Capital Projects Update

November 17, 2022

Public Library Improvements Project

See Page 32 for Details

Introduction

This Capital Project Update summarizes 49 presently funded City of Unalaska capital projects with a combined total appropriated budget of $98,766,630.

Regardless of what fiscal year a project may have been initiated and funded, some span several years. Projects may remain open for multiple years due to varying circumstances such as right-of-way acquisition, pre-development needs, staffing levels, project magnitude, required phasing, weather, contractor difficulty, simply put on hold, or for other reasons.

Projects in this update fall into one of the following categories:

- Pre-development
- Engineering / Design
- Construction / Purchase (mechanical equipment, playground structures)
- Close-out

Six projects initiated in 2019 (FY20), four initiated in 2020 (FY21), 13 in 2021 (FY22), and 13 in 2022 (FY23).

Each of the active projects in this update include 4 parts (except the13 new ones):

- CMMP Summary Sheet (or Project Nomination) as approved by Council
- Narrative of current status
- Financial snapshot of current status
- Photos

This page left blank intentionally

Summary of Open Capital Projects as of 10/31/22

Ref #	Munis ID	Project	Budget	Expensed	Encumbered	Available	Pending Encumbrance	Actual Available	Detail Page
	General Fund								
1	FR21A	Aerial Ladder Replacement	$ 1,500,000	$ 1,432,166	$ 52,182	$ 15,652	$ -	$ 15,652	8
2	GG22A	Communication Infrastructure	$ 1,894,026	$ 503,236	$ 79,404	$ 1,311,386	$ -	$ 1,311,386	12
3	PR19B	Sitka Spruce Park Improvements	$ 878,185	$ 870,042	$ -	$ 8,143	$ -	$ 8,143	16
4	PR22A	Kelty Field Drainage Improvements	$ 100,000	$ 8,015	$ -	$ 91,985	$ -	$ 91,985	20
5	PR22B	Aquatics Center Roof Replacement	$ 445,000	$ -	$ -	$ 445,000	$ -	$ 445,000	24
6	PR23A	Parks & Recreationg Study	$ 150,000	$ -	$ -	$ 150,000	$ -	$ 150,000	28
7	PR601	Public Library Improvements	$ 9,329,201	$ 4,957,543	$ 3,780,731	$ 590,927	$ -	$ 590,927	32
8	PS18A	Repeater Site & Radio Upgrade	$ 1,500,000	$ 1,136,353	$ 319,216	$ 44,431	$ -	$ 44,431	36
9	PS19A	Fire Training Facility	$ 12,000	$ 6,400	$ -	$ 5,600	$ -	$ 5,600	40
10	PW19A	Captain's Bay Road & Utilities	$ 2,564,556	$ 1,775,515	$ 14,963	$ 774,078	$ -	$ 774,078	44
11	PW19B	Causeway Culvert Replacement	$ 799,500	$ 191,257	$ 288	$ 607,955	$ -	$ 607,955	48
12	PW20A	Burma Road Chapel Roof Upgrade	$ 110,000	$ 77,151	$ -	$ 32,849	$ -	$ 32,849	52
13	PW22B	DPW Inventory Room Shelving	$ 150,000	$ 111,994	$ 8,139	$ 29,867	$ -	$ 29,867	56
14	PW23A	DDC Controls Upgrade - GF Buildings	$ 141,323	$ -	$ 141,323	$ -	$ -	$ -	60
15	PW23B	Equipment Storage Building	$ 195,000	$ -	$ -	$ 195,000	$ -	$ 195,000	64
16	PW23C	DPW Warehouse Fire Alarm/Sprinklers	$ 45,000	$ -	$ -	$ 45,000	$ -	$ 45,000	68
17	SS22A	Elementary School Heating Repairs	$ 100,000	$ 54,612	$ -	$ 45,388	$ -	$ 45,388	72
18	SS23A	DDC Controls Upgrade - Schools	$ 97,838	$ -	$ 97,838	$ -	$ -	$ -	76
19	SS601	UCSD Playground	$ 1,326,485	$ 1,197,882	$ 92,700	$ 35,903	$ -	$ 35,903	80
20	PW22C	Pavement Preservation - Sealcoating	$ 1,000,000	$ 87,064	$ 87,064	$ 825,871	$ -	$ 825,871	84
	Electric Fund								
21	EL18B	Automatic Meter Read	$ 523,362	$ 103,474	$ 66,413	$ 353,475	$ -	$ 353,475	88
22	EL18C	Wind Power Development	$ 634,000	$ 428,259	$ 36,513	$ 169,227	$ -	$ 169,227	92
23	EL22B	Makushin Geothermal	$ 5,870,000	$ 1,289,023	$ 99,031	$ 4,481,946	$ -	$ 4,481,946	96
24	EL22D	Electrical Distribution Equip. Replaceme	$ 115,000	$ -	$ -	$ 115,000	$ -	$ 115,000	100
25	EL23A	DDC Controls Upgrade - Powerhouse	$ 33,112	$ -	$ 33,112	$ -	$ -	$ -	104
26	EL23B	Generator Sets Rebuild (FY23)	$ 1,002,154	$ -	$ 715,181	$ 286,973	$ -	$ 286,973	108
27	EL23C	Electrical Distribution Equip. Replaceme	$ 100,000	$ -	$ -	$ 100,000	$ -	$ 100,000	112

Summary of Open Capital Projects as of 10/31/22

Ref #	Munis ID	Project	Budget	Expensed	Encumbered	Available	Pending Encumbrance	Actual Available	Detail Page
	Water Fund								
28	WA17B	Fiber Optic Development	$ 59,127	$ 6,140	$ 14,000	$ 38,987	$ -	$ 38,987	116
29	WA17C	Pyramid Micro Turbines	$ 2,212,019	$ 2,189,242	$ 22,699	$ 79	$ -	$ 79	120
30	WA18A	Generals Hill Water Booster Pump	$ 1,241,000	$ 1,107,918	$ 81,863	$ 51,219	$ -	$ 51,219	124
31	WA20A	CT Tank Interior Maintenance/Painting	$ 1,053,000	$ -	$ -	$ 1,053,000	$ -	$ 1,053,000	128
32	WA21A	Pyramid WTP Chlorine Upgrade	$ 1,507,947	$ 578,842	$ 83,944	$ 845,161	$ -	$ 845,161	132
33	WA22D	Westward to NPF Waterline	$ 800,000	$ -	$ -	$ 800,000	$ -	$ 800,000	136
34	WA23A	DDC Controls Upgrade - Pyramid WTP	$ 24,811	$ -	$ 24,811	$ -	$ -	$ -	140
35	WA23B	East Point Crossing Water Line Inspectio	$ 162,500	$ -	$ -	$ 162,500	$ -	$ 162,500	144
36	WA501	Pyramid Water Storage Tank	$ 1,228,750	$ 93,662	$ -	$ 1,135,088	$ -	$ 1,135,088	148
37	WA504	Water Utility Auto Meter Read	$ 106,052	$ 33,384	$ -	$ 72,668	$ -	$ 72,668	152
	Wastewater Fund								
38	WW17B	Fiber Optic Intrastructure Development	$ 59,127	$ 6,140	$ 1,140	$ 51,847	$ -	$ 51,847	156
39	WW23A	DDC Controls Upgrade - WWTP	$ 28,272	$ -	$ 28,272	$ -	$ -	$ -	160
	Solid Waste Fund								
40	SW21A	Solid Waste Gasifier	$ 700,000	$ -	$ -	$ 700,000	$ -	$ 700,000	164
	Ports Fund								
41	PH17C	CEM Breakwater Repair	$ 150,000	$ 110,000	$ -	$ 40,000	$ -	$ 40,000	168
42	PH17D	UMC Positions 3&4 Replacement	$ 37,467,858	$ 37,365,506	$ -	$ 102,352	$ -	$ 102,352	172
43	PH201	Entrance Channel Dredging	$ 11,489,000	$ 1,554,560	$ -	$ 9,934,440	$ -	$ 9,934,440	176
44	PH20A	Cruise Ship Terminal Design	$ 390,000	$ -	$ -	$ 390,000	$ -	$ 390,000	180
45	PH20B	Emergency Mooring Buoy Maint.	$ 50,000	$ -	$ -	$ 50,000	$ -	$ 50,000	184
46	PH23A	Unalaska Marine Center Restroom	$ 50,000	$ -	$ -	$ 50,000	$ -	$ 50,000	188
47	PH602	Light Cargo Dock & UMC Dredging	$ 2,654,145	$ -	$ -	$ 2,654,145	$ -	$ 2,654,145	192
48	PH905	Robert Storrs SBH Improvments A&B	$ 6,695,000	$ 1,423	$ 22,360	$ 6,671,216	$ -	$ 6,671,216	196
	Airport Fund								
49	AP23A	DDC Controls Upgrade - Airport	$ 22,280	$ -	$ 22,280	$ -	$ -	$ -	200
		Grand Totals	**$ 98,766,630**	**$ 57,276,804**	**$ 5,925,466**	**$ 35,564,360**	**$ -**	**$ 35,564,360**	

This page left blank intentionally

This page left blank intentionally

Aerial Ladder Truck Replacement (FR21A)

PROJECT DESCRIPTION: Replacement of the aerial apparatus. The current apparatus was built in 1997 and has been in service for 22 years.

PROJECT NEED: In keeping with our past practices of replacing apparatus every 25 years we will spec and build this apparatus in FY21. NFPA currently states that apparatus should be replaced every 10 years. With our current low fire call volume and excellent maintenance record we are able to stretch the life span by 150%. Our current apparatus pump has been rebuilt recently and is now in need of more large scale maintenance to come back into compliance with third party certification. Building a new apparatus will ensure that Unalaska Fire Department will stay current with industry standard and best serve the community of Unalaska. This apparatus will allow us to operate more efficiently and safely during emergency events. The new proposed apparatus will be designed with the safety of our firefighters first and the community second. With this new apparatus the department will be able to reach higher or further out and pump more water per minute.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS): The design, development, and purchase of this apparatus will occur in FY21. As we have done with all fire apparatus we will sole source this project through Pierce Manufacturing. This reduces the training and familiarization time for department personnel and city maintenance staff. This apparatus will be custom built in Appleton Wisconsin with three trips made to the manufacturer to ensure the apparatus spec and timeline is being met.

COST & FINANCING DATA: The cost of this apparatus could be fully funded through the general fund. The Fire Department has been a Pierce fleet since 1997 keeping firefighter and maintenance training costs down. In Keeping with that precedent this should be a sole source product through Pierce Manufacturing.

Cost Assumptions	
Other Professional Services	
Engineering, Design, Construction Admin	1,500,000
Construction Services	
Machinery & Equipment	
Subtotal	1,500,000
Contingency (0%)	0
Total Funding Request	1,500,000

FY21-25 CMMP

AERIAL LADDER REPLACEMENT| FIRE

ROLLING STOCK

ESTIMATED PROJECT & PURCHASE TIMELINE
Pre Design: FY 2021
Engineering/Design: FY 2021
Purchase/Construction: FY 2021

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund		1,500,000					1,500,000
1% Sales Tax							
Grant							
Proprietary Fund							
TOTALS $		1,500,000					1,500,000

Aerial Ladder Truck Replacement (FR21A) Funded 2 years ago

- This project will replace the existing aerial apparatus which was built in 1997 and has been in service for 25 years
- Sole-sourced through Pierce Manufacturing in Appleton, Wisconsin
- Fire / EMS worked with Pierce to refine exact configuration and components
- 100% pre-payment was made
- Pre-construction conference call April 28, 2021
- A team of 4 City employees (Ben Knowles, Steve Van Deventer, Arianna Morales, Kai Lloyd) traveled to Appleton, WI on March 12th to perform a 3 day final inspection.
- Comms installed in Washington before truck shipped to Unalaska via AML
- Truck is housed at Amaknak Station
- We're still waiting on Fire Truck associated parts (extrication equipment PO# 22150087) from LN Curtis Company but estimated delivery is late fall

Aerial Ladder Truck Replacement (FR21A)

MUNIS PROJECT FR21A - AERIAL LADDER TRUCK						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Travel and Related Costs	$ 26,281	$ 8,505	$ 3,124	$ 14,652	$ -	$ 14,652
Machinery and Equipment	$ 1,473,719	$ 1,423,661	$ 49,058	$ 1,000	$ -	$ 1,000
	$ 1,500,000	$ 1,432,166	$ 52,182	$ 15,652	$ -	$ 15,652

Aerial Ladder Truck Replacement (FR21A)

Communication Infrastructure (GG22A)

Project Description: Build a citywide communications infrastructure to connect all City departments, facilities and systems. Currently the Information Systems department networks all facilities using outdoor wireless point to point equipment. The technology is subject to bandwidth limitations, interference, weather, and significant annual maintenance. The GCI fiber optic project presents a rare opportunity to install subsurface conduit alongside the company's trenching project throughout the island. Every facility could be interconnected over the next two years installing the City's own underground cable network while the ground is open. This will result in a significant increase of network quality (bandwidth, decreased latency, etc.), reliability, and reduced security risks. This infrastructure would also alleviate hours of internal labor costs associated with maintaining over 100 existing wireless devices throughout Unalaska. The underground network would serve all City departments, as well as SCADA, VoIP (phone system), Security Camera Systems, Disaster Recovery, Email, GIS, and Network Applications (e.g Munis, Sleuth, RecTrac, Cartegraph, Meter Reading Systems, RMS, WatchGuard, etc.).

Project Need: All cities are increasingly reliant on network services that require larger amounts of bandwidth. Unalaska needs a viable path forward that will serve its growing demands (e.g. GIS, Security Cameras, Disaster Recovery, etc.), greater reliability (e.g. SCADA monitoring/control systems), and future scalability (services growth). Most local governments have had high-speed underground cable networks for decades, but Unalaska has repeatedly missed opportunities to install its own underground, high-speed network. The GCI proposal will trench miles of underground cabling and could be the last feasible opportunity to install our own network, This project will upgrade city infrastructure and provide significant cost savings for installation and future operations.

Development Plan & Status : This project will be funded by the General Fund. An additional $105,974 budgeted to the FY17 Fiber Optic Infrastructure Development Project from the Water and Wastewater proprietary funds will be moved to this project.

FY23-32 CMMP

Communications Infrastructure (Citywide)

Other

GG22A

Estimated Project & Purchase Timeline

Pre Design: FY21

Engineering/Design: FY22

Purchase/Construction: FY23

Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
General Fund	947,013	947,013	0	0	0	0	0	0	0	0	0	1,894,026
Wastewater Proprietary	52,987	0	0	0	0	0	0	0	0	0	0	52,987
Water Proprietary Fund	52,987	0	0	0	0	0	0	0	0	0	0	52,987
Total	1,052,987	947,013	0	0	0	0	0	0	0	0	0	2,000,000

Communication Infrastructure (GG22A) Funded 1 year ago

- GCI fiber project is opportunity for us to install fiber optic cable in the same trench
- Planning and legal worked out a joint trench agreement between the City and GCI
- IS received 4 bids for design of City intranet with UTI low at $17,760
- GCI/UTI have been placing conduit and vaults for City intranet in accordance with the Joint Trench Agreement (JTA)
- GCI has obtained easements with OC on Salmon Way and East Point Road
- City to obtain easements from OC for City project located on OC property
- Restoration work by GCI/UTI is progressing and ongoing
- Roads Division working with GCI to identify deficient areas
- UTI crews installed two 6” conduit and two 2” conduit down Captain’s Bay Rd (CBR) as part of the geothermal upgrades with 7,629 LF of trench complete and three vaults installed.
- CBR portion of the project is complete except for placement of some vaults and road crossings
- Due to anticipated traffic disruptions with the CBR vault installations, this work is being scheduled for after “B” Season in late fall
- Temp asphalt patch installed in 2 road crossings near City Hall with permanent cold patch repairs ongoing
- Current progress for COU = 60 vaults and 65,782 LF conduit as of (10-28-22)
- GCI has 2 mainline crews installing drops as they work, 1 full time drop crew, and 1 inside wire crew doing in-home installations

Communication Infrastructure (GG22A)

MUNIS PROJECT GG22A - COMMUNICATION INFRASTRUCTURE						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering & Architectural	$ 129,701	$ 23,232	$ 7,968	$ 98,501	$ -	$ 98,501
Construction Services	$ 1,621,573	$ 480,004	$ 71,436	$ 1,070,133	$ -	$ 1,070,133
Telephone / Fax / TV	$ 200	$ -	$ -	$ 200	$ -	$ 200
Advertising	$ 500	$ -	$ -	$ 500	$ -	$ 500
Machinery & Equipment	$ 142,052	$ -	$ -	$ 142,052	$ -	$ 142,052
Contingency	$ -	$ -	$ -	$ -	$ -	$ -
	$ 1,894,026	$ 503,236	$ 79,404	$ 1,311,386	$ -	$ 1,311,386

John Burnett
GCI | Senior Program Manager, AU Aleutians
m: 208-451-5203| w: www.gci.com

Communication Infrastructure (GG22A)

Sitka Spruce Park Improvements (PR19B)

Project Description: Fully fund the engineering and construction of a new Sitka Spruce Park, also known as "Pirate Park," opened in 1979. This park includes picnic tables, a playground, stationary grill, bike rack, restrooms, a gravel trail, and a significant amount of trees for which it is a National Historic Landmark. This project is intended to replace the existing structures which were constructed during the original construction of the park.

Project Need: In 2015, the swing set was replaced with a new swing designed to accommodate more children. While the equipment has been well maintained since its construction, all of it has seen some significant wear. The current equipment needing to be replaced consists of a large seesaw, three rocking horses, and a large piece of equipment made to look like a ship. When these items were built, this replacement project was planned for 2019. This project is included in the CMMP for the following purposes:

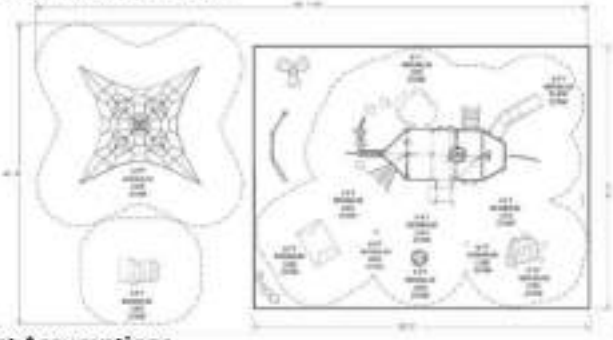
- Improve the quality of the park and the current structures.
- Evaluate the current and future facility in an effort to best accommodate Unalaska residents for the next 20 to 30 years.
- Current playground structures are at the end of their useful life span.

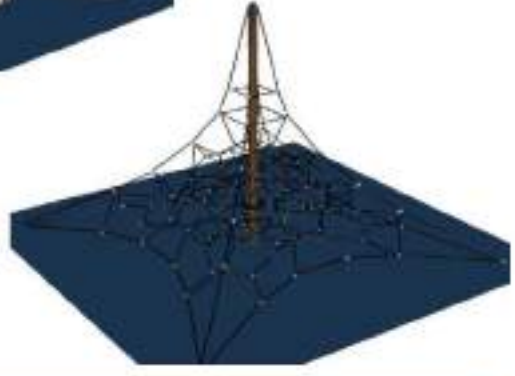
Development Plan & Status (Include Permit and Utility Requirements): After receiving a large amount of public input during FY17 and FY18, PCR staff and the PCR Advisory Board decided the original plans weren't as extensive as the general public preferred. During FY 2019 an analysis of the soil was done in order to ensure that it hadn't been contaminated. After the study was completed we were informed that the area was indeed safe to construct a playground on so we'd suggest moving forward with construction of the park during FY 2020.

FY20-24 CMMP

Sitka Spruce Park Improvements | PCR

Estimated Project & Purchase Timeline
Pre Design: n/a
Engineering/Design: FY 2019
Purchase/Construction: FY 2020





Cost Assumptions	
Engineering, Design, Const Admin	46,000
Other Professional Services	
Construction Services	629,527
Machinery & Equipment	
Subtotal	**675,527**
Contingency (set at 30%)	202,658
TOTAL	**878,185**
Less Other Funding Sources (Grants, etc.)	
Total Funding Request $	**878,185**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)	70,000	808,185					878,185
1% Sales Tax							-
Grant							-
Proprietary Fund							-
TOTALS $	70,000	808,185	-	-	-	-	878,185
Requested Funds:							

102

8

Sitka Spruce Park Improvements (PR19B) Funded 4 years ago

- Also known as “Pirate Park”, the trees are a National Historic Landmark
- Travis-Peterson assessed site and determined ADEC requirements
- Northern Alaska Contractors (NAC) sole bidder $870,500 ($81,500 over budget)
- As a cost saving measure, DPW demo’d certain items ahead of contractor
- Small redesign enabled park elements to fit within the constraints of existing trees
- Northern Alaska Contractors continuing with construction of the park despite material and supplier delays due to Covid 19.
- The basketball court concrete slab has been poured and backboard will be installed before construction is halted in late fall
- Parking area has aggregate surfacing placed and is at final grade
- Excavation and play structure foundations being installed in the lawn area. However, due to limited “green space”, the pyramid climber has been relocated to Community Park to keep the open feel at Sitka Spruce Park. Installation of play structures will occur in summer of 2021 due to the limitation that play surface tiles need to be placed in temperatures above 40 degrees and dry atmospheric conditions
- Large boulder play structure and pirate ship installed with border and tile
- Covid-19 delayed construction but work is complete except for minor clean up
- Playground inspected and certified for use
- Worked with the vendor and contractor to repair/replace broken borders
- Plastic borders were replaced with treated timbers
- This project is 100% complete and can be closed

Sitka Spruce Park Improvements (PR19B)

MUNIS PROJECT PR19B - SITKA SPRUCE PARK						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Legal	$ -	$ -	$ -	$ -	$ -	$ -
Engineering & Architectural	$ 93,360	$ 85,249	$ -	$ 8,111	$ -	$ 8,111
Other Professional	$ -	$ -	$ -	$ -	$ -	$ -
Samplin / Testing	$ -	$ -	$ -	$ -	$ -	$ -
Survey Services	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 784,000	$ 784,000		$ -	$ -	$ -
Telephone / Fax / TV	$ 490	$ 490	$ -	$ -	$ -	$ -
Advertising	$ 303	$ 303	$ -	$ -	$ -	$ -
Contingency	$ 32	$ -	$ -	$ 32	$ -	$ 32
	$ 878,185	$ 870,042	$ -	$ 8,143	$ -	$ 8,143

Rock play structure.
Soft blue tile is installed inside black border.

Sitka Spruce Park Improvements (PR19B)

Due to limited “green space”, the pyramid climber has been relocated to Community Park to keep the open feel at Sitka Spruce Park.

Kelty Field Drainage Improvements (PR22A)

Project Description: Improve the drainage and infield of the softball field. This project will assess and address the field's drainage system with appropriate repairs.

Project Need: The outfield no longer drains after a decent amount of rain. It is unfit and unsafe for use by the public. We frequently cancel softball events because the field needs the first summer months to dry as much as possible. Even as late as August and September the field is very damp and unplayable.

Development Plan & Status : This project will be funded by the General Fund.

FY22-31 CMMP

Kelty Field Improvement Project
PCR

Estimated Project & Purchase Timeline
Pre Design: FY22
Engineering/Design: FY22
Purchase/Construction: FY22

Source	Appropriated	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
General Fund	0	100,000	0	0	0	0	0	0	0	0	0	100,000
Total	0	100,000	0	0	0	0	0	0	0	0	0	100,000

Council Packet page 63

Kelty Field Drainage Improvements (PR22A) Funded 1 year ago

- Silty clay under the grass kept water from draining thru to subsurface
- In-house project
- DPW Roads Division removed sod and layer of silty clay
- Next steps include installation of fill to bring field up to grade, placement of topsoil, and seed/multch
- Work halted in fall 2021 pending outcome of UCSD playfield seeding
- UCSD playfield seeding was successful as observed in spring 2022, the same gravel layers will be utilized at Kelty Field with the addition of topsoil
- Subsurface drain system has been located and televised
- Drain system has 4 partially collapsed areas
- DPW Roads will repair collapsed drains, install gravel layers, topsoil, seed

Kelty Field Drainage Improvements (PR22A)

MUNIS PROJECT PR22A - KELTY FIELD DRAINAGE IMPROVEMENTS						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Other Professional	$ 1,750	$ -	$ -	$ 1,750	$ -	$ 1,750
Repair & Maintenance Serv	$ 97,500	$ 8,015	$ -	$ 89,485		$ 89,485
Telephone / Fax / TV	$ 250	$ -	$ -	$ 250	$ -	$ 250
Advertising	$ 500	$ -	$ -	$ 500	$ -	$ 500
Contingency	$ -	$ -	$ -	$ -	$ -	$ -
	$ 100,000	$ 8,015	$ -	$ 91,985	$ -	$ 91,985

Kelty Field Drainage Improvements (PR22A)

Aquatics Center Roof Replacement (PR22B)

Project Description: This is a Major Maintenance project which will replace the roofing on the Aquatics Center.

Project Need: Presently the roof is a fabric membrane which pulled up during severe wind events and ripped.

Development Plan & Status: DPW hired IRI to patch the ripped membrane and place tires on top to hold it down. IRI gave us a budgetary estimate for purposes of placing this on the CMMP and requesting funding.

This will be put out to bid in early 2022 for summer 2022 construction.

