Port of Nome

STRATEGIC DEVELOPMENT PLAN

DRAFT PLAN MAY 12, 2025

231131

Client
The City of Nome

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Thank You
To Nome's citizens, businesses, stakeholders, and all who participated in the development of this document.

Planning Team
PND Engineers, Inc.; Corvus Design, Inc.; and Northern Economics.

Introduction

Nome, located in Western Alaska on the southern coast of the Seward Peninsula and the Bering Sea, is on the westernmost point on the North American mainland. Nome and its Port are the regional hub for transportation, commerce, and medical services as the city is located more than 500 miles from the nearest road system connected to United States. The Port of Nome serves a vast and underserved region, undergoing significant change. Due to climate change, the Northwest Passage is breaking up earlier and staying ice-free longer each year, providing an outstanding opportunity for the City of Nome and its port facilities. This Strategic Development Plan (SDP) update aims to ensure that the Port of Nome is prepared for the future, having anticipated trends and needs of the maritime industry operating in the region and developing a twenty-year vision for its port facilities.

The City of Nome is determined to prepare itself for the future by thoroughly assessing its current and future maritime and harbor facilities within a comprehensive SDP update for the Port of Nome. This plan aims to provide insights into the direction and strategies required to maximize success, including identifying new projects and development opportunities. The public process will involve City Departments, residents, local businesses, tribal organizations, marine operators, and other stakeholders. The plan will be a strategic implementation tool compatible with the community character that will guide Port priorities for the future. The SDP update will:

- Understand local and regional maritime trends and opportunities for the Port of Nome and its role within the Northwest Passage and Arctic;
- Identify local and regional economic opportunities for the community and the Port of Nome and how collaboratively they can grow, sustain, and support each other;
- Make facility recommendations that support and enhance Nome's harbors as a premier destination for industry, fisheries, mining, recreation, commerce, and visitor services;
- Be a community-endorsed plan that best meets the needs of users and industry through cooperation and consensus-building; and,
- Establish a twenty-year vision with short-, mid-, and long-term development opportunities and goals, including phased development with construction costs, permitting, and funding options for current and future projects.

Development opportunities for the Port of Nome are largely driven by the economic activity and outlook at the Port of Nome and surrounding areas. Understanding these economic trends is crucial for comprehending both the current needs and the prospects of the Port and waterfront. Furthering the analysis, we also examine resource development activities and several maritime industries. To bring our analysis full circle, we turn to the insights provided by local stakeholders—those who have first-hand experience with the Port of Nome and its myriad possibilities. Their perspectives offer invaluable context to the data, rounding out our understanding of the Port's role in regional development and its potential trajectory in the face of evolving maritime dynamics.

PND Engineers, Northern Economics, and Corvus Design are developing this Strategic Development Plan update for the Port of Nome.

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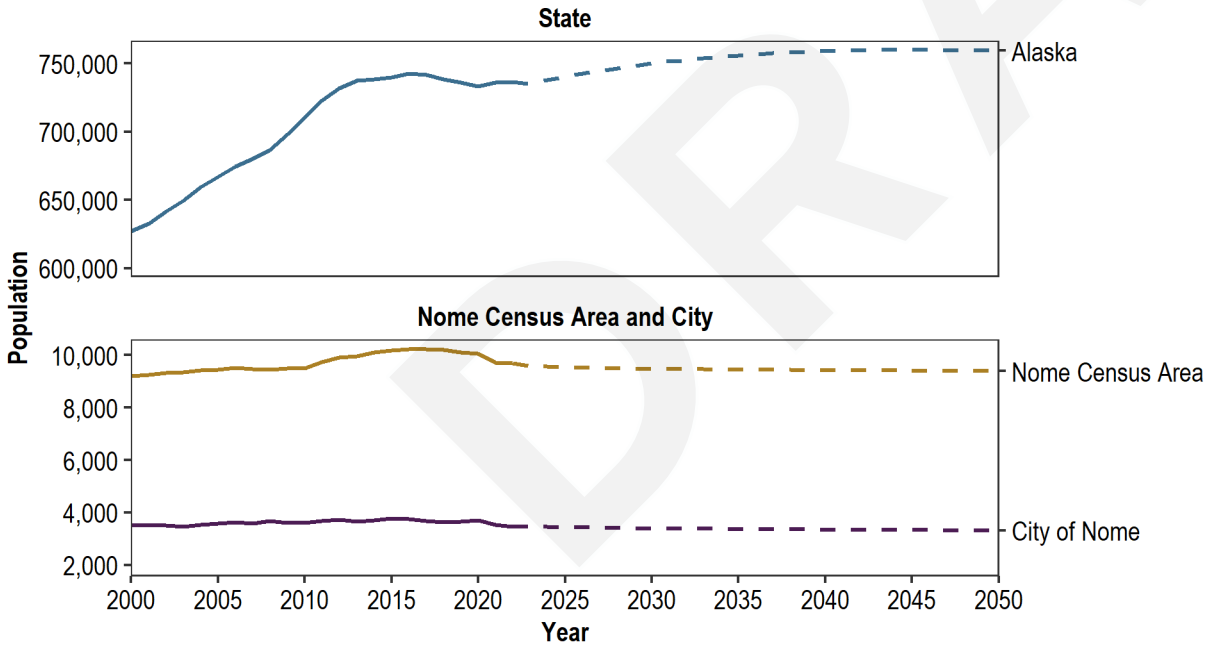
ECONOMIC ASSESSMENT

Regional Outlook

POPULATION

Nome's population, and that of the surrounding region, is an important indicator of the demand for cargo and fuel through the Port of Nome. Population growth and other projects in the region can also drive increases in shipments of these commodities and gravel, as well as other activity. Figure 1 presents the historical and projected population of Alaska, the Nome Census Area, and Nome. Populations for Nome and the Nome Census Area are expected to decrease slightly from 2022 to 2050 (declining by 4.2% and 3.0%, respectively), but generally remain stable. Over the same period, the state population is projected to increase 3.1%. While this demographic-based forecast shows Nome's population shrinking, additional activity related to the port expansion could help to stabilize or increase it.

Figure 1. Population Estimates 2000–2022 and Projections 2023–2060



Source: Northern Economics analysis using data from the ADOLWD (2022a, 2024a)

Acronyms Used in this Chapter

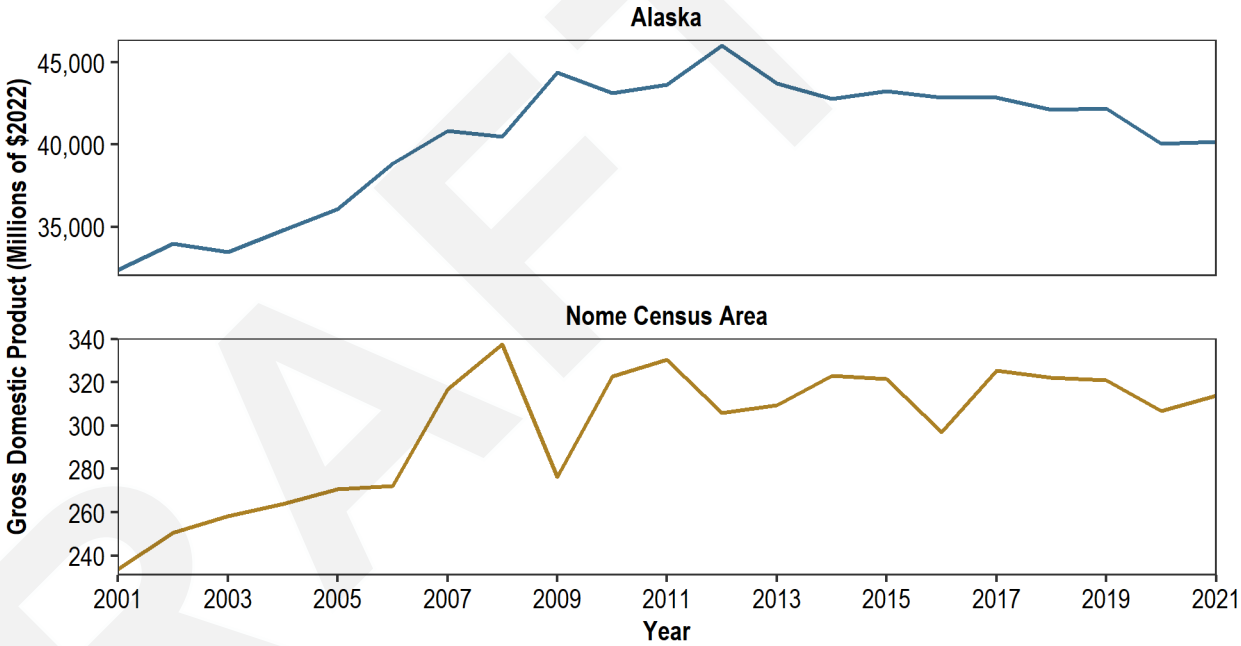
Entity	Acronym
Alaska Department of Commerce, Community, and Economic Development	ADCCED
Alaska Department of Fish and Game	ADF&G
Alaska Department of Labor and Workforce Development	ADOLWD
Alaska Department of Transportation and Public Facilities	ADOTPF
Bureau of Economic Analysis	BEA
Bureau of Labor Statistics	BLS
Commercial Fisheries Entry Commission	CFEC
Gross Domestic Product	GDP
Northern Sea Route	NSR
Northwest Passage	NWP

GROSS DOMESTIC PRODUCT

Gross Domestic Product (GDP) is used to gauge the economic performance of a country or region and represents the value of the goods and services produced by an economy less the value of the goods and services used up in production (U.S. Department of Commerce 2024).

The GDP of Alaska and the Nome Census Area over the last 20 years reflects each area's economic developments. Nome Census Area's GDP grew by 34.3% from 2001 to 2021 on an inflation-adjusted basis, outpacing the 24.2% growth for Alaska as a whole (Figure 2).

Figure 2. Gross Domestic Product ($2022) for Alaska and the Nome Census Area, 2001–2021

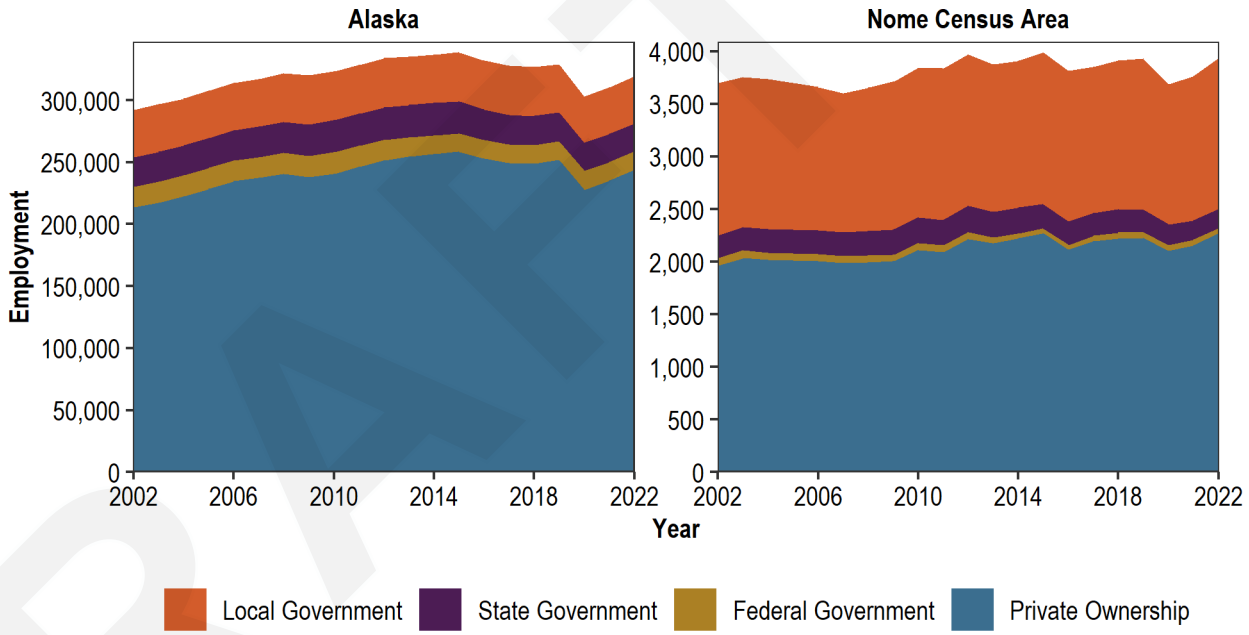


Source: BEA (2023), BLS (2024), and Northern Economics analysis

EMPLOYMENT

The employment levels in Nome and nearby regions are a barometer of the area's labor market health, revealing the ability to provide jobs for the community. High employment in Nome and its hub areas usually translates to a higher quality of life, with more residents earning wages and supporting the local economy. As seen in Figure 3, only the Nome Census Area has recovered to pre-pandemic levels, with employment of 3,937 in 2022, compared to 3,932 in 2019 (an increase of 5). Though recovering, during the same period, Alaska had a decrease of 9,827. The statewide employment forecast for 2030 (ADOLWD 2022b) does not anticipate any protracted periods of elevated oil prices to drive up state employment, and the state is unlikely to use market earnings to expand government services.

Figure 3. Employment Trends for Alaska and Nome Census Area, 2002–2022

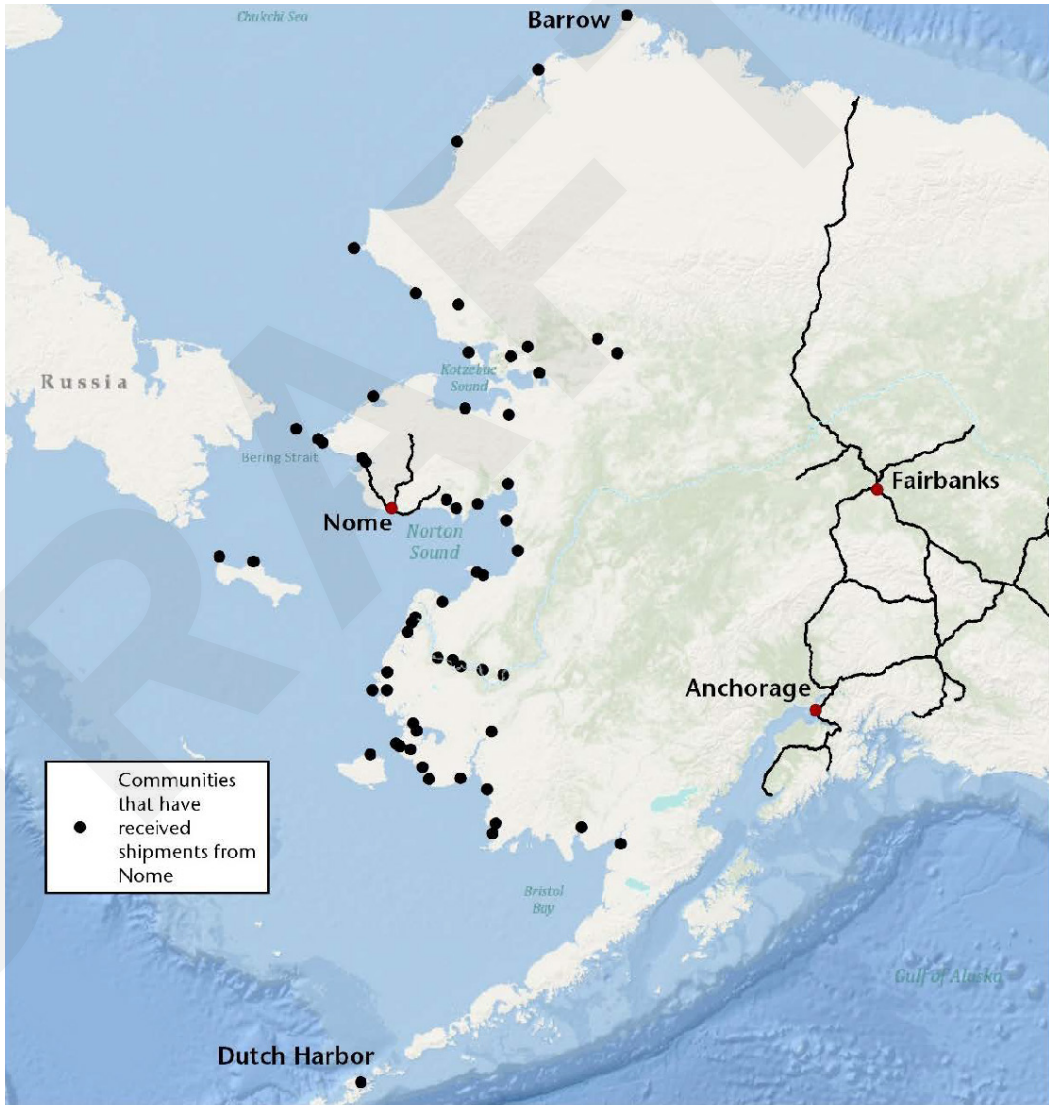


Source: ADOLWD (2024b)

Port Activities

Sixty communities along the state's western coast have received shipments from the Port of Nome, from Dutch Harbor in the south to Utqiaġvik (formerly Barrow) in the north (McDowell Group 2016). Movement of fuel, freight, and gravel are the main sources of revenue and activity at the Port of Nome but increases in cruise ship frequency and vessel sizes indicate an increase in passenger traffic and the associated recreation and tourism activities. Commercial fishing and processing, along with personal use fishing, also contribute to activity at the Port of Nome.

Figure 4. Communities Connected to the Port of Nome



Source: Reproduced from McDowell Group (2016)

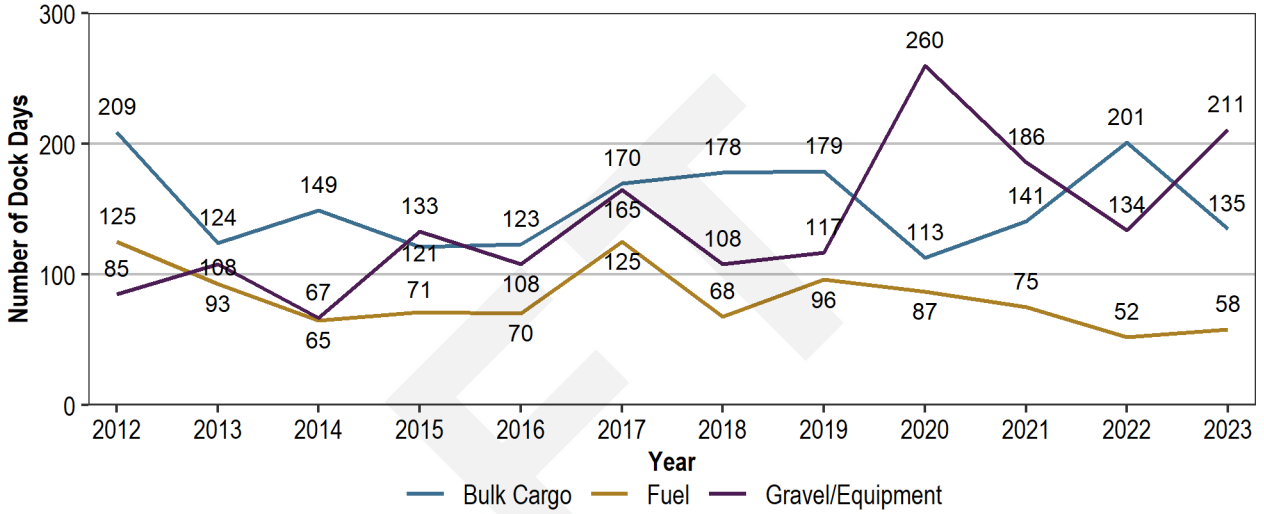
VESSEL TRAFFIC

The following overview provides a snapshot of vessel activity at the Port of Nome and explores the impact of the port's proposed expansion. Overall, while individual vessel categories have experienced their own unique trends, the aggregate vessel traffic has trended downward from 786 transient vessels to 616 over 2012 to 2022. As seen in Figure 5 and Figure 6, Cargo, Fuel, Research, and Pleasure S/V traffic drove the overall decrease, offset by a substantial increase in Gravel/Equipment and Cruise Ship traffic. Cruise ship dockings increased from 1 to 22 during the decade and are anticipated to increase in 2024 based on cruise ship data from the Port of Nome.

Construction projects in the surrounding regions, driven largely by federal spending, are a key driver of gravel/equipment and fuel activity, but fluctuate with the availability of funds. Resource development, which is explored below, can also have a significant impact on vessel traffic.

