Capital Projects Update

November 7, 2019

Wind Power Development Project
Hog Island MET Tower
See Page 88

Introduction

This Capital Project Update summarizes 51 presently funded City of Unalaska capital projects with a combined total appropriated budget of $118,769,867.

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).

Each of the 51 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

Key Elements to Monitor and Control During Project Execution:

1. Schedule
2. Budget
3. Change Orders
4. Scope Creep
5. Inspections
6. Substantial Completion
7. Project Acceptance
8. Punch List
9. Final Completion
10. Close-out
    1. As-BuiltsFinal Pay Request
    2. Archiving Plans / Contract Docs
    3. DOL Notification
    4. Grant / Funding Close-out
    5. Lessons Learned

Summary of Open Capital Projects as of 10/31/19

Ref #	Munis ID	Project	Budget	Expensed	Encumbered	Available	Pending Encumbrance	Actual Available	Detail Page
	General Fund								
1	PR19A	Town Park Improvements	$ 340,000	$ 259,337	$ 56,596	$ 24,068	$ -	$ 24,068	8
2	PR19B	Sitka Spruce Park Imprvmts	$ 878,185	$ 42,148	$ 47,048	$ 788,989	$ -	$ 788,989	12
3	PR601	Public Library Imprvmts	$ 5,408,500	$ 422,667	$ 200,885	$ 4,784,948	$ -	$ 4,784,948	16
4	PS18A	Repeater Site & Radio Upgrade	$ 1,000,000	$ -	$ -	$ 1,000,000	$ -	$ 1,000,000	20
5	PS18B	Records Management System	$ 500,000	$ 294,376	$ 182,823	$ 22,801	$ -	$ 22,801	24
6	PS18C	Haystack Security Fence	$ 295,665	$ 293,167	$ 2,497	$ 0	$ -	$ 0	28
7	PS19A	Fire Training Facility	$ 12,000	$ 6,400	$ -	$ 5,600	$ -	$ 5,600	32
8	PS19C	DPS Building Assessment	$ 290,000	$ 63,469	$ 179,505	$ 47,026	$ -	$ 47,026	36
9	PS20A	ALS Manikin	$ 143,000	$ -	$ -	$ 143,000	$ 118,581	$ 24,419	40
10	PS20B	SCBA Replacement (Fire)	$ 348,400	$ -	$ -	$ 348,400	$ 288,349	$ 60,051	44
11	PS20C	Tsunami Sirens Upgrade	$ 261,879	$ -	$ -	$ 261,879	$ -	$ 261,879	48
12	PW004	Ilulaq Lake Drainage	$ 1,078,312	$ 1,006,033	$ 675	$ 71,604	$ -	$ 71,604	52
13	PW19A	Captain's Bay Road & Utilities	$ 2,000,000	$ 722,009	$ 67,646	$ 1,210,344	$ -	$ 1,210,344	56
14	PW19B	Causeway Culver Replacement	$ 799,500	$ 55,548	$ 11,024	$ 732,929	$ -	$ 732,929	60
15	PW20A	Burma Road Chapel Roof Upgrade	$ 10,000	$ -	$ -	$ 10,000	$ -	$ 10,000	64
16	PW20B	Henry Swanson House Improve	$ 119,340	$ 114,500	$ -	$ 4,840	$ -	$ 4,840	68
17	PW203	City Wide Drainage	$ 3,450,000	$ 3,286,838	$ 2,099	$ 161,063	$ -	$ 161,063	72
18	SS601	UCSD Playground	$ 1,326,485	$ 57,206	$ 6,902	$ 1,262,377	$ -	$ 1,262,377	76
	Electric Fund								
19	EL17B	Old Powerhse Battery Replace	$ 763,070	$ 687,960	$ 19,355	$ 55,755	$ -	$ 55,755	80
20	EL18B	Automatic Meter Read	$ 219,362	$ 2,779	$ 116,359	$ 100,224	$ -	$ 100,224	84
21	EL18C	Wind Power Development	$ 420,000	$ 318,722	$ 34,170	$ 67,109	$ -	$ 67,109	88
22	EL19B	Flywheel Energy Storage	$ 650,062	$ 59,272	$ 17,038	$ 573,752	$ -	$ 573,752	92
23	EL20A	Generator Sets Rebuild (FY20)	$ 1,714,056	$ -	$ 1,082,084	$ 631,972	$ -	$ 631,972	96
24	EL20B	4th Waste Heat Recovery Unit	$ 600,600	$ -	$ -	$ 600,600	$ -	$ 600,600	100
25	EL302	Powerhouse Engine 4	$ 8,575,088	$ 8,062,790	$ -	$ 512,298	$ -	$ 512,298	104

Summary of Open Capital Projects as of 10/31/19

Ref #	Munis ID	Project	Budget	Expensed	Encumbered	Available	Pending Encumbrance	Actual Available	Detail Page
	Water Fund								
26	WA17B	Fiber Optic Development	$ 59,127	$ 2,540	$ 3,600	$ 52,987	$ -	$ 52,987	108
27	WA17C	Pyramid Micro Turbines	$ 2,052,284	$ 46,633	$ 200,767	$ 1,804,884	$ -	$ 1,804,884	112
28	WA18A	Generals Hill Water Booster Pump	$ 1,066,000	$ 3,923	$ -	$ 1,062,077	$ -	$ 1,062,077	116
29	WA20A	CT Tank Interior Maint/Painting	$ 100,000	$ -	$ -	$ 100,000	$ -	$ 100,000	120
30	WA20B	SCBA Replacement (Water)	$ 62,400	$ -		$ 62,400	$ 47,476	$ 14,924	124
31	WA304	Water Supply Development Ph II	$ 560,020	$ 512,759	$ 3,819	$ 43,442	$ -	$ 43,442	128
32	WA501	Pyramid Water Storage Tank	$ 625,000	$ 93,662	$ -	$ 531,338	$ -	$ 531,338	132
33	WA504	Water Utility Auto Meter Read	$ 106,052	$ 33,384	$ -	$ 72,668	$ -	$ 72,668	136
	Wastewater Fund								
34	J0519	Wastewater Treatment Plant	$ 31,786,913	$ 30,836,197	$ 242,562	$ 708,154	$ 1,800,000	$ (1,091,846)	140
35	WW17B	Fiber Optic Infrastr Develop	$ 59,127	$ 2,540	$ 3,600	$ 52,987	$ -	$ 52,987	144
	Solid Waste Fund								
36	SW18A	Composting Project	$ 721,500	$ 7,375	$ -	$ 714,125	$ -	$ 714,125	148
37	SW18B	Cells 3&4 Partial Closure	$ 1,346,000	$ 1,136,878	$ 54,461	$ 154,661	$ -	$ 154,661	152
38	SW20A	Solid Waste Scale Upgrade	$ 65,000	$ 27,100	$ 27,100	$ 10,801	$ -	$ 10,801	156
39	SW20B	Re-Insulation of Baler Building	$ 60,000	$ -	$ -	$ 60,000	$ -	$ 60,000	160
	Ports Fund								
40	PH17C	CEM Breakwater Repair	$ 150,000	$ 110,000	$ -	$ 40,000	$ -	$ 40,000	164
41	PH17D	UMC Positions 3&4 Replace	$ 38,889,640	$ 37,162,854	$ 215,100	$ 1,511,686	$ -	$ 1,511,686	168
42	PH19A	Harbor Office Comms Line	$ 152,000	$ 95,899	$ 4,136	$ 51,965	$ -	$ 51,965	172
43	PH19B	UMC Laydown Area	$ 5,400,000	$ 4,317,548	$ 68,400	$ 1,014,052	$ -	$ 1,014,052	176
44	PH20A	UMC Cruise Ship Terminal Design	$ 390,000	$ -	$ -	$ 390,000	$ -	$ 390,000	180
45	PH20B	Emergency Mooring Buoy Maint.	$ 50,000	$ -	$ -	$ 50,000	$ -	$ 50,000	184
46	PH20C	Rescue Vessel Engine Upgrade	$ 65,650	$ -	$ -	$ 65,650	$ -	$ 65,650	188
47	PH201	Entrance Channel Dredging	$ 2,500,000	$ 1,116,387	$ -	$ 1,383,613	$ -	$ 1,383,613	192
48	PH602	LCD & UMC Dredging	$ 109,650	$ -	$ -	$ 109,650	$ -	$ 109,650	196
49	PH905	Robert Storrs Harbor A&B Improve	$ 650,000	$ -	$ 22,360	$ 627,640	$ -	$ 627,640	200
	Airport Fund								
50	AP18A	Airport Terminal Roof	$ 140,000	$ 10,508	$ 22,335	$ 107,157	$ -	$ 107,157	204
	Housing Fund								
51	EH18A	Lear Rd Duplex Kit/Bath Reno	$ 400,000	$ 14,973	$ 256,166	$ 128,861	$ -	$ 128,861	208
		Grand Total	**$118,769,867**						

Contingency Usage as of 10/31/19

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	0.00	202,658.00	0.00%
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%
PS18C	**Haystack Security Fence**	**38,565.00**	**38,565.00**	**0.00**	**100.00%**
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%
PS20B	**SCBA Replacement (Fire)**	**80,400.00**	**21,000.00**	**59,400.00**	**26.12%**
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%
PW20B	**Henry Swanson House Improvements**	**27,540.00**	**22,700.00**	**4,840.00**	**82.43%**
SS601	UCSD Playground	236,881.00	0.00	236,881.00	0.00%
EL17B	Old Powerhouse Battery Replacement	50,000.00	0.00	50,000.00	0.00%
EL20A	Generator Sets Rebuild (FY20)	395,551.00	0.00	395,551.00	0.00%
EL20B	4th Waste Heat Recovery Unit	138,600.00	0.00	138,600.00	0.00%
WA17C	Pyramid WTP Microturbines	153,771.00	0.00	153,771.00	0.00%
WA18A	General's Hill Water Booster Pump	246,000.00	0.00	246,000.00	0.00%
WA20B	SCBA Replacement (Water)	14,400.00	0.00	14,400.00	0.00%
SW18A	Composting Project	166,500.00	0.00	166,500.00	0.00%
SW18B	**Cells 3&4 Partial Closure**	**151,771.00**	**25,000.00**	**126,771.00**	**16.47%**
SW20A	**Solid Waste Scale Upgrade**	**15,000.00**	**4,944.00**	**10,056.00**	**32.96%**
PH17D	**UMC 3&4 Replacement**	**2,512,265.00**	**1,119,200.00**	**1,393,065.00**	**44.55%**
PH19A	Harbor Office Communication Line	35,000.00	0.00	35,000.00	0.00%
PH19B	**UMC Laydown Area**	**1,085,000.00**	**71,585.82**	**1,013,414.18**	**6.60%**
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%

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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 wages
- One supplier has claimed they were never paid in full by Westside Flooring

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	$ -	$ -	$ -
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	$ 56,596	$ 24,068	$ -	$ 24,068

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:

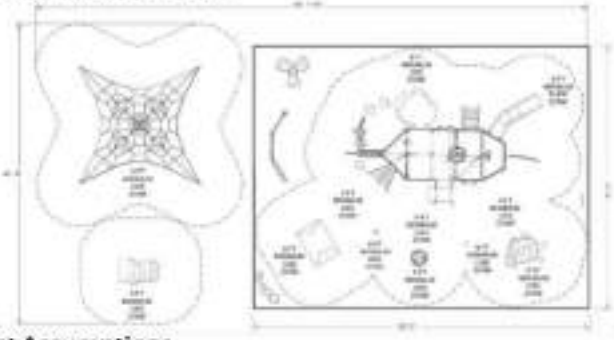
- Improve the quality of the park and the current structures.
- Evaluate the current and future facility in an effort to best accommodate Unalaska residents for the next 20 to 30 years.
- Current playground structures are at the end of their useful life span.

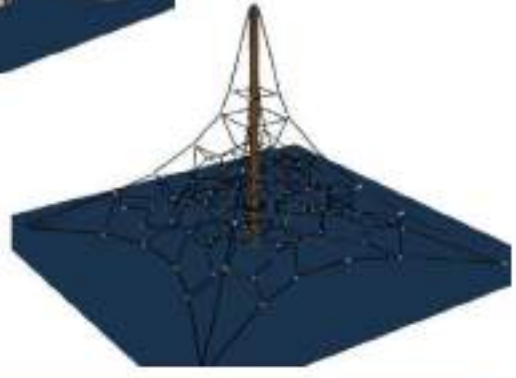
Development Plan & Status (Include Permit and Utility Requirements): After receiving a large amount of public input during FY17 and FY18, PCR staff and the PCR Advisory Board decided the original plans weren't as extensive as the general public preferred. During FY 2019 an analysis of the soil was done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

Sitka Spruce Park Improvements (PR19B)

- Also known as “Pirate Park”, this park design and construction replaces structures dating back to original park and includes picnic tables, play-ground, grill, restrooms, gravel trail, and trees for which it is a National Historic Landmark
- Adjacent lot is a propane storage yard leased from OC, formerly an army public works facility, later operated as Tony’s Service Center
- DPW engaged Travis-Peterson to assess the site and determine ADEC requirements for building a playground there. In October 2018 they took samples of the soil and water below each proposed piece of playground equipment. Residual fuel contamination was discovered but ADEC did not object to installing play equipment as planned because what contamination is there falls below cleanup thresholds
- Playground design began July 2019, bids will be let November 12, 2019, construction beginning in spring 2020
- Designer, Regan Engineering, is also working on the UCSD playground
- SHPO process must be followed due to the NHP status. There are access considerations through adjacent Ounalashka Corporation property that would reduce construction costs. National Park Service approved the development contingent upon the trees remaining undisturbed
- SHPO did not require a permit since the project is not grant funded
- Planning will advance this project by updating the 305-1998-000547-0 original expired access agreement with OC so that construction vehicles can enter through the gate on the Aleutian Electric Lease

Sitka Spruce Park Improvements (PR19B)

MUNIS PROJECT PR19B - SITKA SPRUCE PARK						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Legal	$ 4,750	$ -	$ -	$ 4,750	$ -	$ 4,750
Engineering & Architectural	$ 104,500	$ 42,148	$ 47,048	$ 15,304	$ -	$ 15,304
Other Professional	$ -	$ -	$ -	$ -	$ -	$ -
Samplin / Testing	$ 3,000	$ -	$ -	$ 3,000	$ -	$ 3,000
Survey Services	$ 1,500	$ -	$ -	$ 1,500	$ -	$ 1,500
Construction Services	$ 561,027	$ -	$ -	$ 561,027	$ -	$ 561,027
Telephone / Fax / TV	$ 250	$ -	$ -	$ 250	$ -	$ 250
Advertising	$ 500	$ -	$ -	$ 500	$ -	$ 500
Contingency	$ 202,658	$ -	$ -	$ 202,658	$ -	$ 202,658
	$ 878,185	$ 42,148	$ 47,048	$ 788,989	$ -	$ 788,989

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:

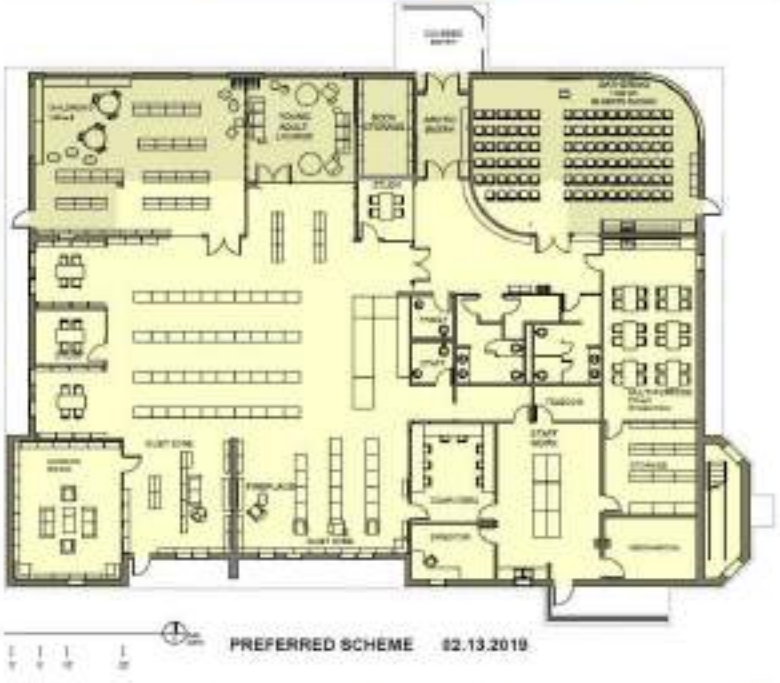
- Space and services for children and teens
- Meeting, study, and program space
- Quiet seating and reading space
- Room for growing library collections

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	

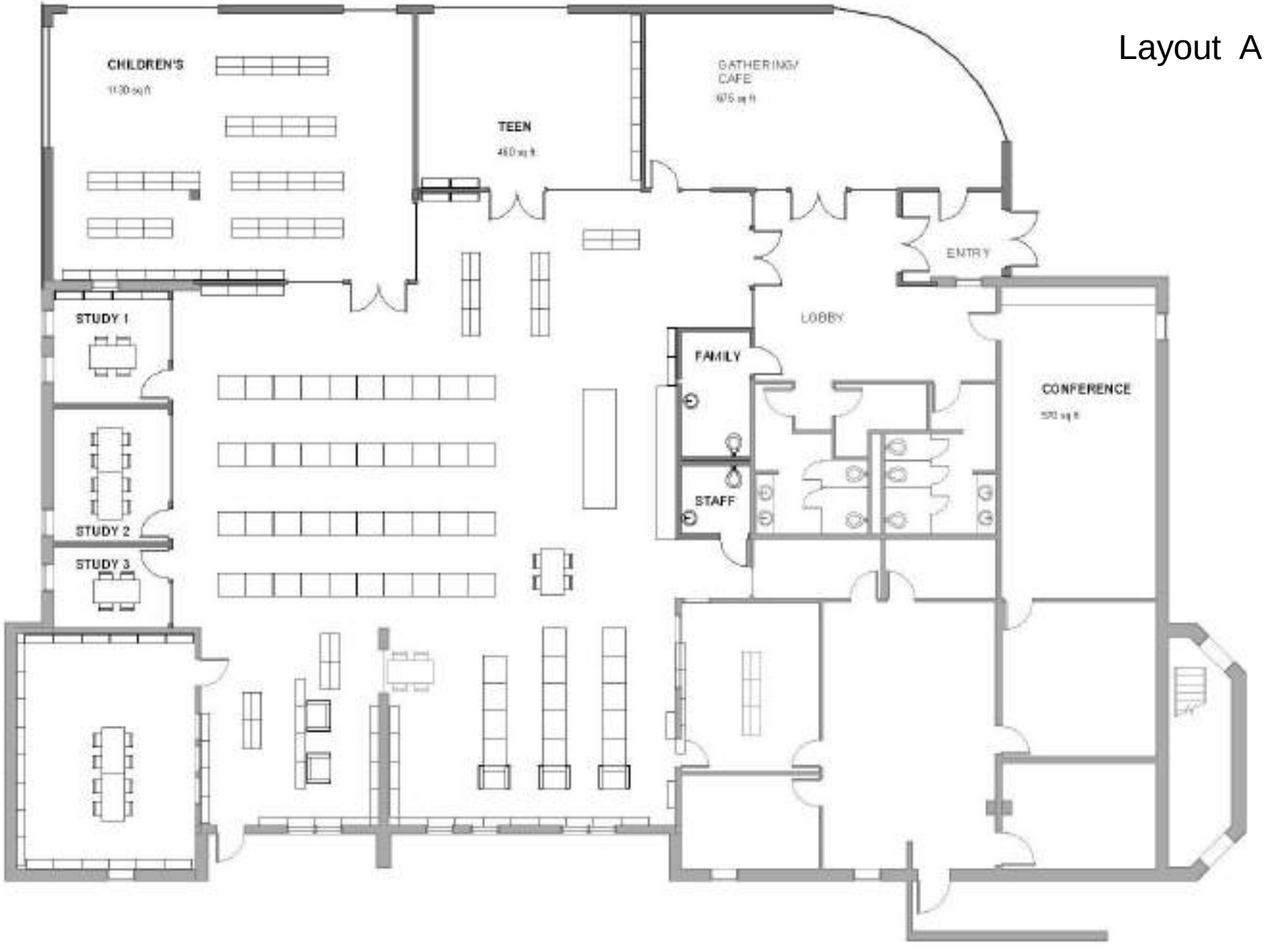
Public Library Improvements (PR601)

- DPW developed and let an RFQ for architectural services on July 10, 2018
- Statements of Qualifications were received on August 21, 2018 from ECI Alaska, Bettisworth North, MRV Architects, Architects Alaska, Alder Architecture and Northwind Architects
- 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
- Final schematic design report completed in June 2019
- 90% design received and posted publicly for bid on Oct 11, 2019
- Bids and qualifications packages are due Nov 20, 2019
- Construction planned for 2020 and grand re-opening in fall 2020
- Contractor selection will be made using a 'Best Value' selection process
- Documents were prepared to a 90% level, a contractor will be selected based on qualifications (30%) and price (70%), then the design will proceed to 100% with contractor input
- Prime Contractor would be selected via RFQ/Price process to allow Contractor to participate as an advisor during the 90% to 100% design process
- It is expected that a contractor will be selected sometime during the week of November 25th or shortly thereafter with award going before Council on December 10th.