FY22-31 CMMP

Aquatics Center Roof Replacement

Estimated Project & Purchase Timeline
Pre Design FY22
Engineering/Design FY22
Purchase/Construction FY22

Cost Assumptions	
Engineering, Design, Const Admin	0
Other Professional Services	532
Construction Services	341,776
Machinery & Equipment	0
Subtotal	342,308
Contingency (set at 30%)	102,692
TOTAL	**445,000**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY22	FY23	FY24	FY25	FY26	Total
General Fund	0	445,000					445,000
Totals	0	445,000					445,000

Aquatics Center Roof Replacements (PR22B) Funded 1 year ago

- This is a Major Maintenance project which will replace the roofing on the Aquatics Center
- The roof is a fabric membrane which pulled up during severe wind events and ripped
- DPW hired IRI to patch the ripped membrane and place tires on top to hold it down
- IRI gave us a budgetary estimate for purposes of placing this on the CMMP and requesting funding
- This will be put out to bid in fall 2022 for summer 2023 work

Aquatics Center Roof Replacements (PR22B)

MUNIS PROJECT PR22B - AQUATICS CENTER ROOF REPLACEMENT						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Construction Services	$ 341,908	$ -	$ -	$ 341,908	$ -	$ 341,908
Telephone / Fax / TV	$ 50	$ -	$ -	$ 50	$ -	$ 50
Advertising	$ 350	$ -	$ -	$ 350	$ -	$ 350
Contingency	$ 102,692	$ -	$ -	$ 102,692	$ -	$ 102,692
	$ 445,000	$ -	$ -	$ 445,000	$ -	$ 445,000

Aquatics Center Roof Replacements (PR22B)

Parks and Recreation Study (PR23A)

Project Description: Develop a Comprehensive Master Plan for parks and recreation. We will hire an outside consulting firm to help us better assess the needs of our department for the next ten years and beyond.

Project Need: PCR's management team has spent a significant amount of time during the past several years developing a plan for future CMMP projects. Bringing in a consultant could help not only with prioritizing those projects, but also with programming, daily operations, and park maintenance.

Many grants and outside funding require a Comprehensive Master Plan that has been recognized by City Council.

Development Plan & Status : Funding will come from the General Fund. Studies do not require a contingency.

FY23-32 CMMP

Parks and Recreation Study

PR23A

PCR

Estimated Project & Purchase Timeline

Pre Design: FY23

Engineering/Design: FY23

Purchase/Construction: FY23

Cost Assumptions

Other Professional Services		$150,000
Engineering, Design, Construction Admin		
Construction Services		
Machinery & Equipment		
	Subtotal	$150,000
Contingency (0%)		$0
	Total Funding Request	$150,000

Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
General Fund	0	150,000	0	0	0	0	0	0	0	0	0	150,000
Total	0	150,000	0	0	0	0	0	0	0	0	0	150,000

Parks and Recreation Study (PR23A) Funded 3 months ago

- Scope includes a Comprehensive Master Plan for Parks and Recreation
- The goals of the Plan are to:
  - Guide future CMMP project initiation & development
  - Prioritize projects
  - Aid in programming daily PCR operations
  - Park maintenance
- An outside consulting firm will be hired via an RFP to write the Plan
- DPW is assembling a draft RFP

Parks and Recreation Study (PR23A)

MUNIS PROJECT PR23A - PARKS AND RECREATION STUDY						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Other Professional	$ 148,300	$ -	$ -	$ 148,300	$ -	$ 148,300
Telephone / Fax / TV	$ 200	$ -	$ -	$ 200	$ -	$ 200
Advertising	$ 500	$ -	$ -	$ 500	$ -	$ 500
Business Meals	$ 1,000	$ -	$ -	$ 1,000	$ -	$ 1,000
	$ 150,000	$ -	$ -	$ 150,000	$ -	$ 150,000

Parks and Recreation Study (PR23A)

Public Library Improvements (PR601)

Project Description: Since the current facility was designed in 1996, we have seen changes in technology, in the community, and in library use. The library's collections and services have also expanded. Consequently, the facility's design and layout are no longer meeting the changing needs of the community.

In FY18, the Foraker Group accepted this project into a Pre-Development Program whose services have been funded by the Rasmusson Foundation at no cost to the city. During the Pre-Development phase, Architect Brian Meissner with ECI visited Unalaska twice and created a concept design based on public and staff input.

City Council elected to go ahead with the project after Pre-Development, and in August 2018, ECI was awarded the design contract by the City of Unalaska. ECI will further develop the design in FY 2019, continuing to incorporate input from the public and from library staff, and arriving at a refined budget estimate for construction. They will present two reports to City Council in January – May of 2019.

Project Need: This project will increase the efficiency and service delivery life of the Unalaska Public Library. The current facility falls short in the following areas:

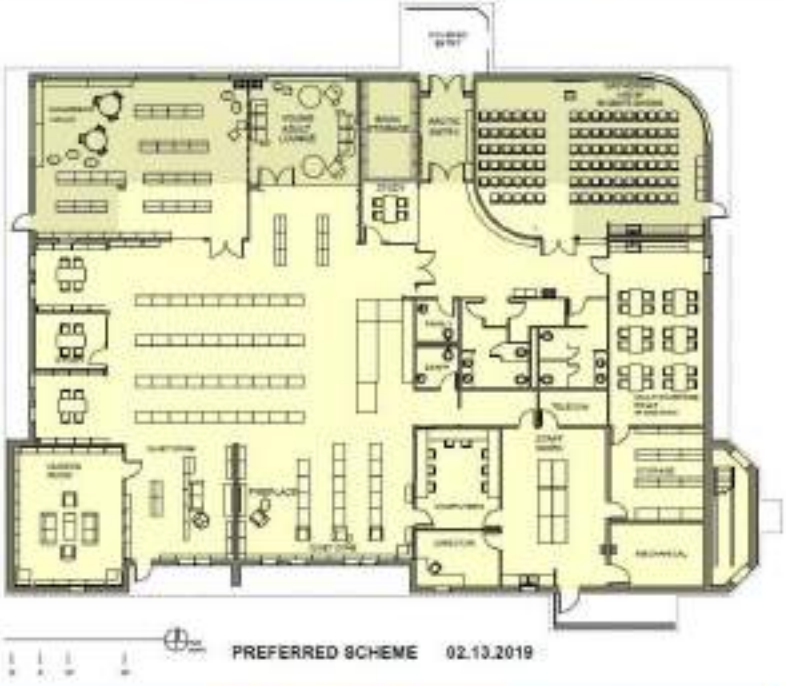
- Space and services for children and teens
- Meeting, study, and program space
- Quiet seating and reading space
- Room for growing library collections

Cost & Financing Data: The current project cost estimate is an Order of Magnitude cost based on conceptual designs created during Pre-Development by ECI Alaska Architecture. Once the project is funded for construction, staff may seek Rasmusson Foundation grant funding.

FY20-24 CMMP

Unalaska Public Library Improvements| PCR - LIBRARY

Estimated Project & Purchase Timeline
Pre Design: FY 2018-2019
Engineering/Design: FY 2019-2020
Purchase/Construction: FY 2020-2021



Cost Assumptions	
Engineering, Design, Const Admin	500,000
Other Professional Services	230,000
Construction Services	4,100,000
Machinery & Equipment	-
Subtotal	**4,830,000**
Contingency (per ECI)	570,000
TOTAL	**5,400,000**
Less Other Funding Sources (Grants, etc.)	
Total Funding Request $	**5,400,000**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)	400,000	5,000,000					5,400,000
1% Sales Tax							-
Grant							-
Proprietary Fund							-
TOTALS $	400,000	5,000,000	-	-	-	-	5,400,000
Requested Funds:						105	

Public Library Improvements (PR601) Funded 7 years ago

- Library building closed on 3-14-22 moved to Burma Road Chapel
- Windscreen art scheduled for shipment to Unalaska the week of 11-28-22 with installation by City personnel under direction of the artist
- Fireplace and artwork installation is complete
- Parking lot striping on hold pending good weather
- Casework and shelving scheduled for shipment to Unalaska the week of 11-28-22
- Storefront glazing began 11-14-22 and will continue until approximately 11-22-22
- Furniture expected to arrive late January 2023
- Interior painting complete with touchup scheduled for after remaining trades are complete
- Ordinance 2022-14 was passed on August 9, 2022 providing additional funds to replace the structurally unsound south roof
- Multi-layered roof system is complete and ready for aluminum top layer (½" Densdeck, blue skin membrane, insulation, sheathing, membrane 2x, Z-furring, and sheathing 2x) on both north and south roofs
- HVAC, Electrical and Plumbing subcontractors completed rough-in inside building, inspection by AMC Engineers was completed on 9-7-22
- 3 Council members toured the project on August 5, 2022
- Project is presently on schedule with re-opening expected in March 2023

Public Library Improvements (PR601)

MUNIS PROJECT PR601 - PUBLIC LIBRARY IMPROVEMENTS						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Eng and Architectural	$ 1,176,150	$ 854,490	$ 316,465	$ 5,196	$ -	$ 5,196
Other Professional	$ 83,934	$ 44,897	$ 10,284	$ 28,753	$ 13,546	$ 15,207
Survey Services	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 7,308,281	$ 3,981,206	$ 3,219,590	$ 107,486	$ 96,198	$ 11,288
Telephone / Fax / TV	$ 2,050	$ 2,031	$ -	$ 19	$ -	$ 19
Advertising	$ 2,163	$ 2,163	$ -	$ -	$ -	$ -
Contingency	$ 373,420	$ -	$ -	$ 373,420	$ -	$ 373,420
Other	$ 379,366	$ 69,995	$ 234,392	$ 74,978	$ 46,600	$ 28,378
General Supplies	$ 3,000	$ 1,925	$ -	$ 1,075	$ -	$ 1,075
Business Meals	$ 837	$ 837	$ -	$ -	$ -	$ -
	$ 9,329,201	$ 4,957,543	$ 3,780,731	$ 590,927	$ 156,344	$ 434,583

Public Library Improvements (PR601)

Fireplace side 1

Fireplace side 2

Repeater Site and Radio Upgrade (PS18A)

This project will upgrade the current radio system by replacing components that include; repeaters, transmitters, antenna systems, and console software operating systems. The various components are located at the top of Haystack, and in the DPS building. This project will ensure the radio system becomes compliant with FCC regulations requiring further 'narrow banding' of public entity radio systems, and will additionally upgrade our current 911 system to become an 'enhanced 911' (E911) system with expansion options for location mapping and CAD (Computer Aided Dispatch) software for incident and event records.

PROJECT NEED: The City of Unalaska utilizes seven radio channels, and all seven channels are maintained and operated by Public Safety. This mission critical system is one of our primary methods of communicating during daily activities as well as disasters. It is designed to provide redundancy in the event of a multi-hazard event. In FY16 two a systems audit was conducted (the R56 audit), which showed there were many problems with the two repeater sites and the system's aging components. Most of the radio system components were purchased around 2005, system parts are no longer manufactured and the components cannot be programed to the frequency ranges which are now required by the FCC.

The E911 system will provide dispatch with the location of the person calling 911 on both wired or wireless phone system, and will result in decreased response times to emergencies. Not incorporating E911 does not affect FCC narrow-banding requirements, nor does it affect the age and condition of our current radio equipment. An investment in a compliant, properly installed communication system will support site repair work, new equipment and new equipment warranty.

DEVELOPMENT PLAN & STATUS: The R56 audit was conducted in FY16 and identified problems with both repeater sites, and with the radio system's components. The contractor will utilize the audit to conduct the needed upgrades, repairs, and replacements in order to obtain R56 audit compliance and ensure operation at the frequency ranges that are required by the FCC. The E911 system will be developed after R56 compliance has been achieved, in a two phased approach—phase one provides caller ID and caller location for landline phones, and phase two provides caller location for landline and cellular phones using GPS mapping and coordinates.

COST & FINANCING DATA: The funding for this project will be for a contractor to upgrade, replace and install radio system components, as well as install the consoles, hardware and software needed for both FCC-required narrow-banding and E911 systems. One funding option is to solely utilize the general fund to pay for the project. Another option is to enact a telecommunication surcharge on all phone lines in Unalaska (up to $2 per line). This surcharge is allowed under AS 29.35.131 and is intended to cover the cost of E911 systems equipment or services (including radio systems). Not updating to an E911 system may affect the ability of the City to assess this telecommunications surcharge. This project is estimated at $630,000.00.

FY20-24 CMMP

Radio System Upgrade | PUBLIC SAFETY

Estimated Project & Purchase Timeline

Pre Design: FY 2018

Engineering/Design: FY 2019

Purchase/Construction: FY 2020

Cost Assumptions	
Engineering, Design, Const Admin	40,000
Other Professional Services	40,000
Construction Services	60,000
Machinery & Equipment	629,231
Subtotal	**769,231**
Contingency (set at 30%)	230,769
TOTAL	**1,000,000**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**1,000,000**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)	310,000	690,000					1,000,000
1% Sales Tax							-
Grant							-
Proprietary Fund							-
TOTALS $	310,000	690,000	-	-	-	-	1,000,000
Requested Funds:						110	

Repeater Site and Radio Upgrade (PS18A) Funded 5 years ago

- This project replaces repeaters, transmitters, antenna systems, and console software operating systems. This ensures the radio system becomes compliant with FCC regulations requiring further ‘narrow banding’ of public entity radio systems, and will additionally upgrade our current 911 system to be-come an ‘enhanced 911’ (E911) system with expansion options for location mapping and CAD (Computer Aided Dispatch) software for incident and event records
- ProComm is the only firm in Alaska with R56 certified technicians so this will be a sole source procurement
- First two phases includes R56 compliance, E-911 software upgrades, dispatch console, and repeater upgrades on Haystack
- Award of contract to ProComm went before Council on 7-27-21
- Phases 1 and 2 are substantially complete
- Two pieces of equipment were replaced under warranty
- Completion of phase 3 has been delayed in preparation for the fiber project from GCI in order for the City to take advantage of possible cost savings and determine internet stability and speed necessary for system programming
- Phase 3 subcontractor work for power and site upgrade requirements completed
- DPW Facilities Maintenance strengthened DPS Comms room floor to support extra weight of equipment and battery backup
- Completion expected by late February 2023 for remaining work such as reinstall misc small peripheral equipment, final programming, and reinstate warranty

Repeater Site and Radio Upgrade (PS18A)

MUNIS PROJECT PS18A - REPEATER SITE & RADIO UPGRADE						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Engineering and Architectural	$ 1,170	$ 1,170	$ -	$ -	$ -	$ -
Other Professional	$ 480	$ 480	$ -	$ -	$ -	$ -
Survey Services	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 778,763	$ 490,459	$ 288,284	$ 19	$ -	$ 19
Telephone / Fax / TV	$ 74	$ 74	$ -	$ 0	$ -	$ 0
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 44,350	$ -	$ -	$ 44,350	$ -	$ 44,350
Machinery and Equipment	$ 675,163	$ 644,170	$ 30,932	$ 61	$ -	$ 61
	$ 1,500,000	$ 1,136,353	$ 319,216	$ 44,431	$ -	$ 44,431

FY18-22 CMMP

REPEATER SITE UPGRADE | PUBLIC SAFETY

ESTIMATED PROJECT & PURCHASE TIMELINE

Inception/Concept: n/a

Pre Design: n/a

Engineering/Design: n/a

Construction: FY18 - FY19

REVENUE SOURCE	EXISTING FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY18	FY19	FY20	FY21	FY22	TOTAL
General Fund (Public Safety)		$110,000					$ 110,000
1% Sales Tax							
Grant							
Proprietary Fund							
TOTALS		$110,000					$ 110,000
Requested Funds:							

Repeater Site Upgrade (PS18A)

Fire Training Facility (PS19A)

Project Description: Establish a live fire training facility in Unalaska. The structure will provide residential type response with a burn room, interior stairs leading to multiple stories, an interior fixed ladder, roof-mounted chop-out curbs, and a parapet roof guard with chain opening. The facility offers multiple training exercises including hose advancement, fire attack, search & rescue, rappelling, laddering, confined space maneuvers, and high-angle rescue operations. Currently there are no such facilities for training public or private sector organizations in Unalaska. This facility will also include a "dirty" classroom and a "clean" classroom that will allow personnel to stay out of the elements while they are instructed on the didactic portion of the lesson.

Project Need: Firefighter certification in Alaska requires a live fire training element to ensure experience fighting fires with significant heat and smoke in limited or zero visibility environments. Uncertified volunteers or paid firefighters can respond to fires, but live fire training and certification ensures that they are prepared and don't panic in real situations. No live fire facility exists in Unalaska, so firefighters travel off-island for training and certification at a cost of approximately $30,000 per person. The training takes 10-12 weeks and volunteers must take time off from their jobs and live away from their families in order to attend. The proposed training facility can be modified for use by the police department to practice active shooter or other use-of-force situations, and also be used as a confined space rescue training facility by other City departments or private industry, and as as a regional training center for other Aleutian Communities.

Development Plan & Status : Only a concept plan exists at the present time.. The proposed site is in the valley near the old chlorine building, or near the current public safety building pending action on the new proposed police station. The general fund will pay for the project. $12,000 was previously appropriated for a temporary training structure made from shipping containers. Cost quote for facility in 2018 dollars is $350,000 plus $85,000 shipping. Other costs include running electrical and water lines to the site and building construction costs for a total of $1,513,500.

FY22-31 CMMP

Fire Training Center

Fire

Estimated Project & Purchase Timeline

Pre Design: FY19

Engineering/Design: FY23

Purchase/Construction: FY24

Cost Assumptions	
Other Professional Services	325,000
Engineering, Design, Construction Admin	0
Construction Services	439,231
Machinery & Equipment	400,000
Subtotal	1,164,231
Contingency (30%)	349,269
Total Funding Request	1,513,500

Source	Appropriated	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
General Fund	12,000	0	0	1,501,500	0	0	0	0	0	0	0	1,513,500
Total	12,000	0	0	1,501,500	0	0	0	0	0	0	0	1,513,500

Fire Training Facility (PS19A) Funded 4 years ago

- This project will construct a live fire training facility and provide residential like design with a burn room, interior stairs to multiple floors, interior fixed ladder, roof-mounted chop-out curbs, and parapet roof guard with chain opening
- This facility will allow for multiple training exercises including hose advancement, fire attack, search & rescue, rappel-ling, laddering, confined space, and high-angle rescue operations
- The facility may also be used for police use-of-force training exercises, as well as for confined space training
- No such facility exists for public or private sector organizations in the City of Unalaska
- DPW removed pipe from the Upper East Broadway site for a temporary interim fire training setup including a few shipping containers and a water storage tank
- Regan Engineering and the City Engineer developed a cost estimate for the full project buildout at the Upper East Broadway site including 2,300 feet of water and sewer main
- DPU removed 19 bags of contaminated soil and continues remediation of the fuel oil spill behind the existing Old Chlorine building
- There is a USGS seismic monitoring station on the property that DPS is coordinating activities with to avoid conflicts
- It is anticipated that this facility may be constructed at the present DPS site
- The Upper East Broadway site is being utilized in its present configuration pending new DPS Police facility construction but has proven to be inadequate due to lack of fire hydrant, classroom setting, and distance from fire station.

Fire Training Facility (PS19A)

MUNIS PROJECT PS19A - FIRE TRAINING FACILITY						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 2,500	$ -	$ -	$ 2,500	$ -	$ 2,500
Other Professional	$ 7,000	$ 6,400	$ -	$ 600	$ -	$ 600
Sampling / Testing	$ 2,500	$ -	$ -	$ 2,500	$ -	$ 2,500
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
	$ 12,000	$ 6,400	$ -	$ 5,600	$ -	$ 5,600

Fire Training Facility (PS19A)

Proposed Fire Training Site at DPS

Upper East Broadway Site

Captains Bay Road and Utilities (PW19A)

Project Description: This project will provide important safety improvements, construct drainage, utilities, and pavement out Captains Bay Road to the entrance of Offshore Systems, Inc. (OSI). This work will construct approximately 2 .5 miles of drainage improvements from Airport Beach Road to OSI, 0.2 miles of rock cliff sloping and road realignment (Safety Improvements), 2.5 miles of paving/walkways/lighting from Airport Beach Road to OSI, and 1.3 miles of electric utility extensions from Westward Seafood Processors to OSI, and 1 mile of waterline extension from Westward to North Pacific Fuel along Captains Bay Road.

Project Need: Captains Bay Road is the logical location for future commercial and residential expansion for the community of Unalaska. Captains Bay has the docking facilities and space for equipment storage to accommodate this and other industrial growth. Oil companies have expressed interest in Unalaska's deep-water port as a resupply port for their northern seas oil exploration and drilling operations. Construction of the road and utility improvements needs to begin now so Unalaska can meet the current and future needs of the community.

Development Plan & Status : In 2017, the City upgraded the electrical service on the first mile of Captains Bay Road to 35 KV from Airport Beach Road to Westward Seafoods. An additional 2 miles of upgrades are required to extend the 35 KV to Offshore Systems, Inc. This final section of the electrical service line is 30 years old and is at its maximum capacity. This project will replace the 15 KV primary electrical line with 2 miles of 35 KV primary electrical line from Westw3ard Seafoods to Offshore Systems, Inc.

Captains Bay Road currently has water and sewer line services from the intersection of Airport Beach Road to Westward Seafoods, a distance of one mile. This project will install a new waterline from Westward Seafoods to North Pacific Fuel to replace the old, failing wood-stave waterline.

HDR Engineering performed a Cost-Benefit Analysis (CBA) of the proposed Captains Bay Road Paving and Utilities Upgrade Project. The purpose of the CBA is to justify project costs to support funding requests to upgrade, pave, illuminate, provide pedestrian walkway, and extend utilities. The range of project benefits includes reduced road maintenance costs, reduced vehicle maintenance costs, reduced vehicle emissions, improved safety, travel time savings, avoided road closures (rock slides, avalanches, accidents). The project is at 65% design and broken into 3 segments over 3 years. The CBA compares project costs against project benefits by segment and by phase to enable decisions to be made regarding the best approach going forward.

FY23-32 CMMP

Captains Bay Road & Utility Improvements

Public Works

PW19A

Estimated Project & Purchase Timeline

Pre Design: FY20

Engineering/Design: FY21

Purchase/Construction: FY23

Captains Bay Road and Utilities

Cost Assumptions	
Engineering, Design, Const Admin	2,966,147
Other Professional Services	2,966,147
Construction Services	23,729,179
Machinery & Equipment	
Subtotal	29,661,474
Contingency (15%)	5,234,378
TOTAL	34,895,851

Source	Appropriated	FY23	FY24	FY25	FY26	FY27	FY28	Total
General Fund	2,000,000	564,556	6,052,582	5,012,551				13,629,689
Grant - CAPSIS		4,000,000						4,000,000
Grant - ARPA			894,688					894,688
Grant - STIP			6,052,582	5,012,551				11,065,133
Electric Capital Fund	972,277							972,277
Electric Proprietary Fund			2,161,823					2,161,823
Water Proprietary Fund			2,172,242					2,172,242
Total	2,972,277	4,564,556	17,333,917	10,025,102				34,895,852

Captains Bay Road and Utilities (PW19A) Funded 4 years ago

- This project provides 0.2 miles of cliff sloping and road realignment (safety improvements), 2.5 miles of paving/walkways from Airport Beach Road to OSI, and 1.3 miles of electric utility extensions from Westward to OSI (this portion is being done under the Makushin Geothermal Project; see page 96), and 1 mile of waterline extension from Westward to North Pacific Fuel
- CAPSIS FY23 funding request for $4M ph1 (Safety Improvements / Road Realignment) was unsuccessful
- The CBA identified ratio of 1.13 **if** project scope includes paving existing alignment the entire length (to OSI) with minimal realignment, a separated paved pedestrian pathway from Westward to Airport Beach Road, a widened shoulder with a rumble strip for the portion between Westward and OSI for the pedestrian pathway (and NO utility extensions nor streetlights)
- A grant application was submitted via Grants.gov for the USDOT RAISE program for $15,396,435 to fund the paving portion but was unsuccessful
- A USDOT grant opportunity, RURAL, has been identified and $15,396,435 applied for with awardees to be announced in October 2022
- Cost Benefit Analysis needs to be updated to include proposed Trident facility
- See page 137 for Waterline from Westward to North Pacific Fuel
- Mtg at DPW Conference room with Chris Hladick, Bob Cummings, Bil Hompka, Steve Tompkins, and Tom Cohenour on 10-12-22 to clarify phasing, component priorities, and strategic approach to funding
- Debrief on 11-10-22 with DOT regarding FY22 RAISE grant application (not funded)
- FY23 RAISE Notice of Funding Opportunity will be released at end of November 2022
- Pre-app mtg w/ DOT on 11-14-22 RE CTP app for paving ABR - WSI

Captains Bay Road and Utilities (PW19A)

MUNIS PROJECT PW19A - CAPTAINS BAY ROAD & UTILITY IMPROVEMENTS						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectura	$ 2,108,733	$ 1,448,325	$ 12,943	$ 647,465	$ -	$ 647,465
Other Professional	$ 279,357	$ 277,298	$ 2,020	$ 39	$ -	$ 39
Survey Services	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 49,523	$ 49,523	$ -	$ -	$ -	$ -
Telephone / Fax / TV	$ 425	$ 369	$ -	$ 56	$ -	$ 56
Advertising	$ 200	$ -	$ -	$ 200	$ -	$ 200
Permit Fees	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 126,318	$ -	$ -	$ 126,318	$ -	$ 126,318
	$ 2,564,556	$ 1,775,515	$ 14,963	$ 774,078	$ -	$ 774,078

Captains Bay Road and Utilities (PW19A)

Turn lane removed from project per Council direction as a cost saving measure.

Causeway Culvert Replacement (PW19B)

Project Description: Replace failing culverts under Broadway Avenue causeway between Methodist Church and Dutton Road.

Project Need: This project was listed as a need in the 2013 Hazard Mitigation Plan. The existing metal culverts that allow drainage from Dutton Lake and surrounding watershed into Iliuliaq Lake are old, rusted, and showing signs of collapse and need to be replaced. Salmon are known to spawn in the Dutton Lake stream.

