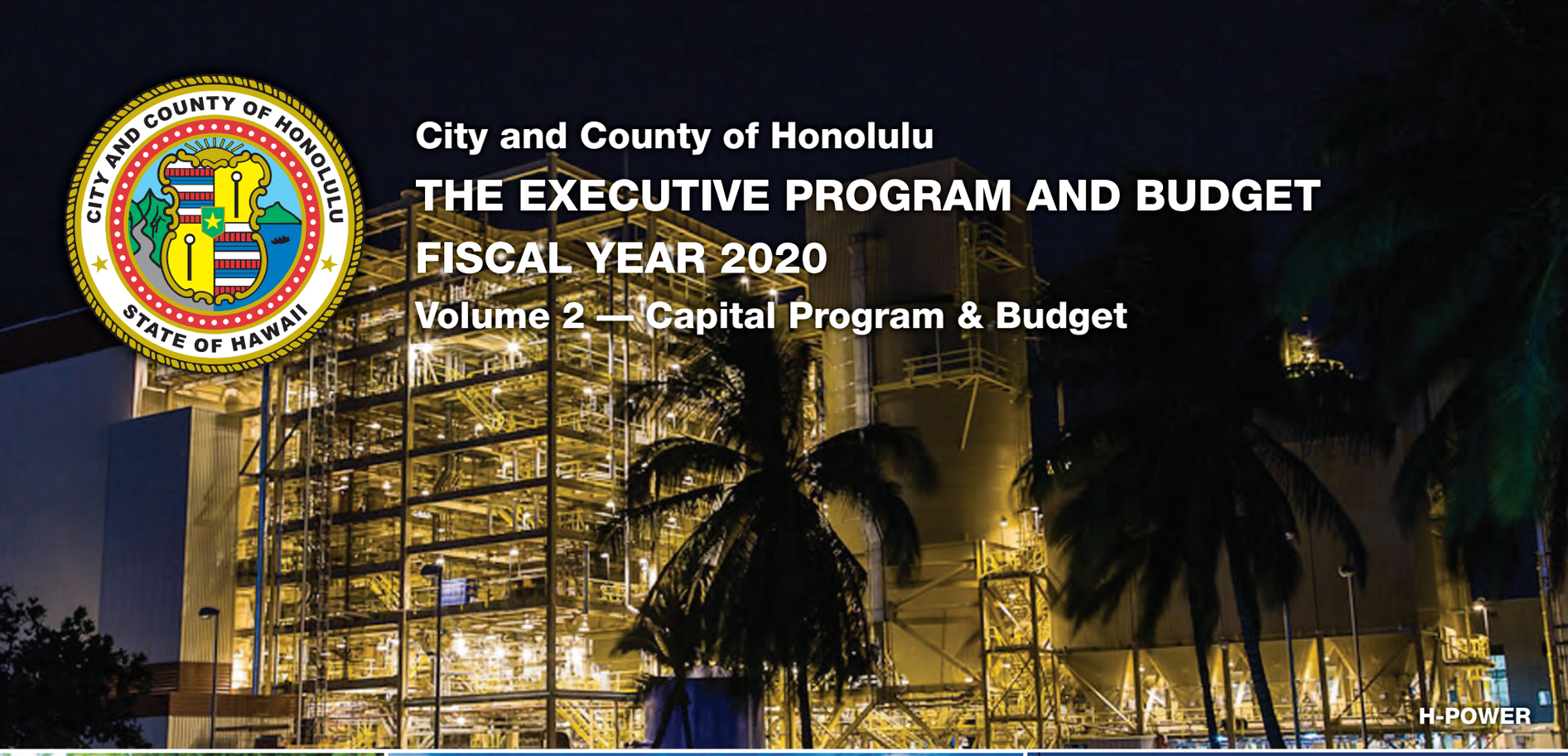
City and County of Honolulu

THE EXECUTIVE PROGRAM AND BUDGET

FISCAL YEAR 2020

Volume 2 — Capital Program & Budget



H-POWER

Thomas Square

Central Oahu Ambulance Station

Kahaluu Telecommunication Tower Replacement

Kailua Regional 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

ANN H. KOBAYASHI, INTERIM CHAIR

DISTRICT V (KAPAHULU TO MAKIKI)

COUNCILMEMBERS:

KYMBERLY MARCOS PINE	DISTRICT I	(EWA BEACH TO WAIANAE)
HEIDI TSUNEYOSHI	DISTRICT II	(MOKULEIA AND MILILANI MAUKA TO KAHALUU)
IKAIKA ANDERSON, VICE CHAIR	DISTRICT III	(WAIMANALO TO HEEIA)
MICHAEL D. FORMBY	DISTRICT IV	(HAWAII KAI TO ALA MOANA BEACH PARK)
CAROL FUKUNAGA	DISTRICT VI	(MAKIKI TO KALIHI)
JOEY MANAHAN	DISTRICT VII	(KALIHI TO HALAWA VALLEY)
BRANDON ELEFANTE	DISTRICT VIII	(FORT SHAFTER TO WAIPIO GENTRY)
RON MENOR	DISTRICT IX	(WAIKELE TO MAKAKILO AND MILILANI TOWN)

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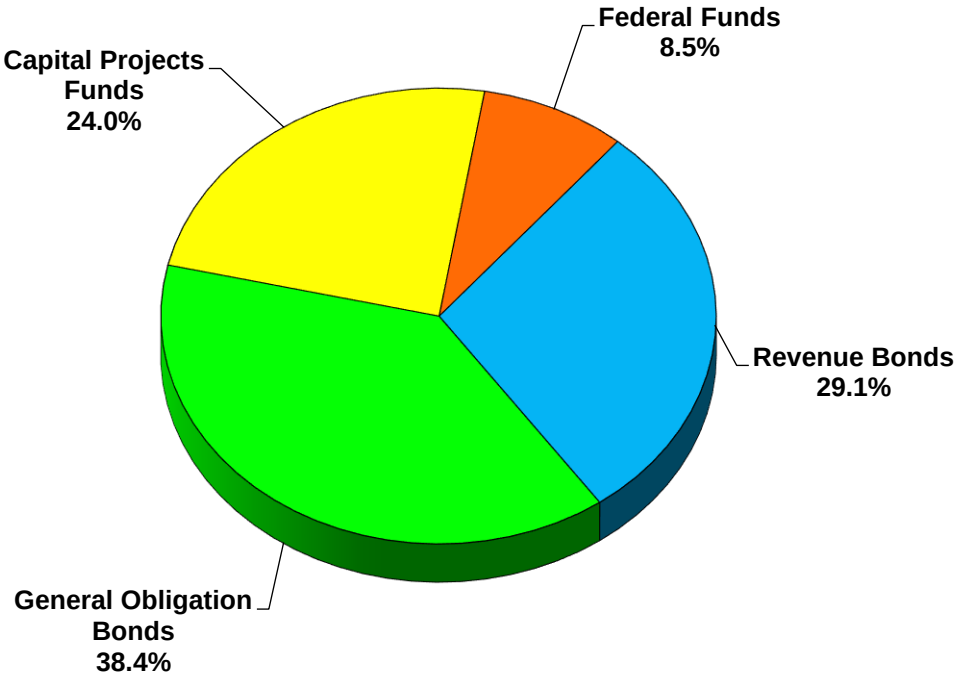
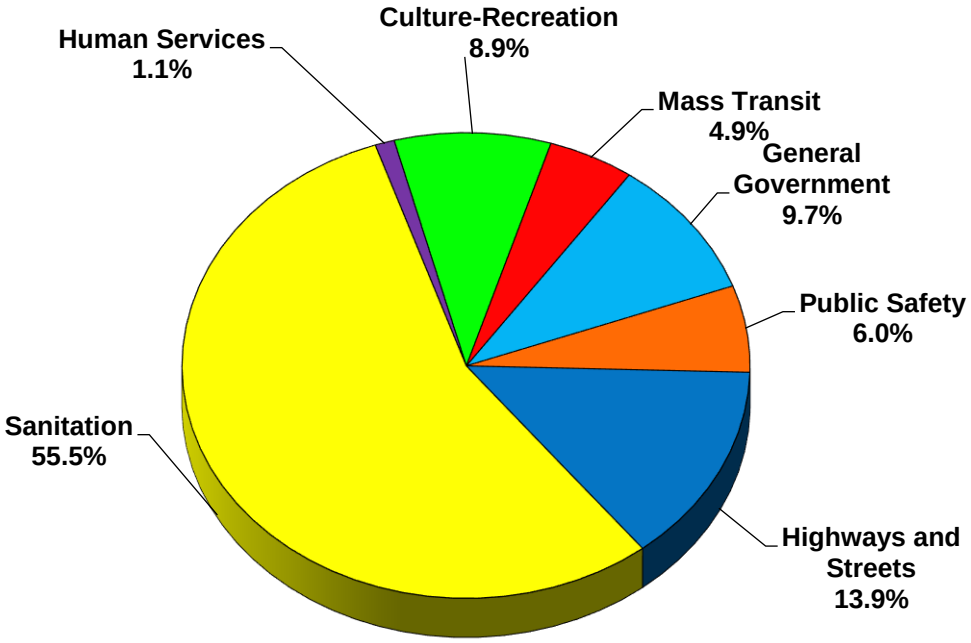
Capital Projects by Funding Source
FY2020



$871 MILLION

Capital Projects by Function
FY2020



$871 MILLION

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PHASE AND FUND SOURCE DESIGNATIONS

PHASE		FUND SOURCE	
ART	ART	AF	Affordable Housing Fund
CONST	CONSTRUCTION	BK	Bikeway Fund
DGN	DESIGN	CD	Community Development Fund
EQUIP	EQUIPMENT	CF	Clean Water and Natural Lands Fund
INSP	INSPECTION	DN	Donation
LAND	LAND	DV	Developer
OTHER	OTHER	FG	Federal Grants Fund
PLAN	PLANNING	GI	General Improvement Bond Fund
RELOC	RELOCATION	GN	General Fund
		HI	Highway Improvement Bond Fund
		HN	Hanauma Bay Nature Preserve Fund
		PP	Parks and Playgrounds Fund
		RL	HCD Rehabilitation Loan Fund
		SR	Sewer Revenue Bond Improvement Fund
		ST	State 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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	56,512	4,129	7,406	3,035	0	0	0	0	0	3,035	0
EQUIP	GN	527	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	17,544	2,251	1,590	3,094	0	0	0	0	0	3,094	0
EQUIP	HN	0	0	66	0	0	0	0	0	0	0	0
EQUIP	HW	5,286	0	366	0	0	0	0	0	0	0	0
EQUIP	SV	1,320	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	64,710	7,841	9,873	5,292	5,292	5,292	5,292	5,292	5,292	31,753	0
EQUIP	WF	0	0	0	6,860	0	0	0	0	0	6,860	0
	Total	148,462	14,221	19,300	18,282	5,292	5,292	5,292	5,292	5,292	44,742	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
EQUIP	7/1/2017	12/31/2027

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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PROJECT ADJUSTMENTS ACCOUNT

Project:	1979110	Function:	General Government	Council:	99
Priority No.:	3	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	6/30/2028

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: Budget and Fiscal Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	56,512	4,130	7,407	3,036	1	1	1	1	1	3,041	0
GN	527	0	0	0	0	0	0	0	0	0	0
HI	17,544	2,252	1,591	3,095	1	1	1	1	1	3,100	0
HN	0	0	66	0	0	0	0	0	0	0	0
HW	5,286	0	366	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	1,320	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0	0	0
WB	64,710	7,841	9,873	5,292	5,292	5,292	5,292	5,292	5,292	31,753	0
WF	0	0	0	6,860	0	0	0	0	0	6,860	0
Total	148,462	14,223	19,302	18,284	5,294	5,294	5,294	5,294	5,294	44,754	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
EQUIP	148,462	14,221	19,300	18,282	5,292	5,292	5,292	5,292	5,292	44,742	0
OTHER	0	2	2	2	2	2	2	2	2	12	0
Total	148,462	14,223	19,302	18,284	5,294	5,294	5,294	5,294	5,294	44,754	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	11,857	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	3,681	0	0	0	0	0	0	0	0	0	0
	Total	19,527	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
GI	19,527	0	0	0	0	0	0	0	0	0	0
Total	19,527	0	0	0	0	0	0	0	0	0	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	11,857	0	0	0	0	0	0	0	0	0	0
EQUIP	3,989	0	0	0	0	0	0	0	0	0	0
OTHER	3,681	0	0	0	0	0	0	0	0	0	0
Total	19,527	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	76,039	4,130	7,407	3,036	1	1	1	1	1	3,041	0
GN	527	0	0	0	0	0	0	0	0	0	0
HI	17,544	2,252	1,591	3,095	1	1	1	1	1	3,100	0
HN	0	0	66	0	0	0	0	0	0	0	0
HW	5,286	0	366	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	1,320	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0	0	0	0	0
WB	64,710	7,841	9,873	5,292	5,292	5,292	5,292	5,292	5,292	31,753	0
WF	0	0	0	6,860	0	0	0	0	0	6,860	0
Total	167,989	14,223	19,302	18,284	5,294	5,294	5,294	5,294	5,294	44,754	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	11,857	0	0	0	0	0	0	0	0	0	0
EQUIP	152,451	14,221	19,300	18,282	5,292	5,292	5,292	5,292	5,292	44,742	0
OTHER	3,681	2	2	2	2	2	2	2	2	12	0
Total	167,989	14,223	19,302	18,284	5,294	5,294	5,294	5,294	5,294	44,754	0

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925 DILLINGHAM BOULEVARD ACQUISITION - KAPALAMA HALE

Project:	2017083	Function:	General Government	Council:	06
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	27,500	0	0	0	0	0	0	0	0	0
	Total	0	27,500	0	0	0	0	0	0	0	0	0

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

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 2020-2025

ALA MOANA TRANSIT PLAZA - TRANSIT ORIENTED DEVELOPMENT

Project:	2017073	Function:	General Government	Council:	05
Priority No.:	2	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	11
TMK:	23039016	Department:	Design and Construction	Senate:	12
				House:	22
				Other:	

Description: Acquire land, plan, design, construct, inspect, provide related equipment and relocation assistance for the develop a intermodal transit plaza in the Ala Moana area which may include affordable housing. Development of the transit plaza may be under taken through a public private partnership.

Justification: Development of an intermodal transit plaza to facilitate alternative transportation connectivity and address climate change, sustainability and resiliency.

Use of Funds: Acquire land, plan, design, construct, inspect improvements, and provide relocation assistance for the development of a sustainable intermodal transit center.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	0	60,000	30,000	0	0	0	0	0	30,000	0
PLAN	GI	0	0	1,000	1,000	0	0	0	0	0	1,000	0
DGN	GI	0	0	1,000	2,000	0	0	0	0	0	2,000	0
CONST	GI	0	0	0	10,000	25,000	25,000	0	0	0	60,000	0
INSP	GI	0	0	0	1,000	0	0	0	0	0	1,000	0
RELOC	GI	0	0	2,000	1,000	0	0	0	0	0	1,000	0
	Total	0	0	64,000	45,000	25,000	25,000	0	0	0	95,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2016	12/31/2021
PLAN	8/1/2016	6/30/2022
DGN	7/1/2017	12/31/2024
CONST	7/1/2022	12/31/2024
INSP	7/1/2019	12/31/2024
RELOC	8/1/2016	6/30/2021

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	40
Maint Cost	120
Useful Life	100

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ART IN PUBLIC FACILITIES

Project:	1996611	Function:	General Government	Council:	99
Priority No.:		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. Alapai Transportation Center $200,000 and the Hauula Fire Station $72,000.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
ART	GI	1,233	0	0	0	0	0	0	0	0	0	0
ART	GN	640	200	272	0	0	0	0	0	0	0	0
	Total	1,873	200	272	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
ART	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	25

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CIVIC CENTER IMPROVEMENTS

Project:	1996007	Function:	General Government	Council:	06
Priority No.:	5	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 address climate change, sustainability resiliency and ensure continued operation of City services.

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

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	837	165	5	5	10	10	10	10	10	55	0
DGN	GI	1,538	285	305	100	50	50	50	50	50	350	0
CONST	GI	19,371	2,040	2,030	885	1,400	1,500	1,400	1,400	1,400	7,985	0
INSP	GI	566	5	5	5	20	20	20	20	20	105	0
EQUIP	GI	255	5	5	5	20	20	20	20	20	105	0
	Total	22,567	2,500	2,350	1,000	1,500	1,600	1,500	1,500	1,500	8,600	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2013	12/1/2026
DGN	7/1/2013	12/1/2026
CONST	12/31/2013	12/31/2026
INSP	12/31/2013	12/31/2026
EQUIP	12/31/2013	12/31/2026

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

Six-Year CIP and Budget FY 2020-2025

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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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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ELECTRIFICATION OF TRANSPORTATION INFRASTRUCTURE

Project:	2019090	Function:	General Government	Council:	99
Priority No.:	3	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design, construct, inspect and provide related equipment to City facilities infrastructure upgrade for electric charging stations.

Justification: Transition to no emission electric bus and vehicles to reduce emissions which contribute to climate change.

Use of Funds: Plan, design, construct, inspect and provide related equipment for sustainable infrastructure of City facilities to support electric charging stations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	100	50	50	50	50	50	50	300	250
DGN	GI	0	0	400	100	100	100	100	100	100	600	500
CONST	GI	0	0	1,300	1,750	1,750	1,750	1,750	1,750	1,750	10,500	8,750
INSP	GI	0	0	200	50	50	50	50	50	50	300	500
EQUIP	GI	0	0	1,000	100	100	100	100	100	100	600	1,000
	Total	0	0	3,000	2,050	2,050	2,050	2,050	2,050	2,050	12,300	11,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2018	6/30/2027
DGN	10/1/2018	6/30/2030
CONST	3/1/2019	6/30/2030
INSP	3/1/2019	6/30/2030
EQUIP	3/1/2019	6/30/2030

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 2020-2025

ENERGY CONSERVATION IMPROVEMENTS

Project:	1998007	Function:	General Government	Council:	99
Priority No.:	6	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	161	45	5	15	30	30	30	30	30	165	150
DGN	FG	6	0	0	0	0	0	0	0	0	0	0
DGN	GI	1,243	75	85	5	30	30	30	30	30	155	300
CONST	FG	443	0	0	0	0	0	0	0	0	0	0
CONST	GI	19,014	370	570	465	415	415	415	415	415	2,540	4,500
INSP	FG	43	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	5	60	5	20	20	20	20	20	105	250
EQUIP	GI	181	5	180	10	5	5	5	5	5	35	300
OTHER	FG	5	0	0	0	0	0	0	0	0	0	0
	Total	21,096	500	900	500	500	500	500	500	500	3,000	5,500

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2013	6/30/2027
DGN	9/1/2013	6/30/2027
CONST	7/1/2013	10/1/2027
INSP	7/1/2013	10/1/2027
EQUIP	7/1/2013	10/1/2027

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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
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	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	200	0	0	0	0	0	0	0	0	0	0

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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HALAWA CORPORATION YARD BLDG "D" IMPROVEMENTS

Project:	2019079	Function:	General Government	Council:	07
Priority No.:		Program:	Public Facilities-Additions And Improvements	Nbrd Board:	20
TMK:		Department:	Design and Construction	Senate:	14
				House:	30
				Other:	

Description: Design, construct and inspect improvements at Halawa Corporation Yard.

Justification: Improvements to extend useful life of building and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	0	0	5	0	0	0	0	0	0	0	0
CONST	GI	0	0	1,450	0	1,500	2,000	0	0	0	3,500	0
INSP	GI	0	0	140	0	120	0	0	0	0	120	0
	Total	0	0	1,595	0	1,620	2,000	0	0	0	3,620	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	5/1/2018	11/30/2018
CONST	3/1/2019	3/31/2020
INSP	3/1/2019	3/31/2020

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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HAUULA CIVIC CENTER IMPROVEMENTS

Project:	2014107	Function:	General Government	Council:	02
Priority No.:		Program:	Public Facilities-Additions And Improvements	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and inspect improvements to the Hauula Civic Center.

Justification: Provide improvements to the Hauula Civic Center and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	100	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	250	0	0	0	0	0	0	0	0	0
INSP	GI	0	50	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	7/1/2017	7/31/2021
DGN	8/1/2018	12/31/2022
CONST	2/1/2018	12/31/2022
INSP	2/8/2018	1/7/2022

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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KAHALUU COMMUNITY MASTER PLAN

Project:	2018104	Function:	General Government	Council:	02
Priority No.:		Program:	Public Facilities-Additions And Improvements	Nbrd Board:	29
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Update the Kahaluu Community Master Plan.

Justification: Update the Kahaluu Community Master Plan.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	100	0	0	0	0	0	0	0	0	0
DGN	GI	0	100	0	0	0	0	0	0	0	0	0
	Total	0	200	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2022
DGN	7/5/2019	12/31/2022

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

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KAHUKU COMMUNITY CENTER IMPROVEMENTS

Project:	2018105	Function:	General Government	Council:	02
Priority No.:		Program:	Public Facilities-Additions And Improvements	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and provide related equipment for improvements to the Kahuku Community Center.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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
	Total	0	300	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2018	6/30/2022
DGN	7/1/2018	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

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KAIMUKI MUNICIPAL PARKING LOT IMPROVEMENTS

Project:	2016086	Function:	General Government	Council:	05
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	75	0	0	0	0	0	0	0	0	0	0
DGN	GI	425	10	0	0	0	0	0	0	0	0	0
CONST	GI	0	3,000	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	500	3,010	0	0	0	0	0	0	0	0	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	12/31/2020
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	15

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KALIHI-PALAMA BUS FACILITY IMPROVEMENTS

Project:	2020074	Function:	General Government	Council:	07
Priority No.:	12	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	15
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Design improvements to the Kalihi-Palama Bus Facility.

Justification: Improvements needed to extend the useful life of the Kalihi-Palama Bus Facility.

Use of Funds: Design improvements to the Kalihi-Palama Bus Facility.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	HI	0	0	0	200	0	0	0	0	0	200	0
CONST	FG	0	0	0	0	80	0	0	0	0	80	0
CONST	HI	0	0	0	0	448	0	0	0	0	448	0
INSP	HI	0	0	0	0	112	0	0	0	0	112	0
	Total	0	0	0	200	640	0	0	0	0	840	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2019	6/30/2020
CONST	1/1/2020	12/31/2023
INSP	9/1/2020	12/31/2023

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

Six-Year CIP and Budget FY 2020-2025

KAPALAMA CANAL CATALYTIC PROJECT - TRANSIT ORIENTED DEVELOPMENT

Project:	2015091	Function:	General Government	Council:	07
Priority No.:		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, catalyze surrounding development and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	500	0	0	0	0	0	0	0	0	0	0
DGN	GI	1,000	100	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	5,000	5,000	10,000	0
	Total	1,500	100	0	0	0	0	0	5,000	5,000	10,000	0

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 2020-2025

KAPOLEI CONSOLIDATED CORPORATION YARD

Project:	1995006	Function:	General Government	Council:	01
Priority No.:	7	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, and address climate change, sustainability and resiliency.

Use of Funds: Design, construct, inspect and provide equipment for sustainable corporation yard improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	296	0	0	0	0	0	0	0	0	0	0
DGN	GI	1,902	50	0	10	0	0	0	0	0	10	0
CONST	GI	28,169	3,150	0	4,690	0	0	0	0	0	4,690	0
INSP	GI	1,603	0	300	300	0	0	0	0	0	300	0
EQUIP	GI	64	0	0	600	0	0	0	0	0	600	0
	Total	32,033	3,200	300	5,600	0	0	0	0	0	5,600	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 2020-2025

KAPOLEI HALE CHILLER PLANT REPLACEMENT

Project:	2019080	Function:	General Government	Council:	01
Priority No.:		Program:	Public Facilities-Additions And Improvements	Nbrd Board:	34
TMK:		Department:	Design and Construction	Senate:	19
				House:	40
				Other:	

Description: Design and construct a replacement chiller plant at Kapolei Hale.

Justification: Extend useful life of facility.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	0	0	5	0	0	0	0	0	0	0	0
CONST	GI	0	0	1,995	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**
DGN	7/1/2018	7/31/2019
CONST	7/1/2019	1/31/2021

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 2020-2025

KOOLAULOA COMMUNITY CENTER

Project:	2018106	Function:	General Government	Council:	02
Priority No.:		Program:	Public Facilities-Additions And Improvements	Nbrd Board:	28
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Conduct a feasibility study to locate a site for a community center in the Koolauloa area.

Justification: Develop a new community center in the Koolauloa area.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	150	0	0	0	0	0	0	0	0	0
DGN	GI	0	150	0	0	0	0	0	0	0	0	0
	Total	0	300	0	0	0	0	0	0	0	0	0

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

Six-Year CIP and Budget FY 2020-2025

LAIE CORPORATION YARD IMPROVEMENTS

Project:	2017072	Function:	General Government	Council:	02
Priority No.:	9	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	23
				House:	47
				Other:	

Description: Plan, design, construct, inspect and provide related equipment for improvements at Laie Corporation Yard.

Justification: Upgrade of corporation yard infrastructure and improvement to address climate change, sustainability and resiliency.

Use of Funds: Design corporation yard improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	250	200	0	600	0	0	0	0	0	600	0
CONST	GI	0	0	0	0	0	3,000	3,000	1,700	1,700	9,400	0
	Total	250	200	0	600	0	3,000	3,000	1,700	1,700	10,000	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 2020-2025

MANANA CORPORATION YARD IMPROVEMENTS

Project:	2009025	Function:	General Government	Council:	08
Priority No.:	8	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. Facility improvements to address climate change, sustainability and resiliency.

Use of Funds: Construct corporation yard sustainable improvements and provide related equipment.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	607	0	10	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	25,195	10	0	0	16,000	9,000	9,000	34,010	0
CONST	HI	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	1,000	0	500	0	150	0	0	650	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	790	0	0	300	0	0	1,090	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	1,286	0	26,205	800	500	0	16,450	9,000	9,000	35,750	0

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

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MEDICAL EXAMINER BUILDING IMPROVEMENTS AND EXPANSION

Project:	2019092	Function:	General Government	Council:	07
Priority No.:	10	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	13
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and inspect facility improvements.

Justification: Upgrade facility infrastructure and renovation improvements to address climate change, sustainability and resiliency. Facility improvements are necessary to meet State requirements.

Use of Funds: Construct, inspect and provide related equipment for sustainable facility improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	150	0	0	0	0	0	0	0	0
DGN	GI	0	0	150	0	0	0	0	0	0	0	0
CONST	GI	0	0	3,500	10	0	0	0	0	0	10	0
INSP	GI	0	0	0	330	0	0	0	0	0	330	0
EQUIP	GI	0	0	0	10	0	0	0	0	0	10	0
OTHER	GI	0	0	1,200	0	0	0	0	0	0	0	0
	Total	0	0	5,000	350	0	0	0	0	0	350	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	4/1/2019	8/31/2019
DGN	9/1/2019	3/31/2019
CONST	6/1/2020	12/31/2021
INSP	6/1/2020	12/31/2021
EQUIP	7/1/2020	12/31/2021
OTHER	4/1/2019	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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MUNICIPAL PARKING FACILITIES IMPROVEMENT

Project:	2020072	Function:	General Government	Council:	99
Priority No.:	11	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Design, construct and inspect upgrade improvements to City municipal parking facilities such as Marin Towers.

Justification: Upgrade municipal parking facilities such as mechanical and electrical infrastructure to increase energy efficiency.

Use of Funds: Design, construct and inspect sustainable municipal parking facilities improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	HI	0	0	0	200	0	0	0	0	0	200	0
CONST	HI	0	0	0	200	0	0	0	0	0	200	0
INSP	HI	0	0	0	50	0	0	0	0	0	50	0
	Total	0	0	0	450	0	0	0	0	0	450	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2019	6/30/2020

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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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: Design, construct, inspect and provide related equipment for corporation yard improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	HI	0	0	0	0	0	0	0	0	0	0	0
PLAN	HI	50	5	0	0	0	0	0	0	0	0	0
DGN	HI	3,214	235	50	5	0	0	0	0	0	5	0
CONST	HI	17,628	5	400	985	0	0	0	0	0	985	0
INSP	HI	719	5	50	5	0	0	0	0	0	5	0
EQUIP	HI	0	0	50	5	0	0	0	0	0	5	0
	Total	21,610	250	550	1,000	0	0	0	0	0	1,000	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 2020-2025

PEARL CITY CORPORATION YARD RENOVATIONS

Project:	1994015	Function:	General Government	Council:	08
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	99	0	0	0	0	0	0	0	0	0	0
DGN	GI	1,074	625	0	0	0	200	0	0	0	200	0
CONST	GI	3,786	0	0	0	2,500	2,500	0	5,000	0	10,000	0
INSP	GI	0	0	0	0	100	0	0	100	0	200	0
EQUIP	GI	55	0	0	0	0	0	0	0	0	0	0
	Total	5,013	625	0	0	2,600	2,700	0	5,100	0	10,400	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

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PEARLRIDGE BUS TRANSFER CENTER AND PLAZA - TRANSIT ORIENTED DEVELOPMENT

Project:	2015092	Function:	General Government	Council:	08
Priority No.:		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, the Pearl Harbor Historic Trail, and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	12,000	0	0	0	0	0	0	0	0	0	0
PLAN	GI	395	250	1,000	0	0	0	0	0	0	0	0
DGN	GI	0	500	1,400	0	0	0	0	0	0	0	0
CONST	GI	0	500	590	0	25,000	0	0	0	0	25,000	0
INSP	GI	0	5	5	0	950	0	0	0	0	950	0
EQUIP	GI	0	5	5	0	50	0	0	0	0	50	0
RELOC	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	12,395	1,260	3,000	0	26,000	0	0	0	0	26,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2014	6/30/2015
PLAN	7/1/2014	6/30/2020
DGN	7/1/2014	6/30/2020
CONST	7/1/2015	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	40
Maint Cost	120
Useful Life	50

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PUBLIC BUILDING FACILITIES IMPROVEMENTS

Project:	1987042	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, inspect and provide related upgrade improvements such as hardening of facilities to extend the useful life of of the facilities, and address unanticipated emergency improvements.

Justification: Upgrade infrastructure and facility improvements to construct improvements to City facilities to minimize any adverse impact on the delivery of essential City services.

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

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	64	1	15	5	10	10	10	10	10	55	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	6,015	445	265	105	20	20	20	20	20	205	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	30,693	2,550	1,710	1,380	950	950	950	950	950	6,130	87,500
CONST	SW	243	0	0	0	0	0	0	0	0	0	0
INSP	GI	834	3	5	5	10	10	10	10	10	55	500
EQUIP	FG	5	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	205	1	5	5	10	10	10	10	10	55	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	39,224	3,000	2,000	1,500	1,000	1,000	1,000	1,000	1,000	6,500	90,000

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	12/31/2027
INSP	7/1/2010	12/31/2027
EQUIP	7/1/2010	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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RENOVATE NA PUEO MINI PARK FORMER ALZHEIMER'S FACILITY

Project:	2018107	Function:	General Government	Council:	06
Priority No.:		Program:	Public Facilities-Additions And Improvements	Nbrd Board:	14
TMK:	18028015	Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design and construct improvements to Na Pueo Mini Park's former Alzheimer's facility.

Justification: Improve City's facility.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	25	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	675	0	0	0	0	0	0	0	0	0
	Total	0	775	0	0	0	0	0	0	0	0	0

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

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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Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DV	709	0	0	0	0	0	0	0	0	0	0
FG	901	0	0	0	80	0	0	0	0	80	0
GI	136,210	43,970	110,350	57,400	60,770	37,850	24,500	25,850	20,750	227,120	136,500
GN	640	200	272	0	0	0	0	0	0	0	0
HI	22,189	250	550	1,650	560	0	0	0	0	2,210	0
SW	300	0	0	0	0	0	0	0	0	0	0
Total	160,949	44,420	111,172	59,050	61,410	37,850	24,500	25,850	20,750	229,410	136,500

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	12,000	27,500	60,000	30,000	0	0	0	0	0	30,000	0
PLAN	2,775	941	2,275	1,075	100	100	100	100	100	1,575	900
DGN	19,311	3,150	3,675	3,325	200	400	200	200	200	4,525	1,800
CONST	119,955	12,540	38,740	20,375	59,043	37,115	23,515	25,215	20,215	185,478	128,750
INSP	3,765	73	1,765	1,750	1,882	100	250	200	100	4,282	3,250
EQUIP	765	16	1,245	1,525	185	135	435	135	135	2,550	1,800
OTHER	405	0	1,200	0	0	0	0	0	0	0	0
RELOC	100	0	2,000	1,000	0	0	0	0	0	1,000	0
ART	1,873	200	272	0	0	0	0	0	0	0	0
Total	160,949	44,420	111,172	59,050	61,410	37,850	24,500	25,850	20,750	229,410	136,500

Six-Year CIP and Budget FY 2020-2025

COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM INFRASTRUCTURE UPGRADE

Project:	2019085	Function:	General Government	Council:	09
Priority No.:	1	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	23
TMK:		Department:	Facilities Maintenance	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and inspect infrastructure upgrade improvements to an area which serves 51% or more households of low and moderate income. To meet U. S. Department of Housing and Urban Development (HUD) environmental review regulatory requirements, no Community Development Block Grant (CDBG) funds shall be encumbered for design and construction prior to the completion of an environmental review and documentation.

Justification: Upgrade infrastructure improvements which serves 51% or more household of low and moderate income.

Use of Funds: Construct infrastructure upgrade improvements to an area which serves 51% or more households of low and moderate income.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	CD	560	0	250	0	0	0	0	0	0	0	0
PLAN	GI	0	0	100	0	0	0	0	0	0	0	0
DGN	CD	100	0	722	0	0	0	0	0	0	0	0
CONST	CD	0	0	0	2,622	0	0	0	0	0	2,622	0
INSP	CD	0	0	0	0	0	0	0	0	0	0	0
OTHER	GN	0	0	0	0	0	0	0	0	0	0	0
	Total	660	0	1,072	2,622	0	0	0	0	0	2,622	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2018	3/31/2019
DGN	4/1/2018	6/30/2019
CONST	7/1/2019	6/30/2020
INSP	7/1/2019	6/30/2020

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 2020-2025

MUNICIPAL FACILITIES IMPROVEMENTS

Project:	2019151	Function:	General Government	Council:	99
Priority No.:	2	Program:	Public Facilities-Additions And Improvements	Nbrd Board:	
TMK:		Department:	Facilities Maintenance	Senate:	
				House:	
				Other:	

Description: Design, construct, inspect and provide related equipment for replacement and/or upgrade of existing public building systems and structures, including NPDES improvements.

Justification: Extend the useful life of municipal facilities to support City operations.

Use of Funds: Plan, design, construct, inspect and provide related equipment for replacement and/or upgrade of existing public building systems and structures.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	20	5	5	5	5	5	0	25	0
DGN	GI	60	0	135	60	50	50	50	50	600	860	0
CONST	GI	581	0	1,860	3,905	900	900	900	900	5,400	12,905	0
INSP	GI	0	0	85	310	10	10	10	10	60	410	0
EQUIP	GI	0	0	25	220	35	35	35	35	240	600	0
	Total	641	0	2,125	4,500	1,000	1,000	1,000	1,000	6,300	14,800	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2018	6/30/2019
DGN	7/1/2018	12/31/2019
CONST	7/1/2019	6/30/2020
INSP	7/1/2019	6/30/2020
EQUIP	7/1/2019	6/30/2020

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 2020-2025

Department Summary: Facilities Maintenance

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
CD	660	0	972	2,622	0	0	0	0	0	2,622	0
GI	641	0	2,225	4,500	1,000	1,000	1,000	1,000	6,300	14,800	0
GN	0	0	0	0	0	0	0	0	0	0	0
Total	1,301	0	3,197	7,122	1,000	1,000	1,000	1,000	6,300	17,422	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	560	0	370	5	5	5	5	5	0	25	0
DGN	160	0	857	60	50	50	50	50	600	860	0
CONST	581	0	1,860	6,527	900	900	900	900	5,400	15,527	0
INSP	0	0	85	310	10	10	10	10	60	410	0
EQUIP	0	0	25	220	35	35	35	35	240	600	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
Total	1,301	0	3,197	7,122	1,000	1,000	1,000	1,000	6,300	17,422	0

Six-Year CIP and Budget FY 2020-2025

Program Summary: Public Facilities-Additions And Improvements

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
CD	660	0	972	2,622	0	0	0	0	0	2,622	0
DV	709	0	0	0	0	0	0	0	0	0	0
FG	901	0	0	0	80	0	0	0	0	80	0
GI	136,851	43,970	112,575	61,900	61,770	38,850	25,500	26,850	27,050	241,920	136,500
GN	640	200	272	0	0	0	0	0	0	0	0
HI	22,189	250	550	1,650	560	0	0	0	0	2,210	0
SW	300	0	0	0	0	0	0	0	0	0	0
Total	162,250	44,420	114,369	66,172	62,410	38,850	25,500	26,850	27,050	246,832	136,500

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	12,000	27,500	60,000	30,000	0	0	0	0	0	30,000	0
PLAN	3,335	941	2,645	1,080	105	105	105	105	100	1,600	900
DGN	19,471	3,150	4,532	3,385	250	450	250	250	800	5,385	1,800
CONST	120,536	12,540	40,600	26,902	59,943	38,015	24,415	26,115	25,615	201,005	128,750
INSP	3,765	73	1,850	2,060	1,892	110	260	210	160	4,692	3,250
EQUIP	765	16	1,270	1,745	220	170	470	170	375	3,150	1,800
OTHER	405	0	1,200	0	0	0	0	0	0	0	0
RELOC	100	0	2,000	1,000	0	0	0	0	0	1,000	0
ART	1,873	200	272	0	0	0	0	0	0	0	0
Total	162,250	44,420	114,369	66,172	62,410	38,850	25,500	26,850	27,050	246,832	136,500

Six-Year CIP and Budget FY 2020-2025

HALEIWA LAND ACQUISITION

Project:	2019091	Function:	General Government	Council:	02
Priority No.:		Program:	Public Facilities-Improvements-Land Acquisitio	Nbrd Board:	27
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Provision of funds to acquire land in Haleiwa for a public safety facility (police, fire, or emergency services) and/or public parking spaces/lot.

Justification: Provision of funds to acquire land in Haleiwa for a public safety facility (police, fire, or emergency services) and/or public parking spaces/lot.