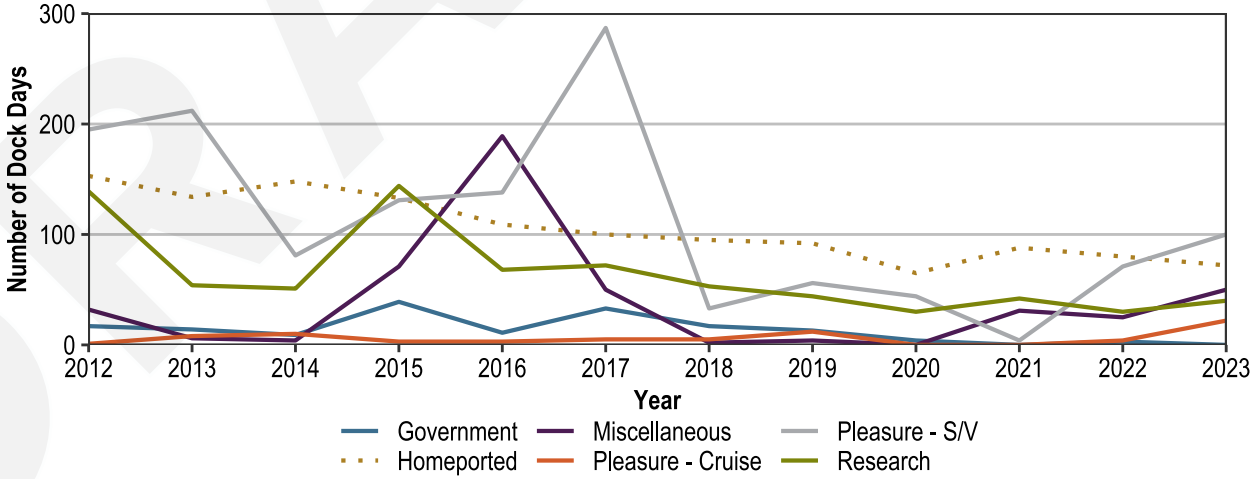
While calls by research vessels have decreased from 139 vessels in 2012 to 40 in 2023, they are still actively working in the region. Changing ice conditions and the port expansion—along with services Nome can provide, such as fuel resupply and sewage and trash disposal—are likely to increase the attractiveness of using the Port of Nome for crew changes, resupplies, and more.

Figure 5. Port of Nome Vessel Dock Days for Bulk Cargo, Bulk Fuel, and Gravel/Equipment Transport, 2012–2023



Source. Port of Nome (2023, 2024a)

Figure 6. Port of Nome Vessel Dock Days for Other Vessel Types, 2012–2023



Source. Port of Nome (2023, 2024a)

COMMODITIES

Cargo

Cargo movements through the Port of Nome have ranged from 20,000 to 30,000 tons annually since 2014, representing a base level of activity corresponding to regional needs plus varying levels of cargo handling for projects. Inbound equipment for Quintillion Fiber drove increases starting in 2017 and a peak of 37,818 tons in 2022. Future economic activity and project development will continue to play a role in cargo movements.

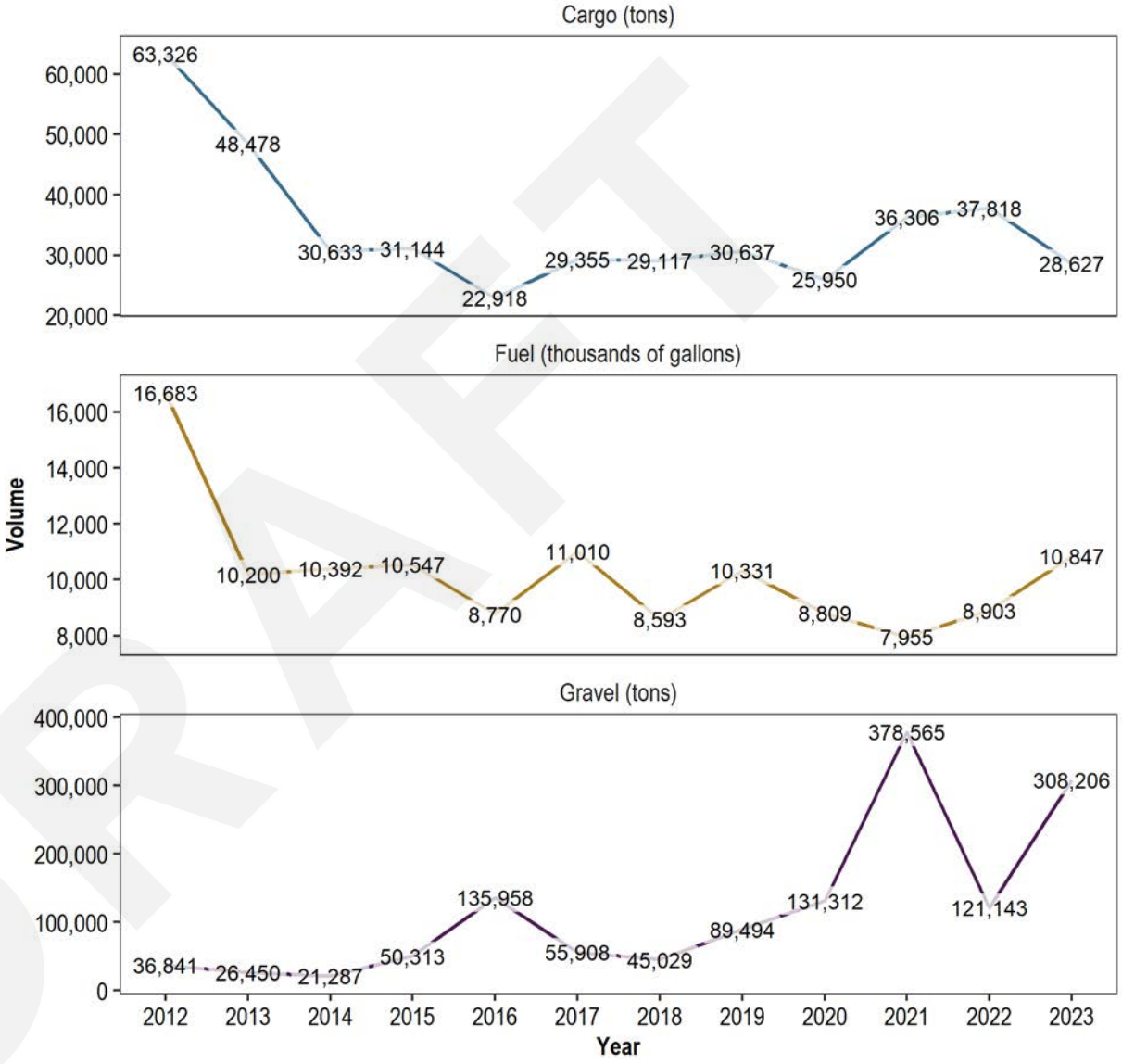
Refined Petroleum Products

Fuel flowing through the Port of Nome reflects local and regional demand, with variation due to transient vessel calls and specific development projects. Calls by gravel barges and vessels related to Quintillion Fiber contributed to the increased fuel volumes seen in 2017 and 2022, for example. As vessel traffic increases, demand for fuel will likewise increase. Development of mineral deposits in the region by Graphite One and other entities will drive fuel flows at the port.

Gravel, Sand, and Rock

Gravel shipments through the Port of Nome have fluctuated over the years depending on regional projects. Since 2019, shipments have been on an upward trend, with peak shipments exceeding 300,000 tons in 2021 and 2023. Development of Graphite One, with exports anticipated to begin in 2030, would generate significant volumes of outbound shipments. Onshore and offshore mineral development and export would also generate activity at the port.

Figure 7. Historical Commodity Movements for Cargo, Fuel, and Gravel, 2012–2023



Source: Port of Nome (2023, 2024b)

Development Landscape

From commodity transport to providing support services and housing, resource development projects near Nome and surrounding regions also present growth opportunities for Nome.

COMMERCIAL FISHERIES

Commercial fishing is an important sector in the Norton Sound Region from an economic perspective. Estimated gross earnings for Nome Census Area resident fishermen were $4,691,580 for all fisheries combined (CFEC 2022). As of 2021, there were 267 seafood processing jobs in the Nome Census Area which resulted in $4.8 million in wages for Alaska residents (United Fishermen of Alaska 2021). Additionally, there are many indirect jobs created that help support the sector, such as administrative and transportation roles.

The commercial fisheries sector in the Nome Census Area from 2013 to 2022 paints a picture of change and resilience. Salmon and crab are historically two of the most important commercial fisheries in the Norton Sound Region. These commercial fisheries also support others that are used as bait fish, such as herring. The number of fishermen has fluctuated over the years, and it peaked for crab fishermen in 2017 with 72 fishermen (CFEC 2017). The same is true for salmon fishermen, except that the peak was in 2016 with 140 fishermen (CFEC 2016). Estimated gross earnings for crab reached a 10-year high in 2022 of $3,789,716 (CFEC 2022). Crab fishing consistently accounts for the largest share of earnings. Unfortunately, commercial salmon fisheries have struggled in recent years for numerous reasons, resulting in lower than usual earnings from 2019 onward (CFEC 2019, 2020, 2021, 2022).

Table 1. Nome Census Area Commercial Crab Fishing

Year	# of Fishermen Who Fished	Total Pounds Landed	Estimated Gross Earnings ($)
2013	48	443,731	2,563,469
2014	47	414,105	2,180,616
2015	65	474,669	2,672,629
2016	54	495,024	3,284,050
2017	72	481,582	3,043,815
2018	52	322,250	2,032,388
2019	30	X	X
2020	1	X	X
2021	3	X	X
2022	31	315,811	3,789,716

Source: CFEC (2013–2022)

Table 2. Nome Census Area Commercial Salmon Fishing

Year	# of Fishermen Who Fished	Total Pounds Landed	Estimated Gross Earnings ($)
2013	123	1,236,097	1,179,926
2014	126	2,102,386	1,889,237
2015	132	2,497,108	1,928,283
2016	140	X	X
2017	139	2,588,924	2,807,095
2018	152	3,659,331	3,975,490
2019	123	304,121	291,499
2020	18	344,629	591,001
2021	129	953,523	637,433
2022	107	605,879	525,209

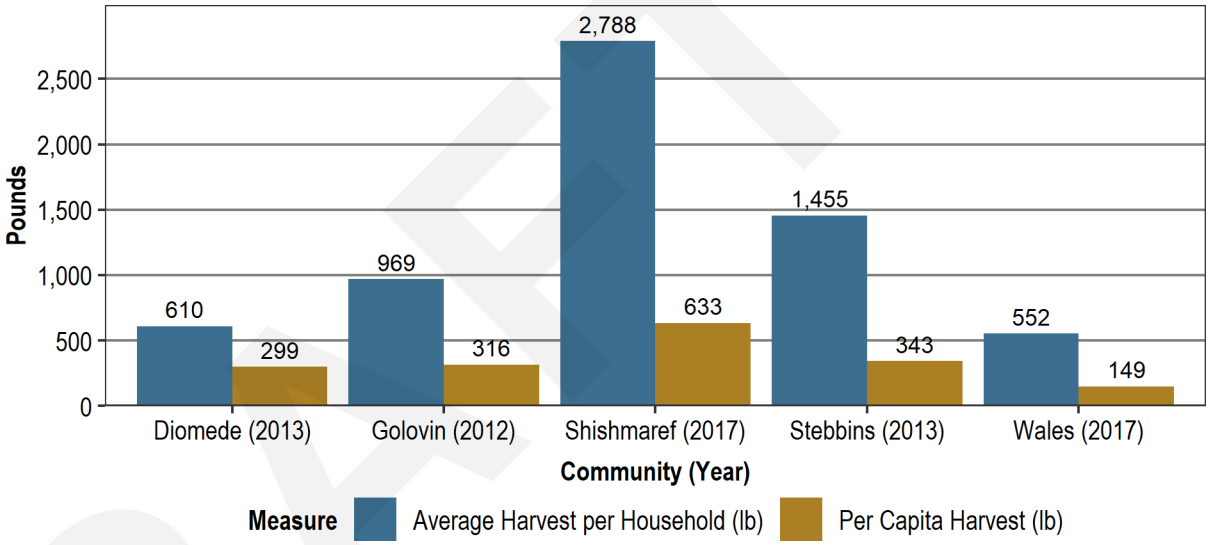
Source: CFEC (2013–2022)

SUBSISTENCE HUNTING AND FISHING

Subsistence fishing for Bering Strait residents of Norton Sound and Port Clarence residents occurs in both marine and fresh waters. For the mainland communities, diet surveys indicate that subsistence-caught fish contribute more than half of the meat, fish, and poultry consumed by area residents (Alaska Department of Fish and Game 2023). In 2022, Nome accounted for 72% of total subsistence salmon harvest permits and 38% of the total harvest in the Norton Sound-Port Clarence Area. As Port Activity increases, access to subsistence hunting and fishing may become increasingly difficult without additional infrastructure.

Due to Nome's remote location 500 miles off the main road system in Alaska, subsistence hunting and fishing are essential for many living in the area. This is nothing new—Bering Strait residents of Norton Sound and Port Clarence residents have relied on fish for cultural and nutritional sustenance for thousands of years. There are many small remote communities surrounding Nome on the Seward Peninsula, which can help offer insight into subsistence lifestyles in the area. ADF&G maintains the Community Subsistence Information System (CSIS), which is a database of community harvest information they've gathered over the years. Not all relevant communities for our purposes have been studied recently, but some have.

Figure 8. Seward Peninsula Communities Subsistence Activities for All Subsistence Resources



Source: ADF&G (2012, 2014, 2017)

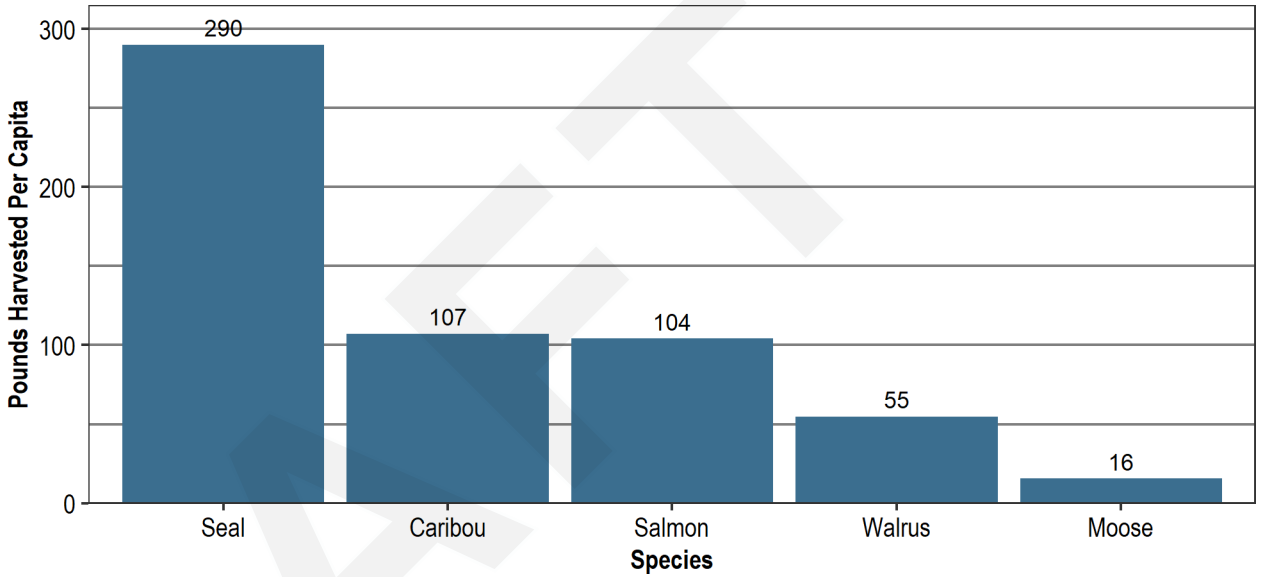
Note: Not all communities included "all resources" as a category, so this figure only includes those that did. Additionally, the communities were surveyed over various years, as indicated. Each of these years represents the most recent year of data available for the communities in the CSIS database.

Of the communities that included data for "all [subsistence] resources," Shishmaref had the highest average pounds harvested per household, and the highest per capita pounds harvested (Figure 8). Shishmaref was the only community on the Seward Peninsula that had multiple years of data available for it that were relatively recent (2014 and 2017). That said, the 2017 data only covered land species, and did not include any information for marine species. Large land mammals represented the largest category of non-marine animals caught for both 2017 and 2014, but there were fewer pounds per capita harvested in 2017 than 2014. This downward trend is a bit concerning, because there was approximately a 10% increase among people attempting to harvest from 2014 to 2017, but still a smaller catch per capita.

Due to Shishmaref having the most complete data set of any community on the Seward Peninsula in the CSIS database for relatively recent years, it can help offer insight into which subsistence resources have the largest harvest per capita. Figure 9 shows the largest harvest by pounds per capita in 2014, which was the most recent year that included both marine and land subsistence resources. Notably, the largest harvest by pounds per capita including a variety of species was marine mammals. Seal alone was a large subsistence resource for the community and had over twice as many pounds per capita compared to the broader large land mammals category. Approximately, 345 pounds of marine mammals were caught per capita, compared to 123 pounds of land mammals caught per capita in 2014. Since Shishmaref is a coastal subsistence community, it is to be expected that its residents rely heavily on marine resources.

Nome is also a coastal community in a similar climate, with access to similar marine resources. Although we don't have recent subsistence data available for catch reports in Nome, it likely includes a similar mix of resources to the Shishmaref community. As Port Activity increases, access to subsistence hunting and fishing may become increasingly difficult without additional infrastructure. This also has the potential to impact surrounding communities that might see more traffic passing by along the Berring Strait and Alaska's west coast.

Figure 9. Largest Harvest (Pounds per Capita) by Resource in Shishmaref, 2014



Source: ADF&G (2014)

Note: Data in this figure are from 2014, which was the most recent year to include harvest data for both land and marine animals for Shishmaref.

MINING ACTIVITY

Rock

Cape Nome Quarry continues to produce quality rock for construction projects in surrounding areas and has supply available for years to come.

Gold, Zinc, Lead, Silver, and Copper

Nome's port could become a pivotal supply chain node for zinc, lead, gold, silver, and copper exploration activities if the Upper Kobuk Minerals Project and Ambler Road Project are developed. At the time of this report, the Ambler Road Project has been halted, though that project or alternative means of access could be developed in the future.

Offshore Dredging

Offshore dredging around Nome is conducted by a wide variety of mainly floating dredges, from small pontoon vessels to large barges. Record gold prices and availability of offshore leases resulted in a significant increase in active gold dredges, from just three in 2004 to a record 128 in 2012. Since then, the number of vessels has declined significantly as operations have consolidated. As capital requirements have grown, commercial mining has shifted to larger vessels and the number of smaller operators has declined. An additional offshore lease sale is anticipated sometime after the 2025 summer mining season.

Graphite

Graphite is a strategic mineral that is an essential mineral for production of renewable and electric vehicle batteries, advanced semiconductor manufacturing, and other modern technologies. The graphite resource near Nome is of national interest as a domestic source of this critical mineral. Graphite is one of only four USG-listed critical minerals that are needed in all sectors screened by the USGS (Graphite One undated). Currently the U.S. is 100% import-dependent and China is the global leader in graphite production (Graphite One undated). As a result of its use in a wide range of modern technology we rely on daily, as well as drones and advanced weapons platforms, developing an independent domestic source of graphite has been identified as a national security priority (Graphite One undated).

Development of that resource promises substantial job creation and local demand for fuel, storage, and other commodities and services. Graphite One is the current project proponent for graphite mining and processing operations. Construction could start in 2027, with the mine beginning operations in 2029 (KNOM 2024). Graphite One plans to begin producing 25,000 tonnes of synthetic anode material out of its Secondary Treatment Plant (STP) by mid-2026 (Graphite One 2024). The mine life is anticipated to be over 20 years with 183,000 dry metric tonnes of concentrate produced each year (Schaffner 2024).

Heavy hauling vehicles, laydown storage space for graphite (during non-shipping seasons), and a man camp will likely be needed to support operations and should lead to a significant increase in economic activity and commodity movements through the Port of Nome.

RECREATION AND TOURISM

Based on the ATIA Alaska Visitor Profile for 2022–2023, 7% of visitors surveyed visited Southwest Alaska, with ~1% visiting Nome. The warming climate and diminishing sea ice have led to an increase in marine traffic from various vessels, including cruise ships, which has the potential to boost marine-based tourism in Nome. Cruise ship traffic at the Port of Nome is predominantly expedition cruise size, with 150–300 passengers and associated crew members. However, the Westerdam—a 2,500-passenger, 1,000-crewmember cruise ship—is expected in 2024. The port expansion will enable larger passenger vessels to dock rather than lighter passengers ashore.

