Capital Projects Update

January 7, 2021

UCSD Playground Project

See page 64 for details

Introduction

This Capital Project Update summarizes 39 presently funded City of Unalaska capital projects with a combined total appropriated budget of $73,449,450.

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

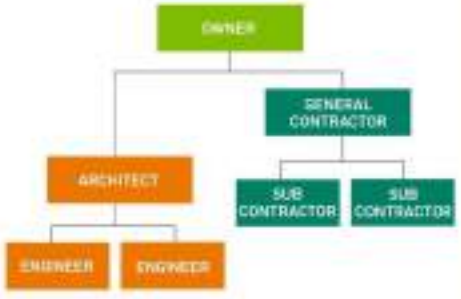
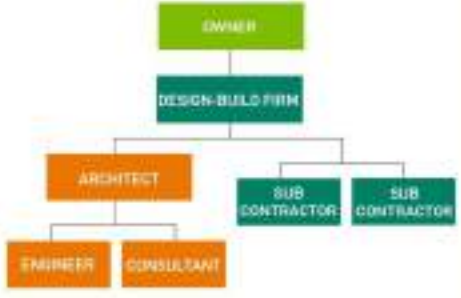
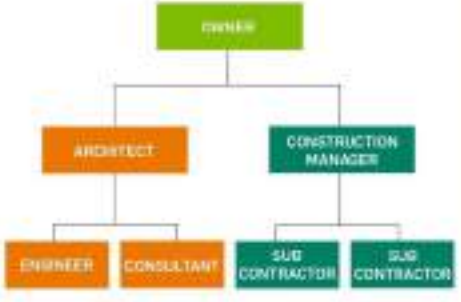
Our oldest project which is still open and funded dates back to 2012.
Six projects were initiated in 2019 (FY20) and four initiated in 2020 (FY21).
Nine projects were closed out via Resolution 2020-50 on 8-11-20 Council meeting.

Each of the 39 active projects in this update include 4 parts:

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

Project Delivery Methods

Getting the best value for your construction dollar

Delivery Method	Organization	Benefits	Challenges
GENERAL CONTRACTOR (DESIGN-BID-BUILD)		• Cost reporting is simplified to one lump sum price (bid) • Design is totally complete before bidding • Owner perceives competitive bid process achieves lowest price • A/E stays on to serve as construction administrator	• Can save costs through low bid procurement, but may sacrifice quality • Does not guarantee price; high risk of legal claims and change orders • Owner does not receive all savings that result during the project • Detailed plans must be complete prior to bidding • Lump sum bids can come in high because of lack of design knowledge • Delivery method is typically longest in duration and not suited to fast track scheduling • A/E and GC may lack established working rapport, no established system of checks and balances • Potential for adversarial relationships
DESIGN-BUILD		• Single point of accountability between design and construction • Design and construction aligned with the Owners goals • Method proven to work for both simple and complex projects • Owner is removed from any potential conflicts between the designer and builder • Design-builder is responsible for A/E mistakes (omissions) • Facilitates fast-track project delivery • Fewer change orders due to integrated project delivery • Early GMP facilitates alternative financing methods • GMP guarantees Owner budget	• Less risk to Owner • Owner gives up some control over the project • Owner needs to clearly define the project purpose and goals through performance based criteria during procurement (RFP) • Typically lends itself to more simplified projects under short timeframes • Project risks are higher for more complex projects
CM/GC CONSTRUCTION MANAGER AT RISK		• Integrated team concept engages all members and provides focus on quality, schedule, budget and end product • CM provides early input on estimating, scheduling, constructability, value planning and logistics • CM procures long-lead items during design to maintain or compress schedule • Facilitates fast-track project delivery • Produces less change orders and schedule delays • Early resource identification and designation to enhance quality, maintain schedule • GMP provides guaranteed budget • Owner keeps all savings • CM procures subcontractors / manages all risk • Single source of accountability throughout construction	• Qualifications-based selection provides best value • Owner can become less hands-on throughout the process • Adds another coordination point during design • Established team rapport can aid in start-up and successful integration • Not all GCs can provide CM services

Summary of Open Capital Projects as of 12/31/21

Ref #	Munis ID	Project	Budget	Expensed	Encumbered	Available	Pending Encumbrance	Actual Available	Detail Page
General Fund									
1	FR21A	Aerial Ladder Truck Replacement	$ 1,500,000	$ 1,381,756	$ -	$ 118,244	$ -	$ 118,244	8
2	PR19A	Town Park Improvements	$ 340,000	$ 259,337	$ 56,388	$ 24,276	$ -	$ 24,276	12
3	PR19B	Sitka Spruce Park Imprvmts	$ 878,185	$ 539,640	$ 338,461	$ 84	$ -	$ 84	16
4	PR601	Public Library Imprvmts	$ 8,681,981	$ 638,810	$ 34,171	$ 8,009,000	$ -	$ 8,009,000	20
5	PS18A	Repeater Site & Radio Upgrade	$ 1,000,000	$ 380,536	$ 40,061	$ 579,404	$ -	$ 579,404	24
6	PS18B	Records Management System	$ 500,000	$ 294,376	$ 182,823	$ 22,801	$ -	$ 22,801	28
7	PS19A	Fire Training Facility	$ 12,000	$ 6,400	$ -	$ 5,600	$ -	$ 5,600	32
8	PS19C	DPS Building Assessment	$ 290,000	$ 234,086	$ 9,278	$ 46,636	$ -	$ 46,636	36
9	PS20A	ALS Manikin	$ 143,000	$ 80,092	$ 25,712	$ 37,196	$ -	$ 37,196	40
10	PS20C	Tsunami Sirens Upgrade	$ 261,879	$ 12,600	$ -	$ 249,279	$ -	$ 249,279	44
11	PW19A	Captain's Bay Road & Utilities	$ 2,000,000	$ 1,317,940	$ 185,791	$ 496,269	$ -	$ 496,269	48
12	PW19B	Causeway Culver Replacement	$ 799,500	$ 181,766	$ 9,445	$ 608,290	$ -	$ 608,290	52
13	PW20A	Burma Road Chapel Roof Upgrade	$ 110,000	$ 11,765	$ 60,091	$ 38,144	$ -	$ 38,144	56
14	PW203	City Wide Drainage	$ 3,816,793	$ 3,286,838	$ -	$ 529,955	$ -	$ 529,955	60
15	SS601	UCSD Playground	$ 1,326,485	$ 1,003,127	$ 283,716	$ 39,642	$ -	$ 39,642	64
Electric Fund									
16	EL18B	Automatic Meter Read	$ 523,362	$ 95,971	$ 73,541	$ 353,850	$ -	$ 353,850	68
17	EL18C	Wind Power Development	$ 495,000	$ 398,965	$ 23,996	$ 72,039	$ -	$ 72,039	72
18	EL19B	Electric Energy Storage	$ 650,062	$ 66,135	$ 11,735	$ 572,192	$ -	$ 572,192	76
19	EL20B	4th Waste Heat Recovery Unit	$ 600,600	$ -	$ -	$ 600,600	$ -	$ 600,600	80
20	EL21A	Generator Sets Rebuild (FY21)	$ 1,748,338	$ 94,753	$ 346,486	$ 1,307,098	$ -	$ 1,307,098	84

Summary of Open Capital Projects as of 12/31/21

Ref #	Munis ID	Project	Budget	Expensed	Encumbered	Available	Pending Encumbrance	Actual Available	Detail Page
	Water Fund								
21	WA17B	Fiber Optic Development	$ 59,127	$ 6,140	$ -	$ 52,987	$ -	$ 52,987	88
22	WA17C	Pyramid Micro Turbines	$ 2,212,019	$ 550,960	$ 1,465,150	$ 195,909	$ -	$ 195,909	92
23	WA18A	Generals Hill Water Booster Pump	$ 1,066,000	$ 63,195	$ 116,735	$ 886,070	$ -	$ 886,070	96
24	WA20A	CT Tank Interior Maint/Painting	$ 100,000	$ -	$ -	$ 100,000	$ -	$ 100,000	100
25	WA21A	Pyramid WTP Chlorine Upgrade	$ 100,000	$ -	$ -	$ 100,000	$ -	$ 100,000	104
26	WA501	Pyramid Water Storage Tank	$ 625,000	$ 93,662	$ -	$ 531,338	$ -	$ 531,338	108
27	WA504	Water Utility Auto Meter Read	$ 106,052	$ 33,384	$ -	$ 72,668	$ -	$ 72,668	112
	Wastewater Fund								
28	WW17B	Fiber Optic Infrastr Develop	$ 59,127	$ 6,140	$ -	$ 52,987	$ -	$ 52,987	116
	Solid Waste Fund								
29	SW21A	Solid Waste Gasifier	$ 100,000	$ -	$ -	$ 100,000	$ -	$ 100,000	120
	Ports Fund								
30	PH17C	CEM Breakwater Repair	$ 150,000	$ 110,000	$ -	$ 40,000	$ -	$ 40,000	124
31	PH17D	UMC Positions 3&4 Replace	$ 38,889,640	$ 37,221,358	$ 22,834	$ 1,645,448	$ -	$ 1,645,448	128
32	PH20A	UMC Cruise Ship Terminal Design	$ 390,000	$ -	$ -	$ 390,000	$ -	$ 390,000	132
33	PH20B	Emergency Mooring Buoy Maint.	$ 50,000	$ -	$ -	$ 50,000	$ -	$ 50,000	136
34	PH20C	Rescue Vessel Engine Upgrade	$ 65,650	$ 41,619	$ -	$ 24,031	$ -	$ 24,031	140
35	PH201	Entrance Channel Dredging	$ 2,500,000	$ 1,054,560	$ -	$ 1,445,440	$ -	$ 1,445,440	144
36	PH602	LCD & UMC Dredging	$ 109,650	$ -	$ -	$ 109,650	$ -	$ 109,650	148
37	PH905	Robert Storrs Harbor A&B Improve	$ 650,000	$ 1,423	$ 22,360	$ 626,216	$ -	$ 626,216	152
	Airport Fund								
38	AP18A	Airport Terminal Roof	$ 140,000	$ 10,508	$ -	$ 129,492	$ -	$ 129,492	156
	Housing Fund								
39	EH18A	Lear Rd Duplex Kit/Bath Reno	$ 400,000	$ 261,600	$ 11,399	$ 127,000	$ -	$ 127,000	160

Grand Total $ 73,449,450

Contingency Usage as of 12/31/20

Not all projects have a contingency line item, therefore not all projects show up on this list.

Project	Description	Budget	Usage	Available	% Used
PR19A	**Town Park Improvements**	**80,000.00**	**56,005.00**	**23,995.00**	**70.01%**
PR19B	**Sitka Spruce Tree Park Improvements**	**202,658.00**	**202,280.85**	**377.15**	**99.81%**
PR601	Public Library Improvements	570,000.00	0.00	570,000.00	0.00%
PS18A	Repeater Site & Radio Upgrade	230,769.00	0.00	230,769.00	0.00%
PS19C	DPS Building Assessment	43,846.00	0.00	43,846.00	0.00%
PS20A	ALS Manikin	33,000.00	0.00	33,000.00	0.00%
PS20C	Tsunami Sirens Upgrade	60,434.00	0.00	60,434.00	0.00%
PW19A	Captain's Bay Road & Utilities	225,000.00	0.00	225,000.00	0.00%
PW19B	Causeway Culvert Replacement	184,500.00	0.00	184,500.00	0.00%
PW20A	Burma Road Chapel Roof Upgrade	20,000.00	0.00	20,000.00	0.00%
PW203	Citywide Multiple Location Drainage	15,423.00	0.00	15,423.00	0.00%
SS601	**UCSD Playground**	**236,881.00**	**197,499.12**	**39,381.88**	**83.37%**
EL18B	Automatic Meter Read System	120,776.00	0.00	120,776.00	0.00%
EL20B	4th Waste Heat Recovery Unit	138,600.00	0.00	138,600.00	0.00%
EL21A	Generator Sets Rebuild (FY21)	403,463.00	0.00	403,463.00	0.00%
WA17C	**Pyramid WTP Microturbines**	**159,487.00**	**113,024.02**	**46,462.98**	**70.87%**
WA18A	General's Hill Water Booster Pump	246,000.00	0.00	246,000.00	0.00%
WA21A	Pyramid WTP Chlorine Upgrade	30,000.00	0.00	30,000.00	0.00%
SW21A	Solid Waste Gasifier	30,000.00	0.00	30,000.00	0.00%
PH17D	**UMC 3&4 Replacement**	**2,512,265.00**	**1,119,200.00**	**1,393,065.00**	**44.55%**
PH20A	UMC Cruise Ship Terminal Design	117,000.00	0.00	117,000.00	0.00%
PH20B	Emergency Mooring Buoy Maint.	11,538.00	0.00	11,538.00	0.00%
PH20C	Rescue Vessel Engine Upgrade	15,150.00	0.00	15,150.00	0.00%
PH905	Robert Storrs SBH Improvements A&B	18,000.00	0.00	18,000.00	0.00%
EH18A	Lear Rd. Duplex Kitchen/Bath Reno.	104,000.00	0.00	104,000.00	0.00%
PH20B	Emergency Mooring Buoy Maint.	11,538.00	0.00	11,538.00	0.00%
PH20C	Rescue Vessel Engine Upgrade	15,150.00	0.00	15,150.00	0.00%
PH905	Robert Storrs SBH Improvements A&B	18,000.00	0.00	18,000.00	0.00%
EH18A	Lear Rd. Duplex Kitchen/Bath Reno.	104,000.00	0.00	104,000.00	0.00%

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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)

- This project will replace the existing aerial apparatus which was built in 1997 and has been in service for 22 years
- With our current low fire call volume and excellent maintenance, we are able to stretch the life span by 150%
- The new aerial ladder truck will enable us to operate more efficiently and safely during emergency events
- As we have done with all our fire apparatus, we will sole-source through Pierce Manufacturing in Appleton, Wisconsin
- Estimated completion date is May 21, 2021
- Fire / EMS worked with Pierce to refine exact configuration and components
- 100% pre-payment has been made
- Price breakdown:
    - Proposal Price $1,465,263.00
    - Less chassis progress payment discount ($13,182.00)
    - Less aerial device progress payment discount ($8,644.00)
    - Less payment upon completion @ factory discount ($23,338.00)
    - Less 100% pre-payment discount ($25,842.00)
    - Total including all pre-pay discounts ***$1,394,257.00***

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	$ 10,000	$ -	$ -	$ 10,000	$ -	$ 10,000
Machinery and Equipment	$ 1,490,000	$ 1,381,756		$ 108,244	$ -	$ 108,244
	$ 1,500,000	$ 1,381,756	$ -	$ 118,244	$ -	$ 118,244

Aerial Ladder Truck Replacement (FR21A)

Town Park Improvements (PR19A)

PROJECT DESCRIPTION: Town Park opened in 1988 and is located in downtown Unalaska. This park includes a wooden gazebo, two picnic tables, a small playground, a stationary grill, and several spruce trees. This project will replace the existing structures that were constructed during the original construction of the park.

PROJECT NEED: In 2015, one of the large playground structures was replaced and was very well received by the children of Unalaska. The other playground equipment constructed was expected to last until Fiscal Year 2020. This replacement project is planned for the summer of 2020. This proposal is being submitted in order to:

- 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.

PROJECT PLAN AND FUNDING: During FY17 and FY18, PCR staff and the PCR Advisory Board performed an assessment of the requirements of Town Park, taking into consideration the stated needs and desires of community members and users of the park. The project will be designed and constructed in FY19. Design is anticipated to be $50,000 and construction is anticipated to be $290,000. These numbers are rough cost estimates based on the original cost of the construction of the park.

FY19-23 CMMP

TOWN PARK IMPROVEMENTS | GENERAL FUND

ESTIMATED PROJECT & PURCHASE TIMELINE
Feasibility/Pre Design: N/A
Engineering/Design: FY 2019
Purchase/Construction: FY 2019

Cost Assumptions

Engineering Services		50,000
Other Professional Services		10,000
Machinery and Equipment		0
Construction Services		200,000
	Subtotal	260,000
Contingency		80,000
	Total $	**340,000**

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY19	FY20	FY21	FY22	FY23	Total
General Fund (PCR)		340,000					340,000
1% Sales Tax							
Grant							
Proprietary Fund							
TOTALS $		340,000					340,000

Requested Funds: Engineering and Construction Services

Town Park Improvements (PR19A)

- Town Park opened in 1988 and is located in downtown Unalaska.
- This park includes a wooden gazebo, two picnic tables, a small playground, a stationary grill, and several spruce trees
- Project replaced existing play structures with three new pieces of equipment
- The low bidder, PlayCraft Systems, negotiated reduced price with the elimination of some low priority perimeter play equipment to widen the contingency
- Resolution 2018-57 authorized the City Manager to enter into an agreement with Playcraft for $288,520 with completion due by October 18, 2019
- Playcraft teamed with Westside Flooring, LLC to perform the work
- Playcraft supplied the equipment and Westside Flooring performed the installation
- Regan Engineering providing construction admin and inspection services
- Artifacts uncovered so archeologist, Ginny Hatfield, called in
- Coordinated with SHPO - approx 30 CY of midden removed and E1 installed
- Play equipment inspected by 3rd party inspector and certified as properly installed in conformance with safety standards and suitable for use
- Grand Opening held on Saturday, June 15th 5:30 – 7:30 PM
- Project complete except final payment was not made pending receipt of releases from subcontractors/suppliers and resolution of issues with the Alaska Department of Labor regarding certified payroll and Title 36 wage rates
- Westside Flooring didn't pay prevailing wages and failed to pay at least two subcontractors (Playcraft and Northern Mechanical) in full.

Town Park Improvements (PR19A)

MUNIS PROJECT PR19A - TOWN PARK						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 17,595	$ 17,387	$ -	$ 208	$ -	$ 208
Other Professional	$ 4,360	$ 4,360	$ -	$ -	$ -	$ -
Survey Services	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 293,900	$ 237,512	$ 56,388	$ -	$ -	$ -
Telephone / Fax / TV	$ 150	$ 77	$ -	$ 73	$ -	$ 73
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 23,995	$ -	$ -	$ 23,995	$ -	$ 23,995
	$ 340,000	$ 259,337	$ 56,388	$ 24,276	$ -	$ 24,276

Town Park Improvements (PR19A)

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:

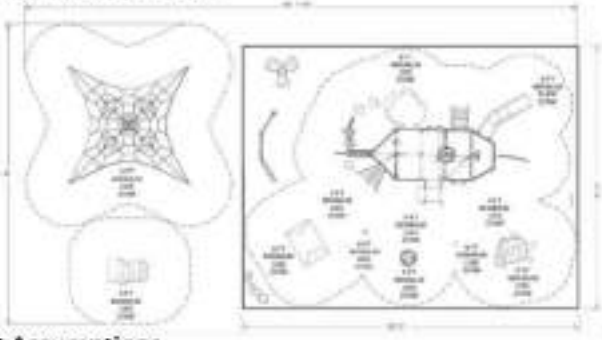
- Improve the quality of the park and the current structures.
- Evaluate the current and future facility in an effort to best accommodate Unalaska residents for the next 20 to 30 years.
- Current playground structures are at the end of their useful life span.