Use of Funds: Provision of funds to acquire land in Haleiwa for a public safety facility (police, fire, or emergency services) and/or public parking spaces/lot. Potential sites shall include, but not limited to, TMK: 6-2-005:002.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	0	3,000	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	7/2/2019	12/31/2022

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

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	7,994	200	0	0	0	0	0	0	0	0	0
LAND	GN	268	0	175	175	175	175	175	175	175	1,050	0
RELOC	GI	0	25	0	0	0	0	0	0	0	0	0
RELOC	GN	0	0	25	25	25	25	25	25	25	150	0
	Total	8,262	225	200	200	200	200	200	200	200	1,200	0

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 2020-2025

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
GI	7,994	225	3,000	0	0	0	0	0	0	0	0
GN	268	0	200	200	200	200	200	200	200	1,200	0
Total	8,262	225	3,200	200	200	200	200	200	200	1,200	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	8,262	200	3,175	175	175	175	175	175	175	1,050	0
RELOC	0	25	25	25	25	25	25	25	25	150	0
Total	8,262	225	3,200	200	200	200	200	200	200	1,200	0

Six-Year CIP and Budget FY 2020-2025

Program Summary: Public Facilities-Improvements-Land Acquisitions

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
GI	7,994	225	3,000	0	0	0	0	0	0	0	0
GN	268	0	200	200	200	200	200	200	200	1,200	0
Total	8,262	225	3,200	200	200	200	200	200	200	1,200	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	8,262	200	3,175	175	175	175	175	175	175	1,050	0
RELOC	0	25	25	25	25	25	25	25	25	150	0
Total	8,262	225	3,200	200	200	200	200	200	200	1,200	0

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Function Summary: General Government

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
BT	0	0	0	0	0	0	0	0	0	0	0
CD	660	0	972	2,622	0	0	0	0	0	2,622	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	80	0	0	0	0	80	0
GC	2,259	0	0	0	0	0	0	0	0	0	0
GI	220,885	48,325	122,982	64,936	61,771	38,851	25,501	26,851	27,051	244,961	136,500
GN	1,435	200	472	200	200	200	200	200	200	1,200	0
HI	39,732	2,502	2,141	4,745	561	1	1	1	1	5,310	0
HN	0	0	66	0	0	0	0	0	0	0	0
HW	5,286	0	366	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	1,320	0	0	0	0	0	0	0	0	0	0
SW	300	0	0	0	0	0	0	0	0	0	0
WB	64,710	7,841	9,873	5,292	5,292	5,292	5,292	5,292	5,292	31,753	0
WF	0	0	0	6,860	0	0	0	0	0	6,860	0
Total	338,501	58,868	136,871	84,656	67,904	44,344	30,994	32,344	32,544	292,786	136,500

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	20,262	27,700	63,175	30,175	175	175	175	175	175	31,050	0
PLAN	3,335	941	2,645	1,080	105	105	105	105	100	1,600	900
DGN	31,328	3,150	4,532	3,385	250	450	250	250	800	5,385	1,800
CONST	120,536	12,540	40,600	26,902	59,943	38,015	24,415	26,115	25,615	201,005	128,750

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
INSP	3,765	73	1,850	2,060	1,892	110	260	210	160	4,692	3,250
EQUIP	153,216	14,237	20,570	20,027	5,512	5,462	5,762	5,462	5,667	47,892	1,800
OTHER	4,085	2	1,202	2	2	2	2	2	2	12	0
RELOC	100	25	2,025	1,025	25	25	25	25	25	1,150	0
ART	1,873	200	272	0	0	0	0	0	0	0	0
Total	338,501	58,868	136,871	84,656	67,904	44,344	30,994	32,344	32,544	292,786	136,500

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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 2020-2025

HONOLULU POLICE DEPARTMENT NPDES SMALL MS4 PERMIT PROGRAM

Project:	2007020	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: 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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	475	5	0	0	0	0	0	0	0	0	0
DGN	GI	1,561	5	0	0	0	0	0	0	0	0	0
CONST	GI	4,787	80	0	0	0	0	0	0	0	0	0
INSP	GI	218	5	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	5	0	0	0	0	0	0	0	0	0
	Total	7,041	100	0	0	0	0	0	0	0	0	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 2020-2025

HPD HEADQUARTERS ELEVATOR REPLACEMENT

Project:	2019078	Function:	Public Safety	Council:	06
Priority No.:		Program:	Police Stations And Buildings	Nbrd Board:	11
TMK:		Department:	Design and Construction	Senate:	13
				House:	25
				Other:	

Description: Design, construct, inspect and provide related equipment for HPD Headquarters elevator replacement.

Justification: Extend the useful life of facility.

Use of Funds: Design, construct, inspect and provide related equipment for HPD Headquarters elevator replacement.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	0	0	5	0	0	0	0	0	0	0	0
CONST	GI	0	0	1,000	0	0	0	0	0	0	0	0
INSP	GI	0	0	5	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	5	0	0	0	0	0	0	0	0
	Total	0	0	1,015	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2018	7/31/2019
CONST	7/1/2019	1/31/2021
INSP	7/1/2019	1/31/2021
EQUIP	7/1/2019	1/31/2021

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 2020-2025

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 for improvement to the Honolulu Police Department Headquarters.

Justification: Improvements to extend the useful life of the facility and address climate change, sustainability and resiliency.

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

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	5	50	10	10	10	10	10	10	60	0
DGN	GI	1,059	655	1,000	15	15	15	15	15	15	90	0
CONST	GI	1,709	825	650	4,965	1,965	1,965	1,965	1,965	1,965	14,790	0
INSP	GI	0	10	40	5	5	5	5	5	5	30	0
EQUIP	GI	0	5	5	5	5	5	5	5	5	30	0
	Total	2,768	1,500	1,745	5,000	2,000	2,000	2,000	2,000	2,000	15,000	0

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

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	100	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	0	350	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 2020-2025

MICROWAVE RADIO SPUR EQUIP AND FACILITIES UPGRADE

Project:	2009034	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: 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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	10	5	0	0	0	0	0	0	0	0
DGN	GI	419	10	5	0	0	0	0	0	0	0	0
CONST	GI	370	2,020	1,475	0	0	0	0	0	0	0	0
INSP	GI	61	200	145	0	0	0	0	0	0	0	0
EQUIP	GI	1,538	10	10	0	0	0	0	0	0	0	0
	Total	2,388	2,250	1,640	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	8/16/2010	2/14/2027
DGN	4/18/2011	12/31/2027
CONST	3/1/2011	3/31/2027
INSP	1/1/2011	3/31/2027
EQUIP	1/1/2012	12/31/2027

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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	2,000
PLAN	GI	32	0	0	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	32	0	0	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 2020-2025

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. Also, to address climate change, sustainability and resiliency.

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

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	156	10	15	5	5	5	5	5	5	30	0
DGN	GI	3,215	325	125	115	25	25	25	25	25	240	0
CONST	GI	16,483	2,145	3,375	2,745	1,940	1,940	1,940	1,940	1,940	12,445	0
INSP	GI	339	10	10	130	25	25	25	25	25	255	0
EQUIP	GI	84	10	10	5	5	5	5	5	5	30	0
RELOC	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	20,277	2,500	3,535	3,000	2,000	2,000	2,000	2,000	2,000	13,000	0

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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	100	0	0	0	0	0	0	0	200	200	4,340
DGN	GI	0	0	0	0	0	0	0	0	0	0	16,000
CONST	GI	0	0	0	0	0	0	0	0	0	0	33,500
	Total	100	0	0	0	0	0	0	0	200	200	53,840

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2020	12/31/2026
DGN	7/1/2020	12/31/2027
CONST	7/1/2021	12/31/2029

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 2020-2025

UPGRADE SECURITY CAMERA SYSTEMS AT VARIOUS POLICE FACILITIES

Project:	2006034	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: 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: Design, construct, inspect and provide related equipment to upgrade cameras at police facilities.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	109	1	0	0	0	0	0	0	0	0	0
DGN	GI	306	110	125	50	0	0	0	0	0	50	0
CONST	GI	3,422	447	315	370	0	0	0	0	0	370	0
INSP	GI	0	1	5	15	0	0	0	0	0	15	0
EQUIP	GI	475	1	5	15	0	0	0	0	0	15	0
	Total	4,312	560	450	450	0	0	0	0	0	450	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	11/1/2009	8/1/2020
DGN	2/1/2010	8/1/2020
CONST	8/1/2010	4/1/2021
INSP	8/1/2010	4/1/2021
EQUIP	10/1/2010	4/1/2021

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 2020-2025

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
GI	39,857	6,910	8,385	8,450	4,000	4,000	4,000	4,000	4,550	29,000	123,240
Total	39,857	6,910	8,385	8,450	4,000	4,000	4,000	4,000	4,550	29,000	123,240

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	0	0	0	0	0	0	0	0	0	0	2,000
PLAN	1,122	31	70	15	15	15	15	15	315	390	4,340
DGN	7,353	1,105	1,260	180	40	40	40	40	290	630	19,800
CONST	28,566	5,517	6,815	8,080	3,905	3,905	3,905	3,905	3,905	27,605	93,000
INSP	718	226	205	150	30	30	30	30	30	300	4,000
EQUIP	2,098	31	35	25	10	10	10	10	10	75	100
RELOC	0	0	0	0	0	0	0	0	0	0	0
Total	39,857	6,910	8,385	8,450	4,000	4,000	4,000	4,000	4,550	29,000	123,240

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
EQUIP	GI	37,094	4,300	2,640	1,800	0	0	0	0	0	1,800	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	37,973	4,300	2,640	1,800	0	0	0	0	0	1,800	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
EQUIP	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	5

Six-Year CIP and Budget FY 2020-2025

Department Summary: Police

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
GI	37,094	4,300	2,640	1,800	0	0	0	0	0	1,800	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	37,973	4,300	2,640	1,800	0	0	0	0	0	1,800	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
EQUIP	37,973	4,300	2,640	1,800	0	0	0	0	0	1,800	0
Total	37,973	4,300	2,640	1,800	0	0	0	0	0	1,800	0

Program Summary: Police Stations And Buildings

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
GI	76,951	11,210	11,025	10,250	4,000	4,000	4,000	4,000	4,550	30,800	123,240
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	77,830	11,210	11,025	10,250	4,000	4,000	4,000	4,000	4,550	30,800	123,240

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	0	0	0	0	0	0	0	0	0	0	2,000
PLAN	1,122	31	70	15	15	15	15	15	315	390	4,340
DGN	7,353	1,105	1,260	180	40	40	40	40	290	630	19,800
CONST	28,566	5,517	6,815	8,080	3,905	3,905	3,905	3,905	3,905	27,605	93,000
INSP	718	226	205	150	30	30	30	30	30	300	4,000
EQUIP	40,070	4,331	2,675	1,825	10	10	10	10	10	1,875	100
RELOC	0	0	0	0	0	0	0	0	0	0	0
Total	77,830	11,210	11,025	10,250	4,000	4,000	4,000	4,000	4,550	30,800	123,240

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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 such energy efficiency and hardening of 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 and address climate change, sustainability and resiliency.

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

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	10	5	10	10	10	10	10	10	60	0
DGN	GI	3,855	245	85	425	50	50	50	50	50	675	0
CONST	GI	26,786	1,695	3,830	2,425	1,900	1,900	1,900	1,900	1,900	11,925	0
INSP	GI	984	40	75	20	20	20	20	20	20	120	0
EQUIP	GI	10	10	5	120	20	20	20	20	20	220	0
RELOC	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	31,634	2,000	4,000	3,000	2,000	2,000	2,000	2,000	2,000	13,000	0

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

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HONOLULU FIRE DEPARTMENT NPDES SMALL MS4 PERMIT PROGRAM

Project:	2007012	Function:	Public Safety	Council:	99
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	848	0	0	0	0	0	0	0	0	0	0
DGN	GI	1,726	10	100	0	0	0	0	0	0	0	0
CONST	GI	3,324	1,950	545	0	500	500	500	500	500	2,500	2,500
INSP	GI	695	330	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	10	0	0	0	0	0	0	0	0	0
	Total	6,593	2,300	645	0	500	500	500	500	500	2,500	2,500

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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KAHALUU FIRE STATION

Project:	2020073	Function:	Public Safety	Council:	02
Priority No.:	2	Program:	Fire Stations And Buildings	Nbrd Board:	29
TMK:	47063001	Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Design, construct, inspect and provide related equipment for station improvements.

Justification: Extend the useful life of fire facility.

Use of Funds: Design, construct, inspect and provide related equipment for station improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	0	0	0	75	0	0	0	0	0	75	0
CONST	GI	0	0	0	800	0	0	0	0	0	800	0
INSP	GI	0	0	0	10	0	0	0	0	0	10	0
EQUIP	GI	0	0	0	15	0	0	0	0	0	15	0
	Total	0	0	0	900	0	0	0	0	0	900	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2019	12/31/2021
CONST	5/1/2019	12/31/2022
INSP	5/1/2019	12/31/2022

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

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KALIHI KAI FIRE STATION

Project:	2019077	Function:	Public Safety	Council:	07
Priority No.:		Program:	Fire Stations And Buildings	Nbrd Board:	15
TMK:		Department:	Design and Construction	Senate:	14
				House:	28
				Other:	

Description: Construct and inspect station improvements.

Justification: Extend the useful life of fire facility improvements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	900	0	0	0	0	0	0	0	0
INSP	GI	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**
CONST	7/1/2019	7/31/2022
INSP	7/1/2019	7/31/2022

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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	7/1/2023	12/31/2025

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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	7/1/2023	12/31/2024
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

Six-Year CIP and Budget FY 2020-2025

PEARL CITY FIRE STATION RELOCATION

Project:	2017076	Function:	Public Safety	Council:	08
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	250	200	10	0	0	0	0	0	0	0	0
DGN	GI	0	0	490	0	500	500	800	0	0	1,800	0
CONST	GI	0	0	0	0	0	0	0	0	4,000	4,000	4,000
INSP	GI	0	0	0	0	0	0	0	0	0	0	500
	Total	250	200	500	0	500	500	800	0	4,000	5,800	4,500

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2019
DGN	7/1/2019	6/30/2022
CONST	7/1/2021	6/30/2024
INSP	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	50

Six-Year CIP and Budget FY 2020-2025

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, and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	0	2,800	0	0	0	0	1,000	0	1,000	0
PLAN	GI	50	0	100	0	0	0	0	0	100	100	0
DGN	GI	0	0	100	0	0	0	0	0	300	300	0
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	3,000	0	0	0	0	1,000	400	1,400	7,500

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2023	12/31/2024
PLAN	7/1/2025	9/30/2026
DGN	7/1/2025	6/30/2026
CONST	9/1/0207	7/30/2029
INSP	9/1/2027	7/30/2029
EQUIP	1/1/2027	7/30/2029

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 2020-2025

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
GI	38,528	4,500	9,145	3,900	3,000	3,000	3,300	3,500	7,050	23,750	49,900
Total	38,528	4,500	9,145	3,900	3,000	3,000	3,300	3,500	7,050	23,750	49,900

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	0	0	2,800	0	0	0	0	1,000	0	1,000	1,000
PLAN	1,148	210	115	10	10	10	10	10	210	260	100
DGN	5,581	255	775	500	550	550	850	50	400	2,900	1,750
CONST	30,110	3,645	5,275	3,225	2,400	2,400	2,400	2,400	6,400	19,225	42,500
INSP	1,679	370	175	30	20	20	20	20	20	130	1,950
EQUIP	10	20	5	135	20	20	20	20	20	235	2,600
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	38,528	4,500	9,145	3,900	3,000	3,000	3,300	3,500	7,050	23,750	49,900

Six-Year CIP and Budget FY 2020-2025

HFD VEHICLE MAINTENANCE FACILITY NPDES SMALL MS4 PERMIT PROGRAM IMPROVEMENT

Project:	2020151	Function:	Public Safety	Council:	99
Priority No.:		Program:	Fire Stations And Buildings	Nbrd Board:	99
TMK:		Department:	Facilities Maintenance	Senate:	99
				House:	99
				Other:	

Description: Design, construct and inspect improvements which include vehicle and equipment wash racks; structural Best Management Practices (BMPs), and covered storage for heavy vehicles and oil products at the Honolulu Fire Department Maintenance Facility.

Justification: Improvements address Environmental Protection Agency (EPA) and State Department of Health Storm Water Management Programs, which are mandated by both Federal and State laws.

Use of Funds: Design, construct and inspect NPDES improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	0	0	0	10	0	0	0	0	0	10	0
CONST	GI	0	0	0	2,490	0	0	0	0	0	2,490	0
INSP	GI	0	0	0	350	0	0	0	0	0	350	0
	Total	0	0	0	2,850	0	0	0	0	0	2,850	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	5/1/2020	4/30/2023
CONST	7/1/2020	12/31/2023
INSP	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	25

Six-Year CIP and Budget FY 2020-2025

Department Summary: Facilities Maintenance

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
GI	0	0	0	2,850	0	0	0	0	0	2,850	0
Total	0	0	0	2,850	0	0	0	0	0	2,850	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	0	0	0	10	0	0	0	0	0	10	0
CONST	0	0	0	2,490	0	0	0	0	0	2,490	0
INSP	0	0	0	350	0	0	0	0	0	350	0
Total	0	0	0	2,850	0	0	0	0	0	2,850	0

Six-Year CIP and Budget FY 2020-2025

COMMUNITY DEVELOPMENT BLOCK GRANT - HONOLULU FIRE DEPARTMENT EQUIPMENT AC

Project:	2019134	Function:	Public Safety	Council:	06
Priority No.:		Program:	Fire Stations And Buildings	Nbrd Board:	14
TMK:		Department:	Fire	Senate:	
				House:	
				Other:	

Description: Acquire equipment for the Kuakini Fire Station.

Justification: Acquire equipment for the Kuakini Fire Station.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
EQUIP	CD	0	0	661	0	0	0	0	0	0	0	0
	Total	0	0	661	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
EQUIP	12/1/2018	12/31/2021

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

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
EQUIP	CD	4,163	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	30,888	3,354	2,805	6,323	0	0	0	0	0	6,323	0
EQUIP	GN	2,449	0	0	0	0	0	0	0	0	0	0
	Total	37,500	3,354	2,805	6,323	0	0	0	0	0	6,323	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
EQUIP	7/1/2014	12/31/2022

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 2020-2025

Department Summary: Fire

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
CD	4,163	0	661	0	0	0	0	0	0	0	0
GI	30,888	3,354	2,805	6,323	0	0	0	0	0	6,323	0
GN	2,449	0	0	0	0	0	0	0	0	0	0
Total	37,500	3,354	3,466	6,323	0	0	0	0	0	6,323	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
EQUIP	37,500	3,354	3,466	6,323	0	0	0	0	0	6,323	0
Total	37,500	3,354	3,466	6,323	0	0	0	0	0	6,323	0

Six-Year CIP and Budget FY 2020-2025

Program Summary: Fire Stations And Buildings

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
CD	4,163	0	661	0	0	0	0	0	0	0	0
GI	69,415	7,854	11,950	13,073	3,000	3,000	3,300	3,500	7,050	32,923	49,900
GN	2,449	0	0	0	0	0	0	0	0	0	0
Total	76,028	7,854	12,611	13,073	3,000	3,000	3,300	3,500	7,050	32,923	49,900

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	0	0	2,800	0	0	0	0	1,000	0	1,000	1,000
PLAN	1,148	210	115	10	10	10	10	10	210	260	100
DGN	5,581	255	775	510	550	550	850	50	400	2,910	1,750
CONST	30,110	3,645	5,275	5,715	2,400	2,400	2,400	2,400	6,400	21,715	42,500
INSP	1,679	370	175	380	20	20	20	20	20	480	1,950
EQUIP	37,510	3,374	3,471	6,458	20	20	20	20	20	6,558	2,600
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	76,028	7,854	12,611	13,073	3,000	3,000	3,300	3,500	7,050	32,923	49,900

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	FG	1,089	400	400	0	0	0	0	0	0	0	0
DGN	HI	202	100	100	5	150	100	100	100	100	555	0
CONST	FG	7,537	3,220	3,240	1,600	0	0	0	0	0	1,600	0
CONST	HI	2,476	830	810	400	0	2,000	810	810	810	4,830	0
INSP	FG	230	0	0	0	0	0	0	0	0	0	0
INSP	HI	262	45	45	45	45	45	45	45	45	270	0
EQUIP	HI	12	5	5	5	5	5	5	5	5	30	0
	Total	11,808	4,600	4,600	2,055	200	2,150	960	960	960	7,285	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	HI	93	0	0	0	0	0	0	0	0	0	0
CONST	HI	530	0	0	0	0	0	0	0	0	0	0
INSP	HI	137	0	0	0	0	0	0	0	0	0	0
	Total	759	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

Six-Year CIP and Budget FY 2020-2025

OAHU TRAFFIC SIGNAL CONTROLLER MODERNIZATION PHASE 1

Project:	2020028	Function:	Public Safety	Council:	99
Priority No.:	5	Program:	Traffic Improvements	Nbrd Board:	99
TMK:		Department:	Transportation Services	Senate:	99
				House:	99
				Other:	

Description: Design, construct, inspect and provide related equipment to upgrade traffic controllers.

Justification: Upgrade traffic system controllers.

Use of Funds: Design, construct, inspect and provide related equipment to upgrade traffic controllers.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	FG	0	0	0	120	120	0	0	0	0	240	0
DGN	HI	0	0	0	30	30	0	0	0	0	60	0
CONST	FG	0	0	0	5,600	5,600	0	0	0	0	11,200	0
CONST	HI	0	0	0	1,400	1,400	0	0	0	0	2,800	0
INSP	FG	0	0	0	560	560	0	0	0	0	1,120	0
INSP	HI	0	0	0	140	140	0	0	0	0	280	0
EQUIP	HI	0	0	0	5	5	0	0	0	0	10	0
	Total	0	0	0	7,855	7,855	0	0	0	0	15,710	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	11/15/2019	3/31/2020
CONST	6/15/2020	12/31/2023
INSP	6/15/2020	12/31/2023
EQUIP	6/15/2020	12/31/2023

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

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	40	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**
PLAN	7/1/2011	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	786	100	100	100	100	100	100	100	100	600	400
CONST	GI	13	0	0	0	0	0	0	0	0	0	0
CONST	HI	1,539	330	330	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	591	60	60	60	60	60	60	60	60	360	240
EQUIP	HI	0	5	5	5	5	5	5	5	5	30	20
	Total	2,929	500	500	500	500	500	500	500	500	3,000	2,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2018	12/31/2028
DGN	7/1/2018	12/31/2028
CONST	7/1/2018	12/31/2028
INSP	7/1/2018	12/31/2028
EQUIP	7/1/2018	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

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	FG	0	0	0	0	0	0	0	0	0	0	0
LAND	HI	73	5	100	1	0	0	0	0	0	1	0
PLAN	HI	199	30	210	9	10	10	10	10	10	59	50
DGN	FG	2,000	80	160	400	80	80	80	80	80	800	90
DGN	HI	4,755	105	40	100	80	80	80	80	80	500	400
DGN	ST	225	0	0	0	0	0	0	0	0	0	0
CONST	FG	2,705	350	1,680	480	350	350	350	350	350	2,230	960
CONST	HI	8,300	540	420	120	350	350	350	350	350	1,870	870
INSP	FG	825	0	360	120	0	0	0	0	0	120	0
INSP	HI	1,721	90	90	30	80	80	80	80	80	430	270
	Total	20,802	1,200	3,060	1,260	950	950	950	950	950	6,010	2,640

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2018	12/31/2028
PLAN	7/1/2018	12/31/2028
DGN	7/1/2018	12/31/2028
CONST	7/1/2018	12/31/2028
INSP	7/1/2018	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 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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
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
	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	6/30/2023

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 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: Design, construct, inspect and provide related equipment for traffic signal improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	5	5	0	5	5	5	5	5	25	0
DGN	FG	2,193	500	400	500	500	500	500	500	500	3,000	0
DGN	HI	1,074	70	100	125	70	70	70	70	70	475	0
CONST	FG	20,087	2,500	3,000	3,500	2,500	2,500	2,500	250	250	11,500	0
CONST	HI	3,121	400	770	875	400	400	400	400	400	2,875	0
INSP	FG	2,508	300	300	300	300	300	300	300	300	1,800	0
INSP	HI	582	20	20	20	20	20	20	20	20	120	0
EQUIP	HI	15	5	5	5	5	5	5	5	5	30	0
	Total	29,580	3,800	4,600	5,325	3,800	3,800	3,800	1,550	1,550	19,825	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2014	12/31/2028
DGN	7/1/2015	12/31/2028
CONST	7/1/2015	12/31/2028
INSP	7/1/2015	12/31/2028
EQUIP	6/1/2015	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

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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
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**
PLAN	7/1/2011	12/31/2013
DGN	7/1/2011	12/31/2013
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	50

Six-Year CIP and Budget FY 2020-2025

Department Summary: Transportation Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
FG	44,187	7,350	9,540	13,180	10,010	3,730	3,730	1,480	1,480	33,610	1,050
GI	162	0	0	0	0	0	0	0	0	0	0
HI	27,366	2,750	3,220	3,815	3,295	3,670	2,480	2,480	2,480	18,220	3,590
ST	225	0	0	0	0	0	0	0	0	0	0
Total	71,941	10,100	12,760	16,995	13,305	7,400	6,210	3,960	3,960	51,830	4,640

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	73	5	100	1	0	0	0	0	0	1	0
PLAN	388	40	220	14	20	20	20	20	20	114	70
DGN	14,452	1,355	1,300	1,380	1,130	930	930	930	930	6,230	890
CONST	49,363	8,170	10,250	14,305	10,930	5,930	4,740	2,490	2,490	40,885	3,150
INSP	7,639	515	875	1,275	1,205	505	505	505	505	4,500	510
EQUIP	27	15	15	20	20	15	15	15	15	100	20
Total	71,941	10,100	12,760	16,995	13,305	7,400	6,210	3,960	3,960	51,830	4,640

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Program Summary: Traffic Improvements

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
FG	44,187	7,350	9,540	13,180	10,010	3,730	3,730	1,480	1,480	33,610	1,050
GI	162	0	0	0	0	0	0	0	0	0	0
HI	27,366	2,750	3,220	3,815	3,295	3,670	2,480	2,480	2,480	18,220	3,590
ST	225	0	0	0	0	0	0	0	0	0	0
Total	71,941	10,100	12,760	16,995	13,305	7,400	6,210	3,960	3,960	51,830	4,640

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	73	5	100	1	0	0	0	0	0	1	0
PLAN	388	40	220	14	20	20	20	20	20	114	70
DGN	14,452	1,355	1,300	1,380	1,130	930	930	930	930	6,230	890
CONST	49,363	8,170	10,250	14,305	10,930	5,930	4,740	2,490	2,490	40,885	3,150
INSP	7,639	515	875	1,275	1,205	505	505	505	505	4,500	510
EQUIP	27	15	15	20	20	15	15	15	15	100	20
Total	71,941	10,100	12,760	16,995	13,305	7,400	6,210	3,960	3,960	51,830	4,640

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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: Plan, design, construct and inspect 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 control improvements to mitigate flooding and address climate change, sustainability and resiliency.

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	43	10	5,010	10	5	5	5	5	5	35	60
PLAN	DN	125	0	0	0	0	0	0	0	0	0	0
PLAN	GI	2,183	200	5,310	410	55	55	55	55	55	685	650
DGN	GI	5,385	800	10,580	1,080	90	90	90	90	90	1,530	1,300
CONST	GI	16,793	990	32,600	2,800	4,350	4,350	4,350	4,850	5,850	26,550	7,200
INSP	GI	0	10	0	200	0	0	0	0	0	200	0
	Total	24,528	2,010	53,500	4,500	4,500	4,500	4,500	5,000	6,000	29,000	9,210

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	750	0	0	0	0	0	0	0	500	500	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	5,000
INSP	GI	0	0	0	0	0	0	0	0	0	0	100
	Total	750	0	0	0	0	0	0	0	500	500	5,100

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	12/31/2027
INSP	7/1/2020	12/31/2027

Annual Effect on Operating Budget	
No of Positions	4
Salary Cost	105
Cur Exp & Equip	235
Maint Cost	0
Useful Life	20

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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 and construct improvements to Kahaluu Flood Control Lagoon.

Justification: Flood mitigation improvements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	350	0	0	0	10	0	0	0	0	10	0
CONST	GI	0	0	0	0	7,990	0	0	0	12,000	19,990	0
	Total	350	0	0	0	8,000	0	0	0	12,000	20,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	9/1/2013	12/31/2021
CONST	2/1/2020	12/31/2027

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

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	9,000	0	0	0	9,000	0
	Total	350	0	0	0	0	9,000	0	0	0	9,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	9/1/2013	12/30/2021
CONST	7/1/2022	12/31/2028

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: 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.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	100	0	0	0	0	0	0	0	0
PLAN	GN	0	0	0	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	12/31/2022

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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	HI	700	0	0	0	10	0	0	0	0	10	0
CONST	HI	0	0	0	0	1,490	0	0	0	0	1,490	0
	Total	700	0	0	0	1,500	0	0	0	0	1,500	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2016	12/31/2020
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: Flood mitigation in Pilina Way and adjacent area. Anticipate minor adjustments in easements which may require land acquisition.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	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	10,000	0	0	0	10,000	0
INSP	GI	0	0	0	0	0	250	0	0	0	250	0
	Total	472	0	0	0	0	10,250	0	0	0	10,250	0

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	2,387	0	0	0	0	10,000	0	0	0	10,000	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	3,131	0	0	0	0	10,000	0	0	0	10,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2008	11/30/2012
DGN	12/1/2012	5/1/2020
CONST	8/1/2018	12/31/2026

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 and construct Kiikii Stream improvements.

Justification: Flood mitigation improvements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	350	0	0	0	0	0	14,000	0	0	14,000	0
	Total	350	0	0	0	0	0	14,000	0	0	14,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	9/1/2013	9/1/2021
CONST	7/1/2020	12/31/2025

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: Address flood control improvements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	0	0	0	0	0	0
	Total	675	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2003	9/1/2004

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 2020-2025

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DN	125	0	0	0	0	0	0	0	0	0	0
FG	91	0	0	0	0	0	0	0	0	0	0
GI	30,770	2,010	53,600	4,500	12,500	33,750	18,500	5,000	18,500	92,750	14,310
GN	0	0	0	0	0	0	0	0	0	0	0
HI	700	0	0	0	1,500	0	0	0	0	1,500	0
Total	31,687	2,010	53,600	4,500	14,000	33,750	18,500	5,000	18,500	94,250	14,310

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	43	10	5,010	10	5	5	5	5	5	35	60
PLAN	4,358	200	5,410	410	55	55	55	55	555	1,185	650
DGN	8,106	800	10,580	1,080	110	90	14,090	90	90	15,550	1,300
CONST	19,180	990	32,600	2,800	13,830	33,350	4,350	4,850	17,850	77,030	12,200
INSP	0	10	0	200	0	250	0	0	0	450	100
Total	31,687	2,010	53,600	4,500	14,000	33,750	18,500	5,000	18,500	94,250	14,310

Six-Year CIP and Budget FY 2020-2025

Program Summary: Flood Control

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DN	125	0	0	0	0	0	0	0	0	0	0
FG	91	0	0	0	0	0	0	0	0	0	0
GI	30,770	2,010	53,600	4,500	12,500	33,750	18,500	5,000	18,500	92,750	14,310
GN	0	0	0	0	0	0	0	0	0	0	0
HI	700	0	0	0	1,500	0	0	0	0	1,500	0
Total	31,687	2,010	53,600	4,500	14,000	33,750	18,500	5,000	18,500	94,250	14,310

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	43	10	5,010	10	5	5	5	5	5	35	60
PLAN	4,358	200	5,410	410	55	55	55	55	555	1,185	650
DGN	8,106	800	10,580	1,080	110	90	14,090	90	90	15,550	1,300
CONST	19,180	990	32,600	2,800	13,830	33,350	4,350	4,850	17,850	77,030	12,200
INSP	0	10	0	200	0	250	0	0	0	450	100
Total	31,687	2,010	53,600	4,500	14,000	33,750	18,500	5,000	18,500	94,250	14,310

Six-Year CIP and Budget FY 2020-2025

EMERGENCY OPERATIONS CENTER

Project:	2019082	Function:	Public Safety	Council:	06
Priority No.:	2	Program:	Other Protection	Nbrd Board:	11
TMK:		Department:	Design and Construction	Senate:	12
				House:	26
				Other:	

Description: Plan, design and construct an emergency operations center with federal grant assistance. No monies for this project shall be expended or encumbered unless matching federal funds are released by phases, for planning, design and construction.

Justification: Facilitate coordination, preparation, response, and recovery activities to address both natural and man-made hazards.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	FG	0	0	135	0	0	0	0	0	0	0	0
PLAN	GI	0	0	135	0	0	0	0	0	0	0	0
DGN	GI	0	0	0	0	0	0	0	0	0	0	1,350
CONST	GI	0	0	0	0	0	0	0	0	0	0	15,000
INSP	GI	0	0	0	0	0	0	0	0	0	0	1,200
	Total	0	0	270	0	0	0	0	0	0	0	17,550

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	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 2020-2025

JOINT EMERGENCY TRAINING FACILITY

Project:	2019093	Function:	Public Safety	Council:	01
Priority No.:		Program:	Other Protection	Nbrd Board:	23
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design a Joint Ocean Emergency Training Facility at Oneula Beach Park, to be used by Department of Emergency
Services, Honolulu Fire Department, and Honolulu Police Department for marine emergency training.

Justification: Plan and design a Joint Ocean Emergency Training Facility at Oneula Beach Park, to be used by Department of Emergency
Services, Honolulu Fire Department, and Honolulu Police Department for marine emergency training.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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**

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 2020-2025

OCEAN SAFETY LIFEGUARD TOWERS REPLACEMENT AND FACILITIES IMPROVEMENTS

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: Plan, design, construct and provide related equipment to replace lifeguard towers and Ocean Safety facilities improvements.

Justification: Replacement towers and ocean safety facilities improvements to support continued ocean safety operations.

Use of Funds: Design, construct and provide related equipment for replacement lifeguard towers and facilities improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	45	0	0	0	0	0	0	0	0
DGN	GI	184	100	90	5	5	5	5	5	50	75	0
CONST	GI	0	5	1,050	65	5	5	5	5	50	135	0
INSP	GI	0	0	20	0	0	0	0	0	0	0	0
EQUIP	GI	234	250	45	180	240	240	240	240	500	1,640	0
	Total	418	355	1,250	250	250	250	250	250	600	1,850	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2016	12/31/2026
CONST	9/1/2016	12/31/2027
EQUIP	9/1/2016	12/31/2027

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 2020-2025

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: Improve ocean safety stations.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	95	0	0	0	0	0	0	0	0	0	0
DGN	GI	366	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	119	0	0	0	0	0	0	0	0	0	0
	Total	580	0	0	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	7/1/2016	12/31/2019
INSP	7/1/2016	12/31/2019
EQUIP	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	15

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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 2020-2025

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
FG	0	0	135	0	0	0	0	0	0	0	0
GI	1,097	355	1,585	250	250	250	250	250	600	1,850	17,550
Total	1,097	355	1,720	250	250	250	250	250	600	1,850	17,550

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	154	0	415	0	0	0	0	0	0	0	0
DGN	590	100	190	5	5	5	5	5	50	75	1,350
CONST	0	5	1,050	65	5	5	5	5	50	135	15,000
INSP	0	0	20	0	0	0	0	0	0	0	1,200
EQUIP	353	250	45	180	240	240	240	240	500	1,640	0
Total	1,097	355	1,720	250	250	250	250	250	600	1,850	17,550

Six-Year CIP and Budget FY 2020-2025

Program Summary: Other Protection

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
FG	0	0	135	0	0	0	0	0	0	0	0
GI	1,097	355	1,585	250	250	250	250	250	600	1,850	17,550
Total	1,097	355	1,720	250	250	250	250	250	600	1,850	17,550

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	154	0	415	0	0	0	0	0	0	0	0
DGN	590	100	190	5	5	5	5	5	50	75	1,350
CONST	0	5	1,050	65	5	5	5	5	50	135	15,000
INSP	0	0	20	0	0	0	0	0	0	0	1,200
EQUIP	353	250	45	180	240	240	240	240	500	1,640	0
Total	1,097	355	1,720	250	250	250	250	250	600	1,850	17,550

Six-Year CIP and Budget FY 2020-2025

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 and construct improvements for various existing City drainage outfalls on the island of Oahu.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	5	0	10	0	0	0	0	0	10	0
PLAN	GI	150	5	0	100	0	0	0	0	0	100	0
DGN	GI	1,322	5	200	280	10	10	10	10	10	330	300
CONST	GI	1,006	790	200	10	390	390	390	390	390	1,960	900
INSP	GI	0	10	0	0	0	0	0	0	0	0	0
	Total	2,478	815	400	400	400	400	400	400	400	2,400	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 2020-2025

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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	195	0	0	0	50	0	0	0	0	50	0
CONST	GI	0	0	0	0	0	3,960	0	0	0	3,960	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	195	0	0	0	50	3,960	0	0	0	4,010	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

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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: Canal improvements to address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	250	0	50	0	0	0	0	0	0	0	0
DGN	GI	500	0	50	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	0	0	0	0	35,000	35,000	0
	Total	750	0	100	0	0	0	0	0	35,000	35,000	0

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 2020-2025

KUAHEA STREET AREA MOVEMENT, PALOLO VALLEY

Project:	1997504	Function:	Public Safety	Council:	05
Priority No.:	4	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: Construct mitigation improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	2,190	0	5,480	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	5	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	15	1,500	0	0	0	0	0	1,500	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	5,981	0	5,500	1,500	0	0	0	0	0	1,500	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2018	6/30/2022
DGN	7/1/2018	12/30/2023
CONST	1/1/2018	12/30/2024

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 2020-2025

MANOA FLOOD/ROCK SLIDE MITIGATION AND IMPROVEMENTS

Project:	2019095	Function:	Public Safety	Council:	05
Priority No.:		Program:	Other Protection-Miscellaneous	Nbrd Board:	07
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design flood/rock slide mitigating measures and other earth stability measures at Huelani Drive, Huelani Place, Rainbow Drive, and Oahu Avenue in Manoa.

Justification: Provide mitigative improvements to stabilize at Huelani Drive, Huelani Place, Rainbow Drive, and Oahu Avenue in Manoa.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	300	0	0	0	0	0	0	0	0
DGN	GI	0	0	50	0	0	0	0	0	0	0	0
	Total	0	0	350	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	3/31/2021	12/31/2024
DGN	3/31/2021	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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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

Six-Year CIP and Budget FY 2020-2025

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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	ST	185	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	12,000	0	0	0	12,000	0
	Total	185	0	0	0	0	12,000	0	0	0	12,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2012	12/31/2017
DGN	7/1/2020	12/31/2022
CONST	7/1/2023	12/31/2024

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 2020-2025

PUNCHBOWL DRAINAGE IMPROVEMENTS

Project:	2019096	Function:	Public Safety	Council:	06
Priority No.:		Program:	Other Protection-Miscellaneous	Nbrd Board:	12
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct, and inspect mitigating measures to address storm drainage, rockslide, and other earth stability issues along Auwaiolimu Street, Hookui Street, and Puowaina Drive in Punchbowl-Papakolea.

Justification: Provide mitigating measures to address storm drainage, rockslide, and other earth stability issues along Auwaiolimu Street, Hookui Street, and Puowaina Drive in Punchbowl-Papakolea.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	10	0	0	0	0	0	0	0	0
DGN	GI	0	0	30	0	0	0	0	0	0	0	0
CONST	GI	0	0	58	0	0	0	0	0	0	0	0
INSP	GI	0	0	2	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	3/31/2020	12/31/2023
DGN	3/31/2020	12/31/2023
CONST	3/31/2020	12/31/2023
INSP	3/31/2020	12/31/2023

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

Six-Year CIP and Budget FY 2020-2025

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 improvements to an existing crib wall, along a portion of Tantalus Drive in the vicinity of 3798 Tantalus Drive.

Justification: Provide roadway right of way improvements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	300	0	0	0	0	0	0	0	0	0	0
	Total	300	0	0	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

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 2020-2025

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: Acquire land, plan, design construct and 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, and address climate change, sustainability and resiliency.

