

# Sitka's Public Works Department

October 16, 2015

Public Works is the City and Borough of Sitka's largest department with 38.5 FTE's plus approximately 6 additional seasonal temporary employees. We are responsible for the design, construction, maintenance and operations of City streets, buildings, vehicles, water, sewer, landfills, recycling and recreational facilities. The Department is directly responsible for six different general fund budgets, six enterprise budgets, and two internal service fund budgets for a total of 14 separate budget accounts:

General Funds:

PW Administration	Streets	Building Department
Engineering	Parks and Recreation	Senior Center

Enterprise Funds:

Water Fund	Wastewater Fund	Sawmill Cove Industrial Park
Airport	Marine Services Center	

Internal Service Funds:

Central Garage	Building Maintenance
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Our department is divided into five areas: Administration, Engineering, Building, Environmental, Maintenance and Operations (see the attached Public Works Organizational Chart). The following is a description of each area:

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<b><u>ADMINISTRATION</u></b>	<b>- Michael Harmon</b>	<b><u>Public Works Director</u></b>
<b><u>CENTRALIZED CONTRACTING</u></b>	<b>- Tori Fleming</b>	<b>Contract Manager</b>
	<b>- Retha Winger</b>	<b>Contract Coordinator</b>
	<b>- Wanda Bush</b>	<b>Asst. Contract Coord. /Office</b>

Mgr.

**4 FTE's Total**

- Administrator, Assembly & Commission coordination
- Customer Service (inquiries, rentals, permits, etc.)
- Interface with State and Federal agencies
- Pursue funding for various Capital Improvement Projects (CIPs)
- Construction and Architectural/Engineering (A/E) contract administration
- Administer service contracts (solid waste, janitorial, vending, snow removal, etc.)
- Lease negotiation (material, land, building space, etc.)
- Vehicle Administration
- Records retention / filing
- General oversight of the department's budget and purchases
- Risk management: leases, claims, grievances, construction, etc.
- Bid and award contracts for construction and purchases
- Procure City equipment
- Prepare purchase orders for public works.

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**MAINT. & OPERATIONS**

- Gary Baugher	<b>Maint. &amp; Ops. Superintendent</b>
- Nick Kepler	<b>Maintenance Supervisor</b>
- Dan Palof	<b>Facilities Supervisor</b>
- Vacant	<b>Parks/Recreation Supervisor</b>
- Jack Blankenship	<b>Streets Foreman</b>
- Bryan Craig	<b>Heavy Equipment Operator</b>
- Kelly Ferguson	<b>Maintenance Worker</b>
- Joseph Daniels	<b>Maintenance Worker</b>
- Ken Winger	<b>Building Maintenance Specialist</b>
- Clancy Board	<b>Building Maintenance Specialist</b>
- Shawn McLeod	<b>Parks and Grounds Specialist</b>
- Jud Kirkness	<b>Parks and Grounds Specialist</b>
- Jeff Cranson	<b>Parks and Recreation Specialist</b>
- Ken Kubik	<b>Chief Mechanic</b>
- Dylan Brooks	<b>Heavy Equipment Mechanic</b>

**15.0 FTE's Total**

- Maintains 14 Primary City buildings plus various other facilities
- Maintains grounds, parks, trails; including restrooms, concessions, and shelters
- Completes capital projects related to building maintenance
- Manages the recreation programs
- Negotiates City leases for buildings, grounds, and parks
- Responsible for the fuel contract (CBS Facilities, Schools, and Hospital)
- Special Projects - design and construction contracts for special projects related to public buildings and grounds

**Public Works Street Maintenance (5.0 FTEs)**

- Street Maintenance – 30 miles of paved and unpaved roads, plus Green Lake Rd, Nelson Logging Road, Tongass and Seward on Japonski Island
  - Pavement Patching
  - Street Maintenance
  - Drainage culverts and roadside ditching
  - Sidewalks
  - Signage
  - Street Sweeping
  - Painting of pavement markings
  - Snow Removal and Ice Control
  - Danger trees and brushing
- Inter-department Services (Solid Waste, Water and Wastewater)
- Parking Lot Maintenance

**Central Garage (2.0 FTEs)**

- City Fleet Routine Maintenance of 124 pieces of equipment
- Heavy Equipment Specialty services
- Inter-department maintenance - generators

**Solid Waste (CBS oversees contract for operations)**

- Municipal Solid Waste Collection and Disposal
- Construction and Demolition (C&D) debris
- Land Clearing (Overburden) debris
- Household Hazardous Waste Collection
- Wastewater sludge disposal
- Scrapyard Operations – metal, junk automobiles, glass
- Recycling – cardboard, plastic, paper, tin cans, and aluminum (glass is being re-purposed)

Item	<b>SOLID WASTE SUMMARY</b>
MSW Disposal	Rabanco will be subcontracting with Alaska Pacific Environmental Services. New contract starting November 2015.
Collection	Alaska Pacific Environmental Services. New contract starting November 2015.
C&D Disposal	Taken to Jarvis Street transfer station
Biosolids	Permitted for Sitka Landfill;
Land Clearing Landfill	Overburden – McGraw’s overburden lease site at Granite Creek pit
Recycling	Rabanco will be subcontracting with Alaska Pacific Environmental Services. New contract starting November 2015. Source separated; currently recycling cardboard, mixed paper, tin cans, glass, newspaper and milk plastic #2;

