



Proposed New Projects Table of Contents

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City of Homer Radio Communication System Upgrades

Project Description & Benefit: The City's radio communication system is a complex, high-tech, multi-component communication infrastructure that serves the daily needs of the Homer Police, Fire, Port & Harbor and Public Works Departments and is critical for effective emergency response to natural disasters and man-made incidents. Communication system technology has changed tremendously during the last thirty years of the digital age. They are now completely digital, can carry encrypted data in addition to voice communications and must comply with FCC bandwidth requirements. Homer's entire system is aging and must be replaced soon to keep up with technological advances.

The Public Safety Radio System consists of central dispatch consoles, five repeaters (two each for fire and police and one for joint use, strategically located at two different sites and elevations), and several Motorola subscription handheld and mobile communication units. The system provides (1) full radio coverage across Homer and outlying communities despite geographically diverse terrain, (2) redundancy in the event a natural or manmade disaster renders one site inoperable, 3) interoperability with all local, borough and state agencies utilizing the ALMR system allowing easy communication with almost any Alaska-based unit during both everyday incidents and large multi-agency response events and 4) Moto-Bridge to electronically connect disparate radios to ensure quality communications with agencies who do not share a common channel with Homer.

However, Motorola will be ending anti-virus protection and software update support for the repeaters and dispatch consoles in 2018. As a result, ALMR will be replacing all of their repeaters and dispatch consoles in 2018. Homer's repeaters and dispatch consoles are identical equipment. If we do not upgrade when ALMR does, Homer will slowly begin to lose communication features before completely losing functionality within three to five years. Additionally, Motorola will cease part replacement support for these components and all the subscription communication devices starting in 2018. A critical parts failure in dispatch or in the repeaters could possibly shut Homer's public safety communication system down. Finally, Public Safety subscription units operate within a specifically licensed bandwidth. FCC is in the process of implementing another round of narrowing bandwidth requirements. The entire system will have to be upgraded to comply with new FCC regulations that will phase in starting in 2020, with full compliance required by 2022.

Port & Harbor and Public Works Radio Systems are of a simpler design -- they need only a basic level of interoperability to communicate with dispatch, police and fire and do not transmit data or need encryption. They will, however, have to meet the new FCC bandwidth requirements in 2022, so all of these radios will have to be replaced. Port & Harbor has one base radio, 7 mobile and 7 portable radios and may need to add a repeater to their system to improve system coverage. Public Works has one base unit, one repeater, 11 portable and 22 mobile radios and a Trimble UHF data radio system for infrastructure locates. Their need for portables is likely to increase as high as 18 to meet new safety requirements with confined space policy changes. It is unknown if the Trimble UHF system will be impacted by FCC's new narrow banding requirements.

Plans and Progress: Homer's Police Department received notice from AK Division of Homeland Securty and Emergency Management to award FY2016 funds in the amount of \$343,363.40 toward radio communication system upgrades. Still, considerable city funds will be needed to replace the entire radio communication system by 2022.

Total Project Cost: \$876,655 - \$956,655 (\$343,363.40 funded through FY16 State Homeland Security and Emergency Management grant award.)

Public safety repeater relocation to new Spit communication tower \$47,363 Public Safety repeater upgrade: \$127,668 Public Safety dispatch consoles and associated equipment: \$296,000 Public Safety radios: \$558,987 Port & Harbor radios and possible repeater: \$40,000 - \$70,000 Public Works radios: \$100,000-\$120,000 system Public Works data radio system: \$50,000-\$80,000



Fire Department Rescue 1 Remount

Project Description & Benefit: Homer Volunteer Fire Department's Rescue 1 vehicle is a 1999 Saulsbury Rescue Truck made up of a 20' stainless steel rescue body mounted on a commercial Freightliner chassis. This apparatus carries a wide assortment of light and heavy equipment necessary for specialized rescue operations such as hydraulic cutters and spreaders (like the Jaws of Life), high and low pressure air lift bags, confined space rescue equipment and an assortment of hand tools to aid in the extrication of entrapped victims. Additionally, the apparatus is equipped with a dual-agent firefighting package that can extinguish small fires in vehicles or prevent them from occurring during rescue operations.

Rescue 1 also carries two additional support systems critical to personnel safety and operations: a breathing air cascade system for on-scene filling of firefighters air bottles and operating air powered equipment and tools, and a 9,000 watt telescoping light tower used to provide scene lighting.

This project will replace Rescue 1's aging and underpowered chassis with a new chassis with a larger motor, making it more capable of navigating the 7-9% road grades within our jurisdiction.

Total Project Cost: \$150,000

Priority Level: Schedule: 2017



Rescue 1, a workhorse in the Homer Volunteer Fire Department fleet, is in need of a new chasis with a larger motor, making it more capable of navigating the area's 7-9% road grades with a load.



