

City of Unalaska

Capital and Major Maintenance Plan

FY2016-FY2020



City of Unalaska

# Capital and Major Maintenance Plan

FY2016-FY2020

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### CITY OF UNALASKA UNALASKA, ALASKA

### RESOLUTION NO. 2015-27

A RESOLUTION OF THE UNALASKA CITY COUNCIL ADOPTING THE CITY OF UNALASKA FY16-FY20 CAPITAL & MAJOR MAINTENANCE PLAN.

WHEREAS, the purpose of the Capital Major and Maintenance Plan (CMMP) is to formalize the process of identifying and completing capital projects and major maintenance projects; and

WHEREAS, the CMMP serves as a tool to help the City effectively and efficiently meet the needs of the community; and

WHEREAS, City Departments, City Committees and Commissions, and Community Groups were invited to submit project nominations; and

WHEREAS, this planning document outlines anticipated or recommended projects and expenditures for the upcoming five years; and

WHEREAS, City staff, CMMP Review Committee, and City Council have had opportunity to review and comment on the nominations and the FY16-FY20 CMMP.

NOW THEREFORE BE IT RESOLVED that the Unalaska City Council hereby adopts the FY16-FY20 CMMP for the City of Unalaska; and

BE IT FURTHER RESOLVED that the City Council reviews and approves the five-year CMMP, which is presented by the City Manager annually per Title 6.12., UCO.

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ATTEST:			MA	AYOR						



### 2. Spreadsheets

- 2.1. Estimated Project and Purchase Timelines
- 2.2. FY 2016
- 2.3. FY 2017
- 2.4. FY 2018
- 2.5. FY 2019
- 2.6. FY 2020
- 2.7. Summary of Project and Funding Sources



### **Estimated Project and Purchase Timelines**

(excluding new vehicle purchases & replacements)

Initiation / Concept
Feasibility / Pre-Design
Engineering / Design
Construction / Purchase

Regardless of when a project might be funded, many remain active in other fiscal years. The purpose of this table is to provide an overview of the estimated project timelines identified in the nominations for the current CMMP and to display the allocation of valuable staffing resources. Projects identified in previous CMMP's that are not in need of additional funding in the current CMMP are not included below.

	Project	Associated Funds					
Fund or Department	(Projects in boldface are newly included in this year's CMMP, other	(Appropriated and	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
rana er zeparenient	projects have been updated from previous CMMPs.)	Requested)					
DPW	Cemetery Survey	\$35,000					<del></del>
DPW & PCR	Burma Road Chapel Roof Ventilation Upgrades	\$375,000					
DPW	DPW Storage Building	\$5,000,000					
PCR-Library	Unalaska Public Library Expansion	\$5,450,000					
DPS	Replace Breathing Air Compressor	\$78,893					
Planning	GIS Orthophotography	\$100,000					
IS	City Network Core Upgrade	\$266,500					
Finance	Finance Replacement Copier	\$27,000					
Planning	Henry Swanson House Improvements	\$335,000					
Planning	Manson's Saltery Improvements	\$95,000					
School (General Fund)	Unalaska City School Playground Renovation	\$300,000					
Clinic (General Fund)	Clinic Restoration Project	\$50,000					
Electric-Distribution	Automatic Meter Read System	\$362,511					
Electric-Production	Stack Silencer Insulation Replacement	\$36,000					
Electric-Production	Old Powerhouse Fan and Motor Replacement	\$15,000					
Electric-Production	Old Powerhouse Battery System Replacement	\$263,070					
Electric-Distribution (General Fund)	Fiber Optic Infrastructure Development Phase 1	\$1,012,407					
Water	CT Tank Interior Maintenance and Painting	\$1,208,000					
Water	Pyramid Water Storage Tank	\$8,250,000					
Water	Water Flow Optimization Project	TBD					
Water	Water Truck Filling Stations	\$259,325					
Water	Pyramid Water Treatment Plant Mircro Turbines	\$1,340,260					
Water	Icy Lake Solar Power Improvements	\$85,500					
Wastewater	Lift Stations 2 & 5 Discharge Pipe Replacement	\$122,250					
Solid Waste	Mad-Vac 61 Litter Collector	\$33,795					
Solid Waste	Reinsulation of Baler Building	\$495,200					
Solid Waste & DPW	Landfill Baler Facility Boiler Flue Replacement	\$14,000					
Ports & Harbors	UMC Dock Replacement & Expansion (Positions III & IV)	\$44,964,858					
Ports & Harbors	Robert Storrs Small Boat Harbor Improvements (A & B Float)	\$10,030,000					
Ports & Harbors	Entrance Channel Dredging	\$250,000					
Ports & Harbors	LCD Expansion	\$4,653,650					
Ports & Harbors	LCD UMC Dredging	\$2,041,650				,	
Ports & Harbors	UMC Electrical Pedestal Installation	\$100,000					
Housing	4-Plex Roof Replacement	\$240,000					
Highlight of Summary of Project and Funding Sources	Total Requested Funds for FY16-FY20 CMMP	\$93,517,313	\$7,138,144	\$16,755,473	\$61,529,266	\$6,765,030	\$1,329,400



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	General Fund			FY16 Financing Sources for Capital Cost							
Project #/	Fund or		Appropriated	FY16			City			Other	
Type	Department	Project	Funding	Request	Total	General Fund	1% Sales Tax	Proprietary	Debt	Grant	Total
туре	Public Safety	Replace Breathing Air Compressor (Purchase)	Fullality	78,893	78,893	78,893	1% Sales Tax	riopiletary	Debt	Giani	78,89
	Planning	GIS Orthophotography (Project Design & Engineering)	-	100,000	100,000	100,000	-	<u>-</u>		-	100,00
	DPW	Cemetery Survey (Project Design & Engineering)	-	35,000	35,000	35,000		-	-	-	35,00
	PCR-Library	Public Library Expansion (Project Feasibility)	-	12,500	12,500	12,500		-	-	-	12,50
	General Fund	Vehicle Replacement (Purchases including Engine 4)	-	843,791	843,791	843,791		-	-	-	843,79
	Finance-IS	City Network Core Upgrade	-	266,500	266.500	266.500		-	-	-	266,50
	Finance	Replacement Copier (Purchase)	-	27,000	27,000	27,000		-	-	-	27,00
		Governmental Grand Total	-	1,363,684	1.363.684	1,363,684	-		-	-	1,363,68
·		Covernmental Grand Total	l l	1,000,004	1,000,004	1,000,004				l l	1,000,00
	School	Unalaska City School Playground Renovation	_	300,000	300,000	300,000	-	-		-	300,00
	Clinic	Clinic Restoration Project	-	50,000	50,000	50,000	-	-		-	50,00
		Community Nomination Grand Total	-	350.000	350.000	350.000	-			- 1	350,00
		Community Nomination Grand Total	- 1	330,000	330,000	330,000	-			- 1	330,00
					ı					Т	
	Proprietary Fu	nds					FY16 Financing	Sources for C	apital Cost		
Project #/	Fund or		Appropriated	FY16			City			Other	
Туре	Department	Project	Funding	Request	Total	General Fund	1% Sales Tax	Proprietary	Debt	Grant	Total
	Electric-Production	Stack Silencer Insulation Replacement (Maint. Const.)	-	36,000	36,000	-	-	36,000	-	-	36,00
		Electric Grand Total	-	36,000	36,000	-	-	36,000	-	-	36,00
-	ı		l l	00,000	00,000			00,000		l I	20,00
WA501	Water	Pyramid Water Storage Tank (Design & Engineering)	100,000	3,525,000	3,625,000	-	-	525,000	-	3,000,000	3,525,00
	Water	Vehicle Replacement (Purchases)	-	241,507	241,507		-	241,507	-	-	241,50
		Water Grand Total	100,000	3,766,507	3,866,507	-	-	766,507		3,000,000	3,766,507
		Water Grand Total	100,000	3,700,307	3,000,307			700,007		3,000,000	3,7 00,307
	Wastewater		-		-	-			_	-	
	Wasiewalei	Western to Complete									
L		Wastewater Grand Total	-	-	-	-	-	-	-	-	-
	1										
	Solid Waste	Mad-Vac 61 Litter Collector (Purchase)	-	33,795	33,795	-	-	33,795	-	-	33,79
	Solid Waste	Landfill Baler Facility Boiler Flue Replacement (Maintenance Const)	-	14,000	14,000	-	-	14,000	-	-	14,00
L		Solid Waste Grand Total	-	47,795	47,795	-	-	47,795	-	-	47,79
	I=	1									
	Ports & Harbors	LCD Expansion (Engineering)	-	19,650	19,650	•	-	19,650	-	-	19,65
	Ports & Harbors	LCD UMC Dredging (Engineering)	-	109,650	109,650	_	_	109,650	_	-	109,65
	Ports & Harbors				_			103,030			
PH201		UMC Electrical Pedestal Installation (Engineering & Construction)	-	100,000	100,000	-	-	100,000	-	-	
	Ports & Harbors	Entrance Channel Dredging (Pre-Design & Feasibility)	100,000	150,000	<b>100,000</b> 250,000	-	-	<b>100,000</b> 150,000	-	1	150,00
PH905	Ports & Harbors Ports & Harbors	Entrance Channel Dredging (Pre-Design & Feasibility)  Robert Storrs Small Boat Harbor Improvements (A&B Float Engineering)	300,000	150,000 290,000	100,000 250,000 590,000			100,000 150,000 290,000		-	150,00 290,00
PH905	Ports & Harbors	Entrance Channel Dredging (Pre-Design & Feasibility)		150,000 290,000 904,858	<b>100,000</b> 250,000		-	<b>100,000</b> 150,000	-	-	100,00 150,00 290,00 904,85
PH905	Ports & Harbors Ports & Harbors	Entrance Channel Dredging (Pre-Design & Feasibility)  Robert Storrs Small Boat Harbor Improvements (A&B Float Engineering)	300,000	150,000 290,000	100,000 250,000 590,000		-	100,000 150,000 290,000	-	- - -	150,00 290,00
PH905	Ports & Harbors Ports & Harbors	Entrance Channel Dredging (Pre-Design & Feasibility) Robert Storrs Small Boat Harbor Improvements (A&B Float Engineering) UMC Dock Replacement and Expansion (Positions III & IV Engineering)	300,000 980,000	150,000 290,000 904,858	100,000 250,000 590,000 1,884,858	- - -	-	100,000 150,000 290,000 904,858	-	-	150,00 290,00 904,85
PH905 PH301	Ports & Harbors Ports & Harbors	Entrance Channel Dredging (Pre-Design & Feasibility) Robert Storrs Small Boat Harbor Improvements (A&B Float Engineering) UMC Dock Replacement and Expansion (Positions III & IV Engineering)	300,000 980,000	150,000 290,000 904,858	100,000 250,000 590,000 1,884,858	- - -	-	100,000 150,000 290,000 904,858	-	-	150,00 290,00 904,85
PH905 PH301	Ports & Harbors Ports & Harbors Ports & Harbors	Entrance Channel Dredging (Pre-Design & Feasibility) Robert Storrs Small Boat Harbor Improvements (A&B Float Engineering) UMC Dock Replacement and Expansion (Positions III & IV Engineering)	300,000 980,000 <b>1,380,000</b>	150,000 290,000 904,858 1,574,158	100,000 250,000 590,000 1,884,858 2,954,158	- - -	-	100,000 150,000 290,000 904,858 1,574,158	- - -		150,00 290,00 904,85 <b>1,574,15</b>
PH905 PH301	Ports & Harbors Ports & Harbors Ports & Harbors	Entrance Channel Dredging (Pre-Design & Feasibility) Robert Storrs Small Boat Harbor Improvements (A&B Float Engineering) UMC Dock Replacement and Expansion (Positions III & IV Engineering) Ports & Harbors Grand Total	300,000 980,000 1,380,000	150,000 290,000 904,858 1,574,158	100,000 250,000 590,000 1,884,858 2,954,158	-	-	100,000 150,000 290,000 904,858 1,574,158	-	-	150,00 290,00 904,85 <b>1,574,15</b>
PH905 PH301	Ports & Harbors Ports & Harbors Ports & Harbors Ports & Harbors Airport	Entrance Channel Dredging (Pre-Design & Feasibility) Robert Storrs Small Boat Harbor Improvements (A&B Float Engineering) UMC Dock Replacement and Expansion (Positions III & IV Engineering) Ports & Harbors Grand Total	300,000 980,000 1,380,000	150,000 290,000 904,858 1,574,158	100,000 250,000 590,000 1,884,858 2,954,158	-	-	100,000 150,000 290,000 904,858 1,574,158	-	-	150,00 290,00 904,88 <b>1,574,15</b>
PH905 PH301	Ports & Harbors Ports & Harbors Ports & Harbors	Entrance Channel Dredging (Pre-Design & Feasibility) Robert Storrs Small Boat Harbor Improvements (A&B Float Engineering) UMC Dock Replacement and Expansion (Positions III & IV Engineering) Ports & Harbors Grand Total  Airport Grand Total	300,000 980,000 1,380,000	150,000 290,000 904,858 1,574,158	100,000 250,000 590,000 1,884,858 2,954,158	-	-	100,000 150,000 290,000 904,858 1,574,158	-	-	150,00 290,00 904,85 1,574,15
PH905 PH301	Ports & Harbors Ports & Harbors Ports & Harbors Ports & Harbors Airport	Entrance Channel Dredging (Pre-Design & Feasibility) Robert Storrs Small Boat Harbor Improvements (A&B Float Engineering) UMC Dock Replacement and Expansion (Positions III & IV Engineering) Ports & Harbors Grand Total	300,000 980,000 1,380,000	150,000 290,000 904,858 1,574,158	100,000 250,000 590,000 1,884,858 2,954,158	-	-	100,000 150,000 290,000 904,858 1,574,158	-	-	150,00 290,00 904,83 1,574,15
PH905 PH301	Ports & Harbors Ports & Harbors Ports & Harbors Ports & Harbors Airport	Entrance Channel Dredging (Pre-Design & Feasibility) Robert Storrs Small Boat Harbor Improvements (A&B Float Engineering) UMC Dock Replacement and Expansion (Positions III & IV Engineering) Ports & Harbors Grand Total  Airport Grand Total  Housing Grand Total	300,000 980,000 1,380,000	150,000 290,000 904,858 1,574,158	100,000 250,000 590,000 1,884,858 2,954,158	-	-	100,000 150,000 290,000 904,858 1,574,158	-	-	150,00 290,00 904,80 1,574,15
PH905 PH301	Ports & Harbors Ports & Harbors Ports & Harbors Ports & Harbors Airport	Entrance Channel Dredging (Pre-Design & Feasibility) Robert Storrs Small Boat Harbor Improvements (A&B Float Engineering) UMC Dock Replacement and Expansion (Positions III & IV Engineering) Ports & Harbors Grand Total  Airport Grand Total  Housing Grand Total  Governmental Fund Total	300,000 980,000 1,380,000	150,000 290,000 904,858 1,574,158	100,000 250,000 590,000 1,884,858 2,954,158	-	-	100,000 150,000 290,000 904,858 1,574,158	-	-	150,00 290,00 904,81 1,574,15 - - - 1,713,68
PH905 PH301	Ports & Harbors Ports & Harbors Ports & Harbors Ports & Harbors Airport	Entrance Channel Dredging (Pre-Design & Feasibility) Robert Storrs Small Boat Harbor Improvements (A&B Float Engineering) UMC Dock Replacement and Expansion (Positions III & IV Engineering) Ports & Harbors Grand Total  Airport Grand Total  Housing Grand Total	300,000 980,000 1,380,000 - - -	150,000 290,000 904,858 1,574,158	100,000 250,000 590,000 1,884,858 2,954,158	-	-	100,000 150,000 290,000 904,858 1,574,158	-	-	150,00 290,00 904,88 1,574,15