**Facilities (3 FTEs)**

- Maintains 14 city buildings
- Completes capital projects related to building maintenance
- Negotiates city leases for buildings, grounds, and parks
- Responsible for the fuel contract
- Projects - design and construction contracts for special projects related to public buildings

**Parks and Recreation Division (4 FTEs)**

**Mission Statement: To enhance the quality of life and promote economic vitality in Sitka by maintaining and expanding recreational opportunities for residents and visitors.**

The four employees of the Parks Division work together to manage, operate, administer and maintain the City’s park and recreation infrastructure and facilities. Approximately four temporary grounds assistants are hired during the summer season. The City and Borough of Sitka, Parks and Recreation Division’s staff actively maintains and/or manages 40 park or grounds areas and 8.17 miles of trail. Infrastructure includes: 7 parks, 3 playgrounds, 2 recreation sites, 11 ball fields, and 26 landscape areas and grounds (flower beds, shrubs, over 800 ornamental trees around Sitka’s public buildings and other public areas), the Kaisei-Marui interpretive memorial site, Tom Young Cabin and the City Cemetery. Park lands include a total of 109 acres with 27.2 acres (1,186,661 sq. ft.) of turf.

Division Responsibilities:

- Operate Ball fields – maintenance of grounds and facilities; field scheduling and field use for 16 different sports and recreation user groups
- Maintain landscape beds and trees – manage over 800 park/urban trees, maintain landscape and flower beds at 21 public buildings and harbors; support Tree and Landscape Committee
- Manage playgrounds/play courts –3 city playground’s equipment maintenance
- Planning and administration for fee programs and Commercial Operator permits
- Support public input and process via 4 boards and committees
- Support and coordinate major projects identified in Comprehensive Plan, Parks and Recreation Plan, Sitka Trail Plan, Tourism Plan, Sitka Landscape Plan, Sitka Urban Forestry Plan, Sitka Outdoor Recreation Plan, Sitka Non-motorized Plan and Parks and Recreation Committee annual goals matrix
- Park and Recreation facility development – planning, inspection & operation. Grant writing and management
- Turf Management – turf is found throughout parks, ballfields, school grounds, harbors and the city’s open spaces
- Parks and Miscellaneous site management – infrastructure maintained at seven parks include, picnic shelters, gazebos, bathhouses, picnic tables, benches, restrooms, parking lots, etc.
- Trails Program – 8.1 miles of city trails and nine trailheads including 6 urban and 3 remote trails

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**ENGINEERING**

<b>Dan Tadic</b>	<b>Municipal Engineer</b>
<b>Stephen Weatherman</b>	<b>Senior Engineer</b>
<b>David Longtin</b>	<b>Senior Engineer</b>
<b>Kelli Cropper</b>	<b>Project Manager</b>
<b>Joshua Houston</b>	<b>Computer-aided Design Tech</b>

**4.5 FTE’s**

Manage the planning, design and construction of roads, utilities, buildings and harbor projects (The five year major capital project plan consists approximately \$116 million in capital expenditures)

- Review plans, inspect and approve private subdivision development
- Issue permits for new water & sewer services, driveways, and encroachments
- Coordinate Public Works GIS database and mapping
- Prepare grant and loan applications for Alaska Department of Environmental Conservation, Alaska Energy Authority, Legislative Requests, State of Alaska Harbor Matching Grant, etc.
- Manage Granite Creek Lease Areas

**Current Major Capital Projects: (see attached 5-yr CIP Plan)**

<b><u>BUILDING DEPARTMENT</u></b>	<b><u>Chris Duguay</u></b>	<b><u>Building Official / Fire Marshal</u></b>
	- Vacant	Building Inspector

**2.0 FTE's**

- Building Official, Fire Marshal, and building inspection responsibilities

<b><u>WATER &amp; WASTEWATER</u></b> <b>(13 FTE's)</b>	<b><u>Mark Buggins</u></b>	<b><u>Environmental Superintendent</u></b>
	- Shilo Williams	Deputy Environmental Superintendent
	- Joe Swain	Chief Water Operator
	- Steve Stiles	Senior Water Operator
	- Rob Lihou	Water Operator
	- Rob Dahlquist	W/WW Electrician
	- Dan Cox	W/WW Mechanic
	- Charles Armer	Apprentice W/WW Mechanic
	- Rich McAlpin	Chief WW Operator
	- Kelly Chevalier	WW Operator/Lab Specialist
	- Derik Rennie	WW Operator/Maintenance Specialist
	- Dan Berlad	WW Operator 1
	- Robert Reid	WW Operator

**Water Fund (5 FTEs)**

- Maintain constant supply of potable water for consumption
- Provide adequate flows/storage for fire protection
- Maintain infrastructure ~ 48 miles of mains, 450 hydrants, 12 air relief valves, 3 water pump booster stations, four pressure zones, 3 treated water storage tanks (3.0 MG)
- Operate and maintain facilities (Blue Lake Water Treatment Plant with emergency generator; Ultra Violet Disinfection Facility with emergency generator; Corrosion Control Facility; Indian River Back-up Supply Source)
- Preventative maintenance & emergency maintenance
- Meet all federal and state regulations for water quality, monitoring and reporting to maintain “unfiltered status”
- Maintain state certified drinking water laboratory for city sampling requirements and on a chargeable basis for private entities e.g. USFS, swimming pool, commercial hot tubs, other municipalities and local contractors
- Maintain state certified operators at required certification levels for Water Treatment and Water Distribution and plan for succession to maintain future compliance
- Keep abreast of upcoming regulations and predict system needs