Recreational Activities

All cruise ship passengers are taken on a tour of the Nome area either before boarding their ship or just after disembarking. The tour generally includes an overview of the city of Nome, gold rush history including gold panning, a visit to a sled dog owner and past Iditarod competitor, and a visit to the tundra.

Nome's tourism strengths lie in its rich gold mining history, the unique and diverse tundra landscape, and its charismatic wildlife, including muskox and reindeer. Birding is also a popular activity, with niche species available and accessible via Nome's road system. Nome also features a museum and cultural center, along with many historical sites. There are two hot springs near Nome that are a draw for tourists, Pilgrim Springs and Serpentine Springs, with Pilgrim Springs being the more developed of the two. Winter tourism attractions, notably the Iditarod, add to its allure, along with potential cultural connections to the Bering Land Bridge National Preserve and a tradition of unique local personalities. Nome and the surrounding region are also known for their local artists (Alaska.org undated).

Locally made art and goods can be found in some shops year-round, but the biggest selection can be found in the Iditarod Arts and Crafts Fair during the Iditarod Week in March (Alaska.org undated). There are other smaller fairs and festivals throughout the year as well. Business license data are also helpful for providing a snapshot of the local art scene. Table 3 shows some NAICS industry codes that we identified as likely to be influenced by a local art scene, and how many local business licenses in Nome indicate that industry as their primary line of business. For perspective, there are 337 active business licenses in Nome, meaning the art-related businesses we identified accounted for 8% of businesses in Nome (ADCCED 2024a, 2024b).

Table 3. Port of Nome Cruise Ship Traffic (2023)

Cruse Ship Traffic	Capacity
Scenic Eclipse (Cancelled)	228
Roald Amundson	530
Scenic Eclipse*	228
NG Resolution	183
Roald Amundson	530
Hanseatic Nature	230
Nansen	530
Silver Wind*	274
Seaborne Venture*	528
L'Austral	264
Sylvia Earle	132
Le Boreal	264
Le Commandant Charcot*	245
2023 Total	4,166

*Note: *Ship anchored, passengers to lighter ashore*
Source: Port of Nome and individual cruise line websites

Table 4. Art-Related Businesses in Nome

Business Sector		Business Count
711510	Independent Artists, Writers, and Performers	14
459420	Gift, Novelty, and Souvenir Retailers	3
459130	Sewing, Needlework, and Piece Goods Retailers	5
458310	Jewelry Retailers	3
458110	Clothing and Clothing Accessories Retailers	2

Source: DCCED (2024a, 2024b) and Northern Economics analysis

NATIONAL SECURITY AND PUBLIC SAFETY

Historically, the polar ice cap has restricted marine travel in the north. However, as the climate warms, sea ice along the northern coast of Alaska is shrinking away. This has resulted in increased vessel traffic of all kinds in the Arctic Ocean. Marine traffic increased by 44% through the Northwest Passage (NWP) between 2013 and 2019 (Schwing 2023). This increase in traffic is because when large industrial ships can travel through the Northwest Passage instead of the Panama Canal, they can reduce their transit time by several days (Schwing 2023).

Maritime use of the area is becoming more of an international issue. Increased Arctic shipping via the NWP and the Russian Federation's Northern Sea Route (NSR) has important global commercial and U.S. national defense implications (Gricius 2021). Russia has claimed that the NSR is within its territorial waters, and so it should have exclusive rights to develop the area and to patrol ships. Other powers, including the U.S. have disagreed with Russia's claim, and neither side agrees who can control the passageway (Gricius 2021). However, Canada is a notable exception, agreeing that Russia can control the NSR, and Russia recognizes Canada's claim to control the NWP. Canada's claim to the NWP has not been accepted by the U.S. or the European Union, with both arguing that the NWP is an international strait, so there is a right of transit. China and Russia have cooperated in their development of the NSR, which has created concerns for the U.S. about protecting its own interests in the arctic (Gricius 2021). China has seen that development of the NSR adds value to its own economic interests and believes it will be worth the investment in the long run. The increased cooperation between China and Russia working as allies in this project has major geopolitical implications (Gricius 2021). Additionally, Russia has been developing new ports, including hydrocarbon and military-oriented ports, throughout the region. Russia has also re-opened over 50 Soviet bases in the Arctic (Gricius 2021). Policy makers, especially in the U.S. have been concerned about Russia's militarization of the Arctic. No other state has near the presence that Russia does in the Arctic (Gricius 2021).

These concerns will become more prevalent as sea ice continues to retreat and vessel activity increases (ADOTPF 2022a). Nome is strategically located such that it can serve as a final port call for vessels that intend to continue through the Bering Strait and beyond to the NSP or NWP, or vessels coming south from the Arctic. However, historically any ships that have a draft deeper than 20 feet cannot come into Nome and dock, which the port expansion will change. The Norton Sound Region maritime boundary is 150 miles from Nome, and vessel traffic to and from the arctic will pass through the region.

An increased Coast Guard presence is anticipated as vessel traffic increases. More traffic and maritime activities increase the risk of safety incidents and emergency disasters. Additionally, vessels engaged in dredging for gold off the coast of Nome are subject to Coast Guard vessel safety and environmental protection requirements. It is also likely that the U.S. will increase its military presence where it can along these routes as it tries to secure its interests in the Arctic. Nome's port expansion combined with its location along the NSR and NWP will make it particularly attractive as hub for military activities.

As traffic in the area increases with the eventual opening of the NSR and NWP, there are bound to be more environmental impacts and accidents, such as oil spills, which will create conservation concerns. Increased government presence will likely become necessary to help mitigate these concerns and help enforce regulations designed to protect wildlife and the environment. While a port expansion and increased shipping could help reduce costs for goods being sent to Nome, it could also create food insecurity for those who rely on subsistence hunting and fishing as a result of environmental impacts from the shipping lanes.

2

PORT FACILITIES

Nome Port

Nome Port, a pivotal maritime hub, serves as the Bering Straits region's primary communication and transportation center. Located 500 miles from the nearest road connection to the rest of the United States, Nome Port underscores the significance of maritime routes as the region's de facto interstate system. This strategic position highlights its crucial role in linking the remote areas of Alaska with the broader national and international maritime networks.

EXISTING FACILITIES

The purpose of this section of the report is to provide an overview of Nome Port's main facilities and their current conditions. Unless otherwise noted, each facility outlined here was inspected in 2019 by PND Engineers, Inc., with follow-up inspections scheduled for 2024. This information is crucial for understanding how to align with the community and the City's goals in planning for the upcoming maintenance and expansion of the port. By assessing these facilities' operational status and maintenance needs, stakeholders can make informed decisions that support strategic planning and sustainable development, ensuring Nome Port continues to serve as a vital hub for the Bering Straits region.

The following pages contain brief descriptions of the current Nome Port facilities and their general conditions based on the 2019 inspection reports.

EXISTING FACILITIES

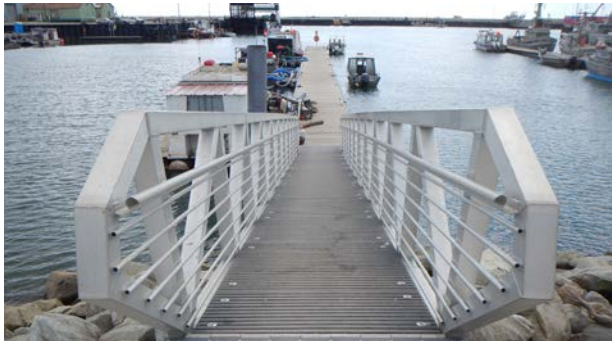
Seawall Revetment

The majority of the city coastline from approximately D Street to just east of the Nome Bypass Road is a built-up armor stone seawall. The seawall protects the coastline and the properties along Front Street, that parallels the coastline, from wave action and storm surges.

Originally constructed in 1951, Nome Seawall Revetment is approximately 3,350 feet long along the City of Nome's coastline. In 2006, the seawall was extended approximately 460 feet to the west as part of the Nome Navigation Improvements project. The top of the original seawall measures approximately 16 feet in width at elevation approximately +18-feet MLLW. The seawall consists of a single layer of large diameter armor rock (6 to 10-ton) at approximately a 2:1 slope followed by a 15-foot toe apron.

Nome seawall

Small Boat Harbor



Float and ramp

Low Dock

FLOATS AND GANGWAYS

2019 Report – Fair Condition

The floats provide small boat moorage for the port and must be removed annually in winter months to prevent damage from ice. There is a known need for additional small boat moorage within the community that would relieve some of the congestion within the harbor as well as separate commercial operations from public activities to increase safety and efficiency.

The West Floating Dock and the East Floating Dock were constructed in 1994 and 2008, respectively. Both docks are pipe float construction with 30-inch diameter 1.88-inch thick steel floats supporting the decks. The typical dock sections are 40 feet long connected by 2-inch thick 24-inch long steel pins. The dimensions for the West and East Floating Docks are 8' x 240' and 8 'x 200', respectively. The supporting aluminum gangways measure four (4) feet wide and forty-two (42) feet long. Floats and gangways are removed during the winter months.

LOW DOCK

2019 Report – Good Condition

Low Dock provides additional small boat moorage within the port and can provide some functionality for onloading and offloading of smaller vessels from the shore without the need of an access gangway.

Construction of the OPEN CELL SHEET PILE™ (OCSP) Small Boat Harbor Low Level Dock was completed in 2008. Consisting of nine (9) cells, the Low Dock measures 300 feet in length along the coastline. The entire face of the sheet structure is constructed of 25 feet long PS31 type sheet piles. The tail walls consist of three (3) 25 feet and nine (9) 15 feet PS31 sheet piles secured by a 19-foot anchor pile at the ends. Granular fill is used as the base course for the structure, with a 12-inch surface meeting the requirements of AASHTO T 27/T 11. Seabed design depth is -10 MLLW with a maximum seabed dredge depth of -10' MLLW.

Design loads are 1,000 psf uniform live load, or a 200-ton crawler. A seabed dredge elevation of -13' MLLW is possible if design live loading is reduced to 500 psf or if four (4) additional sheets are added to each tailwall.

FISH DOCK

2019 Report – Fair Condition

The Fish Dock currently services the local fish processing vendor in town and moors mostly commercial fishing and shipping vessels serving its operations. The cathodic protection will be inspected this year but is expected to be nearing the end of its useful life and require replacement to continue to protect the structure from corrosion.

The Nome Small Boat Harbor Fish Dock is an OPEN CELL SHEET PILE™ (OCSP) type dock structure constructed in 1999. Designed by PND, 15 cells comprised of typically 1/2-inch thick 50-foot long PS32 steel sheet piles make up the structure. The cells are constructed of 22.5’ radius and are connected to the tail walls by wyes secured by 21-foot HP14x73 anchor piles. The cells were filled with 6-inch minus gravel fill with the top twelve (12) inches consisting of 3-inch minus gravel fill. Seabed design depth is -10’ MLLW with a maximum seabed dredge depth of-13’ MLLW.

Design loads are 1,000 psf uniform live load, or a 200-ton crane picking a 100-ton load, or a 68-ton axle load forklift or loader.

EAST DOCK AND SOUTH DOCK

2019 Report – Not Inspected

The East and South Dock and the Gravel Ramp are operated by the City, however the sheet pile structures themselves are owned by the United States Army Corps of Engineers (USACE). The two dock structures are typically used to moor small to medium sized vessels as well as occasionally offload fuel.

GRAVEL BARGE RAMP

Between the East and South Docks is a gravel barge ramp that is used for launching and retrieving large commercial vessels. There is a desire to improve the facility capabilities by lessening the slope to allow for easier vessel launching and retrieval.

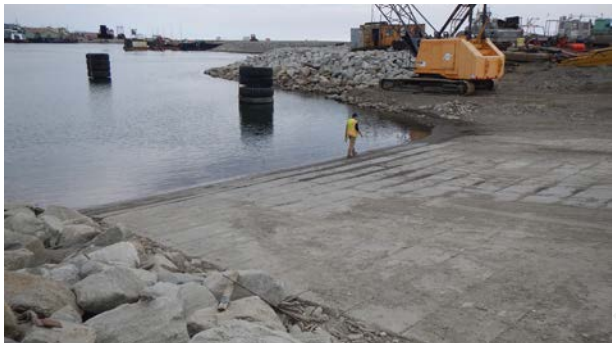
Fish Dock

Snake River Outlet

BARGE RAMP

2019 Report – Poor Condition (Replaced in 2022)

The barge ramp located near the outlet of the Snake River is used to launch and retrieve small to medium sized vessels as well as an array of other local gold mining equipment. The ramp was replaced in 2022 due to the original structure reaching the end of its useful life.



Barge ramp and dolphins from shore

Barge ramp dolphins

HIGH RAMP

2019 Report – Good Condition

Constructed in 2013, the City of Nome Inner High Ramp is a 40-foot long 32-foot-wide concrete ramp sloped at eight (8) percent with the face of the ramp at elevation +3' MLLW. The ramp is typically used to load and offload shallow draft vessels by aligning bow first to the structure and breasting against the two offshore dlophins.

The foundation for the High Ramp consists of a single cell OPEN CELL SHEET PILE™ (OCSP) type dock structure 60 feet in diameter. The cell is comprised of ½-inch thick PS31 steel sheet piles with 24-inch diameter bollard anchor piles securing the two (2) tail walls. Landing fenders are on both sides of the ramp face with 30-inch steel cleats and 24-inch diameter rubber fenders.

High ramp and dolphins

Seabed design depth is -10' MLLW with a maximum seabed dredge depth of -13' MLLW. Additionally there are two (2) dolphins consisting of two (2) 1-inch thick 30-inch diameter 1:2 sloped concrete filled steel batter piles and one (1) plumb king pile of the same composition. A 0.625-inch thick 30-inch diameter steel fender pile with an HDPE sleeve is attached to the fender dolphin. The two offshore dolphins were noted to have some ice related damage and will require repairs in the near future to remain serviceable.

Design vehicles are a loaded Taylor TXC 975 high-capacity forklift (256 kips), center of tires greater than five (5) feet from wall or 150-ton crawler crane picking a 70-ton load.

Outer Harbor

WEST CAUSEWAY AND EAST BREAKWATER

2019 Report – Good Condition

The West Causeway and East Breakwater protect the Outer Harbor basin and provide shelter for vessels during adverse weather conditions. The West Causeway is accessed by a single span vehicle bridge that crosses a small breach near the north end of the structure to provide for fish passage. The basin is dredged annually to maintain adequate draft for incoming vessel traffic. The outer Harbor currently has three dock structures that service the majority of the incoming and outgoing cargo in Nome; West Gold Dock, Middle Dock and City Dock. The City of Nome is responsible for maintaining the East Causeway and dock facilities while maintenance of the West Breakwater falls to USACE.

WEST GOLD DOCK, MID DOCK AND CITY DOCK

2019 Report – Good Condition

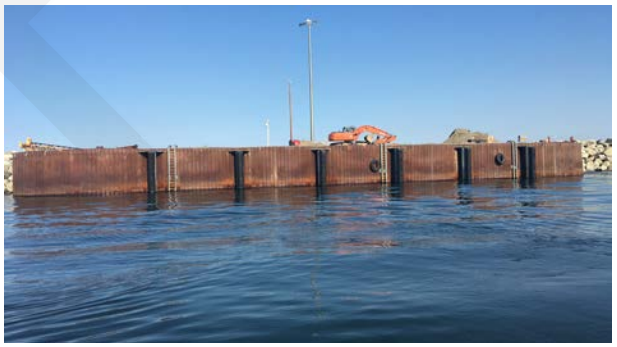
These structures serve as the primary fuel cargo and large vessel mooring facilities with a current draft of -22' MLLW. All three docks are heavily used during the open water season and often have multiple vessels rafted at each location. Mid Dock has a 30' wide access ramp that can be used to roll on and roll off equipment and goods from small barges.

West Gold Dock is an OPEN CELL SHEET PILE™ (OCSP) type dock constructed in 1989. Designed by PND, eight (8) cells comprised of typically 3/8-inch thick 50-foot long used PS28 steel sheet piles make up the structure. Cells are connected to the tail walls by wyes which span approximately 57.5-feet from the face of the dock, secured by an HP14x89 anchor pile. The cells were filled with 6-inch minus gravel fill with the top twelve (12) inches consisting of 3-inch minus gravel fill. Seabed design depth is -22' MLLW with a maximum seabed dredge depth of -29' MLLW.

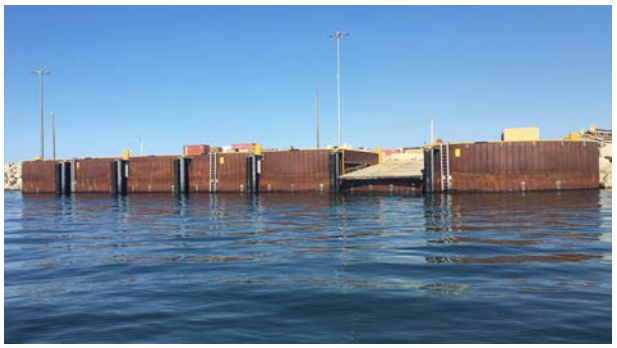
During the 2007 City of Nome Harbor Improvements, six (6) new 24-inch rubber fenders and a 3-inch diameter bull rail were installed along with additional anodes.

Upon completion of construction, the West Gold Dock was estimated to be able to withstand axle loads of over 60 tons and uniform loads of up to 2,000 psf. However, loads close to the dock face were limited to 1,000 psf uniform.

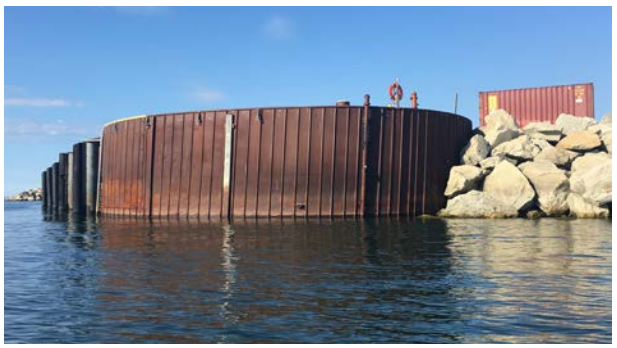
Middle Dock is an OPEN CELL SHEET PILE™ (OCSP) type dock constructed in 2015. Seven (7) cells comprised of PS31 and PS27.5 steel sheet piles, measuring 0.5-inches and 0.375 inches, respectively, make up the structure. HP14x89 anchor piles secure six (6) of the eight (8) tail walls. Embedded in Cell 6-7 is a 10% grade concrete ramp measuring 30.06-feet wide with 24-inch bollard anchor piles



West Gold dock



Mid dock



City dock

Causeway revetment

Breach bridge

securing the two (2) tail walls. The cells were filled with 6-inch minus gravel fill with the top twelve (12) inches consisting of crushed gravel subbase grading D. Seabed design depth is-24' MLLW with a maximum seabed dredge depth of-29' MLLW.

Middle Dock designed to be able to withstand 1,000 psf of uniform live loads, a loaded Taylor 975 high capacity forklift (256 kips), center of tires greater than five (5) feet from sheet pile wall or 150-ton crawler crane picking a 70-ton load.

City Dock is an OPEN CELL SHEET PILE™ (OCSP) type dock constructed in 1991. Designed by PND, seven (7) cells comprised of 1/2-inch thick steel sheet piles with the exception of thirteen (13) 3/8-inch thick sheets make up the structure. 40-foot long HP14x89 anchor piles secure the tail walls. The cells were filled with 6-inch minus gravel fill with the top twelve (12) inches consisting of crushed gravel subbase grading D. Seabed design depth is -20' MLLW with a maximum seabed dredge depth of -29' MLLW.

During the 2007 City of Nome Harbor Improvements, two (2) 24-inch rubber fenders were replaced and a fire hydrant was installed with four (4) 8-inch diameter bollards.

Design loads are 1,000 psf uniform live load, a 200-ton crawler or truck crane picking up a 100-ton load (not within 5 feet from dock face), and a Cat 988 loader at 136,000-lb maximum load.

CAUSEWAY BREACH BRIDGE

2019 Report – Good Condition (Abutments Only – Bridge is owned and maintained by USACE)

The causeway breach bridge, constructed in 2004, provides vehicular access to the West Causeway for all incoming and outgoing port traffic. All port utilities such as power, water and fuel are carried under the bridge via utility supports on the girders. Utility infrastructure is operating and maintained by the City of Nome. The bridge is capable of supporting heavier than normal highway traffic to accommodate the port infrastructure however port operations would be aided by a wider structure in the future. USACE owns, maintains and controls bridge overload evaluation as well as performs inspection of the bridge structure per Federal Highway Administration (FHWA) regulations every two years. PND evaluated the condition of the proprietary OCSP abutments, also USACE owned, during the 2019 inspections but did not evaluate any other aspect of the bridges.