	General Fund	TOPT TO OUT					FY17 Financing	Sources for C	anital Cost		
Dun:+ #/	Fund or		A	FY17			City	Sources for C	apitai Cust	Other	
Project #/		Davis et	Appropriated		T-1-1	0		Description	I Date		T-1-1
Туре	Department	Project	Funding	Request	Total	General Fund	1% Sales Tax	Proprietary	Debt	Grant	Total
	PCR-Library	Public Library Expansion (Engineering & Design)	12,500	375,000	387,500 <b>35.000</b>	375,000	-	-	-	-	375,000
	Planning General Fund	Henry Swanson House Improvements (Engineering)  Vehicle Replacement (Purchases)	-	<b>35,000</b> 1,581,792	1,581,792	35,000 1,581,792	-	-	-	-	<b>35,000</b> 1,581,792
	General Fund	Governmental Grand Total	12,500	1,991,792	2,004,292	1,991,792	-	-	-	-	1,991,792
		Governmental Grand Total	12,300	1,991,792	2,004,232	1,551,752			_		1,331,732
	Proprietary Fu	ınds					FY17 Financing	Sources for C	apital Cost		
Project #/	Fund or		Appropriated	FY17			City			Other	
Type	Department	Project	Funding	Request	Total	General Fund	1% Sales Tax	Proprietary	Debt	Grant	Total
1990	Electric-Production	Old Powerhouse Battery System Replacement (Maint. Const)	- unumg	263,070	263,070	-	170 Galoo Tax	263,070	DODE	Grant	263,070
	Electric-Distribution	Fiber Optic Infrastructure Development Phase 1 (Eng. & Const.)	_	1,012,407	1,012,407	1,012,407	-	203,070	_	_	1,012,407
						1,012,407	-	29,344		-	
	Electric-Distributuion	Automatic Meter Read System (Engineering & Design)  Vehicle Replacement (Purchases)	-	29,344 308,600	29,344 <b>308.600</b>	-	-	308.600	-	-	29,344 <b>308,600</b>
	Electric			,	,	4 040 407		,			
		Electric Grand Total	-	1,613,421	1,613,421	1,012,407	-	601,014	-	-	1,613,421
WA301	Water	CT Tank Interior Maintenance and Painting (Design for Re-Coat)	155,000	100,000	255,000	-	-	100,000	-	-	100,000
WA402	Water	Water Flow Optimization Project (Project Design & Construction)	99,500	TBD	TBD	-	-	TBD	-	-	TBD
WA501	Water	Pyramid Water Storage Tank (Construction)	3,625,000	4,625,000	8,250,000	-	-	1,625,000	-	3,000,000	4,625,000
	Water	Water Truck Filling Stations (Eng. & Const.)	-	259,325	259,325	-	-	259,325	-	-	259,325
	Water	Pyramid Water Treatment Plant Mircro Turbines (Pre-Design)	-	50,000	50,000	-	-	50,000	-	-	50,000
	Water	Icy Lake Solar Power Improvements (Eng. & Const.)	-	85,500	85,500	-	-	85,500	-	-	85,500
	Water	Vehicle Replacement (Purchases)	-	80,500	80,500	-	•	80,500	-		80,500
		Water Grand Total	3,879,500	5,200,325	8,980,325	-	-	2,200,325	-	3,000,000	5,200,325
	Wastewater	Lift Stations 2&5 Discharge Pipe Replace (Maint. Design & Const.	-	122,250	122,250	-	-	122,250	-	-	122,250
	Wastewater	Vehicle Replacement (Purchases)	_	218,126	218,126	_	_	218,126	_	-	218,126
		Wastewater Grand Total	-	340,376	340,376	-	-	340,376	-	-	340,376
		Wastewater Grand Total		340,370	340,370			340,370			340,510
	Solid Waste	Reinsulation of Baler Building (Maintenance Const.)	_	495,200	495,200	_	_	495,200	_	_	495,200
	Solid Waste	Vehicle Replacement (Purchases)	-	206,500	206,500	-		206,500	-	-	206,500
		Solid Waste Grand Total	-	701,700	701,700	-	-	701,700	-	-	701,700
	II.			, ,	•				I	L. L.	
	Ports & Harbors	Vehicle Replacement (Purchases)	-	101,859	101,859	-	•	101,859	-	-	101,859
	Ports & Harbors	LCD UMC Dredging (Construction)	109,650	1,932,000	2,041,650	-	-	1,932,000	-	-	1,932,000
	Ports & Harbors	LCD Expansion (Construction)	19,650	4,634,000	4,653,650	-	-	4,634,000	-	-	4,634,000
		Ports & Harbors Grand Total	129,300	6,667,859	6,797,159	-	-	6,667,859	-	-	6,667,859
	Airport		-	-		-	-	-	-	-	
	Alipoit	Airport Grand Total	-	-	-	-	-			-	<u> </u>
		Airport Grand Total				_		_		_	
	Housing	4-Plex Roof Replacement (Maintenance Design & Construction)		240,000	240,000	-	-	240,000	-	-	240,000
		Housing Grand Total	-	240,000	240,000	-	-	240,000	-	-	240,000
	ſ	_	1	1		1		ı	1	1	
		Governmental Fund Total	12,500	1,991,792	2,004,292	1,991,792	-	-	-	-	1,991,792
		Proprietary Funds Total	4,008,800	14,763,681	18,672,981	1,012,407	-	10,751,274	-	3,000,000	14,763,681
		City Grand Totals	4,021,300	16,755,473	20,677,273	3,004,199	-	10,751,274	-	3,000,000	16,755,473
		•									



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	General Fund			FY18 Financing Sources for Capital Cost							
Project #/	Fund or		Appropriated	FY18			City			Other	
Type	Department	Project	Funding	Request	Total	General Fund	1% Sales Tax	Proprietary	Debt	Grant	Total
	DPW & PCR	Burma Road Chapel Roof Ventilation Upgrades (Maint. Design)	-	25,000	25,000	25,000	-	-	-	-	25,000
	DPW	DPW Storage Building (Feasibility & Design)	-	1,000,000	1,000,000	1,000,000	•	-	-	-	1,000,000
	PCR-Library	Public Library Expansion (Construction)	387,500	5,062,500	5,450,000	2,531,250	-	-	-	2,531,250	5,062,500
	Planning	Henry Swanson House Improvements (Construction)	35,000	300,000	335,000	300,000	-	-	-	-	300,000
	Planning	Manson's Saltry Improvements (Stabilization)	-	65,000	65,000	65,000	-	-	-	-	65,000
	General Fund	Vehicle Replacement (Purchases)	-	893,081	893,081	893,081	-	-	-	-	893,081
		Governmental Grand Total	422,500	7,345,581	7,768,081	4,814,331	-	-	-	2,531,250	7,345,581
	Proprietary Fu	unds					FY18 Financing	Sources for Ca	apital Cost		
Project #/	Fund or		Appropriated	FY18			City			Other	
Type	Department	Project	Funding	Request	Total	General Fund	1% Sales Tax	Proprietary	Debt	Grant	Total
. , , , ,	Electrical-Distribution	Automatic Meter Read System (Project Construction)	29,344	333,167	362,511	-		333,167	-	-	333,167
	Electric-Production	Old Powerhouse Fan and Motor Replacement (Maint. Const.)	-	15,000	15,000	-		15,000	-	-	15,000
	Electric	Vehicle Replacement (Purchases)	-	131,468	131,468	-	-	131,468	-	-	131,468
		Electric Grand Total	29,344	479,635	508,979	-	-	479,635	-	-	479,635
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WA301	Water	CT Tank Interior Maintenance and Painting (Re-Coat)	255,000	953,000	1,208,000	-	-	953,000	-	-	953,000
	Water	Pyramid Water Treatment Plant Mircro Turbines (Design)	50,000	100,000	150,000	-	-	-	-	100,000	100,000
	Water	Vehicle Replacement (Purchases)	-	60,500	60,500	-	-	60,500	-	-	60,500
		Water Grand Total	305,000	1,113,500	1,418,500	-	-	1,013,500	-	100,000	1,113,500
	Wastewater	Vehicle Replacement (Purchases)	-	38,150	38,150	-	-	38,150	-	-	38,150
		Wastewater Grand Total	-	38,150	38,150	-	-	38,150	-	-	38,150
	1	_						ı	ı		
	Solid Waste		-	-	-	-	-	-	-	-	-
		Solid Waste Grand Total	-	-	-	-	-	-	-	-	-
DUIDOA	In	Linear Land Control of the Control o	4 004 050	40,000,000	44.004.050			40,000,000			40.000.000
PH301	Ports & Harbors Ports & Harbors	UMC Dock Replacement and Expansion (Positions III & IV Const.)  Vehicle Replacement (Purchases)	1,884,858	43,080,000 32,400	44,964,858 32,400	-	-	43,080,000 32,400	-	-	43,080,000 32,400
PH905	Ports & Harbors	Robert Storrs Small Boat Harbor Improvements (A&B Floats Const.)	590.000	9.440.000	10.030.000	-	-	6,035,000	-	3,405,000	9.440.000
111000	i ono a narboro	Ports & Harbors Grand Total	2,474,858	52,552,400	55,027,258	_	_	49,147,400	_	3,405,000	52,552,400
		1 orts a marbors crana rotar	2,414,030	32,332,400	33,027,230			43,147,400		3,403,000	32,332,400
	Airport		-	-	-	-	-	-	-	-	-
	1	Airport Grand Total	-	_	-	_	_	_	i -	_	
!		raiport Orana Total						l .	l	<u> </u>	
	Housing		-	-	-	-	-	-	-	-	-
		Housing Grand Total	-	-	-	-	-	_	_	-	-
	L	11000mg Orana Total		l l				I .	I	ı l	
		Governmental Fund Total	422,500	7,345,581	7,768,081	4,814,331	_	_	_	2,531,250	7,345,581
		Proprietary Funds Total	2,809,202	54,183,685	56,992,887			50,678,685	-	3,505,000	54,183,685
		City Grand Totals	3,231,702	61,529,266	64,760,968	4,814,331	_	50,678,685		6,036,250	61,529,266
L		City Grand Totals	3,231,702	01,529,200	04,700,900	4,014,331	•	50,070,005	-	0,030,230	01,529,200

	General Fund	Post of									
Project #/	Fund or		Appropriated	FY19			City			Other	
Type	Department	Project	Funding	Request	Total	General Fund	1% Sales Tax	Proprietary	Debt	Grant	Total
	DPW	Burma Road Chapel Roof Ventilation Upgrades (Maint. Const.)	25,000	350,000	375,000	350,000	-	-	-	-	350,000
	DPW	DPW Storage Building (Construction)	1,000,000	4,000,000	5,000,000	4,000,000	-	-	-	-	4,000,000
	Planning	Manson's Saltry Improvements (Rehabilitation)	65,000	30,000	95,000	30,000	-	-	-	-	30,000
	General Fund	Vehicle Replacement (Purchases)	-	633,920	633,920	633,920	-	-	-	-	633,920
		Governmental Grand Total	1,090,000	5,013,920	6,103,920	5,013,920	-	-	-	-	5,013,920
	Proprietary Fu	ınds				I	FY19 Financing	Sources for C	apital Cost		
Project #/	Fund or		Appropriated	FY19			City			Other	
Туре	Department	Project	Funding	Request	Total	General Fund	1% Sales Tax	Proprietary	Debt	Grant	Total
	Electric		-	-	-	-	-	-	-	-	-
		Electric Grand Total	-	-	-	-	-	-	-	-	-
			1			ı			ı		
	Water	Pyramid Water Treatment Plant Mircro Turbines (Construction)	150,000	1,190,260	1,340,260	-	-		-	1,190,260	1,190,260
	Water	Vehicle Replacement (Purchases)		70,850	70,850	-	-	70,850	-		70,850
		Water Grand Total	150,000	1,261,110	1,411,110	-	-	70,850	-	1,190,260	1,261,110
	Wastewater	Vehicle Replacement (Purchases)	-	490,000	490,000	-	-	490,000		-	490,000
		Wastewater Grand Total	-	490,000	490,000	-	-	490,000	-	-	490,000
	•							•			
	Solid Waste		-	-	-	-	-	-	-	-	-
		Solid Waste Grand Total	-	-	-	-	-	-	-	-	-
	Ports & Harbors		-	-	-	-	-	-	-	-	-
		Ports & Harbors Grand Total	-	-	-	-	-	-	-	-	-
	1										
	Airport		-	-	-	-	-	-	-	-	-
		Airport Grand Total	-	-	-	-	-	-	-	-	-
	1					I					
	Housing		-	-	-	-	-	-	-	-	-
		Housing Grand Total	-	-	-	-	-	-	-	-	-
	1			1			1		ı		
		Governmental Fund Total	1,090,000	5,013,920	6,103,920	5,013,920	-	-	-	- 4 400 000	5,013,920
		Proprietary Funds Total	150,000	1,751,110	1,901,110	-	-	560,850	-	1,190,260	1,751,110
		City Grand Totals	1,240,000	6,765,030	8,005,030	5,013,920	-	560,850	-	1,190,260	6,765,030

City Grand Totals

#### City of Unalaska Capital and Major Maintenance Plan FY 2020

		Des PORT of Date	FY 2	2020							
	General Fund						FY20 Financir	ng Sources for	Capital Cost		•
Project #/	Fund or		Appropriated	FY20			Cit	ty	•	Other	•
Type	Department	Project	Funding	Request			1% Sales Tax	Proprietary	Debt	Grant	Total
	General Fund	Vehicle Replacement (Purchases)	-	785,600	785,600	785,600	-	-	-	-	785,600
		Governmental Grand Total	-	785,600	785,600	785,600	-	-	-	-	785,600
											•
	Proprietary Fur	nds					FY20 Financir	0	Capital Cost		•
Project #/	Fund or		Appropriated	FY20			Cit	ty		Other	
Type	Department	Project	Funding	Request		General Fund	1% Sales Tax	Proprietary	Debt	Grant	Total
	Electric	Vehicle Replacement (Purchases)	-	58,300	58,300	-	-	58,300	-	-	58,300
		Electric Grand Total	-	58,300	58,300	-	-	58,300	-	-	58,300
	Water		-	-	-	-	-	-	-	-	-
		Water Grand Total	-	-	-	-	-	-	-	-	-
	Wastewater	Vehicle Replacement (Purchases)	-	33,000	33,000	-	-	33.000	-	-	33,000
		Wastewater Grand Total	-	33,000	33,000	-	-	33,000	-	-	33,000
			1	, , , , , , , , , , , , , , , , , , , ,	,	l.			l.	1	
	Solid Waste	Vehicle Replacement (Purchases)	-	381,000	381,000	-		381,000	-	-	381,000
		Solid Waste Grand Total	-	381,000	381,000	-	-	381,000	-	-	381,000
			•			•			•		
	Ports & Harbors	Vehicle Replacement (Purchases)	-	71,500	71,500	-	-	71,500	-	-	71,500
		Ports & Harbors Grand Total	-	71,500	71,500	-	-	71,500	-	-	71,500
	Airport		-	-	-	-	-	-	-	-	-
		Airport Grand Total	-	-	-	-	-	-	-	-	-
			-								
	Housing		-	-	-	-	-	-	-	-	-
		Housing Grand Total	-	-	-	-	-	-	-	-	-
										•	
		Governmental Fund Total	-	785,600	785,600	785,600	-	-	-	-	785,600
		Proprietary Funds Total	-	543,800	543,800	-	-	543,800	-	-	543,800

