

**MATANUSKA-SUSITNA BOROUGH
RESOLUTION SERIAL NO. 19-017**

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH ASSEMBLY APPROVING
FEDERAL LEGISLATIVE PRIORITIES FOR FISCAL YEAR 2020.

MSB SEPTAGE FACILITY - \$20.1 million

The project would construct a septage treatment facility to address the disposal of septage created by the 93 percent of the Borough residents who rely on septic tanks for wastewater disposal. Currently all septage is taken into the Municipality of Anchorage. There it receives minimal treatment before discharging into Cook Inlet. Funding is for construction of a new treatment facility. The Assembly has selected a site at the Central Landfill and design of the facility is in progress. Construction funding is approximated to be \$20.1 million. The project is supported by the MSB Septage Treatment and Disposal Study (HDR, 2008, 2013) and the Landfill Development Plan (CH2M Hill, 2015). It will benefit the vast majority of Borough residents. The timeframe for the Septage Treatment Facility (dependent upon funding) is 2022 for completion and beginning operations. This request will fund the project.

PORT MACKENZIE RAIL EXTENSION - \$130 million

Port MacKenzie is a deep-water port capable of docking and loading the largest cargo vessels in the world. This rail extension from the Alaska Railroad mainline to Port MacKenzie will provide a shorter rail route from Interior Alaska to tidewater, which in turn will substantially boost the export of Alaska's minerals and natural resources helping diversify the statewide economy. The project will create jobs, lower transportation costs, and increase economic development. Fuel imports transported north on Port MacKenzie Rail to the Interior would help lower high energy costs. The Alaska Railroad is the first in the nation to receive approval by the Federal Railroad Administration to transport LNG by ISO container. AIDEA is working to expand an LNG facility near Port MacKenzie to develop a fuel supply chain to Interior communities. The rail extension could also save more than \$100 million in construction costs for the State's proposed natural gas pipeline over other ports as Port MacKenzie is 140 miles closer than Seward and 32 miles closer than Anchorage to the Interior. Less expensive bulk transport costs will also help stimulate the development of natural resources and mines such as the one-billion-ton limestone deposit near Livengood. Two sizable mining projects have designated Port MacKenzie as their marine terminal for exports: A

Canada to Alaska railway project projected to export \$100s of billions in commodities including bitumen; and Trilogy Metals, Inc. in the Ambler Mining District projected to hold 8 billion pounds of copper, 3 billion pounds of zinc and more than 1 million ounces of gold-equivalent precious metals.

The shorter mileage to tidewater will also reduce the cost of transporting coal when coal prices recover, helping coal from Alaska's Interior be competitive on the world market. A number of private companies have leased land at Port MacKenzie and will take advantage of the rail extension's quicker transport time to the Interior, including Central Alaska Energy, which plans to import low sulfur fuel, store it in million gallon tanks, and transport it around the state.

SEWARD MERIDIAN PARKWAY EXTENSION NORTH, PHASE 2 (PALMER-WASILLA HIGHWAY TO SELDON ROAD) - \$32.5 million

Seward Meridian Parkway is one of only two north-south arterial corridors in the Borough's transportation network. The project will upgrade the current two-lane road with no shoulder to a four-lane road with shoulders, a separated path, a bridge over Cottonwood Creek, and safety improvements at intersections. Phase 1, Parks Highway to Palmer-Wasilla Highway is complete. Phase 2 will extend from the Palmer-Wasilla Highway to Seldon Road. Heavy traffic generators along the Phase 2 corridor include numerous medical facilities and office complexes, Cottonwood Elementary School, Mat-Su Day School, Fronteras Spanish Immersion Charter School, the Career and Technical High School, and Teeland Middle School. The existing two-lane facility and the poorly connected local street network are not sufficient to support the growing traffic volumes and needs of the surrounding community. Thousands of Borough residents will benefit from this project through increased efficiency of traffic flow (faster travel time, safer travel, lower levels of vehicle emissions, and improved access to businesses, schools, and emergency service facilities). The MSB Long Range Transportation Plan and Official Streets and Highways Plan support this project. Design is currently at 80 percent complete with right-of-way acquisition at 20 percent complete. Construction is expected to commence in 2020.