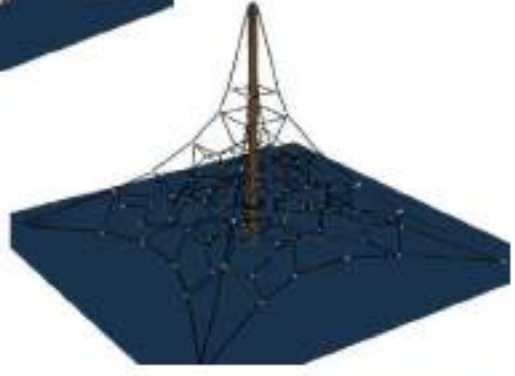
Development Plan & Status (Include Permit and Utility Requirements): After receiving a large amount of public input during FY17 and FY18, PCR staff and the PCR Advisory Board decided the original plans weren't as extensive as the general public preferred. During FY 2019 an analysis of the soil was done 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:							

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Sitka Spruce Park Improvements (PR19B)

- Also known as “Pirate Park”, the trees are a National Historic Landmark
- Travis-Peterson assessed site and determined ADEC requirements
- In October 2018 samples of soil and water below proposed play equipment showed residual fuel contamination but ADEC did not object to play equipment as planned because what contamination is there falls below cleanup thresholds
- 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 spring/summer of 2021 due to the limitation that play surface tiles need to be placed in temperatures above 40 degrees and dry atmospheric conditions
- Boulders and fence posts have been installed in the parking area
- Because of Covid-19 related delays, park is scheduled for spring/summer 2021 completion when play structures and associated play surfaces will be installed

Sitka Spruce Park Improvements (PR19B)

MUNIS PROJECT PR19B - SITKA SPRUCE PARK						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Legal	$ -	$ -	$ -	$ -	$ -	$ -
Engineering & Architectural	$ 93,361	$ 85,249	$ 8,111	$ 1	$ -	$ 1
Other Professional	$ -	$ -	$ -	$ -	$ -	$ -
Samplin / Testing	$ -	$ -	$ -	$ -	$ -	$ -
Survey Services	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 784,027	$ 453,650	$ 330,350	$ 27	$ -	$ 27
Telephone / Fax / TV	$ 117	$ 438	$ -	$ (321)	$ -	$ (321)
Advertising	$ 303	$ 303	$ -	$ -	$ -	$ -
Contingency	$ 377	$ -	$ -	$ 377	$ -	$ 377
	$ 878,185	$ 539,640	$ 338,461	$ 84	$ -	$ 84

Temporary construction access to interior portion of park is thru Aleutian Electric yard.

Sitka Spruce Park Improvements (PR19B)

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:

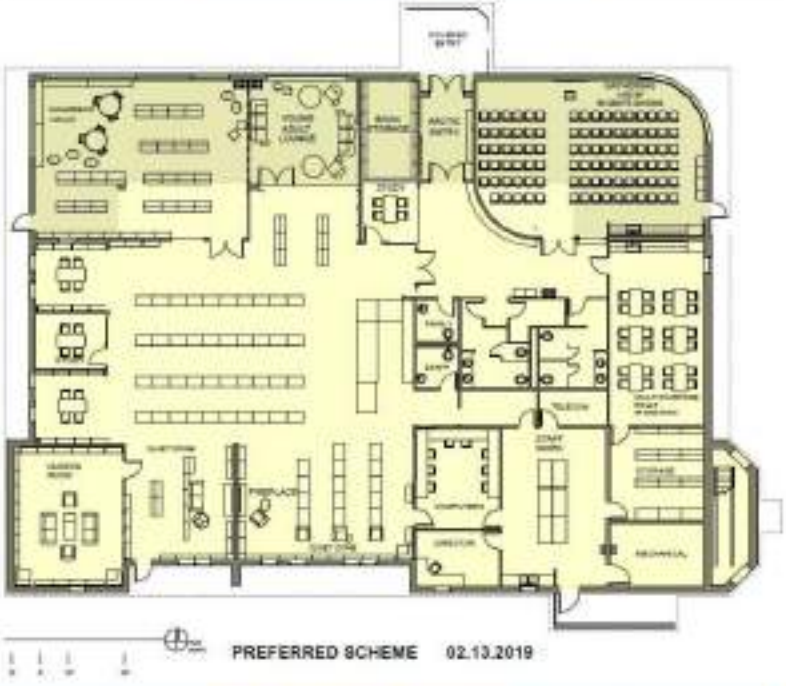
- Space and services for children and teens
- Meeting, study, and program space
- Quiet seating and reading space
- Room for growing library collections

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	

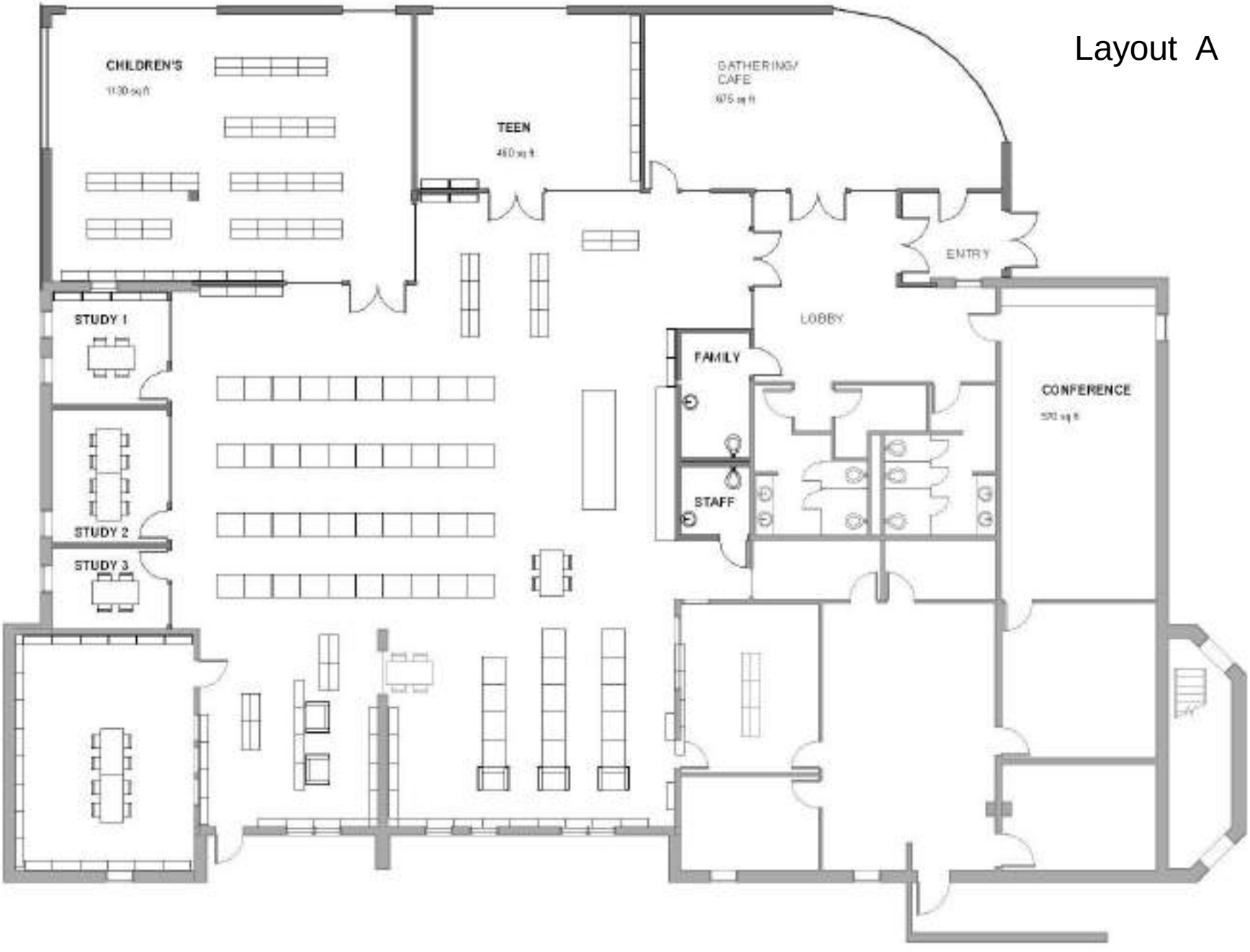
Public Library Improvements (PR601)

- ECI Alaska was selected and completed pre-development and 30% level design
- Public meetings were held Nov 2018, Feb 2019, and April 2019
- Geotech test holes completed in May 2019
- 90% design received and posted publicly for bid on Oct 11, 2019
- Four proposals (bids and qualifications packages) received Nov 20, 2019 which are under review however all came in significantly over our budget
- Contractor selection was made using a 'Best Value' selection process
- Documents were prepared to a 90% level, and a contractor was selected based on qualifications (30%) and price (70%). If a budget amendment is approved, then the design will proceed to 100% with contractor input
- Prime Contractor was selected via RFQ/Price process to allow Contractor to participate as an advisor during the 90% to 100% design process
- The bid results and budget shortfall of $3,273,481 discussed with Council on December 12th
- Council passed Budget Amendment #5 Ordinance 2019-17 signaling us to move forward and award the project
- Change Order #1 to F&W Construction reduced cost ($529,246) via the Value Engineering process
- Due to COVID-19, the contract with F&W was terminated via T for C clause and project was put on hold
- In FY22, staff will select a new architectural firm to rework the design to fit the original $5.4M budget
- FY23 possible construction if Council signals us to move forward based on the redesigned project

Public Library Improvements (PR601)

MUNIS PROJECT PR601 - PUBLIC LIBRARY IMPROVEMENTS						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Eng and Architectural	$ 847,150	$ 603,766	$ 34,171	$ 209,213	$ -	$ 209,213
Other Professional	$ 113,400	$ 32,134	$ -	$ 81,266	$ -	$ 81,266
Survey Services	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 6,903,481	$ -	$ -	$ 6,903,481	$ -	$ 6,903,481
Telephone / Fax / TV	$ 950	$ 912	$ -	$ 38	$ -	$ 38
Advertising	$ 1,163	$ 1,160	$ -	$ 3	$ -	$ 3
Contingency	$ 570,000	$ -	$ -	$ 570,000	$ -	$ 570,000
Other	$ 245,000	$ -	$ -	$ 245,000	$ -	$ 245,000
Business Meals	$ 837	$ 837	$ -	$ -	$ -	$ -
	$ 8,681,981	$ 638,810	$ 34,171	$ 8,009,000	$ -	$ 8,009,000

Public Library Improvements (PR601)



Layout A

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**

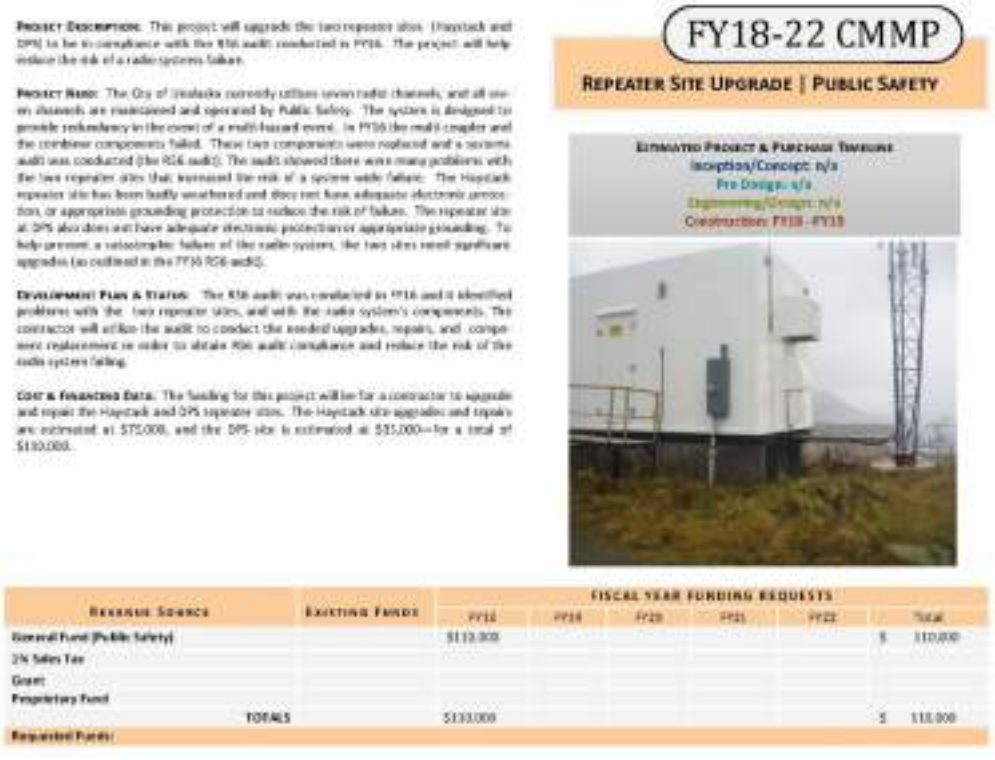
Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)	310,000	690,000					1,000,000
1% Sales Tax							-
Grant							-
Proprietary Fund							-
TOTALS $	310,000	690,000	-	-	-	-	1,000,000
Requested Funds:						110	

Repeater Site and Radio Upgrade (PS18A)

- 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
- Work will be performed at the DPS facility and on Haystack
- Fire is working closely with ProComm (Gary Peters) on final pricing for the R56 upgrade to both Haystack and DPS sites
- ProComm is the only firm in Alaska with R56 certified technicians so this will be a sole source procurement
- Costs will likely be higher than originally forecast due to rapid changes in technology and possible changes in scope (additional radio frequencies/channels) necessitated by an independent fire department and/or for Public Utilities
- Project implementation / construction will be phased over two years
- ProComm’s trip to Unalaska is being planned for early 2021 notwithstanding COVID-19 and reduced air service
- Fire ordered and received mobile and portables. In selection phase for repeater site and dispatch counsel upgrades.

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	$ 51,600	$ -	$ -	$ 51,600	$ -	$ 51,600
Other Professional	$ 7,000	$ -	$ -	$ 7,000	$ -	$ 7,000
Survey Services	$ 5,000	$ -	$ -	$ 5,000	$ -	$ 5,000
Construction Services	$ 252,450	$ -	$ -	$ 252,450	$ -	$ 252,450
Telephone / Fax / TV	$ 200	$ -	$ -	$ 200	$ -	$ 200
Advertising	$ 750	$ -	$ -	$ 750	$ -	$ 750
Contingency	$ 230,769	$ -	$ -	$ 230,769	$ -	$ 230,769
Machinery and Equipment	$ 452,231	$ 380,536	$ 40,061	$ 31,635	$ -	$ 31,635
	$ 1,000,000	$ 380,536	$ 40,061	$ 579,404	$ -	$ 579,404



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)

Records Management System (PS18B)

FY18-22 CMMP

DPS RMS Upgrade | Public Safety

Project Description: This project is for replacement of the existing records management system (RMS) and computer aided dispatch (CAD) system at DPS. The current RMS/CAD, which houses virtually all calls for service for Police, Fire, EMS and Animal Control, is legacy software running on legacy server software. It is also out of compliance with federal requirements for storing, classifying, and reporting of criminal justice information.

Project Need: The RMS/CAD currently being used by DPS was purchased and implemented in 2004. This legacy software is no longer being updated by the parent company and requires legacy server software for use. Limitations in the RMS/CAD and server software reduce hardware upgrade options and affect the ease and speed with which data is retrieved, stored and backed up. The RMS/CAD is out of compliance with federal requirements regarding the storing, classifying, and reporting of criminal justice information (to include criminal intelligence information), and has limited interoperability with federal, regional and state information-sharing databases. Modern RMS software packages are considerably more efficient than our current system, and some have integrated access to state and/or regional criminal information networks, thus reducing the man-hours required for data input. User restrictions in many current RMSs can be personalized to ensure that users of the system—and the system itself – are in compliance with Federal requirements. Most modern RMS software packages are also designed to work with Enhanced 911 call systems, which would allow a seamless transition to an E-911 system in Unalaska.

Cost & Financing Data: The current cost estimate for this project is $500,000. This estimate includes the purchase of hardware, software, on-site training, and conversion/upload of the data existing in the current RMS. The project will be partially funded using $91,000 that was forfeited to DPS from drug investigations. It is likely that the recent sale of a forfeited house will also provide funding for this project. At this time, it is unknown how much this may be. The remaining funds will come from the General Fund.