Development Plan & Status (Include Permit and Utility Requirements): The project is in early stage concept. A complete design will be required along with USACOE and Fish & Game permitting . Dutton Lake and the stream feeding into Dutton Lake are anadromous and do support fish habitat and spawning. As recently as 2016, Fish and Game documented fish in the Lake and stream.

Cost & Financing Data: No cost data is available but preliminary estimates are in the $800,000 range.

FY20-24 CMMP

Causeway Culvert Replacement| DPW

Estimated Project & Purchase Timeline
Pre Design: FY 2019
Engineering/Design: FY 2020
Purchase/Construction: FY 2022

Existing Culverts are Failing

Proposed culverts improve fish habitat, can be visually inspected, and are large enough to accommodate tidal fluctuations and heavy rainfall.

Cost Assumptions	
Engineering, Design, Const Admin	100,000
Other Professional Services	15,000
Construction Services	500,000
Machinery & Equipment	-
Subtotal	**615,000**
Contingency (set at 30%)	184,500
TOTAL	**799,500**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**799,500**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)	100,000	699,500					799,500
1% Sales Tax							-
Grant							-
Proprietary Fund							-
TOTALS $	100,000	699,500	-	-	-	-	799,500
Requested Funds:							

Causeway Culvert Replacement (PW19B) Funded 4 years ago

- This project will replace 3 failing culverts under Broadway Avenue causeway between Methodist Church and Dutton Road
- On 12-11-18, Council approved Resolution 2018-72 which authorized the City Manager to enter into an agreement with HDL Engineering
- A preliminary design report was received on May 30, 2019 and comments from COU provided to HDL who revised and returned the report on 8-22-19
- The culvert will equalize water levels between Unalaska Lake and Dutton (Iliuluk) Lake with capacity to accommodate a 100 year storm and prevent flooding of upstream properties
- DPW received the 65% plans, specs, and estimate on 09-02-20 and provided preliminary feedback which required a significant redesign.
- DPW received revised hydrological report based on guidance from AK Fish & Game and revised 65% design package on 02-16-21
- This project is part of the mitigation for the Captains Bay Road project
- ADF&G provided comments that will require some revisions to the design and restricted in water work to June 24 – July 15
- ADF&G and USACOE permits have been submitted to agencies and consultation with agencies is ongoing to support approval
- After consultation with ADF&G and HDL, it was determined necessary to obtain additional bathymetry and Geotech information for in-water work isolation requirement design
- COU received HDL proposal for the additional bathymetry and Geotech work

Causeway Culvert Replacement (PW19B)

MUNIS PROJECT PW19B - CAUSEWAY CULVERT REPLACEMENT						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectura	$ 191,500	$ 191,106	$ 288	$ 106	$ -	$ 106
Other Professional	$ -	$ -	$ -	$ -	$ -	$ -
Survey Services	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 421,500	$ -	$ -	$ 421,500	$ -	$ 421,500
Telephone / Fax / TV	$ 1,000	$ 52	$ -	$ 948	$ -	$ 948
Advertising	$ 500	$ -	$ -	$ 500	$ -	$ 500
Permit Fees	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 184,500	$ -	$ -	$ 184,500	$ -	$ 184,500
General Supplies	$ 500	$ 99	$ -	$ 401	$ -	$ 401
	$ 799,500	$ 191,257	$ 288	$ 607,955	$ -	$ 607,955

Causeway Culvert Replacement (PW19B)

Burma Road Chapel Upgrades (PW20A)

Project Description: In 2019 the PCR side of the Burma Road Chapel showed signs of rotten siding along the lower portions of the exterior wall. Architect Corey Wall, JYL Architects, crawled under the structure and took photos of the rim joists. Evidence of rot was observed below the building. The original scope of this project included removing shingles, roof boards, and damaged insulation, and installing framing for eave soffit ventilation/increased depth for insulation, insulation to R-30, new roof boards, re-roofing the building, and painting the new eaves and trim. Additional roof repairs will be required in the future. An imminent need is the repair of the rotten sill plate, rim joists, and exterior siding on the PCR side of the Burma Rd Chapel.

Project Need: Exterior siding, structural sill plates and rim joists all show signs of rot and need replacement. Also, the facility lacks proper insulation and ventilation, which causes snow melt on the roof that runs down to the eave, freezes and causes ice dams to separate the walls and roof. As ice dams grow larger, the water from the melting snows backs up and leaks between wood shingles into the building causing water damage. In FY08, metal flashing was installed on the eaves over the electric cable system to heat the flashing. A new roof will protect the facility for at least another 30 years.

Development Plan & Status : DPW's Facilities Maintenance budget will replace the metal flashing and heat trace on the eave as an interim solution when the present system fails. The rotten siding along the lower portions of the exterior wall and sill plate repair work began in November 2020 and will be completed by the end of FY21. The major roof repairs will be conducted in the future, possibly as soon as FY24.

FY22-31 CMMP

Burma Road Chapel Upgrades
Public Works

Estimated Project & Purchase Timeline
Pre Design: FY20
Engineering/Design: FY21
Purchase/Construction: FY24

Cost Assumptions	
Engineering, Design, Const Admin	70,000
Other Professional Services	10,000
Construction Services	373,077
Machinery & Equipment	-
Subtotal	**453,077**
Contingency (set at 30%)	135,923
TOTAL	**589,000**

Source	Appropriated	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
General Fund	110,000	0	0	479,000	0	0	0	0	0	0	0	589,000
Total	110,000	0	0	479,000	0	0	0	0	0	0	0	589,000

Burma Road Chapel Upgrades (PW20A) Funded 3 years ago

- Close up drone footage of entire roof and eaves conducted by DPW
- Foundation inspection utilizing on-island expertise
- Foundation and lower siding repairs will be conducted in summer 2020
- DPW Director inspected the interior perimeter under building (crawl space)
- Some evidence of mold and deterioration of west foundation (wooden) sill plate
- Lower 3’ of siding will be removed so detailed inspection can be performed
- If damage is minimal, repairs will be conducted and new siding installed
- Howard Henning Construction hired to remove lower 3’ of siding, evaluate degree of damage, and make repairs if minimal
- Upon deeper investigation of the foundational members, rotten sill plate, rim joist, sheathing, and siding was more extensive than initially thought
- The City purchased materials and Howard Henning began performing the restoration work
- Work paused over winter and resumed this spring 2021
- Additional areas of rotten wood were also addressed – siding, sheathing, steps
- Restoration work to stabilize foundation is complete
- Addition shingles are coming loose and will be secured
- Next steps include summer 2023 roof shingle cleaning, replacement of compromised shingles, moss removal, and inspection of metal flashing on eaves

Burma Road Chapel Upgrades (PW20A)

MUNIS PROJECT PW20A - BURMA ROAD CHAPEL UPGRADES						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 12,800	$ -	$ -	$ 12,800	$ -	$ 12,800
Construction Services	$ 77,200	$ 77,151	$ -	$ 49	$ -	$ 49
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 20,000	$ -	$ -	$ 20,000	$ -	$ 20,000
	$ 110,000	$ 77,151	$ -	$ 32,849	$ -	$ 32,849

Burma Road Chapel Upgrades (PW20A)

DPW Inventory Room Shelving (PW22B)

Project Description: Rolling high capacity shelving in the DPW Supply Division will increase warehouse capacity by 50%. The carriage and rails system will enable shelves to move side to side and eliminate idle aisles.

Project Need: The DPW Supply Inventory Room is crowded and access to products, inventory, parts, and PPE is inefficient. Overflow is stored in the Warehouse or offsite which is subject to temperature variations and vermin contamination. The rolling bulk shelving will enable us to store double the existing capacity by eliminating static access isles.

Development Plan & Status : Price proposal includes materials and installation. Supplier will come here to install the units with some assistance from City staff.

FY22-31 CMMP

DPW Inventory Room - High Capacity Shelving

Public Works

Estimated Project & Purchase Timeline

Pre Design: FY22

Engineering/Design: FY22

Purchase/Construction: FY22

Cost Assumptions

Engineering, Design, Const Admin		1,385
Other Professional Services		4,000
Construction Services		0
Machinery & Equipment		110,000
	Subtotal	115,385
Contingency (set at 30%)		34,615
	TOTAL	**150,000**

Source	Appropriated	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
General Fund	0	150,000	0	0	0	0	0	0	0	0	0	150,000
Total	0	150,000	0	0	0	0	0	0	0	0	0	150,000

DPW Inventory Room Shelving (PW22B) Funded 1 year ago

- DPW Supply inventory room is overly packed and inefficient
- Rolling high capacity shelving will increase storage capacity by 50%
- Vendor selected - Southwest Solutions Group in Seattle
- Pricing obtained thru Sourcewell of which COU is a member (#136780)
- Floor plan layout reviewed and approved by Supply / Facility Maintenance
- Supply rented a 40’ container for March & April in which to store items from storeroom while new shelving was installed
- Shelving system was delivered to freight company in Seattle March 2nd
- Additional shelves and dividers ship from vendor this week
- Shelving system is installed and in use

DPW Inventory Room Shelving (PW22B)

MUNIS PROJECT PW22B - DPW INVENTORY ROOM SHELVING						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 1,385	$ -	$ -	$ 1,385	$ -	$ 1,385
Other Professional	$ 4,000	$ -	$ -	$ 4,000	$ -	$ 4,000
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 34,615	$ -	$ -	$ 34,615	$ -	$ 34,615
Machinery & Equipment	$ 110,000	$ 111,994	$ 8,139	$ (10,133)	$ -	$ (10,133)
	$ 150,000	$ 111,994	$ 8,139	$ 29,867	$ -	$ 29,867

DPW Inventory Room Shelving (PW22B)

DDC Controls Upgrade – General Fund Bldgs (PW23A)

Project Description: Controls system upgrades to new N4 platform for 11 City owned buildings.

Project Need: New N4 upgrades necessary to stay current with technology.

Development Plan & Status : In FY20, our HVAC controls contractor, Long Building Technologies, gave us an informal no cost quote. In FY23 we will work with Long to refine the scope and get a solid cost estimate. In FY24, Project implementation will occur.

FY23-32 CMMP

HVAC Controls Upgrades - 11 City Buildings

Public Works

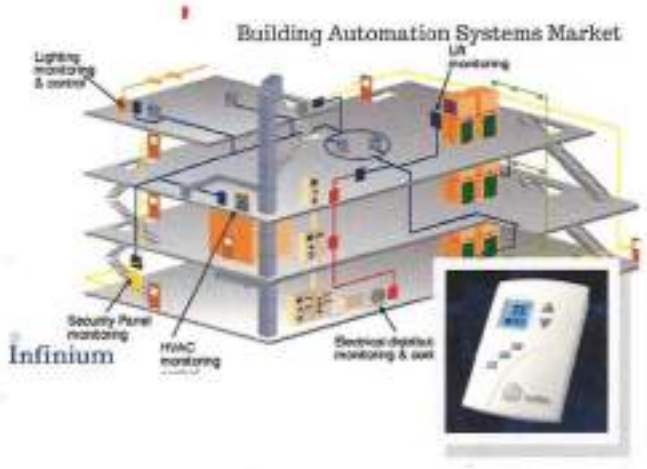
PW23A General Fund Buildings

Estimated Project & Purchase Timeline

Pre Design: FY23

Engineering/Design: FY23

Purchase/Construction: FY24



Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
General Fund		$ 141,323	0	0	0	0	0	0	0	0	0	$ 141,323
Total		$ 141,323	0	0	0	0	0	0	0	0	0	$ 141,323

DDC Controls Upgrade – General Fund Bldgs (PW23A)

DDC Controls Upgrade – General Fund Bldgs (PW23A)

MUNIS PROJECT PW23A - DDC CONTROLS UPGRADE - GF BUILDINGS						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Construction Services	$ 141,323	$ -	$ 141,323	$ -	$ -	$ -
	$ 141,323	$ -	$ 141,323	$ -	$ -	$ -

DDC Controls Upgrade – General Fund Bldgs (PW23A)

DPW Equipment Storage Building (PW23B)

Project Description: Continuous exposure to the elements shortens the useable life of the City's rolling stock (dozers, dump trucks, graders, snow plows) and increases maintenance costs. Winter rain & slush build-up freeze on the equipment and creates excessive morning prep time clearing hubs, hydraulics, windshields, lights, and back-up horns prior to equipment use. This building will maintain an interior temperature at approximately 45F using a heated slab and keep equipment from freezing overnight and ready.

Project Need: A heated building will improve winter emergency response time and increase the capabilities of Public Works. The new storage building will extend the life of trucks, trailers, graders, snow plows, and snow blowers. The building will also decrease maintenance expense.

Development Plan & Status : Land is available on the Public Works site. A building permit and State Fire Marshall approval will need to be obtained. The project will require a new 1.5 inch water service and a new 6 inch sewer drain along with a new electrical service. Funding will come from the General Fund. The project is estimated at $200 per square feet. Building costs are then expected to be $1,545,830.

FY23-32 CMMP

Equipment Storage Building

Public Works

PW23B

Estimated Project & Purchase Timeline

Pre Design: FY23

Engineering/Design: FY23

Purchase/Construction: FY24

DPW Equipment Storage

Cost Assumptions

Engineering, Design, Const Admin		195,000
Other Professional Services		34,000
Construction Services		960,000
Machinery & Equipment		100
	Subtotal	**1,189,100**
Contingency (set at 30%)		356,730
	TOTAL	**1,545,830**
Less Other Funding Sources (Grants, etc.)		-
	Total Funding Request $	**1,545,830**

Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
General Fund	0	195,000	1,350,830	0	0	0	0	0	0	0	0	1,545,830
Total	0	195,000	1,350,830	0	0	0	0	0	0	0	0	1,545,830

DPW Equipment Storage Building (PW23B)

DPW Equipment Storage Building (PW23B)

MUNIS PROJECT PW23B - DPW EQUIPMENT STORAGE BUILDING						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 194,300	$ -	$ -	$ 194,300	$ -	$ 194,300
Telephone TV Fax	$ 200	$ -	$ -	$ 200	$ -	$ 200
Advertising	$ 500	$ -	$ -	$ 500	$ -	$ 500
	$ 195,000	$ -	$ -	$ 195,000	$ -	$ 195,000

DPW Equipment Storage Building (PW23B)

DPW Warehouse Fire Alarm & Sprinklers (PW23C)

DPW Warehouse Fire Alarm & Sprinklers (PW23C)

DPW Warehouse Fire Alarm & Sprinklers (PW23C)

MUNIS PROJECT PW23C - DPW WAREHOUSE FIRE ALARM & SPRINKLERS						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Construction Services	$ 45,000	$ -	$ -	$ 45,000	$ -	$ 45,000
Telephone TV Fax	$ -	$ -	$ -	$ -	$ -	$ -
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
	$ 45,000	$ -	$ -	$ 45,000	$ -	$ 45,000

DPW Warehouse Fire Alarm & Sprinklers (PW23C)

Elementary School Heating Repairs (SS22A)

Elementary School Heating Repairs (SS22A)

Elementary School Heating Repairs (SS22A)

MUNIS PROJECT SS22A - ELEMENTARY SCHOOL HEATING SYSTEM REPAIRS						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Construction Services	$ 75,000	$ 50,881	$ -	$ 24,119	$ -	$ 24,119
Contingency	$ 15,000	$ -	$ -	$ 15,000	$ -	$ 15,000
General Supplies	$ 10,000	$ 3,731	$ -	$ 6,269	$ -	$ 6,269
	$ 100,000	$ 54,612	$ -	$ 45,388	$ -	$ 45,388

Elementary School Heating Repairs (SS22A)

DDC Controls Upgrade - Schools (SS23A)

Project Description: Controls system upgrades to new N4 platform for 11 City owned buildings.

Project Need: New N4 upgrades necessary to stay current with technology.

Development Plan & Status : In FY20, our HVAC controls contractor, Long Building Technologies, gave us an informal no cost quote. In FY23 we will work with Long to refine the scope and get a solid cost estimate. In FY24, Project implementation will occur.

Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
General Fund		$ 97,838	0	0	0	0	0	0	0	0	0	$ 97,838
Total		$ 97,838	0	0	0	0	0	0	0	0	0	$ 97,838

DDC Controls Upgrade - Schools (SS23A)

DDC Controls Upgrade - Schools (SS23A)

MUNIS PROJECT SS23A - DDC CONTROLS UPGRADE - SCHOOLS						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Construction Services	$ 97,838	$ -	$ 97,838	$ -	$ -	$ -
	$ 97,838	$ -	$ 97,838	$ -	$ -	$ -

DDC Controls Upgrade - Schools (SS23A)

UCSD Playground Renovation (SS601)

Project Description: The UCS playground is located at the north end of the school property. The fenced in area of the playground totals 14,260 square feet, and the deteriorating wood and metal structures were installed in about 1996. These playground structures were purchased and installed through the efforts of many local individuals, business and Unalaska Pride. Some have part repaired or removed due to safety concerns with sharp edges and loose handholds. The playground surface is pea gravel with a type of tar paper subsurface. This surface has been fairly easy to maintain, although it needs to be regarded to make it safe and more suitable for students in grades 5 – 12. This might be accomplished with a new play structure, swing set, and additional flat, paved surfaces for basketball, volleyball, and other court based games. Additionally, the adjacent field could be improved through regarding and the additional of topsoil and grass. If fenced in, this field could be utilized for soccer, flag football and other field based games.

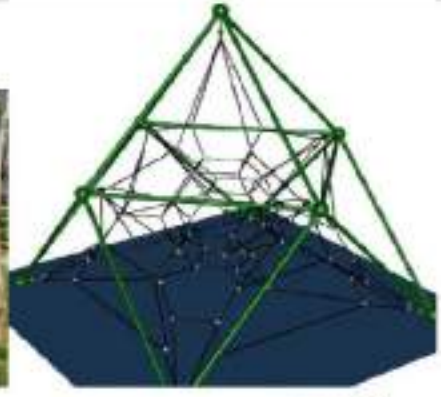
Project Need: The UCS playground would serve as an additional recreation site for families and community members during the evenings, weekends, and summer months. While the play structures at Town Park and the Recreation Center are wonderful for younger children, currently there is not an area in downtown that is appropriately equipped or designed for older children and young adults to play outdoors. The UCS playground would also provide a nice alternative for young people who are not avid skateboarders, but who might rather enjoy playing basketball, volleyball, soccer, and other field or court based activities. The School District's Student Nutrition and Physical Activity policy mandates that schools strive to allow students the opportunity for moderate physical activity each day. Studies have revealed that aerobic exercise during childhood is essential for cognitive development. A playground that meets all industry standards safety requirement would promote healthy life style practice while also expanding city recreation opportunities. This propose project support the Unalaska Comprehensive Plan 2020 by improving a venue for recreation activities. Further, the renovation would enhance the appearance of the downtown neighborhood will improve overall quality of life for Unalaska's residents.

Development Plan & Status (Include Permit and Utility Requirements): Overall costs for this project depends on the concept phase that will include public feedback, preserved and support. Detailed estimates for this project will be gathered once the scope of the project is determined. Possible funding sources included, donations, contributions, sponsorships, and grants.

FY20-24 CMMP

Unalaska City School Playground Renovation | PCR

Estimated Project & Purchase Timeline
Pre Design: n/a
Engineering/Design: FY 2019
Purchase/Construction: FY 2020



Cost Assumptions	
Engineering, Design, Const Admin	30,000
Other Professional Services	
Construction Services	759,604
Machinery & Equipment	
Subtotal	**789,604**
Contingency (set at 30%)	236,881
TOTAL	**1,026,485**
Appropriated Revenue	300,000
Total Funding Request $	**1,326,485**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)	300,000	1,026,485					1,326,485
1% Sales Tax							-
Grant							-
Proprietary Fund							-
TOTALS $	300,000	1,026,485	-	-	-	-	1,326,485
Requested Funds:							

UCSD Playground Renovation (SS601) Funded 7 years ago

- Scope Includes:
  - Multi-use court (full-court basketball, volley-ball)
  - Grass play field construction (soccer, touch football)
  - Perimeter running track and fence
  - Benches and trash receptacles
  - 4 Square court, Swingset, Play equipment (2 climbing structures)
- The existing fuel tank, which was located on the former 4-Square concrete slab play area, was relocated which increased playground area
- Basketball court slab poured, play structure concrete foundations installed, play field graded and seeded
- Items received from contractor and stored at PCR include:
  - 1 box of two soccer goal nets
  - 1 box of soccer goal accessories including straps, clips, and ties
  - 2 volleyball poles with crank
  - 1 box of volleyball nets including allen wrench
- Certified playground inspector approved playground for use
- Grand Opening held on March 23rd at 3:00 PM
- Contractor and COU are monitoring the basketball court concrete and a decision on repairs will be made in the summer of 2022 pending recommendations from Mark Hanson
- Mark Hanson submitted repair recommendation on 07-13-22
- Basketball court stripping will occur in spring of 2023
- Concrete repair on west side of basketball court was performed by contractor

UCSD Playground Renovation (SS601)

MUNIS PROJECT SS601 - UCSD PLAYGROUND RENOVATION						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 66,775	$ 66,318	$ -	$ 457	$ -	$ 457
Sampling / Testing	$ 1,254	$ 540	$ -	$ 714	$ -	$ 714
Survey Services	$ 4,250	$ 4,250	$ -	$ -	$ -	$ -
Solid Waste	$ 442	$ 442	$ -	$ -	$ -	$ -
Construction Services	$ 1,215,750	$ 1,123,050	$ 92,700	$ -	$ -	$ -
Telephone / Fax / TV	$ 728	$ 728	$ -	$ -	$ -	$ -
Advertising	$ 303	$ 303	$ -	$ -	$ -	$ -
Contingency	$ 34,732	$ -	$ -	$ 34,732	$ -	$ 34,732
General Supplies	$ 2,251	$ 2,251	$ -	$ -	$ -	$ -
Interest Expense	$ -	$ -	$ -	$ -	$ -	$ -
	$ 1,326,485	$ 1,197,882	$ 92,700	$ 35,903	$ -	$ 35,903

Grand Opening held on March 23rd at 3:00 PM

UCSD Playground Renovation (SS601)

Pavement Preservation Sealcoating (PW22C)

Project Description: Preserve asphalt roads with the application of slurry coat, also known as sealcoat. This project would hire a contractor to resurface all of Unalaska's paved roads.

Project Need: City roads were paved in 2016 and have not been coated or protected since. The State DOT and AASHTO highly recommend seal coat applications such as slurry seal, chip seal, or some other means to preserve asphalt roads. This maintenance will extend pavement life and protect a major financial investment.

Development Plan & Status : There has not been a paving contractor in Unalaska / Dutch Harbor since 2016. Funding will come from the General Fund.

FY22-31 CMMP

Pavement Preservation - Sealcoating
Public Works

Estimated Project & Purchase Timeline
Pre Design: FY22
Engineering/Design: FY22
Purchase/Construction: FY22

Cost Assumptions	
Other Professional Services	
Engineering, Design, Construction Admin	15,000
General Supplies	554,231
Machinery & Equipment	200,000
Subtotal	769,231
Contingency (30%)	230,769
Total Funding Request	1,000,000

Source	Appropriated	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
1% Sales Tax	0	1,000,000	0	0	0	0	0	0	0	0	0	1,000,000
Total	0	1,000,000	0	0	0	0	0	0	0	0	0	1,000,000

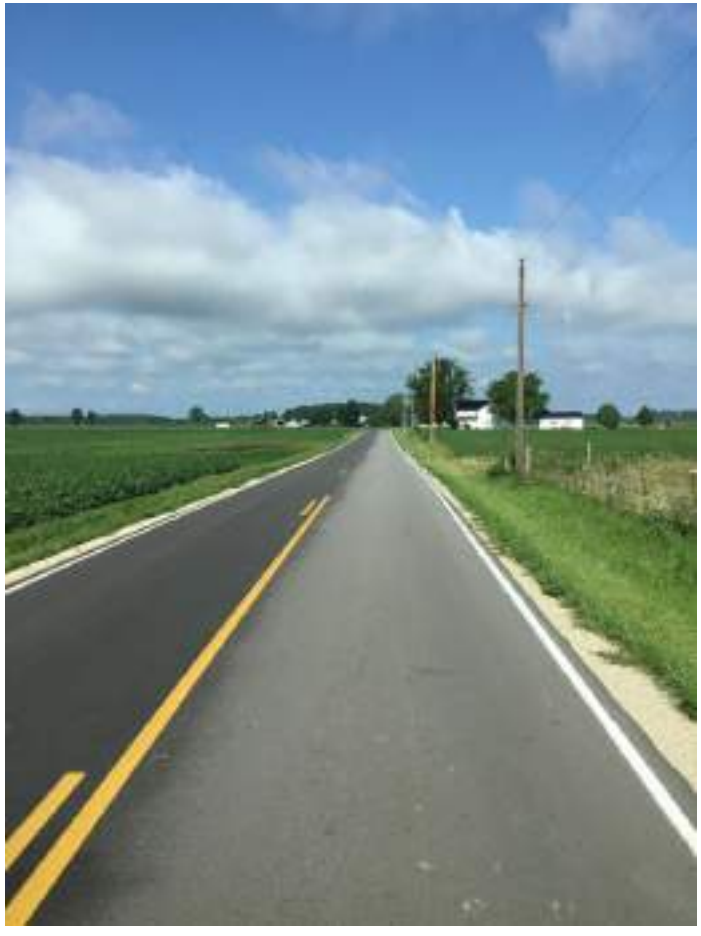
Pavement Preservation Sealcoating (PW22C) Funded 1 year ago

- This project will involve the application of a seal coat on our asphalt roads and parking lots
- This application will preserve the paved roads and extend their useful life
- Seal coating is typically done every 5 years
- Bio-Restore is water based and lessens impact on salmon habitat / environment
- Bio-Restore won the GSA pricing bid so competitive bidding has been done
- 50% payment sent to supplier in order to capture $5,000 discount
- 15 Bio-Restore totes are in Unalaska and delivered on 10-14-22

Pavement Preservation Sealcoating (PW22C)

MUNIS PROJECT PW22C - PAVEMENT PRESERVATION - SEALCOATING						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 15,000	$ -	$ -	$ 15,000	$ -	$ 15,000
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 230,769	$ -	$ -	$ 230,769	$ -	$ 230,769
General Supplies	$ 554,231	$ 81,314	$ 81,314	$ 391,602	$ -	$ 391,602
Machinery & Equipment	$ 200,000	$ 5,750	$ 5,750	$ 188,500	$ -	$ 188,500
	$ 1,000,000	$ 87,064	$ 87,064	$ 825,871	$ -	$ 825,871

Pavement Preservation Sealcoating (PW22C)



Automatic Meter Read (EL18B)

PROJECT DESCRIPTION: The Electric Utility AMR (Automatic Meter Reading) System project encompasses the final design, installation and commissioning of a system capable of integrating with our existing automatic meter reading and financial billing systems. This includes upgrades to the Electrical Distribution system infrastructure, in the form of meter upgrades, to incorporate automatic meter reading capabilities system wide. This project will include the installation of a communications system capable of polling 100% of the electric system utility meters on an operator selectable schedule for both maintenance and monthly meter reading purposes. The implementation of this system is the last step in an effort to synchronize the production, distribution and billing portions of the Electric Utility.