Large Vessel Haulout Repair Facility

Project Description & Benefit: The Large Vessel Haulout Repair Facility will consist of a haul out/launch ramp and improvements to the upland portion of Lot TR 1A (east of the Nick Dudiak Fishing Lagoon). The site has accommodated approximately six to eight vessels (depending on size) with ample workspace. Upland improvements including a large vessel wash down pad (which can also be used by recreational/sport boats), lighting, electrical pedestals and a drainage/water management system will facilitate local, efficient and environmentally sound vessel repairs.

Because of the lack of facilties, large vessels currently have to travel to perform repairs which could otherwise be completed here in Homer. The project is a response to requests from vessel owners/managers seeking safe moorage and uplands haulout area for large shallow draft vessels. Availability of a haul out/repair facility in Homer benefits the local fleet of larger vessels, the local marine trades businesses and the City of Homer. The Large Vessel Repair Facility will operate year round. Vessel owners may arrange with contractors for required services, or perform the work themselves.

Plans & Progress: A Large Vessel Haulout Task Force was formed in 2014. Initially, the Task Force analyzed two potential sites for the facility and determined that developing the repair facility on the uplands of lot TR-1-A is more feasible than developing it on the old chip pad. Project development is being carried out in three phases. Phase 1 included pre-development activities such as site selection and completion of management plans and policies. To date the Task Force has completed Best Management Practices, vessel owner use agreements, and vender use agreements for the Large Vessel Repair facility. Staff have completed a Stormwater Pollution Prevention Plan (SWPPP) with the Alaska Department of Environmental Conservation for a portion of lot TR-1-A.

Phase 2 involves completing the design for the haul out ramp and upland support facilities such as the wash down pad and drainage/water management system according to the prevention plan (SWPPP) and electrical fixtures. Phase 3 is construction.

Total Project Cost: \$600,000

Schedule:

2016: Phase 1 - Pre-Development (completed as part of Barge Mooring Facility preliminary planning & design work)
2017: Phase 2 - Design/Engineering/Permitting: \$105,000
2019: Phase 3 - Construction: \$495,000

Pirority Level:



The Time Bandit hauled out in Spring of 2016 for repairs on Homer Spit Lot TR 1 A next to Pier One Theatre.



Project Description & Benefit: This project will provide safety improvements to an historic public recreation treasure on the Kenai Peninsula--the Ohlson Mountain ski facility. Local fishermen and homesteaders originally founded KSC in 1948 (making it perhaps the oldest operational nonprofit in the Homer area) to get families out of the house during the slow winter months and meet school requirements for physical education. Since then, KSC has provided thousands of lower Kenai Peninsula youths, adults and families with affordable downhill skiing (and more recently snowboarding) opportunities every Sunday (weather permitting) through its 800 foot long rope tow. It is also used by school programs and offers ski and snow board lessons. In addition to the rope row, the facility includes a small lodge/warming hut and outhouse facilities. This historic facility promotes sports education and fitness in the community, and the all-volunteer, non-profit KSC has efficiently utilized countless hours of volunteer labor and a variety of grants to maintain and improve the area. Without this support the ski area would be unable to operate. The ski area is the only facility offering downhill skiing and snowboarding opportunities in Southcentral Alaska other than Alyeska resort in Girdwood and is proud of its 100% safety record.

The ski area has weathered decades of harsh weather conditions; in the past ten years most of the infrastructure has been refurbished and improved. However, the mounting structure and foundation of the Rope Tow's top station, which supports the engine, bullwheel and weight of the rope in motion is very old and after 52 years of service is showing some structural weaknesses. In conjunction with replacing the top station's foundation, an enormous safety and ergonomic improvement will be realized by relocating the top station southward. KSC has always struggled to keep the top of the towpath and rope tow unloading area smooth, safe and efficient due to 1) the steep grade of the hill's apex in relation to the unload area and safety gate; 2) the steep angle of the rope at the apex and 3) a minimum distance between the unload area and the safety gate guarding skiers from entanglement in the bullwheel.

KSC proposes to solve all these problems in one operation: building a new top station foundation 30 feet to the south, relocating the motor higher and further back, protecting the new foundation and motor with a 6' x 12' weatherproof hut and associated grade work. This project extends the life of this historic and well-used recreation area for the next 50 years, significantly improves user safety by more than doubling the existing time and distance an operator and potential victim have in averting an entanglement situation, and greatly improves the rope angle for rider comfort and safety.

Plans and Progress: Scope of work, project design and detailed cost estimates have been prepared. Commitment of fifty hours of volunteer labor from Board members (valued at \$10/hour) has been secured to help accomplish this maintenance and safety upgrade.