1,329,400

1,329,400

785,600

543,800

1,329,400



# City of Unalaska Capital and Major Maintenance Plan FY2016 -FY2020 Summary of Project and Funding Sources

	FY16	FY17*	FY18	FY19	FY20	Totals
General Fund Projects	1,713,684	1,991,792	7,345,581	5,013,920	785,600	16,850,577
Proprietary Fund Projects	5,424,460	14,763,681	54,183,685	1,751,110	543,800	76,666,736
Totals	\$ 7,138,144	\$ 16,755,473	\$ 61,529,266	\$ 6,765,030	\$ 1,329,400	\$ 93,517,313

Funding Source	FY16	FY17*	FY18	FY19	FY20	Totals
General Fund	1,713,684	3,004,199	4,814,331	5,013,920	785,600	15,331,734
1% Sales Tax	-	-	-	-	-	-
Electric Proprietary Fund	36,000	601,014	479,635	-	58,300	1,174,949
Water Proprietary Fund*	766,507	2,200,325	1,013,500	70,850	-	4,051,182
Wastewater Proprietary Fund	-	340,376	38,150	490,000	33,000	901,526
Solid Waste Proprietary Fund	47,795	701,700	-	-	381,000	1,130,495
Ports&Harbors Proprietary Fund	1,574,158	6,667,859	49,147,400	_	71,500	57,460,917
Airport Proprietary Fund	-	-	-	-	-	-
Housing Proprietary Fund	-	240,000	-	-	-	240,000
Debt	-	-	-	-	-	-
Grants	3,000,000	3,000,000	6,036,250	1,190,260	-	13,226,510
Totals	\$7,138,144	\$16,755,473	\$61,529,266	\$6,765,030	\$1,329,400	\$93,517,313

<sup>\*</sup> Amounts do not include the necessary funding for Water Flow Optimization Project in FY17, which is to be determined



### 3. Project Summary Sheets

- 3.1. General Fund Projects
- 3.2. General Fund Community Projects
- 3.3. Electric Division Projects
- 3.4. Water Division Projects
- 3.5. Wastewater Division Projects
- 3.6. Solid Waste Division Projects
- 3.7. Ports Projects
- 3.8. Housing Fund Projects

**PROJECT DESCRIPTION:** This project will provide improvements to the City of Unalaska Cemetery which occupies a portion of land adjacent to the Russian Orthodox Cemetery. The proposed scope of work includes developing a surveyed cemetery plat to properly identify all existing gravesites and establish burial plots for future use.

**PROJECT NEED:** Historically the cemetery has been available for use free to the public. The Department of Public Works is often called on to assist with excavations of gravesites for burials. However, records of the location of occupied cemetery plots have not been well maintained. Placement of new graves and equipment access can be difficult because some gravesites may no longer have visible markers other than depressions in the surface where subsidence has occurred. The cemetery is underlain with shallow bedrock in numerous locations at depths less than 6 feet below ground surface. Incidental grading/drainage and fill work completed along with the road construction portion has allowed for approximately 1 additional acre of suitable burial plot locations;

- A surveyed cemetery plat will show 4' x 10' plots so that as the plots are used the locations may be recorded and reserved in perpetuity.
- Other miscellaneous items will include surveying, marking and placing the cemetery/ graves into the city GIS map.
- When a final surveyed map of the cemetery is completed, the public's assistance may be requested to help identify unknown or unmarked graves as needed so that a more comprehensive record may be developed and they can be identified on the city GIS map.

**DEVELOPMENT PLAN & STATUS:** Between 2011-2013, the Roads Division expanded/ improved the gravel access road to the cemetery, completed an onsite gravel road for vehicle access and visitor parking, installed a gate, and filled selected areas in order to expand the usable area of the cemetery. This survey project will complete the cemetery project.

COST & FINANCING DATA: The project costs include surveying and installing markers. The estimated cost based on other survey projects the City has recently completed is \$35,000. This project is not related to any other project. If the City has other surveying projects scheduled in 2015, completing the projects at the same time will save on travel costs.

### FY16-20 CMMP

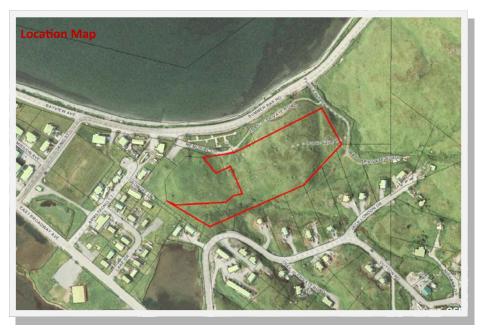
### **CEMETERY SURVEY | GENERAL FUND**

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na Feasibility/Pre Design: na

Engineering/Design: July 2015—June 2016

Construction: na



							FI	SCAL Y	EAR F	UNDING	REQ	UESTS	
REVENUE SOURCE		Exi	STING FUNDS		FY16	FY1	7	FY1	18	FY19		FY20	Total
General Fund (Public Works)		\$	-	\$	35,000								\$ 35,000
1% Sales Tax		\$	-										\$ -
Grant		\$	-										\$ -
Proprietary Fund		\$	-										\$ -
	TOTALS	\$	-	\$	35,000	\$ -	-	\$	-	\$ -		\$ -	\$ 35,000
Requested Funds: Surveying Services													

**PROJECT DESCRIPTION:** The work included in this project will be to remove existing roofing and space sheeting, remove damaged insulation, install additional joists to increase depth of insulation bays including space at the eaves for ventilation strip in a new soffit, install new insulation as needed to complete existing to R-30 factor, install new space sheeting, reroof the building, and paint the new eaves and rake trim. The final task will be to install new moss control wire or strips after construction is completed.

PROJECT NEED: At present, the facility has what is commonly referred to as a "hot roof", meaning it does not have enough insulation and ventilation in the space directly below the roofing to keep the snow and ice from melting on the majority of the roof space. This condition also allows for the formation of "ice dams" at the eaves where the walls and roof join. These are areas from which typically there is not as much heat loss through the roof structure. When these ice dams get large enough, the water from the melting snows backs up behind them and eventually leaks between the wood shingles and into the building structure. To prolong the life of the structure this condition needs to be eliminated, thereby eliminating unnecessary water damage. As a temporary repair in FY08, a custom formed metal flashing was installed along the eaves of the building and over an electric heat trace system designed to heat the flashing. This system works to keep the ice dams from occurring but it is inefficient energy wise and the metal flashing has a definite life span which is nearing its end as the years roll by. The ideal solution is to remove the old roofing and sheeting and increase the insulation and ventilation space directly beneath the roofing. This will allow for more insulation depth with a ventilated space between the roofing and the Insulation that will shed any heat escaping the insulation thus keeping the roofing at or very near the exterior temperatures. Snow landing on the roof will not melt and no ice dams will form at the eaves. The additional insulation will better control heat loss and, coupled with the removal of the electric heat trace currently used, will increase the energy efficiency of the structure reducing operating costs.

**MAINTENANCE HISTORY:** The history of major maintenance from 1940 to 1996 is largely unknown to this administration. Work done prior to 1996 was most likely done to adapt the structure to new uses as the community's need changed. Past work has included: exterior painting, interior renovations, flooring, new roof in 1995, boiler and fuel tank in 1998. Annual average cost of the routine maintenance for this facility is \$16,000.

## **FY16-20 CMMP**

BURMA ROAD CHAPEL ROOF VENTILATION UPGRADES | GENERAL FUND

### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na

Feasibility/Pre Design: na
Engineering/Design: FY 2018

**Construction: FY 2019** 



The facility's life will be extended by not allowing further water damage to the structural components below the roof. The new roof will protect the facility for at least another 30 years if no other catastrophe occurs.

		FISCAL YEAR FUNDING REQUESTS											
REVENUE SOURCE	EXISTING FUNDS	FY15	FY16	FY18	FY19	FY20		Total					
General Fund (Public Works & PCR)	\$ -			\$ 25,000	\$ 350,000		\$	375,000					
1% Sales Tax	\$ -						\$	-					
Grant	\$ -						\$	-					
Proprietary Fund	\$ -						\$	-					
TOTALS	\$ -	\$ -	\$ -	\$ 25,000	\$ 350,000	\$ -	\$	375,000					
Requested Funds: Engineering and Construction Se	rvices												

**PROJECT DESCRIPTION:** Continuous exposure to the elements shortens the life of our rolling stock (dozers, dump trucks, graders, snow plows) and increases maintenance costs. Winter rain & slush build-up freezes on the equipment creating excessing morning prep time clearing hubs, hydraulics, windshields, lights, and back-up horns before equipment can be used. This new building will have a heated slab keeping the temp at approximately 45F to keep equipment thawed out overnight and ready for next day use and/or emergency call-outs.

**PROJECT NEED:** The new building will improve winter emergency response time. It will expand and upgrade the capabilities of the Public Works facility as a whole. The new storage building will extend the life of trucks, trailers, graders, snow plows, and snow blowers. And, the building will decrease maintenance expense.

**DEVELOPMENT PLAN AND STATUS:** This is in the concept stage only. Land is available on the Public Works compound. A building permit and State Fire Marshall approval will need to be obtained. Project will require a new 1.5 inch water service and a new 6 inch sewer drain along with a new electrical service.

**FUNDING:** Funding will come from the General Fund. Project costs are WAG and estimated to be \$200 per square feet. For the 25,000 square foot building costs are then expect to be in the \$5,000,000 range.

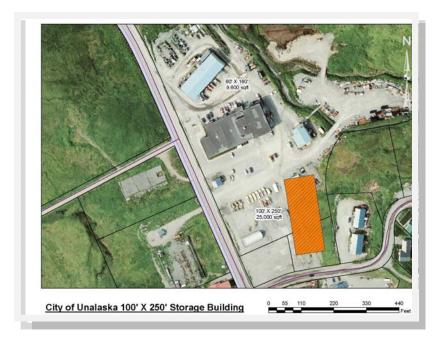
### **FY16-20 CMMP**

**DPW STORAGE BUILDING | GENERAL FUND** 

### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na
Feasibility/Pre Design: FY18
Engineering/Design: FY18

**Construction: FY18-FY19** 



		FISCAL YEAR FUNDING REQUESTS										
REVENUE SOURCE	EXISTING FUNDS	FY15	FY16	FY18	FY19	FY20	Total					
General Fund (DPW)	\$ -			\$ 1,000,000	\$ 4,000,000		\$ 5,000,000					
1% Sales Tax	\$ -						\$ -					
Grant	\$ -						\$ -					
Proprietary Fund	\$ -						\$ -					
TOTALS	\$ -	\$ -	\$ -	\$ 1,000,000	\$ 4,000,000	\$ -	\$ 5,000,000					

Requested Funds: Engineering and Construction Services based on \$200 per square foot.

**PROJECT DESCRIPTION:** The present Unalaska Public Library facility was completed and occupied in 1999. The facility was designed to house up to 50,000 volumes on steel shelving and to seat 52 readers. The design life of the facility, when completed, was 20 years of typical library collection growth and growing public use. The proposed project will add approximately 7,500 sf to the existing 9,400 sf facility. The facility presently has 38,000 volumes on its shelves which, after two shelving expansions, are not presently reducing the amount of seating available to library users. Without enlarging the building footprint, future shelving expansions will reduce customer seating in order to gain the additional capacity needed to reach the design limit of the building. Additionally, public use of the library has increased since 1999 so that, though thought generous during design of the facility, fifty-two reader seats are no longer the minimum capacity needed to serve the public. Expansion of the library facility was planned during its original design. This project proposal is being submitted in order to:

- Raise Council awareness of the need to begin the process of expanding the present facility footprint with a probable construction start date in FY18.
- Correct design issues so that the expanded facility can operate with the same size staff as presently assigned.
- Enhance existing areas of the facility and grounds so that future maintenance is reduced.
- Evaluate existing and future library use so that new services can easily be accommodated and the expanded facility will serve Unalaska through 2039.

**PROJECT NEED:** This project will increase the efficiency and service delivery life of the Unalaska Public Library. The current library facility was designed to fulfill community needs for 20 years. This expansion will add another 20 years to the service delivery capabilities.

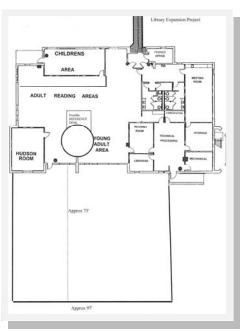
**COST & FINANCING DATA:** The overall project costs are estimated to be \$5,450,000. The State Department of Commerce, Community and Economic Development has a grant program that will pay up to 50% of the Construction cost for new or expanded Library facilities. Library Staffing will not increase as a result of the Expansion Project. However Because the building footprint will nearly double in size, ongoing utility and custodial costs are expected to increase.

### **FY16-20 CMMP**

### PUBLIC LIBRARY EXPANSION | GENERAL FUND

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: FY 2015
Feasibility/Pre Design: FY 2016
Engineering/Design: FY 2017
Construction: FY 2018-2019



Proposed Changes to Public Space & Services and Maintenance Improvements:

- Larger Children's Library
- Seating for Readers and Computer Users
- Create a Centrally located Reference Desk for Visual Control of Facility
- Expand the Mission of the Library
- Include A Video Conference Room as Part of the Expansion
- Improve Library Parking Facilities
- Add Lighted Steel Shelving
- Upgrade card-lock Entry System
- Realign Boiler Exhaust Stack
- Restroom Improvements
- "Smart" Floors

				FI	SCAL YEAR F	UNDING	G REC	QUESTS	}	
REVENUE SOURCE	Ex	CISTING FUNDS	FY16	FY17	FY18	FY1	9	FY2	20	Total
General Fund (PCR—Library)	\$	-	\$ 12,500	\$ 375,500	\$ 2,531,250					\$ 2,918,750
1% Sales Tax	\$	-								\$ -
Grant	\$	-			\$ 2,531,250					\$ 2,531,250
Proprietary Fund	\$	-								\$ -
ТОТА	LS \$	-	\$ 12,500	\$ 375,500	\$ 5,062,500	\$	-	\$	-	\$ 5,450,000

Requested Funds: Engineering & Construction Services, Contingency, Project Inspection | Grants: State Library Matching Grant, Rasmuson Foundation

**EQUIPMENT DESCRIPTION AND FUNCTION:** The Breathing Air Compressor will be used to refill Self-Contained Breathing Apparatus (SCBA) during and after emergency responses.

### **Requested Unit**

Type: 6000psi Unitized Air System (Breathing Air Compressor)

• Year/Make/Model: 2016/Bauer/(UNIII/25H-E3)

• Warranty Terms: Standard

• Special Accessories: Remote fill hose, and 2 ASME 6000psi cylinders

with relieve valve

### **Existing Unit**

Unit ID: Breathing Air CompressorYear/Make/Model: 1992/Bauer

· Condition Ranking: Good

**JUSTIFICATION:** The City of Unalaska, Department of Public Safety (DPS) currently owns a 1992 Bauer Air Compressor which is capable of filling SCBA's to a pressure of 2216psi. Due to changes in technology and NFPA 81 we plan to replace our existing SCBA's in FY2017 and will have to purchase SCBA's that require an operating pressure of 4500psi. DPS also has a mobile air trailer which can be used on scene during extended emergency response operations and to supplement the capability of the fixed compressor at Public Safety. However, the air trailer is not designed to take the place of the fixed compressor.