Estimated Project & Purchase Timeline
Inception/Concept: n/a
Pre Design: n/a
Engineering/Design: n/a
Construction/Purchase: FY18

Revenue Source	Existing Funds	Fiscal Year Funding Requests					
		FY18	FY19	FY20	FY21	FY22	Total
General Fund (Public Safety)		$ 500000					$ $ 500000
1% Sales Tax							
Grant							
Proprietary Fund							
TOTALS		$ 500000					$ 500,000
Requested Funds: Partially funded by seized and forfeited funds							

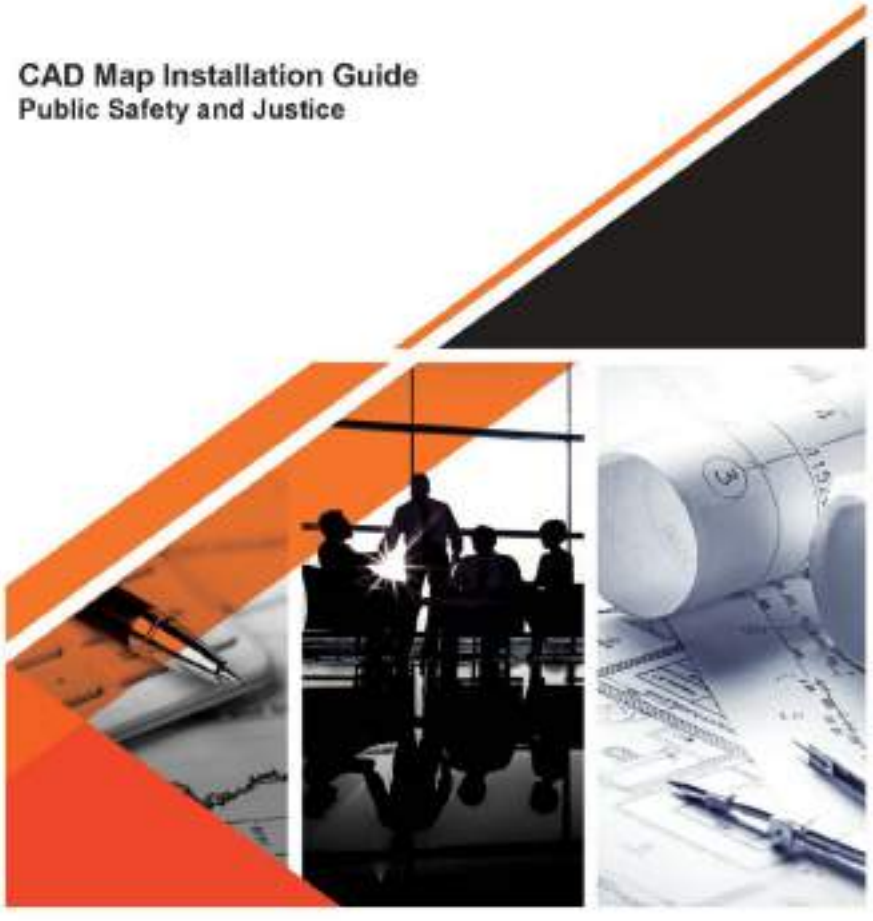
Records Management System (PS18B)

- This project is for replacement of the existing records management system (RMS) and computer aided dispatch (CAD) system at DPS
- The current RMS/CAD, which houses virtually all calls for service for Police, Fire, EMS and Animal Control, is legacy software running on legacy server software
- Current RMS is out of compliance with federal requirements for storing, classifying, and reporting of criminal justice information
- Superion is the vendor responsible for providing and installing the software, providing training, and ensuring our new interfaces with various external programs and/or databases are implemented
- CAD (computer aided dispatch) build is approximately 90% complete
- RMS build is re-scheduled for March
- JMS, Evidence, Mobile Field Reporting, and Public to Police portal builds will be scheduled after RMS build is complete
- The virtual machines have been delivered
- Project on hold pending discussions regarding outdated hardware, software, and support
- No additional funding requested via CMMP

Records Management System (PS18B)

MUNIS PROJECT PS18B - DPS RECORDS MANAGEMENT SYSTEM						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectura	$ -	$ -	$ -	$ -	$ -	$ -
Other Professional	$ 287,504	$ 104,681	$ 182,823	$ -	$ -	$ -
Construction Services	$ -	$ -	$ -	$ -	$ -	$ -
Advertising	$ 350	$ -	$ -	$ 350	$ -	$ 350
Travel and Related	$ 6,650	$ 6,452	$ -	$ 198	$ -	$ 198
General Supplies	$ 10,000	$ -	$ -	$ 10,000	$ -	$ 10,000
Computer Hardware	$ 195,496	$ 183,243	$ -	$ 12,253	$ -	$ 12,253
	$ 500,000	$ 294,376	$ 182,823	$ 22,801	$ -	$ 22,801

Records Management System (PS18B)



Fire Training Facility (PS19A)

Project Description: This project will establish a much needed live fire training facility. The structure will 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 allows for multiple training exercises including hose advancement, fire attack, search & rescue, rappelling, 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. Currently there are no such facilities, for public or private sector organizations, in the City of Unalaska. This facility will also include a "dirty" classroom and a "clean" classroom. These will allow personnel to stay out of the elements while the are instructed on the didactic portion of the lesson.

Project Need: Firefighters cannot be certified in Alaska without meeting a live fire requirement, to ensure that they experience fighting fires with significant heat and smoke in limited or zero visibility environments. An uncertified volunteer or paid firefighter can respond to a fire, but live fire training and certification ensures that they are prepared, so they don't panic in a real situation. No such live fire facility exists in Unalaska. Currently, firefighters go off-island for live fire training and certification at a cost of approximately $3,000 each; the training requires 1-2 weeks and volunteers must take time off from work and/or family commitments in order to attend. The proposed live fire building can be modified for use by the police department to practice active shooter or other use-of-force situations, and can also be used as a confined space rescue training facility by other City departments or private industry. Additionally, this facility could be used as a regional training center for other Aleutian Communities. This project will also include utilities run the site. Approximately 8000 feet of large diameter water piping and wastewater will be run in the road up to the site. This would equip the site as a training site that could be used by multiple departments in the city.

Development Plan & Status (Include Permit and Utility Requirements): At present, only a concept plan exists, shown on the right side of this page. The location of these buildings will be at the present DPS Building which will be the future Fire Station after Police move out and are relocated at their new Police Station which will be constructed at the present day Skate Park.

Cost & Financing Data: All monies will come from the general fund. $12,000 was previously appropriated for a temporary training structure made from shipping containers.

FY21-25 CMMP

Fire Training Center| Fire

PS19A | Capital Project

Estimated Project & Purchase Timeline

Pre Design: FY 2019

Engineering/Design: FY 2024

Purchase/Construction: FY 2024

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

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund	12,000				1,501,500		1,513,500
1% Sales Tax							
Grant							
Proprietary Fund							
TOTALS $	12,000				1,501,500		1,513,500
Requested Funds:							

Fire Training Facility (PS19A)

- 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 a different site such as the present DPS site
- The Upper East Broadway site is being utilized in its present configuration pending new DPS Police facility construction

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)

DPS Building Assessment (PS19C)

Project Description: An independent assessment of the city's oldest building, public safety (1987) with the following goals and objectives:

1. Analyze comprehensive space needs for current/future program requirements.
2. Identify short-comings of the existing facility to meet those requirements.
3. Analyze building for building codes, conditions, and expansion opportunities.
4. Provide a schematics for building expansion or new construction that meets DPS program requirements and will serve the City of Unalaska for the next 50 years.
5. Identify potential sites suitable for consideration for a new DPS complex in Unalaska .

Project Need: Presently, the Department of Public Safety (DPS) structure is unable to safely serve as a modern day Public Safety Complex. The physical structure does not support all the operational needs of the department. Existing facility issues include but are not limited to:

- Inadequate staff support space, undersized staff offices with little privacy; limited interview and observation space; and no locker rooms for uniform changes, post-exposure decontamination, etc.
- Building access restrictions that are required for Police operations constrain volunteer fire-fighter use and activities.
- Detainee entrance is a narrow passage to parking area; emergency responses delayed if prisoners are being unloaded. Undersized booking area crowded and potentially hazardous for staff with unruly prisoners. Evidence drop-off/storage area is remote resulting in chain of custody and security issues.
- Crowded dispatch area provides little security from the public lobby, creating a safety and confidentiality issue. The lobby has seating space for only two people.
- Fire apparatus garage houses EMS supplies, turnout gear, air compressor and gym due to lack of space and creates potential contamination from the garage fumes.

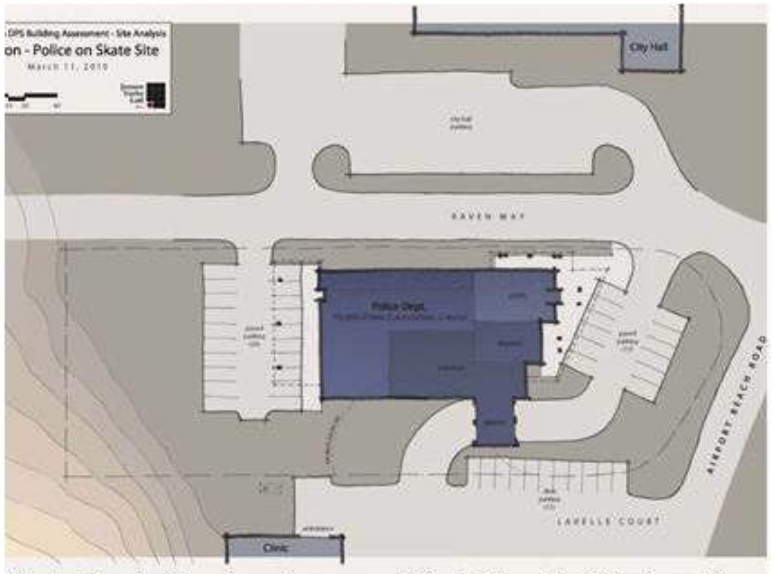
Development Plan & Status (Include Permit and Utility Requirements): FY20 includes funding for a Site Survey and Geotechnical Investigation.

Cost & Financing Data: All monies will come from the general fund. Cost proposal for site survey and geotechnical investigation provided by JYL architects who is performing the DPS Building Assessment.

FY20-24 CMMP

DPS BUILDING ASSESSMENT | GENERAL FUND

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



Skate Park site showing possible Police Facility location. Geotechnical investigation and soils analysis in FY20.

Cost Assumptions	
Engineering, Design, Const Admin	
Other Professional Services	-
Construction Services	146,154
Machinery & Equipment	-
Subtotal	**146,154**
Contingency (set at 30%)	43,846
TOTAL	**190,000**
Less Other Funding Sources (Grants, etc.)	
Total Funding Request $	**190,000**

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DPS)	100,000	190,000					290,000
1% Sales Tax							
Grant							
Proprietary Fund							
TOTALS $	100,000	190,000					290,000
Requested Funds:							

DPS Building Assessment (PS19C)

- An independent assessment of the city's oldest building, public safety (1987) with the following goals and objectives:
  - Analyze comprehensive space needs for current/future program reqs
  - Identify short-comings of the existing facility to meet those requirements
  - Analyze building for building codes, conditions, and expansion opportunities
  - Provide schematics for bldg expansion or new const that meets DPS program reqs and will serve the City of Unalaska for the next 50 years
  - Identify potential sites suitable for consideration for a new DPS complex
- Based on Council input and budget amendment, pre-design scope increased to bring new proposed Police Station and renovation of the existing building to a 30% level design including final space programming, survey, geotech, schematic drawings and cost estimates
- Results of pre-design will support full design and construction in FY21-FY25
- Discovery Drilling finished last boring 9-3-19 bringing total drilled length to 500'
- Preliminary findings show fill on top of geotextile fabric underlain with soft lakebed material. Bedrock was found between 11.5' deep near Airport Beach Road and 49.5' deep on the opposite (north) side of the Skate Park. The Final Geotech Report for the Skate Park site was received on 12-23-19
- Corey Wall with JYW (formerly JYL) presented findings to Council via teleconference during the July 14, 2020 Council meeting wherein Council requested additional sites be evaluated
- DPS Director King and DPW Director Cohenour evaluated 4 additional sites
- Corey Wall reviewed findings at November 10, 2020 Council meeting and DPW Director lead discussion on 4 additional sites with input from Director King

DPS Building Assessment (PS19C)

MUNIS PROJECT PS19C - DPS BUILDING ASSESSMENT						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 243,504	$ 233,563	$ 9,278	$ 663	$ -	$ 663
Other Professional	$ 2,000	$ -	$ -	$ 2,000	$ -	$ 2,000
Telephone / Fax / TV	$ 150	$ 75	$ -	$ 75	$ -	$ 75
Contingency	$ 43,846	$ -	$ -	$ 43,846	$ -	$ 43,846
Business Meals	$ 500	$ 449	$ -	$ 51	$ -	$ 51
	$ 290,000	$ 234,086	$ 9,278	$ 46,636	$ -	$ 46,636

DPS Building Assessment (PS19C)

ALS Manikins - Fire (PS20A)

Project Description: This project is for an Advanced Life Support training manikin.

Project Need: This project would allow the fire department personnel to get a more realistic and intuitive experience during medical training scenarios. This manikin would allow EMS trained career and volunteer staff to diagnose and treat as real as possible ailments while receiving feedback through software and human experience. These manikins are designed to function as a human would during any illness. Examples of this would be sweating, vomiting, fever, bleeding, realistic blood pressures, medication interactions, and many other reactionary behaviors of a patient. This will allow our only EMS service on the island to be better prepared for scenarios faced in the field and will improve patient outcomes. The project would also help the community at large. This manikin could also be used by medical providers at the clinic. This would provide them with continuing education and ensure that that are prepared for any and all cases.

Development Plan & Status (Include Permit and Utility Requirements):

Cost & Financing Data:

FY20-24 CMMP

ALS Manikin| Fire Department

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	-
Construction Services	-
Machinery & Equipment	110,000
Subtotal	**110,000**
Contingency (set at 30%)	33,000
TOTAL	**143,000**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**143,000**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)		143,000					143,000
1% Sales Tax							-
Grant							-
Proprietary Fund							-
TOTALS $	-	143,000	-	-	-	-	143,000
Requested Funds:							

ALS Manikins - Fire (PS20A)

- New project/purchase
- Price quotes received
- Sole source request approved by City Manager
- Order placed thru DPW-Supply Division on 9-2-20
- Purchase Order #21150018 entered on 9-8-20
- Manikin has been placed into service
- Very sophisticated advanced life support unit that replicates real life scenarios
- SimMan ALS provides a mobile, durable solution that meets the training needs of pre-hospital and in-hospital emergency care providers - from basic assessment to advanced life-support skills. From pre-hospital, on-scene assessment and management to definitive care in a hospital, SimMan ALS fulfills the unique training requirements of emergency healthcare providers
    - Airway management
    - Breathing assessment
    - Vascular access
    - Palpation and auscultation
    - Fluid resuscitation
    - ECG interpretation
    - Ultrasound assessment and diagnosis

ALS Manikins - Fire (PS20A)

MUNIS PROJECT PS20A - ALS MANIKIN - FIRE						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Contingency	$ 33,000	$ -	$ -	$ 33,000	$ -	$ 33,000
Machinery & Equipment	$ 110,000	$ 80,092	$ 25,712	$ 4,196		$ 4,196
	$ 143,000	$ 80,092	$ 25,712	$ 37,196	$ -	$ 37,196

ALS Manikins - Fire (PS20A)

Tsunami Sirens Upgrade (PS20C)

PROJECT NEED: The City of Unalaska's Hazard Mitigation Plan identifies all applicable natural hazards, identifies the people and facilities potentially at risk, and ways to mitigate damage from future hazard impacts. Tsunamis are one such natural hazard. Tsunamis can strike at any time of day or night and the community needs to be vigilant at all times 24/7/365. The City's array of 7 tsunami sirens alerts the community of possible danger enabling residents to seek higher ground in advance of impending tsunami strike. Annual inspections of our tsunami sirens indicates they are aging and in need of repairs, replacements, and upgrades. Most of the sirens are worn and require more and more frequent maintenance. Some heaters have failed resulting in inoperable sirens.

DEVELOPMENT PLAN & STATUS: The 7 tsunami sirens are located at:

1. Standard Oil Hill
2. Amaknak Fire Station
3. Ballyhoo Road
4. Bobby Storrs Boat Harbor
5. PCR
6. Unalaska Valley
7. Carl E Moses Boat Harbor

For each of the 7 tsunami sirens, American Signal Corporation (ASC) will provide materials, control server and software, server, training, and system commissioning. A local electrical contractor will remove and replace 200 amp electrical service, install rectifier/controller cabinet, new conduit and wiring, and assist ASC technician.

COST & FINANCING DATA: The funding for this project will come from the General Fund. Price quotes have been solicited and received.

FY20-24 CMMP

Tsunami Sirens Upgrade | PUBLIC SAFETY

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

Cost Assumptions	
Engineering, Design, Const Admin	10,000
Other Professional Services	15,000
Construction Services	133,140
Machinery & Equipment	43,305
Subtotal	**201,445**
Contingency (set at 30%)	60,434
TOTAL	**261,879**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**261,879**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)		261,879					261,879
1% Sales Tax							-
Grant							-
Proprietary Fund							-
TOTALS $	-	261,879	-	-	-	-	261,879
Requested Funds:						111	

Tsunami Sirens Upgrade (PS20C)

- Existing tsunami sirens are approximately 23 years old
- Regan Engineering has been working with Sentry Siren, Inc to develop scope of project which may include additional locations and/or moving sirens
- Siren locations were modeled using the current locations integrated into a Google Earth topographic model to analyze theoretical sound levels
- Some areas are above the Tsunami Zone and some are at periphery of obtaining minimum 70db noise levels. Manufacturer information is currently under review
- Written SOP will be developed regarding operation, testing, and maintenance
- Dan Bellinger with State of Alaska discussed tsunami sirens with Fire Dept and mentioned a NOAA pass thru grant for hazard awareness and mitigation which he will apply for; potential to pay for up to 2 of our sirens
- Sirens tested on approx 6-16-20 identified 4 of 7 not functioning
- Rod Rushing from Aleutian Electric is coordinating with the manufacturer to receive a cost proposal to repair all non-functioning tsunami sirens
- Mike Hanson is coordinating with manufacturer to ensure that proper radio equipment is being utilized to communicate with tsunami sirens
- Received price quote from American Signal and Federal Signal
- Accepting the $122,280 State grant requires a Budget Amendment and Resolution
- NOAA provided the funds to Alaska Department of Homeland Security Emergency Management

Tsunami Sirens Upgrade (PS20C)

MUNIS PROJECT PS20C - TSUNAMI SIRENS UPGRADE						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectura	$ 10,000	$ -	$ -	$ 10,000	$ -	$ 10,000
Other Professional	$ 14,500	$ 12,600		$ 1,900	$ -	$ 1,900
Construction Services	$ 131,695	$ -	$ -	$ 131,695	$ -	$ 131,695
Telephone / Fax / TV	$ 250	$ -	$ -	$ 250	$ -	$ 250
Contingency	$ 60,434	$ -	$ -	$ 60,434	$ -	$ 60,434
Machinery & Equipment	$ 45,000	$ -	$ -	$ 45,000	$ -	$ 45,000
	$ 261,879	$ 12,600	$ -	$ 249,279	$ -	$ 249,279

Tsunami Sirens Upgrade (PS20C)

Captains Bay Road and Utilities (PW19A)

PROJECT DESCRIPTION: This project will construct drainage, utilities, and pavement out Captains Bay Road to the entrance of the Offshore Systems, Inc. (OSI). This will involve approximately 2 .5 miles of drainage improvements from Airport Beach Road to OSI, 2.5 miles of road realignment/paving/ walkways/lighting from Airport Beach Road to OSI, and 1.3 miles of water/sewer/electric utility extensions from Westward to OSI.

PROJECT NEED: Captains Bay Road serves as a primary transportation route for Westward Seafoods, Crowley Marine Transportation, North Pacific Fuel, Northland Services, Offshore Systems Inc., and several smaller businesses as well as residential homes. The section of road making up this project is a high traffic area of heavy vehicles which are used by the fishing and support industries which are vital to the community's economic welfare. During the public meetings regarding the Road Improvement Master Plan recommendations in September 2011, residents and industry representatives discussed the hazards that the high road crown, which is needed for adequate drainage, creates for the large trucks and school buses traveling the road. There was strong support from the public for improvements to Captain's Bay Road. The area of Captains Bay Road is also an area of potential growth in the community as identified in the Comprehensive Plan.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS): This project is grant dependent. Drainage and paving estimates are based on the Ballyhoo Road Drainage & Electrical Upgrades Project. The utility expansion estimate is based on the Henry Swanson Drive Road & Utilities Project's utility construction costs, and other recent materials and equipment costs. These are still very rough estimates that will be refined as the project commencement approaches. Costs are split between Grant Funding and General Fund for the paving and drainage portion and the three utility funds based on the costs for each of those portions. As of April 10, 2020, the State did not award grant funds via the STIP / CTP. Additional grant opportunities will be sought out.