Use of Funds: Acquire land, plan, design, construct and inspect mitigative improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	HI	1	1	10	5	5	5	5	5	5	30	60
PLAN	HI	679	1	10	5	5	5	5	5	5	30	60
DGN	HI	6,226	1	480	100	75	75	75	75	75	475	1,200
CONST	HI	10,212	996	790	785	410	410	410	410	410	2,835	7,000
INSP	HI	65	1	10	5	5	5	5	5	5	30	600
	Total	17,183	1,000	1,300	900	500	500	500	500	500	3,400	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	20	20	5	5	5	5	5	0	25	0
PLAN	GI	1,355	350	0	5	100	100	5	5	0	215	0
DGN	GI	8,867	700	100	5	400	400	100	5	0	910	0
CONST	GI	19,366	1,000	700	4,000	5	3,000	2,000	500	0	9,505	0
INSP	GI	2,020	150	110	495	5	300	200	5	0	1,005	0
EQUIP	GI	25,165	2,750	1,150	250	5	5	5	5	0	270	0
	Total	56,774	4,970	2,080	4,760	520	3,810	2,315	525	0	11,930	0

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

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	0	5,000	5,000	7,000
INSP	GI	0	0	0	0	0	0	0	0	0	0	1,000
	Total	700	0	0	0	0	0	0	0	5,000	5,000	8,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	3/23/2012	8/31/2015
CONST	9/28/2025	10/5/2027

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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1,000	1,000	7,000
	Total	610	0	0	0	0	0	0	0	1,000	1,000	7,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	2/22/2012	3/31/2018
CONST	3/31/2026	12/31/2027

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 2020-2025

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
GI	68,353	5,785	8,530	6,660	970	8,170	2,715	925	41,400	60,840	16,200
HI	17,183	1,000	1,300	900	500	500	500	500	500	3,400	8,920
ST	185	0	0	0	0	12,000	0	0	0	12,000	0
Total	85,722	6,785	9,830	7,560	1,470	20,670	3,215	1,425	41,900	76,240	25,120

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	2,191	26	5,510	20	10	10	10	10	5	65	60
PLAN	2,619	356	375	110	105	105	10	10	5	345	60
DGN	18,886	706	910	385	535	485	185	90	85	1,765	1,500
CONST	34,776	2,786	1,763	6,295	805	19,760	2,800	1,300	41,800	72,760	21,900
INSP	2,086	161	122	500	10	305	205	10	5	1,035	1,600
EQUIP	25,165	2,750	1,150	250	5	5	5	5	0	270	0
Total	85,722	6,785	9,830	7,560	1,470	20,670	3,215	1,425	41,900	76,240	25,120

Program Summary: Other Protection-Miscellaneous

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
GI	68,353	5,785	8,530	6,660	970	8,170	2,715	925	41,400	60,840	16,200
HI	17,183	1,000	1,300	900	500	500	500	500	500	3,400	8,920
ST	185	0	0	0	0	12,000	0	0	0	12,000	0
Total	85,722	6,785	9,830	7,560	1,470	20,670	3,215	1,425	41,900	76,240	25,120

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	2,191	26	5,510	20	10	10	10	10	5	65	60
PLAN	2,619	356	375	110	105	105	10	10	5	345	60
DGN	18,886	706	910	385	535	485	185	90	85	1,765	1,500
CONST	34,776	2,786	1,763	6,295	805	19,760	2,800	1,300	41,800	72,760	21,900
INSP	2,086	161	122	500	10	305	205	10	5	1,035	1,600
EQUIP	25,165	2,750	1,150	250	5	5	5	5	0	270	0
Total	85,722	6,785	9,830	7,560	1,470	20,670	3,215	1,425	41,900	76,240	25,120

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Function Summary: Public Safety

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
CD	4,163	0	661	0	0	0	0	0	0	0	0
DN	125	0	0	0	0	0	0	0	0	0	0
FG	44,279	7,350	9,675	13,180	10,010	3,730	3,730	1,480	1,480	33,610	1,050
GI	246,749	27,214	86,690	34,733	20,720	49,170	28,765	13,675	72,100	219,163	221,200
GN	3,328	0	0	0	0	0	0	0	0	0	0
HI	45,250	3,750	4,520	4,715	5,295	4,170	2,980	2,980	2,980	23,120	12,510
ST	410	0	0	0	0	12,000	0	0	0	12,000	0
Total	344,303	38,314	101,546	52,628	36,025	69,070	35,475	18,135	76,560	287,893	234,760

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	2,306	41	13,420	31	15	15	15	1,015	10	1,101	3,120
PLAN	9,788	837	6,605	559	205	205	110	110	1,105	2,294	5,220
DGN	54,968	4,321	15,015	3,540	2,370	2,100	16,100	1,205	1,845	27,160	26,590
CONST	161,995	21,113	57,753	37,260	31,875	65,350	18,200	14,950	72,495	240,130	187,750
INSP	12,121	1,282	1,397	2,505	1,265	1,110	760	565	560	6,765	9,360
EQUIP	103,125	10,720	7,356	8,733	295	290	290	290	545	10,443	2,720
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	344,303	38,314	101,546	52,628	36,025	69,070	35,475	18,135	76,560	287,893	234,760

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	10

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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.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	BK	0	5	5	5	0	0	0	0	0	5	0
LAND	HI	0	0	0	0	0	0	0	0	0	0	0
PLAN	BK	301	100	100	200	0	0	0	0	0	200	0
PLAN	HI	191	0	0	0	0	0	0	0	0	0	0
DGN	BK	181	300	120	200	0	0	0	0	0	200	0
DGN	FG	91	0	480	0	0	0	0	0	0	0	0
DGN	HI	1,276	0	0	0	0	0	0	0	0	0	0
CONST	BK	622	460	600	200	430	430	430	430	430	2,350	0
CONST	FG	1,636	1,840	0	400	520	520	520	520	520	3,000	0
CONST	HI	2,933	0	0	0	0	0	0	0	0	0	0
INSP	BK	295	45	160	120	130	130	130	130	130	770	0
INSP	FG	778	0	0	80	120	120	120	120	120	680	0
INSP	HI	142	0	0	0	0	0	0	0	0	0	0
EQUIP	BK	10	10	5	5	0	0	0	0	0	5	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	8,458	2,760	1,470	1,210	1,200	1,200	1,200	1,200	1,200	7,210	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2018	6/30/2022
PLAN	7/1/2018	6/30/2026
DGN	7/1/2018	6/30/2026
CONST	7/1/2018	6/30/2026
INSP	7/1/2018	6/30/2026
EQUIP	7/1/2018	6/30/2026

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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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
	Total	0	0	0	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	10

Department Summary: Transportation Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
BK	1,409	920	990	730	560	560	560	560	560	3,530	0
FG	2,506	1,840	480	480	640	640	640	640	640	3,680	0
HI	4,872	0	0	0	0	0	0	0	0	0	0
Total	8,787	2,760	1,470	1,210	1,200	1,200	1,200	1,200	1,200	7,210	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	0	5	5	5	0	0	0	0	0	5	0
PLAN	492	100	100	200	0	0	0	0	0	200	0
DGN	1,878	300	600	200	0	0	0	0	0	200	0
CONST	5,191	2,300	600	600	950	950	950	950	950	5,350	0
INSP	1,216	45	160	200	250	250	250	250	250	1,450	0
EQUIP	10	10	5	5	0	0	0	0	0	5	0
Total	8,787	2,760	1,470	1,210	1,200	1,200	1,200	1,200	1,200	7,210	0

Program Summary: Bikeways And Bikepaths

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
BK	1,409	920	990	730	560	560	560	560	560	3,530	0
FG	2,506	1,840	480	480	640	640	640	640	640	3,680	0
HI	4,872	0	0	0	0	0	0	0	0	0	0
Total	8,787	2,760	1,470	1,210	1,200	1,200	1,200	1,200	1,200	7,210	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	0	5	5	5	0	0	0	0	0	5	0
PLAN	492	100	100	200	0	0	0	0	0	200	0
DGN	1,878	300	600	200	0	0	0	0	0	200	0
CONST	5,191	2,300	600	600	950	950	950	950	950	5,350	0
INSP	1,216	45	160	200	250	250	250	250	250	1,450	0
EQUIP	10	10	5	5	0	0	0	0	0	5	0
Total	8,787	2,760	1,470	1,210	1,200	1,200	1,200	1,200	1,200	7,210	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: Acquire land, plan, design, construct, and inspect complete street improvements which may include areas adjacent to Transit Oriented Development (TOD) areas, including City-owned portions of Kapolei Parkway from Kamolika Boulevard to Keoneula Boulevard.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	200	0	50	0	0	0	0	0	0	0	0
CONST	HI	0	0	1,000	0	0	0	0	0	0	0	0
INSP	HI	0	0	50	0	0	0	0	0	0	0	0
	Total	200	0	1,150	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 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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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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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: Acquire land, design, construct and inspect ADA curb ramps improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	HI	150	0	10	10	10	10	10	10	10	60	100
PLAN	HI	0	10	0	0	0	0	0	0	0	0	0
DGN	FG	3,667	0	0	0	0	0	0	0	0	0	0
DGN	HI	14,961	500	10	10	0	0	0	0	0	10	0
CONST	CD	0	0	0	0	0	0	0	0	0	0	0
CONST	HI	37,478	1,600	900	910	980	980	980	980	980	5,810	980
CONST	UT	3	0	0	0	0	0	0	0	0	0	0
INSP	HI	460	150	70	70	10	10	10	10	10	120	100
EQUIP	HI	0	5	0	0	0	0	0	0	0	0	0
OTHER	DV	167	0	0	0	0	0	0	0	0	0	0
OTHER	HI	563	10	10	0	0	0	0	0	0	0	0
	Total	57,449	2,275	1,000	1,000	1,000	1,000	1,000	1,000	1,000	6,000	1,180

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2011	6/30/2021
CONST	7/1/2011	12/31/2026
INSP	7/1/2011	12/31/2026
OTHER	7/1/2011	12/31/2026

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

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FARRINGTON HIGHWAY IMPROVEMENTS

Project:	2011089	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 improvements on the City portions of Farrington Highway.

Justification: Improve transportation infrastructure.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	HI	0	900	0	0	0	15,000	0	0	0	15,000	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	505	90	50	0	0	0	0	0	0	0	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	10	3,950	0	0	0	4,000	0	0	4,000	11,000
CONST	FG	0	0	0	0	0	0	0	0	0	0	0
CONST	HI	0	0	0	0	0	0	30,000	30,000	0	60,000	60,000
INSP	FG	0	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	12,000	0	0	12,000	12,000
	Total	1,505	1,000	4,000	0	0	15,000	46,000	30,000	0	91,000	83,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2012	12/31/2019
DGN	1/1/2020	3/31/2013
CONST	4/1/2023	3/31/2027
INSP	4/1/2023	9/30/2027

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

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	HI	0	10	10	0	0	0	0	0	0	0	0
PLAN	HI	0	10	10	0	0	0	0	0	0	0	0
DGN	HI	1,156	10	60	30	30	30	30	30	30	180	0
CONST	HI	2,368	776	300	200	200	200	200	200	200	1,200	0
INSP	HI	0	10	40	20	20	20	20	20	20	120	0
EQUIP	HI	0	4	0	0	0	0	0	0	0	0	0
	Total	3,525	820	420	250	250	250	250	250	250	1,500	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2006	12/31/2026
DGN	9/1/2006	12/31/2026
CONST	12/1/2006	12/31/2028
INSP	12/1/2006	12/31/2028

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.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	HI	0	0	0	0	0	0	0	0	0	0	0
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	200	200	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	3,000	200	200	0	0	0	0	0	0	0	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.:		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: Rehabilitate highway and drainage structure improvements.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	HI	21	0	0	0	0	0	0	0	0	0	0
PLAN	HI	60	5	0	0	0	0	0	0	0	0	0
DGN	GI	803	0	0	0	0	0	0	0	0	0	0
DGN	HI	1,436	10	0	0	0	0	0	0	0	0	0
CONST	GI	17	0	0	0	0	0	0	0	0	0	0
CONST	HI	4,151	230	0	0	0	0	0	0	0	0	0
INSP	HI	80	5	0	0	0	0	0	0	0	0	0
	Total	6,567	250	0	0	0	0	0	0	0	0	0

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

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KEALAOLU AVENUE REHABILITATION

Project:	2019094	Function:	Highways and Streets	Council:	
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design and construct the rehabilitation and reconstruction of Kealaolu Avenue.

Justification: Improve road right of way.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	698	0	0	0	0	0	0	0	0
	Total	0	0	700	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/31/2019	12/31/2021
DGN	12/31/2019	12/31/2021
CONST	12/31/2019	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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PAPIPI ROAD COMPLETE STREETS IMPROVEMENTS

Project:	2018108	Function:	Highways and Streets	Council:	01
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	23
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Design and construct improvements within the road right of way.

Justification: Improve road right of way.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	0	300	0	0	0	0	0	0	0	0	0
CONST	GI	0	5,000	0	0	0	0	0	0	0	0	0
	Total	0	5,300	0	0	0	0	0	0	0	0	0

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

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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	GI	1,303	0	0	0	0	0	0	0	0	0	0
DGN	GI	1,268	0	0	0	0	0	0	0	0	0	0
CONST	GI	2,719	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	5,289	0	0	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	6/30/2024

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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1,586	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	14,602	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

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REHABILITATION OF STREETS

Project:	1997502	Function:	Highways and Streets	Council:	99
Priority No.:	3	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 right of way 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: Acquire land, plan, design, construct and inspect street and related improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	HI	0	0	0	5	0	0	0	0	0	5	0
PLAN	HI	7,050	500	860	70	50	50	50	50	50	320	0
DGN	GI	1,425	0	0	0	0	0	0	0	0	0	0
DGN	HI	63,959	2,000	3,560	1,570	2,000	2,000	2,000	2,000	2,000	11,570	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	932,233	26,500	72,280	48,150	46,950	46,950	46,950	46,950	46,950	282,900	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	2,972	0	0	0	0	0	0	0	0	0	0
INSP	HI	38,719	1,000	300	205	1,000	1,000	1,000	1,000	1,000	5,205	6,000
	Total	#######	30,000	77,000	50,000	50,000	50,000	50,000	50,000	50,000	300,000	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

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SALT LAKE BOULEVARD WIDENING

Project:	1989123	Function:	Highways and Streets	Council:	07
Priority No.:	2	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 programmed into 2 or 3 phases.

Justification: Improve traffic circulation and flow, and address climate change, sustainability and resiliency.

Use of Funds: Acquire land, plan, design, construct, inspect and pay for utility company's share of construction costs for sustainable roadway improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	FG	0	0	0	0	0	0	0	0	0	0	0
LAND	HI	44	0	0	10	10	0	0	0	0	20	0
PLAN	HI	1,000	10	0	5	5	0	0	0	0	10	0
DGN	FG	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	3,414	500	110	5	5	0	0	0	0	10	0
CONST	FG	5,250	0	0	25,000	25,000	0	0	0	0	50,000	0
CONST	HI	234	0	0	11,000	14,500	0	0	0	0	25,500	0
CONST	ST	0	0	0	0	0	0	0	0	0	0	0
CONST	UT	84	0	0	2,500	0	0	0	0	0	2,500	0
INSP	FG	980	0	0	0	0	0	0	0	0	0	0
INSP	HI	600	0	0	4,500	4,000	0	0	0	0	8,500	0
	Total	11,607	510	110	43,020	43,520	0	0	0	0	86,540	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	4/14/2011	1/31/2016
DGN	2/1/2016	12/31/2019
CONST	3/29/2020	7/22/2022
INSP	9/1/2019	7/22/2022

Annual Effect on Operating Budget	
No of Positions	3
Salary Cost	90
Cur Exp & Equip	30
Maint Cost	9,000
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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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.:	5	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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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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: Plan and design a secondary emergency access roadway for Leeward Coast residents.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	HI	0	0	0	0	0	0	0	0	0	0	0
PLAN	HI	0	0	1,500	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	12/31/2019
PLAN	7/1/2016	12/31/2019
DGN	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	20

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WAIKIKI IMPROVEMENTS

Project:	1995515	Function:	Highways and Streets	Council:	04
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	200	0	0	0	0	0	0	0	0	0
DGN	HI	2,592	0	0	0	0	0	0	0	0	0	0
CONST	GI	5,830	3,700	0	0	0	0	0	0	3,000	3,000	3,000
CONST	HI	10,702	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	100	0	0	0	0	0	0	0	0	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	21,567	4,000	0	0	0	0	0	0	3,000	3,000	3,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2014	12/31/2019
CONST	5/31/2018	12/31/2026
INSP	5/31/2018	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

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	30,350	0	0	25,000	25,000	0	0	0	0	50,000	0
GI	45,284	9,300	0	0	0	0	0	0	3,000	3,000	3,000
HI	1,140,613	35,055	87,580	66,770	69,770	66,250	97,250	81,250	51,250	432,540	294,180
ST	38	0	0	0	0	0	0	0	0	0	0
UT	1,145	100	100	2,600	100	100	100	100	100	3,100	0
Total	1,217,597	44,455	87,680	94,370	94,870	66,350	97,350	81,350	54,350	488,640	297,180

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	215	910	20	25	20	15,010	10	10	10	15,085	100
PLAN	14,778	625	2,471	75	55	50	50	50	50	330	0
DGN	98,018	3,730	9,441	1,615	2,035	2,030	6,030	2,030	2,030	15,770	23,000
CONST	1,058,153	37,906	75,278	87,860	87,730	48,230	78,230	78,230	51,230	431,510	255,980
INSP	45,667	1,265	460	4,795	5,030	1,030	13,030	1,030	1,030	25,945	18,100
EQUIP	37	9	0	0	0	0	0	0	0	0	0
OTHER	730	10	10	0	0	0	0	0	0	0	0
Total	1,217,597	44,455	87,680	94,370	94,870	66,350	97,350	81,350	54,350	488,640	297,180

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MANGROVE ERADICATION PROJECT

Project:	2019007	Function:	Highways and Streets	Council:	03
Priority No.:		Program:	Highways, Streets And Roadways	Nbrd Board:	
TMK:		Department:	Facilities Maintenance	Senate:	
				House:	
				Other:	

Description: Provide funding for completion of invasive mangrove eradication project in the Kawai Nui wetland area and associated waterways.

Justification: Removal of invasive mangroves the Kawai Nui wetland area and associated waterways.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	797	0	0	0	0	0	0	0	0
INSP	GI	0	0	1	0	0	0	0	0	0	0	0
	Total	0	0	800	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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RECONSTRUCTION OF SIDEWALKS

Project:	2018087	Function:	Highways and Streets	Council:	99
Priority No.:	1	Program:	Highways, Streets And Roadways	Nbrd Board:	
TMK:		Department:	Facilities Maintenance	Senate:	
				House:	
				Other:	

Description: Reconstruct/replacement of existing sidewalks at various locations.

Justification: Sidewalk improvements to facilitate pedestrian safety.

Use of Funds: Construct and inspect sidewalk improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
CONST	GI	200	1,500	2,700	1,800	1,800	1,800	1,800	1,800	1,800	10,800	0
CONST	HI	3,000	3,500	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	300	200	200	200	200	200	200	1,200	0
INSP	HI	650	150	0	0	0	0	0	0	0	0	0
	Total	3,850	5,150	3,000	2,000	2,000	2,000	2,000	2,000	2,000	12,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	7/1/2017	12/31/2025
INSP	7/1/2017	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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Department Summary: Facilities Maintenance

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
GI	200	1,500	3,800	2,000	2,000	2,000	2,000	2,000	2,000	12,000	0
HI	3,650	3,650	0	0	0	0	0	0	0	0	0
Total	3,850	5,150	3,800	2,000	2,000	2,000	2,000	2,000	2,000	12,000	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	0	0	1	0	0	0	0	0	0	0	0
DGN	0	0	1	0	0	0	0	0	0	0	0
CONST	3,200	5,000	3,497	1,800	1,800	1,800	1,800	1,800	1,800	10,800	0
INSP	650	150	301	200	200	200	200	200	200	1,200	0
Total	3,850	5,150	3,800	2,000	2,000	2,000	2,000	2,000	2,000	12,000	0

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INTERMODAL CONNECTIVITY IMPROVEMENTS

Project:	2019026	Function:	Highways and Streets	Council:	99
Priority No.:	1	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 improvements to intermodal centers and transit connections within communities.

Justification: Improve connectivity to intermodal centers and address climate change, sustainability and resiliency.

Use of Funds: Acquire land, plan, design, construct and inspect sustainable intermodal improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	0	0	10	0	0	0	0	0	10	0
PLAN	GI	0	0	40	10	0	0	0	0	0	10	0
DGN	GI	0	0	40	200	80	80	80	80	0	520	0
CONST	GI	0	0	3,640	3,500	1,900	1,900	1,900	1,900	0	11,100	0
INSP	GI	0	0	280	280	20	20	20	20	0	360	0
	Total	0	0	4,000	4,000	2,000	2,000	2,000	2,000	0	12,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2019	12/31/2025
DGN	1/1/2019	12/31/2025
CONST	1/1/2019	12/31/2025
INSP	1/1/2019	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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	EW	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	656	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	22,914	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

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Kuakini Street Extension

Project:	2015040	Function:	Highways and Streets	Council:	06
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	HI	0	100	0	0	0	0	0	0	0	0	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	100	0	0	0	0	0	0	0	0	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	50

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	0	0	0	0	0	0	0	0	0	0
DGN	HI	49	0	0	0	0	0	0	0	0	0	0
CONST	FG	1,146	0	0	0	0	0	0	0	0	0	0
CONST	HI	317	0	0	0	0	0	0	0	0	0	0
INSP	FG	684	0	0	0	0	0	0	0	0	0	0
INSP	HI	99	0	0	0	0	0	0	0	0	0	0
	Total	2,296	0	0	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

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MAKAKILO DRIVE EXTENSION.

Project:	2005025	Function:	Highways and Streets	Council:	01
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	15,000
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	1,500	0	0	0	0	0	0	0	0	0
CONST	FG	0	0	0	0	0	0	0	0	0	0	35,000
CONST	HI	0	0	0	0	0	0	0	0	0	0	50,000
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	3,714	1,500	0	0	0	0	0	0	0	0	100,000

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

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RAIL STATION CONNECTIVITY -TRANSIT ORIENTED DEVELOPMENT

Project:	2018026	Function:	Highways and Streets	Council:	99
Priority No.:		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 and complete street connectivity.

Justification: Develop transit connections in the areas surrounding the rail intermodal centers.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	10	0	0	0	0	0	0	0	0	0
PLAN	GI	0	100	0	0	0	0	0	0	0	0	0
DGN	GI	84	100	0	0	0	0	0	0	0	0	0
CONST	GI	713	3,740	0	0	0	0	0	0	0	0	0
INSP	GI	120	50	0	0	0	0	0	0	0	0	0
	Total	917	4,000	0	0	0	0	0	0	0	0	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

Department Summary: Transportation Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
EW	902	0	0	0	0	0	0	0	0	0	0
FG	15,074	0	0	0	0	0	0	0	0	0	35,000
GI	917	4,000	4,000	4,000	2,000	2,000	2,000	2,000	0	12,000	0
HI	14,340	1,600	0	0	0	0	0	0	0	0	65,000
Total	31,234	5,600	4,000	4,000	2,000	2,000	2,000	2,000	0	12,000	100,000

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	0	10	0	10	0	0	0	0	0	10	15,000
PLAN	714	100	40	10	0	0	0	0	0	10	0
DGN	3,790	1,700	40	200	80	80	80	80	0	520	0
CONST	23,546	3,740	3,640	3,500	1,900	1,900	1,900	1,900	0	11,100	85,000
INSP	3,183	50	280	280	20	20	20	20	0	360	0
Total	31,234	5,600	4,000	4,000	2,000	2,000	2,000	2,000	0	12,000	100,000

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Program Summary: Highways, Streets And Roadways

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	45,424	0	0	25,000	25,000	0	0	0	0	50,000	35,000
GI	46,401	14,800	7,800	6,000	4,000	4,000	4,000	4,000	5,000	27,000	3,000
HI	1,158,603	40,305	87,580	66,770	69,770	66,250	97,250	81,250	51,250	432,540	359,180
ST	38	0	0	0	0	0	0	0	0	0	0
UT	1,145	100	100	2,600	100	100	100	100	100	3,100	0
Total	1,252,681	55,205	95,480	100,370	98,870	70,350	101,350	85,350	56,350	512,640	397,180

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	215	920	20	35	20	15,010	10	10	10	15,095	15,100
PLAN	15,492	725	2,512	85	55	50	50	50	50	340	0
DGN	101,808	5,430	9,482	1,815	2,115	2,110	6,110	2,110	2,030	16,290	23,000
CONST	1,084,899	46,646	82,415	93,160	91,430	51,930	81,930	81,930	53,030	453,410	340,980
INSP	49,500	1,465	1,041	5,275	5,250	1,250	13,250	1,250	1,230	27,505	18,100
EQUIP	37	9	0	0	0	0	0	0	0	0	0
OTHER	730	10	10	0	0	0	0	0	0	0	0
Total	1,252,681	55,205	95,480	100,370	98,870	70,350	101,350	85,350	56,350	512,640	397,180

Six-Year CIP and Budget FY 2020-2025

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: Plan, design, construct and inspect bridge improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	HI	4	10	0	0	5	5	5	5	5	25	0
PLAN	HI	0	10	0	10	15	15	15	15	15	85	0
DGN	HI	9,462	10	10	350	80	80	80	80	80	750	0
CONST	FG	1,138	0	0	0	0	0	0	0	0	0	0
CONST	HI	16,560	2,450	7,270	2,050	1,900	1,900	1,900	1,900	1,900	11,550	0
INSP	HI	205	10	20	90	0	0	0	0	0	90	0
EQUIP	HI	0	10	0	0	0	0	0	0	0	0	0
	Total	27,370	2,500	7,300	2,500	2,000	2,000	2,000	2,000	2,000	12,500	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	11/1/2011	12/31/2028
PLAN	10/1/2011	12/31/2028
DGN	10/1/2011	12/31/2028
CONST	11/1/2011	12/31/2030
INSP	11/1/2011	12/31/2030

Annual Effect on Operating Budget	
No of Positions	5
Salary Cost	200
Cur Exp & Equip	50
Maint Cost	0
Useful Life	75

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
CONST	HI	500	0	0	0	0	0	0	0	0	0	0
	Total	500	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
CONST	1/1/2018	10/31/2018

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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	3,110	0	0	0	0	0	0	0	0	0	0
CONST	HI	3,371	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	6,481	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 2020-2025

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
FG	1,138	0	0	0	0	0	0	0	0	0	0
HI	33,212	2,500	7,300	2,500	2,000	2,000	2,000	2,000	2,000	12,500	0
Total	34,351	2,500	7,300	2,500	2,000	2,000	2,000	2,000	2,000	12,500	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	4	10	0	0	5	5	5	5	5	25	0
PLAN	0	10	0	10	15	15	15	15	15	85	0
DGN	12,573	10	10	350	80	80	80	80	80	750	0
CONST	21,569	2,450	7,270	2,050	1,900	1,900	1,900	1,900	1,900	11,550	0
INSP	205	10	20	90	0	0	0	0	0	90	0
EQUIP	0	10	0	0	0	0	0	0	0	0	0
Total	34,351	2,500	7,300	2,500	2,000	2,000	2,000	2,000	2,000	12,500	0

Six-Year CIP and Budget FY 2020-2025

Program Summary: Bridges, Viaducts And Grade Separation

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
FG	1,138	0	0	0	0	0	0	0	0	0	0
HI	33,212	2,500	7,300	2,500	2,000	2,000	2,000	2,000	2,000	12,500	0
Total	34,351	2,500	7,300	2,500	2,000	2,000	2,000	2,000	2,000	12,500	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	4	10	0	0	5	5	5	5	5	25	0
PLAN	0	10	0	10	15	15	15	15	15	85	0
DGN	12,573	10	10	350	80	80	80	80	80	750	0
CONST	21,569	2,450	7,270	2,050	1,900	1,900	1,900	1,900	1,900	11,550	0
INSP	205	10	20	90	0	0	0	0	0	90	0
EQUIP	0	10	0	0	0	0	0	0	0	0	0
Total	34,351	2,500	7,300	2,500	2,000	2,000	2,000	2,000	2,000	12,500	0

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	HI	2	10	100	10	5	5	5	5	5	35	0
PLAN	HI	736	110	5	30	30	30	30	30	30	180	0
DGN	HI	6,726	95	255	940	300	940	300	940	940	4,360	0
CONST	FG	162	0	0	0	0	0	0	0	0	0	0
CONST	HI	10,885	2,075	1,830	1,090	3,765	3,125	3,765	1,125	1,125	13,995	0
INSP	HI	0	210	0	30	0	0	0	0	0	30	0
	Total	18,510	2,500	2,190	2,100	4,100	4,100	4,100	2,100	2,100	18,600	0

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 2020-2025

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: 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. Non-compliance with permit requirements may lead to significant penalties and fines.

Use of Funds: Design and construct sustainable erosion control improvements at various locations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	100	0	0	0	0	0	0	0	0	0
DGN	HI	1,600	600	400	1,600	400	10	10	650	400	3,070	0
CONST	HI	0	50	2,400	4,000	4,600	4,990	4,990	3,000	4,600	26,180	11,000
INSP	HI	0	50	0	0	0	0	0	0	0	0	0
	Total	1,600	800	2,800	5,600	5,000	5,000	5,000	3,650	5,000	29,250	11,000

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2022
DGN	7/1/2016	12/31/2022
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	40

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KAIMUKI STORM DRAINAGE IMPROVEMENTS

Project:	2019005	Function:	Highways and Streets	Council:	
Priority No.:		Program:	Storm Drainage	Nbrd Board:	
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and inspect drainage systems and drainage system improvements within the block inclusive of Harding Avenue, Kilauea Avenue, 16th Avenue and 22nd Avenue.

Justification: Improve drainage in road right of way.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	0	250	0	0	0	0	0	0	0	0
DGN	HI	0	0	150	0	0	0	0	0	0	0	0
CONST	HI	0	0	1,125	0	0	0	0	0	0	0	0
INSP	HI	0	0	125	0	0	0	0	0	0	0	0
	Total	0	0	1,650	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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MOILIILI STORM DRAINAGE IMPROVEMENTS

Project:	2019006	Function:	Highways and Streets	Council:	
Priority No.:		Program:	Storm Drainage	Nbrd Board:	
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct, and inspect mitigating measures to address storm drainage, rockslide, and other earth stability issues along Auwaiolimu Street, Hookui Street, and Puowaina Drive in Punchbowl-Papakolea.

Justification: Drainage improvements to address flooding.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	0	50	0	0	0	0	0	0	0	0
DGN	HI	0	0	50	0	0	0	0	0	0	0	0
CONST	HI	0	0	399	0	0	0	0	0	0	0	0
INSP	HI	0	0	1	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**

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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RECONSTRUCTION OF STORM DRAIN STRUCTURES, KAKAAKO

Project:	2019081	Function:	Highways and Streets	Council:	05
Priority No.:	3	Program:	Storm Drainage	Nbrd Board:	11
TMK:		Department:	Design and Construction	Senate:	12
				House:	26
				Other:	

Description: Plan, design and reconstruct storm drain structures in the Kakaako area.

Justification: Rehabilitation would help to preclude potential structural failure of the storm drain structures.

Use of Funds: Design improvements to storm drain structures.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	0	200	0	0	0	0	0	0	0	0
DGN	HI	0	0	200	800	2,400	2,400	500	500	1,000	7,600	5,000
CONST	HI	0	0	0	0	3,500	3,600	4,500	4,500	12,000	28,100	174,500
	Total	0	0	400	800	5,900	6,000	5,000	5,000	13,000	35,700	179,500

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2018	6/30/2019
DGN	1/1/2019	6/30/2022
CONST	7/1/2020	12/31/2028

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1,387	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	6,345	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
FG	162	0	0	0	0	0	0	0	0	0	0
HI	26,294	3,300	7,540	8,500	15,000	15,100	14,100	10,750	20,100	83,550	190,500
Total	26,455	3,300	7,540	8,500	15,000	15,100	14,100	10,750	20,100	83,550	190,500

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	114	10	100	10	5	5	5	5	5	35	0
PLAN	1,294	210	505	30	30	30	30	30	30	180	0
DGN	9,713	695	1,055	3,340	3,100	3,350	810	2,090	2,340	15,030	5,000
CONST	15,334	2,125	5,754	5,090	11,865	11,715	13,255	8,625	17,725	68,275	185,500
INSP	0	260	126	30	0	0	0	0	0	30	0
Total	26,455	3,300	7,540	8,500	15,000	15,100	14,100	10,750	20,100	83,550	190,500

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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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	1,482	0	0	0	0	0	0	0	0	0	0
DGN	HI	1,313	0	0	0	0	0	0	0	0	0	0
CONST	HI	2,894	0	0	0	0	0	0	0	0	0	0
INSP	HI	440	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	6,129	0	0	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	720	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	720	0	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

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	470	0	0	0	0	0	0	0	0	0	0
DGN	HI	310	0	0	0	0	0	0	0	0	0	0
CONST	HI	54	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	834	0	0	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

Six-Year CIP and Budget FY 2020-2025

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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	670	0	0	0	0	0	0	0	0	0	0
DGN	HI	450	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	270	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	1,390	0	0	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

Six-Year CIP and Budget FY 2020-2025

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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	120	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	0	0	0	0	0	0	0	0	0	0	0
	Total	420	0	0	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

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	510	0	0	0	0	0	0	0	0	0	0
DGN	HI	550	0	0	0	0	0	0	0	0	0	0
CONST	HI	1,040	0	0	0	0	0	0	0	0	0	0
INSP	HI	140	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	2,240	0	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

Six-Year CIP and Budget FY 2020-2025

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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	1,090	0	0	0	0	0	0	0	0	0	0
DGN	HI	720	0	0	0	0	0	0	0	0	0	0
CONST	HI	2,891	0	0	0	0	0	0	0	0	0	0
INSP	HI	143	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	4,844	0	0	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	365	0	0	0	0	0	0	0	0	0	0
	Total	495	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

Six-Year CIP and Budget FY 2020-2025

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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	80	0	0	0	0	0	0	0	0	0	0
DGN	HI	375	0	0	0	0	0	0	0	0	0	0
CONST	HI	729	0	0	0	0	0	0	0	0	0	0
INSP	HI	350	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	1,534	0	0	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

Six-Year CIP and Budget FY 2020-2025

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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	330	0	0	0	0	0	0	0	0	0	0
DGN	HI	190	0	0	0	0	0	0	0	0	0	0
CONST	HI	180	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	700	0	0	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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	150	0	0	0	0	0	0	0	0	0	0
DGN	HI	365	0	0	0	0	0	0	0	0	0	0
CONST	HI	240	0	0	0	0	0	0	0	0	0	0
INSP	HI	0	0	0	0	0	0	0	0	0	0	0
	Total	754	0	0	0	0	0	0	0	0	0	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

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	60	0	0	0	0	0	0	0	0	0	0
DGN	HI	350	0	0	0	0	0	0	0	0	0	0
CONST	HI	153	0	0	0	0	0	0	0	0	0	0
INSP	HI	470	0	0	0	0	0	0	0	0	0	0
	Total	1,033	0	0	0	0	0	0	0	0	0	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

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Department Summary: Environmental Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
HI	21,094	0	0	0	0	0	0	0	0	0	0
Total	21,094	0	0	0	0	0	0	0	0	0	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	5,742	0	0	0	0	0	0	0	0	0	0
DGN	4,993	0	0	0	0	0	0	0	0	0	0
CONST	8,546	0	0	0	0	0	0	0	0	0	0
INSP	1,813	0	0	0	0	0	0	0	0	0	0
EQUIP	0	0	0	0	0	0	0	0	0	0	0
Total	21,094	0	0	0	0	0	0	0	0	0	0

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NPDES IMPROVEMENTS ALONG KUHIO BEACH

Project:	2019152	Function:	Highways and Streets	Council:	04
Priority No.:	7	Program:	Storm Drainage	Nbrd Board:	09
TMK:		Department:	Facilities Maintenance	Senate:	12
				House:	22
				Other:	

Description: Plan, design, construct, inspect and provide related equipment for NPDES improvements along Kuhio Beach.

Justification: Plan, design, construct, inspect and provide related equipment for NPDES improvements along Kuhio Beach to meet State and federal requirements.

Use of Funds: Design NPDES improvements along Kuhio Beach.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	0	5	0	0	0	0	0	0	0	0
DGN	HI	0	0	20	400	350	350	0	0	0	1,100	0
CONST	HI	0	0	500	0	500	1,000	2,500	2,500	0	6,500	0
INSP	HI	0	0	20	0	100	150	250	500	0	1,000	0
EQUIP	HI	0	0	5	0	0	0	0	0	0	0	0
	Total	0	0	550	400	950	1,500	2,750	3,000	0	8,600	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2018	10/31/2018
DGN	7/1/2018	2/28/2024
CONST	3/1/2019	10/31/2026
INSP	3/1/2019	10/31/2026
EQUIP	7/1/2018	10/31/2019

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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NPDES MS4 EROSION PRONE AREA IMPROVEMENTS

Project:	2018071	Function:	Highways and Streets	Council:	99
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: Design, construct and inspect erosion control improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	150	150	0	0	0	0	0	0	0	0
DGN	HI	0	250	250	350	250	0	0	0	0	600	0
CONST	HI	0	1,125	750	500	1,500	1,500	1,000	1,000	0	5,500	0
INSP	HI	0	125	150	100	150	150	150	150	0	700	0
	Total	0	1,650	1,300	950	1,900	1,650	1,150	1,150	0	6,800	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	30

Six-Year CIP and Budget FY 2020-2025

NPDES MS4 RETROFIT STRUCTURAL BMP IMPROVEMENTS PROGRAM

Project:	2018072	Function:	Highways and Streets	Council:	99
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: Construct and inspect NPDES improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	150	10	0	0	0	0	0	0	0	0
DGN	HI	0	250	10	0	600	700	700	300	0	2,300	0
CONST	HI	0	500	470	800	0	3,500	4,000	4,000	2,500	14,800	0
INSP	HI	0	50	10	150	0	400	400	400	250	1,600	0
	Total	0	950	500	950	600	4,600	5,100	4,700	2,750	18,700	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 2020-2025

NPDES MS4 STRUCTURAL BMPS FOR CITY INDUSTRIAL FACILITIES

Project:	2018073	Function:	Highways and Streets	Council:	99
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	50	150	0	0	0	0	0	0	0	0
DGN	HI	0	200	250	0	0	0	0	0	0	0	700
CONST	HI	0	1,000	10	0	500	0	0	0	0	500	23,500
INSP	HI	0	100	10	0	100	0	0	0	0	100	1,350
	Total	0	1,350	420	0	600	0	0	0	0	600	25,550

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 2020-2025

NPDES MS4 STRUCTURAL BMPS FOR CITY INDUSTRIAL FACILITIES - KAPOLEI-WAIANAE

Project:	2020153	Function:	Highways and Streets	Council:	01
Priority No.:	11	Program:	Storm Drainage	Nbrd Board:	99
TMK:		Department:	Facilities Maintenance	Senate:	
				House:	
				Other:	

Description: Design and construction of various structural Best Management Practice (BMP) improvements to reduce pollutant discharges from various City Industrial Facilities. Implementation of 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: Design of dewatering facility to provide storm water improvements for the Waianae-Kapolei area.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	HI	0	0	0	250	0	0	0	0	0	250	0
CONST	HI	0	0	0	0	0	5,000	5,000	0	0	10,000	0
INSP	HI	0	0	0	0	0	500	500	0	0	1,000	0
	Total	0	0	0	250	0	5,500	5,500	0	0	11,250	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2019	6/30/2022
CONST	12/1/2022	12/31/2023
INSP	12/1/2022	12/31/2023

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 2020-2025

NPDES MS4 STRUCTURAL BMPS FOR CITY INDUSTRIAL FACILITIES - PEARL CITY - EWA

Project:	2020154	Function:	Highways and Streets	Council:	99
Priority No.:	12	Program:	Storm Drainage	Nbrd Board:	99
TMK:		Department:	Facilities Maintenance	Senate:	
				House:	
				Other:	

Description: Design and construction of various structural Best Management Practice (BMP) improvements to reduce pollutant discharges from various City Industrial Facilities. Implementation of 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: Design of dewatering facility to provide storm water improvements for the Ewa-Pearl City area.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	HI	0	0	0	500	0	0	500	500	0	1,500	0
CONST	HI	0	0	0	0	0	0	5,000	5,000	0	10,000	0
	Total	0	0	0	500	0	0	5,500	5,500	0	11,500	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2019	6/30/2022
CONST	12/1/2022	12/31/2023
INSP	12/1/2022	12/31/2023

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 2020-2025

NPDES MS4 STRUCTURAL BMPS FOR TRASH REDUCTION

Project:	2018074	Function:	Highways and Streets	Council:	99
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 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: Construct and inspect improvements to reduce debris discharge from the City's storm drainage system.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	150	150	0	0	0	0	0	0	0	0
DGN	HI	0	250	250	0	250	250	250	250	0	1,000	0
CONST	HI	0	500	500	400	1,000	1,500	1,500	1,500	0	5,900	0
INSP	HI	0	50	150	50	250	250	250	250	0	1,050	0
	Total	0	950	1,050	450	1,500	2,000	2,000	2,000	0	7,950	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 2020-2025

NPDES MS4 TMDL STRUCTURAL BMP IMPROVEMENTS PROGRAM

Project:	2018075	Function:	Highways and Streets	Council:	99
Priority No.:	4	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: Design, construct and inspect stormwater Best Management Practices Improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	350	100	250	0	0	0	0	0	0	0	0
DGN	HI	550	250	100	250	250	250	250	0	0	1,000	0
CONST	HI	0	500	500	1,000	2,500	2,500	1,500	1,000	1,000	9,500	0
INSP	HI	0	50	100	150	250	250	250	150	150	1,200	0
	Total	900	900	950	1,400	3,000	3,000	2,000	1,150	1,150	11,700	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 2020-2025

REHABILITATION/RECONSTRUCTION OF STORM DRAINS AND CATCH BASINS

Project:	2019074	Function:	Highways and Streets	Council:	99
Priority No.:		Program:	Storm Drainage	Nbrd Board:	
TMK:		Department:	Facilities Maintenance	Senate:	
				House:	
				Other:	

Description: Planning, design, construct, inspect and provide related equipment for storm drains within the City's jurisdiction.