### **FY16-20 CMMP**

### REPLACE BREATHING AIR COMPRESSOR | GENERAL FUND

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na
Feasibility/Pre Design: na
Engineering/Design: na

**Purchase or Construction: FY 2016** 



			FISCAL YEAR FUNDING REQUESTS											
REVENUE SOURCE	E	EXISTING FUNDS		FY16	FY17	FY	18	FY19		FY20		Total		
General Fund (Public Safety)	\$	-	\$	78,893							\$	78,893		
1% Sales Tax	\$	-									\$	-		
Grant	\$	-									\$	-		
Proprietary Fund	\$	<del>,</del> -									\$	-		
TO	TALS \$	<b>,</b> -	\$	78,893	\$ -	\$	-	\$ -	\$	-	\$	78,893		

**PROJECT DESCRIPTION:** In 2013, GTG produced the City of Unalaska's GIS Strategic Implementation Plan Update for our GIS. Recommendation #1 is related to additional data layers. It states that, the City of Unalaska has created and/or acquired a host of GIS data layers. One of the layers recommend for updating is the Aerial Photography as updating this photography is highly utilized and critical layer of GIS. Furthermore, in the Three Year Tactical Plan included in the 2013 Plan, GTG recommends an aerial flyover to occur during Year 2 to create new orthophotography. This project is being proposed for FY2016, and will be proposed for updated approximately every 5 years. The last flyover was performed in FY2011.

**PROJECT NEED:** The City of Unalaska has prioritized the use of technology as a means for improving its business process, services, information dissemination and decision making. The resulting document "City of Unalaska Strategic GIS Plan" has served as a roadmap for the successful implementation of the City's GIS since 2008. In 2013, GTG has been asked again to appraise the City's GIS implementation, review the City's present needs, assess current GIS technologies, review local government best practices and provide this 2013 "City of Unalaska GIS Strategic Implementation Plan Update." Based on these recommendations, this project is being proposed for FY 2016.

**PROJECT PLAN AND STATUS:** The GIS Steering Committee, who helps to define the direction of the City's GIS and to identify areas that it can improve or expand, noted that aerial image from 2011 was getting out of date. The Committee decided that this layer should be updated every five years to continually improve our GIS and help to document changes over time. With the Committee's direction, the Planning Department has obtained cost proposals for aerial orthophotography of Unalaska for integration in to our GIS. City of Unalaska GIS Strategic Implementation Plan Update developed in 2013 then recommended this updated imagery in year two of the three year tactical plan. This project nomination proposes that the project be negotiated and designed in the fourth quarter of FY2015, and take place in the first quarter of FY16.

### FY16-20 CMMP

### GIS ORTHOPHOTOGRAPHY | GENERAL FUND

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na
Feasibility/Pre Design: na
Engineering/Design: na
Purchase or Construction: FY 2016



					FIS	CAL YEAR	FUNI	DING REC	QUEST	rs	
REVENUE SOURCE	E	KISTING FUNDS	FY16	FY17		FY18		FY19	F	Y20	Total
General Fund (Planning)	\$	-	\$ 100,000								\$ 100,000
1% Sales Tax	\$	-									\$ -
Grant	\$	-									\$ -
Proprietary Fund	\$	-									\$ -
TOTA	L <b>S</b> \$	-	\$ 100,000	\$	-	\$ -	\$	-	\$	-	\$ 100,000
Requested Funds: Other Professional Services,	Conting	gency									

**PROJECT DESCRIPTION:** Project will replace several major network pieces and allow for increased number of virtual desktop clients as well as increase speed and storage of all City network users. The current server cluster for virtual desktops is at the end of its normal operating life and we have reached capacity on the number of users that it can host. Our main network switches for our main server cluster are also nearing the end of their operating life. Pieces to be replaced are the servers for virtual desktop users, storage for both the server cluster and the desktop cluster, as well as the main switches for the network backplane and City Hall users.

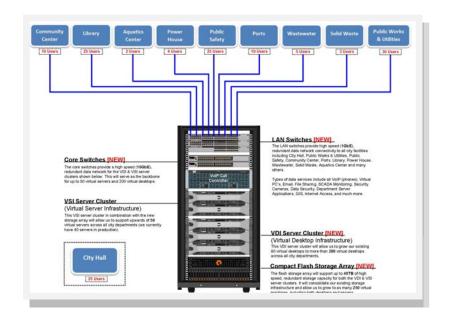
PROJECT PURPOSE AND NEED: The IS staff looked into the most efficient way of increasing the City's ability to virtualize more of our desktop users and increase performance of all servers and legacy desktop users. It became apparent that there are three main areas in discussion on enhancing our ability to increase numbers of virtual desktops and reduce bottlenecks for all network users. Servers to host either the virtual desktops (VDI) or virtual servers (VSI), some type of storage method for all the virtual devices as well as normal data storage, and finally the network switches to route traffic now and into the foreseeable future. The hardware currently housing the virtual server cluster is in good shape for the next 3 years. The hardware for the virtual desktop is currently the major problem from both a performance point of view as well as the ability to replace more physical desktops with virtual ones as the old physical hardware reaches the end of its normal operating life. However replacing just that piece would not address the storage issue. If you address both the storage and VDI cluster you run into the problems of the switching platforms. That led the IS staff to try and identify all the parts and pieces to address the issue as a whole. After a short while it quickly became apparent that most of the purchases would not fit under the normal operating budget. The decision was made to try and pursue a budget amendment and upgrade the main heart of the City's network core. If all major items are purchased together at the same time they can be guaranteed of fitting together and functioning to the maximum benefit of the City and its network users for the next five years or longer. If the project is funded this winter then purchase and installation can be accomplished this spring.

### **FY16-20 CMMP**

### CITY NETWORK CORE UPGRADE | GENERAL FUND

### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: Sep 2014-Oct 2014
Feasibility/Pre Design: Oct 2014-Nov 2014
Engineering/Design: Nov 2014—Dec 2014
Purchase or Construction: July 2015-Dec 2015



					ı	FISC	AL YEAR F	UNDING R	ΕQ	UESTS		
REVENUE SOURCE	Exi	STING FUNDS		FY16	FY17		FY18	FY19		FY20		Total
General Fund (Finance)	\$	-	\$	266,500								\$ 266,500
1% Sales Tax	\$	-										\$ -
Grant	\$	-										\$ -
Proprietary Fund	\$	-										\$ -
TOTALS	\$	-	\$	266,500	\$ -		\$ -	\$	-	\$	-	\$ 266,500
Note: Funding reqest for professional services and	hardw	vare/software based	d on s	several quot	es for the inc	divid	ual hardware	oieces.				

**EQUIPMENT DESCRIPTION AND FUNCTION:** This copier will be networked and can generate copies by command from individual workstations. The networking capabilities allow the employees to bypass the printers and generate copies in one command. This unit should increase employee time productivity and save maintenance costs on the printers. Costs to operate have varied based upon the repairs/maintenance needed, but the annual service costs are around \$1,000. The total cost of repair/maintenance in the last three years have been 2013 - \$5,222.28, 2014 - \$3,083.85, and 2015 (so far) \$2,526.36. The toner and other supply costs have averaged around \$1,500.

#### Requested Unit:

- Canon Image Runner Advance C5205 Artic Office
- Copier/Scanner/PaperDeck

#### **Existing Unit:**

- ICR 5185i
- Condition Ranking: Fair

**JUSTIFICATION:** Payroll, accounts receivable, payable and utilities will use this copier. It will be the main unit used daily by these 10 employees. The average daily number of copies generated will be approximately 100. This is the only unit on the second floor. This machine is also used during the budget process to help generate the high volume number of copies needed. This unit is also used as our fax machine and scanner which is getting a lot more use. It is time to replace the copier as our repairs are increasing and the parts are becoming harder to obtain. According to the copier repair people they will not guarantee they can fix the copier after this year as they may be able to find parts to do so.

### **FY16-20 CMMP**

### FINANCE REPLACEMENT COPIER | GENERAL FUND

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na Feasibility/Pre Design: na

**Engineering/Design: na** 

**Purchase or Construction: FY 2016** 



			FISC	CAL YEAR FU	JNDING REC	QUESTS	
REVENUE SOURCE	EXISTING FUNDS	FY16	FY17	FY18	FY19	FY20	Total
General Fund (Finance)	\$ -	\$ 27,000					\$ 27,000
1% Sales Tax	\$ -						\$ -
Grant	\$ -						\$ -
Proprietary Fund	\$ -						\$ -
TOTALS	\$ -	\$ 27,000	\$ -	\$ -	\$ -	\$ -	\$ 27,000

**PROJECT DESCRIPTION:** The Historic Preservation Commission is charged with working toward the continuing education of the public regarding historic preservation and the community's history. According to the Alaska Heritage Resource Survey documentation created as a part of the 2003 Inventory of Historic Sites and Resources for Unalaska, the Henry Swanson House is associated with WWII military buildup, subsequent development of Unalaska, and with Henry Swanson himself, a notable figure in Unalaska's history. Having gone minimally maintained and unoccupied for many years, the Henry Swanson House Improvement Project includes the development of a plan and eventual construction project to cost-effectively rehabilitate or reconstruct, reuse, and/or better recognize the historical importance of the Henry Swanson House.

PROJECT NEED: As required per City Code, the Historic Preservation Commission produced and Inventory of Historic Sites in 2003. This survey of historic properties in our community included the Henry Swanson House, owned and maintained by the City of Unalaska. The Alaska Heritage Resource Survey documentation completed as a part of the survey provides a detailed overview of the structures, architecture and historical relevance. This unoccupied city facility is maintained in its current state by the City's Maintenance Division. The walls are in poor shape and at least the bottoms of them are suspected in poor or rotted condition in several areas. The under floor pinning lays so near the soil that it is suspected to have deteriorated to a substantial extent over time. An air dryer has been installed to control humidity and a Toyo Stove to assist with moderating the temperature. The Unalaska Comprehensive Plan calls for the Preservation Commission to continue to place interpretive markers at significant historic sites within the City limits, which would be a component of this project; to support and encourage the repair of significant local historic properties; and to advocate for and encourage the appropriate and cost effective preservation, rehabilitation, and adaptive reuse of Unalaska's historic buildings.

**FUNDING:** Very rough estimates provided by the Department of Public Works. Construction costs are based on what it might cost to rehabilitate the existing building. Final costs will be better determined after the structure is assessed and the scope is defined. Grant funding may be available through the Alaska State Historic Preservation Office, or other sources, depending on the final concept of the project.

### **FY16-20 CMMP**

### HENRY SWANSON HOUSE IMPROVEMENTS | GENERAL FUND

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: November 2014-January 2015

Feasibility/Pre Design: na
Engineering/Design: FY 2017
Purchase or Construction: FY 2018



**PROJECT PLAN AND STATUS:** This is a new concept for the Historic Preservation Commission and no work completed at this point. An initial assessment of the structure itself will help to determine whether the repair of the existing building or a total reconstruction of the structure would be more cost effective, as well as what those costs might include. This information will then be used to in the decision making process to identify the scope of the project, develop more detailed estimated for engineering, design and construction of the project, and to determine possible future uses.

			F	ISCAL YEAR F	UNDING RE	QUESTS	
REVENUE SOURCE	EXISTING FUNDS	FY16	FY17	FY18	FY19	FY20	Total
General Fund (Planning)	\$ -		\$ 35,000	\$ 300,000			\$ 335,000
1% Sales Tax	\$ -						\$ -
Grant	\$ -						\$ -
Proprietary Fund	\$ -						\$ -
TOTALS	\$ -	\$ -	\$ 35,000	\$ 300,000	\$ -	\$ -	\$ 335,000
Description of Francisco Construction							

Requested Funds: Construction

**PROJECT DESCRIPTION:** The Historic Preservation Commission is charged with working toward the continuing education of the public regarding historic preservation and the community's history. According to the Alaska Heritage Resource Survey documentation created as a part of the 2003 Inventory of Historic Sites and Resources for Unalaska, the Manson Saltery is associated with the early development of the fishing industry in Unalaska. The Manson's Saltery Improvement Project includes the development of a plan and eventual construction project to cost-effectively rehabilitate or reconstruct, reuse, and/or better recognize the historical importance of the Manson's Saltery.

**PROJECT NEED:** As required per City Code, the Historic Preservation Commission produced and Inventory of Historic Sites in 2003. This survey of historic properties in our community included the Manson's Saltery, owned by the City of Unalaska. The Alaska Heritage Resource Survey documentation completed as a part of the survey provides a detailed overview of the structures, 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, which would be a component of this project; to support and encourage the repair of significant local historic properties; and to advocate for and encourage the appropriate and cost effective preservation, rehabilitation, and adaptive reuse of Unalaska's historic buildings.

**PROJECT PLAN AND STATUS:** This unoccupied city facility has gone unused and unmaintained for years. The Department of Public works is now looking into creating a gravel pathway for hiking down to these structures from the pullout next to the bridge. This is a new concept for the Historic Preservation Commission and no work completed at this point for the structures themselves. The site may serve as a great site for kayakers, picnickers, and in town campers. An initial assessment of the structures themselves and discussion between the Departments of Public Works and Planning along with discussions of the Historic Preservation Commission, the project can basically be divided into three main phases: Securing, stabilizing, and minimally rehabilitating the structures.

**FUNDING:** DPW estimates that stabilizing the structures will run \$65,000 in materials and labor. An additional \$30,000 is estimated to be needed in order to minimally rehabilitate the structures. Final costs will be better determined after the final concept of the project has been defined.

### **FY16-20 CMMP**

### MANSON'S SALTERY IMPROVEMENTS | GENERAL FUND

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

**Inception/Concept: November 2014-January 2015** 

Feasibility/Pre Design: na
Engineering/Design: FY 2018
Purchase or Construction: FY 2019



This is made up of 3 relatively small wood frame bldgs. This herring saltery was associated with the herring fishery, which peaked between ca 1928-late 1930s. Runs were noted in Captains Bay as early as 1907, and a record run occurred in Unalaska in 1928, but profits were slim. Other salteries existed, though none now remain. (Text from the Alaska Heritage Resource Survey documentation from 2003)

							F	ISCA	L YEAR F	UN	DING RE	QUEST	·S	
REVENUE SOURCE		EXIS	STING FUNDS	FY1	.6	FY1	L7		FY18		FY19	FY	/20	Total
General Fund (Planning)		\$	-					\$	65,000	\$	30,000			\$ 95,000
1% Sales Tax		\$	-											\$ -
Grant		\$	-											\$ -
Proprietary Fund		\$	-											\$ -
	TOTALS	\$	-	\$	-	\$	-	\$	65,000	\$	30,000	\$	-	\$ 95,000
Requested Funds: Construction														

**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 about twice per year due to high winds. It is proposed that this playground be renovated 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.

**FUNDING:** 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.

### **FY16-20 CMMP**

### UNALASKA CITY SCHOOL PLAYGROUND RENOVATION | GENERAL FUND

### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: July 2015

Feasibility/Pre Design: July—Sept 2015
Engineering/Design: Sept 2015—May 2016
Purchase or Construction: June—August 2016









**PROJECT PLAN:** This project is anticipated to take from 12 to 15 month from inception to completion. The pre-design and design phases will relay on public input and budgetary constraints. Additionally, this project might need to be extending into future years of the CMMP as funding sources become available.