Port of Nome Modification

In 2020, the United States Army Corps of Engineers (USACE) released the final version of the Port of Nome Modification Project. In this release, they recommended the expansion of port facilities at Nome based on criteria established under Section 2006 of the Water Resources Development Act. The report meticulously examined various alternative layouts and dredge depths for the port, ultimately selecting Alternative 8b as the preferred plan for the port's expansion.

Alternative 8b entails extending the existing West Causeway by approximately 3,500 feet to create a new outer harbor. This new outer harbor is proposed to be dredged to a depth of 40', facilitating the installation of new sheet pile docks. These docks aim to enhance the port's capacity for vessel moorage, both in length and draft. Additionally, Alternative 8b recommends the removal of the existing East Breakwater. In its place, a new East Causeway further east, aligned with E or F Street, is suggested. This causeway includes a breach bridge, akin to the West Causeway, to enable fish passage and water flow. It also accommodates additional sheet pile docks on the interior, further increasing the moorage capacity of the port. Both existing and new docks on the East Causeway are proposed to be dredged to a 28' draft, marking an increase from the current 22' draft.

The execution of the project is delineated into three distinct phases for design and construction. Phase I involves expanding the existing West Causeway and installing new sheet pile docks. As of the time of this writing, Phase I is currently out to bid and is anticipated to commence construction in 2025. Phase II of the project aims to dredge the West Causeway expansion from Phase I to a depth of-40' MLLW, while also deepening the existing harbor to -28' MLLW. Finally, Phase III will entail the removal of the existing East Breakwater and rebuilding it further to the east as a causeway where a new breach bridge and two new sheet pile dock structures will be constructed. The expanded basin will be dredged to a depth of -28' MLLW to match the depth of the existing harbor following Phase II of the project.

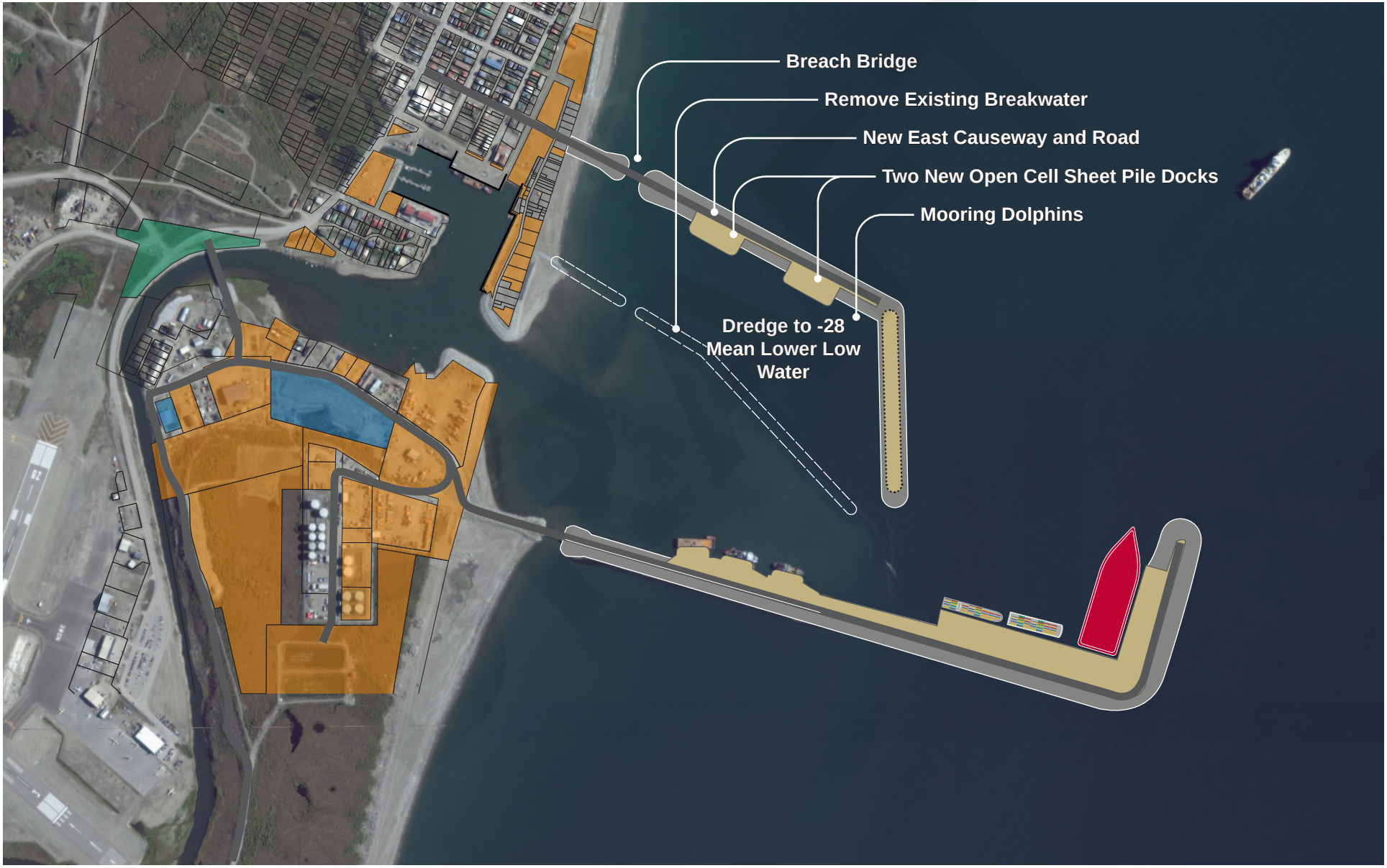
The next pages provide exhibits for the above referenced improvements.

Funded Improvements (Phase I & II)

EXTEND CAUSEWAY (PHASE I) AND DREDGE (PHASE II)

Planned Improvements (Phase III)

REMOVE EAST BREAKWATER & NEW EAST CAUSEWAY AND ROAD



3

PUBLIC ENGAGEMENT

Stakeholder Interviews

Leading up to the public meeting in January 2024, interviews were conducted with community members, local businesses, and commercial and personal use fishers to better understand the needs of the community at the Port of Nome. Interviews were conducted with eight stakeholders, in addition to feedback gathered during the public meetings.

Input included the following:

Community & Environment

- Build a Fishermen's Memorial at Middle Beach where the river meets the ocean.
- Create a dedicated landing and parking for subsistence hunting and fishing on Belmont Point's west side.
- Provide power across dock areas to facilitate maintenance and other dockside activities.
- Lease real estate strategically for temporary housing, considering local housing market impacts.
- Develop River Street / 1st Avenue for operations facilities.

Tourism

- A surge in tourism is expected.
- Upgrade dock surfaces to accommodate cruise passengers.
- Ensure capacity for passenger transportation.
- Improve restroom and shower facilities for community and visitors.
- Provide a welcoming waterfront and activities.

Operational Efficiencies

- Install a travel lift and haul-out for efficient vessel handling.
- Station a dedicated assist boat/tug in Nome for summer operations to aid large vessel maneuvering.
- Assess real demand for maritime services like welding and machine shops.
- Support planned inclusion of jetty.
- Dedicate a docking area for the mining fleet with shallow draft limitations.

Other Feedback

- Additional deepwater slips are needed inside the harbor.
- Plumb the new port with pipelines for fuel/water/sewage.
- Diesel and turbine (naval vessels) pipelines may be required.
- Install waste pump-out stations for vessels.
- There were general concerns about funding for development projects.
- Year-round mining operations could warrant more laydown space.

In-Person Meetings - Vision

Public meetings were held January 23, 24, and 25, 2024. These meetings included two evening public meetings, a meeting with the Ports Commission, and 'open studio' times during the day when people were able to drop by to speak with the team.

The first exercise was to check in with participants for their high-level thoughts and goals for the Port and its future.

What should the Port look like:

- Robust safety and security response
- Clean and simple
- Improved gas and oil spill response
- Provide small business development
- Welcoming
- Include subsistence facilities
- A place to walk and visit (food trucks, trails, beach bar)
- Functional for all vessels small and large
- Modern and forward-thinking future
- More availability for local use
- Provide safe and longer duration subsistence access
- Vibrant waterfront

What do you genuinely care about:

- The environment and nature
- Honoring cultural activities
- Pollution control (minimizing)
- Functional and aesthetic port
- Provide housing
- Provide opportunities for lower income residents to use
- Minimize waste generation

How can we make a difference:

- More jobs and income generation for the community
- Skills and workforce development
- Develop new businesses
- Provide investment opportunities
- Provide sewer and water to port facilities
- Emergency response for region
- Provide Coast Guard facilities
- Dedicated access for subsistence use
- Opportunities for the sale of Native and local art
- Plan and design for climate change and its impacts to community and port
- More moorage for smaller local boats

What do we want to achieve:

- Jobs and economic growth
- Reduced energy costs
- A sustainable community
- Lower costs of living
- Affordable port services
- Strategic military presence for the region (fast response)
- Provide funding for schools and kids
- Better maintained roads

In-Person Meetings - Facilities

The second exercise was to determine what facilities participants felt were needed for the Port for the community in general, and for their specific interests in the Port.

Vessel Support (Larger and cruise ships)

- Shoreside power
- Additional waste disposal capabilities
- Gray water and fresh water facilities
- Incinerator (trash)
- Tank farm expansion (fueling)
- Fueling vessels (including smaller vessels)
- Bathrooms
- Laundromat

Subsistence access to water

- Ramp further out that accesses open water more frequently
- Locate in small vessel harbor
- Boat cleaning station
- Improved boat launch and parking at Belmont Point
  - Meat and fish process table and rack (with water)
  - Boat launch (24’ trailer boat) on inside of west causeway just above fish passage or at cargo expansion area.

Marine service facilities

- Warehouses
  - Ample size and convenient location
  - Heated with utilities
  - Equipment storage (no more Conexes)
  - Service space (welding, refrigeration, hydraulics, etc)
- Shop space
- Marine service providers
- Cranes
- Vessel storage (organized by vessel type and season)
- Vessel haul out/travel lift
- Dry dock

Cargo facilities

- Cargo crane
- Expanded sorting and storage area
- Expanded barge loading
- Lighting

Park and open space

- Parks and plazas
- Bathrooms
- Cruise ship gateway
- Tour vendors
  - Visitor center/Tourism Information
  - Bus/tour staging/drop-off
  - Welcoming and nice
  - Connections to Front Street
- Trails (beach, along harbor and to downtown)
- Parking
- Vendor space
  - Food carts
  - Art and crafts
  - Small business sales area
- Interpretive signs-history and things to do

Port Security

- Lighting
- Cameras
- Port staffing
- Vessel oversight

Bathrooms

- At Small Boat harbor
- Off-loading/gathering cruise ship passengers

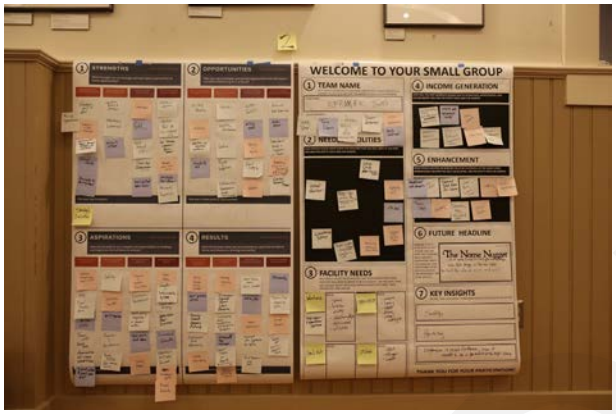
Small boat harbor facilities

- Recreation boat docks (seasonal)
- Restrooms
- Fuel for smaller boats
- Boat launch
- Parking and trailer parking
- Subsistence facilities

Miscellaneous

- Emergency Response Facilities
- Reinforced seawall, respond to climate change impacts
- Wifi
- Energy
- Improved lighting (for vessels-fog and vehicles-parking)
- Parking lots
- City bus
- Gift shops and Quickstop

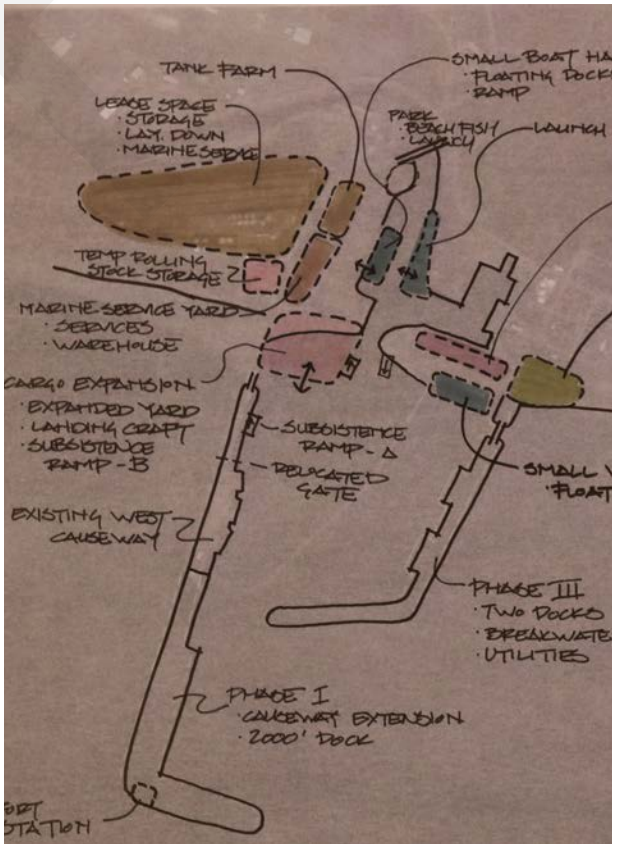
In-Person Meetings - Enhancements



Beyond specific improvements within the Port area, participants were asked what other related enhancements would help with the success of the Port.

RELATED ENHANCEMENTS

- Pavement on L
- Beautification
- Restaurants
- Dockside vendor/artist space
- Food cart area
- Tour excursions area
- Tribal trade and commerce area
- Ferry-OME to ANC
- Make nicer looking
- Ferry to surrounding Bering Strait communities
- Helipad
- Laundromat and showers
- Housing
- Subsistence area
- Park and playground
- Seasonal shops for lease
- Walkway/trail
- Public restroom
- Child care
- Restaurant (coffee shop, snack bar)
- Benches and green space



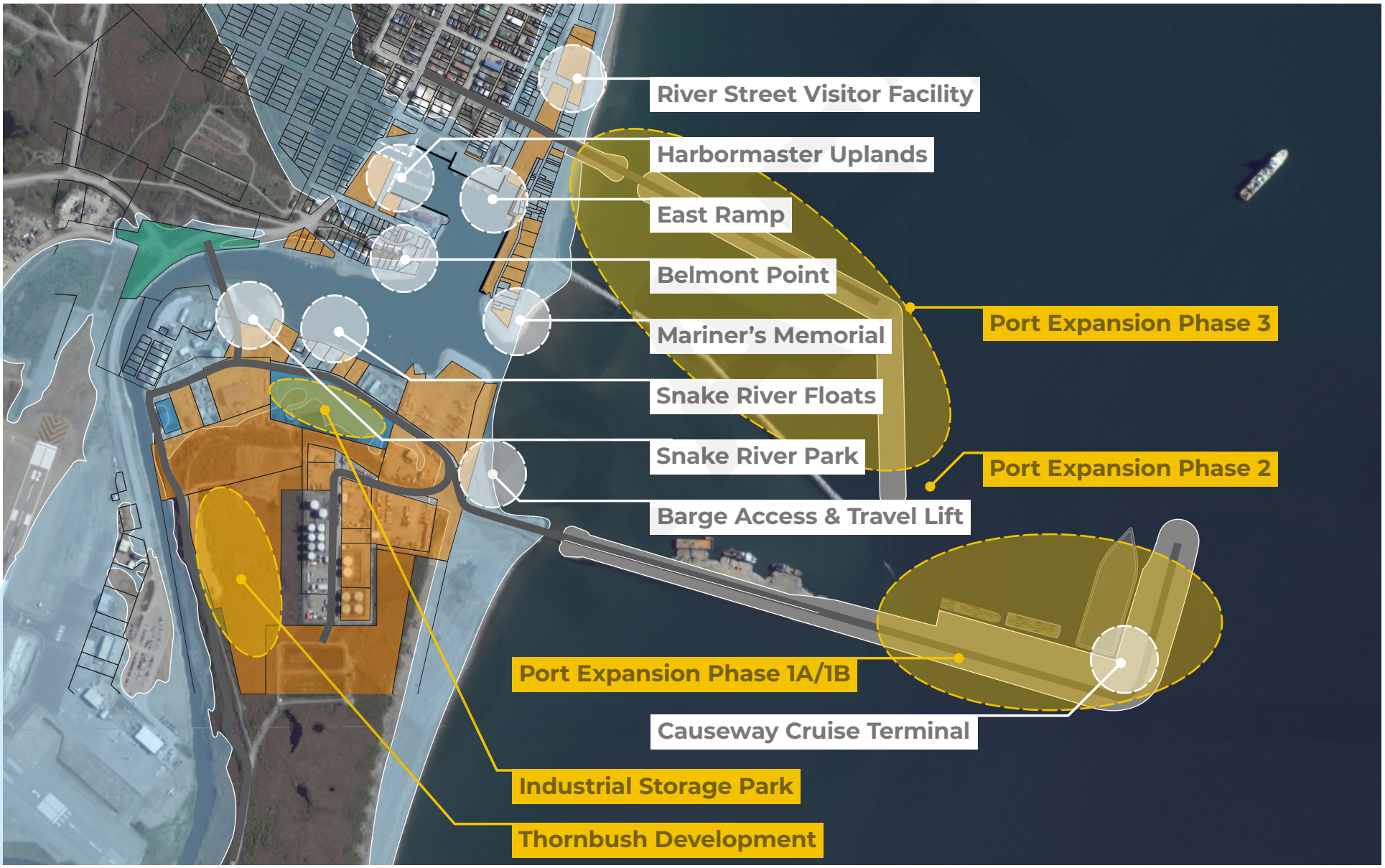
Master Plan Ideas

CONSOLIDATION OF PUBLIC ENGAGEMENT INPUT

4

FOCUS AREAS

Focus Area Key Map



While this development plan has primarily focused on future projects within the port that are not yet underway, it is important to consider current initiatives and how they align with the broader strategic vision for the port's growth. Several key projects are already in progress, and they all directly support or complement the focus areas outlined in this section of the report. Brief descriptions of these key projects, Thornbush Development, Port of Nome Expansion, and the Industrial Storage Park, are given below to provide an understanding of ongoing projects and their role in the larger strategy for the port.

Port of Nome Modifications

The Nome Causeway and Breakwater is a significant upgrade and expansion project through a multi-phase initiative in partnership with the United States Army Corps of Engineers (USACE).

Throughout the process of the port modifications, the city will continue, as is currently the case, to support port access for the community for subsistence use when it is safe to do so.

PHASE 1:

Phase 1a of the project has been fully designed and advertised for bid in early 2025. Bid evaluations are underway at the time of this plan's writing. Construction for Phase 1a is anticipated to begin in 2026 and will extend the existing west causeway by 1,200 feet and add approximately 600 feet of new dock moorage. Phase 1b, currently in design and scheduled for completion in 2026, will build on Phase 1a by extending the causeway an additional 2,300 feet and adding roughly 1,400 feet of additional dock frontage.

PHASE 2:

Phase 2, slated to complete design in late 2025, will focus on deepening the port facility. This work includes providing a 40-foot water depth in the Phase 1a and 1b areas and dredging the existing outer basin to a depth of 28 feet.

PHASE 3:

Phase 3 is expected to begin design in 2028 and will involve removing the existing east breakwater and replacing it with a new causeway aligned with E Street further east. This phase will also include the construction of a new breach bridge—similar in design to the existing one—and two new dock structures, each approximately 400 feet in length. These new facilities will be dredged to match the-28-foot water depth established in Phase 2.