Public Library Improvements (PR601)

MUNIS PROJECT PR601 - PUBLIC LIBRARY IMPROVEMENTS						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectura	$ 722,400	$ 420,357	$ 199,725	$ 102,318	$ -	$ 102,318
Other Professional	$ 113,400	$ 1,200	$ -	$ 112,200	$ -	$ 112,200
Survey Services	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 4,000,000	$ -	$ -	$ 4,000,000	$ -	$ 4,000,000
Telephone / Fax / TV	$ 700	$ 273	$ -	$ 427	$ -	$ 427
Advertising	$ 1,163	$ -	$ 1,160	$ 3	$ -	$ 3
Contingency	$ 570,000	$ -	$ -	$ 570,000	$ -	$ 570,000
Business Meals	$ 837	$ 837	$ -	$ -	$ -	$ -
	$ 5,408,500	$ 422,667	$ 200,885	$ 4,784,948	$ -	$ 4,784,948

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
- Location of the new radio enclosure will be difficult due to the steep terrain and numerous obstructions and private leases already in place
- 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 December 2019

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	$ 339,450	$ -	$ -	$ 339,450	$ -	$ 339,450
Telephone / Fax / TV	$ 200	$ -	$ -	$ 200	$ -	$ 200
Advertising	$ 750	$ -	$ -	$ 750	$ -	$ 750
Contingency	$ 230,769	$ -	$ -	$ 230,769	$ -	$ 230,769
Machinery and Equipment	$ 365,231	$ -	$ -	$ 365,231	$ -	$ 365,231
	$ 1,000,000	$ -	$ -	$ 1,000,000	$ -	$ 1,000,000

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)

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.

FY18-22 CMMP

DPS RMS UPGRADE | PUBLIC SAFETY

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)

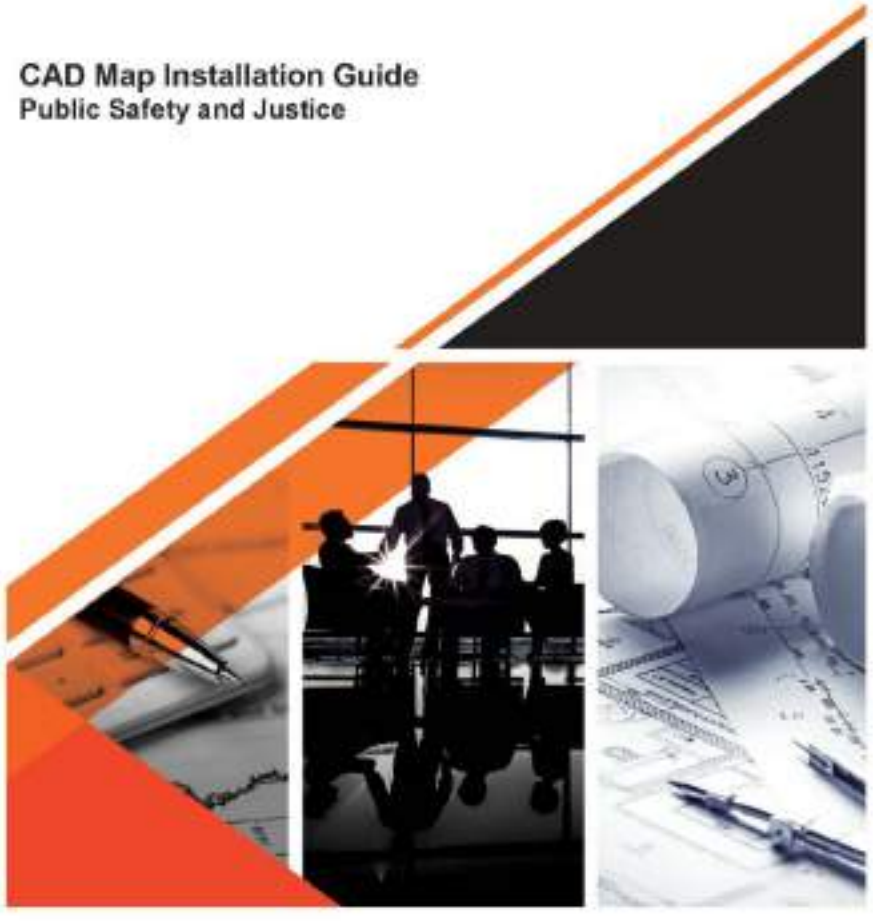
- This project is for replacement of the existing records management system (RMS) and computer aided dispatch (CAD) system at DPS
- The current RMS/CAD, which houses virtually all calls for service for Police, Fire, EMS and Animal Control, is legacy software running on legacy server software
- Current 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 FY20-24 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)

SUPERION



Haystack Security Fence (PS18C)

FY19-23 CMMP

HAYSTACK SECURITY FENCE | DPW

PROJECT DESCRIPTION: Approximately 700' of commercial grade security fencing will be installed around the Unalaska telecommunications facilities on Haystack mountain including 8' high galvanized steel chain link "cyclone" fencing, steel posts embedded in concrete, two sliding gates, barbed wire on the top 2' at a 45 degree angle outward, and one man-gate.

PROJECT NEED: Lack of security fencing has been identified as a vulnerability during annual security drills. Several agencies use this facility for critical communications including the City of Unalaska, United States Coast Guard, and the State of Alaska. Physical security of the facility is required to create a controlled access point, which enables law enforcement to better screen personnel for potential terrorists, acts of vandalism, and theft. This project creates statewide benefits by securing the area with controlled ingress/egress points for anyone using telecommunications via the facility.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS): Concept plans and a budgetary cost estimate have been developed. Detailed plans, specifications, and cost estimate will be finalized in FY19.

COST & FINANCING DATA: Funding derived from grant and General Fund.

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: FY 2017

Engineering/Design: FY 2018

Purchase/Construction: FY 2019

Haystack Security Fence

Cost Assumptions

Engineering, Design, Const Admin		51,000
Other Professional Services (Survey)		2,500
Construction Services		180,000
Machinery & Equipment (Security System)		23,600
	Subtotal	257,100
Contingency		38,565
	TOTAL	295,665
Less Existing Funds (Grant)		(139,000)
Total FY19 Request $		**156,665**

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY19	FY20	FY21	FY22	FY23	Total
General Fund (DPS)		156,665					156,665
1% Sales Tax							
Grant	139,000						139,000
Proprietary Fund							
TOTALS $	139,000	156,665					295,665

Requested Funds: Engineering, Construction, Inspection, Contract Administration

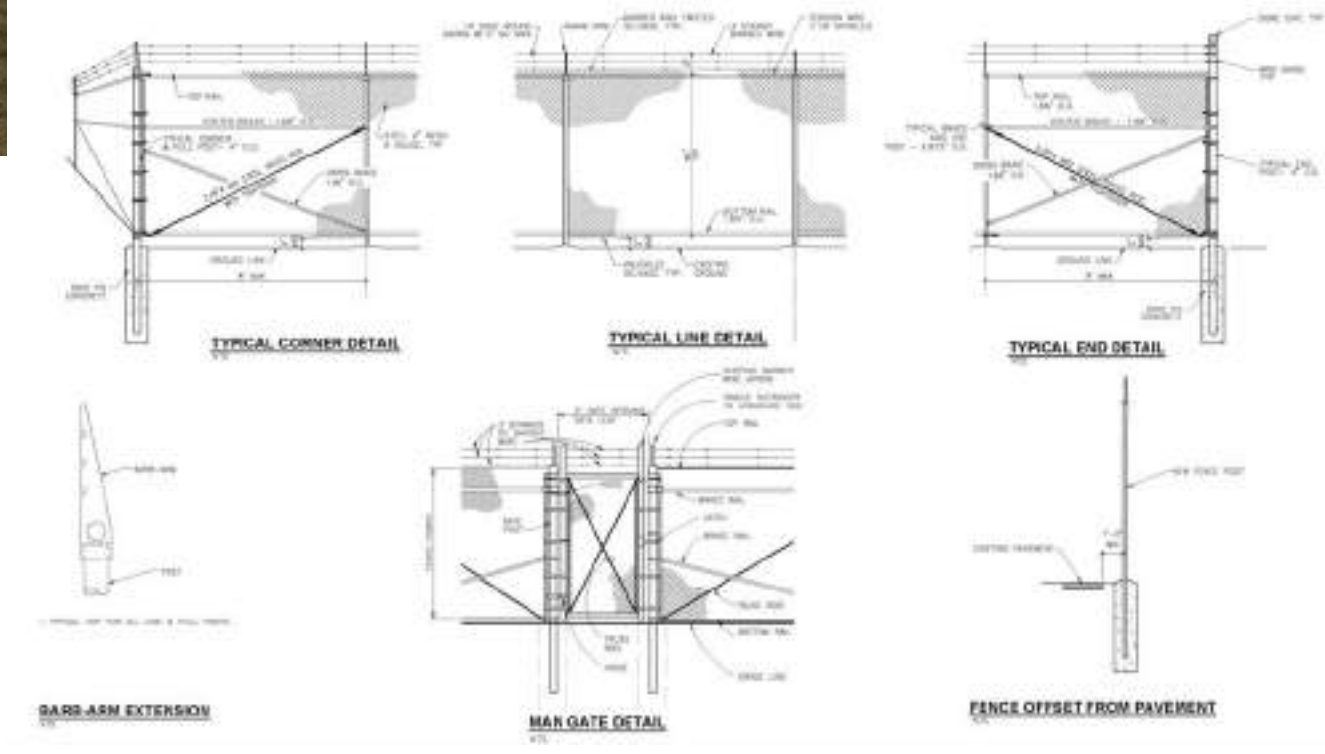
Haystack Security Fence (PS18C)

- Approximately 850’ of 8’ tall security fencing was installed around the telecommunications facilities on Haystack Hill
- Environmental and Historic Preservation (EHP) screening form submitted to grantor July 2018
- The EHP was reviewed by the State who required that the fence not go over WW2 remnants and that an archeologist be present during ground disturbing activities
- Regan Engineering has design contract and developed bid ready plans
- DPW made a written notification to TelAlaska that the security fence will cross over their lease lot which TelAlaska evaluated and approved
- DPW obtained grantor permission to bid using the Project Methodology Report (PMR) Form prior to bid
- Following bid, the PMR form was be updated and approved by the grantor prior to award
- Bids let February 28th with Pre-Bid conference held March 26, 2019, and bids received April 9, 2019 construction Summer 2019
- Two bids received with NAC being low at $262,656
- NAC awarded the work, Notice to Proceed issued
- NAC and subcontractor NW Barriers constructed the fence; all work is complete
- Final payment has been made
- Final grant report completed and submitted on November 6, 2019
- Gates are locked with combination lock

Haystack Security Fence (PS18C)

MUNIS PROJECT PS18C - HAYSTACK SECURITY FENCING						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Arch	$ 33,000	$ 30,503	$ 2,497	$ -	$ -	$ -
Other Professional	$ -	$ -	$ -	$ -	$ -	$ -
Const Services	$ 123,656	$ 123,656	$ -	$ -	$ -	$ -
Telephone / Fax / TV	$ 9	$ 9	$ -	$ -	$ -	$ -
Contingency	$ -	$ -	$ -	$ -	$ -	$ -
Machinery & Equip	$ -	$ -	$ -	$ -	$ -	$ -
Engineering and Arch	$ -	$ -	$ -	$ -	$ -	$ -
Survey Services	$ -	$ -	$ -	$ -	$ -	$ -
Const Services - Grant	$ 139,000	$ 139,000	$ -	$ -	$ -	$ -
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
	$ 295,665	$ 293,167	$ 2,497	$ -	$ -	$ -

Haystack Security Fence (PS18C)



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.

FY20-24 CMMP

Training Center | Fire Department

Estimated Project & Purchase Timeline
Pre Design: FY 2019
Engineering/Design: FY 2022
Purchase/Construction: FY 2023

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 in the valley next to the Water Department Maintenance Shop.

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. Cost quote for facility in 2018 dollars is $255,000 plus $85,000 shipping.

Cost Assumptions	
Engineering, Design, Const Admin	694,418
Other Professional Services	1,746,654
Construction Services	526,418
Machinery & Equipment	-
Subtotal	**2,967,490**
Contingency (set at 30%)	890,247
TOTAL	**3,857,737**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**3,857,737**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)	12,000			2,192,078	1,653,660		3,857,738
1% Sales Tax							-
Grant							-
Proprietary Fund							-
TOTALS $	12,000	-	-	2,192,078	1,653,660	-	3,857,738
Requested Funds:							

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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.

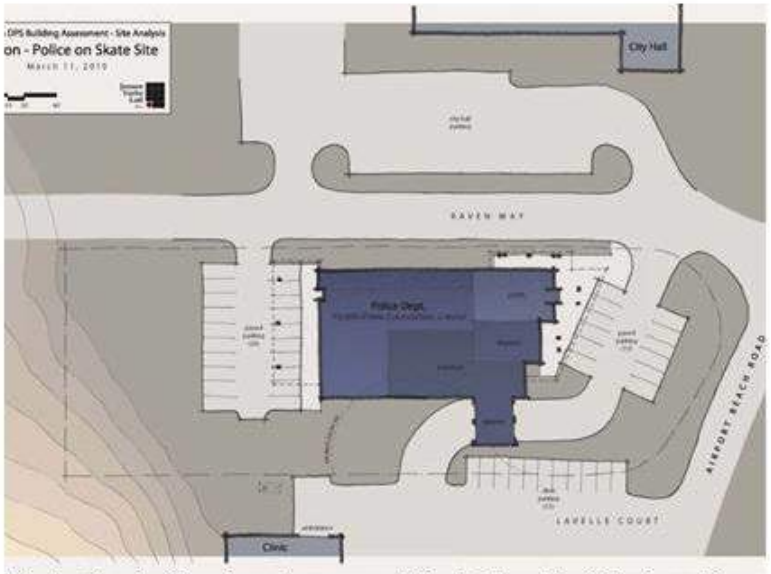
Development Plan & Status (Include Permit and Utility Requirements): FY20 includes funding for a Site Survey and Geotechnical Investigation.

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
- Architectural design firm, Jensen-Yorba-Lott (JYL), was selected to perform the pre-development. JYL architects and mechanical and electrical specialties met with DPS staff on-island in January and returned on March 11th to conduct a public meeting and presented the results to City Council on March 12th
- 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 Geotech Report is being prepared

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	$ 62,946	$ 179,505	$ 1,053	$ -	$ 1,053
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	$ 63,469	$ 179,505	$ 47,026	$ -	$ 47,026

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 sent to City Manager for review / approval

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	$ -	$ -	$ 110,000	$ 118,581	$ (8,581)
	$ 143,000	$ -	$ -	$ 143,000	$ 118,581	$ 24,419

ALS Manikins - Fire (PS20A)

SCBA Replacement - Fire (PS20B)

Project Description: This project will replace the aging and dated SCBA units currently in use. This essential piece of firefighting equipment is regulated under the National Fire Protection Agency. This Agency meets to update the requirements for SCBAs every five years and recommends replacing units every three regulatory cycles. The water Department must also maintain EPA and OSHA compliance with this equipment because of work with Chlorine gas.

Project Need: In Calendar year 2018 NFPA released new guidelines pertaining to SCBA features and functionality. This is the third regulatory update since the last purchase of SCBAs. By following these guidelines put forward by NFPA Unalaska fire department will continue to adhere to industry standards and better serve the community of Unalaska. Adhering to industry standards keeps firefighters and citizens safer in hazardous situations. Being the only emergency response department on the island magnifies the importance of keeping properly functioning equipment because it is not possible to know when a large incident may occur or when help may arrive.
When Water purchased their Survivair SCBA's in 2005/2006 Unalaska Fire Department (UFD) staff provided the annual SCBA flow tests and maintenance for our SCBA's as well as their own since they were certified Survivair SCBA technicians. In subsequent years the UFD upgraded by purchasing SCBA's from a different manufacturer. Staff turnover in the Unalaska Fire Department has resulted in not having a certified Survivair technician here since at least 2012. Subsequently the Water SCBA's must be sent to the Lower 48 as there are only two locations where the maintenance can be performed. Having SCBA's from the same manufacturer as the Unalaska Fire Department will save labor, shipping and repair costs. Currently Fire and Water SCBA's are incompatible. As the individuals designated to respond to issues concerning Chlorine Gas at our water treatment facilities, it is important to obtain SCBA's are compatible with UFD's units.

Development Plan & Status (Include Permit and Utility Requirements): Manufactures have began releasing the most updated SCBA units to end users. By the time of purchase for Unalaska all new packs will be in compliance with 2018 NFPA standards.

Cost & Financing Data: In the past there has been grant opportunities for the purchase of SCBAs. With the current fiscal climate at the state level this source can not be counted on. The Fire Department is also part of a Group Purchasing Organization (GPO) that offers a discount for these units. Purchasing through this GPO will save the city 25% per unit.