PORT MACKENZIE DEEP-DRAFT DOCK PILE SLEEVE PROTECTION - \$6 million

This project will install pipe pile sleeves and fender pile sleeves to protect the deep-draft dock piles from slow deterioration caused by scour from silt and ice impact as well as material loss due to corrosion. Steel pile sleeves and grout will be added to the 64 pipe piles and 14 fender piles of the deep-draft dock. The design

for this work has already been completed. The cost estimate to complete the construction is \$6 million. The deep-draft dock piles were driven in 2004 and have now lost their hot-dipped galvanized protective coating, as verified by an engineer inspection in June 2011, due to scour from the silt and ice laden currents of the Knik Arm of Cook Inlet. These protective pile sleeves, coupled with the cathodic protection system that was installed in 2015, will extend the life of the deep-draft dock twenty (20) to thirty (30) years longer than the alternative of not installing the pile sleeves. This pile protection system will save or defer tens of millions of dollars on future repairs and replacement of the piles. The design has been completed, and the project could be completed in the fall of 2019 if funding is approved. This project is essential to protect the State's investment (\$10 million) and Borough's investment (\$4.7 million) in the construction of Port MacKenzie's deep-draft dock.

MSB SUBSTANDARD ROAD AND BRIDGE IMPROVEMENTS - \$15 million

The Matanuska-Susitna Borough is the fastest growing borough in the State of Alaska. Much of the new development is accessed by roads that were not built to Borough standards, have substandard gravel bases, lack sufficient right-of-way and sight distance, and are underbuilt for the amount of traffic on the roads. Improvements to these roads will ensure that the functionality and safety of the roads meet the proper classification and design standards. These roads are part of the community transportation plan and the Borough's Long Range Transportation Plan. There are also numerous bridges on the Borough's road system that have outlived the design life for the structure and require costly repairs or complete replacement.

FISHERY PROTECTION - \$4 million

This project will continue efforts to protect Mat-Su's declining salmon populations by restoring fish habitat and passage, and providing critical resources for research, monitoring and evaluation projects to inform sound scientific policy recommendations for improved Upper Cook Inlet Fishery Management. Salmon populations are declining in the Mat-Su as evidenced by the state designated stocks of concern, frequent sport fishing closures, and associated business losses. A Strategic Research, Monitoring and Evaluation Plan for the Upper Cook Inlet (completed in 2015) identified significant gaps in data as a barrier to understanding the salmon population declines and the complex economic consequences. Priority action proposed includes: continuing successful initiatives aimed at quantifying the economic significance of Upper Cook Inlet sport fisheries, fish

habitat restoration including Mat-Su's strategic evaluation and replacement of fish passage barriers, and installing fish counting tools on critical drainages to provide in-season fishery data. These efforts will apply more stock specific management strategies to ensure more consistent and abundant returns of salmon to the northern waters of the Mat-Su. Total project cost is \$6.5 million; \$2.5 million was awarded from Alaska Department of Commerce, Community, and Economic Development in 2013.

WEST SUSITNA ROADS TO RESOURCES (FISH CREEK ACCESS)- \$6.3 million

Construct two bridges, improve 6.7 miles of winter ice road and add 12 miles of all season road to open up vast acreage in the west side of the Borough to agriculture, commercial use, forestry, materials extraction, public recreation, resource management, and settlement. The two bridges and forest road will help develop the area between the Little Susitna (Little Su) and Susitna (Big Su) Rivers, opening approximately 200,000 acres. Perhaps as important, the project also puts the State at the doorstep of 6 million acres of land on the other side of the Big Su with oil and gas, mineral, agricultural, timber, and many other resources. The challenge is and always has been, ACCESS to these resources.