Port of Nome Modifications - Phasing Diagram

Phase 1A

West Causeway Extension

- 1,200-foot Causeway
- 600-foot Dock

Phase 1B

West Causeway Extension

- 2,284-foot Causeway
- 1,870-foot Dock

Phase 2

Harbor Deepening

- -28-feet MLLW Outer Basin
- -40-feet MLLW Deepwater Basin

Phase 3

East Causeway

- 2,410-foot Causeway
- 800-foot Dock
- 1,450-foot Breakwater
- 130-foot Causeway Bridge

Thornbush Development & Industrial Storage

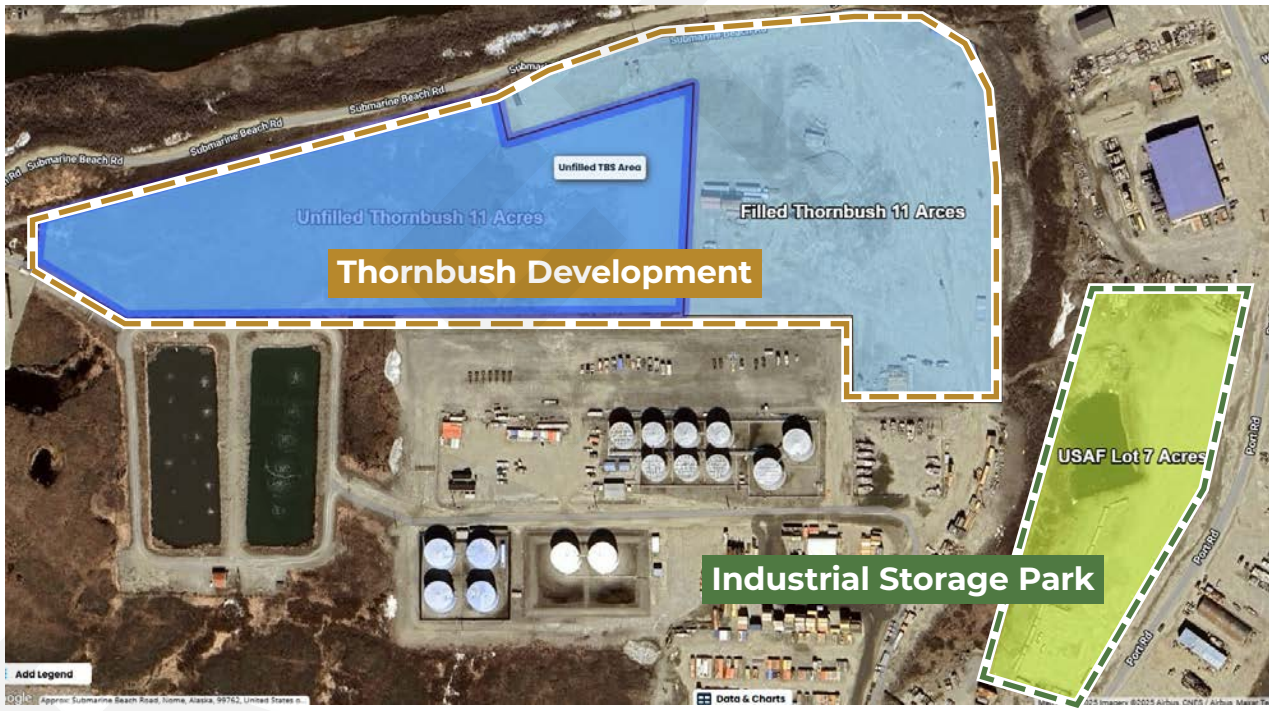
THORNBUSH DEVELOPMENT

The Thornbush development, located just south of the airport on Submarine Road, is an active site utilizing dredge spoils and fill from various projects to create additional laydown and staging areas. Since its inception in 2013, the 18-acre site has added approximately 9 acres of staging space for use by the City. A significant portion of this area includes staging cargo, equipment, and gravel/rock supporting typical port operations. As additional dredge spoils and fill materials become available, including from the next phase of the Inner Harbor development, the remaining 9 acres will ensure sufficient area for staging armor stone, steel, and equipment supporting the upcoming Port of Nome Modification project.

INDUSTRIAL STORAGE PARK

The City of Nome has recently finalized an agreement with the United States Air Force to obtain a 7-acre parcel, formerly known as the West Nome Tank Farm, located on Block 141/ Lot 7 along the west side of Port Road. This parcel will be a staging area for materials and equipment during the upcoming Port of Nome Modification Program. Upon completion of the project, this area could be used as a winter storage yard for vessels and potentially a site for a fuel tank farm in support of the adjacent Nome Joint Utility Systems' power plant.

Location Diagram



Snake River Park

SUMMARY:

General

The roughly 3-acre property is situated on the west bank of the Snake River, south of the Jafet Road bridge. The riverfront section of the site remains undeveloped and mostly in its natural state, while the uplands closer to the road have been filled and leveled for the storage of equipment and materials. During salmon runs in the Snake River, people fish from the shoreline and use the area for recreation.

The community has indicated that a portion of the site be for recreational purposes and to provide access for fishing in the river. A proposed community park could include day-use recreational facilities with trails leading to the river to provide access. The existing uplands storage area would remain and be utilized during the upcoming Port of Nome Modification and continue as industrial usage beyond that time.

While the site offers adequate space for a park, there are some challenges related to steep grading between the filled slopes created for the storage yard and the grades adjacent to the Snake River. The considerable distance between the two areas should allow for accommodating the grade changes and developing an accessible park. The area is subject to flooding and the location and construction of facilities needs to respond to these impacts.

Economic Feasibility & Other Benefits

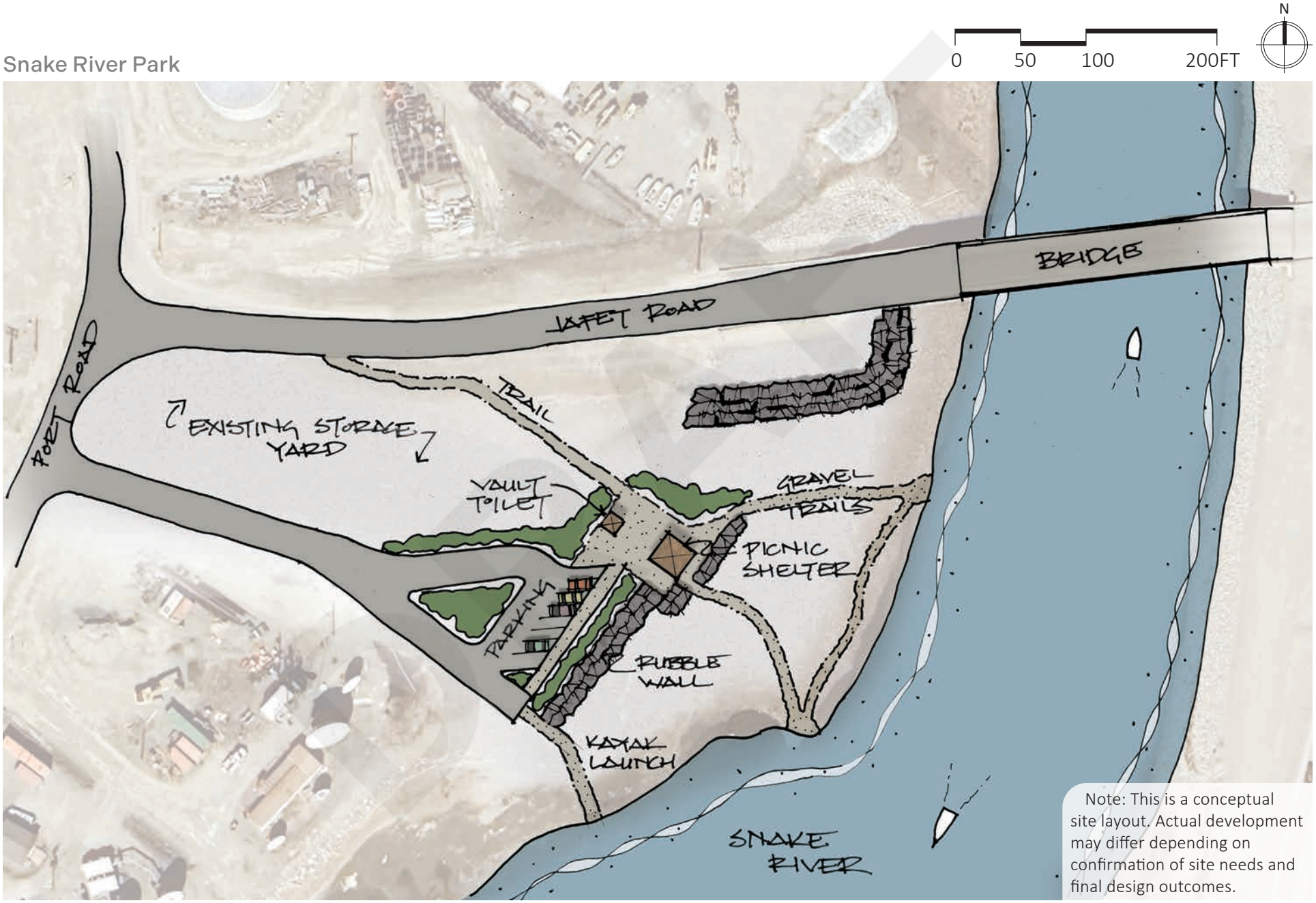
Establishing a public park along the Snake River will create a recreational destination for both locals and visitors. This development could encourage visitors to extend their stays in the community, leading to increased economic opportunities. Benefits could include additional spending on accommodations, dining, and fishing supplies, as well as services like fish processing. Fees could be collected for the rental of the day-use shelter.

Providing improved river access will offer valuable recreation and subsistence opportunities, significantly improving the quality of life for residents, particularly those without boats. Additionally, creating a public park along the Snake River will establish a new recreational area, providing opportunities that are currently lacking in the community. By developing shoreline angling facilities, the project can minimize habitat impacts and enhance fishing experiences.
Restoring the site to a natural state with designated low-impact recreational facilities will create a pleasant park setting along the Snake River, conveniently located near downtown Nome.

Innovation

Much of Nome's waterfront is heavily developed or engineered to withstand storm events. The park provides a unique waterfront experience where the Snake River and adjacent site are restored to a natural state and provides river access from the shore and day-use facilities, providing a desired recreation destination near downtown. As the site goes through natural regeneration, the site could include education and interpretive elements that discuss the importance of healthy riparian ecosystems and supporting natural runs of salmon in the Snake River.

Snake River Park



Note: This is a conceptual site layout. Actual development may differ depending on confirmation of site needs and final design outcomes.

FACILITY IMPROVEMENTS:

Day-Use Recreation Park

The improvements aim to create a natural park setting with enhanced river access along the Snake River. The upper portion of the property, which has been disturbed, is well-suited for the construction of a parking lot, a large day-use recreation and picnic shelter, a vault toilet, and driveway access to the east of the existing storage yard. Vehicle access will be a gravel road leading from Port Road along the south portion of the property to minimize existing use conflicts. The parking lot will be made of gravel and will accommodate approximately eight vehicles. A dedicated parking stall is included to allow walk-down access for those wishing to launch a kayak, canoe, or other small boat by accessing the gravel trail to the river. Facilities for launching larger boats will be available at the new Snake River Floats or Belmont Point.

Adjacent to the main parking lot, there will be an accessible vault toilet, which is a pre-manufactured concrete structure with a minimum 500-gallon vault tank. A 20-foot by 20-foot picnic shelter located at the top of the riverbank will overlook the water and provide a centralized location for gatherings and picnics. The shelter could either be a durable, pre-manufactured metal structure for cost-effectiveness or a more aesthetically pleasing timber structure with a metal roof. It should include at least two picnic tables, a BBQ grill, and trash cans. Additional features, such as a fire pit and benches, could also be included if desired. These facilities are protected from flooding by bringing up the grade and including a rubble rock wall.

From the picnic shelter, 4-foot-wide gravel trails gently descend down the slope to the river's edge, creating a looped trail network. The trails provide basic access to the river and could be used for fishing; however, the shallow water depth along this portion of the river provides challenging angling opportunities without wading or use of watercraft. A trail extends from the parking lot to Jafet Road, providing non-motorized access to the park from surrounding neighborhoods for both cyclists and walkers.

GENERAL CONDITIONS:

Implementation

The first step would be to relocate the existing storage yard on site to a new and more appropriate location. For success, the full development of the park would need to be completed. With the exception of the vault toilet and day-use shelter, most of the work is related to earthworks and the installation of gravel surfacing for trails, parking areas, and river access. In the longer term, these could be paved.

Staffing and Operations

Recreation facilities typically require a daily walk-through to check existing facilities and empty trash. There is no need for on-site staffing of this facility.

Maintenance

Daily trash collection is recommended as part of the site walk-through with daily cleaning of the restroom interior. Seasonal pumping of the vault toilet will occur several times during the season if the recreation area is overly popular. The toilet needs to be winterized prior to freeze-up. Gravel driveways and parking areas would need annual grading. Trail grading may need to occur every two to three years unless subject to heavy use or damaging weather events.

Cost Estimate

The improvements described are conceptual at this time and the costs presented are based on general metrics for similar facility improvements. Actual costs will vary depending on the final design, overall layout, and the selected phasing of construction. Estimates include permitting, engineering and construction administration costs as well as 35% contingency due to the conceptual level of design.

Conceptual Cost Estimate: $1.3MM

Snake River Floats

SUMMARY:

General

The City of Nome owns several parcels totaling approximately 1.5 acres on the west shore of the Snake River, south of Satellite Drive and north of the roll-on, roll-off facility. Much of the site is level and undeveloped, primarily used for storing equipment and materials. This use is not the highest and best option for such a prime public waterfront location, given that ample storage space is available elsewhere in the community.

Initial community discussions about the site considered developing a new boat launch and associated parking. However, further public conversations revealed that the site, along with the Snake River, is suitable for the creation of a new small boat moorage facility. This facility would help alleviate current overcrowding in the existing harbor, enhancing overall efficiency and user experience. The new Snake River Float facility would better organize waterfront activities by providing dedicated spaces for recreational and subsistence users, effectively separating them from the commercial and industrial operations of the existing harbor, thereby improving both harbor safety and operation.

Another identified need for the Snake River Float facility is the inclusion of a fuel dock to serve local boaters. Currently, vessels are fueled by delivery trucks at various locations on the waterfront, as the community lacks dedicated marine fueling facilities.

The site has a few challenges, primarily addressing the seasonal freezing of the Snake River and ensuring that all marine facilities can either be removed or can withstand the freeze-up. The shoreline would need to be stabilized to protect the proposed improvements, and dredging would be required to achieve the necessary water depth for vessel moorage. Given that the publicly owned site is small, additional upland uses, such as parking, would likely need to occur on an adjacent site across Port Road. Additionally, there are contamination monitoring sites along the uplands that may require additional attention and clean up during any uplands site work as compared to a “clean” site.

Economic Feasibility & Other Benefits

A critical need in Nome is for additional moorage space. Expanded moorage space would attract the community and visitors who may desire to moor their vessels in Nome but are currently trailering and launching their boats. Additional moorage space would generate revenue for the City by selling additional docking permits at the new floats.

In January 2025, the City of Nome was awarded a $13.2 million RAISE grant to support the construction of the Snake River Floats. This funding significantly improves the project’s economic feasibility by covering major infrastructure costs. In addition all project permitting for the facilities has been developed and approved with expiration in April, 2029.

The fuel dock was not part of the original scope and was not included in the grant estimate. However, its addition is expected to enhance long-term utility and service capacity.

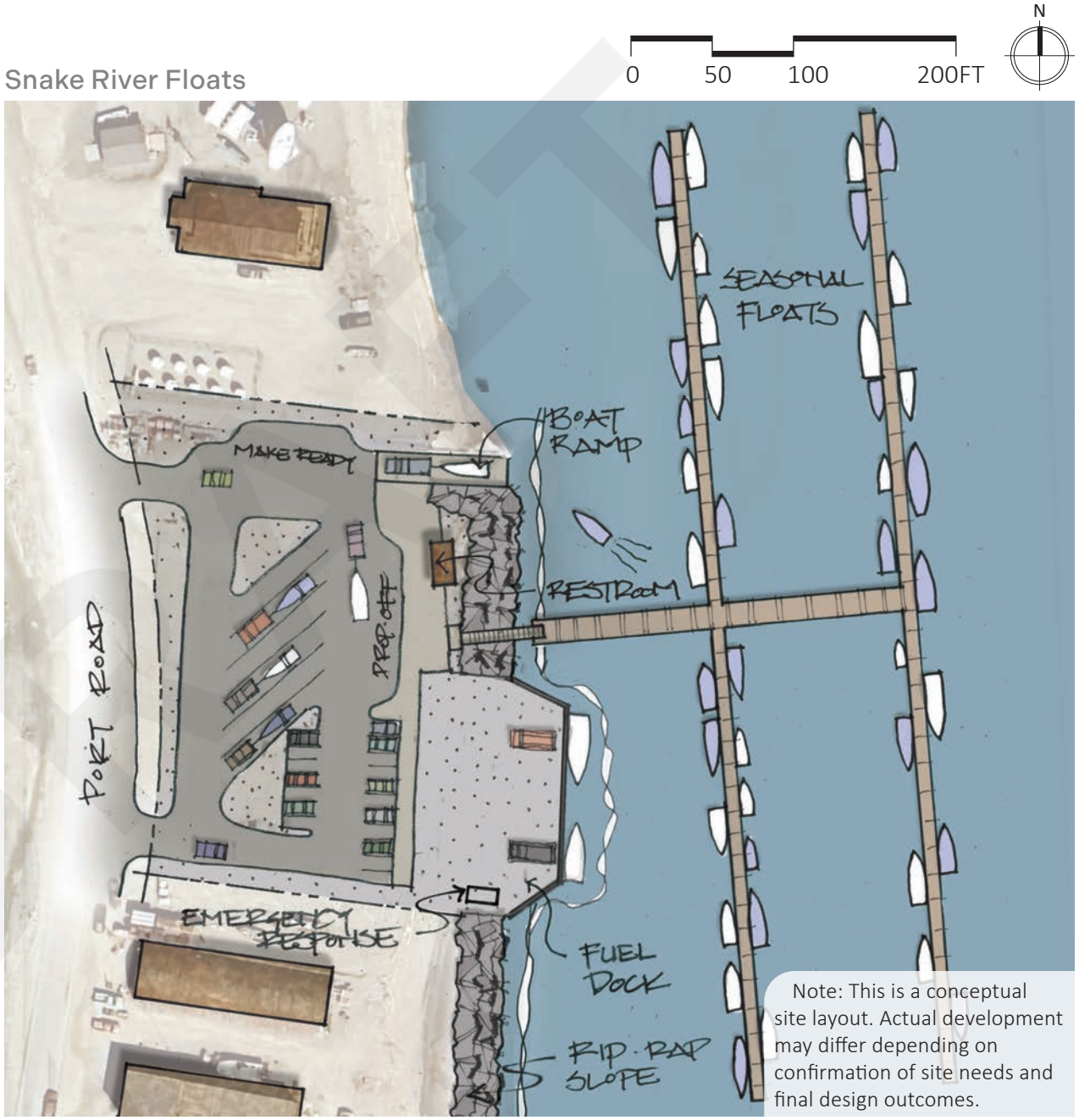
A critical benefit is the dedication of space for recreational and subsistence users at Snake River and the dedication of commercial and industrial operations in the existing harbor. This separation of users improves the safety and operation of the harbors.

Innovation

A key innovation is the dedication of the new Snake River Floats to recreation and subsistence boaters, which removes them from the existing harbor and allows the dedication of the existing harbor to commercial use. The expanded capacity for all users also improves safety and operation by having dedicated use in each harbor rather than mixed-user types. The additional moorage at the new Snake River Floats provides the expanded capacity at both harbors. It reduces the need to store vessels off-site and trailer to launch facilities, making it safer and more efficient by reducing the transport of boats to the harbors.

The dedicated fuel dock would also allow safe and efficient fueling of vessels by providing a dedicated fueling area where vessels come to the fuel truck at this facility rather than the current logistics of the Small Boat Harbor where fuel trucks mobilize to individual vessels that are often rafted alongside one another.

Snake River Floats



Note: This is a conceptual site layout. Actual development may differ depending on confirmation of site needs and final design outcomes.

FACILITY IMPROVEMENTS:

Floats

The Snake River Floats and Fuel Dock would be a key facility for supporting the seasonal moorage of small vessels less than 8-foot draft and up to 40’ +/- while enhancing the separation between recreational, subsistence, and commercial uses along the waterfront. The site would provide public restrooms and a trailered boat launch, with designated trailer parking to accommodate a wide range of users and create a complete facility.

Approximately 2,400 feet of floating moorage within the 8-foot-deep basin would offer seasonal dock space for 60+ small boats. These floats would be designed similar to the existing small boat harbor floats and would allow for easy removal during the winter months to protect infrastructure and extend service life. The developed uplands areas adjacent to the floats would be utilized to stage the floats and gangway during the off-season.

An armored beach would be constructed to provide shoreline protection and ensure the site’s long-term resilience along its entire length. The basin would be dredged or maintained to an approximate depth of 8 feet, supporting safe and reliable use by various small vessels.

Fuel Dock

A fuel dock would be installed to support local boating activity and improve access to essential services on the water. The waterside facility would be on expanded uplands supported by vertical sheet pile that juts into the Snake River and provides access with a water depth of 8’. The fuel dock would provide approximately 150+ linear feet of fueling access with an uplands constructed of gravel. Initially fuel trucks would be staged at the site to facilitate fueling, however, future site upgrades could accommodate a dedicated tank and fueling station on-site to service vessels. A spill response container would be located on site.

