Table of Contents

FY24 Draft CIP INTRODUCTION PAGES

Table of Contents

Table of Contents

FY24 Draft CIP INTRODUCTION PAGES

Funded Projects from the 2022-2027 Capital Improvement Plan

The City of Homer is pleased to report that the following projects have been completed and/or funding procured:

- **Homer Harbor Cathodic Protection**
  City secured an FY23 State of Alaska Municipal Habor Facility Program matching grant to complete this project.
- **Parks, Play Areas & Campgrounds Transition Plan**
  ADA Committee members and City staff completed this project in-house.
- **Homer Volunteer Fire Department Fleet Managment, partial completion with purchase of a Pierce Enforcer 2500 gallon tender to replace Tanker 2.**
  City of Homer funds approved in the FY22-23 Capital Budget.

Introduction: The Capital Improvement Program

A capital improvement plan (CIP) is a long-term guide for capital project expenditures. A capital expenditure is a major, nonrecurring budget item that results in a fixed asset with an anticipated life of at least three years.

A carefully prepared capital improvement plan has many uses. It can assist a community to:

- Anticipate community needs in advance, before needs become critical.
- Rank capital improvement needs in order to ensure the most important projects are given consideration for funding before less critical projects.
- Provide a written description and justification for projects submitted for state funding so the legislature, governor and appropriate agencies have the information necessary to make decisions about funding capital projects.
- Provide the basis for funding capital projects as part of the biennial budget process.
- Understand the impact of new capital projects on maintenance and operating costs so expenses are budgeted in advance to help avoid projects that the community cannot afford.

The City of Homer CIP contains a list of capital projects the community envisions for the future, identifies ways projects will benefit the community, highlights Legislative priority projects and presents a very general target construction schedule. Projects proposed by non-profit organizations and other non-City groups may be included in the CIP with City Council approval, but such inclusion does not indicate that the City intends to provide funding for the project. Projects eligible for inclusion in the City of Homer CIP have a lower cost limit of $50,000 for City projects and $25,000 for those proposed by non-profit organizations.

The number of years over which capital projects are scheduled is called the capital programming period. The City of Homer's capital programming period coincides with the State's, which is a six year period. The six-year plan is updated annually in accordance with a planning schedule approved by City Council at the onset of the CIP process. A copy of the City of Homer CIP schedule appears in the appendix of this document.

Though the CIP is a product of the City Council, administration provides important technical support and ideas with suggestions from the public incorporated through the entire process. The City of Homer solicits input from City advisory bodies, advertises for public input during the CIP public hearings, and invites the public to participate throughout the entire planning process, including the nomination and adoption stages of the process.

Determining project priorities: City of Homer CIP projects are assigned a priority level of 1, 2, or 3, with 1 being the highest priority. To determine priority, City Council considers such questions as:

- Will the project correct a problem that poses a clear danger to human health and safety?
- Is the project specifically recommended in other City of Homer long-range plans?
- Will the project significantly enhance City revenues or prevent significant financial loss?
- Is the project widely supported within the community?
- Is the project strongly supported by one or more City advisory bodies?
- Has the project already been partially funded?
- Is it likely that the project will be funded only if it is identified as being of highest priority?
- Has the project been in the CIP for a long time?

Once the overall CIP list is finalized, the City Council names a subset of projects that will be the focus of efforts to obtain state and/or federal funding in the coming year. The overall CIP and the legislative priority list are approved by resolution.

Integration of the CIP With Comprehensive Plan Goals

Each project listed in the CIP document has been evaluated for consistency with the City's goals as outlined in the Comprehensive Plan. The following goals were taken into account in project evaluation:

Land Use: Guide the amount and location of Homer's growth to increase the supply and diversity of housing, protect important environmental resources and community character, reduce sprawl by encouraging infill, make efficient use of infrastructure, support a healthy local economy, and help reduce global impacts including limiting greenhouse gas emissions.

Transportation: Address future transportation needs while considering land use, economics and aesthetics, and increasing community connectivity for vehicles, pedestrians and cyclists.

Public Service & Facilities: Provide public services and facilities that meet current needs while planning for the future. Develop strategies to work with community partners that provide beneficial community services outside of the scope of City government.

Parks, Recreation & Culture: Encourage a wide range of health-promoting recreation services and facilities, provide ready access to open space, parks, and recreation, and take pride in supporting the arts.

Economic Vitality: Promote strength and continued growth of Homer's economic industries including marine trades, commercial fishing, tourism, education, arts, and culture. Support development of a variety of well-defined commercial/business districts for a range of commercial purposes. Preserve quality of life while supporting the creation of more year-round living wage jobs.

Energy: Promote energy conservation, wise use of environmental resources, and development of renewable energy through the actions of local government as well as the private sector.

Homer Spit: Manage the land and other resources of the Spit to accommodate its natural processes, while allowing fishing, tourism, other marine-related development, and open space/recreational uses.

Town Center: Create a community focal point to provide for business development, instill a greater sense of pride in the downtown area, enhance mobility for all forms of transportation, and contribute to a higher quality of life.

Legislative Request FY2024

City of Homer FY2024 State & Federal Legislative Priorities
approved by
Homer City Council Resolution 22-XXX

1. **Port of Homer: New Large Vessel Harbor**
2. **Multi-Use Community Center, Phase 1**
3. **Slope Stability Program**
4. **Barge Mooring & Large Vessel Haul Out Repair Facility**
5. **Homer Spit Erosion Mitigation**
6.
7.
8.
9.
10.

1. Port of Homer: New Large Vessel Harbor

Project Description & Benefit: This project will construct a new multi-modal large vessel harbor to the north of Homer's existing Port and Harbor. The new large vessel port will support economic development in Alaska by meeting demands of the marine industrial transportation sector and creating jobs. It also addresses navigational safety hazards and advances national security interests by accommodating the layover and repair needs of US Coast Guard ships deployed under the Arctic Security mission.

- Currently, large vessels are moored at System 4 and System 5 transient floats in Homer's Small Boat Harbor. Due to shortage of moorage space, large vessels are rafted two and three abreast constricting passage lanes, creating navigational hazards and overstressing the harbor float system.
- The new facility will fill the unmet mooring needs of 60-100 large vessels that would home port in Alaska, but have been turned away due to their overall size, draft, or that we simply lack the space. These large vessels work in the commercial fishing, oil and gas, research, marine transportation and cargo industries. Port expansion will capture an estimated $3.5 million in economic activity Alaska loses annually due to lack of moorage space and create Alaskan jobs by an estimated $2.75 annually. Over a 50-year period, the cost to Alaska's economy of doing nothing carries a present day value of $93 million.
- The project will also meet the US Coast Guard's long-term mooring needs for the Arctic Security and Search & Rescue missions. The large vessel harbor will be built to USCG specifications for layover and repair of fast cutters and other assets deployed to the Arctic.

Centrally located in the Gulf of Alaska, Homer's Port & Harbor is the region's only ice-free gateway to Cook Inlet, the port of refuge for large vessels transiting the Gulf of Alaska, Cook Inlet, and Kennedy Entrance, and is the marine industrial and transportation system hub for central and Western Alaska.

Plans & Progress: The City, State of Alaska DOT, and Army Corps of Engineers (USACE) partnered on a feasibility study in 2007, which was put on hold because preliminary results indicated the project's Benefit to Cost ratio would be non-competitive for Federal funding. High demand and favorable changes in cost drivers since then prompted the City and USACE to reexamine feasibility utilizing a Section 22 Planning Assistance to States Program grant in 2019. Positive results led the USACE to recommend resuming work on the General Investigation (GI).

Federal funds for the GI have been secured through an FY23 appropriation and the City and State of Alaska have committed the 50% local match required to initiate the three-year study. The GI is scheduled to begin in Federal FY23.

Total Project Cost:	$153,000,000	
General Investigation:	$ 3,000,000	(Federal funds and local match completed FY23)
Construction Estimate:	$150,000,000	
FY2024 Federal Request:	$ 97,500,000	
FY2024 State Request:	$ 32,500,000	
City of Homer:	$ 20,000,000	

Port expansion adds a new basin with its own entrance adjacent to the existing Small Boat Harbor. It will relieve large vessel congestion in the small boat harbor and will provide secure moorage compatible with the USCG's assets .

2. Pioneer Avenue Gateway Redevelopment: Multi-Use Community Center

Project Description & Benefit: The Pioneer Gateway Redevelopment project completes a comprehensive revitalization plan and initiates cleanup on a 4.3-acre Brownfield site located in the heart of Homer's commercial district at the corner of the Sterling Highway and Pioneer Avenue. This project would create an economically viable reuse program that can catalyze site cleanup and construction of a multi-use community center to meet Southern Kenai Peninsula community needs, while contributing to the overall economic development of Homer's central business district. This project is the first phase in designing and constructing a multi-use Community Center to adequately serve the social, recreation, cultural, and educational needs of the Homer community.

The community has long prioritized re-developing the site to better serve recreation needs and as a welcoming gateway for visitors to Homer. A 2015 City of Homer Parks, Art, Recreation and Culture (PARC) Needs Assessment validated this perceived need; a 2022 follow up assessment showed increased public demand for recreation space, reflecting the community's high priority on access to public recreation and educational spaces. Public input describes the community center as a comprehensive multi-generational facility that offers something for people of all ages and identified a general-purpose gymnasium, multi-purpose space for safe walking/running, meeting and convention or events space, dedicated space for youth and emergency shelter as priority features.

Over the years, the City has performed a variety of structural and feasibility analyses, but contamination in the two former school buildings (asbestos, PCBs, mercury and lead-containing materials) requiring controlled removal and disposal has thwarted all efforts. The next steps to accomplishing the community goal of a new facility is twofold: finalizing design and site cleanup.

Plans & Progress: In 2018, a Council appointed Task Force completed several months of study and recommended building a new community facility, rather than trying to rehabilitate the current building. The retrofits needed to bring the building into modern code compliance exceeded the cost of new construction. In September 2021, City Council appropriated $75,000 for professional services for public process, conceptual design and construction cost estimate for a new multi-use center, a big step towards refining the scope of the project and moving it forward. The next step is finalizing design, a feasibility study for ongoing operations and maintenance and a cleanup plan.

In spring of 2022, the City determined the smaller of the two former school buildings was unsafe for occupancy, and began planning demolition of that building. The City will proceed with demolition of the smaller building while planning for a new community facility.

Total Project Cost: $15,795,666

FY24
Phase 1: Abate HazMat in both HERC Buildings: $ 176,377

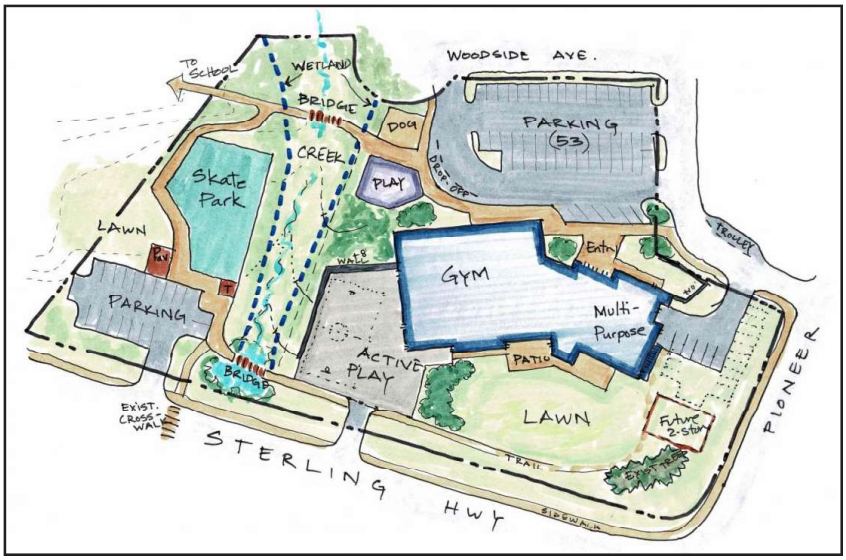
Phase 2: Demolish HERC2 $ 78,094

Final Design & Feasibility Study $ 350,000

FY25
Phase 3: Demolish HERC1 $ 191,195

Construction $15,000,000

FY2024 State Request: $15,000,000
(City of Homer Match: $795,666)



Conceptual design for a new community recreation facility to revitalize a Brownfields site at the gateway to Homer.

3. Slope Stability & Erosion Mitigation Program

Project Description & Benefit: One of the greatest risks to Homer's natural and built environment is the stability of the steep slopes and coastal bluffs upon which much of Homer is built. These slopes are prone to sudden losses in stability, due in large part to the movement of water, whether it's surface water that flows over the ground, storm water that falls from the sky or ground water that flows under the surface. When these waters combine, they saturate the soil, which makes the soil particles "slippery" and creates potential for slumping. The annual freeze-thaw cycle further exacerbates erosional loss.

Another major factor in Homer's coastal erosion is an increase in impervious surfaces due to recent commercial and residential development booms. When stormwater quickly exits developed areas, discharge events downgradient result in extreme coastal erosion and loss of beach sediments critical for maintaining coastal stability.

Homes and businesses in the area have been impacted; homes have slid down steep slopes, forcing residents to abandon their homes. Roads have failed, and with them water/sewer, electrical and natural gas distribution line infrastructure, requiring emergency repairs to restore access. This is a problem affecting both the City and the State of Alaska, as multiple state highways have been, and are continuing to be, adversely affected by slope instability – including the Sterling Highway, Homer's only road connection to the rest of mainland Alaska; Kachemak Drive, a tsunami evacuation route and connector road for commuter, recreational and commercial traffic to Homer's Port & Harbor facility on the Homer Spit; and the southern portion of Main Street.

The City has been researching how these waters collectively affect steep slopes and coastline erosion and developing mitigation measures. Conceptual plans for four specific projects have emerged from the research and together form a Green Infrastructure Storm Water Management System. They include the Kachemak Drive sponge, a green infrastructure project that protects private and public properties as well as Kachemak Drive. The Baycrest Storm Drain conveyance and treatment system protects the Sterling Highway and adjacent, downhill properties and also features a micro-hydro energy generating unit. The Main Street, South and Beluga Lake/Slough projects protects two state roads, manages stormwater from East End Road, a State roadway, and insures water quality for Beluga Slough and Lake, important habitat for waterfowl and shorebirds.

Each project will acquire existing peatland wetlands to serve as stormwater collection sites, which will simultaneously recharge the peat, protect the water quality of Kachemak Bay, conserve critical moose and waterfowl habitat, and protect valuable peatlands to mitigate coastal erosion for the long term. The project will also build green infrastructure to convey sotrmwater to Low-Impact Development biofiltration retention infrastructure before recharging the peatlands.

Plans & Progress:

The Program is being developed in Phases.

- Phase 1: Fieldwork - geological and hydrological testing to document existing conditions: $180,000
- Phase 2: Property Acquisition: $2,500,000
- Phase 3: Design and final specifications: $100,000
- Phase 4: Construction: $2,110,000

Total Project Cost: $4,890,000

Phase 1: **$**180,000 (completed with City of Homer Funds)

FY2024 State Request, Phases 2-4**:** $3,712,500

(City of Homer leveraged 25% Match: $1,177,500)

The Slope Stability Program utilizes green infrastructure to mitigate property and infrastructure losses due to solifluction.

4. Homer Barge Mooring & Large Vessel Haul Out Repair Facility

Habormaster recommends moving this project to the Mid-Range Section because the uplands repair area is currently functional and other Port & Harbor projects have higher priority funding needs.

Project Description & Benefit: This project constructs safe moorage and an associated uplands haul out repair facility for large shallow draft vessels. This improvement supports the marine transportation needs of central and western Alaska. Because of the lack of facilities, these vessels currently have to travel to perform annually required maintenance and repairs which could otherwise be completed here in Homer. The facility benefits the needs of the growing regional fleet of large vessels, the local marine trades businesses and the regional economy.

The mooring facility, proposed along the beach front of Lot TR-1-A (between the Nick Dudiak Fishing Lagoon and Freight Dock Road on the west side of the harbor) will stage barges in the tidal zone with the bow end pulled tight to the beach for accessing a haul out ramp. A dead-man anchoring system will be provided for winching vessels up the ramp above the high tide line for maintenance and minor repairs. Upland improvements will include six work sites with water, electrical pedestals, lighting, and security fencing and cameras. This site has accommodated approximately six to eight vessels (depending on size) with ample workspace; it will offer large vessels the ability to complete their required annual maintenance at the uplands repair facility while wintering over.

Three vessels hauled out for repairs on Homer Spit Lot TR 1 A.

Completing repairs locally gives the marine trades sector greater opportunity to expand services, support a steady labor force and provide higher quality services more competitively. Availability of local repair services also delivers performance benefits to vessels operating in Alaska waters, saving significant time, fuel and other operating expense.

