## CITY OF HOMER HOMER, ALASKA

Mayor/City Council

## RESOLUTION 23-093


#### Abstract

A RESOLUTION OF THE HOMER CITY COUNCIL ADOPTING THE 2024-2029 CAPITAL IMPROVEMENT PLAN AND ESTABLISHING CAPITAL PROJECT LEGISLATIVE PRIORITIES FOR FISCAL YEAR 2025.


WHEREAS, A duly published hearing was held on September 11, 2023 to introduce the final draft of the 2024-2029 Capital Improvement Plan (CIP) and to obtain public comments on capital improvement projects and legislative priorities; and

WHEREAS, The Council received comments from all of the City of Homer Advisory Boards, Commissions and the public at a duly published work session meeting on August 28, 2023; and

WHEREAS, It is the intent of the City Council to provide the Governor, the State Legislature, State agencies, the Alaska Congressional Delegation, and other potential funding sources with adequate information and priorities regarding the City's capital project funding needs.

NOW, THEREFORE BE IT RESOLVED by the City Council of Homer, Alaska, that the "City of Homer Capital Improvement Plan 2024-2029" is hereby adopted as the official six-year capital improvement plan for the City of Homer.

BE IT FURTHER RESOLVED that the following capital improvement projects are identified as priorities for FY2025 State and Federal Legislative Requests:

1. Homer Harbor Expansion
2. Multi-Use Community Center
3. Slope Stability \& Erosion Mitigation Program
4. Homer Harbor Critical Float System Replacement: Float Systems 4 \& 1
5. Karen Hornaday Park Public Restroom
6. A-Frame Water Transmission Line Replacement
7. Homer Spit Erosion Mitigation
8. New Public Works Facility

BE IT FINALLY RESOLVED that the City Manager is hereby instructed to advise appropriate State and Federal representatives and personnel of the City's FY 2025 capital project priorities and take appropriate steps to provide necessary background information.

PASSED AND ADOPTED by the Homer City Council this $11^{\text {th }}$ day of September, 2023.

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MELISSA JACOBSEN, CITY CLERK
Fiscal Note: N/A

# Resolution 23-093, A Resolution of the City Council of Homer, Alaska Adopting the 2024-2029 Capital Improvement Plan and Establishing Capital Project Legislative Priorities for Fiscal Year 2025. Mayor/City Council. 

Item Type: Backup Memorandum
Prepared For: Mayor Castner and Homer City Council

## Date:

September 6, 2023
From: Jenny Carroll, Special Projects and Communications Coordinator
Through: Rob Dumouchel, City Manager

Thank you for taking the time to review the CIP projects during your August 28, 2023 worksession. At present, the CIP is still in a draft form. To bring the CIP to its final form, the following changes require Council consideration and formal action:
> At the worksession, Councilmembers did not discuss any objection to remove the Fairview Avenue Extension-Main Street to West Hill Road from the CIP's Long Range section (Draft CIP page 55). This project will only be removed by formal Council action.

By Motion: Make a motion to remove the Fairview Avenue Extension-Main Street to West Hill Road from the Long Range Projects section.
> Several new projects were proposed for inclusion in the CIP. Adoption into the CIP requires Council approval through a formal motion.

By Motion: Propose inclusion of the following City of Homer projects in the Mid-Range section:

- Homer Waste Water Treatment Plant Improvements
- Engineering Study for Homer Public Library Remodel
- Homer Public Library Siding Replacement
- Homer Public Library Sliding Security Gate
- ADA Accessible Platform Lift System at Ramp 7 in Homer Small Boat Harbor (Port Director provided a backup memo at the August 28, 2023 worksession recommending holding off on adding this project to the CIP until a system better designed for this service is identified and a fuller scope developed according to technical specifications.)
- Regrade and Repave Homer Public Library Parking Lot (Public Works staff recommend holding off on adding this project to the CIP until next year. This will give time to assess effectiveness of mitigation measures already taken.)

By Motion: Propose inclusion of the following projects in the Other Organization and State Project sections:

- Roger's Loop Trailhead Storage Shed (proposed by Homer Trails Alliance)
- Diamond Creek Recreation Area Trails (proposed by Homer Trails Alliance)
- Traffic Control at the Corner of Sterling Highway \& Soundview Avenue (proposed by Councilmember Lord at the August 28 Worksession)
$>$ Three new City of Homer projects were proposed at or since the September $28^{\text {th }}$ worksession and have been recently included in the Proposed New Projects section. Please review.

By Motion: Propose inclusion of the following City of Homer projects in the Mid-Range section:

- HERC Hazardous Material Cleanup and Revitalization Plan (proposed by Councilmembers at the August 28 Worksession
- Roger's Loop Trailhead Parking Lot (nominated by the Homer Trails Alliance for inclusion as a City of Homer project in the Mid-Range section).
- Drainage Management Plan (this project description is a draft. Staff recommends Council approval, which will be provisional until the project description can be fully developed and presented to Council for discussion and full approval).
> All Councilmembers and the Mayor communicated their eight Legislative and Federal Priority project selections. I compiled your recommendations to determine a proposed priority ranking and provide them in the attached Resolution for your consideration. Please note, last year's CIP featured nine Legislative Priority projects because two projects tied for $8^{\text {th }}$ ranking. There were no ties in the top eight projects this year. The Fire Hall Expansion, Phase 1 project will move to the Mid-Range section.

By Motion: establish and approve City Council's prioritized list of the eight Legislative Priority projects.

## RECOMMENDATION:

By motion determine projects to be removed and added to the 2024-2029 CIP, the Legislative Priority Projects and then adopt Resolution 23-093.


491 E. Pioneer Avenue, Homer, Alaska 99603 907-235-8121


September 23, 2024

To The Honorable Mayor and Homer City Council:

I am pleased to present the City of Homer 2024 through 2029 Capital Improvement Plan. The CIP provides information on capital projects identified as priorities for the Homer community. Descriptions of City projects include cost and schedule information and a designation of Priority Level 1 (highest), 2 or 3. Projects to be undertaken by the State of Alaska and other non-City organizations are included in the CIP in separate sections. An overview of the financial assumptions can be found in the Appendix.

The projects included in the City of Homer's 2023-2028 CIP were compiled with input from the public, area-wide agencies, and City staff, as well as various advisory commissions serving the City of Homer.

The City updates the CIP annually to ensure the long-range capital improvement planning stays current, as well as to determine annual legislative priorities and assist with budget development. Your assistance in the effort is much appreciated.

Sincerely,

Rob Dumouchel
City Manager

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# Funded Projects from the 2023-2028 Capital Improvement Plan 

The City of Homer is pleased to report that the following projects have been completed:
Ben Walters Lane Sidewalk Facility
\$1.7M allcoted in the City of Homer FY24/25 Capital Budget for construction.

Other Orgnaizations: SPARC: Flooring Replacement

The following projects have been partially funded:
Homer Harbor Expansion
\$3M in local, State and Federal funding was secured to complete funding for the USACE General Investigation.

Fire Department Fleet Management
Partial completion with purchase of a Ladder Truck utilizing funds approved from FY23 Capital Budget.


## Introduction: Fine capital Tmprovement Progran

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 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, however, 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 FY2025

## City of Homer FY2025 State \& Federal Legislative Priorities approved by <br> Homer City Council Resolution 23-XXX

This list of Legislative Priority projects reflects City Council selections.

1. Homer Harbor Expansion
2. Multi-Use Community Center
3. Slope Stability \& Erosion Mitigation Program
4. Homer Harbor Critical Float System Replacement: Float Systems 4 \& 1
5. Karen Hornaday Park Public Restroom Facility
6. A-Frame Water Transmission Line Replacement
7. Homer Spit Erosion Mitigation
8. New Public Works Facility


## 1. Homer Harbor Expansion

Project Description \& Benefit: This project proposes to expand HomerHarborby constructing a new harborbasinfor large vessels to the north of Homer's existing Port and Harbor. The expanded harbor will correct navigational safety hazards posed by overcrowding in Homer's current small boat harbor, meet moorage demands of the marine transportation sector on which forty-seven non-road connected Alaskan communities, and regional industries, the Port of Alaska and internationally significant commercial fisheries depend. It's design could have the potential to advance national security interests and be a backup port for marine transportation and cargo handling which is critical for Alaska's resilience and recovery in the event a major disaster disables the Port of Alaska.

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 or three or more abreast constricting passage lanes, creating navigational hazards and overstressing the harbor float system.

- The new facility fills unmet moorage, maintenance and repair needs which currently send Alaska's marine industrial, cargo and commercial fishing fleet to ports in the Lower 48 due to their overall size, draft, and simply lack of moorage space. Data show that 63\% of Alaska homeported vessels spent the months of August through December 2022 in non-Alaska ports in the lower 48. This comes with significant operating costs for Alaska's marine industrial fleet. Port expansion will capture economic activity that Alaska loses annually; it will also sustain and create good, living wage Alaskan jobs through the marine trades.
- The project could also meet the US Coast Guard's long-term mooring needs for Search \& Rescue and Arctic Security missions, if the design alternative includes space for the USCG Aspen and/or 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: An earlier feasibility study (funded by the City, State of Alaska DOT, and Army Corps of Engineers (USACE) was put on hold in 2009 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 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 initiate work on a new 3-year General Investigation (GI) commencing March 2023.

Estimated Project Cost:
General Investigation:
Construction Estimate:
$\$ 278,000,000$
\$ 3,000,000 (Secured))
$\$ 275,000,000$


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 harbo as shown below..


FY2025 State Request:
$\$ 46,000,000$
FY2025 Federal Request: $\$ 183,000,000$
City of Homer Match: $\quad \$ 46,000,000$

| Funding Secured | Prior to July '23 | FY24 | FY25 |
| :--- | :---: | :---: | :---: |
| GI USACE | $\$ 300,000$ | $\$ 600,000$ | $\$ 600,000$ |
| GI COH match | $\$ 150,000$ | $\$ 300,000$ | $\$ 300,000$ |
| GI SOA match | $\$ 150,000$ | $\$ 150,000$ | $\$ 150,000$ |



## 3. Multi-Use Community Recreation Center

Project Description \& Benefit: This project secures land, designs and constructis a multi-use community center to meet Southern Kenai Peninsula community needs, while contributing to the overall economic development and quality of life of Homer's residents, businesses and visitors. 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 the need for indoor municipal recreational and community space, especially considering the ongoing challenges of operating in the local schools and the city's aging and defunct HERC facility. 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 instructional programs, safe walking/running, dedicated space for youth and possible emergency shelter as priority features.