Justification: NPDES permit {Part D.1.f.(3)} requires improvements to storm drains 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. Non-compliance with permit requirements may lead to significant penalties and fines.

Use of Funds: Design and rehabilitation/reconstruction of storm drains and catch basins.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	0	10	0	0	0	0	0	0	0	0
DGN	HI	0	0	10	100	100	100	100	100	100	600	0
CONST	HI	0	0	1,960	1,900	1,900	1,900	1,900	1,900	1,900	11,400	0
INSP	HI	0	0	10	0	0	0	0	0	0	0	0
EQUIP	HI	0	0	10	0	0	0	0	0	0	0	0
	Total	0	0	2,000	2,000	2,000	2,000	2,000	2,000	2,000	12,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2018	3/31/2019
DGN	4/1/2019	10/31/2019
CONST	7/1/2019	6/30/2020
INSP	7/1/2019	6/30/2020
EQUIP	12/1/2018	6/30/2020

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 2020-2025

STORM DRAINAGE BEST MANAGEMENT PRACTICES, DOWNTOWN-CHINATOWN

Project:	2018076	Function:	Highways and Streets	Council:	06
Priority No.:	8	Program:	Storm Drainage	Nbrd Board:	13
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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	10	0	50	10	10	0	0	0	70	0
DGN	HI	0	100	0	250	10	10	0	0	0	270	0
CONST	HI	0	1,000	0	10	1,500	1,500	0	0	0	3,010	0
INSP	HI	0	100	0	10	300	300	0	0	0	610	0
	Total	0	1,210	0	320	1,820	1,820	0	0	0	3,960	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 2020-2025

STORM DRAINAGE BEST MANAGEMENT PRACTICES IN THE SALT LAKE DRAINAGE SYSTEM

Project:	2018077	Function:	Highways and Streets	Council:	07
Priority No.:		Program:	Storm Drainage	Nbrd Board:	18
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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	10	10	0	0	50	0	0	0	50	0
DGN	HI	0	10	10	0	0	250	0	0	0	250	0
CONST	HI	0	1,500	1,500	0	0	10	0	0	0	10	2,500
INSP	HI	0	150	350	0	0	10	0	0	0	10	250
	Total	0	1,670	1,870	0	0	320	0	0	0	320	2,750

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

Six-Year CIP and Budget FY 2020-2025

STORM DRAINAGE BEST MANAGEMENT PRACTICES IN THE VICINITY OF KAELEPULU POND

Project:	2018078	Function:	Highways and Streets	Council:	03
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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	0	50	0	0	10	10	0	0	20	0
DGN	HI	0	0	250	0	0	10	10	0	0	20	0
CONST	HI	0	0	100	0	0	1,500	1,500	0	0	3,000	0
INSP	HI	0	0	350	0	0	150	150	0	0	300	0
	Total	0	0	750	0	0	1,670	1,670	0	0	3,340	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	0	0	0	0	150	0	0	0	150	0
DGN	HI	0	0	0	0	0	250	0	0	0	250	0
CONST	HI	0	0	0	0	0	10	0	0	0	10	0
INSP	HI	0	0	0	0	0	10	0	0	0	10	0
	Total	0	0	0	0	0	420	0	0	0	420	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/31/2021	6/30/2022
DGN	7/31/2021	6/30/2022
CONST	7/30/2022	12/31/2025
INSP	7/31/2022	12/31/2025

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

Six-Year CIP and Budget FY 2020-2025

STORM DRAINAGE BMPs IN THE VICINITY OF WAHIAWA RESERVOIR

Project:	2020152	Function:	Highways and Streets	Council:	02
Priority No.:	10	Program:	Storm Drainage	Nbrd Board:	26
TMK:		Department:	Facilities Maintenance	Senate:	22
				House:	39
				Other:	

Description: Plan, design, construct and inspect storm drainage Best Management Practices in the vicinity of Wahiawa Reservoir.

Justification: Implement Best Management Practices in the vicinity of Wahiawa Reservoir.

Use of Funds: Plan, design, construct and inspect storm drainage Best Management Practices in the vicinity of Wahiawa Reservoir.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	0	0	30	0	0	0	0	0	30	0
DGN	HI	0	0	0	150	0	0	0	0	0	150	0
CONST	HI	0	0	0	10	0	0	0	0	0	10	0
INSP	HI	0	0	0	10	0	0	0	0	0	10	0
	Total	0	0	0	200	0	0	0	0	0	200	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2019	10/1/2022
DGN	7/1/2019	10/1/2022
CONST	11/1/2020	12/31/2023
INSP	11/1/2020	12/31/2023

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

Six-Year CIP and Budget FY 2020-2025

STORM DRAINAGE BMPS, WAILUPE-KULIOUOU-NIU STREAM

Project:	2018080	Function:	Highways and Streets	Council:
Priority No.:	9	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: Plan, design, construct and inspect storm drainage improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	0	0	15	0	10	0	0	0	25	0
DGN	HI	0	0	0	200	0	10	0	0	0	210	0
CONST	HI	0	0	0	10	0	1,000	0	0	0	1,010	0
INSP	HI	0	0	0	75	0	150	0	0	0	225	0
	Total	0	0	0	300	0	1,170	0	0	0	1,470	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 2020-2025

STORM DRAIN OUTLETS IN WAIKIKI BEACH

Project:	2018081	Function:	Highways and Streets	Council:	04
Priority No.:		Program:	Storm Drainage	Nbrd Board:	09
TMK:		Department:	Facilities Maintenance	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and inspect storm drain outlet improvements in Waikiki.

Justification: Improve outfall infrastructure.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	10	0	0	50	0	0	10	0	60	0
DGN	HI	0	10	0	0	200	0	0	10	0	210	0
CONST	HI	0	1,000	0	0	10	0	0	1,000	0	1,010	0
INSP	HI	0	250	0	0	10	0	0	100	0	110	0
	Total	0	1,270	0	0	270	0	0	1,120	0	1,390	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 2020-2025

STORM DRAIN OUTLETS NEAR ALA WAI CANAL

Project:	2018082	Function:	Highways and Streets	Council:	04
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 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: Plan, design, construct and inspect storm drain outlets near Ala Wai Canal.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	0	10	30	0	10	10	10	0	60	0
DGN	HI	0	0	10	250	250	260	260	260	0	1,280	0
CONST	HI	0	0	1,000	10	0	1,500	1,500	1,500	0	4,510	0
INSP	HI	0	0	150	10	0	150	150	150	0	460	0
	Total	0	0	1,170	300	250	1,920	1,920	1,920	0	6,310	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 2020-2025

WAIKIKI DRAIN OUTFALL IMPROVEMENTS

Project:	2018083	Function:	Highways and Streets	Council:	04
Priority No.:		Program:	Storm Drainage	Nbrd Board:	09
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: Plan, design, construct and inspect Waikiki drain outfall improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	0	30	0	1,500	0	0	0	0	1,500	0
DGN	HI	0	0	150	0	300	0	0	0	0	300	0
CONST	HI	0	0	10	0	10	0	0	0	0	10	0
INSP	HI	0	0	10	0	10	0	0	0	0	10	0
	Total	0	0	200	0	1,820	0	0	0	0	1,820	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2021
DGN	7/1/2018	12/31/2021
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 2020-2025

Department Summary: Facilities Maintenance

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
HI	900	9,950	10,760	8,020	14,710	27,570	29,590	22,540	5,900	108,330	28,300
Total	900	9,950	10,760	8,020	14,710	27,570	29,590	22,540	5,900	108,330	28,300

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	350	630	825	125	1,560	240	20	20	0	1,965	0
DGN	550	1,320	1,310	2,700	2,560	2,440	2,070	1,420	100	11,290	700
CONST	0	7,125	7,300	4,640	9,420	22,420	25,400	19,400	5,400	86,680	26,000
INSP	0	875	1,310	555	1,170	2,470	2,100	1,700	400	8,395	1,600
EQUIP	0	0	15	0	0	0	0	0	0	0	0
Total	900	9,950	10,760	8,020	14,710	27,570	29,590	22,540	5,900	108,330	28,300

Six-Year CIP and Budget FY 2020-2025

Program Summary: Storm Drainage

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
FG	162	0	0	0	0	0	0	0	0	0	0
HI	48,287	13,250	18,300	16,520	29,710	42,670	43,690	33,290	26,000	191,880	218,800
Total	48,449	13,250	18,300	16,520	29,710	42,670	43,690	33,290	26,000	191,880	218,800

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	114	10	100	10	5	5	5	5	5	35	0
PLAN	7,386	840	1,330	155	1,590	270	50	50	30	2,145	0
DGN	15,256	2,015	2,365	6,040	5,660	5,790	2,880	3,510	2,440	26,320	5,700
CONST	23,879	9,250	13,054	9,730	21,285	34,135	38,655	28,025	23,125	154,955	211,500
INSP	1,813	1,135	1,436	585	1,170	2,470	2,100	1,700	400	8,425	1,600
EQUIP	0	0	15	0	0	0	0	0	0	0	0
Total	48,449	13,250	18,300	16,520	29,710	42,670	43,690	33,290	26,000	191,880	218,800

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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 2020-2025

KAPIOLANI BOULEVARD STREET LIGHT IMPROVEMENTS

Project:	2015089	Function:	Highways and Streets	Council:	05
Priority No.:	2	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. Second phase of project to be from Piikoi to Atkinson.

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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	HI	100	0	300	0	1,150	300	0	3,750	0	5,200	0
CONST	HI	0	0	2,000	0	0	0	0	0	0	0	0
INSP	HI	0	0	20	0	0	0	0	0	0	0	0
	Total	100	0	2,320	0	1,150	300	0	3,750	0	5,200	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2015	12/31/2020
CONST	7/1/2018	12/31/2026
INSP	7/1/2018	12/31/2026

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	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

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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 and construct street light meter cabinet, transformer and street lighting improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	786	50	50	50	50	50	50	50	50	300	0
CONST	HD	0	0	0	0	0	0	0	0	0	0	0
CONST	HI	4,407	440	450	450	450	450	450	450	450	2,700	0
INSP	HI	0	5	0	0	0	0	0	0	0	0	0
EQUIP	FG	79	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	0	5	0	0	0	0	0	0	0	0	0
OTHER	FG	7	0	0	0	0	0	0	0	0	0	0
	Total	5,329	500	500	500	500	500	500	500	500	3,000	0

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
INSP	7/1/2018	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

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Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	5,800	500	2,820	500	1,650	800	500	4,250	500	8,200	0
Total	6,071	500	2,820	500	1,650	800	500	4,250	500	8,200	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	50	0	0	0	0	0	0	0	0	0	0
DGN	1,026	50	350	50	1,200	350	50	3,800	50	5,500	0
CONST	4,909	440	2,450	450	450	450	450	450	450	2,700	0
INSP	0	5	20	0	0	0	0	0	0	0	0
EQUIP	79	5	0	0	0	0	0	0	0	0	0
OTHER	7	0	0	0	0	0	0	0	0	0	0
Total	6,071	500	2,820	500	1,650	800	500	4,250	500	8,200	0

Program Summary: Street Lighting

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	5,800	500	2,820	500	1,650	800	500	4,250	500	8,200	0
Total	6,071	500	2,820	500	1,650	800	500	4,250	500	8,200	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	50	0	0	0	0	0	0	0	0	0	0
DGN	1,026	50	350	50	1,200	350	50	3,800	50	5,500	0
CONST	4,909	440	2,450	450	450	450	450	450	450	2,700	0
INSP	0	5	20	0	0	0	0	0	0	0	0
EQUIP	79	5	0	0	0	0	0	0	0	0	0
OTHER	7	0	0	0	0	0	0	0	0	0	0
Total	6,071	500	2,820	500	1,650	800	500	4,250	500	8,200	0

Function Summary: Highways and Streets

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
BK	1,409	920	990	730	560	560	560	560	560	3,530	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	49,316	1,840	480	25,480	25,640	640	640	640	640	53,680	35,000
GI	46,586	14,800	7,800	6,000	4,000	4,000	4,000	4,000	5,000	27,000	3,000
HD	0	0	0	0	0	0	0	0	0	0	0
HI	1,250,774	56,555	116,000	86,290	103,130	111,720	143,440	120,790	79,750	645,120	577,980
ST	38	0	0	0	0	0	0	0	0	0	0
UT	1,145	100	100	2,600	100	100	100	100	100	3,100	0
Total	1,350,338	74,215	125,370	121,100	133,430	117,020	148,740	126,090	86,050	732,430	615,980

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	333	945	125	50	30	15,020	20	20	20	15,160	15,100
PLAN	23,420	1,675	3,942	450	1,660	335	115	115	95	2,770	0
DGN	132,541	7,805	12,807	8,455	9,055	8,330	9,120	9,500	4,600	49,060	28,700
CONST	1,140,448	61,086	105,789	105,990	116,015	89,365	123,885	113,255	79,455	627,965	552,480
INSP	52,734	2,660	2,677	6,150	6,670	3,970	15,600	3,200	1,880	37,470	19,700
EQUIP	125	34	20	5	0	0	0	0	0	5	0
OTHER	737	10	10	0	0	0	0	0	0	0	0
Total	1,350,338	74,215	125,370	121,100	133,430	117,020	148,740	126,090	86,050	732,430	615,980

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ENHANCED MATERIALS RECOVERY FACILITY

Project:	2018046	Function:	Sanitation	Council:
Priority No.:	6	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 and inspect improvements for recycling facilities.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	WB	0	1	1	1	0	0	0	0	0	1	0
DGN	WB	0	1	1	1	0	0	0	0	0	1	0
CONST	WB	0	3,800	3,000	3,000	3,000	0	0	0	0	6,000	0
INSP	WB	0	1	1	1	0	0	0	0	0	1	0
EQUIP	WB	0	1	1	0	0	0	0	0	0	0	0
	Total	0	3,804	3,004	3,003	3,000	0	0	0	0	6,003	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2018	12/1/2019
DGN	10/1/2018	12/1/2021
CONST	10/1/2018	12/1/2021

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 2020-2025

FOOD WASTE FACILITY

Project:	2019052	Function:	Sanitation	Council:	
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Plan and design a pre- and post-food waste recycling facility to divert waste from commercial businesses to a permitted in-vessel composting facility for finished compost to support the local agricultural industry.

Justification:

Use of Funds: Plan and design a pre- and post-food waste recycling facility to divert waste from commercial businesses to a permitted in-vessel composting facility for finished compost to support the local agricultural industry.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	WB	0	0	1,000	0	0	0	0	0	0	0	0
DGN	WB	0	0	3,000	0	0	0	0	0	0	0	0
	Total	0	0	4,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2019	4/30/2022
DGN	5/1/2019	4/30/2021

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 2020-2025

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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	WB	0	0	0	0	0	0	0	0	0	0	0
DGN	WB	83	0	0	0	0	0	0	0	0	0	0
CONST	WB	581	0	0	0	0	0	0	0	0	0	0
INSP	WB	0	0	0	0	0	0	0	0	0	0	0
	Total	664	0	0	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	6/30/2019
CONST	3/1/2018	12/31/2019
INSP	3/1/2018	12/31/2019

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

Six-Year CIP and Budget FY 2020-2025

KAPAA TRANSFER STATION RENOVATION

Project:	2017050	Function:	Sanitation	Council:	03
Priority No.:	5	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, construct and inspect renovation improvements at Kapaa transfer station.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	WB	149	0	0	0	0	0	0	0	0	0	0
DGN	WB	347	350	1	1	0	0	0	0	0	1	0
CONST	WB	0	0	5,000	4,500	0	0	0	0	0	4,500	0
INSP	WB	0	0	300	200	0	0	0	0	0	200	0
	Total	495	350	5,301	4,701	0	0	0	0	0	4,701	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	4/1/2018	2/28/2019
DGN	4/1/2018	12/31/2020
CONST	7/1/2019	12/31/2021
INSP	7/1/2019	12/31/2021

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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KAWAILOA TRANSFER STATION - LOADOUT MODIFICATION

Project:	2017047	Function:	Sanitation	Council:	08
Priority No.:	7	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, design, construct and inspect transfer station improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	WB	46	0	0	1	0	0	0	0	0	1	0
DGN	WB	159	0	0	1	0	0	0	0	0	1	0
CONST	WB	0	0	0	3,000	0	0	0	0	0	3,000	0
INSP	WB	0	0	0	200	0	0	0	0	0	200	0
	Total	205	0	0	3,202	0	0	0	0	0	3,202	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	2/1/2018	8/31/2019
DGN	9/1/2018	12/31/2020
CONST	5/1/2020	12/31/2022
INSP	5/1/2020	12/31/2022

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

Six-Year CIP and Budget FY 2020-2025

KEEHI TRANSFER STATION - LOADOUT MODIFICATIONS

Project:	2015046	Function:	Sanitation	Council:	07
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	WB	0	0	0	0	0	0	0	0	0	0	0
DGN	WB	268	0	0	0	0	0	0	0	0	0	0
CONST	WB	1,000	3,000	0	0	0	0	0	0	0	0	0
INSP	WB	0	250	0	0	0	0	0	0	0	0	0
	Total	1,268	3,250	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	7/1/2017
DGN	2/1/2015	12/31/2019
CONST	11/1/2016	12/31/2019

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

Six-Year CIP and Budget FY 2020-2025

LEEWARD REFUSE COLLECTION BASEYARD AND CONVENIENCE CENTER

Project:	2014052	Function:	Sanitation	Council:	01
Priority No.:	4	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: Design, construct and inspect a refuse collection baseyard and convenience center.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	WB	0	0	0	0	0	0	0	0	0	0	0
PLAN	WB	250	0	0	0	0	0	0	0	0	0	0
DGN	WB	500	0	1	1	1	0	0	0	0	2	0
CONST	WB	0	0	3,000	7,500	7,500	0	0	0	0	15,000	0
INSP	WB	0	0	800	1	1	0	0	0	0	2	0
EQUIP	WB	0	0	1	0	0	0	0	0	0	0	0
	Total	750	0	3,802	7,502	7,502	0	0	0	0	15,004	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2016	12/31/2018
DGN	6/1/2018	12/31/2022
CONST	5/1/2020	12/31/2022

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

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
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	12/31/2019

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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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, 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. Funds will be used for improvements at the H-Power site.

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	WB	250	1	1	1	0	0	0	0	0	1	0
CONST	WB	17,750	2,000	1,000	2,300	0	0	0	0	0	2,300	0
INSP	WB	51	300	300	1	0	0	0	0	0	1	0
	Total	18,051	2,301	1,301	2,302	0	0	0	0	0	2,302	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	6/1/2015	12/1/2019
CONST	4/1/2016	12/1/2020

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 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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	WB	1,444	500	500	550	500	500	500	500	500	3,050	0
CONST	WB	3,926	750	750	700	750	750	750	750	750	4,450	0
INSP	WB	821	100	100	100	100	100	100	100	100	600	0
	Total	6,192	1,350	1,350	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	6/30/2027
CONST	7/1/2015	6/30/2027
INSP	7/1/2015	6/30/2027

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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	WB	2,288	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	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	329,422	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 2020-2025

SOLID WASTE TO ENERGY FACILITY (H-POWER) ACCESS IMPROVEMENTS

Project:	2014063	Function:	Sanitation	Council:	01
Priority No.:		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: Construct and inspect facility access improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	151	1	0	0	1	0	0	0	0	1	0
CONST	WB	511	500	100	0	3,000	0	0	0	0	3,000	0
INSP	WB	0	50	10	0	1	0	0	0	0	1	0
	Total	693	551	110	0	3,002	0	0	0	0	3,002	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	6/1/2022
INSP	6/1/2016	6/1/2022

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 2020-2025

SOLID WASTE TO ENERGY FACILITY (HPOWER) CONVERSION TECHNOLOGIES

Project:	2018050	Function:	Sanitation	Council:
Priority No.:	3	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: Acquire land, design, construct and inspect improvements for conversion technologies for HPOWER.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	WB	0	0	0	12,000	0	0	0	0	0	12,000	0
PLAN	WB	0	120	120	0	0	0	0	0	0	0	0
DGN	WB	0	1	1,000	1	1	0	0	0	0	2	0
CONST	WB	0	0	10,000	5,000	11,000	0	0	0	0	16,000	0
INSP	WB	0	0	1,000	1,000	1	0	0	0	0	1,001	0
EQUIP	WB	0	0	1,200	0	0	0	0	0	0	0	0
	Total	0	121	13,320	18,001	11,002	0	0	0	0	29,003	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/1/2018
DGN	7/1/2018	12/1/2020
CONST	5/1/2019	12/1/2021
INSP	5/1/2019	12/1/2021
EQUIP	5/1/2019	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

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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, and inspect improvements to the 3rd Boiler facility, to include enclosing 3rd Boiler structure with siding to prevent weathering and corrosion.

Justification: Improvements to include enclosing the facility will reduce wear and tear and maintenance.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	WB	0	0	0	0	0	200	0	0	0	200	0
DGN	WB	0	0	0	0	0	1	0	0	0	1	0
CONST	WB	0	0	0	0	0	18,000	0	0	0	18,000	0
INSP	WB	0	0	0	0	0	1,800	0	0	0	1,800	0
EQUIP	WB	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	20,001	0	0	0	20,001	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2021	12/31/2025
DGN	7/1/2022	12/31/2024
CONST	7/1/2022	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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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: The project will consider alternatives that might be employed to process select and/or additional wastes, including a proposed fourth boiler for HPOWER.

Justification: The project will accommodate population growth and help divert waste from going to the landfill.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	WB	0	0	0	0	0	0	5,400	1	0	5,401	0
DGN	WB	0	0	0	0	0	0	1	27,000	0	27,001	0
	Total	0	0	0	0	0	0	5,401	27,001	0	32,402	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2023	12/31/2026
DGN	7/1/2024	12/31/2029

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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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 and inspect H-POWER improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	WB	0	240	120	50	1	0	0	0	0	51	0
DGN	WB	600	1	600	240	1	0	0	0	0	241	0
CONST	WB	11,565	1,000	4,500	12,000	4,000	0	0	0	0	16,000	0
INSP	WB	0	900	1,000	400	1	0	0	0	0	401	0
EQUIP	WB	0	1	1	0	0	0	0	0	0	0	0
	Total	12,165	2,142	6,221	12,690	4,003	0	0	0	0	16,693	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2013	12/1/2020
DGN	12/1/2014	12/1/2021
CONST	12/1/2015	12/1/2022

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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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
INSP	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 2020-2025

SOLID WASTE TO ENERGY FACILITY (HPOWER) RECONSTRUCTION OF ASH BUILDING

Project:	2018049	Function:	Sanitation	Council:
Priority No.:		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: Construct and inspect reconstruction of ash building for HPOWER.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	WB	0	120	0	0	0	0	0	0	0	0	0
DGN	WB	0	1	0	0	0	0	0	0	0	0	0
CONST	WB	13,321	5,000	7,000	0	0	0	0	0	0	0	0
INSP	WB	0	1,000	200	0	0	0	0	0	0	0	0
	Total	13,321	6,121	7,200	0	0	0	0	0	0	0	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	60

Six-Year CIP and Budget FY 2020-2025

SOLID WASTE TO ENERGY FACILITY (H-POWER) REFURBISHMENT/IMPROVEMENT

Project:	2020052	Function:	Sanitation	Council:	01
Priority No.:		Program:	Waste Collection And Disposal	Nbrd Board:	23
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Various repairs, improvements and/or modifications needed at the H-Power facility.

Justification: Repair, improvements and/or modifications, which require contractor work, are a continuing need. 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. The proposed annual funding will allow for the necessary flexibility in the program.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	WB	0	0	0	0	0	1	1	1	1	4	0
CONST	WB	0	0	0	0	0	12,000	12,000	12,000	12,000	48,000	0
INSP	WB	0	0	0	0	0	1	1	1	1	4	0
	Total	0	0	0	0	0	12,002	12,002	12,002	12,002	48,008	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2022	7/1/2026
CONST	7/1/2022	7/1/2026
INSP	7/1/2022	7/1/2026

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 2020-2025

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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	WB	0	0	0	0	0	0	0	0	0	0	0
DGN	WF	1	0	0	0	0	0	0	0	0	0	0
CONST	WB	9,998	0	0	0	0	0	0	0	0	0	0
CONST	WF	45,996	0	0	0	0	0	0	0	0	0	0
INSP	WB	0	0	0	0	0	0	0	0	0	0	0
INSP	WF	1,001	0	0	0	0	0	0	0	0	0	0
	Total	56,996	0	0	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 2020-2025

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: Design, construct, inspect and provide related equipment for leachate disposal improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	WB	0	0	0	0	0	0	0	0	0	0	0
DGN	WB	0	0	1	0	0	0	0	0	0	0	0
CONST	WB	0	0	3,500	0	0	0	0	0	0	0	0
INSP	WB	0	0	200	0	0	0	0	0	0	0	0
EQUIP	WB	0	0	1	0	0	0	0	0	0	0	0
	Total	0	0	3,702	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	7/1/2019
DGN	7/1/2018	7/1/2021
CONST	7/1/2019	12/1/2021
INSP	7/1/2019	12/1/2021

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

Six-Year CIP and Budget FY 2020-2025

WAIPAHU INCINERATOR SITE CLOSURE - AREA CLEANUP AND IMPROVEMENTS

Project:	2002008	Function:	Sanitation	Council:	08
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	WB	950	1	0	0	0	0	0	0	0	0	0
CONST	WB	0	2,500	0	0	0	0	0	0	0	0	0
INSP	WB	151	250	0	0	0	0	0	0	0	0	0
	Total	1,101	2,751	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	6/1/2009	6/30/2020
CONST	10/1/2018	6/30/2020
INSP	10/1/2018	6/30/2020

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

Department Summary: Environmental Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
WB	406,791	22,741	49,311	52,751	29,859	33,353	18,753	40,353	13,352	188,421	0
WF	46,998	0	0	0	0	0	0	0	0	0	0
Total	453,789	22,741	49,311	52,751	29,859	33,353	18,753	40,353	13,352	188,421	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	0	0	0	12,000	0	0	0	0	0	12,000	0
PLAN	4,064	481	1,241	52	1	200	5,400	1	0	5,654	0
DGN	18,926	857	5,105	796	504	502	502	27,501	501	30,306	0
CONST	424,914	18,550	37,850	38,000	29,250	30,750	12,750	12,750	12,750	136,250	0
INSP	5,874	2,851	3,911	1,903	104	1,901	101	101	101	4,211	0
EQUIP	0	2	1,204	0	0	0	0	0	0	0	0
OTHER	11	0	0	0	0	0	0	0	0	0	0
Total	453,789	22,741	49,311	52,751	29,859	33,353	18,753	40,353	13,352	188,421	0

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Program Summary: Waste Collection And Disposal

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
WB	406,791	22,741	49,311	52,751	29,859	33,353	18,753	40,353	13,352	188,421	0
WF	46,998	0	0	0	0	0	0	0	0	0	0
Total	453,789	22,741	49,311	52,751	29,859	33,353	18,753	40,353	13,352	188,421	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	0	0	0	12,000	0	0	0	0	0	12,000	0
PLAN	4,064	481	1,241	52	1	200	5,400	1	0	5,654	0
DGN	18,926	857	5,105	796	504	502	502	27,501	501	30,306	0
CONST	424,914	18,550	37,850	38,000	29,250	30,750	12,750	12,750	12,750	136,250	0
INSP	5,874	2,851	3,911	1,903	104	1,901	101	101	101	4,211	0
EQUIP	0	2	1,204	0	0	0	0	0	0	0	0
OTHER	11	0	0	0	0	0	0	0	0	0	0
Total	453,789	22,741	49,311	52,751	29,859	33,353	18,753	40,353	13,352	188,421	0

Six-Year CIP and Budget FY 2020-2025

AIEA HEIGHTS SEWERS, SECTION 4, IMPROVEMENT DISTRICT, TMK 9-9-15 TO 17

Project:	1971280	Function:	Sanitation	Council:	07
Priority No.:		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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1	1	0
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	0	0	0	0	1	0	1	2	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	0	0	500	0	1	501	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	0	0	0	2,400	2,400	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	0	0	600	600	0
	Total	0	0	0	0	0	0	501	0	3,003	3,504	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2023	6/30/2025
PLAN	7/1/2023	6/30/2025
DGN	7/1/2023	6/30/2027
CONST	7/1/2025	6/30/2027
INSP	7/1/2025	6/30/2027

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 2020-2025

EWA BEACH SEWERS, SECTION 4, IMPROVEMENT DISTRICT, TMK:9-1-01:37 - 42

Project:	1997811	Function:	Sanitation	Council:	09
Priority No.:	1	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: Plan and design sewer improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	0	0	0	1	0	0	1	0	0	2	0
DGN	SR	1,554	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	500	0	0	1	0	0	501	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	0	22,000	0	0	22,000	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	1,600	0	0	1,600	0
	Total	1,554	0	0	501	0	0	23,602	0	0	24,103	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2008	6/30/2024
CONST	7/1/2024	6/30/2027

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 2020-2025

KAHALUU SEWERS, SECTION 3, IMPROVEMENT DISTRICT, TMK 4-7-12 TO 18, 24,

Project:	1981040	Function:	Sanitation	Council:	02
Priority No.:		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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1	0	1	0	2	0
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	0	0	0	200	0	1	0	201	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	0	1	0	700	0	701	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
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	202	0	702	0	904	0

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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1	0	1	0
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	0	0	0	0	0	300	0	300	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	0	0	0	1	0	1	0
	Total	0	0	0	0	0	0	0	302	0	302	0

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	60

Six-Year CIP and Budget FY 2020-2025

KAILUA SEWERS, SECTION 10, IMPROVEMENT DISTRICT

Project:	2015053	Function:	Sanitation	Council:	03
Priority No.:	2	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: Plan and design sewer improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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
PLAN	SW	0	0	0	300	0	1	0	1	0	302	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	1	0	800	0	300	1	1,102	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	0	0	15,000	1	15,001	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	0	700	700	1,400	0
OTHER	SR	0	0	0	0	0	0	0	0	0	0	0
OTHER	SW	0	0	0	0	0	0	0	0	0	0	0
ART	SR	0	0	0	0	0	0	0	0	0	0	0
ART	SW	0	0	0	0	0	0	0	660	0	660	0
	Total	0	0	0	301	0	801	0	16,661	702	18,465	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2020	6/30/2024
DGN	7/1/2020	6/30/2027
CONST	7/1/2027	12/31/2030
INSP	7/1/2027	12/31/2030

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 2020-2025

KAMEHAMEHA HIGHWAY SEWERS, IMPROVEMENT DISTRICT, KANEOHE

Project:	2005064	Function:	Sanitation	Council:	02
Priority No.:		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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
LAND	SW	0	0	0	0	1	0	1	0	0	2	0
PLAN	SR	15	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	0	0	100	0	1	0	0	101	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	300	0	100	0	0	400	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	0	1,000	0	0	1,000	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	200	0	0	200	0
OTHER	SR	0	0	0	0	0	0	0	0	0	0	0
ART	SR	0	0	0	0	0	0	0	0	0	0	0
ART	SW	0	0	0	0	0	0	50	0	0	50	0
	Total	15	0	0	0	401	0	1,352	0	0	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	0	0	0	300	0	1	0	301	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	0	1	0	400	0	401	0
CONST	SR	0	0	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	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	301	0	401	0	702	0

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	60

Six-Year CIP and Budget FY 2020-2025

Department Summary: Environmental Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
SA	0	0	0	0	0	0	0	0	0	0	0
SR	1,569	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	802	401	1,304	25,455	18,066	3,705	49,733	0
Total	1,569	0	0	802	401	1,304	25,455	18,066	3,705	49,733	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	0	0	0	0	1	1	1	2	1	6	0
PLAN	15	0	0	301	100	501	3	303	1	1,209	0
DGN	1,554	0	0	501	300	802	601	1,401	2	3,607	0
CONST	0	0	0	0	0	0	23,000	15,000	2,401	40,401	0
INSP	0	0	0	0	0	0	1,800	700	1,300	3,800	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
ART	0	0	0	0	0	0	50	660	0	710	0
Total	1,569	0	0	802	401	1,304	25,455	18,066	3,705	49,733	0

Program Summary: Improvement District-Sewers

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
SA	0	0	0	0	0	0	0	0	0	0	0
SR	1,569	0	0	0	0	0	0	0	0	0	0
SW	0	0	0	802	401	1,304	25,455	18,066	3,705	49,733	0
Total	1,569	0	0	802	401	1,304	25,455	18,066	3,705	49,733	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	0	0	0	0	1	1	1	2	1	6	0
PLAN	15	0	0	301	100	501	3	303	1	1,209	0
DGN	1,554	0	0	501	300	802	601	1,401	2	3,607	0
CONST	0	0	0	0	0	0	23,000	15,000	2,401	40,401	0
INSP	0	0	0	0	0	0	1,800	700	1,300	3,800	0
OTHER	0	0	0	0	0	0	0	0	0	0	0
ART	0	0	0	0	0	0	50	660	0	710	0
Total	1,569	0	0	802	401	1,304	25,455	18,066	3,705	49,733	0

Six-Year CIP and Budget FY 2020-2025

AHUIMANU WASTEWATER PRELIMINARY TREATMENT FACILITY FORCE MAIN AND SEWER IMP

Project:	2008063	Function:	Sanitation	Council:	03
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1,262	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	1,540	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	8,550	0	0	0	0	0	0	0	0	0	0
CONST	SW	315	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	11,667	0	0	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 2020-2025

AHUIMANU WASTEWATER PRE-TREATMENT FACILITY IMPROVEMENTS AND EQUALIZATION F

Project:	2013046	Function:	Sanitation	Council:	03
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	101	0	0	0	0	0	0	0	0	0	0
PLAN	SW	1,102	0	0	0	0	1	1	0	0	2	0
DGN	SR	900	0	0	0	0	0	0	0	0	0	0
DGN	SW	1,701	0	0	0	0	500	1	0	0	501	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	20,000	1	0	0	20,001	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	800	800	0	0	1,600	0
	Total	3,804	0	0	0	0	21,301	803	0	0	22,104	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2013	1/1/2019
DGN	1/1/2015	12/30/2024
CONST	1/1/2022	12/30/2024

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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	12,307	0	0	0	0	0	0	0	0	0	0
INSP	SR	713	0	0	0	0	0	0	0	0	0	0
	Total	14,849	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 2020-2025

ALA MOANA-KAKA'AKO TRUNK SEWER

Project:	2015049	Function:	Sanitation	Council:	04
Priority No.:	42	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: Acquire land, plan and design for the Ala Moana-Kaka'ako trunk sewer.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
LAND	SW	0	0	1	1	1	1	1	1	0	5	0
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	1,000	1,000	1,000	500	1	1	1	1	1,504	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	1	1	1	1,000	9,000	1,000	1,000	1,000	13,001	0
CONST	SR	0	0	0	0	0	0	0	150,000	1	150,001	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	12,000	1	12,001	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	0	1,001	1,002	1,002	1,501	9,002	1,002	163,002	1,003	176,512	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/20/2018	7/20/2023
PLAN	7/20/2018	1/1/2023
DGN	1/1/2021	1/1/2028
CONST	1/1/2024	1/1/2028

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 2020-2025

ALA MOANA WASTEWATER 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: Plan and design Ala Moana Wastewater Force Main No. 2 System.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	1,000	0	1	1	0	0	0	2	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	1	0	1	1	0	0	0	2	0
CONST	SW	0	0	0	0	1,500	1,500	0	0	0	3,000	0
INSP	SW	0	0	0	0	1	1	0	0	0	2	0
	Total	0	0	1,001	0	1,503	1,503	0	0	0	3,006	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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

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ALA MOANA WASTEWATER PUMP STATION NO. 3 AND SEWER IMPROVEMENTS

Project:	2015050	Function:	Sanitation	Council:	05
Priority No.:	43	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, and sewer improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SR	0	1	1	35,000	1	1	1	0	0	35,003	0
PLAN	SR	0	1,000	1,000	1	1,000	500	1	0	1	1,503	0
DGN	SR	0	1	1	1	1	8,000	2,000	0	1,000	11,002	0
CONST	SR	0	0	0	0	0	0	0	0	120,000	120,000	0
INSP	SR	0	0	0	0	0	0	0	0	3,000	3,000	0
	Total	0	1,002	1,002	35,002	1,002	8,501	2,002	0	124,001	170,508	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	9/1/2016	12/31/2021
PLAN	9/1/2018	1/1/2022
DGN	9/1/2021	1/1/2028
CONST	1/1/2025	1/1/2028

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 2020-2025

ALA MOANA WASTEWATER PUMP STATION UPGRADE

Project:	2013048	Function:	Sanitation	Council:	05
Priority No.:	14	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: Design, construct and inspect wastewater pump station upgrade improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	602	1	0	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	1,048	1	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	20,000	0	1	0	0	0	0	0	1	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	1,972	2,000	0	200	0	0	0	0	0	200	0
	Total	3,622	22,002	0	202	0	0	0	0	0	202	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2013	1/1/2018
DGN	6/1/2016	12/31/2020
CONST	4/1/2019	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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 2020-2025

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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
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
	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1	0	1	2	1
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	0	0	0	0	500	0	1	501	1
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	0	0	1	0	1,000	1,001	200
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	20,000
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	800
	Total	0	0	0	0	0	0	502	0	1,002	1,504	21,002

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	10/1/2023	7/1/2026
PLAN	7/1/2023	7/1/2026
DGN	7/1/2023	7/1/2028
CONST	1/1/2026	7/1/2028

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 2020-2025

AWA STREET WASTEWATER PUMP STATION, FORCE MAIN AND SEWER SYSTEM IMPROVEME

Project:	2011046	Function:	Sanitation	Council:	07
Priority No.:	8	Program:	Sewage Collection And Disposal	Nbrd Board:	15
TMK:		Department:	Environmental Services	Senate:	13
				House:	29
				Other:	

Description: This project included force main assessment work required by the 2010 Consent Decree. The project evaluated 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 diversion of flow away from the pump station. The current recommendation is for new sewer relief lines to be constructed, using FY17 and FY18 funds, to provide a new sewer relief in Waikamilo Road for the diversion of flows.

