

Initials:

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### TRANSMITTAL MEMORANDUM

TO: The Honorable Mayor and City Council

FROM: Delilah A. Walsh, City Manager

DATE: December 28, 2022 File #" MGR22-094

RE: Public Works Director's Project Status Report - December 2022

Attached for City Council review is the project status report of the Public Works Director for the month of December 2022. Should the City Council have questions regarding the Public Works Director's report, staff can respond accordingly.

### PUBLIC WORKS / ENGINEERING DEPARTMENT Mark Hilson, P.E., Public Works Director Kara Jurczak, P.E., Assistant Public Works Director

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# PUBLIC WORKS DIRECTOR'S REPORT DECEMBER 2022

Project:	KETCHIKAN GENERAL HOSPITAL ADDITION & ALTERATION	
Project Cost:	\$45,207,269	
Completion Date:	2016	

#### PROJECT SUMMARY & BACKGROUND

In October of 2013, Ketchikan voters passed a \$43M Bond Referendum to fund the first phase of the expansion and alteration project. Principal funding will consist of the \$43M in bonds, \$15M from a legislative grant, and \$8M from PeaceHealth. On September 4, 2014, Council action finalized the Phase I Guaranteed Maximum Price of \$45,935,018. NAC Architecture has been issued a contract amendment bringing the total A/E contract to an amount not to exceed \$1,221,616. The DOWL HKM Contract Amendment has been approved for Phase I project management, bringing the contract total to \$1,801,000.

#### **UPDATE**

Phase I construction was observed to be substantially complete on June 24, 2016. The contractor continues to work on a short list of lingering items. LDC and the City continue to meet bi-weekly to discuss and work through obstacles to wrapping the work up. Meanwhile, LDC and Marble Construction finished the locker room finishes and temporary door infill (near the ER entrance) on August 17, removing the last outstanding item on the Phase I final Certificate of Occupancy. An issue with an occasional exceedance of the OR relative humidity requirements has been raised by PeaceHealth. The project's mechanical engineer has been tasked with offering HVAC operational suggestions (within the context and cost of the existing professional services agreement). Peace Health has also engaged a mechanical engineer to review the matter at their cost. PeaceHealth's stated goal is to have this resolved for the summer of 2019.

Phase II - T- Phase II-T is substantially complete. The contractor has finished all punch list items. The City is withholding funds to ensure remedy of the final outstanding issues. Vinyl floor replacement is now complete. WJE has completed the design work on the seismic joint between the addition and the old hospital. The Horizontal portion of the seismic joint is finished, but some additional defective work was found in the process of fixing the horizontal joint. WJE has been working on a design that will fix this area (also located above the Atrium). There will be activity soon to remove some additional siding in order to get accurate field measurements to create shop drawings for sheet metal and other fabrication. Axiom (the siding manufacturer/installer) has indicated that they are 12 to 15 months out for orders. The parking garage intumescent repair has been pushed back to 2023 according to Layton Dawson. Layton and Dawson have reached a settlement including a settlement with the City that has provided payment to the subcontractors. This payment will be issued via joint checks to Layton and the subcontractors in the coming weeks.

Project:	PARK AVENUE SAFE SHELTER	
Project Cost:	\$683,499	
Completion Date:	February 2022	

#### PROJECT SUMMARY & BACKGROUND

At the Council meeting on October 21, 2020 City Council funded \$119,000 for the interior remodel of the former KYI building into a new overnight warming shelter for Ketchikan's homeless population. As of December 7 2020, the shelter has been occupied overnight and has been near or at capacity on a regular basis. Construction is complete and the shelter is functioning as intended. The City received a grant from the Alaska Community Foundation Coronavirus Nonprofit Relief Fund in the amount of \$683,499. Because of this grant, the City committed to funding the shelter addition project. Construction is ongoing at the shelter with framing, insulation and exterior siding work complete in the addition. The budget on this is expected to be very tight especially given the increased costs of shipping and building materials. It is likely some in-house effort will be required to make the addition feasible from a cost perspective, and FCHS has been asked to make a concerted effort to fundraise. At the Council meeting of September 2, Council awarded Contract 21-14 to PK builders in the amount of \$621,000.00.