Plans \& Progress: A recent 2023 hazmat report of the city owned HERC facilities/campus, which had been the preferred site, determined this location will not be possible in the near term due high cost of mitigation. While federal grants will be applied for to assist with assessment and mitigation, this process will likely take many years. The city is in the process of reviewing possible locations for a community center preferably centrally located.

In 2018, a City Council appointed Task Force completed several months of study and recommended building a new community facility, rather than trying to rehabilitate the HERC facility. The retrofits needed to bring the building into modern code compliance exceeds the cost of new construction. In September 2021, the City expended \$49,964 to update the recreation needs analysis, engage the public and produce concept designs and construction cost estimates for different options for a new multi-use center. This was a big step towards refining the scope of the project and moving it forward. Additional steps will include finalizing design, cost estimates and completing a feasibility study for ongoing operations and maintenance.

Total Project Cost: $\$ 16,050,000$
FY24
Land Purchase
Phase 1: Final Design \& Feasibility Study

FY25
Phase 2: Construction $\$ 15,000,000$

FY25 State Request:
Phase 1
FY25 Federal Request:
Phase 2
\$15,000,000
City of Homer Match: $\quad \$ 700,000$


The City of Unalaska's Commuity Center is an example of a centrally located, widely used recreation facility by both residents and visitors.



## 3. Slope Stability \& Erosion Mitigation Program

Project Description \& Benefit: Instability of steep slopes and coastal bluffs present hazards to Homer's natural and built environment. Their instability is due in large part to the movement of both surface water and ground water. When these waters combine, they saturate the soil, which makes the soil particles "slippery" and creates potential for slumping. The annual freezethaw cycle further exacerbates erosional loss. An increase of impervious surfaces due to commercial and residential development booms also contributes to coastal erosion. When stormwater quickly exits developed areas, discharge events down gradient result in extreme coastal erosion and loss of beach sediments critical for maintaining coastal stability.

Erosional impacts include homes that have slid down steep slopes, forcing abandonment. 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 and Kachemak Drive, a tsunami evacuation route and connector road for commuter, recreational and commercial traffic to Homer's regionally active Port and Harbor facility on the Homer Spit.

After studying how these waters collectively affect steep slopes and coastline erosion, the City developed innovative mitigation plans for four projects. Together they form the City's Green Infrastructure Slope Stability \& Erosion Mitigation Program. They include (1) Kachemak Sponge Wetland Treatment System, a nature-based infrastructure project that protects private and public properties as well as state-owned Kachemak Drive by acquiring using natural wetlands to collect and treat storm water. The project mitigates flooding and coastal erosion as well as recharges valuable peatlands. (2) Baycrest Storm Drain Conveyance and Treatment System protects the state-owned Sterling Highway and downhill properties by mitigating flooding and coastal erosion. This project features a micro-hydro energy generating


The Slope Stability Program utilizes nature based and low impact development techniques to mitigate erosional damage and protect water quality. unit. (3) Beluga Lake and (4) Beluga Slough Wetland Treatment Systems also use natural wetlands to manage storm water, protecting two state-owned roads, Main Street and Sterling Highway. They also protect the water quality of Beluga Slough and Beluga Lake, important habitat for shorebirds. Together, these projects will protect and recharge valuable peatlands, protect water quality, conserve critical moose and waterfowl habitat and mitigate coastal erosion for the long term.

Plans \& Progress: The Kachemak Sponge and Beluga Slough systems are Phase 1 and are underway. The City completed preliminary water quality, flow rate and peatland data collection. Design work and initial appraisals of peatlands to be acquired for the Kachemak Sponge project is complete. Federal IIJA funds from a FY23 NOAA grant will assist with peatlands acquisition. The City also secured a FY23-25 Alaska Clean Water Act grant for the Beluga Slough Storm Water Treatment System.

Project Cost (Phase 1): $\$ 5,028,791$ )
Kachemak Drive Wetland Treatment System \$4,388,791
Beluga Slough \& Bishops Beach Stormwater
Treatment Systems
$\$ 690,000$
Total Phase 1 Cost:
\$5,028,791
City of Homer grant \& match funds secured $\$ 1,845,310$
FY2025 State Request Beluga Slough: \$ 429,484
FY2025 Federal Request Kachemak Sponge: \$2,799,381

| Funding Secured | Prior to July '23 | FY24/25 |
| :--- | :--- | :--- |
| COH Data Collect | $\$ 180,000$ | - |
| Kachemak Sponge |  |  |
| NOAA IIJA grant | $\$ 1,171,410$ | - |
| COH HART Road | - | $\$ 418,000$ |
| Beluga Slough |  |  |
| FY23-25 ACWA grant | $\$ 11,866$ | $\$ 141,441$ |
| COH HART Road | $\$ 81,313$ | - |
| COH In-kind | $\$ 25,896$ | - |



City of Homer Capital Improvement Plan • 2024-2029

## 4. Homer Harbor Critical Float System Replacment: Float Systems 4 \& 1

Project Description \& Benefit: System 4 is made up mostly of floats that were constructed in 1964 for the original Homer Harbor. In the 2002 Transfer of Responsibility Agreement (TORA) project, those original floats were moved to create System 4. Within two years, the System's 207 slips for vessels ranging in size from 24 feet to 60 feet in length and over 1,000 linear feet of transient moorage was filled to maximum capacity. System 4 provides dockage for the Seldovia Fast Ferry Kachemak Explorer for passenger and freight loading. System 4 has two accessible gangways on ramps 6 and 7 and is supported by a public restroom and public fish cleaning station located at the top of ramp 6.

The 1964 timber floats are 30 years beyond their engineered life expectancy and should be replaced before they are condemned and need to be decommissioned. Major maintenance (adding flotation to the end of main floats and replacing timber piles, decking, and stall floats) has allowed continued use of these floats. Despite these efforts, many conditions have combined to produce a critical loss of structural capacity. Bullrails, used for securing mooring lines, are cracked or deteriorated; older timber piles have areas of rot; flotation foam has disintegrated throughout these floats, reducing freeboard, which ultimately reduces load capacity and increases rates of corrosion. The lack of floatation and deteriorated structural members makes the entire main float lists to one side; snow has to be removed in the winter to prevent sinking. Lack of flotation also causes the stall floats to be unstable or bouncy when walking on them, resulting in a potential safety hazard. Parts of System 1 dates back to 1986 The lack of freeboard flotation, concrete and timber deterioration and broken structural elements at end floats and failures in some headwalk floats likewise puts these components of System 1 in critical to serous categories.

Plans \& Progress: R\&M Engineers provided a harbor-wide condition report and cost estimate for float replacement in 2023. It recommended replacing floats categorized as serious and critical and upgrading shore power, fire suppression and potable water. AAA float can be expanded towards the load and launch ramp to open up narrow fairways between the floats, giving vessels more room to safely navigate between the float systems The City submitted a Federal grant application for FY23 Port Infrastructure Development Program funds to assist with design, engineering and construction. State matching funds help leverage federal dollars in support of Homer's regionally critical port infrastructure.

Total Project Cost: $\quad \$ 59,289,547$
FY25 State Request:
\$ 6,077,178
FY23 Federal PIDP Request: \$47,135,190
City of Homer Match $\quad \$ 6,077,179$


System 4 floats to be replaced.


The Headwalk Float AAA is warped, suggesting a failure in the structural members below the deck and lack of floatation..


Low freeboard resulting in submerged pile collar. Decking has rot and hardware connections protrude through it.


## 5. Karen Hornaday Park Public Restroom Facility

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 92,000 user days each year. This includes Little League participants and spectators, plus general use park visitors and attendees of small gatherings and large events that reserved the park annually, such as reunions, the Scottish Highland Games festival and concerts.

The Karen Hornaday Park Master Plan, first approved in 2009, is outdated. Development of a new plan by the Park, Arts, Recreation and Culture Advisory Commission and adoption by City Council is underway. The plan will develop a site plan and designs for two high priority park needs to improve safety and provide accessibility: an entry road, parking area and accessible pathway to park amenities and public restrooms facilities. 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.

The highest need is an ADA accessible public restroom facility. The former restroom facility was demolished in 2020 due to safety concerns. The physical structure had deteriorated over the years. 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
Plans \& Progress: Over the years, grant support and significant volunteer efforts have assisted the City in developing Homer's premier public park. The first step of the current project is to create a new Park Master Plan, extend water/wastewater utility to the site selected for the public restroom and construct the restroom facility. The second phase will be road, parking lot and accessible trail construction.

Project Cost (Phase 1): $\quad \$ 1,080,000$

$$
\begin{array}{lrr}
\text { Master Plan Update: } & \$ 50,000 \text { (COH funds) } \\
\text { Water Sewer Utility Extension: } & \$ 530,000 \text { (COH funds) } \\
\text { Restroom Construction: } & \$ 500,000
\end{array}
$$

FY25 State Request: \$500,000
(City of Homer Match: $\$ 580,000$ )


Public restroom facilities and safe, accessible pedestrian access for the many park users is lacking in the park.



## 6. A-Frame Water Transmission Line Replacement

Project Description and Benefit: This project replaces an 800 -foot section of cast iron water supply 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 susceptible to catastrophic damage during seismic events.

This supply line is the only line transmitting water to the west side of Homer. It serves 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. The expedient availability of machinery and spare parts for timely repair during a major disaster and the need to provide emergency drinking water are additional challenges/concerns.

Replacing the cast iron pipes with HPDE pipes protects this critical water utility infrastructure from seismic damage, and significantly mitigates 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 overall public health and safety, fire protection capability and the economy. To mitigate the likelihood of a catastrophic break that would disrupt water supply and smaller ruptures that could compromise water quality, the obsolete cast iron pipe will be replaced with earthquake resilient High Density Polyethylene pipe.

The water main is critical infrastructure that assures 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: The City's FY24-25 Capital Budget allocates \$90,000 to complete the design for the distribution line. The A-Frame Transmission Line Replacement is included on Alaska Drinking Water Fund's FY24 Intended Use Plan. This project, combined with the design and installation of a 250,000-gallon water storage tank on the west side for drinking water resiliency (also on the FY24 Intended Use Plan) is under consideration for a FY24 Federal appropriation.

Total Project Cost: \$804,092
Design: \$90,000
Construction: \$714,092
FY25 State/Federal Request: \$634,274
City of Homer Match: $\quad \$ 160,818$

| Funding Secured | FY24 |
| :--- | :--- |
| Design |  |
| COH Water CARMA | $\$ 90,000$ |



Replacing the water transmission line is critical for the life, health and safety of residents who rely on the system for delivery of residential and commercial potable water.