**Background:** The Water system supplies water to nearly 99% of the population of the City (approximately 3,300 residential and commercial customers). There are two sources of supply, Blue Lake Reservoir and Indian River. The Blue Lake source is the primary supply with Indian River serving only as a backup or emergency intake for supply. Blue Lake is an adequate supply for the foreseeable future. However, treated water storage capacity needs to be increased by at least another

1.2 MG, on the Sawmill Creek side of town where there currently is no storage. Use of the Indian River water source requires a state approved temporary filtration system or the issuance of a community wide boil water notice due to inadequate treatment of this surface water and limited chlorine contact time before the first customer. We received an extension for compliance for additional disinfection of Blue Lake water which is required by the federal Long Term 2 Enhanced Surface Water Treatment Rule. Our extended date to be operational and approved is October 1, 2016; ultra violet (UV) was selected as the most cost effective method. The UV facility has been operating in test/training and proof mode since late May 2015. The UV treatment facility has an estimated total cost of \$8 million; over 70% of the costs will be paid by state grants.

The distribution and transmission systems are constructed of mostly ductile iron pipe with a smaller portion of cast iron mains and the recent addition of corrosion resistant high density polyethylene mains. The distribution system includes three storage tanks; the Charteris St. Tank (1.2 million gallons, MG), the Harbor Mt. Tank (0.8 MG) and the relatively new higher elevation Whitcomb Heights Tank (1.0 MG). The distribution mains extend approximately 7 miles north to the Samson Tug & Barge Facility, 5 miles southeast to Sawmill Cove Industrial Park (SMCIP) and 2 miles west to the USCG Air Station from the central business district. The connections of the transmission main and the distribution system are near the Sawmill Creek Road and Indian River Road and Jeff Davis St. intersections. Pressures in the lower elevations e.g. the downtown area range from 80 to 85 psi and are correspondingly lower at higher elevations (reducing by approximately ½ psi per foot of elevation rise). There are 3 higher elevation pressure zone booster stations including Wortman Loop, upper Cascade St, and higher elevations in the Gavin subdivision; the upper section of Hillside subdivision and Whitcomb Heights. The Blue Lake system is rated for 8 million gallons per day (MGD). Current water production averages between 3.0 and 4.4 MGD. A flow rate in excess of 5 MGD is achievable by gravity head from Blue Lake at its new elevation.

Blue Lake water receives treatment at three individual locations; at the Blue Lake Water Treatment Facility near the Blue Lake Hydro and Sawmill Creek where the water is chlorinated for disinfection and the pressure is reduced; at the UV Facility on the GPIIP where additional UV disinfection is achieved and fluoride is added for dental health and at the Corrosion Control Facility on Jarvis Street where a sodium carbonate (soda ash) solution is added for pH and alkalinity stabilization to reduce the corrosive nature of the water to household plumbing and comply with the Lead and Copper Rule. Proper disinfection is achieved through managing the chlorine concentration and contact time in the 5+ mile transmission main, the UV light intensity relative to flow and UV transmittance coupled with constant monitoring of other required water quality parameters such as temperature and pH that affect chlorine's disinfection properties. In the future, aging sections of the distribution system continually need to be replaced.

Sitka has one of the lower water utility rates in Alaska with flat residential rate of \$38.96 per month and a metered rate of \$0.00121 per gallon, or 12.1 cents per 100 gallons – about 60% of the national average for tap water.

## **Wastewater Fund (8 FTEs)**

- Maintain uninterrupted sanitary sewage collection
- Maintain infrastructure – 40 miles of collection mains, 41 major, and 37 residential lift stations, 9 permanent and 3 trailer mounted emergency generators
- Maintain WWTP equipment and plant performance to operate WW systems within federal operation limits (NPDES permit) to maintain 301 (h) permit status
- Preventative and emergency maintenance
- Required federal reporting
- Follow all applicable federal and state laws
- Predict system growth and replacement needs
- Maintain state certified operators at required certification levels for Wastewater Treatment and Wastewater Collection and for succession to maintain future compliance
- Identify and reduce sources of inflow and infiltration (I&I) into the collection system
- Coordinate community semi-annual Household Hazardous Waste Collection events
- Provide environmental monitoring & reporting of landfills – e.g. leachate sampling, surveys, methane monitoring (closed Kimsham & APC Landfills, and active Sitka Landfill and Biosolids Site)
- Environmental Restoration Projects – Granite Creek, Swan Lake & Sawmill Cove/Silver Bay
- Provide expertise to other city departments for pump and motor rebuilds
- Maintain and operate GPIP's low pressure wastewater collection system to ensure uninterrupted sanitary sewage collection – one duplex lift station, approximately 1 mile of collection mains
- Keep abreast of upcoming regulations and predict system needs

**Background:** The sanitary sewer system collects and treats the sanitary wastewater from nearly 98% of the population of the City (approximately 3000 residential and commercial customers). The average flow to the wastewater treatment facility is 1.2 million gallons per day (MGD) which has decreased from 1.8 MGD in the 1980's. This reduction is due to removal of extraneous flows (inflow and infiltration, I&I) entering the system through leaks and improper connections. The maximum federally permitted average flow is 1.8 MGD on a monthly basis.