			FI	SCAL YEAR F	JNDING REC	UESTS	
REVENUE SOURCE	EXISTING FUNDS	FY16	FY17	FY18	FY19	FY20	Total
General Fund	\$ -	\$ 300,000					\$ 300,000
1% Sales Tax	\$ -						\$ -
Grant	\$ -						\$ -
Proprietary Fund	\$ -						\$ -
TOTALS	\$ -	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ 300,000
Requested Funds: Engineering and Construction							

**PROJECT DESCRIPTION:** The Clinic located at 34 Lavelle Court, has not been pained, scraped, washed, sprayed for fungus, since it was built in 1992. It is in desperate need of spraying the building to kill fungus and mold (which can get into the clinic), washing the building to removed loose paint and caulk where necessary, reset protruding nails, prime all nail heads and necessary wood and have two finish coats of paint applied. In addition the parking lots need to have painted parking spaced so folks park in appropriate spots to avoid scratching other cars, creating dings in other cars and potential accidents.

**PROJECT NEED:** The benefit to the community would be a clinic that is still function with appropriate outside wood that will not deteriorate, therefor causing damage to the only 24 hour emergency service we have on the island. While the inside of the clinic is maintained carefully for safety reasons and quality of healthcare is also maintained, if we do not properly maintain the structure itself, then the clinic might cease to exist as we know it, possible move to another relocation that is not suitable but available, etc.

The clinic is also a focal point of being listed on city tours touting our excellent health care facility when politicians or other dignitaries/folds of distinction tour the island. They are awed when they enter the facility, but when looking at it from the outside they usually comment I didn't realize how updated and modern your facility was until I got inside. These tours add to the possibility of business's coming to the island to stay thus adding monies into our economy. When most business's tour the island and are thinking of moving their employees, they are looking for all the modern day conveniences their employees have now such as great healthcare facility, school system, grocery store, etc. Those that do not tour the facility only assume our clinic is old by looking at the 22 year old structure that has not been painted or takin car of in 22 years.

**FUNDING:** Estimated cost is based on a quote, if costs run over Clinic will pay remaining amount. Project will be put out for an RFP by the Clinic.

### **FY16-20 CMMP**

### CLINIC RESTORATION PROJECT | GENERAL FUND

### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: July 2015

Feasibility/Pre Design: na

**Engineering/Design:** na

**Purchase or Construction: August 2015** 





			F	ISCAL YEAR F	UNDING REC	QUESTS	
REVENUE SOURCE	EXISTING FUNDS	FY16	FY17	FY18	FY19	FY20	Total
General Fund	\$ -	\$ 50,000					\$ 50,000
1% Sales Tax	\$ -						\$ -
Grant	\$ -						\$ -
Proprietary Fund	\$ -						\$ -
TOTALS	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000

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

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

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

### **FY16-20 CMMP**

### **AUTOMATIC METER READ SYSTEM | ELECTRIC**

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na

Feasibility/Pre Design: na

Engineering/Design: July 2016—October 2016
Construction: July 2017—October 2016





We are mandated by federal and State regulations to report accurate and timely power production and efficiency data. AMR systems are observed by these agencies as the most accurate form of revenue metering. This project will upgrade the residential, commercial and Industrial electric meters throughout the entire system.

Improvements will reduce cost by reducing the operational hours required by current staff. Annually approximately 500 man hours are currently dedicated to meter reading, re-reading, cut in/out reading and overage calls. That time can then be dedicated to system maintenance and upkeep.

				F1S	SCAL YEAR I	UNDING R	EQUESTS	
REVENUE SOURCE	EXIST	ING FUNDS	FY16	FY17	FY18	FY19	FY20	Total
General Fund	\$	-						\$ -
1% Sales Tax	\$	-						\$ -
Grant	\$	-						\$ -
Proprietary Fund (Electric—Distribution)	\$	-		\$ 106,052	\$ 256,459			\$ 362,511
TOTALS	\$	-	\$ -	\$ 106,052	\$ 256,459	\$ -	\$ -	\$ 362,511

## **FY16-20 CMMP**

### STACK SILENCER INSULATION REPLACEMENT | ELECTRIC

**PROJECT DESCRIPTION:** Replace all the insulation and covering at the new power plant.

**PROJECT NEED:** Replace the insulation and metal sheeting on the exhaust silencer for engine #13. The insulation blew partly off in a wind storm and then got water logged. Temporarily repair has been made with baling wire but it will not last. The whole unit needs to be stripped and re insulated with more robust materials. Two companies look at repairing it but no one has given us a formal bid.

Without exhaust insulation our exhaust will exit the exhaust stack at a lower temperature that can possibly cause excess smoke. This would be in violation of our air quality operating permit.

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na
Feasibility/Pre Design: na
Engineering/Design: na
Construction: FY 2016



			FI	SCAL YEAR I	FUNDING R	EQUESTS	
REVENUE SOURCE	EXISTING FUNDS	FY16	FY17	FY18	FY19	FY20	Total
General Fund	\$ -						\$ -
1% Sales Tax	\$ -						\$ -
Grant	\$ -						\$ -
Proprietary Fund (Electric—Production)	\$ -	\$ 36,000					\$ 36,000
TOTALS	\$ -	\$ 36,000	\$ -	\$ -	\$ -	\$ -	\$ 36,000
Requested Funds: Construction Services and Contingence	у						

# **FY16-20 CMMP**

### OLD POWERHOUSE FAN AND MOTOR REPLACEMENT | ELECTRIC

**PROJECT DESCRIPTION:** Replace the old fans and motors with smaller units at the old power plant. Accommodate the air movement in the old power plant for engine combustion and ventilation.

**PROJECT NEED:** Currently we run a 60 horse power motor/fan that is too large for our operation and used a lot of fuel. The new fans would be 5 horse power and would use 12 times Less fuel to operate and still give us enough air movement for our operation. In the month of October we would have used 1765 gallons of fuel LESS with the smaller fans. That is about a \$5000 savings. Currently, fans are checked daily and serviced as needed. Belts are replaced once per year at about \$200 per year.

### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na
Feasibility/Pre Design: na
Engineering/Design: na
Construction: FY 2018



							F1:	SCAL	YEAR F	UNDING	RE	QUEST	S	
REVENUE SOURCE		Exis	TING FUNDS	FY1	6	FY:	17		FY18	FY19		FY20	)	Total
General Fund		\$	-											\$ -
1% Sales Tax		\$	-											\$ -
Grant		\$	-											\$ -
Proprietary Fund (Electric—Production)		\$	-					\$	15,000					\$ 15,000
	TOTALS	\$	-	\$	-	\$	-	\$	15,000	\$	-	\$	-	\$ 15,000

Requested Funds: Salaries & Wages, Benefits, Supplies, Machinery & Equipment (Contacted vendors for parts and material costs. Educated estimate on labor.)

**PROJECT DESCRIPTION:** Replace the aging 130 volt DC battery system and charger at the old power plant. Bring system up to current safety codes. engines, switch gear and emergency lighting utilize this battery bank.

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, failure of this system is imminent. This antiquated system is out of compliance with present safety is regulation. 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. Batteries are currently checked daily and the cost of distilled water is minimal. 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.

### **FY16-20 CMMP**

**OLD POWERHOUSE BATTERY SYSTEM REPLACEMENT | ELECTRIC** 

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na
Feasibility/Pre Design: na
Engineering/Design: na
Construction: FY 2017



		FISCAL YEAR FUNDING REQUESTS								
REVENUE SOURCE	EXISTING FUNDS	FY16	FY17	FY18	FY19	FY20	Total			
General Fund	\$ -						\$ -			
1% Sales Tax	\$ -						\$ -			
Grant	\$ -						\$ -			
Proprietary Fund (Electric—Production)	\$ -		\$ 263,070				\$ 263,070			
TOTALS	\$ -	\$ -	\$ 263,070	\$ -	\$ -	\$ -	\$ 263,070			

Requested Funds: Salaries & Wages, Solid Waste, Travel, Machinery & Equipment, Contingency (Based on quote and estimates)

**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. Phase 1 will include research and design to develop our existing infrastructure between the major network hubs including City Hall, Public Safety, Haystack and DPW/DPU, with provisions to research the feasibility of incorporating ancillary sites adjacent to the planned infrastructure. Ancillary sites could include: Town Substation, Library, Community Center and the Schools. 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.

This project will use the existing utility infrastructure for the routing of new fiber optic cabling. To what extent new data and/or electric utilities will be required will not be known until the existing infrastructure is researched further. It is expected that a certain amount of new utilities will be required, dependent on the final scope of the project. In addition, rerouting and reconfiguration of existing Electric utilities is also expected in order to accommodate the installation of fiber optic cabling.

### **FY16-20 CMMP**

### FIBER OPTIC INFRASTRUCTURE DEVELOPMENT PHASE 1 | ELECTRIC

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na

Feasibility/Pre Design: July 2016—Dec 2016
Engineering/Design: Feb 2017—June 2017

**Construction: Sept 2017– July 2018** 

**FUNDING AND RELATIONS TO OTHER PROJECTS:** Utilizing existing infrastructure, the Phase 1 estimated ROM cost is approximately \$1,242,000. If existing infrastructure cannot be used, the estimated ROM cost would be approximately \$5,067,000. Funding may be provided through General Funds. Availability of grants is unknown at this time; however, this project and a utility communications infrastructure may greatly relate to Homeland Security and other public safety sector funding. For example, while not directly part of this project, this basic infrastructure will assist with the feasibility of and management of cameras and other security measures currently in process.

Currently the Ports department is in the process of implementing a camera system. Phase 1 of the fiber optics infrastructure project will not only assist with this existing installation, but with future project of the same nature. Installation of a communications infrastructure is directly related to any current utility project(s) as well as future projects. Projects that will excavate locations within the utility, in which it would be beneficial to install communications infrastructure should incorporate the appropriate portion of this project at a minimum for review during its design and implementation. 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.

			FISCAL YEAR FUNDING REQUESTS									
REVENUE SOURCE	EXIST	EXISTING FUNDS			FY17	FY18	FY19	FY20		Total		
General Fund	\$	-		\$	1,012,407				\$	1,012,407		
1% Sales Tax	\$	-							\$	-		
Grant	\$	-							\$	-		
Proprietary Fund (Electric—Distribution)	\$	-							\$	-		
TOTALS	\$	-	\$ -	\$	1,012,407	\$ -	\$ -	\$ -	\$	1,012,407		

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

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

MAINTENANCE HISTORY: 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.

**RELATIONSHIP TO OTHER PROJECTS:** 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.

### **FY16-20 CMMP**

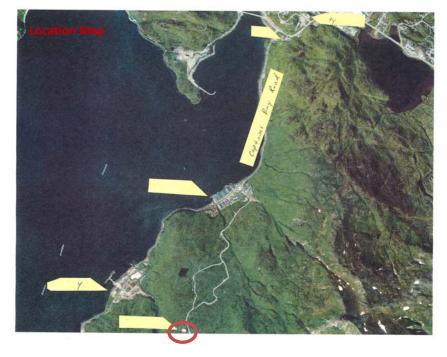
### CT TANK INTERIOR MAINTENANCE & PAINTING | WATER

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na

Feasibility/Pre Design: na Engineering/Design: FY 2017

**Construction: FY 2018** 



			FISCAL YEAR FUNDING REQUESTS							
REVENUE SOURCE	Exist	TING FUNDS	FY16	FY17	FY18	FY19	FY20		Total	
General Fund	\$	-						\$	-	
1% Sales Tax	\$	-						\$	-	
Grant	\$	-						\$	-	
Proprietary Fund (Water)	\$	155,000		\$ 100,000	\$ 953,000			\$	1,208,000	
TOTAL	<b>s</b> \$	155,000	\$ -	\$ 100,000	\$ 953,000	\$ -	\$ -	\$	1,208,000	

Existing Funds: Engineering, Construction, Telephone, Advertising, Inspections | Requested Funds: Engineering, Construction, Travel, Advertising, Contingency, Inspection

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

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

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

**PERMITTING:** A "Certificate to Construct" and a "Certificate to Operate" are required from ADEC, obtained through application by the designing engineer.

## **FY16-20 CMMP**

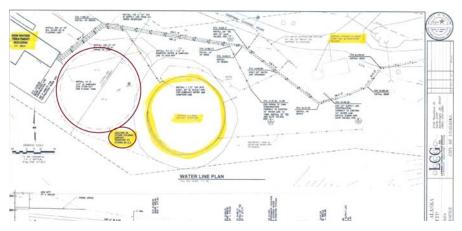
### PYRAMID WATER STORAGE TANK | WATER

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na

Feasibility/Pre Design: July 2014—August 2015
Engineering/Design: September 2105—November 2016

Construction: April 2017—September 2017



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.

		FISCAL YEAR FUNDING REQUESTS									
REVENUE SOURCE	EXISTING FUNDS	FY16	FY17	FY18	FY19	FY20	Total				
General Fund	\$ -						\$ -				
1% Sales Tax	\$ -						\$ -				
Grant	\$ -	\$ 3,000,000	\$ 3,000,000				\$ 6,000,000				
Proprietary Fund (Water)	\$ 100,000	\$ 525,000	\$ 1,625,000				\$ 2,250,000				
TOTALS	\$ 100,000	\$ 3,525,000	\$ 4,625,000	\$ -	\$ -	\$ -	\$ 8,250,000				
Requested Funds: Engineering Services, Construct	Grants: Alaska	Grants: Alaska Department of Environment Conservation, Clean Water Fund									

**PROJECT DESCRIPTION:** This project is an expansion to the capabilities of our existing SCADA system. In short, it will help determine how to prioritize the use of out City's potable water supplies and the design to do so. Then, it will provide recommendations construction of the control systems and components needed to maximize the use of these water sources to their fullest extent.

PROJECT NEED: Maximizing our water supplies will help to maintain water system pressures and reduce the risk of water contamination caused by backflow at high elevations. These backflows can occur when high water demands cause loss of water service to the higher elevations. Best engineering and management practices established by the water industry do not allow for any portion of a water utility's distribution system pressures to operate below 20 psi. Currently, under extreme circumstances, this can happen in our system and this project will help to address this issue. The Water Utility has spent a great deal of time over the past years identifying items that affect the operation of our water system. Some of this information has been made possible through the data gathered from our SCADA system. This project will give recommendations on how to address operational issues in the most efficient and cost effective manner. It will give recommendations for the "Control" portion of our Supervisory Control and Data Acquisition (SCADA) system. One major benefit to this project is its ability to enable the water system to utilize ALL of the water available from our existing water supplies. Currently, due to system hydraulics and operational constraints, we are at times only able to produce approximately 75% of the water available from our wells. The operational issues that cause this inefficiency will be addressed in this project, thus reducing the amount of additional water resources that will be required from elsewhere. This project should help to increase the life expectancy of the water distribution system by reducing stress caused by pressure surges and water hammer.

**DEVELOPMENT PLAN & STATUS:** The City continues to study the effects of pressure fluctuation, controls and operational constraints in the water system over the past few years. This project will address the reasons these things happen and provide solutions to address the problems. This project will require follow-up with full design for the selected system improvements and construction of those improvements.

### FY16-20 CMMP

### WATER FLOW OPTIMIZATION PROJECT | WATER

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: May 2012-January 2013
Feasibility/Pre Design: July 2013-November 2013
Engineering/Design: July 2017-December 2017
Construction: January 2018-November 2018



Ultimately, this project will add benefit to our current Water Supply Development Project by increasing the water available to our water distribution system from existing water sources.

The image to the left is a representation of water utilities, including hydrants, service connection, system valves, water mains and service lines.