FY20-24 CMMP

SCBA Replacement| FIRE DEPARTMENT & WATER

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	316,000
Subtotal	**316,000**
Contingency (set at 30%)	94,800
TOTAL	**410,800**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**410,800**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)		348,400					348,400
1% Sales Tax							-
Grant							-
Proprietary Fund		62,400					62,400
TOTALS $	-	410,800	-	-	-	-	410,800
Requested Funds:							

SCBA Replacement - Fire (PS20B)

- DPW received procurement request package from DPS
- Procurement is being done thru firm who won the government contract via pre-established competitive bidding process
- Procurement package given to DPW Supply for purchase
- This purchase is combined with DPU Water Division SCBA purchase (slide 125)
- Fire will receive 30 SCBA's and Water will receive 6 SCBA's

SCBA Replacement - Fire (PS20B)

MUNIS PROJECT PS20B - SCBA REPLACEMENT - FIRE						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Contingency	$ 59,400	$ -	$ -	$ 59,400	$ -	$ 59,400
Machinery & Equipment	$ 289,000	$ -	$ -	$ 289,000	$ 288,349	$ 651
	$ 348,400	$ -	$ -	$ 348,400	$ 288,349	$ 60,051

SCBA Replacement - Fire (PS20B)

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)

- Specs and upgrade design being researched
- Existing tsunami sirens are approximately 23 years old
- 2 of 7 sirens do not work
- DPS, DPW, DPU, and City Manager met on 10-2-19 to discuss path forward
- Regan Engineering has been working with Sentry Siren, Inc to develop scope of project which may include additional locations and/or moving sirens
- Initial siren sound analysis indicates coverage voids in UMC dock area, Dutch Harbor Post Office/Alaska Ship Supply area, Haystack, and Upper Broadway/Steward Road areas
- Written SOP will be developed regarding operation, testing, and maintenance

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	$ -	$ -	$ 14,500	$ -	$ 14,500
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	$ -	$ -	$ 261,879	$ -	$ 261,879

Tsunami Sirens Upgrade (PS20C)

Ilulaq Lake (PW004)

CITY OF UNALASKA
FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM
FY 2011- FY 2015
NEW PROJECT NOMINATION APPLICATION

☐ Feasibility ☐ Design ☒ Construction

Prepared by: Jim Dickson, Roads Crew Chief Date: December 18, 2009
Department: Public Works

Project Name: Ilulaq Lake Drainage Project

This project will begin in Fiscal Year: 2011

1. **Location Legal Description / Ownership is:**

   Ownership varies along Delta Way from Ilulaq Lake to Unalaska Bay.

   Lot: _____ Block: _____ Sub: Ptarmigan Flats

   Tract: _____ USS: _____ Unsubdivided: _____

   Does the City own the property? No. Portions of the project where easements must be obtained are owned by the Qunalashka Corporation and/or its subsidiaries.

2. **Project Description:** This project will correct drainage problems at Ilulaq Lake from flooding at Horizon Lines upper yard, and running down East Point Rd. and flooding the Ptarmigan Flats business community of Horizon, Samson, Delta Western Fuel, Lundy Electric, Pacific Stevedoring, and Highliner Foods. The project will install 1366 Ft. of drain culverts, 9 Manholes, 7 catch basins, and 1 oil/water separator. Work will be performed by a General Contractor.

3. **Project Purpose and Need:** This project is needed in order to avert disastrous flooding at the van storage yards adjacent East Point Rd. The outlet pipe at Ilulaq Lake is not functioning properly. Preliminary investigation by the Roads Crew has found the pipe is completely blocked between the Lake and Delta western fuel rack. The existing pipe was installed during World War II and must be replaced.

4. **Development Plan and Status:** On-site inspection revealed little to no water movement into the World War II Storm Sewer Inlet at the lake. This is draining all the lake water and storm drains from the Ilulaq Lake to the bay on East Point Rd. No other discharge pipes were discovered. No alternate discharges have been found. Design is in progress with completion anticipated in March 2010. Construction in scheduled for summer of 2010.

Revised Form 3/2008

Ilulaq Lake (PW004)

Background:

- This is an overflow pipe and will not drain the lake.
- An easement MOU with OC/Matson has been fully executed
- This work was bid with the City Wide Multi-Location Drainage project

Remaining Work:

- This work is complete

Schedule:

- May 2, 2017 bids received/opened with Northern Alaska Contractors (NAC) sole bidder
- Notice to Proceed issued July 5, 2017
- NAC requested moving work to Summer 2018 which was granted
- NAC completed the East Point Road section in September 2018
- NAC completed the Matson Yard portion (East Point Road to Ilulaq Lake) in November
- PND performed a site survey and is in the process of re-platting the Matson yard to add a utility easement for the newly installed storm drain.
- Draft plat sent to Planning for review
- NAC has completed all construction and submitted their final environmental report
- Final payment to NAC has been made
- This project will be closed out

Ilulaq Lake (PW004)

MUNIS PROJECT PW004 - ILULAQ LAKE DRAINAGE						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Legal	$ 250	$ -	$ -	$ 250	$ -	$ 250
Engineering and Architectural	$ 176,312	$ 155,298	$ 675	$ 20,338	$ -	$ 20,338
Sampling / Testing	$ 10,000	$ 7,460	$ -	$ 2,540	$ -	$ 2,540
Survey Services	$ 14,000	$ 13,980	$ -	$ 20	$ -	$ 20
Construction Services	$ 859,000	$ 821,757	$ -	$ 37,243	$ -	$ 37,243
Telephone / Fax / TV	$ 250	$ 13	$ -	$ 237	$ -	$ 237
Advertising	$ 500	$ 252	$ -	$ 248	$ -	$ 248
Permit Fees	$ 11,000	$ 485	$ -	$ 10,515	$ -	$ 10,515
Land	$ 7,000	$ 6,787	$ -	$ 213	$ -	$ 213
	$ 1,078,312	$ 1,006,033	$ 675	$ 71,604	$ -	$ 71,604

Ilulaq Lake (PW004)

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, 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. In September 2011 residents and industry representatives discussed the hazards at public meetings about the Road Improvement Master Plan. Although the road's high crown is needed for adequate drainage, it also creates a safety hazard for the large trucks and school buses traveling the road. The public expressed strong support for improvements to Captains 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): Preliminary cost estimates have been provided by HDL Engineering and Regan Engineering based on recent materials and construction costs in Unalaska. These are still very rough estimates that will be refined as the project commencement approaches. Costs are split between the General Fund for the paving and drainage portion and the three utility funds based on the costs for each of those portions. Predesign and Permitting started in FY19 helped define scope, the road realignment, utility needs, and permitting requirements. An aggressive schedule has full design, permitting and ROW realignments concluded during FY20-FY21 with construction spread over 2.5 seasons from FY22-FY24.

Cost & Financing Data: HDL Engineering provided a preliminary cost estimate to City Council in February 2019. City Council supported proceeding with full design using the general fund. In the mean time, the City Manager and DPW are investigating funding sources for full construction, such as the STIP and BUILD grant programs.

FY20-24 CMMP

Captains Bay Rd & Utility Improvements | DPW / DPU

Estimated Project & Purchase Timeline
Pre Design: FY 2019
Engineering/Design: FY 2020
Purchase/Construction: FY 2022 & 2024

Captains Bay Road and Utilities

Cost Assumptions	
Engineering, Design, Const Admin	4,238,461
Other Professional Services	300,000
Construction Services	40,846,154
Machinery & Equipment	-
Subtotal	**45,384,615**
Contingency (set at 30%)	13,615,385
TOTAL	**59,000,000**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**59,000,000**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)	1,250,000	750,000		22,000,000		25,000,000	49,000,000
1% Sales Tax							-
Grant							-
Proprietary Fund				10,000,000			10,000,000
TOTALS $	1,250,000	750,000	-	32,000,000	-	25,000,000	59,000,000
Requested Funds:						96	

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 has begun and includes scoping, cost estimation, surveying a civil base map, geotechnical and 30% level plans. Surveying and geotechnical work occurred during the week of July 2018
- HDL prepared a proposed roadway alignment for Council consideration in December which was presented to council on February 12, 2019
- HDL conducted additional topological and bathymetric survey
- HDL has refined the road alignment based on the new information and is pursuing preliminary permitting
- 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

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	$ 664,110	$ 65,146	$ 939,244	$ -	$ 939,244
Other Professional	$ 11,000	$ 8,168	$ 2,500	$ 332	$ -	$ 332
Survey Services	$ 9,000	$ -	$ -	$ 9,000	$ -	$ 9,000
Construction Services	$ 65,000	$ 49,523	$ -	$ 15,477	$ -	$ 15,477
Telephone / Fax / TV	$ 1,000	$ 209	$ -	$ 791	$ -	$ 791
Advertising	$ 500	$ -	$ -	$ 500	$ -	$ 500
Permit Fees	$ 20,000	$ -	$ -	$ 20,000	$ -	$ 20,000
Contingency	$ 225,000	$ -	$ -	$ 225,000	$ -	$ 225,000
	$ 2,000,000	$ 722,009	$ 67,646	$ 1,210,344	$ -	$ 1,210,344

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 Iliuliaq Lake are old, rusted, and showing signs of collapse and need to be replaced. Salmon are known to spawn in the Dutton Lake stream.

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

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

FY20-24 CMMP

Causeway Culvert Replacement| DPW

Estimated Project & Purchase Timeline

Pre Design: FY 2019

Engineering/Design: FY 2020

Purchase/Construction: FY 2022

Existing Culverts are Failing

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

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

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

Causeway Culvert Replacement (PW19B)

- 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
- Dutton Lake is inhabited by Coho Salmon
- Rerouting traffic through Dutton Road and Gromoff Lane is not feasible due to over 3,000 vehicles traveling across the causeway per day
- 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 construct a single 80’ long 119” W x 80” H aluminum arch culvert 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
- Design is underway

Causeway Culvert Replacement (PW19B)

MUNIS PROJECT PW19B - CAUSEWAY CULVERT REPLACEMENT						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectura	$ 163,500	$ 55,431	$ 11,024	$ 97,045	$ -	$ 97,045
Other Professional	$ -	$ -	$ -	$ -	$ -	$ -
Survey Services	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 449,500	$ -	$ -	$ 449,500	$ -	$ 449,500
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	$ 55,548	$ 11,024	$ 732,929	$ -	$ 732,929

Causeway Culvert Replacement (PW19B)

Burma Road Chapel Upgrades (PW20A)

Project Description: This project replaces rotting foundation members and portions of rotting exterior siding, 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, reroofs the building, paints the new eaves and trim.

Project Need: Siding on the PCR side of the Burma Road Chapel is showing severe signs of rot and water has seeped into portions of the wood rim joists causing rot along the foundation. 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 in the foundation and below the roof. The new roof will protect the facility for at least another 30 years.

Maintenance history includes: Repairs from 1940 to 1996 is largely undocumented. Work prior to 1996 adapted the structure to new uses as needs evolved. Past work includes: exterior painting, interior renovations, flooring, new shingles in 1995, boiler and fuel tank in 1998. 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

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

Cost & Financing Data:

FY20-24 CMMP

Burma Road Chapel Upgrades | General Fund

Estimated Project & Purchase Timeline
Pre Design: FY 2020
Engineering/Design: FY 2021
Purchase/Construction: FY 2022

Cost Assumptions	
Engineering, Design, Const Admin	70,000
Other Professional Services	10,000
Construction Services	350,000
Machinery & Equipment	-
Subtotal	**430,000**
Contingency (set at 30%)	129,000
TOTAL	**559,000**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**559,000**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)		10,000	70,000	479,000			559,000
1% Sales Tax							-
Grant							-
Proprietary Fund							-
TOTALS $	-	10,000	70,000	479,000	-	-	559,000
Requested Funds:							

Burma Road Chapel Upgrades (PW20A)

- Close up drone footage of entire roof and eaves in process
- Foundation inspection by architect in process

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	$ 10,000	$ -	$ -	$ 10,000	$ -	$ 10,000
Telephone / Fax / TV	$ -	$ -	$ -	$ -	$ -	$ -
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
General Supplies	$ -	$ -	$ -	$ -	$ -	$ -
	$ 10,000	$ -	$ -	$ 10,000	$ -	$ 10,000

Burma Road Chapel Upgrades (PW20A)

Henry Swanson House Improvements (PW20B)

Project Description: The Henry Swanson House Improvement Project includes the rehabilitation, reuse, and recognition of the historical importance of the Henry Swanson House.

Project Need: As required per City Code, the Historic Preservation Commission produced an Inventory of Historic Sites in 2003. This survey of historic properties in our community included the Henry Swanson House. The Alaska Heritage Resource Survey documentation completed as a part of the survey provides a detailed overview of the structure, architecture, and historical relevance. The Unalaska Comprehensive Plan calls for the Preservation Commission to continue to place interpretive markers at significant historic sites within the City limits and to advocate for cost effective preservation, rehabilitation, and adaptive reuse of Unalaska's historic buildings. This current funding request is to elevate the construction of the house to prevent future mold issues.

Development Plan & Status (Include Permit and Utility Requirements): The DPW Facilities Maintenance Division inspected the building in the fall of 2017 and found the structure solid but in need of much TLC. The metal roof has helped keep the overall structure in fair and salvageable condition. Small inspection holes were cut into the floor, walls, and ceiling to inspect the inner structure and it was found to be in good condition. Tests for 36 different strains of mold were conducted by an independent lab with results showing little to no evidence of mold. DPW will solicit bids from local contractors to raise the structure approximately 30" off the ground, place the building on a solid perimeter foundation, and bring electrical up to code. DPW Facilities Maintenance will repair and paint the interior, inspect/repair electrical wiring, and restore heat via the existing Toyo stove to control humidity. Once the Henry Swanson House is returned to useable condition, a written report with pictures providing the history of the house will be made available to assist Council in making a decision about the future use of the historic home.

Cost & Financing Data:

FY20-24 CMMP

Henry Swanson House Improvements | DPW

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

Cost Assumptions	
Engineering, Design, Const Admin	4,000
Other Professional Services	2,800
Construction Services	85,000
Machinery & Equipment	-
Subtotal	**91,800**
Contingency (set at 30%)	27,540
TOTAL	**119,340**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**119,340**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)		119,340					119,340
1% Sales Tax							-
Grant							-
Proprietary Fund							-
TOTALS $	-	119,340	-	-	-	-	119,340
Requested Funds:						112	

Henry Swanson House Improvements (PW20B)

- Howard Henning submitted the only bid
- Council approved Resolution 2019-38 on 7-23-19 authorizing the City Manager to enter into an agreement with Henning Construction Company for $85,000
- Notice of Award issued 7-30-19
- Notice to Proceed issued 8-1-19
- Structure found to be 2’ onto adjoining property
- Structure found to have substantial rot on rim joists
- Change Order #01 issued on 8-28-19 for $29,500 to cover:
  - Moving structure 10’ north due to encroachment onto adjoining property not owned by the City
  - Repair and reinforce rotten perimeter rim joists
  - Remove rotten siding as needed and replace with no-groove T-111
- Entire structure has been raised and moved 10’ north
- Henning Construction Work is 100% complete
- Substantial Completion Date was 9-30-19 and achieved
- Final Completion Date was 10-15-19 and achieved
- In-House work yet to accomplish is meter base installation, mugo pine trimming, entrance door replacement, interior painting, interior plumbing

Henry Swanson House Improvements (PW20B)

MUNIS PROJECT PW20B - HENRY SWANSON HOUSE IMPROVEMENTS						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Salaries and Wages	$ -	$ -	$ -	$ -	$ -	$ -
Health Insurance	$ -	$ -	$ -	$ -	$ -	$ -
FICA/Medicare	$ -	$ -	$ -	$ -	$ -	$ -
PERS Employer Bene	$ -	$ -	$ -	$ -	$ -	$ -
Unemployment Ins	$ -	$ -	$ -	$ -	$ -	$ -
Workers Comp	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 114,500	$ 114,500	$ -	$ -	$ -	$ -
Telephone/Fax/TV	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 4,840	$ -	$ -	$ 4,840	$ -	$ 4,840
	$ 119,340	$ 114,500	$ -	$ 4,840	$ -	$ 4,840

Henry Swanson House Improvements (PW20B)

City Wide Multi-Location Drainage (PW203)

Project Description: This 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 & Financing Data: 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.

FY20-24 CMMP

City Wide Drainage – Trapper Drive | DPW

Estimated Project & Purchase Timeline
Pre Design: FY 2017
Engineering/Design: FY 2017
Purchase/Construction: FY 2021


Trapper Drive looking southwest


Trapper Drive looking northeast

Cost Assumptions	
Engineering, Design, Const Admin	50,000
Other Professional Services	-
Construction Services	360,000
Machinery & Equipment	-
Subtotal	**410,000**
Contingency (set at 30%)	123,000
TOTAL	**533,000**
Less Other Funding Sources (Grants, etc.)	
Total Funding Request $	**533,000**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)	166,207		366,793				533,000
1% Sales Tax							-
Grant							-
Proprietary Fund							-
TOTALS $	166,207	-	366,793	-	-	-	533,000
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 will be requested in the FY21-25 CMMP cycle to complete the Trapper Drive portion

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	$ 389,950	$ 383,241	$ 2,099	$ 4,610	$ -	$ 4,610
Survey Services	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 3,001,463	$ 2,886,958	$ -	$ 114,504	$ -	$ 114,504
Telephone/FAX/TV	$ 500	$ 42	$ -	$ 458	$ -	$ 458
Advertising	$ 305	$ 304	$ -	$ 1	$ -	$ 1
Travel and Related Costs	$ 605	$ 581	$ -	$ 24	$ -	$ 24
Land	$ 54,732	$ 14,784	$ -	$ 39,949	$ -	$ 39,949
	$ 3,450,000	$ 3,286,838	$ 2,099	$ 161,063	$ -	$ 161,063

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.

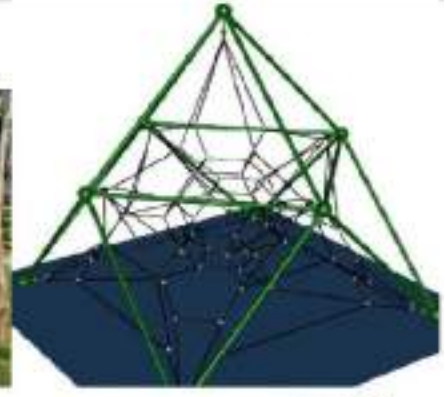
Project Need: The UCS playground would serve as an additional recreation site for families and community members during the evenings, weekends, and summer months. While the play structures at Town Park and the Recreation Center are wonderful for younger children, currently there is not an area in downtown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

UCSD Playground Renovation (SS601)

- Scope Includes:
  - Multi-use court (basketball, volley-ball)
  - Synthetic 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
- Regan Engineering was contracted to finalize the plans and provided a line item cost estimate so the budget could be reevaluated during the FY20 CMMP process
- PCR and UCSD worked together in January 2019 to provide Regan Engineering with an outline of the desired play features
- In February 2019 Regan Engineering presented a preliminary layout and cost estimate of $1.3 million dollars for a community park and is proceeding with that plan on Council's approval with construction
- Design is 100% complete as of 11-1-19 and has undergone a PCR/UCSD review
- The design was combined with Sitka Spruce Park into a single comprehensive bid package
- Bids to be advertised on November 12, 2019 with construction in spring 2020

UCSD Playground Renovation (SS601)

MUNIS PROJECT SS601 - UCSD PLAYGROUND RENOVATION						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Contingency	$ -	$ -	$ -	$ -	$ -	$ -
Engineering and Architectura	$ 105,000	$ 35,473	$ 6,902	$ 62,625	$ -	$ 62,625
Survey Services	$ 4,250	$ 4,250	$ -	$ -	$ -	$ -
Solid Waste	$ 500	$ 442	$ -	$ 58	$ -	$ 58
Construction Services	$ 976,854	$ 17,000	$ -	$ 959,854	$ -	$ 959,854
Telephone / Fax / TV	$ 100	$ 41	$ -	$ 59	$ -	$ 59
Advertising	$ 500	$ -	$ -	$ 500	$ -	$ 500
Contingency	$ 236,881	$ -	$ -	$ 236,881	$ -	$ 236,881
Interest Expense	$ 2,400	$ -	$ -	$ 2,400	$ -	$ 2,400
	$ 1,326,485	$ 57,206	$ 6,902	$ 1,262,377	$ -	$ 1,262,377

UCSD Playground Renovation (SS601)

Old Powerhouse Battery System Replacement (EL17B)

PROJECT DESCRIPTION: Replace the aging 130 volt DC battery system and charger. Bring system up to current safety codes

PROJECT NEED: These 60 batteries feed electricity to the existing switch gear, and emergency equipment in the event of a power outage. They also feed the main electrical breakers during normal run times. The batteries and charger life expectancy is 25 years but have been in service for 30 years, the reliability of this system is questionable. This antiquated system is out of compliance with present safety regulations. With this project, we will upgrade the system to meet regulations and tie this system together with the battery system in the new power plant, which will create redundancy in the system, increasing our reliability and safety to the community.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS):

COST & FINANCING DATA: Expected life is 25 years. The facility will be used far into the future at least 25 years. We currently have 5 pieces of equipment in the building that produce electricity as well as our fuel supply and engine cooling and storage. This project will be funded using the Electric Proprietary Funds.