Preliminary Estimate by HDL Engineering for total project costs = $53,911,000

COST & FINANCING DATA:

Cost Assumptions

Engineering, Design, Const Admin		5,370,000
Other Professional Services		300,000
Construction Services		35,800,000
Machinery & Equipment		0
	Subtotal	41,470,000
Contingency (set at 30%)		12,441,000
	TOTAL	**53,911,000**
Less Other Funding Sources (Grants, etc)		
Total Funding Request		**53,911,000**

FY21-25 CMMP

CAPTAINS BAY ROAD & UTILITY IMPROVEMENTS | DPW

PW19A | CAPITAL PROJECT

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: FY 2020

Engineering/Design: FY 2021

Purchase/Construction: FY 2022

Captains Bay Road and Utilities

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund	2,000,000			9,977,750	9,977,750	9,977,750	31,933,250
Grant			12,977,750				12,977,750
Electric Proprietary Fund				3,000,000			3,000,000
Water Proprietary Fund					3,000,000		3,000,000
Wastewater Proprietary Fund						3,000,000	3,000,000
TOTALS $	2,000,000		12,977,750	12,977,750	12,977,750	12,977,750	53,911,000

Captains Bay Road and Utilities (PW19A)

- This project will construct drainage, utilities, and pavement out Captains Bay Road to the North Pacific Fuel operations (former Crowley dock) and continuing to Offshore Systems, Inc. (OSI). This will involve approximately 2.3 miles of drainage improvements from Airport Beach Road to North Pacific Fuel (NPF), 2.6 miles of paving from Airport Beach Road to OSI, and 1.0 miles of water/sewer/electric utility extensions from Westward to NPF. For the electric utility, this will be an extension of the FY17 project to upgrade electric service to Westward
- DPW awarded the design contract to HDL Engineering Consultants
- Initial design work includes scoping, cost estimate, surveying a civil base map, geotechnical and 30% level plans. Surveying and geotechnical work occurred during the week of July 2018
- HDL presented proposed roadway alignment to Council on February 12, 2019
- An 8 minute video was produced illustrating the need and shown to our representatives in Washington DC
- The video was submitted to the State of Alaska as part of STIP grant application
- State informed us that our STIP application was good but no funding awarded
- Project will need to be phased into 8 different sub-projects to maximize STIP funds
- DOT informed DPW that project awards are in the $2 to $3 million range
- HDL recently submitted 65% design package which is undergoing City review
- As part of 65% review, a phasing strategy will be devised to maximize grant funding
- DPW staff held conference call with HDL to discuss and plan project phasing

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	$ 1,668,500	$ 1,256,317	$ 185,791	$ 226,392	$ -	$ 226,392
Other Professional	$ 12,000	$ 11,838	$ -	$ 162	$ -	$ 162
Survey Services	$ 8,000	$ -	$ -	$ 8,000	$ -	$ 8,000
Construction Services	$ 65,000	$ 49,523	$ -	$ 15,477	$ -	$ 15,477
Telephone / Fax / TV	$ 1,000	$ 263	$ -	$ 737	$ -	$ 737
Advertising	$ 500	$ -	$ -	$ 500	$ -	$ 500
Permit Fees	$ 20,000	$ -	$ -	$ 20,000	$ -	$ 20,000
Contingency	$ 225,000	$ -	$ -	$ 225,000	$ -	$ 225,000
	$ 2,000,000	$ 1,317,940	$ 185,791	$ 496,269	$ -	$ 496,269

Captains Bay Road and Utilities (PW19A)

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 Iluliaq 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)

- 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 to perform the pre-design and design
- Construction in FY21 is possible; however, impacts to other capital projects, inclusion with the Captains Bay Road & Utility Improvements contract, and permitting is being considered and make FY22 more likely
- 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
- HDL recommendation is to install a single 78” diameter aluminum culverts with fill added to Dutton Lake to provide single lane detour around construction
- 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. The City is waiting for revised 65% package
- HDL revising hydrological report based on guidance from AK Fish & Game
- Because of redesign, draft permit applications and revised 65% design package are expected in January 2021

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	$ 181,649	$ 9,445	$ 406	$ -	$ 406
Other Professional	$ -	$ -	$ -	$ -	$ -	$ -
Survey Services	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 421,500	$ -	$ -	$ 421,500	$ -	$ 421,500
Telephone / Fax / TV	$ 1,000	$ 17	$ -	$ 983	$ -	$ 983
Advertising	$ 500	$ -	$ -	$ 500	$ -	$ 500
Permit Fees	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 184,500	$ -	$ -	$ 184,500	$ -	$ 184,500
General Supplies	$ 500	$ 99	$ -	$ 401	$ -	$ 401
	$ 799,500	$ 181,766	$ 9,445	$ 608,290	$ -	$ 608,290

Causeway Culvert Replacement (PW19B)

Burma Road Chapel Upgrades (PW20A)

PROJECT DESCRIPTION: It became evident in 2019 that the PCR side of the Burma Road Chapel was showing signs of rotten siding along the lower portions of the exterior wall. Architect Corey Wall with JYL Architects, who are conducting the DPS Building Assessment Project, crawled under the Burma Road Chapel and took photos of the rim joists. Signs of rot are evident from inside below the building. The original scope of this project removes shingles, roof boards, damaged insulation, installs framing for eave soffit ventilation/increased depth for insulation, installs insulation to R-30, installs new roof boards, re-roofs the building, paints the new eaves and trim. That scope has not changed but the temporary repairs to the roof are holding up remarkably well and additional roof repairs will need to be executed in the future. A more imminent need is the repair of the rotten rim joists and exterior siding on the PCR side of the Burma Rd Chapel.

PROJECT NEED: As noted above in Project Description, the exterior siding and rim joists are showing signs of rot and need to be replaced. Also, the facility lacks proper insulation and ventilation below the roofing. It causes snow melt on the roof to run down to the eave and freezes where the walls and roof join together where there is less heat loss at that part of the roof structure. 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. The facility's life will be extended by eliminating further water damage to the structural components below the roof. The new roof will protect the facility for at least another 30 years.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS): As part of the DPW-Facilities Maintenance budget, we will replace the metal flashing and heat trace on the eave as an interim measure when the present system fails. The rotten siding along the lower portions of the exterior wall and wall sill plate will be repaired in FY21. The major roof repairs will be conducted in the future, possibly as soon as FY24.

FY21-25 CMMP

BURMA ROAD CHAPEL UPGRADES | DPW

PW20A | MAJOR MAINTENANCE

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: FY 2020

Engineering/Design: FY 2021

Purchase/Construction: FY 2024

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
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	589,000

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund	10,000	100,000			479,000		589,000
1% Sales Tax							
Grant							
Proprietary Fund							
TOTALS $	10,000	100,000			479,000		589,000
Requested Funds:							

Burma Road Chapel Upgrades (PW20A)

- Close up drone footage of entire roof and eaves will be 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
- If damage is extensive, which is unlikely given the initial inspection under building in crawl space, then architectural expertise will be sought
- 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
- Restoration of foundational members is approximately 50% complete with the worst part being completed
- Because of the onset of winter, the remainder of the work will be accomplished in spring/summer of 2021

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	$ 15,000	$ -	$ -	$ 15,000	$ -	$ 15,000
Construction Services	$ 75,000	$ 11,765	$ 60,091	$ 3,144	$ -	$ 3,144
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 20,000	$ -	$ -	$ 20,000	$ -	$ 20,000
	$ 110,000	$ 11,765	$ 60,091	$ 38,144	$ -	$ 38,144

Burma Road Chapel Upgrades (PW20A)

City Wide Multi-Location Drainage (PW203)

PROJECT DESCRIPTION: This is part of an ongoing drainage project spanning multi-years. This phase of the project will improve storm drain infrastructure and control runoff from spring snow melt and rainfall which has been an ongoing cause of erosion on Trapper Drive for several years.

PROJECT NEED: The Road Improvement Master Plan, completed in 2009-1010, identified drainage improvements as a high priority task in order to keep water off road surfaces and out of the road base. Gravel and paved roads without adequate drainage deteriorate and require much more frequent maintenance of the driving surface. Improved water quality in our lakes, streams, and ocean has also been identified as high priority by the community and the Alaska Department of Fish and Game.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS): This portion of our City Wide Multi-Location Drainage (Munis number PW203) project is fully designed and was included in the 2017 bid package. Because bids came in higher than our budget allowed, the Trapper Drive portion was removed from the bid award with the intent to conduct the work at a later date. Regan Engineering has completed plans and specifications for this work. Cost estimate is based on the 2017 bids with a 10% inflation factor included. Council initially funded this project via the FT2013 CMMP and Budget Ordinance 2012-04 which was approved and adopted on May 22, 2012.

Cost Assumptions		
	Other Professional Services	
	Engineering, Design, Construction Admin	381,711
	Construction Services	2,554,284
	Machinery & Equipment	
	Subtotal	2,935,995
	Contingency (30%)	880,798
	Total Funding Request	3,816,793

FY21-25 CMMP

CITY WIDE MULTI-LOCATION DRAINAGE | DPW

PW203 | CAPITAL PROJECT

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: FY 2017

Engineering/Design: FY 2017

Purchase/Construction: FY 2021

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund	3,450,000	366,793					3,816,793
1% Sales Tax							
Grant							
Proprietary Fund							
TOTALS $	3,450,000	366,793					3,816,793
Requested Funds:							

City Wide Multi-Location Drainage (PW203)

Background:

- The Road Improvement Master Plan, completed in 2009-2010, identified drainage improvements as a high priority maintenance task in order to keep water off road surfaces and out of the road base. Gravel and paved roads without adequate drainage deteriorate and require much more frequent maintenance of the driving surface.
- The added benefit of installing drainage systems with sediment separators or other water filtering practices improves water quality in our lakes, streams, and ocean.

Remaining Work:

- Trapper Drive portion was removed from project scope due to lack of funding, however, it will be added in FY21-25 CMMP cycle

Schedule:

- May 2, 2017 bids opened
- Northern Alaska Contractors (NAC) sole bidder
- Notice to Proceed issued July 5, 2017
- NAC requested moving work to Summer 2018 which was granted
- October 2018 NAC is complete with all of the misc drainage projects
- Additional funds received via FY21-25 CMMP cycle to complete the Trapper Drive portion
- Possible water line located in same location as storm drain - issue being investigated

City Wide Multi-Location Drainage (PW203)

CITYWIDE MULTIPLE LOCATION DRAINAGE - MUNIS PROJECT PW203						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Salaries and Wages	$ 500	$ 103	$ -	$ 397	$ -	$ 397
Overtime	$ 500	$ 330	$ -	$ 170	$ -	$ 170
Health Insurance Benefit	$ 500	$ 107	$ -	$ 393	$ -	$ 393
FICA/Medicare Employer Match	$ 100	$ 33	$ -	$ 67	$ -	$ 67
PERS Employer Benefit	$ 500	$ 115	$ -	$ 385	$ -	$ 385
Workers Compensation Ins	$ 50	$ 8	$ -	$ 42	$ -	$ 42
Other Employee Benefits	$ 50	$ 3	$ -	$ 48	$ -	$ 48
Legal	$ 245	$ 230	$ -	$ 15	$ -	$ 15
Engineering and Architectural	$ 414,950	$ 383,241	$ -	$ 31,710	$ -	$ 31,710
Survey Services	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 3,327,833	$ 2,886,958	$ -	$ 440,875	$ -	$ 440,875
Telephone/FAX/TV	$ 500	$ 42	$ -	$ 458	$ -	$ 458
Advertising	$ 305	$ 304	$ -	$ 1	$ -	$ 1
Travel and Related Costs	$ 605	$ 581	$ -	$ 24	$ -	$ 24
Permit Fees	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 15,423	$ -	$ -	$ 15,423	$ -	$ 15,423
Land	$ 54,732	$ 14,784	$ -	$ 39,949	$ -	$ 39,949
	$ 3,816,793	$ 3,286,838	$ -	$ 529,955	$ -	$ 529,955

City Wide Multi-Location Drainage (PW203)

This is where the storm water drains into Margaret's Bay. The end of the pipe has a 'Tide Flex' valve to keep water from backing up into the pipe.

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.

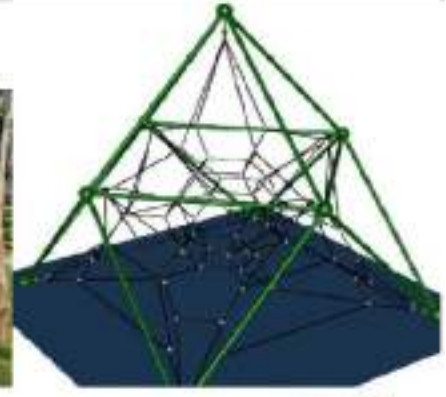
Project Need: The UCS playground would serve as an additional recreation site for families and community members during the evenings, weekends, and summer months. While the play structures at Town Park and the Recreation Center are wonderful for younger children, currently there is not an area in downtown 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:							

104

UCSD Playground Renovation (SS601)

- 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
- Grading of play field is complete as is most of perimeter aggregate trail
- Existing berms have been relocated closer to Bayview Ave to make room for the playground improvements and have been seeded & mulched
- Fence post foundations are prepped and ready for new perimeter fencing
- The new storm sewer system is installed
- Playground will be completed in spring/summer 2021 due to winter weather
- Basketball court slab poured, play structure concrete foundations installed, play field graded and seeded
- Play surface safety tiles for swing set and pyramid climber play areas completed before weather conditions (temperature and moisture requirements) deteriorated
- Basketball and volleyball posts and backboards installed
- 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

UCSD Playground Renovation (SS601)

MUNIS PROJECT SS601 - UCSD PLAYGROUND RENOVATION						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectura	$ 62,375	$ 58,938	$ 3,437	$ -	$ -	$ -
Sampling / Testing	$ 1,350	$ -	$ 1,029	$ 321	$ -	$ 321
Survey Services	$ 4,250	$ 4,250	$ -	$ -	$ -	$ -
Solid Waste	$ 442	$ 442	$ -	$ -	$ -	$ -
Construction Services	$ 1,215,750	$ 936,500	$ 279,250	$ -	$ -	$ -
Telephone / Fax / TV	$ 408	$ 479	$ -	$ (71)	$ -	$ (71)
Advertising	$ 303	$ 303	$ -	$ -	$ -	$ -
Contingency	$ 39,382	$ -	$ -	$ 39,382	$ -	$ 39,382
General Supplies	$ 2,225	$ 2,215	$ -	$ 10	$ -	$ 10
Interest Expense	$ -	$ -	$ -	$ -	$ -	$ -
	$ 1,326,485	$ 1,003,127	$ 283,716	$ 39,642	$ -	$ 39,642

UCSD Playground Renovation (SS601)

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)

- 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
- Procurement methodology approved / City Attorney reviewed Itron contract
- 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
- <300 meters remain to be installed out of 1020 total (875 res / 145 industry)

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	$ 92,866	$ 73,541	$ 172,389	$ -	$ 172,389
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	$ 95,971	$ 73,541	$ 353,850	$ -	$ 353,850

Automatic Meter Read (EL18B)

Wind Power Development (EL18C)

FY19-23 CMMP

WIND ENERGY| ELECTRIC PRODUCTION

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.

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: FY 2018

Engineering/Design: FY 2020

Purchase/Construction: FY 2022

Cost Assumptions

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

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)

- 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
  - OC leases did not include fees and are complete. 1. 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
  - Final Phase II Siting Report version 3 was received from V3 in October 2018
- Phase III: Data Collection We are presently in this phase
  - 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
  - Harsh weather conditions caused equipment failure which resulted in additional project cost
  - Council passed Budget Amendment request on 01-14-20
  - This phase expected to be complete by October 2020
  - 2nd draft of Phase III report received on 8-19-20 from V3
  - Final draft of Phase III report will include systems and economic analyses
  - Application for $100K Alaska Energy Authority grant was made for design phase
  - Bunker Hill MET tower has been taken down
  - Logistical issues have not allowed the lowering of the Hog Island MET tower. Hog Island MET and Pyramid Valley MET are scheduled for removal in spring 2021
  - MET tower right-of-way agreements have been extended for Hog Island and Pyramid Valley
- Phase IV: Design
  - Wind data collected in Phase III can be used to define a future wind farm and further assess the electrical grid for integration

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	$ 269,429	$ 22,119	$ 61,006	$ -	$ 61,006
Other Professional	$ 27,535	$ 17,057	$ -	$ 10,478	$ -	$ 10,478
Telephone / Fax / TV	$ 185	$ 104	$ -	$ 81	$ -	$ 81
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
Machinery and Equipment	$ 114,726	$ 112,375	$ 1,876	$ 475	$ -	$ 475
	$ 495,000	$ 398,965	$ 23,996	$ 72,039	$ -	$ 72,039

Wind Power Development (EL18C)

Electric Energy Storage (EL19B)

PROJECT DESCRIPTION: This nomination is for the final design, procurement, construction, integration and commissioning of one 1 MW PowerStore PCS (16.5MJ) flywheel system, space for future second flywheel system, and related components.

PROJECT NEED: The electrical loads introduced the City's electrical grid by equipment such as large ship to shore cranes are outside the intended loading profile. To counter these rapid changes in load, which at times reach levels of 10 to 15% of the total load in seconds, the engines must constantly react to both the rapid increases and decreases of the system load. The engines reaction to these changes decreases efficiency and creates undue mechanical and electrical wear on the equipment and distribution system. In addition generation dispatch is often significantly effected due to the inability of the facilities to run in the most efficient configuration possible. The proposed Flywheel system will arrest the rapid changes in the electrical load.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS): Design will be accomplished in FY2019 and FY2020. Installation of the Flywheel equipment will be in FY2021. Permitting is not expected for this project. Money for this project will come from the Electrical Proprietary Fund.

COST & FINANCING DATA:

Cost Assumptions	
Other Professional Services	100,000
Engineering, Design, Construction Admin	271,312.00
Construction Services	1,648,688.00
Machinery & Equipment	1,480,000.00
Subtotal	3,500,000.00
Contingency (20%)	700,000.00
Total Funding Request	4,200,000.00

FY21-25 CMMP

ELECTRIC ENERGY STORAGE SYSTEM | ELECTRIC

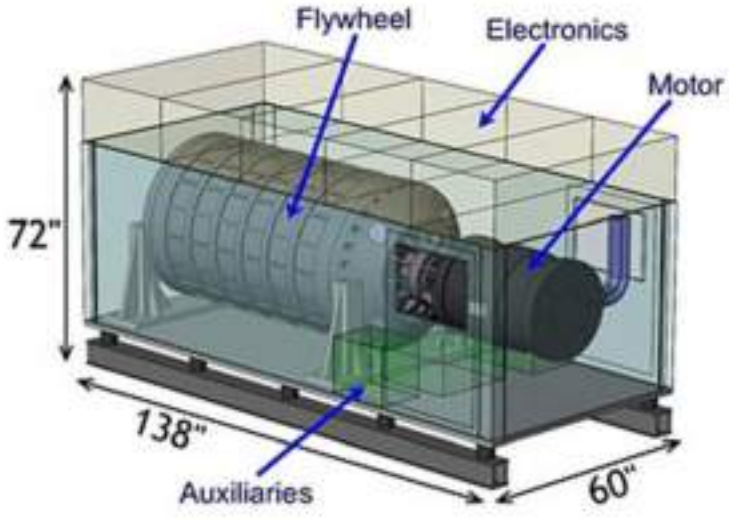
EL19B | CAPITAL PROJECT

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: FY 2019

Engineering/Design: FY 2020

Purchase/Construction: FY 2022



REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund							
1% Sales Tax							
Grant							
Proprietary Fund	650,062		3,549,938				4,200,000
TOTALS $	650,062		3,549,938				4,200,000
Requested Funds:							

Electric Energy Storage (EL19B)

- This project is the final design, procurement, construction, integration and commissioning of one 1 MW PowerStore PCS (16.5MJ) flywheel system, space for future second flywheel system and related components.
- The flywheel system will reduce generation equipment wear and tear and allow it to run more efficiently. It also supports future cranes and wind energy integration
- DPW contracted with EPS to perform the study, selection of a flywheel manufacturer and 15% level drawings for $75,478 with a due date of March 2019
- A 90'x90' area is needed to house the flywheel equipment containers
- Site selected is at the north end of the Old Powerhouse which eliminates the need to purchase land
- On September 30th, the City received a draft EPS prepared RFQ package to select equipment supplier so design can proceed based on the selected equipment
- EPS finalized equipment RFQ package for bids; pending funding
- This project is slated for construction in 2020-2021 but is not fully funded
- With advancements in technology, other electric energy storage systems are being evaluated including new battery technology
- Due to Covid and the signature of the PPA for the Makushin geothermal project, this project is on hold
- More information on how the geothermal project might impact this project will be needed in order to forward.