			FISCAL YEAR FUNDING REQUESTS									
REVENUE SOURCE	EXISTI	NG FUNDS	FY16		FY17	FY18	FY19	FY20		Total		
General Fund	\$	-							\$	-		
1% Sales Tax	\$	-							\$	-		
Grant	\$	-							\$	-		
Proprietary Fund (Water)	\$	99,500		\$	TBD				\$	TBD		
TOTALS	\$	99,500	\$ -	\$	TBD	\$ -	\$ -	\$ -	\$	TBD		
Existing Funds: Engineering Services, Contingency												

**PROJECT DESCRIPTION:** This project will install two water truck filling stations, one on Unalaska Island (Unalaska Valley –Well House #1) and one on Amaknak Island (Airport Beach Road Weigh Station) This project will: help comply with backflow regulations by protecting the city's water system against cross connections; support the Utility's Water Loss Control Program by allowing non-emergency hydrant water use to be metered; reduces water theft and simplifies water billing; and reduces fire hydrant damage.

**PROJECT NEED:** This project will help protect our city's water quality by better controlling hydrant use. It addresses some of the cross-connection control issues currently experienced with fire hydrant use, helping to bring the City into compliance with backflow protection requirements. Using these filling stations will reduce the wear on our city's fire hydrants. Fire hydrants are designed for occasional use under extreme conditions. They are not intended for multiple daily uses. Approximately 5 million gallons of water per year are purveyed through our hydrants. This averages about 1,500 hydrant uses per year. With this project complete, our fire hydrants will no longer be subjected to wear or damage from this kind of use. This project will eliminate the need to use our hydrants for these purposes, helping to insure they will be functioning when needed for emergencies. No additional revenue will be generated by the installation of these filling stations; however, fire hydrant maintenance costs are expected to go down by approximately \$5,000.00 per year. The Water Utility understands that development of raw water sources for the city is very costly. The Utility has developed a Water Loss Control Program to help optimize the use of existing water sources and to help future water source development be more cost effective. This project supports our Water Loss Control Program by better controlling, and metering, miscellaneous water use. These filling stations will be set up to automatically identify each customer and bill for water used. They will be available for use 24 hours a day. The meter and backflow preventer will be protected from the damage caused by improper use, freezing, carelessness and neglect seen using the current system.

### **FY16-20 CMMP**

### WATER TRUCK FILLING STATIONS | WATER

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na

Feasibility/Pre Design: Feb 2016—Nov 2016

Engineering/Design: Dec 2016-July 2017
Construction: August 2017-June 2018

**DEVELOPMENT PLAN:** Each station will require water and electric service and a 9 ft. x 4.5 ft. concrete mounting pad. For reliability of service and cost of operation, both stations will be placed within Water Pressure Zone #3. The project has three primary parts:

- 1. Underground utility installation, slab placement and site prep. Some curb and gutter and asphalt replacement will be necessary.
- 2. Purchase and shipping of pre-constructed Water Filling Stations
- 3. Setting the station on the slab, connecting utilities, and site finish





			FISCAL YEAR FUNDING REQUESTS							
REVENUE SOURCE	EXISTI	NG FUNDS	FY16		FY17	FY18	FY19	FY20		Total
General Fund	\$	-							\$	-
1% Sales Tax	\$	-							\$	-
Grant	\$	-							\$	-
Proprietary Fund (Water)	\$	-		\$	259,325				\$	259,325
TOTALS	\$	-	\$ -	\$	259,325	\$ -	\$ -	\$ -	\$	259,325

**Note:** A bid was obtained for the filling stations and other numbers are based on past projects.

**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 hundreds of thousands of dollars in energy costs each year.

**DEVELOPMENT PLAN:** Planning was done during the design of the new WTP to provide the space needed for the future installation of inline 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. Grants will be sought before Phase II begins. Phase II is design and Phase III is the construction piece.

### **FY16-20 CMMP**

### PYRAMID WATER TREATMENT PLANT MICRO TURBINES | WATER

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: FY2016
Feasibility/Pre Design: FY17
Engineering/Design: FY 2018
Construction: FY2019



			FISCAL YEAR FUNDING REQUESTS										
REVENUE SOURCE	EXISTI	NG FUNDS	FY16		FY17		FY18		FY19	FY20		Total	
General Fund	\$	-									\$	-	
1% Sales Tax	\$	-									\$	-	
Grant	\$	-				\$	100,000	\$	1,190,260		\$	1,290,260	
Proprietary Fund (Water)	\$	-		\$	50,000						\$	50,000	
TOTALS	\$	-	\$ -	\$	50,000	\$	100,000	\$	1,190,260	\$ -	\$	1,340,260	
Note: Funding requests are for professional services, eng	gineering, o	construction and	contingency.										

**PROJECT DESCRIPTION:** This project will increase the capacity of solar power at Icy Lake. The additional capacity is needed to provide a more robust and reliable power supply at the Lake. It will also provide additional monitoring capabilities and a better safety factor to this site.

**PROJECT NEED:** The lcy Lake Automation project was implemented in order to enable fast, safe, year round access to the water at lcy Lake. The project was successful, allowing precise measurement of the water and the ability to regulate the flow from lcy Lake into the lcy Creek Reservoir. This can be done remotely from the main SCADA computer in Unalaska Valley, eliminating the need to send operators into the watershed during unfavorable conditions. The system also allows for remote monitoring of the site and equipment. After several months of monitoring it has become apparent that additional solar capacity would be beneficial to the site. OptimERA Inc. was hired to run an analysis on the system to determine the output of the existing equipment as installed. The study (attached) shows the need to increase the total solar capacity in order to meet the sites base load demand through the Pollock "A"

season. The work proposed in this project will also upgrade wiring to handle additional load, improve and expand monitoring capabilities, and make other site improvements. Making this site as robust as possible is essential to the future development of Icy Lake. It is not only crucial in operating the equipment, but also in gathering the data needed for the future development. This is a critical facility. It provides raw water storage for use during times when the standard water supplies are unable to keep up with the demands. Automating this site is supported by the 2004 Water Master Plan. It is a follow-up project to the FY12 Icy Lake Power project and will support future development at Icy Lake.



### **FY16-20 CMMP**

### ICY LAKE SOLAR POWER IMPROVEMENTS | WATER

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na

Feasibility/Pre Design: na

Engineering/Design: July 2016—Sept 2016

**Construction: Sept 2016-Nov 2017** 

**DEVELOPMENT PLAN:** Design for this site has been complex due to its remote location, the extremely high winds, and the close proximity to steep mountain sides. Reliability of any system requires redundancy. Originally the Icy Lake site was designed using wind turbines and solar power. Wind turbines that are being successfully utilized in Unalaska Valley were used; however, they were unable to handle the extreme and variable wind loads found at Icy Lake. The wind turbines were replaced with a Thermal Electric Generator (TEG) unit. The TEG unit is working well, but is just able to handle the existing base load. Having a solar array that can also handle the base load will give the system needed redundancy at a reduced operational cost. Combined with the TEG unit, it will supply the power to enable additional monitoring and a quicker load recovery when the valve actuator is operated. The project design and electrical work will be contracted out. The site work will be done in-house in an effort to reduce costs.

			FISCAL YEAR FUNDING REQUESTS										
REVENUE SOURCE	EXISTING	FUNDS	FY16		FY17	FY1	.8	FY1	.9	FY2	20		Total
General Fund	\$ -											\$	-
1% Sales Tax	\$ -											\$	-
Grant	\$ -											\$	-
Proprietary Fund (Water)	\$ -			\$	85,500							\$	85,500
TOTALS	\$ -		\$ -	\$	85,500	\$	-	\$	-	\$	-	\$	85,500

Note: Requested fund is for Salaries & Wages, Engineering, Construction, Supplies and Contingency. The numbers were derived from the ROM Estimate provided by OptimERA Inc.

**PROJECT DESCRIPTION:** Replacement of corroded discharge pipes, check valves, and plug valves at two lift stations and install a zinc anode to prevent further corrosion. Lift station 2 Lis located at 275 Fast Point Rd and was built in 1983. Lift station 5 is located at 69 Steward Rd and was built in 1986.

PROJECT PURPOSE AND NEED: Each lift station contains two pumps. Each pump has an individual 4" discharge line including a check valve and plug valve all located inside the lift station. The discharge piping and valves at lift stations 2 & 5 have been exposed to an extremely harsh environment for over 30 years and 28 years respectively. It has been determined through routine maintenance that corrosion problems have become evident that could lead to pump shut downs or prolonged pump runs due to pipe leaks or valve failures. The discharge pipes are pressurized lines that can blow out in badly corroded areas causing pumps to run too long and possibly overheat and fail. The existing ductile iron piping in both stations has lasted 30 years with no corrosion control. New ductile iron piping and a sacrificial zinc anode should increase the life of the discharge piping to at least 40 years.

MAINTENANCE HISTORY: In 2008 a plug valve vault was installed for lift station 5 and the pressure main was upsized from 3" to 6". In 2012 both lift stations 2 & 5 received fiberglass buildings to house new upgraded electrical/SCADA controls. Oil is changed in the pumps once per year. Plug valves are exercised quarterly which entails placing a 2" mainline key on the valve and fully closing and opening both valves to ensure that they are working properly. The wet well is cleaned monthly by hosing it down with 1 ½" fire hose. The site is visited once per week for a security check. Cost is approximately 20 man-hours per year at each lift station.

### **FY16-20 CMMP**

### LIFT STATIONS 2&5 DISCHARGE PIPE REPLACEMENT | WASTE WATER

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na Feasibility/Pre Design: na **Engineering/Design: FY2017 Construction: FY2017** 





			FISCAL YEAR FUNDING REQUESTS										
REVENUE SOURCE	EXISTING FUNDS	FY16	FY17	FY18	FY19	FY20	Total						
General Fund	\$ -						\$ -						
1% Sales Tax	\$ -						\$ -						
Grant	\$ -						\$ -						
Proprietary Fund (Waste Water)	\$ -		\$ 122,250				\$ 122,250						
TOTAL	<b>S</b> \$ -	\$ -	\$ 122,250	\$ -	\$ -	\$ -	\$ 122,250						
Note: Funding is for design and constructions. Number	Note: Funding is for design and constructions. Numbers are based on ROM estimated from general construction costs.												

## **FY16-20 CMMP**

### MAD-VAC 61 LITTER COLLECTOR | SOLID WASTE

#### **UNIT DESCRIPTION:**

Mad-Vac 61

Year/Make/Model: 2012

• Engine Size/Fuel Type: 13.8hp Kubota Diesel

Specialty Items: Trailer Package, Extension Hose, Hose Boom, Catalytic Converter, Filter, Bagless System, Emergency Stop and Shut Off.

#### **UNIT COST:**

Basic Equipment Cost: \$25,450Specialty Equipment Cost: \$7,350

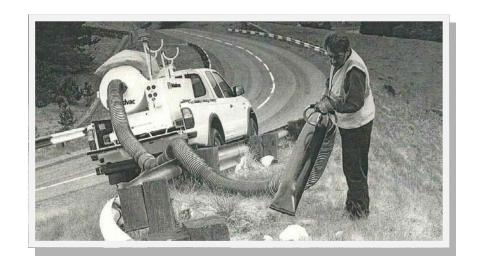
Shipping Costs: \$1,995Total Cost: \$33,795

**UNIT FUNCTION:** The Landfill personnel uses 120 man hours a year picking up trash within the Landfill perimeter. The Madvac Litter collector is light weight and does the job of 4 manual pickers. It can be towed behind small pickup, requiring no CDL License. Operational Cost is estimated at \$710.00 annually.

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na Feasibility/Pre Design: na Engineering/Design: na

Purchase/Construction: FY2016



					FI	SCAL	YEAR	FUNDING	RI	EQUEST	S	
REVENUE SOURCE	Ex	ISTING FUNDS	FY16	ı	Y17	F'	Y18	FY19		FY20	)	Total
General Fund	\$	-										\$ -
1% Sales Tax	\$	-										\$ -
Grant	\$	-										\$ -
Proprietary Fund (Solid Waste)	\$	-	\$ 33,795									\$ 33,795
тота	<b>LS</b> \$	-	\$ 33,795	\$	-	\$	-	\$ -		\$	-	\$ 33,795

### **FY16-20 CMMP**

**RE-INSULATION OF BALER BUILDING | SOLID WASTE** 

**PROJECT DESCRIPTION:** This project will be conducted at the Landfill Baler Building, built in 1998. It consists of replacing approximately 75% of the wall insulation, approximately 10% of the ceiling insulation, and installing a PVC Liner Panels over all of the buildings insulation to protect the insulation from birds. This project is intended to replace damaged insulation and defend against future damage.

**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 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 rodents. 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.

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na
Feasibility/Pre Design: na
Engineering/Design: na

**Purchase/Construction: FY2017** 



						FIS	CAL \	/EAR	FUNDING F	REQ	UESTS	
REVENUE SOURCE		EXISTI	NG FUNDS	F'	Y16	FY17	FY	′18	FY19		FY20	Total
General Fund		\$	-									\$ -
1% Sales Tax		\$	-									\$ -
Grant		\$	-									\$ -
Proprietary Fund (Solid Waste)		\$	-			\$ 495,200						\$ 495,200
то	TALS	\$	-	\$	-	\$ 495,200	\$	-	\$ -		\$ -	\$ 495,200

Note: Requested funds are for inspection, contingency, construction and engineering and based on contractor estimates.

**PROJECT DESCRIPTION:** This project will be conducted at the Unalaska Solid Waste Baler Facility, 1181 Summer Bay Road, originally constructed in 1998. This will replace the existing 10" boiler flue with a 12" flue as is required by manufacturers recommendations and the State of Alaska Dept. of Labor & Workforce Development, Labor Standards and Safety Division. This project is associated with only the 2012 project to replace the boiler at the Baler Facility, which has been completed.

PROJECT PURPOSE AND NEED: Two years ago a new boiler was installed at the Solid Waste Baling Facility replacing a boiler that had three sections fail over a ten year period. The new Boiler was chosen because it was manufactured by a company with a proven record of fail free service within the City's other facilities. When purchased, no information was given regarding a different specification for flue dimensions so the fact that a larger diameter flue was required for the new boiler went undiscovered until all work was scheduled and material was purchased. In an attempt to keep the project on schedule and keep the cost from escalating well beyond the amended budget, it was decided to proceed using a draft inducement fan to insure at least minimal venting. However, it was understood by this Division that the draft inducer could be used only as a temporary solution until funds could be requested to install the proper sized flue. The schedule for the request was accelerated when the State of Alaska's Boiler & Pressure Vessel Inspector directed the correct size flue be installed as soon as possible due to safety concerns. This nomination is a result of that State Inspector's written direction and the need to install the proper sized flue to vent the boiler correctly.

## **FY16-20 CMMP**

LANDFILL BALER FACILITY BOILER FLUE REPLACEMENT | SOLID WASTE

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na Feasibility/Pre Design: na Engineering/Design: na

Purchase/Construction: FY2016

**REQUIREMENT**: In June of 2014 an inspector from the Boiler and Pressure Vessels Section of the Alaska State Department of Labor and Work Force Development, Division of Labor Standards and Safety visited the Baler Facility on one of their regular bi-annual inspection tours. It is required by state statute that Boilers and Pressure Vessels be inspected and certified bi-annually by a state inspector. This inspector found the boiler's flue as it was installed by the contractor was unsafe and required we bring the flue up to the boiler manufacturers specifications by eliminating the barometric damper, the draft inducement fan, and enlarging the flue to 12" as required by the manufacturer. We were directed to remove the barometric damper and close the hole in the flue as soon as possible or no later than 9/17/14, and then given until 12/31/15 to correct the stack size and remove the draft inducement fan. We are also required to report our progress as each item on the inspectors list is completed.