PROJECT NEED: Results of a survey on Rural Electrical Systems in 2012, conducted by AEA (Alaska Energy Authority), noted that our meter reading abilities were an area to look at for improvement. The AEA in addition to other agencies mandate accuracy between power sales and production, with an expected line loss for our system of about 4%. When Power Cost Equalization (PCE) reports show line losses excessively higher or lower than 4%, an explanation must be provided. Less accuracy may affect the PCE (Power Cost Equalization) rate, which generally covers more than half of residential customers' electrical utility bill. This project will increase monitoring abilities of the system, including, but not limited to the ability to pass on notice of excessive power use to customers, quicker cut in/out of services and reduce "bad" meter reads due to read or input error. Automatic polling will allow meters to be read on a more consistent base, with the ability to disregard time/labor conflicts with weekends, holidays, and weather conditions which currently causes fluctuations of more than a week in the read schedule.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS): This project is closely related with existing Water Utility Meter reading system, and existing Power Production SCADA upgrades, as well as integration of all these systems into the City Finance Department. The implementation of a single interdepartmental system between the Electric and Water Utilities will reduce engineering time, implementation costs, construction costs, future maintenance cost and training cost by using a common system. An AMR system will create the ability to accurately synchronize customer billing from the Electric Distribution, with the required governmental agency Electric production reports, creating a more accurate overall picture of power produced and power sold.

FY21-25 CMMP

AUTOMATIC METER READ SYSTEM | ELECTRIC

EL18B | CAPITAL PROJECT

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: FY 2017

Engineering/Design: FY 2019

Purchase/Construction: FY 2021

Cost Assumptions	
Engineering, Design, Const Admin	19,184
Other Professional Services	32,875
Construction Services	30,527
Machinery & Equipment	320,000
Subtotal	**402,586**
Contingency (set at 30%)	120,776
TOTAL	**523,362**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**523,362**

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund							
1% Sales Tax							
Grant							
Proprietary Fund	219,362	304,000					523,362
TOTALS $	219,362	304,000					523,362
Requested Funds:							

Automatic Meter Read (EL18B) Funded 5 years ago

- The Electric Utility AMR (Automatic Meter Reading) System project encompasses the final design, installation and commissioning of a system capable of integrating with our existing automatic meter reading and financial billing systems
- In FY17 Boreal Controls conducted a scoping study and costs were solicited from 3 vendors: Sensus, Itron and General Electric. Itron had the lowest cost at $316,867 for both water and electric combined
- DPU Electric negotiated with Itron for a 3 phased approach to install the meters, handheld reader and software for $98,096 as Phase 1
- Once all 3 phases are complete, it will fully automate the system and a drive-by will no longer be necessary to collect meter readings
- On 12-11-18, Council approved Resolution 2018-64 which authorized the City Manager to enter into an agreement with Itron to conduct Phase 1 for $98,096.00
- Phase 2 & 3 funding requested in the FY20-FY24 CMMP cycle
- Residential meters built at Itron factory (Texas) and received in October 2019
- Commercial meters built to COU spec and programmed to match our demand load and system
- Installation began on Standard Oil Hill residential area and proceeding as time and manpower allows
- All 1032 meters are installed (777 res / 255 industry)
- Last phase of project is MUNIS integration; this portion is on-going.

Automatic Meter Read (EL18B)

MUNIS PROJECT EL18B - AUTOMATIC METER READ						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 338,796	$ 100,370	$ 66,413	$ 172,014	$ -	$ 172,014
Telephone / Fax / TV	$ 200	$ 13	$ -	$ 187	$ -	$ 187
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 120,776	$ -	$ -	$ 120,776	$ -	$ 120,776
General Supplies	$ 2,000	$ 1,501	$ -	$ 499	$ -	$ 499
Computer Hardware	$ 1,590	$ 1,590	$ -	$ -	$ -	$ -
Machinery & Equipment	$ 60,000	$ -	$ -	$ 60,000	$ -	$ 60,000
	$ 523,362	$ 103,474	$ 66,413	$ 353,475	$ -	$ 353,475

Automatic Meter Read (EL18B)

Wind Power Development (EL18C)

PROJECT DESCRIPTION: This initial phase of the project for Wind Energy requires funds to aid in studies and research that will further define the scope of the project and determine the viability of wind energy in Unalaska.

PROJECT NEED: The community of Unalaska continues to bring forward the need to develop alternative energy capabilities. If Wind Energy is determined to be cost effective then it will be a great way to increase power generated in an environmentally friendly method.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS): The first step in determining if wind can be a viable resource to produce electricity on the island is to perform wind studies. Results will determine whether there are any geographic areas that meet the wind standards for sustainable wind energy production. In concert with the studies, a determination needs to be made on whether the city would be able to obtain all of the proper permits from the various governmental agencies. The first phase of the wind studies is underway and will be completed in FY2019. Results will identify where to install MET towers to gather wind data for 12-18 months. Further scoping for this project will be completed when the first phase study is complete.

COST & FINANCING DATA: Cost and financing are undetermined for the overall project. We estimate the cost of the study at $200,000 but will need to refine that cost as we move forward in the process. This project was funded in FY2018 in the amount of $200,000. Further costs will be updated when the scope of work is updated.

Cost Assumptions

Engineering Cost	
Other Professional Services	$ 200,000
Machinery and Equipment	
Construction Services	
Subtotal	$ 200,000
Contingency	
Total	$ 200,000

FY19-23 CMMP

WIND ENERGY| ELECTRIC PRODUCTION

ESTIMATED PROJECT & PURCHASE TIMELINE
Pre Design: FY 2018
Engineering/Design: FY 2020
Purchase/Construction: FY 2022

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY19	FY20	FY21	FY22	FY23	Total
General Fund	200,000		TBD	TBD			200,000
1% Sales Tax							
Grant							
Proprietary Fund (Electric-Production)							
TOTALS $	200,000		TBD	TBD			200,000

Requested Funds: Funds to be used to aid in studies and research to refine the concept of the project.

Wind Power Development (EL18C) Funded 5 years ago

- Phase I: Past Assessments
- Phase II: Pre-Design Site Selection
  - November 2017, V3 Energy (V3) and Electrical Power Systems (EPS) were selected to assess prospective temporary Meteorological Tower (MET) sites and basic grid requirements
  - The first 3 MET stations went up in October 2018. We have a September 1, 2018 through September 1, 2020 lease agreement with OC for the sites – including Hog Island
- Phase III: Data Collection
  - Industry standard study. One to two years of data minimum IUC 61 400-1 Turbine Design Standard to obtain 5 year warranties from turbine manufacturers for extreme winds and turbulence
  - If initial wind data exhibits undesirable characteristics such as excessive turbulence or shear, a tower may be moved to the next site on a prioritized list. The prioritized list emphasizes open exposure, proximity to electrical grid, future site development costs and FAA restrictions
  - The AEA recommended to the legislature to approve the feasibility study portion of the grant ($139,000) and not the final design portion of the application. Final decision on funding will not be complete until legislature approval, expected by summer's end. Drafting of final report is on hold until legislature decides on funding the feasibility study grant application. If feasibility study is funded, the final report will be limited to a final wind resource assessment report. If the feasibility grant application is not funded the final report will incorporate as many elements of a feasibility study as the budget allows in an effort to give council more actionable information that would be useful if further development of the islands' wind resource is desired.
- Phase IV: Design
  - A $139,000 Alaska Energy Authority grant for a feasibility study was approved and funds appropriated by the state legislature
  - Ordinance 2021-16, BA #2, 1st Reading went before Council on 11-09-21 via Consent Agenda; 2nd reading will be at the 12-14-21 Council Meeting
  - Final Wind Resource Assessment has been completed
  - V3 Energy selected a turbine model for the site and is analyzing a 1 or 2 turbine, low/medium penetration scenario
  - Met towers, solar panels, control box sold at Surplus Sale for $1,000
  - Cost estimate being prepared by V3
  - Turbine contractor on-site 10-12-22 to evaluate site access and determine installation costs
  - V3 presented final wind resource assessment and preliminary economic analysis to City Council on 11-10-22
  - Another grant opportunity is available from AEA for maximum amount of $4M with applications due 12-05-22
  - Staff applying for AEA grant for final design and construction of wind generation project in lower Pyramid Valley
  - Staff completed Resolution 2022-47 to formalize City Council support for AEA grant application

Wind Power Development (EL18C)

MUNIS PROJECT EL18C - WIND POWER DEVELOPMENT						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Legal	$ -	$ -	$ -	$ -	$ -	$ -
Engineering and Architectural	$ 352,554	$ 276,375	$ 13,072	$ 63,108	$ -	$ 63,108
Other Professional	$ 27,535	$ 23,492	$ -	$ 4,043	$ -	$ 4,043
Telephone / Fax / TV	$ 185	$ 104	$ -	$ 81	$ -	$ 81
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
Machinery and Equipment	$ 114,726	$ 114,838	$ -	$ (112)	$ -	$ (112)
Salaries and Wages	$ 5,000	$ -	$ -	$ 5,000	$ -	$ 5,000
Health Insurance Benefits	$ 217	$ -	$ -	$ 217	$ -	$ 217
FICA/Medicare Employ	$ 383	$ -	$ -	$ 383	$ -	$ 383
PERS Employer Benefit	$ 1,100	$ -	$ -	$ 1,100	$ -	$ 1,100
Unemployment Insurance	$ 50	$ -	$ -	$ 50	$ -	$ 50
Workers Compensation	$ 200	$ -	$ -	$ 200	$ -	$ 200
Engineering and Architectural	$ 118,150	$ 13,450	$ 23,442	$ 81,258	$ -	$ 81,258
Travel and Related	$ 13,900	$ -	$ -	$ 13,900	$ -	$ 13,900
	$ 634,000	$ 428,259	$ 36,513	$ 169,227	$ -	$ 169,227

Wind Power Development (EL18C)

Makushin Geothermal (EL22B)

Project Description: This project is the City of Unalaska's estimated portion of reliability upgrades for the City electrical distribution system required to accept energy from the Makushin Geothermal Plant. It requires connecting multiple self-generating industrial customers to the current distribution system, installs more robust intermediate level protections, replaces the aging submarine cable at Iliuliuk Bay, upgrades numerous feeder connections and substations, and improvements to the current SCADA system and automated controls. Other funds will be set aside for legal and consulting fees associated with implementing the project.

Project Need: On August 31, 2020, the City entered into a Power Purchase Agreement (PPA) with OCCP. Section 11, Paragraph (c) of the PPA stipulates the City will be responsible for half of the next ten million dollars ($5,000,000) after the first two million dollar cost of reliability upgrades and distribution additions needed to supply energy from the geothermal plant to Unalaska residents and businesses, and the entirety of the interconnection costs beyond 12 million dollars, if required. This project represents a community partnership to bring renewable energy to Unalaska.

Development Plan & Status : The budget for this project was estimated from required funding commitments outlined in the Power Purchase Agreement. A more accurate budget will be determined upon completion of the Intertie Study currently in progress, and based on Study findings there may be a Phase II project to accomplish the required upgrades. Funding for this project will come from the General Fund.

FY22-31 CMMP

Makushin Geothermal Project
Electric

Estimated Project & Purchase Timeline
Pre Design: FY22
Engineering/Design: FY22
Purchase/Construction: FY23

Source	Appropriated	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
1% Sales Tax	0	2,860,000	0	0	0	0	0	0	0	0	0	2,860,000
General Fund	0	0	2,860,000	0	0	0	0	0	0	0	0	2,860,000
Total	0	2,860,000	2,860,000	0	0	0	0	0	0	0	0	5,720,000

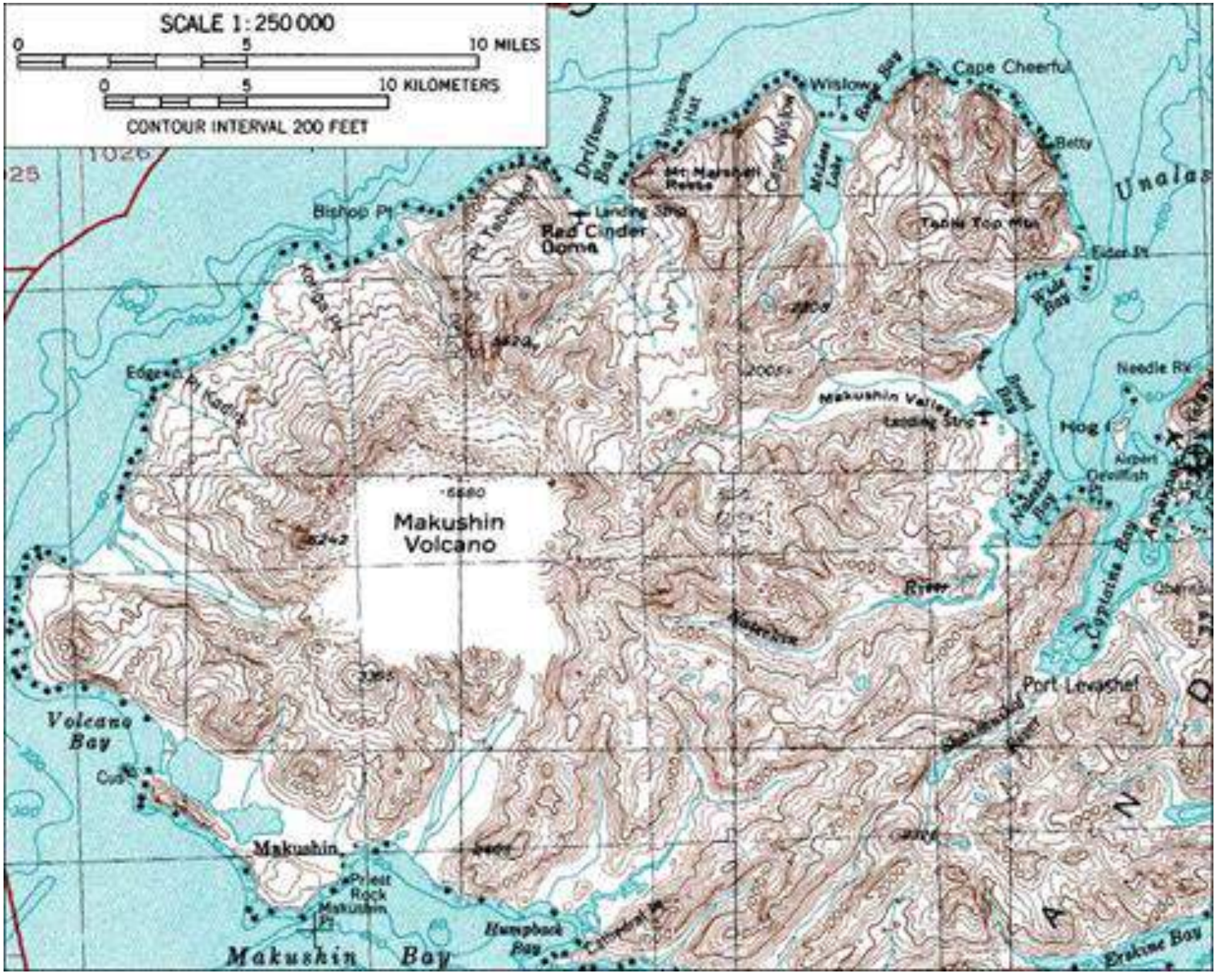
Makushin Geothermal (EL22B) Funded 1 year ago

- This project is the City's estimated portion of reliability upgrades for the City electrical distribution system required to accept energy from the Makushin Geothermal Plant
- DPU currently focused on completing engineering studies and design for eleven sub-projects required to connect to geothermal power
- DPU developed a rate tool to gauge effects of different revenue and cost structures
- DPU supporting data requests from USDOE Office of Indian Energy to complete Socioeconomic Study of the effects of geothermal power on City
- Main Viper Reclosers were upgraded to be more reliable and handle the higher loads under geothermal
- On-Site meetings with PDC Engineers, Haight & Associates, and PND Engineers on upgrading the Coast Guard Dock electrical service to supply more power to the new generation of cutters and ice breakers
- UTI crews working to install two 6" conduit and two 2" conduit down Captain's Bay Rd (CBR) as part of the geothermal upgrades with 7,629 LF of trench complete and three vaults installed.
- CBR portion of the project is complete except for Pyramid Creek crossing and some vault locations. Due to anticipated traffic disruptions with the vault installations, this work is being scheduled for after "B" Season
- DPU received ROM cost analysis for electrical extension from OSI to Trident
- DPU evaluated costs if Trident demand exceeds capacity of existing 1/0 cable and dedicated line is required from Town Substation to Trident
- OCCP continues to submit monthly progress reports
- OCCP indicates they are on the threshold of securing funding

Makushin Geothermal (EL22B)

MUNIS PROJECT EL22B - MAKUSHIN GEOTHERMAL						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering & Architectural	$ 1,933,200	$ 25,307	$ 4,000	$ 1,903,893	$ -	$ 1,903,893
Other Professional	$ 215,000	$ 12,049	$ 4,352	$ 198,600	$ -	$ 198,600
Construction Services	$ 3,336,500	$ 1,010,587	$ 90,680	$ 2,235,234	$ -	$ 2,235,234
Telephone / Fax / TV	$ 300	$ 69	$ -	$ 231	$ -	$ 231
General Supplies	$ 385,000	$ 241,012	$ -	$ 143,988	$ -	$ 143,988
	$ 5,870,000	$ 1,289,023	$ 99,031	$ 4,481,946	$ -	$ 4,481,946

Makushin Geothermal (EL22B)



Electrical Distribution Equipment Replacement (EL22D)

Project Description: This project funds the purchase of ongoing replacement equipment for the electrical distribution system. It includes electrical switches, section cans, transformers, and cables. Electrical equipment will also be purchased for new customers and for existing customers who need to upgrade electrical service.

Project Need: Ongoing replacement of the distribution system equipment is necessary to maintain its reliability and protect the assets of the City and ensure the safe distribution of electricity. This project will correctly capture and capitalize the expenditures made to keep the system operational as well as in expand the system where necessary.

Development Plan & Status : Funding for this project will come from the Electrical Proprietary Fund retained earnings.

FY22-31 CMMP

Electrical Distribution Equipment Replacement
Electric

Estimated Project & Purchase Timeline
Pre Design: NA
Engineering/Design: NA
Purchase/Construction: NA

FY22 Cost Assumptions	
Engineering, Design, Construction Admin	
Other Professional Services	
Construction Services	
Machinery & Equipment	$100,000
Subtotal	$100,000
Contingency (15%)	$15,000
Total Funding Request	$115,000

Source	Appropriated	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Electric Proprietary Fund	0	115,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,015,000
Total	0	115,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,015,000

Electrical Distribution Equipment Replacement (EL22D)

Funded 1 year ago

- This project funds the ongoing replacement equipment for the electrical distribution system
- Included are electrical switches, section cans, transformers, and cables
- DPU ordered 100 kVA pad mount transformers and feeder protection relays
- This project will be closed and replaced by EL23D
- Supply chain delays and large pricing increases combined with more demand for infrastructure improvements is placing a strain on City inventories of these items
- Equipment purchased in FY22 has not yet been received

Electrical Distribution Equipment Replacement (EL22D)

MUNIS PROJECT EL22D - ELECTRICAL DISTRIBUTION EQUIPMENT						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 15,000	$ -	$ -	$ 15,000	$ -	$ 15,000
Machinery & Equipment	$ 100,000	$ -	$ -	$ 100,000	$ -	$ 100,000
	$ 115,000	$ -	$ -	$ 115,000	$ -	$ 115,000

Electrical Distribution Equipment Replacement (EL22D)

DDC Controls Upgrade - Powerhouse (EL23A)

Project Description: Controls system upgrades to new N4 platform for 11 City owned buildings.

Project Need: New N4 upgrades necessary to stay current with technology.

Development Plan & Status : In FY20, our HVAC controls contractor, Long Building Technologies, gave us an informal no cost quote. In FY23 we will work with Long to refine the scope and get a solid cost estimate. In FY24, Project implementation will occur.

FY23-32 CMMP

HVAC Controls Upgrades - 11 City Buildings

Public Works

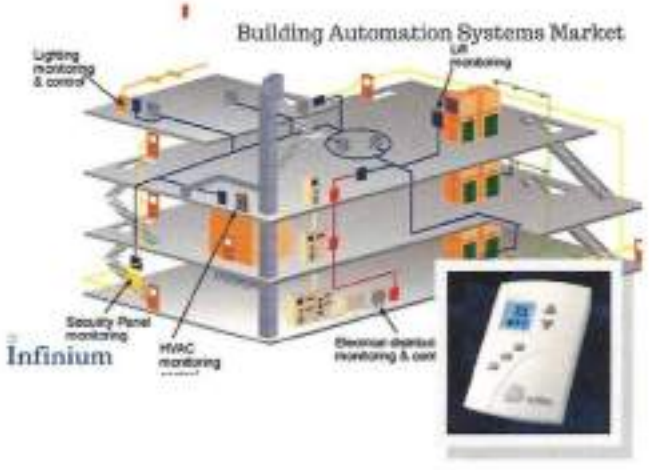
EL23A Powerhouse

Estimated Project & Purchase Timeline

Pre Design: FY23

Engineering/Design: FY23

Purchase/Construction: FY24



Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Electric Fund		$ 33,112	0	0	0	0	0	0	0	0	0	$ 33,112
Total		$ 33,112	0	0	0	0	0	0	0	0	0	$ 33,112

DDC Controls Upgrade - Powerhouse (EL23A)

DDC Controls Upgrade - Powerhouse (EL23A)

MUNIS PROJECT EL23A - DDC CONTROLS UPGRADE - POWERHOUSE						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Construction Services	$ 33,112	$ -	$ 33,112	$ -	$ -	$ -
	$ 33,112	$ -	$ 33,112	$ -	$ -	$ -

DDC Controls Upgrade - Powerhouse (EL23A)

Generator Sets Rebuild (FY23) (EL23B)

Project Description: This project consists of inspection, major maintenance, and rebuilds of the primary generator sets in the Unalaska Powerhouse. The maintenance schedule for the generator sets at the Unalaska Powerhouse is determined by engine hours. Engine inspections are also conducted by the manufacturer's mechanics to determine if engine rebuilds are needed or if they can be prolonged according to the hourly schedule.

Project Need: These generator set rebuilds are needed to maintain our equipment and the reliability of our electrical production. Our Certificate of Fitness from the Alaska Energy Authority states that we must keep all electrical generating equipment in good running condition.

Development Plan & Status : Due to the high cost of the engine rebuilds, it has been determined that the cost will be capitalized. Costs for the Generator Sets rebuilds can fluctuate greatly according to what is determined by the maintenance inspections. Costs for these rebuilds has been determined by the worst case scenario according to the history of the engines. Money that is not used for rebuilds by the end of the fiscal year, will be returned to the proprietary fund.

FY23-32 CMMP

Generator Sets Rebuild

Electric

EL23B

Estimated Project & Purchase Timeline

Pre Design: NA

Engineering/Design: NA

Purchase/Construction: NA

Cost Assumptions	
Repair & Maintenance	$2,115,385
Other Professional Services	
Construction Services	
Machinery & Equipment	
Subtotal	$2,115,385
Contingency (30%)	$634,615
Total Funding Request	$2,750,000

Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Electric Proprietary	500,000	750,000	1,000,000	500,000	0	0	0	0	0	0	0	2,750,000
Total	500,000	750,000	1,000,000	500,000	0	0	0	0	0	0	0	2,750,000

Generator Sets Rebuild (FY23) (EL23B)

- Parts to perform in-frame major overhaul of Caterpillar Unit #13 ordered in July 2022
- Ordinance 2022-17 second reading for BA #2 passed on 10-11-22
- Additional funds requested for labor, rebuild 4 Wartsilla heads, and send Unit #7 generator out for rewinding
- Work was ordered on PO #23410039 to rebuild four Wartsilla heads and two turbos

Generator Sets Rebuild (FY23) (EL23B)

MUNIS PROJECT EL23B - GENERATOR SETS REBUILD FY23						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Repair & Maintenance	$ 969,077	$ -	$ 715,181	$ 253,896	$ -	$ 253,896
Contingency	$ 33,077	$ -	$ -	$ 33,077	$ -	$ 33,077
	$ 1,002,154	$ -	$ 715,181	$ 286,973	$ -	$ 286,973

Generator Sets Rebuild (FY23) (EL23B)

Electrical Distribution Equipment Replacement (EL23C)

Project Description: This project funds the purchase of ongoing replacement equipment for the electrical distribution system. It includes electrical switches, section cans, transformers, and cables. Electrical equipment will also be purchased for new customers and for existing customers who need to upgrade electrical service.