The sanitary sewer system is operating near target capacity so growth may continue to include more customers at the same rate as the reduction in I&I flows. Great strides have been made in I&I reduction in the past 20 years and more recently with significant improvements: Paxton Manor, Sheldon Jackson College, Biorka/Park Streets, Brady St., Monastery St., Etolin Way, Baranof St. and Oja Way, utility improvement projects.

Due to the geology and topography the wastewater collection system is particularly complex for the community's size. The collection system includes 41 lift stations containing approximately 85 pumps and related control and alarm systems (more than Anchorage). The collection system extends nearly 6 miles from the central business district to the north to just past the Alaska Marine Lines Barge Facility, 5 miles southeast to SMCIP and 2 miles west to the USCG Air Station. In total there are approximately 40 miles of collection system mains.

The treatment system consists of standard primary treatment unit processes with a deep water marine outfall with a 301(h) discharge waiver from EPA. Normally, sewage treatment systems are required to have secondary treatment but EPA allows for this waiver for properly operated systems discharging into the ocean. Lime treated, class B-dewatered sludge from the primary treatment is deposited in a specific site at the Sitka Landfill in accordance with EPA guidelines and a DEC landfill permit. Potential future needs for the wastewater system include; treatment plant effluent disinfection, expanded capacity at the biosolids disposal area, additional sludge treatment, additional lift stations, continued reduction in I&I, and replacement of aging mains, entire lift stations, pumps, controls and other electrical and mechanical equipment in the existing system.

# CITY & BOROUGH OF SITKA PUBLIC WORKS CIP PLAN

Year	Project Manager	Project Name	Project Budget	Available Funding	Funding Shortfall
<b>2015</b>					
	DL	2014 Sewage LS Upgrades (Lake & Monastery)	\$841,000.00	\$850,000.00	(\$9,000.00)
	DL	Edgcumbe Drive Street Reconstruction	\$5,463,544.00	\$5,463,544.00	\$0.00
	DL	Hollywood Way Water & Sewer	\$874,000.00	\$1,437,300.00	(\$563,300.00)
	DL	Lake Street Culvert Replacement	\$175,000.00	\$300,000.00	(\$125,000.00)
	DL	New Archangel Sewer Replacement	\$325,000.00	\$325,000.00	\$0.00
	5		\$7,678,544.00		
	DT	Quarry Development	\$120,000.00	\$120,000.00	\$0.00
	DT	Sitka Transient Float Replacement	\$6,150,000.00	\$6,150,000.00	\$0.00
	2		\$6,270,000.00		
	GB	City/State Building Improvements	\$207,444.00	\$207,444.00	\$0.00
	GB	Cross Trail Phase 6 - Design	\$250,000.00	\$250,000.00	\$0.00
	2		\$457,444.00		
	HD	Eliason Harbor Flootation Upgrades - West Transient Float	\$125,000.00	\$125,000.00	\$0.00
	1		\$125,000.00		
	KC	Harrigan Centennial Hall Renewal - Year 1	\$8,300,000.00	\$8,300,000.00	\$0.00
	1		\$8,300,000.00		
	SW	Baranof and Monastery Street Water and Sewer - SMCR to DeGroff	\$1,090,000.00	\$2,422,500.00	(\$1,332,500.00)
	SW	UV Disinfection Facility - Year 2	\$4,483,000.00	\$6,055,500.00	(\$1,572,500.00)
	2		\$5,573,000.00		
	TEMP	Jarvis Substation Control Building Re-roof	\$103,880.00	\$120,000.00	(\$16,120.00)
	TEMP	Kettleon Memorial Library - Year 2	\$3,447,405.00	\$3,447,405.00	\$0.00
	TEMP	Net Shed Roof Replacement	\$105,400.00	\$105,493.00	(\$93.00)
	3		\$3,656,685.00		
	<b>Total Project Costs</b>		<b>2015</b>		
			\$32,060,673.00		
<b>2016</b>					
	DL	2016 Sewage LS Upgrades (Channel & Landfill)	\$1,365,000.00	\$1,365,000.00	\$0.00
	DL	Jeff Davis Water and Sewer Improvements	\$920,000.00	\$1,416,000.00	(\$496,000.00)
	2		\$2,285,000.00		
	DT	Baranof Warm Springs Dock	\$1,900,000.00	\$1,900,000.00	\$0.00
	DT	Sea Walk Phase II Design	\$200,000.00	\$200,000.00	\$0.00
	DT	Seaplane Base Siting Study Update	\$20,000.00	\$120,000.00	(\$100,000.00)
	3		\$2,120,000.00		

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 FM = Facility Maintenance PWM = Public Works Manager/Maintenance HD = Harbor Department TEMP = Temporary Project Manager