Plans & Progress: Project development is being carried out in phases. Phase 1, initiated in 2014, consisted of forming a Large Vessel Haul Out Task Force to assist with site selection and completion of Best Management Practices, vessel owner use agreements, and vendor use agreements. Staff additionally completed a Stormwater Pollution Prevention Plan (SWPPP) with the Alaska Department of Environmental Conservation for a portion of lot TR-1-A. Since completing these basic requirements, the haul out area has become a popular repair site option for some of our large vessel owners. This further justifies additional investments to improve our ability to serve these customers and bring more of these customers to Homer. Phase 2 completed design and permitting utilizing $255,000 in State Legislative Grant funds and $42,626 in additional City of Homer funds. The project is shovel-ready and the design is bid-ready. Phase 3 will complete construction project construction.

Total Project Cost: $5,297,626

2019: Phase 2 Engineering/Permitting/Geotechnical/Design: $297,626 (Design completed June 2020).

2025: Phase 3 Construction: $5,000,000 (Project is shovel ready.)

FY2024 State Request for Phase 2: $4,841,933 (City of Homer Match: $158,067)

5. Homer Spit Road/AK Highway 1 Coastal Erosion Mitigation

Project Description and Benefit: The City of Homer requests that the Alaska Department of Transportation and Public Facilities (AK DOTPF) work cooperatively with the Army Corps of Engineers (USACE) and the City of Homer to design, permit and implement a long term erosion mitigation and maintenance plan to mitigate and stabilize erosion conditions on the Homer Spit. This project is needed to protect critical infrastructure on the Homer Spit.

The Homer Spit is a 4.5 mile long glacial spit composed of sands and gravel that offers recreational, commercial, industrial, and residential use. It is a valuable asset to the City of Homer and the State of Alaska due to its economic and recreational opportunities. It is also a unique, coastal feature and a valuable environmental resource with its extensive bird and marine habitat.

While typically in equilibrium, the Spit is undergoing a long period of erosion. Changes in storm patterns the past few years with milder summers and fewer strong southeasterly events may be affecting the sediment movement along the spit, allowing greater erosion and less seasonal accretion. The USACE addressed erosion concerns in 1992 with 1,000 feet of rock revetment in 1992, which they extended an additional 3,700 feet in 1998. This caused beach lowering adjacent to and further south of the rock revetment along the Spit. In that area, AK DOT & PF armored the highway in two emergency projects. These areas are subject to periodic overtopping, damaging the asphalt on the roadway shoulder

Erosional damage on the Spit, if left unchecked, will undermine the State-owned Sterling Highway that connects the Kenai Peninsula mainland to organizations like the United States Coast Guard and Alaska Marine Highway, and ultimately diminish the role the Homer Spit plays as a regional commerce center and transportation hub for Southcentral Alaska. Many private businesses located on the Homer Spit depend on the Sterling Highway as their gateway to conduct business; the Sterling Highway also accesses the City of Homer Port and Harbor critical infrastructure that supports United State Coast Guard facilities, the Alaska Marine Highway system, regional commercial marine transportation, the commercial fishing industry and the marine trades. The road is also an essential tsunami evacuation route. A coordinated, long-term maintenance plan is needed.

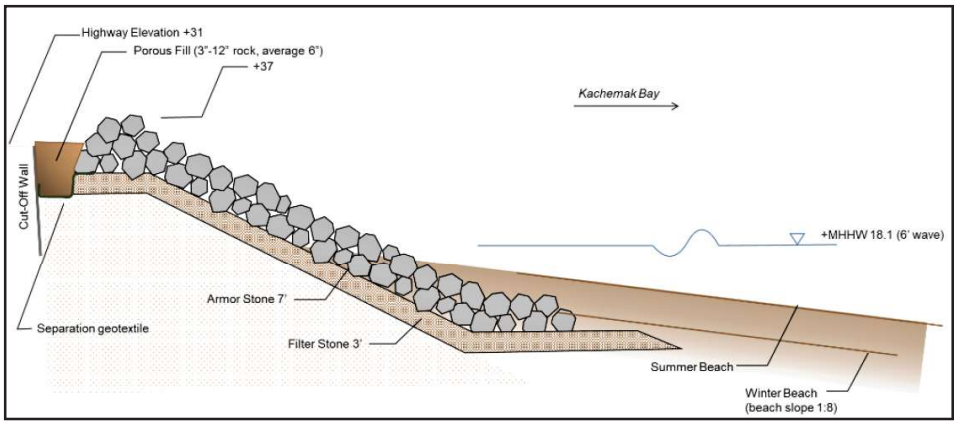
Plans & Progress: The USACE conducted two extensive studies with detailed erosion management information: a 2017 Dredged Material Management Guidance Manual and a 1989 investigation report, Storm Damage Reduction Final Interim Feasibility Report with Engineering Design and Environmental Assessment. More recently, in 2019, HDR analyzed environmental conditions and sediment transport and produced a Coastal Erosion Assessment of the Sterling Highway Termini on the Homer Spit which also considered concept alternatives (perched bench, groin field, offshore breakwater, sediment management and rock revetment) for improving resilience of existing roadway embankment. A rough order of magnitude for revetment is $1.5 M per 100-foot station.

Due to the importance of road access on Homer Spit, a traditional revetment was recommended; however it strongly encouraged coupling any rock project with a beach renourishment program ad sediment management plan for long term viability of the Spit. Dredging operations for the construction of Homer's new large vessel harbor will provide sufficient material to renourish the beach.

The City requests that the USACE and State develop a final design and implementation plan.

Total Project Cost: $18,000,000
Phase 1: Engineering & Design
$ 3,000,000

Phase 2: Construction
$15,000,000



Armor stone revetment schematic.

Mid-Range Projects

Part 2: Mid-Range Projects

ADA Transition Projects

City Hall Access Barrier Removal

Project Description & Benefit: Under Title II of the Americans with Disabilities Act (ADA), all State and local governments must be accessible to, and usable by, people with disabilities. The basic principles of the ADA are equal opportunity, integration, and inclusion. From 2017-2019, the City of Homer ADA Compliance Committee and City Staff evaluated City Facilities to identify accessibility barriers. The results were compiled into the City's Transition Plan, in accordance with Title II of the ADA regulations. City Hall is one of the most used city buildings throughout the year and this project corrects access barriers (ADA Priority Level 1 issues) to get into the building.

City Hall access barriers include:

- Cross slopes that exceed 1:48 ratio for all designated accessible parking spaces;
- absence of van accessible parking;
- incorrect dimensions of accessible parking spaces;
- improperly located signage;
- absence of a level landing at the top of the curb ramp below the front entrance ramp;
- handrails on ramp protrude into the path of travel and reduces the width to less than 36" width requirement;
- push bar on main entrance door protrudes into the doorway and reduces the width of the opening to less than 32" width requirement; and
- front door entrance threshold height.

Plans & Progress: Public Works Staff assisted the ADA Compliance Committee during the self-evaluation process, and together helped develop solutions and remedies which are included in the Transition Plan. City Council approved the Transition Plan in Resolution 19-024. This project would ideally be addressed in conjunction with local paving and asphalt repair projects in 2023-24 to take advantage of the paving equipment and contractors that will be mobilized locally.

Total Project Cost: $400,000

Schedule: 2023-2024

Priority Level: 1

ADA Compliance Committee feedback:
Ask Jan what has been completed from project list; can she add some of the ADA paving projects in Transition Plan to PW small works paving program?

The cross slope of the accessible parking spaces at the lower entrance to City Hall exceeds the maximum allowed 1:48 under ADA standards.

Nick Dudiak Fishing Lagoon
Accessible Ramp & Fishing Platform

Project Description & Benefit: The Nick Dudiak Fishing Lagoon located on the Homer Spit is a man-made marine basin that the Alaska Department of Fish and Game annually stocks with king and silver salmon smolts to provide an easily accessible recreational sport fishing opportunity. This road accessible, shore based salmon fishing site attracts a wide array of sport anglers. When salmon return to the terminal fishery from May through September, over 250 anglers line the bank at any one time.

Due to its popularity, the City of Homer enlarged the lagoon to five acres (twice its original size) in 1994, and in 1999 added accessibility features (handicapped parking and a series of ramps and landings inside the fishing lagoon) to expand recreational sport fishing opportunities to anglers with mobility challenges. The City also maintains fish cleaning tables, restroom facilities, a small picnic area and adjacent campground to serve fishermen's needs.

The existing twenty-year old ADA platform is subject to damage from tidal action, gravel build-up and ice scouring. Over the years, despite annual maintenance, it has succumbed to these forces and no longer serves its purpose of providing ADA access to the fishing waters. Parts of it have detached from the main body and are a safety hazard. A new access ramp and fishing platform, designed and located to resist these forces, is needed to restore accessibility to the Fishing Lagoon, improve the fishing experience, and if possible, reduce maintenance.

Plans & Progress: The City has been working in concert with Alaska Department of Fish and Game to design and seek funding to replace the ramp. In 2022, the City and State prepared conceptual design options for consideration. Initially, the preferred option is for floating access (similar to a dock) that provides over-water fishing opportunities. The floats will allow the dock to move up and down during tidal swings to provide ADA access to fishing for the entire tidal fluctuation. A gangway to the dock would be affixed to a fixed pier above the highwater level. The floating portion of the dock and the gangway should be designed to be removable to avoid seasonal ice damage and to perform maintenance as necessary.

Total Project Cost: $ 770,000

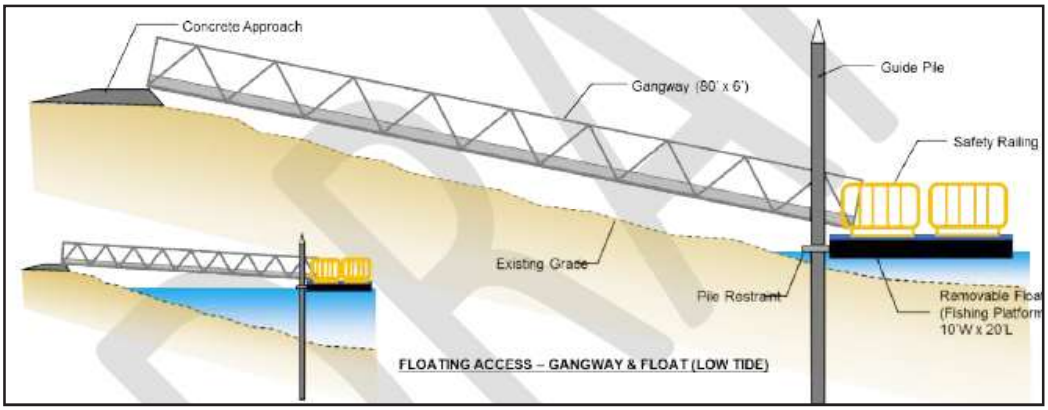
Concept Design $ 30,000 (Completed 2022; City of Homer funds)

Final Design $70,000

Construction $ 700,000

Schedule: Final Design 2023/Construction 2024

Priority Level: 1



A concept design of a removable gangway and floating fishing platform to restore ADA angler access to the Nick Dudiak Fishing Lagoon.

Staff recommends removing this from the CIP as City Public Works staff has been correcting these issues over time and many are completed. The ADA Committee requests annual updates from Public Works on items completed in the ADA Transition Plan.

Public Restroom Accessibility Barrier Removal

Project Description & Benefit: Under Title II of the Americans with Disabilities Act (ADA), all State and local governments must be accessible to, and usable by people with disabilities. The basic principles of the ADA are equal opportunity, integration, and inclusion. From 2017-2019, the City of Homer ADA Compliance Committee and City Staff evaluated City Facilities to identify accessibility barriers. The results were compiled into the City's Transition Plan, in accordance with Title II of the ADA regulations. This project corrects barriers at City public restroom facilities. A clear path of travel to a bathroom and clearance for entry, maneuverability inside, and access to water closets, toilet paper, soap and hand towel dispensers or dryers, are just some of the key requirements of the ADA. These accessible features are required for public restrooms whether they are restrooms with stalls in a City building or individual bathrooms that are located on the spit and in town. Correcting these issues are a benefit the entire community.

Barrier removal in existing bathrooms include:

- relocating grab bars, toilet paper dispensers, coat hooks, and mirrors;
- moving tactical signage to the appropriate location on the left side of the entrance;
- adjusting the entrance threshold height;
- replacing toilets that are too high or have flush lever to the open side of the water closet;
- covering pipes below lavatories;
- replacing hardware on stall doors and bathroom doors, and;
- removing obstacles to clear floor space for wheelchair maneuverability.

Plans & Progress: Public Works Staff assisted the ADA Compliance Committee during the self-evaluation process, and together with Port and Harbor staff helped develop solutions and remedies included in the Transition Plan. City Council approved the Transition Plan in Resolution 19-024. This project will proceed in phases to remove accessibility barriers in existing City restrooms, bringing them into ADA compliance.

Total Project Cost: $75,000

Airport Restroom & Water Fountain $14,400 (funded in FY22 with City of Homer Capital Funds)

Schedule:
2024 Continuation of barrier removal in existing bathrooms $60,600

Priority Level: 1

This project will correct accessibility issues at City of Homer public restrooms.
Some depicted here include improperly placed dispensers and grab bars, lack of wheel chair space from bench, incorrect door swing and lack of cover on the lower pipes

Removing Parking and Pavement Accessibility Barriers at City Facilities

Project Description & Benefit: Under Title II of the Americans with Disabilities Act (ADA), all State and local governments must be accessible to, and usable by, people with disabilities. The basic principles of the ADA are equal opportunity, integration, and inclusion. From 2017-2019, the City of Homer ADA Compliance Committee and City Staff evaluated City Facilities to identify accessibility barriers. The results were compiled into the City's Transition Plan, in accordance with Title II of the ADA regulations. This project corrects parking and pavement barriers (ADA Priority Level 1 issues) at City facilities to aid the entire community in accessing and participating in programs, services or activities provided by the City of Homer.

ADA regulations standardize the size and number of marked accessible parking spaces in a lot and appropriate signage placed such that it cannot be obscured by a vehicle parked in the space. Accessibility standards also require firm, stable and slip resistant surfaces. Many City of Homer facilities do not meet these standards.

This project will correct the following parking barriers in the vicinity of the Homer Harbor, at Public Works, Homer Public Library, the Animal Shelter, Baycrest pullout bathroom facility and the Fire Hall:

- Absence of accessible parking;
- absence of van accessible parking;
- incorrect dimensions of accessible parking spaces;
- improperly located signage;
- accessible parking spaces where water pools and snow melt creates icy conditions that become hazardous in the winter;
- parking space identified in gravel lots that fail to provide a path of travel to a sidewalk or facilities; and
- cross slopes that exceed 1:48 ratio on paved lots.

Plans & Progress: City staff assisted the ADA Compliance Committee during the self-evaluation process and together developed solutions and remedies that were included in the Transition Plan. City Council approved the Transition Plan in Resolution 19-024. This project is expected to proceed incrementally. In 2021, accessible vehicle and van parking spaces were paved at Harbor Ramps 3, 4 and 5, and at public restrooms and compliant signage and pavement markings were completed.

Total Project Cost: $385,600
Phase 1: Harbor Accessible Parking, completed $49,100

Schedule:
2024: Facility Parking Lot Cross Slopes & Signage $336,500

Priority Level: 1

Accessible parking spaces at Ramp 4 in the Port & Harbor provide an example of where spaces need to be paved and a path of travel provided.

Self-Evaluation and Transition Plan for City Parks, Trails & Campgrounds

Project Description & Benefit: Under Title II of the Americans with Disabilities Act (ADA), all State and local governments must be accessible to, and usable by, people with disabilities. The basic principles of the ADA are equal opportunity, integration, and inclusion. The Self-Evaluation is a comprehensive report that outlines the barriers for people with disabilities as they seek to use local government services and programs. It is drafted by the state or local government in collaboration with and review by a sample user group of people with disabilities. It includes a transition plan of architectural and administrative barriers to programs that need to be removed in order to make the program accessible. Completion of this project will be a significant step meeting the requirements of Title II of the ADA, by having a full Self-Evaluation and Transition Plan for the City of Homer.

A completed Self Evaluation and Transition Plan will:

- Acknowledge the City's obligation to comply with ADA Title 2 Subpart D- Program Accessibility § 35.149
- meet the requirement of ADA Title 2 Subpart D- Program Accessibility § 35.150 Existing Facilities, (d) Transition Plan;
- identify barriers to be resolved and establish a timeline for completion; and
- bring the City of Homer closer to its goal of being a Universally Accessible City as identified in Resolution 17-075(A).

Plans & Progress: In 2017, the City of Homer ADA Compliance Committee and City Staff began evaluating City facilities to identify accessibility barriers and prepared a Transition Plan, which City Council approved in 2019. Evaluating and preparing a plan for City Parks, Trails and Campgrounds exceeds the ability and time allowance of City staff and ADA Compliance Committee members. This project entails hiring a consulting firm that specializes in preparing ADA Transition Plans to evaluate City parks, trails and campground facilities for inclusion in the City's Transition Plan.

Total Project Cost: $60,000

Schedule: 2021-22

Priority Level: 1

Staff & ADA Committee recommend moving this project to the 'Completed' list. The transition Plan for parks, play areas and campgrounds.was done in-house and is close to complete. When complete it will be transmitted to Public Works for cost estimating.