Project Need: Ongoing replacement of the distribution system equipment is necessary to maintain its reliability and protect the assets of the City and ensure the safe distribution of electricity. This project will correctly capture and capitalize the expenditures made to keep the system operational as well as in expand the system where necessary.

Development Plan & Status : Funding for this project will come from the Electrical Proprietary Fund retained earnings.

FY23-32 CMMP

Electrical Distribution Equipment Replacemen

Electri

EL23C

Estimated Project & Purchase Timeline

Pre Design: NA

Engineering/Design: NA

Purchase/Construction: NA

FY23 Cost Assumptions	
Engineering, Design, Construction Admin	
Other Professional Services	
Construction Services	
Machinery & Equipment	$100,000
Subtotal	$100,000
Contingency (0%)	0
Total Funding Request	$100,000

Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Electric Proprietary Fund	115,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,115,000
Total	115,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,115,000

Electrical Distribution Equipment Replacement (EL23C)

- Supply Division is soliciting quotes to order another round of stainless steel replacement transformers to upgrade failing units in the field

Electrical Distribution Equipment Replacement (EL23C)

MUNIS PROJECT EL23C - ELECTRICAL DISTRIBUTION EQUIPMENT REPLACEMENT						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Engineering and Architectural	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ -	$ -	$ -	$ -	$ -	$ -
Machinery & Equipment	$ 100,000	$ -	$ -	$ 100,000	$ -	$ 100,000
	$ 100,000	$ -	$ -	$ 100,000	$ -	$ 100,000

Electrical Distribution Equipment Replacement (EL23C)

Fiber Optic Development (WA17B)

FY17-21 CMMP

FIBER OPTIC INFRASTRUCTURE DEVELOPMENT | ELECTRIC

PROJECT DESCRIPTION: This is the first phase of a potential multiphase project to develop a communications utility infrastructure (fiber optic) between the various departments and outlying utility locations. The first phase will install new fiber optic conduit and vaults on Captains Bay Road to provide reliable communication to Water and Wastewater systems. The project will install about 10,000 feet of fiber optic cable, conduit, a fiber optic vault, and fiber optic enclosure. To save costs, this phase of the project will be completed in conjunction with the Captains Bay 35kV Electrical Upgrade to Westward project, which will be done concurrently in FY 2017. This is the initial step of the planned Fiber Optic Infrastructure project to develop a communications utility infrastructure (fiber optic) between the various departments and outlying utility locations.

For FY 18—FY 21, the fiber optic system will be expanded based on the analysis of the current utility infrastructure that will determine the most efficient next phase of the project. The most optimistic outcome for this design is to develop a plan which uses existing utility distribution line infrastructure to route new fiber optic cabling throughout the utility, avoiding the cost of a complete new installation.

PROJECT NEED: This project will improve the internal communications of the municipality as well as the Department of Public Safety. Currently, a majority of the community's daily communications rely upon wireless technology, using both licensed and unlicensed bands, which are both private and publicly owned. Due to the increasing demand for data from the personal and private sectors these technologies are becoming increasingly saturated. By leveraging existing distribution systems we hope to further develop our own communications systems in order to lessen the demand on existing wireless infrastructure and ultimately become less dependent on such technology which is often less reliable due to our weather conditions. The installation of a more robust, underground infrastructure will also allow for future growth of the utility and community in all areas of data management, including daily operations, marine, public safety, security and utility SCADA. By using the existing distribution systems we can avoid the extensive civil cost associated with developing a new underground infrastructure.

ESTIMATED PROJECT & PURCHASE TIMELINE
Inception/Concept: n/a
Pre Design: n/a
Engineering/Design: n/a
Construction: FY 2017

FUNDING AND RELATIONS TO OTHER PROJECTS: Internal research has provided justification of the needs for better communications. A preliminary design of the Captains Bay Fiber Optic Installation has been completed in-house to determine an ROM cost estimate for the project. Full design is needed to help coordinate the construction of the Captains Bay Fiber Optic Installation with the Captains Bay 35kV Electrical Upgrade to Westward project. The estimated cost of the first phase is $332,166, which is to be split between water and wastewater, as they are the two utilities benefiting from this first phase. This will be complete in FY17.

The Electric Utility is in the process of pursuing upgrades to the Captains Bay Road high voltage distribution line with the Captains Bay 35kV Electrical Upgrade to Westward project. Significant cost savings are anticipated by completing this Captains Bay Fiber Optic Installation project in conjunction with the Captains Bay Road distribution line upgrade. Due to the extensive cost associated with civil construction in our location, cost reduction upwards of 75% of total installation cost can be seen through planning in conjunction with existing and future projects. Future phases of this project will be planned in conjunction with other projects to obtain the same cost savings.

REVENUE SOURCE	EXISTING FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY17	FY18	FY19	FY20	FY21	Total
General Fund							
1% Sales Tax							
Proprietary Fund (Water)		$ 59,227					$ 59,227
Proprietary Fund (Waste Water)		$ 59,227					$ 59,227
TOTALS		$ 118,454					$ 118,454

Requested Funds: Engineering, Construction, and Contingency (ROM estimates)

Fiber Optic Development (WA17B) Funded 6 years ago

- This is the first phase of a multiphase project to develop a communications utility infrastructure (fiber optic) between the various departments and outlying utility locations
- DPU is leading implementation of this project as opportunities arise
- No additional funding requested for this project

Fiber Optic Development (WA17B)

MUNIS PROJECT WA17B - FIBER OPTIC INFRASTRUCTURE DEVELOPMENT						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 25,737	$ -	$ -	$ 25,737	$ -	$ 25,737
Training Services	$ 1,236	$ 1,236	$ -	$ -	$ -	$ -
Other Professional	$ -	$ -	$ -	$ -	$ -	$ -
Survey Services	$ 10,000	$ -	$ -	$ 10,000	$ -	$ 10,000
Construction Services	$ 16,800	$ -	$ 14,000	$ 2,800	$ -	$ 2,800
Telephone / Fax / TV	$ 50	$ -	$ -	$ 50	$ -	$ 50
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
Travel and Related	$ 1,304	$ 1,304	$ -	$ 0	$ -	$ 0
General Supplies	$ 4,000	$ 3,600	$ -	$ 400	$ -	$ 400
	$ 59,127	$ 6,140	$ 14,000	$ 38,987	$ -	$ 38,987

Fiber Optic Development (WA17B)

Fiber optic cable is typically laid in 2” orange conduit.

Pyramid Micro Turbines (WA17C)

Project Description: This project will install Micro-Turbines in the new Pyramid Water Treatment Plant. Previous studies have shown that turbines located at this site have the potential to greatly reduce the fossil fuel energy demand in this plant, potentially even reducing the cost to operate this new plant to current operating levels.

Project Need: It is intended to reduce or eliminate the cost of the additional energy required to operate the new WTP, helping to reduce the rising cost of producing potable water. Because of the elevation of the Icy Creek Reservoir, the pressure of the water has to be reduced before it can be processed. This is currently achieved by stripping off the energy through a Pressure Reducing Valve or PRV. A PRV regulates the pressure by restricting the flow through a point. This project proposes to use Inline Micro-Turbines to produce electricity and reduce the pressure. The electricity generated would be used to meet electrical and other energy demands of the WTP, potentially saving the utility and its customers money in energy costs each year. The WTP currently uses about 200,000 kW per year in electricity. Micro-Turbines will generate about 345,000 kW per year with the capability to produce 575,00 kW per year if additional water rights are acquired.

Development Plan & Status (Include Permit and Utility Requirements): Planning was done during the design of the new WTP to provide the space needed for the future installation of inline Micro-Turbines. This project will determine the most efficient way to utilize that space. It will effect both how the new WTP operates and how much it costs to operate. This project will be broken into three parts. Phase I will be Pre-design including gathering stream data, permitting, validation of existing data, and 35% design including engineers estimate with O&M costs. Phase II is design and Phase III is the construction piece.

Cost & Financing Data: Payback is 10 years. This is an estimate which can change.

FY20-24 CMMP

Pyramid Water Treatment Plant Micro Turbines | WATER

Estimated Project & Purchase Timeline
Pre Design: FY 2018
Engineering/Design: FY 2019
Purchase/Construction: FY 2021

Cost Assumptions	
Engineering, Design, Const Admin	120,000
Other Professional Services	30,000
Construction Services	660,750
Machinery & Equipment	450,000
Subtotal	**1,260,750**
Contingency (set at 30%)	378,225
TOTAL	**1,638,975**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**1,638,975**

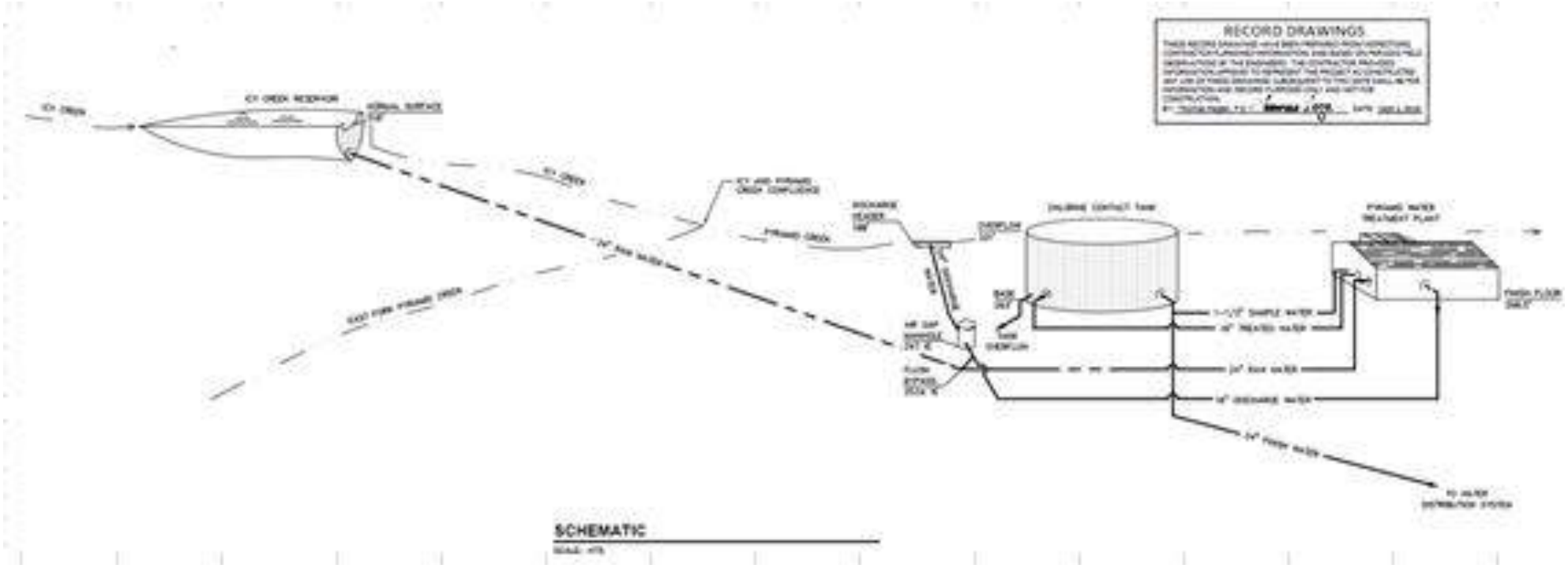
Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
1% Sales Tax							-
Grant							-
Proprietary Fund	50,000		1,588,975				1,638,975
TOTALS $	50,000	-	1,588,975	-	-	-	1,638,975
Requested Funds:						120	
							6

Pyramid Micro Turbines (WA17C) Funded 6 years ago

- This project installs inline micro-turbines i.e. generating pressure reducing valves (GPRVs) in the Pyramid WTP to produce electricity from process water only
- Rentricity did an analysis and selected specific hydro-turbine equipment based on the anticipated flow range and pressures. They developed 15% mechanical and electrical design drawings and prepared a construction cost estimate based on the anticipated scope of work. They provided an estimate for detailed design and preparation of bid ready documents which is now in progress
- Construction will be conducted in fall 2021 during the period of low water demand preceding the holidays and fishing A season
- Budget amendment approved by Council on July 28, 2020 to fully fund project
- Resolution 2020-48 approved on July 28, 2020 authorizing the City Manager to enter into an agreement with the Low Bidder – Industrial Resources, Inc.(IRI)
- IRI given Notice to Proceed on August 20, 2020
- Due to long lead times for critical valves, construction window has been moved to October 1, 2021 to December 1, 2021
- Final completion date December 15, 2021
- The micro hydro turbine generators and the electrical control panels were directly procured by the COU and have been delivered to IRI in Washington
- Pre-construction meeting held on November 13, 2020
- IRI brought on additional staff to improve project communication and coordination
- IRI submitted a submittal registry and has started submitting submittals for review
- On-site commissioning completed on 12-7-21
- Resolution 2021-80 authorized an addendum to IRI contract to construct the Chlorine Upgrade Project for $441,474.73
- The contractor continues work on completing punch list items
- The City is working with the design engineer to troubleshoot turbine operational issues
- Staff prepared memo for BA #4 to add funds in order to complete the project

Pyramid Micro Turbines (WA17C)

MUNIS PROJECT WA17C - PYRAMID WTP MICRO TURBINES						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering & Architectural	$ 478,120	$ 466,062	$ 11,980	$ 79	$ -	$ 79
Other Professional	$ 39,000	$ 38,731	$ 269	$ -	$ -	$ -
Construction Services	$ 1,430,943	$ 1,420,494	$ 10,449	$ -	$ -	$ -
Telephone / Fax / TV	$ 622	$ 622	$ -	$ -	$ -	$ -
Advertising	$ 1,439	$ 1,439	$ -	$ -	$ -	$ -
Contingency	$ -	$ -	$ -	$ -	$ -	$ -
Machinery and Equipment	$ 261,895	$ 261,895	$ -	$ -	$ -	$ -
	$ 2,212,019	$ 2,189,242	$ 22,699	$ 79	$ -	$ 79



Pyramid Micro Turbines (WA17C)

Generals Hill Water Booster Pump Station (WA18A)

Project Description: Install a water booster station on Generals Hill, including underground plumbing, a small building, two pumps with controls, and plumbing to connect a fire engine.

Project Need: This project will increase water service pressure in the upper elevations of the hill. It will greatly reduce the risk of contamination of the water system due to backflow for all utility customers, and decrease the potential for customers to lose water service due to low pressure. Water pressure at the top of Generals Hill does not currently meet the minimum industry standard and in the event of a fire is insufficient to supply a fire engine.

Development Plan & Status : The City has already acquired the land. A contractor will be needed for construction.

FY22-31 CMMP

Generals Hill Water Booster Pump

Water

Estimated Project & Purchase Timeline

Pre Design: FY18

Engineering/Design: FY19

Purchase/Construction: FY22

Source	Appropriated	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Water Proprietary Fund	1,066,000	175,000	0	0	0	0	0	0	0	0	0	1,241,000
Total	1,066,000	175,000	0	0	0	0	0	0	0	0	0	1,241,000

Generals Hill Water Booster Pump (WA18A) Funded 5 years ago

- This project consists of installing a water booster station on General Hill at approximately 100 feet of elevation. It will include underground plumbing, a small building, two pumps with controls and a fire department connection to connect a fire engine to boost pressure to fire flows during an emergency
- A 4050 SF parcel purchased from each of 2 land owners
- Planning Commission Resolutions 2021-04 and 2021-05 for a Conditional Use Permit and Preliminary Platt were approved
- Remaining tasks to complete land acquisition:
  - ~~Certificate to Plat (recently received)~~
  - ~~Edits required for final plat (in process by LCG Lantech)~~
  - ~~Mylar of final plat received~~
  - Record final plat with State
  - Have deed prepared
    - This can be done by a title company or the City Attorney
    - This will require several signatures including landowners, lending institutions, City
  - Record deed with State
- Two bids for construction received on 03-09-21
  - Available Budget $888,833
  - Northern AK Contractors $916,537
  - Wolverine Supply $1,235,000
- NAC connected to existing water main and set blowoff MH and blowoff pipe all piping in complete and has been chlorinated and tested
- Procurement delay prevents the door and Toyo stove from being installed
- Site work complete and project is 95% complete
- Approx 1200 LF of electrical and spare conduit were installed from lower Eagle Drive to the Booster Station to provide power to the building
- IS installed wireless intranet connection to DPU SCADA system to allow remote monitoring
- UFD, Boreal, DPU-Water, DPW, and NAC collaborated to perform water flow test and commission the project on 9-15-22 and 9-16-22
- Pump station is turned on and is operational, customers have good water pressure

Generals Hill Water Booster Pump Station (WA18A)

MUNIS PROJECT WA18A - GENERALS HILL WATER BOOSTER PUMP						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Engineering and Architectural	$ 178,345	$ 115,059	$ 39,326	$ 23,960	$ -	$ 23,960
Survey Services	$ 13,891	$ 13,891	$ -	$ (0)	$ -	$ (0)
Construction Services	$ 917,282	$ 890,237	$ 42,537	$ (15,492)	$ -	$ (15,492)
Telephone / Fax / TV	$ 575	$ 541	$ -	$ 34	$ -	$ 34
Advertising	$ 552	$ 552	$ -	$ -	$ -	$ -
Permit Fees	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 40,385	$ -	$ -	$ 40,385	$ -	$ 40,385
General Supplies	$ 63,320	$ 60,987	$ -	$ 2,333	$ -	$ 2,333
Land	$ 26,650	$ 26,650	$ -	$ -	$ -	$ -
	$ 1,241,000	$ 1,107,918	$ 81,863	$ 51,219	$ -	$ 51,219

Generals Hill Water Booster Pump Station (WA18A)

CT Tank Interior Maintenance & Painting (WA20A)

Project Description: This project will paint and perform other maintenance to the inside of the Pyramid CT Tank. Work will be performed in two phases. The coatings on the ceiling are deteriorating at a rate to meet its predicted life span of 20-25 years. Small sections of coatings are beginning to drop into the water in the tank. The floor has problems with pitting that needs to be dealt with immediately. In some locations the pitting is believed to exceed ½ of the thickness of the steel plate. If left in its current condition, the tank floor will likely be leaking in 2-3 years. In 5-7 years, large sections of the ceiling coatings will be dropping into the water and could plug the tank discharge holes or break up and travel through the distribution system and into customers' services. Shortly after, structural damage will begin to occur. This tank can be kept in good reasonable service for many years to come, with the proper maintenance including painting, for a fraction of the cost of a new tank. Adding a new CT Tank may however, be the best option to provide for the ability to maintain this existing CT Tank

Project Need: The Pyramid CT Tank was originally constructed in 1993. The tank has been drained every 3-5 years for cleaning and/or inspection over the past 10 years. It takes from 200-300 man hours over a 7-10 day period to drain, clean and inspect the tank. The tank has never been completely de-watered, because it is a lengthy process, tank configuration and the equipment available. Historically, water tanks in this area have exteriors re-coated every 15-25 years. In 2008 the CT Tank roof was painted with a finish coat after a failed attempt to replace the wind damaged foam insulation in 2000. In 2004 anodes were added to help slow the rate of corrosion to the inside of the tank. Total cost for maintenance has averaged about $25,000.00-$30,000.00 per year.

Development Plan & Status : Building a second CT Tank was the designed and intended path to take when the original CT Tank was built. It provides the redundancy required in the treatment process to maintain Filtration Avoidance status. It also directly addresses the operational function issues associated with maintaining each tank

FY22-31 CMMP

CT Tank Interior Maintenance and Painting

Water

Estimated Project & Purchase Timeline

Pre Design: FY20

Engineering/Design: FY20

Purchase/Construction: FY22

Cost Assumptions	
Engineering, Design, Const Admin	75,000
Other Professional Services	-
Construction Services	735,000
Machinery & Equipment	-
Subtotal	**810,000**
Contingency (set at 30%)	243,000
TOTAL	**1,053,000**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**1,053,000**

Source	Appropriated	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Water Proprietary Fund	100,000	953,000	0	0	0	0	0	0	0	0	0	1,053,000
Total	100,000	953,000	0	0	0	0	0	0	0	0	0	1,053,000

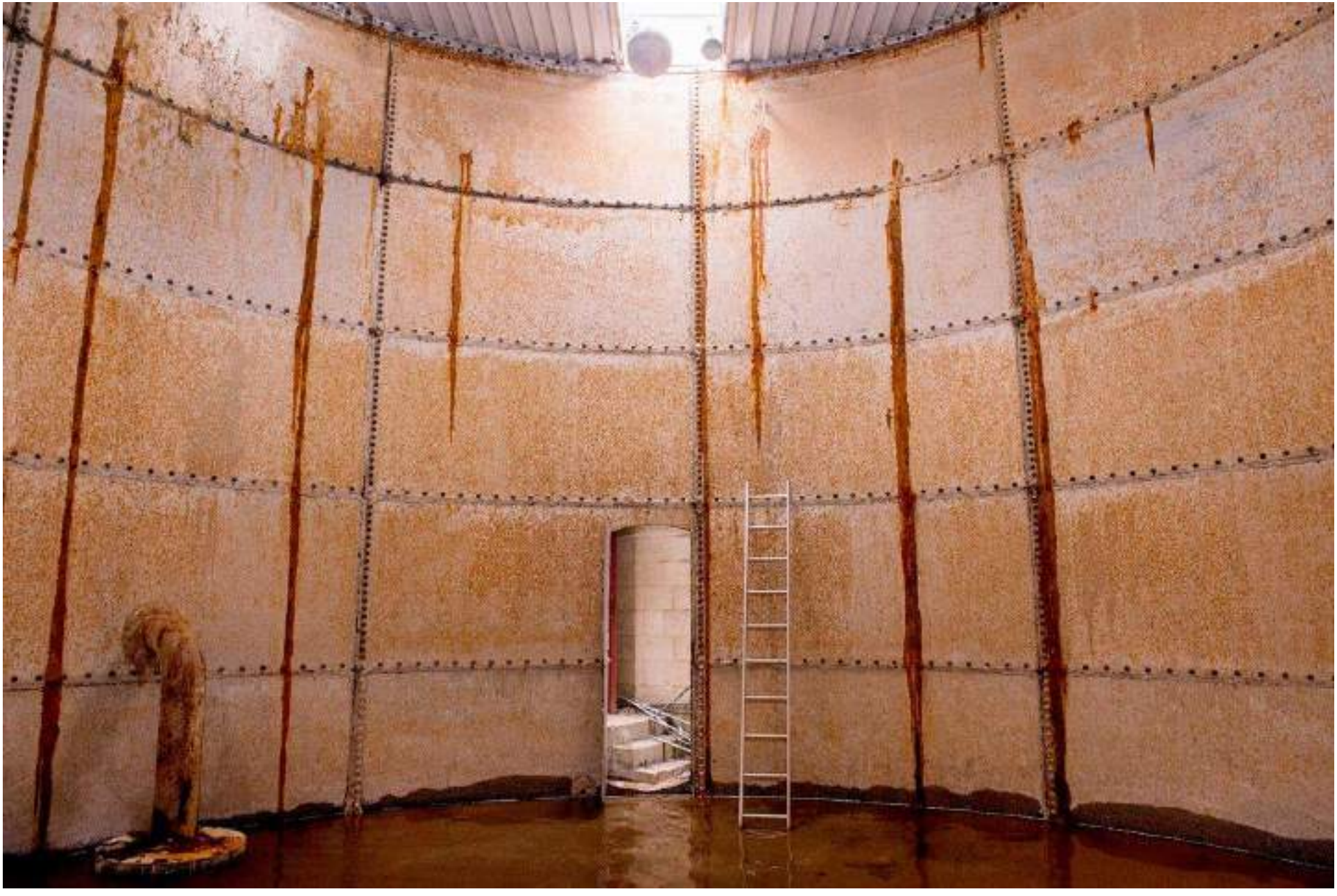
CT Tank Interior Maintenance & Painting (WA20A) Funded 3 years ago

- A scope of work is being developed for a tank inspection which will go out for bids
- DPU is leading implementation of this project with 2023 being the soonest work would take place

CT Tank Interior Maintenance & Painting (WA20A)

MUNIS PROJECT WA20A - CT TANK INTERIOR MAINTENANCE & PAINTING						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering & Architect	$ 99,750	$ -	$ -	$ 99,750	$ -	$ 99,750
Construction Services	$ 709,500	$ -	$ -	$ 709,500	$ -	$ 709,500
Telephone / Fax / TV	$ 250	$ -	$ -	$ 250	$ -	$ 250
Advertising	$ 500	$ -	$ -	$ 500	$ -	$ 500
Contingency	$ 243,000	$ -	$ -	$ 243,000	$ -	$ 243,000
	$ 1,053,000	$ -	$ -	$ 1,053,000	$ -	$ 1,053,000

CT Tank Interior Maintenance & Painting (WA20A)



Pyramid WTP Chlorine Upgrade (WA21A)

Project Description: This project in the Pyramid Water Treatment Plant (PWTP) will include the removal of the existing Chlorine Gas system and the installation of an on-site system which generates liquid Chlorine (Sodium Hypochlorite) using salt and electricity.

Project Need: Using stringent regulations, the EPA is doing away with Chlorine Gas as the primary method of disinfecting potable water. Vendors for Chlorine Gas are becoming scarce as most Water Treatment Plants and other users have already changed over to an alternative. There are only two remaining Chlorine Gas vendors located on or near the west coast which will ship to Alaska. We are currently using the vendor who is located on the coast. We have experienced issues with their product. If we continue to have issues with Chlorine Gas from them or they quit carrying Chlorine Gas altogether, the remaining vendor is twice the price due to the extra cost involved in shipping the Chlorine Gas to the coast. In addition, potable water treated with Chlorine Gas is more acidic than Sodium Hypochlorite. Combined with the rise in EPA's standards, there is a very high possibility that we will be required to perform a corrosion control study and begin adding a corrosion control inhibitor to our potable water. Switching to Sodium Hypochlorite will help lower the acid index of our drinking water. This will lessen the possibility of having to perform the study or add an inhibitor. In addition, the multiple safety items associated with Chlorine Gas that we are required to own are very expensive, highly regulated and take a significant amount of time to maintain.