FY19-23 CMMP

OLD POWER HOUSE BATTERIES | ELEC. PRODUCTION

ESTIMATED PROJECT & PURCHASE TIMELINE
Pre Design: FY 2018
Engineering/Design: FY 2018
Purchase/Construction: FY 2019

Cost Assumptions		
Engineering Services		40,000
Other Professional Services		0
Machinery and Equipment		250,000
Construction Services		173,070
	Subtotal	413,070
Contingency		50,000
	Total $	**513,070**

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY19	FY20	FY21	FY22	FY23	Total
General Fund							
1% Sales Tax							
Grant							
Proprietary Fund (Electric-Production)	263,070	250,000					513,070
TOTALS $	263,070	250,000					513,070
Requested Funds:							

Old Powerhouse Battery System Replacement (EL17B)

- 60 thirty-two year old batteries supply power to switchgear and emergency equipment in the event of power outage and are 7 years past their replacement date
- On January 24, 2017, Council approved Resolution 2017-01 which authorized the City Manager to enter into agreement with Electrical Power Systems (EPS) to perform, design, provide bid phase support, and perform construction inspection
- Cost estimate of $443,500 (includes 10% contingency) exceeds original estimated cost. This is due to code requirements that became known during design; specifically: additional ventilation, eyewash station, fire-proofing walls and ceiling, and fire marshal review/approval
- Electrical Power Systems completed the design which was let for bids on June 19 2018 (FY18). Bids were received on August 9, 2018 with the low bidder Puffin Electric coming in at $547,300
- A budget amendment (Ordinance 2018-12) was approved on October 23, 2018 provided the additional funding
- On 12-11-18, Council approved Resolution 2018-65 which authorized the City Manager to enter into an agreement with Puffin Electric to perform this work
- EPS performed construction administration and Regan Engineering provided inspection services
- Puffin Electric is complete with construction work and they have provided O&M manuals and Record Drawings
- There is an ongoing issue with Alaska Department of Labor and Wage for work Magone/Resolve performed as a subcontractor that needs to be cleared up before final payment can be made

Old Powerhouse Battery System Replacement (EL17B)

MUNIS PROJECT EL17B - OLD POWERHOUSE BATTERY SYSTEM REPLACEMENT						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Overtime	0	0	0	0	0	0
Health Insurance Benefit	0	0	0	0	0	0
FICA/Medicare Employer Matc	0	0	0	0	0	0
PERS Employer Benefit	0	0	0	0	0	0
Unemployment Ins Benefit	0	0	0	0	0	0
Workers Compensation Ins	0	0	0	0	0	0
Other Employee Benefits	0	0	0	0	0	0
Engineering and Architectural	160,000	157,724	2,215	61	0	61
Sampling / Testing	0	0	0	0	0	0
Solid Waste	0	0	0	0	0	0
Construction Services	551,000	530,160	17,140	3,700	0	3,700
Telephone / Fax / TV	1,000	76	0	924	0	924
Contingency	50,000	0	0	50,000	0	50,000
General Supplies	270	0	0	270	0	270
Machinery and Equipment	800	0	0	800	0	800
	763,070	687,960	19,355	55,755	0	55,755

Old Powerhouse Battery System Replacement (EL17B)

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 replacing our existing meters to incorporate automatic meter reading capabilities system wide. This project will include the installation of a communications system capable of automatically taking the electrical meter reads at a given time. 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 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

Cost & Financing Data: THE MONEY FOR THIS PROJECT WILL COME FROM THE ELECTRICAL PROPRIETARY FUND.

FY20-24 CMMP

Automatic Meter Read System | ELECTRIC DISTRIBUTION

Estimated Project & Purchase Timeline

Pre Design: FY 2017

Engineering/Design: FY 2019

Purchase/Construction: FY 2020-2021

Cost Assumptions	
Engineering, Design, Const Admin	19,184
Other Professional Services	32,875
Construction Services	30,696
Machinery & Equipment	320,000
Subtotal	**402,755**
Contingency (set at 30%)	120,827
TOTAL	**523,582**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**523,582**

Revenue Source	Approprated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
1% Sales Tax							-
Grant							-
Proprietary Fund	119,362	100,000	304,000				523,362
TOTALS $	119,362	100,000	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
- The procurement methodology has been approved and the City Attorney reviewed the 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 are being built to spec
- Installation will begin on Standard Oil Hill residential area

Automatic Meter Read (EL18B)

MUNIS PROJECT EL18B - AUTOMATIC METER READ						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 155,572	$ -	$ 115,936	$ 39,636	$ -	$ 39,636
Telephone / Fax / TV	$ 200	$ 13	$ -	$ 187	$ -	$ 187
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
General Supplies	$ 2,000	$ 1,176	$ 423	$ 402	$ -	$ 402
Computer Hardware	$ 1,590	$ 1,590	$ -	$ -	$ -	$ -
Machinery & Equipment	$ 60,000	$ -	$ -	$ 60,000	$ -	$ 60,000
	$ 219,362	$ 2,779	$ 116,359	$ 100,224	$ -	$ 100,224

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
  - V3 held initial site visit, met with COU, and met with OC in November 2017 and held a second site visit in March 2018 to meet with COU and OC
  - V3 estimate $122,300 (3 towers) to $200,500 (5 towers) not including OC leases
  - 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
  - Sites considered included Pyramid Valley near the Reservoir, Veronica Lake also in Pyramid, Little South America, and Hog Island
  - Final Phase II Siting Report version 3 was received from V3 in October 2018
- Phase III: Data Collection
  - Installation of 3 MET Towers accomplished in October of 2018
  - DPW worked with V3 on the installation of the 4th MET Tower on Hog Island in summer 2019 and is working out technical issues to automate the data reads
  - This is an industry standard study. One to two years of data is minimum IUC 61 400-1 Turbine Design Standard to obtain 5 year warranties from prospective 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
- 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
  - No additional funds requested for this project as of September 2019

Wind Power Development (EL18C)

MUNIS PROJECT EL18C - WIND POWER DEVELOPMENT						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Legal	$ -	$ -	$ -	$ -	$ -	$ -
Engineering and Architectural	$ 287,554	$ 192,378	$ 34,170	$ 61,006	$ -	$ 61,006
Other Professional	$ 19,735	$ 14,063	$ -	$ 5,672	$ -	$ 5,672
Telephone / Fax / TV	$ 185	$ 104	$ -	$ 81	$ -	$ 81
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
Machinery and Equipment	$ 112,526	$ 112,175	$ -	$ 351	$ -	$ 351
	$ 420,000	$ 318,722	$ 34,170	$ 67,109	$ -	$ 67,109

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):

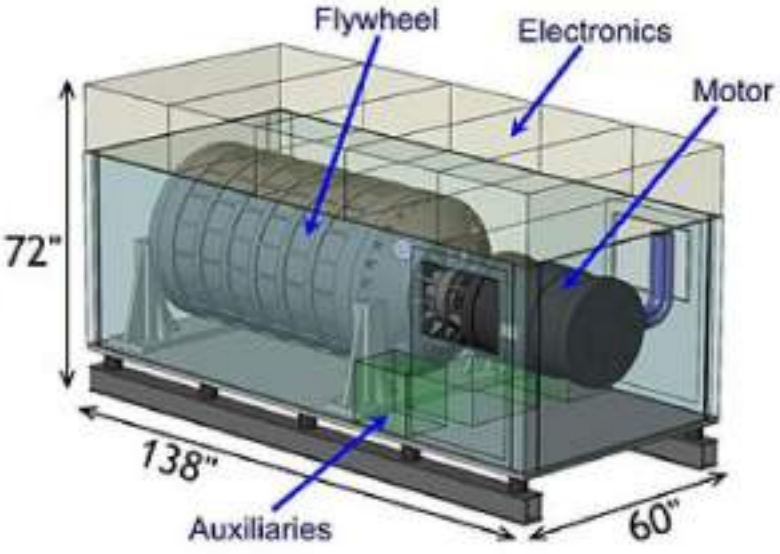
Design will be accomplished in FY2019 and FY2020. Installation of the Flywheel equipment will be in FY2020. Permitting is not expected for this project.

COST & FINANCING DATA: Money for this project will come from the Electrical Proprietary Fund.

FY20-24 CMMP

Flywheel Energy Storage System I ELECTRIC PRODUCTION

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



Cost Assumptions	
Engineering, Design, Const Admin	271,312
Other Professional Services	100,000
Construction Services	1,648,688
Machinery & Equipment	1,480,000
Subtotal	**3,500,000**
Contingency (set at 20%)	700,000
TOTAL	**4,200,000**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**4,200,000**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
1% Sales Tax							-
Grant							-
Proprietary Fund	78,750	571,312	3,549,938				4,200,000
TOTALS $	78,750	571,312	3,549,938	-	-	-	4,200,000
Requested Funds:							

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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
- Property options are being explored across Biorka, on Ballyhoo side of Old Powerhouse, and on East Point Road between APL and Bendickson Road.
- 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 is in the process of finalizing equipment RFQ package for bids
- 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
- Previously named Flywheel Energy Storage, this project has been renamed Electric Energy Storage to better reflect expanded options

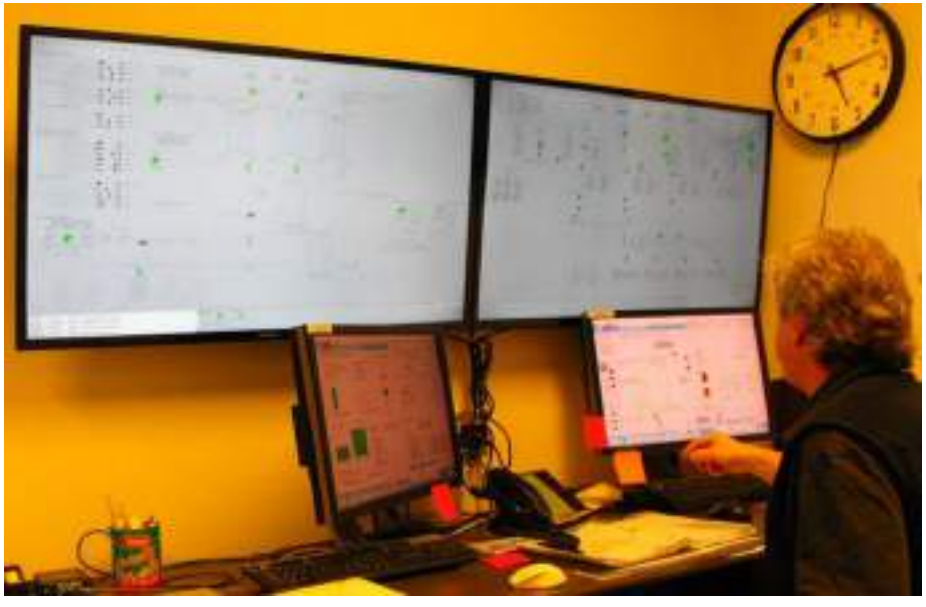
Flywheel Energy Storage (EL19B)

MUNIS PROJECT EL19B - FLYWHEEL ENERGY STORAGE						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 325,750	$ 59,220	$ 17,038	$ 249,492	$ -	$ 249,492
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	$ 59,272	$ 17,038	$ 573,752	$ -	$ 573,752

Flywheel 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]



Generator Sets Rebuild (EL20A)

Project Description: 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.

Project Need: These Generator Set rebuilds are needed to maintain our equipment and the reliability of our electrical production. The replacement costs are approximately $7 million for the Wartsila Gensets and $5 million for the C280 Caterpillars. Maintaining the City's investment is an important priority. Also, 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 rebuilds has been determined by past rebuild costs according to the worst case scenario. A 2% inflation rate has been added each year. Money that is not used for rebuilds by the end of the fiscal year, will be returned to the proprietary fund.

FY20-24 CMMP

Generator Sets Rebuild | Electric Production

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	500,000
Construction Services	-
Machinery & Equipment	6,361,553
Subtotal	**6,861,553**
Contingency (set at 30%)	2,058,466
TOTAL	**8,920,019**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**8,920,019**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
1% Sales Tax							-
Grant							-
Proprietary Fund		1,714,056	1,748,338	1,783,305	1,818,970	1,855,350	8,920,019
TOTALS $	-	1,714,056	1,748,338	1,783,305	1,818,970	1,855,350	8,920,019
Requested Funds:							

Generator Sets Rebuild (EL20A)

- 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
- DPW Facilities Maintenance Division is constructing 3 moveable work benches to facilitate tear-down and rebuild

Generator Sets Rebuild (EL20A)

MUNIS PROJECT EL20A - GENERATOR SETS REBUILD						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Repair & Maintenance	$ 1,318,505	$ -	$ 1,082,084	$ 236,421	$ -	$ 236,421
Contingency	$ 395,551	$ -	$ -	$ 395,551	$ -	$ 395,551
	$ 1,714,056	$ -	$ 1,082,084	$ 631,972	$ -	$ 631,972

Generator Sets Rebuild (EL20A)

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

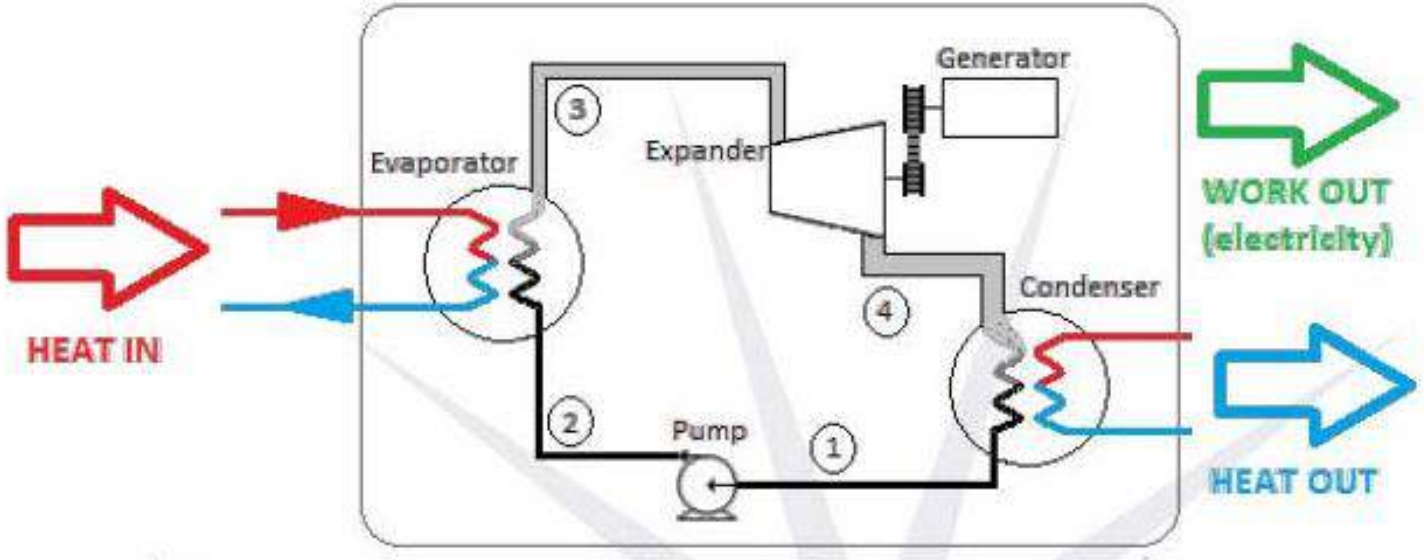
4th Waste Heat Recovery ORC (EL20B)

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.



Powerhouse Engine 4 (EL302)

CITY OF UNALASKA
FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM
FY 2013 - FY 2017
NEW PROJECT NOMINATION APPLICATION

[ ] **Feasibility** [X] **Design** [X] **Construction**

Prepared by: Dan Winter Date: 1/18/2012

Department: Department of Public Utilites - Electrical Production

Project Name: Powerhouse 4th Engine

This project will begin in Fiscal Year: 2013

1. **Project location / legal description / tax lot ID:**

Lot No.	Block No.	Subdivision
Tract	USS	Unsubdivided

Does the City own the property? (Check Yes or No) YES [X] NO [ ]

If not, how will it be acquired? (Purchase, lease, easement, etc.)

2. **Project description: Write a brief narrative describing what will be constructed and why the project is being proposed.**

This project consists of the purchase and installation of a 4.4 MW, C-280 Caterpillar Gen/Set that will be purchased by the City. This installation work consists of the contractor providing all materials and labor needed to install the owner supplied generating unit. Also included in the price is engineering design and inspection.