Total Project Cost: \$25,435

Foundation (materials, labor & equipment): \$9,160 Motor Relocation (tear down, inspection, cleaning and relocation): \$3,400 Motor Hut Construction (includes materials & volunteer labor): \$2,775 Extend Power Supply to New Location: \$6,000 Excavator and Grade Work: \$4,100

Schedule:

Planning & Design: 2016 Preconstruction completed by: July 2017 Construction completed by: Jan 2018



Ohlson Moutain Rope Tow's top station, which supports the engine, bullwheel and weight of the rope in motion, is in need of foundation repair.



Homer Medical Clinic Expansion

Project Description and Benefit: The Kenai Peninsula Borough owns and provides for the operation of the South Peninsula Hospital. South Peninsula Hospital, Inc. (SPH Inc.) manages the operations of the facilities through a Sub Lease and Operating Agreement with the Borough and the City of Homer. The Hospital is run on a nonprofit basis in order to ensure the continued availability of medical services to the area. The Homer Medical Center falls under this umbrella, and is located near the hospital's main campus.

Homer Medical Center provides a central location for family practice, OB/GYN, midwifery and other primary care services. They have outgrown their current space, multiple physicians are sharing office space; storage is an ongoing problem as well as challenges with patient flow. With the limited number of exam rooms the facility is not able to function at the current level of demand, let alone the expected growth based on an aging population. This project is intended to improve patient as well as service provider satisfaction, while allowing the facility to function at a more optimum capacity, and will support the clinic's goal to become a certified Patient Centered Medical Home, which is the preferred model of primary care.

The existing Medical Center is a roughly 5,000 sq. ft. wood framed structure and while it is 30 years old, it has been maintained relatively well. Homer Medical Center is comprised of 27 nurses and clerical personnel, six physicians and two midlevel providers. Only two of the physicians are full time. There are four or five family practice providers on any given day using the main clinic. The clinic is open six days a week until 5pm, with extended hours on Tuesday and Thursday evenings. The current patient load is 65 to 70 patients per day.

Plans and Progress: The plan is to expand the facility east and south on the existing lot, adding a total of 5,700 square footage to accommodate additional exam rooms, waiting area and office space. In addition to expanded space, renovations and site improvements will also be done, such as expanded parking. The expansion and improvements will eliminate the need to rent the building across the street, currently rented for the purposes of the clinic's business office. Architectural schematics are nearly complete. Bond funding is being requested by the Borough by vote of the service area, but no change in the mil rate is expected.

Total Project Cost: The estimated cost of the proposed addition is \$2,800,000 - \$3,000,000. This includes final project design, project management and administrative costs.

Schedule: Fall 2016 - Summer 2017.



Homer Medical Clinic



Project Description & Benefit: The Kenai Peninsula Borough owns and provides for the operation of the South Peninsula Hospital. South Peninsula Hospital, Inc. (SPH Inc.) manages the operations of the facilities through a Sub Lease and Operating Agreement with the Borough and the City of Homer. The Hospital is run on a nonprofit basis in order to ensure the continued availability of medical services to the area.

The heating, ventilation and air conditioning ("HVAC") units for South Peninsula Hospital's operating rooms were installed in 1974. Currently, air handling unit AC-2 and the rooftop air cooled condensing unit associated with it are past their expected useful life and the entire system no longer provides sufficient control of room temperature and humidity levels required for hospital operating rooms under FGI Guidelines for Design and Construction of Hospitals and Outpatient Facilities. The existing HVAC system is also not well equipped to provide for proper operating room pressure control to meet FGI criteria.

Air conditioning alters the properties of air (temperature, humidity and sterile filtration) to more favorable conditions for keeping the hospital hygienic and to facilitate treatment of disease. Proper ventilation and filtration in the operating room are the most important means of reducing contamination and preserving the correct pressure relationships between functional areas. Maintaining the required level of relative humidity is essential to control the growth of microorganisms, prevent electrostatic discharge and is important to the shelf life of sterile supplies and maintenance of electro-medical devices. Temperatures also need to be adequately controlled given the heat produced by operating room lighting, equipment and staff.

Plans and Progress: Recommendation for long-term system replacement is to first provide new rooftop air handling unit(s) to serve the operating rooms and related spaces. Ultimately, a complete replacement of the HVAC systems serving the operating rooms is necessary for proper humidity and temperature control, air exchange rates, and room pressurization for the operating room environment. This system configuration will serve the entire surgery department and will be determined under a subsequent design phase. Modifications to HVAC systems serving the spaces adjacent and related to the operating rooms may also be warranted.

Total Project Cost: The estimated cost of the proposed project is \$1,800,000. This includes project management and administrative costs.

Schedule: 2017-2018