# CITY & BOROUGH OF SITKA PUBLIC WORKS CIP PLAN

Year	Project Manager	Project Name	Project Budget	Available Funding	Funding Shortfall	
2016	KC	Harrigan Centennial Hall Renewal - Year 2	\$8,300,000.00	\$8,300,000.00	\$0.00	
	1		\$8,300,000.00			
	SW	2016 Sitka Paving (Katlian, Lincoln - Jeff Davis to SNHP, Gavan)	\$1,842,000.00	\$1,842,000.00	\$0.00	
	SW	Eagle Way Road and Utility Upgrade	\$754,200.00	\$754,200.00	\$0.00	
	SW	Old Harbor Mountain Road & Utility Upgrade	\$745,800.00	\$745,800.00	\$0.00	
	3		\$3,342,000.00			
TEMP		GPIP Multi-Purpose Deepwater Dock Design	\$790,114.00			
	1		\$790,114.00			
		<b>Total Project Costs</b>	<b>2016</b>			
			\$16,837,114.00			
<b>2017</b>						
2017	DL	2017 Sewage LS Upgrades (Crescent & Brady)	\$1,000,000.00	\$665,000.00	\$335,000.00	
	DL	O'Cain Street Water Line Replacement	\$175,000.00	\$100,000.00	\$75,000.00	
	DL	South Lake Street & West DeGroff Street Utility and Street Improvements	\$1,645,000.00	\$0.00	\$1,645,000.00	
		3		\$2,820,000.00		
	DT	Crescent Harbor Float Replacement - Phase I	\$12,100,000.00	\$0.00	\$12,100,000.00	
	DT	Sealing Cove Harbor Maintenance Repairs	\$735,412.00	\$0.00	\$735,412.00	
		2		\$12,835,412.00		
	KC	Airport Building Electric Boiler Construction	\$200,000.00	\$0.00	\$200,000.00	
	KC	Airport Phase I Baggage Make-up and TSA Screening	\$1,850,000.00	\$275,000.00	\$1,575,000.00	
	KC	Seaplane Base EA & Design	\$400,000.00	\$100,000.00	\$300,000.00	
		3		\$2,450,000.00		
	SW	Expand Biosolids Disposal Area	\$500,000.00	\$500,000.00	\$0.00	
	SW	Nelson Logging Road Upgrade	\$2,343,000.00	\$2,343,000.00	\$0.00	
		2		\$2,843,000.00		
	TEMP		GPIP Multi-Purpose Deepwater Dock	\$6,709,886.00	\$7,500,000.00	(\$790,114.00)
	1		\$6,709,886.00			
		<b>Total Project Costs</b>	<b>2017</b>			
			\$27,658,298.00			
<b>2018</b>						
2018	DL	East DeGroff Street Water & Sewer Replacement	\$1,980,000.00	\$0.00	\$1,980,000.00	
	DL	Lift Station Cathodic Protection Systems	\$397,000.00	\$397,000.00	\$0.00	
	DL	Waterline Loop System Japonski (Valve and Tee)	\$70,000.00	\$70,000.00	\$0.00	
		3		\$2,447,000.00		

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# CITY & BOROUGH OF SITKA PUBLIC WORKS CIP PLAN

Year	Project Manager	Project Name	Project Budget	Available Funding	Funding Shortfall
	DT	Lincoln Street Paving - Harbor Way to Harbor Drive	\$1,230,000.00	\$0.00	\$1,230,000.00
	DT	MSC Bulkhead Reconstruction	\$6,159,372.00	\$0.00	\$6,159,372.00
	2		\$7,389,372.00		
	KC	Airport Building Replace 2003 Addition Roof	\$214,000.00	\$0.00	\$214,000.00
	KC	WWTP Building Envelope	\$1,200,000.00	\$0.00	\$1,200,000.00
	KC	WWTP HVAC Upgrades	\$2,040,000.00	\$0.00	\$2,040,000.00
	3		\$3,454,000.00		
	SW	DeArmond Street Utility and Street Improvements	\$450,000.00	\$0.00	\$450,000.00
	SW	Eliason Harbor Electrical Replacement	\$5,281,817.00	\$0.00	\$5,281,817.00
	2		\$5,731,817.00		
		<b>Total Project Costs      2018</b>	<b>\$19,022,189.00</b>		
<b>2019</b>					
	DL	Extend 16" Main and Abandon Old Airport Water	\$600,000.00	\$0.00	\$600,000.00
	DL	Marine Street Utility and Street Improvements (Osprey to Erler)	\$1,565,000.00	\$0.00	\$1,565,000.00
	DL	Replace Generators - Lift Stations	\$100,000.00	\$0.00	\$100,000.00
	3		\$2,265,000.00		
	DT	Crescent Harbor Boat Launch Ramp	\$347,128.00	\$0.00	\$347,128.00
	DT	Sea Walk Phase II - Totem Square to Library	\$1,500,000.00	\$0.00	\$1,500,000.00
	DT	Sealing Cove Harbor Boat Launch Ramp	\$1,014,081.00	\$0.00	\$1,014,081.00
	3		\$2,861,209.00		
	KC	Seaplane Base	\$11,766,597.00	\$0.00	\$11,766,597.00
	1		\$11,766,597.00		
	SW	2019 Sitka Paving (Cascade Creek - HPR to Dodge, Lake - First to End, Brad	\$1,670,000.00	\$0.00	\$1,670,000.00
	SW	Lincoln Street Utility and Street Improvements (Jeff Davis to Harbor Drive)	\$1,650,000.00	\$0.00	\$1,650,000.00
	2		\$3,320,000.00		
		<b>Total Project Costs      2019</b>	<b>\$20,212,806.00</b>		
		<b>Total Project Costs 5 year CIP Plan</b>	<b>\$115,791,080.00</b>		

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American Society of Civil Engineers  
World Headquarters  
1801 Alexander Bell Drive  
Reston, VA 20191

Web: <http://www.asce.org>



**PEER REVIEW for PUBLIC AGENCIES**

**Report to:**

**Michael Harmon, P.E.  
Director of Public Works  
City and Borough of Sitka  
Sitka, Alaska**

**ASCE Peer Review**

**January 23-25, 2013**

## **ASCE Peer Review Team**

### **Team Leader:**

Christine Andersen, P.E., M.ASCE  
Director of Public Works  
City of Santa Barbara, CA

### **Team Members:**

Stuart A. Moring, P.E., M.ASCE  
Director of Public Works/Environmental  
City of Roswell, GA

Christopher J. King, P.E., S.E., M.ASCE  
President  
Robinson Engineering, Ltd.