# 7. Homer Spit Coastal Erosion Mitigation 

Project Description and Benefit: The City of Homer requests that the Alaska Department of Transportation and Public Facilities (AK DOT\&PF) 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 revetment projects. These areas are subject to periodic overtopping, damaging the asphalt on the roadway shoulder

Erosional damage on the Spit is undermining the State-owned Sterling Highway that connects the Kenai Peninsula mainland to organizations like the United States Coast Guard and Alaska Marine Highway. The road is also an essential tsunami evacuation route. If left unchecked, erosion will ultimately diminish the role the Homer Spit plays as a regional commerce center and transportation hub for Southcentral Alaska, including the commercial fishing industry and the marine trades. Erosion is actively undermining public recreational facilities and private commercial enterprises to the point that properties have been abandoned or condemned. 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 $\$ 1.5 \mathrm{M}$ 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 and sediment management plan for long term viability of the Spit. Dredging operations in Homer Small Boat harbor and during construction of Homer's new large vessel harbor will provide sufficient material to renourish the beach.

The project could progress through a USACE General Investigation, or through a State of Alaska/City of Homer application for Federal PROTECT planning grant funds. The GI would progress from phase 1 (USACE authorization to implement the Dredged Material Management Plan to immediately mitigate erosional damage, while concurrently, initiating Phase 2: design and engineering of erosion mitgation measures through a USACE General Investigation.

Phase 1 \& 2 Project Cost: $\$ 3,960,000$
Phase 1: Beach Renourishment Authorization, dredging and placing materials: $\$ 960,000$

Phase 2: USACE General Investigation: \$3,000,000
FY25 State Request $\quad \$ 1,980,000$
(City of Homer match: $\$ 480,000$ )
FY25 Federal Request $\quad \$ 1,500,000$


Example of recent active erosion on the Homer Spit.


## 8. 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 off site will soon need a new location. Additionally, Homer's new Tsunami Inundation Map shows the potential risk of a 30' high wave to move 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 sustainability.

Based on a 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 be compatible with adjacent land uses. The facility will be sized to provide for current and future administrative and customer support services; 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 2024-25 and begin construction in 2026. Availability of funding would adjust these time periods.

Total Project Cost: \$11,377,750
Schedule: 2024
2023: Property Acquisition \$ 600,000
2024-2025: Facility Design \$ 828,500
2026-27: Construction $\$ 9,949,250$
FY25 State/Federal Request: \$9,949,250
City of Homer Match: $\$ 1,428,500$


The City of Homer Public Works department's equipment and fleet and personnel have outgrown the current facility, which is also located in a tsunami inundation zone.

| Funding Secured | FY24 | FY25 |
| :--- | :--- | :--- |
| Property Acquisition |  |  |
| COH Land Reserves | $\$ 600,000$ | - |

City of Homer Capital Improvement Plan • 2024-2029

## Mid-Range Projects

Part 2: Mid-Range Projects

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## ADA Transition Projects

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## 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 Advisory Board and City Staff evaluated City Facilities to identify accessibility barriers. The results were compiled into the City's Facilities 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 Advisory Board during the self-evaluation process, and together developed solutions and remedies that are included in the Transition Plan. City Council approved the Transition Plan in Resolution 19-024. In 2022, the City allocated funds to design a new City Hall Ramp to bring it into ADA compliance.

Total Project Cost: \$400,000
Schedule: 2024-2025
Priority Level: 1

| Funding Secured | Prior to July '23 | FY24/25 |
| :--- | :--- | :--- |
| Design ADA City Hall Ramp |  |  |
| COH Comm Assist Program | $\$ 14,400$ | - |



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.

Once a final design and Fishing Hole location is determined, Phase 2 of the project will be to make improvements necessary to connect the ramp to uplands amenities such as accessible parking spaces, restrooms, the Fishing Hole campground and fish cleaning tables.

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 high water level. The floating portion of the dock and the gangway would be designed to be removable to avoid seasonal ice damage and to perform maintenance as necessary.

Total Project Cost: \$770,000
Concept Design \$ 18,813 Completed 2022;
Final Design \$70,000

Construction \$700,000
Schedule: Final Design 2024


Construction 2025

## 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.


## 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 Advisory Board 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 19024. 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:

2026: Facility Parking Lot Cross Slopes \& Signage \$336,500

## Priority Level: 1



While inaccessibility issues in these spaces has been remedied since this photo was taken, it provides an example of spaces needing to be paved and a path of travel to the sidewalk provided.

## Parks, Art, Recreation \& Culture

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## Bayview Park Restoration

Project Description \& Benefit: Bayview Park is a neighborhood park at the top of Main Street in the heart of Homer intended to serve preschool age children and their families. The park, the only park in Homer dedicated to serve preschool age children, has been undeveloped since its formation.

This project seeks to transform Bayview Park into an inviting, safe and accessible destination for young families to provide improved recreational opportunities for all in our community. Project scope includes:

- finalizing the park's site plan and specifications after gathering community input;
- pave Bayview Park parking area and delineate ADA parking and construct accessible park pathways;
- procure and install inclusive playground equipment and natural playground features; and
- install accessible rubber tile safety surfacing under the playground equipment and replace rickety white picket fence with a more durable, low-maintenance fence that provides a level of safety for young children playing near busy roads.

Plans \& Progress: In 2022, the City installed an ADA accessible sidewalk to the park from Main Street as part of the new Main Street Sidewalk project. The sidewalk design replaced the existing open ditch on the east side of Bayview Park with a closed storm drain system to create a space where a parking lost and access into the park can be built. A donation by the Kachemak Bay Rotary Club will help procure new playground equipment. In 2023, the City worked with a landscape architect to develop a conceptual park plan and dedicated 2023 Healthy and Equitable Communities grant funds from the Alaska Department of Health and Social Services to assist with park improvements.

Total Project Cost: \$190,000
Phase 1: Finalize park design and specifications, construct parking lot and paths, procure and install playground equipment with safety surfacing. \$139,330 (Funding complete 2023)

Phase 2: Install accessible rubber tile safety surfacing under playground equipment and replace perimeter fence. \$50,670

Schedule: 2023-2026
Priority Level: 1


Bayview Park, dedicated to serve pre-school age children and their families is undeveloped. A more practical chain length fence will also be needed to keep young children out of roads and ditches.

| Funding Secured | Prior to July '23 | FY24 |
| :--- | :--- | :--- |
| Design \& install features |  |  |
| KBay Rotary | $\$ 12,000$ | - |
| HEC Round 2 Grant | $\$ 74,916$ | - |
| Drainage/Parking |  |  |
| COH HART Roads | - | $\$ 32,000$ |
| Accessible Pathways |  |  |
| COH HART Trails | - | $\$ 20,314$ |



## 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 pot holed, 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. Mariner Park Campground would also benefit from landscaping.

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.
Total Project Cost: \$95,000

| Mariner Park Campground | $\$ 50,000$ |
| :--- | :--- |
| Fishing Hole Campground | $\$ 45,000$ |

Schedule: 2025-2026

Priority Level: 2


Mariner Campground at the base of the Homer Spit.


City of Homer Capital Improvement Plan • 2024-2029

## 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: 2027
Priority Level: 3


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


## Jack Gist Park Improvements

Project Description \& Benefit: Jack Gist Park was founded in 1998 on 12.4 acres of land donated to the City of Homer by a private landowner. Park development took place on top of a retired landfill that was capped. As originally envisioned by the Jack Gist Recreational Park Association, this parcel has been developed primarily for soft ball fields. It also features a disc golf course. Changes in usage patterns, deferred maintenance, and adjacent residential development have highlighted the need for various improvements within the Park. The need for these improvements and the impacts of deferred maintenance will only continue to grow as the residential density increases in the neighborhood around the park.

The park hosts numerous softball tournaments annually, and disc golfers. Improvements for the health and safety of park users includes a public restroom facility, irrigation for field turf maintenance and remediation of drainage issues that have led to poor quality athletic turf. Drainage improvements are also needed address persistent standing water in ditches and in low spots in the parking lots, bleacher areas and the ball field access. Development of drainage routes will encourage groundwater (which is expected to be amplified by residential development adjacent to the park) into existing drainage routes to the east and west of the park and through culvert crossings.

The park's two parking lots are small, uneven, poorly drained and poorly delineated. The plan is to grade and expand them in conjunction with the needed drainage work. The existing area between fields and property line allows for increasing available parking spaces, as well as provide ADA parking.

Plans \& Progress: . Capital funds approved for FY23 and in the FY24-25 budget will extend water, sewer and electrical utilities to the park from the adjacent development. These will initially be stubbed off in a location central to the lower fields to provide irrigation for the fields during dry spells and assist in turf maintenance practices. Plans also include providing the necessary infrastructure for the eventual construction of public restrooms.

Project Cost: $\quad \$ 470,000$

| Utilities | $\$ 42,500$ |
| :--- | :--- |
| Drainage: | $\$ 25,000$ |
| Parking: | $\$ 30,000$ |
| Site prep: | $\$ 22,500$ |

Phase 2: Restroom cost estimate: $\$ 350,000$
Schedule: 2023-2025
Priority Level: 1


One of the softball fields at Jack Gist Park.

| Funding Secured | Prior to July '23 | FY24 |
| :--- | :--- | :--- |
| Utiity Extension |  |  |
| COH HAWSP | $\$ 42,500$ | - |
| Drainage/Parking |  |  |
| COH General Fund | - | $\$ 55,000$ |
| Site Prep | - |  |
| COH General Fund |  | $\$ 22,500$ |



## Port and Harbor

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# Barge Mooring \& Large Vessel Haul Out Repair Facility 

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 elsewhere to perform annually required maintenance and repairs, which could otherwise be completed here in Homer. The new 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.

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


Three vessels hauled out for repairs on Homer Spit Lot TR 1 A. 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.)
Schedule: 2027

## Priority Level: 3



# 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. The 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 to prevent fish slurry that leaks onto the ground from entering a storm drain. 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: Preliminary project design and cost estimates are complete. The building replacement project will be awarded a Federal Aid in Sport Fish Restoration Act (Dingle-Johnson Act) grant, which will fund up to $75 \%$ of project costs. The project is also listed on the AK DEC Intended Use Plan for the Alaska Clean Water Fund.

Total Project Cost: \$374,978
Phase 1: Engineering and Design: \$25,000
Phase 2: Construction: $\$ 289,978$
Site Drainage: $\quad \$ 60,000$

Schedule: 2024


Corrosion is compromising the Fish Grinding building's structural integrity and degrading interior fixtures.