Launch Facility and Parking

The boat launch would be a gravel launch facility that is 80’ +/- feet long and 18’ +/- feet wide, accommodating trailered vessels up to 40’ +/- feet long. The uplands include parking for approximately six vehicles with trailers and twenty passenger vehicles for those using the moorage facility. Parking and driveways would be gravel and, if desired, could be paved with curbs and gutters to reduce dust and maintenance at a future date. Parking on-site does not meet the anticipated demands of the new facility, requiring additional off-site parking for trailers and passenger vehicles on an adjacent site across Port Road.

The improvements would include a two-fixture vault toilet as a pre-manufactured concrete structure with a vault tank.

GENERAL CONDITIONS:

Staffing and Operations

The facility would require part-time staffing during the busy season to monitor the fuel dock, moorage and boat launch.

Maintenance

The seasonal removal of the float systems in autumn and the reinstallation in early spring would be required, similar to the existing small boat harbor floats, to ensure that damage during the winter ice season does not occur. Floats would be designed to be easily detached into manageable sections so they can be removed and launched as needed. Floats would be able to be removed via the boat ramp and staged in the parking lot during the off season. Removal of the floats would also allow for ease of inspection and maintenance as needed.

Daily trash collection is recommended as part of the site walk-through with daily cleaning of the restroom interior. Seasonal pumping of the vault toilet would be needed and could occur several times during the season if heavily used. The toilet would need to be winterized prior to freeze up and opened in the spring. Gravel driveways and parking areas would need annual grading.

Cost Estimate

The costs for the Snake River Floats project are based on approximately 35% design documents developed for the RAISE grant application process. Actual costs will vary depending on the final design, overall layout, and the selected phasing of construction.

Conceptual Cost Estimate: $21.5MM (Includes Fuel Dock Costs)

Harbormaster Uplands

SUMMARY:

General

The uplands associated with the Small Boat Harbor and surrounding the existing harbormaster office consist of a large unsecured gravel lot that currently has little defined use. The only structure on the site is the aging 1,400-square-foot harbormaster office located off Belmont Street. This flat 1.8-acre site is situated at the corner of Belmont and Seppala Drive.

The gravel lot lacks defined driveways, parking areas, or spaces for storage, resulting in haphazard use, but also allows for maximum flexibility. The lot serves primarily as unorganized parking in the summer as well as storage for various port equipment. The site includes numerous shipping containers, stored vehicles and vessels, as well as materials and equipment used by harbor staff for the operation and maintenance of the harbors. The existing harbormaster building has exceeded its intended lifespan and is insufficient for the needs of the harbor department.

Feedback regarding this site emphasizes the necessity for a new, modern, and larger harbormaster office, along with a harbor warehouse to store equipment and vehicles, which would also include a small workshop. Additional improvements desired include secured fenced storage, open flexible storage areas, and organized harbor parking that could double as float storage during the winter months. There is also a request for a harbor comfort station equipped with restrooms, showers, and laundry facilities to support users of the Small Boat Harbor. Furthermore, stakeholders wish to connect the harbor to downtown through a harbor walk. Adjacent to the harbor, a covered area for used oil receptacles is needed to facilitate safe and efficient harbor operations.

One significant advantage of this site is its flat terrain and largely unprogrammed use, which poses few challenges for development. All necessary utilities are available, supporting both the Small Boat Harbor and its operations. The proposed improvements to the Harbormaster Uplands Area, along with the development of new floats on the Snake River and relocating all recreational boating to these new floats, would enhance functionality and user services at the Small Boat Harbor. This shift would place a greater focus on accommodating commercial boaters.

Economic Feasibility & Other Benefits

A larger and modernized harbormaster office, new warehouse, and organized storage are not expected to provide economic benefits but would greatly improve the efficiency and operation of the Harbor Department. Similarly, the harbor comfort station and used oil receptacles would not generate significant revenue but would provide the amenities needed to support users at the Small Boat Harbor.

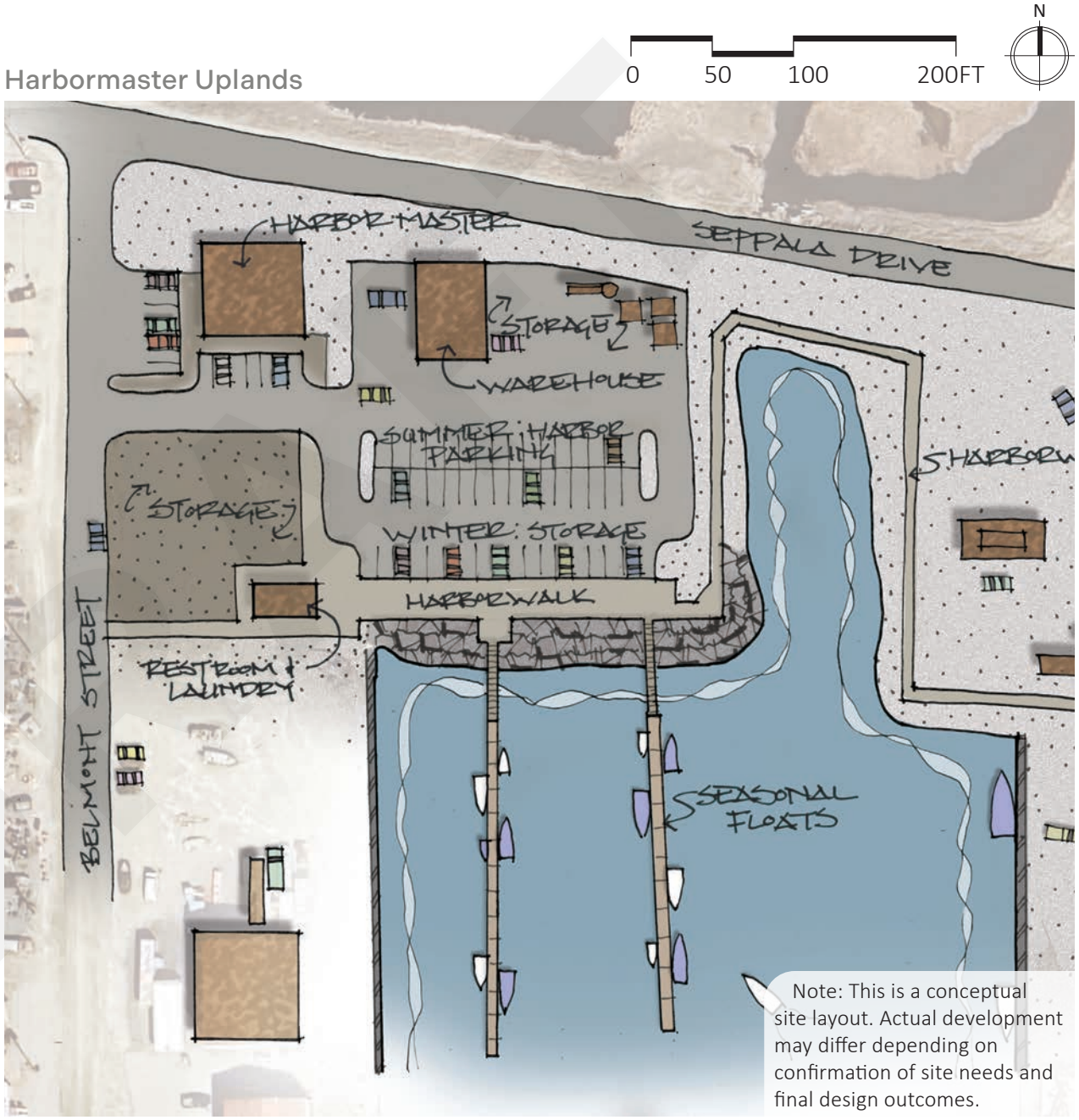
FACILITY IMPROVEMENTS:

Harbormaster Office

The Harbormaster Office is a 3,600-square-foot facility that would support the operational needs of the Harbormaster and port staff. It provides a centralized location for administrative functions, allowing port users direct access to staff for coordinating berthing assignments, handling duties and fees, and addressing other harbor-related needs. The facility plays a key role in ensuring efficient and responsive port operations.

As part of the improvements an established driveway with designated parking stalls and sidewalks are developed around the harbormaster's office. Defining these spaces with asphalt pavement, concrete curb and gutters and striping would organize the site and reduce dust and maintenance. The site would include lighting and security cameras.

Harbormaster Uplands



Warehouse and Storage Yard

The warehouse is a 2,400-square-foot heated pre-manufactured metal building that would accommodate the storage of equipment and materials, allow the storage and maintenance of vehicles and small boats, and include a small shop for the maintenance and repair of harbor elements. Large, motorized roll-up doors allow easy vehicle and equipment access, while the shop area includes workbenches, tool racks, storage cabinets, and the needed ventilation and lighting. Racks allow for the storage of materials.

The yard has two storage areas: an unsecured gravel lot approximately 6,000 square feet to the east of the warehouse and a fenced gravel yard roughly 8,000 square feet to the south of the harbormaster office. In the winter, the parking lot associated with the Small Boat Harbor is utilized for the storage of the harbor floats. The yards are expected to have lighting and security cameras.

Harbor Comfort Facility

This facility provides full-service accessible restrooms with two fixtures and a shower per side. The showers are expected to be coin-operated but generate little revenue. Also included are simple laundry facilities that are expected to include two commercial-grade washers and dryers that are also coin-operated. These facilities would be enclosed within a heated structure of approximately 800 square feet. All materials would be durable and low-maintenance. This facility would have complete mechanical systems, be connected to City utilities, and have security cameras in public spaces.

GENERAL CONDITIONS:

Implementation

The highest priorities are the construction of the new harbormaster office and the harbor comfort station. Once completed, the next improvements would be the warehouse, storage yards, and organized harbor parking. Vehicle areas could initially be gravel and be later upgraded to asphalt paving with curbs and gutters. This project concept includes many aspects that could easily be separated into phases as funding and needs arise.

Staffing and Operations

The harbormaster office would be fully staffed and the basis of operations for the Harbors Department. At this time this would not necessitate any additional staffing from that already provided.

Maintenance

The anticipated maintenance for a harbor master office involves regular checks and upkeep to combat the marine environment. This includes inspecting and potentially treating the building's exterior for moisture damage. Work includes maintaining the functionality of communication equipment crucial for harbor operations. Interior maintenance would focus on general wear and tear, ensuring a comfortable and efficient workspace for staff, and addressing any issues arising from the damp coastal climate, like mold or mildew. Inspecting and maintaining doors, windows, and heating and ventilation systems would ensure functionality and comfort within the building.

The anticipated warehouse maintenance would primarily focus on preventing corrosion and ensuring structural integrity. Regular inspections would be crucial to identify any signs of rust, loose fasteners, or damage to the metal panels, roof, and gutters. Periodic cleaning would remove debris and prevent moisture buildup. Additionally, inspecting and maintaining doors, windows, and heating and ventilation systems would ensure functionality and security, contributing to the building's longevity and operational efficiency.

The harbor comfort station would require regular maintenance to ensure functionality and cleanliness for users. Daily or more frequent cleaning of all facilities, including toilets, showers, sinks, and laundry machines, and trash removal would be necessary. Plumbing maintenance would be necessary to address leaks and clogs and ensure proper water pressure and drainage. Electrical checks would be conducted to maintain lighting, outlets, and the operation of the laundry equipment. Periodic inspection and repair would ensure adequate ventilation to prevent mold or mildew. The anticipated maintenance for a harbor master office involves regular checks and upkeep to combat the marine environment. This includes inspecting and potentially treating the building's exterior for moisture damage.

Cost Estimate

The improvements described are conceptual at this time and the costs presented are based on general metrics for similar facility improvements. Actual costs will vary depending on the final design, overall layout, and the selected phasing of construction. Estimates include permitting, engineering and construction administration costs as well as 35% contingency due to the conceptual level of design.

Conceptual Cost Estimate: $17.7MM (Full Build)

- **$9.7MM (Harbormaster Building)**
- **$4.7MM (Warehouse Facility)**
- **$1.9MM (Toilet\Laundry Facility)**
- **$1.4MM (Site Upgrades and Harbor Walk)**

Belmont Point

SUMMARY:

General

Belmont Point has traditionally served as a subsistence access point to the Snake River and Norton Sound during late autumn and early spring when the harbor is frozen. The approximate 2-acre site is also used for recreational boat launches during the summer months. Boats are launched from the beach, and both the beach and surrounding uplands are used for short-term storage of skiffs and vehicles with trailers. Currently, there are no formal boat launch or access facilities, so boats on trailers must launch from the gravel shoreline, which poses challenges as not all trailers are compatible with the beach. This method of launching has led to some impacts on the Snake River's shoreline, as well as some safety concerns. The area is also popular for angling from the shoreline.

The community has requested the development of simple boat launch facilities to improve access. In addition, residents expressed interest in having a small day-use recreation facility that includes a shelter, picnic area, and fish cleaning station which would enhance the area's programming and use. The intention is to continue allowing boats to be launched from the beach while improving waterfront access from Prospect Place to the Snake River. These enhancements would support both recreational and subsistence activities for the community.

A key challenge in this project is the narrow configuration of the site along the Snake River, along with neighboring private property to the east, while still accommodating the desired improvements. Additionally, the natural beach shoreline would need stabilization to ensure site upgrades are protected.

Economic Feasibility & Other Benefits

The economic benefits of these improvements are limited, primarily to the potential for collecting launch fees or renting the small recreation shelter. Establishing an organized boat launch facility would also minimize the impact on the natural shoreline of the Snake River.

FACILITY IMPROVEMENTS:

Launch Facility

Improvements include the upgrade of the existing natural gravel boat launch ramp with a more formal gravel surface facility. This ramp would accommodate trailered small boat launches, providing reliable and convenient water access to the Snake River during the open water season.

Widening and regrading the existing aggregate road on Prospect Place will improve access to the site. Further upgrades may include paving the road, driveway, parking area to enhance durability, reduce dust, and minimize maintenance while improving accessibility.

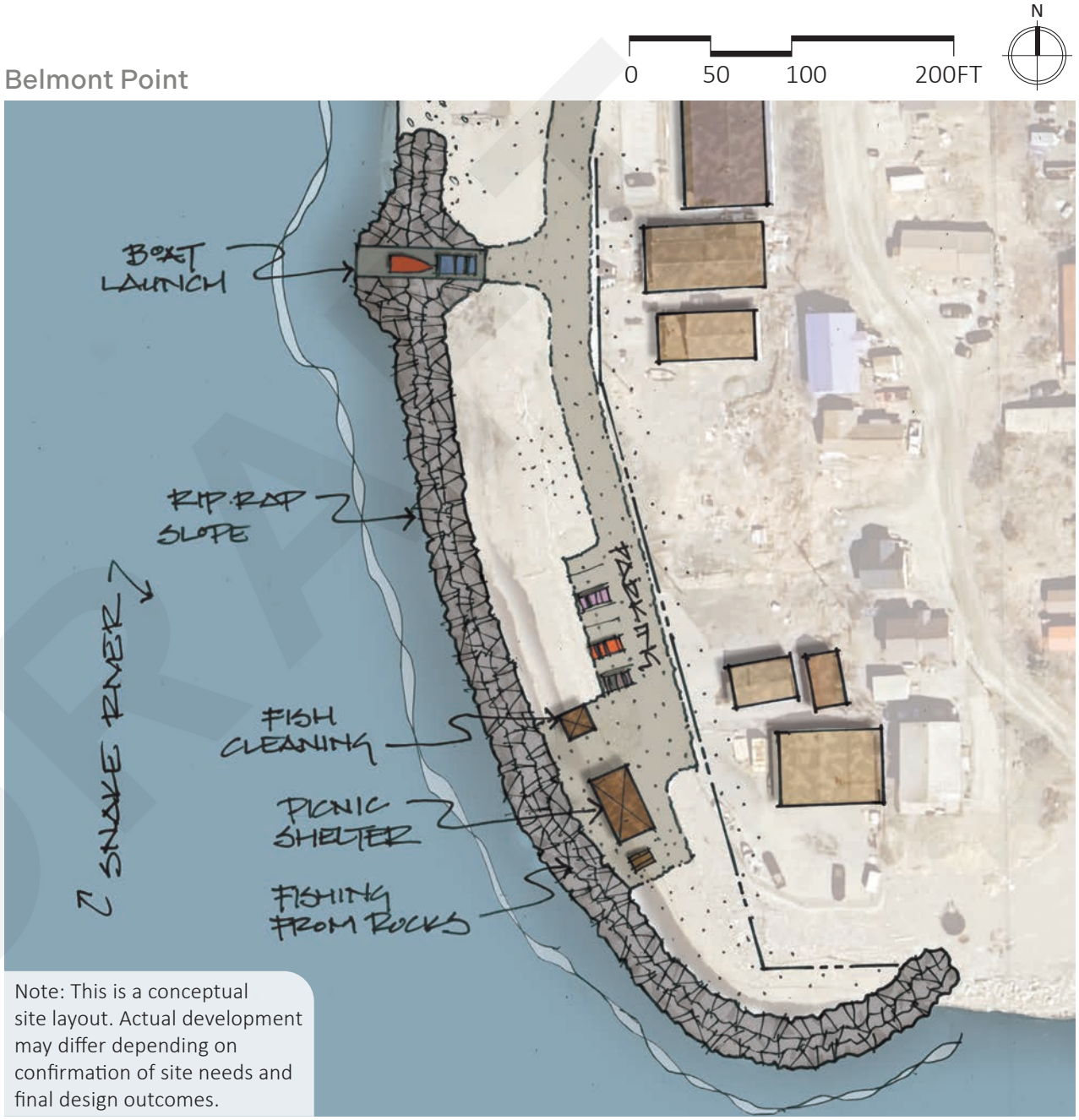
Beach armoring will be implemented to protect the improvements along vulnerable shoreline sections. This protection may also support the expansion of usable uplands over time, thereby increasing the site's long-term value and functionality.

Day-Use Area

A small, accessible day-use area is located to the south end of the site and offers a gathering space at Belmont Point and the adjacent shore fishing that occurs in this area. The recreation area will include a small 15-foot by 15-foot picnic structure with a picnic table, BBQ grill, and trash can. The structure could be pre-manufactured metal or a more aesthetic timber shelter with a metal roof. The surfacing under the shelter and surrounding picnic area will be compacted crushed gravel; however, upgrading with paved surfaces would create a more durable surface, improve accessibility, and reduce maintenance efforts. A small parking lot is adjacent to the shelter.

A community-use fish and seal cleaning station will be established to support local fishing activities. This amenity will promote responsible processing of seals and fish while helping to maintain site cleanliness. The community wishes for this station to be covered, with an approximate size of 10 feet by 10 feet, and ideally equipped with water for cleaning seals and fish. However, extending water service will add complexity in terms of installation and maintenance.

Belmont Point



Note: This is a conceptual site layout. Actual development may differ depending on confirmation of site needs and final design outcomes.

GENERAL CONDITIONS:

Implementation

The highest priority for development of this site is providing the improved launch facility, any related beach armoring to support the launch. The day-use area and fish cleaning station would be a secondary improvement for Belmont Point unless complete funding for the whole project is secured. If desired, the fish and seal cleaning station could be part of the boat launch project.

Staffing and Operations

The facility does not require on-site staffing, however daily site visits during seasonal use would encourage proper use of the facilities.

Maintenance

Gravel boat launch maintenance includes regrading during heavy use periods and after significant storm events with light duty dozers or grading equipment. During the summer and high-use periods, daily maintenance visits are expected to ensure trash cans are emptied and the cleaning station and recreation area are clean and operational. Annual grading of the parking lots and driveways will be required, and depending on use, more frequent grading of the gravel boat launch may be needed.

Cost Estimate

The improvements described are conceptual at this time and the costs presented are based on general metrics for similar facility improvements. Actual costs will vary depending on the final design, overall layout, and the selected phasing of construction. Estimates include permitting, engineering and construction administration costs as well as 35% contingency due to the conceptual level of design.

Conceptual Cost Estimate: $11.6MM

River Street Visitor Facility

SUMMARY:

General

As Nome welcomes large and mid-sized cruise ships to the community during the summer, it must prepare to create a safe and positive visitor experience. With cruise ships berthing on the causeway, passengers must be transported via motor coach into town.

The City owns several undeveloped lots adjacent to River Street and Gold Avenue that total just under 2-acres. A portion of this site is used as a dog lot for the Iditarod Trail Sled Dog Race in the winter; however, they remain largely unprogrammed for the rest of the year. This site is on the western edge of downtown Nome, near many attractions, making it an ideal location for a cruise ship visitor facility.