Due to the number parks, playgrounds and campgrounds in the City, the ADA Committee determined that it would be a better use of time and effort to perform a separate transition plan for city trails after the Parks, Playgrounds and Campgrounds transition plan is complete.

Accessibility improvements to City trails, parks and campgrounds allows everyone to receive full benefits of Homer's park & recreation amenities.

Parks, Art, Recreation & Culture

Bayview Park Restoration

Project Description & Benefit: Bayview Park is a neighborhood park at the top of Main Street. This project seeks to improve accessibility and safety of the Park and its playground elements so that the park is more user-friendly for preschool age children and for children with disabilities or mobility issues.

In 2011, volunteers with Homer's Early Childhood Coalition adopted Bayview Park and coordinated with Corvus Design to create a park master plan. While some elements of the plan have been implemented, much more work needs to be done to transform the park into a fun, safe and accessilbe destination for young families. Project goals include:

•Replacing the existing high-maintenance, and rickety white picket fence with with a wood frame-chain link fence to improve the stability and durability of the fence. The fence also provides a level of safety for young children around the busy roads and deep water-filled ditches surrounding the park.

•Procuring and installing inclusive playground equipment and safety surfacing to reduce risk of injuiresnew playground equipment to ADA standards, and extending ADA trail to the new elements.

Plans & Progress: . In 2022, the City will be installing an ADA accessible sidewalk to the park from Main Street as part of the new Main Street Sidewalk project. The design replaces the existing open ditch on the east side of Bayview Park with a closed storm drain system and creates accessible parking and access to that side of the park. The Kachemak Bay Rotary Club committed $10,000 in 2022 to help procure new playground quipment, which the City plans to install with the help of community volunteers.

Total Project Cost: $190,000

Schedule: 2022-2023

Priority Level: 2

Though charming, the white picket fence that surrounds Bayview Park is in need of constant repair. A more practical chain length fence is needed to keep young children out of roads and ditches.

Homer Spit Campground Renovations

Project Description and Benefit: The Mariner Park and Fishing Hole campgrounds are situated on the Homer Spit. Their waterfront locations and close proximity to recreational activities and visitor support services make the campgrounds very popular with both Alaskans and out-of-state visitors. City campgrounds are heavily used in the summer and shoulder seasons, hosting over roughly 20,000 campers annually and generating up to $200,000 in revenue through camping fees.

The campgrounds are primitive. Campers use porta potties and have no means of hand washing. Campsites are potholed, poorly marked and without tent pads. Many lack picnic tables and fire rings.

This renovation project greatly improves the camping experience and makes it easier to maintain the campgrounds to a higher standard of cleanliness and safety. Renovations include installing hand wash stations, grading campgrounds, delineating and labeling campsites, developing tent pads in tent camping areas and installing picnic tables and fire rings at sites that currently lack these basic amenities.

Completing these renovations bring the campgrounds to a minimum standard to keep them healthy, attractive and competitive. Visitors have a choice of where to stay on the Kenai Peninsula. We anticipate these upgrades will attract new visitors and motivate existing visitors to extend their stays or come back. Summer and shoulder season visitors contribute significantly to Homer's overall economy through their patronage of local businesses throughout their stay.

Plans and Progress: This project is 80% shovel ready.

Staff recommends adding elements from Mariner Park Improvements project in the long range section.

Total Project Cost: $90,000

Mariner Park Campground	$45,000
Fishing Hole Campground	$45,000

Schedule: 2023-2024

Priority Level: 1

Mariner Campground at the base of the Homer Spit.

Homer Spit Trailhead Restroom

Project Description & Benefit: The parking lot at the intersection of the Ocean Drive bike path and Homer Spit Trail gets heavy use year round. The Spit trail is a popular staging area for biking, running, walking, and roller blading. Parents bring their young children to ride bikes because the trail is relatively flat and has few dangerous intersections. An ADA accessible restroom would be used by recreationalists and commuters using both trails.

Total Project Cost: $400,000

Schedule: 2025

Priority Level: 2

The parking lot at the Spit trail head full of cars on a sunny day.

Jack Gist Park Improvements, Phase 2

Project Description & Benefit: Jack Gist Park has been was founded in 1998 on 12.4 acres of land donated to the City of Homer by a private landowner. As originally envisioned by the Jack Gist Recreational Park Association, this parcel has been developed primarily for softball fields. It also features a disc golf course.

The proposed project will complete Phase 2 by improving drainage around the upper ball field. Phase 3 will provide potable water (water main extension) and construct a plumbed restroom.

Plans & Progress: Phase 1 of this project was completed in 2011 after a five year period of incremental improvements. In 2005-2006, a road was constructed to Jack Gist Park from East End Road, a 70-space gravel parking area was created, and three softball fields were constructed including fencing, dugouts, and backstops. In 2008, bleachers were installed at all three softball fields. In 2009, three infields were resurfaced. In 2010, with volunteer help, topsoil was spread and seeded on two of the three fields and the parking area was improved and expanded. 2011 saw improvements to the third ball field: drainage improvements on the outside perimeter (right and left field lines), imported material to improve the infield and topsoil and seeding to improve the outfield. In 2022, the City will install a bike path connecting Jack Gist Park to two new nearby residential deveopments and to East End Road.

Phase 2 Project Cost: $60,000

Schedule: 2024-2025

Priority Level: 2

One of the softball fields at Jack Gist Park.

Karen Hornaday Park Improvements

Project Description & Benefit: Karen Hornaday Park is Homer's largest, most diverse public recreation space. At 40 acres in size, it offers a wide variety of activities, including camping, ballfields, playgrounds and two public pavilions with picnic facilities, barbecue grills and campfire circles. For those looking to relax, the park offers benches to view Kachemak Bay and the surrounding mountains and glaciers, as well as access to a more intimate, natural area along Woodard Creek on the park's eastern boundary. The park hosts an estimated 100,000 user days each year. This includes 18,000 campers, 2,000 Little League participants and spectators, plus general use park visitors and attendees of approximately 1,000 small gatherings and large events reserved in the park annually such as the Scottish Highland Games festival and concerts.

The Karen Hornaday Park Master Plan, first approved in 2009, sets forth goals and objectives to be accomplished over a 10-year period. While several aspects of the plan have been accomplished, two major projects are still outstanding: safe and accessible park entry for vehicles and pedestrians and an accessible public restroom facility. This project accomplishes Design B-2 from the Park's Master Plan to provide accessible and safe entry to the park for both cars and pedestrians and constructs an ADA accessible public restroom. The design, shown below, realigns the park entrance road eastward and provides all parking on the west side of the road to prevent people from having to cross road traffic to access the park. It also provides an adjacent accessible pedestrian entry path, which the park currently lacks.

The plan also constructs a new ADA accessible public restroom facility. At present, the park only offers portable toilets; the former restroom facility was demolished in 2020 due to safety concerns. Over the years the physical structure had deteriorated and its advanced age combined with high use resulted in worn interior finishes, making cleaning difficult; aged bathroom fixtures and dilapidated stalls made it nearly impossible for City maintenance personnel to provide a safe, sanitary facility. The portable toilets currently provided are inadequate to support the needs of the many visitors and groups who utilize this public recreation space.

This project significantly improves safety for pedestrians and accommodates a variety of park users with varying abilities, facilitating access to the park and ensuring inclusive recreational opportunities for all to enjoy.

Plans & Progress: Phase 1 of park improvements (including ballfields, drainage, a new playground) were accomplished through an Alaska Legislature appropriation of $250,000 in FY 2011 and community grassroots efforts of HoPP. A Land and Water Conservation Fund (LWCF) grant in 2103 completed campground improvements and developed a new day use area between the two ball fields. Significant volunteer efforts and HART Program funding in 2017 constructed two new footpaths providing pedestrian access to the park along Fairview Avenue on the southern border of the park and from Danview Avenue. Neither of these trails are ADA accessible and they do not address safety issues of children running across the road from the parking lot to access the park.

In 2021, a field survey confirmed that Concept Design B-2 could be accommodated over the existing conditions. A design and cost estimate for the accessible pedestrian entry trail have also been completed.

Total Project Cost: $784,500

Pedestrian Trail: $164,500 (FY22 Rec Trails Program grant received)
Road Realignment: $120,000 (City of Homer FY22 Capital funds)
Parking Area: $75,000
Restroom Utilities & Construction: $425,0000

Schedule: 2023 -2025

Priority Level: 1

Concept Design B-2 from the Karen Horndaday Park Master Plan

Port and Harbor

Deep Water/Cruise Ship Dock Expansion, Phase 1

Project Description & Benefit: Upgrades to the Deep Water/Cruise Ship Dock are necessary to provide a facility that can accommodate multiple industry groups and provide the greatest economic benefit to the area. A feasibility study of expanding and strengthening the dock (with later phases including a terminal building and other upland improvements) is nearing completion. Expansion increases the Port & Harbor's capability to support regional resource development initiatives with moorage and a staging area for freight service to the Lake and Peninsula Borough (via the Williamsport-Pile Bay Road) and to potential future Cook Inlet region resource development projects. There is current demand for modifications to the existing dock to accommodate long-term mooring of large resource development vessels such as timber, mining and oil and gas barges, and as designed, the dock will be able to handle icebreakers, of particular importance given Alaska's strategic arctic location.

The facility will boost cargo capability. The City has a 30-acre industrial site at the base of the dock which can support freight transfer operations and serve as a staging area for shipping to and from the Alaska Peninsula, the Aleutians, and Bristol Bay. Handling containerized freight delivery to the Kenai Peninsula would reduce the cost of delivering materials and supplies to much of the Peninsula. The dock expansion will also enhance cruise ship-based tourism in Homer by providing moorage at the dock for two ships (a cruise ship and a smaller ship) at the same time, reducing scheduling conflicts.

Finally, improvements to the dock will fulfill a contingency planning requirement under Homeland Security provisions. The Port of Anchorage, through which 90% of the cargo for the Alaska Railbelt areas and the Kenai Peninsula passes, is vulnerable. If the Port of Anchorage were to be shut down and/or incapacitated for any reason, Homer's port would become even more important as an unloading, staging, and trans-shipping port.

Plans & Progress: In 2005 the City of Homer spent $550,000 for cathodic protection of the existing dock and conceptual design of an expanded dock. $2 million in federal transportation earmark funds were appropriated in FY2006 to prepare preliminary design and conduct further economic analysis. The Alaska Legislature appropriated an additional $1 million for FY2011. Homer City Council has authorized the sale of $2 million in bonds to help fund the construction of this project. The City started on project design and feasibility with R&M consulting to begin design and feasibility. To date, the team completed an extensive conditions survey of the existing infrastructure, bottom condition survey, soils core drilling, and a very detailed tide/current profile for the dock. The feasibility study helped identify the best option for expansion to improve freight and cargo handling capabilities. Some uplands improvements have been completed to benefit cargo movement and storage on land close to the deep water dock: paving outer dock truck bypass road, removing the old wooden fence around the concrete storage yard and replacing it with a chain link fence, stormwater runoff handling, lighting and security cameras.

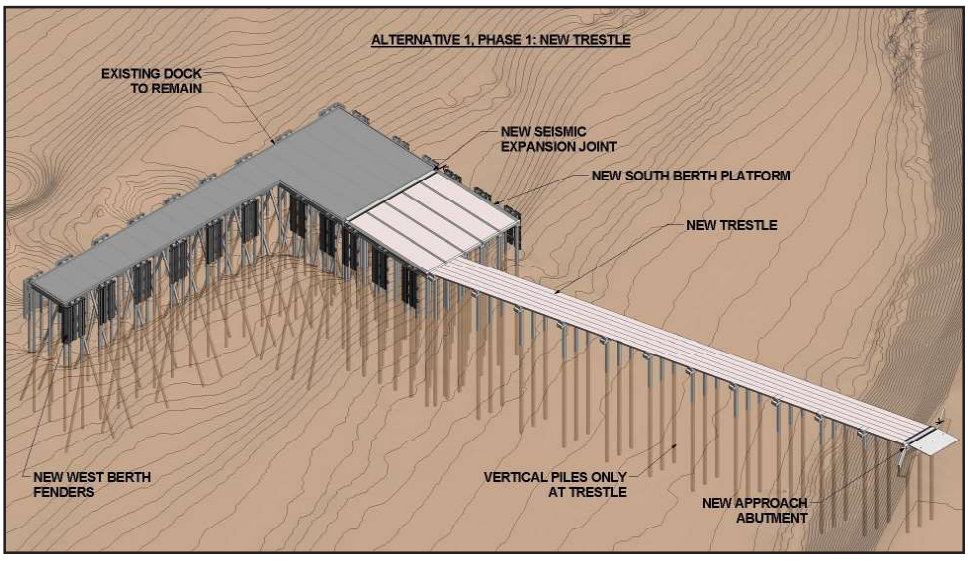
Total Project Cost: $35,000,000

Feasibility: $1,250,000
(Completed September 2016)

Design: $1,750,000

Construction: $32,000,000

Priority: 2



Deep Water Dock Expansion proposed design.

Harbor Ramp 8 Public Restroom

Project Description & Benefit: Ramp 8 serves System 5, the large vessel mooring system. Previously, restroom facilities for Ramp 8 consisted of an outhouse. This outdated restroom brought many complaints to the Harbormaster's office. Sanitary restroom facilities are expected in modern, competitive harbors along with potable water and adequate shore power. The Ramp 8 outhouse was removed in 2015. A new public restroom in this location is needed to serve the crew members of large vessels when they come to port.

Plans & Progress: Design costs for this project would be minimal as the City has standard public restroom plans engineered that can be easily modified for this location.

Total Project Cost: $400,000

Schedule: 2025

Priority Level: 3

Ramp 8 sees heavy use from crews of large vessels moored in System 5. Since this outhouse was removed in 2015, crews either use a porta potty provided by the Port & Harbor, or walk 1.5 blocks to use the nearest restroom facility.

~~Homer Harbor Cathodic Protection~~

This project received FY23 AK Municipal Harbor Grant funding and has been moved to the completed project list.

Project Description & Benefit: Homer Harbor's float system is comprised of 161,000 square feet of concrete and wood floats supported by over 500 steel pilings. Steel has a number of characteristics that make it desirable for structural use in harbors, including the ability to last almost indefinitely if properly protected from the destructive effect of electrolysis. Corrosion stemming from electrolysis, however, dramatically shortens the useful life of the pilings.

Most of the float system piling in Homer Harbor predates the 1999 ownership exchange from the State to the City of Homer. When originally installed, a hot-dipped galvanized coating protected the piling. This coating is typically effective between 15 and 20 years. Harbor pilings range in age from 34 to 26 years old. Over time, electrolysis has depleted this original protective coating to the point where it is no longer protecting the pilings. The potential readings obtained in a cathodic protection half-cell survey in 2018 were -0.60, a reading that indicates freely corroding steel according to National Association of Corrosion Engineers (NACE) Standards.

This project proposes to install a passive cathodic protection system to fully protect the saltwater and soil submerged harbor pilings from corrosion. The method selected provides zinc anodes attached externally to the pile as a "sacrificial" source of positively charged ions. The anode material oxidizes preferentially to the steel, greatly reducing or eliminating the rusting of the steel piles.

The long-term benefit is to extend the remaining safe and usable service life of the harbor float system, at least an additional 20 years and perhaps indefinitely, avoiding the high costs of limiting allowable loads on corroded load-bearing piles and eventually repairing or replacing structurally disabled piling.

Plans & Progress: The City began the process of installing cathodic protection in 2018. As part of that project, R&M Engineering designed a cathodic protection program for the entire harbor float system. The sacrificial anode system was selected as it has the advantage of being relatively simple to install, is suitable for localized protection, and less liable to cause interaction on neighboring structures.

Utilizing $200,000 in Port and Harbor reserve funds, the City contracted a firm to install zinc anodes on 139 of the 500 harbor piles. Test results from a post-construction cathodic protection survey verified that the system is providing adequate levels of cathodic protection to the piles as defined by the applicable NACE International Standards SP0176-2007.

A cost estimate to protect the remaining pilings was completed in 2021. Another $200,000 in reserve funds was requested in the FY21 budget as it is our goal to get this work done as quickly as possible to preserve the integrity of the foundation of the float system harbor-wide.

Total Project Cost: $1,080,800

Cathodic Protection 2018: $200,000
(139 pilings completed with City of Homer Port & Harbor Reserve funds)

Cathodic Protection 2021 $200,000
(protect remaining pilings)

Project funding needed: $680,000

Schedule: 2023

Priority Level: 1

Example of the damage electrolysis causes to harbor pilings. This broken piling in 2012 caused the R & S floats in the harbor to be condemned until it could be repaired.

Homer Harbor Security Cameras: Ramp 1-5 Access Points

Project Description and Benefit: This project will expand and enhance coverage capabilities of Homer Harbor's current security camera system. The Port and Harbor Advisory Commission and staff have a long term goal of installing cameras on the west side of the basin at the access points to Ramp 1 through Ramp 5. Expanding the current camera system allows harbor officers to keep a monitored eye on these heavily trafficked areas.