## Priority Level: 1

| Funding Secured | Prior to July '23 | FY24/25 |
| :--- | :--- | :--- |
| Engineering/Design | $\$ 25,000$ | - |
| ADF\&G Dingell-Johnson | (pending) |  |



## 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: 2027
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 Dredging

Project Description and Benefit: Due to sediment infiltration, Homer's small boat harbor is in need of dredging to restore design depth. The US Corps of Engineers is authorized as part of their mission to maintain the navigable channel from the harbor entrance all the way to the load and launch ramp. However, all the rest of the harbor is a local responsibility.

The dredged materials can be used to renourish beaches on the west side of the Homer Spit, where erosional damage is actively undermining the State-owned Sterling Highway. Recreational properties and commercial properties are impacted to the point that properties have been abandoned or condemned. Beach renourishing will follow the US Corps of Engineers Dredged Material Management Plan approved for the Homer Spit.

Plans \& Progress: Dredging requires a survey of the entire basin by a certified Marine surveyor capable of conducting a multi-beam survey that provides quantities of dredged material that would need to be removed to get the basin back to the original depths. The City's FY24-25 allocates funds to complete the survey work.

Phase 2 will create a request for proposals to solicit bids for dredging the harbor. Depending on the results of the bids, the City may need to prioritize efforts and focus on specific areas of concern first.

Total Project Cost: \$980,000
Phase 1: Harbor bottom survey: $\$ 25,000$

Phase 2: Dredging: \$955,000

Schedule: 2023-24

| Funding Secured | Prior to July'23 | FY24/25 |
| :--- | :--- | :--- |
| Harbor Survey | - | $\$ 25,000$ |



## 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 in 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 and a cost estimate obtained.

Total Project Cost: $\$ 364,000$
System Design: \$5,728 (funding completed)
Equipment Purchase and Installation: \$358,272

Schedule: 2025

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 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 estimate forthcoming．
Phase 3：Condenser upgrades estimate forthcoming．

## Schedule：

2019－2020：Phase 1 study completed 2021：Design and engineering for upgrades 2024：Phase 2

Priority： 1


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


## Large Vessel Sling Lift, Phase 1

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, the system 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 away. 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 owneroperator 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: 2027
Priority Level: 3


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

## 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 the point where a larger replacement project is required. More may be revealed after an engineering inspection during Phase 1, but to date, 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: 2025

## Priority Level: 2



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


City of Homer Capital Improvement Plan • 2024-2029

## Wood Grid Replacement

Project Description \& Benefit: The 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 attention 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: 2026

## Priority Level: 2



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

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- Fire Department Fleet Management ............................ 32


## 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 or increased demands on service requirements.

The current fire station was built in the early 1980's. It has five bays to hold four fire trucks and two ambulances. Vehicles are double-stacked in the bays 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 originally 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 a new fire station facility that will adequately meet 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 and design work.
Total Project Cost: $\$ 20,000,000$
Phase 1, Design: $\quad \$ 1,500,000$
Construction: $\$ 18,500,000$


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.


## 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, two 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 should then be used in a reserve status for an additional ten years and decommissioned once it is 25 -years old.

While the City has made great strides to update its aged fleet of aged-out apparatus and specialized vehicles, two pieces of equipment critical to safe and effective fire response. two priority pieces of equipment are 15 years to over 30 years old and at the end of their functional life. The Department has developed a strategic, cost saving approach to meeting Homer's fire protection needs with the following top-prioritized replacements:

QuickAttack Brush Truck. In 2022, after 33 years of service, HVFD's single front-line wildland firefighting apparatus (a 1990 Ford F-350 Crew Cab Pickup with a forestry firefighting slip-in unit) was decommissioned. The entire City of Homer is in the Wildland-Urban Interface (with the exception of most of the Spit) and atsignificant risk from wildfire. The City is also often called to provide mutual aid in wildland fires in neighboring Anchor Point and KESA districts. A quick attack pumper truck will allow the department access to areas that will not support the weight or dimensions of larger fire tucks and can be used as a backup brush unit. $\$ 575,000$

Engine-4, at over 40-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. 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, sidelining vehicles for lengthy repairs and putting both firefighters and the public at great 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. $\$ 850,000$

Plans and Progress: HVFD developed a fleet replacement plan that places apparatus on standard replacement cycles consistent with NFPA requirements and community needs. Funds were allocated for a used ladder truck in the FY23 Capital budget. Replacing Brush-1 and Engine-4 are the highest priority.

Total Project Cost: $\quad \$ 1,655,000$
Quint/Ladder Truck: $\quad \$ 230,000$ (complete)
Quick Attack/Brush Truck: \$575,000
Engine 4 Replacement: $\$ 850,000$

| Funding Secured | Prior to July '23 | FY24/25 |
| :--- | :--- | :--- |
| Ladder Truck |  |  |
| COH Fleet CARMA | $\$ 230,000$ | - |

Schedule: 2025-2026

## Priority Level: 1



HVFD's Brush-1 is a converted 1990 Ford truck which is NFPA non-compliant, has aged out of its functional life by 17 years and has been decommissioned.

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## Public Works Projects

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## 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 environmental stewardship, 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 and home to, among other wildlife, nesting sand hill cranes. Failure of the mechanical equipment could cause the pumps to fail and the wet well to overflow, creating an ecological disaster.

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 structure
- 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. The Project is listed on the Alaska Department of Environmental Conservation's FY24 Intended Use Plan for State Revolving Loan funds, and is under consideration for a Federal appropriation. ADEC has offered a Principal Forgiveness Subsidy in the amountof $\$ 500,000$. TheCity will proceed with Final Design in FY24 and hopes to implement construction in FY25..

## Total Project Cost:

\$2,937,353
Engineering Concept Design:
\$ 18,023 (complete)
Final Design:
\$ 100,000 (funded)

Schedule: 2024-2025

Priority Level: 1

| Funding Secured | Prior to July ' 23 | FY24/25 |
| :--- | :--- | :--- |
| Conceptual Design | $\$ 18,023$ | - |
| Final Design |  |  |
| COH HAWSP | - | $\$ 100,000$ |



The Beluga Lift Station is located on a causeway that crosses Beluga Slough, pictured above, a tidal estuary wetland about 0.6 miles long.


Project Description \& Benefit: This project rehabilitates Heath Street, a collector street in Homer that runs north-south from Pioneer Avenue to the Sterling Highway. Heath Street provides critical access for Homer's public safety responders: Homer Volunteer Fire Department at the top of Heath Street on Pioneer Avenue, Homer Police Department further south on Heath Street and Homer Public Works Department at the bottom of Heath Street on the Sterling Highway. Other major destinations on Heath Street include a US Post Office, the University of Alaska's Kenai Peninsula College, a 55,0000 square foot commercial building, financial institutions and the Homer Public Library.

Heath Street is a paved road that is showing signs of failing. The vehicle wheel tracks are depressed, almost like ruts in the asphalt. Public Works believe this is being caused by a failing storm drain system and inadequate drainage that is allowing water to infiltrate the road bed causing soft spots. The condition is getting worse with each freeze-thaw cycle.

Rehabilitation work should include improvements to the curb, gutter and sidewalk, including proper curb cuts to make the sidewalk and street crossings accessible.

Plans \& Progress: The City has invested in a storm drain condition survey and extensive value engineering in the final design to make the project affordable .-

Estimated Project Cost: \$953,339
Schedule: 2025

Priority Level: 2

| Funding Secured | Prior to July '23 | FY24/25 |
| :--- | :--- | :--- |
| Storm Drain <br> Condition Survey | $\$ 30,136.55$ | - |



Photo showing the beginning of soft spots mid-way down Heath Street.


## Homer Airport Terminal Improvements

Project Description and Benefit: The Homer Airport Terminal, built in 1994, suffers from obsolescence and deferred maintenance of its major systems such as the antiquated fire system, obsolete air handling system and failing exterior doors. While the interior lobby space offers an attractive welcome, some of the public features do not comply with the ADA, including the restrooms. The interior also needs renovation and refreshing to improve the desirability and function. The exterior is showing its age - peeling paint is allowing the weather to penetrate the building's protective siding. Broken and uneven sidewalks compromise ADA accessibility to the building, as does poorly delineated ADA accessible parking.

This project will complete repairs and renovations needed for ADA-compliance, energy efficiency, security and resilience. Improvements will benefit the Homer Airport, a regional Airport that provides access to the intrastate air transportation system for all of the Southern Kenai Peninsula and Kachemak Bay region and supports light plane service to several small communities on the south shore of Kachemak Bay which otherwise are only accessed by boat. Aviation plays a critical role in the everyday life of rural Alaska towns; our economy, citizens, businesses, industries, and government agencies depend on aviation, often as a primary mode of transportation for travel, medical services, shipment of goods, and tourism. At times when highways are shut down, the airport facility is a lifeline. Addition of an emergency backup power generator will keep the terminal operational in times of emergency and power outages.

The project additionally benefits visitors. The City has developed a cohesive, City-wide plan for consistent and attractive wayfinding. Directional and informational signs at Homer's gateways are the highest priority in Homer's Wayfinding Plan. This project implements wayfinding designed for the Airport Terminal to help people get where they want to go and improve the visitor experience.

The AK Department of Transportation and Public Facilities owns the airport and leases space upon which the Homer Airport Terminal sits to the City of Homer. The City is responsible for building maintenance, repair and renovations. The Terminal is a joint use passenger/cargo terminal comprised of a $8,673 \mathrm{SF}$, single-story building, including $1,200 \mathrm{SF}$ of cargo terminal. The functional areas in the building include departure lounge/security, lobby/waiting area, airline space, baggage claim/bag car unloading, concessions, circulation, and administration/mechanical.