#### **UPDATE**

First City Homeless Services purchased and installed appliances and has moved in. It is anticipated that Public Works will continue to provide support in the form of project management/architecture as FCHS settles in to their new space.

Project:	MARRIED MAN'S TRAIL IMPROVEMENTS	
Project Cost:	\$327,890	
Completion Date:	January 2023	

#### PROJECT SUMMARY & BACKGROUND

In adopting the 2022 General Government Budget, the City Council appropriated CPV funds in the amount of \$250,000 to widen the boardwalk at Married Man's Trail Exit near Park Avenue and \$140,000 to continue the boardwalk surfacing in the Married Man's Trail Gap area. Total funding for the project is \$390,000. At the meeting on June 9, 2022 City Council awarded Contract 22-13 to BAM, LLC in the amount of \$327,890 with a project contingency of 32,789 for a total project cost of \$360,679.

#### **UPDATE**

BAM, LLC continues construction of the Park Avenue entrance side of the Married Man's Trail and will move onto replacing the boardwalk near the salmon ladder shortly thereafter. Construction is

ongoing and anticipated to be completed in February 2023, but is dependent on getting temperatures suitable for pouring concrete footings. Unanticipated deeper bedrock and some unknown utilities are going to result in some additional costs, but at this point, these costs are covered by contingency.





Project:	NEW AERIAL PHOTOS & TOPO MAPS	
Project Cost:	\$240,000	
Completion Date:	Contract complete	

#### PROJECT SUMMARY & BACKGROUND

The aerial orthophotos purchased jointly between the City, KPU, and Ketchikan Gateway Borough in 2008 are out of date. The aerial orthophotos purchased by FEMA in 2014 are also out of date and did not cover some vital facilities and areas, including Ketchikan Lakes, Whitman, Fawn Mountain, and Upper & Lower Silvis Lakes. The aerial maps and topographic maps are used for a variety of in-house purposes and public presentations. The cost of the project will be funded equally between the City and Ketchikan Public Utilities. An RFQ was prepared by Staff and publicly advertised. Numerous proposals were received, and evaluated by a selection committee. The City Council awarded the contract to Lidar America at the April 4, 2019 Council meeting. Prior to contract award, an increased photo resolution was negotiated without increasing the contract cost. This will result in state of the art picture clarity and increase the quality of data that can be obtained from the photo. Staff postponed the data acquisition flight in order to capture the Front, Mill, and Stedman improvements in the photos. Unfortunately, the ADOT project took longer than expected to finish and the weather window to complete the flight passed.

The Coronavirus pandemic delayed the project through 2020 and 2021 due to Canadian travel restrictions. The contractor has requested a large change order to the contract. The 2019 contract with Lidar America has been terminated.

The Public Works Department is working with the Ketchikan Gateway Borough (KGB) and KPU Divisions to share costs for a new photo that would be obtained with a drone instead of an airplane. A quote has been received and approved by Elevate USA.

Elevate USA has completed their work with substantial cost savings from the original project. The photo resolution is remarkable, and has saved us time already.

#### **UPDATE**

### **BRIDGES & TRESTLES**

Project:	SAYLES/GORGE AND WATER STREET TRESTLE #1 REPLACEMENT	
Project Cost:	\$4,800,000	
Completion Date:	2023	

#### PROJECT SUMMARY & BACKGROUND

The Public Works Department is working in support of the Alaska Department of Transportation and Public Facilities for design and complete replacement of these two structures. The two projects are included in the Statewide Transportation Improvement Plan. ADOT permitting and design is ongoing. R&M Engineering-Anchorage was awarded the design by ADOT. Streets Division cleaned the underside of the structure to allow R&M to use scanning technology to survey the structure.

Public Works designed and installed an interim abutment to support the structure until the ADOT construction project begins.

Staff met with the ADOT bridge design team to evaluate design criteria and design concept options. For Water St #1 the design concept recommended is a retaining wall and fill section, eliminating the life-cycle costs of bridge ownership. Construction is anticipated to begin in 2022.

For Sayles/Gorge, two bridge design concepts were chosen for further vetting. Eliminating the bridge and constructing a fill section for Sayles Gorge was evaluated and ruled out. ADOT&PF's consultant completed a bridge selection report. The consultant evaluated a fill section along with steel and concrete structure. The steel and concrete structure was recommended.