Over the years, security cameras have come to play an ever increasing role in assisting staff to monitor harbor and vessel security because of the advantages they provide. Cameras allow harbor officers to monitor situations while completing other tasks the field or while on the radio helping other customers. Quick review of a recorded incident will also help an officer verify vessel status while not having to actually dedicate time to watching and waiting on scene. Cameras also provided an element of safety by allowing responding officers to view a situation before arrival; they can also be used to assist in monitoring evacuations from the Spit in the case of a tsunami or other natural disaster without putting officers in harms way.

Plans & Progress: City Council approved a capital budget request of $20,000 for the design of the Ramp 1 through 5 camera system in the 2022/2023 budget. Once the design is completed, an accurate cost estimate will be available for installation and implementation of this important security systems upgrade.

Total Project Cost: $120,000 (estimated)
System Design: $20,000
Equipment Purchase and Installation: $100,000 (TBD after system design)

Schedule: 2022-2023

Priority Level: 1

Security cameras, pictured here, center, allow harbor officers to gain situational awareness before responding to an event, to verify details of recorded events and monitor progress of evacuations or check on inundation during tsunami events.

Ice Plant Upgrade (Project Update Pending)

Project Description & Benefit: The ice plant at the Fish Dock is a critical component of the overall Port and Harbor enterprise, providing more than 3,500 tons of flake ice each year to preserve the quality of more than 20 million pounds of salmon, halibut, sablefish, and pacific cod landed at the Port of Homer.

Although the Ice Plant has been maintained very well since being built in 1983, efficiencies may be gained by upgrading certain key components of the plant with current technologies, which may include replacing the refrigeration compressors, integrating natural gas into the process, and/or upgrading the control systems to increase the plant's efficiency and reduce operating costs.

Plans & Progress: This project is proceeding in a three-phase approach. Phase 1 consisted of contracting with Coffman Engineering from Anchorage to assess Homer's Ice Plant and provide a list of options for upgrading the facility to optimize energy savings, plant maintenance, equipment longevity and return on investment. The study also considered the possibility of creating a year-round cold storage refrigeration system as an upgrade to the original plan. Two recommendations from the study to optimize energy savings comprise Phase 2 and Phase 3 of the project: upgrading the evaporator fans and condensers with variable frequency drives.

Total Project Cost:

Phase 1: $40,000 (Design and engineering study)

Phase 2: ?? (Evaporator fan upgrades)

Phase 3: ?? (Condenser upgrades)

Schedule:
2019-2020: Phase 1 study completed
2021: Design and engineering for upgrades
2022: Phase 2

Priority: 1

Four of the Ice Plant's aging compressors are shown here.

Large Vessel Sling Lift, Phase 1

Staff recommend removing this project from the CIP as a large vessel lift will be considered in the design of the new Large Vessel Harbor Expansion project.

Project Description & Benefit: During the investigation conducted in 2014 by the Large Vessel Haulout Task Force, the Task Force quickly recognized a need to provide haulout services to all vessels that moor in the harbor. As a first step in filling this need, the Port & Harbor developed an airbag haul-out system on available tidelands within the harbor. This system has proved successful.

However, it works only for part of the fleet: large, flat-bottomed, shallow draft vessels. Much of the fleet in the harbor is not able to use this system because of the vessel's deep draft hull configuration.. A lift in a local commercial yard is being expanded to accommodate vessels up to 150 tons, which will accommodate most limit seiners and many of our larger boats. Homer will still lack haulout services for deep draft vessels larger that 150 tons.

A sling lift has been proposed as a possible haulout solution for vessels that are not currently being served in Homer. The lift, coupled with an on-site repair yard would provide these vessel owners the option to perform their annually required maintenance and repairs locally without having to travel, similar to how large shallow draft vessels currently utilize the airbag system. Haul outs ease the burden of travel for the vessel owners during the winter season and, as an added bonus, generate business to help sustain local marine trades.

Key to the success of the project is to select a location that has space for an on-site repair yard, and to select a sustainable owner-operator model. Possible locations are the old chip pad or in the new large vessel harbor; owner-operator scenarios include privately owned and operated with a lease to the Enterprise, a public private partnership, or alternatively, municipally owned and operated by the City using Enterprise employees.

Plans & Progress: Project development will have two phases. The first phase will be a comprehensive study about how to best build and operate this new service at the Port of Homer. It will consider location and include engineering and design options and a cost-benefit analysis. The study will also research options for operating this new service, providing an analysis of various ownership and operating models. It will also work on completing regulatory requirements such as a Stormwater Pollution Prevention Plan (SWPPP) with the Alaska Department of Environmental Conservation.

Phase 2 will be construction of the support infrastructure after considering the results of the phase one study and acquisition of the sling lift.

Total Project Cost: $65,000 (Phase 1)

Schedule: 2025

Priority Level: 3

An example of a sling lift and and adjacent repair yard area.

Old Main Dock Removal and Disposal

Project Description & Benefit: This project will remove the old Main Dock from inside the Pioneer Dock facility and dispose of or salvage all associated materials. The old Main Dock was the original ocean dock in Homer, built in 1965 at the time of the first dredging for the Homer Harbor. When the Main dock was no longer safe to be used as a commercial pier in 2001, the City built the new Pioneer Dock around it, leaving the Main Dock in place.

The Main Dock has become a safety hazard and potential liability for the City. It has deteriorated to the point that it is unsafe even for an individual to walk on.

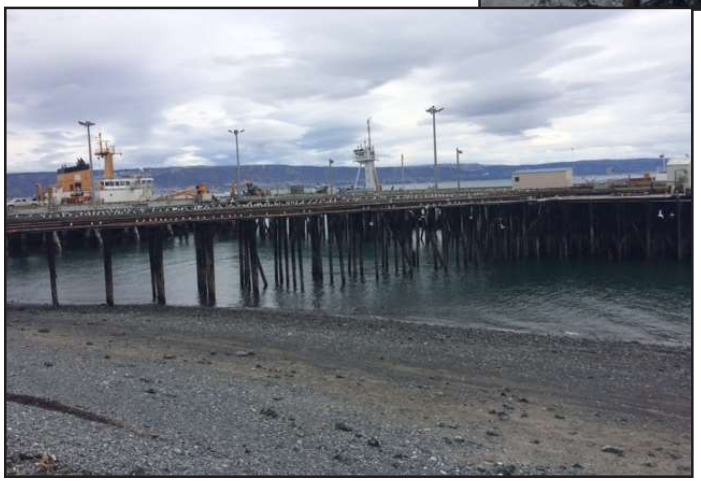
Plans & Progress: Identifying this project in the Capital Improvement Plan aids in the project's first step, which is to search and solicit sources of financial aid for the project. For instance, it is possible it would quality under a State or Federal initiative for waterfront renewal or rehabilitation. Removal of the Main Dock can be achieved using a variety of heavy equipment and disposal methods that satisfy safety, environmental and building requirements.

Total Project Cost: Unknown. Methods for removal presented by interested contractors at a later date will help hone the scope of work and cost requirements for this project.

Priority Level: 3

Schedule: 2025

Pending Port & Harbor approval, staff recommend removing this project until there's a plan for a trans-formative element and cost estimates.



The former Main Dock in Homer's Port & Harbor is over fifty years old, defunct and deteriorated to the point that it is a hazard and a liability.

Steel Grid Repair

Project Description and Benefit: The Steel Grid is a series of benches (steel beams) laid out on intertidal land that can support a boat for hull repairs during low tides. Vessels float over the grid at high tide and then set down on the grid as the tide recedes. Vessel owners are able to do minor repairs and inspections to their vessels hulls while "dry" on the grid and refloat with the incoming tide.

The Steel Grid is one of two tidal grids that the Port and Harbor operates. Because of our large tidal exchange in Kachemak Bay, Homer's tidal grids are likely one of the most useful vessel grid systems in the world. They utilize the tides to our advantage to provide an inexpensive way for vessel owners to maintain their vessels' hulls.

Homer's Steel Grid was originally built 42 years ago and accommodates vessels from 60 feet to 120 feet with a 200 ton limit. The grid was originally rated for vessels up to 400 tons but was downgraded to 200 ton max limit as it aged due to the condition of the supporting piles and benches. Maintenance and repairs of bents and fenders have kept this grid patched up and going for a good long while, but we're now at a point when we need a larger project replacement. More may be revealed after an engineering inspection during Phase 1, but as of now, staff believe that the piers and wooden fenders are still serviceable. It is anticipated that only the grid itself would need to be replaced.

Plans & Progress: This project would consist of two phases. The first phase is preliminary engineering and design to ascertain the scope and cost of the improvement, including what permitting is required. The second phase would be construction or repair.

Total Project Cost:

Phase 1: Engineering and Design: $25,000
Phase 2: Construction: (TBD after engineering and design phase.)

Schedule: 2024

Priority Level: 2

A marine vessel utilizing Homer Harbor's steel grid for repairs.

System 4
Vessel Mooring Float System

Project Update Pending -- condition report and updated cost estimates expected by August 22.

Project Description & Benefit: System 4 is made up mostly of floats that were relocated from the original harbor construction in 1964. In the 2002 Transfer of Responsibility Agreement (TORA) project, System 4 was completed by moving the old floats into place. Within two years it was filled to maximum capacity. System 4 floats are over 20 years beyond their engineered life expectancy and are showing their age. This project can be done in phases.

Plans & Progress: Phase 1 floats HH, JJ, and headwalk float AA between those floats were replaced in fall of 2014. Power and water was extended from ramp 7 to JJ and HH as part of the same project. A new landing float was installed for Ramp 7 in the spring of 2014.

Phase 2 replaces CC, DD, EE and GG floats and the remainder of AAA that wasn't upgraded in 2014. We also plan to extend AAA towards the LL ramp so that we can open up the fairways between the floats to give the vessels a little more room to navigate between the float systems.

Total Project Cost: $5,600,000

Schedule:

2022 Design: $600,000

2023-2026 Construction: $5,000,000

Priority Level: 3

System 4 floats to be replaced.

Detail of aging Float DD.

Wood Grid Repair

Project Description & Benefit: TThe Wood Grid is a series of benches (in this case wooden beams) laid out on intertidal land that can support a boat for hull repairs during low tides. Vessels float over the grid at high tide and then set down on the grid as the tide resides. Vessel owners are able to do minor repairs and inspections to their vessels hulls while "dry" on the grid and refloat with the incoming tide.

The Wood Grid is one of two tidal grids that the Port and Harbor operates. Because of our large tidal exchange in Kachemak Bay, Homer's tidal grids are likely one of the most useful vessel grid systems in the world. They utilize the tides to our advantage to provide an inexpensive way for vessel owners to maintain their vessels' hulls.

Homer's Wood Grid was originally built 50 years ago and accommodates vessels up to 59 feet with a 50-ton limit. Other than the walkway replacement that occurred in 2001, the wood grid has seen very little in terms of upgrades since.

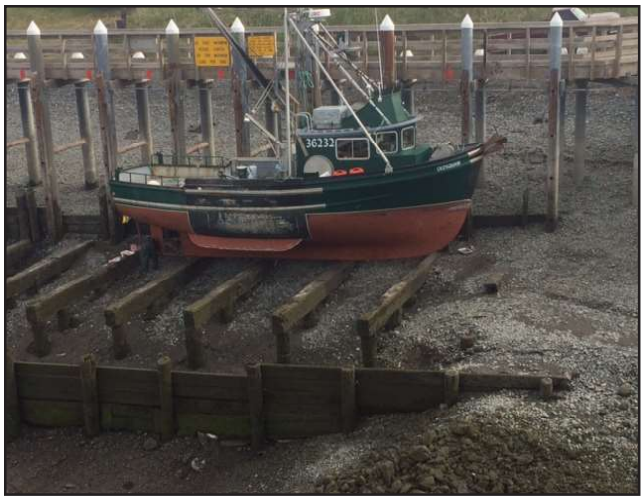
Three particular issues would likely be addressed in an upgrade. Gravel has migrated downhill and filled in between the benches, making it increasingly difficult for people to actually to get under the vessels on the grid to perform repairs. A second issue is with the Wood Grid's retaining walls. Due to age, the upper wall is no longer retaining infill from the bank above and the lower submerged wall has degraded to the point that staff are not able to repair it. Another concern is that the benches and the buried pile that support them have deteriorated to the point that staff is unable to repair them. At a minimum the piles and benches will need to be replaced.

Plans & Progress: This project would consist of two phases. The first phase is preliminary engineering and design to ascertain the scope and cost of the improvement, including what permitting is required. The second phase would be construction.

Total Project Cost:
Phase 1: Engineering and design: $25,000
Phase 2: Construction: to be determined in Phase 1.

Schedule: Phase I: 2022

Priority Level: 1



The Wood Grid in Homer's Port and Harbor was originally built 40 years ago and accommodates vessels up to 59 feet with a 50 ton limit. Other than replacing the walkway in 2001, the wood grid has seen very little in terms of upgrades since.

Public Safety

City of Homer Radio Communication System Upgrades

Project Update Pending -- will either be moved to completed, or updated to reflect PW comms needs and any new FCC/ALMR requirements.

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. It is now completely digital, can carry encrypted data in addition to voice communications and must comply with FCC bandwidth requirements.

Homer's communication system (consisting of the Public Safety Radio System, the Port and Harbor Radio System and the Public Works Radio system) needs upgrading to keep up with technological advances, comply with new FCC bandwidth requirements, maintain interoperability with all local, borough and state agencies utilizing the ALMR system and maintain software updates and other manufacturer product support.

The goal of this project is to upgrade the entire radio communication system to stay within FCC compliance.

Plans and Progress: Progress on this project has been incremental with assistance from Alaska State Homeland Security grant funds. To date, the main dispatch consoles, two City of Homer repeaters, two emergency backup dispatch radios, all Police, Fire and Port & Harbor radio units have been upgraded. Components still needing upgrades are listed under the Total Project Cost section below.

Total Project Cost: $850,362 - $950,362
($560,362 of total project cost has been funded through State Homeland Security and Emergency Management grant awards.)

Public safety repeater relocation on Homer Spit:	$ 35,271 (completed)
Dispatch consoles and associated equipment:	$ 296,000 (completed)
Public Safety repeater upgrade:	$ 63,430 (completed)
HPD Public Safety radios:	$ 165,661 (completed)
HVFD Public Safety handheld & mobile radios	$ 118,983 (completed)
Port & Harbor radios and repeater:	$ 171,174 (completed)
Public Works radios:	$ 100,000 - $120,000
Public Works data radio system:	$ 50,000 - $ 80,000

Schedule: 2019-2024

Priority: 1

City-wide radio system upgrades are needed to maintain full communication operability.

Fire Department Fleet Management

Project Description & Benefit: To meet the community's fire protection needs and Insurance Services Office (ISO) requirements, Homer requires two Tankers for off-hydrant operations, three front-line Fire Engines and one Reserve Fire Engine. National Fire Protection Agency codes recommend maintaining apparatus with the latest safety features and operating capabilities to maximize firefighting capabilities while minimizing the risk of injuries. Apparatus in first-line service should not be more than 15 years old; apparatus over 25-years old and properly maintained should be placed in reserve status.

Many of the apparatus and specialized vehicles in the Homer Volunteer Fire Department fleet are 15 years to over 30 years old and at the end of their functional life. Functional capabilities and safety features of fire apparatus has greatly improved in the last fifteen years, including fully enclosed cabs, modern seat belt configurations, improved roll-over stability and braking systems. Apparatus over 25 years old also become unreliable. Systems fail, putting both firefighters and the public at risk. Extending the life to 30 years may be marginally acceptable with the volume of HVFD runs, but anything beyond that poses an unacceptable level of risk. The Department has developed a strategic, cost saving approach to meeting Homer's fire protection needs with the following top-prioritized replacements:

Brush-1. Brush-1 is is HVFD's single front-line wildland firefighting apparatus. It is a 1990 Ford F-350 Crew Cab Pickup with a forestry firefighting slip-in unit and is 16 years past its useful life. The entire City of Homer is in the Wildland-Urban Interface (with the exception of most of the Spit) and at significant risk from wildfire. The City is also often called to provide mutual aid in wildland fires in neighboring Anchor Point and KESA districts. Brush-1 is overloaded when carrying a crew of four firefighters, a slip-on firefighting unit with 200 gallons of water and the required firefighting tools and hoses. It has none of the safety systems on current vehicles, including airbags for the front seat occupants. Replacing Brush-1 with a quick attack pumper truck will allow access to areas that will not support the weight or dimensions of larger fire tucks and can be used as a backup brush unit. $185,000

Engine-4, at over 30-yeas old has well exceeded its functional lifespan and lacks modern safety and capability features that cause concern for operational ability and the safety of our first responders and the public. $785,000

Ladder-1. Ladder-1. Adding an aerial truck to HVFD's fleet will greatly enhance the City of Homer's firefighting capability. Over time, as Homer's population has grown, so has the size and complexity of its buildings making fighting fire from the ground no longer safe or practical. Currently, HVFD is only able to provide elevated hose streams from ground ladders, which severely limits the application of water and endangers the lives of firefighters. Aerial apparatus allow for application of water to the interior of a building without placing firefighters in immediate danger. They also allow for the rescue of people trapped in upper stories or on rooftops by fire or other incidents that impede the use of interior stairways.