Powerhouse Engine 4 (EL302)

- $7,223,180 Construction
- 100% complete
- 3 Change Orders = $207,132
- 2.87% Change Order Cost
- 19 Page DEC Permit to Operate received
- We conducted emissions testing for 1 year +
- Presently working with HMH Consulting who is working on finalizing permitting with EPA and DEC so we can also operate engines 8 & 9 (both are CAT's)

Powerhouse Engine 4 (EL302)

MUNIS PROJECT EL302 - POWERHOUSE ENGINE 4						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 48,089	$ 48,089	$ -	$ -	$ -	$ -
Machinery and Equipment	$ 951,911	$ 951,911	$ -	$ -	$ -	$ -
Salaries and Wages	$ 1,500	$ 1,401	$ -	$ 99	$ -	$ 99
Temporary Employees	$ 100	$ 33	$ -	$ 67	$ -	$ 67
Overtime	$ 16,250	$ 10,219	$ -	$ 6,031	$ -	$ 6,031
Health Insurance Benefit	$ 1,650	$ 1,445	$ -	$ 205	$ -	$ 205
FICA/Medicare Employer Match	$ 1,350	$ 838	$ -	$ 512	$ -	$ 512
PERS Employer Benefit	$ 6,925	$ 6,579	$ -	$ 346	$ -	$ 346
Unemployment Ins Benefit	$ 175	$ 4	$ -	$ 171	$ -	$ 171
Workers Compensation Ins	$ 250	$ 227	$ -	$ 23	$ -	$ 23
Other Employee Benefits	$ 100	$ 55	$ -	$ 45	$ -	$ 45
Engineering and Architectural	$ 327,411	$ 328,475	$ -	$ (1,064)	$ -	$ (1,064)
Construction Services	$ 5,315,288	$ 4,810,875	$ -	$ 504,413	$ -	$ 504,413
Telephone / Fax / TV	$ 125	$ 121	$ -	$ 4	$ -	$ 4
General Supplies	$ 1,300	$ 301	$ -	$ 999	$ -	$ 999
Computer Hardware / Software	$ 4,000	$ 3,587	$ -	$ 413	$ -	$ 413
Machinery and Equipment	$ 1,898,664	$ 1,898,631	$ -	$ 33	$ -	$ 33
	$ 8,575,088	$ 8,062,790	$ -	$ 512,298	$ -	$ 512,298

Powerhouse Engine 4 (EL302)

New Warsilla Engine & Generator

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	$ 2,540	$ 3,600	$ 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**

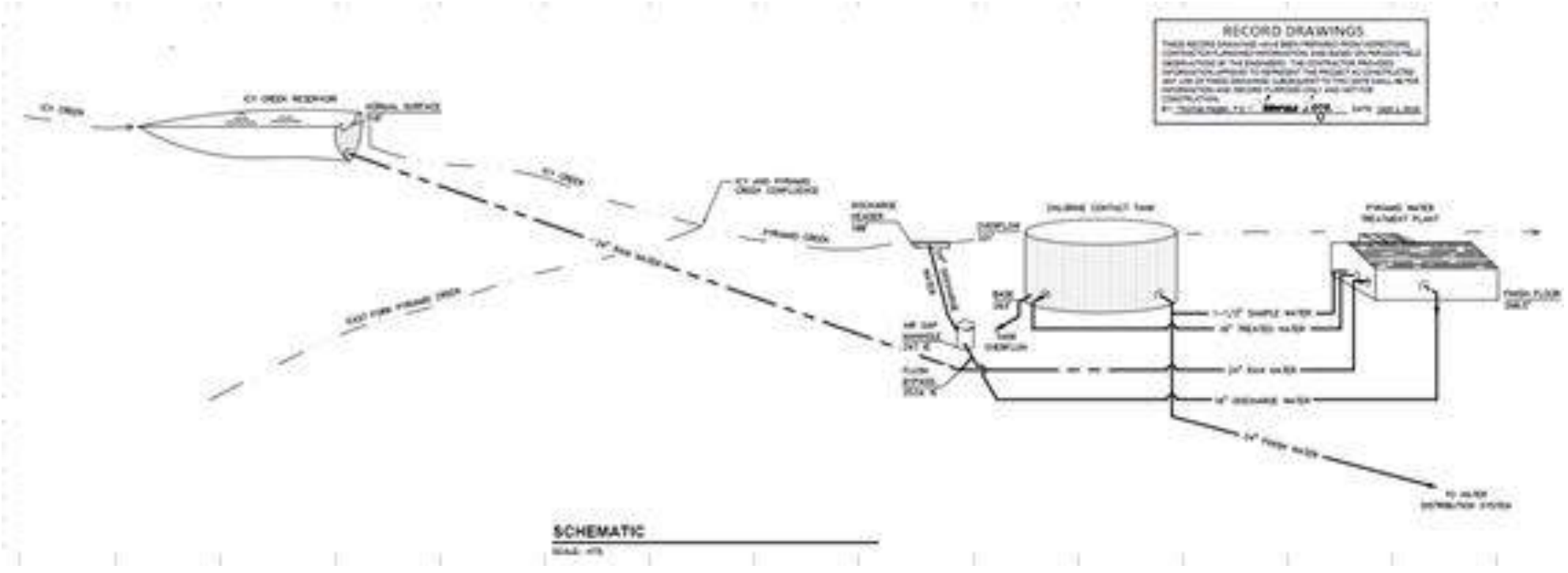
Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
1% Sales Tax							-
Grant							-
Proprietary Fund	50,000		1,588,975				1,638,975
TOTALS $	50,000	-	1,588,975	-	-	-	1,638,975
Requested Funds:						120	

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
- During FY18 Water Utility Master Planning, HDR developed a final estimate which concurs with DPW's estimate that two parallel GPRVs will generate twice as much electricity as the WTP uses with a payback of 8-12 years
- DPW/DPU let an RFQ in November 2018 selecting a designer to develop construction details, competitively select a GPRV manufacturer, and provide construction cost estimates
- 5 SOQs were received: Rentricity, HDR, Coffman, KGS, and EPS
- Following initial scoring and post interview scoring, resolution 2019-12 recommended award to Rentricity for preliminary design and equipment manufacturer selection
- Rentricity started design including kick-off meeting on April 2, 2019
- 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
- A BA was submitted based on the estimated costs
- Bid documents are expected to advertise in March 2020 with construction completed in the fall during the period of low water demand preceding the holidays and fishing A season

Pyramid Micro Turbines (WA17C)

MUNIS PROJECT WA504 - PYRAMID WTP MICRO TURBINES						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering & Architectural	$ 300,700	$ 46,633	$ 200,767	$ 53,300	$ -	$ 53,300
Other Professional	$ 218,000	$ -	$ -	$ 218,000	$ -	$ 218,000
Construction Services	$ 820,213	$ -	$ -	$ 820,213	$ -	$ 820,213
Telephone / Fax / TV	$ 500	$ 1	$ -	$ 499	$ -	$ 499
Advertising	$ 500	$ -	$ -	$ 500	$ -	$ 500
Contingency	$ 153,771	$ -	$ -	$ 153,771	$ -	$ 153,771
Machinery and Equipment	$ 558,600	$ -	$ -	$ 558,600	$ -	$ 558,600
	$ 2,052,284	$ 46,634	$ 200,767	$ 1,804,883	$ -	$ 1,804,883



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

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	$ -	$ -	$ 114,900	$ -	$ 114,900
Survey Services	$ 7,500	$ -	$ -	$ 7,500	$ -	$ 7,500
Construction Services	$ 550,000	$ -	$ -	$ 550,000	$ -	$ 550,000
Telephone / Fax / TV	$ 200	$ 23	$ -	$ 177	$ -	$ 177
Permit Fees	$ 2,400	$ -	$ -	$ 2,400	$ -	$ 2,400
Contingency	$ 246,000	$ -	$ -	$ 246,000	$ -	$ 246,000
Land	$ 145,000	$ 3,900	$ -	$ 141,100	$ 26,000	$ 115,100
	$ 1,066,000	$ 3,923	$ -	$ 1,062,077	$ 26,000	$ 1,036,077

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. 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: 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. 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. 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.

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

Cost & Financing Data:

FY20-24 CMMP

CT Tank Interior Maintenance & Painting | Water

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

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					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
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

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)

SCBA Replacement - Water (WA20B)

Project Description: This project will replace the aging and dated SCBA units currently in use. This essential piece of firefighting equipment is regulated under the National Fire Protection Agency. This Agency meets to update the requirements for SCBAs every five years and recommends replacing units every three regulatory cycles. The water Department must also maintain EPA and OSHA compliance with this equipment because of work with Chlorine gas.

Project Need: In Calendar year 2018 NFPA released new guidelines pertaining to SCBA features and functionality. This is the third regulatory update since the last purchase of SCBAs. By following these guidelines put forward by NFPA Unalaska fire department will continue to adhere to industry standards and better serve the community of Unalaska. Adhering to industry standards keeps firefighters and citizens safer in hazardous situations. Being the only emergency response department on the island magnifies the importance of keeping properly functioning equipment because it is not possible to know when a large incident may occur or when help may arrive.
When Water purchased their Survivair SCBA's in 2005/2006 Unalaska Fire Department (UFD) staff provided the annual SCBA flow tests and maintenance for our SCBA's as well as their own since they were certified Survivair SCBA technicians. In subsequent years the UFD upgraded by purchasing SCBA's from a different manufacturer. Staff turnover in the Unalaska Fire Department has resulted in not having a certified Survivair technician here since at least 2012. Subsequently the Water SCBA's must be sent to the Lower 48 as there are only two locations where the maintenance can be performed. Having SCBA's from the same manufacturer as the Unalaska Fire Department will save labor, shipping and repair costs. Currently Fire and Water SCBA's are incompatible. As the individuals designated to respond to issues concerning Chlorine Gas at our water treatment facilities, it is important to obtain SCBA's are compatible with UFD's units.

Development Plan & Status (Include Permit and Utility Requirements): Manufactures have began releasing the most updated SCBA units to end users. By the time of purchase for Unalaska all new packs will be in compliance with 2018 NFPA standards.

Cost & Financing Data: In the past there has been grant opportunities for the purchase of SCBAs. With the current fiscal climate at the state level this source can not be counted on. The Fire Department is also part of a Group Purchasing Organization (GPO) that offers a discount for these units. Purchasing through this GPO will save the city 25% per unit.

FY20-24 CMMP

SCBA Replacement| FIRE DEPARTMENT & WATER

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	316,000
Subtotal	**316,000**
Contingency (set at 30%)	94,800
TOTAL	**410,800**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**410,800**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)		348,400					348,400
1% Sales Tax							-
Grant							-
Proprietary Fund		62,400					62,400
TOTALS $	-	410,800	-	-	-	-	410,800
Requested Funds:							

SCBA Replacement - Water (WA20B)

- DPW received procurement request package from Fire
- Procurement is being done thru firm who won the government contract via pre-established competitive bidding process
- Procurement package given to DPW Supply for purchase
- This purchase is combined with Fire Department SCBA purchase (slide 45)

SCBA Replacement - Water (WA20B)

MUNIS PROJECT WA20B - SCBA REPLACEMENT - WATER						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Contingency	$ 14,400	$ -	$ -	$ 14,400	$ -	$ 14,400
Machinery & Equipment	$ 48,000	$ -	$ -	$ 48,000	$ 47,476	$ 524
Telephone / Fax / TV	$ -	$ -	$ -	$ -	$ -	$ -
	$ 62,400	$ -	$ -	$ 62,400	$ 47,476	$ 14,924

SCBA Replacement - Water (WA20B)

Water Supply Development Phase II (WA304)

CITY OF UNALASKA
FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM
FY 2013 - FY 2017
NEW PROJECT NOMINATION APPLICATION

[ ] **Feasibility** [X] **Design** [ ] **Construction**

Prepared by: Clint Huling / JR Pearson Date: 3/8/2012

Department: Public Utilities - Water Division

Project Name: Water Supply Development Phase II New Wells Design- WA202

This project will begin in Fiscal Year: 2013

1. **Project location / legal description / tax lot ID (attach site map from GIS):**

Lot No.	Block No.	Subdivision
Tract	USS	Unsubdivided

Does the City own the property? (Check Yes or No) YES [ ] NO [ ]

Does the City lease the property? (Check Yes or No) YES [ ] NO [ ]

If not, how will it be acquired? (Purchase, lease, easement, etc.) This project will locate property suitable for well development; the location is unknown at this time.

2. **Project description: Write a brief narrative describing what will be constructed and why the project is being proposed.**

This project is to complete design for new drinking water wells as recommended by the Phase I Feasibility Study. Full design with permitting, bid ready specifications, and construction engineering management are included with this phase of the project.

Water Supply Development Phase II (WA304)

- This project is the evaluation of an expansion of drinking water resources
- In 2013 DPW/U worked with Shannon & Wilson to evaluate various possibilities including a new well on Whittern Lane, expansion of the Pyramid Valley Icy Lake System and a new well in the Shaishnikoff River Valley
- A pump test was performed on Well 1A across the street from DPW in 2013 and the semi-confined or isotropic conditions indicated the need for another shallower piezometer in Whittern Circle to better measure impacts to the creek. Rehabilitation of Wells 1a, 2 and 3 were also completed
- In July 2018, DPW/U and Shannon & Wilson performed a survey of Icy Lake to develop feasibility and preliminary costs to raise the Icy Lake dam, install turbidity mitigation measures, divert a snow bowl above Icy Lake directly into Icy Lake or develop two earthen dams just above Icy Creek Reservoir. This work expands on historical work by Golder & Associates when Icy Lake Dam was constructed in the 1990s
- A drone survey into the Pyramid Valley for this study was completed and imagery submitted to Planning
- In August 2018 DPW/U and Shannon & Wilson performed a second week long pump test on Well 1A with additional shallow piezometers and a crew measuring creek levels
- The data from the Well 1A pump test and the Icy Lake Survey were summarized in a professional report with cost estimates in January 2019
- No additional funding requested for this project

Water Supply Development Phase II (WA304)

MUNIS PROJECT WA304 - WATER SUPPLY DEVELOPMENT PHASE II						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Other Professional	$ 506,020	$ 489,020	$ 3,819	$ 13,182	$ -	$ 13,182
Construction Services	$ 2,900	$ 2	$ -	$ 2,898	$ -	$ 2,898
Survey Services	$ -	$ -	$ -	$ -	$ -	$ -
Telephone / Fax / TV	$ 250	$ 13	$ -	$ 237	$ -	$ 237
Advertising	$ 250	$ -	$ -	$ 250	$ -	$ 250
Permit Fees	$ 500	$ -	$ -	$ 500	$ -	$ 500
General Supplies	$ 50,100	$ 23,725	$ -	$ 26,375	$ -	$ 26,375
	$ 560,020	$ 512,759	$ 3,819	$ 43,442	$ -	$ 43,442

Water Supply Development Phase II (WA304)

Icy Lake Watershed

Well 2 – Replace pump & motor.
Thoroughly flushed out .

Pyramid Water Storage Tank (WA501)

Project Description: This project will construct a second 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: reduces service interruption, boil water notices, and risk of system contamination during maintenance; allows routine maintenance to be done on the interior or exterior of either tank during any season, prolonging the life of these tanks; expands 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; improves the flow characteristics of the new Pyramid Water Treatment Plant; plant operators will be able to allow the tanks to absorb the high and low flows, maintaining a more stabilized treatment process and allowing the new Ultra Violate treatment process to operate more efficiently.

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.

Cost & Financing Data: The total project cost is reflected on the slides and in the spreadsheets. This project is pending approximately 8.5 million dollars in grant funding, making the total request of council out to approximately $625,000.

FY20-24 CMMP

Pyramid Water Storage Tank| Water

Estimated Project & Purchase Timeline
Pre Design: FY 2022
Engineering/Design: FY 2023
Purchase/Construction: FY 2024

Much of the pre-design work for this job was completed with the design of the original CT Tank. Very little piping will be required to connect the new CT Tank to the Water Distribution system. Space (in the red circle) has been maintained for the new tank between the existing tank and the new Pyramid Water Treatment Plant.

Cost Assumptions	
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.)	8,509,943
Total Funding Request $	**625,000**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
1% Sales Tax							-
Grant					603,750	7,906,193	8,509,943
Proprietary Fund	625,000						625,000
TOTALS $	625,000	-	-	-	603,750	7,906,193	9,134,943
Requested Funds:							

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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 also project 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 FY21 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 FY23

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 then 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: n a

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 overage 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 has the option to reevaluate and request increased funding in the FY21-FY25 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)

Waste Water Treatment Plant (J0519)

CITY OF UNALASKA
FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM
FY 2013 - FY 2017
NEW PROJECT NOMINATION APPLICATION

[ ] **Feasibility** [x] **Design** [x] **Construction**

Prepared by: Clint Huling / Dan Winters Date: 2/3/2012

Department: Public Utilities - Wastewater Division

Project Name: Wastewater Treatment Plant Improvements - Design & Construction-J0519

This project will begin in Fiscal Year: 2013

1. **Project location / legal description / tax lot ID (attach site map from GIS):**

Lot No.	Block No.	Subdivision
Tract	USS	Unsubdivided

Does the City own the property? (Check Yes or No) YES [X] NO [ ]

Does the City lease the property? (Check Yes or No) YES [ ] NO [X]

If not, how will it be acquired? (Purchase, lease, easement, etc.) At this time, land acquisition is not expected. However, if secondary treatment is built, land acquisition will be needed.

2. **Project description: Write a brief narrative describing what will be constructed and why the project is being proposed.**

The City of Unalaska's consultant, Bristol Engineering Services Corporation, prepared a WWTP Facility Plan and presented it to the Unalaska City Council and the public on September 14, 2011. The purpose of the Facility Plan was to evaluate the existing WWTP, identify future requirements for waste water treatment, identify and evaluate alternatives for waste water treatment, and recommend a preferred waste water treatment system. The Facility Plan recommended a chemically enhanced primary treatment process based on the comparison of capital costs, maintenance costs, increased sewer rates, and, most importantly, water quality benefits.

Waste Water Treatment Plant (J0519)

- Construction work on this project has been complete since 2015
- The City is presently involved in lengthy disputes over claims from the contractor
- Unresolved claims are in the $1.8M range

Waste Water Treatment Plant (J0519)

MUNIS PROJECT J0519 - WWTP IMPROVEMENTS						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Construction Services	$ 6,970,874	$ 6,970,874	$ -	$ -	$ -	$ -
Construction Services	$ 8,566,600	$ 8,566,600	$ -	$ -	$ -	$ -
Salaries and Wages	$ 2,008	$ 2,008	$ -	$ -	$ -	$ -
Overtime	$ 3,697	$ 3,697	$ -	$ -	$ -	$ -
Health Insurance Benefit	$ 775	$ 775	$ -	$ -	$ -	$ -
FICA/Medicare Employer Match	$ 428	$ 428	$ -	$ -	$ -	$ -
PERS Employer Benefit	$ 1,380	$ 1,380	$ -	$ -	$ -	$ -
Unemployment Ins Benefit	$ 14	$ 14	$ -	$ -	$ -	$ -
Workers Compensation Ins	$ 165	$ 165	$ -	$ -	$ -	$ -
Other Employee Benefits	$ 29	$ 29	$ -	$ -	$ -	$ -
Legal	$ 109,000	$ 82,640	$ -	$ 26,360	$ -	$ 26,360
Engineering and Architectural	$ 6,104,505	$ 5,784,218	$ 40,710	$ 279,576	$ -	$ 279,576
Other Professional	$ 318,073	$ 210,241	$ 103,841	$ 3,991	$ -	$ 3,991
Sampling / Testing	$ 20,225	$ 20,225	$ -	$ -	$ -	$ -
Survey Services	$ 4,000	$ 4,000	$ -	$ -	$ -	$ -
Buildings/Land Rental	$ 15,376	$ 15,376	$ -	$ -	$ -	$ -
Construction Services	$ 9,033,210	$ 8,528,124	$ 98,011	$ 407,075	$ 1,800,000	$ (1,392,925)
Telephone / Fax / TV	$ 7,502	$ 7,447	$ -	$ 55	$ -	$ 55
Advertising	$ 1,215	$ 1,215	$ -	$ -	$ -	$ -
Travel and Related Costs	$ 6,400	$ 1,367	$ -	$ 5,033	$ -	$ 5,033
Permit Fees	$ -	$ -	$ -	$ -	$ -	$ -
General Supplies	$ 129,187	$ 129,187	$ -	$ -	$ -	$ -
Computer Hardware / Software	$ 6,946	$ 6,946	$ -	$ -	$ -	$ -
Business Meals	$ 304	$ 209	$ -	$ 95	$ -	$ 95
Machinery and Equipment	$ -	$ -	$ -	$ -	$ -	$ -
Interest Expense	$ 485,000	$ 499,032	$ -	$ (14,032)	$ -	$ (14,032)
	$ 31,786,913	$ 30,836,197	$ 242,562	$ 708,154	$ 1,800,000	$ (1,091,846)

Waste Water Treatment Plant (J0519)

The closest building is the old structure with the Liquid Stream Building in the back. Sludge handling (remodel inside old bldg) is complete. The smaller addition to the left of the closest building is the new Lab.