A most recent proposed STIP amendment #3 by the State of Alaska ADOT&PF proposes pushing construction for both the Sayles/Gorge Viaduct and the Water Street Trestle #1 out one fiscal year, to 2023 and 2022 respectively.

Staff met with ADOT & their design team. Staff reviewed the Bridge Type Selection Report for Sayles-Gorge Bridge and agree with their recommendations. Staff also conducted a Plans-In-Hand review for Water St. #1 and provided comments and feedback to ADOT. The City was required to provide another local share necessary to enter the construction phase of the project in 2022. The required local share has been paid using funds appropriated in the 2022 budget. The local match required to move into ROW acquisition has been sent to the State.

Sayles/Gorge: ADOT's contractor performed a geotechnical investigation in April 2022. ADOT plans to submit a 25% review set of plans and specifications to Public Works Engineering by the end of June.

Water Street #1: Design is at 75% and the project is in the ROW acquisition phase. City and KPU staff participated in the Plans, Specifications, and Estimate (PS&E) review. Engineering staff submitted comments and participated in a PS&E meeting with ADOT and their design consultants. ADOT is anticipating bidding the project in the Spring of 2023.

None

### STREETS DIVISION (Capital Improvement Projects)

Project:	TRANSPORTATION INFRASTRUCTURE (Annual CIP)	
Capital Budget:	\$300,000	
Completion Date:	2022	

#### PROJECT SUMMARY & BACKGROUND

This budget item replaces the Safer Streets & Sidewalks, Staircase & Boardwalk Repair, Pavement Overlay-Surface Repair, Concrete Road Repair, Bridge Repair, Stormwater Infrastructure, ROW Maintenance, and Wall & Abutment Repair line items of the 2020-2021 budgets.

#### **Eichner Avenue Concrete Replacement - Complete**

In 2022 a major component (approximately \$100K) of this CIP may be new pavement on Valley Court as mandated by a previous legal settlement agreement.

#### **UPDATE**

Generally speaking attracting interest from contractors is becoming increasingly difficult. This project is no exception. Last month Staff sent out another request for quotes for epoxy sealing the upper Park Avenue bridge, however similar to the prior request for quotes, it did not yield any interested contractors. We will be trying again in late winter.

## WASTEWATER DIVISION (Capital Improvement Projects)

Project:	TONGASS AVE/WATER ST SEWER FORCE MAIN REHAB & GRAVITY SEWER REPLACEMENT PHASE II	
Project Cost:	\$8,000,000	
Completion Date:	2023 – Pending Funding	

#### PROJECT SUMMARY & BACKGROUND

Phase II involves rehabilitating the City's remaining 2,700-linear feet of sewer force main and 1,700-linear feet of sewer gravity mains. This section of gravity sewer is known to be a major contributor to the sewer system's inflow and infiltration. On June 15, 2017 the City Council approved this project's nomination for the National Infrastructure Program. At the same meeting, the City Council approved an amendment adding funds to a contract with Stephl Engineering to fast track design of this project. The project has been broken into four distinct segments that will each be separate construction projects. These projects are critical in order to reduce the amount of infiltration and inflow coming to the wastewater treatment plant. High peak flows in August and October, during heavy rain events that also corresponded to high tides, resulted in bypassing at pump stations. Based on historical infiltration and inflow studies, it is envisioned that these projects will take a significant step towards muting those peak flows. Value engineering is complete. As such, the

project design will incorporate portions of trenchless technology to help mitigate high cost, elevated risk and potential impacts to residents and businesses along the project corridor. Design Status:

- -Segment 1 is complete
- -Sections 1&2 for Water Street have been combined and are at 95% design

Staff has been in contact with the design firm and review of designs for each phase are ongoing. Staff completed the install of 5 flow monitoring devices along the Water Street Corridor. The installation allowed measurement of infiltration and inflow in the sewer lines along this corridor to occur for a 5 month window of time. Assessment of the data being collected through the flow monitoring study showed that there was identifiable tidal influence in the area surrounding Pump Station 3, just after the Tongass and Water Street viaducts.

Staff submitted a request to Congressman Don Young for potential funding of Segment 1 (Jefferson St to Pump Station 4), and on May 3, it was announced that Don Young has selected the project as part of his Community Project Funding request. This selection does not guarantee funding award but is a step towards that direction.