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 wastewater facility and infrastructure improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1,004	1	0	1	0	0	0	0	0	1	0
PLAN	SW	501	0	0	0	0	0	0	0	0	0	0
DGN	SR	4,001	500	0	1,000	0	0	0	0	0	1,000	0
DGN	SW	2,500	0	0	0	0	0	0	0	0	0	0
CONST	SR	92,427	40,000	0	1	0	0	0	0	0	1	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	3,000	1,500	0	1	0	0	0	0	0	1	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	103,433	42,001	0	1,003	0	0	0	0	0	1,003	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/30/2011	6/30/2017
DGN	6/30/2014	12/30/2020
CONST	6/1/2018	12/30/2020

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 2020-2025

AWA STREET WWPS IMPROVEMENTS/REHAB

Project:	2019046	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Project includes structural, mechanical, civil, electrical and/or other improvements and rehabilitation work to the existing Awa Street Wastewater Pump Station. Project will address the pump station capacity needed to meet population and development projections.

Justification: The improvements and rehabilitation work are needed to ensure station reliability and compliance with current standards. Pump station capacity will meet projected needs.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	400	1	1	0	0	402	0
DGN	SR	0	0	0	0	1	1,000	1,000	1	0	2,002	0
CONST	SR	0	0	0	0	0	0	30,000	1	0	30,001	0
INSP	SR	0	0	0	0	0	0	1,500	1,500	0	3,000	0
	Total	0	0	0	0	401	1,001	32,501	1,502	0	35,405	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2021	4/30/2024
DGN	5/1/2021	4/30/2023
CONST	7/1/2023	12/31/2025
INSP	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	0

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	4,739	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	7,799	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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 2020-2025

BEACHWALK WASTEWATER PUMP STATION FORCE MAIN SYSTEM

Project:	2016046	Function:	Sanitation	Council:	04
Priority No.:	15	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, design, construct and inspect improvements to Beachwalk wastewater pump station force main system.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	1,400	300	1	1	0	0	0	0	0	1	0
DGN	SW	401	500	1	1	0	0	0	0	0	1	0
CONST	SW	0	0	2,500	1,000	0	0	0	0	0	1,000	0
INSP	SW	0	0	1	1	0	0	0	0	0	1	0
	Total	1,801	800	2,503	1,003	0	0	0	0	0	1,003	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	60

Six-Year CIP and Budget FY 2020-2025

BERETANIA STREET SEWER IMPROVEMENTS

Project:	2017059	Function:	Sanitation	Council:
Priority No.:	26	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, design, construct and inspect improvements to the Beretania Street sewers.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	251	1	1	1	0	0	0	0	0	1	0
DGN	SW	251	250	150	500	1	0	0	0	0	501	0
CONST	SW	0	0	0	3,000	1	0	0	0	0	3,001	0
INSP	SW	0	0	0	300	100	0	0	0	0	400	0
	Total	502	251	151	3,801	102	0	0	0	0	3,903	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2018	7/1/2012
DGN	5/1/2018	12/1/2022
CONST	12/1/2020	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	30,483	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	38,885	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	0	0	0	0	0	0	0	0	0
CONST	SR	2,821	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	5,323	0	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 2020-2025

DOWSETT HIGHLANDS RELIEF SEWER

Project:	2009099	Function:	Sanitation	Council:	06
Priority No.:	9	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	402	1	0	1	0	0	0	0	0	1	0
PLAN	SW	2	0	0	0	0	0	0	0	0	0	0
DGN	SR	8,817	4,500	1	100	0	0	0	0	0	100	0
DGN	SW	2,000	0	0	0	0	0	0	0	0	0	0
CONST	SR	69,424	80,000	1	1	0	0	0	0	0	1	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	2,000	1,200	1,000	1	0	0	0	0	0	1	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	82,645	85,701	1,002	103	0	0	0	0	0	103	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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 2020-2025

ENV SUPPORT FACILITIES AT HONOULIULI WWTP

Project:	2017053	Function:	Sanitation	Council:
Priority No.:	27	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, design, construct and inspect support facilities at the Honouliuli WWTP.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	1	0	0	0	0	0	1	0
PLAN	SW	549	1	0	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	600	1	0	0	0	0	601	0
DGN	SW	0	600	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	70,000	70,000	0	0	0	0	140,000	0
INSP	SR	0	0	0	1,200	1,200	0	0	0	0	2,400	0
	Total	549	601	0	71,801	71,201	0	0	0	0	143,002	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2017	7/1/2022
DGN	10/1/2018	7/1/2024
CONST	1/1/2021	7/1/2024
INSP	1/1/2021	7/1/2024

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

Six-Year CIP and Budget FY 2020-2025

EWA BEACH WASTEWATER PUMP STATION FORCE MAIN SYSTEM IMPROVEMENTS

Project:	2012056	Function:	Sanitation	Council:	01
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	900	0	0	0	0	0	0	0	0	0	0
PLAN	SW	600	0	0	0	1	1	1	0	0	3	0
DGN	SR	1,600	0	0	0	0	0	0	0	0	0	0
DGN	SW	901	1	0	0	2,000	500	500	1	0	3,001	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	4,778	1	0	0	0	0	30,000	1	0	30,001	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	400	0	0	0	0	1,200	800	0	2,000	0
	Total	8,779	402	0	0	2,001	501	31,701	802	0	35,005	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2012	12/30/2019
DGN	6/1/2016	12/1/2025
CONST	12/1/2017	12/1/2025
INSP	12/1/2017	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1	0	1	1	3	0
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	800	0	0	0	0	200	0	1	1	202	1
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	903	0	0	0	0	0	0	1,000	500	1,500	501
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	30,001
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	2,000
	Total	1,703	0	0	0	0	201	0	1,002	502	1,705	32,503

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2014	1/1/2023
DGN	5/1/2016	12/30/2028
CONST	12/1/2026	12/31/2028

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

Six-Year CIP and Budget FY 2020-2025

HALAWA WASTEWATER PUMP STATION FORCE MAIN SYSTEM IMPROVEMENTS

Project:	2012046	Function:	Sanitation	Council:	06
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	400	0	0	0	500	0	0	0	0	500	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	401	0	0	0	0	0	0	0	0	0	0
CONST	SR	3,252	0	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	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	4,053	0	0	0	500	0	0	0	0	500	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2012	6/30/2022
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 2020-2025

HART STREET/WAIAKAMILO ROAD REPLACEMENT SEWER

Project:	2019065	Function:	Sanitation	Council:	07
Priority No.:	22	Program:	Sewage Collection And Disposal	Nbrd Board:	15
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Replace approximately 1,700 linear feet of existing sewer mains in Hart Street and Waiakamilo Road with new sewer mains, and divert flow to the 54-inch sewer main in Nimitz Highway.

Justification: The project is needed in conjunction with the discontinuance of an existing old sewer in Waiakamilo Road as a result of the Waiakamilo Road Trunk Sewer project, which is being done under the Awa Street WWPS, FM and Sewer System Improvements project to meet requirements of the 2010 Consent Decree.

Use of Funds: Plan, design, construct and inspect sewer replacement at Hart Street/Waiakamilo Road.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	0	0	1	1	0	0	0	0	0	1	0
DGN	SW	0	0	1	1	0	0	0	0	0	1	0
CONST	SW	0	0	9,000	8,500	0	0	0	0	0	8,500	0
INSP	SW	0	0	900	1	0	0	0	0	0	1	0
	Total	0	0	9,902	8,503	0	0	0	0	0	8,503	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2018	6/30/2020
DGN	7/1/2018	6/30/2021
CONST	10/1/2019	10/30/2021
INSP	10/1/2019	10/30/2021

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 2020-2025

HART STREET WWPS FORCE MAIN IMPROVEMENTS PHASE 3

Project:	2017054	Function:	Sanitation	Council:
Priority No.:	16	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, by 2019, follow-up action plan and improvements. 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 wastewater force main improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	900	400	0	500	0	1	0	0	0	501	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	1	1	0	800	0	200	0	0	0	1,000	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	20,000	0	0	0	20,000	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	1,400	0	0	0	1,400	0
	Total	901	401	0	1,300	0	21,601	0	0	0	22,901	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2016	7/1/2021
DGN	10/1/2016	7/1/2024
CONST	1/1/2022	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	60

Six-Year CIP and Budget FY 2020-2025

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. 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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	201	0	0	0	0	0	0	0	0	0	0
PLAN	SW	1	0	0	0	1	0	0	0	0	1	0
DGN	SR	650	0	0	0	0	0	0	0	0	0	0
DGN	SW	400	0	0	0	100	0	0	0	0	100	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	5,000	0	0	0	0	5,000	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	500	0	0	0	0	500	0
	Total	1,252	0	0	0	5,601	0	0	0	0	5,601	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 2020-2025

HELE STREET SEWER RELIEF/REHABILITATION, KAILUA

Project:	2010062	Function:	Sanitation	Council:	03
Priority No.:		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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	251	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	10,601	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	600	0	0	0	0	0	0	0	0
	Total	12,156	0	10,601	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	12/31/2021
CONST	10/31/2019	12/31/2021

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 2020-2025

HONOLULU AREA WASTEWATER PUMP STATION FACILITIES IMPROVEMENTS

Project:	2013051	Function:	Sanitation	Council:	99
Priority No.:	36	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: Plan, design, construct and inspect wastewater pump station facilities improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	1	0	0	0	0	0	0	0	0	0	0
PLAN	SW	1,000	0	1	1	0	0	0	0	0	1	0
DGN	SR	800	0	0	0	0	0	0	0	0	0	0
DGN	SW	402	0	200	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	9,000	5,000	0	0	0	0	0	5,000	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	400	1	0	0	0	0	0	1	0
	Total	2,203	0	9,601	5,003	0	0	0	0	0	5,003	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 2020-2025

HONOULIULI WASTEWATER BASIN ODOR CONTROL

Project:	2010069	Function:	Sanitation	Council:	01
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	902	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,616	0	0	0	0	0	0	0	0	0	0
CONST	SR	9,710	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	12,228	0	0	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SR	26,510	0	0	0	0	0	0	0	0	0	0
PLAN	SR	14,011	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,000	0	0	0	0	0	0	0	0	0	0
	Total	41,521	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2008	12/31/2020
DGN	1/1/2012	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 2020-2025

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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	400	0	0	0	0	0	0	0	0	0	0
PLAN	SW	1,101	0	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	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	1,503	0	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 2020-2025

HONOULIULI WASTEWATER TREATMENT PLANT SECONDARY TREATMENT

Project:	2012058	Function:	Sanitation	Council:	01
Priority No.:	10	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: Design, construct and inspect wastewater treatment plant improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	4	1	1	0	0	0	0	0	0	0	0
PLAN	SW	3,000	0	0	0	0	0	0	0	0	0	0
DGN	SR	56,234	35,000	16,000	1	0	0	0	0	0	1	0
DGN	SW	2	0	0	0	0	0	0	0	0	0	0
CONST	SR	369,598	240,000	83,000	1	0	0	0	0	0	1	0
INSP	SR	2,000	2,000	1,500	1,500	0	0	0	0	0	1,500	0
	Total	430,838	277,001	100,501	1,502	0	0	0	0	0	1,502	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 2020-2025

HONOULIULI WASTEWATER TREATMENT PLANT UPGRADE, PHASE 2

Project:	2013053	Function:	Sanitation	Council:	01
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	502	0	0	0	0	0	0	0	0	0	0
DGN	SW	1,200	200	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	13,113	1	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	800	0	0	0	0	0	0	0	0	0
	Total	14,815	1,001	0	0	0	0	0	0	0	0	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 2020-2025

HONOULIULI WWTP HEADWORKS, PUMP STATION, ENERGY SAVINGS, SOLIDS PROCESS UPG

Project:	2019047	Function:	Sanitation	Council:
Priority No.:	45	Program:	Sewage Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: Improvements/upgrades to the existing facilities at Honouliuli Wastewater Treatment Plant, which in conjunction with the secondary treatment upgrade, provide for future energy and maintenance efficiency, reliability, and capacity needs. The project includes improvements to the headworks screens, grit removal, influent pump station, primary clarifiers, trickling filters, digesters, mixing tanks, electrical and SCADA systems, odor control, and other support facilities, and conversion to new HRBC, THP, combined heat and power, and fats, oils and grease systems.

Justification: Improvements, rehabilitation or reconstruction of facilities are needed to ensure the plant meets the projected future flows for the planning period, provides for energy and maintenance efficiency, and maintains reliability and compliance with all applicable regulations and permits.

Use of Funds: Plan and design wastewater treatment plant and related facility improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	0	0	0	1	1	1	0	0	0	3	0
DGN	SW	0	0	0	14,000	14,000	1	1	12,000	1	40,003	0
CONST	SW	0	0	0	0	0	240,000	1	120,000	1	360,002	0
INSP	SW	0	0	0	0	0	2,000	2,000	1,500	1,500	7,000	0
	Total	0	0	0	14,001	14,001	242,002	2,002	133,500	1,502	407,008	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2020	4/30/2023
DGN	5/1/2020	4/30/2022
CONST	7/1/2022	12/31/2025
INSP	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	0

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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

Six-Year CIP and Budget FY 2020-2025

IWILEI, KING STREET, KOKEA STREET AREA SEWER IMPROVEMENTS

Project:	2019067	Function:	Sanitation	Council:	07
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	13
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Construct new connecting sewer at Iwilei Road and Kuwili Street. Replace existing sewers through and fronting Aala Park in King Street. Remove old unused laterals on the sewer main through Aala Park. Construct new sewers along and in the vicinity of Olomea Street, Kokea Street and King Street. Abandon old sewers and reconnect laterals to new sewers.

Justification: New sewers are necessary to re-route flow around areas prone to sewer maintenance problems, diverting the flow away from the problem sewers, and in some cases changing the existing sewers to local mains, which will reduce and minimize the maintenance problems.

Use of Funds: Plan and design sewer improvements at Iwilei, King Street, Kokea Street area.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	0	0	800	0	1	1	0	0	0	2	0
DGN	SW	0	0	1	0	1,000	1	0	0	0	1,001	0
CONST	SW	0	0	0	0	0	7,000	0	0	0	7,000	0
INSP	SW	0	0	0	0	0	800	0	0	0	800	0
	Total	0	0	801	0	1,001	7,802	0	0	0	8,803	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	4/1/2019	6/30/2021
DGN	4/1/2019	6/30/2023

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 2020-2025

KAHALA WASTEWATER PUMP STATION AND FORCE MAIN SYSTEM IMPROVEMENTS

Project:	2013054	Function:	Sanitation	Council:	04
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	0	0	0	0	0
PLAN	SW	500	200	0	0	1	0	0	0	0	1	0
DGN	SR	800	0	0	0	0	0	0	0	0	0	0
DGN	SW	800	400	0	0	1	1	0	0	0	2	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	30,000	1	0	0	0	30,001	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	800	800	0	0	0	1,600	0
	Total	2,601	600	0	0	30,802	802	0	0	0	31,604	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 2020-2025

KAHANAHOU WASTEWATER PUMP STATION UPGRADE AND SEWER IMPROVEMENTS

Project:	2009107	Function:	Sanitation	Council:	03
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	451	0	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	0	0	0	0	0	0	0	0	0	0
DGN	SW	600	0	0	0	0	0	0	0	0	0	0
CONST	SR	22,198	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	24,601	0	0	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 2020-2025

KAHUKU WWTP - SEPTAGE RECEIVING, SBR AND SLUDGE THICKENING IMPROVEMENTS

Project:	2019069	Function:	Sanitation	Council:	02
Priority No.:	28	Program:	Sewage Collection And Disposal	Nbrd Board:	27
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Upgrade/replace septage receiving station and upgrade under-capacity Sequencing Batch Reactors (SBRs), at Kahuku Wastewater Treatment Plant. Improve sludge thickening process facilities.

Justification: Improvements to the septage receiving facilities are needed to improve the removal of grit, reduce and prevent depositing of grit in the SBRs, and to improve capacity. Sludge thickening improvements are needed to reduce hauling.

Use of Funds: Design, construct and inspect septage receiving, SBR and sludge thickening improvements at Kahuku WWTP.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	0	0	1	0	0	0	0	0	0	0	0
DGN	SW	0	0	1	1	0	0	0	0	0	1	0
CONST	SW	0	0	7,000	4,000	0	0	0	0	0	4,000	0
INSP	SW	0	0	800	355	0	0	0	0	0	355	0
	Total	0	0	7,802	4,356	0	0	0	0	0	4,356	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2018	6/30/2020
DGN	12/1/2018	6/30/2021
CONST	7/1/2019	6/30/2021
INSP	7/1/2019	6/30/2021

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 2020-2025

KAILUA ROAD WASTEWATER PUMP STATION FORCE MAIN SYSTEM IMPROVEMENTS

Project:	2012048	Function:	Sanitation	Council:	03
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	1	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	250	0	0	0	0	0	0	0	0	0	0
DGN	SW	552	0	0	0	0	0	0	0	0	0	0
CONST	SR	3,977	0	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	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	5,130	0	0	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	6/30/2019
CONST	6/1/2017	6/30/2019

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

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KAILUA ROAD WASTEWATER PUMP STATION IMPROVEMENTS

Project:	2017058	Function:	Sanitation	Council:	03
Priority No.:	35	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.

Use of Funds: Plan, design, construct and inspect wastewater pump station improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1	0	0	0	0	2	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	6,000	1	0	0	0	0	6,001	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	500	300	0	0	0	0	800	0
	Total	0	0	0	6,502	302	0	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	7/1/2023
CONST	12/1/2020	7/1/2023
INSP	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

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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 EA and/or EIS, as may be required.

Justification: The work is required to meet Federal and State requirements, 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.

Use of Funds: Plan wastewater treatment plant and sewer basin facilities.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	3,000	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	3,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2008	12/1/2021

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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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

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KAILUA WASTEWATER TREATMENT PLANT IMPROVEMENTS

Project:	2008071	Function:	Sanitation	Council:	03
Priority No.:		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.

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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	701	0	0	0	0	0	0	0	0	0	0
DGN	SR	5,460	0	0	0	0	0	0	0	0	0	0
CONST	SR	19,868	0	0	0	0	0	0	0	0	0	0
INSP	SR	4,800	0	0	0	0	0	0	0	0	0	0
	Total	30,829	0	0	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	12/1/2019
CONST	8/1/2010	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 2020-2025

KAILUA WASTEWATER TREATMENT PLANT OUTFALL IMPROVEMENTS/REHABILITATION

Project:	2010048	Function:	Sanitation	Council:	03
Priority No.:	30	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 wastewater treatment plant outfall improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SW	0	0	0	1	0	0	0	0	0	1	0
PLAN	SR	400	0	0	0	0	0	0	0	0	0	0
PLAN	SW	902	0	0	1	0	0	0	0	0	1	0
DGN	SR	1	0	0	0	0	0	0	0	0	0	0
DGN	SW	1	0	0	600	150	0	0	0	0	750	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	3,000	0	0	0	0	3,000	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	300	0	0	0	0	300	0
	Total	1,304	0	0	602	3,450	0	0	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 2020-2025

KAILUA WASTEWATER TREATMENT PLANT-SOLIDS HANDLING SYSTEM IMPROVEMENTS

Project:	2017055	Function:	Sanitation	Council:	03
Priority No.:	29	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, biogas use, 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 wastewater treatment plant solids handling system improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	350	0	200	1	1	0	0	0	202	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	1	0	800	1,000	800	1	0	0	2,601	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	25,000	1	0	0	25,001	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	1,000	1,000	0	0	2,000	0
	Total	0	351	0	1,000	1,001	26,801	1,002	0	0	29,804	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2017	7/1/2019
DGN	6/1/2017	12/31/2024
CONST	6/1/2022	12/31/2024
INSP	6/1/2022	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 2020-2025

KAILUA WASTEWATER TREATMENT PLANT-TUNNEL INFLUENT PUMP STATION AND HEADWO

Project:	2013056	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 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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	13,500	1	1	0	0	0	0	0	0	0	0
CONST	SR	182,841	1	1	0	0	0	0	0	0	0	0
CONST	SW	4,551	0	0	0	0	0	0	0	0	0	0
INSP	SR	10,500	100	100	0	0	0	0	0	0	0	0
	Total	211,392	102	102	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2012	7/1/2016
DGN	7/1/2012	12/31/2018
CONST	8/30/2015	12/31/2018
INSP	8/30/2015	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 2020-2025

KAILUA WASTEWATER TREATMENT PLANT UPGRADE, PHASE 2

Project:	2016050	Function:	Sanitation	Council:
Priority No.:	31	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, design, construct and inspect improvements to Kailua wastewater treatment plant.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	302	1	1	1	0	0	0	0	0	1	0
DGN	SR	700	300	2,230	1	0	0	0	0	0	1	0
CONST	SR	0	0	25,500	25,000	0	0	0	0	0	25,000	0
INSP	SR	0	0	1,000	2,000	0	0	0	0	0	2,000	0
	Total	1,002	301	28,731	27,002	0	0	0	0	0	27,002	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2017	12/30/2018
DGN	9/1/2017	12/31/2022
CONST	12/31/2019	12/31/2022
INSP	12/31/2019	12/31/2022

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

Six-Year CIP and Budget FY 2020-2025

KAILUA WWTP - PRIMARY AND SECONDARY TANK REHABILITATION

Project:	2019071	Function:	Sanitation	Council:	03
Priority No.:	37	Program:	Sewage Collection And Disposal	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Rehabilitate the existing primary sedimentation tanks and secondary clarifier tanks at the Kailua Regional Wastewater Treatment Plant (WWTP), including the associated mechanical, electrical and other appurtenances. Project includes tank condition assessment, lining and/or exterior coating, replacement of internal metal structures and equipment, launders, covers, piping, and valves. Project includes demolishing unused facilities.

Justification: Assessment, improvements and/or rehabilitation of the primary sedimentation tanks and secondary clarifier tanks are needed to ensure continued reliability of these facilities.

Use of Funds: Plan, design, construct and inspect primary and secondary tank rehabilitation at Kailua WWTP.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	0	0	1	1	500	1	0	0	0	502	0
DGN	SW	0	0	1	1	1	1,800	1	1	0	1,804	0
CONST	SW	0	0	8,000	1,000	0	0	22,000	1	0	23,001	0
INSP	SW	0	0	800	1	0	0	1,000	1,000	0	2,001	0
	Total	0	0	8,802	1,003	501	1,801	23,001	1,002	0	27,308	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2018	6/30/2021
DGN	10/1/2018	11/30/2024
CONST	10/1/2019	11/30/2024
INSP	10/1/2019	11/30/2024

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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KAILUA WWTP - TFSC & BIOTOWER SYSTEM IMPROVEMENTS

Project:	2019064	Function:	Sanitation	Council:	03
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	31
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Rehabilitate the existing trickling filter solids contactor (TFSC) facilities and biotower system facilities at the Kailua Regional Wastewater Treatment Plant (WWTP), including the associated mechanical, electrical and other appurtenances. Project includes assessment of existing facilities, improvements to motorize the distribution arms, addition of variable frequency drives (VFDs), new can pumps, valves, program controls, wetwell assessment and lining and/or exterior coating, assessment of filter media and covers, and demolition of unused facilities. Project may also include rehabilitation of solids contactor and reaeration tanks and appurtenances.

Justification: Assessment, improvements and/or rehabilitation of the TFSC facilities and biotower system facilities are needed to ensure continued reliability.

Use of Funds: Plan, design, construct and inspect TFSC & Biotower system improvements at Kailua WWTP.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	0	0	1	0	500	1	0	0	0	501	0
DGN	SW	0	0	1	0	1	800	1	0	0	802	0
CONST	SW	0	0	6,000	0	0	0	10,000	0	0	10,000	0
INSP	SW	0	0	600	0	0	0	800	0	0	800	0
	Total	0	0	6,602	0	501	801	10,801	0	0	12,103	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2018	6/30/2022
DGN	10/1/2018	6/30/2024
CONST	10/1/2019	6/30/2024
INSP	10/1/2019	6/30/2024

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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SR	107	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	61,399	0	0	0	0	0	0	0	0	0	0
INSP	SR	3,251	0	0	0	0	0	0	0	0	0	0
	Total	69,529	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	12/31/2018
CONST	3/1/2008	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 2020-2025

KALIHI VALLEY SEWERS - RELIEF/RECONSTRUCTION

Project:	2018058	Function:	Sanitation	Council:
Priority No.:	44	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: Plan and design sewer improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1	0	200	0	201	0
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	0	700	0	1	0	1	1	703	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	1	0	2,000	0	400	200	2,601	0
CONST	SW	0	0	0	0	0	0	0	40,000	1	40,001	0
INSP	SW	0	0	0	0	0	0	0	1,000	1,000	2,000	0
	Total	0	0	0	701	0	2,002	0	41,601	1,202	45,506	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2020	7/1/2023
DGN	7/1/2022	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	60

Six-Year CIP and Budget FY 2020-2025

KAMEHAMEHA HIGHWAY WASTEWATER PUMP STATION FORCE MAIN SYSTEM IMPROVEMENT

Project:	2012049	Function:	Sanitation	Council:	07
Priority No.:	11	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: Plan, design, construct and inspect force main system improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SR	20	100	0	0	0	0	0	0	0	0	0
LAND	SW	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	0	300	1	1	0	0	0	0	0	1	0
PLAN	SW	501	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,300	1,000	200	200	0	0	0	0	0	200	0
DGN	SW	852	0	0	0	0	0	0	0	0	0	0
CONST	SR	8,500	8,500	500	1	0	0	0	0	0	1	0
CONST	SW	12,392	0	0	0	0	0	0	0	0	0	0
INSP	SR	600	600	1	1	0	0	0	0	0	1	0
INSP	SW	550	0	0	0	0	0	0	0	0	0	0
	Total	24,715	10,500	702	203	0	0	0	0	0	203	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 2020-2025

KAMEHAMEHA HIGHWAY WASTEWATER PUMP STATION UPGRADE, MAPUNAPUNA

Project:	2010060	Function:	Sanitation	Council:	07
Priority No.:	17	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: Plan, design, construct and inspect wastewater pump station improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	501	0	0	1	0	0	0	0	0	1	0
DGN	SR	857	250	0	200	0	0	0	0	0	200	0
CONST	SR	7,211	1	0	1	0	0	0	0	0	1	0
INSP	SR	1,619	1	0	1	0	0	0	0	0	1	0
	Total	10,187	252	0	203	0	0	0	0	0	203	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/31/2010	6/30/2016
DGN	5/1/2014	5/1/2021
CONST	6/1/2017	5/1/2021

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 2020-2025

KAMEHAMEHA HWY/WHITMORE AVENUE SEWER IMPROVEMENTS, WAHIAWA

Project:	2019073	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Increase sewer capacity for approximately five or more existing sewer segments, along Kamehameha Highway and Whitmore Avenue, upstream of the inverted sewer siphon. Project may include replacing or upsizing the sewers in the same alignment, or in an adjacent parallel alignment.

Justification: Project is needed to provide adequate capacity for projected additional connections upstream, including projected flow from the Navy JBPHH-Wahiawa Annex and other development.

Use of Funds: Plan and design improvements to the Kamehameha Highway and Whitmore Avenue sewers.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	0	0	250	0	1	0	1	0	0	2	0
DGN	SW	0	0	1	0	300	0	1	0	0	301	0
CONST	SW	0	0	0	0	0	0	2,500	0	0	2,500	0
INSP	SW	0	0	0	0	0	0	400	0	0	400	0
	Total	0	0	251	0	301	0	2,902	0	0	3,203	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2018	6/30/2023
DGN	10/1/2018	6/30/2025

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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	2,885	0	0	0	0	0	0	0	0	0	0
INSP	SR	300	0	0	0	0	0	0	0	0	0	0
	Total	3,985	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

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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

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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 force main improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	0	0	0	0	0
DGN	SR	140	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	1,540	0	0	0	0	0	0	0	0	0	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.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	16,800	1	0	0	0	0	0	0	0	0	0
CONST	SR	188,114	5,000	0	0	0	0	0	0	0	0	0
INSP	SR	12,047	1,000	0	0	0	0	0	0	0	0	0
	Total	219,961	6,001	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/31/2011	12/31/2013
DGN	12/31/2011	12/31/2018
CONST	12/31/2011	12/31/2018

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.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	100	1	0	0	0	0	0	0	0	0	0
PLAN	SW	500	0	0	0	0	0	0	0	0	0	0
DGN	SR	1	300	0	0	0	0	0	0	0	0	0
DGN	SW	302	0	0	0	0	0	0	0	0	0	0
CONST	SR	420	1,900	0	0	0	0	0	0	0	0	0
CONST	SW	311	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	1,634	2,201	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/31/2011	12/31/2016
DGN	7/1/2013	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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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LUALUALEI WWPS FORCE MAIN - SHORELINE PROTECTION

Project:	2019048	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Provide shoreline protection for the existing Lualualei Wastewater Pump Station Force Mains at locations being threatened by coastal erosion. The project plan includes starting the planning and design consultant services with funding from project 2001062, Wastewater Treatment Plant, Pump Station and Force Main Projects.

Justification: Erosion along the shoreline in the vicinity of the existing force mains threatens the integrity of the force mains.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	0	0	0	0	1	0	0	0	0	1	0
DGN	SW	0	0	0	0	200	0	0	0	0	200	0
CONST	SW	0	0	0	0	5,000	0	0	0	0	5,000	0
INSP	SW	0	0	0	0	400	0	0	0	0	400	0
	Total	0	0	0	0	5,601	0	0	0	0	5,601	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2020	6/30/2021
DGN	7/1/2020	6/30/2021
CONST	7/1/2021	6/30/2022
INSP	7/1/2021	6/30/2022

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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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 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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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
PLAN	SW	0	0	0	0	0	300	1	1	0	302	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	0	1	400	1	0	402	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	0	0	3,000	0	3,000	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	0	0	0	0	0	301	401	3,002	0	3,704	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	0	0	0	0	400	1	0	401	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	0	0	1	500	0	501	0
CONST	SR	0	0	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	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	401	501	0	902	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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

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: Design, construct and inspect wastewater pump stations, force mains and sewer improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	700	300	0	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	602	600	0	0	1	0	0	0	0	1	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	8,000	0	0	0	0	8,000	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	600	0	0	0	0	600	0
	Total	1,302	900	0	0	8,601	0	0	0	0	8,601	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2014	12/1/2020
DGN	7/1/2017	12/1/2023
CONST	12/1/2021	12/1/2023

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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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MOANALUA STREAM SEWER REPLACEMENT/RECONSTRUCTION

Project:	2019072	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Evaluate alternatives for re-aligning the existing sewer located along Moanalua Stream. Based on the results of the planning phase, design and construct new sewers to replace the existing to avoid the stream. Acquire new easements and reconnect laterals as necessary.

Justification: Placing the sewer in a new alignment outside the stream will provide maintenance crews with safer access, reduce the potential for injuries, reduce hazard areas and improve response time in the event of an emergency.

Use of Funds: Plan and design replacement/reconstruction of the Moanalua Stream area sewers.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SW	0	0	0	0	1	0	0	0	0	1	0
PLAN	SW	0	0	500	0	1	0	1	0	0	2	0
DGN	SW	0	0	1	0	1,000	0	1	0	0	1,001	0
CONST	SW	0	0	0	0	0	0	10,000	0	0	10,000	0
INSP	SW	0	0	0	0	0	0	1,000	0	0	1,000	0
	Total	0	0	501	0	1,002	0	11,002	0	0	12,004	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2018	6/30/2021
DGN	10/1/2018	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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

Six-Year CIP and Budget FY 2020-2025

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. The project evaluated the alternative of constructing an estimated 10,000 lf of 18 and 21-inch gravity diversion 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. 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 structural, mechanical, electrical and site improvements needed to ensure pump station reliability and compliance with current standards.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1	0	0	0	1	0
PLAN	SR	500	0	0	0	0	0	0	0	0	0	0
PLAN	SW	700	1	0	0	0	1	0	0	0	1	0
DGN	SR	1	0	0	0	0	0	0	0	0	0	0
DGN	SW	701	400	0	0	0	400	1	0	0	401	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	402	0	0	0	11,002	602	0	0	11,604	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2011	7/1/2019
DGN	7/1/2017	12/31/2024
CONST	10/1/2022	12/31/2024
INSP	10/1/2022	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 2020-2025

PALOLO VALLEY SEWER REHABILITATION

Project:	2008078	Function:	Sanitation	Council:	05
Priority No.:		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 FY17/FY18 are for the portion of SI-CS-17 to be done by a deadline of 6/30/20. Construction funds in FY23 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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SR	12	0	0	0	0	0	0	0	0	0	0
LAND	SW	0	0	0	0	1	0	1	0	0	2	0
PLAN	SR	1,001	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	0	0	400	1	1	0	0	402	0
DGN	SR	2,001	1	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	1	400	200	0	0	601	0
CONST	SR	3,838	1,000	0	0	0	0	0	0	0	0	0
CONST	SW	9,675	0	0	0	0	0	5,000	0	0	5,000	0
INSP	SR	0	400	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	400	0	0	400	0
	Total	16,527	1,401	0	0	402	401	5,602	0	0	6,405	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2007	12/1/2018
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 2020-2025

PEARL CITY TRUNK SEWERS - REHABILITATION/REPLACEMENT

Project:	2020046	Function:	Sanitation	Council:	08
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	21
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Assess, plan, rehabilitate and/or replace trunk sewers between Pearl City and Waimalu.

Justification: Long-term improvement to accommodate future growth, including transient-orientated-development (TOD), projected wet weather flows, and results of condition assessment work.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	800	800	0
DGN	SR	0	0	0	0	0	0	0	0	1	1	0
	Total	0	0	0	0	0	0	0	0	801	801	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2025	6/1/2028
DGN	5/1/2026	6/1/2029

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 2020-2025

PEARL CITY/WAIPAHU TRUNK SEWER

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	800	0	0	800	0
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	0	0	1,000	0	1	0	1	1,002	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	1	0	5,000	0	1,000	6,001	0
CONST	SW	0	0	0	0	0	0	0	0	80,000	80,000	0
INSP	SW	0	0	0	0	0	0	0	0	1,200	1,200	0
	Total	0	0	0	0	1,001	0	5,801	0	82,201	89,003	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2021	7/1/2025
DGN	7/1/2023	12/31/2028
CONST	7/1/2025	12/31/2028

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 2020-2025

PEARL CITY WASTEWATER PUMP STATION, FORCE MAIN, AND SEWER SYSTEM ALTERNATIVE

Project:	2013060	Function:	Sanitation	Council:	08
Priority No.:	20	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 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. The project may include flood proofing the existing station or other mitigation measures. 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 flow requirements. Due to the existing location in the flood zone, either additional flood-proofing or other mitigation 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: Plan, design, construct and inspect improvements at Pearl City wastewater pump station.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SR	0	1	0	0	0	0	0	0	0	0	0
PLAN	SR	1	1	1	1	0	0	0	0	0	1	0
PLAN	SW	900	0	0	0	0	0	0	0	0	0	0
DGN	SR	700	300	1	100	0	0	0	0	0	100	0
DGN	SW	2	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	15,000	1	1	0	0	0	0	0	1	0
INSP	SR	0	800	800	1	0	0	0	0	0	1	0
	Total	1,603	16,102	803	103	0	0	0	0	0	103	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2014	1/1/2018
DGN	6/1/2017	9/1/2021
CONST	9/1/2019	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GN	893	0	0	0	0	0	0	0	0	0	0
PLAN	SW	10,622	0	0	0	0	0	0	0	0	0	0
DGN	GN	2,475	0	0	0	0	0	0	0	0	0	0
DGN	SW	23,744	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	SW	20,460	0	0	0	0	0	0	0	0	0	0
OTHER	SW	17,256	8,863	8,120	8,458	8,458	8,458	8,458	8,458	8,458	50,748	0
	Total	77,280	8,863	8,120	8,458	8,458	8,458	8,458	8,458	8,458	50,748	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2019	6/30/2021
DGN	7/1/2019	6/30/2021
INSP	7/1/2019	6/30/2021

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 2020-2025

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, design, construct and inspect wastewater pump station and force main system improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	801	200	0	0	1	0	0	0	0	1	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	501	300	0	0	1	0	0	0	0	1	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	3,500	0	0	0	0	3,500	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	400	0	0	0	0	400	0
	Total	1,302	500	0	0	3,902	0	0	0	0	3,902	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2014	1/1/2020
DGN	6/1/2017	12/31/2023
CONST	12/1/2020	12/31/2023

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

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	8,661	0	0	0	0	0	0	0	0	0	0
INSP	SR	700	0	0	0	0	0	0	0	0	0	0
	Total	10,805	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 2020-2025

SAND ISLAND WASTEWATER BASIN ODOR CONTROL

Project:	2010049	Function:	Sanitation	Council:	07
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SR	1,551	0	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	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	10,316	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	1,600	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	16,319	0	0	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 2020-2025

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. 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 needed for the treatment of wastewater, and for the prevention of wastewater spills, including facilities that need to be rehabilitated or replaced to reduce risk of failure, and facilities needed to convey future projected design flows.

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	5,000	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	0	5,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	3/1/2009	12/31/2023

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 2020-2025

SAND ISLAND WASTEWATER TREATMENT PLANT ENERGY IMPROVEMENTS

Project:	2015045	Function:	Sanitation	Council:	07
Priority No.:	21	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: Design, construct and inspect energy improvements at Sand Island Wastewater Treatment Plant.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	1	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	1	1	0	0	0	0	0	1	0
DGN	SW	0	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	24,000	5,000	0	0	0	0	0	5,000	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	1	1	0	0	0	0	0	1	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	24,003	5,002	0	0	0	0	0	5,002	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2016	1/1/2020
DGN	5/1/2018	1/1/2022
CONST	10/31/2019	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 2020-2025

SAND ISLAND WASTEWATER TREATMENT PLANT EXPANSION, PRIMARY TREATMENT

Project:	1994511	Function:	Sanitation	Council:	07
Priority No.:	23	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-FY17 fiscal years provide for the Phase 2 project work. FY20 funds are for rehabilitation of wet sludge storage facilities and related appurtenances.