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)

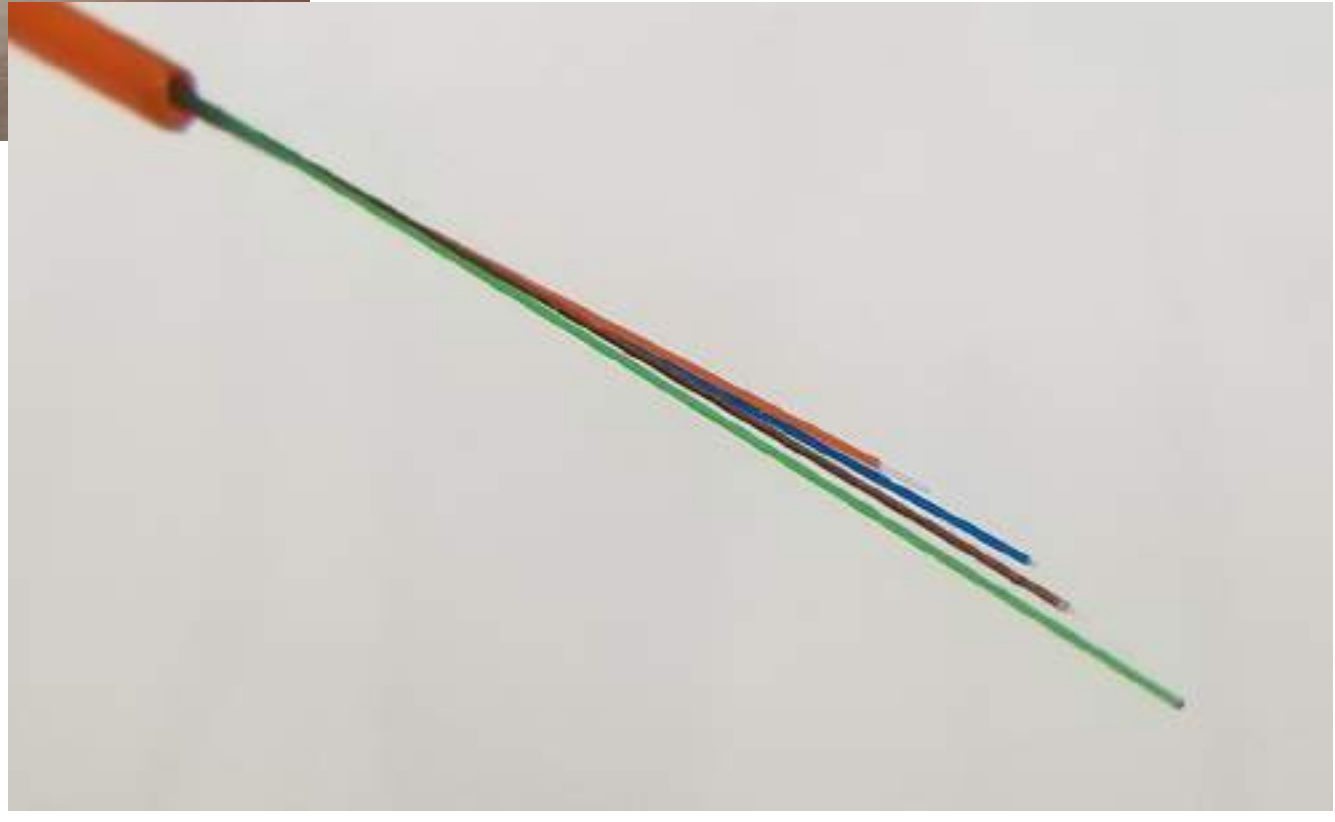
- This is the first phase of a multiphase project to develop a communications utility infrastructure (fiber optic) between the various departments and outlying utility locations
- DPU is leading implementation of this project as needs and opportunities arise
- No additional funds requested for this project

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	$ 2,540	$ 3,600	$ 52,987	$ -	$ 52,987

Fiber Optic Infrastructure (WW17B)

Fiber-Optic Cable



Composting System (SW18A)

Project Description: This is a multi year project consisting of Feasibility, design, and construction, of a biological solids composting system at the Unalaska solid waste facility. The compost material involved includes wastewater sludge, food and fish waste, cardboard, and wood.

Project Need: Currently, biological solids and compostable material make up approximately 40% of the Unalaska Solid Waste intake. These bio solids consist of wastewater sludge, fish processor fish waste and food waste. Other compostable material consists of cardboard, paper, and wood. This waste substantially decreases the useful life of the Landfill cells and increases the organic load into the Leachate stream. Since the influx of wastewater sludge into the landfill, the organic load to the leachate stream has increased to 720 pounds per day compared to 126 pounds per day prior to the influx. This puts additional loading on the leachate system and has an ill effect on the wastewater plant process, which must use more chemicals and electricity to process it. All of this waste can be composted into usable class A soil. This soil can be used for cover material at the landfill or be sold to the public.

Development Plan & Status (Include Permit and Utility Requirements):
Feasibility: An internal feasibility study has been completed by Deputy Director of Public Utilities. An external feasibility is scheduled for July 1, 2017 (FY2018). **Design:** Design is scheduled to begin on July 1, 2018 (FY2019). **Construction:** Construction will begin July 1, 2019 (FY2020). **Permitting:** Classifying the composted soil as a class A soil is scheduled to begin as soon as the compost units are started up.

Cost & Financing Data: The cost estimates for this project are derived from Kodiak's composting project and estimates are very rough. Funds for the Feasibility study and design will come from the Proprietary Fund. The construction is depicted as coming from the General Fund at this time. If the Solid Waste Proprietary Fund has the monetary reserve to pay for the construction in the future, then they will.

FY20-24 CMMP

Composting| Solid Waste

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

Cost Assumptions	
Engineering, Design, Const Admin	105,000
Other Professional Services	50,000
Construction Services	100,000
Machinery & Equipment	300,000
Subtotal	**555,000**
Contingency (set at 30%)	166,500
TOTAL	**721,500**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**721,500**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
1% Sales Tax							-
Grant							-
Proprietary Fund	105,000	616,500					721,500
TOTALS $	105,000	616,500	-	-	-	-	721,500
Requested Funds:							

Composting System (SW18A)

- This is a multi-year project consisting of feasibility, design, and construction, of a biological solids composting system at the Unalaska solid waste facility. The compost material involved includes wastewater sludge, cardboard, wood and in later phases food and fish waste
- Pilot scale tests are being run during Fall 2018 using the Biocells equipment and DPU is pricing full-scale equipment including: wood chipper and metal removal, grinder mixer and an Ag-Bag unit
- The Ag-Bag unit is a mobile hydraulic press that pushes the pre-compost mix into a long plastic sheet tube where it sits and is aerated until the composting process causes the temperature to exceed 160° at which point the compost is safe for beneficial reuse
- About 3,000 cubic yards of compost would be generated per year without food and fish waste
- This project poses opportunities for the community to separate paper, cardboard and potentially food waste for recycling
- Small pilot tests were conducted at the Landfill to determine best methodology to implement larger scale tests
- DPW will be sending material to Sunriver Environmental in Oregon for a full scale test

Composting System (SW18A)

MUNIS PROJECT SW18A - COMPOSTING SYSTEM						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 185,000	$ -	$ -	$ 185,000	$ -	$ 185,000
Other Professional	$ 10,000	$ 4,005	$ -	$ 5,995	$ -	$ 5,995
Construction Services	$ 200,000	$ -	$ -	$ 200,000	$ -	$ 200,000
Telephone / Fax / TV	$ 250	$ 12	$ -	$ 238	$ -	$ 238
Contingency	$ 166,500	$ -	$ -	$ 166,500	$ -	$ 166,500
General Supplies	$ 9,750	$ 3,357	$ -	$ 6,393	$ -	$ 6,393
Machinery & Equipment	$ 150,000	$ -	$ -	$ 150,000	$ -	$ 150,000
	$ 721,500	$ 7,375	$ -	$ 714,125	$ -	$ 714,125

Composting System (SW18A)

Landfill Cells 3 & 4 Partial Closure (SW18B)

FY18-22 CMMP

CELLS 3&4 PARTIAL CLOSURE| SOLID WASTE

PROJECT DESCRIPTION: Partial Cell Closure for Cells 3 &4

PROJECT NEED: Cells 3 & 4 (Area 2) are full and are ready for their exterior closure lining. Installing this liner would help keep the landfill in compliance by diverting rain water from seeping in to side slopes and into the cells, therefore reducing excessive flows to the leachate storage facility. It is estimated that this 55,000 square foot area contributes to approximately 20% of the leachate flow. Reducing this flow would decrease the load on the wastewater plant.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS):
Design: designs were made in fy2007 during closure of area 1 (cells 1 & 2). This design should be sufficient for area 2 closure.
Construction: Construction will go out for bid July 1, 2017 (FY2018) and will be Completed by June 30, 2018 (FY2018).

COST & FINANCING DATA: the cost estimate for this project is based upon closure costs of area 1 (cells 1 & 2) that had an average cost of $12 per square foot. Estimating with annual cost increases and a 10% contingency the 2018 cost would average $16 per Square foot for area 2.

ESTIMATED PROJECT & PURCHASE TIMELINE
Inception/Concept:
Pre Design:
Engineering/Design:
Construction: FY18

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

Landfill Cells 3 & 4 Partial Closure (SW18B)

- The City's ongoing Landfill Development Project has, over the past decade, brought about the construction of 3 new lined cells at the Landfill as well as the Leachate Management System and re-alignment of Summer Bay Road around the Landfill. The next step in the Development Plant is the Partial Closure of Cells 3&4
- Bristol Engineering, the design engineer, estimated cost at $1,045,350
- Northern Alaska Contractors (NAC) was the sole bidder at $1,031,000
- Substantial Completion Date August 31, 2018
- Final Completion Date September 14, 2018. The contractor completed the work late due to problems scheduling the liner installers but the work progressed well and there were no change orders
- The liner installation was completed in September 2018
- Liner weld test reports and as-built survey finalized
- Regan Engineering provided construction administration and inspections services and Bristol Engineering provided the specialized liner inspections required by ADEC
- Bristol Engineering prepared as-builts for permitting closure
- We need a ADOL release to make final payment and close the project and that was hung up with NAC (or their subcontractor, NW Linings) who used out-of-state employees. ADOL said they closed the case but we are still waiting on the ADOL release necessary to make final payment
- This project will be closed out when we get the ADOL part squared away which is expected to be in the near future

Landfill Cells 3 & 4 Partial Closure (SW18B)

MUNIS PROJECT SW18B - CELLS 3&4 PARTIAL CLOSURE						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 185,179	$ 145,328	$ 14,461	$ 25,390	$ -	$ 25,390
Construction Services	$ 1,031,000	$ 991,000	$ 40,000	$ -	$ -	$ -
Telephone / Fax / TV	$ 200	$ 112	$ -	$ 88	$ -	$ 88
Advertising	$ 450	$ 438	$ -	$ 12	$ -	$ 12
Permit Fees	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 126,771	$ -	$ -	$ 126,771	$ -	$ 126,771
Interest Expense	$ 2,400	$ -	$ -	$ 2,400	$ -	$ 2,400
	$ 1,346,000	$ 1,136,878	$ 54,461	$ 154,661	$ -	$ 154,661

Landfill Cells 3 & 4 Partial Closure (SW18B)

Solid Waste Scale Upgrade (SW20A)

FY20-24 CMMP

Solid Waste Scale Upgrade | Solid Waste

Project Description: This project consists of replacing the outdated scale components to the Solid Waste State Certified scale.

Project Need: The Landfill uses a state certified vehicle scale to determine the amount of waste entering the Landfill. This scale also determines the tonnage cost to charge the customer. When the scale in inoperable, Landfill Personnel must estimate the tonnage of waste entering the Landfill. This is a very inefficient way to operate. The Solid Waste Scale was installed in 1997. The scale platform is still operational but the other scale components, such as the load bearing cells and control mechanisms are obsolete and parts cannot be obtained when repairs are needed. Upgrading the scale components will also dictate that a recalibration and certification will need to be completed, which is included in the costs.

Development Plan & Status (Include Permit and Utility Requirements): Recertification of the scale will be needed. This cost is included.

Cost & Financing Data: The money for this project will come from the Solid Waste Proprietary Fund.

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	10,000
Construction Services	10,000
Machinery & Equipment	30,000
Subtotal	**50,000**
Contingency (set at 30%)	15,000
TOTAL	**65,000**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**65,000**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
1% Sales Tax							-
Grant							-
Proprietary Fund		65,000					65,000
TOTALS $	-	65,000	-	-	-	-	65,000
Requested Funds:							

Solid Waste Scale Upgrade (SW20A)

- DPU finalizing equipment specifications and placed order
- This work replaces the measuring components and not the steel platform
- The brand of scale at the Landfill is Toledo Scale
- Parts have been ordered thru Phillips Scale in Anchorage
- Phillips Scale sells, installs, and certifies scales
- Parts have been ordered and are expected to arrive within 2 weeks
- Phillips Scale will arrive on site and conduct the install once parts arrive and schedules can be coordinated

Solid Waste Scale Upgrade (SW20A)

MUNIS PROJECT SW20A - SOLID WASTE SCALE UPGRADE						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ -	$ -	$ -	$ -	$ -	$ -
Other Professional	$ -	$ -	$ -	$ -	$ -	$ -
Telephone / Fax / TV	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 10,056	$ -	$ -	$ 10,056	$ -	$ 10,056
Machinery & Equipment	$ 54,944	$ 27,100	$ 27,100	$ 745	$ -	$ 745
	$ 65,000	$ 27,100	$ 27,100	$ 10,801	$ -	$ 10,801

Solid Waste Scale Upgrade (SW20A)

Re-Insulate Baler Building (SW20B)

PROJECT DESCRIPTION: This project will be conducted at the Landfill Baler Building, built in 1998. It will replace approximately 75% of the wall insulation, approximately 10% of the ceiling insulation, and install PVC Liner Panels over all of the building's insulation to protect the insulation from birds. This project is intended to replace damaged insulation and defend against future damage. This project will also find a solution and pay for the installation of devices that will deter the birds from entering the Baler Building.

PROJECT PURPOSE AND NEED: Our local bird population has torn out a great amount of the insulation in the walls and ceiling of the Landfill Baler Building. Attempts to persuade the birds to go elsewhere have been futile. In order to conserve fuel and reduce heating costs, it is necessary to replace the damaged insulation, and to cover the insulation with PVC panels to protect the City's investment from the flying nuisances. The corrugated PVC Panels will be tightly fitted and slick so birds cannot land or perch on it. This project is related to the stack replacement for boiler system.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS): This project was put on hold until a solution for our bird problem could be developed. However no solution has been found. Staff is still researching a way to deter the birds from entering the Baler Building.

Cost & Financing Data: Money for this project will come from the Solid waste Proprietary Fund.

FY20-24 CMMP

Re-Insulation of Baler Building | SOLID WASTE

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

Cost Assumptions	
Engineering, Design, Const Admin	60,000
Other Professional Services	40,000
Construction Services	300,000
Machinery & Equipment	275,000
Subtotal	**675,000**
Contingency (set at 30%)	202,500
TOTAL	**877,500**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**877,500**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
1% Sales Tax							-
Grant							-
Proprietary Fund		60,000	817,500				877,500
TOTALS $	-	60,000	817,500	-	-	-	877,500
Requested Funds:							

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Re-Insulate Baler Building (SW20B)

- DPW Facilities Maintenance inspected Baler Building and is researching insulation and paneling options

Re-Insulate Baler Building (SW20B)

MUNIS PROJECT SW20B - RE-INSULATE BALER BUILDING						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 59,800	$ -	$ -	$ 59,800	$ -	$ 59,800
Telephone / Fax / TV	$ 200	$ -	$ -	$ 200	$ -	$ 200
Contingency	$ -	$ -	$ -	$ -	$ -	$ -
	$ 60,000	$ -	$ -	$ 60,000	$ -	$ 60,000

Re-Insulate Baler Building (SW20B)

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
- 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)

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

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

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

FY17-21 CMMP

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

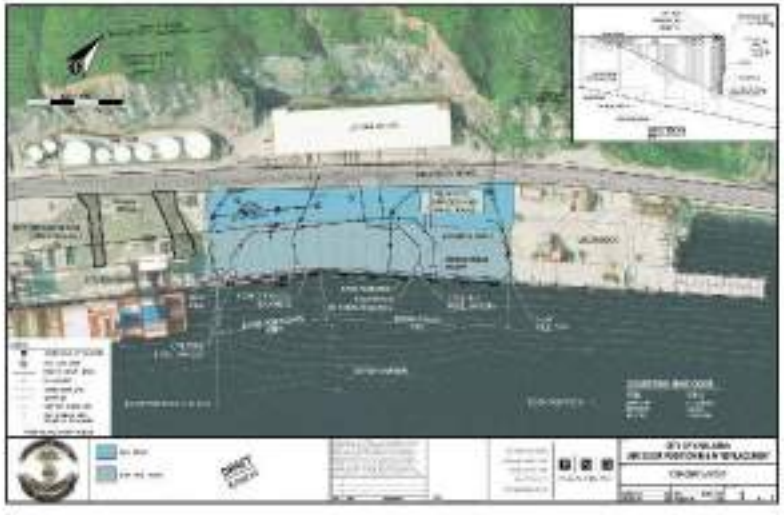
Estimated Project & Purchase Timeline

Inception/Concept: FY 2014

Pre Design: FY 2014 - FY 2015

Engineering/Design: FY 2015 - FY 2017

Construction: FY 2018 - FY 2020



Revenue Source	Existing Funds	Fiscal Year Funding Requests					
		FY17	FY18	FY19	FY20	FY21	Total
General Fund							
1% Sales Tax							
Grant							
Proprietary Fund (Ports)	$ 1,884,858	$ 1,121,000	$ 47,682,000				$ 50,687,858
TOTALS	$ 1,884,858	$ 1,121,000	$ 47,682,000				$ 50,687,858

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

UMC Positions 3 & 4 Replacement (PH17D)

- 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
- Grout that failed over the winter was replaced
- Additional sand fill between pavers was installed
- 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
- TMC will submit a final pay request by November 8, 2019

UMC Positions 3 & 4 Replacement (PH17D)

MUNIS PROJECT PH17D - UMC POSITIONS III & IV REPLACEMENT						
DESC	BUDGET	EXPENSED	ENCUMBERED	MUNIS AVAILABLE	PENDING ENCUMBRANCES	ACTUAL AVAILABLE
Salaries and Wages	$ -	$ -	$ -	$ -	$ -	$ -
Overtime	$ -	$ -	$ -	$ -	$ -	$ -
Health Insurance Benefit	$ -	$ -	$ -	$ -	$ -	$ -
FICA / Medicare Employer Match	$ -	$ -	$ -	$ -	$ -	$ -
PERS Employer Benefit	$ -	$ -	$ -	$ -	$ -	$ -
Unemployment Ins Benefit	$ -	$ -	$ -	$ -	$ -	$ -
Workers Compensation Ins	$ -	$ -	$ -	$ -	$ -	$ -
Other Employee Benefits	$ -	$ -	$ -	$ -	$ -	$ -
Legal	$ -	$ 113	$ -	$ (113)	$ -	$ (113)
Engineering and Architectural	$ 2,215,000	$ 2,134,967	$ 66,338	$ 13,695	$ -	$ 13,695
Other Professional	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 35,243,460	$ 34,990,503	$ 148,762	$ 104,195	$ -	$ 104,195
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	$ 37,162,854	$ 215,100	$ 1,511,686	$ -	$ 1,511,686

UMC Positions 3 & 4 Replacement (PH17D)

Harbor Office Communications Line (PH19A)

PROJECT DESCRIPTION:

This project will replace the unreliable wireless communication line at the Unalaska Marine Center (UMC) Harbor Office with hard-wired direct connectivity from the Harbor Office to the Powerhouse. From the Powerhouse, the Harbor Office will have direct connectivity to City Hall, DPS, the rest of Unalaska, and the outside world. This will provide seamless transmission of phone calls and data by bypassing multiple wireless connections.