Plans and Progress: HVFD developed a fleet replacement plan that places apparatus on standard replacement cycles consistent with NFPA requirements and community needs. Replacing Brush-1 and Engine-4 are the highest priority.

Total Project Cost: $2,570,000
Quick Attack/Brush Truck: $185,000
Engine 4 Replacement: $785,000
Quint/Ladder Truck $1,600,000

Schedule: 2023-2025

Priority Level: 1

HVFD's Brush-1 is a converted 1990 Ford truck which is NFPA non-complaint and has aged out of its functional life by 16 years.

Fire Hall Expansion, Phase 1

Project Description & Benefit: In 2014, in response to aging and crowded conditions, the City assessed Homer's emergency services space needs. Initial plans to correct building and space inadequacies called for co-locating the Police and Fire stations within a new Public Safety facility. However, ultimately, the decision was made to build a stand-alone Police Station and defer expansion plans for the Fire Department.

In the interim, the City addressed much needed deferred maintenance at the Fire Hall, which included conversion to natural gas, improved air handling, fixing floor drainage issues in Bays 2 and 3, and general refurbishing of wall and floor finishes and kitchen cabinets, but nothing was done to address inadequate facility space.

The current fire station was built in the early 1980's. It has five bays to hold four fire trucks and two ambulances. The bays are double-stacked with barely with enough room for a person to move between the trucks, much less accommodate new, modern fire apparatus which are longer and wider than the vehicles the bays were designed for. Storage, training, parking and apron space are also very limited. Expansion is required to meet minimum space requirements for firefighting apparatus, provide an adequate number of offices and bunk rooms and sufficient storage, parking and drill training spaces.

This project resumes the planning/conceptual design process for an adequate fire station facility that meets the community's current need for well-prepared, safe, and timely emergency response. It (1) updates the needs assessment to reflect current departmental conditions and needs for a stand-alone Fire Station facility; (2) conducts site feasibility analysis, including the potential to incorporate the former Police Station property into a design at the current site, either through expansion or rebuilding; and (3) conceptual designs and cost estimates.

Plans & Progress: This project can progress in phases. Phase 1 is pre-development work.

Total Project Cost: $20,000,000

Design: $1,500,000

Construction: $18,500,000

Schedule: 2023

Priority Level: 1

Two examples illustrating the department's need for additional space: parking area in the equipment bay does not meet minimum space requirements for firefighting apparatus and insufficient storage capacity .

Public Works Projects

Ben Walters Lane Sidewalk Facility

Project Description and Benefit: This project will provide approximately 6,150 feet of ADA-compliant sidewalk, curb and gutter on Ben Walters Lane from Lake Street to East End Road. The need for a sidewalk on Ben Walters Lane was first articulated in Homer's 2004 Non-Motorized Transportation and Trail Plan and has been included in the 2021 update. This project also aligns with transportation goals articulated in the City's Comprehensive Plan.

Ben Walters Lane is a busy mixed-use collector street, collecting traffic from adjacent neighborhoods and connecting it to two of Homer's main thoroughfares: East End Road and Lake Street. Ben Walters Lane supports both residential and commercial traffic. For example, the street is home to many single family residences, some multi-family residences, two City parks, multiple businesses and health care facilities. Further, Ben Walters provides access to two schools located on East End Road and numerous businesses located on Lake Street.

Ben Walters traffic is not just leisure neighborhood traffic; motorists travel Ben Walters at times to bypass the East End Road and Lake Street intersection, hoping to move more quickly to the Sterling Highway, and on their way to and from work places located on Ben Walters Lane. Because Ben Walters Lane has no sidewalks, pedestrians travel along the side of the road, which is hazardous. The road is narrow and side drainage ditches are deep and often flowing with water.

A sidewalk facility will create a safe environment for pedestrians as well as young children biking to school and will fill a missing gap in connectivity between East Road and lower Lake Street sidewalks and connect to the East End Road bicycle and pedestrian path.

Plans & Progress: The overall project is conceived as one ADA accessible sidewalk located within the vehicular right of way on one side of Ben Walters Lane from East End Road to Lake Street. Some drainage work within the right-of-way would be required to properly direct storm water runoff to catchment basins and adjacent roadside ditches. An engineer's conceptual cost estimate for the project has been developed.

Total Project Cost: $1,773,436

Design & Survey: $ 73,436 (City of Homer FY22 Capital funding)

Schedule: 2023

Priority Level: 1

New Public Works Facility

Project Description & Benefit: The Public Works Department, located at the bottom of Heath Street, has outgrown its facilities. The current mechanic shops are too small to accommodate the city's large equipment and are out of space to house any new machinery. Due to lack of space the building maintenance shop was relocated to a derelict building offsite will soon need a new location. Additionally, Homer's new Tsunami Inundation Map shows the potential for a 30' high wave moving through the Public Works complex. Public Works and associated heavy equipment are critical infrastructure for response and recovery activities before, during and after a disaster.

To help evaluate the risks to Public Works of personal injury and property damage from a tsunami and recommend possible mitigation options, Homer City Council appointed a Public Works Campus Task Force in 2020. The Task Force confirmed risks to the public works campus and additionally identified that the facility is suffering from obsolescence due to growth and technological changes over time. After evaluating different mitigation strategies (including creating tsunami resistant seawalls or perimeter mounds and constructing tsunami resistant buildings in same location), the Task Force advised relocating the mission critical portions of the Public Works campus (administration, building maintenance, City fueling station, rolling stock, piping, culverts, mechanics shop, motor pool shop and other essential equipment and materials) to a new location to mitigate loss and damage during a tsunami event and to provide for long-term stainability.

Based on an needs assessment, the new facility would require a 4.6 acre site. Ideally, the site would be located within or close to the Central Business District, and compatible with adjacent land uses. The facility will be sized to provide for current and future administrative and customer support personnel; road, drainage, building, water, sewer, motor pool maintenance activities; and equipment/materials storage

The existing Public Works site could be converted into public summer use open space (adjacent to the animal shelter, Beluga Slough, and conservation land) and provide space for environmentally sensitive snow storage in the winter.

Plans & Progress: This project will most likely be completed in three phases consisting of concept design and property acquisition followed by full design and construction. The proposed time frame is to purchase property in 2023; design the facility in 2023-24; begin construction in 2025, with a new facility ready for occupancy in 2026. Availability of funding would change these time periods.

Total Project Cost: $12,027,750

Schedule:

2023: Property Acquisition	$1,150,000
2023-2024: Facility Design	$ 828,500
2025-26: Construction	$9,949,250

Priority Level: 1

City of Homer existing Public Works facility.

Raw Water Transmission Main Replacement

Project Description & Benefit: This project replaces the two 45-year old cast iron raw water transmission mains that transfer raw water from Bridge Creek Reservoir to the treatment plant. These aging cast iron transmission mains are susceptible to earthquake damage. Multiple repairs have already been made to these mains. The last two repairs made were in response to earthquake damage. Major damage to the raw water transmission mains would make it impossible to serve the town with treated drinking water for domestic use and would reduce the City's ability to provide adequate water pressure for fire protection. Both mains will be replaced with High Density Polyethylene (HDPE) pipe, which is extremely durable and is less susceptible to damage by earthquakes or other natural disasters.

One of water mains, at 8 inches, is under-sized to meet the maximum capacity of the Water Treatment Plant. The other main, a 10-inch line, is at capacity now. The Water Treatment Plant produces 2 million gallons a day. However, the capacity of the treatment can be increased to 2.9 million gallons a day to meet increased demand in the future. The 10-inch transmission main would not be able to provide the plant with enough water to serve the City's needs at this higher rate.

Plans & Progress: The plan is to replace both lines with larger 12-inch HDPE pipe. HDPE pipe is more resilient to damage by earthquakes or other natural disasters; larger pipes provide system redundancy and will be able to transport an adequate amount of raw water to the treatment plant for plant maximum daily flow both now and for future expansion of the treatment facility.

The City applied for a FEMA FY19 Hazard Mitigation Grant. The proposal ranked fifth out of 51 eligible projects by the State and was submitted to FEMA for review. In 2022, the City responded to FEMA's request for information and the project is likely to move forward to grant award by the end of 2022. In FY20 and FY21 Homer City Council approved a total of $247,585 for design of the raw water main transmission project

Total Project Cost: $2,179,445

Design: $ 235,385 (Completed with City of Homer FY20 & FY21 Capital funding)

Construction: $1,944,060

Schedule: 2023

Priority Level: 1

HDPE pipes do not rust, rot or corrode and are more resilient to earthquakes than the cast iron pipes currently in use.

Water Storage/Distribution Improvements, Phase 3

Project Description & Benefit: This project replaces aging water storage/distribution system components and makes other system improvements to increase water storage capabilities and drinking water quality, improve water system distribution and water transmission effectiveness and safeguard public health. A dependable water system ensures public safety and contributes to Homer's growth and economic vitality.

The project also builds drinking water resilience. The storage tank on the water supply system's west trunk will alleviate a drinking water storage deficiency. Current storage capacity gives Homer only a two-day supply of stored drinking water, making us vulnerable to critical water shortages. A 500-foot trunk line from the new tank will provide domestic water and firefighting capabilities to an unserved area in the city, and the pressure-reducing vault on this line will add system resiliency. The pressure-reducing vault will interconnect the two lines, allowing either trunk to distribute water to the other in the event one is damaged or out-of-service.

First identified during the formation of the 2006-2025 Homer Water & Sewer Master Plan, these critical infrastructure improvements have been designed and partially completed:

- Phase 1: was completed in 2016. 2,600 linear feet of 10" and 12" water distribution main was installed across Shellfish Avenue and a new pressure reducing vault (PRV) was constructed to provide water supply to a new tank site; 4,500 linear feet of 12" water main was extended on Kachemak Drive, both connecting isolated sections of town and eliminating dead end mains. The City removed an old redwood tank and purchased property on which the new tank will be constructed.
- Phase 2: consists of installing water transmission main in support of a future new water storage tank, rehabilitation of the existing A-Frame existing storage tank, and demolition of the A-Frame pressure reducing vault (PRV).
- Phase 3: consists of the construction of a new 0.75 million gallon water storage tank on the east side and a 0.25 million gallon tank on the west side to provide increased capacity for domestic use, fire flow and future micro hydro power generation, modifying/replacing three PRV stations and the installation of micro-hydro turbines that can efficiently produce power back onto the grid, reducing the City's electricity costs and creating green power.

Plans & Progress: : Project design was completed in 2014 utilizing $485,000 in Special Appropriation project grant funds from the Environmental Protection Agency and $399,214 (45%) in matching funds from the City. Phase 1 construction was completed in 2016 utilizing $1,980,254 in FY16 State of Alaska Municipal Matching Grant program funds, $848,680 City of Homer funds and benefitted property owner's assessments. Phase 2 construction work should be completed in 2024 using ADEC grant monies and water reserve funds using State of Alaska Municipal Matching Grant program funds and City of Homer water reserve account funds.

Phase 3 construction can be completed after phase 2 is finished and funding has been identified.

Total Project Cost: $10,438,214
2014 (Design, Completed): $884,214
2016 Phase 1 Construction(Funded, Completed):$1,980,000
2023-2024 Phase 2 Construction: $1,600,000
2024 Phase 3 Construction: $5,974,000

Priority Level: 1

State Projects

The City of Homer supports the following state projects which, if completed, will bring significant benefits to Homer residents.

Transportation projects within City limits:

Transportation projects outside City limits:

Baycrest Overlook Gateway Improvements Phase 3

Project Description & Benefit: When you drive to Homer on the Sterling Highway, it is hard to resist pulling over at the Baycrest Hill Overlook, even if you have been there before. The overlook (constructed in the 1990's by visionaries at Alaska Department of Transportation and Public Facilities during a Sterling Highway reconstruction project) has become the primary entrance to Homer. The first experience of that Baycrest view is cited by many residents as the primary reason for deciding to settle in Homer.

Baycrest Overlook is one of three gateways into Homer and is part of Homer's Gateway Project, which entailed enhancing visitor and resident experiences at the entrances to Homer.

This project requests that the State Department of Transportation complete Phase 3 of the Baycrest Overlook Interpretive Plan -- paving the parking lot near the Welcome to Homer sign and upgrading the restroom facility -- as part of the Sterling Highway Reconstruction project Anchor Point to Baycrest Hill.

The City of Homer's ADA Transition Plan identified immediate needs to bring the site into ADA compliance, making the site accommodating for all visitors. The Van Accessible parking space needs clear demarcation with new painted lines and a "Van Accessible" sign. Public restroom improvements include relocating the grab bars to meet all location requirements, specifically addressing objects below the grab bar, and marking the restroom for the visually impaired.

Plans & Progress: The Gateway Project began in 2009 when a collaborative effort (involving the City of Homer, Alaska State Parks, National Park Service, Kachemak Research Reserve and U.S. Fish and Wildlife Service) created a beautiful diorama in Homer's airport terminal highlighting the wealth of public and private lands available to everyone who comes to Kachemak Bay.

In 2013, the City and State of Alaska DOT continued the focus on Homer's gateway sites by collaboratively producing the Baycrest Overlook Interpretive Plan which outlines three phases for improving the overlook. Many of the goals of the first two phases have been achieved, including making the site more welcoming, orienting visitors to the natural landscape and community, helping encourage commerce and allowing travelers a comfortable place to linger, rest and enjoy the spectacular setting.

To address the immediate accessibility issues, the City of Homer Public Works Department will evaluate the options of scheduling repairs in house as time and budget allow, and preparing cost estimates and requesting funds for a contractor to correct accessibility barriers cited in the ADA Transition plan.

East Hill Road Bike Lane

Project Description and Benefit: This project would create a bike lane, in conjunction with an Alaska Department of Transportation project to repave East Hill Road.

The need for a non-motorized transportation element on East End Road was identified in the 2021 Updated to Homer's Non-Motorized Transportation and Trail Plan. This project also aligns with transportation goals articulated in the City's Comprehensive Plan.

East Hill Road is one of Homer's key arterials, connecting scores of residential properties to downtown Homer. There is currently no safe provision for non-motorized traffic; pedestrians and bicyclist must take their lives into their hands by riding on the road. The AK Department of Transportation is planning to repave East Hill Road. It should be feasible to add an adjacent bike path to this project.

Plans & Progress: The subject project is conceived as one lane for non-motorized traffic on one side of East Hill Road as far off the traveled way as the existing right of way allows. Some drainage work within the right-of-way would be required to properly direct storm water runoff to catchment basins and adjacent roadside ditches. An engineer's conceptual cost estimate of $2,000,000 for the project has been developed by the City of Homer.

Homer Intersection Improvements

Staff recommends removing this project and proposing new one after Transportation Planning..

Project Description & Benefit: This project implements recommendations of the 2005 Homer Intersections Planning Study commissioned by the Alaska Department of Transportation and Public Facilities. The study analyzed the needs of twelve intersections according to traffic forecasts, intersection safety records, pedestrian concerns and intersection options. The benefit of the improvements will be to enhance traffic safety and quality of driving and pedestrian experiences, particularly as the community continues to grow.

The study noted six Homer intersections needing traffic controls to 1)provide gaps for turning vehicles and 2) provide safer crossings for pedestrians on Homer's main thoroughfares where traffic volumes are increasing and worsening in the summer months. DOT/PF have improved some of the intersections ; the two remaining include Sterling Highway at Pioneer Avenue and Sterling Highway at Heath Street.

The intersection study also analyzed areas with poor or non-existent lane and crosswalk pavement markings, missing or inadequate crosswalk signage and heavy traffic volumes. City Council passed two resolutions formally requesting DOT&PF Include additional enhanced pedestrian safety measures in two area road improvement projects: Pioneer Avenue and Lake Street. Resolution 18-034 asked DOT&PF to install a pedestrian crosswalk across Lake Street at Grubstake when DOT&PF installs sidewalks and repaves Lake Street. Resolution 19-029 requests DOT&PF include crosswalks with lighting features across Pioneer Avenue at intersections in the Pioneer Avenue Pavement Preservation Project.

The City also expects the State of Alaska to adhere to 2010 ADA standards when constructing, altering or repaving streets and intersections, including mandated curb ramps or other sloped areas at intersection having curbs or other barriers to entry from a street level pedestrian walkway. Further, while not mandated, the City's ADA Committee endorses upgrading Homer's four traffic signals to audible pedestrian signals and evaluating potential additional traffic control/pedestrian crosswalk installation in areas where there are major pedestrian traffic generators or where multi-use trails crosses the roadway.

Plans & Progress: DOT/PF installed a four-way stop with flashing overhead beacon at the Pioneer Avenue and Main Street intersection in 2016. They installed a traffic signal at the Main Street and Sterling Highway intersection in 2019.

During the 2020 Pioneer Avenue Pavement Preservation Project, all curb ramps were updated to current ADA requirements, crosswalk markings that were agreed to between DOT&PF and the City (at Bartlett, Main, Svedlund, Kachemak, and Heath) were replaced with grooved-in thermoplastic; the crosswalk at Svedlund was relocated to make pedestrians more visible to drivers; the crosswalk at Main Street was relocated to align with the path on the south side; and portions of the existing pathway which had significant cracking, making them difficult for wheelchairs to use, were replaced.