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: Design, construct and inspect wastewater treatment plant improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	202	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	11,412	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	1	250	0	0	0	0	0	250	0
CONST	SR	195,079	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	1	5,000	0	0	0	0	0	5,000	0
INSP	SR	12,375	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	1,000	1	0	0	0	0	0	1	0
	Total	219,068	0	1,002	5,251	0	0	0	0	0	5,251	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	3/1/1999	6/1/2006
DGN	3/1/1999	5/1/2022
CONST	4/1/2007	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 2020-2025

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 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, design construct and inspect wastewater treatment plant improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	1	0	0	0	0	0	0	0	0	0	0
PLAN	SW	151	0	1	0	100	0	0	0	0	100	0
DGN	SR	800	0	0	0	0	0	0	0	0	0	0
DGN	SW	751	0	1	0	800	0	1	0	0	801	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	6,000	0	0	0	7,000	0	0	7,000	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	600	0	0	0	600	0	0	600	0
	Total	1,703	0	6,602	0	900	0	7,601	0	0	8,501	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2013	9/1/2022
DGN	6/1/2016	6/1/2025
CONST	6/1/2019	6/1/2025

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 2020-2025

SAND ISLAND WASTEWATER TREATMENT PLANT OUTFALL IMPROVEMENTS/REHABILITATION

Project:	2009102	Function:	Sanitation	Council:	07
Priority No.:		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: Design, construct and inspect improvements to the outfall at Sand Island wastewater treatment plant.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	1,150	0	0	0	0	0	0	0	0	0	0
DGN	SR	501	0	1	0	0	0	0	0	0	0	0
CONST	SR	0	0	14,500	0	0	0	0	0	0	0	0
INSP	SR	599	0	1	0	0	0	0	0	0	0	0
	Total	2,250	0	14,502	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/31/2009	7/31/2019
DGN	12/1/2014	12/31/2021
CONST	9/1/2019	12/31/2021

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 2020-2025

SAND ISLAND WASTEWATER TREATMENT PLANT RETURN FLOW TREATMENT

Project:	2015055	Function:	Sanitation	Council:	
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SR	3,089	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	1	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	8,000	0	0	0	0	0	0	0	0	0
INSP	SR	1,001	0	0	0	0	0	0	0	0	0	0
INSP	SW	1,285	800	0	0	0	0	0	0	0	0	0
	Total	5,375	8,801	0	0	0	0	0	0	0	0	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	30

Six-Year CIP and Budget FY 2020-2025

SAND ISLAND WASTEWATER TREATMENT PLANT SECONDARY TREATMENT

Project:	2012059	Function:	Sanitation	Council:	07
Priority No.:	12	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, design, construct and inspect wastewater treatment plant improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	6,500	500	500	1	1	0	0	0	2,500	2,502	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	14,002	14,000	30,000	20,000	16,000	1	1	0	60,000	96,002	0
CONST	SR	0	0	0	105,000	586,000	1	1	0	0	691,002	0
CONST	SW	0	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	2,500	2,500	2,000	2,000	1,500	0	10,500	0
INSP	SW	0	0	0	0	0	0	0	0	0	0	0
	Total	20,502	14,500	30,500	127,501	604,501	2,002	2,002	1,500	62,500	800,006	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	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 2020-2025

SAND ISLAND WWTP AIR CONDITIONING REFURBISHMENT

Project:	2019068	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Refurbish/replace air conditioning systems at existing buildings at the Sand Island Wastewater Treatment Plant. The project may include the Administration, Headworks, and Effluent Pump Station buildings.

Justification: Refurbishment/replacement is required to upgrade and modernize existing systems that are beyond useful economic life, to provide better energy efficiency, reliability, and reduce and prevent breakdowns and unscheduled maintenance.

Use of Funds: Design, construct and inspect air conditioning refurbishment at Sand Island wastewater treatment plant.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	SW	0	0	1	0	0	0	0	0	0	0	0
CONST	SW	0	0	6,000	0	0	0	0	0	0	0	0
INSP	SW	0	0	1	0	0	0	0	0	0	0	0
	Total	0	0	6,002	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	10/1/2018	6/30/2021
CONST	7/1/2019	6/30/2021
INSP	7/1/2019	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

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	8,100	0	0	0	0	0	0	0	0	0	0
INSP	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	9/30/2015	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	30

Six-Year CIP and Budget FY 2020-2025

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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
RELOC	SR	0	0	0	0	0	0	0	0	0	0	0
RELOC	SW	0	8,000	0	0	0	0	0	0	0	0	0
	Total	0	8,000	0	0	0	0	0	0	0	0	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	20

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SAND ISLAND WWTP SOLIDS SYSTEM IMPROVEMENTS/UPGRADE

Project:	2018054	Function:	Sanitation	Council:
Priority No.:	13	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 project 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: Plan and design WWTP solids system improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	200	0	0	0	0	0	200	0
PLAN	SW	0	0	0	0	0	1	0	0	0	1	0
DGN	SR	0	0	0	3,000	0	0	0	0	0	3,000	0
DGN	SW	0	0	0	0	0	1	1	0	0	2	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	90,000	1	0	0	90,001	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	1,200	800	0	0	2,000	0
	Total	0	0	0	3,200	0	91,202	802	0	0	95,204	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2021	6/1/2022
DGN	1/1/2021	12/31/2024
CONST	6/1/2022	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 2020-2025

SAND ISLAND WWTP UV SCREENING IMPROVEMENTS

Project:	2020047	Function:	Sanitation	Council:	07
Priority No.:	38	Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and inspect replacement of existing UV screens with new screening equipment, add one additional screen that is blocked with knockout walls, and add submersible mixers.

Justification: Upgrade/improvements to the existing UV screening facilities 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: Plan, design, construct and inspect UV screening improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	10,000	0	0	0	0	0	10,000	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	1,000	0	0	0	0	0	1,000	0
	Total	0	0	0	11,002	0	0	0	0	0	11,002	0

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

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	17,955	0	0	0	0	0	0	0	0	0	0
PLAN	SW	9,158	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	15,000	0
	Total	27,113	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	6/30/2026

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 2020-2025

SEWER EASEMENT ACCESS IMPROVEMENTS - MILILANI EFFLUENT SEWER, PACIFIC PALISAD

Project:	2019070	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Construct easement access improvements for the existing Mililani Effluent Sewer and 10-inch sewer in the vicinity of the Royal Kunia Country Club. Project may include improved sewer maintenance roads, security fences and gates. Additional easement area may be required. Construct easement access trails for existing sewers in the vicinity of Fern Ridge and Pacific Palisades.

Justification: Improved easement access roads and access trails are needed for sewers in easements that are difficult or unsafe to access. The improvements will provide maintenance crews with safer access, reduce the potential for injuries, reduce hazard areas and improve response time in the event of an emergency.

Use of Funds: Plan and design sewer easement access improvements to Mililani effluent sewer, Pacific Palisades, Aiea, and Halawa Heights.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SW	0	0	0	0	1	0	1	0	0	2	0
PLAN	SW	0	0	400	0	1	0	1	0	0	2	0
DGN	SW	0	0	1	0	600	0	1	0	0	601	0
CONST	SW	0	0	0	0	0	0	3,500	0	0	3,500	0
INSP	SW	0	0	0	0	0	0	400	0	0	400	0
	Total	0	0	401	0	602	0	3,903	0	0	4,505	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2018	6/30/2021
DGN	10/1/2018	6/30/2024

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 2020-2025

SEWER I/I RELIEF AND REHABILITATION PROJECTS - ALA MOANA TRIBUTARY BASIN

Project:	2013063	Function:	Sanitation	Council:	99
Priority No.:		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: Design, construct and inspect sewer relief and rehabilitation projects.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	2	1	0	0	0	0	0	0	0	0	0
PLAN	SW	1,401	0	0	0	0	0	0	0	0	0	0
DGN	SR	2,500	500	1	0	0	0	0	0	0	0	0
DGN	SW	1,502	0	0	0	0	0	0	0	0	0	0
CONST	SR	14,206	15,000	15,000	0	0	0	0	0	0	0	0
INSP	SR	0	1,500	1,500	0	0	0	0	0	0	0	0
	Total	19,611	17,002	16,501	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	1/1/2013	1/1/2019
DGN	7/1/2015	12/31/2021
CONST	10/1/2017	12/31/2021

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

Six-Year CIP and Budget FY 2020-2025

SEWER I/I RELIEF AND REHABILITATION PROJECTS - HART ST. TRIBUTARY BASIN

Project:	2013064	Function:	Sanitation	Council:	99
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1	0	0	0	0	0	0	0	0	0
PLAN	SW	1,401	0	0	0	0	0	0	0	0	0	0
DGN	SR	1,000	1	0	0	0	0	0	0	0	0	0
DGN	SW	2,002	0	0	0	0	0	0	0	0	0	0
CONST	SR	1,756	1	0	0	0	0	0	0	0	0	0
INSP	SR	0	1,200	0	0	0	0	0	0	0	0	0
	Total	6,160	1,204	0	0	0	0	0	0	0	0	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

Six-Year CIP and Budget FY 2020-2025

SEWER I/I RELIEF AND REHABILITATION PROJECTS - LEEWARD AREA

Project:	2013065	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: 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, design, construct and inspect sewer relief and rehab projects in the Leeward area.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	0	0	0	1	0
PLAN	SR	1	0	0	0	0	0	0	0	0	0	0
PLAN	SW	601	0	1	1	0	1	0	0	0	2	0
DGN	SR	500	0	0	0	0	0	0	0	0	0	0
DGN	SW	202	0	300	1,000	0	500	0	0	0	1,500	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	1	0	10,000	0	0	0	10,001	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	1	0	1,000	0	0	0	1,001	0
	Total	1,304	0	301	1,004	0	11,501	0	0	0	12,505	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2014	1/1/2018
DGN	10/1/2016	12/31/2024
CONST	10/1/2022	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 2020-2025

SEWER I/I RELIEF AND REHABILITATION PROJECTS - WINDWARD AREA

Project:	2013066	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 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, construct and inspect sewer relief and rehabilitation projects for the Windward area.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SR	0	0	0	0	0	0	0	0	0	0	0
LAND	SW	0	0	1	0	0	0	0	0	0	0	0
PLAN	SR	1	0	0	0	0	0	0	0	0	0	0
PLAN	SW	602	1	1	1	0	0	0	0	0	1	0
DGN	SR	400	0	0	0	0	0	0	0	0	0	0
DGN	SW	702	100	100	100	0	0	0	0	0	100	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	1	6,200	900	0	0	0	0	0	900	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	1	1	0	0	0	0	0	1	0
	Total	1,705	102	6,303	1,002	0	0	0	0	0	1,002	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2014	1/1/2019
DGN	5/1/2016	12/1/2021
CONST	10/31/2019	12/1/2021

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

Six-Year CIP and Budget FY 2020-2025

SEWER I/I RELIEF & REHABILITATION 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: Plan and design sewer relief and rehabilitation projects.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	500	0	1	0	0	0	0	1	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	1	0	500	0	1	1	0	502	0
CONST	SW	0	0	0	0	0	0	2,800	1	0	2,801	0
INSP	SW	0	0	0	0	0	0	300	300	0	600	0
	Total	0	0	501	0	501	0	3,101	302	0	3,904	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	60

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SR	189	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	500	500	500	500	500	500	500	3,000	0
CONST	SR	26,996	0	0	0	0	0	0	0	0	0	0
CONST	SW	89,552	18,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	84,000	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	121,819	19,500	15,300	15,300	15,300	15,300	15,300	15,300	15,300	91,800	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	6/30/2021
DGN	7/1/2017	6/30/2021
CONST	7/1/2017	6/30/2021

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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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 2020-2025

SEWER RELIEF & REHABILITATION - ALA MOANA BASIN

Project:	2020048	Function:	Sanitation	Council:	05
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	11
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Project includes the second increment of sewer relief and sewer rehabilitation projects identified by capacity assessment, facility planning and condition assessments. 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 may include, but is not limited to, some improvements to meet 2010 Consent Decree requirements which have construction completion schedule allowed after 2020.

Justification: The sewer relief and rehabilitation projects are needed for continued reliability of service.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	500	500	1	1	1	1,003	0
DGN	SR	0	0	0	0	1	1	4,000	1	1	4,004	0
CONST	SR	0	0	0	0	0	0	0	30,000	30,000	60,000	0
INSP	SR	0	0	0	0	0	0	0	1,500	1,500	3,000	0
	Total	0	0	0	0	501	501	4,001	31,502	31,502	68,007	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2020	12/31/2021
DGN	7/1/2020	12/31/2021
CONST	7/1/2022	12/31/2028
INSP	7/1/2022	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

Six-Year CIP and Budget FY 2020-2025

SEWER RELIEF & REHABILITATION - LEEWARD AREA

Project:	2020049	Function:	Sanitation	Council:	99
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	99
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Project includes the second increment of sewer relief and sewer rehabilitation projects identified by capacity assessment, facility planning and condition assessments. 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. Project may include, but is not limited to, work on Kapolei Parkway sewer, Mililani trunk sewer, and/or some improvements to meet 2010 Consent Decree requirements which have construction completion schedule allowed after 2020.

Justification: The sewer relief and rehabilitation projects are needed for continued reliability of service.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	800	500	1	1	0	1,302	0
DGN	SR	0	0	0	0	1	4,000	1	1	0	4,003	0
CONST	SR	0	0	0	0	0	0	32,000	32,000	0	64,000	0
INSP	SR	0	0	0	0	0	0	1,500	1,500	0	3,000	0
	Total	0	0	0	0	801	4,500	33,502	33,502	0	72,305	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2020	12/31/2023
DGN	7/1/2020	12/31/2023
CONST	7/1/2024	12/31/2028
INSP	7/1/2024	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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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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	121	0	0	0	0	0	0	0	0	0	0
DGN	SR	502	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	100	0	0	0	0	0	0	0	0	0
CONST	SR	2,595	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	4,000	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	300	0	0	0	0	0	0	0	0	0
	Total	3,218	4,400	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	7/1/2019
CONST	7/1/2016	7/1/2019

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 2020-2025

WAHIAWA,WHITMORE VILLAGE AND MAKAKILO AREA WASTEWATER PUMP STATION AND FA

Project:	2013069	Function:	Sanitation	Council:	99
Priority No.:	41	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.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	651	0	0	0	0	0	0	0	0	0	0
PLAN	SW	1	0	0	1	0	0	0	0	0	1	0
DGN	SR	550	0	0	0	0	0	0	0	0	0	0
DGN	SW	200	0	0	550	0	1	0	0	0	551	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	20,000	0	0	0	20,000	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	2,000	0	0	0	2,000	0
	Total	1,402	0	0	551	0	22,001	0	0	0	22,552	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	9/1/2012	12/1/2019
DGN	9/1/2016	12/1/2024
CONST	9/1/2022	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

Six-Year CIP and Budget FY 2020-2025

WAHIAWA WWTP - EFFLUENT SYSTEM & STORAGE

Project:	2020050	Function:	Sanitation	Council:	02
Priority No.:	40	Program:	Sewage Collection And Disposal	Nbrd Board:	26
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Effluent system and storage improvements at Wahiawa Wastewater Treatment Plant will allow storage and retreatment of up to approximately 3 million gallons of non-specification recycled water, in accordance with the proposed agreement and funding provided by the State.

Justification: Provision of additional on-site storage facilities is in accordance with the proposed agreement.

Use of Funds: Plan, design, construct and inspect the effluent system and storage improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	ST	0	0	0	500	0	0	0	0	0	500	0
DGN	ST	0	0	0	1,250	0	0	0	0	0	1,250	0
CONST	ST	0	0	0	7,500	0	0	0	0	0	7,500	0
INSP	ST	0	0	0	500	0	0	0	0	0	500	0
	Total	0	0	0	9,750	0	0	0	0	0	9,750	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2019	12/31/2020
DGN	7/1/2019	12/31/2020
CONST	1/1/2021	12/31/2024
INSP	1/1/2021	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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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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	800	0	0	0	0	0	0	0	0	0	0
PLAN	SW	700	300	0	0	0	0	0	0	0	0	0
	Total	1,500	300	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2010	12/31/2021

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

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WAIANAE WASTEWATER TREATMENT PLANT IMPROVEMENTS/UPGRADE

Project:	2013067	Function:	Sanitation	Council:	01
Priority No.:	33	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, primary clarifiers, 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 and design improvements at Waianae wastewater treatment plant.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	80	0	0	0	0	0	0	0	0	0	0
PLAN	SW	500	1	300	1	0	0	0	0	0	1	0
DGN	SR	1,620	0	0	0	0	0	0	0	0	0	0
DGN	SW	300	2,100	800	500	0	1	0	0	0	501	0
CONST	SR	18,464	0	0	0	0	0	0	0	0	0	0
CONST	SW	10,576	13,000	8,000	0	0	8,000	0	0	0	8,000	0
INSP	SR	1,200	0	0	0	0	0	0	0	0	0	0
INSP	SW	1,569	600	2,600	0	0	500	0	0	0	500	0
	Total	34,309	15,701	11,700	501	0	8,501	0	0	0	9,002	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2014	7/1/2017
DGN	12/1/2015	6/1/2024
CONST	6/1/2017	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 2020-2025

WAIANAE WASTEWATER TREATMENT PLANT OUTFALL IMPROVEMENTS/REHABILITATION

Project:	2013100	Function:	Sanitation	Council:	01
Priority No.:		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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	600	0	700	0	0	1	0	0	0	1	0
DGN	SW	3	0	300	0	0	100	0	0	0	100	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	2,000	0	0	0	2,000	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	300	0	0	0	300	0
	Total	603	0	1,000	0	0	2,401	0	0	0	2,401	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	6/1/2014	10/1/2018
DGN	6/1/2017	12/1/2024
CONST	6/1/2022	12/1/2024

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

Six-Year CIP and Budget FY 2020-2025

WAIANAE WWTP DIGESTER 2 IMPROVEMENTS

Project:	2019049	Function:	Sanitation	Council:
Priority No.:	32	Program:	Sewage Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: Project includes rehabilitation and/or upgrades to the existing digester no. 2 at the Waianae Wastewater Treatment Plant. The project includes conversion of the digester cover to a fixed cover system, including associated piping, mixing and appurtenant equipment. Project also provides related improvements to electrical, mechanical, and structural components of the digester system.

Justification: Rehabilitation and upgrades to the digester are required to ensure continued reliability and efficiency of the facilities.

Use of Funds: Plan, design, construct and inspect wastewater treatment plant digester improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	0	0	0	1	0	0	0	0	0	1	0
DGN	SW	0	0	0	1	0	0	0	0	0	1	0
CONST	SW	0	0	0	8,000	0	0	0	0	0	8,000	0
INSP	SW	0	0	0	500	0	0	0	0	0	500	0
	Total	0	0	0	8,502	0	0	0	0	0	8,502	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2019	12/31/2024
DGN	7/1/2019	12/31/2024
CONST	7/1/2019	12/31/2024
INSP	7/1/2019	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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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: Plan and design wastewater treatment plant influent pump station and flow equalization improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	500	1	0	0	501	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	0	1	600	0	1	602	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	0	0	0	6,000	6,000	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	0	0	0	600	600	0
	Total	0	0	0	0	0	501	601	0	6,601	7,703	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2022	7/1/2025
DGN	10/1/2022	7/1/2028

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 WWTP RECYCLED WATER AND IMPROVEMENTS

Project:	2019050	Function:	Sanitation	Council:	
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: The project includes improvements to the effluent treatment system and in-plant recycled water system at the Waianae Wastewater Treatment Plant. Project will provide efficient use of recycled water within the plant to reduce the use of potable water. The project will also provide related improvements to electrical, mechanical, civil and structural components of these facilities.

Justification: Efficient use of recycled water within the plant will help reduce the use of potable water. The project will provide reliability and efficiency of the facilities, and maintain compliance with applicable regulations and permits.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	0	0	0	0	0	500	0	1	0	501	0
DGN	SW	0	0	0	0	0	1	0	800	0	801	0
	Total	0	0	0	0	0	501	0	801	0	1,302	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2021	12/31/2026
DGN	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	30

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	9,337	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	11,713	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

Six-Year CIP and Budget FY 2020-2025

WAIKALUA WASTEWATER PUMP STATION UPGRADE AND ALTERNATIVE DIVERSION SEWER

Project:	2008080	Function:	Sanitation	Council:	03
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	282	0	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	0	0	0	0	0	0	0	0	0	0
DGN	SW	350	0	0	0	0	0	0	0	0	0	0
CONST	SR	3,109	0	0	0	0	0	0	0	0	0	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
	Total	4,222	0	0	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

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WAIKAPOKI WASTEWATER PUMP STATION UPGRADE

Project:	2006055	Function:	Sanitation	Council:	03
Priority No.:	18	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: Plan, design and construct wastewater pump station improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	219	0	0	1	0	0	0	0	0	1	0
DGN	SR	1,122	0	0	100	0	0	0	0	0	100	0
CONST	SR	7,354	0	0	1	0	0	0	0	0	1	0
INSP	SR	1,000	0	0	0	0	0	0	0	0	0	0
	Total	9,694	0	0	102	0	0	0	0	0	102	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

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WAIMALU TRUNK SEWERS - REHABILITATION/REPLACEMENT

Project:	2020051	Function:	Sanitation	Council:	08
Priority No.:		Program:	Sewage Collection And Disposal	Nbrd Board:	21
TMK:		Department:	Environmental Services	Senate:	
				House:	
				Other:	

Description: Assess, plan, rehabilitate and/or replace trunk sewers between Waimalu and Halawa.

Justification: Long-term improvement to accommodate future growth, including transient-orientated-development (TOD), projected wet weather flows, and results of condition assessment work.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	800	800	0
DGN	SR	0	0	0	0	0	0	0	0	1	1	0
	Total	0	0	0	0	0	0	0	0	801	801	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2025	6/30/2028
DGN	5/1/2026	6/30/2028

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 2020-2025

WAIMALU WASTEWATER PUMP STATION FORCE MAIN SYSTEM

Project:	2017056	Function:	Sanitation	Council:
Priority No.:	19	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 wastewater pump station force main system improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	800	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	0	0	200	1	0	0	0	0	201	0
CONST	SW	0	0	0	0	600	0	0	0	0	600	0
INSP	SW	0	0	0	0	1	0	0	0	0	1	0
	Total	801	0	0	201	602	0	0	0	0	803	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2016	12/1/2019
DGN	10/1/2016	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

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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: Plan, design, construct and inspect wastewater pump station upgrade improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	1	0	0	0	0	0	0	0	0
PLAN	SW	502	0	0	0	0	0	0	0	0	0	0
DGN	SR	0	0	200	0	0	0	0	0	0	0	0
DGN	SW	1,001	0	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	15,000	0	0	0	0	0	0	0	0
INSP	SR	0	0	1,200	0	0	0	0	0	0	0	0
	Total	1,503	0	16,401	0	0	0	0	0	0	0	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 2020-2025

WAIMANALO WASTEWATER TREATMENT PLANT - SOLIDS SYSTEM IMPROVEMENTS

Project:	2019066	Function:	Sanitation	Council:
Priority No.:	34	Program:	Sewage Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: Solids system improvements at the Waimanalo Wastewater Treatment Plant, including digester tank rehabilitation, conversion of existing floating covers to fixed covers, and other upgrades/repairs/replacement needed for wastewater sludge thickening, storage, digestion, dewatering, loading facilities, biogas treatment and use, and related processes. Planning phase to include assessment of existing structures/facilities. Rehabilitate/replace pumps, piping, valves and other appurtenances as determined in the planning phase.

Justification: Project will provide needed improvements of solids handling processes and facilities, with improved efficiency and reliability of the solids handling operation.

Use of Funds: Plan and design improvements to the solids system for Waimanalo WWTP.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	0	0	500	300	1	0	0	0	0	301	0
DGN	SW	0	0	1	300	800	1	0	0	0	1,101	0
CONST	SW	0	0	0	0	0	10,000	0	0	0	10,000	0
INSP	SW	0	0	0	0	0	800	0	0	0	800	0
	Total	0	0	501	600	801	10,801	0	0	0	12,202	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	10/1/2018	6/30/2022
DGN	10/1/2018	6/30/2024

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 2020-2025

WAIPAHU WASTEWATER PUMP STATION FORCE MAIN

Project:	2012053	Function:	Sanitation	Council:	09
Priority No.:	25	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. 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: Acquire land, plan, design and inspect WWPS force main improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SR	0	0	0	1	0	0	0	0	0	1	0
LAND	SW	0	0	0	0	1	0	0	0	0	1	0
PLAN	SR	2,401	0	0	1	0	0	0	0	0	1	0
PLAN	SW	700	0	0	0	1	0	0	0	0	1	0
DGN	SR	3,500	0	0	1,000	0	0	0	0	0	1,000	0
DGN	SW	1	0	0	0	1	1	0	0	0	2	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	60,000	1	0	0	0	60,001	0
INSP	SR	0	0	0	1	0	0	0	0	0	1	0
INSP	SW	0	0	0	0	2,000	2,000	0	0	0	4,000	0
	Total	6,602	0	0	1,003	62,003	2,002	0	0	0	65,008	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/31/2011	12/31/2020
DGN	12/31/2017	12/1/2024
CONST	9/30/2021	12/1/2024

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 2020-2025

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 rehabilitation may involve pipe lining methods, and replacement of some sections, as determined in the planning phase. 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: Acquire land, plan and design wastewater pump station force mains upgrade improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SR	0	0	0	0	1	0	1	0	0	2	0
LAND	SW	0	0	1	0	0	0	0	0	0	0	0
PLAN	SR	0	0	0	0	1	0	1	0	0	2	0
PLAN	SW	0	0	800	0	0	0	0	0	0	0	0
DGN	SR	0	0	0	0	2,000	0	500	300	0	2,800	0
DGN	SW	0	0	1	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	40,000	1	1	40,002	0
INSP	SR	0	0	0	0	0	0	800	800	800	2,400	0
	Total	0	0	802	0	2,002	0	41,302	1,101	801	45,206	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	12/1/2019	12/31/2023
DGN	12/1/2019	12/31/2026
CONST	12/1/2023	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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Waipahu WWPS No.2 (new)

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 Trunk Sewer 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 Trunk Sewer 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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1	0	300	301	0
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	0	0	0	0	0	1,000	0	1	1,001	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	0	0	0	0	0	0	1	0	4,000	4,001	0
	Total	0	0	0	0	0	0	1,002	0	4,301	5,303	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2023	7/1/2027
DGN	7/1/2025	12/31/2029
CONST	7/1/2027	12/31/2029

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 2020-2025

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: Plan, design, construct and inspect wastewater pump station upgrade improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	274	0	0	0	0	0	0	0	0	0	0
PLAN	SW	2	0	1	0	0	0	0	0	0	0	0
DGN	SR	501	0	0	0	0	0	0	0	0	0	0
DGN	SW	400	0	200	0	0	0	0	0	0	0	0
CONST	SR	2,810	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	900	0	0	0	0	0	0	0	0
INSP	SR	500	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	1	0	0	0	0	0	0	0	0
	Total	4,487	0	1,102	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	12/31/2020
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	50

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
EQUIP	SR	8,802	0	0	0	0	0	0	0	0	0	0
EQUIP	SW	55,937	9,601	12,678	11,427	12,000	12,000	12,000	12,000	12,000	71,427	0
	Total	64,738	9,601	12,678	11,427	12,000	12,000	12,000	12,000	12,000	71,427	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
EQUIP	7/1/2019	6/30/2021

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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	12,786	5,000	5,000	12,000	5,000	5,000	5,000	5,000	5,000	37,000	0
	Total	13,931	5,000	5,000	12,000	5,000	5,000	5,000	5,000	5,000	37,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
OTHER	7/1/2019	6/30/2021

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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	272	0	0	0	0	0	0	0	0	0	0
PLAN	SW	1,239	0	0	0	0	0	0	0	0	0	0
OTHER	SW	455	316	325	317	317	317	317	317	317	1,902	0
	Total	1,966	316	325	317	317	317	317	317	317	1,902	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2019	6/30/2021

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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WASTEWATER PROGRAM MANAGEMENT

Project:	2007073	Function:	Sanitation	Council:	99
Priority No.:	46	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	10,850	0	0	0	0	0	0	0	0	0	0
PLAN	SW	27,455	2,500	2,500	1,000	0	0	0	0	0	1,000	0
DGN	SR	0	0	0	0	0	0	0	0	0	0	0
DGN	SW	1,652	1	1	1	0	0	0	0	0	1	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	3,000	1	1	1	0	0	0	0	0	1	0
	Total	42,957	2,502	2,502	1,002	0	0	0	0	0	1,002	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2019	6/30/2021
DGN	7/1/2019	6/30/2021
INSP	7/1/2019	6/30/2021

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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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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	0	1	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	1	0	0	0	0	0	0	0	0	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	17,000	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	3,000	0	0	0	0	0	0	0	0	0
	Total	0	20,002	0	0	0	0	0	0	0	0	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	20

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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: Acquire land, plan, design, construct and inspect wastewater treatment plant, pump station and force main improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SW	7	0	1	1	1	1	1	1	1	6	0
PLAN	SR	6,311	0	0	0	0	0	0	0	0	0	0
PLAN	SW	6,048	100	99	99	99	99	99	99	99	594	0
DGN	SR	12,243	0	0	0	0	0	0	0	0	0	0
DGN	SW	5,970	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	6,000	0
CONST	SR	44,940	0	0	0	0	0	0	0	0	0	0
CONST	SW	54,219	15,000	15,000	15,000	15,000	10,000	10,000	10,000	10,000	70,000	0
INSP	SR	4,202	0	0	0	0	0	0	0	0	0	0
INSP	SW	6,053	500	500	500	500	500	500	500	500	3,000	0
	Total	139,993	16,600	16,600	16,600	16,600	11,600	11,600	11,600	11,600	79,600	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2019	6/30/2021
DGN	7/1/2019	6/30/2021
CONST	7/1/2019	6/30/2021

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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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 rehabilitate or reconstruct the force mains for the existing West Beach WWPS Nos. 1 and 2. Alternative configurations and routes for the 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: Rehabilitation or reconstruction 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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	SR	0	100	0	0	0	0	0	0	0	0	0
PLAN	SR	0	1	0	0	0	0	0	0	0	0	0
DGN	SR	2,500	2,000	0	0	0	0	0	0	0	0	0
CONST	SR	13,569	30,000	0	0	0	0	0	0	0	0	0
INSP	SR	0	1,500	0	0	0	0	0	0	0	0	0
	Total	16,069	33,601	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	7/1/2019
DGN	7/1/2017	12/31/2019
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	60

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WEST LOCH ESTATES WWPS UPGRADE

Project:	2019051	Function:	Sanitation	Council:
Priority No.:	47	Program:	Sewage Collection And Disposal	Nbrd Board:
TMK:		Department:	Environmental Services	Senate:
				House:
				Other:

Description: The project will provide upgrades to the existing West Loch Estates Wastewater Pump Station, including structural, mechanical, civil and electrical improvements as determined in the planning phase. Project includes improvements in pumping capacity as needed to meet projected future flows for the planning period.

Justification: Project provides structural, mechanical, civil and electrical improvements needed to ensure station reliability and compliance with current standards.

Use of Funds: Plan and design wastewater pump station upgrade improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SW	0	0	0	500	0	1	0	0	0	501	0
DGN	SW	0	0	0	1	0	300	0	100	0	401	0
CONST	SW	0	0	0	0	0	0	0	2,000	0	2,000	0
INSP	SW	0	0	0	0	0	0	0	200	0	200	0
	Total	0	0	0	501	0	301	0	2,300	0	3,102	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	5/1/2021	6/1/2024
DGN	5/1/2022	6/1/2026
CONST	7/1/2026	12/31/2027
INSP	7/1/2026	12/31/2027

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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	SR	0	0	0	0	0	0	0	0	0	0	0
PLAN	SW	3	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	1,600	0	0	0	0	1	0	0	0	1	0
CONST	SR	0	0	0	0	0	0	0	0	0	0	0
CONST	SW	0	0	0	0	0	3,000	0	0	0	3,000	0
INSP	SR	0	0	0	0	0	0	0	0	0	0	0
INSP	SW	0	0	0	0	0	300	0	0	0	300	0
	Total	1,603	0	0	0	0	3,301	0	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
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
SR	2,166,643	494,372	204,250	253,729	664,408	16,504	115,309	231,107	157,908	1,438,965	0
ST	0	0	0	9,750	0	0	0	0	0	9,750	0
SW	501,455	165,900	197,262	165,699	225,162	556,013	169,711	240,990	215,987	1,573,562	53,505
Total	2,674,308	660,272	401,512	429,178	889,570	572,517	285,020	472,097	373,895	3,022,277	53,505

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	30,947	305	105	35,105	108	106	908	303	403	36,933	1
PLAN	199,842	10,166	21,566	7,725	9,016	5,817	4,714	2,807	6,907	36,986	2
DGN	285,395	65,913	52,206	48,667	42,967	31,815	16,717	17,607	70,205	227,978	701
CONST	1,941,202	531,406	285,104	293,909	801,602	490,503	218,806	401,005	260,004	2,465,829	50,001
INSP	120,560	20,702	16,408	11,570	10,102	18,501	18,100	24,600	10,601	93,474	2,800
EQUIP	64,738	9,601	12,678	11,427	12,000	12,000	12,000	12,000	12,000	71,427	0
OTHER	31,623	14,179	13,445	20,775	13,775	13,775	13,775	13,775	13,775	89,650	0
RELOC	0	8,000	0	0	0	0	0	0	0	0	0
Total	2,674,308	660,272	401,512	429,178	889,570	572,517	285,020	472,097	373,895	3,022,277	53,505

Program Summary: Sewage Collection And Disposal

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
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
SR	2,166,643	494,372	204,250	253,729	664,408	16,504	115,309	231,107	157,908	1,438,965	0
ST	0	0	0	9,750	0	0	0	0	0	9,750	0
SW	501,455	165,900	197,262	165,699	225,162	556,013	169,711	240,990	215,987	1,573,562	53,505
Total	2,674,308	660,272	401,512	429,178	889,570	572,517	285,020	472,097	373,895	3,022,277	53,505

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	30,947	305	105	35,105	108	106	908	303	403	36,933	1
PLAN	199,842	10,166	21,566	7,725	9,016	5,817	4,714	2,807	6,907	36,986	2
DGN	285,395	65,913	52,206	48,667	42,967	31,815	16,717	17,607	70,205	227,978	701
CONST	1,941,202	531,406	285,104	293,909	801,602	490,503	218,806	401,005	260,004	2,465,829	50,001
INSP	120,560	20,702	16,408	11,570	10,102	18,501	18,100	24,600	10,601	93,474	2,800
EQUIP	64,738	9,601	12,678	11,427	12,000	12,000	12,000	12,000	12,000	71,427	0
OTHER	31,623	14,179	13,445	20,775	13,775	13,775	13,775	13,775	13,775	89,650	0
RELOC	0	8,000	0	0	0	0	0	0	0	0	0
Total	2,674,308	660,272	401,512	429,178	889,570	572,517	285,020	472,097	373,895	3,022,277	53,505

Function Summary: Sanitation

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
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	2,168,212	494,372	204,250	253,729	664,408	16,504	115,309	231,107	157,908	1,438,965	0
ST	0	0	0	9,750	0	0	0	0	0	9,750	0
SW	501,455	165,900	197,262	166,501	225,563	557,317	195,166	259,056	219,692	1,623,295	53,505
WB	406,791	22,741	49,311	52,751	29,859	33,353	18,753	40,353	13,352	188,421	0
WF	46,998	0	0	0	0	0	0	0	0	0	0
Total	3,129,665	683,013	450,823	482,731	919,830	607,174	329,228	530,516	390,952	3,260,431	53,505

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	30,947	305	105	47,105	109	107	909	305	404	48,939	1
PLAN	203,920	10,647	22,807	8,078	9,117	6,518	10,117	3,111	6,908	43,849	2
DGN	305,876	66,770	57,311	49,964	43,771	33,119	17,820	46,509	70,708	261,891	701
CONST	2,366,116	549,956	322,954	331,909	830,852	521,253	254,556	428,755	275,155	2,642,480	50,001
INSP	126,434	23,553	20,319	13,473	10,206	20,402	20,001	25,401	12,002	101,485	2,800
EQUIP	64,738	9,603	13,882	11,427	12,000	12,000	12,000	12,000	12,000	71,427	0
OTHER	31,634	14,179	13,445	20,775	13,775	13,775	13,775	13,775	13,775	89,650	0
RELOC	0	8,000	0	0	0	0	0	0	0	0	0
ART	0	0	0	0	0	0	50	660	0	710	0
Total	3,129,665	683,013	450,823	482,731	919,830	607,174	329,228	530,516	390,952	3,260,431	53,505

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ACQUISITION OF HILO HATTIE BUILDING IWILEI

Project:	2019001	Function:	Human Services	Council:	07
Priority No.:		Program:	Human Services	Nbrd Board:	15
TMK:		Department:	Community Services	Senate:	
				House:	
				Other:	

Description: Provision of funds for the acquisition of Hilo Hattie for use as housing, a hygiene facility, and a place where health services can be provided for homeless individuals.

Justification: Acquisition of Hilo Hattie for use as housing, a hygiene facility, and a place where health services can be provided for homeless individuals.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	0	8,000	0	0	0	0	0	0	0	0
PLAN	GI	0	0	100	0	0	0	0	0	0	0	0
DGN	GI	0	0	250	0	0	0	0	0	0	0	0
CONST	GI	0	0	1,649	0	0	0	0	0	0	0	0
OTHER	GI	0	0	1	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	7/1/2018	12/31/2021
PLAN	7/1/2018	12/31/2021
DGN	7/1/2018	12/31/2021
CONST	7/1/2018	12/31/2021
OTHER	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	100

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	AF	0	5	5	5	5	5	5	5	5	30	30
PLAN	AF	0	5	5	5	5	5	5	5	5	30	30
DGN	AF	0	5	5	5	5	5	5	5	5	30	30
CONST	AF	300	5	5	5	5	5	5	5	5	30	30
OTHER	AF	8,851	4,980	40,823	7,240	6,980	6,980	6,980	6,980	6,980	42,140	29,880
	Total	9,151	5,000	40,843	7,260	7,000	7,000	7,000	7,000	7,000	42,260	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 2020-2025

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 the administration of 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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
OTHER	CD	92,532	6,249	3,126	362	0	0	0	0	0	362	0
OTHER	FG	2,581	0	0	0	0	0	0	0	0	0	0
OTHER	RL	0	0	0	400	0	0	0	0	0	400	0
	Total	95,114	6,249	3,126	762	0	0	0	0	0	762	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	20

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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: Provision of funds for the land acquisition, lease, development, and/or renovation of facilities for new or existing urban rest stops, navigation centers, crisis centers, workforce/affordable housing, and other community -focused projects initiated by community stakeholders in partnership with State housing development agencies or qualified nonprofits. Consideration will be given to innovative low-cost housing options including but not limited to assisted living modular micro-unit buildings.

Justification: Improve communities.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	2,035	1	10,000	0	0	0	0	0	0	0	0
PLAN	GI	0	1	1	0	0	0	0	0	0	0	0
DGN	GI	0	1	1	0	0	0	0	0	0	0	0
CONST	GI	0	1	7,997	0	0	0	0	0	0	0	0
OTHER	GI	0	4,996	1	0	0	0	0	0	0	0	0
	Total	2,035	5,000	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	30

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	8,243	610	623	601	601	601	601	601	601	3,606	0
	Total	11,669	610	623	601	601	601	601	601	601	3,606	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
OTHER	7/1/2012	12/31/2026

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 2020-2025

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 the administration of grants and/or loans to nonprofit organizations or City agencies developing affordable housing for lower income persons.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
OTHER	FG	35,887	3,617	1,221	472	472	472	472	472	472	2,832	0
	Total	35,887	3,617	1,221	472	472	472	472	472	472	2,832	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
OTHER	7/1/2012	12/31/2026

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 2020-2025

HOMELESS PREVENTION INITIATIVE

Project:	2019002	Function:	Human Services	Council:	07
Priority No.:		Program:	Human Services	Nbrd Board:	15
TMK:		Department:	Community Services	Senate:	
				House:	
				Other:	

Description: Provision of funds for the acquisition, lease, development, and/or relocation of facilities at TMK:1-5-041:005 or elsewhere for the relocation of the Sand Island Drug Treatment Center.