Development Plan & Status : This project will require a consultant for design and engineering to obtain Alaska Department of Environmental Conservation (ADEC) approval. A contractor will be needed for construction. A ROM for this project would be $500,000 – $750,000. This number could be reduced if the existing crane, Chlorine Gas Bay, etc. in the PWTP can be utilized with the new system. The existing PWTP Chlorine Gas Bay is believed to be of sufficient size to house the new Sodium Hypochlorite equipment. However, a heated area for salt storage will be required. It would be most efficient to have the salt storage area as part of the existing PWTP structure. Doing so would require an addition to the current building.

FY22-31 CMMP

Pyramid Water Treatment Plant Chlorine Upgrade

Water

Estimated Project & Purchase Timeline

Pre Design: FY21

Engineering/Design: FY21

Purchase/Construction: FY22

Hypochlorite Generator

Cost Assumptions		
	Other Professional Services	$ 25,000
	Engineering, Design, Construction Admin	$ 80,000
	Construction Services	$ 250,000
	Machinery & Equipment	$ 169,231
	Subtotal	$ 524,231
	Contingency (30%)	$ 157,269
	Total Funding Request	$ 681,500

Source	Appropriated	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Water Proprietary Fund	100,000	581,500	0	0	0	0	0	0	0	0	0	681,500
Total	100,000	581,500	0	0	0	0	0	0	0	0	0	681,500

Council Packet page 104

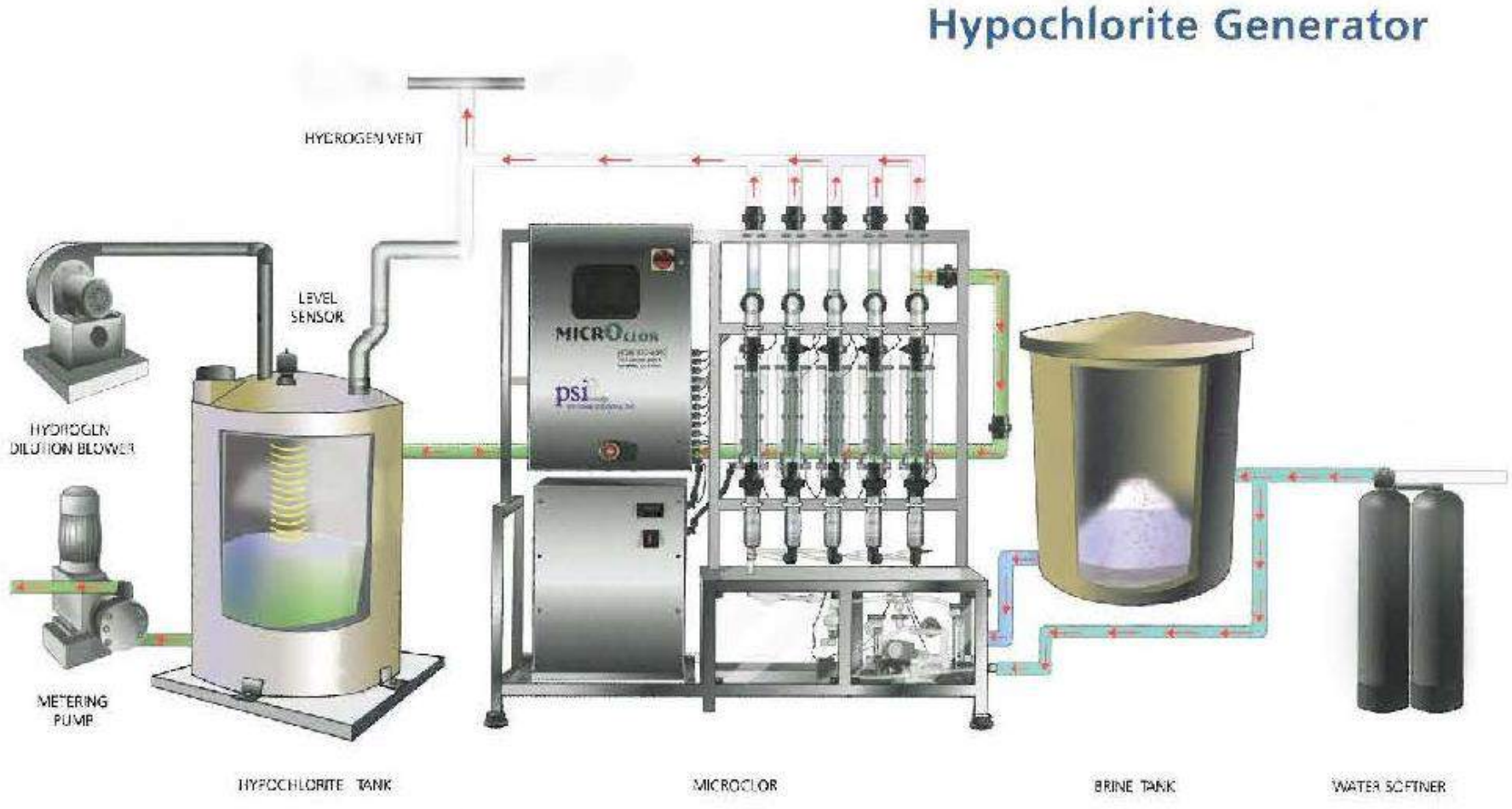
Pyramid WTP Chlorine Upgrade (WA21A) Funded 2 years ago

- This project includes the removal of the existing chlorine gas system and the installation of an on-site system which generates liquid chlorine (sodium hypochlorite) using salt and electricity.
- EPA standards call for phasing out shipping and handling cylinders of chlorine gas
- An RFP for on-site sodium hypochlorite generation system equipment was advertised on April 16th
- Design sole sourced to Taku Engineering who did mechanical design for WTP Micro Turbines Project
- An RFP for the supply of On-Site Sodium Hypochlorite Generation System was advertised on May 16, 2021 with 5 proposals being submitted
- PSI was selected as the supplier of the equipment for the On-Site Sodium Hypochlorite Generation System
- Materials for on-site sodium hypochlorite generation system have been received from vendor
- A 95% design plan set has been completed by Taku Engineering
- A pre-bid meeting was held on July 7th with 4 participants
- One bid was received and it exceeds the available budget. A request for additional funds is being prepared
- Council approved Resolution 2021-80 which authorized sole sourcing this work to IRI for $441,474.73
- T&M contract with IRI has been terminated due to expected costs exceeding budget based on increased material costs
- A bid package was prepared, and the project was re-bid with bid opening July 21, 2022
- A request for additional funding approved via BA #2 on 10-11-22
- Contract award to IRI will go before Council on 11-22-22 via Resolution 2022-44
- Work will proceed in spring 2023

Pyramid WTP Chlorine Upgrade (WA21A)

MUNIS PROJECT WA21A - PYRAMID WTP CHLORINE UPGRADE						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering & Architectural	$ 174,939	$ 87,236	$ 21,858	$ 65,846	$ -	$ 65,846
Other Professional	$ 27,500	$ 638	$ 26,863	$ -	$ -	$ -
Construction Services	$ 901,802	$ 240,602	$ -	$ 661,200	$ -	$ 661,200
Telephone / TV / Fax	$ 290	$ 256	$ -	$ 34	$ -	$ 34
Advertising	$ 284	$ 284	$ -	$ -	$ -	$ 0
Contingency	$ 118,081	$ -	$ -	$ 118,081	$ -	$ 118,081
Machinery & Equipment	$ 285,051	$ 249,827	$ 35,224	$ -	$ -	$ -
	$ 1,507,947	$ 578,842	$ 83,944	$ 845,161	$ -	$ 845,161

Pyramid WTP Chlorine Upgrade (WA21A)



Westward to NPF Waterline (WA22D)

FY22 – 32 CMMP

Westward to NPF Waterline
Project added in May 2022

Red line in photo shows location of proposed waterline from Westward to North Pacific Fuel.

Westward to NPF Waterline (WA22D) Funded 1 year ago

- This work was initially part of the Captains Bay Road project but was taken out based on information gleaned from the Cost Benefit Analysis conducted by HDR
- Grand funds became available to help fund this work
- Ordinance 2022-06 Budget Amendment #4 passed on May 10, 2022 recognized receipt of ARPA grant (American Rescue Plan Act) and appropriated $800,000 for use on the waterline project
- Staff is seeking additional grant funding but are prepared to fund the balance of the project from the Water Proprietary Unrestricted Retained Earnings if necessary
- Regan Engineering provided initial cost estimate
- A scope of work is being developed for this work which will go out for bids
- DPU is leading implementation of this project with summer 2023 (FY24) being the likely time work would begin
- HDR drafted a grant application requesting $1.5M from the Denali Commission to extend the water main from Westward to NPF with an award of $386,400 granted for the design and permitting portion of this project
- City met with Denali Commission on 10-12-22 to finalize scope of grant award and clarify reporting schedule
- Staff are preparing memo for BA #4 to accept grant funds from Denali Commission to cover project design

Westward to NPF Waterline (WA22D)

MUNIS PROJECT WA22D - WESTWARD TO NPF WATERLINE						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 250,000	$ -	$ -	$ 250,000	$ -	$ 250,000
Other Professional	$ 50,000	$ -	$ -	$ 50,000	$ -	$ 50,000
Survey Services	$ -	$ -	$ -	$ -	$ -	$ -
Telephone / Fax / TV	$ -	$ -	$ -	$ -	$ -	$ -
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 495,000	$ -	$ -	$ 495,000	$ -	$ 495,000
General Supplies	$ 5,000	$ -	$ -	$ 5,000	$ -	$ 5,000
	$ 800,000	$ -	$ -	$ 800,000	$ -	$ 800,000

Westward to NPF Waterline (WA22D)

The chart below shows the Captains Bay Road project phasing. The portion in the red box is the Westward to NPF Waterline portion that was removed to become a stand alone project. The amount of ARPA funds appropriated to this project is $800,000. A revised cost estimate will be developed to determine cost escalations.

Phasing and Construction Plan as of 02-03-22		Revenue Source & Amounts					
Fiscal Year		General	Grant	Elec	Water	Wastewater	Totals
N/A	**Appropriated Funds**						
	Engineering Design & Permitting	2,000,000					2,000,000
FY23	**Safety Improvements**		**CAPSIS**				
	Slope rock Dead Man's Curve & straighten from Dead Man's Curve to Pyramid Creek	564,556	4,000,000				4,564,556
	Electrical Conduit Upgrade						
	Westward to OSI. Trenching & conduit install in-house or GCI joint trench agreement.			972,277			972,277
FY24	**Waterline Installation to NPF**		**ARPA**				
	Westward to North Pacific Fuel. Replaces failing wood stave pipe.		894,688		2,172,242		3,066,930
	Electrical Service Extension						
	Westward to OSI. Install vaults and pull conductors.			2,161,823	-	-	2,161,823
	Paving Segment A		**STIP**				
	Airport Beach Road to Westward. Includes storm drains, sidewalk, and street lights.	6,052,582	6,052,582	-	-	-	12,105,163
FY25	**Paving Segments B and C**		**STIP**				
	Westward to OSI. Includes storm drains, sidewalk, and street lights.	5,012,551	5,012,551	-	-	-	10,025,102
	Totals	13,629,689	15,959,821	3,134,100	2,172,242	-	34,895,851

DDC Controls Upgrade – Pyramid Water Treatment Plant (WA23A)

Project Description: Controls system upgrades to new N4 platform for 11 City owned buildings.

Project Need: New N4 upgrades necessary to stay current with technology.

Development Plan & Status : In FY20, our HVAC controls contractor, Long Building Technologies, gave us an informal no cost quote. In FY23 we will work with Long to refine the scope and get a solid cost estimate. In FY24, Project implementation will occur.

FY23-32 CMMP

HVAC Controls Upgrades - 11 City Buildings

Public Works

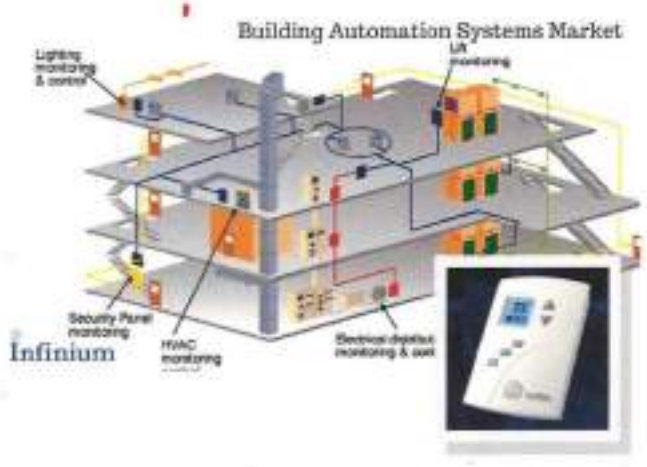
WA23A Pyramid Water Treatment Plant

Estimated Project & Purchase Timeline

Pre Design: FY23

Engineering/Design: FY23

Purchase/Construction: FY24



Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Water Fund		$ 24,811	0	0	0	0	0	0	0	0	0	$ 24,811
Total		$ 24,811	0	0	0	0	0	0	0	0	0	$ 24,811

DDC Controls Upgrade – Pyramid Water Treatment Plant (WA23A)

DDC Controls Upgrade – Pyramid Water Treatment Plant (WA23A)

MUNIS PROJECT WA23A - DDC CONTROLS UPGRADE - WTP						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Construction Services	$ 24,811	$ -	$ 24,811	$ -	$ -	$ -
	$ 24,811	$ -	$ 24,811	$ -	$ -	$ -

DDC Controls Upgrade – Pyramid Water Treatment Plant (WA23A)

East Point Crossing Water Line Inspection (WA23B)

Project Description: This project consists of the inspection of the water line crossing from East Point Road to West Broadway Avenue. This underwater pipe crossing to Amaknak Island at East Point is a 12-inch ductile iron pipe installed in 1977. HDR recommends conducting a "See Snake" system inspection for this water line due to its invasive approach to pipe inspections. PICA Corporation's See Snake system is the only insertion type tool that HDR was able to identify that offers pipe wall condition assessment capability in a 12-inch pipe application. See Snake is a device that uses an electromagnetic Remote Field Technology to measure wall thickness and detect internal and external flaws as it moves through a pipe. See Snake can also detect and locate external stress on a pipe due to soil movement, bridging, inadequate support, rippling, or denting.

Project Need: The East Point Crossing pipe is one of only two water system connections to Amaknak Island. Should this pipe ever fail, the consequences could be a shutdown of all water service to Amaknak Island until the break can be located and isolated. This would be especially devastating during processing season. Flow of water to Amaknak Island could be restricted for a period of at least several weeks while waiting for the pipe to be repaired by divers or a new pipe installed. If the break occurs under the Alyeska Seafoods facility the washout from the flow could cause structural damage to buildings. Given the criticality, age, and seawater exposure of this pipe, action is recommended to perform condition assessment and/or replace the pipe.

Development Plan & Status : The budget for this project was estimated from the Water Master Plan. A more accurate budget will be determined during the design phase of the project. Funding will come from the Water proprietary Fund.

FY23-32 CMMP

East Point Crossing Water Line Inspectior

Wate

WA23B

Estimated Project & Purchase Timeline

Pre Design: FY23

Engineering/Design: FY23

Purchase/Construction: FY23

Cost Assumptions		
	Engineering, Design, Construction Admin	
	Other Professional Services	$50,000
	Construction Services	$75,000
	Machinery & Equipment	
	Subtotal	$125,000
	Contingency (30%)	$37,500
	Total Funding Request	$162,500

Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Water Proprietary	0	162,500	0	0	0	0	0	0	0	0	0	162,500
Total	0	162,500	0	0	0	0	0	0	0	0	0	162,500

East Point Crossing Water Line Inspection (WA23B)

East Point Crossing Water Line Inspection (WA23B)

MUNIS PROJECT WA23B - EASTPOINT WATERLINE CROSSING INSPECTION						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Other Professional	$ 50,000	$ -	$ -	$ 50,000	$ -	$ 50,000
Repair and Maintenance	$ 75,000	$ -	$ -	$ 75,000	$ -	$ 75,000
Contingency	$ 37,500	$ -	$ -	$ 37,500	$ -	$ 37,500
	$ 162,500	$ -	$ -	$ 162,500	$ -	$ 162,500

East Point Crossing Water Line Inspection (WA23B)

Pyramid Water Storage Tank (WA501)

FY23-32 CMMP

Project Description: This project will construct a second 2.6 million gallon Chlorine Contact Tank (CT Tank) next to the existing CT Tank. It will provide much needed clear water storage and enable maintenance to be done on the interior of either tank regardless of process seasons or weather. The project will require the installation of approximately 200 ft. of 16" DI water main, 200 ft. of 8" DI drain line, and 100 ft. each of 1" sample line and control wiring

Project Need: Additional storage provided by this tank will help to meet many of the issues mentioned in the 2004 Water Master Plan. Even in the Water Distribution System's current configuration, this new tank will provide an additional 960,000 gallons of the additional 4 MG of finished water storage recommended in the Master Plan. When planned future development is completed on Captain's Bay Road, over 2.2 MG of water storage will be available at the maximum Pyramid Water Treatment Plant capacity of 9 MGD. The additional storage will provide a much needed buffer, allowing time to troubleshoot and repair problems in the event of an equipment failure or system malfunction. It will reduce the likelihood of water shortages and/or outages during the Pollock Processing seasons. Additional benefits include:

- Reduce service interruption, boil water notices, and risk of system contamination during maintenance.
- Allow routine maintenance to be done on the interior or exterior of either tank during any season, prolonging the life of these tanks.
- Expand and upgrade both the water treatment and distribution systems, using the full 9 MGD design capacity of the new water treatment plant will be possible.
- Improve the flow characteristics of the new Pyramid Water Treatment Plant. Plant operators will be able to allow the tanks to absorb the high and low flows, maintaining a more stabilized treatment process and allowing the new Ultra Violate treatment process to operate more efficiently.

Pyramid Water Storage Tank

WA501

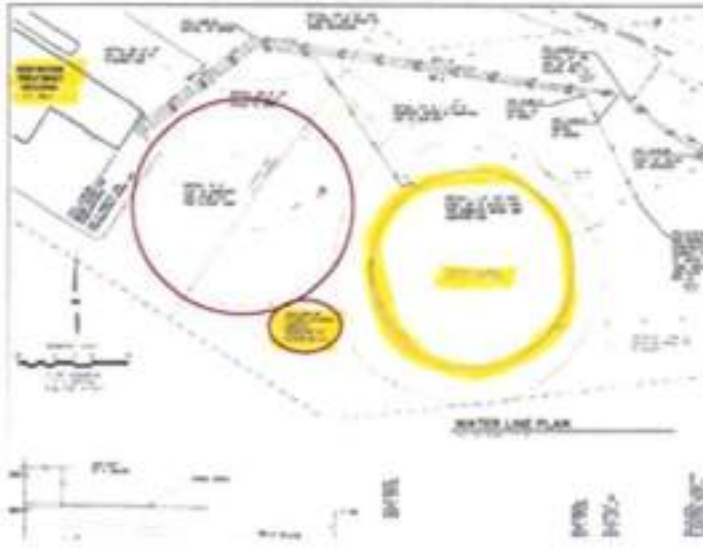
Water

Estimated Project & Purchase Timeline

Pre Design: FY14

Engineering/Design: FY23

Purchase/Construction: FY24



Development Plan & Status : A "Certificate to Construct" and a "Certificate to Operate" are required from ADEC, obtained through application by the designing engineer.

Engineering, Design, Const Admin		647,000
Other Professional Services		-
Construction Services		6,379,879
Machinery & Equipment		-
	Subtotal	**7,026,879**
Contingency (set at 30%)		2,108,064
	TOTAL	**9,134,943**
Less Other Funding Sources (Grants, etc.)		-

Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Water Proprietary	625,000	603,750	7,906,193	0	0	0	0	0	0	0	0	9,134,943
Total	625,000	603,750	7,906,193	0	0	0	0	0	0	0	0	9,134,943

Pyramid Water Storage Tank (WA501) Funded 8 years ago

- Constructing a second Chlorine Contact Tank (CT Tank) next to the existing CT Tank to provide clear water storage and enable interior maintenance to be done on either tank regardless of process seasons or weather. The project also requires installing about 200’ of 16” water main, 200’ of 8” drain line and 100’ each of 1” sample line and control wiring
- Design is scheduled for near future and will be conducted by HDL Engineering and JV Jones who performed the previous 35% level design after being awarded the design contract through a competitive RFP process
- Additional funds will be requested in a future year

Pyramid Water Storage Tank (WA501)

MUNIS PROJECT WA501 - PYRAMID WATER STORAGE TANK						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Legal	$ -	$ -	$ -	$ -	$ -	$ -
Engineering & Architectural	$ 1,007,640	$ 93,662	$ -	$ 913,978	$ -	$ 913,978
Survey Services	$ 5,000	$ -	$ -	$ 5,000	$ -	$ 5,000
Travel and Related	$ 10,000	$ -	$ -	$ 10,000	$ -	$ 10,000
Permit Fees	$ 25,000	$ -	$ -	$ 25,000	$ -	$ 25,000
Contingency	$ 181,110	$ -	$ -	$ 181,110	$ -	$ 181,110
	$ 1,228,750	$ 93,662	$ -	$ 1,135,088	$ -	$ 1,135,088

Pyramid Water Storage Tank (WA501)

New tank will be sited between existing tank and new WTP building

Water Utility Auto Meter Read (WA504)

FY15-19 CMMP

WATER UTILITY AMR SYSTEM | WATER

PROJECT DESCRIPTION: The Water Utility AMR (Automatic Meter Reading) System, project encompasses the final design, installation and commissioning of a system capable of integrating with our existing automatic meter reading and financial billing systems. This project will include the installation of a communications system capable of polling 100% of the water system utility meters on an operator selectable schedule for both maintenance and monthly meter reading purposes. The implementation of this system is the last step in an effort to synchronize the production, distribution and billing portions of the Water Utility.

PROJECT NEED: The new AMR system will help to detect water leaks on the customers' side of their water meters. Leaks provide the potential for contaminates to enter the water system creating a health hazard. This project will expand and upgrade the Water Utility's existing Mobile Radio Read System and replace the Mobile Reader with a Fixed Base Read System possessing even more flexibility and capability. Automatic polling will allow meters to be read on a more consistent base, with the ability to disregard time/labor conflicts with weekends, holidays, and weather conditions which currently causes fluctuations of more than a week in the read schedule. AMR will help reduce unaccounted for water by more precise identification of water use. It will increase monitoring abilities of the system, including, but not limited to the ability to pass on notice of excessive water use to customers, quicker cut in/out of services and reduction of "bad" meter reads due to read or input error. The new AMR system will provide the capability for the Water Utility to get instantaneous reads of customer demands, enabling rapid adjustment to source water production priority. This will help optimize source water use and reduce waste.

RELATIONSHIP TO OTHER PROJECTS: Implementation of ARM will be closely related with Implementation of ARM for the Electric Utility and the existing Water Utility Mobile Radio Meter Reading system, and existing Power Production SCADA upgrades, as well as integration of all these systems into City Finance Department. The implementation will reduce engineering time, implementation costs, construction costs, future maintenance cost and training cost by using a common system. This system will create the ability to accurately synchronize customer billing from the Water Distribution, with Water production reports, creating a more accurate overall picture of water produced and water sold.

ESTIMATED PROJECT & PURCHASE TIMELINE

Inception/Concept: na

Feasibility/Pre Design: July 2013—November 2013

Engineering/Design: July 2104—August 2014

Construction: August 2014—October 2014

FY2015	FY2016	FY2017	FY2018	FY2019

We are mandated to accurately report water production and maintain accurate revenue metering. These systems are observed by regulatory agencies to be the most accurate form of revenue metering.

This project will reduce cost by reducing the operational hours required by current staff. Annually, approximately 132 man hours of labor are currently dedicated to meter reading, re-reading, cut in/out reading and average calls. That time can instead be dedicated to routine system maintenance and upkeep.

REVENUE SOURCE	EXISTING FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY15	FY16	FY17	FY18	FY19	Total
General Fund	$ -						$ -
1% Sales Tax	$ -						$ -
Grant	$ -						$ -
Proprietary Fund (Water)	$ -	$ 106,052					$ 106,052
TOTALS	$ -	$ 106,052	$ -	$ -	$ -	$ -	$ 106,052

Requested Funds: Engineering Services, Construction Services, Travel Costs, Permitting, Equipment, Contingency *(Based on joint feasibility study by Ferguson Waterworks and Sensus Meters)*

Water Utility Auto Meter Read (WA504) Funded 8 years ago

- The Water Utility AMR (Automatic Meter Reading) project encompasses the final design, installation and commissioning of a system capable of integrating with our existing automatic meter reading and financial billing systems
- In FY17 Boreal Controls conducted a scoping study and costs were solicited from 3 vendors: Sensus, Itron and General Electric. Itron had the lowest cost at $316,867 for both water and electric combined
- DPU Electric is proceeding but the Water portion is pending funding
- DPU will reevaluate and request increased funding in CMMP cycle
- There are 602 water services total (residential + commercial)
- 300 water services are presently read by a Sensus reader
- All 602 water services will be switched to an Itron reader
- Project will not begin until Electric Utility MUNIS integration is complete (likely funding and execution in FY24 for Water portion)

Water Utility Auto Meter Read (WA504)

MUNIS PROJECT WA504 - WATER UTILITY AUTOMATIC METER READ						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering & Architectural	$ 50,000	$ 33,375	$ -	$ 16,625	$ -	$ 16,625
Telephone / Fax / TV	$ 100	$ 9	$ -	$ 91	$ -	$ 91
General Supplies	$ 55,952	$ -	$ -	$ 55,952	$ -	$ 55,952
	$ 106,052	$ 33,384	$ -	$ 72,668	$ -	$ 72,668

Water Utility Auto Meter Read (WA504)

Fiber Optic Infrastructure (WW17B)

FY17-21 CMMP

FIBER OPTIC INFRASTRUCTURE DEVELOPMENT | ELECTRIC

PROJECT DESCRIPTION: This is the first phase of a potential multiphase project to develop a communications utility infrastructure (fiber optic) between the various departments and outlying utility locations. The first phase will install new fiber optic conduit and vaults on Captains Bay Road to provide reliable communication to Water and Wastewater systems. The project will install about 10,000 feet of fiber optic cable, conduit, a fiber optic vault, and fiber optic enclosure. To save costs, this phase of the project will be completed in conjunction with the Captains Bay 35kV Electrical Upgrade to Westward project, which will be done concurrently in FY 2017. This is the initial step of the planned Fiber Optic Infrastructure project to develop a communications utility infrastructure (fiber optic) between the various departments and outlying utility locations.