Plans \& Progress: The City's FY24-25 capital budget allocates funds for the two highest priority projects for customer safety and accessibility: constructing an ADA family restroom in the terminal and repairing uneven sidewalk segments.
Total Project Cost: $\$ 1,402,570$
Interior Renovations $\quad \$ 378,000$
ADA restroom and other ADA compliance issues
Furniture upgrade for ADA compliance
Fire/Life Safety Systems $\quad \$ 159,156$
Replace HVAC and fire alarm systems
Replace automatic entry doors for security/energy efficiency
Exterior Renovations $\quad \$ 659,812$
Provide ADA-compliant parking and access
EV Charging Station
Paint exterior siding
Install wayfinding signage/kiosk


Resilience Measures: $\quad \$ 205,602$
Install backup generator for emergency power Solar installation -

Schedule: 2024
Priority Level: 1

| Funding Secured | Prior to July '23 | FY24/25 |
| :--- | :--- | :--- |
| ADA Restroom |  | - |
| COH Design Gen CARMA | $\$ 14,400$ |  |
| COH Construct Gen CARMA | - | $\$ 50,000$ |
| COH Sidewalk Repair Gen CARMA | - | $\$ 76,175$ |



## Homer All Ages \& Abilities Pedestrian Path

Project Description and Benefit: This project combines two high priority sidewalk projects to significantly improve pedestrian access to everyday destinations, key facilities and recreational opportunities. HAPP fills major gaps in Homer's non-motorized pathways to provide equitable, safe and low-stress pedestrian facilities connecting neighborhoods, Coast Guard housing and the Senior Centerto service providers, businesses and schools. Local residents will have a safe, year-round, accessible route for daily activities; wayfinding signs and online tools will complement the project by identifying and easily sharing the route with visitors. The Independent Living Center is currently developing "Accessible Homer" and a "Blue Path" online map that identifies ADA accessible routes, businesses, service providers, and recreational opportunities within Homer. Together these efforts will increase tourism access to and economic benefits to the Central Business District. Major destinations along the HAPP include: the Public Library, markets, pharmacy, Post Office, banks, recreation areas. Improvements installed to the north and east of the Senior Center will provide a safe and accessible route to the hospital and medical district.

HAPP is two interconnected loops. The north loop connects the Senior Center on Svedlund Street south to Pioneer Avenue, and west to Main Street along Herndon and Lee Streets. The south loop intersects the north loop at Svedlund and Pioneer Avenue where an enhanced crosswalk is needed. South of Pioneer Avenue, the south loop continues on City-maintained Poopdeck Trail, connects to sidewalk on Hazel Avenue and then south to the Sterling Highway, where a highly visible pedestrian crosswalk is needed. The route then joins an existing trail from the Islands and Oceans Visitor Center, south to Old Town. From Old Town the route turns north on Main Street continuing uphill to Lee Street.

Much of the route is already constructed. The scope of this project completes and connects the two HAPP loops by constructing sidewalk on Svedlund Street from Pioneer Avenue to the Senior Center and from Herndon Street to Lee Drive to Main Street and on the State-owned portion of Main Street south from the Sterling Highway to Ohlson Lane. Right of way is secured and an environmental checklist review shows no concerns. Where the HAPP crosses Pioneer Avenue and the Sterling Highway, both arterial roads, crosswalk improvements (such as Rectangular Rapid Flashing Beacons, high-visibility pavement markings and/or curb extensions) are essential for pedestrian safety.

Plans \& Progress: The City's recent investment of $\$ 1.4 \mathrm{M}$ to construct a sidewalk on Main Street from Pioneer Avenue north completed one major missing portion of the HAPP. Private sector support included sidewalk construction by the Aspen Hotel in 2019, connecting to the Sterling Highway and to the Island and Ocean Visitor Center sidewalk and public trails. The City has funding to provide wayfinding improvements at several locations along the HAPP and allocated funds to design the Svedlund/Herndon sidewalk segments. The project is under consideration for Alaska Department of Transportation FY2225 Transportation Alternatives grant funding.

Total Project Cost:
\$3,900,000
Svedlund/Herndon \& Lee Street: \$1,600,000
Main Street South to Ohlson Lane: $\$ 2,000,000$
Crosswalkimprovements: \$ 300,000
Schedule: 2024
Priority Level: 1


HAPP completes important sidewalk connections and installs high visibility crosswalks to improve non-motorized transportation andsafety..

| Funding Secured | Prior to July '23 | FY24/25 |
| :--- | :--- | :--- |
| Svedlund/Herndon Design |  |  |
| COH HART Roads | - | $\$ 75,000$ |

## Svedlund/Herndon Street Sidewalks

Project Description and Benefit: This project constructs an ADA-compliant sidewalk connecting the Senior Center to Pioneer Avenue via Svedlund Street and to Main Street via Herndon Street, which are currently lacking sidewalk facilities. The Senior Center, an Assisted Living center and two independent senior housing developments are located on Svedlund and Herndon Streets, just one block from Pioneer Avenue, the Independent Living Center and everyday services provided by Homer's central business district and a few blocks to Main Street and several medical providers. The construction of a safe, accessible route for residents to travel to Homer's Central Business District and Medical District is a relatively small project with great impact.

Seniors and disabled citizens face challenges with regard to mobility and independence in an automobile oriented society. For those who do not drive, maintaining a high quality of life depends upon the proximity and accessibility of the non-motorized transportation system. Being able to move about the community without having to rely on others is vital for maintaining physical and emotional wellbeing, reduces the risk of isolation and quality of life improves.

Plans \& Progress: The project (as part of the Homer All Ages and Abilities Pedestrian Path) is under consideration for Alaska Department of Transportation FY22-25 Transportation Alternatives grant funding. If unsuccessful, the City can begin design work for sidewalk facilities (including curb and gutter) for the west side of Svedlund to Pioneer Avenue and on Herndon Street to Lee Street with funds allocated in the City's FY24/25 Capital budget.

Total Project Cost: $\$ 1,600,000$
Phase 1: Design $\$ 75,000$ (secured)
Phase 2: Construction $\$ 1,525,000$


The sidewalk that might connect Homer Senior Center and independent senior housing to Pioneer Avenue ends after only a few steps north on Svedlund Street. Herndon Street, pictured above also has no sidewalk.

| Funding Secured | Prior to July '23 | FY24/25 |
| :--- | :--- | :--- |
| Svedlund/Herndon Design |  |  |
| COH HART Roads | - | $\$ 75,000$ |



# 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, creating vulnerability 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
2024-2025 Phase 2 Construction: $\$ 1,600,000$
2026 Phase 3 Construction: $\$ 5,974,000$
Priority Level: 1


## Wayfinding \& Streetscape Plan Implementation

Project Description and Benefit: Homer lacks coherent wayfinding for visitors and residents alike to find destinations by vehicle or on foot. The City hired Corvus Design to create a wayfinding plan for the City in 2021, which was adopted in 2022. Recommended improvements include working with the Alaska Department of Transportation (DOT) to revise many Sterling Highway signs, and install themed signage for drivers and pedestrians so they can easily find destinations. The work also included recommendations on benches, trash cans and landscaping which contribute to the small town character of downtown Homer.

Plans \& Progress: The project will proceed in two phases. The goal of the first phase is to install 26 Pioneer Avenue banners, ten wayfinding signs and ten benches. New Pioneer Avenue banners were installed in 2023. Capital funds for wayfinding signs were approved in the City's FY24 capital budget, with the goal to fabricate and install basic bollard style trail marker signs on both ends of five routes. The City will also work with Alaska Department of Transportation (AK DOT) to update road signage during the Sterling Highway the repaving project (likely in FY25/26) and during other future AK DOT road projects in Homer. Goals of phase two is to install 26 wayfinding signs, two gateway signs and an additional ten benches.

Total Project Cost: \$277,500

Phase 1: \$126,500 (\$56,500 secured)
Phase 2: \$151,000

| Funding Secured | Prior to July '23 | FY24/25 |
| :--- | :--- | :--- |
| Phase 1 Wayfinding Streetscape |  |  |
| Pioneer Avenue banners | $\$ 6,500$ | - |
| Wayfinding trail marker signs |  |  |
| COH HART Fund | - | $\$ 50,000$ |

Schedule: Phase 1 2023-2025


## 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:

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- Sterling Highway Milepost 172:

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## 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. and creates a powerful first impression. 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 entails 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-ofway 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.



# 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, winding road with essentially no shoulders, only side-slopes and drainage ditches along most of its length.

The road provides access to a state airport with general aviation businesses, light industrial businesses, private residents and 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 commuter 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 pedestrians and cyclists. 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 1 R project plan and evaluate a future project to create safe and sustainable 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 Rehabilitation

Project Description \& Benefit: This project will rehabilitate storm drains and pavement on the state-owned portion of Main Street from Pioneer Avenue south to Ohlson Lane. Ideally this project will include a curb gutter and sidewalks to provide a safe means for pedestrians to travel from Ohlson Lane in Old Town north to Pioneer Avenue, making it a complete street.

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 is a main commercial corridor and supports residential traffic as the street is also home to many single family residences, some multi-family residences, and leads to trails systems and one of the City's most popular parks.

The road condition has deteriorated over the past several years. The pavement is raveling and the drainage system is inadequate, allowing water to infiltrate the road bed. This adversely impacts the structural integrity of the road, particularly during freeze/thaw cycles. The lower portion suffers from potholes, triggering continual complaints from the traveling public. The storm drain systems needs to be rehabilitated.

Any road rehabilitation should be coupled with addition of a sidewalk facility to fill a gap on this busy mixed-use collector street.

Plans \& Progress: The City has held off doing any technical work because it is a State road. A funding request for AK Department of Transportation FY22-25 Community Transportation Program grant funding is under consideration and is a mechanism to make these much needed improvements to Main Street.

Estimated Project Cost: $\$ 4,300,000$


State-owned portion of Main Street in Homer, Alaska.


# Main Street Sidewalk: 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 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 requesting DOT \& PF upgrade Main Street with a sidewalk facility.

In 2022, the City of Homer completed a $\$ 1.4 \mathrm{M}$ project to install sidewalks on the city-owned portion of Main Street, from Pioneer Avenue North. Over the last several 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 continuous 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 Avenue 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 needs State partnership in this important nonmotorized transportation improvement.

## Estimated Total Project Cost:

 \$2,000,000Cost includes a WAG of $\$ 100,000$ for storm 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.


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## Sterling Highway Milepost 172 Drainage Improvements

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.

In 2022, Sterling Highway Reconstruction project managers engaged with the City of Homer Public Works Director about analyzing water flow and drainage related to the project.


Aerial photo of the area downslope of the outfall from a

## 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.

## 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:

- Homer Hockey Association:

$$
\text { Kevin Bell Ice Arena Condenser Project ...................... } 51
$$

- Homer Senior Citizens Inc.: Alzheimer's Unit52
- Kachemak Shellfish Growers Association: FLUPSY \& Otter Predation Assistance 53
- Kachemak Ski Club:

Homer Rope Tow Access \& Equipment Upgrades 54


# Homer Hockey Association Kevin Bell Ice Arena Condenser Project 

Project Description \& Benefit: TThe 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 with a yearly budget of $\$ 300,000$ to $\$ 375,000$. HHA is seeking financial support to replace the condenser unit. The current cool-air condensers have been in use since 2005 when the facility opened, and they need to be replaced and updated. The condenser unit is an essential part of the refrigeration system that cools the refrigerant down, in order to get the temperature reduced to maintain the quality of the ice. The proposed replacement condenser is an evaporative condenser and will be more efficient to operate and maintain.