## Introduction

The City and Borough of Sitka (Sitka) invited the American Society of Civil Engineers (ASCE) to conduct a public agency peer review of its Public Works Department. An ASCE Peer Review is a structured process that helps an agency such as the Sitka Public Works Department (Sitka PWD) to improve the management and quality of its services to the public. To accomplish this goal, ASCE selected a team of three individuals who had an appropriate mix of knowledge and experience to address this review—professional engineers whose breadth of management and technical experience positions them to help other public agencies improve their service. ASCE and the Sitka Public Works Director jointly approved the reviewers who then formed the peer review team (PRT) that worked to identify key issues that the organization currently faces and opportunities to address those issues. The review was carried out on a confidential basis and concluded with a briefing at the end of the site visit. This report summarizes the findings that were reviewed in that briefing.

At the request of Public Works Director Michael Harmon, ASCE through its PRT designed the reviews of the Sitka PWD to give the director and staff a management picture of themselves, a “snapshot in time,” and to respond to specific review needs. The PRT interviewed a cross-section of individual staff members representing a wide range of responsibilities within the Sitka PWD and other Sitka departments. They also interviewed staff and officials from partner and customer agencies, and groups that interact with the Sitka PWD in executing their mission and responsibilities. The PRT has identified strengths and challenges, and opportunities facing the agency, but it does not pose direct solutions to problems. The team believes such solutions must emerge from within the organization itself.

## The ASCE Peer Review Process

The review performed for the Sitka PWD included the following components:

- A. A preliminary assessment: Sitka PWD provided extensive advance background materials from each department, including annual reports, strategic plans, budgets, organizational charts, and other reports or documents relevant to the review. A copy of this information was provided electronically to each PRT member before their site visit, to allow enough time for its review, preliminary assessment, and preparation of questions for the on-site interviews. In addition, the PRT reviewed approximately 35 pre-review questionnaires from Sitka PWD staff and management.
- B. An on-site assessment: The PRT conducted a site visit of three days at the Sitka PWD’s facilities. During this site visit, the PRT conducted initial and interim meetings with the Public Works Director, the Municipal Administrator, and several department heads and conducted one-on-one

interviews with staff of the Sitka PWD and the Sitka Economic Development Association, which works regularly with Sitka PWD.

- C. A verbal report: The team developed findings and presented a closing verbal briefing to Michael Harmon, Public Works Director.
- D. A written report: The PRT is providing this overview written report at the request of the Director, summarizing the results of the review. It is a concise report citing findings, identifying strengths, and including potential opportunities for the Sitka PWD to explore further.

All documents obtained or developed during the peer review have been or will be returned to the Sitka PWD or destroyed, and all notes and information presented electronically by the Sitka PWD will be deleted after the agency's acceptance of this report. ASCE's findings are confidential and are shared only to the extent that the Sitka PWD chooses to do so. To insure confidentiality, comments from staff questionnaires and interviews are only provided in a form that does not associate any information with the specific individuals. Disclosure of the written report may be done by the Sitka PWD, but ASCE will not share the document.

### **Components of the Sitka PWD Peer Review**

The standard components of an ASCE Peer Review applicable to the Sitka PWD include organizational management, project management, emergency management procedures, technical procedures, human resource management, financial management, and public relations practices. Additional focus areas of this peer review included special emphasis areas expressed by the Sitka PWD. These involved addressing the following two strategic areas:

- A. Infrastructure Maintenance: Sitka has seen a shift in state and federal resources coming into the community to support the maintenance and operation of public works infrastructure, which results in more local responsibility for funding to support these assets. This situation creates challenges for the department in meeting community and Assembly expectations for level of service, particularly in the streets maintenance program.
- B. Capital Program Delivery: Sitka has been successful in gaining grant funding for several capital projects through the support of state and federal elected officials. The implementation of this capital program is a critical priority for the city and is a key Public Works Department function.

## Introduction to Observations

The PRT has condensed its observations into these three principal thematic areas:

1. Sitka PWD strengths (what appears to be going well);
2. Influencers/drivers and challenges for the Sitka PWD; and
3. Key opportunities (areas of opportunity for the Sitka PWD to consider as an organization)

Internal consultation and analysis by the PRT is an important element of the peer review process. Since this is largely a snapshot in time, there are some strengths, challenges, and opportunities for which the team could not achieve clarity or consensus. However, the PRT felt it important to relate some of those matters to the agency as possibly being of interest for later discussions among involved management and staff. As with all the findings of the PRT, the agency must determine relevancy and what, if any, follow-up actions are suitable. ASCE will make no effort to ascertain whether the Sitka PWD takes action on the strengths, challenges, and opportunities outlined here. Rather, as noted previously, it is our belief and desire that progress and associated solutions will emerge from the agency itself.