DOT/PF completed design work for Lake Street Rehabilitation in 2020. While the design does not include a pedestrian crosswalk at Grubstake, it does include curb ramps, warning signs, and electric conduits for a potential crosswalk system in a future project.

Kachemak Drive Non-Motorized Pathway

Project Description & Benefit: This project constructs a separated non-motorized pathway along Kachemak Drive from East End Road to Ocean Drive. Kachemak Drive, a State-owned/operated road in the City of Homer, is a primary east-west transportation corridor. It is a 35-miles per hour, narrow, widning road with essentially no shoulders, only side-slopes and drainage ditches along most of its length.

It provides access to a state airport with general aviation businesses, light industrial businesses, private residents and it connects the Homer Spit to several marine storage and repair businesses, most notably Northern Enterprises, the largest industrial marine storage, repair and boat launch complex on the southern Kenai Peninsula. As a major truck route and communter route for residents in Kachemak City and other communities further out East End Road, traffic is often heavy, with over 1,500 vehicles daily. Kachemak Drive is also a tsunami evacuation route and is the only alternate route connecting Homer to East End Road should emergencies close the primary west to east Pioneer Avenue route.

Kachemak Drive is also heavily used by pedestirans and clyclists. Bicycle traffic has increased over the years due to the advent of wide-tire winter bicycles and Homer's increasing popularity as a bicycle-friendly town. Recreational and commuter bicyclists and pedestrians use Kachemak Drive to connect to non-motorized paths along the Homer Spit, Ocean Drive, and East End Road. However Kachemak Drive is inherently unsafe for non-motorized users due to narrow lane width, the lack of shoulders, traffic levels and design speed. Cyclists are forced to the left of the fog line. Motorists typically slow down behind bicyclists, wait until there is no oncoming traffic, then pass by crossing the center line. This condition is dangerous to motorists and cyclists, especially on curves and the hill leading up from the base of the Spit to the airport, where visibility is low -- creating the perfect storm for conflict between motorized and non-motorized users at best, and injury or fatalities at worst.

The benefit of constructing a two-lane, unpaved separated path that runs parallel to Kachemak Drive is two-fold. Foremost, it will significantly improve safety for non-motorized users, provide greater accessibility and pedestrian path connectivity, as well as a higher quality of life for residents and visitors alike. The project, if coupled with the Green Infrastructure Erosion Mitigation project will aid in road longevity by mitigating significant frost heaving caused by ground water.

Plans & Progress: The City has long identified this route as a high priority safety issue. In 2012, the City invested $20,000 to develop a conceptual design for the first half-mile of a Kachemak Drive Path, from the intersection of Kachemak Drive and Ocean Drive to a parking area at the crest of a hill on Kachemak Drive. This work resulted in a recommended trail cross-section for an 8-foot wide path to be built on the south side of Kachemak Drive.

When Alaska DOT/PF began scoping a "1R" road project for Kachemak Drive, Homer City Council passed Resolution 21-065 requesting that DOT include accommodations for non-motorized users in the 1R project plan and evauate a future project to create safe and sustainale pedestrian amenities along Kachemak Drive. The AK DOT/PF Preconstruction Manual states, "Expect bicycle traffic along most roads and streets. Where bicyclists are allowed, all new construction and reconstruction must provide for use by bicyclists and pedestrians."

The City proposes to partner with the State to accomplish this goal.

Estimated Project Cost: $2,000,000

Bicyclists riding in the right-of-way after turning onto Kachemak Drive from the Homer Spit bicycle path..

Main Street Sidewalk Facility: Pioneer Avenue South to Ohlson Lane-

Project Description & Benefit: This project will provide curb and gutter, sidewalks and storm drainage for the state-owned portion of Main Street from Pioneer Avenue south to Ohlson Lane.

Homer's Main Street is a primary north-south corridor running from Bayview Avenue (near the hospital) to Ohlson Lane (near Bishop's Beach). As such, it is a busy mixed-use collector street, collecting traffic from adjacent neighborhoods and connecting it to Homer's main thoroughfare – the Sterling Highway, which is part of the state's highway system. It also supports residential traffic as the street is home to many single family residences, some multi-family residences, and leads to trails systems and one of the City's most popular parks.

Despite its proximity to the hospital, businesses and residential neighborhoods, Main Street has no sidewalks, making pedestrian travel unpleasant and hazardous. Sidewalks on this busy street will enhance the quality of life for residents and visitors alike and provide economic benefits to local businesses and the community as a whole.

Plans & Progress: Main Street is city-owned from Pioneer Avenue northward, and a State street from Pioneer Avenue south. The Homer Non-Motorized Transportation and Trail Plan, adopted by the City Council in 2004, calls for construction of sidewalks on both sides of Main Street to provide a safe means for pedestrians to travel between Old Town and Pioneer Avenue, and stresses that this should be regarded as a "near term improvement" to be accomplished in the next two years. Further, City Council passed Resolution 06-70 in June 2006 requestiong DOT & PF upgrade Main Street with a sidewalk facility.

In 2022, the City of Homer completed a $1.1M project to install sidewalks on the city-owned portion of Main Street, from Pioneer Avenue North. Over the last severl years, State of Alaska DOT & PF obtained $2.8 million to make safety improvements to Main Street Intersections. In 2016, they installed a four-way stop and flashing overhead beacon at the Pioneer and Main Street intersection. They then installed a traffic signal at the Sterling Highway and Main Street intersection. However, this work did not address pedestrian safety improvements on Main Street itself.

The City strongly supports development of a cotinuous pedestrian facility along the whole of Main Street, leveraging it's funding to help secure State funding for the construction of an ADA accessible sidewalk located within the vehicular right-of-way on the west side of Main Street from Pioneer Avnue to its southern terminus. Some drainage work within the right-of-way would be required to properly direct storm water runoff to catchment basins and adjacent roadside ditches.

The City has already commissioned the design and survey of the corridor and is seeking to partner with AK DOT&PF forconstruction funding.

Estimated Project Cost:
$500,000

Cost includes a WAG of $100,000 for strom drain improvements.

A mother pushes a stroller along Main Street between the Sterling Highway and Bunnell Street, while another pedestrian walks on the other side of the road.

Sterling Highway Milepost 172 Drainage Improvements

Staff recommends removing this project from the CIP. Addressed in Slope Stability Program in Legislative Priorities section.

Project Description & Benefit: The Baycrest Subdivision neighborhood (downslope from a beehive collector installed at milepost 172 on the Sterling Highway by the Alaska Department of Transportation (ADOT)) is built on sloping terrain of unconsolidated soils containing blue clay with a high water table and incidental springs. Properties in this subdivision experience unusually high levels of flooding, runoff and erosion.

Some Judy Rebecca Court properties in this neighborhood in particular have suffered damage due to water saturation including cracked windows and shifting foundations. The property damage is related to the amount of water in the soil and every effort needs to be extended to control the amount of water introduced into the soil, including water runoff from the Sterling Highway. These homes are located 750 linear feet distant and 125 feet vertical downslope from the beehive collector outfall. While certainly not all the problematic water is coming from the outfall, attention to drainage in the area is important to reduce the potential for slope failure and possible loss of property and life.

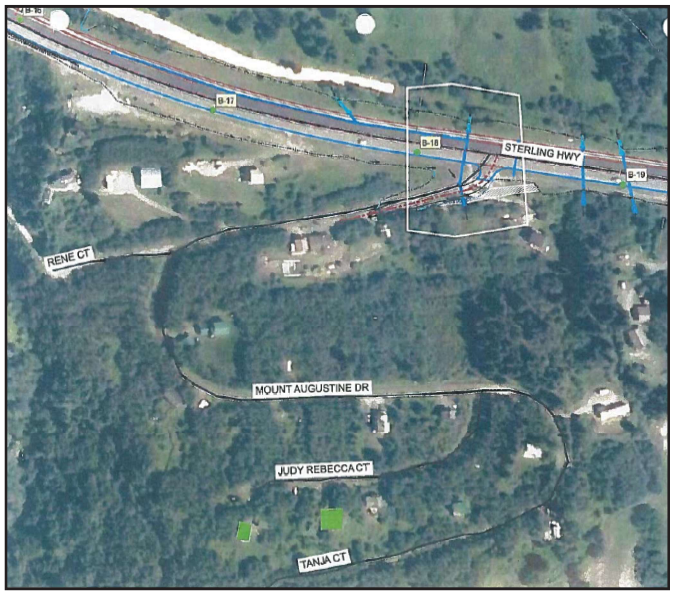
Water flow volume measurements from the beehive collector over time indicate that the outfall is directing a concentrated discharge of water onto the Baycrest neighborhood slope, adding to an already precarious water saturated soil condition. The City of Homer requests that ADOT divert the beehive collector outfall off the slope and into a natural drainage similar to the one that exists below the next Sterling Highway concrete encased cross-drain some 80 paces east of the Mt. Augustine Drive intersection with the Sterling Highway.

Keeping water off this slope where possible helps mitigate the potential for catastrophic slope failure; discharging the beehive collector outfall into a naturally occurring drainage mitigates the potential for impacting other area properties with the additional runoff.

Plans & Progress: At the request of affected home owners and Homer City Council members, a local retired geologist studied and provided mitigation recommendations to the City of Homer and ADOT. Additionally, Newton Bingham, a PE with ADOT evaluated the situation in November of 2017. In recognition of the potential hazard to property and life, Homer City Council passed Resolution 17-082 in September 2017 directing the Homer Advisory Planning Commission to consider a Natural Hazards Overlay District or other appropriate zoning regulation on and around Baycrest Subdivision. In line with an Alaska Administrative Order 175 under Order item 1 which states, "To the maximum extent possible consistent with existing law, all state agencies with construction ...shall encourage a broad and united effort to lessen the risk of flood and erosion losses in connection with State lands and installations and state-financed or supported improvements...", City Council passed Resolution 18-008 in January 2018 requesting ADOT fix Sterling Highway drainage effecting the Baycrest Subdivision.

In February 2018, a group from Homer met with ADOT Deputy Commissioner Amanda Holland and telephonically with Central Region Director Dave Kemp about Homer's request.

A February 2019 letter from ADOT refutes that the highway and culvert are altering the drainage pattern as the highway and culvert predates development of the Baycrest Subdivision by twenty years. The letter also states that no engineering analysis would suggest that moving the culvert to a new location would improve conditions in the subdivision. On the contrary, it would (rightly) result in claims that ADOT is altering drainage patterns and then would be held responsible for any and all erosion in the area downhill.



Aerial photo of the area downslope of the outfall from a Sterling Highway beehive collector.

West Hill Road Bike Lane

Project Description and Benefit: This project creates a bike lane on West Hill Road.

West Hill Road is one of Homer's key arterials, connecting scores of residential properties to downtown Homer. There is currently no safe provision for non-motorized traffic; pedestrians and bicyclist must take their lives into their hands by riding on the road. Traffic on West Hill Road is growing as several new residential subdivisions are being developed, compounding the risks.

The subject project is conceived as one lane for non-motorized traffic on both sides of West Hill Road as far off the traveled way as the existing right of way allows. Some drainage work within the right-of-way would be required to properly direct storm water runoff to catchment basins and adjacent roadside ditches.

Plans & Progress: The need for a non-motorized transportation element on West Hill Road was identified in the 2021 Update to Homer's Non-Motorized Transportation and Trail Plan. This project also aligns with transportation goals articulated in the City's Comprehensive Plan. An engineer's conceptual cost estimate of $2,300,000 for the project has been developed by the City of Homer.

Sterling Highway Reconstruction Anchor Point to Baycrest Hill

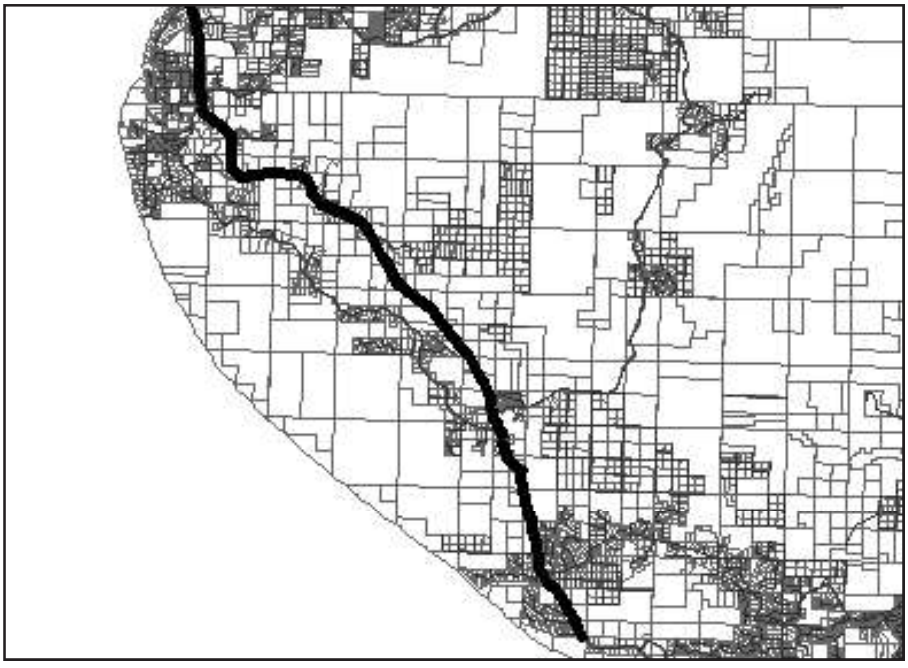
Staff recommends removing this project from the CIP. Project in STIP and planned for implementation..

Project Description & Benefit: This project will reconstruct 12 miles of the Sterling Highway between Anchor Point (MP 157) and the top of Baycrest Hill in Homer (MP 169) to address severe safety issues resulting from curves, hills and blind spots on the existing road. The project has been identified as a high priority of the Kenai Peninsula Borough.

Many major side road intersections, gravel hauling operations, and school bus stops contribute to dangerous conditions on the 12-mile section of highway, which has been the scene of several serious accidents, many with fatalities, over the past several years. Continued population growth has led to more subdivisions with intersecting roads and more traffic on the highway, exacerbating the problem. School buses must stop in some locations with blind corners and hills.

According to the 2018-2021 Statewide Transportation Improvement Plan, the project will provide passing lanes, widening and realignment a to address safety and passing opportunities, and pavement resurfacing between Anchor Point and the top of Homer Hill. The South Fork Anchor River Bridge (deemed structurally deficient by DOT&PF) will be replaced and a new bridge is proposed to replace culverts that currently carry the North Fork Anchor River under the Sterling Highway.

Plans & Progress: $2.5 million dollars was included in the FY2013 capital budget for design and right of way phases of this project. Preliminary engineering and environmental assessment services began in the summer of 2014. $1.7 million dollars was in the FY19 budget for Right of Way funding. DOT&PF's Statewide Transportation Improvement Plan indicates the project may go to construction phase in 2023. $80.8 is currently budgeted..



Location of DOT&PF's Sterling Highway Reconstruction Project.

Projects Submitted by Other Organizations

The City of Homer supports the following projects for which local non-profit organizations are seeking funding and recognizes them as being of significant value to the Homer community:

Beluga Slough Trail Extension

Project Description and Benefit: The goal of this project is to extend the existing Beluga Slough Trail around the northern perimeter of Beluga Slough to expand recreational and educational opportunities for the Homer community and its visitors. Beluga Slough is a unique environment which has been the focus of environmental education activities for decades. Naturalists from federal, state and non-governmental agencies bring local families and visitors to the existing trail to share the rich natural history of the slough's vegetation, wildlife and invertebrates. The 0.5 mile extension provides greater viewing opportunities for shorebirds, salt marsh habitats and intertidal flats. The extension would create a quiet, non-motorized trail away from the Sterling Highway with connections to Bishop's Beach, Homer's Old Town District and Ben Walters Park.

Plans and Progress: This trail concept is included in the 2004 Homer Non-Motorized Transportation and Trail Plan. A community-based project team has formed to honor Carmen Field, who taught so many about Beluga Slough through her work at the Kachemak Bay National Estuarine Research Reserve and Alaska Department of Fish and Game. This trail extension would allow Carmen's memory and her love for bringing people out into the natural world to live on.

The proposed trail (see map below) would be on City of Homer property. Owners of the new Aspen Suites Hotel, which opened in May 2019, anticipate re-platting their private parcel and donating the lower portion to the city (indicated by yellow star). Planning for the project and discussions with the private landowner is under way. Construction of Phase 1 is anticipated to start in fall of 2021.

Project proponents have discussed potential project sponsorship and/or trail coalition membership with The Homer Foundation and other area organizations. Discussions with City of Homer Park, Arts, Recreation & Culture Advisory Commission and City staff, yielded the following issues that will need to be addressed and budgeted for as the project moves forward:

- security vulnerability of the Public Works complex and sewer treatment facility;
- places recreational feature in floodplain, which is inconsistent with AK Department of Transportation & Public Facilities emergency response plan in the event of potential Beluga Slough Dam failure;
- mitigation of illegal use of lands newly accessed by the trail and the added security measures (landscaping/patrol time) it requires to insure public safety; and
- environmental permitting /land use authorizations.