PROJECT NEED:

Because of the Port location, the Harbor Office does not have a direct line of sight to the Haystack Communication Facility. As a result, multiple wireless jumps are required in order to achieve communication but that results in a weak connection subject to frequent interruptions. The communication signal is often interrupted by UMC vessel traffic or weather. The direct hard-wired line will reduce the amount of disconnections the Harbor Office experiences with the current City intranet and phone system. This is particularly critical during times of emergency response.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS):

Preliminary engineering is complete. Final design in FY19 with construction in FY19-20

COST & FINANCING DATA:

Cost Assumptions:

Engineering, Design, Const Admin		9,500
Other Professional Services (Survey)		2,500
Construction Services		95,000
Machinery & Equipment		10,000
	Subtotal	117,000
Contingency		35,000
	Total $	**152,000**

FY19-23 CMMP

HARBOR OFFICE COMMUNICATION LINE| PORTS

ESTIMATED PROJECT & PURCHASE TIMELINE

Pre Design: N/A

Engineering/Design: FY 2019

Purchase/Construction: FY 2019-2020

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY19	FY20	FY21	FY22	FY23	Total
General Fund							
1% Sales Tax							
Grant							
Proprietary Fund (Ports & Harbors)		152,000					152,000
TOTALS $		152,000					152,000
Requested Funds:							

Harbor Office Communications Line (PH19A)

- This project will replace the unreliable wireless communication line at the Unalaska Marine Center (UMC) Harbor Office with hard-wired direct connectivity from the Harbor Office to the Powerhouse. From the Powerhouse, the Harbor Office will have direct connectivity to City Hall, DPS, the rest of Unalaska, and the outside world. This will provide seamless transmission of phone calls and data by bypassing multiple wireless connections
- DPU Electric Line Crew identified and made available underground conduit between the Powerhouse and Lift Station #6 near the Latitude 54 building
- DPU Electric Line Crew installed pull string in conduit to install the communications lines from the Powerhouse to Lift Station #6
- New conduit was trenched in between Lift Station #6 and Latitude 54 building
- All the fiber has been pulled
- Connections to exterior of Old Powerhouse along with penetrations into the building anticipated to be complete by mid November
- A 52” long coring bit was used to penetrate concrete walls to run fiber
- Interior cabling will be done in-house by COU IS folks
- No additional funding requested for this project

Harbor Office Communications Line (PH19A)

MUNIS PROJECT PH19A - HARBOR OFFICE COMMS LINE						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectura	$ 3,500	$ -	$ -	$ 3,500	$ -	$ 3,500
Training Services	$ 1,500	$ 1,236	$ -	$ 264	$ -	$ 264
Other Professional Services	$ 2,500	$ -	$ -	$ 2,500	$ -	$ 2,500
Construction Services	$ 14,500	$ 14,000	$ -	$ 500	$ -	$ 500
Travel and Related	$ 3,000	$ 1,304	$ -	$ 1,696	$ -	$ 1,696
Contingency	$ 35,000	$ -	$ -	$ 35,000	$ -	$ 35,000
General Supplies	$ 76,500	$ 75,029	$ 4,136	$ (2,665)	$ -	$ (2,665)
Computer Hardware	$ 5,500	$ 4,330	$ -	$ 1,170	$ -	$ 1,170
Machinery & Equipment	$ 10,000	$ -	$ -	$ 10,000	$ -	$ 10,000
	$ 152,000	$ 95,899	$ 4,136	$ 51,965	$ -	$ 51,965

Harbor Office Communications Line (PH19A)

2014-000267-0
Recording District 305 Aleutian Islands
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NON-EXCLUSIVE EASEMENT AGREEMENT

Delta Western, Inc. ("Delta Western"), a Washington corporation, the address of which is 4241 21st Avenue West, Floor 4, Seattle, Washington, 98199-1250, and the City of Unalaska ("City"), a first-class Alaska municipal corporation, the address of which is 43 Raven Way, P. O. Box 610, Unalaska, Alaska, 99685, hereby agree as follows:

1. **Recitals**. Delta Western owns and operates a fuel distribution business in Unalaska, Alaska, and seeks to install, operate and maintain a fuel pipeline in City-owned right-of-way. Delta Western submitted the following description of its proposed project in letter to the City dated October 6, 2011, a copy of which is attached to this agreement:

...

The proposed plan is for the new pipeline to be able to service the Unalaska Marine Center ("UMC") Dock, the Coast Guard Dock, and the KDH [Kloosterboer Dutch Harbor] Dock.

...

The proposed 8", or possibly 10", fuel line would begin in the vicinity of the Delta Western dock where it would enter City of Unalaska right of way on East Point Road and extend east, turning and heading north down Ballyhoo Road until reaching the south end of the Kloosterboer dock where it would leave the City right of way. The line will generally be located on the north side of the East Point right of way and east side of the Ballyhoo right of way before joining the proposed City utility trench for the remainder of the run down Ballyhoo.

...

For the portion of the project where the proposed fuel line would be the only utility in the trench, the trench would be a minimum of three feet wide to allow for good compaction of the fuel line. For the section where we would like to have the fuel line join in with the City's utility trench there will be a minimum of 1' separation between the fuel line and any other utilities. The top of the fuel line will be a minimum of 48" below grade.

Delta Western would like to add a service connection near position four at the UMC dock and tie into the existing unused service line at the Coast Guard dock. Details of the ties to the UMC and Coast Guard Dock would be coordinated with the City.

...

2. **Easement Grant**. City shall grant and convey to Delta Western and hereby grants and conveys to Delta Western, subject to the terms and conditions of this Agreement, a ten-foot wide non-exclusive easement ("Easement") in, upon, under and through City-owned right-of-way for East Point Road and Ballyhoo Road, in the area of said right-of-way located in portions of recorded plats 95-07, 96-01, 2011-05, 2011-06, 83-8, 84-03, 89-11, 90-05, 94-04, and 97-10.

Following installation of Delta Western's fuel pipeline, a description of the Easement will be prepared (pursuant to Paragraph 3 below) and agreed to by the parties in an addendum to this agreement. This agreement and any addendum(s) thereto will be recorded in the Aleutian Recording District following completion of the pipeline project.

The location of any improvements Delta Western proposes to build at the Unalaska Marine Center and the terms of use for the same shall be by a separate agreement.

3. **As-Built Survey**. Promptly following completion of the fuel pipeline improvements to be constructed and installed in the Easement, Delta Western shall, at its expense, provide City with an "as-built" survey showing the precise location of the improvements, and that such improvements are within the boundaries of the Easement granted or, in the event of any variance, a proposed amended legal description of the Easement. Any such change to the legal description of the Easement shall only become effective upon the City's written acceptance of same.

4. **Use Limitation**. The Easement shall be used by Delta Western only for the purpose of installing, constructing, operating, maintaining, repairing and removing its fuel pipeline ("Permitted Uses"), and not for any other use.

5. **Term**. The Easement shall run for a term of twenty (20) years commencing on December 1, 2011, the date Delta Western started construction of its fuel pipeline. Delta Western shall have the option to extend the Easement term for two additional terms of six years each beyond the initial term. To exercise this option, Delta Western must give City at least 60 days written notice prior to the end of the preceding term.

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2014-000267-0

UMC Laydown Area (PH19B)

PROJECT DESCRIPTION: This project is located on the south end of the Position 7 at the Unalaska Marine Center on Ballyhoo Road. The proposed site is an extension to the uplands and is strictly fill. Upon completion provides an additional 1.9 acres of leasable uplands.

PROJECT NEED: This project will provide a much needed addition to the existing operational uplands at the Unalaska Marine Center. It was identified as an economic benefit during the Design process for the Unalaska marine center expansion and replacement project .

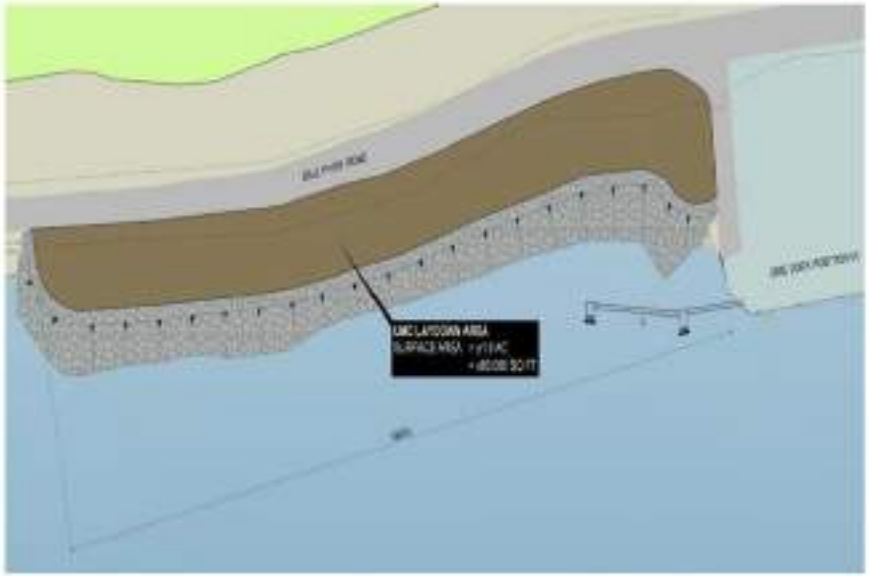
DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS): This extension is permitted through the USACE and has gone through the appropriate NEPA Reviews. The design is complete and all critical pieces are in place to move forward with the completion of this fill work.

COST & FINANCING DATA: This project is to be funded out of the Port Proprietary Fund and is estimated to have return on investment of 10 years or less. This project was an additive alternative to the original UMC project but was removed from the project. The leftover from the UMC contingency budget is expected to cover the projected cost of the laydown area.

FY19-23 CMMP

UMC LAYDOWN AREA| PORTS & HARBORS

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



Cost Assumptions:

Engineering CA Services		10,000
Other Professional Services		5,000
Construction Services		4,300,000
	Subtotal	4,315,000
Contingency		1,085,000
	TOTAL $	**5,400,000**

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY19	FY20	FY21	FY22	FY23	Total
General Fund							
1% Sales Tax							
Grant							
Proprietary Fund (Ports & Harbors)		5,400,000					5,400,000
TOTALS $		5,400,000					5,400,000
Requested Funds:							

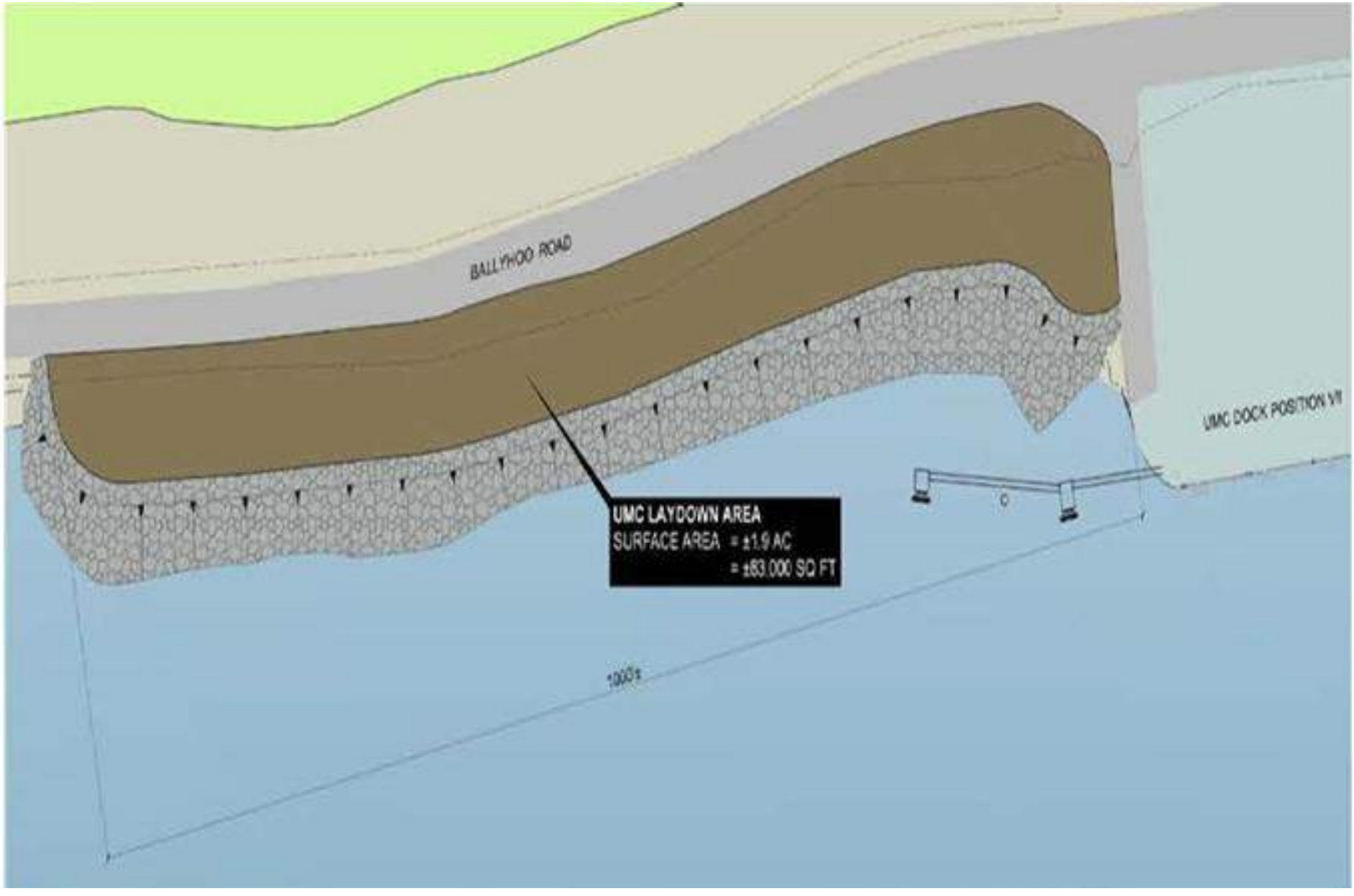
UMC Laydown Area (PH19B)

- This project is located on the south end of the Position 7 at the Unalaska Marine Center on Ballyhoo Road
- The site is an extension to the uplands and is ocean fill with some drainage improvements and lighting
- This project provides an additional 1.9 acres of leasable uplands
- PND Engineers and DPW/Ports bid the project in September 2018 with 3 bids received on October 16, 2018
- Northern Alaska Contractors (NAC) was the low bidder at $3,837,342
- Resolution 2018-62 authorized the City Manager to enter into an agreement with NAC for the work
- DPW awarded the contract to NAC in November 2018
- NAC began work in last week of April 2019
- Project was certified to be Substantially Complete on August 27, 2019
- All Punch List items are complete
- Final survey and as-built record drawings are complete
- Final payment has been made

UMC Laydown Area (PH19B)

MUNIS PROJECT PH19B - UMC LAYDOWN AREA						
DESC	**BUDGET**	**EXPENSED**	**ENCUMBERED**	**MUNIS AVAILABLE**	**PENDING ENCUMBRANCES**	**ACTUAL AVAILABLE**
Engineering and Architectural	$ 201,952	$ 183,630	$ 18,101	$ 221	$ -	$ 221
Other Professional Services	$ 792	$ 792	$ -	$ -	$ -	$ -
Construction Services	$ 4,183,342	$ 4,133,042	$ 50,300	$ -	$ -	$ -
Telephone/FAX/TV	$ 500	$ 83	$ -	$ 417	$ -	$ 417
Contingency	$ 1,013,414	$ -	$ -	$ 1,013,414	$ -	$ 1,013,414
	$ 5,400,000	$ 4,317,548	$ 68,401	$ 1,014,051	$ -	$ 1,014,051

UMC Laydown Area (PH19B)



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 Position7.

Project Need: Cruise ship activity is on the rise in Unalaska and is proving to be a benefit to local commerce. The cruise ships do not have a place to reserve with certainty as the Unalaska Marine Center is designated for industrial cargo and fishing operations. We have been fortunate to be able to accommodate most of the cruise ship activity, but the passenger count and number of vessel call s is on the rise.

With this in mind, a cruise ship terminal would allow for dedicated cruise ship berthing. It would eliminate passengers walking through and around cargo operations. During the off season for cruise ships this facility could be used for fishing vessel offloads. This would allow additional revenue opportunity and still bolster commerce through committed berthing for the cruise ship industry.