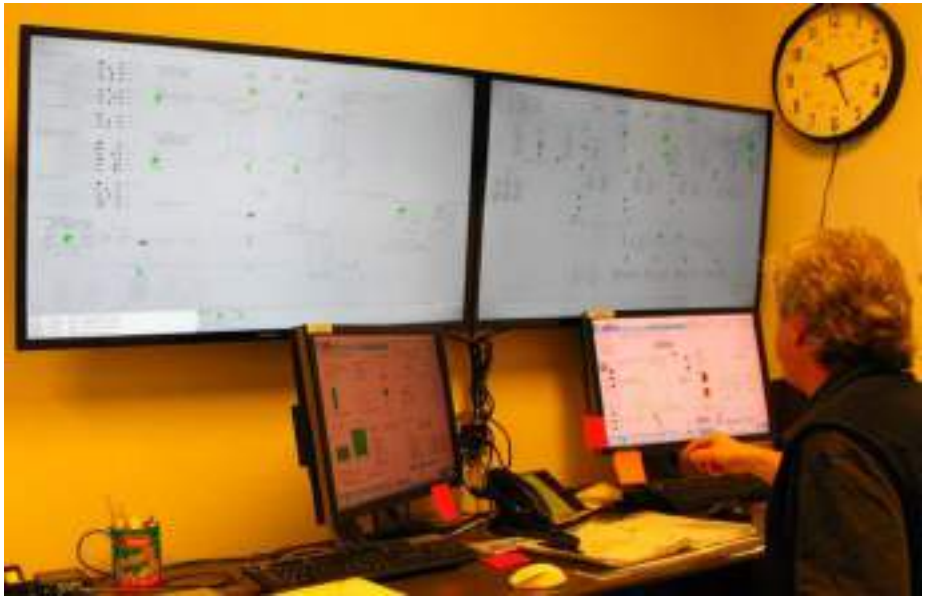
Electric Energy Storage (EL19B)

MUNIS PROJECT EL19B - ELECTRIC ENERGY STORAGE						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 325,750	$ 66,083	$ 11,735	$ 247,932	$ -	$ 247,932
Other Professional	$ 20,000	$ -	$ -	$ 20,000	$ -	$ 20,000
Telephone / Fax / TV	$ 150	$ 52	$ -	$ 98	$ -	$ 98
General Supplies	$ 2,850	$ -	$ -	$ 2,850	$ -	$ 2,850
Machinery & Equipment	$ 301,312	$ -	$ -	$ 301,312	$ -	$ 301,312
	$ 650,062	$ 66,135	$ 11,735	$ 572,192	$ -	$ 572,192

Electric Energy Storage (EL19B)

Flywheel energy storage (FES) works by accelerating a rotor (flywheel) to a very high speed and maintaining the energy in the system as rotational energy. When energy is extracted from the system, the flywheel's rotational speed is reduced as a consequence of the principle of conservation of energy; adding energy to the system correspondingly results in an increase in the speed of the flywheel.

Advanced FES systems have rotors made of high strength carbon-fiber composites, suspended by magnetic bearings, and spinning at speeds from 20,000 to over 50,000 rpm in a vacuum enclosure.[2] Such flywheels can come up to speed in a matter of minutes – reaching their energy capacity much more quickly than some other forms of storage.[2]



4th Waste Heat Recovery ORC (EL20B)

Project Description: This nomination is for the purchase, installation and commissioning of a 4th ElectraTherm Organic Rankine Cycle heat recovery unit to be installed in the old powerhouse facility.

Project Need: The addition of the 4th unit increases the cooling capacity of the existing power production facility, which adds redundancy to the community's existing facilities, reduces the amount of fuel required to produce energy, reduces pollution, and decreases the amount of additional energy required to run the existing facilities.

Development Plan & Status (Include Permit and Utility Requirements): To minimize the design we recommend the sole source to Electrical Power Systems (EPS) as the Mechanical and Electrical installer for those portions of this project. EPS/MBIS was the principal designer, mechanical installer, electrical installer, and SCADA integrator for the installation of the original 3 ORC units. As the Engineer of Record, EPS has existing knowledge of the electrical production facility and its subsystems, and they have a proven track record of successful and well-implemented Design Build projects for the Electrical Utility. The design from the first three ORCs will be used for this project. The piping, electrical race ways, and concrete slab was installed for the fourth unit during the construction of the first three units.

Cost & Financing Data: The monies for this project will come from the Electrical proprietary Fund. Cost were determined from quotes from Electratherm and Electrical Power Systems.

FY20-24 CMMP

4th Waste Heat Recovery Unit | Electric Production

Estimated Project & Purchase Timeline
Pre Design: None
Engineering/Design: FY 2020
Purchase/Construction: FY 2020

Cost Assumptions	
Engineering, Design, Const Admin	-
Other Professional Services	-
Construction Services	$285,000
Machinery & Equipment	$177,000
Subtotal	**462,000**
Contingency (set at 30%)	138,600
TOTAL	**600,600**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**600,600**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
1% Sales Tax							-
Grant							-
Proprietary Fund		600,600					600,600
TOTALS $	-	600,600	-	-	-	-	600,600
Requested Funds:							

4th Waste Heat Recovery ORC (EL20B)

- RFP package from the previous ORC's is being updated
- After bid package is finalized, it will be posted publicly for bids
- This project is being pushed out to a future year since the need is not pressing

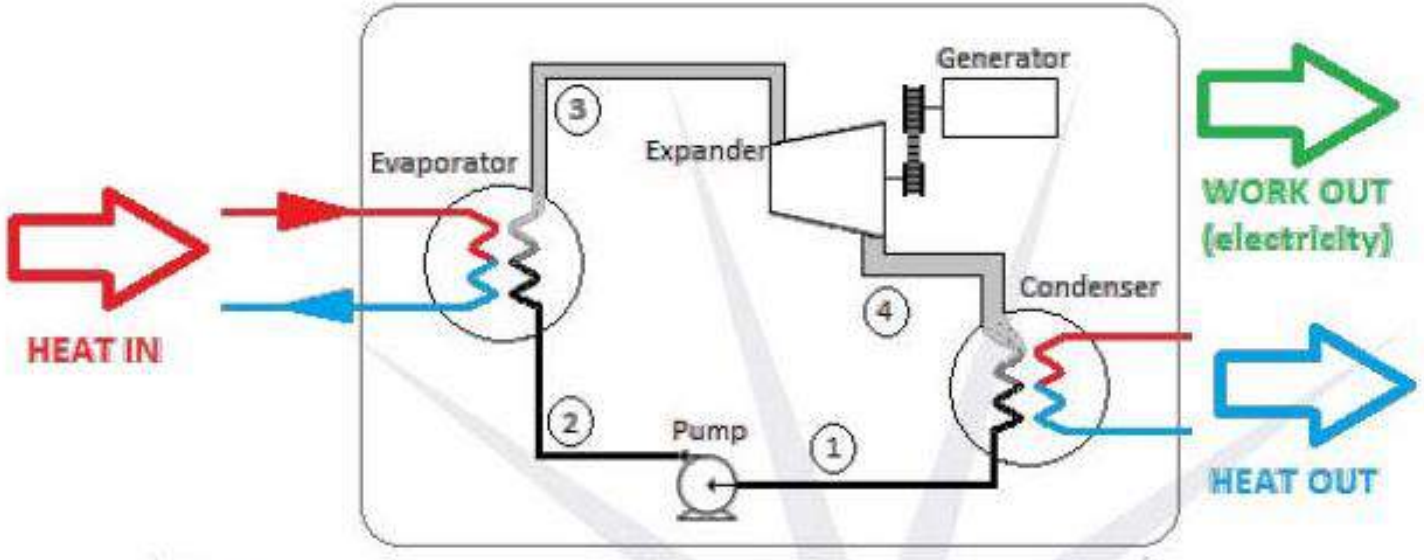
4th Waste Heat Recovery ORC (EL20B)

MUNIS PROJECT EL20B - 4th WASTE HEAT RECOVERY ORC						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Engineering and Architectural	$ 361,750	$ -	$ -	$ 361,750	$ -	$ 361,750
Other Professional	$ 100,000	$ -	$ -	$ 100,000	$ -	$ 100,000
Telephone / Fax / TV	$ 250	$ -	$ -	$ 250	$ -	$ 250
Contingency	$ 138,600	$ -	$ -	$ 138,600	$ -	$ 138,600
Machinery & Equipment	$ -	$ -	$ -	$ -	$ -	$ -
	$ 600,600	$ -	$ -	$ 600,600	$ -	$ 600,600

4th Waste Heat Recovery ORC (EL20B)

What is an ORC?

The Organic Rankine Cycle (ORC) is a thermodynamic cycle which uses an organic fluid to convert low-temperature heat into mechanical work. That mechanical work can then be converted into electricity. An ORC thermodynamic process transfers the heat using an organic working fluid with a boiling point below that of water. The ElectraTherm Green Machine ORC process is shown below in Figure 1.



1. Low pressure liquid
2. High pressure liquid
3. Heated, pressurized vapor
4. Low Pressure Vapor

Generator Sets Rebuild (EL21A)

PROJECT DESCRIPTION: This project consists of the 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 manufacturers mechanics to determine if engine rebuilds are needed according to the hourly schedule or can be prolonged.

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

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS): Due to the cost of the engine rebuilds, it has been determined that the cost will be capitalized.

COST & FINANCING DATA: Costs for the Generator Sets rebuilds can fluctuate greatly according to what is determined by the maintenance inspections. Costs for these re-builds has been determined by the worst case scenario according to the history of the engines. A 2% inflation rate has been added each year. Money that is not used for re-builds by the end of the fiscal year, will be returned to the proprietary fund.

FY21-25 CMMP

GENERATOR SETS REBUILD | ELECTRIC

MAJOR MAINTENANCE

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: NA

Engineering/Design: NA

Purchase/Construction: NA

Cost Assumptions	
Repair & Maintenance	$6,998,785
Construction Services	
Machinery & Equipment	
Subtotal	$6,998,785
Contingency (30%)	$2,099,635
Total Funding Request	$9,098,420

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund							
1% Sales Tax							
Grant							
Proprietary Fund		1,748,338	1,783,305	1,818,970	1,855,350	1,892,457	9,098,420
TOTALS $		1,748,338	1,783,305	1,818,970	1,855,350	1,892,457	9,098,420

Generator Sets Rebuild (EL21A)

- This project consists of the inspection, major maintenance and rebuilds of the four 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 according to the hourly schedule or if they can be prolonged
- This project is a DPU Powerhouse Maintenance Project and will be ongoing through the life of the Powerhouse
- This is an ongoing annual project covering all 4 gensets

Generator Sets Rebuild (EL21A)

MUNIS PROJECT EL21A - GENERATOR SETS REBUILD						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Repair & Maintenance	$ 1,344,375	$ 94,753	$ 346,486	$ 903,135	$ -	$ 903,135
Advertising	$ 500	$ -	$ -	$ 500	$ -	$ 500
Contingency	$ 403,463	$ -	$ -	$ 403,463	$ -	$ 403,463
	$ 1,748,338	$ 94,753	$ 346,486	$ 1,307,098	$ -	$ 1,307,098

Generator Sets Rebuild (EL21A)

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)

- 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	$ 40,500	$ -	$ -	$ 40,500	$ -	$ 40,500
Training Services	$ 1,500	$ 1,236	$ -	$ 264	$ -	$ 264
Other Professional	$ 827	$ -	$ -	$ 827	$ -	$ 827
Survey Services	$ 10,000	$ -	$ -	$ 10,000	$ -	$ 10,000
Telephone / Fax / TV	$ 50	$ -	$ -	$ 50	$ -	$ 50
Advertising	$ 250	$ -	$ -	$ 250	$ -	$ 250
Travel and Related	$ 2,000	$ 1,304	$ -	$ 696	$ -	$ 696
General Supplies	$ 4,000	$ 3,600	$ -	$ 400	$ -	$ 400
	$ 59,127	$ 6,140	$ -	$ 52,987	$ -	$ 52,987

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**

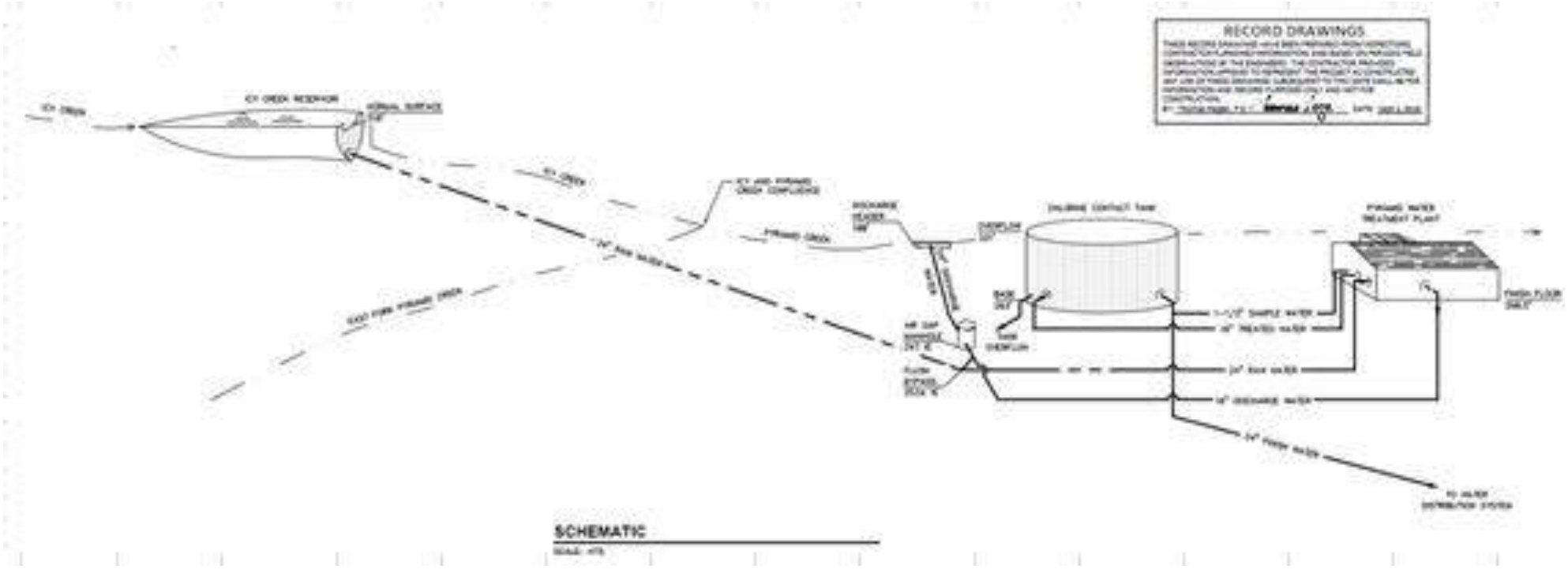
Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
1% Sales Tax							-
Grant							-
Proprietary Fund	50,000		1,588,975				1,638,975
TOTALS $	50,000	-	1,588,975	-	-	-	1,638,975
Requested Funds:						120	6

Pyramid Micro Turbines (WA17C)

- 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 will be shipped from the factory on March 1, 2021
- 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
- IRI will hold monthly project meetings and additional project meetings as needed to facilitate project coordination

Pyramid Micro Turbines (WA17C)

MUNIS PROJECT WA17C - PYRAMID WTP MICRO TURBINES						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering & Architectural	$ 405,435	$ 336,710	$ 5,390	$ 63,335	$ -	$ 63,335
Other Professional	$ 85,000	$ -	$ -	$ 85,000	$ -	$ 85,000
Construction Services	$ 1,394,497	$ -	$ 1,394,497	$ -	$ -	$ -
Telephone / Fax / TV	$ 1,500	$ 399	$ -	$ 1,101	$ -	$ 1,101
Advertising	$ 1,439	$ 1,439	$ -	$ -	$ -	$ -
Contingency	$ 46,463	$ -	$ -	$ 46,463	$ -	$ 46,463
Machinery and Equipment	$ 277,685	$ 212,411	$ 65,263	$ 11	$ -	$ 11
	$ 2,212,019	$ 550,960	$ 1,465,150	$ 195,910	$ -	$ 195,910



Pyramid Micro Turbines (WA17C)

Generals Hill Water Booster Pump Station (WA18A)

Project Description: 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 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 potential for contamination of the water system due to backflow, and decrease the potential for customers to lose water service due to low pressure. Water pressure at the top of General Hill does not currently meet the minimum industry standard of 40 psi or a minimum sustainable pressure of 20 psi. Measured residual pressures range from 0 to 26 psi at the uppermost fire hydrant. This is not simply an inconvenience to the highest General Hill customers, but it is a health and safety issue for all water utility customers. These low water pressures create a high potential for contamination of the water system caused by backflow. This is of special concern during water main breaks and fires.

Development Plan & Status (Include Permit and Utility Requirements): 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. Land purchase will also be required.

Cost & Financing Data: This project will be funded by the Water Proprietary fund. Costs are rough estimates, but staff will refine cost estimates prior to FY18 budget submittal.