March 2022, Tongass Ave Force Main project received partial funding through Congressional directed spending allocations in the amount of \$1.25 million.



Tongass Ave Sewer Replacement



**Updated Sections of Water Street Sewer Replacement** 

#### **UPDATE**

#### Tongass Ave (Force Main only) - None

**Water Street** – The project was evaluated by ADEC prior to BIL funding becoming available. Unfortunately at that time, no subsidy was awarded. According to ADEC current procedures the project can be reevaluated in November of 2023. The schedule is being pushed by ADOT progress on the Water Street reconstruction project and may not line up well with ADEC's timeline. Staff will continue to engage with both state agencies. This is \$4.1M project.

Project:	PUMP STATIONS GENERATOR REPLACEMENT	
Project Cost:	\$130,000 per year	
Completion Date:	March 2023	

#### PROJECT SUMMARY & BACKGROUND

In adopting the 2018 General Government Operating and Capital Budget, the City Council appropriated money to large and small pump station upgrades for replacement of the aged generators and components at each of the seven pump stations. Electrical engineering company Haight & Associates was hired to design a year by year phased set of construction documents that will go out to bid beginning in 2019.

On September 17, the City Council approved a contract to procure the 150kW Generator Set. Staff is moving forward with that purchase and arranging for the installation. The 150kW Cummins/Onan Generator set has been ordered and is expected within the next 6 months.

The Wastewater Division has received the second of three large pump station generators. Staff is working on plans to keep sewage moving, while working on Pump Station 2 which will include removal of the old gen-set and automatic transfer switch, installation of the new gen-set and new automatic transfer switch, replacement of three 10" plug valves, cleaning of the wet well and installation of a dual auger wipe removal machine.

#### **UPDATE**

The work is on hold until the Wastewater Division Supervisor position is filled and/or progress is made on filling Public Works Engineering vacancies.

# **WASTEWATER DIVISION (Operations)**

In addition to the routine work performed on a regular basis, the Wastewater Division performed the following work during the past month:

- The Wastewater Division does not have any viable supervisor candidates due to below market compensation. We are doing the best we can to transition supervisory duties and the sharing of information, plans, projects and ideas however, this is occurring at the expense of progress on other priorities. We will be short the required level two treatment certified operators in the coming months.
- ADEC and EPA is moving ahead with new discharge limits that spur additional disinfection facilities at the plant. It is anticipated there will be a 5 year timeline to study, design, construct and demonstrate operational compliance with the new requirements. Overall this is a very tight timeline that would be challenging to meet so it increases the critical nature of filling the Division Supervisor position.
- The Wastewater lab, collection, and treatment teams should be commended for continuing to efficiently meet and surpass our effluent limits through effective communication and teamwork.
- A big "Thank you" to Mike McMahon, Joe Stollar, and Steven Perro, they spent the Christmas weekend handling emergency call-outs due to high tides and high flows and unanticipated influent characteristics. Their dedication and solid teamwork kept the treatment plant compliant with our permit.

### **STREETS DIVISION (Operations)**

In addition to the routine work performed on a regular basis, the Streets Division performed the following work during the past month:

- There has been a few snow events which streets crews had been called out overnight for snow plowing, and winter maintenance.
- Temperatures dropped to well below freezing which caused several glaciers in certain areas
  of the city. Streets has applied salt and sand where they can to keep traffic moving on the icy
  conditions.
- Streets moved to the other part of Fair Street and removed the asphalt where the pot holes and cracks were forming at the bridge. We dug down, added rebar, and poured a concrete slab. Once the concrete is cured we will re-open the lane and Fair Street will be a two lane road once again.







# **GARAGE DIVISION (Operations)**

In addition to the routine work performed on a regular basis, the Garage Division performed the following work during the past month:

- With recent cold weeks we now have started processing our used oil to provide heat for the building. All oil has to be filtered through a fine mesh filter to confirm there is no debris in it to create a good clean heating fuel for our used oil furnaces.
- # 52529 Trackless We have removed and modified the current plow cutting edges. Welded extra material to the cutting edge. This is to make plowing the city sidewalks more efficient and clean. This adds more weight to the front to apply more down pressure to be able to cut through the packed snow and ice.
- #52509 Ports and Harbors oil pump truck had issues with dead batteries. Repaired batteries and also had a very wet interior. Tested truck for water leaks and noticed moss growing out of upper cab clearance lamps. Removed all lamps and cleaned growth off of lights and cab and resealed to eliminate water leaks.
- #52503 Found multiple problems with the engine while doing the manifolds. We are repairing everything possible before reassembly. Engine was covered in lots of corrosion from being a front line plow/salter truck. Multiple components have had to be ordered and replaced to get engine back up to good operating condition.