Total Project Cost: The project will be accomplished in three phases with significant community-based labor and supplies anticipated.

Phase 1: negotiation with private land owner for donation or easement, project design work, and construction of 375 feet of the western-most part of the trail (backcountry – recreational trail design): $25,000 - 75,000

Phase 2: construction of 1,200 feet of the eastern part of the trail (backcountry - recreational trail design): $150,000 - 250,000

Phase 3: construction of 1,000 feet of the middle and wettest section requiring a semi-improved trail design: $300,000 - 450,000

Proposed extension of the Beluga Slough Trail indicated by white dashed line.

Homer Hockey Association
Kevin Bell Ice Arena Acquisition

Project Description & Benefit: The Kevin Bell Arena was constructed in 2005, with initial funding from grants associated with the 2006 Arctic Winter Games combined with a loan from English Bay Corporation /Homer Spit Properties. Homer Hockey Association (HHA) has successfully operated the Arena since its opening. HHA has met operating and capital acquisition costs within a yearly budget of $300,000 to $350,000. HHA is seeking financial support to retire the remaining debt of $2,087,000 million dollars from purchasing the Arena.

HHA's mission is to cultivate on-ice recreation of all kinds, for all ages, on the Lower Kenai Peninsula. HHA has been accomplishing this mission for more than a decade as one of the few non-profit, volunteer run ice rinks in the United States. Volunteers contribute an estimated 14,000 hours annually, representing a huge commitment of time and effort by our community. Over the years, programs have been expanded to include activities for all: figure skating, hockey at all age and skill levels, broomball, curling and numerous community and school open skate events. The public and open skate events bring up to 1000 additional users during the busiest months. These efforts earned HHA the 2012 Alaska Recreation and Parks Association Outstanding Organization award and more recent recognition from the USA Hockey Association.

The Kevin Bell Arena hosts numerous games, tournaments and events that bring commerce to the City of Homer. This is especially important during the winter when tourism and occupancy rates are low. HHA hosts several separate youth and adult hockey tournaments totaling approximately 150 games each year. In 2015-2016 these games brought over 1,160 out of town players to Homer, accompanied by family and fans that contributed an estimated $646,187 to the local economy through lodging, transportation, dining and merchandise purchases. KBA has hosted several consecutive youth State Hockey Championship Tournaments which are widely attended by families from all over the State. KBA is home ice for the Mariner-High School Co-Op Team with includes players from all of the secondary schools on the southern Kenai Peninsula.

Plans and Progress: HHA has an active and committed Board of Directors and membership. The volunteer hours are leveraged by several successful fundraisers, sponsor and advertising campaigns, grant awards and donations each year. This covers approximately one third of the annual operating and capital expenses. The remaining expenses are covered by user fees.

The purchase of the building would provide HHA the opportunity to open more programs and expand existing programs to include more of the community. The high user fees are a barrier for many families but necessary just to meet annual expenses. The building purchase would allow HHA to adequately fund and plan for the replacement of the major mechanical components of the ice arena and allow for major building maintenance. It could allow for heating and additional seating to accommodate the spectators. Major projects that could increase revenue such as permanent year-round flooring could become feasible. The building purchase would allow this important community resource to grow and prosper into the future.

Total Project Cost: $1, 954,300

Christmas Eve public skate at Kevin Bell Arena is well attended.

Homer Senior Citizens Inc. Alzheimer's Unit

Project Description & Benefit: Seniors are the fastest growing population for the State of Alaska. Homer is projected as the second city in the State which will see the most significant growth in this demographic. Homer Senior Citizens operates a 40-bed assisted living facility. We have sent four seniors from our community due to Alzheimer's disease in the past four years. Losing one senior a year is unacceptable as it tears away the fabric of our community. Most of our seniors have families remaining in the Homer community.

To maintain the health of a senior, a full continuum of care is required. Maintaining physical, mental, and social capacity supports the dignity of our most vulnerable adults. HSC Alzheimer's Unit has been a strategic priority for the Board of Directors to keep our seniors' home in the community. We will not need a certificate of need for this project.

The Alzheimer's Unit will include fifteen beds and 24/7 care. Additionally, we will include a memory care program to maintain the existing cognitive capacity. Specific features for therapy pool and activities room which will be open to all seniors 55 and older. The activities room will be stage 2 of the project and will incorporate low-impact exercise equipment to maintain senior's physical capacity. This also opens the possibility to contract with South Peninsula Hospital for use of the therapy pool for other age groups benefiting the entire population of Homer.

We will be holding many fundraising events to secure the match for foundation grants. We have identified three foundations which funds for this type of project are acceptable. One of the priorities for scoring of the grants is Capital Improvement Plan designation.

Operating funds will be secured from "fees for service;" room and board; billing for Physical Therapy in both the therapy pool and the exercise program in the activities room (once stage 2 has been completed); and fees for contracted space for equipment and pool.

Plans & Progress: HSC has met with Hydro Worx to incorporate the Therapy Pool with the Alzheimer's Unit. Projected 5-year profit will be approximately $1,508,600. This does not include contractual arrangements with third party vendors.

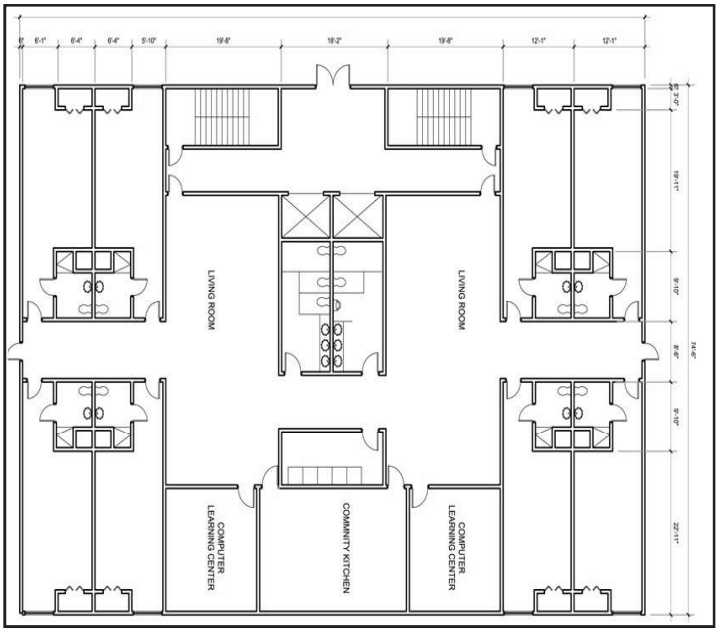
We have been activity fundraising for the Unit for the past five years. Fundraising activities include our Annual Alzheimer's Fundraiser at the Second Star Mansion with a live concert by a Chicago Jazz Band led by Tim Fitzgerald. To date we have accumulated total of $99,550 in fundraising for this valuable project.

Due to COVID-19, we postponed plans with our architect to design the facility. We will begin discussions with the architect again this fall.

Total Project Cost: $3,000,000

Funding Received as of date: $99,950

Example of a HydroWorx Therapy Pool Room .



Kachemak Shellfish Mariculture Association
Kachemak Shellfish Hatchery

Project Description and Benefit: Since 1994 Kachemak Mariculture Association (KSMA), a 501c5 organization, has steadfastly upheld its primary mission of assisting shellfish growers in Kachemak Bay to establish an economically sustainable oyster industry. Today through its close partnership with the Kachemak Shellfish Growers' Coop (KSGC), eleven aquatic farms are providing jobs for processing, marketing, and shipping half-shell oysters. For the last eight years the processing facility on the Spit is also culturing, marketing, and shipping oyster seed to the eleven member farms and to farms outside of Kachemak Bay.

KSGC farms have been recently impacted by oyster seed shortages affecting the entire Pacific Coast. The farmers wrestled with the financial realities of unpredictable seed shortages. KSMA farmers decided to be in charge of their own seed production. Therefore the farmers decided to build a small experimental seed hatchery / setting facility at the KSMA building to address the seed needs of the growers. This experimental hatchery has consistently set millions of spat seed every year thanks due to the nutrient rich waters, dedication of two KSMA employees, and the growers volunteerism. The local nursery has been undermanned and underfunded, but the resulting seed has proven to out perform all other seed—it grows faster and mortality rates are significantly better that all previous seed grown outside of Alaska. However, this past year, severe tides and storms have hastened the degeneration of a critical piece of nursery equipment.

The piece of equipment is called a FLUPSY — a FLoating UPwelling System. Microscopic spat cannot go directly from the hatchery to the farm sites. The spat must spend six months to a year in appropriately graded bins, at great labor expense of cleaning and grading, in salt water that is constantly being moved by an electrically-driven paddle wheel. At 18 years old, the FLUPSY lacks AK DEC compliant floatation, and is showing the wear-and-tear of the harsh maritime climate coupled with winter storm damage. The present FLUPSY is also unsecured making it a vandalism target. The project includes new safety equipment and covered, lockable dry storage for tools and laborer's needs.

The economic benefits of this oyster industry in Homer are great. Oysters have become a sparkling year-round addition to Homer's seafood options for locals and tourists alike. Every cooler of oysters delivered to the dock represents approximately $150 to the grower. By the time the end user receives those oysters, the economic ripple effect becomes approximately $725. Excess seed is sold to other growers in and out of state helping to fulfil an economic development priority in Alaska's Comprehensive Economic Development Strategy.

Our local hatchery and a new, safe state-of-the-art FLUPSY can also provide a viable educational lab for high school and university students, who currently have to travel to Seward for mariculture studies. Mariculture courses could easily be developed around aquatic farming opportunities including the raising of sea vegetables and kelp.

Plans and Progress: The new FLUPSY is being developed in two phases. The design phase is complete. With the help of the Kenai Peninsula Economic Development District, KSMA continues to pursue grant funds to assist with the construction phase. Should funds be secured from other sources, KSMA will be seeking grant matching funds.

Total Project Cost: $247,500

Left: Oyster spat ready to sell to growers. Right: FLUPSY bins taken out of the water. Spat in the right bin have been cleaned,sorted, graded and counted.

Kachemak Ski Club:
Homer Rope Tow Access & Equipment Upgrades

Project DescripCon & Benefit: The Kachemak Ski Club was founded more than sixty years ago to operate a rope tow just off Ohlson Mountain Road near Homer. Our founders wanted to get Homer kids out of the house on the weekends and it is no different today. Over the years, this historic public recreational treasure has hosted thousands of downhill sports enthusiasts, family and social gatherings and also has served as a venue for snow sports safety instruction.

This project improves the skier access to and experience on the slopes, making it more welcoming for youngsters and newcomers. It relocates and refurbishes the hill's aging electric bullwheel at the top of the slopes and grades the upper towpath to lower the rope's haul angle to diminsh the physical strain on skiers riding to the top of the hill. It also allows purchase of a portable rope tow device that can be positioned on the lower, more gently sloping part of the hill to increase the number of skiers who can be accommodated on busy days and improve access and skill development for new riders. It will also be used for snowsport instructional classes and special events, leaving the main rop tow open for other riders.

To augment natural features and offer entertaining challenges for more advanced skiers and snowboarders the project seeks to acquire terrain park features.

Plans and Progress: The Homer Rope Tow recreation area is separated from Ohlson Mountain Road by private land, but has legal access via a Section Line easement. A circuitous quarter mile long trail connects the road to the hill, avoiding several structures that encroach into the easement. To make access safer, Kachemak Ski Club is developing a shared parking area with Homer's Snowmade snow machine organization, directly across Ohlson Mountain Road from the Section Line entrance point. This new parking area will minimize the safety risks of double parking on Ohlson Mountain Road and dispersed pedestrian traffic in the roadway that now occurs during crowded weekends. While alternative grant funds will be pursued to fund the majority of the parking areas construction, it is anticipated that additional funds will be needed to complete the project: new signage and security features such as fencing and gates.

Total Project Cost: $90,000

Relocation of Bull Wheel & Slope Grading: $40,000

Equipment (auxiliary rope tow & terrain park features): $35,000

Parking/access improvements: $15,000

Youth enjoying Homer's own downhill ski area.

SPBHS recommends removing this project from the CIP due to shiftig budget priorities..

SPBHS: The Annex Upgrade

Project Description & Benefit: South Peninsula Behavioral Health Services provides services at multiple sites throughout Homer. Our customers include children, adults and families that may be struggling with mental illness, development disabilities, substance use disease, or combinations of all three. One of our older facilities, 948 Hillfair Court, also known as The Annex, houses several of our important programs serving over 140 individual customers annually. Programs include:

- ***Journeys*** - day treatment and adult rehab.
- ***Souply*** - our vocational training soup delivery program.
- ***Individual Placement and Support (IPS)*** - our vocational training program that partners with local business to provide vocational experience for those struggling with a variety of issues including treatment and case management support for our customers in need.

The building is old and annual repairs to plumbing, painting, the Souply kitchen, and the treatment rooms often exceeds our maintenance budget for our entire agency. We are in the initial planning stages of rebuilding and redeveloping this property to better accommodate the needs of our clients, our staff and the community. The updated building will include a revitalized commercial kitchen; treatment rooms that are private and secured; group and community rooms that are designed to meet the needs of our population; updated electric, plumbing and network services; and expanded services to meet the health needs of the community.

Plans and Progress: SPBHS has completed phase one of the project with a $50,000 dollar grant to improve the foundation and addressstructural issues. This also included clearing space next to the building and addressing drainage issues created by neighboring properties. SPBHS also received a grant to assist in upgrading the Souply kitchen equipment.

The SPBHS Board of directors Facilities Committee and the Client Council have been reviewing possible next steps for updating/expanding the building. This has included developing plans to remodel the current footprint while expanding internal square footage to better meet the needs of the program. It has also included proposals to build an additional building immediately adjacent to meet the needs of the clients and the community.

Upon finalizing the next steps the agency will begin moving forward with a three-year project to remodel The Annex. This will include fundraising from foundations and other charitable organizations, determining the full scope of services to implement in the new building, and developing a three-year work plan. SPBHS has included in its budget for the coming year an effort to end the year with a $250,000 surplus earmarked for the project.

In March of 2020, all agency-wide facilities updates were put on hold. During the past year as agency, client, and community changes have informed the way we do business, we are reviewing how those changes (telecommuting, telemedicine, etc.) impact our services. To this end, we anticipate that the updating of our Hillfair property will continue, albeit with different end goals that have not been detailed at this point. During the summer of 2021, the SPBHS is undertaking a new strategic planning session. This will inform the direction of the renovations/updates/improvements to the Hillfair Property.

Total Project Cost: $500,000-$750,000.

Annual maintenance to the Annex, an older, former residential building that houses several SPBHS programs, often exceeds SPBHS' entire agency maintenance budget.

The Annex's group treatment space needs remodeling to make the space more private and separate from a public entrance, public bathroom and stairway to offices.

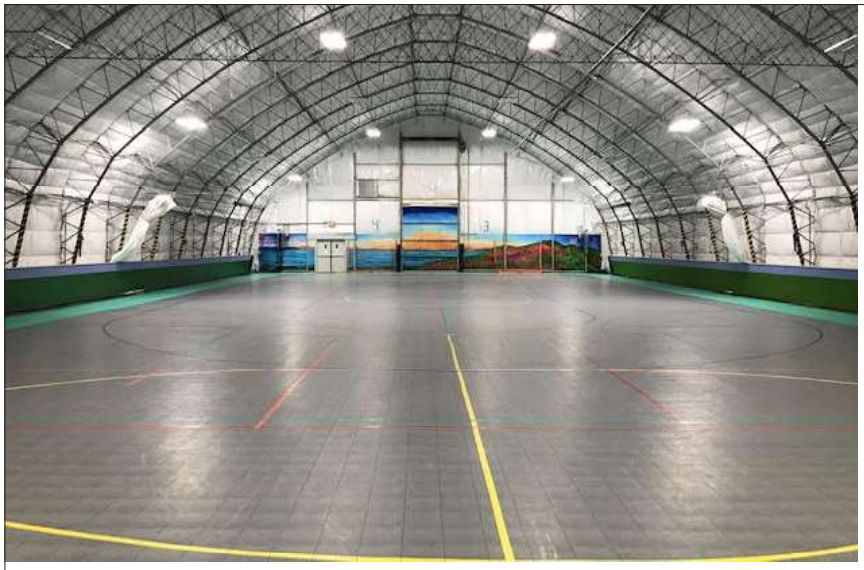
SPARC: Flooring Replacement

Project Description and Benefit: South Peninsula Athletic and Recreational Committee owns and manages the SPARC building on land abutting the Homer Middle School campus, leased for $1/year from the Kenai Peninsula Borough, per a 20 year lease. This facility is a non-governmental recreational facility available for community use on a daily basis. A wide variety of activities occur there including pickleball, walking, soccer, roller-skating, and basketball. It also hosts large community events such as performances, celebrations of life, youth dances, and even a recent car/motorcycle show with food trucks and a vendor fair.