FY20-24 CMMP

General Hill Booster Pump| Water

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

Cost Assumptions	
Engineering, Design, Const Admin	45,000
Other Professional Services	25,000
Construction Services	500,000
Machinery & Equipment	250,000
Subtotal	**820,000**
Contingency (set at 30%)	246,000
TOTAL	**1,066,000**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**1,066,000**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
1% Sales Tax							-
Grant							-
Proprietary Fund	221,600	844,400					1,066,000
TOTALS $	221,600	844,400	-	-	-	-	1,066,000
Requested Funds:							

Generals Hill Water Booster Pump (WA18A)

- 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
- Property to place the water booster station is critical path for this project and Planning is in process of acquiring a suitable location from the range of sites identified by DPW as suitable
- The land to be used for the booster station has to be situated within a range of elevations where the booster pumps can provide adequate domestic pressure and also where the fire engine can adequately boost fire pressure
- On June 28 2018, Planning sent a letter to affected property owners offering to purchase land to site the booster station
- Planning arranged assessments of 2 properties for acquisition of project and drafted purchase offer letters
- Exhibit A which is a map showing booster station layout in relation to property lines and dwellings is being prepared for inclusion in offer letters
- Regan Engineering is the design engineer and will perform design after property acquisition is complete
- LCG Lantech located property corner monuments and surveyed site to accurately identify proposed booster pump location
- Resolution 2020-42 on 7-14-20 authorizing the CM to execute land purchase
- A 4050 SF parcel purchased from each of 2 land owners
- Design proceeding based on secured location

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	$ 114,900	$ 31,070	$ 76,370	$ 7,460	$ -	$ 7,460
Survey Services	$ 7,500	$ 2,392	$ -	$ 5,108	$ -	$ 5,108
Construction Services	$ 470,000	$ -	$ -	$ 470,000	$ -	$ 470,000
Telephone / Fax / TV	$ 200	$ 23	$ -	$ 177	$ -	$ 177
Permit Fees	$ 2,400	$ -	$ -	$ 2,400	$ -	$ 2,400
Contingency	$ 246,000	$ -	$ -	$ 246,000	$ -	$ 246,000
General Supplies	$ 80,000	$ 3,810	$ -	$ 76,190	$ -	$ 76,190
Land	$ 145,000	$ 25,900	$ 40,365	$ 78,735	$ -	$ 78,735
	$ 1,066,000	$ 63,195	$ 116,735	$ 886,070	$ -	$ 886,070

Generals Hill Water Booster Pump Station (WA18A)

CT Tank Interior Maintenance & Painting (WA20A)

PROJECT DESCRIPTION: This project is to paint and perform other maintenance to the inside of the Pyramid CT Tank. The 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 of the length of time and type of equipment available to do the work, and the configuration of the tank, complete de-watering has not been practical. Historically, water tanks in this area have had to have the exteriors re-coated every 15-25 years. The CT Tank roof was painted with a finish coat in 2008 after a failed attempt to replace the wind damaged foam insulation in 2000. Anodes were added in 2004 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 (INCLUDE PERMIT AND UTILITY REQUIREMENTS): 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

COST & FINANCING DATA:

FY21-25 CMMP

CT TANK INTERIOR MAINTENANCE AND PAINTING | WATER

WA20A | MAJOR MAINTENANCE

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: FY 2020

Engineering/Design: FY 2020

Purchase/Construction: FY 2022

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**

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund							
1% Sales Tax							
Grant							
Proprietary Fund	100,000		953,000				1,053,000
TOTALS $	100,000		953,000				1,053,000
Requested Funds:							

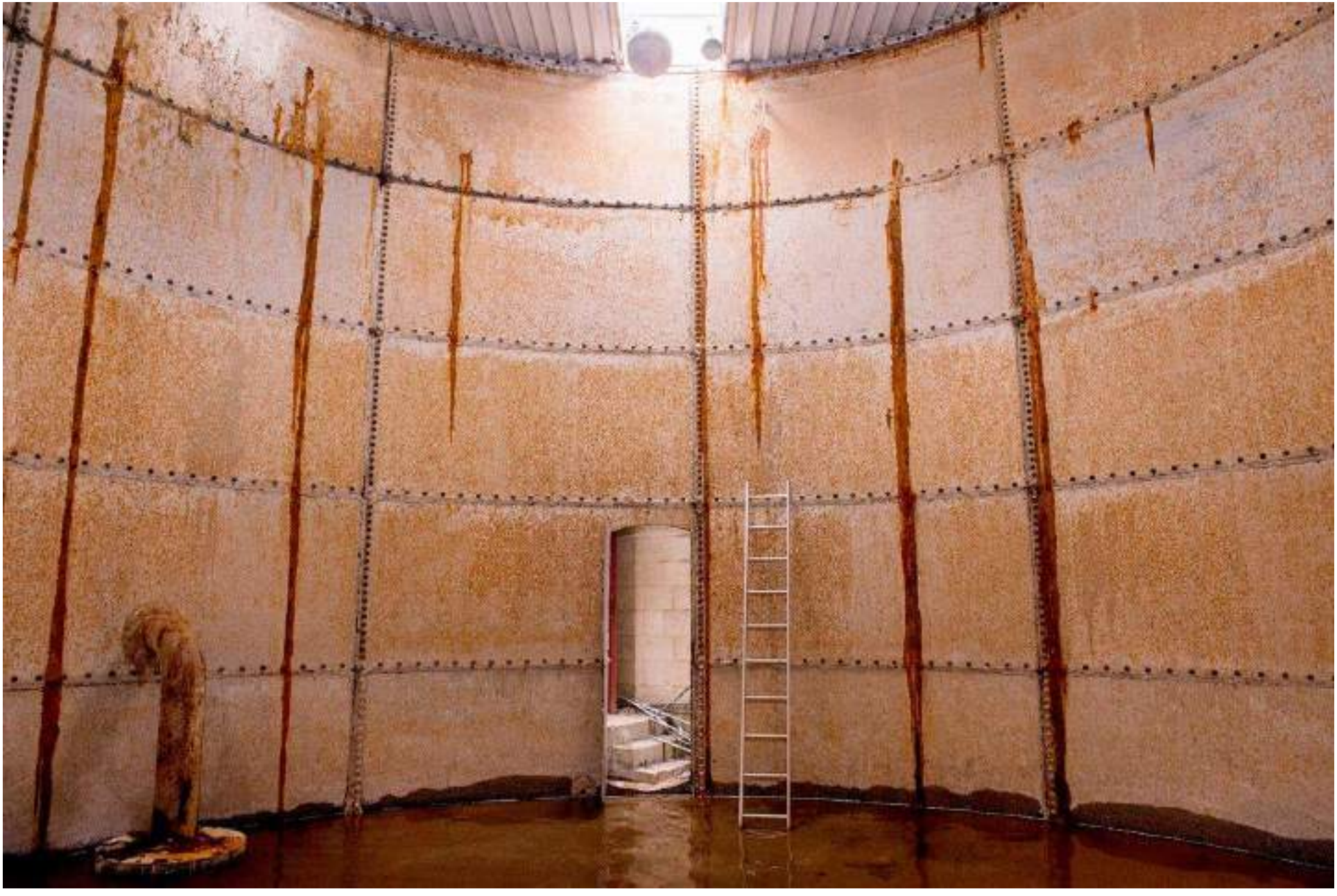
CT Tank Interior Maintenance & Painting (WA20A)

- A scope of work is being developed with which to go out for bids
- DPU is leading implementation of this project in a future year
- Considerations underway to coordinate this work with the Pyramid WTP Micro-Turbines project

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	$ -	$ -	$ -	$ -	$ -	$ -
Telephone / Fax / TV	$ 250	$ -	$ -	$ 250	$ -	$ 250
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
General Supplies	$ -	$ -	$ -	$ -	$ -	$ -
	$ 100,000	$ -	$ -	$ 100,000	$ -	$ 100,000

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 (INCLUDE PERMIT AND UTILITY REQUIREMENTS): 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.

COST & FINANCING DATA: A ROM for this project would be $900,000 - $1,100,000, assuming the existing crane and Chlorine Bay in the PWTP can be utilized with the new system. A heated area for salt storage may be required, preferably as part of the existing PWTP structure. Annual salt use for storage planning purposes will be about 15 pallets.

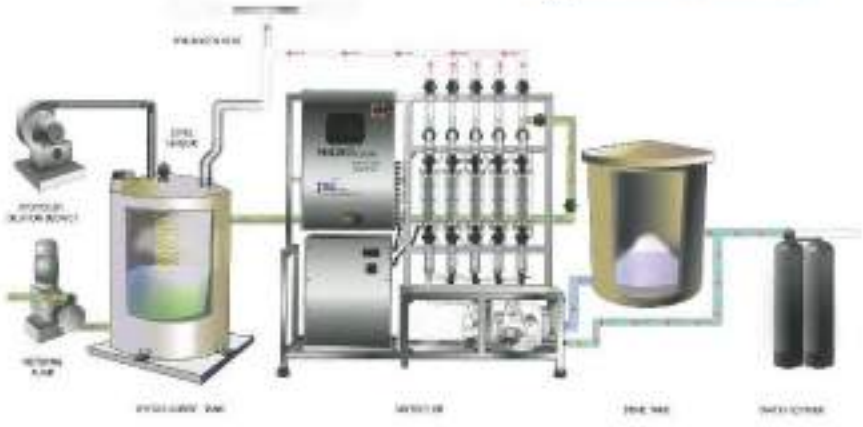
FY21-25 CMMP

PYRAMID WATER TREATMENT PLANT CHLORINE UPGRADE | WATER

WA501 | CAPITAL PROJECT

ESTIMATED PROJECT & PURCHASE TIMELINE
Pre Design: FY 2021
Engineering/Design: FY 2021
Purchase/Construction: FY 2022

Hypochlorite Generator



Cost Assumptions	
Other Professional Services	$25,000.00
Engineering, Design, Construction Admin	$80,000.00
Construction Services	$250,000.00
Machinery & Equipment	$400,000.00
Subtotal	$755,000.00
Contingency (30%)	$226,500.00
Total Funding Request	$981,500.00

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund							
1% Sales Tax							
Grant							
Proprietary Fund		100,000	881,500				981,500
TOTALS $		100,000	881,500				981,500
Requested Funds:							

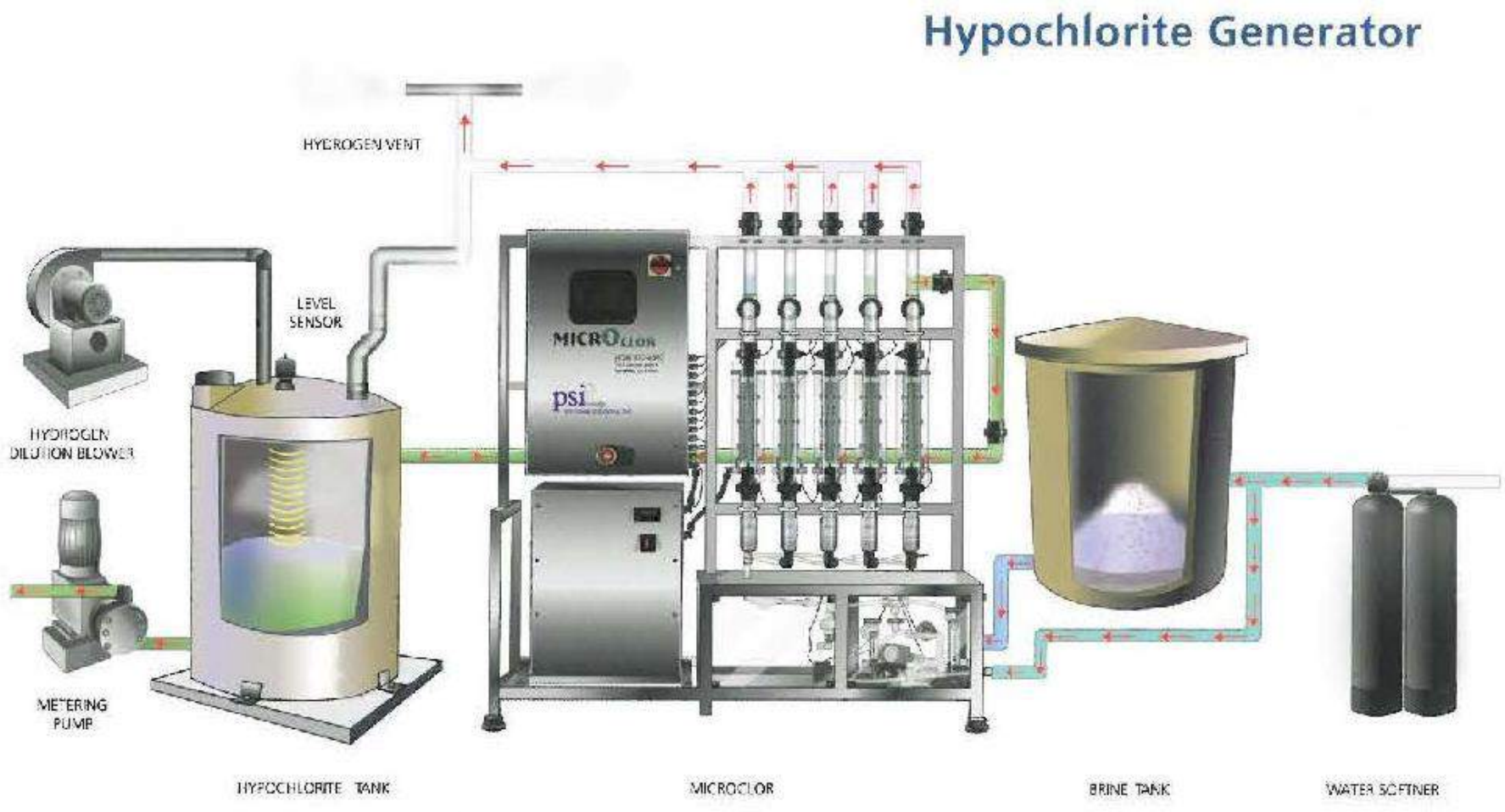
Pyramid WTP Chlorine Upgrade (WA21A)

- 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
- There are only 2 vendors remaining that will ship chlorine gas to Alaska
- This project will significantly increase the safety of our employees
- In the process of selecting a vendor for the on-site sodium hypochlorite generation system
- Once vendor has been selected, a design engineer will be selected to prepare a bid set of drawings and specifications
- This project has a high likelihood of impacting the Pyramid Micro-turbines Project and design and construction will need to be closely coordinated

Pyramid WTP Chlorine Upgrade (WA21A)

MUNIS PROJECT WA21A - PYRAMID WTP CHLORINE UPGRADE						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering & Architectural	$ 69,200	$ -	$ -	$ 69,200	$ -	$ 69,200
Telephone / TV / Fax	$ 300	$ -	$ -	$ 300	$ -	$ 300
Advertising	$ 500	$ -	$ -	$ 500	$ -	$ 500
Contingency	$ 30,000	$ -	$ -	$ 30,000	$ -	$ 30,000
	$ 100,000	$ -	$ -	$ 100,000	$ -	$ 100,000

Pyramid WTP Chlorine Upgrade (WA21A)



Pyramid Water Storage Tank (WA501)

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 Violet treatment process to operate more efficiently.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS): A "Certificate to Construct" and a "Certificate to Operate" are required from ADEC, obtained through application by the designing engineer.

FY21-25 CMMP

PYRAMID WATER STORAGE TANK | WATER

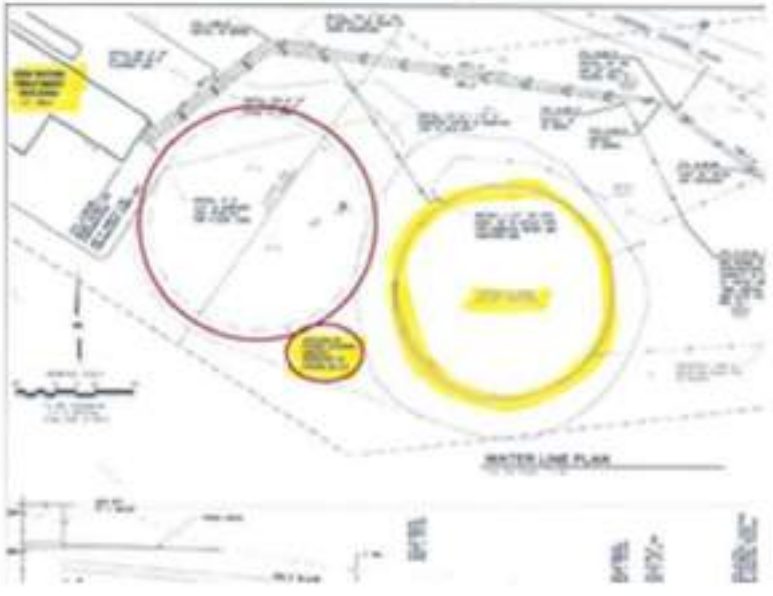
WA501 | CAPITAL PROJECT

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: FY 2014

Engineering/Design: FY 2023

Purchase/Construction: FY 2024



COST & FINANCING DATA:

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.)	-
Total Funding Request $	**9,134,943**

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund							
1% Sales Tax							
Grant							
Proprietary Fund	625,000			603,750	7,906,193		9,134,943
TOTALS $	625,000			603,750	7,906,193		9,134,943
Requested Funds:							

Pyramid Water Storage Tank (WA501)

- 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	$ 585,000	$ 93,662	$ -	$ 491,338	$ -	$ 491,338
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
	$ 625,000	$ 93,662	$ -	$ 531,338	$ -	$ 531,338

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)

- 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

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)

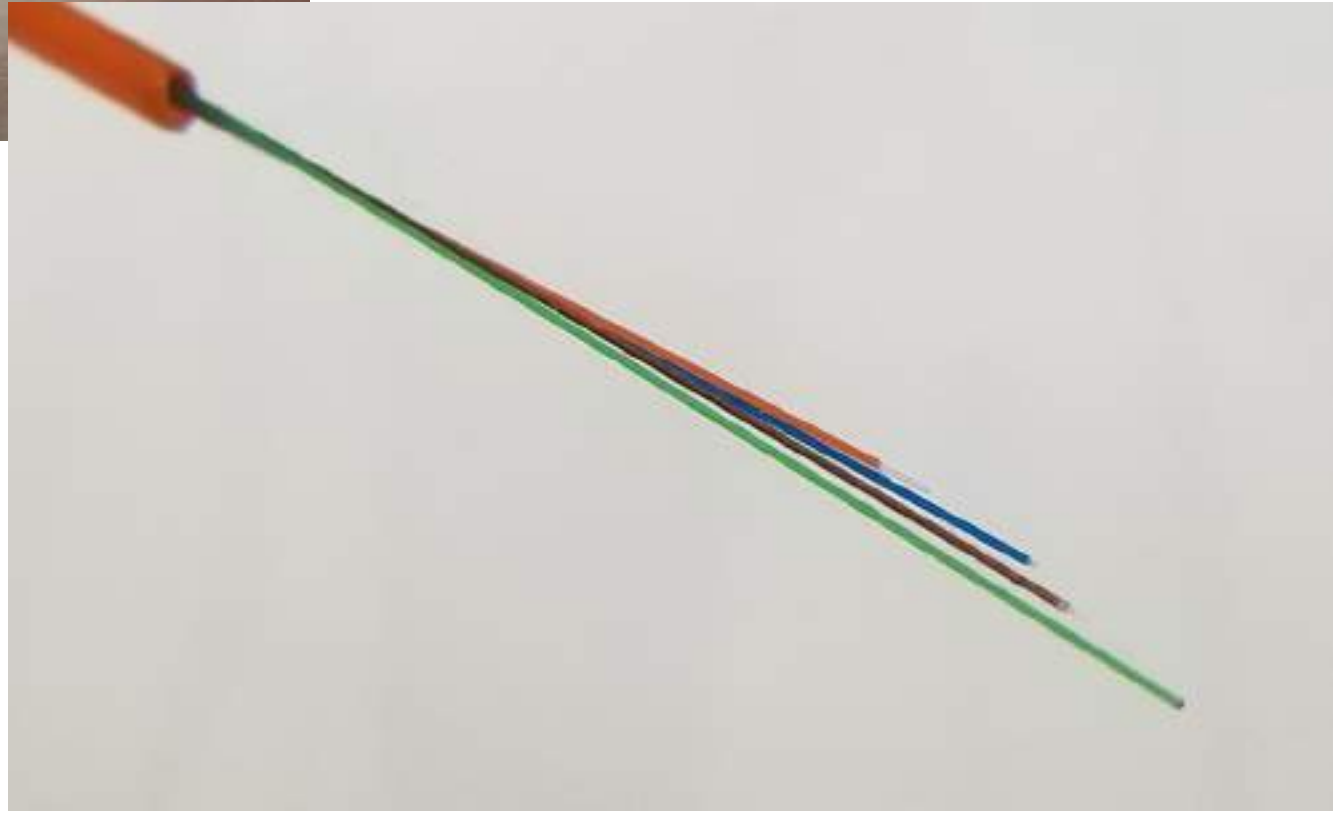
- This is the first phase of a multiphase project to develop a communications utility infrastructure (fiber optic) between the various departments and outlying utility locations
- DPU is leading implementation of this project as needs and opportunities arise
- No additional funds requested for this project

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	$ 1,500	$ 1,236	$ -	$ 264	$ -	$ 264
Other Professional	$ 827	$ -	$ -	$ 827	$ -	$ 827
Survey Services	$ 10,000	$ -	$ -	$ 10,000	$ -	$ 10,000
Telephone / Fax / TV	$ 50	$ -	$ -	$ 50	$ -	$ 50
Advertising	$ 250	$ -	$ -	$ 250	$ -	$ 250
Travel and Related	$ 2,000	$ 1,304	$ -	$ 696	$ -	$ 696
General Supplies	$ 4,000	$ 3,600	$ -	$ 400	$ -	$ 400
	$ 59,127	$ 6,140	$ -	$ 52,987	$ -	$ 52,987

Fiber Optic Infrastructure (WW17B)

Fiber-Optic Cable



Solid Waste Gasifier (SW21A)

PROJECT DESCRIPTION: The pre-design, design, and construction of a Gasifier to incinerate garbage.