#52503 Engine overhaul





Oil Processing totes



New Trackless welded red cutting edges.



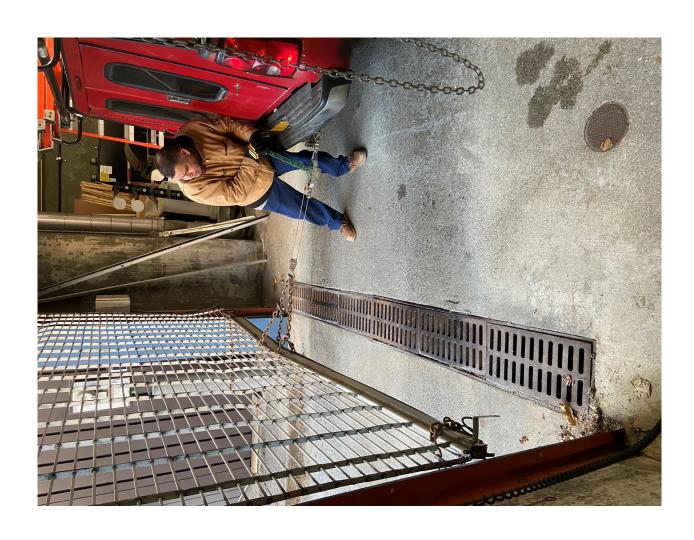
# **BUILDING MAINTENANCE DIVISION (Operations)**

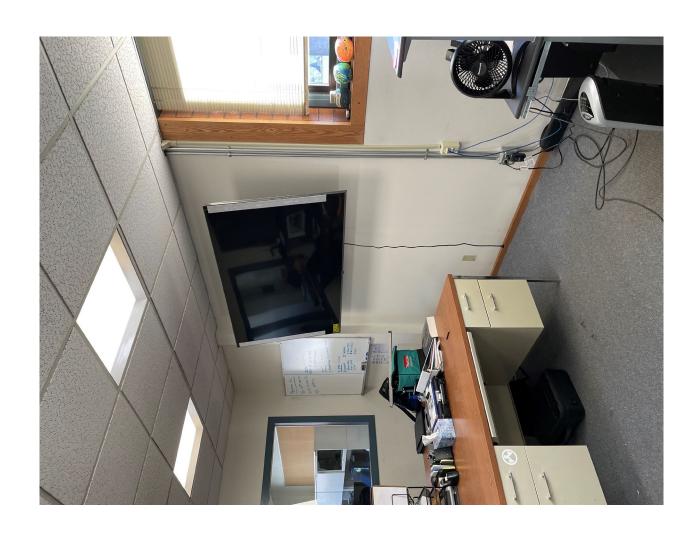
Building Maintenance accomplishments summary:

- Besides completing numerous small work orders and requests, we completed a city wide HVAC filter change.
- Installation of new electric hot water heater to replace original boiler assist hot water heater at Police Station.
- Installed new work stations, painting, new white boards, troubleshoot circulation pump.