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 almost two decades 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 frequent community and school skating events. KBA is also home ice for the Mariner-High School Co-Op Team with includes players from all the secondary schools on the southern Kenai Peninsula.

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 2022-23 these games brought over 1,740 out of town players to Homer, accompanied by family and fans that contributed to the local economy through lodging, transportation, dining, and merchandise purchases..

Plans and Progress: HThe purchase and replacement of the condenser would enable HHA to remain open. It is imperative that our rink continue to operate for the health and welfare of the diverse community we serve. Covid-19 has taken away so much over the past two years with restricted social interactions and limited activities and exercise that has led to mental and physical health instability in communities everywhere. HHA has done our best to keep the Kevin Bell Arena open as a safe place for kids, families, and community members to come together and exercise their minds and bodies.

We had amazing results from the no cost recreational options we offered to the public and school groups last season. In the winter of 2022-2023, there were approximately 1,135 people who attended the free public skating provided every Sunday afternoon. The Kevin Bell Arena also hosted 17 separate school group events with approximately 435 total students enjoying a one hour no cost skating session. These events helped aid our community's recovery from the lingering social and health impacts of Covid-19.

HHA has an active and committed Board of Directors and membership base. The volunteer hours are leveraged by several successful fundraisers, sponsorships and advertising campaigns, grant awards and donations each year. This covers approximately one half of the annual operating and capital expenses. The remaining expenses are covered by user fees. However, a project as large as replacing the condensers is outside the scope of our annual operating budget.

Total Project Cost: \$140,000


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


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## 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 city in the State which will see the second most significant growth in this demographic. Homer Senior Citizens operates a 40-bed assisted living facility. We have had to relocate 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 Wing 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 Wing 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 actively fundraising for the Wing for many 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 a total of $\$ 99,550$ in fundraising for this valuable project.

We will be working with the architectural firm to develop a new plan for the wing to be located in The Terrace existing space.
Total Project Cost: \$750,000


Example of a HydroWorx Therapy Pool Room .


## Kachemak Shellfish Mariculture Association FLUPSY \& Otter Predation Assistance

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 and rental lease with the Kachemak Shellfish Growers' Coop (KSGC), local aquatic farms are providing jobs for processing, marketing, and shipping live oysters for the half-shell market, and retail sales from KSMA's processing facility. This lease to the Coop also includes a portion of the facility to grow out oyster larvae which has been successfully grown and sold to member farms and farms outside of Kachemak Bay for the last ten years.

To date the small hatchery continues to set millions of seed every year. Once the seed is large enough, the "spat" can then be transplanted into the nutrient rich waters of Kachemak Bay, and a critical piece of equipment then comes into to play. This piece of anchored equipment is called a FLUPSY, an acronym for Floating Upwelling System. The microscopic spat need six months to a year a year to grow to size large enough to be transferred to the permitted aquatic farm sites for final grow out. Great amounts of time and expensive labor is needed to clean and grade the spat during the time they are in the FLUPSY. KSMA's FLUPSY is over 23 years old and in great disrepair due to age and the harsh marine environment. The FLUPSY is poorly anchored, a vandalism target, and needs new operational \& safety equipment along with DEC-compliant floatation, and covered, lockable dry storage for tools and laborers' needs.

In addition, the federally protected sea otter population in Kachemak Bay has exploded in recent years. The otters have learned how to gain access to a new food source, oysters, by tearing into the mesh lantern nets that have been the industry standard of growing suspended cultured oysters for the last 32 years. The farms now need to use coated 16 -gauge wire cages, at a substantial increase in cost.

Alaska's Comprehensive Economic Development Strategy has prioritized mariculture development for many years. Now is a critical time to move mariculture in Kachemak Bay ahead. The economic benefits of this oyster industry in Homer are great. Oysters have become a sparkling year-round staple to Homer's seafood options for locals and tourists alike. The local hatchery and a new, safe state-of-the-art FLUPSY can also provide a viable educational lab for high school and university students. Mariculture courses can further be developed around aquatic farming opportunities including the raising of sea vegetables and kelp.

Plans and Progress: KSMA is working closely with the Kenai Peninsula Economic Development District (KPEDD) to secure grant money to build a new FLUPSY to benefit the Kachemak Bay farmers and other in-state farms. The cost to secure pile driven anchoring piles, update the present electrical system, and locally build a new FLUPSY is estimated to be $\$ 750,000$. Additionally, KPEDD is aware and supportive of financial assistance to purchase, in bulk, hundreds of coated 16 gauge wire cages for each farm. The price tag for this new system is currently being researched and discussed by the mariculture community, but is estimated at a minimum $\$ 50-\$ 75 /$ cage.

Total Project Cost: \$750,000-\$950,000


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 Description \& 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 safety of skier access to the area, as well as the skier 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 hill. It grades the upper towpath to lower the rope's haul angle, to diminish the physical strain on skiers riding to the top of the hill. It also purchases a portable rope tow device that can be positioned on the lower, more gently sloping part of the hill. This will 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 rope tow open for other riders.

To augment natural features and offer entertaining challenges for more advanced skiers and snow boarders the project seeks to acquire terrain park features. These would include brushing and mulching a gully next to the entrance trail to the lodge, thus creating a natural 'half-pipe' type feature. Also planned: creation of two mid-mountain earthen 'table tops' for jumps and aerial maneuvers for advanced skiers and snow boarders.

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 Snowmads snow machine club, directly across Ohlson Mountain Road from the Section Line entrance point, on Kenai Peninsula Borough lands. This new, expanded parking area minimizes the safety risks of double parking on Ohlson Mountain Road and dispersed pedestrian traffic in the roadway that has occurred during crowded weekends. KSC has already cost-shared an expansion of the pre-existing Snomads parking lot at the Watermelon Trailhead in 2022. And also paid to have a sizable new area brushed and mulched, serving as a primitive frozen earth parking lot during the 2022-2023 season.

While alternative grant funds and KSC cash reserves will likely be used to complete additional grading and gravel work on the parking area's construction to harden it for year-round use, additional funds will be needed for new signage and security features such as fencing and gates.

Total Project Cost: \$90,000
Parking/access improvements: $\$ 15,000$
Relocation of Bull Wheel \& Slope Grading: \$40,000
Equipment (auxiliary rope tow \& terrain park features): \$35,000


Youth enjoying Homer's own downhill ski area.


## 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 FairviewAvenue from Main Street to West Hill Road. The road is approximately 4,200 linear feet and the project will inelude 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 devefoping alternative access for emergency vehicle response. The need for the road extension has increased markedlywith the development of three major residential subdivisions in the area.
This improvement is fecommended in the 2005 Homer Area Transportation Plan.
Recommend removal since road connections have been established to West Hill Road.
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


City of Homer Capital Improvement Plan • 2024-2029

## Capital Improvement Long-Range Projects


#### Abstract

Port \& Harbor Deep Water/Cruise Ship Dock Expansion, Phase 1: Upgrades to and expansion of he Deep Water Dock Expansion will boost Homer Port \& Harbor 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. Dock improvements will also fulfill a contingency planning requirement under Homeland Security provisions. The Port of Alaska, 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. A $\$ 1,250,000$ feasibility study was completed in September 2016.


Cost: Cost estimates are $\$ 1,750,000$ for design and $\$ 32,000,000$ for construction.

Harbor Float System 5 Redesign: System 5, built in 1988, moors large industrial vessels within Homer's Small Boat Harbor. Over the years, as the number and size of large vessels has grown, the System has been used at and beyond its engineered capacity. System 5 will have to be replaced within the next ten years. In the next three years, the City will be conducting a US Corps of Engineers General Investigation into building a new harbor basin dedicated to these large vessels. Once constructed, the large vessel fleet will move off System 5, freeing up the area around System 5 (approximately 20\% of the small boat harbor) to be redesigned. A newly designed System 5 will better accommodate the needs of the many small vessels on the harbor stall wait list and help define the maximum benefits of building the large harbor expansion. Conceptually, System 5's main float could be built closer to the bank and extend further toward the harbor entrance with a Tee out provide more moorage than the current system. This would also provide the option to prioritize the use of the float closest to the harbor entrance for vessels needing that kind of access (such as a Coast Guard small boat station, water taxi pickup and drop off, and emergency medical transport vessels) and to explore upgrading the old commercial ramp near System 5 to a drive down float to meet the needs of small cargo vessels, passenger loading and commercial fishing vessels.

Cost: This project works with engineers to conceptually design options for System 5 and produce rough order magnitude cost estimates.

Old Main Dock Removal and Disposal: This project removes the old Main Dock from inside the Pioneer Dock facility, which is a derelict structure in the Port \& Harbor, a safety hazard and potential liability for the City. 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 as a commercial pier in 2001, the City built the new Pioneer Dock around it, leaving the Main Dock in place. It has deteriorated to the point that it is unsafe even for an individual to walk on. This project removes and disposes of the structure in a method that satisfies safety and environmental requirements. Where possible, salvaged materials may be sold.

Cost: Unknown


# Capital Improvement Long－Range Projects 

## 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 versus replacing the line 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.

Cost：$\$ 400,000$

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 safety concern．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 that 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，following complete streets design，this project creates a center turn lane，well－marked crosswalks，and a separated bike path to improve traffic flow on Ocean Drive and reduce risks to drivers，bicyclists，and pedestrians．The project will also enhance the appearance of the Ocean Drive corridor by moving utilities underground and providing some landscaping and other amenities．

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## Capital Improvement Plan Appendices

## CITY OF HOMER 2024-2029 CAPITAL IMPROVEMENT PLANNING PROCESS <br> \& <br> FY 2025 LEGISLATIVE REQUEST DEVELOPMENT SCHEDULE

| ACTION | TIME FRAME |
| :---: | :---: |
| City Council Approval of CIP Planning Schedule | May 8,2023 |
| Solicit new/revised project information from City Departments, local agencies and non-profits | May 9, 2023 |
| Input for New Draft Requested By | June 2, 2023 |
| Prepare and Distribute Draft CIP to City Advisory Groups for Review and Input: | Meeting Dates: |
| ADA Compliance Committee | July 13 |
| Planning Commission | July 19 or August 2 |
| Park, Art, Recreation and Culture Advisory Commission | June 15 |
| Economic Development Advisory Commission | August 8 |
| Port and Harbor Advisory Commission | June 28 and August 23 |
| Administrative Review and Compilation | August 29 - September 6 |
| City Council Worksession to Review Proposed Projects | August 28 |
| Resolution on CIP - Legislative Request Public Hearing for CIP - Legislative Request | September 11 |
| Administration Forwards Requests for Governor's Budget | September 25 |
| Distribution of CIP and State Legislative Request | September 25 |
| Compilation/Distribution of Federal Legislative Request | October 2023 \& January 2024 |



City of Homer Capital Improvement Plan • 2024-2029

## Capital Improvement Plan Appendices

Awaiting City Council Resolution adopting FY25 CIP.