PROJECT NEED: The Landfill cells are rapidly reaching capacity. It is estimated that we have five years to come up with another way to deal with the City's garbage or 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 break-down 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 (INCLUDE PERMIT AND UTILITY REQUIREMENTS): Combination of grant funds and Landfill proprietary funds. Future funding is to be determined at a later date.

FY21-25 CMMP

SOLID WASTE GASIFIER| SOLID WASTE

CAPITAL PROJECT

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: FY 2021

Engineering/Design: FY 2022

Purchase/Construction: FY 2025

COST & FINANCING DATA:

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**

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund							
1% Sales Tax							
Grant							
Proprietary Fund		100,000	200,000	400,000		7,620,000	8,320,000
TOTALS $		100,000	200,000	400,000		7,620,000	8,320,000

Solid Waste Gasifier (SW21A)

- 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

Solid Waste Gasifier (SW21A)

MUNIS PROJECT SW21A - SOLID WASTE GASIFIER						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 69,200	$ -	$ -	$ 69,200	$ -	$ 69,200
Telephone / Fax / TV	$ 300	$ -	$ -	$ 300	$ -	$ 300
Advertising	$ 500	$ -	$ -	$ 500	$ -	$ 500
Contingency	$ 30,000	$ -	$ -	$ 30,000	$ -	$ 30,000
	$ 100,000	$ -	$ -	$ 100,000	$ -	$ 100,000

Solid Waste Gasifier (SW21A)

CEM Breakwater Repair (PH17C)

P | N | D
ENGINEERS, INC.

January 23, 2015 PND 151013

Peggy McLaughlin
Director of Ports
City of Unalaska
P.O. Box 610
Unalaska, Alaska 99685

Re: CEM Floating Breakwater Repair Concept Development

Dear Peggy,

PND Engineers, Inc. (PND) is pleased to provide this proposal for development of conceptual repairs and modifications for the Carl E Moses (CEM) Floating Breakwater pontoon inter-connections. Based upon our discussions and photographs, it is our understanding that the chain inter-connection between longitudinally adjacent floating concrete pontoons have failed on several occasions, allowing the pontoons to become misaligned and will likely result in impact damage during wave/wake events as the pontoons bump against each other in an uncontrolled manner, eventually resulting reduced structure life and long-term damage. We understand the USACE has been slow to develop a remedy to the situation and has asked the City for input to the repair solution. PND's proposed scope and deliverables are described below:

Conceptual Design
PND will review and utilize the USACE original design drawings and photographs of the damaged breakwater float connections to develop approximately three or four repair/modification concept hand sketches and written descriptions to improve/replace the pontoon connection. These hand sketches can then be reviewed and assessed by the City of Unalaska for determination as to which alternatives will be provided to the Corp of Engineers as a suggested remedy to the problem. The conceptual designs will be qualitative concepts, as development of detailed design forces and pontoon interactive motion is beyond the desired scope and will be addressed by USACE. We understand that the sketches are to be "generic" and that PND will be working behind the scene to assist the City in providing technical input to USACE.

CEM Breakwater Repair (PH17C)

- 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 has issued a contract for the repair of the breakwaters
- COU is waiting on confirmation from the USACE that the contractor has completed repair work and that repairs are performing successfully
- USACE will then ask the COU to accept the CEM Harbor as complete
- No additional funding requested for this project

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)

FY17-21 CMMP

UMC Dock Replacement & Expansion (Positions III&IV) | Ports

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.

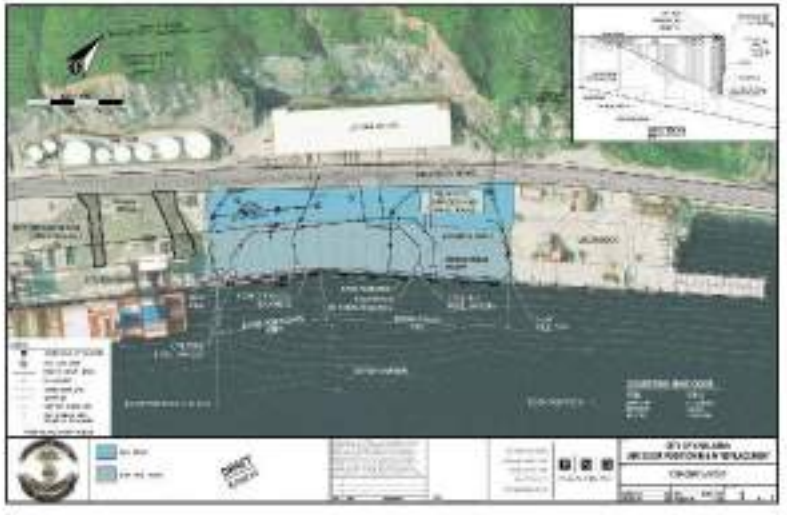
Estimated Project & Purchase Timeline

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)

- 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
- Positions III and IV are open for business. The remaining work is to complete minor final completion punchlist items
- The project is currently at 2.1% of the total contract value in change orders and is on track to be completed under budget
- 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
- TMC and the City agreed to a $25,000 credit for incomplete work
- TMC submitted their final pay request
- Subcontractor lien releases were never submitted by TMC but the deadline for a subcontractor to file a lien is past
- Close out this project after as-builts are completed by PND

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	$ 120	$ 113	$ -	$ 8	$ -	$ 8
Engineering and Architectural	$ 2,215,000	$ 2,178,471	$ 22,834	$ 13,695	$ -	$ 13,695
Other Professional	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 35,243,340	$ 35,005,503	$ -	$ 237,837	$ -	$ 237,837
Telephone / Fax / TV	$ 1,000	$ 882	$ -	$ 118	$ -	$ 118
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
Travel and Related Costs	$ -	$ -	$ -	$ -	$ -	$ -
Permit Fees	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 1,393,065	$ -	$ -	$ 1,393,065	$ -	$ 1,393,065
General Supplies	$ 6,500	$ 5,785	$ -	$ 715	$ -	$ 715
Computer Hardware/Software	$ 3,125	$ 3,114	$ -	$ 11	$ -	$ 11
Machinery and Equipment	$ 27,490	$ 27,490	$ -	$ -	$ -	$ -
Interest Expense	$ -	$ -	$ -	$ -	$ -	$ -
	$ 38,889,640	$ 37,221,358	$ 22,834	$ 1,645,448	$ -	$ 1,645,448

UMC Positions 3 & 4 Replacement (PH17D)

Paver blocks exceed allowable height tolerance

Crane Tie-Down Vault
with no drain.

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 calls 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 (INCLUDE PERMIT AND UTILITY REQUIREMENTS): ROM for geotechnical is about $300 and ROM for design is $600.

COST & FINANCING DATA:

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

FY21-25 CMMP

UMC CRUISE SHIP TERMINAL | PORTS

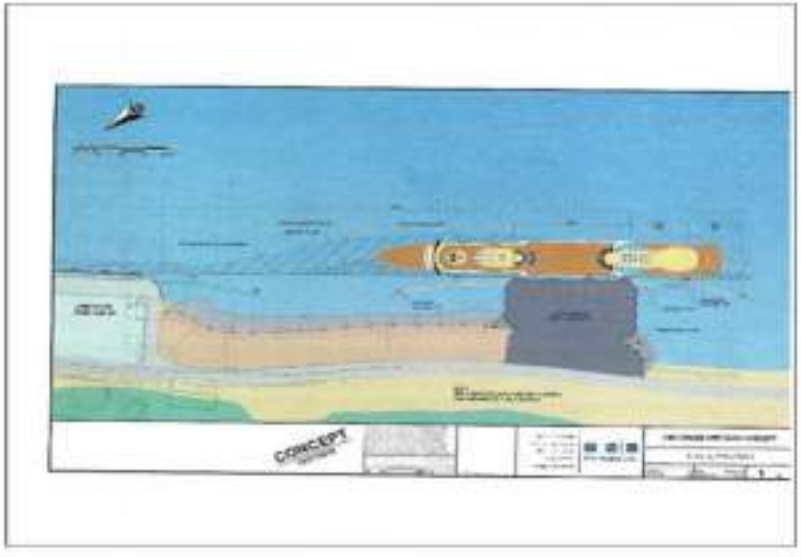
PH20A | CAPITAL PROJECT

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: FY 2020

Engineering/Design: FY 2023

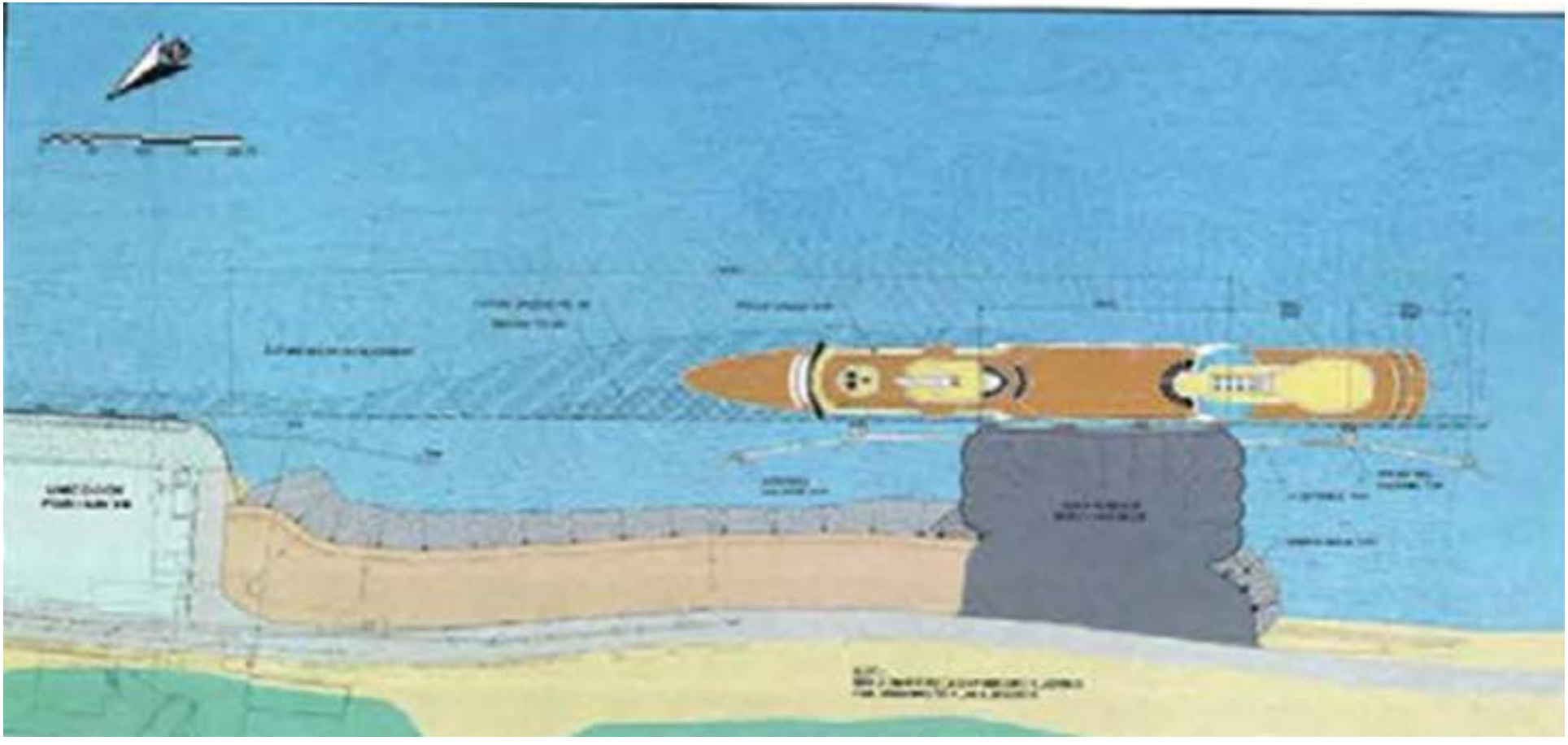
Purchase/Construction: FY 2025



REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund							
1% Sales Tax							
Grant							
Proprietary Fund	390,000			910,000		17,290,000	18,590,000
TOTALS $	390,000			910,000		17,290,000	18,590,000
Requested Funds:							

Cruise Ship Terminal Design (PH20A)

- Concept design discussions underway
- PND consulted for additional input
- Ports is considering impact of estimated 30 cruise ships



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)

- Scope of work being developed with input from Ports

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)

Rescue Vessel Engine Upgrade (PH20C)

Project Description: Rescue Vessel Engine Upgrade

Project Need: The Tide Breaker runs on two Yamaha F250 . Both of these engines are original to the vessel. The Engines have had on going issues with water and seals that can no longer be replaced. We have sent out one of the engines for a complete rebuild. This puts the vessel out of service. Yamaha is phasing out the F250 model that is on the Tide Breaker. We would purchase two Yahama LF300's and maintain the F250 as back up for the Tide Breaker so that engine maintenance does not take the vessel out of commission. The LF300 could eventually serve as back up engines for a new response vessel. The costs includes shipping.

Development Plan & Status (Include Permit and Utility Requirements):

Cost & Financing Data: Anticipated cost is $50,500 with an additional mandatory 30% contingency totaling $65,650.

FY20-24 CMMP

Rescue Vessel Engine Upgrade | 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	-
Construction Services	-
Machinery & Equipment	50,500
Subtotal	**50,500**
Contingency (set at 30%)	15,150
TOTAL	**65,650**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**65,650**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
1% Sales Tax							-
Grant							-
Proprietary Fund		65,650					65,650
TOTALS $	-	65,650	-	-	-	-	65,650
Requested Funds:							

Rescue Vessel Engine Upgrade (PH20C)

- Engine specs were developed
- Price quotes obtained from 3 vendors
- Engines and spare props ordered and installation completed 10-5-20

Rescue Vessel Engine Upgrade (PH20C)

MUNIS PROJECT PH20C - RESCUE VESSEL ENGINE UPGRADE						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ -	$ -	$ -	$ -	$ -	$ -
Other Professional	$ -	$ -	$ -	$ -	$ -	$ -
Telephone / Fax / TV	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 15,150	$ -	$ -	$ 15,150	$ -	$ 15,150
Machinery & Equipment	$ 50,500	$ 41,619	$ -	$ 8,881	$ -	$ 8,881
	$ 65,650	$ 41,619	$ -	$ 24,031	$ -	$ 24,031

Rescue Vessel Engine Upgrade (PH20C)

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. See attachment for general area of dredge location. The City will work with the Corps of Engineers to help fund, design, construct, and maintain this project. The first step in the process is conducting the biological assessments, understand the impact of dredging to beachfronts inside of the harbor, and working on application with the Corps of Engineers to partner for the dredging. This dredging project will allow deeper draft vessels to enter into Dutch Harbor including tankers, container ships and breakbulk vessels. This project will also reduce delayed arrival and departure of current vessels entering into to Dutch Harbor due to storm surge and swell in the channel. The current estimate to be removed is 23,400 CY.

PROJECT NEED: Due to a bar that crosses the entrance channel vessels entering the port are limited by their draft rather than their need for services the community can provide. Numerous vessels passing the community cannot enter our port. Depending upon sea conditions the depth under keel for vessels currently utilizing the port can be as little as one meter according to the Alaska Marine Pilots. In storm conditions especially any northerly wind the sea height can make this situation worse by causing vessels to pitch resulting in contact with the sea floor where the bar is located. This represents both a safety concern as well as an economic constraint upon the community. Dredging the entrance channel to a sufficient depth and width would alleviate this problem.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS): This project has been included on the Senate Bill WRDA. The City is working through the Cost Benefit Analysis of the project. This is necessary to show the Corps that this project has benefit to the nation and worthy of the Corps of Engineers time and expenses. We continue to move forward with understanding some of the other key pieces of the project that will keep it moving forward efficiently. Some of the pieces will be the biological assessment and impacts of dredging and any impacts dredging may have on the inner harbor. The overall cost is to be evaluated. The City intends on working with the Corps of Engineers to accomplish this project. The immediate funding request is for feasibility and biological information required for the Corps of Engineers applications. We will also need to understand if the change in the contour of the channel entrance as any impact inside the harbor including beachfront.