The proposed project is the critical first step to opening up this region for economic development. A winter ice road to the area and two ice bridges across the Little Su were constructed in 2014. The project begins at the end of West Susitna Parkway southwest of Big Lake. Upgrade of the winter ice road to a two-way single lane all season resource recovery road (including two all-season bridges) is proposed. The project includes one bridge constructed across the Little Su as well as one small bridge placed across a tributary stream. In addition, extending the existing winter ice road approximately 12 miles across Borough and State land will connect it near the preferred crossing point for the future bridge across the Big Su. Upgrading this proposed 12-mile ice road to a two-way single lane all-season resource recovery road will require additional study and funding. State of Alaska has already expended \$400,000 on 6.7 miles of winter ice road. Project costs include: 1) Pioneer Road and unnamed stream crossing (\$1.43 million), 2) bridge over the Little Su, west approach and turnaround (\$4.41 million), and 3) architect and engineering fees (\$450,000), for a total project cost of \$6,290,000. The Borough has \$1 million in the Land Management permanent fund that can be allocated for this project. The project will take at least three years to complete from the time funding is secured.

ABILITY TO USE FEDERAL FUNDS TO PROTECT BOTH RESIDENTS AND CRITICAL ROADWAYS

Federal Road Funds are needed to protect both people and roads where river erosion or flooding threatens both residents and major highways. A federal policy change may be needed to use highway construction and maintenance funds for advance protection of the roadway and residents at the same time. Two critical areas are Old Glenn Highway between MP13 and 15 and the Glenn Highway between MP 63.5 and 66. In both instances the highway is built upon the same highly erodible sand and gravel material that caused imminent danger to the highway and sent several houses into the Matanuska River at both locations.

Challenges in dealing with widely changing braided plains on the Matanuska and other rivers include, "...expense, lack of a coordinated effort or responsible agency, and erosion of installed structural features..." (Geomorphology and Bank Erosion of the Matanuska River, Curran & McTeague USGS2011).

In 2016, the State of Alaska stepped up to protect more than just the road at Old Glenn MP15 by installing riprap along the embankment and putting a revetment paralleling the riprap instead of staying within the road right-of-way. The net result probably saved the highway, helped prevent flooding residents down river and retained a larger and important land buffer (reducing future erosion and flooding risks) between the river and the road. Disaster was averted. The road was saved. Residents were better protected at the same cost.

Protection measures such as bank stabilization, channelization dikes and revetments can be put in place well in advance of potential erosion and flooding much more cheaply than waiting for water to overtop the road. To build revetment alone between Glenn Highway MP64 and 66 would cost somewhere between \$18 and \$26 million. A dike and channel construction could potentially protect most of the two-mile stretch for a fraction of that cost. Dike and channel construction is estimated at \$2 million with an annual or two-year maintenance of \$250,000.

Standard structural response such as dikes, channels and revetments are all extremely expensive to build and maintain. The least costly methods are buying people out so that they can be out of the risk area, and new experiments are being done with bank stabilization in a State program. The Matanuska-Susitna Borough continues to apply for federal flooding and erosion funding for this fairly remote area with few residents.

Whichever solution is chosen, federal highway funds are critical to protect both people and highways.

SUSITNA/TALKEETNA RIVER FLOOD CONTROL - \$30 million

Federal funds to protect a population of roughly 800 residents and 250,000 annual visitors. Additionally, the same flood protection infrastructure needed would also protect a vital Alaska Railroad link to the interior (Fairbanks and beyond) of Alaska. The infrastructure needed is critical to the survivability of the community of Talkeetna, Alaska and the Alaska railroad infrastructure located there. The communities well and sewage treatment plant would be among the casualties when (not if) the next major flood occurs.