City of Homer Capital Improvement Plan • 2024-2029

## Capital Improvement Plan Appendices

Awaiting City Council Resolution adopting FY25 CIP.

# Capital Improvement Plan 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 $1 \frac{1}{2}$ percent sales tax approved by voters of Homer for debt service and CIP projects is dedicated at $3 / 4$ percent to sewer treatment plant debt retirement, with the remaining balance to be used in water and sewer system improvement projects, and $3 / 4$ 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

# Red font denotes projects added to the Proposed New Projects section since the August 28, 2023 City Council Worksession. <br> <br> City of Homer Nominated Projects 

 <br> <br> City of Homer Nominated Projects}

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## Homer Waste Water Treatment Plant Improvements

Project nominated by the Public Works Director.
Project Description and Benefit: The two clarifier tanks at the WWTP each contain about 94,000 gallons of waste water and operate clarifying equipment to remove solids from the waste stream in order to meet permit regulations and protect the clean waters of Kachemak Bay. The clarifiers and all associated equipment were originally installed in 1990 and operate in an extremely corrosive environment.

Despite regular maintenance, in 2022 a clarifying belt unit failed in one of the tanks. In an emergency fix, the maintenance crew noted excessive wear on the rollers, links and support pin for the flights of belts in both tanks, prompting an emergency replacement.

This project seeks to slow corrosion and mitigate similar malfunction in the future by removing the existing coating in the clarifiers and digesters in the Waste Water Treatment plant and applying a new coating consistent with industry standards as corrosion protection for the concrete tanks and vats. It also improves reliability by replacing other electrical controls at the Waste Water Treatment plant exposed to corrosion showing excessive wear. It replaces the WWTP's generator transfer switch and rebuilds the electrical components of the effluent box at the sewage lagoon.

Plans \& Progress: The Project is listed on the Alaska Department of Environmental Conservation's FY24 Intended Use Plan for State Revolving Loan funds.

## Total Project Cost:

Clarifier Coating Replacement
Digester Coating Replacement
Electrical Component Replacements
\$707,245
\$369,439
\$231,806
\$103,000

## Schedule: 2024

## Priority Level: 1



City of Homer Waste Water Treatment Plant staff checking a membrane tray for leaks


## Engineering Study for Homer Public Library Remodel

Project nominated by the Library Advisory Board.
Project Description and Benefit: Homer Public Library has expanded steadily in line with population growth in the area, from a 600 square foot cabin in the 1950 s to a 3,500 square foot building in the 1980 s to the current 17,000 square foot facility, which opened in 2006. In the 2018 Homer Comprehensive Plan, staff noted that the new building was projected to meet the community's needs for 20 years, and those projections have proven reasonably accurate. As of 2023, the building has not yet exceeded capacity, but the area population is growing rapidly and utilization of public spaces like the library are rebounding from the Covid-19 pandemic shut downs.

Staff have identified several needs, based on operational impact and competition among patrons for limited resources. Operationally, the library needs increased storage space and office/workspace. Based on use, public use spaces to be considered in the remodel include:

- A larger meeting room. The current meeting room is $19^{\prime} \times 15^{\prime} 6^{\prime \prime}$. The multipurpose space should be at least twice as large. This was identified as a long-term priority in the Library's 2019 Strategic Plan.
- An increased number of study rooms was also identified as a long-term priority in the library's 2019 Strategic Plan.
- A dedicated teen room
- An outdoor covered space, suitable for public programs even in marginal weather. The Friends of Homer Library and some community members have discussed this in conjunction with improvements to the western lot, but it was not considered a high priority for that project. Accessibility improvements, such as signage and bathrooms that are easier to use.

Additionally, accessibility improvements to the public restrooms and signage are needed.
Plans \& Progress: Staff has identified specific needs, and some high priority components of the remodel have been prioritized in the Library's 2019 strategic plan, but no design work or planning has been done. Funding is requested for an engineering study to conduct a needs assessment and provide a detailed space analysis, cost estimate, concept design options and, public outreach. The study will provide the basis for determining feasibility of various projects, which could be combined or treated separately.

Total Project Cost: \$75,000
Schedule: 2026

Priority Level: 2


Library usage has increased substantially over the past seventeen years, and with it, the need to remodel to expand both public use and operational spaces within the building.

## Homer Public Library Siding Replacement

## Project nominated by the Library Advisory Board.

Project Description and Benefit: The Homer Public Library building opened in September 2006. The concrete siding was relatively new technology at the time, and while it has lasted 17 years, it is now cracked and falling off the building. The City's Building Maintenance division has worked hard to patch and replace missing pieces, but the worsening problem is both an eyesore and a potential path for mositure to enter the building.

The siding covers all four sides of the building, but the damage is worst on the south side, where the wall curves outward and the siding is under tension.

Plans \& Progress: Building Maintenance has contacted several vendors for cost estimates and are still awaiting response. The costs below are a best guess, based on experience and the area of the building's façade. Professionals could fully replace the siding in a week or two, weather permitting. If funding and a contract is secured, the project could be done in summer 2024 to protect the facility from water infiltration and damage.

Total Project Cost: \$500,000
Schedule: 2024


Examples of damaged and broken siding on the library's south-facing wall (at left) and above the library's back door (at top).

# Homer Public Library Sliding Security Gate 

Project Description and Benefit: The Homer Public Library building was originally intended to have a sliding gate between the meeting room and the main floor. When community meetings occurred after closing hours, library staff could close off the rest of the building while still allowing public access to the meeting room and restrooms. Staff would also lock the front entrance, and the meeting organizer would be responsible for admitting people to the meeting and ensuring that the front door latched upon departure. The Port and Harbor Office has a very similar setup, with an externally-accessible meeting space and a gate separating it from the rest of the office.

For cost reasons, the library gate was never installed. This means that staff must work overtime to supervise any community events held outside of regular hours, which in turn means that community groups must pay $\$ 50 /$ hour to rent the room. This fee discourages the public from using a resource that was designed for them. The room is in constant demand during open hours, and extending its use into the evening would enhance the value of the resource for the community. It would also expand the range of community groups that could use it, since adults in particular prefer to meet after working hours. The gate was listed as a long-term priority in the library's 2019 Strategic Plan.

Installing a gate should be relatively easy, since the building was designed for it and a structural frame is already in place. The corridor is 127 inches wide and 189 inches tall (to the drop ceiling) with a utility space 22 " tall above the ceiling, which puts it in the same class as security screens for commercial retail outlets. Given that it is the main egress from the building, it would need to be powered and include an emergency opening switch on the inside.

Plans \& Progress: In November 2021, the library director assembled a list of manufacturers and spoke with several of them on the phone about the feasibility of the project. The rough cost estimates varied a great deal, but the consensus was that phase one is an engineering analysis of the space followed by procurement and installation.

Total Project Cost: \$75,000
Schedule: 2025

Priority Level: 2


Structural frame for a security gate that was built in to the Libraray's entry hall.


## ADA Accessible Platform Lift System for Ramp 7 in Homer Small Boat Harbor

## Project nominated by the ADA Advisory Board.

Project Description and Benefit: This project would provide a lift system to enhance ADA access between the parking lot and floating dock at Ramp 7 during all tidal stage levels. Installation of the platform lift/elevator ramp system would provide safe, ADA access to one of Homer's premier assets, Kachemak Bay. It would benefit all who use the Harbor, workers, residents and visitors by providing ADA access no matter what the tide levels were for the day.

While the Homer Harbor is accessible and fully compliant with Federal ADA regulations, the addition of a lift system would provide the highest level of amenities and a be great source of pride for the community.

Plans \& Progress: Planning and design funds will support feasibility and design. Feasibility work includes identifying a suitable product for this purpose and its specifications. Further, while companies manufacture lift systems that are in operation in other harbors, a system would have to be designed to work safely with large tidal fluctuations experienced in the harbor. Additionally, project cost will vary depending on whehter a new ramp or significant ramp modifications are needed to meet product specifications and to accommodate the lift system and other ramp traffic. Cost estimate below assumes ramp modifications.

Total Project Cost: $\$ 370,000$

| Design/Engineering: | $\$ 70,000$ |
| :--- | :--- |
| Construction | $\$ 300,000$ |

Port Director provided a backup memo at the August 28, 2023 worksession recommending holding off on adding this project to the CIP until a system better designed for this service is identified and a fuller scope developed according to technical specifications.



## Project nominated by the ADA Advisory Board.

Project Description and Benefit: The Homer Public Parking lot is built with a $1 \%$ grade, which is compliant with ADA regulations for wheelchair access. However, the parking lot experiences drainage issues each winter during freeze/ thaw cycles, specifically at the locations dedicated for Accessible Parking. This issue has been in place since shortly after opening in 2006. The parking spaces gather water from snow melt which then typically refreezes when temperatures drop creating large ice pads representing a very slippery and dangerous footing for those persons using the spaces.

Relocation of the accessible spaces can be accomplished but that still leaves spaces that present a slip and fall hazard for any persons accessing the area while visiting the Library, whether they are just traversing the parking lot or parking in the affected location..

Plans \& Progress: Public Works personnel addressed the issue in July 2023 by creating a drainage channel through the parking lot curb and clearing ditches so that drainage will flow from the Homer Public Library parking lot. Also, snow removal operations will be modified so that plowed berms do not prohibit water drainage in this affected area. Conditions this winter/spring will indicate effectiveness of the fix. If inadequate, a complete redesign and repaving may be necessary to accomplish drainage while maintaining the $1 \%$ grade.

Total Project Cost: Unknown

| Design/Engineering: | $\$ X X X$ |
| :--- | :--- |
| Construction | $\$ X X X$ |

Schedule: 2026

Priority Level: 2

Special Projects Coordinator consulted with Public Works staff, who recommend holding off on adding this project to the CIP until next year. This will give time to assess effectiveness of mitigation measures already implemented


Drainage issues, especially during freeze thaw cycles in the winter and spring months create hazardous access conditions at Homer Public Library.