For FY 18—FY 21, the fiber optic system will be expanded based on the analysis of the current utility infrastructure that will determine the most efficient next phase of the project. The most optimistic outcome for this design is to develop a plan which uses existing utility distribution line infrastructure to route new fiber optic cabling throughout the utility, avoiding the cost of a complete new installation.

PROJECT NEED: This project will improve the internal communications of the municipality as well as the Department of Public Safety. Currently, a majority of the community's daily communications rely upon wireless technology, using both licensed and unlicensed bands, which are both private and publicly owned. Due to the increasing demand for data from the personal and private sectors these technologies are becoming increasingly saturated. By leveraging existing distribution systems we hope to further develop our own communications systems in order to lessen the demand on existing wireless infrastructure and ultimately become less dependent on such technology which is often less reliable due to our weather conditions. The installation of a more robust, underground infrastructure will also allow for future growth of the utility and community in all areas of data management, including daily operations, marine, public safety, security and utility SCADA. By using the existing distribution systems we can avoid the extensive civil cost associated with developing a new underground infrastructure.

ESTIMATED PROJECT & PURCHASE TIMELINE
Inception/Concept: n/a
Pre Design: n/a
Engineering/Design: n/a
Construction: FY 2017

FUNDING AND RELATIONS TO OTHER PROJECTS: Internal research has provided justification of the needs for better communications. A preliminary design of the Captains Bay Fiber Optic Installation has been completed in-house to determine an ROM cost estimate for the project. Full design is needed to help coordinate the construction of the Captains Bay Fiber Optic Installation with the Captains Bay 35kV Electrical Upgrade to Westward project. The estimated cost of the first phase is $332,166, which is to be split between water and wastewater, as they are the two utilities benefiting from this first phase. This will be complete in FY17.

The Electric Utility is in the process of pursuing upgrades to the Captains Bay Road high voltage distribution line with the Captains Bay 35kV Electrical Upgrade to Westward project. Significant cost savings are anticipated by completing this Captains Bay Fiber Optic Installation project in conjunction with the Captains Bay Road distribution line upgrade. Due to the extensive cost associated with civil construction in our location, cost reduction upwards of 75% of total installation cost can be seen through planning in conjunction with existing and future projects. Future phases of this project will be planned in conjunction with other projects to obtain the same cost savings.

REVENUE SOURCE	EXISTING FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY17	FY18	FY19	FY20	FY21	Total
General Fund							
1% Sales Tax							
Proprietary Fund (Water)		$ 59,227					$ 59,227
Proprietary Fund (Waste Water)		$ 59,227					$ 59,227
TOTALS		$ 118,454					$ 118,454

Requested Funds: Engineering, Construction, and Contingency (ROM estimates)

Fiber Optic Infrastructure (WW17B) Funded 6 years ago

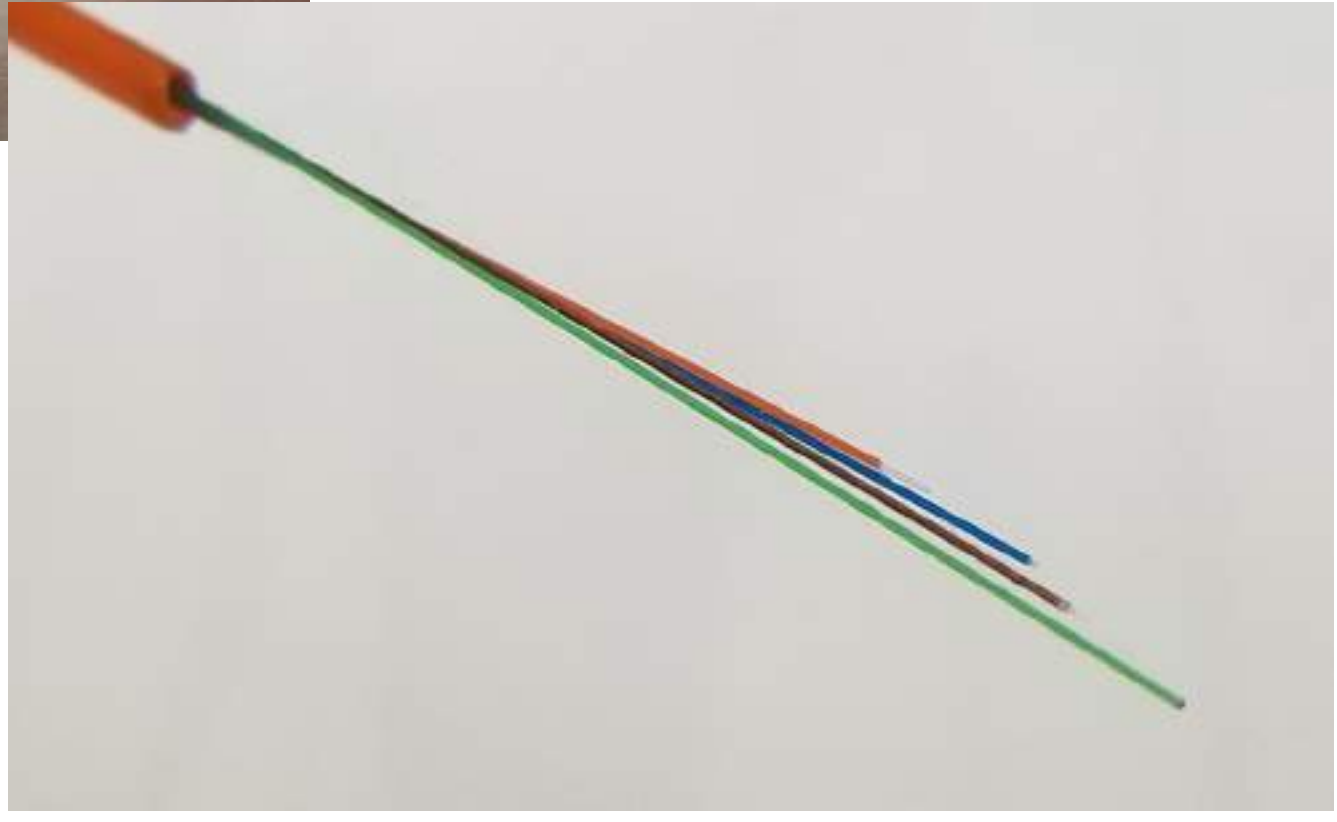
- This is the first phase of a multiphase project to develop a communications utility infrastructure (fiber optic) between the various departments and outlying utility locations
- DPU is leading implementation of this project as needs and opportunities arise
- No additional funds requested for this project

Fiber Optic Infrastructure (WW17B)

MUNIS PROJECT WW17B - FIBER OPTIC INFRASTRUCTURE DEVELOPMENT						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 40,500	$ -	$ -	$ 40,500	$ -	$ 40,500
Training Services	$ 1,236	$ 1,236	$ -	$ 0	$ -	$ 0
Other Professional	$ 419	$ -	$ -	$ 419	$ -	$ 419
Survey Services	$ 10,000	$ -	$ -	$ 10,000	$ -	$ 10,000
Construction Services	$ 1,368	$ -	$ 1,140	$ 228	$ -	$ 228
Telephone / Fax / TV	$ 50	$ -	$ -	$ 50	$ -	$ 50
Advertising	$ 250	$ -	$ -	$ 250	$ -	$ 250
Travel and Related	$ 1,304	$ 1,304	$ -	$ 0	$ -	$ 0
General Supplies	$ 4,000	$ 3,600	$ -	$ 400	$ -	$ 400
	$ 59,127	$ 6,140	$ 1,140	$ 51,847	$ -	$ 51,847

Fiber Optic Infrastructure (WW17B)

Fiber-Optic Cable



DDC Controls Upgrade – WWTP (WW23A)

Project Description: Controls system upgrades to new N4 platform for 11 City owned buildings.

Project Need: New N4 upgrades necessary to stay current with technology.

Development Plan & Status : In FY20, our HVAC controls contractor, Long Building Technologies, gave us an informal no cost quote. In FY23 we will work with Long to refine the scope and get a solid cost estimate. In FY24, Project implementation will occur.

Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Wastewater Fund		$ 28,272	0	0	0	0	0	0	0	0	0	$ 28,272
Total		$ 28,272	0	0	0	0	0	0	0	0	0	$ 28,272

DDC Controls Upgrade – WWTP (WW23A)

DDC Controls Upgrade – WWTP (WW23A)

MUNIS PROJECT WW23A - DDC CONTROLS UPGRADE - WWTP						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Construction Services	$ 28,272	$ -	$ 28,272	$ -	$ -	$ -
	$ 28,272	$ -	$ 28,272	$ -	$ -	$ -

DDC Controls Upgrade – WWTP (WW23A)

Solid Waste Gasifier (SW21A)

Project Description: The pre-design, design, and construction of a Gasifier to incinerate garbage.

Project Need: The Landfill cells are reaching capacity. Unalaska has about five years to come up with alternatives for the City's garbage or must find a new place to build new cells. Thermal processing of solid waste is the future of Landfills. Gasification is a process that uses a feedstock, often municipal or industrial waste, for a thermo chemical conversion of waste in high heat. This is done in a low oxygen environment and causes material breakdown at the molecular level. Once the molecular breakdown occurs, the gasification process recombines them to form a syngas, a gas similar to natural gas.

Development Plan & Status : A combination of grant funds and Landfill proprietary funds will pay for this project, which will be installed within the current building footprint. The City is seeking state funding for a portion of the project, although it is currently still budgeted for the Solid Waste Proprietary Fund.

FY23-32 CMMP

Solid Waste Gasifier

SW21A

Solid Waste

Estimated Project & Purchase Timeline

Pre Design: FY21

Engineering/Design: FY22

Purchase/Construction: FY25

Cost Assumptions

Engineering, Design, Const	800,000
Other Professional Services	100,000
Construction Services	3,000,000
Machinery & Equipment	2,500,000
Subtotal	6,400,000
Contingency (set at 30%)	1,920,000
TOTAL	**8,320,000**

Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Solid Waste Proprietary	300,000	400,000	0	7,620,000	0	0	0	0	0	0	0	8,320,000
Total	300,000	400,000	0	7,620,000	0	0	0	0	0	0	0	8,320,000

Solid Waste Gasifier (SW21A) Funded 2 years ago

- This project will construct a gasifier to incinerate garbage
- Landfill cells are rapidly reaching capacity
- It's estimated that we have 5 years to come up with another method of dealing with the City's garbage or find a new location for landfill cells
- DPU identified two vendors interested in helping us develop this project
- Staff worked with Waste Management to pinpoint a precise per ton quote for removal of all waste via barge to allow better cost analysis. Using this metric to evaluate gasifier financials and alternatives
- Grant application submitted to the Department of Energy Office of Energy Efficiency & Renewable Energy for technical assistance in plotting the best way forward
- Grant was awarded and confirmed that gasification of anaerobic digestion was the best waste reduction strategy for our location
- Another grant application to the DOE was applied for and awarded to assist with RFP preparation and proposal scoring
- DPU plans to issue an RFP for design services with a technology provider to be awarded in late 2022
- Utility staff are preparing materials for a work session for City Council to update them on progress

Solid Waste Gasifier (SW21A)

MUNIS PROJECT SW21A - SOLID WASTE GASIFIER						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 667,750	$ -	$ -	$ 667,750	$ -	$ 667,750
Telephone / Fax / TV	$ 750	$ -	$ -	$ 750	$ -	$ 750
Advertising	$ 1,500	$ -	$ -	$ 1,500	$ -	$ 1,500
Contingency	$ 30,000	$ -	$ -	$ 30,000	$ -	$ 30,000
	$ 700,000	$ -	$ -	$ 700,000	$ -	$ 700,000

Solid Waste Gasifier (SW21A)

CEM Breakwater Repair (PH17C)

This is a project primarily in the hands of the US Army Corp of Engineers

CEM Breakwater Repair (PH17C) Funded 6 years ago

- This is a project primarily in the hands of the US Army Corp of Engineers (USACE)
- The original installation has been problematic with the breakwater sections getting caught on each other.
- The USACE issued a contract for the repair of the breakwaters which was completed but did not resolve the issues
- After repairs are successfully completed USACE will ask the COU to accept the CEM Harbor as complete
- USACE is waiting on their Congressional Reprogramming Request (CGR) for funding to complete the work

CEM Breakwater Repair (PH17C)

MUNIS PROJECT PH17C - CEM BREAKWATER REPAIR						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Construction Services	$ 150,000	$ 110,000	$ -	$ 40,000	$ -	$ 40,000
Other Professional	$ -	$ -	$ -	$ -	$ -	$ -
	$ 150,000	$ 110,000	$ -	$ 40,000	$ -	$ 40,000

CEM Breakwater Repair (PH17C)

UMC Positions 3 & 4 Replacement (PH17D)

PROJECT DESCRIPTION: This project will replace the pile supported sections of Positions 3 and 4 at the Unalaska Marine Center with an open cell sheet pile dock capable of supporting modern shipping needs. The project will align approximately 390 feet of new dock with the current U. S. Coast Guard Dock creating a total length of 730 ± feet. The project will also provide an additional 220 ± feet in alignment with Positions 5 through 7 creating the added length needed for modern Containerships that use the Port of Dutch Harbor. The completed project will create approximately 1.8 acres of additional back reach and a preferred additive alternate would be to extend the crane rails located on Positions 5 - 7 with 100 gauge rails from position 4-7 as part of this project.

FUNDING AND RELATIONSHIP TO OTHER PROJECTS: The budget for this is based on the Engineer's Estimate provided in July of 2014. Council appropriated $980,000 in FY14 and $904,858 in FY16 for this project. The budgeted number for FY17 is in addition to the engineering services already contracted. The funding for this project is a work in process. Grant funds are not readily available and we continue to work on securing funding for this project. Funding for engineering and design is necessary to move this project forward so that when construction funds are secured the project is shovel ready. The construction of UMC positions 3 and 4 is estimated to be 2 construction seasons. During the demo phase of the construction phase we will be displacing fishing vessel offloads and fueling barges. We are proposing an upgrade to the Light Cargo Dock in order to accommodate displaced vessels during construction. This project will include all basic services including water, sewer, and electrical. It will also include an upgrade to fuel services already provided.

PROJECT NEED: The City of Unalaska has been informed that changes in containerized shipping is currently in the planning phases. This will bring a different class containership into Port as well as demands for increased uplands support for container storage and powering of refrigerated cargo. Positions 3 and 4 are primarily used by the fueling companies, fishing vessel offloads, the Alaska State Ferry and as overflow for large container vessels. Positions 3 and 4 are heavily used for offloading fishing vessels. These vessels are also able to fuel and backload stores while offloading their product. The fishing vessels offloads require additional space both at the face of the dock and uplands for freight movement; to accommodate multiple berthing for offloads and to meet the needs of the shipping industry an expansion of the Unalaska Marine Center is needed.

FY17-21 CMMP

UMC DOCK REPLACEMENT & EXPANSION (POSITIONS III&IV) | PORTS

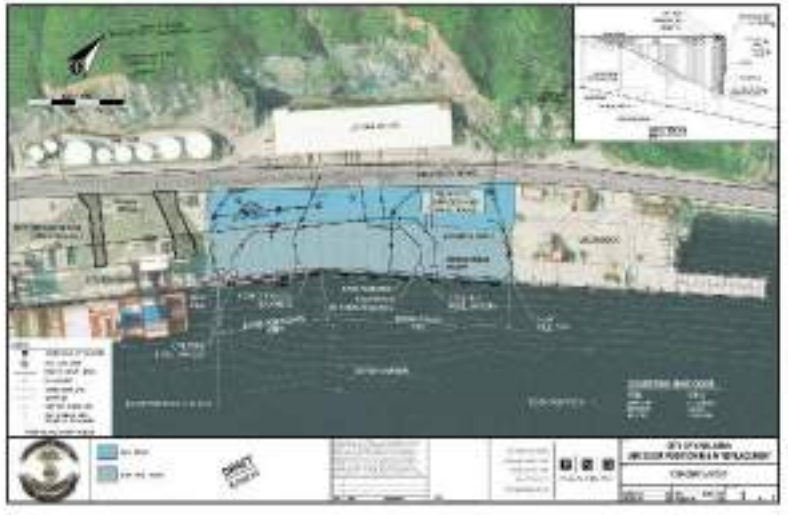
ESTIMATED PROJECT & PURCHASE TIMELINE

Inception/Concept: FY 2014

Pre Design: FY 2014 - FY 2015

Engineering/Design: FY 2015 - FY 2017

Construction: FY 2018 - FY 2020



REVENUE SOURCE	EXISTING FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY17	FY18	FY19	FY20	FY21	Total
General Fund							
1% Sales Tax							
Grant							
Proprietary Fund (Ports)	$ 1,884,858	$ 1,121,000	$ 47,682,000				$ 50,687,858
TOTALS	$ 1,884,858	$ 1,121,000	$ 47,682,000				$ 50,687,858

Existing Funds: Engineering Services | **Requested Funds:** Engineering, Construction Services, Utility, Contingency, Inspection

UMC Positions 3 & 4 Replacement (PH17D) Funded 6 years ago

- This project began construction in Summer FY18 and provides 714 feet of useable protected dock face, an extension of the crane rail length of 280 feet with a future additional 418 feet available in the future, utility and fueling connections and a paved area from the dock face to Ballyhoo Road.
- The contractor Turnagain Marine Construction (TMC) has the following construction schedule:
  - Substantial Completion 12-15-18
  - Final Completion 1-15-18
- TMC arrived on-site October 28, 2019 and began completion of all remaining Punch List items
- TMC completed their work on November 4, 2019 at which time a walk-thru was conducted, however, additional incomplete work was identified
- Subcontractor lien releases were never submitted by TMC but the deadline for a subcontractor to file a lien is past
- As-builts received from PND
- Howard Henning releveled a 30’ x 4’ area of pavers and misc work
- Five crane tie down pocket drains recently completed by NAC - summer 2022
- Trench drain grout work completed by Howard Henning, invoice received, PA in process

UMC Positions 3 & 4 Replacement (PH17D)

MUNIS PROJECT PH17D - UMC POSITIONS III & IV REPLACEMENT						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Salaries and Wages	$ -	$ -	$ -	$ -	$ -	$ -
Overtime	$ -	$ -	$ -	$ -	$ -	$ -
Health Insurance Benefit	$ -	$ -	$ -	$ -	$ -	$ -
FICA / Medicare Employer Match	$ -	$ -	$ -	$ -	$ -	$ -
PERS Employer Benefit	$ -	$ -	$ -	$ -	$ -	$ -
Unemployment Ins Benefit	$ -	$ -	$ -	$ -	$ -	$ -
Workers Compensation Ins	$ -	$ -	$ -	$ -	$ -	$ -
Other Employee Benefits	$ -	$ -	$ -	$ -	$ -	$ -
Legal	$ 113	$ 113	$ -	$ -	$ -	$ -
Engineering and Architectural	$ 2,178,471	$ 2,178,471	$ -	$ -	$ -	$ -
Other Professional	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 35,252,003	$ 35,149,651	$ -	$ 102,352	$ -	$ 102,352
Telephone / Fax / TV	$ 882	$ 882	$ -	$ -	$ -	$ -
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
Travel and Related Costs	$ -	$ -	$ -	$ -	$ -	$ -
Permit Fees	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ -	$ -	$ -	$ -	$ -	$ -
General Supplies	$ 5,785	$ 5,785	$ -	$ -	$ -	$ -
Computer Hardware/Software	$ 3,114	$ 3,114	$ -	$ -	$ -	$ -
Machinery and Equipment	$ 27,490	$ 27,490	$ -	$ -	$ -	$ -
Interest Expense	$ -	$ -	$ -	$ -	$ -	$ -
	$ 37,467,858	$ 37,365,506	$ -	$ 102,352	$ -	$ 102,352

UMC Positions 3 & 4 Replacement (PH17D)

Paver blocks exceed allowable height tolerance

Crane Tie-Down Vault
with no drain.

Entrance Channel Dredging (PH201)

Project Description: This project will remove material from the channel bar that crosses the entrance of Iliuliuk Bay before vessels can enter Dutch Harbor. The dredging will increase the depth of water to accommodate the draft of large vessels transiting the channel and utilizing the Unalaska Marine Center and facilities inside of Dutch Harbor. The City will work with the US Army Corps of Engineers to help fund, design, construct, and maintain this project. This project already completed the biological assessments to gauge the impact of dredging to beachfronts inside of the harbor. The USACE has secured a congressional authorization to fund the dredging. This will allow deeper draft vessels to enter into Dutch Harbor including tankers, container ships and break-bulk vessels. The project will reduce delays of current vessels entering and departing the harbor due to storm surge and swell in the channel. The project estimates removal of 23,400 CY of material.

Project Need: The bar that crosses the entrance channel limits vessels entering the port by their draft rather than need for services in the community. Many vessels passing the community cannot enter our port due to water depth. Depending upon sea conditions the keel depth for vessels currently utilizing the port can be as little as one meter to the bottom according to the Alaska Marine Pilots. Storm conditions, especially northerly wind, undulates the sea height and makes the situation worse by causing vessels to pitch resulting in contact with the sea floor where the bar is located. Dredging the entrance channel to a sufficient depth and width will alleviate the safety concerns and allow more vessel/cargo traffic into the port, increasing Unalaska's economic utility.

Development Plan & Status : The City conducted a Cost Benefit Analysis of the project to prove its benefit to the nation and that it is worthy of the USACE's and expenses. This project moved steadily forward to assimilate other key pieces, such as the biological assessment, impacts of dredging, and any impacts dredging may have on the inner harbor. In 2020 the US Congress authorized funding to the project with USACE and made available $27M. The City needs a match of just $9M, bringing the total cost to $38.456M. It will be completed in phases over FY22 and FY23.