To enhance the visitor experience for cruise ship passengers, motor coaches would arrive at the River Street Visitor Facility, allowing passengers to disembark close to downtown Nome. From there, they can explore the community on foot or board tour shuttles to access other tours and attractions. In addition to functioning as a motor coach terminal, the facility would allow passengers can interact with staff, view multimedia exhibits, and explore interpretive stations to learn about Nome's history, attractions, and activities available in the community. The facility would include restrooms and also allow visitors to purchase tickets for other attractions and events, as well as board tour shuttles to surrounding locations.

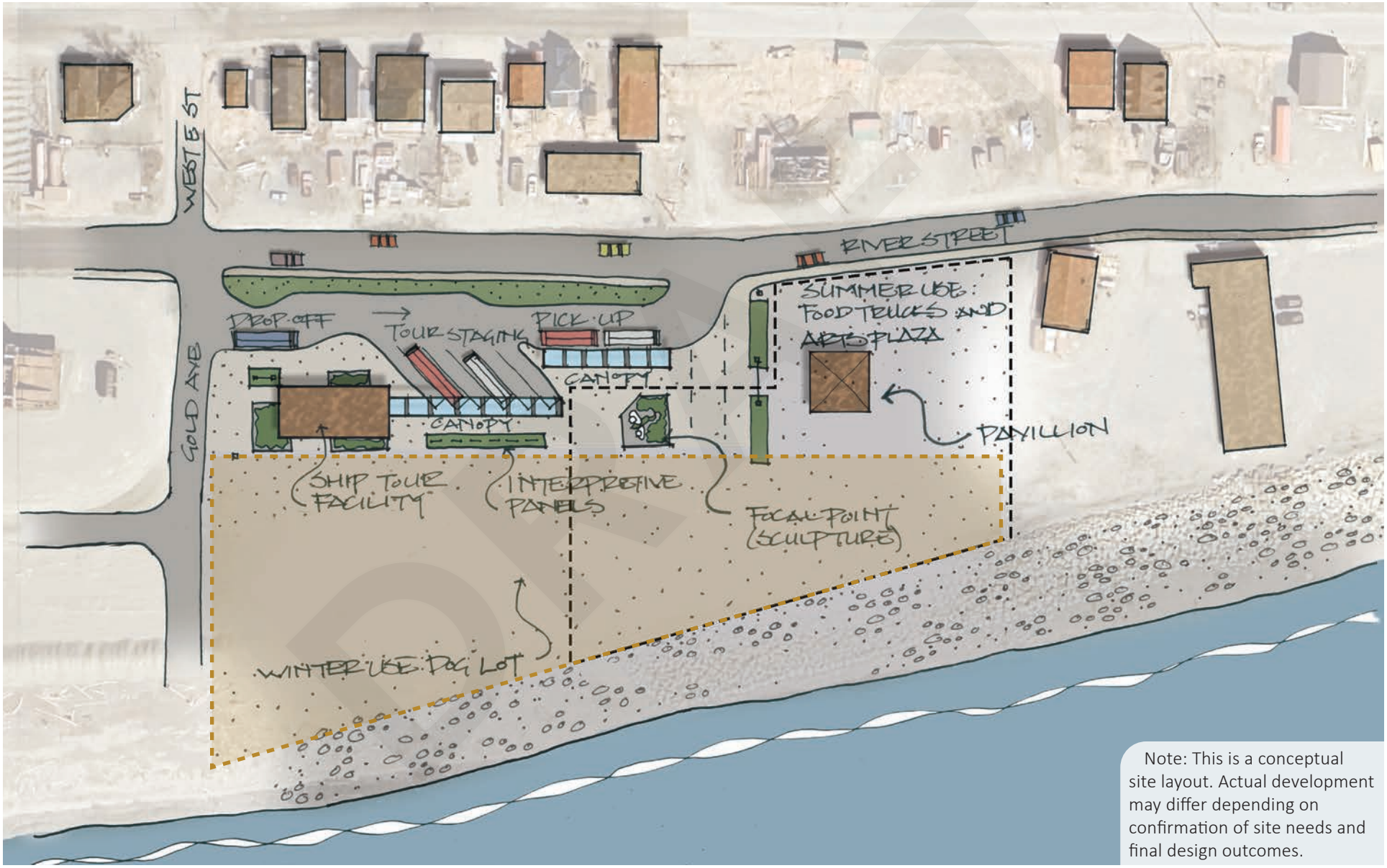
The exterior open space would feature interpretive panels, artwork, and landscaping to create a welcoming gateway to the community. Additional open space to the east would include a vendor plaza for arts and crafts sales, food trucks, and other offerings that would appeal to cruise ship passengers and locals. A large pavilion structure in this plaza space provides shelter from inclement weather. During the winter, the plaza would serve as a dog park for the Iditarod. The facility would allow the future development of the Middle Beach Park that was designed in 2015, if still a community priority.

An improved pedestrian route from the gateway terminal would run along River and Front Streets, providing better access to downtown Nome. This route would be widened and paved, featuring sidewalks, wayfinding signs, and street furnishings to create an aesthetically pleasing streetscape for the downtown area.

Economic Feasibility & Other Benefits

This facility provides a critical visitor transportation hub and visitor service to create a positive visitor experience for cruise ship passengers. Nome is experiencing a notable increase in its cruise ship industry, presenting significant economic opportunities. As larger and more frequent cruise ships arrive in Nome, they bring visitors eager to explore the community's unique history, culture, and Arctic environment. This growing visitor industry stimulates the local economy through increased spending at local businesses, including shops, restaurants, and tour operators. Creating new jobs in the tourism sector, from guiding excursions to providing hospitality services, offers valuable employment opportunities for Nome residents. The revenue generated from passenger fees and local taxes can be reinvested in community infrastructure and services, enhancing Nome's overall quality of life. While careful planning and management are essential to mitigate potential environmental and social impacts, the growing cruise ship industry holds promise for sustainable economic growth and diversification.

Cruise Ship Gateway and Visitor Area



Note: This is a conceptual site layout. Actual development may differ depending on confirmation of site needs and final design outcomes.

FACILITY IMPROVEMENTS:

River Street Visitor Facility

The facility would be a staffed facility that operates when cruise ships are in port. It would offer visitor information services and allow guests to purchase tours from local operators within an approximate 2,600-square-foot space. The facility would accommodate up to 100 visitors at a time, which is equivalent to the capacity of two motor coaches.

Staff would provide visitor and informational services, which may include static printed materials, interactive multimedia displays, and exhibits that highlight Nome's history, culture, attractions, and tours. The focus would be on providing initial contact for visitors to help them make informed decisions about how to spend their time in Nome, without duplicating information and exhibits found elsewhere in the community.

Additionally, the visitor facility would feature restrooms, each equipped with three fixtures per side. The facility would include all necessary mechanical systems and offer high-quality lighting to enhance the displays and exhibits. The building's design would reflect Nome's architectural style, making it easily identifiable to visitors. Clear signage on the building would identify its use for visitors.

Motor Coach Staging

The River Street Visitor Facility serves as the transportation hub for motor coaches traveling between the cruise ship berth on the causeway and downtown Nome. The layout of the site promotes one-way traffic circulation to facilitate quick curbside drop-offs and pick-ups for passengers arriving from and departing to the cruise ship. Motor coaches would operate on a regular schedule to transport guests to town and back to their ship.

There is designated space for one motor coach for drop-off, located directly adjacent to the visitor facility, ensuring a swift transfer of passengers off the bus. Additionally, there are two pick-up spaces available for those returning to the ship, which accommodate the typically slower loading process. The pick-up area features a canopy that protects passengers waiting to board the bus from the weather.

Between the two motor coach circulation hubs, there are six nose-in parking stalls designated for passengers who have purchased tours requiring transportation to various attractions or destinations. These coaches would remain on-site longer while they load passengers. The nose-in parking arrangement allows for easy identification of the bus tours, and a canopy extending from the visitor facility along the tour bus staging area provides shelter and guidance to passengers, protecting them from the elements. The overhead canopy would be high enough to accommodate motor coaches and would consist of a metal frame covered with removable fabric or plastic material, which can be taken down during the off-season.

All vehicle areas would be paved with asphalt and include concrete curbs and gutters to clearly delineate motor coach circulation routes and ensure the safe identification of pedestrian and vehicular zones. Striping on paved surfaces would help regulate the movement of motor coaches and define parking and staging areas.

Public Plaza and Open Space

Ample open public space facilitates the movement of pedestrians from the motor coaches to the River Street Visitor Facility and downtown Nome. Ideally, these spaces should be paved; however, in the short term, they can be covered with compacted crushed aggregate, provided they are fully accessible. Raised planting beds adjacent to the building create a welcoming environment and can also serve as seating areas. The public plaza would include benches and trash cans. Interpretive panels placed within the plaza offer information for visitors year-round, including when the facility is closed. The large colored panels can suggest itineraries for various desired experiences, such as historic destinations, recreational opportunities, shopping, and more.

The plaza should feature a designated 'Kodak' or 'Instagram' spot, which could include a large sculpture or piece of artwork that embodies Nome and serves as a focal point for the plaza. It is essential to cluster amenities within the plaza near the built structures and elements of the larger visitor facility. An open space with minimal clutter allows for maximum flexibility, which can best accommodate a dog lot in the winter.

The eastern portion of the site consists of a large, unprogrammed lot that caters to both summer and winter needs. During the summer, the lot hosts food trucks, arts and crafts vendors, and other businesses that do not have a brick-and-mortar presence. The arts and crafts plaza would feature a large gravel area with limited electrical power sources around the perimeter to support the vendors. In the center of this plaza, there would be a large pavilion or shelter designed to protect the vendors. This structure would measure at least 40 feet by 40 feet and can be a pre-manufactured metal building, or a frame topped with a seasonal canopy that is removed at the end of the summer. In winter, the plaza would continue to support the needs of the Iditarod. If desired, the proposed Middle Beach Park can be constructed in the future and will be integrated with these facilities.

Pedestrian Connectivity

Once at the River Street Visitor Facility, a clearly defined safe pedestrian route would visually guide visitors to downtown Nome along River and Front Streets. The route shall be fully accessible and should be concrete paved sidewalks with a width of eight feet or more, where the right of way allows. Creating visual interest such as including gold 'sparkle grains' in the concrete sidewalk finish or creating a wood plank finish would reinforce the community's gold rush heritage and be a unique identifier to downtown. This route shall connect to the Harbor Walk to create a pedestrian network and access to other destinations along the waterfront.

The inclusion of benches, pedestrian scaled lighting, trash cans, hanging flower baskets and banners from light or banner poles, all create interest and improve the aesthetics of downtown Nome. An essential element is the development of a wayfinding system to guide visitors through the community and to its destinations. These can include simple 'finger-pointing' signs at intersections with walking durations to attractions, to community maps and interpretive panels where wider sidewalks are present. Creating continuity in the branding of signs and wayfinding creates a unified aesthetic that also greatly helps visitors and locals move through and learn about the community. Ideally wayfinding would remain in place year-round, with banners, interpretive panels, and hanging baskets being seasonal. Locate benches, lighting and wayfinding to not interfere with snow removal and storage. Some of these streetscape elements may also need to be seasonal to prevent interference with snow maintenance operations.

GENERAL CONDITIONS:

Implementation

Phased implementation would be challenging and to create a transportation hub into the community without some level of visitor services would be counterproductive to creating the facility. Ideally, the River Street Visitor Facility and Causeway Terminal are a critical first phase of implementation. Elements that include the canopies, landscaping and open space plaza could be a future phase but to create an appropriate 'first impression' and gateway facility, including these elements would make a significant contribution to the overall project. The arts and crafts plaza and pavilion could easily be a second phase of work.

As road improvements are completed on River and Front Streets, streetscape enhancements that include improved sidewalks, site furnishings, wayfinding and other elements could be incorporated into the larger streets project. If desired, the sidewalk and streetscape improvements could be a stand-alone project linking the gateway facility to downtown.

Staffing and Operations

The River Street Visitor Facility would be staffed by up to two people (perhaps more depending on ship size) while a ship is in port. It could be expected that an additional staff person might be required outside the facility to help facilitate directing visitors to the correct tour and motor coaches back to the cruise ship.

Maintenance

Maintenance includes a consistent schedule of upkeep to ensure a welcoming and functional environment. This includes routine cleaning of interior and exterior spaces, regular inspections and repairs of structural elements like roofing, walls, and flooring, and the maintenance of essential systems such as HVAC, plumbing, and electrical. Preventative maintenance, like seasonal system checks and addressing minor issues promptly, helps to avoid more costly repairs down the line and ensures the longevity of the facility. Landscaping requires regular watering and weeding, while site furnishings would require occasional cleaning and daily trash removal from receptacles. Exhibits, interpretive panels, and informational displays, both inside and in the open space require periodic cleaning, updates, and care to remain engaging and accurate.

Cost Estimate

The improvements described are conceptual at this time and the costs presented are based on general metrics for similar facility improvements. Actual costs will vary depending on the final design, overall layout, and the selected phasing of construction. Estimates include permitting, engineering and construction administration costs as well as 35% contingency due to the conceptual level of design.

Conceptual Cost Estimate: $13.6MM

Causeway Cruise Terminal

SUMMARY:

General

As Nome welcomes large and mid-sized cruise ships to the community during the summer, it must prepare to create a safe and positive visitor experience. Nome is looking to the future with plans to develop an improved cruise ship berthing facility as part of the causeway expansion. This facility would be located more than a quarter-mile offshore and nearly a mile from downtown Nome, which presents a challenging route for passengers to walk. Due to the berth's location, passengers would be required to board motor coaches as they disembark from their cruise ship for transportation from the causeway and into town.

To enhance the visitor experience for cruise ship passengers, motor coaches would depart from a large, dedicated pedestrian plaza and motor coach staging area and transport visitors to the River Street Visitor Facility, allowing passengers to disembark close to downtown Nome. From there, they can explore the community on foot or board tour shuttles to access other tours and attractions.

It is necessary to create a welcoming, safe, and dedicated disembarkation area adjacent to the cruise ship berth within the active industrial uses on the causeway. Providing basic facilities such as a covered waiting area, portable restrooms, and organized motor coach loading will provide basic comforts for visitors on what can be an exposed site on bad weather days.

Economic Feasibility & Other Benefits

This facility provides a critical visitor transportation hub and visitor service to create a positive visitor experience for cruise ship passengers. Nome is experiencing a notable increase in its cruise ship industry, presenting significant economic opportunities. As larger and more frequent cruise ships arrive in Nome, they bring visitors eager to explore the community's unique history, culture, and Arctic environment. This growing visitor industry stimulates the local economy through increased spending at local businesses, including shops, restaurants, and tour operators. Creating new jobs in the tourism sector, from guiding excursions to providing hospitality services, offers valuable employment opportunities for Nome residents. The revenue generated from passenger fees and local taxes can be reinvested in community infrastructure and services, enhancing Nome's overall quality of life. While careful planning and management are essential to mitigate potential environmental and social impacts, the growing cruise ship industry holds promise for sustainable economic growth and diversification.

In addition to the economic benefits and creating a positive visitor experience, the gateway terminal also addresses a significant safety concern. The cruise ship berth is integrated into an industrial working waterfront, and passengers need to be safely transported from the berth to downtown rather than walking through this active and dangerous area on the breakwater. Motor coaches can safely transport passengers through this active area while also creating a convenient method of traveling downtown.

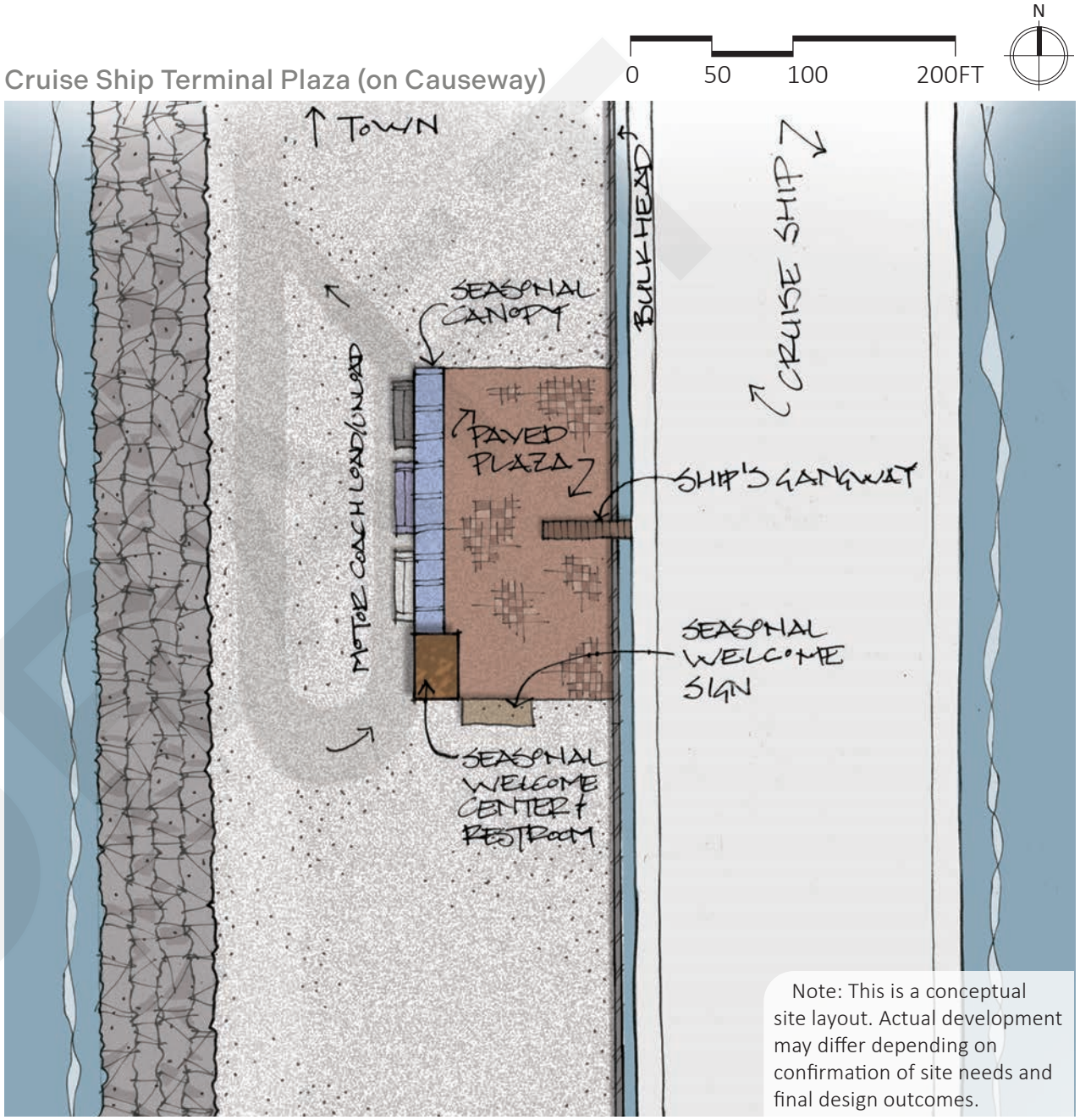
FACILITY IMPROVEMENTS:

Causeway Cruise Ship Terminal

A dedicated plaza space located on the causeway adjacent to the cruise ship berthing area serves as a terminal for passengers disembarking from and boarding the vessels. This dedicated space is crucial for ensuring safety, as it is separated from other industrial activities occurring on the causeway. It serves as a gateway for cruise ship passengers arriving in Nome, allowing Nome staff to greet them and provide initial contact upon their arrival. The area features a motor coach staging zone, enabling the transportation of passengers into town to the River Street Visitor Facility, where they can receive enhanced visitor services and assistance.

The accessible plaza should be approximately 80’ x 240’ to allow room for the ship gangway as well as adequate room for motor coaches to stage for pick-up and drop-offs. Initially the plaza could be constructed from compacted gravel, with plans to pave, or other surface, it in the long term. The width of the causeway allows for motor coaches to create a dedicated one-way circulation system and still allow other activities to move past the site. Since passengers may need to queue for the motor coaches, installing a temporary/seasonal canopy would enhance their experience.

Cruise Ship Terminal Plaza (on Causeway)



Note: This is a conceptual site layout. Actual development may differ depending on confirmation of site needs and final design outcomes.

Additionally, a small mobile visitor kiosk and mobile restroom facilities would be added, during cruise ship berthing, to assist passengers with initial orientation and safety while disembarking. The desk would only be staffed when a ship is in port. The plaza would include a small "Welcome to Nome" sign or another distinctive gateway feature.

GENERAL CONDITIONS:

Implementation

Phased implementation would be challenging and to create a transportation hub into the community without some level of visitor services would be counterproductive to creating the facility. Ideally, the causeway terminal and the River Street Visitor Facility are a critical first phase of implementation. Elements that include the canopies, landscaping and open space plaza could be a future phase but to create an appropriate 'first impression' and gateway facility, including these elements would make a significant contribution to the overall project.