## Roger's Loop Trailhead Parking Lot

*NEW* Project nominated by the Homer Trails Alliance for inclusion in the City of

## Homer Public Works section.

Project Description and Benefit: This project builds an off road parking lot at the Roger's Loop trailhead. The parking lot will serve the trailhead for 15 miles of ski trails, the Homestead and other all-season trails, and the Homer Demonstration Forest. Currently this area averages 700 users per week during the summer and $800-1000$ users per week during the winter. The current parking is inadequate for this amount of users; cars park on a short section of widened road shoulder near the trailhead. Long lines of cars line the roadway, which is narrow and does not have a pedestrian path, causing road congestion and danger for pedestrians as they are forced to walk in the traffic corridor to get to the trailhead. Icy road conditions in the winter increase the risk for pedestrians walking in the roadway.

This project will benefit the Homer community by providing safe access to a very popular year-round recreation area. Efforts to build a parking lot at this trailhead have been ongoing since 1998. A trailhead is included in the Diamond Creek Recreation Area Management Plan approved by the City of Homer in 2013. Resolution 23-014 was passed and adopted by the Homer City Council on February 13, 2023. The Resolution supports adding the Rogers Loop parking lot to the Capital Improvement Plan.

Plans \& Progress: The proposed project includes 24 off-road parking spaces and will require pit run gravel, processed surface material, and culverts. The City and project sponsors (Homer Trails Alliance and Kachemak Nordic Ski Club) will need to approve and execute a Memorandum Of Agreement defining the roles and responsibilities for construction and maintenance of the facility.

Total Project Cost: $\$ 200,000$


Proposed location of the Roger's Loop Trailhead parking area.


## HERC Hazardous Material Cleanup and Revitalization Plan

*NEW* Project nominated by City Councilmembers.
Project Description and Benefit: This project 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 and helps create an economically viable reuse plan that will contribute to Homer's overall quality of life and the economic development of Homer's central business district.

The HERC property houses two former school buildings. Over the years, the City has performed a variety of structural and feasibility analyses to assist revitalization efforts. However, contamination in the two buildings (asbestos, PCBs, mercury and lead-containing materials) requiring controlled removal and disposal has thwarted all efforts. The buildings are in a state of disrepair; it is only a matter of a few years before they can no longer be utilized for recreation or for City maintenance and the community recreation staff currently housed in the buildings.

Plans \& Progress: In spring 2023, the City contracted with Hazardous Building Materials Consulting, LLC to carry out a limited Hazardous Materials Assessment of HERC 1 (the larger of the two buildings) and a comprehensive assessment of HERC 2 (the smaller of the two buildings). The results reveal that both buildings contain hazardous materials, as expected due to their age and the prevailing construction materials utilized in the 1950s. Examples include lead paint, asbestos, and materials like paint and varnish that harbor PCBs. These test results hold significant implications for these buildings' demolition (or renovation).

The project would progress in phases; the first would be procuring professional services to make a cleanup plan and carry out property cleanup activities, followed by revitalization planning.

Phase 1 Project Cost: pending more information - ?


Photo forthcoming if project approved for the CIP.


## Comprehensive Drainage Management Plan

*NEW* DRAFT Project nominated by City Councilmembers
Project Description and Benefit: Homer's Drainage Management Plan, developed in the early 1980s, includes design criteria and methods for a standardized approach to the construction of drainage facilities based on basin runoff flows. The Plan recommended the use of "natural drainage ways and pre-existing manmade drainage ditches as the most cost-effective way to develop the complete drainage system."

Currently, the City maintains only three miles of storm sewer and associated catch basins that outflow into Kachemak Bay. Otherwise, Homer's stormwater is largely channeled and drained through an open ditch system. Homer's Design Criteria Manual for subdivisions does not currently address on-site stormwater management, with individual developers addressing stormwater on large parcel developments on a case-by-case basis.

Conditions have changed since the early 1980s. Development in Homer has greatly expanded, and with it the size and demand on Homer's drainage system. Stormwater management strategies and tools have also advanced considerably since Homer's plan was developed. They now include a wide variety of gray and green infrastructure technologies, low impact development and behavioral practices, as well as innovative policy strategies (such as drainage districts) that, together, can improve the quality and reduce the velocity and quantity of runoff discharging onto downstream properties or directly to receiving waters.

This project develops a comprehensive regulatory, administrative and operational framework to guide Drainage Management in Homer with the goals of protecting our environment; reducing flooding to protect people and property; reducing demand on public stormwater drainage systems and supporting healthy watersheds. It will:

- Consider and recommend storm water management systems and best management practices including specifications for collection, storage, conveyance and treatment structures;
- Incorporate low impact development and green infrastructure management practices to treat or reduce storm water discharges and urban non-point source runoff to area streams and the critical wildlife habitat of Kachemak Bay
- Include public participation and involvement in policy development to better manage runoff and protect downstream properties from the impacts of runoff, pollution prevention and property development best practicts.

Plans \& Progress: . TBD

Total Project Cost: TBD

Staff has not been able to fully develop this project in the time available since the CIP worksession; the description here is a draft. Staff recommends provisional approval of this project for inclusion in the 2024-2029 CIP, with a final project being added after it is more fully developed and approved by Council


## Roger's Loop Trailhead Storage Shed

Project nominated by the Homer Trails Alliance for the Other Organizations section. Project Description and Benefit: This project builds 16 foot by 44 foot shed on a City of Homer owned parcel at the Rogers Loop Trailhead to accommodate Kachemak Nordic Ski Club grooming equipment for lower Baycrest ski trails. Currently the equipment is kept outdoors. General maintenance and machine repairs must occur outside, or the equipment is trailered to a suitable indoor location. This shortens the working lifespan of the equipment, as storage outside does not allow the snow and ice buildup within the machine to melt in-between uses. Sometimes, trails cannot be groomed because of maintenance needs or frozen equipment issues. The proposed building will alleviate these concerns by providing a heated, indoor space that is accessed from public property. This will allow for quicker repairs, longer lifespan of the equipment, and a secure place to house tools and machine parts.

The community of Homer will benefit by having a better skiing experience on trails that are consistently maintained. It is a cost savings to the community in that KNSC will not have to raise membership fees to cover the cost of the additional maintenance and shortened lifespan of this equipment that is kept outdoors. It is also a volunteer cost benefit in that it makes it easier to be a KNSC volunteer when they have working equipment. Well maintained equipment means better grooming which means a better ski experience for all users.

Plans \& Progress: A site plan, shed design, HEA requirements for power hookup and securing the services of a contractor are all complete. Zoning code \& other legalities are currently being reviewed.

Total Project Cost: \$72,000


Proposed location of the storage shed shown in green.


# Homer Trails Alliance: Diamond Creek Recreation Area Trails *NEW* Project nominated by the Homer Trails Alliance for the Other Organiza- 

 tions section.Project Description and Benefit: This project develops summer trails linking the "forested islands" throughout the Diamond Creek Recreation Area (DCRA). These trails are part of the Diamond Creek Recreation Area Resource Management Plan which was prepared by Homer Soil and Water Conservation District and adopted by the City of Homer in 2013.

Recently installed trail counters at the Rogers Loop Trailhead indicate an immense demand for a summer use trail system on the north shore of Kachemak Bay. During peak summer months, 700 hikers per week visit the Baycrest and Homestead trail system via the Rogers Loop Trailhead. During winter months over 1000 skiers and snowshoers per week use this access. The current growth rate of the surrounding residential areas indicates that these numbers are on the rise.

It has been documented that for every $\$ 1$ spent on trail development, up to $\$ 3.40$ is returned in benefits. In addition to economic benefits, communities with a robust trail network experience higher levels of physical and mental health, lower healthcare costs, and an overall greater sense of community involvement and well-being.

Plans \& Progress: Over 4 miles of proposed trail has been mapped including a mile of all abilities trail linking the southwest corner of the DCRA across from Green Timbers Road at MP 167.9 to the Alaska Department of Transportation Trailhead at Milepost 168.9 of the Sterling Highway. As proposed in the 2013 management plan, trailheads have been designed at two locations along the west border of the DCRA.

Total Project Cost: $\$ 200,000$



## Traffic Control at the Corner of Sterling Highway and Soundview Avenue

*NEW* Project nominated by Councilmember Lord for the State section.

Project Description and Benefit: This project a traffic light at the corner of the Sterling Highway and Soundview Ave in Homer.

The West Homer Elementary Site Council has worked with the school administrators and staff, parents, and the Kenai Peninsula Borough School District to increase the safety and efficiency of the school parking lot, especially during the school pick up and drop off times. The school moved the bus loading and unloading zone to behind the school and implemented a new traffic pattern for students arriving and departing to eliminate 'hazardous double drop off and pick up lines of years past and improve the efficiency of bus and parent traffic interaction.

The remaining traffic congestion consists of a bottleneck of cars and busses departing the school due to a required left turn on to the Sterling Highway that crosses the busy northbound lane of traffic. An additional hazard is that northbound traffic is going around cars that are backed up in the northbound lane waiting to turn right onto Soundview Avenue and into the school. The cars waiting to turn left onto the highway from Soundview Avenue are proceeding because it appears northbound traffic is stopped and the drivers are unable to see the cars accelerating and going around the traffic jam. Several near-miss accidents have been witnessed at this location.

The intersection at the highway and Soundview currently has infrastructure that supports a flashing yellow light at the intersection. This stretch of road is overdue to be reworked to provide a proper school zone, turn lanes and cross walks for West Homer Elementary (which opened in 1997). However, in these challenging times with our state budget, the simple solution of regulating traffic turning onto the Sterling Highway with a new traffic light using the existing infrastructure would be a small improvement that will have big impact. Replacing the flashing light with a programmable traffic light that controls north and southbound traffic to allow left turns from Soundview Avenue during school year at arrival and dismissal times would support and improve the changes West Homer Elementary has already made, and most importantly help prevent a tragic incident.

Plans \& Progress: A request for a traffic study and solution by the West Homer Elementary Site Council, supported by the Principal and Homer City Council was submitted to the State in early 2019. Currently, the Alaska Department of Transportation has infrastructure in place that operates flashing yellow light. A possible solution is for that existing infrastructure to support a programmable traffic light to provide a green arrow for the left hand turn onto the highway during very predictable heavy traffic times. Other school zone improvements could be planned and implemented during the State's plan for Sterling Highway Milepost 169-175 Pavement Preservation Project and Pedestrian Safety Upgrades.


## Comprehensive Drainage Management Plan

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Plans \& Progress: . TBD

Total Project Cost: TBD

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