FY23-32 CMMP

Entrance Channel Dredging

PH201

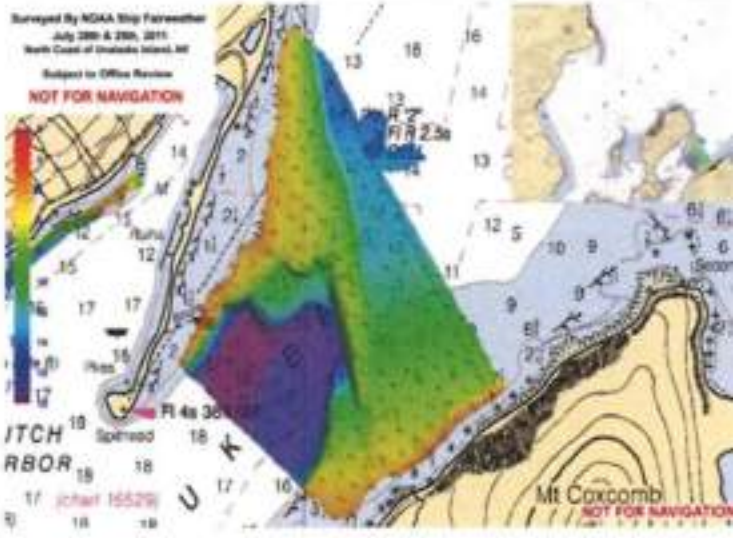
Ports

Estimated Project & Purchase Timeline

Pre Design: FY19

Engineering/Design: FY20

Purchase/Construction: FY22-23



Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
1% Sales Tax	1,000,000	1,000,000	0	0	0	0	0	0	0	0	0	2,000,000
General Fund	5,994,500	3,494,500	0	0	0	0	0	0	0	0	0	9,489,000
Grant	13,483,500	13,483,500	0	0	0	0	0	0	0	0	0	26,967,000
Total	20,478,000	17,978,000	0	0	0	0	0	0	0	0	0	38,456,000

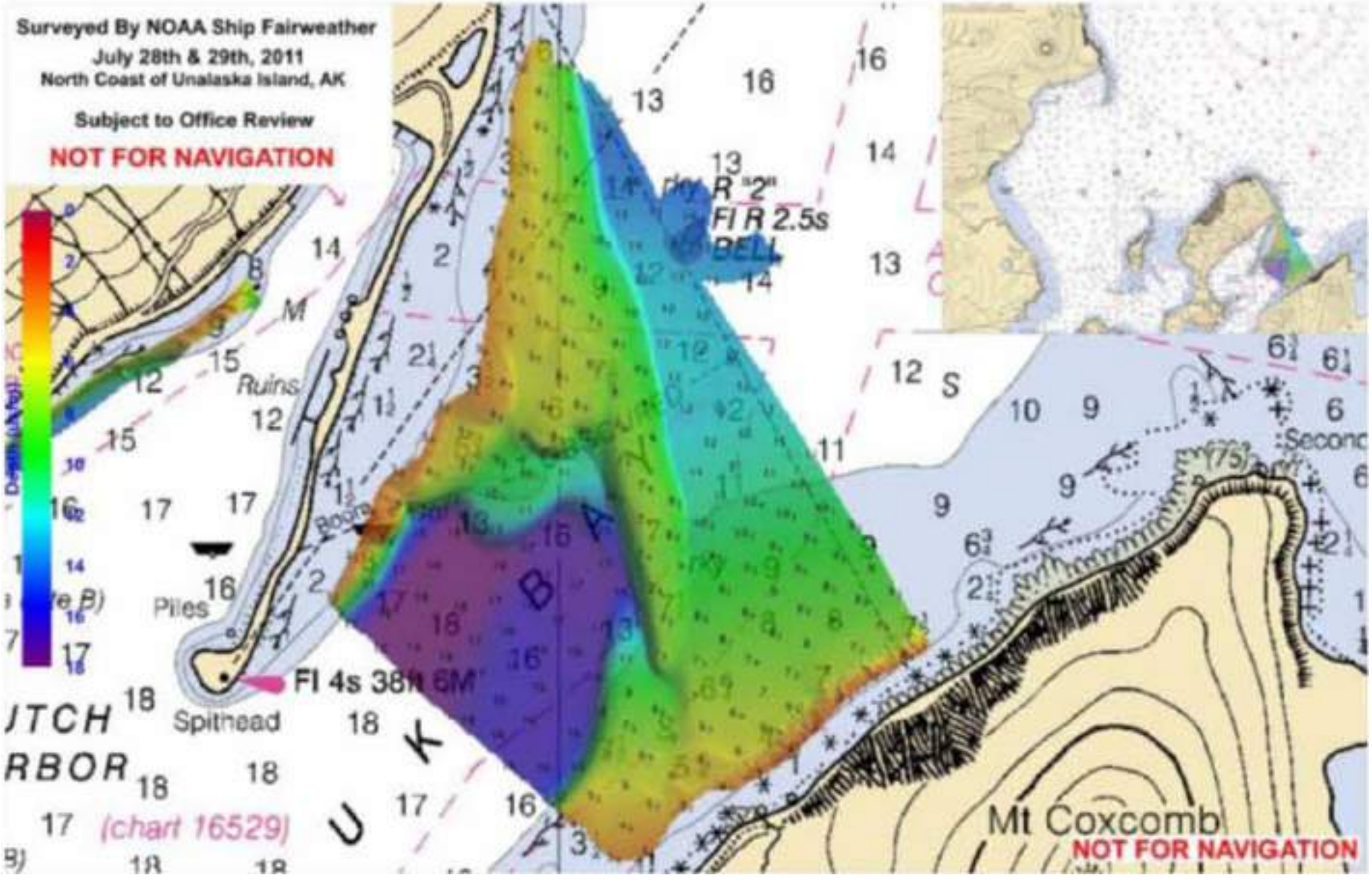
Entrance Channel Dredging (PH201) Funded 11 years ago

- This project will remove 182,000 cubic yards of material from an area 600’ x 600’ at the channel bar that crosses the entrance of Iliuliuk Bay enabling vessels to enter Dutch Harbor safely
- The bar causes inefficiencies in the delivery of fuel, durable goods, and exports to/from Dutch Harbor
- Ports is working with the United States Army Corps of Engineers (USACE) in the planning stage and expect dredging in FY22
- USACE completed their Final Feasibility Report and Final Environmental Assessment dated November 2019
- USACE will present a project update to the COU on January 10, 2023
- Estimated Total Cost is $30,445,000 with the City share at $7,611,250
- USACE Recommended Plan:
  - Dredge Channel to -58 feet MLLW
  - Dredge Volume 182,000 CY
  - Length of Channel 600 Feet
  - Width of Channel 600 Feet
  - Maintenance Dredging 16,000 CY @ 25 yrs

Entrance Channel Dredging (PH201)

MUNIS PROJECT PH201 - ENTRANCE CHANNEL DREDGING						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering & Architectural	$ 1,054,500	$ 500,000	$ -	$ 554,500	$ -	$ 554,500
Other Professional	$ 1,091,212	$ 1,029,385	$ -	$ 61,827	$ -	$ 61,827
Construction Services	$ 7,993,488	$ 25,175	$ -	$ 7,968,313	$ -	$ 7,968,313
Telephone / Fax / TV	$ 750	$ -	$ -	$ 750	$ -	$ 750
Advertising	$ 700	$ -	$ -	$ 700	$ -	$ 700
Contingency	$ 1,348,350	$ -	$ -	$ 1,348,350	$ -	$ 1,348,350
	$ 11,489,000	$ 1,554,560	$ -	$ 9,934,440	$ -	$ 9,934,440

Entrance Channel Dredging (PH201)



Cruise Ship Terminal Design (PH20A)

Project Description: This project will design the Unalaska Marine Center Cruise ship terminal. This Terminal will provide an open sheet pile design dock with mooring dolphins to the South of Unalaska Marine Center Position 7.

Project Need: Cruise ship activity is on the rise in Unalaska and is proving to be a benefit to local commerce. The cruise ships do not have a place to reserve with certainty as the Unalaska Marine Center is designated for industrial cargo and fishing operations. We have been fortunate to be able to accommodate most of the cruise ship activity, but the passenger count and number of vessel call s is on the rise. With this in mind, a cruise ship terminal would allow for dedicated cruise ship berthing. It would eliminate passengers walking through and around cargo operations. During the off season for cruise ships this facility could be used for fishing vessel offloads. This would allow additional revenue opportunity and still bolster commerce through committed berthing for the cruise ship industry.

Development Plan & Status : ROM for geotechnical is about $300,000 and ROM for design is $600,000.

FY22-31 CMMP

UMC Cruise Ship Terminal

Ports

Estimated Project & Purchase Timeline

Pre Design: FY20

Engineering/Design: FY24

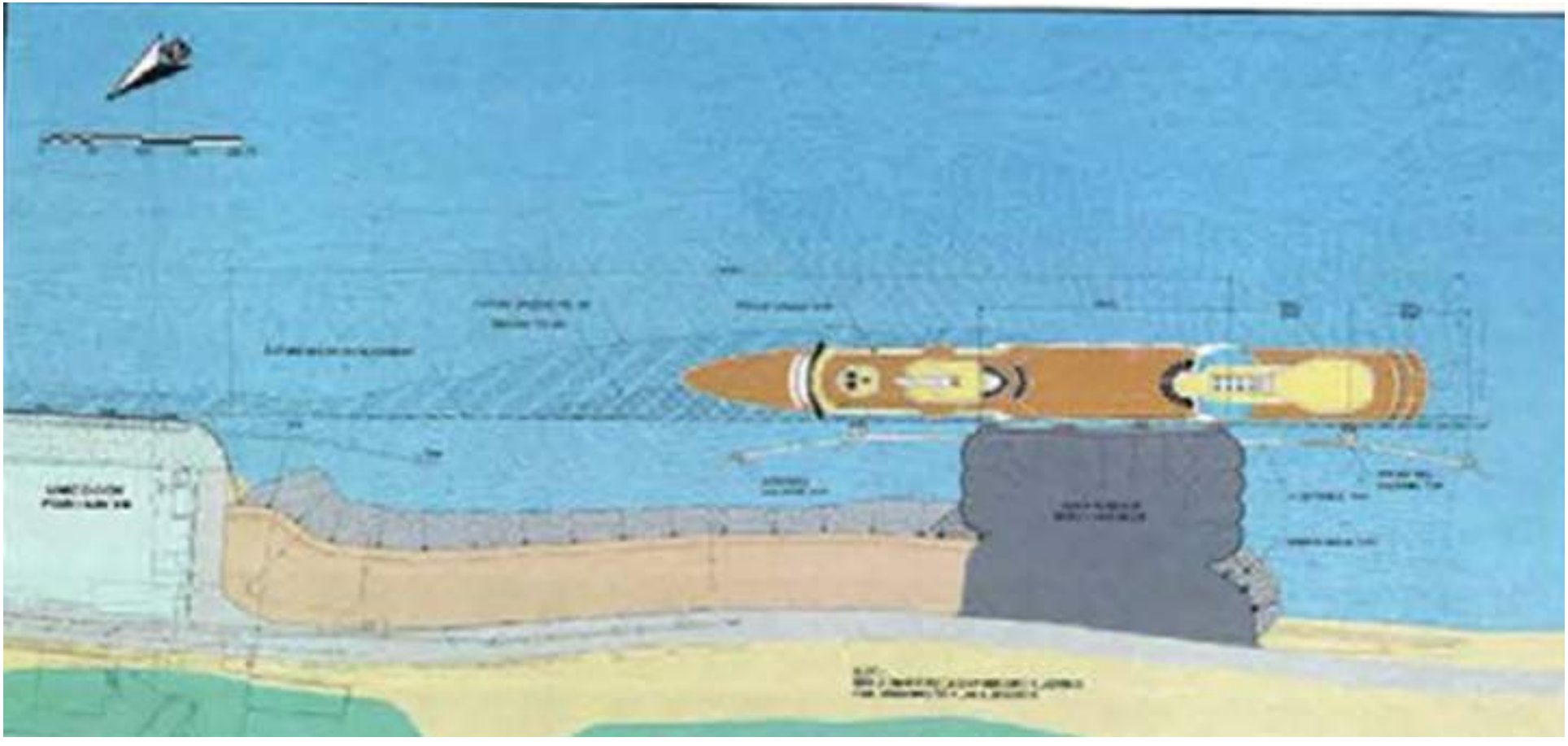
Purchase/Construction: FY26

Cost Assumptions	
Other Professional Services	
Engineering, Design, Construction Admin	1,300,000
Construction Services	13,000,000
Machinery & Equipment	
Subtotal	14,300,000
Contingency (30%)	4,290,000
Total Funding Request	18,590,000

Source	Appropriated	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Ports Proprietary Fund	390,000	0	0	910,000	0	17,290,000	0	0	0	0	0	18,590,000
Total	390,000	0	0	910,000	0	17,290,000	0	0	0	0	0	18,590,000

Cruise Ship Terminal Design (PH20A) Funded 3 years ago

- Concept design has been completed by PND
- PND consulted for input on possible dredging needs and uplands geotechnical investigation
- Ports is working directly with PND to move this project forward



Cruise Ship Terminal Design (PH20A)

MUNIS PROJECT PH20A - CRUISE SHIP TERMINAL DESIGN						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 273,000	$ -	$ -	$ 273,000	$ -	$ 273,000
Contingency	$ 117,000	$ -	$ -	$ 117,000	$ -	$ 117,000
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
General Supplies	$ -	$ -	$ -	$ -	$ -	$ -
	$ 390,000	$ -	$ -	$ 390,000	$ -	$ 390,000

Cruise Ship Terminal Design (PH20A)

Mooring Buoy Maintenance (PH20B)

Project Description: This is maintenance required to ensure the integrity of the mooring buoy. This project will inspect the tri-plate and anchor chain connecting to the 35, 000 lb anchors. It will inspect the anchor chain at the mudline, remove marine growth from the buoy, and inspect the buoy for structural integrity. It will also confirm GPS Coordinates for anchor locations.

Project Need: The structural integrity of the buoy system is critical to be able to provide this as an emergency asset. Materials can degrade over time and it is important that we keep this type of maintenance on a 4-5 year rotation in order to identify weakness or replacement needs.

Development Plan & Status (Include Permit and Utility Requirements): This buoy system is located in State waters and permitted by the Department of Natural Resources. A copy maintenance records and replacement records will be provided to DNR.

Cost Assumptions: A quote for a flat fee labor service for $25,000 has come in from Resolve/Magone Marine, with an additional quote from LFS Dutch for $10,365 for materials. The contingency on this project is expected to cover additional materials if needed.

FY20-24 CMMP

Emergency Mooring Buoy Maintenance | Ports

Estimated Project & Purchase Timeline
Pre Design: FY 2020
Engineering/Design: FY 2020
Purchase/Construction: FY 2020

Cost Assumptions	
Engineering, Design, Const Admin	-
Other Professional Services	25,000
Construction Services	13,462
Machinery & Equipment	-
Subtotal	**38,462**
Contingency (set at 30%)	11,538
TOTAL	**50,000**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**50,000**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
1% Sales Tax							-
Grant							-
Proprietary Fund		50,000					50,000
TOTALS $	-	50,000	-	-	-	-	50,000
Requested Funds:							

Mooring Buoy Maintenance (PH20B) Funded 3 years ago

- Scope of work being developed by Ports
- Typical scope for this type of work would include:
  - Anchor chain inspection
  - Anchor inspection
  - Marine growth removal from buoy and chain
  - Inspection & repair of buoy
  - GPS confirmation of anchor locations and buoy location

Mooring Buoy Maintenance (PH20B)

MUNIS PROJECT PH20B - MOORING BUOY MAINTENANCE						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ -	$ -	$ -	$ -	$ -	$ -
Other Professional	$ 25,000	$ -	$ -	$ 25,000	$ -	$ 25,000
Telephone / Fax / TV	$ 162	$ -	$ -	$ 162	$ -	$ 162
Contingency	$ 11,538	$ -	$ -	$ 11,538	$ -	$ 11,538
Machinery & Equipment	$ 13,300	$ -	$ -	$ 13,300	$ -	$ 13,300
	$ 50,000	$ -	$ -	$ 50,000	$ -	$ 50,000

Mooring Buoy Maintenance (PH20B)

UMC Restrooms (PH23A)

Project Description: This project is the purchase and installation of a new restroom for the Unalaska Marine Center. Water and Sewer service has been stubbed in at UMC for the purpose of installation of public restrooms for dock workers and passengers. City of Unalaska Code requires connecting to City services where available. These services are available at UMC

Project Need: For many years dock workers have used portable toilets. These outhouses require service from the Wastewater Treatment Staff. This project will provide a minimum of four toilets bring the City into compliance with City Code and EPA regulations. The facilities will improve working conditions for employees and visitors.

Development Plan & Status : This project involves a preexisting design and the restroom will tie into a pre-poured foundation that connects into existing utility services. The current cost assumption is from Public Works, for approximately $700 per square foot. This would be a from-scratch creation, a worst case scenario for funding. Ports is sourcing pre-designed and built options to lower the cost.

FY23-32 CMMP

Restroom Unalaska Marine Cente

Port

PH23A

Estimated Project & Purchase Timeline

Pre Design: FY23

Engineering/Design: FY23

Purchase/Construction: FY24

Cost Assumptions

Engineering, Design, Construction Admin	50,000.00
Other Professional Services	25,000.00
Construction Services	332,815.00
Machinery & Equipment	
Subtotal	407,815.00
Contingency (30%)	122,345.00
Total Funding Request	530,160.00

Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Ports Proprietary Fund	0	50,000	480,160	0	0	0	0	0	0	0	0	530,160
Total	0	50,000	480,160	0	0	0	0	0	0	0	0	530,160

UMC Restrooms (PH23A) Funded 3 months ago

UMC Restrooms (PH23A)

MUNIS PROJECT PH23A - UMC RESTROOMS						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 50,000	$ -	$ -	$ 50,000	$ -	$ 50,000
	$ 50,000	$ -	$ -	$ 50,000	$ -	$ 50,000

UMC Restrooms (PH23A)

LCD and UMC Dredging (PH602)

Project Description: This project includes the engineering, permitting, and dredging at the faces of the Light Cargo Dock and the Unalaska Marine Center positions 1-7. It will complement other capital projects in the Port, namely the dredging of the entrance channel. Larger vessels will be able to enter into Dutch Harbor, and now we need to ensure the depth of the dock face coincides with the new traffic. The depths at the Unalaska Marine Center vary from -32 and -45 at MLLW. Dredging at the face of the Unalaska Marine Center would create a constant -45 from Positions 1-7. This will accommodate deeper draft vessels throughout the facility. The existing sheet pile is driven to approximately -58 . and dredging to -45 will not undermine the existing sheet pile. This project is primarily to accommodate large class vessels. Many of the vessels currently calling the Port must adjust ballast to cross the entrance channel and dock inside the harbor. This project timeline coincides with other dredging projects, including the Light Cargo Dock (LCD). Dredging in front of the Light Cargo Dock will also make this dock more accessible for current customers. Vessels using the Light Cargo Dock that draws more than 22'. must place another vessel between the dock face and their vessel in order to get enough water under the keel.

Project Need: The completion of this dredging will enhance current and future operations by creating usable industrial dock face that is designed for vessels in varying lengths and tonnage

Development Plan & Status : This dredging project supports the recently completed UMC position 3 and 4 Replacement project and the dredging of the entrance channel. The estimates for dredging of the Light Cargo Dock include 6000 CY of dredging and 3100 CY of shot rock slope protection. The dredging material will not be removed; however, it will be relocated on the sea floor. Dredging at UMC estimated to relocate 6000 CY of dredging material and will require approximately 1200 CY of shot rock slope protection. The City is seeking state support for this project, but it is currently budgeted for the Ports Proprietary Fund.

Cost Assumptions	
Other Professional Services	
Engineering, Design, Construction Admin	109,650
Construction Services	1,932,000
Machinery & Equipment	
Subtotal	2,041,650
Contingency (30%)	612,495
Total Funding Request	2,654,145

FY23-32 CMMP

LCD & UMC Dredging

PH602

Port

Estimated Project & Purchase Timeline

Pre Design: FY19

Engineering/Design: FY23

Purchase/Construction: FY23

LIGHT CARGO DOCK, BARGE, TRAMPER

BARGE IS BEING USED AS A "SPACER" TO PROVIDE DEPTH FOR TRAMPER

Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Ports Proprietary	109,650	2,544,495	0	0	0	0	0	0	0	0	0	2,654,145
Total	109,650	2,544,495	0	0	0	0	0	0	0	0	0	2,654,145

LCD and UMC Dredging (PH602) Funded 7 years ago

- This project includes the engineering, permitting, and dredging at the faces of the Light Cargo Dock and the Unalaska Marine Center positions 1-7. The completion of this dredging will enhance current and future operations by creating useable industrial dock face that is designed for vessels in varying lengths and tonnage
- Ports is currently working with PND Engineers on the initial planning phases with dredging in FY22-23 in conjunction with the Entrance Channel Dredging project
- No additional funding requested for this project

LCD and UMC Dredging (PH602)

MUNIS PROJECT PH602 - LCD & UMC DREDGING						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering & Architectural	$ 110,000	$ -	$ -	$ 110,000.00	$ -	$ 110,000.00
Other Professional	$ 109,650	$ -	$ -	$ 109,650.00	$ -	$ 109,650.00
Construction Services	$ 1,821,300	$ -	$ -	$ 1,821,300.00	$ -	$ 1,821,300.00
Telephone / Fax / TV	$ 500	$ -	$ -	$ 500.00	$ -	$ 500.00
Advertising	$ 200	$ -	$ -	$ 200.00	$ -	$ 200.00
Contingency	$ 612,495	$ -	$ -	$ 612,495.00	$ -	$ 612,495.00
	$ 2,654,145	$ -	$ -	$ 2,654,145.00	$ -	$ 2,654,145.00

LCD and UMC Dredging (PH602)

Typical dredging operation

Robert Storrs Harbor A & B Floats (PH905)

Project Description: This project will remove the existing A and B Floats at the Harbor and reconfigure the Harbor to accommodate a new float system, ADA gangway and create uplands for parking and a public restroom. It will also include a fire suppression system, electricity and year-round water supply to users and new piling.

Project Need: This project would include replacing the deteriorated floats and reconfiguring the floats and fingers of A and B Floats to include updated electrical systems, lighting, fire suppression, year-round utilities, and an ADA-required gangway. Based on current engineer concepts, the reconfiguration of A and B Floats will create at least 30 additional slips plus linear tie options. This should alleviate some of the 30 vessel waiting list. The reconfiguration will also allow for development of the uplands for required parking and a public restroom. The existing dock arrangement was carried over from a previous location. In order to accommodate the vessel demand at the Robert Storrs Harbor, a new configuration of the floats would allow for better use of the basin based on bathymetry and navigational approaches and also allow for additional vessel slips, with minimal fill and no dredging. It will add a significant number of slips for vessels 60' and under. This is an extension of the Robert Storrs Float Replacement Project. C Float is was completed in FY16. As the Float Replacement Project for Robert Storrs is being constructed in phases it was logical to separate the phases into separate project tracking purposes.

Development Plan & Status : The current estimates place this project at approximately 9.5 million dollars, based on engineers estimates for in kind replacement. We are eligible to apply for a 50% grant through the Alaska Department of Transportation and Public Facilities. 50% of the funding for this is estimated to come out of the Port Net Assets.

FY22-31 CMMP

Robert Storrs Small Boat Harbor Improvements (A & B Floats)

Ports

Estimated Project & Purchase Timeline

Pre Design: FY19

Engineering/Design: FY20

Purchase/Construction: FY22

Existing Condition (left)
Side Tie: 643 feet
Slips: 6 - 42 foot & 6 - 60 foot

Proposed Concept (right)
Side Tie: 218 feet
Slips: 22 – 26 foot, 13 - 32 foot, & 20 - 42 foot

Cost Assumptions	
Other Professional Services	
Engineering, Design, Construction Admin	650,000
Construction Services	7,000,000
Machinery & Equipment	
Subtotal	7,650,000
Contingency (30%)	2,295,000
Total Funding Request	9,945,000

Source	Appropriated	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Grant	0	3,250,000	0	0	0	0	0	0	0	0	0	3,250,000
Ports Proprietary Fund	650,000	6,045,000	0	0	0	0	0	0	0	0	0	6,695,000
Total	650,000	9,295,000	0	0	0	0	0	0	0	0	0	9,945,000

Robert Storrs Harbor A & B Floats (PH905) Funded 14 years ago

- Ports worked with PND Engineers developing conceptual plans which are complete. Scoping is complete and the Port would like to pursue this replacement project upon completion of the present UMC Positions 3&4 project
- Additional tideland lease from the State is required for float extension and land use agreement or land swap with Unisea for uplands development (parking)
- Ports is currently working with Planning on complex tideland acquisition from the State and a property swap with UniSea
- The design will be used to apply for matching ADOT grant funding with possible construction in FY23
- Council will be briefed/presented with options for Design/Build, Design Best Value Bid, and Design/Bid/Build for the A and B Float replacement
- Ports will not pursue construction without matching grant funds through the Harbor Grant matching program
- DPW contracted LCG Lantech to survey Pacesetter Way R/W
- Ports Director is working directly with PND to move this project forward

Robert Storrs Harbor A & B Floats (PH905)

MUNIS PROJECT PH905 - ROBERT STORRS SBH IMPROVEMENTS						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 650,000	$ -	$ 22,360	$ 627,640	$ -	$ 627,640
Survey Services	$ 1,500	$ 1,423	$ -	$ 77	$ -	$ 77
Construction Services	$ 4,497,750	$ -	$ -	$ 4,497,750	$ -	$ 4,497,750
Telephone / Fax / TV	$ 250	$ -	$ -	$ 250	$ -	$ 250
Advertising	$ 500	$ -	$ -	$ 500	$ -	$ 500
Contingency	$ 1,545,000	$ -	$ -	$ 1,545,000	$ -	$ 1,545,000
	$ 6,695,000	$ 1,423	$ 22,360	$ 6,671,216	$ -	$ 6,671,216

Robert Storrs Harbor A & B Floats (PH905)

DDC Controls Upgrade – Airport (AP23A)

Project Description: Controls system upgrades to new N4 platform for 11 City owned buildings.

Project Need: New N4 upgrades necessary to stay current with technology.

Development Plan & Status : In FY20, our HVAC controls contractor, Long Building Technologies, gave us an informal no cost quote. In FY23 we will work with Long to refine the scope and get a solid cost estimate. In FY24, Project implementation will occur.

FY23-32 CMMP

HVAC Controls Upgrades - 11 City Buildings

Public Works

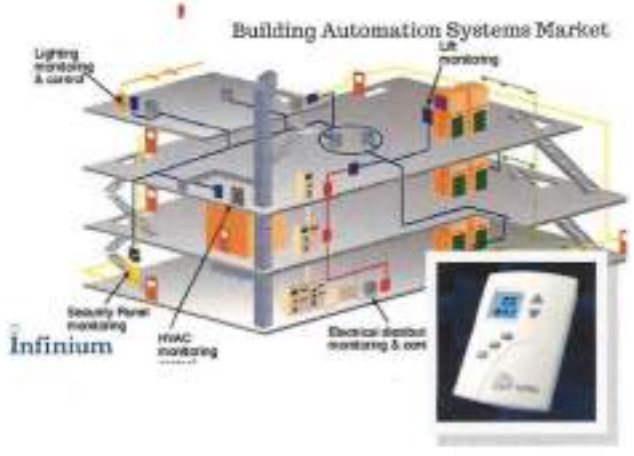
AP23A Airport

Estimated Project & Purchase Timeline

Pre Design: FY23

Engineering/Design: FY23

Purchase/Construction: FY24



Source	Appropriated	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Airport Fund		$ 22,280	0	0	0	0	0	0	0	0	0	$ 22,280
Total		$ 22,280	0	0	0	0	0	0	0	0	0	$ 22,280

DDC Controls Upgrade – Airport (AP23A) Funded 3 months ago

DDC Controls Upgrade – Airport (AP23A)

MUNIS PROJECT AP23A - DDC CONTROLS UPGRADE - AIRPORT						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Construction Services	$ 22,280	$ -	$ 22,280	$ -	$ -	$ -
	$ 22,280	$ -	$ 22,280	$ -	$ -	$ -

DDC Controls Upgrade – Airport (AP23A)

Typical gasifier used to incinerate garbage and burn toxic chemicals/fumes

See page 164

For more information about this project update, contact:
Tom Cohenour
Director of Public Works / Contracting Officer
City of Unalaska, AK 99685
907-581-1260 office
907-359-5056 cell

The End