## Sitka PWD Strengths

The PRT observed the following strengths of the Sitka PWD:

### A) Job Satisfaction and Work Environment

The staff of the Sitka PWD is responsible for a significant breadth of program responsibilities including engineering design and construction, streets, park and fleet maintenance, water and wastewater treatment and operations, city building operation and maintenance, and building code enforcement. Within each program area the staff are dedicated and expressed a strong connection to the city and a commitment to quality service. While the staff of the agency is very lean for the magnitude of programs that they are responsible for, they are committed to serving the public as effectively as possible. Although housing cost is a voiced concern by staff, and they observe that salaries tend to be flat as cost of living increases, generally staff were pleased to be working for the Sitka PWD and take pride in their efforts.

### B) Perception of Sitka PWD within the community

Those interviewed from other departments and from the community spoke in positive terms of the Sitka PWD.

C) Organization and Job Clarity

Staff members have a clear understanding of their roles and function within the organization. However, there were some statements indicating a lack of clarity regarding decision-making and/or reporting authority.

D) Financial Management

The Sitka financial support system seems to work well with the Sitka PWD to manage financial matters, particularly in capital project management. There is a strong focus on managing to budgets.

E) Technical Practice and Procedures

- 1) Sitka PWD engineering standards, manuals, and procedures appear to support the department's needs for public project delivery. There is a need for private development standards that ensures the infrastructure built by private developers, that is ultimately turned over to the City for ongoing maintenance, is built to the same standards as public projects.
- 2) There are technical staff with many years of experience in the department. As retirements occur, the Sitka PWD would be strengthened even more if their knowledge can be captured and passed on to new managers and staff.

### **Influencers/Drivers and Challenges for the Sitka PWD**

The PRT noted several factors that are outside the direct control of the Sitka PWD. Yet, these factors may significantly influence the organization's performance. Evaluating these factors may present further opportunities for the department to improve performance and service satisfaction over time. They include:

A. Staffing Resource to Capital Program Implementation

The PRT understands that there is some concern expressed by the Assembly regarding the level of engineering staffing for the capital program. However, the level of engineering resources committed to the implementation of a fairly aggressive capital program does not appear to be at all excessive.

There are several key challenges that impact the effectiveness of the engineering staff. One of these is that Sitka is a very engaged community and the PRT understands there are 15 Boards, Commissions, and Committees supported by the Sitka PWD that play a variety of roles in review and participation in the development of capital projects. Support to

these groups can require significant resources from the limited Public Works staff.

Another challenge to the effective use of the engineering staff is grant fund application and management, which continues to be an important function within the capital program given the sources of funding. Finance staff plays a critical role in support of the financial grant management and reporting and is recognized and appreciated by the PW staff. The functions of grant writing and project reporting for Public Works are a significant work load and are currently handled by engineers in the division, although these are in large part clerical and coordination functions that do not require engineering skills. Allowing the engineering staff to focus on the project design and construction management functions of the capital improvement program would make best use of the engineering staff as resources. The Municipal Administrator supported recent additions of engineering staff for the capital program work in recognition of the risk to grant funding if implementation does not move forward. Providing support staff to coordinate, schedule and record actions of the various committees, and to provide support to the grants management function could be a cost effective approach to maintaining capital project delivery.

#### B. Infrastructure Condition and Funding Availability

The PRT understands from interviews that Sitka has historically enjoyed a strong level of funding support for infrastructure from outside the local community. As those funding sources are diminishing or going away completely, the ability of the Sitka PWD to meet the expectations of the community and elected officials in maintaining facilities such as roads, parks, buildings, and water and wastewater is also challenged. This reality of the challenge that Sitka has in funding the ongoing maintenance and operation of infrastructure that was built with grants and funding from state and federal sources is not well understood in the community of Sitka.

### **Key Opportunities for the Sitka PWD**

The following opportunities reflect specific issues and actions the PRT suggests could improve the ability of the Sitka PWD to carry out its responsibilities and achieve community interests.

#### A. Communication

Almost every organization could improve its vertical and horizontal communications, and Sitka PWD is no exception. The department has the opportunity to increase its effectiveness by improving internal

communications, and the PRT suggests the following could be some of the methods used to achieve this:

- 1) The all-hands meetings of the department are a valuable communication tool for Sitka PWD staff, especially with a work group that has geographically diverse work locations. Giving the division managers a clearer role and responsibility for communication that is consistent across the organization can also help unify the diverse work groups and clarify responsibilities. Department director contact is highly valued by Public Works staff and provides a boost to morale. All-hands meetings give the director the opportunity to communicate his vision for the Sitka PWD clearly and to increase accountability for achieving it. The recent adoption of these meetings has been received very well by staff and the PRT strongly encourages their continuation.
- 2) Consider a regular schedule of meetings with key managers, key managers' sub-group meetings, and leadership team meetings. This will also help to clarify decision-making authority and/or reporting responsibility.
- 3) Some efficiencies could be gained with improved communication in the field, and clarification of policies regarding cell phones and radios for communication with crews could help achieve this.
- 4) Some of the operational activities are not supported by engineering standards, but are standard practices that are transmitted through "on-the-job training," which emphasizes the need for cross-training and succession planning in a lean organization such as Sitka PWD.