Justification: Acquisition, lease, development, and/or relocation of facilities at TMK:1-5-041:005 or elsewhere for the relocation of the Sand Island Drug Treatment Center.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	0	1	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
OTHER	GI	0	0	3,997	0	0	0	0	0	0	0	0
	Total	0	0	4,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2018	12/31/2021
PLAN	7/1/2018	12/31/2021
DGN	7/1/2018	12/31/2021
OTHER	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	100

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	24,124	0	0	0	0	0	0	0	0	0	0
PLAN	GI	217	0	0	0	0	0	0	0	0	0	0
DGN	GI	3,885	0	0	0	0	0	0	0	0	0	0
CONST	GI	21,191	0	0	0	0	0	0	0	0	0	0
INSP	GI	500	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	4,450	0	0	0	0	0	0	0	0	0	0
OTHER	GI	8,071	0	0	0	0	0	0	0	0	0	0
	Total	62,439	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	12/30/2021
DGN	7/1/2014	12/30/2021
CONST	7/1/2014	12/30/2021
EQUIP	7/1/2014	12/30/2021
OTHER	7/1/2014	12/30/2021

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 2020-2025

HOUSING AND HYGIENE CETER

Project:	2019003	Function:	Human Services	Council:	99
Priority No.:		Program:	Human Services	Nbrd Board:	99
TMK:		Department:	Community Services	Senate:	
				House:	
				Other:	

Description: Plan, design, and acquire land to construct a facility for housing, hygiene, and health services for homeless individuals.

Justification: Develop a facility for housing, hygiene, and health services for homeless individuals.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	0	1,800	0	0	0	0	0	0	0	0
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	2,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2018	12/31/2021
PLAN	7/1/2018	12/31/2021
DGN	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	100

Six-Year CIP and Budget FY 2020-2025

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 the administration of grants to nonprofit organizations serving persons with HIV/AIDS.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
OTHER	FG	6,702	427	551	551	551	551	551	551	551	3,306	0
	Total	6,702	427	551	551	551	551	551	551	551	3,306	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
OTHER	7/1/2012	12/31/2026

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 2020-2025

HOUSING TRUST FUND (HTF) PROGRAM

Project:	2018001	Function:	Human Services	Council:	99
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
OTHER	FG	0	1,350	0	0	0	0	0	0	0	0	0
	Total	0	1,350	0	0	0	0	0	0	0	0	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	20

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	30

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	0	0	0	0	0	0	0	0	0
	Total	4,400	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
OTHER	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 2020-2025

URBAN HONOLULU HYGIENE AND MEDICAL TRIAGE CENTERS

Project:	2019004	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 land acquisition, planning, design, and construction for the development of facilities for new urban rest stops and medical triage/crisis centers and community-focused projects initiated by community stakeholders in partnership with State/City agencies and/or qualified nonprofits.

Justification: Provision of funds for the land acquisition, planning, design, and construction for the development of facilities for new urban rest stops and medical triage/crisis centers and community-focused projects initiated by community stakeholders in partnership with State/City agencies and/or qualified nonprofits.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	0	0	500	0	0	0	0	0	0	0	0
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
CONST	GI	0	0	3,000	0	0	0	0	0	0	0	0
OTHER	GI	0	0	500	0	0	0	0	0	0	0	0
	Total	0	0	5,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2018	12/31/2021
PLAN	7/1/2018	12/31/2021
DGN	7/1/2018	12/31/2021
CONST	7/1/2018	12/31/2021
OTHER	7/1/2018	12/30/2021

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
AF	13,551	5,000	40,843	7,260	7,000	7,000	7,000	7,000	7,000	42,260	30,000
CD	95,958	6,249	3,126	362	0	0	0	0	0	362	0
FG	57,915	6,004	2,394	1,624	1,624	1,624	1,624	1,624	1,624	9,744	0
GI	64,474	5,000	39,000	0	0	0	0	0	0	0	0
RL	0	0	0	400	0	0	0	0	0	400	0
Total	231,899	22,252	85,363	9,646	8,624	8,624	8,624	8,624	8,624	52,766	30,000

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	26,159	6	20,306	5	5	5	5	5	5	30	30
PLAN	217	6	707	5	5	5	5	5	5	30	30
DGN	3,885	6	857	5	5	5	5	5	5	30	30
CONST	21,491	6	12,651	5	5	5	5	5	5	30	30
INSP	500	0	0	0	0	0	0	0	0	0	0
EQUIP	4,450	0	0	0	0	0	0	0	0	0	0
OTHER	175,196	22,228	50,842	9,626	8,604	8,604	8,604	8,604	8,604	52,646	29,880
Total	231,899	22,252	85,363	9,646	8,624	8,624	8,624	8,624	8,624	52,766	30,000

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AFFORDABLE HOUSING WITH PREFERENCE IN TRANSIT ORIENTED ZONES PROGRAM

Project:	2018002	Function:	Human Services	Council:	99
Priority No.:		Program:	Human Services	Nbrd Board:	99
TMK:		Department:	LAND MANAGEMENT	Senate:	
				House:	
				Other:	

Description: Provision of funds for the acquisition of land and other miscellaneous costs for the development of low income affordable housing and any necessary related infrastructure improvements, with preference to housing in transit oriented zones.

Justification: Develop affordable housing in transit oriented zones.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	8,059	49,000	0	0	0	0	0	0	0	0	0
CONST	GI	5,541	0	0	0	0	0	0	0	0	0	0
OTHER	GI	349	1,000	0	0	0	0	0	0	0	0	0
	Total	13,949	50,000	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	7/1/2017	12/31/2024
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	30

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Department Summary: LAND MANAGEMENT

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
GI	13,949	50,000	0	0	0	0	0	0	0	0	0
Total	13,949	50,000	0	0	0	0	0	0	0	0	0

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	8,059	49,000	0	0	0	0	0	0	0	0	0
CONST	5,541	0	0	0	0	0	0	0	0	0	0
OTHER	349	1,000	0	0	0	0	0	0	0	0	0
Total	13,949	50,000	0	0	0	0	0	0	0	0	0

Program Summary: Human Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
AF	13,551	5,000	40,843	7,260	7,000	7,000	7,000	7,000	7,000	42,260	30,000
CD	95,958	6,249	3,126	362	0	0	0	0	0	362	0
FG	57,915	6,004	2,394	1,624	1,624	1,624	1,624	1,624	1,624	9,744	0
GI	78,423	55,000	39,000	0	0	0	0	0	0	0	0
RL	0	0	0	400	0	0	0	0	0	400	0
Total	245,848	72,252	85,363	9,646	8,624	8,624	8,624	8,624	8,624	52,766	30,000

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	34,218	49,006	20,306	5	5	5	5	5	5	30	30
PLAN	217	6	707	5	5	5	5	5	5	30	30
DGN	3,885	6	857	5	5	5	5	5	5	30	30
CONST	27,032	6	12,651	5	5	5	5	5	5	30	30
INSP	500	0	0	0	0	0	0	0	0	0	0
EQUIP	4,450	0	0	0	0	0	0	0	0	0	0
OTHER	175,545	23,228	50,842	9,626	8,604	8,604	8,604	8,604	8,604	52,646	29,880
Total	245,848	72,252	85,363	9,646	8,624	8,624	8,624	8,624	8,624	52,766	30,000

Function Summary: Human Services

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
AF	13,551	5,000	40,843	7,260	7,000	7,000	7,000	7,000	7,000	42,260	30,000
CD	95,958	6,249	3,126	362	0	0	0	0	0	362	0
FG	57,915	6,004	2,394	1,624	1,624	1,624	1,624	1,624	1,624	9,744	0
GI	78,423	55,000	39,000	0	0	0	0	0	0	0	0
RL	0	0	0	400	0	0	0	0	0	400	0
Total	245,848	72,252	85,363	9,646	8,624	8,624	8,624	8,624	8,624	52,766	30,000

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	34,218	49,006	20,306	5	5	5	5	5	5	30	30
PLAN	217	6	707	5	5	5	5	5	5	30	30
DGN	3,885	6	857	5	5	5	5	5	5	30	30
CONST	27,032	6	12,651	5	5	5	5	5	5	30	30
INSP	500	0	0	0	0	0	0	0	0	0	0
EQUIP	4,450	0	0	0	0	0	0	0	0	0	0
OTHER	175,545	23,228	50,842	9,626	8,604	8,604	8,604	8,604	8,604	52,646	29,880
Total	245,848	72,252	85,363	9,646	8,624	8,624	8,624	8,624	8,624	52,766	30,000

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AIEA DISTRICT PARK

Project:	1998134	Function:	Culture - Recreation	Council:	08
Priority No.:		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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	252	50	0	0	0	0	0	0	0	0	0
DGN	PP	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	1,691	1,075	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
EQUIP	PP	0	0	0	0	0	0	0	0	0	0	0
	Total	1,943	1,125	0	0	0	0	0	0	0	0	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 2020-2025

AIKAHI COMMUNITY PARK SAFETY FENCE IMPROVEMENTS

Project:	2019136	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, construct and inspect park improvements.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	97	0	0	0	0	0	0	0	0
INSP	GI	0	0	1	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	7/1/2018	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	15

Six-Year CIP and Budget FY 2020-2025

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	CF	4,056	0	0	0	0	0	0	0	0	0	0
OTHER	CF	0	0	0	0	0	0	0	0	0	0	0
	Total	4,056	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
LAND	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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AINA KOA NEIGHBORHOOD PARK

Project:	2017098	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	03
TMK:	35036014	Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and provide related equipment for park improvements.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	10	5	0	0	0	0	0	0	0	0
DGN	GI	0	40	10	0	0	0	0	0	0	0	0
CONST	GI	0	170	125	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	110	0	0	0	0	0	0	0	0
	Total	0	220	250	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2021
DGN	7/1/2017	12/31/2021
CONST	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	15

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ALA MOANA REGIONAL PARK

Project:	1998107	Function:	Culture - Recreation	Council:	04
Priority No.:	1	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 and address climate change, sustainability and resiliency.

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

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	2,356	5	5	10	0	0	0	0	0	10	0
PLAN	PP	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	4,897	4,000	400	10	50	50	50	0	0	160	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	8,795	15,985	7,146	3,625	1,940	1,940	1,940	0	0	9,445	0
CONST	PP	2,932	0	439	335	0	0	0	0	0	335	0
INSP	GI	446	5	5	10	5	5	5	0	0	25	0
EQUIP	GI	86	5	5	10	5	5	5	0	0	25	0
	Total	19,801	20,000	8,000	4,000	2,000	2,000	2,000	0	0	10,000	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2013	12/31/2023
DGN	7/1/2013	12/31/2023
CONST	6/1/2008	12/31/2023
INSP	6/1/2008	12/31/2023
EQUIP	7/1/2015	12/31/2023

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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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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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ALA WAI PROMENADE IMPROVEMENTS

Project:	2019137	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, and construct improvements, including the repair and maintenance of the Ala Wai Promenade.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	5	0	0	0	0	0	0	0	0
DGN	GI	0	0	5	0	0	0	0	0	0	0	0
CONST	GI	0	0	90	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	7/1/2018	12/31/2021
DGN	7/1/2018	12/31/2021
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

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AUWAIOLIMU NEIGHBORHOOD PARK

Project:	2019138	Function:	Culture - Recreation	Council:	06
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	12
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Design and construct Auwaiolimu Neighborhood Park improvements to mitigate homeless encroachments.

Justification: Improve recreational resource; mitigate homeless encroachments and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	0	0	25	0	0	0	0	0	0	0	0
CONST	GI	0	0	75	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	7/1/2018	12/31/2021
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	0

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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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
	Total	1,285	0	100	0	0	0	0	0	0	0	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

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 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: Plan, design and construct canoe halaus improvements at various parks.

Justification: Improve recreational resources and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	5	100	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	1,000	0	0	0	0	0	0	0	0	0
	Total	5	1,200	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2019
DGN	1/1/2018	9/30/2019
CONST	10/1/2019	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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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 resources for the community and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	12/31/2019
CONST	1/30/2015	6/30/2019

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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COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM PARK IMPROVEMENTS

Project:	2019084	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 and inspect improvements for parks that serve areas of 51% or more low and moderate income households. To meet U. S. Department of Housing and Urban Development (HUD) environmental review regulatory requirements, no Community Development Block Grant (CDBG) funds shall be encumbered for design or construction prior to the completion of an environmental review and documentation.

Justification: Improve parks which serve 51% or more low and moderate income households address climate change, sustainability and resiliency.

Use of Funds: Design and construct parks improvements which serve an area with 51% or more low and moderate income households.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	CD	0	0	610	0	0	0	0	0	0	0	0
PLAN	GI	50	0	100	0	0	0	0	0	0	0	0
DGN	CD	2,200	0	1,480	2,310	0	0	0	0	0	2,310	0
CONST	CD	0	0	0	2,157	6,217	6,444	4,615	0	0	19,433	0
INSP	CD	0	0	0	0	0	0	0	0	0	0	0
EQUIP	CD	0	0	0	0	0	0	0	0	0	0	0
OTHER	GN	0	0	0	0	0	0	0	0	0	0	0
	Total	2,250	0	2,190	4,467	6,217	6,444	4,615	0	0	21,743	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2018	9/30/2023
DGN	10/1/2019	6/30/2024
CONST	7/1/2018	6/30/2026
INSP	7/1/2018	6/30/2026

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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DEPARTMENT OF PARKS AND RECREATION NPDES SMALL MS4 PERMIT PROGRAM

Project:	2007054	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, 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.

Use of Funds: Design and construct NPDES improvements for parks.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	841	5	0	0	0	0	0	0	0	0	0
DGN	GI	1,202	20	330	60	0	130	160	0	0	350	0
CONST	GI	1,178	455	0	2,100	2,200	400	0	850	1,000	6,550	0
INSP	GI	165	10	0	0	180	30	0	70	80	360	0
EQUIP	GI	0	10	0	0	0	0	0	0	0	0	0
	Total	3,385	500	330	2,160	2,380	560	160	920	1,080	7,260	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.:		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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	50	0	0	0	5	0	0	0	5	0
CONST	GI	0	750	0	0	0	1,495	1,500	0	0	2,995	0
INSP	GI	0	0	0	0	0	300	300	0	0	600	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	800	0	0	0	1,800	1,800	0	0	3,600	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	9/30/2017
DGN	7/1/2014	9/30/2023
CONST	12/31/2019	12/31/2023
INSP	12/31/2019	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

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DIVISION OF URBAN FORESTRY/HORTICULTURE SERVICES OFFICE REPLACEMENT

Project:	2010089	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:	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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	250	0	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	250	100	0	0	0	0	0	0	0	0	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 TREE FARM - PATSY T MINK CENTRAL OAHU REGIONAL PAR

Project:	2014105	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, 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 and address climate change, sustainability and resiliency. The tree farm will replace the current tree farm in Waiawa on land leased from Kamehameha Schools.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	50	0	0	0	0	0	0	0	0	0	0
DGN	GI	50	200	200	0	5	0	0	0	0	5	0
CONST	GI	0	0	0	0	1,395	0	0	0	0	1,395	0
INSP	GI	0	0	0	0	50	0	0	0	0	50	0
EQUIP	GI	0	0	0	0	50	0	0	0	0	50	0
	Total	100	200	200	0	1,500	0	0	0	0	1,500	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	12/31/2023
INSP	7/1/2017	12/31/2023
EQUIP	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

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DOLE COMMUNITY PARK

Project:	2018088	Function:	Culture - Recreation	Council:	06
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	10
TMK:	21038007	Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Design, construct and provide related equipment for park improvements.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	0	25	0	0	0	0	0	0	0	0	0
CONST	GI	0	375	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	100	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	7/1/2017	12/31/2022
CONST	7/1/2017	12/31/2022
EQUIP	7/1/2017	12/31/2022

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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DOWNTOWN HONOLULU - KAKAAKO FENCED DOG PARK

Project:	2018089	Function:	Culture - Recreation	Council:	06
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	11
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design park improvements.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	65	0	0	0	0	0	0	0	0	0
DGN	GI	0	85	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	7/1/2017	12/31/2022
DGN	7/1/2017	12/31/2022

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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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	2	0	0	0	0	0	0	0	0	0
DGN	GI	27	86	10	0	0	0	0	0	0	0	0
CONST	GI	184	447	440	0	0	0	0	0	0	0	0
INSP	GI	0	26	0	0	0	0	0	0	0	0	0
	Total	211	561	450	0	0	0	0	0	0	0	0

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

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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ENERGY CONSERVATION IMPROVEMENTS AT VARIOUS PARKS

Project:	2018090	Function:	Culture - Recreation	Council:	99
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design energy conservation improvements at various parks.

Justification: Improve energy efficiency at various parks and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	100	0	0	0	0	0	0	0	0	0
DGN	GI	0	400	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	7/1/2017	12/31/2022
DGN	7/1/2017	12/31/2022

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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EWA COMMUNITY POOL

Project:	2018091	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 park improvements.

Justification: Improve recreational resource for the community and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	150	0	0	0	0	0	0	0	0	0
DGN	GI	0	150	0	0	0	0	0	0	0	0	0
	Total	0	300	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2022
DGN	7/1/2017	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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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0
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	0
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	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
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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HAHAIONE NEIGBORHOOD PARK

Project:	2018092	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	01
TMK:	39038001	Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and provide related equipment for park improvements.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	5	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	125	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	110	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	7/1/2017	12/31/2022
DGN	7/1/2017	12/31/2022
CONST	7/1/2017	12/31/2022
EQUIP	7/1/2017	12/31/2022

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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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 community and address climate change, sustainability and resiliency.

Use of Funds: .

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	7/1/2018	12/31/2021
DGN	7/1/2018	12/31/2021
CONST	7/1/2018	12/31/2021
INSP	7/1/2018	12/31/2021
EQUIP	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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HALEIWA BEACH PARK REFURBISHMENT

Project:	2016094	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:	62001002	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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	7/1/2017	12/31/2021
DGN	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	15

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HANAUMA BAY NATURE PRESERVE

Project:	2016101	Function:	Culture - Recreation	Council:	04
Priority No.:	11	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 and address climate change, sustainability and resiliency.

Use of Funds: Design, construct, inspect sustainable park improvements and provide related equipment which include two replacement lifeguard towers.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HN	0	0	0	0	0	0	0	0	0	0	0
DGN	HN	347	0	0	110	0	0	0	0	0	110	0
CONST	HN	2,179	0	0	1,340	0	0	0	0	0	1,340	0
INSP	HN	134	0	0	50	0	0	0	0	0	50	0
EQUIP	HN	0	0	0	300	0	0	0	0	0	300	0
	Total	2,660	0	0	1,800	0	0	0	0	0	1,800	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 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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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

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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: Plan, design, construct and inspect improvements to park facilities such as the parking lot, stadium, comfort station and park entryway.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	511	0	200	0	500	0	0	5	0	505	5
CONST	GI	792	0	0	0	0	1,000	2,000	1,000	0	4,000	1,000
INSP	GI	0	0	0	0	0	50	0	195	0	245	195
	Total	1,303	0	200	0	500	1,050	2,000	1,200	0	4,750	1,200

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2019
DGN	7/1/2016	12/31/2025
CONST	6/30/2021	12/31/2025
INSP	6/30/2021	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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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	515	0	0	0	515	0
CONST	GI	0	0	0	0	0	0	2,500	3,000	0	5,500	0
INSP	GI	0	0	0	0	0	0	50	50	0	100	0
	Total	0	0	0	0	0	515	2,550	3,050	0	6,115	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2021	12/31/2022
CONST	7/1/2022	12/31/2025
INSP	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	30

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HOA ALOHA NEIGHBORHOOD PARK

Project:	2018093	Function:	Culture - Recreation	Council:	07
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	18
TMK:	11059005	Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Design, construct and provide related equipment for exercise-equipment at park.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
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	7/1/2017	12/31/2022
CONST	7/1/2017	12/31/2022
EQUIP	7/1/2017	12/31/2022

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 2020-2025

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:	66002001	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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	100	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	800	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	7/1/2017	12/31/2021
DGN	7/1/2017	12/31/2021
CONST	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	15

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KAHALA COMMUNITY PARK

Project:	2019139	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: Design and construct repairs to the roof of the recreation center building.

Justification: Improve recreational resource for the community and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	0	0	110	0	0	0	0	0	0	0	0
CONST	GI	0	0	850	0	0	0	0	0	0	0	0
	Total	0	0	960	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2018	12/31/2021
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	0

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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	3,200	0	300	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	3,200	0	500	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	12/31/2021

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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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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	CF	12,203	0	0	0	0	0	0	0	0	0	0
LAND	GI	0	0	0	0	0	0	0	0	0	0	0
OTHER	CF	0	0	0	0	0	0	0	0	0	0	0
OTHER	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	12,203	0	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	100

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KAILUA DISTRICT PARK - SKATE PARK IMPROVEMENTS

Project:	2019140	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, construct, inspect and provided related equipment for skate park improvements.

Justification: Improve recreational resource for the community and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	146	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	150	0	0	0	0	0	0	0	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
EQUIP	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

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KAIMANA BEACH IMPROVEMENTS

Project:	2019141	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, design, and construct outdoor shower and drainage improvements.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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
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	7/1/2018	12/31/2021
DGN	7/1/2018	12/31/2021
CONST	7/1/2018	12/31/2021

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

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KAIMUKI COMMUNITY PARK

Project:	2018094	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	04
TMK:	32005009	Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design construct, inspect and provide related equipment for park improvements.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	5	50	0	0	0	0	0	0	0	0
DGN	GI	0	10	100	0	0	0	0	0	0	0	0
CONST	GI	0	125	298	0	0	0	0	0	0	0	0
INSP	GI	0	0	1	0	0	0	0	0	0	0	0
EQUIP	GI	0	110	1	0	0	0	0	0	0	0	0
	Total	0	250	450	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2022
DGN	7/1/2017	12/31/2022
CONST	7/1/2017	12/31/2022
INSP	7/1/2018	12/31/2022
EQUIP	7/1/2017	12/31/2022

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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KALANIANAOLE BEACH PARK

Project:	2018095	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, design, construct inspect and provide related equipment including the installation of a play apparatus.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	100	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	500	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	5	0	0	0	0	0	0	0	0	0
	Total	0	715	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2022
DGN	7/1/2017	12/31/2022
CONST	7/1/2017	12/31/2022
INSP	7/1/2017	12/31/2022
EQUIP	7/1/2017	12/31/2022

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 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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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:	13004123	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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	7/1/2017	12/31/2019
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	15

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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) - Plan, design, construct, inspect and provide related equipment for park improvements.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
PLAN	PP	40	0	0	0	0	0	0	0	0	0	0
DGN	GI	93	0	150	0	1	1	0	0	0	2	0
CONST	GI	0	0	700	0	1,500	1,500	0	0	0	3,000	0
INSP	GI	0	0	0	0	100	10	0	0	0	110	0
	Total	133	0	850	0	1,601	1,511	0	0	0	3,112	0

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	20

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KAMANELE SQUARE IMPROVEMENTS

Project:	2019142	Function:	Culture - Recreation	Council:	05
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	07
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct, inspect and provide related equipment for park improvements and playground equipment at Kamanele Square in Manoa.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds: .

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	50	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	64	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	216	0	0	0	0	0	0	0	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
EQUIP	7/1/2018	12/30/2021

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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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0
CONST	GI	2,289	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	3,230	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2021	12/31/2025
CONST	7/1/2011	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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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	8	0	0	0	0	0	0	0	0	0	0
DGN	GI	20	0	0	0	50	0	0	0	0	50	0
CONST	GI	329	0	0	0	4,000	0	0	0	0	4,000	0
CONST	PP	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	50	0	0	0	0	50	0
	Total	358	0	0	0	4,100	0	0	0	0	4,100	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2014	6/30/2022
CONST	7/1/2014	6/30/2023
INSP	7/1/2014	6/30/2023

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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KAPI'OLANI REGIONAL PARK, WAIKIKI

Project:	1998100	Function:	Culture - Recreation	Council:	04
Priority No.:	7	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 park improvements.

Justification: Improve recreational resource and address climate change, sustainability and resiliency .

Use of Funds: Design and construct sustainable park improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	7	0	0	0	0	0	0	0	0	0	0
DGN	GI	54	0	48	0	20	20	20	20	0	80	0
DGN	PP	0	0	0	20	0	0	0	0	0	20	0
CONST	GI	138	0	0	0	80	80	80	80	0	320	0
CONST	PP	0	0	443	564	0	0	0	0	0	564	0
INSP	GI	0	0	10	0	0	0	0	0	0	0	0
EQUIP	PP	0	0	0	0	0	0	0	0	0	0	0
	Total	199	0	501	584	100	100	100	100	0	984	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2018	6/30/2021
CONST	7/1/2019	12/31/2022
INSP	7/1/2018	12/31/2022

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

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KAPOLEI REGIONAL PARK

Project:	1973116	Function:	Culture - Recreation	Council:	01
Priority No.:	10	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	34
TMK:	91016002	Department:	Design and Construction	Senate:	19
				House:	40
				Other:	

Description: Design, construct and inspect park improvements.

Justification: Improve recreational resource for the community and address climate change, sustainability and resiliency .

Use of Funds: Design, construct and inspect sustainable park improvements

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	50	10	0	0	0	0	0	0	0	0	0
DGN	GI	454	10	0	50	0	0	0	0	0	50	0
CONST	GI	3,325	100	0	400	0	0	0	0	0	400	0
CONST	PP	0	145	0	197	0	0	0	0	0	197	0
INSP	GI	0	10	0	50	0	0	0	0	0	50	0
EQUIP	GI	0	870	0	0	0	0	0	0	0	0	0
EQUIP	PP	0	5	0	0	0	0	0	0	0	0	0
	Total	3,829	1,150	0	697	0	0	0	0	0	697	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2016	6/30/2021
CONST	7/1/2017	12/31/2022
INSP	7/1/2019	12/31/2022
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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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	GI	4,250	0	0	0	0	0	0	0	0	0	0
OTHER	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	4,250	0	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	100

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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 park improvements such as the road barriers along the entire roadway from Lagoon Drive entrance and resurface/reconstruct 464 parking stalls and baseyard parking.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	25	0	0	0	5	0	0	0	0	5	0
CONST	GI	0	0	0	0	3,500	0	0	0	0	3,500	0
INSP	GI	0	0	0	0	25	0	0	0	0	25	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	25	0	0	0	3,530	0	0	0	0	3,530	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2012	6/30/2018
CONST	7/1/2018	6/30/2022
INSP	7/1/2018	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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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	20

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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 and construct park improvements including roof repair, gymnasium floor repair, and meeting room repair.

Justification: Improve recreational resource for the community and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	0	0	205	0	0	0	0	0	0	0	0
DGN	PP	121	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	1,475	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	1,680	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2018	12/31/2021
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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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: Plan, design and construct parking improvements, including but not limited to, redesign of existing parking lot layout and the construction of additional parking areas.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	250	0	0	0	0	0	0	0	0
PLAN	PP	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	14	0	750	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	2,000	0	0	0	0	0	0	0	0
CONST	PP	142	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	155	0	3,000	0	0	0	0	0	0	0	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

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 COMFORT STATION IMPROVEMENTS

Project:	2019143	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, design and construct comfort station expansion and improvements

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	50	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	400	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	7/1/2018	12/31/2021
DGN	7/1/2018	12/31/2021
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	20

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KOKO HEAD DISTRICT PARK GYMNASIUM FLOOR IMPROVEMENTS

Project:	2018096	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	01
TMK:	39012001	Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Design and construct a new wood floor in the park gymnasium.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	0	150	0	0	0	0	0	0	0	0	0
CONST	GI	0	400	0	0	0	0	0	0	0	0	0
	Total	0	550	0	0	0	0	0	0	0	0	0

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

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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KUALOA REGIONAL PARK

Project:	2014093	Function:	Culture - Recreation	Council:	02
Priority No.:	6	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 due to safety and liability reasons and address climate change, sustainability and resiliency . 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 inspect sustainable park improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	300	50	5	5	0	0	0	0	0	5	0
CONST	GI	0	0	2,266	1,500	0	0	0	0	0	1,500	0
CONST	PP	0	545	535	170	0	0	0	0	0	170	0
INSP	GI	0	0	195	200	0	0	0	0	0	200	0
EQUIP	PP	0	5	0	0	0	0	0	0	0	0	0
	Total	300	600	3,001	1,875	0	0	0	0	0	1,875	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	12/31/2022
INSP	7/1/2018	12/31/2022

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	0
Maint Cost	0
Useful Life	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: Upgrade comfort stations and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	0	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	900	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2018	12/31/2021
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	20

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KUHIO BEACH PROMENADE IMPROVEMENTS

Project:	2019144	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, design and construct improvements to Kuhio Beach Promenade, including the removal and redesign of all pavilions makai of Kalakaua Avenue between Kuhio Beach Hula Mound and Waikiki Wall.

Justification: Improve recreational resource and address climate change, sustainability and resiliency

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	100	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	1,400	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	7/1/2018	12/31/2021
DGN	7/1/2018	12/31/2021
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	0

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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	90	0	0	0	0	0	0	0	0	0	0
CONST	GI	943	0	0	0	0	0	0	0	0	0	0
	Total	1,032	0	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	20

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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	5	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	20	0	0	0	0	0	0	0	0	0
INSP	GI	0	5	0	0	0	0	0	0	0	0	0
	Total	0	40	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2018
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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MAKALAPA NEIGHBORHOOD PARK IMPROVEMENTS

Project:	2018097	Function:	Culture - Recreation	Council:	07
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	18
TMK:	99003039	Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Design, construct and provide related equipment for park improvements.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
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	7/1/2017	12/31/2022
CONST	7/1/2017	12/31/2022
EQUIP	7/1/2017	12/31/2022

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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MAKIKI DISTRICT PARK PARKING LOT IMPROVEMENTS

Project:	2019075	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: Plan, design and construct park improvements.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	200	0	0	0	0	0	0	0	0
DGN	GI	0	0	200	0	0	0	0	0	0	0	0
CONST	GI	0	0	100	0	0	0	0	0	0	0	0
CONST	PP	0	0	90	0	0	0	0	0	0	0	0
	Total	0	0	590	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2018	6/30/2019
DGN	7/1/2018	6/30/2019
CONST	7/1/2019	6/30/2020

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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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	0	0	0	0	0	0	0	0	0
CONST	GI	3,089	0	0	0	0	0	0	0	0	0	0
CONST	PP	83	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	3,502	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	7/1/2014	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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	151	0	0	0	0	0	0	0	0	0	0
DGN	GI	357	0	5	0	0	0	0	0	0	0	0
CONST	GI	740	0	400	0	0	0	0	0	0	0	0
INSP	GI	0	0	95	0	0	0	0	0	0	0	0
	Total	1,248	0	500	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	8/30/2019
CONST	7/20/2017	7/20/2020
INSP	7/1/2019	7/20/2020

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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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	0	0	0	0	0	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	0
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	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2016
DGN	7/1/2018	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 2020-2025

MELEMANU NEIGHBORHOOD PARK PLAYCOURT REPLACEMENT

Project:	2019145	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	25
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and inspect a new playcourt.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	25	0	0	0	0	0	0	0	0
DGN	GI	0	0	25	0	0	0	0	0	0	0	0
CONST	GI	0	0	249	0	0	0	0	0	0	0	0
INSP	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	7/1/2019	6/30/2020
DGN	1/1/2020	12/31/2020
CONST	7/1/2021	12/31/2021
INSP	7/1/2021	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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MILILANI DISTRICT PARK IMPROVEMENTS

Project:	2018098	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	25
TMK:	94005041	Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design and construct park improvements.

Justification: Improve recreational resource for the community and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	200	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	1,100	0	0	0	0	0	0	0	0	0
CONST	PP	0	0	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**
PLAN	7/1/2017	12/31/2022
DGN	7/1/2017	12/31/2022
CONST	7/1/2017	12/31/2022

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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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	12	100	0	0	0	0	0	0	0	0	0
DGN	GI	321	150	0	0	0	0	0	0	0	0	0
CONST	GI	1,773	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	2,106	250	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2019	12/31/2020
DGN	7/1/2019	12/31/2020

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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MILILANI PARKS IMPROVEMENTS

Project:	2019146	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	25
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and inspect improvements at various parks in Mililani including, but not limited to, Noholoa Neighborhood Park, Hokuahiahi Neighborhood Park, Mililani Neighborhood Park, Holanialii Neighborhood Park, Kuahelani Neighborhood Park, Mililani Waena Neighborhood Park, Kipapa Neighborhood Park, Makaunulau Community Park, and Kaomaaiku Neighborhood Park and provide lighting improvements at Mililani Mauka District Park.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	200	0	0	0	0	0	0	0	0
DGN	GI	0	0	200	0	0	0	0	0	0	0	0
CONST	GI	0	0	1,500	0	0	0	0	0	0	0	0
INSP	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	7/1/2019	6/30/2020
DGN	7/1/2019	6/30/2020
CONST	7/1/2020	6/30/2021
INSP	7/1/2020	6/30/2021

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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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	141	0	0	0	0	0	0	0	0	0	0
DGN	GI	1,635	0	0	0	0	0	0	0	0	0	0
CONST	GI	1,496	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	3,272	0	0	0	0	0	0	0	0	0	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

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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MOKAUEA STREET MINI PARK IMPROVEMENTS

Project:	1995116	Function:	Culture - Recreation	Council:	07
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	15
TMK:	12001050	Department:	Design and Construction	Senate:	16
				House:	30
				Other:	

Description: Design, construct and provide equipment for park improvements.

Justification: Improve recreational resources and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
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	7/1/2017	6/30/2019
CONST	7/1/2017	6/30/2019
EQUIP	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	15

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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	113	10	50	0	0	0	0	0	10	10	0
PLAN	PP	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	644	10	50	0	0	0	0	0	200	200	0
DGN	PP	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	0	470	850	0	0	0	0	0	1,200	1,200	0
CONST	PP	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	10	50	0	0	0	0	0	0	0	0
INSP	PP	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	500	0	0	0	0	0	0	0	0	0
EQUIP	PP	0	0	0	0	0	0	0	0	0	0	0
	Total	757	1,000	1,000	0	0	0	0	0	1,410	1,410	0

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

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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0	0	0	0	0	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	0
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	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	GN	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	411	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	6/30/2018
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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0
DGN	GI	3,082	0	0	0	0	0	0	0	0	0	0
CONST	GI	8,843	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	11,974	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	7/1/2014	6/30/2016
CONST	7/1/2016	6/30/2018

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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	200	75	0	0	0	0	0	0	0	0	0
CONST	GI	0	600	0	0	0	0	0	0	0	0	0
	Total	200	675	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2018
DGN	7/1/2015	12/31/2018
CONST	7/1/2019	6/30/2020

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.:	12	Program:	Participant, Spectator And Other Recreation	Nbrd Board:	25
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Design and construct park improvements.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds: Design and construct park sustainable improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	400	185	0	50	0	0	0	0	0	50	0
CONST	GI	0	2,750	0	1,550	0	0	0	0	0	1,550	0
CONST	PP	0	0	0	21	0	0	0	0	0	21	0
	Total	400	2,935	0	1,621	0	0	0	0	0	1,621	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2019
DGN	7/1/2015	12/31/2019
CONST	7/1/2017	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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PATSY T. MINK CENTRAL OAHU REGIONAL PARK - PICKLEBALL COURTS

Project:	2018099	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 park improvements.

Justification: Improve recreational resource for the community and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	7/1/2017	12/31/2022
DGN	7/1/2017	12/31/2022

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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PATSY T. MINK CENTRAL OAHU REGIONAL PARK - TENNIS COURT LIGHTING

Project:	2018100	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: Design and construct park improvements.

Justification: Improve recreational resource for the community and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	0	30	0	0	0	0	0	0	0	0	0
CONST	GI	0	1,750	0	0	0	0	0	0	0	0	0
	Total	0	1,780	0	0	0	0	0	0	0	0	0

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

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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PAUAHI RECREATION CENTER

Project:	2019086	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, inspect and provide related equipment for park improvements.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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
CONST	GI	0	0	400	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	7/1/2018	6/30/2019
DGN	7/1/2018	6/30/2019
CONST	7/1/2019	6/30/2020

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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PEARL HARBOR HISTORIC TRAIL

Project:	2015104	Function:	Culture - Recreation	Council:	08
Priority No.:		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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	10	0	0	0	0	0	0	0	0	0
CONST	GI	0	1,000	0	0	0	0	0	0	0	0	0
INSP	GI	0	90	0	0	0	0	0	0	0	0	0
	Total	499	1,100	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	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

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PETRIE COMMUNITY PARK

Project:	2000004	Function:	Culture - Recreation	Council:	04
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	04
TMK:	32045002	Department:	Design and Construction	Senate:	10
				House:	19
				Other:	

Description: Plan, design, construct and provide related equipment for a play apparatus.

Justification: Improve recreational resource for the community and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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
INSP	GI	0	0	0	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	7/1/2018	6/30/2019
DGN	7/1/2016	6/30/2019
CONST	7/1/2018	6/30/2019
EQUIP	6/30/2018	6/30/2019

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	15
Maint Cost	0
Useful Life	30

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POKAI BAY BEACH PARK

Project:	2018101	Function:	Culture - Recreation	Council:	01
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	24
TMK:	85001006	Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan and design park improvements.

Justification: Improve recreational resource for the community and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	120	0	0	0	0	0	0	0	0	0
DGN	GI	0	125	0	0	0	0	0	0	0	0	0
	Total	0	245	0	0	0	0	0	0	0	0	0

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

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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PRESERVATION AND CONSERVATION LANDS

Project:	2009041	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: 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 and address climate change, sustainability and resiliency .

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	CF	600	10,532	1,000	1,000	1,000	1,000	1,000	1,000	1,000	6,000	5,000
OTHER	CF	2,325	1	9,503	10,700	6,000	6,000	6,000	6,000	6,000	40,700	25,000
	Total	2,925	10,533	10,503	11,700	7,000	7,000	7,000	7,000	7,000	46,700	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

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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	702	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	702	0	0	0	0	0	0	0	0	0	0

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

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RECONSTRUCT WASTEWATER SYSTEMS FOR PARKS

Project:	1998105	Function:	Culture - Recreation	Council:	99
Priority No.:	4	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 and address climate change, sustainability and resiliency .

Use of Funds: Design, construct and inspect sustainable park wastewater systems improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	268	20	5	0	0	0	0	0	0	0	0
DGN	GI	2,446	200	100	100	100	100	100	100	100	600	100
CONST	GI	5,105	2,760	1,380	1,890	2,890	2,890	2,890	2,890	2,890	16,340	2,890
CONST	PP	250	0	0	0	0	0	0	0	0	0	0
INSP	GI	180	10	10	10	10	10	10	10	10	60	10
EQUIP	GI	0	10	5	0	0	0	0	0	0	0	0
	Total	8,250	3,000	1,500	2,000	3,000	3,000	3,000	3,000	3,000	17,000	3,000

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.:		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. and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	58	55	0	0	0	0	0	0	0	0	0
DGN	GI	2,643	130	0	0	0	0	0	0	0	0	0
CONST	GI	12,264	1,655	0	0	0	0	0	0	0	0	0
INSP	GI	113	5	0	0	0	0	0	0	0	0	0
EQUIP	GI	383	155	0	0	0	0	0	0	0	0	0
	Total	15,461	2,000	0	0	0	0	0	0	0	0	0

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. 2 IMPROVEMENTS

Project:	1998129	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 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, and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	5	0	0	0	0	0	0	0	0	0
PLAN	PP	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	1,786	20	0	0	0	0	0	0	0	0	0
DGN	PP	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	10,449	1,805	0	0	0	0	0	0	0	0	0
CONST	PP	917	0	0	0	0	0	0	0	0	0	0
INSP	GI	70	15	0	0	0	0	0	0	0	0	0
EQUIP	GI	347	155	0	0	0	0	0	0	0	0	0
	Total	13,568	2,000	0	0	0	0	0	0	0	0	0

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. 3 IMPROVEMENTS

Project:	1998130	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 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. and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	56	5	0	0	0	0	0	0	0	0	0
DGN	GI	4,055	30	0	0	0	0	0	0	0	0	0
CONST	GI	10,449	1,795	0	0	0	0	0	0	0	0	0
CONST	PP	36	0	0	0	0	0	0	0	0	0	0
INSP	GI	96	15	0	0	0	0	0	0	0	0	0
EQUIP	GI	232	155	0	0	0	0	0	0	0	0	0
	Total	14,923	2,000	0	0	0	0	0	0	0	0	0

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.:		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,and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	16	110	0	0	0	0	0	0	0	0	0
DGN	GI	3,939	310	0	0	0	0	0	0	0	0	0
CONST	GI	11,314	1,670	0	0	0	0	0	0	0	0	0
CONST	PP	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	170	5	0	0	0	0	0	0	0	0	0
EQUIP	GI	613	5	0	0	0	0	0	0	0	0	0
	Total	16,051	2,100	0	0	0	0	0	0	0	0	0

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. 5 IMPROVEMENTS

Project:	2005117	Function:	Culture - Recreation	Council:	09
Priority No.:		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, and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	5	0	0	0	0	0	0	0	0	0
DGN	GI	449	30	0	0	0	0	0	0	0	0	0
CONST	GI	2,412	455	0	0	0	0	0	0	0	0	0
INSP	GI	0	5	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	5	0	0	0	0	0	0	0	0	0
	Total	2,860	500	0	0	0	0	0	0	0	0	0

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.:	3	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 and address climate change, sustainability and resiliency.