FY21-25 CMMP

ENTRANCE CHANNEL DREDGING | PORTS

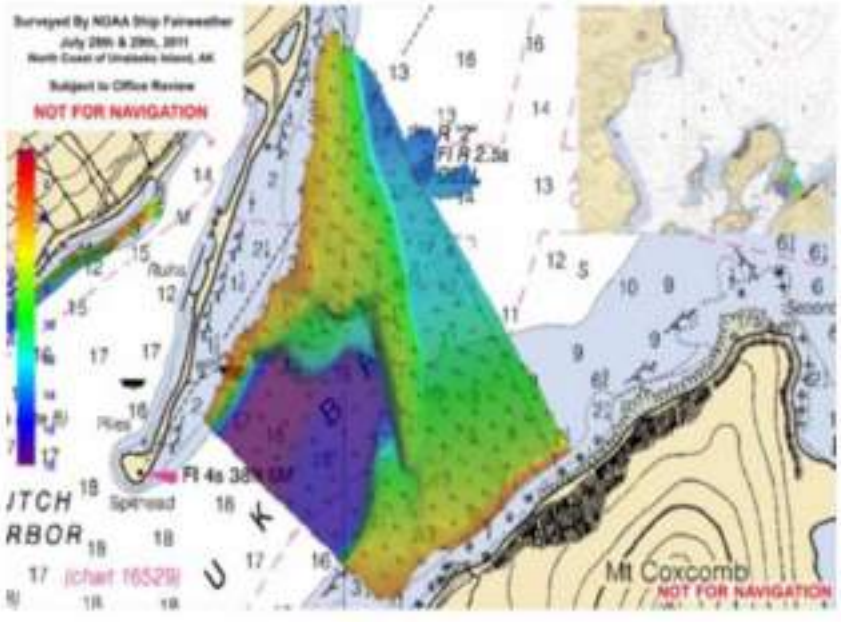
PH201 | CAPITAL PROJECT

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: FY 2019

Engineering/Design: FY 2020

Purchase/Construction: FY 2022



COST & FINANCING DATA:

Cost Assumptions	
Other Professional Services	1,500,000
Engineering, Design, Construction Admin	1,000,000
Construction Services	34,936,750
Machinery & Equipment	
Subtotal	37,436,750
Contingency (0%)	0
Total Funding Request	37,436,750

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund	2,500,000		8,734,000				11,234,000
1% Sales Tax							
Grant			26,202,750				26,202,750
Proprietary Fund							
TOTALS $	2,500,000		34,936,750				37,436,750
Requested Funds:							

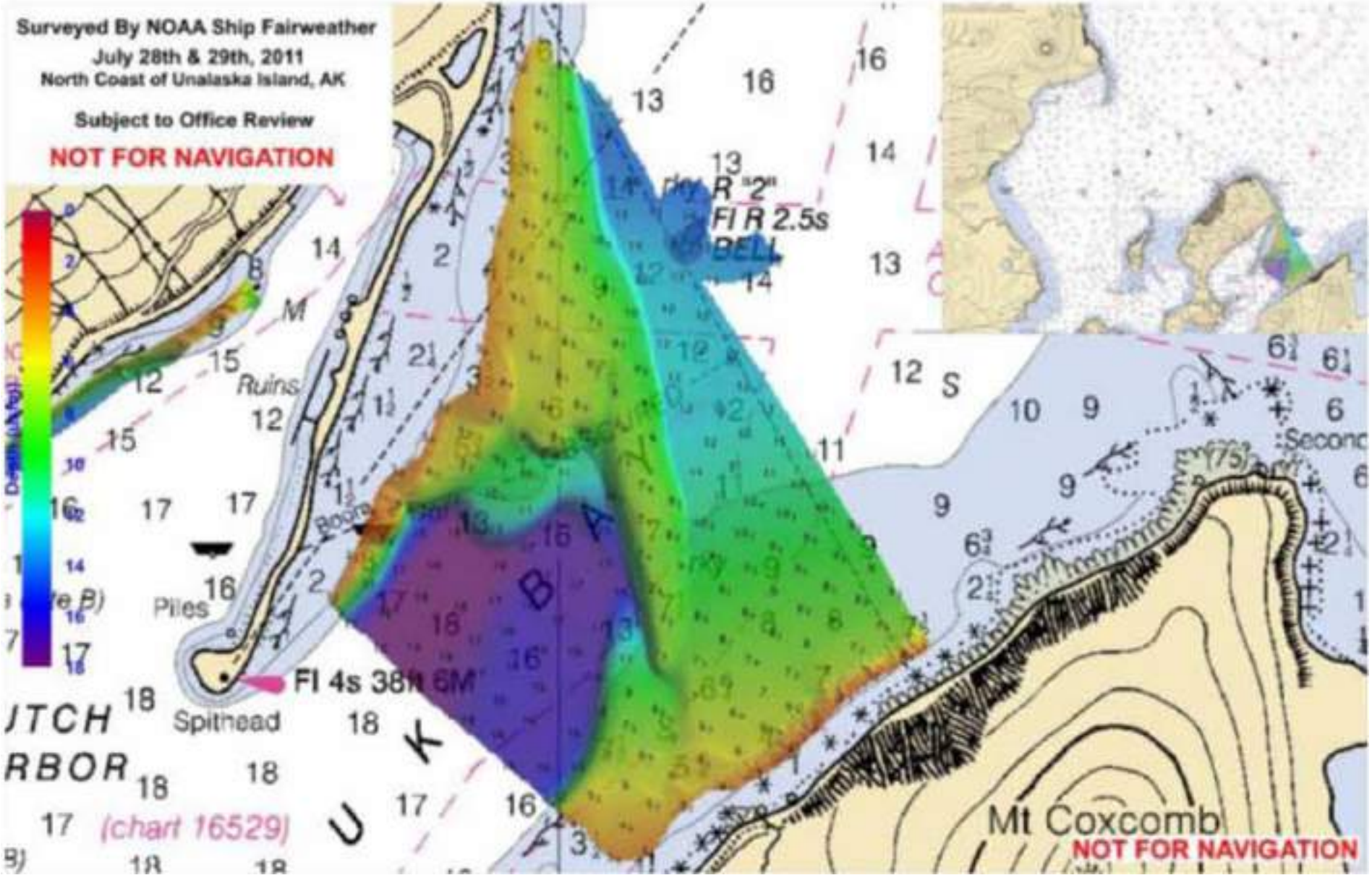
Entrance Channel Dredging (PH201)

- 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 is planning on presenting that report to the COU and the public
- 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	$ 1,000,000	$ -	$ -	$ 1,000,000	$ -	$ 1,000,000
Other Professional	$ 1,091,212	$ 1,029,385	$ -	$ 61,827	$ -	$ 61,827
Construction Services	$ 408,538	$ 25,175	$ -	$ 383,363	$ -	$ 383,363
Telephone / Fax / TV	$ 250	$ -	$ -	$ 250	$ -	$ 250
	$ 2,500,000	$ 1,054,560	$ -	$ 1,445,440	$ -	$ 1,445,440

Entrance Channel Dredging (PH201)



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 17.This project is proposed to complement other pending capital projects in the Port.

With the dredging of the entrance channel larger vessels will be able to enter into Dutch Harbor. 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 Dutch Harbor. We are proposing that in concert with the Dredging at the UMC we also dredge in front of the LCD. The LCD is scheduled to handle some of the regular customers using the Unalaska Marine Center. These customers will be displaced during construction of Positions 3 and 4. 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 draw 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 (INCLUDE PERMIT AND UTILITY REQUIREMENTS): This dredging project is in support of both the 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.

COST & FINANCING DATA:

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

FY21-25 CMMP

LCD & UMC DREDGING | PORTS

PH602 | CAPITAL PROJECT

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: FY 2019

Engineering/Design: FY 2023

Purchase/Construction: FY 2023

LIGHT CARGO DOCK, BARGE, TRAMPER

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

REVENUE SOURCE	**APPROPRIATED FUNDS**	**FISCAL YEAR FUNDING REQUESTS**					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund							
1% Sales Tax							
Grant							
Proprietary Fund	109,650			2,544,495			2,654,145
TOTALS $	109,650			2,544,495			2,654,145
Requested Funds:							

LCD and UMC Dredging (PH602)

- 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**
Other Professional	$ 109,650	$ -	$ -	$ 109,650	$ -	$ 109,650
	$ 109,650	$ -	$ -	$ 109,650	$ -	$ 109,650

LCD and UMC Dredging (PH602)

Typical dredging operation

Robert Storrs Harbor A & B Floats (PH905)

FY21-25 CMMP

ROBERT STORRS SMALL BOAT HARBOR IMPROVEMENTS (A & B FLOATS)| PORTS

PH905 | CAPITAL PROJECT

PROJECT DESCRIPTION: This project is an additional phase to the Robert Storrs Float improvement project. It will remove the existing A and B Floats at the Harbor and reconfigure the Harbor to accommodate the new float system ADA gangway and create uplands for parking and a public restroom. It will also include a fire suppression system, electric and year-round water supply to Harbor 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, a reconfiguration of A and B Floats will at minimum create 30 additional slips plus linear tie options to accommodate part of the 37 vessel waiting list. Reconfiguration will also allow for development of the uplands for a certain amount of required parking and a public restroom. Because the current floats were relocated, they were arranged in the harbor based on the materials at hand and not with consideration to the best use of the basin. In order to accommodate the vessel demand at the Robert Storrs Harbor, reconfiguration 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 (INCLUDE PERMIT AND UTILITY REQUIREMENTS): 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.

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: FY 2019

Engineering/Design: FY 2020

Purchase/Construction: FY 2022

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 & FINANCING DATA:

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

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund							
1% Sales Tax							
Grant			3,250,000				3,250,000
Proprietary Fund	650,000		6,045,000				6,695,000
TOTALS $	650,000		9,295,000				9,945,000
Requested Funds:							

Robert Storrs Harbor A & B Floats (PH905)

- 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 FY21
- 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
- Pacesetter Way R/W was surveyed by LCG Lantech
- Ports is researching pre-made float assembly options

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	$ 630,500	$ -	$ 22,360	$ 608,140	$ -	$ 608,140
Survey Services	$ 1,500	$ 1,423	$ -	$ 77	$ -	$ 77
Telephone / Fax / TV	$ -	$ -	$ -	$ -	$ -	$ -
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 18,000	$ -	$ -	$ 18,000	$ -	$ 18,000
	$ 650,000	$ 1,423	$ 22,360	$ 626,216	$ -	$ 626,216

Robert Storrs Harbor A & B Floats (PH905)

Airport Terminal Roof (AP18A)

FY19-23 CMMP

AIRPORT TERMINAL ROOF REPLACEMENT | AIRPORT

PROJECT DESCRIPTION: The Unalaska Airport Terminal Building has a one level roof with a raised clerestory, which is in need of replacement with a gable roof.

PROJECT NEED: The building is an approximately 16,200 SF facility with an Inverted Roof Membrane Assembly (IRMA) that slopes to internal roof drains. The design relies on insulation that is placed on top of a waterproof membrane which covers the structural deck. Concrete pavers (ballast) placed over the entire roof hold down the insulation. The pavers deteriorate rapidly compared to the membrane and debris and organics accumulate in joints preventing water access to roof drains. Inspection of the membrane is complicated due to the difficulty in removing the pavers and insulation. Chronic leaks have been reported at isolated areas during periods of high wind and rain. Two permeant under ceiling water catchment systems consisting of plastic, drain pan, hose, and 5 gallon buckets merely contain the leaks inside the building. Numerous attempts have been made over the years to repair the leaks which have all achieved limited success. An architectural/engineering firm was hired in 2008 to design a repair which was then publicly bid and the repairs were made. This failed to preventing roof leaks.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS): A new peaked gable roof with adequate pitch is in the concept stage.

COST & FINANCING DATA: Funding for an architectural/engineering firm to perform an on-site inspection, evaluation, and produce plans, specifications, and bid package for a peaked gable roof design was publicly solicited with 5 proposals received on 1-31-18. The budgetary estimate for the design services is estimated to be $140,000.

Cost Assumptions

Engineering Services		10,000
Other Professional Services		130,000
Machinery and Equipment		0
Construction Services		TBD
	Subtotal	140,000
Contingency 30% of Subtotal		Included
	Total	140,000
Funds Appropriated in FY18		$ (140,000)
	Total FY19 Request $	**0**

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: FY 2018

Engineering/Design: FY 2018-2019

Purchase/Construction: FY 2020

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY19	FY20	FY21	FY22	FY23	Total
General Fund							
1% Sales Tax							
Grant							
Proprietary Fund (Airport)	140,000		TBD				TBD
TOTALS $	140,000		TBD				TBD

Requested Funds: Engineering, Construction, Inspection, Contract Administration

Airport Terminal Roof (AP18A)

- The Unalaska Airport Terminal Building has a flat Inverted Roof Membrane Assembly (IRMA) with a raised clerestory with a history of leaking
- The IRMA was completely replaced in 2009. Temporary sealing of panel joints on the clerestory finally stopped the leakage in 2017
- ECI Architecture was awarded the design contract after an RFQ process and conducted a site visit and an invasive roof and clerestory study in August 2018 in conjunction with DPW Facilities Maintenance
- The results of that study may lead to design in 2020 or a recommendation to wait for the full exterior remodel that will be needed in the next 10-15 years
- ECI Architecture prepared options and recommendations with costs that will be used to update the construction budget through the CMMP process in the following years
- ECI's recommendations show that the building will require a $9 million dollar renovation in about 10 years
- No additional funding requested for this project
- This project will be closed out

Airport Terminal Roof (AP18A)

MUNIS PROJECT AP18A - AIRPORT TERMINAL ROOF REPLACEMENT						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 40,000	$ 10,468	$ -	$ 29,532	$ -	$ 29,532
Construction Services	$ 99,450	$ -	$ -	$ 99,450	$ -	$ 99,450
Telephone / Fax / TV	$ 200	$ 40	$ -	$ 160	$ -	$ 160
Advertising	$ 350	$ -	$ -	$ 350	$ -	$ 350
	$ 140,000	$ 10,508	$ -	$ 129,492	$ -	$ 129,492

Airport Terminal Roof (AP18A)

Lear Road Duplexes Kitchen / Bathroom Reno (EH18A)

PROJECT DESCRIPTION: This project consists of the full renovation of both kitchens in units 69 & 73 and 81 & 85 (4 kitchens and 6 bathrooms total). The work will replace all cabinets, countertops, and flooring in both units of both duplexes, and will also include some electrical, plumbing, fixtures, and parts as necessary.

PROJECT NEED: This project has been nominated due to the age and condition of the cabinets, countertops, and flooring in both units of both duplexes. The cabinets and countertops in the units are original from 1980, meaning they are 40 years old. Labor and maintenance cost are increasing. Over time, some cabinet doors have been replaced with plywood, and some hinges don't hold well because the screw holes have been stripped. In addition, many drawers in all units do not function properly due to worn out or missing drawer guide parts and finding replacement parts has become quite difficult. The countertops have loose laminate as well as chips and burns, which are difficult to repair and nearly impossible to match. The flooring was replaced in all of the units in 2000; however, these floor coverings now have tears, holes, and stains as a result of fifteen years of use since that installation was completed.

If left in their current condition, employee tenants will have countertops, cabinets, and flooring which will be difficult to operate, keep clean and are potentially hazardous. Drawers and doors that will not open or slide properly could cause injury, cracked countertops can harbor dangerous bacteria, and irregular flooring surfaces are a trip hazard. These current issues will remain and new issues will arise as the units age, requiring maintenance costs to increase.

Through this project, the City will gain serviceable components while reducing maintenance costs. These kitchen renovations will act to retain or more likely increase the property's value for years to come and increase desirability, which can be important for employee recruiting and retention.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS): ECI Architecture prepared final plans in July 2018. Regan Engineering assembled the bid package in October 2018 with bids being let on March 8, 2019 due on April 9, 2019. Industrial Resources, Inc (IRI) was the selected contractor. Project scope was reduced from 4 units to 2 units because IRI's bid exceeded available funding. Work proceeded on units 69 & 73.

COST & FINANCING DATA:

FY21-25 CMMP

LEAR RD DUPLEXES KITCHEN & BATH RENOVATIONS| HOUSING

EH18A |MAJOR MAINTENANCE

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: NA

Engineering/Design: NA

Purchase/Construction: FY 2024

Lear Road Duplexes

Cost Assumptions

Engineering, Design, Const Admin		60,000
Other Professional Services		10,000
Construction Services		426,000
Machinery & Equipment		0
	Subtotal	496,000
Contingency (set at 30%)		148,800
	TOTAL	**644,800**

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY21	FY22	FY23	FY24	FY25	Total
General Fund	400,000				244,800		644,800
1% Sales Tax							
Grant							
Proprietary Fund							
TOTALS $	400,000				244,800		644,800
Requested Funds:							

Lear Road Duplexes Kitchen / Bathroom Reno (EH18A)

- Project consists of the full reno of kitchens and bathrooms in both units (4 kitchens and 6 bathrooms total). This replaces cabinets, appliances, countertops, flooring in both duplexes, and plumbing and fixtures
- ECI Architecture prepared final plans in July 2018.
- Regan Engineering assembled bid package in October 2018
- The work was bid on March 8, 2019 with bids due on April 9, 2019
- Tenant considerations are being accommodated through Housing
- Three bids received with low bid half what the other two bids were
- Low bidder allowed to withdraw because they omitted some work
- Scope reduced to only the two 3 bed units to accommodate budget
- Work awarded to IRI for $235,586
- Cabinets, countertops, and bathroom fixtures are installed
- Work complete on first two units
- Additional funding requested in future year to complete other 2 units

Lear Road Duplexes Kitchen / Bathroom Reno (EH18A)

MUNIS PROJECT EH18A - LEAR ROAD DUPLEX KITCHEN RENOVATIONS						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Salaries and Wages	$ -	$ -	$ -	$ -	$ -	$ -
Health Insurance Benefit	$ -	$ -	$ -	$ -	$ -	$ -
FICA/Medicare Employer Match	$ -	$ -	$ -	$ -	$ -	$ -
PERS Employer Benefit	$ -	$ -	$ -	$ -	$ -	$ -
Unemployment Insurance	$ -	$ -	$ -	$ -	$ -	$ -
Workers Compensation Ins	$ -	$ -	$ -	$ -	$ -	$ -
Other Employee Benefits	$ -	$ -	$ -	$ -	$ -	$ -
Engineering and Architectural	$ 38,550	$ 27,668	$ 11,399	$ (517)	$ -	$ (517)
Solid Waste	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 237,356	$ 233,586	$ -	$ 3,770		$ 3,770
Telephone/FAX/TV	$ 350	$ 347	$ -	$ 3	$ -	$ 3
Contingency	$ 104,000	$ -	$ -	$ 104,000	$ -	$ 104,000
General Supplies	$ -	$ -	$ -	$ -	$ -	$ -
Facility Maintenance	$ 19,744	$ -	$ -	$ 19,744	$ -	$ 19,744
	$ 400,000	$ 261,600	$ 11,399	$ 127,000	$ -	$ 127,000

Lear Road Duplexes Kitchen / Bathroom Reno (EH18A)

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

See page 120

For more information about this project update, contact:

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City of Unalaska, AK 99685
907-581-1260 office
907-359-5056 cell

The End