#### B. Project Management

- 1) The Sitka PWD has the opportunity to increase its effectiveness by creating metrics that would assist in driving the department goals forward. Currently, project success is measured by whether the project stays within budget. Using project management tools that identify milestones along a timeline for delivery of a project can be useful for staff as well as in communicating to the public. Because of the significant role that public participation plays in each project, expectations for completion of a project can be more easily managed when the impact of public participation is clearly indicated in the timeline for project delivery.
- 2) The Sitka PWD might also consider the use of Level of Service standards for the operation and maintenance of the infrastructure that balance them against resource allocation. This could be a tool to help the Assembly, Sitka administration, and the general public better understand the needs and goals of the department and the choices involved in moving toward a higher level of service.

### C. Human Resources Management

- 1) There is an opportunity for development of the workforce through expanding and formalizing the mentoring program. Mentoring could take many forms, such as pairing of employees from the same discipline, cross training between discipline areas, and sharing of historical organizational knowledge. Both [ASCE](#)<sup>1</sup> and the American Public Works Association ([APWA](#)<sup>2</sup>) have mentoring programs the Sitka PWD could use.
- 2) Ongoing training is challenging, with limited budgets and travel constraints. However, the availability of web-based technical and professional training is becoming both more available and of higher quality. Examples include the APWA supervisor and technical training programs and ASCE professional development programs available online. Maintaining and refreshing skills of long-term employees, as well as developing skills for staff to be able to promote into vacancies, is important to the success of the Sitka PWD.
- 3) Throughout the department there are individual key staff members responsible for their own program areas. Having a planned approach to assure that cross-training, succession planning, and skill development occurs is an area to consider. Recruitment is challenging, given the high cost of housing in the area and the physical limitations for commuting. Therefore, developing supervisory experience by allowing staff members to fill in for others during vacancies or leaves can be very helpful and could improve the staff's training in technical skills.
- 4) The Sitka Public Works Director plays an important function in the administration of the City. The Municipal Administrator views the director as one of his key managers, with the ability to act during his absence from office. At the same time, the staff of the Sitka PWD looks to the director for leadership and guidance. Maintaining a balance of roles in supporting the department and the larger Sitka organization is important in meeting both needs. The role of the Department Management Team could be tailored to assist in this area.

<sup>1</sup> Information on ASCE's mentoring programs can be found at <http://www.asce.org/mentoring>.

<sup>2</sup> Information on APWA's mentoring programs can be found at <http://www.apwa.net/mentoring>.

#### D. Public Information

- 1) The regular reports to the Assembly from Sitka PWD that are used to keep a current status of capital project delivery have been very well received and create a valuable communication link. These are important to maintain and build from.
- 2) The concerns of Sitka regarding infrastructure condition and funding needs are shared by many other communities. There are resources available from ASCE and other recognized associations that help to convey the message of what happens as infrastructure deteriorates. ASCE's [Failure to Act](#)<sup>1</sup> economic studies and the ASCE [Report Card for America's Infrastructure](#)<sup>2</sup> are a couple of examples that can be used by local agencies to explain the problems.
- 3) Linked to the concerns for ongoing maintenance of public infrastructure is the need for clear development standards for projects built as part of private development. This will ensure that those projects, when turned over to the City for ongoing maintenance, will perform with the same expectations as those for publicly built projects.
- 4) There are areas of public works responsibility that are traditionally under-recognized by the community unless a failure or crisis occurs. This appears to also be a concern for the Sitka PWD. There is not a current strategy in place to encourage community recognition and understanding of the ongoing maintenance functions and costs for streets, buildings, water and wastewater, and other infrastructure maintenance areas. A communications plan, perhaps that also incorporates information noted in item 2. above, could help the department achieve an understanding within the community of the impact of a lack of funding for certain projects and programs. This would provide a platform for the Sitka PWD to describe alternate levels of service associated with different levels of funding.

<sup>1</sup> The "Failure to Act" economic studies are available at <http://www.asce.org/failuretoact/>.

<sup>2</sup> The "Report Card for America's Infrastructure is available at <http://www.asce.org/reportcard/>.

## **Summary**

In summary, there are always opportunities for improvement in any organization, but there do not appear to be any serious deficiencies in the processes, policies, and practices related to the areas that were the subject of this review. The PRT did not notice or identify any areas of wasteful resource allocation. The comments provided earlier in this report regarding a stronger role for support staff to allow better utilization of technical and professional staff resources could aid cost effective efficiencies.

The PRT concludes that the Sitka PWD staff is generally performing its work in a manner that is aligned with the needs and wishes of its citizens and elected officials. This perception appears to be shared by both internal staff and external partners and stakeholders. The peer review process did not reveal any serious deficiencies either in the department's organizational structure or with its processes and procedures. The positive professional attitudes consistently expressed by Sitka staff reinforce the PRT's confidence in this conclusion.

## **In Appreciation**

In conclusion, the PRT felt that their time at the Sitka PWD was well spent. We were impressed with the management initiatives we saw, as well as the capabilities of staff and their openness. We hope our efforts will help them to continue to move ahead. We appreciated the cooperative attitude of everyone we met during the review. We recognize the outstanding coordination support provided by Mellissa Cervera during the process.

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# Public Works Organizational Chart

Updated: 10/13/15 by Mellissa Cervera  
 Created By: Michael Harmon