The SPARC flooring is plastic sport court tile over compacted NFS select fill, but there is a need for an improved floor to better accommodate the wide variety of activities in the building and allow for more regular and thorough cleaning. The long-term plan has always been to replace the inexpensive first floor, which was already well used when installed in 2017. The first step in replacing the floor will be the installation of a concrete slab to support whatever new flooring is selected. Currently the building has a layer of sand below the floor. The sand will be utilized for the base of the concrete for any replacement floor.

Plans & Progress: Since 2017, SPARC has been setting aside funds in a capital account to be applied to the costs of a floor upgrade. Currently the accoun is funded at $45,000. In 2020, SPARC formed a Flooring Committee which was tasked with selecting the specific flooring by winter of 2021. The Flooring Committe was composed of representatives of various sports to provide input on the design and choice of flooring. The SPARC Board of Directors and committee members consulted with Alaskan Industries, Inc., an Alaskan firm that has installed dozens of gym floors around the state. Based on consultations with this firm, including a site visit from their founder, the SPARC chose a “Mondo Advanced” Flooring package, which meets all our unique uses and circumstances. A Letter of Interest to the Murdock Charitable Trust requesting funding for half the cost in the winter of 2021 resulted in an invitation to submit a full application for project funding. The application is pending.

Total Project Cost: $478,681
Preconstruction and Administration: $155,917
Construction: $322,764



Flooring inside SPARC.

Capital Improvement Long-Range Projects

The following projects have been identified as long-range capital needs but have not been included in the Capital Improvement Plan because it is not anticipated that they will be undertaken within the six-year period covered by the CIP. As circumstances change, projects in the long-range list may be moved to the six-year CIP.

Local Roads

Fairview Avenue – Main Street to East End Road: This project provides for the design and construction of Fairview Avenue from Main Street to East End Road. The road is approximately 3,000 linear feet and the project will include paving, water and sewer mains, stub-outs, storm drains, and a sidewalk or trail. The project extends from the intersection of Main Street to the Homer High School, and finally to East End Road, and will provide an alternative to Pioneer Avenue for collector street access east/west across town. This roadway would benefit the entire community by reducing congestion on Pioneer Avenue, the major through-town road, and would provide a second means of access to the high school. It would also allow for development of areas not currently serviced by municipal water and sewer.

This improvement is recommended by the 2005 Homer Area Transportation Plan. Necessary right of way has already been dedicated by the Kenai Peninsula Borough across the High School property.

Cost: $1.75 million

Fairview Avenue – Main Street to West Hill Road: This project provides for the design and construction of Fairview Avenue from Main Street to West Hill Road. The road is approximately 4,200 linear feet and the project will include paving, water and sewer mains, stub-outs, storm drains, and a sidewalk or trail. In conjunction with the Fairview to East End Road project, this project will benefit the entire community by providing an alternative to Pioneer Avenue for collector street access east/west across town, thereby reducing congestion on Pioneer Avenue and developing alternative access for emergency vehicle response. The need for the road extension has increased markedly with the development of three major residential subdivisions in the area.

This improvement is recommended in the 2005 Homer Area Transportation Plan.

Cost: $3 million

Parks And Recreation

East Trunk/Beluga Lake Trail System: This project will create two connecting trails:

- The Beluga Lake Trail will partially encircle Beluga Lake with a raised platform trail that includes a wildlife observation site. The trail will connect neighborhoods and business districts on the north and south sides of the lake.
- The East Trunk Trail will provide a wide gravel pathway from Ben Walters Park east along the City sewer easement, along the north side of Beluga Lake (connecting with the Beluga Lake Trail), and eventually reaching East End Road near Kachemak City.

The completed trail system will connect Paul Banks Elementary School, the Meadowood Subdivision, and other subdivisions and residential areas to Ben Walters Park. It will additionally provide hiking, biking, and wildlife viewing opportunities around Beluga Lake. In addition, it will provide an important non-motorized transportation route.

The Beluga Lake Trail, a trail connection to Paul Banks Elementary School and East End Road are included in the 2004 City of Homer Non-Motorized Transportation and Trail Plan.

Cost: Beluga Lake Trail—$1.5 M East Trunk Trail—$2 M

Capital Improvement Long-Range Projects

Staff recommends removing this project as it is not in the Non-Motorized Transprtation & Trails Plan 2022 Supplement and proposing new projects that align with the plans priorities: areas affected by recent or proposed developments and routes that improve the function of existing routes by providing connectivity or accessibility.

Horizon Loop Trail, Phase 1: The Homer Horizon Loop Trail is proposed as a four to five mile route that would run clockwise from Karen Hornaday Park up and around the top of Woodard Creek Canyon, traverse the bluff eastward and then drop down to Homer High School. The parking lots of Karen Hornaday Park and Homer High School would provide trailhead parking. Those wishing to complete the loop will easily be able to walk from Homer High School to Karen Hornaday Park or vice versa via Fairview Avenue. A later stage of trail development will connect the Horizon Loop Trail with the Homestead Trail at Bridge Creek Reservoir.

Cost: Staff time.

Mariner Park Improvements: This project makes significant improvements to Mariner Park as called for in the park's Master Plan: construct a bike trail from the "Lighthouse Village" area to Mariner Park ($325,000); construct a pavilion, additional campsites and interpretive kiosk ($150,000); and improve the appearance of the park with landscaping ($75,000.)

Cost: $500,000

Staff recommends combining realistic elements of this improvement with the Mariner Park campground improvement project in mid range section and delting this project.

Utilities

Water Storage/Distribution Improvements Phase 4 - Spit Water Line: The existing Homer Spit water line is 40 years old and constructed of 10-inch cast iron pipe. In recent years it has experienced an increasing number of leaks due to corrosion. The condition has been aggravated by development on the Spit resulting in increased load from fill material on an already strained system. This project consists of slip lining approximately 1,500 linear feet of water main to the end of the Spit. Slip lining the Homer Spit waterline, versus replacing, will reduce cost while ensuring an uninterrupted water supply for public health, fire/life and safety needs, and protecting economic activities on the Spit. Grant funds from the EPA allowed the City to complete project design in 2014.

Staff recommends deleting this project and creating a new project to address the Spit's long range water improvement needs and the potential for a new large vessel harbor.

Cost: $400,000

Capital Improvement Long-Range Projects

Bridge Creek Watershed Acquisition: Bridge Creek Reservoir is Homer's sole water source; land in this area owned by the City is protected by a watershed protection district. The City seeks to acquire additional land for the district to protect the watershed from development that could threaten the water supply, and to ensure the availability of land for future water supply. Conservation easements may also be utilized to restrict development that is incompatible with clean water.

Cost: $1,000,000

Alternative Water Source: Currently Bridge Creek Reservoir is Homer's sole water source. Population growth within the City, increased demands for city water from residents outside City limits, increasing numbers of tourists and summer residents, and climate change has reduced surface water availability. These factors demonstrate the need for a new water source to augment the existing reservoir. An alternative water source also builds redundancy into this essential life/safety municipal infrastructure, making it possible to serve town with treated drinking water and adequate fire protection in the event of contamination or earthquake damage to Bridge Creek Reservoir.

Cost: $16,750,000

West Hill Water Transmission Main and Water Storage Tank: Currently, water from the Skyline water treatment plant is delivered to Homer via two transmission mains. One main (12-inch) is located along East Hill Road and delivers water to the east side of town. The other (8-inch) runs directly down to the center of town. A third transmission main is needed to deliver water to the west side of town, provide water to the upper West Hill area, and provide backup support to the two existing transmission mains. A new water storage facility is also needed to meet the demands of a rapidly growing community.

The addition of a third water transmission main has been identified in comprehensive water plans for over 20 years.

Cost: Design—$500,000 Construction—$4.5 M

STATE PROJECTS

Ocean Drive Reconstruction with Turn Lane: Ocean Drive is a segment of the Sterling Highway connecting Lake Street with the Homer Spit Road. It sees a great deal of traffic, particularly in the summer, and has become a source of concern for drivers, bicyclists, pedestrians and tour bus operators. This project will improve traffic flow on Ocean Drive and reduce risks to drivers, bicyclists, and pedestrians by creating a center turn lane, providing well-marked crosswalks, and constructing a separated bike path. The project will also enhance the appearance of the Ocean Drive corridor by moving utilities underground and providing some landscaping and other amenities.

Currently, a bicycle lane runs on the south side of Ocean Drive. However, it is common for vehicles to use the bicycle lane to get around vehicles which have stopped in the east-bound traffic lane to make a left turn, presenting a significant risk to bicyclists and pedestrians using the bike lane. Attendance at the Homer Farmers Market during the summer season contributes significantly to traffic congestion in the area. In addition, Homer is seeing increased cruise ship activity which also translates into more traffic on Ocean Drive. All of these factors have led to increased risk of accidents.

Capital Improvement Appendices

Capital Improvement Appendices

CITY OF HOMER
2023-2028 CAPITAL IMPROVEMENT PLANNING PROCESS

FY 2024 LEGISLATIVE REQUEST DEVELOPMENT SCHEDULE

ACTION	TIME FRAME
City Council Approval of CIP Planning Schedule	May 23, 2022
Solicit new/revised project information from City Departments, local agencies and non-profits	May 24, 2022
Input for New Draft Requested By	June 30, 2022
Prepare and Distribute Draft CIP to City Advisory Groups for Review and Input:	
Planning Commission	August 3
Park, Arts, Recreation and Culture Advisory Commission	August 18
Port and Harbor Advisory Commission	August 24
Economic Development Advisory Commission	August 23
ADA Committee	August 15
Administrative Review and Compilation	August 29 - September 6
City Council Worksession to Review Proposed Projects	September 12
Resolution on CIP - Legislative Request Public Hearing for CIP - Legislative Request	September 26
Adoption of Resolution by City Council	September 13
Administration Forwards Requests for Governor's Budget	October 8
Distribution of CIP and State Legislative Request	October 8
Compilation/Distribution of Federal Legislative Request	October 2022 & January 2023

Capital Improvement Appendices

City of Homer Financing Assumptions: Capital Improvement Program

Implementation of the City of Homer Capital Improvement Plan requires utilization of various financing mechanisms. Financing mechanisms available to the City of Homer include:

- Federal grants or loans
- State grants or loans
- General obligation bonds
- Limited obligation bonds
- Revenue bonds
- Special assessment bonds
- Bank loans
- Pay as you go
- Private sector development agreements
- Property owner contributions
- Lease or lease–purchase agreements

The use of any of the financing mechanisms listed above must be based upon the financial capability of the City as well as the specific capital improvement project. In this regard, financing the CIP should take into consideration the following assumptions:

1. The property tax cap of six-mill (at which point sales tax goes away) precludes use of this revenue source for major capital improvements. Available revenue should be utilized to fund operation and maintenance activities.
2. The operating revenue of enterprise funds (Port & Harbor, Water & Sewer) will be limited and as such, currently only fund operation and maintenance activities.
3. The utilization of Federal and State grants will continue to be significant funding mechanisms. Grants will be pursued whenever possible.
4. The 1½ percent sales tax approved by voters of Homer for debt service and CIP projects is dedicated at ¾ percent to sewer treatment plant debt retirement, with the remaining balance to be used in water and sewer system improvement projects, and ¾ percent to the Homer Accelerated Roads and Trails (HART) Program for building, improving and maintaining Homer's roads and trails. The annual budget will transfer a minimum of $550,000 of the 3/4% dedicated sales tax exclusively for road and trail capital improvements and construction. The HART Program will require property owner contributions of $30 per front foot for road reconstruction, with an additional $17 per front foot for paving.
5. The Accelerated Water and Sewer Program will only be considered if the fund has a debt service of 1.25 or greater.
6. The private sector will be encouraged to finance, construct, and operate certain nonessential capital improvements (e.g., overslope development).
7. The utilization of bonds will be determined on a project-by-project basis.
8. The lease and/or lease–purchase of capital improvements will be determined on a project-by-project basis.

Proposed New Projects
Table of Contents

City of Homer Projects

Other Organizations

State Projects

Beluga Sewage Lift Station

Project Description and Benefit: This project replaces aging sewer collection components. A dependable sewage collection and treatment system ensures public safety and contributes to Homer's growth and economic vitality.

The Beluga Sewer Lift Station consists of a concrete control vault and an 8' diameter concrete wet well. All the waste water from the Homer Spit, as well as many residential and commercial neighborhoods, flows into the wet well on its way to the Waste Water Treatment Plant. The septic waste water contains hydrogen sulfide gas, which oxidizes in the presence of moisture, producing sulfuric acid. The acid eats concrete and metal, damaging the piping, mechanical controls and concrete structure itself. A breach of the concrete structure would cause raw, septic sewage to flow into Beluga Slough, part of Kachemak Bay's Critical Habitat, home to, among other creatures, nesting sand hill cranes. Failure of the mechanical equipment could cause the pumps to fail and the wet well to overflow.

The need to renovate this critical infrastructure was first identified during the formation of the 2006-2025 Homer Water & Sewer Master Plan. The City invested in the development of a conceptual engineering design, which has been completed. The Conceptual Engineering Report evaluated various options for renovating the lift station and developed a cost effective solution, which includes:

- Installing a fiberglass wet well into the existing concrete structural
- Replacing the valves and piping with stainless steel or plastic components;
- Installing more energy efficient and durable pumps; and
- Upgrading the instrumentation and control systems.

Plans & Progress: . Conceptual project design was completed in 2020, funded by the City's Capital Asset Repair and Maintenance Account (CARMA).

Total Project Cost: $970,000

Schedule: 2023-2024

Priority Level: 1

A-Frame Water Transmission Line Replacement

Project Description and Benefit: This project replaces an 800-foot section of cast iron water suppply line in Homer's water utility system. The pipe, at 57-years-old, is brittle, corroded and on a 52-degree slope, making it extremely susceptable to catastrophic damage during seismic events.

This supply line is only line transmitting water to the west side of Homer, serving hundreds of customers, South Peninsula Hospital and two schools. Loss of this line our sole drinking water utility would have a devastating impact to public health and safety, and fire protection capability. Even short-term water supply disruption (due to serious but repairable seismic damage to the supply line) has serious consequences, including the impacts to hospital/ medical care facilities, the availability of machinery and spare parts for timely repair during a major disaster and the need to provide emergency drinking water.

Replacing the cast iron pipes with HPDE pipes protects this critical water utility infrastructure from seismic damage, significantly mitigating potential life, health and public safety losses associated with a major earthquake event. Loss of supply in the area's sole drinking water utility would have a devastating impact on public health and safety, fire protection capability and the economy. To mitigate the liklihood of a catastrophic break that would disrupt water supply and smaller ruptures that could compromise water quality, the cast iron pipe will be replaced with earthquake resilient High Density Polyethylene pipe.

The water main is critical infrastructure for the life, health and safety of Homer's 5,522 residents and additional residents in surrounding unincorporated areas who rely on the system for delivery of residential and commercial potable water and fire protection services. Demand for water distribution doubles during the summer (June to August), compared to the height of winter (December and January) due to the influx of seasonal residents and a burgeoning tourism industry.

Plans & Progress: .

Total Project Cost: $804,092

Schedule: 2023

Priority Level: 1

Fish Grinding Building Replacement

Project Description and Benefit: This project replaces the Fish Grinding Building located on the uplands within the Homer Small Boat Harbor, and completes site drainage improvements to meet DEC permitting requirements.

The building requiring replacement secures and protects a DEC-permitted industrial fish waste grinding system. They system processes a large volume of fish carcasses (on average 304,600 pounds annually) generated by non-commercial sport fishing activity and collected from the City's public fish cleaning tables for environmentally sound disposal. This sport-caught fish waste is transported to the Fish Grinding Building in totes where it is mixed with salt water and ground, and then pumped to an underwater outfall located in Kachemak Bay adjacent to Homer's Pioneer Dock**.**

The current building is a twenty-one year old, 600 square foot metal clad building. Over time, the humid, salty sea air and the saltwater slurry used in the fish grinding process have taken a corrosive toll on the building. The building is rusting out in several areas, compromising its structural integrity and degrading electrical fixtures. The new proposed building will be constructed on the same concrete footprint, utilize existing utility hook ups and designed with corrosion-resistant materials to protect the fish grinder and associated equipment from the elements, saving on costly equipment maintenance and repairs.

The project also completes site work to correct a site drainage/water quality issue cited in the recent EPA permit review. When totes are delivered to the Fish Grinding Building and awaiting processing, fish slurry inevitably leaks onto the ground and enters a storm drain rather than the outfall line. Site work will create a drainage system in the tote storage area to insure leakage is channeled into the outfall line. These two improvements insure that this important facility can continue to meet sport angler need while remaining compliant with EPA regulations.

Plans & Progress:

Total Project Cost: $275,000
Phase 1: Engineering and Design: $25,000
Phase 2: Construction: $250,000

Schedule: 2024

Priority Level: 1

A new building made of corrosion-Corrosion is compromising the Fish Grinding building's structural integrity and degrading