					FIS	CAL '	YEAR	FUNDIN	IG RE	QUEST	S	
REVENUE SOURCE	E	EXISTI	NG FUNDS	FY16	FY17	F۱	/18	FY1	9	FY	20	Total
General Fund		\$	-									\$ -
1% Sales Tax	:	\$	-									\$ -
Grant	Ş	5	-									\$ -
Proprietary Fund (Solid Waste)		\$	-	\$ 14,000								\$ 14,000
тот	ALS \$	\$	-	\$ 14,000	\$ -	\$	-	\$	-	\$	-	\$ 14,000

Note: Requested funds are for supplies and contingency and based on quotes and freight estimations.

**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  $\pm$  feet. The project will also provide an additional 220  $\pm$  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 the FY14 CMMP process. The budgeted number 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 approximately 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 these 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.

### **FY16-20 CMMP**

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

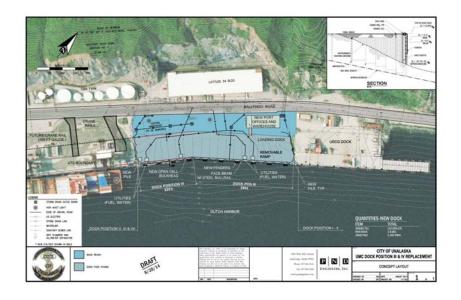
#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: FY14

Feasibility/Pre Design: FY14—FY15
Engineering/Design: FY15-FY17

Construction: FV19 FV20

**Construction: FY18-FY20** 



				FI	ISCAL YEAR FUI	NDING REQ	UESTS		
REVENUE SOURCE	EXISTI	NG FUNDS	FY16	FY17	FY18	FY19	FY20		Total
General Fund	\$	-						\$	-
1% Sales Tax	\$	-						\$	-
Grant	\$	-						\$	-
Proprietary Fund (Ports)	\$	980,000	\$ 904,858		\$ 43,080,000			\$ 4	4,964,858
TOTALS	\$	980,000	\$ 904,858	\$ -	\$ 43,080,000	\$ -	\$ -	\$ 4	4,964,858

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

**PROJECT DESCRIPTION:** This project is an additional phase to the Robert Storrs Float improvement project. It will remove the existing A and B Floats at the Harbor and reconfigure the Harbor to accommodate the new float system ADA gangway and create uplands for parking and a public restroom. It will also include a fire suppression system, electric and year-round water supply to Harbor users and new piling.

PROJECT NEED: This project would include replacing the deteriorated floats and reconfiguring the floats and fingers of A and B Floats to include updated electrical systems, lighting, fire suppression, year-round utilities, and an ADA-required gangway. Based on current engineer concepts, a reconfiguration of A and B Floats will at minimum create 30 additional slips plus linear tie options to accommodate part of the 37 vessel waiting list. Reconfiguration will also allow for development of the uplands for a certain amount of required parking and a public restroom. Because the current floats were relocated, they were arranged in the harbor based on the materials at hand and not with consideration to the best use of the basin. In order to accommodate the vessel demand at the Robert Storrs Harbor, reconfiguration of the floats would allow for better use of the basin based on bathymetry and navigational approaches and also allow for additional vessel slips, with minimal fill and no dredging. It will add a significant number of slips for vessels 60' and under. This is an extension of the Robert Storrs Float Replacement Project. C Float is currently funded and has an established construction schedule. 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. We are eligible to apply for a 50% grant through the Alaska Department of Transportation and Public Facilities. We are not eligible to apply until we completely finished the C Float Project. 50% of the funding for this is estimated to come out of the Port Net Assets.

TOTALS \$

**Proprietary Fund (Ports)** 

# **FY16-20 CMMP**

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

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na

Feasibility/Pre Design: February 2014 (FY14)—July 2014 (FY 15) Engineering/Design: January 2015 (FY15)—July 2015 (FY16) Construction: Spring 2018 (FY18) -August 2019 (FY20)

Existing Condition (left)

• Side Tie: 643 feet

• Slips: 6 - 42 foot & 6 - 60

\$ 6,525,000

\$ 10,030,000

Proposed Concept (right)

• Side Tie: 218 feet

\$6,035,000

\$9,440,000

Slips: 22—26 foot, 13 - 32 foot, &
 20 - 42 foot

			FICO	AL VEAR FILE	IDING DEGI	UECTC	
			FISC	AL YEAR FUN	IDING KEQ	OE212	
REVENUE SOURCE	EXISTING FUNDS	FY16	FY17	FY18	FY19	FY20	Total
General Fund	\$ -						\$ -
1% Sales Tax	\$ -						\$ -
Grant	\$ -		\$3,405,000				\$ 3,405,000

\$ 290,000

\$ 290,000

Requested Funds: Engineering, Construction, Contingency, Inspection | Grant Funds: Possible ADOT & PF Grant after C Float is complete

300.000

300.000

**PROJECT DESCRIPTION:** This project will remove material from the channel bar that crosses the entrance of lliuliuk 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.

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

## **FY16-20 CMMP**

### **ENTRANCE CHANNEL DREDGING | PORTS**

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na
Feasibility/Pre Design: FY2016
Engineering/Design: tbd
Construction: tbd



				F	ISC	AL YEAR FUN	IDING REQ	UESTS	
REVENUE SOURCE	Exi	ISTING FUNDS	FY16	FY17		FY18	FY19	FY20	Total
General Fund	\$	-							\$ -
1% Sales Tax	\$	-							\$ -
Grant	\$	-							\$ -
Proprietary Fund (Ports)	\$	100,000	\$ 150,000						\$ 250,000
TOTALS	\$	100,000	\$ 150,000	\$ -	-	\$ -	\$ -	\$ -	\$ 250,000
Notes: Funding related to professional services cos	rtc								

**PROJECT DESCRIPTION:** The Light Cargo Dock expansion is necessary to accommodate the increased gear transfers and requests for fishing vessel offloads. Once completed this project allows the Port to service existing customers during the construction of the Unalaska Marine Center Expansion and replacement of Positions 3 and 4. The project consists of completing the center cell of the existing facility adding over 90' of dock face in the middle of the existing facility. This gives the facility 238' of working dock face and 372' of moorage from the South mooring dolphin to the North mooring dolphin. This project will include surfacing consistent with the existing concrete surface to provide a solid work surface for cargo and gear transfers. Once the project is complete the LCD will available to work vessels up to 350' on the larger side of the atsea processing vessels, 3 smaller vessels handling gear transfers, or wide variety of combinations of vessel types and operations.

**PROJECT NEED:** The Light Cargo Dock Expansion is an expansion of the existing facility. This project is intended to be a proactive approach to handling fishing vessels gear and product offloads. The gear transfer activity at the LCD has increased in the last two years and requests for use of the LCD is increasing as are the revenues. As the City moves forward with the Expansion and Replacement project of the UMC Positions 3 & 4 we are looking to not only use this base for the current customers, but also to accommodate existing customers from UMC that will be displaced during construction.

**PROJECT STATUS:** When the LCD was built the center cell was part of the project and was not completed as means to keep that project within budget. The concepts from the original project have been reviewed and modified to meet current use and needs. Consequently, the preliminary work for design concept has already been completed. We have been working with PND Engineers on this project and anticipate proposing PND as the designers for this. The own the design for the open sheet pile and they were the Engineer of Record for the original construction of the Light Cargo Dock.

**FUNDING:** This project including design, 30% contingency, 10% inspection, and mobilization and demobilization costs and construction and materials with ROM is expected to be \$4,653,650. This is project that can be paid for from the Port Net Assets.

# **FY16-20 CMMP**

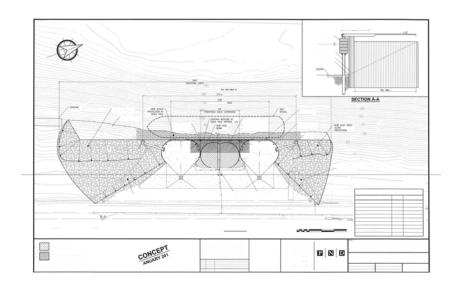
### **LIGHT CARGO DOCK EXPANSION | PORTS**

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na

Feasibility/Pre Design: na Engineering/Design: FY 2016

Construction: FY 2017



				FISC	AL YEAR FUN	IDING REQ	UESTS		
REVENUE SOURCE	EXISTI	NG FUNDS	FY16	FY17	FY18	FY19	FY20	To	otal
General Fund	\$	-						\$	-
1% Sales Tax	\$	-						\$	-
Grant	\$	-						\$	-
Proprietary Fund (Ports)	\$	-	\$ 19,650	\$ 4,634,000				\$ 4,653	,650
TOTALS	\$	-	\$ 19,650	\$ 4,634,000	\$ -	\$ -	\$ -	\$ 4,653	,650

Notes: Funding related to engineering, construction, contingency and inspection. Based on the engineer's proposal and ROM.

**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.

## **FY16-20 CMMP**

### **LCD & UMC DREDGING | PORTS**

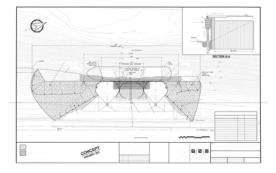
#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

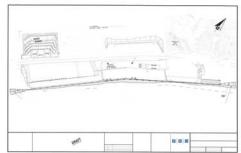
Inception/Concept: na

Feasibility/Pre Design: na

Engineering/Design: July 2015 – Jan 2016

**Construction: FY 2017** 





			FISC	CAL YEAR FUI	IDING REQ	UESTS	
REVENUE SOURCE	EXISTING FUNDS	FY16	FY17	FY18	FY19	FY20	Total
General Fund	\$ -						\$ -
1% Sales Tax	\$ -						\$ -
Grant	\$ -						\$ -
Proprietary Fund (Ports)	\$ -	\$ 109,650	\$ 1,932,000				\$ 2,041,650
TOTALS	\$ -	\$ 109,650	\$ 1,932,000	\$ -	\$ -	\$ -	\$ 2,041,650

**Notes:** Funding related to professional services, construction, contingency and inspection.

**PROJECT DESCRIPTION:** This project would be for electrical pedestals at Unalaska Marine Center adjacent to Ballyhoo Road. This is project is being driven by the users of Unalaska Marine Center and the cost of installation will be negotiated into an agreement with customer. The City of Unalaska has interest in the overall planning and utility layout for this project and we are requesting funding for engineer for concept layout and design.

**PROJECT NEED:** This project is to install electrical pedestals at the Unalaska Marine Center to power containerized refrigerated loads that are too heavy to transit over the road system. By installing pedestals at the Unalaska Marine Center this loads can be worked solely at the UMC without out the need for trucking.

**PROJECT STATUS AND IMPACTS:** The customer is developing the desired layout and number of pedestals based on their volume. The City would need to upgrade transformers and power supply and oversee the installation of this project. This would require an upgrade to power supplies and transformers. The specifics of those needs will be driven by the determination of number of pedestals and estimated power consumption. This project would be an additional revenue sources for Public Utilities and would also guarantee the Port long term storage lease.

### **FY16-20 CMMP**

### **UMC ELECTRICAL PEDESTAL INSTALLATION | PORTS**

#### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na

Feasibility/Pre Design: na

Engineering/Design: July 2015—Sept 2015
Construction: Sept 2015—January 2016



			FISC	CAL YEAR FUN	IDING REQ	UESTS	
REVENUE SOURCE	EXISTING FUNDS	FY16	FY17	FY18	FY19	FY20	Total
General Fund	\$ -						\$ -
1% Sales Tax	\$ -						\$ -
Grant	\$ -						\$ -
Proprietary Fund (Ports)	\$ -	\$ 100,000					\$ 100,000
TOTALS	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ 100,000
Notes: Funding related to engineering convices							

**Notes:** Funding related to engineering services.

**PROJECT DESCRIPTION:** This project will remove the existing steel roofing and the existing plywood roof sheathing and replace all with new like materials.

**PROJECT NEED:** The roofing material on this building is reaching the end of its useful life. Sheathing beneath the roofing is not in good condition due to poor moisture control for the first few years of the structure's life. The improper control of moisture in the attic space allowed sufficient moisture to penetrate the wood sheathing material and promoted mold growth on the bottom surface of the plywood. This roofing will require ever increasing maintenance for it to remain in a useable condition. However, when steel roofing starts to fail, it generally is deteriorating in several areas at nearly the same time. By making the replacement before failure has reached the point of allowing enough moisture into the structure to damage other components within the structure, we save the funds that might have been spent repairing collateral damage. Leaks not repaired in a reasonable amount of time can also increase risk of health problems for the inhabitants due to molds and material failures. Stresses to roofing materials will bring a deteriorating material to the point of failure more rapidly than a material in good condition. When roofing materials fail during a storm with high winds and rain, repair efforts can be grounded due to safety concerns. In this case, the roof sheathing beneath the roofing is also suspect of possible failure. This will compound the problem of the roof failure and should the wood around the fasteners that holds the roofing in place become soft from rot, the fasteners will no longer keep the roofing material in place. In high winds, a sheet of roofing flying around is very dangerous and could cause injury or death to the living and damage anything else within its flight path.

**MAINTENANCE HISTORY:** The date of original construction was June of 1988 and the project is included in the 2003 Maintenance Plan. The history of major maintenance include residing and painting in 1998, new floor coverings in 1999, painting the exterior of the building in 2007, installing new floorcovering and renovation the interiors of all four units in 2012, and a new boiler room in 2012. Additionally, approximate annual routine maintenance costs are \$16,000.

# **FY16-20 CMMP**

### 4-PLEX ROOF REPLACEMENT | HOUSING

### **ESTIMATED PROJECT & PURCHASE TIMELINE**

Inception/Concept: na

Feasibility/Pre Design: July 2014—August 2015

**Engineering/Design: September 2105—November 2016** 

Construction: April 2017—September 2017



The project will extend the life of this building by protecting the material components from moisture. The life of a new steel roof is estimated at 25 years. The anticipated life of the building will be extended similarly because of this project.