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

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	140	25	25	400	25	25	25	25	25	525	0
DGN	GI	4,880	170	1,154	1,680	75	75	75	75	75	2,055	0
DGN	PP	90	0	66	0	0	0	0	0	0	0	0
CONST	GI	26,503	5,755	6,885	8,790	9,850	9,850	9,850	9,850	9,850	58,040	0
CONST	PP	1,409	98	331	706	0	0	0	0	0	706	0
INSP	GI	1,028	25	491	380	25	25	25	25	25	505	0
INSP	PP	0	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	917	25	494	650	25	25	25	25	25	775	0
EQUIP	PP	0	5	126	0	0	0	0	0	0	0	0
	Total	34,967	6,103	9,571	12,606	10,000	10,000	10,000	10,000	10,000	62,606	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2027
DGN	7/1/2014	6/30/2027
CONST	7/1/2014	6/30/2027
INSP	7/1/2014	6/30/2027
EQUIP	7/1/2014	6/30/2027

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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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:	11063014	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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	1	0	0	0	0	0	0	0	0	0
DGN	GI	60	50	0	0	0	0	0	0	0	0	0
CONST	GI	310	350	0	0	0	0	0	0	0	0	0
INSP	GI	0	40	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	109	0	0	0	0	0	0	0	0	0
	Total	370	550	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	12/31/2021
DGN	7/1/2015	12/31/2021
CONST	7/1/2016	12/31/2021
INSP	7/1/2016	12/31/2021
EQUIP	7/1/2016	12/31/2021

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 COMFORT STATION IMPROVEMENTS

Project:	2019087	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, design, construct, inspect and provide related equipment for park improvements.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	0	0	100	0	0	0	0	0	0	0	0
CONST	GI	0	0	250	0	0	0	0	0	0	0	0
	Total	0	0	350	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2019	12/31/2021
CONST	7/1/2019	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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THOMAS SQUARE

Project:	2014096	Function:	Culture - Recreation	Council:	05
Priority No.:		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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	220	15	5	0	0	0	0	0	0	0	0
DGN	GI	1,239	490	100	0	0	0	0	0	0	0	0
CONST	DV	0	0	0	0	0	0	0	0	0	0	0
CONST	GI	2,764	4,145	685	0	0	0	0	0	0	0	0
CONST	PP	0	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	30	5	0	0	0	0	0	0	0	0
EQUIP	GI	0	20	5	0	0	0	0	0	0	0	0
	Total	4,223	4,700	800	0	0	0	0	0	0	0	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
INSP	7/2/2018	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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	467	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	4,856	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
EQUIP	PP	0	0	0	0	0	0	0	0	0	0	0
	Total	5,324	0	0	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	25

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WAIALAE IKI NEIGHBORHOOD PARK

Project:	2019088	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, inspect and provide related equipment for park improvements.

Justification: Improve recreational resource for the community and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	0	0	100	0	0	0	0	0	0	0	0
CONST	GI	0	0	400	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**
DGN	7/1/2018	6/30/2019
CONST	7/1/2019	6/30/2020

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 DISTRICT PARK LIGHTING IMPROVEMENTS

Project:	2017110	Function:	Culture - Recreation	Council:	02
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	27
TMK:	67001044	Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and inspect a new field lighting system to replace current system.

Justification: Improve recreational resource for the community and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	200	0	0	0	0	0	0	0	0	0
DGN	GI	100	430	0	0	0	0	0	0	0	0	0
CONST	GI	3,528	4,250	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	3,628	4,880	0	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

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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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	0
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	0
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	0

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

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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WAIAU DISTRICT PARK

Project:	2018102	Function:	Culture - Recreation	Council:	08
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	21
TMK:	98052002	Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct park improvements.

Justification: Improve recreational resource for the community and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	10	0	0	0	0	0	0	0	0	0
DGN	GI	187	10	0	0	0	0	0	0	0	0	0
CONST	GI	0	180	0	0	0	0	0	0	0	0	0
	Total	187	200	0	0	0	0	0	0	0	0	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

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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WAIAU NEIGHBORHOOD PARK

Project:	2018103	Function:	Culture - Recreation	Council:	08
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	21
TMK:	98050070	Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct and provide related equipment for park improvements

Justification: Improve recreational resources and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	5	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	150	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	125	0	0	0	0	0	0	0	0	0
	Total	0	300	0	0	0	0	0	0	0	0	0

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

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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WAIKIKI WAR MEMORIAL COMPLEX/WAIKIKI BEACH

Project:	1998117	Function:	Culture - Recreation	Council:	04
Priority No.:	8	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 and address climate change, sustainability and resiliency . Planning and design of a long term solution must be undertaken to mitigate the hazards.

Use of Funds: Plan and design facility improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	1,750	250	250	10	10	0	0	0	0	20	0
DGN	GI	500	250	10	300	500	1,000	0	0	0	1,800	0
CONST	GI	79	0	0	0	0	0	0	30,000	0	30,000	0
	Total	2,329	500	260	310	510	1,000	0	30,000	0	31,820	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	12/31/2021
DGN	7/1/2014	12/31/2021
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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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	150	0	1	0	0	0	0	0	0	0	0
DGN	GI	400	0	1	0	0	0	0	0	0	0	0
CONST	GI	1,482	0	147	0	0	0	0	0	0	0	0
INSP	GI	0	0	1	0	0	0	0	0	0	0	0
EQUIP	GI	117	0	0	0	0	0	0	0	0	0	0
	Total	2,149	0	150	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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WAIMANALO DISTRICT PARK

Project:	2011113	Function:	Culture - Recreation	Council:	03
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	32
TMK:	41009264	Department:	Design and Construction	Senate:	25
				House:	51
				Other:	

Description: Plan, design, construct, inspect and provide related equipment for park improvements.

Justification: Improve recreational resource for the community and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	4	0	0	0	0	0	0	0	0
DGN	GI	0	0	4	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	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	10	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2019	12/31/2021
DGN	7/1/2014	6/30/2016
CONST	7/1/2018	12/31/2020
INSP	7/1/2019	12/31/2021
EQUIP	7/1/2019	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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WAIPAHU DISTRICT PARK

Project:	2018085	Function:	Culture - Recreation	Council:	
Priority No.:		Program:	Participant, Spectator And Other Recreation	Nbrd Board:	
TMK:		Department:	Design and Construction	Senate:	
				House:	
				Other:	

Description: Plan, design, construct, inspect and provide related equipment for park improvements.

Justification: Improve recreational resource for the community and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	180	0	0	0	0	0	0	0	0
CONST	PP	88	83	0	0	0	0	0	0	0	0	0
EQUIP	PP	0	5	0	0	0	0	0	0	0	0	0
	Total	88	88	200	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2018	6/30/2019
DGN	7/1/2018	6/30/2019
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	15

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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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	269	0	10	0	200	0	0	0	0	200	0
DGN	GI	375	0	390	0	0	200	0	0	400	600	0
CONST	GI	6,087	0	0	0	0	0	1,000	0	2,000	3,000	0
INSP	GI	289	0	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	7,020	0	400	0	200	200	1,000	0	2,400	3,800	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	12/31/2021
DGN	7/1/2016	12/31/2021
CONST	7/1/2015	12/31/2027
INSP	7/1/2015	12/31/2027
EQUIP	7/1/2015	12/31/2027

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 resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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**
PLAN	7/1/2008	12/31/2011
DGN	7/1/2008	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

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
CD	2,200	0	2,090	4,467	6,217	6,444	4,615	0	0	21,743	0
CF	19,184	10,533	10,503	11,700	7,000	7,000	7,000	7,000	7,000	46,700	30,000
DV	500	0	0	0	0	0	0	0	0	0	0
FG	584	0	0	0	0	0	0	0	0	0	0
GI	214,156	70,136	43,540	23,840	29,421	21,736	22,610	48,270	17,890	163,767	7,940
GN	30	0	0	0	0	0	0	0	0	0	0
HN	2,660	0	0	1,800	0	0	0	0	0	1,800	0
PP	9,633	891	2,029	2,013	0	0	0	0	0	2,013	0
Total	248,947	81,560	58,163	43,820	42,638	35,180	34,225	55,270	24,890	236,023	37,940

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	21,109	10,532	1,000	1,000	1,000	1,000	1,000	1,000	1,000	6,000	5,000
PLAN	7,557	1,973	2,282	420	235	25	25	25	35	765	0
DGN	47,454	9,146	7,740	4,695	1,306	2,096	405	200	775	9,477	305
CONST	163,884	57,038	35,781	25,345	33,572	25,599	26,375	47,670	16,940	175,501	7,390
INSP	3,384	316	993	700	445	430	390	350	115	2,430	245
EQUIP	2,733	2,554	864	960	80	30	30	25	25	1,150	0
OTHER	2,825	1	9,503	10,700	6,000	6,000	6,000	6,000	6,000	40,700	25,000
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	248,947	81,560	58,163	43,820	42,638	35,180	34,225	55,270	24,890	236,023	37,940

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Program Summary: Participant, Spectator And Other Recreation

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
CD	2,200	0	2,090	4,467	6,217	6,444	4,615	0	0	21,743	0
CF	19,184	10,533	10,503	11,700	7,000	7,000	7,000	7,000	7,000	46,700	30,000
DV	500	0	0	0	0	0	0	0	0	0	0
FG	584	0	0	0	0	0	0	0	0	0	0
GI	214,156	70,136	43,540	23,840	29,421	21,736	22,610	48,270	17,890	163,767	7,940
GN	30	0	0	0	0	0	0	0	0	0	0
HN	2,660	0	0	1,800	0	0	0	0	0	1,800	0
PP	9,633	891	2,029	2,013	0	0	0	0	0	2,013	0
Total	248,947	81,560	58,163	43,820	42,638	35,180	34,225	55,270	24,890	236,023	37,940

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	21,109	10,532	1,000	1,000	1,000	1,000	1,000	1,000	1,000	6,000	5,000
PLAN	7,557	1,973	2,282	420	235	25	25	25	35	765	0
DGN	47,454	9,146	7,740	4,695	1,306	2,096	405	200	775	9,477	305
CONST	163,884	57,038	35,781	25,345	33,572	25,599	26,375	47,670	16,940	175,501	7,390
INSP	3,384	316	993	700	445	430	390	350	115	2,430	245
EQUIP	2,733	2,554	864	960	80	30	30	25	25	1,150	0
OTHER	2,825	1	9,503	10,700	6,000	6,000	6,000	6,000	6,000	40,700	25,000
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	248,947	81,560	58,163	43,820	42,638	35,180	34,225	55,270	24,890	236,023	37,940

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ALA WAI GOLF COURSE CLUBHOUSE ROOF RECONSTRUCTION

Project:	2019076	Function:	Culture - Recreation	Council:	05
Priority No.:		Program:	Special Recreation Facilities	Nbrd Board:	08
TMK:		Department:	Design and Construction	Senate:	10
				House:	30
				Other:	

Description: Design and reconstruct clubhouse improvements.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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
INSP	GI	0	0	0	0	50	50	0	0	0	100	0
	Total	0	0	150	0	800	800	0	0	0	1,600	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	12/1/2018	8/31/2019
CONST	7/1/2020	12/31/2022
INSP	7/1/2020	12/31/2022

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

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ALA WAI GOLF COURSE ENTRANCE IMPROVEMENTS

Project:	2019089	Function:	Culture - Recreation	Council:	05
Priority No.:		Program:	Special Recreation Facilities	Nbrd Board:	08
TMK:		Department:	Design and Construction	Senate:	10
				House:	30
				Other:	

Description: Plan, design, and construct improvements to the golf course.

Justification: Improve recreational resource and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	25	0	0	0	0	0	0	0	0
DGN	GI	0	0	25	0	0	0	0	0	0	0	0
CONST	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	7/1/2019	12/31/2022
DGN	7/1/2019	12/31/2022
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	0

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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**
DGN	7/1/2010	12/31/2018
CONST	7/1/2010	6/30/2014

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

Justification: Maximize use of City enterprise resources.

Use of Funds: Provision of funding for the preparation of demolition specifications, demolition and related demolition inspection of the parking structure, exhibition hall and maintenance facility, provided a public-private partnership agreement is executed for the redevelopment, and operation and maintenance of the Blaisdell campus.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	4,970	0	0	0	0	0	0	0	0	0	0
DGN	GI	12,844	12,000	0	200	0	0	0	0	0	200	0
CONST	GI	0	0	0	24,000	0	0	0	0	0	24,000	0
INSP	GI	0	0	0	100	0	0	0	0	0	100	0
	Total	17,814	12,000	0	24,300	0	0	0	0	0	24,300	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2016	6/30/2018
DGN	7/1/2019	1/31/0220
CONST	11/1/2020	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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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**
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

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DEPARTMENT OF ENTERPRISE SERVICES GOLF COURSE NPDES SMALL MS4 PERMIT PROGR

Project:	2007019	Function:	Culture - Recreation	Council:	99
Priority No.:	2	Program:	Special Recreation Facilities	Nbrd Board:	99
TMK:		Department:	Design and Construction	Senate:	99
				House:	99
				Other:	

Description: Plan, design, construct, inspect and provide related equipment for NPDES improvements, which include vehicle and equipment wash racks; structural Best Management Practices (BMPs), and covered storage for heavy vehicles and oil products at municipal golf courses.

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: Design, construct and inspect West Loch Golf Course NPDES improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	570	0	30	0	0	0	0	0	0	0	0
DGN	GI	1,516	0	255	10	0	0	0	0	0	10	0
CONST	GI	8,209	500	390	5,000	500	0	0	0	0	5,500	0
INSP	GI	1,000	0	5	50	0	0	0	0	0	50	0
EQUIP	GI	0	0	5	0	0	0	0	0	0	0	0
	Total	11,294	500	685	5,060	500	0	0	0	0	5,560	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	2/1/2010	6/30/2015
DGN	7/1/2019	12/31/2021
CONST	8/1/2019	12/31/2021
INSP	8/1/2019	12/31/2021
EQUIP	8/1/2019	12/31/2021

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	258	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	405	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2011	12/31/2018
CONST	7/1/2008	12/31/2012
EQUIP	7/1/2008	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

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ENTERPRISE FACILITIES IMPROVEMENTS

Project:	1999012	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: Provision of funds for improvements (inclusive of energy conservation and NPDES improvements) for the Department of Enterprise Services facilities, such as, the Blaisdell Center and Waikiki Shell.

Justification: Improvements to continue facility operations and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	5	50	0	0	0	0	0	0	0	0
DGN	GI	1,451	5	200	0	0	0	0	0	0	0	0
CONST	GI	7,331	55	1,200	0	0	0	0	0	0	0	0
INSP	GI	109	5	10	0	0	0	0	0	0	0	0
EQUIP	GI	0	5	40	0	0	0	0	0	0	0	0
	Total	8,891	75	1,500	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	6/30/2026
DGN	7/1/2015	6/30/2026
CONST	7/1/2015	6/30/2026
INSP	7/1/2015	6/30/2026
EQUIP	7/1/2015	6/30/2026

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 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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1,000	1,000	1,000
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	110	0	0	0	0	0	0	0	1,000	1,000	1,000

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	312	0	0	0	0	0	0	0	0	0	0
	Total	352	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.:	4	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, Ted Makalena, West Loch, Ewa Villages and Kahuku Golf Courses.

Justification: Improvement municipal golf courses to ensure availability of recreation resources and address climate change, sustainability and resiliency .

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

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	15	20	60	15	15	15	15	15	135	0
DGN	GI	1,200	25	135	390	25	25	25	25	25	515	0
CONST	GI	6,221	250	715	530	250	250	250	250	250	1,780	0
INSP	GI	0	10	25	20	10	10	10	10	10	70	0
EQUIP	GI	0	0	5	0	0	0	0	0	0	0	0
	Total	7,421	300	900	1,000	300	300	300	300	300	2,500	0

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 - BIRD FACILITY

Project:	2017079	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: 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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	50	0	0	0	0	0	0	0	0	0
DGN	GI	198	150	0	0	0	0	0	0	0	0	0
CONST	GI	0	0	0	0	1,500	2,000	0	0	0	3,500	0
INSP	GI	0	0	0	0	120	0	0	0	0	120	0
	Total	198	200	0	0	1,620	2,000	0	0	0	3,620	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
INSP	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.:	7	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 and address climate change, sustainability and resiliency. 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: Design Hawaii island exhibit.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	25	0	0	0	0	0	0	0	0	0
DGN	GI	0	75	0	200	0	0	0	0	0	200	0
CONST	GI	0	0	0	0	500	750	750	750	0	2,750	0
INSP	GI	0	0	0	0	125	0	0	0	0	125	0
	Total	0	100	0	200	625	750	750	750	0	3,075	0

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
INSP	7/1/2020	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 IMPROVEMENTS

Project:	2001097	Function:	Culture - Recreation	Council:	04
Priority No.:	1	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 and address climate change, sustainability and resiliency .

Use of Funds: Plan, design, construct and inspect for sustainable zoo improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	40	10	70	5	5	5	5	5	95	0
DGN	GI	1,986	480	260	375	5	5	5	5	5	400	0
CONST	GI	10,283	3,440	1,300	300	780	530	530	530	530	3,200	0
INSP	GI	0	40	45	55	5	5	5	5	5	80	0
EQUIP	GI	65	0	5	0	5	5	5	5	5	25	0
	Total	12,334	4,000	1,620	800	800	550	550	550	550	3,800	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2015	6/30/2025
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 PRIES BUILDING RENOVATION

Project:	2017077	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: 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 and address climate change, sustainability and resiliency.

Use of Funds: Design, construct and inspect sustainable renovation improvements.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	373	0	100	50	0	0	0	0	0	50	0
CONST	GI	0	0	650	1,500	500	500	0	0	0	2,500	0
INSP	GI	0	0	70	50	0	0	0	0	0	50	0
	Total	373	0	820	1,600	500	500	0	0	0	2,600	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2018	1/30/2020
CONST	7/1/2020	12/31/2021
INSP	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	50

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
DGN	GI	408	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	2,563	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	12/31/2018
INSP	7/1/2013	12/31/2018

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.:		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 and address climate change, sustainability and resiliency.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	500	10	0	0	0	0	0	0	0	0	0
DGN	GI	0	190	200	0	0	200	200	100	0	500	100
CONST	GI	0	0	0	0	3,000	0	1,000	2,000	2,000	8,000	1,000
INSP	GI	0	0	0	0	200	0	200	80	80	560	80
EQUIP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	500	200	200	0	3,200	200	1,400	2,180	2,080	9,060	1,180

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2015
DGN	7/1/2014	6/30/2025
CONST	7/1/2018	6/30/2025
INSP	7/1/2016	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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TED MAKALENA GOLF COURSE - NEW CART PATHS

Project:	2007025	Function:	Culture - Recreation	Council:	08
Priority No.:		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 and address climate change, sustainability and resiliency. Cart paths that are in the middle of the fairway obstruct play.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	406	50	50	0	0	0	0	0	0	0	0
CONST	GI	3,313	1,150	550	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	3,720	1,200	600	0	0	0	0	0	0	0	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.:	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 for improvements to the Waikiki Shell inclusive of ADA and NPDES improvements.

Justification: Improve facility for continued use and address climate change, sustainability and resiliency.

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

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	20	20	20	0	0	0	0	0	20	0
DGN	GI	275	80	260	50	0	0	0	0	0	50	0
CONST	GI	884	885	1,085	800	0	0	0	0	0	800	0
INSP	GI	0	15	15	30	0	0	0	0	0	30	0
	Total	1,159	1,000	1,380	900	0	0	0	0	0	900	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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WEST LOCH GOLF COURSE - PONDS & WATERWAYS

Project:	2007024	Function:	Culture - Recreation	Council:	09
Priority No.:		Program:	Special Recreation Facilities	Nbrd Board:	23
TMK:	91017006	Department:	Design and Construction	Senate:	20
				House:	42
				Other:	

Description: Dredge silt retention basins throughout the course and also Honouliuli Stream that drains into the course. Dredging will bring silt retention basins to original base line.

Justification: Silt retention basins and the stream have not been dredged since the course was opened back in 1990. Over the years, silt has accumulated in the basins and stream to the point that it does not drain properly. During substantial rain periods, the basins and stream overflow into the fairways. This makes the course unplayable and necessary to close, which results in loss of revenues.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	0	0	0	0	0	0	0	0	0	0
DGN	GI	410	0	0	0	0	0	0	0	0	0	0
CONST	GI	34	0	0	0	0	0	0	0	0	0	0
INSP	GI	0	0	0	0	0	0	0	0	0	0	0
	Total	444	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/20/2015	7/20/2015
CONST	7/20/2015	7/20/2015
INSP	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	30

Department Summary: Design and Construction

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
GI	68,923	19,575	8,055	33,860	8,345	5,100	3,000	3,780	3,930	58,015	2,180
Total	68,923	19,575	8,055	33,860	8,345	5,100	3,000	3,780	3,930	58,015	2,180

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	6,040	165	155	150	20	20	20	20	20	250	0
DGN	21,450	13,055	1,635	1,275	30	230	230	130	30	1,925	100
CONST	40,146	6,280	6,040	32,130	7,780	4,780	2,530	3,530	3,780	54,530	2,000
INSP	1,169	70	170	305	510	65	215	95	95	1,285	80
EQUIP	118	5	55	0	5	5	5	5	5	25	0
Total	68,923	19,575	8,055	33,860	8,345	5,100	3,000	3,780	3,930	58,015	2,180

Program Summary: Special Recreation Facilities

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
GI	68,923	19,575	8,055	33,860	8,345	5,100	3,000	3,780	3,930	58,015	2,180
Total	68,923	19,575	8,055	33,860	8,345	5,100	3,000	3,780	3,930	58,015	2,180

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	6,040	165	155	150	20	20	20	20	20	250	0
DGN	21,450	13,055	1,635	1,275	30	230	230	130	30	1,925	100
CONST	40,146	6,280	6,040	32,130	7,780	4,780	2,530	3,530	3,780	54,530	2,000
INSP	1,169	70	170	305	510	65	215	95	95	1,285	80
EQUIP	118	5	55	0	5	5	5	5	5	25	0
Total	68,923	19,575	8,055	33,860	8,345	5,100	3,000	3,780	3,930	58,015	2,180

Function Summary: Culture - Recreation

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
CD	2,200	0	2,090	4,467	6,217	6,444	4,615	0	0	21,743	0
CF	19,184	10,533	10,503	11,700	7,000	7,000	7,000	7,000	7,000	46,700	30,000
DV	500	0	0	0	0	0	0	0	0	0	0
FG	584	0	0	0	0	0	0	0	0	0	0
GI	283,080	89,711	51,595	57,700	37,766	26,836	25,610	52,050	21,820	221,782	10,120
GN	30	0	0	0	0	0	0	0	0	0	0
HN	2,660	0	0	1,800	0	0	0	0	0	1,800	0
PP	9,633	891	2,029	2,013	0	0	0	0	0	2,013	0
Total	317,870	101,135	66,218	77,680	50,983	40,280	37,225	59,050	28,820	294,038	40,120

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	21,109	10,532	1,000	1,000	1,000	1,000	1,000	1,000	1,000	6,000	5,000
PLAN	13,597	2,138	2,437	570	255	45	45	45	55	1,015	0
DGN	68,904	22,201	9,375	5,970	1,336	2,326	635	330	805	11,402	405
CONST	204,030	63,318	41,821	57,475	41,352	30,379	28,905	51,200	20,720	230,031	9,390
INSP	4,553	386	1,163	1,005	955	495	605	445	210	3,715	325
EQUIP	2,851	2,559	919	960	85	35	35	30	30	1,175	0
OTHER	2,825	1	9,503	10,700	6,000	6,000	6,000	6,000	6,000	40,700	25,000
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	317,870	101,135	66,218	77,680	50,983	40,280	37,225	59,050	28,820	294,038	40,120

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ALAPAI TRANSPORTATION MANAGEMENT CENTER

Project:	2006018	Function:	Utilities or Other Enterprises	Council:	06
Priority No.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	339	0	0	0	0	0	0	0	0	0	0
DGN	FG	7,921	0	0	0	0	0	0	0	0	0	0
DGN	HI	13,665	400	500	0	0	0	0	0	0	0	0
CONST	FG	34,660	0	0	0	0	0	0	0	0	0	0
CONST	HI	44,125	100	5	0	0	0	0	0	0	0	0
INSP	FG	316	0	0	0	0	0	0	0	0	0	0
INSP	HI	6,564	1,000	1,490	0	0	0	0	0	0	0	0
EQUIP	FG	0	0	0	0	0	0	0	0	0	0	0
EQUIP	HI	26	1,500	5	0	0	0	0	0	0	0	0
	Total	107,614	3,000	2,000	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2009	6/1/2010
DGN	6/29/2012	6/30/2019
CONST	4/27/2015	6/30/2019
INSP	8/4/2014	6/30/2020
EQUIP	7/1/2014	6/30/2020

Annual Effect on Operating Budget	
No of Positions	0
Salary Cost	0
Cur Exp & Equip	30
Maint Cost	2,199
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: 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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	177,349	16,394	16,752	25,440	18,098	18,498	18,868	19,245	19,245	119,394	0
EQUIP	HI	81,821	4,849	23,281	16,360	39,525	39,625	44,717	54,811	64,811	259,849	0
	Total	259,596	21,243	40,033	41,800	57,623	58,123	63,585	74,056	84,056	379,243	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
EQUIP	7/1/2018	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 and provide related equipment for bus stop improvements at various locations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1,533	365	400	365	365	365	365	365	365	2,190	0
CONST	FG	249	145	145	145	145	145	145	145	145	870	0
CONST	HI	3,154	350	600	37	350	350	350	350	350	1,787	0
INSP	HI	65	20	25	20	20	20	20	20	20	120	0
EQUIP	HI	0	5	5	10	10	10	10	10	10	60	0
RELOC	HI	0	5	0	0	0	0	0	0	0	0	0
	Total	5,474	895	1,180	582	895	895	895	895	895	5,057	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2018	12/31/2025
DGN	7/1/2018	12/31/2025
CONST	7/1/2018	12/31/2025
INSP	7/1/2018	12/31/2025
EQUIP	7/1/2018	12/31/2025
RELOC	7/1/2018	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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	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	1,137	0	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	0	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	0	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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ELECTRIFICATION OF TRANSPORTATION PROGRAM

Project:	2018027	Function:	Utilities or Other Enterprises	Council:	07
Priority No.:		Program:	Mass Transit	Nbrd Board:	15
TMK:		Department:	Transportation Services	Senate:	
				House:	
				Other:	

Description: Plan, design, construct, inspect and provide equipment for electric buses and related infrastructure for charging stations for Middle Street Transit Center

Justification: Provision of funds to plan, design, construct, inspect and provide equipment for electric buses and related infrastructure for charging stations for Middle Street Transit Center to enhance investment towards public transit.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	GI	0	50	0	0	0	0	0	0	0	0	0
DGN	GI	0	400	0	0	0	0	0	0	0	0	0
CONST	GI	0	5,500	0	0	0	0	0	0	0	0	0
INSP	GI	0	50	0	0	0	0	0	0	0	0	0
EQUIP	GI	0	4,000	0	0	0	0	0	0	0	0	0
	Total	0	10,000	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2017	12/31/2022
DGN	7/1/2017	12/31/2022
CONST	7/1/2017	12/31/2022
INSP	7/1/2017	12/31/2022
EQUIP	7/1/2017	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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KALIHI-PALAMA BUS FACILITY IMPROVEMENTS.

Project:	2006004	Function:	Utilities or Other Enterprises	Council:	07
Priority No.:		Program:	Mass Transit	Nbrd Board:	15
TMK:	12015006	Department:	Transportation Services	Senate:	15
				House:	32
				Other:	

Description: To restore and reinforce the Kalihi Stream bank along the Kalihi-Palama Bus Facility.

Justification: To provide protection of the bus facility from the Kalihi Stream bank erosion. The erosion and overgrowth of brush and trees along the stream are adjacent to the facility and requires mitigation measures.

Use of Funds:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	HI	0	0	0	0	0	0	0	0	0	0	0
PLAN	HI	200	0	0	0	0	0	0	0	0	0	0
DGN	FG	58	0	0	0	0	0	0	0	0	0	0
DGN	HI	675	0	0	0	0	0	0	0	0	0	0
CONST	FG	315	0	0	0	0	0	0	0	0	0	0
CONST	HI	1,346	0	0	0	0	0	0	0	0	0	0
INSP	FG	36	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	2,631	0	0	0	0	0	0	0	0	0	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	3/1/2013	6/1/2014
DGN	6/1/2014	12/31/2015
CONST	1/1/2016	1/1/2021
INSP	1/1/2016	1/1/2017

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

Six-Year CIP and Budget FY 2020-2025

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: Develop an intermodal center to include handi-vans, regional transit center, parking which may include a public partnership to leverage City assets.

Justification: Development of an intermodal center to facilitate 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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	HI	8,577	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	1,000
DGN	FG	2,000	0	0	0	0	0	0	0	0	0	2,500
DGN	HI	2,735	0	0	0	0	0	0	0	0	0	80,000
CONST	FG	16,130	0	0	0	0	0	0	0	0	0	0
CONST	HI	19,129	0	0	0	0	0	0	0	0	0	0
INSP	HI	2,009	0	0	0	0	0	0	0	0	0	3,000
EQUIP	HI	0	0	0	0	0	0	0	0	0	0	0
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	52,652	0	0	0	0	0	0	0	0	0	86,500

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
DGN	7/1/2008	6/30/2020
CONST	7/1/2009	6/30/2020

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.:		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:

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	0	5	0	0	0	0	0	0	0	0	0
DGN	HI	3,600	10	0	0	0	0	0	0	0	0	0
INSP	HI	0	10	0	0	0	0	0	0	0	0	0
EQUIP	HI	8,400	3,440	0	0	0	0	0	0	0	0	0
	Total	12,000	3,465	0	0	0	0	0	0	0	0	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	20

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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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.:	3	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: Plan, design, construct and install equipment for transit safety and security improvements at various locations.

dollars in thousands

Phase	Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
PLAN	HI	43	0	0	1	1	1	1	1	1	6	0
DGN	FG	90	0	0	73	73	73	73	73	73	438	0
DGN	HI	133	73	73	1	1	1	1	1	1	6	0
CONST	FG	0	0	0	1	1	1	1	1	1	6	0
CONST	HI	135	0	0	1	1	1	1	1	1	6	0
EQUIP	FG	1,562	297	297	290	290	290	290	290	290	1,740	0
EQUIP	HI	632	1	1	1	1	1	1	1	1	6	0
	Total	2,595	371	371	368	368	368	368	368	368	2,208	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2018	12/31/2025
DGN	7/1/2018	12/31/2025
CONST	7/1/2018	12/31/2025
EQUIP	7/1/2018	12/31/2025

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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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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	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	1,700	0	0	0	0	1,700	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	1,700	0	0	0	0	1,700	0

Estimated Implementation Schedule		
Phase	**Start Date**	**End Date**
PLAN	7/1/2014	6/30/2019
DGN	7/1/2015	6/30/2019

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 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
FG	242,604	16,836	17,194	25,949	18,607	19,007	19,377	19,754	19,754	122,448	2,500
GI	0	10,000	0	0	0	0	0	0	0	0	0
HI	208,752	12,138	26,390	16,801	41,979	40,379	45,471	55,565	65,565	265,760	84,000
Total	451,356	38,974	43,584	42,750	60,586	59,386	64,848	75,319	85,319	388,208	86,500

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	8,583	0	0	0	0	0	0	0	0	0	0
PLAN	2,004	60	5	6	6	6	6	6	6	36	1,000
DGN	34,536	1,248	973	439	439	439	439	439	439	2,634	82,500
CONST	125,125	6,095	750	184	2,197	497	497	497	497	4,369	0
INSP	9,656	1,080	1,515	20	20	20	20	20	20	120	3,000
EQUIP	269,790	30,486	40,341	42,101	57,924	58,424	63,886	74,357	84,357	381,049	0
RELOC	1,603	5	0	0	0	0	0	0	0	0	0
ART	59	0	0	0	0	0	0	0	0	0	0
Total	451,356	38,974	43,584	42,750	60,586	59,386	64,848	75,319	85,319	388,208	86,500

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Program Summary: Mass Transit

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
FG	242,604	16,836	17,194	25,949	18,607	19,007	19,377	19,754	19,754	122,448	2,500
GI	0	10,000	0	0	0	0	0	0	0	0	0
HI	208,752	12,138	26,390	16,801	41,979	40,379	45,471	55,565	65,565	265,760	84,000
Total	451,356	38,974	43,584	42,750	60,586	59,386	64,848	75,319	85,319	388,208	86,500

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	8,583	0	0	0	0	0	0	0	0	0	0
PLAN	2,004	60	5	6	6	6	6	6	6	36	1,000
DGN	34,536	1,248	973	439	439	439	439	439	439	2,634	82,500
CONST	125,125	6,095	750	184	2,197	497	497	497	497	4,369	0
INSP	9,656	1,080	1,515	20	20	20	20	20	20	120	3,000
EQUIP	269,790	30,486	40,341	42,101	57,924	58,424	63,886	74,357	84,357	381,049	0
RELOC	1,603	5	0	0	0	0	0	0	0	0	0
ART	59	0	0	0	0	0	0	0	0	0	0
Total	451,356	38,974	43,584	42,750	60,586	59,386	64,848	75,319	85,319	388,208	86,500

Function Summary: Utilities or Other Enterprises

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
FG	242,604	16,836	17,194	25,949	18,607	19,007	19,377	19,754	19,754	122,448	2,500
GI	0	10,000	0	0	0	0	0	0	0	0	0
HI	208,752	12,138	26,390	16,801	41,979	40,379	45,471	55,565	65,565	265,760	84,000
Total	451,356	38,974	43,584	42,750	60,586	59,386	64,848	75,319	85,319	388,208	86,500

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	8,583	0	0	0	0	0	0	0	0	0	0
PLAN	2,004	60	5	6	6	6	6	6	6	36	1,000
DGN	34,536	1,248	973	439	439	439	439	439	439	2,634	82,500
CONST	125,125	6,095	750	184	2,197	497	497	497	497	4,369	0
INSP	9,656	1,080	1,515	20	20	20	20	20	20	120	3,000
EQUIP	269,790	30,486	40,341	42,101	57,924	58,424	63,886	74,357	84,357	381,049	0
RELOC	1,603	5	0	0	0	0	0	0	0	0	0
ART	59	0	0	0	0	0	0	0	0	0	0
Total	451,356	38,974	43,584	42,750	60,586	59,386	64,848	75,319	85,319	388,208	86,500

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Summary

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Six-Year CIP and Budget FY 2020-2025

Summary Total

Fund Source Totals dollars in thousands

Fund Src	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
AF	13,551	5,000	40,843	7,260	7,000	7,000	7,000	7,000	7,000	42,260	30,000
BK	1,409	920	990	730	560	560	560	560	560	3,530	0
BT	0	0	0	0	0	0	0	0	0	0	0
CD	102,981	6,249	6,848	7,451	6,217	6,444	4,615	0	0	24,727	0
CF	19,184	10,533	10,503	11,700	7,000	7,000	7,000	7,000	7,000	46,700	30,000
DN	428	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	396,033	32,030	29,743	66,233	55,961	25,001	25,371	23,498	23,498	219,562	38,550
GC	2,259	0	0	0	0	0	0	0	0	0	0
GI	876,300	245,050	308,067	163,369	124,257	118,857	83,876	96,576	125,971	712,906	370,820
GN	9,991	200	472	200	200	200	200	200	200	1,200	0
HD	0	0	0	0	0	0	0	0	0	0	0
HI	1,544,508	74,945	149,051	112,551	150,965	156,270	191,892	179,336	148,296	939,310	674,490
HN	2,660	0	66	1,800	0	0	0	0	0	1,800	0
HW	5,286	0	366	0	0	0	0	0	0	0	0
PP	9,633	891	2,029	2,013	0	0	0	0	0	2,013	0
RL	0	0	0	400	0	0	0	0	0	400	0
SA	0	0	0	0	0	0	0	0	0	0	0
SR	2,168,212	494,372	204,250	253,729	664,408	16,504	115,309	231,107	157,908	1,438,965	0
ST	449	0	0	9,750	0	12,000	0	0	0	21,750	0
SV	1,320	0	0	0	0	0	0	0	0	0	0
SW	501,755	165,900	197,262	166,501	225,563	557,317	195,166	259,056	219,692	1,623,295	53,505
UT	1,145	100	100	2,600	100	100	100	100	100	3,100	0
WB	471,501	30,582	59,184	58,043	35,151	38,645	24,045	45,645	18,644	220,174	0
WF	46,998	0	0	6,860	0	0	0	0	0	6,860	0
Total	6,177,881	1,066,772	1,009,774	871,190	1,277,382	945,898	655,135	850,078	708,869	5,308,552	1,197,365

Phase Total dollars in thousands

Phase	Expend Encumb	Appn 2018	Appn 2019	2020	2021	2022	2023	2024	2025	Total 6 Years	Future Years
LAND	117,757	88,529	98,131	78,366	1,334	16,322	2,124	2,520	1,614	102,280	23,251
PLAN	256,281	16,304	39,148	10,748	11,353	7,219	10,503	3,497	8,274	51,594	7,152
DGN	632,039	105,501	100,870	71,758	57,226	46,769	44,369	58,238	79,202	357,562	140,726
CONST	4,145,282	714,114	582,318	559,725	1,082,239	744,864	450,463	634,777	473,942	3,946,010	928,401
INSP	209,764	29,034	28,921	25,213	21,008	26,107	37,246	29,841	14,832	154,247	38,435
EQUIP	598,296	67,639	83,088	83,252	75,816	76,211	81,973	92,139	102,599	511,991	4,520
OTHER	214,826	37,420	75,002	41,103	28,381	28,381	28,381	28,381	28,381	183,008	54,880
RELOC	1,703	8,030	2,025	1,025	25	25	25	25	25	1,150	0
ART	1,932	200	272	0	0	0	50	660	0	710	0
Total	6,177,881	1,066,772	1,009,774	871,190	1,277,382	945,898	655,135	850,078	708,869	5,308,552	1,197,365