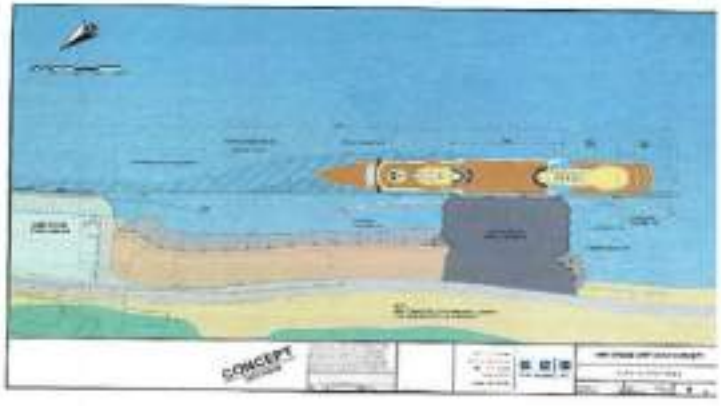
Development Plan & Status (Include Permit and Utility Requirements):

Cost & Financing Data: ROM for geotechnical is about $300 and ROM for design is $600

FY20-24 CMMP

UMC Cruise Ship Terminal Design| Ports

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

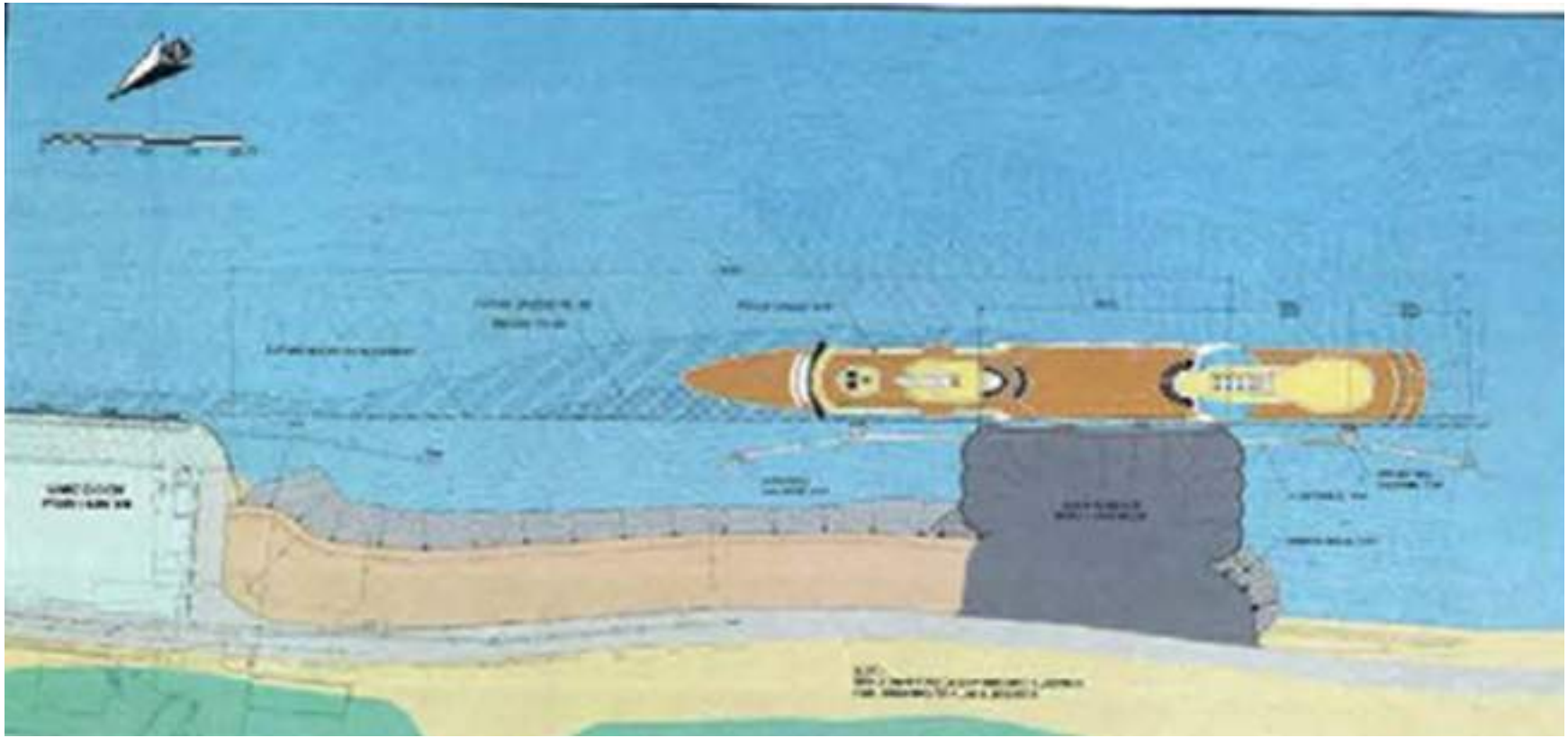


Cost Assumptions	
Engineering, Design, Const Admin	600,000
Other Professional Services	-
Construction Services	300,000
Machinery & Equipment	-
Subtotal	**900,000**
Contingency (set at 30%)	270,000
TOTAL	**1,170,000**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**1,170,000**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
1% Sales Tax							-
Grant							-
Proprietary Fund		390,000	780,000				1,170,000
TOTALS $	-	390,000	780,000	-	-	-	1,170,000
Requested Funds:							

Cruise Ship Terminal Design (PH20A)

- Concept design discussions underway
- PND consulted for additional input
- Ports is considering impact of next summer's 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

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 being developed

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	$ -	$ -	$ 50,500	$ -	$ 50,500
	$ 65,650	$ -	$ -	$ 65,650	$ -	$ 65,650

Rescue Vessel Engine Upgrade (PH20C)

Entrance Channel Dredging (PH201)

Project Description: This project is a General Fund project. It 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 break-bulk 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. We are moving all unencumbered proprietary funds back to Ports to use for more pressing projects.

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.

Project Status: The Feasibility Study is complete and the milestone of presenting the study to Headquarters reached. USACE HQ will be tracking our feasibility finish [intensely]! As the District is poised to complete actions by March/April - - - District is definitely geared/tuned to the signed Chief's Report date. Design phase, and Construction are the next phases of the project.

FY20-24 CMMP

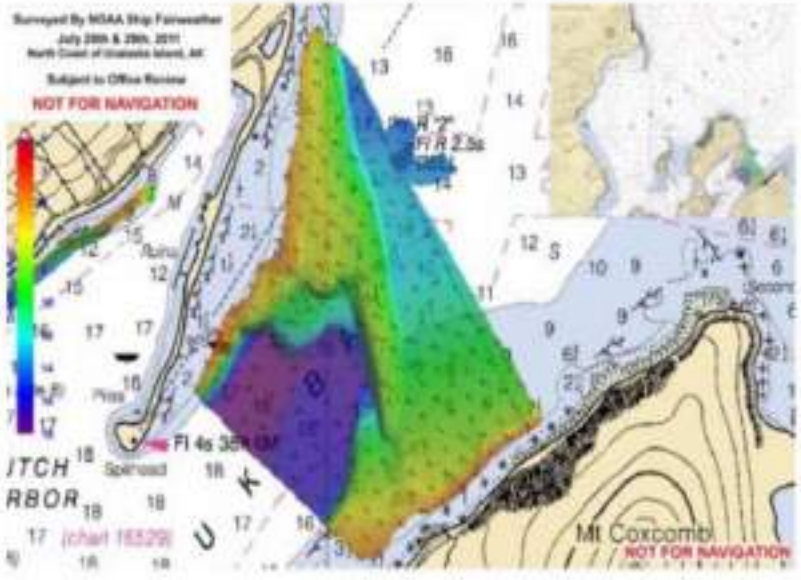
Entrance Channel Dredging | PORTS

Estimated Project & Purchase Timeline

Pre Design: FY 2019

Engineering/Design: FY 2020

Purchase/Construction: FY 2022



Cost Assumptions	
Engineering, Design, Const Admin	1,500,000
Other Professional Services	1,000,000
Construction Services	2,500,000
Machinery & Equipment	
Subtotal	**5,000,000**
Contingency (set at 30%)	1,500,000
TOTAL	**6,500,000**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**6,500,000**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)	1,500,000	1,000,000		4,000,000			6,500,000
1% Sales Tax							-
Grant							-
Proprietary Fund							-
TOTALS $	1,500,000	1,000,000	-	4,000,000	-	-	6,500,000
Requested Funds:							

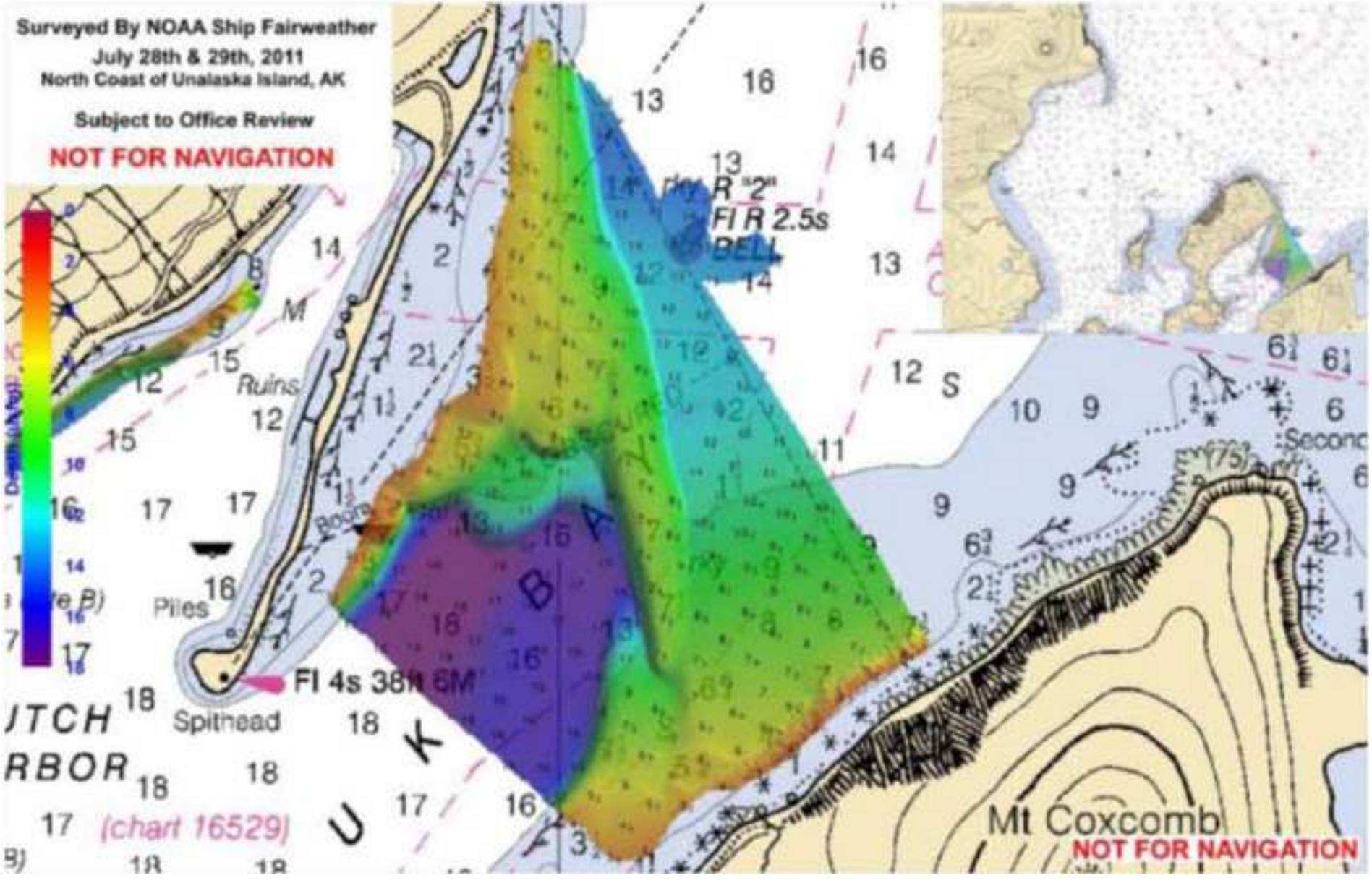
Entrance Channel Dredging (PH201)

- This project will remove material from the channel bar that crosses the entrance of Iliuliuk Bay before vessels can enter Dutch Harbor
- Ports is working with Army Corps in the planning stage and expect dredging in FY22
- USACE is working on completing the feasibility report and is planning on presenting that report to the COU and the public
- At that time, USACE will have recommendations for dredging options, dredging depths, and funding programs

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	$ 1,091,212	$ -	$ -	$ -	$ -
Construction Services	$ 408,538	$ 25,175	$ -	$ 383,363	$ -	$ 383,363
Telephone / Fax / TV	$ 250	$ -	$ -	$ 250	$ -	$ 250
	$ 2,500,000	$ 1,116,388	$ -	$ 1,383,613	$ -	$ 1,383,613

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 1-7. This project is proposed to compliment 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 ft. and -45 ft. at MLLW. Dredging at the face of the Unalaska Marine Center would create a constant -45ft from Positions 1-7. This will accommodate deeper draft vessels throughout the facility. The existing sheet pile is driven to approximately -58 ft. and dredging to -45ft 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 schedule 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 draws more than 22ft. must place another vessel between the dock face and their vessel in order to get enough water under the keel.

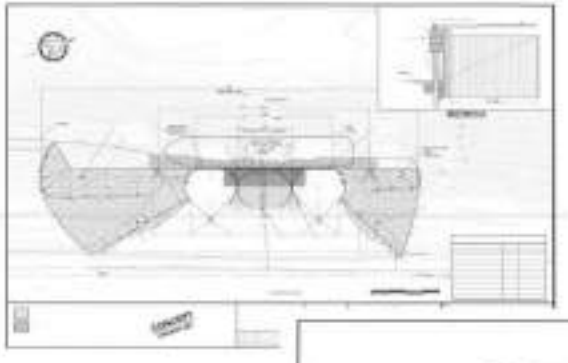
Project Need: The completion of this dredging will enhance current and future operations by creating useable industrial dock face that is designed for vessels in varying lengths and tonnage.

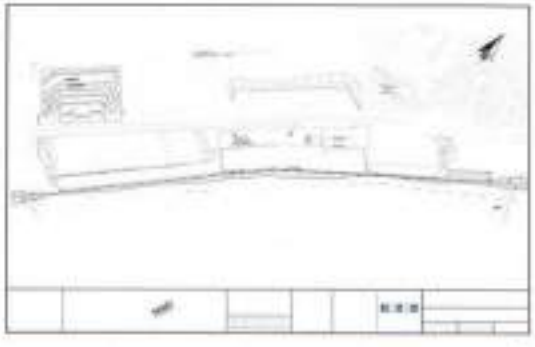
Project Status: This dredging project is in support of both the UMC position 3 and 4 Replacement project and the dredging of the entrance channel. The estimates for dredging of the Light Cargo Dock include 6000 CY of dredging and 3100 CY of shot rock slope protection. The dredging material will not be 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.

FY20-24 CMMP

LCD and UMC Dredging | Ports

Estimated Project & Purchase Timeline
Pre Design: FY 2019
Engineering/Design: FY 2023
Purchase/Construction: FY 2023





Cost Assumptions	
Engineering, Design, Const Admin	109,650
Other Professional Services	-
Construction Services	1,932,000
Machinery & Equipment	-
Subtotal	**2,041,650**
Contingency (set at 30%)	612,495
TOTAL	**2,654,145**
Less Other Funding Sources (Grants, etc.)	-
Total Funding Request $	**2,654,145**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
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)

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. In FY17 we are reducing funding set aside for this project to make them available for other more urgent Ports projects.

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.

Funding: 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.

FY20-24 CMMP

Bobby Storrs A & B Float Realignment & Replacement| Ports

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

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

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

Cost Assumptions	
Engineering, Design, Const Admin	650,000
Other Professional Services	-
Construction Services	9,980,000
Machinery & Equipment	-
Subtotal	**10,630,000**
Contingency (set at 30%)	3,189,000
TOTAL	**13,819,000**
Less Other Funding Sources (Grants, etc.)	3,405,000
Total Funding Request $	**10,414,000**

Revenue Source	Appropriated Funds	Fiscal Year Funding Requests					
		FY20	FY21	FY22	FY23	FY24	Total
General Fund (DEPT)							-
1% Sales Tax							-
Grant			3,405,000				3,405,000
Proprietary Fund	50,000	600,000	6,575,000				7,225,000
TOTALS $	50,000	600,000	9,980,000	-	-	-	10,630,000
Requested Funds:							

Robert Storrs Harbor A & B Floats (PH905)

- 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
- 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 and 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

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	$ 632,000	$ -	$ 22,360	$ 609,640	$ -	$ 609,640
Other Professional	$ -	$ -	$ -	$ -	$ -	$ -
Telephone / Fax / TV	$ -	$ -	$ -	$ -	$ -	$ -
Advertising	$ -	$ -	$ -	$ -	$ -	$ -
Contingency	$ 18,000	$ -	$ -	$ 18,000	$ -	$ 18,000
	$ 650,000	$ -	$ 22,360	$ 627,640	$ -	$ 627,640

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

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	$ 22,335	$ 7,197	$ -	$ 7,197
Construction Services	$ 99,450	$ -	$ -	$ 99,450	$ -	$ 99,450
Telephone / Fax / TV	$ 200	$ 40	$ -	$ 160	$ -	$ 160
Advertising	$ 350	$ -	$ -	$ 350	$ -	$ 350
	$ 140,000	$ 10,508	$ 22,335	$ 107,157	$ -	$ 107,157

Airport Terminal Roof (AP18A)

Lear Road Duplexes Kitchen / Bathroom Reno (EH18A)

PROJECT DESCRIPTION: This project consists of the full renovation of both kitchens in both units (4 kitchens total). The work will replace all cabinets, countertops, and flooring in both units of both duplexes, and may also include some plumbing work and 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, meaning they are 35 years old. Labor and maintenance costs are increasing. Over time, some cabinets 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.

MAINTENANCE HISTORY: From 1998 to 2013, various maintenance projects have taken place, including roof replacement, grading and drainage, exterior painting (twice), deck replacement, carpet replacement, window replacement, and water service line replacement. These projects have totaled $250,100.

DEVELOPMENT PLAN & STATUS (INCLUDE PERMIT AND UTILITY REQUIREMENTS): Architect visited the site and has provided preliminary concept plans.

COST & FINANCING DATA: Architect provided budgetary estimate shown in the Cost Assumptions table.

Cost Assumptions

Engineering Services		Included
Other Professional Services		Included
Machinery and Equipment		0
Construction Services		296,000
	Subtotal	296,000
Contingency		104,000
	Total $	**400,000**

FY19-23 CMMP

LEAR ROAD DUPLEXES KITCHEN & BATHROOM RENOVATIONS| HOUSING

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

REVENUE SOURCE	APPROPRIATED FUNDS	FISCAL YEAR FUNDING REQUESTS					
		FY19	FY20	FY21	FY22	FY23	Total
General Fund	124,994	275,006					400,000
1% Sales Tax							
Grant							
Proprietary Fund (Housing)							
TOTALS $	124,994	275,006					400,000

Requested Funds: Engineering Services and Construction Services *(Estimates based material and labor estimates from vendors in 2016 plus 3% annual inflation adjustments)*

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 will replace all cabinets, appliances, countertops, and flooring in both units of both duplexes, and may include 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 with 60 days allowed per unit
- Demo on one unit is complete
- Submittals and material procurement is in progress
- Additional work may be awarded depending on what's uncovered

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	$ 35,000	$ 14,782	$ 20,580	$ (362)	$ -	$ (362)
Solid Waste	$ -	$ -	$ -	$ -	$ -	$ -
Construction Services	$ 241,006	$ -	$ 235,586	$ 5,420		$ 5,420
Telephone/FAX/TV	$ 250	$ 191	$ -	$ 59	$ -	$ 59
Contingency	$ 104,000	$ -	$ -	$ 104,000	$ -	$ 104,000
General Supplies	$ -	$ -	$ -	$ -	$ -	$ -
Facility Maintenance	$ 19,744	$ -	$ -	$ 19,744	$ -	$ 19,744
	$ 400,000	$ 14,973	$ 256,166	$ 128,861	$ -	$ 128,861

Lear Road Duplexes Kitchen / Bathroom Reno (EH18A)

UMC Laydown - BEFORE

UMC Laydown - AFTER

See page 176

For more information about this project update, contact:

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The End