Staffing and Operations

The causeway terminal would be staffed when a ship is in port and may require two people. Regular scheduled cleaning and restocking of the restrooms during the day would be required when a ship is in port.

Maintenance

Maintenance includes a consistent schedule of upkeep to ensure a welcoming and functional environment. This includes routine cleaning of interior and exterior spaces.

Cost Estimate

The improvements described are conceptual at this time and the costs presented are based on general metrics for similar facility improvements. Actual costs will vary depending on the final design, overall layout, and the selected phasing of construction. Estimates include permitting, engineering and construction administration costs as well as 35% contingency due to the conceptual level of design.

Conceptual Cost Estimate: $4.75 MM

Mariner's Memorial & Harbor Walk

SUMMARY:

General

Nome's waterfront serves as a working waterfront with limited public amenities. However, waterfront walks and public spaces along these working areas offer invaluable opportunities for the community to connect with their maritime heritage and the essential industries that shape Nome. These spaces provide recreational benefits, promoting both physical and mental well-being while allowing residents and visitors to observe the activities of harbors, fishing fleets, and shipping operations.

The community aims to safely provide public access to and along its waterfront by establishing clearly defined pedestrian routes that separate public areas from the working waterfront. Creating pedestrian facilities along the waterfront between marine-based facilities can enhance access and become a destination for both residents and visitors. Additionally, there is a desire to develop dedicated public open spaces on the waterfront, including a mariners' memorial.

One significant challenge is identifying potential hazards that could arise where public access conflicts with the working waterfront and developing routing and safety solutions to address these issues. Significant coordination may be needed to work with waterfront property owners to establish a safe and continuous route along Nome's waterfront and its harbors.

Economic Feasibility & Other Benefits

Vibrant waterfronts and public areas can attract locals and tourists, stimulating local businesses and enhancing the overall quality of life while contributing to a more connected community. Defined pedestrian routes can create safer waterfronts, especially in areas adjacent to the working waterfront. Establishing a waterfront walk from downtown, alongside the harbor, and leading to the Snake River can provide recreational opportunities that benefit residents' physical and mental well-being. By integrating public access with the functional aspects of a working waterfront, these areas can become vibrant and engaging environments that educate, inspire, and strengthen the bond between people and the sea.

FACILITY IMPROVEMENTS:

Mariners' Memorial

Mariners' memorials serve as sacred spaces that honor those lost at sea and recognize the contributions of seafarers to trade, transportation, and commerce. They provide a place for remembrance, reflection, and gratitude, ensuring that the stories and sacrifices of mariners are not forgotten. The memorial should be constructed from durable materials designed to withstand challenging marine environments and ensure longevity. Suitable materials include stone, steel, and concrete. The memorial should be located close to the water to support ceremonies such as the blessing of the fleet and remembrance celebrations. The site should be large enough to accommodate gatherings while also including smaller, intimate spaces for contemplation. It should feature benches, opportunities for interpretation, and appropriate landscaping and sculptural elements.

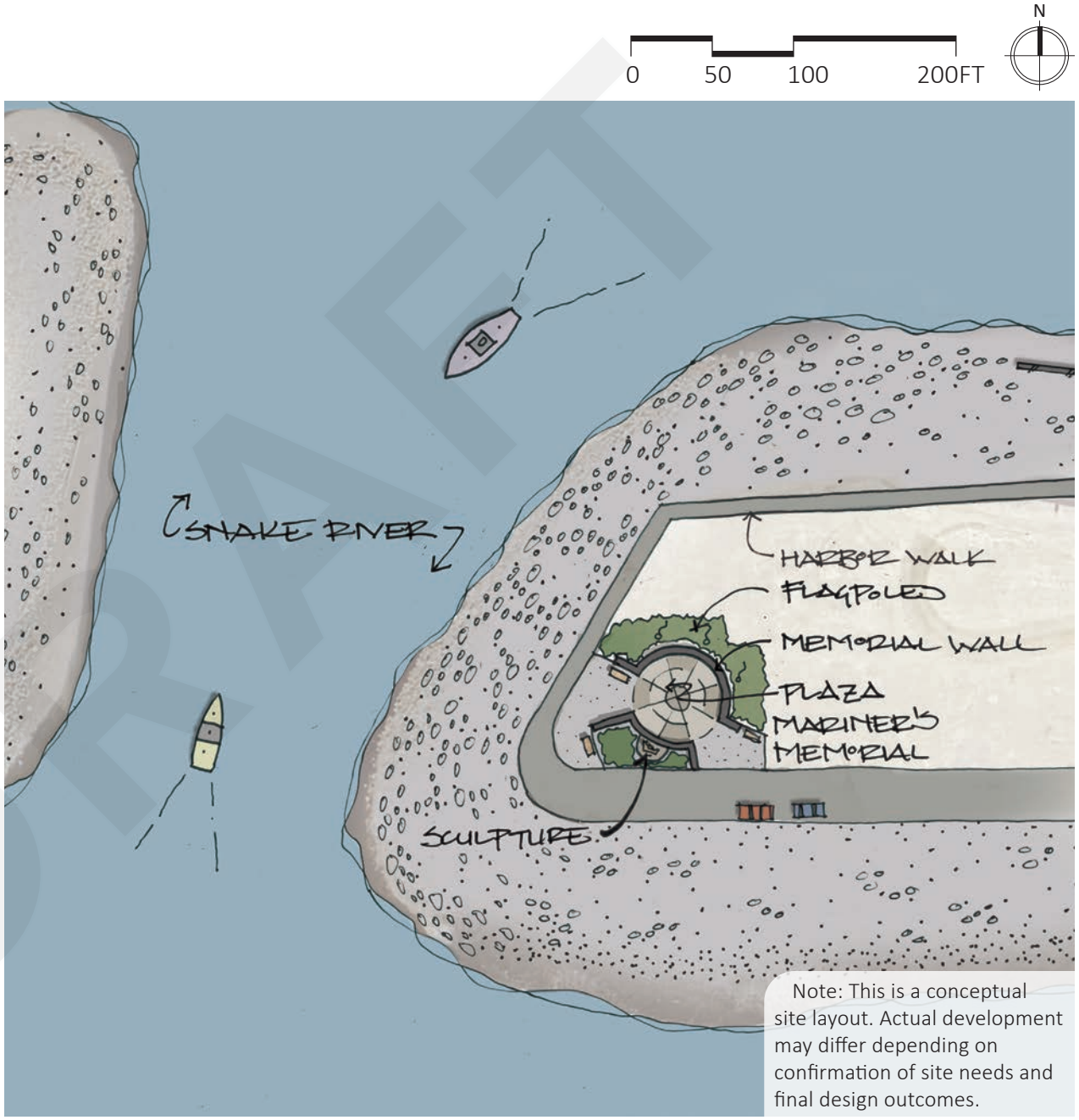
The memorial is proposed to be situated at the end of the breakwater and Gold Avenue, at the harbor and Snake River entrance, where numerous vessels pass. Other locations on the waterfront could also accommodate the memorial. Given the spiritual significance of memorials, great care must be taken in their location and design to honor and reflect the rich marine heritage of Nome.

Harbor Walk

The harbor walk would be a continuous pedestrian waterfront route extending from the River Street Visitor Facility to the end of the Gold Avenue breakwater and back to the harbor, running adjacent to Belmont Point and concluding at the proposed Snake River Park. The walkway should be at least 5 feet wide and up to 8 feet wide in areas expected to experience higher foot traffic. Existing sidewalks in the vicinity of the waterfront should be incorporated into the harbor walk.

The walk must be fully accessible and constructed from durable materials such as concrete or compacted crushed gravel. The preferred approach is to build the harbor walk on fill material to keep costs down, although some sections may require a more expensive elevated walkway. Additionally, the harbor walk should be designed to accommodate smaller vehicles, including ATVs or quads, for maintenance and emergency access. Sections of the walk with a vertical drop-off would need guardrails for safety.

Benches and trash cans should be placed at widened locations along the harbor walk, particularly in areas where people might gather or enjoy good views of harbor activities. At key destinations and intersections along the route, "finger-pointing" wayfinding signs should be



Note: This is a conceptual site layout. Actual development may differ depending on confirmation of site needs and final design outcomes.

installed to indicate travel times to various destinations. Additionally, routing maps of the waterfront and harbor walk should be provided at entry points and key locations. Wayfinding signage should be consistent and share similar branding with the Nome pedestrian corridor leading to downtown.

The route should prioritize its proximity to the water's edge. It is essential to identify current waterfront uses and any potential hazards related to a working waterfront. Routes must be carefully selected to prevent conflicts and ensure safety. Collaboration with waterfront land managers is crucial to explore possible routes for the harbor walk through private property, incorporating fencing or other barriers to ensure pedestrian safety. While it may be necessary to navigate around private properties, efforts should be made to quickly return to the waterfront whenever possible. Where feasible, the harbor walk should align with existing rights-of-way and easements.

Furthermore, areas of interest along the route should be identified, providing opportunities for viewing these activities and incorporating interpretive elements to enhance the user experience and educate visitors about Nome's working waterfront.

GENERAL CONDITIONS:

Implementation

Phased implementation of the Mariner's Memorial may be a challenge and would be expected be a single construction project.

In contrast, the harbor walk is expected to be developed in multiple phases and can be integrated with other waterfront development initiatives. The phasing plan would prioritize segments that are likely to receive the highest foot traffic as a pedestrian route. Key areas for initial development could include the pathway from the River Street Visitor Facility to the Mariner's Memorial on the breakwater (approximately 1,500 linear feet), and from the River Street Visitor Facility to the existing harbor and Belmont Street (approximately 2,300 linear feet). The first phase of improvements might involve constructing the harbor walk with compacted gravel, with future upgrades planned for a more durable surface, such as concrete.

The long-range connection from Belmont Street to Belmont Point and the new Snake River Park would require approximately 3,000 linear feet of harbor walk and would require negotiations to cross the residential neighborhood to the east of Belmont Point and the State of Alaska for the portion along Seppala Drive and the Jafet Road bridge.

Staffing and Operations

The facility would not require staffing; however, daily walking of the route would ensure the facility is safe and operational.

Maintenance

Regular daily maintenance of the harbor walk, including emptying trash cans, is expected. An annual spring cleaning would include power washing all hard surfaces and site furnishings, as well as grading any gravel sections of the harbor walk. Additionally, annual inspections of elevated sections and guardrails would ensure their longevity. Interpretive panels can be removed seasonally and reinstalled in the spring.

Cost Estimate

The improvements described are conceptual at this time and the costs presented are based on general metrics for similar facility improvements. Actual costs will vary depending on the final design, overall layout, and the selected phasing of construction. Estimates include permitting, engineering and construction administration costs as well as 35% contingency due to the conceptual level of design.

Conceptual Cost Estimate: $1.0MM (Mariners Memorial)

Conceptual Cost Estimate: $2.40MM (Harbor Walk)

Barge Access & Travel Lift

SUMMARY:

General

Nome relies on challenging retrieval and launch operations for its large vessels that includes large equipment and airbags. These operations occur at the existing launch ramps that can create congestion and challenging launches and retrievals.

The community expressed the desire for a dedicated travel lift facility that includes a +/- 150 ton travel lift that can accommodate typical vessels between 100 and 130-feet in length. A preferred site is the north end of the existing causeway near the breach bridge.

The site presents some challenges including the need to access deeper water. Locating the travel lift within the causeway places it largely within a protected marine environment.

Economic Feasibility & Other Benefits

The proposed Travel Lift Facility offers strong economic and operational benefits for the Port of Nome and the broader maritime community. By enabling fast, safe, and efficient vessel launching and retrieval—particularly compared to current methods using rolling airbags—the facility will significantly reduce labor, risk, and cost for vessel owners and operators.

The facility will allow both local and seasonal vessels to access shore-based maintenance services in Nome, reducing the need for costly travel to distant facilities further south. This capability not only supports vessel longevity and operational readiness but also creates new opportunities for local businesses to establish marine repair and maintenance services.

In addition, the Travel Lift Facility will provide a new revenue stream for the City and Port through service fees for vessel launching, retrieval, and potential uplands storage. The site will be capable of accommodating a larger class of vessels than current infrastructure allows, expanding the port's capacity to serve a wider range of users and supporting long-term economic growth in the region.

Innovation

Relocating these operations from existing facilities such as the barge ramp and small boat launch will help relieve congestion, improving access and functionality across the port.

FACILITY IMPROVEMENTS:

Travel Lift Facility

The Travel Lift Facility will be located at the north end of the existing causeway and will include a 150-ton travel lift to accommodate the launching and removal of large vessels typically between 100 to 130 feet in length. The orientation of the facility would be parallel to the causeway.

The basin will be dredged to a depth of 28 feet, an increase from the current 22 feet, aligning with improvements planned in Phase 2 of the Port of Nome Expansion Project.

The facility will include a lifting basin approximately 130 feet long and 35 feet wide and a travel lift dock approximately 125 feet by 130 feet that includes a 60 foot by 100 foot washdown pad.

The facility also offers potential for on-site vessel maintenance, limited vessel storage, and a washdown and cleaning area—providing essential infrastructure to support local marine operations.

GENERAL CONDITIONS:

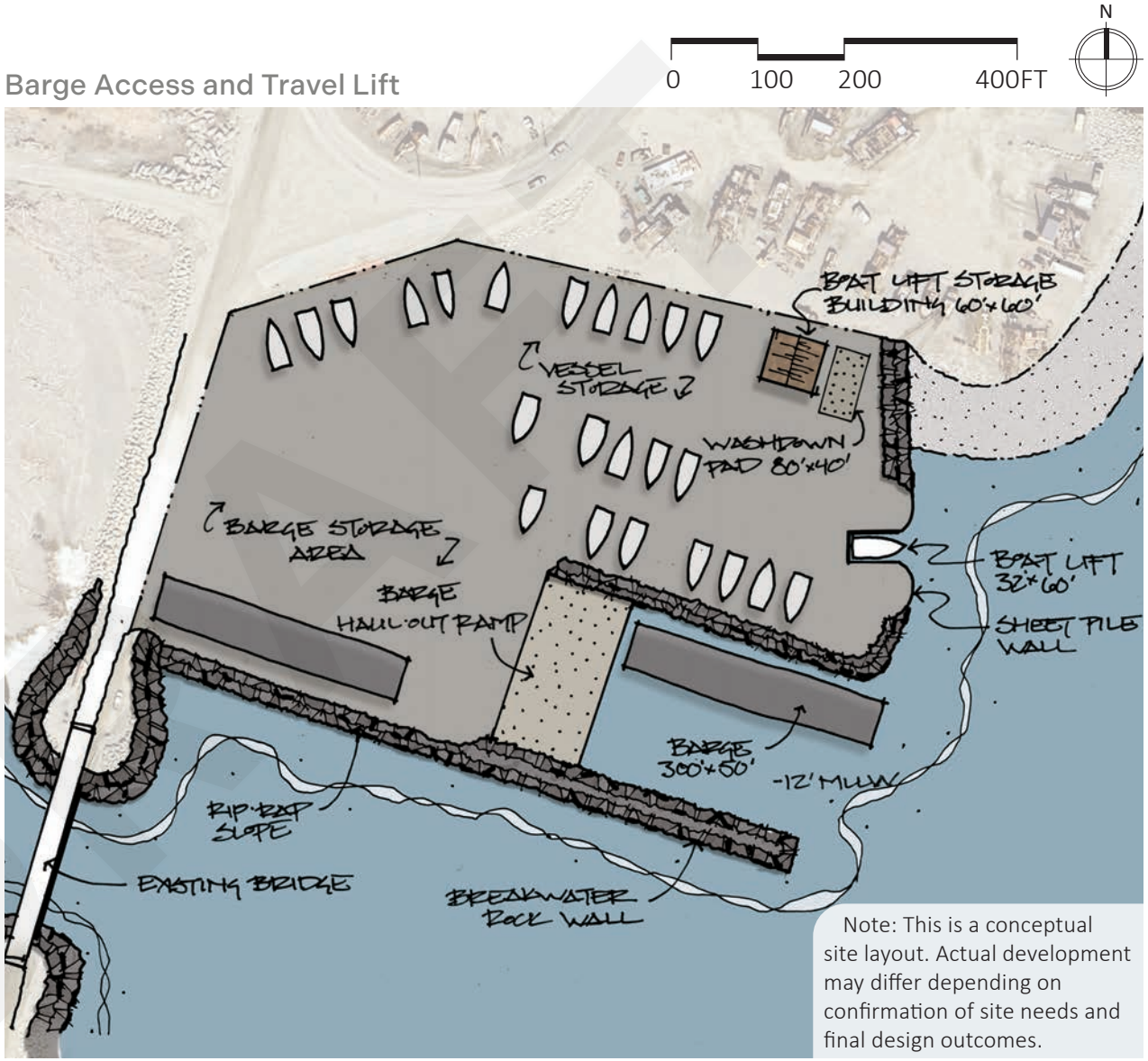
Implementation

The Travel Lift Facility could be constructed in phases to align with available funding. Initial construction would include the full dock structure and uplands necessary for lift operations. Additional features such as a washdown pad and other support amenities could be added in future phases as funding becomes available, allowing the facility to expand its functionality over time without delaying core operations.

Staffing and Operations

The Travel Lift Facility is not expected to require full-time staffing for day-to-day operations. Staff would be scheduled as needed to support vessel lifts and launches, with multiple personnel present during those operations to ensure safety and efficiency. Once a washdown pad is installed, additional staff would be required during its use to monitor operations and ensure compliance with environmental and safety protocols.

Barge Access and Travel Lift



Note: This is a conceptual site layout. Actual development may differ depending on confirmation of site needs and final design outcomes.

Maintenance

The Travel Lift Facility will require routine inspection and maintenance consistent with the standards applied to other Port of Nome infrastructure. Key tasks will include regular inspection of structural components, grading of uplands, and periodic replacement of sacrificial anodes to prevent corrosion.

The travel lift itself will require ongoing upkeep to ensure safe and efficient operation, including mechanical inspections and preventative maintenance. Once installed, the washdown pad will also require periodic inspection and maintenance to ensure proper function and environmental compliance.

Cost Estimate

All costs are presented in 2025 United States dollars and are based on conceptual drawings and the details outlined in this report. The planning cost ranges, developed per the Association for the Advancement of Cost Engineering (AACE), are intended to accommodate potential design refinements as the project advances, while offering the City a consistent basis for comparing proposed improvements across different sites.

Conceptual Cost Estimate: $22.25 MM

East Ramp

SUMMARY:

General

The existing east ramp, constructed of gravel, currently supports the launching and retrieval of large vessels, with operations for the largest vessels aided by heavy equipment and the use of airbag rollers to maneuver in and out of the water. The ramp is located adjacent to the south and east harbor walls, which are operated by the City and Port of Nome but owned by the U.S. Army Corps of Engineers (USACE). Despite its functionality, the area is limited by constrained uplands space, which restricts the capacity for vessel storage and staging during maintenance or layup operations.

There is a desire to create a more durable ramp surface and reduce the ramp grades to better meet operational needs.

Economic Feasibility and Other Benefits

There would be limited economic benefits; however, improvements will greatly impact the use of this facility including creating safer and more efficient launching and retrieval of vessels. The upgrades would also reduce the anticipated maintenance of the facility. Improving the functionality and the reduction in maintenance will provide some economic benefits.

FACILITY IMPROVEMENTS:

Ramp Improvements

Upgrades to the existing east ramp could include the addition of concrete planking to create a more durable and low-maintenance ramp surface, improving long-term reliability. Modifying the ramp to have a shallower slope would enhance safety and efficiency during vessel launching and retrieval, particularly for larger vessels that currently require heavy equipment and airbag rollers to access the water. Coordination on slope change and/or installation of concrete planking would need to be done with USACE to ensure wall stability was maintained as well as Nome Joint Utility Services (NJUS) to ensure the buried power lines in the area are unaffected.

GENERAL CONDITIONS:

Implementation

All improvements as one phase of work would be required to make this project a success.

Staffing and Operations

This facility is not expected to require full-time staffing for day-to-day operations. Staff would be scheduled as needed to support vessel launches, with multiple personnel present during those operations to ensure safety and efficiency.

Maintenance

The proposed ramp improvements would require periodic observations of ramp conditions toallow smooth launching and retrieval operations.

Cost Estimate

The improvements described are conceptual at this time and the costs presented are based on general metrics for similar facility improvements. Actual costs will vary depending on the final design, overall layout, and the selected phasing of construction. Estimates include permitting, engineering and construction administration costs as well as 35% contingency due to the conceptual level of design.

Conceptual Cost Estimate: $6.0 MM

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