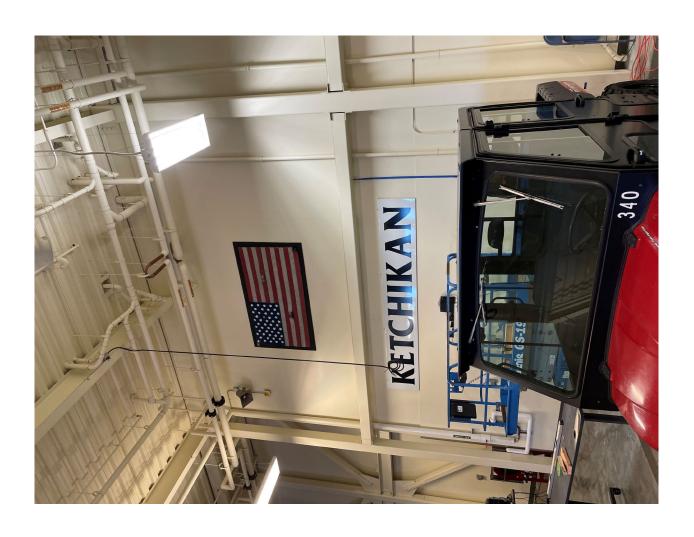
- Started a complete remodel in the downstairs bathrooms/work room at the Totem Heritage Center.
- Trouble shoot heating on first floor of City Hall, also replaced broken tiles in entryway.
- Streets outside parking lights troubleshooting and repaired. Snow removal where needed, mechanical room walkthroughs, Rewire outside lights at Solid Waste to direct wire LED's., change outside lights photo cell sensor,
- No heat call at Museum, compressor belt needed replaced, store materials for next exhibit at shop,
- Continue remodel of downstairs bathrooms and workroom storage at THC.
- Replace relay on circ. Pump for domestic hot water, hang new American flag made of old water hosed by the high school students.
- TFCC no heat, rewire fans to temporarily work with switch.
- Police exit door needed help after it was ran into, ordered parts, temporarily not working, manual override in use.

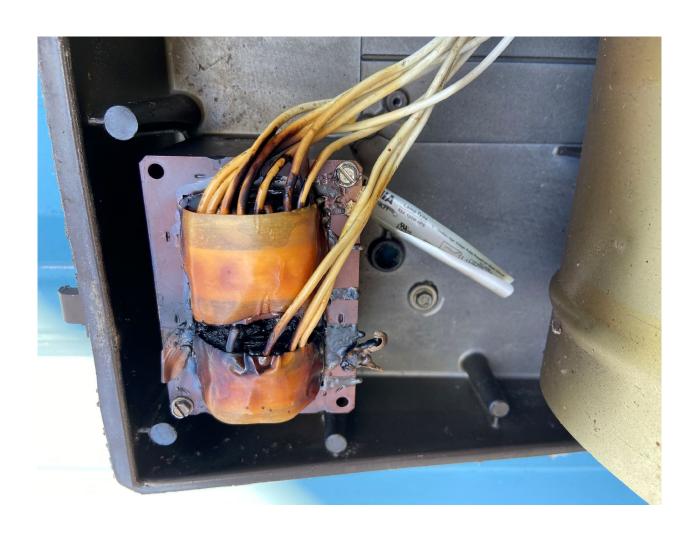




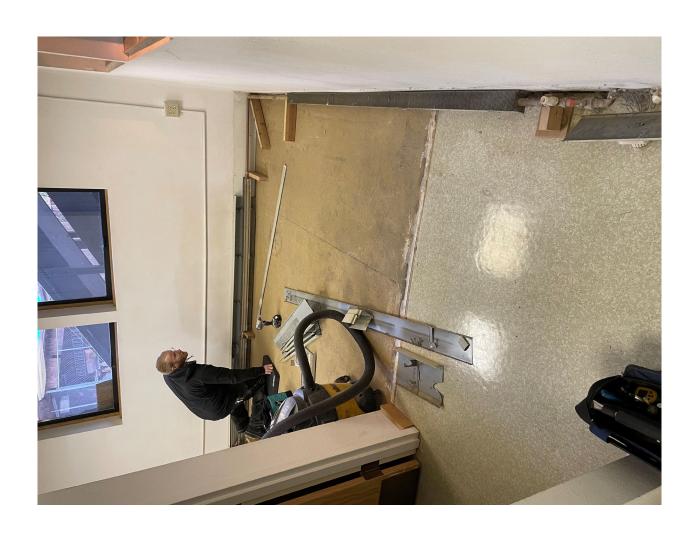












# **BUILDING INSPECTION DIVISION**

# **PERMITS**

UPDATED: 11/18/22		
PERMITS ISSUED	SINCE LAST REPORTING PERIOD	YEAR-TO-DATE
Traffic Control Permits:	3	39
Permits to Excavate:	1	68
Side Sewer Permits:	0	8
Site Development Permits:	1	23
Building Permits:	3	92
Total Permits:	8	230