The Talkeetna River flows 85 miles from its headwaters in the Talkeetna Mountains into the Susitna River at the community of Talkeetna. The Susitna River flows 313 miles from its headwaters at Susitna Glacier to its terminus at Cook Inlet and drains an area of approximately 20,000 square miles. The confluence of the Chulitna, Susitna, and Talkeetna Rivers has migrated east north east to such an extent that a high-water event places the community in imminent danger of flooding. Such a flood occurred in 2012, essentially destroying the erosion control structure rendering it useless and causing \$1.8 million in damage to the dike and \$183,111 in damage to local roads. This event also breached an earthen berm containing the community's sewage treatment lagoons potentially releasing millions of gallons of human wastewater into the river system. In addition to monetary and environmental value, the flood threatened the Alaska railroad bridge that crosses the Talkeetna River. This rail line connects Fairbanks North Star Borough, with a population of nearly 100,000 residents, plus two active Army and Air Force bases in central Alaska, with ports in south central Alaska which are used for military deployment and sustainment of the civil and military population. The 2012 flood also threatened the community's sole water treatment plant. Current erosion control projects do not address the flood risk issue that threatens the viability and resilience of the community, fiber optic cable connecting communications to the interior, and the rail line to federal military installations near Fairbanks.

The Matanuska-Susitna Borough is working with the U.S. Army Corps of Engineers (USACE) on a continuing authorities program Section 205 - flood damage reductions project that begins on January 29, 2019 to determine the federal interest and begin the feasibility study. This study is a requirement for a 205 design and

construction project and both phases require match funding to move them forward.

An estimated 250,000 people visit Talkeetna annually. With the peak flow season for the Rivers being the same peak flow season for the visitors, any high-water event threatens the safety of thousands of people.

KNIK-GOOSE BAY ROAD RECONSTRUCTION (CENTAUR AVE TO VINE RD) - \$114 million

This federally funded project will expand Knik-Goose Bay Road to a four lane divided highway from Centaur Avenue near the City of Wasilla to Vine Road, a major north-south arterial that connects to the Parks Highway. The project also includes signalized intersections, drainage improvements and a reconstructed separated pathway. Design is at approximately 70 percent. The breakdown of total project cost is design at \$11 million, right-of-way \$16 million, utility relocations \$25 million, construction \$62 million. Construction is expected to begin in 2021.

GATEWAY VISITOR CENTER, FINAL PHASE 4 - \$5.8 million

This project would fund the final construction phase of a 10,800 sq. ft. Gateway Visitor Center at mile 36 Glenn Highway. This project has been driven by the dramatic decrease in access and visibility of the current visitor center due to the construction of the Glenn/Parks interchange, the Trunk Road roundabout, and the development of the Mat-Su Regional Medical Center campus. The design process has been all inclusive of cultural, recreational, and historical organizations and partners. It is envisioned as a destination in its own right situated on a bluff with a dramatic view of Pioneer Peak and the surrounding Palmer Hay Flats. The facility will also serve as an interpretive site for sport fishing stewardship by developing a trail to a salmon viewing platform at the creek below the bluff. The site was selected for the easy access to adjacent State Park land (Matanuska Lakes State Park).

The project is supported by a 2010 Feasibility Study funded by a \$114,000 National Scenic Byways grant and a 20% match by the MSB, and also a 2008 MSB Tourism Infrastructure Needs Study. The land was purchased in January 2014 with a \$1 million FY14 capital appropriation. The design phase was completed in November 2016 with a \$1.235 million FY15 capital appropriation. The final phase also has a \$1.2 million match from the Borough sale of the current visitor center site located in the Borough medical campus. The Matanuska-Susitna Borough submitted this project to the US DOT National Advisory Committee on Travel and Tourism and it is

currently under consideration as a critical infrastructure project. This project is shovel-ready.

ADOPTED by the Matanuska-Susitna Borough Assembly this 5 day of February, 2019.


VERN HALTER, Borough Mayor

ATTEST:


LONNIE R. McKECHNIE, CMC, Borough Clerk
(SEAL)

PASSED UNANIMOUSLY: Sykes, McKee, Leonard, Mayfield, Sumner, and Boeve