				FI	SCAL YEAR F	UNDING RE	QUESTS	
REVENUE SOURCE	EXIST	ING FUNDS	FY16	FY17	FY18	FY19	FY20	Total
General Fund	\$	-						\$ -
1% Sales Tax	\$	-						\$ -
Grant	\$	-						\$ -
Proprietary Fund (Housing)	\$	-		\$ 240,000				\$ 240,000
TOTALS	\$	-	\$ -	\$ 240,000	\$ -	\$ -	\$ -	\$ 240,000

Requested Funds: Engineering Services and Construction Services (ROM estimates based on cost per square foot after consulting a contractor)



4. Vehicle Replacement Schedule

Vehicle #	Function / Description	Year	Life Cycle	Expected Replace- ment	Original Purchase Cost	Estimated Replacement Value 2014	2015 5% / 12%	2016 6% / 15%*	2017 7% / 18%*	2018 8% / 21%*	2019 9% / 24%*	2020 10% / 27%*	2021 10%/30%
GENERAL FUND													
AC2	Air Compressor	1994	20	2019	\$ 14,070	\$18,000						\$19,800	
AC4	Air Compressor	1994	20	2019	\$ 14,070	\$18,000						\$19,800	
AC5	Air Compressor for SCBA	1996	20	2019	\$ 14,070	\$18,000		\$19,800					
AR1	Asphalt Recycler	2011	20	2031	\$ 174,000	\$200,000							
BD5	Dozer	1989	20	2015	\$ 249,758	\$450,000			\$517,500				
BD6	4D Dozer	1992	20	2013	\$ 82,395	\$175,000				\$211,750			
BH2	Backhoe 4X4	1999	15	2015	\$ 73,232	\$110,000						\$139,700	
ВН3	Excavator	2005	15	2021	\$ 102,043	\$182,131							
BH6	Backhoe 580 Case 2WD	1992	15	2011	\$ 46,006	\$110,000			\$129,800				
BH10	Volvo Excavator	2009	15	2024	\$ 176,826	\$182,131							
CC2	Compactor	2001	20	2022	\$ 31,567	\$55,000							
CC3	Compactor	2009	20	2029	\$ 130,194	\$134,100							
CH0028	4x4, Explorer XL	1998	15	2013	\$ 28,175	\$33,000			\$34,980				
CH5249	4x4, Expedition	2013	15	2028									
CH8905	4x4, Explorer XL Rusty - DNR	1997	15	DNR	\$ 28,175	\$33,000							
P3404	4x4, Explorer XL w/electronics	1999	15	2015	\$ 28,685	\$50,992				\$55,071			
CH3710	4x4, Ranger w/ Topper	1996	15	2012	\$ 18,403	\$23,000			\$23,920				
DT2	Dump Truck	2000	18	2019	\$ 138,487	\$150,000						\$190,500	
DT4	MULTIFUNCTION	2009	18	2027	\$ 265,811	\$281,760							
DT5	Dump Truck	1994	18	2013	\$ 96,000	\$150,000			\$177,000				
DT6	Dump Truck	1994	18	2013	\$ 96,000	\$150,000				\$181,500			
DT7	Dump Truck	1996	18	2015	\$ 117,735	\$150,000					\$186,000		
DT8	Dump Truck (Asphalt & HS1 Seeder)	1986	18	2011	\$ 41,000	\$48,000			\$58,080				
EST1	Emergency Response Trailer	2012	15	2027	\$ 12,500	\$15,000							
FL2	Forklift - Hyster E30XL	1988	20	2010	\$ 12,683	\$25,000		\$34,523					
FL5	Forklift	2004	20	2025	\$ 63,409	\$75,000							
GM2	Riding Lawn Mower	2009	10	2019	\$ 7,902	\$8,000						\$8,800	
GS18	Gen Set	1999	20	2020	\$ 46,730	\$50,000							\$65,000
HB1	Asphalt Hot Box	2001	15	2017	\$ 34,830	\$38,000				\$41,040			
HS1	Seed Blower	1997	15	2012	\$ 17,047	\$19,000			\$19,950				
IS1293	15 Passenger Van	1998	15	2014	\$ 33,068	\$40,000							
L1	Loader, Tool Car, Cat IT	2001	18	2020	\$ 156,993	\$175,000							\$227,500
L3	Loader, CAT	2005	18	2023	\$ 55,054	\$75,000							
L4	Loader, Tool Car, Cat IT	1991	18	2010	\$ 100,488	\$175,000			\$206,500				
L9	Loader, volvo	2007	18	2023	\$ 231,000	\$265,000							
ML1	Genie Man Lift	2009	15	2024	\$ 74,918	\$78,000							
ML2	Genie Man Lift	2012	15	2027									

DO4	D 11 01:	0000	4.5	0040	Φ.	04.000	<b>\$00.000</b>						<b>A</b> 44.000	
PS1	Road Lazer Striper	2003	15	2019	\$	34,000	\$38,000						\$41,800	
PS2	Asphalt Distributor	2004	15	DNR	\$	42,096	\$45,000							
	Marine Fire Pump for Rescue Boat	1992	15	2010	\$	20,124	\$23,000				\$24,150			
PW0030	4x4, Explorer XL	1998	15	DNR	\$	28,347	\$33,000							
PW0688	4x4, Pickup Super Cab	2003	15	2019	\$	25,113	\$30,000						\$33,000	
PW1765	Flatbed, F-350	2010	15	2025	\$	61,550	\$61,550							
PW1992	Flatbed, 2WD, Lift Gate	1995	15	DNR	\$	29,020	\$32,000							
PW3448	F250 Supercab 4x4	2000	15	2016	\$	29,435	\$34,000			\$36,380				
PW4212	4x4, Flatbed w/snow plow	2003	15	2019	\$	28,600	\$34,000							
PW4397	4x4, Pickup Super Cab	2009	15	2024	\$	26,883	\$30,000							
PW4572	One Ton Truck w/Service	2006	15	2022	\$	44,500	\$46,000							
PW4751	Flatbed with Box	2004	15	2020	\$	31,247	\$46,000							\$59,800
PW5954	4x4, Flatbed	1996	15	2012	\$	24,176	\$30,000				\$32,400			
PW6065	4x4, Pickup	2003	15	2019	\$	22,313	\$30,000						\$33,000	
PW6784	4x4, Expedition XLT	2002	15	2017	\$	29,992	\$33,000				\$35,640			
PW6372	1 ton Flatbed w/plow	2007	15	2023	\$	30,828	\$33,000							
PW7449	4x4, Pickup	2000	15	2016	\$	22,752	\$30,000			\$32,100				
PW8586	4x4 Flat bed w/crane	1996	15	2012	\$	40,014	\$48,000				\$51,840			
PW9610	F150 Supercab 4x4	2000	15	2016	\$	23,652	\$30,000				\$32,400			
PW9611	F150 Supercab 4x4 Jim's Old Truck	2000	15	2016	\$	23,652	\$30,000			\$36,000				
PW9623	4x4, Explorer XL w/electronics	2002	7	2010	\$	32,595	\$48,500							
RC5818	Passenger Van	2012	15	2027										
RES7193	Ambulance	1998	13	2012	\$	225,000	\$204,220	\$184,210						
RG2	Cat Grader	2004	18	2023	\$	258,329	\$322,472							
RG3	Volvo Grader	2006	18	2025	\$	210,455	\$322,472							
RG8	Volvo Grader	2010	18	2028	\$	322,472	\$322,472							
S2878	Fuel Truck , F-600	2008	15	2024	\$	35,000	\$37,000							
SB2	Snow Blower	2000	25	2025	\$	43,741	\$50,300							
SS1	Street Sweeper	2001	15	2017	\$	137,339	\$145,000				\$175,450			
ST1	Sand Truck	1998	15	2014	\$	137,501	\$231,595			\$273,282				
T2	Tractor, 5th Wheel	1998	20	2019	\$	104,410	\$165,000						\$209,550	
TR2	Trailer (Scissor lift)	1992	20	2013	\$	6,000	\$8,000					\$10,000	, ,	
TR4	Trail King Lowboy	2002	20	2023	\$	45,500	\$50,000					, ,,,,,,,,		
TR6	Trailer	???	20	2020	\$	25,000	\$28,000							\$36,400
TR7	Trailer (Utility)	2004	20	2025	\$	25,000	\$27,000							400,100
TR8	Trailer (Rescue)	2005	20	2026	\$	60,208	\$64,000							
	Trailer (Cement Mixer)	1978	20	2010	\$	20,000	\$22,000							
TR11	TrailMax	2007	20	2027	\$	24,000	\$26,000					\$28,224		
TR21	Shoring Trailer	1997	20	2017	\$	28,706	\$30,000					Ţ_U, 1		
UFD0118	4x4 Supercab	2003	15	2019	\$	30,464	\$33,000						\$36,300	
UFD0592	Fire Engine	1997	18	2018	\$	348,381	\$385,000					\$409,696	ψου,σου	
UFD0750	Pumper, 4WD #4	1992	18	2010	\$	180,499	\$250,000		\$737,573			φ-100,000		
UFD3503	Ambulance	2012	13	2025	\$	191,875	\$204,220		ψ101,013					
01 03303	Ambulance	2012	13	2023	φ	191,073	φ204,220							

LIEDOFOE	D	2004	40	2024	¢ 274 204	¢205 000							
	Pumper/Tender	2004	18	2021	\$ 371,201	\$305,000				Ф <b>Г</b> 4 040			
	4x4, Equip Truck	1997	15	2013	\$ 44,021	\$48,000			#00.000	\$51,840			
	4x4, Explorer XL Response Unit	2003	15	2019	\$ 28,706	\$33,000			\$36,300				
UFD7954	4x4, Explorer XL	2005	15	2021	\$ 31,919	\$33,000	<b>A</b> 10 000						
UPD0232	4x4, Explorer XL w/electronics	2005	7	2013	\$ 37,100	\$48,500	\$49,800						
UPD8025	4x4, Expedition XLT w/electronics	2011	15	2026	\$ 28,175	\$48,500							
UPD3405	4x4, Explorer XL w/electronics	1999	15	DNR	\$ 28,685	\$48,500		\$0	Replace with u	sed Police ve	ehicle UPD96	33	
UPD3672	4x4, Expedition XLT w/electronics	2010	15	2025	\$ 28,175	\$48,500							
UPD4087	4x4, Explorer XL w/electronics	2005	15	2020	\$ 31,867	\$48,500							\$63,050
UPD7414	4x4, Explorer XL w/electronics	2003	7	2011	\$ 30,250	\$48,250							
UPD8407	4x4, Explorer XLS w/electronics	2005	15	2021	\$ 31,919	\$48,500							
UPD9546	4x4, Expedition XLT w/electronics	2009	7	2016	\$ 39,605	\$48,500						\$53,350	
UPD9633	4x4, Explorer XL w/electronics	2008	7	2016	\$ 37,644	\$48,500		\$51,895	Earmarked for	<b>Animal Conti</b>	rol officer		
UPD9826	4x4, Expedition XLT w/electronics	2012			\$ 43,605	\$44,500							
WT2	Water Tanker	1996	20	2016	\$ 109,514	\$125,000							
					\$ 6,846,479	\$8,477,664							
					Annual Costs:		\$234,010	\$843,791	\$1,581,792	\$893,081	\$633,920	\$785,600	\$451,750
ELECTRIC	FUND												
AC3	Air Compressor	1994	20	2014	\$ 12,338	\$18,000						\$19,800	
BD7	Dozer	1996	20	2017	\$ 85,000	\$90,000				\$99,068			
BH1	Backhoe 4X4	2000	15	2016	\$ 81,183	\$110,000			\$129,800				
E1214	Crane Truck	1986	20	2011	\$ 34,250	\$95,000			\$109,250				
E1451	4x4, Pickup, w/svc	2004	15	2019	\$ 27,548	\$35,000						\$38,500	
E4117	Bucket Truck	2001	20	2022	\$ 72,699	\$95,000							
E6	Boom Truck	1997	20	2018	\$ 152,915	\$175,000							
E5629	1 Ton Pickup w/svc	2008	15	2024	\$ 70,000	\$73,000							
E6238	4x4, PU Super Cab, Dan's Old Truck	1997	15	DNR	\$ 23,501	\$30,000							
E8581	4x4, Pickup, w/svc	1996	15	2012	\$ 26,628	\$35,000			\$37,450				
E8585	4x4, Pickup	1996	15	2012	\$ 25,810	\$30,000			\$32,100				
E9483	4x4, Pickup	2001	15	2017	\$ 25,998	\$30,000			<b>40</b> =,100	\$32,400			
FL3	Forklift	1985	20	DNR	\$ 8,000	\$10,000				<b>4</b> 0=, 100			
FL6	Forklift	2009	20	2029	\$ 32,569	\$35,000							
TR17	Utility Trailer	1995		2020	\$ 9,382	\$15,000							
11011	Cumy Transi	1000			\$ 687,821	\$876,000							
					Annual Costs:	\$070,000	\$0	\$0	\$308,600	\$131,468	\$0	\$58,300	\$0
WATER					. iiiidai ooots.		ΨΟ	ΨΟ	<del>\$500,000</del>	Ψ101,400	ΨΟ	Ψ00,000	ΨΟ
	Backhoe, 4x4 Case 590 Turbo	1992	15	2012	\$ 59,379	\$110,000		\$205,096					
CL1	Generator	1988	25	2014	\$ 20,000	\$40,000		+=30,000	\$48,400				
GS13	Gen Set	Unknown	20	2010	\$ 25,000	\$50,000			\$ 10, 100	\$60,500			
TR19	Trailer (Sport)	1995	20	2016	\$ 25,000	\$30,000			\$32,100	Ψ30,000			
W0446	4x4, Pickup	1997	15	2013	\$ 31,032	\$30,000			ψ02,100		\$32,700		
W8582	4x4, Pickup	1996	15	2013	\$ 26,628	\$30,000		\$36,411			Ψ02,100		
	4x4, Pickup, Utility	2002	15			_		φ30,411			¢29.150		
W7211	4x4, Pickup, Utility	2002	15	2018	\$ 32,059	\$35,000					\$38,150		

W7587	4x4, Pickup	2008	15	2024	\$	22,236	\$30,000								
WSM3	Snow Machine - Polaris	2010	10	2020	\$	6,989	\$7,000								\$7,700
WSM2	Snow Machine - Polaris	2010	10	2020	\$	6,989	\$7,000								\$7,700
					\$	255,312	\$369,000								
					Annı	ual Costs:		\$0	\$241,507	\$80,500	\$60,500	\$70,850	\$0	\$	15,400
WASTEWATER															
BH9	Backhoe	1996	15	2012	\$	78,850	\$110,000			\$126,500					
GS15	Gen Set - Diesel	Unknown	20	2010	\$	25,000	\$50,000			\$57,500					
GS17	Gen Set	2000	20	2021	\$	47,000	\$50,000								
SD5275	Flatbed F-350	2004	15	2020	\$	40,154	\$46,000							(	\$50,600
SD5542	4x4 Pickup F-150	2004	15	2019	\$	18,892	\$30,000						\$33,000		
SP1	Trailer Mounted Pump	2005	10	2016	\$	31,024	\$35,000			\$34,126	\$38,150				
TR14	Trailer (Service)	1992	20	DNR	\$	25,000	\$28,000								
VT2 (50%)	Vactor Truck	1997	20	2018	\$	214,730	\$265,000					\$490,000			
					\$	480,650	\$614,000								
					Annı	ual Costs:		\$0	\$0	\$218,126	\$38,150	\$490,000	\$33,000	(	\$50,600
SOLID WAS	STE														
BD8	Dozer	1996	20	2017	\$	218,997	\$350,000								
L7	Loader - Cat 950	1996	18	2014	\$	199,204	\$300,000						\$381,000		
LF0750	Flatbed with Lift	2003	15	2019	\$	57,180	\$61,550								
LF1	Loader - Volvo	2007	18	2026	\$	65,000	\$73,000								
LF3	Vactor Truck	1987	25	2013	\$	109,400	\$175,000			\$206,500					
RH1	Rock Hauler - Terex	1981	25	DNR	\$	125,000	\$125,000								
					\$	774,781	\$1,084,550								
					Annı	ual Costs:			\$0	\$206,500	\$0	\$0	\$381,000		\$0
PORT/HAR	BOR														
FL4	Forklift	2003	20	2024	\$	43,850	\$50,000								
HM0416	F350 One Ton Flatbed	1999	15	2015	\$	25,585	\$61,550			\$65,859					
HM2	Rescue Boat	2005	20	2026	\$	172,834	\$200,000								
HM4396	4X4 Supercab	2009	10	2019	\$	26,883	\$30,000						\$33,000		
HM5059	4X4 Supercab w SB	2009	10	2019	\$	32,698	\$35,000						\$38,500		
HM8387	F150 Supercab 4x4	2001	15	2017	\$	26,000	\$30,000			\$36,000	\$32,400				
HM9290	4x4, Explorer XLT	2007	15	2023	\$	23,350	\$33,000								
HML1	908 CAT Loader	2004	18	2023	\$	74,672	\$125,000								
TR9	Trailer (Rescue Boat)	2005	20	2026	\$	25,000	\$30,000								
					\$	450,872	\$594,550								
					Annı	ual Costs:		\$0	\$0	\$101,859	\$32,400	\$0	\$71,500		\$0



City of Unalaska, Capital and Major Maintenance Plan, FY2016-FY2020